



## CHAPTER SIX

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Figure h. Contextual photo in Plastic View (Author 2016)



## 6. TECHNOLOGICAL INVESTIGATION

### 6.1 TECTONIC CONCEPT

In chapter one of this dissertation, the argument and project intentions discussed the proposal of a primary healthcare facility that makes use of a smaller scale bottom up approach to healthcare in supporting the larger scale top down approach to healthcare. Keeping in mind the critical analysis and intentions of these arguments, the tectonic concept aims to follow on from this by considering a mediation between the tectonics used in each of these approaches. In other words, a mediation between the technology that resulted in the machine like efficient building typologies that are constructed with large spans and industrial materials that come across as very imposing and institutional in nature, and the smaller scale, more intimate and low key space making principles used in clinics and COPC outposts which are more human scale in nature.

### 6.2 STRUCTURAL INTENTION

In order to implement such a concept and simultaneously support the arguments put forward in the previous chapter regarding architectural language, the research process intends to utilise the built fabric present in Plastic View as a precedent in order to suggest a contextually appropriate structural system. The key characteristics summarised from this precedent study are as follows; the presence of a structural system that supports a mono-pitch roofing system, infill walling panels that define space and which alternate between the exposing and hiding the structural system.

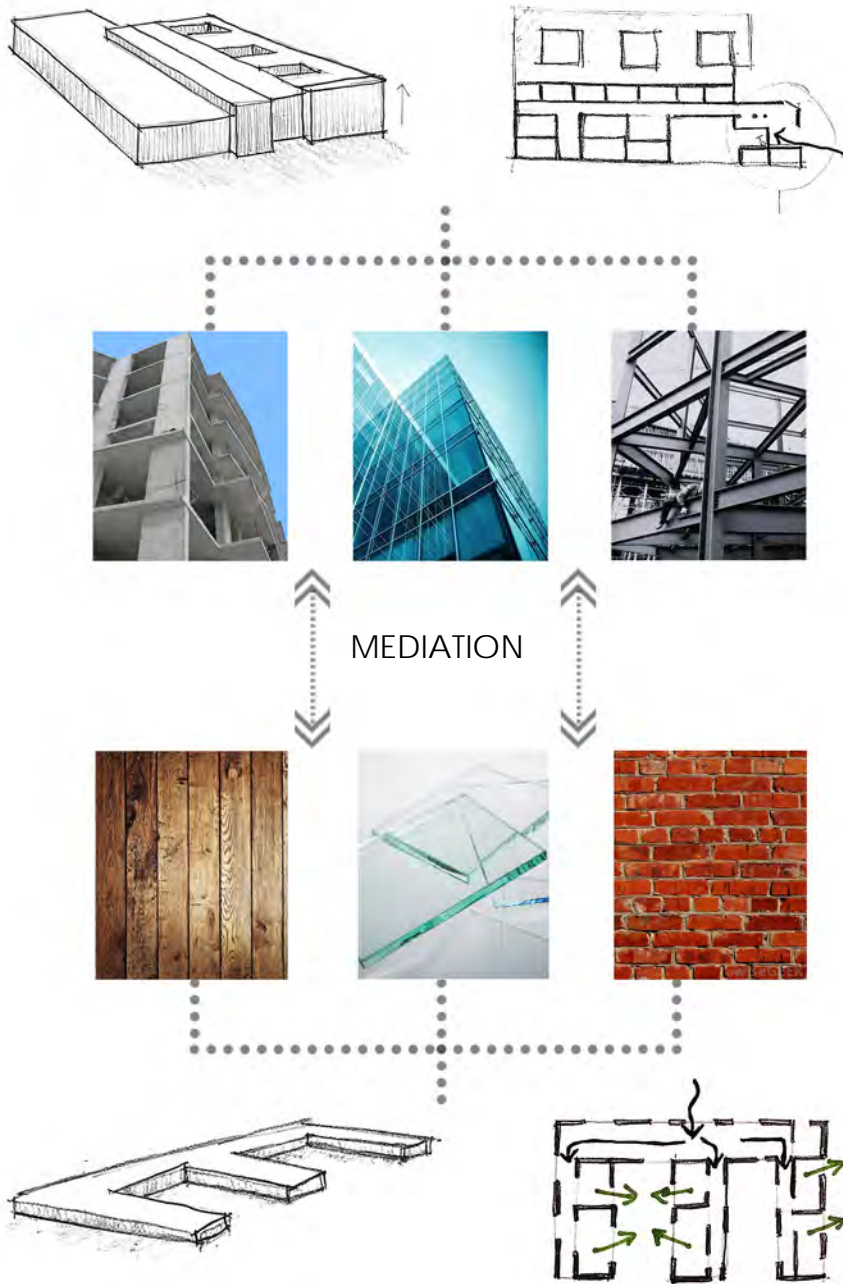
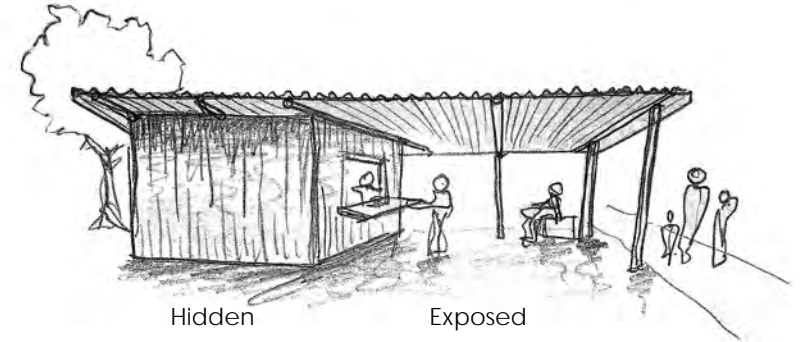
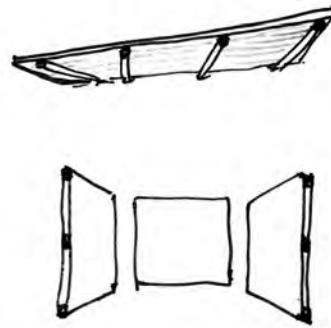
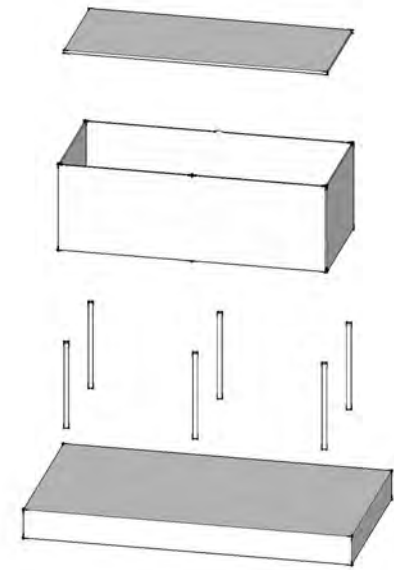
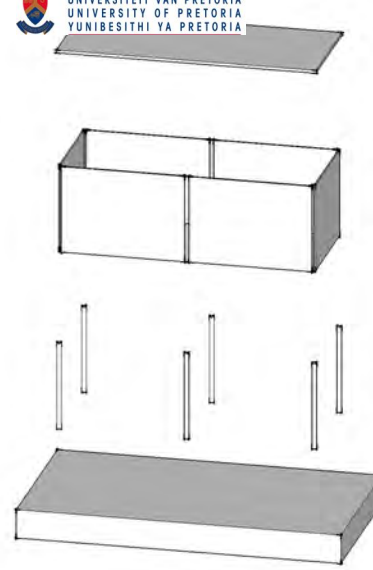
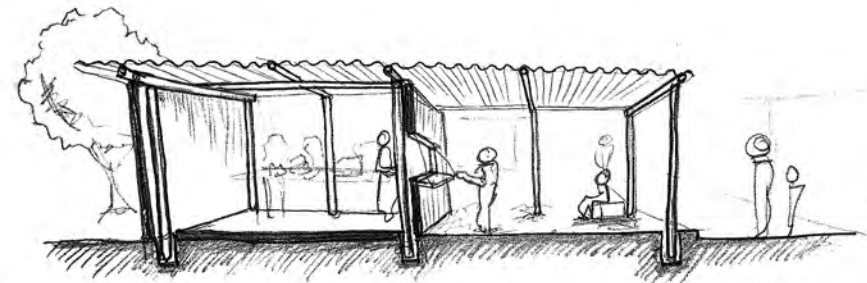
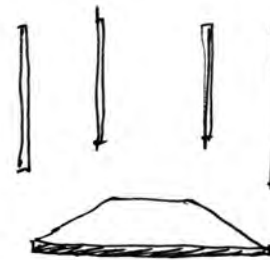


Figure 71. Illustration of tectonic concept (Author 2016).



Hidden Exposed



Hidden Exposed

Figure 72. Plastic View architectural language analysis images (Author 2016).



### 6.3 TECTONIC INTENTION

The result of this concept and intention, led to the following approach to the tectonics of the facility.

Firstly, all ground floor walls are intended to be made of brick, which in some areas in the facility acts as load bearing brick. The intention behind this is to incorporate the humanised, low key and more intimate scale aesthetic to the areas of the building which the public have the most interaction with. It is also a hard wearing material for such a high traffic area.

Secondly, in order to reflect the technology used in high tech, machine like efficient hospital typologies and to support the proposed height and span of these spaces, a steel structural system was then chosen for the areas of the facility that consist of two to three storeys. Whilst the infill for this structural system is brick on the ground floor, the first and second level spaces are defined by lightweight non structural walling panels, both internally and externally. This structural system then alternates between being hidden and exposed.

Thirdly, the roof is also intended to reflect the current vernacular of Plastic View, which is defined by a simply constructed mono-pitch roof, made up of steel rafters and purlins and a steel roof sheeting material.

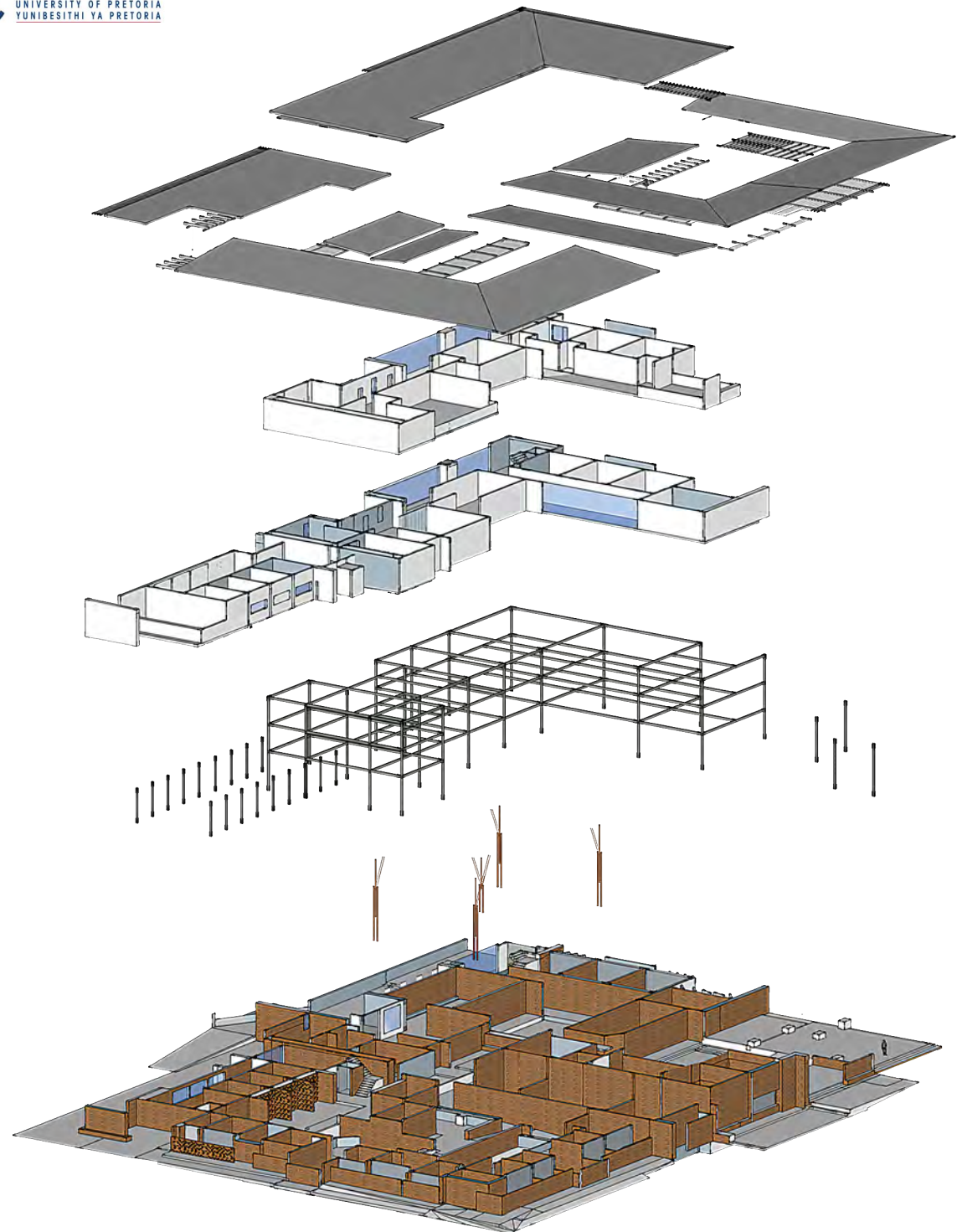
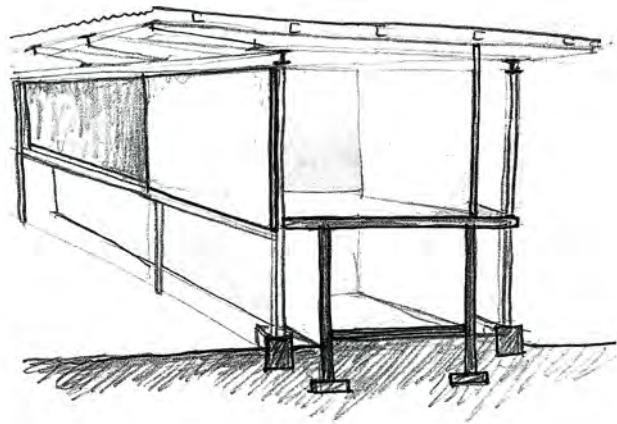
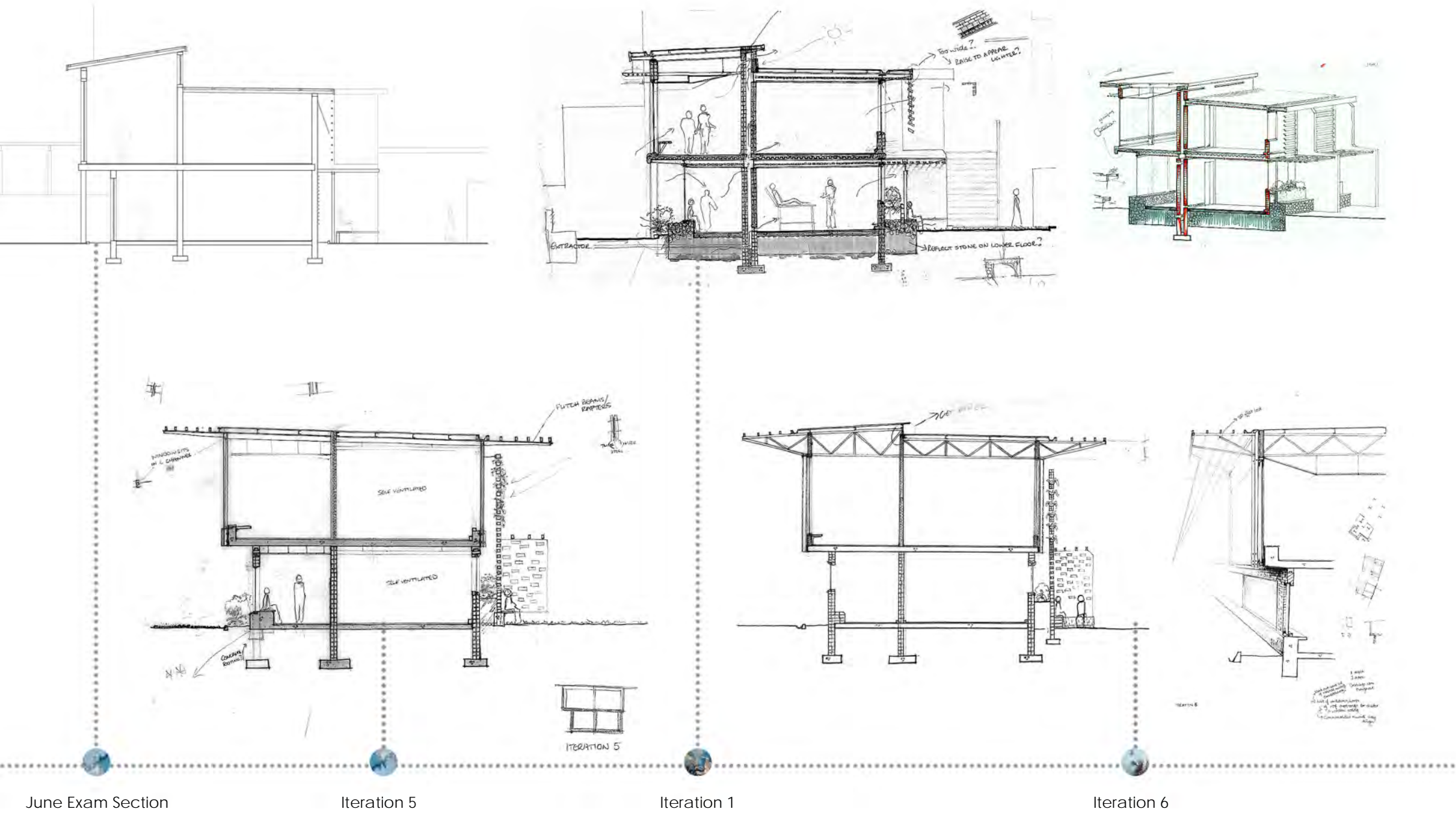


Figure 73. Illustration of tectonic intention and exploded structure (Author 2016).

## 6.4 SECTIONAL DEVELOPMENT



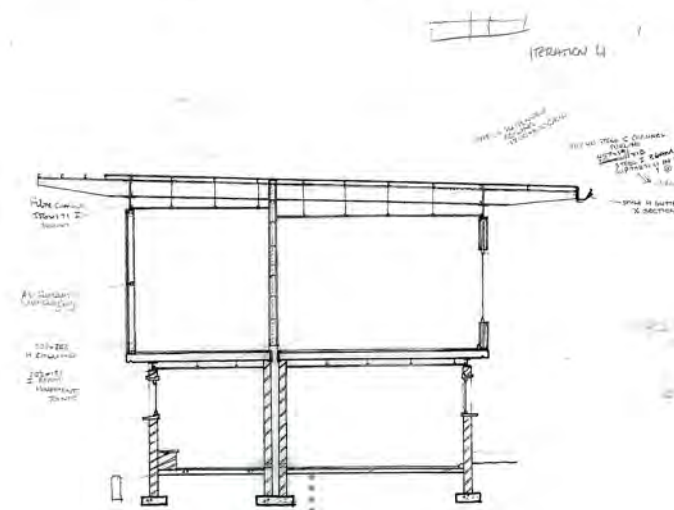
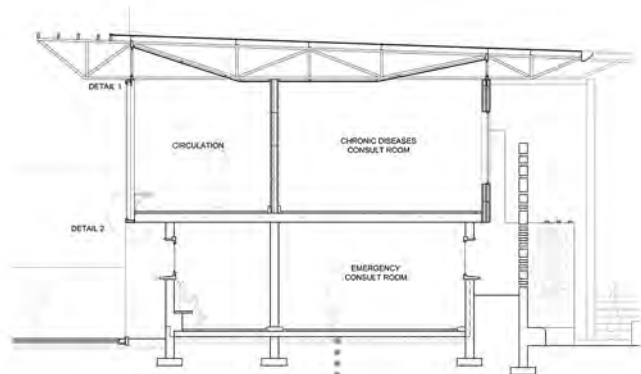
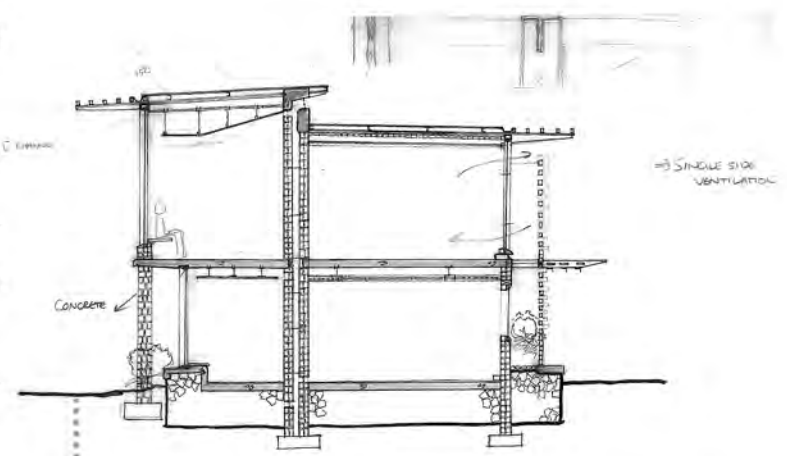
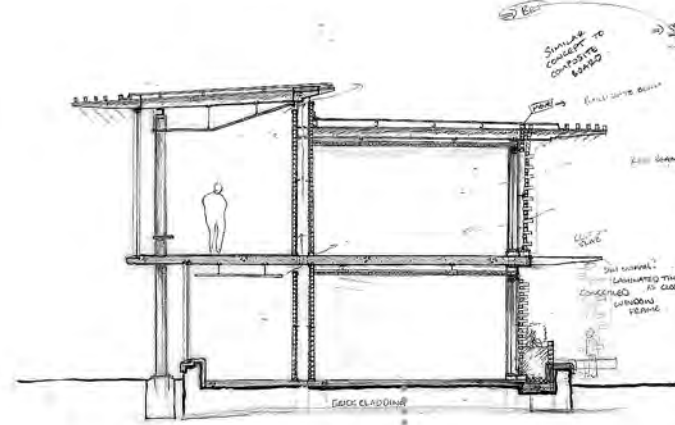
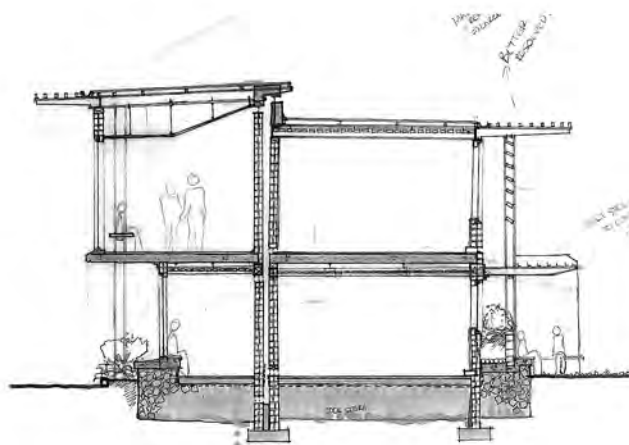
June Exam Section

Iteration 5

Iteration 1

Iteration 6

Figure 74. Sectional development (Author 2016).



Iteration 2

Iteration 7-  
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crit in September

Iteration 3

Iteration 4

Iteration 8