

## **Barbican (Beech Gardens) Podium – Water proofing project.**

### **Brief for Chairman – Barbican Residents Consultative Committee.**

#### **Background.**

The Podium has leaked for over thirty years in a number of areas across the estate and many remedies have been attempted to find ways to cure the problem. In the main these repairs just pushed the water elsewhere; anyone who has seen the number of drip trays in our car parks will understand the scale of the problem. After several years of water ingress into the Virgin Active leisure complex, the COL were threatened with legal action. Members of the Corporation agreed the expenditure to cure the problem, but insisted that the technical solution should be guaranteed and the chosen methodology should provide the specification for future repairs across the Estate. The timeline is set out below, to help residents understand some of the complexities of the project.

**Eddie Stevens**  
**Housing Services Director**

The Barbican Podium North West (NW) waterproofing project is required to prevent on-going water penetration through the Barbican Podium (the areas of White Lyon Ct, John Trundle Highwalk, Beech Gardens and Bryer Court Pond) to the commercial premises below, car parks and Beech Street Tunnel and to prevent saturation of the structure. This could cause corrosion of the reinforcement and subsequent deterioration of the concrete over the longer term.

#### **Project Scope**

The project scope includes;

- The design and implementation of a suitable waterproofing membrane (with an insurance backed guarantee) to remedy leaks within the Barbican Podium in the areas of White Lyon Ct, John Trundle Highwalk, Beech Gardens and Bryer Court Pond.
- Replacement of all current hard landscaping in accordance with planning consents.
- Replacement of podium tiling.
- Replacement of soft landscaping (see comments below)

Whilst the replacement of soft landscaping (soil and planting) is within the project scope and one of its success criteria; it is excluded from the waterproofing specification and associated cost plan and as such is being dealt with as a sub project.

#### **Technical Solution**

This is a complex, technical project; the development of the technical specification has required excavation of the site to assess the structural integrity beneath the garden beds, the general composition and depths below the tiles and beds and completion of trial works, to test the potential solutions, before finalising the technical specification.

Interim measures including drainage of the pond and temporary waterproofing works were required to prevent the worst of the leaks, until the full scheme is implemented.

The trial works, completed at the end of Jan 2013, identified some issues requiring further investigation and, once these were completed, the technical works aspect of the specification was completed in February 2013. The trial works also identified a possible alternative solution, presented by the manufacturer of the preferred waterproofing membrane, and this has been further investigated and trialed.

Other work such as development of the Bill of Quantities, obtaining listed building consents, tile investigations and procurement methods were run in parallel.

## Project Timeline

Jan 2011	Report on the continued leaks from the NW Barbican Podium to commercial premises below.
March 2011	Bryer Court Pond drained & enabling works carried out to prevent water penetration via screed
Intervening period	Appointments of Project Manager, Architects, Quantity Surveyor etc to investigate potential technical solution and produce estimated cost plan.
<b>Oct 2011</b>	<b>Report to Project Sub-Committee</b> - approval obtained based on outline cost plan to proceed with project investigations and develop a technical specification.
Jan to Mar 2012. Jan to May 2012 Ongoing	Pre-Qualification stage completed for procurement of a main contractor. Investigative works carried out and waterproofing products tested. Detailed drawings produced Detailed cost plan produced Work to obtain listed building consents for Beech Gardens & White Lyon Ct
May 2012	Removal of Trees as enabling works to further investigation and soil removal to commence later in year. Timing of tree removal in advance of nesting season. <i>(NB this work should have been followed by the removal of soil, however, procurement of an appropriate contractor ended when the approved contractor pulled out and, due to increased costs, it was necessary for the process to be carried out again.)</i>
June 2012	<b>Report to Project Sub-Committee*</b> - Following investigative works a full cost plan was produced, which resulted in a significant increase in works and associated costs against the original estimate. Approval was obtained from Project Sub Committee for the increased scope of works and associated costs. The Sub Committee also requested additional investigations to consider alternative technical solutions in respect of the area at White Lyon Court. <i>* report also to Barbican Residential Committee (BRC) and Policy &amp; Resources</i> The Sub Committee also requested an Internal Audit review of the increased costs to the project.

July 2012	5 <sup>th</sup> July 2012. A site visit with Sir Michael Snyder (Chairman of the Projects Sub Committee) and representative members from the Project Sub Committee, officers from the Barbican Estate Office and City Surveyors. The group met with a representative from Bickerdike Allen Partners – the appointed Architects. The purpose of the site visit was to provide an opportunity for the Chairman and Members to view the site and discuss the detail of the proposed works and alternative technical solutions for White Lyon Court.
July 2012 – Sept 2012	Additional investigative works carried out at the request of the Project Sub Committee in respect of the technical solution for White Lyon Court.  Re-commenced procurement process of a contractor for the soil removal
Sept 2012	<b>Report to Project Sub-Committee*</b> – Approval obtained to appoint soil removal contractor and proceed with soil removal works.  <i>* report also to BRC</i>
Oct 2012	<b>Report to Project Sub-Committee*</b> – Approval obtained for the technical solution at White Lyon Court.  <i>* report also to BRC</i>
Nov 2012	Internal Audit of Beech Gardens Project completed – including financial assessment due to projected increase costs  Soil removal from Podium gardens areas.
Dec 2012 – Jan 2013	Product trial works & completion of Technical Specification.
Feb 2013	Development of Bill of Quantities  <b>Progress report to project Sub Committee</b> including outcomes of internal audit review of costs.
Mar 2013 – Sept 2013	Pre-Qualification Questionnaire (PQQ), tender and contract award process (see separate timeline for procurement)  <b>Report to: BRC, Project Sub-Committee &amp; Court of Common Council.</b>
Oct 2013	Contract prepared & dispatched.
Nov 2013	Contracts signed & works commenced.

### Procurement Timeline for main contractor

Pre-Qualification Questionnaire was issued on the London tenders portal on 12<sup>th</sup> April 2013.  
Preparation of tender documents - April / May 2013

Return & Evaluation of PQQ deadline - May 2013

Invite to Tender issued - 23<sup>rd</sup> May with return date 8<sup>th</sup> July 2013.

Evaluation of Tenders – 15<sup>th</sup> July 2013

Post Tender Interviews – 25<sup>th</sup> July

Authority to start work and post tender award August & Sept (final sign off 11<sup>th</sup> Sept 2013):

- Barbican Residential Committee
- Project Sub Committee
- Court of Common Council

Tender award letter issued – Sept 2013

Post tender discussions – During Sept 2013

Contracts prepared and dispatched - 11<sup>th</sup> Oct 2013.

Contract commencement date - 1<sup>st</sup> November 2013

Construction trial works - 25<sup>th</sup> November 2013 to 20<sup>th</sup> Dec 2013 (approx.)

Main works commence - 6<sup>th</sup> January 2013 for 12 months.

Contract end date - 31<sup>st</sup> January 2015.

The background to the procurement is that we had originally completed a PQQ exercise in March 2012, which identified 6 shortlisted contractors. However, due to the increased cost in overall works (reported to Projects Sub Committee in June 2012) we were then advised that the current PQQ process would be abortive.

Several alternative procurement methods were considered, including the use of current framework agreements and the potential use of incumbent suppliers (unfortunately the latter could not be progressed due to the supplier not being able to commit to current Terms & Conditions). Either of these approaches would have attracted a shorter procurement process, but were discounted. Discussions between the Housing Property Services, City Surveyors and COL Procurement Service concluded that a 2 stage open tender procurement process of pre-qualification and then full Invite to Tender of 4-6 shortlisted contractors would be required.