

RESEARCH

Cardiff's Transport White Paper:
Transport Vision to 2030

Changing how
we move around
a growing city



This document is available in Welsh /
Mae'r ddogfen hon ar gael yn Gymraeg



Diagram from Wellbeing of Future Generations Act 2015

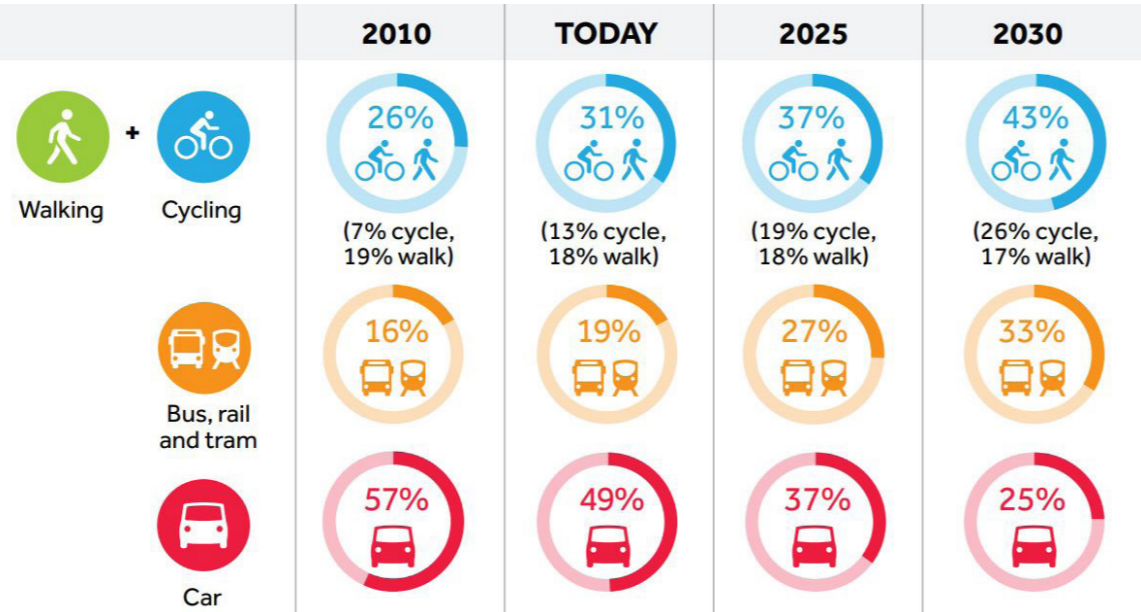


Diagram from Cardiff Transport Whitepaper - Transport Vision for 2030

In 2019, Cardiff City Council published the report titled Cardiff's transport white paper - Transport vision for 2030, which states the city's transportation goals in regards to dealing with carbon emissions, connectivity and congestion.

As seen in the figures to the left, with the planned phasing out of private vehicles, other means of transportation will need to become more robust, and public facilities will need to be enhanced.

As of currently, one of the more popular means of transportation in Cardiff is cycling, and cycling facilities have been identified as one of the primary focus of expansions in Cardiff's transport white paper.

However, as of currently, cyclists are hesitant to cycling into city center as publicly accessible secure cycle storages are hard to come by, and existing cycle storage options are unsafe due to vandalism and criminal activities.

This project aims to look at improving the connectivity in Cardiff by exploring the concept of providing a more secure means of public bicycle storage, whilst providing the public with additional welfare facilities in the form of modular kiosks.

This project builds upon milestones set by the Welsh government in Well-being of Future Generations Act 2015, and aims to improve upon the following well-being goals:

- A Resilient Wales
- A Healthier Wales
- A More Equal Wales
- A Wales of Cohesive Communities
- A Globally Responsible Wales

METHODOLOGY

With the planned phasing out of private vehicles as the main means of transportation in Cardiff, there would eventually be large amounts of unused carparking spots. As such, these kiosks should be based upon the sizes of car parks to capitalise on these unused spaces.

They should also be easily transportable to their chosen site locations, designed to be easily assembled and disassembled, repairable and also robust.

The kiosks should have modules that function as additional shop fronts in town centers, and can be fitted out as different store types. This can then help with financing the maintenance and surveillance of the cycle hubs.

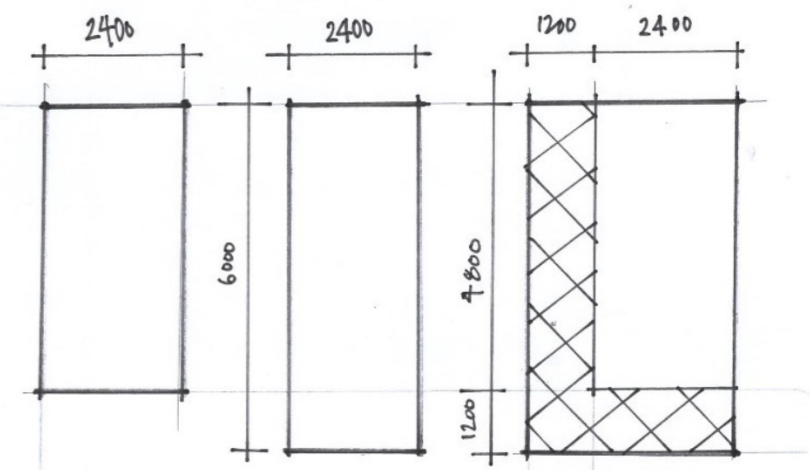
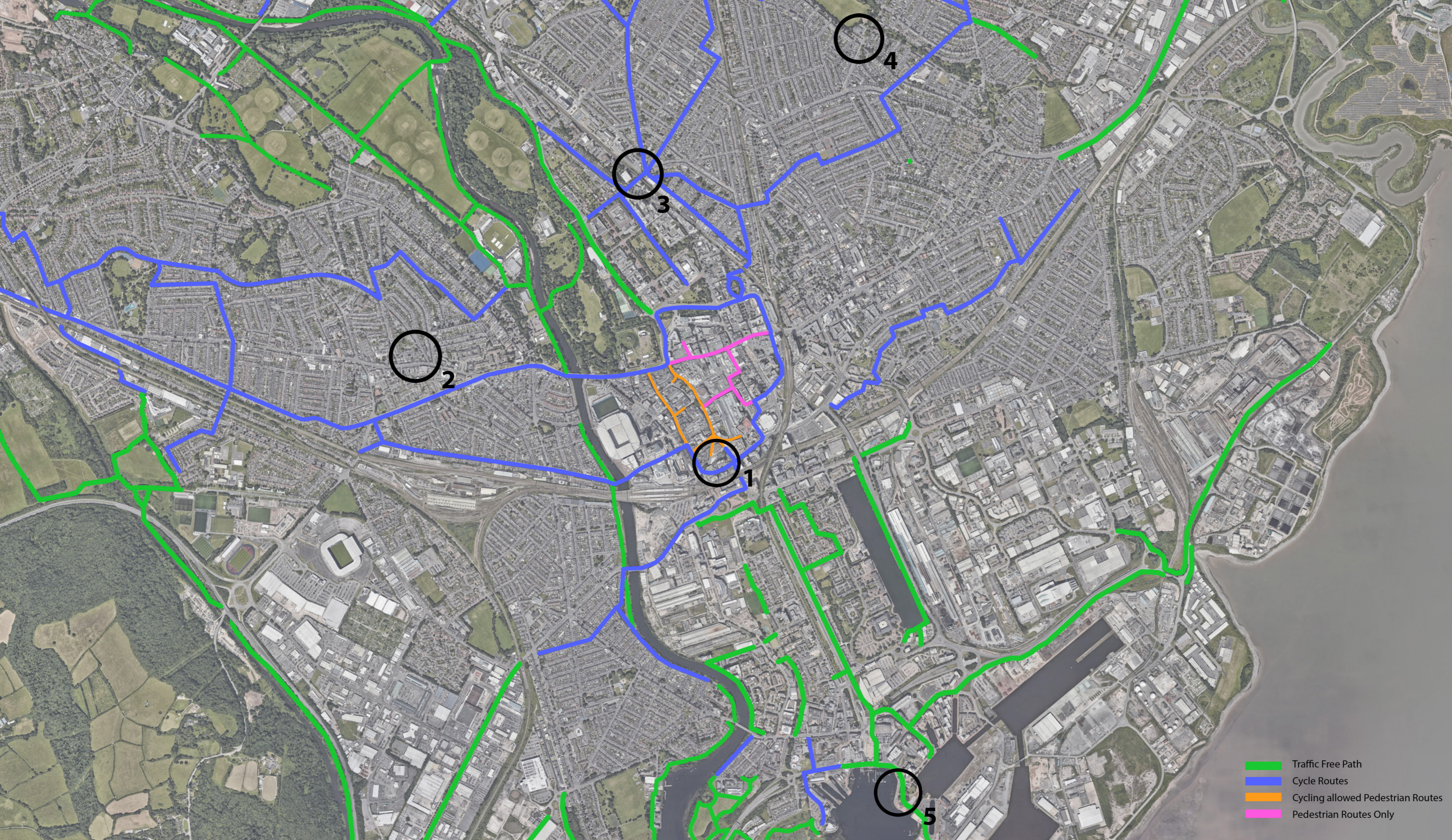


Diagram showing conventional carparking sizes

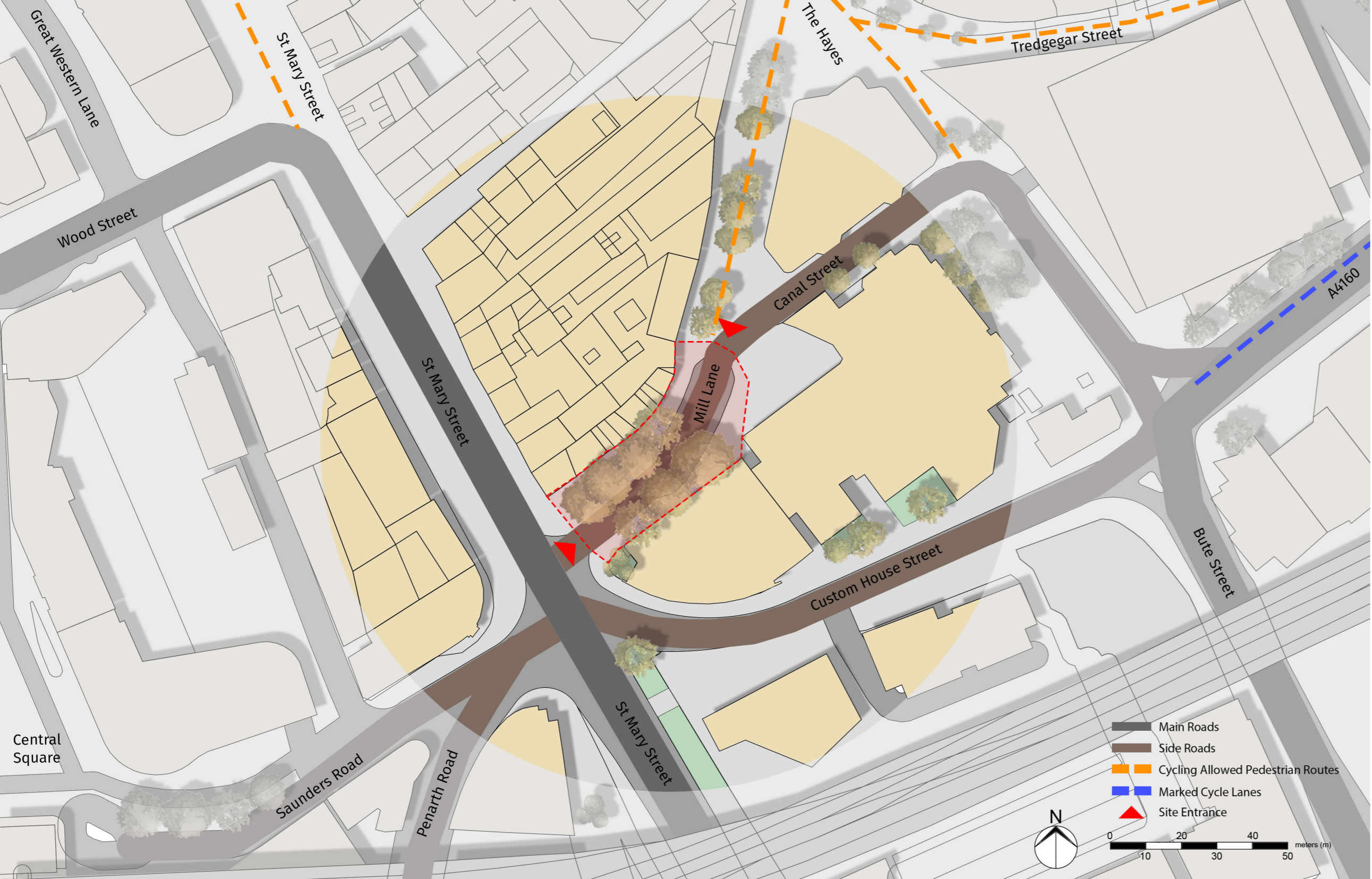
EXISTING CYCLE ROUTES IN CARDIFF



POTENTIAL CYCLE HUB LOCATIONS

- 1 - City Center Hub**
Mill Lane
- 2 - Pontcanna Hub**
Cowbridge Road East
- 3 - Cathays Hub**
Maindy Road
- 4 - Roath Hub**
Pen-Y-Lan Road
- 5 - Cardiff Bay Hub**
Harbour Drive

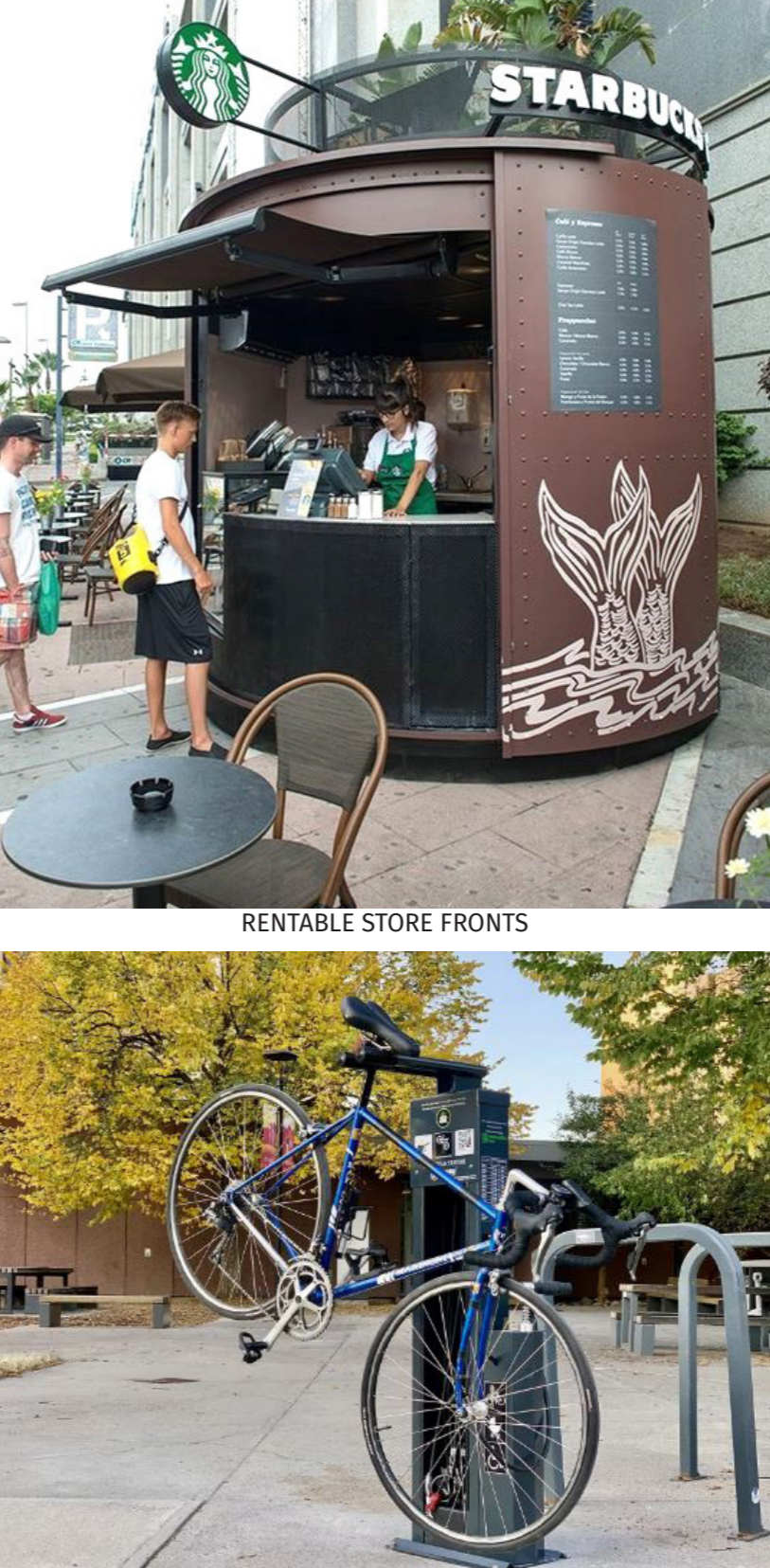
CARDIFF CITY CENTER HUB SITE - MILL LANE



CARDIFF CITY CENTER HUB SITE - MILL LANE SITE PHOTOS



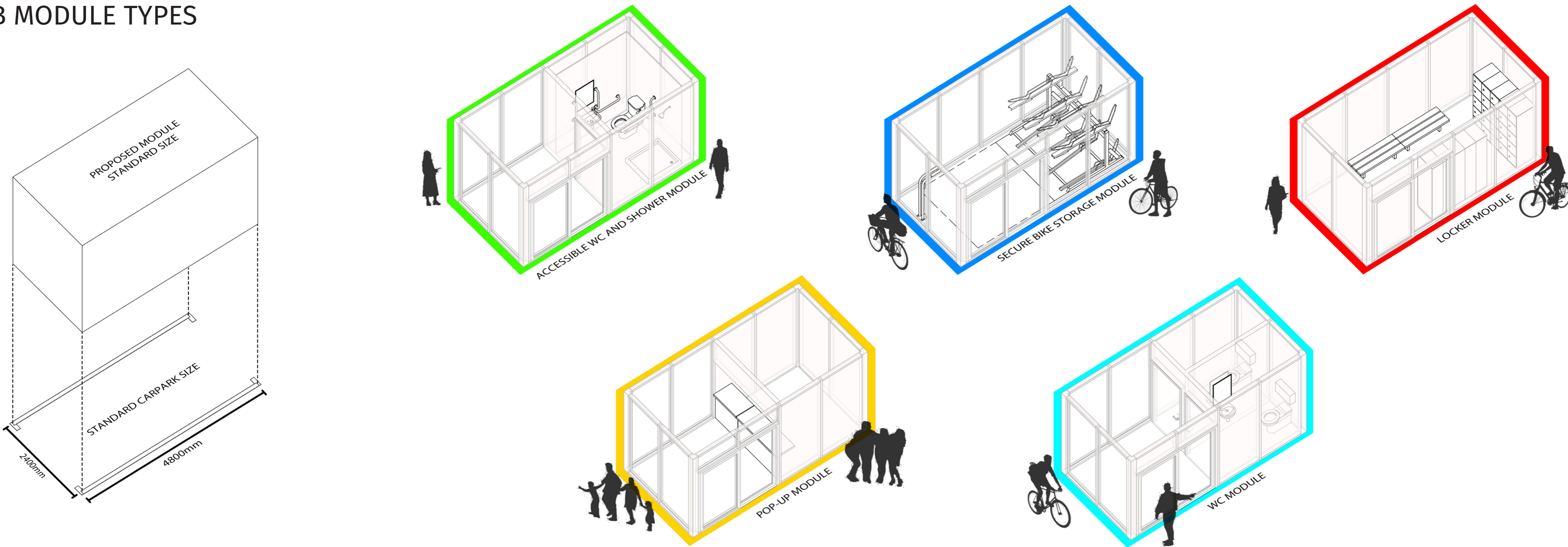
TYPOLGY STUDIES



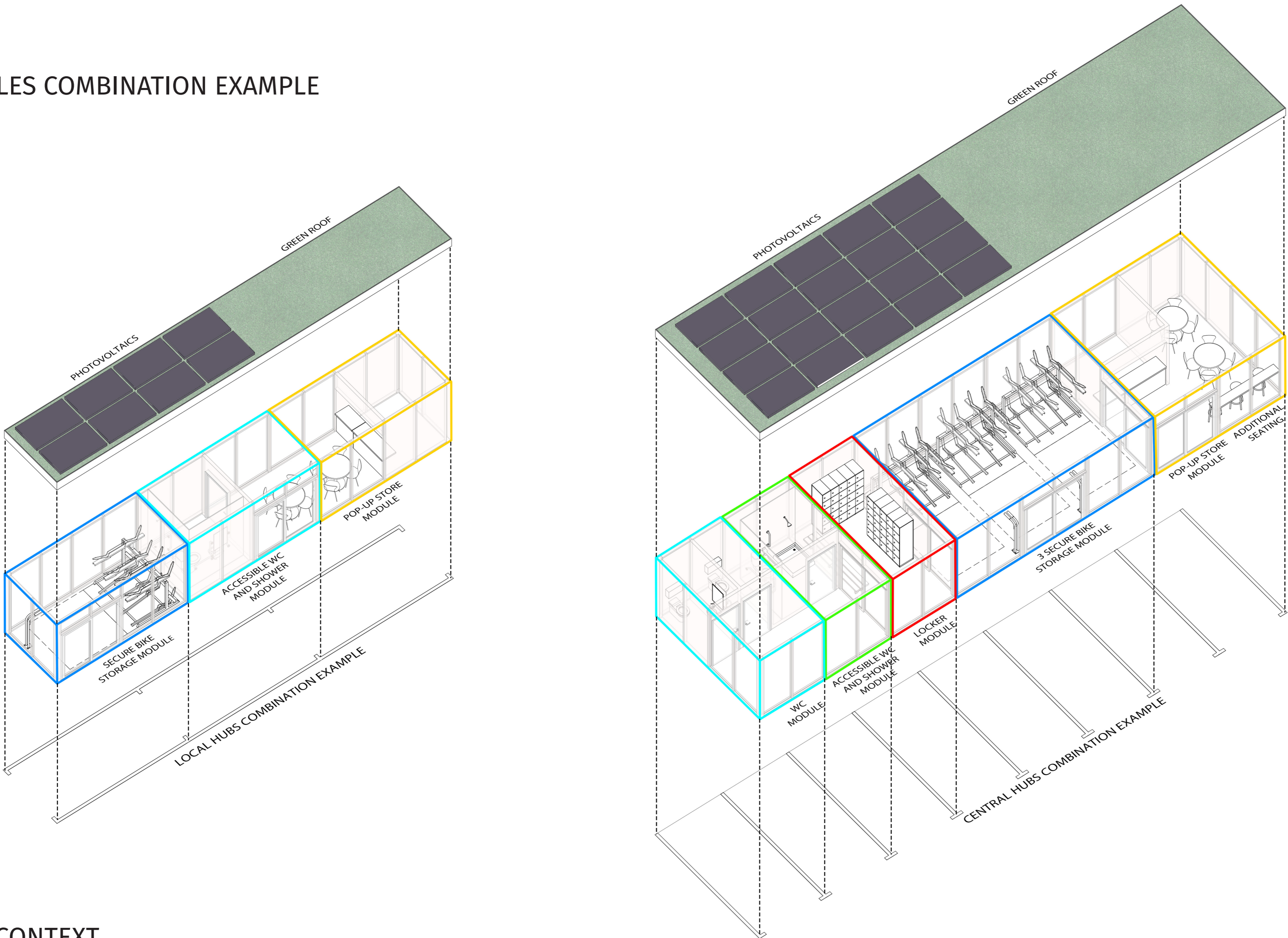
SECURE BIKE STORAGE
The proposed cycle hubs should include modules with the following functions:

- 1. SECURE BIKE STORAGE**
As this is the main function of this proposal, this is also the core module to every cycle hub. The bike storage should be opaque and light weight but robust and secure. It can also function on a small subscription based payment method to finance this module's maintenance and repair costs.
- 2. RENTABLE STORE FRONTS**
This would function as the main means of income generation, but would also provide cyclers and pedestrians with an easy access to services such as cafes, convenience stores, or even just vending machines.
- 3. RENTABLE BIKE REPAIR STATION**
This would function as a repair station with in-built repair tools which can be secured to the cycle hub itself. This feature can be an add on to the subscription payment, and secured behind a safebox with a periodically generated passcode system.
- 4. WELFARE FACILITIES AND SECURE STORAGE**
This is to allow cyclers with the ability to safely store their belongings if they wish to. There should also be toilets and showers which need to be checked and cleaned periodically. These can be financed with income from both the subscription and the rentable store fronts.

CYCLE HUB MODULE TYPES



CYCLE HUB MODULES COMBINATION EXAMPLE



PERSPECTIVES IN CONTEXT

