VECTURA

NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK

Inhalation Centre of Excellence

Introduction

Welcome to our public consultation on exciting plans for the development of a new groundbreaking research centre.

The following provides information on Vectura's proposals to provide a new facility in the Bristol & Bath Science Park (BBSP) at Emersons Green on the outskirts of north Bristol.

Vectura provides innovative inhaled drug delivery services, and has more than 20 years' experience, helping customers succeed in bringing inhaled medicines to market. Combining formulation development expertise and differentiated proprietary technology from pre-clinical to commercial phases, Vectura has expertise in delivering a broad

range of complex inhaled therapies across a variety of platforms, including dry powder inhalers, pressurized metered dose inhalers and nebuliser products for small molecules, biologics, complex combinations and generic products.

The Plan

The consultation is intended to get your initial feedback on these proposals. We will review how any feedback can be integrated into our emerging design prior to submitting a planning application to South Gloucestershire Council.

On the following boards you will find details about the proposals and the new site location. If you have any queries or feedback, please use the Feedback Form on the website.



Masterplan - consented outline principles







Aerial view showing plot



Full layout drawing showing original masterplan consent



3d aerial view looking south-west



DATE:

Detailed aerial view

3d aerial view looking north-west Note: above images extracted from masterplan documentation

STRIDE TREGLOWN

PUBLIC CONSULTATION BOARDSPROJECT:PROJECT ICENO:152795





NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK



The Strategy

Vectura's future business strategy includes brand new premises for a more streamlined and efficient way of working and to allow the company to meet existing and future growth.

In order to meet this objective, an 'in principle' proposal has been agreed with South Gloucestershire Council to allow the company to build brand new premises on land at Bristol & Bath Science Park.

The site benefits from an extant outline planning consent for B1, B2 and B8 under PK13/2502/O granted in May 2016 and supporting masterplan.



Background

Vectura is a science focussed business based on the research and development of inhalation products for the treatment of respiratory diseases. The company works with business partners to bring DPI, pMDI and nebuliser medicines to market with the help of specialist facilities and staff.

Our aims

- To create a modern and fit-for-purpose working environment
- Enable growth and innovative thinking
- Provide the ability to expand existing activities
- Enhance productivity and efficiency, including co-location and collaboration of teams
- Create a workspace which helps train, retain and attract talent





Our partners and licensees have succeeded in bringing DPI, pMDI and nebuliser medicines to market with the help of our specialist capabilities.



To date, this combination of formulation science, device technology and inhaled development expertise has contributed to the success of 11 inhaled medicines which have been launched by commercial partners and licencees. These have generated \$10 billion in sales and by 2018 these products were used by 9 million patents worldwide. The company was formed in 1997 and was first listed on the AIM in 2004.

The business has established sites in Chippenham, Cambridge, London and Switzerland.

How do we do it?

Our services

Vectura offers a number of services including:

- Development; formulation, pharmaceutical analysis and device platforms

- Manufacturing; process development and technical tranfer, product manufacturing

- Regulatory services

Currently

Our current main R&D facility is at Chippenham. This has a number of buildings including laboratory and 'pilot' line spaces where new products are developed. There is also some small scale manufacturing.

The Process

Our combination of formulation science, device technology and inhaled development expertise has contributed to the success of 13 inhaled medicines, launched by our partners and licensees. Since launch, they have generated \$11 billion in sales and in 2020 these products were used by 10 million patients worldwide.

exacting requirements. This starts within

looking for innovative new solutions.

we would then think about the process

the medicine to market. This involves

assessing how products can be scaled up into production processes. The key

to this research is the ability to test these processes and to constantly innovate and

refine. There are many 'back-room' spaces associated with all of our research facilities

so we have a complex mix of spaces where

there is constant movement of people and

components. We can then set up processes

and production lines within our cleanroom

facilities.

that would be required in order to bring

our research and development labs where

our team of experts begins the journey into

Once determining a solution for our clients,

Examples of some of the products which Vectura create



Inhaled medicines

At our existing facility we start looking at new inhaled solutions by looking at the process of how medicines can be inhaled for the greatest efficacy and to achieve client's In addition to all of our technical spaces we also need areas for staff to write-up the results from their research, break-out spaces, amenity.

device selection / development /

development industrialisation

manufacture

Typical process flow for Vectura



Some of the existing research laboratory spaces currently within Chippenham



PUBLIC CONSULTATION BOARDSPROJECT:PROJECT ICENO:152795

02.02.2022

DATE:





NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK

• Why Bristol & Bath Science Park?

A good place to do business

Key drivers

Vectura reviewed many different locations but have settled on the Science Park as the best place to realise their future business goals. Sustainable transport and the ease of accessing the site for staff and visitors has been key to this decision.

The site is easily accessible from the M4/ M5 by car and is well connected by public transport, with regular bus services linking to railway stations, Bristol city centre, nearby towns and villages and more. The site is on the Metrobus route and close to the Lyde Green Park and Ride. • Conveniently located for M4 and M5, as well as Bristol's two railway stations

• Allows Vectura to connect with other likeminded scientific and innovative businesses

• The site gives Vectura access to modern facilities combined with green, open spaces

• Access to an excellent talent pool from Bristol, Bath and beyond

• Link to cycle network





Pedestrian/cycle route

The site has adjacent on street parking and there are also additional parallel bays along Feynman Way. There are bays around the green including a new electric car charging hub. There is a park and ride site at the southern end of the Science Park which gives regular access to the city centre and other locations. 9 Lyde Green

Pedestrian

The site itself has good tree lined pedestrian walkways which link to a wide pedestrian and cycle route along the ring road. Along here you can reach the adjacent pub and hotel facilities, Friska and the workhub at the Forum. There is also a nature space and wetlands zone to the north. Sainsburys Emersons Green is 10 minutes walk south through the site and across a pedestrian bridge or via the ring road. There is also a Sainsbury's Local and other amenities within Lyde Green which can be reached either via Howsmoor Lane or by following the road past IAAPS.

Buses

The site is well served by the Metrobus M3x and the 49. The transport hub bus stops are close to the site as shown by the map on the right.

Cycles

Cycling is popular at Vectura and there will need to be good numbers of cycle parking and electric charging points. We also expect to provide some spaces for e-scooters and other emerging adopted technologies.



Diagram showing main transport links and routes



Wider context showing distances to adjacent areas together with the proximity to UWE and local amenities



VECTURA

NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK

The Site - Constraints and Opportunities

The site is at a prominent location and is one of the first buildings you see on approaching the Science Park from the ring road if arriving as a car user, pedestrian or cyclist. The Park masterplan shows each building within the development having its main elevation facing 'inwards'. However it must also be taken into account the west and south west building facades will be visible from the Lyde Green roundabout and Westerleigh Road.

The site itself can be seen within the photographs on the right hand side. Image 1 is taken from the bus only lane to the south. There are a number of street trees along this elevation but the site is relatively open. Level differences from this route mean that for the most part it is not possible to gain direct

access to the site currently except for in the south west corner.

The site was previously used as parking for the construction of surrounding sites and so is for the most part a gravel surface with scrub planting that has built up over time. To the eastern edge there are a handful of trees and bushes which have grown up primarily due to the vacant nature of the site.

The masterplan requires that all plots are accessed from within the Park and do not have separate access points from Westerleigh Road (ie. from outside the Science Park).







• **Sun path** - the sun moves from the right hand side of the building on plan and then moves around the southern elevation and onto the facade facing the roundabout late in



the day.

- 'No build zone' the eastern side of the site has an area where we are not allowed to build in accordance with the masterplan. This is shown as a lighter area on the aerial image to the right. The western edge of this zone roughly aligns with the western access pavement around the Forum building.
- Key views the main views of the building are primarily from the east and west. Views of the north of the building will likely over time be hidden by the development of the adjacent plot.
- Connection to green space we are keen to create a real connection to the green space opposite. This will be by creating views and routes through to this area. It will also be about providing a setting for the green with a building and site design which provides a suitable 'edge'.
- Access vehicular access would be from the south-east of the site which would mean that vehicles will not travel around Dirac Crescent. This will keep this area as a more pedestrian space to encourage safe flows to the green area opposite and also to the Forum building to the north.

Masterplan massing principles

Setback plant **Rectangular** profile uilding

The masterplan had a series of height options, the most similar to what is being proposed is three storeys with setback plant

Masterplan aerial view

Diagram showing the key constraints and opportunities for the Science Park site





This image shows the type of massing originally envisaged and which has formed the principles of the proposals

Annotated extract illustrating the key principles which are set up via the masterplan



VECTURA • • • •

NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK

Vectura accommodation requirements

Vectura wishes to create a mix of uses within the building in order to make a flagship R&D facility. The four main uses are listed on the right. Each type of space has its own very specific requirements regarding height and ventilation. They also have specific requirements about where in the building they can be located with particular regard to where they should be adjacent.

Offices have a fairly standard requirement in terms of heights but these spaces must also be sufficiently flexible to be able to locate laboratory space. The logical place for these would be along the building's eastern flank which gives easy access to the building entrance and as they will be moderately

glazed they will have good views across the green. This position would help to give a degree of activity to the eastern facade. Cleanrooms must ideally be all located at ground level as these areas have heavy equipment and must be able to gain easy access to goods in/out. Cleanrooms always have a high requirement for ventilation and as such they have a floor's worth of ductwork located above. Laboratories must all be located on one floor as the process flows within these areas would mean that the same rooms would have to be repeated on multiple floors to make them work.

These basic requirements set the basis of how the building can be designed.

Key spaces:





Emerging design

The block diagrams to the right show how the building mass is starting to look. The offices form a three storey block along the front (Dirac Crescent side). The upper storey of this block is set back to allow a terrace. Behind this are the Cleanrooms which are shown as 2 storeys due to their requirement for one storey of ventilation ducts directly above. Then above this there is virtually a full storey of laboratory space followed by a setback third floor where the majority of the building plant is shown. A 'support' space is shown to the north west corner of the building which will be primarily warehouse space.

Laboratory and Office/Write-Up spaces are generally on the South

with fire escape requirements.

and East. Plant is set back at the top level. There are 4 staircores in line

The building proportions closely follow those shown within the masterplan. This makes quite a rectangular building with three storeys and a totally setback level.

The building elevations are starting to take shape. The approach we are using is that the east elevation of the office will be more glazed than the rest of the building which will require a degree of vertical solar shading. The rest of the building is likely to be far more solid with punched vertical windows where possible. This approach can be seen on the sketch images below.

The sketch images below show the main entrance forming a primary route from Dirac Crescent, with a small area of parking in front of the building. The terrace and upper floor have a panoramic view of the green opposite.



Curtain walling Brickwork Timber or teracotta Metal rainscree

Material 'look and feel' relates to other buildings on the Science Park:

The proportions and materiality of the Forum buildingPicture windows and flat cladding of the NCC - Solar shading of the NCC2 and the Forum - Vertical fins and curtain walling of IAAPS

Paying close attention to other buildings nearby



View of eastern elevation and entrance area



VECTURA

NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK

Layout strategy

The building has been set out according to the constraints plan and masterplan requirements described earlier. As mentioned on the previous boards, specific building functions require particular positions and this in part sets the wider site design. The cleanrooms must have easy access to the support area. Through having explored various options, we think the best location for this is at the north west corner. Service vehicles will enter the car park and then use the northern access road to get to the rear of the building. This area will be fenced and will also contain bin storage and any external compounds that might be required for storage.

As with other plots at the Science Park, the As with other piols of the Science Fork, the majority of the car parking is located at the rear of the building. The front of the building would be for accessible spaces and visitors primarily. Cycle parking is located behind a secure line although there is also some visitor parking located at the main building entrance also.

There will be extensive shower, locker and changing facilities at ground floor level positioned adjacent to the cycle parking area.

A new substation will be required for the building which is shown as being located towards the south east corner of the site.



Pedestrian view when walking towards the SE corner of the site (looking north)



habitats and ecology

seeks to:

- Provide active frontage along Dirac Crescent
- Incorporate existing boundary trees and hedgerows where possible
- Provide features such as a brown roof and green screens to cycle storage/shelter and the service yard boudary
- Create outdoor meeting areas including the opportunity for a walking meeting route
- Create external amenity space associated with a cafeteria area to the south east corner

Landscape enhancement features





1. Microhabitat creation -scrub patches and sparsely vegetated ground with bare substrate

2. Proposed tree species to include truit and willow species for pollinators 3. Proposed New Hedgerows to site boundaries -Native Species mix based on hose present on site





5. Microhabitat creation wildflower banks 5. Microhabitat creation beetle/bug log piles





6. Existing 7. Green Screen to Service

8. Car park planting - Microhabitat c wildlife ponds

Block Paving

Shared Surface Design to Arrival

Seating + Lighting to Frontage

Frontage Seating Planter Feature

LANDSCAPE DESIGN OPPORTUNITIES + STRATEGY



- Create a landscape that enhances existing site habitats and ecology
- Active frontage along Dirac Crescent with an arrival space at the junction corner
- Incorporate existing boundary trees and hedgerows
- Provide brown roof to cycle storage/ shelter
- Create outdoor meeting areas including a walking meeting route
- Create amenity space associated with the café area

Key

- Proposed Building Location.
- /// Arrival space- shared surface with pedestrian priority.
 - Secure parking zone- cars + cycles.

Back of House - to

Permeable Parking to Parking Bays



rain gardens and ephe

Arrival Space + Circulation

Block Paving to Paths

Outdoor amenity space- external dining; - external meeting pods.

Frontage + setting- formal wedges+ shrub planting with street trees.

- Walking route for amenity walking, meetings etc.
- Habitat Zone.

Cycle Store with Green or Brown Roof.

External Meeting Options



Meeting Pod with Extending S Flexibility of Use





NEW R&D FACILITY, BRISTOL AND BATH SCIENCE PARK



liver significant inward **investment** and generate high quality **employment** opportunities.



Innovative, architectural and **high** quality sustainable design that makes a positive contribution to the Science Park.

Modern, specialist R&D facilities that fosters collaboration and staff wellbeing in the spaces and environment created.

A landscape strategy for the site which delivers ecological enhancement and amenity space.







- Completion and facility opening early 2025

Vectura will submit a reserved matters application following discussions with stakeholder groups and South Gloucestershire Council.

Please fill in a feedback form to leave any comments.



STRIDE TREGLOWN

MEP Environmental Acoustics Lighting Fire Engineers



Structures Civils

CRADDYS

Transport



Project Manager Planning Consultan



Fulkers

Bailey Russell

ethos

- An energy strategy that seeks to maximise the use of **on-site renewables** and **low** carbon energy.
- Promotes **sustainable travel** being well served by public transport and access to the cycle network.

STRIDE TREGLOWN

Quantity Surveyor

Ecology

Building Regulations

Communications



PUBLIC CONSULTATION BOARDS PROJECT: PROJECT ICE 152795 NO:



DATE: 02.02.2022