

of the University of the Witwatersrand) included the Yeoville Tower and places the Russian constructivist influence as central²⁹.

In 2016, Aeron Stipanov, an honours student at the University of the Witwatersrand, prepared an excellent report on the Yeoville Water Tower as part of a project, *Documenting Johannesburg*, under the supervision of Brendan Hart. This report meticulously illustrated the elevations and the engineering details and documented the tower in drawings and photographs. However, Stipanov did not get back to Klönne and the Dortmund origins³⁰.

THE BLUEPRINT IS THE KEY TO THE TREASURE

It's time for the blueprint of the Yeoville Water Tower to be revealed for what it is. The blueprint is the key to the treasure in our midst. Yeoville's iconic steel water tower stands proud and high on the Yeoville Ridge: it is a heritage treasure that dates back to 1913. At 105 years old, it is time to appreciate the industrial archaeology of Johannesburg and its mining origins and to realise that mine headgear, the Yeoville suburb and the Park Station structure are as precious to preserve as the baronial mansion.

FOOTNOTES

¹Felix Stark, Johannesburg, *Seventy Golden Years*, 188 by Felix Stark for the Municipal Public Relations Dept. *Der Deutsch-Afrikaner* 30 August, 1928, p10, advertisement.

²*South African Mining Yearbook*, 1941–42, Alphabetical List of engineering concerns in the Union of South Africa and Rhodesia.

³The German umlaut has been dropped and evidently had passed to the next generation). Further research is required.

⁴The records of the National Archives of South Africa provide the earliest reference is as far back as 1897 and relate about information regarding the tender for the supply of a hydraulic now post office of Johannesburg. (This would have been the Russian Street).

⁵There is a further record of an "illiquid case payment" in a dispute between Kusner (Pty) Limited and a Jacobus du Plessis Burger, date unknown, if record is dated 1971.

⁶German text as follows: Von (Illegible) getriebener (Illegible) Motor der verring massige getrauch gemacht und der gebrauch keinen abnutzen und darf weder kopiert noch drucken Personen zum Zweck der Benutzung mitge geteilt werden, Aug. Klönne, Düsseldorf, 1913. https://patents.google.com/patent/Aug_Klönne1913

⁷Company history of <http://www.smstsa.co.za>

⁸See <http://www.smstsa.co.za> and iron building that was originally prefabricated and shipped to South Africa. It was erected at the substantial cost of R100,000.

⁹See Karel A Bakker, Nishky ZA *Wilhelms: A shared Past*, long Robert C, et al, 1988, NZA and structures of the Netherlands, Johannesburg, Publications, Johannesburg.

¹⁰De Jong Robert C, et al, 1988, NZA and structures of the Netherlands, Johannesburg, Publications, Johannesburg.

The tower marks a moment in time when prefabrication and imported steel were necessities for comfort and progress. The design of the tower successfully marries cutting-edge engineering and quality architecture. Finding the blueprint pays due homage to the German influence in Johannesburg's history.

It is even more surprising that...



Imprisonment of the Human Body: Reforming the system & lives through architecture [using Pollsmoor]

Kirsty Pettit
PTTKIR003

APG5079W

Design Dissertation

Advisor : Simone le Grange

figure 1: the liminality of the visitors centre

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1 September 2022

abstract

This project looks at an approach to the design of a prison visitors centre for Pollsmoor Maximum Security Prison which is grounded in humane design principles. Pollsmoor – like many prisons around the world and in South Africa – presents issues of gangsterism and overcrowding which are exacerbated by poor living conditions and a lack of effective rehabilitation programmes. This results in high reoffence rates upon release which then places further pressure on the system. Research into this cycle has shown that the single biggest determinant in reducing recidivism (reoffence) is the degree to which an inmate has a relationship with family or community members that are able to invest in them and provide support (Turanovic & Tasca, 2019).

A prison visitors centre presents the liminal space where family and community relationships are maintained and strengthened. Visiting an inmate in Pollsmoor is however, not a liminal experience because there is no defined separate visitors' centre. Families with young children cross into the actual cell blocks in order to visit loved ones. Therefore, the intent of this project is to create a separate visitors' centre integrated into nature within a secure portion of the agricultural land in Pollsmoor. It is vital that the visitors centre typology is challenged in favour of a humane environment which doesn't criminalise innocent family members. This is extended to both contact visits and non-contact visits which are sometimes unavoidable.

The larger intent behind this work is for the visitor's centre to firstly, fit within a master plan for the redesign of Pollsmoor but secondly for it to begin the conversation around prison design in South Africa. Prisons will always be needed in society to provide justice to individuals affected by a crime. However, if we intend for inmates to behave like decent human beings upon release, we need to treat them as human beings during incarceration.

contents

part a

introduction	1
problem statement & aims	2
theory of prisons	3- 9
precedent – HMP saughton	10 - 11
pollsmoor prison	12 - 23
humane design theory	24
precedent – storstrøm prison	25 - 26
prison visit	27
principles	28 - 31

part b

process work	32 - 35
programme	36 - 37
site	38 -39
site response diagramatic	40
concept	41
programme	42 - 43
technology & materials	44 - 46

part c

design	47 - 57
conclusion	58
references	59 - 64



figure 2: pollsmoor materiality

part a _ introduction

I have lived in Tokai all my life and the presence of Pollsmoor Prison - its warders and its invisible prisoners seen only as hands gripping bars in speeding police vans- have always terrified me. My disgust for its prison conditions emerged when our family gardener found himself within its walls. It was a panic to get him out. But my conception of a prisoner is a complete binary – sweet innocent Mario on one hand and on the other the man I put in prison. His attack on my life stole both of our freedoms even though it was ultimately unsuccessful. I think about him all the time and I actually don't even know where he is anymore because of police protocol. His mental sickness is not something I believe punishment will fix; he needs real help. Not many stay in prison forever so what happens when they come out of their time in prison and re-enter society? Societal ideology around punishment is changing again – this time towards that of rehabilitation. Therefore, the architecture of prisons needs to change.

When I started this project, I thought that I could change the system and “fix” all of its problems. I tried to redesign Pollsmoor entirely and I failed spectacularly. I have realised this issue is bigger than one person, one perspective and a one-year study. I do not have all the answers but I hope to add value through the small part I have found for myself within this issue.

problem statement

Pollsmoor – like many prisons around the world and in South Africa – presents issues of gangsterism and overcrowding which are exacerbated by poor living conditions and a lack of effective rehabilitation programmes. This results in high reoffence rates upon release which then places further pressure on the system. There is no separate visiting centre at Pollsmoor which means families with young children cross into the actual cell blocks to visit their loved ones.



figure 3: threshold into current visiting facilities in prison blocks

+ aims

Research into this cycle has shown that the single biggest determinant in reducing recidivism (reoffence) is the degree to which an inmate has a relationship with family or community members that are able to invest in them and provide support (Turanovic & Tasca, 2019).

Therefore, I have chosen to focus on the design of a new visitor's centre for Pollsmoor which is founded in humane design principles. The aim is to aid in the reduction of the recidivism rate through improved family relationships that are strengthened through the accommodations of the visitor's centre. Part of this means reducing the trauma associated with the visitor's centre for families in order to make visits more desirable and possible.

In South Africa it costs the Correctional Department R163 155.00 to keep one prisoner for a year or R447 per day per inmate (Nitsckie, 2021). Just 10 inmates per year being rehabilitated back into society due to a better relationship with their family, results in a saving of R1.6 million. This means a financial investment into the visitor's centre pays for itself within just a few years.

theoretical background - prison

Prison, jail, correctional facility or detention centres are different names given to what is ultimately the same concept. A place to hold people convicted of a crime, a place of punishment. But as ideologies around punishment have changed over the course of history, so too has the architecture because almost nowhere else is it as clear that “form follows function” than in penal architecture. Penal architecture is a direct expression of societal ideology (Fridhov & Groning, 2018).

From the 16th to the 18th century Capital punishment was a public display, akin to a theatre. Physical punishment was inflicted in the form of hangings and beatings for public viewing for the purposes of deterring society from committing acts of crime (Glasgow, 2020). New laws and ideologies around punishment were introduced in the early 18th century which promoted incarceration over capital punishment. The pressure this placed on the prison system at the time as well as the rise of Colonialism resulted in Britain sending their prisoners via boat to their colonies such as Australia (Olesen, 2020).

The Victorian era brought about punishment ideologies that moved towards penance which is seen in the architecture of isolation in prisons. The intent of prisons was outlined by John Howard in the 1777 “State of Prisons in England and Wales” which was to prevent reoffences by allowing prisoners to reflect and feel their guilt (Fridhov & Groning, 2018). The Panopticon was the product of 18th century social theorist Jeremy Bentham (Glasgow, 2020). His design for a prison was based on a central rotunda operating as a surveillance point and multiple floors of cells were arranged around this central surveillance point. The psychological torture inherent in this design is that the prisoners are unable to know if they are being watched or not. It is impossible for one or even two guards to watch every prisoner simultaneously but even the knowledge that they could be the one being monitored is sufficient to alter behaviour (Glasgow, 2020). Bentham also created a system of pipes leading to each cell which would allow wardens to hear even just a whisper. It is now understood that this form of incarceration will significantly affect mental health and possibly even lead to insanity (Saher & Cetin, 2016).

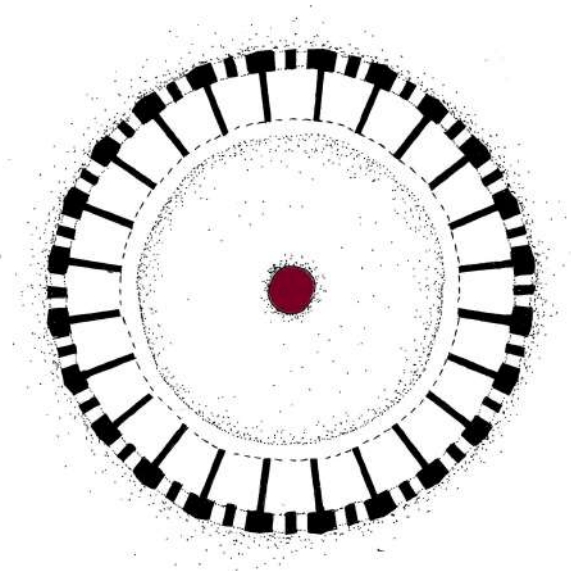


figure 4: plan of the panopticon

The Pentonville Prison constructed in 1842 was a further development of Bentham's concept which established the radial layout in prison design (Olesen, 2020). The two world wars stagnated the progression of prison ideologies until the 1960s when the welfarist "New Wave Prisons" were introduced (Olesen, 2020). These prisons placed emphasis on rehabilitation and reintegration into society and showcased the introduction of recreational spaces in prisons (Olesen, 2020).

By the 1970s this post war idealism had waivered with the rise of Neoliberalism and the public no longer believed in the ability to reform criminals (Olesen, 2020). His book "Discipline and Punish" Foucault addresses the topic of power and advocates for discipline instilled through "the gaze" as a means of achieving self-regulation (Glasgow, 2020). Prison design we see today is heavily informed by the introduction of CCTV cameras in 1987 (Olesen, 2020).

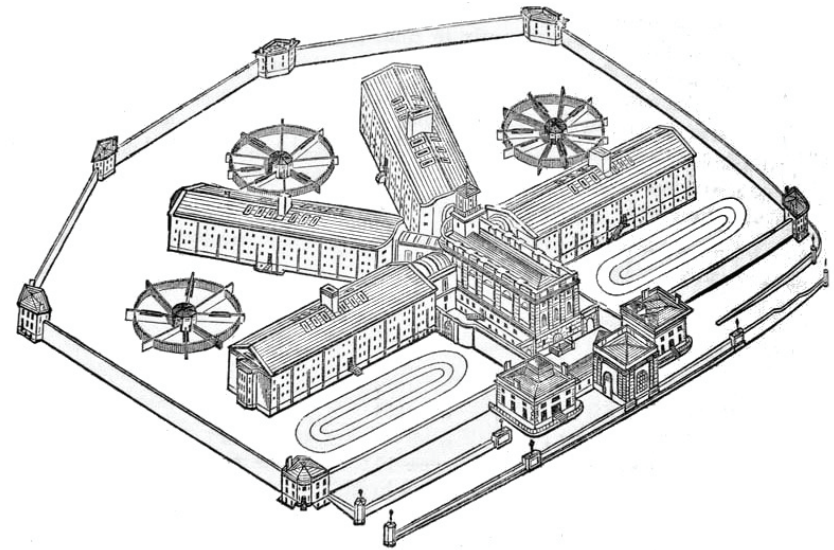


figure 5: pentonville prison

prison today +

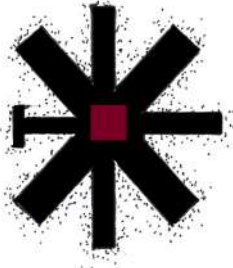
Power and control are inextricably tied to the existence of prisons and punishment because of the physical constraints they put on their occupants (Galford, 2021). This fragile, human construct holds gravity that can inflict physical and spatial violence which dehumanises and degrades. Such a dangerous concept requires understanding and clarity. Height is still used as one of the primary forms of control and surveillance. Prison labour and isolation units also still exist in prisons of today, albeit mostly according to laws and regulations to protect prisoners' rights. In prison design the physical built form is a vehicle that can maximise the social framework of domination and control (Galford, 2021). This process is often carried out through psychological means. Psychological translations of power and control often serve to constantly reinforce the state of imprisonment. This may be through sensory deprivation or overstimulation, the removal of human choice, denial of personal space, control of routine and states of non-normalcy (Galford, 2021).

layouts today

With the Panopticon being regarded as inhumane today, the prison reform of the last century has developed four general layout types upon which prison design of today is based upon. The ability for warders to oversee and control movement of prisoners at all times means often designers will combine elements of these layout typologies in order to maximise their benefits and reduce their inefficiencies (St John, 2019). The choice of layout used will “play a role in promoting either socialisation or isolation” because of the direct link between layout and social behaviour (St John, 2019). Therefore, the layout should be used as a means of promoting social behaviour that increases the rehabilitative impacts of social support (St John, 2019).

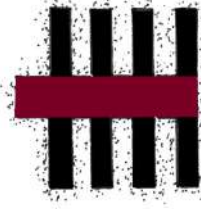
Movement is a vital consideration in the design of prisons. From the perspective of warders having multiple barriers or check points results in time delays when accompanying prisoners (St John, 2019). If circulation occurs outdoors, then extra personnel are required outdoors permanently for extra supervision which during cold months can impact morale (St John, 2019). Then excessive barriers such as gates and doors can be traumatic and depressing for prisoners because of the constant strip searches and sounds created by locking gates and doors (St John, 2019). The choice of layout has an impact on the prisoner to warder relationship as well as the safety of a prison

figure 6 - 9: layouts



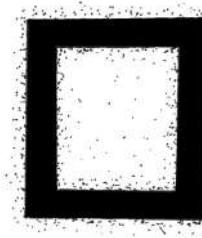
radial layout

A radial layout consists of multiple wings radiating from a centralised control and surveillance point. The cells and other prison functions are located along corridors within these wings. The main benefit of this layout is the ability to contain and shut down any violence occurring within prison groups (Lodato,2014).



telephone layout

The telephone pole layout consists of a central corridor running perpendicular to blocks containing cells and prison functions. This is a layout typically used in maximum security prisons because of the opportunity it provides for continuous circulation of warders. It also provides far more control around access into each block (Lodato,2014).



courtyard layout

The courtyard typology is a highly secure form of imprisonment where all prison functions and cells face into a centralised outdoor space. The courtyard is often used for exercise yards due to their 360°surveillance opportunities (Lodato,2014). The issue with these layouts are that they are expensive both to build and maintain (Lodato,2014).

Pollsmoor Prison itself is an example of both the implementation of the courtyard typology but arguably also the maintenance difficulties.

campus layout

The previous three typologies prioritise easy and secure movement of prisoners. The issue which then arises is that prisoners are confined to the same spaces' day in and day out. This leads to frustration, boredom and thus conflict (Vox, 2019). The campus layout meets this demand by spreading out its functions across the entire prison site as separate entities. Emphasis is then placed on the design of a highly secure perimeter wall as well as carefully designed circulation routes (Lodato, 2014). However, navigating circulation routes outdoors during cold months can eliminate any positive benefit that being able to experience nature. The careful designation of circulation routes means the use of high fences and razor wire is common which can cancel out the positive effects of being in nature as they serve as reminders of the imprisonment status (St John, 2019). Campus style layouts have been shown to improve positive relations between warders and prisoners but unfortunately have also been linked to higher instances of misconduct among prisoners (St John, 2019).

Storstrøm Prison is a prison in Denmark which will be discussed further on in this report. It makes use of a campus style layout but shows how the previous three typologies can be successfully integrated at an individual building scale. The design presents a fusion of courtyards and the radial layout (Mandrup Hansen, 2019).

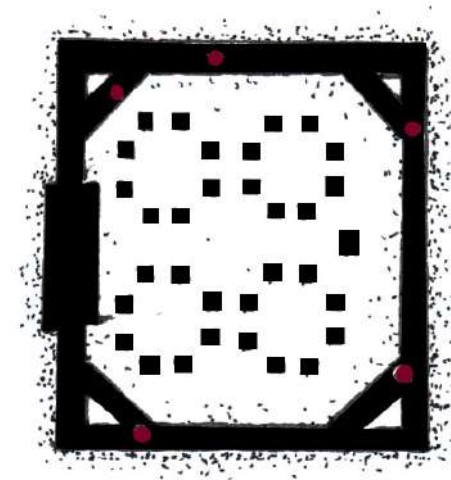


figure 10: campus layout

visitation history

Inmate visitation as a typology within the prison can be traced back to prisons in the late 17th century. The Walnut Street Jail in Pennsylvania allowed 15 min visits every 3 months. All visits were non-contact and were held behind a grilled barrier. These visits were granted only on the basis of exemplary behaviour (Sitren, 2021).

When punishment ideologies moved towards penance, visitation was banned completely. Visitation was seen as a hindrance to inmates silently reflecting on their crime before returning home (Sitren, 2021). This was reversed in the 1970's with the acknowledgement of the importance of family and community bonds to inmates (Sitren, 2021).



figure 11: current standard non contact visitation typology

visitation role

Visitation plays a vital role in the mental health of inmates because it is a “buffer from the realities of contemporary prison life such as overcrowding and violence” (Kinsella, 2017). Loneliness and isolation from family and community is a source of distress in prison which can impact on an inmate’s adjustment into prison life and their wellbeing (Turanovic & Tasca, 2019). There is also evidence which shows that a prison which encourages visits with families is subject to far less violence (Woodall, 2018).

A maintained connection with family and community during incarceration also plays an important role upon release back into society because these ties can influence access to housing, the job market and treatment services as well as provide emotional support during the transition (Turanovic & Tasca, 2019). Unfortunately, the impact of the loss of familial closeness can lead to released individuals engaging sexual, physical, emotional and substance abuse (Toews, 2020).

visitation today

Visitation is a standard component of prisons today however it is far from ideal in many instances. The visitor's centre represents a liminal space between the prison and society (Woodall, 2018). The majority of inmates in most prisons are men and so the visitor's centre is often described as the women's prison. This is because families effectively end up "doing the wait" with their incarcerated loved ones (Foster, 2019). Visiting an inmate on a regular basis is a "time, resource and labour-intensive process" (Sitren, 2021). Visits are often extremely emotional with feeling of excitement, anticipation and joy but also sadness or anger (Jardine, 2018). There is also pressure for a visit to go well which can be overwhelming (Woodall, 2018).

The need to prevent escapes and contraband exchange during visits means the visitor's centre often criminalises innocent visitors through invasive search procedures and excessive waiting periods. Some visits are still held behind glass for this reason as well (Woodall, 2018). Overall, this results in an experience that is daunting, traumatic and a source of emotional strain (Foster, 2019).

Spatially the visitors and inmates become subject to corporeal discomfort especially when design has been used to discourage intimacy (Moran & Disney, 2018). As the diagrams below suggest the height and width of tables are used as a device of separation and prevention of contraband. Furniture is bolted to the floors allowing no flexibility. The use of hard shiny surfaces and no soft furnishings combined with the closeness of large groups of people creates a volume of noise which impacts the ability to hear each other. This means inmates and visitors have to lean over the table (as they can't move the furniture) which after a while becomes uncomfortable (Moran & Disney, 2018).

Discomfort is also felt through the invasion of privacy. There are some very important conversations which need to take place such as child custody, financial, legal and romantic matters and often inmates are closer to each other than they are to their visitors which increases the risk of being overheard by other inmates. This means some conversations may be avoided to the detriment of the success of the visit in terms of intimacy and resolutions (Moran & Disney, 2018).

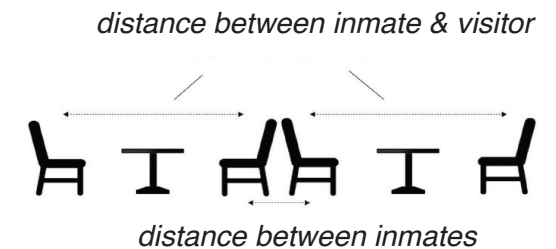


figure 12: distance

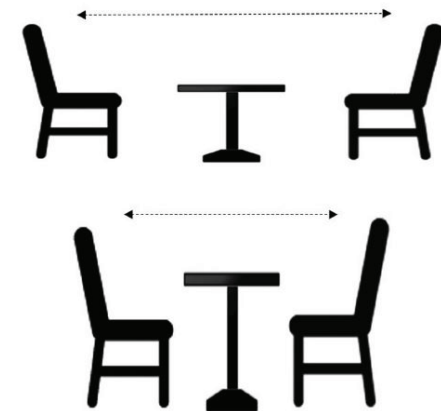


figure 13: height used to further distance

HMP Saughton

Unfortunately, despite extensive research very little architectural documentation of prison visitors' centres is available. This is possibly due to security risks associated with contraband in prison visitors' centres. The prison visitor's centre has only become a subject of study within the prison discourse which possibly accounts for the lack of exceptional design in this typology (Comfort, 2007) The following project does not represent an ideal architecture but is simply useful in understanding the existing typology. The HM Prison Saughton is located in Edinburgh and its "Families' Reception Centre" was designed in 1997 by Gareth Hoskins Architects (Gillespie, 2000). The brief required that the building be open and friendly with clear and obvious organisation upon entry. It also required that visitors be able to relax within the space and have a degree of privacy (Gillespie, 2000). Some of the facilities provided within this centre are: "security screening, information desks, waiting space, toilets, pram storage, lockers, café, creche, play areas, counselling spaces and offices" (Gillespie, 2000).

A curved wall draws the visitor into the lobby leading directly to the reception desk. The waiting room is located within a curved room with services such as the visitor ablutions directly adjacent for ease of use (Gillespie, 2000). The counselling room provided is also adjacent to the waiting room encouraging the use if needed. The reception area allows surveillance into the visiting areas which is not separated entirely from the waiting area. Before visitors enter into the visiting area, they are able to drop off items such as prams in the storage area. Visitors and inmates are afforded a choice of visiting format in either the seating bays, café space, TV room, indoor and outdoor play spaces or the more private meeting room (Gillespie, 2000). The roof opens to the South allowing an abundance of sunlight which along with the use of warm tones creates a cosy and comfortable environment (Gillespie, 2000).



figure 14 - 18: photography of visitors centre at hmp saughton



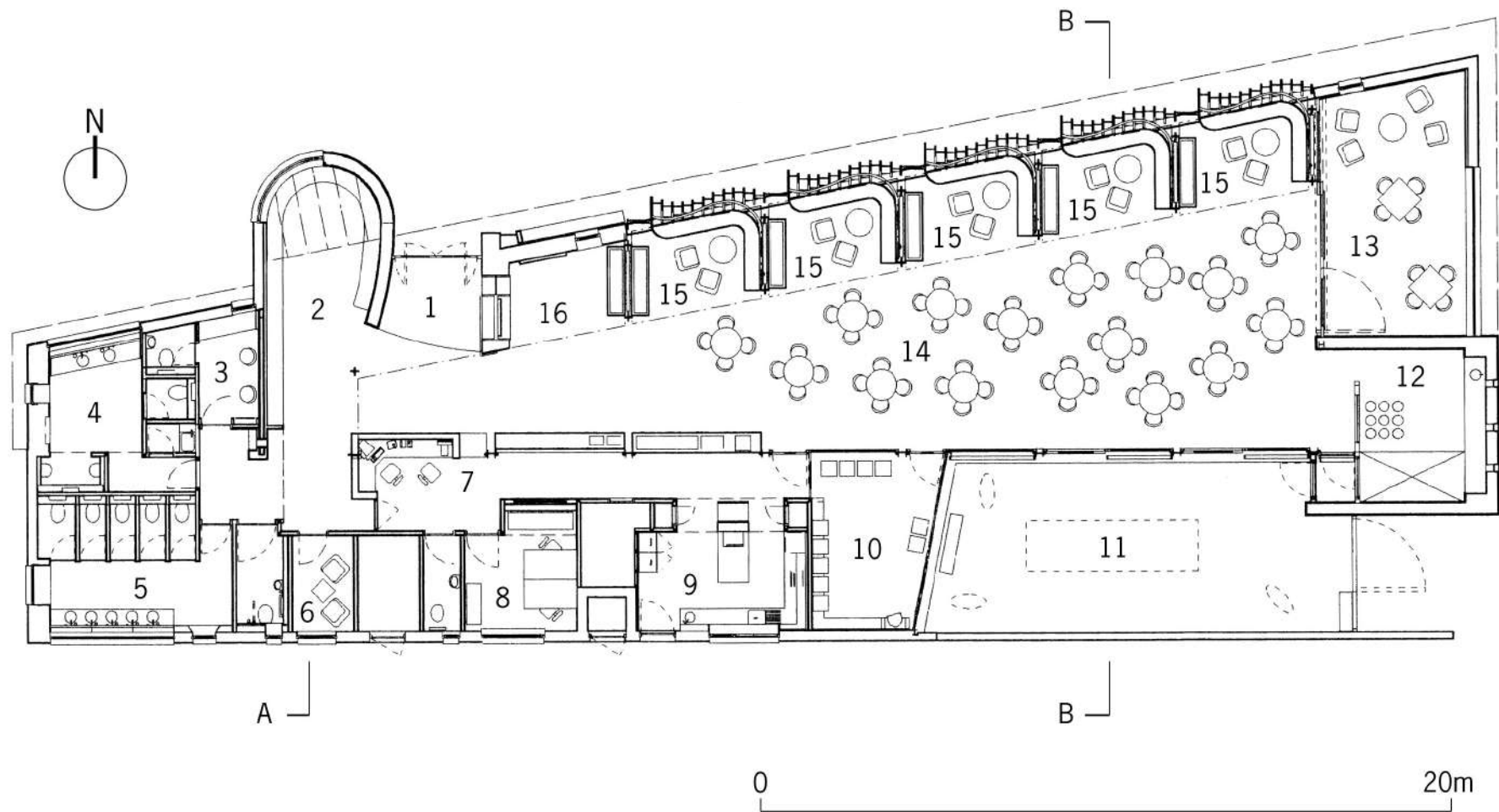


figure 19: plan

- | | | | |
|-------------------|----------------|---------------|------------------|
| 1. entrance lobby | 5. wc female | 9. kitchen | 13. meeting room |
| 2. waiting area | 6. counselling | 10. tv room | 14. cafe |
| 3. baby change | 7. reception | 11. play area | 15. seating bay |
| 4. wc male | 8. office | 12. play room | 16. buggy store |

figure 21: cape town locality of pollsmoor

pollsmoor locality

Pollsmoor Prison is located in the Southern Suburbs of Cape Town. Its reputation precedes itself and it is in stark contrast to the affluent residential fabric surrounding it which nestle into the foothills of the Constantia valley.



figure 20: mountain views from pollsmoor prison





figure 22: pollsmoor locality context

pollsmoor locality

The suburbs of Tokai, Westlake, Kirstenhof and Steenberg estate border onto Pollsmoor. The major freeway the M3 runs adjacent to the site which provides access onto Tokai Road which leads to Steenberg Road which is where the main entry is located.

pollsmoor history

Use of the Pollsmoor land dates back to the colonial agricultural history of Cape Town due its prime locality within the Constantia Valley. The site has served many uses ranging from farm land, a grand prix race track and a military camp during World War 2 (Jackman, 2014).

Once the war ended, a need arose from the surrounding farms for prison farm labour and prisoners were brought in from the Roeland Street Prison. The prisoners spent Monday to Friday working on the farms under the supervision of a warden. But by 1948 it was agreed that an official outpost was required to ensure security within this system. The original prison accommodation was for 20 prisoners, 3 cooks, 4 cleaners and 13 workers but by 1949 this was expanded to accommodate 200 prisoners (Jackman, 2014). Thus, Pollsmoor Prison came to be. The buildings seen today were constructed in 1964 (Filippi, 2011) during the height of apartheid so the architecture reflects the ideologies and attitude towards its predominantly black prisoners. The 1967 Terrorism Act had led to an increase in prison populations due to the mass arrests of young black men from the townships (Filippi, 2011).

At the time the judicial system classed offences as either political or common crime so initially Pollsmoor was for common criminals whereas Robben Island was utilised for the political prisoners. However, the definition of a political crime was fluid and often judges opted to define political crimes rather as common crime to avoid acknowledging the sophistication of black resistance groups such as the Pan African Congress (Filippi, 2011). Consequently, high level ranking PAC members were actually imprisoned at Pollsmoor alongside common criminals (Filippi, 2011).



figure 23: old photograph of pollsmoor before development of surroundings

Nelson Mandela, Walter Sisulu and other well-known apartheid resistance figures were moved to Pollsmoor from Robben Island in the 80s. Political prisoners were then fully separate from common criminals and granted better living conditions but still deprived of access to newspapers (Filippi, 2011). Even so, conditions were still despicable enough for Mandela to contract TB during his time at Pollsmoor (Myre, 2013). Pollsmoor Prison held black, white and coloured prisoners but still adhered to the apartheid societal structures of racial segregation. White prisoners were given better food, more visitation rights and allowed to send and receive more letters than black and coloured prisoners (Filippi, 2011). However, the 1959 Prisons Act meant all prisoners were subject to “corporal punishment, solitary confinement, reduced diet and the right of warders to use deadly force with considerable impunity” (Filippi, 2011).

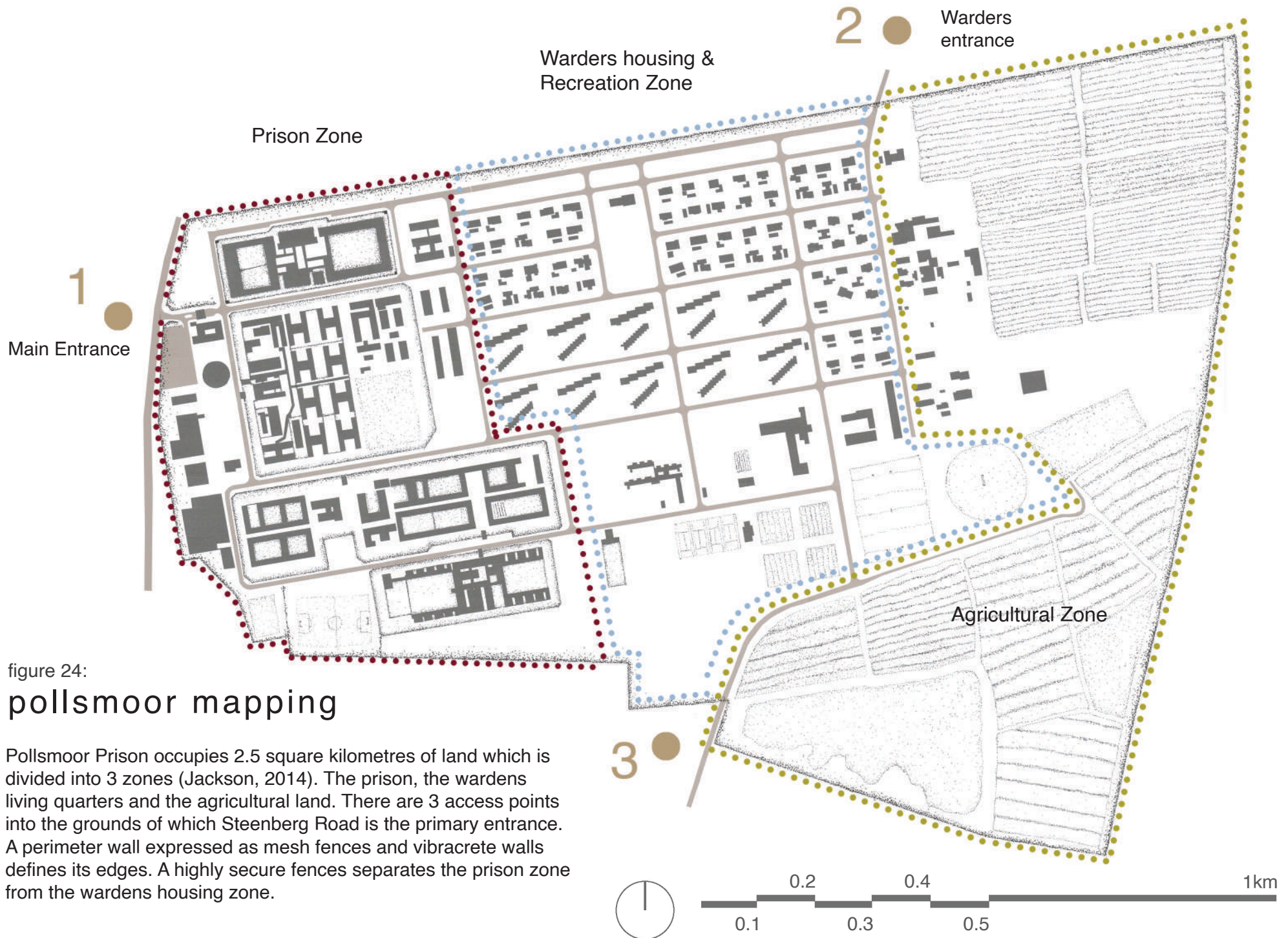


figure 24:
pollsmoor mapping

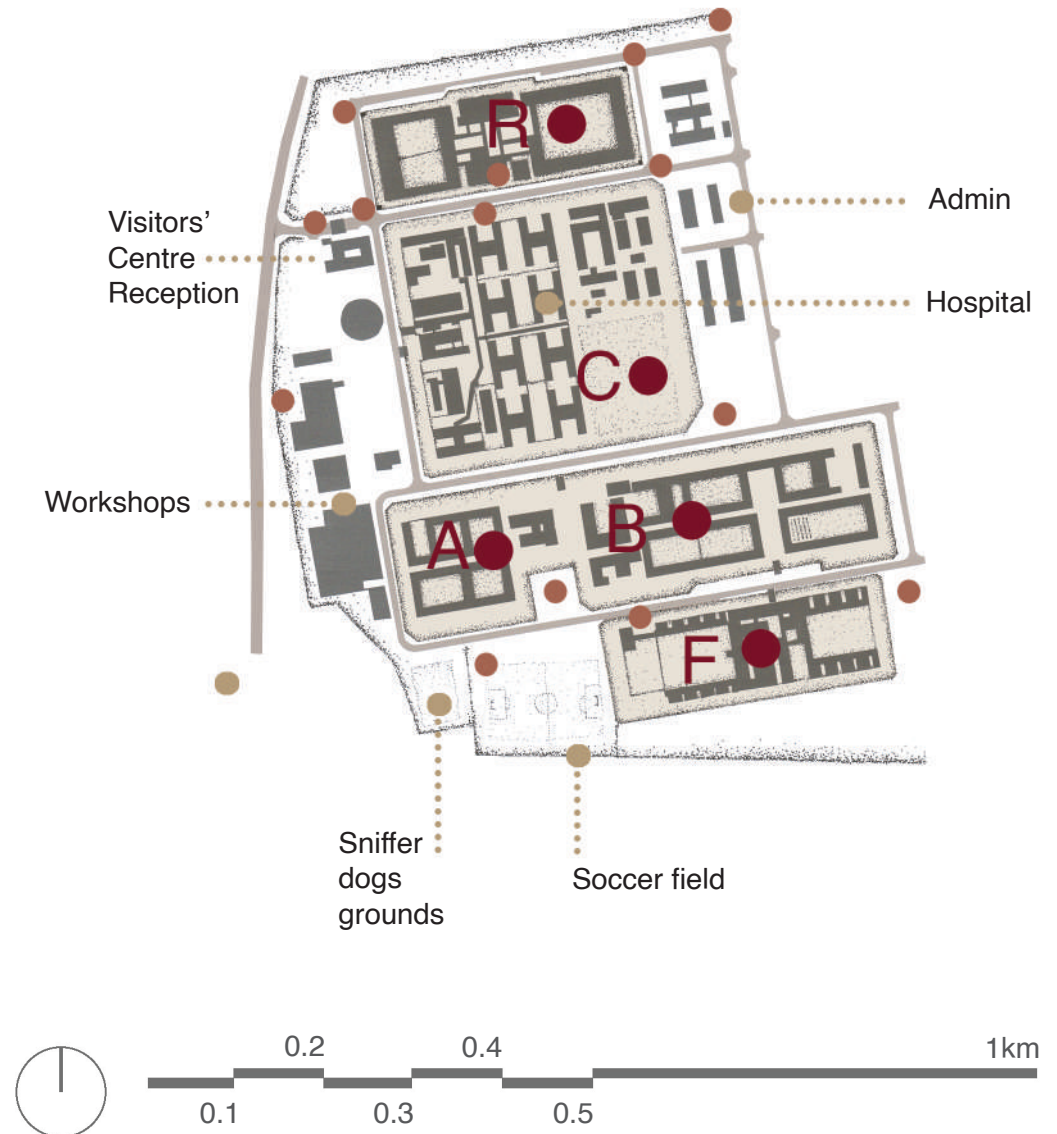
Pollsmoor Prison occupies 2.5 square kilometres of land which is divided into 3 zones (Jackson, 2014). The prison, the wardens living quarters and the agricultural land. There are 3 access points into the grounds of which Steenberg Road is the primary entrance. A perimeter wall expressed as mesh fences and vibracrete walls defines its edges. A highly secure fences separates the prison zone from the wardens housing zone.

prison zone

The prison zone is accessed from Steenberg Road and has 5 separate prison blocks within it. In recent years due to overcrowding Pollsmoor has become mostly a remand detention facility (for inmates awaiting trial) and the majority of inmates are transferred to other prisons such as Worcester Prison once they have been sentenced or towards the end of their sentence. The Remand Detention facility is therefore the largest facility within Pollsmoor. The other four prisons consist of Medium A which houses awaiting trial and sentenced juveniles, Medium B which houses sentenced adult males and Medium C houses sentenced adult males with short sentences, on day parole or soon to be released males. The female wing houses sentenced and unsentenced adult women and juveniles.

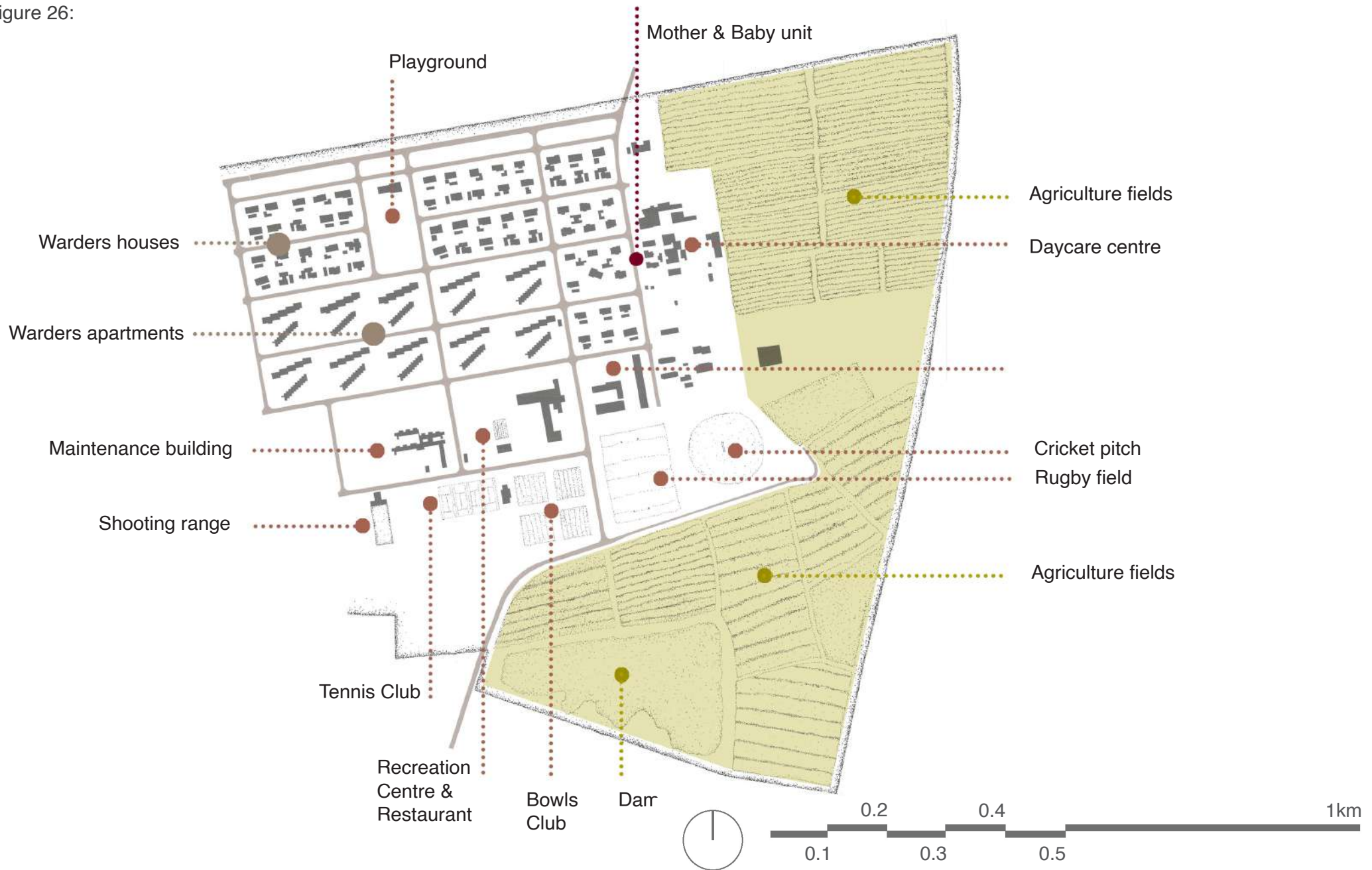
Various facilities such as the visitors centre reception, hospital, pharmacy, sniffer dog training ground, prisoner soccer and administration are located within the prison zone. There is also a block separate to the women's prison where female prisoners with children under 2 are housed. These facilities exist outside of the fences around the prison blocks but still inside the prison zone, so are a medium security level. The prison blocks make use of the courtyard typology and are highly secure with surveillance and fences around each block. The orange circles on the diagram represent the surveillance towers and checkpoints

figure 25: prison zone mapping



warder housing & recreation zone + agricultural zone

figure 26:



The warden's housing zone is accessed via Glenbrae Road off Tokai Road. Within this zone are two typologies of housing – stand-alone house and apartment blocks. The assumption is that the housing typology correlates to warden rank. Housing is arranged along a grid layout of large blocks that dwarf the housing units and result in a sparse landscape and wasted open space. The housing zone was designed to be almost self-sufficient, although many of the facilities such as the butchery have now closed. With the design originally accommodating for white wardens, it is evident in the large swathe of land accommodated for recreation that quality of life was accounted for. The recreation zone includes a cricket field, rugby field, swimming pool, tennis court, bowls club and shooting range. There is also a Recreation Centre where the official Pollsmoor restaurant is located. Wardens' children were accommodated for with the inclusion of a playground and a day-care centre. Interestingly the unit for imprisoned mothers and their babies (under age of 2) is located within this zone rather than the prison zone.

The agricultural zone is located adjacent to the housing zone without a separating fence. Prison labour has been used to tend to these fields and the produce is used to feed the prison population. Inmates are brought to these fields via prison transportation and are supervised by several warders.

design flaws

Through an analysis combining security levels with access and movement routes the inherent flaws within the design become evident. A single entrance is utilised by the public (accessing the restaurant), visitors (accessing the visitors centre), inmates (returning from court appearances in high security vans) and warders and their family members (accessing Steenberg Village shopping centre). The prison zone is classed as a high security zone but movement routes indicate the public crossing directly through the centre of it past cell blocks and then crossing into the private realm of the warders living quarters to access the restaurant in the recreation centre. Chaos also ensues when police vans bringing inmates back from court appearances have to use the same entrance as the public but are unable to stop for security purposes which is dangerous for pedestrians.

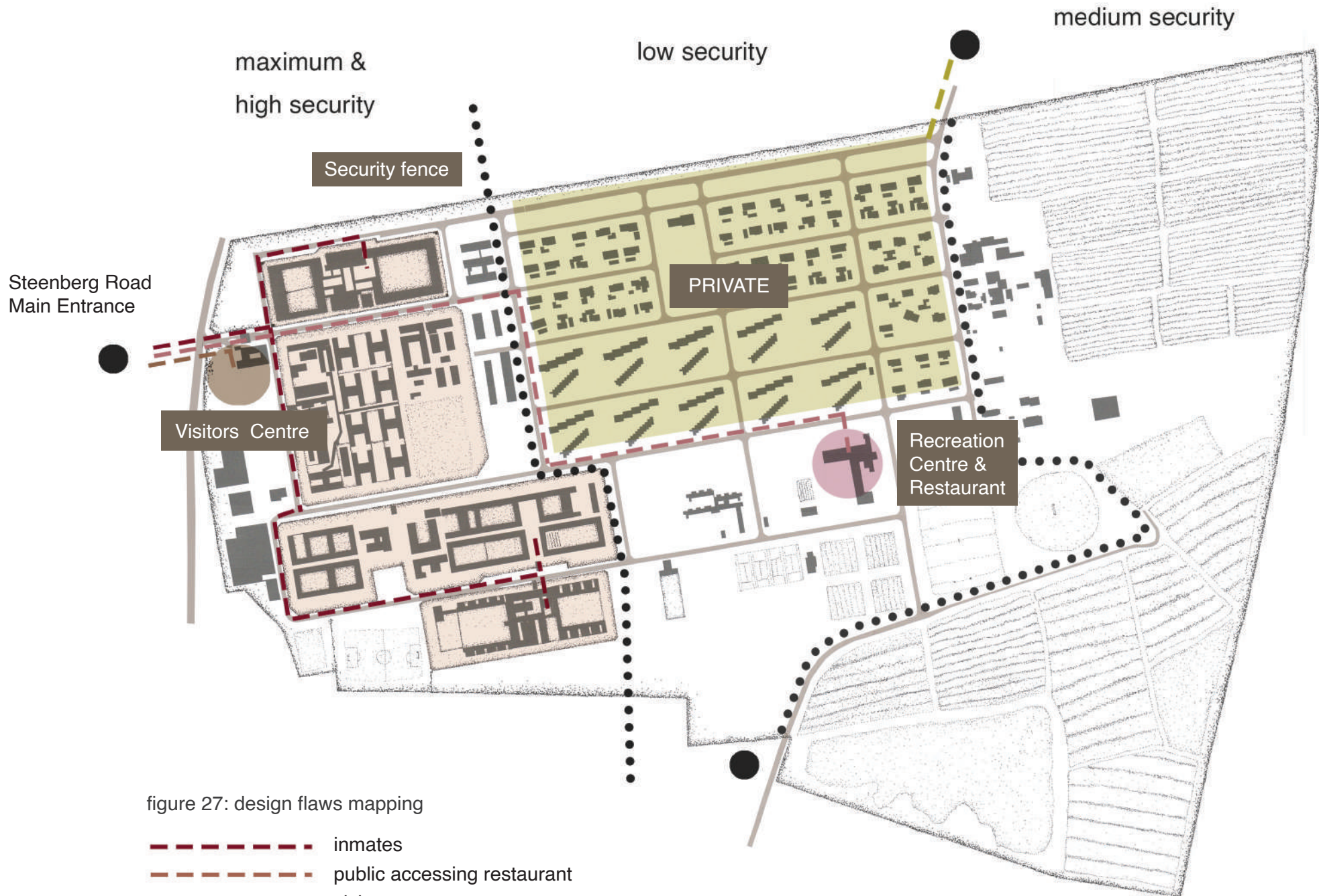


figure 27: design flaws mapping

- inmates
- public accessing restaurant
- visitors



figure 28: current reception area for visitors centre



figure 29: threshold into visiting area in cell blocks



figure 30: visits behind glass & visible disrepair

visitors centre

The visitors centre reception is located adjacent to the entrance in the Prison zone where visitors queue outside in the parking lot before sign in. Once they have been signed in, they wait inside until a bus arrives which transports them into the cell block, they are visiting. They wait in another waiting room there while the inmate is located. Research indicates this is a degrading experience that is loud, scary and dirty. The disrepair can be seen in the toilets, windows and the benches.

Ashleigh Furlong produced this description of the visiting conditions within the Pollsmoor Visitors Centre: “The visiting room is long and dimly lit, with grimy glass panes separating the inmates from the visitors. There are partitions to give some form of privacy between the visitors, but the sound of 50 or more people shouting at each other through a tiny metal grid in the glass is deafening. After what feels like barely 30 minutes, the lights are switched off. Most people know this means the end of their visiting time. In the gloom, with the only light coming from the window on the other side of the glass where the inmates are, visitors say goodbye and slowly trickle out of the room” (Furlong, 2016).

ideology in the architecture

As the initial building constructed in 1964, past ideologies of punishment and apartheid era rhetoric is evident in the Medium A building shown below. The Medium A building set the precedent for the use of the courtyard typology as well as the overwhelming use of yellowish brick. The intent for the prison block to appear as harsh and unwelcoming is evident through the use of scale. The block is actually 2 storeys but a fake wall is used to extend the height in order to appear more menacing to the human eye especially from inside the courtyard. Hard surfaces such as the concrete floor level and lack of any trees or nature leave the courtyard feeling harsh and unwelcoming. The cells are arranged on either side of a 3m corridor with warder surveillance points at certain intervals. The corridors are dark and make use of hard surfaces that allow noise to echo and travel far. The 40m² cells are communal and designed to accommodate 18 men (Smith, 2021).

The disregard for their human dignity and privacy is seen in the design of 1 toilet, 1 shower and 1 sink to be shared by 18 men with no separation between sleeping quarters. Window openings for the cells are 4 barely openable windows of 1.2m² which do not meet suitable ventilation requirements (Smith, 2021). The disregard for human life is seen in the design choices allowing views only into the dismal inner courtyard as window openings on the exterior of the block which would have had views of the Tokai Mountain range are blocked off with concrete coverings (Smith, 2021).

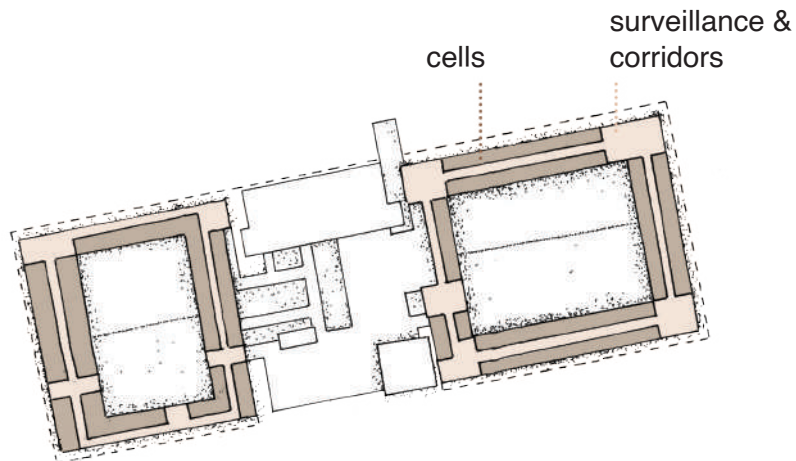


figure 31: remand block



figure 32: toilets within communal cells



figure 33: minimal ventilation & sunlight

gangsterism

Gangsterism presents one of the biggest issues and Pollsmoor Prison is home to the 26s, 27s and the 28s – notorious prison gangs which exist in prisons across South Africa. While the exact history of these gangs is largely unknown, it's believed the Numbers Gang was established in the late 1800s with the purpose of protecting black mineworkers (Kaviani, 2018). The Number rose in power during apartheid as their objective became to attack the prison system and challenge apartheid economic and racial injustice (Filippi, 2011).

These gangs hold huge power within the prison environment due to the absence of direct warden supervision in the communal cells for large swathes of the day. The gangs are only loosely associated with each other and each have their own function, hierarchy and rules. Gang rules are strictly followed and are often extremely violent. Gang affiliation and rank is marked by tattoos to the face and body so that their status is evident even outside the prison system. Another body modification is the removal of the front teeth which is known as a passion gap (Kaviani, 2018).

Recruiting new members from new arrivals is vital to sustaining these gangs so Pollsmoor segregate the gangs into 3 separate sections on a single floor to reduce interaction (McKenzie, 2016) However, many new arrivals seek the safety of joining a gang.

The other issue which arises from this segregation of gangs is that the 1-hour prisoners are released from their cells into the courtyard for exercise is used to “communicate with prisoners in other cells, exchange drugs and mete out punishment to those in other cells.” In fact, exercise during this hour is strictly forbidden by gang law (Filippi, 2011). Prisoners are not able to obtain the intended benefits of exercise such as releasing frustration and endorphins.

Inherent in the gang system is the use of “wyfies” and sexual assault (Kaviani, 2018). The impact of any rape is horrendous but rape of men by men leads to additional issues surrounding “lost” manhood. When prisoners who have been raped during their prison sentence are released into society, they often inflict rape on innocent women and children as a means of proving their manhood (Kaviani, 2018).

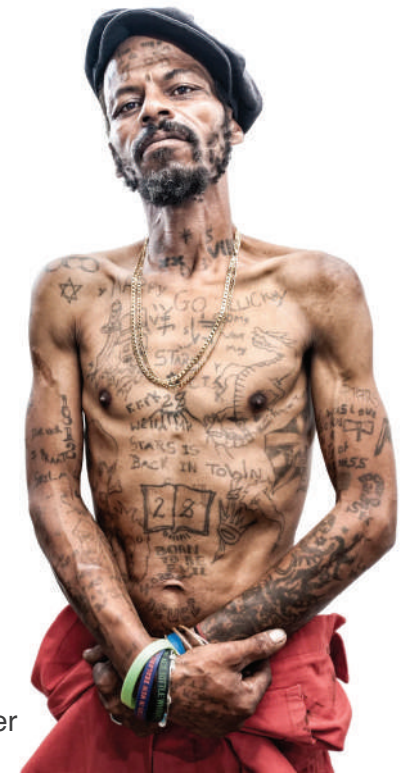


figure 34: 28's gang member

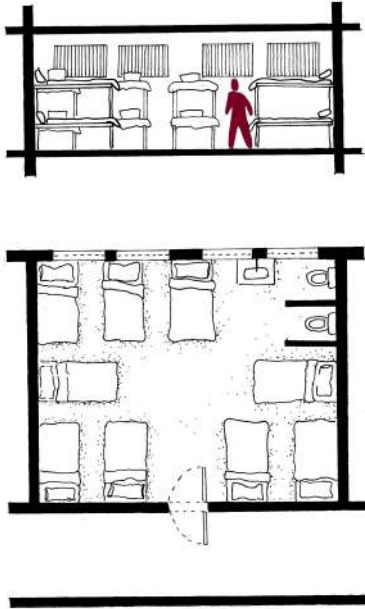


figure 35: cells

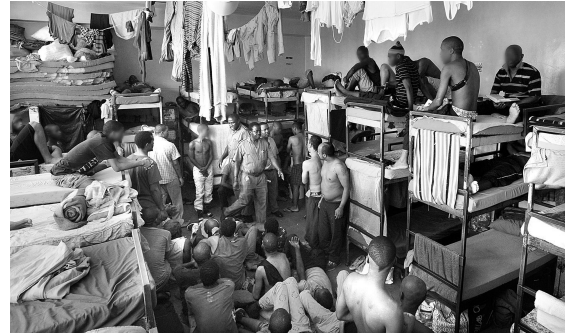


figure 36: overcrowding

overcrowding

As previously stated Pollsmoor was designed with a maximum capacity of 4336 prisoners to be staffed by 1278 warders and staff members. The prison is now almost at double capacity with roughly 8000 prisoners (Jackson, 2014). Pollsmoor makes use of 40m² communal cells intended to accommodate roughly 18 people sharing 1 toilet, 1 shower and 1 sink inside the cell (Smith, 2021). Today there can be as many as 60 people in one of these cells (McKenzie, 2016). At this level of overcrowding personal space becomes non-existent and infringements on prisoner rights are inevitable.

Not only does this overcrowding put pressure on the toilet plumbing system, but also other services within the prison such as the pharmacy, hospital and laundry services (Cameron, 2015). The impact of this as a whole, is that cells become places of frustration, filth, violence and disease.



figure 37: recidivism cycle

This report tackles the topic of recidivism (likelihood of prisoners reoffending upon release) later on but it is important to understand the cyclical impact overcrowding is having on recidivism rates in the Pollsmoor context. The apartheid legacy of this country has resulted in the social realities and issues that perpetuate crime and lead to overcrowded prisons (Smith, 2021). This brings rise to gangsterism, violence, poor service delivery and low staff morale. The consequence of that is then poor implementation of rehabilitation programmes that then lead to higher rates of reoffence which starts the entire cycle all over again (Smith, 2021).

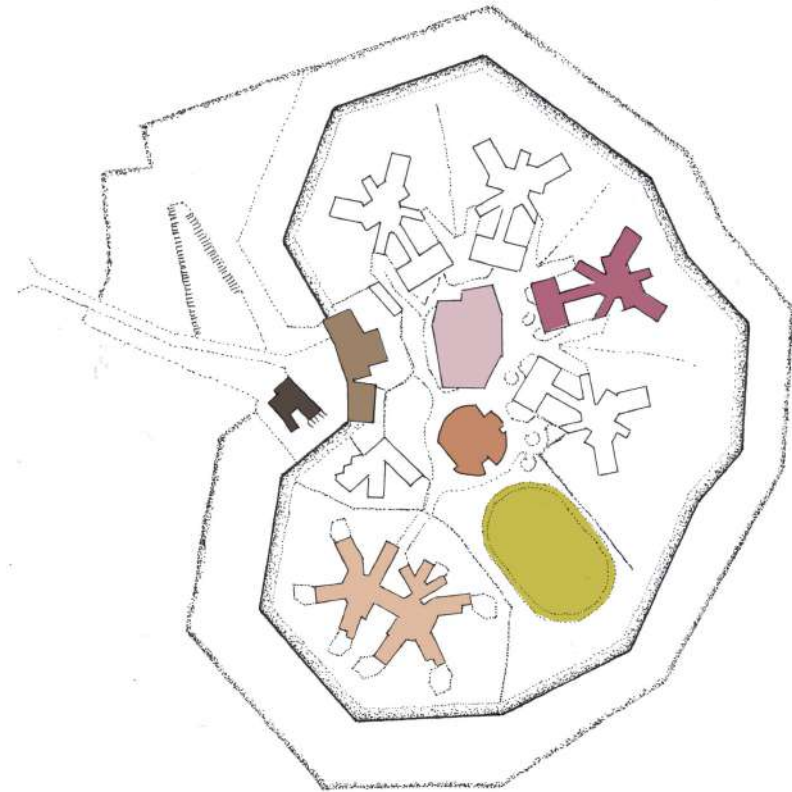
theoretical _ humane design



figure 38: the wall as punishment

Humane design is a term that has been recently developed within the prison design discourse. The fundamental belief of humane design is that the imprisonment is the punishment so the architecture doesn't have to be (Vox, 2019). It requires that the basic human dignity that is afforded in the outside world be given to inmates. This refers to access to sunlight, ventilation, nature and considerations of noise, aesthetics and privacy (Vox, 2019). Humane prisons therefore place value on the mental and emotional wellbeing of inmates (Woodall & Kinsella, 2017). The purpose of humane prisons is rehabilitation and reintegration back into society rather than just punishment (Clancy & Maguire, 2017).

figure 39 & 40: Storstrom Prison



precedent _ storstrom prison

Storstrøm Maximum Security Prison is located in Denmark and was designed by architects CF Moller according to the principles of humane design. For the architects that required rehabilitative architecture that places value on human wellbeing because their “overall goal is to motivate offenders to become law abiding citizens rather than punish them for not being so” (Mandrup Hansen, 2019). Another humane design principle that was adhered to in Storstrøm was the theory of normality. The architects “wanted to make the environment as similar to the outside world as possible to make the return to normal life easy to process” (Mandrup Hansen, 2019).

This consideration is seen in the masterplan layout of the site – shown adjacent. The layout expresses itself as a village with a square seen in the centre hosting buildings such as the cultural centre and workshop building (Mandrup Hansen, 2019). Streets fan out from the centre leading to the cell blocks where inmates make there “morning commute” to work or run daily errands around the site (mimicking life in the real world) to the library, grocery store or sports facilities (Mandrup Hansen, 2019). Freedom of movement within the controlled environment of the prison grounds is vital in developing self-sufficiency and responsibility within inmates that will prepare them for the outside world (Mandrup Hansen, 2019).

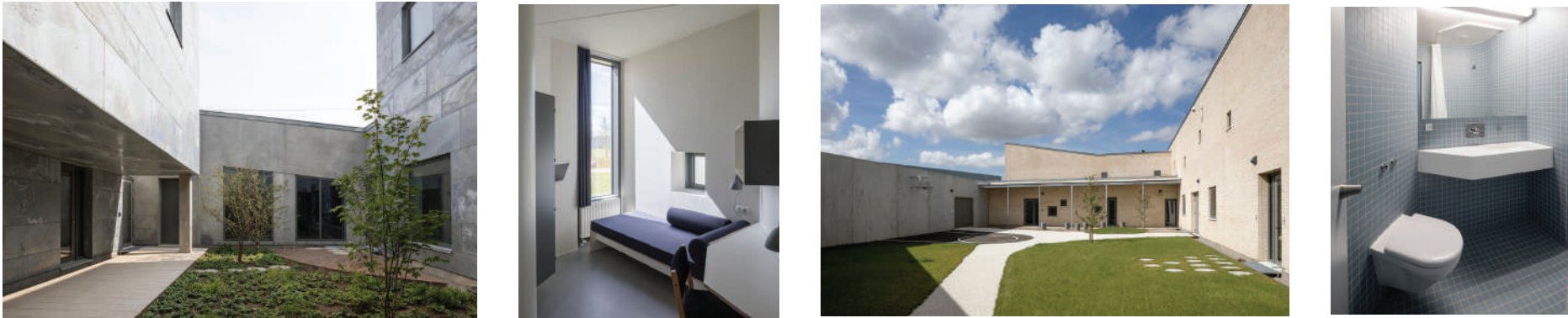


figure 41 - 45: Storstrom Prison photography

The buildings take inspiration from Danish architecture resulting in a familiar and varied arrangement of roofscapes, materials and scales. Massing and scale were carefully designed so that one doesn't feel like they are in a prison (Mandrup Hansen, 2019).

Another way Storstrøm was de-institutionalised was through its integration with nature. Outdoor space is fully accessible by inmates but also visible through barless windows that also bring sunlight and ventilation into all spaces. This speaks to another principle of humane design which is to design for comfort. This can be understood through the human senses and refer to aspects such as noise, colour and texture but also furnishing (Mandrup Hansen, 2019). Another aspect which is important to design for within a humane prison is the degree of personal control & privacy (Mandrup Hansen, 2019).



worcester prison visit & interviews

Despite considerable effort unfortunately I was unable to gain access to the Visitors Centre at Pollsmoor Prison. The family of a female inmate did reach out to me however and provided invaluable insights into their experience of the prison system and the operations of Pollsmoor Prison.

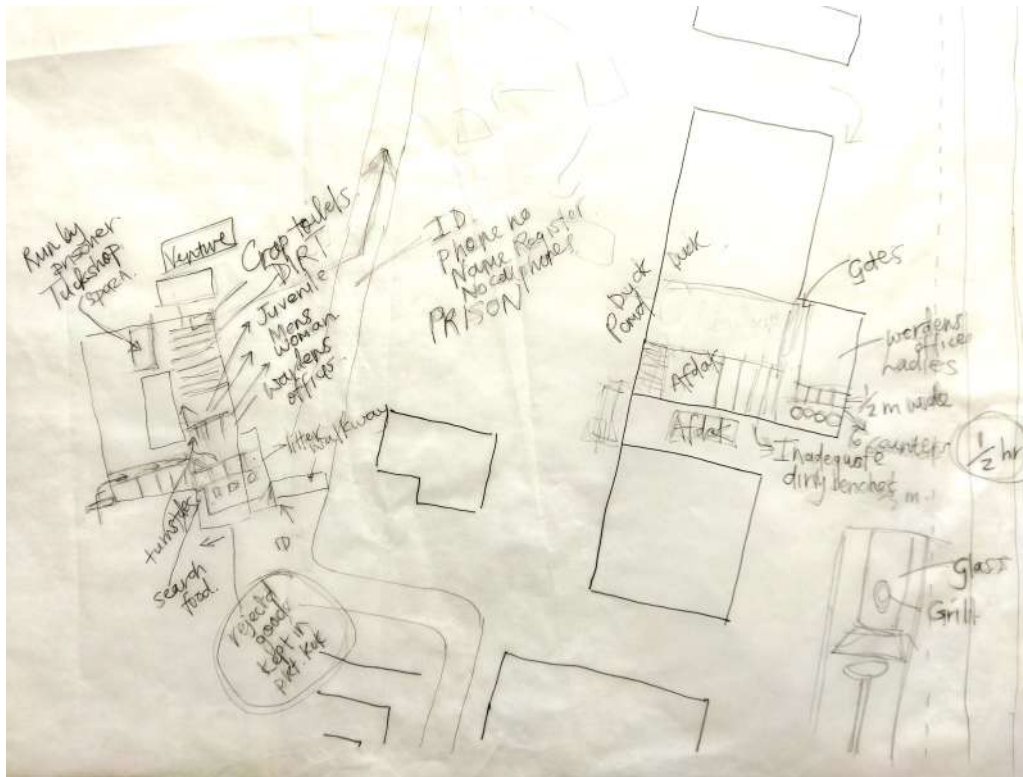


figure 46: diagram & notes drawn by “Lucy’s” family to illustrate their experiences and pollsmoor operations

I was then afforded the opportunity to meet the female inmate (now on referred to with alias of Lucy) at her prison in Worcester where she is now after being in Pollsmoor for 6 years. Despite her crime of murder, I was able to visit Lucy on a C level visit. This meant I was able to enjoy a 1-hour contact visit in the outdoors within a courtyard. She was not handcuffed and a few warders socialised nearby. I was able to bring gifts, hug and we shared a packet of Doritos. I was also not searched before entry. Another visit was being held nearby and the female inmate was able to hold her young child. This form of visit was the highest privilege within the prison and achieved through good behaviour. Lucy commented that privileges which allowed some form of contact with the outside world such as being allowed to operate the tuckshop or higher levels of contact with loved ones during visits were a major motivation for good behaviour.

This experience was invaluable. Worcester Prison is undoubtedly very different from the visiting experience at Pollsmoor but it illustrated what is possible. Being out in the sunshine, fresh air and not being criminalised as a visitor set the tone for a truly wholesome and positive visit that was beneficial to both parties. Hugging me goodbye, Lucy introduced me to the warders (who she calls Ma) as her first friend which absolutely broke my heart. I will be waiting at the gates with her family when she is released at the end of the year.

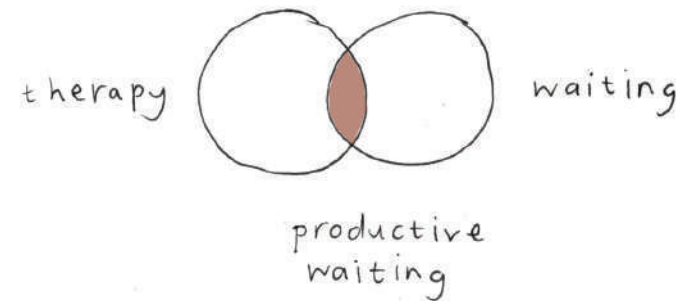
design principles

My research informed the following design principles for the application of humane design to the visitor's centre typology.

the image

The first is that it must be differentiated from the prison itself in both location and visual appearance. When the visitor's centre is constructed in the exact style as the prison it leaves visitor's feeling as if they are entering prison itself (Conias & Guaralda, 2013). Architecturally articulating the visitor's centre as different to the prison aids in allowing the visitor to feel or convince themselves they are visiting anywhere else other than a prison (Conias & Guaralda, 2013). Part of achieving this means views from the visitor's centre should not face onto high fences or into the prison and should rather focus on views into nature (Conias & Guaralda, 2013). Windows should allow an abundance of sunlight and natural ventilation to achieve a level of comfort and normality (Conias & Guaralda, 2013).

figure 47:



productive waiting

Visitors become subject to the power of prison authorities from the moment they enter the prison for a visit. This is done through the regulation of their time and bodies (Foster, 2019). The reason for wait periods is to allow staff time to manage the visit which includes locating and transporting the inmate.

However, this removal of personal power should never infringe on agency. Every visitor should have the ability to decide how they wait because it means waiting doesn't have to be a negative or empty experience (Foster, 2019). This taps into the concept of constructive or equipped waiting which makes waiting productive. Productive waiting can be in the form of reflective and social waiting which prepare the visitor for a better visit (Foster, 2019). The waiting room becomes a natural therapy space because in a way everyone there is going through the same situation. It is also often the same visitors that visit on a specific day and over time form social bonds (Foster, 2019).

security

As the primary interface between the prison and society, the visitor's centre presents the risk of contraband exchange or escapes which undermine the security operations of the prison (Woodall & Kinsella, 2017). However, the security measures carried out need to be appropriately mediated with the comfort needs of innocent visitors. Some options of achieving this could be by limiting the number of entries and exits, natural surveillance, separation of zones and CCTV surveillance (Conias & Guaralda, 2013). The appearance of security equipment in terms of size and intrusiveness is part of ensuring that security does not become more intimidating than need be (Conias & Guaralda, 2013). Reference to airport security equipment is useful in replicating quick and non-invasive security checks using equipment such as X-Ray machines (Conias & Guaralda, 2013).

journey

Another means of achieving security can be through the circulation and zoning (Conias & Guaralda, 2013). The circulation was brought up in my interview with Lucy's family as an important aspect of the experience. They noted that many visitors are of low literacy levels so circulation and zoning should be easily legible without relying on signage. Part of achieving this can be done through colour coding or floor markings (Conias & Guaralda, 2013).

Her family also expressed how they pray for the bus which transports them from the reception to the visiting areas in the cell blocks to be broken down. When it is (which is often) they relish in the small moment it affords them to self-collect and emotionally prepare for the upcoming visit. Transporting visitors around the prison is a removal of personal agency which makes visitors feel like inmates – especially in the current set up at Pollsmoor of visitors crossing into actual cell blocks for visits. Circulation should thus accommodate for transitional spaces.

zones

Children have historically not been considered in the design of carceral spaces such as a visitor's centre and they are wholly inappropriate for them. One claim for the reason behind this is that children are a distraction to other inmates and their families (Conias & Guaralda, 2013). Zoning is a mechanism which can be used to deal with this and to provide separate areas for visits with children and those without (Conias & Guaralda, 2013). Noise is a factor frequently noted by visitors as an issue as all visits tend to occur in a single room (Woodall & Kinsella, 2017). It would be ideal to have multiple visit rooms zoned around a specific form of visit and acoustically separated from each other with less visitors in each space. This will aid in surveillance but also the ability to converse. More defining zoning in terms of distance between one visiting group and another will aid in privacy.

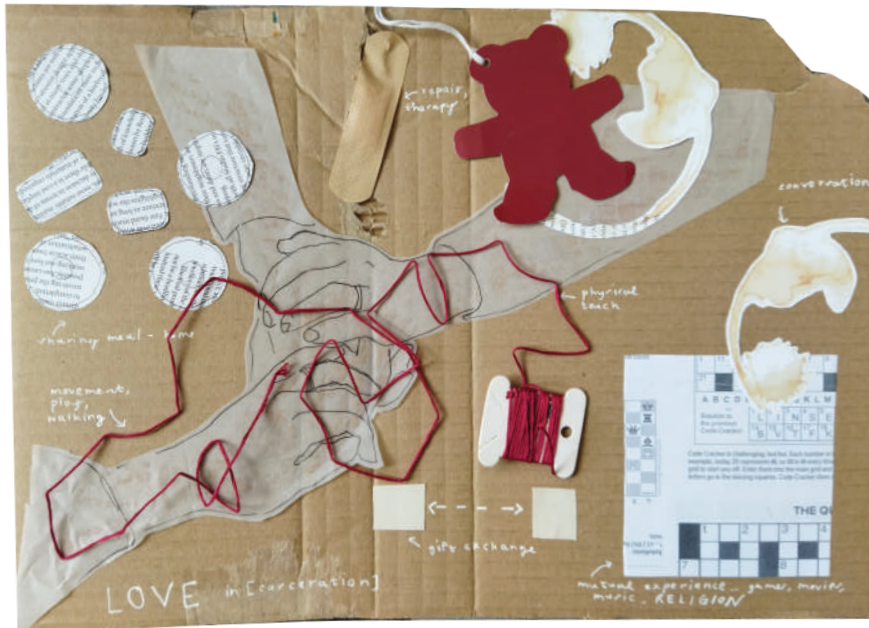


figure 48: love in [carceration] - small experiences of love such as food, play, human touch, mutual experience, therapy, gifts & conversation.

experiences _ food

Visiting an inmate can sometimes be an awkward experience because of time apart, the crime committed and the sole reliance on conversation. Physical affection is a huge part of family practices which are very often impossible in a prison visit environment (Jardine, 2018).

This means that food becomes a dominant element of simulating everyday family practices which normalise the visit experience. Sharing food and drinks is intrinsic to what families do together and it becomes a form of emotional currency (Jardine, 2018). Food can be seen as love, a reminder of home and culture. Spatial provisions which are centred around the act of sharing food and drinks is vital within the prison visitor's centre (Jardine, 2018).

experiences_ play

Children are a source of pride and motivation to incarcerated parents but visits with children under the current typology are painful. It is difficult to interact for incarcerated parents to interact with their children in an appropriate manner and they also don't want their children exposed to the harshness of the prison environment (Woodall & Kinsella, 2017). The intimidating environment of the prison visiting centre means that children may act out which causes warders to place unrealistic demands on the visiting parent to control their child. This may be done through threats to disallow visitation which places stress on the parent (Conias & Guaralda, 2013). Play is a natural act which occurs between parent and child and one which should be incorporated into the areas zoned for children within the visitor's centre. Play enhances the quality of the visit by recreating a more relaxed home environment (Woodall & Kinsella, 2017).

It allows for greater movement and physical contact which is important for stimulating bonding. For inmates play visits allow them to learn more about their child by following their cognitive development and interests (Woodall & Kinsella, 2017). Play visits during incarceration maintain and strengthen relationships which aid in maintaining a positive outlook while in prison (Woodall & Kinsella, 2017). It also helps to re-establish their role as mother or father and improves the relationship with their partner which provides reassurance that they will be able to transition back into a home life upon release (Woodall & Kinsella, 2017).

For children play visits are less awkward and intimidating (Woodall & Kinsella, 2017). Being allowed more freedom to move within a relaxed environment specifically designed for their needs and size makes visiting more appealing which allows them to maintain the natural relationship with their parent. It will also assist in the transition into a different family dynamic where one parent is absent from home life (Woodall & Kinsella, 2017).

Investing in the emotional wellbeing of children with incarcerated parents is part of managing future overcrowding of prisons because they are statistically more likely to exhibit behavioural problems and homelessness due to the trauma they have experienced. This could lead to criminal behaviour later in life if they are not supported early on (Toews, 2020) This also highlights the role which the prison plays in creating and exacerbating racial and social inequality within society (Jardine, 2018).

experiences _ nature

Visitor's Centres are predominantly indoor venues with little to no interaction with context, nature or the elements making them generally sterile and institutional (Toews, 2020). Including a garden within the visitor's centre is a viable antidote to this and can significantly help with the emotional aspect of visits. Green spaces are calming and can be a buffer to natural stress responses by inspiring prosocial behaviour (Toews, 2020). One of the ways which security can be managed within the garden is to utilise trees with narrow trunks that allow surveillance (Toews, 2020). The use of fences should be in contrast to the standard prison fences which are intimidating (Toews, 2020).

process work

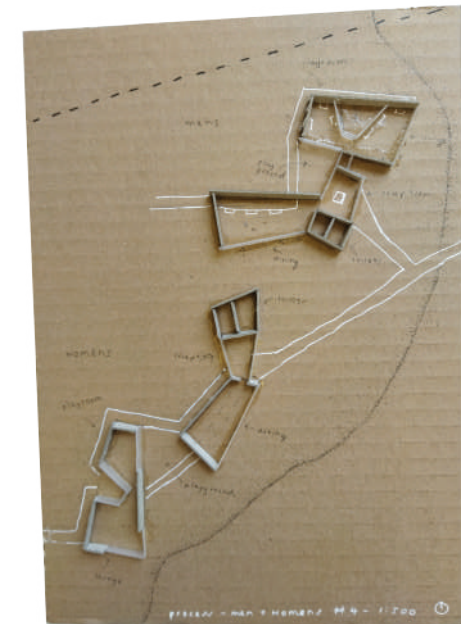
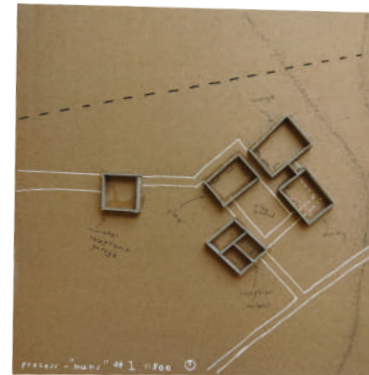
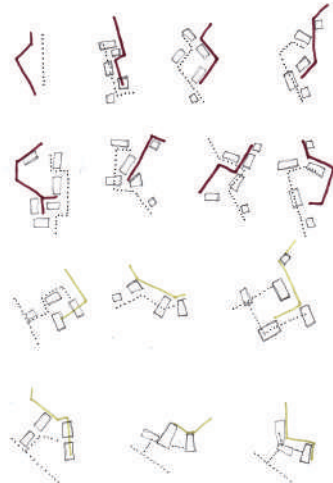
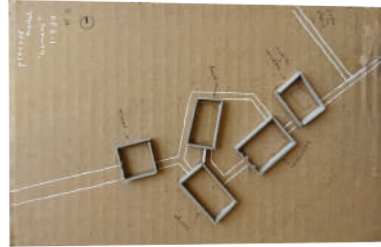
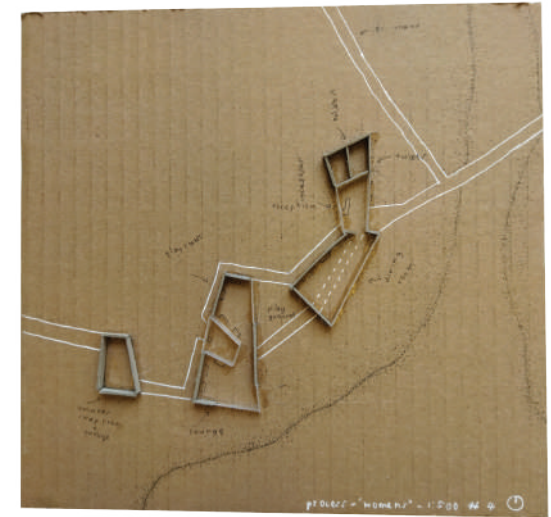
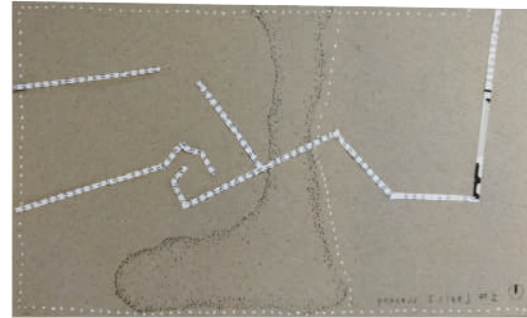
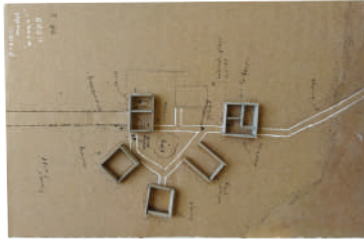
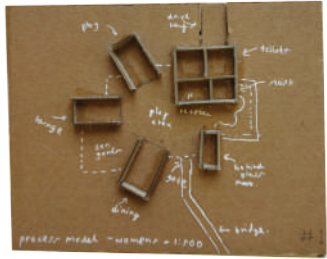


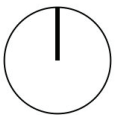
figure 54 - 62:

process work

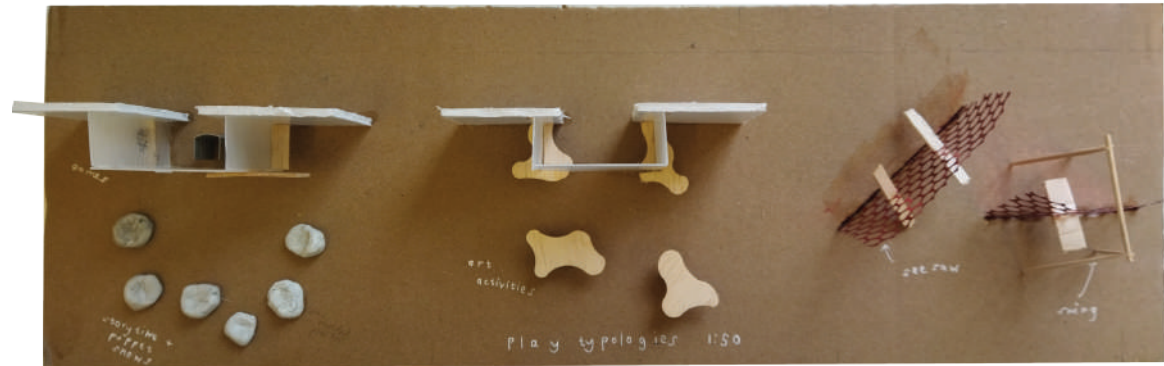
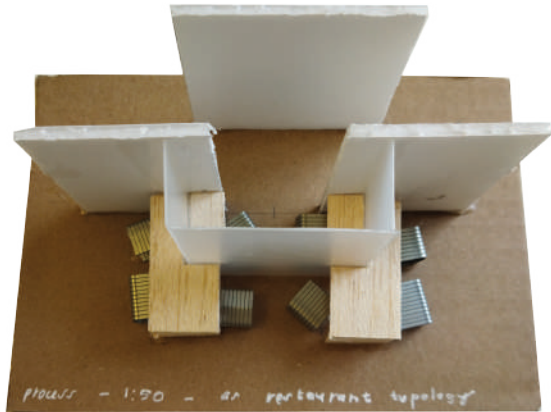
interim crit design



figure 63



process work



I have found it very difficult to accept the reality of visits being held behind glass. In South Africa awaiting trial prisoners are not allowed contact visits. Seeing a parent behind glass will forever alter the relationship a child has with their parent and it feels wrong to condemn their relationship before proving guilt. Interviews with those in the prison system unfortunately confirmed that they are necessary in some circumstances.

In these models I was exploring how everyday experiences such as the dining room table and play facilities such as storytelling, puppet shows, games and playground furniture could be simulated across a boundary.

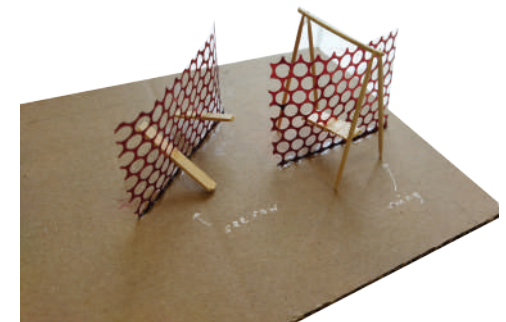
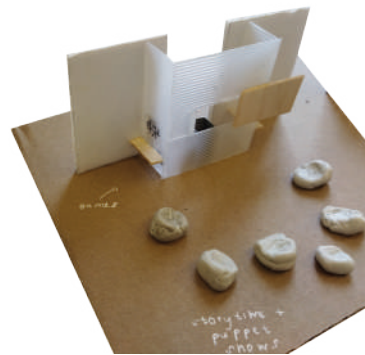


figure 64 - 66

programme

The programme required for the visitor's centre is set across 3 separate components. The first is a reception area accessed only by the public which sets into motion the processes required for the visit to take place. Within this component will be staff facilities, ablutions, a tuckshop, a locker room and a security zone. Separate waiting facilities will be provided for children and adults which are more suited to their needs and support. They will be centred around productive waiting through the provision of counselling spaces and child entertainment. A post office service will be provided for families to drop off items for remand prisoners as they are allowed to receive parcels (convicted inmates are not though). This could serve to improve contact with families beyond just the two allowed visits per month.

The second component is the visiting areas. Pollsmoor accommodates both men and women, and they need to be kept separate so this requires two separate visiting facilities. The forms of visiting I intend to accommodate for is a lounge environment, a play environment and a meal sharing environment. These forms of visits need to be accommodated as both contact and non-contact visits. The visiting areas require a reception/ control point which can oversee access to the visitors only ablutions as well as direct and supervise visits.

The third component is the administration or drop off point for the inmates who are being brought into the site via prison transport services. Male and female visit times will be staggered by 30-minute intervals to avoid contact between genders and also congestion of security procedures and wait times. The visits themselves will be 1 hour which is half an hour longer than they are currently.



quantifiable data for visitors centre

Pollsmoor Prison accommodates roughly 8000 inmates on any given day which are spread across the 5 prisons within it (Ruiters, 2022). The breakdown of inmates is as follows however these numbers are very rough as they fluctuate daily.

Remand Detention Facility: 4500 (especially vulnerable to daily fluctuations)

Medium A: 400

Medium B: 1500 roughly

Medium C: 1000 roughly

Female: 780 (Ruiters, 2022)

Under South African law inmates awaiting trial are not allowed contact visits however they are allowed to be brought food by family members. Sentenced inmates are allowed contact visits but they are not allowed to be brought food (DCS, 2022). All inmates are allowed 2 visits per month which must be booked by phone call 24 hours in advance (DCS, 2022). Visit times at Pollsmoor are 30 minutes but in some other prisons in South Africa visits are one hour. Just over half of the inmates at Pollsmoor are in remand so will only be allowed the non-contact visits.

Formula - for if everyone uses the maximum number of visits allowed:

Men

$7000 \text{ men} \times 2 \text{ visits} = 14\,000 \text{ visits per month}$

$14\,000 \div 30 \text{ (days in month)} = 466 \text{ visits per day}$

$466 \div 8 \text{ (1-hour visits from 9:00 – 17:00)} = 60 \text{ visits for the men's every hour}$

30 would be Non-Contact and 30 would be Contact.

Women

$780 \times 2 \text{ visits} = 1560 \text{ visits per month}$

$1560 \div 30 = 52 \text{ visits per day}$

$52 \div 8 = 7 \text{ visits per hour}$

4 would be Non-Contact and 3 Would be Contact.

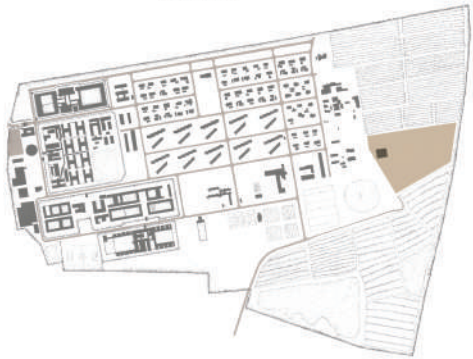
site
figure 67:



TOKAI
Tokai Road

Susan Way

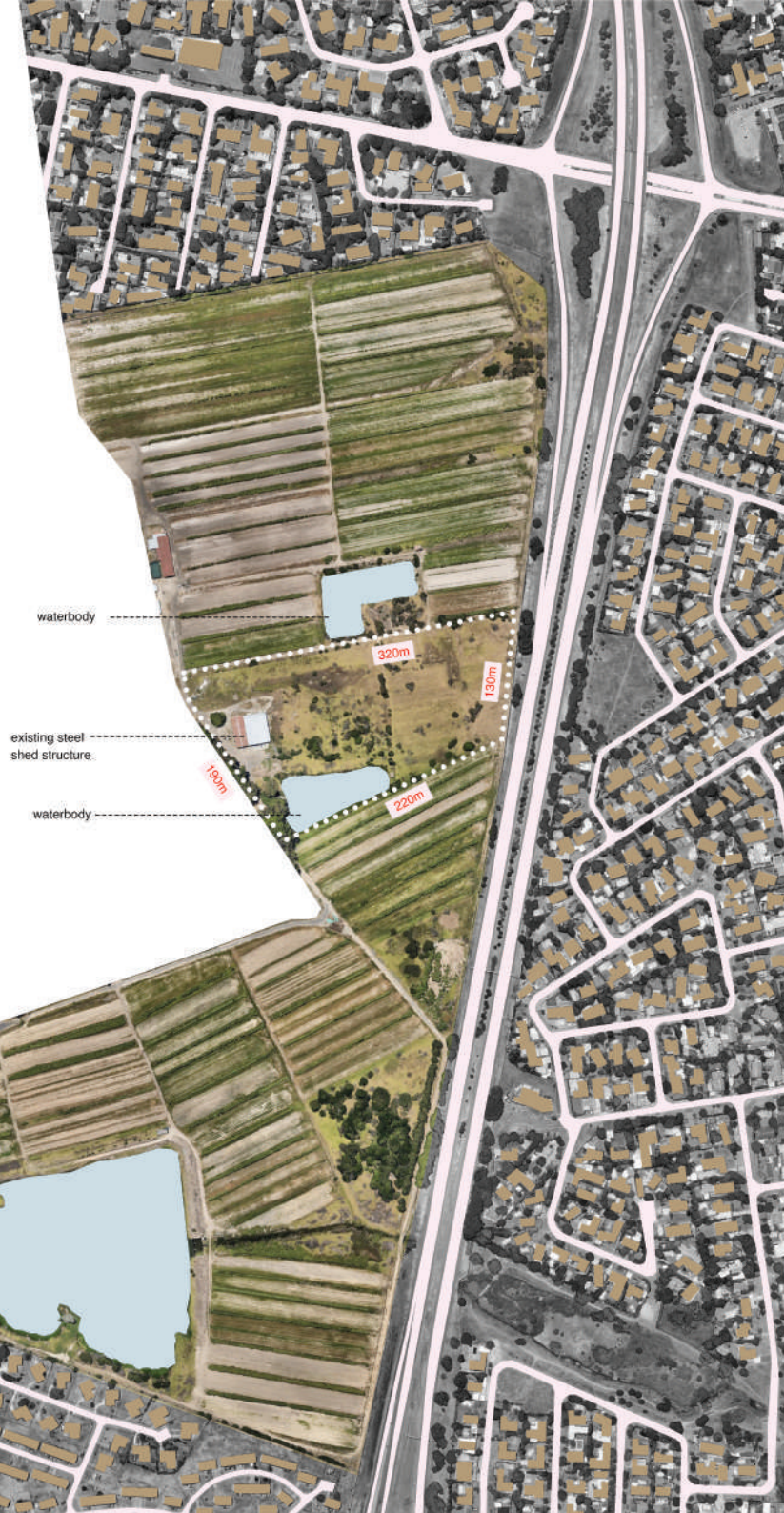
Site Plan



site aerial photograph



port jackson vegetation [alien]

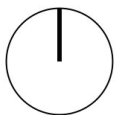


site

My chosen site is a piece of open land within the agricultural area in Pollsmoor. This presents a space visually removed from the prison and integrated into nature. The site will be accessed via Susan Way which is a residential road off Tokai Road. There are two separate water bodies located to the north and the south of the site.

There is an existing steel shed on the site which I will relocate. Port Jackson vegetation cover site which is actually alien and invasive. Inmates do work under supervision in the fields surrounding the site and are brought to the site via prison transportation.

figure 68: chosen site - water bodies & mountain views



site response _ diagrammatic

In order to maintain the functioning of the surrounding agricultural land and security of the visitors centre it is necessary to create a highly controlled environment but which conveys an illusion of boundlessness.

One of the ways of achieving this is to join the two water bodies on either side of the site and to landscape the site as a wetland with shrubbery and tall grasses. This symbolically divides the site and marks a transition into a liminal space that is neither the outside world nor the prison entirely. The wetland landscaping can allow for hidden fences to physically separate zones and contain user groups without the imposing nature of fences alone.

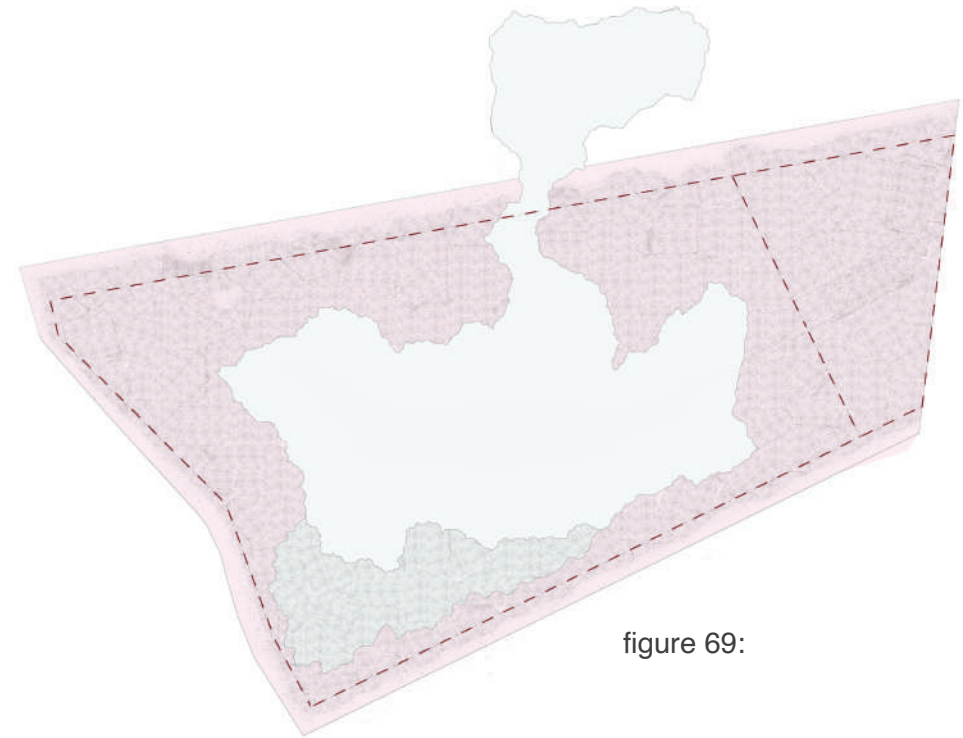


figure 69:



figure 70:

concept & programme

Inmate Reception



Visiting Building



Visitors Reception



[building as pause + preparation]

[building as liminality]

[BUILDING AS BRIDGE]

[building as journey]

figure 71:

With the water acting as the divide, it raises the question “but what connects?”. I intend to conceptually express my building as a bridge. The programme will be set across three masses with the visitor’s reception building and the inmate reception building on either side of the water body. The actual visiting building is located within the water body with foot bridges linking it to the buildings on either side. Placing the visiting building within the water embraces its inherent liminality as a space between two worlds.

It also embraces the understanding that interactions within a visiting facility may not always be easy and are emotionally charged. The proximity to nature with the sounds and sights of the water and wetland life help to provide a calm environment that is totally removed from the prison environment. The foot bridges bringing inmates from one side and visitors from another allows for a pause moment to prepare oneself emotionally.

programme

Inmates in South Africa are entitled to 2 x 1 hour visits every month. Awaiting trial inmates are only allowed non-contact visits whereas sentenced inmates are allowed contact visits with their loved ones.

Pollsmoor accommodates both male and female prisoners who need to be kept separate. In order to maintain this separation without overlap of facilities, scheduling will be so that on certain days and times visits are designated for female inmates or male inmates.

There are much fewer female inmates than male inmates so there are therefore less time slots allocated for their visits. This doesn't infringe on their right for 2 x 1 hour visits every month.

Non-contact and contact visits will be held within the same facility – as will be shown shortly, however their visit times will be staggered by 30 minutes to prevent bottle necks at both of the reception buildings.

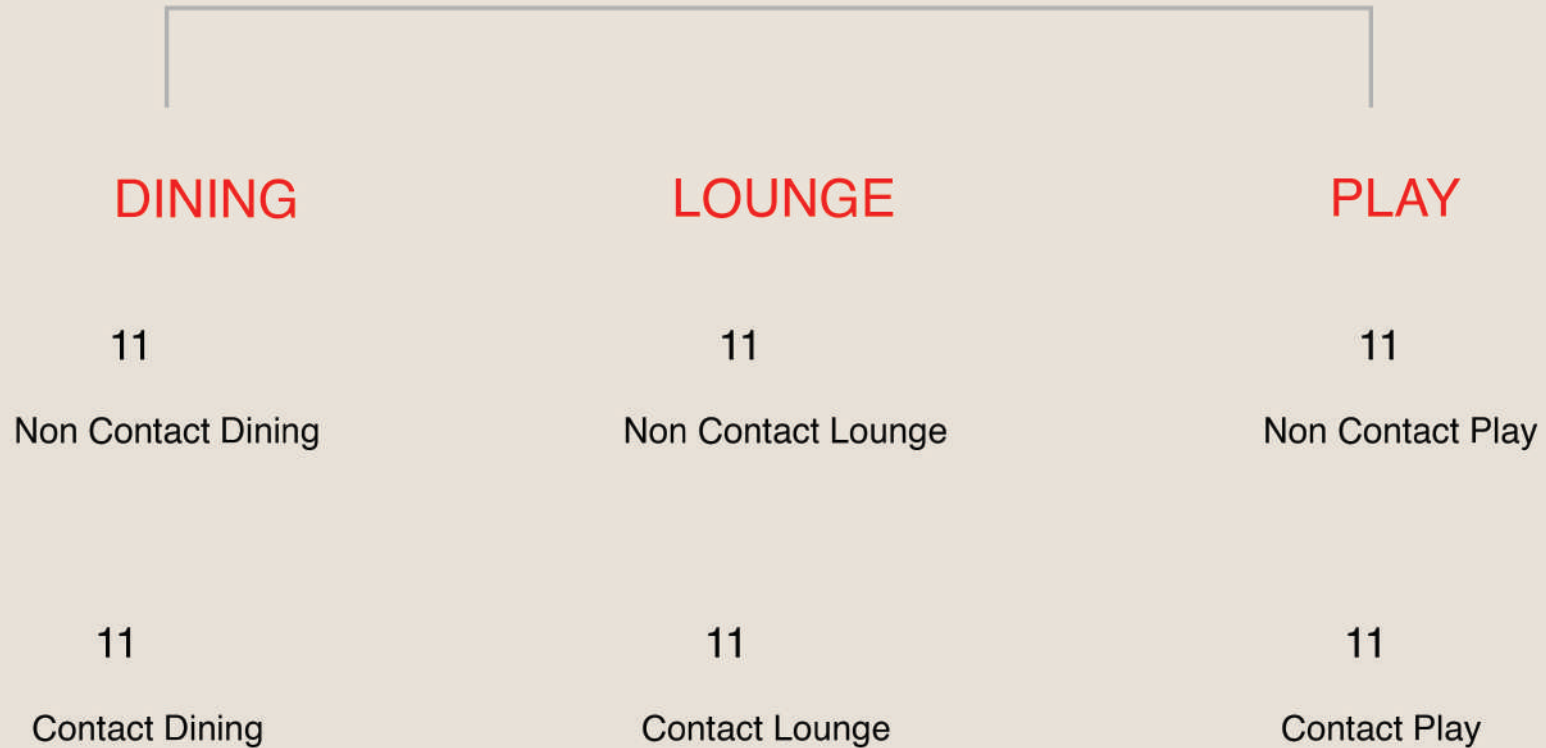
33
CONTACT

inmates visits
per hour

33
NON CONTACT

inmates visits
per hour

Visits are then split into 3 formats (applied to both contact & non contact) as below:



programme

There are three forms of visiting I will be accommodating for. A play visit, a dining visit and a lounge visit. They are applied to both contact and non-contact visits and are designed to meet the maximum requirements for the male inmates which require 33 contact and 33 non-contact visits every hour. Therefore, these are split into 11 in each form of visit format.

materiality & technology _ research

The creation of a secure bubble for the visitor's centre on the edge of the prison grounds means that the architectural security which is seen in prison cell blocks is not necessary. Essentially this means there is no need for mechanisms such as bars on windows because there is no way to escape further than the bubble due to the hidden fences. This is also supported by the principle of differentiating the image of the visitor's centre from the prison itself.

A factor which cannot be ignored with regards to materiality choice is that often prison budgets do not extend towards maintenance of buildings. The material choice thus needs to account for durability against the elements and daily, preferably requiring very little maintenance.



figure 72: hidden fences within wetland landscaping

materiality choice

Hard materials such as concrete, brick and metal are usually associated with prison buildings (Engstrom & van Ginneken, 2022). These materials are poor in terms of sound absorption and depending on their use are monotonous, uncomfortable and sterile. They are the default due to their robustness which research has actually shown is counterproductive because it encourages people to try and break them (Engstrom & van Ginneken, 2022). With the use of softer materials such as carpet, wood and cork, this desire for destruction isn't felt (Engstrom & van Ginneken, 2022). Safety of inhabitants should always be considered from a design perspective so no materials or elements are able to be used as a weapon.

The use of hard materials such as concrete and brick should not be ruled out but could rather be considered from the vantage of tactility and variation. Variation of material use within façade design can be used to express the human scale of buildings and create visual interest (Engstrom & van Ginneken, 2022). These materials also become institutional when they lack texture. Designing traditionally hard and sterile surfaces in a way which accommodates the need for human touch changes their visual perception. This was done in Storstrøm Prison where the use of concrete walls was unavoidable. The architects employed artists to design the wall which resulted in the circular indents being cast into the surface. Charred wood becomes a viable cladding option due to its durability as it requires no maintenance post installation (Hasburg, 2021).

figure 73: material collage



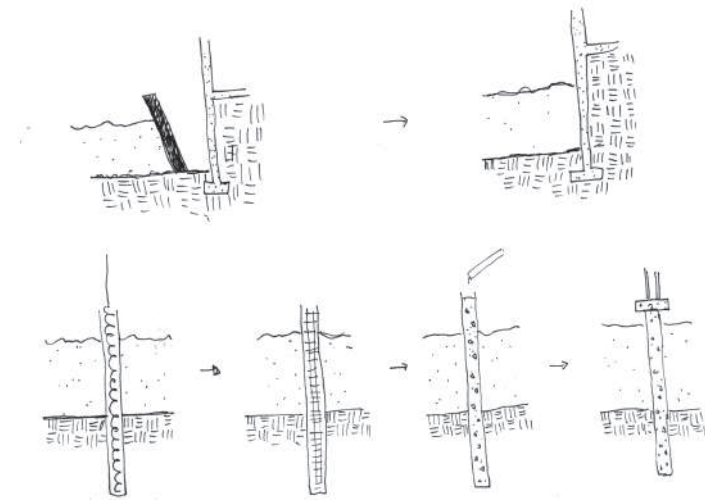
architecture & water

The only difference between building on land and building over water comes in the foundations. The design constraints of a superstructure over water are the same as it would be on land (Featherstone, 1963). The two main methods of constructing foundations within water are the use of pile foundations and caissons (Featherstone, 1963).

Caissons refer to the creation of a water tight zone which excludes water from the necessary area while the foundations are laid. This means that the substructure and the superstructure become integrated and the building will essentially rise from the water rather than “float above” (Featherstone, 1963). This approach is unsuitable to this project as I favour the illusion of floating over the water and also because the water body is being created by joining two existing ponds on either side. The foundations can then be constructed prior to the waterbody being filled.

Therefore, the choice of foundation is the use of piling. This is when a columnar member is either vertically driven or cast in-situ into the ground (Featherstone, 1963). A pile cap is then used to seal up the pile and, in this design, a galvanised steel column will be bolted into it to function as a stilt that raises the building off the water by about a metre. This is possible because the created water body is not subject to any tides or flooding.

Caissons system



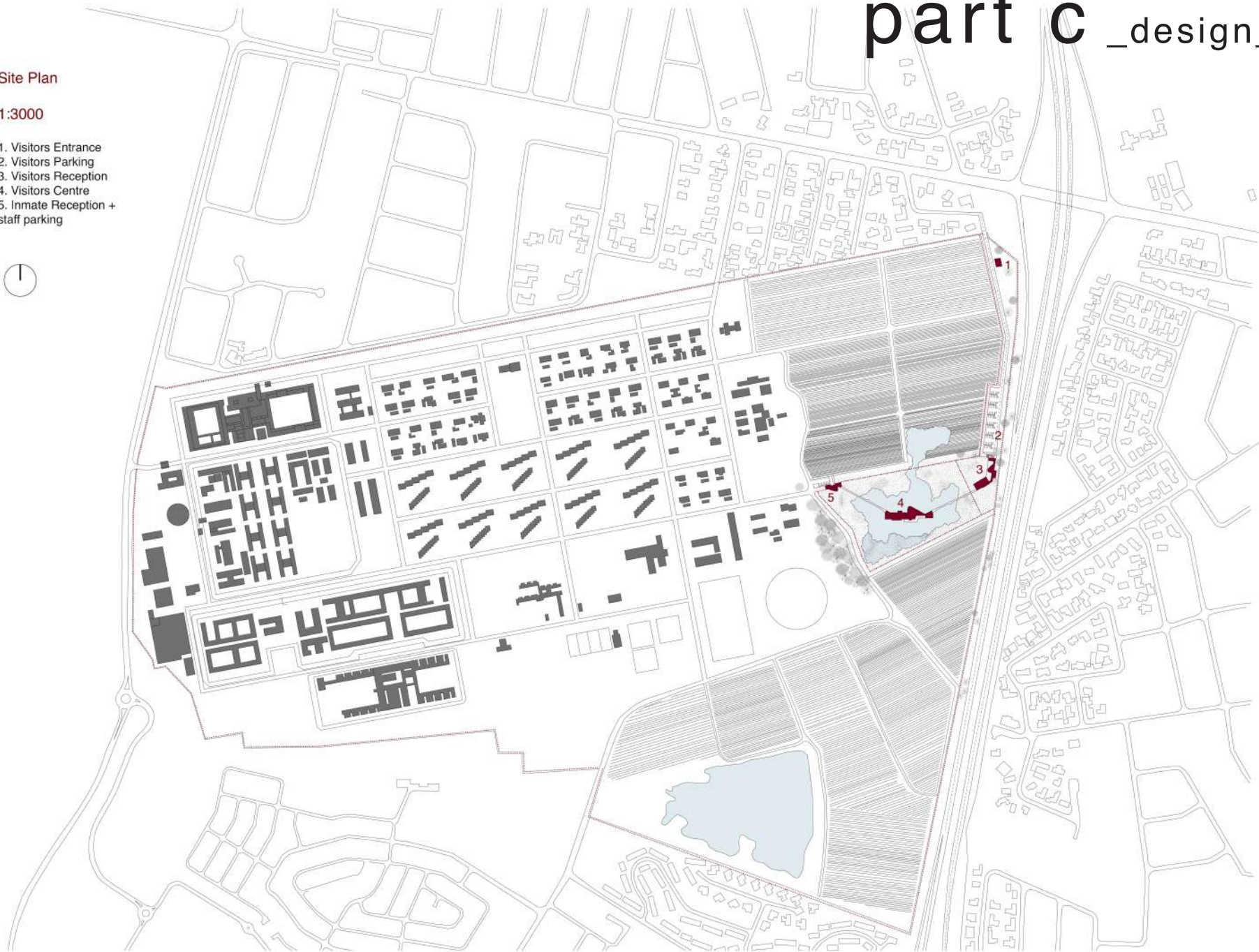
Pile system
figure 76:

part c _design_ plan

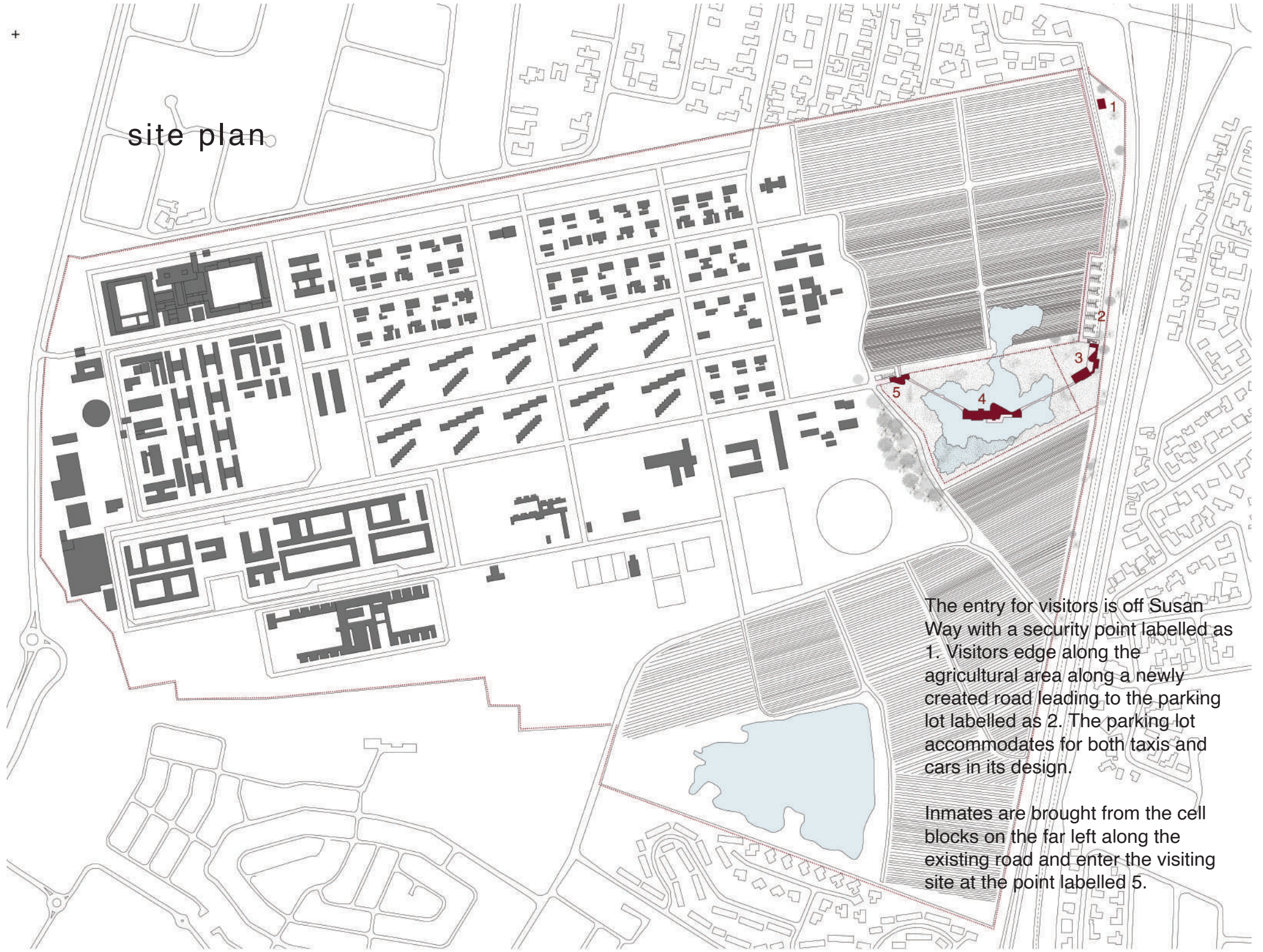
Site Plan

1:3000

1. Visitors Entrance
2. Visitors Parking
3. Visitors Reception
4. Visitors Centre
5. Inmate Reception + staff parking



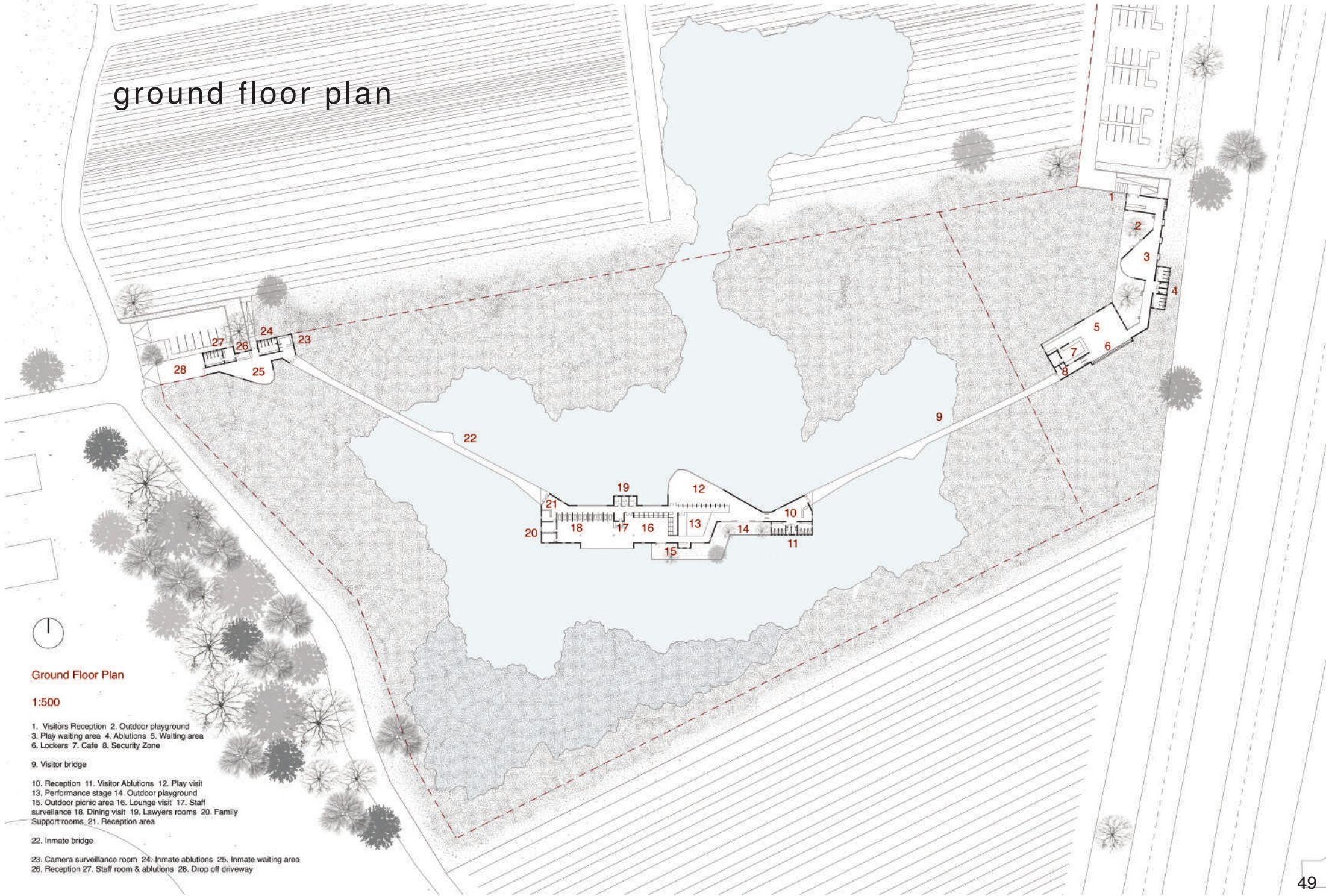
site plan



The entry for visitors is off Susan Way with a security point labelled as 1. Visitors edge along the agricultural area along a newly created road leading to the parking lot labelled as 2. The parking lot accommodates for both taxis and cars in its design.

Inmates are brought from the cell blocks on the far left along the existing road and enter the visiting site at the point labelled 5.

ground floor plan



Ground Floor Plan

1:500

- 1. Visitors Reception 2. Outdoor playground
- 3. Play waiting area 4. Ablutions 5. Waiting area
- 6. Lockers 7. Cafe 8. Security Zone
- 9. Visitor bridge
- 10. Reception 11. Visitor Ablutions 12. Play visit
- 13. Performance stage 14. Outdoor playground
- 15. Outdoor picnic area 16. Lounge visit 17. Staff surveillance 18. Dining visit 19. Lawyers rooms 20. Family Support rooms 21. Reception area
- 22. Inmate bridge
- 23. Camera surveillance room 24. Inmate ablutions 25. Inmate waiting area
- 26. Reception 27. Staff room & ablutions 28. Drop off driveway



Link to video render :
<https://www.youtube.com/watch?v=rfFbDEwbWgY>

or please scan adjacent QR code.

ground floor plan _ detail

The previous ground floor plan depicts the three masses with the visitor's reception building on the right, the visiting building within the water body and the inmate reception on the left. They are linked by the footbridges on either side mentioned previously. Quite important to note in this drawing is the fences around the site which create a bubble that allows for a relative level of freedom because there is nowhere to escape to.

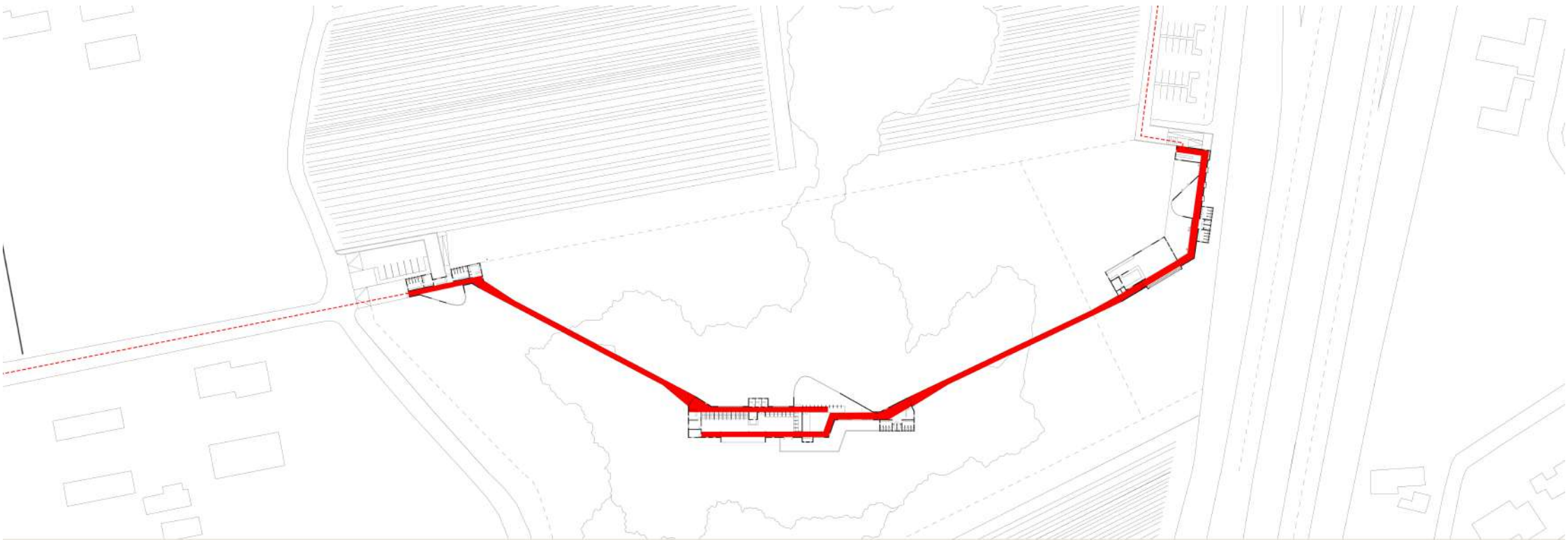
The water is a sort of conceptual divide but then there is also another fence cutting across the wetland over here which stops inmates from being able to get to the zone over here where they would be able to escape more easily.

As the following text will suggest, the building was designed as a journey of movement and is thus best experienced through video renders. A series of QR codes can be scanned to access the video rendering to the correlating building.

In this first video the viewer is shown the three separate buildings connected via the footbridges. The use of the wetland as a means of obscuring high security fences becomes more clear as the fences are almost impossible to actually see.

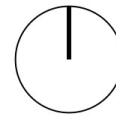
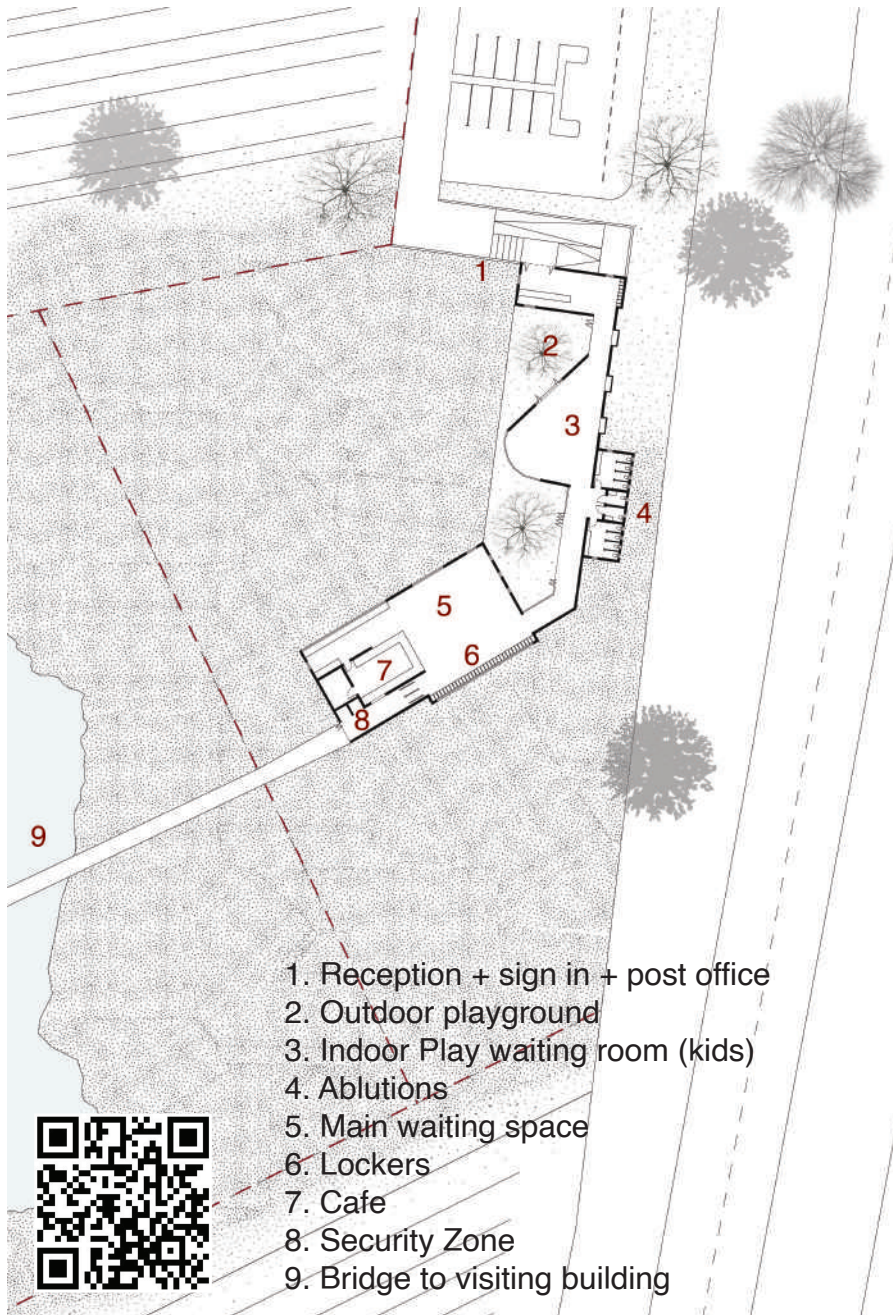
The design of the building incorporates varying forms, roofscapes and materialities. This was done to create a stark contrast to the existing prison and prison typologies in favour of a deinstitutionalised visiting centre typology.

Deinstitutionalisation was also attempted in a variety of other ways. One being the use of pitched roofs to achieve recognisability and an association with domesticity. Another being the choice to opt for a single storey building that is in the human scale and therefore less imposing and domineering. A playful approach was also utilised through the application of circular windows which softened the facades as well as glass curtain walls with no bars that allowed sunlight and uninterrupted views out into nature. This would reduce feelings of entrapment but through the use of security glass wouldnt compromise on security.



circulation as design informant

The form of this building is derived from the circulation and its need to be intuitive and obvious. This is important as the low literacy levels of users means the building cannot rely on written signage. I therefore created a spine where all facilities open out off from it.



visitors reception building

Visitors enter into the reception building with the sign in counter in front before turning towards the postal drop off lockers to the right. This is for families to drop off essential items such as soap without needing to use up a valuable visit. The main circulation route then leads the visitor past an outdoor playground space and into a kids play waiting space which caters to the specific needs of children within a playful built form. The circulation route then leads them past the ablutions to the left and an outdoor waiting space on the right. A strong guiding wall creates privacy by blocking off the freeway but high level windows still allow views of the mountain.

The circulation route then leads the visitor into the main waiting space with a tuckshop café placed centrally. Work counters are located to the side which facilitate productive waiting. Therapeutic and social waiting is then facilitated in the central space which encourages visiting families to seek comfort and social connections from each other. Visitors are able to enjoy the space as one would in a coffee shop or cafe.

When visitors are called for their visit time, they leave any belongings in the lockers on the left and pass through security scanners. Once they have been cleared, they are able to received their pre-purchased items from the café as it opens to both sides. Booths are provided for any more intimate searches that may be required.

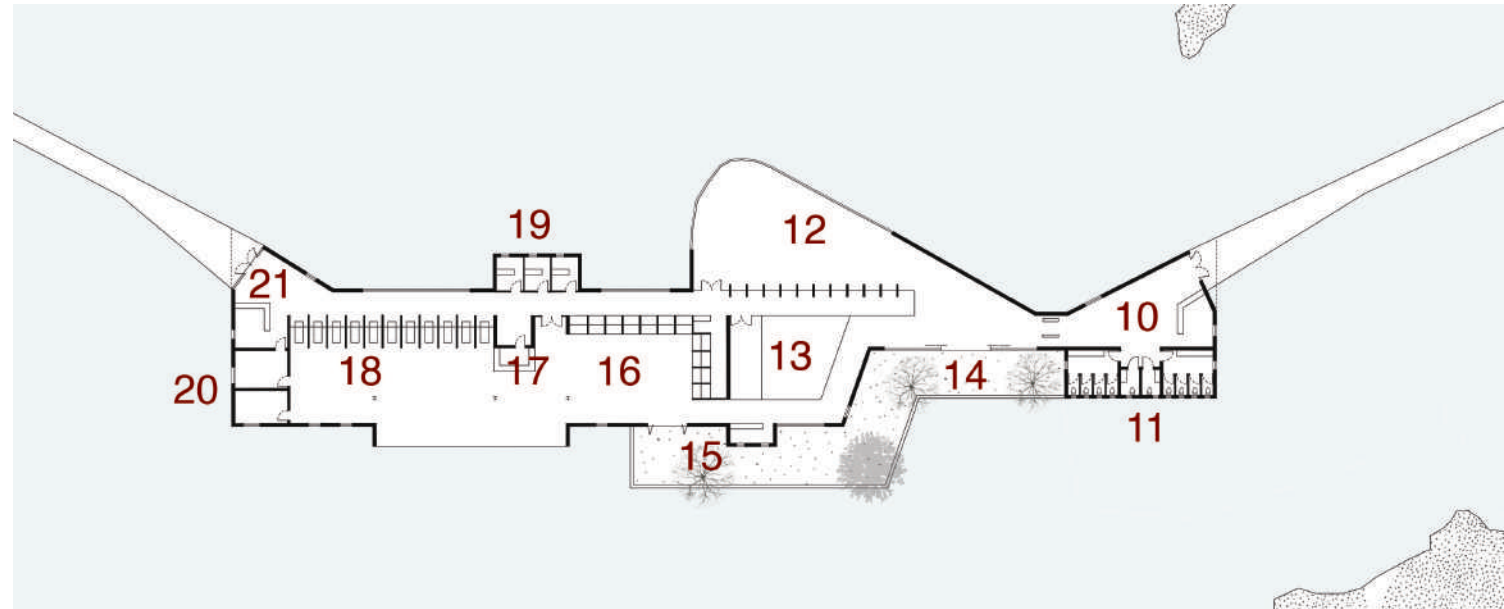


visiting building



Link to video render:
https://www.youtube.com/watch?v=lkC_bsHxr_a8

10. visitors entry + security desk
11. Visitor only ablutions 12. Play visit venue
13. Performance space 14. Outdoor playground
15. Outdoor picnic spot 16. Lounge visit venue
17. Security desk 18. Dining visit venue
19. Lawyers meeting rooms 20. Family support counselling rooms
21. Security desk + inmates entry

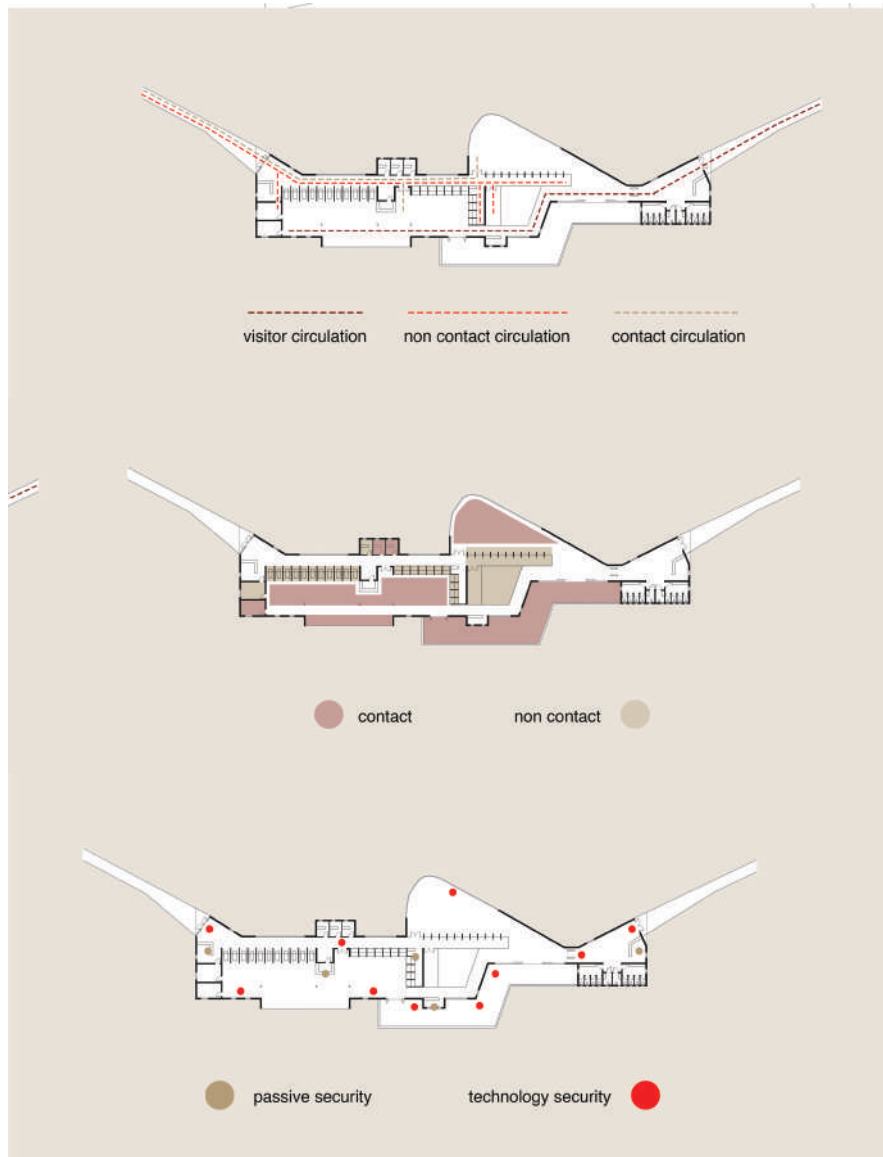


Visitors enter the main visiting building via reception/ security area labelled 10. This oversees access of the visitor only ablutions (for safety purposes) at 11 which is blocked off from inmate access by turntiles. Following the main circulation route leads visitors past the outdoor play area to the left and indoor play venue to the right. Contact play occurs centrally whereas non contact play takes place in the booths to the side.

The route then leads visitors into a performance space (labelled 13) allocated for non contact visitation. The invisible boundary between performer and audience means this non contact visitation can occur without physical boundaries. This is overseen by a security desk though. The route then leads the visitor into the main visitation space with the lounge visitation at 16 and dining visitation at 18. Non contact visitation of both typologies are towards the edges within booths and contact visitation is dispersed centrally. Interactions are overseen

by a security desk at 17 which is adjacent to the inmate entry point into the main visiting space. Labelled 20 are two family support counselling rooms and at 19 are three lawyers meeting rooms. Inmates enter into the visiting building via the footbridge and into a security reception at 21. The following diagrams as well as the render video explain the inmate only circulation corridor.

visiting building through diagrams

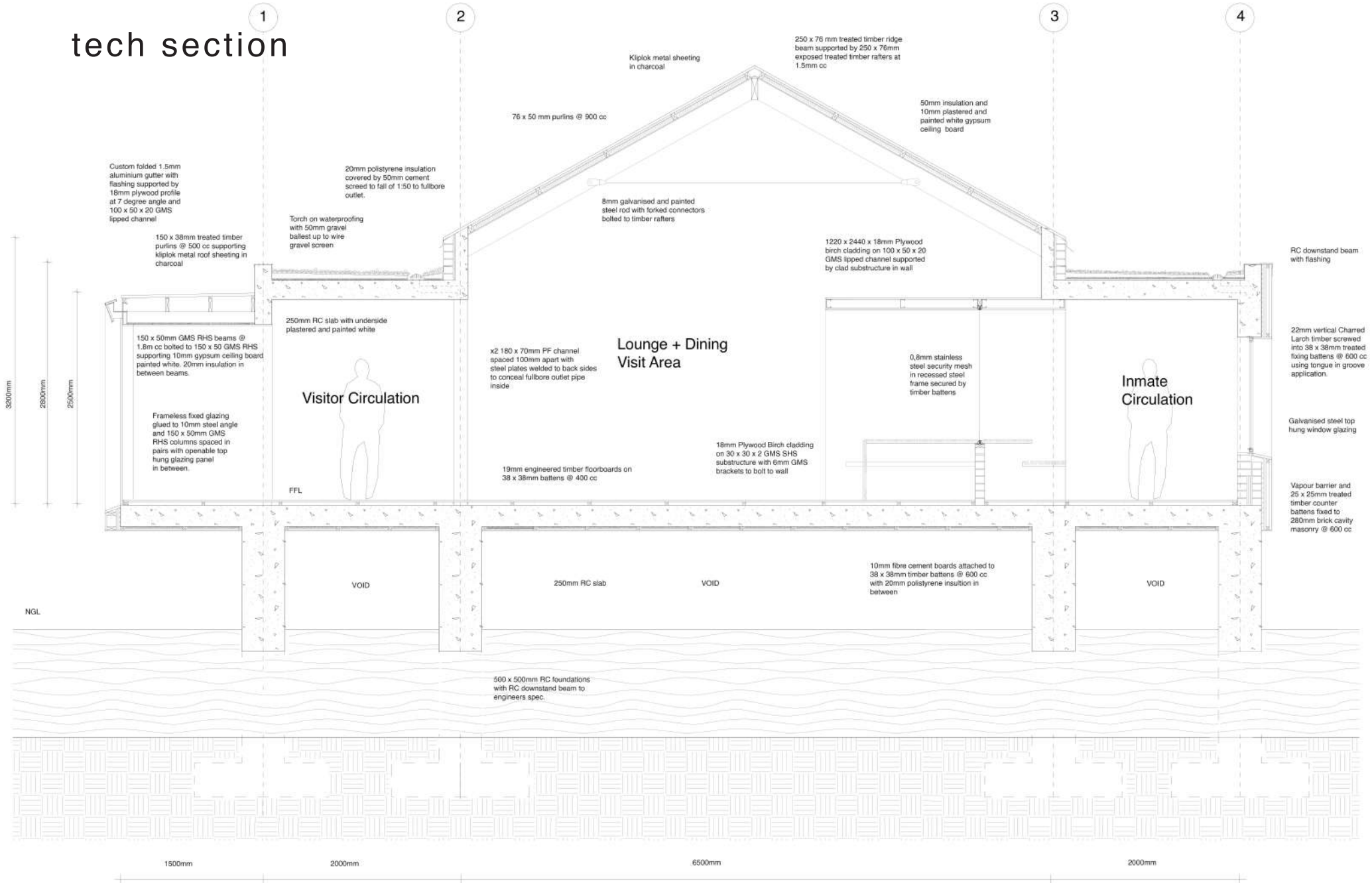


The adjacent diagram indicates the entry of visitors into the visiting building on the right and along the main circulation route. Inmates enter into the reception zone on the left. Contact inmates (shown as beige dotted line) access the visitation spaces via doors off their corridor. Non contact visitation inmates access booths off their main circulation route. Their families sit on the other side of the booth during non contact visitation.

This diagram shows the distinction between contact and non-contact visitation. The darker pink is the contact visitation with the lounge and dining areas and including the outdoor playground and picnic area. The lighter pink is the non-contact visitation on the edges of the spaces seen in the lounge, dining and play visitation. The performance space however operates differently as it is a non contact visitation but without the physical barrier.

While the building does exist within the bubble created by the fences around the site there does have to be additional security mechanisms. The pink dots indicate where warders are positioned for passive or natural surveillance and the red dots show how this surveillance is balanced and supported by technology in the form of turnstiles, access doors and camera surveillance.

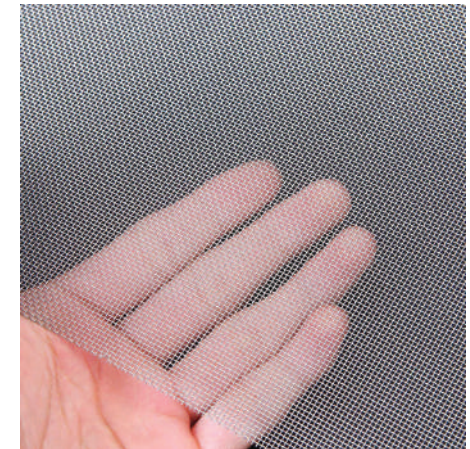
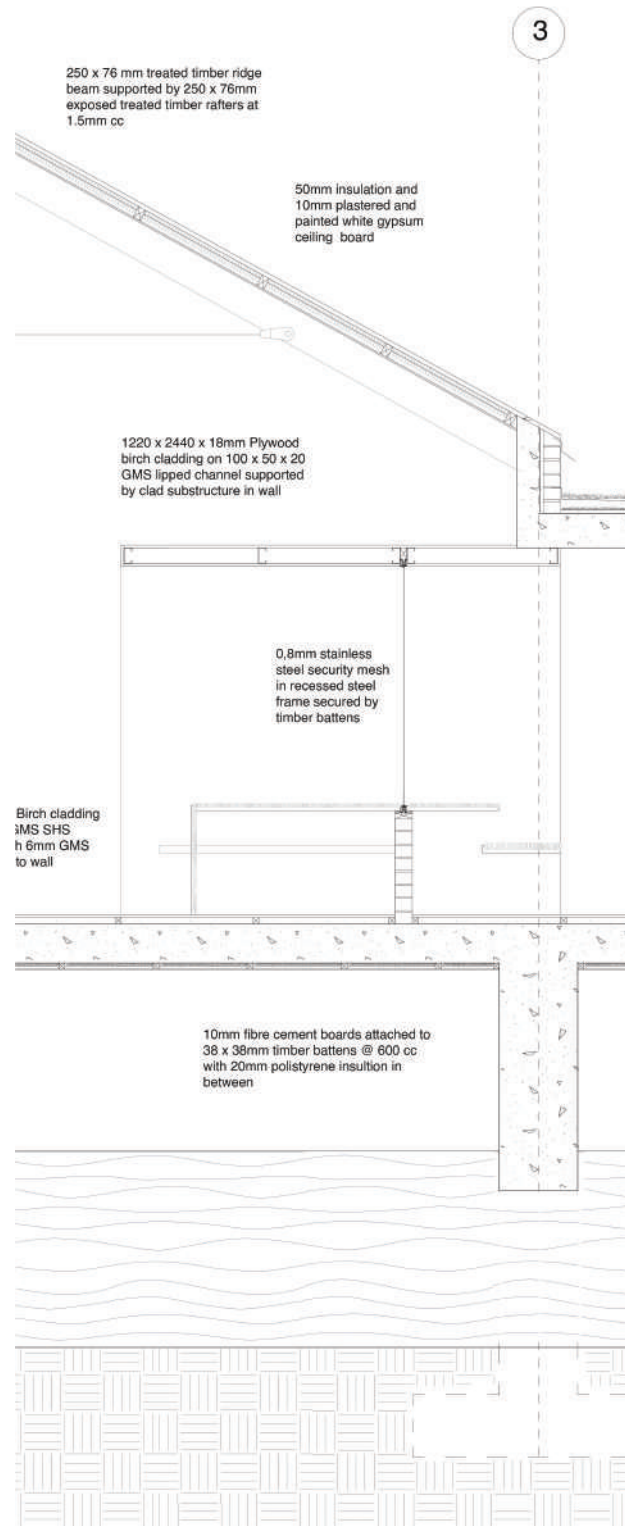
tech section



technical detailing

The non-contact visits will be held behind this steel mesh as opposed to glass which creates a very physical divide. This option I have chosen means they can hear, see, smell & feel each other better without compromising on security. I do feel uncomfortable with the notion of non-contact visitation for unsentenced inmates however my research did show that they are vital in some instances.

In future I would hope legal procedures would change so that non- contact is only used if the family requests it or if inmates have shown abuse of contact visitation. This is supported by the understanding that prisons run best when there is a system of benefits related to good behaviour. In an ideal world the court system would also process inmates quickly meaning that only briefly would unsentenced inmates be subject to non-contact visits unless they misbehave. In an even more ideal world, these mesh screens would be removed entirely.



Stainless steel wire mesh



inmates reception building

Prison transport vehicles bring inmates from the cell blocks to the left of the site via the existing road and drop off inmates in an enclosed driveway labelled 28. There is also staff parking provided. Inmates then enter via a set of doors and follow the guiding wall past the staff ablutions and staff room and into their waiting area.

The curved form creates a relaxing environment where inmates are able to prepare or calm themselves while looking out into the wetland and the views of the mountain. A staff surveillance desk is labelled at 26 which provides surveillance of all movement as well as access to the inmate ablutions and to the set of doors leading into the agricultural area. In sunny weather inmates will be allowed to access the agricultural area while they are waiting for their visit and pick flowers for their visiting loved ones.

This is because there is often an unfair power dynamic and inmates often want to give back to their loved ones who they are so reliant on. A camera surveillance room is labelled as 23 which oversees all camera footage of interactions within the visitors centre as well as entry and exit from the waiting area to the visiting building.



Video render link:
https://www.youtube.com/watch?v=g8F_ILv_f_I

- 23. Camera surveillance room
- 24. Inmates ablutions
- 25. Inmate waiting area
- 26. Security desk
- 27. Staff ablutions + staff room
- 28. Inmate drop - off zone.

conclusion

In conclusion, I do not think that my project is going to solve every issue prevalent to the prison system. These issues are vast, nuanced and rooted in societal failures that trace back to apartheid history of this country. I intend for my intervention to be viewed as a small part of a variety of interventions targeting all aspects of the prison system & Pollsmoor specifically. The small part I find for myself within this environment is for society to begin to view inmates as the mothers, fathers, sons, daughters or siblings that they are. Crime will also exist in every society as it has since the beginning of time and people will always deserve justice when a crime is committed against them. Punishment will mean different things to different people but at the end of the day we all want inmates to be rehabilitated so that they don't commit crimes upon release. For this to happen, we have to treat them as human beings during incarceration.

I hope that if this visitor's centre was ever built that it would be a beacon of light within the Pollsmoor community and a space filled with love and support because these are the people who need it the most.



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table of figures

Figure 1: own illustration

Figure 2: Izhaeva, M. High resolution texture of a yellow brick wall. [Digital Photograph] Available at: https://www.123rf.com/photo_69580996_high-resolution-texture-of-a-yellow-brick-wall-background-in-the-countryside-rough-blocks-of-stone-b.html

Figure 3: Hopkins, R. 2016. The Constitutional Court has condemned conditions at the Cape Town Prison. [Digital Photograph] Available at: <https://mg.co.za/article/2016-03-03-filth-disease-sex-and-violence-for-pollsmoors-female-inmates/>

Figure 4: Own illustration based on : Reverley, W. 1791. Plan of Jeremy Bentham's panopticon prison. [Drawing] Available at: <https://www.theguardian.com/technology/2015/jul/23/panopticon-digital-surveillance-jeremy-bentham>

Figure 5: J. Jebb. 1862. Isometric drawing of Pentonville Prison, in Henry Mayhew, The Criminal Prisons of London. [Drawing] Available at: <https://www.digitalpanopticon.org/Imprisonment>

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Figure 11: Spitale, L. 2022. Make the most out of your trip to visit your loved one in prison. [Digital Photograph] Available at : <https://www.prison-fellowship.org/resources/support-friends-family-of-prisoners/prisoner-resources/visiting-room-sabotage/>

Figure 12 & 13: Moran, D & Disney, T. 2018. Distance between intended visitors, and between visits. [Digital drawing] Geografiska Annaler: Series B, Human Geography. 100 (3): 179 – 194.

Figure 14 – 18: Gillespie, N. 2000. Jailhouse Rocks. [Digital Photograph]. Available at: <https://www.architectsjournal.co.uk/archive/jailhouse-rocks>

Figure 19: Gillespie, N. 2000. Jailhouse Rocks. [Digital Drawing]. Available at: <https://www.architectsjournal.co.uk/archive/jailhouse-rocks>

Figure 20: Google Earth Pro. 2022. Pollsmoor prison. [Digital Map]

Figure 21: Own illustration using: Google Earth Pro. 2022. Pollsmoor prison. [Digital Map]

Figure 22: Own illustration using: Google Earth Pro. 2022. Pollsmoor prison. [Digital Map]

Figure 23: Laing, A. 2022. Pollsmoor Prison in Tokai. [Digital Photograph] Available at: <https://www.iol.co.za/weekend-argus/news/offender-who-escaped-from-pollsmoor-apprehended-shortly-before-midnight-ea74f137-d671-4eec-8d17-3a884664d6c0>

Figure 24 – 27: Own illustrations

Figure 28: Google Earth Pro. 2022. Pollsmoor prison. [Digital Map]

Figure 29: Hopkins, R. 2016. The Constitutional Court has condemned conditions at the Cape Town Prison. [Digital Photograph] Available at: <https://mg.co.za/article/2016-03-03-filth-disease-sex-and-violence-for-pollsmoors-female-inmates/>

Figure 30: Subotzky, M. 2004. Kakies and his wife, Pollsmoor Prison Visitors Centre. [Digital Photograph] Available at: <https://www.artsy.net/artwork/-mikhael-subotzky-kakies-and-his-wife-pollsmoor-prison-visitors-centre>

Figure 31: Own illustration based on: Smith, S. 2021. Reparation by way of Restoration and Reintegration: Rethinking prison architecture in a post-apartheid South Africa. Vula.

Figure 32: Voice of the Cape FM. 2015. Inside Pollsmoor's cells of shame. [Digital Photograph] Available at: <https://www.vocfm.co.za/inside-pollsmoors-cells-of-shame/>

Figure 33: Subotzky, M. 2004. Prisoner climbs up to a window to buy contraband, Pollsmoor Maximum Security Prison. [Digital Photograph] Available at: <https://www.magnumphotos.com/newsroom/society/mikhael-subotzky-vier-hoeke-four-corners/>

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Figure 37: Own illustration based on: Smith, S. 2021. Reparation by way of Restoration and Reintegration: Rethinking prison architecture in a post-apartheid South Africa. Vula.

Figure 38: Own model

Figure 39: Own illustration based on: CF Moller Architects. 2017. Storstrøm Prison plan. [Digital Drawing]. Available at: <https://www.archdaily.com/885376/storstrom-prison-cf-moller/5a3111cfb22e38ea34000243-storstrom-prison-cf-moller-photo>

Figure 40: Groundplug. 2018. Prison Storstrøm. [Digital Photograph] Available at: <https://groundplugindustry.com/en/prison-storstrom/>

Figure 41 – 45: Eskerod, T. 2017. Storstrøm Prison. [Digital Photograph]. Available at: <https://www.archdaily.com/885376/storstrom-prison-cf-moller/5a3111cfb22e38ea34000243-storstrom-prison-cf-moller-photo>

Figure 46 & 47: Own illustrations

Figure 48 – 62: Own models

Figure 63: Own drawing

Figure 64 – 66: Own models

Figure 67: Own illustration

Figure 68 - 72: Own diagrams

Figure 73: Own illustration

Figure 74 & 75: Own Drawing – Based on: Wilson, R. 2019. Old into New: Recycled bricks form façade of Copenhagen housing project. [Digital Drawing]. Available at: <https://www.architectsjournal.co.uk/buildings/old-into-new-recycled-bricks-form-facade-of-copenhagen-housing-project>

Figure 76: