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Redevelopment of Cleveland Pools, Bath - Structural Engineer Project Brief

Cleveland Pools Trust Ltd

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Revision History

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Date	Revision No.	Prepared By	Authorised By
10 July 2015	D00	Christopher Fagg	
13 July 2015	D01	Christopher Fagg	

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Contents

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1.0 Purpose of Document

This document sets out the project background scope of services and duties and deliverables for the procurement of the Structural Engineer consultant.

2.0 Background

The Cleveland Pools Trust Ltd have received a funding award from HLF to develop the exciting project of re-opening the existing outdoor Georgian bathing Pool in Bath, which was originally built in 1815. The site is listed grade II* and is part of the Bath World Heritage Site. The site was last used for swimming in the mid 1980's and is thought to be the oldest purpose designed Lido in the UK, possibly Europe. The project has evolved from the efforts of a committed local group who have fought to bring the site back into use as a naturally water treated open air swimming facility to serve the local community, adding a new dimension to Baths tourist offer away from the core of the City.

A key decision that must be made early on in this project will be whether the trust is able to deliver its aspiration for a naturally treated non-chemically treated pool. Dependent upon the method(s) used there is concern that a natural option may limit the number of swimmers per day which might adversely affect the business plan viability. Very careful consideration will therefore need to be given as to how to obtain the best advice from the appointed consultant design team, and perhaps request that an initial assessment of the relevant factors involved be provided at tender stage to provide convincing evidence of an understanding of the projects challenges.

A detailed list of the background documents to this project can be found in Appendix A. These can be found on the Cleveland Pools website www.clevelandpools.org.uk/en/left/information/

3.0 Scope of Services

The Trust requires a Structural Engineer consultant to provide design services for the refurbishment of the swimming pool facilities and the on-site Grade II* listed building.

The Structural Engineer will assist the Lead Designer role in refurbishing the existing Grade II* listed building, the site grounds and the on-site swimming pool. The renovated site will be used as a community owned lido by paying members of the general public. The renovated buildings will serve as the on-site offices, changing rooms and other facilities for the lido. Any renovations must maintain the buildings Grade II* listed status.

Cleveland Pools Trust would prefer the pool to be designed as either low chlorine or a no chlorine pool. The Structural Engineer will first support the feasibility study to be carried out to assess if a naturally filtered pool is viable. The Structural Engineer will then lead on setting out the Initial Concept design. Once the initial concept design has been completed the Structural Engineer will work alongside the Architect, M&E Consultant, the Ecologist and the Quantity Surveyor to complete the final concept design.

The procurement of the main contractor will be either Traditional with Contractor Design Elements or a Two Stage Design and Build Contract, therefore once the main contractor has been procured there will be the option to novate the Structural Engineer. The Structural Engineer will then proceed to advise either the main contractor or the client on the completed design.

Please note that tenders will need to be priced on the basis of a Two Stage Traditional Contract.

There will be a break point in the project should it not pass the second round bid for HLF funding. If this does not happen the Structural Engineer's services will no longer be required and the contract terminated.

Further specific points to meet the Trust's vision for the project will need assessed for their feasibility as part of the design process. These can be found in Appendix B.

4.0 Duties and Deliverables

The main duties and deliverables are listed out in Appendix C. The Consultant should include for weekly design meetings as well as the possibility for ad-hoc on site meetings.

5.0 Estimated Costs

The below table provides a breakdown of the agreed Capital Costs with the HLF. Please provide your fee quotes based on these figures.

Capital costs

Cost Heading	Description	Cost	Vat	Contingency		Total
		£	£	£	%	£
Repair and conservation work	Historic buildings, pool, paths and terraces	1,219,502	243,900	0	0	1,463,402
New building work	Café building and disabled access	452,027	90,405	0	0	542,432
Other capital work	River bank work, landing stage and landscaping work	164,669	32,934	0	0	197,603
Equipment and materials	Disabled adapted buggy,fit out cafe, heritage interpretation	73,600	14,720	0	0	88,320
Other	Contractors preliminaries,maintenance for the first 3 years post opening.	364,239	72,848	0	0	437,087
Total Costs		2,594,857	518,971	0	0	2,728,844

6.0 Project Programme

Please see Appendix D for the current project programme.

7.0 Project Organogram

Please see Appendix E for the current project organogram.

8.0 Tender Timetable

It is the intention of the Trust, that this procurement will follow a clear, structured and transparent process at all times and that all Tenderers will be treated equally.

Timetable	
Submission Instructions	
ITT Release Date	13 July 2015
Deadline for receipt of clarifications	20 July 2015
Target date for responses to clarifications	27 July 2015
Supplier Open Session	29 July 2015
Deadline for Return of Tenders	05 August 2015 by 15:00 (3pm)
Evaluation of Tenders	10 August 2015
Tender Interviews	17 August 2015
Notification of contract award decision	20 August 2015

Tenderers should note that this is an indicative timetable only and may be subject to change. Any changes will be communicated to all tenderers as soon as possible.

Please confirm whether you will be attending the Supplier Open Session at Cleveland Pools on 29 July at your earliest convenience, and by Friday 03 July at the latest, by emailing Christopher Fagg at Chris.Fagg@Provelio.com. The Open Session will include a brief background to the history of Cleveland Pools, following by a description of the project, tour of the site and time for questions and answers.

9.0 Instructions to Tenderers

9.1 Tender Requirements

Tenderers are required to submit the following information:

- Evidence of experience in working on similar projects. Please note we will be assessing this on the following criteria:
  - Experience in working on Heritage Lottery Funded Projects. Ideally you will have experience in working on three or more HLF funded projects.
  - Experience in working on either low or no chlorine swimming pools
  - Experience in new build construction within Grade II* listed surroundings
  - Experience in restoring a Grade II* listed or historical building
  - Experience of public consultation/community engagement
- Details of the proposed team the consultant has offered. We will be looking for CVs detailing each consultant's experience and qualifications.
- The Trust's preference is to use the services of a Contractor who has a local office in the South West Region. Please confirm the location from which the services will be provided along with an organisation structure chart for that location, showing links to any other offices and establishing how this office will support and interact with the Trust. Please demonstrate how the location and structure chart will:
  - Demonstrate value for money
  - Limit travelling costs and time (please note these costs must be included within the fee proposal)
  - Provide details of the timescales for availability of staff when needed to attend ad-hoc/unplanned meetings when or in the event that urgent matters arise.
- Your fee proposal, including the following:
  - A completed copy of the Appendix F Contract Data,
  - A costed activity schedule in line with the project programme.
- Proof of insurance as detailed in 10.0 Insurance Requirements.

9.2 Tender Instructions

Tender instructions are as follows:

- Please submit any queries to Christopher Fagg at Chris.Fagg@Provelio.com
- As set out in the above Tender Timetable please ensure the returns are received by 3.00pm on 20 July 2015.
- Please ensure tender returns are submitted via email to Chris.Fagg@Provelio.com or by post to:
  - Provelio Limited, The Meeting House, Lewins Mead, Bristol, BS1 2NN

10.0 Insurance Requirements

Cleveland Pools Trust will require the following proof of insurance:

- Evidence of PI cover (minimum of £5 million for each and every claim). If this is not available they should confirm that they would be eligible to obtain this level of cover if appointed.
- Evidence of Public and Employer Liability Insurance (minimum of £5 million). If this is not available they should confirm that they would be eligible to obtain this level of cover if appointed.

11.0 Quality and Cost Scoring

Tenders will be marked on a Quality:Cost ratio of Quality 50%:Cost 50%.

This will ensure that the successful applicant will be able to provide the right services for a fair price.

11.1 Quality Scoring

The Quality element of the scoring will be made up out of 50 marks which will be broken down as follows:

Experience in working on similar projects. Please note we will be assessing this on the following criteria: — 15 marks

- Experience in working on Heritage Lottery Funded Projects. Ideally you will have experience in working on three or more HLF funded projects.
- Experience in working on either low or no chlorine swimming pools
- Experience in new build construction within Grade II* listed surroundings
- Experience in restoring a Grade II* listed or historical building
- Experience of public consultation/community engagement

The proposed team the consultant has offered. We will be looking for CVs detailing each consultant's experience and qualifications. — 10 marks

The Trust's preference is to use the services of a Contractor who has a local office in the South West Region. Please confirm the location from which the services will be provided along with an organisation structure chart for that location, showing links to any other offices and establishing how this office will support and interact with the Trust. — 10 marks

Please demonstrate how the location and structure chart will:

- Demonstrate value for money
- Limit travelling costs and time (please note these costs must be included within the fee proposal)
- Provide details of the timescales for availability of staff when needed to attend ad-hoc/unplanned meetings when or in the event that urgent matters arise.

Performance at Interview — 15 marks

Total — **50 marks**

The Interviews held will approximately last an hour and will seek to determine each applicants understanding of the project whilst assessing the quality of both the work and the team they have offered.

Each interview will begin with a ten minute presentation where each tenderer will demonstrate the following:

- The company they work for,
- Who will be working on this project,
- The skills their team will offer this project,
- A summary of the team's experience,
- The key challenges they have identified for this project.

11.2 Cost Scoring

Compliant price submissions will be scored with the lowest gaining 50 marks and the other prices scored relative to the cheapest.

Please provide a costed activity schedule in line with the project programme detailing your fee proposal for this project. Please ensure that any travel costs and expenses are included within your fee proposal. Further criteria may be found in Appendix E, Contract Data.

Please fill in the Table A found in Appendix F, Contract Data, detailing your price breakdown across the RIBA Stages.

Appendices

Appendix A - List of Project Background Documents

1.0 List of Background Project Documents

Business Case Submitted to the Heritage Lottery Fund April 2014	http://www.clevelandpools.org.uk/pdfs/BusinessCase.pdf
Conservation Statement	http://www.clevelandpools.org.uk/pdfs/ConservationStatement.pdf
Initial Feasibility Study	http://www.clevelandpools.org.uk/pdfs/FeasibilityStudy.pdf

Appendix B - Trust Vision

Vision – key physical elements the project is to provide to be included within Briefs for design team/consultants

- Affordable open air heated naturally water treated swimming pool open all year round 22-24c
    - Roll away insulated pool cover out of sight when not in use
    - Sustainable renewable heating systems wherever possible
        - River water heat recovery
        - Solar PV/thermal
        - Super insulation to pool and buildings
        - Dark black/slate pool tiles and bottom (maximise solar heating gain)
- Children's facilities (10 yrs and under separate from main pool (Hygiene)/limited hours from 11am – 5pm – reduce noise for residents) these might include:
    - Swimming facility – splash/running water/fountain/swimming area (summer only? – heated 28-30c)
    - Waterslide (using landscape's natural slope?)
    - Traverse climbing wall?
- Sauna & or hot tub (assumed would enhance winter use of pools)
- Sensitive restoration of grade II* Georgian cottage and changing rooms, new uses to maximise revenue generation opportunities
- Appropriate paving materials and surfaces, sensitive to setting
- New build elements modern design that does not compete visually with or degrade significance of grade II* buildings and World Heritage site
- Take opportunities to enhance significance where there this would not negatively affect business case e.g. potential restoration of lost significant features:
    - Ladies cold plunge pool (incorporate with sauna?)
    - perpetual shower
    - other features/landscaping
- Create a new Retail Café / shop – within new or existing buildings?
    - tuck shop, hot cold drinks and snacks, ice creams or Sit down inside café cooked meals
    - sell merchandise – pool swim wear
- Office pool manager
    - volunteer meeting area/storage facilities
    - room for hire/other activities – massage/healing/training/education
- Adaptable space for events / covered – retractable?
- Historic Interpretation
- Increased security
    - Boundary wall repair, visual and acoustic screening from adjacent residents, enhanced entrance gates
- Welcoming access
    - Foot
    - Cycle parking area
    - Boat pontoon – a pontoon has been procured separately and will be in place by Autumn 2015

Known issues to be considered with natural pool systems

The Trusts own research has indicated that two main natural pool systems exist (there maybe others). Notes of comprehensive questions asked and initial responses of two companies contacted

that represent each system are included for information in Appendix A along with their contact details.

- **Biotop** - Appears to rely on both physical and biological filters supplemented with areas of aquatic planting. Uncertain if draft business plan target of up to 300 users per day in summer, could be accommodated. Rule of thumb is 3cubic meters of water per user per day. Areas of aquatic planting cannot be used for swimming, but can be separate from main swimming pool. With a limited site area this may be a constraint upon water area available for swimming.
- **Clear water revival** – claim that no aquatic plants are required with their sealed biological filter system, but they can be included for aesthetics. Feel that up to 300 users could be accommodated with sufficient filters, user number would need to be calculated based on water volume available in final design

Both systems appear to require that:

- Filters whether aquatic or sealed units must be separated from river flood water. Flooding would require that any areas of aquatic plants be entirely renewed due to potential contamination, sealed filters if not isolated would similarly have to be re-conditioned
- Filling/Re-filling pool with mains water would require filters to remove phosphate content. Potential use of bore hole water may reduce the amount of filtering required dependant on water tests
- Recommended temp range for heated natural pool 22-24 c
- recommended that children under 10yrs use a separate pool to avoid cross contamination with main pool, additional UV treatment recommended, or a chemically treated option for this element
- plant rooms of around 12 sqm area
- stringent policies required for wildlife/rodent management in riverside location minimising risks of Weils disease

The Trusts original 2011, options appraisal by Fergusson Mann also included substantial initial research on pool systems which it maybe useful to review as back ground information. See http://www.clevelandpools.org.uk/pdfs/OptionsAppraisal2.pdf - see page 43

1.0 Appendix A Pools Specialists

1.1 Biotop

Contact details:

Email	Ben Garner <bg@kingcombe.com>
Phone Number	07787528058

1. Feasibility - A naturally treated swimming pool is entirely feasible in this location. Any system used in this location will be subject to the challenges of the river side location.

2. Need to Aquatic plants – The Biotop system could in theory be designed without any aquatic plants. *(You will need to check with designers in Austria to check that this can be done).* A no aquatic plant system would be based around a large gravel/biological living filter accommodated within the volume of the existing children's pool which could be covered over. The depth at the shallow end would need to be deepened. If aquatic plants were used, which is preferable in your view, they would need to be located away from any potential flood risk. Use of the existing children's pool area would be an option to achieve this, in which case not all of it could be covered. The general rule of thumb is 50:50 area of aquatic plants to swimming area. Less planted area can be achieved with more biological filters added.

3. User number limits –As a rule of thumb 3 cubic meters water volume is required for each person using the pool per 24 hr day (Needs confirmation, FLL guidelines). It makes no difference how long they stay in the pool. You have taken measurements to ascertain water volume, and make an estimate of the maximum no's of swimmers per day that could use the Cleveland Pools site. *(as a comparison you stated that the Kings Cross temporary pool that you designed is of a similar size, and is designed to accommodate a maximum of 163 swimmers per 24 hr period).*

4. Plan Room size – as a comparison the Kings Cross unheated pool has a plant room of approximately 12sqm, including 3no bio filter units and pumps.

5. Use by children - A separate children's pool for ages 10 and under is recommended to help prevent potential contamination of the main pool (It's something to consider as the risk of faecal contamination is higher with young children). However, management ensuring younger children wear waterproof nappies would be important. Children as young as 4 yrs use the Kings Cross Pool if wearing swim nappies. If contamination occurred the pool would need to be closed (entire pool if not separated), water quality tested by a UCAS accredited laboratory and would take around 3 days to get results. *(By comparison a chlorinated pool would need to be closed for 1 day and undergo super chlorination, to ensure safety prior to re-opening).* Whilst a children's pool or splash pool could be naturally treated, a chlorinated option carries less risk (because the volume is too small to offer any 'buffering'). UV treatment could also be considered.

6. Water temperature – max recommended temp is 25c. warm water holds less Oxygen and so pool can be more prone to algea bloom unless more oxygen added with a water fountain/fall feature. This can be a positive part of the design.

7. Wildlife – recommend excluding wildlife wherever possible especially birds

8. Rats and Weils disease – need to guard and take every precaution against rats, esp given location beside river. Regular rodent control and traps, good hygiene emptying bins no food spillage, drinks or eating to be allowed around pool margins close to river, minimises risk.

9. If the pool flooded – would be preferable to design the site so that it could be protected from flooding. Aquatic plant areas and biological filter areas must be isolated from flood water to prevent contamination. Main pool container to be pumped out and washed. Refilling with mains water would require special filters to remove phosphorous (highly likely). Ground water from a bore hole would be a better option, but this may also have to be filtered depending on water quality. *(can suggest names of suitable bore hole companies, est £15-£30k dependent upon depth and ground conditions – also consider access for the drilling rig)* At Kings Cross the mains water phosphorous content was so high that extremely expensive deionization plant was brought in especially to remove it when filling the pool. *(You felt this would not be an easy option on this site as the equipment was housed on a large pantechnican lorry)*

10. Heating – expensive, recovery of heat from river would require specialist equipment and consents (there are also practical considerations). Air source heat pumps are (fairly) noisy, ground source heat pump would be an option through use of vertical bore holes, quiet no noise issue. Dark pool lining and shallow areas can help heat water up naturally. *(Kings cross pool currently 15c (has reached 20), mixture of bathers with and without wetsuits)*

11. Water quality monitoring – water chemistry, clarity, oxygen levels and microbiology measured weekly by UCAS credited laboratory. Legionella must be tested for in waters over 18c, particular risk if a water feature created a fine mist.

12. Maintenance – inlets to pipework from pool daily cleaning to remove leaves etc. bespoke maintenance regime would be designed given nature of site, pollen falling on water, leaves from trees.

13. Suncream/skin products – No recognised issues, general requirement to shower before entering pool.

14. Relevant legislation – No BS for water quality in natural swimming pools. Germany has water treatment guidelines for swimming ponds FLL – *(post meeting research)* *http://www.iob-ev.eu/cms/iob/en/cms?cms_knuuid=4330650c-cf96-4428-b26d-a00b3d56236c* *http://www.fll.de/shop/english-publications/swimming-pools-with-biological-water-purification.html* *- in German only at present time ?*

15. Existing schemes – Kings Cross temporary public pool most recent and of comparible size, un heated, capacity 163 users per 24 hr period. Other pools by partner Biotop installers in Austria, Germany. King Coombe would seek specialist advice on design of a pool on this site from Austria.

16. General management & operation – suggest external paving apron sloped back away from the pool edge so water run-off does not enter pool. Hot tub and chemical treatment transference to natural pool not considered an issue, recommend shower before pool

entrance. *(running of Kings Cross pool handed over to company that does everything, physical maintenance, ticketing, water quality checks)*

1.2 Clear Water Revival

Contact details:

Email	David Nettleton <david@clear-water-revival.com>
Phone Number	0117 9232588

1. Feasibility - A naturally treated swimming pool is entirely feasible in this location.

2. Need for Aquatic plants - The Clear Water Revival (CWR) system does not require any use of aquatic plants in or beside the swimming pool to treat water, maximising water area for swimming. With the CWR system aquatic plants can be used, but are not essential and would be optional inclusions, if desired, purely for more aesthetic reasons. *(A swimming pond, more natural appearance would usually include these with softer sides, and would have a water treatment function. The conventional rule of thumb for swimming ponds water surface area to planted area is 50:50 swimming:planted areas)* Correct, so we are drawing a distinction here between *Natural Swimming Pools* i.e. swimming pools filtered naturally, and *Swimming ponds*, i.e. ponds that you can swim in, where algae and hygiene control is through an ecosystem approach with adequate and balanced macrophytic planting.

3. Water treatment system - The CWR system relies upon living 3 stage biological filters, contained within pressure vessels. These are connected to the pool via pipes and can be remotely located, water circulating via pumps.

4. User number limits - There is no theoretical limit of the number of people that could use the pool, 300 per day in summer is feasible. Additional filters would be added to increase user load. From between 6-8 filter vessels would be required for a pool of the current size. This would necessitate a plant room of approximately 8x4x2.2m high, possibly as little as 7x3m (would need to do calculations). Filters require cleaning/flushing, every 2-3 months. *(By way of comparison, you estimated Clifton Lido, low chlorine pool accommodated 250 swimmers per day).*

5. Use by children - A separate children's pool for ages 10 and under is recommended to prevent contamination of the main pool. This can be naturally treated, but it's recommended that it be supplemented with UV light sterilization also. (*in your experience children tend to like water heated to 30-32C too hot for a natural system, and a traditionally treated chemical pool is possibly an option for young children)*. If contaminated, solids would need to be removed, the pool closed and a full circulation of its water with UV completed prior to re-opening (est 1 day but water volume and filter size dependant), hence best to have a separate pool. I would say that the main purpose for a separate pool would be for mitigating the inconvenience to users if very young children have 'accidents' in the pool thereby causing closure of the pool for the day, and also due to the temperature issue if very young children use the pool. If users have to be over a specific age ie no toddlers then I don't think a separate pool is necessary.

6. Water temperature - Heating water increases efficiency of natural biological treatment process, ~~optimal temperature 22-24c, up to 28c possible, but not recommended~~ but It is not recommended to go over 30c due to potential legionella risk if there are water features added to the system.

7. Educational Partnership & Research - The CWR system is being reviewed with UWE in Bristol as part of a natural water treatment research project. Formally looked at by

Cranfield University Water Sciences Institute. CWR is the first company in the world to use a system requiring no conventional aquatic plants. Our innovate UK funded R&D programme is being carried out in collaboration with Cranfield and UWE. Senior staff (i.e. Prof. Darren Reynolds at UWE) at both universities have been overseeing our work.

8. If the pool flooded – the circulation of water to the living filters would need to be isolated to prevent contamination. Cleaning and re-populating them with living organisms, starting them up from scratch, would otherwise take up to 3 weeks (2 weeks to seed, 1 week to filter all pool water). The main pool would need to be drained, pressure washed and re-filled. Re-filling with mains water would be expensive, and would require special additional filters to remove phosphates (these filters can be included within the design and can be regenerated on site without being taken away). Once, re-filled and filtered, the pool should be useable within a period of 7 – 10 days provided the living biological filters have been maintained during closure. If the filters were isolated and maintained in operation (by recirculating through a small tank) during pool closure the pool would be useable from the point the filter system is reconnected. A better option for re-filling the pool would be to use spring water or water from a bore hole. (in your experience a 60m bore hole to access ground water should be sufficient and cost around £9,000 to create). Such water would not require special filtering and would be free. There is still a requirement for phosphate extraction from borehole water but it requires less treatment so costs are reduced.

9. Heating – using dark black slate tiles in the pool will maximise natural solar heating, in summer sunshine un-shielded by trees 20c should be achievable this way. A pool cover will minimise heat loss when not in use. Pool sides and bottom should also be insulated. Heating options might include solar/thermal, heat recovery from river would require Specialist Company. Other pools typically use electricity or gas.

10. Water quality monitoring – digital meter continuously measures water quality and is monitored off site via internet. Temp/O2/Ph/Nitrogen levels. Microbiological testing to be carried out by a lab.

11. Maintenance – skimmers require daily checking /cleaning to remove leaves etc. Pumps and pump inlets require daily checking, flow rates need checking on gauges. Leaves will need removing from pool at the end of each day (prior to putting the cover on) if the skimmers have not caught them. Use of a pool cleaning robot maybe advisable to automate this. Annual maintenance regime to regenerate and flush filters would be done under contract with CWR.

12. Rats and Weils disease – if there is not source of food, no hiding areas, rats should not be a problem as they have no reason to enter the pool water.

13. Suncream/skin products – there should be no issues with use, however would recommend that everyone showers using natural shampoo biodegradable/ prior to entering water. CWR could work with trust to provide and make a suitable product(s) as at Clifton Lido.

14. Relevant legislation – No current legislation for naturally treated pools in UK.

15. Existing schemes – Scarlett Hotel, Cornwall, CWR designed and built by others ½ Cleveland pools size. Belfast Public Pool opening Sept 15 similar size to Cleveland Pools designed for around 150 users per day. Austria, German, Swiss and Belgium (??) campsites, have similar pools

16. General management & operation – pools of less than 1.2m depth do not require lifeguards

Appendix C - Duties and Deliverables

Structural and Civil Engineering Services Deliverables/ Plan of Work

This section sets out the overall tasks required for the delivery of the project from the whole consultant team. In all stages the appointed consultants will be expected to work together closely as a team with regular design team meetings, co-ordinated by the Architect.

The design work must ensure evidence of a strong conservation philosophy based on the Cleveland Pools Conservation Plan. The scheme must also demonstrate how it will achieve and where possible, go above and beyond the statutory requirements with regard to social sustainability and accessibility.

Public and stakeholder Consultations will need to be carried out in the pre-application stages [2 and 3], potentially taking the form of one or two exhibitions and a number of targeted meetings and some larger workshops. These will need to involve the conservation plan consultant and possibly others, in continued development and understanding of the needs of potential end user groups, to feed into the full range of plans, to be submitted within the stage II application (including, Business Plan, Activity Plan).

The Consultant shall provide the following Services in whole or part as instructed by the Trusts Representative.

For ease of reference the Services have been divided into stages as described below. General Obligations, applicable to all stages of the Project, are identified first followed by specific obligations for each stage in accordance with the Trust's Project Management Manual. Such divisions however shall not limit the Consultant's obligations generally to provide the Services when appropriate.

A list of typical stage deliverables is included within each stage. The purpose of the deliverables is to identify the specific products that must be produced generally and at each stage of the project. This list is not exhaustive and adjustments adding or deleting deliverables must be made, based on the needs of the Project before each stage commences. Failure to produce deliverables is construed to mean that a Project is in delay.

The Services should not be viewed as definitive. The Consultant is encouraged to use his own initiative and expertise to assist the Client in achieving the right solution.

1. GENERAL OBLIGATIONS

1. To take responsibility for the structural design and integrity of the project, including the full design for the underground drainage, external retaining structures (for example retaining walls, swales, crib lock walls etc) and the inspection of completed works for compliance with design and specification.
2. The Structural Engineer has a duty to ensure that they produce a cost-efficient design solution. This may also include contribution to Value Management / Value Engineering if required.
3. Co-ordinate consultations with third parties that relate to the structural design of the Project.
4. Agree with the Project Team and the Client compatible computer software that will:
   - enable the transfer of information between the Client, Project Team and the Contractor; and
   - produce and procure from the Project Team and Contractor co-ordinated as-built information and operation and maintenance manuals from both the Project Team and the Contractor for ease of use by occupiers.
5. Provide information to the Design Team Leader to enable the Design Team Leader to prepare a monthly progress report to the Project Manager identifying amongst others:
   - The progress of the Consultant’s design;
   - The progress of the Contractor’s design (if any);
   - Comments in relation to quality of the Project on and off site;
   - Progress of the documentation to be provided on completion of the Project.

The purpose of the report is not to catalogue past achievements but to set future objectives and to assess potential problems.

6. Review and approve any design drawings produced by others, including fabricators and sub-contractors, which fall within the remit of the Structural Engineer. These may include contractor design packages such as roof truss rafters.

7. Operate a quality management procedure appropriate to the needs of the Project.

8. Comply at all times with the Trust's Standing Orders, Financial Regulations.

9. Assist the Design Team Leader with input into stage plans, including programming the Design Team's work and defining the design deliverables to be produced at the end of the stage.

10. Assist the Design Team Leader with input into the Project Approach during stage 0 and assist with reviewing and updating in subsequent stages.

11. Assist in the preparation of the risk log. Take ownership of specific risks as agreed with the Design Team Leader, and assist in the formulation of action plans.

12. Execute risk management action plans, advise the Design Team Leader of changes in the status of risks. Identify new risks as they arise, and provide input into their mitigation.

13. Manage the design resources available to produce required deliverables, highlighting resource problems as necessary with the Design Team Leader.

14. Manage and co-ordinate the production of Design Team deliverables in accordance with the stage plan.

15. Attend Design Team co-ordination meetings.

16. Raise Project Issues as they arise with the Design Team Leader and assist with their evaluation and resolution, recommending action where appropriate.

17. Ensure technical compliance of the structural design with relevant legislation, design codes and standing orders.
18. Contribute to and provide completed design team deliverables for incorporation into the end stage reports.
19. Agree with the Design Team Leader the Design Team deliverables to be produced in the next stage and assist the Design Team Leader with programming for their delivery.
20. Obtain approval from the Design Team Leader to proceed to the next Project stage.

2. STAGE 0 – PROJECT INITIATION AND FEASIBILITY (RIBA Stages A &B)

Management Duties

1. Assist the Design Team Leader with the co-ordination of investigations, surveys and feasibility design studies.
2. Assist the Design Team Leader with the presentation of the recommended scheme and estimate, together with a summary of rejected options , to a Client Representative Review Panel at a formal **Feasibility Design Review** prior to formal issue of Stage End report to the Project Board

Research Information

3. Receive, analyse and comment on the Client's requirements in conjunction with the Project Team including the draft brief, budget and preferred programme, raising any issues with the Client at the earliest opportunity.
4. Inspect the Site(s) and research all information available in relation to the Site(s) and any existing structures, services and other constraints affecting the Site(s).
5. Advise on the structural aspects of site appraisals.
6. Assist with the Identification of Options for consideration
7. For each Site recommend any surveys, investigations or other risk assessments that will be necessary to inform the structural design and advise the Design Team Leader on the timing of such assessments. Attend site to witness any trial pit investigations.

Provide Design Information, Analysis and Advice

8. Advise on the structural aspects of feasibility design studies for each option; consider comments and amend design(s) as appropriate.
9. Provide information for initial capital and life cycle costs.
10. Advise on risks associated with each option

11. Contribute to the appraisal of options
12. Contribute to the development of the preferred option sufficient to prepare the strategic brief.
13. Contribute to the preparation of the strategic brief.

Typical Stage 0 Design Deliverables

14. Contribute to the Site investigations, surveys and constraints report
15. Contribute to the Feasibility design studies report

STAGE 1 – CONCEPT DESIGN (RIBA Stage C)

Research Information

1. Consider structural aspects of feasibility design studies, site surveys and investigations and appraise constraints.
2. Evaluate Strategic Brief; consider programme, cost, risks and environmental issues.
3. Identify any additional information required.

Provide Design Information, Analysis and Advice

4. Participate in the development of the Project Brief
5. Advise on the structural aspects of initial design studies.
6. Consider comments on design studies with Client and Users
7. Assist with the preparation of Concept Design proposals in accordance with the Strategic Brief and developing Project Brief and provide information for initial cost studies.
8. Prepare and review initial design risk assessments with the Principle Designer.

Typical Stage 1 Deliverables

9. Room live loadings schedule, including abnormal point load requirements.
10. Option appraisal and recommendations for structural elements. To include load transfer and stability provision.
11. Design Risk Assessment with regard to structural design elements, to include risks in use and risks in construction and maintenance.
12. Contribute to Design Development Report to include:

- Indicative structural engineering scope of works, inclusive of underground drainage and external retaining structures
- Indicative transportation and environmental impact scope of works

STAGE 2a – SCHEME DESIGN (RIBA Stage D)

Management Duties

1. In conjunction with the Design Team Leader co-ordinate and present detailed proposals and cost plan, to a Client Representative Review Panel at a formal **Scheme Design Review** prior to formal issue of Stage End report to the Project Board

Provide Design Information, Analysis and Advice

2. Contribute to the ongoing development of the Project Brief
3. Evaluate structural aspects of concept design proposals Develop structural aspects of detailed design solutions
4. Contribute to the preparation of Detailed Proposals and outline specification of structural elements
5. Provide information on structural design for elemental cost plan
6. In conjunction with the Architect consult and negotiate as necessary to establish compliance in principle with statutory requirements.
7. Review design co-ordination and development with the Design Team Leader, carry out design risk assessments.

Consents

8. Assist the Architect in making and negotiating full development control, conservation areas and listed building consents with the local authority planners, engineers, surveyors and other relevant departments.

Typical Stage 2a Deliverables

9. Contribute to the Design Development Report to include:

- Indicative structural engineering scope of works and outline specification of structural elements, inclusive of underground drainage and external retaining structures.
- Structural aspects of Building Regulation and other statutory approval compliance status

10. Updated design risk assessments

3. STAGE 2b – DETAILED DESIGN, PRODUCTION & TENDER INFORMATION (RIBA Stages E,F & G)

Provide Design Information, Analysis and Advice

1. Complete final layouts.
2. Receive and incorporate design information from Design Team and consultees
3. Consult statutory authorities on developed design proposals
4. Receive and comment on structural aspects of service locations, and major builders' work for services installations i.e. water storage tanks, air handling units.
5. Provide for integration of service installations and associated major builders work implications
6. Complete sizing of all structural elements
7. Provide information for cost checks
8. Review design co-ordination and development with Design Team Leader review and update design risk assessments, and provide final information for pre-construction information document.
9. Prepare, including receiving and integrating information from Design Team and specialists, all structural aspects of co-ordinated production information.
10. Issue design deliverables for preparation of tender pricing document and pre-tender estimate

11. Advise on contract conditions, to include preliminaries, contingencies, access, working and storage areas, work sequence and phasing.
12. Provide design deliverables to be included with tender documents

Consents

13. In conjunction with the Project Team, submit, negotiate and obtain Building Regulation approval and all other statutory approvals.

Typical Stage 2b Deliverables

14. Hard copies of all structural information required for tender – 1 set per tendered plus 2 additional copies
15. Design Calculations
16. Finalised general arrangement plans for all structural elements, inclusive of underground drainage and external retaining structures (1:50)
17. Finalised structural sections (1:100 and 1:50)
18. Finalised structural elevations (1:100)
19. Reinforcement schedules, including bar bending schedules
20. Beam and lintel schedules
21. Finalised construction details for all structural elements to the appropriate scale
22. Project specific NBS Specification for all structural elements based on Trust's Standard Specification for Building Works
23. Finalised structural details for major builder's work in connection with building services engineering, including statutory authorities
24. Statutory compliance certificates (Planning, Building Control etc.)
25. Updated design risk assessments.

STAGE 3 – TENDER AND CONTRACT (RIBA H&J)

Provide Design Information, Analysis and Advice

1. Assist with the appraisal of tenders and any negotiations with tenderer(s) authorised by the Project Manager
2. Contribute to the tender report
3. Contribute to the preparation and assembly of the main contract documents
4. Attend and contribute to pre-contract meeting

Typical Stage 3 Deliverables

5. Record of responses to tenderers queries
6. Technical evaluation of tenders for incorporation into tender report.
7. 2 sets of structural drawings for contract

At the end of RIBA Stage 3 and the submission of the Round 2 HLF application there will be a break clause as all subsequent Stages through to completion are subject to HLF deliver funding being secured.

At the end of RIBA Stage 3 if the Round 2 HLF application is successful there will be the option to Novate the Architect.

4. STAGE 4 – CONSTRUCTION, COMMISSIONING & HANDOVER (RIBA Stage K)

Inspection and Compliance Duties

1. Make regular visits to the Site, as required, to inspect the progress and quality of the work being executed by the Contractor. This must be once fortnightly as a minimum until the structural element of the work is complete. Assist in the resolution of any queries received. It is expected that this will as a minimum, cover the inspection of formations, reinforcement of significant elements, steelwork and timber trusses / framing. This list is not exhaustive and other visits to deal with specific elements may be required.

2. Receive reports from Contractor, Design Team and Clerk of Works, comment and take action as appropriate.

3. Contribute to Contract Administrators monthly report.

4. Attend contract progress meetings and present Structural Engineers report; and attend all other appropriate meetings as requested by the Project Manager. Where appropriate, these may be combined with visits required under 6.1

5. Receive and comment on snagging list from Clerk of Works, agreeing any outstanding items with the Contract Administrator

Provide Design Information, Analysis and Advice

6. Respond to reasonable requests for additional information from main contractor, sub-contractors and specialist suppliers and contractors.

7. Provide as built drawings and update specification for incorporation into Health and Safety file

Typical Stage 4 Deliverables

8. Contribution to Contract Administrators monthly report.

9. Inspection reports

10. Advise the Contract Administrator on the need for Instructions

11. Response to reasonable requests for additional information

5. STAGE 5 – DETECTS LIABILITY & PROJECT CLOSURE

Management Duties

1. Contribute to, and provide completed design team deliverables for incorporation into, the Project Closure Report.

2. Attend and contribute to the Post Project Review

Inspection and Compliance Duties

3. Comment on defect reports, determine necessary action and advise the Contract Administrator.

4. Assist the Contract Administrator with reviewing decisions affecting the completion date within the period prescribed in the Building Contract
5. Assist the Contract Administrator with pre-final inspections,
6. Assist the Contract Administrator with the final inspection.

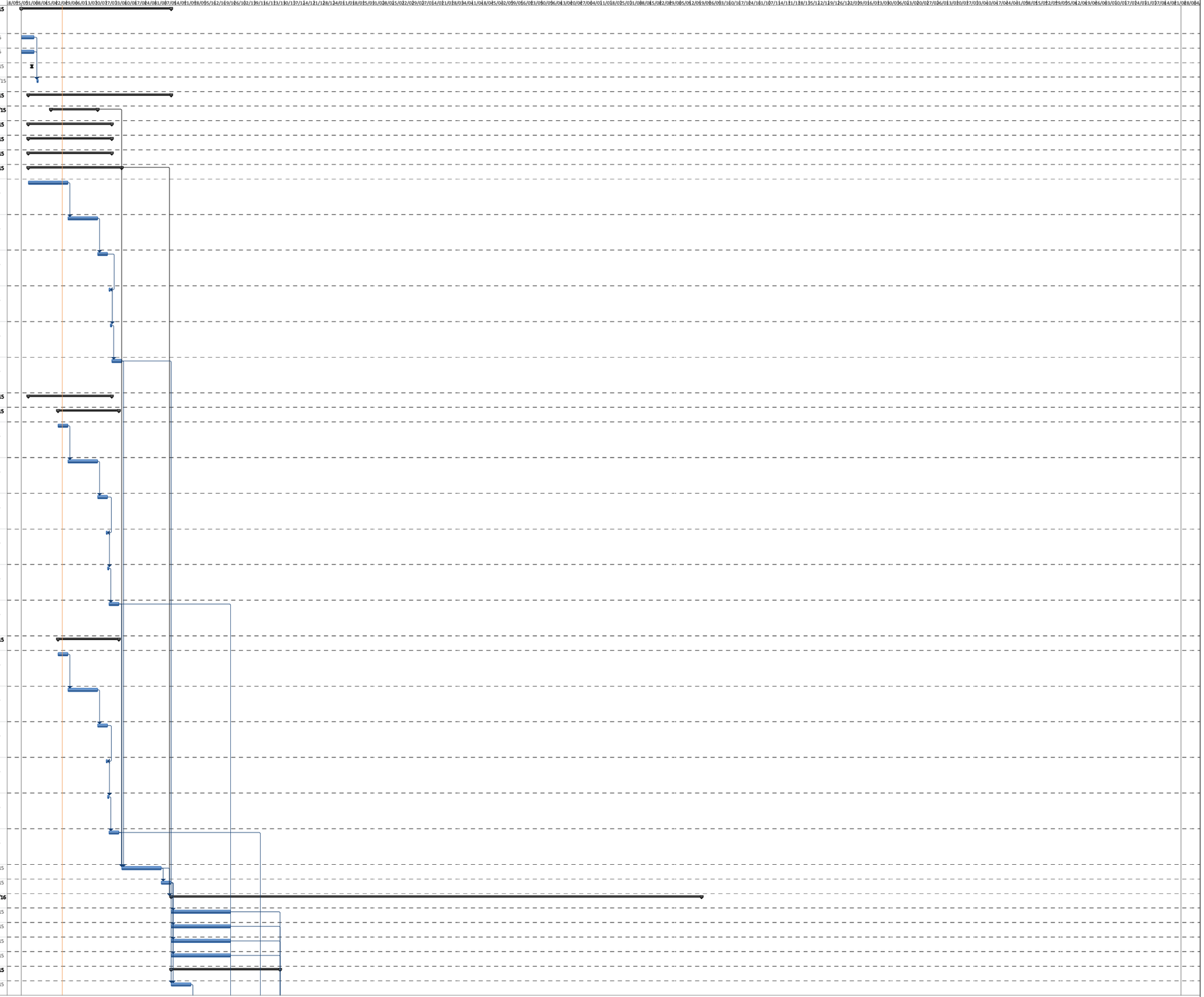
Typical Stage 5 Deliverables

7. Defect inspection reports
8. Input into Post Project Review
9. As built drawings

Appendix D - Project Programme

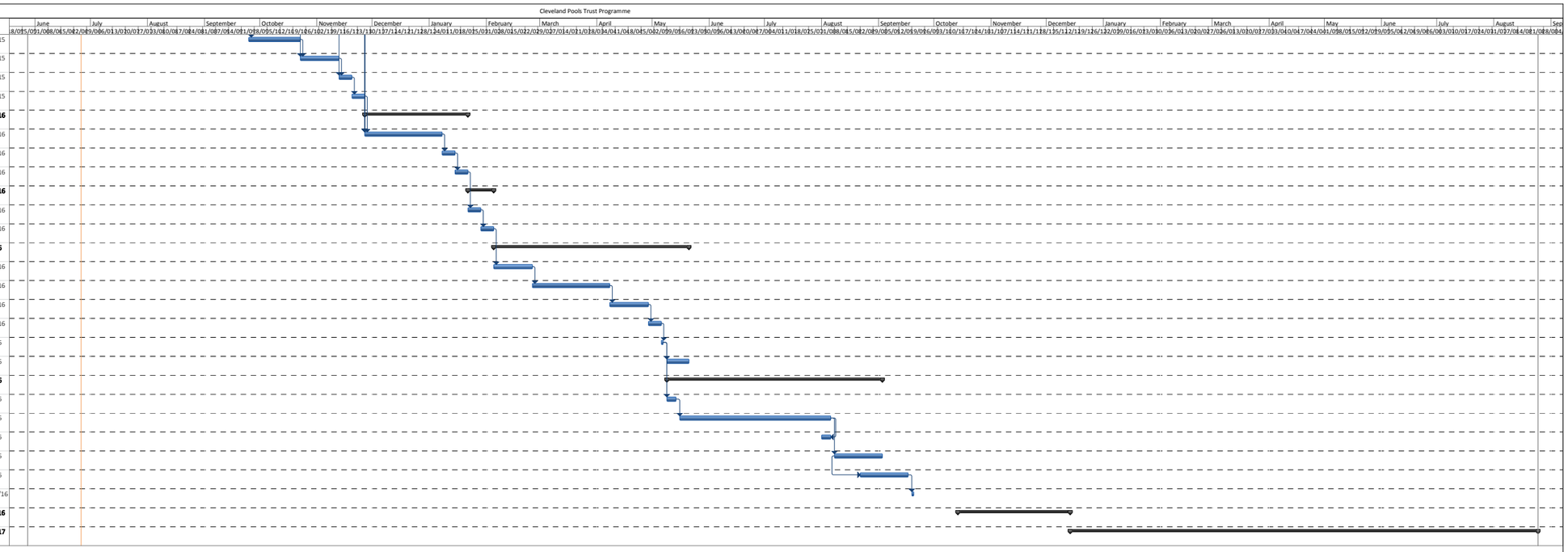
Cleveland Pools Trust Programme

ID	Task Name	Duration	Start	Finish
1	**Stage 1 - Preparation**	**76 days**	**Thu 28/05/15**	**Thu 10/09/15**
2	Finalise Procurement Strategy	7 days	Thu 28/05/15	Fri 05/06/15
3	Finalise Vision for the Project	7 days	Thu 28/05/15	Fri 05/06/15
4	Meeting with HLF Project Monitor	1 day	Thu 04/06/15	Thu 04/06/15
5	Project Board Meeting	1 day	Mon 08/06/15	Mon 08/06/15
6	**Consultant Procurement**	**73 days**	**Tue 02/06/15**	**Thu 10/09/15**
7	**Procure Pools Specialist**	**23 days**	**Thu 18/06/15**	**Mon 20/07/15**
13	**Conservation Plan**	**43 days**	**Tue 02/06/15**	**Thu 30/07/15**
20	**Activity Plan**	**43 days**	**Tue 02/06/15**	**Thu 30/07/15**
27	**Business Plan**	**43 days**	**Tue 02/06/15**	**Thu 30/07/15**
34	**Procure Architect**	**48 days**	**Tue 02/06/15**	**Thu 06/08/15**
35	Prepare Tender Documents	4 wks	Tue 02/06/15	Mon 29/06/15
36	Tender Period	3 wks	Tue 30/06/15	Mon 20/07/15
37	Assessment Period	1 wk	Tue 21/07/15	Mon 27/07/15
38	Interview	1 day	Wed 29/07/15	Wed 29/07/15
39	Notify successful and unsuccessful applicants	1 day	Thu 30/07/15	Thu 30/07/15
40	Appoint Architect	5 days	Fri 31/07/15	Thu 06/08/15
41	**Procure Ecologist and Flood Modelling**	**43 days**	**Tue 02/06/15**	**Thu 30/07/15**
48	**Procure Mechanical and Electrical Engineer**	**31 days**	**Tue 23/06/15**	**Tue 04/08/15**
49	Prepare Tender Documents	1 wk	Tue 23/06/15	Mon 29/06/15
50	Tender Period	3 wks	Tue 30/06/15	Mon 20/07/15
51	Assessment Period	1 wk	Tue 21/07/15	Mon 27/07/15
52	Interview	1 day	Mon 27/07/15	Mon 27/07/15
53	Notify successful and unsuccessful applicants	1 day	Tue 28/07/15	Tue 28/07/15
54	Appoint M&E Consultant	1 wk	Wed 29/07/15	Tue 04/08/15
55	**Procure Quantity Surveyor**	**31 days**	**Tue 23/06/15**	**Tue 04/08/15**
56	Prepare Tender Documents	1 wk	Tue 23/06/15	Mon 29/06/15
57	Tender Period	3 wks	Tue 30/06/15	Mon 20/07/15
58	Assessment Period	1 wk	Tue 21/07/15	Mon 27/07/15
59	Interview	1 day	Mon 27/07/15	Mon 27/07/15
60	Notify successful and unsuccessful applicants	1 day	Tue 28/07/15	Tue 28/07/15
61	Appoint Quantity Surveyor	1 wk	Wed 29/07/15	Tue 04/08/15
62	Prepare Natural Filter Feasibility Study	4 wks	Fri 07/08/15	Thu 03/09/15
63	Review Project Feasibility	1 wk	Fri 04/09/15	Thu 10/09/15
64	**Stage 2 - Design, Tender and Contract**	**267 days**	**Fri 11/09/15**	**Mon 19/09/16**
65	Prepare Conservation Plan	6 wks	Fri 11/09/15	Thu 22/10/15
66	Prepare Activity Plan	6 wks	Fri 11/09/15	Thu 22/10/15
67	Carry out Ecological Survey and Flood Assessment	6 wks	Fri 11/09/15	Thu 22/10/15
68	Prepare Business Plan	6 wks	Fri 11/09/15	Thu 22/10/15
69	**Concept Design**	**55 days**	**Fri 11/09/15**	**Thu 26/11/15**
70	Architect Review Brief	2 wks	Fri 11/09/15	Thu 24/09/15



Cleveland Pools Trust Programme

ID	Task Name	Duration	Start	Finish
71	Initial Concept Design	4 wks	Fri 25/09/15	Thu 22/10/15
72	Final Concept Design (M&E, Conservation, Ecologist, Business)	3 wks	Fri 23/10/15	Thu 12/11/15
73	QS Concept Design Costs	1 wk	Fri 13/11/15	Thu 19/11/15
74	Client Review and Sign Off	1 wk	Fri 20/11/15	Thu 26/11/15
75	**Outline Design**	**40 days**	**Fri 27/11/15**	**Thu 21/01/16**
76	Prepare Outline Design	6 wks	Fri 27/11/15	Thu 07/01/16
77	Outline Design Costs	1 wk	Fri 08/01/16	Thu 14/01/16
78	Review Outline Design with Stakeholders	1 wk	Fri 15/01/16	Thu 21/01/16
79	**End Design Stage**	**10 days**	**Fri 22/01/16**	**Thu 04/02/16**
80	Prepare End Stage Report	1 wk	Fri 22/01/16	Thu 28/01/16
81	Project Board Approval	1 wk	Fri 29/01/16	Thu 04/02/16
82	**2 Stage Design and Build Contractor Procurement**	**76 days**	**Fri 05/02/16**	**Fri 20/05/16**
83	Prepare Tender Documents	3 wks	Fri 05/02/16	Thu 25/02/16
84	Issue Stage 1 Contractor ITT	6 wks	Fri 26/02/16	Thu 07/04/16
85	Assess Tender Returns	3 wks	Fri 08/04/16	Thu 28/04/16
86	Stage 1 Contractor Interviews	1 wk	Fri 29/04/16	Thu 05/05/16
87	Notify successful and unsuccessful applicants	1 day	Fri 06/05/16	Fri 06/05/16
88	Appoint Contractor	2 wks	Mon 09/05/16	Fri 20/05/16
89	**Contractor Stage 1 - Design**	**85 days**	**Mon 09/05/16**	**Fri 02/09/16**
90	Review Outline Design	1 wk	Mon 09/05/16	Fri 13/05/16
91	Prepare Detailed design	12 wks	Mon 16/05/16	Fri 05/08/16
92	Carbon Footprint Analysis by Architect	1 wk	Mon 01/08/16	Fri 05/08/16
93	Prepare cost plan and cash flow. Agree price with contractor.	4 wks	Mon 08/08/16	Fri 02/09/16
94	Prepare Round 2 HLF bid	4 wks	Mon 22/08/16	Fri 16/09/16
95	Submit Detailed Design to HLF	1 day	Mon 19/09/16	Mon 19/09/16
96	**HLF Stage 2 Grant Decision Period**	**43 days**	**Fri 14/10/16**	**Tue 13/12/16**
98	**Stage 4 - Delivery**	**182 days**	**Wed 14/12/16**	**Thu 24/08/17**



Appendix E - Project Organogram

Initial Draft Management Structure 11/3/15

BOARD OF TRUSTEES x 7

Project Board (Monthly - 1/4rtly with HLF*)

Senior Users	Chair	***Senior Suppliers***
Local Residents *(Bathwick Residents Association ?)* Tourism Association Bath Dolphins *(Swimmers)* Schools/Children/Cyclists User Group Reps#	*Ann Dunlop* *All Trustees x7*	HLF* *(Main Funder)* B&NES *(Landowner & Funder)* English Heritage* *(BAR Grant)* PRT* *(Strategic Adviser)* Contractor *(When appointed)*

Capital Works & Procurement Group
(weekly with Project Director as required)
Chair – Paul Simons *(Major Projects)*
Ina Harris *(Procurement)*
Ainslie Ensome *(Conservation)*

Project Director
(Christopher Heath)

HLF Monitor*
Mentor – *Business Planning~*
Mentor – *Activity & Interpretation+*

ADMIN ASSISTANT

Business Planning Group~
- Market Analysis Consultant

Project Manager

Fundraising, PR & Marketing Group~
- User Group# *Residents/ Swimmers/ Schools/ Tourists/ Public/ Cyclists/ Children*
- Fundraising Consultant
- Graphic Design

Learning/Interpretation/ Activity Planning Group+
- Activity Plan/Interpretation Consultant
- Conservation Plan Consultant

Quantity Surveyor
CDM
Water Treatment Specialist
Architect
Structural Engineering
Landscape Architect
Mechanical & Engineering
Conservation Plan Consultant

Contractor
- Sub Contractor
- Sub Contractor
- Sub Contractor

Funds Available for:

- Water Hygiene Research £8,916
- Flood Risk Assessment £8,916
- Green Travel Plan £8,916
- Access £8,916
- Conservation Management Plan £18,000
- Interpretation Advice £15,000
- Activity Plan £12,000
- Accountancy Advice £5,000
- Community & Public Engagement £5,000
- Fundraising Advice £5,000
- Disability Access Assessment £2,000
- Catering Advice £2,000
- Trustees Governance costs £2,000
- Specialist VAT advice £1,300
- Insurances £5,000
- Pilot Activities £24,000
- Contingency £42,000

Appendix F - Contract Data

APPENDIX F

CONTRACT DATA

CONDITIONS

1.1 Commencement Date:

1.2 The Project Manager: The person duly appointed to be the Trust's Representative for each particular commission.

BASIS OF FEE

So long as the Consultant shall continue to provide the Service in accordance with the provisions of the Contract and to the satisfaction of the Trust, the Trust shall make to the Consultant the payments provided for in the Contract on the basis of the agreed percentage fees and hourly rates included in the following tables A and B. All prices shall be stated in pounds sterling and exclusive of VAT.

Table A – Hourly Rates

Description	Rate
Director/Partner	
Principle Services Engineer	
Services Engineer	
Technician	

Basis of Payment

Project Stage (End of)	Payment Method	% of total fee
Stage 0 - Project Initiation & Feasibility	Time Charge	
Stage 1 - Concept Design	% Fee	
Stage 2a - Scheme Design	% Fee	
Stage 2b - Detailed Design	% Fee	

Stage 3 - Tender and Contract	% Fee	
Stage 4 - Construction and Commissioning	% Fee	
Stage 5 - Defects Liability and Project Closure	% Fee	

EXPENSES AND DISBURSEMENTS

All expenses whatsoever shall be deemed to be included within the Consultant's submitted bid based on percentage fees and time charges, together with any relevant percentage adjustments thereto, except and to the extent stated in the Contract Conditions.

DESIGN ELEMENT SUM

The Design Element Sum for fee calculation purposes will be the agreed cost of the consultant's design element as defined within the final account and certified by the Consultant, subject to agreement by the Trust's Representative, of the value of all work executed under the Consultant's direction (regardless of professional discipline), This is defined as:-

1. The cost of all works **designed or arranged** by the Consultant and included in the Consultant's commission, irrespective of whether such work is then carried out under separate contracts. The Consultant will be informed by the Trust's Representative of the cost of any such separate contracts.

2. The cost of built-in furniture or equipment where the Consultant has undertaken a design and co-ordinating role, but excludes the cost of loose furniture and equipment.

3. The cost shall not include the value of any works or variations necessary or claims payable due to the direct fault or failings of the Consultant, or works that have been carried out not in accordance with the agreed brief or subsequent instructions from the Trust's Representative.

4. The cost shall not include administrative costs incurred by the Trust's Representative, interest on capital or the cost of raising monies or the cost of land or wayleaves, etc.

5. The cost shall not include the value of professional fees or direct contracts not arranged by the consultant.

6. Interim fees (to be paid before the Design Element Final Account Sum is known) will be paid against the design element estimated tender cost (pre contract) or actual design element tender cost (post contract) and corrected when the Final Account is agreed.

TIME CHARGES

The Consultant shall not carry out any works that require payment on a time charge basis without the prior written approval of the Trust's Representative.

An estimate of the likely time charge cost shall be given by the Consultant to the Trust's Project Manager for approval, and shall not be exceeded without further written approval from the Trust's Representative.

Where work is ordered that is reimbursable on a time charge basis, the following rules shall apply:-

- The Trust's Representative must request this service in writing.
- The Consultant shall on a monthly basis provide staff time sheets to the Trust's Representative for authorisation.
- Staff costs will be valued at the rates entered in the Schedule of Rates or rates equivalent thereto.
- The costs of staff in higher or lower grades than those listed will be deemed included as an overhead to the rates contained in the schedule.
- Travel costs are to be including within tender price.

- Time spent on supervisory duties shall be deemed to be included in the time charge rates quoted.

Consultants shall maintain records of time spent on the Service performed on a time charge basis, and such records shall be made available to the Trust's Representative in accordance with the Conditions of Contract and the Specifications.

Time charge rates shall include for all expenses and disbursements as described above.

All costs by way of Time Charges will be paid for the actual time spent by the Consultant in undertaking the Commissions. The charges shall be calculated by multiplication of the specified Time Charge and the hours spent.

Where the Trust's Representative requires the Consultant to carry out other unspecified services, reimbursement will be made at the appropriate Hourly Rates in clause 1 Table B of Fee Schedule. Before commencement of any such work outside the scope of the tender price agreed. The consultants must notify the Project Director…with an estimate of time and additional cost must be agreed prior to such new work starting.

LUMP SUMS

Where the basis of remuneration for Services is an agreed lump sum fee, then such fees shall be deemed to be fully inclusive of all costs and expenses as described in Clause 2 above.

REPETITION

Where in the opinion of the Trust's Representative a degree of repetition is evident within a project or between successive projects, then a reduction in the amount of fees to be paid to the Consultant shall be agreed between the Trust's Representative and the Consultant.

The Trust will expect any time charge or percentage fee for option appraisals/feasibility studies to reflect similar previous schemes carried out by the Consultant as directed by the Trust's Representative.

FEES FOR COST REDUCTION

When a tender for construction works or any relevant part thereof, e.g. the engineering services' installations, is in excess of the Pre-Tender Project Sum, the cost of effecting reductions and negotiating a revised tender with the works Contractor which meets the approval of the Trust's Representative shall be deemed to be included in each Consultant's fees for basic duties. The post tender fees for basic services shall be based on the amount of the original tender figure.

Where a budget is reduced by the Trust and this requires a tender to be reduced or re-tendered, the cost of carrying out such action by the Consultant shall be paid as a time charge or lump sum basis as directed by the Trust's Representative. The fee for pre-contractual work will be calculated on the amount of the original unreduced lowest bona fide tender.

In the event that tenders for works contracts are received but none are accepted, the cost of the construction works shall be based, in each case, upon the lower of the following:-

- the Pre-Tender Project Sum
- the most recent budget costs for the construction work **approved** by the Trust's Representative.

CANCELLED PROJECTS

Where a project is cancelled by the Trust's Representative prior to tender acceptance, the Consultant shall be paid for the basic services carried out as follows:-

1. In the event that tenders have been received, the interim fees due will be based on the lowest bona fide tender or the most recent budget costs for the works, as **approved** by the Trust's Representative, whichever is the lower.

2. Where the project is cancelled prior to receipt of tenders, the fees due for any completed work stage shall be based on the lower of the Pre-Tender Project Sum or the most recent budget cost for the works, as **approved** by the Trust's Representative, plus a time charge for the part completed stage, unless this time charge exceeds the fees due for completing the stage when the lower amount shall be paid.

Allowable Disbursements

The Fees and Time Charges specified in the Pricing Schedule of these Conditions shall be exclusive of VAT and of the costs below, which shall be treated as disbursements, **but shall not be incurred without the prior written consent of the Employer:**

- Planning Application fees
- Building Regulation fees
- Statutory Undertakers' Costs
- Special/Site Investigations
- Advertisements required by the provisions of Standing Orders on specific commissions and in order to satisfy EU competitive tendering regulations

All travel costs are to be included in the tender price