



CHAPTER THREE

- 3. An Introduction to Site Specifics
 - 3.1 Site Location and Justification
 - 3.2 Site Specifics

Figure e. Typical residential structure in Plastic View (Author 2016)

3. AN INTRODUCTION TO SITE SPECIFICS

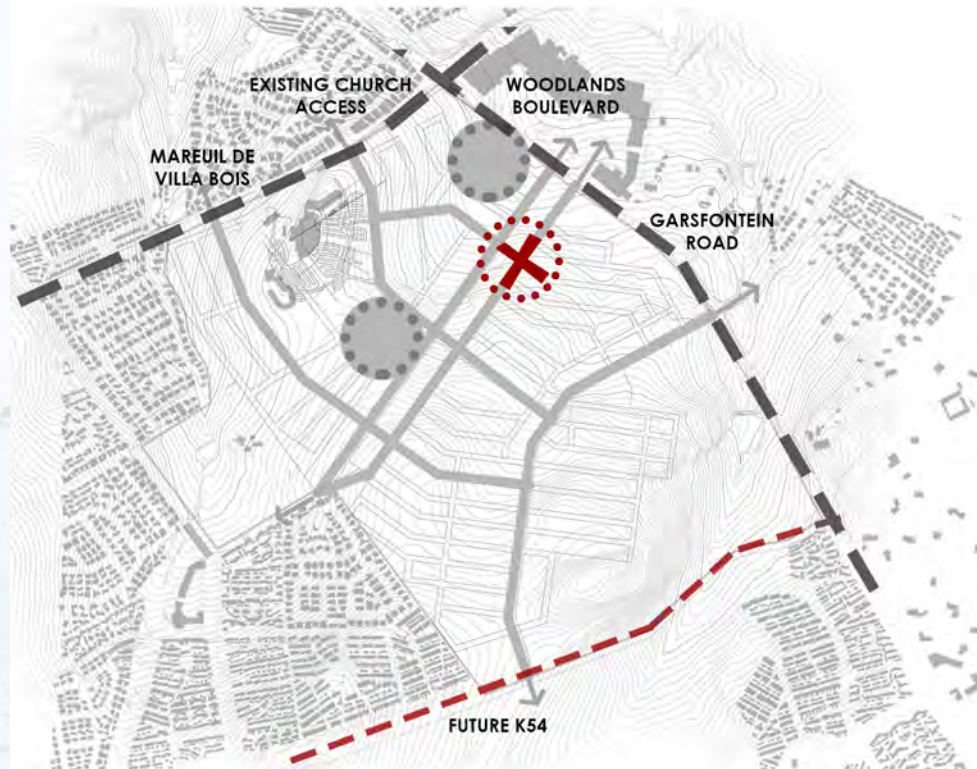


Figure 41. Site Location in context of the larger urban framework (Author 2016).

3.1 SITE LOCATION AND JUSTIFICATION

As evidenced in earlier chapters of this dissertation, health care at present is not an easily accessible amenity to the community of Plastic View. Therefore, together with the research potential of the site justified previously, the choice of site is seen to make health care a more easily accessible amenity to all in this area.

As mentioned in the urban vision chapter of this dissertation, all the individual research proposals on the Plastic View precinct branch off from the main access boulevards across the site. The reason for this is to build on the envisioned energy spine which this boulevard is intended to create.

To further strengthen this idea, Salat's (2011) theories on creating successful resilient cities show that basic amenities such as healthcare provision, should be found within accessible walking distances throughout the urban fabric (Salat 2011: 400-401). Therefore, in order to enable such opportunities, the site for this dissertation is situated along the line which roughly demarcates the middle of the proposed framework, making it an equally visual and physical accessible amenity to the community on site. This situation is shown opposite, with the location of the other basic amenities, namely food and education, also shown in grey.

The proposed programme and client base for this intervention suggests the need for a large amount of community interaction and pedestrian traffic. Based on what the framework anticipates, the choice of site location is seen to allow for this as it is based on an intersectional access node between the vehicular and pedestrian boulevards, with a drop off point being found on the vehicular route. This intersectional position suggests the site as a dispersion point of commuters into the residential part of the framework, in other words, a desire line of movement for the community during their daily commutes. Based on the anticipations of the urban framework, this suggests convenient accessibility to the facility from this route. This position also advocates the opportunity for the engagement of the community with the facility by providing the additional healthy eating and health education activities suggested for the programme.



Figure 42. Urban edge conditions around proposed site, with activity and intersectional node illustrated (Author 2016).

The site location is also found as a transitional space between the larger scale retail/ commercial oriented part of the framework, and the smaller scale residential part of the framework. This position supports the ideas laid out in the architectural issue as it provides a convenient point for an intermediate scale facility which the community may visit to receive healthcare, and a convenient point for the healthworkers to disperse from in order to conduct households visits within the community.

The urban vision for the northern edge condition of this site location suggests a slower traffic movement area with less activity, as it is situated away from the main intersectional node and pedestrian drop off point. However, it is still situated on an access road into the residential area and so is not seen as a corner without any activity. This situation provides the conditions for a more private aspect of the programme, namely the healthcare facility which the community visits in order to receive medical attention.

3.2 SITE SPECIFICS

Due to the lack of infrastructure and built fabric on the larger precinct, the conditions of the surrounding context for this proposed site were informed by a set of guidelines laid out in the urban vision, which created a number of informants for the design to respond to. As discussed in the introduction chapter of this dissertation, these guidelines were informed by the framework proposed by StudioMAS, as well as the group's theoretical stand points which were influenced by Salat (2011) and Steyn (2005).

To the north west of the site, the area cornered by Garsfontein Road and De Villa Bois Mareuil was zoned as a high density/ mixed use typology consisting of a variation of three to five storey buildings intended to accommodate formal retail and office environments. This high density area is bordered to the south by the main vehicular access road across the precinct which connects Garsfontein road to the residential area on the Western edge of the precinct. A pedestrianised island hosting one-two storey infrastructure buildings is intended to accommodate informal retail activities and also to act as a buffer between this vehicular access road and the pedestrian boulevard running parallel to it. The anticipation is for the community to filter from the vehicular access road through these retail activities, onto the pedestrian boulevard. This pedestrian boulevard runs along the north west border of the dissertation's proposed site with an intersectional road connecting it to the vehicular access road via a drop off point on the north western corner of the site.

The buildings surrounding the proposed site on the north east, south west and south east of the site, are zoned to be two-three storey medium density live work units which gradually transforms into one-two storey low density residential living units towards the southern end of the precinct. All access roads envisioned from this pedestrian boulevard into these residential areas, are anticipated to be predominantly pedestrian oriented.

In order to inform the aforementioned building footprints, the urban vision uses the theories put forward by Alexander's *A Pattern Language* (1964). Influenced by the thinking in this text, a study was undertaken into the footprint patterns currently existing in a number of informal settlements; namely Alaska in Mamelodi (UP Arch (Hons) 2011-2015), Slovo Park in Johannesburg (UP Arch (Hons) 2010-2013) and in Plastic View itself. The process undertaken in this study consisted of the analysis of a number of programme specific settlement resolutions, specifically considering how these programmes then informed the relationship between the street edge and building. These situations were analysed through both plans and sections and included; modal intersections, private edges, public edges, pedestrian oriented retail, vehicular oriented retail, formal and informal trade and recreational spaces. These situations are illustrated on the following page.



STREET NEIGHBOURHOOD TYPOLOGY



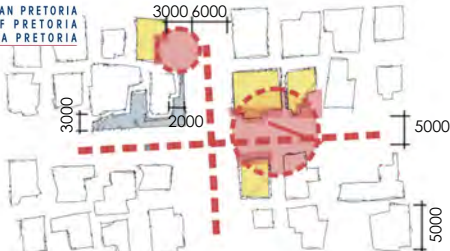
MULTI FUNCTIONAL RESIDENCES



COURTYARD TYPOLOGY

MODAL INTERSECTION

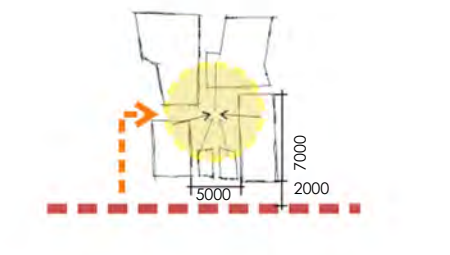
INFORMAL PEDESTRIAN TRADE



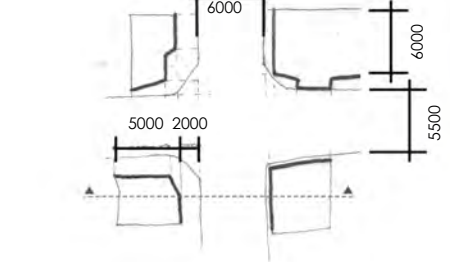
Mixed use each with different levels of street interaction. Residential entrance situated away from busy intersections



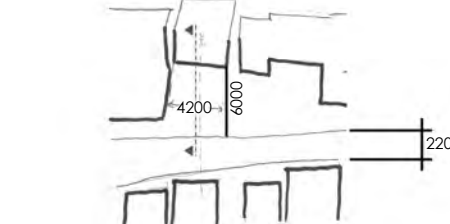
Residential structures often host additional entrepreneurial activities, these are set back from the street forming a courtyard that presents an opportunity for social interaction



Residences face onto a communal courtyard that allows for social activity and passive security



Informal trade often found adjacent to nodal intersections



Informal trade often found to encroach on pedestrian roads

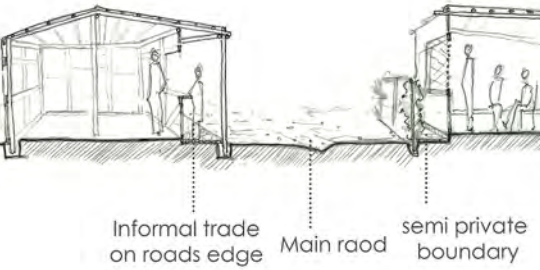
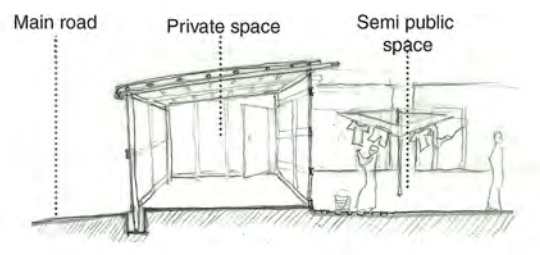
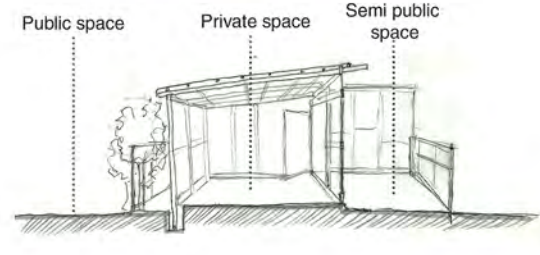
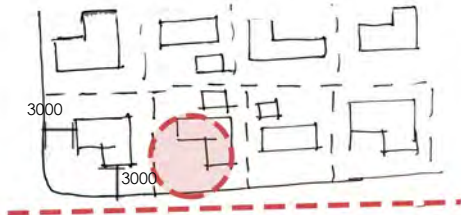
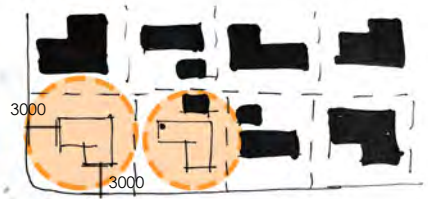
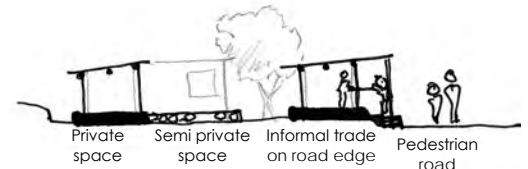
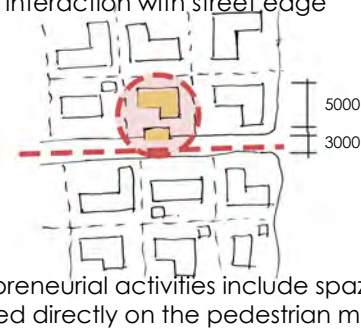
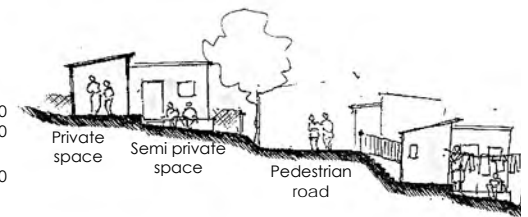
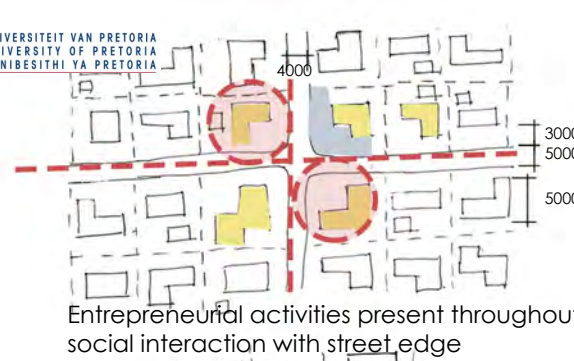


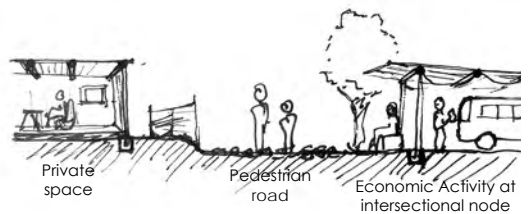
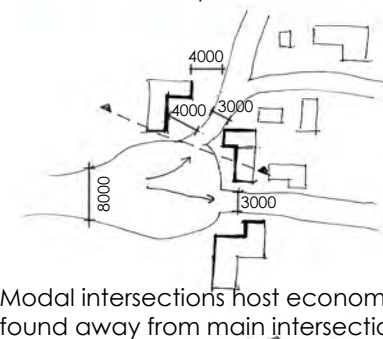
Figure 43. Plastic View typology study (IIP Arch M(Prof) Research 2016).



COURTYARD TYPOLOGY-PLINTH AS SOCIAL SPACE

Courtyard space acts as threshold to residential structures. The presence of a plinth creates a platform for social activity with the street edge

MODAL INTERSECTION



INFORMAL PEDESTRIAN TRADE

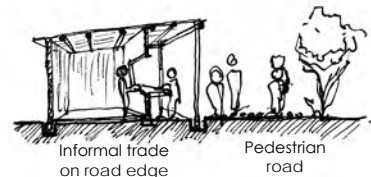
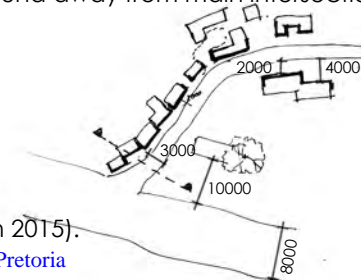
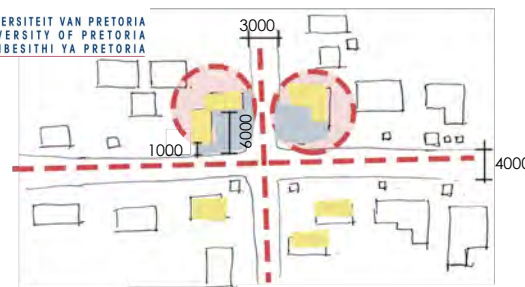


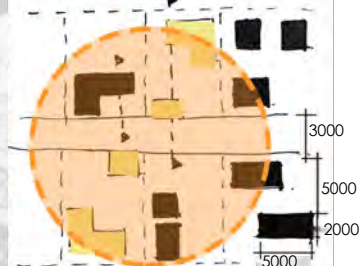
Figure 44. Alaska typology study. (UP Arch Hons Research 2015).



STREET NEIGHBOURHOOD TYPOLOGY



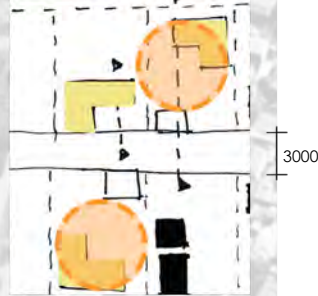
Mixed use each with different levels of street interaction.



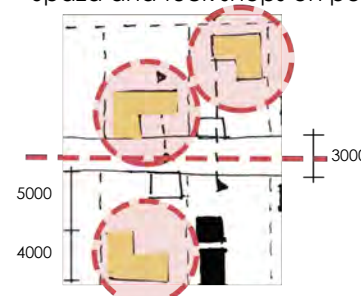
MULTI FUNCTIONAL RESIDENCES



Spaza and tuck shops on pedestrian movement routes, some create social spaces

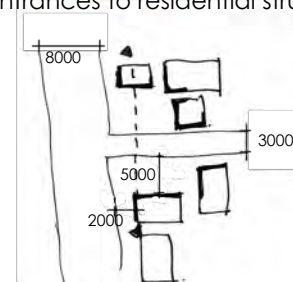


COURTYARD TYPOLOGY



Entrances to residential structures through a courtyard threshold

MODAL INTERSECTION



Modal intersections play an important role in the community. Structures are set back to create social spaces

INFORMAL PEDESTRIAN TRADE

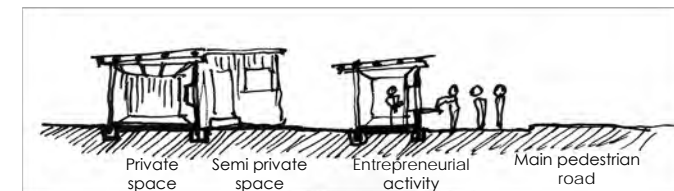
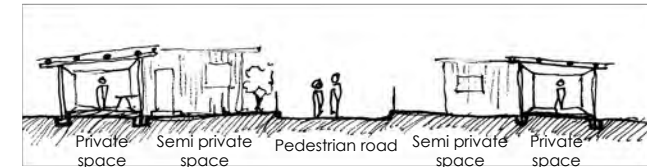
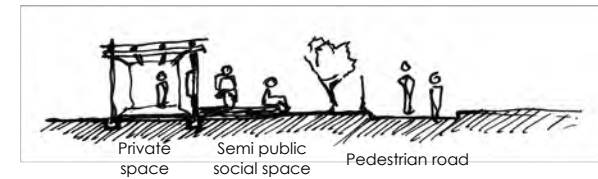
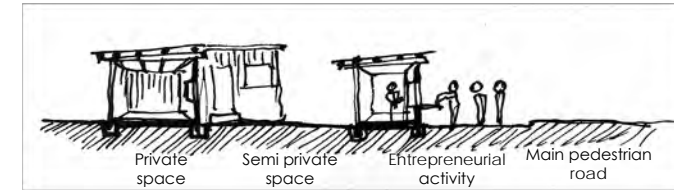
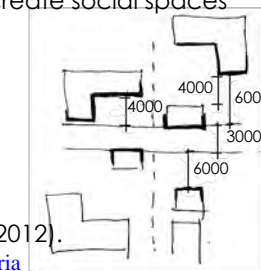


Figure 45. Slovo Park typology study. (UP Arch Hons Research 2012).

	DETACHED	STACKED	PERIMETER
50 du/ha	 Floor area ratio: 0.25 Coverage 25% Height: 1	 Floor area ratio: 0.25 Coverage 7% Height: 4	 Floor area ratio: 0.25 Coverage 8% Height: 4
70 du/ha	 Floor area ratio: 0.35 Coverage 35% Height: 1	 Floor area ratio: 0.35 Coverage 9% Height: 4	 Floor area ratio: 0.35 Coverage 12% Height: 4
100 du/ha	 Floor area ratio: 0.5 Coverage 50% Height: 1	 Floor area ratio: 0.5 Coverage 12% Height: 4	 Floor area ratio: 0.5 Coverage 16% Height: 4
120 du/ha	 Floor area ratio: 0.6 Coverage 60% Height: 1	 Floor area ratio: 0.6 Coverage 15% Height: 4	 Floor area ratio: 0.6 Coverage 16% Height: 4

Figure 46. CSIR density parameters (CSIR 2011:4).



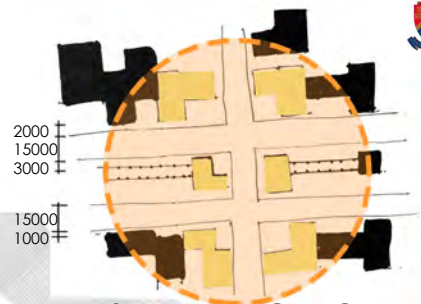
Figure 47. Urban edge conditions around proposed site (AUthor 2016).

Based on the anticipated programmes intended on site, the results of these situational studies were then used as informants for the urban edges around this dissertation's proposed site.

For example, retail based on the vehicular access boulevard is found to be much closer to the road side than it is on the pedestrian boulevard. This allows pedestrians to wander along the boulevard and take in the retail options available from a distance whilst vehicles moving at a faster pace are able to catch glimpses of retail activities placed closer to the roadside.

As was often the case in these settlements, residential buildings become multi functional spaces housing both retail and residential activities, evident in the live work units proposed by the framework. The retail aspect is seen as the public interface of this building and is situated directly on the street, whilst the residential aspect is found in the more private realm, which in the case of the urban vision and the multi storey typology indicated, is found raised above the street. The intention behind this situation being to encourage constant activity of people entering and exiting the building which strengthens the passive surveillance of the street. Entrances to solely residential buildings are set back from the main thoroughfare, and make use of a public square or courtyard that acts as a primary threshold to the building entrance. This threshold may be seen to service a number of residential blocks in some cases. This courtyard typology is also used to access more private business or retail activities. The use of planters and vegetation may also be used to create a threshold, as seen in some residential back of house situations in the aforementioned case studies.

In order to achieve the anticipated density on site, the urban vision needed to specify the footprint size of these surrounding residential and retail blocks. A document developed by the CSIR (2011) which specifies a number of principles regarding the spatial implications of low, medium high density housing gradients and various floor area ratios was used in order to guide this design decision (CSIR 2011: 4). According to this document, an area of high density occupation, as is specified for the areas near the chosen site, would consist of 120 dwellings/ha (du/ha) with each unit covering the minimum living unit area of 50m² (CSIR 2011:4). Therefore, in order to achieve this figure at a floor area ratio of 0.6, the residential block footprint sizes would be at an area of 200m²/block (UP Arch MArch (Prof) 2016). This average footprint size would also then allow for larger unit sizes for larger families occupation as well as single units in the residential block design of the urban vision.



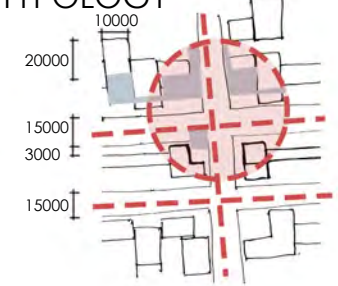
STREET NEIGHBOURHOOD TYPOLOGY



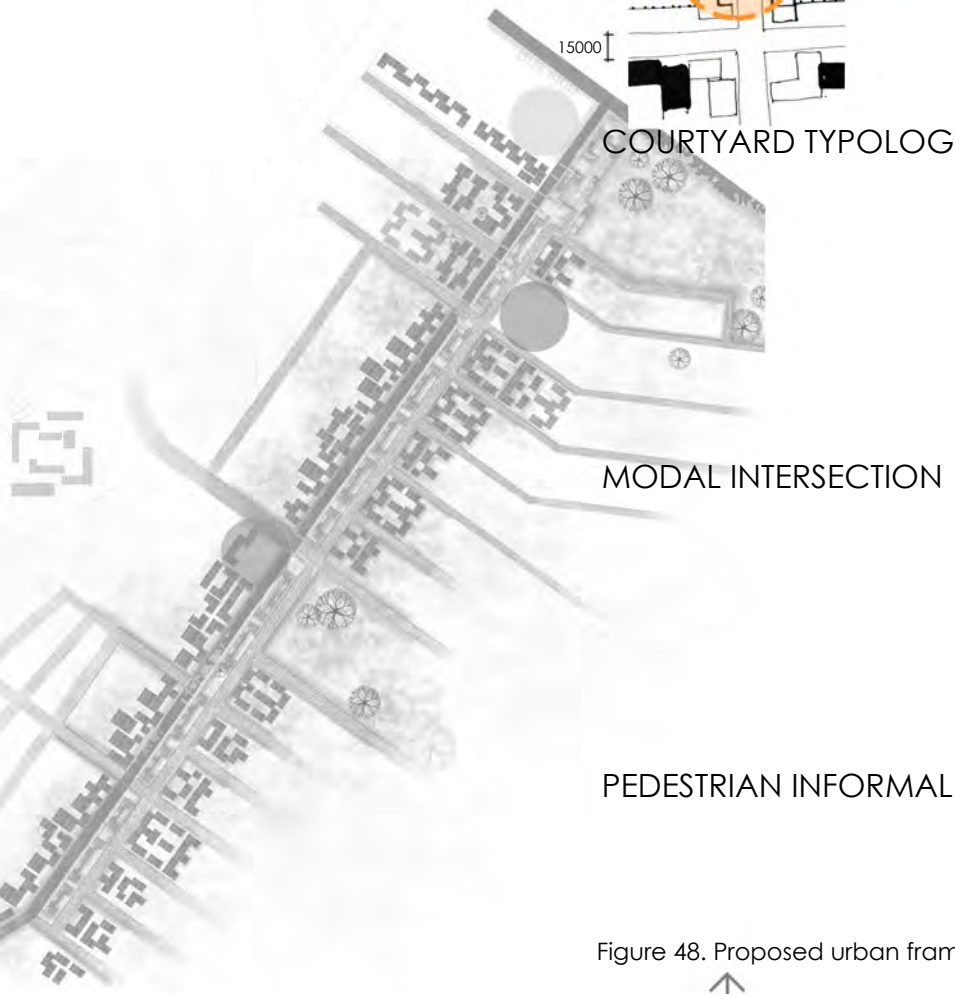
Mixed use, mixed density streetscapes



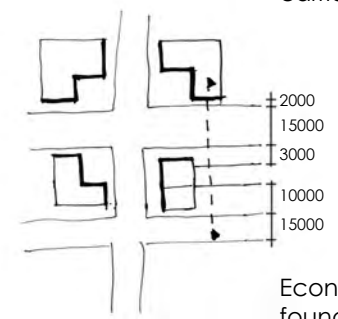
COURTYARD TYPOLOGY



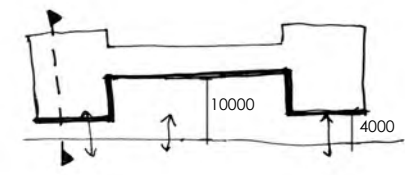
The courtyard typology seen in the informal settlements was carried through into the framework



MODAL INTERSECTION



Economic activities situated around courtyard social spaces are found at modal intersections



PEDESTRIAN INFORMAL TRADE

Pedestrian informal trade situations are set back from the movement routes which create social spaces adjacent to stalls



Figure 48. Proposed urban framework typologies. (UP Arch M(Prof) Research 2016).

