# CALUM DUNCAN ARCHITECTS

Greenway Hub Stage 2 Concept Design Report October 2022





### INTRODUCTION

Calum Duncan Architects LTD (CDAL) were appointed by Wester Hailes Growing to carry out an architectural feasibility study that would investigate a new Community Hub to the north of the Greenway and adjacent to the existing Community Garden in Wester Hailes. This new facility would serve the neighbourhoods of Murrayburn, Hailesland and Dumbryden, with the detailed use of the facility being guided by the outcomes of the consultation process as carried out by Community Enterprise and Calum Duncan Architects.

The site: Adjacent to the Wester Hailes Greenway, between the residential streets of Murrayburn Gardens and Murrayburn Grove.



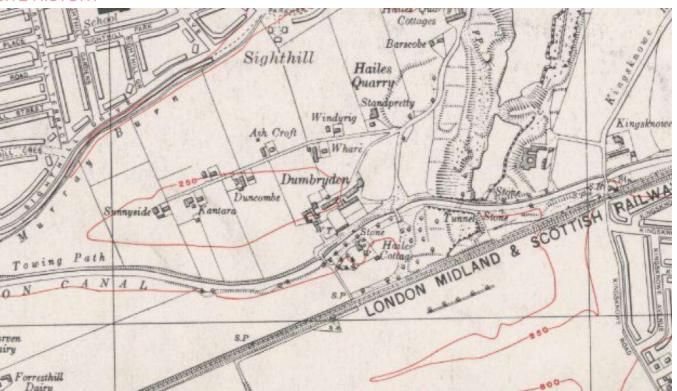
Neighbourhoods of Murrayburn, Hailesland and Dumbryden (by Atkins)



Location plan with site boundary



#### SITE HISTORY



Extract of 1938 OS map

On the 1938 OS map above, the area of Murray burn, Hailesland and Dumbryden can be seen to the south of the post war housing of Sighthill constructed to the north. The Greenway area can be seen to historically be a rural road linking a series crofts adjacent to the larger Dumbryden Farm. The Greenway Hub site is likely to be on the line of this central road and close to the Ash Croft or Duncombe.



Housing to the East end of the Murrayburn Greenway 1979 (photo: John Walmsley)

Construction of the existing housing on the site began in around 1967, and as documented by the above image, by the later 1970's the housing was beginning to require repairs.



The Murrayburn Greenway Aerial Photograph, Canmore, 1991



Aerial View prior to Community Garden Construction



View of the site as existing

The 1991 Greenway Area shows the hard standing of what was a pavilion building and adjacent, we understand to have been a prefab type construction which served as a community space. During consultations with the neighbouring community, this has been referred to fondly when it functioned as a youth club and for gatherings. The year of its demolition is unknown. This is a provision which is now missed by those who used and remember the building. This is now the location of the community garden.

The Greenway Hub site itself appears to be largely unaltered since its construction as a concrete paved space. It is unclear how it was envisaged to be used and our speculation would be, it was seen as an open public 'piazza' of sorts or may have been planned to accommodate a non residential building which did not materialise. However, its existing nature and character is exceptionally underwhelming and unhelpful in terms of circulation, social engagement, character or function.



### **CONSULTATION OUTCOMES**

The methodology and outcomes of the consultation exercise for this study has been led by Community Enterprise (CE) with the input and engagement of Calum Duncan Architects. This process has been described in the Business plan produced by CE. Key aspects which have been given consideration as outcomes from the consultation include:

The local demographics shows a higher than average number of young people under the age of 16, a ethnically diverse and a high number of unemployed people in the community.

Feedback from locals revealed there are not facilities which cater for the younger ages or provide support for the diversity of the community, including the unemployed. The CE report describes I full the demographic and asset mapping for the locality, which has set out the aims for the brief and the feasibility proposals.

The vision for the Greenway Hub is to:

- Provide a welcoming and accessible space for the community to come together and connect around shared activities, events and support our community to become more connected
- Join up with other support providers in the area to offer a holistic service to our community, which has a range of needs, with a focus on young people under the age of 12
- Take steps to reduce food insecurity and poverty in our community by helping to improve household finances and providing a venue for community food-based activity and learning
- Promote the health and wellbeing of our community by encouraging and supporting healthy, sustainable living by improving diet and supporting positive mental health
- Encourage and provide opportunities for local people to develop skills and experience that will improve employment prospects.

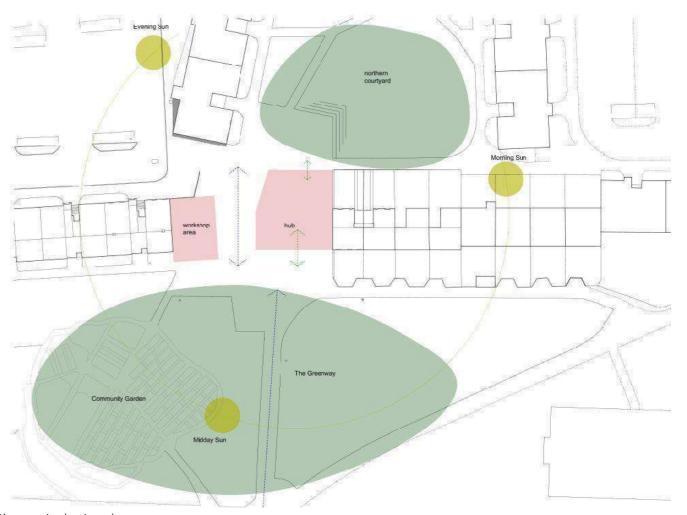
#### THE BRIEF

The brief has been set out in detail and compiled in the form of an Accommodation Schedule, Appendix to this report. New single storey community space will function as a 'BASE CAMP' for a variety of uses, with the flexibility to accommodate multiple users of varying ages with a focus on the needs to early years and younger age groups. The primary special facilities within the brief are as follows:

- Community Space: As a flexible space for community group activities, meetings and as a community café operating on an intermittent basis. Importantly, this space can function as a 'base' for groups which are focused on outdoor activities, but presently have nowhere to begin and finish, or use as an indoor space where the activity and weather require this.
- Pantry: The space will function using the established scheme as a 'food pantry', where the local community can purchase a range a variety of produce at a reasonable price.
- Teaching Kitchen: With a strong link the adjacent community garden, this will provide teaching opportunities for cooking and preparation of food. This can also cater as preparation kitchen for a community café.
- Office: Building management space with 2 desks.
- Private Meeting: A place for various small group meetings and private one to one consultations.
- Makers Workshop: A workshop space for youth training and making opportunities.



### SITE ANALYSIS + DESIGN PROPOSALS



Site analysis drawing

### Location + Services

The site is currently absent of character, function or use, and only services as a relatively exposed and unwelcoming open space which locals can be seen to negotiate in order to walk between services, housing or greenspaces. Notable local services are few and far between, with only Michael's Shop, being located on the opposite residential corner to the south of the Greenway space. The nearest, permanent non-residential building are the facilities of Wester Hailes plaza. It is evident that with this lack of services, and activity, the locality feels transient in its nature.

#### Access, Footfall and Parking

Pedestrian access is of primary importance to the operation of the Hub, with its purpose being to cater for the local neighbourhoods, over users from afar. The location is excellent being centrally located within the neighbourhoods it will service. The building doesn't fall clearly within the local authority requirements for vehicle parking, with community centre being the nearest building type (but note it differs being a local neighbourhood hub). The site sits out with the city parking zones. For a new build community centre this would require 1 space per 40sqm, so 4 spaces for a 175sqm building. The adjacent court of Murrayburn Green is has unrestricted and little used on street parking. We would propose demarking 1-2 no accessible spaces for the building. Early discussion with the local authority is recommended during the detailed design stage to agree. Cycle parking will likely be requires as 2 for users and 1 for staff. We would recommend providing more. Murrayburn green on street parking would also be suitable for deliveries to the building.

### Green + External Space

In contrast to the site itself, there are some promising green open spaces local to the site. Most are not used to their potential, with the exception of the relatively recent construction of the Murrayburn and Hailesland Neighbourhood Garden, within the southern Greenway space established in 2019. The green courtyard space to the north does have the potential for improvements, for which there is the ambition within the wider landscape masterplan (Edinburgh Council/ Atkins Consultants), to introduce an amphitheatre within the grass landscaped area (point 1 on plan below). The immediate adjacent spaces, given the importance of relevant outdoor related uses, are considered so as to make space within the boundary of the building which internal spaces can spill out into, and also bring activity to the wider green space to the south and north.



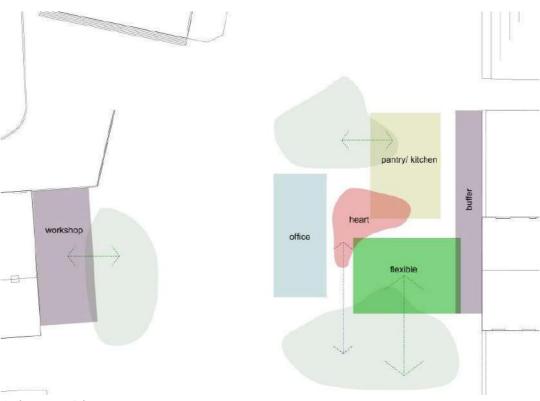
City of Edinburgh Council/ Atkins Landscape master plan extract



#### **DESIGN PROPOSALS**

### Desire lines, Active Frontages + Orientation

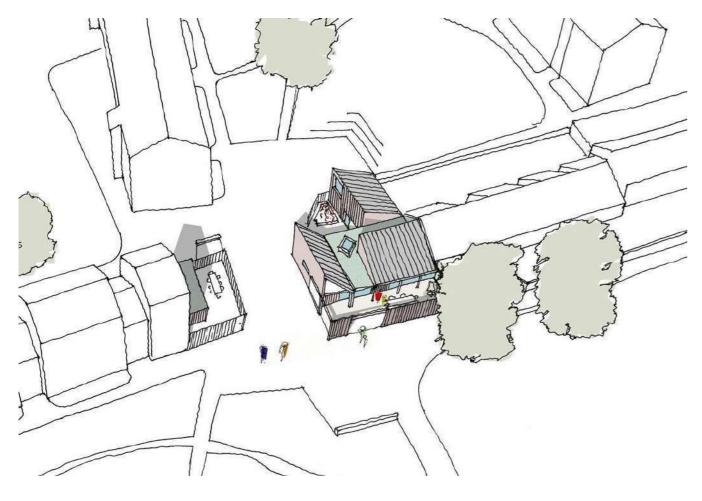
Proposal focus on the use of the east area of the site which meets the single storey residential housing to the east. Currently this area is without character or function. On the west side of the site, this then reinforces the north/south circulation between the greenways to south and the landscaped courtyard to the north. The opposite higher gable then becomes ideal for the separate workshop space. These two uses (Hub building and workshop), being separate, are beneficial to maximise activity, presence and footfall, so challenging the current transient nature. The main elevation to the Hub faces the sunny south facing Greenway aspect, improving the space as an active frontage.



Adjacency Diagram

The development of the architectural feasibility study has provided a design proposal which organises the uses to reflect the nature of varying and complimentary activities, considering need, aspect and orientation around the site. The adjacency of spaces within he building are considered to reflect their similar uses and compatibility. The south aspect is primary, in terms of activity, sunny outside space. The main entrance is provided this side, linking towards the pedestrian route across the Greenway including connections to the Community Garden and Michael's Shop. Creating a secured enclosure to this south elevation makes a usable external space akin to an external room, for learning, play and congregating.

The entrance would give access to a central circulation heart, which importantly can directly give access to the uses of Community space, Kitchen, office, meeting and the pantry. Given the location is relatively quite single storey residential building to the east, a buffer of storage or services is located along the residential gable wall. The pantry function, which operates is a different way to a traditional shop where footfall is primary, works well in this case to the northside. An independent external entrance bringing needed activity to the courtyard on the north side, but linked to the internal kitchen space.



Sketch visual from south

### Massing and Context

It feels appropriate that the community hub should feel visually playful, in response to its three main functions, but which acknowledges the residential neighbours. The Hub is proposed to be single storey allowing all spaces to have direct connection from the outside, easily accessed and avoid the need to for a lift. The primary Community space reflects the form of the adjacent terraced houses, avoiding conflict in terms of daylight/ sunlight and gives a friendly sense of engagement with the existing buildings. This south facing pitched roof is very suitable for PV panels. The other main uses of pantry and office/meeting are then 'articulated' as a composition of spaces/uses. These roof spaces can be used to give a generosity of space, where more public in nature, such as the community space. These forms can integrate high level windows to give a characterful and bright quality of daylight (as well as views out). Where height is less important, such as the meeting space, the higher roof works well to accommodate services.

#### Material and Detail

Consideration is given to how and appropriate material character can be developed which is visually and practically appropriate, as well as sustainable in terms of energy efficiency, embodied energy and toxicity. The form will lend itself to a variety of external surface finishes, and this needs some careful consideration in terms of lifespan and robustness, while providing a friendly feel.

A secured boundary, which can open generously during hours of operation (by wide hinged or sliding doors), allows the elevations within this boundary to have greater flexibility due to this protection. Likewise, higher



level surfaces are less prone to wear, and for these surfaces would consider a timber finish where out of reach, being sustainable, durable, relaxed and friendly in appearance. At the lower level and exposed areas, it may be that brickwork or a rendered surface is appropriate. The roofs are envisaged as a standing seam, profiled sheet metal finish, with flat surfaces as sedum green roof, with generous rooflight to the central circulation area. These are initial considerations at this stage which will be developed in detail, with consideration for their durability and maintenance.

The external form/ shape will be designed to feel generous, light and reflective of the relevant internal spaces. Each space will be designed to consider the aspects of sunlight for the buildings energy use to balance heat gain and overheating to each space. Example precedent images are provided to suggest the opportunities externally and internally, in terms of surface material, form, daylight, space and general character.







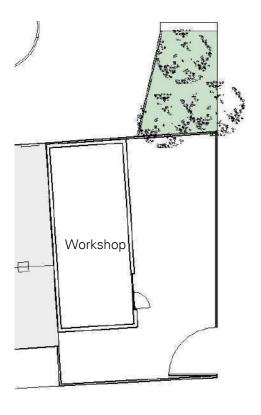
Precedent images for material, light and space

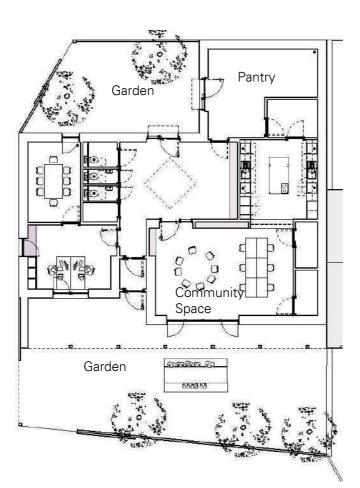
#### Sustainability and Passive House

A running cost analysis has been undertaken based on improved local authority Technical Standards coming into use in October 2022. This is compared to a 'Passive House' standard of design which reduces running cost further. This design potentially suits the Passive House design method, and we would recommend this be discussed at the commencement of the detailed design stage. The principle of the methodology is to make an external fabric which is as extremely thermally efficient, thorough insulation, airtightness, detailing of construction and efficient ventilation. This is referred to a 'fabric first' approach. It would also be recommended that the embodied carbon, toxicity and local sourcing of materials be considered during the detailed design stage and these considerations have been made within this outline design stage,

### Accessibility

We recommend in line with best practice for accessibility, that any additional space created in the school is accessible by wheelchair and ambulant disabled persons. Unless there is consideration of a lift being installed, this is best done by looking at a single storey building and these proposals are based on this principal.



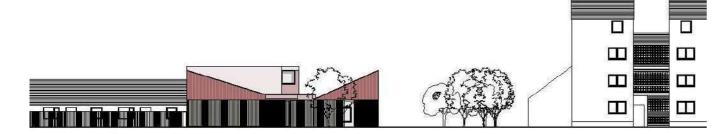




Plan view of Greenway Hub and Workshop



South Sketch Elevation



North Sketch Elevation





### **OUTLINE SPECIFICATION**

**Purpose:** The following description and referenced drawings summarises the outline specification at RIBA Stage 2 Concept Design.

#### Removals

Paving slabs to existing ground.

### Structural Foundations

Refer to structural engineers report.

### Superstructure

Refer to structural engineers report. Options to be considered during detailed design:

CLT panels

SIPS panels

Prefabricated timber Larsen truss or composite joist to walls and roofs.

### **Ground Floor**

Likely to be concrete slab floor with EPS insulation below. This is most beneficial for achieving accessible level form outside.

Floor finish options to be considered appropriate to each space.

# **Upper Floor**

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# External Wall

To suit superstructure solution.

U value outline target of 0.1 W/m2k for Passivhaus.

Vapour open and air tight construction.

### Roof

Flat roof to be considered as sedum roof build up.

Pitched roof finish to be consider in detailed design stage in terms of durability and maintenance.

Coated metal standing seam to be investigated.

South facing roof as full PV finish.

U value outline target of 0.1 W/m2k for Passivhaus.

### Internal Wall

Timber stud with part recycled and durable plasterboard finish.

Acoustic insulation internally.

Some areas of plyboard substrate for fixings (kitchen, wcs and as required).

### Ceiling

Plasterboard and fibre acoustic ceiling to social areas.

#### Stairs + Lift

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#### Windows

Outline target of 0.68 W/m2k triple glazed for Passivhaus or low energy target.

Timber or metal frame.

#### **External Doors**

Passivhaus standard and secure locking to comply with technical standards.

### Internal Doors + Screens

Painted internal doors allow future repainting.

30 + 60min FR doors to be considered.

Sound reduction to be not less than 30db for accommodation spaces.

Glazed vision panels to fire doors and where beneficial.

### Sanitary

Reduced flow wc cisterns

Dual flush of 4/2.6lt (effective 2.95lt) with delay fill ball valve. Local guidance or symbols required instructing the user on the appropriate operation of the flush.

### Reduced flow taps

6 litres/min for water pressure of 0.3MPa and either/ both timed automatic shut off/ electronic sensor/ low flow screw down/ level taps/ spray taps.

Service routing of water to flush, from rain water harvesting.

# Signs + Notices

Some internal and external signage to be investigated. Braille signage throughout.

### Permanent Access and Safety Equipment

Access hatch form inside for security, leading to any flat roofs. Permanent access to sloping roofs not considered a requirement.

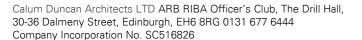
### Unframed isolated trims/skirtings/sundry items

MDF to be avoided or to be low VOC specification throughout the building. Skirtings and door frames should be softwood painted. New skirtings generally SW 75 x 20mm.

#### Ironmongery

Locking and ironmongery to be considered during detailed design with client consultation

# **Lightning Protection**





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# Fire Proofing

# Painting and Clear Finishes

### **Fixed Fittings**

Refer to accommodation schedule for individual space requirements – to be developed int eh detailed design stage.

### Loose Fittings and Furniture

Refer to accommodation schedule for individual space requirements – to be developed int eh detailed design stage.

### External Hard and Soft Landscaping

Courtyard surfaces maybe self-binding gravel and some areas of good quality durable paving.

## Planting

To be considered in consultation with client at detailed design stage. The opportunity for new trees will be considered.

### Cycle Parking

Provision to be established in stage 3.

### Contractor considerations

To consider:

Self-build with the client as a community benefit

Considerate contractor

Passivhaus experience and sustainability measures

#### STRUCTURE + SERVICES

#### Ground

Existing ground at proposed formation is currently unknown and assumed to have a maximum allowable bearing pressure of 75kN/m2. Ground conditions to be confirmed on site via trial pit investigation by Contractor. Allowing for minimum 4No. pits. One adjacent to the neighbouring building foundations, 2 under the footprint of the new hub building and one under the footprint of the new workshop. Trial pits should be backfilled following inspection.

#### Structure

The proposed structural options are compatible with being constructed to a passive house standard and incorporate a fabric first approach to increase the thermal efficiency of the building.

#### Substructure

Any foundation design will be confirmed upon receipt of trial pit investigation. To achieve passive house standards, there are various options to achieve the thermal properties required:

- Assumed 300mm thick reinforced slab cast under the entire footprint of the building, on top of loadbearing insulation such as Isoquick or foamglas.
- Assumed 200mm thick reinforced slab foundation with 450mm thick edge thickenings to support loadbearing walls. Insulation to wrap around thickening.
- Adopt an insulated slab Foundation system to directly support the loadbearing walls.
- Pad foundations to be cast to support external timber posts.

#### Superstructure

All external walls are described as being formed in assumed 175mm thick SIPs panels acting as racking panels with external cladding system to CDAL specification. A series of internal loadbearing walls have been proposed to support the roof panels and provide lateral stability to the building. All door and window openings to be framed out with timber lintels supported on cripple studs to each side. Beams over larger openings to be CLT or Glulam timber (where possible steelwork will be avoided). New roof to be formed in 175mm SIPs panels spanning between loadbearing walls in the North-South direction. External timber canopy structure to be formed in posts and beams, suitably treated for external

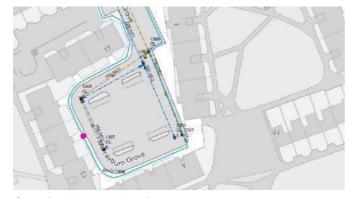
External timber canopy structure to be formed in posts and beams, suitably treated for external conditions. Roof structure in this area is assumed to be separate from the main building and is to be formed in timber rafters.

### Flooding

The site is currently out with any known flooding zones with reference to the SEPA Flood Maps.

#### Drainage

With reference to the Scottish Water GIS system (attached), we can confirm there is an existing separate surface and foul water system located to the North-West of the site. All new drainage from the Greenway Community Hub will need to discharge into these systems. Scottish Water to be contacted as part of a pre development enquiry to confirm the existing system can handle the increase in discharge.



Scottish Water drawing extract



### MECHANICAL ELECTRICAL SERVICES

#### Introduction

Harley Haddow have been appointed to assess a proposed new development in Wester Hailes, Edinburgh, for both energy consumption and predicted running costs.

This report looks at the baseline compliance targets required for a new building within the national building regulations and within the local planning policy for Edinburgh as well as a higher specification fabric to reduce energy consumption and carbon emissions further.

#### Compliance Targets

The CO<sub>2</sub> emissions associated with the annual energy consumption have been assessed in accordance with Building Regulations Section 6: Energy (Scotland) 2022 using the National Calculation Method for Dynamic Simulation Model (DSM).

 2021 Scottish Building Standards (Non-Domestic), Section 6 requires the Building Emission Rate (BER) to meet or better the Target Emission Rate (TER).

The analysis is based on the information currently available to give a representative analysis of the building.

As part of the City of Edinburgh Council Climate emergency declaration, they also note the following which will require to be considered:

 The proposal should maximise the potential for onsite renewables to meet the heat and energy demands for the building. The applicant should consider PV/solar panels and air source heat pumps linked to energy storage. However, this will be dependent on the final design.

Gas as an energy source is not in tandem with the Councils objectives relating to air quality or assist with tackling the City of Edinburgh Councils declared Climate Emergency made in 2019. Nor will the use of gas comply with the Councils objectives to reach zero carbon, decarbonise buildings/heating. Gas only serves to bolster the background NOx levels within the city and so from an air quality point of view is not supported.

#### **Future Proofing**

The Scottish Government currently aims to achieve the following carbon emissions reduction targets:

- 70% CO<sub>2</sub> reduction by 2030;
- 90% CO<sub>2</sub> reduction by 2040;
- Net-zero carbon by 2045.

As part of this process, there will be policies and targets put in place which will push new developments and existing buildings to move away from fossil-fuel based heating systems such as gas. Potential alternatives will include electric solutions which will be supplied by a largely decarbonised electricity grid due to the significant contribution from renewable technologies onto the network.

### **Options Appraisal**

Three fabric options have been modelled for Greenway Community Hub. Option 1 would be considered to be the minimum standards to achieve Section 6 Building Regulations compliance. The other options are further fabric improvements to achieve lower energy consumption and running costs.

- Option 1 Compliance baseline fabric with ASHP
- Option 2 Minimum Passivhaus standards with ASHP
- Option 3 Optimal Passivhaus fabric with ASHP and MVHR

System	Performance Parameters
Heating	All options – Underfloor heating served by ASHP (COP 3.0)
	Option 1+2: Natural Ventilation
Ventilation	Option 3: Mechanical Ventilation Heat Recovery System

Table 1. Performance parameters

5 1 · 5	U-Values			
Fabric Element	Option 1	Option 2	Option 3	
External Walls	0.21 W/m <sup>2</sup> K	0.15 W/m <sup>2</sup> K	0.10 W/m <sup>2</sup> K	
Ground Floor	0.22 W/m <sup>2</sup> K	0.15 W/m <sup>2</sup> K	0.10 W/m <sup>2</sup> K	
Roof	0.2 W/m <sup>2</sup> K	0.15 W/m <sup>2</sup> K	0.10 W/m <sup>2</sup> K	
Glazing	1.6 W/m <sup>2</sup> K	0.8 W/m <sup>2</sup> K	0.8W/m²K	
Air Permeability*	5 (0.3 ACH)	1 (0.033)	1 (0.033 ACH)	

Table 2. Fabric U-values

### Results Analysis

ı	tesuits Arialysis						
	Options	Total energy (MWh)	% Reduction	Associated Running Costs (£)	% Reduction	Associated Carbon Emissions (kg.CO <sub>2</sub> )	% Reduction
	Option 1 – Compliance Baseline	10.2	N/A	£5,854.2	N/A	2382.8	N/A
	Option 2 - Passivhaus Minimum	8.3	19.1%	£4,837.6	17.4%	1927.2	19.1%
	Option 3 - Passivhaus Optimum	7.8	24.2%	£4,566.7	22.0%	1805.8	24.2%

Table 3. Total Consumption and Cost Summary

Company Incorporation No. SC516826





- (1) Energy figures based on IES modelling. Total energy consumption is the combination of lighting, miscellaneous equipment and system energy
- (2) Running costs based on typical electricity tariffs (52 p/kWh)

The running costs are indicative only, therefore these figures could vary significantly in practice based on actual operation and management and are a guide only. The pence per kilowatt figure is taken from the predicted rate from October 2022 taken from Ofgem.

Option 3, a full Passivhaus design would result in a 24.2% reduction on building regulations compliance and a 22% running cost reduction.

#### Full results breakdown

Option 1 - ASHP - New reg u-values

Use	Total Energy (MWh)	Total Energy (kWh)	Energy Consumption by End Use (kWh/m²)	Total Running cost	Total emissions (kg)
Systems	3.68	3680.00	20.91	£2,092.45	
Equipment	5.5433	5543.30	31.50	£3,061.37	2383
Lighting	1.0031	1003.10	5.70	£700.46	2303
Total	10.2264	10226.40	58.10	£5,854.28	

Option 2 - ASHP - Passivhaus worst case

Use	Total Energy (MVVh)	Total Energy (kWh)	Energy Consumption by End Use (kWh/m²)	Total Running cost	Total emissions (kg)
Systems	1.725	1725.00	9.80	£1,075.85	
Equipment	5.5433	5543.30	31.50	£3,061.37	1927
Lighting	1.0031	1003.10	5.70	£700.46	1327
Total	8.2714	8271.40	47.00	£4,837.68	

### Option 3 - ASHP - Passivhaus best case

Use	Total Energy (MWh)	Total Energy (kWh)	Energy Consumption by End Use (kWh/m²)	Total Running cost	Total emissions (kg)
Systems	1.2039	1203.90	6.84	£804.88	
Equipment	5.5433	5543.30	31.50	£3,061.37	1806
Lighting	1.0031	1003.10	5.70	£700.46	1000
Total	7.7503	7750.30	44.04	£4,566.71	

#### **COST ESTIMATE**

Executive Summary Only Refer Appendix for Hardies report

### **Project Cost Limit**

Notwithstanding that this Project Estimate has been prepared in accordance with the "RICS New Rules of Measurement" (NRM) the overall 'Out Turn' Cost Limit for the project is not reported here. Therefore in addition to the Building Works Estimate, and Risk Allowance and Inflation reported here, Design Fees must be taken into consideration to achieve an overall 'Out Turn' Cost Limit.

Overall Cost Limit Summary (Level 1)

Cost Centre	Group Element/Element	Overall % Cost	Overall £/m²	Total Element Cost (Target Cost) £
0 1 2 3 4 5	Facilitating works Substructure Superstructure Internal finishes Fittings, furnishings and equipment Services	1.03% 5.12% 31.41% 2.34% 3.23% 8.23%	49.01 244.93 1,501.42 111.96 154.36 393.58	10,685.00 53,395.00 327,310.00 24,407.00 33,650.00 85,800.00
6	Prefabricated buildings and building units	0.00%	-	-
7 8	Work to existing buildings External works	0.00% 13.95%	 666.70	 145,341.00
	Sub-Total Building Works	65.31%	3,121.96	680,588.00
9 10 11	Passivhaus design allowance Main contractor's preliminaries Main contractor's overheads and profit	7.55% 8.74% 4.90%	360.94 417.95 234.05	78,684.00 91,113.00 51,023.00
	Total: Building Works Estimate	86.49%	4,134.90	901,408.00
12 13	Project/design team fees Other development/project costs			1 1
	Base Cost Estimate	86.49%	4,134.90	901,408.00
14	Risk	4.32%	206.74	45,070.00
	Cost Limit (Excluding inflation)	90.82%	4,341.64	946,478.00
15	Inflation	9.18%	438.89	95,679.00
	Cost Limit (Excluding VAT Assessment)	100.00%	4,780.54	1,042,157.00
16	Total (sub total 0 to 15)			£1,042,000.00

All totals rounded to nearest hundred A detailed elemental analysis for the Project is included in Appendix A.

#### **Previous Estimate Reports**

This is our first budget estimate for the scheme, Rev A.





#### **Further Considerations**

No specific specification has been issued. This report has been prepared on the basis of verbal conversations with the Architect. All design specification queries and assumptions were clarified by the Architect via email, this was used as the basis for the Estimate.

The next stage would be to progress the design drawings and prepare a detailed outline specification detailing the specific proposals for the building fabric and fit out, together with the proposed site works and drainage solutions. A more detailed cost plan could then be developed from this information.

A value management/engineering session may be appropriate to ensure value for money is maintained.

### Design basis of the report

Information Requirements

To enable the preparation of this project estimate a series of questions has been issued to the Architect, as set out in the 'RICS:NRM'.

Design Proposals, Drawings

The project estimate has been prepared from the following drawings/sketches:

Architect: Calum Duncan Architects

084 L(SK) 11A Plans

084 L(SK) 15 Massing Elevation (uncontrolled)

Structural Engineer: David Narro Associates

SK 001 Structural Scheme Design (indicative)

#### Design Proposals, Specifications

The project estimate has been prepared from the specification notes produced by the Architect as indicated on the foregoing drawings.

Mechanical and Electrical installation proposals are based on a comparison with a recent similar project. No specialist advise has been provided at this stage.

#### Financial basis of report

#### Basis for Measurement

The project estimate has generally been prepared in accordance with the RICS New Rules of Measurement Order of Cost Estimating and Cost Planning for Capital building Works, 2nd edition, effective from 1 January 2013 (RICS:NRM)

#### Cost Information

The project estimate has been prepared generally on the basis of 'Element Cost per m²' rates for buildings of a similar size specification. These rates have been derived from our in-house cost information and from Cost Analyses published by the BCIS-Online services .

The budget costs for the Mechanical and Electrical Installations have been based on the outline allowances made for a typical development of similar size and complexity. No specialist cost advise

has been provided at this stage

We have priced the various elements of the work net and applied separate adjustments for Preliminaries, Contingencies and Design risk. The specific elemental analyses are included in Appendix A.

#### Procurement

The estimate assumes that tenders will be sought on a competitive single stage basis and that the contract will be awarded on a standard form of building contract.

For the purposes of this estimate we have assumed a 'Traditional' fully designed fixed price tender, however, other possible procurement routes could be considered. The choice of procurement route may have an effect on the cost for the project, we would recommend an early discussion to resolve this issue.

### Programme

Indicative dates show construction beginning in 2024, we have inflated the costs based on a commencement date on site in the 2nd quarter of 2024.

#### Pricing Levels

The level of pricing assumes a contractor will have clear access to the working areas and that the work will be executed during normal working hours.

The Base Date for the this estimate is the publish date stated on the front cover.

#### Risk Allowances

Notwithstanding the 'RICS:NRM', at this stage a notional percentage allowance has been included for price and design risk.

#### Schedule of Accommodation

Schedule of Accommodation (for Construction Cost Calculations)

For the purposes of the calculation of construction costs, the 'Gross Internal Floor Area' will be as defined by the 'Code of Measuring Practice' 6th edition, as published by the RICS/BCIS.

For this Project Estimate the 'Gross Internal Floor Area' is defined as;

Ref.	Description	Sq ft	m²
1 2	Ground Floor Workshop	1,905 441	177 41
	Total Gross Floor Area	2,346	218

These areas are as measured from the Architects design drawing 084 L(SK) 11A

#### Schedule of Site Area

The overall site areas are as shown on drawing 084 L(SK) 11A is 756 m<sup>2</sup> which is made up of the main community hub building and external area, the workshop and the external area, as well as an open external area within the boundary between the buildings.





#### **Exclusions and Qualifications**

#### Exclusions

### The following are not included in this Project Estimate.

- Value Added Tax
- Value Added Tax (VAT) in relation to buildings is a complex area. Therefore, it is
  recommended that VAT be excluded from the estimate. It is recommended that specialist
  advice is sought on VAT matters to ensure that the correct rates are applied to the various
  aspects of the building project
- Professional fees
- Planning and other Local Authority charges
- Ground investigation surveys and reports
- Land purchase and legal fees
- Contributions to Section 75 (106 and 278) works agreements
- Finance Charges
- Sales and Marketing costs
- Any costs caused by 'Third Party Rights'
- General fittings and furnishings fit out, other than as shown on the drawings and Appendix A.
- Data wiring, CCTV wiring, equipment and fit out (Containment is allowed for)
- Specialist Security
- Statutory utility infrastructure charges or any upgrading of the off site services.
- Works associated with any archaeological studies.

#### Qualifications

### The following qualifications apply to this Project Estimate.

- This report is based on the information available listed in Section 3. As this information is developed it will effect the allowances and assumption made in this report.
- It has been assumed that the existing ground conditions are good and there are no
- requirements for ground improvement, ground retention or land drainage.
- No allowance has been made for excavating below ground water level.
- No allowance has been made for piling, deep trench fill foundations and/or specialist foundations.
- It has been assumed that the finished floor levels have been set above the existing
- prevailing levels.
- No allowance has been made for contaminated soil removal. No detailed
- information is available.
- No allowance has been made for any additional Electricity Sub-Station requirements.
- Drainage of the site is assumed to be to connections at the boundary of the site. It is assumed that the drainage connection has sufficient fall and capacity. No allowance has been made for pumping stations or water retention.
- It is assumed that External Services connections have the capacity and are assumed
- to be at the boundary of the site.
- We have assumed that the external cleaning of the building will be via a temporary
- access. The tenant will be responsible for providing all equipment.
- We assume there is no requirement for the use of a tower crane(s).
- No allowance has been made for the removal of any 'Fly Tipping' on the site or any other contaminated waste.
- No allowance has been made for the removal of any underground storage tanks.
- We assume any items are removed prior to the start of the contract.
- No allowance has been made for asbestos removal. It is assumed that any asbestos has been removed prior to the start of the contract.

#### STATUTORY CONSENTS

#### Planning

There are no restrictions relating to conservation are or listed building consent. The key considerations relating to planning are:

### Daylight and Sunlight Guidance

Proposals will be considered with reference to the City of Edinburgh Planning guidance of sunlight and daylight requirement. The proposals described comply with these guidelines, however good dialogue will be beneficial during the detailed design stages with the housing association and tenant to ensure due consultation is made, and the Greenwood Hub respects these considerations as a good neighbour.

#### Noise

The planning submission will be considered in relation to environmental noise. This will relate to any potential requirements for noise break out from the building and hours or operation where noise could be a concern. Discussions to date in terms of the proposed uses for the building are likely to be compatible uses, where the building is likely to operate largely within working hours and gatherings will be low key in nature.

### **Building Control**

These proposals have given consideration to the technical standards, taking into account the 1<sup>st</sup> December 2022 revision. The detailed design development of this proposal will be developed in to suit all section of the technical standards requirements, with specific considerations including:

### Section 2: Fire:

- Building access for fire assistance and accessible parking provision
- Building within 1m of neighbouring property
- Fire and smoke detection
- Section 3 Environment
- Ventilation of spaces (extent of controlled or passive ventilation)

### Section 4: Safety

Accessibility and activity space requirements

#### Section 6: Energy

Thermal performance of fabric (technical standards as a minimum)

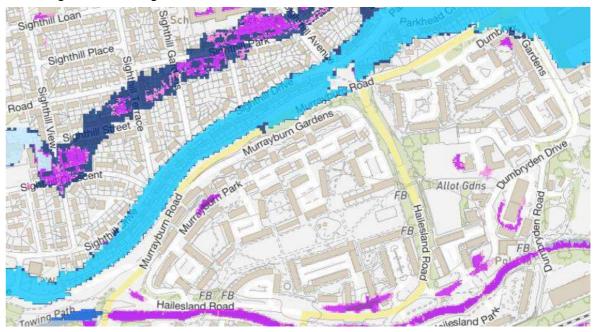


### **ECOLOGY AND BATS**

At this stage there has not been an Ecology Survey carried out. There are not existing structures for bats or birds to hibernate within. The ground is fully slabbed and is not at risk of accommodating endangered species.

#### **FLOOD RISK**

The SEPA flood risk map does not highlight the site and immediate area t be at risk of flooding, as outlined on the extract below. The nearest risk areas flowing Murrayburn Road (Medium Risk) and following the canal (High risk)



### OTHER RISK CONSIDERATIONS

- Ground Contamination
- Site Access: implications during construction
- Security
- Access, views, noise
- Planning,
- Legal ownership
- Security and maintenance
- Building control,
- Accessible design,
- · Socially inclusive design,
- Services requirements,
- · Structural requirements,
- Energy and sustainable design issues,
- Greenspace and Ecology.