4. BRIEF [redacted]

- "O! beware, my lord, of jelousy; It is the green-eyed monster which doth mock the meat it feeds on." - *William Shakespeare (1564-1616)*
- "Sometimes our fate resembles a fruit tree in winter. Who would think that those branches would turn green again and blossom, but we hope it, we know it." - *Johann Wolfgang von Goethe (1749-1832)*

4.1 PROBLEM STATEMENT
4.2 CLIENT PROFILE
4.3 BRIEF

4. BRIEF

4.1 PROBLEM STATEMENT

The city of Tshwane has a profound vision of becoming a city with a true identity. The defragmentation of the city grid along the north eastern and western edges makes this vision hard to achieve. Furthermore, a definite barrier exists between Pretoria CBD and the surrounding townships. This is a result of the urban development strategy of the Apartheid era. These surrounding townships and neighbourhoods all contribute to the identity of the city, and being situated so far from the CBD without a definite urban link, the identity of a city as whole can not be achieved. The city grid is contained by a definite urban edge. This edge is formed by major vehicular roads, which have very important functions in the city. Beyond this edge, the grid starts to loose its form, creating a series of lost space.

This leads to a lost connection between the city and surrounding areas. It is this lost space that harm the identity of the city. If an activity corridor could be established through the development of this lost space, the connection between the surrounding neighbourhoods and townships could be established, which will give the City of Tshwane an identity of a being a city that functions as a whole. The objective of this dissertation is the development of a proposal for the continuation of the city grid, through the development of lost space into meaningful space, through the synergy between colour and light. The future vision of the proposal is to establish an activity corridor that will bind the whole of Tshwane into one canvas of identity.

4.2 CLIENT PROFILE

BARLOWORLD SOUTH AFRICA & THE TSHWANE UNIVERSITY OF TECNNOLOGY

The clients for the proposed project is Barloworld South Africa in conjunction with the TUT Art and Drama Campus. Barloworld South Africa consists of Barloworld Coatings, the market leader in architectural and automotive coatings in South Africa, with factories in Durban, Port Elizabeth, Cape Town and Johannesburg. They also have factories in Botswana, Malawi, Swaziland, Zambia and other Sub-Saharan African countries. To establish a factory or outlet in Pretoria is one of their main objectives. Their architectural brands include the premium Plascon range, as well as Crown, Professional and Poly-cell. They also supply specialized coatings to South African industrial and furniture markets, as well as paintbrushes through their Hamilton Brush company. To the automotive sector they also supply Plascon, Spies Hecker,

Standox and DuPont brands. Through the Plascon paint range, they have launched yearly forecast colours, with the goal of attracting a bigger market to their product. This includes 2007's "Colours Inspired by Discovery' and 2008's Light-Inspired Colours. The central aim is to inspire their clients in using their product as well as to show the user how these colours could be used in their environment. Barloworld also invests in research facilities. They currently have a research facility and laboratory in Stellenbosch that invents new technology to produce better quality paint at a lower cost, while altering the chemical make-up of the paint to be less harmful to the environment. (Creamer Media 2007)

The Art Department of the Tshwane University of Technology also has a need for extra studio space, as well as a facility where the students can exhibit or practice their art. This space should be allocated in close proximity to the main campus.

4.3 BRIEF

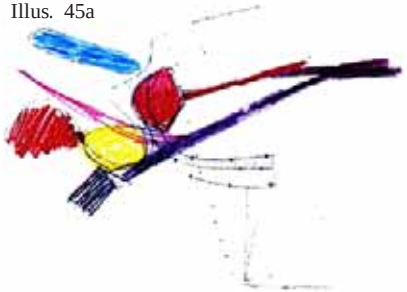
Barloworld South Africa needs to spread the production of their main product, Plascon paint. They need a site which is in Pretoria, the only major city in South Africa where they do not have a factory. It needs to be a facility where their new forecast colours can be manufactured and distributed. Research and testing laboratories must also be provided. A Concept Shop (similar in function to the Plascon Concept Shop in Design Quarter) must also be incorporated which will display their products while serving as an area where different concepts can be explored through which will rent this space from Barloworld.

5. PRECEDENT STUDIES

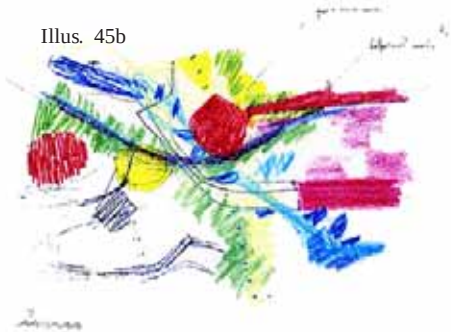
- "A handful of pine-seed will cover mountains with the green majesty of a forest. I, too, will set my face to the wind aned throw my handful of seed on high." - *Fiona Macleod (1855-1905)*
- "When the green woods laugh with the voice of joy, And the dimpling stream runs by; When the air does laugh with our merry wit, And the green hill laughs with the noise of it." - *Lord Byron (1788-1824)*

5.1 EMBT
5.2 ENRIC MIRALLES
5.3 studioMAS
5.4 GUNTHER HENN

Illus. 45a



Illus. 45b



Illus. 45c

Illus. 45a-c (right) Generative sketches and drawings, Mollet Del Valles Park, Spain, 2002, EMBT (Enric Miralles and Benedetta Tagliabue) (Arcspace 2007)

5. PRECEDENT STUDIES

5.1 EMBT

5.1.1 PARQUE DE LOS COLORES - MOLLET DEL VALLES, SPAIN

Starting Date: February 1992
Inaguration Date: March 2002
Architects: Enric Miralles and Benedetta Tagliabue (EMBT), Barcelona
Project Team: Enric Miralles, Lluis Cantallops, Joan Mias, Ricardo Flores, Josep Cargol, Jordi Artigues, Mary Rose Greene, Lucia De Colle, Nicolas Alvarez, Victoria Garriga, Sibyl Maurer, German Zambrana
Client: Mollet del Valles Town Counsel
Brief: Public Park in Barcelonan – to redefine a sense of place.

The Park of Colours is part of the urban renewal of public parks in Barcelona, which brings to life neglected and deprived parts of the city. This Park of Colours, designed by Enric Miralles and Benedetta Tagliabue, is the first phase in a masterplan that will eventually house a sports hall and civic centre. The site lies in Barcelona's industrial belt, and is surrounded by featureless apartment blocks. As a result of the lack of character and context, the architects had to redefine a sense of place. The architects used physical fragments, including bits of walls, pavement, and familiar elements throughout the city, to create a fictitious topography which would eventually merge with the planting and new construction. (BERTOLUCCI 2002: p.84)

"The main interest of this project is, maybe, not directly in it, but in the "themes" it contains; the suspension of the building, of graffiti becoming architecture, of the colours of a painting becoming places, if the suspended spirit of the users, of unexpected connections" – Miralles and Tagliabue.(ARCSPACE 2002)

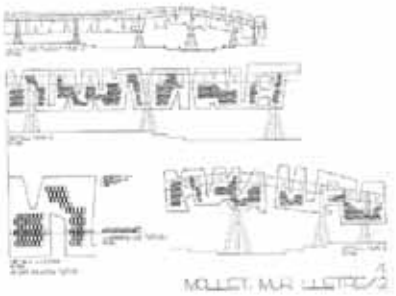
The man-made environment is penetrated by a series of long, horizontal pergolas made of fragments of brick, concrete and rusted steel, which evoke the forms of urban graffiti.(illus. 43) The pergolas are elevated on columns, and act as suspended screens that filter light and mark out where to walk and where to rest, by creating shadow zones and paths. The focus of

Illus. 43a

Illus. 43b

Illus. 43c

Illus. 43d



Illus. 47a

Illus. 47b

Illus. 47c

Illus. 47a-c (left) Plans and elevations, Mollet Del Valles Park, Spain, EMBT (Enric Miralles and Benedetta Tagliabue)
(Architectural Review 2002: p.84-87)

the composition is a small open air theatre that offers the potential for communal gatherings and performances. Antenna-like fittings resemble clusters of trees, while providing a virtual roof for the walkways and functional lighting by night. An existing Romanesque stone building was the 'model' for the civic center from the beginning, but later started to change, and separate from the original model. What remained though was the necessity to climb into it though long stairs and ramps. The new park has a richly varied texture that will evolve with time as the landscaping gets more established and the patterns of use begin t emerge in the park. "At times almost dream-like, the park has the quality of a complex, ever-changing stage set for the daily dramas of urban life." (BERTOLUCCI 2002: p.86)

The Park of Colours is a very good example of how the architects created a public gathering space through the use of elevated concrete pergolas, which filter light and provide shade. How the park is to evolve through future use patterns and the establishment of landscaping is also very important. What is very important is their concept of the colours of a painting to become part of the place, and thereby, create a sense of place in an area that was previously neglected and deprived.

Illus. 43e

Illus. 43a-e (left) Photos of Mollet Del Valles Park, Spain, 2002, showing the pergolas, crafted from concrete and steel which give it a strong sculptural quality while filtering light and providing shade. (Enric Miralles and Benedetta Tagliabue) (Arcspace 2007)

Illus. 44a

Illus. 44b

Illus. 44c

Illus. 44a-c (top) Photos of Mollet Del Valles Park, Spain, showing the antenna-like light fittings that resemble clusters of trees. (Enric Miralles and Benedetta Tagliabue) (Philips 2007)

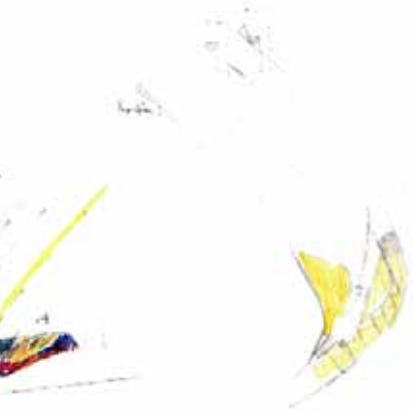
Illus. 46 (below) Generative sketches and drawings, Mollet Del Valles Park, Spain, EMBT (Enric Miralles and Benedetta Tagliabue) (Arcspace 2007)

5.1.2 SANTA CATERINA MARKET - BARCELONA, SPAIN

Starting Date: April 1997
Inauguration Date: May 2005
Architects: Enric Miralles and Benedetta Tagliabue (EMBT), Igor Peraza,Barcelona
Engineers: Robert Brufau, Jose Maria Velasco, Miquel Llorens
Client: Forment de Ciutat Vella S.A
Brief: Rehabilitation of Santa Caterina Market, Barcelona, Spain.

This reconstruction of the Santa Caterina Market brings life and light into one of the worst slums of Barcelona's Gothic Quarter. The area around the Santa Caterina Market is central, located three blocks from Barcelona Cathedral. People did not see a reason to cross the Via Laietana, which is dominated by vehicle movement. The Via Laietana has split the quarter since it was cut through in an early-20th-century "renewal". Previous interventions in this area resulted in large-scale demolitions. The architects design for the market grew out of a critique on these efforts. Miralles and Tagliabue saw an opportunity in Barcelona's declining public fresh-food markets to the changing needs and lifestyles of urban families.(COHN 2006: p.99+101)

The architects retained the white-painted masonry walls on three sides of the rectangular 1845 market structure.(illus.48c) This is covered with a brightly coloured tile roof (5 500 m²), which is visible from streets and plazas that lead to the cathedral, thereby advertising the market like a horizontal billboard.(illus. 49d) The roof's fluid form suggests the cantilevering awnings that cover patios in southern Spain. The 67 colours of the hexagonal roof tiles were inspired by heaped vegetables, fruits, seafood, meats and other fresh produce. (ibid: p.105)



Illus. 48c

Illus. 48a

Illus. 48b

The roof, made by assembling 300 000 ceramic hexagons, is supported by a "forest" of steel pillars that create movement in the organization of its interior. (ODDO 2005)

The importance of this project is how the architects used the original structure of the market, while introducing a colourful attraction to transform a dour fresh-food market into a high-spirited riot of colour. The architects gave people a reason to cross a busy road, and be part of an urban market and therefore, part of every day life.

Illus. 48a-d Photos of urban-renewal of the Santa Caterina Market, Spain, 2002, showing the brightly coloured tile roof. EMBT (Enric Miralles and Benedetta Tagliabue)
(Architectural Record 2006: p.99-106)

Illus. 48d

5.1.3 GRAN VIA EXPRESSWAY ACOUSTIC PANELS - BARCELONA, SPAIN

Starting Date: April 1997
Architects: Enric Miralles and Benedetta Tagliabue (EMBT)
Client: Forment de Ciutat Vella S.A
Brief: To design acoustic panels which prevent the noise from the expressway to reach the upper levels and buildings.(illus. 40)

A long row of acoustic screens prevents the noise of the fast traffic way (lower level) to reach the upper level, which is designated for slow traffic and pedestrians. This will provide an acoustic screen for the surrounding buildings as well. The screens consist of a resistant outer skin that surrounds an acoustic insulation core. The shape of the screens is designed to reflect noise. The inner material also helps with its absorbing qualities. The set conforms a body of 2, meters by 7,5 meters in length. The width varies between 10 and 50 cm. (EMBT 2007)

The importance of this program is the inventive use of concrete, with the architect's use of colour. A colour study was done by the architects. Through this study, coloured acoustic glass was chosen, and placed into slits carved in the concrete.(illus. 50) A constant movement of coloured light falls on the road and traffic below, creating an ever-changing movement of colour and light. This gives the 'stagnant' concrete panels a quality of interactiveness in its environment.

Illus. 49 Photograph of model of Gran Via Expressway acoustic panels, Spain, EMBT (Enric Miralles and Benedetta Tagliabue) (EMBT 2007)

Illus. 50 Photograph of Gran Via Expressway acoustic panels, showing the coloured glass inserted into the concrete skin, Spain, EMBT (Enric Miralles and Benedetta Tagliabue) (EMBT 2007)

Illus. 51 Photograph of Pavillion Arcelor Luxembourg, showing their use of colour on the exterior of the building, Luxembourg, EMBT (Enric Miralles and Benedetta Tagliabue) (EMBT 2007)


Illus. 53a

5.2 ENRIC MIRALLES & CARME PINÓS

5.2.1 IGUALADA CEMETRY - BARCELONA, SPAIN

Starting Date: 1984
Construction Date: 1985-1994
Architects: Enric Miralles and Carme Pinós

The Igualada Cemetery or the Cemetery Nou in Igualada, near Barcelona was constructed between 1985 and 1994 as a replacement for the old “Cemetery Vell”. The cemetery became widely regarded as one of the most poetic works of 20th century Catalan architecture. (WIKIPEDIA 2007)

The project was conceived, in part, as an earthwork that transforms the surrounding landscape and also serves as part of a metaphor for the river of life. A processional route descends from the entrance and serves as a pathway toward the burial area. Concrete loculi serving as retaining walls, line the route. The intention was to bring the bereaved down into the landscape to a ‘city of the dead’, an in-between place where the dead and the living are brought closer together. The spaces are designed to provoke thoughts and memories for the visitors. (ibid)

The cemetery can be considered as architecture of the land that involves a humanization of the brief and appreciation of the topography.

The importance of this project is the inventive use of concrete, which act as burial retainers, as well as concrete retaining walls. The concrete loculi have been detailed to be robust, yet read like poetry to the bereaved visitors. The concept of the ‘in-between’ used by the architects, is also very important, as this can be seen to link with the concept of Louis Kahn; “Between Silence and Light”, where inspiration and exploration is achieved.


Illus. 53b


Illus. 53c


Illus. 53d

Illus. 53a-d Details of concrete loculi, Igualada Cemetery, Igualada, Barcelona, Spain, (1985-1994) EMBT (Enric Miralles and Benedetta Tagliabue) (Wikipedia 2007)

Illus. 52a-b Photographs of concrete loculi, Igualada Cemetery, Igualada, Barcelona, Spain, (1985-1994) EMBT (Enric Miralles and Benedetta Tagliabue) (Wikipedia 2007)

Illus. 52b

Illus. 54 Photograph of refurbishment of the old Novilon building for the LR Plastics Factory, Durban, 2005-2006, studioMAS and soundspacedesign. (LOW 2007: p.88)

Illus. 55a

Illus. 55 a-b Computer rendering of the refurbishment of the old Novilon building for the LR Plastics Factory, Durban, 2005-2006, studioMAS and soundspacedesign. (LOW 2007: p.88)

Illus. 55b

Illus. 56 Photograph of re-facing with custom designed bird proof concrete blocks to enable natural cross ventilation and filtering of northern light. LR Plastics Factory, 2005-2006, Durban, studioMAS and soundspacedesign. (LOW 2007: p.93)

Illus. 57 Photograph of the diner, where staff and clients can mingle and interact during the course of the day, giving a genuine humane dimensuon to a factory setting. LR Plastics Factory, 2005-2006, Durban, studioMAS and soundspacedesign. (LOW 2007: p.94)

5.3 soundspacedesign

5.3.1 LR PLASTICS - DURBAN, SOUTH AFRICA

Comissioned:	2004
Designed:	2005
Completed:	March 2006
Architects:	soundspacedesign
Brief:	To relocate the LR Plastics flexible packaging company from Prospecton into the old Novilon building.
Client:	LR PLASTICS

The old Novilon building was designed in the early 1950's, and is renowned as a landmark building, as it is an example of the modern period 'Mobeni-style' face brick factories that populated the Southern Industrial band of Durban. The clients wanted a design which is contemporary and representative of their hi-tech flexible packaging brand.

The addition of 3000m² of design, sales and administrative offices increased the existing building with 35%. This afforded the opportunity for architectural re-branding in the form of a re-imagined 'landmark', as well as a resultant urban form and new interior environment suitable for the everyday use of workers and management. (LOW 2007: p.90) The architects designed each department with a clear identity, with their own kitchen, ablutions and lounge as well as administrative offices. The building is refaced with custom designed bird proof concrete blocks to enable natural ventilation and to filter the northern light.(illus.56)In complimenting the existing building, a clean-lined modernist approach has been adopted for the design intervention, with uncluttered elevations. Large areas of glazing on the north and east sides allow for visual permeability in an attempt to integrate the environment with the building. The landscaping is also similar to the established landscaping adjacent to and outside of the property. In this way, the conventional boundary is contested,

Illus. 58a

Illus. 58b

and public space made to be an extension of the site. The interior of the building has been carefully redesigned, by evolving an appropriate language of detailing.(ibid:p.92-93)

The importance of this design is how the architects dealt with the redesign of an industrial landmark, while providing a contemporary building that reflects the client's profile. The design of the interior with the use of bright colours that contrasts with the nature of the industrial materials and machinery gives a more humane dimension to the factory setting, as well as the inventive use of concrete to provide natural ventilation and filtering of light in a factory.

5.4 GUNTHER HENN

5.4.1 VOLKSWAGEN PHAETON FACTORY – DRESDEN, GERMANY

Architect: Gunter Henn

Illus. 59a

Illus. 59a-b Exterior photographs of Volkswagen's Phaeton Factory, showing the landmark glass tower, Dresden, Germany, 2005 (AUTOSPEED 2005)

Illus. 59b

Illus. 60a

Illus. 60b

Illus. 60a-e Interior photographs of Volkswagen's Phaeton Factory, showing how the factory functions as a 'Transparent Factory', Dresden, Germany, 2005. (AUTOSPEED 2005)

Illus. 58a-b (left) Photograph of interior space, showing the careful redesign and appropriate language of detailing, establishing an engaging interior. LR Plastics Factory, Durban, studioMAS and soundspacedesign. (LOW 2007: p.90-91)

Illus. 60e

Illus. 60c

Illus. 60d

The factory is located at the intersection of Lennéstrasse and Stübelallee, and located 100 meters from the Dresden Botanical Gardens in the city centre. The factory's landmark is a glass tower almost 40 meters high and visible from a considerable distance - finished vehicles are stored within it, ready for collection.(illus.59) The idea of a brand new and truly unique automotive plant in the heart of one of Europe's most beautiful cities was realized by the architect, Gunter Henn, who also designed Volkswagen's Autostadt Complex, which is part of the company's worldwide headquarters in Wolfsburg. Volkswagen's Phaeton luxury class vehicle is built behind 27,500 square meters of glazed facades in a production area covering 55,000 square meters. The glazed area and 24,000 square meters of parquetry floor create a light, airy atmosphere. Phaeton customers are encouraged to come to Dresden to see their car being built. (AUTOSPEED 2007)

The factory has also been named the 'Transparent Factory', as it is a glazed factory that displays the whole process of building a luxury vehicle to the visitor. The factory is also designed in such a way that the production floor is uncluttered while in constant motion as well as maintaining a very high level of cleanliness.

Illus. 61 Exterior view of entrance to Plascon Factory, Krugersdorp, South Africa. Unknown architect. (Author 2007)

Illus. 62 Aerial Photograph of Plascon Factory, Krugersdorp, South Africa. Unknown architect. (Author 2007)

Illus. 63 Display products in reception area. (Author

Illus. 64 Aerial Photograph of Plascon Factory, Krugersdorp, South Africa. Unknown architect (Author 2007)

5.5 UNKNOWN

5.5.1 PLASCON FACTORY– KRUGERSDORP

Illus. 65 Display products in reception area. (Author 2007)

Unfortunately, the author was not allowed to take any photos of the factory itself or any of the internal processes within the factory. Therefore, only the exterior of the factory could be photographed. The architect of the factory is unknown. The photographs of aerial photographs in the administrationoffices vaguely show the layout of the factory,. It is evident that no formal architectural style is employed in the factory, with corrugated iron structures built haphazardly on the rectangular site.(illus.62+64) Five different plants exist in the factory, each with their own function. The general layout and requirements for a paint factory is very important, and this was the importance of including the Plascon factory in the Precedent studies, although no genuine architectural style was found in the design of the factory. This provided an opportunity for architecture and engineering to merge in the design of a paint factory, and not merely engineered, as is evident in so many industrial buildings in South Africa. (Author 2007)

Illus. 66 Exterior view of dispatch area. Plascon Factory, Krugersdorp, South Africa. Unknown architect. (Author 2007)