Part 2

The Strategic Case (2)

Appendix 2D	-	Bed Modelling Exercise
Appendix 2E	-	FM Brief
Appendix 2F	-	BREEAM Pre Assessment
Appendix 2G	-	Sustainability Report
Appendix 2H	-	Condition Surveys – Ailsa, Horseshoe at Ayrshire Central
Appendix 2J	-	Workforce
Appendix 2K	-	Benefits Realisation Plan
Appendix 2L	-	Service Continuity Plan

Appendix 2D

Bed Modelling Exercise

Mental Health Bed Modelling: Stage 2 Report

(Draft 7.0, 30 May 2011)

Prepared by:

Norman Sutherland
Buchan + Associates Ltd
127 Sinclair Street
Helensburgh
G84 9AT

Tel 01436 679100

CONTENTS **PAGE**

APPENDICES

STRATEGIC SUMMARY

In reflection of the need to clarify future capacity requirements, a team were commissioned by the Mental Health Executive and Capital Planning Steering Group to undertake a robust review of future mental health bed requirements across NHS Ayrshire & Arran.

This team, who were supported by Buchan + Associates health planning, utilised an agreed process and methodology to firstly identify a new baseline for existing beds. This new benchmark is based on historical utilisation data and represents the number of beds that services should have now were they operating at optimal capacity but in the absence of any further improvements in practice.

Working with the many clinical/management teams involved, the project team then identified those variables likely to have an impact on all services in the future before presenting these in a series of scenarios. These scenarios represent the range of anticipated bed requirements in the future by service/specialty within 5 year blocks spread over 15 years.

The scenarios developed include indicative "best" and "worst" cases for all clinical areas as well as a range of "versions of the future" that lie somewhere between. It is intended that these should inform the agreed "version of the future" that decision-makers within NHS Ayrshire & Arran will ultimately use as the basis for future strategic and facility planning.

The information gathered has been used to populate a spreadsheet that can be reviewed and updated as new or better information becomes available in order to ensure that the modelling process remains a pro-active, rather than re-active activity.

The scenarios generated to date all tend to indicate:

- A general reduction in the numbers of acute mental health beds required, primarily due to demographic changes and the need to transfer some beds to more specialist areas, e.g. Rehabilitation and elderly

- A general increase in the numbers of elderly beds required, primarily due to demographic changes, but only (within most scenarios) to a level that could still be managed within the existing elderly bed complement given existing occupancy levels.

- The opportunity to go beyond simply re-defining bed numbers within existing areas in order to fundamentally review the purpose and role of beds in the future and to deliver those services required rather than provided historically, e.g. To dispense with vague definitions such as "non acute mental health" beds in favour of streamed rehabilitation facilities that impart a sense of positive movement, progression and rehabilitation.

- An overall likely requirement, even at the end of the 15 year period projected, for less beds overall than at present, largely due to the opportunity for streamlined clinical practice, demographic change and the opportunity to make better use of available capacity than at present.

- A requirement to fundamentally re-configure beds within mental health services in order to ensure an appropriate balance between current and future capacity & cost considerations.

1. BACKGROUND

The Project Team working on the development of the proposed North Ayrshire Community Hospital (NACH) have, over the last 12-18 months developed a robust brief for the facility that includes:

- An extensive clinical specification
- A detailed schedule of accommodation
- A clear site overview
- An FM services strategy
- A range of supporting technical documentation

The proposed NACH facility has been planned in the context of new models of care that will determine how mental health services are delivered throughout Ayrshire & Arran for the foreseeable future. These models of care were based around current guidance and best practice, as well as key national health planning documentation and local strategies – most notably "Mind Your Health".

Whilst the Project Team remains clear that the strategic principals established in such strategies remain wholly valid, there is also a growing belief that some elements require review and strengthening – not least because of the length of time since "Mind Your Health" was approved by the Board. One such key area is the bed model associated with mental health services across Ayrshire, where it was decided to use time available within the business case planning process to review, re-evaluate and strengthen the planning underpinning the model.

The impetus to provide further review and challenge of the bed model was further fuelled by a range of issues that have/will have an impact on the project. These include:

- Increasing pressure on revenue across public sector services
- On-going concerns over capital availability
- Issues raised by Architecture & Design Scotland (A&DS) over the current configuration/design for the facility presented in the Outline Business Case (OBC) that could be "unlocked" by changes to the clinical brief/Schedule of Accommodation
- An overall requirement to further test/challenge want vs. need in the context of whole system health/social care delivery

It has always been recognised that the NACH development is a key opportunity to review the delivery of a wide range of services across A&A, with the project seen very much as a catalyst for widespread service delivery improvement. This review should also therefore be seen as a further effort to ensure that:

- The scale and configuration of the facility being developed is absolutely what is required in the context of whole system health and social care delivery
- The global capacity created is appropriate in terms of its volume, location, configuration and relationship with existing/retained estate
- Alternative models of care have been explored, reviewed and considered as appropriate
- Current bed/ward configurations and titles do not restrict or adversely influence future requirements
- Any changes agreed are used as an opportunity to mitigate on-going risks associated with effective delivery of the project

2. THE STRATEGIC PROCESS

In order to provide a clear structure to the proposed review and ensure that best use is made of all of those resources involved - a robust review process was developed that included 4 key strategic stages:

2.1 Stage 1: Agreement on the brief, process and timescales for review

It was important that the team undertaking the review process had a clear remit and understanding of the parameters that it was to be conducted within – particularly given the amount of effort already expended on the project. Stage 1 therefore involved identifying Linda Boyd as the NHS Officer leading the review process as well as; representatives of clinical and supporting services who would participate; the team that would be available to them; how the process would be conducted (in outline); and the timescales involved.

This was agreed through the submission of a paper, outlining the proposed process, to the Mental Health Executive Team, Partnership Forum and Capital Planning Group.

The outcome of Stage 1 was the formal commissioning and commencement of the review process.

2.2 Stage 2: Review of the current brief/bed model by service

Stage 2 involved individual interviews with senior managers and clinicians representing all services identified in the existing clinical brief.

These meetings were designed to identify concerns around historical service proposals and to provide robust constructive challenge related to alternative delivery models and capacity planning issues. In support of identifying an amended baseline for bed requirements they included a review of historical bed modelling data in order to establish accuracy and realise agreement on how many beds are optimally required ‘now”. (This is discussed in more detail in the section related to The Bed Modelling Process)

These meetings resulted in a requirement for additional information/data to be considered, presented and/or clarified and therefore led to follow-up sessions with specific agreed outcomes that were documented on a service-by-service basis.

Stage 2 concluded with an agreed “modified baseline” of beds currently required by service and a documented list of factors likely to impact on these numbers in the future. It also generated a series of “future scenarios” that represent the range of beds likely to be required within existing and re-defined future service models.

2.3 Stage 3: System-wide “Cross-check”

It is important to recognise that the health and social care system is reliant upon a wide range of services acting together to deliver optimal seamless care for patients. This “efficient continuity” must be underpinned through; clarity around the delivery of transitional care by all of the agencies involved; “blurring of the edges” around steps in the process of care; and clear financial agreements designed to optimise health and social care spend.

Stage 3 in the process is therefore designed to test proposed models of care, including any changes agreed, in the context of whole system delivery and the review of key patient journeys, e.g. To consider what if any "knock-on" effect results from current/future anticipated changes to all service models.

It is anticipated that this will be conducted, following approval of the baseline data and future planning scenarios identified here-in by NHS Ayrshire & Arran through a combined workshop(s) that will see redesigned patient journeys being presented and discussed in order to ensure that;

- all data/assumptions have been robustly challenged,
- all opportunities have been realised,
- all risks have been identified and mitigated as far as possible,
- all agencies are aware of the benefits and implications associated,
- all "service overlaps" have been identified and addressed,
- no "service gaps" exist,
- the preferred future configuration is supported.

Stage 3 will conclude with re-designed service models having been "tested" in the context of whole-system care delivery and re-evaluated as appropriate.

2.4 Stage 4: Strategic Review & Recommendations

Stage 4 will see the outcomes of the process to date pulled together into a paper that makes strategic recommendations related to how the project brief should change. As well as documenting proposed changes, this paper will also identify the potential impact of these changes including the strengths, weaknesses, opportunities and threats associated with them.

Proposed changes may relate to all aspects of the project brief including:

- The range and scale of the new build proposed
- The configuration of the new buildings
- The number/type of beds/spaces delivered in all areas
- The additional impact on facilities/services out with the immediate Ayrshire Central site (including non NHS bodies/agencies)
- The level of risk associated with adopting any changes proposed
- The positive impact associated with making any changes proposed

In summary this report will:

- Make clear recommendations around how the project brief should change
- Identify the risks and opportunities associated with these changes
- Where clear recommendations are not deliverable and/or alternative options are cited that cannot be resolved within the review process, make recommendations around how these could be addressed for consideration and approval.
- Strengthen the strategic planning process around mental health services across NHS Ayrshire & Arran considerably, particularly as they relate to any proposed future expenditure/investment/dis-investment decisions.

3. THE BED MODELLING PROCESS

3.1 Methodology

The bed modeling process employed by Buchan + Associates has sought to be as robust as possible and has involved the project team, with the support of the wider clinical, management and technical support body, undertaking a series of logical stages that were each conducted in turn.

These stages included:

- Identifying the current physical and staffed bed numbers available across all of the areas involved in the review
- Agreeing broader "bed types" in order to optimise future planning opportunities, i.e. Plan for the required number of acute mental health beds rather than the number required in each of the 4 existing AMH wards
- Calculating theoretical bed days available Per Annum over the last 3 years in order to identify a baseline of available capacity
- Confirming actual bed days available (where different) in order to support an accurate calculation of current occupancy and highlight areas where bed numbers may have changed/be changing
- Identifying actual occupied bed days over the last 3 years from available Scottish Medical Records (SMR data)
- Reviewing local published performance indicators provided for national bench marking purposes
- Calculating historical and current occupancy
- Agreeing optimal occupancy on a service by service/ward by ward basis
- Calculating an amended baseline number of beds required based purely on optimising occupancy, i.e. How many beds would be required by bed type without any changes to clinical process or practice simply by optimising occupancy
- Reviewing comparative national benchmark indicators where available in order to highlight exceptional practice and/or potential for improvement
- Identifying the range of factors likely to affect capacity requirements in the future
- Documenting these "future impact factors" along with any data and assumptions employed (This is important to enable the model to be kept under continual review)
- Generating future scenario's that represent "alternative views of the future" in order to support future modeling and sensitivity analysis

B+A have employed this bespoke methodology as:

- It is clear and transparent
- It summarises all historical data and future assumptions in a single document
- It is suited to mental health type bed modeling where background data and performance information has been much more difficult to get and simple bench-marking is less effective due to huge variances in care models
- It charts capacity change over time, facilitating capacity and capital/facilities planning that would not be possible otherwise
- It remains live and updatable – unlike other modeling techniques that seek to capture a single "moment in time" and require regular repetition
- It presents a range of standard and bespoke scenarios as a basis for future capacity planning

- It supports global planning through identifying and cross-referencing impacts on other services
- It supports financial planning and cost/benefit realisation modeling through identifying the relationship between the cost of individual elements of change and potential future impacts/savings

The spreadsheet that presents an overview of this process including baseline assessment, performance data and future projections is summarised in Appendix A. This identifies existing wards/departments as individual rows with columns that represent two different sets of information:

- Amended baseline capacity requirements based on real historical data (or agreed projected formulas) that identify the difference between existing bed numbers and those actually required. Essentially, the number of beds required now based on simply increasing capacity to agreed occupancy levels. (Designed to ensure that any future change is against the number of beds that areas "should" have now rather than the number they "actually" have now).
- Future change elements that represent the anticipated impact of all of the variables identified that are likely to impact on the number/configuration of beds required in the future.

It is important to note that this spreadsheet does NOT present the answer to what the future bed model should look like, rather the means to calculate this through the generation of alternative scenarios.

In summary it presents information related to the present and how things could change.

3.2 Exclusions

It is important to be aware that the bed modeling information presented here-in relates solely to mental health in-patient beds and that:

- Elderly (non mental health) beds that are a component of the overall NACH proposals are being modelled separately under the auspices of the work on-going related to wider medical/elderly bed modeling.
- Non NACH mental health areas were added to the review process after it had commenced. Whilst it has been possible to utilise agreed future change parameters to model elderly mental health beds in community facilities it has NOT been possible to realistically project future learning disability bed requirements at this time.
- Learning disability beds are currently the subject of a separate, local review process
- ECT areas are being reviewed and will be reported upon through the proposed follow-up paper that highlights overall changes to future accommodation requirements
- Out-patient and other supporting areas within the proposed NACH will be similarly reviewed and reported on separately

4. THE PRESENT

4.1 Baseline Capacity/Information Considerations

All of the data used in this bed modeling exercise has been provided, reviewed, challenged and agreed by the full range of individuals and departments involved in the review process thus far including Information Services and Health Economics. (Appendix B) It is important to underline a number of areas where the available historical data presented in the model either highlights anomalies or requires further clarification/comment however. This information is presented by exception.

4.1.1 Adult Mental Health (AMH Wards)

Whilst Kyle Ward and 1D at Crosshouse have very similar performance data, Park Ward has historically had a lower turnaround and 1E a higher turnaround.

The accepted hypotheses that explains this situation are:

- Park Ward's turnaround was historically slower due to specific clinical practices/practice that have now changed, e.g. Longer length's of stay, lower turnover, higher bed occupancy, etc
- Ward 1E achieves a higher throughput and shorter length of stay as a result of the 4 detox beds there in. These also manifest as a higher number of discharges.
- The wards cover different geographical areas with different socio-economic factors that have an impact on turnover, length of stay, etc.

As well as explaining different performance data for clinical areas that have a similar clinical function, this range of performance data is also potentially indicative of the extent to which even modest changes in clinical practice can impact upon performance and have been used to project the possible impact of improvements in length of stay.

4.1.2 Non-Acute Mental Health (NAMH) Wards

All non-acute mental health wards have been totally aggregated in the bed model in order to better manage the difficulties associated with available data relating to reducing bed numbers over the period used to calculate a modified baseline.

This manifests as an average number of staffed beds of 44 over the last 3 years as compared to a current bed number of 30 and an indicative baseline requirement of 34. The difference between the actual number of beds currently operational (30) and calculated requirement (34) is partly justified by the fact that the service has begun to implement some of the actions identified as "future impact factors".

Whilst on-going problems with transferring patients from acute to NAMH wards would seem to bear out the assessment that there is currently a short-term under-provision of NAMH beds, most future scenarios see these issues being addressed quickly through changing ward profiles and practice and the performance focus of the bed management group.

Some future scenarios, based on clinical discussion/debate, also see the concept of non-acute mental health wards disappearing in favour of "streamed rehabilitation" that promotes an active recovery/discharge model and is supported by the transfer of a number of AMH beds to rehabilitation.

4.1.3 Forensic Rehabilitation/Low Secure

This is a totally new service developed as an interim model until commission of low secure at NACH. This service commenced within the last year and consequently it has not been possible to identify a realistic baseline bed requirement from historical data. Instead it was agreed to develop an estimate of baseline requirement based on a documented formula that was debated extensively with the clinical service. This formula was designed to reflect the areas that patients accessing the new forensic service will come from and was agreed as:

Low Secure Baseline Bed Requirement = Average Bed days per year in Ayr Clinic/365 +2 beds for Rowan Bank step down + 1 bed for unmet need from prisons + 5% operational flexibility.

Due to increasing numbers of patient bed days being procured through Ayr Clinic (743 days in 06/07, 1172 days in 07/08, 1305 days in 08/09, 1627 days in 09/10 and 1322 days in 10/11) the average bed days has been calculated based on 2007/08 to 2010/11 data only.

This equates to 1366/365 + 2 + 1 + 5% = 3.74 + 2 + 1 + 0.37 = 7.11 beds.

Although this presents an agreed baseline for the forensic rehabilitation unit, it should be noted that all future scenarios also see forensic areas requiring the equivalent of 3 additional beds to support patients who are currently being managed in AMH wards. These beds relate to those patients who are currently re-admitted continuously and are intended to break this “revolving door cycle” by providing a longer period of intervention in a more appropriate environment. This manifests as 2 beds being removed from AMH wards and 3 being added to the forensic area with the net increase of 1 bed representing increased length of stay.

4.1.4 IPCU

No specific comments on baseline data.

4.1.5 Elderly Mental Health

It should be noted that, within the Non NACH component of the model, Marchburn and Pennelburn wards at East Ayrshire Community Hospital have already been combined into a single ward of 16 beds (9 fewer than the previous combined total of 25) but have been left as single rows in the summary sheet to ensure correct interpretation of historical data.

The current total of 16 beds would appear to be 3 fewer than baseline data would indicate.

4.1.6 Addictions (Inpatient)

Although it is not a new service, it has proven extremely difficult to collate accurate baseline data around addictions services due to a range of factors including:

- The range of different areas where these patients are currently treated
- A lack of clarity and data around the duration of historical treatment programmes
- A lack of clarity and data around the number of people accessing different programmes of different durations.

It has been possible to agree however that addictions beds should be 100% elective (all planned admissions) with the only variables affecting capacity required 1) the number of patients requiring to access programmes and 2) the duration of these programmes.

Historically addictions services have run three such programmes:

- Drug detoxification, a 2 week programme not clearly identified in any previous capacity planning and possibly therefore an unfunded development?
- Alcohol detoxification, a 1 week programme undertaken in addictions beds (4) currently located in Crosshouse Ward 1E
- Rehabilitation, a 5/6 week programme undertaken at Loudon House.

Rather than relying upon historical data to project a revised baseline, in reflection of the need to plan for a 100% elective service, a formula was developed and agreed. This formula is:

Baseline addiction beds required = beds required for drug detox + beds required for alcohol detox + beds required for rehabilitation (where programme durations are as noted previously and demand is based on average demand/uptake over the last 3 years)

4.1.6.1 Drug Detoxification

As it is not currently recorded as a separate programme it has been impossible to identify the baseline bed days required to support drug detoxification needs based on historical data. However, extensive discussion with service representatives, including the senior consultant within the service identified a number of factors relevant to current drug detoxification capacity planning. Most notably:

- Historically the service has probably received somewhere between 12-18 referrals per year that are likely to result in commencement of a drug detoxification programme in an inpatient setting.
- The historical duration of a drug detoxification programme is 2 weeks
- For clinical and operational reasons it is not feasible to have any more than 1 client at a time in a facility undergoing drug detoxification

It has consequently been possible to conclude that 1 bed (365 bed days) would be sufficient for drug detoxification and that whilst this is probably considerably more than the (estimated) capacity required, any additional capacity could be transferred to other programmes as or be available to support an expansion of the drug detox programme.

4.1.6.2 Alcohol Detoxification

Helix data available identifies 198 patients attending Loudon House for alcohol detox in 2008, 180 attending for alcohol detox in 2009 and 181 attending for alcohol detox in 2010 or an average of 186 patients per annum. In the context of a 100% elective alcohol detox programme that lasts 1 week this equates to 1302 bed days required for alcohol detoxification or 3.6 beds.

4.1.6.3 Rehabilitation

Combined rehabilitation is currently managed through Loudon house and is delivered via a mixed duration combined rehabilitation programme.

It has been extremely difficult to gather data relating to the patients accessing these services, however bed statistics for the period 1/3/2010 to 22/03/2011 have been obtained that indicate that around 102 patients attended the facility over a 1 year period with an average length of stay of circa 35.2 days. (5 weeks).

Assuming 102 patients is normal for any given year and that the programme duration supported by the Clinical and Managerial Team, is 5 weeks this equates to 3570 bed days or 9.7 beds.

4.1.6.4 Overall Addictions Modelling

When considering all three programmes, a new baseline based on the agreed formula would conclude that the number of bed days required in a new consolidated addictions unit would be: 365 bed days for drug detox + 1302 bed days associated with alcohol detox + 3570 bed days associated with rehabilitation programmes.

This is a total of 5237 bed days/year or 14.3 beds.

Given the difficulty associated with obtaining this data and the indirect sources used it should be noted that it is highly susceptible to error and, in particular “double counting”.

It is also important to note that the 14.3 beds identified represent the bed complement required to replace the existing Loudon House and addictions beds in Crosshouse and that consequently the baseline assumption around a redesigned addictions facility (currently Loudon House) alone would be circa. 10 beds.

It is also interesting to note that were the duration of rehabilitation programmes to drop to 4 weeks or three weeks then baseline Loudon House bed requirements would drop to circa. 8 and circa. 6.5 beds respectively – reflecting how significant programme duration is on bed requirements.

All future scenarios include the assumption that existing addictions beds will transfer from AMH wards into a new consolidated addictions ward that delivers all of the services identified.

4.1.7 Mental Health Rehabilitation

No specific comments on baseline data.

4.1.8 Learning Disabilities (Arrol Park)

As noted previously specific modeling has NOT been undertaken relating to learning disability services as this is currently being progressed through a separate local review process.

4.2 The Amended Baseline Beds Required

Utilising the methodology employed identifies significant differences between actual existing bed capacity and the current capacity required were beds to be used optimally. This is presented in Appendix A but also highlighted in the table overleaf.

Area/Ward	Current Beds	Beds Rqd?	Comment
Acute Mental Health	92	92	
Non Acute MH	30	34	
Forensic/Low Secure	10	7	
IPCU	7	7	
Elderly MH	36	27	
Addictions	12	10	
MH Rehab	12	9	
Non NACH (Incl Arrol Park and Elderly MH)	127	95	1) Does not include Cumbrae Lodge 2) Includes rationalisation of Marchburn and Pennelburn
TOTALS	326	281	

It should be noted that this calculation is only a factor of existing occupancy against agreed optimal occupancy and therefore does not imply anything about any other performance element/relative factor, e.g. Length of stay.

4.3 National/Local Performance Data

Whilst developing amended baseline bed requirements, in support of identifying future threats/opportunities related to service change, a range of benchmarking data was reviewed. This included comparators published by Information Services Division (ISD) and the National Mental Health Benchmarking Project.

4.3.1 National Benchmark Performance Indicators

ISD publish a range of national benchmark performance indicators that datasets could be identified for including throughput, mean length of stay and percentage occupancy with available data presented in Appendix A.

Unfortunately, the data is not directly comparable with the specific areas identified within the modeling exercise and should therefore be considered with extreme caution.

It was also concluded that the national benchmark data does not appear to represent optimal performance and that whilst it may be possible to conclude – based on review of it alone – that NHS Ayrshire & Arran's mental health beds were performing well compared to the national average, that this did not underline the opportunity for significant improvement identified by individual services.

4.3.2 National Mental Health Benchmarking Project

The Mental Health Benchmarking Project was set up to support the improvement of mental health services across Scotland by using a range of information to compare key aspects of performance, identifying gaps as well as opportunities for improvement and providing a means to monitor progress.

The Mental Health Benchmarking Project now focuses on adult mental health services with most of the indicators referring to general psychiatry services and psychiatry of old age which together make up about 90% of the SMR04 data base.

The key domains and indicators for the benchmarking project have changed to match current policy initiatives and are in line with the Healthcare Quality Strategy. Updated data are currently available across 6 domains and 19 indicators. The six domains are efficiency, effectiveness, person centeredness, safety, equity and timeliness.

The last available report (July 2010) shows a decrease of inpatient admissions across Scotland (from 20,318 in 2007/08 to 18546 in 2008/09) that was reflected in Ayrshire & Arran. It also highlights a higher level of expenditure on adult mental health resources across Ayrshire & Arran than Scotland as a whole with £149,000 per 1000 NRAC weighted population as compared to £143,000 for the whole the country. Total spend is also slightly higher than the Scottish figure for general psychiatry/head of population with £163 compared with £161.

NHS A&A by comparison has a lower spend on community general psychiatry services at £46/head compared with £54/head across Scotland with 28% of general psychiatry spend on community-based resources.

In terms of beds per 1000 NRAC adjusted population, NHS Ayrshire & Arran is the second highest in the country with 1 bed/1000 NRAC population based on the last data analysed.

Although the report presented is a complex document, utilising 4 year old data and requiring careful consideration, it is not unreasonable to conclude that, during the period the data relates to, NHS Ayrshire & Arran:

- Had more beds within mental health than the Scottish average
- Had longer lengths of stay – at the higher end stay durations - than average

It is also worthy of note that the Board was recognised as one of the safest in the country based on those measures of “safety” reported.

5. WHAT WILL CHANGE?

5.1 Future Impact Factors

Having agreed an “amended baseline” of beds required by individual services the next stage in the process was to identify how these requirements are likely to change in the future by identifying the range of factors that may have an impact. (“Future impact factors”)

To make future modeling easier to understand and document, once these future impact factors had been identified these were arranged into a series of strategic headings in order to prevent duplicate/double counting and make impact and inter-relationship assessment easier. These headings were agreed as:

- Demographic Change Elements
- Corporate Performance Elements
- Clinical Performance Elements
- Financial Performance Elements and Targets

Demographic elements include population and epidemiological factors that are wholly out with the influence of the NHS Board. They are considered within the

model to reflect a shifting baseline over time that other changes/inputs will deviate from.

Corporate performance elements represent potential changes/improvements in patient management that could have an immediate and lasting effect on capacity requirements if implemented and managed appropriately. Although feasible and desirable, corporate performance elements may have a direct and/or indirect cost/impact to implement. Where there is an impact within the bed model this is shown as duplicate entries in different rows.

Clinical performance elements represent the potential impact of changes in clinical practice/re-design on future capacity requirements.

Although out with the scope of this review, financial performance elements and targets reflect the frequent requirement to set specific targets that push services and practice beyond where clinical negotiation and modeling may indicate they could be. They also reflect the potential impact of improved “whole system” financial and service planning along with clarity around the requirement and options for resource transfer and service “buy in”.

In order to present a changing picture, impacts of those factors identified have been assessed at 5, 10 and 15 year intervals from a baseline of 2008. 2008 has been agreed as the baseline for calculations as it is both the first year that historical data relates to and the year that population projection data takes as a baseline.

It is important to underline that no one knows what the future really holds and that as well as current projections proving to be wrong new, as yet unknown, factors may appear that have a significant and un-assessed impact on future bed requirements. These arguments are often used as an excuse for undertaking no real detailed future service modeling or as the reason why models have to be majorly re-worked at regular intervals.

B+A hold that such modeling is extremely important and valid however, so long as all assumptions and modeling data (“the working out”) are based on the best evidence or assumptions available and clearly documented to allow scrutiny, challenge and future revision & learning as appropriate.

A definition of future impact factors identified, along with data sources utilised and how these have been translated into a potential impact on beds within a range of scenarios are highlighted in the following sections.

It is important to note that the scenarios presented do not all include all of these factors and/or reflect them to differing extents.

5.2 Demographic Change

As noted previously, demographic change elements are considered within all of the scenarios presented to reflect a shifting baseline over time that other changes/inputs will deviate from. The major demographic change identified relates to population changes that reflect a growth in the elderly population and reduction in the under 65 population that is the major underlying trend in all subsequent modeling.

5.2.1 Population Profile

“The impact of changing age profiles”

Data Source: GRO Population Projections

This assumption recognises that changes in population will have an impact on beds but more specifically makes the assumption that GRO population projection changes (Appendix C) will have a direct and 100% impact on bed requirements. E.g. A 10% increase in the >65 age group will result in a 10% increase in elderly beds.

Whilst data shows the well documented increase in the elderly population that is often presented as a “demographic time bomb” with major implications for hospital services, so it also shows a significant drop in the population below the age of 65.

This is significant when we consider that 57% of the agreed baseline beds manage patients in the under 65 age group.

5.2.2 Epidemiological Change

“The impact of changing epidemiological profiles/presentation”

Data Source: GRO Population Projections and Clinical Judgment

This measure attempts to present an appropriate "offset" of pure GRO population data projections/impact on beds based on anticipated future epidemiological change, e.g. Future projections related to drug/alcohol misuse raise the hypothesis that there may be a requirement for increased drug/alcohol detoxification in the under 65 age group despite a fall in the population below the age of 65 whilst changing care concepts may mean that increases in the elderly population may not have a 100% impact on elderly beds.

Despite extensive discussion and challenge related to this issue none of the clinical services identified any instances where documented evidence and/or current clinical thinking could demonstrate any examples where this would be the case, preferring to see the impact of other variables in future scenarios such as average length of stay.

Adult Mental Health service representatives, for example, saw epidemiological change “as a risk rather than a number”. Whilst recognising the likely reality of increased “diagnosis” and expectation of treatment as a result of a wide range of factors they do not believe that this will translate into a requirement for additional beds and this is therefore the baseline assumption made.

Elderly services, in reflection of the two distinct patient groups that they care for; functional and organic, believe that both are likely to rise in line with population as a result of:

- The direct correlation between age and organic brain disease (The ageing wider population)
- The ageing population within the current adult mental health environment with functional mental health problems and complex care needs that will transfer into elderly wards by virtue of their age, e.g. those with alcohol related brain disease.

They do not consequently believe that it is appropriate to assume anything other than that the full impact of population changes should be factored into elderly bed modeling for the foreseeable future and that, rather than recording the “complexity

change" associated with elderly care as a direct epidemiological impact , it is more relevant to include this within scenarios related to length of stay.

The assumptions within these scenarios have consequently been agreed with elderly services and see 30% of the elderly MH population requiring an increased length of stay between 50 and 100% at the upper bounds.

5.3 Corporate Performance

As noted previously, corporate performance elements represent potential changes/improvements in patient management that could have an immediate and lasting effect on capacity requirements if implemented and managed appropriately.

Although feasible and desirable, corporate performance elements may have a direct and/or indirect cost/impact to implement. Where there is an impact within the bed model this is shown as duplicate entries in different rows. E.g. Beds moving from one area to another.

The varying impact of corporate performance in each of the scenarios presented is the reason why the "starting point" is different in each as all are assumed to have an impact that can be realised within 5 years, e.g. A scenario that assumes that all delayed discharges can be removed will show an early requirement for less beds than a scenario that assumes less.

5.3.1 Removal of Delayed Discharges

"The impact of appropriately placing patients deemed locally to be 'delayed discharges in alternative areas"

Data Source: HELIX Patient Management System, AMH Bed Management Reports

Although no "technical" delayed discharges (as defined by the Scottish Government for over 65's only) are recorded within mental health wards, improved local clinical case management and bed management within acute mental health has identified a significant number of patients who no longer require acute hospital care but have been in acute hospital beds for some time. The planning team therefore believe that it is wholly appropriate to identify which of these patients are truly "delayed discharges" and which require transfer to other areas within the healthcare system, in order to assess the impact on a future bed model.

The only way to gather this information was through an analysis of all locally produced available bed management records and reports that highlight individual patient circumstances.

This was undertaken with the support of clinical and bed managers who identified a routine average of 10 patients at any given time within AMH beds who should not be there and whose stay had been protracted as a result of capacity issues in other areas. A detailed review of patients within this category revealed that at any given time it is normal to find circa 3 patients who are ready for discharge and a further 7 awaiting transfer to non-acute mental health wards.

This is translated within the model as a requirement to move 7 beds from acute to rehabilitation (recorded under the separate measure of the impact of a maximum 90 day stay in AMH wards) and the identification of 3 patients/beds who are deemed to be "delayed discharges".

5.3.2 Removal of Boarders

"The impact of not boarding any patients from one ward to another"

Data Source: HELIX Patient Management System

This factor was identified as it was perceived that it may represent a problem in some areas.

A review of available data highlighted that boarding activity cannot be attributed to the ward level that a patient was transferred to and from and that the only data available is gross movement into and out of a specific ward. In summary, over the period of data analysed, Ward 1D &1E Crosshouse, ACH P1 and P2, P5 and P6 have no boarders in or out. ACH P3 has 90 boarders in and out but they are movements between rehab and assessment in P3 itself - the patients do not physically leave the ward. Across Ailsa very few wards borrow or lend beds with, in total, 32 bed days borrowed / lent in the last year.

It has consequently been concluded that boarding issues will have no impact on the final model although the variable has been left in with a "nil return" to confirm that it has been considered.

5.3.3 Removal of Out of Area Placements

"The impact of NHS A&A not routinely accepting patients from out with Ayrshire & Arran"

Data Source: HELIX Patient Management System

This measure has been included as a result of a number of services recognising a continuing increase in the number of bed days being taken up by patients from other health board areas as a result of no beds being available locally. (Most notably NHS Greater Glasgow & Clyde)

It is designed to understand the impact of the non NHS A&A patients on current bed requirements in reflection of the fact that these beds can only be made available if they are vacant. It also reflects a sense that failing to consider this capacity could be perceived as factoring in additional capacity to meet other Board's requirements rather than adopting the traditional stance of mutual assistance between Boards as/when required on a broadly even basis.

Available data indicates that, in the past year approx 98 patients with 1,240 bed days (and non NHS A&A post codes) were treated in A&A. This equates to approximately 4 beds/year related to non NHS A&A patients being treated within the region – primarily in AMH areas.

It is also important to note however, particularly with a view to keeping this measure under review, that the number of out of area placements may be increasing, with local measures indicating 6-7 beds currently routinely occupied by non-NHS A&A patients.

5.3.4 Re-patriation of Patients To NHS Ayrshire & Arran

"The impact on NHS A&A of having to manage all patients with an Ayrshire & Arran postcode currently being treated elsewhere locally"

Data Source: HELIX Patient Management System

This measure has been included as it is the reciprocal of the previous item and was therefore deemed important to consider.

Available data indicates that, in the past year approx 660 bed days related to 58 patients from NHS A&A were treated elsewhere which equates to less than 2 beds/year.

Unlike the previous measure however this data can be linked to known patients who attend specialist centers in other Board areas that deliver services not available locally and who receive a payment for delivering these services. Although interesting to note then, there is no sense that these patients would ever be re-patriated to Ayrshire & Arran and a clear understanding that, even if they were, they would return with an appropriate "funding stream" to support alternative provision.

5.3.5 Removal of Under 18 Year Olds From Acute Adult Beds

"The impact of no under 18 year olds being admitted into adult beds"

Data Source: HELIX Patient Management System

Clinical services have recognised that it is not appropriate for clients under 18 years old to be treated in adult beds, particularly given that arrangements are in place to manage them in a more appropriate environment. This measure quantifies the number of beds currently associated with under 18 year olds being treated in adult areas and the impact that addressing this issue could have on a future bed model.

Available data indicates that the number of bed days associated with under 18 year olds in adult wards has fluctuated significantly. E.g. In 2006 under 18 YO's accounted for 1045 bed days, in 2007 736 bed days, in 2008 583 bed days, in 2009 1490 bed days and in 2010 573 bed days. The team view is that this may be attributable in part, to having had only one locum consultant historically. A situation that has now been addressed through realising full consultant capacity and an expanded clinical team through additional investment.

These would have been the equivalent of between 1.6 and 4.1 beds in total and average at 2.43 beds over the 5 years.

This impact is always on A&A AMH wards with again a sense that numbers may have begun to rise again recently.

5.4 Clinical Performance

Clinical performance elements represent the potential impact of changes in clinical practice/re-design on future capacity requirements.

5.4.1 Reduced Length of Stay

"The impact of reducing average length of stay by 10%"

Data Source: Nil, arithmetic calculation only based on clinical discussion and local performance variance (where available) only. E.g. AMH wards have had lengths of stay that vary historically between 50% and 100%.

This measure reflects the effect of reducing length of stay by 10%, which clinical services have acknowledged as a reasonable baseline target level. Calculations do not assume 100% positive impact on beds but are instead adjusted based on anticipated demographic change and optimal occupancy, i.e. A ward with 85% optimal occupancy will only realise an 8.5% reduction in beds from a projected demographic baseline based on a 10% reduction in length of stay.

Although a 10% reduction in length of stay target is presented as a constant for calculation purposes, different scenarios present alternative effects of differing lengths of stay on all services ranging from an increasing length of stay in some areas to a 20% reduction.

Whilst this measure is applied to addictions services in all scenarios it is important to note that it does not reflect the actual impact of varying the length of identified detox/rehabilitation programmes which could be regarded as separate variables worthy of separate modelling depending on on-going clinical discussion related to optimal programme duration.

5.4.2 Re-configuration of AMH, Addictions and Forensic/Low Secure Beds

"The impact of re-aligning AMH areas to ensure a more appropriate and balanced distribution of acute beds. Specifically the consolidation of 4 addictions beds currently in AMH wards into a single addictions unit and transfer of 2 existing AMH beds into forensic to better meet patient needs"

Data Source: AMH Bed Management Reports and Clinical Discussion

Extensive discussions with a wide range of clinical services identified a requirement to shift the boundaries on some existing areas in order to better meet current patient needs and ensure that future facility planning is appropriate. Presently this includes two separate elements:

- The transfer of the 4 addictions beds currently located within ward 1E at Crosshouse to a consolidated addictions facility (currently Loudon House). Impact: transfer of 4 beds from AMH wards to addictions.

- The transfer of 2 beds from AMH wards to forensic to better meet the needs of an identified patient demographic whose care needs would be better met in this area. Impact: transfer of 2 beds from AMH wards to forensic plus creation of an additional bed in forensic to manage increased length of stay.

The latter group, who clinical and bed management data indicates represent circa. 2 beds of AMH activity at any given time, are those patients who present frequently at AMH wards but whose length of stay is not sufficient to "break the cycle" of their illness resulting in continual re-admission. Their transfer to the forensic ward for a longer period is designed to address this "revolving door" admission issue but requires more than the 2 beds transferred due to the increased length of stay anticipated which is believed to be a worthwhile investment overall.

The impact of both of these changes, which are included in all future planning scenarios, is a reduction in AMH beds by 6, increase in forensic beds by 3 and increase in addictions beds by 4.

The global net change is an increase of 1 bed overall to manage longer stays in forensic.

5.4.3 Impact of 100% Single Rooms

"The impact of moving to an environment with 100% single rooms"

Data Source: Documented Assumption Based on Clinical Discussion

Current Scottish Government guidance indicates that any new build hospital facility must plan for 100% single rooms and this is consequently the proposal related to NACH.

It is important to recognise the positive benefits that 100% single rooms bring to healthcare facilities however and in particular to understand if/how the configuration has an impact on bed modelling.

Following extensive discussion, clinical services agreed that as well as improving infection control, privacy/dignity and mixed-sex ward issues, the increased flexibility associated with 100% single rooms would allow optimal occupancy to be increased without detrimental impact on services/care. This increase in acceptable occupancy has therefore been transformed into a measure of the impact of moving to 100% single rooms and as such is assumed to be "the impact of increasing optimal occupancy by 5% from the baseline".

Clearly this factor will only have an impact in those scenarios where a move to 100% single rooms is anticipated, e.g. Construction of NACH, but even then will only have an impact on those areas that are not currently 100% single rooms.

5.4.5 Impact of 90 Day Maximum Stay in AMH Wards

"The impact of acute mental health patients spending no more than 90 days in AMH wards"

Data Source: HELIX Patient Management System, AMH Bed Management Reports

Extensive clinical discussion has highlighted that patients are currently spending considerably longer in AMH wards than may be appropriate, with a notional 90 days identified as the maximum period that anyone should spend in an AMH bed before either being discharged or moved to a more appropriate environment. This measure seeks to identify the impact of realising such a change.

It should be noted that this measure is not about overall length of stay, which is considered separately, but rather about the appropriateness of the clinical environment and its ability to best meet client needs.

The only way to gather this information was through a review of all available bed management records that highlight individual patient circumstances.

As noted previously, this confirmed that it is normal to find circa 3 patients in AMH wards who are ready for discharge either to home or a nursing home and a further 7

waiting transfer to non acute mental health wards. This is therefore translated within the model as a requirement of a shift of 7 beds from acute to rehabilitation beds and the identification of 3 patients/beds who are deemed to be "delayed discharges" (recorded under the separate measure of delayed discharges).

As well as ensuring that the future bed model re-aligns clinical areas to deliver care in those specialist environments required, the discussion around this measure has also identified the opportunity to fundamentally review existing NAMH wards – where this patient group would traditionally transfer to - in order to develop a more structured rehabilitative model for all patients. E.g. A model that sees acute patients move from AMH wards to discharge or specialist areas such as "streamed rehabilitation", IPCU or forensic as a component of a structured care pathway that always demonstrates movement and active care management.

Scenarios present a range of options related to this measure from it not being achieved, through it being achieved with a less than 100% impact on other areas. .

5.4.6 Impact of "Front Door" Redesign

This column has been included in recognition of the fact that extensive work on-going around "front door services" may have an impact on mental health services, despite the fact that no information/data has been generated thus far to this effect. It does however represent an area that must be kept under review and updated in reflection of how that project develops.

5.5 Financial Performance Elements and Targets

This section has been left within the model to allow further future consideration and re-alignment but is deemed to be out with the remit of the review team at this time. It includes a number of measures that have been identified that either will have no impact on those services being reviewed, e.g. Heat targets or that require consideration at a corporate level across Ayrshire & Arran, e.g. The impact of resource transfer between sectors, savings targets, etc.

6. THE FUTURE

6.1 Scenario Planning

In order to model the range of beds required in the future a number of scenarios have been developed that present alternative assumptions related to the "future impact factors" identified. These scenarios represent the range of likely bed requirements in the future by service/specialty over a 5, 10 and 15 year period.

The scenarios developed fall into 2 basic formats:

- A range of worst case - best case scenarios. (Scenarios 1-4)
- A comparison between what NHS A&A may achieve in isolation as compared to with the targeted support of planning partners (Scenarios A & B)

It is noted that these scenarios are not exhaustive and that in reality there are untold combinations of the variables identified. It is important that they represent the full range of potential future bed numbers required however (upper and lower bounds) in order to support key decision-makers within NHS Ayrshire & Arran agreeing the bespoke combination of assumptions they intend to use to identify the actual beds they believe are required.

All scenarios are based on demographic/epidemiological impact being as forecast.

6.2 Worst-Best Case Scenarios

6.2.1 Scenario 1

Scenario 1 ("The Worst We Could Expect Without Active Management") suggests a future that sees; delayed discharges increase by 50%; out of area placements increase by 100%; all NHS A&A patients being re-patriated to Ayrshire & Arran from other Board areas; under 18 year olds continuing to be managed in adult beds at the same rate; length of stay remaining as at present in adult wards; length of stay increasing by 100% for 30% of elderly patients in reflection of increasing complexity; addictions and forensic beds being re-aligned from AMH wards; 100% single rooms not happening/having no impact; and a 90 day maximum stay not being achieved in AMH wards.

NACH	Global Impact		
	Scenario 1		
	"The Worst We Could Expect Without Active Management"		
	5 Years	10 Years	15 Years
AMH - Park Ward - Ailsa	93.4	90.3	87.3
AMH - Kyle Ward - Ailsa			
AMH - 1D - Crosshouse			
AMH - 1E - Crosshouse			
NAMH - Killochan - Ailsa	33.5	32.4	31.2
NAMH - Cloncaird/Crossraguel - Ailsa			
NAMH - Albany - Ailsa			
NAMH - Ballantrae - Ailsa			
FR - Forensic Rehabilitation	9.9	9.6	9.4
IPCU - Ailsa	7.2	7.0	6.7
EMH - Pavilion 1 - Ayrshire Central	19.9	21.8	23.7
EMH - Pavilion 2 - Ayrshire Central	18.3	20.1	21.9
ADD - Loudon House - Ailsa	13.8	13.5	13.1
MH REHAB - Glenapp - Ailsa	9.0	8.7	8.4
	205	203.3	201.7

6.2.2 Scenario 2

Scenario 2 ("Not As Much As We Might Expect") suggests a future that sees; delayed discharges remain as at present; out of area placements reduce by 50%; no NHS A&A patients being re-patriated to Ayrshire & Arran from other Board areas; A 50% reduction in under 18 year olds being managed in adult beds; length of stay remaining as at present in adult wards; length of stay increasing by 50% for 30% of elderly patients in reflection of increasing complexity; addictions and forensic beds being re-aligned from AMH wards; 100% single rooms not happening/having no impact; and a 90 day maximum stay being achieved in AMH wards with 100% impact on other wards (rehab).

NACH	Global Impact		
	Scenario 2		
	"Not As Much As We Might Expect"		
	5 Years	10 Years	15 Years
AMH - Park Ward - Ailsa	74.6	71.5	68.5
AMH - Kyle Ward - Ailsa			
AMH - 1D - Crosshouse			
AMH - 1E - Crosshouse			
NAMH - Killochan - Ailsa	33.5	32.4	31.2
NAMH - Cloncaird/Crossraguel - Ailsa			
NAMH - Albany - Ailsa			
NAMH - Ballantrae - Ailsa			
FR - Forensic Rehabilitation	9.9	9.6	9.4
IPCU - Ailsa	6.2	6.0	5.7
EMH - Pavilion 1 - Ayrshire Central	17.6	19.3	21.0
EMH - Pavilion 2 - Ayrshire Central	16.2	17.8	19.3
ADD - Loudon House - Ailsa	13.8	13.5	13.1
MH REHAB - Glenapp - Ailsa	16.0	15.7	15.4
	187.8	185.7	183.7

6.2.3 Scenario 3

Scenario 3 ("What We Might Expect?") suggests a future that sees; delayed discharges reduced by 50%; out of area placements reduce by 100%; no NHS A&A patients being re-patriated to Ayrshire & Arran from other Board areas; All under 18 year olds being managed out with adult beds; length of stay reducing by 10% on average across adult wards; length of stay remaining the same on average across elderly wards; addictions and forensic beds being re-aligned from AMH wards; 100% single rooms happening within 5 years and having the impact projected (increases acceptable occupancy by 5%); and a 90 day maximum stay being achieved in AMH wards with only a 50% impact on other wards (rehab).

NACH	Global Impact		
	Scenario 3		
	"What We Might Expect"		
	5 Years	10 Years	15 Years
AMH - Park Ward - Ailsa	63.2	56.7	54.1
AMH - Kyle Ward - Ailsa			
AMH - 1D - Crosshouse			
AMH - 1E - Crosshouse			
NAMH - Killochan - Ailsa	30.5	28.0	27.0
NAMH - Cloncaird/Crossraguel - Ailsa			
NAMH - Albany - Ailsa			
NAMH - Ballantrae - Ailsa			
FR - Forensic Rehabilitation	9.2	8.7	8.5
IPCU - Ailsa	5.6	5.1	4.9
EMH - Pavilion 1 - Ayrshire Central	15.3	16.1	17.5
EMH - Pavilion 2 - Ayrshire Central	14.1	14.8	16.1
ADD - Loudon House - Ailsa	12.9	12.2	11.9
MH REHAB - Glenapp - Ailsa	15.2	14.5	14.3
	166.0	156.1	154.2

6.2.4 Scenario 4

Scenario 4 (“The Absolute Best We Might Achieve With Pro-active Management?”) suggests a future that sees; delayed discharges reduced by 100%; out of area placements reduce by 100%; no NHS A&A patients being re-patriated to Ayrshire & Arran from other Board areas; All under 18 year olds being managed out with adult beds; length of stay reducing by 20% on average across all ward areas; addictions and forensic beds being re-aligned from AMH wards; 100% single rooms happening within 5 years and having the impact projected (increases acceptable occupancy by 5%); and a 90 day maximum stay being achieved in AMH wards with only a 50% impact on other wards (rehab).

NACH	Global Impact		
	Scenario 4		
	"The Absolute Best We Might Achieve With Pro-active Management"		
	5 Years	10 Years	15 Years
AMH - Park Ward - Ailsa	54.1	47.8	45.5
AMH - Kyle Ward - Ailsa			
AMH - 1D - Crosshouse			
AMH - 1E - Crosshouse			
NAMH - Killochan - Ailsa	27.5	25.1	24.2
NAMH - Cloncaird/Crossraguel - Ailsa			
NAMH - Albany - Ailsa			
NAMH - Ballantrae - Ailsa			
FR - Forensic Rehabilitation	8.6	8.0	7.9
IPCU - Ailsa	5.0	4.5	4.3
EMH - Pavilion 1 - Ayrshire Central	12.7	13.2	14.4
EMH - Pavilion 2 - Ayrshire Central	11.7	12.2	13.2
ADD - Loudon House - Ailsa	12.0	11.3	11.1
MH REHAB - Glenapp - Ailsa	14.4	13.8	13.5
	145.9	135.9	134.0

6.3 NHS / Planning Partner Scenarios

6.3.1 Scenario A

Scenario A ("What We Might Achieve Without Targeted Support From Planning Partners") suggests a future that sees; delayed discharges and out of area placements continuing as at present; no NHS A&A patients being re-patriated to Ayrshire & Arran from other Board areas; 75% less under 18 year olds being managed out with adult beds; length of stay reducing by 10% on average across all ward areas; addictions and forensic beds being re-aligned from AMH wards; 100% single rooms happening within 5 years and having the impact projected (increases acceptable occupancy by 5%); and a 90 day maximum stay being achieved in AMH wards with a 100% impact on other wards (rehab).

NACH	Global Impact		
	Scenario A		
	"What we might achieve without targetted support from planning partners"		
	5 Years	10 Years	15 Years
AMH - Park Ward - Ailsa	67.3	60.8	58.2
AMH - Kyle Ward - Ailsa			
AMH - 1D - Crosshouse			
AMH - 1E - Crosshouse			
NAMH - Killochan - Ailsa	30.5	28.0	27.0
NAMH - Cloncaird/Crossraguel - Ailsa			
NAMH - Albany - Ailsa			
NAMH - Ballantrae - Ailsa			
FR - Forensic Rehabilitation	9.2	8.7	8.5
IPCU - Ailsa	5.6	5.1	4.9
EMH - Pavilion 1 - Ayrshire Central	14.0	14.6	15.9
EMH - Pavilion 2 - Ayrshire Central	12.9	13.5	14.7
ADD - Loudon House - Ailsa	12.9	12.2	11.9
MH REHAB - Glenapp - Ailsa	15.2	14.5	14.3
	167.6	157.4	155.3

6.3.2 Scenario B

Scenario B ("What We Might Achieve With The Full Support of All Planning Partners") suggests a future that sees; delayed discharges and out of area placements reduced by 100%; no NHS A&A patients being re-patriated to Ayrshire & Arran from other Board areas; 75% less under 18 year olds being managed out with adult beds; length of stay reducing by 15% on average across all ward areas; addictions and forensic beds being re-aligned from AMH wards; 100% single rooms happening within 5 years and having the impact projected (increases acceptable occupancy by 5%); and a 90 day maximum stay being achieved in AMH wards with only a 50% impact on other wards (rehab).

NACH	Global Impact		
	Scenario B		
	"What we might achieve with the full support of all planning partners"		
	5 Years	10 Years	15 Years
AMH - Park Ward - Ailsa	58.5	52.1	49.6
AMH - Kyle Ward - Ailsa			
AMH - 1D - Crosshouse			
AMH - 1E - Crosshouse			
NAMH - Killochan - Ailsa	29.0	26.5	25.6
NAMH - Cloncaird/Crossraguel - Ailsa			
NAMH - Albany - Ailsa			
NAMH - Ballantrae - Ailsa			
FR - Forensic Rehabilitation	8.9	8.4	8.2
IPCU - Ailsa	5.3	4.8	4.6
EMH - Pavilion 1 - Ayrshire Central	13.3	13.9	15.1
EMH - Pavilion 2 - Ayrshire Central	12.3	12.8	14.0
ADD - Loudon House - Ailsa	12.5	11.8	11.5
MH REHAB - Glenapp - Ailsa	14.8	14.1	13.9
	154.6	144.5	142.5

6.4 Summary of Scenarios

Appendix D summarises data from all of the scenarios presented by bed type, indicating trends and 5, 10 and 15 year projections. In addition the table below summarises key values that include existing bed complement, amended baseline bed complement and proposed OBC bed complement as well as the highest, lowest and average bed complement per bed type/area as forecast at 15 years.

NACH	Current		OBC	15 Year Projection		
	Existing	Amend'	Prop'	Low	High	Av
AMH - Park Ward - Ailsa	92	92	88	45.5	87.3	60.5
AMH - Kyle Ward - Ailsa						
AMH - 1D - Crosshouse						
AMH - 1E - Crosshouse						
NAMH - Killochan - Ailsa	30	34	30	24.2	31.2	27.7
NAMH - Clochcaird/Crossraguel - Ailsa						
NAMH - Albany - Ailsa						
NAMH - Ballantrae - Ailsa						
FR - Forensic Rehabilitation/low secure	10	7	10	7.9	9.4	8.6
IPCU - Ailsa	7	7	8	4.3	6.7	5.2
EMH - Pavilion 1 - Ayrshire Central	18	14	15	14.4	23.7	17.9
EMH - Pavilion 2 - Ayrshire Central	18	13	15	13.2	21.9	16.5
ADD - Loudon House - Ailsa	12	10	15	11.1	13.1	12.1
MH REHAB - Glenapp - Ailsa	12	9	12	8.4	15.4	13.3
TOTAL (NACH Elements)	199	186	193	128.9	208.7	161.9

Non NACH	Current		OBC	15 Year Projection		
	Existing	Amend'	Prop'	Lowest	Highest	Average
Arrol Park - Learning Disability (Treatment/Assm) - Ayr	18	14		14	16	15
EMH - Clonbeith (Continuing Care) - Ailsa	16	11		11	15	13
EMH - Croy House (Functional Assm) - Ailsa	14	10		10	13	11.5
EMH - Dunure (Organic Assm) - Ailsa	22	16		16	21	18.5
EMH - Iona (Continuing Care) - Ailsa	12	8		8	12	10
EMH - Jura/Brodick House (Continuing Care) - Ailsa	20	13		13	17	15
EMH - Lewis/Brodick House (Continuing Care)	9	6		6	8	7
EMH - Marchburn (Continuing Care) - EACH	13	10		10	13	11.5
EMH - Pennelburn (Continuing Care) - EACH	12	9		9	12	10.5
TOTAL (Non NACH Elements)	136	97		97	127	112

OVERALL TOTAL	335	283		225.9	335.7	273.9

It should be noted that:

- the NACH component of this table does not include beds in Cumbrae Lodge whose bed numbers were not considered in this review
- future non NACH projections have been based on anticipated change in modeled NACH elderly mental health beds,

- Arrol Park data should be treated with extreme caution as NO modelling has been undertaken at this time relating to learning disability services as this is currently the subject of a separate piece of work
- "Average" projections at 15 years are based on the 6 scenarios modeled for NACH services and highest and lowest projections for non-NACH services. They should not therefore be considered to have particular statistical significance.

7. CONCLUSIONS

In consideration of all of the scenarios modeled, which it must again be acknowledged may not reflect the specific future that NHS Ayrshire & Arran wish to plan for, it is possible to see:

- A general reducing trend in acute mental health bed requirements from the existing baseline due to demographic shift and the need to transfer some beds to more specialist/different areas, e.g. Rehabilitation and elderly
    - All scenarios – even the worst case – show AMH care manageable within the existing bed complement for the next 15 years
    - Most scenarios show AMH care manageable with 1 ward less than at present based on improved performance
    - Best scenarios indicate the possibility for AMH beds to drop by 50% within 15 years
    - Most scenarios see elements of existing AMH services being invested in alternative areas, e.g. forensic and rehabilitation to better meet patient needs

- A general increasing trend in the bed numbers required to support elderly areas from the "new baseline" calculated but, within 80% of scenarios, to a point that could still be managed within existing overall elderly bed complement and always within the current global bed complement.
    - Current NACH EMH wards have 36 beds, with the worst-case scenario suggesting a requirement for 46 beds at 15 years.
    - Scenarios 3,4, A and B never exceed the existing available elderly beds for NACH specialties
    - None of the scenarios ever exceed available capacity within non NACH specialties
    - None of the scenarios ever require more beds than are available to all of the services at present

- That significant opportunity exists to go beyond simply re-defining bed numbers within existing areas in order to fundamentally review the purpose and role of key future bedded areas and create the services required rather than provided historically, e.g. To dispense with vague "non acute mental health" beds in favour of streamed rehabilitation facilities that impart a sense of positive movement, progression and rehabilitation.

- An overall requirement, even at the end of the 15 year period projected, for less beds overall than at present largely due to improved clinical practice, demographic change and the opportunity to make better use of available capacity than at present.

- A requirement for fundamental re-configuration of existing bedded resources to ensure that they represent the optimal balance between both general and specialist roles as well as available capacity and revenue cost.

8. EMERGING QUESTIONS

In reviewing the high level conclusions presented, even in the absence of a definitive and accepted bed model it is possible to highlight a range of questions that these conclusions may give rise to as a preferred theoretical bed model is transformed into an actual physical configuration and plan. These are likely to include:

- What are the preferred range of variables to be used in the definitive bed model that will form the basis for future strategic and facility planning?

- If the suggestion that AMH bed numbers are lower than currently required - and expected to reduce further - is accepted, how and where should future re-configured wards be located given the existing distribution between Crosshouse and Ailsa?

- Recognising a net over provision of elderly mental health beds at present, some of which are likely to be required within the next 15 years, what are the options available to the Board?

- In recognition of the small numbers of beds in key areas such as forensic and IPCU does the Board need to consider how these services are configured/co-located in the future?

- What impact will this revised model have on staffing and other revenue resources related to bed complement and how will this be agreed?

- In recognition of the fact that investment in other services is likely to be required to realise those improvements modeled, e.g. Reduced length of stay, what impact will this revised model have on staffing and other revenue resources out with the existing bed model?

APPENDIX A BED MODELLING SUMMARY SHEET

See separate Spreadsheet

APPENDIX B PROCESS PARTICIPANTS TO DATE

Joan	Barber	Consultant Psychiatrist
Derek	Barron	Associate Nurse Director, Mental Health Services
Linda	Boyd	Healthcare Manager, Adult Mental Health Services
Dawn	Carson	Consultant Forensic Psychiatrist, Psychiatry
Jim	Crichton	Director of Mental Health Services
Maire	Currie	Healthcare Manager, Older People and Vulnerable Adults
Kirsti	Dickson	Head of Health Economics
Ken	Emmerson	Head of Information Services
Carol	Fisher	Healthcare Manager, Specialist Mental Health Services
Maria	Gilfedder	Senior Nurse Adult Mental Health In Patient & Forensic Service
Pete	Gilfedder	Senior Nurse Addiction Services
Morag	Henderson	Clinical Director, Adult Mental Health In-patient and Forensic
Philip	Korsah	Clinical Director for Anaesthesia (Crosshouse), Consultant in Anaesthesia & Intensive Care Medicine
William	Lauder	Clinical Nurse Manager Non-Acute In-Patient & Forensic Services
Anne	Lee	Specialist Team Manager, Addiction Services
Isabel	Marr	Service Manager, Elderly Mental Health Services
Elaine	McClure	Project Implementation Manager, Mental Health Services
Margaret	McEwan	Service Manager, Adult In-Patient & Forensic Services
Crawford	McGuffie	Associate Medical Director, Integrated Care and Partner Services
Gordon	McKay	Staff Side Representative
Hugh	McMillan	Consultant Geriatrician
Seamus	McNulty	Consultant Psychiatrist/Clinical Director, Elderly Mental Health Services
Liz	Moore	Healthcare Director - Integrated Care and Emergency Services
Owen	Moseley	Trainee Health Economist
Lynne	Murray	Acting Clinical Nurse Manager, Acute Adult In-Patient Services
Angela	O'Neill	Associate Nurse Director, Integrated Care and Partner Services
Richard	O'Rourke	Resource Centre Co-ordinator, Arrol Park
Jeremy	Stirling	Consultant Psychiatrist/Clinical Lead in Addictions
Andy	Swanson	Senior Nurse, Elderly Mental Health Services
John	Taylor	Associate Nurse Director, Mental Health Services
Mandy	Yule	Healthcare Director - Integrated Care and Partner Services

APPENDIX C POPULATION PROJECTIONS

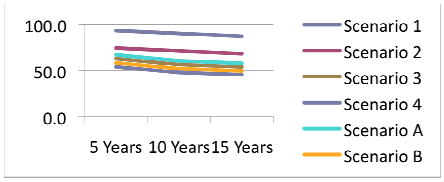
GRO POPULATION PROJECTIONS: NHS AYRSHIRE & ARRAN

Age group	2008 Persons	2013 Persons	2018 Persons	2023 Persons	2028 Persons	2033 Persons
All Ages	**367.5**	**368.6**	**368.5**	**367.6**	**365.1**	**360.3**
		100.0	**100.0**	**100.0**	**100.0**	**100.0**
0-15	64.8	62.8	63.1	62.8	60.8	58.4
%change (2008 base)		100.0	100.0	100.0	100.0	100.0
16-29	59.8	61.8	57.7	52.9	51.5	52.1
%change (2008 base)		100.0	100.0	100.0	100.0	100.0
30-49	99.1	90.7	84.1	82.4	83.9	82.1
%change (2008 base)		100.0	100.0	100.0	100.0	100.0
50-64	75.8	77.3	80.1	78.9	70.1	61.5
%change (2008 base)		100.0	100.0	100.0	100.0	100.0
65-74	37.4	42.1	45.1	45.1	47.5	50.1
%change (2008 base)		100.0	100.0	100.0	100.0	100.0
75+	30.5	33.9	38.4	45.6	51.3	56.0
%change (2008 base)		100	100	100	100	100
16 -65	234.7	229.8	221.9	214.2	205.4	195.8
Relative Change (%) (2008 base)	100	97.9	94.5	91.3	87.5	83
65+	68.0	76.0	83.5	90.7	98.8	106.1
Relative Change (%) (2008 base)	100.0	111.8	122.8	133.4	145.3	156.0

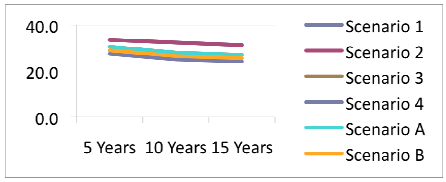
APPENDIX D SCENARIO SUMMARY BY BED TYPE

SCENARIO SUMMARY BY BED TYPE

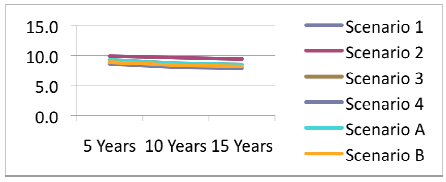
AMH	5 Years	10 Years	15 Years
Scenario 1	93.4	90.3	87.3
Scenario 2	74.6	71.5	68.5
Scenario 3	63.2	56.7	54.1
Scenario 4	54.1	47.8	45.5
Scenario A	67.3	60.83	58.2
Scenario B	58.5	52.14	49.64



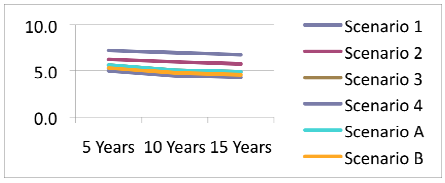
NAMH	5 Years	10 Years	15 Years
Scenario 1	33.5	32.4	31.2
Scenario 2	33.5	32.4	31.2
Scenario 3	30.5	28.0	27.0
Scenario 4	27.5	25.1	24.2
Scenario A	30.5	28.0	27.0
Scenario B	29.0	26.5	25.6



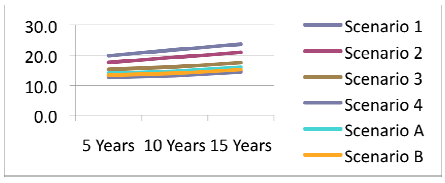
Forensic	5 Years	10 Years	15 Years
Scenario 1	9.9	9.6	9.4
Scenario 2	9.9	9.6	9.4
Scenario 3	9.2	8.7	8.5
Scenario 4	8.6	8.0	7.9
Scenario A	9.2	8.7	8.5
Scenario B	8.9	8.4	8.2



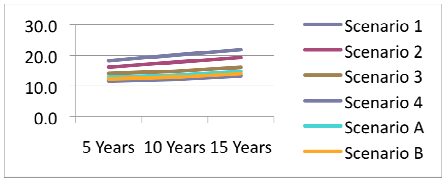
IPCU	5 Years	10 Years	15 Years
Scenario 1	7.2	7.0	6.7
Scenario 2	6.2	6.0	5.7
Scenario 3	5.6	5.1	4.9
Scenario 4	5.0	4.5	4.3
Scenario A	5.6	5.1	4.9
Scenario B	5.3	4.8	4.6



EMH P1	5 Years	10 Years	15 Years
Scenario 1	19.9	21.8	23.7
Scenario 2	17.6	19.3	21.0
Scenario 3	15.3	16.1	17.5
Scenario 4	12.7	13.2	14.4
Scenario A	14.0	14.6	15.9
Scenario B	13.3	13.9	15.1

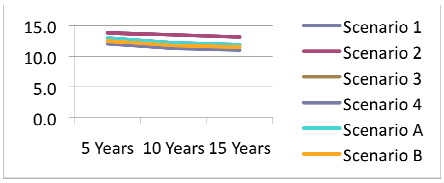


EMH P2	5 Years	10 Years	15 Years
Scenario 1	18.3	20.1	21.9
Scenario 2	16.2	17.8	19.3
Scenario 3	14.1	14.8	16.1
Scenario 4	11.7	12.2	13.2
Scenario A	12.9	13.5	14.7
Scenario B	12.3	12.8	14.0

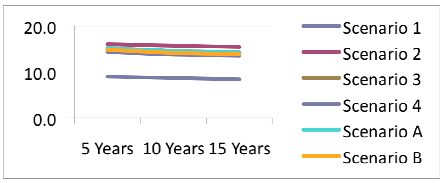


APPENDIX D SCENARIO SUMMARY BY BED TYPE

Addictions	5 Years	10 Years	15 Years
Scenario 1	13.8	13.5	13.1
Scenario 2	13.8	13.5	13.1
Scenario 3	12.9	12.2	11.9
Scenario 4	12.0	11.3	11.1
Scenario A	12.9	12.2	11.9
Scenario B	12.5	11.8	11.5



MH Rehab	5 Years	10 Years	15 Years
Scenario 1	9.0	8.7	8.4
Scenario 2	16.0	15.7	15.4
Scenario 3	15.2	14.5	14.3
Scenario 4	14.4	13.8	13.5
Scenario A	15.2	14.5	14.3
Scenario B	14.8	14.1	13.9



NHS Ayrshire & Arran Mental Health Bed Modelling Summary Sheet

NACH	Baseline Assumptions					Baseline Data		Local Performance Indicators			
	Current (Physical) Bed Numbers	Current Bed Numbers By Area	Average Staffed Bed Numbers	Theoretical Days Available/ Bed (PA)	Theoretical Bed Days Available PA	Actual Bed Days Available	Occupied Bed Days	Throughput (patients/ bed/ per year)	Turnover Interval (days)	ALS from local calculations	Occupancy from local calculations
AMH - Park Ward - Ailsa	23	92	23	365	8395	8418	7356	8.63	5.34	36.96	87.38%
AMH - Kyle Ward - Ailsa	23		23	365	8395	8399	7016	12.69	4.74	24.03	83.53%
AMH - 1D - Crosshouse	23		23	365	8395	8405	7115	12.72	4.4	24.28	84.65%
AMH - 1E - Crosshouse	23		23	365	8395	8405	7026	16.59	3.61	18.39	83.59%
NAMH - Killochan - Ailsa	30	30	44	365	16060	19030	13357	0.38	333	785	70%
NAMH - Clochcaird/Crossraguel - Ailsa											
NAMH - Albany - Ailsa											
NAMH - Ballantrae - Ailsa											
FR - Forensic Rehabilitation/low secure	10	10	10	365	3650	3650	1825				
IPCU - Ailsa	7	7	7	365	2555	2557	2292	7.85	4.82	41.67	89.64%
EMH - Pavilion 1 - Ayrshire Central	18	18	18	365	6570	6570	4240	3.06	42.36	77.09	64.54%
EMH - Pavilion 2 - Ayrshire Central	18	18	18	365	6570	6570	3910	3.44	42.9	63.06	59.51%
ADD - Loudon House - Ailsa	12	12	12	365	4380	3768	3061	8.62	7.94	34.39	81.24%
MH REHAB - Glenapp - Ailsa	12	12	12	365	4380	4380	3027	0.5	225.5	504.5	69.11%
		199	213								

Non NACH	Baseline Assumptions					Baseline Data		Local Performance Indicators			
	Current (Physical) Bed Numbers	Current Bed Numbers By Area	Average Staffed Bed Numbers	Theoretical Days Available/ Bed (PA)	Theoretical Bed Days Available PA	Actual Bed Days Available	Occupied Bed Days	Throughput (patients/ bed/ per year)	Turnover Interval (days)	ALS from local calculations	Occupancy from local calculations
Arrol Park - Learning Disability (Treatment/Assm) -	18	18	18	365	6570	10220	6039	1.1	139.8	189.9	59.09%
EMH - Clonbeith (Continuing Care) - Ailsa	16	16	16	365	5840	5110	3055	0.64	215.4	352.3	59.78%
EMH - Croy House (Functional Assm) - Ailsa	14	14	14	365	5110	5110	3167	4.6	31	48	61.98%
EMH - Dunure (Organic Assm) - Ailsa	22	22	22	365	8030	8030	4922	3.4	45.4	61.7	59.95%
EMH - Iona (Continuing Care) - Ailsa	12	12	12	365	4380	3650	2349	0.24	851.5	669.3	62.74%
EMH - Jura/Brodick House (Continuing Care) - Ails	20	20	20	365	7300	6570	3942	0.81	208.5	238.8	59.97%
EMH - Lewis/Brodick House (Continuing Care)	9	9	9	365	3285	3650	2306	0.68	0	534.8	63.18%
EMH - Marchburn (Continuing Care) - EACH	13	16	13	365	4745	4745	3143	2.88	41.9	84.5	66.24%
EMH - Pennelburn (Continuing Care) - EACH	12		12	365	4380	4380	2806	1.39	93.6	168.8	64.06%
Cumbrae Lodge	45										
		181									

Amended Baseline Requirements				National (Benchmark) Performance Indicators				Impact of Demographic Change Elements								
Optimal Occupancy (%)	Baseline Bed Numbers Required	Difference	Baseline Bed Numbers Required By Area	Throughput	Turnover Interval	Mean LOS (Bed DaysEpisode)	Percentage Occupancy	Population Profile			Epidemiological Change			Removal Of Delayed Discharges		
								<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years
85%	23.64	1	92	7.5		40.2	83%	-1.9	-5.0	-8.0	0	0	0	-3	-3	-3
85%	22.60	0														
85%	22.91	0														
85%	22.62	0														
90%	34	-10	34					-0.7	-1.9	-3.0	0	0	0	0	0	0
95%	7	-3	7					-0.1	-0.4	-0.6	0	0	0	0	0	0
85%	7	0	7	1.4		224.1	86%	-0.2	-0.4	-0.6	0	0	0	0	0	0
85%	14	-4	14	2		138.5	75%	1.6	3.1	4.6	0	0	0	0	0	0
85%	13	-5	13	2		138.5	75%	1.5	2.9	4.2	0	0	0	0	0	0
90%	10	-2	10					-0.2	-0.5	-0.9	0	0	0	0	0	0
90%	9	-3	9					-0.2	-0.5	-0.8	0	0	0	0	0	0
		-27	186													

Amended Baseline Requirements				National (Benchmark) Performance Indicators				Impact of Demographic Change Elements								
Optimal Occupancy (%)	Baseline Bed Numbers Required	Difference	Baseline Bed Numbers Required By Area	Throughput	Turnover Interval	Mean LOS (Bed DaysEpisode)	Percentage Occupancy	Population Profile			Epidemiological Change			Removal Of Delayed Discharges		
								<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years
75%	14	-4	14					-0.3	-0.8	-1.2	0	0	0	0	0	0
90%	11	-5	11					1.3	2.4	3.5	0	0	0	0	0	0
85%	10	-4	10					1.2	2.3	3.4	0	0	0	0	0	0
85%	16	-6	16					1.8	3.5	5.2	0	0	0	0	0	0
90%	8	-4	8					1.0	1.9	2.8	0	0	0	0	0	0
90%	13	-7	13					1.6	3.0	4.5	0	0	0	0	0	0
90%	6	-3	6					0.7	1.4	2.1	0	0	0	0	0	0
90%	10	-3	10					1.1	2.2	3.2	0	0	0	0	0	0
90%	9	-3	9					-2.1	-1.4	-0.8	0	0	0	0	0	0
			97													

Impact Of Corporate Performance Elements												Impact of Clinical Performance Elements															Impact of Financial Performance El						
Removal of Boarders			Removal of "Out of Area Placements"			Repatriation of Patients To A&A			Removal of under 18 year olds from AMH Beds			Reduce Bed Days Required/LOS By 10%			Re-configuration of AMH, Addiction and Low Secure Beds			Impact of 100% Single Rooms			Impact of 90 day Maximum Stay In Acute MH Wards			Impact of "Front Door" Redesign			Impact of Integrated Resource Framework/ Resource Transfer Monies			Resource Transfer Associated With "Re-Shaping Care For Older People"			HE Reduct to Tre
<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years
0	0	0	-2	-2	-2	1	1	1	-2.5	-2.5	-2.5	-7.6	-7.4	-7.1	-6	-6	-6	0	-3.7	-3.6	-7	-7	-7	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-3.0	-2.9	-2.8	0	0	0	0	-1.5	-1.4	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.7	-0.6	-0.6	3	3	3	0	-0.3	-0.3	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.6	-0.6	-0.6	0	0	0	0	-0.3	-0.3	-1	-1	-1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-1.3	-1.4	-1.5	0	0	0	0	-0.7	-0.8	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-1.2	-1.3	-1.4	0	0	0	0	-0.7	-0.7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.9	-0.9	-0.8	4	4	4	0	-0.4	-0.4	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.8	-0.8	-0.8	0	0	0	0	-0.4	-0.4	7	7	7	0	0	0	0	0	0	0	0	0	0

Impact Of Corporate Performance Elements												Impact of Clinical Performance Elements															Impact of Financial Performance El						
Removal of Boarders			Removal of "Out of Area Placements"			Repatriation of Patients To A&A			Removal of under 18 year olds from AMH Beds			Reduce Length of Stay/ Tx Programmes By 10%			Re-configuration/ Re-design of Addiction Services			Impact of 100% Single Rooms			Impact of 90 day Maximum Stay In Acute MH Wards			Impact of "Front Door" Redesign			Impact of Integrated Resource Framework/ Resource Transfer Monies			Resource Transfer Associated With "Re-Shaping Care For Older People"			HE Reduct to Tre
<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years	<10 Years	<15 Years	<5 Years
0	0	0	0	0	0	0	0	0	0	0	0	-1.2	-1.0	-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-1.0	-1.2	-1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-1.0	-1.1	-1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-1.5	-1.6	-1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.8	-0.9	-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-1.3	-1.5	-1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.6	-0.7	-0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.9	-1.1	-1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-0.6	-0.6	-0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ements and Targets				
EAT Target tion in Referral eatment Time		Other Corporate Savings/ Targets		
<10 Years	<15 Years	<5 Years	<10 Years	<15 Years
0	0			
0	0			
0	0			
0	0			
0	0			
0	0			
0	0			

Global Impact		
<5 Years	<10 Years	<15 Years
-29.1	-35.6	-38.2
-3.7	-6.2	-7.2
2.2	1.7	1.5
-1.8	-2.3	-2.5
0.3	1.0	2.2
0.3	0.9	2.1
-1.1	2.2	1.9
6.0	5.3	5.1
-26.845	-33.045	-35.169

ements and Targets				
EAT Target tion in Referral eatment Time		Other Corporate Savings/ Targets		
<10 Years	<15 Years	<5 Years	<10 Years	<15 Years
0	0			
0	0			
0	0			
0	0			
0	0			
0	0			
0	0			
0	0			
0	0			

Global Impact		
<5 Years	<10 Years	<15 Years
-1.5	-1.8	-2.2
0.2	1.2	2.3
0.2	1.3	2.3
0.4	1.9	3.4
0.2	1.0	1.8
0.3	1.6	2.9
0.1	0.7	1.4
0.2	1.1	2.0
-2.6	-2.1	-1.5

Key: AMH (Adult Mental Health), NAMH (Non Acute Mental Health), IPCU, LS (Low Secure), EMH (Elderly Mental Health), ADD (Addictions Mental Health)

NOTE: THIS DOCUMENT DOES NOT PRESENT A BED MODEL, RATHER IT PRESENTS THE MAXIMUM IMPACT OF A RANGE OF FACTORS THAT MAY INFLUENCE A BED MODEL
NOTE: THIS DOCUMENT IS PESENTED WHOLLY TO SUPPORT FUTURE SCENARIO PLANNING
DATA
Data relates to 3 calander years (2008, 2009, 2010)
Source HELIX (Pt Management System - active since 2008)

FORMULAE
Yellow cells contain client generated data, including that calculated using establish formulae
Pink cells contain data generated by formula within this spreadsheet
Theoretical bed days available = current staffed bed numbers x days available PA
Actual bed days available = (bed complement x 365) - lent beds + borrowed beds + temporary beds
Average LOS = occupied bed days/discharges + deaths + transfers Out)
Throughput = in-patient discharges/average number of available staffed beds
Turnover interval = available staffed bed days - occuppied bed days/in-patient discharges

Additional Points of Note
Occupied bed are days based on a single 12MN bed return
Optimal occupancy data is based on clinical agreement
Differences between actual and theoretical bed days available are all explained through changes in bed numbers over the period of the data
Turnover interval of circa 4 days in AMH areas tends to indicate that bed numbers are not limiting admissions, i.e. Even areas with high occupancy have beds at key times
Ward 1E currently includes 4 x de-tox beds with a short LOS (??Manifests as increased number of discharges PA?)
NAMH beds have been consolidated in this version to address changing ward/bed profiles across the data (Breakdown data is available separately but is of limited use for this reason)
Forensic/low Secure area is a new concept with no reliable historical data available.
Low secure baseline calculated using formaula: Av Bed days per year in Ayr Clinic/365 +2 beds for Rowan Bank step down + 1 bed for unmet need from prisons + 5% operational flexibility
Low secure beds = 3.7+2+1 + 5% = 7 beds
Red cells represent areas where specific questions are warranted to validate results, e.g. Areas where theoretical data does not match actual
Marchburn and Penelburn wards have amalgamated since this data was generated and dropped to 16 beds combinned (From 25)

Assessed quality of projected information:

Based on best estimates/new "targets"
Based on available projected data/established "targets"
Based on actual recorded data

Appendix 2E

FM Brief

North Ayrshire Community Hospital

"Soft" FM Services Brief (DRAFT)

Supported by:

BUCHAN ASSOCIATES LTD

24 October 2011 Version 17.0

Version control

Date of this revision: 24 October 2011
Date of Next revision: TBC

Revision date	Previous revision date	Summary of Changes	Changes marked
26/04/10	09/04/10	Reviewed draft document with FM Strategy Group at meeting. TSSU changed to CDU, Appendices amended.	Version 9.0
		Estates (Iain McInally) and Procurement (Jim Cockburn) to provide appendices by Friday 30 April.	To do
10/05/10	26/04/10	Corporate Services overview provided by Andrew Elliott Estates overview provided by John McCallum	Version 10.0
11/05/10	10/05/10	Support Services update from Morag Moore (verbally discussed and amended with Janice Gillan)	Version 11.0
20/05/10	11/05/10	Appendix N - List of vehicles/journeys from procurement at ACH revised	Version 12.0
24/05/10	20/05/10	Cash machine text inserted from Anne Thomson	Version 13.0
25/05/10	24/05/10	Comments from Elaine Steel incorporated. Appendices A, B and C deleted, table of contents updated	Version 14.0
24/06/10	25/05/10	Amended cashier section to include Ailsa staff	Version 15.0
01/07/10	24/06/10	Comments from George Lightbody incorporated.	Version 16.0
24/10/11	24/06/10	Updated to reflect exemplar design development.	Version 17.0

Table of contents

1. Strategic Context

1.1 NHS Ayrshire & Arran's Property Strategy

NHS Ayrshire and Arran in partnership with local authorities and a range of other stakeholders in health, community and social care have developed a property strategy that identifies, in broad terms, their property needs for the foreseeable future. This strategy is based on a hub and spoke model that sees specialist centres supported by community hospitals which are in turn supported by a network of resource centres, health centres, community clinics and independent contractor premises.

The property strategy foresees the proposed service configuration at each "Hub" being focused around:

- A comprehensive range of primary care services including more specialist primary care services
- GP Acute, intermediate, mental illness and continuing care inpatients
- Minor-intermediate surgery services
- Outpatient consulting and day services
- Minor injury services
- Bases for extended primary care teams
- General Practice specialties
- Access to out-of-hours services
- Primary care – pharmacy, dental and optical services
- Integrated health and social outreach teams

This is entirely consistent with the current approach to community hospitals and their service configuration as per 'Developing Community Hospitals, A Strategy for Scotland' (Scottish Executive, 2006).

The new North Ayrshire Community Hospital (NACH – a "working" title only) based within the grounds of the existing Ayrshire Central Hospital (Fig 1, below) is being developed as one such hub.

Fig.1. Ayrshire Central Hospital: Aerial View

This briefing document describes the Facility Management (FM) requirements of the global NACH site (as represented by the overall combination of new build and retained accommodation).

It is consequently presented in a number of different sections that broadly relate to:

- The strategic context
- An overview of the facility, including service/design principles, concepts, relationships, etc
- More detailed descriptions of individual components of FM services in the context of the current and proposed facility.

It should be noted that this FM brief relates solely to “soft” FM briefing considerations around the facility and that it is only one component of a wider suite of documents that provide the detailed descriptions required.

1.2 Bed/Service Modelling

The range/volume of services specified/scheduled within this document are based on agreed service modelling data. This modelling data has been generated from a wide range of reviews including:

- Detailed current and future bed modelling related to all services
- A detailed analysis of all current and future outpatient activity as well as the services/locations available to support this
- A review of current and future office, meeting and administrative requirements in the context of new buildings and retained estate

All data collected/reviewed has been analysed in the context of existing local and national strategies on a single, service-wide health/social services perspective to ensure the provision of appropriately sized/configured areas that recognise current and future service delivery trends.

Although deemed to be robust, this data does not in any way negate the requirement for the new facility to be as flexible as possible to meet as yet unknown future care needs/trends.

Specific planning data/assumptions are included in the individual service templates presented as Appendices.

2. Facility overview

2.1 Retained Estate

The new NACH facility will feature a significant new build element that is described within wider briefing documentation as well as an extensive retained estate. Services that will continue to be delivered from retained estate include:

- Those delivered from Pavilions 10 and 11 and the Douglas Grant Rehabilitation Unit
- Diagnostics (within the Horseshoe building)
- General outpatients (Within the Horseshoe building)
- Offices, including clinical staff offices (Within the Horseshoe building)
- Most support services (Various locations)
- Production kitchen and main staff dining areas

It is consequently noted that creating the optimal relationship between new and retained facilities is seen as a key design challenge associated with this project. Specifically, the whole facility must be seen and operate as a cohesive unit, with appropriate safe “links” identified to/from existing facilities and the new build.

This challenge is made all the more difficult when recognising the wide range of different patient groups that will eventually be located on the site, many of whom have very different care/environmental needs and the fact that FM services will need to continue to service a wide range of buildings/service delivery locations.

2.2 New Build Component

The new build component of the NACH is as identified in the relevant Schedule of Accommodation (S of A) for the project. In summary this includes:

- A main entrance with reception areas, waiting space, security/porters accommodation, café, small retail outlet, toilets, spiritual care area and other supporting space as appropriate.
- Outpatient clinic/consultation areas that will supplement existing out-patient areas within the current out-patient department, primarily supporting the full range of mental health and psychology-related OP/consulting activity but also capable of hosting “general-type” out-patient consulting as required.
- An ECT facility with treatment and recovery spaces that will also be used as clinic accommodation for AHP services and potentially as a minor surgical procedures area. (Functions changing on a sessional basis)
- A pharmacy/dispensary area
- A meeting/tribunal area, located close to out-patients that, as well as delivering a dedicated tribunal function, will combine with out-patient group rooms to deliver a meeting room suite function servicing the whole facility.

- In-patient ward areas arranged in a number of clinically appropriate "clusters" around shared support "clusters" including:

    - 3 x 20 bed acute mental health (AMH) wards
    - 1 x 10 bed addictions ward
    - 1 x 30 bed rehabilitation unit
    - 1 x 8 bed Intensive Psychiatric Care Unit (IPCU)
    - 1 x 8 bed forensic rehabilitation area
    - 2 x 15 bed elderly mental health wards
    - 1 x 30 bed frail elderly ward
    - 1 x 30 bed frail elderly long term care ward
    - TOTAL: 206 beds

It is noted, that in developing the operational model for the facility, a number of principles have been established that need to be recognised in the design, layout and configuration of the new estate and how it relates to existing/retained buildings. These include that:

- Wards should be configured in identified "clusters", in line with the exemplar design, with each cluster supported by a small range of local services and support accommodation.
- All clinical consultations at the new NACH will take place in designated clinical consulting areas that will be separate from staff offices. These clinical consultation areas will include the existing general and specialist outpatient departments within the Horseshoe building, the new consultation areas specified within the schedules of accommodation for mental health/psychology/LDS/Etc, (including children's services) and identified consulting space within wards and support "clusters".
- The majority of non-clinical accommodation on the site will be located within retained estate – primarily in the Horseshoe building.
- Staff will use the new dining room for all meals and breaks where they can leave the ward, with no local staff areas being provided out with this central "hub".
- The new kitchen area will service all meal requirements throughout the site.
- A designated staff changing facility will be provided within retained estate. (All changing is based on a model that will see staff having access to lockers for the period of a shift/duty only to ensure optimal use of all areas)
- The majority of support services functions will continue to be delivered from existing locations on the site. The only exception to this being the inclusion of a porter's area, security office, cashiers function and limited support areas in the new building.
- Control of infection issues remain extremely important considerations with Domestic Services Rooms (DSR or "Cleaners rooms"), linen areas, clean utility rooms and dirty utility rooms specified in all areas. Whilst efficient design may allow some appropriate sharing of these facilities, the design should always optimise the control and management of Hospital Acquired Infection in line with all relevant guidance on this matter, most notably in line with HAI SCRIBE.

- Future flexibility of all accommodation and, in particular, the ability of new spaces to be easily changed with time with regards to boundaries, layouts, patient groups using and clinical models employed is paramount.
- The overall design and layout of all areas should aim to reduce the risk of harm to patients and staff.

Areas within the new build component and retained estate that are particularly important to FM service delivery are highlighted within the service specific FM considerations presented as appendices to this document.

3. Hours of Service & Work Patterns

Unless stated explicitly in detailed area briefs it should be assumed that:

- All wards will operate 24 hours/day, 365 days/year
- Outpatient areas will normally operate from 8-5 Monday to Friday and evenings. (There may in the future be availability to provide weekend and out of hours appointments/sessions)
- Admin areas will primarily operate between 8-5 Monday to Friday, although meeting rooms will be required to support evening/weekend events

As administrative areas are unlikely to be staffed out with office hours the implications of this should also be considered within the design. Specifically this should allow for these areas to be “locked down” when un-staffed with a separate provision for out of hour’s visitors to make contact with ward/clinical staff before being allowed access to clinical areas.

It is specifically noted that security of the overall site is extremely important and that to this end the facility should be developed around the principles of “Secured By Design”. The specific implications of this request are covered within the relevant Technical Brief.

To support out of hours access it is also important that the porters area (and associated facilities) be located in such a physical location that they can support appropriate access for patients/visitors when the facility is “locked down” overnight. During the overnight “lock down” period, access to the new build component – and all areas that can be accessed from it – should be through this single controlled entry point.

4. Service Continuity

It is essential that, during construction, all services are maintained on the hospital site within the existing operational buildings. This will present significant challenges in terms of care delivery, goods in and out, utility connections, etc.

Whilst many of these issues will be progressed through close working with technical staff and the established “de-cant” group, etc, it is important to

recognise that Ayrshire Central Hospital is, and will remain throughout the build process a busy, functional clinical facility. The safety of everyone visiting or resident within the site must remain paramount at all times with regards to both the direct and indirect effects of the development process.

It is noted that FM services will need to continue to be delivered to all “live” areas of the site throughout the build programme, including the required access of a large number of delivery/collection vehicles that include articulated lorries. (Details of specific delivery/collection requirements can be found within the relevant appendices to this document, including appendices F, G, H, I & J).

5. Schedule of Accommodation

The current Schedule of Accommodation has been issued as a component of the Clinical Brief. Please refer to this document for more detailed information related to clinical service delivery issues and specified accommodation.

The S of A should be considered to be the primary reference document related to new facility area requirements. Specifically, no additions to briefed area should be incorporated into any design unless they have first been incorporated in the S of A and issued – even where such changes/areas may be inferred or suggested by other briefing documents.

Furthermore, the Clinical Brief notes that, although areas to be provided are as specified in the schedule of accommodation, it is important that:

- Every opportunity to appropriately rationalise scheduled areas through design should be identified
- Accommodation should be as flexible as possible
- Links to existing estate should be clearly identified and provide safe access to/from key buildings – most notably the Horseshoe building and main kitchen/dining area
- A key design challenge will be making the whole facility (new build and existing estate) operate as one seamless clinical unit

To clearly identify how FM services should influence facility design/configuration the FM service overviews presented as appendices to this document attempt to highlight key design issues/implications although these are NOT exhaustive.

Rather, as with clinical services, every opportunity should be taken through the design/development of the facility design to mitigate those current service risks identified whilst improving the overall performance of the facility and all of those services that it supports/are required to support it.

Appendix A – Catering Services

1. Service contact information

Service Contact: Janice Gillan

E-mail: janice.gillan@aaaht.scot.nhs.uk

Telephone: 01563 827 050

2. Overview of the service

Catering staff on the North Ayrshire Community Hospital site must provide a high quality service that offers a range of appetising and nutritious food and drink to all key customers. These services must reflect specific dietary needs/tastes and must be flexible enough to deal with changing demands.

Specifically the catering service must provide:

- A wide and varied selection of food and beverages to meet the dietary needs and preferences of the patient/client groups being serviced including; healthy eating; specific dietary requirements; ethnic, cultural, religious choice diets; prescribed therapeutic diets; vegetarian and vegan diets; etc
- Good quality, safe, wholesome and nutritious meals, snacks and beverages in compliance with requirements of all food safety legislation, and to the frequency and standard as laid out in the relevant guidance/documentation
- Food that is presented in an attractive manner which offers customers a choice, with particular attention paid to appearance, taste, texture, portion control and nutritional value;
- A comprehensive and varied range of snacks and confectionery
- Support and provide professional advice of non NHS catering services on-site, e.g. Volunteer run areas

Key customers of the service include patients (in-patients, out-patients, day patients, etc), members of staff and visitors.

3. Specific services delivered

The catering service currently:

- Provides an “ad-hoc” service to clinical areas as required in support of special dietary/scheduling requirements, e.g. Providing previously un-ordered meals to newly admitted patients as required
- Prepares and provides circa 950 meals/day throughout Ayrshire Central Hospital as well as a wide range of snacks
- Services the catering needs of circa 150 patients three times per day for breakfast, lunch and evening meals

- Manages the hospital dining area that delivers around 100 till transactions at breakfast time, 250 at lunchtime and circa 20 in the evening to staff and visitors, etc
- Services/manages the vending requirements for the whole site (Primarily drinks machines with some confectionary)
- Provides the provision of “hospitality” through providing tea/coffee/drinks/snacks as required to events, meetings, etc across the site

4. Service delivery times

The main dining area is currently open Monday to Friday from 8:30am to 6:30pm and from 9am to 7pm at weekends.

The production kitchen is open from 7:00am to 7:45pm in order to service patient mealtimes as highlighted in Table 1 (Below).

Meal	Start Time	Finish Time
Breakfast	[0800] hrs	[0900] hrs
Mid Morning	Local provided tea/coffee/snack	
Lunch	[1200] hrs	[1300] hrs
Mid Afternoon	Local provided tea/coffee/snack	
Evening Meal	[1645] hrs	[1800] hrs
Supper	Local provided tea/coffee/snack	

Table 1. Patient Mealtimes at Ayrshire Central Hospital

Other food/beverage delivery locations now and in the future are likely to include:

- Ward areas
- The new cafeteria/shop
- Identified vending areas including: ward areas, outpatients, meeting areas, support cluster, etc

5. Service delivery staff

The catering service is delivered by and dependent upon a wide range of staff that include:

Direct

- Catering management x 1WTE
- Assistant Head Cooks x 3 WTE
- Cooks x 3.8WTE
- Catering Assistants x 14.97 WTE
- Patient Meals Supervisor x 2.06 WTE
- Catering Storekeeper x 0.93 WTE
- Clerical officer x 0.8WTE

Indirect

- Speech & Language Therapists (Support of special dietary requirements)
- Dieticians (Support of special dietary requirements)
- Porters (For transport/collection of trolleys/meals)
- Nursing/clinical staff (For serving meals and assistance with ordering and consumption as required)
- Domestic staff (Collection of trays, general assistance at mealtimes as appropriate)

This range of staff reflect the fact that effective nutrition involves more than just the production of appropriate meals but also effective presentation, delivery, temperature control, preparation, surroundings, positioning and assistance to eat as required.

6. Service delivery locations

Key delivery locations for catering services include:

- The existing production kitchen (Not a build component of this project)
- The existing main dining area (Not a build component of this project)
- Ward dining rooms
- Ward bedroom areas
- Meeting areas (For the purposes of hospitality)
- Hospital volunteers shop/cafe areas
- Day patient areas where meals are served
- Areas with vending machines

It is noted that Appendix L of this document identifies a list of anticipated vending locations in the new facility.

7. Key processes supported

Key processes fulfilled by catering services include supplies receipt, food production, wash up and processing menu cards. These processes are outlined here for information regarding how they should influence overall site design/configuration.

7.1 Goods receipt process/ingredient control

- Goods arrive from suppliers at Ayrshire Central Site with circa 90% from national contract suppliers. (See relevant vehicle delivery information appendices)
- Fresh goods arrive daily, other goods are delivered weekly (Busiest time is Monday morning when 8-10 delivery vehicles are reasonably expected)
- Goods (such as Milk and Bread) are delivered before 7.00am and arrangements are in place to facilitate this i.e. indoor/secure area, out with external environmental factors

- (It is noted, in line with the information contained within the relevant appendices, that delivery vehicles range from “transit –type” vans to large articulated lorries)
- Vehicles enter the site and go to the delivery area at the kitchen
- Food is unloaded into the delivery area at kitchen
- Delivery is checked against order and placed in relevant storage areas (Storage areas include: dry store; refrigerated store; raw, cooked, chilled meat stores and freezer)
- Goods are issued to production areas as per standard recipes
- Goods are issued to wards on receipt of a requisition form (e.g.. biscuits, juice)

7.2 Food Production/Delivery Process

- Menu-mark system (software programme) identifies a 3 week menu rota
- Production planning (manual process) identifies the quantity of ingredients required based on standard ingredients and estimates of menu preferences
- Production plan triggers order of required ingredients
- On a meal-by-meal basis raw goods are measured within the relevant store
- Measured raw ingredients are then taken to the production kitchen
- Cooks prepare meals in appropriate areas within the production kitchen
- (Production areas include; special diets area; bakery area; general production area; salad area)
- Hot food is transferred to hot holding units for hot service or to chiller area for cold service
- (Patient and dining room is provided in a variety of hot and cold containers)
- Food is plated in plating area for all ward patients (A member of the catering team takes responsibility for plating each course based on the reviewed patients menu card)
- Plated food is loaded onto meal trolleys using a “hot base” system loaded with heat pellets to maintain ambient temperature (trolley capacity ranges from 16 patients to 32 patients)
- Meal trolleys are transferred onto delivery vehicles by porters using vehicles with ramps
- Porters deliver meal trolleys to wards
- Trolley is unloaded and placed in trolley bay/dining area
- Patients meals are served from the trolley appropriate to patients (1 course at a time)

7.3 Wash Up Process

- All patient meal trolleys, plates and crockery are returned to the trolley for collection and return to main kitchen by porters
- Completed menu cards for the next day are also loaded onto trolleys
- Trolleys are emptied and stripped within the central dish-wash area by catering staff
- Crockery and cutlery is put through the dishwasher by catering staff
- Trolleys are cleaned and stored ready for the next service by catering staff

Menu cards that arrive with the trolleys are reviewed and checked against individual dietary requirements to confirm appropriate receipt and applicability of ordering

8. Key risks

Key risks associated with delivering catering services that building design/configuration should seek every opportunity to influence/address include:

- Food Safety Act (1990) – specifically temperature control
- Time constraints - primarily the production and delivery of large numbers of hot meals within very limited timeframes
- Food production not being ready in time for the porters arriving to collect
- Utility failure (e.g., heat, light, power and water)
- Delivery failure – in particular reliance upon multiple mechanical processes
- Equipment failure (for instance, with vehicles)

9. What will change in the new facility?

Although the key processes will remain relevant, the development of the NACH facility will mean that:

- The level of catering requirement will increase – from supporting circa150 patients and associated staff/visitors to supporting circa 250 patients and associated staff/visitors
- NHS catering services may support management of the planned cafe/retail area if hospital volunteers are not able to sustain
- A safe access route from the new development to the main dining room will be required for staff, patients and visitors
- Clear, safe FM delivery routes need to be identified from the production kitchen to all ward areas
- Higher numbers of patients will produce their own meals as a result of a move towards a more intensive rehabilitation based model of care. (This is under-pinned by the scheduling of self-catering kitchens in key areas with appropriate local raw goods storage)
- The service may take the opportunity to move to the use of electrically operated/heated trolleys necessitating sufficient plug points in all holding areas – including within trolley bays in wards
- Catering staff changing may require to be moved to the new build for staff changing, as a result of increased capacity for storage and production
- The Catering Service will take the opportunity to evaluate the merits of bulk supply service to some areas for local plating – necessitating flexibility within the design/configuration of ward server areas to support the same
- The Catering Service will continue to evaluate alternative catering strategies
- Relocation of existing staff from other sites will be required to facilitate the increased capacity

10. What specific influences should the catering service have on facility design/configuration?

Key influences on facility configuration/design include (but are not restricted to):

- Must meet/be able to support attainment of all current regulations/guidance/standards
- Must comply with Food Safety Act (1990)
- Must be able to accommodate trolley delivery systems
- Must be able to accommodate food delivery from external suppliers
- Must support safe service/process delivery
- Must ensure that all trolley movements are safe and minimise manual handling requirements
- Must have area for trolley parking in wards
- Must keep food travel/delivery times and distances as short as possible
- Must identify supply/delivery/process specific routes
- Must support future flexibility, including changes to the proposed catering strategy
- Must support nutritional support throughout the entire food journey
- Must comply with sustainability and environmental agendas

11. Key regulations/guidance that impact upon the service

Include:

Mandatory

- Food Hygiene Regulations (2006)
- Food Safety Act (1990)

Health Department Guidance

- NHS QIS Food Fluid & Nutritional Care Standards in Hospital (2003)
- Guidelines for Hospital Catering (1995)
- Food In Hospitals (2008)
- NHS Ayrshire & Arran Food Safety Policy
- NHS Ayrshire & Arran, Food In Health Action Plan (2008)
- Scottish Consumer Council Healthy Living Award
- All relevant SHTM, SHBN and relevant technical guidance

Appendix B – Support Services (Including Domestic Services, Sewing Room Services, Linen Room Services, Patients Personal Clothing Laundry and Portering)

1. Service contact information

Service Contact: Janice Geddes

E-mail: janice.geddes@aaaht.scot.nhs.uk

Telephone: Crosshouse, Ext 27541

2. Overview of current service

Support Services at Ayrshire Central covers a wide range of housekeeping and support services including:

- Portering services
- Domestic (cleaning) services
- Sewing/linen services
- Patients Personal Clothing laundry services

These services are essential to the safe, effective and efficient running of the entire site as well as areas that extend beyond the existing facility, i.e. some areas based at Ayrshire Central provide/deliver a region-wide service.

3. Specific services delivered

Support Services based at the North Ayrshire site currently include:

3.1 Portering Services

Portering Services at Ayrshire Central provide a general portering, logistical and security service across the hospital site 24 hours a day.

Specifically, portering and portering/security staff are responsible for ensuring that a wide range of routine and ad-hoc tasks are undertaken timeously and to the required standards. They are also responsible for ensuring that a pro-active approach is taken regarding security issues.

Key customers of the service include patients (in-patients, out-patients, day patients, etc), members of staff, visitors, volunteers and public.

Specific services delivered by the portering/security function on the Ayrshire Central site currently include:

- Patient movements across the site
- Delivering/transferring equipment as required
- Delivering/collecting meal trolleys
- Delivering/collecting mail
- Delivering/collecting medical records on and off site
- Delivering/collecting clean/used linen
- Delivering all goods across the site
- Car parking
- Waste collection and management
- Supporting the “Fire Team”
- Ensuring buildings are appropriately secured when not in use
- Responding to requests for assistance to deal with security related issues as appropriate
- Liaising with the police service regarding security concerns/issues as appropriate
- Providing the (non-clinical) central point of contact for the facility – particularly out of normal hours

3.2 Domestic Services

Domestic services at Ayrshire Central are responsible for the delivery of safe efficient domestic services that must conform to National Cleaning Standards and Healthcare Acquired Infections (HAI) Standards. The services delivered must be flexible enough to support the wide-ranging requirements of a large number of service users including in-patient services (wards), outpatient services (clinics, gyms, etc) and public areas (corridors, entrances, cafe, retail, ward dining spaces).

Specifically, domestic services staff are responsible for the cleaning of all internal areas with exception of the main kitchen. Cleaning of the main kitchen is the responsibility of kitchen staff.

Key customers of the service include patients (in-patients, out-patients, day patients), members of staff, visitors, and volunteers amongst others.

Domestic staff operate throughout the site and will respond out with normal working hours if required (e.g. in the event of a flood etc). They are supported by a range of external contracts that cover areas such as:

- Window cleaning
- Feminine hygiene
- Pest control

The service is audited using the HAI Monitoring Framework, which is an ongoing assessment of the outcome of cleaning processes to assess the extent to which cleaning meets the National Cleaning Specification.

Each Charge Nurse will be provided with a Cleaning specification detailing the service, standards, times when the service is provided.

3.3 Sewing Room Services

The sewing room is provided onsite.

All staff uniforms for NHS Ayrshire and Arran are ordered through the Ayrshire Central sewing room and the area also processes uniform requests as well as labelling and tagging new uniforms as required.

In addition the area adjusts and repairs as required; uniforms, ward curtains, bed screens and patient clothing as appropriate.

The number of uniforms processed in 2009 was 92,000.

3.4 Linen Room Services

The linen room is provided onsite.

Linen is provided and laundered by NHS Lanarkshire and delivered to Ayrshire Central Monday to Saturday. (See relevant transport appendices for details).

Fresh linen is checked for quality and quantity on arrival. The linen room maintain a “buffer stock” and supervises local linen stock levels, e.g. within wards and departments at agreed levels.

The number of articles delivered to the linen room by the linen services supplier was 245,368 in 2009.

3.5 Patients Personal Clothing Laundry (PPCL)

The PPCL at Ayrshire Central is provided onsite.

The PPCL at Ayrshire Central supplies the whole of Ayrshire and Arran with laundering services for all staff uniforms. The PPCL also support the laundering and marking of patient’s personal clothing

The number of articles processed in 2009 was 33,000.

4. Service delivery times

Currently and for the foreseeable future:

- Domestic staff are available 6.30am – 8pm
- The Linen Room opens from 8am – 12 Noon Mon - Fri
- The Patients Personal Clothing Laundry opens from 7:30am – 3:30pm Mon-Fri
- The Sewing Room opens from 8.30am – 1pm Mon-Fri

- Portering staff will be available through a shift system throughout the day and night
- Dedicated security staff will be available 24/7

It is specifically noted that portering/security personnel and nursing staff are the only staff who have a presence on the site 24 hours/day.

5. Service delivery staff

Support Services are delivered by and dependent upon a wide range of staff that include:

- Support Services management staff
- Domestic manager x 1WTE
- Domestic assistants x 46.76 WTE
- Domestic supervisors x 3.81 WTE
- Uniform distribution officer x 0.54WTE
- Sewing room assistant x 1.36WTE
- Patient personal clothing laundry assistants x 2.84WTE
- Patients personal clothing supervisor x 1WTE
- Clerical officer x 0.54WTE
- Grounds x 2.00WTE
- Security x 2.55WTE
- Porters x 21.95 WTE
- Head porter/ supervisor porter x 2WTE

Portering/security services are supported by a range of staff that includes:

- Support Services management staff
- Head porter
- Porters
- Security staff
- Flexible Portering/Security staff (Night shift only)

This range of staff reflect the wide range of services provided by Support Services.

6. Service delivery locations

Key delivery locations for Support Services include:

- The laundry building, including sewing room, linen room and PPCL (Not a build component of this project)
- The Horseshoe building, for management offices, staff sign in and changing (Not a build component of this project)
- Cleaners rooms (DSR's) located throughout the site
- Wards, clinical areas, non-clinical areas in all areas serviced by domestics

Key delivery locations for Portering/Security Services include:

- The Porters area (Within the entrance area of the new build)
- The Mail Room (Within the entrance area of the new build)
- The Security Office (Within the entrance area of the new build)
- Local waste holding areas
- The central waste management compound
- The production kitchen
- Central Decontamination Unit (area wide service)
- All wards and departments on site
- All clinical/non-clinical areas of the site where their services are required

7. Key processes supported

Key processes undertaken by Portering staff/services include waste collection/ management, food collection/distribution, mail collection/delivery/management, CDU collection/delivery and linen delivery/collection. These processes are outlined here for information regarding how they should influence overall site design/configuration.

7.1 Waste Collection and Management

It is important to note that all waste within NHS Ayrshire & Arran is segregated as per the relevant national policies, e.g. clinical waste. There is also a commitment to further segregation however in support of increasing re-cycling, e.g. cardboard, plastic, glass, etc. Waste is marked at point of origin and secured both locally and in a main central compound.

Key process elements include:

- Domestic waste bags get filled as appropriate within ward, clinical, admin and other areas
- Domestic staff tie up domestic waste bags and remove from (small bins) when full/during routine cleans
- Domestic staff take sealed domestic waste bags directly to local holding areas – placing them in the appropriate waste streams (clinical, domestic, cardboard, special, etc)
- Clinical waste is disposed of in clinical waste bins
- Clinical staff tie up clinical waste bags and remove from holders when full/as appropriate – storing in local hold areas
- Porters transfer sealed clinical waste from dirty utilities to local holding areas - placing them in the appropriate waste streams (clinical, domestic, cardboard, special, etc)
- Porters take separated waste (clinical, domestic, special, etc) from local holding areas in sealed bags on trolleys to central waste management compound (normally 3 times/day)
- Within waste compound, domestic waste is collected by local contractor
- Within waste compound, clinical waste is collected by national contractor
- Porters maintain waste separation and empty bags into larger Euro bins as appropriate

- Domestic waste and cardboard is compacted within the waste compound utilising compactors
- Domestic waste is collected by a contractor using a conventional bin lorry once a week
- Clinical waste is collected from the central waste holding component 3 times/week by a nationally procured waste management contractor using an articulated lorry

NB Portering duties are scheduled to separate clean and dirty tasks through the use of dedicated waste management porters
NB Special waste streams also managed in the same way

7.2 Meal Trolley Distribution and Collection

- Porters report to production kitchen
- Porters place full meal trolleys on delivery vehicles utilising vehicle with ramp
- Porters drive delivery vehicle to pavilions/offload areas
- Porters unload meal trolleys
- Porters deliver meal trolleys to ward areas as required

NB Once meal trolleys have been filled with empty trays and completed menu cards process is reversed to return trolleys to dish wash/trolley clean area within main kitchen

7.3 External Mail Collection/Delivery/Management

- Porter uplifts mail from Post Office at Irvine and delivers to Mail Room (Once a day/6 days a week)
- Porters sort mail and place in appropriate pigeon holes in sorting area of mail room
- Porters distribute/deliver mail throughout the site 3 times/day
- Outgoing mail is collected from identified collection/delivery points during the same “run”
- External outgoing mail is separated and sent to Crosshouse for franking using NHS vehicles

7.4 Internal Mail Collection/Deliver Management

- Porters sort internal mail and place in appropriate pigeon holes in sorting area of mail room
- Porters distribute/deliver internal (including medical records) mail throughout the site 3 times/day
- Internal mail is collected from identified collection/delivery points during the same “run”

7.5 Linen Delivery and Collection

Linen delivery and collection largely mirrors waste collection, with local staff securing and transferring soiled linen to local holding areas from where it is collected by porters and transferred to the linen area.

7.5 Cleaning

It is important to note:

- That all of the facility is cleaned on a regular basis as determined by operational function and utilisation
- That much of this work is manual and requires ready access to the necessary materials
- That standards of cleanliness are monitored both internally and independently using established national cleaning standards

8. Key risks

Key risks associated with delivering Support Services that building design/ configuration should seek every opportunity to influence/address include:

- Minimising Healthcare Acquired Infection
- The impact of increasing stringent standards/cleaning regimes
- The elimination of inaccessible areas and un-cleanable surfaces
- Time constraints - primarily the need to clean operative clinical areas as quickly as possible with the minimum disruption to patients/services
- Utility failure
- Delivery failure – in particular reliance upon a wide selection of local equipment, for instance, vacuum machines and buffers
- Ad-hoc problems that require immediate mobilisation, for instance floods, toilet overflow and spillages
- Manual handling issues/concerns including the loading/unloading of vehicles and transfer of heavy goods
- Travel distances
- Site security – 24 hours
- Equipment failure, for example vehicles, tail lifts and trolleys
- Management/handling of waste/hazardous substances
- Complexity of waste management and increasing regulation regarding the same

9. What will change in the new facility?

Although the key processes will remain relevant, the development of the NACH facility will mean that:

- 100% of beds will be in single rooms with en-suites, impacting upon the resources required/time taken to clean the ward environment
- The number of additional toilets will be increased dramatically
- The areas requiring cleaning will increase substantially
- Fixtures, fittings and finishes will be to a modern standard and specification making cleaning easier
- Floor coverings will be standardised throughout the new build component, allowing some rationalisation of the equipment required
- DSR's will be specified to the current standards – making service delivery/provision more efficient/effective only if at the correct size
- Facility design and choice of finishes MUST be in line with the relevant technical guidance and must make cleaning and tidying as easy as possible in recognition of stringent hospital cleaning standards and support infection control
- Circulation areas will increase in size significantly, as will patient, visitor and staff numbers
- Some personal clothing laundering may take place in identified wards where local laundry facilities are provided and patients are deemed fit to do this, impacting on volume
- There will be no requirement for screens to separate bed areas but there will be a requirement for window curtains/blinds
- Relocation of existing staff from other sites will be required to facilitate the increased capacity
- The Porters area will move from the existing "lodge" building to an area within the new build component of the site (including security office, head porters office and mail room)
- The rationalised new build will improve overall site safety/security through separating pedestrian/vehicular traffic appropriately
- The porters area will be, along with wards, the only areas staffed 24 hours/day. (Consequently it must be centrally located and able to respond to out of hours requests optimally. It must also be able to control, co-ordinate and manage out of hours security, including controlled entry to the site through a single, normally locked, entry point as required)
- Relocation of existing staff from other sites will be required to facilitate the increased capacity

10. What specific influences should Support Services have on facility design/configuration?

Key influences on facility configuration/design include (but are not restricted to):

- Ensuring an appropriate distribution of appropriately sized DSR's
- Providing adequate storage space for cleaning materials/equipment
- Providing adequate storage and cleaning for equipment in all areas
- Following all guidance regarding floor, wall, fittings and surface finishes, ensuring safety aspects and easy cleaning
- Chemical store within DSR requires a locked door
- Ensuring that all areas can be appropriately/easily cleaned
- Facility to store clean linen on wards
- Facility to store dirty linen locally

- Identifying appropriate delivery and collection routes for goods/services to/from relevant facilities on the site.
- Support services being involved in all decisions around finishes, e.g. Floor coverings, wall finishes, blinds, etc
- The need for defined clean/dirty FM transfer routes as part of the design process
- Ease of access ramps on all delivery routes that are suitably shallow
- Wall protection around all FM delivery routes
- Security CCTV in all areas, site will be smaller geographically but population will increase
- The need for defined vehicular operating areas/routes as required
- The need for defined vehicular delivery/drop off/turning routes/areas
- Provision of the portering/security/mail areas scheduled – adjacent/close to the single (secured) out of hours entrance to support controlled entry out of hours as appropriate
- Location of porters/security area close to meeting areas to support/control/manage entry/exit out of normal hours, for example, evening meetings and seminars
- Provision of sufficiently sized /located local waste holding areas as scheduled
- Minimal travel distances within all identified key process routes

11. Key regulations/guidance that impact upon the service

Include:

- National Cleaning Services Specification (2009)
- SHTM 30 (Purple Book)

Appendix C – Gardens & Ground Services

1. Service contact information

Service Contact: Janice Geddes

E-mail: janice.geddes@aaaht.scot.nhs.uk

Telephone: Crosshouse, Ext 27541

2. Overview of current service

The Gardens and Grounds service at NACH employs 2 gardeners in support of the maintenance and management of all external (garden and landscaped) areas across the full expanse of the hospital site.

3. Specific services delivered

Specific services delivered by the grounds staff include:

- Maintenance of all garden/grounds areas (Including focal areas/flower beds)
- Grass cutting throughout the growing months
- Clearing of leaves
- Gritting/clearing of all roads, paths across the site in winter
- Dealing with pest control (mole catcher) and (tree management) directly or through liaison with external contractors
- Call out service

4. Service delivery times

Grounds staff work Monday to Friday (8am – 4:30pm) and Saturday (8am – 1pm) from their base within the site, which will continue to be delivered from within retained estate. Clearly, their role takes them across the entire local estate on a daily basis.

5. Service delivery staff

The service is delivered by 2 gardeners.

6. Service delivery locations

Delivery locations include; the gardeners shed, tractor shed, fuel store, chemical store and garden equipment store. (Some of these facilities may need to move/be re-provided as a result of the final design for the facility agreed)

7. Key processes supported

Whole site of grounds and gardens

8. Key risks

Key risks associated with delivering the Gardens/Grounds Services that building design/configuration should seek every opportunity to influence/address include:

- Secure storage
- Manual handling issues/concerns including the loading/unloading of vehicles and transfer of heavy goods
- Equipment failure, for instance, vehicles, tail lifts and trolleys
- Management/handling of waste/hazardous substances
- The increased number of gardens/requirements for gardening support
- The number of roads/paths/hard landscaped areas requiring snow clearance and/or gritting
- Sustainable and attractive for wildlife and birds
- Inaccessible areas for gardeners
- Tree management

9. What will change in the new facility

Although the key processes identified here will remain relevant, the development of the NACH facility will mean that:

- More ward areas may have external spaces/gardens requiring support/management
- Relocation of existing staff from other sites will be required to facilitate the increased capacity
- There will be more paths, roadways and hard landscaped areas requiring management. (Most notably snow clearance and winter conditions management)

10. What specific influences should the garden/grounds service have on facility design/configuration?

Key influences on facility configuration/design include (but are not restricted to):

- The need for garden/external spaces to be VERY low maintenance
- The need for garden/external spaces to be accessible with all of the equipment necessary to support it, for instance, mowers

- The need for internal courtyard spaces to minimize the maintenance and in particular tools required to support them, for example, internal courtyards should be capable of being managed by gardeners using primarily only hand tools
- The need for external paths/access routes to be rationalised and clearly defined

11. Key regulations/guidance that impact upon the service

Include:

- COSHH
- Pesticide Regulations

Appendix D – Corporate Services overview (Including Procurement, Sterile Services, Sustainable Development, Waste Management Policy & Planning, Staff Lottery and Surplus Equipment)

1. Service contact information

Service contact: Andrew Elliot, Head of Corporate Services

Email: andrew.elliot@aaaht.scot.nhs.uk

Telephone: Ayrshire Central Hospital, ext 23585

2. Overview of current service

The Corporate Services Department delivers a broad range of services within NHS Ayrshire and Arran. These include:

- Procurement, including Customer Services, Procurement Systems & Processing and Strategic Sourcing
- Sterile Services
- Sustainable Development
- Waste Management Policy and Planning
- Staff Lottery
- Surplus Equipment

3. Specific services delivered

Specific services delivered by the **Procurement Department** function on the North Ayrshire site currently include provision of:

- Professional advice on procurement of goods and services, including advice on tendering and contracting to ensure best value;
- A dedicated team to process requisitions, orders and complaints;
- A team of drivers to safely deliver goods to all wards/departments across the site in full and good condition, as well as a returns/collection service;
- A group which is committed to ensure that all wards/departments use mandatory nationally contracted commodities and services.

Specific service delivered by the **Sterile Services Department** function on the North Ayrshire site include provision of a quality pre-set instrument tray service and other medical devices (with full tracking/traceability).

Specific service delivered by the NHS Ayrshire and Arran **Staff Lottery** on the North Ayrshire site is the provision of significant levels of recurring income for patients and staff. Distribution of diaries, which requires portering services

Specific service delivered by the **Surplus Equipment** facility on the North Ayrshire site is the opportunity to dispose/acquire surplus/obsolete equipment.

4. Service delivery times

At present and for the foreseeable future:

All staff within **Procurement** and **Staff Lottery** are available from 9.00 am to 5.00 pm Monday to Friday. (Customer Services staff are available from 8.00 am Monday to Friday).

Sterile Services is available 8.00 am – 8.30 pm Monday to Thursdays; 8.00 am – 6.30 am Friday; 8.00 am – 1.00 pm Saturday. In addition, the department provides an out of hours/emergency on-call system.

5. Service delivery staff

Services are supported by a range of staff that includes:

- Management staff (Head of Procurement, Procurement & Systems Manager, Customer Services Manager, Strategic Sourcing Implementation Manager and Commercial Manager)
- Support Services staff
- Customer Services staff
- Commodity officers
- Drivers

6. Service delivery locations

Key delivery locations within the North Ayrshire site include:

- The Area Receiving Point
- All wards, pavilions and departments
- All clinical/non clinical areas of the site where their services are required.

7. Key processes supported

Key processes supported on the North Ayrshire site by procurement staff include:

- Managing deliveries from the Area Receiving Point at Procurement to all areas within the site.

- Managing direct deliveries to designated wards/departments in accordance with the relevant delivery timetable.

It is further noted that the Ayrshire Central Site functions as a regional hub for sterile services, supporting the cleaning and sterilisation of instruments from across the NHS Ayrshire & Arran Health Board area. Specifically, it is noted that a new CDU is currently being completed on the Ayrshire Central Site that is out with the build component of the proposed NACH but that must be taken into consideration during site planning. Around 6 HGV and smaller vehicles require access to/from this area at various times throughout the day.

8. Key Risks

Key logistical services risks associated with the North Ayrshire site include:

- Manual handling issues/concerns including the loading/unloading of vehicles, transfer of heavy goods/cages.
- Security, especially overnight.
- Equipment failure, e.g. vehicles, tail lifts, cages.
- Suitable access for distribution and storage areas to prevent bottlenecks.
- Access for articulated vehicles at the Area Receipting Point from National Procurement and outside suppliers.
- Restricted access due to type of patient.

9. What will change in the new facility

The development of the NACH facility will mean that:

- Rather than dropping off small amount of cages in numerous locations, there will be large drop off at specific “drop off” points – could cause obstruction if lorry is stationery for long period while delivering to several locations.
- More wards will be physically connected/part of the same building, meaning that more manual movement will be required.
- The rationalised new build will improve overall site safety through separating pedestrian/vehicular traffic appropriately.

10. What specific influences should the Procurement strategy have on facility design/configuration?

- The need for defined vehicular operating areas/routes as required.
- The need for defined vehicular delivery/drop-off/turning routes/areas.
- The need for corridors that are capable of supporting all procurement/delivery activities as appropriate.
- Must be able to accommodate cage delivery system.
- Must be able to accommodate deliveries at the Area Receipting Point from National Procurement and other external suppliers.

- Access/egress awareness regarding onward deliveries from Area Receiving Point to other sites.
- Must support safe service/process delivery.
- Must have area for cage parking in wards.
- Must identify supply/delivery/process delivery routes.
- Must have adequate storage facility within ward/department.
- Must ensure that deliveries are timed to avoid bottlenecks.

11. Key regulations/guidance that impacts upon the service

- Health & Safety at Work Act
- Moving & Handling Policy
- Carriage of Dangerous Goods & Use of Transportable Pressure Equipment Regulations 2009 (CDG2009)
- Fire Regulations
- COSSH Regulations
- Operating Procedure for the Condemnation & Disposals of Assets and Stock
- Procurement Operating Procedures

Appendix E – Cashiers Services overview

1. Service contact information

Service Contact: George Lightbody

E-mail: **george.lightbody@aaaht.scot.nhs.uk**

Telephone: Crosshouse, Ext 27020

and

Service Contact: Jessie Mitchell (Health of Administration, Mental Health Services)

E-mail: Jessie.mitchell@aapct.scot.nhs.uk

Telephone: 01292 513014 (extension 13014)

2. Overview of current service

The Cashiers service at Ayrshire Central fulfils the full range of cashier functions to patients and visitors.

3. Specific services delivered

Specific services delivered by Cashiers staff include:

- Processing and paying travel expense claims
- Collecting, recording and banking till receipt income
- Collecting, recording, banking and managing patient monies
- Storing high value goods given over for “safe-keeping”
- Managing patient property and valuables
- Maintaining patient financial records

4. Service delivery times

The Cashiers Office is open 9am – 5pm (Monday to Friday). Out with these times money is held in ward safes.

5. Service delivery staff

The service is delivered at different times by:

- Cashiers staff x 1
- Mental Health Cash Office Staff x 3
- Ward staff

6. Service delivery locations

Elements of the Cashiers function take place at a range of areas including:

- The Cashiers Office
- Ward duty rooms (Areas with safes)
- Dining room

7. Key processes supported

As noted previously.

8. Key risks

Key risks associated with delivering the Cashiers Services that building design/configuration should seek every opportunity to influence/address include:

- The security of money, property and staff
- Ease of access for staff, patients and visitors
- Storage of patients funds and valuables
- Compliance with Standing Financial Instructions (SFI)
- Secure overnight safe storage

9. What will change in the new facility

Although the key processes identified here will remain relevant, the development of the NACH facility will mean that:

- The Cashiers office will move to the new build
- Cashiers services will have to deal with more patients
- Cashiers services will have to deal with more patients who, because of their health/legal status, require more assistance with the management of their personal finances
- There will be an increase in patients funds, transactions and travelling expenses
- Relocation of Mental Health cash office staff from Ailsa Hospital will be required to facilitate the increased capacity
- A cash machine operated by a bank will be required

10. What specific influences should the cashier's service have on facility design/configuration?

Key influences on facility configuration/design include (but are not restricted to):

- The need for secure small safes in appropriate areas within individual wards to support local patient money management
- The need for an appropriately located Cashiers Office within the new build. (This should be close to the Porters/security area but within an area that is accessible in the evenings to support out of hours deposits)
- The need for a "night safe" in the cashiers office, accessible to ward staff
- The need for effective security in/around the cash office for handling cash and high-value goods, e.g. The requirement for security glass panels and shutters
- The need for CCTV monitored of the cashiers office
- The requirement for a suitably reinforced floor to support the main safe in cashiers office
- Panic alarms linked to the security office

11. Key regulations/guidance that impact upon the service

Include:

- Standing Financial Instructions (SFI)
- Adults with incapacity (Scotland) Act 2000
- Mental Health (Care and Treatment) (Scotland) Act 2003
- Mental Welfare Commission

Appendix F – Catering Stores Delivery Schedule

	Delivery	Time of Delivery	Approximate time of unload	Size of Vehicle
Monday 25 May 09	Wiseman	4.00am	10 min	7 x Ton
	McGhee	5.00am	10 min	2 x Ton
	Browning	5.20am	5 min	2 x Ton
	Broadfoot	7.10am	15 min	1.5 Ton
	Fife Creamery	7.15am	15 min	7.5 Ton
	3663	8.05 am	20 min	18 Ton
	Brake Bros	8.10am	20 min	14 Ton
	WW Wales	8.45 am	10 min	1.5 Ton
	Coca Cola	11.25am	15 min	21 Ton
	Lainshaw	2.30pm	5 min	1.5 Ton
Tuesday	Wiseman	4.00am	10 min	7 x Ton
	McGhee	5.00am	10 min	2 Ton
	Browning	5.20am	5 min	2 Ton
	Broadfoot	8.10am	15 min	1.5 Ton
	Gillardi	9.05am	5 min	1.5 ton
	DeliceDeFrance	10.00am	10 min	7.5 Ton
	Customer Services/diets	1.30pm	10 min	7.5 Ton
Wednesday	Wiseman	4.00am	10 min	7 x Ton
	McGhee	5.00am	10 min	2 Ton
	Browning	5.20am	5 min	2 Ton
	Brake Bros	7.05 am	20 Min	14 Ton
	Broadfoot	7.45am	15 min	1.5 Ton
	3663	8.30am	20 min	18 Ton
	WW Wales	9.10am	10 min	1.5 Ton
	Gillardi	10.00am	10 min	1.5 Ton
Thursday	Wiseman	4.00am	10 min	7 x Ton
	McGhee	5.00am	10 min	2 Ton
	Browning	5.20am	5 min	2 Ton
	Fife Creamery	7.25am	15 min	7.5 Ton
	Broadfoot	7.45am	15 min	1.5 Ton
	Gillardi	8.15am	5 min	1.5 Ton
	Key Catering	12.00noon	10 min	7.5 Ton
	Customer Services/ Disposable	1.30 pm	10 min	7.5 Ton
Friday	Wiseman	4.00am	10 min	7 x Ton
	McGhee	5.00am	10 min	2 x Ton
	Browning	5.20am	5 min	2 x Ton
	Broadfoot	7.35am	15 min	1.5 Ton
	WW Wales	8.10am	10 min	1.5 Ton

	Delivery	Time of Delivery	Approximate time of unload	Size of Vehicle
	Gillardi	8.20am	5 min	1.5 Ton
	Pieroni	10.15am	5 min	1.5 Ton
	Customer Services /Diets	1.30pm	10 min	7.5 Ton
Saturday	Wiseman	4.00am	10 min	7 x Ton
	McGhee	5.00am	10 min	2 x Ton
	Broadfoot	7.30am	15 min	2 x Ton

This survey was carried out in May 2009 and refreshed in April 2010 and is an accurate reflection of a usual week of deliveries at ACH Catering “back door”.

Appendix G – ACH External Transport Vehicle/ Journey List

Vehicle	Transporting To	Load Carried	Type/Size Of Vehicle	Runs Per Day	Runs Per Week	Delivery/ Pick Up Point At ACH
TSSU Day Shift	Ayr Hospital / Carrick Glen Heathfield And Whitletts	Sterile And Soiled Theatre Instruments	Ford Transit	3 Per Day 5 Days Per Week (Mon-Fri)	15	ACH TSSU
TSSU Day Shift	X/House Hospital/ Ayrshire Maternity Unit (AMU), And Surrounding Clinics	Sterile And Soiled Theatre Instruments	Ford Transit	3 Per Day 5 Days Per Week (Mon-Fri)	15	ACH TSSU
TSSU Back Shift And Sat, Pm	Ayr Hospital / Carrick Glen and X/House	Sterile And Soiled Theatre Instruments	Ford Transit		6	ACH TSSU
Patient Clothing/ Personal Linen (PPCl) Am	Biggart, Ayr, Arrol Park/ Ailsa And Heathfield	Clean / Soiled Linen, PPC And Staff Uniforms	Fame Van (Extended Transit – Long Wheel Base)	1 Per Day 5 Days Per Week (Mon – Fri)	5	ACH PPCl
Patient Clothing/ Personal Linen (PPCl) Pm Sat And Sun Am	X/House And Kirklandside Hospitals	Clean / Soiled Linen, PPC And Staff Uniforms	Fame Van (Extended Transit – Long Wheel Base)	1 Per Day 7 Days Per Week (Mon-Sun)	7	ACH PPCl
Pharmacy Mon-Fri Sat Am	ACH, X/House And Outlying Clinics And Health Centres	Prescriptions, Drugs, Pharmacy Stores, and Medical Gas Cylinders	Fame Van (Extended Transit – Long Wheel Base)	3 Per Day 5 Days Per Week +1 (Mon-Fri)	16	Medical Gas Cylinders -> ACH Training Centre Prescriptions, Drugs, Pharmacy Stores ->Various Pavilions
Arran	Brodick, Arran War Memorial Hospital and Lamlash H/C	Pharmacy, Stores, Linen And Medical Gas Cylinders	Fame Van (Extended Transit – Long Wheel Base)		1	Various ACH
Millport	Brooksby	Pharmacy	Fame Van		1	Various

Vehicle	Transporting To	Load Carried	Type/Size Of Vehicle	Runs Per Day	Runs Per Week	Delivery/ Pick Up Point At ACH
	House, and Lady Margaret Hospital	Stores, and Medical Gas Cylinders	(Extended Transit – Long Wheel Base)			ACH
Renal South	East and South Ayrshire	Patients Renal Dialysis Waste	Transit Van		1	Drop Off ACH Waste Compound
Renal North	North Ayrshire	Patients Renal Dialysis Waste	Transit Van		1	Drop Off ACH Waste Compound
Cssd	Victoria Infirmary/ X/House	Sterile Theatre Gowns	7.5 Tonne Truck		1	TSSU/CDU
Three Towns Saltcoats	Three Towns Saltcoats	Mail	Transit Van	1 Per Day 5 Days Per Week (Mon – Fri)	5	Various ACH
Environmental Clinical Waste Uplift (Healthcare)	ACH <> Base	Clinical Waste	Large, Medium Truck (Varies)		3	ACH Waste Compound
Domestic Waste Uplift (Council)	ACH <> Base	Domestic Waste	Large Compactor		1	ACH Waste Compound
Cardboard Recycling Uplift (Lowmac)	ACH <> Base	Recycling (Cardboard)	Large		1 Uplift Every 2 Weeks	ACH Waste Compound
Estates Courier Vans	Courier To ACH	General Estates Material Deliveries	Various	1 Run Per Day 7 Times Per Week (Mon-Sun)	7	Estates Workshop
Estates Suppliers (Vans)	Supplier To ACH	General Estates Material	Various	1 Run Per Day 7 Times Per Week (Mon-Sun)	7	Estates Workshop
Estates Suppliers (Large Parts)	Supplier To ACH	General Estates Material (Larger Parts)	Truck		One Or Twice Per Week	Estates Workshop
Waste Cooking Oil (Richardsons Oils)	Richardsons Base - > ACH	Waste Cooking Oil	HGV 7.5 Tonnes		Once Every 3 – 4 Weeks	Waste Compound
Laundry Deliveries	Wishaw <> ACH	Bed Linen. Deliver Clean	HGV 7.5 Tonnes	1 Deliver Per Day (Mon –	6 Times	ACH Linen

Vehicle	Transporting To	Load Carried	Type/Size Of Vehicle	Runs Per Day	Runs Per Week	Delivery/ Pick Up Point At ACH
(Wishaw)		And Uplifting Of Soiled Linen		Sat)	Per Week (Mon – Sat)	Room
Canon Hygiene	Base <> ACH	Sanitary Bins	HGV 3.5 Tonnes		1 Deliver/ Uplift Per Month	Various ACH Site
Contract Window Cleaning	Base <> ACH	Window Cleaning Equipment	Transit Van		Every 3 Months	Various ACH Site
Uniform Supplies (Dimensions)	Base <> ACH	New Staff Uniforms	Transit Van		2 Runs Per Week	

Appendix H – ACH internal transport vehicle/ journey list

Vehicle	Transporting To	Load Carried	Type/Size Of Vehicle	Runs Per Day	Runs Per Week	Delivery/ Pick Up Point At ACH
Waste Management	ACH	Soiled Linen, Domestic And Clinical Waste			21	
Food/ Clean Linen And PPC	Pavilions And General Servery	Patients Meal Trolley's And Clean Linen And PPC			21	
Mail	All Wards Dept's And Offices	External/ Internal Mail , Medical Records And PPC			28	
Laboratory Vans	ACH <-> Crosshouse Hospital	Lab Specimens		2 Runs Per Day 5 Times Per Week (Mon-Fri)	10	
Ailsa Mail Van	ACH <-> Ailsa Hospital	Mixed Load: Mail, Medical Records, Reprographics Material	Large Transit High Top Van. Load Weight: ½ Tonne Loaded	1 Run Per Day 7 Days Per Week (Mon-Sun) Run Operates At About 10.30-10.45am EACH Day	7	Various Around ACH
Ailsa TSSU Van	Ailsa Hospital To ACH	Sterile And Soiled Theatre Instruments	Large Transit Van	1 Run 5 Days Per Week	5	ACH TSSU
ACH Estates Van 1	Internal Around ACH	Site Maintenance: Tools Etc	Transit	Site Maintenance: Tools Etc		Estates Workshop To Various Points On ACH Site
ACH Estates Van 2	Internal Around ACH	Site Maintenance: Tools Etc	Citroen Dispatch	Site Maintenance: Tools Etc		Estates Workshop To Various Points On ACH Site

Appendix I – List of vehicles/journeys from procurement at ACH

Delivery to:	Load	Type of Vehicle	AM/PM Scheduled Daily	Scheduled Weekly	AM/PM Scheduled Deliveries
Ailsa, Biggart, Heathfield	Supplies, stationery	7.5 tonne +tail-lift	Monday		ACH - site
Maybole,Girvan, Dailly, Dalmellington, Patna, Rankinston, Coylton, Drongan, Ochiltree, Auchinleck, Cumnock, New Cumnock, Muirkirk, Catrine	Supplies, stationery	7.5 tonne +tail-lift	Tuesday	Tuesday Wk 1	ACH - site
Kilmarnock - N/West, Central Cl, T/WoodHead Cl, Hurlford, Newmilns, Darvel, Galston, Mauchline, Tarbolton, Mossblown, Prestwick, Troon, Dundonald, Crosshouse Cl.	Supplies, stationery	7.5 tonne +tail-lift	Tuesday	Tuesday Wk 2	ACH - Site
Irvine - Ballot Rd, Lanfine Way, B/Hill, Kilmaurs, Stewarton, Beith, Kilbirnie, Dalry, Largs, Skelmorlie, West Kilbride, Ardrossan, Saltcoats, Stevenston, Kilwinning	Supplies, stationery	7.5 tonne +tail-lift	Tuesday	Tuesday Wk 3	ACH - Site
Troon, Prestwick	Supplies, stationery	7.5 tonne +tail-lift	Tuesday	Tuesday Wk 4	ACH - Site
Biggart, Westmount, Heathfield, North Ayr HC, Ailsa	Supplies, stationery	7.5 tonne +tail-lift	Wednesday		ACH - site
Kilmarnock - Strathlea, Central Cl, N/West, Bentinck Cte, Kirklandside, East Ayrshire Comm. Hospital, Cumnock, Holmhead Lodge	Supplies, stationery	7.5 tonne +tail-lift	Wednesday		ACH - site
Ailsa, Hartfield Hse, Nightingale Hse, Arrol Pk, Strathdoon, Ayr Hospice, Miller Rd, Dalblair Rd	Supplies, stationery	7.5 tonne +tail-lift	Thursday		ACH - site
Ailsa, Biggart, Symington	Supplies, stationery	7.5 tonne + tail-lift	Friday		ACH - site

Delivery to:	Load	Type of Vehicle	AM/PM Scheduled Daily	Scheduled Weekly	AM/PM Scheduled Deliveries
Kilmarnock - Strathlea, London Rd, Dundonald Rd, Portland Rd x 2, Kirklandside, East Ayrshire Comm. Hospital, Cumnock, Holmhead Lodge	Supplies, stationery	7.5 tonne + tail-lift	Friday		ACH - site

Appendix J – List of Vehicles/Journeys to Procurement at ACH

Procurement Department - List of Supplier Deliveries to ACH					
Delivery from;	Load	Type of Vehicle	AM - Scheduled Delivery	Day of Delivery	PM - Scheduled Deliveries
National Distribution Centre	Supplies	38 tonne Tractor and trailer Unit		Daily Mon to Fri	13.00
Lyreco	Stationery	3.5 tonne Transit	* various	Daily Mon to Fri	
McCormicks	Stationery	3.5 tonne Transit	* various	Tues & Thurs	

Appendix K - NACH Anticipated Vending Requirements Within New Build Areas

Location (As identified on the current S of A)	Machine Requirements	Technical Requirements
Main Entrance area	1 x cold drinks vending machine	Access to 13 amp socket
	1 x confectionery machine	Access to 13 amp socket
	1 x hot drinks machine	Access to 13 amp socket + water pipe (incoming only)
Other Entrance Areas	Only if demand required in the future for cold drinks / confectionery	Access to 13 amp socket
Cash machine (Business Case and Contract with Central Legal Office must be secured – discuss with Finance and Estates (Anne Thomson (Financial Accountant)/Iain Gairns (Property Services Manager)	1 x cash machine	Data outlet Access to 13 amp socket 24/7 access Lockable room

Appendix 2F

BREEAM Pre Assessment

breeam

BREEAM Healthcare 2008 Pre-Assessment Estimator

Indicative Overall BREEAM Score
70.04%

BREEAM Rating Benchmarks	
PASS	≥30
GOOD	≥45
VERY GOOD	≥55
EXCELLENT	≥70
OUTSTANDING*	≥85

Minimum BREEAM Standards					
	Pass	Good	Very Good	Excellent	Outstanding
	YES	YES	YES	YES	NO

Ref	BREEAM Issue Title	BREEAM Healthcare - Issue Criteria	Number of BREEAM credits available	Total predicted BREEAM credits achieved	Minimum required credits by BREEAM issue and rating					Notes
Management										
Man 1	Commissioning	One credit where evidence provided demonstrates that an appropriate project team member has been appointed to monitor commissioning on behalf of the client to ensure commissioning will be carried out in line with current best practice. Two credits where, in addition to the above, evidence provided demonstrates that seasonal commissioning will be carried out during the first year of occupation, post construction (or post fit out).	2	2	1	1	1	1	2	NHS Ayrshire & Arran Dawn / RDH / Core Associates Commissioning specialist
Man 2	Considerate Constructors	One credit where evidence provided demonstrates that there is a commitment to comply with best practice site management principles. Two credits where evidence provided demonstrates that there is a commitment to go beyond best practice site management principles.	2	2	-	-	-	1	2	Dawn / RDH
Man 3	Construction Site Impacts	One credit where evidence provided demonstrates that 2 or more of items a-g (listed below) are achieved. Two credits where evidence provided demonstrates that 4 or more of items a-g (listed below) are achieved. Three credits where evidence provided demonstrates that 6 or more of items a-g are achieved: a. Monitor, report and set targets for CO2 or energy arising from site activities b. Monitor, report and set targets for CO2 or energy arising from transport to and from site c. Monitor, report and set targets for water consumption arising from site activities d. Implement best practice policies in respect of air (dust) pollution arising from the site e. Implement best practice policies in respect of water (ground and surface) pollution occurring on the site f. Main contractor has an environmental materials policy, used for sourcing of construction materials to be utilised on site g. Main contractor operates an Environmental Management System. One additional credit where evidence provided demonstrates that at least 80% of site timber is responsibly sourced and 100% is legally sourced.	4	3	-	-	-	-	-	Dawn / RDH
Man 4	Building user guide	One credit where evidence provided demonstrates the provision of a simple guide that covers information relevant to the tenant/occupants and non-technical building manager on the operation and environmental performance of the building.	1	1	-	-	-	1	1	NHS Ayrshire & Arran (Whoever is responsible for producing O&M manual)
Man 6	Consultation	One credit where evidence provided demonstrates that consultation has been, or is being, undertaken and feedback given to the local community and building users. In addition, advice should also have been sought from any relevant national and local history, archaeological bodies or military history groups regarding the heritage value of the building/site/surroundings. Two credits where, in addition to the above, evidence provided demonstrates that changes to the design and/or action has been taken as a result of the above consultation process. This should include the protection of any parts of the building (or site) having historic or heritage value in accordance with independent advice from the relevant body.	2	2	-	-	-	-	-	All Dawn / RDH / Core Associates
Man 7	Shared Facilities	One credit where evidence provided demonstrates that shared facilities have been provided as a consequence of consultation feedback. Two credits where, in addition to the above, evidence provided demonstrates that these facilities can be accessed without compromising the safety and security of the building and its occupants.	2	0	-	-	-	-	-	NHS Ayrshire & Arran All
Man 8	Security	One credit where evidence provided demonstrates that an Architectural Liaison Officer (ALO) or Crime Prevention Design Advisor (CPDA) from the local police force has been consulted at the design stage and their recommendations incorporated into the design of the building and its parking facilities (if relevant).	1	1	-	-	-	-	-	ALO / CPDA Dawn / RDH / Core Associates
Man 11	Ease of Maintenance	One credit where evidence provided demonstrates that specifications for the building and the building services/systems and landscaping have considered ease and efficiency of maintenance in line with best practice.	1	1	-	-	-	-	-	Dawn / RDH / Core Associates DSSR TGP / URS
Man 12	Life Cycle Costing	One credit where evidence provided demonstrates that a Life Cycle Cost (LCC) analysis based on the feasibility study proposals has been undertaken on the building design at a strategic and system level. Two credits where, in addition to the above, evidence provided demonstrates that the results of the feasibility study and consideration of LCC have been implemented.	2	2	-	-	-	-	-	Faithful & Gould
Man 13	Good Corporate Citizen	One credit where evidence provided demonstrates that the Good Corporate Citizen model has been used to assess the development and that there is a commitment to continue to use the model to re-assess the development regularly.	1	1	-	-	-	-	-	NHS Ayrshire & Arran Dawn / RDH / Core Associates
		Indicative Management (weighted) Section Score	**10.00%**							
Health & Wellbeing										
Hea 1	Daylighting	Two credits where at least 80% by floor area of occupied staff and public spaces have an average daylight factor of 2% or more. And at least 80% by floor area of occupied patient spaces (dayrooms, wards) and consulting rooms have an average daylight factor of 3% or more.	2	2	-	-	-	-	-	L.M. Architects DSSR
Hea 2	View Out	One credit where evidence provided demonstrates that all workstations/benches and desks and at least 80% by floor area of public areas have an adequate view out. One credit where evidence provided demonstrates that all patient-occupied spaces have an adequate view out.	2	2	-	-	-	-	-	L.M. Architects
Hea 3	Glare Control	One credit where evidence provided demonstrates that an occupant-controlled shading system (e.g. internal or external blinds) is fitted in relevant building areas.	1	1	-	-	-	-	-	L.M. Architects Dawn / RDH / Core Associates
Hea 4	High frequency lighting	One credit where evidence provided demonstrates that high frequency ballasts are installed on all fluorescent and compact fluorescent lamps.	1	1	1	1	1	1	1	DSSR
Hea 5	Internal and external lighting levels	One credit where evidence provided demonstrates that all internal and external lighting, where relevant, is specified in accordance with the appropriate maintained illuminance levels (in lux) recommended by CIBSE.	1	1	-	-	-	-	-	DSSR
Hea 6	Lighting zones & controls	One credit where evidence provided demonstrates that, in all relevant building areas, lighting is appropriately zoned and occupant controllable.	1	1	-	-	-	-	-	DSSR
Hea 7	Potential for natural ventilation	One credit where evidence provided demonstrates that fresh air is capable of being delivered to the occupied spaces of the building via a natural ventilation strategy, and there is sufficient user-control of the supply of fresh air.	1	0	-	-	-	-	-	DSSR
Hea 8	Indoor air quality	One credit where air intakes serving occupied areas avoid major sources of external pollution and recirculation of exhaust air.	1	1	-	-	-	-	-	DSSR
Hea 9	Volatile Organic Compounds	One credit where evidence provided demonstrates that the emissions of VOCs and other substances from key internal finishes and fittings comply with best practice levels.	1	1	-	-	-	-	-	Dawn / RDH / Core Associates
Hea 10	Thermal comfort	One credit where evidence provided demonstrates that thermal comfort levels in occupied spaces of the building are assessed at the design stage to evaluate appropriate servicing options, ensuring appropriate thermal comfort levels are achieved.	1	1	-	-	-	-	-	DSSR

Hea 11	Thermal zoning	One credit where evidence provided demonstrates that local occupant control is available for temperature adjustment in each occupied space to reflect differing user demands.	1	1	-	-	-	-	-	DSSR
Hea 12	Microbial contamination	One credit where evidence provided demonstrates that the risk of waterborne and airborne legionella contamination has been minimised.	1	1	1	1	1	1	1	DSSR
Hea 13	Acoustic Performance	One credit where evidence provided demonstrates that indoor ambient noise levels and airborne and impact sound insulation levels achieve the recommended performance benchmarks outlined HTM 08-01 Part A. One credit where evidence provided demonstrates that reverberation times are compliant with the recommended performance benchmarks outlined HTM 08-01 Part A.	2	2	-	-	-	-	-	Dawn / RDH / Core Associates Acoustic Specialist
Hea 15	Outdoor Space	One credit where evidence provided demonstrates the provision of an adequate outdoor amenity space accessible for use by the building's occupants.	1	1	-	-	-	-	-	TGP
Hea 19	Arts in health	One credit where evidence provided demonstrates that an art co-ordinator has been appointed or an art strategy and policy have been prepared for the development.	1	1	-	-	-	-	-	Dawn / RDH / Core Associates - NHS
		Indicative Health & Wellbeing (weighted) Section Score	**14.17%**							

Energy

Ene 1	Reduction of CO2 Emissions	Up to fifteen credits where evidence provided demonstrates an improvement in the energy efficiency of the building's fabric and services and therefore achieves lower building operational related CO2 emissions (refer to the BREEAM manual for benchmarks)	15	8	-	-	-	6	10	DSSR
Ene 2	Sub-metering of Substantial Energy Uses	One credit where evidence provided demonstrates the provision of direct sub-metering of energy uses within the building. Two credits where, in addition to the above, evidence provided demonstrates that sub meters are connected to a BMS or other type of automated control device.	2	2	-	-	1	1	1	DSSR
Ene 3	Sub-metering of high energy load Areas and Tenancy	One credit where evidence provided demonstrates sub-metering of energy consumption by tenancy/building function area is installed within the building.	1	1	-	-	-	-	-	DSSR
Ene 4	External Lighting	One credit where energy-efficient external lighting is specified and all light fittings are controlled for the presence of daylight.	1	1	-	-	-	-	-	DSSR
Ene 5	Low zero carbon technologies	One credit where evidence provided demonstrates that a feasibility study considering local (on-site and/or near site) low or zero carbon (LZC) technologies has been carried out and the results implemented. Two credits where evidence provided demonstrates that the first credit has been achieved and there is a 10% reduction in the building's CO2 emissions as a result of the installation of a feasible local LZC technology. Three credits where evidence provided demonstrates that the first credit has been achieved and there is a 15% reduction in the building's CO2 emissions as a result of the installation of a feasible local LZC technology. Or alternatively: A maximum of one credit where evidence provided demonstrates that a contract with an energy supplier is in place to provide sufficient electricity used within the assessed building/development to meet the above criteria from a 100% renewable energy source. (Note: a standard Green Tariff will not comply)	3	2	-	-	-	1	1	DSSR
Ene 8	Lifts	Up to two credits are available where evidence provided demonstrates the installation of energy-efficient lift(s).	2	2	-	-	-	-	-	DSSR
Ene 15	Provision of Energy Efficient Equipment	One credit where evidence provided demonstrates procurement of office and domestic scale equipment on the basis of energy-efficient performance over the product life cycle.	1	1	-	-	-	-	-	NHS Ayrshire & Arran
Ene 16	CHP Community Energy	One credit where evidence provided demonstrates that a feasibility study has been carried out on the potential for the building to set up, contribute to or benefit from a local CHP community energy scheme.	1	1	-	-	-	-	-	DSSR
		Indicative Energy (weighted) Section Score	**13.15%**							

Transport

Tra 1	Provision of public transport	Up to five credits are awarded on a sliding scale based on the assessed buildings' accessibility to the public transport network.	5	2	-	-	-	-	-	URS NHS Ayrchire & Arran
Tra 2	Proximity to amenities	One credit where evidence provided demonstrates that the building is located within 500m of accessible local amenities appropriate to the building type and its users.	1	1	-	-	-	-	-	NHS Ayrshire & Arran URS/ URS
Tra 3	Cyclist Facilities	One credit where evidence provided demonstrates that covered, secure and well-lit cycle storage facilities are provided for all building users. Two credits where, in addition to the above, adequate changing facilities are provided for staff use.	2	1	-	-	-	-	-	URS / LM Architects Dawn / RDH /Core Associates NHS Ayrshire & Arran
Tra 4	Pedestrian and cycle safety	**Medium/Large developments** e.g. acute, teaching, specialist and mental health hospitals One credit where evidence provided demonstrates that the site layout has been designed in accordance with best practice to ensure safe and adequate cycle access. One credit where evidence provided demonstrates that the site layout has been designed in accordance with best practice to ensure safe and adequate pedestrian access.	2	2	-	-	-	-	-	URS / NHS Ayrshire & Arran
Tra 5	Travel plan	One credit where evidence is provided to demonstrate that a travel plan has been developed and tailored to the specific needs of the building users.	1	1	-	-	-	-	-	URS / NHS Ayrshire & Arran
Tra 6	Maximum car parking capacity	One credit where evidence provided demonstrates that the number of parking spaces provided for the building has been limited.	1	0	-	-	-	-	-	NHS Ayrshire & Arran Dawn / RDH / Core Associates
Tra 7	Travel information point	One credit where evidence provided demonstrates there is a dedicated space within the development for the provision of real-time public transport information.	1	1	-	-	-	-	-	Dawn / RDH / Core Associates / NHS Ayrshire & Arran
Tra 8	Deliveries & manoeuvring	One credit where evidence provided demonstrates that vehicle access areas have been designed to ensure adequate space for manoeuvring delivery vehicles and provide space away from manoeuvring area for storage of refuse skips and pallets.	1	1	-	-	-	-	-	URS / LM Architects
		Indicative Transport (weighted) Section Score	**5.14%**							

Water

Wat 1	Water Consumption	Up to three credits where evidence provided demonstrates that the specification includes taps, urinals, WCs and showers that consume less potable water in use than standard specifications for the same type of fittings.	3	3	-	1	1	1	2	L.M. Architects DSSR
Wat 2	Water meter	One credit where evidence provided demonstrates that a water meter with a pulsed output will be installed on the mains supply to each building/unit.	1	1	-	1	1	1	1	DSSR
Wat 3	Major leak detection	One credit where evidence provided demonstrates that a leak detection system is specified or installed on the building's water supply.	1	1	-	-	-	-	-	DSSR Dawn / RDH / Core Associates
Wat 4	Sanitary supply shut off	One credit where evidence provided demonstrates that proximity detection shut-off is provided to the water supply to all toilet areas.	1	0	-	-	-	-	-	DSSR
Wat5	Water recycling	Up to two credits where evidence provided demonstrates the specification of systems that collect, store and, where necessary treat, rainwater or greywater for WC and urinal flushing purposes.	2	0	-	-	-	-	-	URS / DSSR
Wat 6	Irrigation systems	One credit where evidence provided demonstrates that a low-water irrigation strategy/system has been installed, or where planting and landscaping is irrigated via rainwater or reclaimed water.	1	1	-	-	-	-	-	T.G.P.

Indicative Water (weighted) Section Score 4.00%

Materials

Mat 1	Materials Specification (major building elements)	Up to six credits are available, determined by the Green Guide to Specification ratings for the following major building/finishing elements: 1. External Walls 2. Windows 3. Roof 4. Upper Floor Slabs 5. Internal Walls 6. Floor Finishes / Coverings	6	5	-	-	-	-	-	Dawn / RDH / Core Associaites L.M. Architects
Mat 2	Hard landscaping and boundary protection	One credit where evidence provided demonstrates that at least 80% of the combined area of external hard landscaping and boundary protection specifications achieve an A or A+ rating, as defined by the Green Guide to Specification.	1	0	-	-	-	-	-	T.G.P./ LM Architects
Mat 3	Re-use of building façade	One credit is awarded where evidence provided demonstrates that at least 50% of the total façade (by area) is reused and at least 80% of the reused façade (by mass) comprises in-situ reused material.	1	0	-	-	-	-	-	N/A
Mat 4	Re-use of building structure	One credit is awarded where evidence provided demonstrates that a design reuses at least 80% of an existing primary structure and for part refurbishment and part new build, the volume of the reused structure comprises at least 50% of the final structure's volume.	1	0	-	-	-	-	-	N/A
Mat 5	Responsible sourcing of materials	Up to 3 credits are available where evidence provided demonstrates that 80% of the assessed materials in the following building elements are responsibly sourced: a. Structural Frame b. Ground floor c. Upper floors (including separating floors) d. Roof e. External walls f. Internal walls g. Foundation/substructure h. Staircase Additionally 100% of any timber must be legally sourced.	3	2	-	-	-	-	-	Dawn / RDH / Core Associates
Mat 6	Insulation	One credit where evidence provided demonstrates that thermal insulation products used in the building have a low embodied impact relative to their thermal properties, determined by the Green Guide to Specification ratings. One credit where evidence provided demonstrates that thermal insulation products used in the building have been responsibly sourced.	2	1	-	-	-	-	-	Dawn / RDH / Core Associates DSSR
Mat 7	Designing For Robustness	One credit where protection is given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements.	1	1	-	-	-	-	-	L.M. Architects - URS

Indicative Materials (weighted) Section Score 7.50%

Waste

Wst 1	Construction Site Waste Management	Up to three credits are available where evidence provided demonstrates that the amount of non-hazardous construction waste (m3/100m2 or tonnes100m2) generated on site by the development is the same as or better than good or best practice levels. One credit where evidence provided demonstrates that a significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled.	4	3	-	-	-	-	-	Dawn / RDH
Wst 2	Recycled aggregates	One credit where evidence provided demonstrates the significant use of recycled or secondary aggregates in 'high-grade' building aggregate uses.	1	0	-	-	-	-	-	Dawn / RDH URS
Wst 3	Recyclable waste storage	One credit where a central, dedicated space is provided for the storage of the building's recyclable waste streams.	1	1	-	-	-	1	1	Dawn / RDH / Core Associates
Wst 4	Compactor / Baler	One credit where evidence provided demonstrates that either an industrial waste compactor or baler is installed for compacting/baling waste materials generated on site and a. A water outlet is provided for cleaning b. The development achieves the BREEAM credit for storage of recyclable waste.	1	0	-	-	-	-	-	Dawn / RDH / Core Associates
Wst 5	Composting	One credit w here evidence provided demonstrates there is a vessel on site for composting food waste, and adequate storage for such waste generated by the building's users and operation. OR Where space or access is limited, there is a dedicated space for compostable food waste to be stored prior to removal and composting at an alternative site.	1	1	-	-	-	-	-	Dawn / RDH / Core Associates

Indicative Waste (weighted) Section Score 4.69%

Land Use & Ecology

LE1	Re-use of land	One credit where evidence provided demonstrates that the majority of the footprint of the proposed development falls within the boundary of previously developed land.	1	1	-	-	-	-	-	URS / T.G.P.
LE2	Contaminated land	One credit is awarded where evidence provided demonstrates that the land used for the new development has, prior to development, been defined as contaminated and where adequate remedial steps have been taken to decontaminate the site prior to construction.	1	0	-	-	-	-	-	URS / Dawn / RDH / Core Associaites
LE3	Ecological value of site AND Protection of ecological features	One credit is awarded where evidence provided demonstrates that the construction zone is defined as land of low ecological value and all existing features of ecological value will be fully protected from damage during site preparation and construction works.	1	0	-	-	-	-	-	URS/Dawn / RDH / Core Associaites
LE4	Mitigating Ecological impact	One credit where evidence provided demonstrates that the change in the site's existing ecological value, as a result of development, is minimal. Two credits where evidence provided demonstrates that there is no negative change in the site's existing ecological value as a result of development.	2	2	-	-	1	1	1	URS
LE5	Enhancing Site Ecology	One credit where the design team (or client) has appointed a suitably qualified ecologist to advise and report on enhancing and protecting the ecological value of the site; and implemented the professional's recommendations for general enhancement and protection of site ecology. Two credits where, in addition to the above, there is a positive increase in the ecological value of the site of up to (but not including) 6 species. Three credits where, in addition to the above, evidence is provided to demonstrate a positive increase in the ecological value of the site of 6 species or greater.	3	2	-	-	-	-	-	URS/T.G.P.

LE6	Long term impact on biodiversity	One credit where the client has committed to achieving the mandatory requirements listed below and at least two of the additional requirements. Two credits where the client has committed to achieving the mandatory requirements listed below and at least four of the additional requirements.	2	1	-	-	-	-	-	NHS Ayrshire & Arran
		Indicative Land Use & Ecology (weighted) Section Score	**6.00%**							
Pollution										
Pol 1	Refrigerant GWP - Building services	One credit where evidence provided demonstrates the use of refrigerants with a global warming potential (GWP) of less than 5 or where there are no refrigerants specified for use in building services.	1	0	-	-	-	-	-	DSSR
Pol 2	Preventing refrigerant leaks	One credit where evidence provided demonstrates that refrigerant leaks can be detected or where there are no refrigerants specified for the development. One credit where evidence provided demonstrates that the provision of automatic refrigerant pump down is made to a heat exchanger (or dedicated storage tanks) with isolation valves. Or where there are no refrigerants specified for the development.	2	0	-	-	-	-	-	DSSR
Pol 3	Refrigerant GWP - Cold storage	One credit where evidence provided demonstrates the use of refrigerants within cold storage systems with a global warming potential (GWP) of less than 5.	1	0	-	-	-	-	-	NHS Ayrshire & Arran Dawn / RDH / Core Associates
Pol 4	NOx emissions from heating source	One credit where evidence provided demonstrates that the maximum dry NOx emissions from delivered space heating energy are ≤100 mg/kWh (at 0% excess O2). Two credits where evidence provided demonstrates that the maximum dry NOx emissions from delivered space heating energy are ≤70 mg/kWh (at 0% excess O2). Three credits where evidence provided demonstrates that the maximum dry NOx emissions from delivered space heating energy are ≤40 mg/kWh (at 0% excess O2) and emissions from delivered water heating energy are 100 mg/kWh or less (at 0% excess O2).	3	1	-	-	-	-	-	DSSR
Pol 5	Flood risk	Two credits where evidence provided demonstrates that the assessed development is located in a zone defined as having a low annual probability of flooding. One credit where evidence provided demonstrates that the assessed development is located in a zone defined as having a medium or high annual probability of flooding AND the ground level of the building, car parking and access is above the design flood level for the site's location. One further credit where evidence provided demonstrates that surface water run-off attenuation measures are specified to minimise the risk of localised flooding, resulting from a loss of flood storage on site due to development.	3	3	-	-	-	-	-	URS
Pol 6	Minimising watercourse pollution	One credit here evidence provided demonstrates that effective on site treatment such as Sustainable Drainage Systems (SUDs) or oil separators have been specified in areas that are or could be a source of watercourse pollution.	1	1	-	-	-	-	-	Dawn / RDH / Core Associates URS
Pol 7	Reduction of Night Time Light Pollution	One credit where evidence provided demonstrates that the external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.	1	1	-	-	-	-	-	DSSR
Pol 8	Noise Attenuation	One credit where evidence provided demonstrates that new sources of noise from the development do not give rise to the likelihood of complaints from existing noise-sensitive premises and amenity or wildlife areas that are within the locality of the site.	1	1	-	-	-	-	-	Acoustic Consultant
		Indicative Pollution (weighted) Section Score	**5.38%**							
Innovation										
Man 2	Considerate Constructors	Where post construction, a Considerate Constructors Scheme certificate can be provided demonstrating that the site achieved CCS Code of Considerate Practice with a score of at least 36. OR Where post construction, the site has complied in full with the alternative, independently assessed scheme, and the alternative scheme addresses all the mandatory and optional items in Checklist A2.	1							Dawn / RDH
Hea 1	Daylighting	At least 80% of the floor area (for the building spaces/room identified above in the standard requirements) has an average daylight factor of 3% in multi-storey buildings and 4% in single-storey buildings.	1							L.M. Architects DSSR
Ene 1	Reduction of CO2 emissions	One additional innovation credit can be awarded where evidence provided demonstrates the building is designed to be a carbon neutral building as defined by the NCM (i.e. in terms of building services energy demand), as follows: a. A new building achieves a CO2 index less than 0 on the benchmark scale. b. A refurbished building achieves a CO2 index equal to or less than 0 on the benchmark scale. Two additional innovation credits can be awarded where evidence provided demonstrates the building is designed to be a True zero carbon building (in terms of building services and operational energy demand).	2							DSSR
Ene 5	Low or Zero Carbon Technologies	A local LZC energy technology has been installed in line with the recommendations of a compliant feasibility study and this method of supply results in a 20% reduction in the building's CO2 emissions.	1							DSSR
Wat 2	Water Meter	Where sub meters are fitted to allow individual water-consuming plant or building areas to be monitored such as cooling towers, car washes, catering areas, etc. If the building does not have any major water consuming plant this exemplar credit is not available. Each sub meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption. In addition to the above, for sites with multiple departments e.g. large health centres or acute hospitals, separate pulsed sub meters are fitted on the supply to the following areas where present: a. Staff and public areas b. Clinical areas and wards c. Letting areas: On the water supply to each tenant unit d. Laundries e. Main production kitchen f. Hydrotherapy pools g. Laboratories h. CSSD/HSDU, pathology, pharmacy, mortuary and any other major process water user.	1							DSSR Dawn / RDH / Core Associates
Mat 1	Materials Specification	One exemplary BREEAM credit can be awarded as follows: a. Where assessing four or more applicable building elements, the building achieves at least two points additional to the total points required to achieve maximum credits under the standard BREEAM requirements. b. Where assessing fewer than four applicable building elements, the building achieves at least one point additional to the total points required to achieve maximum credits under the standard BREEAM requirements.	1							Dawn / RDH / Core Associates L.M. Architects
Mat 5	Responsible Sourcing of Materials	Where, in addition to the standard BREEAM requirements, 95% of the applicable materials, comprised within the applicable building elements, have been responsibly sourced.	1							Dawn / RDH / Core Associates
Wst 1	Construction Site Waste Management	Where non-hazardous construction waste generated by the building's development meets or exceeds the resource efficiency benchmark required to achieve three credits (as outlined in the guidance). Where at least 90% by weight (80% by volume) of non-hazardous construction waste and 95% of demolition waste by weight (85% by volume) (if applicable) generated by the build has been diverted from landfill and either: a. Reused on site (in-situ or for new applications) b. Reused on other sites c. Salvaged/reclaimed for reuse d. Returned to the supplier via a 'take-back' scheme e. Recovered from site by an approved waste management contractor and recycled. Where all key waste groups are identified for diversion from landfill at pre-construction stage SWMP.	1							Dawn / RDH

Indicative Innovation (weighted) Section Score	0.00%

Appendix 2G

Sustainability Report

Sustainability

This programme will promote sustainability across three fronts, these are:

A: Through the procurement, construction and operation of the new facility

The design of the new facility will be developed to provide a comfortable, therapeutic and stimulating environment for the occupants whilst minimising the impact of the building on the environment both during construction and in operation. A number of measures, outlined below, have been considered in order to improve the sustainability of the building; these aspects will continue to be developed throughout the design process.

Passive Energy Saving Measures

By careful consideration of the location, orientation, form, extent of solar shading and construction type of the building (both opaque and translucent elements), a comfortable internal environment will be maintained with minimal energy input.

Daylighting

Natural light can make an important contribution to sustainability by reducing the electrical energy used for artificial lighting. It also contributes to the well-being of visitors and staff, and the aesthetics and feel of the space. This is further improved by the use of simple, but effective lighting control measures (such as daylight control in highly glazed areas and PIR control of transiently occupied spaces) as well as energy efficient artificial lighting design and luminaire selection.

By making the best use of the final site chosen and minimising the number of storeys in the building, daylight penetration to the lower levels of the building has been optimised.

North facing glazing will be maximised to allow good quality diffuse daylight to enter the building whilst minimising the potential for glare and overheating. Effective solar shading/control will be provided to the other main elevations.

Natural Ventilation

The outline proposals aim to maximise the use of natural ventilation to provide a comfortable internal environment. Generally the layouts will allow for effective natural-ventilation of space by means of opening windows. In addition, where mechanical ventilation is required in order to meet clinical or statutory requirements, high efficiency/low energy fans will be used and ventilation heat recovery will be maximised.

Building Envelope

The building will include a high level of thermal insulation and careful detailing to minimise unwanted heat loss and uncontrolled infiltration.

Efficient Building Services Installations

The building services systems within the facility will be designed and controlled so that they operate at maximum efficiency and only operate when required, thus minimising energy consumption. Some examples of ways in which building services may be designed to reduce energy consumption are as follows:

The artificial lighting will utilise low energy fluorescent or discharge lamps and luminaries with high light output ratio.

Automatic lighting controls, with manual override, will be used to ensure lights are switched off when sufficient natural daylight is available or when rooms are unoccupied.

All air handling units will incorporate variable speed fans. Automatic controls will ensure the fans only deliver the volumes or air required to suit the requirements of the space at any particular time. This will reduce energy consumption for both fans and heating of fresh air.

Other Low and Zero Carbon Technologies will be applied as appropriate in order to achieve the expected planning requirement of a 15% reduction in predicted Carbon Emissions when compared against the Notional Building criteria within the latest Technical Standards.

Water Conservation

Water consumption will be reduced by using low water use fittings, flow restrictors and timed flow control to reduce wastage. Rainwater/Greywater Harvesting will also be considered where appropriate.

Materials

Construction materials will be selected on grounds of their suitability for the job and their sustainability. Choosing sustainable construction materials involves consideration of environmental impacts throughout their life cycle and the avoidance of non-renewable materials where possible. The following have been considered during the selection process:

- Impact of the material's production on the environment.
- Hazards to health or local environment during construction or use.
- Life span of the material.
- Nature of the resources involved, renewable or non-renewable, scarce or abundant.
- Emission of CO_2 during production and consideration of embodied energy.
- How far and by what modes the material will be transported.
- The use of recycled material.

Eventual destination of the material after the building's life; where possible materials and construction methods will be employed that will allow building components to be reused at the end of the building's life, or recycled where reuse is not possible.

The methodologies set out in "The Green Guide to Specification" (bre: August 2007) will be used to assess different materials and determine the most sustainable material for each element of the buildings. Where possible A +/A rated materials or their nearest equivalent will be used.

Landscaping & Ecology

The following items have been considered in respect of how the facility will interact with its surroundings:

- Biodiversity before and after the build
- Use of native species
- Use of a scheme that avoids artificial irrigation or fertilizers
- Trees for shading
- Retention of existing vegetation
- Avoidance of disturbing the water table and watershed
- Integrated pest management

Management/ Methodology

The following proposed procedures will help to develop a sustainable construction methodology for the contractor:

- Using lean construction methods with minimum waste.
- Minimising energy use during construction.
- Separation of construction waste (and avoidance of waste in the first place) and the careful disposal of toxic waste to prevent pollution of the local environment.
- Preserving local biodiversity through careful and compact zoning of construction activities.
- Conserving water resources.
- Developing good relationships with local people in order to safeguard particularly important features of the local environment.
- Careful monitoring of the construction process.
- Responsible sourcing through identification of the supply chain and product stewardship.

B: Through the location of the new facility

There is one major positive contribution to the overall sustainability of the programme that the choice of site can make and that is its location.

The Board are aware that one of the overriding objectives for the new facility, that of “accessibility”, inherently corresponds to sustainable outcomes. Accessibility of the site was one of the key criteria in the options appraisal exercise.

Green Travel

The Board employs a Travel and Access Co-ordinator, who is currently working with the team in the preparation of a travel plan for the new development, the aim being to ensure that pollution from transportation is minimised and to assist the journey for all residents of Ayrshire and Arran to the new facility.

C: Through the provision of facilities capable of sustaining growth

The overriding objective of this programme is to provide a modern, fit for purpose, Community Hospital that meets the Clinical brief and allows future flexibility to meet the changing needs of the NHS Ayrshire & Arran.

The ideas of 'growth' and 'sustainability' could be regarded as potentially opposing forces.

Consideration is being given to sustaining growth by providing a facility with a:

- Long Life
- Low Maintenance
- Flexible Layout
- Capability of Extension
- Potential for re-use/ adaptation of the premises by other functions

Future proofing of the existing facility, like Accessibility, was one of the key criteria in the options appraisal exercise and in the development of the preferred option. There is some room for expansion on site if required but, primarily, the building has been constructed in such a way that there is flexibility to nurse patients with varying needs between wards if bed number pressures arise.

The Cost of Sustainable Development

While the Board acknowledge that it is a common misconception that sustainable development is more expensive or too expensive, the Programme Team are working within the constraints of fixed capital budget. A whole life cost approach has been taken to this programme and sustainable development has been viewed in the longer term or holistic sense, however, this has to be balanced with the affordability of the initial capital cost and the competing priorities of the benefits criteria outlined in chapter.

The Board at present aspires to an Excellent BREEAM rating, however, it is important to note that the current ratings will only be achieved if the design team and the Board submit the relevant information for each credit counted within the 'possible' score. The cost V benefits will be kept under review as the design develops.

Summary

The programme team has given careful consideration to the ongoing sustainability of the new facility post completion. After procuring a building that is designed and constructed with sustainability as one of the key priorities it is then essential that the ongoing management of the facility continues these principals. Operational policies are already being developed to ensure resources are utilised to their maximum and waste is minimised. An Environmental Management System installed in the building will help staff control light, ventilation, temperature and monitor energy usage and allow targets to be set regarding reducing consumption.

This new Hospital will lead NHS Ayrshire & Arran's journey in reducing our carbon output by making it one of the most environmentally aware buildings in our estate.

By providing this facility and doing so across the three fronts described, the provision of the services within the new Community Hospital will be sustainable for the foreseeable future.

The flyer below demonstrates how the Director's team is tackling the challenge of ensuring NHS Ayrshire & Arran has a sustainable future:

Appendix 2H

Condition Survey

NHS Ayrshire & Arran
AILSA HOSPITAL
Refurbishment

Cost Plan Nr 5
date 08/06/2011

Refurbishment estimated costs

Clonbeith & Dunure ; Iona & Jura			2,232,189
Croy			426,451
Project Works			**2,658,640**
Fees		14%	372,210
			3,030,850
Equipment (% of the Project Works)		5%	132,932
Other NHS A&A costs (planning , building warrant)			5,000
			3,168,782
Tender Price inflation to 2014/15	Inflation	10%	316,878
			3,485,660
Board contingency - Opt Bias		15%	522,849
			4,008,509
VAT		20%	801,702
			£ 4,810,211
Estimated (Provisional) VAT rebate		-22.9%	-183,349
			£ 4,626,862

Assumptions / Clarifications / Exclusions:

No Asbestos is present

No allowance for BREEAM

No allowance for Decant or Re-provision of Services during the works

It has been assumed (*confirmation required from Arch*) that the proposed Clinical Brief to re-configuration of the bedroom and the installation of the new wet room en-suite will all be contained within the existing bedroom and en-suite footprint

An allowance has been made for additional supports to support the ceiling mounted patient handling hoist track associated with the proposed installation of the new wet room en-suite (*confirmation required from Structural Consultant on the feasibility - requirements regarding additional supports associated with the existing timber frame structure*)

It has been assumed that the existing bedroom en-suite drainage can cope with the change to a en-suite wet room, no allowance has been made for increasing the existing below ground drainage installation

It has been assume that the existing building has spare utility (power water drainage etc.) capacity to serve the proposed two new (storage & Staff Changing) modular buildings (*to be confirmed by M&E consultant*)

Assumptions / Clarifications / Exclusions : cont

All the proposed new ceiling track mounted patient handling hoists are based upon single patient up to 200kg weight, no allowance for bariatric patient hoists

Estimated VAT rebate allowance TBC by NHS A&A finance dept.

NHS Ayrshire & Arran

Cost Plan Nr 5

Clonbeith & Dunure ; Iona & Jura

date 08/06/2011

Elemental Summary

Base Date 2Q10	Refurbishment Works		
	GFA (ft2)	8,913	
	GFA (m2)	828	
Element	**Cost**	**Cost/m2 GFA**	**Cost/ft2 GFA**
0 Downtakings/ Alterations/ Repairs	**£1,029,684**	**1,243.58**	**115.53**
1 Substructure	**£0**	**0.00**	**0.00**
2 Superstructure			
2A Frame	£0	0.00	0.00
2B Upper Floors	£0	0.00	0.00
2C Roof	£0	0.00	0.00
2D Stairs	£0	0.00	0.00
2E External Walls	£0	0.00	0.00
2F Windows & External Doors	£0	0.00	0.00
2G Internal Walls & Partitions	£0	0.00	0.00
2H Internal Doors	£0	0.00	0.00
Group Element Total £	**£0**	**0.00**	**0.00**
3 Internal Finishes			
3A Wall Finishes	£0	0.00	0.00
3B Floor Finishes	£0	0.00	0.00
3C Ceiling Finishes	£0	0.00	0.00
Group Element Total £	**£0**	**0.00**	**0.00**
4 Fittings	**£0**	**0.00**	**0.00**
5 Services			
5A Sanitary Appliances	£2,000	2.42	0.22
5B Disposal Installation	£0	0.00	0.00
5C Water Installation	£34,000	41.06	3.81
5D Space Heating & Heat Source	£75,000	90.58	8.42
5E Ventilation Systems	£106,000	128.02	11.89
5F Electrical Installations	£567,652	685.57	63.69
5G Gas Installation	£0	0.00	0.00
5H Protective Installation	£0	0.00	0.00
5I Communication Installations	£0	0.00	0.00
5J Lift & Conveyor Installations	£0	0.00	0.00
5K BWICS	£48,305	58.34	5.42
Group Element Total £	**£832,957**	**1,005.99**	**93.46**
6 External Works			
6A Site Works	£0	0.00	0.00
6B Drainage	£0	0.00	0.00
6C External Services	£0	0.00	0.00
Group Element Total £	**£0**	**0.00**	**0.00**
	£1,862,641.20		
8 Preliminaries 12%	**£223,517**	**269.95**	**25.08**
9 Contrcator OH&P 7%	**£146,031**	**176.37**	**16.38**
7 Warranties/ Consents	**£0**	**0.00**	**0.00**
TOTAL CONSTRUCTION COST	**£2,232,189**	**2,695.88**	**250.45**

NHS A NHS Ayrshire & Arran | Cost Plan Nr 5

Feasib Feasibility **Clonbeith & Dunure ; Iona & Jura** | date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment | GFA 4,338 m2

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
			Downtakings/ Repairs **LMA Arch Draft report 15-4-10 ;** **section 9 Conclusion**					
		9.0	The survey concludes that the overall building fabric retains its integrity, is generally in a fair condition and that the recorded defects are rectifiable. In its current condition the building is a tale of two stories. The interior which is generally in a good condition and the exterior which, with the exception of the roof requires a minimum general repair.					
Build	1		Remove all 3 nr entrance canopies and make good	3	nr	10,000.00	30,000.00	
Build	3		Redecorate timber fascia.	Works being / to be by NHS FM Maintenance				
Build	2		Overclad the existing fascia and soffits with an insulated fascia system	350	m2	50.00	17,500.00	
Build	2		Apply an insulated render system to external walls to prevent further deterioration of brickwork, precast window surrounds and plinth	1,500	m2	100.00	150,000.00	
Build	2		Allow for minor repairs to external walls before applying render system	750	m2	20.00	15,000.00	
			Alternative Option allow for patch & repair of existing external walls and facia allow say 50% estimate of new render system say £80k					
Build	2		Replace all missing window head and cill flashings where missing. (no details of qty - extent of works)	1	sum	5,000.00	5,000.00	
Build	3		Repair / replacement of timber and metal framed single glazed units to east elevation of Link Corridors.	Works being / to be by NHS FM Maintenance				
Build	3		External ; re- decoration to all previously externally decorated surfaces.	Works being / to be by NHS FM Maintenance				
Build	3		Install glass fibre above suspended ceilings and to bulkhead framing.	Works being / to be by NHS FM Maintenance				
Build	3		Replace selected glazed timber screens, aluminium and UPVC windows to maintain a sealed building envelope	Works being / to be by NHS FM Maintenance				
Build	3		Repair minor frost damage to concrete slab access ramps (east elevation Clonbeith).	Works being / to be by NHS FM Maintenance				
Build	3		Repair / replace frost damaged retaining wall brickwork to access ramps (south elevation, Brodick).	Estates / FM Maintenance To Advise				
Build	3		Test all precast concrete roof facias for loose or bossed concrete. Remove any spalling or loose concrete sections and replace. Alternatively treat exposed reinforcement with corrosion inhibitor and patch repair.	Works being / to be by NHS FM Maintenance				
Build	3		Repair water tightness to 2No. external roof plant room housings. Repair / replace water damaged timbers.	Works being / to be by NHS FM Maintenance				
			Buchan Associates Ailsa Clinical (Draft) Brief Rev 4 2-9-10					
Clinical	1		Convert existing en-suite into a "dual accessible wet room"	14	nr	17,500.00	245,000.00	
Clinical	1		Overhead hoist capable of transferring from bed to WC and shower in 6 nr of the 14 nr wet room conversions (qty of 6nr hoists discussed and agreed at review meeting 20-9-10)	6	nr	17,500.00	105,000.00	

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment GFA 4,338 m2

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
			Provide a small glass conservatory (circa 12-15m2) - probably to be accessed through the removal of an existing bedroom - primarily to improve the ingress of light to day areas.					
Clinical	1		Mods and alts to make way for conservatory	3	nr	5,000.00	15,000.00	
Clinical	1		Glass conservatory 15m2 x £1500 / m2	3	nr	22,500.00	67,500.00	
Clinical	1		Storage space external to the existing footprint with link corridor to the main ward areas. (fully serviced Modular building)	80	m2	1,000.00	80,000.00	
Clinical	1		Allowance for modular building ; foundations Approx size 78 m2	80	m2	120.00	9,600.00	
Clinical	1		Allownace for utility (power water drainage etc.) from the existing adjacent Clonbeith & Dunure ; Iona & Jura buildings	1	sum	25,000.00	25,000.00	
Clinical	1		Allowance for storage equipment	1	10%	8,000.00	8,000.00	
Clinical	1		Strip out and remove from site existing porta cabin	1	item	5,000.00	5,000.00	
Clinical	1		Staff / changing modular building with toilets and showers linked to main building Approx size 78 m2 (fully serviced Modular building incl foundations)	80	m2	1,300.00	104,000.00	
Clinical	1		Allowance for modular building ; foundations Approx size 78 m2	80	m2	120.00	9,600.00	
Clinical	1		Allownace for utility (power water drainage etc.) from the existing adjacent Clonbeith & Dunure ; Iona & Jura buildings	1	sum	50,000.00	50,000.00	
Clinical	1		Allowance for lockers, benches, misc staff changing equipment	1	10%	10,400.00	10,400.00	
			" Assume existing building has spare utility (power water drainage etc.) capacity to serve these two modular buildings "					
			Replace anti-slip floor coverings in shared areas/day spaces					
Clinical	1		Uplift and remove and dispose of existing flooring	1,301	m2	10.00	13,014.00	
Clinical	1		Supply and lay anti-slip floor coverings	1,301	m2	50.00	65,070.00	
Clinical	Note		Roof light provision in day space areas and improve light ingress / area (removed as a cost saving as discussed and agreed at review meeting 20-9-10)		nr	0.00	0.00	
			To Cost Summary					**£ 1,029,684**
			1 SUBSTRUCTURE				0.00	
			To Cost Summary					**£ 0**
			2 SUPERSTRUCTURE					
			a Frame					
			N/A				0.00	£ 0
			b Upper Floors					
			N/A				0.00	£ 0
			c Roof					
			N/A				0.00	£ 0
			d Stairs					
			N/A				0.00	

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment GFA 4,338 m2

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
								£ 0
		e	**External Walls**					
			N/A				0.00	
								£ 0
		f	**Windows & External Doors**					
			N/A				0.00	
								£ 0
		g	**Internal Wall & Partitions**					
			N/A				0.00	
								£ 0
		h	**Internal Doors**					
			N/A				0.00	
								£ 0
			To Cost Summary					**£ 0**
		3	**INTERNAL FINISHES**					
		a	**Wall Finishes**					
			N/A				0.00	
								£ 0
		b	**Floor Finishes**					
			N/A				0.00	
								£ 0
		c	**Ceiling Finishes**					
			N/A				0.00	
								£ 0
			To Cost Summary					**£ 0**
		4	**FITTINGS**					
			To Cost Summary					**£ 0**
		5	**SERVICES**					
		a	**Sanitary Appliances**					
M&E	1		Assisted bathrooms ; exposed chrome pipework no longer SHTM compliant. Allow for boxing in existing chrome pipework with a demountable panel	4	nr	500.00	2,000.00	
			To Cost Summary					**£ 2,000**
		b	**Disposal Installations**					
						Incl.	0.00	
			To Cost Summary					**£ 0**
			M&E services scoping meeting held at Brunston House, Ailsa Hospital 8-9-10					
			Note ; Colonbeith & Dunure and Iona & Jura buildings generally have a flat roof and solid plasterboard ceiling, very little - no ceiling void area to run any new services.					
			Colonbeith & Dunure and Iona & Jura					
		c	**Water Installations**					
M&E	1		Allow for water booster set	2	nr	5,000.00	10,000.00	
Build	3		Waters services generally ok ; any works associated with legionaries requirements will be carried out by HNS FM - Estates	Works being / to be by NHS FM Maintenance				
M&E	1		Allowance for " Minor " works to cold water services to eliminate dead legs in the system	1	item	5,000.00	5,000.00	
M&E	1		Allow for cold water temperature sensors to be fitted	1	item	3,000.00	3,000.00	

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment GFA 4,338 m2

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
M&E	**1**		Allow for insulation to existing cold water storage tank	1	item	1,000.00	1,000.00	
note	**note**		Hot water storage and hot water services ok ; no refurbishment works			0.00	0.00	
M&E	**2**		Existing copper compression fittings non- compliant with current SHTM ; allow for replacement of copper fittings (only where visible, easily accessible and practical to do so)	1	item	15,000.00	15,000.00	
			To Cost Summary					**£ 34,000**
			d Source Heating & Heat Space					
			Colonbeith & Dunure					
note	**note**		Existing boilers in good condition - no refurbishment works			0.00	0.00	
M&E	**2**		Pump set ; consider strip out existing and replace with new	1	item	5,000.00	5,000.00	
			Iona & Jura					
note	**note**		Existing boilers in good condition - no refurbishment works			0.00	0.00	
M&E	**2**		Pump set ; consider strip out existing and replace with new	1	item	5,000.00	5,000.00	
			Colonbeith & Dunure and Iona & Jura					
M&E	**2**		Replace LPHW pipework insulation (only where visible, easily accessible and practical to do so)	1	item	10,000.00	10,000.00	
note	**note**		Terminal LPHW heaters ok ; no works required			0.00	0.00	
M&E	**2**		Existing LPHW heating system ok, allowance for only " minor localised alteration works "	1	item	15,000.00	15,000.00	
			Colonbeith & Dunure					
			Controls ; the installed controls appear only to relate to the equipment installed within the boiler plant room. Control panel is identified as being manufactured by Milngavie Controls					
			Iona & Jura					
			Controls ; the installed controls appear only to relate to the equipment installed within the boiler plant room. One panel is identified as being manufactured by Landis & Gyr the other is unidentified					
M&E	**1**		Allow for rationalising the existing boiler controls ; not complete replacement ; also allow for some " minor " additional end of leg clamp on sensors to improve existing controls system	1	item	35,000.00	35,000.00	
			Complete BMS controls replacement installation £ 35 < > £70 / m2 = £150k < > £300k					
M&E	**1**		Allow for some " minor " additional temperature monitoring clamp on sensors	1	item	5,000.00	5,000.00	
			To Cost Summary					**£ 75,000**
			e Ventilation System					
			Colonbeith & Dunure					
M&E	**1**		Strip out existing small roof mounted supply AHUs and associated twin fan extract units and replace with new like for like roof mounted small AHUs and twin extract fan	2	nr	12,500.00	25,000.00	
M&E	**1**		Strip out existing external ductwork & insulation run on the flat roof and replace with new ductwork & external weatherproof insulation	2	nr	12,500.00	25,000.00	
M&E	**1**		Replace existing ventilation diffusers & grills	1	item	3,000.00	3,000.00	

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment GFA 4,338 m2

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
			Iona & Jura					
M&E	1		Strip out existing small roof mounted supply AHUs and associated twin fan extract units and replace with new like for like roof mounted small AHUs and twin extract fan	2	nr	12,500.00	25,000.00	
M&E	1		Strip out existing external ductwork & insulation run on the flat roof and replace with new ductwork & external weatherproof insulation	2	nr	10,000.00	20,000.00	
M&E	1		Replace existing ventilation diffusers & grills	1	item	3,000.00	3,000.00	
M&E	1		Allow for new elect power supplies to new AHU's and extract fans	2	nr	2,500.00	5,000.00	
			To Cost Summary					**£ 106,000**
			f Electrical Installations					
			Colonbeith & Dunure and Iona & Jura					
			Main LV installation					
M&E	1		Strip out existing main LV switchboard - 25 years old	2	item	2,000.00	4,000.00	
M&E	1		Install new main LV switchboard	4,338	m2	12.00	52,056.00	
M&E	1		Disconnect and re-connect existing sub mains cabling	2	item	5,000.00	10,000.00	
M&E	note		Existing sub-main cabling ok			0.00	0.00	
			LV distribution					
M&E	2		Strip out existing sub mains distribution boards - 25 years old	2	item	2,000.00	4,000.00	
M&E	2		Install new sub-mains distribution boards	4,338	m2	6.00	26,028.00	
M&E	2		Disconnect and re-connect existing sub circuit wiring	2	item	5,000.00	10,000.00	
			Small Power					
M&E	Note		The existing sub-circuit power wiring is ok and does not require any replacement / re-wiring works					
M&E	2		Existing sub-circuit wiring ok - allowance only for re-wiring " minor local small power points " as a consequence of the refurbishment works	2	item	5,000.00	10,000.00	
M&E	Note		~~Allow for the installation of magnetic solenoid bedroom door holders (est qty 90nr bedrooms) and interface with FA panel~~ (deleted as a cost saving 20-9-10)		nr		0.00	
			Lighting Installation					
M&E	Note		The existing lighting wiring wiring is ok and does not require any replacement / re-wiring works					
M&E	2		Allowance only for re-wiring " minor local ltg points " as a consequence of the refurbishment works	2	item	7,500.00	15,000.00	
M&E	1		Allow for installing local PIR lighting control	2	item	5,000.00	10,000.00	
M&E	1		Allow for replacing existing light fitting with energy efficient light fittings	4,338	m2	40.00	173,520.00	
			Power supplies to Mech services					
M&E	1		Allow for new elect power supplies to new AHU's and extract fans	4	nr	3,000.00	12,000.00	
			Fire Alarms					
M&E	note		Existing fire alarm installation is ok and does not require to be replaced			0.00	0.00	
M&E	2		Allowance only for re-wiring " minor local FA points " as a consequence of the refurbishment works	2	item	7,500.00	15,000.00	
			Emergency Lighting					
M&E	Note		The existing emergency lighting wiring wiring is ok and does not require any replacement / re-wiring works					
M&E	1		Allow for replacement of emergency light fittings	4,338	m2	5.00	21,690.00	
			External Lighting					
M&E	note		Existing external lighting installation wiring and light fittings ok - no refurbishment works			0.00	0.00	
			Nurse Call - Staff Personal Alarm					

NHS A NHS Ayrshire & Arran — Cost Plan Nr 5

Feasib Feasibility **Clonbeith & Dunure ; Iona & Jura** — date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment — GFA 4,338 m2

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
M&E	1		Existing nurse call system ; appears to have been extended with a mix of different accessories, sections of the existing system appear not to be working ; allow for a complete new nurse call system	4,338	m2	36.00	156,168.00	
			Security					
M&E	note		No security refurbishment works			0.00	0.00	
			Access Control					
M&E	1		No access control at present ; allow for minimal front door access control at the three main building entrances (no other access controls systems allowed for)	3	nr	2,500.00	7,500.00	
			CCTV					
M&E	2		CCTV is provided externally as part of the site wide coverage ; allow for local door entry CCTV - audio at the three reception areas (no other CCTV system allowed for)	3	nr	2,500.00	7,500.00	
			PA					
M&E	note		No existing PA system - no PA works			0.00	0.00	
			IT Data					
M&E	note		No IT Data refurbishment works					
M&E	2		Allow for " minor " IT Data points re-location works as a consequence of the refurbishment works	1	item	5,000.00	5,000.00	
			Telephone - communications					
M&E	note		No tele- comms refurbishment works					
M&E	2		Allow for " minor " Tele -comms points re-location works as a consequence of the refurbishment works	1	item	5,000.00	5,000.00	
			Lighting Protection					
M&E	2		allow for lighting protection survey	1	item	1,500.00	1,500.00	
M&E	2		allow for possible installation of a new lighting protection installation	4,338	m2	5.00	21,690.00	
			To Cost Summary					**£ 567,652**
		g	**Gas installation**					
						Incl.	0.00	
			To Cost Summary					**£ 0**
		h	**Protective Installations**					
						Incl.	0.00	
			To Cost Summary					**£ 0**
		I	**Communications installations**					
						Incl.	0.00	
			To Cost Summary					**£ 0**
		j	**Lift and Conveyor Installations**					
						Incl.	0.00	
			To Cost Summary					**£ 0**
		K	**BWICS**			£ 784,652		
			(excl BWIC with the new Modular buildings)			£ 301,600		
				10.0%	%	£ 483,052	48,305.20	
			To Cost Summary					**£ 48,305**
		6	**EXTERNAL WORKS**					
		6a	**Site Works**					
							0.00	
							0.00	
			To Cost Summary					**£ 0**

NHS A NHS Ayrshire & Arran | Cost Plan Nr 5

Feasib Feasibility **Clonbeith & Dunure ; Iona & Jura** | date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment | **GFA** **4,338** **m2**

Source	Priority	Item	Brief description of works	QUANTITY	UNIT	RATE	£--p	Total
		6b	**Drainage**					
					Sum		0.00	
			To Cost Summary					**£ 0**
		6c	**External Services**					
							0.00	
			To Cost Summary					**£ 0**
					OK	0.00	1,862,641.20	£ 1,862,641
		7	**Warranties/ Consents**					
			Landlords Consent				0.00	
			Building Warrant				0.00	
			To Cost Summary					**£ 0**

Note:
Exclusions:

Assumptions:

NHS Ayrshire & Arran

Cost Plan Nr 5

Croy

date 08/06/2011

Elemental Summary

Base Date 2Q10	Refurbishment Works		
	GFA (ft2)	8,913	
	GFA (m2)	828	
Element	**Cost**	**Cost/m2 GFA**	**Cost/ft2 GFA**
0 Downtakings/ Alterations/ Repairs	**£70,000**	**84.54**	**7.85**
1 Substructure	**£0**	**0.00**	**0.00**
2 Superstructure			
2A Frame	£0	0.00	0.00
2B Upper Floors	£0	0.00	0.00
2C Roof	£0	0.00	0.00
2D Stairs	£0	0.00	0.00
2E External Walls	£6,000	7.25	0.67
2F Windows & External Doors	£5,000	6.04	0.56
2G Internal Walls & Partitions	£0	0.00	0.00
2H Internal Doors	£0	0.00	0.00
Group Element Total £	**£11,000**	**13.29**	**1.23**
3 Internal Finishes			
3A Wall Finishes	£3,750	4.53	0.42
3B Floor Finishes	£14,523	17.54	1.63
3C Ceiling Finishes	£0	0.00	0.00
Group Element Total £	**£18,273**	**22.07**	**2.05**
4 Fittings	**£0**	**0.00**	**0.00**
5 Services			
5A Sanitary Appliances	£500	0.60	0.06
5B Disposal Installation	£0	0.00	0.00
5C Water Installation	£20,000	24.15	2.24
5D Space Heating & Heat Source	£50,500	60.99	5.67
5E Ventilation Systems	£25,000	30.19	2.81
5F Electrical Installations	£137,252	165.76	15.40
5G Gas Installation	£0	0.00	0.00
5H Protective Installation	£0	0.00	0.00
5I Communication Installations	£0	0.00	0.00
5J Lift & Conveyor Installations	£0	0.00	0.00
5K BWICS	£23,325	28.17	2.62
Group Element Total £	**£256,577**	**309.88**	**28.79**
6 External Works			
6A Site Works	£0	0.00	0.00
6B Drainage	£0	0.00	0.00
6C External Services	£0	0.00	0.00
Group Element Total £	**£0**	**0.00**	**0.00**
	£355,850.40		
8 Preliminaries 12%	**£42,702**	**51.57**	**4.79**
9 Contrcator OH&P 7%	**£27,899**	**33.69**	**3.13**
7 Warranties/ Consents	**£0**	**0.00**	**0.00**
TOTAL CONSTRUCTION COST	**£426,451**	**515.04**	**47.85**

NHS Ayrshire & Arran
Feasibility

Croy

Cost Plan Nr 5
date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment

GFA 828 m2

Source	Priority	Item	Brief description of works	Qty	UNIT	RATE	£--p	Total
			LMA Arch Draft report 15-4-10 ; section 9 Conclusion					
		9.1	The survey concludes that the overall building fabric retains its integrity, is generally in a very good condition and that the recorded defects are rectifiable and generally cosmetic					
		0	**Downtakings / Repairs**					
			Roof					
Build	**3**	1	Remove moss / vegetation growth to roof coverings (front elevation)	Works being / to be by NHS FM Maintenance				
Build	**3**	2	Replace localised damaged concrete roof tiles	Works being / to be by NHS FM Maintenance				
Build	**3**	3	Replace damaged upvc gutter to front elevation	Works being / to be by NHS FM Maintenance				
Build	**Note**		*No refurbishment works to roof*					
Build								
Build			**External Walls**					
Build	**3**	1	Re-decorate painted facias and soffits to roof perimeter	Works being / to be by NHS FM Maintenance				
Build	**3**	2	Repair / replace frost damaged vertical face brickwork to front elevation	Works being / to be by NHS FM Maintenance				
Build	**3**	3	Repair minor shrinkage cracks at concrete slab ramp junctions to building / thresholds	Works being / to be by NHS FM Maintenance				
Build	**3**	4	Repair / replace frost damaged brickwork to perimeter access ramps	Works being / to be by NHS FM Maintenance				
Build	**3**	5	Minor efflorescence to be cleaned from brickwork at front entrance cobbled recess and ramp	Works being / to be by NHS FM Maintenance				
Build	**Note**		*No refurbishment works to external walls*					
			Windows & External Doors					
Build	**3**	1	Replace damaged door threshold to main entrance door	Works being / to be by NHS FM Maintenance				
Build	**3**	2	Repair loose / impact damaged handrail to RHS of main entrance	Works being / to be by NHS FM Maintenance				
Build	**Note**		*No refurbishment works to windows & external doors*					
Build								
Build			**Internal Finishes**					
Build	**3**	1	Re-decorate all previously decorated surfaces	Works being / to be by NHS FM Maintenance				
Build	**Note**		*No refurbishment works to internal finishes*					
			Conversion of existing en-suites into wet room en-suites					
Clinical	**1**		The conversion of identified existing en-suites within each ward area into fully dual accessible “wet room type” en-suites that are in line with those specified for the NACH development and HBN 00-02 that are equipped with overhead hoists capable of supporting travel between bed, WC and shower.					
			Info. from Norman S 24-8-10 ; There is no requirement to shift the external bedroom wall but may be a requirement to re-align walls between bedroom and en-suite. Should you have access to this information please note that the en-suite area required is between 4.5 and 6m2 (dependent upon shape) and that the minimum acceptable bedroom size would be 15m2 or no less than present (if currently smaller)					
			Assume a complete internal re-built of the bedroom and the new wet room en-suites **all contained within the footprint of the existing bedroom and en-suite**					
			Strip out and dispose of existing bedroon & en-suite back to the timber frame (except the outer / window wall which it is assumed is not affected by the proposed alterations)	1	item	1,000.00	1,000.00	
			Allow for alterations to the stud partition wall line between the bedroom and the en-suite wet room and enlarge door opening between bedroom and wet room	1	item	1,000.00	1,000.00	
			Bedroom ; new ceiling	15	m2	45.00	675.00	
			Bedroom ; walls 2 layer soundblock Gyproc plasterboard floor to ceiling height 2400 - 2700mm	12	m	120.00	1,440.00	

NHS Ayrshire & Arran — Cost Plan Nr 5

Feasibility — **Croy** — date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment — GFA 828 m2

Source	Priority	Item	Brief description of works	Qty	UNIT	RATE	£--p	Total
			Bedroom ; skirtings & door facing	1	item	50.00	50.00	
			Bedroom ; painting to walls & skirtings	40	m2	5.00	200.00	
			Bedroom ; non-slip flooring	15	m2	50.00	750.00	
			Bedroom ; re-use existing door		nr	0.00	0.00	
			Wet room ; marine plywood sheeting to ceiling	6	m2	25.00	150.00	
			Wet room ; waterproof pvcu sheeting to wet room ceiling	6	m2	100.00	600.00	
			Wet room ; marine plywood sheeting to walls	20	m2	25.00	500.00	
			Wet room ; waterproof pvcu sheeting walls	20	m2	100.00	2,000.00	
			Wet room ; Altro marine non-slip flooring	6	m2	50.00	300.00	
			Sliding door, door frame & ironmongery between bedroom & wet room	1	nr	1,500.00	1,500.00	
			Eletrical installation fit out, to bed room an en-suite, ltg, small power, FA etc. water proof fittings in wet room	1	nr	1,000.00	1,000.00	
			Assume no Mech LPHW heating works as it is assume the existing LPHW ratidaor on the outer wall is not affeted by the proposed works	0	nr	0.00	0.00	
			New Mech extract vent with humidity control to en-suite wet room assume roof mounted extract with weather proof roof cowl	1	nr	1,000.00	1,000.00	
			Roof new opening & up stand for vent extract	1	nr	500.00	500.00	
			Plumbing water services & above ground drainage alterations	1	nr	1,000.00	1,000.00	
			New wet room en-suite assisted sanitary ware package	1	nr	2,500.00	2,500.00	
		17,500	Sundries	1	nr	1,335.00	1,335.00	
		17,500	24v electric ceiling track mounted patient handling hoist, lift / lower single patient up to 200kg weight	1	nr	13,000.00	13,000.00	
			Install additional steelwork supports for ceiling mounted patient handling hoist track details **TBC by URS**	1	sum	4,000.00	4,000.00	
			Electrical supply to hoist	1	nr	500.00	500.00	
								£ 35,000
Clinical	1		Second ; Conversion of existing en-suites into wet room en-suites	1	nr	35,000.00	35,000.00	£ 35,000
			To Cost Summary					**£ 70,000**
		1	**SUBSTRUCTURE**					
							0.00	
			To Cost Summary					**£ 0**
		2	**SUPERSTRUCTURE**					
		a	**Frame**					
			N/A				0.00	
								£ 0
		b	**Upper Floors**					
			N/A				0.00	
								£ 0
		c	**Roof**					
							0.00	
								£ 0
		d	**Stairs**					
			N/A				0.00	
								£ 0
		e	**External Walls**					
Build	2		Repair / replace frost damaged brickwork to perimeter access ramps	1	Sum	3,000.00	3,000.00	
Build	2		Minor efflorescence to be cleaned from brickwork at front entrance cobbled recess and ramp	1	Sum	3,000.00	3,000.00	
								£ 6,000
		f	**Windows & External Doors**					
Clinical	2		Install openable light hoppers in existing large bedroom windows (at present not openable) Allow for total replacement of 2nr large bedroom windows with openable hoppers	2	nr	2,500.00	5,000.00	
								£ 5,000

NHS Ayrshire & Arran
Feasibility

Croy

Cost Plan Nr 5
date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment

GFA 828 m2

Source	Priority	Item	Brief description of works	Qty	UNIT	RATE	£--p	Total
		g	**Internal Wall & Partitions**					
							0.00	
								£ 0
		h	**Internal Doors**					
							0.00	
								£ 0
			To Cost Summary					**£ 11,000**
		3	**INTERNAL FINISHES**					
		a	**Wall Finishes**					
M&E	1		Allowance for local re-decoration only associated with M&E local works	250	m2	15.00	3,750.00	
								£ 3,750
		b	**Floor Finishes**					
			Shared areas / day spaces of all ward areas					
Clinical	1		Lift existing flooring and dispose, prepare floor	250	m2	8.00	2,003.20	
Clinical	1		Installation of appropriate new durable, anti-slip floor coverings	250	m2	50.00	12,520.00	
							0.00	
								£ 14,523
		c	**Ceiling Finishes**					
							0.00	
								£ 0
			To Cost Summary					**£ 18,273**
		4	**FITTINGS**					
							0.00	
			To Cost Summary					**£ 0**
		5	**SERVICES**					
		a	**Sanitary Appliances**					
M&E	1		Assisted bathrooms ; exposed chrome pipework no longer SHTM compliant. Allow for boxing in existing chrome pipework with a demountable panel	1	nr	500.00	500.00	
			To Cost Summary					**£ 500**
		b	**Disposal Installations**					
						Incl.	0.00	
			To Cost Summary					**£ 0**
			M&E services scoping meeting held at Brunston House, Ailsa Hospital 8-9-10					
		c	**Water Installations**					
M&E	1		Allow for water booster set	2	nr	5,000.00	10,000.00	
M&E	3		Waters services generally ok ; any works associated with legionaries requirements will be carred out by HNS FM - Estates	Works being / to be by NHS FM Maintenance				
M&E	1		Minor works to cold water services to eliminate dead legs in the system	1	item	3,000.00	3,000.00	
M&E	1		Allow for cold water temperature sensors to be fitted	1	item	1,500.00	1,500.00	
M&E	1		Allow for insulation to existing cold water storage tank	1	item	500.00	500.00	
M&E	note		Hot water storage and hot water services ok ; no refurbishment works			0.00	0.00	
M&E	2		Existing coppper compression fittings non- compliant with current SHTM ; allow for replacement of copper fittings (where visible, easily accessible and practical to do so)	1	item	5,000.00	5,000.00	

Source	Priority	Item	Brief description of works	Qty	UNIT	RATE	£--p	Total
			To Cost Summary					**£ 20,000**
		d	**Source Heating & Heat Space**					
M&E	**1**		Strip out existing boiler installation ; flue, 2nr boilers, pipework,	1	nr	5,000.00	5,000.00	
			Install new boiler installation ; flue, 2nr boilers, pipework, etc.connected to existing outging LPHW pipework within boilerhouse					
M&E	**1**		flue	1	item	5,000.00	5,000.00	
M&E	**1**		boilers	2	nr	7,500.00	15,000.00	
M&E	**note**		retain existing pump set			0.00	0.00	
M&E	**1**		Allow for part new LPHW pipework within boilerhouse	1	item	5,000.00	5,000.00	
M&E	**2**		Replace LPHW pipework insulation (where visible, easily accessible and practical to do so)	1	item	8,000.00	8,000.00	
M&E	**note**		Terminal LPHW heaters no works required			0.00	0.00	
M&E	**2**		Existing LPHW heating system ok, allow for only " minor localised alteration works "	1	item	10,000.00	10,000.00	
M&E	**1**		Contols ok ; allow for some " minor " additional temperature monitoring clamp on sensors	1	item	2,500.00	2,500.00	
			To Cost Summary					**£ 50,500**
		e	**Ventilation System** **Mechnaical Installation**					
M&E	**2**		No fesh air supply to main internal corridors ; allow for new roof mounted fresh air supply fans and " local " ductwork	8	nr	1,500.00	12,000.00	
M&E	**2**		BWIC new roof opening for roof mounted fresh air supply fans	8	nr	1,000.00	8,000.00	
M&E	**2**		Install ductwork insulation (where visible, easily accessible and practical to do so)	1	item	5,000.00	5,000.00	
			To Cost Summary					**£ 25,000**
		f	**Electrical Installations**					
			Main LV installation					
M&E	**1**		Strip out existing main LV switchboard - 25 years old	1	item	2,000.00	2,000.00	
M&E	**1**		Install new main LV switchbaord	828	m2	18.00	14,904.00	
M&E	**1**		Disconnect and re-connect existing sub mains cabling	1	item	2,000.00	2,000.00	
note	**note**		Existing sub-main cabling ok			0.00	0.00	
			LV distribution					
M&E	**2**		Strip out existing sub mains distribution boards - 25 years old	1	item	2,000.00	2,000.00	
M&E	**2**		Install new sub-mains distribution boards	828	m2	6.00	4,968.00	
M&E	**2**		Disconnect and re-connect existing sub circuit wiring	1	item	3,000.00	3,000.00	
			Small Power					
M&E	**2**		Existing sub-circuit wiring ok - allowance only for re-wiring " minor local small power points " as a consequence of the refurbishment works	1	item	5,000.00	5,000.00	
			Lighting Installation					
M&E	**2**		Existing sub-circuit lighting wiring ok - allowance only for re-wiring " minor local ltg points " as a consequence of the refurbishment works	1	item	5,000.00	5,000.00	
M&E	**1**		Allow for installing local PIR lighting control	1	item	5,000.00	5,000.00	
M&E	**1**		Allow for replacing existing light fitting with energy efficient light fittings	828	m2	40.00	33,120.00	
			Power supplies to Mech services					
M&E	**1**		Allowance for elect works associated with boiler replacement works	1	item	5,000.00	5,000.00	

NHS Ayrshire & Arran
Feasibility

Croy

Cost Plan Nr 5
date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment

GFA 828 m2

Source	Priority	Item	Brief description of works	Qty	UNIT	RATE	£--p	Total
M&E	**2**		Allpwance for elect power supplies to new roof mounted fresh air supply fans	8	nr	1,000.00	8,000.00	
M&E	**1**		**Fire Alarms** Existing fire alarm installation ok - allowance only for re-wiring " minor local FA points " as a consequence of the refurbishment works	1	item	2,500.00	2,500.00	
M&E	**1**		**Emergency Lighting** Existing emergency lighting installation wiring ok - however allow for replacement of emergency light fittings	828	m2	5.00	4,140.00	
note	**note**		**External Lighting** Existing external lighting installation wiring ok - no refurbishment works			0.00	0.00	
M&E	**1**		**Nurse Call - Staff Personal Alarm** Existing nurse call system does not work in at least half of the building ; all for a complete new nurse call system	828	m2	30.00	24,840.00	
note	**note**		**Security** No security refurbishment works			0.00	0.00	
M&E	**1**		**Access Control** No access control at present ; allow for minimal front door access control at the building main entrance (no other access controls systems allowed for)	1	item	2,500.00	2,500.00	
M&E	**2**		**CCTV** CCTV is provided externally as part of the site wide coverage ; allow for local door entry CCTV - audio at the reception area (no other CCTV system allowed for)	1	item	2,500.00	2,500.00	
note	**note**		**PA** No existing PA system - no PA works			0.00	0.00	
note	**note**		**IT Data** No IT Data refurbishment works					
M&E	**2**		Allow for " minor " IT Data points re-location works as a consequence of the refurbishment works	1	item	1,500.00	1,500.00	
note	**note**		**Telephone - communications** No tele- comms refurbishment works					
M&E	**2**		Allow for " minor " Tele -comms points re-location works as a consequence of the refurbishment works	1	item	1,000.00	1,000.00	
M&E	**2**		**Lighting Protection** allow for lighting protection survey and possible installation of a new lighting protection installation	828	m2	10.00	8,280.00	
			To Cost Summary					**£ 137,252**
		g	**Gas installation**			Incl.	0.00	
			To Cost Summary					**£ 0**
		h	**Protective Installations**			Incl.	0.00	
			To Cost Summary					**£ 0**
		I	**Communications installations**			Incl.	0.00	
			To Cost Summary					**£ 0**
		j	**Lift and Conveyor Installations**			Incl.	0.00	
			To Cost Summary					**£ 0**

NHS Ayrshire & Arran

Feasibility

Croy

Cost Plan Nr 5

date 08/06/2011

GFA area taken from Arch condition survey report 15-4-10

Elemental Cost Build-up: Existing Building Refurbishment

					GFA	828	m2	
Source	**Priority**	**Item**	**Brief description of works**	**Qty**	**UNIT**	**RATE**	**£--p**	**Total**
		K	**BWICS**					
				10.0	%	233,252	23,325.20	
			To Cost Summary					**£ 23,325**
		6	**EXTERNAL WORKS**					
		6a	**Site Works**					
					Sum		0.00	
			To Cost Summary					**£ 0**
		6b	**Drainage**					
					Sum		0.00	
			To Cost Summary					**£ 0**
		6c	**External Services**					
							0.00	
			To Cost Summary					**£ 0**
					OK	0.00	355,850	£ 355,850
		7	**Warranties/ Consents**					
			Landlords Consent				0.00	
			Building Warrant				0.00	
			To Cost Summary					**£ 0**

Note:

Exclusions:

Assumptions:

BRODICK HOUSE, CLONBEITH & DUNURE WARDS
AILSA HOSPITAL
DALMELLINGTON ROAD
AYR

PMI 016 - CONDITION SURVEY OF BRODICK, CLONBEITH & DUNURE WARDS

SURVEY DOCUMENTS:

LMA - BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL - 'BUIILDING' CONDITION SURVEY (15th APRIL 2010)

URS - BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL - 'STRUCTURAL' CONDITION INSPECTION (APRIL 2010)

DSSR - BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL, 'SERVICES' CONDITION REPORT - (21st APRIL 2010)

BRODICK HOUSE - CLONBEITH & DUNURE WARDS, AILSA HOSPITAL, AYF

SUMMARY OF RECOMMENDATIONS: 'BUILDING' CONDITION SURVEY REPORT

LMA - BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL - 'BUIILDING' CONDITION SURVEY (15th APRIL 2010)

DESCRIPTION	COMMENTS	PRIORITY RANKING	COST (TBA)
External Works			
Roof			
Carryout localised repairs and full repointing to roof concrete facias. Include repairs where impact damaged to canopies.		1	
Redecorate Clerestory timber fascia.			
Replace cemeticious soffit linings.	Noted to be in poor condition. Possibly asbestos based - TBC		
*Consideration to overclad existing fascias and soffits with insulated fascia system (See above 3 items)			
External Walls			
Render repairs and redecoration required to perimeter ring beam.	Dampness and cracking (particularly to west elevations) evident.		
Remove efflorescence to all elevational brickwork	West and North elevations are in poor condition		
Repair / replace all defective brickwork (cracked or spalling)	West and North elevations are in poor condition		
Rake out and repoint defective brickwork pointing to elevations	West and North elevations are in poor condition		
Remove and rebuild roof gable parapets.	Parapets identified as leaning inwards. Further investingation recommended	1	
Repair localised cracking to precast window surrounds and repoint			
Repair defective precast window surrounds to West and North elevations	Suffering from effects of dampness		
*Consider application of insulated render system to external walls to prevent further deterioration of brickwork, precast window surrounds and plinth			
External Glazing & Doors:			
Replace all missing window head and cill flashings where missing.			
*Consider repair / replacement of timber and metal framed single glazed units to east elevation of Link Corridors.	Rought evident and condition is poor		
External Grounds / Landscaping:			
External Decoration:			
Undertake decoration to all previously decorated surfaces.			
Internal Works			
Ceilings:	Noted as in good condition		
Consideration to install glassfibre above suspended ceilings and to bulkhead framing.			
Partitions / Walls:	Noted as in good condition		
Floors:	Noted as in good condition		
Doors / Internal Glazing:			
Fixture & Fittings:			
Sanitary Fittings			
Install IPS system to all exposed chrome pipework to assisted bathrooms	Exposed pipework no longer SHTM compliant.		
Decorative Finishes	Noted as in good condition		

Additional Information / Questions	Comments
Survey Report Exclusions	
CCTV survey of below ground drainage systems.	
Intrusive surveys	
Asbestos Survey	

BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL, AYF

SUMMARY OF RECOMMENDATIONS: 'STRUCTURAL' CONDITION SURVEY REPORT

URS - BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL - 'STRUCTURAL' CONDITION INSPECTION (APRIL 2010)

DESCRIPTION	Comments	PRIORITY RANKING	COST (TBA)
External Works			
Repair minor frost damage to concrete slab access ramps (east elevation Clonbeith).			
Repair / replace frost damaged retaining wall brickwork to access ramps (south elevation, Brodick).		1	
Remove effloresence to brickwork throughout	Prevalent to elevations where no roof overhang (west elevations)		
Parapets - repoint mortar joints, replace frost damaged and cracked brickwork, remove effloresence. Address/rebuild parapets that lean inwards to buidling.	Recommendation for further investagtion to determine root cause and extent of defect, including an inspection of gable wall cavity using a borescope (to confirm condition of steel frame and wall ties)		
Repair localised cracking to brickwork elevations throughout (with suitable injected resin product). Vertical crack to west side of Brodick house boiler room elevation to be monitored.	Possibly caused by thermal or very minor settlement.		
Test all precast concrete roof facias for loose or bossed concrete. Remove any spalling or loose concrete sections and replace. Alternatively treat exposed reinforcement with corrosion inhibitor and patch repair.	All loose precast sections should be removed **IMMEDIATELY - RISK TO PUBLIC SAFETY** (Clonbeith & Dunure ward entrance canopy)	1	
Repair water tightness to 2No. external roof plant room housings. Repair / replace water damaged timbers.			
Internal Works			
Remove surface corrosion to roof plant room steelwork frame and redecorate.			

Additional Information / Questions	
Further investigation should be carried out to identify all load bearing walls and racking panels. Source from Record Drawings .	
Survey Report Exclusions	
Damp/Timber Specialist Inspection	
Intrusive surveys	
Asbestos Survey	

BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL, AYR

SUMMARY OF RECOMMENDATIONS: 'SERVICES' CONDITION SURVEY REPORT

DSSR - BRODICK HOUSE, CLONBEITH & DUNURE WARDS, AILSA HOSPITAL, 'SERVICES' CONDITION REPORT - (21st APRIL 2010)

Description	Physical Condition	Functional Suitability	Statutory Compliance	Comments	PRIORITY RANKING	Cost (TBA)	
MECHANICAL SERVICES							
HEATING							
Fuel Store	N/A	N/A	N/A	Not duel fuel, gas only. No stand by fuel storage.			
Boiler Plant	Fair	Satisfactory	Yes	Boilers manufactured in 2002.			
Pumping Plant	Poor	Poor	Yes	Pumping plant is looking tired and replacement should be considered.			
Pipework Distriburtion System Material	Good	Satisfactory	Yes	Renewal should be considered if extensive refurbishment is proposed			
Insulation Type	Good	Poor	No	Rockwool insulation is no longer to be installed under current SHTM guidance. Insulation thickness will also no longer comply with latest updates to BS5422	1		
Terminal Heaters	Good	Good	Good	Terminal heaters are provided with LST covers			
VENTILATION							
AHU's / Fans	Poor	Poor	No	External roof mounted AHU plant is of poor condition. (Age unknown). Installed inclined manometers have no fluid. LPHW Pipework to one number AHU heater battery has been disconnected. Ductwork insulation is covered in PIB which has been subject to some bird damage (pecking to remove the insulation for nesting). It is not known whether the non-decommissioned AHU is operable or not.	1		
Ductwork & Insulation	Poor	Poor	No	Where installed, ductwork is of steel type. Ductwork installations are insulated complete with PIB weathering protection.	1		
Diffusers & Grilles	Good	Poor	No	Diffuser types vary from side wall diffusers to egg crate ceiling fixed. Volume flow rates would need to be checked to determine minimum fresh air compliance or otherwise.	1		
CONTROLS							
Controls - Boilers	Good	Good	Good	The installed controls appear to relate only to the equipment installed within the boiler plantroom. The control panel is identified as being manufactured by Milngavie Controls.			
PUBLIC HEALTH							
Domestic Water	Good	Good	No	Non compliance with SHTM and Water Bye-Laws i.e. pipework material, insulation material, location of thermostatic valves and length of dead legs, limited anti-ligature provision, no zone protection against backflow, DHWS vent pjpe venting to external, in some instances the use of flexible connection as means of final connections to appliances has been adopted.	1		
Cold Water Storage	Good	Good	Yes	Unable to confirm the degree of screening, minor alterations to screened overflows, screened tank vents required DHWS vent pipework, i.e. discharge into tank.			
HWS Generation	Fair	Good	No	TBA. Supporting information required from DSSR	1		
Pumping Plant	N/A	N/A	N/A				
Pipework Material, Distribution System & Insulation Type	DHWS. TCWS & MWS, Ridgid Glass	Fair	No	Non compliance with current thermal insulation British Standards	1		
Sanitaryware and Fittings	Good	Good	See Fabric	See Building findings			
Pipework Materials	Stainless Steel Mannesmen Compression	Good	Yes				
Drainage	Good	Good	Yes	N/A			
Miscellaneous							
MWS Filtration Plant	Poor	Fair	Yes	Non compliance with SHTM. Unable to confirm the degree of filtration, no means of remote monitoring, manual inspection and change over required, unable to confirm if filtersare operational simultaneously.	1		TBC
Thermostatic Blending Valves	Fair	Fair	Yes	Minor adjustments on the physical location of some of the TMV valves and full service of all valves required.			
Temperature Monitoring of Distribution Pipework	Unable to confirm provision of temperature monitoring devices	Poor	No	Non compliance with SHTM i.e. unable to confirm if temperature monitoring of the pipework distribution networks has been provided.	1		
Whole Site & Zone Backflow Protection	N/A	Non Existent	No	Non compliant with Water Byelaws (no obvious protection provided).	1		
Anti-ligature Showering	N/A	Poor	No	Exposed shower valve at high level riser rail within showering areas	1		

ELECTRICAL SERVICES						
Main switchgear	Satisfactory	Good	No	The original construction date of this building is thought to be late 1960's. It appears the main switchgear is original. It no longer meets with statutory compliance and has reached the end of its life expectancy. Replacementshould be considered.	1	
Distribution Boards	Good	Good	Yes - but not compliant with best practice	MEM Memshield 2 MCB distribution board. This board appears to be newer than the main switchgear. It is likely this board was replaced in 1998 during extension works to the building. Best practice would require split lighting and power boards and sub metering. This is not provided.	2	
Standby Generation	N/A	N/A	N/A	Standby generation is site wide and not specific to building. Not looked at as part of survey.		
Containment	Good where replaced and visible	Good where replaced and visible	Unknown	Containment systems where visible appear in good condition and fit for purpose. However, much of the containment is not visible and therefore inconclusive.		
Wiring / Cabling	Good where replaced and visible	Good where replaced and visible	Unknown	Wiring systems where visible appear in good condition. Much of the wiring is relatively new, possibly having been done during refurbishment works in 2002. However, much of the wiring is not visible and therefore inconclusive. Where original wiring is still in place it will have reached the end of it's 20-25 year life expectancy and replacement should be considered. Statutory compliance is unknown. For instance distribution board could not be accessed so circuit resiliency (twin circuiting) could not be determined.		
Small Power	Good	Good	Yes	Electrical accessories are generally in good working condition. Much of the accessories have been replaced. Probably during previous refurbishment works of 2002. Where original accessories are still in place, they will have reached the end of their 20-25 year life expectancy and replacement should be considered.		
Data / Comms	Good	Good	Yes	Data Hub appears fairly new. May have been added/upgraded during refurbishment work carried out in 1997.		
Lighting	Good	Good	In Part	The condition of the light fittings are generally good. It is likely at least partial refurbishment has taken place during the life of the building. Lighting controls are a little outdated. For example, there is little or no use of automatic lighting controls such as presence detection. Where original light fittings remain they should be replaced as they have reached the end of their life expectance.	2	
Fire Alarms	Good	Good	Yes	Good condition and good coverage generally. Relatively new ADT Minerva FAP provided at main entrance. Linked through site wide network. System possibly upgraded during 2002 refurbishment works.		
Emergency Lighting	Satisfactory	Satisfactory	In Part	Fitting are generally in good condition. Upgrade has taken place during the life of the building. Possibly 2002. The use of "Exit" on illuminated exit signs does not comply with current BS5266. Suggest upgrade which would also provide some additional external emergency bulkheads.	2	
External Lighting	Fair	Satisfactory	Yes	Standard perimeter lighting and External emergency bulkheads provided where required. Fittings appear old and are of different types. Replacement should be considered. May also be a shortfall of light covering the car park as there is any a single lantern and columns covering the car park entrance.		
Nurse Call	Satisfactory	Satisfactory	No	System appears to has been upgraded in part during the life of the building. Suggested by the mixed age of accessories. Elements of the system do not appear to comply with current guidance. For instance lack of pull cords. Overhauling the system should be considered.	1	
Induction Loops	N/A	N/A	No	No induction loop systems provided anywhere in building. Induction loop should be provided at reception as a minimum standard. Additional coverage should be considered in designated areas or possible use of mobile units.	1	
Security	N/A	Satisfactory	N/A	Limited secure/alarmed doors or windows are required at present as building is operated 24/7. NHS should review future use of building to determine any future upgrade of security system.		

Access Control	Good	Satisfactory	N/A	A small no. of departmental access control doors are provided within the building. NHS should review the future use of the building in order to determine any upgrade of the access control system. We recommend additional access control as a minimum to the main entrance.		
CCTV	Good	Satisfactory	N/A	Provided externally to cover the areas courtyards and blind recess areas. Installation appears relatively new. Coverage not provided at the main entrance. Coverage provided at the Physiotherapy entrance. Consider additional CCTV coverage.		
Personal Attack	N/A	N/A	N/A	Personal attack not provided. Should be considered during any refurbishment work.		
Paging / PA	N/A	N/A	N/A	Staff to Staff communication not provided. Provision should be considered during any refurbishment works.		
Lightning Protection	N/A	N/A	Inconclusive but requirement unlikely	Currently not provided. Requirement should be reassessed in detail during any refurbishment works. However due to the height of the building and its position in the surrounding environment, it is likely this will not be required.		

CROY HOUSE
AILSA HOSPITAL
DALMELLINGTON ROAD
AYR

PMI 016 - CONDITION SURVEY OF CROY HOUSE

SURVEY DOCUMENTS:

LMA - CROY HOUSE, AILSA HOSPITAL - 'BUIILDING' CONDITION SURVEY (15th APRIL 2010)

URS - CROY HOUSE, AILSA HOSPITAL - 'STRUCTURAL' CONDITION INSPECTION (APRIL 2010)

DSSR - CROY HOUSE, AILSA HOSPITAL, 'SERVICES' CONDITION REPORT - (21st APRIL 2010)

CROY HOUSE, AILSA HOSPITAL, AYR

SUMMARY OF RECOMMENDATIONS: 'BUILDING' CONDITION SURVEY REPORT

LMA - CROY HOUSE, AILSA HOSPITAL - 'BUIILDING' CONDITION SURVEY (15th APRIL 2010)

DESCRIPTION	COMMENTS	PRIORITY RANKING	COST (TBA)
External Works			
Roof			
Remove moss / vegetation growth to roof coverings (front elevation)	Maintenance, excluded from scope of works		
Replace localised damaged concrete roof tiles	Maintenance, excluded from scope of works		
Remove vegetation growth to all rainwater goods	Maintenance, excluded from scope of works		
Replace damaged upvc (OG profile) gutter to front elevation	Maintenance, excluded from scope of works		
Redecorate painted facias and soffits to roof perimeter	Maintenance, excluded from scope of works		
External Walls			
Repair / replace frost damaged brickwork to perimeter access ramps	Work order raised, funded through Stat Standards		
Minor efflorescence to be cleaned from brickwork at front entrance cobbled recess and ramp	Work order raised, funded through Stat Standards		
External Glazing & Doors:			
Install openable light hoppers 2 x fixed lights to bedroom windows (not openable)	Doors and glazing generally in good condition - work to be costed	1	
Replace damaged door threshold to main entrance door	Maintenance, excluded from scope of works		
External Grounds / Landscaping:			
Make good movement joints to access ramps / building junction	Maintenance, excluded from scope of works		
External Decoration:			
Undertake decoration to all previously decorated surfaces.	Maintenance, excluded from scope of works		
Internal Works			
Ceilings:			
Partitions / Walls:			
Floors:			
Doors / Internal Glazing:			
Fixture & Fittings:			
Sanitary Fittings			
Install IPS system to all exposed chrome pipework to assisted bathrooms	Exposed pipework no longer SHTM compliant. Clarification as to extend, required.	1	
Decorative Finishes			
Redecorate all previously decorated surfaces	Good condition although dated - maintenance		

Additional Information / Questions	Comments
Survey Report Exclusions	
CCTV survey of below ground drainage systems.	
Intrusive surveys	
Asbestos Survey	

CROY HOUSE, AILSA HOSPITAL, AYR

SUMMARY OF RECOMMENDATIONS: 'STRUCTURAL' CONDITION SURVEY REPORT

URS - CROY HOUSE, AILSA HOSPITAL - 'STRUCTURAL' CONDITION INSPECTION (APRIL 2010)

DESCRIPTION	Comments	PRIORITY RANKING	COST (TBA)
External Works			
Repair / replace frost damaged vertical face brickwork to front elevation			
Repair loose / impact damaged handrail to RHS of main entrance	**IMMEDIATE RISK TO PUBLIC SAFETY Will be done through maintenance**		
Repair minor shrinkage cracks at concrete slab ramp junctions to building / thresholds	Maintenance, excluded from scope of works		
Remove moss growth to roof covering to prevent moisture ingress and deterioration to water tightness	Maintenance, excluded from scope of works		
Internal Works			
None			

Additional Information / Questions	
Further investigation should be carried out to identify all load bearing walls and racking panels. Source from Record Drawings .	
Survey Report Exclusions	

CROY HOUSE, AILSA HOSPITAL, AYR

SUMMARY OF RECOMMENDATIONS: 'SERVICES' CONDITION SURVEY REPORT

DSSR - CROY HOUSE, AILSA HOSPITAL, 'SERVICES' CONDITION REPORT - (21st APRIL 2010)

Croy House	Physical Condition	Functional Suitability	Statutory Compliance	Comments	PRIORITY RANKING	Cost (TBA)	
MECHANICAL SERVICES							
HEATING							
Fuel Store	N/A	N/A	N/A	Not duel fuel, gas only. No stand by fuel storage.			
Boiler Plant	Poor	End of Life	No	Boilers confirmed as 27 years old and have reached end of life. Manufacturer has confirmed that model contains asbestos rope	1		
Pumping Plant	Good	Good	Yes	Pumps appear well maintained.			
Pipework Distriburtion System Material	Good	Satisfactory	Yes	Renewal should be considered if extensive refurbishment is proposed			
Insulation Type	Good	Satisfactory	No	Rockwool insulation is no longer to be installed under current SHTM guidance. Insulation thickness will also no longer comply with latest updates to BS5422	1		
Terminal Heaters	Good	Good	Good	Terminal heaters are provided with LST covers			
VENTILATION							
AHU's / Fans	Good	Poor	No	No fresh air supply to main internal corridors - does not conform to Healthcare Guidance. No AHUs installed. Fans provide extraction only, via roof cowls.	1		
Ductwork & Insulation	Good	Poor	No	Where installed, ductwork is of steel type. Ductwork installations are insulated.	1		
Diffusers & Grilles	Good	Yes	Yes	Extract grilles are of egg-crate type			
CONTROLS							
Controls - Boilers	Good	Good	Good	Unable to determine manufacturer (no identification).			
PUBLIC HEALTH							
Domestic Water	Good	Good	No	Non compliance with SHTM and Water Bye-Laws i.e. pipework material, insulation material, location of thermostatic valves and length of dead legs, limited anti-ligature provision, no zone protection against backflow, DHWS vent pjpe venting to external, in some instances the use of flexible connection as means of final connections to appliances has been adopted.	1		
Cold Water Storage	Good	Good	Yes	Not able to confirm degree, minor alterations to screened overflows, screened tank vents required DHWS vent pipework, i.e. discharge into tank.			
HWS Generation	Fair	Good	No	TBA. Supporting information required from DSSR	1		
Pumping Plant	N/A	N/A	N/A				
Pipework Material, Distribution System & Insulation Type	DHWS. TCWS & MWS, Ridgid Glass	Fair	No	Non compliance with current thermal insulation British Standards	1		
Sanitaryware and Fittings	Good	Good	See Fabric	See Building findings			
Pipework Materials	Cooper, Yorkshire & Kutilite compression fittings	Fair	No	Non compliant with SHTM pipework material			
Drainage	Good	Good	Yes	N/A			
Miscellaneous							
MWS Filtration Plant	Poor	Fair	Yes	Non compliance with SHTM. Unable to confirm the degree of filtration, no means of remote monitoring, manual inspection and change over required, unable to confirm if filtersare operational simultaneously.	1		TBC
Thermostatic Blending Valves	Fair	Fair	No	Major adjustments on the physical location of some of the TMV valves and a full service of all valves required, reduction in length of dead legs required.	1		
Temperature Monitoring of Distribution Pipework	Unable to confirm provision of temperature monitoring devices	Poor	No	Non compliance with SHTM i.e. unable to confirm if temperature monitoring of the pipework distribution networks has been provided.	1		
Whole Site & Zone Backflow Protection	N/A	Non Existent	No	Non compliant with Water Byelaws (no obvious protection provided).	1		
Anti-ligature Showering	N/A	Poor	No	Exposed shower valve at high level riser rail within showering areas	1		
ELECTRICAL SERVICES							
Main switchgear	Satisfactory	Good	Yes - Depending on site wide distribution	Main switchgear is 25 years old - end of its life expectancy. Replacement should be considered. No power factor correction (p.f.c.). P.f.c. could form part of site wide distribution.			

Distribution Boards	Good	Good	Yes - but not compliant with best practice	MEM Memshield 2 MCB distribution board. This board appears to be newer than the main switchgear. It is likely this board was replaced in 1998 during extension works to the building. Best practice would require split lighting and power boards and sub metering. This is not provided.	2	
Standby Generation	N/A	N/A	N/A	Site wide and not specific to building. Not looked at as part of survey.		
Containment	Good - where visible	Good - where visible	N/A	Containment systems where visible appear in good condition and fit for purpose. However, much of the containment is not visible and therefore inconclusive.		
Wiring / Cabling	Good - where visible	Unknown	Unknown	Wiring systems where visible appear in good condition. However, much of the wiring is not visible and therefore inconclusive. Where wiring is still in place for the exiting part of the building it is reaching the end of its 20-25 year life expectancy and replacement should be considered. Wiring systems within the extension will be circa 1998 and are well within life expectancy. Statutory compliance is unknown. For instance distribution board could not be accessed so circuit resiliency (twin circuiting) could not be determined.		
Small Power	Good	Good	Yes	Electrical accessories are generally in good working condition. Where accessories are still in place for the exiting part of the building they are reaching the end of their 20-25 year life expectancy and replacement should be considered. Small power within the extension will be circa 1998 and are well within life expectancy.		
Data / Comms	Good	Good	Yes	Data Hub appears fairly new. May have been updated during refurbishment work carried out in 1998.		
Lighting	Good	Good	In Part	The condition of the light fittings are generally good. Suggest at least partial refurbishment has taken place during the lift of the building. Lighting controls are a little outdated - no use of automatic lighting controls e.g. presence detection. Where original light fittings remain they should be replaced as they have reached the end of their life expectance.		
Fire Alarms	Good	Good	Yes	Good condition and good coverage generally. Void detection also provided. Relatively new ADT Minerva FAP provided at main entrance. Linked through site wide network. System possibly upgraded during 1998 refurbishment works.		
Emergency Lighting	Satisfactory	Satisfactory	Yes	Fitting are generally in good condition. The use of Euro running man Legends on Exit signs suggests the emergency lighting has been upgraded in recent years.		
External Lighting	Satisfactory	Satisfactory	Yes	Standard perimeter lighting and External emergency bulkheads provided where required. Age of installation is difficult to determine.		
Nurse Call	Poor	Poor	No	System does not work in a least half of the building. System is also outdated. Recommend total replacement.	1	
Induction Loops	N/A	N/A	No	No induction loop systems provided anywhere in building. Induction loop should be provided at reception as a minimum standard. Additional coverage should be considered in designated areas or possible use of mobile units.	1	
Security	N/A	Satisfactory	N/A	Limited secure/alarmed doors or windows are required at present as building is operated 24/7. NHS should review future use of building to determine any future upgrade of security system.		
Access Control	N/A	Poor	No	No electrical access control is provided to the building. NHS to review future use of the building to determine any future upgrade requirements. Recommendation for access control as a minimum to the main entrance. Departmental control should also be considered.	1	
CCTV	N/A	N/A	N/A	Provided externally only as part of site wide coverage. Additional provision should be considered during refurbishment works.		
Personal Attack	N/A	N/A	N/A	Personal attack not provided. Should be considered during any refurbishment work.		
Paging / PA	N/A	N/A	N/A	Staff to Staff communication not provided. Provision should be considered during any refurbishment works.		
Lightning Protection	N/A	N/A	Inconclusive but requirement unlikely	Currently not provided. Requirement should be reassessed in detail during any refurbishment works. However due to the height of the building and its position in the surrounding environment, it is likely this will not be required.		

lawrencemcphersonassociates

HORSESHOE BUILDING No. 1
AYRSHIRE CENTRAL HOSPITAL, KILWINNING ROAD, IRVINE

Building Condition Survey

20 APRIL 2010.

A&A01-LMA-RP-Condition Survey-003

R·D HEALTH

Version: 1.0

This Version

Authored by:

name: James McGinlay
role: Lead Architect / Associate
signed:
date: 21th April 2010

Reviewed by:

name: Stuart McPherson
role: Partners / Principal
signed:
date: 23rd April 2010

Authorised for issue by:

name: Stuart McPherson
role: Partner / Principal
signed:
date: 23rd April 2010

The signed original of this page is retained by the issuing team.

Version History

Version	Date	Status and Purpose	Changes Overview
1.0	23.04.10	Information	

Contents

Appendix

1.0 Introduction

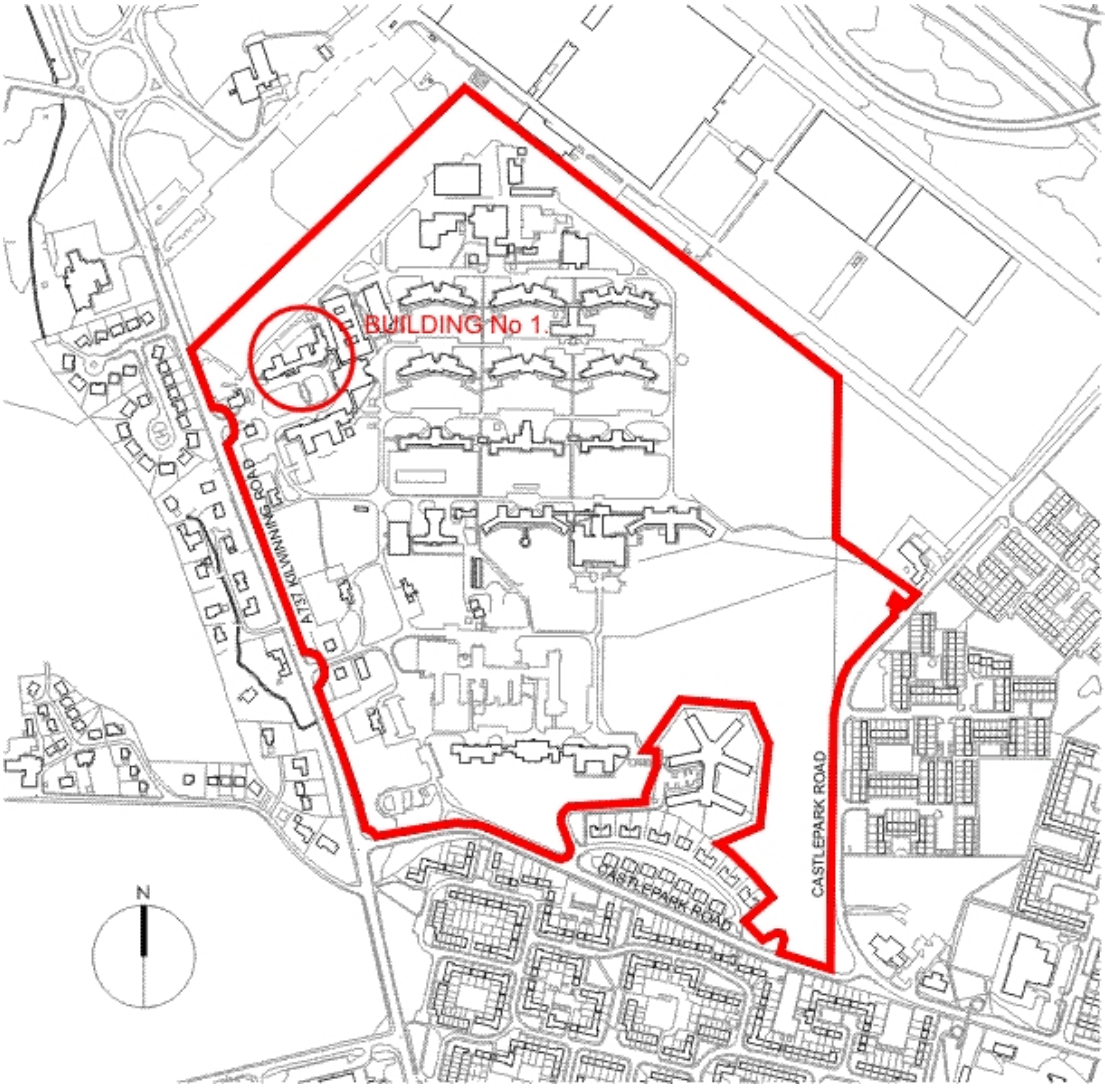
1.1 This report was commissioned by NHS Ayrshire & Arran to ascertain the building condition and therein assist in the formation of a brief for the refurbishment of Horseshoe Building 1, and the wider retained estate at Ayrshire Central Hospital. The survey was carried out on the 20th April 2010 and the conclusions are based on the evidence of visual, non intrusive inspection together with reference to BRE Water Ingress Report of April 1997.

2.0 Location

2.1 Irvine is a coastal town on the Firth of Clyde located approximately 25 miles south west of Glasgow. With a population of approximately 40,000 it is the largest settlement in North Ayrshire. The Hospital is located at the northern edge of the urban area of Irvine to the east of Kilwinning Road (A737) the main arterial route between the town centre and the A78 (Trunk Road).

Ayrshire Central Hospital comprises a number of disparate buildings supporting inpatient, outpatient and administrative functions. The hospital construction dates back to 1939 and was built as a `fever hospital' opening in 1941.

The northern end of the site contains a trio of B listed buildings known as `The Horseshoe' with Building No 1, forming the northern extremity of `The Horseshoe'.



3.0 Building Description

3.1 This facility designed in the International Modern Style and constructed in the early 1940's presently houses, Breast Screening, Physiotherapy and Dietetic Departments. The building is two storey, with basement and rooftop plant housings of rendered solid masonry and facing brick plinth external wall construction with suspended concrete ground floor, first floor and flat roof slabs. Water ingress and dampness historically has been problematic, culminating in the extensive external window, render and roof refurbishment currently nearing completion.

At the time of survey the Breast Screening Department was undergoing refurbishment and extension. Works comprised the construction of a new single storey flat roofed timber framed extension with rendered blockwork external leaf to the north face, refurbishment of the original building encompassed extensive internal refurbishment, including all mechanical and electrical services together with complete redecoration and new vinyl floor finishes. The Breast Screening extension is the second of two single storey flat roofed extensions added, the other also located to the north elevation is also flat roofed with cavity masonry construction which currently houses a plant room.

Ground and first floor plans can be referenced in Appendices Nos. 1&2.

4.0 Building Structure

4.1 Foundations/Substructure

Ring beams of reinforced concrete can be viewed through various access hatches and through experience of other buildings and ground investigations it could be concluded that the likely foundation type is a piled solution. No intrusive investigations of the foundations were conducted and there was no evidence of either subsidence or differential settlement. The presence of dampness in the building plinth was not detected, however instances of expansion and brick face spalling due to frost action can be found at and below dpc level. Access/Exit ramps show signs of minor movement at junctions with the building, isolated cracking of ramp surfaces were noted due to differential settlement and brick has suffered frost action spalling.

4.2 Floor

The floor is of suspended concrete construction and was not subjected to intrusive investigation. It was found to be generally true and level with no evidence of movement or dampness.

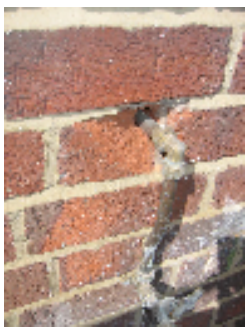
4.3 External Walls

The refurbished external walls comprise an existing wall construction from inside out of plaster, fibreboard, cavity, 340mm thick brickwork, two coats render all lined with ventec board and acrylic render system. As a result, externally the walls were found to be in an as new condition.

The existing red facing brick plinth was found generally to be in good condition with localised areas of brickwork patching, service sealing and cleaning of efflorescence required. There was also evidence of expansion movement above the bituminous dpc, due to the absence of movement joints and it is likely that this movement is historical and no further expansion would occur. Service housings located to the rear were found with doors suffering from rought and in need of decoration.








4.4 Roof

The roof is a built up felt flat roof of cork insulation and concrete construction, laid to falls. Refurbished in 2009 with an overlay system comprising a single roof membrane, 80mm polyurethane insulation all laid on the existing felted roof and mechanically fixed, complete with fall restraint system and maintenance walkways. Having only recently been completed the roof was found to be in an as new condition.

Fascia and soffits of acrylic render were also found to be in an as new condition having only recently been completed as part of the external refurbishment.

Painted aluminium rainwater goods are also in an as new condition having only recently been installed.

4.5 Internal Partitions

Internally the partitions comprise loadbearing spine walls and individual room partitions perpendicular to the external walls of masonry construction plastered on the hard. Generally the walls show no evidence of settlement, shrinkage or excessive abuse and are in good condition.

5.0 Building Fabric

5.1 External Windows

All windows are double glazed with thermally broken powder coated aluminium frames externally and white UPVC internally with the exception of the curved windows to the stairwell and staff areas which are single glazed in powder coated aluminium frames. Window installation was completed in 2009 and the windows were found to be in an as new condition. The outer pane of a double glazing unit adjacent to the Breast Screening extension was found to be broken.

5.2 External Doors

Doors are timber construction with vision panels and double glazed entrance doors. All doors are in as new condition.

5.3 Sanitary and Culinary Fittings

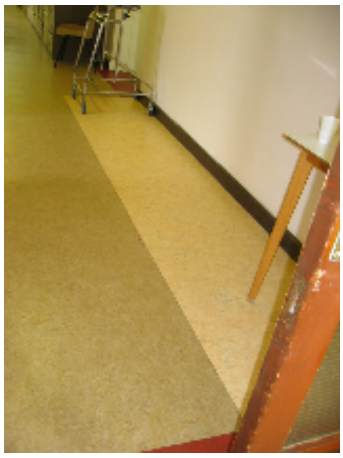
All sanitary fittings throughout the building were found to be in good condition. The Breast Screening Department benefits from being refurbished and fittings were found to be brand new and installed in accordance with the current SHTM's. Physiotherapy and Dietetic Departments have not benefited from refurbishment, although fittings are generally in good condition they are dated and exposed pipework etc is no longer SHTM compliant. Staff areas culinary sinks, worktops and base units were found to be in poor condition and in need of upgrading.

5.4 Decorative Finishes

The Breast Screening Department ground floor level was found to be undergoing refurbishment which included redecoration comprising new suspended ceilings, painting of walls, doors, skirtings etc and the laying of new vinyl floor coverings. All other areas including Breast Screening first floor, decoration is generally in a poor condition and dated. Ceiling and wall paint peeling is evident at areas having suffered from water ingress and general wear and tear. Rainwater pipe boxings at ceiling level require decoration. Areas of carpet and vinyl were found to be blown with evidence of patching to large areas.

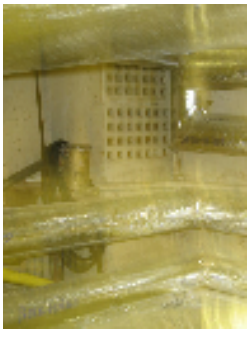




5.5 Attic & Basement

The small basement plant area located below the Physiotherapy Department stairwell was found in a good dry condition with no dampness evident. Being of flat roof construction there are no attic or ceiling voids on the upper level of the building.




6.0 Structural Condition

6.1 An independent condition survey and report has been compiled by a Structural Engineer.

7.0 Mechanical and Electrical Services

7.1 An independent condition survey and report has been compiled by a Building Services Consultant.

8.0 Drainage

8.1 Below ground drainage systems were not subjected to a CCTV survey.

9.0 Conclusion

9.1 The survey concludes that following the extensive refurbishment of the roof, walls, windows and doors that the overall building fabric retains its integrity, is generally in a very good condition and that the recorded defects are rectifiable and generally cosmetic.

In its current condition the internal finishes require a minimum general repair which is to be anticipated given that the external works have only just recently (early 2010) been completed. This aligns with good refurbishment practice of commencing with external works and on completion, thereafter addressing the interior elements.

10.0 Recommendations

10.1 The buildings external walls are lacking insulation and the opportunity should be taken during any internal refurbishment of increasing their thermal performance.

10.2 To assist in the prevention of further deterioration of the facing brick plinth the introduction a drip strip to all areas of brickwork abutting tarmac or concrete hardstanding is recommended.

10.3 Installation of a suspended ceiling system would create a ceiling cavity that would act as a services route, therein allowing the removal of all surface mounted service conduits and cables.

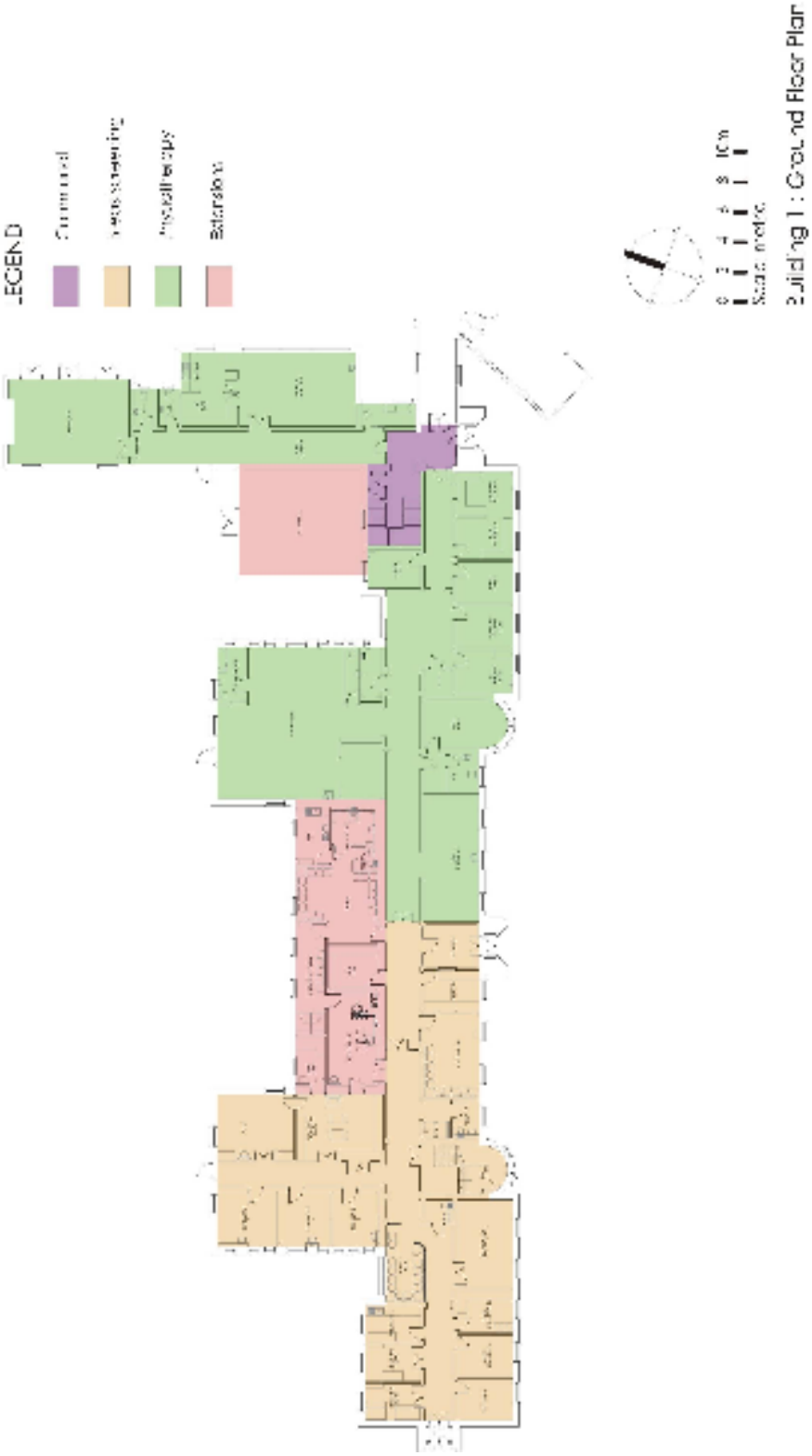
10.4 Consideration should be given to the fitting of IPS systems to hide plumbing pipework and increase infection control.

10.5 Interior decoration and floor finishes are dated and the building would benefit from complete redecoration and new vinyl floor finishes.

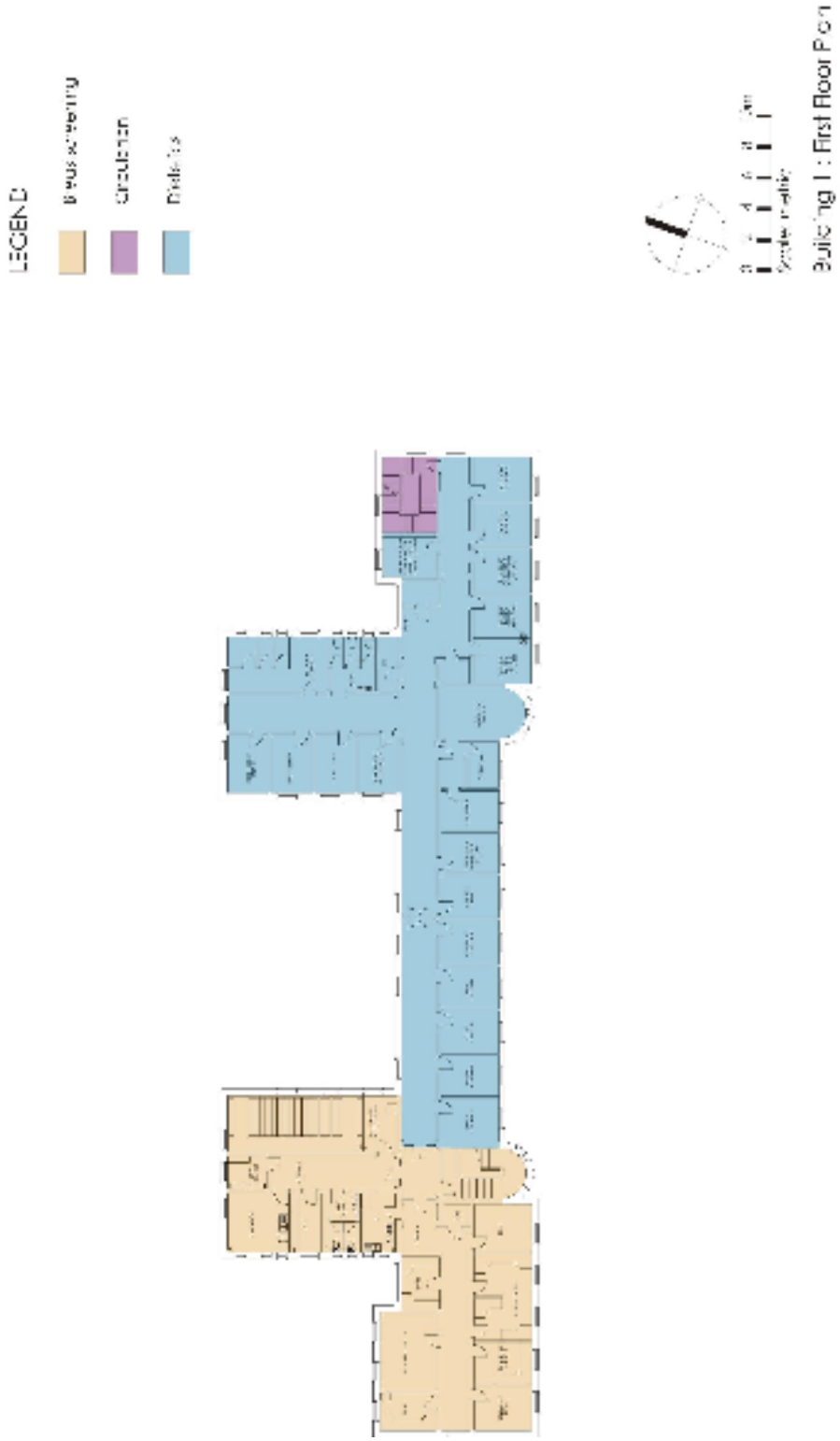
10.6 No asbestos was detected during visual inspection and this report is to be read in conjunction with the Asbestos Survey. Should an Asbestos Survey not have been carried out it is recommended that one be implemented at the earliest.

Appendices

Appendix 1.



Appendix 2.



lawrencemcphersonassociates

HORSESHOE BUILDING No. 2
AYRSHIRE CENTRAL HOSPITAL, KILWINNING ROAD, IRVINE

Building Condition Survey

20 APRIL 2010.

A&A01-LMA-RP-Condition Survey-004

R·D HEALTH

Version: 1.0

This Version

Authored by:

name: James McGinlay
role: Lead Architect / Associate
signed:
date: 22nd April 2010

Reviewed by:

name: Stuart McPherson
role: Partners / Principal
signed:
date: 23rd April 2010

Authorised for issue by:

name: Stuart McPherson
role: Partner / Principal
signed:
date: 23rd April 2010

The signed original of this page is retained by the issuing team.

Version History

Version	Date	Status and Purpose	Changes Overview
1.0	23.04.10	Information	

Contents

Appendix

1.0 Introduction

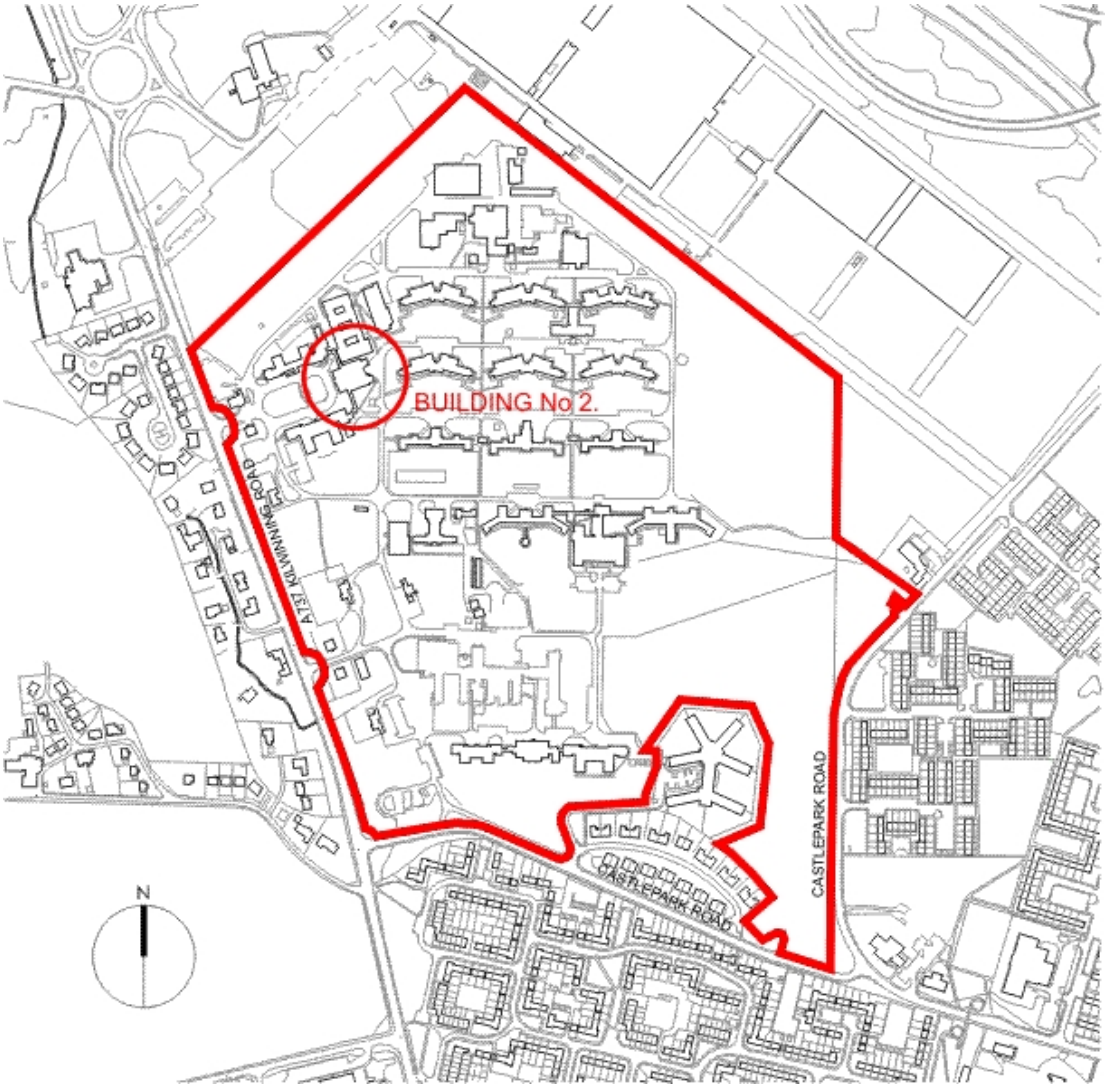
1.1 This report was commissioned by NHS Ayrshire & Arran to ascertain the building condition and therein assist in the formation of a brief for the refurbishment of Horseshoe Building 2, and the wider retained estate at Ayrshire Central Hospital. The survey was carried out on the 20th April 2010 and the conclusions are based on the evidence of visual, non intrusive inspection only.

2.0 Location

2.1 Irvine is a coastal town on the Firth of Clyde located approximately 25 miles south west of Glasgow. With a population of approximately 40,000 it is the largest settlement in North Ayrshire. The Hospital is located at the northern edge of the urban area of Irvine to the east of Kilwinning Road (A737) the main arterial route between the town centre and the A78 (Trunk Road).

Ayrshire Central Hospital comprises a number of disparate buildings supporting inpatient, outpatient and administrative functions. The hospital construction dates back to 1939 and was built as a `fever hospital' opening in 1941.

The northern end of the site contains a trio of B listed buildings known as `The Horseshoe' with Building No 2, forming the central element of `The Horseshoe'.



3.0 Building Description

3.1 This building designed in the International Modern Style and constructed in the early 1940's presently houses, Recreation Hall, Dining/Kitchen and Parentcraft facilities. The facility is single storey with a double height Recreation Hall and is of rendered solid masonry construction encompassing a facing brick plinth, timber and concrete timber suspended floors and built up felt flat roof to lower and higher levels respectively.

Water ingress and dampness historically has been problematic, culminating in the extensive external window, render and roof refurbishment currently ongoing. The building outline is as originally completed with no additions.

A floor plan can be referenced in Appendix No. 1.

4.0 Building Structure

4.1 Foundations/Substructure

Ring beams of reinforced concrete can be viewed through various access hatches and through experience of other buildings and ground investigations it could be concluded that the likely foundation type is a piled solution. No intrusive investigations of the foundations were conducted and there was no evidence of either subsidence or differential settlement. The presence of dampness in the building plinth was not detected, however instances of expansion and brick face spalling due to frost action can be found at and below dpc level.

4.2 Floor

The Recreation Hall & Stage floors are suspended timber floors with hardwood T&G narrow gauge boarding and was not subjected to intrusive investigation, but was found to be generally true and level with no evidence of movement or dampness, however the top seal requires attention. All other floors are of suspended concrete construction and also were not subjected to intrusive investigation, but found to be generally true and level with no evidence of movement or dampness.

4.3 External Walls

The partially refurbished external walls comprise an original wall construction from inside out of plaster, fibreboard, cavity, 340mm thick brickwork and two coats render. The visible walls generally appeared free from any signs of settlement with only superficial cracking. The render and paint overcoating had deteriorated with significant areas of damp, boss, cracking and spalling evident. Generally the external wall fabric is intact and was presently undergoing refurbishment which entails the removal of damp and boss areas of render, base coat patching etc, all to be lined with ventec boarding and an acrylic render system.

The existing red facing brick plinth was found generally to be in good condition with localised areas of brickwork patching, service sealing and cleaning of efflorescence required. There was also evidence of expansion movement above the bituminous dpc, due to the absence of movement joints and it is likely that this movement is historical and no further expansion would occur.

4.4 Roof

The roof comprises two flat roofed construction methods at two different levels. Firstly, visual inspection of the roof over single storey areas, indicates a roof construction comprising concrete beams with terracotta pan infills, concrete screed, cork insulation and built up felt roofing system. Visual inspection of the second higher roof over the Reception Hall revealed a roof structure of steel lattice beams at close centres, timber joist purlins spanning between, sarking boards, cork insulation and built up felt roofing system. Both roofs are currently undergoing refurbishment by way of an overlay system comprising a single roof membrane, 80mm polyurethane insulation all laid on the existing felted roof and mechanically fixed complete with fall arrest system and maintenance walkways.

Metal framed georgian wired single glazed rooflights were noted in the Parenting and Kitchen Preparation areas and were found to be corroded.

Timber fascias and soffits are currently under refurbishment. Existing timber linings are being stripped and replaced with external quality plywood, overclad with ventec boarding to receive an acrylic render system finish to match Buildings 1 and 3.

Existing cast rainwater goods are also in the process of being replaced by new aluminium sections for painting also to match Buildings 1 and 3.

4.5 Internal Partitions

Internally the partitions comprise loadbearing Recreation Hall perimeter partitions & non loadbearing individual room partitions all of masonry construction with a combination of plaster on the hard and lath finishes. Generally the walls show no evidence of settlement, shrinkage or excessive abuse and are in good condition.

5.0 Building Fabric

5.1 External Windows

All windows were installed in 2009 and are double glazed with thermally broken powder coated aluminium frames externally and white UPVC internally with the exception of the windows to the north and east elevations which retain their existing single glazed timber framed windows. Aluminium windows are in an as new good condition, however the original timber windows were found to be in poor condition, suffering from rought, paint peeling with some windows no longer able to open.

5.2 External Doors

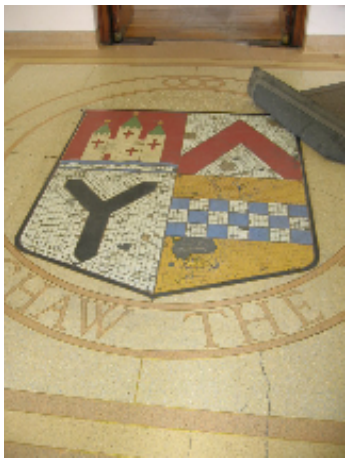
Doors are timber panel construction overlayed with plywood and found to be in a fair condition.

5.3 Sanitary and Culinary Fittings

All sanitary fittings throughout the building were found to be in good condition although they are dated and exposed pipework etc is no longer SHTM compliant. Parenting area culinary sinks, worktops and base units were found to be in poor condition and in need of upgrading. Kitchen / Dining facilities have benefited from recent refurbishment and were found to be in good condition.

5.4 Decorative Finishes

The Kitchen / Dining area has benefited from recent refurbishment and decoration was found to be fresh and in good condition. All other areas, decoration is generally in a poor condition and dated. Ceiling and wall paint peeling is evident at areas having suffered from water ingress and general wear and tear. Areas of carpet and vinyl were found to be blown with evidence of wear and tear to large areas. Internal doors and facings etc are the originals and generally in good condition. The front entrance floor is of terrazzo with regional crest decoration and is in fair condition.



5.5 Attic & Basement
A small under stage basement space was found in a good dry condition with no dampness evident. Being of flat roof construction there is no attic although there is a ceiling void over the Reception Hall and this also was found to be generally dry.

6.0 Structural Condition

6.1 An independent condition survey and report has been compiled by a Structural Engineer.

7.0 Mechanical and Electrical Services

7.1 An independent condition survey and report has been compiled by a Building Services Consultant.

8.0 Drainage

8.1 Below ground drainage systems were not subjected to a CCTV survey.

9.0 Conclusion

9.1 The survey concludes that at the time of viewing the overall building fabric retains its integrity, is generally in a fair condition and that the recorded defects are rectifiable and generally cosmetic.

In its current condition the building is a tale of two stories. The interior which is generally in good condition and the exterior which requires the refurbishment currently being carried out.

10.0 Recommendations

10.1 The buildings external walls are lacking insulation and the opportunity should be taken during any internal refurbishment of increasing their thermal performance.

10.2 Replacement of the original windows and rooflights.

10.4 Repair entrance lobby floor decorative regional crest.

10.3 Installation of a suspended ceiling system would create a ceiling cavity that would act as a services route, therein allowing the removal of all surface mounted service conduits and cables.

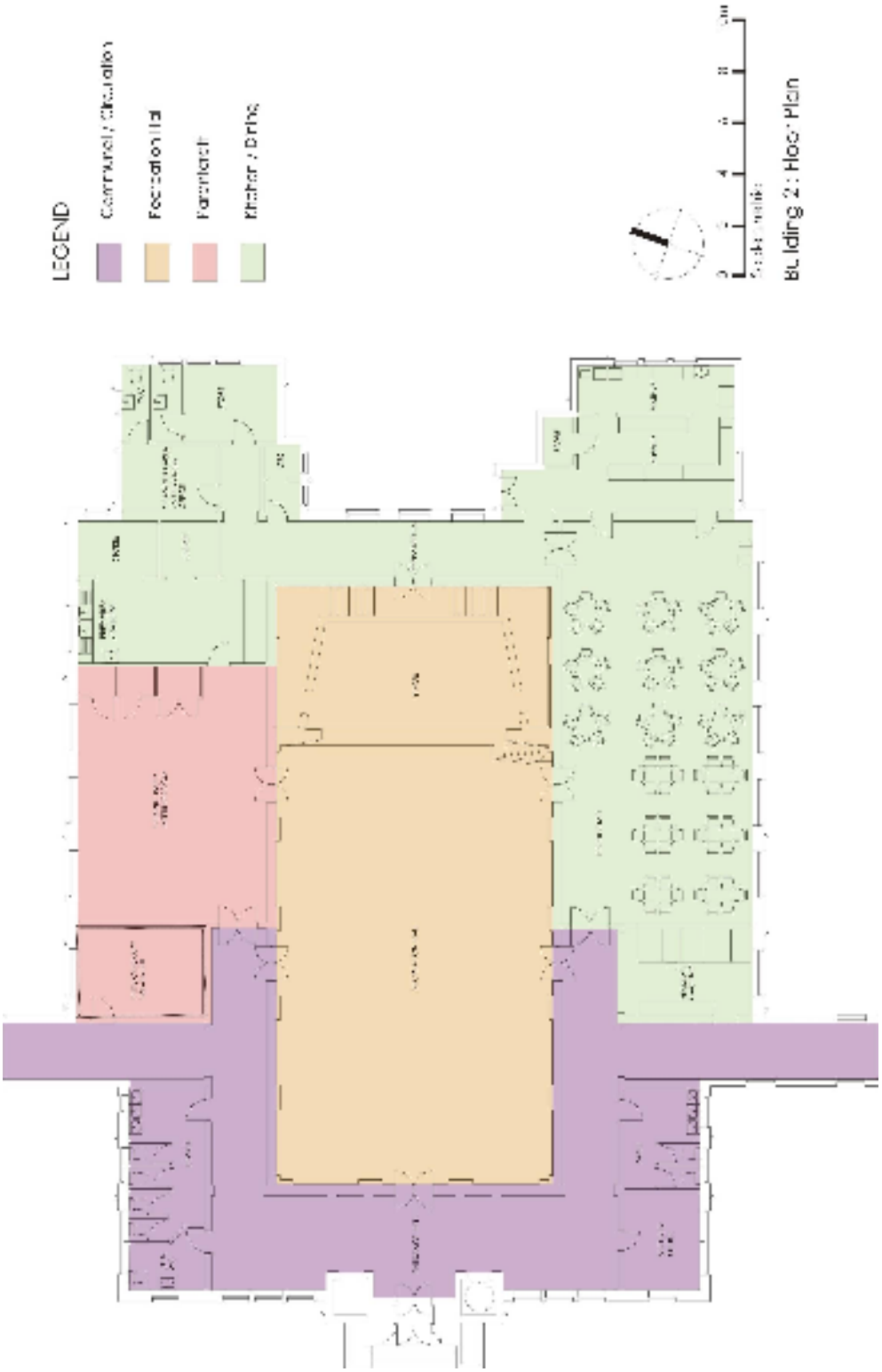
10.4 Consideration should be given to the fitting of IPS systems to hide plumbing pipework and increase infection control.

10.5 Interior decoration and floor finishes are dated and the building would benefit from complete redecoration and new vinyl floor finishes.

10.6 No asbestos was detected during visual inspection and this report is to be read in conjunction with the Asbestos Survey. Should an Asbestos Survey not have been carried out it is recommended that one be implemented at the earliest.

Appendices

Appendix 1.


LEGEND
Communal Circulation
Recreational
Perimeter
Kitchen / Drink
Building 2 : Floor Plan

Project | **AYRSHIRE CENTRAL HOSPITAL SERVICES CONDITION REPORT**

HORSESHOE BUILDINGS 1 & 2

23TH APRIL 2010

DSSR | CONSULTING ENGINEERS

This Version

Authored by:

name:	Richard Chisholm, Neil Gray & Kenny Hay
role:	Electrical, Mechanical & Public Health Engineers
signed:	
date:	23/04/2010

Reviewed by:

name:	Alex Rodger
role:	Regional Partner
signed:	
date:	23/04/2010

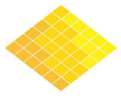
Authorised for issue by:

name:	Alex Rodger
role:	Regional Partner
signed:	
date:	23/04/2010

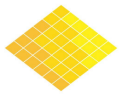
The signed original of this page is retained by the issuing team.

Version History

Version	Date	Status and Purpose	Changes Overview
1	26/4/10	First Draft for review	



Contents



1. INTRODUCTION

Building 1 is a single wing two storey flat roofed building, comprising Outpatient facilities, staff accommodation, ground floor boiler plantroom and rooftop water storage tank.

Building 2 is the central portion of the horseshoe, a single storey (double height) flat roofed building, comprising catering/ dining and Outpatient facilities, a Parentcraft area and a gym hall / theatre area. Building 2 is connected to both buildings 1 & 3 via link corridors.

The original building was constructed around 1939 and opened in 1941.

A new Outpatients department has been built to the rear, on the junction of buildings 1 & 2, to create additional Outpatient facilities.

The entire Horseshoe complex is currently undergoing a significant upgrade of the external envelope, including new glazing and rendered external walls. Refer to architects condition report for further details.

2. SERVICING PRINCIPLES

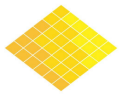
2.1. MECHANICAL & PUBLIC HEALTH

2.1.1. Heating

Buildings 1 and 2 are served via a 2 separate boiler house locations. The boiler house connected to Building 1 serves all of Building 1 and around 90% of Building 2. The boiler house at the rear of Building 3 serves all of Building 3 and the dinning area and link corridor of Building 2.

The boilers are gas fired within both boiler houses and have 2 separate low pressure gas sub-meters within each boiler house. One meter serves the heating and one meter serves the hot water installations.

Both boiler houses have a primary circuit with inline twin pumps. Within the rear boiler house (Building 3) there is one original heating secondary circuit that served all of Building 3 and the Dining area and link corridor of Building 2. There has since been an additional secondary circuit added to serve the new Dental area within Building 3. Within the other boiler house (Building 1) there is one original heating secondary circuit that served all of Building 1 and 90%



of Building 2. There has since been an additional 4 secondary circuits added to serve the new X-Ray and OPD departments (2 No. circuits - North and South), the extension to the OPD and the Breast Screening department (currently under construction).

Secondary Circuits are distributed via an underground service tunnel that approximately follows the route of the central/ link corridors connecting Buildings 1 & 2.

Building 1 and Building 2 are heated by standard wall mounted radiators which have no LST covers. These radiators are served by exposed mild steel pipework which have no insulation provided. Each radiator can be locally controlled via TRV's.

2.1.2. Ventilation

Building 1 is predominantly naturally ventilated. There is currently major refurbishment works to the Breast Screening department including an extension to the side of Building 1 where mechanical ventilation is being provided, refer to Breast Screening refurbishment works drawings for details

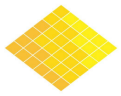
Building 2 is predominantly naturally ventilated. There are 2 No. kitchen extract hoods and a wall mounted extract fan provided within the kitchen wash-up/ servery area. There is also a wall mounted extract fan provided within the Prep area and a window mounted extract fan provided within the Parentcraft/ Meeting room.

No supply air ventilation is provided within either building.

2.1.3. Domestic Hot & Cold Water

Buildings 1, 2 & the new Outpatients facility, are all served from a central plantroom to the rear of Building 1 and the pipework distributed via the buildings' solumn / service trench.

A mains water supply enters Building 1 from the central horseshoe courtyard and rises through the building into the rooftop cold water storage tank room, while branch lines are taken to serve a limited number of mains water outlets within the Building 1, Buildings 2 and the new Outpatients facility. No inline filtration has been provided on the incoming mains water supply, or on the cold water draw off from the rooftop cold water storage tank.



The domestic cold water storage tank is a pre-insulated GRP sectional tank, gravity feeding a single constant running booster pump unit. This crude pump unit pressurises both the hot and cold water distribution systems.

Hot water is generated via two direct gas fired water heaters located within the plantroom of Building 1.

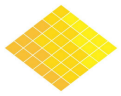
The domestic water services distribution pipework for Buildings 1,2 and the supply pipework to the new Outpatients facility have been installed using copper pipework , while the newly refurbishment of the Breast Screening Clinic is utilising stainless steel pipework to tie into the existing local copper distribution pipework.

Throughout Buildings 1 and 2 thermostatic temperature control of the domestic hot water outlets is non existent. Warning notices identifying “Caution, Very Hot Water” have been positioned directly above or adjacent to each hot water outlet. Within the refurbishment of the Breast Screening Clinic touch free PIR thermostatic controlled “RADA Sense” outlets are being installed.

The existing domestic water installation employs standard anti-legionella measures such as opposing tank connections within the cold water storage tank, cold water storage tank monitoring, correct hot water generation temperatures, single pump DHW circulation arrangement and a domestic hot water flow and return pipework installation. Throughout Buildings 1 & 2 there is no end-of-line remote temperature monitoring with some areas having extended dead legs.

2.1.4. Above Ground Foul Drainage

The above ground foul drainage within both buildings 1 & 2 adopts a single discharge stack system, along with stub stacks and direct connections into the below slab drainage installation. Venting of the foul drainage is via the roof top terminations. The existing foul and waste drainage pipework systems utilises a combination of cast iron rope / lead chalked pipework and joints and upvc pipework.



A separate independent rainwater system exists, removing the surface water from the building's flat roof via internal and external down pipes. All of the external rainwater down pipes and hoppers have been renewed as part of the on going external refurbishment package - for further details refer to Architect's condition survey report.

2.2. ELECTRICAL

2.2.1. Switchgear

Building 1 has a ground floor LV switch room containing the main LV distribution equipment for Building 1. As well as supplying local MCB distribution boards throughout the building, this LV switchboard also supplies electricity to various remote buildings including the new Sexual Health Building and the Entrance Lodge. The origin of supply for this switchboard is from a new 200A Fused Switch (from Kitchen Sub-Station 1) located in the X-ray/ Out-patients building.

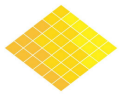
Building 2 has a main LV switchboard located in the Kitchen. As well as supplying local MCB distribution boards throughout the building, this switchboard also supplies the remote volunteers shop/ café located centrally on the site. The origin of supply for this switchboard is from another switchboard (from Maternity Sub-Station 2) located within Building 3.

2.2.2. Standby Generation & Emergency services

There is no dedicated standby generation provided to the Horse Shoe Building. Standby generation is provided from two central locations. Kitchen Sub-Station 1 and Maternity Sub-Station 2 each have a 450kVA stand-by generator, each feeding half the site.

Emergency lighting is provided via self-contained emergency luminaires. Illuminated exit signs are located internally, and bulkhead luminaires are located externally above final exit doors. Dedicated emergency bulkheads are also provided to ensure adequate emergency lighting level coverage throughout the facilities. Emergency lighting key test facilities are located adjacent to each distribution board.

An analogue addressable fire alarm and detection system is installed in each building and linked throughout the site. A main ADT Minerva fire alarm panel



is located at the Out-patients/ X-ray entrance which serves Buildings 1 & 2. Smoke detectors, manual break glass facilities and sounders are provided throughout the facilities.

2.2.3. Small Power and Data

Small power and data within the facilities is generally provided by means of a mixture of surface white PVC accessories and surface conduit, with the exception of Kitchen & Plant areas which have surface metal clad accessories and surface metal conduit. Recessed accessories do exist but are less prevalent.

An IT node cabinet is located within the Breast Screening department which serves the facilities.

2.2.4. Lighting and External Lighting

Lighting to the facilities is generally provided by various types of surface mounted linear fluorescent luminaires. There is a mix of twin and single lamp types, with prismatic or opal diffusers. Prismatic and Opal diffuser fittings generally occur in corridor areas, toilets kitchen areas and plant rooms. Whilst some office areas have cat 2 type louvers, some are also fitted with opal or prismatic diffusers.

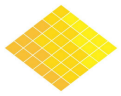
Externally, circular fluorescent luminaires are provided above entrance doors and the ring main road around the Horse Shoe building is lit by column mounted luminaires and twin Son flood lights.

2.2.5. Ancillary electrical systems

A nurse call system is provided throughout the facilities. Typically, nurse call equipment, including over door lights, are provided in therapy areas and disabled toilets. Nurse call alarms are monitored via the nurse bases/ receptions. A basic follow-me light system is adopted.

A CCTV system is provided to Building 2 and to dedicated external areas. The cameras are monitored from the security room near the entrance to Building 2.

The recreation hall/ stage within Building 2 has a basic music/ PA system with speakers and a basic stage lighting and control system.



Both Buildings 1 & 2 have basic security systems in the form of PIR movement detectors in a small no of rooms and circulation spaces. Building 1 security covers main reception areas and corridors and Building 2 system covers the kitchen store areas.

3. EQUIPMENT INSTALLATIONS

3.1. BUILDING 1 GROUND FLOOR MECHANICAL PLANTROOM :

The following equipment is accommodated within the ground floor mechanical plantroom:

4 No Hamworthy UR Series (95.8kW output) gas fired boilers (Flued through the roof via chimney)

1 No Hamworthy Purewell classic gas fired boilers (Flued through the roof via chimney)

1 No twin head Grundfos primary shunt pump (LPHW Primary Circuit – Line mounted)

1 No twin head Grundfos secondary pump (LPHW – Line mounted Serving OPD South)

1 No twin head Grundfos secondary pump (LPHW – Line mounted Serving OPD North)

1 No twin head Grundfos secondary pump (LPHW– Line mounted Serving extension to the OPD)

1 No twin head Grundfos secondary pump (LPHW– Line mounted serving Breast Screening redevelopment 2010)

1 No Heating Control Panel.

2 No Gas sub meters serving hot water circuit and heating circuit.

1 No constant running cold water booster pump set. (Running pressure 1.4 bar)

2 No Hamworthy 88kW (input), 280 Litre gas fired water heaters, flued to above

1 No domestic hot water service circulating pump

1 No domestic hot water expansion vessel approximately 100 litres capacity

Services drop into the buildings solumn and floor trench for principal distribution.

1 no. 3ph MCB MEM Memshield distribution board

3.2. BOILER HOUSE ADJACENT TO BUILDING 3:

The following equipment is accommodated within the boiler house that is located adjacent to Building 3 (Boiler survey only as it only serves the Dining area of building 2):

7 No Hamworthy UR Series (95.8kW output) gas fired boilers (Flued through the roof via chimney)

1 No twin Head Grundfos primary shunt pump (LPHW Primary Circuit – Line mounted)

1 No Heating Control Panel.

2 No Gas sub meters serving hot water circuit and heating circuit.

3.3. VENTILATION: WALL / WINDOW FANS

Wall/window fans are installed for the following accommodation:

Building 1:

None.

Building 2:

Prep Area/ Access – Vent-Axia Wall fan (controlled via switched fused spur)

Parentcraft/ Meeting Room - Reversible Xpelair window fan (controlled via Xpelair fan speed controller)

Wash up - Reversible Xpelair window fan (controlled via Xpelair fan speed controller)

3.4. VENTILATION: KITCHEN EXTRACT FANS

Kitchen Extract fans are installed for the following accommodation:

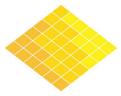
Servery – Roof unit kitchen extract hood connects to extract fan directly located on roof above (controlled via Roof units fan controller).

Wash Up – Roof unit kitchen extract hood connects to extract fan directly located on external wall (controlled via Roof units fan controller).

NB: No fire suppression systems installed within kitchen canopies.

3.5. WATER STORAGE WITHIN THE ROOF- TOP PLANTROOM

The domestic cold water storage tank is located within Building 1 and is a pre-insulated GRP storage tank, sized at 2x3x1.5m high tank, with two screw-down access hatches and no internal division. This tank gravity feeds a single constant running booster pump set located within Building 1's ground floor plant room. The mains water infill and cold



water draw off have been position at opposite ends of the tank inducing cross flow through the storage tank.

Cold water storage tank monitoring is present within the tank. However there is no indication to what extent this monitoring extends to, i.e. temperature only, or water levels and temperature.

Screening of the storage tank, overflow and warning pipes has been provided. It is assumed that the screening complies with minimum requirement of the Water Byelaws only.

3.6. ELECTRICAL SYSTEMS BUILDING 1

Main LV switchboard – Aird Walker & Ralston

2 no. 3ph LV distribution boards- MEM MCB (DB cupboards)

1 no. 3ph LV distribution board- MEM MCB Menshield 2

3 no. 1 phase ltg DB- MEM MCB Memshield 2 (Corridors)

1 no. 3 phase distribution board located in Plantroom.

Fire Alarm panel- ADT Minerva in Outpatients/ X-Ray entrance

Security Keypad. Located in Reception

P/A tanoy system. Microphone located at reception

3.7. ELECTRICAL SYSTEMS BUILDING 2

Main LV Switchboard located in Kitchen

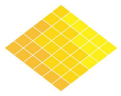
1 no. LV distribution board (old style circuit breakers) located in Kitchen

2 no. 1 phase ex ltg DB- MEM MCB Memshield 2 (Dining Hall DB and Meeting Room DB)

2 no. 3ph LV distribution board- MEM MCB Menshield 2 (Stage DB and Kitchen Store DB)

P/A and Music system located adjacent to stage

CCTV monitoring equipment located in Security room.



4. NOTES:-

The survey of the premises was based on visual inspection only. The condition and future applicability of any elements of the installation remain inconclusive at this time due to inaccessibility (services embedded in building fabric) and lack of “as fitted” or record information.

In order to build a more accurate picture of the age and condition of the systems and whether systems fully comply with statutory documents, further investigation will be required including access to NHS A&A record information, and details of the intended future use of each area.

EPC’s (Energy Performance Certificates) were not displayed at the entrances to the buildings. This has now become a statutory requirement. NHS A&A to confirm whether these have been carried out.

Whilst surveying Building 1 it was evident that the entire ground floor of the Breast Screening department is currently undergoing a full redevelopment. The 1st floor is undergoing a partial redevelopment. The redevelopment appears to be reaching the end of its programme and is currently at the final decorating phase. The redevelopment appears to include a services refurbishment including replacement lighting and small power. As these constitute new and unfinished work we have not included a full inspection and report relating to this area. Any reference to conditions mentioned does not include this area. We assume any works carried out under this contract comply fully with current standards and regulations and are appropriate to the intended use of each area.

5. CONDITION REPORTS

5.1. MECHANICAL SERVICES CONDITION REPORT

Condition Survey Exercise Ayrshire Central Hospital - Building 1

Service	Physical Condition	Functional Suitability	Statutory Compliance	Comments
HEATING				
Fuel Store	N/A	N/A	No	The installed boilers are not dual fuel and operate on natural gas only. Consequently there is no standby oil fuel storage serving this facility. Evidence of a previous secondary LPG back up supply still exists, although disconnected.
Boiler Plant (Original)	Poor	The units are around 25 years old and have reached the end of their useful life	No	4 x Hamworthy UR (95.8kW output). Efficiency will be poor due to age of plant.
Boiler Plant (New)	Good	The unit is around 1 year old	Yes	1 x Hamworthy Purewell. This was installed to serve the extension to the OPD department.
Pumping Plant (Primary)	Good	Pump age has not been ascertained but all look in good operable condition.	No	1 No twin Head Grundfos shunt pump unit (LPHW Primary Circuit – Line mounted) Pumps look well maintained. Some have no Invertors therefore do not conform to Healthcare guidance on energy efficiency.

Pumping Plant (Secondary)	Good	Pump age has not been ascertained but all look in good operable condition.	yes	1 No twin Head Grundfos pump unit (LPHW – Line mounted Serving OPD South) 1 No twin Head Grundfos pump unit (LPHW – Line mounted Serving OPD North) 1 No twin Head Grundfos pump unit (LPHW– Line mounted Serving extension to the OPD) 1 No twin Head Grundfos pump unit (LPHW– Line mounted serving breast screening redevelopment 2010) Pumps look well maintained and in new condition, all pumps have invertors
Pipework Distribution System Material	Good	Satisfactory for minor modifications however renewal to be considered if major refurbishment takes place	No	LPHW pipework is run in Mild Steel, the condition of which looks reasonable for anticipated age. If extensive refurbishment / re-planning is being considered it would be prudent to renew given the age of the existing system. General pipe work is exposed and emitting heat although radiators are turned off. Non- LST. Non Compliant
Insulation Type	Poor	No insulation provided on majority/ several lengths of pipework	No	General pipe work is exposed throughout the building and emitting vast amounts of heat, irrespective of heat demand at emitters. These pipes are hot to touch and should be insulated. This does not conform to Healthcare guidance and is considered a health and safety issue in public/ staff areas.
Terminal heaters	Good	Good	No	Terminal heaters are standard wall mounted radiators. They have no Low Surface Temperature (LST) Covers therefore do not conform to current Healthcare guidance. Potential health and safety issue.

VENTILATION				
AHU's / Fans	N/A	N/A	No	There is no ventilation provided within Building 1 therefore this does not conform to infection control/ Healthcare guidance in certain areas.
CONTROLS				
Controls - Boilers	Good	Fair	Unknown	The installed controls appear to relate only to the equipment installed within the boiler plantroom. Control Panel by Landis & Gyr (Siemens). Condition of the panel is aged but is serviceable. Boiler lock-out/ safety features untested therefore inconclusive
Controls - Heating	N/A	N/A	No	There is no local control to maintain temperature within rooms served by heat emitters. When emitters are turned off the exposed pipework still heats the room and overheating is experienced in rooms.

Condition Survey Exercise Ayrshire Central Hospital - Building 2

Service	Physical Condition	Functional Suitability	Statutory Compliance	Comments
HEATING				
Fuel Store	N/A	N/A	No	The installed boilers are not dual fuel and operate on natural gas only. Consequently there is no standby oil fuel storage serving this facility. Evidence of a previous secondary LPG back up supply still exists, although disconnected.
Boiler Plant (Original) - Boiler house at Building 1	Poor	The units are around 25 years old and have reached the end of their useful life	No	4 x Hamworthy UR (95.8kW output). Efficiency will be poor due to age of plant.
Boiler Plant (Original) - Boiler house at Building 3	Poor	The units are around 25 years old and have reached the end of their useful life	No	7 x Hamworthy UR (95.8kW output). Efficiency will be poor due to age of plant.
Boiler Plant (New) - Boiler house at Building 1	Good	The unit is around 1 year old	Yes	1 x Hamworthy Purewell. This was installed to serve the extension to the OPD department.
Pumping Plant (Primary)- Boiler house at Building 1	Good	Pump age has not been ascertained but all look in good operable condition.	No	1 No twin Head Grundfos shunt pump unit (LPHW Primary Circuit – Line mounted) Some have no Invertors therefore do not conform to Healthcare guidance on energy efficiency.
Pumping Plant (Primary) - Boiler house at Building 3	Good	Pump age has not been ascertained but all look in good operable condition.	No	1 No twin Head Grundfos shunt pump unit (LPHW Primary Circuit – Line mounted) Pumps look well maintained. Some have no Invertors therefore do not conform to Healthcare guidance on energy efficiency.

Pipework Distribution System Material	Good	Satisfactory for minor modifications however renewal to be considered if major refurbishment takes place	No	LPHW pipework is run in Mild Steel, the condition of which looks reasonable for anticipated age. If extensive refurbishment / re-planning is being considered it would be prudent to renew given the age of the existing system. General pipe work is exposed and emitting heat although radiators are turned off. Non- LST. Non Compliant
Insulation Type	Poor	No insulation provided on majority/ several lenghts of pipework	No	General pipe work is exposed throughout the building and emitting vast amounts of heat, irrespective of heat demand at emitters. These pipes are hot to touch and should be insulated. This does not conform to Healthcare guidance and is considered a health and safety issue in public/ staff areas.
Terminal heaters	Good	Good	No	Terminal heaters are standard wall mounted radiators. They have no Low Surface Temperature (LST) Covers therefore do not conform to current Healthcare guidance. Potential health and safety issue.
VENTILATION				
AHU's / Fans	N/A	N/A	No	There is no ventilation provided within Building 2 therefore this does not conform to infection control/ Healthcare guidance in certain areas. There are 2 wall fans and a window fan located in building 2 these fans are still in reasonable working order.
Kitchen Fans	Poor	Fan age has not been ascertained, however the units have reached the end of their useful life	No	There is no 2 no kitchen fans located within the servery and wash up areas. These units have no fire suppression systems therefore do not conform to Healthcare guidance.

CONTROLS				
Controls - Boilers	Good	Fair	Unknown	The installed controls appear to relate only to the equipment installed within the boiler plantroom. Control Panel by Landis & Gyr (Siemens). Condition of the panel is aged but is serviceable. Boiler lock-out/ safety features untested therefore inconclusive
Controls - Heating	N/A	N/A	No	There is no local control to maintain temperature within rooms served by heat emitters. When emitters are turned off the exposed pipework still heats the room and overheating is experienced in rooms.

5.2. PUBLIC HEALTH CONDITION REPORT

Condition Survey Exercise	Ayrshire Central	Horseshoe Building 1	Public Health Installations

Service	Physical Condition	Functional Suitability	Statutory Compliance	Comments
Domestic Water	Fair	Fair	No	Building 1 serves Building 2 and Outpatients departments in their entirety. The Breast Clinic Dept. of the building is currently under refurbishment. We assume that the designers of this section of the building are currently designing and constructing to the current regulations and SHTM's. Existing cold water storage tanks, pumps and DHWS generation plant have not been upgraded / renewed or refurbished. The remainder of the building does not comply with SHTM and Water Byelaws i.e. Pipework material (copper), no thermostatic blending valves or outlets installed, length of dead legs, limited anti-ligature provision, no zone protection against backflow.
Cold Water Storage	Good	Fair	No	Storage tank size 2x3x1.5m high single compartment tank, single infill and draw off, no filtration. Unable to confirm the degree of screening of the tank vent, overflows and warning pipes, assumed basic Water Byelaw requirements i.e. 65 microns. Non-compliance with SHTM.
HWS Generation	Good	Good	Yes	2 x Hamworthy DR90 L CE F/A 280 litre direct gas fired water heaters incorporating de-stratifications pumps. Water Heater 1 is in excess of 7 years old. Water Heater 2 has been replaced within the last 5 years. DHW expansion vessel approx vessel volume = 100 litres (displacement type)
Pumping Plant	Good	Poor	No	Non-compliance with SHTM. Not full automatic in operation, i.e. 24 hr operation running via a looped bypass, single pump installation, no pressurisation vessel

Pipework Material, Distribution System & Insulation Type	Main distribution - Copper with elements of stainless steel Mannesmann. Insulation - Rigid foam class O foil faced	Fair	Pipework - No	Non-compliance with SHTM pipework material. Copper pipework is the main pipework material with isolated areas of stainless steel pipework. These would seem to be where sanitary appliances have been replaced and additional appliances added. No technical data to confirm if existing thermal insulation meets current thermal insulation British Standards, however unlikely to be compliant.
Sanitary ware and fittings	Fair / Poor	Fair	Architect to advise	Architect's to advise on suitability and statutory compliance
Pipework Materials	Fair / showing signs of ageing	No - due to pipework materials	No	Non-compliance with SHTM pipework material, i.e. non approved pipework material.
Drainage	Fair	Fair	Yes	Due to the on going refurbishment works, some internal and external drainage has been replaced. Elsewhere both internal and external drainage shows signs ageing and physical damage. The pipework materials are a combination of cast iron rope & lead caulk, cast iron Ensign / MuPVC / UPVC
Miscellaneous				
Filtration plant	N/A	N/A	No	Non-compliance with SHTM, SHTN no filtration provided on either the incoming mains water supply or the tanked draw off service, serving the buildings.
Thermostatic Blending Valves	Poor	Poor	No	Non-compliance with SHTM, no thermostatic point of use blending valves or outlets within the building, with the exception of the newly refurbished Breast Clinic area.

Temperature monitoring of distribution pipework	N/A	N/A	No	FM Engineers confirmed that there is no temperature sensors incorporated within the domestic water services distribution system. Non- compliance with anti-legionella guide lines.
Whole Site & Zone Backflow protection	N/A	Non existent	No	Non compliance with Water byelaws i.e. no obvious protection provided. We assume at this time that the design of the Breast Clinic Refurbishment fully complies with the current Water Byelaws and SHTM's

Condition Survey Exercise Ayrshire Central Horseshoe Building 2 | **Public Health Installations**

Service	Physical Condition	Functional Suitability	Statutory Compliance	Comments
Domestic Water	Fair	Fair	No	Building 2 is served from Building 1. Refer to Building 1 report.
Cold Water Storage	N/A	N/A	N/A	
HWS Generation	N/A	N/A	N/A	
Pumping Plant	N/A	N/A	N/A	
Pipework Material, Distribution System & Insulation Type	Main distribution - Copper with elements of stainless steel Mannesmann. Insulation - Rigid foam class O foil faced	Fair	No - pipework material	Non-compliance with SHTM pipework material. Copper pipework is the main pipework material with isolated areas of stainless steel pipework. These would seem to be where sanitary appliances have been replaced and additional appliances added. No technical data to confirm if existing thermal insulation meets current thermal insulation British Standards, however unlikely to be compliant.
Sanitary ware and fittings	Fair / Poor	Fair	Architect to advise	Architect's to advise on suitability and statutory compliance
Pipework Materials	Fair / showing signs of ageing	No - pipework material	No	Non-compliance with SHTM pipework material, i.e. non approved pipework material.

Drainage	Fair	Fair	Yes	Due to the on going refurbishment works, some internal and external drainage has been replaced. Elsewhere both internal and external drainage shows signs ageing and physical damage. The pipework materials are a combination of cast iron rope & lead caulk, cast iron Ensign / MuPVC / UPVC
Miscellaneous				
Filtration plant	N/A	N/A	No	Non-compliance with SHTM, SHTN no filtration provided on either the incoming mains water supply or the tanked draw off service, serving the buildings.
Thermostatic Blending Valves	Poor	Poor	No	There are no thermostatic point of use blending valves are outlets within the building.
Temperature monitoring of distribution pipework	N/A	N/A	No	FM Engineers confirmed that there is no temperature sensors incorporated within the domestic water services distribution system. Non-compliance with anti-legionella guide lines.
Whole Site & Zone Backflow protection	N/A	Non existent	No	Non compliance with Water byelaws i.e. no obvious protection provided. We assume at this time that the design of the Breast Clinic Refurbishment fully complies with the current Water Byelaws and SHTM's

5.3. ELECTRICAL SERVICES CONDITION REPORT

Condition Survey Exercise	Ayrshire Central Hospital	Building 1

Service	Physical Condition	Functional Suitability	Statutory Compliance	Comments
Main Switchgear	Satisfactory	Poor	Inconclusive. But not compliant with best practice	The original construction date of this building is thought to be 1941s. It appears the main switchgear has been replaced sometime around 1965-1975. It no longer meets with statutory compliance and has reached the end of its life expectancy. Significant alterations and add-ons to the switchgear have taken place over the life of the building. The arrangement no longer meets best practice guidelines and may no longer comply with statutory regulations. For instance there is no sub-main circuit resiliency (Dual Sub-Mains) or bus couplers for isolation.
Distribution boards	Good	Fair	Inconclusive. But not compliant with best practice	A mix of relatively new MEM Memshield 2 MCB distribution boards and what appears to be older style MEM MCB distribution boards. Some of the distribution boards appear to be newer than the main switchgear, having been replaced during the last 15 years. Best practice would require split lighting and power boards and sub metering. This is not provided. Due to the amount of upgrade works to the DB's over the life of the system, it may no longer comply with statutory regulations. Where DB's are of the older type, they have reached the end of their life expectancy and should be considered for replacement.
Standby Generation	N/A	N/A	N/A	Standby generation is site wide and not specific to The Horseshoe Building. Not reviewed at as part of this condition survey. Standby generation is provided via Kitchen Sub-station 1.

Containment	Fair	Satisfactory	Inconclusive. Check the extent of cross bonding.	Containment systems, where visible, appear in fair condition and fit for current purpose. However, some of the containment is not visible and therefore survey inconclusive. In some instances, where trunking is visible, some of the lids are missing, exposing the cables. This as a minimum will need addressing. The majority of the final circuits are run in Surface metal conduits which, although old, appear in a relatively good condition. The current construction of the facilities does not lend itself to recessing the final circuit containment. Containment generally does not appear overcrowded.
Wiring/ Cabling	Satisfactory	Satisfactory	Unknown	Wiring systems where visible appear satisfactory. However, much of the wiring is not visible and therefore survey inconclusive. Much of the wiring appears to be old and beyond its life expectancy. Where this is the case, replacement should be considered. Statutory compliance is unknown. However, compliance is unlikely and certainly not to the current IEE 17th edition Wiring Regs. Note: 2 No. Single phase dedicated lighting distribution boards within building 1 appear to have changed use during current works to the breast screening department or during other recent works carried out. Sub-main cable sizes should be checked as they appear too small to accommodate new small power requirements. This appears to be non-compliant and should be reviewed immediately.
Small Power	Satisfactory	Satisfactory	Yes	Electrical accessories are generally in a satisfactory working condition. However, the majority of accessories are old and are reaching the end of their life expectancy. Replacement should be considered. Some modern upgrades (dado trunking) have been provided in designated rooms such as reception. Such upgraded have allowed the use of the electrical accessories to remain functionally satisfactory.

Data/ Comms	Good	Good	Yes	Data Hub appears fairly new and appears to provide the desired functionality.
Lighting	Poor	Poor	No	The condition of the light fittings is generally poor. Although generally in working order, some of the diffusers are missing, dirty or no longer fit for purpose. Where fittings are of the suspended type, some of the suspensions are broken. Lighting controls are a little outdated. For example, there is little or no use of automatic lighting controls such as presence detection. Generally, light fittings are beyond their life expectancy, do not comply with VDU use in offices and should be considered for replacement.
Fire Alarms	Satisfactory	Satisfactory	Inconclusive	Satisfactory and good coverage approaching L1 compliance generally. Relatively new ADT minerva FAP provided at main entrance to Out-patients/ X-ray building. Linked through site wide network. Cable installation appears to be soft skin throughout. The installation in terms of detectors, sounders and break-glass units are reaching the end of their life expectancy and replacement should be considered within the next 5 years. We have stated statutory compliance as inconclusive because although the system appears to be approaching L1 coverage, Fire Code (SHTM 81) states "with accepted deviations". Further review of the system with the NHS A&A fire officer will determine whether the building is deemed L1 compliant.
Emergency Lighting	Good	Good	Yes	Fittings are generally in good condition. Upgrade has taken place during the last couple of years including new white FP200 type cabling and new self contained bulkheads and key test facilities located adjacent to local distribution boards. A small No. of original bulkhead fittings still remain in situ and their removal should be considered as they are no longer in use.

External Lighting	Satisfactory	Satisfactory	N/A	There is little or no use of external building perimeter lighting. Columns and fittings appear in reasonable condition. Lighting controls may need to be repaired as column mounted fittings were lit during daylight hours.
Nurse Call	Fair	Fair	No	The nurse call system is very old and elements no longer work. This was noted by some sticky tape over nurse call points, suggesting they were no longer in use. The system has reached the end of its life expectancy and replacement should be considered.
Induction Loops	N/A	N/A	No	No induction loop systems provided anywhere in building. Induction loop should be provided at reception as a minimum standard. Additional coverage should be considered in designated areas or possible use of mobile induction loop units.
Security	Fair	Poor	N/A	A limited security system is provided at present. It appears to function as required. Review of the future use of the building will determine any future upgrade of the security system.
Access Control	N/A	N/A	N/A	No electrical access control is provided at this time. Review of the future use of the building will determine any future requirement
CCTV	N/A	N/A	N/A	No CCTV coverage is provided at this time. Review of the future use of the building will determine any future requirement.
Personal Attack	N/A	N/A	N/A	Personal attack not provided at present. NHS should consider the installation of a staff panic alarm system.
Paging/ PA	Fair	Poor	N/A	Small speaker P/A system is in working condition but limited. Staff to Staff communication not provided. Review of the future use of the building will determine any future requirement

Lightning protection	N/A	N/A	Inconclusive	Currently not provided. Requirement should be reassessed in detail during any refurbishment works in line with current standards- BS EN 62305

Condition Survey Exercise	Ayrshire Central Hospital	Building 2

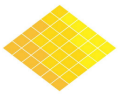
Service	Physical Condition	Functional Suitability	Statutory Compliance	Comments
Main Switchgear	Satisfactory	Poor	Inconclusive. But not compliant with best practice	The original construction date of this building is thought to be 1941s. It appears the main switchgear has been replaced sometime around 1965-1975. It no longer meets with statutory compliance and has reached the end of its life expectancy. Significant alterations and add-ons to the switchgear have taken place over the life of the building. The arrangement no longer meets best practice guidelines and may no longer comply with statutory regulations. For instance there is no sub-main circuit resiliency (duel Sub-Mains) or bus couplers for isolation.
Distribution boards	Good	Fair	Inconclusive. But not compliant with best practice	A mix of relatively new MEM Memshield 2 MCB distribution boards and what appears to be older style MEM MCB distribution boards. Some of the distribution boards appear to be newer than the main switchgear, having been replaced during the last 15 years. Current best practice would require split lighting and power boards and sub metering. This is not provided. Due to the amount of upgrade works to the DB's over the life of the system, it may no longer comply with statutory regulations. Where DB's are of the older type, they have reached the end of their life expectancy and should be considered for replacement.

Standby Generation	N/A	N/A	N/A	Standby generation is site wide and not specific to The Horseshoe Building. Not reviewed at as part of this condition survey. Standby generation is provided via Kitchen Sub-Station 2.
Containment	Fair	Satisfactory	Inconclusive. Check the extent of cross bonding.	Containment systems, where visible, appear in fair condition and fit for current purpose. However, some of the containment is not visible and therefore survey inconclusive. In some instances, where trunking is visible, some of the lids are missing, exposing the cables. This as a minimum will need addressing. The majority of the final circuits are run in Surface metal conduits which, although old, appear in a relatively good condition. The current construction of the facilities does not lend itself to recessing the final circuit containment. Containment generally does not appear overcrowded.
Wiring/ Cabling	Satisfactory	Satisfactory	Unknown	Wiring systems where visible appear satisfactory. However, much of the wiring is not visible and therefore survey inconclusive. Much of the wiring appears to be old and beyond its life expectancy. Where this is the case, replacement should be considered. Statutory compliance is unknown. However, compliance is unlikely and certainly not to the current IEE 17th edition Wiring Regs.
Small Power	Satisfactory	Satisfactory	Yes	Electrical accessories are generally in a satisfactory working condition. However, the majority of accessories are old and are reaching the end of their life expectancy. Replacement should be considered.
Data/ Comms	N/A	N/A	N/A	No Data Node in this building.

Lighting	Poor	Poor	No	The condition of the light fittings is generally poor. Although generally in working order, some of the diffusers are missing, dirty or no longer fit for purpose. Where fittings are of the suspended type, some of the suspensions are broken. Lighting controls are a little outdated. For example, there is little or no use of automatic lighting controls such as presence detection. Generally, light fittings are beyond their life expectancy and should be considered for replacement.
Fire Alarms	Satisfactory	Satisfactory	Yes	Satisfactory and good coverage approaching L1 compliance generally. Relatively new Addressable ADT Minerva FAP provided at main entrance to Out-patients/ X-ray building. Linked through site wide network. Cable installation appears to be soft skin throughout. The installation in terms of detectors, sounders and break-glass units are reaching the end of their life expectancy and replacement should be considered within the next 5 years. We have stated statutory compliance as inconclusive because although the system appears to be approaching L1 coverage, Fire Code (SHTM 81) states "with accepted deviations". Further review of the system with the NHS A&A fire officer will determine whether the building is deemed L1 compliant.

Emergency Lighting	Good	Good	Yes	Fittings are generally in good condition. Upgrade has taken place during the last couple of years including new white FP200 type cabling and new self contained bulkheads and key test facilities located adjacent to local distribution boards. A small No. of original bulkhead fittings still remain in situ and their removal should be considered as they are no longer in use.
External Lighting	Satisfactory	Satisfactory	N/A	As building 1 comment.
Nurse Call	N/A	N/A	N/A	No nurse call is provided in this building. The current use of the building does not require this function.
Induction Loops	N/A	N/A	No	No induction loop systems provided anywhere in building. Induction loop should be provided at reception as a minimum standard. Additional coverage should be considered in designated areas or possible use of mobile induction loop units.
Security	Fair	Poor	N/A	A limited security system is provided at present. It appears to function as required. Review of the future use of the building will determine any future upgrade of the security system.
Access Control	N/A	N/A	N/A	No electrical access control is provided at this time. Review the future use of the building will determine any future requirement.

CCTV	Good	Good	N/A	4 no. new CCTV cameras have been installed to cover building 2. These cameras have been integrated into the existing system, located within the control room. The existing system appears relatively new and in good working order. It also appears to provide the required functionality at present. Review of the future use of the building will determine any future upgrade requirements.
Personal Attack	N/A	N/A	N/A	Personal attack not provided at present. Review the future use of the building will determine any future requirement.
Paging/ PA	Unknown	Unknown	N/A	Small speaker P/A system in the recreation hall. The condition of this is unknown as there was no access available to the control equipment. Staff to Staff communication not provided. Review the future use of the building will determine any future requirement.
Lightning protection	N/A	N/A	Inconclusive	Currently not provided. Requirement should be reassessed in detail during any refurbishment works in line with current standards- BS EN 62305



APPENDIX 1 : EQUIPMENT LIFE SPANS

The following is a list of typical life spans for services Equipment

PLANT ITEM	TYPICAL ECONOMIC LIFE
Automatic Controls	15 – 20 years
Boiler Plant	15 – 20 years
Calorifiers	20 – 25 years
Chillers	15 – 20 years
Cooler Batteries	15 – 20 years
Ventilation Distribution Ductwork	25 – 30 years
Heater Batteries	15 – 20 years
Heat Exchangers	20 – 25 years
Fans	15 – 20 years
Motors	20 – 25 years
Pumps	15 – 20 years
Pipework	25 – 30 years
Radiators	15 – 20 years
Tanks	15 – 30 years
Valves	20 – 25 years
Transformers	15 – 30 years
HV Switchgear	25 – 30 years
LV Switchgear	25 – 30 years
Main LV Cabling	25 – 30 years
Sub Circuit PVC / LSF Cables	20 – 25 years
Generators	25 – 30 years
Fire Alarm Systems	320 – 25 years
Call Systems	20 – 25 years
Battery Services ie. Emergency Ltg	Up to 10 years maximum
Telephone Systems	20 – 25 years
Lift Services	20 – 25 years
Lighting Installation	20 – 25 years

Appendix 2J

Workforce Information

NACH Projected Budget Figures

Assumptions made:
Baseline is October 2011 budget staffing.
Bed numbers for new NACH is 206
Increase in toilets, due to single rooms (10%)
Sickness and leave cover (21%)

Domestic

Staff Group	Weekly Budget Hours	Increased Capacity (27%)	Increased Toilets (10%)	Sub Total Hours	Sickness/ Leave (21%)	Projected Budget Hours	W.T.E
Clerical B2	20	5.4	0	25.4	5.33	30.73	0.82
Uniform Officer B3	20	5.4	0	25.4	5.33	30.73	0.82
Domestic Asst/Hair Dress/HK	1359.5	367.05	135.95	1862.5	391.13	2253.63	60.10
Sewing Linen	72.5	19.58	0	92.08	19.34	111.42	2.97
PPCL Asst	104.5	28.22	0	132.72	27.87	160.59	4.28
PPCL Supervisor	37.5	0	0	37.5	7.88	45.38	1.21
Domestic Supervisor	142.75	38.54	0	181.29	38.07	219.36	5.84
Totals	1756.75	464.19	135.95	2356.89	494.95	2851.84	76.04

Porters

Staff Group	Budget Hours	Increased Capacity (27%)	Sub Total Hours	Sickness/ Leave (21%)	Projected Budget Hours	W.T.E.
Porter/Driver	675.25	182.32	857.57	180.09	1037.66	27.67
Waste Porter	35	9.45	44.45	9.33	53.78	1.43
Security	102	27.54	129.54	27.20	156.74	4.18
Gardeners	75	20.25	95.25	20.00	115.25	3.07
Supervisor	37.5	0	37.5	7.88	45.38	1.21
Head Porter	37.5	0	37.5	7.88	45.38	1.21
Totals	962.25	239.56	1201.81	252.38	1454.19	38.77

Domestic

Staff Group	Weekly Budget Hours	W.T.E.
Clerical B2	20	0.53
Uniform Officer B3	20	0.53
Domestic Asst/Hair Dress/HK	1359.5	36.25
Sewing Linen	72.5	1.93
PPCL Asst	104.5	2.80
PPCL Supervisor	37.5	1.00
Domestic Supervisor	142.75	3.81
Totals	1756.75	46.85

Catering

	Current		NACH	
	Staff	**WTE**	**Staff**	**WTE**
Band 1	29	15	39	20
Band 2	1	0.66	2	1.1
Band 3 cooks	5	4.8	7	6.8
Band 3 Supervisors	4	2.3	4	2.3
Band 4	1	1	2	2
Band 5	1	1	1	1
Band 7	1	1	1	1
On Floor	42	25.76	56	34.2
Sick/annual		5.25		6.8
TOTAL		31.01		41

This is on the basis of existing conventional service
Also required is the delivery of portering staff depending on number of trollies
Equipment need will come to Approx £60,000 at todays Market prices
Essential 50 m2 area for trolley bay and 30m2 for dining area

Cashiers

Current Staffing and Future Staffing

1 Band 4
1 Band 3

Estates

Current

Total staffing levels for general maintenance of the current ACH estate, excluding specialist maintenance on CDU equipment is 10 wte, consisting of :-

- 1 x Estates Officer
- 1 x Maintenance Supervisor
- 1 x Fitter
- 1 x Electrician
- 2 x Joiners
- 1 x General Builder
- 1 x Plumber
- 2 x Assistants

Future

It is understood that the new hospital will be built under the NPD scheme, with the building and its services being maintained by the external FM contractor as required by that process.

The NHSA&A owned equipment within the new facility will however be maintained by NHSA&A staff.

Following construction of the NACH it is estimated that 7 wte staff will be required to maintain the retained estate and the NHSA&A owned equipment within the new facility. The actual breakdown of those 7 wte posts is yet to be finalized.

Administration

It is anticipated that the following staff would work from the NACH development.

Current

Title	Band	Current WTE	Future WTE
Medical Records Officer	2	2.48	2.48
Ward Clerk	2	1.03	1.00
Ward Secretary	3	0.50	
Recruitment Officers	3	1.61	1.50
Secretarial / Out-Patients	3	2.80	2.80
Secretary	3	1.00	1.00
Secretary	4	1.00	1.00
Supervisor	4	2.00	2.00
Mental Health Act Co-ordinator	5	0.80	0.80
Operations Co-ordinator	5	1.00	1.00
Total		**14.22**	**13.58**

Future

The WTE staffing levels have been based on current and future activity. There is a reduction of 0.50 WTE as the secretarial support to the EMH Team Leader will remain on the Ailsa site. Also 1 WTE cashier will remain as there will still be an inpatient population on the Ailsa site. There will be additional duties required at NACH for the Consultation & Intervention Area and the Rehabilitation Consultant, therefore, no further reduction in staffing levels can be identified.

Due to a limited number of staff remaining on the Ailsa site there will require to be cross cover from NACH during annual leave and sickness.

Clinical Services

The nursing establishment projections, unless otherwise stated, have been applied using a workforce planning model that integrated predicted absence as part of the formula and recognises that the ability to deliver nursing services depends fundamentally on the nurse-patient ratio.

The planned time out and absenteeism has been calculated at 22.5%, summarised in Figure 1. (SEHD 2004a).

Figure 1 – Planned time out and absenteeism

• Annual Leave		15.75%
• Employee Friendly Policies	-	0.25%
• Sickness Absence	-	4.0%
• Proportion Maternity Leave	-	1.0%
• Agenda for Change	-	1.5%
Total		**22.50%**

The nursing workload, defined as the daily amount and type of nursing resources required to care for an individual patient are based on the information collated using the Professional Judgement Tool and an analysis of current nursing establishment and costs.

Elderly Mental Health

Skill mix
With the development of integrated care pathways and the changes to community activity as a result of the introduction of Community Care Home Liaison nurses an opportunity to review clinical leadership structure and skill mix within Community Mental Health Teams exists. The planning for the new facility at ACH enabled the clinical team to determine the most appropriate skill mix to meet changing needs.

Redesign / new models of care / role development
- The design of the new build with single, en-suite facilities will significantly impact on the delivery of care, providing more privacy and dignity to the patient group.
- Advanced Nurse Practitioners.
- Nurse Consultant for Dementia.
- Development of the Community Care Home Liaison Service, will impact on the number of readmissions to the new hospital. These posts will augment and enhance the existing General Hospital Liaison Nurse posts.
- Specialist posts, i.e. psychosocial interventions.
- Self Help Support workers.

These developments will further enhance and improve the patient experience. There will be quicker access to the service and decision making will be more effective and patient centred. An opportunity exists to strengthen and develop links with Higher Education Institutions.

Minimum requirement for the two 15 bed wards have been calculated at ***1.35wte nurse – patient ratio.***

Good skill mix contributes to the quality of patient care, patient satisfaction and clinical outcomes (RCN 2006) and as such the ratio for acute beds is calculated at 55 qualified and 45 unqualified ratio.

Skill Mix Cost

Ward	Band 7	Band 6	Band 5	Band 2	Total	Total Wte
Pavilion 1	57,291 1 wte	95,322 2 wte	313,674 8.14 wte	235,770 9.11 wte	702,057	20.25
Pavilion 2	57,291 1 wte	95,322 2 wte	313,674 8.14 wte	235,770 9.11 wte	702,057	20.25
Total	**114,582**	**190,644**	**627,348**	**471,540**	**1,404,114**	**40.50**

Care of Older People's Services

The workforce of this service is currently evaluating a revised staffing model [based on a combination of two workforce tools – Keith Hurst In-patient Tool & Professional Judgement Tool] on an interim basis. If this evaluates positively a request for this funding on a recurring basis will be made. Current and interim workforce is detailed below. Overall a reduction of 30 beds in the revised model of care will be phased in over subsequent months and the future staffing projections for the final model detailed below has been developed following the application of these approved workforce tools.

Current Staffing

ACH	Registered wte	Non-Registered wte	Total wte
Pavilion 3	11.48	13.21	24.96
Pavilion 5	10.38	12.51	22.89
Pavilion 6	10.32	13.23	23.55
	32.18	38.95	71.13

Interim Staffing (to 31 March 2012)

ACH	Registered wte	Non-Registered wte	Total wte
Pavilion 3	14.1	17.6	31.7
Pavilion 5	12.2	17.6	29.8
Pavilion 6	12.2	17.6	29.8
	38.5	52.8	91.3

Propsed Future Staffing

ACH	Registered wte	Non-Registered wte	Total wte
Pavilion 3	14.1	17.6	31.7
Pavilion 5/6 30 bed CC	12.2	17.6	29.8
Total	26.3	35.2	61.5

Adult Acute Inpatient Mental Health & Forensic Service

This workforce plan covers the period [2011 – 2016] during which we will consider the service changes over the next 5 years and beyond, in particular, our new build facility on the Ayrshire Central site, National drivers, future 'Models of Care' and through redesign develop 'new ways of working'.

To underpin the developments we will reshape our future workforce, define the required skill set, competencies and ultimately the staffing establishment to deliver the high quality service required.

Our current workforce will be the basis of our future workforce. Our future workforce will have to be affordable, available and, above all, adaptable.

Workforce planning is an on-going activity developed in partnership with staff using the same professional judgment modelling the required staffing is detailed below.

Area	**Current bed numbers**	**Proposed bed numbers**	**Variance**	**Current WTE**	**Proposed WTE**	**Variance**
Acute Admission	88	60	-28	110.10	87.10	-23.00
IPCU	7	8	+1	23.14	25.70	+2.56
Rehabilitation/Non Acute CC	42	30	-12	55.23	54.23	-1.00
Forensic Rehab' Service (low secure)	10	8	0	21.30	22.95	+1.65
ECT				2.00	2.00	0.00
Advanced Nurse Practitioners				6	10	+4.00
Operational Management Team (including Bed Management & Night C/N)				8.00	8.00	0.00
Grand Total	147	106	-41	225.77	209.98	-15.79

Addiction Services

Current position

The current complement of staff within the Loudoun House Residential Rehabilitation Unit is:

- 1 x band 7 Charge Nurse
- 1 x band 6 depute Charge Nurse
- 10 x band 5 staff nurses
- 4 x band 2 nursing assistants

Total number of staff = 16 wte

In-patient alcohol detoxification beds are currently situated within the Acute Admissions Unit, Ward 1E within the Crosshouse Hospital site. They will merge in this revised model.

Future Proposal

In planning this unit, the emerging model of care was discussed and it was agreed that the establishment would be based on a skill mix of nursing staff due to the complexity of the target group and the requirement for assessing clinical need and differential diagnosis. In addition it is recognised that a wide range of statutory, voluntary and commissioned partners may be involved with patients throughout their contact with this service. In discussion with Occupational Therapy, it has been agreed that referrals will be sent directly to the Occupational Therapy Service based on-site at NACH. Further discussion is required with a wider range of partners to ensure multi-disciplinary support has been appropriately discussed agreed prior to this move.

Over the next 3-4 years, this model will continue to be refined and all staff involved will be consulted and supported by staff side and Human Resources.

Nursing Establishment

The nursing establishment is applied using the workforce planning model described above.

The Addiction Staffing complement will be:

- 1 x band 7 Charge Nurse
- 1 x band 6 depute Charge Nurse
- 8 x band 5 staff nurses
- 5 x band 2 nursing assistants

Total number of staff = 15 wte

Allied Health Professionals

With regards to the workforce, referrals are sent direct to the relevant Departments to be actioned by a team which delivers services across all areas of mental health and primary care.

- Physiotherapy - 1 band 7, 1 band 3
- Dietition-2.5wte band5/6.
- Speech and Language-no clinicians dedicated to the wards.
- Occupational Therapy-3wte band 5/6, 0.5wte band 3. (based on the NACH site covering solely mental health in-patient areas).
-

Medical staffing Psychiatry

General Adult

The most significant drivers impacting on medical workload include Modernising Medical Careers - reduction in junior doctor training numbers and move to a service delivered by trained doctors. Coupled with junior doctors limited to 48 hours a week and Shifting the balance of care - transfer of services into the community (Also balance of hospital and community services national Mental Health Strategy which is out for consultation).

The workforce plan is to have 13 junior trainees and 5 - 7 higher trainees plus the existing Consultants. Bed numbers for IPCU/Forensic and Continuing care will not change significantly and medical staffing will remain unchanged. With the reduction in General Adult beds the model assumes that the workload will transfer to the community/crisis and that medical review of these patients will be required as before. Reduction in 1 SD for each General Adult locality is underway as part of efficiency savings and this workload will be picked up by the General Adult consultants as well as the increased workload due to the reduction in junior doctors.

For each General Adult consultant we would adjust Programmed Activities to 40% for inpatient work and 10% for crisis/urgent Out Patients in the new model compared to 50% in our current model.

Elderly Mental Health Psychiatry

There is no proposed change to Elderly Mental Health Psychiatry workforce.

Medical Staffing – Geriatrics

Workforce modelling for this service is currently being reviewed however with the significant increase in elderly population it is expected that significantly many more case will be cared for in a community rather than inpatient setting and programmed activities will shift a larger proportion of current inpatient workload to community based care.

Nursing Staff

The following chart provides a breakdown regarding the workforce provision of all nursing staff grades for the services that would transfer to North Ayrshire Community Hospital. The total headcount is 326 which equates to 301.6 whole time equivalent (WTE) staff.

Band	Post Title/Designation	Headcount	WTE
Band 2	Clinical Band 2 / Nursing Assistant	127	112.84
Band 3	Clinical Band 3 / Nursing Assistant	13	12.67
Band 5	Clinical Band 5 / Staff Nurse	143	134.82
Band 6	Clinical Band 6 / Deputy Charge Nurse	28	26.27
Band 7	Ward Manager / Charge Nurse	15	15
	Total	326	301.6

These staffing figures can be further broken down to reflect the staffing for each area:

Acute Mental Health and Forensic

Band	Post Title/Designation	Headcount	WTE
Band 2	Clinical Band 2 / Nursing Assistant	49	46.73

Band 3	Clinical Band 3 / Nursing Assistant	9	9
Band 5	Clinical Band 5 / Staff Nurse	81	78.63
Band 6	Clinical Band 6 / Deputy Charge Nurse	14	12.65
Band 7	Ward Manager / Charge Nurse	6	6
	Total	159	153.01

Rehabilitation

Band	Post Title/Designation	Headcount	WTE
Band 2	Clinical Band 2 / Nursing Assistant	8	7.86
Band 3	Clinical Band 3 / Nursing Assistant	3	3
Band 5	Clinical Band 5 / Staff Nurse	13	12
Band 6	Clinical Band 6 / Deputy Charge Nurse	3	3
Band 7	Ward Manager / Charge Nurse	2	2
	Total	29	27.86

Elderly Mental Health

Band	Post Title/Designation	Headcount	WTE
Band 2	Clinical Band 2 / Nursing Assistant	66	54.25
Band 3	Clinical Band 3 / Nursing Assistant	1	0.67
Band 5	Clinical Band 5 / Staff Nurse	41	36.19
Band 6	Clinical Band 6 / Deputy Charge Nurse	10	9.62
Band 7	Ward Manager / Charge Nurse	5	5
	Total	123	105.73

Frail Elderly

Band	Post Title/Designation	Headcount	WTE
Band 2	Clinical Band 2 / Nursing Assistant	47	37.30
Band 3	Clinical Band 3 / Nursing Assistant	1	0.67
Band 5	Clinical Band 5 / Staff Nurse	25	21.2
Band 6	Clinical Band 6 / Deputy Charge Nurse	6	5.8
Band 7	Ward Manager / Charge Nurse	3	3
	Total	82	67.97

Addictions

Band	Post Title/Designation	Headcount	WTE
Band 2	Clinical Band 2 / Nursing Assistant	4	4
Band 3	Clinical Band 3 / Nursing Assistant	-	-
Band 5	Clinical Band 5 / Staff Nurse	8	8
Band 6	Clinical Band 6 / Deputy Charge Nurse	1	1
Band 7	Ward Manager / Charge Nurse	2	2
	Total	15	15.00

Appendix 2K

Benefits Realisation Plan

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Overall Benefits Sponsor*(s):

- Jim Crichton – Director, Primary Care and Mental Health Services
- Mandy Yule – Director, Integrated Care & Partner Services
- Liz Moore – Director, Integrated Care & Emergency Services
- John Wright – Director, Information & Clinical Support Services

Overall Benefits Realisation Manager*(s):

- Linda Boyd – Health Care Manager, Adult Mental Health Services
- Maire Currie – Health Care Manager, Older Peoples Service
- Jean Hendry – Health Care Manager, Community & Partnerships
- Carol Fisher – Health Care Manager, Specialist Mental Health Services
- Angela O'Neill – Associate Nurse Director, Integrated Care & Emergency Services
- Sinclair Molloy – Health Care Manager, Emergency/Urgent Care

(* or as designated in future)

Benefit & SMART Measures Note: All realisation dates are from date of commissioning (unless otherwise specified), all measures relate to the contribution made by the new build component of the ACH site), baseline taken in year prior to opening unless otherwise stated

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
1. **Improved quality of clinical care including standards and clinical outcomes**						
Wards at current ACH have no ANPs. Medical rotas are currently threatened by Junior Doctor cover arrangement via MMC	Safe	• Medical / Advanced Nurse Practitioner (ANP) day and night cover on site will increase to 100% compared to the baseline taken 1 year prior to opening	Jim Crichton Liz Moore	Linda Boyd Maire Currie	Associate Nurse Director (Derek Barron)/ Associate Medical Director (John Taylor)/ Clinical Director for Care of the Elderly (Sandy Ghosh)	Data will be collected from the service

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
Waits occur are below level/cover spread over many sites	Safe	• Percentage of patients requiring urgent medical assessment seen within one hour by medical staff/ANP will increase from baseline to 100% within 1 year	Jim Crichton Liz Moore	Linda Boyd Maire Currie	Derek T Barron Dr John Taylor	Request requires to be more clearly defined i.e. which patients/ specialty Measurement system required
Current travel costs include travel from base to base	Efficient	• On call Medical/ANP Staff travel costs will be reduced overall within 3 years (excluding change of base costs)	Jim Crichton Liz Moore	Linda Boyd Not applicable to Care of the Elderly (COE)	Fiona Neilson, Management Accountant Linda Boyd/Margaret McEwan John Taylor Sandy Ghosh Derek T Barron	Presupposes that the post build system will be the same as the current arrangements . Data from expenses
Compliances low due to current limitation of IPCU	Effective	• QIS IPCU standards will achieve a 10% higher compliance than baseline within 2 years	Jim Crichton	Linda Boyd	Senior Nurse (Maria Gilfedder) and Associate Medical Director (John Taylor) Margaret McEwan Lynne Murray	Presupposes that there will be no changes in the standards, unless arrangements in place to ensure local recording

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
Areas of compliance are impacted by physical design of current buildings	Effective	• QIS Schizophrenia ICP measures for inpatient care aspects will achieve a 10% higher compliance than current baseline within 2 years	Jim Crichton	Linda Boyd	Lead Consultant, Adult in-patient and Forensic services (Morag Henderson) and Associate Medical Director (John Taylor) Maria Gilfedder	Presupposes that there will be no changes in the standards, unless arrangements in place to ensure local recording
Areas of compliance are impacted by physical design of current buildings	Effective	• QIS admission to hospital standards will achieve a 10% higher compliance than current baseline within 2 years	Jim Crichton	Linda Boyd Not applicable to Care of the Elderly (COE)	Mental Health Service Managers (Peter McArthur, Isabel Marr, Margaret McEwan)	Presupposes that there will be no changes in the standards, unless arrangements in place to ensure local recording
Areas of compliance are impacted by physical design of current buildings	Effective	• Frail Elderly Clinical Quality Care Indicators will improve by 10% from baseline within 2 years	Liz Moore	Maire Currie	Clinical Director for Care of the Elderly (Sandy Ghosh)	Presupposes that there will be no changes in the standards unless arrangements to ensure local recording.

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
Nutritional care standards will allow patients to have their nutritional state assessed and monitored as part of their overall clinical care, with menus tailored to their needs where appropriate	Effective	• The rolling programme of assessment of Nutrition care standards will show no deterioration and improvement will be noted in 10% of indicators within 2 years	Mandy Yule	John McConway or Angela O'Neill Linda Boyd	Louise Benson (Dietetic Manager)	Presupposes that there will be no changes in the standards unless arrangements in place to ensure local recording.
2. **The implementation of current and new models of health care and the wider clinical strategy**						
Bed occupancy and length of stay are best in benchmark data	Efficient	• Mental Health bed numbers overall will be reduced from baseline	Jim Crichton	Linda Boyd	Mental Health Service Managers (Peter McArthur, Isabel Marr, Margaret McEwan)and Bed Managers Mental Health Services (Shielah McFadzean/ Fiona Kachach) Gail Sabbatini	Readily Available – Bed data
Bed number reduction required by local strategy	Efficient	• Frail elderly continuing care beds will reduce from 60 to 30 from baseline	Liz Moore	Maire Currie	Discharge co-ordinator for Crosshouse Older People's Services (Lorraine Sheridan)	Readily Available – Bed data

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
Length of stay is not best in Scotland	Patient Centred	• Mental Health patient length of stay in acute wards will reduce compared with the baseline within 2 years of facility opening.	Jim Crichton	Linda Boyd	Margaret McEwan and Bed Managers Mental Health Services (Shielah McFadzean/ Fiona Kachach Isabel Marr Gail Sabbatini	Readily Available – Bed Data National Mental Health Benchmarking Data
Length of stay is not best in Scotland	Patient Centred	• Mental Health patient length of stay in rehabilitation unit will reduce compared with the baseline within 2 years of facility opening.	Jim Crichton	Linda Boyd	Margaret McEwan and Bed Managers Mental Health Services (Shielah McFadzean/ Fiona Kachach and John McConway Lynne Murray William Lauder Gail Sabbatini Local Authorities	Readily Available – Bed Data
Lack of Community rehabilitation facility increases length of stay	Patient Centred	• Frail elderly rehabilitation length of stay will be reduced compared with the baseline within 2 years of facility opening.	Mandy Yule	Jean Hendry	Anne Sinclair and John McConway	Readily Available – bed data
DNA rates in poorer environments are higher	Timely Efficient	• DNA rates to adult mental health outpatient areas will reduce by 2% within 2 years	Jim Crichton		Service Manager for Adult Mental Health Community Services (Gail Sabbatini), head	Readily Available – Outpatient data

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
					of Administration (Jessie Mitchell) and Associate Medical Director (John Taylor)	
No opportunity due to physical limitations of building: limited rehabilitation	Patient Centred Equitable	• Rehabilitation ward in-reach to acute mental health wards will be established before the new facility is opened and increased by 10% within 2 years of facility opening	Jim Crichton	Linda Boyd	Service Manager, Adult Mental Health In-Patient and Forensic Services (Margaret McEwan) William Lauder	Which specialties, within what parameters. specific data would require to be collected
3. **Improved access to area wide and local health services for an increased proportion the people of Ayrshire and Arran**						
Plan requires to be developed	Timely	• A travel plan for the development will be put in place which will describe the transport and sustainable travel arrangements for the development	John Wright	Transport & Access Co-ordinator		URS our external consultants are responsible for creating the NACH travel plan. Our Transport and Access Co-ordinator is responsible for working with them to ensure a travel plan is created.

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
More patients currently travel longer distances due to current location of in-patient services	Efficient	• Overall travel costs paid to mental health patients will be reduced within 1 year	Jim Crichton	Linda Boyd	Head of Administration Mental Health Services (Jessie Mitchell)	Data from Cashiers
Specialist services such as IPCU not on all sites	Patient Centred Safe	• Number of "transfers out" of the facility will be reduced within 1 year compared to baseline	Jim Crichton Liz Moore	Linda Boyd Not applicable to COE	Bed Managers Mental Health Services (Shielah McFadzean/ Fiona Kachach Margaret McEwan Isabel Marr	Readily available – bed data
New models of care required for new facility	Patient centred Safe	• Number of "internal transfers" within the site will be reduced within 1 year	Jim Crichton Liz Moore	Linda Boyd Not applicable to COE	Bed Managers Mental Health Services (Shielah McFadzean/ Fiona Kachach and Margaret McEwan Isabel Marr	Readily available – bed data
4. **Maximised opportunities for partnership working and wider public involvement/engagement**						
Community integration is currently very limited	Equitable	• The number of community groups accessing group facilities out with working hours will increase within 3 years	Mandy Yule	Jean Hendry	Voluntary Organisations Contracts Manager (Linda Jones)	Determined by number of bookings for rooms by partners and agencies.

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
						Measure uptake.
Community integration is currently very limited	Patient Centred Efficient	• More opportunities will be identified for volunteer involvement in day to day service delivery, e.g. Gardening support	Mandy Yule	Jean Hendry	Head of Clinical Support Services (North) (George Lightbody) and Voluntary Organisations Contracts Manager (Linda Jones)	Degree of interest generated by public participation.
5. **Supporting an improved and safer working and clinical environment** Implicit in the Staff Governance Standard is that all legal obligations are met, including NHS employers complying with current employment legislation, and that all policies and agreements are implemented. The Standard requires that all NHS Boards must demonstrate that staff are: • Well informed • Appropriately Trained • Involved in decisions which affect them • Treated fairly and consistently Provided with an improved and safe working environment						
Lack of range of parking in the right place	Timely	• The number of short term parking spaces provided will be increased as a ratio to longer term	John Wright	Head of Clinical Support Services (North) (George Lightbody)		Baseline needs established
Some services remain below national standard	Efficient Patient Centred	• Sickness and absence rates among all staff employed in the development will show an improvement within 3 years	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd Carol Fisher Dan Docherty John McConway Angela O'Neill	O&HR (Jane McMinigal/ Scott Semple)/ Service Managers (Jan Thomson, Cathy Kyle, Peter McArthur, Isabel	Data is readily available

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
					Marr, Margaret McEwan, Jessie Mitchell, Gail Sabbatini) John McConway	
Workforce plans require to project workforce for new models and environment	Efficient	• Clinical staff turnover will be managed in accordance with agreed workforce plans	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd Carol Fisher Morag Moore Angela O'Neill	Owned by the Service Managers – O&HRD will provide a support role and the workforce intelligence detail Service Managers for Mental Health Services (Jan Thomson, Cathy Kyle, Peter McArthur, Isabel Marr, Margaret McEwan) and Manager Older People and Vulnerable Adults (Anne Sinclair) and O& HRD (Jane McMinigal/Scott Semple)	Data is readily available
Costs are rising Support	Safe	• Cost of security incidents on the site	John Wright	Head of Clinical		Determine

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
services		will reduce by 25% within 2 years (Vandalism, crime, etc) of opening		Support Services (North) (George Lightbody)		baseline and put in place arrangements required to collect specific data in line with safer by design
Costs are rising support services	Safe	• Number of crime reports submitted with respect to the site will reduce by 25% within 2 years of opening	John Wright	Head of Clinical Support Services (North) (George Lightbody)		Determine baseline and put in place arrangements required to collect specific data in line with safer by design
Formal report by MWC raises concern regarding environment	Effective	• Specific current environmental concerns raised by the Mental Welfare Commission (MWC) will be addressed within 1 year of the facility opening	Jim Crichton	Linda Boyd	Service Manager for Elderly Mental Health Services (Isabel Marr)	Mental Welfare Commission (MWC) Annual Report
Ward environment	Safe Effective Patient	• There will be a 5% decrease in absconds from acute wards from baseline within 2 years of the facility opening	Jim Crichton	Linda Boyd	Service Manager for Adult in-patient and forensic services (Margaret	

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
	Centred				McEwan) Service Manager for Elderly Mental Health Services (Isabel Marr) Clinical Nurse Managers for Adult In Patient Services (Lynne Murray & William Lauder) Dr Morag Henderson and Dr Seamus McNulty (Clinical Directors) Maria Gilfedder and Andrew Swanson (Senior Nurses)	
Some Ward Environments have limited natural daylight and direct sunshine or easy access to outdoor space	Effective	• Design will demonstrate maximisation of direct and indirect light sunlight to both private and public spaces	John Wright	John Scott		
Minimal access to single room accommodation	Patient Centred	• 100% of service users will have single room accommodation compared to baseline	John Wright	John Scott		
Minimal choice of socialisation space	Patient Centred	• At least 25% more service users will rate the choice available to them as good at 1 year against baseline.	Jim Crichton Liz Moore	Linda Boyd Maire Currie		

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
Minimal access to therapeutic , rehabilitation, re-enablement activity	Patient Centred	• Measured at 1, 3 and 5 years a 20% increase in therapeutic activity from baseline will occur and be sustained.	Jim Crichton Liz Moore	Linda Boyd Maire Currie		
There is minimal key adjacency from wards/departments	Patient Centred Safe	• The key adjacencies of wards/depts as specified in the clinical brief has at least 80% delivered and distances between each are is minimised compared to baseline	John Wright	John Scott	Linda Boyd Maire Currie	
Prevention of trips and falls is a priority	Safe	• A more fit for purpose environment will contribute to a reduction of reported trips and falls for patients annually compared to baseline	Jim Crichton Liz Moore	Linda Boyd Angela O'Neill	Services Managers (Margaret McEwan, Isabel Marr/Manager Clinical Nurse Manager (Pamela Wheeler)	Datix Reports
Improvement in attendance at mandatory and statutory training	Safe Effective	• Increase percentage of directorate staff up-to-date with statutory/mandatory training by year 2 of opening compared to baseline	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd Carol Fisher Angela O'Neill	Head Occ H&S (Hugh Currie) Assistant Director of Estates and Capital Planning (Dan Doherty)	Data is readily available
In-patient areas have a poorer uptake of failure to attend pre-booked statutory and mandatory training	Safe Effective	• Reduce the did not attend rate for staff failing to attend statutory/mandatory training by year 2 of opening compared to baseline	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd Angela O'Neill Carol Fisher	Head Occ H&S (Hugh Currie) Assistant Director of Estates and Capital Planning (Dan Doherty)	Data is readily available
Occupational Health & Safety Policy compliance is high except where	Safe	• Increase percentage directorate/department compliance for meeting safety management	Jim Crichton Mandy Yule Liz Moore	Linda Boyd Angela O'Neill Carol Fisher	Head Occ H&S (Hugh Currie)	Data is readily available

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
environmental constraints apply		system policies and procedure by year 2 of opening compared to baseline	John Wright			
6. **Delivering future flexibility and functionality**						
Models of care are currently restricted due to lack of flexibility and functionality	Timely Efficient Equitable	• There will be flexibility to respond to specific re-alignment of ward/clinical areas within 5 years of opening any clinical service model change can be accommodated by the flexibility of the building. Any associated cost will be within "minimal" range	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd Carol Fisher Maire Currie Jean Hendry	Service Managers Mental Health Services (Jan Thomson, Cathy Kyle, Peter McArthur, Isabel Marr, Margaret McEwan, Jessie Mitchell, Gail Sabbatini) and Clinical Nurse Manager for Older People Services and Vulnerable Adults (Pamela Wheeler)	Number of service redesign initiatives and associated will be recorded
Models of care are currently restricted due to lack of flexibility and functionality	Efficient	• The flexibility of the design of the development will reduce the need for major adaptations (i.e. Costing more than £50,000) within the first 10 years of the building being commissioned	John Wright	Senior Project Manager, Capital Planning (Iain Fairley)		
Very limited choice	Patient	• The facility will offer an increased	John Wright	John Scott	Service Manager,	

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
currently exists	centred Equitable	opportunity and variety of generic spaces (for instance, room sizes and layout) to meet a range of purposes, including quiet/ discussion /consultation areas			Elderly Mental Health Services (Isabel Marr) Service Manager, Adult In Patient Services (Margaret McEwan) Service Manager, Addiction Services (Peter McArthur) Operations Co-ordinator (Elaine Steel) Service Manager, Community Mental Health Services (Gail Sabbatini)	
Current buildings do not comply with guidance	Efficient	• All current building guidance and space standards will be met by the development	John Wright	John Scott		
7. **Making more efficient and effective use of resources**						
There is no additional revenue budget available	Efficient	• It is anticipated that the baseline revenue budgets will be met in year 1 and annually thereafter	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd Angela O'Neill John McConway Dan Docherty Carol Fisher	Service Managers for Mental Health Services (Jan Thomson, Cathy Kyle, Peter McArthur, Isabel Marr, Margaret	Data available but need to specify what is associated with this development with finance colleagues as

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
					McEwan, Jessie Mitchell, Gail Sabbatini) and Clinical Nurse Manager (Pamela Wheeler)	per revenue plan
Workforce plans require to project workforce for new models and environment	Efficient	• Workforce projections will be within 5% of actual at 2 and 5 years	Jim Crichton Mandy Yule Liz Moore John Wright	Linda Boyd John McConway Dan Docherty Angela O'Neill Carol Fisher	Responsibility lies with the service managers, O&HRD will provide a supporting role in terms of professional guidance and workforce intelligence Service Managers for Mental Health Services (Jan Thomson, Cathy Kyle, Peter McArthur, Isabel Marr, Margaret McEwan) and Manager Older People and Vulnerable Adults (Anne Sinclair) and Workforce	Data available – Workforce Futures

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
					Modernisation Manager (Craig Lean)	
Whole life cost savings will result in a reduction in capital, energy/ maintenance and replacement charges	Efficient	• When the development realises the BREEAM rating of healthcare excellent, the whole life cycle costs will be realised	John Wright	John Scott		Available
Current blue book costs show some areas can attain further efficiency	Efficient	• Blue Book cost per treatment will be reduced	Jim Crichton Liz Moore Mandy Yule	Linda Boyd Maire Currie Carol Fisher John McConway Angela O'Neill Finance Senior Manager (Fiona Neilson)		Available
Revenue budgets will not increase	Efficient	• Cleaning costs/m2 will be reduced	John Wright	Morag Moore	Domestic Services Manager - Facilities (Janice Geddes)	How much %, what period of time?
Analysis of current overtime skews aspects of environment impact negatively on model of care	Efficient	• Scope for further reduction in clinical overtime and monitoring use of overtime will be easier due to co-location of services, 5% decrease in overtime will be achieved by end of year 2 of opening	Jim Crichton Liz Moore	Linda Boyd Carol Fisher Angela O'Neill	Service Managers, Mental Health Services (Jan Thomson, Cathy Kyle, Peter McArthur, Isabel Marr, Margaret McEwan, Jessie Mitchell, Gail Sabbatini) and Clinical	Data should be available – Expenses/ Payroll.

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
					Nurse Manager for Older People Services and Vulnerable Adults (Pamela Wheeler) and Finance Senior Manager (Fiona Neilson)	
8. **Supporting the delivery of all current, national and local and future strategies, policies and targets e.g. "having the right care in the right place at the right time"**						
Safety and incidents relating to environment should be avoided	Patient Centred Safe Effective Efficient Equitable Timely	• The number of Adverse incidents occurring within Mental Health in-patient facilities will be reduced within 2 years of opening compared to baseline	Jim Crichton Liz Moore	Linda Boyd Carol Fisher Angela O'Neill	Service Manager for Adult In-patient and forensic services (Margaret McEwan) Service Manager for Elderly Mental Health Services (Isabel Marr) Service Manager for Addiction Services (Peter McArthur) Clinical Nurse Manager, Older People's Services (Pamela Wheeler)	Data will be available from the Datix incident reporting system
9. **Assisting in the delivery/ provision of NHS Ayrshire & Arran published values** It is proposed to adopt a values-driven approach to move from good to great. Whilst NHS Ayrshire and Arran has explicit values - excellence, efficiency, teamwork, equality, care and improvement, it is proposed to explore with staff the behaviours required to meet the new challenges. The values adopted						

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
thereafter should be apparent in decision-making, prioritisation, management, leadership and interactions between colleagues. (extract from NHS Board Meeting 7 April 2010 Paper 2 - **Sustainable future - mission, vision, values and objectives)**						
Further promotion of values required	Patient Centred Safe Effective Efficient Equitable Timely	• An audit after 1 year will demonstrate the adherence to the Ayrshire & Arran published values	Patricia Leiser	Linda Boyd Carol Fisher	Workforce futures (Craig Lean) Service Future (Kate Thomas)	Data available, model of assessment may change in line with requirement of NHS Board
Achieved in 2010 desire to maintain and improve	Patient Centred Safe Effective Efficient Equitable Timely	• Regular inspections from Customer Service Excellence ™ (CSE) or future model will demonstrate that the new development will achieve and maintain the standards required by CSE	Jim Crichton	Linda Boyd Carol Fisher	Service Development & Training Co-ordinator (Gordon Reid) and Gail Sabbatini, Service Manager, Community Mental Health Services	Data availability
Environmental limitations contribute negatively to patient experience	Equitable	• Complaints about where values have been breached (for instance, confidentiality, privacy and dignity), will be reduced compared to existing inpatient mental health and older peoples inpatient facilities	Jim Crichton Mandy Yule Liz Moore	Linda Boyd Carol Fisher Assistant Director of Nursing (PF&PI) (Andrew Moore) Angela O'Neill	Service Manager for Adult In Patient Services (Margaret McEwan) Service Manager for Elderly Mental Health Services (Isabel Marr) Service Manager for Addiction Services (Peter	Information available via Complaints Department

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
					McArthur)	
To be explored Anecdotal information currently highlights inequity	Equitable	• Inequalities in access to services will reduce. This is not currently recorded, data source will be explored and confirmed by 2012	Jim Crichton Liz Moore Mandy Yule	Equality and Diversity Officer, Patient and Community Relations Team (Elaine Savory)	(Marlene McMillan)	Requires to be defined and data gathered By groups and location Recording of Equality and Diversity input would help if recorded and/or can demonstrate proactive inclusion of difficult to reach communities.
Further improvement planned	Patient Centred Safe Effective Efficient Equitable Timely	• The following measures identified in the Single Outcome Agreements, (North, South and East Ayrshire) will show marked improvement: • Number of people on register with diagnosis of dementia – How will the new hospital impact on the number of people of the QOFdementia register? • Mental health and well-being scores on Warwick-Edinburgh Mental Well-being scale out with regeneration areas of North Ayrshire – South Ayrshire Council collect these data;	Jim Crichton Liz Moore Mandy Yule		Partnership Co-ordinators (Michelle Sutherland, Phil White and Katie Kelly)	• Site improve dementia pathways and care Assumption that S.O.A still in use on opening of

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
		however note that no data available at present and future data will be dependent on outcome of the review of the South Ayrshire 1000. • Indicator not included in East Ayrshire SOA 2011-2014Number of people being assessed for alcohol and drugs misuse –North Ayrshire indicator only • Number of substance misusers accessing treatment and care service – North Ayrshire indicator only • Deaths per 100,000 population from alcohol related diseases – not an indicator for South Ayrshire • Number of patients waiting more than six weeks for discharge to appropriate setting in North Ayrshire. North Ayrshire indicator only –East Ayrshire SOA 2011-14 includes the Change Fund Indicator 'Bed days lost to delayed discharge (>4 weeks) • Patients hospitalised with alcohol conditions – East Ayrshire SOA 2011-2014 • Patients hospitalised with drug related conditions – East Ayrshire SOA 2011-2014 • Deaths from suicide – East Ayrshire SOA 2011-2014 • Patients prescribed drugs for anxiety/depression/psychosis – East				facility: • Measurement to be defined • Site deliver addictions work with partners • Site deliver addictions work with partners • Site deliver addictions work with partners to reduce alcohol and drug deaths • Partners working together to support older people

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
		Ayrshire SOA 2011-2014				
Environmental limitations impact negatively on models of care		• **Current Heat Targets (2011/12) directly linked to development will be met**			Policy, Planning and Performance (Eunice Johnstone)	Measurement in place for NHS level A&A data.
	Timely	• Rate of attendance at Accident and Emergency. Detail: To support Shifting the Balance of Care, NHS Boards will achieve agreed reductions in the rates of attendance at A&E. Time limited to 2013/14	Liz Moore	Sinclair Molloy		
	Timely	Reduction in emergency bed day rates for patients aged 75+. Detail : Reducing the need for emergency hospital care, NHS Boards will achieve agreed reductions in emergency bed day rates for people aged 75 and over between 2009/10 and through improved partnership working between acute , primary care and community care sectors This is time limited to 2011/12 but proposed DRAFT 2012/13 target is to 2014/15 and requires a reduction of 12%on bed day rates	Liz Moore	Maire Currie		
	Timely	Drug and Alcohol Treatment: Referral				

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
		to Treatment. Detail: By March 2013, 90% of clients will wait no longer than 3 weeks from referral received to appropriate drug treatment that supports their recovery	Jim Crichton	Maire Currie Carol Fisher		
	Efficient	• HEAT Target- Reduce carbon emissions. Detail: To reduce energy-based carbon emissions and to continue a reduction in energy consumption to contribute to the greenhouse gas emissions reduction targets set in the Climate Change (Scotland) Act 2009.	John Wright	Iain Fairley		Local data via the PMS National data from ISD
	Efficient	• HEAT Target Reduce Energy Consumption Details: To reduce energy-based carbon emissions and to continue a reduction in energy consumption to contribute to the greenhouse gas emissions reduction targets set in the Climate Change (Scotland) Act 2009.	John Wright	Iain Fairley		
10. **Minimising the risk of healthcare acquired infections (HAI)**						
Environmental limitations impact negatively on models of care	Safe	• All HAI criteria will be met and the Healthcare Acquired Infections (HAI) SCRIBE process will be followed	Jim Crichton Liz Moore Mandy Yule	Morag Moore Angela O'Neill Linda Boyd Carol Fisher	Senior Infection Control Nurse (Frances Lafferty)	Date requires to be confirmed with Infection

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
						Control
	Safe	• Identified and discrete "clean" and "dirty routes" will be provided and awaited showing 100% compliance by staff	John Wright	Morag Moore and Head of Clinical Support Services North (George Lightbody)		As detailed in FM Strategy Timeframe
	Safe	• National cleaning audit performance will be improved within 1 year	John Wright	Morag Moore	Domestic Services Manager - Facilities (Janice Geddes)	Define baseline
	Safe	• Infection control audits will show measurable improvements within 1 year	Jim Crichton Liz Moore Mandy Yule	Angela O'Neill Linda Boyd Carol Fisher	Senior Infection Control Nurse (Frances Lafferty)	Define baseline
	Safe	• Number of HAI incidents will be reduced by more than 20% within 2 years	Jim Crichton Liz Moore Mandy Yule		Senior Infection Control Nurse (Frances Lafferty)	Define baseline
	Safe	• Environmental audits will demonstrate 100% achievement in new build areas within 1 year	Jim Crichton Liz Moore Mandy Yule		Senior Infection Control Nurse (Frances Lafferty)	Define baseline
11. **Supporting the aims and objectives of the Capital Plan/Property Strategy and wider environmental agenda**						
Current estate is inefficient	Patient Centred Safe Effective Efficient Equitable Timely	• Delivers BREEAM "excellent" upon commissioning	John Wright	Senior Project Manager, Capital Planning (Iain Fairley)		Define baseline

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
	Efficient	• Heating consumption/volume will be reduced within 2 years	John Wright	Senior Project Manager, Capital Planning (Iain Fairley)		Define baseline
	Efficient	• Carbon emissions will be reduced see KPM 1 at section 9	John Wright	Senior Project Manager, Capital Planning (Iain Fairley)		Define baseline and know what is/can be measured
		• Six facet survey will show marked improvement for the Ayrshire Central Site overall	John Wright	Senior Project Manager, Capital Planning (Iain Fairley)		Define baseline and % improvement
12. **Bringing an end to institutional living and ensuring that the mental health stigma associated with existing facilities does not transfer to the new development**						
The current facilities contribute to the stigma of mental illness	Equitable	• The stigma attached to Ailsa Hospital will not be transferred to the new development • Service users and carers using the new facility report a decrease in experience stigmatised behaviour/attitude from baseline	Jim Crichton	Linda Boyd Carol Fisher Maire Currie	Health Promotion Officer (Maggie Dhinsa)	Anti Stigma Group to contribute questions to annual service user satisfaction survey by 2011 to establish baseline
13. **Staff Survey**		•				
High quality management of change agenda required	Patient Centred Safe Effective Efficient	Proposed measurements: • A substantial percentage of staff will agree that getting to work is easier • More than 75% of staff will agree that their working environment has	Mark Adderley	Jim Crichton Mandy Yule Liz Moore John Wright	O & HRD (Jane McMinigal/ Scott Semple)	Staff survey to be established by April 2012 and

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
	Equitable Timely	improved • Staff survey results will show a measurable improvement within 2 years in levels of satisfaction • More than 75% of staff will feel safe working within the new facility • Time taken from arriving at the site to arriving at the required location will be reduced for staff • Staff survey results show that staff within the development are kept well informed • Staff survey results show that staff feel they are appropriately trained • Staff survey results show that staff feel they are involved in decisions which affect them • Staff survey results show that staff are treated fairly and consistently • Staff survey results show that staff are provided with an improved and safe working environment				administered annually to establish baseline and trend
14. **Patient/Service User Survey**						
Current environment constrains current model of care and this has negative impact on service users	Patient Centred Safe Effective Efficient Equitable Timely	Proposed measurements: • Within 2 years the care provided will show a measurable improvement according to the published values via 10 Essential Shared Capabilities and Rights Relationships and Recovery • Within 2 years the number of	Jim Crichton Liz Moore		Assistant Director of Nursing (PF&PI) (Andrew Moore)	Patient/Service User survey to be established by April 2012 and administered annually to

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
		complaints within adult inpatient mental health services will have reduced. • Within 2 years there will be an improvement in the quality of care and standards according to indicators • The facility will have a name and identity that separates it from the historical services/facilities that it is superseding • When asked, 50% of respondents will know the name of the new facility within 2 years • When asked, the majority of carers, visitors, clients and patients who previously attended the same service at another facility within Ayrshire will voice a measurable improvement in the new hospital • Patients feel integrated in the community • Time taken from arriving at the site to arriving at the required location will be reduced for patients • The spiritual care area provided will cater/support the needs of people of all religions or no religion equally • The facility will be integrated through the local community through: o The development of the hospital and grounds for				establish baseline and trend

North Ayrshire Community Hospital
Benefits Realisation Action Plan

Summary of current deficit	"6 dimensions of quality"	Benefit & SMART Measures	Benefit Sponsor	Benefits Realisation Manager (* or as designated in the future)	Critical Supporter (* or as designated in the future)	Data availability/ comment
		public/community use ○ providing access to unique aspects of nature and greenery for the wider public ○ The cafeteria area providing informal socialisation and acting as a small in-hospital "community hub"				

Appendix 2L

Service Continuity Plan

Service Continuity 10/11/11

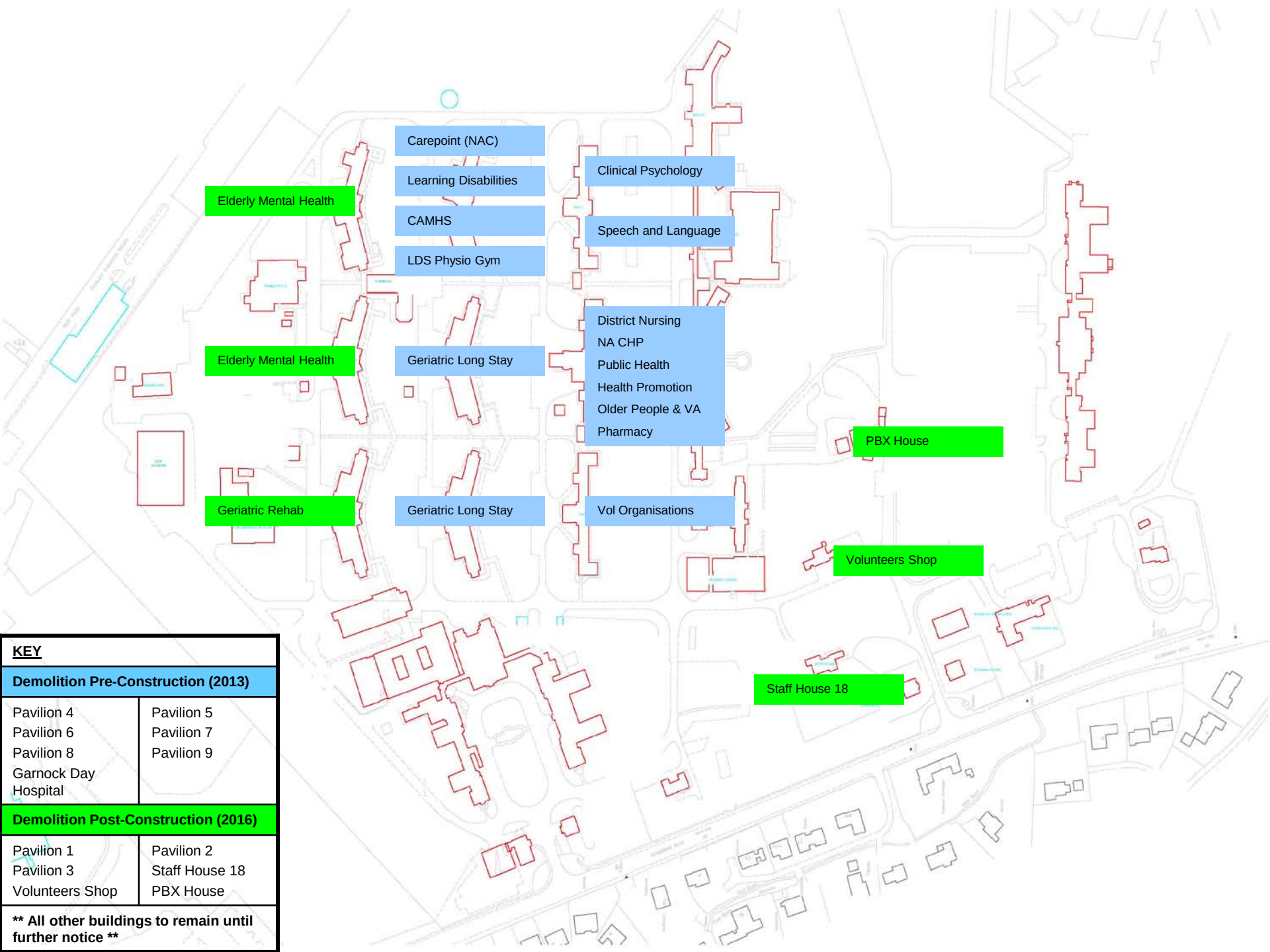
Description	Service	No. of staff	Proposal	Estimated costs ex VAT	Action	By When
Pavilion 1	Elderly Mental Health	31	Remain (move into new build on completion)	n/a	No outstanding actions.	
Pavilion 2	Elderly Mental Health	23	Remain (move into new build on completion)	n/a	No outstanding actions.	
Pavilion 3	Geriatric Rehabilitation	27	Remain (move into new build on completion)	n/a	No outstanding actions.	
Pavilion 4	Learning Disabilities Service	19	Feasibilty study underway for Horseshoe Bld. 2 and Porter's Lodge	£130,000	Staff House 18 is no longer viable due to land sale. CP Team looking at Horseshoe Bld. 2 and Porter's lodge as alternative options.	Nov-11
	CAMHS	22	Dining area / coffee room	£176,750	SoA finalised and sent to Core Associates for feasability design.	Nov-11
	Learning Disabilities Physiotherapy Gym	5	Parentcraft Room	£52,100	Initial cost estimates being submitted to CPB 7th November for prioritisation and approval.	Nov-11
	Carepoint (Local Authority)	5	Off-site	n/a	Discussion between NAC and Ambulance Service required.	Apr-13
Pavilion 5	Geriatric Long Stay	26	Suitable decant option for 30 beds to be sourced	£50,000	Wards options currently being considered include Biggart and Crosshouse.	Dec-12
Pavilion 6	Geriatric Long Stay	28	Suitable decant option for 30 beds to be sourced	£50,000	Wards options currently being considered include Biggart and Crosshouse.	Dec-12
Pavilion 7	Clinical Psychology	22	Horseshoe building 1 / 1st floor. Clinic space to ADOC rooms	£11,500	Awaiting completion of Dietetics move to allow refurb works to start	Dec-11
	Speech and Language Therapy	12	Dining area / coffee room	As per CAMHS	SoA agreed with CAMHS and sent to Core Associates for prelimanary designs	Nov-11
Pavilion 8	CHP	34	Horseshoe building (B3 2nd Floor – Sex Health / PDU / Community Child Health Area)	£11,250	Initial cost estimates being submitted to CPB 7th November for prioritisation and approval.	Nov-11
Pavilion 9	Voluntary Organisations	50	Off-site	n/a	Comfirm with Linda Jones, NAC relocation timescales, and any action required by Property Services.	Jul-13
Garnock	Elderly Mental Health	8	Horseshoe building (B3 2nd Floor - PCMHT Area)	n/a	**Moves complete - June 2011 Garnock now empty**	
	Podiatrist	1	Office - Room 451 - 1st floor Horseshoe. Share decontamination facilities with ACH Dental	n/a		
Horseshoe B3 / 2nd Floor	Practice Development Unit	10	45 Lister Street	n/a	**Move complete - July 2010**	
Horseshoe B1 / 1st Floor	MCN Heart & Stroke	3	2 offices in 47 Lister Street	n/a	**Move complete - Oct 2010**	
Horseshoe B3 / 1st Floor	Community Child Health	8	Move staff to Rainbow House (to create space in Horseshoe)	n/a	**Move complete - July 2011**	
ADAT Building	ADAT	3	3 Lister Street	n/a	**Move complete - July 2011**	
Staff House 18	Alzheimers	2	Horseshoe building 1 / 1st floor	TBC	Proposed move to the 1st floor of the Horseshoe to be discussed with the service.	Nov-11
Staff House 18	Dieticians	6	ADAT Building	TBC	Move planned for 24/11/11	Nov-11
Horseshoe B1 / 1st Floor	Dieticians	6	ADAT Building	TBC	Move planned for 24/11/11	Nov-11
Staff House 18	FACE	6	Offsite	TBC	Options / costings to be discussed with Morag Moore and Denise Brown	Dec-11

Requests for ACH Accommodation

Service	No. of staff	Current location	Contact	Date
Speech and Language Therapy	12	Vineburgh Court, Irvine	Ailsa Paterson	Feb-11
Community Eating Disorder Service	8	Kiln Walk, Irvine	Craig Stewart	Mar-11
Asset Based Community Development Project	6	n/a	Cathy Roarty	Jul-11

Description	Service	No. of staff	Proposal	Estimated costs ex VAT	Action	By When
Staff House 18	Heartstart	2	Offsite	TBC	Options / costings to be discussed with Morag Moore and	Dec-11

Service	No. of staff	Current location	Contact	Date



KEY

Demolition Pre-Construction (2013)

Pavilion 4	Pavilion 5
Pavilion 6	Pavilion 7
Pavilion 8	Pavilion 9
Garnock Day Hospital	

Demolition Post-Construction (2016)

Pavilion 1	Pavilion 2
Pavilion 3	Staff House 18
Volunteers Shop	PBX House

**** All other buildings to remain until further notice ****