

**Outline Business Case for the
Development of Coatbridge Dental & Integrated Resource Centre,
Incorporating a Facility for Dental Outreach Training**

Purpose of Paper

NHS Lanarkshire is asked to approve the attached business case for the provision of facilities to provide a dental centre incorporating outreach training in Coatbridge in a new facility with general practice and community mental health accommodation.

The Board will recall that the Scottish Executive has provided funding of £4,426,000 for the development of the centre from the Primary & Community Care Premises Modernisation Programme. This business case outlines the proposed use of this capital funding to support the development of a training centre for dental students and dental therapists in the West of Scotland as well as a centre for the community dental service

In evaluating the options for developing the facility, consideration was given as to whether there would be benefit in advancing the planned capital scheme for G.P. and community mental health service accommodation in Main Street, Coatbridge (from 2010/11 in the Capital Plan) to develop a larger building incorporating both services.

The Board is asked to formally approve capital expenditure of £9,965,520 to create a new health facility incorporating a dental facility, two GP practices and community mental health accommodation in Coatbridge. Of this capital, £5,539,520 will be funded from the NHS Lanarkshire Capital Allocation (brought forward from 2010/11 in the original Capital Plan) and £4,426,000 from the grant from the Primary & Community Care Premises Modernisation Programme.

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20 September 2006



**DEVELOPMENT OF COATBRIDGE DENTAL & INTEGRATED RESOURCE CENTRE
INCORPORATING A FACILITY FOR DENTAL OUTREACH TRAINING**

OUTLINE BUSINESS CASE

SEPTEMBER 2006

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Executive Summary

NHS Lanarkshire, in partnership with NES, the University of Glasgow and the Edinburgh Dental Institute submitted a bid to the Primary & Community Care Premises Modernisation Fund for the development of a dental centre in Coatbridge. The purpose of the project is to meet the training needs of the additional dental students, provide a local facility to train dental therapists and, enhance training for local dental staff and to do so in an area where there was poor oral health and high levels of need in the population. The bid was successful and two options were identified to deliver the agreed outcome. This business case evaluates these options.

One of the options looks at the dental development on its own as an additional build as part of the extension/redevelopment of Coatbridge College. The second option recognises that NHS Lanarkshire had approved in principle another development in the centre of Coatbridge, to replace the Community Mental Health accommodation and relocate 2 GP surgeries, and looks at the benefits of combining the two schemes into a larger development in the Main Street.

The location and merits of each option are very similar. Our academic partners preferred option 1 and local clinicians and managers preferred option 2 because, in combining two projects, it delivered a wider range of improvements and was slightly nearer the centre of the town.

However, in terms of capital expenditure and value for money, the second option, to develop a larger facility on the Main Street to improve GP, Mental Health and Dental accommodation was by far the most beneficial. It offers the opportunity to bring together a range of services in a short timescale and at less cost than pursuing them as separate projects.

It is recommended that NHS Lanarkshire proceed with the development of a new facility on the Main Street to provide a dental centre, accommodation for two GP practices and replacement accommodation for the Community Mental Health Team (who will be displaced by the development). This option enhances our joint working with North Lanarkshire Council, as it will involve collocation with the Council Service Point, a community café, the Registrar and a library. It will enable the demolition and redevelopment of a disused building, enhancing the visual appearance and providing economic activity to the Main Street of a relatively deprived area.

The Board is asked to formally approve capital expenditure of £9,965,520 to create a new health facility incorporating a dental facility, two GP practices and community mental health accommodation in Coatbridge. Of this capital, £5,539,520 will be funded from the NHS Lanarkshire Capital Allocation (brought forward from 2010/11 in the original Capital Plan) and £4,426,000 from the grant from the Primary & Community Care Premises Modernisation Programme.

Introduction

NHS Lanarkshire is committed to developing a strategy for improving and modernising its dental services and improving the oral health of the people of Lanarkshire.

NHS Lanarkshire now seeks to develop a Dental Centre in Coatbridge to provide: facilities for the education of dental students and dental therapists; an improved base for the Community Dental Service (CDS) and facilities for specialist services/enhanced training of dentists to be developed. The Scottish Executive has allocated capital funding for this project from the Primary & Community Care Premises Modernisation Programme.

The development of this facility will enable sufficient training places for the dental student intake from 2008 and is part of the overall strategy to train more dentists and thereafter provide NHS dentistry to meet the needs of the population. It is proposed, in consultation with the University of Glasgow, NES and the Edinburgh Dental Institute, that a dental centre of 14 chairs will be created to enable the training of dental students, therapists and dental nurses.

The proposed facility will also include a further 5 chairs to enhance the provision of Community Dental Services in an area of high deprivation and poor oral health by relocating and expanding the service and also by providing additional training facilities for qualified dentists. The relocation of the Community Dental Service from Coatbridge Health Centre will free up much needed space for other primary care services. It is also proposed to relocate two GP practices to the new facility (one from Coatbridge Health Centre and the Church Street practice), substantially improving their premises and also freeing up space in the Health Centre.

Strategic Context

The proposal to develop a dental centre is consistent with national and local strategies. In particular it supports the delivery of NHS Lanarkshire's Oral Health Strategy and the Scottish Executive's "An Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland". The dental centre is effectively a joint development with NES Scotland, Glasgow University, Coatbridge College and the Edinburgh Dental Institute. The capital funding has been granted by the Scottish Executive to support the training of additional dental students, nurses and dental therapists.

This project will establish a state of the art dental outreach facility that will provide educational facilities to a range of dental professionals. By locating the facility in Coatbridge, NHS Lanarkshire will enhance the dental services in an area of high need and it is hoped that staff from the centre, once trained, will be encouraged to work in the Lanarkshire area.

Through its Health Plan and its public consultation 'A Picture of Health', NHS Lanarkshire has made a commitment to the provision of improved access to dental services and improved oral health and has also made a commitment to improve its primary and community care services.

Whilst the driving force for the business case is the development of dental services, it is recognised that NHS Lanarkshire intended to improve its primary care premises in Coatbridge, as agreed in the Five Year Capital Plan, and the benefits of combining both projects are explored. NHS Lanarkshire has poor GP premises in many locations and there is a pressing need to improve this situation. In Coatbridge, the Church Street practice has been looking for alternative premises for some time, to enable DDA compliance and to increase in size. Coatbridge Health Centre is now far too small and the relocation of one practice and the Community Dental Service would dramatically improve the working environment for the other users.

Clinical Needs

Dental Health in Lanarkshire is poor compared to most parts of Scotland, and Coatbridge has the worst record of dental health within Lanarkshire. Less than 30% of children are decay free and nearly 30% are estimated to be in need of urgent treatment. The estimated number of unregistered people within a three-mile radius of the centre of Coatbridge is 35,000.

- Local public will be able to access the service
- There will be a facility to raise the number of dental nurses in training
- There will be the opportunity to develop specialist dental services
- The new discipline of dental therapist will be introduced to Lanarkshire
- A source of trained PCD's (Professions Complementary to Dentistry) for local practices will be provided

Current Service

At present there are 7 dental practices in the area, several of the practices are upstairs and therefore are not DDA compliant. It is expected that there will be increased provision locally by practices for approximately 3000 – 4000 patients over the next year.

Since the mid 1990s, Lanarkshire has had fewer dentists per head of population compared to Lothian and Glasgow, 38 per 100,000 compared to 44 and 52 respectively, and the number of Vocational Trainees in Lanarkshire has also been small compared to its neighbouring Boards.

The Community Dental Service currently delivers care in the area from a single surgery in Coatbridge Health Centre. The surgery operates to capacity (10 sessions per week), however, due to the large number of patients requiring care from the Community Dental Service, the waiting times for appointments are long and the surgery team have, on several occasions, had to temporarily 'close their list' to new patients. The need for dental care provided by the Community Dental Service is constrained by a lack of surgery space. An additional surgery would enable the Community Dental Service to better meet the dental needs of the local community by allowing more patients to have care and prompt effective treatment when they need it.

Future Service

The proposal is to build new premises in Coatbridge to:

- Accommodate a centre of learning in association with:
 - Glasgow University to provide an outreach facility for dental students (10 surgeries)
 - Edinburgh Dental Institute to provide an outreach facility for Dental Therapists (4 surgeries)
 - Coatbridge College to provide a training environment for Dental Nurses

Provide a centre for primary care based specialist outpatient services by employing specialists in, e.g. paediatric dentistry, oral surgery and restorative dentistry (3 surgeries)/ enhanced general dental practitioners

- Provide an opportunity for Lanarkshire G.D.P.s with special interests to train under the direction of the specialists (surgeries shared with specialists), in the short term the facility may be used for training Vocational Trainees
- Accommodate the Community Dental Service (2 surgeries)

Glasgow University Dental School will be responsible for the primary care experience for undergraduate dental education on an outreach basis. Edinburgh Dental Institute will be responsible for the education and training of dental therapists on an outreach basis. The facility will also provide training experience for dental nurses in association with Coatbridge College.

The specialist outpatient service will offer greater opportunity to train local GDPs in specialist skills. This will enhance specialist dental provision and reduce onward referrals to secondary care.

Proposed Outcomes – Benefit to Patients

The proposed development has a number of objectives and will provide the following benefits:

- Extended local opportunities for training dental nurses
- An increased supply of dental nurses for local practices
- A built-in career opportunity for dental nurses who might want to develop to therapy training (currently opportunities for dental nurse career development are very limited)
- An opportunity to let local people train as dental therapists
- A reservoir of therapists for the local practices
- The possibility of attracting dentists to the area after they have graduated
- A facility for specialist practitioners/dentists with special interest to take referrals from general dental practitioners to avoid referrals to secondary care
- Potential to relocate the Emergency Dental Service if appropriate (this will be assessed over time)

NHS Lanarkshire is seeking to retain and indeed expand the availability of NHS dentistry in its main centres of population and this development supports that objective. As previously stated the poor level of dental health and the relative deprivation across Lanarkshire make it imperative that access to an NHS dental service is maintained and that practices are able to recruit appropriately qualified staff.

This proposal will also improve compliance with recent legislation and guidance. Specifically the expansion of the overall accommodation and the correct sizing of the individual surgeries will ensure compliance with the Disability Discrimination Act and also the Glennie Report's recommendations on the sterilisation of instruments.

Options Considered

The overwhelming objective is to develop an outreach training centre by late 2008 and to locate this in an area of poor oral health that is also accessible to dental students travelling from a wider area. In view of this, Lanarkshire considered various locations but concluded that the outreach centre would appropriately be located in the Coatbridge area.

There were a number of advantages to locating in Coatbridge:

- There is the poorest level of dental health in Lanarkshire
- The dental registration rates are relatively low and the increased access would not threaten the local dentists
- Coatbridge College is the only further education college relatively locally training dental nurses
- There are good public transport links for students to use
- It is relatively central and accessible for Lanarkshire-wide training
- There would be the opportunity to relocate the service for homeless people bringing it nearer to where they live

Short Listed Options

In view of the timescale for the development, options that involved land purchase could not be considered due to their adverse impact on the timescale. In practice no suitable alternative town centre locations were available.

“Do Nothing” Option

The “do nothing” option has not been short-listed. In practice, if this development did not proceed the biggest single impact would be on the outreach training centre. This is a huge increase in training capacity and the nature of the equipment fit out would mean that it could not be provided in any other way. The timescale for provision is very tight; and indeed would preclude any option involving land purchase. It is reasonable to assume that it could not be provided elsewhere in the timeframe available and therefore there would be a high profile problem of dental students having no facilities from which to train.

In response to the national shortage of dentists, there has been an increase in the number of dental students admitted to the two Dental Schools in Scotland, and in line with Government policy, provision has to be made for these students to get experience in the primary care setting. These students are already at the Dental Schools and undertake this practical work in years 4 & 5 of their course.

As part of the same policy, as detailed in “An Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland”, there should be an increase in the numbers training to be Dental Care Professionals. The Coatbridge development would play a key role in providing training accommodation for these students. There would also be a lost opportunity to train two cohorts of dental nurses each year, in line with the same policy document.

Funding for the Dental Centre was made available on the basis of implementation by September 2008 and the grant received a high media profile. There is considerable local political interest, particularly in view of the fact that this is a significant investment in an area of Lanarkshire that is perceived by local politicians and the public as having “lost out” on secondary care investment, with the proposal to reconfigure the acute activity in Monklands District General hospital.

The “Do Nothing” option would mean that the GP and Mental Health Team premises were, at the very least, delayed. This would prolong the overcrowding and use of poor accommodation. It may also jeopardise the opportunity for joint working with North Lanarkshire Council.

Two options have been identified for the Dental Centre.

Option 1 - New build as part of larger development on Coatbridge College site

Coatbridge College is situated in a central location, in Kildonan Street, Coatbridge. It is well served by public transport with good bus links and three train stations.

Coatbridge College are planning to build a state of the art four-storey development on its site. This new building will become the main entrance/focal point of the college and will have links with the existing main building. The proposed dental centre would occupy one of the new floors and would have access to all college facilities for the benefit of both staff and students. There would be greater opportunities for joint working than if the new Dental Outreach Centre was located off-site. The College campus is used by over 5,000 people, providing a potential source of patients.

This project would be led by Coatbridge College and NHS Lanarkshire would make a capital grant to the project.

Option 2 - New build as part of a new development with North Lanarkshire Council and Coatbridge GP Practices

This option would utilise a site on Main Street, Coatbridge. A disused swimming pool and the NHS building that accommodates the Community Mental Health Team currently occupy the site. This site is close to the centre of the shopping precinct and is well served by public transport with

good rail links and three train stations. NHS Lanarkshire and North Lanarkshire Council have been developing proposals for this site independently of the Dental Centre, but the project is capable of expansion to accommodate the dental facility as well. The site was evaluated as the most suitable future location of GP & Mental Health premises due to its proximity to the existing services, all of which are in the town centre. There is no land purchase and this makes the site particularly attractive and facilitates timeous completion of the project

The proposal is to demolish the existing buildings and create a site to develop a new building to accommodate two GP practices; the Community Mental Health Resource Network; a library; “one stop shop”; the Registrar and Shop Mobility. An additional floor could be added to enable the Dental Centre to collocate.

This development would improve joint working between the General Medical Practitioners and the dental service. Patients may prefer a main street location, which is slightly more central.

North Lanarkshire Council would lead this project and NHS Lanarkshire would make a capital grant to the project.

Benefits and Weaknesses

The benefits and weaknesses of each option are as follows:

Option 1 - New build as part of larger development on Coatbridge College site

Benefits:

- Good educational links to College
- Availability of wide range of College facilities
- Large potential pool of patients

Weaknesses:

- Less realistic as a work experience
- Timescale for opening is potentially later
- Slightly less acceptable/accessible to patients who are not students

Option 2 - New build as part of a new development with North Lanarkshire Council and Coatbridge GP Practices

Benefits:

- Collocation with health facilities
- Improved opportunities for multi-agency working
- More central location
- Accelerates improvements to GP facilities
- No requirement to purchase land for GP facilities

Weaknesses:

- Link to Coatbridge College is less distinct
- Timescale very tight

Because of the limited number of options and the difficulties in arranging for senior staff from NES, Glasgow University, the Community Dental Service and Edinburgh Dental Institute to all meet together it was felt that a formal scoring process was inappropriate. Each stakeholder was provided with detailed information about each option and its strengths and weaknesses and they were asked to state their preference and indicate the strength of preference. Opinion was mixed with the academic stakeholders tending to favour the College site and the Community Dental Service and NHS Dental staff favouring the Main Street site. All stakeholders agreed that if there were significant differences in costs then they would accept the lowest cost option.

A summary report of the views of the stakeholders is provided in Appendix 1.

Financial Appraisal

To assist in the process of financial appraisal, NHS Lanarkshire employed the District Valuer to appraise the financial costs of each option. The District Valuer's report states that option 2 is significantly better value for money, comparing total costs. For the purposes of comparison, option 1 includes costs for a separate GP & Mental Health development in Coatbridge.

Capital Cost

The capital costs of the two options are as follows:

Option 1 College Site and separate GP/Mental Health accommodation	£ 11,428,000
Option 2 Main Street Site, all facilities	£ 9,966,000

All costs are robust estimates, with capital costs subject to confirmation through competitive tendering.

NHS Lanarkshire has received a capital grant of £4,426,000 from the Primary & Community Care Premises Modernisation Programme 2006-07 and 2007-08 – Dental Premises.

The District Valuer provided an independent recommendation that NHS Lanarkshire pursue the negotiation of option 2 as this is the least cost option in terms of cost per square metre and is less costly than developing two separate facilities in the Coatbridge area. The District Valuer has also undertaken a value for money analysis and has confirmed the costs for the Main Street option are within an acceptable cost per sq m range in terms of current construction costs.

Funding Process

The outreach dental training service must be in place by the end of August 2008, to accommodate the intake of dental students at the beginning of their academic year. In view of the tight timescale and the need to work in partnership with other agencies for both options, there is no opportunity to take this forward as a PPP/PFI scheme. With both options, NHS Lanarkshire would be undertaking a joint venture and developing its premises as part of a larger building. NHS Lanarkshire would make a capital payment to the lead developer to fund its share of the scheme and in lieu of any rental payment. A capital procurement route has been chosen by both lead organisations. A further factor is that the majority of the cost is available as a capital grant from the Scottish Executive.

The Capital and Revenue consequences of this project are included in NHS Lanarkshire's Capital and Revenue Financial Plans.

Revenue Impact

The revenue consequences of both options are detailed in Appendix 2. The revenue impact for NHS Lanarkshire is relatively modest and is largely the additional property costs associated with enhancing the size and quality of the accommodation for the Community Dental Service, the G.P.s and the Community Mental Health Team. As previously stated, this development also improves the environment for the G.P.s remaining in Coatbridge Health Centre.

The additional revenue consequences of the options are:

	Option 1	Option 2
	£000's	£000's
NHS Lanarkshire	£426	£415
NES	£484	£453
Non Cash Limited	£355	£322

In practice, therefore, Option 2 has the lower revenue costs, and the revenue consequence to NHS Lanarkshire would be £415,000 per annum.

The additional revenue costs associated with the training facility will be met by NES and Primary Care non-cash limited funding.

Economic Appraisal

The net present value and equivalent annual cost have been calculated as follows:

	Option 1	Option 2
	£000's	£000's
NPV	£26,608	£25,813
EAC	£969	£940

From this, it can be seen that, as both options are of similar non-financial benefit, then this supports the selection of option 2

Optimism Bias

Optimism Bias is the demonstrated systematic tendency for appraisers to be over optimistic about key project parameters. In assessing the likely capital costs it is important to consider the impact of optimism bias.

The two main causes of optimism bias in estimating capital costs are: poor definition of the scope and objectives, resulting in omission of costs and poor project management resulting in risks not being mitigated and the project over-running.

This business case has calculated a cost for optimism bias, based on the best estimates at this stage in the process.

In accordance with the Treasury Green Book guidance, an optimism bias of 11.92% has been applied to the construction costs. Details of the factors included in this calculation are provided at Appendix 3.

Risk and Uncertainty

The most significant risk with both options is that the building is not available on time. For both options the lead organisations were asked to confirm that they could achieve the deadline and North Lanarkshire Council has provided a detailed timetable for the project. Discussions will take place with Glasgow University to ensure that contingency plans are in place in case the project is delayed.

In the case of both options, much of the construction risk will be transferred to the lead agency.

A risk register has been developed and details of the risk identified are provided in Appendix 4.

Preferred Option

The preferred option is option 2, a development with North Lanarkshire Council in the Main Street. This option will not only provide the outreach dental training centre in purpose built accommodation that is very accessible to the public, but it will also enable the replacement of outmoded GP accommodation that is no longer fit for purpose in terms of size, quality and functional suitability. The relocation of the Community Dental Service and a GP practice from Coatbridge Health Centre will give much needed additional space to the existing users, improving the range and frequency of their services.

This option can be delivered in the timescale required and represents better value for money than option 1. This option enables a much wider range of improvements to be delivered in a faster timescale than originally envisaged when the schemes were separately identified.

Timetable

As previously stated, the outreach dental training centre is required by end August 2008. The proposed timescale to meet this is as follows:

OBC approval	September 2006
FBC approval	November 2006
Planning consent	January 2007
Contractor appointed	February 2007
Completion	August 2008

Project Management

An efficient, robust and competent project management structure has been initiated and is planned to ensure that the desired project outcomes are delivered to the highest quality.

Essentially, the project will be managed by North Lanarkshire Council's Property Department. North Lanarkshire Council representatives will consult with a project board throughout the development to ensure that the needs of the users are met as cost effectively as possible.

To achieve the desired outcome the project plan will use the following delivery tools and processes –

- Identify the composition and responsibilities of the Project Team/Delivery Group and all associated stakeholders;
- Demonstrate the competency of the Project Team to deliver;
- Identify and evaluate stakeholders' needs to be embedded in design; and
- Make use of existing best practice.

User Involvement and Stakeholder Identification

It is imperative to ensure that the proposed facility meets the high standards of performance required to create an environment that facilitates and assists in the treatment of patients, and that early input is received from potential end users and stakeholders with suitable knowledge and experience to add value to the design process. The following individuals have been identified as being centres of knowledge within their respective fields and will contribute towards the Project Management.

Name	Organisation	Job Title
Margie Taylor	NHS Lanarkshire	Consultant in Dental Public Health
Mike Devine	NHS Lanarkshire	Director of Salaried Primary Care Dental Services
Graham Johnston	NHS Lanarkshire	Project Manager
Eric Hislop	NLC	Group Manager Housing & Property Services
Jim Wright	NHS Lanarkshire	Locality Manager
Jim Dykes	NHS Lanarkshire	Head of Property Services
Brian McWatt	NHS Lanarkshire	Management Accountant
Dr Curle		GP
Dr Brankin		GP

Role of External Advisers

- As the preferred procurement option is the traditional publicly funded method it is anticipated that the following external advisers will provide services:
- Project Design Team (Managed through lead Architect);
- Cost Management Consultant; and
- CDM Consultant.

These retained functions will report directly to the North Lanarkshire Council Project Manager and will only issue contractors with instruction whereby financial liabilities will be sustained to the project after his consultation and approval.

Separate NHS Lanarkshire advisors will be appointed to scrutinise the process and ensure value for money is achieved.

In addition, representatives of the University of Glasgow, Edinburgh Dental Institute and NES will be consulted on, and apprised of, all aspects of the design and implementation of the outreach training facility.

Stakeholders Meeting – Summary Report

As there were only two viable options for the development of the Dental Centre it was agreed it would not be appropriate or feasible to undertake a conventional scoring process and indeed there would be difficulties even gathering the key stakeholders together to undertake this process.

To identify the quality benefits of each option, the key stakeholders were provided with detailed information in respect of the options and were asked to comment on this.

NES

The Associate Dean for Post-Graduate Dental Education at NES indicated that both of the options looked good and could deliver the required facilities for Dental Outreach. Some concern was expressed that the college proposal might not be available by the start of the 2008/09 academic year and he expressed further concern that the general population in Coatbridge might be reluctant to use a facility if it was located on a student campus.

On balance NES indicated that the preference would be for the Main Street option.

University of Glasgow Dental School

The Professor of Clinical Microbiology and Head of School at the University of Glasgow Dental School also felt it was difficult to identify a clear favourite from the options available. He felt that the central location on Main Street would be more attractive to local sites but both sites were very close to each other and well served by public transport.

Again the speed of availability was a key factor and the facility was required for September 2008.

On balance, the Coatbridge College site was favoured because of the opportunities for articulation with the DCP courses being developed by Coatbridge College. The large student population was seen as a good source of patient recruitment. It was also felt that the educational resources at hand on the college campus would provide a significant advantage.

Community Dental Service

The Head of the Community Dental Service could envisage advantages in both locations. On balance he felt there was some benefit to the Main Street site as it offered students an opportunity to work in a health centre type environment, which would be more similar to their working environment when they were fully qualified. He also felt it would be easier to attract patients and that there would be opportunities to provide the Out-of-Hours service from this location.

Generally all the stakeholders felt that there was no overwhelming preference in favour of one or other site and that both sites were capable of developing an appropriate service.

Costs & Assumptions

Financial Results**Capital Cost Summary**

Cost	Option 1 £000's	Option 2 £000's
Building Costs	7,024	5,500
Demolition	139	162
Roads	92	162
Car Parking	967	1,078
Entrance	77	90
Fees	308	698
Contingency	203	410
Equipment	900	900
Optimism Bias (11.92%)	1,050	966
VAT	688	
Total Capital Costs	11,428	9,966

Revenue Cost Summary

Full Year Revenue Cost

Teaching Staff	200	200
Dental Nurses	186	186
Reception/Clerical Staff	19	19
Facilities inc. Estates & Rates	261	261
Other non pay	50	50
Total Annual Revenue Cost	716	716

Capital Charges Summary

Full Year

Cost	Option 1 £000's	Option 2 £000's
Depreciation Buildings	175	151
Depreciation Equipment	90	90
Interest Charge	400	349
Total Capital Charges	665	590
Total Annual Charges	1,381	1,306
Existing NHSL Budgets	116	116
Net Annual Costs Increase	1,265	1,190
Funding Required:-		
NHS Lanarkshire (Note 1)	426	415
NES	484	453
Non-cash Limited	355	322
Total Funding	1,265	1,190
NET PRESENT VALUE	Option 1 £000's	Option 2 £000's
NPV	26,608	25,813
EAC	969	940

Note 1

NHS Lanarkshire Existing Budget of £116,000 has been offset against the costs apportioned to NHSL when computing the funding requirements for each body.

Financial Assumptions

The following sets out the financial assumptions used in the financial modelling.

Construction Costs

These have been developed in conjunction with North Lanarkshire Council Housing and Property & Services Division with input from Architects and Quantity Surveyors, based on schedules of accommodation and preliminary design layouts. Full inclusion has been made for demolition, access roads, car parking, professional fees and contingencies as detailed in the Capital Costs Summary above. For the financial appraisal, VAT has been included in the new build costs in respect of the Dental Build at Coatbridge College. No VAT will be applied in respect of the other buildings as these are being developed by the Council who will recharge the costs and VAT will not be applied. VAT has been excluded from the economic appraisal. Optimism bias has been applied to the new build costs but has not been applied to equipment. Equipment Costs are based on an allowance of £40,000 for each Dental surgery plus an allocation of £100,000 in respect of equipment and fittings for the GP/Mental Health facility.

Revenue Costs

The staff costs in respect of the Teaching Staff and Dental Nurses have been apportioned between NES and non-cash limited primary care dental funding. This has been done on the basis of the time that will be spent supervising and working with students and providing a service in the area. Facilities revenue costs are assumed to be the same for both options on the basis that the floor areas occupied by each of the facilities will be constant over each of the Options. Other costs include an allowance of £42,000 in respect of recurring decontamination costs and other supplies and consumables.

Capital Charges

Buildings have been depreciated over 60 years and equipment over 10 years. Interest has been applied at 3.5% per annum. Capital charges are apportioned on the relative costs of the facilities.

Net Present Values

NPVs and EACs have been calculated on the capital costs (excluding VAT) and the revenue costs (excluding capital charges).

Discount Factor

The effects of inflation have been excluded from all costs except construction, as the impact on the economic analysis will not vary between the options. A discount rate of 3.5% has been applied in calculating the NPVs.

**Coatbridge Outreach Dental Facility
Optimism Bias Mitigation Factor Calculation - Standard Buildings**

Appendix 3

Capital Expenditure

Mitigation Factor	Type	Contribution	Mitigation	Managed Mitigation
Late Contractor Involvement in Design	Procurement	2	70%	1.40
Poor Contractor Capabilities	Procurement	9	80%	7.20
Dispute and Claims Occurred	Procurement	29	50%	14.50
Design Complexity	Project Specific	1	80%	0.80
Degree of Innovation	Project Specific	4	90%	3.60
Inadequacy of Business Case	Client Specific	34	60%	20.40
Project Management Team	Client Specific	1	90%	0.90
Poor Project Intelligence	Client Specific	2	50%	1.00
Public Relations	Environment	2	90%	1.80
Site Characteristics	Environment	2	30%	0.60
Economic	External	11	10%	1.10
Legislation/Regulations	External	3	80%	2.40
Total		100		55.70
Optimism Bias Adjustment	Upper Band Adjustment			24%
				10.63%

Works Duration

Mitigation Factor		Contribution	Mitigation	Managed Mitigation
Complexity of Contract Structure		1	30%	0.30
Late Contractor Involvement in Design		3	60%	1.80
Poor Contractor Capabilities		4	80%	3.20
Dispute and Claims Occurred		4	50%	2.00
Design Complexity		3	80%	2.40
Degree of Innovation		1	90%	0.90
Inadequacy of Business Case		31	60%	18.60
Large Number of Stakeholders		6	80%	4.80
Funding Availability		8	90%	7.20
Poor Project Intelligence		6	50%	3.00
Public Relations		8	90%	7.20
Site Characteristics		5	40%	2.00
Permits/Consents/Approvals		9	80%	7.20
Legislation/Regulations		9	80%	7.20
Total		98		67.80
Optimism Bias Adjustment	Upper Band Adjustment			4%
				1.29%
Total Optimism Bias	Maximum = 28%, Minimum = 3%			11.92%

								Appendix 4
Construction/Property Risk analysis								
Item	RISK	Risk Ownership			Risk Score		Management Strategy	Consequences
		NHS	Non NHS	Shared	Impact	Probability		
1	Change in requirement of stakeholders	X			Med	Med	Ensure brief and specifications are fully discussed with users and future proofed	Changes will incur delay in completion of project and increased costs
2	Design change due to NHS policy change	X			Low	Low	Ensure all policy matters including anticipated changes are fully covered in the brief and the specifications	Changes will incur delay in completion of project and increased costs, otherwise functional suitability may be affected
3	Inadequate design			X	Low	Med	Involve professional advisers to ensure brief and specification are adequate and developers designs meet requirements prior to approval	Changes will incur delay in completion of project and increased costs, otherwise functional suitability may be affected
4	Delay in completion of design			X			Ensure information requirements are met timeously	Delay in completion of project and increased construction costs attributed on basis of cause
5	Design team default		X					
6	Incorrect time and cost estimates		X					
7	Unforeseen ground conditions			X	Med	Med	Ensure contingency sums are set at a suitable level till ground conditions are known	Delay in completion of project and increased construction costs attributed on basis of cause
8	Problems with utility connections			X	Med	Med	Ensure early approaches are made to utility suppliers to meet program dates	Delay in completion of project and implementation of disruptive service contingency plan with subsequent costs
9	Failure to reach contractual agreement between NHS/NLC			X	Med	Low	Ensure joint approach, adequate consultation and agreement processes are in place during preparatory period.	Delay in completion and/or occupation and implementation of disruptive service contingency plan with subsequent costs
10	Contractor default including failure to build to design			X	Med	Low	Ensure suitable vetting procedures are in place to establish contractors ability prior to issuing tenders	Delay in completion of project implementation of disruptive service contingency plan and increased construction cost attributed on basis of cause
11	Poor project management			X	Low	Low	Ensure joint approach and adequate liaison meetings are set	Delay in completion and/or occupation and implementation of disruptive service contingency

							up between NHSL and SLC, ensure design teams are rigorously vetted prior to appointment.	plan with subsequent costs and possible increased construction cost
12	Planning approval delayed			X	Low	Med	Secure input and consultation from Local authority planners at initiation stages and throughout the project design	Delay in completion of project implementation of disruptive service contingency plan and increased cost attributed on basis of cause
13	Planning approval refused			X	High	Low	Secure input and consultation from Local authority planners at initiation stages and throughout the project design, implement appeal proceedings on refusal	Abortive work costs, review of strategic approach delay in implementation of strategic aim
14	Conflict with boards estate strategy	X			Med	Low	Involve strategic planners and service users at inception and throughout project development stage	Impact on other developments incurring review of strategy and possible delay on other projects.
17	Delay in completion of construction works			X	Med	Med	Robust Contractor and Design Team vetting procedures, efficient processes for information exchange and progress monitoring.	Delay in completion and/or occupation and implementation of disruptive service contingency plan with subsequent costs and possible increased construction cost
18	Land Transaction Difficulties		X		Low	Low	Early legal involvement and title checks	Delay in completion and/or occupation and implementation of disruptive service contingency plan with subsequent costs

Coatbridge Facility					
	Description	quantity	area sq m		Comments
	Dental				
1	Reception	1	24	24	Incorporating space for receptionist 1 A&C + 1 Principle Dent Nurse
2	Waiting Area (50 place)	1	88	88	includes play area and space for 3 wheelchair users and preventative bay
3	Dental Surgeries	5	16.5	82.5	2 for Comm Dentistry, 3 for Specialist Services
4	Outreach Dental Area	1	231	231	10 GDP + 4 Dental Hygienists + Central Supervision areas
5	Recovery Room	1	16	16	2 recovery chairs
6	Ambulant WCs	4	8	32	2 Male & 2 Female
7	Disabled WC	1	5	5	
8	Decontamination	1	36	36	Neighbourhood (clean & dirty rooms with steriliser)
9	Store and Trolley bay for above	1	32	32	Clean and dirty areas
10	Compressor room	2	16	32	allows for 8 compressors (4 running 4 standby)
11	Medical Gas room	1	16	16	Inhaled anaesthetics Oxygen and suction Piped gasses to 14 Surgeries
12	Switch/Plant Room	1	18	18	Electrical Switchgear Ventilation etc
13	X ray room	1	12	12	OPT unit
14	Open Plan Office	1	22	22	Oral Health Educators with 800 perimeter work surface & 8 filing cabinets
15	Open Plan Office	1	16	16	6 PCs on perimeter benching with pedestal filing cabinets
16	Records Room	1	16	16	Requirement to be confirmed may be electronic records
17	Technicians Lab	1	30	30	Includes storage space
18	Storage	3	10	30	
19	Staff Room	1	30	30	Rooms to be capable of combining to form one large room, sub division to be formed using acoustic folding room dividers
20	Education resource room	1	30	30	
21	Meeting room	1	30	30	
22	Changing/Lockers	4	9	36	
23	Staff WCs	4	8	32	2 Male & 2 Female
24	Domestic Services Room	1	10	10	
25	Waste Storage	1	12	12	Domestic and Clinical
	Sub Total			918.5	
	Mental Health Accommodation			950	
1	Medical	7	9	63	
2	Nursing	2	9	18	
3	Nursing	1	270	270	
4	Occupational Therapy	1	130	130	
5	Psychology	7	9	63	

6	Social Work	1	9	9	
7	Social Work	1	65	65	
8	Admin & Clerical	1	12	12	
9	Admin & Clerical	1	102	102	
10	Treatment Rooms	2	18	36	
11	Drug Store	1	9	9	
12	Record Storage	1	7.5	7.5	
13	Meeting rooms	1	12	12	
14	Meeting rooms	2	18	36	
15	Reception	1	13.5	13.5	
16	Waiting Area	1	15	15	
17	Learning Centre	1	12	12	
18	Stat/copy/mail	1	9	9	
19	Staff Room				
20	Kitchen	1	12.5	12.5	
21	Toilets	2	4	8	
22	Toilets	2	2.25	2.25	
	NET TOTAL			950	
	GP Accommodation			1500	Schedule of Fees & Allowances
	Planning allowance				To be determined by detailed design
	Engineering allowance				
	Circulation allowance				