DESIGN STUDIES 4A 10 DECEMBER 2020

### **LAURIESTON** THE EDUCATION HUB WIP

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## **URBAN STRATEGY**



Laurieston's urban strategies can be categorised into 4 distinctive areas, results of the previous group study of Laurieston.

The Mobillity strategy follows Eglinton Street to the west of the neighborhood. This strategy focuses on throughfares through Laurieston, connecting to the city while providing opportunities to stop and spend time in the community.

The Health strategy focuses on South Portland Street and Abbotsford Place, through the new residential redevlopments. It will provide greenery and other opportunities to connect to nature in order to improve the mental health of residents. It will also provide cycling paths and pedestrian zones to encourage physical health.

The Cultural Strategy will run along Gorbals street and crosses a vacant site as well as an opportunity to add to the new redevelopment. It will provide education, entertainment opportunities, and informal gathering spaces for the community. It will also connect to the city to easily draw people to the area through the bridge and railway.

The Commercial Strategy follows Norfolk Street and will create a new high street in Laurieston. It aims to create a sense of permanence through economic activity while attracting the city.





My chosen strategy is the Cultural Strategy.

The vacant site to the south-east provides opportunities to connect to the rest of the city through the disused railway line. The current arches are also abandoned and provide interesting spaces to integrate with. It is also in close proximity to the new redevelopment providing easy access for residents.

LANDMARKS

STRATEGY AREA

## THE SITE





#### PROPOSED DEVELOPMENTS

New commercial units have been proposed for the Laurieston Arches. They are currently occupied by community storage or are closed off completely. However this redevelopment does little to activate the vacant site and create a true communal space.











#### LOCAL AREA

The area includes two redevelopments, which are gated and include small green spaces. The neighborhood does lack outdoor gathering space that is accessible by all. The arches also host memorials or art pieces demonstrating their importance to the community.







### PRECEDENCE



#### LEGO HOUSE I BIG

This building houses exhibition spaces an dpublic spaces that embody the culture and values of LEGO. It draws inspiration from the basic lego brick, stacking and staggering simple blocks to create a heirarchy of space throughout the building and allowing users to 'climb' it.

#### FRATRY, CARLISLE CATHEDRAL I FEILDEN FOWLES

Feilden Fowles refurbished this cathedral, creating a new entrance pavilion. This pavilion integrates with the gothic architectural language of the cathedral, using pointed stone arches. The material and arch motif allows the addition to stand out while still being a part of the cathedral.





#### CADENCE | ALISON BROOKS ARCHITECTS

This residential development in Kings Cross, London interacts with the street through dramatic brick archways which form a colonade. This language echos the arches and vaulted spaces of Kings Cross and St Pancras stations.







## **ENCLOSURE CONCEPT**

COAL DROPS YARD I HEATHERWICK STUDIO

This design redevelops two long Victorian warehouses with the attached train viaducts to create public space and a commercial destination. Here, arches are reused for retail as retaining the original architecture.



The initial concept for this design is creating public space through stacked blocks running up and along the arches. This will create a human scale and the impression that residents can climb up it. The blocks curved arrangement will enclose the public spaces on the site while maintaining permeability.





### USERS



Laurieston's residents can be divided into three categories according to economic activity, age and education: Highly qualified professionals, semi-skilled workers and retirees. Throughout the past few decades, Laurieston has gone through several interations of dvelopment, torn apart and put together each time. In order to create a sense of permanence, the residents of Laurieston need a dedicated gathering space. An education hub allows highly qualified professionals, semi skilled workers and retirees to interact to whatever extent they wish to. Highly qualified professionals can use new spaces to work and learn new skills. Semi-skilled workers will be able to learn new skills and use family spaces. Retirees can use gathering and learning spaces to interact and combat isolation. An Education Hub for all ages can bring these groups of people together.



RETIREES

## PROGRAM BREAKDOWN

#### ECONOMIC ACTIVITY





EDUCATION





#### COMMERCE

- > ARCHIVE
- > COMMUNITY GARDEN
- > URBAN SQUARE
- > CONNECTED 'STATION'
- > LIBRARY

#### LEARN

- > YOUTH CLUB / AFTERSCHOOL CLUB
- > FOYER
- > KINDERGARTEN
- > STUDIO
- > WORKSHOP
- > LECTURE HALL

- > BOOKSTORE
- STRATIONARY STORE
- > COFFEE SHOPS/ FOOD
- BAR

- > TECHNOLOGY LAB
- > OFFICES
- > SMALL CLASS ROOMS

The programme can be broken down into 4 categories: Commerce, Learn, Work and and Gather in order to cater to the 3 user groups. Primary spaces are more important, properly delivering the services neccesary while secondary spaces support these functions. Areas in bold can be used across multiple categories in order to create more multiuse spaces.





#### WORK

- > BUSINESS 'INCUBATOR'
- > LECTURE HALL
- > FOYER
- > WORKSHOP
- > OPEN PLAN HOT DESKING
- > OFFICES

### GATHER

- > FOYER
- > **AMPHITHEATER**
- > URBAN SQUARE
- > GARDEN

- > TECHNOLOGY LAB
- > BREAK ROOMS
- > MEETING ROOMS

- > MOBILITY HUB
- > PLAY SPACES

> MULTIUSE SPACES





## **VOLUME STUDY**





ARCHIVE



## **CONCEPT DEVELOPMENT**





D1 The first iteration of this concept was a simple volume placed above the site on the railway line. This however did not interact with the site or take advantage of the arches. It did make the most use of the railway line while also creating more greenery on the railway lines.

D2 The second Iteration broke the volume down into multiple blocks ranging them along the arches. This stil did not interact with the site and cut off circulation along the arches by touching the ground there. Stepping the volumes created the impression of being able to climb up the building without a human scale.

D3 The third iteration begins to interact with the site and create deliberate urban space on the site. It however blocks much of the light underneath the blocks as well as access to many of the arches.



D4 The fourth iteraction begins to break up the volume, in order take advantage of more light as well as create a more human scale so users can actually climb up the volumes. This allows for access to the railway without entering the building. It also creates a vareity of public spaces.



# LOCATION PLAN













### **STREET VIEW**





## 'AXONOMETRIC'





URBAN STRATEGY



Trams can take parts of the education, working and communal features to the rest of the city. These pass into the building and open directly into the adult education centre and library spaces. They also provide an transportation solution to draw people into the neighborhood.



The Amphitheater provides a public performance space which can provide an event space for local theaters and music venues. It also looks onto the stage inside the building. This block also houses a mobility hub which allows residents to hire sustainable transport to disperse into the neighborhood.



The arches can either be closed or remain open. Enclosed arches can contain retail spaces or educational spaces. Open arches can form protected areas for popup cultural events as well as provide permeability to Gorbals.



### VIEWS





### ELEVATION





# SECTION





SECTION AA















## CIRCULATION







## STRUCTURE AND ENVELOPE

#### ARCHED STRUCTURAL WALLS

Arches allow weight to disperse to the concrete frame, making the external walls structural and reducing the need for internal structure



#### CONCRETE BEAM STRUCTURE

Concrete beams and coloumns will support a slab which support the external structural walls.





BRICK WALLS

Brick will allow the new development to stand out while integrating with the arches.



#### GREEN ROOF

Green roofs will be public gathering spaces on each block

## RAILWAY

The disused section of the railway is part of the original city union line. This section of the line runs from the northeast and south-west, across the the city. It can provide access to the rest of the city from the street.

#### CITY UNION LINE

- > originally built by City of Glasgow Union Railway
- > also known as the Tron Line
- the section running across the city from SW to NE opened in 1870-1
- > used to connect to the St Enoch Railway Station
- > North British Railway took over the northern section
- south western section was quadrupled in the late nineteenth century
- souther railway facilities concentrated to Central Station in 1960s
- > Bellgrove section remains in intensive passenger use
- > large span bridges accross the city are now iconic
- through routh from sheilds junction to bellgroe was in use to transfer empty coaches and light treight service





▲ Edinburgh & Glasgow Railway Springburn Sighthill Junction Barnhill ✓ Garnkirk and Glasgow Railway > Blochairn Iron Works Garngad Provan Gas Works Alexandra Park Haghill Goods Haghill Junction Duke Street Coatbridge Branch (NBR) Bellgrove High Street East Junction ▶ Glasgow City and District Railway Gallowgate St Enoch (Dunlop Street) Saltmarket Junction Clyde Junction River Clyde Gorbals Junction Gorbals Southside Glasgow, Barrhead and Neilston Direct Railway Main Street Cumberland Street Paisley Canal Line (until 1967) ▲ Glasgow and Paisley Joint Railway General Terminus and Glasgow Harbour Railway Shields Road Shields Junction ✓ Glasgow and Paisley Joint Railway



**LAURIESTON** THE EDUCATION HUB WIP

### THE TRAM





BUSINESS INCUBATION CARRIAGE



The tram can connect to several spaces inside the building, and provide services to the rest of the city. It is also able to bring people to the Hub in Laurieston with regular dedicated transport.

