

<b>Committee(s):</b>	<b>Date(s):</b>	<b>Item no.</b>
<b>Epping Forest and Commons</b>	<b>12 May 2014</b>	<b>CS 026/13</b>
<b>Subject:</b> Outcome Report - (1 of 2) QEHL Interpretation Centre	<b>Public/Non-Public</b> <b>Public</b>	
<b>Joint Report of:</b> <b>City Surveyor and Open Spaces</b>	<b>For Information</b>	
<b><u>Summary</u></b>		
<u>Brief description of project</u>		
<p>Alteration and expansion of the Coach House, Rangers Road, Chingford into a visitor and education facility. In turn this project permits the City to regain the historic integrity of the adjacent Queen Elizabeth's Hunting Lodge (QEHL) to improve its presentation, access and displays. This project forms part of the greater Branching Out programme of works, substantially funded (74%) by the Heritage Lottery Fund (HLF) and carried out concurrently with Butlers Retreat (2 of 2).</p> <p>A condensed version of this report was submitted and approved at Projects Sub on the 2 April 2014. The report contained a financial summary with interim figures which have now been adjusted to final sums to reflect expenditure and commitments in respect to the Interpretation element of the project.</p>		
<u>Outcome Report recommendation</u>		
<ul style="list-style-type: none"> <li>• Client department sign off procedures to incorporate stakeholder consultation. Departmental pro-formas to be updated.</li> <li>• Key risk items to contractors procurement and delivery should be standing items on contract progress agendas. Departmental pro-formas to be updated.</li> <li>• In addition to technical manuals it would be useful to have a simple summary user guide for the building systems. This is one of the recommendations of the BSRIA 'Soft Landings' approach to building handover. Standard preliminaries and service consultants briefs to be updated.</li> <li>• Operation and Maintenance files - consider the use of a web hosting site for project information and hand over documentation. Recommendation to be carried to Town Clerks programme office.</li> </ul>		

## Overview

<b>1. Evidence of Need</b>	<p>Lack of education space for visiting school parties.</p> <p>Former buildings under-used and did not meet compliance with the Disability Discrimination Act.</p> <p>Access to information and the view for visitors from the adjacent QEHL needed improvement. Lack of comprehensive exhibition display about Epping Forest.</p>
<b>2. Project Scope and Exclusions</b>	<p>Infill extension between Coach houses, external colonnade and viewing platform (as Appendix 2). The displacement of Orion Harriers Running club (but no relocation costs).</p> <p>The exhibition (or interpretation content) was managed directly by Open Spaces as a fit out item under this project (non contract fit out).</p> <p>It was considered that the immediate landscaping around the buildings would be best procured as part of the car parking project and was managed directly by Open Spaces as a separate project.</p>
<b>3. Link to Strategic Aims</b>	<p>A Vibrant and Culturally Rich City - Promoting a dynamic and culturally rich environment, by encouraging greater diversity of culture and leisure opportunities.</p> <p>An Inclusive and Outward Looking City - Promoting equality of opportunity, accessibility and involvement for everyone, in particular those who are currently excluded, and contributing to local, regional and national prosperity, by enhancing accessibility and raising awareness of existing opportunities strengthening the local voluntary and community sector and enhancing services for children and young people, support for vulnerable children and their families and facilitating expansion of childcare.</p>
<b>4. Within which category does the project fit</b>	<p>4. Substantially reimbursable</p> <p>7.a) Asset enhancement/improvement (capital)</p>

<p><b>5. What is the priority of the project?</b></p>	<p>B- Advisable</p>																										
<p><b>6. Resources Expended</b></p>	<p>The figures below show the actual figures expended to date. Contract retention monies and are paid and are reflected in the Budget. (see 9 and Appendix).</p> <table data-bbox="603 571 1260 1090"> <tr> <td>Contract works</td> <td>1,245,233</td> </tr> <tr> <td>non contract works</td> <td>744</td> </tr> <tr> <td>Fountain</td> <td>23,882</td> </tr> <tr> <td>Fit out</td> <td>42,854</td> </tr> <tr> <td>Displays</td> <td>173,736</td> </tr> <tr> <td>Equipment</td> <td>10,919</td> </tr> <tr> <td>Materials</td> <td>1,991</td> </tr> <tr> <td>Staff</td> <td>33,966</td> </tr> <tr> <td>Fees</td> <td>143,572</td> </tr> <tr> <td>HLF Stage1</td> <td>56,000</td> </tr> <tr> <td><b>Sub total expenditure</b></td> <td><b>1,732,897</b></td> </tr> <tr> <td>anticipated commitments</td> <td>19,344</td> </tr> <tr> <td><b>Project Total</b></td> <td><b>1,752,241</b></td> </tr> </table>	Contract works	1,245,233	non contract works	744	Fountain	23,882	Fit out	42,854	Displays	173,736	Equipment	10,919	Materials	1,991	Staff	33,966	Fees	143,572	HLF Stage1	56,000	<b>Sub total expenditure</b>	<b>1,732,897</b>	anticipated commitments	19,344	<b>Project Total</b>	<b>1,752,241</b>
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**Outturn Assessment**

<p><b>7. Assessment of project against Success Criteria</b></p>	<p>Although the Evaluation Report did not have any specific, measurable or timed criteria the following aims have been extracted:</p> <p><i>Increased patronage.</i></p> <p>The total number of visits to The View in 2012 were double those to the Hunting Lodge during the same period in the previous year and visitors to the QEHL have also increased, as illustrated in the graph below.</p>
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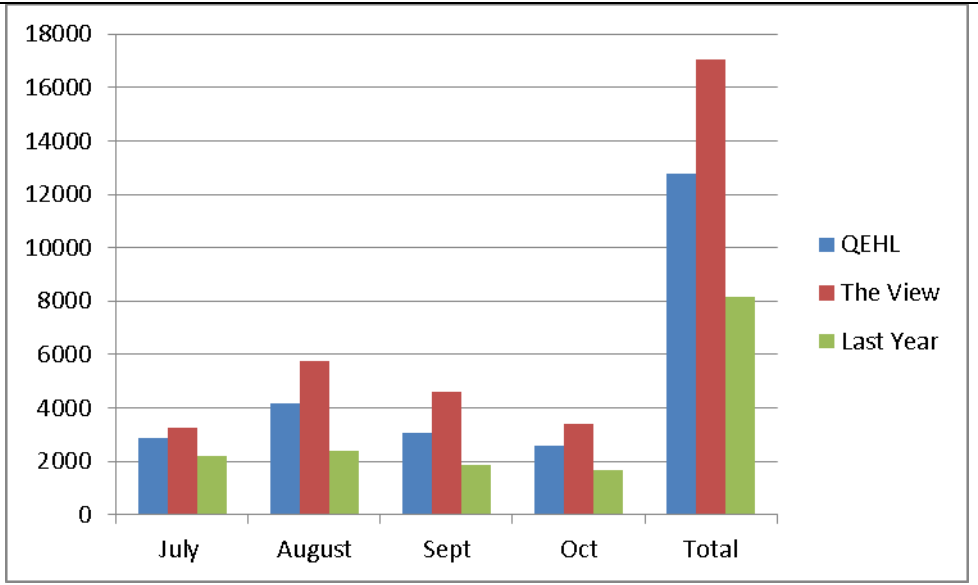


Figure 1. Graph indicating visitor numbers Summer/ Autumn 2012

During the same period, only 2% of the total of 451 comments received were negative.

*Improved visitor experience and enhance site for educational visits*

The buildings, improved landscaping and combination of modern and traditional materials is a significant improvement to the grouping of buildings and the setting of the listed Hunting Lodge. By housing the ancillary shop function the new building has enabled the presentation of the Hunting Lodge to be improved. The additional space created for the interpretation content allows the history and features of Epping Forest to be better understood and enjoyed.

*Accessibility*

The new buildings benefit from new pathways and level access is achieved to the main entrance of all the buildings in the group. The lift to the first floor and new viewing platform at the rear of the Interpretation Centre allows less able bodied visitors a similar view to that of the uppermost storey of the Hunting Lodge, which was historically open sided and to which level access cannot readily be provided.

**8. Programme**

The programme did not run as scheduled with the following delays to the project:

- As there was no right to access the adjacent property to erect scaffolding and carry out works an application was made to the adjacent long lessee, Whitbread, for a hoarding licence to the west elevation. However Whitbread used this to their advantage as they were looking for consent to vary the terms of their lease. This frustrated the licence application and start on site by 4 months.
- Between HLF stage 2 approval and development of detail

	<p>design there was a delay due to negotiating the contract with the HLF.- 7 months.</p> <ul style="list-style-type: none"> <li>• Construction delays to two critical packages- timber colonnade and glazing affected the contract completion. The infill glazing package was implemented as a contractors design portion and suffered as a result of the lack of clarity to specification and protracted communication between supplier, sub contractor, contractor and approving designer. Due to the relatively small value of the works the main contractor suffered from lack of attention from a supplier that monopolises the market (Pilkington). A value engineering workshop early in the procurement exercise would have been useful to agree the employer's requirements.</li> <li>• The windows in the front elevation were not scheduled for replacement and on removal of the render it was discovered that the frames were badly corroded. Deciding on a specification for the replacement, the approval of shop drawings and the manufacture of these led to a delay.</li> <li>• There was also a desire that the timber colonnade be sourced from Epping Oak. Checking the viability of this delayed the procurement of the timber and the package delivery.</li> </ul> <p>As a consequence of the construction delays (last three bullets above) the contract completion was extended by 40 weeks in total. Of this delay 13 weeks were granted as a relevant event (outwith the contractors control) and an extension of time was granted at an additional cost of £37,000.</p> <p>To mitigate impact on the landscaping contract, partial possession was taken so that temporary accommodation (both contractors and temporary staff) could be relocated off the forecourt. This effectively removed a resource for the contractor and may have contributed to the overall delay.</p>
<p><b>9. Budget</b></p>	<p>See appendix for the comparative evaluation, tender and outturn costs. The contractor was local, which both met City of London Procurement aims and explained the lower tender price compared to other tendering contractor who had a wider national market. Savings and efficiencies were also made by letting this contract concurrently with Butlers Retreat.</p> <p>The majority (74%) of the expenditure in excess of the contract value and other unscheduled project cost have been covered by a drawdown from the Branching Out Project contingency in agreement with HLF.</p>

Works variations:

Significant variations (greater than £3k)	
rainwater harvesting as the late provisional sum included was insufficient.	16,750
associated alterations to drainage system including additional manholes	7,274
second-hand stock brick (scheduled works allowed for re-use which proved uneconomic due to cementitious mortar)	4,000
removal of underground diesel tanks to the forecourt (which resulted in large proportion of contract contingency being used). Although ground penetrating survey techniques were used to survey the underground services the scale and details of the diesel tanks were not apparent..	17,520
Unscheduled structural repairs following opening out including-  Replacing wall plate to first floor of east coachhouse;  Lintol arrangement to fireplaces  Wall straps and herringbone trusses to floor	11,349
removal of one long concrete lintel to shop (where the openings were faced up as multiple openings)	4,561
Savings against a mansafe fall arrest system, omitted due to capital and ongoing revenue cost following assesment that temporary protection to the roof could be implemented and that the requirement for access was infrequent.	6,868
Additional external luminaires	3,590
Front windows were scheduled to be repaired, however when the render was removed it was apparent the existing frame were badly corroded and required to be replaced.	6,650

	Timber structure above a suspended ceiling to the roof of the education room was badly rotten and required additional unscheduled structural works	6,551
	removal and installation of new gas meter	3,012
	additional render repairs to that scheduled	3,500
	<b>Sub Total</b>	<b>91,625</b>
	Balancing variations below £3,000	25,749
	<b>Sub total additional contract works</b>	<b>117,374</b>
	<b>Extension of time</b>	<b>37,000</b>
	Omission of provisional sums and contingency	(76,406)
	Adjustment of landscape works	(10,000)
	landscaping works omitted from budget and vired to the £2.008 million landscape project	
	<b>Post contract works</b>	
	To remediate design defect to lighting switching in Education room	744
	<b>Total works variations (a)</b>	<b>68,712</b>

Non works project variations

<p><b>Fountain</b> In keeping with the overall heritage investment in the site, the Durning Lawrence Fountain adjacent to Butler's Retreat has been re-located onto a new foundation, cleaned and restored by Cathedral Works Organisation</p>	<b>23,881</b>
<p><b>furniture, fixtures and equipment</b> fit out of the shop furniture to education room  future proofing the building for audio visual and content and internet connectivity</p>	27,266 5,814  11,920
<p><b>sub total</b></p>	<b>45,000</b>
<p><b>Exhibition and Display</b> The interpretation content was managed as a separate project by Epping Forest. The increase reflects the additional design and scope since feasibility stage</p>	<b>54,000</b>
<p><b>Fees</b> Additional project fees incurred as a consequence of overuning of contract and additional or increase in scope including exhibition</p>	<b>24,000</b>
<p><b>Total non works project variations (b)</b></p>	<b>146,881</b>
<p><b>Total project variations (a+b)</b></p>	<b>215,593</b>

**10. Risk**

It is the nature of a refurbishment project to an historic property that there will be unforeseeable risks inherent in the structure. Despite undertaking surveys of the fabric and underground scans at design stage neither the extent of the underground diesel tanks nor the peculiar structural arrangement of lintel to the west coach house were apparent. As such, these could not have been fully scheduled and the contract contingency was not sufficient, resulting in additional expenditure. It was useful that the primary funding partner (HLF) insisted on a large central contingency which could be drawn upon.

A risk register was developed in the early design development stage. Although this register was updated and circulated when the contractor was appointed it could have been better utilised to focus



	on key areas of risk at contract progress meetings.
<p><b>11. Communications</b></p>	<p>The representative of the primary funder (the HLF) commented that that the quarterly reporting to them was good and concise.</p> <p>Early in the project, although user groups had been consulted it was assumed there was a degree of internal dialogue when stage approvals were signed off. It was assumed that when Client commented that these incorporated the user group comments, it transpired that this was not always the case and further, particular user requirements had to be filtered in at detailed design stage.</p>
<p><b>12. Benefits achieved to date</b></p>	<p><u>Visitor attraction</u></p> <p>The new permanent exhibition comprehensively covers the history and archaeology of the Forest along with its ecological significance for the first time. The innovative design incorporates items from the museum collection, including taxidermy, in an engaging way.</p> <p>Visitor Services are now able to book more school visits with the additional learning facilities and have employed two Learning Assistants to deliver more educational sessions at The View and the Hunting Lodge.</p> <p>School children have used the Community Room as part of their educational session and have also used the room to have lunch when the weather is inclement, which has led to very positive feedback from pupils and teachers alike.</p> <p>There has been good uptake of the Community Room and Temporary Exhibition spaces with regular bookings taken. The new building allows an improved shop which produces a steady income with significantly improved takings.</p> <p>The complex has received a commendation from the London Borough of Waltham Forest Design awards.</p> <p><u>Sustainability</u></p> <p>During the course of the works the existing building envelope was fully insulated. This, combined with a modern central heating system, passive infra-red controlled lighting and a photovoltaic (pv) array has improved the energy performance of the building which achieved a 'B' rating on its Energy Performance Certificate. The building also has rain water harvesting incorporated, low flush toilets and sensor controlled taps to minimise mains water consumption.</p> <p>For the first time Epping Foresthave received a Gold Standard in the Green Tourism Award for the Gateway complex, in part due to the sustainability of the View development. The project also helped Epping Forest retain the Green Flag and Green Heritage awards.</p> <p>The View has received an International Green Apple Award for the Built Environment from the Green Organisation.</p>

<p><b>13. Strategy for continued achievement of benefits</b></p>	<p>Visitor numbers to QEHL and The View are being registered using electronic visitor counters and a manual count as back up. Retail income is also closely monitored to ensure the retail stock is relevant and profitable.</p> <p>There is a wide programme of events at The View and QEHL listed in the Epping Forest Events Diary.</p> <p>The strategy for the use of the Community Room / Courtyard and Temporary Exhibition area is being implemented. Courtyard events have taken place on a regular basis from March 2013. Events booked include concerts and a Farmer's Market.</p>
<p><b>14. Outstanding actions</b></p>	<p>End of defects liability period, there were some minor snagging items , these comprise:</p> <ul style="list-style-type: none"> <li>• An eaves detail to an external store; as raised by a Member, an alternative detail has been suggested and has been resolved by the contractor.</li> <li>• Another issue which has caused concern at Member level is the colour of the infill brick; it was scheduled to re-use bricks arising from the demolitions, however this proved uneconomic on the basis they had cementitious mortar which would have been time consuming to remove. The replacement new brick was a close match to the London Stock but did not have the same weathered appearance. This is not an uncommon conservation approach; however in order to alleviate the concerns of the Member investigations quotations have been established to either clean the entire wall or stain the new brickwork to suite the existing. This would be carried out, by others as independent works, in addition to the contract.</li> <li>• A road safety audit is being commissioned for Rangers Road (Epping Forest division liaising with the London Borough of Waltham Forest).</li> </ul>

**Review of Team Performance**

<p><b>15. Governance arrangements</b></p>	<p>Satisfactory, initiated a project board. Involvement from project sponsor (Director of Open Spaces) for major issues and significant additional expenditure throughout.</p>
<p><b>16. Areas for improvement</b></p>	<p>Although operation and maintenance training was organised at handover the Client team did not think this was sufficient. The training was verbal with no summary information to the building systems. This problem was compounded by incomplete Health and Safety files at handover. The files have required coordination and</p>

	review to get to an acceptable level and it has been challenging to keep track of their location and approval status. In future Employers Requirements could state that the operation and maintenance information be delivered over a secure website; this would allow information to be made available earlier and the status of the documentation would be clear. Simplified summary information should be provided for users.
<b>17. Special recognition</b>	The consultant Quantity Surveyor acted as a good arbitrator when communications became confrontational between the contractor and the Employer's team over delays. Furthermore, the cost consultant has not requested additional fees resulting from additional time expended whereas other consultants have.

### Lessons Learnt

<b>18. Key lessons and how they will be used and applied</b>	<ul style="list-style-type: none"> <li>• Client department sign off procedures to incorporate stakeholder consultation. Departmental pro-formas to be updated.</li> <li>• Key risk items to contractors procurement and delivery should be standing items on contract progress agendas. Departmental pro-formas to be updated.</li> <li>• In addition to technical manuals it would be useful to have a simple summary user guide for the building systems. This is one of the recommendations of the BSRIA 'Soft Landings' approach to building handover. Standard preliminaries and service consultants briefs to be updated.</li> <li>• Operation and Maintenance files - consider the use of a web hosting site for project information and hand over documentation. Recommendation to be carried to Town Clerks programme office.</li> </ul>
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### Appendices

<b>Appendix 1</b>	Budget Analysis
<b>Appendix 2</b>	Comparive before/ after photographs

### Contact

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Appendix 1

Budget Analysis

	<b>EVALUATION</b>	<b>TENDER</b>	<b>OUTTURN</b>	<b>VARIANCE</b>
	(£ 000s)	(£ 000s)	(£ 000s)	(£ 000s)
additional works			117	117
extension of time			37	37
ommission of p'sums and contingency			-76	-76
Adjustment for landscape works			-10	-10
scheduled works		1177	1177	0
non contract works			1	1
<b>Sub total Works</b>	<b>1,374</b>	<b>1,177</b>	<b>1,246</b>	<b>69</b>
Fountain	0	0	24	24
Non contract fitout	0	0	45	45
Museum collection display	120	120	174	54
Equipment	0	13	13	0
Materials	0	8	8	0
Professional fees Stages F- L	281	162	186	24
<b>sub total other project costs</b>	<b>401</b>	<b>303</b>	<b>450</b>	<b>147</b>
<b>Capital Total</b>	<b>1,775</b>	<b>1,480</b>	<b>1,696</b>	<b>216</b>
HLF Bid Stage 1	56	56	56	0
<b>Total project cost</b>	<b>1,831</b>	<b>1,536</b>	<b>1,752</b>	<b>216</b>

Appendix 2  
Comparive before/ after photographs



Before works



After works complete