

Community Building, Torpoint

Feasibility Report

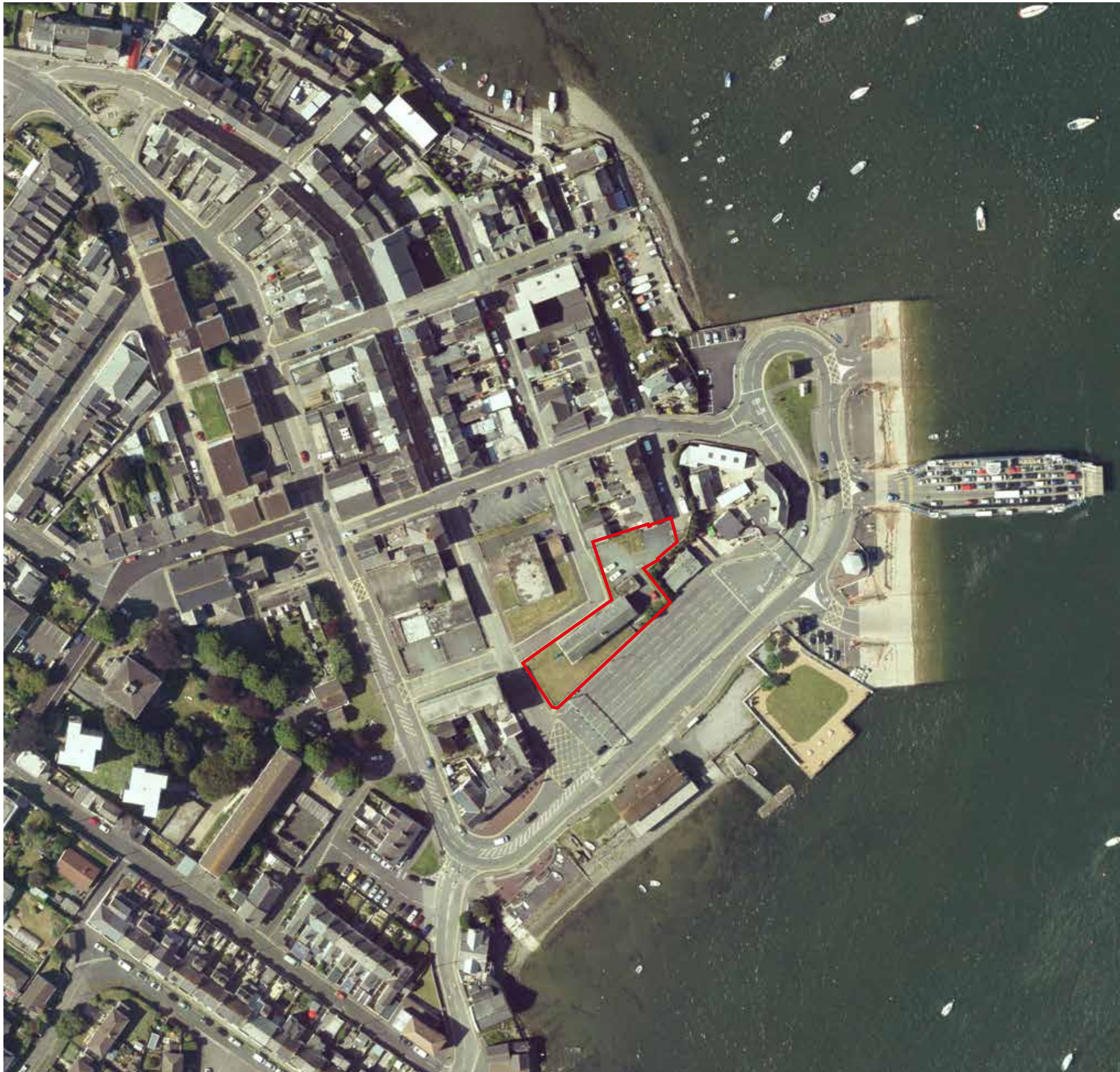
February 2024



CliftonEmerydesign

This project is funded by the UK Government through the UK Shared Prosperity Fund. Cornwall Council has been chosen by Government as a Lead Authority for the fund and is responsible for monitoring the progress of projects funded through the UK Shared Prosperity Fund in Cornwall and the Isles of Scilly.





Executive summary

This feasibility study has been undertaken by Clifton Emery design on behalf of Torpoint Town Council with specialist input provided by Mace Green, SLR and Hulley and Kirkwood. The purpose of the study is to set out recommendations for the redevelopment of the police station site to the bottom of Fore Street, providing a new community and housing development that overlooks the River Tamar.

Following an appraisal of development options a preferred development scheme is illustrated providing a community building and 14 no. apartments along with associated infrastructure. The proposals demonstrate how a building of appropriate design can create a new piece of social infrastructure for the town enabling economic growth and regeneration. Details of size, location and design are provided supported by an understanding of potential costs, risks, issues and opportunities.

The feasibility study provides a level of information that will support Torpoint in future bids for central government funding to bring forward a scheme that will provide a much needed stimulus to underpin broader change in the town.

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Background

Section 1



The team and brief

This report has been commissioned by Torpoint Town Council and is a feasibility study to explore options for the development of the Police Station site, creating a combined community and housing development overlooking the River Tamar, adjacent to the Ferry Lanes and at the base of the main shopping street in the Town. The scope of the study concerns the area of land outlined in red on the plan to the left.

The brief sets out the following requirements for the community building:

- A multifunctional building designed to maximise its occupancy and use throughout the time it is open
- To facilitate the provision of visitor and transport information
- Provide work space for both town and Cornwall officers
- Incorporating the existing library, cafe, gallery, art and creative studios
- Flexible work space for all sector use
- Designed to encourage its use and hire by educational, health and welfare organisations

Under an agreement with Department for Levelling Up, Housing & Communities and a requirement of the One Public Estate (OPE) Funding there is a requirement to provide housing with a proportion of that housing being affordable. One of the key outputs is to understand the mix of housing that could be provided within this site as part of the development.

The report has been prepared by Clifton Emery design (urban designers, architects and landscape architects) with assistance from Mace Green (cost consultancy, building surveying and construction), Hulley and Kirkwood (sustainability and low energy expertise) and SLR (drainage, flood risk and ground conditions). The work has been undertaken in close liaison with Torpoint Town Council.



About the site

Torpoint is one of four key arrival/departure points for visitors to Cornwall, with this development site representing the first/last impression of visitors to Cornwall through this gateway. The site, positioned between Fore Street, Macey Street and the ferry queueing lanes, represents the Town centre and is the focus for mixed use development and public realm enhancement.

Existing Buildings

The site is currently occupied by the Police Station, a two storey pitched roof building. Parking is provided in the northern part of the site accessed from Macey Street. The demolition of this building, being achieved through grant funding from the One Public Estate and the Brown Field Release Scheme, represents the first phase of redevelopment of the town.

Ferry queueing area

The ferry queueing area, immediately south of the development site, is a significant constraint to designing and developing high-quality housing on the site. Careful consideration will need to be given to the design of both the community building and residential units to minimise the various impacts of the ferry queueing area.

Local Context

Existing buildings in the immediate context are poor and together create an environment that is tired and lacking quality. Building heights range from single storey to a maximum of four storeys (Abercrombie House) with a mix of flat and pitched roofs. External materials are predominately painted render with smaller areas of hung tile and reconstituted stone.

About the site

Waterfront views

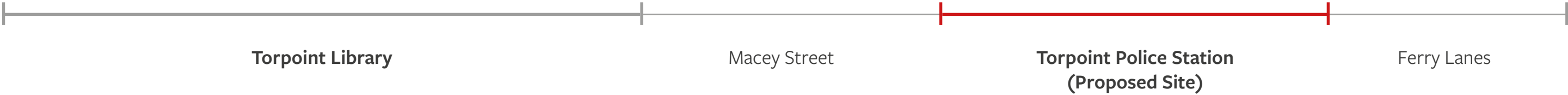
Views from the site to the waterfront are a positive asset. Development should be designed to minimise the impacts of the ferry queueing lanes whilst optimising views of the waterfront from the proposed community building, housing and public realm.

Levels

The topography of the site is characterised by a slope that falls away from Fore Street towards the ferry queueing area and the waterfront. This provides a design challenge for proposed buildings and the public realm. It also provides an opportunity for establishing positive inter-relationships between the buildings and external spaces.

Existing Drainage

There is an existing public combined sewer that passes beneath the existing police station building. The development of design proposals should consider the impact of the retention of the existing drain and/or how any diversion works can be minimised.





The site



Ferry queuing lanes



Existing building



Waterfront views



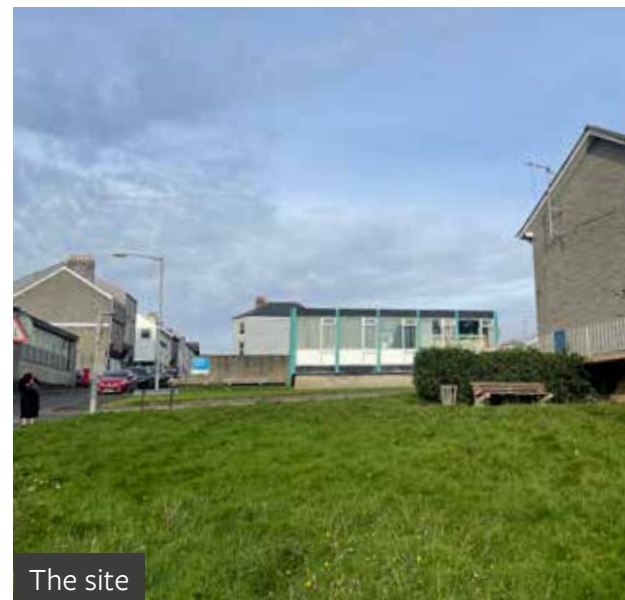
The existing library building



Ferry Road



Views along Fore Street



The site

About the site

Future Development

The demolition of the police station and development of a new community building will release the current library for demolition and as a result the next area of land to deliver some of the housing and some of the aspirations for a wider regeneration scheme. Designs for the community building and housing should consider its future integration into a wider regeneration proposal, including its interface with a new market square.

Existing Planning Consent

Previous development proposals put forward by Devon and Cornwall Constabulary for the site were approved in September 2017 under application reference PA17/01771. Proposals comprised the demolition of the existing police station and construction of 10 no. apartments and new police station provided through a three storey 6 unit block and a two storey 4 unit block.

Site vision and concept

Section 2



Our vision

The delivery of a community building and housing has at its core a desire to help restore a sense of pride in Torpoint creating a visible focus for the town and bringing to life the vision that Torpoint has had for the last ten years. It will help restore belief in the Town's future, its leadership and generate jobs, build a stronger community and reduce the departure of the younger population seeking better opportunities.

The facility will support networking and a creative mix of people from all ages enabling development, increased skills, stronger community and a more prosperous future for all. Importantly it will also enable people of all ages to mix, generating an environment that will help with the increased levels of loneliness identified in Torpoint.

Extract from the Torpoint Town Team Vision

Initial development options

Initial concept development proposals explore three options for providing a community building and residential development on the site.

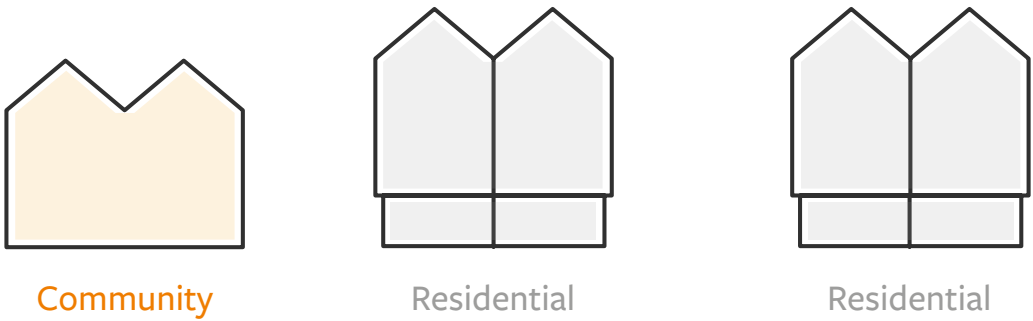
Option 1
Three separate buildings are proposed, comprising a standalone two storey community building with two further three storey residential blocks providing a total of 12 no. Residential units.

Option 1a
Similar to option 1, three separate buildings are proposed however the provision of office accommodation above the community building is proposed.

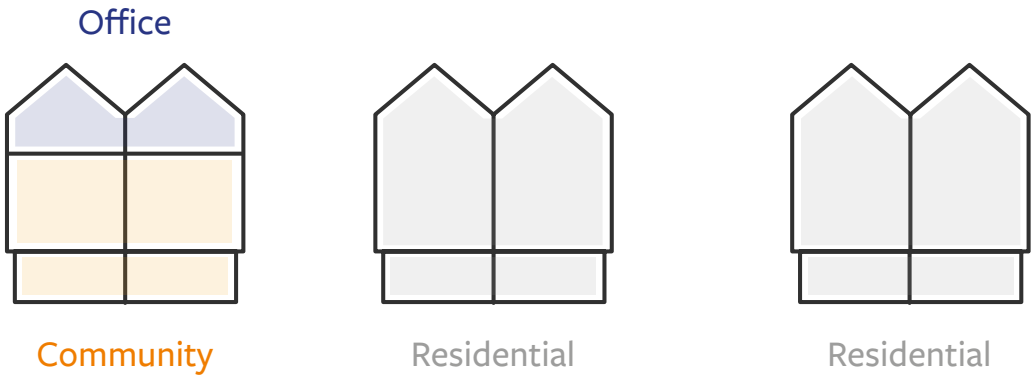
Option 2
Under this option, two buildings are proposed, with the community building to be provided on a single floor of accommodation with residential units provided above. A second smaller residential block is provided to the side. In total under this option 14 no. residential units are provided.

Following close liaison with Torpoint Town Council option 2 was selected as the preferred option to be taken forward as the focus of the feasibility study.

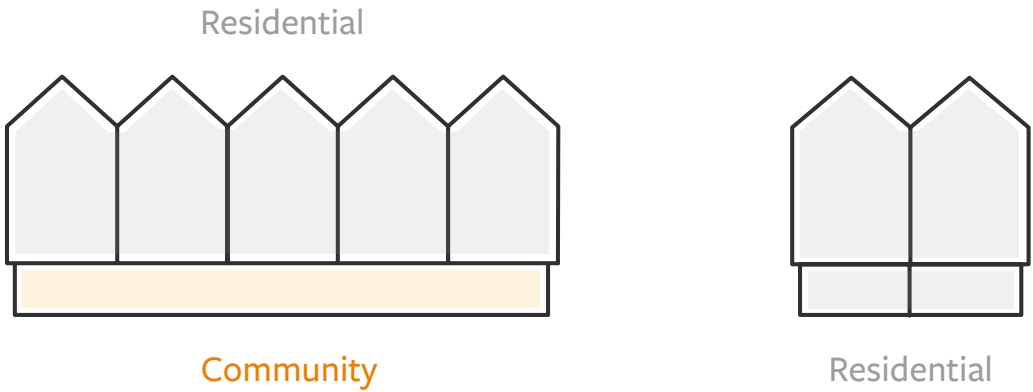
Option 1
Community hub
12 dwellings



Option 1a
Community hub
Office
12 dwellings



Option 2
Community hub
14 dwellings



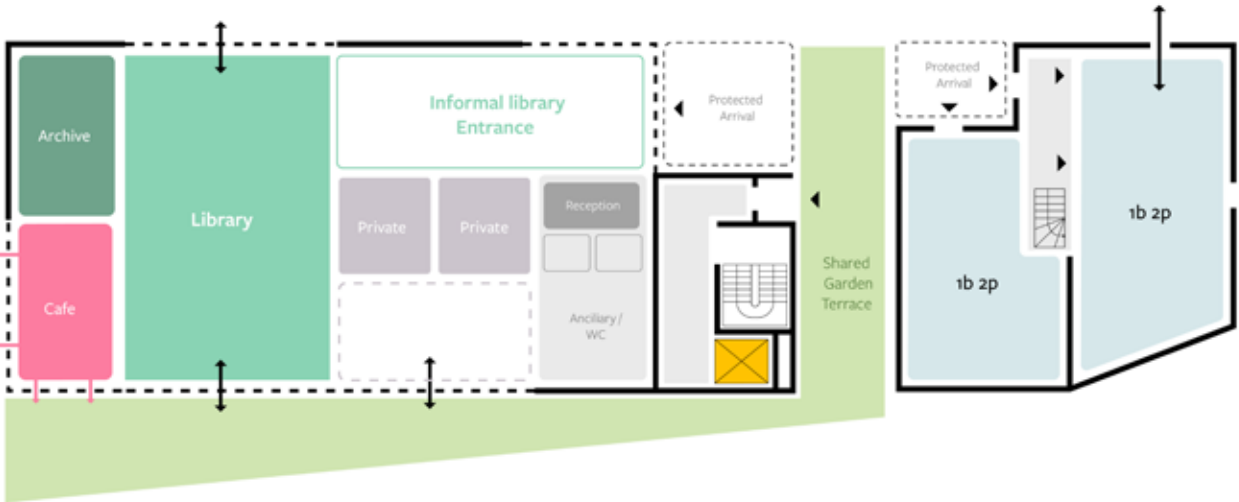
Preferred option 2



Section through the building



First floor



Ground floor - community space

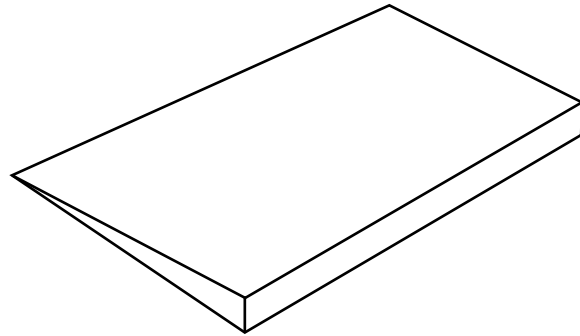


Second floor

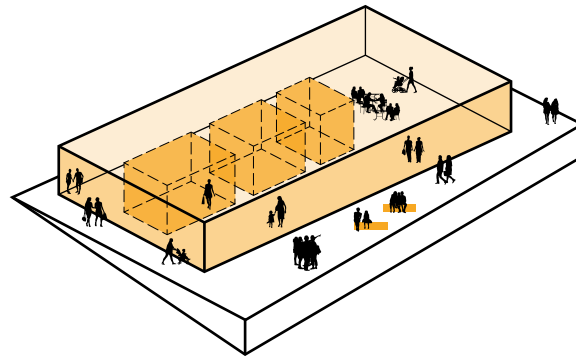
Preferred development option

Section 3

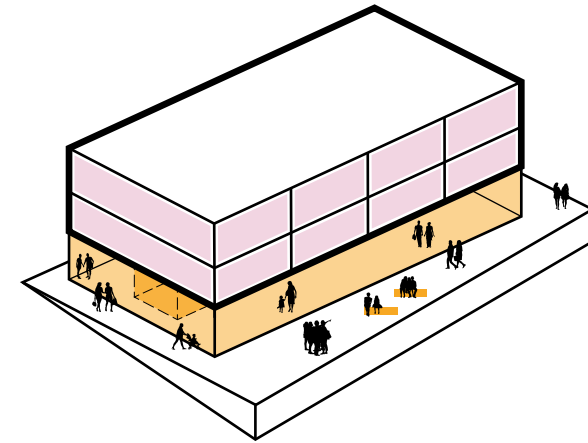
Preferred development option



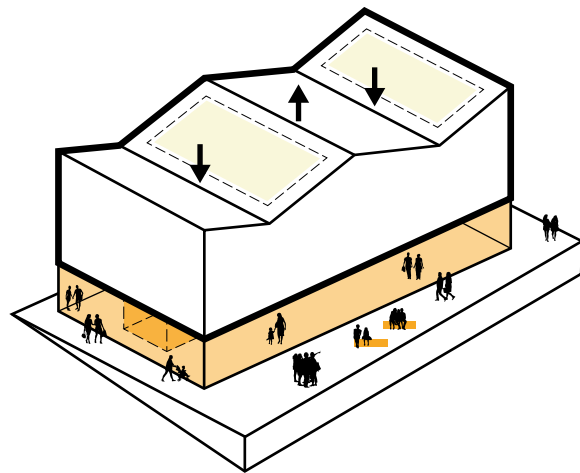
1. Provide a plinth that elevates the site above the ferry queueing lanes, dealing with the existing sloping topography and creating a level platform on which the building can sit.



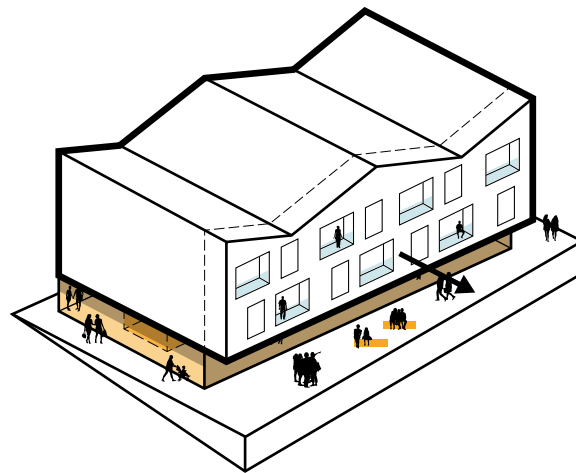
2. Provide ground level community accommodation organised around centrally positioned pods of fixed ancillary accommodation. An open floor plate with flexible uses is to be provided around the pods giving an active frontage and promoting inclusivity and transparency.



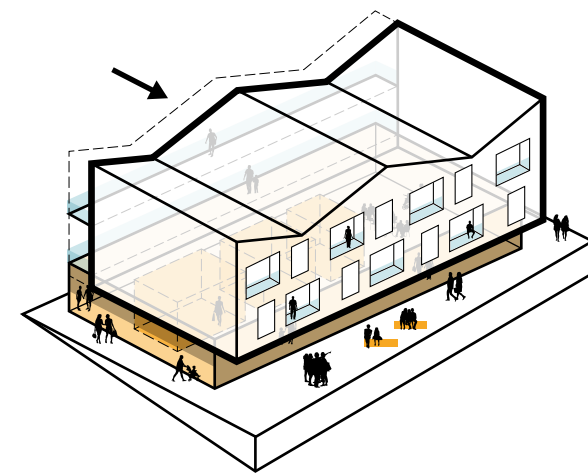
3. Provide residential accommodation on upper floors with the structural grid set out to allow a simple building form and repetition of internal layouts. Structural bays to be sufficiently wide enough to allow living spaces and primary bedrooms to all apartments to be located on the south elevation.



4. Articulate the roof form to provide variety and animation giving the community building a civic presence and identify. Roof forms to be orientated to maximise the opportunity for PV.



5. Project the residential accommodation forward to provide solar screening to the heavily glazed ground floor. Provide inbound south facing balconies to residential accommodation that limit solar gains and provide private amenity space with views beyond.



6. Provide deck access to the apartments on the north elevation that in time will provide an active frontage onto a new market square.

Preferred development option - concept



The layout has been designed so that two individual buildings can be developed working both collectively and individually - this way their delivery is flexible and can respond to comprehensive or more incremental procurement.

The community building with two floors of residential over (block A) is positioned to the western half of the site addressing the corner with the potential for active frontage onto Fore Street, Macey Street and the ferry queueing lanes. Set back from the southern boundary there is an opportunity to provide a raised plinth elevating the building from the ferry queueing lanes below and providing an opportunity for a south facing public external breakout space from the community building complete with waterfront views.

A second residential block is provided to the eastern side of the site (block B), with residential accommodation provided over 3 floors complete with lift access to provide Part M 4(2) accessible units at all levels.

A 6m break separates the buildings, providing a 3 metre easement to either side of the public sewer which will need re-routing to facilitate the proposed layout. This would be subject to a S185 application with South West Water. Following further development of initial concept proposals the exact position of the sewer has been established and the easement requirements of South West

Water confirmed during an informal conversation. The retention of the existing sewer restricts the potential development of the land to the eastern side therefore these feasibility proposals assume that the sewer will be rerouted.

The break provides the opportunity for stepped access between Macey Street and the town waterfront. As part of future design development further consultation with South West Water should be completed in relation to potential for build over rights.

Car parking to the residential accommodation is provided to the north of the site, accessed from Macey Street. A total of 13 no. spaces are shown including Part M4 (2) compliant spaces, with 2 spaces accessed from King Street to the east. As part of future design development liaison with the Local Authority Planning and Highways department should be completed to agree final parking requirements. However, it is noted that the site is a sustainable town centre location with further opportunity for additional parking outside of the immediate red line area. Part M compliant pedestrian access is provided from the car park to the entrances to the residential accommodation set at a lower level.

A communal external space to be used by residents is provided to the south of the block B, elevated above the ferry queueing lanes.

Preferred development option

1. Community building entrance
2. Vehicle access from Hooper Street
3. Residential entrance
4. Residential parking
5. External terrace to community building
6. Communal terrace to residential accommodation
7. Stepped access to waterfront
8. Bin storage



Preferred development option in wider context



Preferred development option with future opportunities



The plan opposite illustrates the preferred layout in relation to potential future development to the north as part of the wider regeneration of the town centre.

- 1 Demolition of the existing library a new market square
- 2 New retail, food beverage and residential accommodation
- 3 Pedestrian walkway to the waterfront

Accommodation schedule

Proposals provide a total of 14 no. Apartments as the below split;

Block A (Community Building)
6 no. 2 bed apartments - 61.9 sq.m
2 no. 1 bed apartments - 50.3 sq.m

Block B
2 no. 2 bed apartments - 63.2 sq.m
4 no. 1 bed apartments - 50 sq.m

- 1 bed apartment
- 2 bed apartment

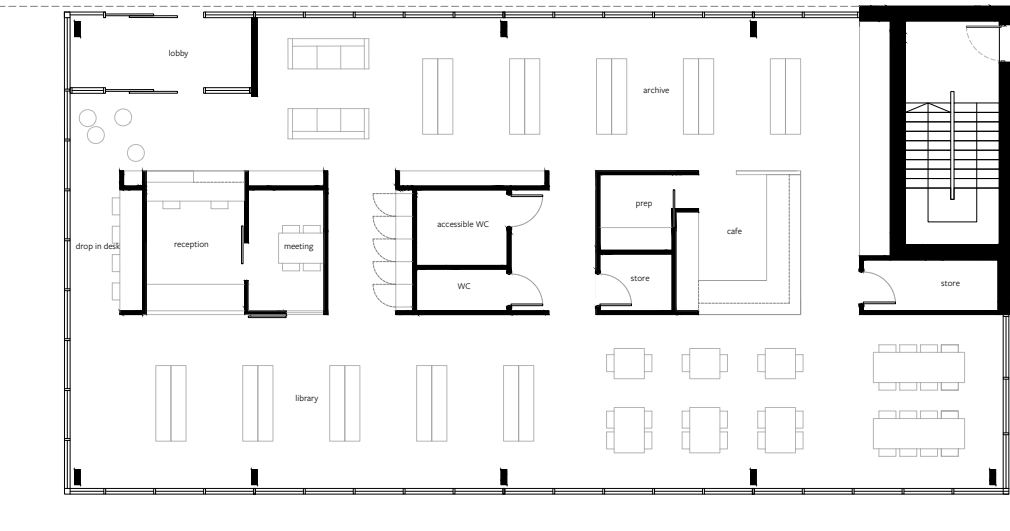
Block A



Block B



First floor



Ground floor - community space



Accommodation schedule

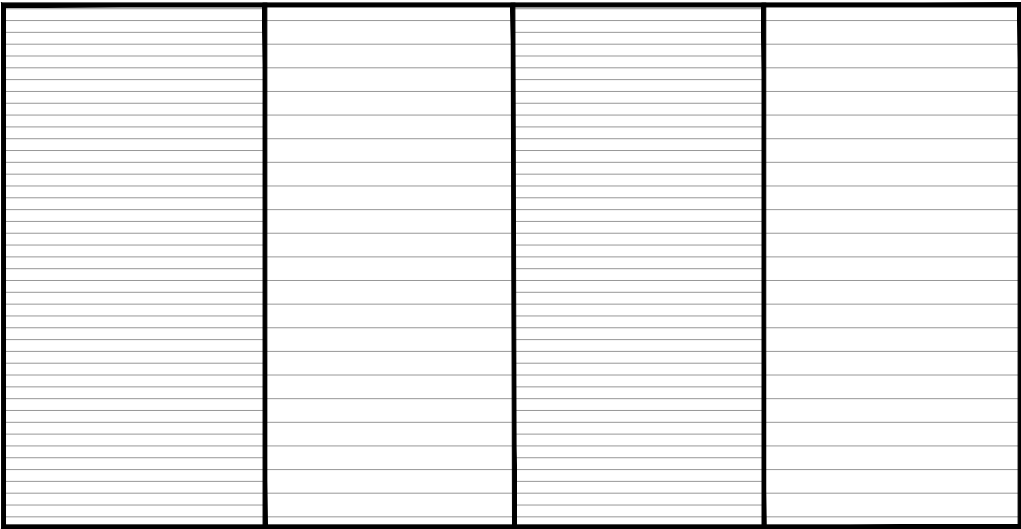
Proposals provide a total of 14 no. Apartments as the below split;

Block A (Community Building)
6 no. 2 bed apartments - 61.9 sq.m
2 no. 1 bed apartments - 50.3 sq.m

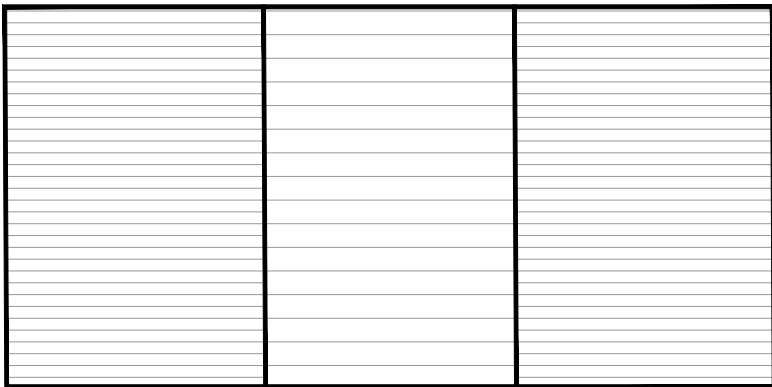
Block B
2 no. 2 bed apartments - 63.2 sq.m
4 no. 1 bed apartments - 50 sq.m

- 1 bed apartment
- 2 bed apartment

Block A



Block B



Roof plan



Second floor



View of the proposal in the surrounding context

Scale and massing

The proposed scale and massing of the preferred layout indicates how the community and residential buildings can be developed so that they relate positively to the scale of the surrounding buildings in the centre of town.

Both blocks are shown as three storey buildings set on a plinth - responding to the scale of existing buildings to the west, the ferry queueing lanes and the waterfront to the south.

Roof forms have been developed to show a contemporary locally distinctive design approach that provides variety, articulation, animation and can relate positively to the scale and form of buildings in the town centre. The orientation of roof forms also provide the opportunity for the efficient use of roof mounted PV as part of the servicing strategy.

The scale and height strategy has been designed so it relates well to its townscape and landscape context. It has also been developed to respond to the existing topography, with entry points positioned to relate to existing street levels. Floor to floor levels reflect the intended use of individual floors with the residential floor to floor being shown at 3 metres and an increase in floor to floor to the community area to circa 4.5m giving the opportunity for greater ceiling heights and ceiling void depths for services distribution. This variation in height is naturally provided through the buildings relationship to entry points along Macey Street therefore retaining a composed building form with consistent levels to upper floors.

Community accommodation

At its core the project is an aim to create a new piece of social infrastructure: a community space in which people can gather, and which will provide the space and capacity for both formal and informal programmes and events to take place. The building should be designed as a flexible meeting place, that feels welcoming to all; helping to promote inclusivity and encourage the community to be flexible in its use.

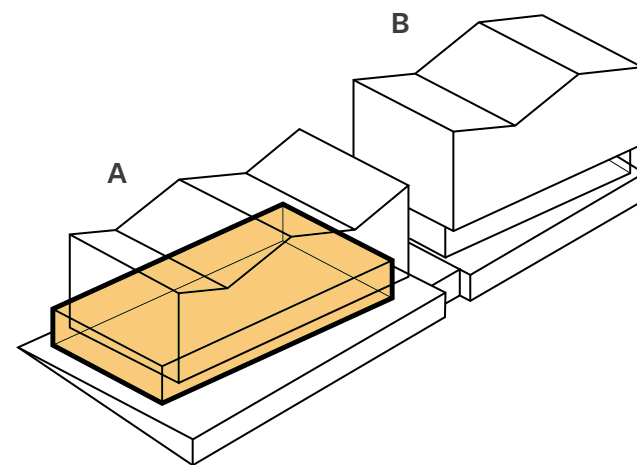
In order to deliver a building that meets this aim the proposed plan adopts a simple strategy of providing a series of pods through the centre of the plan around which an open flexible floor plate is provided. The pods will provide all fixed accommodation including a reception with adjoining meeting room, WC's, storage and a cafe with prep area. Breaks are provided between the pods to allow visibility through the building and beyond. The sides of the pods are to provide built in shelving, display panels, storage and workstations, designing out inefficient circulation space.

The main entrance is set at the corner junction between Fore Street and Macey Street, with existing pedestrian footways giving access. A welcoming reception point is situated inside the entrance. Access from the cafe via large glazed sliding doors can be provided to the south facing external terrace with views beyond. Internal materials are envisaged as being self finish for speed, cost and durability. Plywood can be used extensively as a finish to add warmth and speed up construction (as opposed to dry lining) whilst the primary structure (timber or steel) can be left exposed.

The use of plywood can be extended into furniture, giving a single homogeneous finish that avoids the building having a front and back.

The use of a combination of pivoting bookshelves and mobile furniture could be used allow the entire space to be opened out to host lectures, readings, performances and training sessions. During core library hours, the shelves can shelter a series of intimate spaces, which can be further enclosed with a heavy curtain to create quiet private moments for smaller groups.

A simple material palette of warm plywood, coloured stains and curtains create a backdrop for local people and community organisations to make the space their own. Such an approach will allow the hub to be what the Torpoint community wants it to be today and allow it to adapt to changing needs for decades to come.



Ground floor community space



Residential accommodation

Apartment layouts adopt an open deck access strategy with benefits including;

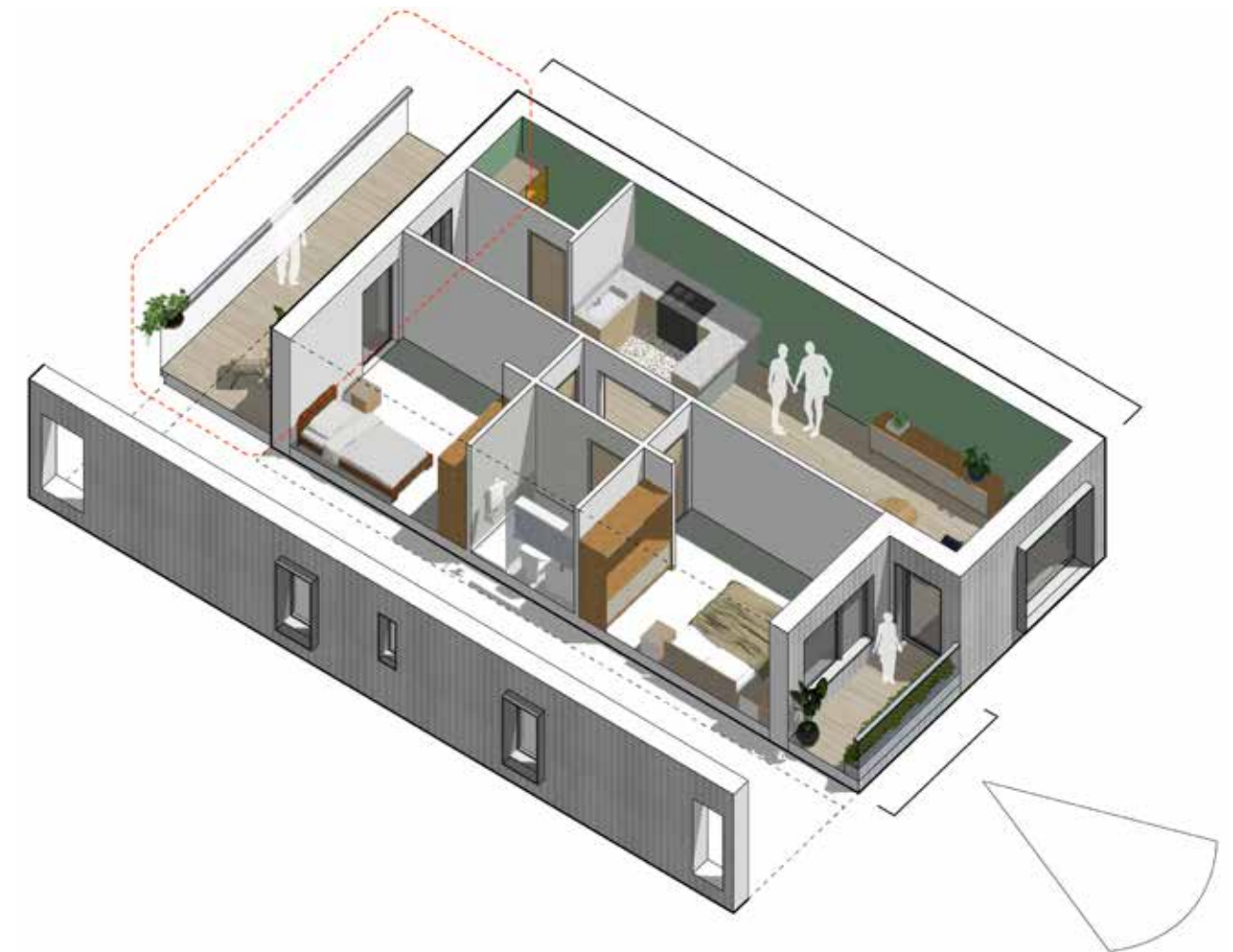
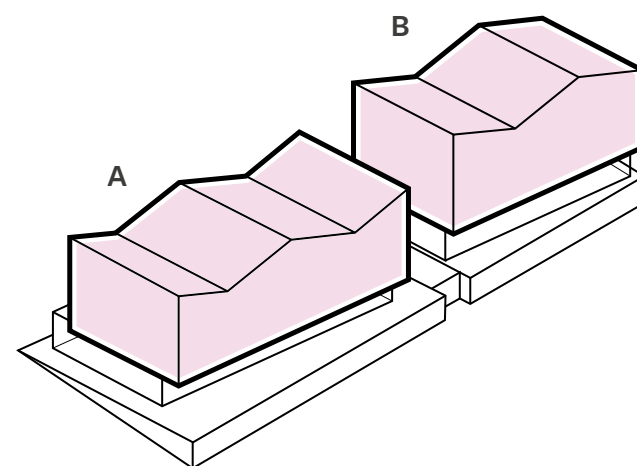
- Homes with their own front door to the 'street in the sky' have an enhanced sense of identity and lend themselves to visible personalisation;
- Decks offer the potential as social spaces for meeting neighbours;
- Decks offer scope for innovative open plan apartment layouts, maximising the effective use of space;
- Dual aspect homes offer cross ventilation, daylight from both sides and variety of outlook;
- Decks minimise internal common spaces, with a potential reduction in capital and management costs, depending on the detailed design;
- Bringing all or most common areas into the open air has potential health benefits.

Shared arrival and circulation space should be practical, safe and convenient access for residents, visitors and emergency services. The design of these spaces can also have a profound effect on the journey from the street to home, which is all too often uninspiring.

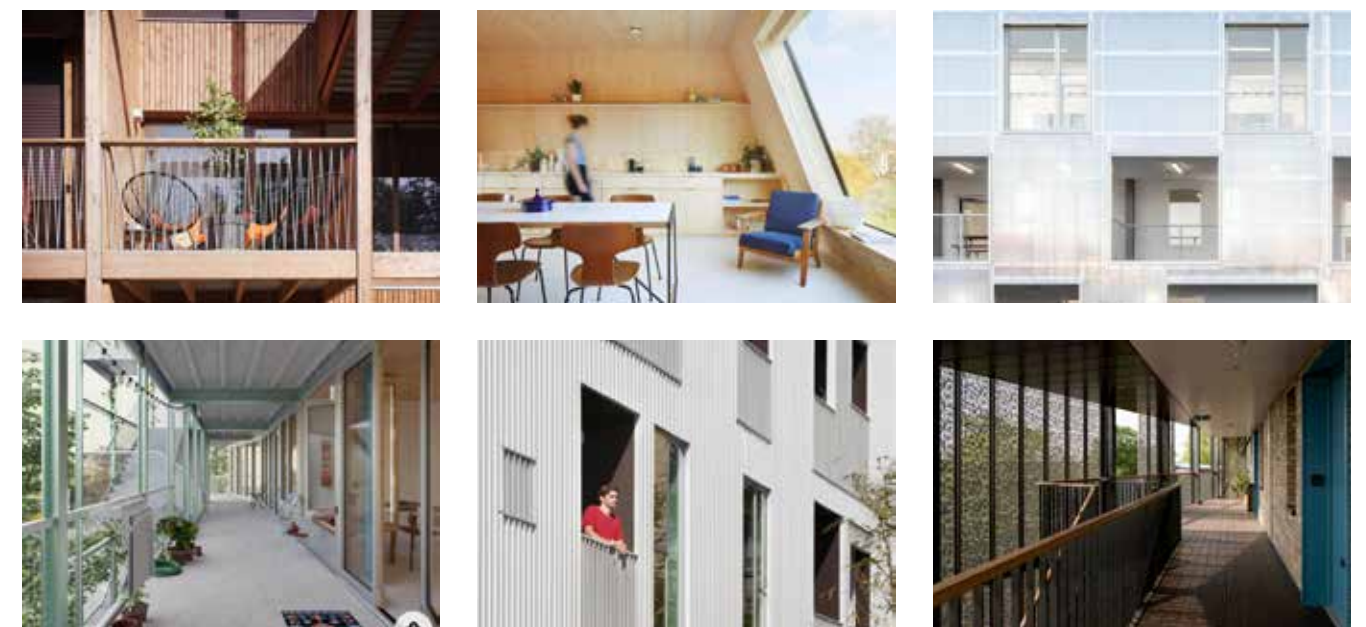
Well designed common areas also invite positive social contact with neighbours and scope for residents to take ownership of their building. Compared to fully internal circulation, deck access offers additional opportunities for enjoyable and sociable circulation spaces.

Internal layouts of apartments have been configured to allow living spaces and the primary bedroom to be positioned on the south elevation to benefit from waterfront views. Both are arranged around an inset balcony providing private amenity space to each dwelling. Bathrooms and kitchens are located in the centre of the plan, concentrating all wet services and allowing key habitable spaces to benefit from natural daylight and ventilation.

Block B provides a total of 6 no. Apartments set over three floors. Each floor is served by a lift ensuring that each apartment is accessible to Building Regulations M4 (2) Accessible and adaptable dwellings. This ensures compliance with the requirements of Policy 13 Development Standards of the Cornwall Local Plan which sets out that housing developments of 10 dwellings or greater should provide 25% of dwellings as accessible dwellings.



Typical residential layout



Elevational treatment and material strategy

Existing buildings in the immediate context are characterised by the use of render finishes that are tired and lacking quality.

Design proposals should consider the longevity and long term maintenance of selected materials, giving particular attention to the exposed marine environment. At the same time, the elevational treatment should reflect the vision for the building to be a landmark within the streetscape, restoring a sense of pride in Torpoint.

The community building is envisaged as two distinct elements that reflect the mixed use. The ground floor is proposed to be fully glazed

and should avoid any visual methods of defence such as roller shutters to give a welcoming feel. Extensive glazing will enhance views to the surrounding area and connectivity between the new community hub and the people of Torpoint. Colours of curtain walling should be chosen to avoid feeling corporate whilst large areas of glazing give opportunities for vinyl artwork and displays.

As part of future design development the impact of solar gains and overheating should be assessed and the facade developed accordingly.



Elevation looking from Ferry Street

Elevational treatment and material strategy



The upper floors of residential accommodation are conceived as a sculptural element sat above the glazed ground floor, reflecting the different uses of the upper floors of the building. Material options include metal rainscreen cladding with simple refined contemporary detailing (examples shown to the left).

A textured or profiled finish will provide a changing facade through shadow as the sun moves around the building during the day whilst colour selection should consider the impact of air pollution from the ferry queueing lanes, the exposed setting and the desire to create a landmark building.

Rainscreen cladding can be fixed to a relatively simple, efficient and fast to construct main frame with lightweight infill panels to achieve target U values.

Opening arrangements should adopt a chequerboard approach that breaks up the mass and creates a playful and friendly elevation. The use of balconies and deck access add further interest to the facade.

A similar approach to the elevational treatment can be carried through to block B, providing continuity to the street scene with each building differentiated through different ground floor treatments.

Site section

The section running north to south through the proposed community building demonstrates the relationship between the surrounding streets, the community accommodation and the upper floors of residential accommodation.

The positioning of apartments in the upper floors of the building elevates them so that they are well above the ferry queueing lanes, with internal layouts designed to allow accommodation to look out above and beyond the queueing lanes to the views beyond.

The ground floor shows how the positioning of fixed accommodation to the centre of the plan allows for flexible use to the perimeter giving the potential to create a dynamic relationship between Macey Street, Fore Street, the internal accommodation and external terrace with views to the waterfront whilst at the same time being protected from the ferry queueing lanes below. As such, the building has been designed to be inclusive and transparent and with scale and informal appearance that is inviting.



Procurement, construction and programme

Section 4

Procurement



The final delivery strategy will be informed by the preferred tenure of the housing and possible phased delivery of the two building proposal. Where affordable, a partnership with a registered provider will be required to bring forward the housing element of the proposals. We understand that Torpoint Town Council are exploring options to provide housing for ex-forces including discussions with SSAFA. The logistics of forming a partnership between Torpoint Town Council, Cornwall County Council, the preferred registered provider and SSAFA or equivalent will need further explorations however there are examples of affordable housing developments that have been subject to similar delivery partnerships.

Examples within the local context include:

Stirling House, Honick Knowle, Plymouth

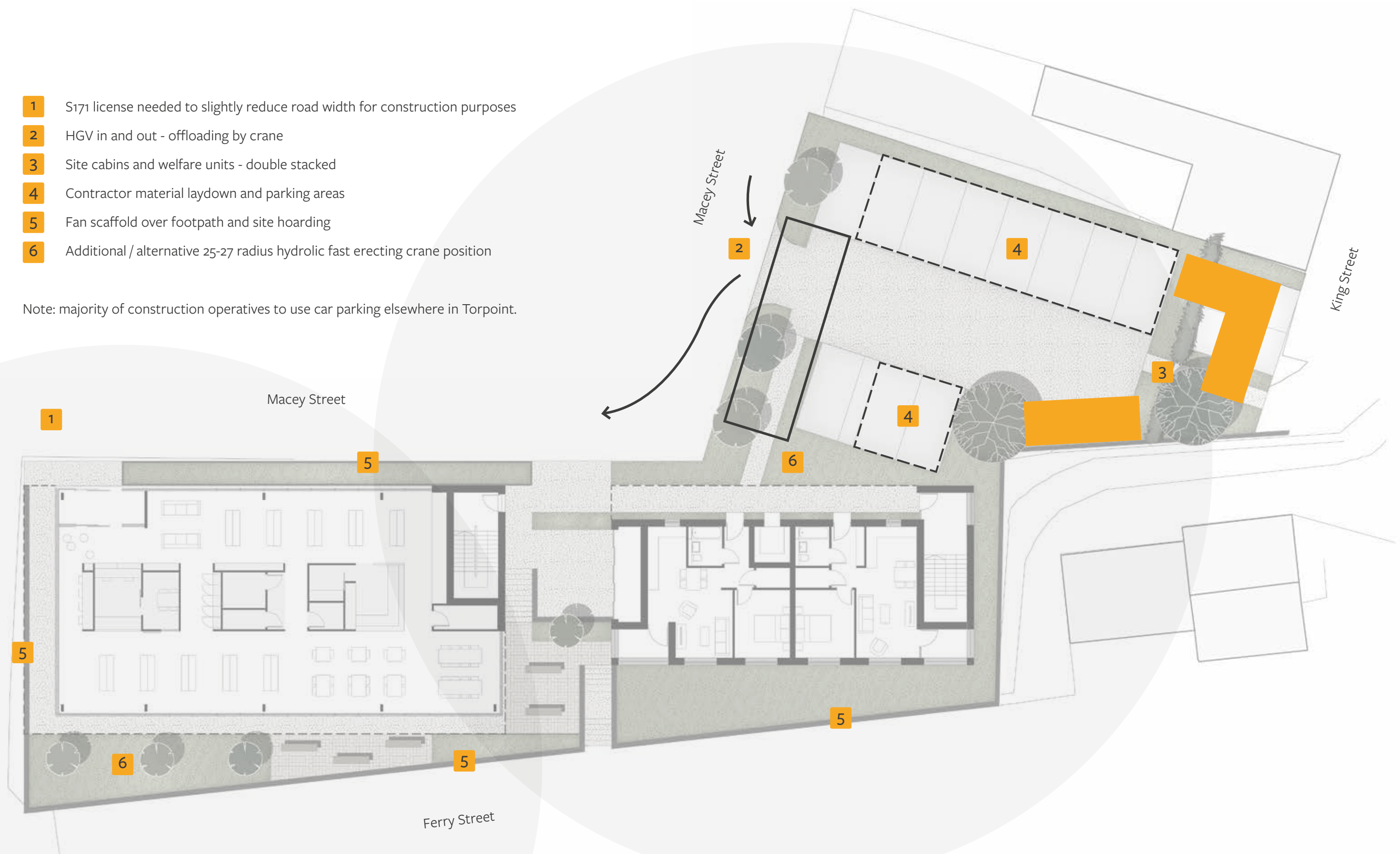
Delivered in partnership between Plymouth City Council, Live West and Alabare, delivered as a socially affordable rented housing, Live West worked with Alabare veterans self build scheme in allocating up to 12 properties to let to military veterans. The veterans were also given the opportunity to participate in the actual build of the scheme. Overseen by the contractor to gain experience and potentially work their way towards a qualification.

The delivery of this project in 2021 was a follow up to the **Nelson Project, Millbay** delivered in 2017 as a partnership project between Plymouth City Council, Live West, the Community Self Build Agency and Homes England. Ex-service personnel helped with the construction of the 24 homes, 12 of which were for military veterans and mixed use affordable homes.

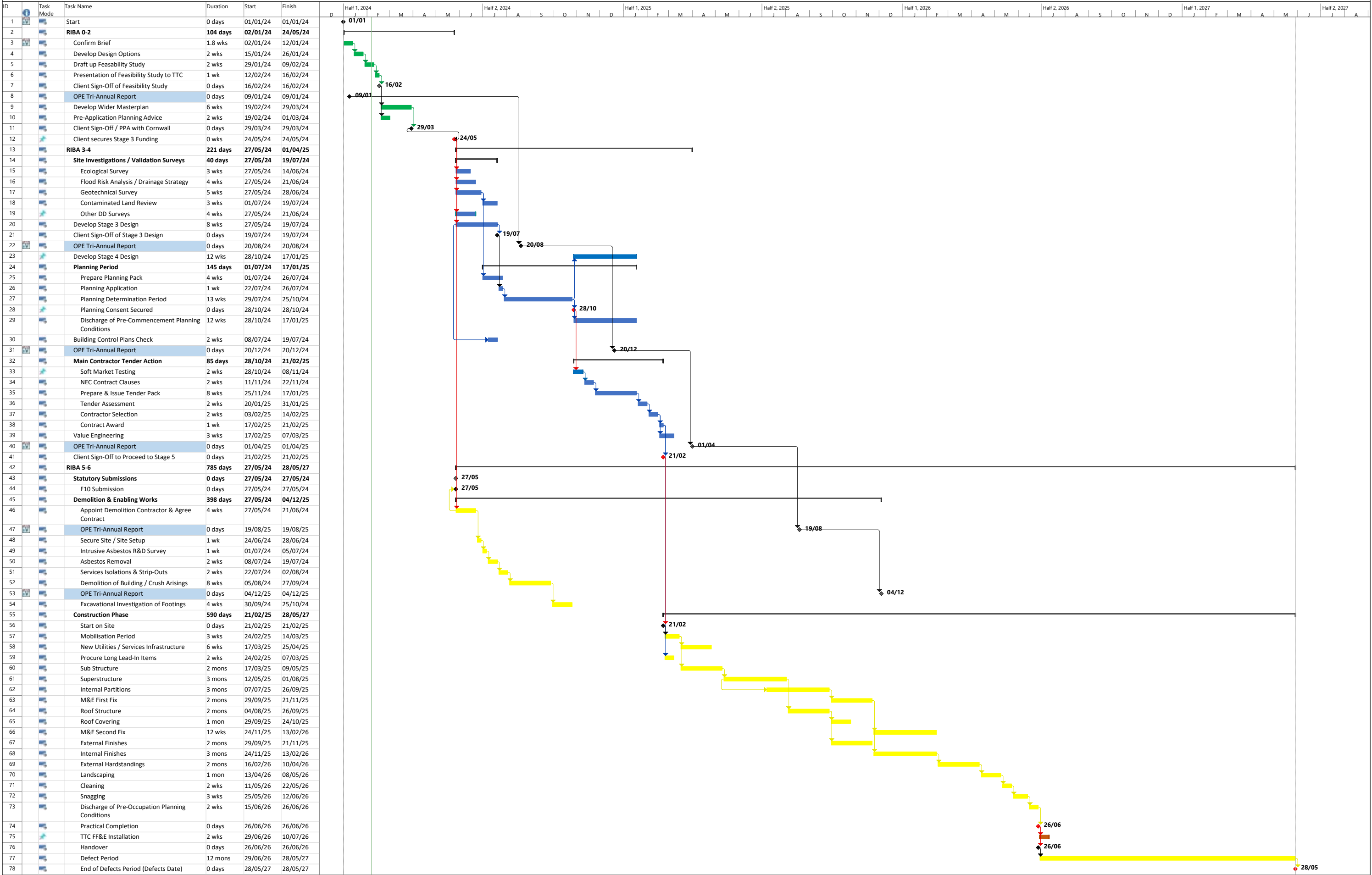
Construction strategy

- 1 S171 license needed to slightly reduce road width for construction purposes
- 2 HGV in and out - offloading by crane
- 3 Site cabins and welfare units - double stacked
- 4 Contractor material laydown and parking areas
- 5 Fan scaffold over footpath and site hoarding
- 6 Additional / alternative 25-27 radius hydraulic fast erecting crane position

Note: majority of construction operatives to use car parking elsewhere in Torpoint.



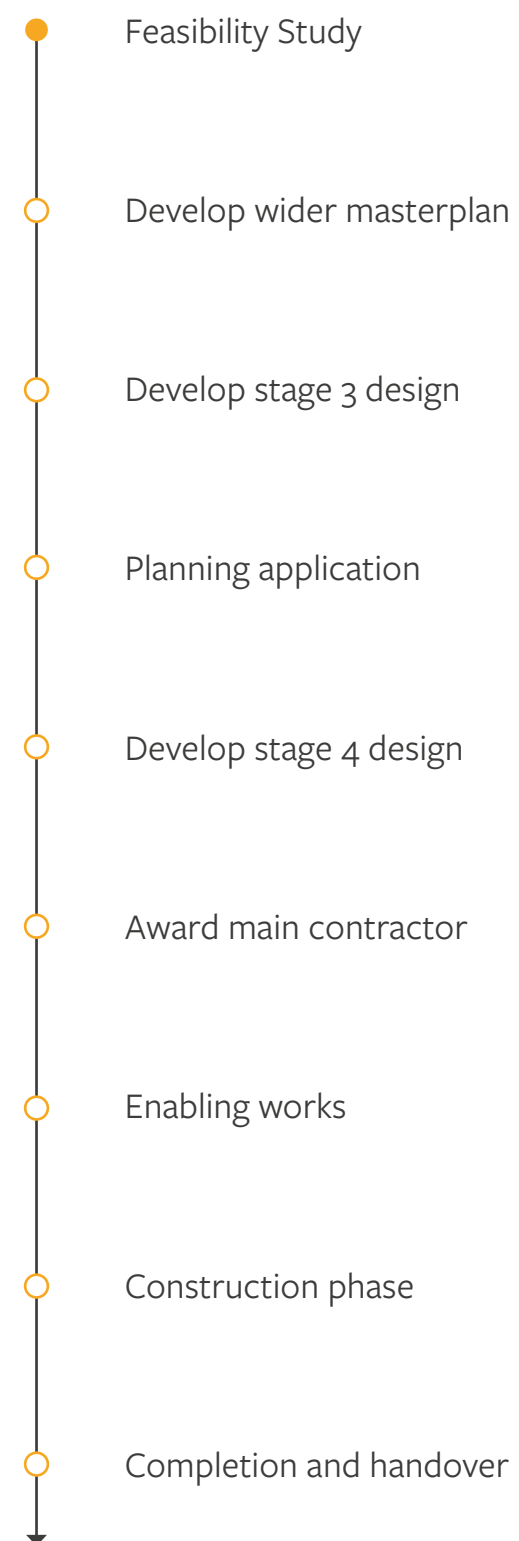
Torpoint Town Council Outline Programme February 2024 Rev A



Next steps
Section 5



Next steps



Appendices

Outline MEP Strategy

Carbon and Energy Driving Factors

The factors which will influence the energy strategy and are the principal drivers in the development of the proposals include:

- Conservation of Fuel and Power: Approved Document L (2021 revision)
- Cornwall Council – Climate Emergency Development Plan Document, Policy SEC1 Sustainable Energy and Construction

Sustainable Design Approach

The starting point in the design of an **energy efficient and low carbon building** shall be the **building envelope design**, followed by the provision of **energy efficient engineering services** and the integration of those systems into the building.

The following are proposed as a base strategy for achieving Part L 2021 and Cornwall Council SEC1 Policy compliance:

- High efficiency air to water electric heat pumps for building thermal loads
- Roof mounted photovoltaics coupled with battery storage
- Enhanced building fabric U values
- Low building fabric leakage rate ensuring reduction of thermal bridging
- Mechanical ventilation with heat recovery (MVHR)
- High efficiency LED lighting

If compliance with the Passivhaus standard was to be targeted then enhancement of the following are expected:

- U values
- Air permeability
- Detailing of external fabric to avoid thermal bridges
- Thermal comfort
- Heat recovery

Plant

The key items of plant required for the project will be :

- The source of heat for the heating and hot water generation
- The interface between the heat source and the individual apartments
- The incoming supplies to the building with the associated metering
- Any renewable technologies such as the proposed PV panels.

The preferred choice of solution for each will be subject to the appropriate technical solution, the harshness of the environment, the internal and external space available, the impact on the environment locally and globally, the tenure of the accommodation and the access for maintenance.

Tenure

The preferred tenure will impact on the servicing strategies.

Sold or commercially let accommodation:

- Individual EPCs
- Individual plant associated with each apartment
- Require individual plant arrangements for the PV and ASHP
- Cheaper to run as no secondary systems operating
- Risk of individual plant failure preventing heating and hot water generation

Operated more as a single entity with an accommodation provider responsible for providing services to the apartments:

- Centralised plant
- Less larger units
- Need for internal plant areas associated with the external units
- Requirement for secondary plant and circulation
- Less efficient
- Benefit that single point of failure less likely

Drainage and Flood Risk

Key Findings

- The elevated position of the site helps to ensure that it is not subject to flood risk and no significant mitigation measures are likely to be required.
- Whilst it is anticipated that the site currently drains surface water runoff to the combined sewer, South West Water are likely to resist this connection being retained as part of the redevelopment. They have indicated that all alternative options must be exhausted before a connection to the combined sewer would be permitted.
- Alternative options would consist of an offsite connection to a surface water sewer, or the sea. There are anticipated to be numerous services beneath the highway which may mean that these connection points are not practical.
- Several options for the management of surface water have been defined, but these are not exhaustive and are subject to further investigation.

Recommendations

- Wider land ownership should be established to determine whether a new outfall into the sea is practical.
- An understanding of the services beneath the highway should be established to determine if these could preclude a connection to the sea or the surface water sewer.
- Once further details are available, further liaison with South West Water is likely to be required.

Ground Investigation

Contamination Issues and Risk Assessment

- Site occupied by historic gas works
- If significant made ground is present the site may have potential to represent a source of hazardous ground gases

Contaminated Land Recommendations

A Phase II intrusive ground investigation and risk assessment will be required to establish the nature and severity of the potential risks identified by the Conceptual Model. These works should include the following:

- Assessment of shallow soils to establish if they are significantly impacted by contaminants that could impact on and off site human receptors
- Ground gas and vapour monitoring to identify whether the proposed structure may need to incorporate protection measures
- An assessment of groundwater to established if the site poses a continued risk to surface water receptors

Geotechnical recommendations

A ground investigation is recommended to determine the presence and thickness of any made ground on site and the composition of the underlying natural strata needs to be determined to provide foundation recommendations.



Risk Register

ID Number	Originator	Description of Risk Item	Owner (Organisation)	Owner (Individual)	Probability (1-5)	Impact (1-5)	Overall Risk Rating (1-25)	Risk Value	Probability Adjusted Risk Value	Mitigation Strategy	Action by	Comments
STRATEGIC / LEGAL / FUNDING RISKS												
1	PM/QS	<u>Ferry Service</u> Potential disruption of Torpoint Ferry services incurring significant penalties.	PM/QS	PM/QS	1	5	0			Robust measures for identifying potential risks to ferry schedule (e.g. crain oversailing, road closures, potentially disruptive deliveries etc.) to be implemented in CPP and Construction Strategy	Client / Consultant team	
2	PM/QS	<u>Funding</u> Project no longer meets requirements of OPE BLRF resulting in lack of funding.	Client	Client Representative	1	4	0			Core consultant team to ensure requirements for funding agreements are set out ahead of time and ensure strict adherence to all requirements throughout project duration i.e. OPE tri-annual reports etc.	Client / Consultant team	
3	PM/QS	<u>Funding</u> Feasability study contains insufficient detail to allow BLRF round 3 / VASA funding	Client	Client Representative	1	2	0			Feasability study to be produced in line with all requirements for potential funding bids	Client	
4	PM/QS	Negotiations with Cornwall Council delay progression of the project.	Client	Client Representative	2	4	8			Regular reviews required and agree date and strategy. Ensure strategic programme includes key milestones.	Client	
5	PM/QS	Contract terms cannot be agreed with developer / main contractor.	Client	Client Representative	2	4	8			Mid tender interview and Tender appraisal to focus upon clarifications and exclusions. Ensure early soft market testing of procurement route is undertaken.	Client / Contractor	
6	PM/QS	Accuracy of red line title boundary is questioned leading to potential abortive design.	Client	Client Representative	3	4	12			Client legal representatives to undertake due diligence on precise boundary positions.	Client / Contractor	
7	Client	Due to effects of re-occurrence of Covid-19/international conflict, the freeholder delays progress of the project.	Client	Client Representative	2	3	6			Monitor Landowner commitment / progress.	Freeholder	
PLANNING / GENERAL RISKS												
8	PM/QS	<u>Failure to Obtain Statutory Approval</u> Unable to meet requirements of Planning Permission / Building Control approval.	PM/QS	PM/QS	2	4	8			Engage with LPA early via pre app approach. Ensure high degree of public consultation undertaken.	PM/QS	
9	PM/QS	<u>Demolition Notice</u> Failure to obtain s.80 demolition notice in sufficient time incurring delays to demolition	Client		1	2	2			PM to liaise with client to ensure all statutory obligations are completed and CDM responsibilities are understood.	PM/QS	
10	PM/QS	<u>A Vision for Torpoint</u> Potential changes to the 'Neighbourhood Plan for Torpoint' which is currently open to public consultation, resulting in non-conformity or need for design changes.	Client	Client Representative	2	2	4			Client to inform consultant team of any updates from public consultation and maintain close relationship with CC planning officer.	PM/QS	
11	PM/QS	<u>Planning Conditions</u> Onerous Pre-commencement / Pre-occupation planning conditions cause delays to programme	Client	Client Representative	1	3	3			Engage with LPA early pre planning determination to understand magnitude of conditions and ensure realistic programme for discharge and appropriate ownership of condition.	Client / Contractor	
12	PM/QS	<u>Planning Conditions</u> Delays in discharging Pre-occupation planning conditions cause delays to handover / occupation	PM/QS	PM/QS	1	4	4			Engage with LPA early pre planning determination to understand magnitude of conditions and ensure realistic programme for discharge and appropriate ownership of condition.	Client / Contractor	
13	PM/QS	<u>Ecology</u> Bats / barn owls / nesting birds discovered on site leading to delays in demolition / construction operations	Client	Client Representative	1	2	2			Site deemed to be low-risk for nesting birds/bats/owls, ecological inspection to be commissioned before demolition works commence and again prior to main construction activities.	PM/QS	
14	PM/QS	<u>Ecology</u> Demolition phase timeline coincides with bird nesting season (March - August) causing delays to programme	Client	Client Representative	1	2	2			Site deemed to be low-risk for nesting birds/bats/owls, ecological inspection to be commissioned before demolition works commence	PM/QS	
15	PM/QS	<u>Contract</u> Construction Contract does not meet TTC approval requirements	PM/QS	PM/QS	1	1	1			Contract to be developed in-line with TTC requirements incorporating appropriate NEC4 contract provisions. Potential legal amendments required?	Client / Contractor	
16	PM/QS	<u>CDM 2015</u> Client / Consultant / Contractor failure to adhere to CDM duties.	Client		1	4	4			Ensure that experienced Principal Designer and Principal Contractors are engaged and monitored. Also ensure client is performing required duties under CDM.	Client / Consultant team	
17	PM/QS	<u>Unacceptable Planning Condition</u> There is a risk that a Planning Condition is unacceptable to the Client	Client	Client Representative	3	4	12			Renegotiate planning condition or reconsider options	Client / Contractor	
18	PM/QS	Client unable to confirm brief or instructions in timely manner to allow design to progress in accordance with programme.	Client	Client Representative	2	4	8			Ensure timely stakeholder engagement, RIBA stage gateways and sign offs.	Client	
19	PM/QS	<u>Regulatory/ Legislative Change</u> There is a risk that Building Regs change during the life of the project and require design/ spec alteration	PM/QS	PM	3	4	12			Ensure design complies with latest regulations and monitor evolving legislation / take account of where possible.	PM/QS	
20	PM/QS	<u>Poor coordination</u> There is a risk of poor coordination / communication within the project team	PM/QS	PM	3	4	12			Ensure outputs, which are relevant to the Client team, are completed and are co-ordinated.	PM/QS	

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21	PM/QS	<u>Poor communication</u> There is a risk of poor coordination / communication between the Client's team	PM/QS	PM	3	4	12			Ensure regular co-ordination meetings are held and action points are completed. Adjusted to suit Client's or design team's requests where and when required highlighting design concerns	PM/QS	
22	PM/QS	<u>Changes in Key Personnel</u> There is a risk that key individuals are lost from the project team resulting in loss of knowledge transfer, commitment and enthusiasm.	PM/QS	PM	2	3	6			Ensure that multiple individuals are actively working on the project for resilience purposes.	Contractor	
23	PM/QS	<u>Secure Sustainability rating</u> There is a risk that the developer / contractor doesn't achieve the targeted sustainability e.g. BREEAM, Passivhaus, etc rating	PM/QS	PM/QS	1	3	3			Developer / contractor risk, implications of non compliance to be addressed. Undertake preliminary, design stage and construction stage assessments and maintain a level of contingency credits. Maintain base line of Building Regulation compliance.	Contractor	
24	PM/QS	<u>Secure EPC rating</u> There is a risk that the developer or contractor doesn't achieve the targeted EPC rating	PM/QS	PM/QS	1	3	3			Developer risk, implications of non compliance to be addressed.	Contractor	
25	PM/QS	<u>Timely Decision making by Client</u> There is a risk that decisions by the client are delayed which has an impact on cost or programme	Client	Client Representative	2	3	6			Maintain a decision matrix / action list tracker. Ensure client is aware of the required times decisions are required by in accordance with strategic programme.	Client	
DESIGN & TECHNICAL RISKS												
26	PM/QS	<u>Failure to Provide Design Information in Timely Manner</u> Design team unable to issue Design Information in time for construction to commence	Design Team	PM/QS	2	3	6			Regular Design Team meetings to be held throughout design development & coordination stages to address any potential delays.	Design Team	
27	PM/QS	<u>Impact of Uncoordinated Design</u> Design not coordinated between disciplines resulting in time & cost implications	Design Team	PM/QS	3	3	9			Design disciplines to hold regular coordination meetings, throughout RIBA Stages 3 & 4.	Design Team	
28	PM/QS	<u>Statutory Requirements</u> Design fails to meet statutory requirements	Design Team	PM/QS	1	3	3			Design will be developed in line with current Building Regulations and will be subject to Building Regs plans check via Building Control.	Design Team	
29	PM/QS	<u>Project Brief</u> Design fails to meet requirements of the Project Brief	Design Team	PM/QS	1	3	3			Design to be developed in line with options suggested within ITT, tender marking process to gauge suitability of design in wider context of project brief. Potential changes to be highlighted and managed by PM through Change Control procedure.	Design Team	
30	PM/QS	<u>Existing Structures</u> New building imposes excessive loads on existing retaining structures / cliff face to the eastern boundaries.	Design Team	PM/QS	1	4	4			Structural engineer to undertake load path assessment of new design and geotechnical site investigations to assess condition of existing retaining structures.	Design Team	
31	PM/QS	<u>Services / Utilities</u> Below ground drainage works exceed anticipated costs due to unexpected ground conditions / layout / unanticipated services / delay in locating existing services	Client	Client	3	4	12			Drainage survey to be commissioned before works commence together with trial pit investigations to verify combined sewer position. Ensure S185 diversion and Build Over Agreements are secured early to prvent construction delays.	Design Team	
32	PM/QS	<u>Contamination</u> Extent of ground contamination more expansive than anticipated, especially given previous gas storage works at western edge of the site. Asbestos content greater than first envisaged.	Client	Client	3	4	12			Monitoring to be implemented, stage II geotechnical and intrusive contamination testing to be performed. Follow up asbestos testing to be undertaken prior to main construction activity.	Design Team	
33	PM/QS	<u>Cost Plan</u> Cost plan exceeds budget leading to value engineering / re-design work.	PM/QS	Client	2	3	6			QS involvement throughout all design stages required.	PM/QS	
34	PM/QS	<u>Services</u> Insufficient capacity within existing services infrastructure causing additional time and cost implications associated with increased infrastructure.	PM/QS	Client	2	3	6			Services feasibility study to be undertaken during RIBA stage 3.	Design Team	
35	PM/QS	<u>Surface Water Attenuation</u> Insufficient capacity within existing combined sewer to accept surface water discharge causing additional time and cost implications associated with rock excavation for drainage attenuation tank.	PM/QS	Client	3	4	12			FRA and drainage strategy investigations and negotiation with SWW to be undertaken to determine practical solution.	Design Team	
36	PM/QS	<u>Sewer Build Over Agreement</u> Insufficient depth of existing combined sewer affecting new drainage and potentially building design. Potential need for Build Over Agreement due to reduced invert level cover depth.	PM/QS	Client	3	4	12			Engage in early dialogue and negotiations with SWW to agree practical solution and progress Build Over Agreement early.	Design Team	

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PROCUREMENT RISKS												
37	PM/QS	<u>Insufficient Market Interest</u> Limited number of contractors or developers available within the market or interested in the scheme.	Client	Client Representative	2	4	8			Market testing / Contractor engagement early on in design process.	PM/Client	
38	PM/QS	<u>Contractor Selection / Tender Documentation</u> insufficient design detail / poorly coordinated tender pack leads to increased risk premium during contractor selection (tendering) process and increased length of Tender period.	Design Team	PM/QS	2	3	6			Design team to ensure adequate detail is provided within tender documents.	PM/QS	
39	PM/QS	<u>Design Changes</u> Post-contract design changes implemented by the client incur further design / consultant fees	Client	Client Representative	3	2	6			Post-Contract design changes to be implemented through a pre-agreed Change Control procedure	PM/QS	
40	PM/QS	<u>Procurement</u> TTC varies basis of procedures for procurement leading to revised tender process	Client	Client Representative	1	3	3			Pre agree procurement procedures at early stage of the project.	Client	
41	PM/QS	<u>Contractor / Developer Selection</u> Tender applicants have limited / insufficient experience of similar projects	PM/QS	PM/QS	2	4	8			Undertake soft market testing, followed by rigorous pre qualification process to test experience.	PM/QS	
42	PM/QS	<u>Quality of Tender Documentation</u> There is a risk that an incomplete or poorly coordinated tender pack will increase the tender period and tender returns	PM/QS	PM	3	3	9			Consultant to regular review developing design and robustly review and comment upon the tender documentation	PM/QS	
43	PM/QS	<u>Scheme Unaffordable</u> There is a risk that the tender returns are higher than the allocated budget	PM/QS	QS	2	4	8			Complete timely cost report and utilise cost management techniques such as value engineering and optioneering.	PM/QS	
44	PM/QS	<u>Scheme Affordability</u> There is a risk that the tender return is higher than the allocated budget which results in the developer trying to reduce specification/ scope so as to align their development appraisal	PM/QS	QS	2	4	8			Complete detailed review of Contractors Proposals to ensure they align with the Client's Employers Requirement.	Contractor	
CONSTRUCTION RISKS												
45	PM/QS	<u>Supply Chain</u> Contractor unable to procure materials due to geographical location of site	Client	Client Representative	2	3	6			Long lead-in items to be identified and procured early on in Programme to minimise risk of delays. Regular meetings to be held with the Contractor to allow potential delays or difficulties in procurement to be discussed and mitigated. Design of structural components to be cognisant of land and water delivery routes.	Contractor	
46	PM/QS	<u>Supply Chain</u> Difficulties with access / road closures etc affecting deliveries to site	Client	Client Representative	2	3	6			Robust delivery methodology to be as part of Construction Strategy / CPP. Use different road and water delivery strategies.	Contractor	
47	PM/QS	<u>Contractor Insurance</u> Contractor unable to evidence required insurance coverage - (PI - £5m, EL - £5m, PL - £5m)	PM/QS	QS	1	2	2			Proof of insurance to be included within Tender Submission	Contractor	
48	PM/QS	<u>Ground Conditions</u> Ground conditions not as expected, e.g. unsuitable for proposed foundation type. Additional rock excavation required, more than first envisaged.	Client	Client Representative	1	2	2			CBR testing and geotechnical trial pits and boreholes to be performed before works commence.	PM/QS	
49	PM/QS	<u>Below Ground Drainage</u> Potential cost / time impact due to sewer protection works (300mm Dia. sewer pipe running through site, 350mm below proposed foundation depth)	Client	Client Representative	3	3	9			Protection measures to be agreed between SWW & demolition contractor before commencement. Consideration to include careful demolition of building and floor slabs, followed by assessment of foundation type and layout by excavational investigation. Sections of footing to potentially be left in-situ to avoid risk of damage during demolition phase (sewer diversion anticipated before construction phase).	Contractor	
50	PM/QS	<u>Below Ground Drainage</u> Potential cost / time impact due to sewer diversion. Kemp Engineering CCTV Drainage survey identified sections of damaged sewer pipe to the section North of the police station. SWW may wish to repair these sections as part of planned diversion, SWW are yet to respond on survey findings.	PM/QS	PM/QS	3	3	9			Client to give consideration to damaged section of pipe when coordinating sewer diversion with SWW to ensure blocked area is assessed and rectified as part of those works.	Design Team	
51	PM/QS	<u>Stabilisation Works / Netting</u> Retaining wall to South of site requires further stabilisation works incurring extra costs	PM/QS	PM/QS	2	4	8			Appropriate structural assessment to be implemented before adjusting site levels.	Design Team	
52	PM/QS	Supply chain availability	PM/QS	PM/QS	3	4	12			Weekly commercial meetings along with monthly progress meetings to be held with the Contractor throughout the project enabling any issues as a result of the ongoing material shortages to be aired and discussed with the aim of agreeing a mitigation strategy.	Contractor	
54	PM/QS	Material availability	PM/QS	PM/QS	2	3	6			Review specifications to ensure that the materials can be sourced from UK and are in plentiful supply.	Contractor	

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55	PM/QS	<u>International Conflict / Covid -19</u> Increased contingency allowances within Tender/ Contract Sum	PM/QS	QS	2	3	6			Advice from legals on the risk allocation and who is best to mange risk/ hold risk. Review amended contractual terms.	Contractor	
56	PM/QS	<u>Main Contractor Insolvency</u> There is a risk of main contractor insolvency	PM/QS	PM/QS	2	5	10			Mid and post tender interviews undertaken to assess financial stability and exposure of other projects.	Contractor	
57	PM/QS	<u>Subcontractor Insolvency</u> There is a risk of subcontractor insolvency	PM/QS	PM/QS	3	3	9			Post Tender interviews to assess robustness of supply chain undertaken.	Contractor	
59	PM/QS	<u>Unforeseen Ground Conditions</u> There is a risk that unforeseen ground conditions are encountered during the project	PM/QS	QS	1	3	3			Mitigate through trial pitting post demolition activities and prior to main contractor tender action.	Contractor	
60	PM/QS	<u>Weathertightness</u> There is a risk that poor construction workmanship will lead to water ingress, especially given the exposure rating of the site.	Client	Client Representative	2	3	6			Ensure Contract Documentation includes for warranties and correction clauses for poor workmanship. Latent Defect Insurance to be put in place. Clerk of Works / Principle Designer to closely monitor construction and waterproofing.	Contractor	
61	PM/QS	<u>Design Changes (developers / contractors team)</u> There is a risk of changes to the approved design or the agreed assumptions on which underpin the design	PM/QS	PM	2	3	6			Regular monitor variations of the agreed contract specification and scope.	PM/QS	
62	PM/QS	<u>Incoming Services</u> Risk that new incoming services to the site are delayed by third parties and will not meet programme critical dates	PM/QS	PM/QS	3	3	9			Monitor progress on a regular basis. Ensure works are ordered so as to allow float within the completion date before it becomes critical to overall programme.	Contractor	
63	PM/QS	<u>Statutory Authorities</u> There is a risk that 'others' (who the Client appoints) do not perform in accordance with the programme e.g. fibre links etc	PM/QS	PM/QS	3	3	9			Monitor progress on a regular basis. Ensure works are ordered so as to allow float within the completion date before it becomes critical to overall programme.	Contractor	
64	PM/QS	<u>Equipment (Existing Office Furniture)</u> There is a risk that existing equipment identified for transfer is not in the similar condition to time of survey and cannot be transferred	Client	Client Representative	1	2	2			Re survey marked furniture before new furniture order is placed.	Client	
65	PM/QS	<u>Equipment (Other)</u> There is a risk that all other equipment requirements are not fully defined and/or are not procured to suit the project timescales	Client	Client Representative	3	3	9			Ensure all stakeholders are aware of the programme.	Client	
66	PM/QS	<u>ICT and AV</u> Risk that strategy and level of technology changes from Contract Documents leading to change	Client	Client Representative	1	3	3			Client to monitor industry and technological changes and follow change protocol if necessary.	Client	
67	PM/QS	<u>Early Access</u> There is a risk that the Main Contractor will not achieve early access dates	PM/QS	PM	2	4	8			Monitor progress and report early risks to completion.	PM/QS	
68	PM/QS	<u>Adverse Weather Conditions</u> Affect progress of works, craneage and envelope works - high wind and driving rain conditions given exposure of site.	PM/QS	PM	2	4	8			Review at time to resequencing works so as to mitigate any delays. Ensure contractor makes allowances for crane downtime. Maximise offsite MMC construction techniques.	Contractor	
69	PM/QS	<u>Delayed Practical Completion</u> There is a risk that the Main Contractor will not meet the agreed Contract programme	Client	Client Representative	3	4	12			Develop further options should PC not be achieved in time of the current completion.	Contractor	
70	PM/QS	<u>Client Changes</u> There is a risk of design changes to the agreed design potentially causing project delay. The impact and risk of this increases as the project progresses.	PM/QS	PM	2	4	8			No further changes can be accommodated by the Contractor.	Client	



Cost Plan

Block A
Community Building
£3.1m

Block B
Residential Block
£1.6m

External Works
£600,000

TOTAL - £5.3m



CliftonEmerydesign