The Blooming Mind: A spatial Dialogue of Neurodivergence

Site Research

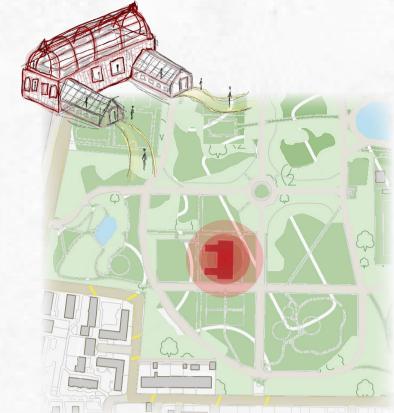
Springburn Winter Gardens is located in Glasgow's Springburn Park. Built for public events and exotic plant exhibitions, it sits near key historic landmarks and reflects Springburn's industrial heritage and community identity. The site holds strong potential for cultural renewal and reconnecting people with

Inside, the open-plan space is supported by sixteen steel columns. This flexible layout preserves the building's historic character while accommodating a variety of community uses, making it well-suited for multifunctional and adaptable design.

The glasshouse is built with red industrial brick walls and timber detailing, featuring large windows, an arched iron and glass roof, and curved semi-oval roofs on the two wings that reflect the form of the main structure.



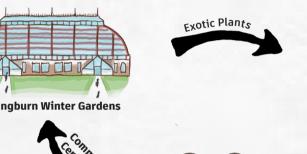
Interior view of the opens space and greenery that take over the whole space.



Location of Springburn Winter Gardens, Glasgow, UK.

Proposed Communication Centre

This project aims is to create an inclusive community centre that breaks communication barriers between late-diagnosed neurodivergent and neurotypical adults. Using sensory-led design, nature-based activities, and shared emotional experiences, it promotes understanding, challenges stigma, and celebrates the strengths of people with ASD or ADHD.



The design concept connects the building's botanical past with nature's calming effect on neurodivergent individuals, creating spaces that help them feel calm, safe, and accepted.

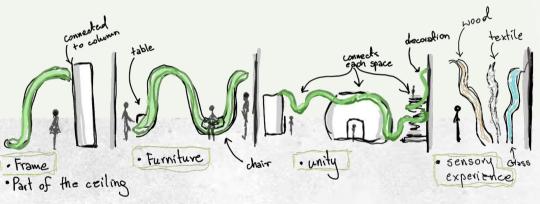
Proposed 3D Physical Section Model

The handmade sectional model presents a three-story design where flowing green vines create sensory pathways connecting all levels through a central flower structure, linking the structural framework



Full video of design concept and crafting: https://www.youtube.com/watch?v=xkpAKmS-3fs

The physical model demonstrates how organic forms and natural elements integrate with the existing architecture to create calming, inclusive spaces specifically designed for neurodivergent adults.

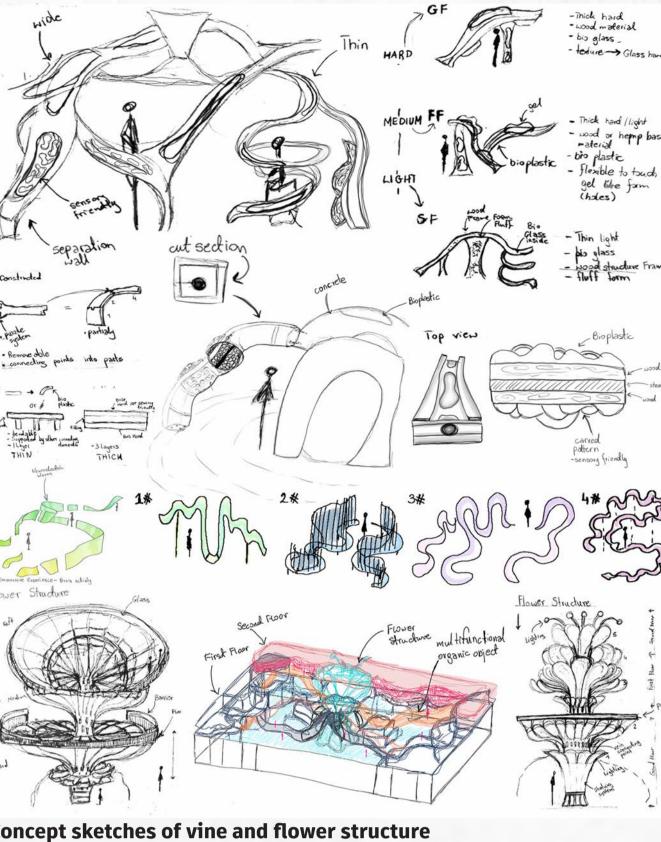




Reception space includes calming green sensory elements that support comfort and inclusivity from the moment visitors enter the space.



View of the micro garden exterior walls with nature-inspired shapes and vines that connect to the top level.



Concept sketches of vine and flower structure

Ground floor - Breaking Social

Barriers Through Shared Plant Care







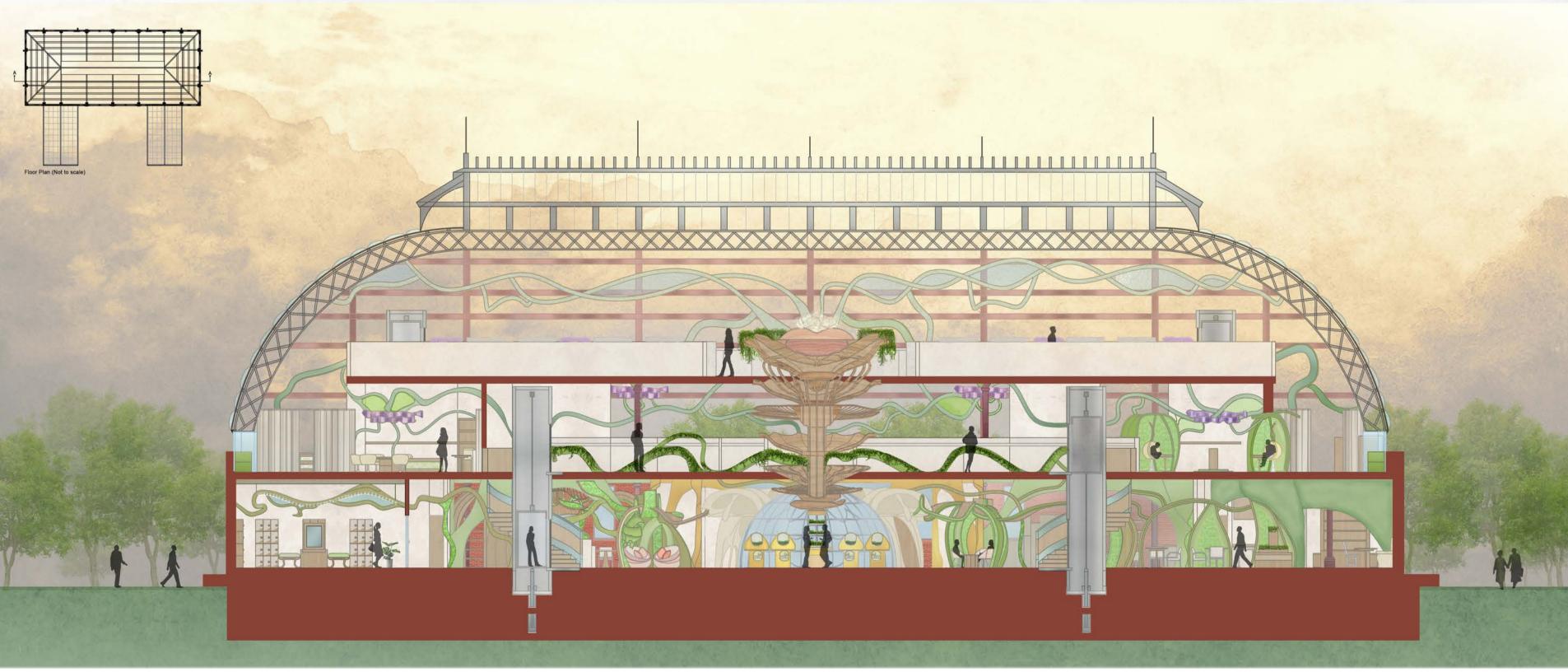
Bioplastic Vine for Anxiety Relief



First Floor - Multi-Level Connector **Flower Structure**



Flower Structure



Proposed Long Section of the Three-Storey Building Shows Social Interaction Spaces Connected by Flower Structure and Sensory Vines, Maintaining Connection to Nature Throughout.

Hydroponic System

Through Masking → Through Authenticity



Masking frequently emerges as a defense mechanism after a series of instances of social rejection, bullying, or public mockery for showing Masking helps many diagnosed adults feel better for a short time, but it brings emotional distress afterwards.



When communities talk openly about neurodivergence, they create acceptance. Sharing experiences reduces shame and ouilds connection. Safe spaces allow people to celebrate their neurodivergent identity without fear of judgment. This eliminates the need for masking.

Transformation in neurodivergent experiences

neurodivergent transformation from challenges (isolation, barriers) to strengths through supportive design. Red-to-green gradient shows

struggle-to- flourishing journey.



User Group



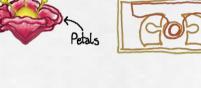
Family members and close friends of neurodivergent

The secondary user group

Hyperactivity Disorder (ADHD Individuals Aged 18 to 60

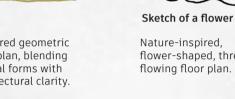
Adults Diagnosed Later in Life with ASD or Attention Deficit

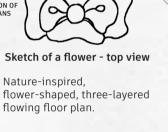




The Springburn Winter Gardens glasshouse was originally a single-story, open, and light-filled botanical space.

A layered geometric floor plan, blending natural forms with architectural clarity.





My concept adds two upper floors, creating a inspired by organic growth. These floors unfold like petals, forming a blooming flower when seen from above.



(3) Security Room

(5) Locker Room

6 Public Toilet

7 Staff Room

① Communication and

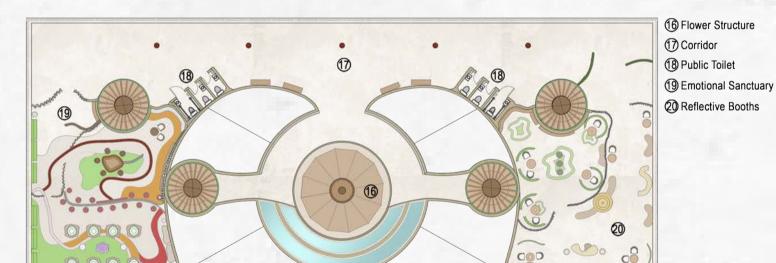
11) Main Hallway 12 Micro Garden

(14) Kitchen Room

15 Storage Room

13 Cafe

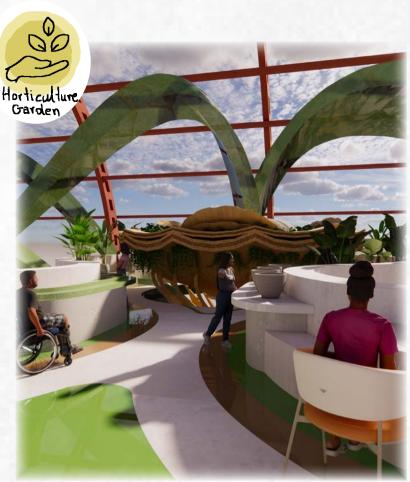




First Floor Plan



Visualisations



Second Floor - View of the Horticulture Therapy space.

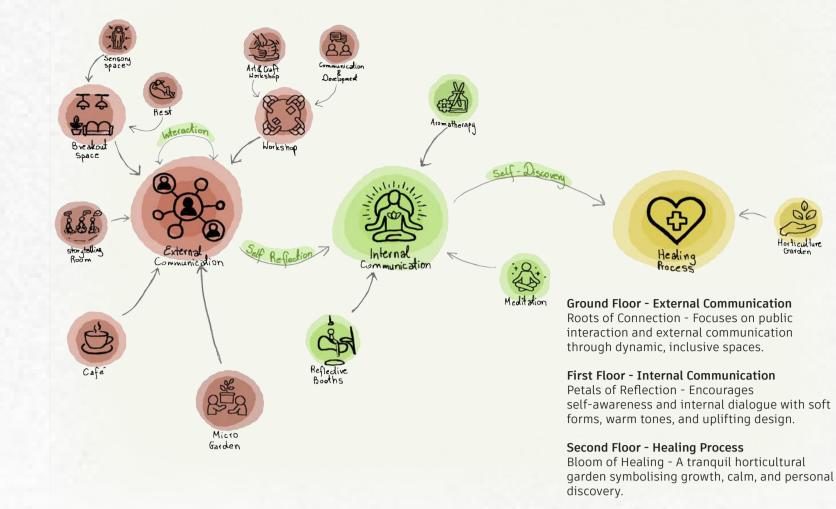


First FLoor - Aromatherapy Space.



Ground Floor - Open Space Cafe





Proposed Program

Exploded Isometric



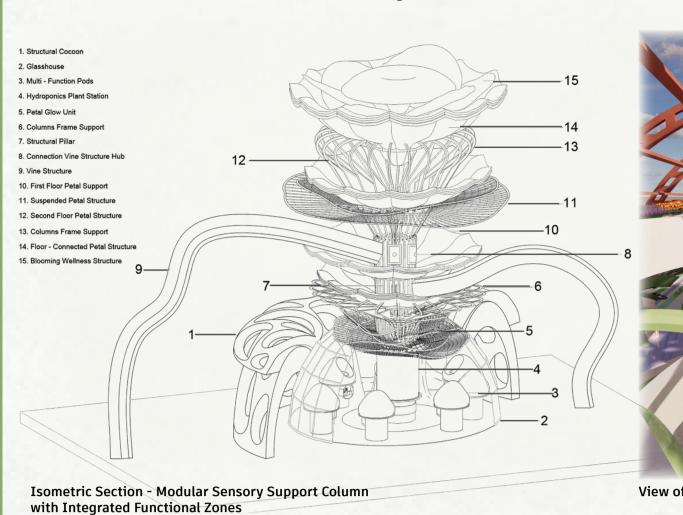


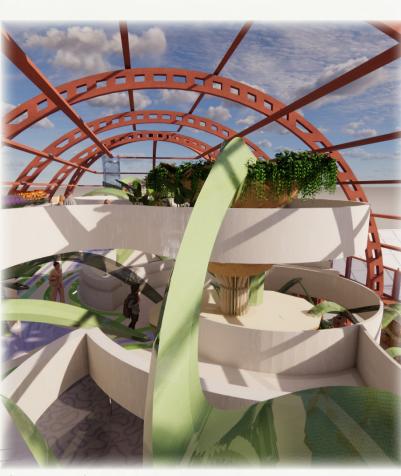
surrounded by green vines.



Spiral Staircase Theraupetical Area Concrete organic shape barriers Communication Reflective Booths Sanctuary Communication Space Communication and Development Cafe Workshop space Art and Craft

Flower Structure and Sensory Vine detail





View of the vines movement and flower support structure.

Sensory-Tactile Green Vine in detail

Proposed Section – Human

Scale Reference



- New Material

Ash Wood

Steel - New Material

Vine Structure



(inside) Flower Structure

Vine Structure

system and internal support. The exposed and the material Front View — Biomaterial and tacticle 3D pattern detail

structural and sensory

Side View - Vine Structure

Constructed from wood,

bioplastic, and tactile

elements, this section

shows the layering

side presents the steel tube core, the bioplastic application over wood, thickness designed for

Ash wood strip used as a dividing profile

Base Formation: The wooden base was carved to create an organic channel that securely holds the curved steel tube for internal support. Steel Tube Integration: The steel tube was secured using strong epoxy and hidden joinery (dowels, brackets) for stability and a clean look.

A homemade bioplastic (agar agar, vinegar, beeswax, glycerine, water, natural green dye) was pressed warm onto the wood in layers, forming a flexible, firm surface that was then lightly sealed for durability.

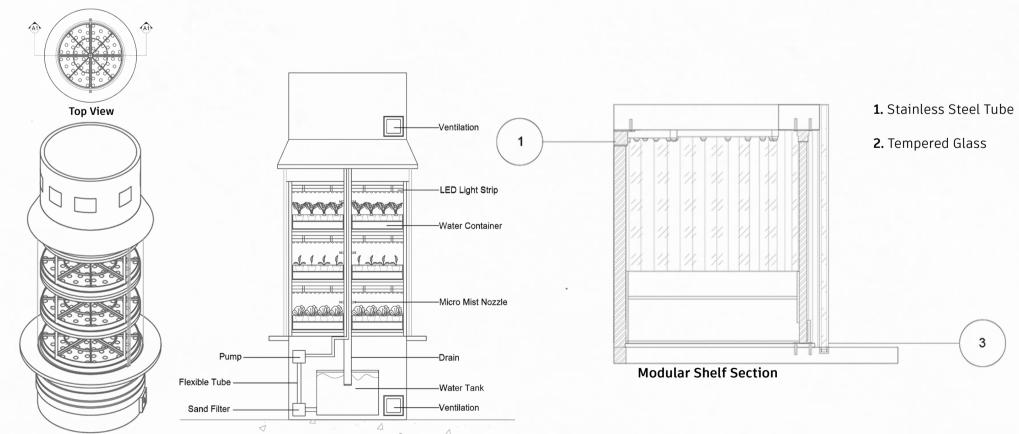
Sketch - shape and

use of vine

Soft textures, subtle imprints, and elastic areas inspired by sensory tools create a calming, interactive experience for neurodivergent users.

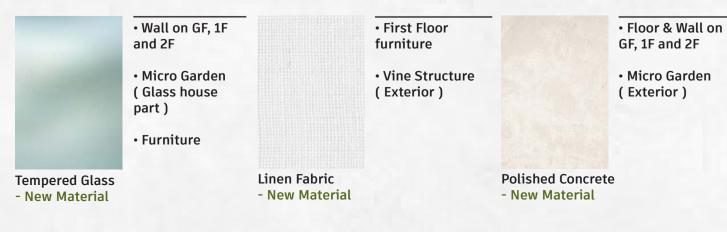
Side View — Steel tube and wood section detail

Hydroponic System in detail



Materials

Isometric View



Section A - A

