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Feasibility Study – Hall For Cornwall

NOV 2014 rev G

8th issue
Size: A3 Document

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1.0 INTRODUCTION

- 1.1 Foster Wilson Architects were approached by the management of Hall For Cornwall in June 2012 and asked to prepare a feasibility study looking into proposals for the improvement of the current building. This report formed part of the basis of an Arts Council England (ACE) Lottery application.
- 1.2 This report describes the developed proposals, including the main options 1 - 3 for the auditorium, a programme and estimated costs.
- 1.3 Burnley Wilson Fish were recommended by Foster Wilson Architects to provide outline costs for the feasibility study and were appointed by Hall For Cornwall in July 2012.
- 1.4 This report brings together Foster Wilson's design appraisal and outline proposals, Burnley Wilson Fish's cost report and documentation prepared by Hall For Cornwall's management and staff, including the brief, sustainability action plan and ongoing maintenance and building work requirements.
- 1.5 In 2014 the report was updated to reflect an new Heritage Lottery application.

2.0 FEASIBILITY BRIEF

Prepared by Hall For Cornwall

2.1 Briefing Introduction

Since Hall For Cornwall's (HFC) opening as a theatre 15 years ago, the organisation has gone through a series of business and artistic changes. Launched with an unsustainable business model, the following three business plans sought to stabilise the business, helped by funding and investment. Sustain funding from Arts Council England (ACE) greatly assisted with HFC's ability to focus on increasing sales and make riskier artistic decisions, which have rewarded the organisation in a growth in audience numbers.

The Senior Management are now considering what a 10 year plan for the organisation may look like.

2.2 Major themes of the ten year plan are:

- A major capital project to make the business more sustainable; new income streams and cost savings.
- Diversifying its income streams through increased fundraising activity and entrepreneurial ventures, to counter balance predicted cuts to investment by funders.
- Working with other cultural organisations to share backroom resources and explore joint ventures or mergers to unify the Cornish cultural offer, which might include a name change and re-brand.
- Expanding the offer of the venue to encompass new platforms for capacity; including digital engagement and revitalising spaces within the building to host and curate the Arts and Crafts industry sector. Craft displays and sales would become a major contingent of driving a footfall strategy for the daytime.
- Identify HFC as a cultural hub along the spine of Cornwall, creating a better workflow and consolidating Cornwall's brand identity.

Whilst this brief is ambitious, we believe our future lies in being able to deliver it.

2.3 Background

HFC opened in 1997 after a high profile community led campaign and securing Lottery funding. Prior to its refurbishment the building was used as a mixed venue hosting small scale touring work as well as life as a *City Hall*, where agricultural and community events were presented. The heritage of the existing building is complicated and eclectic. During its conversion into a theatre there were funding shortfalls and very public exchanges in the press and media on whether the county wanted to have a theatre. Today the Cornish are very proud of the venue with public ownership widespread.

HFC became a client of Arts Council England and Cornwall Council in 2000, following a period of recovery. It now turns over £4 million and is one of the largest cultural clients for Cornwall Council and ACE in Cornwall. However, its investment from funders is a fraction of the funding its contemporaries The Bristol Old Vic and Theatre Royal Plymouth receive, yet Cornish audiences and tourists have similar expectations as the metropolitan audiences but with less investment to present productions.

With only 1,000 seats HFC is the only major venue in Cornwall, presenting touring productions of musicals and dramas, with a mix of one night shows and local hires from amateur groups. There is a vibrant Education department with admired outreach work. Recently there has been a launch of a more intimate performance space in one of the rooms above the Coffee Shop to develop edgier work and develop local talents. The company has ambitious plans to develop its digital capacity in performance and platforms but as yet does not have the funds to do it.

The HFC building looks tired and is in need of investment to compete with other venues in the South West of England. Respectful of the history of the HFC's creation, the original building project was a huge achievement using the money available; however it is apparent that the project in 1997 ran out of funds. Areas of the building do not work as envisaged, either at the time of concept or in present day scenarios.

Considering the forthcoming landscape of reduced investment from the local authority and ACE, there is an urgency to diversify income streams in a 10 year framework plan and consider how the building could be put to better use.

2.4 The Building

Located centrally within Truro there is an importance and history associated to the site for the Cornish; starting with the taking in of cargo coming off boats unloaded from the quay in the late 19th century, to a City Hall which staged an agricultural show called Fat Stock, right through to today's major independent theatre with a national profile.

The building itself is a handsome granite Grade II* listed building with two principal facades to Boscawen Street and Back Quay. While the interiors of the frontage buildings remain the original hall has been replaced by the new theatre built in the 1990s.

The resulting public spaces and theatre auditorium do not live up to the public's expectations; in particular comfort was compromised in initial designs. The building has a warren of corridors and fire exits, as the theatre was shoe horned in to the tight space available, and confusingly, the auditorium is at right angles to the front and back entrances making it hard to orientate around the building because of this unusual configuration.

The venue does not reflect the premium products presented onstage. This is exemplified by the younger professional segmentations who do not attend, with research indicating this is a consequence of the catering and bar offerings being considered too shabby, with patchy customer service that does not attract customers back.

The reading of the building is complicated by the fact that the original back entrance of the building adjoining Lemon Quay is now used as the main entrance. The original front of the building, which faces to the main high street, Boscawen Street, is only used for special occasions and state visits.

The building complex is shared by Truro City Council, on a peppercorn rent from Cornwall Council. There might therefore be some synergy in a joint venture by Truro City Council and HFC looking at how the building as a whole might best be used for the future. Whilst the adjacent buildings to HFC are currently occupied, consideration to their possible incorporation into our building could be factored in to this project.

The following brief describes the parameters on how to operate the building more sustainably, through improved income streams and reduced running costs.



Existing quay-side façade and current entrance to the theatre.

2.5 In broad terms the following are areas to explore:

1) Issues of Identity and arrival for a building with a front and back entrance

There is an identity problem - how to arrive at the building. The Boscawen Foyer, reminiscent of an opera set, is the original front door to HFC. Above this entrance is the name '*City Hall*', where Truro City Council's government chambers and offices are housed with their entrance to the side. On Lemon Quay the building has '*Hall For Cornwall*' on the front of it with the Box Office and Coffee Shop entrances. This is confusing for those who visit, it does not broadcast a clear message or identity for the organisation, and as a result tourists often stumble upon the venue or cannot find it easily. A major consideration of this project has to consider where the front door should be and or how this issue can be addressed and improved.

2) Improvements to foyers and public spaces, including catering and bars

The Boscawen Foyer at present is home to Truro's Flea Market. Once a vibrant attraction, which drew people to the building, the market has been declining and now looks more like a jumble sale and this part of the building seems woefully underused.

Leading on from the Boscawen Foyer, HFC boasts the longest bar in Cornwall across the rear of the auditorium. This in itself presents problems where customers occupy a space at the bar and the organisation doesn't have the staff to exceed the customers' expectations in delivery of service. The environment has hard surfaces and is unfriendly, old fashioned and uninviting. Ancillary sales have to be improved to deliver better income streams.

Over the years, ill-informed capital works have been undertaken on the promise of delivering more catering profits. The organisation is at a crossroads in reviewing its catering operations. The present Coffee Shop site with a mezzanine level is cumbersome to operate, within present licensing restrictions. There is an outside catering area on Lemon Quay, which is also difficult to operate and does not look as if it belongs to HFC.

A key question that the organisation has to ask is should it carry on with its present catering operations or would the space be better utilised to provide better public spaces and bigger bars, which are simpler to operate and deliver profits?

The reception rooms above the Coffee Shop are hidden away. There are 3 rooms of varying sizes that are underused. They do not feel as if they belong to the building. The largest space, the Assembly Room, has a cumbersome catering area, which is used for storage, while the room itself is being utilised to stage Platform Events, as a laboratory space where the organisation can help develop local artistic talent.

The building is underutilised during the day. The business planning should gravitate around tackling this issue by investigating:

- How the building can engage with the local community as well as tourists.

- How the building can create breathing space to incorporate public spaces and to display Arts and Crafts from the local creative industries..
- How the building can better incorporate modern digital practices.- Theatres have always viewed their public spaces as conference facilities; we believe that there is an untapped market in using the building to convene conversations, platforms and forms of broadcasting as a new income stream.
- Finally how the community spaces to be used by the Education department or local groups, create further opportunities for HFC to become a cultural hub for creative people to meet.

3) Provision of office space

There is one office in the HFC building, while other team members housed in a plant room of homemade construction at the side of the reception room. Around the corner from the theatre, staff rent a second floor suite of offices at a cost of £50k per year, which currently has two years left on the lease.

An ambition in this feasibility work is to consider how office space could be brought back into the main building for greater efficiency coupled with reduced overheads. The company has aspirations to build a group of associate companies and artists who would work alongside the organisation. Planning for this expansion and a further development in the county of creating cultural hubs across the region, probably mean that a strategy of providing hot desks and meeting spaces, coupled with creating good digital connectivity is a priority for the evolution of the organisation.

4) The auditorium and stage house:

The stage house is generally well equipped, being only 15 years old. The height of the fly tower is too low; planning consent was refused to make it a normal height. There is no cross over onstage. Flying systems and other equipment have been maintained well. Some stage machinery such as the Pit Lift has operated temperamentally recently. As is often the case, the lighting and sound box are not used as planned. The sound mixer desk takes up premium seats resulting in loss of revenue. An audit of current equipment, air conditioning plants and electrics should be undertaken and while not considered a major contingent in present capital thinking any major problems should be considered in this project.

Dressing rooms and backstage corridors are tatty and uncomfortable and a scheme to improve these for artists needs to be developed.

The auditorium looks dated and old fashioned with 1980's purple colour scheme. Everything looks uncomfortable with hard surfaces. Curtains partition the foyer area so noise disturbance is a problem to overcome. Audience members, actors and the theatre managements complain of a lack of 'magic', 'atmosphere' or 'focus' in the venue.

The proscenium opening is 16 metres in width. Having such a wide aperture presents

problems in sightlines for touring dramas and some musicals. At times the auditorium seating/ticketing map has had over 10 configurations to accommodate the various sightline problems. The seating is on a retractable bleacher system. The flexibility this provides allows standing concerts for rock bands to be presented in the programme. Elderly audiences are nervous in ascending the bleacher system as it wobbles and feels unstable. The benefits of the flexibility of a bleacher system versus a fixed auditorium with increased seating capacity should be carefully considered.

5) Unloading on Lemon Quay & Get-in:

Lorries currently have to park in front of the building entrance on Lemon Quay when visiting companies are 'getting in' for performances. This blocks the entrance to the Coffee Shop and Box Office, is an annoyance to pedestrians and is unhelpful in HFC's ability to trade and sell tickets. There are general Health & Safety issues arising from get-in operations mixing with the general public that could be improved. Consideration on how the 'Get In' could be improved is a major part of the project brief.

2.6 Briefing Conclusions

With future funding reductions HFC sees the potential of capital works on the building as an opportunity to make the organisation more commercially sustainable, whilst improving the customer experience and providing better facilities for creative partners.

The design should do more to celebrate the heritage of the building, to engage and invite people into the building and entice them to return, either to use the catering facilities and craft shop or as an audience member seeing a performance.

3.0 PROJECT PRIORITIES

Following further consultation with HFC we have drawn up a list of project priorities in order of preference based upon the brief (section 2). This list can be used as a reference resource as the project progresses to later design stages.

1) **Business Sustainability:**

Increased seat capacity* (priority)

Improved income streams from:
Bar and box office and merchandise sales
Food/café offer - kitchens & servery

2) **Customer FOH foyer experience:**

(Note this section has some relations and crossovers with item 1 & 2)

Improved:
Foyer area and public spaces
WCs facilities
Communication and wayfinding
Spaces that appeal to as wide a customer base as possible

3) **Building Sustainability:**

(Note this section has some relations and crossovers with item 1 & 2)

Improved:
Energy use
Recycling
Reduced:
Overheads
Carbon footprint
Waste

4) **Building Identity:**

Improved:
Sense of Heritage
Street presence
Building signage
Building themes and identity
Building external lighting
Show display and communication to public

5) **Auditorium FOH experience:**

Improved:
Auditorium atmosphere
Customer comfort
Seat viewing angles
Auditorium acoustics

6) **Staff/Office space & facilities:**

Space for administration within the building
Improved/increased:
Office space
Break out space for staff

Project Priorities cont....

7) Digital facilities: Media centre

Space for hot desking / conference / meetings / broadcast
Infrastructure to allow:
Connection 'rainbow' to satellite facilities (Falmouth)
Connections to street/quay
Outside broadcast

8) Community/Education facilities:

Community spaces:
Including 2nd floor meeting room & rehearsal room

9) Visiting performer facilities:

Improved/expanded: Dressing rooms, wardrobe laundry

10) Get in:

Improved access to stage
External alterations to improve pedestrian and lorry access separation

11) BOH technical facilities:

Auditorium technical infrastructure -
Lighting bridges, control rooms etc
BOH Under stage areas, lift pit, storage etc.
Flytower & associated equipment

4.0 THE ARCHITECTURAL ISSUES

Whilst it is clear from visiting HFC that there are a number of very positive aspects to the building; the organisation, the performances and public services it provides, it is also clear from the briefing document, our series of study visits and from talking to the staff and senior management that a series of complex problems and issues prevail within the building. These can be summarised as follows:

Front of House areas

- Building & organisation name “Hall for Cornwall” does not conjure the correct image for the building and its organisation/role/performances.
- A lack of a clear street presence - Public/visitor confusion over the back/front of building
- A lack of foyer space for the audience capacity
- A lack of clear way finding signage
- A lack of any consistent common themes or branding to the building relating to Cornwall or Cornish history
- A main public bar area land locked within the building plan, without daylight or character.
- No spaces, foyers, bars which encourage younger audiences
- No dedicated merchandising counters in prominent positions within the building
- Problems with circulation
- A lack of historical narrative or history of the building or place for customers/users
- Dated or tired finishes, furniture and décor
- High competition from nearby restaurants and cafes on the food offer

- No dedicated FOH tannoy or sound system
- Under used rehearsal/community spaces on the 2nd floor
- Redundant or limited use of servery on 2nd floor
- Lack of front of house storage

Auditorium

- The inability to secure, separate & control the auditorium from the public areas
- Auditorium requires high staffing numbers for this reason
- A steep rake with limited handrails for security when climbing - uncomfortable for older users
- A very wide proscenium
- Very wide viewing angles and restricted views from extreme side seats
- Bleacher seating moves/shakes when audience climbs the rake
- Two cross over gangways reduce connection between audience and stage and affect viewing angles
- No balcony front lighting positions
- Very steep follow spot lighting locations
- Acoustics are acceptable for the spoken word and amplified performances but poor for classical music or opera
- Flat floor configurations are under used and not very profitable

- Due to wide seating configuration the auditorium suffers from a lack of focus and atmosphere
- No dedicated sound control location - current location loses prime seats
- Underused projection room under 1st floor bleacher
- Limited standing audience capacity when folding screens deployed
- Dated or tired finishes, furniture and décor

Back of House

- Poor office and staff areas - plant and storage areas used as office space
- No main office area, with the majority of staff located in a separate building
- The separation of staff leads to a split in the organisation, with the satellite staff feeling removed from the day-to-day activity of the theatre.
- Very limited get in, with inadequate door heights
- The main local area electrical sub-station is located within get in
- Get in requires removal of bins which are stored in get in
- Get in requires lorries to park and unload across majority of the current quayside main entrance
- No dedicated scene dock or store
- A lack of clear way finding signage
- Poor design of stage door/BOH office set within main foyer
- No dedicated wardrobe or laundry
- Tired and dated dressing rooms and fittings
- Minimal stage level dressing room or star dressing rooms
- Lack of back of house storage

5.0 OVERALL STRATEGY

5.1 STAGE 1 - Initial Diagrammatic Study

(Referring to drawing 517/00)

FWAs initial thoughts which were examined briefly at concept stage, were that the auditorium is orientated at 90 degrees to the ideal configuration.

Typically the diagram for a theatre building is linear:

A single grand entrance and foyer, leading through to the auditorium, then the stage and finally the back of house to the rear, with good access for shows to get in.

The existing layout, originally dictated by planning constraints, places the stage and flytower centrally within the plan of the building. This causes considerable difficulty with the get in, as highlighted in section 4.0, and has the effect of splitting the public entrances between the two ends of the building causing duplication of front of house facilities.

We understand from meeting with people involved in the original scheme design that the reason for this slightly odd arrangement was due to the local planning and conservation departments concern over the effect the high Flytower would have on the Quayside end of the building and the listed façade.

Interestingly from the heritage statement the original layout of the 1925 Public Hall had this North South Layout with the entrance at the Boscawen end and Stage to the Quay side.

We therefore considered at a very early stage whether, if this planning concern could be mitigated, significant benefits could be achieved by rotating the auditorium and stage to align with the axis of the building to create a more logical sequence of accommodation. (See diagrams opposite).

This initial study (Drawing 517/00) was explored with the client and quantity surveyor, but with an outline estimated cost for this scheme in the region on £20+ million (given the almost full rebuild of the auditorium and stage house and basement areas required) it was discounted as not being a viable option, given the likely funding constraints.



Diagram of a more typical linear progression from front of house (red), through the auditorium (green)/Stage (purple) to back of house (blue) based on the HFC plans

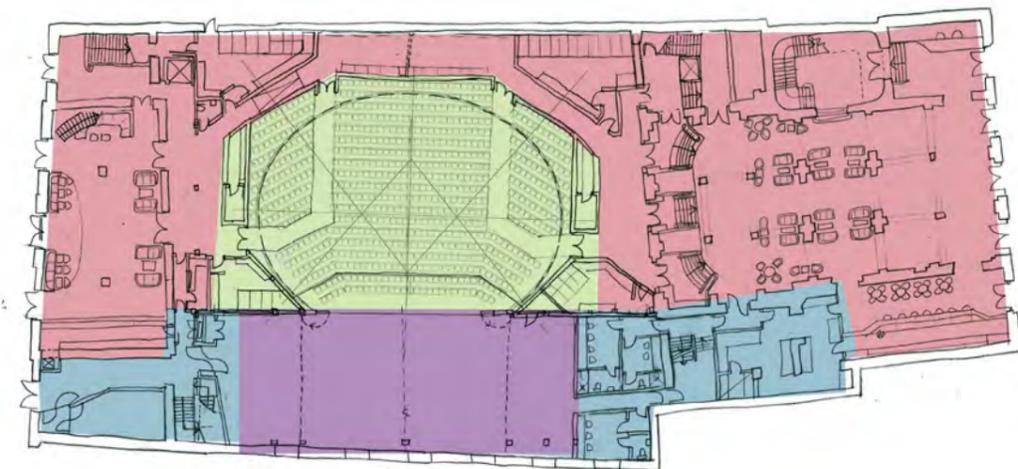


Diagram of existing building with central isolated stage and auditorium and split front of house

5.2 STAGE 2

Following this initial diagrammatic investigation, it was decided to develop the inherited stage and fly tower layout and investigate ways of resolving the existing issues by other means, as described below.

5.2.1 Front of House

Resolving the issues of the building's identity and the confusion of the main entrance and foyers space are clearly paramount if the building is to work better.

When visiting the site it is clear to us that the main entrance of the building should move to the Boscawen street end of the building. This space (currently external covered space) has great potential to become a new grand foyer. Due to the land locked nature of the building and its planning constraints, this area provides the only scope to expand the building and to solve a number of the major issues as listed in section 4.0.

By moving the main entrance and providing this additional foyer area at the Boscawen Street side of the building also unlocks the Quay foyer and mezzanine areas at the opposite end of the building. This alteration would enable the Quayside foyer to take on a different character, both as secondary foyer but also as a multi purpose media/digital centre for Truro.

We feel it will also be important to differentiate the foyers - The Boscawen foyer could be thought of as the grand classical space which will appeal to the 'county set' whilst the Quay Digital hub can be remodelled to attract a younger demographic, the two working in partnership to attract as wide a range of visitors as possible.

By undertaking these major alterations, the building will be able to properly service the 1000+ audience members, whilst also providing two new 'destination' spaces within the building to enable improved daytime usage.

5.2.2 Auditorium

We have investigated three different options for the remodelling of the auditorium and surrounding front of house lobby and circulation areas that define the central section of the building.

To varying degrees these options alter the existing auditorium to seek to resolve some or all of the issues listed in section 4.0. These are explained in more detail in section 7.0 but in summary:

Option 1

Makes the least change to what exists now, retaining the overall form of the auditorium (as a single angled rake), but replaces the bleachers with a fixed tier, giving opportunities to improve the layout, circulation and overall quality of the space and provide additional foyer space beneath. The sidewalls are moved in to remove the extreme seats and improve focus on the stage.

Option 2

Expands on the adjustments of option 1 but adopts curved seating rows to create an amphitheatre form.

Option 3

Proposes to completely remodel the auditorium to provide a more traditional and characterful three level auditorium space with a shallow sloped stalls and two elliptical balconies above which wrap around to meet the stage.

Each auditorium option has accompanying variations to the front of house lobby and circulation spaces

5.2.3 Back of House

The major alteration to the organisation of the building in the non-public areas is to return the administrative offices back into the main building.

We have also made proposals to expand the dressing room spaces provided at ground floor (stage level) as well as allowing for a full refurbishment of all the other remaining BOH spaces, which are tired and in need of upgrading, including the lighting and ventilation systems.

We have also investigated improvements to the Get-in by removing the sub station and the mezzanine floor above to improve the size and height.

6.0 DESIGN PROPOSALS

6.1 Boscawen & Quayside Elevations

New signage and its placement are important to announce the new theatre to the street and quay. On the Boscawen side of the building (which will form the new main entrance) we propose that the existing Town Hall sign is moved to first floor level with a new "Hall for Cornwall" or new theatre name (to be confirmed) sign placed above ground floor level.

We propose new architectural feature lighting to both elevations and also new way finding and poster displays at ground floor level. With the expansion of the Boscawen foyers into the Town Hall entrance area and the adjoining café, further localised signage for Bar/Box Office and Town Hall may be required.

6.2 Boscawen Foyer - Ground floor

The wonderful arcaded space of the existing Boscawen foyer will be restored to create the much-needed new entrance foyer and front of house area.

This will require the relocation of the flea market, which currently uses the space, to a more suitable location in the town, as well as moving the tourist information office.

The existing covered but external foyer will be enclosed with full height glass doors to the street allowing a high degree of transparency from the street to the interior.

The existing floor levels will require some adjustment to enable level access and we also propose the floor finishes are altered from the existing mixture of new and old surfaces to a more coherent patterned stone layout.

New services and lighting will be required, which will include new large hanging chandeliers and up lighting which will be essential to lift the light levels in the space, particularly due to its deep plan. We have also included for new way finding signage and show displays.

Furnishing the space will require a range of new flexible furniture of appropriate character and quality, to include: console tables, sofas, tub chairs and stools, as well as fixed banquette seating and drinks shelving.

The general atmosphere of the space should be comfortable and welcoming, but should also celebrate the grand character of the existing architecture.



Existing Boscawen flea market and sketch of proposed new Boscawen foyer

6.3 OPTION: New kitchen/Café/VIP space off Boscawen Foyer on site of existing café - Ground floor (Illustrated on all ground floor plans 517/01, 04, 07)

One of the aspirations for the theatre is expanding into the spaces adjoining the Boscawen foyer, the first of these, located to the left of the Boscawen façade, is currently an independent café business leased from the Council.

Subject to the acquisition of this space we propose that the new main kitchen/servery is located here. This would allow for the main catering offer to be provided at this end of the building.

For the bar counters to serve the main foyer 3 potential layouts are shown across the 3 ground floor plans, these including a preferred option (517/07) of providing a central 3 sided island bar within the main Boscawen foyer joined to a secondary smaller bar within the existing café space.

The 517/07 layout (or similar subject to further design development) would provide a separated room off the Boscawen foyer enabling this space to operate independently of the main foyer; either to provide flexibility to the Boscawen end of the building via a reduced daytime/night-time offer, or as a separate VIP/ Private hire space for evening events and performances.

The 3 designs will require a new opening (arched to match the existing) to be formed between the main foyer space and the bar, which will be subject to the approval of the conservation officer.

(Also see 6.5)

6.4 OPTION: New shared box office and shared town hall entrance off Boscawen Foyer (Illustrated on all ground floor plans 517/01, 04, 07)

The other area of possible expansion is located to the left of the Boscawen façade, currently the Town Hall entrance leading to the first floor council chambers.

There are two spaces, the first entrance hall is an under utilised reception area, which then leads up steps to the grand staircase (currently rather spoiled by a series of storage rooms which have been built under the elegant stone cantilevered stair) which in turn leads to first floor.

We propose that the entrance lobby area is opened up to the main Boscawen foyer space (matching the bar opening opposite) and becomes the new box office.

This box office counter could also serve as an information desk and reception to the council chambers.

The grand staircase area (which would ideally would be cleared of the rooms under the stairs) could house a separate reception for the council (if required) or a tourist information area etc. We have assumed the existing shuttered opening, which leads to the Boscawen foyer, would be opened up fully and a glazed door added providing an additional alternative entrance to the Town hall via the foyers.

The design will require a new opening (arched to match the existing) to be formed between the main foyer space and the town hall entrance, which will be subject to the approval of the conservation officer.

(Also see 6.5)

6.5 OPTION: Reduced foyer and box office option - Ground floor (Illustrated on drawing 517/04 Extract plan)

If as a result of further discussion with the Council it is found that neither the Café nor the Town Hall entrance can be acquired, we have indicated on drawing 517/04 how the Boscawen foyer would work with the box office and bar located within the existing space. The main disadvantage of this arrangement is the lack of a kitchen and servery.



Existing Boscawen/Town Hall facade

6.6 Quay Foyer - Ground floor & Gallery

The existing (and only) foyer space is located on the Quayside end of the building. This currently houses the box office, café/ bar provision plus the restaurant for the theatre as well as a small stage door office.

The majority of these functions are housed on ground level with a large mezzanine floor at first floor level used as the restaurant.

At ground floor level the space is somewhat compromised by the large central accommodation stair which leads to the first floor, which also blocks the centre of the three arched doorways leading to the street.

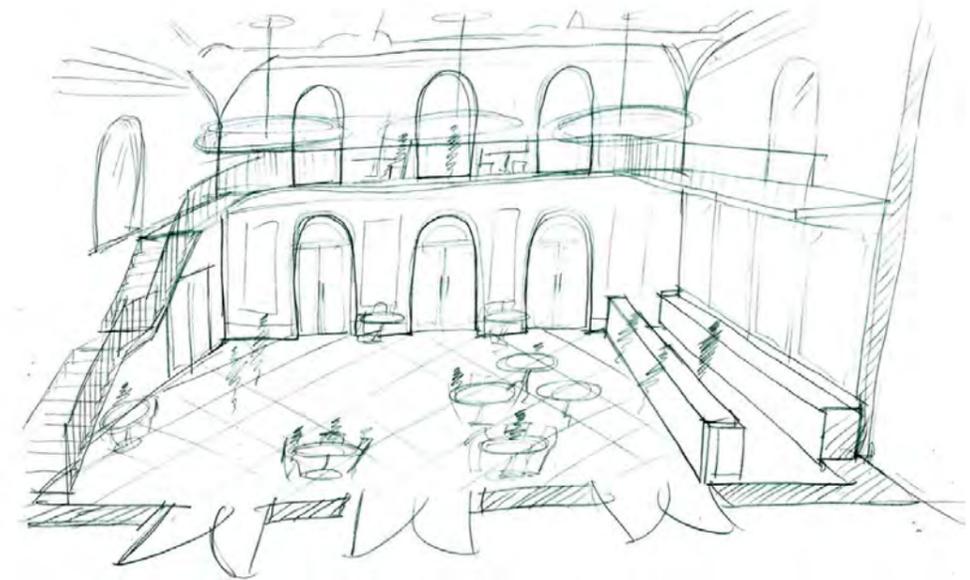
We have proposed that the main box office is relocated to the Boscawen foyer whilst this foyer retains some ticketing functionality via a new bar and café counter located to one end of the space.

At ground floor the existing stair, fixed furniture, floor finishes café counter, stage door enclosure and related fittings would be removed. At first floor we have proposed the mezzanine floor is removed and replaced by a narrow gallery, in order to recover the scale of the original space. This will provide a generous double height room that will then compliment the scale of the new Boscawen foyer on the other side of the building.

It is envisaged that the historic features of the space will be restored, such as mouldings, cornices and a cantilevered gallery. The general feel of the foyer however will be targeted towards a more relaxed and contemporary character, appealing to a younger audience, to contrast with the more classical Boscawen foyer.

A gallery which wraps the space will provide viewing and seating areas looking down onto the ground floor as well as providing access through a series of newly formed openings into spaces beyond - refer to 6.14.

The final form of the gallery will be subject to further study. Two options are shown on the drawings: A slim Gallery providing less floor space but a more open double height space (51702 & 517/05) or a curved arrangement (517/08) providing greater floor area as well as a more enclosed 'senate' style space.



Existing and sketch of proposed Quayside media centre/foyer with slim gallery.

6.6.2 Media centre:

Within the theatre's brief is a plan to provide a new media centre with digital capability for the building.

To provide this we have proposed this foyer, its gallery and the rooms off it will form the focus for the new media centre, providing Internet access, hot desks and encouraging daytime use by local business people.

We have suggested that a series of new openings are made between the Quay gallery and these spaces, deeper within the plan, which will provide a visual link to the foyers and enable daylight to penetrate further into the plan.

The final brief for the digital suite is still being developed by the theatre but ideas include:

- Hot desks areas for staff and customers/business
- Digital infrastructure and external links to other sites (Falmouth) and organisations
- Relaxing areas and break out spaces
- Video/Media mixing and outside broadcast capabilities
- Informal meeting space
- Screening or projection areas
- Video conferencing
- Provide temporary staging at ground floor level and seating to both levels to enable performances viewed from multiple levels.

6.7 FOH stair core A & lift - All levels

For auditorium options 1 & 2 a general refurbishment to fixtures and finishes will be undertaken to these areas including; new lighting and services alteration, as well as way finding signage, as required. The general arrangements of the stairs and lifts will remain unchanged, the exception being to the top of the Quay side foyer stair & core where we will remove the existing small office over the stair at third floor level.

OPTION Auditorium option 3 - Rebuild stair core A

(Illustrated on drawing 517/07,08 & 09)

Auditorium option 3 will require the stair and lift to be redesigned and replaced to provide adequate means of escape from the upper levels of the theatre.

6.8 BOH stair cores - All levels

A general refurbishment to fixtures and finishes will be undertaken to these areas including; new lighting and services alteration as well as way finding signage as required. The general arrangements of the BOH stairs and lifts will remain unchanged.

6.9 Existing Dressing Room Areas - All levels

Whilst the current dressing rooms do suffer from difficult planning arrangements due to the nature of the building there is limited scope to alter this, we therefore propose only a general refurbishment of these areas. This will include some minor re-planning plus new fixtures and finishes, including new lighting and services alteration as well as way finding signage as required.

The general arrangements of the existing dressing room will remain generally unchanged, the exception being if option 3 of the auditorium designs is adopted - as this allows for some expansion to the stage right 1st floor dressing room.

6.10 New Dressing Room Areas - Ground floor

By re planning the auditorium (in all three options - see section 8.0) we are able to relocate some of the front of house WCs and free up valuable back of house floor space.

We have indicated two new ensuite star dressing rooms inserted into this space.

As a result of this we may consider re-assigning a dressing room space on either the 1st or 2nd floors to become a dedicated laundry and maintenance wardrobe room.

6.11 FOH WC areas - All levels (location and sizes vary subject to auditorium options)

In general the front of house toilets are distributed unevenly throughout the building at all levels and require either full refurbishment or complete relocation.

Within the auditorium options (section 8) we have replanned the WCs to allow for a much more even and balanced distribution of toilets. These are positioned off the main lobby spaces outside the auditorium.

The existing WCs would receive new finishes, cubicles and sanitaryware in a more contemporary design. The numbers of both male and female WCs and urinals could also increase overall and we would also seek to increase the disabled WC provision.

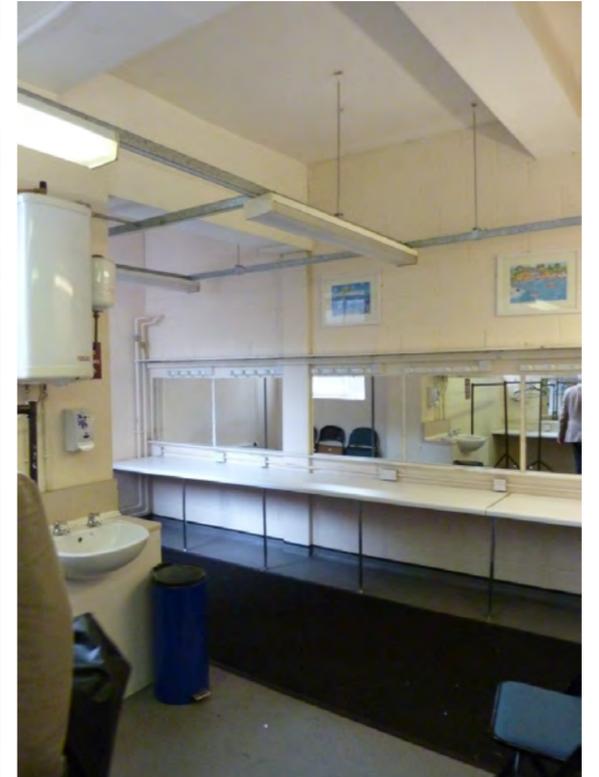
The building currently provides the following FOH WC numbers

Male WC	8
Urinals	9
Male sinks	17
Female WCs	26
Female sinks	15
DWCs	3

For audience numbers of 1000 the Technical Standards for Places of Entertainment (Yellow book table 23 60%F 40%M) recommends the following standards:

Male WC	3
Urinals	9
Male sinks	5
Female WCs	25
Sinks	13

The existing numbers appear to include some under and over provision for the sanitary requirements and we would undertake a full re-evaluation of the numbers and best locations for WCs at the next stage, particularly in relation to the new Boscawen foyer.



Existing get in and typical dressing room

6.12 OPTION: Single Height Get in - Ground floor
(Illustrated on drawing 517/04/05 & 07/08)

The existing get-in provision (or lack of) is a real issue for such an important receiving house, particular problems include:

- The external roadway requires lorries to park across the building to unload - suggested amendments to this are covered in 6.13.
- A series of low (relative to stage scenery) doorways limit the height/size of scenic elements delivered
- There is no dedicated scene dock for stage storage.
- The existing electrical sub-station - which we believe serves a number of the surrounding buildings on the Quay takes up the majority of the get-in area
- The get-in is also used as the main bin store

At worst this prevents or discourages some shows from being staged at all and at best considerably increases the manpower and time required to set up a performance.

As a start we would look at the following solutions internally:

- Adjust mechanical ventilation and other services to maximise head height.
- Adjust the doorways to maximise the possible head height

The main alternative to these piecemeal adjustments is to consider making the get-in double height (covered by section 6.18) which would require removal of the mezzanine floor above and the kitchen which is currently located there.

Further to this we could also look to increase the floor area at ground level but this would necessitate the removal of the substation. There are a number of major factors in this:

- Achieving approval from the electricity board
- Finding an alternative location for the sub-station
- Managing and minimising disruption to the surrounding Quay and related businesses
- The anticipated high cost

As a result of these factors it is very difficult for us to predict the feasibility or cost at this stage but this could be in the region of £300-500k.

6.13 OPTION: Acquisition of adjoining land for get in:

We understand there maybe a future possibility that the buildings adjoining the existing get in will be redeveloped. Should this be the case then a strong case should be made to acquire a strip of land (ideally 5m high by 4.5m) to allow for a 14m articulated lorry to reverse into it, with further length to enable a direct connection to the stage. This zone is indicated on drawings 517/04 & 517/07. This strip of land would solve the vast majority of the existing get in operation issues and would be very desirable.

6.14 External Quay - Ground floor

We have not investigated fully the external landscaping options at this stage, as these would be undertaken by the Council. It would seem to us however that there is scope for alterations to the Quay landscaping and roadways to the benefit to the theatre. These could include:

- Alter the roadway to enable get-in lorries to park perpendicular to the building and not block the Quay foyer.
- Re-route the road away from the building and pedestrianise the pavement directly in front of the Quay foyer to enable direct access to external café seating.
- Improve the current outside broadcast cable duct link from stage left out to the pavement, which is undersized, and extend it to the far end of the Quay.
- Any new design might also consider new landscaping to allow for outdoor theatre performances.
- Further thought needs be given to the provision of dedicated disabled parking and a disabled drop off point

There is a growing trend towards public realm design based on the Dutch model or 'shared space' approach (between cars, cyclists and pedestrians) which provides benefits both from an aesthetic standpoint and also one of safety. A good example of this is the recently completed Exhibition Road project in London.

Note: Currently this work has not been included in the cost plan and would need to be negotiated with the council.

6.15 OPTION First floor gallery bar
(Illustrated on drawing 517/08)

An alternative use of the multi purpose space in 6.14 is as an additional service bar.

This will be of particular use for Auditorium option 3 due to the increased audience numbers above stalls level who will require access to a bar/drink without descending to ground floor level.

6.16 OPTION: Digital space (above get in) - First floor
(Illustrated on drawings 517/05)

Further to 6.14 the floor area above the existing get-in shown on the option 1 plans is indicated as additional multi purpose space.

Please note other options for this space include a servery and back of house office (see 6.16). This arrangement assumes a single storey get-in.

6.17 OPTION: Kitchen Servery & BOH Office - First floor
(Illustrated on drawings 517/08)

An alternative to the additional multi media space is that of a kitchen servery and back of house office (shown on option 2 & 3 plans). The decision on which option is progressed (between 6.15 & 6.16) hinges on whether the theatre feel they will still require a servery kitchen on this side of the building to service the ground floor foyer and external quay area. This arrangement also assumes a single storey get-in.

6.18 OPTION: Double height get-in - Ground floor
(Illustrated on drawing 517/01 & 02)

The final optional arrangement of the 1st floor area above the get in is to remove the floor completely. The single storey get-in as described in 6.12 is very limited. It would be possible subject to further study to create a double height space.

This would require alteration the adjacent stair core and fire exit strategy from the 1st floor. This combined with the possible relocation of the electrical sub-station would provide the sort of get-in space a receiving house of this size requires.

6.19 Meeting room - Second floor

The existing panelled meeting room would remain and function much as it does now, both as an in house meeting room but also available as part of the quayside digital hub as a community resource.

We would look to improve the finishes and replace some of the heating devices and fireplace with more suitable inserts.



6.20 OPTION: Meeting room/Overspill Dressing Room - Second floor & Mezzanine
(Illustrated on drawing 517/06 & 09)

To meet the requirement in the brief to return the administration and office functions back into the building, we have proposed this function is relocated to the third floor. These spaces, which are currently underused as rehearsal and education spaces would be ideal office areas (and were previously used as offices).

The existing redundant servery area would be stripped out and the room returned to its original state.

We have included in the drawing pack an initial study (see office drawing & option 1 layouts) of the proposed office area. This demonstrates that, based on the current staffing requirements, and provided that a new mezzanine structure could be fitted into the existing double height room (subject to listed building consent) it would be possible to house the full office staff and associated functions on this floor.

This layout would leave the existing end rehearsal room free to be used as it is now - as an overspill dressing room for large casts or as a general multi purpose space / Young Farmers' Room (see 6.22).

6.21 OPTION: Main Office without Mezzanine - Second floor
(Illustrated on drawing 517/03)

Further to 6.20 we have indicated on drawing 517/03 that should the mezzanine not be possible then the end rehearsal room would be required for office use.

6.22 Young Farmers' Room - Third floor

Located within the back of house areas at the Boscawen end of the building, the existing Young Farmers' Room is used by the Young Farmers' organisation as well from time to time as a dressing room or orchestra room.

The function of this room will remain although some of its functions may be shared with the end rehearsal room at the Quayside of the building as per 6.19

The room is very badly lit and requires a full refurbishment. We have suggested, subject to planning consent, that some additional roof lights should be considered.

6.23 General Basement and Under Stage Areas - Basement

A general refurbishment to fixtures and finishes will be undertaken including new lighting and services alteration. We have also included an allowance for a new orchestra pit lift mechanism, as well as way finding signage. The general arrangement to the basement areas will remain unchanged.

6.24 Stage & Flytower

It is not envisaged at this stage that any major works will take place in the stage and Flytower. However a number of issues listed in the HFC ongoing maintenance plan and future considerations document (see addendum) could be addressed as part of the main works.



Office level options with mezzanine (left) and without mezzanine (right)

7.0 EXISTING

AUDITORIUM ANALYSIS

7.1 Entry/lobbies

The existing auditorium is accessed from the two main lobby spaces located at stage right and left. Currently these spaces are only curtained off from the main auditorium resulting in an inability to secure and soundproof the auditorium from the public/foyers. This leads to problems with security as well as requiring considerable staffing numbers to control people in these locations during show times.

7.2 Seating capacity

The existing auditorium consists of a two-tiered single raked arrangement.

The auditorium is listed as having 1000 seat capacity.

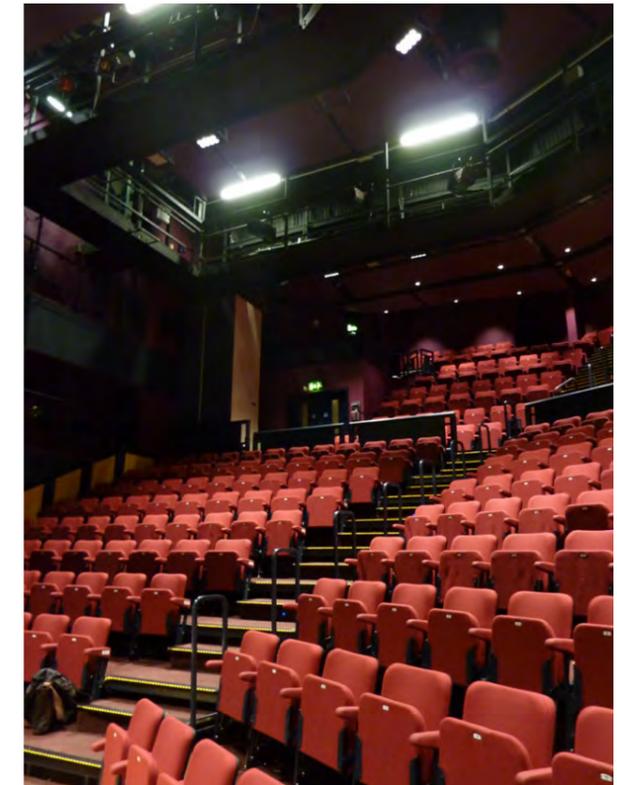
According to the original seating plan (refer to the existing drawings in the addendum) there are 992 'fixed' seats made up of 948 in the main seating tiers plus 44 on the orchestra pit lift.

Further to this there is space for a further 6-8 loose seats which can be (but are not often) placed in the two box positions above the rear balcony level doors and we assume this is how the 1000 capacity is achieved.

In practice however the maximum capacity is **965**.



Views of Auditorium



This is accounted by some variations between the current and original seating plan drawings, including the loss of row D that is not used, as it constrains the cross over gangway, and four less seats on the orchestra pit.

It should also be noted that this 965 maximum capacity is not often achieved, as within this number further reductions are required:

Less 5-10 seats subject to numbers of wheelchairs in row E (2 seats per wheelchair removed)

Less 40 seats of rows AA & BB if the orchestra pit is lowered.

Less 22 seats if the main sound-mixing desk is used

Less 9 seats that are used for Stewards.

Therefore the number of actual revenue producing seats for a typical full house is between **894 and 956 seats.**

7.3 Seating Arrangement

The seating is split into different price bands subject to location and view as well as the type of production.

The theatre currently (due to some of the issues described below and in section 4.0 plus the type of show) has five different seating price configurations.

These are named as: (These layouts are included in the addendum.)

- Comedian
- One Nighter,
- Drama/Musical/Dance
- Musical/Drama/Dance

The seating tiers are split as follows:

Rows AA - BB

Below auditorium entry level

Mounted on the orchestra pit lift

Removable seating

Rows A - C

Below entry level

Fixed seating mounted on fixed concrete tiers

Row D

At entry level

Whilst shown on existing drawings this row is not used as it constricts the cross gangway

Row E - M

From entry level to balcony level

Fold down chairs mounted on a retractable bleacher system split into 3 sections.

Row N -R

Front part of balcony

(It should be noted that row N is only sold for persons over 5'2" due to poor sightlines over crossover).

Fold down chairs mounted on a retractable bleacher system split into 3 sections

Rows S - U

Rear part of balcony

Fixed seating mounted on fixed concrete tiers

7.4 The Bleachers

The retractable bleacher system is quite old and the theatre reports that the bleacher tiers often shake or move whilst audience are climbing them.

When combined with an elderly audience and a steep rake this provides quite an unsettling experience.

When retracted the flat floor area enables a larger standing audience for live music or similar performances, however these events are currently only programmed for around 6-8 performances per year and whilst they bring in good bar sales, they are not very profitable, as the theatre only receive a rental fee. Sightlines for a standing audience are also not ideal in this configuration as the stage is too low.

7.5 Proscenium/Viewing Angles/Crossovers

The auditorium-seating bowl is very wide and the stage has a very wide 16m proscenium.

Whilst this proscenium is good for some performances, such as dance, it is too wide for most touring theatre and has to be masked down. This produces very wide viewing angles with restricted views of the stage from the extreme outer seats. Most touring venues have a typical proscenium opening of 10 - 12m.

The cross over gangways, in particular the lower gangway (nicknamed the yellow brick road) separates the majority of the audience from the stage, this has the effect of distancing the audience from the stage.

The rear gangway, at the front of the gallery level, causes viewing problems from row N immediately behind it, and these seats are only sold to taller members of the audience.

The very wide seating configuration of the auditorium also results in a poor sense of focus to the stage area.

7.6 Technical

Acoustics:

The acoustics of the space are reasonable for the spoken word and amplified performances but due to the limited volume of the space it is not suited to un-amplified classical music or opera. This problem, which is not unusual in larger multi-use spaces, could be addressed by installing an electronic acoustic enhancement system which has proved very effective in similar venues elsewhere. It would need to be decided if the programming advantages of such a system justify the capital cost (approx £250,000 - 300,000). An acoustic consultant should be appointed at a later stage to advise on all the acoustic issues for the project.

Production Lighting:

The main production lighting control room is located in the roof void behind a series of lighting bridges. Whilst these generally provide good lighting cover and positions, there are some issue with acute lighting angles, in particular for follow spots. Side lighting positions are catered for by three vertical lighting booms on either side side.

Due to the single rake there are no balcony front lighting locations leading to issues with visiting shows that would normally light from this location.

Any redesign of the auditorium should seek to improve the current FOH lighting positions.

Sound:

The main sound desk position is located at balcony level within the audience seating and requires the removal of 22 seats in its largest configuration. Due to the layout this also causes sightline issues with the row to the rear of the desk, as well as the loss of prime seating.

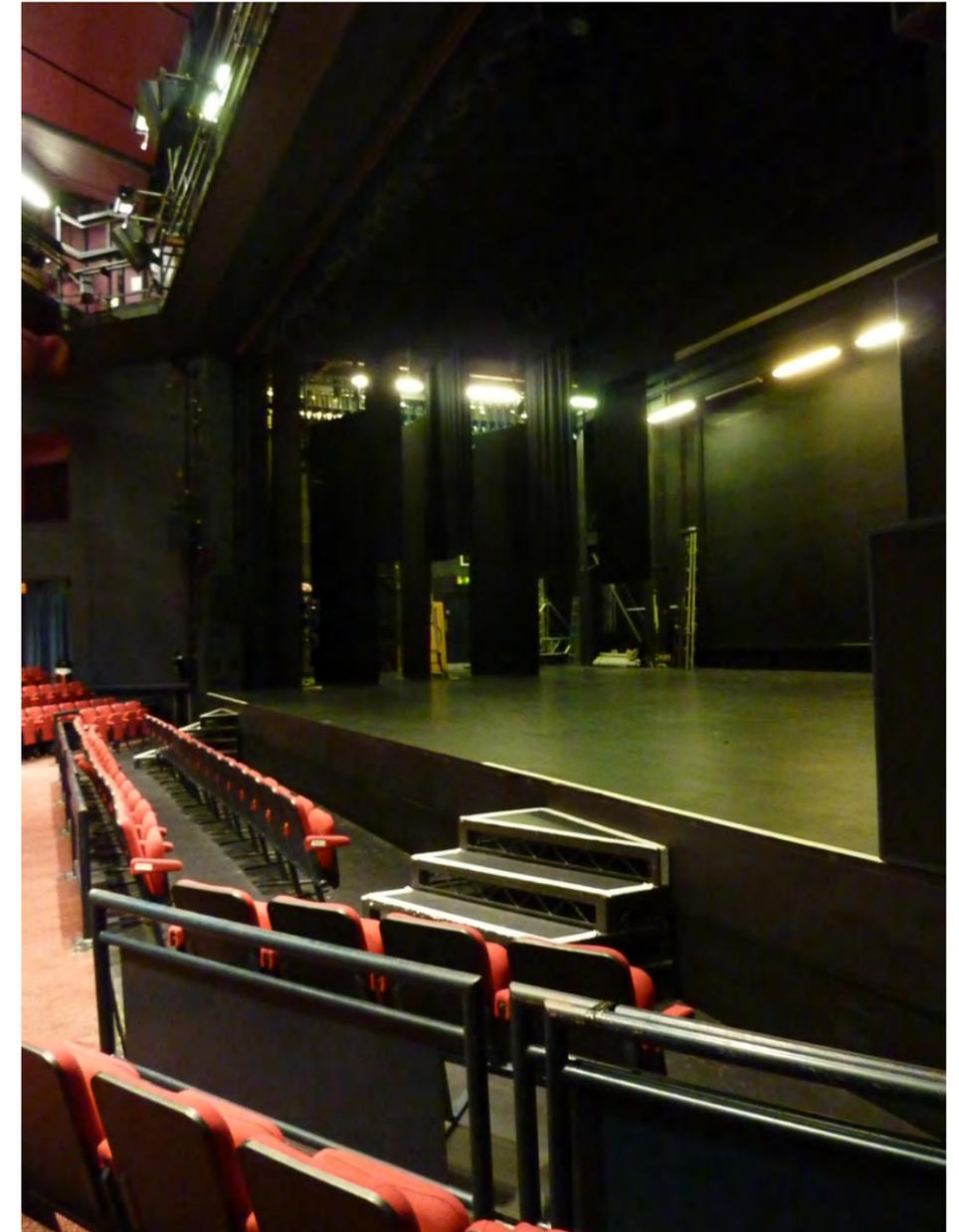
Sound mixing desks can be very large and heavy items and currently positioning these requires the bleacher to be retracted and the desk to be hoisted from ground level up to the balcony location.

Behind the bleacher seating at balcony level there is a projection room although this is not used and has become redundant.

A theatre consultant should be appointed at a later stage to advise on all the technical installations for the project.

7.7 Décor and Finishes

The existing colour scheme is predominately red/purple. The seating is upholstered in a red fabric that is probably due for renewal. Metal work is picked out in a blue grey colour and there are some timber infill panels to the side of the bleachers. There is much that could be done to improve the ambience of the auditorium through the renewal of finishes and materials.



View of proscenium

8.0 AUDITORIUM OPTIONS

8.1 Auditorium Option 1

(Illustrated on drawing 517/01. 02 & 03)

The first option for the auditorium is an approach that seeks only to amend and improve the existing layout without radically rebuilding, remodelling or re-structuring the space.

The single rake layout is retained but the bleacher is removed at both levels and the whole rake is constructed as a fixed tier.

The seating bowl is reconfigured to remove the two main crossover gangways and seat row depths are adjusted to enable longer row lengths.

The overall width of the auditorium is retained, however we have introduced 2m deep side galleries that will take loose seating to reduce the apparent width of the space and eliminate the extreme side seats. The main gangways are relocated to the sides

The proscenium would be adjusted to provide sliding side and header panels enabling reduction in both width and height.

The number of exits are reduced to two at ground floor level, two (existing) at balcony level and two smaller exits at the top of balcony.

This will provide escape capacity for 1000 under the Technical Standards.

The auditorium would be provided with new seating, lighting and finishes and the ceiling panels would be replaced.

Provision has been made for upgrading the electrical infrastructure.

The upper lighting bridge structures and control room remain unchanged although further investigations are required to resolve some of the lighting issues described in section 7.6.

In order to adjust the acoustics of the space due to the volume constraints the only viable solution would be an electronic acoustic enhancement system.

We have used similar system before, most recently at The Theatre Royal Norwich, which has received very positive feedback from both performers and audiences.

This system would be used on all three options.

These changes have the following major benefits:

- The extreme side seats are moved inwards with the outer seats of the main seating block located 3.2m in from their previous position
- It should be noted the side gallery seats are further out towards the sidewalls but are still located further in than the existing side seats.
- The reconfigured seating would enable a reduced proscenium width to 12m, which is more suitable for Drama, whilst still allowing the wider 16m configurations for dance
- The new side galleries and seating shape and focus the space.
- The majority of the gangways are now located next to walls which enables continuous handrails - these will feel much more secure for elderly audiences.
- The seating tiers become fixed removing any movement or shake
- The auditorium can be secured from the public and more easily stewarded
- Capacity increases: 1012 seats in main tier plus 34 loose side seats

Total 1046, an increase of 81

NOTE: Total excludes losses from orchestra pit/wheelchairs/sound desk so actual numbers will reduce subject to these configurations. Numbers are initial estimates and could vary as the designs are developed.

Auditorium Option 1 - Surrounding Cross Over, Lobbies and WCs

(Note there are variations to the lobby and WCs areas within each auditorium option)

The major advantage of removing the bleacher seating is this frees up a significant area of floor space under the seating rake where the bleacher would normally store.

The existing long bar would be relocated to the much more suitable and pleasant areas in the foyers which enables the main WC functions and store areas to relocate to this location.

The extra floor area enables increased WC & DWC numbers plus scope for a cloakroom and the location enables a more accessible and even distribution of the WCs, shared between the two foyers/entrances.

To facilitate and encourage movement between the foyers areas a generous cross over corridor is provided, which is 4-5m wide and could easily be planned to house exhibits, display cases and information on local history, artefacts and artworks for the community and visitors to enjoy.

The side entry lobbies to the auditorium directly off the foyers are reorganised to provide prime sales and merchandise counters to target customers as they enter and exit the auditorium.

8.2 Auditorium Option 2

(Illustrated on drawing 517/04, 05 & 06)

The second option for the auditorium is a variation on option 1 but which undertakes greater alterations to the existing structures and form of the auditorium.

The design is similar to option 1 but the seating rows are curved to create an amphitheatre form.

By curving the seat rows we are seeking to soften the overall character of the room and provide improved audience cohesion and focus on the stage.

The proscenium is amended as per option 1.

A new sound control room location is added to the rear of the stalls although its final configuration is subject to further design development at the next stage.

As in Option 1, provision has been allowed for upgrading the electrical infrastructure and acoustics. The upper lighting bridge structures and control room remain unchanged, although further investigations are required to resolve some of the lighting issues described in section 7.6.

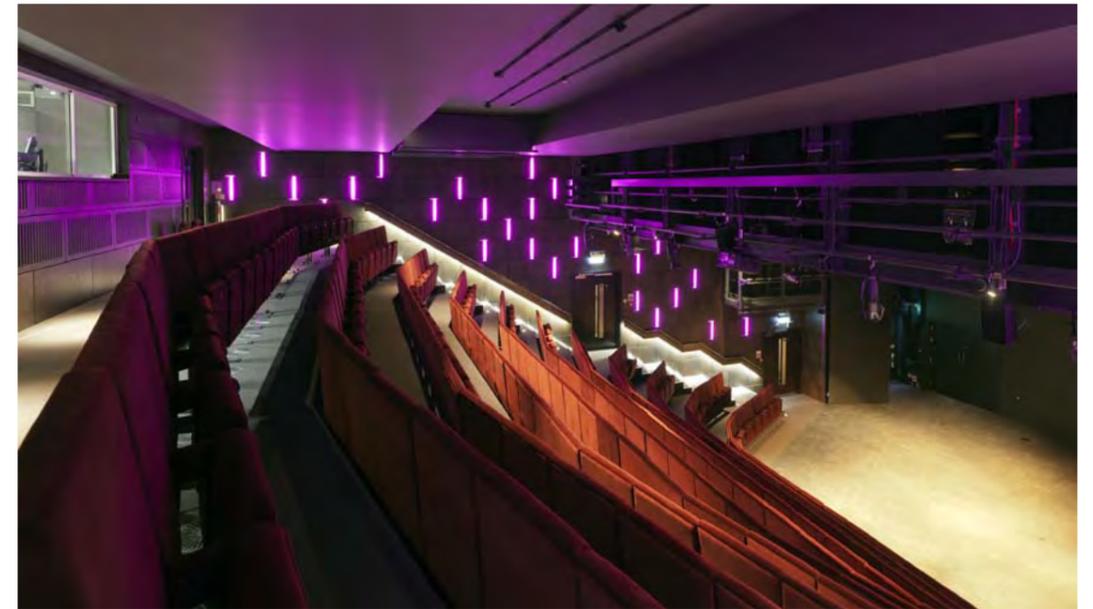
These changes have the following major benefits: (as per option 1).

- The extreme side seats are moved inwards with the outer seats of the main seating block located 3.2m in from their previous position
It should be noted the side gallery seats are further out towards the sidewalls but are still located further in than the existing side seats.
- The reconfigured seating would enable a reduced proscenium width to 12m more suitable for Drama, whilst still enabling the wider 16m configurations for dance
- The new side galleries and seating shape and focus the space.
- The majority of the gangways are now located next to walls which enables continuous handrails - these will feel much more secure for elderly audiences.
- The seating tiers become fixed removing any movement or shake
- The auditorium can be secured from the public and more easily stewarded
- Capacity increases: 965 seats in main tier, 30 loose side seats, total 995 an increase of 30
NOTE: Total excludes losses from orchestra pit/wheelchairs/sound desk so actual numbers will reduce subject to these configurations. Numbers are initial estimates and could vary as the designs are developed.

Auditorium Option 2 - Surrounding cross over, lobbies and Wcs

(Note there are variations to the lobby and WCs areas with each auditorium option)

Please refer to option 1.



Angled seating at St James Theatre, London by Foster Wilson Architects



Curved seating rows at The American School in London by Foster Wilson Architects (Note stepped side galleries)

8.3 Auditorium Option 3

(Illustrated on drawing 517/07, 08 & 09)

The third option for the auditorium is a much more radical alteration of the existing structure and form. It effectively strips out the whole space and starts again.

The design seeks to create a more traditional, focused and atmospheric multi-level auditorium.

A sloped stalls floor is excavated to create a shallow rake from front to back with new seating configured in long curved seating rows.

The sidewalls of the auditorium are moved inwards to reduce the overall width of the auditorium and as per options 1 & 2 the proscenium width can be reduced.

Major alterations also take place at first and second floor levels where the existing balcony structure is removed completely and two new curved balconies are added.

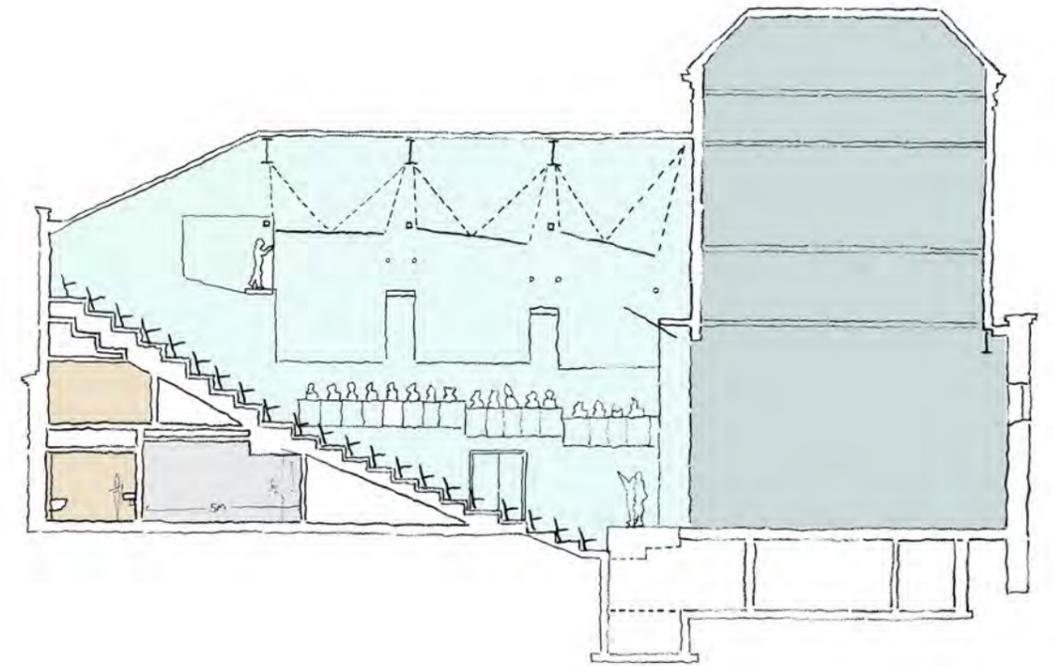
By creating new shaped balconies that wrap the space and extend the audience upwards the whole nature of the space would be transformed.

The side balconies could be designed as individual boxes or stepped to added further interest.

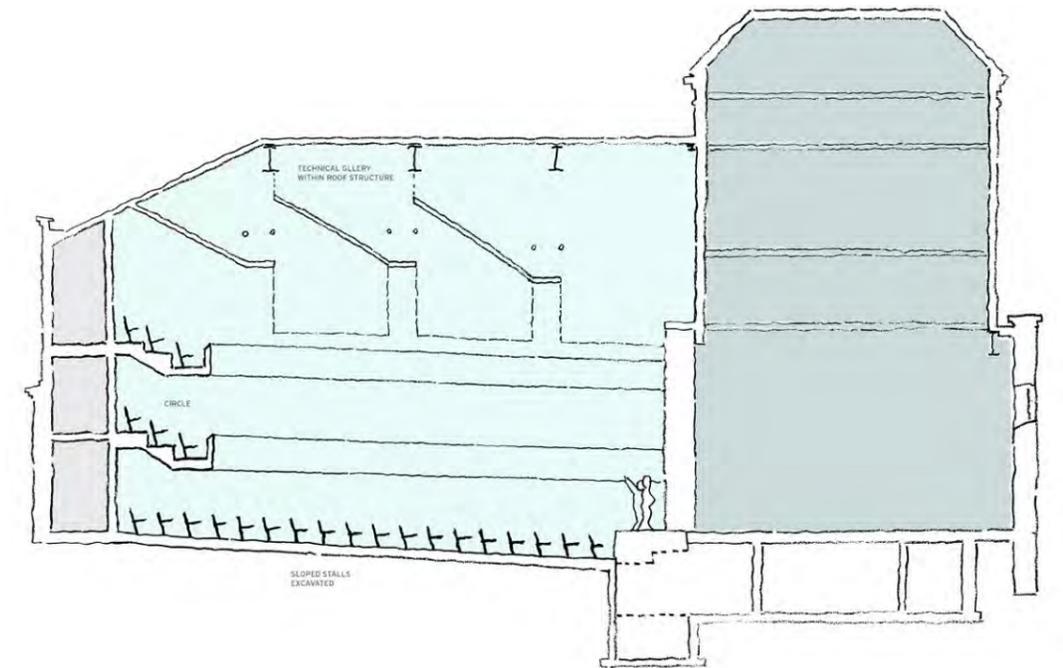
A new sound desk position is located to the rear of the stalls although its final position is subject to further design development at the next stage.

As per option 1 & 2 provision has been allowed for upgrading the electrical infrastructure and acoustics.

The lighting bridges would require considerable redesign, which would include moving them upwards into the roof structure or completely rebuilding them to better suit the curved balcony shapes below. These alterations would also require alterations to the existing mechanical ductwork housed in the roof void.



Typical section for options 1 & 2



Typical section for option 3

These changes have the following major benefits:

- The extreme existing side seats are moved inwards with the outer seats of the main seating block located 2m in from their previous position
- A transformed auditorium character with a much greater connection to the historic listed nature of the building and much greater scope to invoke Cornish themes and traditions within the architectural form.
- The reconfigured seating would enable a reduced proscenium width to 12m more suitable for drama whilst still enabling the wider 16m configurations for dance.
- The two new side galleries help shape and focus the space.
- The sloped stalls enables improved access for wheelchairs, ambulant disabled and elderly patrons.
- The seating tiers become fixed removing any movement or shake
- The auditorium can be secured to the public and more easily stewarded
- The layout provides a dedicated sound mixing location
- The layout provides two new balcony front lighting positions as well as high-level bridge positions.
- The overall reduction in width of the audition enables increase floor area within the digital media space and dressing rooms located at 1st floor
- Due to the distributed audience across 3 levels the auditorium will feel full even when not.
- The seating capacity increases: 738 seats in stalls, 242 in circle, 248 in gallery
Total 1228, an increase of 263

NOTE: Total excludes losses from orchestra pit/wheelchairs/sound desk so actual numbers will reduce subject to these configurations. Numbers are initial estimates and could vary as the designs are developed.

Auditorium Option 3 - Surrounding cross over corridors, lobbies and Wcs

Due to the much deeper configuration of the seating in option 3 the crossover space is reduced and become more of a wide corridor as per option 2.

The side lobbies again become the focus for the new WCs and sales counters providing a similar increased WC numbers and opportunities merchandise counters as per option 2 but in a slightly different configuration.



Three tier theatres: Bouffes du Nord, Paris (top) New RST, Stratford-upon-Avon (bottom)

9.0 OPTIONS APPRAISAL

Option	Construction Cost 2Q 2015 ex. Fees, VAT, and client direct costs (refer to cost report for further details).	Key Features	Strengths	Weaknesses	Provisional Ranking
Option 1	£ 7,341,800 (Auditorium £1,320,000 ex acoustic system)	An extra 81 seats added New side galleries Reconfigured seating & gangways Gangways located at side walls Fixed single seating tier (angled) The auditorium can be secured from the public Existing structure retained Existing lighting bridges retained	Lowest cost Fastest build time No underground works and associated risks Best of the three for WC & cross over space	Least improvements to atmosphere Least improvements to audience focus to stage (wrap) Steep rake retained Long seating rows Sound desk position still within seating No balcony front lighting positions	2
Option 2	£ 7,454,100 (Auditorium £1,410,000 ex acoustic system)	An extra 30 seats added New side galleries Reconfigured seating & gangways Gangways located at side walls Fixed single seating tier (curved) The auditorium can be secured from the public Existing structure retained Existing lighting bridges retained	Low cost Fast build time No underground works and associated risks	Medium improvements to atmosphere Least improvements to audience focus to stage (wrap) Steep rake retained Long seating rows Sound desk position still within seating No balcony front lighting positions	3
Option 3	£8,728,800 (Auditorium £2,216,500 ex acoustic system)	An extra 263 seated added Three tier auditorium New balconies x 2 Reconfigured seating & gangways New sloped stalls floor Gangways located at side walls Fixed seating tiers The auditorium can be secured from the public Balcony front lighting	Creates most additional seats Provides sloped stalls - better access Creates a new and improved auditorium Best audience focus and wrap Will feel full even when half empty due to distribution of audience Provides balcony front lighting locations Provides balcony boxes and greatest range of seating positions and balcony front seats	Highest cost Longest build time Has highest risks associated with underground works Auditorium lobbies spaces and crossover less generous than option 1	1

9.1 SUMMARY

If one assesses the options purely on seating numbers then, provided the extra build costs can be justified, option 3 is by far the best solution in terms of income generation.

It also provides the greatest change in the character of the auditorium space. Its clear disadvantage is the additional cost and risk involved.

Between options 1 and 2, Option 1 is probably preferable on the basis that it costs less and has greater seating numbers, albeit at the loss of the curved seating rows.

10.0 BUILDING HERITAGE

10.1 Listing Citation (from English Heritage web listing).

The building was listed Grade II* in January 1971:

TRURO SW8244NE

BOSCAWEN STREET 880-1/7/16 (South side) 08/01/71 The City Hall GV II*

City hall. 1846. By Christopher Eales.

Granite ashlar fronts; dry Delabole slate hipped roofs; tall granite ashlar stacks with modillioned cornices. Large rectangular plan with formerly open arcade with large stair hall fronting a large market hall. Classical style. 2 storeys; north Boscawen Street front is symmetrical 5 bays. Rusticated ashlar to ground floor with vermiculations to jambs and round arches over moulded impost string; mid-floor cornice string as part of Doric entablature with triglyphs and mutules. Plain ashlar to 1st floor; heavy crowning cornice with thick modillions. Windows have alternate triangular and round pediments; sill cornices on consoles, pilasters. Tall pedimented clock tower. Back Quay elevation is 2 storeys; 7 windows with round arches. Central bays breaking forward.

INTERIOR: fine interiors include Market Hall on ground floor with vaulted plaster ceiling and granite vestibule leading on right to cantilevered granite stairs with cast-iron balustrade. 1st floor has landing and courtroom with panelled benches and large council chamber and committee room all with moulded and carved plaster ceilings, chimney-pieces, doorcases, cast-ironwork and other original features and fittings.

Listing NGR: SW8268544781

National Grid Reference: SW 82685 44781

10.2 Conservation Areas and related issues:

The site is within Truro Conservation Area

The site is also within a Historic Characterisation area (Character area 1: City Centre)

Under Lemon Quay the River Kenwyn Flows out into the Malpas Estuary and area of designated Special Scientific Interest.

10.3 Archaeological Investigations

In 1996 Cornwall Archaeological Unit undertook investigations prior to the last refurbishment. The report titled "Archaeological Investigations at City Hall Turo 1996 can be found in the Appendices

It is noted that this report pdf scan is of low quality and it missing the archive drawings and photographic slide record:

These are listed as being held at the CAU at Old County Hall, Truro, under following codes:

Archive drawing GRH236

Field drawings and notes GRE223

Photographic record:

Pre-demolition - Colour slides GCS 20215 to 20270, Black and White prints GBP 559/560

Excavation:

Colour slides GCS 19360 to 19421, Black and White prints GBP 564

Watching Brief:

Colour slides GCS 20271 to 20380, Black and White prints GBP 597/609

The site code was CHT96

Project number 1996026

Archive box labelled CHT96 1996026

It is recommended these records are found (if they have not been already) and ideally digitised to form part of any digital archive and also a reference point for the renovation and refurbishment proposals.

10.4 Heritage Statement

In 2013 HFC commissioned Alan Baxter and Associates LLP (ABA) to write an initial Heritage statement giving an Account of the historic development of the City Hall building complex. These reports can be found in the Appendices.

10.5 TRURO HISTORY TIME LINE SUMMARY:

The following is a brief summary taken as excerpts from the Alan Baxter heritage Statement and Archaeological investigations split under new headings:

(all direct quotes for these documents are in italics)

11th Century - Early Truro

First records of Truro date from pre historic times:

"Truro has ancient origins, confirmed by early pre historic earthwork in what today is the Hendra area, just North of the River Kenwyn. It is first officially documented in 1140."

14th - 15th Century - Truro Industry and expansion

Over the 14th to 15th century Truro expanded:

"Despite two epidemics of Black Plaque in 1348/49 and 1361/62 Truro's importance as a centre for maritime trade and industry expanded so much that in 1575 it was handling and transporting one third of all tin produced in Cornwall."

"The result was an Elizabethan royal charter in 1589, permitting the election of a mayor and a weekly market."

16th / 17th Century - Mayor and marketplace

The early history and use of the site on which the building currently stands was very similar to the way it is now:

"The first formal market house is recorded in existence in 1658. It was built at the Western end of the aptly named middle row, a line of narrow market buildings that developed along the centre of today Boscawen Street."

"The market house was an architectural embodiment of the Elizabeth charter with town council on a first floor covering an open market below."

"By the eighteenth century middle Row was Truro's civic centre. A mining boom replaced maritime trade as the most lucrative activity and Truro became a Stannary Town, a place where smelted tin was collected, tested and sampled before it was sold."



Boscawen Street c1830 with market gates visible on left (Cornwall Record Office)



Boscawen Street c late 19th century (Hall for Cornwall)

18th Century - First foundations of a theatre:

The first mention of the use of the site as a theatre is in the late 18th century:

“The centre of Truro continued to grow and hospitality and market buildings were joined by private houses...with the ability to sell from their own houses, the market buildings along middle row began to decline. The Market Hall then became a ‘gallery’ hosting performance of theatre and music such as a performance of Handel in 1761.”

18th Century - Hall and market

Another iteration of the repeating use of market and Town hall occurred just before the turn of the century:

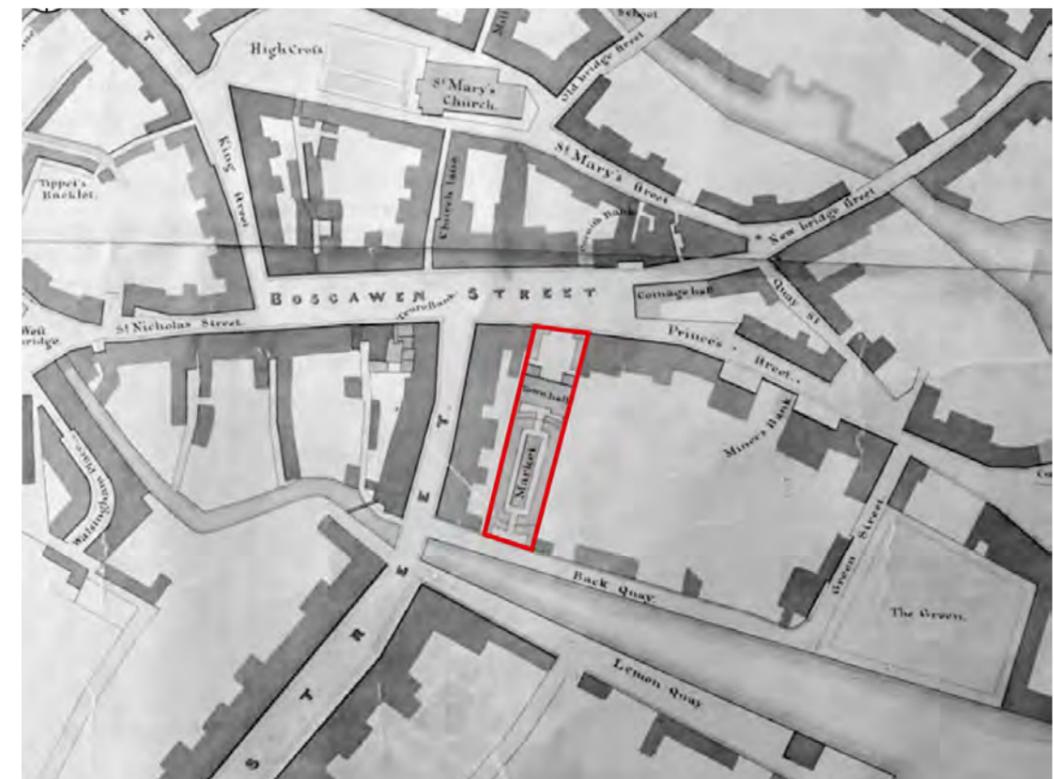
“Middle row was finally demolished in the 1790s... a replacement fresh food market was still required and a new, partially open market and town hall were constructed on the site of the present City Hall complex.”

19th century - City Status:

The arrival of the railway triggered a new status to Truro and eventually the new building of the city hall complex we see today:

“In the 1860s I.K Brunel’s Great Western Mainline arrived linking Truro to Paddington. With the passing of the 1876 Bishopric of Truro Bill, the town was also granted a Bishop. This event, coupled with the general prosperity, saw Queen Victoria granting Truro City status in 1879.”

“The original market was found to be too small and the building taken down. In 1847, it was replaced by the city Hall complex we see today.”



Survey Map December 1848 & 1835 (Cornwall Record Office)

10.6 The Building evolution:

Introduction to the building:

"Over its 150 year history, this group of spaces comprising of the City Hall has played a key role in the public life of Truro as well as the wider country. Today, the Hall for Cornwall is one of the country's largest performance venues and continues to have a tangible cultural importance and social relevance... The City Hall complex is the grandest in the country and the only one of its kind in Truro. Overall, it is an example of a heritage asset that is well used by civic and even wider county community."

19th century - The new building

The basic form of the building as we know it now was opened in 1847:

"The new building was designed by London architect Christopher Eales (1809 - 1903)."

"The tender to building the scheme was won by a Mr Prior of Helston, Cornwall at a price of £8328...and the Opening ceremony was presided over by Mayor Clements Carlyon."

Market, police station fire brigade and town council

Interestingly through this early period of its life the building housed a number of functions, which have since been lost:

"Containing a larger enclosed market numbering 56 stalls, it also housed the local fire brigade and police station on the ground floor as well as the town hall and administrative offices of the City of Truro on the first floor'. 'Whist the covered market existed under the civic spaces it may not have been enough. Newspaper of the time implies that plans and elevations for a new pig market, fish market and corn exchange were presented in 1866."

Market, ice rink, cinema and rifle range

The building continued to evolve and alter its function as Truro developed and needs changed:

"The central market hall section continued to change drastically:

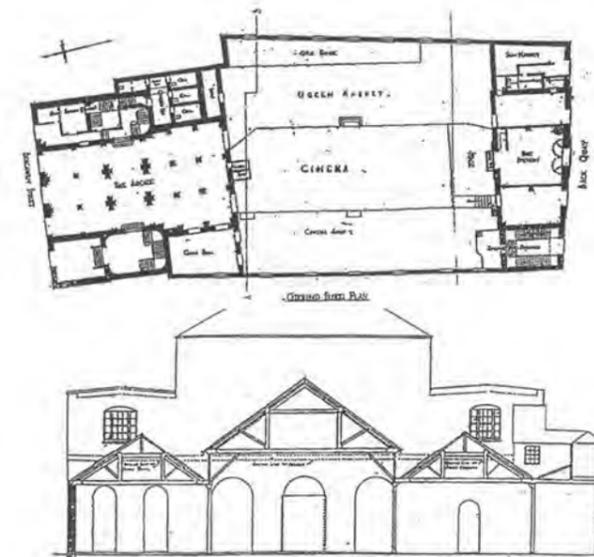
Subdivided with time into three aisles the spaces consisted of vegetable stands, an ice rink alongside added in 1907, further followed by addition of a cinema in 1912. Although the space suffered from a significant fire that gutted most of the building in 1914, by 1919 the now well partitioned space was officially known as the County Picture Theatre and Truro Skating Rink."

"While the Boscawen Street façade continued as the main elevation, Back Quay was made both more prominent and usable when the River Kenwyn was covered over in 1923 crating and public space and parking area in front of the southern façade."

"The Eastern section of the hall stayed as a veritable market until 1925 when the space was finally unified as Truro's public hall. With a capacity of 1000, a stage, dressing rooms and public cloakrooms, it was the kind of venue needed by an administrative centre that Truro was becoming rather than a vital trading hub it had been."



Photograph of Boscawen Street in 1905 (Hall for Cornwall)



Plan of the City Hall and Hall for Cornwall and section through Hall c1924 (Cornwall Records office)

10.7 The architecture

A brief description of the City Hall complex:

"The style is Italianate Classicism. Eales austere, masonry forms of the market hall are picked out with painted and gilded mouldings and other details at frieze and ceiling level. It also appear there was than original intention to infill the portal openings on the City Hall side with timber and glazed section doors."

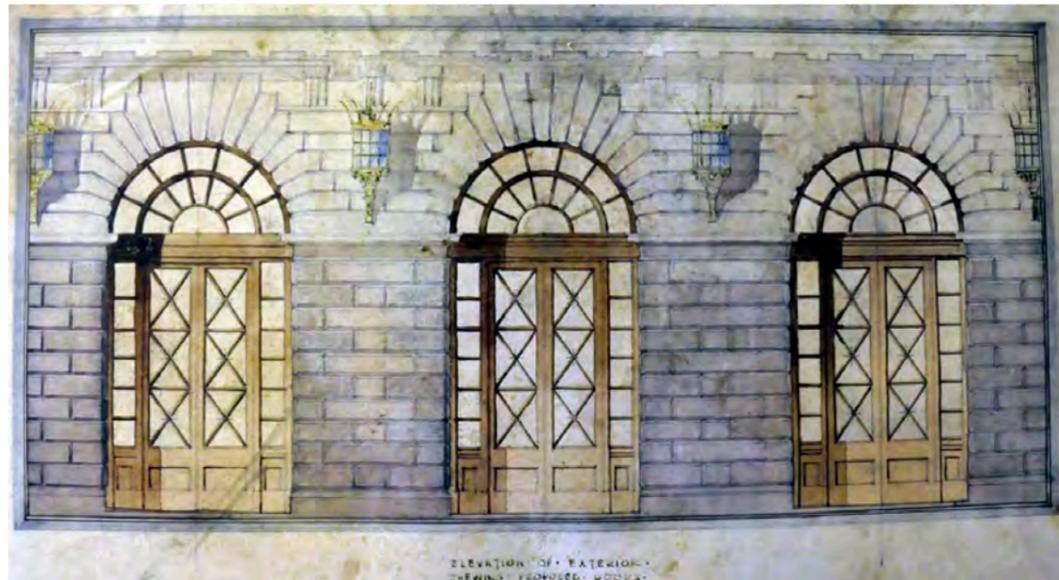
"The building received interest before it was built. Prior to its building a drawing of the Boscawen Street elevation was included in the Royal Academy's Summer Exhibition 1838."

"The Boscawen elevation remains remarkable unchanged with the exception of the later addition of the Bell tower in 1858. The records the Quay side elevation may be somewhat later."

"During the 1925 alterations the old 'triple pitched roof over the three aisles were replaced by a public halls barrel vaulted roof and Doric columns. The main entrance was from the Boscawen end and the stage was at the Southern end. It was also during this remodelling that the prisoner cells were removed from the Police station in the North Eastern corner of the City Hall (the café today)."

"While traces remain most of these have been lost to extensive remodelling. Further refurbishments took place in the 1950s, 1980s and 1990s. Function evolved too and today the city hall accommodates a flea market and café as well."

"The most recent remodelling 1995-97, whilst thorough in its scope, with the entire central section gutted and a lot of back Quay spaces rebuilt, the project was still competed with shortfalls that continue to plague the usability of the import performance venue."



Design for Truro City Halls market interior c. 1840 (Cornwall Record Office)



Design for Truro City Halls market interior c. 1840 (Cornwall Record Office)

10.8 Heritage and restoration opportunities:

A sensitive refurbishment of the two ends of the building; the Boscawen façade and foyer (and adjoining spaces) and the Lemon Quay facade and Quay side foyer, to form the 'bookends' to the new theatre space in the centre is clearly very desirable, and there is significant scope to not only highlight the architectural heritage elements of these spaces but also explore and communicate their history.

In order to undertake a sympathetic restoration we would recommend the following areas of further investigation, scope and development:

Record and capture:

A measured survey of the space and façade. This would take the form of a LADAR survey (or point cloud survey) which would include a full RGB colour record.

It should be noted videos, stills and sections (perhaps before after etc) can be created from this form of survey to great effect, such as those by ScanLabs:

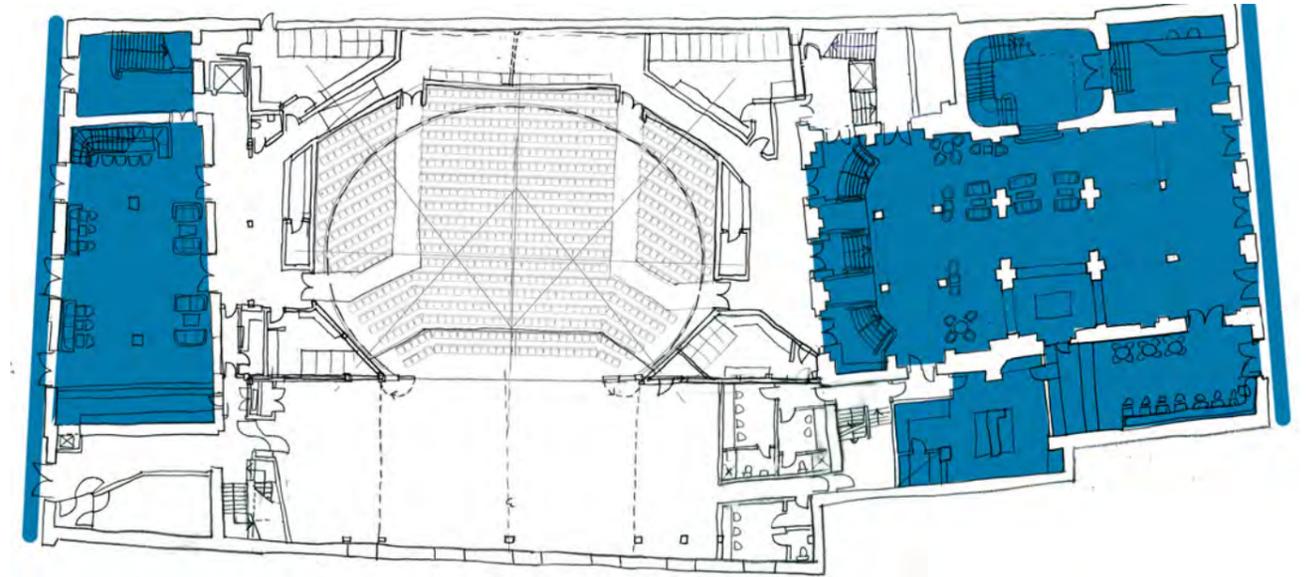
<http://scanlabprojects.co.uk/> and other similar survey firms.

Repairs:

From the recent condition surveys a list of required repairs to the front and rear façades, front and rear roofs, bell tower and interiors of the Boscawen foyer and Quay side foyers have been identified and should be undertaken as part of the renovation. There are also minor repairs to some of the 3rd floor spaces (meeting room) and original staircases.

Research:

Paint research can be used to identify original colour schemes. Further investigation of any additional original colour drawings (see page 32) of the interior should also be undertaken as these provide an invaluable reference guide.



Ground floor plan showing main areas of heritage potential.

Façades:

Lighting:

Both façades would benefit from new architectural lighting, this will not only enhance the character and detail of the fine façades but also provide a focal point to the street elevations and act as a beacon at night to highlight the theatre and increase its street presence.

Signage:

New illuminated signage and banner signage (subject to consent) would also enhance the visibility of the theatre.

Digital content:

At low level some discrete digital screens or media/ information points could be considered (either outside or within the foyers) to more efficiently communicate and promote the theatres programme, history, show information etc This approach can often minimise the need for numerous separate standard poster displays and keep the façade less cluttered at low level. This technology can also be used to improve access by enabling spoken content for visually impaired users and or touch screen technology.

Entrance doors:

From the original drawings it would be possible to replicate the original designs, although some consideration to improving the visibility into the foyers using fully glazed doors may be preferable.

Interiors:

Decoration:

Using the paint research a historically influenced decoration scheme should be considered to the Boscawen foyer and Quay side foyers.

Reproduction:

In many of the historic areas of the building, where original decorative features have been lost, consideration will be given to their restoration, subject to further research and consent

New Finishes:

There are opportunities in choice of finishes to communicate the heritage and history of the building indirectly. One might for example use a stonework floor to express the idea of an internal street or market linking the front and rear foyers, echoing the 18th century layout. The use of etching, inlays, old plans, outlines of historic walls or lost room layouts and text within finishes could also be used as a method of communicating a narrative or history. (Please also refer to section 11 place).

Internal Signage:

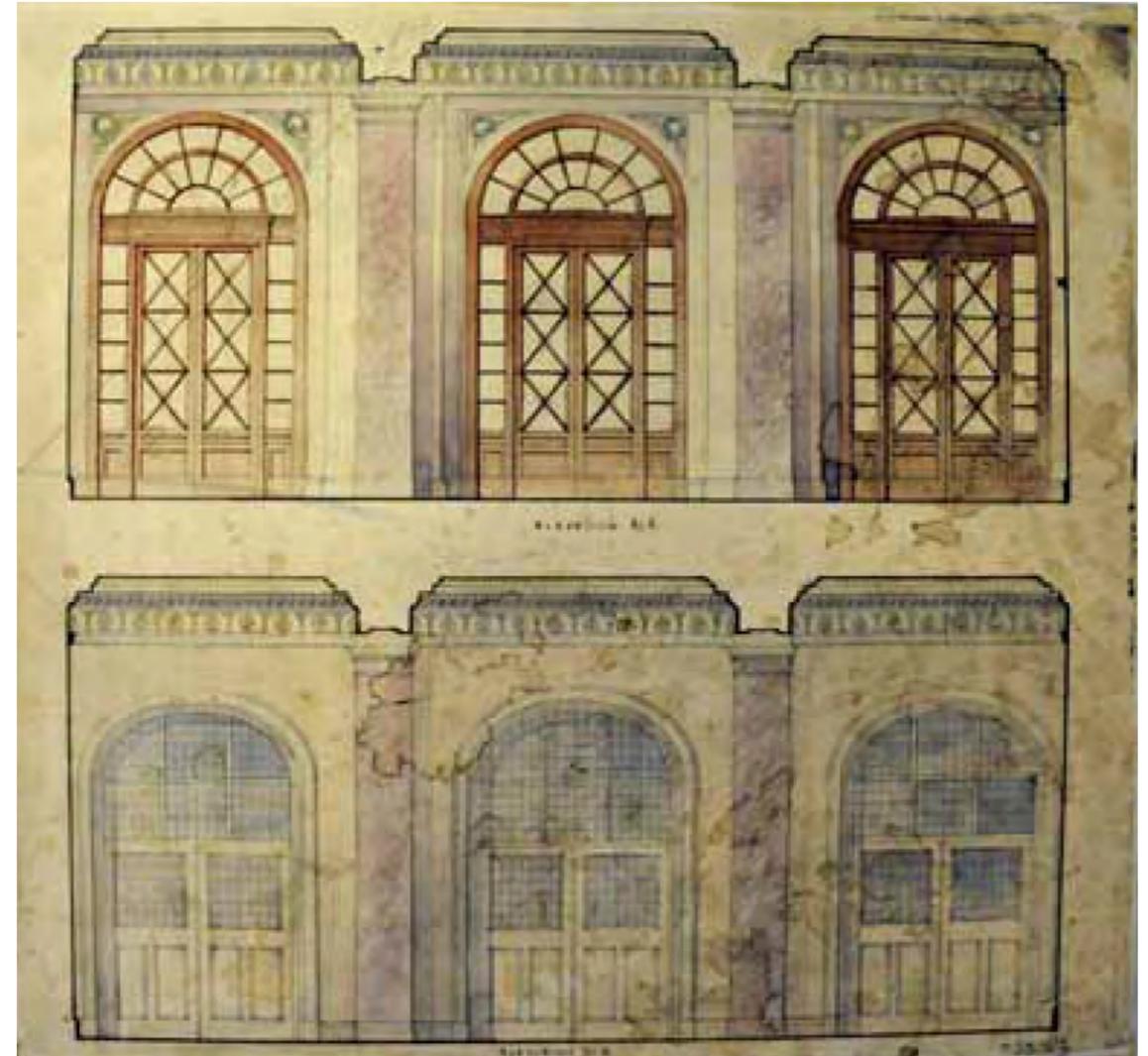
New way finding signage will improve customer access and information and could as already mentioned include digital content. There are also opportunities with the naming of rooms and spaces to communicate a connection with the theatre history and location. (Please also refer to section 11 place).

Internal Lighting:

The foyers will greatly benefit from new low energy LED lighting

This will enhance the character and detail of the fine interior and new decorative scheme.

This would include new historic appropriate light fittings (with modern LED sources) including large chandeliers, wall lights, recessed coffer lighting, low level lighting and floor mounted lamps.



Design for Truro City Halls market interior c. 1840 (Cornwall Record Office)

Adaption:

The Boscawen foyer and quay side foyers would benefit from some sensitive adaptations:

Boscawen side:

We have indicated that new opening would be formed within the Boscawen foyer to enable the linking of the new bar café and town hall entrance to form a much more open and accessible space.

The removal of the detracting café and tourist office modern additions will also greatly improve these spaces.

Quay side:

The removal of the modern 1st floor which currently almost fully fills the current foyer is an important adaptation. We have suggest that a much slimmer gallery (final form to be agreed) would be more appropriate, this will meet the operational needs of the theatre - including enabling split level viewing down into the proposed 'senate' space - whilst still returning the space to some of its original grandeur which is currently lost.

New construction:

In order for these spaces to operate as new public spaces the Boscawen foyer (and to a lesser extend the Quay side foyer) will need new mechanical (ventilation heating etc) and electrical (power data lighting) services infrastructure. How this can be sensitively introduced within the existing fabric will need careful consideration at the detail design phase.

The foyer will also require new bar and café counters, ticket/box office counters plus loose furniture and fittings

Shared facilities:

It is intended that as part of the alterations to the Boscawen foyer a more open civic face to the Town hall will be created. This will encourage open access into the Town hall spaces above, which are currently perceived as being quite private and removed from the ground floor market space. It is also intended that in turn the Town hall staff and services could also utilise the foyer facilities for informal meetings and interactions with the public.

Use of the Town Hall spaces:

Whilst these space do not form part of this feasibly study, we can envisage that new connections between the theatre and the Town hall (starting at the ground floor as described) could eventually be extended into the upper floors. This may possibly include:

- New connections at first floor level
- Restoring the partially remove staircase to the Western side of the Boscawen foyer
- Using the Town Hall spaces for events such as hospitality, shared theatre and community activities, building tours and education

Scope and Costs:

The costs associated with works to the Boscawen Street and Back Quay frontages, which comprise the main areas of conservation work eligible for heritage funding, have been separately identified in the cost plan and scope of works in the appendix

11.0 PLACE

Hall For Cornwall are keen to explore Cornish themes and history within the building as a whole, including the auditorium. This could take the form of displaying actual artefacts and historic information as well as incorporated designs within the architecture itself.

This could include:

- The naming of spaces after Cornish themes
- Use of local traditional materials and finishes
- Use of historic patterns or designs in finishes or graphics
- Use of abstract references including echoes of actual historic structural forms

However, Hall For Cornwall and FWA are also keen to ensure that the themes do not feel contrived, nor that the overall outcome is patronising or in poor taste.

There is a wealth of Cornish history the building can draw on which might include:

- Ancient structures - St Piran Round, Plain-an-qwarry, Boscawen Ün, Men-an-Tol, Gwennap Pit and so on
- Places and Traditions,
- Myths and legends
- Cornish Language and Cornish plays: *Origo Mundi*, the *Passio Domini Nostrri* and *Resurrexio Domini Nostrri*
- Cornish and Celtic symbols and patterns
- Notable people, dates and events

Further possible history and themes can be found at:

<http://www.cornwallinfocus.co.uk>, <http://www.historic-cornwall.org.uk/a2m/index.htm>



(top to bottom) St Piran Round, Boscawen Ün, Gwennap Pit.

12.0 STATUTORY APPROVALS

12.1 Land Ownership Issues

Cornwall Council currently owns the freehold of the building.

The two areas adjacent to the Boscawen Foyer (café and Town Hall entrance) are also owned by the Council:

In order to provide the full foyer space both these spaces will need to be acquired under Hall for Cornwall's demise/lease.

12.2 Rights of Way Issues

We understand there to be no rights of way that will be affected by the works

12.3 Rights of Light Issues

The proposals remain within the general footprint of the existing building so we do not anticipate any effect on adjacent properties.

12.4 Part Wall Agreements

Due to the land locked nature of the site and the proximity of multiple freeholders within the adjacent buildings there may be multiple party wall agreements required subject to:

The extent of the proposed excavations should they fall within 6m and 45 degrees from the adjoining foundations or 3m of any part wall

Any works to a party wall that cut into the walls, add structural loads or demolish any sections.

12.5 Planning & Listed Building Consent Permission

The location of the building sits within the Cornwall Council planning district.

The site is in the Truro conservation area.

The building is Grade II* Listed.

The proposed schemes will require Planning Permission, Listed Building Consent and possible Conservation Area Consent from the Council.

A pre-planning meeting was held with the council in December 2012 a copy of the subsequent result of the meeting is copied below:

"PA12/03300/PREAPP - Hall For Cornwall Trust, Back Quay, Truro.

Dear Julien,

Thank you for spending the time to come and run through you proposals with myself and Nick Cahill (Historic Environment). It seems that the project is seeking to breathe life and long term sustainability into Cornwall's premier cultural venue and we would like to offer our support in principle to your ambitions.

As I advised yesterday the key issue is likely to relate to the works to the Listed building (being Grade 2) and the Boscawen Street entrance could raise the main issues relating to works to the Listed building (loss of fabric). However, this level of detail will need to be discussed and submitted at a later date as part of a subsequent pre-application submission.*

Nick confirmed that his recollection was that the auditorium had been substantially altered to the extent that there is very little of historic value likely to impact upon the proposed remodelling of the auditorium.

You seem to be aware of the potential sensitivity of the project and are speaking to the relevant people (Truro City Council, etc) so hopefully the scheme will come forward with a consensus of support to help it progress towards fruition in a positive manner.

I did mention to you that I had a meeting arranged with Donald Martin of the Council's Public Space Team and he has showed me the interim proposals for enhancing the outdoor space on Lemon Quay with the objective of tidying up and improving the environment outside the Hall for Cornwall and Manolos(?). They look to be positive changes that should make the space outside the entrance to your venue more welcoming to the public and will hopefully come forward in the near future.

If you require any further assistance do not hesitate to contact me.

Regards,

Dan Mitchell, MRTPI
*Principal Development Officer
Development Management
Planning and Regeneration Service
Cornwall Council*

In general the council are very supportive of the scheme. One area of the works which will require further detailed consultation (as noted above) will be the formation of any connections between the Boscawen foyer and the adjacent spaces - café/town hall - which will require two new openings (and therefore some loss of fabric), however when considered against the overall refurbishment benefits we feel this could be negotiated successfully.

12.6 Highways

Due to the proximity of the building to the highway and pavement at both ends of the building some alteration to the pavement may be required. There are various aspirations as listed in section 6.13 for amendments to the Quay landscape and roadway.

These should be discussed with the local council and highways department at the next stage.

12.8 Building Control Approval

The proposals will require Building Control Approval from the Council.

At the next design stage the proposals would be developed in accordance with the requirements of the Technical Standards for Places of Entertainments. Foster Wilson Architects recommend that the Building Control department be consulted during the next stage.

12.9 Part B: Fire Safety

The proposals will alter the existing fire strategy for the building and will require consultation with the Fire & Rescue Service during the next stage. If further alterations to the fire escape strategy are considered (for example to try to increase capacity) the use of the fire engineering consultant maybe required.

12.10 Part M: Access

The new foyer spaces, rehearsal room and café/community room will all be designed to part M of The Building Regulations and to be fully accessible.

12.11 CDM Coordination

The theatre will need to appoint a CDM coordinator to discharge their duties under the Construction (Design & Management) Regulations 2007 regarding construction health and safety issues at stage D. It should be noted that the CDM regulation are currently out for consultation pending new regulations and recommendations due 2014-2015 which may effect this appointment.

12.12 Premises License

The proposals will require an amendment to the existing Premises License from the Borough Council. Foster Wilson Architects recommend that Licensing Service and Environmental Health departments, the Police Authority, and the Fire & Rescue Service be consulted during the next stage.

Included in this will be the requirements for the theatre to produce/alter the existing fire risk assessment strategy and management plan for the building.

13.0 SUSTAINABILITY

13.1 Part L: Conservation of Energy

The conservation of energy is a key aspect to any refurbishment or new build project and must adhere to the ever increasing requirements which are incorporated in Part L of The Building Regulations and related building control documents and standards.

13.2 Existing Building

Where possible further upgrading to building fabric should be considered:

- Ensure any remaining areas of single glazing are replaced with double glazed units.
- Ensure all roof areas are well insulated where possible.
- Ensure insulated Lagging is fitted to any un-insulated pipes and ventilation ductwork.
- Minimise draughts and air loss by ensuring new and existing external doorways are fully sealed and weathered, plus introduce draft lobbies where possible.

Improvements could also be made in the following areas

- Add mechanical and electrical controls and monitoring equipment to all heating and cooling systems to ensure they are operating at optimum efficiency.
- Provide staff training in building systems and building use.
- Replace all lighting to low energy and long life sources such as LED.
- Ensure all areas are on lighting sensors to ensure lights are switched off when not in use.
- Minimise water usage: include use of water saving devices, such as low flush toilets and non-concussive spray taps.
- Reduce waste and recycle - Ensure building wide recycling stations for visitors and staff
- Encourage and promote public transport and cycling (plus parking/storage) travel routes to building and encourage car share schemes.

Useful resources on how to improve the day to day functioning of the theatre can be found at:

Julies Bicycle:

<http://www.juliesbicycle.com/resources/practical-guides>

The Theatre Trusts Ecovenue scheme:

<http://www.theatrust.org.uk/resources/ecovenue/>

13.3 New elements

The fully refurbished building areas will be designed to comply with the latest part L requirements. It should be noted that a submission to building control in 2013 would have to achieve the higher standards of part L2013 that may come into effect during this year and or any further editions. It should be noted that there is provision for relaxation of these standards when applied to a listed building.

Key factors to consider whilst designing any new or remodelled areas will be:

1. *Good Daylighting:* artificial lighting contributes a significant proportion of the energy costs of a typical public building, despite the fact that they operate largely in daylight hours.
2. *Lighting:* All lighting to low energy and long life sources such as LED. Ensure all areas are on lighting sensors to ensure lights are switched off when not in use.
3. *Low Fabric Heat Loss:* about half the energy consumption is expected to be from heating. A proportion of this is fabric heat loss and depends largely on the thermal efficiency of the building envelope as a whole, including glazed elements, frames and junctions.

4. *Limit Overheating:* the high casual heat gains associated with high density occupancies and electronic equipment mean that solar heat gains in the summer months should be avoided where ever possible
5. *Minimise water usage:* the design shall incorporate water saving devices, such as low flush toilets and non-concussive spray taps
6. *Efficient Ventilation and Services:* the high occupancy density expected means that maintaining the minimum fresh air ventilation rate only when it is required is important for keeping ventilation losses low throughout the 24 hour cycle. Natural ventilation of spaces that are not acoustically sensitive will be used wherever possible. The design will utilise the most efficient services and controls available on the market to minimise wastage
7. *Use of Green specification materials:* where possible specify Materials with lower embedded energy and from sustainable sources and or produced without harmful chemicals
8. *Renewable Energy:* These could include use of the following subject to budget and further detailed M&E investigations (not within current cost plan).

Photovoltaic panels on the south facing roof areas.

Thermal panels on the south facing roof areas.

Rainwater harvesting system and grey water recycling systems.

Many of these features, especially the daylighting and control of summer overheating, contribute to the well-being and comfort of the building occupants, as well as reducing energy use.

Another important issue for both the client and the design team to consider is the approach to purchasing and waste. Throughout the procurement and life cycle of the building, the team should be looking at ways to reduce and recycle waste. It is also important for us to procure items that are energy efficient, from more sustainable and local sources, as well promote fair trade.

13.4 BREEAM

BREEAM or BRE Environmental Assessment Method, is a voluntary scheme that aims to quantify and reduce the environmental burdens of buildings by rewarding those designs that take positive steps to minimise their environmental impacts.

Projects are assessed using a system of credits. The credits are grouped within the following categories:

Management

Health & Wellbeing

Energy

Transport

Water

Materials

Waste

Land Use & Ecology

Pollution

The assessment process results in a report covering the issues assessed together with a formal certification giving a rating on a scale of PASS, GOOD, VERY GOOD, EXCELLENT and OUTSTANDING.

BREEAM 2008 Assessments require a Design Stage and Post Construction Assessment to be carried out to achieve full certification.

Within each of the BREEAM categories outlined above, there are a number of credit requirements that reflect the options available to designers and managers of buildings.

An environmental weighting is applied to the scores achieved under each category, as shown below, in order to calculate the final BREEAM score. The weighting factors have been derived from consensus based research with various groups such as government, material suppliers and lobbyists. This research was carried out by BRE to establish the relative importance of each environmental issue.

It is recommended if HFC wish to achieve (or are required to achieve) a certain BREEAM rating) that an appropriate consultant or project team member(s) is appointed in a BREEAM consultant role as credits can be awarded right from the start for item like consultations and feedback of stakeholders etc.

14.0 CONSERVATION OF ENERGY PLAN

The following documentation has been prepared by the theatre's management outlining their current programme on carbon & energy reduction as well as outlining future aspirations

13.1 Carbon reduction

Hall for Cornwall signed up to the 10:10 project which aims to encourage companies and individuals to reduce their carbon emissions by 10% during 2010.

Our action year was completed in June 2010 and resulted in a 17% reduction in our carbon emissions (energy, fuel, travel) to 369 tCO2e from 443 tCO2e during the previous (baseline) year.

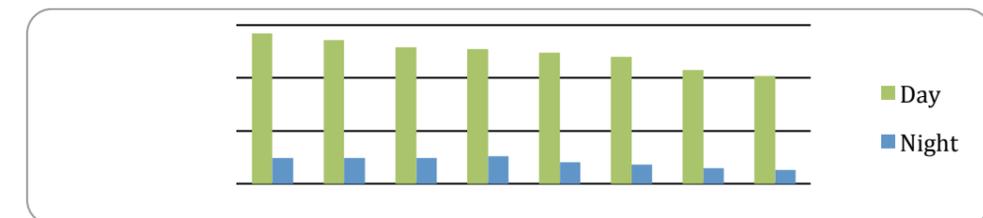
13.2 Energy

Hall for Cornwall uses gas, for heating and cooking, and electricity for ventilation and lighting within the building and, significantly, specialist theatre lighting for the auditorium and stage. Effective facilities management is necessary as the building hosts a varied range of events and activities on a daily basis.

The table below shows Hall for Cornwall's electricity consumption during the past seven years and our targets for the current year.

2005/06		2006/07		2007/08		2008/09	
day	night	day	night	day	night	day	night
566,958	99,110	542,450	98,780	515,042	98,835	510,122	104,241

2009/10		2010/11		2011/12		2012/13	
day	night	day	night	day	night	day	night
495,957	82,280	480,360	73,519	430,124	60,137	407,707	52,033



Electricity consumption shows a pleasing reduction since 2005, demonstrating the benefit of a consistent focus on energy saving measures throughout the period. In particular this includes ongoing promotion of staff awareness to ensure equipment in all areas is turned off when not required and taking opportunities to replace lighting and equipment with low energy alternatives.

We are committed to renewing lighting with low energy, long life LED lamps as the technology becomes viable and last year completed the world's first installation of GDS's award winning ARC system LED houselights, which has been a huge success.

Gas consumption is recorded weekly to enable close monitoring of use related to the building's varied occupancy requirements. The value of daily management of the BMS to maximize efficient control of heating and ventilation in all areas is demonstrated, following a loss of focus during 2008, by the significant savings made over the following years.

kWh	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Gas	598636	378652	457889	644058	446634	398729	312930	347840

The gas consumption for 2011/12 is influenced by an unusually mild winter, hence a predicted increase for the current year.

13.3 Pollution

Hall For Cornwall's Premises Dept. introduced, in November 2009, 'green' cleaning methods and embarked on a program of staff training and development to NVQ2 qualification which the housekeeping team achieved in March 2010. This led to improved cleanliness standards throughout the building and a reduction in chemical use by more than 50%, resulting in 0.25 tonnes less chemical disposal per annum. Our Catering Dept. adopted the same methods contributing to a further reduction in chemical use.

13.4 Waste Management

Hall For Cornwall has a long term commitment to waste reduction and recycling. Recycling measures include separating cardboard, plastics, cans, tins, paper and glass for regular collections, and we store used items such as batteries, lamps and ink cartridges for bulk collection.

Hall For Cornwall has achieved a 50% reduction in the quantity of landfill waste collected per annum from the premises, from an average* 50 tonnes in 2005/06 to 25 tonnes in 2009/10 (*tonnage based on average weight of 79.5kg per 1100ltr bin - Cory / CC audit). A further 20% reduction to 20 tonnes is projected.

13.5 Water

Hall For Cornwall's water consumption is directly related to the number of visitors to the building on a daily basis. We record consumption weekly and relate this to the building activity to monitor use and identify possible wastage.

An approximate average of 3 litres of water is used for every person that visits Hall for Cornwall including theatre-goers, staff, coffee shop and restaurant users, market traders and shoppers. This consumption figure includes use of toilets, cooking, washing up in dining and bar areas, cleaning throughout the building, i.e. total water consumption.

Water saving measures include automatic sensors monitoring urinal use to limit flushing, reduced volume toilet cisterns and concussive taps in basins to prevent wastage

13.6 Suppliers

We are committed to using local contractors whenever possible, and work with them to schedule visits to minimise unnecessary travelling.

Hall For Cornwall has a long-term commitment to using local suppliers whenever possible. Almost all (95%) of Hall For Cornwall's regular purchases are from West Country based suppliers with 90% in Cornwall.

13.7 Some of our ambitions for the future:

We have a large south facing roof expanse which has great potential for solar hot water and PV cells to generate electricity.

The same roof expanse offers the potential for rainwater recovery for use in flushing toilets. There is potential for further water reduction through use of dual flush toilets and sensor operated taps.

We are currently replacing all dressing room mirror lamps with a low energy alternative, and making changes to the installed lighting controls to facilitate local switching allowing us to leave more lights off more of the time. This work could be extended more widely through the building and the use of sensors in some areas would contribute greatly towards efficiency, ideally combined with LED lighting to further reduce energy use,

negate the detrimental effects of more frequent switching of fluorescents, and reduce the quantity of lamps being used and disposed of.

Use of LED's for emergency lighting would require smaller batteries for back up. Since these batteries are on trickle charge 24/7 this should have a noticeable impact on our base load. It will also reduce the quantity of batteries required for routine replacement in these fittings.

Advances in stage lighting technology offer opportunities to increase use of more energy efficient lanterns. For example, we recently replaced a quantity of 1200watt profiles with modern 600watt units which outperform the old with \div the power. We have more in need of replacement. There is also increasingly effective use of LED's for stage lighting which could be incorporated into the venue lighting facilities.

15.0 PROJECT PROCUREMENT

15.1 Introduction

Given the complexity of the project and the importance of controlling quality and cost, it has been assumed that the proposed works will be most appropriately procured through a traditional competitive tender process, with a standard fixed price lump sum JCT form of contract.

15.2 Consultants

Foster Wilson Architects (FWA) have been appointed along with Burnley Wilson Fish to compete this feasibility report to RIBA stage B.

If the project goes forward it will be necessary to appoint a full design team of consultants to study all aspects of the proposals in more detail, at the next stage of design development. A full design team for a project of this sort would include:

- Architect
- Quantity Surveyor
- Structural Engineer
- Services Consultant
- Lighting Consultant
- Acoustic Consultant
- Theatre Technical Consultant

- CDM Coordinator
- BREEAM consultant (subject to requirements).

With the possibility of further advice at a later stage from:

- Planning Consultant
- Fire Consultant
- Access Consultant
- Bar/Catering Consultant/Operator
- Signage/branding consultant

HFC should also consider the use of an experienced client consultant or liaison who will act as the client representative. This maybe someone from within the existing organisation who has experience with building projects (and a history with the existing building), they often have a technical background so can read and understand drawing and specifications or they maybe an outside party appointed in this role.

The role is there to:

- Act as a primary point of contact for the design team.
- Advise (along with the design team consultants) the client/board/management etc to facilitate the reviewing and approval the designs at each stage, ensuring the brief has been met.

15.3 Appointment of consultants

If successful the ACE and UK regulations have criteria to ensure a fair and competitive tendering process for consultants is carried out which may include (OJEU) tendering if the theatre is subject to the Public Procurement Regulations or if the amount of money given solely by Arts Council England, or in conjunction with other public funding or other lottery distributor, exceeds 50 per cent of your project costs

More details can be found in the ACE 2012-2015 Guidance documentation for stage two applications available from the ACE website.

15.3 Drawings

The theatre has provided one CAD section drawing with the remaining majority of the drawing supplied as A1 hardcopies of the general arrangement plans and sections, plus a series of detailed engineer's drawings. These have been used as backgrounds for feasibility study drawings.

An additional level of detail including an accurate dimensional survey will be required to develop the proposals in more detail at the next stage of design development. This would take the form of commissioning a full laser survey of the building this may include options for scan to BIM and LADAR / full colour capture of important spaces. It may also be necessary to undertake some preliminary investigate opening up or testing (ventilation, electrical systems) subject to the level of detail retained in the theatres records & manuals.

16.0 PROGRAMME

16.1 Programme Summary

The programme on the following page is intended to suggest a potential 'best case' timetable, based on the scale and complexity of the proposals.

The programme assumes that the works will be carried out as a single multi phase contract, and will be traditionally procured with a competitively tendered fixed price lump sum standard JCT form of contract. The programme is subject to further consultation, and is dependent on Cornwall Council, ACE and other potential funders being able to approve to proceed at key stages.

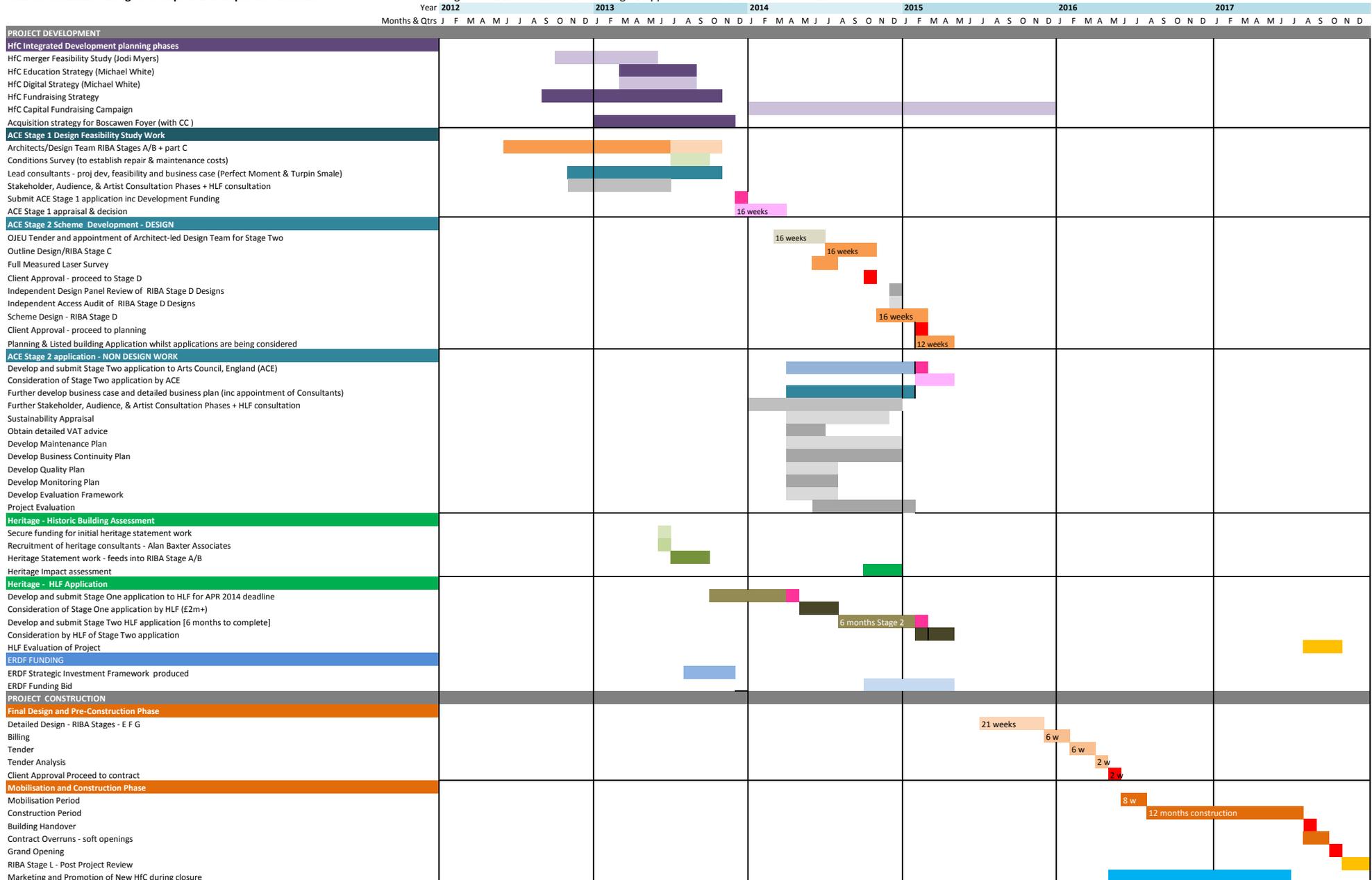
It has been assumed that works are phased to minimise closure periods. We have made the assumption it would be possible for the main contractor to:

- First close and complete the Boscawen foyer whilst the theatre remains open.
- Open the Boscawen foyer as the main entrance and then close and complete the Quay foyer whilst the theatre remains open or with minimal dark time.
- Finally close the theatre fully and work on the connecting areas BOH and auditorium

The final timing and phasing of the project will require further discussion. For initial estimates we have programmed a 12 month build with a 6 month dark period towards the end although these are conservative estimates and depend very much on the final scheme options.

Hall for Cornwall – Integrated Capital Development Schedule

Aligned to DEC deadline for ACE Stage 1 Application & APR14 deadline for HLF



17.0 COST REPORT

Prepared by Burnley Wilson Fish

Please note for overall project costs professional fees (one could allow in the region of 20%) would need to be added to the cost estimates below.

Further to this depending on the Theatre's or Council's position regarding VAT, this may also be payable.

Please also note the list of further exclusions.

These figures should be used as a guide to a rough order of cost for the three options and have been calculated based on benchmarking from similar types of completed theatre venues.

Subject to the final agreed target budget the final brief and scope of the scheme can be tailored to meet the cost requirements.

Due to the various options to the FOH and BOH areas, which are interchangeable regardless of which of the three main auditorium options are progressed, a base scheme has been priced with the sub options shown as either savings or extras over this base scheme.

Therefore all costed options below have:

Sub station retained.

The servery kitchen at first floor to the quayside kept (reduced) along with the new office next door.

The mezzanine added to the office layout.

The Box office and bar are located in the extended town hall and café.

Seating in all options is new.

1) Cost saving if the bar and box office are within the Boscawen foyer (not in town hall entrance and café) - £280,000 and there is no new kitchen -£100,000. Total -£380,000

2) Cost for Sub station removal - Could be between +£300,000 to £500,000 but impossible to say until the new location is known.

3) Additional cost of a double high get in (Excluding sub station removal in 3 above) - Approximately +£50,000 to +£100,000 dependant on the structural and services requirements.

4) Cost saving for multi function room in lieu of servery kitchen and office - £70,000

5) Cost saving if mezzanine office floor is omitted. - Approximately -£100,000

6) Cost saving for Auditorium acoustic system -£250,000

	AUDITORIUM OPTION 1					AUDITORIUM OPTION 2					AUDITORIUM OPTION 3				
	Area	Rate	Total	Heritage	Other	Area	Rate	Total	Heritage	Other	Area	Rate	Total	Heritage	Other
Boscawen Elevation New theatre sign, poster displays, banners, lighting and 5 nr glass doors		140,000	140,000	85,000	55,000		140,000	140,000	85,000	55,000		140,000	140,000	85,000	55,000
Repairs and Maintenance Works			21,204	21,204				21,204	21,204				21,204	21,204	
Boscawen Foyer Refurbishment of double height foyer area including new stone floor, structural alterations, new electrical and mechanical services	400 m²	2,350	940,000	900,000	40,000	400 m²	2,350	940,000	900,000	40,000	400 m²	2,350	940,000	900,000	40,000
New bar space off Boscawen Foyer on site of existing café with new bar counter.	80 m²	3,250	260,000	205,000	55,000	80 m²	3,250	260,000	205,000	55,000	80 m²	3,250	260,000	205,000	55,000
New shared box office and shared Town Hall entrance off Boscawen Foyer with new box office counter, new ticketing infrastructure, media displays and provision for credit card.	50 m²	3,250	162,500	137,500	25,000	50 m²	3,250	162,500	137,500	25,000	50 m²	3,250	162,500	137,500	25,000
Repairs and Maintenance Works			29,040	29,040				29,040	29,040				29,040	29,040	
New Kitchen Refurbishment of existing area including a £100,000 allowance for new kitchen equipment and fittings	70 m²	2,500	175,000	175,000	-	70 m²	2,500	175,000	175,000	-	70 m²	2,500	175,000	175,000	-
FOH Office and circulation areas Light refurbishment of offices and staircases to included new electrical services	150 m²	750	112,500	-	112,500	150 m²	750	112,500	-	112,500	150 m²	750	112,500	-	112,500
Option 3 - Rebuilding of staircase and lift											135 m²	1,050	141,750	-	141,750
Auditorium Option 1 - Remodelling of auditorium including new steel structures, folding proscenium wall, adaptations to existing mechanical and electrical services, new seating.	600 m²	2,200	1,320,000	-	1,320,000										
Option 2 - Remodelling of auditorium including curved seat rows, new steel structures, folding proscenium wall, adaptations to existing mechanical and electrical services, new seating.						600 m²	2,350	1,410,000	-	1,410,000					
Option 3 - Remodelling of auditorium including new steel structures, excavating to lower stalls, new circle and gallery level balconies, extensive adaptations to existing mechanical and electrical services, raising the existing lighting galleries and new seating.											715 m²	3,100	2,216,500	-	2,216,500
Electronic acoustic sound system			240,000	-	240,000			240,000	-	240,000			240,000	-	240,000
Front of House Options 1 & 2 - Reconfiguration of the area around the auditorium to provide toilets, lobbies, stores, cross over corridor, multiuse space to first floor and other circulation areas	1000 m²	1,250	1,250,000	-	1,250,000	1000 m²	1,250	1,250,000		1,250,000					
Options 3 - Reconfiguration of the area around the auditorium to provide toilets, lobbies, stores, cross over corridor, multiuse space and circle bar to first floor and other circulation areas											967 m²	1,400	1,353,800	-	1,353,800
Back of House Reconfiguration of the area around the auditorium to provide dressing rooms and circulation space	325 m²	1,150	373,750	-	373,750	325 m²	1,150	373,750		373,750	325 m²	1,150	373,750	-	373,750
Quay side accomodation Get in - including enlarging door openings	60 m²	1,350	81,000	-	81,000	60 m²	1,350	81,000	-	81,000	60 m²	1,350	81,000	-	81,000
Circulation areas	125 m²	500	62,500	-	62,500	125 m²	500	62,500	-	62,500	125 m²	500	62,500	-	62,500
Kitchen servery	35 m²	2,450	85,750	-	85,750	35 m²	2,450	85,750	-	85,750	35 m²	2,450	85,750	-	85,750
Offices and community meeting room	180 m²	750	135,000	25,000	110,000	180 m²	750	135,000	25,000	110,000	145 m²	750	108,750	25,000	83,750
New mezzanine office floor and staircase	54 m²	1,700	91,800	-	91,800	54 m²	1,700	91,800	-	91,800	54 m²	1,700	91,800	-	91,800
Quay Foyer Refurbishment of double height foyer area including new stone floor, forming new gallery area, new electrical and mechanical services	170 m²	1,802	306,300	120,000	186,300	170 m²	1,802	306,300	120,000	186,300	170 m²	1,802	306,300	120,000	186,300
Repairs and Maintenance			1,530	1,530				1,530	1,530				1,530	1,530	
Quay Elevation New theatre sign, poster displays, banners and lighting			50,000	25,000	25,000			50,000	25,000	25,000			50,000	25,000	25,000
Repairs and Maintenance			2,753	2,753				2,753	2,753				2,753	2,753	
SUB TOTAL			5,840,627	1,727,027	4,113,600			5,930,627	1,727,027	4,203,600			6,956,427	1,727,027	5,229,400
Tender Price inflation forecast from 3Q12 (218) to 1Q17 (256)			993,000	294,000	699,000			1,008,000	294,000	714,000			1,183,000	294,000	889,000
Client Contingency 10%			683,300	202,000	481,300			694,300	202,000	492,300			814,500	202,000	612,500
SUB TOTAL			7,516,927	2,223,027	5,293,900			7,632,927	2,223,027	5,409,900			8,953,927	2,223,027	6,730,900
Loose Furniture to Boscawen and Quay Foyers			150,000		150,000			150,000		150,000			150,000		150,000
TOTAL ORDER OF COST ESTIMATE		£	7,666,927	2,223,027	5,443,900			7,782,927	2,223,027	5,559,900			9,103,927	2,223,027	6,880,900

VAT, Professional fees, statutory fees, and legal fees, survey fees, acquisition costs, theatre equipment, loose furniture other than to Foyer areas, stainless steel bar fittings and equipment, mobile sales counters, non heritage maintenance works and repairs to the existing building fabric, removal of asbestos and any other contamination, external works and landscaping, new incoming services mains including BT digital link, digital equipment and the moving of the existing substation.