



## 3.1 Social, political and economic roots

Domitilla Hyams was concerned with the suffering of a mother of an intellectually disabled child and felt the need to provide relief for her. After her apparition she made it her life's work to take care of these children. To begin with, Danny Hyams and his wife Domitilla visited institutions for intellectually disabled children. They consulted experts in the field, and asked the mayor of Edenvale for land. Three months later the Little Eden Society opened their doors to care for three little girls. Between 1967 and 1976 the residents were housed in thirteen different locations. The first permanent home was built in Edenvale and opened in 1976.

When the society was started there were limited facilities available for the care of intellectually disabled people, many of whom were also very physically disabled. For this reason the Department of Health approved of the initiative. In the Apartheid era separate facilities had to be built, by law, for "whites" and "non-whites". Despite this fact, Domitilla insisted on the admission of "non-whites" from a very early stage, knowing full well that she could get into a lot of trouble for this.

Economically, the Little Eden Society has always and still relies on fund raising and donations, as they are a non-profit organisation. "When Little Eden has been in debt a cheque has just arrived. When they were desperate for a vehicle, someone gave one. When a volunteer was needed full time to take the children to and from the schools, a driver was found. Nothing has been easy." (Toc H 1971). Fund raising was a lot easier in those early days of Little Eden.



Figure 21 - The founders, Danny & Domitilla Hyams, during a visit to Little Eden - Edenvale by Nelson Mandela in 2002 (photograph by author)



# 3.2 Precedent study - Little Eden

#### 3.2.1 Overview of Little Eden

Between its two homes, the Little Eden Society cares for 290 children and adults. These residents have profound intellectual and almost always physical disabilities, their average physical age is twenty years but the average intellectual age is that of a one-year-old child, with some as low as the level of a newborn, needing to be fed, carried, changed and bathed.

Little Eden Society's first and primary facility is its home in Edenvale. Mostly smaller children and residents requiring frequent medical attention live here. It has residential units and therapy facilities and a chapel on the premises where the Holy Mass and daily prayers are part of the spiritual care that the staff and residents partake in. It further houses the administration facilities for management and finance of the Little Eden Society.

The Elvira Rota Village, situated in Bapsfontein, includes the residential and therapy facilities as well as an operational farm providing for part of the daily food requirements. It also gives the residents a hands-on connection to nature. A facility for those residents with extremely challenged behaviour, who might inflict injury on themselves and others, is also located at their Elvira Rota Village.

The relative location of each home is illustrated in Figure 22.

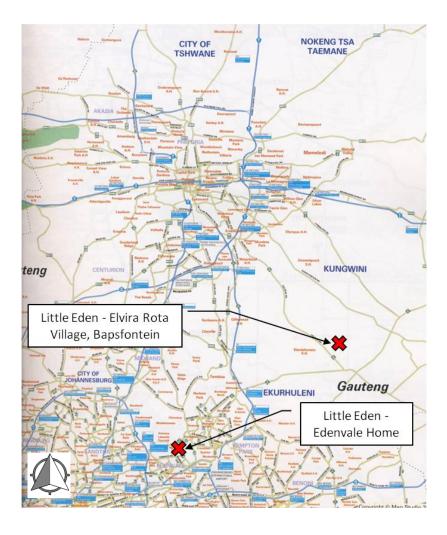


Figure 22 - Current Little Eden Society homes (after Map Studio 2006:7)



#### 3.2.2.1 Location & site layout



Figure 23 – Zoning of the Little Eden Edenvale facility (after aerial photo extracted from Google Earth 2007-02-22)

Unlike other homes which were generally removed from the community, the site chosen for the Edenvale home was located between the residential suburb and the local retail centre of Edenglen on the southeast side and the industrial township of Sebenza to the north, Johannesburg South Africa. This is illustrated in Figure 23, which shows how the home is nestled between residential, retail and industrial zones. The choice of this location has proven to be most beneficial as community involvement from an individual up to a corporate level has been high since the inception of the home.

The facility is located on 1,63 ha of land and was built in stages over a number of years as the need arose and finance became available. The maximum coverage allowable for the site is 40% but only 27% is

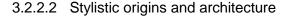
as the annual fête, as well as outdoor space for the residents to play and take part in e activities such as their sports day. 180 of the 290 residents are cared for at the Edenvale home.

Work on the site began with the construction of a radial layout of prefabricated buildings. This was followed by the therapy centre and finally the chapel was built. Five of the buildings within the 'star' are dormitories, which provide accommodation for the residents. Two of the radial buildings house the administration, laundry and kitchen. The nurses' station is located in the centre of the radial star configuration. This allows for consistent monitoring by the nurses and provides easy access to each wing.

At the site's western extremity is the stepped configuration of the therapy centre extending from the north to the south boundaries and shielding the residential buildings from the busy road to the west. The eastern third of the site is an open field. Bordering this field is the chapel, Boitemelo dormitory and the bulk stores structure.



Figure 24 – Layout of the Little Eden - Edenvale facility (after aerial photo copied from Google Earth 2007-02-22)





The buildings that comprise Little Eden - Edenvale were built over time and this is evident from the architecture. The new is made to fit in with the old, without trying to look exactly the same. As a result the architecture is a combination of a number of distinguishable styles:

- Architecture of surveillance From an initial inspection of the site layout, it became clear that an architecture of surveillance was established in the radiating star plan which was influenced by panoptic layout designs, allowing for easy control.
- Functionality- At closer inspection of the individual buildings it also became evident, that the architecture is quintessentially functional. This can be attributed to the urgency of the need for facilities at the time as well as the financial constraints, which were always a consideration for an organization such as the Little Eden Society.
- Accessibility All the buildings on the site are single story
  with adjoining covered ramps to allow for easy navigation
  as well as to accommodate the slope of the site and
  access with wheelchair, pram and carriage.



Figure 25 – A view of the precast structure of the dormitories (photograph courtesy of Little Eden Society)

As the primary contractor for the initial panoptic star, the Little Eden Society chose a company called RIBCO, who, at the time, had just built an institution in the West Rand for the care of 'nonwhite' psychiatric patients. RIBCO was able to erect the required buildings economically and rapidly by using a prefabricated rib-frame construction technique with precast reinforced concrete panels that slid into the "ribs." The inherent functionalism becomes clear with closer inspection of the prefabricated structure. The exterior panels are composed of an exposed aggregate, which requires very low maintenance. The windows in these panels are

residents on the one hand but limits the amount of natural light entering into the buildings. The different wings are colour-coded allowing for easy recognition. These buildings all have pitched roofs of IBR sheeting, and the floors are all covered in vinyl. In response to the problem of limited light, part of the yellow wing was altered, large windows and glass doors were installed and it is now used as a sun-room for the residents.



Figure 26 – A view of the sun room in yellow wing (photograph courtesy of Little Eden Society)

To link the various radiating wings and the Boitemelo wing, a system of steel walkways and shelters was designed and constructed after the buildings were completed. The ground under this was then paved to allow for easy movement for the physically disabled and to help control the storm water.

The old staff quarters, built at the same time as the core buildings, were also constructed using the rib-frame, but instead of the usual concrete panels, it was decided that the infill was to be built from bricks. This included an upstairs store. The staff quarters were then used as a training centre for self-help skills. As the staff now no longer lived on the premises they needed new ablutions and tearooms. These were constructed in 1980. A conventional brick structure was chosen over the previously used rib-frame construction, with an exterior wall of face brick. The interior walls

were plastered and painted. The roof was made from IBI the existing complex. The training centre was then converted into a dormitory for the older boys in 1983, this is called the Boitemelo wing, named after one of the late residents.



Figure 27 – External views of the therapy centre at Little Eden - Edenvale (photographs courtesy of Little Eden Society)

In 1980 the therapy centre was constructed on the highest part of the site. The roofing is IBR, like the rest of the complex. The construction of this centre is of a higher quality and today is still in good condition both internally and externally. The external wall consists of a combination of face brick panels and plastered walling, echoing the rib-frame construction of the core buildings. The therapy centre consists of four buildings that are interlinked with covered walkways and verandas. The windows are larger than that of the core buildings and the building has better thermal control properties both in the summer heat and winter cold.

The Chapel of Our Lady of the Angels was begun in 1992 and blessed in 1993. This building includes a lower level garage and storage space, as well as ablution and kitchen facilities that are used during public gatherings, such as the annual fête. The chapel is hexagonal in shape and was built using brick. The exterior walls have a combination of face brick and plastered and

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Ited areas, similar to that of the therapy centre. The interior of
the chapel is notable for its wooden ceiling panels and beams.

The large open piece of land on the northeast side of the site, the park, is used as a playground for the residents, as well as hosting their annual sports day and the annual fête.

The new staff tearoom and ablution facilities were built in 1997. This was constructed from bricks, with face brick on the exterior. Large windows allow for natural lighting and ventilation. These facilities are larger than the previous ones and cater not only for the staff, but also for visitors.

The administration facilities were renovated in 1999. The new facilities were built from brick and plastered to look similar to the exposed aggregate of the original buildings. A new entrance was created to mark the threshold into the reception area. An internal court exists between parts of the new and old sections, allowing light and air to enter the building, as well as providing a green space.



Figure 28 – An external view of the chapel as well as a close-up of its timber ceiling (photographs by author)

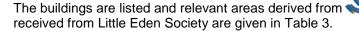


# 3.2.2.3 Functionality and services provided

Table 2 - Functions and services provided (derived from information received from Little Eden Society)

Function/					
service	Description	Structure			
Accommodation	Each resident has his/her own bed or cot. A wing typically sleeps about 25 residents	Dormitories or wings			
Frail care	Red wing houses 25 residents who require continuous monitoring and medical attention	Red wing			
Bathing & ablutions	Toilets, baths, nappy changing areas, sluice rooms, teeth are brushed twice a day, hairdressers cut hair regularly	In each dormitory			
Administration	The administrative functions of the home take place within the administrative wing and include offices for the various permanent staff members, meeting rooms and reception	Admin			
Laundry	Little Eden requires an industrial laundry facility to wash, dry and iron 2500 nappies as well as copious amounts of clothing, bed linen, etc. every day	Kitchen & laundry wing			
Kitchen	5 meals a day are prepared for each resident including mid- morning and mid-afternoon snacks. This equates to over a thousand meals which need to be prepared daily	Kitchen & laundry wing			
Therapy	A number of therapies are provided at Little Eden, including: occupational therapy, physiotherapy, hydrotherapy, reflexology and music therapy	Within the therapy centre, hall as well as dormitories			
Garage	An extended 4 bay garage can fit up to 8 vehicles	Garage			
Workshop	The workshop is used to perform minor maintenance to the buildings and equipment as well as to store various tools and garden equipment	Workshop			
Staff day time catering	No overnight facilities are provided for staff, a tea and lunch room are however provided	Staff room			

service	Description	Structure
Visitors room	Visitors and families of residents are received in the visitor's room where they can spend time with the residents	Visitors room
Religious services	Daily prayers are said together and regular masses attended.	Chapel
Storage	Storage is a valuable resource at the facility. Anything and everything is stored, including spare chairs, tables and mattresses.	Bulk storage building and garages under the chapel
Concerts, fêtes and entertainment	Throughout the year a number of concerts, fêtes and other fund raising events are held either in the open field or in the hall.	Hall & open field
Outdoor activities and exercises	Various outdoor activities, for both the mobile and immobile residents, take place on the field at the bottom of the site	Open field
Parking	Parking for staff and visitors is provided in the parking area in front of reception with overflow on to the open field	Parking at reception, garages and open field
Paper & recycling collection	As a source of income, Little Eden has a number of paper, glass and other recycling bins on the property which are located in the parking lot	Recycle bins in parking Lot
Jumble and second hand goods collection, processing & storage	Little Eden receives a number of donations of clothing and other items, which it either uses or resells. Storage and processing of this normally occurs in the storage garage below the chapel	Storage garage below the chapel
Nursing, medical & dental services	130 of the 180 residents are on medication for conditions such as epilepsy and some for aggressive and psychotic behaviour. 24 hour nursing care is provided including regular administration of medicine as well as regular consultations by general practitioners, psychiatrists, dentists and chiropractors	Nurses station and doctors room at the centre of the dormitory star





The buildings are listed and relevant areas derived from received from Little Eden Society are given in Table 3.

UNIVERSITY OF PRETORIA 'esident dormitory wing assignment by physical and mental conditions (derived from information received from Little Eden Society)

Table 3 - Schedule of buildings and areas for Little Eden - Edenvale
(derived from information received from Little Eden Society)

Category	Individual Buildings	Area (m²)	% Area	Category % Area		
	Standard care dormitory (5x)	975m²	22%			
Accommodation	High care dormitory (red wing)	167m²	4%	35%		
	Older residents dormitory	411m²	9%			
	Kitchen and laundry	180m²	4%			
Support &	Administration offices	215m²	5%			
administration	Store	60m²	1%	12%		
	Staff tea room and ablutions	90m²	2%			
	Therapy centre (physio-, occupational- & hydrotherapy)	1030m²	23%	050/		
Care & therapy	Sun room	40m²	1%	25%		
	Medical consulting rooms & nurses station	25m²	1%			
Spiritual	Chapel	620m²	14%	14%		
Services	Sheltered walkways, ramps & link spaces	644m²	14%	14%		
TOTAL	4457m <sup>2</sup>	100%	100%			

TOTAL	4457m <sup>2</sup>	100%	100%
Residents are grouped together according to intellectual ability and behaviour. As intellect malfunctioning, underdeveloped or damage affected by this will have a higher chance the physical disabilities and mental illness as we both homes show how the groups are divided intellectual and physical abilities and disabilities and every person is different and unoften blurred and there is overlap between to	o their phys tual disabili d brain, it fo an normal ell. Although ed up accor ities, this is nique the b groups. The	sical and ity is due to bllows that people of the table ding to the a general coundaries	to the t people having es for eir lisation. s are
change as some residents improve and other	ars deterior	ale.	

Capability	Wing		Red	Blue	Yellow	Orange	Lilac	0
	Capability Characteristic	Green						Boitemelo
Mental	higher	•						
functioning	lower		•	•	•			
Mobility	mobile	•				•	•	
Mobility	immobile		•	•	•			•
Physical	younger	•						
áge	older			•				•
Behaviour	un- disturbed	•	•	•	•			•
	disturbed					•	•	
Strength	strong	•				•	•	
	weak		•	•	•		·	•
Gender	male	•	•	•	•	•	·	•
	female	•	•	•	•		•	•

#### 3.2.2.4 Lessons learnt



A number of important lessons were learnt from Little Eden-Edenvale, and these were in part addressed in the Bapsfontein home (the Elvira Rota Village), and it is important to note these here.

The important flaws in the design and architecture of the home include:

- Poor heat exchange properties of the prefabricated buildings, which can be attributed to the thickness and materials of the prefabricated walls.
- The bathrooms were too small to allow for comfortable manoeuvring of the residents in wheelchairs and trolleys.
- The window heights and sizes limited natural lighting into the spaces, this was due to initial safety concerns around the accessibility of the windows. However in hindsight this proved only to be an issue for the most active and violent residents. More natural sunlight and dayrooms in the accommodation buildings would have been better as residents benefit greatly from this.
- The prefabricated walls make alterations difficult (one cannot even hammer a nail into the walls).
- In general the nursing station and doctor's room were too small.

At the same time a few aspects of the design have proven advantageous:

- Having the residents' accommodation concentrated in one area and in a layout that is easy to control and monitor, makes the management of the residents, as well as day-today activities, quicker and easier to perform.
- The nature, design and quality of the therapy centre buildings have proven to be highly economical and environmentally friendly. Specifically: heating and cooling requirements are lower, external building maintenance is less due to the partial face brick finish and the tile flooring requires less maintenance.
- The location of the site, between commercial, residential and retail areas has also proved advantageous. Little Eden enjoys the support of a number of corporate and religious organizations as well as individuals mostly from the surrounding area.

## 3.2.3 Elvira Rota Village, Bapsfontein

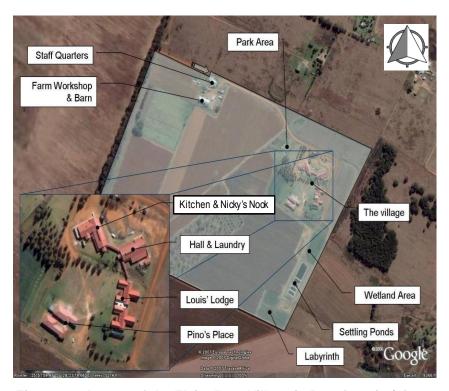


Figure 29 - Layout of the Elvira Rota Village in Bapsfontein (after aerial photo extracted from Google Earth 2007-02-22)

The Elvira Rota Village is located in the rural area of Bapsfontein in Gauteng, South Africa, and is the agricultural satellite facility of the main Edenvale home. This facility cares for 110 of the 290 residents accommodated by the Little Eden Society.

The Elvira Rota Village is located on a 43ha farm and was developed by the Little Eden Society in order to provide a home where the residents have more interaction with the natural environment such as caring for the animals and plants. Generally the older and more mobile residents reside here.

The staff quarters, farm workshop and barn are located entrance to the north of the farm. Some farm animals, for therapeutic caring by willing residents, are kept in this area. The crops and pecan nut orchards take up most of the land.

The village is located in the north east of the farm. This includes the therapy facilities, kitchen, laundry, hall and dormitories with their ablutions, diningroom, day rooms and verandas. The park with its playground equipment and shaded benches is to the northwest of the village.

Pino's Place is Little Eden Society's facility for persons with not only profound intellectual disability, but also disturbed and challenged behaviour, which is considered a danger to themselves and others. This is located in the south east of the village, in a self-contained unit.

The wetland area and labyrinth (not established at the time of the photograph in Figure 29) are the most recent additions to the Elvira Rota Village. These are located near the settling ponds in the south east corner of the site.

## 3.2.3.1 Stylistic origins and architecture

As the Elvira Rota Village was established after the Edenvale home, lessons learnt greatly impacted on the design of this facility. The architecture of surveillance, inherent in Edenvale's radial layout, made way for a village layout, which combined a village-like plan with covered walkways linking the buildings. The use of robust materials and higher quality construction was an imperative, based upon the lessons learnt in the Edenvale home.

Red face brick was used extensively in the construction of almost all of the buildings in the facility. The roofing throughout is double-pitched IBR with gable end walls. The adjoining walkways have red brick paving, walls and pillars to match the buildings with double pitch red IBR roofing and exposed treated timber rafters.



Figure 30 – A view of the dormitories as well as the adjoining walkways (photographs by author)



Figure 31 – Inside a dormitory and view down a corridor (photographs by author)

The dormitories at Bapsfontein are configured around courtyards. Whereas the Edenvale home has large dormitories, each accommodating up to 25 beds and cots. Dormitories were made smaller in Bapsfontein primarily because the type and level of care provided for the residents housed here is less intense, requiring a lower level of nursing care.



Figure 33 – View of the inside of the hall (photograph by author)

mobile residents, rooms were built for the older and more residents. It was found that on average the residents prefer each other's company to being by themselves, with the exception of those who are more disturbed or challenged. For this reason when alterations and additions were executed, the smallest rooms were designed to accommodate at least two people.

Great care was taken with the interior finish to protect the structure and fixtures. Metal kickboards on the cupboards and doors and steel railings for use as grab rails as well as wall protection were installed in the high traffic areas such as passages.

The interior of the hall has painted exposed rafters with a raised section in the roof with clerestory windows. This not only provides additional natural lighting to the hall but also ventilation.



Figure 32 – The residents with challenged behaviour are housed at Pino's Place (photograph by author)

Pino's Place is the section accommodating those people with more challenged and disturbed behaviour. It has single rooms, as some of these residents either need to be isolated from others or want to be by themselves, as well as rooms for up to ten people. Materials and fittings used in Pino's Place are robust and tamper-proof as some of the residents are capable of damaging finishes and fittings.

Windows are made from polycarbonate, not glass, to provide users from possible broken panes. Doors are solid with extra hinges. Epoxy coating is used in the bathrooms instead of tiles as the residents have been known to remove the tiles from the floor and walls. Fittings such as toilets, basins and baths are made from stainless steel as porcelain fittings when broken can result in sharp edges that can injure residents and staff. Mirrors are made from high gloss stainless steel instead of glass. Slabs are used instead of tables as tables can be broken and thrown around.

### 3.2.3.2 Functionality provided and services rendered

Of the 110 residents, Louis' Lodge houses 50 residents with separate sections for males and females. Nicky's Nook, a section for the older men, houses 20. The older females are grouped with the younger residents, and enjoy mothering them. Pino's Place has two self-contained units, one for "aggressive challenged behaviour" and the other for "challenged behaviour" accommodating 40 residents in total. The grouping is illustrated in Table 6Table 5.

Table 5 - Resident grouping by physical and mental attributes (derived from information received from Little Eden Society)

Capability	Wing	n	Red				<b>×</b>	je		elo
	Capability Characteristic	Green		Blue	Yellow	Orange	Lilac	Boitemelo		
Mental	higher	•								
functioning	lower		•	•	•					
Mobility	mobile	•				•	•			
MODILLY	immobile		•	•	•			•		
Physical	younger	•								
age	older			•				•		
Behaviour	un- disturbed	•	•	•	•			•		
Benavioui	disturbed					•	•			
Strength	strong	•				•	•			
	weak		•	•	•			•		
Gender	male	•	•	•	•	•		•		
	female	•	•	•	•		•	•		

biannual concerts, and the development of the wetland area and labyrinth. This not only creates a sense of achievement and belonging for the residents, but also helps to create awareness amongst members of the public as they are invited to experience these activities and places. Residents are also encouraged to help out with chores and caring for one another, this further adds to their sense of belonging.

Nicky's Nook is the dormitory for the older men who are often weaker than the younger residents. the oldest resident is fifty-five, a lot younger than what is usually being called old. Their bodies age a lot quicker and they experience the physical and mental effects of old age a lot younger than is normally the case. People suffering from intellectual disability often have physical problems and are more prone to illness. In the past they often had a shorter life expectancy than mentally healthy people. Nowadays with the level of medical care available these people reach older ages.



Figure 34 – A view of Nicky's Nook as well as part of the adjoining covered walkway (photograph by author)

Louis' Lodge has separate sleeping areas for males and females, but they all share in the same group activities. The older girls, in their twenties, are grouped with the younger residents and enjoy



mothering them. Their daytime groups are named the Butthe Bumblebees.

Members of the Butterflies are generally the younger and intellectually better functioning individuals who have less physical and intellectual disabilities than the members of the Bumblebees and require more intellectual stimulation.

The Bumblebees generally have older members, display more problematic behaviour, frequently suffer from mental conditions, or have physical problems such as spastic bodies and autism. They therefore require less stimulation, and the stimulation they receive is different and less intense than that received by the Butterflies.

Pino's Place, as already stated, is home to residents with more challenged and disturbed behaviour problems. Until Pino's Place was built, residents who were a danger to themselves and others had to be transferred to other homes, as Little Eden did not have the facilities to deal with their behaviour problems. Pino's Place has two self-contained units, Olive and Acacia.

The group of intellectually disabled people staying in the Olive section is the bigger group and although they have disturbed challenged behaviour, they are the lesser disturbed of the two groups.

Acacia houses the smaller group. This group requires less stimulation as over-stimulation can cause outbursts. Some of the residents in both groups (Olive and Acacia) need or prefer to be by themselves and thus some of the accommodation includes single rooms with the remainder in rooms of six beds.

The farm produces pecan nuts, maize and bean crops for sale as well as vegetables for the residents. Farm animals are kept for therapeutic care and interaction with the residents who enjoy feeding and looking after them. Horse riding is a favourite pastime for some of the more active residents. Borehole water is used for irrigation as well as other services.

The wetland area, started in 2004, was developed to create a more sustainable and eco- friendly environment. The Little Eden Society doesn't only help the residents to look after themselves, but also to care for the environment. Residents who were able and willing to, helped in the development of the wetland and the labyrinth. Participation in activities such as these not only help them look after nature, it also gives them a sense of achievement and belonging.

The wetland has a variety of indigenous plants and provides a sanctuary with its benches and walks, as well as functioning as a natural water filter and home to bird and insect life.

The labyrinth, which opened on Arbour day 2006, has a calming effect on residents, staff and visitors. Labyrinths, unlike mazes which confuse with their choices and dead-ends, help one to focus the



Figure 35 - The labyrinth (photograph by the author)

mind and the soul on

an intellectually and spiritually calming journey with a visible destination. Little Eden has found a marked change in the behaviour of its residents using the labyrinth, they are calmer and even those residents who display aggressive disturbed behaviour have less outbursts.