

Outline Budget Estimate

Leamington & Horatia House - Refurbishment & Structural Remedial Proposals

for

Portsmouth City Council

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Project Nr: 35340
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0.0 Introduction

- 0.1 The Outline Budget Estimate currently forecasts a total order of cost range of circa £81M - £86M including professional fees and contingency provisions but excluding VAT, Inflation and Portsmouth City Council (henceforth PCC) or Third Party Costs.
- 0.2 The information provided herein is based on a desktop undertaking by Mace following the receipt of the Wilde Carter Clack structural proposals issued on 27th November 2018 and 10th December 2018 outlined in Section 3 of this document. This Outline Budget Estimate seeks to provide an indicative cost and programme assessment of the proposals for means of the budgeting of construction costs only.
- 0.3 The basis of this Outline Budget Estimate can be found in Section 3,4,5,6 and 7 of this document. This includes a list of Assumptions, Exclusions & Risks. Please note the Exclusions to these figures.
- 0.4 The industry appetite for work of this nature and complexity, associated risk and public profile remains low. This has been validated following our regional and national supply chain interface. This poses a significant risk to the viability of the scheme commercially and in regards to programme and quality. As such, it is our opinion that the capital cost for these works is likely to exceed this estimate in order for PCC to secure a Principal Contractor appointment. Moreover, the project constraints would almost certainly see PCC retain a significant accountability for cost and programme risk throughout the project lifecycle.
- 0.5 The proposed structural solution generated by Wilde Carter Clack, whilst may be structurally viable, in our opinion is commercially unviable given the potential inability to construct the drawn proposals. Furthermore, given the nature and condition of the existing structure and proposed scope of works, it is our opinion that PCC would be unlikely to secure the appropriate warranties as desired for works of this nature and level of capital expenditure. In summary, it is our recommendation that deconstruction and new build option be implemented in lieu of the proposed refurbishment, which will likely represent a better value alternative to PCC.
- 0.6 The costs are a budget estimate of costs assuming procurement through a competitive single stage traditional procurement process for the Enablement Works, and a competitive two stage design and build tendering process as proposed by Portsmouth City Council for the Structural Repairs & Refurbishment works (henceforth 'Main Works'). Note, inflation and uncertainty pertaining to the impact of Brexit remain a risk to the project and is currently excluded. Construction indices and data indicates a potential circa 24% increase in construction cost to mid point of the proposed construction programme (Q2, 2023). This could be in the region of circa £15m and represent an addition to all costs shown herein.

0.0 Introduction (cont'd).

0.7 Should PCC wish to continue further investigation into this option, we would highly recommend the following immediate actions;

- Further structural assessment, survey, design and modelling be carried out to validate the proposals currently tabled as referenced in Section 3 of this report.
- A full intrusive asbestos survey.
- A full condition survey of the MEP installations.
- Below ground investigations
- Trial works to determine methodology for proposed slab removal, external envelope fixing, foundation works etc.

It should be noted that due to the structural condition of the building the full extent of required surveys and investigations cannot be fully undertaken until the construction works have commenced.

0.8 The execution of the proposed works will require the buildings to be fully decanted and vacated. No persons can be in occupation in any form during the execution of any construction works or related activities. This includes the undertaking of surveys, testing, strip-out, preparatory works and pre-construction activities.

0.9 Following the completion of the enablement works undertaking and subsequent surveys, should the decision be made not to undertake the proposed main works or should it be found to be unviable, the costs associated therewith are not deemed wholly abortive as in our opinion a vast extent would be required to enable safe and effective deconstruction of the structures. Moreover, should a deconstruction option be investigated we would recommend supply chain engagement in the first instance to determine a robust methodology and associated costs, given the building characteristics and site constraints. At this stage we would anticipate a budget of £5m - £6m for these works subject to confirmation of scope, methodology and timing of proposed works.

1.0 Executive Summary - Commercial Update

1.1 The table below identifies a summary of the Outline Budget Costs. The Total Construction Cost includes adjustment for Main Contractors Preliminaries and On Costs. The Total Order of Cost includes all adjustments for professional fees, contingency but excludes adjustment for inflation.

	Order of Cost Estimate (£)
Leamington & Horatia Building Clearance & Enablement Works	1,680,000
Leamington & Horatia Structural Repairs & Refurbishment	60,200,000
Total Construction Cost	61,880,000
Professional Fees	10,940,000
Contingency	7,300,000
Inflation	Excluded
Total Order of Cost	80,120,000
Say	81,000,000
Cost Range (£)	£81m-£86m

Note:

- Inflation is currently excluded. Industry indices and data indicates a potential circa 24% increase in construction cost to mid point of the proposed construction programme (Q2, 2023). This could be in the region of circa £15m and represent an addition to all costs shown herein. The impact of Brexit also remains subject to determination which is excluded.



2.0 Executive Summary - Programme Update

2.1 The table below identifies a summary of the outline estimated programme dates. The overall programme is forecast at circa 51 months. This equates to a forecast programme for Building Clearance and Enablement Works of 9 months and the Main Works of 42 months.

	Building Clearance & Enablement Works Programme
Forecast Commencement	2Q/19
Forecast Duration	9 months
Forecast Completion	1Q/20
	Structural Repairs & Refurbishment
Forecast Commencement	3Q/21
Forecast Duration	42 months
Forecast Completion	1Q/25

The above programme is subject to validation of proposed works methodology and sequencing with the appointed design team and Principal Contractor.

2.0 Executive Summary - Programme Update (Cont'd)

2.2 The key factors influencing the programme timescales are mainly due to the following;

- Screenshot reinforcement requirements to Horatia, and additional proposed hollow core slab reinforcement requirements to Leamington. The proposed floor by floor phasing methodology, driven by building structural constraints, generates an extended and inefficient programme duration due to works sequencing. This is a significant programme and cost risk and represent a critical path activity.
- Proposed requirement for false façade exoskeleton and associated groundwork's and connections to existing building. This is a significant undertaking and represents a significant programme and cost risk.

2.3 We would advise the following next steps to further investigate and validate the proposed durations;

- Seek expert advice on sequencing and construction timelines from specialist supply chain partners pertaining to key critical path structural activities following intrusive survey outputs.
- In addition to validating these timeframes and providing more information around sequencing, the proposal would need to be market tested with a suitably qualified Principal Contractor.
- Efficiencies can be further investigated to enable Leamington & Horatia to run concurrently but this would require further detailed investigation, survey outputs and supply chain interface.

3.0 Information Used

3.1 Information Used

Leamington House

- Wilde Carter Clack - Typical Tower Floor Plan - DWG No.S.101 Rev P1 Dec-18
- Wilde Carter Clack - Typical Residential Flat Floor Plan - DWG No.S.102 Rev P1 Dec-18
- Wilde Carter Clack - Ground Floor RC Beam Layout - DWG No.S.103 Rev P1 Dec-18
- Wilde Carter Clack - Typical Cross Wall Layout Plan - DWG No.S.104 Rev P1 Dec-18
- Wilde Carter Clack - Typical Flank Wall Elevation - DWG No.S.105 Rev P1 Dec-18
- Wilde Carter Clack - Sections Sheet 1 - DWG No. S.110 Rev P1 Dec-18
- Wilde Carter Clack - Sections Sheet 2 - DWG No. S.111 Rev P1 Dec-18
- Wilde Carter Clack - Sections Sheet 3 - DWG No. S.112 Rev P1 Dec-18
- Wilde Carter Clack - Sections Sheet 4 - DWG No. S.113 Rev P1 Dec-18
- Wilde Carter Clack - Details Sheet 1 - DWG No. S.115 Rev P1 Dec-18
- Wilde Carter Clack - Elevation Sheet 1- DWG No. S.120 Rev P1 Dec-18
- Wilde Carter Clack - Structural Specification Rev P2 Dec-18

Horatia House

- Wilde Carter Clack - Typical Tower Floor Plan - DWG No.S.01 Rev P2 Nov-18
- Wilde Carter Clack - Typical Residential Flat Floor Plan - DWG No.S.02 Rev P2 Nov-18
- Wilde Carter Clack - Ground Floor RC Beam Layout - DWG No.S.03 Rev P1 Nov-18
- Wilde Carter Clack - Typical Cross Wall Layout Plan - DWG No.S.04 Rev P1 Nov-18
- Wilde Carter Clack - Typical Flank Wall Elevation - DWG No.S.05 Rev P2 Nov-18
- Wilde Carter Clack - Sections Sheet 1 - DWG No. S.10 Rev P1 Nov-18
- Wilde Carter Clack - Sections Sheet 2 - DWG No. S.11 Rev P1 Nov-18
- Wilde Carter Clack - Sections Sheet 3 - DWG No. S.12 Rev P1 Nov-18
- Wilde Carter Clack - Sections Sheet 4 - DWG No. S.13 Rev P1 Nov-18
- Wilde Carter Clack - Details Sheet 1 - DWG No. S.15 Rev P1 Nov-18
- Wilde Carter Clack - Elevation Sheet 1- DWG No. S.20 Rev P1 Nov-18
- Wilde Carter Clack - Structural Specification Rev P1 Nov-18

4.0 Assumptions

Generally

- Decanting of existing buildings including any temporary moves to be executed and funded by PCC in advance of any works commencement.
- The buildings are to be fully vacated and decanted. No persons can be in occupation in any form during the execution of any construction works or related activities. This includes the undertaking of surveys, testing, strip-out, preparatory works or pre construction activities in their entirety.
- The existing structure can accommodate the proposed works and associated loads etc. No allowance has been made for substructure and/or structure enhancement, reinforcement, alteration, or upgrading over and above proposals included herein.
- Programme of 51 months for both phases, with both buildings being executed concurrently.

Building Clearance & Enablement Works

- Start on Site Q2 2019 for period of 9 months
- Works to be executed as a single contract with no sectional completion with the appointed Demolition / Specialist Contractor
- Single Stage Procurement Approach with Pre Qualified Tenderers.
- Demolition / Specialist Contractor Appointment via applicable framework or equivalent mechanism to ensure delivery of best value.
Main Contractors OH&P of 10%
- Nominal allowance for asbestos removal included at £300k - subject to validation via intrusive survey.
- All waste produced as result of enablement works undertakings will be extracted from the building via existing lifts - these will be in poor condition as a result on completion with no works proposed thereto until their replacement as part of the main works.
- No scaffold required or associated hoists etc. for the proposed enablement works.
- No requirement for making good on completion of works other than where required to leave works in a safe condition only. This includes external areas.
- No permanent hoarding or site setup will be installed and retained as part of enablement works for the main works undertakings.

Structural Repairs & Refurbishment

- Start of Site Q3 2021 for period of 42 months
- Works to be executed as a single contract with no sectional completion.
- Works to be executed to both buildings concurrently.
- Two Stage Design & Build Procurement Approach.
- Main Contractor Appointment via applicable framework or equivalent mechanism to ensure delivery of best value.
- Main Contractors OH&P of 10%

4.0 Assumptions (cont'd)

- All proposed works to the external envelope can be undertaken from scaffolding and craneage. No provision for mast climbers, external lifts or haul cages.
- Existing screeds can be removed by hand only without detriment to the existing structure.
- Scaffold and associated hoists etc. are required for the proposed full duration of the project and all proposed works can be executed therefrom.
- Minor breaking out to existing foundation only to facilitate formation of new ground beam - no requirement for building underpinning.
- No requirement for upgrading below ground substructure to accommodate proposed building loads.
- Exoskeleton is formed to flank walls only with fixings at 500mm centres at each floor level.
- Provision of a tower crane required for each building for the duration of the project is required.
- Steel bracing to internal cross walls to be bolted to slab with resin anchors - no requirement for breaking out existing walls or bolting through entirety of slab.
- Slab adaptations (Leamington) have to be installed independently of the screed with curing allowed prior to screed installation.
- Building Overclad - assumed the existing cladding frame will be removed and a new frame installed, fixed to the existing external walls, to receive the new cladding. The new cladding will consist of frame, insulation and cladding which will be in the form of Rock panel FS-Extra or similar Class 0 system suitable for residential developments over 18m high.
- All windows to be removed in their entirety and replaced to match existing.
- No works to the roof are required as specified by PCC with exception of the over clad to the envelope parapet.
- MEP Infrastructure to be replaced, not retained and serviced.
- All MEP installations and appliances are electrically fed, with no gas provision servicing the building, with the exception of centralised boiler plant housed on the Ground Floor.
- Sprinkler coverage within the properties to include all areas, other than residential bathrooms or where the floor area is less than 5m². No requirement for coverage to communal areas on residential floors. Assumed sprinkler tanks will be housed externally within the site demise (location tbc).
- External Works - full reinstatement of existing hard and soft landscaping to the respective plot areas to match existing proposals only. No allowance for wholesale re-design/re-profiling.
- Street Furniture - assumed requirement to replace with new to match existing proposals. No provision for wholesale re-design/re-profiling.

5.0 Exclusions

Generally

- VAT
- Inflation
- Costs arising from a Section 106 and/or 278 agreements.
- Costs arising from Construction Infrastructure Levy.
- Monitoring costs; adjacent buildings, noise, dust, vibration, environmental audits, modelling, wind studies and the like.
- Local Authority charges, road closures, etc.
- Any necessary off-site reinforcement of services infrastructure including diversions, upgrades and wayleaves required by proposed works.
- Temporary accommodation
- Decanting of existing buildings including any temporary moves or requirements to facilitate early occupation.
- Effects of working condition restrictions, such as Environmental Management Plans.
- Renewable energy technologies as may be required by the Local Planning Authority (henceforth LPA).
- Works required to comply with Part 2B of the Building Regulations (Consequential Improvements)
- Portsmouth City Council, stakeholder and/or third party costs.
- Air rights, rights of light, boundary wall issues, over sailing rights/licences (or any third party compensation settlements).
- Revenue costs/occupation costs/running costs (outside the scope of the construction project).
- Removal, mitigation or treatment pertaining to contaminated materials. Nominal allowance included herein for asbestos removal subject to confirmation of requirement following intrusive survey.
- Ecological requirements and associated costs.
- BREEAM assessment costs and fees.
- Out of hours working - normal weekday working hours assumed.
- All works to the roof with the exception of the parapet over clad
- Legislative or regulatory policy changes including outputs following Grenfell Tower proceedings.
- Undertaking works whilst the building is occupied. Based on the scope it is assumed that no persons can be in occupation in any form during to execution of any construction related activities. This includes the undertaking of surveys, testing, strip-out, preparatory works or pre construction activities in the entirety.
- Substructure and/or structure enhancement, reinforcement, alterations to facilitate proposed works over and above provisions stated herein.

5.0 Exclusions (cont'd)

Enablement Works

- Requirement for installation of scaffolding or building wrap during enablement works execution. All works to be managed and contained within envelope of the existing structure.
- Requirement for temporary works, propping, structural enhancements/repairs etc. to facilitate the proposed enablement works in advance of structural works being undertaken as part of the main works.
- Requirement for craneage or other form of lifting equipment

Structural Repairs & Refurbishment

- Major Refurbishment/Remodel - no provision for enhancements to building envelope design/specification to address site location, constraints, stakeholders and adjacencies. Assumed like for like replacement with proposed alternative at base date of this report.
- Loose FF&E, IT and other tenant and/or client specialist items.
- Upgrading or enhancement of services infrastructure
- Reinstatement of central play park and associated works - by PCC.
- Additional cost associated with parallel working as the programme assumes sequential working floor by floor.
- Underpinning to existing structure to facilitate proposed works.
- Modifications to existing foundations to facilitate formation of new ground beam to receive flank wall steel frame over and above those included herein.
- Works to existing structural frame, slabs (other than screed) and external walls unless identified herein.

6.0 Risks

6.1 Generally

- Inflation & impact of Brexit.
- Legislative or regulatory policy changes including outputs following Grenfell Tower proceedings.
- Programme - subject to validation following confirmation of exacting project requirements.
- Building decant and resident relocation to meet programme requirements.
- The industry appetite for works of this nature and complexity, associated risk and public profile remains very low. This has been validated following our regional and national supply chain interface.
- Securing of a competitive tender from a competent Principal Contractor and supply chain.
- Buildability of Wilde Carter Clack drawn structural proposals - yet to be validated.
- Outputs of surveys and outputs not yet undertaken.
- Ability to undertake all required surveys and investigations prior to works commencement, this will likely see PCC retain significant risk accountability throughout the project lifecycle.
- Unavoidable damage caused in the execution of the proposed remedial works and associate cost and programme impact.
- Financial viability of proposal for Portsmouth City Council.

7.0 Area Schedule

Leamington House

Site footprint (m2): 3,600 External area (m2): 2,876

Functional Space (GIA)						Totals (m2)
Level	Dwelling Apartments	Communal	Offices	Plant	Other	
Ground	n/a	242	19	36	427	724
Level 01-18	10,098	2,040	n/a	136	n/a	12,274
Roof	n/a	n/a	n/a	n/a	n/a	0
Totals (m2)	10,098	2,282	19	172	427	12,998

Horatia House

Site footprint (m2): 4,900 External area (m2): 4,176

Functional Space (GIA)						Totals (m2)
Level	Dwelling Apartments	Communal	Offices	Plant	Other	
Ground	n/a	242	19	36	427	724
Level 01-18	10,098	2,040	n/a	136	n/a	12,274
Roof	n/a	n/a	n/a	n/a	n/a	0
Totals (m2)	10,098	2,282	19	172	427	12,998

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