

RECONSIDERING
RECIDIVISM



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Abstract

Over the past few years the New Zealand youth incarceration rate has been steadily dropping, however, the percentage of youth re-offending and graduating into the adult justice system has shown the opposite. On average almost half of youth offenders re-offend within two years of being released, and this has coalesced in harsher and longer sentencing. Inadequate facility placement and incorrect implementation of rehabilitative programs are failing these youth upon release, poorly preparing them for reintegration. With rehabilitative principles reliant on experience and environment to be effective, the architecture of these facilities plays a large role in the process.

In response to the escalating issue of youth recidivism, this investigation explores how architecture could be used as a rehabilitative device, analyzing how penal environments and architecture affects its users and how providing a positive environment helps with offender reintegration.

This research proposes that architecture has the potential to encourage beneficial traits important for societal acceptance and introduction, defining a list of principles important for rehabilitation and proposing an architectural response that engages with them. Here the work explores ideas of identity, belonging and independence, and how penal design can negatively affect these. It also explores normative design and how normalized experiences and form provide positive feedback to both the incarcerated and the public, investigating the importance community acceptance has on released offenders.

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No investigation is conducted alone, and without the support I have received over the past year this work may not have been completed. Not only have these people contributed through suggestions, design critique and personal anecdotes but they also stand as an advocate for change within youth justice. To the friends and family that have supported my work and to my fellow academics and alumni that have provided resources and feedback throughout the year, thank you. Although the number of names I could list here is immeasurable, there are a few people I'd like to specifically acknowledge.

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And Oranga Tamariki for their consultation and advice throughout the project. Without having a personal connection to youth justice myself, Oranga Tamariki gave huge insight into how youth justice facilities operate, how they are currently design, and why these facilities are failing.

Preface

Throughout my architectural studies and career, I have always held a fascination with how the built environment psychologically affects us. It was through this interest that I began to explore the potential for architecture to support both positive and negative experiences, naturally finding penal design an interesting example of both design extremes, based in ideas of both punishment and rehabilitation. This work analyzes youth justice residencies - one aspect of penal design to propose a rehabilitative strategy that critiques and adapts rehabilitative principles into architectural form, however, while I have consulted with industry professionals and individuals well acquainted with New Zealand's youth justice system, I have never myself experienced penal architecture from an offender's view. While I believe it is an important step to consult with the intended users, this was outside the scope of this one year masters design research investigation. However, while I have a very limited exposure to the youth justice system myself, I have attempted to still produce a well-researched and unbiased piece that discusses penal design and experience based off literature as opposed to first-hand accounts.

Another limitation is my lack of Māori world view in a area where Māori are disproportionately represented. I have only loosely explored cultural identity within this work due to my limited knowledge of the subject and how to best implement it. There remains a large disparity in cultural population within youth justice facilities, with Māori children and young people having an offending rate 6.3 and 4 times higher than European/Other children and young people respectively.¹ Many contemporary New Zealand justice facilities incorporate cultural and ethnic symbolism as a rehabilitative aid, as a powerful promoter of

identity, as a response to the large Māori population within these facilities, however these design decisions are often made in collaboration with local Iwi and cultural experts. While cultural identity is powerful for rehabilitation², this investigation instead focuses on the effects of scale, circulation and invisible security instead as principles I feel more educated to discuss.

In an attempt to understand these limitations, I reached out to Oranga Tamariki (New Zealand Youth Justice) to discuss the issues around youth justice and designs role in these facilities from a first hand perspective. While no substitute for personal experience, their input helped drive the thesis and gave the design process a sense of practicality. Through feedback of design elements and concepts, and discussions around safety, security, and systematic issues, the support and information gained from professionals well acquainted with these facilities elevated the design process and outcome to something more resolved than I could have hoped to have achieved without them.

1 Ministry of Justice, "Youth Justice Indicators Summary Report," 7.

2 Ministry of Justice, "Culture-Based Correctional Rehabilitative Interventions for Indigenous Offenders," 3.

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Introduction

To most, the goal of incarceration can be separated into two categories, rehabilitation and punishment. However, despite penal reforms and new a focus on reintegration within penal facilities, years of social stigma and political propaganda has driven the idea that punishment and deterrence is the answer to crime rates, and an increasingly tougher stance on offending has led to harsher and more increased sentencing.¹ This influx of offenders into the system subsequently strains the already underfunded rehabilitation programs, sowing doubt to their effectiveness. This “tough on crime” stance is not delegated to the adult system alone. New Zealand youth justice saw an increase in convictions over the past decade, and while statistics show an overall decrease in youth offending rates,² the political bias within the system leads to most sentencing resulting in a conviction. Not only are these sentencings harsher and more frequent, the strain they put on youth justice facilities and rehabilitative programs inhibits the effectiveness of these facilities,¹ making offender reintegration harder and contributing to the New Zealand prison pipeline from youth justice to the adult system.

In a 2022 study it was found that 57% of Māori and 46% of non-Māori youth offenders had reoffended in an adult court within two years of leaving the youth system.³ While still a lower statistic than the recidivism peak of 2015/2016, it leaves just under half the youth entering the system at risk of reoffending. Furthermore, while both the offending rates for youth declined by 65% between 2010 and 2022 and the proportion of serious offending decreased to 32%,⁴ youth facilities remain at capacity, raising the question, where is the system failing our youth? While it is easy to critique the justice system, or harsh sentencing, the youth justice facilities themselves are failing

to meet the rehabilitative needs to ensure effective youth reintegration. Once released a combination of unfamiliarity, confusion and social rejection gives into recidivism and a loss of identity or belonging outside of the justice system encourages youth to form criminal connections within these facilities. However exists an underlying similarity between each of these issues: They are all products of an offenders environment.

In response to the high recidivism rates, and the large percentage of youth offenders finding themselves in the adult justice system, this research investigation proposes, and explores, how the design of a youth justice facility can enable architecture to have a rehabilitative function and reduce reoffending through an architectural experience. The increased interest by Oranga Tamariki in adopting smaller scale facilities to both provide more individualised treatment and avoid larger scale gangs and cliches that form in larger facilities has led to this investigation exploring a small-scale project with the intent to propose a base design that could be adapted across New Zealand. This research proposal aims to offer a new perspective on youth justice facilities in New Zealand and provide an architectural contribution to the conversation.

1 Fyers, “20 Years of ‘tough on crime’ stance sees prison population surge”.

2 Ministry of Justice youth conviction data indicates that between 2012-2022 while the number of convictions has been halved (10,827 in 2012 to 6,900 in 2021) the number of proved charges has steadily increased (43%-48%).

3 Ministry of Justice, “Youth Justice Indicators Summary Report,” 5.

4 Ibid, 6.

Research Objectives

The primary goal of this research investigation is to understand the relationship between architecture and youth recidivism to develop an architectural response that addresses and reduces youth reoffending. Through a review of literature, case studies, and principles this investigation aims to critique current youth justice design and develop a residence that better supports the rehabilitation of youth offenders. This process begins with research that engages with each objective of this research investigation.

The first objective aims to understand the reasons behind youth recidivism, the influence of penal environments on released youth offenders, and the role the physical environment plays in this. Through reviewing investigations conducted with youth that have re-offended and first-hand accounts of the effects of a prison environment, this first part explores the potential architecture has as a facilitator of recidivism. Understanding the driving reasoning behind youth recidivism, and how spatial experience affects offenders, is fundamental to being able to provide an effective response.

The second objective aims to understand how architecture can be adapted to respond to these issues. Taking the spatial reasons for reoffending explored previously and comparing them against rehabilitative strategies reveals where a lack of architectural development is present, while also providing examples of effective designs. Through analysis of modern design strategies in similar youth justice facilities, and how each example has integrated rehabilitative principles to respond to these issues, an understanding of how other architects have explored the same issue forms. The aim of this objective is not to critique all rehabilitative methods designers have explored,

but rather derive a specific architectural response informed by the effectiveness of built precedents.

The third objective aims to explore how these ideas can be implemented within a high-security facility. While rehabilitation and reintegration are the goals of these facilities, they still need to provide a safe and secure environment. Drawing upon case studies, penal security design strategies, and penal safety guidelines, the final objective aims to provide a sense of practicality to the research, that fits within the philosophies of contemporary youth justice design.

The first objective provides an understanding of both spatial facilitators and responses to recidivism through literary analysis, while the second objective explores the answers provided by modern design. Once explored these objectives coalesce into a developed design for a proposed small-scale youth justice facility in Wellington informed by the research conducted to help better reintegrate youth offenders and lower the percentage of New Zealand youth graduating into the adult penal system. This design concept is then critically analyzed from a resident's perspective to reflect on the design's effectiveness and provide avenues for further investigation.

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The importance of early childhood on youth development is uncontested, however, it is only over the past few decades that a growing body of research into brain development has uncovered how suggestible young minds can be. Studies in youth neurology have revealed that the areas of a young mind concerning judgment are generally not fully developed until the early to mid-twenties.¹ Unsurprisingly then, a youth's environment can have a significant influence on their brain development, with secure facilities being no exception.

Confinement has been shown to lead to short-term declines in judgment and psychosocial maturity leading into early adulthood, with this period of lower maturity resulting in more impulsive and negative peer-influenced decisions upon release.² However, while the behavioural and developmental effects of penal environments on have been extensively investigated, the literature focuses on youth when incarcerated, with a lack of studies that explore how a facility influences recidivism. How an environment continues to affect offenders once released is a key factor in understanding how a facility can better rehabilitate, including an understanding of why they might fail in this.

This chapter discusses the perspectives of academics who have researched youth recidivism and investigates how youth justice design can negatively affect offenders. It discusses offender interviews conducted by Mark Halsey, the environment studies of Leslie Fairweather, and the firsthand accounts of harmful spaces from Yngve Hammerlin and a current Norwegian inmate, John K, separating their experiences into three architecturally influenced principles, risk, trauma and spatial vertigo.

1 National Juvenile Justice Network, "Arrested Development: Confinement Can Negatively Affect Youth Maturation," 1.

2 Ibid, 2.

Risk

One of the primary points Halsey discusses in “Negotiating Conditional Release”, an exploration of youth recidivism, is risk. Halsey defines risk as the likelihood of an individual reoffending while recognising that for many of the interviewed youth the risk of them regressing was directly linked to factors outside of their control:

Risk – and, more pointedly, its material manifestations of danger and harm (in that order) – persists due to the confluence of events and not just because of choices made (or not made). As such, it is important to realize that the state is deeply implicated in not only the management of risk but its spilling over into transgressions of various kinds.¹

Halsey draws upon a specific example to reinforce his point. One of his interviewees chose not to attend drug counselling due to their well-being, only to be sent back to youth justice for breaching their parole conditions. The individual saw their repeated exposure to drug discourse as harmful as a recovering addict, yet even after voicing their concerns with release workers to avoid this scenario, the system saw counselling as a defining factor in their rehabilitation. Here, risk can be seen manifesting, where it is not a stagnant concept attached to an individual’s decisions when released, but instead a multi-layered facet just as influenced by situations as personal choice.¹

Throughout Halsey’s interviews, it becomes apparent that risk is tied to individuals’ independence. While Halsey describes risk as being understood on many levels – personal, political, social, spatial, temporal and bureaucratic, in all his described instances of offenders breaching parole, many do so through an attempt to exhibit independence. Many individuals he interviewed

had little to no control over their placement, activities or work opportunities, with Halsey arguing that the controlled management structures were a large reason for risk-based recidivism.¹ Should an uncomfortable situation, environment or social interaction arise for an offender, there is little that the individual could do to avoid it. The structure of limiting independence to offenders is interesting considering the importance of fostering independence for reintegration. In a handbook discussing guidelines for preventing recidivism, the United Nations Office on Drugs and Crime states:

[Prisoners] tend to experience diminished independence, self-sufficiency, self-esteem and initiative. Upon their release, offenders are suddenly required to organize their lives independently outside of the closed system that used to structure their everyday lives.²

They note that, particularly in younger offenders, a lack of independence or everyday life shifts can generate deficiencies in conflict management skills, socially acceptable responses and the ability to navigate social interactions effectively. The office also acknowledges that the penal environment not only restricts the development of these skills but can also negatively contribute to anti-social behaviour, stating that released offenders may also need to unlearn some behavioural patterns they learned during imprisonment.² While risk can be seen as a systematic issue, risk-based breaches tend to result from a lack of offered independence or initiative. Spatially penal environments offer few opportunities for youth to develop the social skills required for successful reintegration, and the controlling nature of these systems leaves offenders confused once released.

¹ Halsey, “Negotiating conditional release,” 160-161.

² United Nations Office on Drugs and Crime, “Introductory Handbook on the Prevention of Recidivism and the Social Reintegration of Offenders,” 29.

Trauma

The lasting effects of space is no better explored than in the concept of violent space. In his chapter in “Prison, Architecture and People” Yngve Hammerlin explores this concept, stating that:

Space must be studied from both the ethical and aesthetic perspective. The material world around specific locations and social space is not always a positive experience. A space can also awaken feelings of alienation, threats and sickening sensations.¹

Hammerlin links this concept to his upbringing within an abusive family, explaining how these experiences left him with materialistic and physical nausea from the spaces in which these events transpired. To Hammerlin it felt as if the architecture itself became an abuser, with the environment being so interwoven with violent behaviour. Hammerlin describes seeing the same physical associations forming in prisoners as a result of designs meant to restrict, where architecture is an extension of authority, and violence is not uncommon, stating how it was the apartment, the rooms and the interior that constricted his life, that set the framework for his existential and alienating architectural nausea.¹

Halsey also wrote about how trauma affected the youth he interviewed, yet instead of them seeing prison as a violent space, they tended to re-offend to escape from a traumatic home environment. Much like Hammerlin, these offenders found certain elements becoming either comforting or hostile depending on their experience within those spaces, with Halsey mentioning how wounds affecting self-worth or confidence are often derived from traumatic experiences and spaces.²

However, while Hammerlin mostly discusses

how spaces retain traumatic experiences, he does acknowledge that a space can be described as the opposite – being peaceful.¹ Ironically, while detention centres are designed to prevent breakouts, the inherent secure nature of such a facility can become comforting to its users as an escape from a traumatic environment. Although not designed to work as such, the relative safety and protection the architecture and system provide from an abusive family or friends appeals to these youth and can incentivise re-offending as a way to return to this environment.

In terms of design, this contrast in spacial identity as something both traumatic and safe raises an interesting design issue. Should a normative penal environment still be a comforting space? Here the detrimental effect of a violent space outweighs the potential increase in penal escapism. Providing a normalised architecture that avoids alienation and removes the building as an extension of authority contributes to an overall positive effect on offenders while a violent space can make reintegration almost impossible.

¹ Hammerlin, “Prison, Architecture and Humans,” 250.

² Halsey, “Negotiating conditional release,” 154.

Spatial Vertigo

A final architectural consideration Halsey outlines is spatial vertigo, stating that:

It is ... not unreasonable to think that juveniles emerging from long detention orders (where the body has been strictly confined) may experience a fleeting or possibly sustained period of spatial vertigo in a world largely bereft of the totalizing architectures of correctional environments.¹

Here Halsey suggests that the environmental alienation many offenders experience once released reduces the success of their integration. Halsey uses vertigo to describe, particularly in regards to distance, how a rapid change in environmental constants make integration more difficult due to unfamiliarity. The experiences Halsey discusses are reminiscent of Kalervo Oberg's concept of Culture Shock, in which the loss of familiarity and social interactions with an environment results in anxiety and discomfort.² Offenders need time to adjust and separate the two environments, with an inadequate introduction to a foreign geography potentially compelling an individual to re-offend out of spatial trauma.

Halsey also discusses how geographical issues can exacerbate the consequences of a situation and lead to recidivism, where architectural unfamiliarity, rehabilitation program locations, or an inadequate amount of dedicated adjustment time, resulted in situations where interviewees would steal a car as work obligations or rehabilitative programs were too far away.¹

In contrast Fairweather focuses on the effectiveness of the social and emotional support an established community can provide, particularly a community

where the offenders already have social ties. They argue that geographically isolating a facility from the surrounding area not only poses a problem for the psychological reassurance that local communities, families, friends and volunteer groups provide the youth, but can also limit staff access to basic facilities. It can become difficult for an isolated community of prison staff to effectively function when they are distanced from both social support and access to schools, shops or leisure activities.³

While both Halsey and Fairweather understood spatial vertigo as driven by location, a current Swedish inmate, refereed too as John K, wrote in "Prison, Architecture and Humans" about the sensory experience spatial vertigo can give while incarcerated. When speaking of his time within Halden Prison, he remarks on how the rural silence of the surrounding area felt more tormenting than the consolation. He states that while the location of the prison had been specifically chosen for its rehabilitative qualities, to someone accustomed to living in a city, the lack of reassuring normality that traffic smog and city noise provides became unbearable.⁴ John's unique perspective on geographical normality suggests that geography transcends just location and architectural identity and that it can be just as influential through the intangible senses. Then it is also not unreasonable to suggest that the same sensory overload or deprivation is just as potent to those who have been released from penal environments, and that it is this environmental shock that contributes most toward alienation and recidivism.

1 Halsey, "Negotiating conditional release," 159.

2 Oberg, "Culture Shock," 1.

3 Fairweather, "Psychological effects of the prison environment," 34.

4 K, "Prison, Architecture and Humans," 30.

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REHABILITATION

Originally conceived as a punishment and deterrent for crime, a contemporary shift in thinking over the last century has changed opinions on what the goal of incarceration should be. New Zealand youth justice has focused on rehabilitation over punishment since its inception, with Oranga Tamariki aiming to address the underlying factors that contribute towards youth crime rates and support families through the youth justice process.¹ While many of these facilities include programs and courses that have adapted over time to provide the support youth need for successful reintegration, the architecture of these facilities has seen little development.

The potential architecture has as a rehabilitative device, especially in an isolating environment, is often overlooked in the penal system. While not as noticeably effective as more mainstream rehabilitation options, if design can exaggerate negative emotions through the ideas presented in the previous chapter, would the same not be true for the opposite?

This chapter compiles current research, papers and philosophies from a variety of academics to analyse how architecture could be adapted for rehabilitation. It explores the importance of identity and community acceptance through the architecture guidebook "Wellbeing in Prison Design", as well as discusses Leslie Fairweather's analysis of the many axis size that can change an offender's experience. This chapter concludes with a compilation of both chapters, deriving a set of principles similarly reflected across these works to bring into the design process.

1 Oranga Tamariki, "Youth Justice Residences".

Identity, Belonging and Value

In 2017 a team led by Matter Architecture produced a guidance paper that set out to establish a series of design principles they argued would improve rehabilitation in prison environments. In this report, titled “Wellbeing in Prison Design”, the authors state the following:

While prison design has historically sought to deprive incarcerated persons of their ‘sense of self’, recent findings suggest that supporting a strong and positive sense of identity is critical to the rehabilitative function of these spaces.¹

The paper argued that identity is strongly linked to a user’s sense of place and that change in environment can upset one’s self-efficacy, self esteem, belonging, and positive distinctiveness. Particularly in communal areas, where individuality is less easily expressed, social and community relationships play a large role in supporting a strong sense of self, while in private areas the guide recommended allowing personalization, as an inability to express identity hampers individuals forming attachments to a space. The guide also explores the benefits of creative involvement, whether through activities such as gardening or through creative interactions with the architecture, such as mural painting, stating that these activities have been linked to greater valuation, concern for maintenance, sense of ownership, and self-esteem.¹

To further explore how the prison environment affects identity one only needs to look toward first-hand accounts from inmates. Writing about an interview he had with a Norwegian high security prisoner, Gudrun Brottveit discusses how powerful the transition from being considered an ordinary man to a prisoner was for the interviewee. The inmate, only referred to as

Fredrik, describes how hard it was to retain a sense of dignity while simultaneously being treated like an animal, his identity crisis becoming apparent when he states “I have committed a crime and deserve my punishment, but I’m not a criminal person”. Fredrik describes the experience as an additional penalty and a contributor to accepting an identity as a criminal.² What stands out most in Fredrik’s passages is the lack of normality, autonomy and positive social interaction, all of which seem to be the catalysts for this identity shift. With identity being such an integral part of rehabilitation, any environment that forces an identity shift, whether through abnormality or by stripping humanity, would hinder an offender’s transition.

John K also discusses identity and value from his personal experiences within Halden Prison, however, for him, the overdesigned and out of touch nature of the world’s most human prison crushed his self-esteem more than any other facility. Only once he had been moved to Bastoy Prison and was given responsibility and trust could he finally feel he had personal value. He finishes his short essay preaching the venerability of the human spirit, acknowledging the benefits of colour, furniture and materiality but warning designers that they are no substitute for the human need to belong, be accepted and be recognised.³

1 Matter Architecture, *et al.*, “Wellbeing in prison design,” 46.

2 Brottveit, “Prison, Architecture and Humans,” 210-211.

3 K, “Prison, Architecture and Humans,” 34-35.

Community Integration and Acceptance

When discussing the rehabilitative effect of an offender's social capital, the "Wellbeing in Prison Design" guide states:

*The evidence shows that those prisoners, who are able to develop and/or maintain social networks such as family, friends and community groups are far more likely to succeed.*¹

The guide suggests that for a released prisoner, having an established social network is hugely important for the rehabilitative journey. Once within the community, not having the constant professional and peer support a correctional facility provides can harm an isolated offender's successful transition. Once released it becomes the community's responsibility to provide this social network, as these strong relationships foster community acceptance and can create an obligation and incentive to follow the law.¹ Fairweather further states that while prisons should be designed as inescapable and isolated, they need to still be accepted or even adopted by the surrounding community. Fairweather even advocates for community involvement, proposing that the local people should be able to join select activities or volunteer at the facility as a way to build these relationships with the detainees.²

Unfortunately, the inherent nature of a penal facility, and the social stigma around them, make it difficult to effectively integrate them within the community. St. John mentions how damaging visual justice can be, and the large role aesthetics play in public perception. While prisons have never been the pinnacle of aesthetic quality, St. John emphasises how important beautifying any public/prisoner interface is, to retain both willingness for that visitor to stay or return but also to emit positive reassurance of how the institution

values and treats their detainees. Here, St. John suggests that instead of designs that feed into the public stigma of criminals, prisons should be aesthetic and enjoyable experiences for visitors where they can internalize the use of a correctional institution as a place of rehabilitation.³

To achieve this outcome both Fairweather and St. John gave design examples that they believed helped with community integration and acceptance. Fairweather draws attention to the waiting area, stating that visitors need dry, comfortable areas with lavatories, play areas for children and access to social services. Areas should be colourful, brightly lit and provide a relaxed feel as the security measures allow, with visiting booths needing to relieve tension to not provoke bad experiences.⁴ St. John focuses more on building form, advocating for round, curved shapes over sharp edges, and an aesthetic that emphasises the correctional facilities' neutrality. St. John believes providing this perception that punishment is being served fairly and indiscriminately is key to having offenders and visitors accept a sentence.³

1 Matter Architecture, *et al.*, "Wellbeing in prison design," 97.

2 Fairweather, "Psychological effects of the prison environment," 47.

3 St. John, "Placial Justice: Restoring Rehabilitation and Correctional Legitimacy Through Architectural Design," 4.

4 Fairweather, "Psychological effects of the prison environment," 36.

Institution Size

When discussing facility size Fairweather states the following:

The internal arrangement of a building can influence the degree and quality of personal relationships within it to a remarkable degree. These relationships will not develop healthily in huge impersonal blocks of cells where the individual is dwarfed by the overpowering size of the structure. They can only be attempted in buildings which respect the quality of the individual by being attractive, as normal in appearance as possible, and suitable in scale.¹

Institution size can be understood on two axes. Here Fairweather discusses the impact of architectural size, and how a large and overpowering space can affect the development of personal relationships with staff or other offenders. Lopez adds to this, stating that larger spaces heighten an offender's sense of isolation and anxiety. To minimize the negative effects of size, Lopez suggests that spaces should be broken down into smaller, self-sufficient units dependent on security risks and space use.² She also advocates for variety in housing and collective spaces within these units to satisfy the requirements for different rehabilitative programs and degrees of custody, describing how dependent institution size should be on the offender's needs.²

Size can also be understood as prison population. The "Wellbeing in Prison Design" guide mentions how overpopulation has been linked to several negative behaviours such as anonymity, stress, social fragmentation and violence. The guide observed that individuals in single-occupancy rooms were much less likely to feel these effects and that rooms that exhibit confining attributes such as low ceilings and narrow spaces can increase stress levels as they simulate

crowding.³ Decreasing the prison population, and providing more individual space, also seems beneficial for rehabilitation, with a study by the Swedish Prison and Probation Service (SPPS) noting that smaller living units provided significant positive effects on youth detainees. The SPPS recommend sizes of 15-20 offenders for youth facilities, with increased numbers resulting in difficulties for staff to adequately attend to each offender's needs and a greater chance for hierarchies and subgroups to start forming.⁴

1 Fairweather, "Prison Architecture in England," 340.

2 López, "How to build for success: prison design and infrastructure as a tool for rehabilitation".

3 Matter Architecture, *et al.*, "Wellbeing in prison design," 49-50.

4 Swedish Prison and Probation Service, "How Architecture and Design Matter for Prison Services," 35-36.

Rehabilitative principles

While it is not viable to build a perfect rehabilitative correctional facility due to influences such as personal, economic and political, reviewing the literature discussed in the previous chapters, a set of principles were defined that were present across the work regardless of external factors. These principles were commonly identified as being vital for offender well-being and success in reintegration attributes that offer opportunities for architecture and rehabilitation to coexist in harmony with one another. Presented below are the five principles this research investigator identified and a summary of how each fulfils its purpose to reduce youth recidivism.

The design must provide a normative experience, one that not only reflects a residential aesthetic but also encourages similar movement to daily life. One of the main points Halsey identified as facilitating youth recidivism was an offender's likelihood of re-offending through unfamiliarity with the outside environment, and the increased independence it offers. The isolating and structured nature of the penal system removes the daily shifts and practices of normative life and makes reintegration difficult for released offenders. Providing a normative design that exaggerates daily program and activity shifts and allows more independence in its spatial organization continues to provide residents with a sense of autonomy needed for successful reintegration. An aesthetically normative design and avoiding an institutional architecture reduces the culture shock offenders feel both entering the environment or once released, as well as reducing the effects the penal environment has regarding traumatic spaces. This principle also extends to institution size, as it is the normative, smaller populated institutions that provide the best support for youth through the formation and development of more personal relationships.

The design must offer user independence. Another facilitator towards recidivism Halsey explored was risk, and how a lack of free will and independence can encourage youth to re-offend. Many systematic issues, such as location, political climates, and peer pressure, can lead to situations where youth feel they have a lack of choice and must re-offend. The same mentality in released offenders can be observed in incarcerated youth, where strict systems, timetables and punishments limit independence, where any attempt to deviate from the premeditated systems leads to punishment. Providing independence architecturally, through the use of unrestricted movement or multi-use activities spaces allows for moments of choice for offenders, where they can feel more in control of their actions. Encouraging independence also benefits offenders once released, allowing them to better adapt to an environment without the many systems of prison.

The design must promote identity and belonging. Historically penal environments have encouraged the loss of identity to dehumanize offenders as a form of punishment, however, when shifting the mentality of incarceration as a form of punishment to a form of rehabilitation and eventual reintegration into society, this loss of identity proves damaging. Identity and sense of self are highly important for mental well-being and belonging, leading to most social interactions. Denying offenders, particularly youth offenders, the means to express themselves, through background, hobbies or philosophies denies them the means to develop the social dialogue needed to comfortably engage with society outside of incarceration. Architecture has an important role in enabling identity and expression, by allowing opportunities where offenders can visually express themselves. Brottveit discusses how architecture can

strip humanity through monotony, institutionalization and a lack of normality, all contributors to avoid when designing for rehabilitation instead of punishment.

The design must be integrated into the wider community. Community acceptance and public stigma are a large contributing factor to why rehabilitation programs fail since released offenders find difficulty overcoming the conceptions the general public have about criminals. An inability to adjust or engage with a community due to public perception and avoidance can lead offenders to re-offend due to either a lack of connection, unable to perceive the effects of their actions, or intentionally in retaliation for being an outcast. As the Wellbeing in Prison Design guide suggests, architecture plays a large role in this public perception and acceptance, both aesthetically and functionally. A small-scale, residential building reflective of the surrounding area is more positively perceived than an institutional complex while features that frame public/resident interactions more positively humanize offenders and encourage the public to be more accepting of them once released.

The design must provide a safe and secure environment for all users. These facilities should be designed for rehabilitation but they still house individuals deemed too dangerous to themselves or others, and subsequently, any justice facility needs to consider the safety of both the residents and the staff. However, safety and security can serve a purpose more than just practical. As the Swedish Prison and Probation Service discussed, smaller populations are easier for staff to manage yet also provide the added rehabilitative benefits from more personal relationships. Likewise, a user feeling safe in their environment limits the power of traumatic spaces,

and the likelihood of the resident experiencing environmental trauma is greatly reduced.



CASE STUDIES

While many penal facilities continue to contribute towards recidivism through outdated and hostile architecture, a contemporary shift in how the justice system is viewed has led to an increase in projects that focus on rehabilitating offenders rather than imprisoning them. The following chapter examines case studies from around the world where the modern rehabilitative principles discussed in the previous chapter have been adapted into architectural form.

The first case study is UArchitect's Maasburg Juvenile detention centre (Netherlands, 2019) where form and materiality explore how fragility and the temporal can be used as a reflection of the youth residents to encourage reflection and pause. The second case study is Combas Architect's Juvenile Detention Education Facility (France, 2017), where light and sight take precedence to define spaces forming places of intimacy and community within the architecture. The final case study discusses a project less concerned with the ethereal in Holmsheidi prison by Arkis Architects (Iceland, 2016) to examine how a high-security environment can still incorporate rehabilitative principles without sacrificing the safety of the users.

Following the exploration of these facilities, this chapter will conclude with an examination of how these buildings have addressed the previously outlined design principles, where the projects succeed and where they fail as rehabilitative devices.

Maasberg Juvenile Detention Centre

| UArchitects | Netherlands | Completed 2019 |

Located in the Netherlands, Maasberg Juvenile detention centre is a converted adult prison complex redesigned to function as a rehabilitative space for troubled youth. The facility defines itself as a smaller scale project than that of contemporary institutions, and housing significantly lower numbers of residents to both increase the effectiveness of individual treatment but also domesticate the size of the institution. The site is split into distinct structures, each for different programs. This helps provide youth with a more normalised daily routine, encouraging a journey between spaces. The architects retrofitted the entire facility however entirely new structures were designed for the living and educational spaces, each of which is separate and architecturally unique. The site concept was to encourage a more intense relationship between the users and nature, letting the interior feel less removed and confined. While stylistically different, each building assumes the colour, materiality and form of the landscape, inspiring the same moments of pause and reflection within the architecture (figure 3.5).

The middle of the site contains a small pavilion that houses the staff offices, visiting spaces and education facilities. The concept for the design was to foster a sense of temporality as a reflection of the temporary nature of the resident's incarceration. The structure has been lifted off the ground to add a sense of lightness, while lightweight steel is the only solid element visible (figure 3.3). The central core walls are disguised behind wooden struts to drastically reduce the rigidity of the pavilion, while a focus on light, wooden materials integrate it within the landscape. The focus on temporality helps the rehabilitative process by encouraging reflection, while the natural

aesthetic creates a sense of architectural belonging that residents can resonate with. The extended use of glazed panelling and privacy screens over solid volumes allows outsiders visual connection into the site while residents can connect with the surrounding community, continuing a dialogue between the two. The classrooms on the second floor and the offices on the ground floor function independently from each other and can be separately accessed through exterior stairways. These spaces are designed as multi-purpose, offering large, open areas and ample exterior glazing to provide comfortable and adaptable learning environments. The ground floor focuses more on the visitor experience, dramatizing the meeting of residents and visitors through spatial manipulation. The fragile nature of the design is also an intentional safety measure. While reliance on modularity helps ease replacing damaged elements (figure 3.4), architectural frigidity demands respect. The passive nature provides a more comfortable relationship between youth and the environment and reduces incentives to vandalise or destruct the environment. Meant to reflect the resident's fragility, Maasburg aims to present a relatable architecture that acts as a reflective experience rather than a hostile environment that demands users to conform to its environment.

Figure 3.1 Maasberg juvenile detention centre





Figure 3.2 Steel temporality

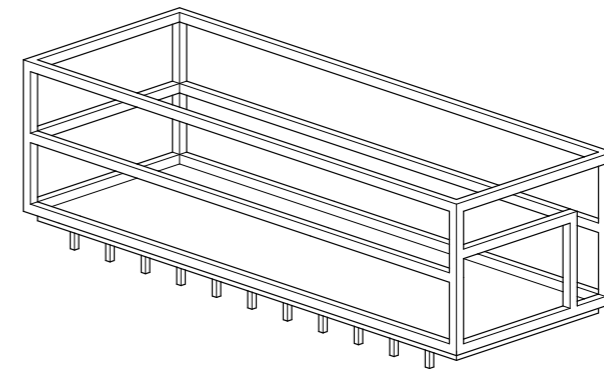


Figure 3.3 Steel frame
The exposed framing wrapped around the exterior form adds a temporary and lightweight feel to the structure.

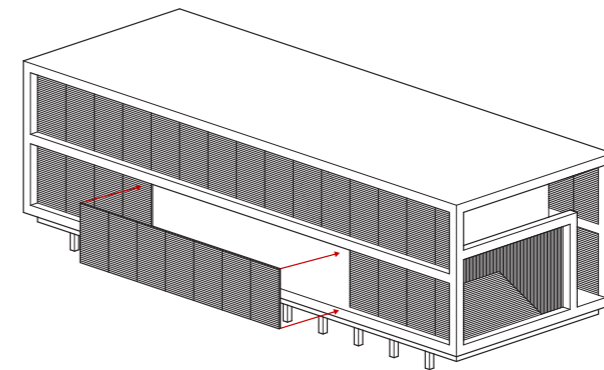


Figure 3.4 Paneled system
A paneled system offers convenience and further temporarily and is both easy to maintain and cheap to replace.

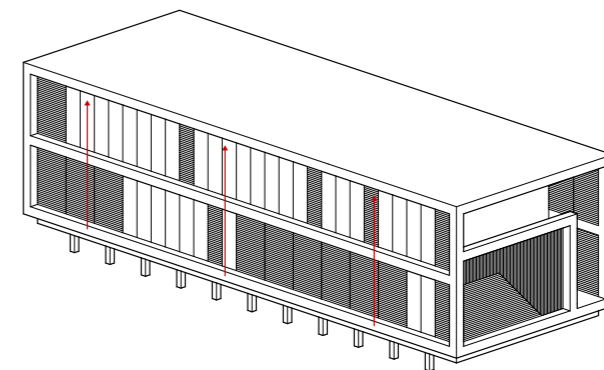


Figure 3.5 Vertical movement
The structure's verticality is reflective of the environment around it, inspired by the bare trees as a way to integrate the building within the site.

Maasbergs temporality is what defines it as a project. The lightweight materials have been expertly crafted to suit a variety of rehabilitative principles in such a balance with other aspects of the design that the completed result is almost unidentifiable as a penal facility yet serves its purpose well. The focus on wood panelling not only links the environment and structure together, an important for a resident to foster a sense of belonging, through shared materiality, colour and verticality but it is also reminiscent of contemporary residential design. Maasbergs interior and exterior are fairly normative, both formally and aesthetically, sharing many architectural details with modern home design such as slim windows, horizontal cladding and double story.

The environment is also a defining feature of the project. Inspiring the building design off of the surrounding area builds a more solid connection between the residents and the land. The focus of the vertical movement to resemble the trees that litter the site overlaps context and aesthetics and encourages youth to engage more with the surrounding site than typical youth justice facilities, where a disconnect between context and architecture results in culture shock.

Temporality extends further than just a rendition of the environment, as it also serves as a metaphor for the residents themselves. Uarchitects describe the building as being as temporary as the youths stay, using the architecture to reinforce how residents perceive themselves and their time incarcerated. However, while an offender's stay is temporary, encouraging the exploration of identity and belonging within an environment specifically designed to feel transitional carries its issues. Distancing youth from the idea of the facility as a punishment and more as a temporary

rehabilitation project is beneficial as it encourages a more positive attitude and minimizes anti-social behaviours, however, a temporary structure loses some of its power as a home, or place of belonging. If a youth arrives in a facility that acknowledges a change in both the residents and the architecture how can an individual form a meaningful connection with the building? The idea of home or a place of belonging can change, yet it is never temporary and this focus on seeing the architecture in this way limits how deeply the residents can engage with the design.

Where the design begins to fall apart is in its floor plan, where staff access and security options are very limited. While it is a small building, the long hallways and large, open communal spaces offer staff limited options to interfere with disputes. Most of the building lacks security beyond the minimum for a youth justice centre. Sight lines, surveillance and space division are overlooked, and while material rigidity and resident safety are considered, the project uses its small scope and population size to provide an architectural response built upon a metaphor rather than a practical one.

Figure 3.6 Robust/lightweight material dichotomy





Figure 3.7 Maasberg vertically expressed



Centre Éducatif Fermé

| Combas Architects | France | Completed 2017 |

Combas Architects juvenile detention centre in Marseille, France, stands as a counterargument to contemporary youth justice design. In a landscape where security takes precedence over space quality, this facility engages with the site's natural typology to create the illusion of open space while still achieving physical confinement (*figure 3.8*). With the structure being placed at the rear apex of the site, the natural gradient of the landscape places residents above the facility's perimeter security, allowing youth to overlook the restrictions of the program and reconnect with the surrounding community (*figure 3.9*). However, the defining feature of this facility is Combas Architects' focus on using light as a rehabilitative tool. Spaces are uniquely lit to define program and influence or accentuate the space's intended uses, while materiality and texture explore how to create movement and life in such a static environment.

The plan splits the facility into three separate sections, living, communal, and administration. The building adopts a U shape as an enveloping form that surrounds the residents, with a central space that opens into a courtyard invoking the site's original agricultural identity through vegetation (*figure 3.10*). Engagement with the site continues its influence into the elevations, which follow the same downward path as the typology. The main spine is intersected on both ends by angled forms, forming the site's rear security and angling parallel to its contours (*figure 3.11*). Each of these sections boasts impressive full-height glazing that overlooks Marseille to not obscure the horizon as a metaphor for the resident's new path once released. The rough, raw materiality of the design allows moments of reflection and sobriety, while still providing a robust

base for the needs of such an environment, using the stripped-back look to invoke more of an educational context than that of punishment (*figure 3.12*). These bare walls become accented and complemented by textures, where exposed grain and framework express movement and directionality that add tactility to the otherwise blank canvas. The choice for a muted and educational colour scheme helps ground and mature the building while also accentuating the small uses of brightness within the design, where depth has been further explored through neon-coloured light indents that bring the circulation areas to life.

Light plays a central role in defining individuality and space identity, with each area being specifically lit in a variety of different ways. While the circulation spaces are defined through coloured light, Bedrooms introduce more backlit environments to provide more intimacy and self-reflectivity. Meanwhile exposed beams running down inter-room corridors offer a different perspective, casting softer sunlight throughout the spaces where the staggered shadows accentuate movement between spaces (*figure 3.13*) while in the communal areas large glazing offers a more brightly, and equally lit environment to promote more social activities.

Figure 3.8 Aerial of Centre Éducatif Fermé



Figure 3.9 Site typology
The natural gradient of the site allows residents to see over the perimeter security and reconnect with the surrounding community.

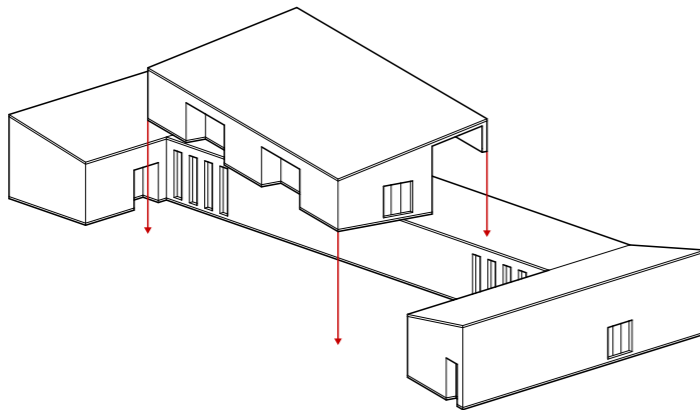


Figure 3.10 Central communal space
The entire site wraps around the central communal space with the main entrances all being accessed through the space.

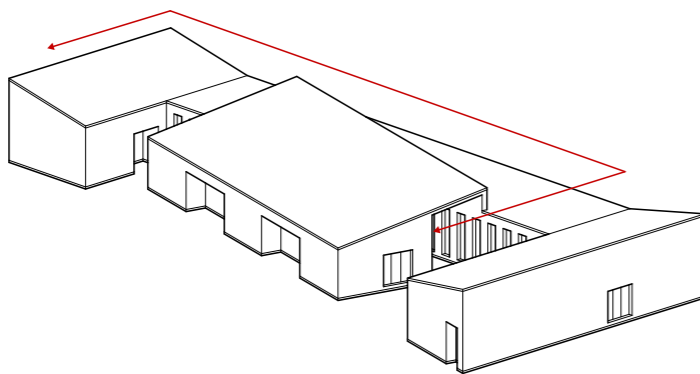


Figure 3.11 Building as the perimeter
The shape of the structure forms a natural perimeter around the edge of the site, reducing the need for obvious fencing or security.



Figure 3.12 Reflecting the surrounding materiality



Where the Centre Éducatif Fermé excels is Combas Architect's control over light and community integration. The division of space and program through lighting adds variety and sets spatial moods in an otherwise materiality and aesthetically blank structure. Incorporating light as the defining feature of the design offers many benefits, most of all being able to reduce the complexity of the interior and provide a safer, more durable environment for staff and residents. Instead of circulation and vandalize-able detailing, normative daily movements are explored through texture and light, both qualities that provide a much safer environment for all users. However, while Combas has crafted a delicate balance between providing a normative experience and providing a safe and secure environment, both qualities work against each other, not in tandem. The black, bare walls still institutionalize the structure and strip youth of their humanity through lack of expression. Limited colour and entirely solid materials are a persistent reminder of the building's function, and the areas where the lighting and texture soften the environment lack the residential features to offset this. The safety these design moves provide is paramount yet these bare, concrete walls still offer little opportunity for identity exploration and unlimitedly fails to distance itself from penal architecture.

Where the centre does exhibit effective design moves is in terms of how the facility is integrated within the community. Basing the materiality off the surrounding environment helps to assimilate the facility within its locale, as a way to encourage a sense of community through similarity to the public (*figure 3.12*). This normalized architecture extends to the boundaries of the site, with the building walls as a perimeter helping to avoid the use of obvious indicators of incarceration

Figure 3.13 Light and shadow defining space use

and strengthening the public perception of the structure. The gradient of the site further serves to connect the facility to the wider community, offering views across Marseilles, establishing a visual connection between the residents and the outside, reminding residents of their proximity to friends and family and allowing them to observe daily life on the outside.

While the architect's attention to light and context elevates this project above many contemporary youth justice facilities, there is a distinct lack of consideration towards providing opportunities to express identity or allow independence. The circulation patterns are static and don't allow individual exploration while the bedrooms are bare and blank with no differentiation. The centre is designed with rehabilitation in mind, yet a questionable design language and an overbearing focus on atmosphere leave the facility feeling reminiscent of the same blank, concrete environments that aim to strip prisoners of their identities.



Figure 3.14 Centre Éducatif Fermé elevation

Fangelsid Holmsheidi

| Arkis Architects | Iceland | Completed 2016 |

While the previous case studies focused on rehabilitation, the more successful and effective projects tend to be those that can adapt to a variety of security levels depending on the residents at the time. Therefore this final study opted to analyze how a contemporary high-security prison has balanced security and normality without sacrificing its rehabilitative qualities. Holmsheidi prison in Reykjavik, Iceland, adopts many of the same design strategies as the previous examples, focusing on resident and staff wellbeing within a high-security environment. The complex is a single structure, with spaces defined through changes in design language. To disguise the nature of the building, form is used as the external security, using interior courtyards to provide exterior space without compromising the site's perimeter (*figure 3.17*). This gives the facility a normalized form, limiting the amount of fencing and incarceration symbolism. These courtyards serve as points of community, each centred within a collection of bedroom units. This creates a direct dialogue between the private and communal spaces, helping give the resident's an identity and a community to connect with, while also allowing staff to better divide the larger facility population into more manageable sizes.

The plan revolves around a central guard spiral that acts as a way point between each wing, a necessary passageway when changing spaces. While this allows easy monitoring of resident movements by staff, the area's distinct design language helps the space feel unique and provides a sense of movement and passage between areas. While the rest of the facility centres around the interior courtyards, the guard point is entirely enclosed and removed from dialogue with the

exterior, with the tunnel-like nature of the central space providing a threshold between programs, creating a journey and reinforcing daily shifts through movement and space differentiation. The building form also wraps around the space, with the circular shape of the room contrasting the rest of the building's gridded design (*figure 3.18*). Further separating the program, light has been carefully implemented to establish moments of reflection and tranquillity. Skylights and solar wells light the central thoroughfares and give the space an ethereal, heightened look, and offer spaces that encourage pause and social interaction through their contrast with the surrounding architecture (*figure 3.16*).

The bedrooms themselves form areas of intimacy, the only rooms where identity and privacy can be explored to comfort residents. Each room has been designed as unique, noticeably through colour, but also through a form where light and overlooks provide residents with unique views. The angled plan of each bedroom directs views away from noticeable facility features, helping rooms feel more removed from a penal environment (*figure 3.19*). Once partnered with the courtyards, the facility allows for the removal of open and hostile reminders of confinement, such as barbed wire or cameras, providing a safe, high-security environment without reassuring the residents or public of the complex's nature.

Figure 3.15 Angled windows of Holmsheidi





Figure 3.16 Central guard post and transition space

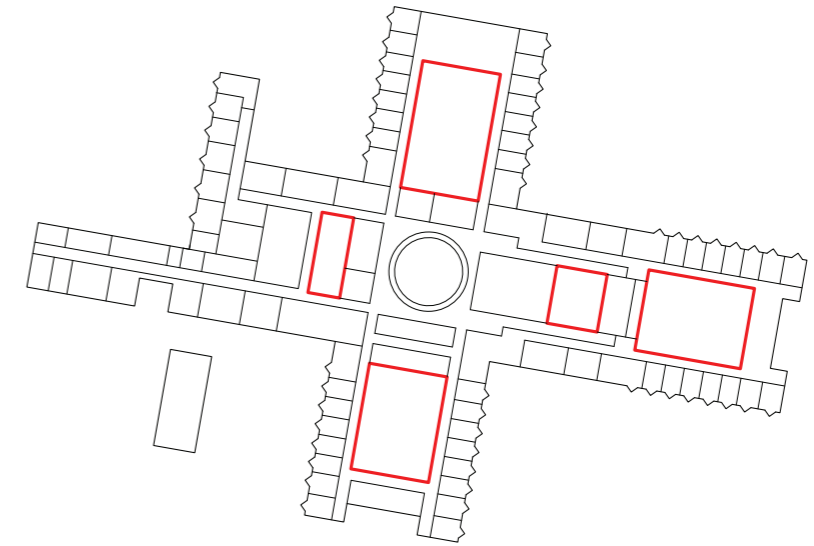


Figure 3.17 Inner courtyards

Outside space is provided within the facility itself to reduce the need for external security, normalizing the appearance of the building.

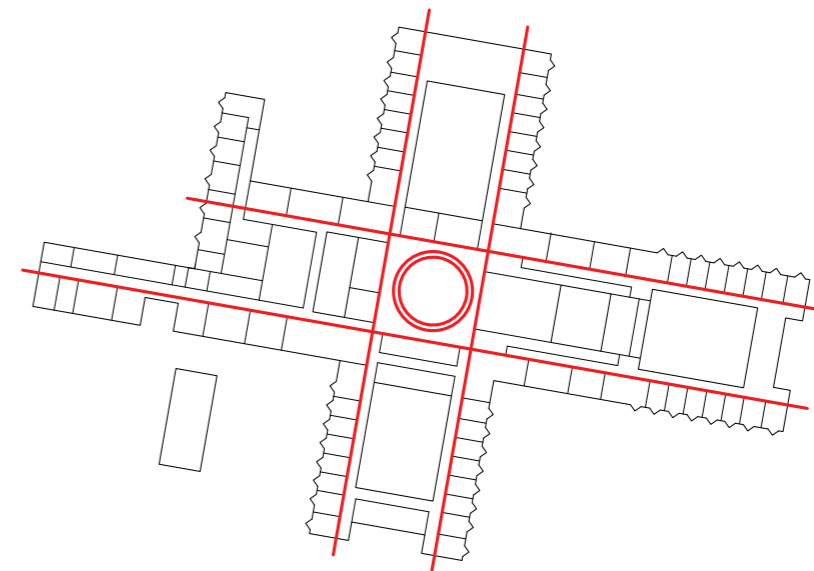


Figure 3.18 Dialogue between curves and grids

The plan follows an entirely gridded design, except for the central guard post. This enclosed space is vastly different from the rest of the facility to provides residents with a sense of movement.

Much like the Centre Éducatif Fermé, Fangelsid Holmsheidi suffers from the same disconnect between security and normality. Holmsheidi is foremost a high-security prison, and that is reflected across a variety of architectural safety measures. The layout of the facility allows it to be broken down into sections for staff convenience, with each bedroom and courtyard wing separate from each other. Having the central link between these wings be the primary guard post spatial is effective. Staff can monitor the whole facility from one point, and can easily intervene with disagreements, however as this space also acts as a transition space between wings, it creates a spatial dynamic where residents are confronted with an obvious reminder of their incarceration multiple times a day. In previous studies freedom of movement has been used to encourage resident independence, however, forcing residents to pass through such a space would be harmful to their well-being and identity. This isn't the only area where Holmsheidi sacrifices normality for security, as the internal courtyards further remind residents of their incarceration. While limiting perimeter security and introducing outdoor space as a part of the architecture creates a normalized appearance to the surrounding community, the inner courtyards act as another barrier between the residents and the outside. Here the residents have no visual contact with the community, and through the wall sided any sense of location or proximity is muddled. While having the community accept the offenders once released is important, the offenders themselves not having built a connection before they leave can lead to a re-offence due to a lack of connection and lack of belonging.

These issues have been addressed, there are moments when Holmsheidi thrives. While the inner courtyards amply feelings of incarceration, the angled

windows diminish it. Angling each room away from fences, cameras or any reminder that this is a penal environment encourages normality again, not to mention how the different ways light and colour are intensified within the bedrooms bring a sense of identity to them. While the aesthetic of the common rooms and courtyards feel clinical and institutional, with numbered doors and large glazing panels, the bedrooms and exterior excel at normalizing the facility.

Safety will always take precedence, however, Holmsheidi shows that a delicate balance between normality and safety is achievable. While it disappoints in the plan from a rehabilitative perspective, the unique use of sight lines and light to rebuild identity has a strong foundation, only lacking a way for residents to better connect with the surrounding community and build the relationships necessary for a successful reintegration.

Figure 3.19 Angled bedroom unit

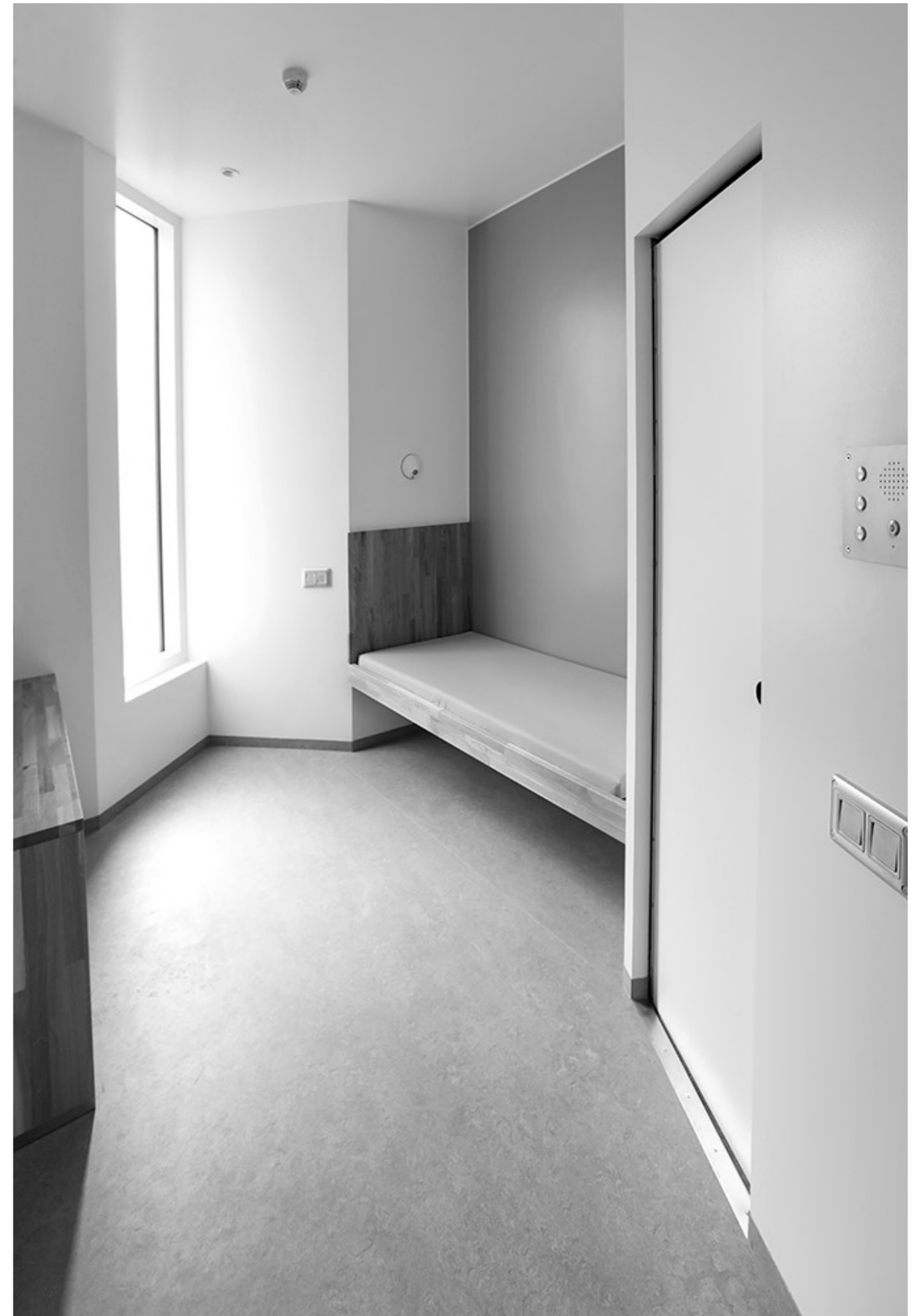




Figure 3.20 Holmsheidi interior courtyard

IV

DESIGN
PROPOSAL

The act of rehabilitation is rooted in the experience, an escape from previous events through present ones. In much the same way as architecture, rehabilitation is best described as an individual's journey, and its impact can be viewed and critiqued through an individual's experience. This chapter follows a similar journey, one of design, exploring how the previously outlined rehabilitative principles could be encouraged through architectural intervention.

This chapter proposes a small-scale youth justice facility for six residents on a site in Wellington, New Zealand. The brief was derived from the need for less institutionalized youth justice facilities that better rehabilitate offenders through small-scale and community focusing and is designed to reduce the number of youth migrating into the adult system. The project was to provide multi-purpose spaces that not only cater to varying levels of security but also include the necessary teaching spaces, kitchens and administration blocks typical of such facilities.

This proposal acts as an amalgamation of the previously explored principles and designs, building upon the work of previous academics and architects to contribute a response to the ever-present issues surrounding offender rehabilitation and youth justice. Similar to an offender's rehabilitative journey, this chapter moves between experiences, individually delving into each room in detail to explore how each space exemplifies rehabilitative principles and how the architecture has been adapted as a re-integrative device.

Site Selection

When selecting a site, a driving consideration became how the surrounding community could be integrated to reduce the stereotypically intimidating image justice facilities admit to encourage social acceptance and avoid youth alienation upon release.

The Wellington suburb of Mount Cook was chosen due to both its proximity to the central city and educational facilities while also ensuring there is little separation between the public and the offenders. The mostly student nature of the suburb is also very appealing, with a younger demographic that are similar in age and maturity and are generally less stagnant in living location, providing a community more accepting of this facilities construction.

Aligning the facility along a green belt introduces natural greenery into the site, and reduces feelings of urban claustrophobia present in more built up suburbs. This helps to de-institutionalize the proposal, and simulates the stereotypical New Zealand back yard for offenders to identify with. The reserve also acts as a natural barrier, with the site contours forming a valley at its centre, replacing the typically overbearing confining nature of perimeter fencing with a softer natural border (figure 4.3).

Figure 4.1 Site context





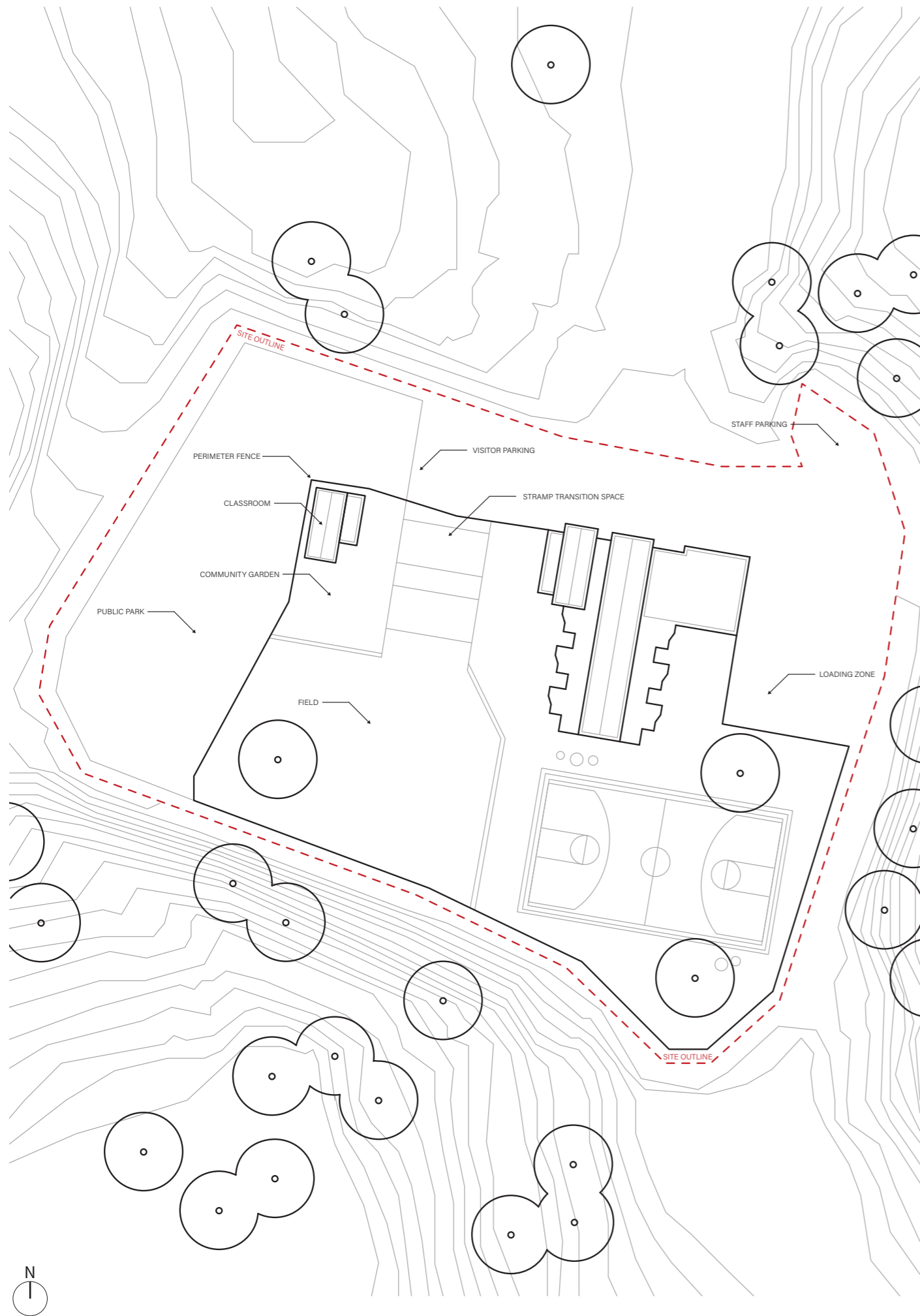
Figure 4.2 Site border



Figure 4.3 Natural topographical barrier



Figure 4.4 Surrounding community



Site Design

The site's position and layout were derived from exploring how other youth detention centres have approached site positioning and form and downscaling them, in terms of both plan and elevation, into a more normalized and approachable size, adopting a more residential form to help generate community acceptance through a visual reflection of the surrounding area. Pitched roofs and horizontal wooden cladding engages with the materiality of the immediate community while the single-storey building allows the site to be dwarfed by the surrounding architecture, integrating the facility within the landscape rather than exposing its purpose through architectural distinction and height. Reducing the intimidating presence of such a facility helps to build community acceptance, of both the building and its residents, which becomes further noticeable in how the youth are treated once released.

While community acceptance and integration drove the exterior design, the internal site explores how to create a journey between activities and spaces, and how program shift could be used to normalize daily movement. This journey starts with an outdoor living area, designed as a flexible extension of the living space. This acts as the start of a resident's journey between home and school and merges the threshold between the interior and exterior through shared materiality to make the transition from the living room to the outside less abrupt. Following this a weaving stramp¹ design divides the journey path, adding independence to residents by offering a variety of levels, textures and routes to be explored (figure 4.8). This diverts users from a linear and repetitive path and further simulates the variety of choices offered in normal daily commutes. The rest of the site is dedicated to sports and outdoor activities, with a basketball court and a small open field towards the

rear, and a communal garden offering many different activities and learning opportunities for the youth while also providing ways for residents to give back to the community through sports, produce and learning experiences to further develop a positive and accepting dialogue between offenders and the general public.

Wrapped around the site perimeter is a facility fence, a feature needed for security purposes (figure 4.9). However, an attempt has been made to domesticate this and remove conventional symbols of incarceration such as barbed wire and visible cameras and make it appealing to both the residents and the public. Once again influenced by the surrounding residential architecture the fence is opaque. This offers residents privacy while restricting public prying, however, the site typology allows for rooftops and vegetation to overlook the perimeter, re-establishing a connection with the wider community. To provide privacy without enclosing the youth within an entirely fenced perimeter, where possible the buildings themselves form the perimeter wall, reducing a caged feeling in the site. These structures are positioned at the lowest point of the site, with the forested natural typology at the rear forming a valley between the architecture and the environment, disguising the height of the perimeter through the environment and providing a natural flow down through the site.

¹ Stramp is a recognized architectural term for a combined stair and ramp design. Origin unknown.

Figure 4.5 Site plan

Floor plan

The plan is designed to give as much control to staff as possible without affecting the normative feel of the building. The layout is centred around the foyer, a large, open room designed to be the central transition space between programs. Allowing staff surveillance was the primary concern when developing the floor plan, ensuring there are no blind spots or areas that are difficult to control. With this in mind, the plan adopted a "T" shape, with three wings branching off the central foyer. This ensures that each branch is a simple shape without details residents can hide behind and that all areas can be viewed by standing in the middle of the foyer.

The wings themselves were positioned to best provide a normative living experience through daily activity shifts. The bedrooms are towards the rear of the building, isolating them from the publicly accessible areas to emphasise the intimacy of the spaces, where the residents all start and end their day. From here the move between the common room, foyer, living room and classroom simulating the daily shifts between sleeping, greeting family, eating and then learning. Dispersed between these activities are environmental changes that emphasise movement between areas. This is achieved through the transition between inside and outside, with the foyer in between the common room and living space simulating an internal courtyard while the classroom is a completely separate structure that forces youth to leave the inside to access.

The administration wing is unique in the fact that it needs to cater towards residents, staff and the general public. It has a single point of entry, one that is directly viewable from both the reception and the foyer. This allows staff and residents to monitor who and what is entering the facility. The staff and visitor rooms are also in this wing so these parties can engage with

the residents or work without needing to enter the incarceration section of the facility. Almost even space in this facility has been designed to be as multi-use as possible, and offer limitless opportunities for learning, recreational or work opportunities as well as allowing ways for different degrees of custody to engage with each other safely. The focus on visibility, safety and division of space through plan ensures that the facility can be adapted for each individual's personal rehabilitation needs.

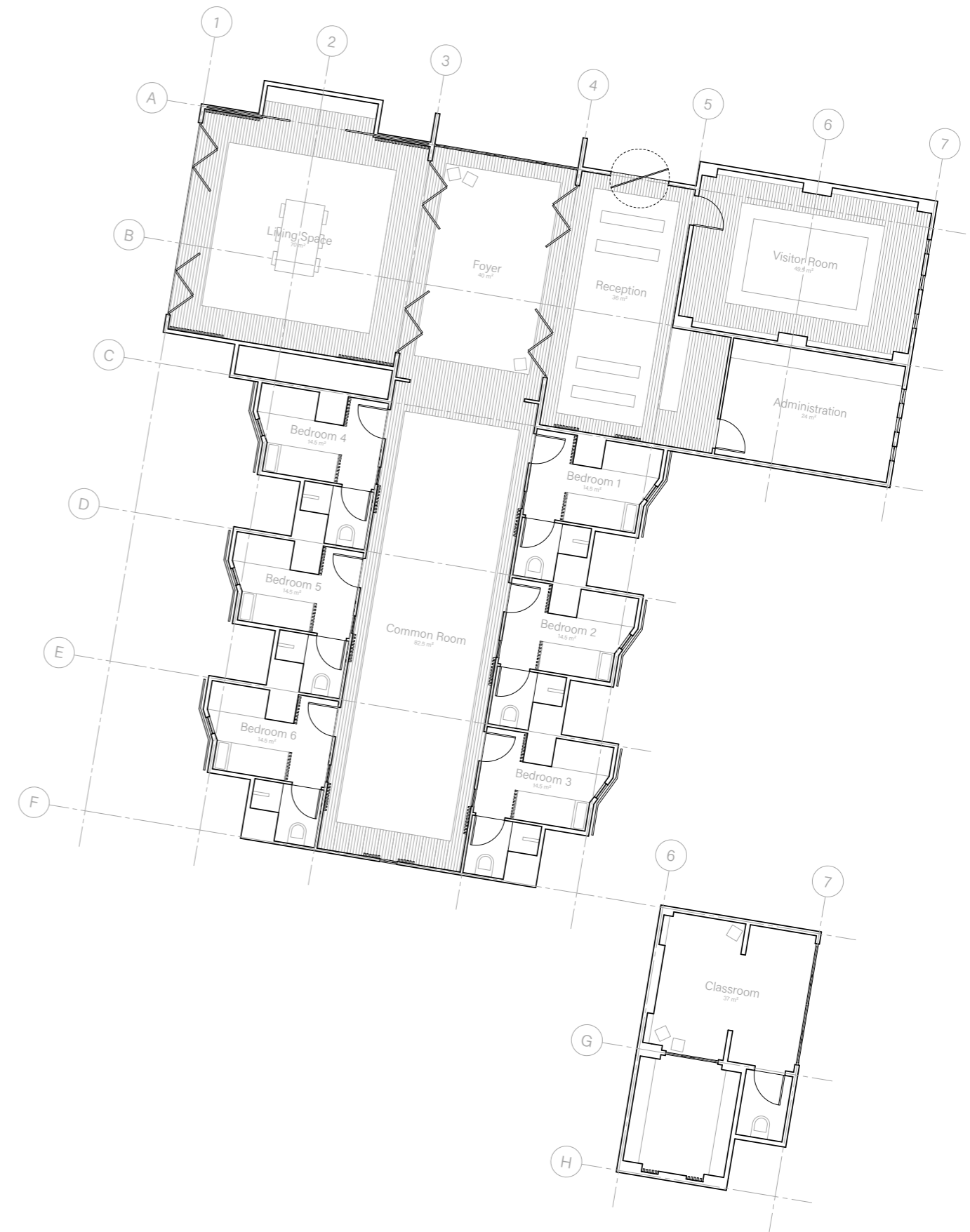


Figure 4.6 Floor plan



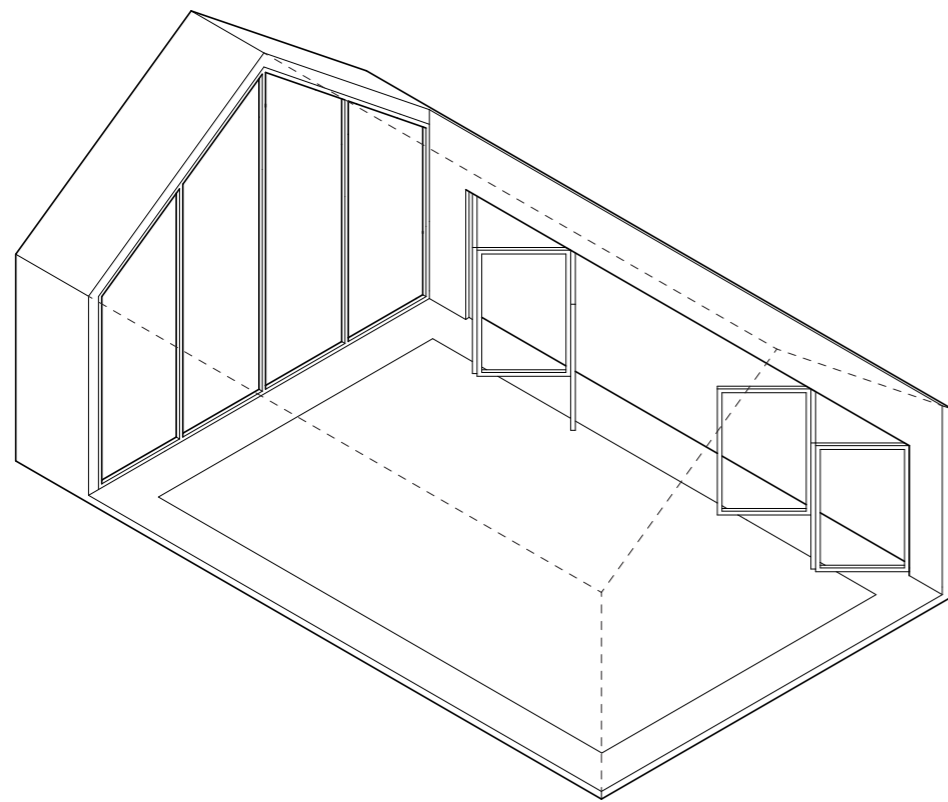
Figure 4.7 Front elevation



Figure 4.8 Stramp design



Figure 4.9 Perimeter fence



Central Foyer

Much like the central guard point of Holmsheidi prison, the foyer acts as both a security centre and a threshold between each of the facility's wings. The space is designed to resemble an outdoor space, changing materiality to distinguish the area from the rest of the building while simulating movement without sacrificing security. The large, gabled roof reflects conventional New Zealand residential design to provide a familiar and normative architecture, limiting the extent of culture shock residents feel being placed in a new environment (*figure 4.11*). The high ceiling also dramatizes the experience when entering the room, further pushing the illusion of the space as an internal courtyard. Each of the building's primary wings split off from the central room, to allow visual communication between all areas from a single point for surveillance (*figure 4.12*). Further aiding in security, each wing can be closed off depending on staff needs through sliding doors, allowing staff the ability to tailor the space depending on activities or resident behaviours.

The foyer acts as the central grounding point of the facility, separating each wing through the illusion of exterior space. Styled to resemble an internal courtyard rather than a room, the transition between low, solid roof forms to a glazed roof combined with the change in flooring materiality helps the space to act more like an exterior area (*figure 4.13*). This move was made to draw attention to the normative daily shift in everyday life between activities and space, with the foyer becoming a transition space between each wing's activities reinforcing movement between exterior and interior space. The independence a journey provides can help rebuild identity and self-worth as offering opportunities where residents feel in control of their actions and movement provides autonomy in an environment that is typically designed around

controlling and limiting residents. The large, glazed front both extenuates the gabled form of the structure and floods the space with natural light and views of greenery further linking the space with outside environments. Plants have many positive effects on the human psyche, notably they reduce anti-social behaviour through colour, smell and connectivity to nature, however, they also provide a recognizable sense of passing time. Allowing residents to see changing seasons and plant growth lets them observe a physical change over their time at the facility, and breaks down the monotony of structured days.

As the central room of the facility, each wing branches from the foyer's position and allows fluid movement between spaces while allowing the diversion of spaces depending on the needs of staff. Closer to the front of the building, each side is flanked by public areas. To one side there are the staff rooms and reception, designed to allow visitors to watch the facility through the foyer space, while the other side contains the communal dining room and looks out over the exterior yard. To reinforce the privacy of the spaces, the bedrooms and their connecting corridor are pushed to the rear of the site, with the entrance hidden from public view. As well as the physical privacy this provides, the action of moving deeper within the facility increases the distance between the public and private areas, forming a more intimate environment around the bedrooms, helping residents to feel more comfortable and less observed when occupying those spaces.

Figure 4.10 Foyer isometric

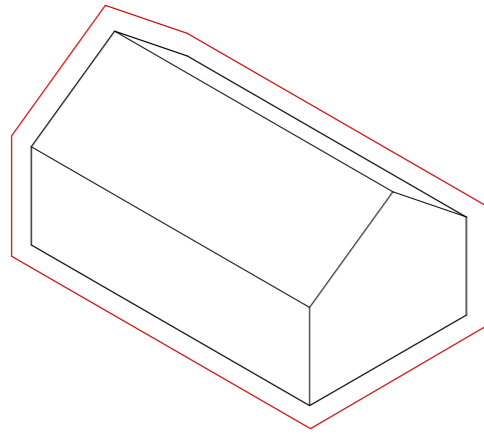


Figure 4.11 Typical gable form
The simplification of a typical residential form helps normalize the space by reflecting the surrounding context.

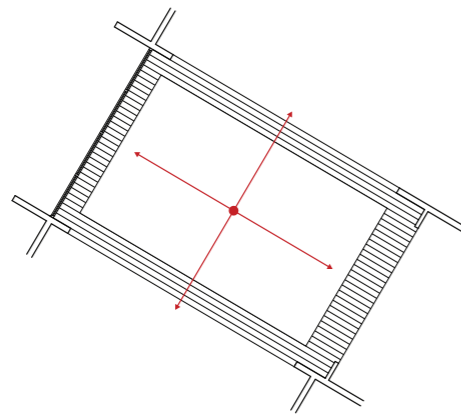


Figure 4.12 Visual centrepoint
The plan layout allows each of the facility's wings to be monitored from the central foyer.

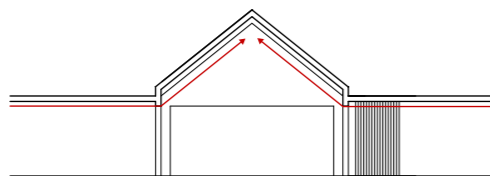


Figure 4.13 Height transition
Raising the roof within the foyer simulates an outdoor environment and exaggerates movement into the space.



Figure 4.14 Glazed interior gable

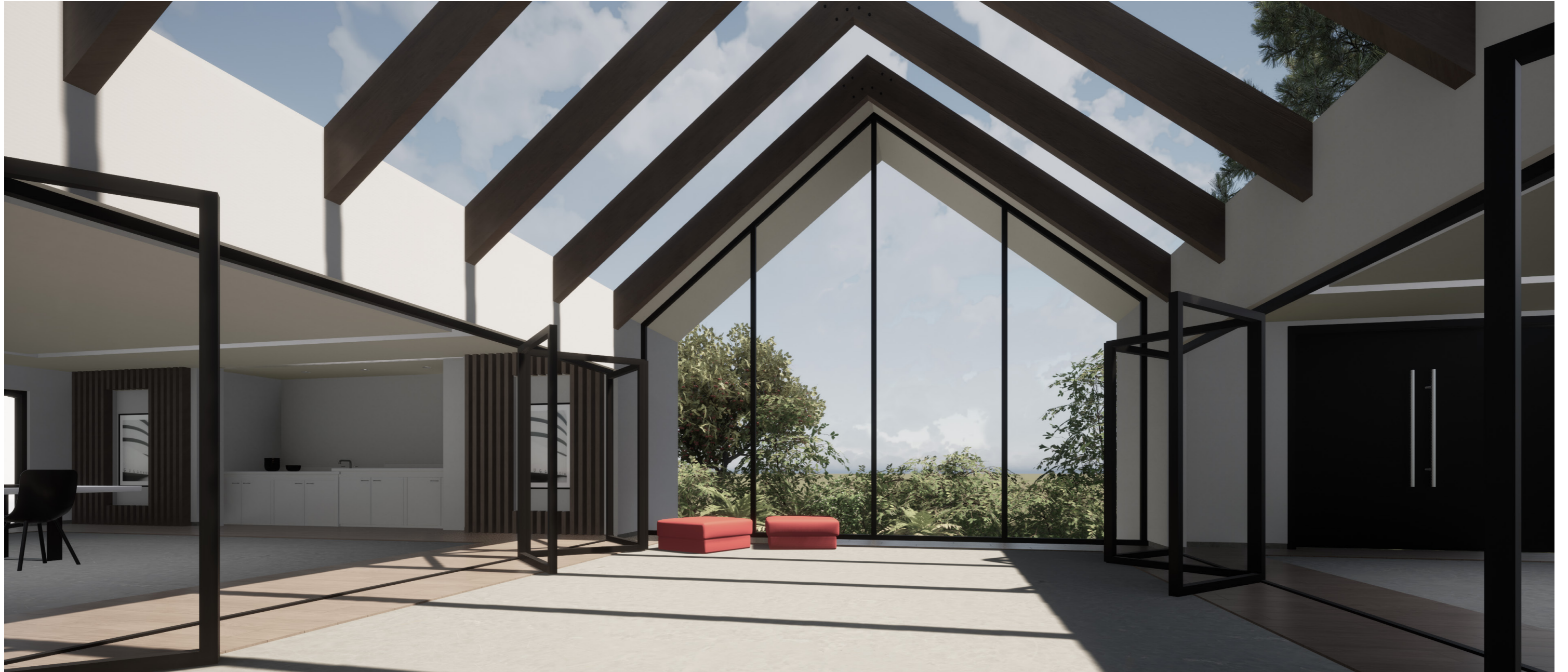
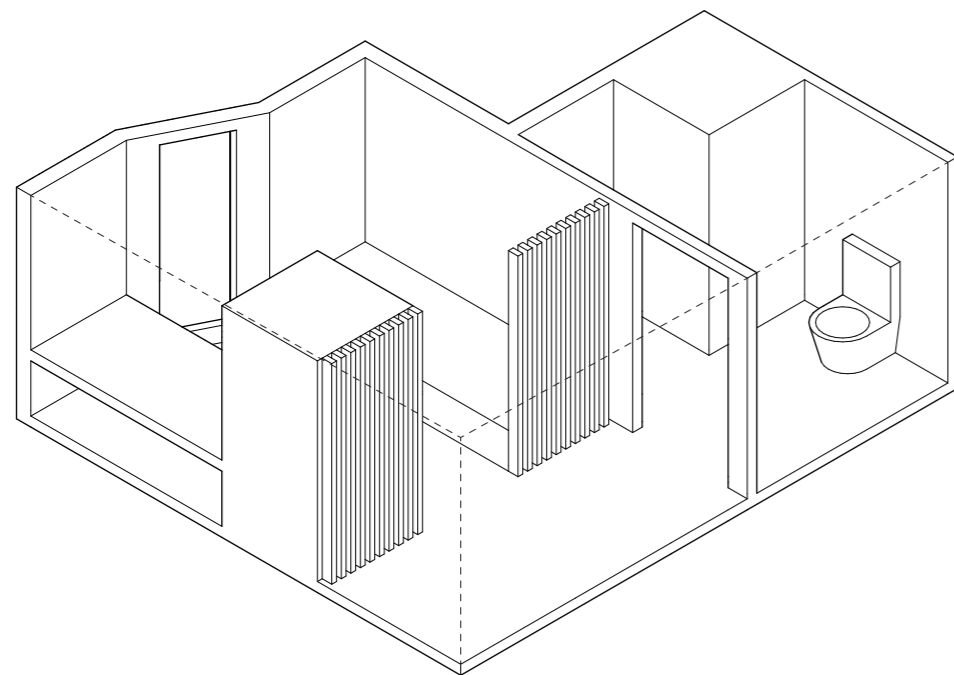


Figure 4.15 Central foyer



Bedroom Unit

For residents, the bedroom acts as a sanctuary, the only place of true privacy. As such, the environment has been designed to be a moment of peace and seclusion within the primarily communal-driven architecture of the rest of the facility, providing moments of self-reflection for the youth offenders. This aesthetic departure from communal to personal has been accompanied by a tonal shift in lighting aimed to privatize the space, with the perforated exterior panelling being designed to soften the exterior light as it enters while the cast shadows break up the uniformity of the room and reduce the sense of external surveillance for residents while still providing staff visual oversight through internal measures. The trunk-shaped cut-outs allow a connection with the natural environment to be formed, imitating the quiet contemplation of a forest. The oxidized colour of these steel panels naturally plays with the tint of sunlight entering each space, providing a warmer tone than that of the other spaces. Inspired by the similar design strategy in Holmsheidi prison, the back walls of each unit wedge outward. This move was made to orientate each unit towards either the morning or evening sun, granting each bedroom a further sense of distinction (figure 4.17).

However, while these spaces have been designed as comfortable retreats for residents, they are also purposely claustrophobic to incentivise socialization in other areas. Providing a limited amount of usable floor space, and a strip-based floor plan that makes the rooms difficult for multiple people to inhabit, youth are incentivised to spend time in the more open areas of the facility and engage with the communal aspects of the design (figure 4.18). The ceiling height in these spaces is also reduced, as well as only having east and west-facing windows, which limits midday sun and encourages residents to congregate

in the warmer, more sunlit rooms of the building.

A prime concern throughout the design was how to provide a safe and secure environment for both residents and staff. Providing a rigid environment that can withstand the brutality and vandalism often found within penal facilities isn't difficult however balancing these features with the already established and explored principles around rehabilitation leads to a focus on more normalized concepts. Furniture has been architecturally integrated where possible for permanence with personalization and identity exploration expressed through less dangerous means such as room colouration and décor. Privacy screens were changed from walls to segmented partitions to allow staff visibility into the entire room from the internal windows (figure 4.19) with areas of complete privacy, such as toilets, delegated to separate rooms, while services such as sprinklers, lights and AC units were set into the ceiling to prevent the likelihood of users purposely breaking systems. Safety for the users becomes highly important within these private spaces due to the high risk of unseen self-harm or antisocial behaviours. Each unit incorporates a door that can be locked on either side, allowing staff to contain those that pose a threat to themselves, or for a user to lock themselves in a room should they feel overwhelmed or socially removed. Much like in contemporary detention centres all these locks can be overridden by a staff master key but this ability to control spaces allows residents more freedom while not interfering with staff control.

Figure 4.16 Bedroom isometric

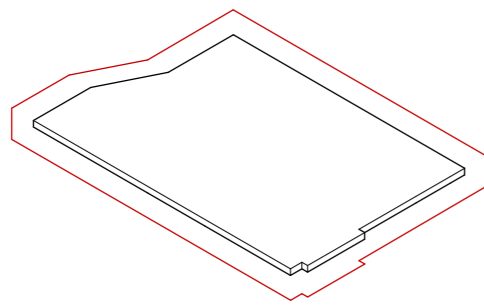


Figure 4.17 Floor plan with wedged window
The wedge shape of the units gives unique overlooks for each bedroom.

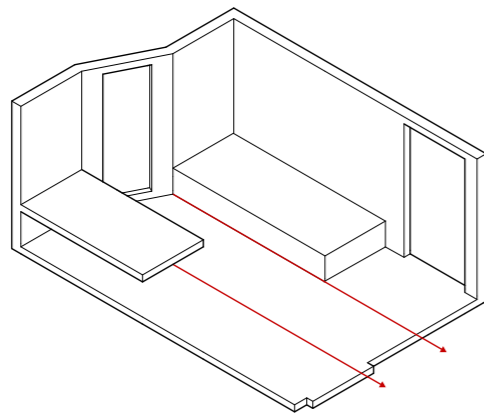


Figure 4.18 Strip based design
Dividing the rooms into strips allows for both modular uniformity and tightens the space.

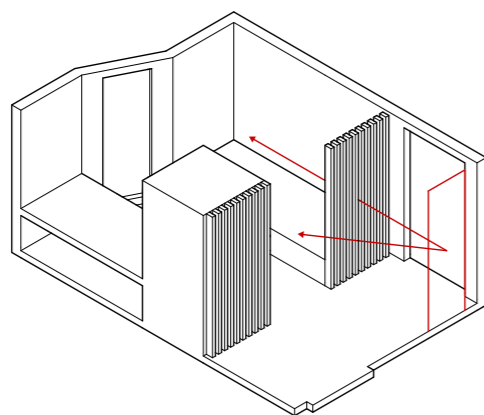


Figure 4.19 Visual security
Segmented partitions allow for sight throughout the whole room from the communal corridor.

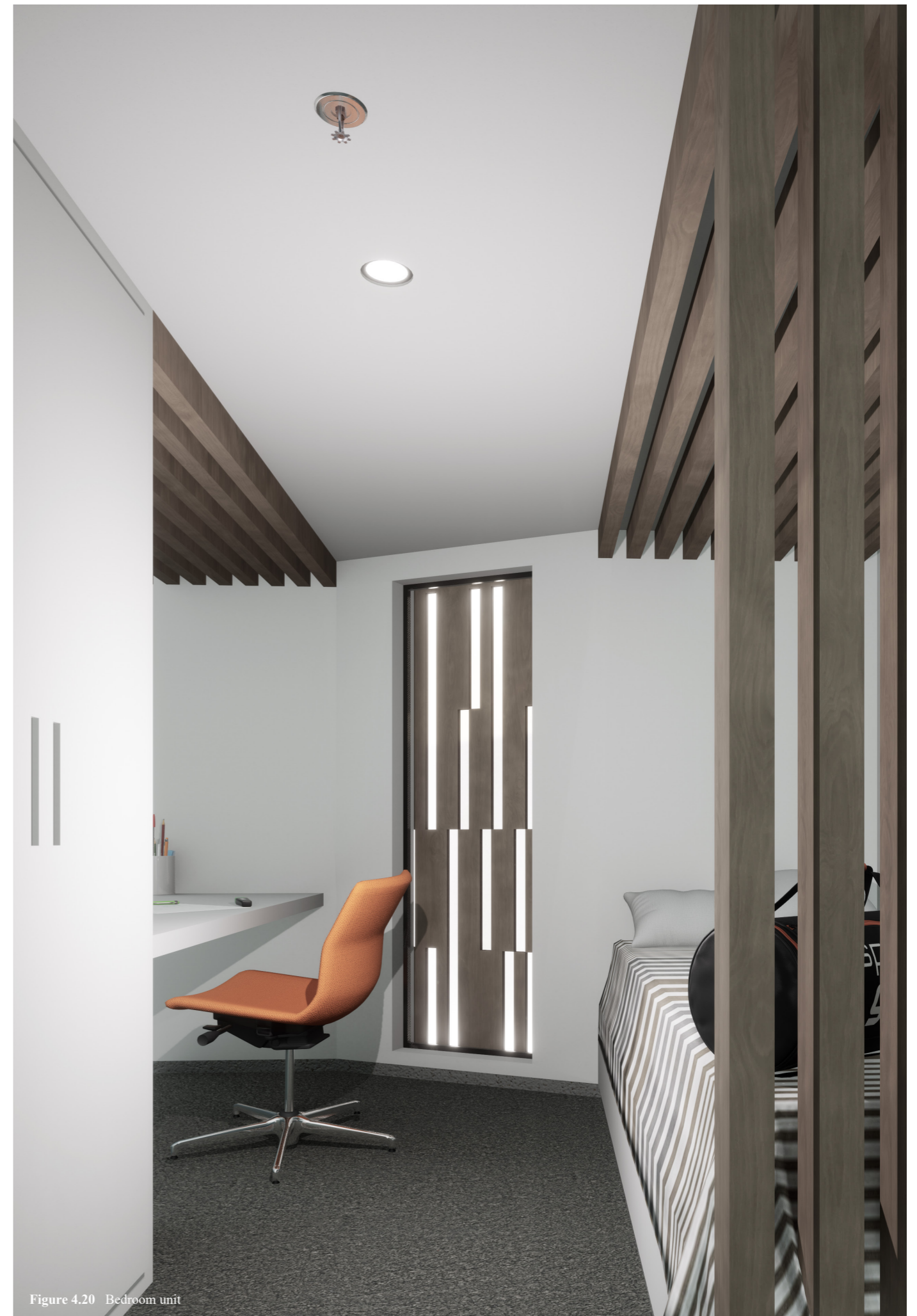


Figure 4.20 Bedroom unit



Figure 4.21 Separate bedroom and bathroom



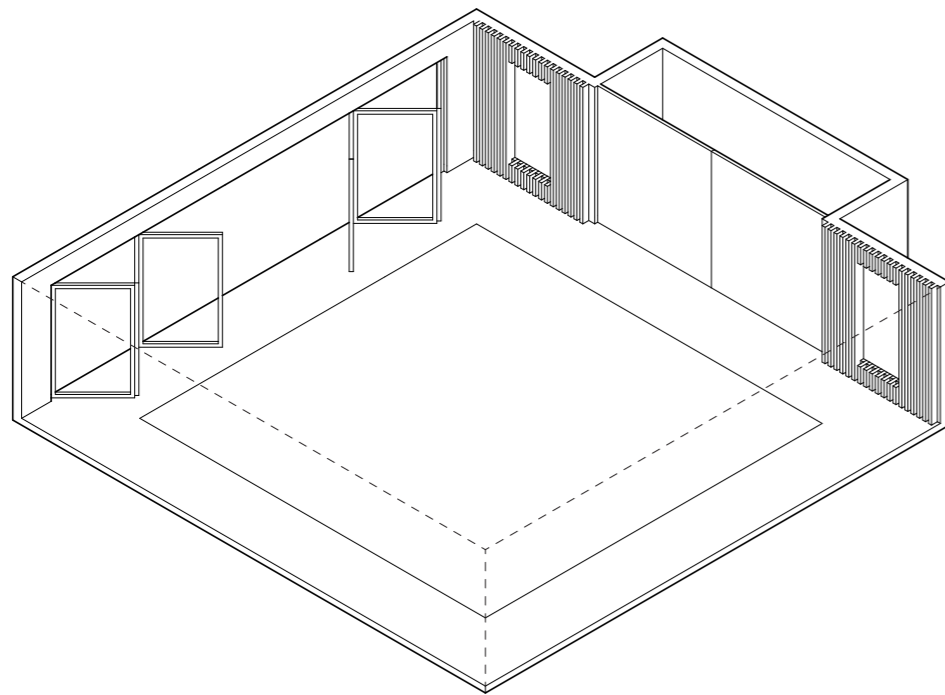
Figure 4.22 View from the communal room

Bathroom & Ligature Points

Each unit includes its own private bathroom to allow staff more freedom to lockdown certain residents or control space uses for extended periods of time. With these spaces being the most private areas of the design, they are inherently the most dangerous, especially when considering the high volume of ligature points a typical bathroom contains. Ligature points refer to anything that can be used to tie rope or cord to self-harm and are a primary concern within any facility housing at risk residents. To combat this the fittings in these bathrooms are specifically designed to reduce dangerous finishings, and include rounded edges, invisible fixings, and solid volumes. To reduce the need for extra fixings, each bathroom within this concept integrates as many fittings as possible into the room's walls, with storage, sinks and showers all embedded in the architecture. The few exposed fittings that are retained are modelled to be smoother and bulkier. Some typical bathroom comforts have had to be removed in favour for a more safety conscious design, such as toilet lids and adjustable shower heads, however through robust materiality a still domesticated and normalised aesthetic has been achieved, as to not disassociate residents with culture shock.

Figure 4.23 Bathroom





Living Space

Initially inspired by normative open-plan living spaces, the dining area is designed as a multipurpose communal environment that draws upon the same fundamental concepts behind residential open-plan designs to encourage socialization and extended habitation. A strong connection to the natural world through light and visual communication normalizes the environment, providing a similar spatial organization to a conventional home with the bi-fold doors opening onto the facility's exterior space. In order to reduce antagonizing residents through traumatic spaces the room follows principles of normative design, both aesthetically through light, common materiality and spatially, adopting the conventional position of the living room as a threshold between privacy and community. Contrasting the low socioeconomic architecture youth offenders are typically accustomed to, the materiality invokes a level of modernity, continuing to create a residential experience through reflecting modern housing while attempting to avoid the aesthetics youth may associate with traumatic experiences. These moves help to reduce the level of culture shock residents feel while in the space, since the shared language and spatial distribution make the environment feel more familiar and comfortable.

The familiarity of the program within the space is accompanied by a stripped-back aesthetic, designed to act as a canvas for residents to project their home environments and experiences onto. To further value youth belonging, limiting the amount of specific trim, details and furniture both allow a safer, more durable environment but allows for youth the space to feel familiar to most residences. This also amplifies the socializes of the space, with the minimalism drawing attention to the interactions of the space rather than the architecture itself. Light is used to

frame these social areas, with light wells defining a central space and giving a sense of etherealness and intimacy to the interactions within the light boundaries. Due to the importance dining spaces hold within a household as the familial centre of a home, encouraging positive social connection in the space helps to recreate a feeling of belonging, or redefine the meaning of family to those with estranged relationships or difficulty connecting with relatives.

The security of the space is once again derived from control and durability. Staff can shut off areas and open other areas while still maintaining visual contact with the whole facility. This is no more apparent than with the kitchen slider, where the kitchen size can be controlled and moderated depending on how comfortable staff are with residents accessing the kitchen (*figure 4.26*). Ligature points are once again considered throughout the kitchen however not to the same extent as the private areas due to the space's public nature. Utilities are integrated within the architecture again and dangerous fixtures such as taps and draw handles are either removed or carefully considered. To provide visual interest and texture to the space without increasing the level of security concerns changes in flooring were explored, designed to also facilitate the space's multi-purpose nature, where the floor thresholds can help define spaces for social connectivity and games.

Figure 4.24 Living space isometric

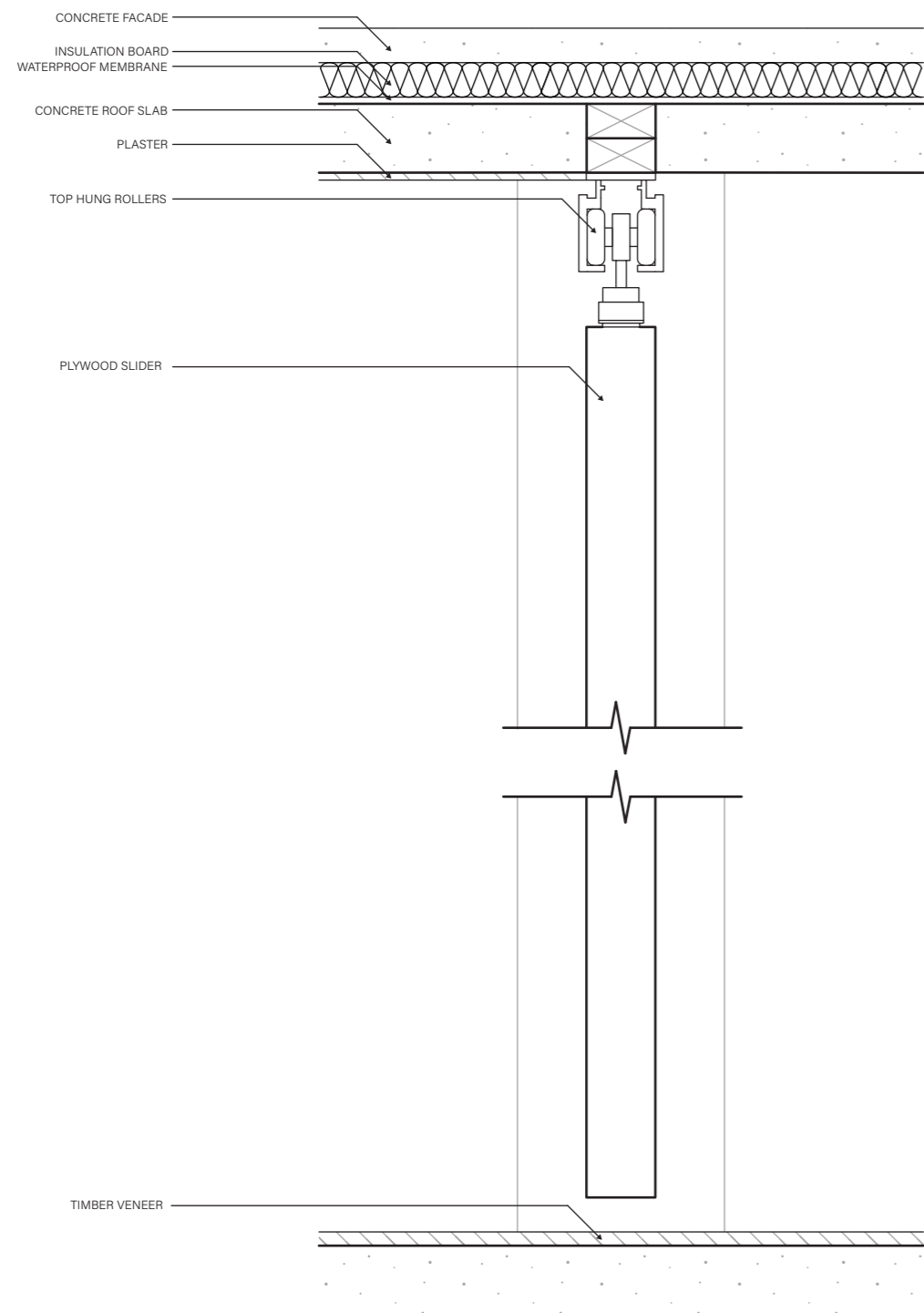


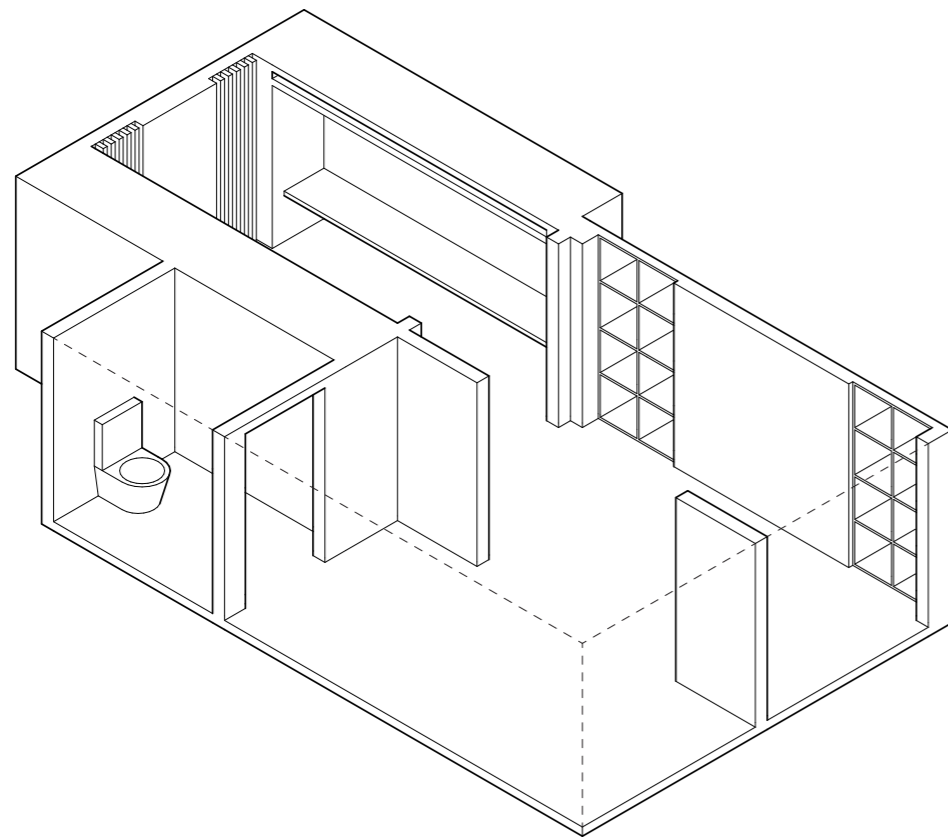
Figure 4.25 Kitchen slider detail 1:10 at A4



Figure 4.26 Kitchen security slider



Figure 4.27 Living space



Classroom

In a move to separate learning and living, and to better simulate daily shifts through a detachment of program, the classroom is removed from the main building by a landscape of intertwining paths. This space acts as a threshold between programs, and creates a journey between each activity, promoting the same sense of independence and movement present in daily commutes. The structure itself is smaller and architecturally distinct, deriving its form from more contemporary learning environments rather than a residential precedent to further differentiate it from the interior architecture of the living area. While keeping the materiality as robust and secure as possible, the darker external colour scheme contrasts with a bright, softer interior helping to entice the residents into a space that is typically disliked by youth offenders, whose disenfranchisement and mistrust of the education system often leads to a lack in educational achievement and fulfillment.¹ The darker exterior acts like a shell, enveloping the warmer tones of the interior, and when coupled with the smaller intimacy of the room and lack of large windows, make the environment feel more protective of those learning inside.

The interior is inspired by contemporary learning design language to make education more enjoyable and comfortable. Robust carpeting to avoid vandalism and simple cushioned seats minimize security concerns by providing less for youth to harm themselves or others with, while a contrasting colour palette with that of the rest of the facility brings personality uniqueness, defining the space as separate without the accompanying childish personality an overuse of bright colours brings. Due to the high amount of youth offenders with cognitive impairments such as ADHD, making sure to limit external distractions and focus on learning was a prominent consideration. High windows

with little overlook become less distracting, while the primary teaching space is faced away from other activities to isolate youth within their work (*figure 4.30*). While external distractions have been limited, providing opportunities for stimulation within more monotonous activities has been explored. Limited wall decorations, movable furniture and a clean design have been proven to help students with learning difficulties concentrate and can provide stimulation and further engagement in learning activities.²

To facilitate many different teaching styles, the space can be divided between a multi-use open area and a computer lab with glazed bi-fold doors to encourage space division or extension while still providing a visual connection between each teaching area (*figure 4.32*). Furthering the variety of teaching opportunities, the building's site position places it as a centre point between multiple learning environments, allowing staff to quickly and efficiently switch between activities or safely split the residents up between community gardens, sports fields and areas for public/resident interactions (*figure 4.32*). Much of the same security concerns of the primary building are echoed here, with a visual connection between the spaces, a limited amount of exposed or reachable fixtures and consideration of ligature points having been explored (*figure 4.29*).

1 Sutherland, "The relationship between school and youth offending," 3.

2 Alkahtany, "Space Design for Hyperactivity and Distracted Attention".

Figure 4.28 Classroom isometric

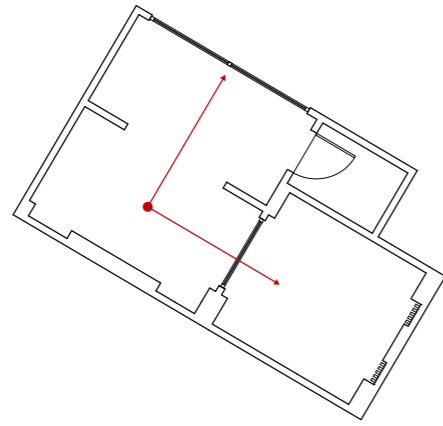


Figure 4.29 Visual connection between spaces
Much like the foyer the space is designed to be able to be monitored from a static central position.

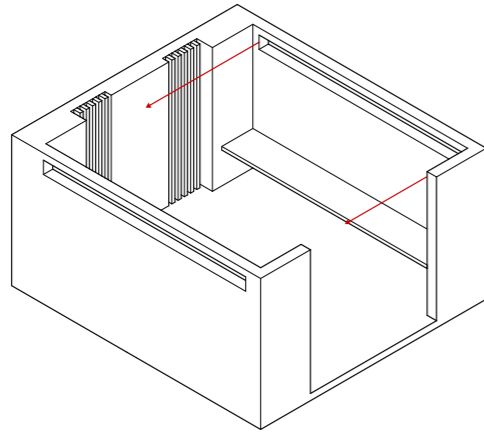


Figure 4.30 ADHD-influenced design
The room incorporates features such as high windows and less decor to limit learning distractions.

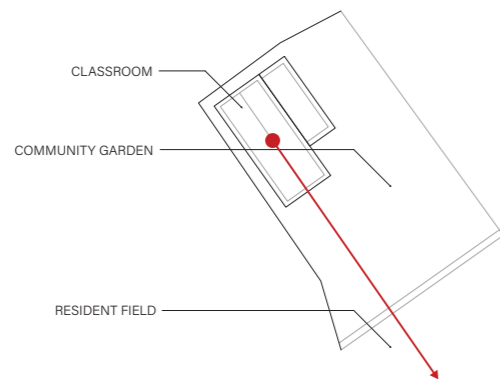


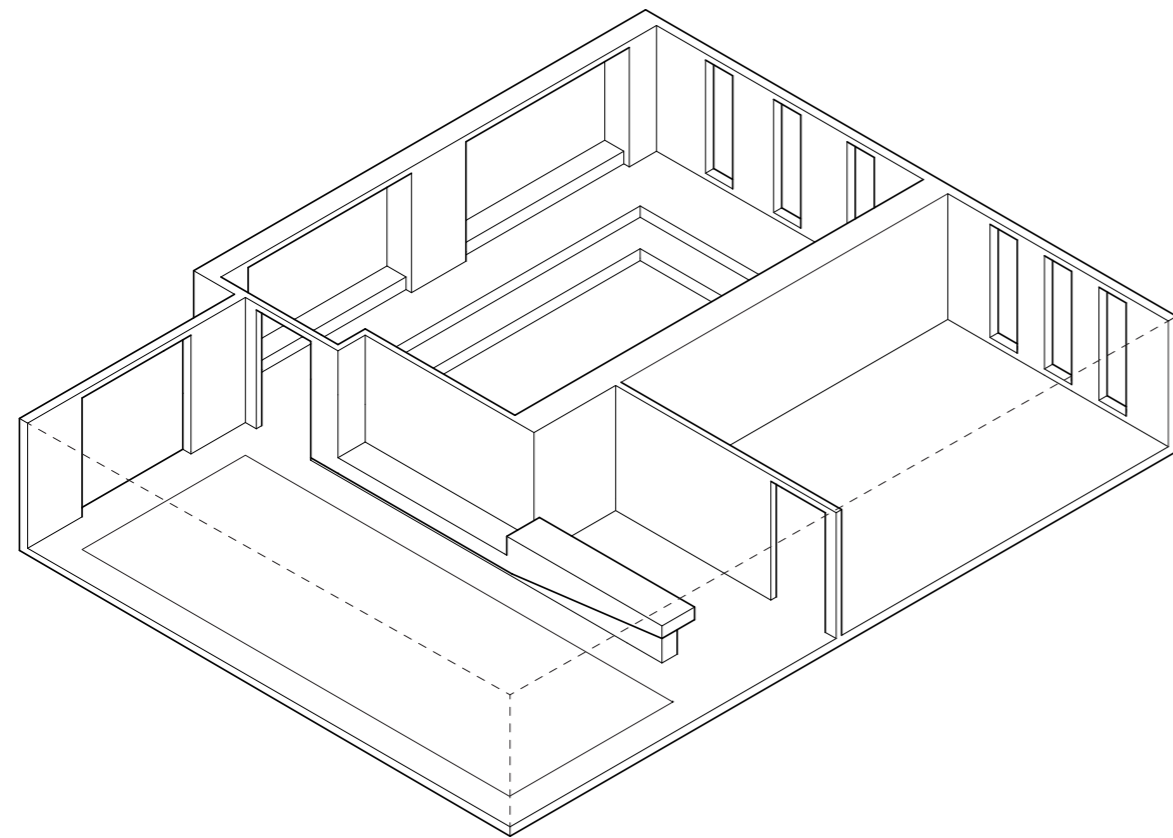
Figure 4.31 Connection between learning environments
The classroom's position on site provides smooth transitions between different learning opportunities.



Figure 4.32 Classroom divider



Figure 4.33 Control of space



Administration

The left branching from the foyer contains the entrance, reception, staff areas and visiting space. Its position opposite the foyer and kitchen creates a sight line across the majority of the site's communal areas, allowing staff to survey almost all congregation areas as well as being positioned as a necessary central point in any resident/public interactions. This becomes particularly crucial during after-hours or lockdown periods when certain sections are shut down so any attempt to breach these can be seen and intervened with, as well as to provide a second security point between the facility foyer and the main entrance. Through this entrance, all site movements can be monitored, and once again allows staff to control the flow of people through the facility. The use of a glazed bi-fold door in this section not only establishes a visual connection for staff but also allows residents to better connect with the outside community, normalizing daily experiences such as visitors, deliveries and staff movements, building trust between both residents and those entering the site without sacrificing safety through physical contact. While these doors are designed to be closed during most times, the glass allows residents to quickly alert staff should an issue arise, where the modular foyer space allows for division between difficult parties.

The combination of the staff area with the visiting space within one wing is another move designed to allow more staff control over the use of space. Visitors can wait in the reception, watching the youth through the glass doors or they can be brought into the private room to avoid interactions with residents (figure 3.46). Both these moves help to normalize the visiting experience for the visiting parties, while also providing enough utility to make sure visiting parties feel safe and comfortable in the space. This continues to the detailing of the spaces, which can adopt a more

aesthetic approach due to the reduced need for a secure environment. The reception takes inspiration from contemporary residential design, much like the rest of the facility, with a higher ceiling, common materiality, and a long, skinny profile to welcome users to the space. As a collective transition space between public and private areas, the room facilitates the same function as a hallway and has been designed accordingly (figure 3.45). Providing a recognizable form and aesthetic welcomes users to the space through an identifiable and familiar use. Not only does this help visitors feel welcome and safe within the environment, but it subverts the institutional architectural expectations such a facility holds. Instead of the cold concrete and metal barring that propagate throughout penal architecture stigma, the relatively homely scale and materiality of the reception comfort visitors and provide a more reassuring experience.

Further departing from the architectural expectations of penal environments, the private rooms are designed to make visits and interactions between residents and family more comfortable, with cool lighting and a communal seating pit feel that attempts to make the experience more special and intimate to all participants (figure 3.44). Much like the rest of the facility, the furniture here has been incorporated into the architecture for safety concerns, however, with less need to provide quick and safe access across the space in this room for staff, levels have been more deeply explored to heighten the space while also emphasizing the moments experienced in the space through the uniqueness of the level change. Descending into the pit forms a more intimate experience between those experiencing it together through proximity and shared space, to emphasize how personal and important these visits are.

Figure 4.34 Administration isometric

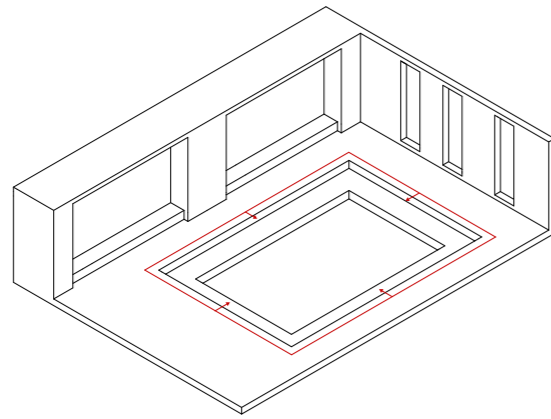


Figure 4.35 Sunken floor providing intimacy
Restricting space brings users physically closer and romanticizes interactions in the pit.

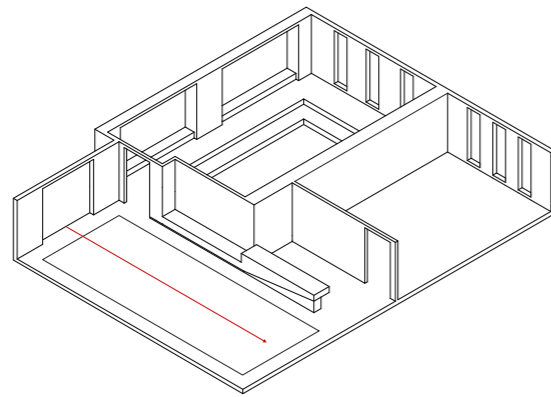


Figure 4.36 Passageway between public and private
The communal passageway splits the facility between residents, staff and visitors.

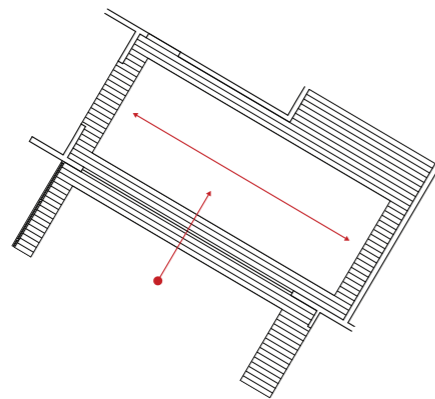


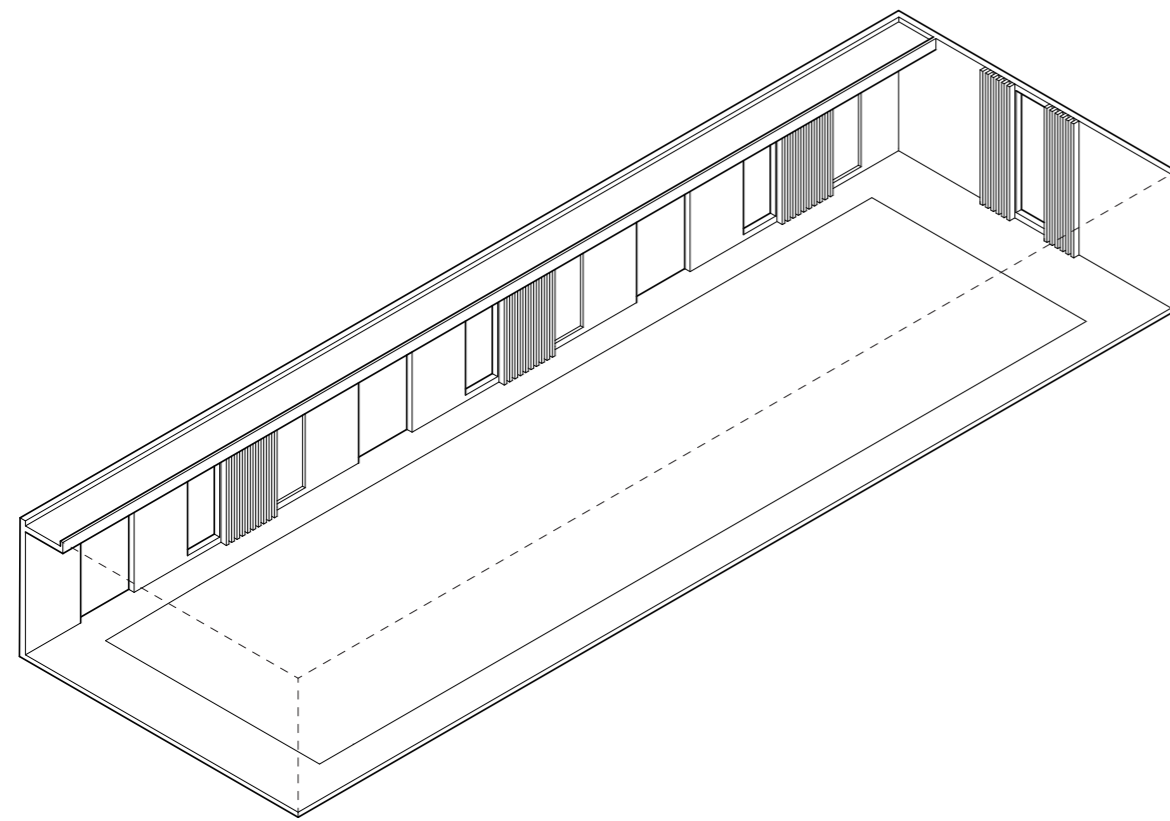
Figure 4.37 Opportunities to view daily life
Glass walls allow residents to view visitors, staff and deliveries to normalize the facility.



Figure 4.38 Sunken floor



Figure 4.39 Living space



Common Room

The communal space was primarily designed around smell and vegetation, an exploration of how spaces can be divided through the senses. Much like the other rooms, the main form of the space is simplified and multi-purpose, inspired by stories of residents in similar facilities using these long, inter-room hallways has areas for cricket matches and similar. The primary feature of this space is the continuation of the pitched ceiling, helping to extenuate the space's height and encourage residents to congregate in this space rather than the smaller private bedrooms.

The raised planting adds to this encouragement. Positioned safely out of reach from residents to not pose a safety concern, the greenery adds a comforting and natural connection to the space that is absent due to the internal layout of the facility, while the scent the vegetation brings helps to distinguish it from the rest of the rooms (*figure 4.42*). The rehabilitative effects greenery and nature provide, especially how a connection to the natural environment and scent can reduce anti-social behaviours through mitigation of stress and anxiety,¹ elevating the communal space from an inter-room hallway to an experience reflective of the site geography. To further accustom residents to the surrounding community a mixture of plants that incorporate both the look and smell of the surrounding nature reserve are used and further deconstructs the threshold between interior and exterior space.

Along each side are three-bedroom units. Each unit has a window between the common room and the bedroom, allowing both staff and residents transparency to room activities. For staff, this offers security, where each resident can be viewed and accounted for to ensure safety while for residents this provides opportunities for identity and personality to thrive (*figure 4.43*).

Through personal choices in bedroom design, residents can express themselves. Accent colours, such as chairs and bedding, posters, decor and space personalization help to continue fostering identity within environments that value uniformity. These opportunities to express themselves offer residents solace and comfort in objects and themes they enjoy while the responsibility given to them through choice continues to fulfil a sense of belonging and personal value. Having these choices viewable from communal spaces allows other residents to also view another's identity and connects youth with similar interests. However, while expression is an important facilitator of rehabilitation, allowing unrestricted personalization creates issues surrounding gang-affiliated symbols or colours and clique-instigated bullying. While an obvious concern, with full staff viability to these personalization options, these issues can be easily avoided through careful consideration, a preselected catalogue of options or repeating changing each room.

¹ López, "How to build for success: prison design and infrastructure as a tool for rehabilitation".

Figure 4.40 Common room isometric

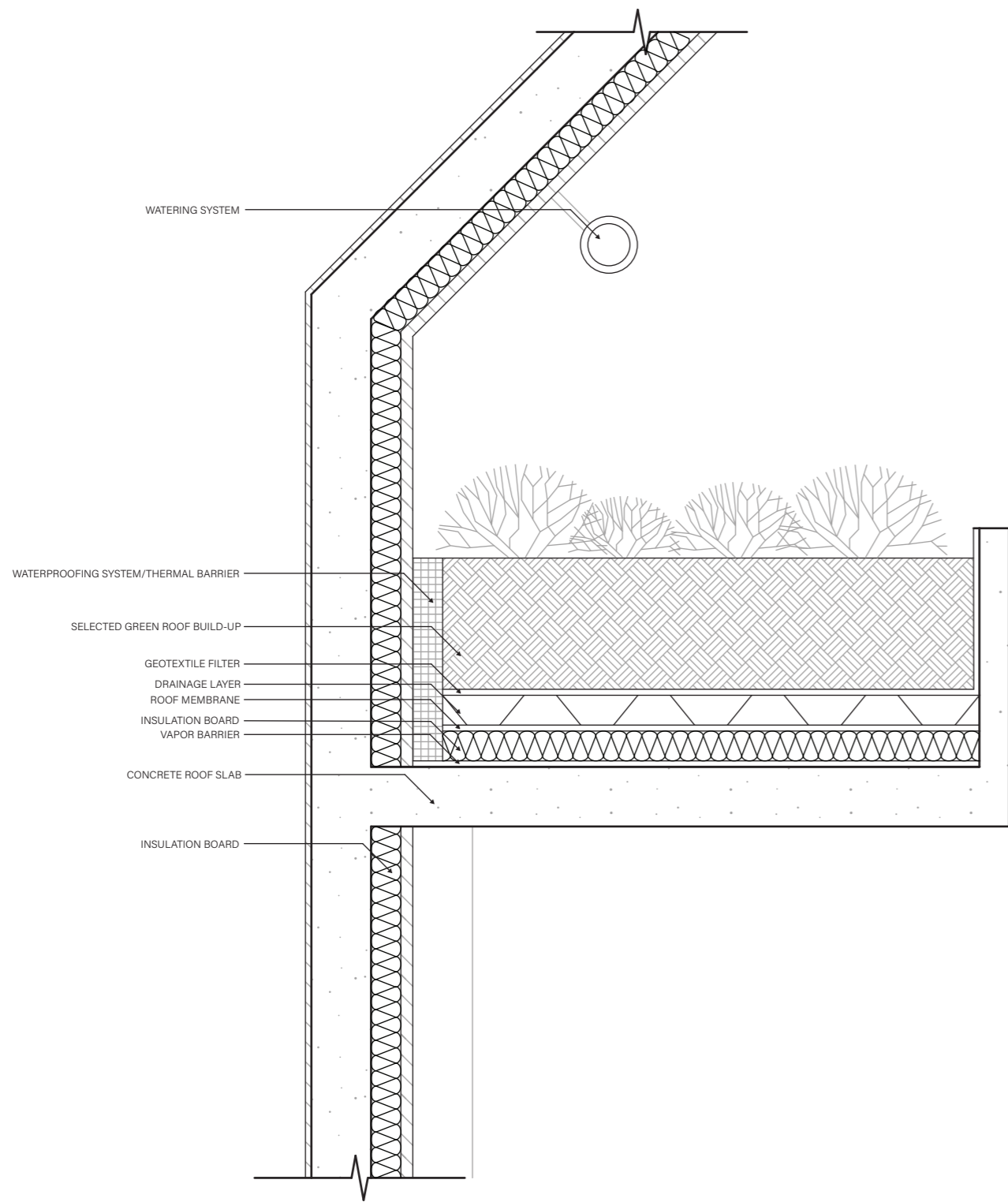


Figure 4.41 Green roof detail 1:10 at A4

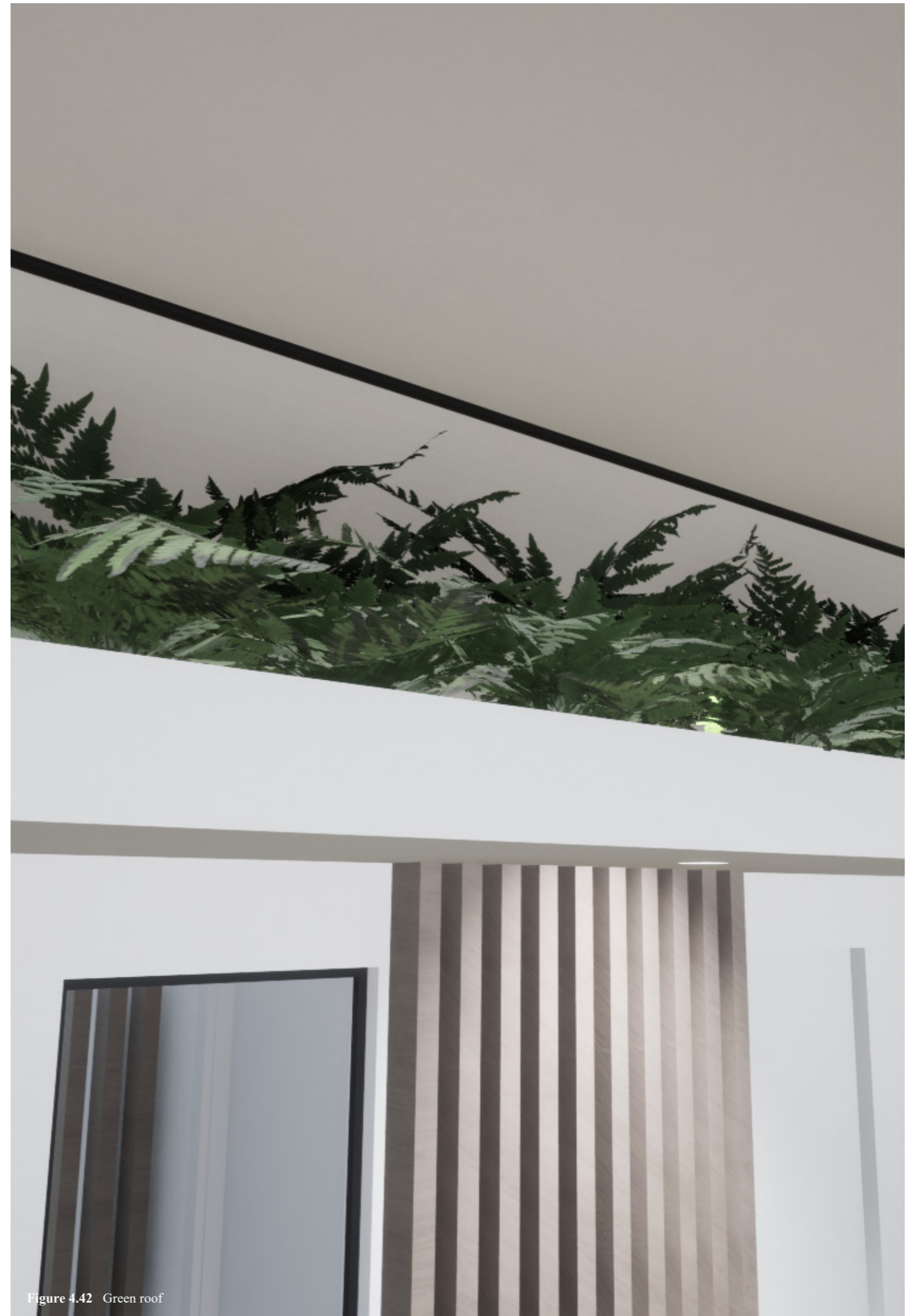


Figure 4.42 Green roof



Figure 4.43 Common room wall detailing



Figure 4.44 Common room

V

PŌWHIRI

Rehabilitative design is built upon a user's experience. While this proposal found the basis for its principles in research and case studies, the effectiveness of the project as a rehabilitative device can only be truly critiqued through how the space is experienced by its users. This chapter aims to reflect upon the design through an experience of a common activity that would occur within the space, assessing the building's functionality and ability to perform this task.

This chapter follows an account of a new resident experiencing their first introduction to the facility through a pōwhiri. The welcome is an important stage in rehabilitation, and the power a pōwhiri holds as both a spiritual and cultural experience provides a unique perspective to test the design through.

Not only does a pōwhiri hold sentimental value for the residents, but it also offers an opportunity where all users of the building can experience the design together. Ceremonies such as this help to build connections between the residents and staff while also offering an opportunity for the wider community to observe the facility's activities. This chapter aims to test the design through the experience and view how the architecture would relate to common activities and user groups.

I arrived in the early morning, just as the orange sky was breaching the horizon. The air full of anxiety, I was ushered out of our van with the rest of my cohort and gathered just out of sight of the facility in a small, intermingled group of staff and soon-to-be residents. Here we waited in the cold until we heard a call of a kaikaranga echoing down the street and our welcoming ceremony began.

Slowly I made my way up the hill and crossed the threshold of the property, onto the grounds that will be my home for the next year. Here the building begins to come into view, as a small, mostly wooden form. Expecting a dominating structure its residential aesthetic was surprising and helped to quell my nervousness as I approached the facility while ahead of me each group's kaikaranga exchanged calls. Along one side of the path, current residents and staff stood, watching us as we inched closer towards the entrance to their home. The group stopped often, paying respects to the land and each other, which allowed me moments of pause to become more comfortable with the building and the people I would soon be enveloped by.

After we have finished our arrival, the kaikaranga welcomed us, and with the pleasant weather continuing we took our seats opposite the tangata whenua in the shadow of the facilities gable.

Once both parties had seated the Whaikōrero began. The host speaker started first, a current resident, welcoming us all to the community. After we had been welcomed the residents sang a waiata before allowing us as the visitors to speak. The staff within our group sang their waiata and concluded their speeches by presenting a koha to the tangata whenua on behalf of all the new residents. A notion that was graciously received.

We finished the ceremony with a Harirū, greeting each member of our new family with a hongī. Once finished we all made our way into the comfort of the inside as a single community. The differences between us have been blown away by the outdoors. I made my way between the rooms towards the living space where kai was being served. The shift in tone from a spiritual welcome into daily living was accompanied by the shift between the exposure of the outside to the comforting community I was now a part of. After serving myself I found a small group of residents eating in the foyer who I introduced myself to, any previous feeling of anxiety and shock long gone.

VI

REFLECTION

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CONCLUSION

Reflection

As this investigation concludes, so do the two journeys within. One a journey of research through design, where I have explored and critiqued youth justice architecture and the second a narrative journey where a proposal is developed and examined through its engagement with the rehabilitative journey. Both these journeys aimed to acknowledge the physical and physiological aspects of rehabilitative design, exploring how both facets can work in tandem to enable architecture to be a rehabilitative device. However, it is necessary to address the subjective nature of the rehabilitation process, and the influence it has on these journeys.

Ultimately rehabilitation is built upon experience and past experiences. An attempt has been made to provide sufficient rehabilitative space, however not all moments will be as effective as suggested. Both journeys rely on a complete engagement with the design, an ideal resident, to investigate all principles within the design. While this has been done to fully explore the proposal, it neglects to view the individual traumas of these residents and the differing rehabilitative needs between them. A rehabilitation program can only be as effective as the user's engagement level, something that can be dependent on how personalized the program is for each individual. On a surface level, this proposal has addressed this issue. The introduction of individuality a personalization into rooms engages users more personally, and the focus on a moving environment that can react and change dependent on activities and needs gives staff more freedom to provide this individual support. However, to present a safe and secure environment, it becomes more practical to provide a static and durable space that promotes longevity through preventing vandalism than a modular environment that can be adapted for different rehabilitative needs. The journeys

also assume a typical daily shift between spaces. Normative life is a subjective topic, as everyone experiences these shifts uniquely. While the shifts presented in this investigation were derived from a combination of what was observed in other youth justice facilities and personal experiences, these might differ from what offenders expect or would consider as normal. If taking this research further I believe both these issues would require further consideration.

While architecture is not a driving force behind recidivism, the impact the built environment can have on offender decisions has been noted as being a large enough issue for penal systems to consider. With the pipeline between the youth and adult system becoming strained through repeat offending, this research investigation aimed to explore the design implications penal environments have on recidivism, and ultimately propose a rehabilitative response. While contemporary work focuses on the rehabilitative aspect of architecture, the introduction of response to recidivism remains largely unexplored, as a link between traumatic spaces and architectural experiences.

The introduction of normative designs as a response to Hasley's idea of risk smooths the mental transition between environments. The discomfort offenders feel through the change in architecture stands out as a compelling reason behind mental degradation throughout incarceration, with normative architecture acting as a bridge that allows offenders to view the penal environment as nothing more than an extension of the outside rather than removed. Visible confinement reflects on those incarcerated, themselves closing up and reducing the effectiveness of other rehabilitative methods. Removing visual reminders of confinement and connecting the

facility with the community helps offenders to become more open to the idea of rehabilitation.

The establishment of self and identity helps to interfere with emotional and traumatic experiences space can foster by providing a sense of belonging and value. Both the experiences before and during incarceration and amplified by the restriction and implied authority architecture holds, with the lasting effects of this visible to released offenders. The cramped, punishing environments offenders are subjected to intensify spatial trauma while moments of belonging provide the opposite, spatial connection. Amplifying this connection with the architecture reduces the possibility for individuality shifts while incarcerated, and focuses offenders on self-improvement over spatial survival, an important step towards rehabilitation.

The relationship between community, geography and acceptance can be increasingly detrimental to integration if not handled correctly. The Wellbeing in prison design handbook acknowledged the importance of community acceptance for successful re-integration, as a lack of social inclusion cultivates a disconnect between offenders and expected social norms. The simulation of daily shifts through movement and journeying allows offenders to retain familiarity with normal activities such as work travel or daily activity shifts to become more socially aware and less disconnected from a community.

While this research investigation primarily focuses on youth justice facilities, and recidivism as an instigator for the prison pipeline, throughout the research the same theory and principles were discussed within the adult system. While addressing recidivism at a young age, before complete mental maturity, seems to be the most beneficial with further exploration I believe these same ideas could be applied to other penal systems, if not to reduce recidivism then to better understand the influence of the architecture of offenders.

However, the inability to personally, discuss, interview and test finding with currently incarcerated individuals gives this research a degree of speculation. A primary

limitation to furthering this research is the ethical requirements surrounding interviewing individuals under the age of 18. These offenders are still legally children, and as such the ethics approvals needed were out of the scope of this thesis. The research and findings of this proposal base their arguments on work conducted by other academics more qualified to conduct these interviews than I am, this research investigation only aims to adapt their work to my area of expertise.

Another limitation comes from respect for cultural symbolism. Culture can be a powerful device to encourage identity and a sense of belonging, and with a predominately Māori population present in the New Zealand youth justice system, incorporating Māori culture and symbolism into the design outcome would yield an overall positive outcome. However, without proper consultation with cultural experts to ensure the correct use of symbolism and avoid misinterpretation, my limited knowledge in these areas leaves me wary as to not appropriate or misconstrue a user's culture.

Conclusion

The escalation crisis youth recidivism poses through increasingly harsh sentencing and inadequate facilities if left unopposed will continue to cycle youth through a system that is unfit to provide them with the support they need. Architecture provides a unique opportunity to address this issue due to the fundamental concept of incarceration being environmental confinement. This thesis intended to investigate the role architecture plays in recidivism and the ways design can benefit disenfranchised youth and reduce re-offending. The chosen program, a small-scale youth justice facility, builds upon the rehabilitative principles of identity, community acceptance and normative design, using architecture as a vehicle for positive behavioural shifts.

With the effects of poor justice facilities reverberating throughout the penal system, an innovative design solution that not only prepared youth for reintegration but also provided a safe, secure and adaptable response is needed. Through an exploration and analysis of rehabilitation, recidivism and penal precedents a set of principles was derived, identifying the most effective design strategies, particularly by comparing how contemporary youth justice facilities have addressed these principles, and how successful that integration has been.

Built upon the concepts of normative design as a response to the negative effects confinement and social distancing fosters, the proposal models its form, circulation, materiality and atmosphere off of residential design. The discomfort and shock many offenders experience upon release due to a rapid change in culture and experiences increases the likelihood of re-offending and can be mostly linked to the dismantlement of normative actions, movements and interactions by the penal system. Architecture

that simulates daily shifts helps offenders retain their familiarity with the social norms of the outside.

The impact of identity, independence and individuality are other principles outlined across the rehabilitative design. The homogenization of offenders within the penal system cultivates an environment that lacks the positive reinforcement youth need to instil change. Opportunities to express themselves, through colour, decor or actions reminds youth of their importance and self-worth within society, resulting in a reduction of recidivism as offenders become more aware of the impact of both their positive and negative actions.

While the focus of this research was on the offender's experience, the impact community perception and social stigma had on recidivism could not be ignored. Community nonacceptance of rehabilitated offenders was identified as being a contributing factor towards re-offending rates, where offenders' rehabilitation efforts were interrupted by a communities unwillingness to welcome a criminal into the neighbourhood. Humanizing offenders was a large consideration to dismantle this stigma, allowing interactions between the public and prisoners to be within positive spaces, contexts and environments. Opportunities where both groups would be in contact with each other were maximized, so the community could not only engage more with the youth but they could become invested, and observe an individual's change over time.

One of the primary difficulties of the process was exploring how security and safety could work in tandem with normality. The secure nature of these facilities offered few opportunities for complex or dramatic design moves, where an environment heavily associated with poor mental health, learning difficulties

and anti-social behaviours can inadvertently become dangerous to its users if not properly accounted for. Aspects such as materiality, lighting, colour, durability and surveillance were all carefully considered to ensure that the environment was as harmless as possible. This extended beyond the physical aspects of the space, with the proposal needing to avoid design changes that accentuated aggressive tendencies.

While the design itself is specifically tailored to the Wellington site, the fundamental principles and concepts explored here are encouraged to be replicated across all New Zealand youth justice facilities. Within the many studies and prison reforms, architecture remains an underutilized rehabilitative device and I hope that these techniques will be further explored, and eventually adopted into youth justice design so these facilities may provide better support and re-integration tools to those who need it the most.

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Images

- Fig. 3.1** Van Onna, Norbert. "Maasberg Juvenile Detention Living-230949." N.D. <https://architizer.com/projects/maasberg-juvenile-detention-living/>
- Fig. 3.2** Van Onna, Norbert. "Maasberg Juvenile Detention Living-230945." N.D. <https://architizer.com/projects/maasberg-juvenile-detention-living/>
- Fig. 3.6** Van Onna, Norbert. "Maasberg Juvenile Detention Living-230937." N.D. <https://architizer.com/projects/maasberg-juvenile-detention-living/>
- Fig. 3.7** Van Onna, Norbert. "Maasberg Juvenile Detention Living-230938." N.D. <https://architizer.com/projects/maasberg-juvenile-detention-living/>
- Fig. 3.8** Callejas, Javier. "Juvenile Detention Educational Facility." 2017. <http://combas.archi/project/centre-educatif-ferme-marseille/>
- Fig. 3.12** Callejas, Javier. "Juvenile Detention Educational Facility." 2017. <https://www.archdaily.com/882562/juvenile-detention-educational-facility-combas-architectes>
- Fig. 3.13** Callejas, Javier. "Juvenile Detention Educational Facility." 2017. <http://combas.archi/project/centre-educatif-ferme-marseille/>
- Fig. 3.14** Callejas, Javier. "Juvenile Detention Educational Facility." 2017. <https://www.archdaily.com/882562/juvenile-detention-educational-facility-combas-architectes>
- Fig. 3.15** Magnusson, Hreinn. "Cells from Outside." 2017. <https://miesarch.com/work/3427>
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- Fig. 3.19** Magnusson, Hreinn. "Cell." 2017. <https://miesarch.com/work/3427>
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- Fig. 4.3** Authors own
- Fig. 4.4** Authors own