

BREAKING OUT [OF THE CYCLE]

sports, recreation, education and culture centre at the leeuwkoop juvenile prison



Philippa Frowein

This document is submitted in partial
fulfilment for the degree: Master of
Architecture (Professional) at the University
of the Witwatersrand, Johannesburg, South
Africa, in the year 2012



Prisoner enrolled in the Hlumelelisa Rehabilitation Program at Medium A, Leeuwkop (Photographer: Paul Bruns 2012)

“If we have the attitude that prisoners must
be left to rot away in jail, then we should
not be surprised that they are rotten people
when we release them”

Paul Bruns _ Hlumelelisa

[recidivism] - repeat offending after
experiencing the negative consequences of
the criminal action

I, Philippa Katherine Frowein (0706225A)
am a student registered for the course
ARPL7003 in the year 2012. I hereby declare
the following:

I am aware that plagiarism (i.e. the use of
someone else's work without permission and/
or without acknowledging the original sources)
is wrong. I confirm that the work submitted
for assessment for the above course is my
own unaided work except where I have
stated explicitly otherwise. I have followed
the required conventions in referencing
thoughts, ideas and visual materials of
others. I understand that the University of
Witwatersrand may take disciplinary action
against me if there is a belief that this is
not my unaided work or that I have failed to
acknowledge the source of the ideas or words
in my own work.

Signed: _____

ACKNOWLEDGEMENTS

I would like to dedicate this thesis to my family. To my dad, thank you for watching movies late at night to keep me company, for helping me to use the power tools at midnight and for all your love and support. To my mom, thank you for helping me through this rollercoaster, for proof reading all of my essays and for comforting me when I cried, I would never have been able to do this without the two of you! To Claudia, who brings me tea and makes me laugh – you are my biggest fan thank you! I love you all lots.

To Paul Bruns and the staff and students at Hlumelelisa, you have taught me so much. I will never forget the experiences you have given me and I am eternally grateful for everything you have done for me this year, thank you!

Richard Woodward, thank you for sharing the plans with me and for helping me where no one else could or would. Without your help, I would have been designing in the dark.

Grant, thank you for encouraging me when I was down and for being there to share with me in my small triumphs! Thank you for your humour, love and inspiration. To Dan, thank you for your support and friendship and for all the chats that kept me going.

Finally, thank you to Jono, Eric and Kiki. Jon, thank you for your patience, input, thoughts and direction, those brownies when I was stressed and for encouraging me to reach my full potential. Eric and Kiki thank you for your time, all of your help with my design and for your stories and inspiration.

All photographs in this thesis have been
taken by Philippa Frowein, unless otherwise
stated.



CONTENTS

00 Abstract	9	03 Programme	
PART 01	11	Introducing the SREC building	124
Introduction		The Brief	126
01 Theory		SREC Programme	128
Crime and Recidivism in South Africa	16	04 Concept development	134
Historical Development of Prison Architecture	19	Design process	
Breaking the Cycle of Recidivism	47	05 Design Development	148
Case Study: San Luis Obispo County Juvenile Services Center	52	06 Technology	158
Conclusions	74	07 Architectural Intervention	174
		08 Bibliography	186
PART 02			
02 Site			
Journal Entry 01: My First Visit to Leeuwkop Prison Farm	83		
Journal Entry 02: The Juvenile Prison	90		
Site Analysis	96		
Conclusions	116		



Prisoner enrolled in the Hlumelisa Rehabilitation Program at Medium A, Leeuwkop (Photographer: Paul Bruns, 2012)

A week before my nineteenth birthday, I was working in my garage with a friend, finishing an architecture project. My mom arrived home, parked on the pavement and chatted to us through the fence while looking for her keys. A silver golf raced up the road and stopped next to my mom's car. Three men got out the car. One went to my mom and pushed her onto the ground; he kicked her repeatedly and tried to bite her rings off her fingers. The other ran toward me and I threw a glass bottle at him so hard that it broke on his chest. He came at me with a gun and held it to my head. The other held a gun to my best friend's head. My mom screamed for my dad, so my friend and I started screaming too. I heard a gun shot and I wondered in that moment if I had been shot and whether we would die. My friend stopped screaming; they left us. My father had shot four bullets into the golf. I never knew about the gun that we owned.

The next day, my mother was blue with bruises. My father worries all the time that he could have killed someone. We have raised our walls, put up electric fences and I am afraid of the dark. This thesis is one way in which I am attempting to deal with my own traumatic experience, but also to contribute to a solution for crime in our country.

ABSTRACT

economic circumstances in the wake of historical political turbulence have lead to criminal behaviour, and the cyclical nature of criminal patterns. Growing crime rates are a feature of countries around the world, and various governments have attempted to deal with offenders by adopting 'tough on crime' strategies. Nevertheless, crime rates are increasing, and new research has shown that rehabilitation is becoming more relevant than punishment in the fight against recidivism.

In the White Paper on Corrections, published in 2005, the Department of Correctional Services identified the actual prison environment as a route cause of crime, calling the prison a "university of crime." Gang violence, rape and intimidation cause prisoners to commit crimes in an attempt to survive. On their release, they have the potential to be damaged individuals who pose a greater threat to society than before their incarceration. The White Paper suggests that rehabilitation of prisoners is the only way to deal with criminal reoffending and The Department of Correctional Services has fully committed to the theory of

rehabilitation in its legislation. Unfortunately most of the actual prison buildings in South Africa were designed purely for incarceration and punishment of offenders, and little thought has been given to spaces for rehabilitation.

This thesis deals with the retrofit of rehabilitation programme in existing problematic prison infrastructure in an attempt to deal with the high levels of recidivism in South Africa. South African prisoners have the right to sports, recreation, education and culture [SREC] activities, but currently participation is documented at only four percent. The juvenile prisoners at the Leeuwkop Prison Farm form part of the majority of young offenders without good SREC facilities, and it is the aim of this thesis to investigate the culture of Leeuwkop Prison and determine what is needed for both prisoners and prison staff in terms of offering rehabilitation and SREC facilities. This thesis will also focus upon the way in which a new SREC building can be used to integrate prisoners and the public in an attempt to address the stigmas associated with offenders in South Africa.

Post-Apartheid South Africa is experiencing documented crime rates considered unacceptably high by both members of the public and governmental agencies. Research indicates that poor socio-



Juvenile Prisoners
(Photograph from
Community Law
Centre 1997: 11)

INTRODUCTION

“Prisons can be an expensive way of making bad people worse”

(The British White Paper on Crime, Justice and Protecting the Public, in Oppler 1998: 45)

High levels of recidivism have contributed greatly to the unacceptably high crime rates in South Africa. While the government has attempted to address re-offending by punishing criminal behaviour in increasingly tougher prison environments, crime levels have continued to rise. The South African prison is fraught with corruption, overcrowding, violence, rape and intimidation, and new arguments have emerged that the prison environment itself, is a route cause of crime. The Department of Correctional Services has admitted that the prison has become a “university of crime” (Department of Correctional Services, 2005, p. 10) and has adopted rehabilitation as part of a holistic crime fighting strategy. Inevitably, the built environment lags

behind the progressive legislation, and our prison buildings do not embody the spirit of rehabilitation.

The aim of this thesis is to develop an architectural intervention for juvenile offenders that updates the existing problematic prison infrastructure at the Leeuwkop Prison Farm and reflects the new policies and theories on prisoner rehabilitation. The thesis is presented in two parts; the theoretical essay and the design of the intervention. The research component attempts to unpack the reasons for criminal deviancy in relation to psychology, society, social phenomena and spaces. It looks at the prison environment and the theory of rehabilitation, spatially, in an attempt to

discover how to create new spaces that can positively affect offenders’ behaviour. The second part of this thesis introduces the SREC (sports, recreation, education and culture) building as the architectural intervention based on rehabilitation ideals.

The theory essay aims to determine why South African prison environments aggravate criminal behaviour. It is argued that the spatial layout and programme of the prison can directly influence the behaviour of prisoners, while in detention, and after their release. The development of incarceration spaces is studied in relation to history, politics, psychology and human rights, through the analysis of four South African prison buildings, built in different eras of prison theory. The study is used to argue for rehabilitation in the failure of alternative models of correction, whose negative effects continue to effect South African prisons and crime statistics today. It is also acknowledged that South African social phenomena have developed from unique socio-political events, and that new prison buildings must respond to these specific factors. This essay will highlight

PRAYER
OF THANK GIVIN

HEAVENLY FATHER, I THANK U
INSPIRING ME TODAY TO BE SERVICIOUS
AND TO BE MOTIVATED BY
DREAM OF IMPACTING OTHERS WITH
INVESTMENT OF MY PERSONALITY.
MY THAT YOU'LL GRANT ME INCREASE
IN GRACE AND WISDOM TO SERVE U
THOSE FOR WHOM CHRIST DIED,
IN JESUS' NAME. AMEN.

PRAYER

FATHER, I THANK U FOR INSPIRING
TODAY THE URGE AND NEED TO BE
FOR MY CONGREGATION AND EVERY
MY WORLD. I DECLARE THAT
THROUGH YOUR WISDOM AND POWER OF
SPIRIT. I'LL USE WHATEVER POSITION
INFLUENCE I FIND MYSELF TO IMPACT
POSITIVELY ON PEOPLE AND HELP THEM
ACHIEVE THEIR GOALS AND REALIZE THEIR
GIVEN DREAMS, IN JESUS' NAME. AMEN.



Prisoner enrolled in the Hlumelisa Rehabilitation
Program at Medium A, Leeuwkop (Photographer:
Paul Bruns, 2012)



the social and psychological foundations of crime and recidivism that this thesis will be attempting to work with.

While new Generation prisons have been built in South Africa, but the prison system, as a whole, is still preoccupied with historical precedents on punishment and incarceration. The San Luis Obispo Juvenile Services Centre, an international precedent is analysed as a successful case study for a new rehabilitation building in South Africa. This building will greatly influence the thinking behind the architectural intervention at the Leeuwkop Juvenile Prison that this thesis is ultimately concerned with.

The design process has been a journey into a foreign environment and foreign culture. In the second part of the thesis, I have attempted to take the reader with me on this journey, so that they can experience the way in which preconceived ideas and clichés of the prison have been broken along the way. This will lead to a better understanding of the site, programme, challenges and surprises that this project is centred around.

The site analysis is represented through journal entries and analytical mappings that allow the reader to understand the culture of Leeuwkop as a place and a prison. The analysis was used to determine missing programme, in terms of rehabilitation, existing spaces, movement of prisoners on site and users.

In order to develop programme for a building typology protected by secrecy, I was given access to new generation prison plans, and the aid of a prison architect working for the Department of Correctional Services. The plans and diagrams are presented as part of the process of designing the brief.

The conceptual thinking through to technical resolution is presented in sequence following the development of programme and represents the way in which this project has progressed. The concept of the SREC building as an inversion of the current prison model is explored and developed into a building that has responded to a unique site and an interesting social environment.

Socio-economic factors and unique events in South African history have created a culture of violence and crime, especially amongst its youth. Various governmental agencies have attempted to deal with crime through the prison system, and its various forms throughout the history of this country. A major shift in prison philosophy has seen the adoption of rehabilitation of offenders as a solution to high levels of crime. This thesis seeks to understand the spatial requirements for a successful rehabilitation model in order to design the new sports, recreation, education and culture building for juvenile offenders at the Leeuwkop Prison Farm. In addressing recidivism within the prison environment, the project also deals with broader socio-economic issues, prisoners' basic human rights, overcrowding in the prisons, the high cost of imprisonment and ultimately, public safety.



The background is a solid orange color. Overlaid on this are white line-art patterns that resemble a stylized map or architectural plan. These patterns include various geometric shapes, lines, and clusters of small squares, suggesting buildings, streets, and urban layouts. The patterns are scattered across the page, with some appearing more dense than others.

01 | THEORY

CRIME AND RECIDIVISM IN SOUTH AFRICA

Crime plagues South Africans on a day to day basis, whether it is petty or violent crime. In 2010 alone, over 2.1 million people reported a crime, equating to forty four murders and one hundred and eighty two sexual offences per day. (South African Police Service, 2011) According to victim surveys conducted by 'Victims Against Crime,' it is estimated that sixty percent of crimes are never reported to the police due to lack of confidence in and access to our police service. (Herrendorfer, 2004) Such anger and fear has developed in the South African public that the government has developed "tough on crime" (Muntingh, 2005, p. 40) strategies to make prisons a deterrent to crime, creating longer jail sentences, overcrowding and stress on the prison system as a whole. (Department of Correctional Services, 2005)

According to the White Paper on Corrections in South Africa, (Department of Correctional Services, 2005) the country has the highest ratio of prison inmates to general society in the world. The prison system has been widely criticised as ineffective and expensive due to high reconviction rates, violence and corruption. Unofficial crime statistics tend to show an eighty to ninety percent recidivism rate of South African released offenders (Open Society Foundation for South Africa, 2010) and the Department of Correctional Services has admitted that the prison system has become a “university of crime” (Department of Correctional Services, 2005, p. 10) and a “breeding ground of criminality.” (Mr BMN Balfour in the foreword to the White Paper on Corrections in South Africa 2005) The prison is a violent place afflicted by overcrowding, inhumane conditions, gang activity, and idleness, all of which contribute to recidivism and re-offending. In an attempt to protect themselves from brutal rape, inmates join gangs whose initiation requirements involve murder or

disfigurement of other non gang members or wardens. (Harris, 2006) It follows, that a person can enter prison as a thief, but leave as a murderer. Most inmates will not serve a life sentence and will be released, however the prison environment has changed them, back into society. (Department of Correctional Services, 2011) It is therefore imperative that the prison system attempts to change inmates for the better and prevent further damage to the psyche of prisoners.

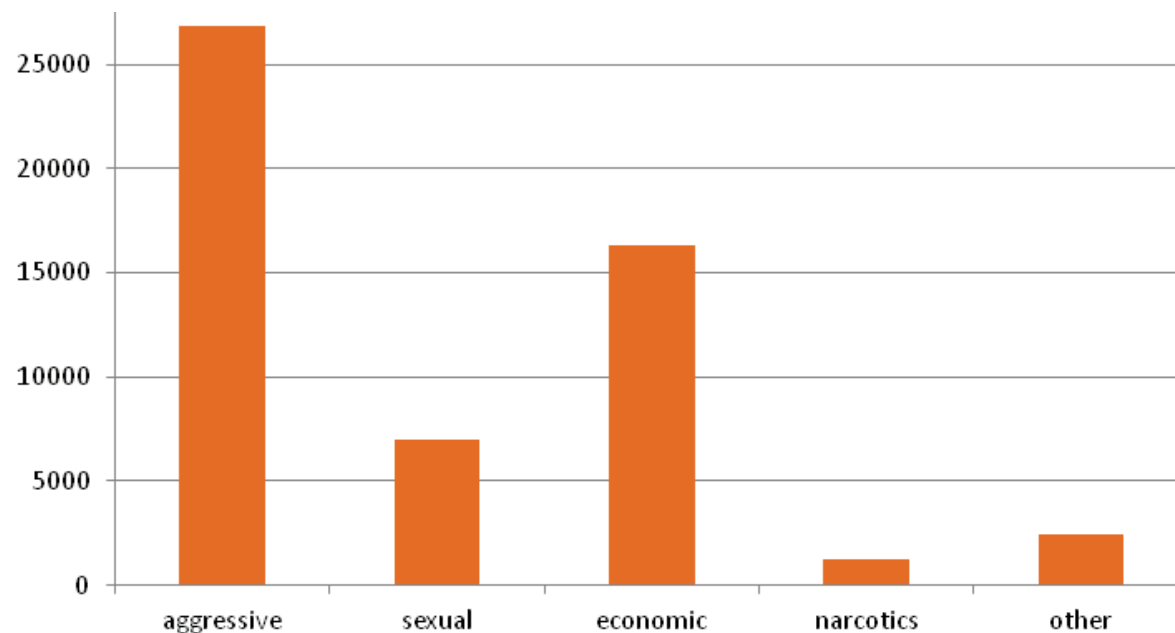
The youth of our country are the leaders of South Africa’s tomorrow. Of the total prison population, thirty four percent of prison inmates are between the ages of fourteen and twenty five. (Department of Correctional Services, 2011) Juvenile prisoners require special focus and attention, during and after incarceration, as recidivism among ex-convicts below the age of 21 is more prevalent than in adult offenders. (Martinson, 1979) Fifty four thousand seven hundred and seventeen juveniles under the age of twenty five are currently in jails in South

Africa, most of them for serious aggressive, sexual and economic crimes (Department of Correctional Services, 2011) Various socio-economic roles play a part in criminal behaviour of young people, and South African society becomes the victim of violent and criminal actions. It follows that society must become part of the solution to solve social problems, before and after juveniles come into contact with the law, and that the prison system must be adjusted to assist in the prevention of recidivism in an attempt to reduce crime and increase public safety. (Wolmarans & Jacobsz, 1994)

Crime in South Africa is a serious problem that affects criminals, victims, and society at large by lowering the general quality of life of the public by spreading fear and violence. Violent crime is rife within the young population and many juvenile offenders have been sentenced to time in prison. The prison has been proven to be ineffective by enabling the cycle of crime,



Juvenile Prisoners Indicating their Gang Affiliation (Community Law Centre, 1997:48)



rather than inhibiting it, and a new attitude of rehabilitation must be adopted in the justice system in order to prevent crime. While reducing recidivism will have an effect on crime reduction in South Africa, rehabilitative programmes also affect broad socio-economic problems, and addressing these issues will benefit many more people than just criminals. The ultimate benefit will be freedom for all South Africans in a safer society.

The Department of Correctional Services

has admitted that recidivism is a serious contributor to crime and has adopted rehabilitation into its legislation. The architecture of the current South African prison lacks adequate spaces for rehabilitative programmes, preventing them from becoming fully effective. In order to fully understand the current problems within the prison system, the history of incarceration theories must be explored, in conjunction with their spatial solutions and the way they have been adopted into the justice system.

HISTORICAL DEVELOPMENT OF PRISON ARCHITECTURE

Penal theory has passed through various philosophies, all of which have produced architecture that attempts to change the prisoner for the better through corrective punishment. The four main

eras of prison theory have been identified

as; retribution, deterrence, reformation and rehabilitation,

although various parallel theories have

existed at any one point. (Department of Correctional Services, 2005) While the theories and architecture may have been developed in Europe, South Africa adapted the prison, in its various forms, to suit its own social and political agendas throughout the various stages of its history.



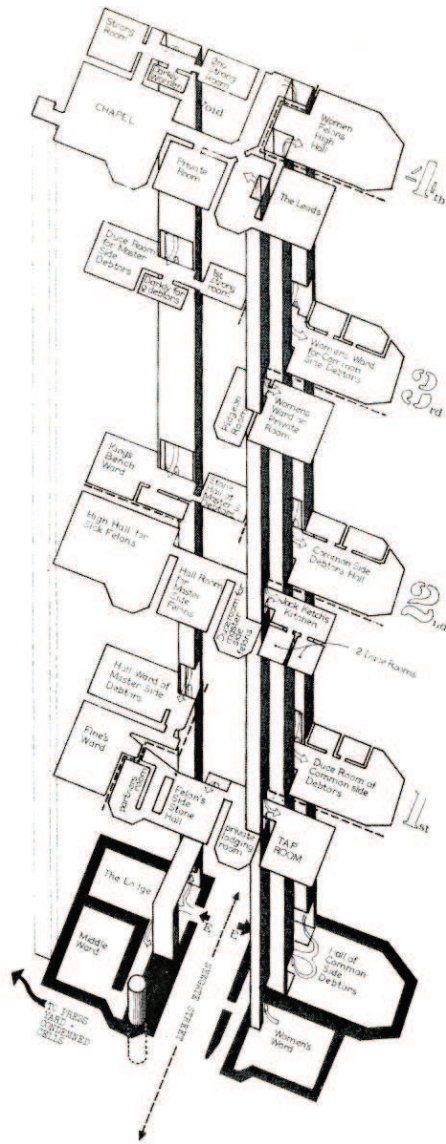
Dutch East India Company. Castle of Good Hope
 “Donker Gat”. Cape Town, 1666-1679 (Lou82, 2008)



Dutch East India Company. Castle of Good Hope
 Cape Town, 1666-1679 (Google Earth)



Dutch East India Company. Castle of Good Hope
 Cape Town, 1666-1679 (Photographer: Rodney
 Frowein 2012)



Northgate Gaol Analytical Drawing. (Evans, 1982, p. 38)

retribution

The retribution model seeks to exact revenge on the prisoner in a greater proportion to the crime that is committed; so that the pain of punishment is greater than the pleasure derived from criminal behaviour. Retribution ignores the victim and focuses on the individual responsible for the crime. The model assumes that the prisoner will connect his suffering to his crime and desist in criminal activities for fear of further punishment. (Muntingh, 2001)

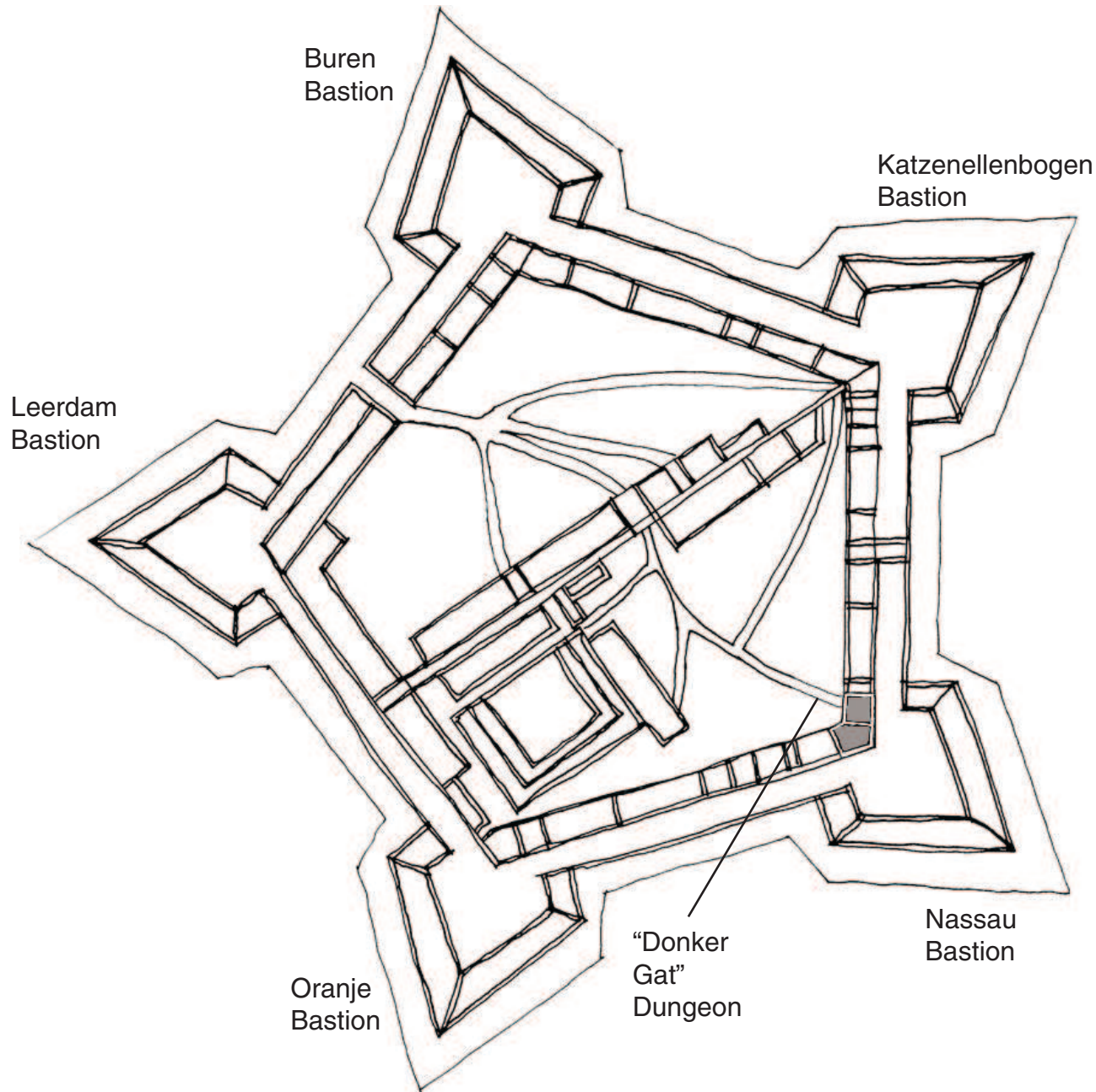
Early South African prisons adopted the retributive model for punishment, subjecting prisoners to torture, pain and sometimes death. Based on medieval dungeons and early gaols built in Europe, the early gaols were usually considered a place of containment, before the sentence was carried out in public. (Evans, 1982)

Gaols contained a small population of prisoners and were often housed within existing churches, palaces, city walls or castles, located on the outskirts of the city. The architecture of the prison was unremarkable, often domestic, and blended into the fabric of the city. Foucault explains

that the primary function of the dungeon was to contain prisoners, deprive them of light and to hide them away from society. (Foucault, 1977) The typical features of early prison buildings included dark, damp rooms, originally buried underground with stone walls and low vaulted ceilings where prisoners were chained to the walls or floors. The European prison complexes were very permeable, allowing public access to taverns, brothels and shops located inside the complex. (Evans, 1982)

The earliest example of a retributive gaol in South Africa was built in the walls of the first colonial building to be built on South African soils. The Castle of Good Hope was constructed between 1666 and 1679 as a fort for the early settlers of the Cape. A dungeon and a torture cell were built in the walls of the castle and were used to detain prisoners including local tribesmen, slaves and petty thieves. The law at the time stated that prisoners must confess to their crimes before they could be convicted and the torture chamber was used to draw out confessions from terrified offenders. Many prisoners were executed within the castle walls. (Morkel, 2006)

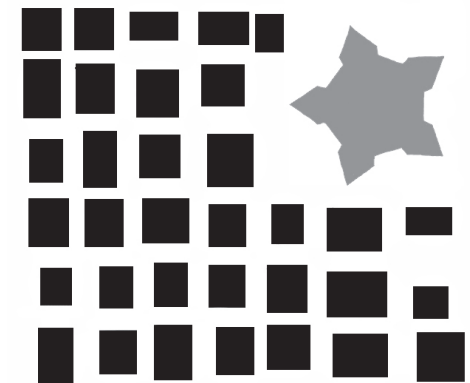
The dungeon rooms were built with stone



walls and floors and a vaulted stone ceiling. The dreaded “donker gat” (Morkel, 2006) had no windows, and a small steel door. The castle was built so close to the shore line, that at high tide, the rooms would flood. In an attempt to remedy the problem, the prison guards were made to dig a hole in the floor to drain the water, but the hole only made the flooding worse and inmates were left in the dark, chained to the walls, with water to their chests. (Morkel, 2006)

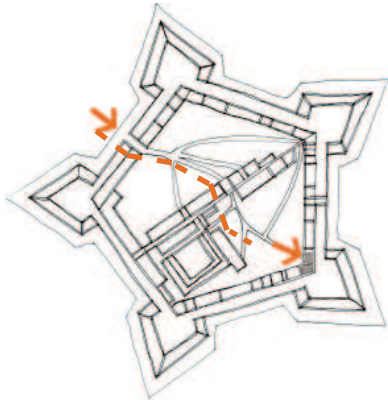
The castle is here analysed in terms of context, access and circulation, security, surveillance, public permeability, rehabilitative activities and cells. It is then compared to buildings from other eras, analysed in the same way .

context



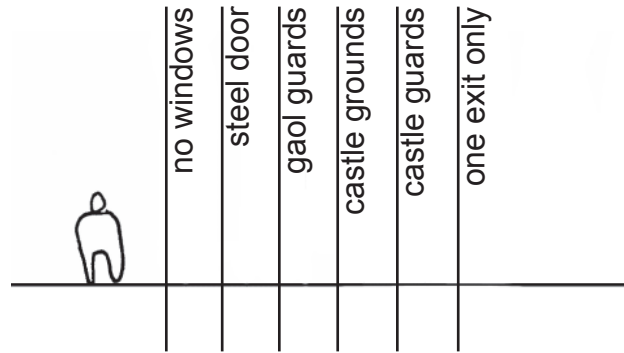
The early gaol was situated within the city or on its outskirts, in existing buildings and city walls.

access



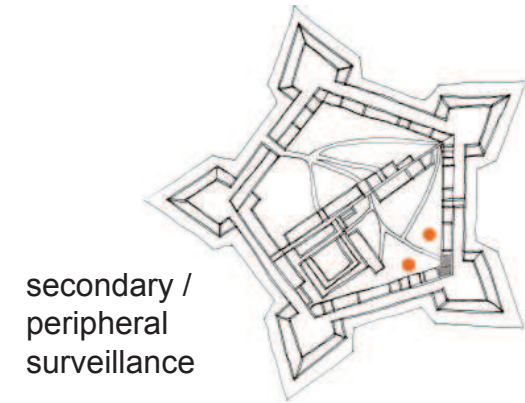
Access was through the outer gate, through the castle grounds and through the gaol's door.

security



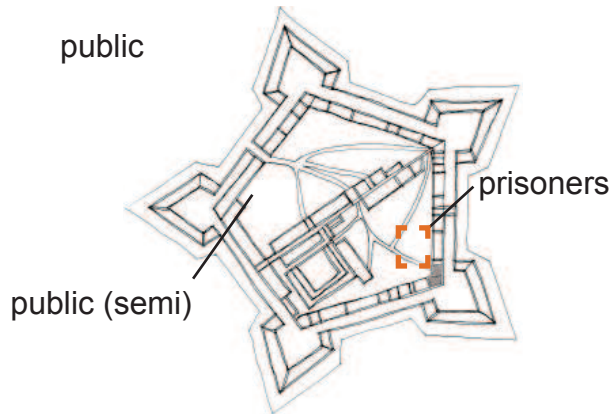
Security did not determine the shape or aesthetics of the gaol. The only security was the cell door and the guards

surveillance



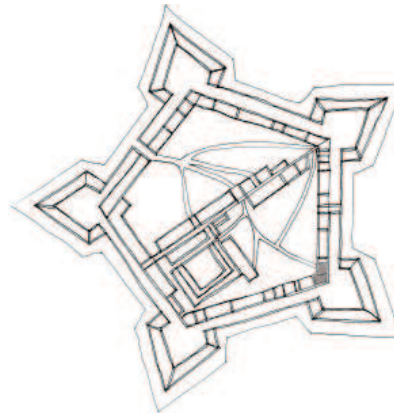
The gaol guards kept watch over the prisoners. The large courtyard allowed people living in the castle to also keep watch

permeability



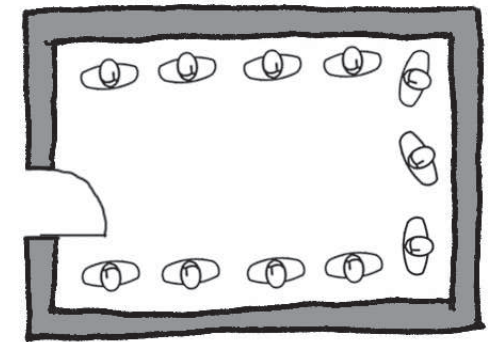
Civillians lived within the castle so the complex was very permeable. The actual cell becomes private.

activity

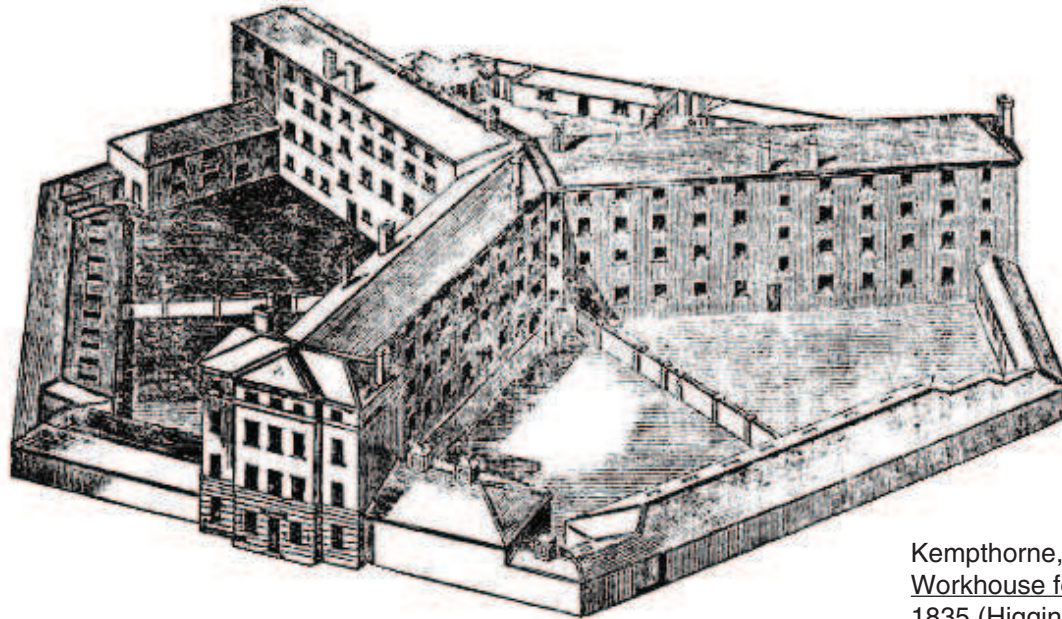


No meaningful activities are provided. The result is idleness and boredom

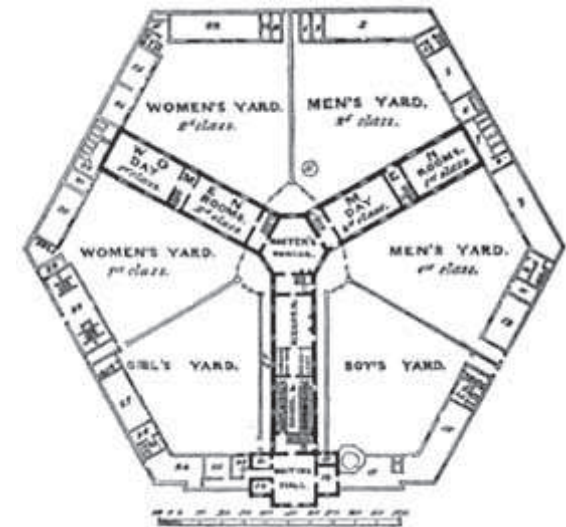
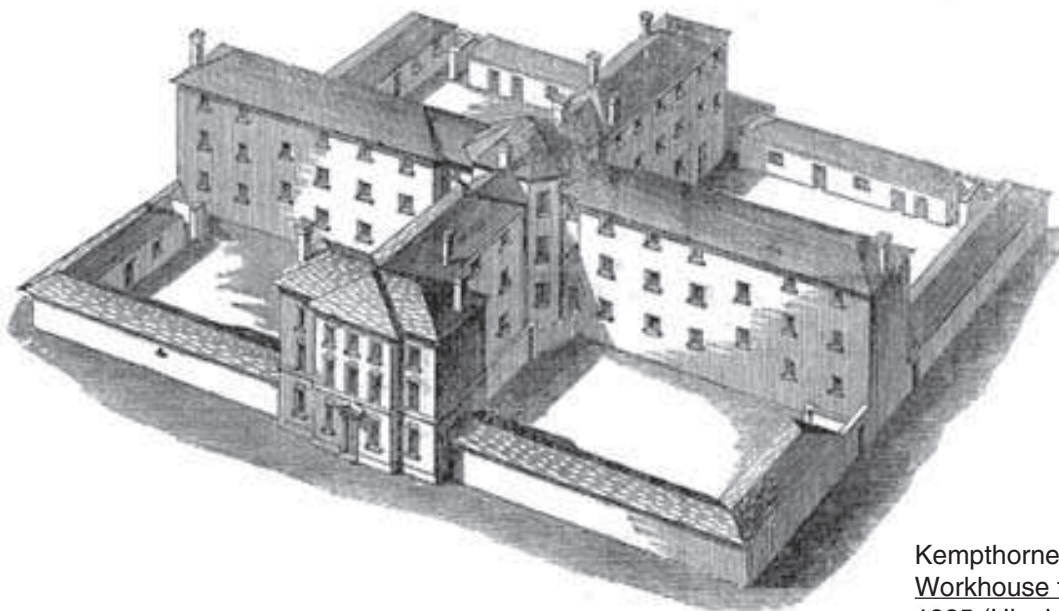
cells



Prisoners were kept in communal cells, chained to walls or floors. There are no windows.



Workhouses in England: These buildings were specifically designed around control. The workers are separated by both gender and age. The poor were criminalised and held on the pretence of assistance, but were extorted as cheap labour for factory owners.



Kempthorne, S. Y Plan
Workhouse for 300 Paupers.
1835 (Higginbotham, 2012)

deterrence

The second distinct phase of prison theory, the deterrence model, uses an environment that is punishment in itself and aims to scare prisoners into becoming good citizens. The theory here is that prisoners will stop offending once they have experienced the negative effects of the prison, and that general society will see how prisoners are treated, discouraging them from committing crimes themselves. (Muntingh, 2001)

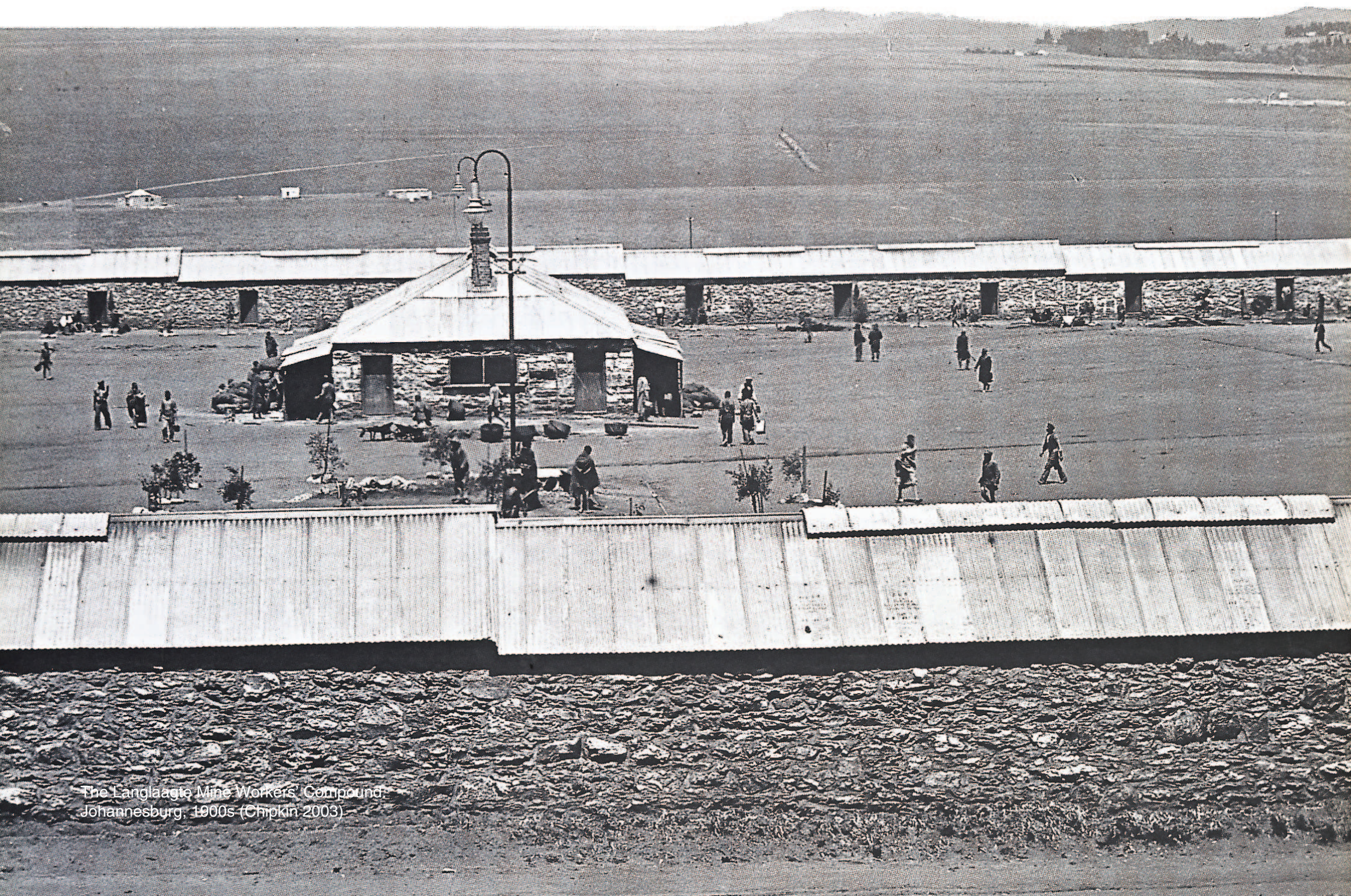
Both internationally and locally, the workhouse model was used as a deterrent for crime, where the socially unacceptable and idle were forced to work on menial tasks, and disobedience was punished

through torture, solitary confinement and the withdrawal of privileges. In England, the Poor Law was passed in 1834, forcing poverty stricken and homeless, men, women and children to go to work in the workhouses that housed thousands of prisoners. (Beckett, 2012)

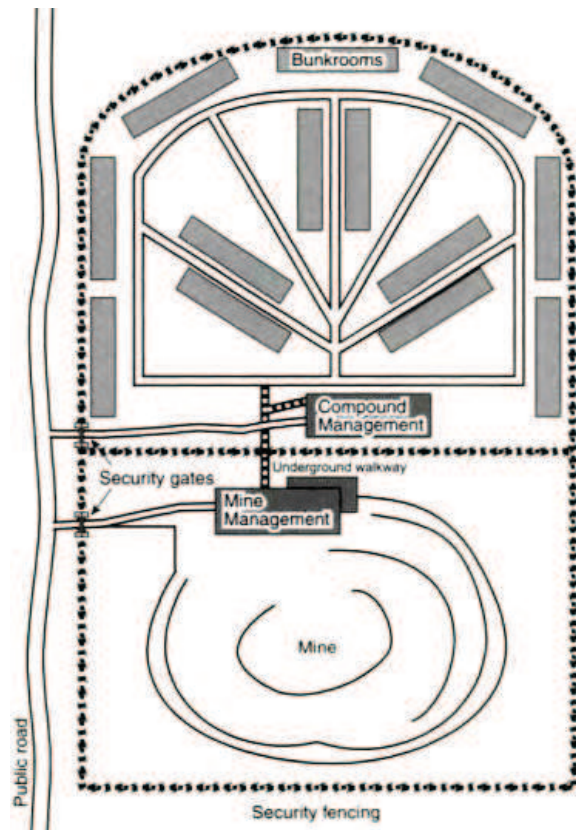
In South Africa, the government adopted the workhouse model to secure a cheap black labour force, creating the mine compound as a prison outpost. (Oppler, 1998) The mine workers' compound originated in Kimberley in 1870, upon the discovery of diamonds and was used to house the mine workers and control the illegal trade of diamonds by workers. (Weiss, 2011) The design of the compound was reproduced on the mines of the Witwatersrand, after the discovery of gold in 1886. The invention of Apartheid laws such as the Pass Law criminalised people of colour, banishing them to the all-black-male mine compounds and by 1985, ninety eight percent of all workers were living in compounds. (James, 1992)

Many thousands of people died in the mine workers' compounds, notorious for poor conditions, overcrowding and malnutrition. (Weiss, 2011)

Although compounds in South Africa were built in various sizes, all were designed for the control of a large population of black workers. The compounds separated workers from the external political environment and used the segregation of religious denominations and cultural backgrounds to exert power over the masses. Designed as prisons, the closed buildings detained workers for the full duration of their contracts, unless weekend passes allowed individuals to leave the compounds. (Elphick & Davenport, 1997) The buildings were surrounded by high iron fences and barbed wire, and the compound gates were strictly guarded and lit up at night. (Johnstone, 1976) Compounds were located next to mine shafts, and catered specifically to one shaft. The compounds were linked to the mines by an underground tunnel and entrances and



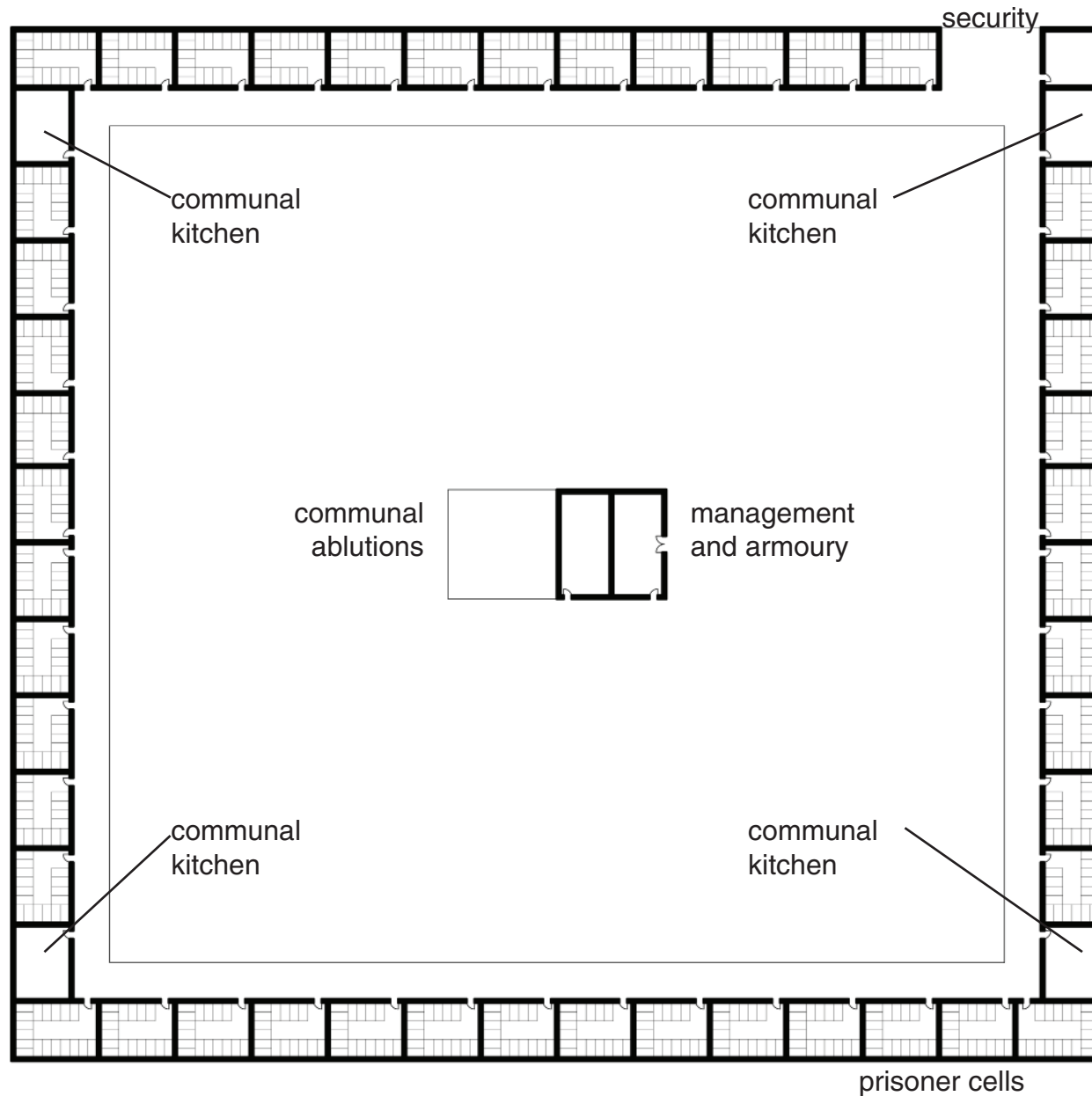
The Langlaagte Mine Workers' Compound
Johannesburg, 1900s (Chipkin 2003)



Mine Workers' Compound, South Africa (Panelli 2004: 172) showing the mine tunnel from the compound to the mine shaft and the security fences surrounding the compounds. This plan is not a typical square plan, however the surveillance has remained central and the dormitories make up the perimeter.

exits to the tunnels were heavily guarded. (Weiss, 2011)

These buildings were often characterised by courtyard architecture, with a taller perimeter wall and shorter inner wall, covered by an inward facing mono-pitch roof, making up communal cells for up to six thousand workers. (Weiss, 2011) A manager's office was set up as a central surveillance point, for easy control of the inmates. Weapons and ammunition were housed in the manager's office, and workers felt a strong omnipresent force and surveillance. (Johnstone, 1976) The workers had free access to the courtyard and were allowed to carry out activities such as dancing, singing, sports, games and church within the space. (Elphick & Davenport, 1997)



The mine compound was used as a prison outpost so that the mines were supplied with free prison labour. (Kallaway, P. & Pearson, P. 1986)

The conditions in the compounds were inhumane as prisoners were kept in poorly equipped cells that were overcrowded. (Kallaway, P. & Pearson, P. 1986)

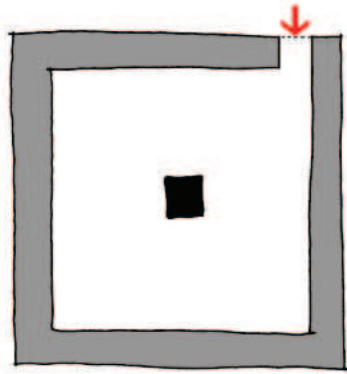
context



The Langlaagte Deep Mine Workers' Compound. Johannesburg, 1900s (after Chipkin 2003). All images generated from (Kallaway, P. & Pearson, P. 1986)

The mine compound was set up as a prison outpost where prisoners worked on menial tasks. They were situated next to mine shafts.

access



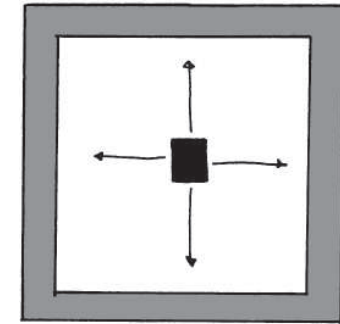
The compound had only one access point for security purposes. This access point is heavily guarded.

security



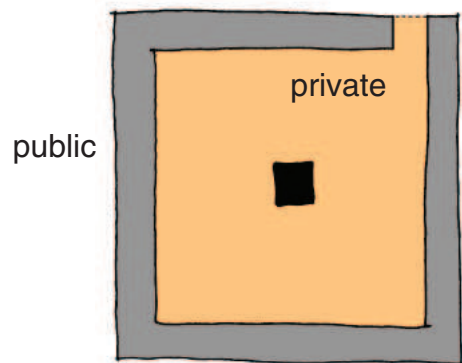
Escaping prisoners would have to cross large open spaces and avoid guards. The prison is surrounded by fences and barbed wire.

surveillance



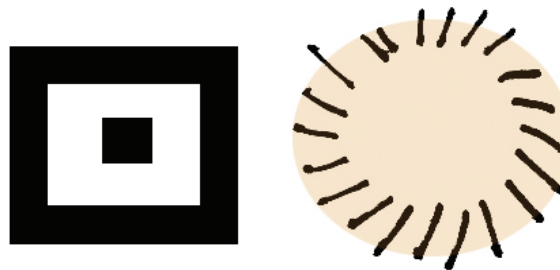
The central point is occupied by guards who have a 360 degree view of the prisoners' accommodation. This gives a feeling of omnipresent surveillance.

permeability



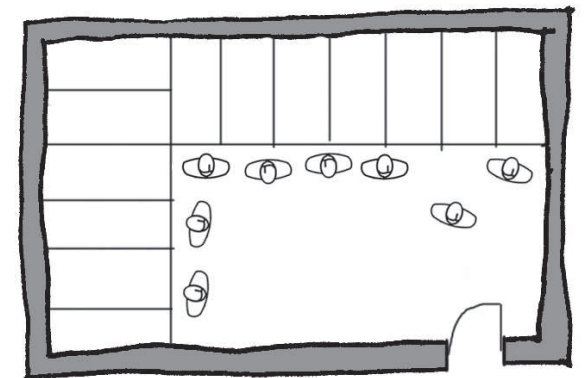
The courtyard architecture protects the private internal space. The public was not allowed in this building and the prisoners were not allowed to leave without passes.

activity

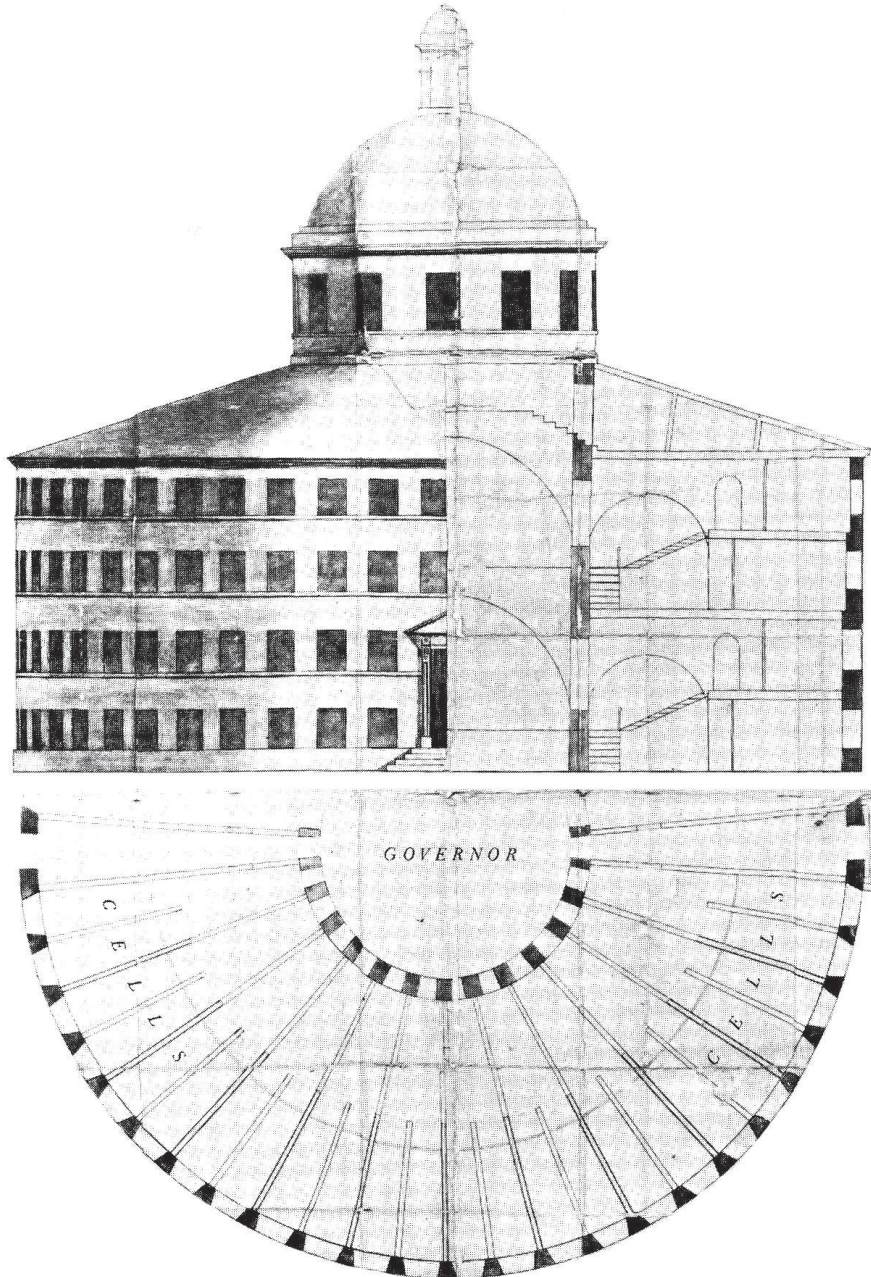


Prisoners were forced to work on the mine doing menial jobs in order to 'correct' their behaviour. The mine is next to the prison building and connected by a tunnel.

cells



Communal cells housed prisoners in terrible conditions. Beds were made of concrete trusses



reformation

The reformation model uses architecture to change a prisoner's behaviour from criminal to 'normal' by impressing morals, discipline and order on the offender. (Foucault, 1977)

The Age of Enlightenment saw society define and separate the criminal, insane, lazy or dangerous, from the 'normal' through town planning and architectural devices of control and power. (Evans, 1982) Geometrical, rational archetypes of institutions, such as prisons, schools, hospitals and asylums, were designed around efficiency and moral change, through work, solitary confinement and constant observation. (Crow, 2007) Prisons were strategically placed on the outskirts of the city in an attempt to physically brand the unwanted and remove them from society, until they had been 'corrected'. (Foucault, 1977)

Jeremy Bentham's Panopticon was designed

as a four storey circular building, whose perimeter was made up of one hundred and ninety two solitary cells on each floor. The cells' partitioning walls radiated from the building's centre point, allowing no contact between prisoners. Solitary confinement forced the prisoner to reflect inwardly upon his actions and ensured that no prisoners had the opportunity to share their criminal stories or plan a group attack. The entire cell could be seen from the centre point of the building, leaving no place for the prisoner to hide, and no privacy. The mental torture of loneliness replaced the physical torture of the previous prison models. (Foucault, 1977)

At the centre of the building was a surveillance tower block, given a god-like importance, separated from the cells by an exercise yard space. (Bentham, 1843) Each cell had a window to the outside, and one on the inside that corresponded with the tower's windows, through which prisoners' backlit silhouettes could be constantly observed. The tower was designed so that prisoners

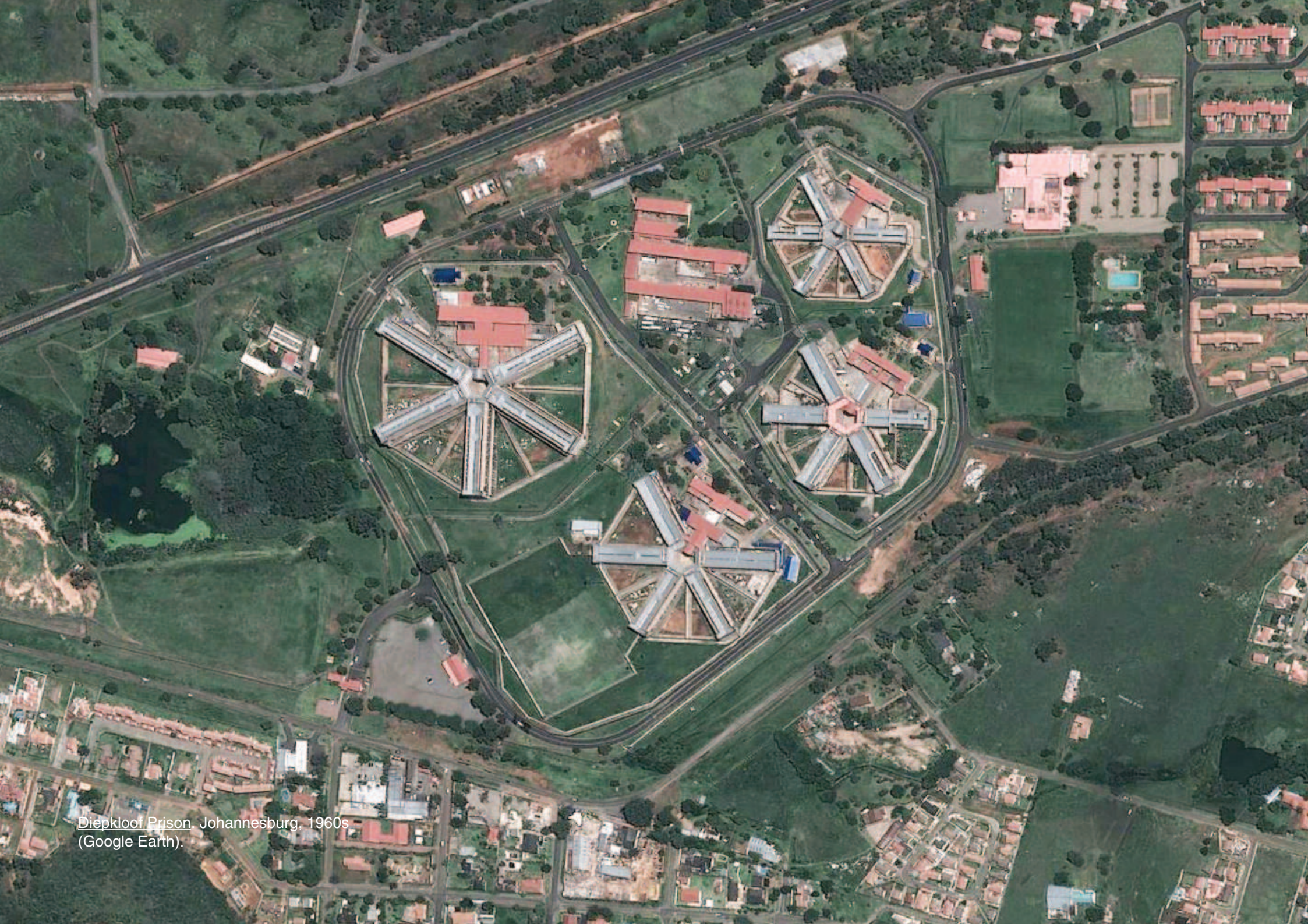
could not see any movement created by the guards within the tower, creating an illusion of the omnipresent observer. (Foucault, 1977) "[The prisoner] is seen, but does not see; he is the object of information, never a subject in communication" (Foucault, 1977, p. 200)

For the first time, the actual architecture became the mode of imprisonment, rather than retrofit ironmongery. The building became machine-like and the prisoners were given no opportunity to act outside of their roles, due to the ever present control and surveillance. Prisoners could be controlled from a central point by very few staff and managed as separate entities rather than a crowd. (Foucault, 1977)

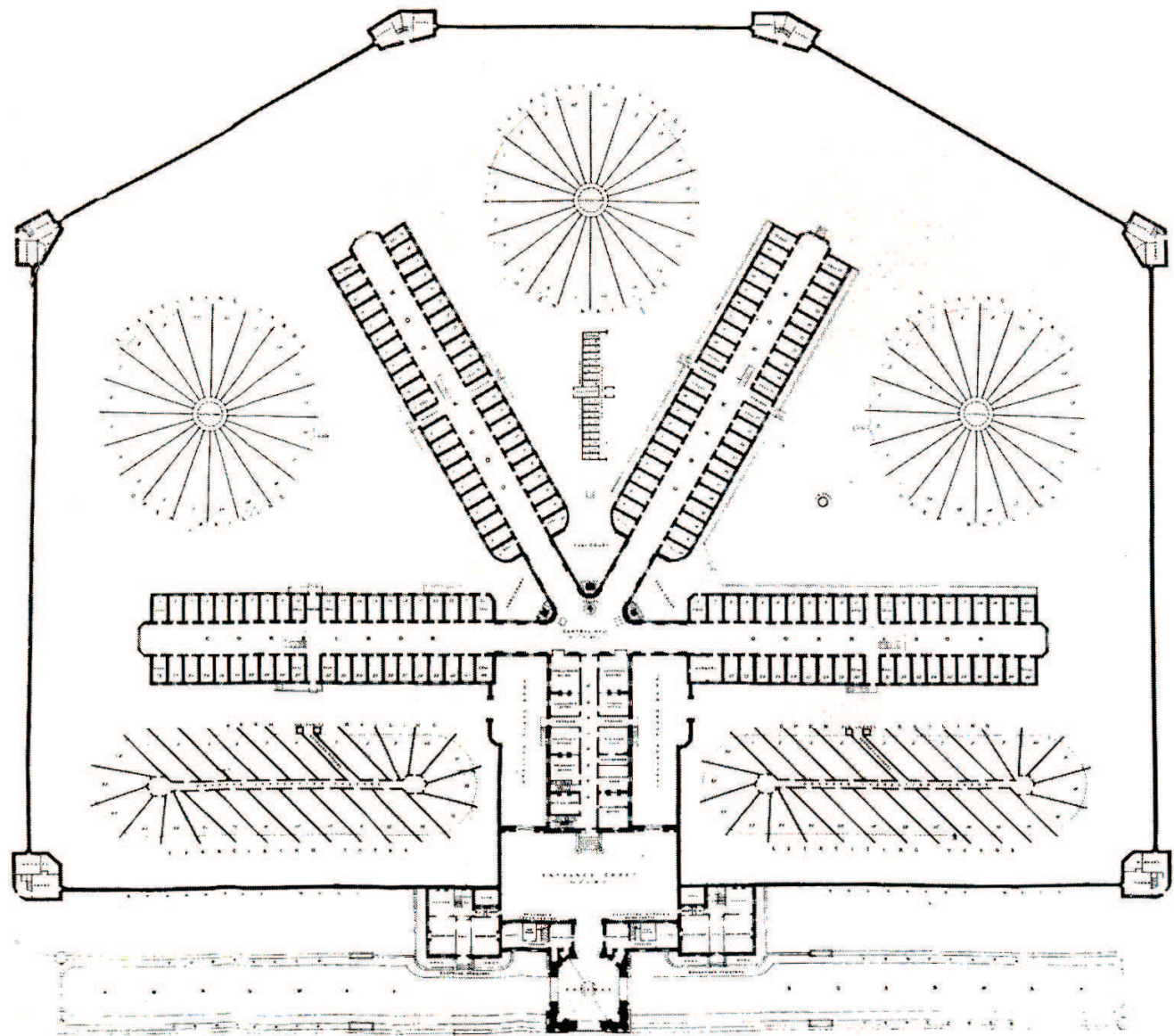
The archetype has been adopted and adapted for use around the world. Diepkloof Prison, in South Africa, is an adaptation of the Panopticon, developed by Joshua Jebb for the Pentonville Penitentiary in the 1840s. (Evans, 1982) The prison was built in the

1980s, in the twilight years of the Apartheid regime, in an attempt to regain control the black masses in Soweto. As in the design of the Panopticon, the prison centres on management and control functions, but radial arms of linearly arranged cells fly outwards from it. While the panopticon design allowed the use of the courtyard space created between the tower block and perimeter cell block for recreation, the space created between the radial arms is used for recreation in the radial arm model. (Evans 1982)

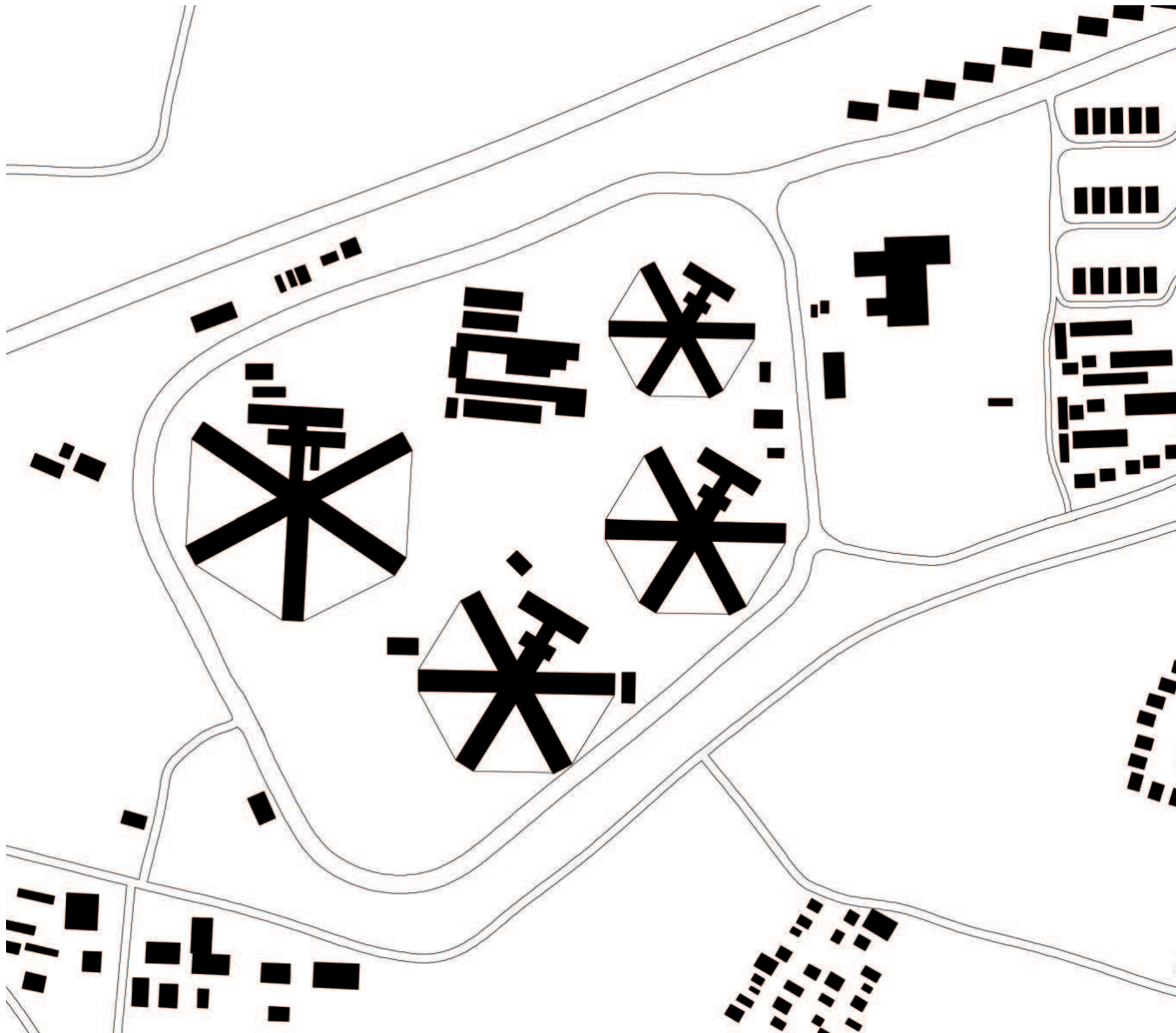
Left: Bentham, J. Panopticon. 1787 (Evans, 1982, p. 203). This figure is an illustration by Bentham showing the plan and sectional elevation of the Panopticon. Notice that the cells occupy the entire width of the perimeter block and that the tower windows are positioned for maximum surveillance of the prisoners.



Diepkloof Prison, Johannesburg, 1960s
(Google Earth).



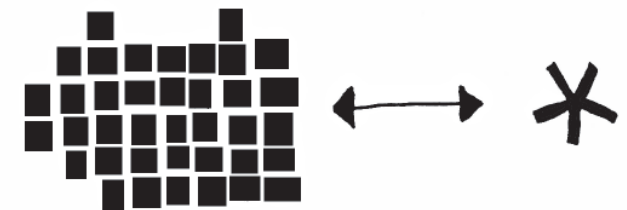
Right: Jebb, J.
The Model Prison.
 Based on Bentham's
 Panopticon in
 Pentonville, 1840-
 1842 (Evans, 1982,
 p350). This adaptation
 of the Panopticon
 was heralded as the
 model prison after
 the design was used
 for the Pentonville
 Penitentiary in the
 1840s



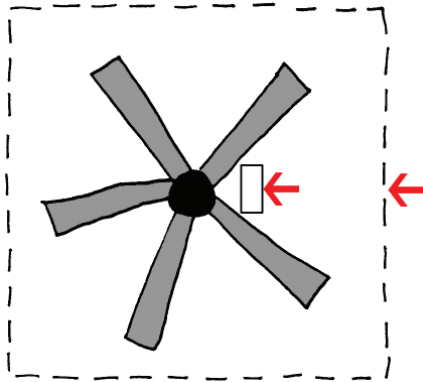
The Diepkloof Juvenile Prison is built using a wagon wheel plan, a derivative of bentham's panopticon. (Community Law Centre 1997)

Diepkloof is notorious for poor conditions and the buildings are severely overcrowded. The cells are dark and there are no windows facing outside, as designed in the panopticon. Bunk beds are used to prevent solitary confinement. (Community Law Centre 1997)

context

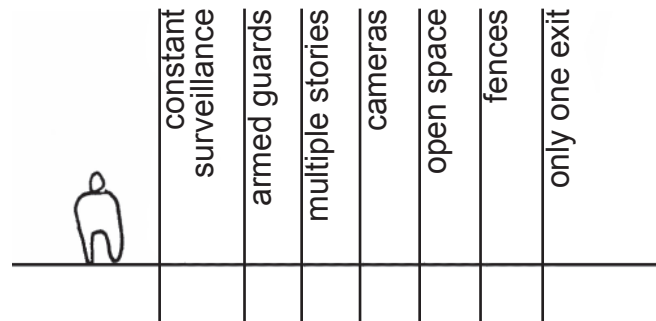


access



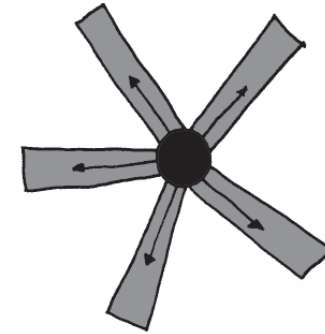
Access to the prison is through the property gates and then administration buildings. There is only one access point which is guarded and controlled.

security



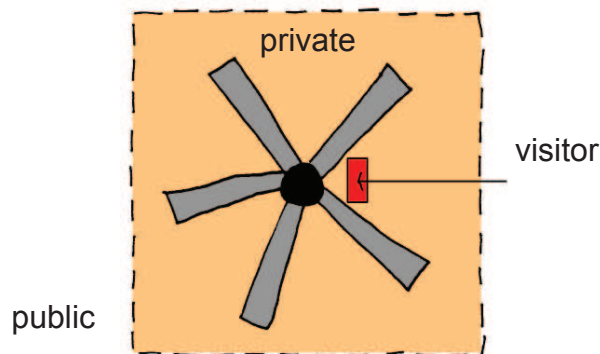
Security becomes complicated with panopticon surveillance, multiple gates and guards as well as open spaces. Modern technology has also aided security.

surveillance



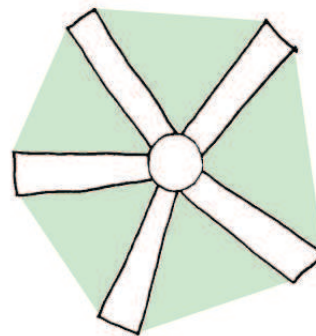
Panopticon surveillance allows to a minimal number of prison guards to prisoners. Prisoners feels that they are under constant surveillance.

permeability



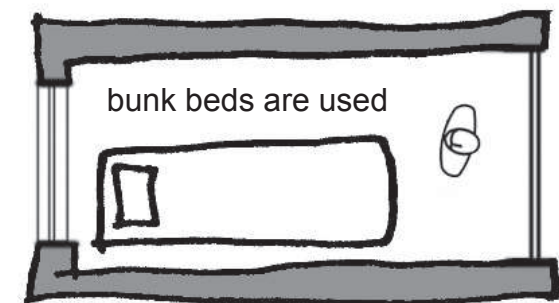
Public access to the prison is denied. Prisoners are allowed visitors, who have designated areas and time slots in which to meet.

activity



No meaningful activities are provided, except sports fields between building wings, but they are abandoned. The result is idleness and boredom.

cells



Solitary cells were designed so that a prisoner had no communication and anguished in mental torture. A window provided backlighting for easy surveillance.



Gryce, A. Grendon Hall. Grendon Underwood Therapeutic Prison, Buckinghamshire, 1882 (http://en.wikipedia.org/wiki/File:Grendon_Hall,_HM_Prison_Springhill,_Grendon_Underwood_-_geograph.org.uk_-_436628.jpg#filelinks) 2012

rehabilitation

High recidivism rates in South Africa point to the conclusion that the first three theories around incarceration do not achieve offender correction. The retribution and deterrence theories both require that the offender considers the consequences of his actions, before committing a crime, and require that the consequences of imprisonment are enough to scare a potential criminal into becoming a law abiding citizen. (Muntingh, 2001) While revenge often wins public favour, crimes are seen as transgressions against the state and the prisoner may serve his sentence without any regard for his victim or society at large.

In all three models examined the prisoner experiences punishment for the act that he committed, while the reasons for his criminal act and the influence he has had on his victim are ignored. (Muntingh, 2001) The growing numbers of prisoners and

re-offenders prove that the current prison system is in need of change.

Throughout history, several penal theories have been in circulation at any one time. The fourth theory, the rehabilitation model, was developed approximately two hundred years ago, reaching its peak in the 1950s, even though the dominant philosophy in the prison system at that time had been a retributive approach. (Crow, 2007) Rehabilitation is a “form of intervention that is designed to alter the way that offenders think, feel or behave” (Crow, 2007, p. 5) and is usually a carefully planned process of courses that target life skills, education, vocational skills, cognitive skills, personality and relationships with offenders in preparation for their release back into society. Rehabilitation courses are most successful when tailored to suit the individual needs of an offender, and are designed to treat each offender differently. The aim of the programme is to reduce recidivism and crime, but also to promote the social responsibilities of prisoners as part of

a community. Rehabilitation is often paired with reintegration; a process of “after-care” (Muntingh, 2005, p. 6) that assists released offenders in need of financial, educational, housing and employment aid. Rehabilitation focuses on the future endeavours of the offender, rather than his criminal act of the past, giving the prisoner a clean slate. (Crow, 2007)

The rehabilitation model has its roots in the reformation model and attempts to treat prisoners by altering their behaviour, rather than their morality. The theory of reformation can be traced to Cesare Lombroso (1835-1909), a positivist, who believed that offenders are born ‘criminal’ and should not be punished, but rather studied and analysed, in order to determine means of crime prevention and treatment of their ‘sickness’. In England 1962, Grendon Hall was converted to Grendon Underwood Therapeutic Prison, and was hailed a victory for the treatment model; (Crow, 2007) yet no therapeutic prisons were ever

built in South Africa.

The treatment model’s popularity came into decline in the 1960s and 1970s after various influential papers were published citing the failure of rehabilitative efforts. The analogy of criminality as a sickness that could be treated was becoming contested on the findings of ‘The English Convict: A Statistical Study,’ published 1913 by Charles Goring, who argued that criminality was normal, rather than pathological. Other critics fired at the unethical treatment of offenders in the prisons and the neglect of the victim in a penal system so focused on the offender. In 1974, Martinson published a report for the New York State Governor’s Committee on Criminal Offences with his infamous conclusion that “nothing works” in terms of rehabilitation and treatment of offenders, citing that none of the rehabilitative programmes significantly reduced recidivism. While his methodology has been widely criticised, even in a later report written by Martinson himself, the treatment of offenders became secondary to their punishment in

the prison systems throughout the world. While the treatment model became unpopular due to widespread criticism, the critics agree that it was not the theory itself that was flawed, but its implementation. From later research on the topic, it became evident that programmes must become offender and offence specific, and target the roots of criminal deviancy. (Martinson, 1979) The treatment model has been analysed and adjusted according to research and has been revived, worldwide, as the rehabilitation and reintegration model.

The rehabilitative model has produced the New Generation Prison, designed as an international prototype and implemented in several new South African prison designs. The new Kimberley Prison was designed and built as a new generation prison, and houses c-max prisoners, many of whom will never be released. Ironically, many medium security prisons such as Leeuwkop Prison, in the northern suburbs of Johannesburg, remain unchanged and outdated, in

desperate need of rehabilitation spaces for prisoners who are likely to be released.

The prototype buildings are one or two storeys high, with domestic style pitched roofs and facebrick walls. The prison complex is designed with a city-scale hierarchy from the central street to the housing unit. Rehabilitative functions such as the multi purpose hall, sports facilities and work spaces feed off from the central street. Smaller 'streets' lead to each housing complex, further divided into smaller housing units, grouped around sports facilities. This layout creates a decentralised management system, in stark contrast to the Panopticon, and allows for offenders to be classified and grouped as management requires. The move away from the institutional building allows each prisoner to feel a sense of place and identity and prisoner-staff relationships are improved.

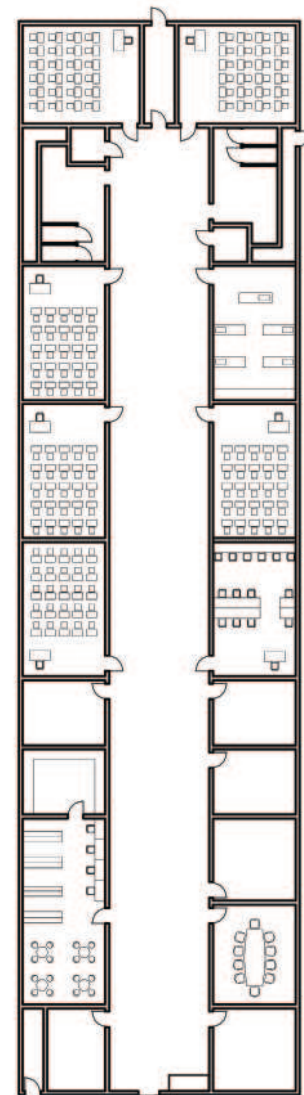
Each cell holds ten prisoners, and space has been allocated for desk space for

educational purposes. The cells are centred on a day room, where inmates may interact freely and engage in social activities and each node contains a laundry, kitchen, ablutions and management unit. These nodes are then grouped around the outdoor sports facilities.

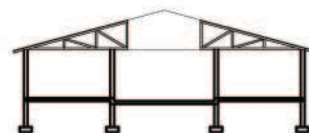
Rehabilitation of offenders occurs sporadically in prisons in South Africa, but without the necessary facilities and spaces to allow for adequate programmes. (April, 2012) The White Paper on Correctional Services has based its management of prisons first and foremost on rehabilitation, (Department of Correctional Services, 2005) yet South African prison buildings were generally built on theories of reform, incapacitation and deterrence, not rehabilitation, and are in desperate need of upgrades. Due to the incorporation of incapacitation theory, the justice model and 'tough on crime' strategies in the justice system, the prisons are overcrowded, leading to social problems, breakdown

of prison infrastructure and ultimately recidivism.

Prison theories and the way in which they are adopted into the Department of Correctional Services, have been moulded by public opinion and the fear of crime. While the theory of rehabilitation has been incorporated into the White Paper on Correctional Services, (Department of Correctional Services, 2005) the dominant theories in practice are the theories of retribution and deterrence after 'tough on crime' attitudes were adopted. The theory of rehabilitation needs to be implemented fully, in practice, in the outdated prisons in order to reduce recidivism and improve prisoners' human rights.



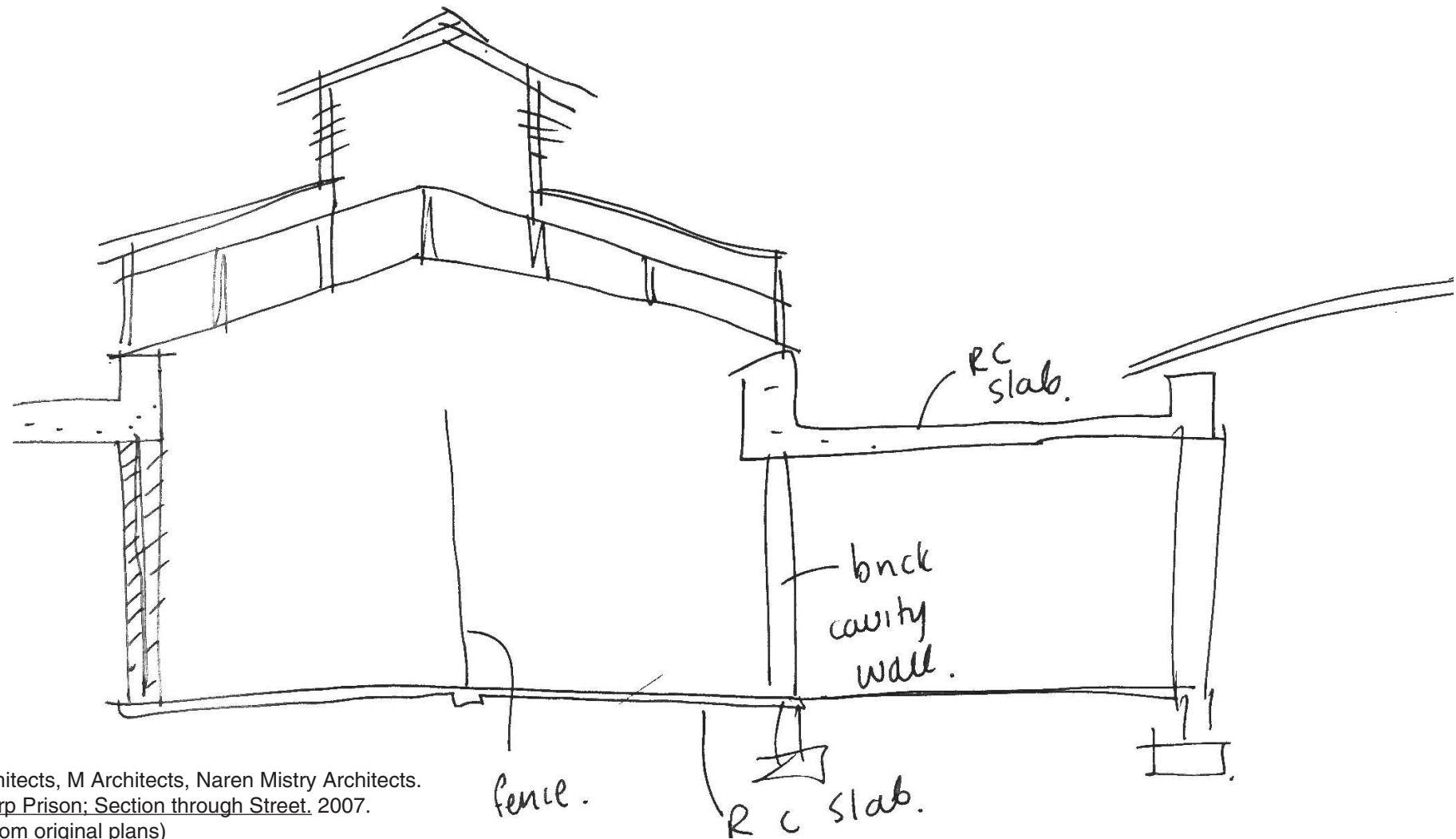
central street



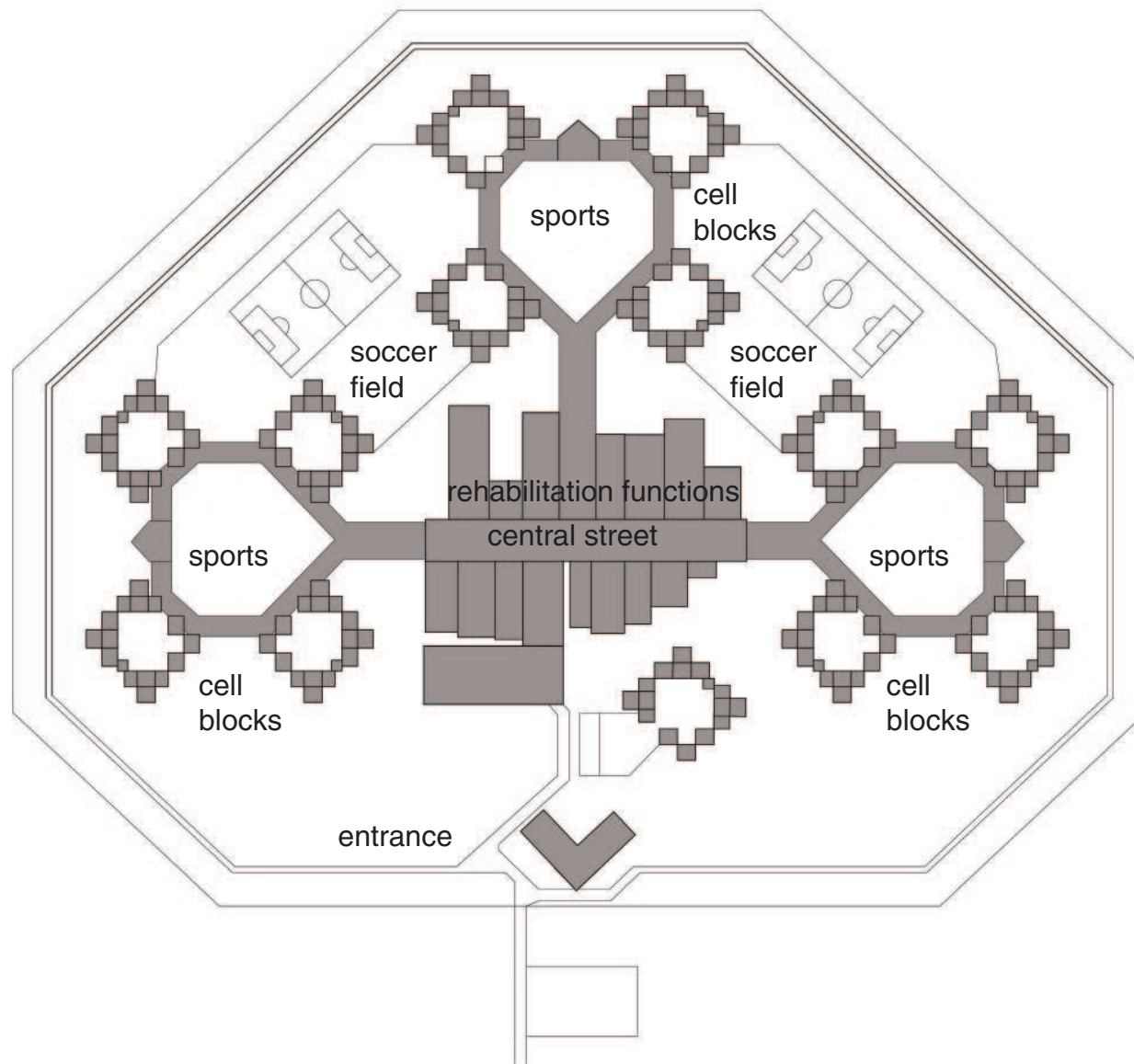
Left: RSL Architects, M Architects, Naren Mistry Architects. Klerksdorp Prison; education wing off the central street. 2007. (drawn from original plans) The education wing includes classrooms, science labs, computer labs and staff areas. There is a small library and meeting room. The section is domestic.



Aziz Tayob Architects. Kimberley Prison. Kimberley, 2010 (Google Earth, 2012) This new prison is designed using the New Generation Prototype. The housing units, grouped around the sports fields are clearly visible in this image. The central street with administrative, rehabilitative and security functions can also be seen in this image



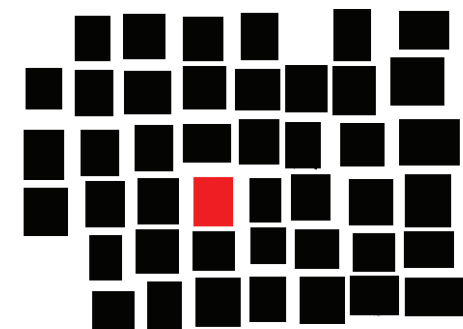
RSL Architects, M Architects, Naren Mistry Architects.
Klerksdorp Prison: Section through Street. 2007.
(drawn from original plans)



The new generation prison prototype has been designed to house rehabilitative facilities for prisoners.

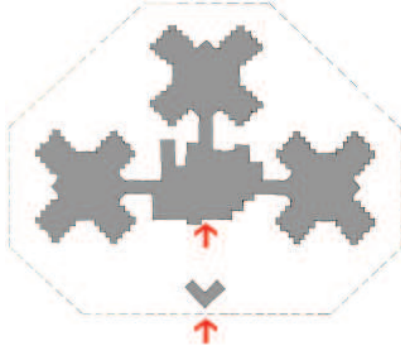
The new Kimberley Prison has been built using the prototype, yet holds prisoners with life sentences, who may never have a need for rehabilitation into society.

context



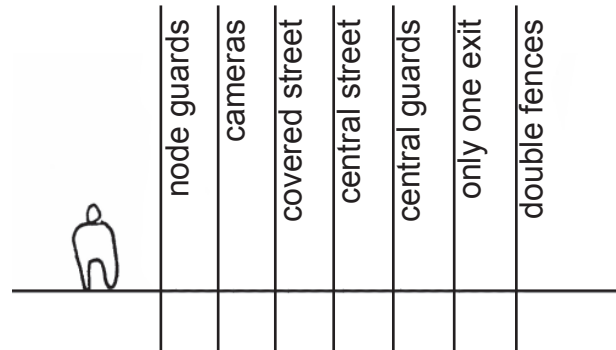
The rehabilitative prison should be in the city to allow for interaction between the public and the prisoners. Kimberley Prison is still located on the periphery.

access



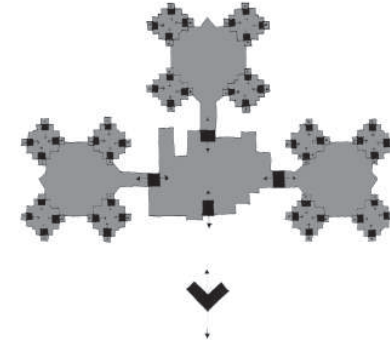
There is only one access point to the prison property gate, and then one entrance to the building. Prisoners circulate through internal streets.

security



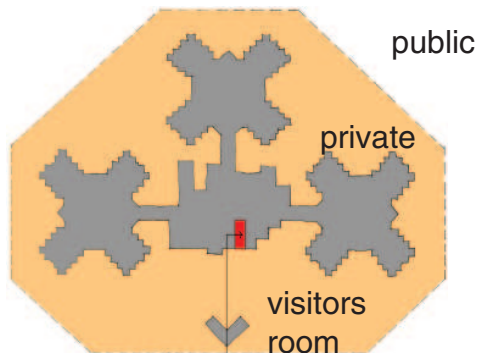
An escaping prisoner would need to pass through various guards and surveillance points. Security should be low in order to make rehabilitation work

surveillance



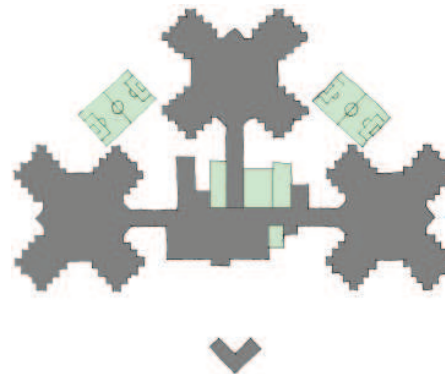
Surveillance is decentralised so that prisoners are controlled in small groups. The building becomes less institutional and more campus like.

permeability



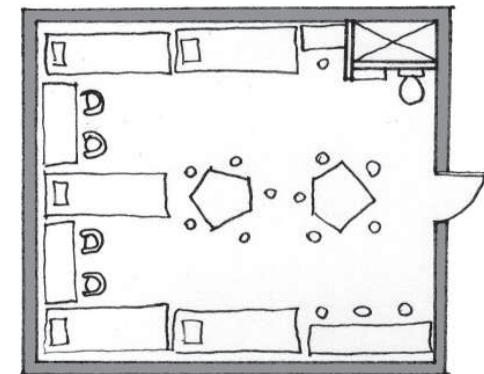
The prison remains inaccessible to the public. It should allow interaction for rehabilitation. This will help in reducing the stigma associated with inmates.

activity



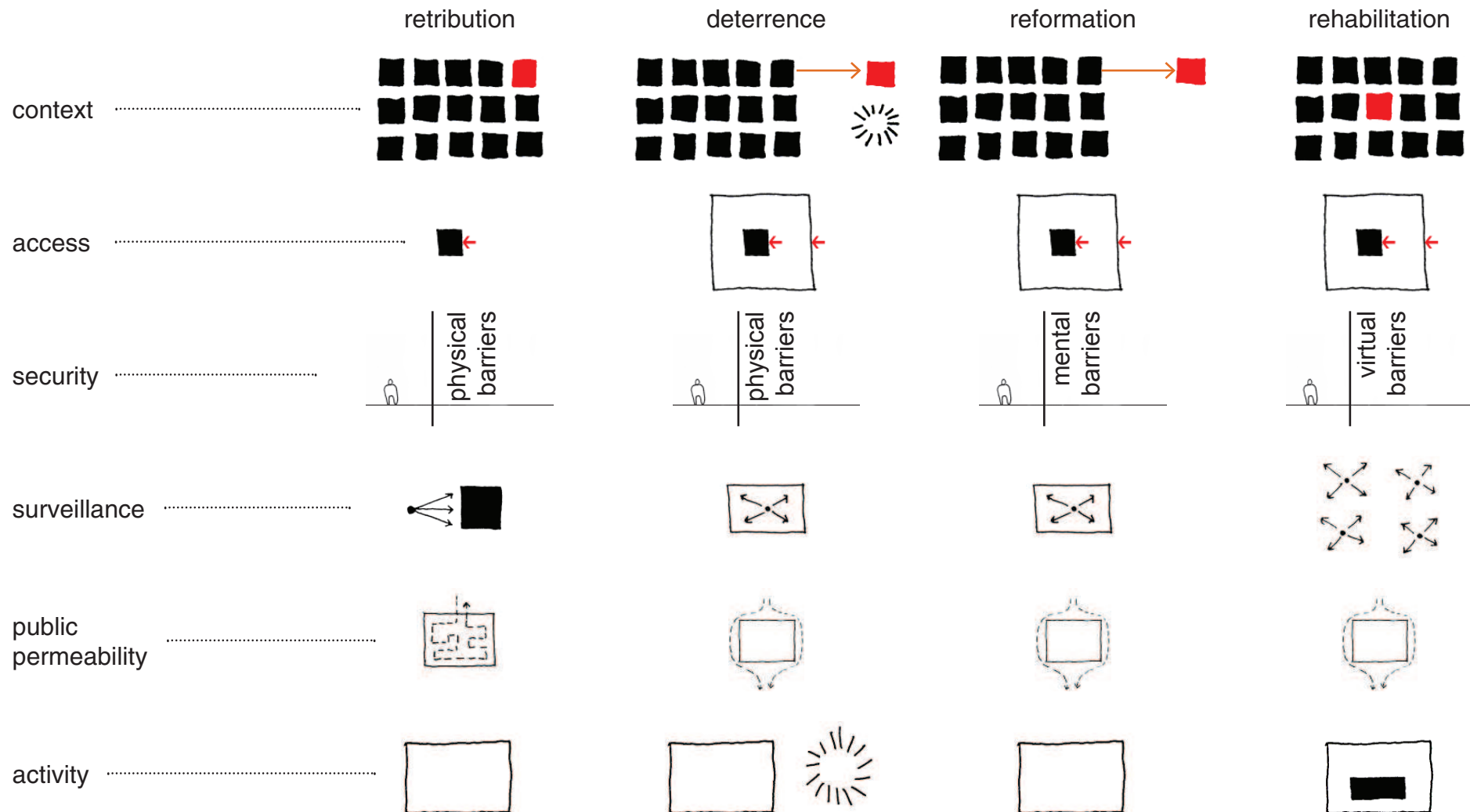
Sports, recreation, education, culture, therapy, skills development, religion and leisure spaces should be provided as part of the prison

cells



Ten prisoners stay together in a cell equipped with tables and desks for studying. Cells group around the day room.

typological analysis



Over the years the prison has moved progressively further away from the city, however, in recent times it can be concluded that the prison must re-enter the fabric of the city for the purpose of the rehabilitation of offenders.

Access to the prison has developed from direct access off the street, to a multi-layered access as a result of strict security. While direct access is desirable for a building, the element of security makes that near impossible.

Security has moved from physical barriers to virtual barriers. This allows for lighter, flexible architecture and interesting materials. The building must be mindful of the safety of the public, but security can be light, as prisoners will be low security.

Disbursed surveillance allows the wardens to have a greater control of smaller groups within the prison. The new building must allow for disbursed, discreet surveillance. Central surveillance is too institutional.

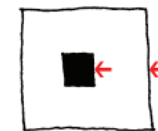
The original prisons were very permeable. Although the modern prison does not allow public access, for security purposes, certain aspects of the prison should be permeable in an attempt to develop prisoner-society relationships to deal with offender stigmas.

The new rehabilitative prisons have recreational and rehabilitative aspects built into the design of the prison. The new building must provide the missing activities for the existing South African prison that was built in the era of reformation.

THE NEW SREC BUILDING



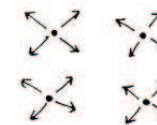
Building to attempt to include society.



Access established by the existing prison.



Modern materials, flexible design. low security.



Decentralised control and surveillance.



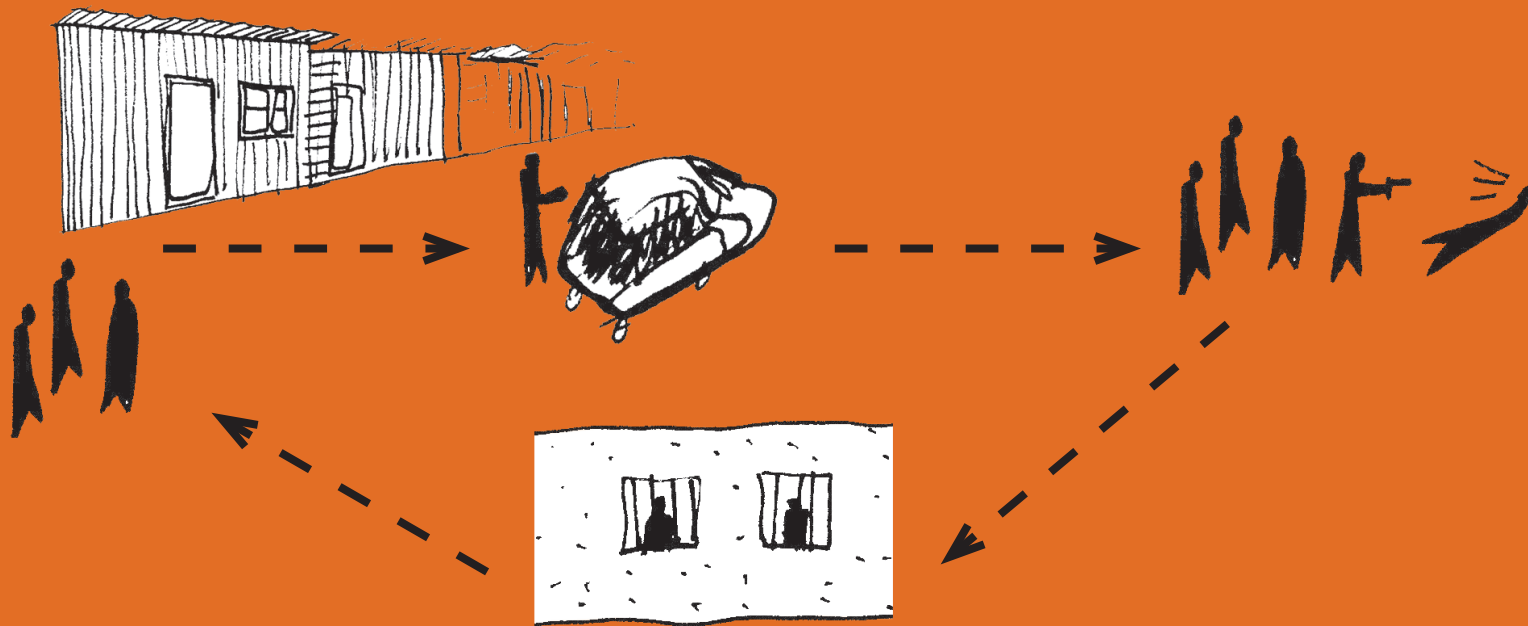
Prisoner and society interaction within building.



New programme, added to the existing building.

BREAKING THE CYCLE OF RECIDIVISM

In order to fully understand rehabilitation theory and the issues that rehabilitation programmes are designed to overcome, some reasons for criminal deviancy have been explored. It is also important to determine the reasons for the cyclical nature of crime and the role that the prison institution plays in recidivism.



In their paper 'The "What" and "Why" of Goal Pursuits', (2000) Deci and Ryan explain that human beings need to feel that they can independently achieve their own goals and belong to social relationships in order to maintain mental health and to mature psychologically. Those who live in circumstances that support these basic needs have an "intrinsic motivation" (Deci & Ryan, 2000, p. 233) to achieve life goals, the ability to internalise and adapt to extrinsic motivation and the continued motivation to achieve long term goals. Where social circumstances do not foster "competence, autonomy, and relatedness", (Deci & Ryan, 2000, p. 227) substitute needs such as drugs and alcohol or material needs may prevent vulnerable people from achieving their goals and forming good relationships. (Deci & Ryan, 2000)

The three basic psychological needs manifest themselves in life as the "nine primary human goods" (Muntingh, 2005, p. 11) which are behaviours and emotions that are directly linked to the three basic psychological needs. According to Muntingh the human goods are:

" life (e.g. health, optimal physical functioning, sexual satisfaction); knowledge; excellence in play and work, excellence in agency (autonomy and self directedness), inner peace (freedom from emotional turmoil and stress), relatedness and community (including intimate, romantic and family relationships), spirituality (finding purpose and meaning in life), happiness, and creativity" (2005, p. 11)

According to the "Good Lives Model" (Muntingh, 2005, p. 11) criminals often develop problematic life goals because of their own aggression, lack of direction and substitute needs, all developed from unsupportive environments and unfulfilled basic needs. Substance abuse, poor problem solving skills and anti-social behaviour sabotage an offender's ability to satisfy his own basic psychological needs. (Muntingh, 2005)

In South Africa, many socio-economic and historical circumstances have denied a large part of its population psychological security. People of colour in particular have experienced social, economic and

political oppression due to the Apartheid Government's racial laws, leading to migrant labour, a breakdown of family structures, cultures and traditions and a disruption in education. (Stumpf, 1994) The Department of Correctional Services believes that the history of violence in South Africa that developed in conjunction with the struggle against Apartheid has contributed to the "culture of violence" (Department of Correctional Services, 2005, p. 50) and very high levels of violent crime. Young South Africans are at the highest risk of offending as they are least able to support themselves psychologically, socially and financially and are usually marginalised in society (Schoeman, 1994)

Once denied the three basic psychological needs due to unstable socio-economic conditions, 'damaged' people may turn to crime, seeing no alternative, due to a lack of problem solving skills, basic vocational skills and inadequate education. Often criminals are sentenced to prison where the conditions worsen their ability to achieve basic psychological nourishment and the cycle is perpetuated. The purpose of rehabilitation is to break the cycle of criminal recidivism, once an offender has come into contact with the law. There are various ways in which the



Juvenile Prisoners (Community
Law Centre, 1997:2)

cycle of recidivism is maintained, and may be broken.

Recidivism refers to the cycle of offenders re-committing a crime after experiencing the negative consequences of a previous offence. (Little, Fowler, & Coulson, 1990) While the prison is traditionally set up as a deterrent to crime, the recidivism rate among South African offenders is extremely high, revealing that the prison does not serve to reform offending behaviour. Some have argued that the prison system may even contribute to criminal behaviour. (Muntingh, 2001) Lukas Muntingh (Muntingh, 2005) argued that there are eight contributors to criminal recidivism including “normative heterogeneity, institutionalisation..., criminal careers..., social factors, alcohol and drugs ..., and family and community.” (Muntingh, 2005, p. 15) These factors will be considered in greater detail below.

Often the morality of an offender is addressed the rehabilitation process. Prisoners are faced with a harsh, dangerous environment and may make strategic survival decisions rather than the ‘right’ choice. Young offenders often join gangs in prison in order to protect themselves from rape, violence and even death, but in turn, find themselves obliged to take part in

criminal activities, even after their release. When large numbers of gang members released into a community, it can cause instability and further deviancy in the whole community.

The prison environment and incarceration have been identified as factors that increase recidivism for various reasons. In a workshop designed to address juvenile offending, it was concluded that institutionalisation should be a last resort as punishment for young criminals and that where juvenile delinquents are detained; they should be cared for and assisted, rather than punished. (Wolmarans & Jacobsz, 1994) The prison can have serious mental, physical and emotional effects on its inmates known as “carceral suffering,” (Muntingh, 2001, p. 4/6) related to the confined spaces and overcrowding of prisons. Symptoms include loss of concentration and memory, deterioration in eyesight, hypersensitive hearing, chronic attempts to make oneself unimportant and unnoticed, suicide and trauma related stress. (Muntingh, 2001)

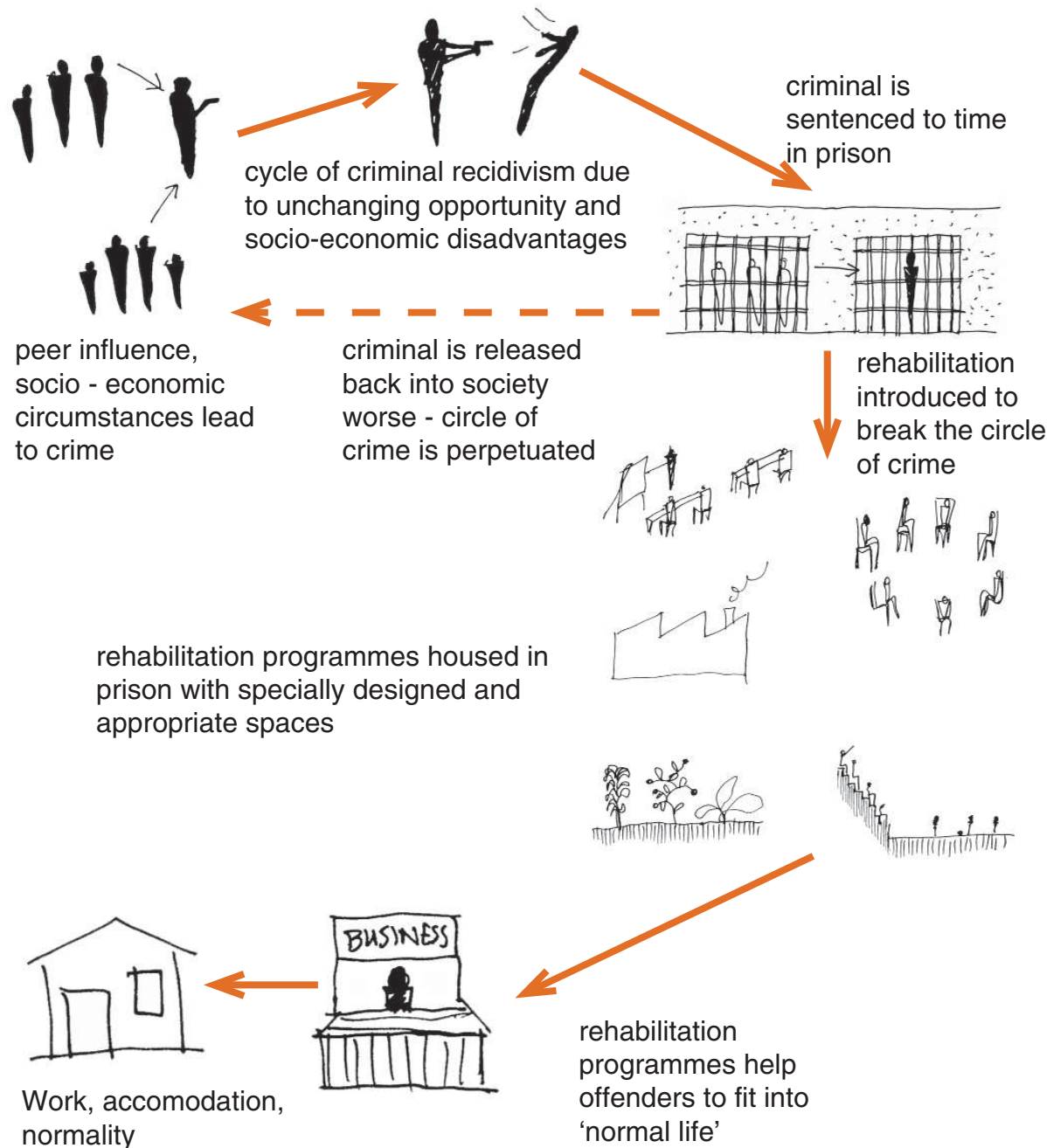
In South African prisons, many inmates are subjected to gang violence, mutilation, rape, serious injury, death and assault at the hands of other inmates and prison

guards. (NICRO, 2011) Young prisoners are recruited and initiated through violence into protective gangs, such as the numbers gangs, where they consolidate a life of crime. (Harris, 2006)

Long term prisoners are at a greater risk of psychological damage due to long durations of containment without rehabilitation programmes, which are usually initiated near the end of a sentence, before which they may negatively affect other inmates. (Muntingh, 2005) They bide their time in prison without stimulation or rehabilitative initiatives. Boredom and idleness lead to conflict and deviant behaviour. (Oppler, 1998)

By providing programmes with which prisoners can engage, time is spent on meaningful endeavours that eliminate boredom, but also provide opportunities for social and emotional development.

Social exclusion and stigmas are associated with released prisoners, who find that the punishment for their crimes continues into their lives after prison. (Department of Correctional Services, 2005) Prisoners struggle to fit back into ‘normal’ life and to find employment and housing. This leads



to criminal activity stemming from both the desperation for money and psychological damage. (Deci & Ryan, 2000)

Career criminals are at a high risk of re-offending once released from the prison system and cost the state a lot of money in terms of both imprisonment and criminal acts. Career criminals are usually initiated into the world of crime at a young age, after exposure to dysfunctional family relationships, poverty, unemployment, and alcohol abuse and commit crime regularly in order to support themselves financially. (Muntingh, 2005) These criminals require special rehabilitation programmes that address a change in lifestyle, attitude and personality.

Various social problems affect criminal recidivism, the combination of which differs from one offender to another. The most common social contributors to criminality in South Africa are historical inequality, poverty, unemployment, inadequate housing, dysfunctional families, truancy, lack of skills, substance abuse, and exposure to negative influences and crime. (Muntingh, 2005) Social circumstances that deprive a person of the basic psychological needs; competency, autonomy and relatedness,

can cause psychological damage, lowering cognitive skills and increasing the chance of deviant behaviour. (Deci & Ryan, 2000)

Abuse of alcohol and illegal drugs has been shown to be linked to crime in a number of ways. (Muntingh, 2005) Alcohol increases its user's emotions, often leading to violent and aggressive crimes where one might have a propensity for criminal behaviour. Intoxicated criminals have decreased risk and consequence assessment abilities and lowered cognitive skills. Alcohol abuse is linked with depression and anxiety, often experienced by socially excluded individuals, and places released offenders at a high risk of recidivism. (Muntingh, 2005) Drug abuse, the drug trade and drug addiction are three factors that motivate repeat offending for both criminal organisations and individuals. (Muntingh, 2005)

While dysfunctional families may contribute to criminal behaviour, supportive families can prevent an offender from re-offending. (Muntingh, 2005) Family and peer relationships within prison and after release can influence a person's behaviour and breaking ties with childhood friends or negative influences has been shown to inspire change in offenders. (Crow, 2007)

Apartheid policy broke down many family structures, schools and communities, through racial segregation and forced removals, creating weak social control resulting in criminal behaviour that is still evident in the current crime statistics. (Department of Correctional Services, 2005)

While various factors contribute to the cycle of re-offending, many cannot be dealt with by authorities alone, but must be overcome by individual offenders themselves. The social circumstances in which offenders live has an impact on recidivism, and the actual prison environment also adds to the social, emotional and psychological issues that contribute to offending behaviour. The rehabilitative model creates spaces where past experiences, psychological problems and negative influences can be highlighted and addressed, so that upon release, a prisoner might take his life path in a better direction. Rehabilitation must be adopted in order to change the prison environment and inmates in order to reduce recidivism, maintain human rights and deal with South Africa's broad social problems. The Department of Correctional Services maintain that "this style of management is the most effective and safest way of managing correctional centres." (Department

of Correctional Services, 2005, p. 40) Programmes aim to teach offenders life skills that would guide them in decision making and provide alternative solutions to criminal action. (Crow, 2007)

CASE STUDY

SAN LUIS OBISPO COUNTY JUVENILE SERVICES CENTER

"The essential goal is to minimise the trauma often associated with incarceration so that effective intervention becomes possible." (Sullivan & Farbstein, 2005, p. 17)



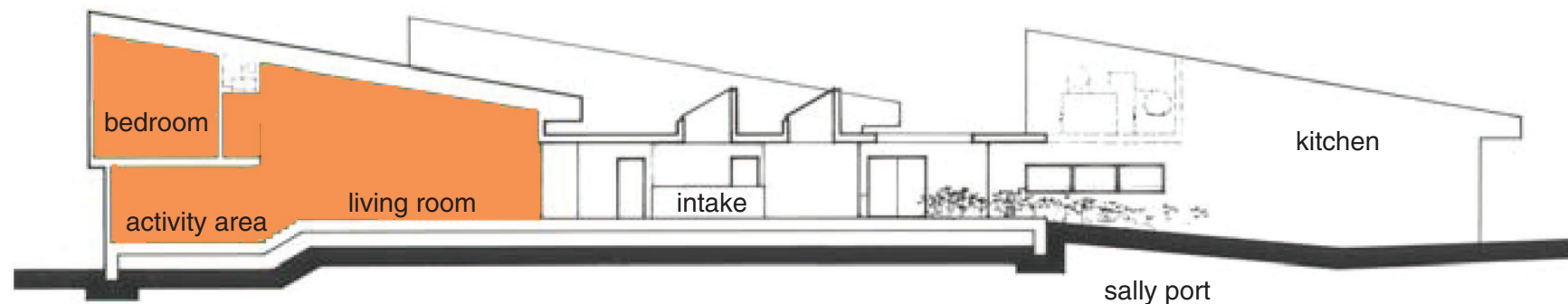
The San Luis Obispo Juvenile Services Centre, completed in 1981, is a juvenile prison designed along the principles of rehabilitation. This building was chosen as a case study because it was designed with specific targets and parameters that were then evaluated as part of a report, thirteen years after it was opened for use. It has also been used as a precedent for the design of further juvenile prisons in America. The building is 1860 square meters and accommodates thirty nine juvenile offenders under the age of eighteen. In this chapter, the design intentions will be analysed in conjunction with the findings of the post-occupation evaluation findings. (Sullivan & Farbstein 2005)

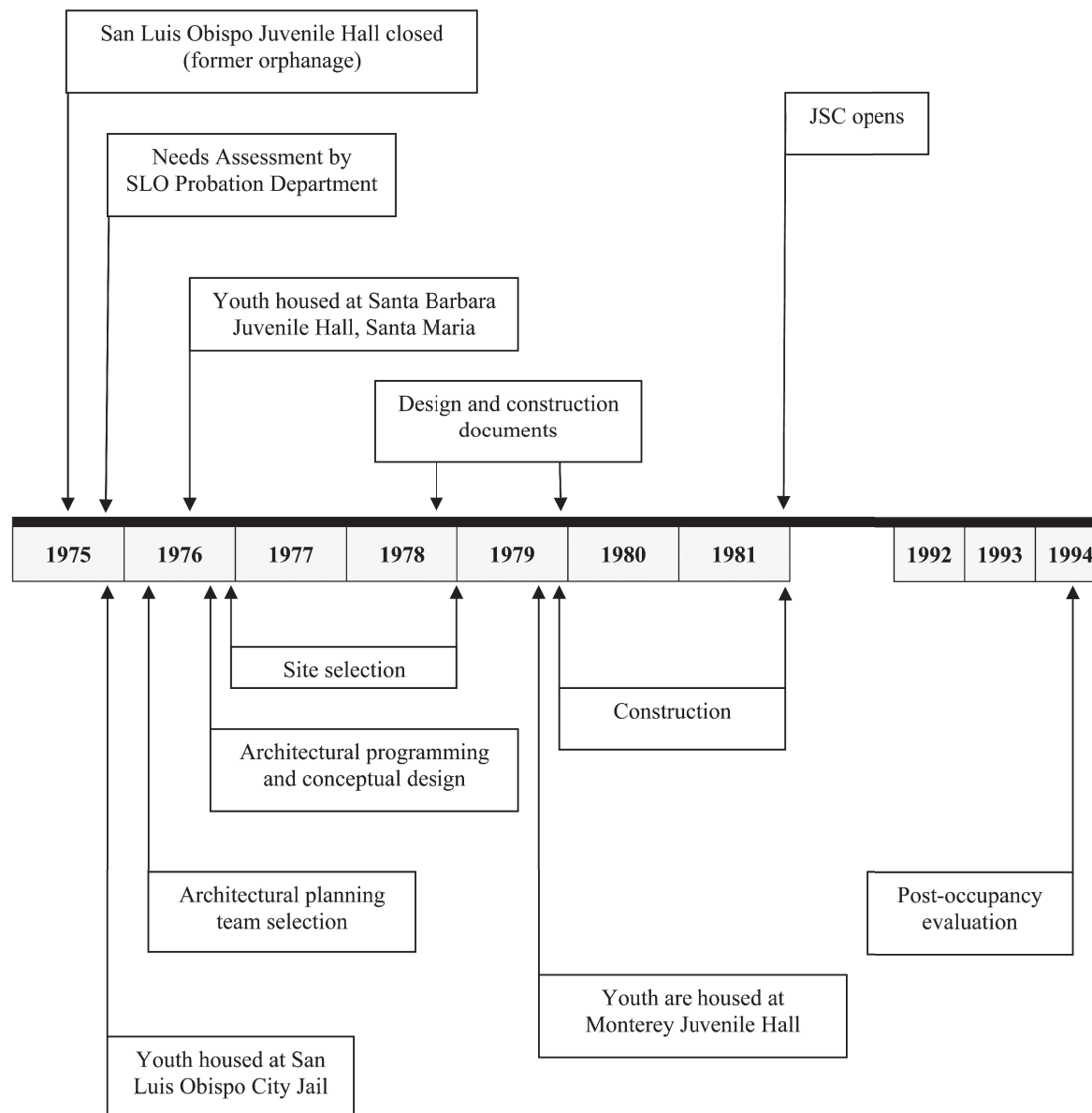
In 1974, the original San Luis Obispo Juvenile Detention Centre was condemned

by the fire marshal, and the juveniles detained there at the time were moved to the city jail. The County selected two architectural firms to collaborate on the design of the new building; MDW Inc and Sullivan Farbstein Associates. Before beginning the design process, the architects were involved in selecting an appropriate site and consulting various governmental agencies, school boards, juveniles, parents and members of the public. (Sullivan & Farbstein 2005)

The architects were faced with a difficult challenge; to design a building for the detention of criminal youths in a non-institutional setting that supported the concepts of rehabilitation. 'Normal' prisons are usually hard, frightening, noisy spaces that are designed around security and

detention. Often juveniles rebel in these spaces as they feel that society has neglected them. Rehabilitation theory looks at behaviour modification, and concentrates on spaces that are beneficial to the juveniles' growth rather than their punishment. The architecture of a rehabilitation prison is concerned with "normalising" (Sullivan & Farbstein, 2005, p. 16) the prisoners in preparation for their release into society. MDW Inc and Sullivan Farbstein Associates focused on the use of light, materials, scale, colour, the relationships between spaces, and the site in order to create spaces that imitate 'normal life'. Their main design drivers were flexibility, rehabilitation, security, lighting and a non-institutional setting. (Sullivan & Farbstein 2005)





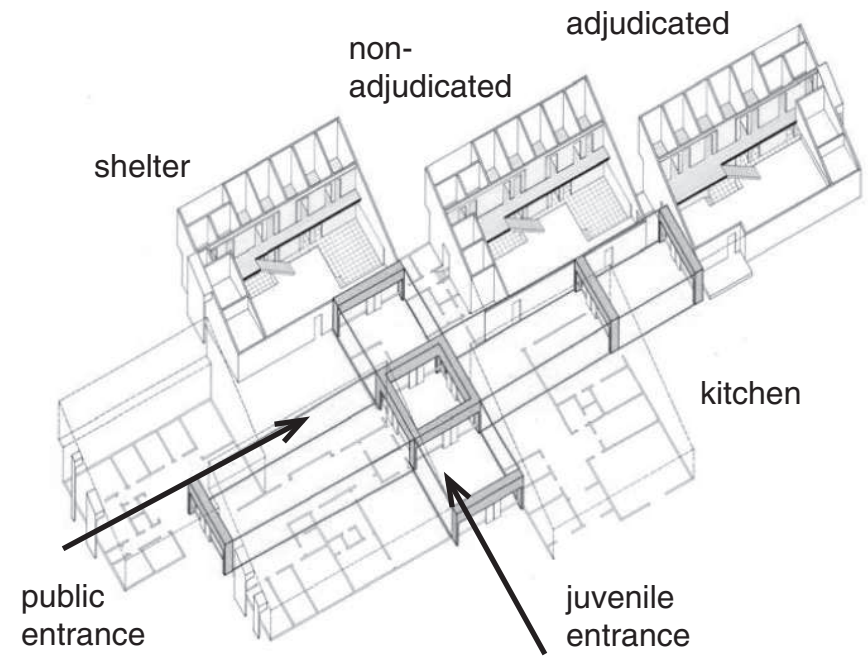
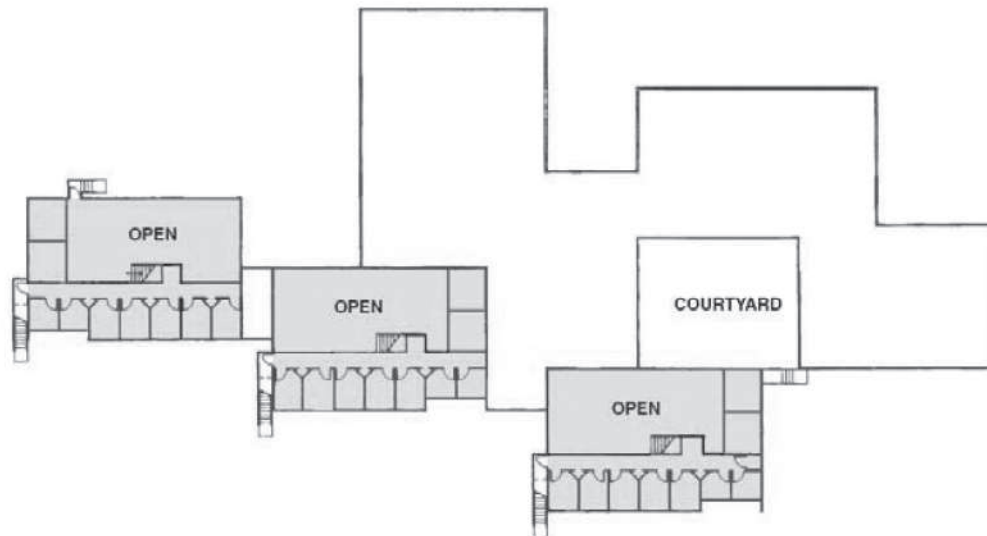
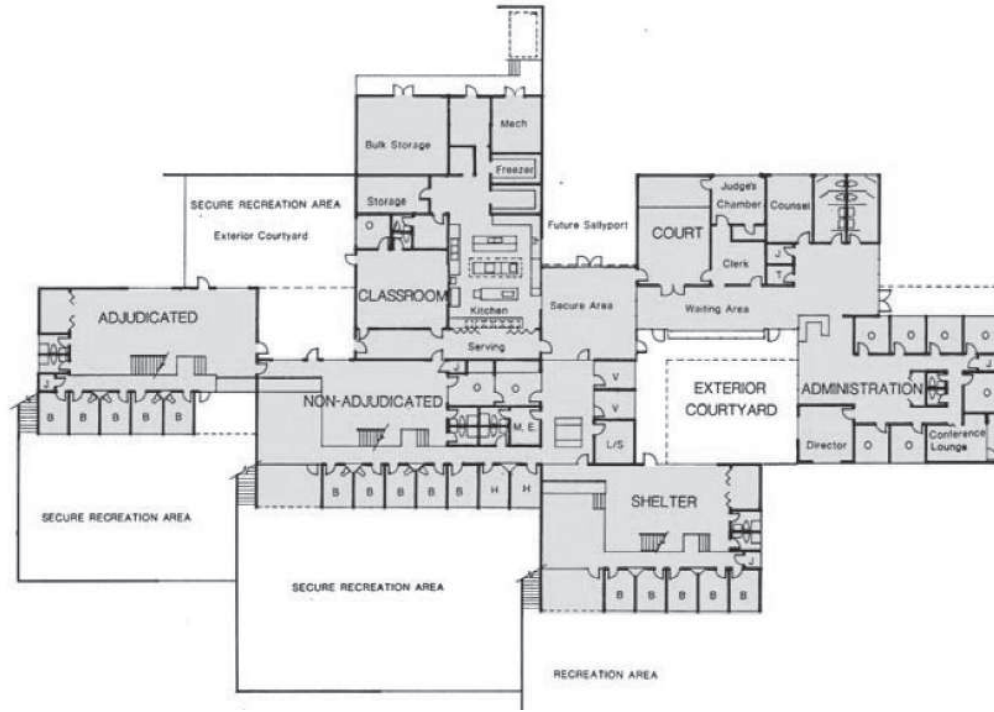
Previous Page Left: MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre.1981. (Sullivan & Farbstein 2005: 10)

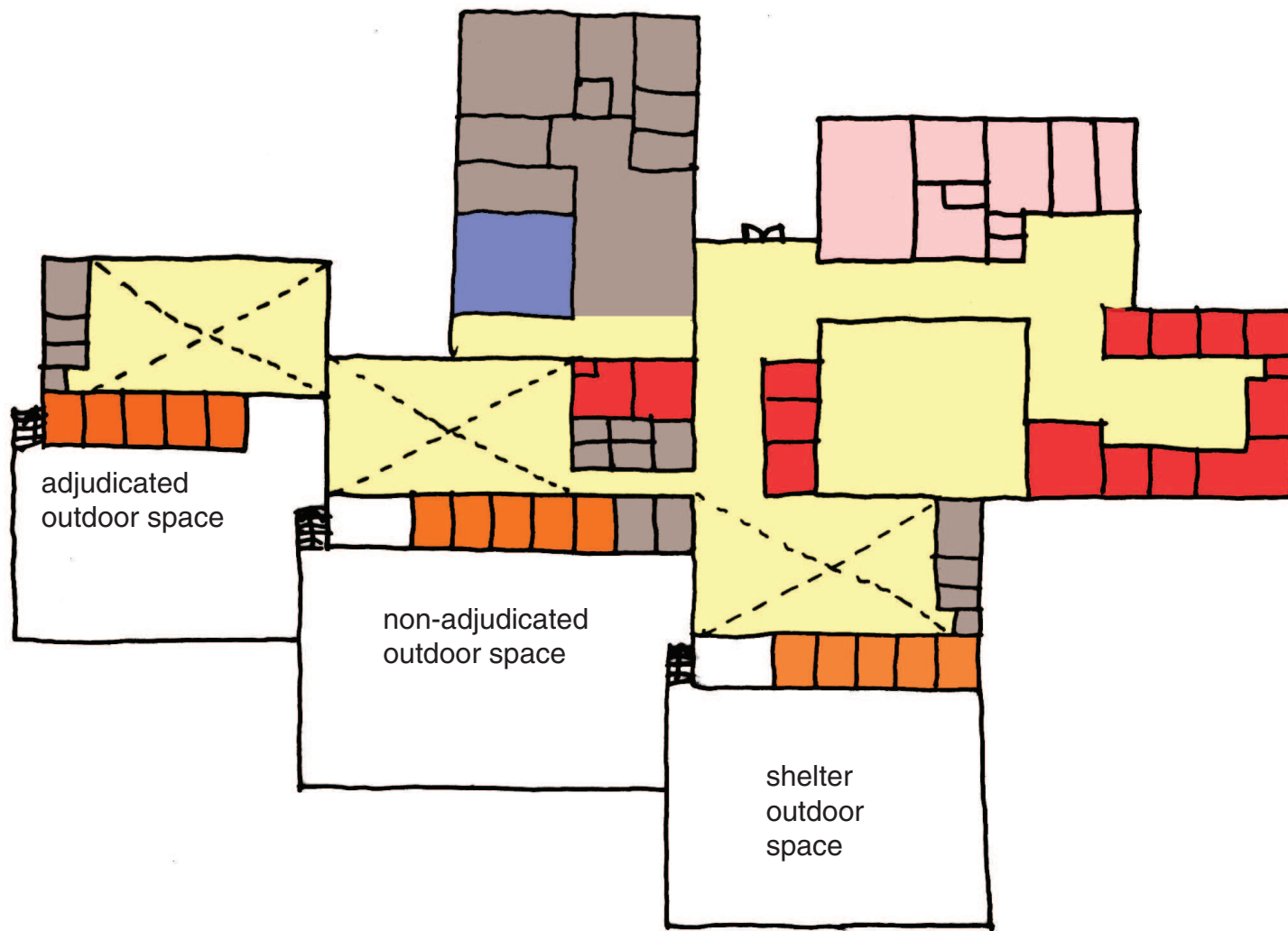
Previous Page Right: MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre: Section through Prisoner Entrance.1981. (Sullivan & Farbstein 2005: 9)

Left: Timeline illustration of the project (Sullivan & Farbstein 2005: iv)

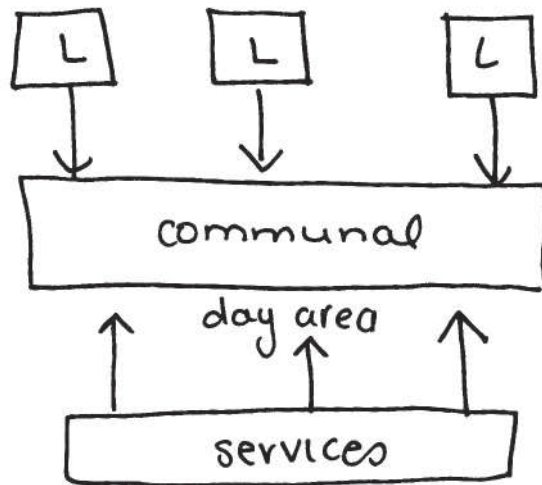
Right: MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre: Plans.1981. (Sullivan & Farbstein 2005: 11)

Far right: MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre: Isometric Diagram.1981. (Sullivan & Farbstein 2005: 46)





- shelter
- non-adjudicated
- adjudicated
- services
- classroom
- communal
- juvenile court
- administration



programme

The programme is conceptualised as three accommodation types; 'adjudicated', 'non-adjudicated' and 'shelter' areas, linked by shared living and service areas. Sentenced juveniles would live in the adjudicated section, youths awaiting trial in the non-adjudicated area, while homeless, abandoned or abused youths were given accommodation in the shelter area. The size of each accommodation area was determined by good staff to offender ratios and good communication spaces, resulting in ten beds per living area. (Sullivan & Farbstein 2005)

Further programme included a juvenile court and its necessary service areas, judges' chambers and waiting areas. An administration block is placed at the entrance of the public amenities. Spaces such as the kitchen, classroom and outdoor recreation spaces form part of the multi-use areas, used for skills and behaviour development of the juveniles. (Sullivan & Farbstein 2005)



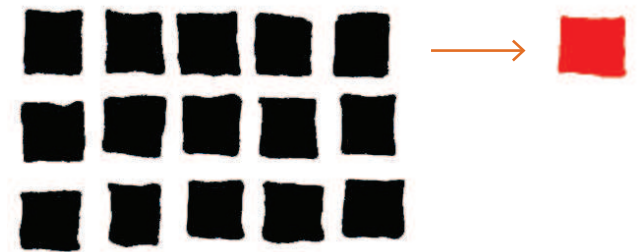
adult prison

juvenile prison

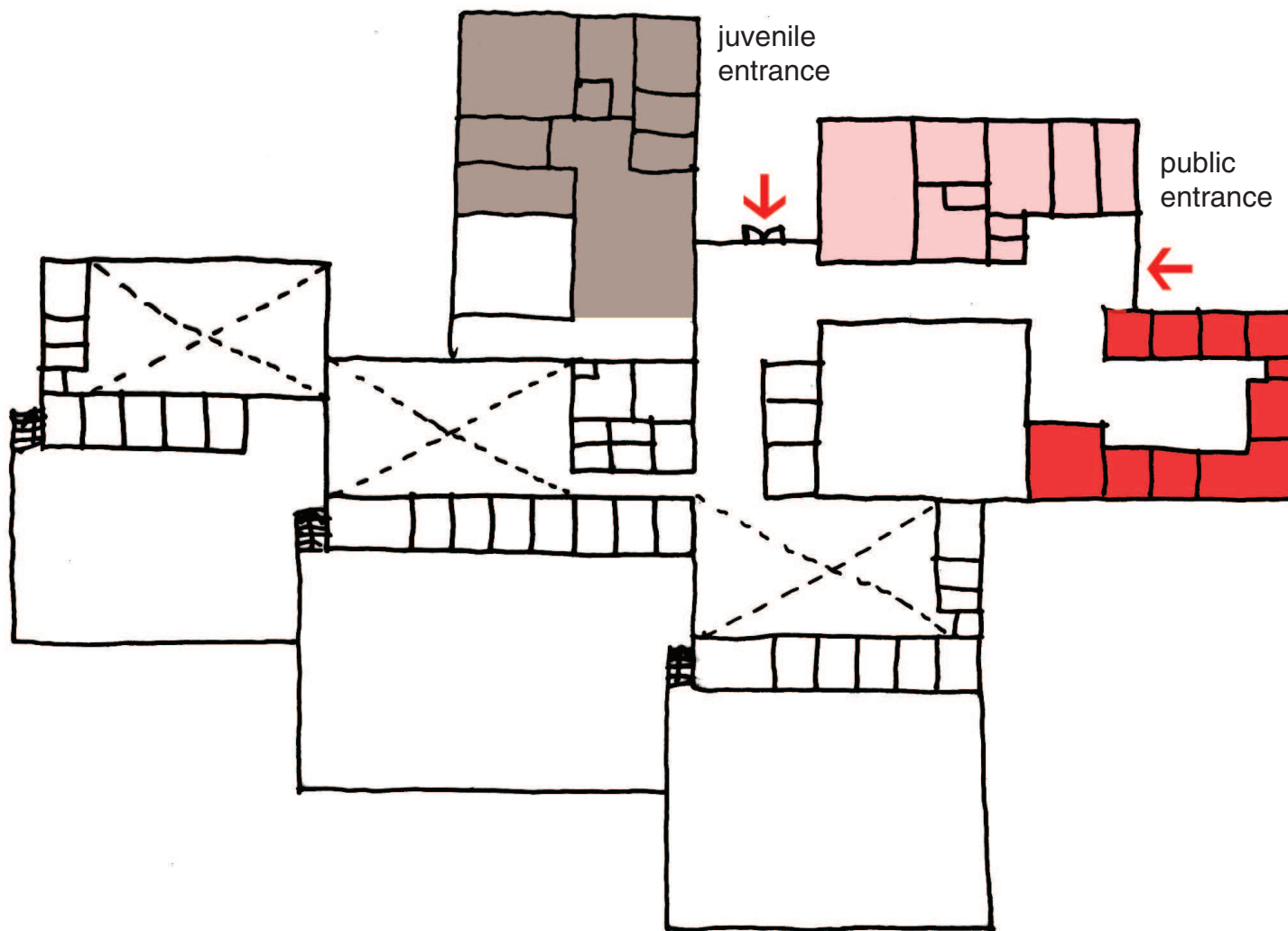
site

The site was chosen according to several criteria including views, access, services and budget. While rehabilitation theorists suggest that prisons should be moved back into the city, a rural site was chosen due to public favour. The rural setting allows for beautiful views, and juveniles are encouraged to feel relaxed in the natural setting. (Sullivan & Farbstein 2005)

Interesting public and semi public spaces were created because of the challenging site chosen. The awkward shape of the site, and its unstable soil conditions left the architects with very little buildable space. (Sullivan & Farbstein 2005)



MDW Inc and Sullivan Farbstein Associates, San Luis Obispo Juvenile Services Centre 1981. (Sullivan & Farbstein 2005: 2)



- administration
- juvenile court
- kitchen
- entrances

access



Separate access is provided for the public and the juvenile offenders. The public entrance is framed by the administration areas and court room, giving the public a sense of safety and order upon arrival. (Sullivan & Farbstein 2005)

The juvenile entrance has been carefully designed to minimise the trauma of arriving at a prison. The juveniles are greeted with a glass sally port (a double door, used in banks and prisons) that is landscaped and provides views right into the building, minimising the effect of the unknown. The sally port is roofed by open trellises. The kitchen is placed next to the juvenile entrance so that there is a smell of food upon arrival. This is important as juveniles are usually hungry when arriving at an institution after long waits elsewhere, and the idea of a caring home is reinforced. (Sullivan & Farbstein 2005)

Left: MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre. 1981. (Sullivan & Farbstein 2005: 13)



flexibility

As rehabilitation requires that prisoners are given the opportunity to participate in various activities, the notion of flexibility was very important in this design.

Spaces were designed to be large enough for different activities, and care was taken to design movable furniture – a new concept in the design of prisons. All furniture was designed as colourful, modular components that could be moved and packed away easily in the storage areas provided. (Sullivan & Farbstein 2005)

Consideration was also given to the way in which the building could expand in the future, and the building was placed on site with this in mind. (Sullivan & Farbstein 2005)

The concept of flexibility was questioned in the post-occupancy evaluation. Young offenders need to be constantly stimulated, and too many activities in one space made the offenders feel contained. Where spaces were successful, flexible furniture needed to be stored in a space within the room, or the space was not used effectively. Prison staff suggested that the building

needed some spaces that were dedicated to specific activities, while others remained flexible so that offenders could experience different spaces during their day. (Sullivan & Farbstein 2005)

lighting

The use of varied and natural lighting was very important in the design of this building. High ceilings are used in the design to create large volumes and spaces, but they also minimise the vandalism of light fittings.

The use of large, unobstructed windows was important for both light and views and made the spaces usable for a variety of activities. Security glazing is specified to avoid escapes, while allowing good views and natural light. Aluminium storefront window frames are used, and where high risk juveniles are contained, the glass is reinforced with a mesh. (Sullivan & Farbstein 2005)



Both: Communal Area. MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre.1981. (Sullivan & Farbstein 2005: 26)



View of Public Entrance. MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre. 1981. (Sullivan & Farbstein 2005: 10)



Bedrooms. MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre. 1981. (Sullivan & Farbstein 2005: 6)

In an attempt to make the building feel more residential, the architects played with scale, materials, form and planning. Timber construction was chosen over concrete, challenging the typical heavy masonry construction of most prisons. The roofs are sloped, adding to the residential aesthetic and natural, textured materials such as timber and carpet were used to reduce the institutional feeling, and deal with scale and noise. The juveniles were made to feel like individuals who belonged in the building. (Sullivan & Farbstein 2005)

Each juvenile is given their own 'bedroom,' rather than a cell, that has unique characteristics, natural lighting, and soft, natural textures. Individual therapy sessions can take place in the bedrooms so that the process is seen as more personal and informal. Juveniles are also given their own bathroom, avoiding group bathrooms where most prison fights and attacks occur. The bedrooms look on to communal day rooms, shared by boys and girls. (Sullivan & Farbstein 2005)

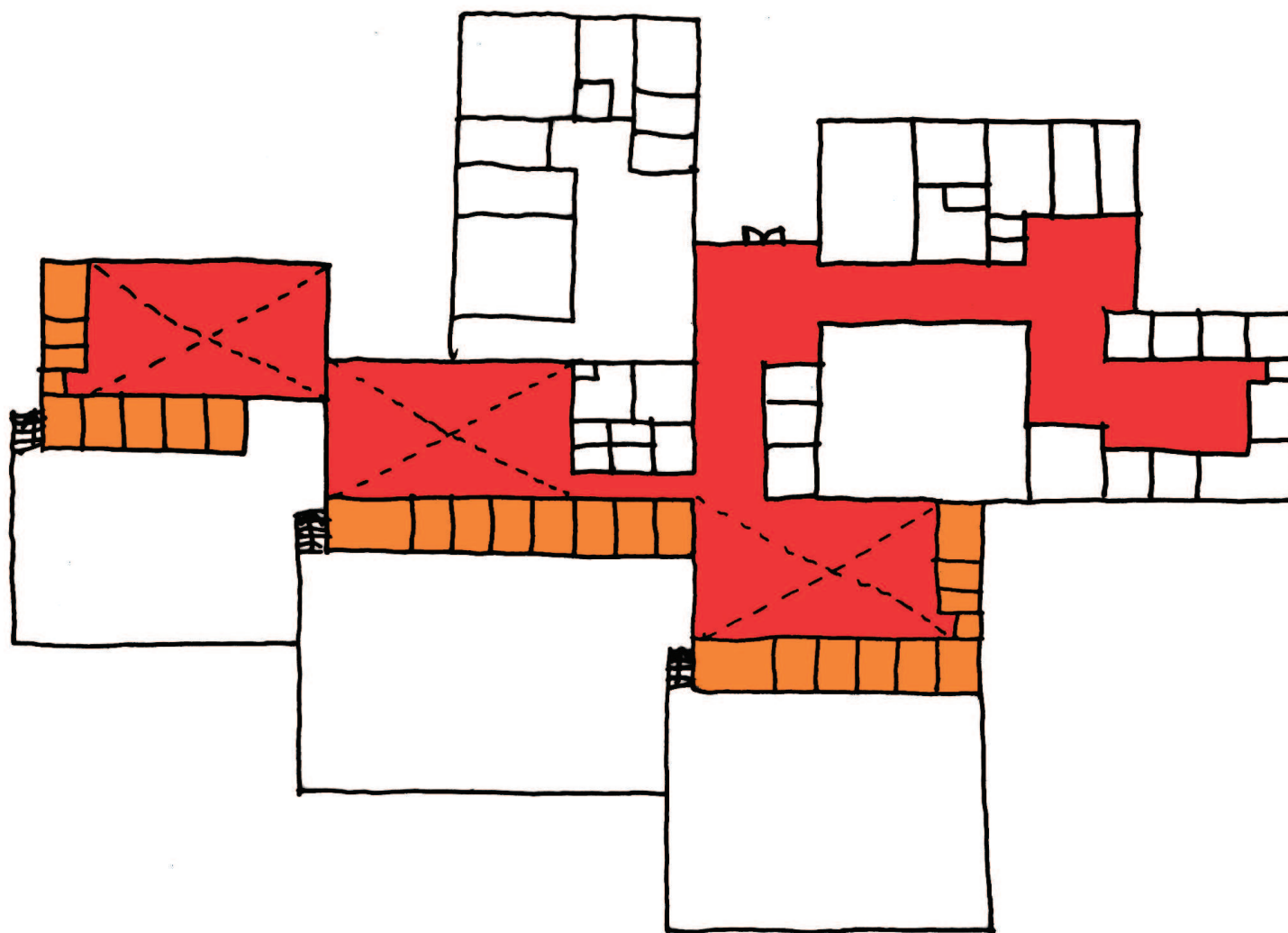
The communal spaces are finished with soft,

non-institutional setting

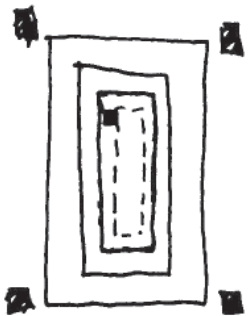
warm textures and movable furnishings. Natural light was important and level changes in the floors and ceilings created varying spaces. (Sullivan & Farbstein 2005)

The planning of staff areas, next to juvenile areas sets up direct relationships and makes the prisoners feel that they are part of a family, rather than fighting a faceless institution. In this way relationships between staff and prisoners are formed. (Sullivan & Farbstein 2005)

While the building has satisfied the constraints of the rehabilitation model, the public have complained that the building resembles a "Hilton Hotel" (Sullivan & Farbstein, 2005, p. 41). While the non-institutional setting may seem like a 'soft' punishment, vandalism and destruction of property is lower, and the building needed very little maintenance in the thirteen years between its opening and evaluation. The non-institutional setting also contributes to the effective security of the building. (Sullivan & Farbstein 2005)

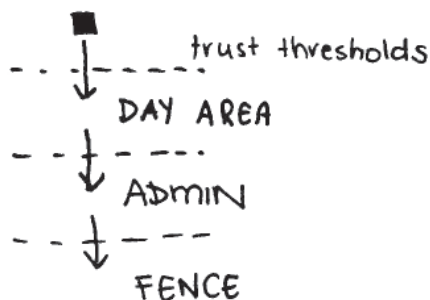


- staff surveillance
- juvenile cells



normal
prison
= layers
of
security
each is
the same
level

Normal Prison



Rehabilitation Prison

New rehabilitation prisons use the “direct supervision approach” (Sullivan & Farbstein, 2005, p. 1) where counselling staff, rather than security staff are used to control the children and interact with them on a daily basis. In the design for San Luis Obispo, the architects planned the building so that juveniles were watched by a minimum number of staff whose offices looked onto the juveniles’ spaces. Each office is visible from other offices so that help is available if needed. This model of security is based on the faith that the prisoners will not try to escape, and the offenders are only punished once they actually break that trust. In a ‘normal’ prison, the security is based on the faith that the prisoner will try to escape, and is designed as a preventative measure. (Sullivan & Farbstein 2005)

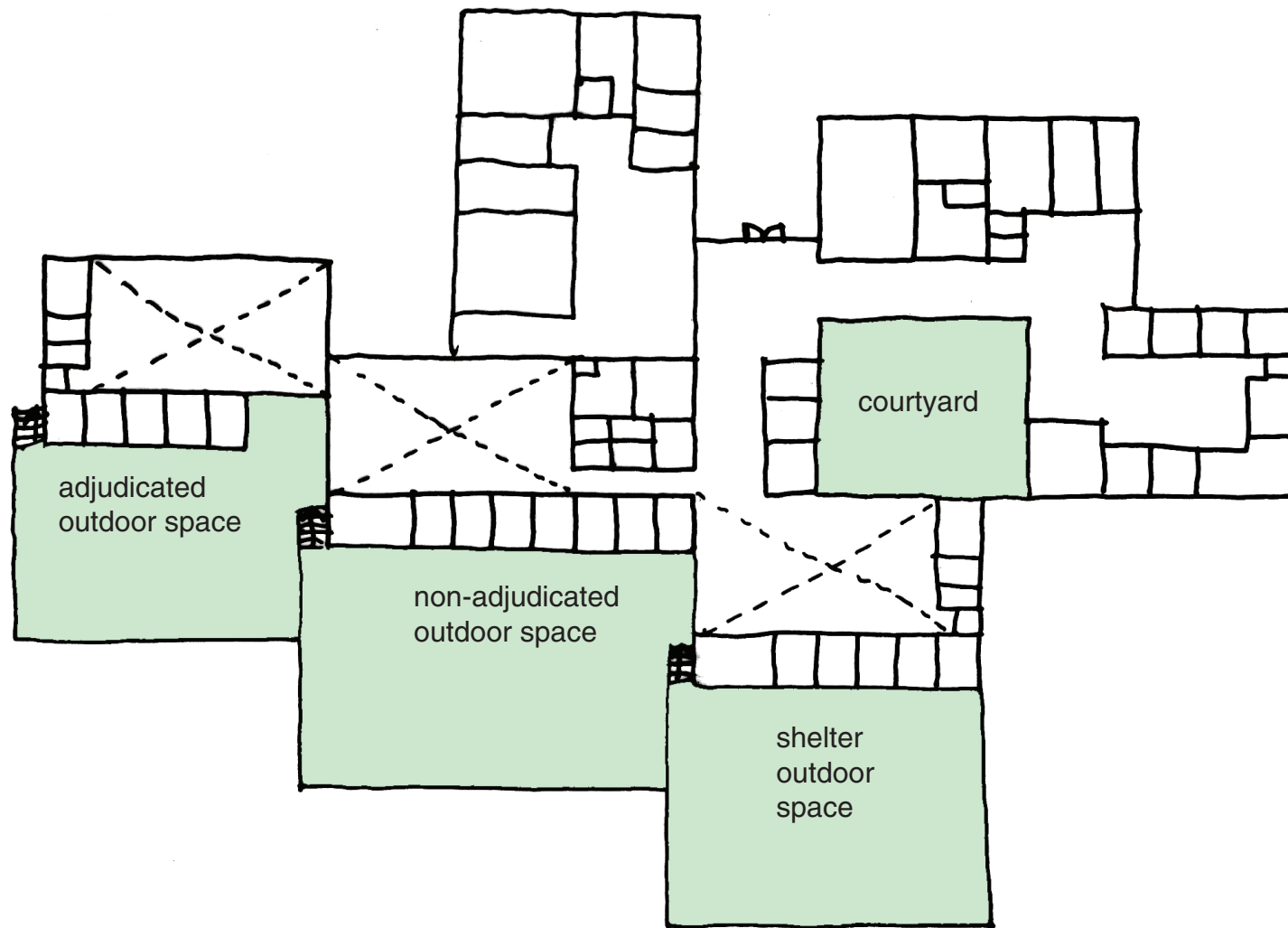
Staff areas are located within the communal day areas so that relationships are built up between juveniles and staff, and a level of trust is developed. This model was developed from the “unit management model” (Sullivan & Farbstein, 2005, p. 6); an idea that separates the juveniles into manageable groups of a smaller size. While

security

rehabilitation is important, the design of the building should ensure that juveniles cannot hide in the building.

While staff interaction is integral to security, staff members need private spaces where they can relax. The building must be conceptualised as both a prison and a workplace. (Sullivan & Farbstein 2005)

When the architect returned to the building after thirteen years, the evaluation of the security system was very important. The direct relationships created between staff and inmates lowered rates of attempted escapes, violence, suicides and assaults. The staff used the escape attempts to identify problematic areas in the building and modify them to prevent further escapes. The lower staff turn-over rates are also attributed to the new relationships developed in the workplace, saving the department money in staff training. (Sullivan & Farbstein 2005)



outdoor areas



Outdoor Recreation Area. MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre. 1981. (Sullivan & Farbstein 2005:12)

Each living area is connected to a fenced outdoor area and each accommodation unit can access the outdoor area directly. These areas are equipped for outdoor sports

outdoor areas

and are also used for external circulation routes to the upper level of juvenile accommodation.

A landscaped internal courtyard is also provided for counselling, family visits and waiting. The juveniles are visible from the administration area while in the courtyard.

The outdoor areas were heavily criticised in the post-occupancy evaluation of the building for several reasons. The outdoor spaces have proved to be too small, after they were cut in size to fit the budget. The staff felt that a full basketball court or soccer pitch was needed and that more space was required for a weights gym. They did feel, however, that the outdoor space was imperative in avoiding the feeling of containment, and contributed to the lower levels of aggression in the youths. (Sullivan & Farbstein 2005)

The courtyard was also criticised as a space for visitation as it was seldom used. Staff suggested that future prison designs should include a dedicated indoor visiting hall with a waiting area. (Sullivan & Farbstein 2005)



-  flexible space
-  kitchen
-  classroom

skills development areas



The classroom provided can be partitioned off and used by the different groups of offenders at the same time. It is used for skills training, schooling, crafts and dining. The staff indicated that the building required more classrooms with dedicated storage spaces. (Sullivan & Farbstein 2005)

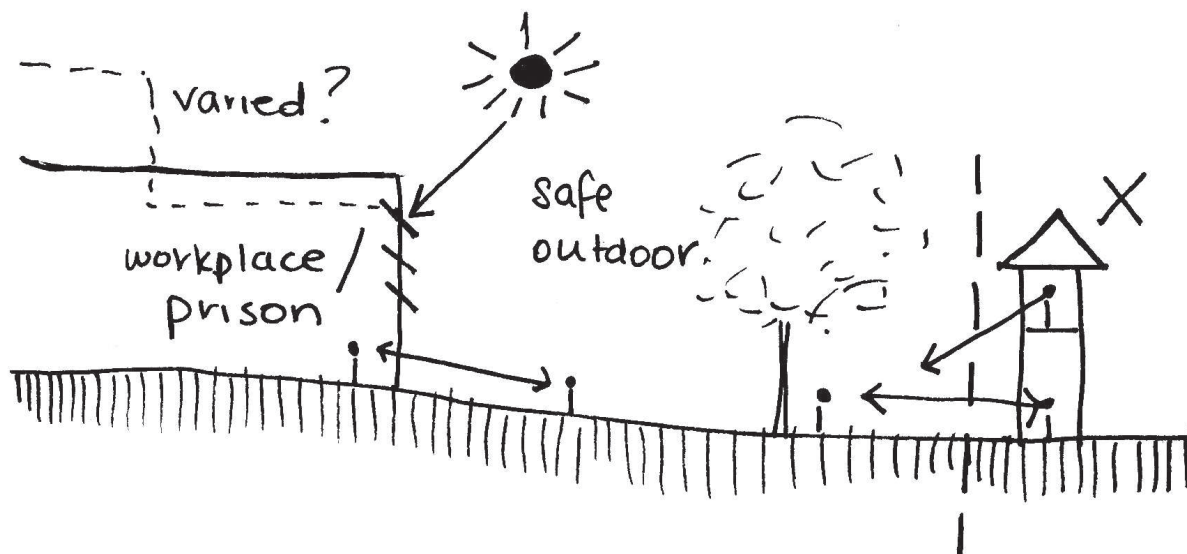
The kitchen is used for both meal-time and for skills training. The architects made it big enough for lessons in food preparation and cooking classes for the juveniles as part of their rehabilitation. (Sullivan & Farbstein 2005)

MDW Inc and Sullivan Farbstein Associates. San Luis Obispo Juvenile Services Centre.1981. (Sullivan & Farbstein 2005:10)

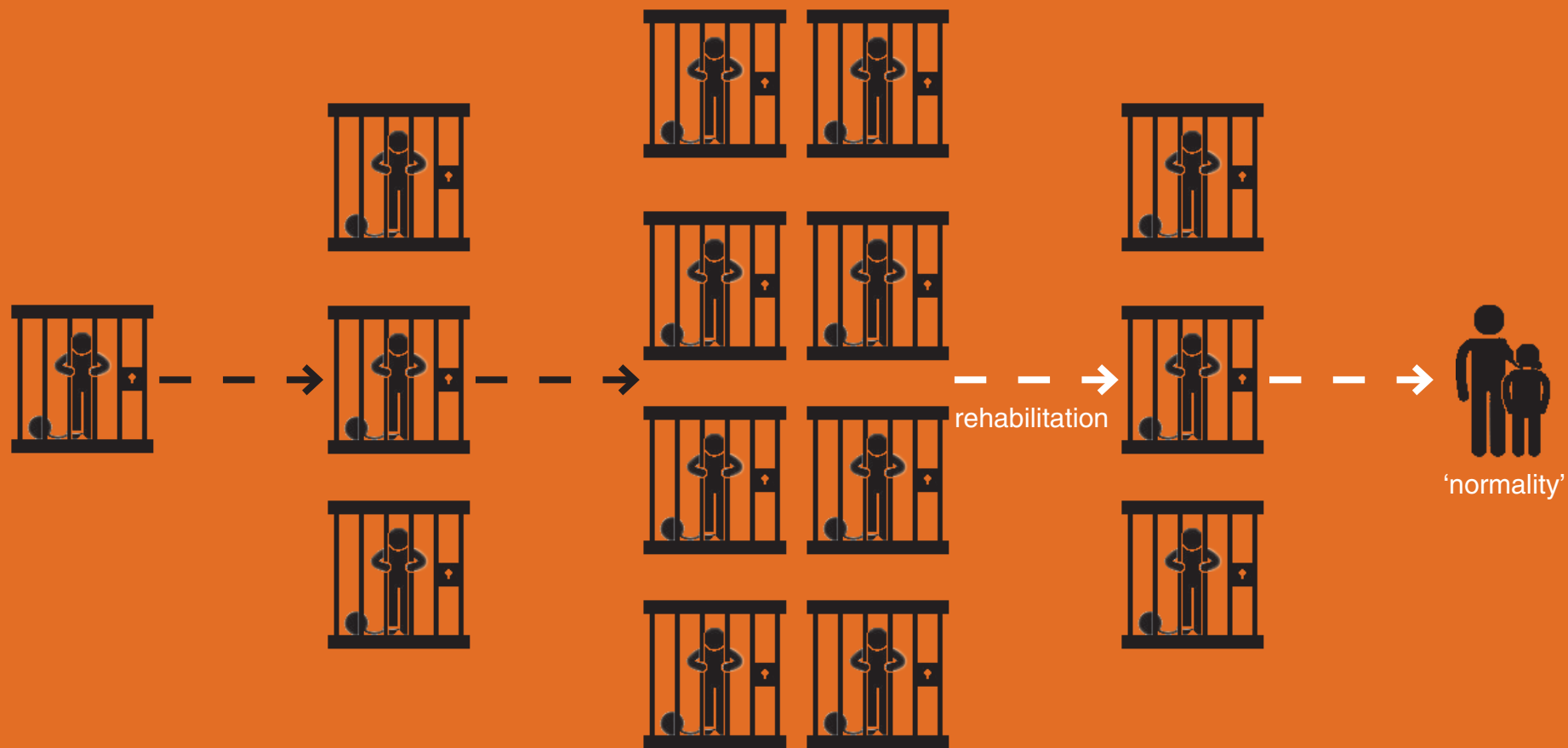
Key design principles for future juvenile prison designs as determined by this project:

1. Spaces should be designed for the staff as well as the juvenile offenders.
2. Spaces should facilitate communication between the staff and offenders.
3. The relationships between internal spaces and their connections to outside spaces are important.
4. The living units should provide both privacy, and a connection to one another.
5. Security should form part of the building, rather than becoming monumental boundaries.
6. Materials, colours and textures should be used to vary the spaces.
7. Recreational spaces are important.
8. Both flexible and permanent spaces should be designed within the building.
9. Outdoor spaces should be used as an extension of indoor spaces.
10. Corridors should be avoided.
11. Very large spaces should be avoided, and different kinds of spaces are encouraged.
12. Staff and offenders should be encouraged to socialise, but staff need private spaces too.
13. Consider all the senses when designing for juveniles.
14. Movable, varied furniture is important.
15. Natural light is important for flexibility and good living conditions.
16. Transparency at the entrance helps to minimise the trauma associated with prisons

The study of the San Luis Obispo Juvenile Services centre has been valuable as it has highlighted several key principles for the design of a prison building. While the aim of this thesis is not to create accommodation spaces, but rather a sports, recreation, education and culture building, there are many lessons that can be learned from the case study. The design of the SREC building will be influenced by the thinking and arguments on light, outdoor spaces, flexibility, security and materiality.



THEORY CONCLUSIONS



Recidivism has a major impact on high levels of crime in South Africa, brought on by socio-economic problems in society and in the prison. While the concept of rehabilitation is regarded by many as being “soft on crime,” (Muntingh, 2001, pp. 1, Chapter 01) one must consider the economic and social benefits for the public, victims and prisoners. Addressing rehabilitation within the prison context will have an influence on crime prevention, the cost of the prison on the tax payer, human rights standards, and socio-economic problems faced by many South African citizens.

The current prison system is not effective and can be considered a route cause of crime in South Africa. While ‘tough on crime’ attitudes have been adopted in recent history, the resulting overcrowding, institutionalisation and gang activity have created severely damaged individuals who pose a greater risk to society than before their detention. The purpose of rehabilitation programmes is to “undo the effects of imprisonment” (Muntingh, 2005, p. 17) while also addressing the offender’s behaviour prior to incarceration so that upon release, the offender can re-enter society without posing a threat to public safety. Each prison inmates costs the government

258.39 per day, totalling about R4,2 million per day. (Mapisa-Nqakula, 2011) Crime and imprisonment cost the government large sums of tax payer’s money, and the incarceration of repeat offenders without effective rehabilitation is expensive and therefore unethical. Most rehabilitation programs reduce repeat offending by 5%, (Muntingh, 2005) reducing the number of prisoners in the system and their corresponding cost to society.

Overcrowding in prisons puts a great strain on the infrastructure of prisons, resulting in broken toilets, inefficient kitchens and sewerage disposal and outdated water supply. (Muntingh, 2001) While building new prisons may alleviate the pressure on existing infrastructure, the causes of overcrowding remain untreated and criminals will continue to be incarcerated at an increasing rate. Prisoner rehabilitation deals with the causes of criminality, reducing recidivism and re-conviction of prisoners, resulting in a decrease in offender populations and the strain on prison infrastructure.

The United Nations and other international agencies continue to condemn South African prisons for their inhumane treatment of

prisoners. The prison system needs to meet international regulations by addressing overcrowding and prisoner safety with comprehensive rehabilitation programmes. (Department of Correctional Services, 2005) Rehabilitation addresses many of the social problems faced by the majority of South Africans on a daily basis and gives people the tools and opportunities such as education, vocational skills and life skills, to cope in a capitalist environment. (Crow, 2007) The focus on literacy, basic education, and social relationships provides prisoners with the basic human rights of which they had possibly been deprived, and which caused deviant behaviour in the first place.

“If we have the attitude that prisoners must be left to rot away in jail, then we should not be surprised that they are rotten people when we release them” (Bruns, 2012)

Crime affects South Africans on a day to day basis, stealing hope, slaying feelings of safety and freedom and bringing out paranoia, racism, hate and suspicion. While the causes of crime are multi-dimensional and complex, it has been recognised that deviant behaviour is influenced by deep psychological problems that develop out of social circumstances. Poverty,



Juvenile Prisoners (Community
Law Centre, 1997:2)

inadequate housing, unemployment, dysfunctional families, exposure to crime and substance abuse are highlighted as enablers of criminality as they stifle successful psychological fulfilment needed for satisfactory mental health. The study of the causes of criminal behaviour aids in the development of successful rehabilitation programmes that deal with recidivism, as well as broad social issues in the South African context.

The rehabilitation of criminal offenders is directly related to the causes of deviant behaviour and programmes must be aimed at individual offenders' psychological, physical and emotional needs. Though the approach of rehabilitation is often regarded by the public as being "soft on crime," (Muntingh, 2001, pp. 1, Chapter 01) benefits in a reduction in recidivism include an overall reduction in expenditure of tax payers' money on prisoners, the reduction in crime, and overall attention given to socio-economic problems in society. While the government has accepted that the rehabilitation of prisoners is a necessary part of crime prevention, spaces within our

prisons do not support the rehabilitation and development those in detention. Most South African prisons currently in use were built with retribution theory as the main design driver. (Oppler, 1998) Prisoners are not provided with stimulation and spend their days biding their time, in violent, aggressive and abusive environments that further damage their psyche. The prison, as it stands, increases recidivism among offenders and new rehabilitation spaces must be retrofitted to existing problematic prisons to bring our prison environments up to date with legislation.



PART 02: SREC







The background is a solid orange color. Overlaid on this are white line-art patterns that resemble a stylized map or architectural plan. These patterns include various geometric shapes, lines, and clusters of small squares, suggesting buildings, streets, and possibly topographical features like rivers or hills. The patterns are distributed across the entire page, with some areas being more dense than others.

02|SITE

JOURNAL ENTRY 01:

MY FIRST VISIT TO LEEUEWKOP PRISON FARM





I had plans to meet with Paul Bruns, the founder of the Hlumelelisa prisoner rehabilitation programme, that morning. Considering that I had contacted him over the internet, I was just as afraid to meet him, as the prisoners he had promised I would meet. My dad gave me the directions to the prison: “just follow Rivonia Road until it ends, and the gate should be right in front of you”. As promised, the simple steel gate stood before me, looking foreboding only because I knew what stood behind it. I rolled down my window, explaining to the guard that I was going to the nursery. He asked me to step out of the vehicle and open my boot. Apparently the driver must open his or her own boot, rather than the guard, so that he doesn’t get shot by a prisoner hiding in your car.

I asked for directions and proceeded to drive down the long straight road into the heart of the prison farm. (Left Top) On the downhill, I passed some small houses to my left, and to the right stood Medium B, one of the male-only prisons. (Left Bottom) The prison is a large facebrick building with pitched sheeting roofs. It is surrounded by two high fences and guarded by the four brick surveillance towers with windows only at the very top. To be honest, the site of an actual prison

building made me uneasy.

A prison guard dressed in his brown uniform emerged from the field to my left with a Alsatian dog by his side, crossed the road and the pair disappeared into the crops on the right. A group of prisoners, dressed in bright orange overalls with the words Department of Correctional Services printed in black circles on them, were doing road works and I was directed by a warden to drive around them. The road began to climb upwards and when it ended, I turned right and parked under the trees on the pavement.

Paul came to meet me. To my surprise, he looked completely normal. He greeted me enthusiastically and began right away with the tour. Hlumelelisa had been given the rights to use the abandoned Leeuwkop Nursery for the rehabilitation of prisoners. The programme runs for nine months at a time, teaching prisoners to grow plants and trees from seeds. When fully grown, these plants are then donated to an Alexandra-based project called Greening Alex. Plants ready to go to Alex, were set up in neat rows under shade cloth next to the entrance. Spotted around the nursery were various buildings, each set up with irrigation systems, housing plants at different stages



Above: Nursery for tree seedlings to be donated to Alexandra



Above: Hlumelelisa administration building with classroom, office, storerooms and a small library

of their lives. There was everything from vegetables, to cacti, to delicate flowers, to herbs in neat pots in very normal nursery style buildings. We walked towards a little white, one storey building. Paul showed me the classroom, storerooms and office area in the building. He proudly showed me the artwork and signposting that a prisoner had painted on the walls for him.

Paul introduced me to one of the prisoners working in the gardens. He meekly greeted me and shook my hand, being careful to avoid eye contact. I suddenly felt sad for him and I was ashamed that I had been so nervous to meet these people. I met the four remaining prisoners, all of whom seemed more nervous to meet me, than I them. We had some photos taken together and chatted politely. As we were about to leave, one prisoner offered me a huge pumpkin, that they had grown themselves. After the warden gave him permission, he marched straight off to my car and I opened the boot so that he could place it carefully inside. All the while, the warden kept a watchful eye over the two of us. (I was glad for that)

We jumped into Paul's little car so that he could show me the rest of the prison farm. He reversed quickly without looking

and smashed into a pole. After lifting the remnants of his wing mirror into the backseat, we hurried on cheerfully into the depths of the prison grounds. We passed rows and rows of tiny houses, rented out to prison wardens and their families. Some had garden gnomes or statues on their front lawns to give them a bit of identity. The houses stopped abruptly when a huge curved fence began to protrude to the right. It was a double fence, the outer fence about four meters high, and the inner fence about three meters high. Dogs ran between the two fences, carving out a much defined running path. A terrible looking prison building sat in the bare, treeless land. It was also made from brick, with tiny windows that were covered by two layers of security bars. Again, four surveillance towers sat at each corner of the fence, making sure no prisoner had the opportunity to escape. Paul explained that this was Maximum CC that houses some of the worst murderers and rapists in the country.

We turned left, passed more little houses, then a small lake where the public can go fishing and even stay overnight. Finally we came to an area more built up than the rest of the farm. We made our way through the little roads and Paul pointed out landmarks



Above: Lake for public use - flyfishing, picnics and holiday accommodation



*Top: Medium A RDP-like cells
Above: Warden family housing for rent*



such as the solitary confinement prison and administration block. He told me we would then visit the Medium A prison. We parked in street parking and Paul asked me to leave my cellphone, camera and valuables in the car. We walked along an outer fence to a gate guarded by about three wardens. They didn't seem to be doing much, considering that prisoners seemed to be passing in and out of the gate at their own free will. This made me somewhat alarmed, though I tried to act as if it were normal.

We signed our names at the guard hut and passed through the first gate. Between the two fences, prisoners were setting up chairs, apparently for their Saturday church service. We passed through the second gate, and I was beginning to draw attention as one of very few women on the farm. A group of prisoners walked up to Paul and myself, and brazenly shook my hand. We walked to yet another gate and passed through the third fence to the RDP – looking cells. Each cell is built as a small house with a pitched roof and holds twenty beds. As overcrowding is an issue, each cell probably sleeps closer to thirty or forty prisoners. I was told it was too dangerous to enter these cells, even though prisoners here were classified as low security.

We walked to the admin house, one of the cells that was used as an office, where we were greeted by Mrs April, the medium A warden. She is a short, stocky, no-nonsense, Indian woman who seemed to think that my theoretical project was a bit pointless. She was sitting at a table with about four prisoners. One was an older white man, with huge tattooed arms and a balding head. He grew what little hair was left into a long scraggly ponytail and looked like a prisoner straight out of the movies. He sat next to a skinny, tall Indian prisoner who looked too normal to be in an orange jumpsuit. Two younger black prisoners sat on old plastic chairs, completing the odd lunch party.

Mrs April suggested we move into the adjacent room to discuss my project. I explained that I knew absolutely nothing about prisons and asked her to give me a run down of Leeuwkop.

Mrs April said that the prison is old, and is not functioning as it should. She explained that there are four male-only prisons on the farm; Medium A that houses low security prisoners who would be released in the next two years or less, Medium C, the prison near the gate that houses medium security

prisoners, Maximum CC, that houses criminals so dangerous that they are not allowed outside at all, and the Juvenile Prison, Medium B.

She said the prison struggled most with a shortage of staff and gestured towards the afore mentioned prisoners stating that they are her friends and that they “help her with security.” Shocked, I asked her what would happen if something went wrong, and she laughed: “I would be in big trouble.”

I asked her what she would do if the prison were given money for an upgrade. She said that all prisoners were entitled to sports, recreation, education and culture (SREC), but that the facilities were so bad that the prisoners could not properly enjoy these rights. She explained that Medium A has a big hall that can be partitioned to be used as classrooms, but gets very noisy. She also said that there is a soccer pitch, but that a basketball court is badly needed. She spoke about the juvenile prison and said that the children do not attend school because the facilities are so bad.

As we were about to leave, she looked me up and down and said that she was glad I was dressed as I was, because they had had

some bad experiences with girls like me and warned me not to come again unannounced for my own safety. I was glad that my hair was in a strict bun, that I had chosen not to wear make up and that my clothes covered as much skin as they could. She said that next visit, I would be provided with a guard, or two. I walked out of the office, secretly panicked that a prisoner would kill me with my own pen, and did not feel safe until I had reached the car again.

We parked the car outside the administration building, a stern building with small windows that was painted vaguely pink. Paul wanted me to meet with the social worker for Medium A. We chatted mainly about the same missing facilities and how prisoners’ clothes were sometimes stolen from the dispensary, so that upon release they had less than when they came in. It sounded very depressing. Her work involved group and individual therapy sessions to deal with HIV/AIDS and family development. A loud alarm went off signalling the escape of a prisoners and she didn’t even blink. I wondered how often that happened.

Next, we drove south, the road flanked on either side by rows and rows of growing cabbages. The road began to roll steadily

upwards until we were on top of a large hill. To the right, a massive piece of land had been graded in anticipation for the new generation juvenile prison. Finally we arrived at the Juvenile Prison. A large bird of prey kept a watchful eye over the cars from his circular cage at the entrance to the prison. We were not allowed to enter, but could see the shack-like corrugated zinc structure shine in the sun. It has low pitched roofs and looks very much like a factory building. It is again, surrounded by a double fence, with a

Below: Leeuwnkop petrol station and small shop with ATM

Right: Warden sports club with tennis courts, rugby field, bowls green, and a small pub. There is a big drinking problem amongst wardens and their families at Leeuwnkop.





heavily guarded gate and four surveillance towers.

We continued down the same road past the juvenile prison until we reached a settlement of small wardens' houses, a small primary school and a high school, before we turned around to go back to my car.

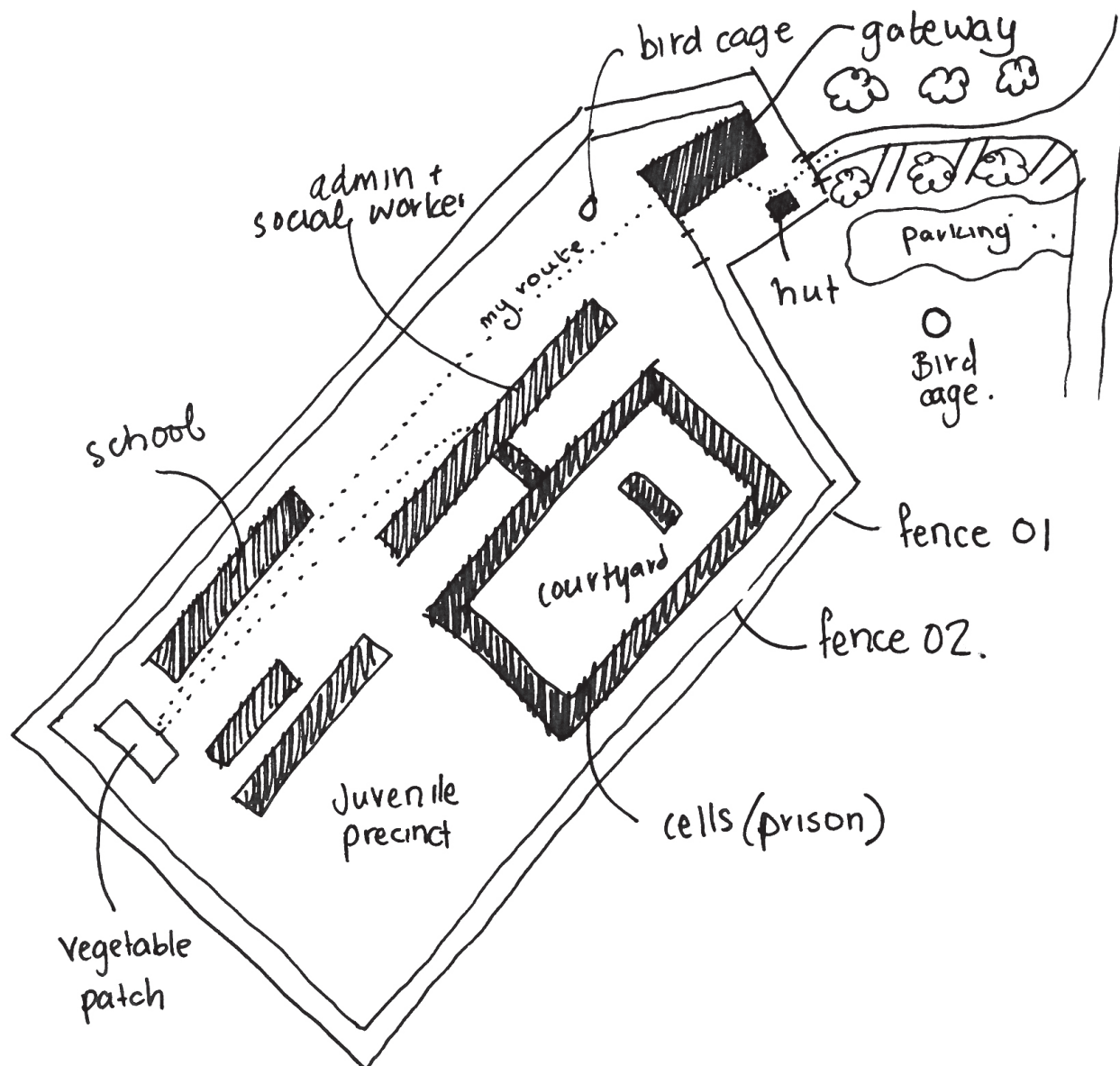
We passed the administration building once again, and to its right stood an abandoned piece of ground. It is the unused land between the old prison hospital and its fence. The land is watched by four dilapidated surveillance towers, with blackened bricks and broken windows. We sped past it, but I knew that this could be the site for my SREC building. Ideas had been floating around in my head the whole day, and somehow this site made sense.

Paul dropped me back at my car and I drove back down the long straight road to the exit. I crossed the river and I couldn't help but notice how beautiful the grounds were. I was again asked to open my boot, this time revealing a pumpkin, got back in my car and drove off to hugely appreciated freedom.

JOURNAL ENTRY 02:

THE JUVENILE PRISON





The process of gaining entry to South African prisons, particularly those holding juveniles is an administration and ethics nightmare, so when a visit to the Leeuwkop juvenile prison was sprung on me, I was somewhat unprepared.

It was snowing at Wits and the students were throwing snowballs at one another when I got a call from Paul, asking if I would be interested in seeing his new project at Leeuwkop. The next morning I jumped into his car and we were off towards the juvenile prison. We parked next to the bird cage and I noticed that the bird held inside was a chicken, not a bird of prey. We walked towards the pedestrian gate and a large man opened it for us. We were ushered towards the small guard hut to the left and filled in forms about our visit. Each of us was patted down by guards within the hut. It was freezing, their heater had broken and the hut was little more than a shed.

Instead of proceeding through the next fence as I had anticipated, we were taken through a building to our right. This building acts as the gateway to the juvenile precinct. We walked through a welcome lecture for a class of school children, taking the crime prevention tour of the prison. We passed

through a heavy turnstile and a metal detector and emerged on the other side of the building into the precinct. Several male peacocks pranced around in front of the ugly metal building. There was another bird cage holding chickens, and a stray cat made its way around the gardens, hunting for prey.

Paul explained that his new project was a modest vegetable patch within the juvenile gardens. As we walked, I noticed the double fences to my right, hugging a patrol road between them. We continued through beautifully manicured flower gardens and came upon the sad vegetable patch, freshly turned, in desperate need of seedlings and attention. He knows that it is the start of something great, and I congratulate him for his vision.

On our way back towards the gate we stopped at the faded, pale pink, prefabricated school buildings. I expected that classes would be running as it was a Wednesday, but there was not a student in sight. I tried to peer into the dusty windows, but Paul was already opening the door to one of the classrooms. The walls were very thin, the floor was a rough concrete slab, without a screed or floor finish and there was no ceiling, revealing open steel trusses. The





room was cold and lifeless. I could not help comparing it to my school with beautiful red bricks, stained glass chapel windows, pretty courtyards and large, well lit classrooms. The place was dismal.

I thought that the trip was over as we headed back along the strip of empty classrooms. I beckoned one of the scrawny looking cats, but it bolted off in the opposite direction. I wondered if it had come under any abuse from the juveniles. We walked along the side of the shiny corrugated zinc prison building and stopped at a blank metal door. Paul knocked and someone opened a small slit in the door. After explaining the nature of our visit, the thick steel door began to open to reveal a small steel room. We moved through the heavy turnstile door to the right into pitch black.

The power was out and I was terrified. I didn't know whether we were headed into the cells, and I hoped that the security mechanisms were not dependant on the same power supply. We were travelling down a long narrow passageway flanked by identical door after door to the right and left. The only light came from two doors towards the end of the passage that were left open. My hands were stretched out in front of me,



looking for direction, and I placed my feet gingerly in case of steps in the floor level. The length of the corridor was marked by the silhouettes of security gates every few meters.

A young woman came to her door to meet us. We walked into her office, lit up by the large windows looking onto the back of another part of the prison. Mrs Snell is a social worker who seems passionate about her job. She wore a Khaki uniform, with her black hair in a severe bun, making her look like part of the military. She and Paul exchanged ideas about the vegetable patch, and my project was introduced as having something to do with it. If you need to speak to anyone in the Department of Correctional Services, it seems that you need to have some kind of connection to something or someone within the prison. Still, my questions were regarded with a level of suspicion and I was asked to make an appointment to see her at another time.

During the meeting the lights had returned, and the walk back to the dark steel room was a little easier. The corridor was painted beige and the doors signposted with that typically South African green writing, reserved only for our institutional

buildings and the Kruger Park. The doors protected various offices for social workers, management and security staff. There was one bleak classroom and some messy storage areas. Towards the end of the passage was a grey, lifeless, visiting room that had a door leading to the corridor and one that lead into the prison area.

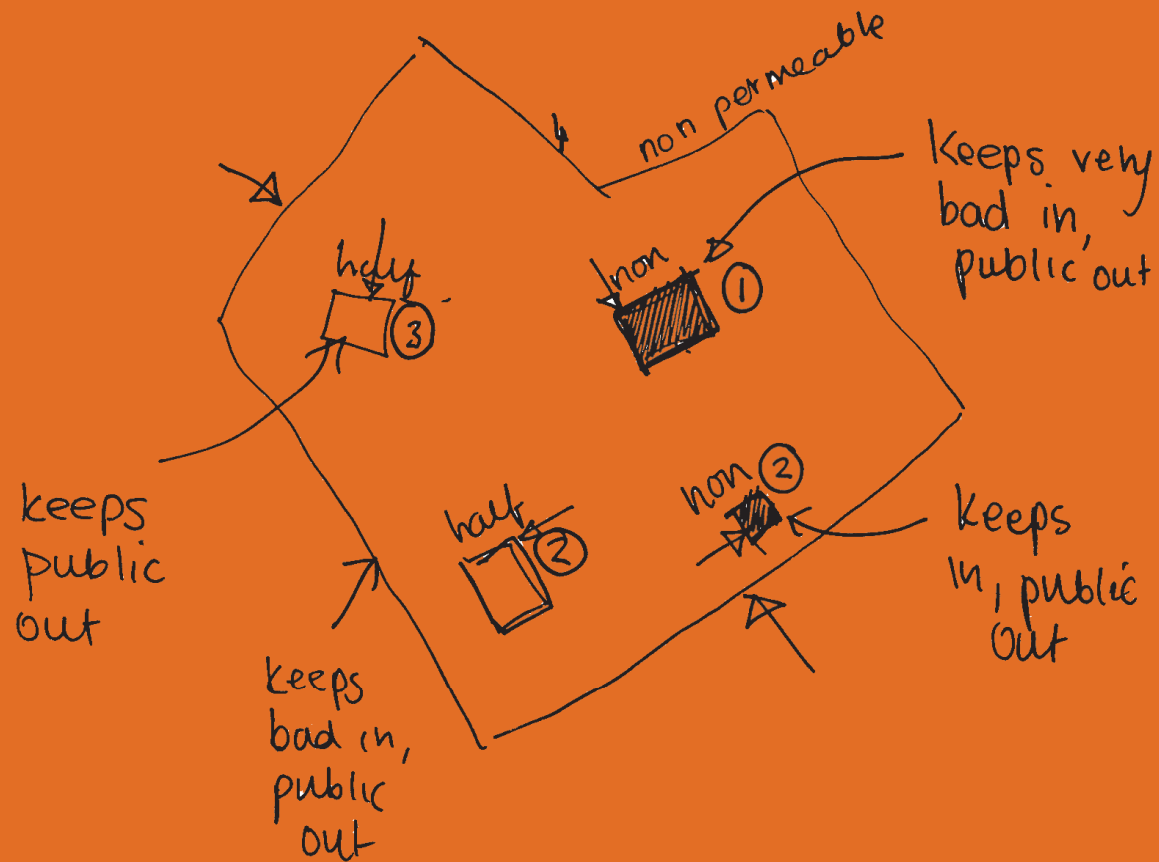
As we reached the steel room, Paul asked the guard if we could enter the juvenile area. He hesitated, but Paul was already pushing through the other turnstile, I blindly followed him, stunned that I was about to enter the prison area. We passed through two metal detectors and another turnstile into a mess of a queue for something. The whole line of juvenile prisoners, dressed in red jumpsuits, changed to look at me. A boy, much younger than me, came towards me to steal a quick handshake. They all knew I didn't quite belong there, I wonder if I looked afraid. I huddled as close to Paul as I could, considering that I don't really know him that well, and followed him towards the end of the corridor. By the time we had reached the courtyard, there were a hundred eyes on me.

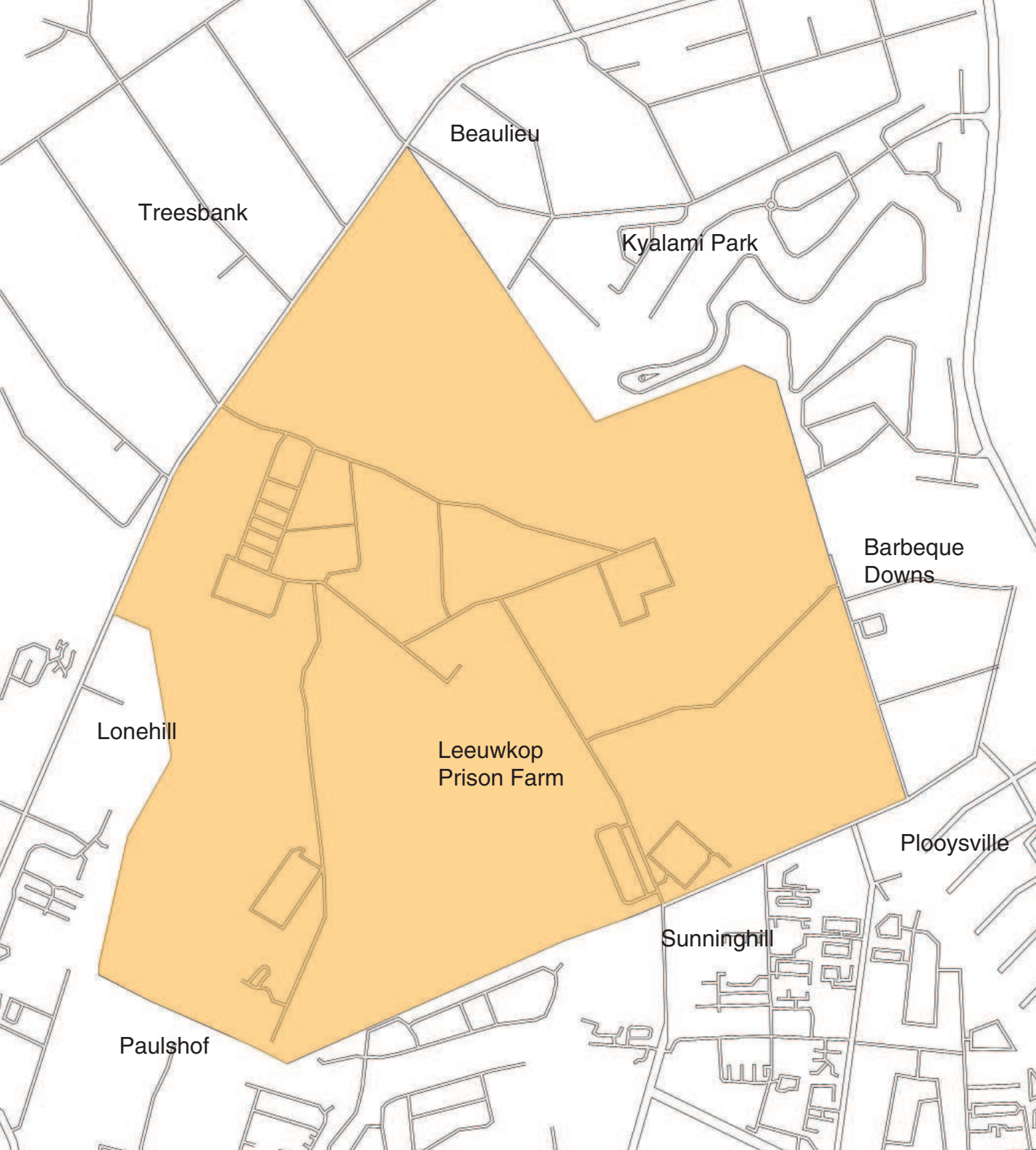
The courtyard is a vast area of brown, short cut grass that is so flat it must have been constructed with a spirit level. The perimeter

is made up of cells. From where I stood, I saw the many doors punctured into the low rise, corrugated metal building, all separated from the courtyard by a fence of barbed wire. The juveniles wear red uniforms, so that they can be identified as separate from the adults. The barbed wire was littered with red shirts or pants whose owners stood between the doors and fence, half naked, shivering. In the centre of the courtyard was a strange shed, so covered in barbed wire it looked like an image from a World War, that was supposedly the only dining facility in the prison. It was probably fear – I never set a foot on that grass.

The whole area was filled with a strange blankness, lifelessness. The spirit of the place was so different to Medium A, and so wrong for children. I understood why these children learn to hate society, why they lack empathy for other people, why they feel rejected. The Minister of Correctional Services visited the prison a few years ago and declared the building unfit for human habitation. I think it was worse than I had imagined.

SITE ANALYSIS





Leeuwkop Prison Farm is situated in the northern suburbs of Johannesburg, bordered by Sunninghill to the south-east, Kyalami to the north and Lonehill to the west. The complex houses four prisons within its management area; Medium A, Medium B (juvenile prison), Medium C and Maximum C. The prison complex caters to 4500 male prisoners. (Parliamentary Monitoring Group, 2011)





On the 29th of August 1890, President Paul Kruger donated Rietfontein Farm number 15 to the Department of Prisons and Reformatories, to be developed as a prison. (Department of Correctional Services, 2012) Construction of the first prison building, Medium A, began in 1915, and its first prisoners were admitted in 1924. The 850 hectare farm was declared a prison farm officially in 1959 and the Maximum C and Medium C prisons became operational in 1961 and 1973 accordingly. During Apartheid, various political prisoners were detained at Leeuwkop Prison Farm and a number of hunger strikes were carried out there. (Department of Correctional Services, 2012)



Leeuwkop Juvenile Centre of Excellence, or Medium B, was built in 1983 for seven hundred and twenty three medium security offenders under the age of twenty one, and its first prisoners were admitted to the prison on the first of April 1984. (Department of Correctional Services, 2012) The prison was built as a temporary structure, but has remained in use, housing nine hundred juvenile offenders. (Parliamentary Monitoring Group, 2011)

Top: Medium C.

Left: Maximum C (City of Joburg Website 2012)

Secondary Roads

Private dirt roads that lead to the agricultural areas on the site

Main Roads

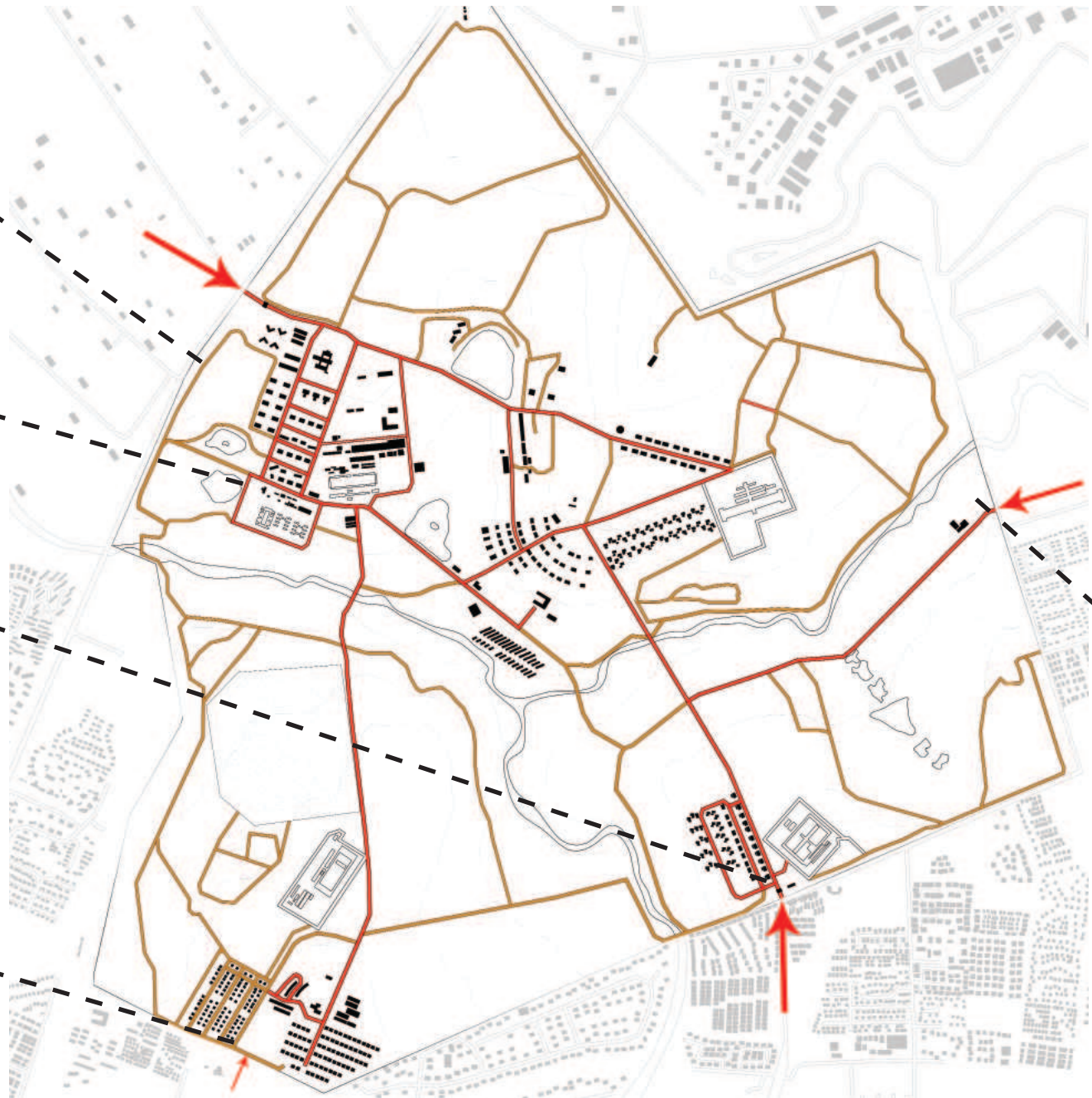
Public tarred roads that lead to the prisons, housing and administration areas.

Main Prison Access

These gates provide access into the prison farm.

Pedestrian Access

This gate leads to staff accommodation and is unguarded. It stays open at all times.





Golf Course Access

This gate leads to the golf course. The public can move into this area freely, although there is a boom and a guard. The public cannot access the prison from this gate



farm access

The prison farm can be accessed from one of four entrances. The main vehicular entrances to the prison are situated on Main Road and Leeuwkop Road. Visitors are required to open their boots for inspection and inform the guards of their reason to visit Leeuwkop. The entrance to the golf course does not allow direct access into the prison, but is also guarded.

The pedestrian gate at the southern boundary of the grounds leads to prison staff accommodation and is unguarded.

Once inside the prison, the public may travel along the main routes and move freely within the farm. The actual prison complexes within the farm are not accessible to the general public.



Leeuwkop Holiday Accomodation

Three cottages are made available to the public as holiday accomodation. There is a lake near the cottages where guests can go fishing. (Bruns 2012)

Leeuwkop Restaurant

The public may eat at the wardens' restaurant. (Bruns 2012)



Leeuwkop Golf Course

The public can access the Leeuwkop Golf course. The original caddies were prison inmates, but the programme has been shut down. (Bruns 2012)

Although the farm functions as a prison, there are areas of the complex that are open to the public. Public interaction with prisoners is a very important concept in the theory of rehabilitation and the culture of Leeuwkop suggests that a new rehabilitation building would function really well on the site.

The public have full access to the golf course and can become members of the club. Unfortunately, the prison has removed

public access

the caddy system that forced golfers to hire a prisoner as a caddy.

The public are also invited to use the prison dams, restaurant and holiday accommodation for recreational purposes. As low security prisoners are allowed to move around on the site, the public are likely to experience chance encounters with them.



Leeuwkop Solitary Confinement

This building houses both prisoners who are 'under observation for bad behaviour' (April 2012) and prisoners who have requested solitary cells for study purposes. (April 2012)

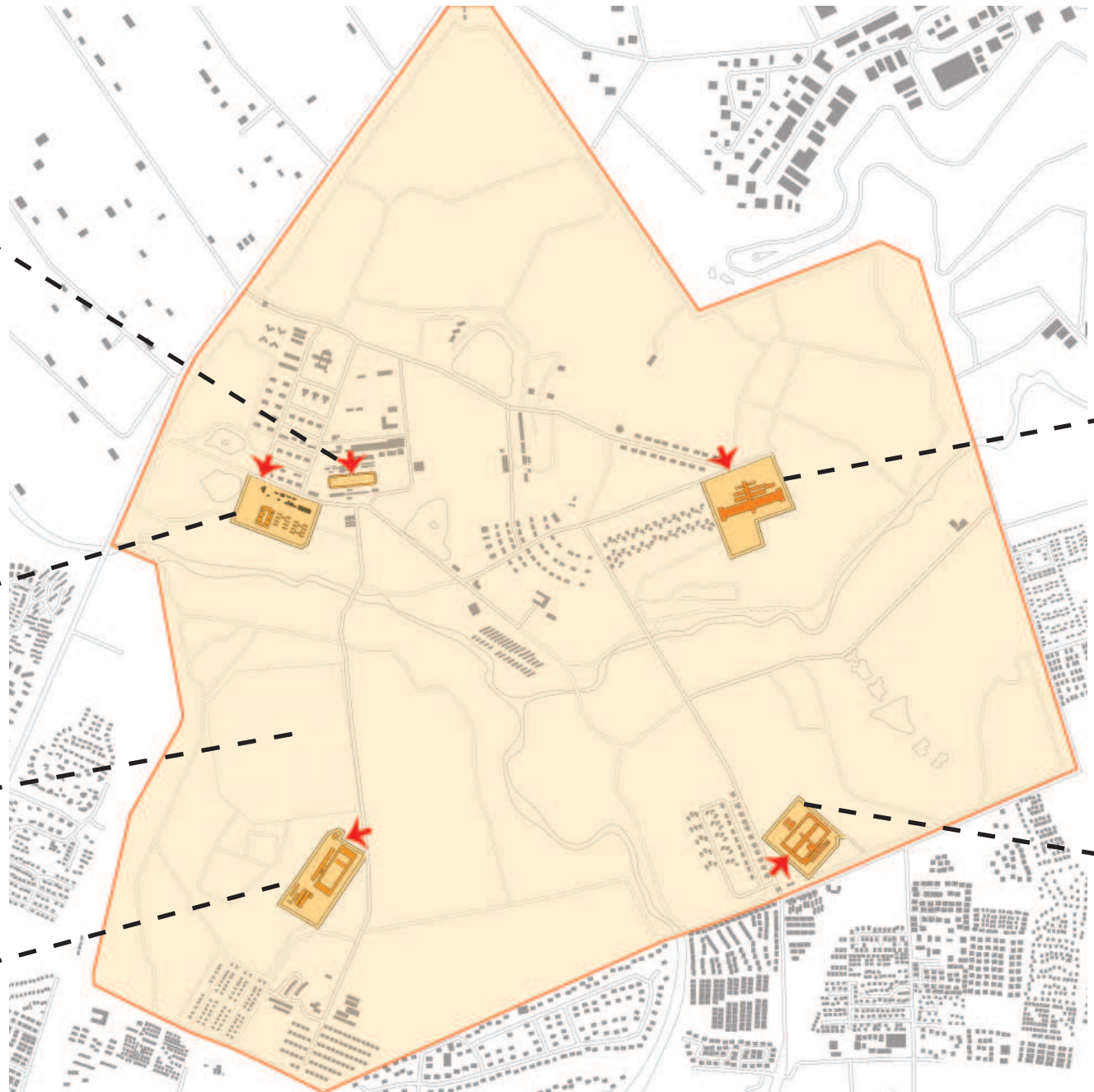
Leeuwkop Medium A Prison

1053 Prisoners held here
(Parliamentary Monitoring Group 26 January 2011)

Proposed site for a New Generation
Prison for the Juveniles (has been
abandoned)

Leeuwkop Medium B Prison

900 juvenile prisoners held here .
Juveniles and adult prisoners may not mix,
for the safety of the juveniles. (Community
Law Centre 1997)



Leeuwkop Maximum CC Prison

1623 Prisoners held here
Overcrowded
Holds only Male Prisoners
(Parliamentary Monitoring Group 26 January 2011)

These prisoners “never see sunlight” (April 2012)

Leeuwkop Medium C Prison

1283 Prisoners held here
Overcrowded
Holds only Male Prisoners
(Parliamentary Monitoring Group 26 January 2011)

Leeuwkop Prison Farm operates on different levels of security, related to prisoners’ risk profiles and sentence lengths. The prisons are fenced as separate areas within the prison farm that operate differently to one another. All of the buildings are placed as objects within flat, unobstructed landscapes as part of security, and all have guard towers and double fences.

The Maximum C prison is the most tightly controlled space on the farm. Prisoners are kept within the confines of their cells for most of the day and are not permitted to venture into the space between their building and fence. Public access is tightly controlled.

Once a prisoner’s security level has been decreased from highly dangerous, to medium risk, prisoners are moved from the Maximum C prison, to the Medium C prison. Prisoners are permitted to move within the confines of the fenced area during certain times of the day, and are otherwise confined to their building.

During the last two years of a sentence, prisoners are transferred to Medium A, a

security gradients

low security prison. Low security prisoners at Leeuwkop are allowed out of their fenced area at certain times of the day to work on the farm. They are allowed to attend church outside their area on Saturdays and attend rehabilitation programmes throughout the week. The prison operates more like a halfway house and prisoners are given a bit of freedom. The outer fence of the prison farm acts as their true boundary, as the Medium A fence is very permeable.

The juvenile prison works in much the same way as Medium C, as juvenile activities are available within the fenced area. Low security prisoners in the juvenile section need to experience the same freedom as those at Medium A.

Warden Sports Facilities

Tennis courts, a rugby field and bowling greens are provided for use by the wardens only. There is also a sports clubhouse. Prisoners do not have access to many sports facilities. (Bruns 2012)

Petrol Station and Shop

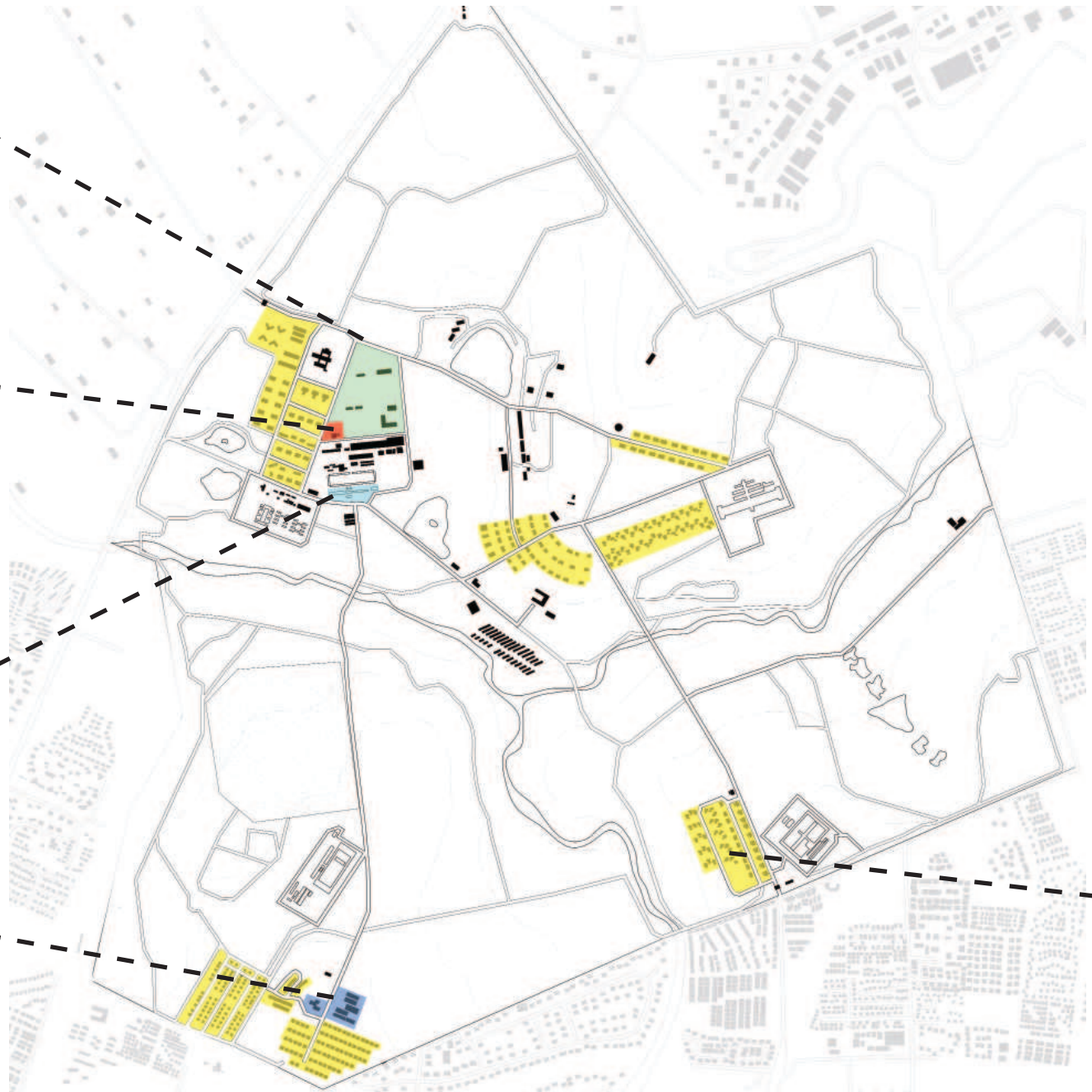
Wardens have access to ATMs, a small shop and a petrol station on the farm. (Bruns 2012)

Administration Block

There is an administration block that holds social workers and trainees that cater to the adult prisoners. (Bruns 2012)

School

A primary school and high school are provided for the wardens' children. The school does not cater to juvenile prisoners. (Bruns 2012)



farm programme

The prison farm can be compared to a small suburb, complete with shops, sports facilities, houses, schools, a petrol station and farming. While most of the site is rural, a 'CBD' of sorts has developed that houses the administration area and social amenities for the wardens and their families that live on site.



Warden Housing

The wardens may stay at Leeuwkop in houses provided to them for a monthly renting fee. There is also housing provided for municipal workers in the southern region of the site(Bruns 2012)



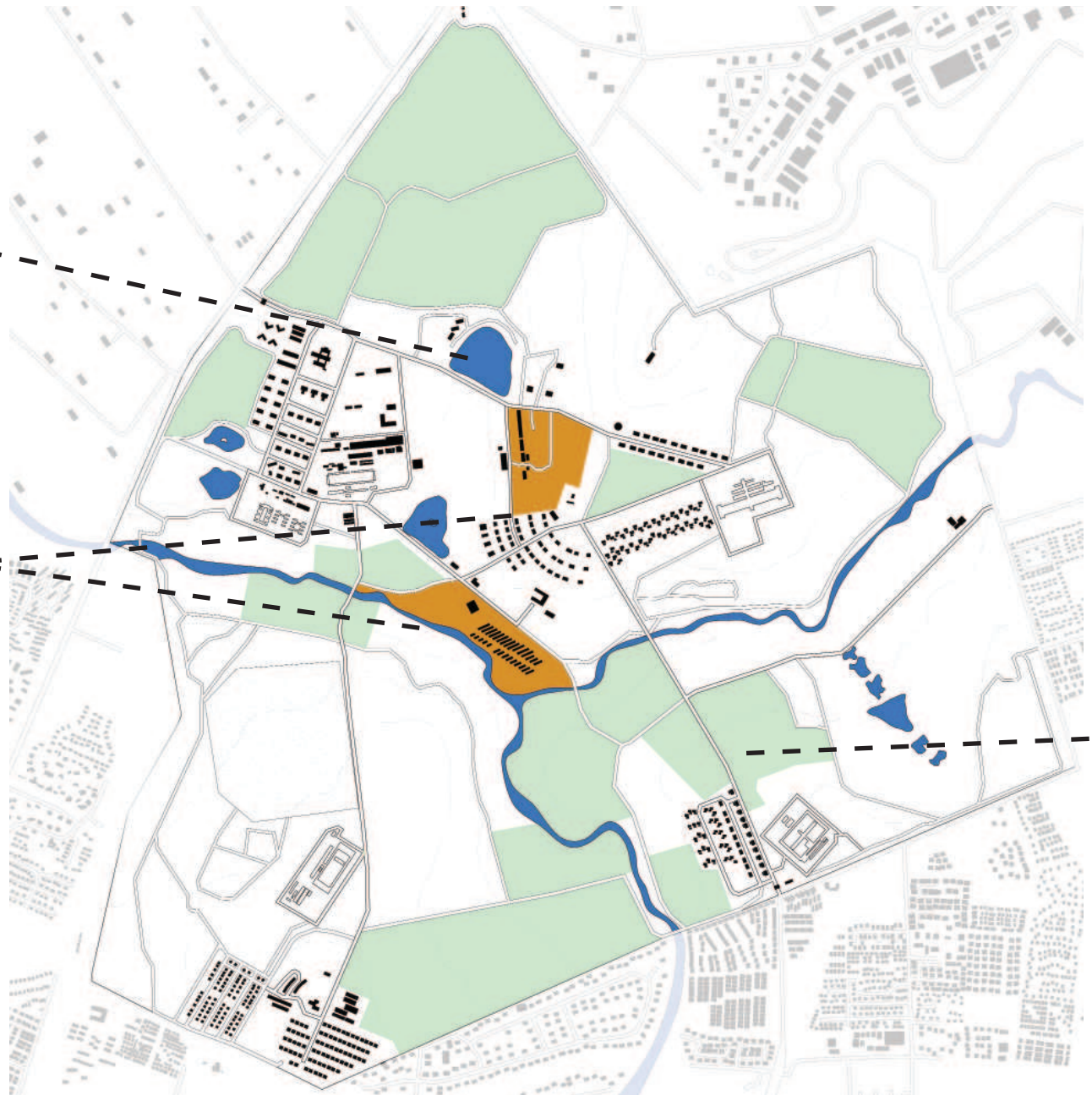
Damns

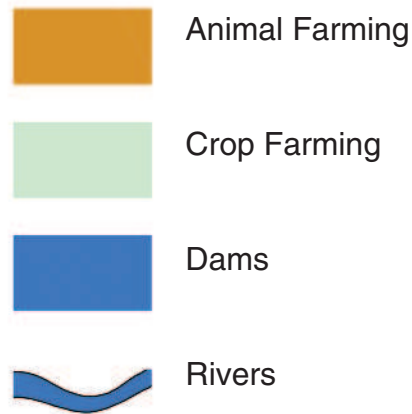
The public is allowed to go fishing at some of the dams in Leeuwkop for a fee. The dams are also used for irrigation purposes.

Animals

Cattle and pigs are reared on the farm. Prisoners are involved in rearing animals and preparing animal products. (Institute for Security Studies 2011)

Leeuwkop Farm produces its own butter, milk and cream. There is also an abbatoir on site. (Institute for Security Studies 2011)





Crops

Leeuwkop is one of the biggest prison farms in Gauteng. (Institute for Security Studies 2011)

Prisoners are involved in crop farming, if they choose so and are on good behaviour. (Institute for Security Studies 2011)

Crops grown here are then used to feed prisoners in Gauteng. Each prison farm in Gauteng grows a different selection of vegetables. (Bruns 2012)

The prison complex has dedicated large tracts of land to farming and produces its own vegetables, meat and dairy products. Pigs and cattle are reared on site as part of the self sustainability of the prison and rehabilitation of prisoners. Milk, butter and cheese are produced on the farm. (Special Rapporteur on Prisons, 2004) Leeuwkop also has an abattoir where animals are slaughtered. The products generated on the farm are then distributed to other the prisons

agriculture

in Gauteng. All of the six prison farms in Gauteng produce different vegetable and meat products. (Bruns 2012)

As Leeuwkop's primary land use is agricultural, inmates are invited to become involved in farm labour activities. The prisoners are taught all the necessary skills as part of their rehabilitation, and are given time to work on weekdays.

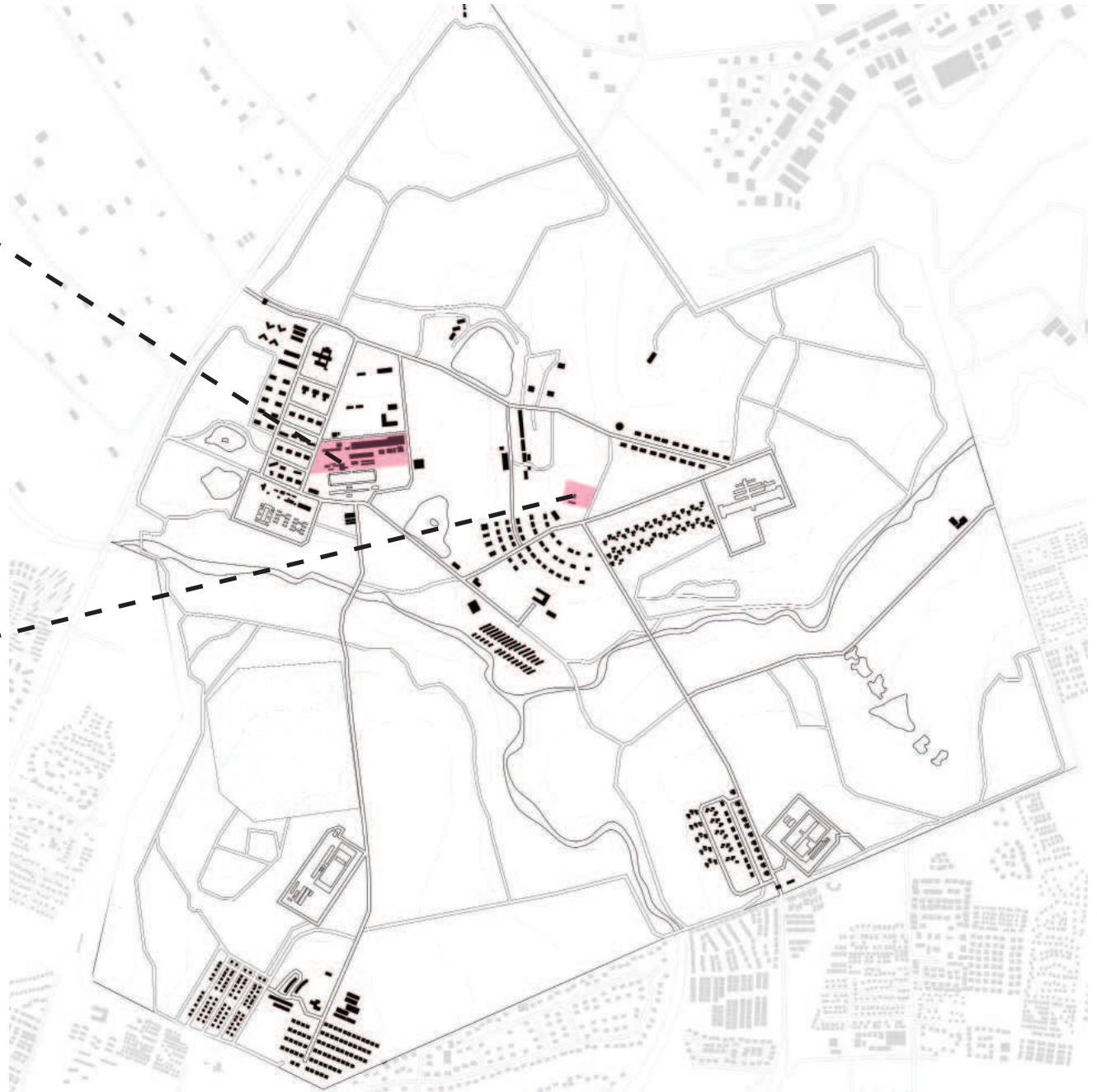


Leewukop Rehabilitation Centre

Adult inmates sign up to be taught skills such as welding and bricklaying and the sheds. (Bruns 2012)

Hlumelelisa Programme

Agricultural programme that teaches inmates to grow plants from seeds. Courses run for nine months and inmates are chosen to participate. (Bruns 2012)



rehabilitation

The Department of Correctional Services has adopted rehabilitation of prisoners as part of the prison environment. As Leeuwkop is an older prison, it was not designed with rehabilitation as its main focus, but efforts have been made to introduce programmes that promote the rehabilitation of offenders.

The main rehabilitation areas are stationed within the Leeuwkop 'CBD'. Prisoners also have access to some facilities within the actual prison areas. The facilities that are available to the juvenile prisoners will be discussed in further detail under the next heading.





proposed site
for the new
generation prison

This aerial photograph shows a rural landscape. In the upper left, a large, cleared, brownish area is marked as the 'proposed site for the new generation prison'. Below this, a rectangular facility with multiple buildings and a central courtyard is labeled 'juvenile prison'. To the right of the juvenile prison, a road runs vertically. Further to the right, a large, dark, forested area is labeled 'agricultural land'. A small, circular structure is visible in the upper right corner of the image.

juvenile
prison

agricultural land

Leeuwkop Juvenile Prison

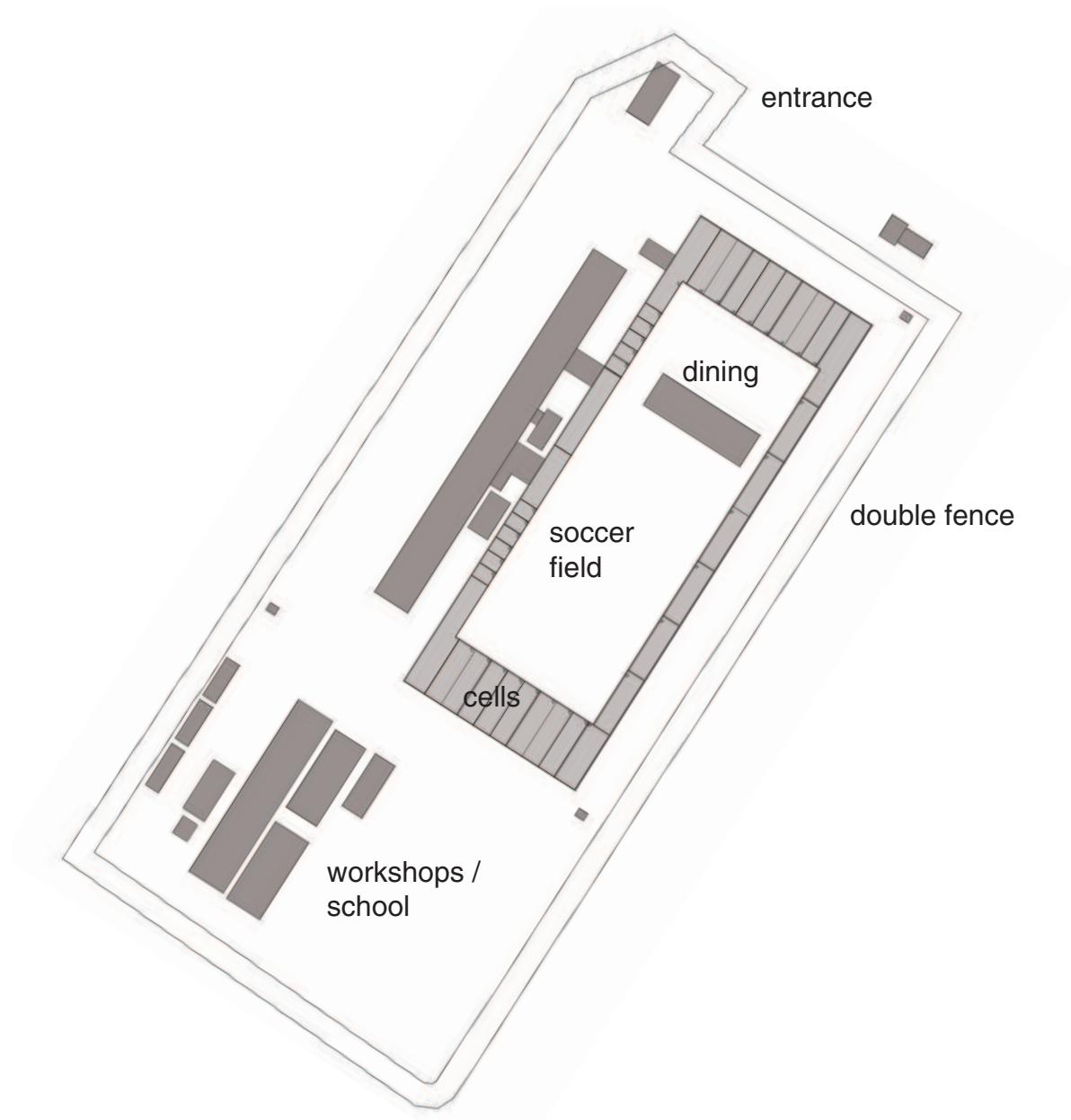
The juvenile prison is a masonry structure, clad in zinc sheeting. It was designed as a perimeter block around a central courtyard and has twenty four cells, housing both juvenile and child offenders as young as fourteen years of age. The prison was designed without a dining facility, and a retrofit dining hall has been built in the courtyard as a corrugated sheeting roof structure, providing little protection against poor weather conditions. Staff members have complained that it is very cold in winter and too hot in summer. (Parliamentary Monitoring Group, 2011)

While the Leeuwkop Juvenile Centre of Excellence accommodates 900 offenders, it can only house 200 in the formal school at the prison. (Parliamentary Monitoring Group, 2011) Two additional temporary school buildings have been built in order to cater for some of the other prisoners. There are currently only eighty solitary cells made available for the juveniles wishing to study privately. (Parliamentary Monitoring Group, 2011) The current conditions of the schools are so poor that attendance is very low and often teachers do not arrive to do their jobs.

(April, 2012)

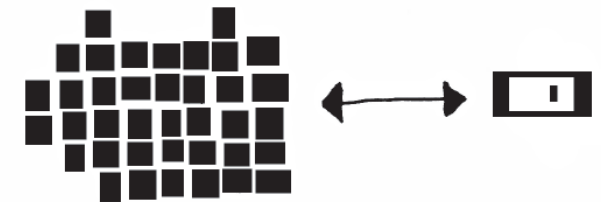
The building has been poorly maintained and is currently “unfit for human habitation.” (Parliamentary Monitoring Group, 2011) A new generation juvenile prison was envisioned on the Leeuwkop site, but due to an environmental Impact Assessment, the construction has been halted, as an endangered species of frog was discovered on site. (Parliamentary Monitoring Group, 2011) The new prison was originally designed to be located adjacent to the existing building, and due to the EIA and a new housing development the plans have been abandoned. (Parliamentary Monitoring Group, 2011)

The Department of Correctional Services has decided to upgrade the existing prison and plans are under way for the building to be renovated to house the juveniles from Emthonjeni and Boksburg prisons, which will bring the total inmate population to one thousand six hundred prisoners. (Parliamentary Monitoring Group, 2011) This would require that maximum security offenders be introduced to the Leeuwkop



juvenile population, and should be held separately to the lower security juveniles. (Parliamentary Monitoring Group, 2011)

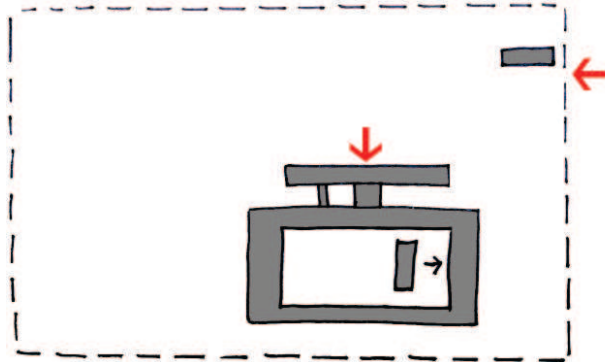
context



Leeuwkop Correctional Facilities. 1983 (After Community Law Centre 1997) All other images after (Community Law Centre 1997)

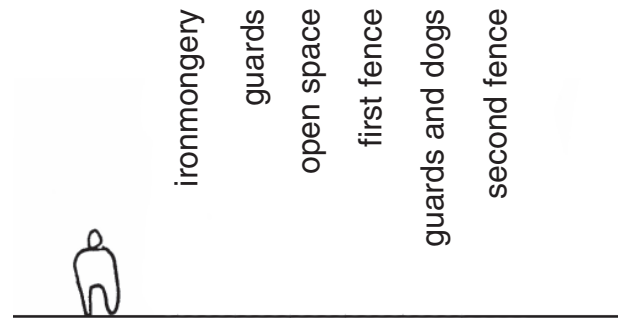
The prison is built on a farm in the northern suburbs of Johannesburg. It is removed from society as a reformatory prison would be

access



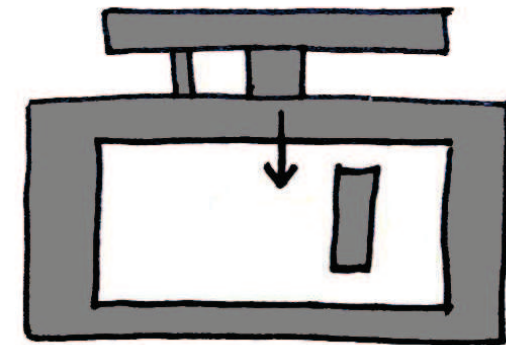
The prison sits within a fenced area within the greater prison complex and access is through a double gate and then admissions

security



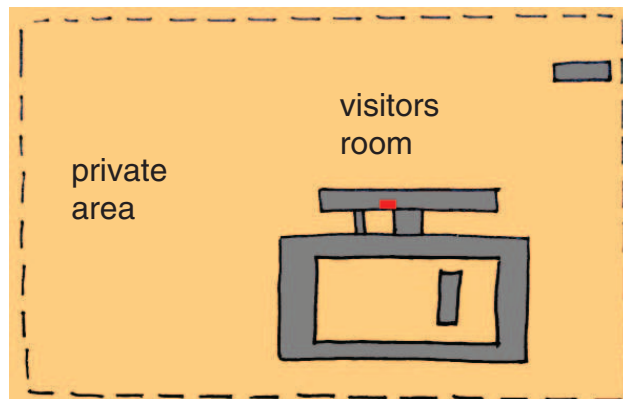
The open space within the fence acts as a security barrier. The prison also sits within a greater complex.

surveillance



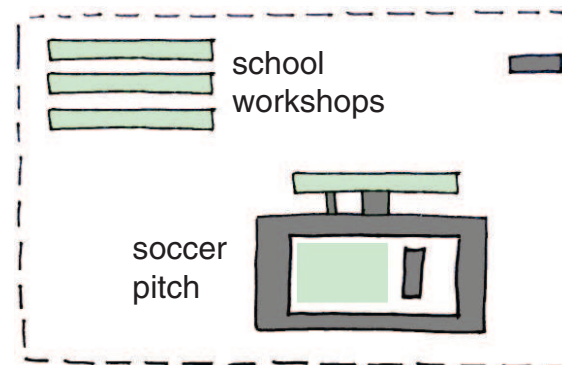
Surveillance is peripheral, similar to the retributive gaol

permeability



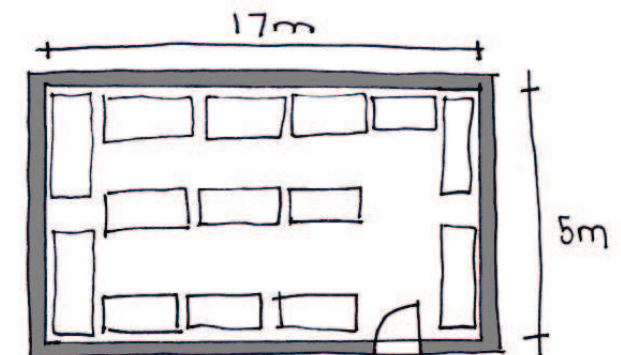
The prison is completely private with specialised visitation rights. It is completely removed from the public

activity



Some rehabilitative spaces are provided including sports, education and skills development, though spaces are inadequate

cells



Cells are designed in a similar fashion to the deterrence prison cells with twenty eight beds and are often overcrowded

Chosen Site

A site in the 'cdb' was chosen because public access is possible and because the site sits near administration, sports, residential and rehabilitation programme. The site is also near to social workers and psychologists' offices.

Other Sites Considered

A site near the juvenile prison was considered, but gaining access to that area of the farm is very difficult for the public.





Photograph of the site. The towers guarded the old prison hospital.

The new SREC building is envisioned as an addition to the existing infrastructure at Leeuwkop. A site near to the juvenile prison was originally considered, due to its links with the original building. One of the main

design drivers for the SREC building is the interaction of the juveniles with the public. Neither of the public entrances to the prison farm are near to the juvenile prison, and public access becomes a challenge. The juvenile prison also seems quite forgotten on the southern side of the farm.

Considering the culture of Leeuwkop Farm, and the way in which low security prisoners are given the freedom to move around the farm, I felt that the SREC building should be located in the CBD area of the site and the juveniles can walk there everyday. This allows the juvenile offenders to experience a variety of spaces during their day, and links the prison building to the rest of the site. The public can access the CBD area easily, as there is a public vehicular gate on Main Road, and the other public facilities are also within the CBD area, so a degree of control is maintained over public access.

The building will also be used by the wardens and their family, so the building ties into the sports complex for the wardens on an urban scale. The accommodation for single wardens is very close to the site, and

SREC site choice

the building can become a social hub.

The site is directly to the south of the rehabilitation buildings for the adult offenders, and while the design must respond to the adult offenders by setting up a protective barrier, the building does tie in to the site's overall plan for rehabilitation spaces. Once grouped, the precinct can be showcased as a precedent for other prisons in Gauteng.

The site chosen is within the grounds of the old prison hospital, which has been renovated to hold the offices for the prison social workers and psychologists. The transformation of the hospital mimics the transformation of the theory of rehabilitation; from its roots in pseudo-medical treatment of offenders, to behaviour modification and psychological theory. The new offices within the SREC building will accommodate social workers and psychologists specifically trained to work with juveniles, but the proximity to the other prison social workers and psychologists allows for the effective sharing of information.



Warden Rugby Pitch and sports complex

Adult Rehabilitation Block

Warden Housing

Adult Rehabilitation Block

Social Workers and psychologists

Site

Administration

Lake

leeuwkop Medium A low security Prison

10119

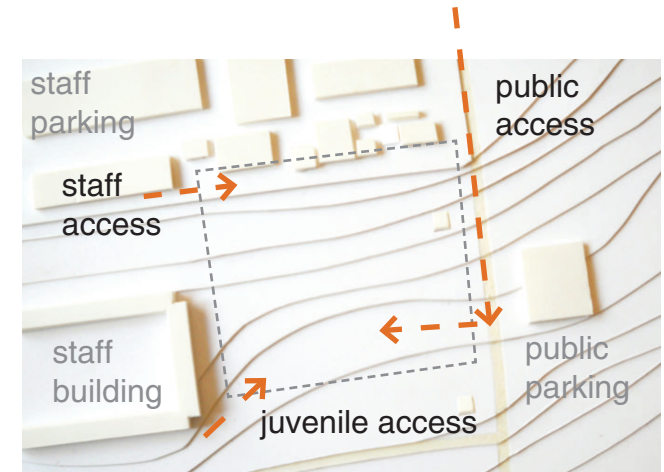


Photograph of the site. The pink/orange buildings in the back are the old prison hospital.

site responses

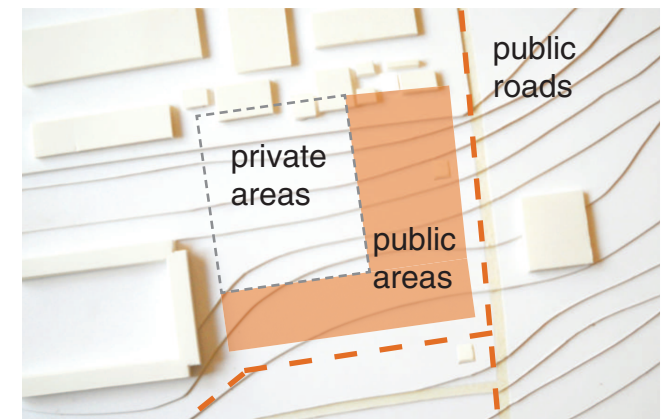
access

Movements of the public, staff and juvenile prisoners were tracked to the site in order to determine appropriate entrances to the building. The prison farm entrance, location of the juvenile prison and the position of staff and public parking were taken into consideration when looking at movement routes towards the site.



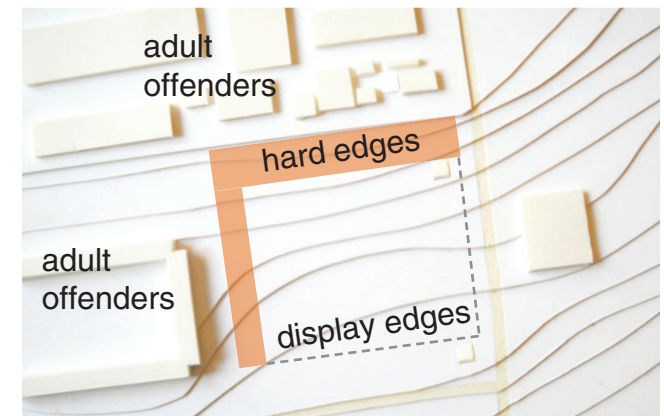
public vs private

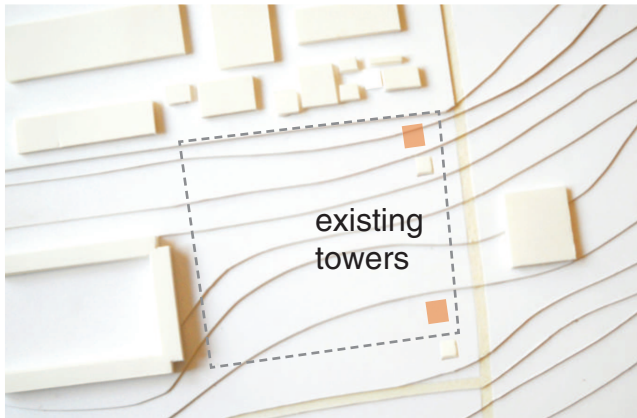
The main vehicular routes that pass the site, divide the area into a more public zone, along the street edge, and a private zone that is held in the back of the site.



edges

Juvenile and adult offenders may not occupy the same space, to avoid rape, abuse or intimidation. The presence of adult offenders in buildings to the north and west of the site, results in the creation of protective edges towards those buildings. The other two sides of the site can become 'display' edges that are more permeable, and allow views into the building.





The design must take into consideration the existing guard towers on site, including their symbolism and presence

existing structures



The design must take into consideration the natural steep slope of the site, by terracing.

slope



The building must be broken up to allow the entrance of north light into the middle areas in the building.

orientation and light

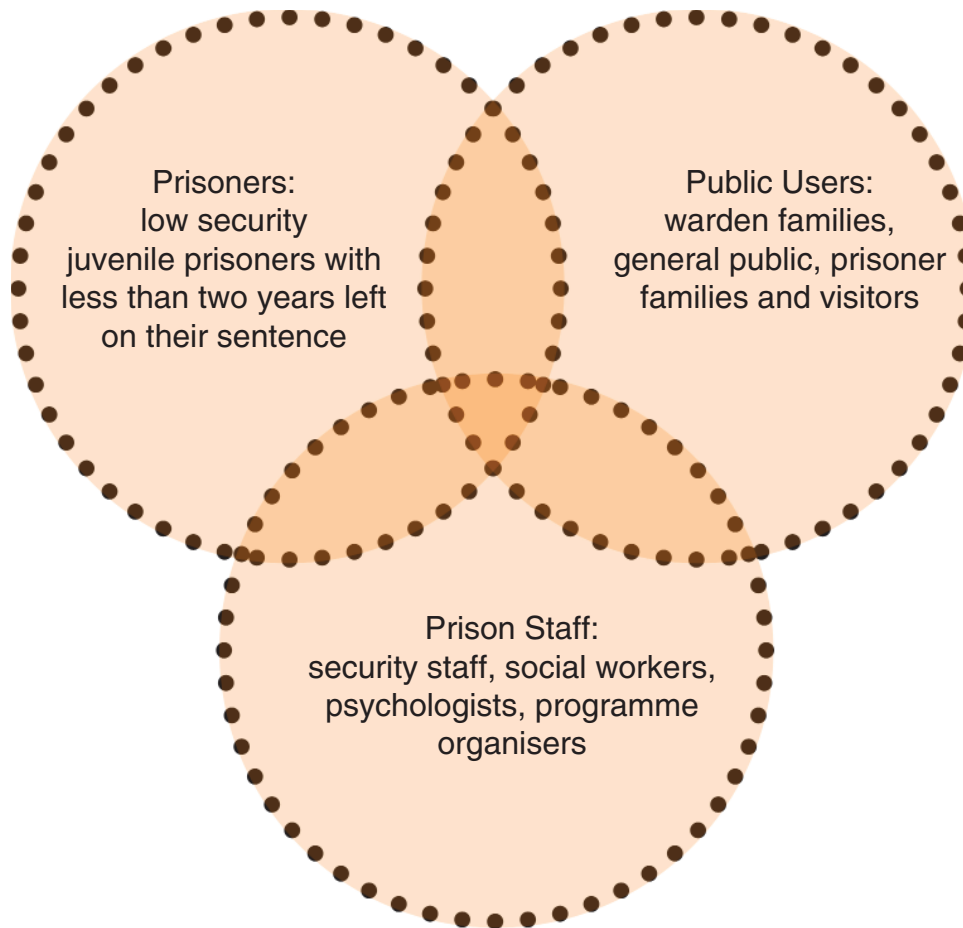


The background is a solid orange color. Overlaid on this are white line-art patterns that resemble architectural plans or maps. These patterns include various geometric shapes, lines, and clusters of small squares, suggesting building footprints, streets, and urban layouts. The patterns are scattered across the page, with some appearing more densely than others.

03|PROGRAMME

INTRODUCING THE SREC BUILDING

The Sports, Recreation, Education and Culture Building (SREC Building) will be an addition to the existing Juvenile Correctional Centre at the Leeuwkop Prison Farm. This building is a necessary addition to Medium B that will bring the existing prison up to date with the White Paper on Correctional Services, in terms of rehabilitation, and the reintegration of prisoners into society after their release. (Department of Correctional Services, 2005)



The building is designed for three different user groups that are brought together to interact on a social level. The primary users are juvenile offenders with less than two years on their sentence, allowing the building to function as a low security prison building. The buildings must also be considered as a workplace for prison staff and rehabilitation programme organisers. As the main concept of the building is prisoner – society interaction, the brief includes social spaces for the general public, including wardens' families and prisoner visitors, in an attempt to create relationships and address the stigmas faced by prisoners when they are released back into society.

SREC project brief

In developing the project brief, the project constraints, requirements and foci were analysed in an attempt to create a cohesive building that relates to its context and theoretical boundaries.

Successful rehabilitation requires a custom fit approach that focuses on both general criminogenic issues and the individual's specific needs. The programmes must also be developed to address a wide range of issues for each offender. The South African government has adopted the needs based intervention scheme, analysing all new inmates to determine their specific strengths and weaknesses so that they can be empowered to reach their full potential for release back into society. (Department of Correctional Services, 2005)

Lukas Muntingh (2001) writes that rehabilitation must be holistic and incorporate spiritual, social, psychological, intellectual, inspirational, cultural, emotional, and community based interventions and that allow inmates to express themselves. The programme is engineered to correct offending behaviour through promoting an

Requirements	Sports, Recreation, Education, Culture programme Social Spaces Security System Natural light Flexible spaces and permanent spaces Building as a workplace for staff Outdoor spaces Building should showcase the new talents developed by prisoners
Constraints	Building cannot allow the interaction of juvenile and adult offenders No corridors Building must respond to the site
Foci	Prisoner - society interaction Passive surveillance Inversion of the current prison archetype Normalisation of prisoners Rehabilitation of prisoners - development and display of progress

offender's social responsibility, but must also address human development through life skills coaching, education, physical and mental exercise, vocational training and social guidance. Family and community relationships must be strengthened so that upon release, vulnerable offenders have a structure to which they can return. The interaction between the prisoner and society should be promoted in order to establish relationships and reduce stigmas associated with offenders. This allows the development of empathy between the prisoners and society.

All South African prisoners are given the right to access to sports, recreation, education, and culture (SREC), yet the lack of adequate facilities and staff has resulted in a four percent participation in SREC even though the activities are important for both the mental and physical wellbeing, and rehabilitation of prisoners. (NICRO, 2011) These activities are particularly interesting, as many psychological and behavioural issues can be addressed through physical exercise, teamwork, academics and recreational activities. Sports, for example, can cause behavioural modification in juveniles because of the exposure to role models, healthy competition, and working in

a team. Experts think that self esteem and aggression can be addressed in sport, and that team sports are beneficial for different children for different reasons. Culturally, where juveniles have had the opportunity to develop talents, programmes must allow for them to showcase their work in order to develop confidence in themselves.

The youth in South Africa has been shown to have a very poor literacy rate and the prisons aim to address this through academic programmes. Prison staff should encourage children to attend school as the attendance rate in prisons is alarmingly low. A juvenile offender answered: "we are learning criminal activities more than anything" when questioned about school attendance. (Community Law Centre, 1997, p. 37) At Leeuwkop Prison, juveniles refuse to attend school as the facilities resemble poorly constructed shacks and teachers often fail to come to work. (Community Law Centre, 1997)

Where vocational training is included in rehabilitative efforts, the courses must be useful and must promote self sustainability of the individuals upon release. Poverty is a major cause of crime in South Africa and prisoners must be trained for interviews and

taught skills that are relevant in the country's economy. (Department of Correctional Services, 2005) Agriculture, industrial production and technical workshops are some useful programmes.

Prisoners are encouraged to participate in community projects that allow them to give back to society. Crime prevention and poverty alleviation are the emphasis of these programmes; and in addition, the debilitating stigma associated with prisoners is challenged. (Department of Correctional Services, 2005)

Individual and group therapy sessions must be provided to prisoners, as needed, to address conflict resolution, substance abuse and life skills training. Programmes are reliant on social workers, psychologists and psychiatrists for their successful implementation. These professionals aim to determine the cause of criminal behaviour and provide offenders with alternative life paths and offenders are taught to react to social situations differently. (Martinson, 1979)

PROGRAMME

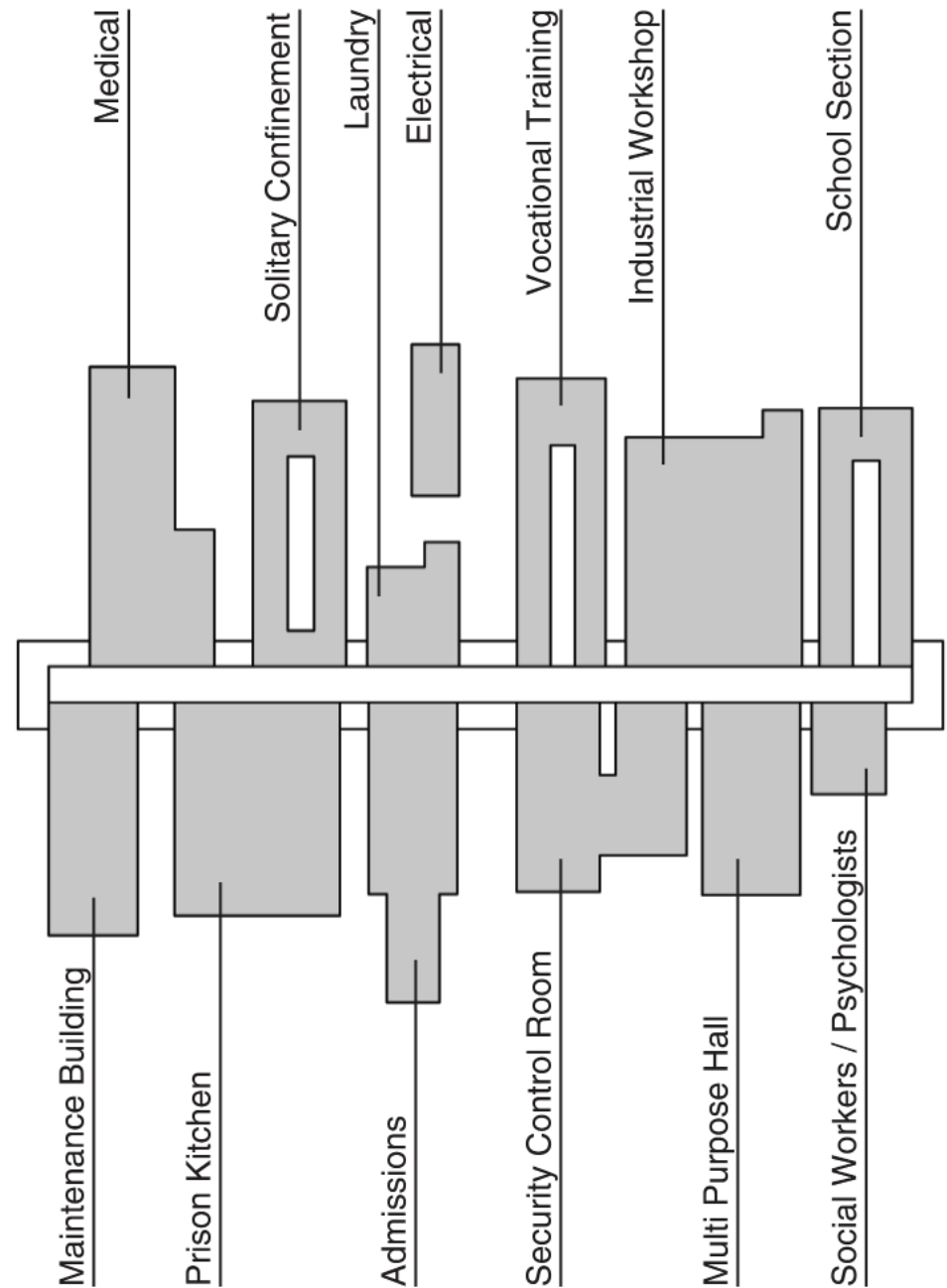
The programme was conceptualised as sports, recreation, education, and culture spaces that are shared where the programme is flexible. Prisons operate on very strict timetables, making flexibility achievable as spaces can be used differently at different times of the day. In selecting programme for the SREC building, spaces that promote rehabilitation through therapy, team work, education, skills development and exercise were considered after studying existing rehabilitation programs. In developing the programme, I looked at case studies and legislation around rehabilitation in order to understand the spaces needed and the way in which the prison would use those spaces.

According to Muntingh (2005), isolated rehabilitation programs are unsuccessful unless grouped with various other rehabilitation programs with varied approaches to behaviour modification. The most successful rehabilitation attempts are those which group physical, mental and emotional development programs, in different plans, for different juvenile offenders. This is called the “needs-based” (Department of Correctional Services, 2005, p. 61) rehabilitation approach. Juvenile prisoners are assessed in terms of their

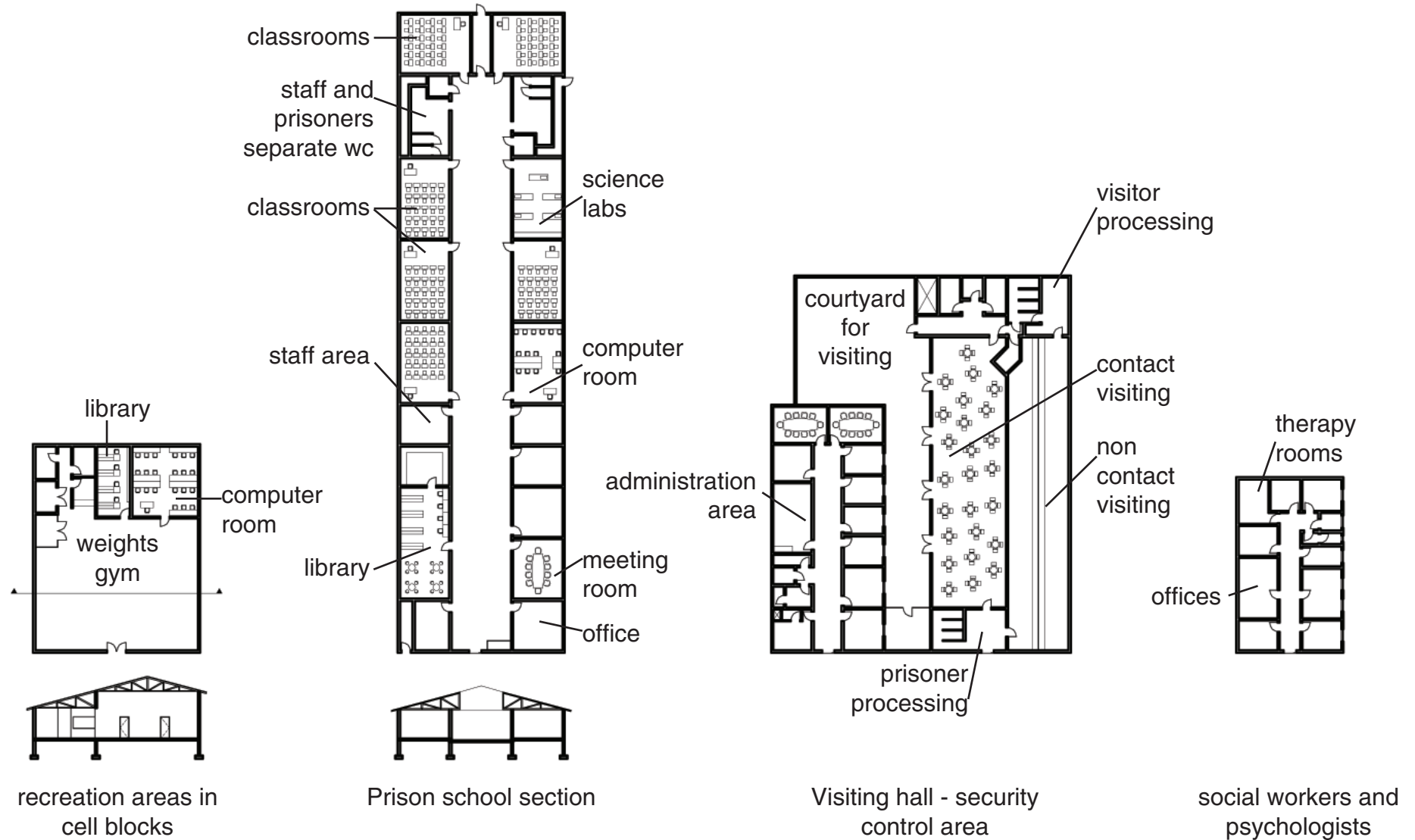
physical, emotional, mental and spiritual needs, and a rehabilitation plan is tailored to suit those specific requirements. (Muntingh, 2005) The prison needs to be equipped with facilities that suit a wide range of rehabilitation services, but unfortunately, older South African prisons lack adequate spaces for rehabilitation.

NICRO, a South African rehabilitation organisation, found that while sports, recreation, education and culture activities promote offender rehabilitation, only four percent of South African prisoners participate in these programmes. A report released in 2011 (NICRO, 2011) criticized the Department of Correctional Services for the poor participation in SREC activities and suggested that more effort should be put into promoting SREC involvement. The new addition to the Juvenile Prison at Leeuwkop was therefore conceptualised as a SREC building.

In discovering the programme requirements for the SREC building the plans for the New Generation Prison at Klerksdorp were consulted. The main rehabilitation spaces are positioned off the central street, which then leads to the clusters of cells. These plans gave me an understanding of the spatial requirements for security, staff and prisoner areas within the building.



programme case study

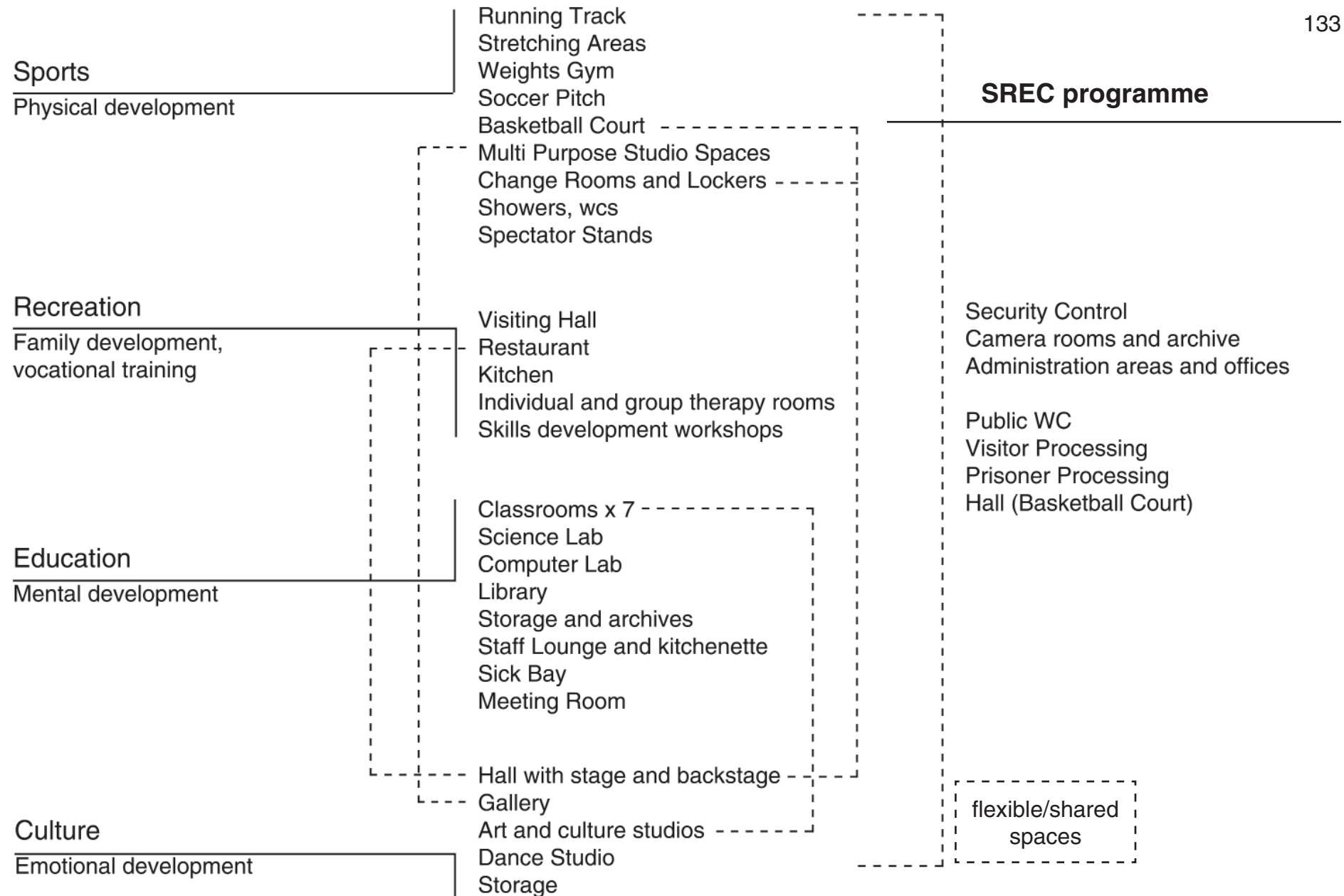


self development
programme

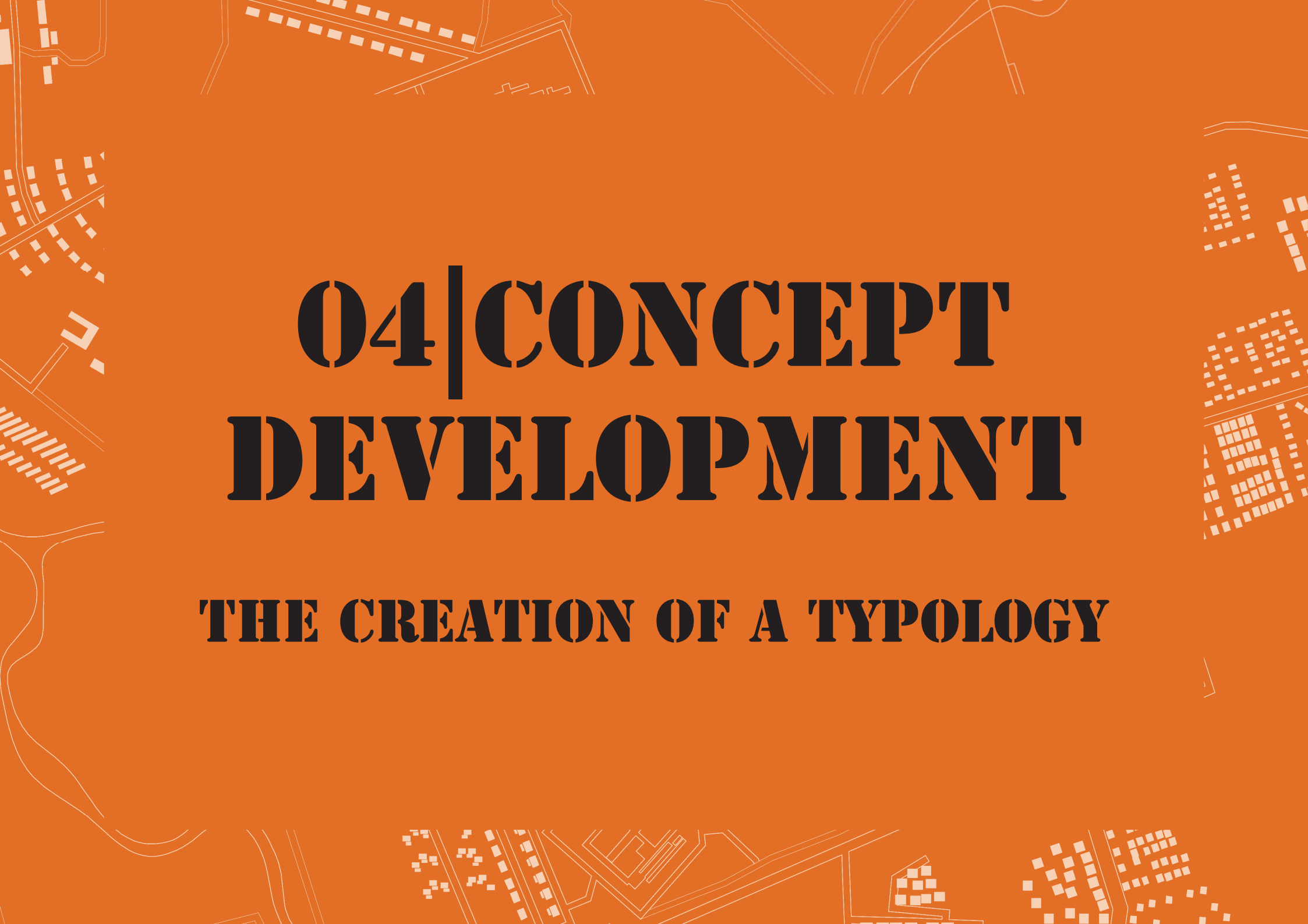
- skills development
- therapy
- school

public programme

- sports
- visiting
- hall
- restaurant





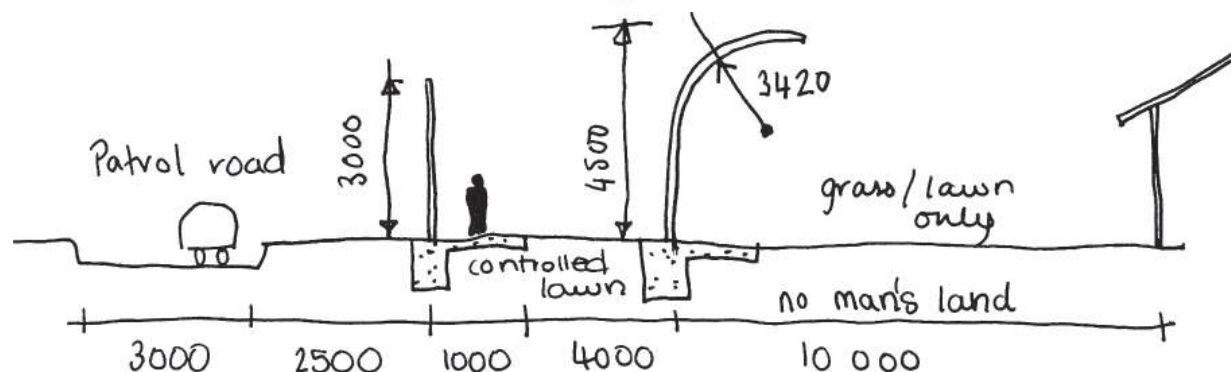
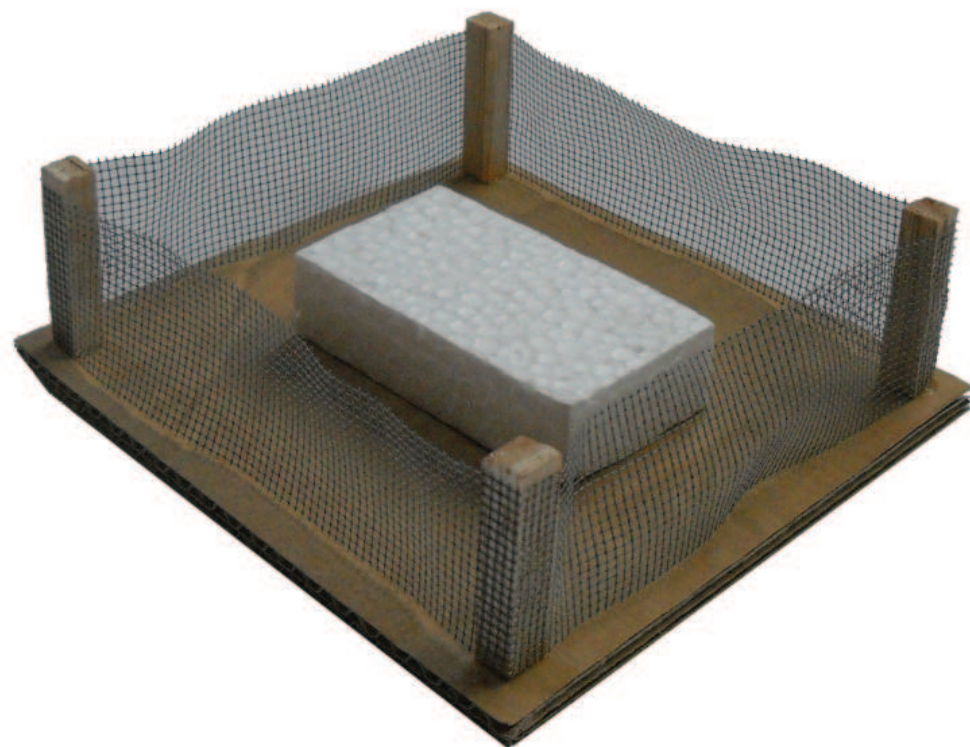
The background is a solid orange color with white line art illustrations of architectural elements. These include various building footprints, some with internal grid patterns, and abstract lines suggesting roads or structural elements. The illustrations are scattered around the perimeter of the page.

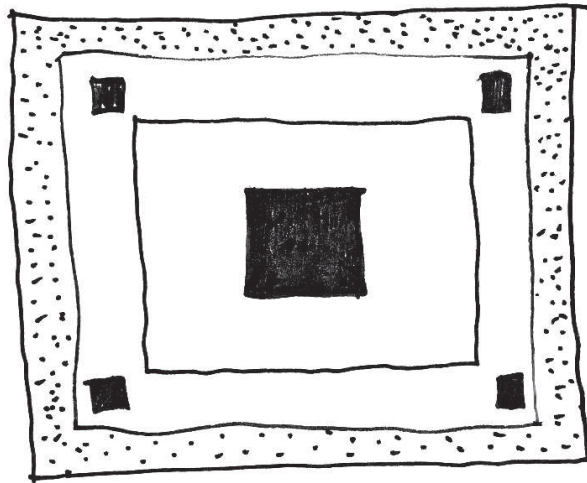
04|CONCEPT DEVELOPMENT

THE CREATION OF A TYPOLOGY

The case study on the San Luis Obispo Juvenile Services Centre, highlighted the fact that the latest theory on imprisonment requires that prisoners are rehabilitated, and that direct supervision is employed; that is that “counsellors rather than guards [participate] with the youth.” (Sullivan & Farbstein, 2005, p. 1) The rehabilitation building trusts that the prisoners will not escape, and hands out punishment only after something has gone wrong, while the current model assumes that all prisoners are attempting to escape as is designed around preventative measures.

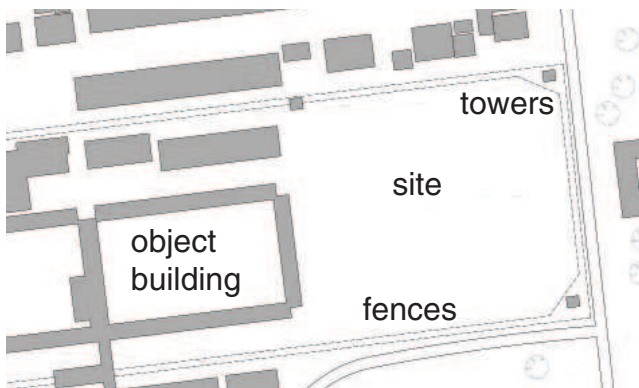
The South African prisons that are currently in use were built with security and detention as their main design drivers. The security of the prison complexes is conceived as layers of thresholds that keep offenders confined to small areas and prevent escape. The cells enter onto tight corridors, designed according to the accuracy of a rifle. These corridors lead to sally port rooms, before exiting into ‘no mans land’, the unobstructed lawn that leads to the prison fence. The prison fence is exploded into two fences that hold a running strip for attack dogs. Finally, there is a road that runs the perimeter of the fence for armed guards. Traditionally, the perimeter fence is broken up by guard





towers, placed strategically to watch the whole of no mans land. (Anonymous South African prison architect 2012)

The site chosen for the new SREC building at Leeuwkop resembles this typology. The new building will sit in the 'no mans land' of the old prison hospital, and will challenge the way in which the typology works. The site has three existing towers, and two fences. The prison hospital is designed as the object building.



While security is very important for public safety, the notion of security is changing with the acceptance of rehabilitation as a strategy for crime prevention. Rehabilitation is a process that attempts to 'normalise' criminals and ready them for life in normal society. This process should occur in 'normal spaces' that mediate between the extreme prison environment and freedom. The rehabilitation model therefore requires a complete inversion of the current prison model, while still encompassing a security strategy. In an attempt to create a building that is fit for rehabilitation, I have analysed the current model in greater detail in order to better understand it and grapple with it. I have attempted to deconstruct the elements that make up the whole, and in my design,

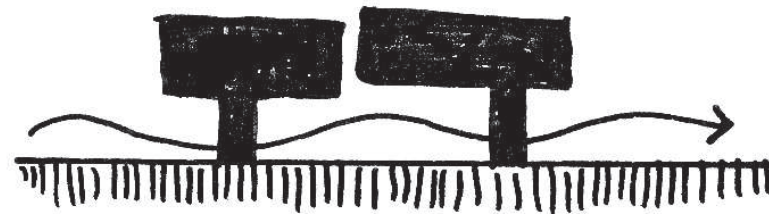
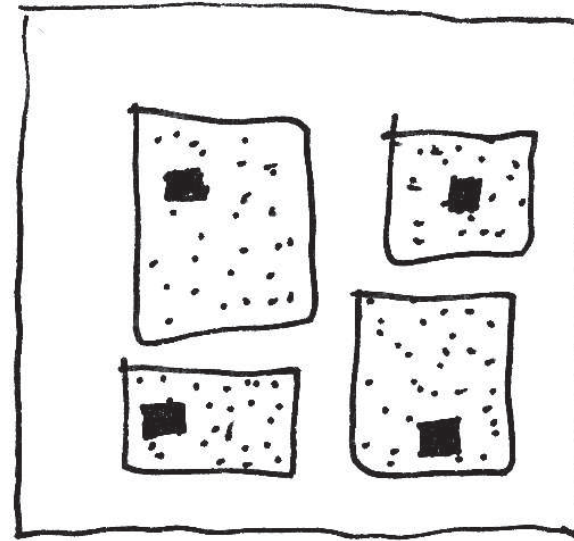
use elements of the current model that I feel are relevant, and I invert those that I feel do not work with the theories of rehabilitation. The tower specifically has interested me as a monument of security that has more effect as a symbol, than as a functional part of a security system.



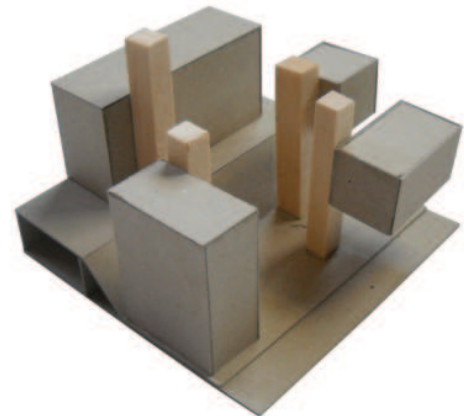
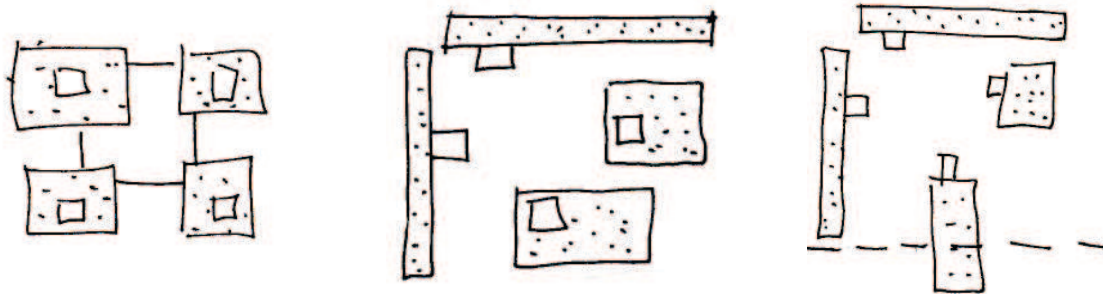
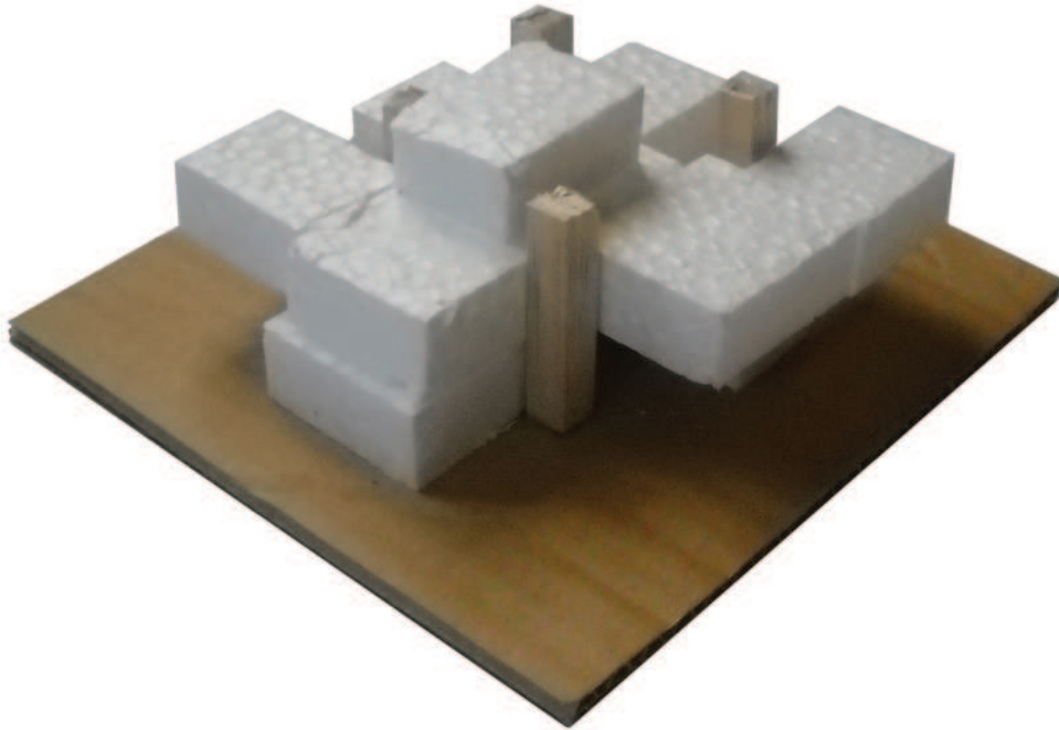
The design process began with a very literal inversion of the prison model. I looked at the current prison model in plan and section and inverted the physical elements in order to make the model work in a different way.

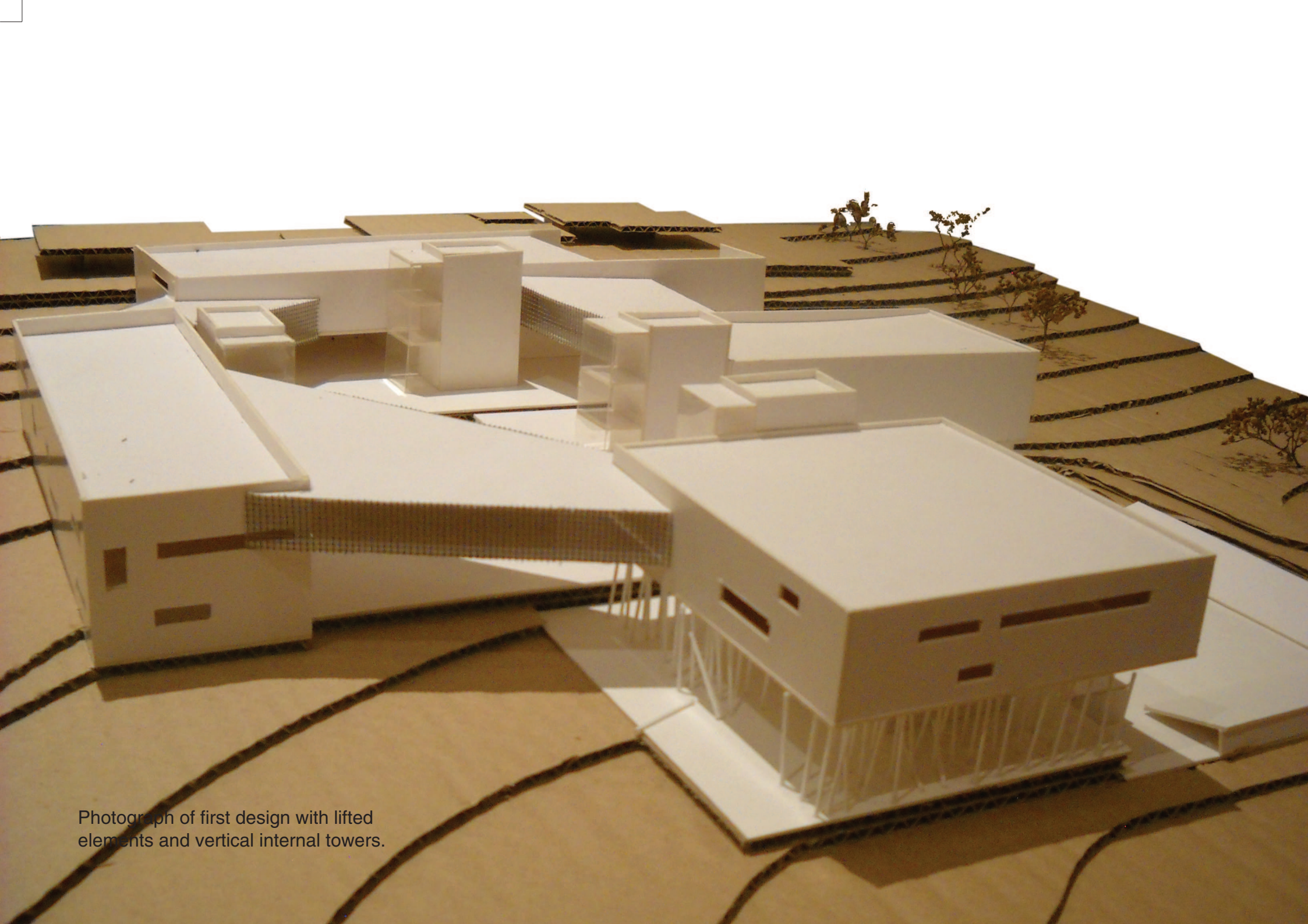
I moved the four towers in towards the centre of the site and then hung programme from the towers. Each tower held sports, recreation, education or culture programme. I wanted to challenge the tower, by hiding it within the mass of the rehabilitation programme, and inverting the gaze of the prison guard, so that the public areas of the building were watched as a priority, rather than the no mans land, where prisoners would attempt to escape. By making the towers structural, I was able to free up the ground floor, creating a forum for public-prisoner interaction. They became the building cores with glass boxes that held security control offices, stacked on top of one another.

The site is bordered by buildings to the north and west that accommodate adult offenders during the day. It was therefore necessary to create hard edges along those boundaries in order to protect the juveniles from intimidation, gang involvement and violence. The building touched the ground to the north

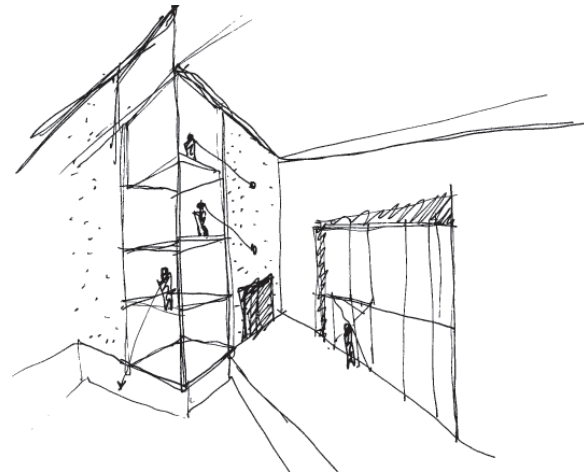
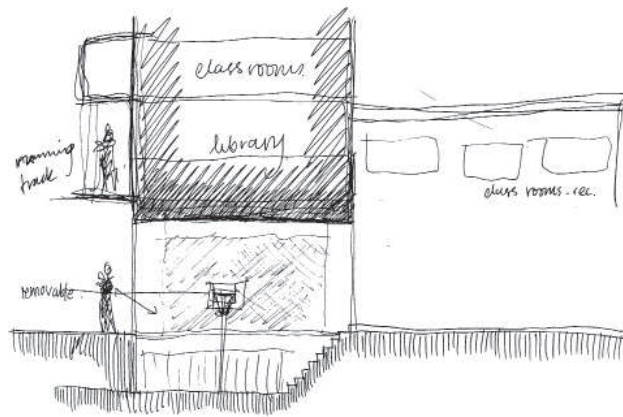


and west, but lifted on the east and south to create display edges so that the prisoners' new found talents could be presented to the public and other prisoners.

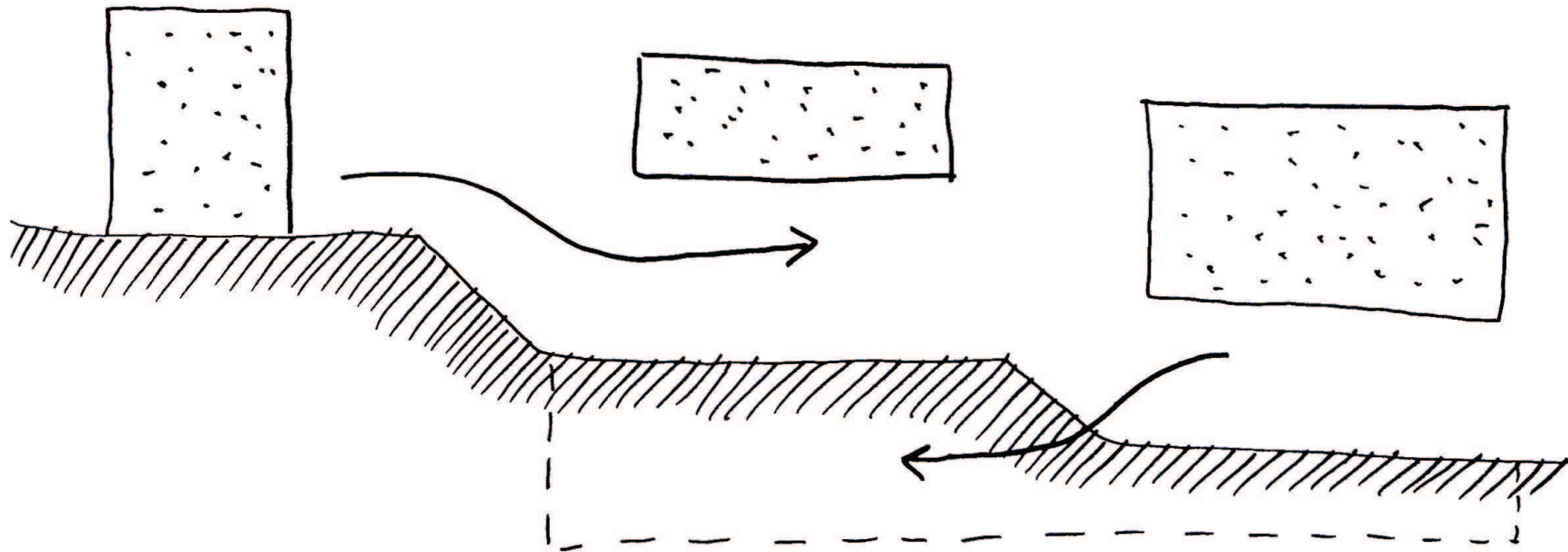




Photograph of first design with lifted elements and vertical internal towers.

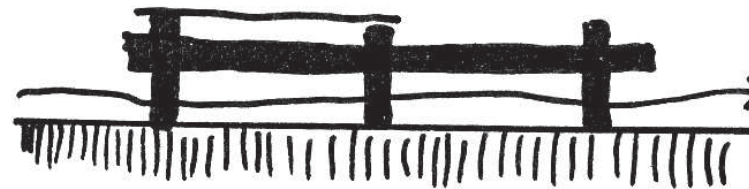
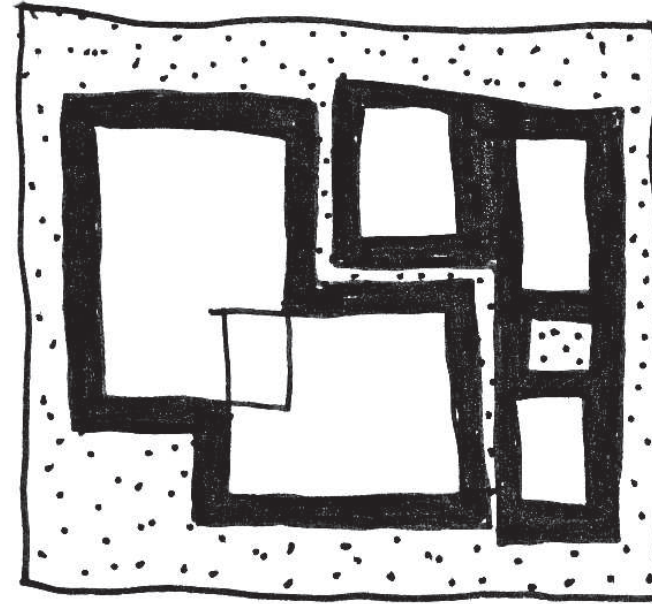


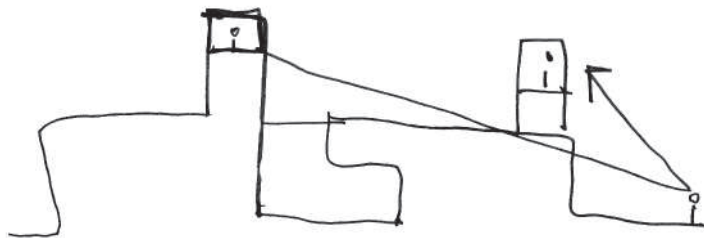
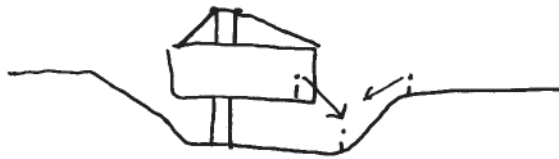
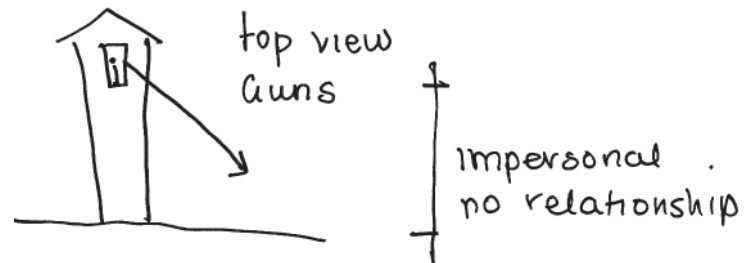
On further examination of this scheme, I found that I had not truthfully inverted the prison, as I had not really grappled with the current prison archetype. The towers, although structural, remained too literal, very institutional and their programme remained the same. I began to look at the way towers functioned; what they represented, what their function was and how they worked. I worked to deconstruct the towers for a better understanding of whether or not they were useful, and whether they could be represented in a different way.



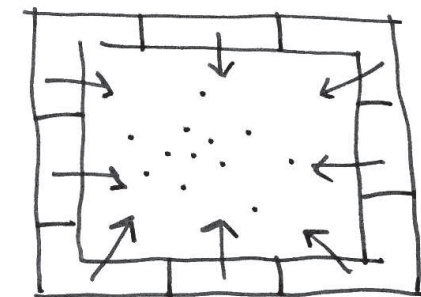
Conceptually, I began to design the second scheme by moving the towers inwards and exploding the building outwards. As my site had an existing prison fence, I stretched the building right to the fence line, creating a large mass over the whole site. I began cutting courtyards out of the building, creating the inverse figure ground of a prison complex. I then began to look at the tower, its symbolism and purpose.

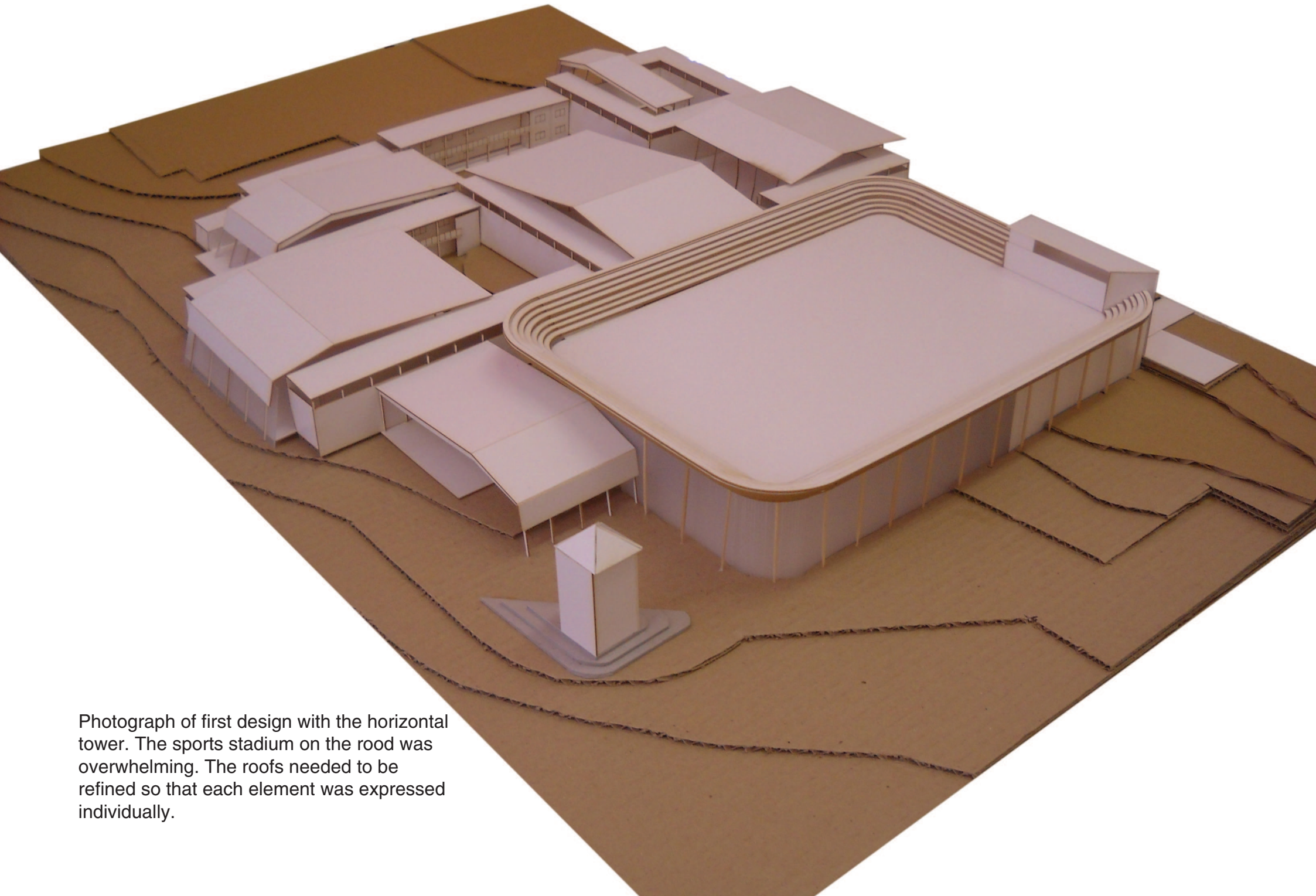
The tower has become redundant over recent years with the advent of new video, sensor and security technology, as well as the evidence of the human error inherent in a security model that relies on a single person monitoring a panoramic area. (Anonymous Prison Architect 2012) The guard tower is a structure placed at the corners of the prison perimeter, between the two fences. The tower holds an armed prison guard whose purpose is to shoot and kill any prisoner that is attempting to escape from the compound. The towers are placed so that no area within the compound is unseen, by virtue of overlapping surveillance. The guards sit at the top of the tower so that they can see, but that they cannot be seen. Their relationship to the prisoner is removed and a hierarchy is established that keeps the prisoner suppressed. (Sullivan & Farbstein, 2005)



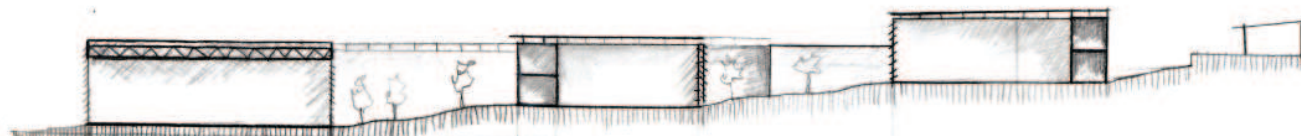
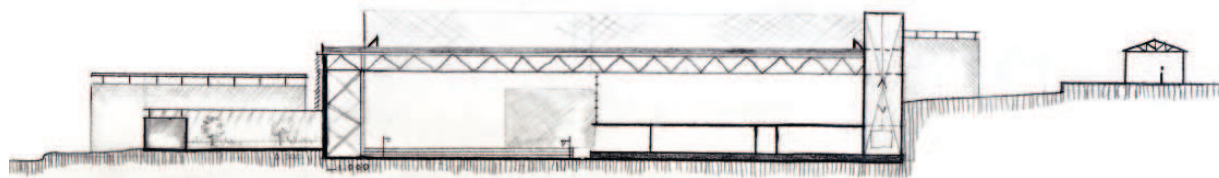
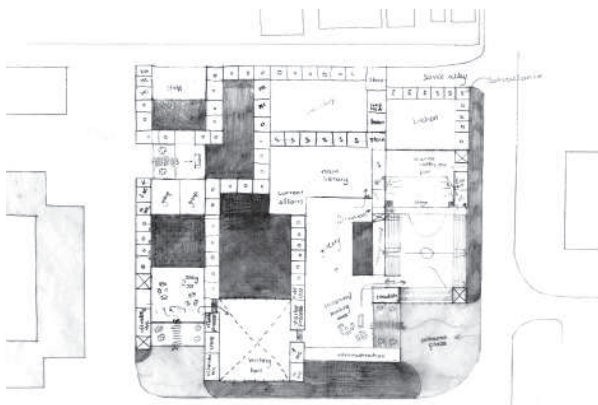
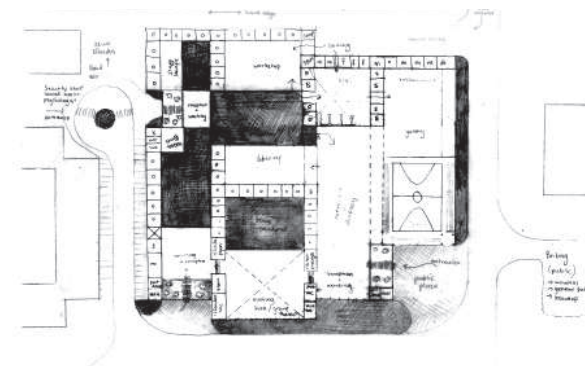
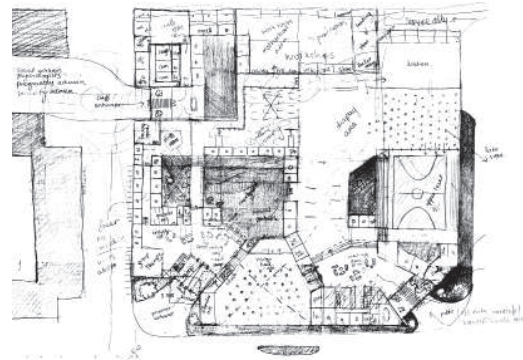


In inverting the tower, I have chosen to address the relationships set up between the guard and the prisoner, by turning the tower on its side. The tower becomes a horizontal strip of offices and service spaces that hold psychologists, social workers, cleaning staff, programmes officers and security staff, who look on to the internal spaces in the building. The active surveillance from the tower, becomes passive surveillance from the horizontal tower, guarding the larger spaces within the building where prisoners and public come into contact with one another. This sets up a direct relationship between the prisoner and the staff member and creates a relationship based on respect, rather than fear. (Sullivan & Farbstein, 2005)





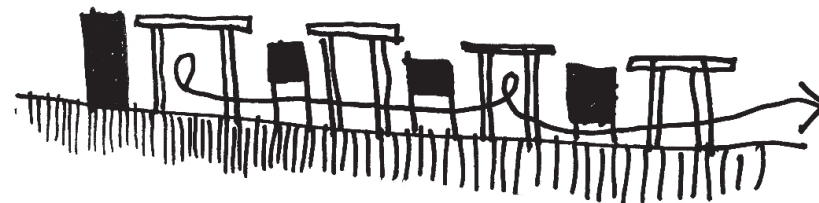
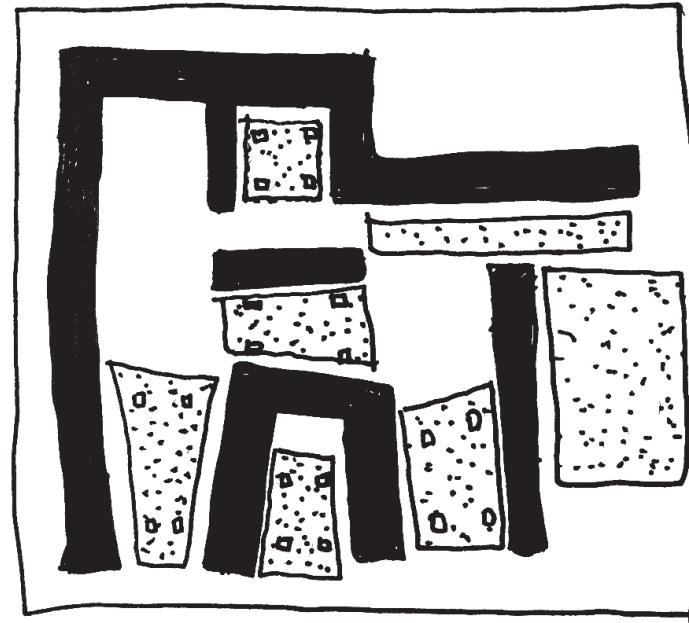
Photograph of first design with the horizontal tower. The sports stadium on the road was overwhelming. The roofs needed to be refined so that each element was expressed individually.

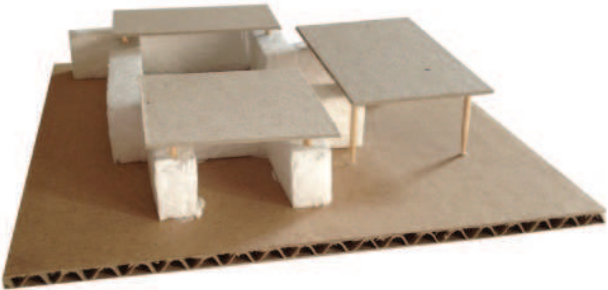
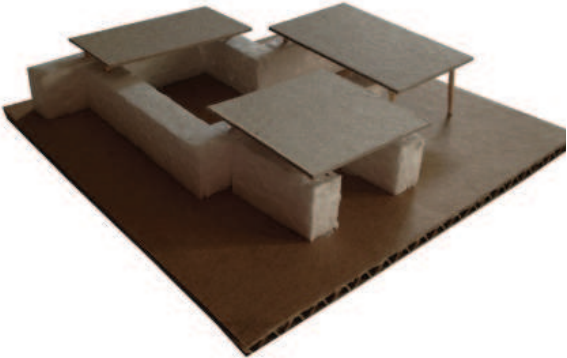


In developing the concept further, the different elements are liberated and expressed in section and 3D. The different spaces must take on their own character that expresses their intention and use.

The horizontal tower becomes a servant space, expressed as a low lying simple building that holds administration functions. The larger spaces become a celebration of skills development and a showcase space for newly found talents, and are conceptualised as roofs that hold the space. The tower lifts up in places to allow for the connection of different spaces within the building visually and spatially. The idea of the vertical tower is returned to the design as light wells that create interesting internal spaces, while the roof of the horizontal tower becomes trafficable. The courtyard is still an integral part of the design that is used for circulation, light and recreation. It is articulated as an extension of the larger roofed spaces

The final design is based on these concepts. In order to develop the design, series of exercises in placing the horizontal tower, the programme and mass are used to create the final product. These exercises are presented in the next chapter.









05|DESIGN DEVELOPMENT

programme placement

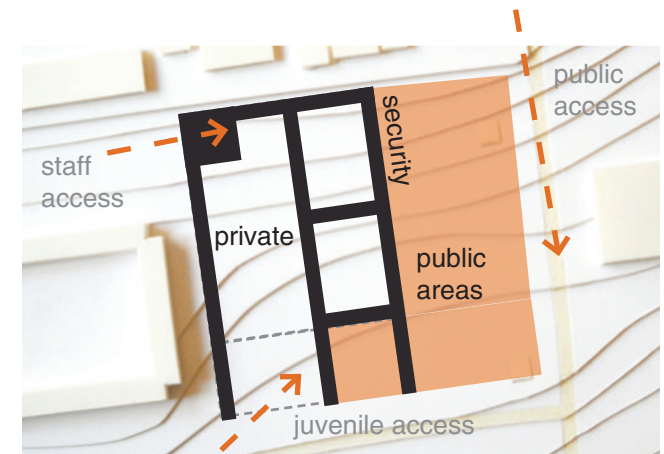
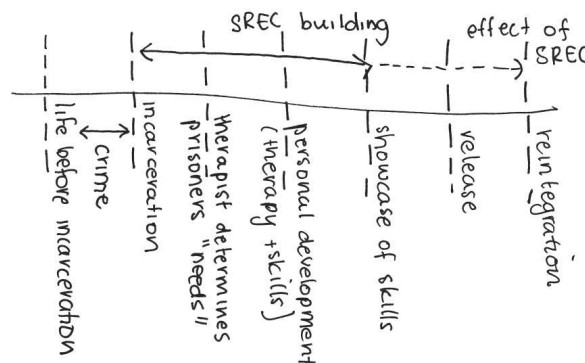
When placing programme on site, it was important to consider the dynamics of rehabilitation, as well as the existing programme within the buildings that frame the site. In a study done by Lucas Muntingh, (2001) it was found that the process of rehabilitation takes place in two stages; the identification and development of skills, and then the display of the newly developed skills. The programme was separated into three categories; security and administration, personal development and showcase of skills. The process of rehabilitation, from skills development, to the display of new found talent, must be represented within the design of the building. The placement of programme therefore relates to the process of rehabilitation, public and private spaces, access and security.

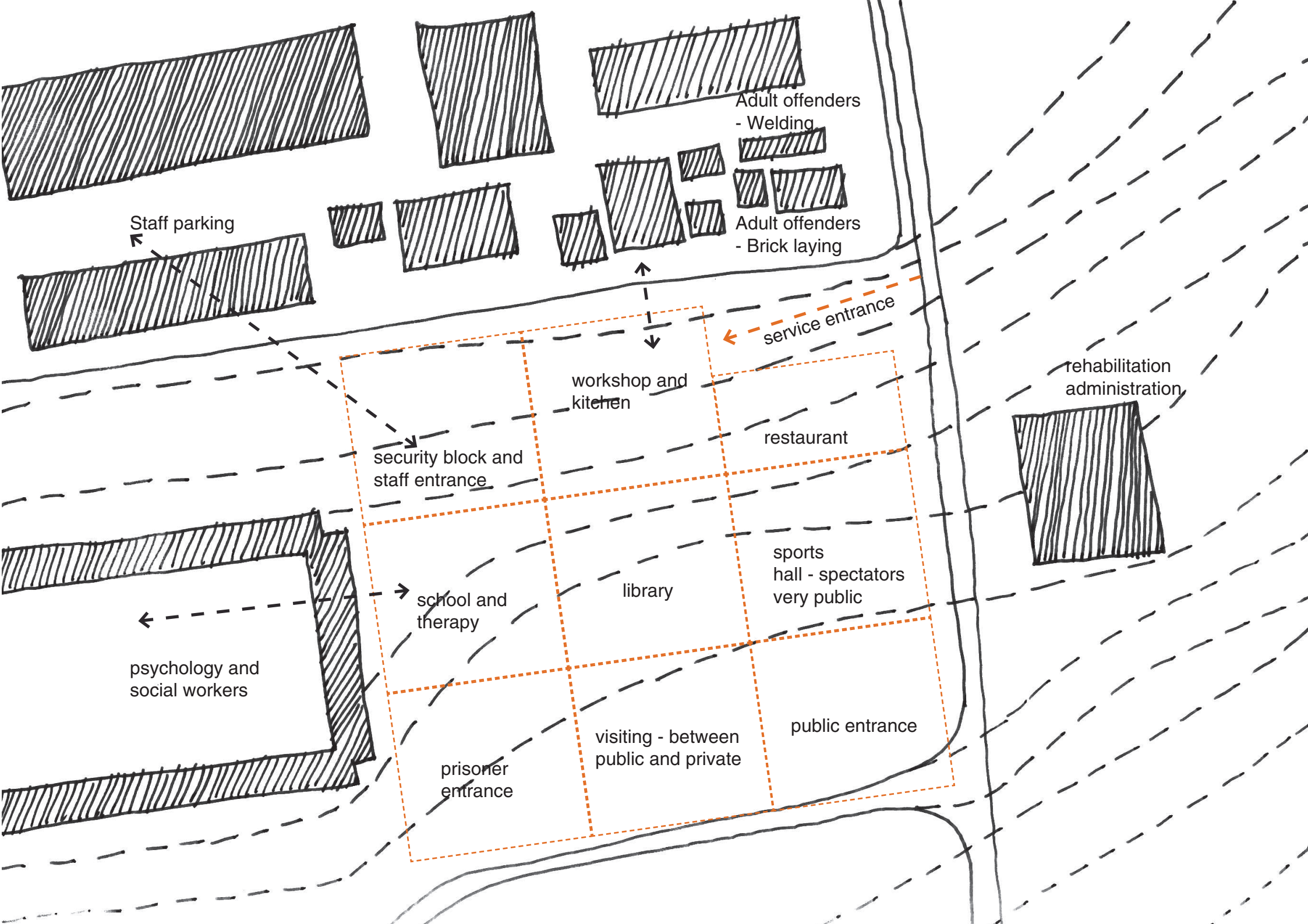
In analysing the site, public and private areas were identified that occur naturally because of roads and access points that are used in the placement of programme. In the SREC building, programme that deals with the development of talent, or behaviour modification is conceptualised as private and intimate, while the spaces that promote

the prisoners or showcase their talent, are placed within the public realm of the building. The security programme inhabits the horizontal tower, and is weaved between the larger spaces to secure them. The video surveillance hub, security staff areas and high tech spaces are then grouped together in the most private part of the site, so that

security becomes quiet and secondary, rather than monumental and symbolic.

Programme is then placed within the spaces dedicated to personal development, public showcasing or administration according to light, access, existing programme that surrounds the site, services and views.





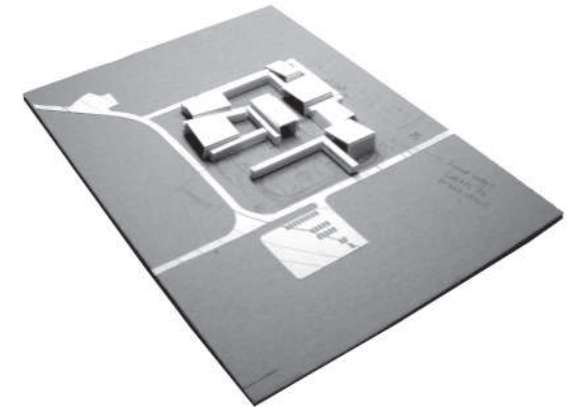
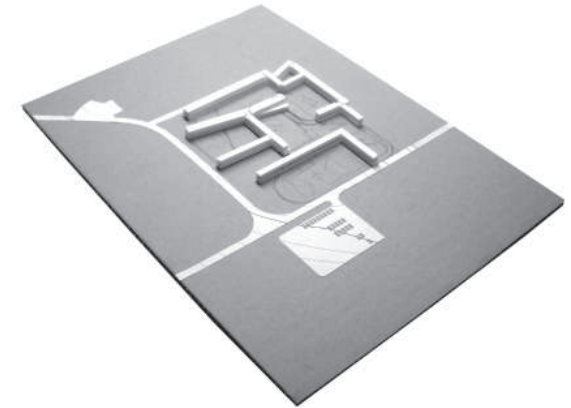
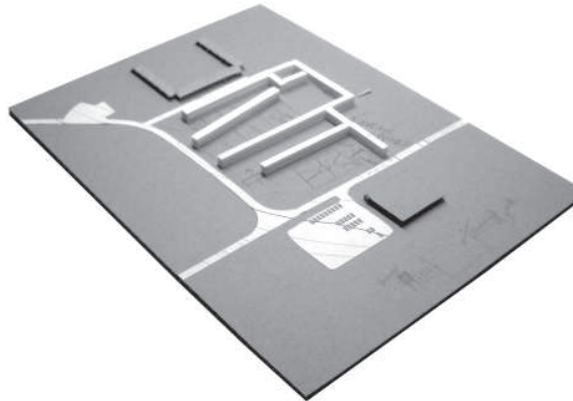
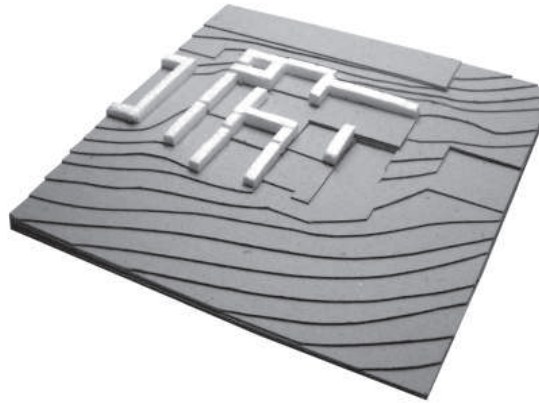
horizontal tower study

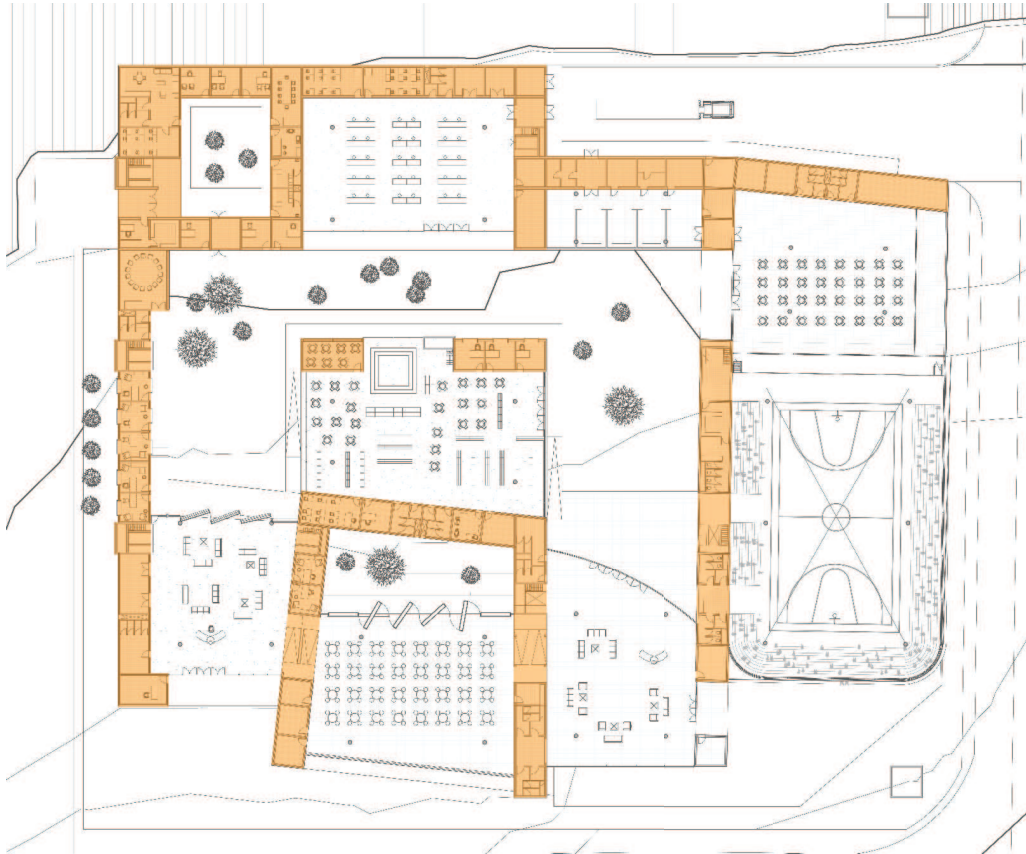
The horizontal towers were placed on site to frame the larger programme to keep those spaces under constant passive surveillance. The horizontal tower creates a wall to the north and west of the site, to protect the juvenile offenders from adult offenders.

In the first model, the lines of the existing buildings surrounding the site influenced the lines in the SREC building. The horizontal towers were placed parallel to the other buildings and one another. The spaces in the courtyards and library were very narrow.

In an attempt to vary the spaces, and deal with the very narrow spaces created in the first model, I began shirting the horizontal towers to pick up on the lines of the roads, and movement routes. The wall to the north and west remains parallel to the existing buildings, while the public and display edges of the site begin to move. The library becomes very small and the courtyard becomes narrow.

Model attempts to make an entrance for the staff. The snake begins to vary on the upper and lower floors. The restaurant is given





outdoor spaces. Some spaces are awkward.

In model four, the wall to the north and west becomes parallel to existing buildings again while the other snakes are given the freedom to dance, this reinforces the concept of the hard edge and display edge. Internal horizontal towers are shifted to create bigger courtyards and a bigger library. At this point a running track is introduced to the roof of the horizontal tower, but the shapes do not lend themselves to running.

In the fifth model, more thought is given to the running track. The horizontal tower is shifted to that track on the roof is more fluid. The shift in the northern wall allowed for a bigger service area and directs views to the lake. The shifts relate to one another. The library is given views into the courtyard. In this model, the massing of the roofs for the larger spaces in relation to the horizontal towers is considered.

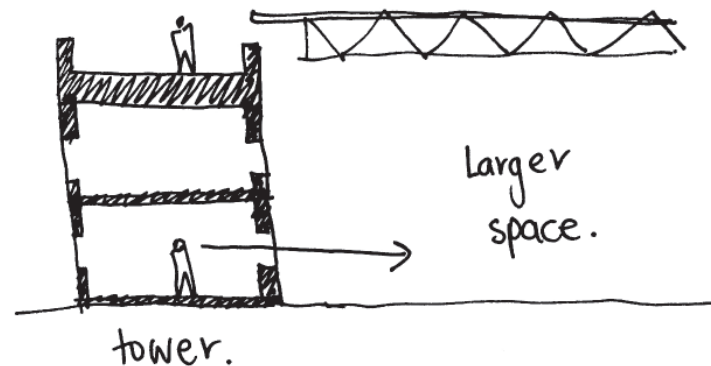
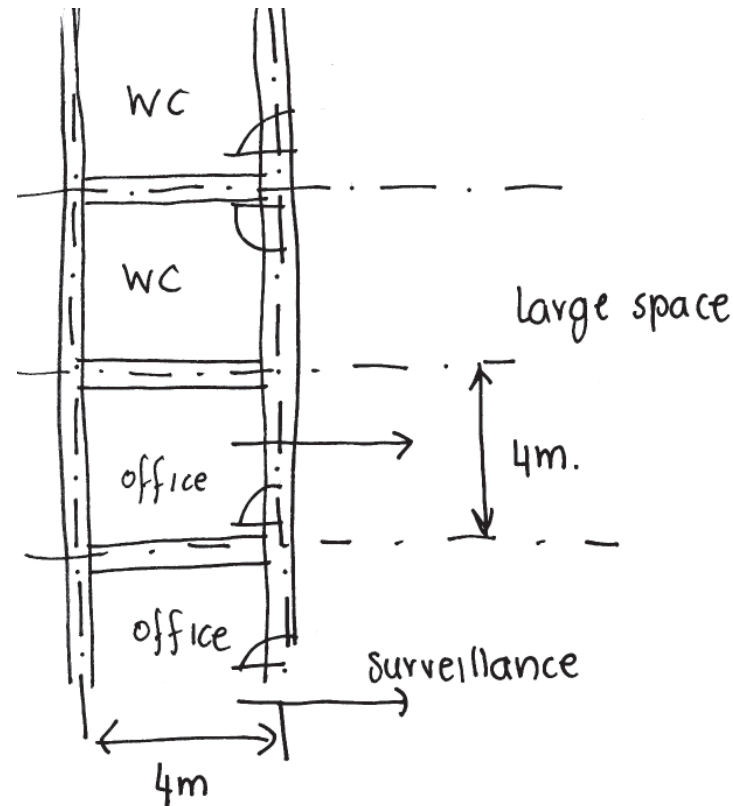
The diagram shows the final placement of the horizontal towers on site.

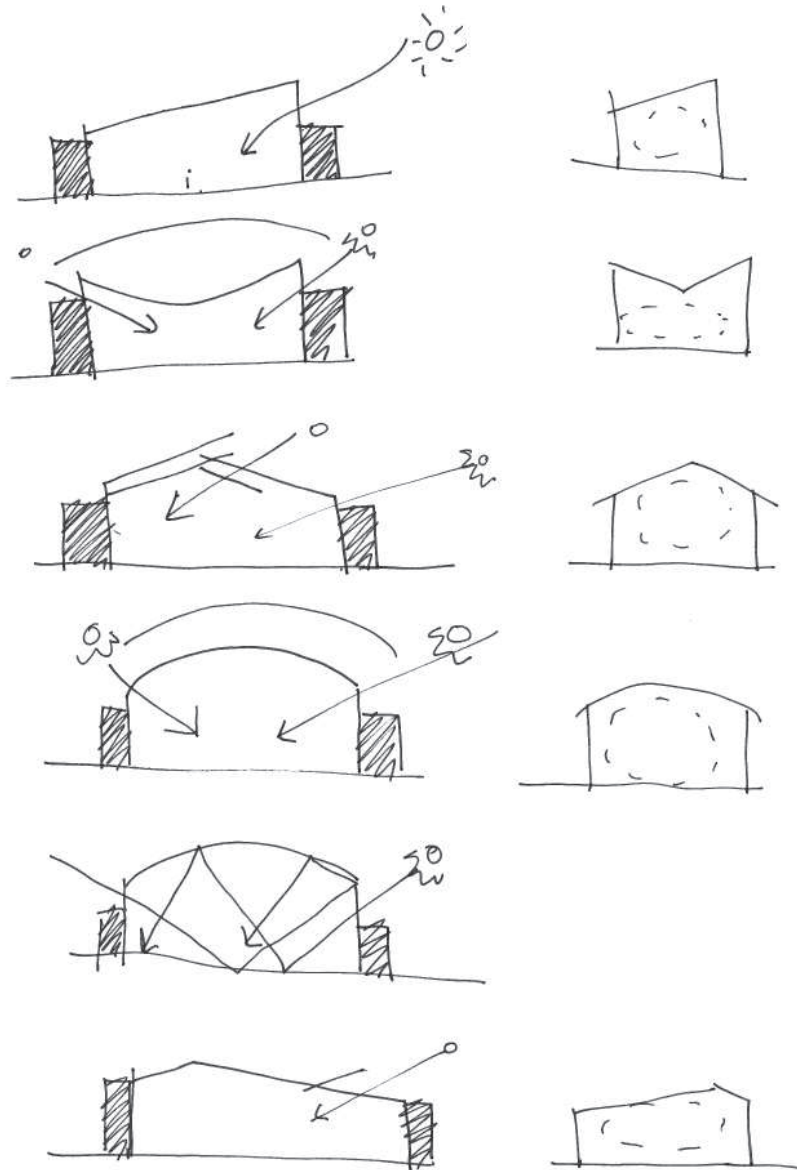
horizontal tower design

The horizontal tower is an administration block, with service spaces, such as offices, toilet blocks, storage spaces and vertical circulation. The size of the tower is therefore based on the average suitable size for an office, from 3,75m to 7,5m. (Neufert & Neufert, 2000) The existing guard towers on site have a base of about 4m by 4m. I therefore put the snakes on a grid of 4m by 4m so that the offices would be the correct size.

The towers are double storey in places. The office programme is distributed over both floors to ensure proper surveillance of the spaces, while maintaining a direct relationship between staff and prisoners.

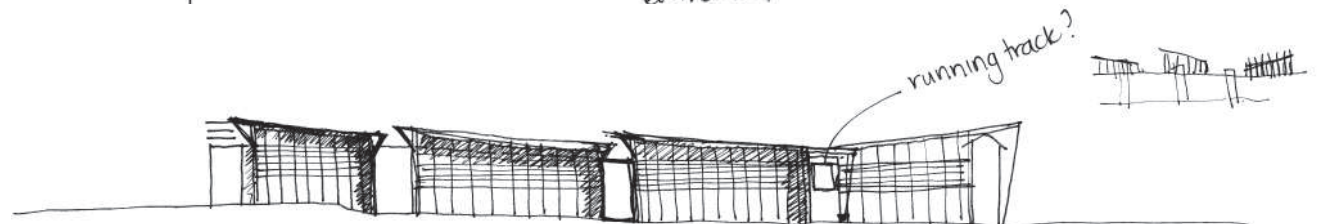
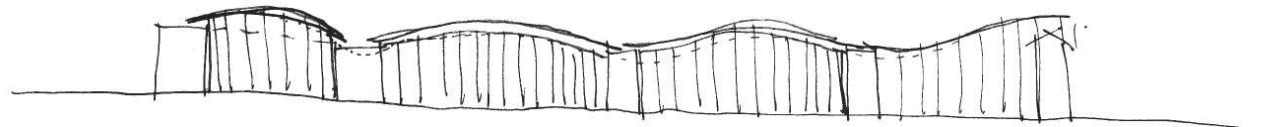
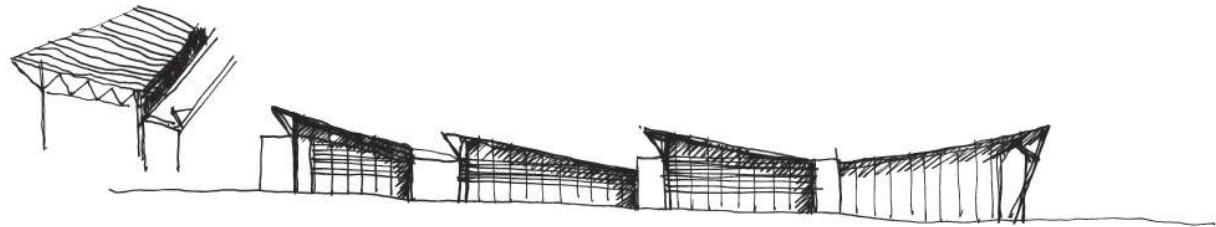
The horizontal tower is influenced by the guard towers. It is masonry construction, with simple geometries and simple windows that allow the offices to look into the larger spaces.



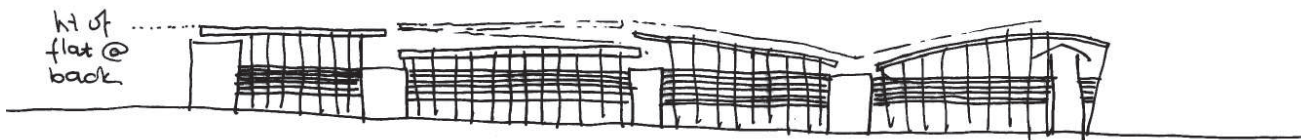
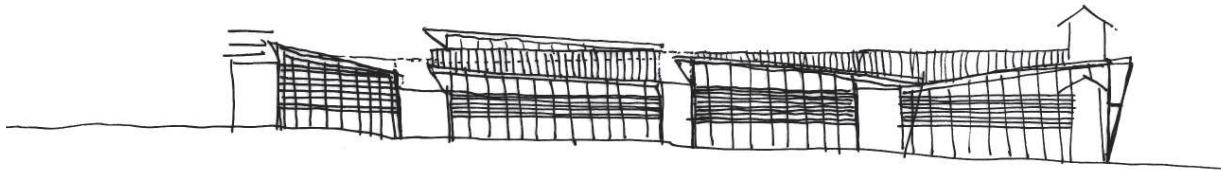
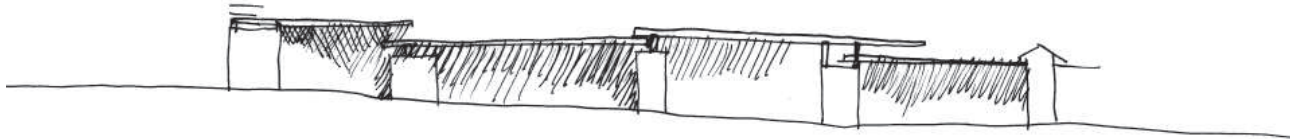
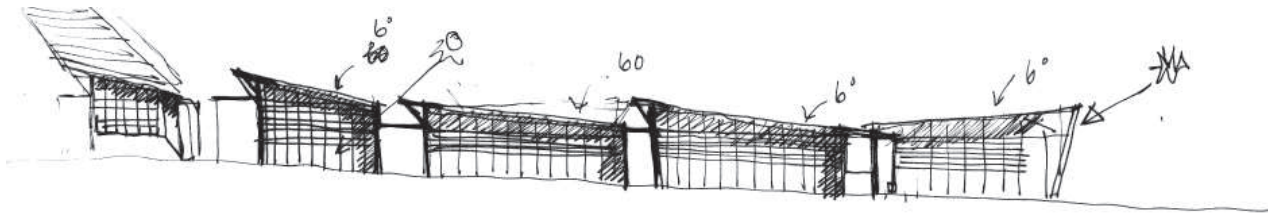


roof study

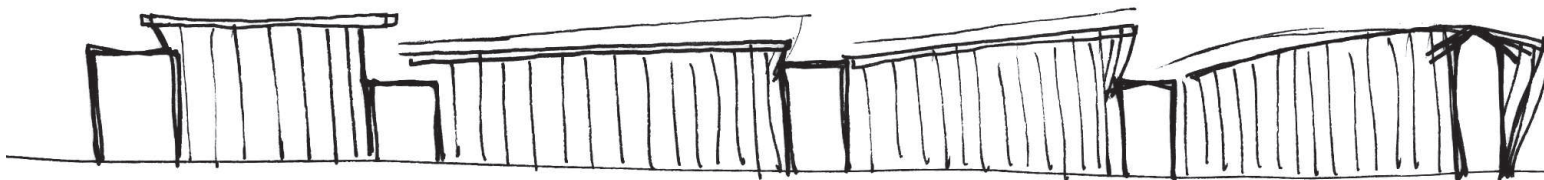
In determining the roof shape for the larger spaces, I considered portal frame roof shapes that would create large interior spaces. Natural lighting is important. I found that where the roof created a rounded volume, a celebratory spirit was given to the space. I then did an elevation composition study for each elevation, to determine how the roofs would interact with one another, and the slope of the site. I attempted to bring across the idea that the building changes from the private, intimate spaces, to the public showcase areas.



south elevation composition study



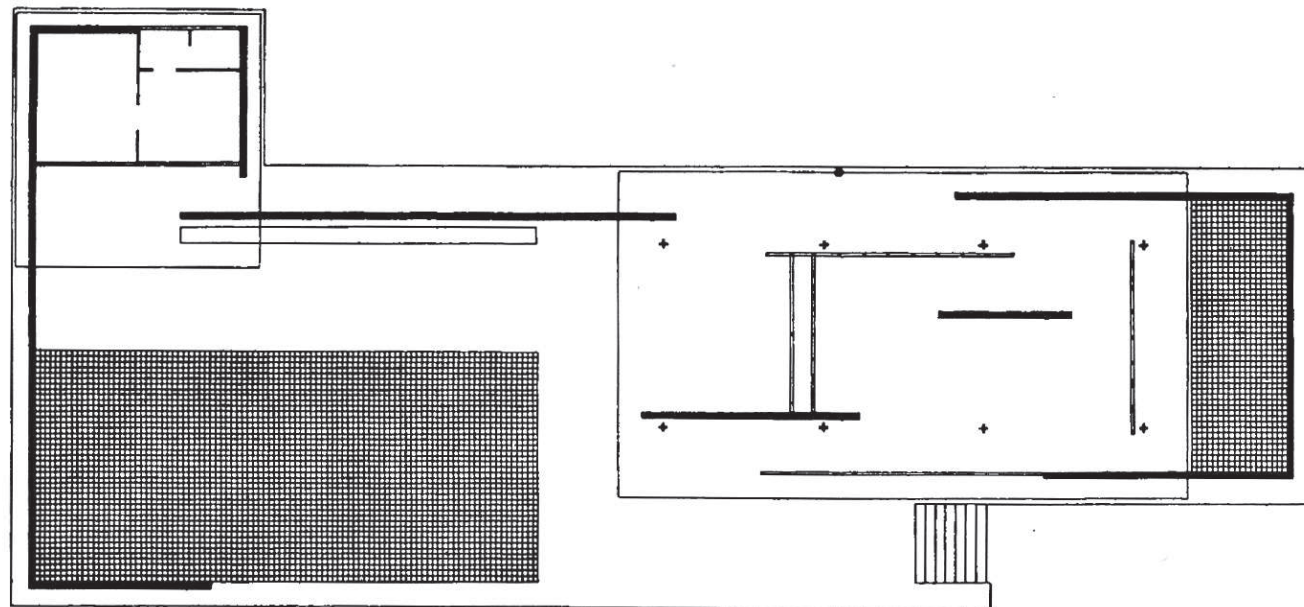
≠ space needed.
starts dancing







06 | TECHNOLOGY



Mies van der Rohe identifies and separates different elements within his designs. The columns, walls and roofs are extracted and expressed individually. Above: Ludwig Mies van der Rohe. German Pavillion at the International Exhibition. Barcelona, 1929 (Cohen, 2007: 68)

The buildings surrounding the site for the new SREC building are mainly low technology masonry buildings and lightweight farm style sheds. In developing the form and aesthetic for the project, the technology of simple farm sheds and framed buildings was looked at. The development of the section was therefore critical in designing a building that responds to its context, in terms of materiality, form and scale. The junction between the different geometries and materials of the horizontal tower and roof in the section is significant both conceptually, in the expression of the contrasting spaces, but also for weather proofing. In order to effectively resolve this section, influence and advice were drawn from case studies of roofs and a workshop with an engineer.

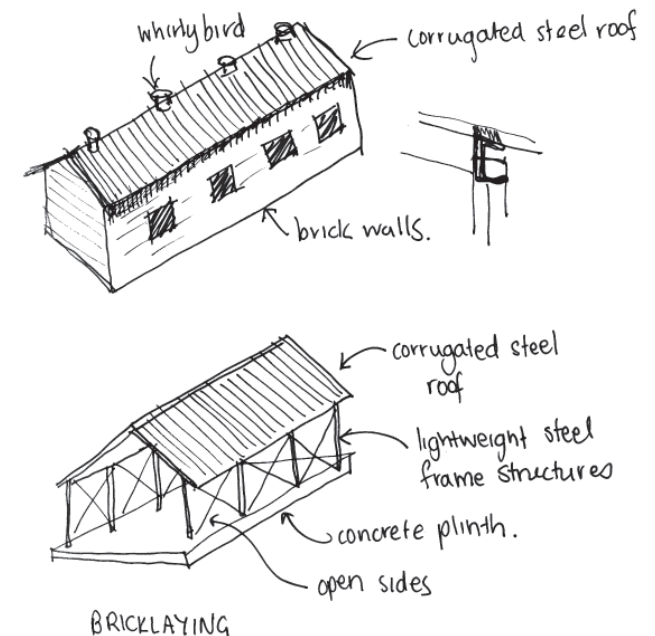
The buildings at Leeuwkop resemble simple farm buildings. The buildings to the north of the site, used for rehabilitation of adult prisoners are mainly rectangular, with corrugated sheeting roofs and brick or sheeting walls. The old prison hospital to the west, used for administration, and psychologists, is a brick building, plastered and painted pink. The existing guard towers on the site are masonry construction with conservative windows and pitched roofs.

When translating the concept of the horizontal towers and the larger activity spaces into a building, the materiality and geometries of the different components are influenced by the context of the prison farm. The horizontal towers are therefore quiet structures that slide between the other forms within the design. Their windows are simple, their design inexpensive and basic. The roof scapes and detailing of the towers becomes important. The roofs of the towers become trafficable playgrounds and an outdoor running track. The running track has sculptural, curving bridge elements, but otherwise runs quietly along the top of the horizontal tower.

While the horizontal tower is understated, the large volumes where the prisoners and the public interact become the areas where the form of the building is expressed. The form is created using simple farm-inspired large span roofs that sit between the horizontal towers. This creates fragmented, campus style buildings that are in tune with the scale of the surrounding buildings, and the style of new generation prison designs. The forms of the roof change across the site, indicating the changing nature of the spaces – from intimate and private, to celebratory and public. They seem quiet and stable

along the northern and western edges of the building, but begin to shuffle and dance towards the public edges.

The technical resolution of the buildings began with a case study of a very large structure in Europe, used for exhibitions, various case studies of delicate detailing of roof lights and shed structures, and finally component sizing with an engineer.



structure case study

The structural system for Hall 6 at the exhibition centre, Messe Dusseldorf has been chosen as the structure of the roof spans a large distance with very few columns. As the larger spaces in the SREC building are required to be flexible and the ground floor clear, the spaces need to be unobstructed by columns. The case study is also useful as the columns are inset. In the SREC building, this technology can be used to liberate the roof structure from the horizontal tower structure, reinforcing the idea of the independent elements.

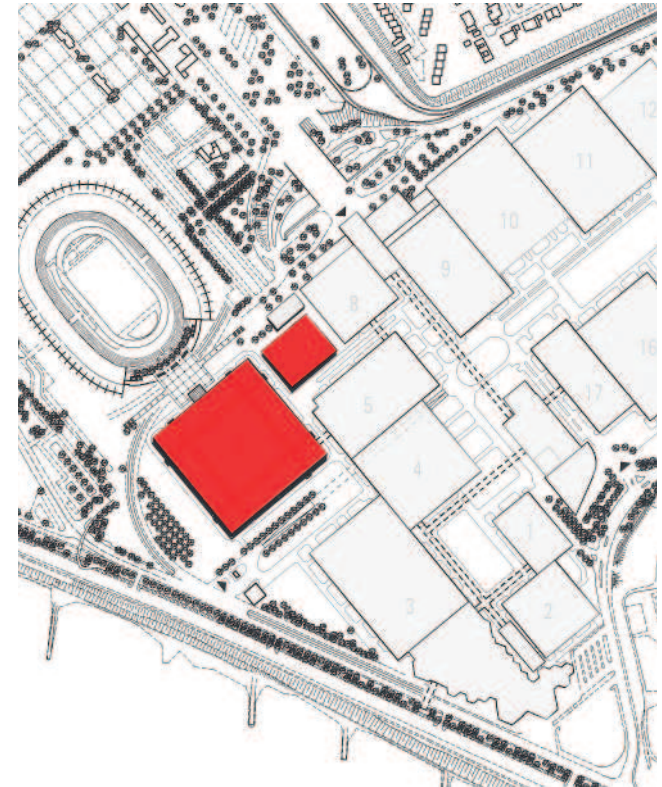
Hall 6 is a 24000sqm exhibition hall, designed by GMP Von Gerkan, Marg und Partner and Aachen Architects. It is located within the Messe Dusseldorf exhibition grounds in Germany. The roof is designed as a cantilevered steel structure, and is the largest of its kind in Europe. The structural components are mainly circular steel hollow sections ranging from 193,7mm to 508mm diameters, allowing the roof to span an unsupported distance of 90m, with a 'cantilever' of 35m. (Marg, 2007)

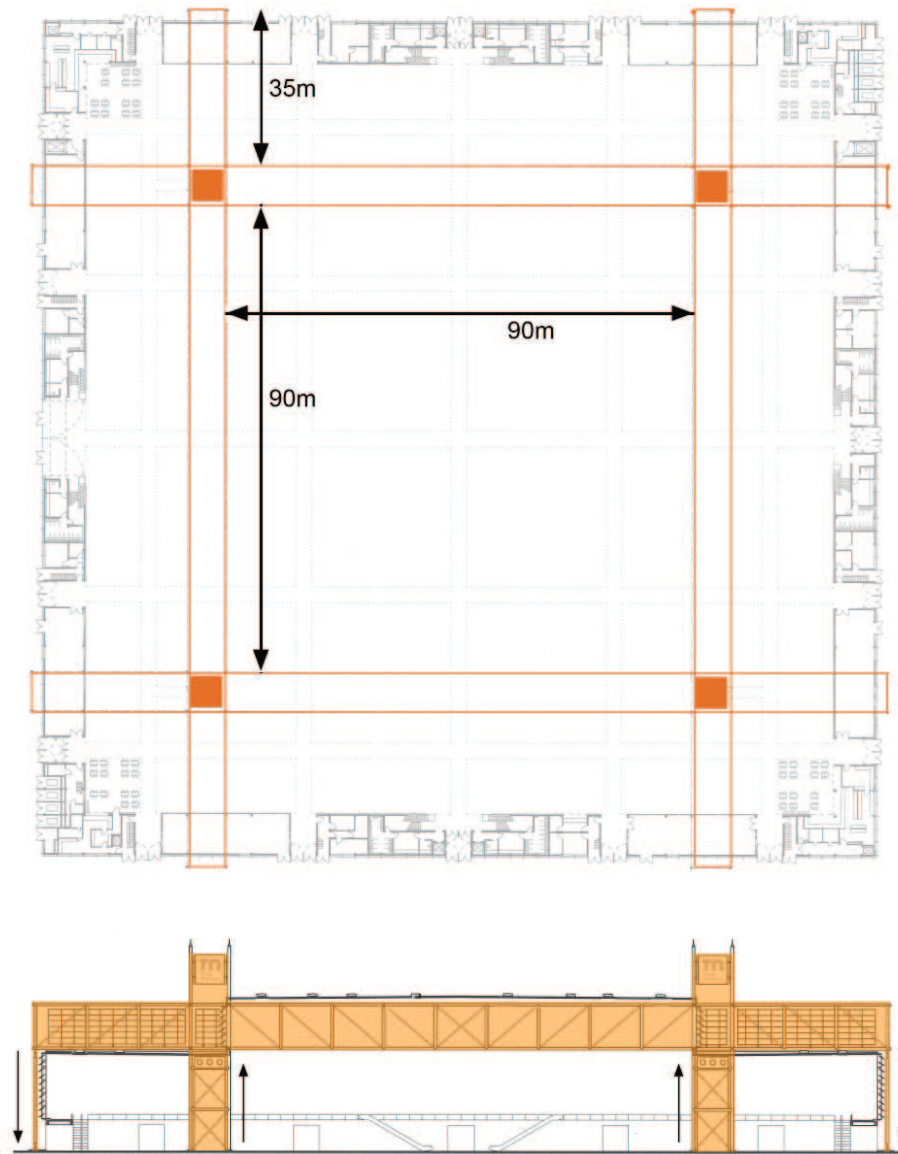
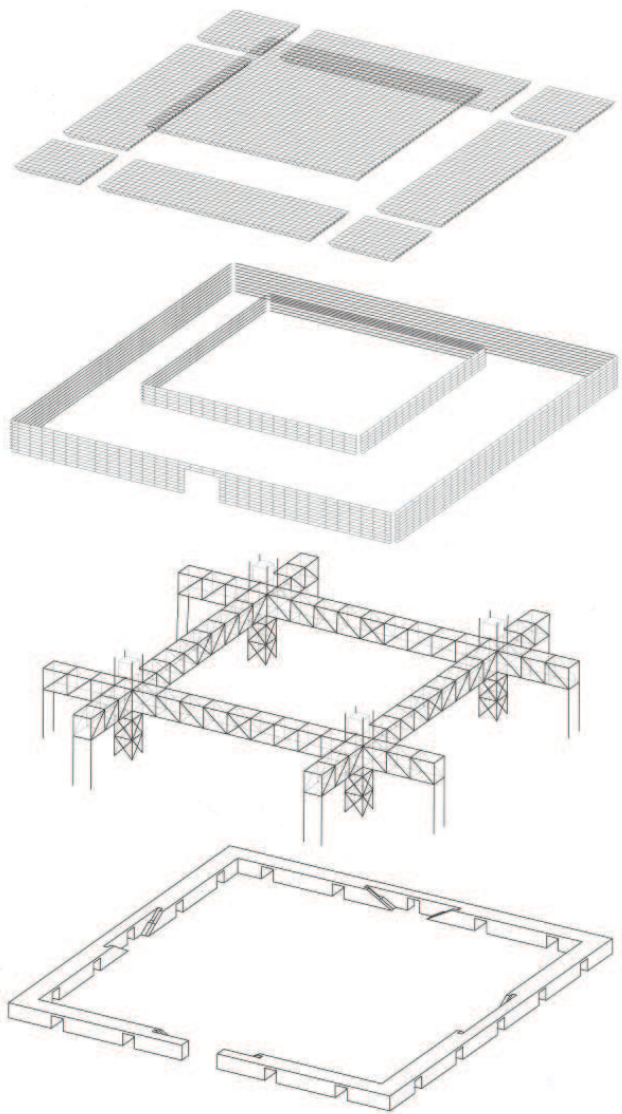
Also interesting, is the very clear hierarchy

of structure seen in Hall 6. This is interesting on an engineering level, but also on an aesthetic level, when allowing structure to stand freely within a space.

The roof is made up of several layers. The first is the super structure: four steel compression columns, about ten by ten meters wide, each made up of four steel hollow sections, latticed into trusses, that support roof girders about twelve meters deep. The second layer of structure is the secondary space frame structure (top of diagram). This provides rigidity and support for the roof covering, and sits on different levels at different areas in the building. This creates a varying façade. (Marg, 2007) Where the roof experiences a change in level, windows are inserted, and then protected by louvers (second from top.)

(All images generated from Marg 2007)

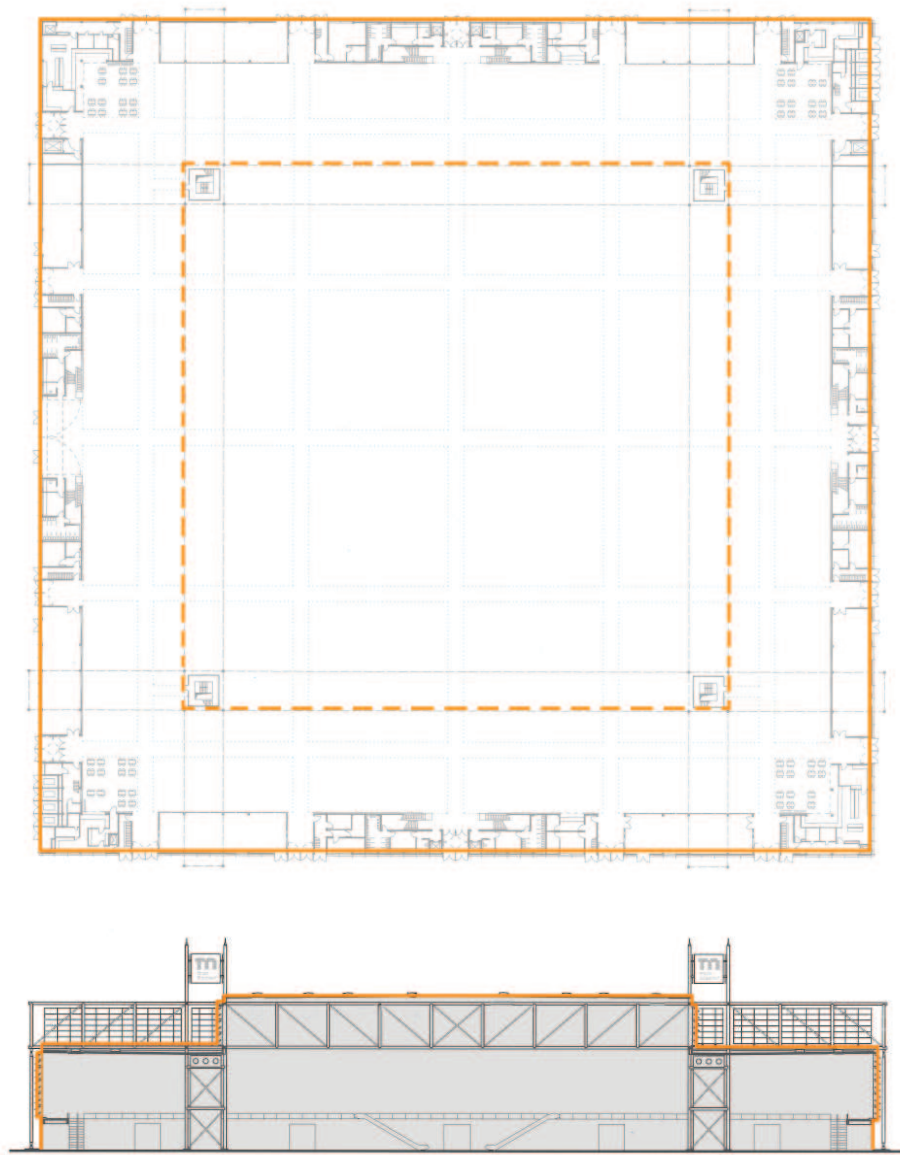
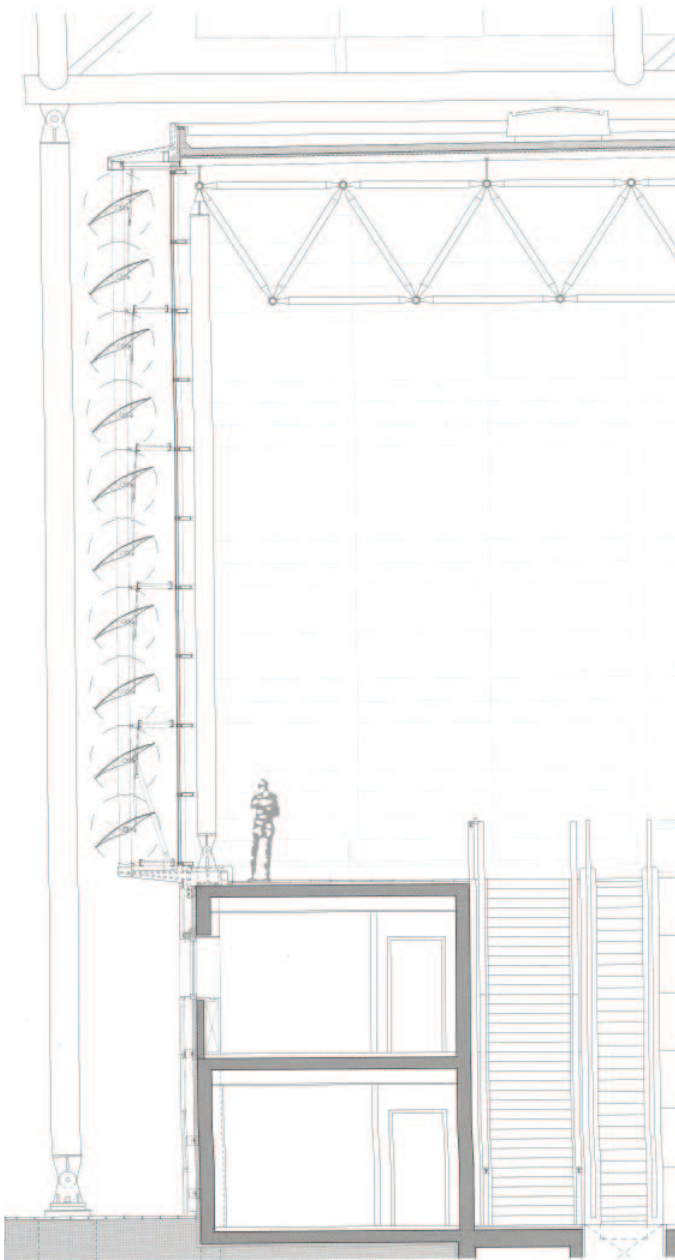




The space is enclosed with a skin of glazing for weatherproofing, and a secondary skin of louvers for protection from solar gain. The second skin is interesting as it can change, as the weather changes. This creates a varying façade.

The SREC building will adopt a similar structure, with larger columns placed on the ground floor that support a more complicated girder structure. The cantilever will allow for a glazed connection between the horizontal tower and the roof. The spans in the SREC building are much smaller, and an engineer has been consulted to size the components.





SREC structure engineered

The engineer aided in the sizing of components in a workshop environment. We worked with the greatest span in the SREC building and designed trusses according to their loads in the 'worst case scenario'.

Some of the sketches have been included in the following pages of the document. These calculations along with other roof case studies have lead to a sketch section of the roof design and its junction with the horizontal tower.

for worst loading case, take greatest span (30m)
bearing weight of 4m width of steel sheeting.
(centres @ 4m)

areal specific weight: $w_A = 8 \text{ kg/m}^2$

max purlin spacing: $\leq 1200 \text{ mm}$

purlin wt./m: $w_L = 5,8 \text{ kg/m}$

Tech data.

$t = 0,80 \text{ mm}$

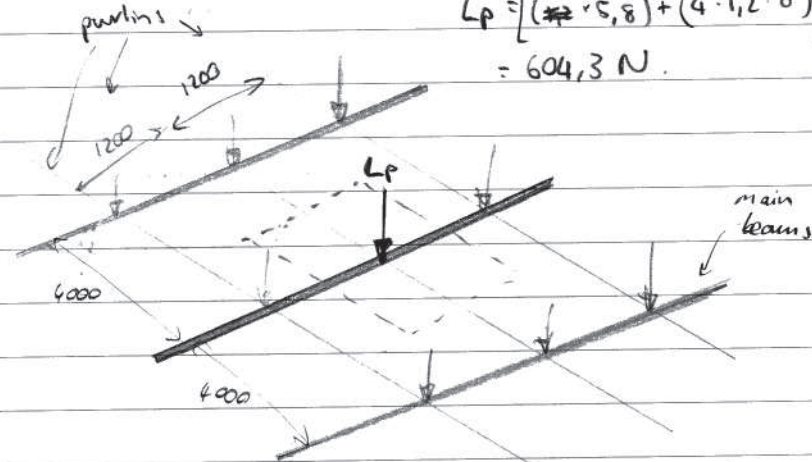
steel grade S235

www.corline.co.za/corline-corr-spec.html

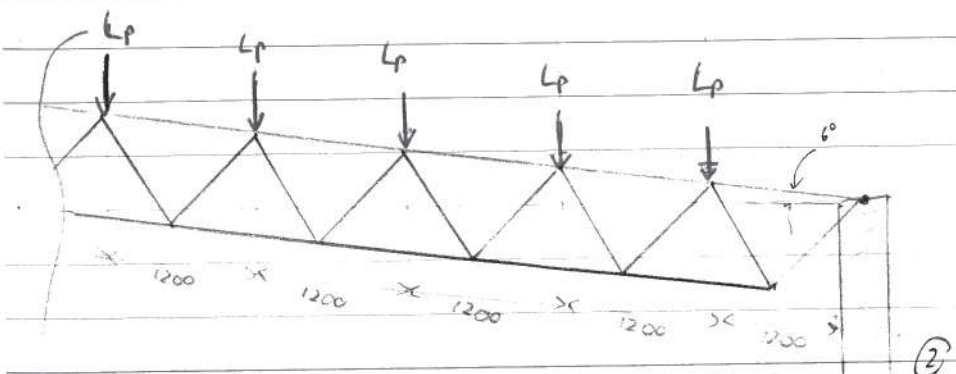
Point loads

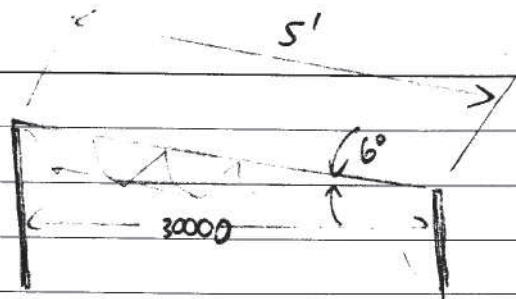
$$L_p = \left[\left(\frac{4}{12} \cdot 5,8 \right) + \left(4 \cdot 1,2 \cdot 8 \right) \right] \cdot 9,81$$

$$= 604,3 \text{ N}$$



side view of each beam (simple 2D truss)

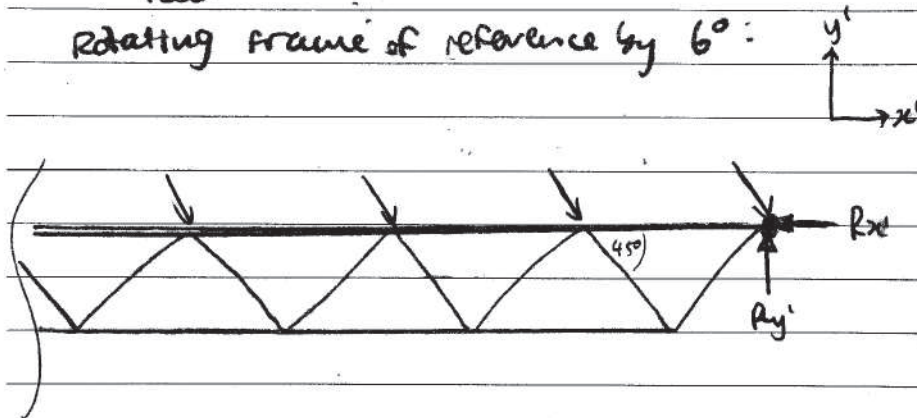




$$\cos 6^\circ = \frac{30000}{5'} \quad \therefore 5' = \frac{30000}{\cos 6^\circ} = 30165 \text{ mm}$$

$$\frac{30165}{1200} = 25.1 \approx 26 \text{ intervals}$$

Rotating frame of reference by 6° :

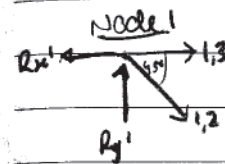


$$R_x = 26 (L_p \sin 6^\circ) / 2 = 1641 \text{ N} / 2 = 820 \text{ N}$$

$$R_y = 26 (L_p \cos 6^\circ) / 2 = 7808 \text{ N}$$

assumes reaction are shared equally

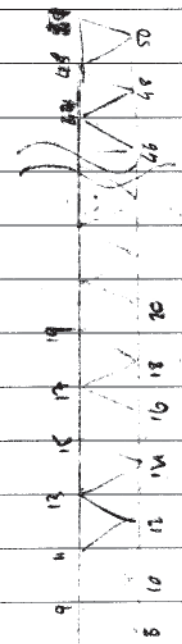
Always initially assume beams in TENSION!



$$\sum F_y: F_{1,2} \cos 45^\circ = R_{2,1}$$

$$\sum F_x: F_{1,3} = R_{1,3} - F_{1,2} \cos 45^\circ$$

Count: Node #



Node 2:

$$\begin{aligned} \sum F_y = 0: & F_{1,2} = F_{2,3} \\ \sum F_x = 0: & F_{2,4} = (F_{1,2} - F_{2,3}) \cos 45^\circ \end{aligned}$$

Node 3:

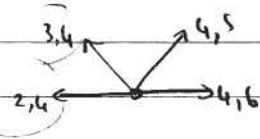


$$\sum F_y = 0: F_{3,4} (\sin 45^\circ) = L_p \cos 6^\circ - F_{2,3} \sin 45^\circ$$

$$\sum F_x = 0:$$

$$F_{3,5} = F_{1,3} + F_{2,3} - F_{3,4} \cos 45^\circ - L \sin 6^\circ$$

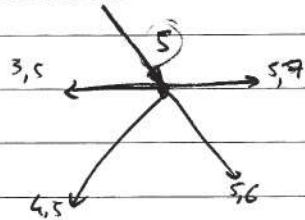
Node 4:



$$\sum F_y = 0: F_{4,3}(\sin 45^\circ) = -F_{3,4}(\sin 45^\circ)$$

$$\sum F_x = 0: F_{4,6} = F_{2,4}$$

Node 5:



$$\sum F_y = 0: F_{5,4} = \frac{-F_{4,5} \sin 45^\circ - L \cos 45^\circ}{\sin 45^\circ}$$

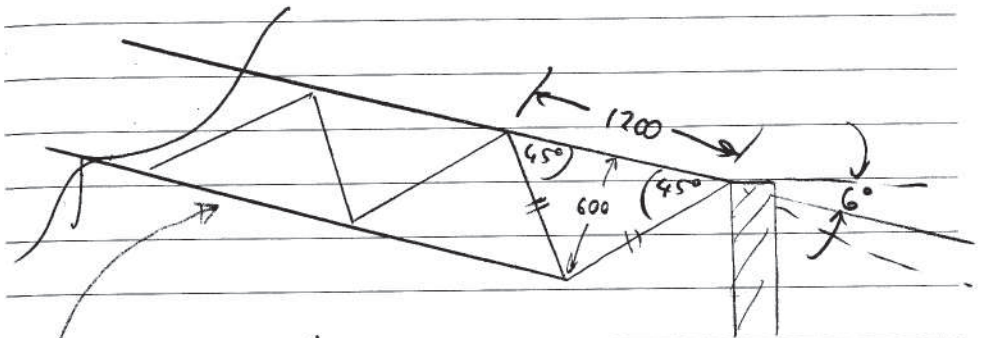
and follow on up to Node 51 (see spreadsheet)

NOTE:

In a nutshell, using a truss lattice as shown will be adequate based on these VERY BASIC calculations.

Some major simplifying assumptions were made, and a more detailed analysis would be needed before considering construction.

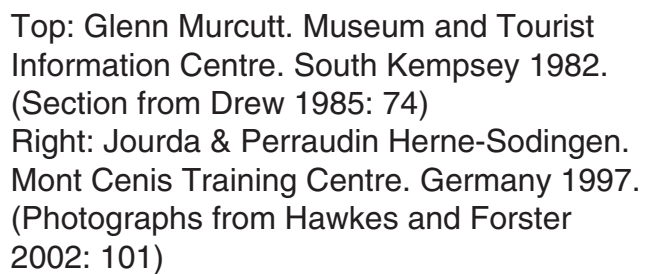
2-D Truss Lattice: (elevation sketch)



all beams*: cylindrical, ID 140mm
OD 180mm

* Beams on bottom row can be made smaller to reduce weight/cost, but may be inconvenient.

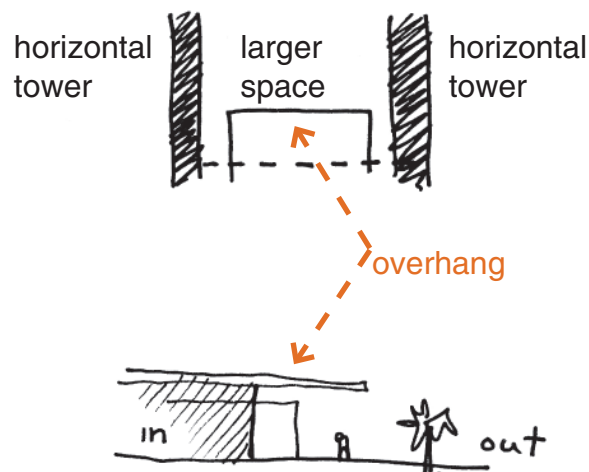
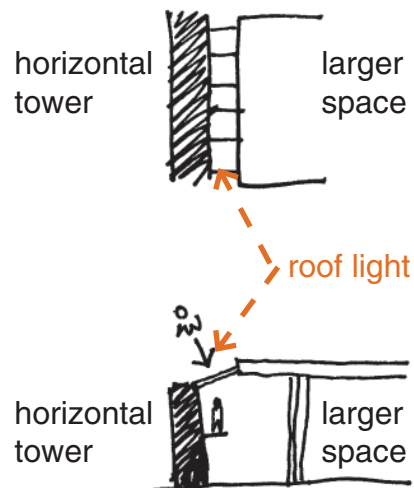
See Purlin layout and spacing on page (2)



SREC roof design 'rules'

On investigation of the scheme, I found that there are two instances where the roof and the horizontal tower meet. I created a set of rules to guide the way in which the two instances are detailed. Where a roof meets a horizontal tower, the junction is detailed as a roof light. Where a roof shears past a horizontal tower, it extends past the glazing line to form a deep overhang.

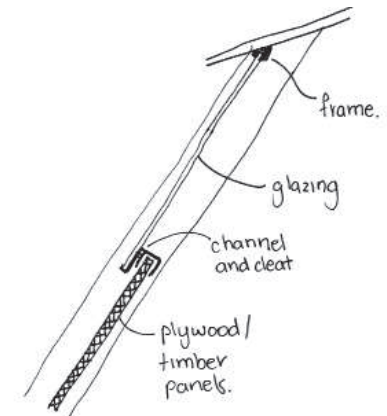
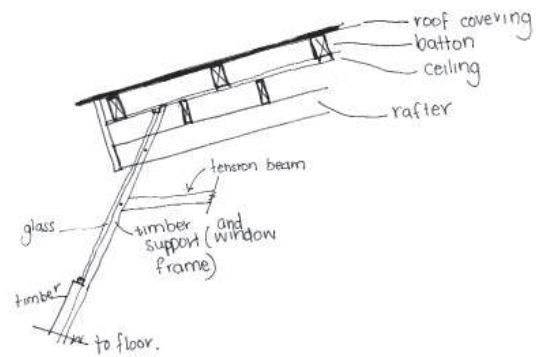
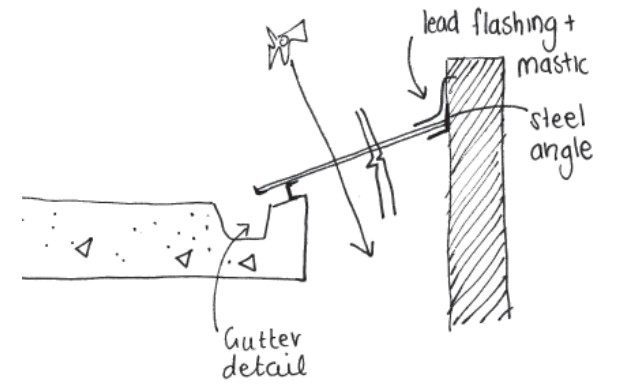
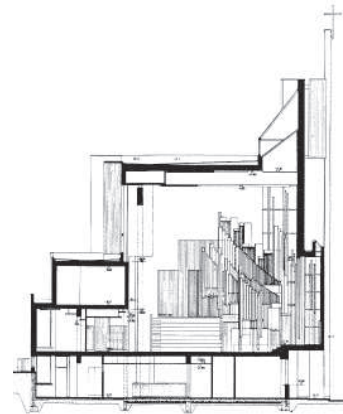
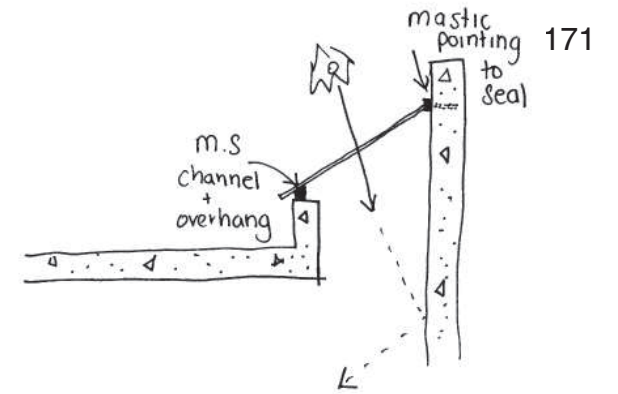
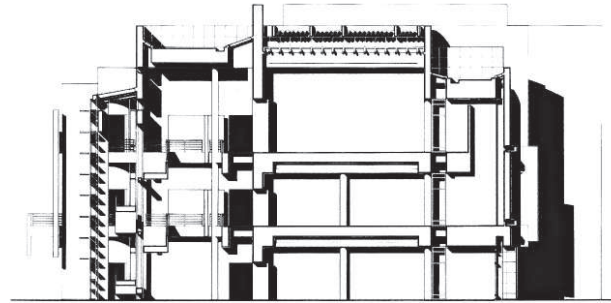
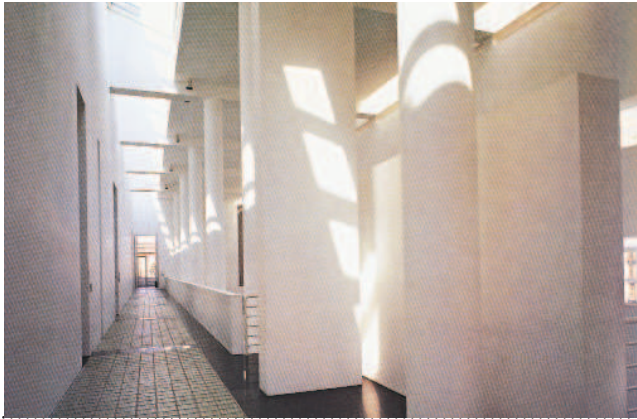
In order to detail this, further study was done on roof lights.



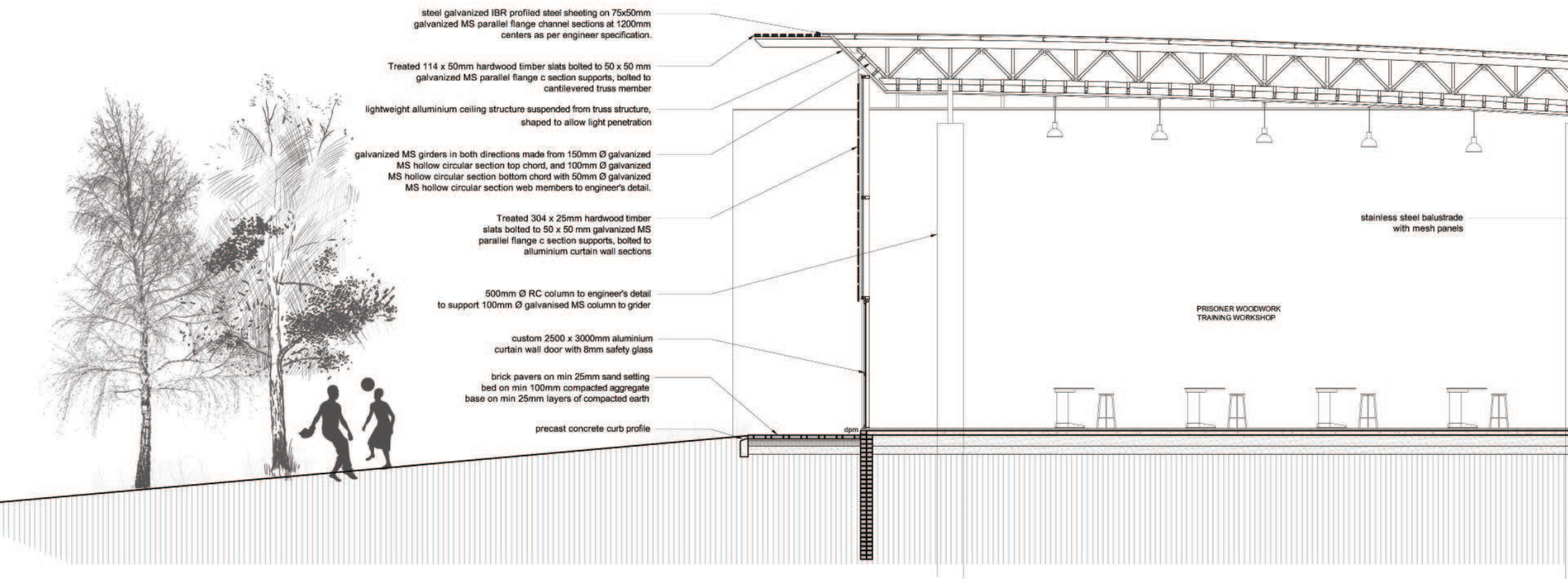
Juha Leiviska. Myyrmäki Church. Finland 1984. (Photograph and section from Plummer 2009: photograph page 31, section page 33)

Richard Meier. Barcelona Museum of Contemporary Art. Spain, 1995. (Photograph and section from Plummer 2009: 174)

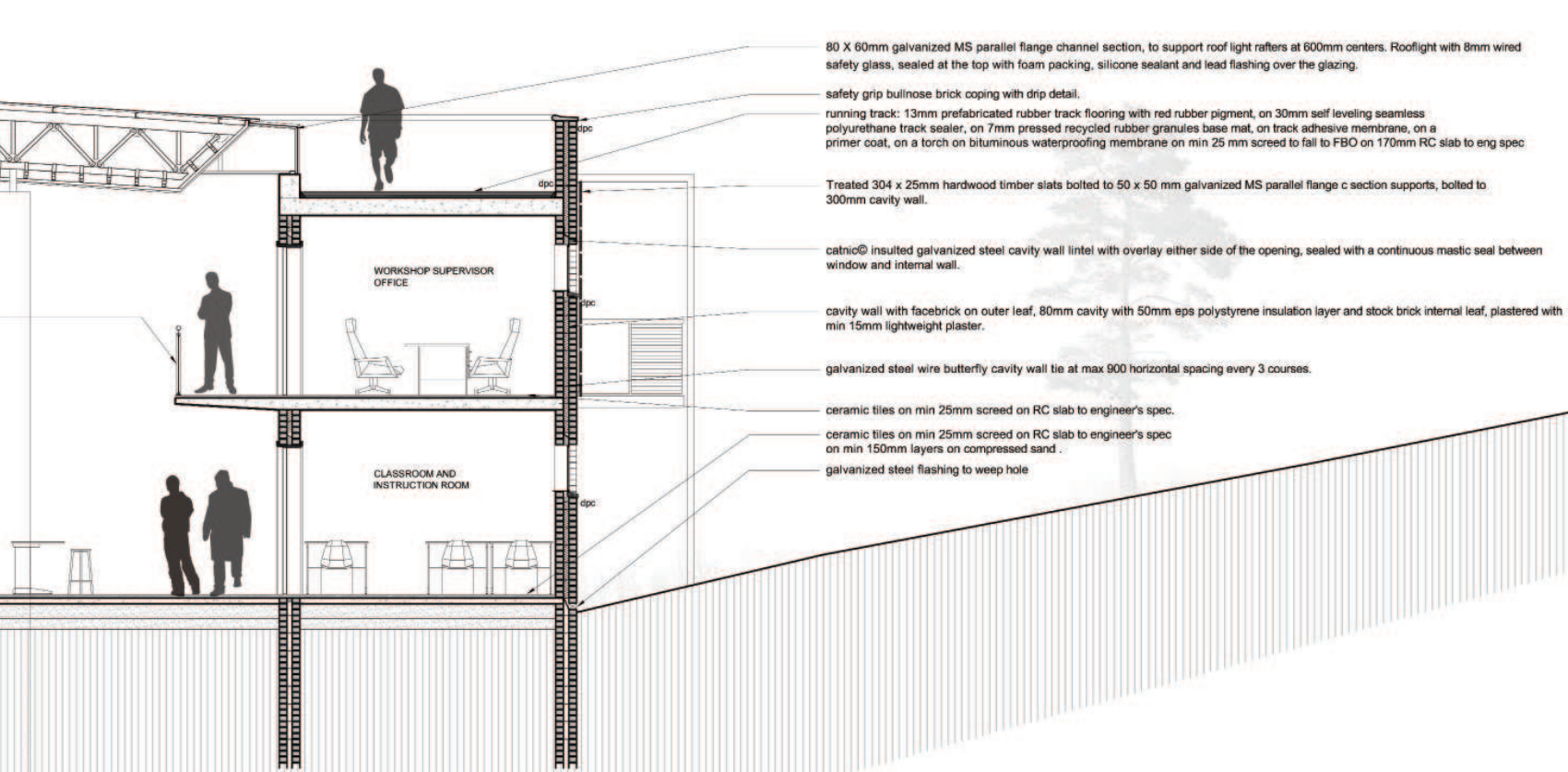
Russel Withers. Withers House. Glenfield, 1969. (Photograph from Mitchell & Chaplin, 1984: 43)



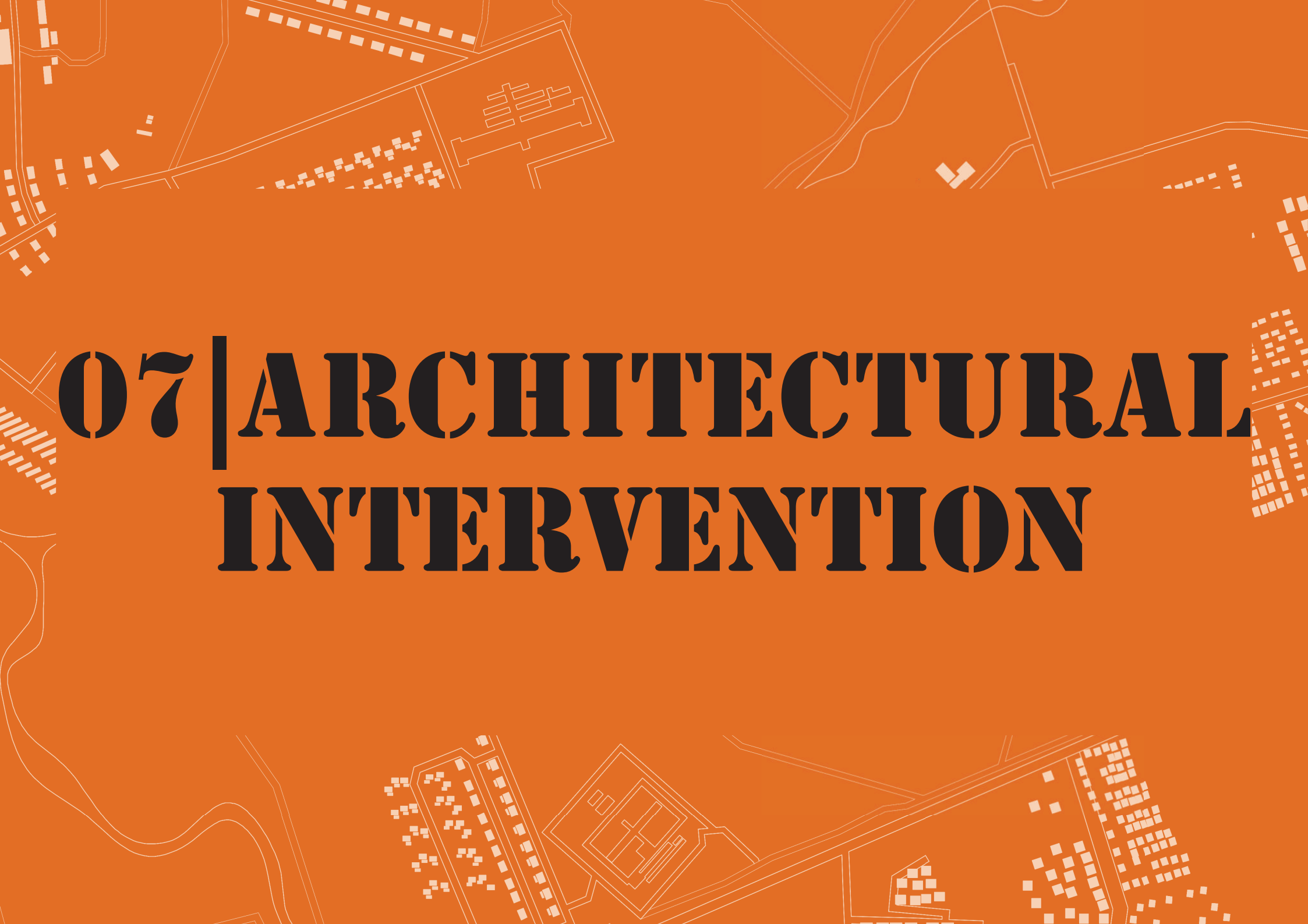
SREC detailed section



section through workshop

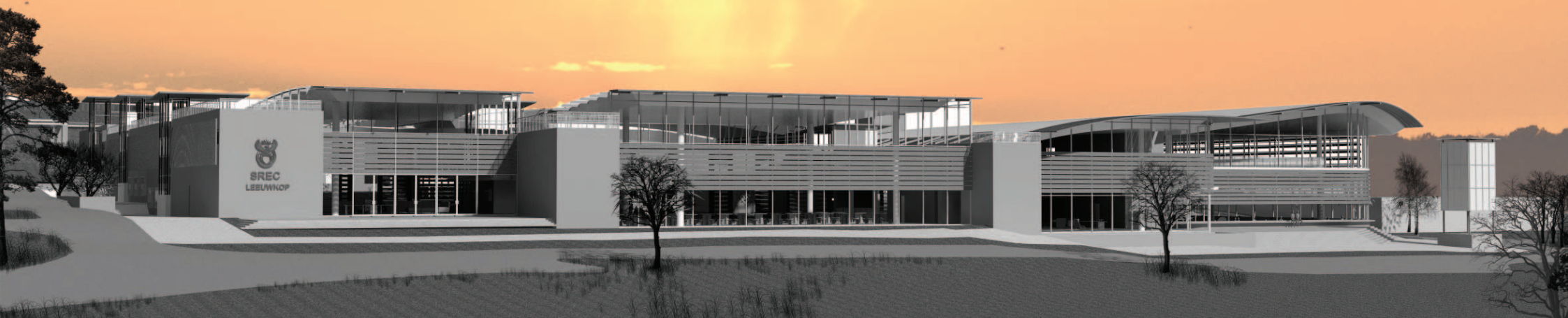


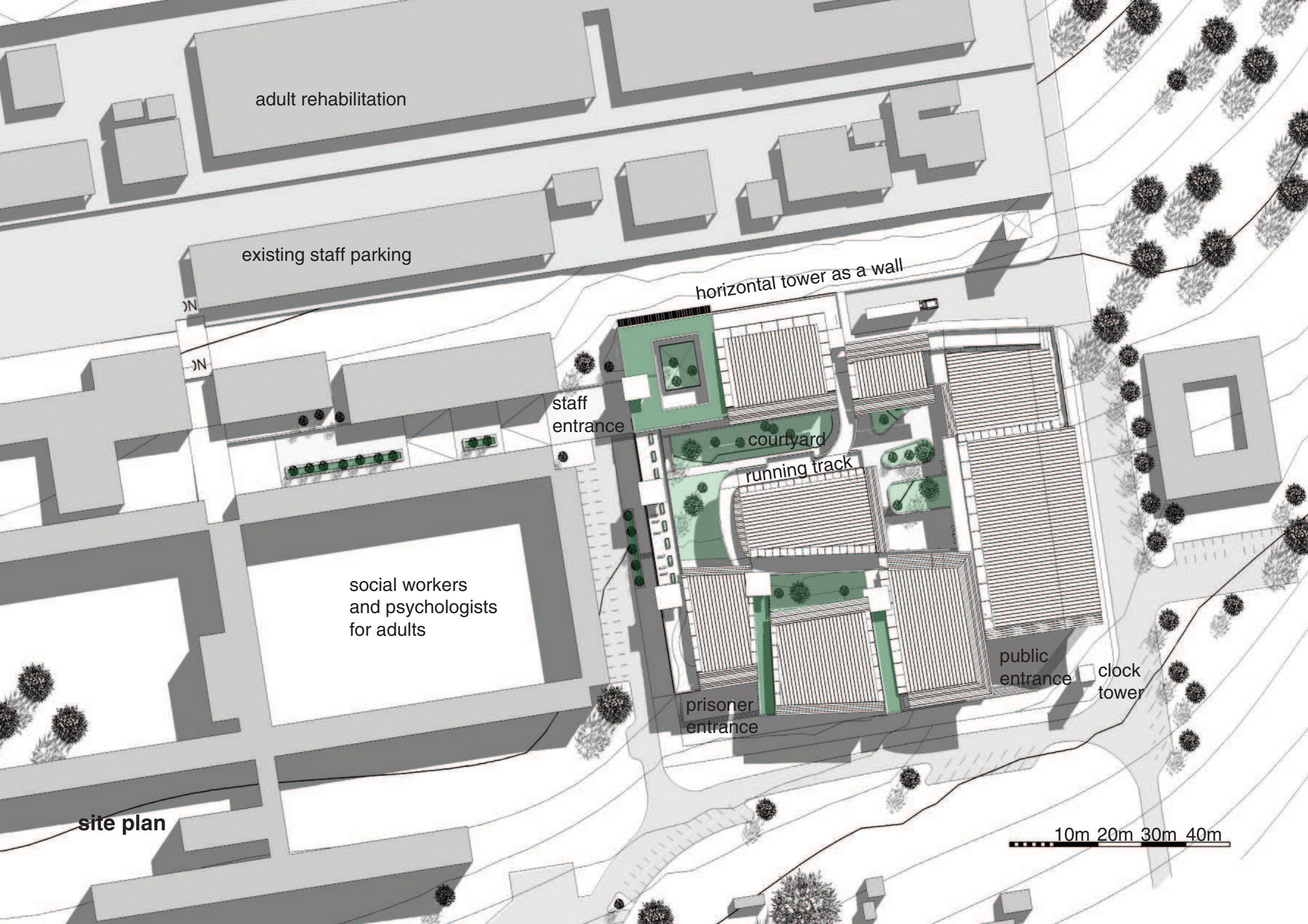




07 | ARCHITECTURAL INTERVENTION

Render of the prisoners' walk to the building, showing the difference between the wall and display edges of the design





adult rehabilitation

existing staff parking

horizontal tower as a wall

staff entrance

courtyard

running track

social workers
and psychologists
for adults

prisoner
entrance

public
entrance

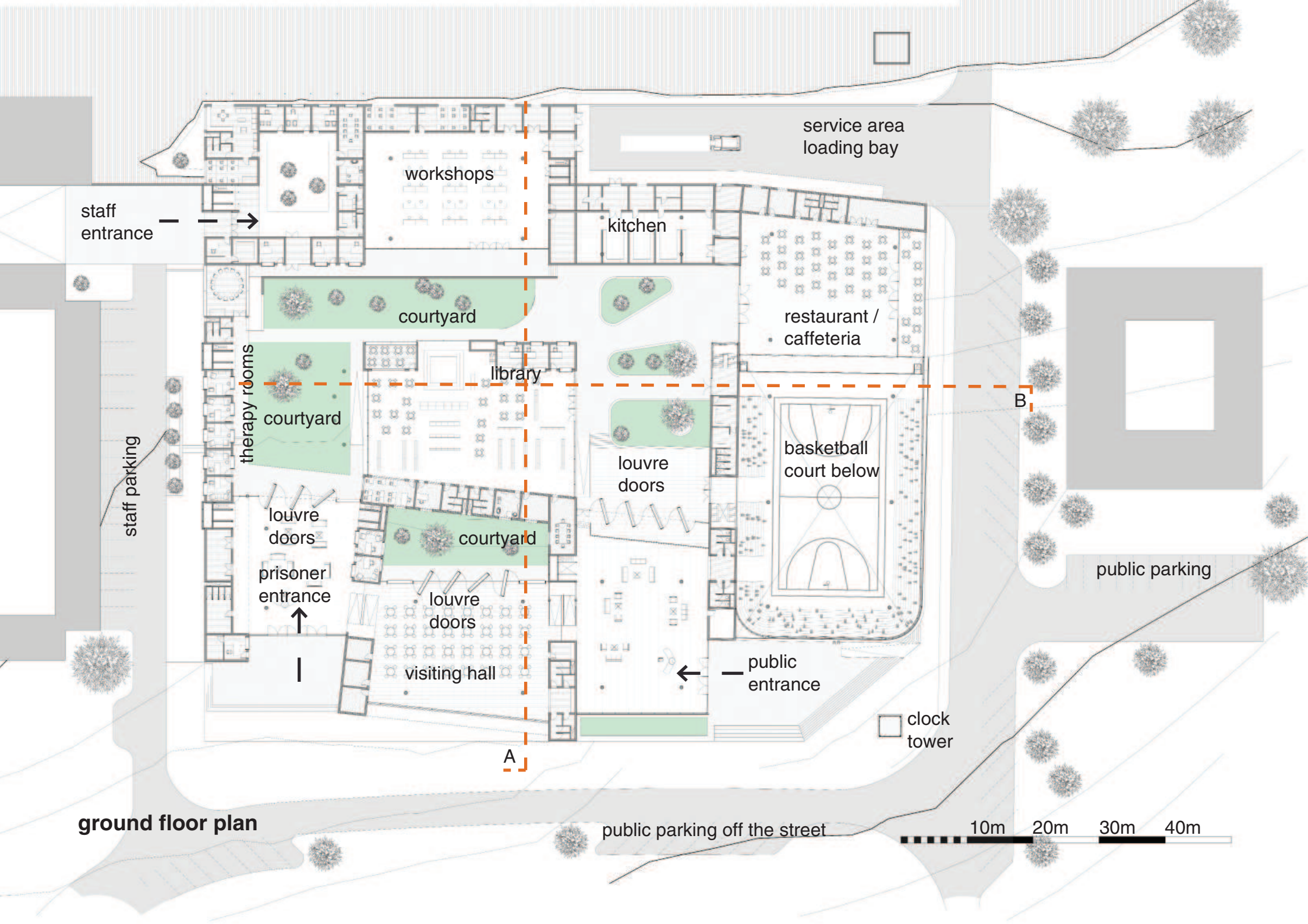
clock
tower

site plan

10m 20m 30m 40m

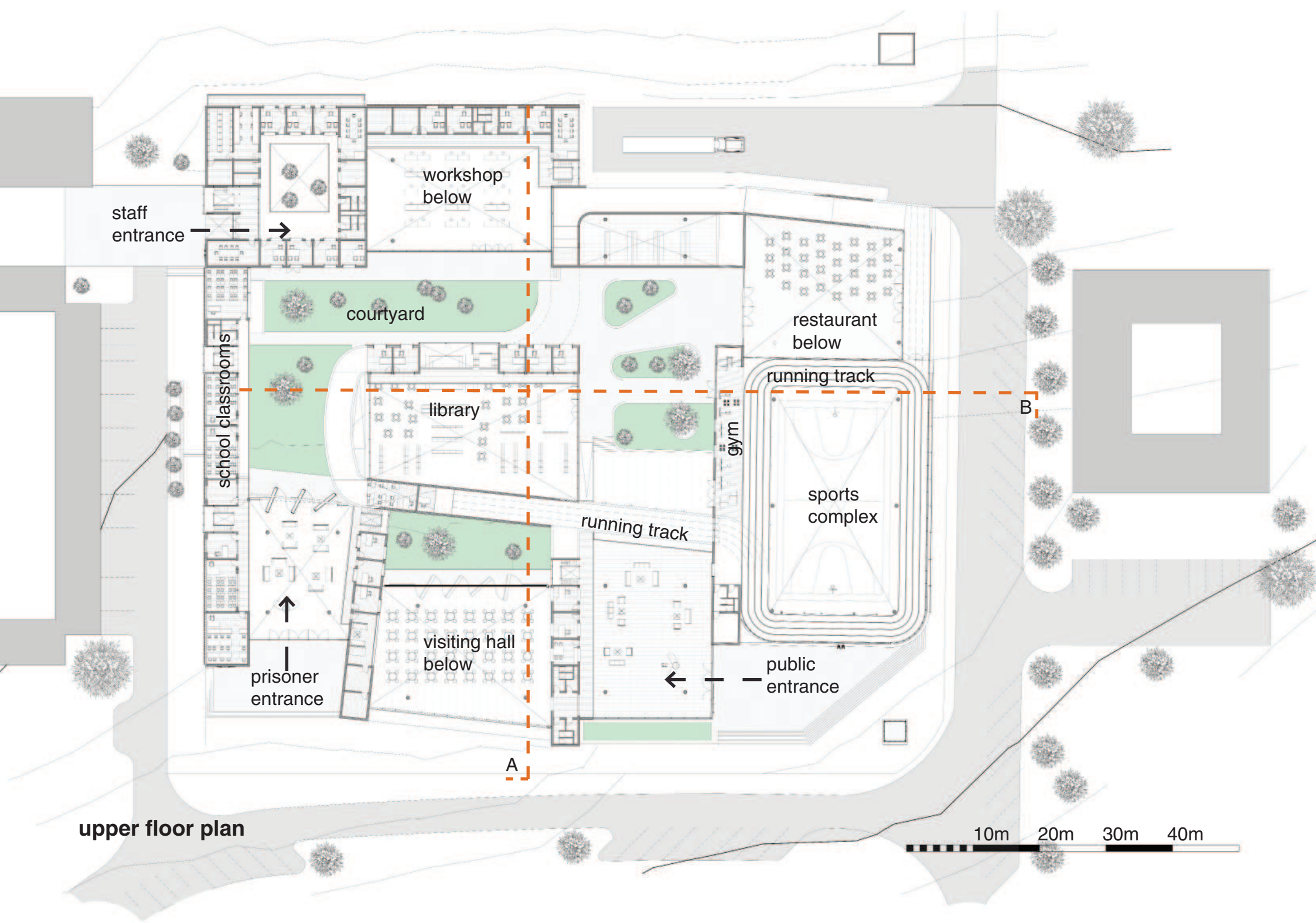


sports hall, basketball level





prisoner entrance



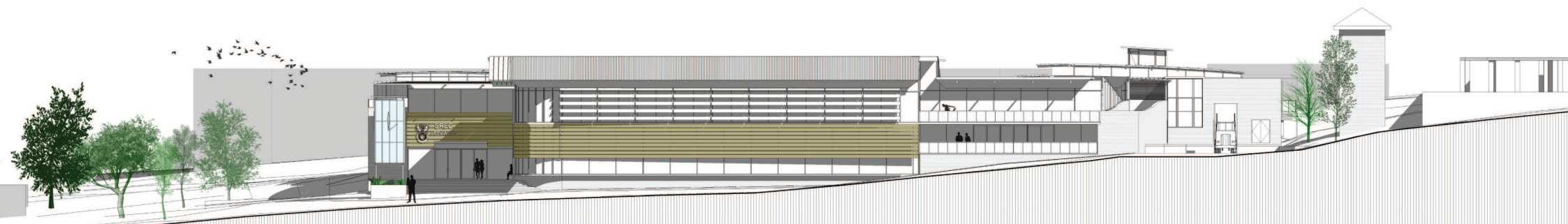
upper floor plan



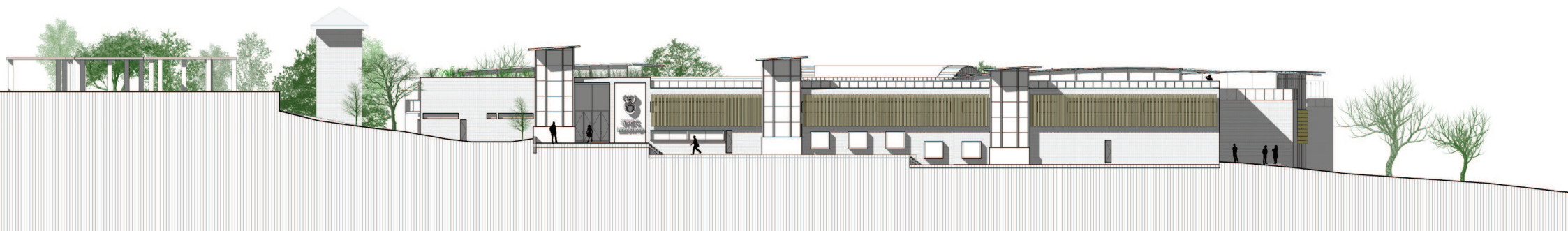
public entrance and clock tower
night render



south elevation



east elevation

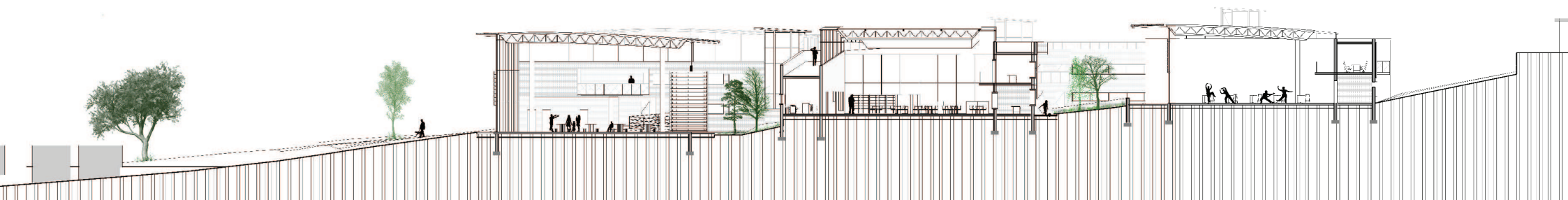


west elevation

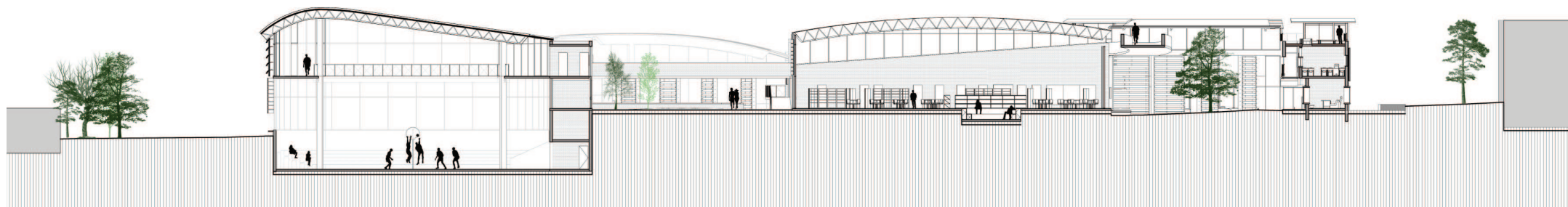




library



section A

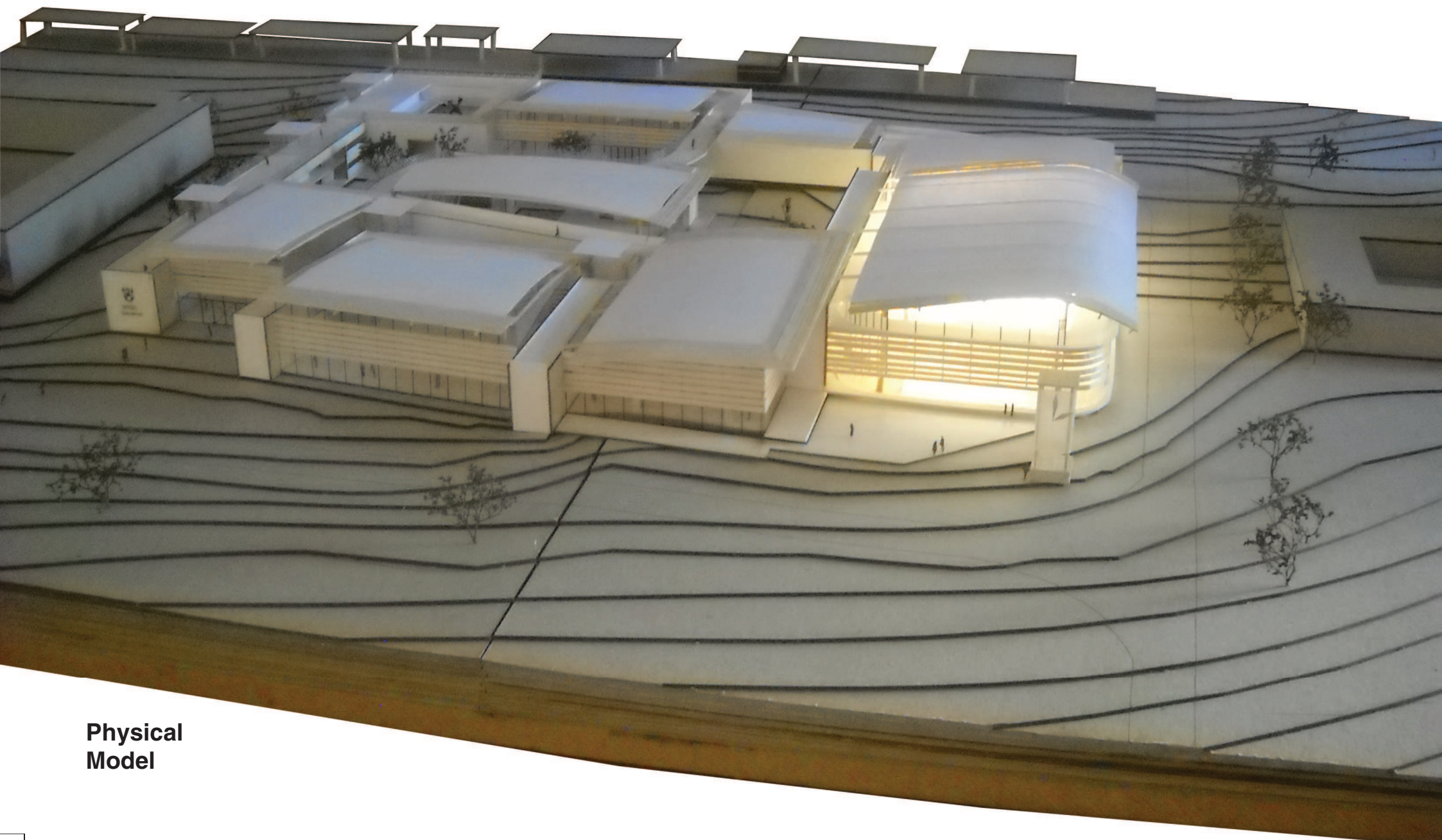


section B

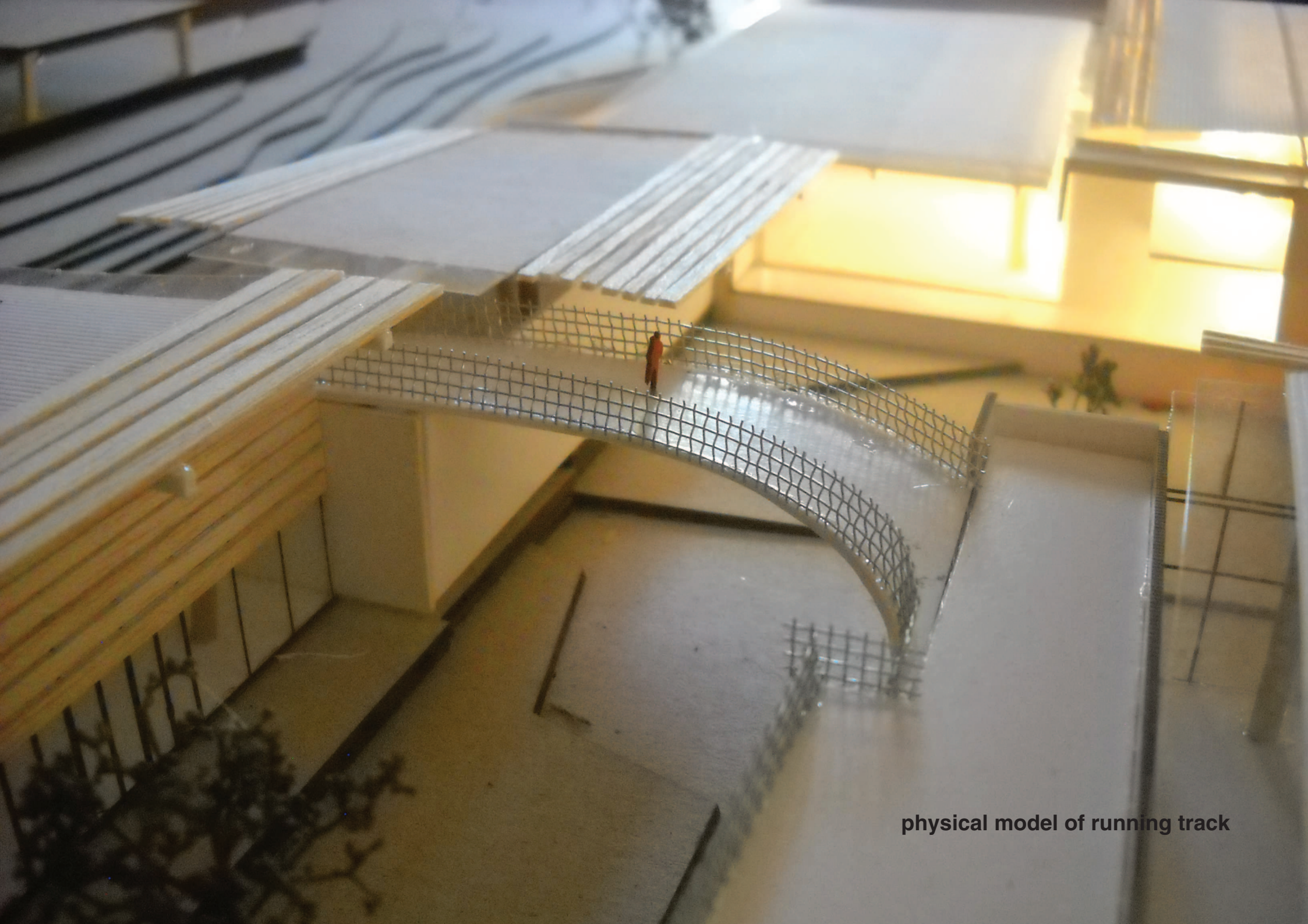




internal courtyard



Physical
Model



physical model of running track



Physical model

BIBLIOGRAPHY

Written Texts

- ARNOT, R. (2009). Stitching Space: A Viaduct between the Prison and the City. Johannesburg: University of the Witwatersrand.
- ATLAS TUBE. (2012). Messe Düsseldorf, Hall 6. Retrieved October 19, 2012, from Atlas Tube: <http://www.atlastube.com/cidect/exhibition-and-conference-centers/messe-dusseldorf-hall-6>
- BECKETT, J. (2012, February 13). Poverty, The Poor Law and the Workhouse. Retrieved April 04, 2012, from The Nottinghamshire Heritage Gateway: <http://www.nottsheritagegateway.org.uk/themes/poverty.htm>
- BENTHAM, J. (1843). The Works of Jeremy Bentham, vol. 4. Edinburgh: William Tait.
- BLOY, M. (2002, November 16). Designing the workhouse: Cruciform buildings. Retrieved April 04, 2012, from The Victorian Web: <http://www.victorianweb.org/history/poorlaw/design1.html>
- CAPE TOWN DO STUFF. (n.d.). Castle of Good Hope. Retrieved June 12, 2012, from Cape Town Do Stuff: <http://dostuffct.com/activity/city-bowl/castle-good-hope>
- CAPETOWN-NET.COM. (2009). Castle of Good Hope. Retrieved June 2012, 2012, from Greater Cape Town City and Tourism Guide: http://www.capetown-net.com/castle_of_good_hope_in_cape_town.php
- CHEONG, S. (2010, January 31). "Please sir! I want some more!": The Horror of Victorian-era Workhouses. Retrieved April 04, 2012, from Not Yet Published: <http://scheong.wordpress.com/2010/01/31/please-sir-i-want-some-more-the-horror-of-victorian-era-workhouses/>
- CHIPKIN, C. M. (1993). Johannesburg Style, Architecture & Society 1880s-1960s. Cape Town: David Philip.
- CITY OF JOHANNESBURG. (2012, June 06). Joburg. Retrieved September 27, 2012, from Not such a fun time: http://www.joburg.org.za/index.php?option=com_content&view=article&id=8115:not-such-a-fun-time&catid=88:news-update&Itemid=266
- COHEN, J. L. (2007). Ludwig Mies van der Rohe: Second and updated edition. Berlin: Birkhauser Verlag AG.
- COMMUNITY LAW CENTRE. (1997). Children in Prison in South Africa: A Situational Analysis. Cape Town: University of the Western Cape .
- CROW, I. (2007). The Treatment & Rehabilitation of Offenders. London: SAGE Publications Ltd.
- DECI, E. L., & RYAN, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self Determination of Behaviour. *Psychological Inquiry* , 11, 227-268.
- DEPARTMENT OF CORRECTIONAL SERVICES. (2011, February 28). Basic Information. Retrieved March 07, 2012, from Department of Correctional Services: <http://www.dcs.gov.za/AboutUs/StatisticalInformation.aspx>
- DEPARTMENT OF CORRECTIONAL SERVICES. (2005, April 7). White Paper. Retrieved March 23, 2012, from Department of

Correctional Services: <http://www.dcs.gov.za/AboutUs/COE/whitepaper.aspx>

DESIGN SOLUTIONS. (2012). Projects. Retrieved April 19, 2012, from Design Solutions: <http://www.designsolution.co.za/projects>

DREW, P. (1985). Leaves of Iron. Australia: Angus & Robertson.

DUNHAM, D. L. (2011). Violence in a Time of Liberation: Murder and Ethnicity at a South African Gold Mine, 1994. USA: Duke University Press.

ELPHICK, R., & DAVENPORT, R. (1997). Christianity in South Africa: A Political, Social and Cultural History. Berkley and Los Angeles: University of California Press.

ENGLISH HERITAGE. (2007). Grendon Hall, Grendon Underwood, Buckinghamshire. Retrieved April 12, 2012, from English Heritage: National Monuments Record: <http://viewfinder.english-heritage.org.uk/search/reference.aspx?uid=86353&index=144&mainQuery=&searchType=all&form=basic&theme=&county=&district=&placeName=grendon%20underwood>

EVANS, R. (1982). The Fabrication of Virtue: English Prison Architecture, 1750-1840. New York: Cambridge University Press.

FOUCAULT, M. (1977). Discipline and Punish: The Birth of the Prison. New York: Vintage Books.

GLANZ, L. (Ed.). (1994). Preventing Juvenile Offending in South Africa: Workshop Proceedings. Pretoria: HSRC Publishers.

HAWKES, D., & FORSTER, W. (2002). Architecture, Engineering and Environment. Lawrence King in Association with Arup.

HERRENDORFER, E. (2004). SA Crime Statistics: Facts & Fallacies. Retrieved March 25, 2012, from Firearm News: http://www.christianaction.org.za/firearmnews/2004-02_SACrimeStatistics.htm

HIGGINBOTHAM, P. (2012). Workhouse Architecture. Retrieved April 12, 2012, from The Workhouse: <http://www.workhouses.org.uk/>

JAMES, W. G. (1992). Our Precious Metal: African Labour in South Africa's Gold Industry, 1970-1990. Claremont, South Africa: David Philip Publishers (Pty) Ltd.

JOHNSTONE, F. A. (1976). Class, Race, and Gold: A Study of Class Relations and Racial Discrimination in South Africa. London: Routledge.

KALLAWAY, P., & PEARSON, P. (1986). Johannesburg: Images and Continuities. Johannesburg: Ravan Press (Pty) Ltd.

LITTLE, W., FOWLER, H. W., & COULSON, J. (Eds.). (1990). The Shorter Oxford English Dictionary on Historical Principles. New York: Oxford University Press.

LOU82. (2008). The Dungeon in the Castle of Good Hope, Cape Town. Retrieved June 12, 2012, from TravelPod: <http://blog.travelpod.com/travel-photo/lou82/5/1221314640/cimg2403.jpg/tpod.html>

MAPISA-NQAKULA, N. (2011, April 12). Correctional Services Budget Vote Speech 2011 / 12 in the National Assembly, Parliament of RSA Good Hope Chamber. Retrieved April 10, 2012, from South African Government Information: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=17731&tid=31895>

MARG, V. (2007). Halle 6. Michigan: Prestel.

MARTINSON, R. (1979). New Findings, New Views: A Note of Caution Regarding Sentencing Reform. Hofstra Law Review , 7, 243-258.

- MITCHELL, D., & CHAPLIN, G. (1984). The Elegant Shed: New Zealand Architecture since 1945. London: Oxford University Press.
- MORKEL, F. (2006, April 6). Castle Information. Retrieved June 12, 2012, from The Castle of Good Hope: http://www.castleofgoodhope.co.za/New_Folder/CASTLEINFOweb.pdf
- MUNTINGH, L. (2001). Monograph No 52: After Prison: The Case for Offender Reintegration. Pretoria: Institute for Security Studies.
- MUNTINGH, L. (2005). Offender Rehabilitation and Reintegration: Taking the White Paper on Corrections Forward. Cape Town: University of the Western Cape.
- NICRO. (2011). Correctional Services 2011 / 2012 Budget. Retrieved April 10, 2012, from NICRO: <http://www.nicro.org.za/wp-content/uploads/2011/06/2011-NICRO-DCS-budget-submission-2011-2012.pdf>
- OPEN SOCIETY FOUNDATION FOR SOUTH AFRICA. (2010). Conference on Recidivism and Reoffending in South Africa. Johannesburg.
- OPPLER, S. (1998). Monograph No. 29: Correcting Corrections: Prospects for South Africa's Prisons. Pretoria: Institute for Security Studies.
- PANELLI, R. (2004). Social Geographies: From Difference to Action. London: Sage Publications Ltd.
- PARLIAMENTARY MONITORING GROUP. (2011, May 24). Construction of correctional centres, Leeuwkop project, remand detention project update briefings: Departments of Public Works and Correctional Services. Retrieved April 19, 2012, from Parliamentary Monitoring Group: <http://www.pmg.org.za/report/20110525-department-public-works-progress-made-construction-four-new-generatio>
- PLUMMER, H. (2009). The Architecture of Natural Light. United Kingdom: Thames & Hudson Ltd.
- SCHOEMAN, B. (1994). Message from the Director-General. In L. Glanz (Ed.), *Preventing Juvenile Offending in South Africa: Workshop Proceedings* (pp. 5-7). Pretoria: HSRC Publishers.
- SOUTH AFRICAN POLICE SERVICE. (2011). Crime Statistics: April 2010 - March 2011. Retrieved March 07, 2012, from South African Police Service: <http://www.saps.gov.za/statistics/reports/crimestats/2011/categories.htm>
- STUMPF, R. (1994). Introduction and Orientation. In L. Glanz (Ed.), *Preventing Juvenile Offending in South Africa: Workshop Proceedings* (pp. 3-4). Pretoria: HSRC Publishers.
- SULLIVAN, P., & FARBSTAIN, J. (2005). *Juvenile Services Center Design Challenges and Opportunities*. The American Institute of Architects, San Luis Obispo.
- WEISS, L. (2011). Exceptional Space: Concentration Camps and Labour Compounds in Late Nineteenth-Century South Africa. In A. MYERS, & G. MOSHENSKA (Eds.), *Archaeologies of Internment* (pp. 21-32). London: Springer.
- WOLMARANS, S., & JACOBSZ, R. (1994). The Prevention of Juvenile Offending: Problems and Solutions. In L. Glanz (Ed.), *Preventing Juvenile Offending in South Africa: Workshop Proceedings* (pp. 11-21). Pretoria: HSRC Publishers.

Interviews

ANONYMOUS. (2012, August 14). Personal communications with head of design for the Department of Correctional Services (P. Frowein, Interviewer)

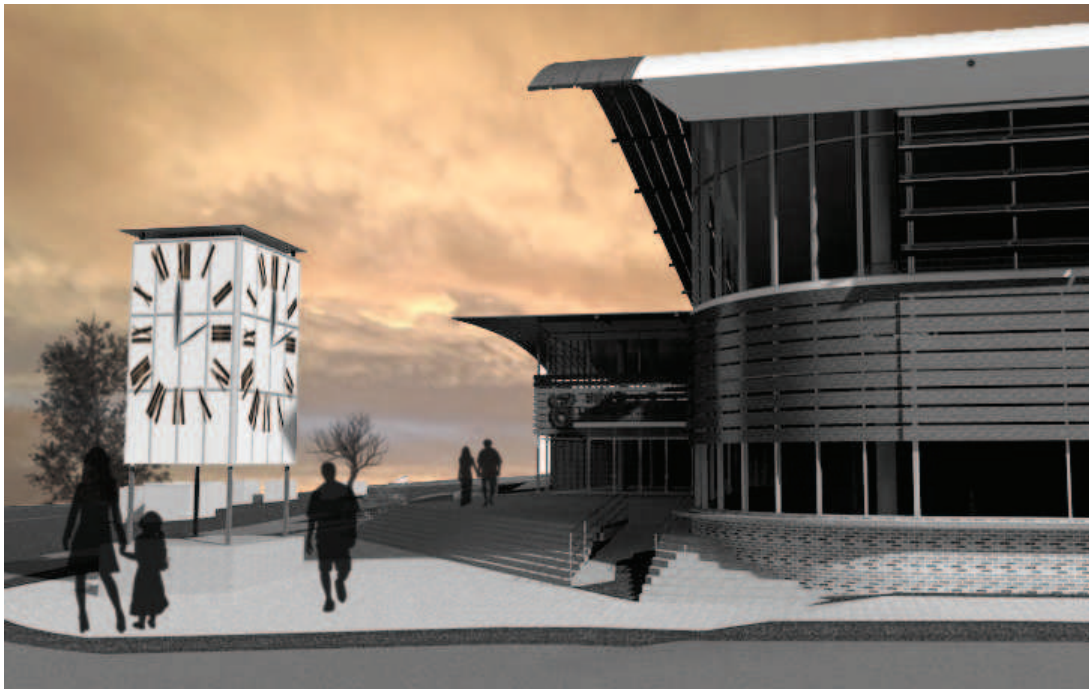
APRIL. (2012, March 9). Interview with the Head of Medium A at Leeuwkop Prison. (P. Frowein, Interviewer)

BRUNS, P. (2012, March 9). Interview with the Head of Hlumelelisa. (P. Frowein, Interviewer)

WOODWARD, R. (2012, April 20). Personal communications with housing procurement manager at Group 5 about the Klerskdorp Prison. (P. Frowein, Interviewer)

Video Media

HARRIS, G. (Director). (2006). Ross Kemp on Gangs - South Africa [Motion Picture]. United Kingdom: British Sky Broadcasting .



clock tower and public entrance