Practitioner's Statement

111 Glassview Sunni Zeng

111 Glassview is a miniature, residential housing estate located in the Adelaide city. The design brief involved the development of a body of works, consisting of the structure of a housing design as the major component, with its floor plan and elevation plans. This housing design was used as a template in the mini-estate in the second component where an estate plan and a logo were designed for the project. Within the brief, was an emphasis on sustainability and maximizing the limited land space available, with only 5m by 5m per allotment. This became the major constraint and requirement of the design, requiring effective space saving strategies to create spacious interiors within the compact house and attentive details on the functions of every aspect for a solar passive home. Another requirement also included a target market of the working class thirties to forties, looking for a sustainable lifestyle.

With the land constraint being a major aspect of my brief, my research process was initiated by looking at various housing designs which centre around the effective use of limited land and the concept of miniature housing. This ranged from traditional timber portable structures to contemporary compact houses. Through studying the relation between various exterior structures and interior layouts, I was able to expand my knowledge on how different elements create space physically and visually within a design. I then experimented with a number of these elements, including voids and elevated ceilings to expand heights of rooms and common areas, extensive use of large glass panes to extend interior spaces to the outside environment, and ceiling glass to introduce natural light without compromising privacy. This not only taught me the fundamental principle of maximising useable floor space, but also the importance of creating a visual flow throughout the entire structure to maintain a spacious feeling within the house.

Another majorly influential aspect of my research was learning the design process of a residential building from a primary source, practicing architect Katherine Dujmovic. From her, I learnt the technique of planning interior spaces beforehand and basing the exterior structure on the interior functions to produce effective ideas. During this process, I also recognised the importance of glazing orientation in creating a sustainable building, which guided me in the research of sites. This allowed me to begin with the housing template and estate plan based on appropriate orientations to maximise winter sun and allow natural light and ventilation.

These techniques were implemented into my work along with inspirations from prominent architectural movements and respective architects that revolve around the style of minimalism and functionality. This inspiration included Mies van der Rohe with the International Style and Marcel Breuer with Brutalism. Keeping in mind the importance of appropriate amounts of glazing and their orientations, I incorporated the distinctive use of glass from Mies and substituted his use of steel with Breuer's innovative style of concrete shapes to create lines that run along the exterior structure as a distinctive feature. I attempted to maintain a balance between the sustainable functions of the design and a minimal yet unique appearance. An example being the two side facades formed with repetition of same angled lines but presented differently to introduce natural light in various directions. While Mies focused on repetition of exact same elements, mainly geometric glass shapes and running lines from steel frames, I integrated his extensive use of glass with unique exterior forms from Breuer to suit residential housing, however incorporating fibre cement cladding instead of concrete to achieve a sustainable design.

My project logo was mainly inspired by the housing design with repetition of geometric shapes from the structure outline. With a mirrored flip of the first shape and their angular lines, the logo not only reflects the stylistic ideas of the housing design but also forms as a symbol of the site location of 111 Angas St. It also effectively conveys sophistication through its balance and simplicity. This was produced while looking at variations of typography and the overall feelings they convey in

architectural project logos, with Sydney's Central Park development project being a major influence. Through their different logos for each stage, I was able to observe the difference between young cheerful impressions sans serif capital fonts gave, and the mature classic style like from serif types which I took use of to suit my need for a sophisticated aesthetic. I also took into account the contrast of vivid colours and monochromatic black and whites that reinforced these two different styles.

Overall, the brief has been successfully met through my housing design with the intended focus on functionality and sustainability while constructed on 5m by 5m areas. I have created a simplistic form that consists details of repeating lines running in the same angle as stylistic focal points to attract target mature buyers, while constructing them based on the function of each aspect, primarily creating natural light, ventilation and space. The sustainability of the project is also seen in the estate plan which emphasises on the orientation of all housing to receive maximum north facing and winter sun, while the logo effectively delivers a sophisticated impression for the intended audience. Although various materials were considered and experimented with, the final model was not of the best quality with certain rough edges and messy gluing. As small details like these highly affect the overall quality of the model, the making process needs to be better planned with more precise cutting and measurements. However, the digital render that accompanies the 3D model provides refined portrayal of the final model.

Through undergoing the design process and the completion of this practical, I was able to experiment with different structural elements and observe their space maximising abilities in this unique context. A major principle that has had revolutionary influence on my design values is the importance in the design of visual space and the flow of it within a structure. While the balance between form and function in a design has always been important, this gave me a new understanding of function in architecture, with space not only limited to its physical quantity but also as a visual appeal. I also further developed my belief on form follows function while finding a suitable solution to a demanding brief, as the constraints forced an initial focus on the functions which naturally led to the form of the design. Moreover, while I experimented with different digital mediums to produce a realistic render, including Sketchup, Kerkythea and Photoshop, I recognised that an architectural model is merely a visual representation of the design in terms of form rather than materials. Through this practical, I developed various aspects of my personal value in architecture and created effective designs as resolutions to the brief.