



# ARPL2000 – ARCHITECTURE DESIGN AND THEORY URBAN INFILL

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*How would you like to live?*

*What if you could live and work in a building?*

*What if you and your building could become self sufficient?*

*What if your building could adapt according to your needs?*

The Urban Trellis, a project set in Yeoville, addresses a range of issues expressed by Yeovillites:

- Economic empowerment to help residents progress to larger, more comfortable spaces;
- Flexible spaces which can be readily altered, subdivided or enlarged to accommodate a variety of household arrangements;
- A sustainable community where people are encouraged to know one another through collective action - in contrast to the existing conditions of impermanence which have contributed to a sense of detachment and insecurity.

In reply, 'Urban Trellis' begins with the concept of adding productive elements to a basic residential core:



- The building is raised off the ground, maximising the land available for farming, food processing and food sales. This helps to activate the street and to create a community hub.
- The provision of an extra, neutral room in each unit to facilitate maximum flexibility within an over-all modular structure. This extra room can be used for subletting, storage or for additional production. Vertical gardens are attached to the residential facades, bringing the productive surface to each resident. At the top of the building, an optional light structure can be added, providing additional flexible space for gardens.
- The 'Urban Trellis' functions as an urban farm, enabling all residents to work collectively to produce and sell agricultural goods. This in turn improves food security, contributes to a sense of community and enhances the sustainability of the building and residents alike.

The design approach demonstrates the possibility of improving residential densities while creating a self-sufficient, farm in an inner city environment. It is a place where the Yeovillite may 'Live, Work, Sell.' The extremely flexible plan allows residents to alter their accommodation in accordance with their varying needs at different stages of their lives. Within a rigid, permanent trellis-like structure, spaces can be easily adjusted by locking and unlocking of interleaving doors, or by the use of easily-removable plywood panels. This enables the possibility of an entirely detached neutral room, and the enlarging of a double unit to form a large family unit.



Urban Trellis also responds to the need for high-density accommodation, providing for 450-500 people/ha. It is also set upon a grid which could be replicated upon any typical multiple-of-15m stand in Johannesburg.

'Urban Trellis' suggests a powerful prototype for Yeoville's future, offering empowerment, development, and long-term sustainability.