

## PROJECT INITIATION DOCUMENT

**Project name** *Student Union, Beit Quadrangle Building Refurbishment, Phase II*

**Release** V 2.0  
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<b>Project Champion:</b>	Dr Chris Towler (Director of project Management)
<b>Accountable Body:</b>	Imperial College Management Board

### Executive Summary

This is Phase II of the Master Plan Project for the Student Union building. The Plan increases the capacity and flexibility of the facilities offered for student activities.

The Master Plan is being executed in stages as funds become available by providing more and more suitable space in the building. Phase II :

- Creates a new mezzanine second floor in the West wing of the building to allow space for a new Student Activity Centre.
- Creates a new gymnasium / activity / dance space on the 3<sup>rd</sup> floor.
- Completes the central core of the building including new risers for mechanical and electrical engineering in support of future roof plant installation as well as new changing rooms & showers for the new gym / dance space on the 3<sup>rd</sup> floor.
- Replaces the building's ageing and obsolete electrical infrastructure.
- Incorporates (where practicable) energy efficiency measures to reduce running costs of the building.

Current estimated probable cost £ 3.163m VAT inc.

Timeline:

- Start July 2007
- Complete February 08

## DOCUMENT HISTORY

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**Document** This document is only valid on the day it was printed.  
**Location** The source of the document is: O:\BTQN - Beit Quad\BTQN0701 Beit Quad Refurbishment Phase 2\06. Cost Management\6.2 PM1-PM2-PM3 & Project Feasibility Document

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### Revision History

Revision date	Author	Summary of Changes	New Version
19/04/07	Peter Haldane	Additional benefit post CT review	V1-2
25/05/07	Peter Haldane	Amended Financial Approval / 2. Source of Funds	V 2-0

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**Distribution** This document has been distributed to:

Name	Title	Date of Issue	Version

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## PURPOSE

To document the justification for the undertaking of the project, based on the estimated cost of development and implementation against the risks and anticipated business benefits to be gained.

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## BACKGROUND

The Union Building (Beit Quadrangle - North side) was last redeveloped in 1955. Since then, small-scale changes and refurbishments have been made, including the creation of activity/meeting rooms in the 1960s and the refurbishments of the ground floor café and club-bar in the mid-90s. In recent years, the demographic make-up of students at Imperial has changed markedly and the range of activities in which students are interested in participating while at Imperial College has greatly increased. As a result, the facilities offered to students no longer match the requirements of all our members. With the needs of our students set to change further in the future, an overhaul of the Union building is now required not only to optimise the space and offering we currently have, but to allow us to diversify our offering, move forward and enhance the experience of all students at Imperial College, bringing it up to a standard comparable to our benchmark Institutions.

In addition, in order for the Union to meet its obligations under the Disabilities Discrimination Act 1995 and provide access to the building and services for our staff and members, necessary work to improve access is being carried out.

Particular problems include:

- Building not DDA compliant
- Poor state of building modification and maintenance
- Poor use of space (increased demand for wider range of space types)
- Not contributing to wider requirements of College – conferences & catering, activity space, social space (missed opportunity).
- High building running costs (poor insulation).

A Master Plan has been developed to meet these requirements and is being addressed in stages as funding becomes available. Phase 1 of the Master Plan takes the form of a Project started in August 2006 and costed at £1.4m and which includes:

- Refurbishment of the Central Core of the building including the installation of a DDA compliant lift.
- Improving recreational access to the Quadrangle.

Phase 1 is due to complete in April 2007.

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## PROJECT DEFINITION

### Objectives

- **Further progress the Building Master Plan by a coherent body of work in line with current availability of funding while maintaining the operational use of the building.**

Improve student facilities in line with purpose of available funding from Harlington Trust.

- **Replace ageing building electrical infrastructure**

As discovered during Phase 1 of Refurbishment.

- **Further Reduce Pressure of Student Activity on College Space**

Greatly improve efficiency of space within the building

Improve the contribution to College facilities and reducing the current high demand on College space.

- **Incorporate energy efficiency measures (where affordable) to reduce running costs.**

Better insulation / double glazed windows.

Rainwater harvesting.

Electrical generation.

Hot water heating by solar panel.

### Scope

The proposed phasing of the redevelopment would allow part of the Master Plan for redevelopment of the Union Building to be ready for the College's Centenary celebrations and assist in the College's fundraising efforts intended for that time. In addition, the Union plans to take this opportunity itself to raise money through fundraising and increased revenue from its refurbished outlets to assist in funding the second and subsequent phases.

The long term aim is to provide a building to meet Union and wider College business requirements over the next 20 years.

## **Deliverables**

### **Detailed Design – Master Plan Phase 2**

#### **Complete Central Core**

- Mechanical and Electrical engineering risers for roof mounted plant
- Fit out changing and disabled lavatory spaces

#### **New Student Activity Centre – 2<sup>nd</sup> Floor Mezzanine West**

#### **New Gymnasium / Activity / Dance Space – 3<sup>rd</sup> Floor West**

#### **New Activity / Meeting Rooms – East Basement**

#### **Replacement Electrical Infrastructure**

- Discovered during work for Phase 1 to be well past its serviceable life

#### **Energy Efficiency Measures**

- An allowance has been made with reference to compliance with Building Regulation Part L2B. A survey has been commissioned with Hurley Palmer Flatt under Phase I of the project, to establish a defined scope of works to enable compliance. As the defined scope of works has yet to be produced, an allowance of 10% of the construction cost has been included in the PID. This may not be sufficient to carry out all of the works required to comply with Part L2B.

## **Benefits**

The Union Building is a major and iconic College facility. However, it fails to meet its potential. It is an old building on a very limited site, built for purpose as a Student Union but at a time when a Union fulfilled different requirements for its members. It has been altered considerably throughout its history, most notably in 1955 at the time of the Jubilee expansion of Imperial College when it was doubled in size by the addition of the two upper floors, as well as in the 1990s when the function of the ground floor and its relationship to the East and West basements of the Beit Quadrangle group of buildings was completely changed.

At present, less than optimum utilization of the available space prevents the building from fully meeting the requirements of either the College or the present student body's requirements. In addition it is in a poor state of maintenance, particularly of the drainage and electrical systems and is not fully DDA compliant.

Investment in refurbishing the building will improve:

### **Compliance with Legal and Welfare Requirements**

Legal requirements and student welfare aspirations will be met through these works including progress towards full building DDA compliance through improved access, lavatory and changing facilities.

### **Efficiency of space use within the building**

Improving contribution to College facilities and reducing the demand on College space. Currently there is a high demand on College space for student activities. A refurbished Union building allowing more efficient and flexible use of space will allow much more of these demands to be met within the Union building itself.

### **College Reputation**

The benefits to the Union and College from redeveloping the Beit Quad building are numerous. Overhauling this out of date building will add a number of prestigious facilities to the College community, bringing us into line with the offering of benchmark Colleges and Universities and their Unions, within London, the rest of the UK and Internationally. With the emergence of the student as 'consumer' following the introduction of top-up fees, the provision of high quality facilities for all areas of University life is crucial. Recreational, social and welfare facilities must be of a comparable high standard to accommodation and academic facilities across the Institution. Providing a Students' Union that can achieve the same reputation the College already enjoys academically, can only add value to that reputation and assist in recruiting the highest quality students from the EU and overseas.

### **Safe and Welcoming Facilities for the College Community**

By providing a redeveloped and inviting building, we will be continue to offer a safe, welcoming and inclusive social and recreational space on campus, serving a vital welfare function for all members of the College community, particular in the evenings and weekends, when little other suitable provision is available.

This will include bookable space in support of student devotional obligations

### **Progression of Master Plan**

This project further progresses the Student Union Building Master Plan which will be completed in a subsequent phase (Phase 3) or phases

### **Risks & Uncertainties**

None

### **Exclusions**

Project excludes any items that would prevent building returning to a fully operational state at the end of the phase; in particular, roof mounted water heating and ventilation plant.

### **Constraints & Assumptions**

- Commencement of project is conditional on availability of funding from Imperial College in order to meet the costs of the project not achieved by continuing fundraising by Imperial College Union.
- Carrying out of works constrained around student term dates.

### **Interfaces & Dependencies**

#### **Projects**

- Master Plan Phase 1
- College Catering and Conferences review
- College Centenary celebrations

#### **Other systems**

- Student Residence (Beit Hall)

### **Acceptance Criteria**

*Have the Project Board, College or Customers set forward any acceptance criteria?  
How will you know that this deliverable is fit for purpose?*

## **UPDATE ON PROGRESS SO FAR**

Phase 1 of the Master Plan has been completed.

### **Outcomes of any feasibility work**

*Or sensitivity analysis, or gap analysis, consideration of initial options listed in Project Brief*

### **Outcomes of any consultation exercise**

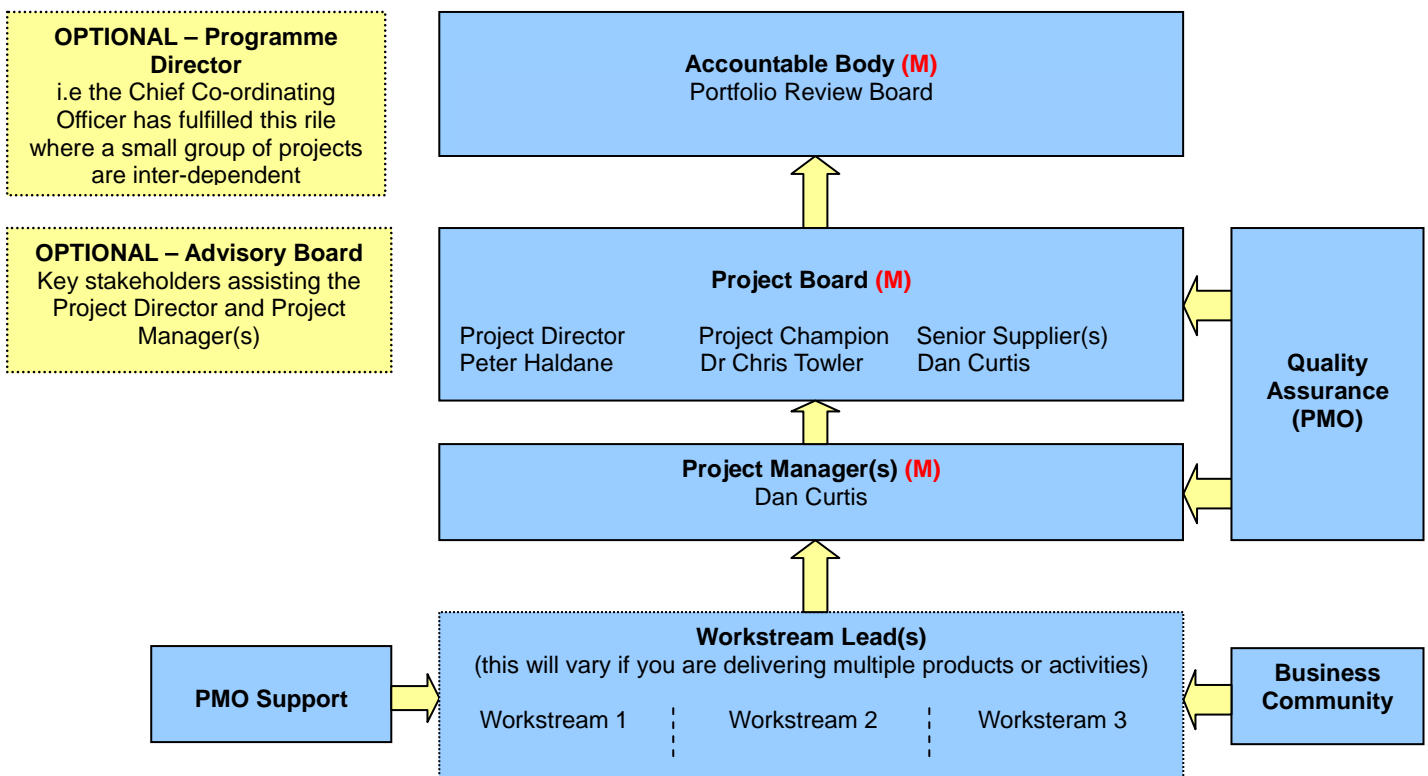
# PROJECT ORGANISATION STRUCTURE

Project roles are **not** indicative of a staff position, the person with the most suitable experience and character will be selected for the most appropriate role, regardless of their position in the College. The Project Management Office can assist you with role assignment.

Update below to reflect the projects/workstreams, you may also have a user committee that feeds into the project manager.

The roles:

Please insert names in diagram below.



Should you require role definition for assistance please reference:

[http://www3.imperial.ac.uk/portal/page?\\_pageid=210,2522582&\\_dad=portallive&\\_schema=PORTALLIVE](http://www3.imperial.ac.uk/portal/page?_pageid=210,2522582&_dad=portallive&_schema=PORTALLIVE)

**(M) Indicates Mandatory Roles**

Project Board: Project Champion – Dr Chris Towler Project Director – Peter Haldane Senior Supplier – Dan Curtis	Advisory Board:
Workstream Leads:	Project Manager: Dan Curtis

## Stakeholder Analysis



Sometimes, it will be obvious who the key stakeholders are, but for more complex projects, a formal analysis is likely to be helpful. Therefore, the purpose of a Stakeholder Analysis is to inform the Project Board and Project Manager who should contribute to the project, where barriers might be and the actions that need to be taken before detailed project planning.

The identification of stakeholders will also assist in determining who would form part of the Advisory Board and Business Community in the Project Organisation.

The template can be found at the location below:

[http://www3.imperial.ac.uk/portal/page?\\_pageid=210,3190698&\\_dad=portallive&\\_schema=PORTALLIVE](http://www3.imperial.ac.uk/portal/page?_pageid=210,3190698&_dad=portallive&_schema=PORTALLIVE)

Provide a link to your project area where your link to your Stakeholder Analysis is located.

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## PROPOSED DEVELOPMENT PLAN

*Include proposed stages and timeline (MS Project)*

*Note the major deliverables within the stages*

*Note the skills or resource required for the main stages*

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## COMMUNICATION PLAN

The Communication Plan defines what information is needed and when it should be supplied.

Determine what regular reporting and reviews you will need, below are the suggested minimum:

- Checkpoint Report (weekly team based progress)
- Highlight Report (monthly for the project board with financial summary)
- Technical Reviews
- Quality Reviews (monitoring against objectives, acceptable standards)

Should your feasibility project be significant in size then it is suggested that you use a Communication Plan, the template can be found at the location below:

[http://www3.imperial.ac.uk/portal/page?\\_pageid=210,3190698&\\_dad=portallive&\\_schema=PORTALLIVE](http://www3.imperial.ac.uk/portal/page?_pageid=210,3190698&_dad=portallive&_schema=PORTALLIVE)

Provide a link to your project area where your link to your Communication Plan is located.

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## QUALITY PLAN

1. Drawings to be in accordance with College CAD Strategy.
2. The design is/will be in accordance with all College Technical Policy Statements.
3. Types of accessories and schedule of manufacturers to be selected in accordance with the College's Standardisation arrangements.
4. Input to be included from Isolation Surveys, Asbestos reports, Technical Policies and Standardisation requirements.

5. Standard Duty Holder Sign-off to be carried out with the following in compliance with ICL Project Procedures;

Fire Officer  
Security Officer  
Maintenance Manager  
Energy Manager  
College Engineer  
Safety Director  
Space Manager  
Disabilities Officer

Project Design Stage Reviews will be held to ensure compliance with the design brief and to ensure technical requirements are being met by the proposed design solutions. These reviews will involve the project and design teams, project client, user co-ordinator, duty holders and Assistant Director of Estates (Projects).

The design team will conduct working sessions / workshops with the project client to:

- Review and amend the Design Brief
- Discuss design options/proposals
- Identify gaps or omissions in the brief
- Agree plan of work required before proposals can be accepted.

The working sessions will be conducted as required to meet the project needs with continual involvement by the project client and an agreed agenda prepared for each session.

In accordance with Estates Project Procedures, monthly Project Review meetings will be held and minutes of the meetings distributed. At the completion of Stage C/D Design Proposals. The scheme will be forwarded for sign-off by Estates Property Services Manager, Client and Duty Holders List any standards you are aware of that will need to be met for this feasibility study. E.g. building standards, coding standards, etc.

To monitor that the project and its deliverables are of a consistent and acceptable standard, regular reviews will need to be held.

Should your feasibility project be significant in size then it is suggested that you use a Quality Plan, the template can be found at the location below:

[http://www3.imperial.ac.uk/portal/page?\\_pageid=210,3190698&\\_dad=portallive&\\_schema=PORTALLIVE](http://www3.imperial.ac.uk/portal/page?_pageid=210,3190698&_dad=portallive&_schema=PORTALLIVE)

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## PROJECT TOLERANCES

The Cost Report includes contingencies at 10% (£222K gross).

The Project Board must set any tolerances that the Project Manager must work within.

For example, if the timeline has been set at 10 months, is there a 5% tolerance which allows the project to deliver 2 weeks early or 2 weeks late without needing to seek approval, but using the normal project communication channels.

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## PROJECT CONTROLS

The Design Stage Review process is a two part process carried out at key stages of a project to ensure that the delivery of the project meets strategic College aims and Client (e.g. Faculty) requirements as dictated by time, budget and quality constraints. The two parts of the design stage review process are:

1. Review of the relevant Design Stage information by the Project Client, User Co-ordinator and College Duty Holders.
2. Formal Sign-Off by the Project Client, Project Manager and Estates authorities confirming that the project can progress to the next stage.

The Project Client shall be deemed to be the Head of Faculty for all Faculty based projects.

### Design Stage Review Aims

The principal aim of any design stage review will be to ensure a clear understanding by all interested parties of:

- The scope of works;
- The anticipated outturn cost;
- The project programme;
- Compliance of relevant college standards, policies and procedures;
- All relevant legal issues (ie CDM, party walls, statutory approvals, funding conditions etc).

Various components will be agreed/approved and fixed at the following key project stages:

- End of project proposal stage
- Completion of concept design
- Completion of co-ordinated design
- Completion of tender documentation
- Completion of construction/fabrication design documentation

This defines what monitoring, reporting and control mechanisms are needed by the Project Management Team.

This project will adhere to the Change Management procedure set-out for ICT / Estates / Finance (*delete as necessary*). Please see link below to access either the Request for Change form (outside project tolerances) or Change Control Form (within project tolerances).

[http://www3.imperial.ac.uk/portal/page?\\_pageid=210,3190698&\\_dad=portallive&\\_schema=PORTALLIVE](http://www3.imperial.ac.uk/portal/page?_pageid=210,3190698&_dad=portallive&_schema=PORTALLIVE)

## FINANCIAL SUMMARY

(all costs inclusive of VAT – update as necessary for your estimating procedures)

	2005/06	2006/07	2007/08	2008/09	Later Yrs	Total
	£k	£k	£k	£k	£k	£k
Feasibility study (if incl. in project)						
<b>Property costs</b>						
Construction (S&C)						
Fit out & Furnishings						
Other						
<b>ICT costs</b>						
Hardware & Software						
Analysis & Development						
Other						
Equipment Costs						
<b>Total Capital Costs</b>						
<b>Non Capital costs</b>						
Direct project related						
Additional Running Costs						
Additional Staff costs						
<b>Total non capital costs</b>						
<b>Total Project Costs</b>						
<b>Additional income</b>						
<b>Savings</b>						
<b>Net project cashflow</b>						
<b>Income &amp; Expenditure (I&amp;E) impact</b>						
Depreciation						
Non capital costs						
Savings						
<b>Total I&amp;E impact</b>						

## FINANCIAL APPROVAL

The financial start date should be from the point fees are incurred on the Project				
Financial Start Date:		Financial End Date:		
<b>1. PROJECT COST</b>	<b>COST (including VAT)</b>		<b>SOURCE OF QUOTE</b>	
Feasibility study	£			
Construction (Shell and Core)	£ 2,146,496.84			
Building Regulations Part L2 Compliance	£ 214,649.68			
ICT Hardware & Software	£			
ICT Analysis and Development	£			
ICL Shutdown Costs @ 1.5%	£ 42,500.64			
Design/ Professional Fees @20%	£ 472,229.30			
Contingency @10%	£ 287,587.64			
<b>Total*</b>	<b>£ 3,163,464.10</b>			
<b>2. SOURCE OF FUNDS</b>	<b>VALUE</b>		<b>CONFIRMED?</b>	
Capital Plan	£ 1,449,000.00		<input type="checkbox"/>	
Student Union	£ 1,714,464.10		<input type="checkbox"/>	
<b>Total*</b>	<b>£ 3,163,464.10</b>			
* - Project Cost total and Source of Funds total must be equal.				
<b>3. CONFIRMATION:</b> In signing this form the signatories below confirm that:				
The budget has been developed with appropriate input from the Project Board and Support Service Divisions			<input type="checkbox"/>	
All College regulations relating to the Project will be complied with			<input type="checkbox"/>	
A Project Brief document has been completed and approved			<input type="checkbox"/>	
All project costs have been approved by the relevant Professional Service Provider				
Estates	Name:		<input type="checkbox"/>	
ICT	Name:		<input type="checkbox"/>	
Other:	Name:		<input type="checkbox"/>	
The VAT and other Tax implications of the project have been considered			<input type="checkbox"/>	
A business case has been developed and is included			<input type="checkbox"/>	
There is an undertaking to deliver the project in accordance with the agreed budget, programme and scope.			<input type="checkbox"/>	
<b>Position</b>	<b>Project Director</b>	<b>Project Champion</b>	<b>Project Manager</b>	
Signature:	.....	.....	.....	
Date:				
<b>4. APPROVAL:</b>				
<b>Threshold</b>	<b>Accountable Body</b>	<b>Approval</b>		<b>Please Tick</b>
		<b>Management</b>	<b>Finance</b>	
£250k-1m	Portfolio Review Board	Deputy Rector Chief Operating Officer Director of Strategy & Planning	Director of Finance	<input type="checkbox"/>
£1-5m	Management Board	Rector or Deputy Rector	Chief Finance Officer	<input type="checkbox"/>
>£5m	Council	Chairman of Council	Chief Finance Officer	<input type="checkbox"/>
Name:				
Signature:		.....	.....	
Date:				