

OFFICE OF THE INSPECTOR  
OF CUSTODIAL SERVICES

Physical Infrastructure  
Review Paper

**Banksia Hill Directed Review  
August 2013**



## Contents

1	Introduction.....	1
2	Overview.....	3
3	Conclusions.....	4
4	Banksia Hill site Layout.....	5
5	Physical Infrastructure .....	10
6	Infrastructure Testing.....	52
7	Appendix A: Examples of Physical Infrastructure at Hakea Prison Units 11 and 12 .....	53
8	Appendix B: Visit to Australian Juvenile Detention Centres .....	57

## **1 Introduction**

- 1.1 On the evening of Sunday 20 January 2013, an extremely serious incident of mass disorder occurred at Banksia Hill Juvenile Detention Centre ('Banksia Hill'), a facility managed by the Department of Corrective Services ('the Department'). This was by far the most serious incident of this type in Western Australia since what is generally known as the 'Casuarina Prison riot' of Christmas Day 1998. Although the incident had some very specific dynamics and features which set it apart from previous prison 'riots' in Western Australia (for example, staff and detainees were not targeted with violence), the term 'riot' is an apt description of the incident.
- 1.2 Banksia Hill is the state's only juvenile detention centre and at the time, housed 185 males and 21 females. The incident began just before 6:00 pm when three male detainees absconded from one of the units and then used some loose pavers and debris to break another detainee out of his cell. After the first assisted break out, the situation escalated with more and more detainees being assisted to break out of their cells.
- 1.3 In total, 61 detainees escaped from their cells and a significant number of detainees caused damage to their cells. Due to the nature of the incident and the extent of the damage, it has not been possible to put a precise figure of detainees involved in the incident. Department-supplied figures put the number of detainees involved the riot at around 73, all male, but it is more likely that, in total, somewhere between one-half and two-thirds of Banksia Hill's male detainees were actively involved to some degree, and also some of the females.
- 1.4 Extensive damage was caused to parts of the buildings at Banksia Hill, including 106 cells, as well as to some equipment and personal property. The worst of the damage resulted from windows being attacked from both the outside and the inside.
- 1.5 The consequences for the detainees were dramatic, with 73 of the male detainees being immediately transferred in the early hours of 21 January 2013 to a nearby adult prison, Hakea Prison ('Hakea'). Within the next three weeks the majority of the remaining male detainees at Banksia Hill were subsequently transferred to Hakea while the damage caused by the riot was repaired and security upgrades implemented. The female detainees continued to be housed at Banksia Hill along with a small number of male detainees under 15 years of age and some older male detainees who needed to be held there for specific purposes.
- 1.6 On 24 January 2013 the Minister for Corrective Services ('the Minister') directed the Inspector of Custodial Services ('the Inspector') under section 17(2)(b) of the

*Inspector of Custodial Services Act 2003* to carry out a full investigation into all aspects of the incident including:

- the context of the incident;
- facts of any contributing/causal factors;
- security and integrity of the cells;
- security systems and infrastructure;
- security practices and protocols for all staff;
- adequacy of crisis/emergency management planning and crisis/emergency management response;
- temporary housing of juvenile detainees at Hakea Prison; and
- to report to Parliament on the findings at the conclusion of the review.

1.7 In addition, the Minister also asked the Inspector 'to review staffing levels at the facility and report on the management of the incident and its impact on staff'.

1.8 The terms of reference for this Directed Review of the riot at Banksia Hill ('the Inquiry') require the Inspector to carry out 'a full investigation into all aspects of the incident' including the specific areas identified. This Physical Infrastructure Review Paper ('the Paper') is one of a suite of six Papers prepared as part of the Inquiry and in support of the Inspector's Report to Parliament.

## **2 Overview**

- 2.1 This Paper illustrates the physical infrastructure (buildings, fencing and groundwork) which makes up the Banksia Hill facility and documents the changing character of the physical environment leading up to the riot on 20 January 2013. It also documents typical damage to the buildings and the nature of remedial work being undertaken to prepare the site for the transfer of detainees back from Hakea Prison.
- 2.2 The Paper does not provide an audit of the design or quality of construction detailing or of the engineering services as they relate to standards. It does, however, analyse the basic detainee management principles which underpin the site layout and also makes comment about the damage to the buildings at Banksia Hill.
- 2.3 During the Inquiry, the site was inspected on a number of occasions and a range of people were interviewed, including those persons who had influenced the original design, and those involved with the various expansion programs and modifications made to the buildings and facilities ('retrofitting') which had taken place and which are currently being implemented.
- 2.4 A visit was made to Hakea Prison Units 11 and 12 to make comparison of physical infrastructure between the adult and juvenile estates.
- 2.5 Photographs taken during visits to a range of significant eastern states juvenile detention centres, which form a background reference for this Inquiry, are added at Appendix B. This is intended to place Banksia Hill within an appropriate national context.
- 2.6 Although the inner perimeter barrier at Banksia Hill, which was under construction at the time of the Inquiry, is illustrated in this Paper, it does not form part of the comments or observations made.

### 3 Conclusions

- 3.1 The site layout generally reflects the design principles articulated in the Operational and Functional Briefs prepared for the Banksia Hill facility and dated May 1995.<sup>1</sup>
- 3.2 With the benefit of hindsight, more robust physical cell infrastructure, for example, adding external security mesh to windows and strengthening internal fittings, together with improved climate control, might have limited the extent to which the riot gained momentum.
- 3.3 The retrofitting of the physical infrastructure leading up to the riot appears to have been implemented in an ad hoc manner and in many cases did not make sense having regard to a logical integration with the adjacent infrastructure.
- 3.4 The quality of retrofitting and remedial work has been diminished by a lack of considered input by a comprehensive stakeholder group working under the guidance of a well-constructed brief<sup>2</sup>.
- 3.5 The retrofitting and remedial work has resulted in visual deterioration around the residential environment of the centre. This deterioration in the physical environment at Banksia Hill may well have an impact on the emotional state of both staff and detainees.
- 3.6 Unrestrained access by detainees to poorly secured building materials, particularly in and around recently completed construction sites and loose fittings within the secure precinct at Banksia Hill, led to excessive damage being inflicted to the buildings.
- 3.7 The changes to the physical infrastructure made since the riot (the strengthening of infrastructure through the installation of bars and grilles), if not supported by changes to staffing and procedural adherence, may undermine safety and security.

---

<sup>1</sup> The Operational Brief is the document which articulates how the Department will staff and manage each of the activities which will take place on a daily basis within the centre. The Functional Brief is the document which articulates the extent, character and configuration of required accommodation to guide the design of the centre.

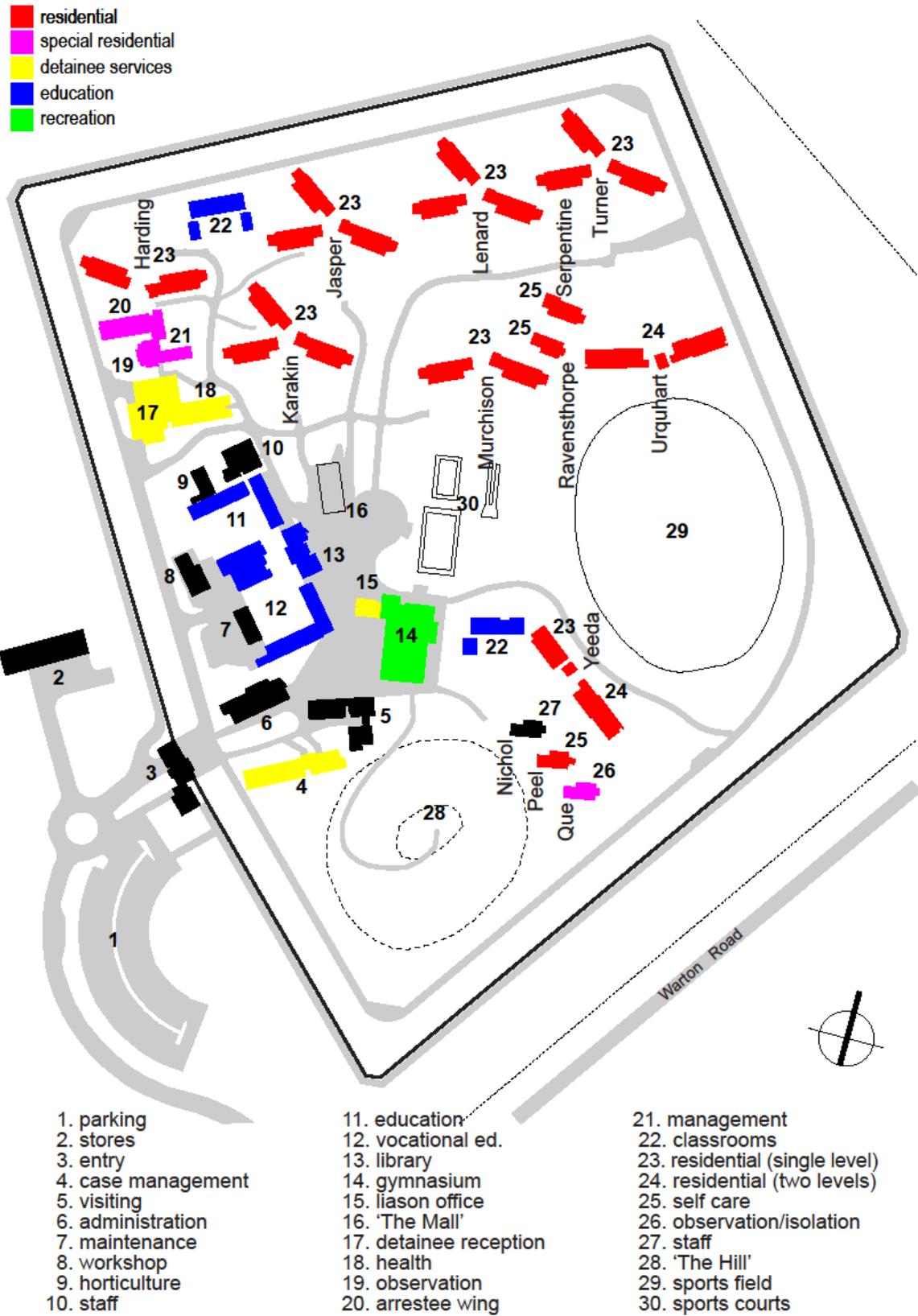
<sup>2</sup> See for example, this Inquiry's *Security Review Paper*, Chapters 5 and 6.

## **4 Banksia Hill site Layout**

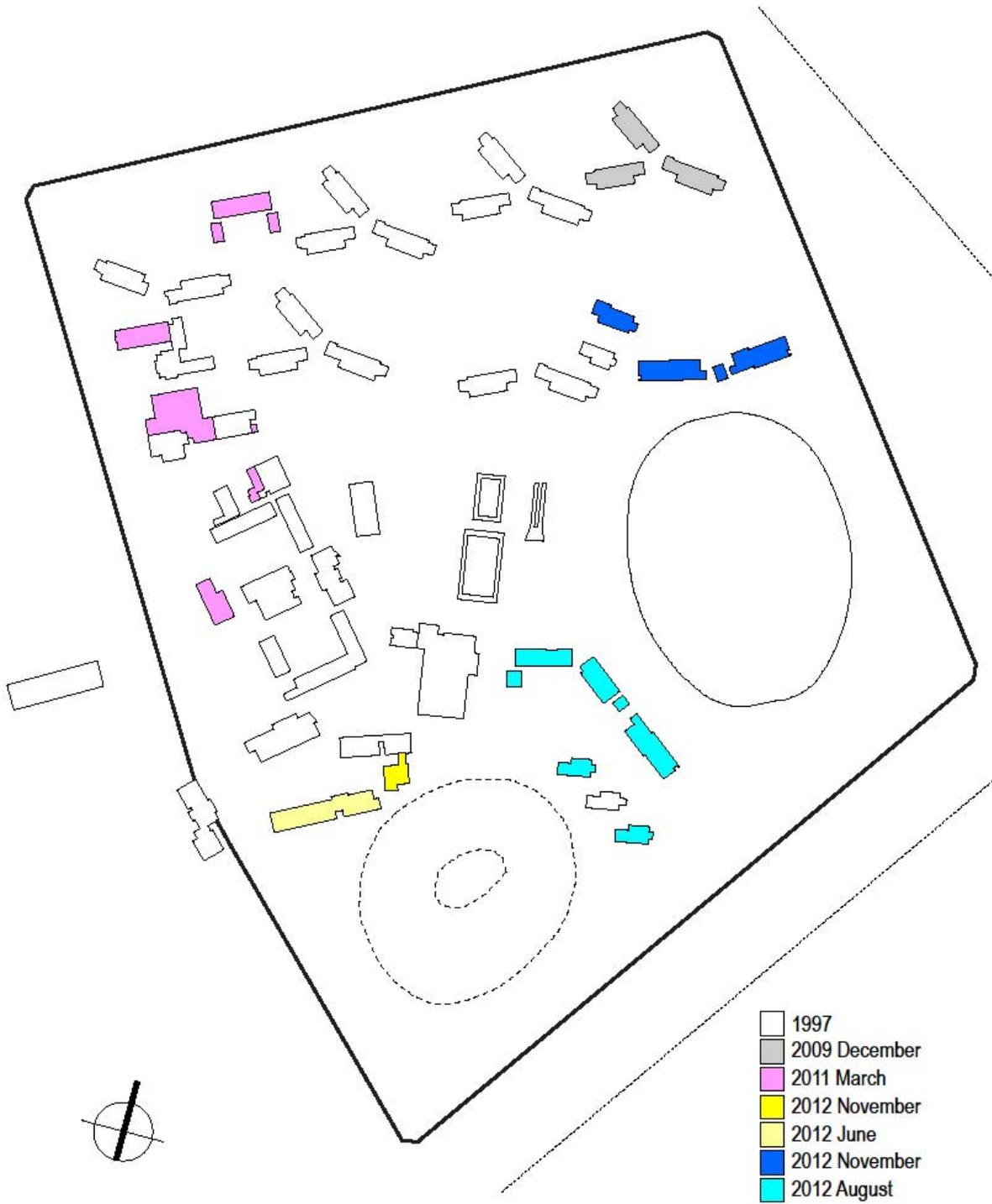
- 4.1 This chapter illustrates how the site layout has been organised to support the daily activities within Banksia Hill, including the management of detainees. It reflects the condition of the estate prior to the riot and as at April 2013, and identifies the management demarcation and barriers which have been introduced over time and in preparation for the amalgamation with Rangeview Remand Centre in September 2012. At the time of writing, additional remedial work was being considered and changes to the physical infrastructure implemented in preparation for the transfer of detainees back from Hakea Prison.



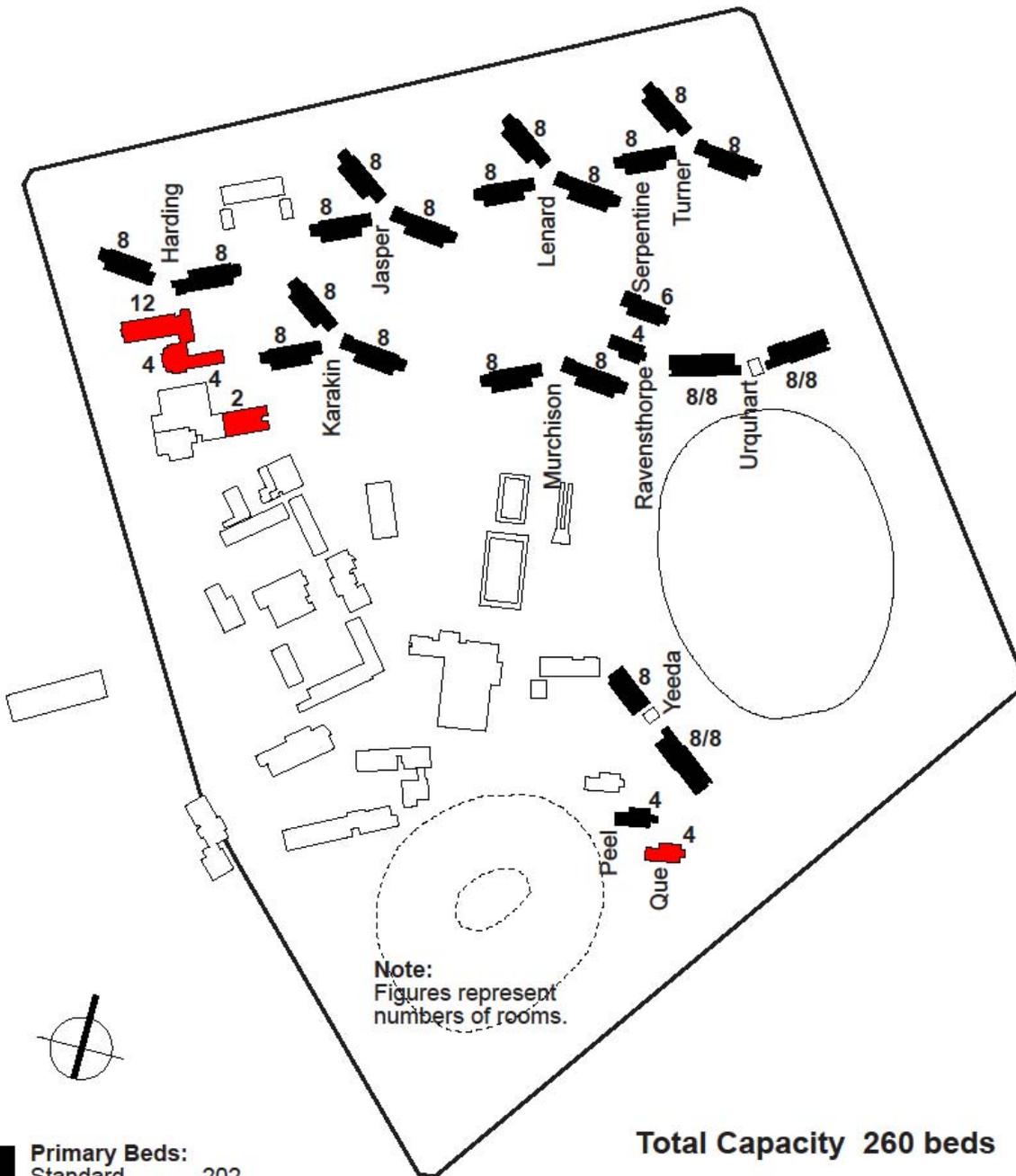
**Figure 1**  
*Aerial View*



**Figure 2**  
*Site Familiarisation*



**Figure 3**  
*Development Stages*



**Total Capacity 260 beds**

**Primary Beds:**  
 Standard 202  
 Self Care 14

**Two Bed Rooms:**  
 Urquhart 2  
 Yeeda 1

**Access Beds:**  
 Urquhart 2  
 Yeeda 1

**Total Standard 222 beds**

**D/bunk Beds:**

Harding (5)  
 Turner (3)  
 Lenard (3)  
 Jasper (12)  
 Karakin (12)  
 Murchison (2)  
 Yeeda (1)

**Total D/bunks 38 beds**

**Special Beds:**  
 Management 4  
 Arrestee 12  
 Observation 6  
 Isolation 2  
 Health 2

**Total Special 26 beds**

**Figure 4**  
*Bed Capacity*

## 5 Physical Infrastructure

### Detention centre design

5.1 Contemporary detention centres developed around 'campus style' concepts, by their very nature, introduce environmental factors which can pose security risks. For example:

- preference for single level domestic scale buildings
- introduction of accessible, cultivated and naturally landscaped terrain
- greater distances for movement of people and services
- opportunities for visitors including community groups to access parts of the secure precinct.

5.2 The risks associated with the above 'campus style' detention centre have to be assessed alongside the quality of the operational procedures and staffing in place at the detention centre. Sound operational procedures and proper staffing can reduce the prospect of incidents arising and improve the response to incidents should they occur. Some of the operational considerations requiring special attention include:

- protocols governing the control over contraband entering and leaving a secure site;
- comprehensive supervision levels; and
- control over movements around a secure site.

5.3 The need for the safety and security of staff, detainees and visitors is unreservedly acknowledged. It is easy to recognise the contribution that physical infrastructure brings to security. However, human interaction between staff and detainees, regulated through effective procedures is critical to the ongoing safety and security of any custodial facility. Physical security and electronic systems serve to support, not replace staff. They cannot replace the inherent security highly trained, adequately resourced, confident staff can provide, whilst working positively with detainees around a well-defined and meaningful structured day.

5.4 Considerations which add to a positive experience for people in detention environments include:

- Visual quality of the built environment – scale, character, colour and texture.
- Access and view onto landscaped space and visual connection to the horizon and surroundings.
- Respect for and recognition of cultural difference, bearing in mind the over representation of Aboriginal people.

- Quantity and quality of internal and external space – thermal conditions, lighting and acoustics.
  - Opportunities for detainees to control aspects of their private space. For example, heating and cooling which can add to a positive experience, particularly in cell space.
- 5.5 The negative impact hostile visual environments can have on the emotional well-being of staff, detainees and visitors should not be underestimated. This in turn can significantly increase risk. The powerful impact a positive physical environment can have on a person’s emotional state and how it acts to reduce stress and anxiety and therefore lower risk, has been well documented.<sup>3</sup> See ‘Changes to Infrastructure and Environment Following the Riot’ below for a discussion of the negative effects of the changes made following the riot.
- 5.6 The ‘campus style’ original design and early construction of Banksia Hill seems to adequately reflect the requirements articulated in the 1995 Operating Brief and Functional Brief (albeit basic documents) which preceded the design work, at the end of the 1990’s. In hindsight, there are things which could have been better considered in these documents to guide the original project and to set parameters for the expanded accommodation. Examples include:
- more robustness to the cells, in particular to the fittings, windows, observation and ventilation panels, and the ceilings.
  - external protection to cell windows.<sup>4</sup>
  - avoiding circumstances where roof edges are adjacent to low height walls, balustrades and fences.
  - improving the thermal quality of the residential buildings, particularly the cooling of cells.
- 5.7 However, it is clear Banksia Hill was designed to create a positive environment for detainees. The following are key extracts supporting the original master plan layout of Banksia Hill. They are taken from the Definition Phase Report dated April 1995:
- Make clear zones within which detainees can be assigned without the use of oppressive fence structures.
  - Respect the character of the natural landscape and minimise the amount of bulldozing.

---

<sup>3</sup> Ulrich R, ‘Effects of Interior Design on Wellness: Theory and Recent Scientific Research’ (1991) 3 *Journal of Health Care Interior Design* 104; Sternberg E M, *Healing Spaces. The Science of Place and Well-Being* (Cambridge: MA Harvard University Press, 2009).

<sup>4</sup> The use of security mesh was recommended for cell windows which were ‘susceptible to being broken from the outside by detainees’ in a review conducted in 2009 - *Cell and Window Security Test Banksia Hill Detention Centre* (June 2009). The recommendations were never formally considered or acted upon.

- Cultivate and irrigate immediate land around buildings and sports/recreation areas.
- Encourage the use of indigenous plant life throughout and integrate their provision and maintenance with the Horticulture Program of Vocational Training.
- The central open spaces and appropriate program facilities to be orchestrated into a setting which will foster “Mall” type activities at weekends and evenings, as well as during the day.

### **Infrastructure and environment during the early days**

- 5.8 An examination of the history at Banksia Hill since it was first commissioned, revealed that during the early years it was well run and that the basic ‘campus style’ design<sup>5</sup> adequately supported principles laid down in the Operational Brief established at that time.<sup>6</sup> The facility was regarded as a benchmark Australian project.<sup>7</sup>
- 5.9 The condition and quality of the physical environment in the early days of Banksia Hill’s operation, compares favourably with a majority of contemporary centres in the Eastern States, which were visited during the Inquiry as part of the preparation for this Paper.
- 5.10 The following images depict Banksia Hill in the early days of its operation.



**Photo 1**

*Entry courtyard as part of a defined space away from detainee areas, and with a welcoming atmosphere.*

<sup>5</sup> See the Office of the Inspector of Custodial Services’ (OICS) *Report of an Announced Inspection of Banksia Hill Juvenile Detention Centre*, Report No. 37 (September 2006) [8.1] which states: ‘Banksia Hill Detention Centre is well up to standard overall. The foundations of a great facility are laid and a baseline level of service has been established. Things that cannot be easily or cheaply changed, such as the physical design of the centre, are basically good. The design creates a positive, pleasant, campus-like atmosphere that is conducive to therapeutic and rehabilitative processes. In addition, there appears to be a high level of commitment from a skilled staff team, despite the daily challenges they face and the history of recent management change. The acting-Superintendent and his staff are to be congratulated for their achievements thus far.’

<sup>6</sup> Operational Brief Part One Version Three (May 1995).

<sup>7</sup> Bimberi (ACT), Youth Training Centre (SA) and Brisbane Youth Detention Centre (Qld) are all based on the design of Banksia Hill.



**Photo 2**  
*Character of the residential domain.*



**Photo 3**  
*Outdoor area, Self-care Unit.*



**Photo 4**  
*Consideration given to colour along a unit corridor and dining space.*



**Photo 5**  
*Consideration given to colour and soft furnishings in both living and dining spaces.*



**Photo 6**  
*View into the Mall. Designed for special activities such as Performing arts and 'hang-out space.'*



**Photo 7**  
*Typical living unit's outdoor space.*



**Photo 8**

*Sports courts and sports field.*



**Photo 9**

*Aerial view of the Hill within the centre grounds.*



**Photo 10**

*Pathway to the Hill. It was intended that the Hill be used as part of a programmed activity for detainees, giving them access, under appropriately managed arrangements, to enjoy and engage with natural flora and to also gain an outlook of the surroundings. Access is currently cut off by a left over fence from previous construction activity – refer to Photo 12.*



**Photo 11**  
*Natural landscape forming  
The Hill. It provided amenity  
and outlook.*



**Photo 12**  
*Left over construction site  
fence blocking access to the  
Hill. The fence is  
discontinuous and does not  
provide any rational  
demarcation or barrier  
control.*



**Photo 13**

*A view from the top.*

### **Changes to the infrastructure and environment prior to the riot**

- 5.11 The following images indicate the changing condition and character of the physical infrastructure and environment during the years leading up to the riot. A review of the testing of infrastructure by the Department indicates that the majority of the retrofitting and remedial work has been carried out in response to specific incidents and perceived concerns.
- 5.12 The quality of the retrofitting and remedial work has been diminished by a lack of input from a comprehensive stakeholder group working under guidance of a well-constructed brief. There were opportunities for the Department to engage with experts and this may have improved security through better design and provide better outcomes for detainees and staff.<sup>8</sup> The images below illustrate some of the changes which have occurred.



**Photo 14**

*View towards the perimeter wall from the Hill.*

---

<sup>8</sup> See for example, this Inquiry's *Security Review Paper*, Chapter 6.



**Photo 15**

*Detail of razor wire added to the perimeter wall soon after completion of the early construction works as a result of security testing.<sup>9</sup>*



**Photo 16**

*Introduction of “cage” mesh fencing - central to the Harding Unit wings.*



**Photo 17**

*Mesh fencing added to Harding Unit.*

---

<sup>9</sup> It does not appear that other less lethal solutions were considered.



**Photo 18**

*Placement of razor wire to discourage roof ascents from adjacent low height wall.*



**Photo 19**

*Barriers installed at roof edges to discourage ascents. Raised levels alongside roof edges make the roofs vulnerable to opportunistic ascents.*



**Photo 20**

*Notices placed over staff base windows. This significantly reduces sight lines and does not assist engagement of staff with detainees (see also Photo 21).*



**Photo 21**



**Photo 22**

*Early retrofit in reaction to a breach of the cell through a broken window sash – cell furniture was used to break the sash.*



**Photo 23**

*Modifications to a window in the Harding Unit Wing.*



**Photo 24**  
*Drying frames vulnerable to removal by detainees.*



**Photo 25**  
*Illogical adjacency to provide continuity of management enclosure.<sup>10</sup>*

---

<sup>10</sup> There is a lack of continuity in the effective climbable height as a result of butting a high fence with barbed wire against a lower wall without wire. The chain link mesh provides an easily scaled surface which can be used to gain access to the top of the wall.



**Photo 26**  
*Illogical continuity of fence top configuration.<sup>11</sup>*



**Photo 27**  
*Detail of barbed wire topping to management fences.<sup>12</sup>*



**Photo 28**  
*The use of razor or barbed wire, creating a maintenance issue.*

---

<sup>11</sup> The fence's 'Y' shaped top is harder to negotiate than the straight top of the gate. The gate was scaled by detainees, assisted by the gate frame providing a natural foot-hold. This configuration negated the benefit of the additional expense of the 'Y crank'.

<sup>12</sup> Photos 35 to 37 illustrate the ease with which boys scaled the fences despite these anti-climb measures.



**Photo 29**

*Grilles introduced in reaction to perceived concerns about injury of people falling from upper levels.*



**Photo 30**

*Illogical application of grilles – ‘gaps or no gaps?’*



**Photo 31**

*It is easy to crawl below the fence with no concrete plinth.*

5.13 Photos 32 to 34 show the management fencing around the most recently constructed boys' unit at Banksia Hill. This fence type was easily scaled by detainees during the riot, rendering them as 'demarcation' rather than 'barrier' fences. The issues surrounding the adding of lethal layers to fences in juvenile facilities is covered elsewhere in the Inquiry.<sup>13</sup>



**Photo 32**  
*Management fencing to the new boys unit. Gates in management fences need to be controlled and managed effectively or they get left open and defeat the original purpose of installation.*



**Photo 33**  
*Inner perimeter service road.*



**Photo 34**  
*Management fencing around the new boy's unit (looking out towards the older units).*

---

<sup>13</sup> See this Inquiry's *Security Review Paper*, Chapter 6 for discussion of the decision to install high management fences and potential risks to detainees who are at peak age for risk-taking behaviour.



**Photo 35**

*An illustration that the frames of the fencing and gates provide ready foot- and hand-holds and are easily scaled.*



**Photo 36**

*This boy is four metres above the concrete ground surface and is oblivious to the risk of falling or wire entanglement.*



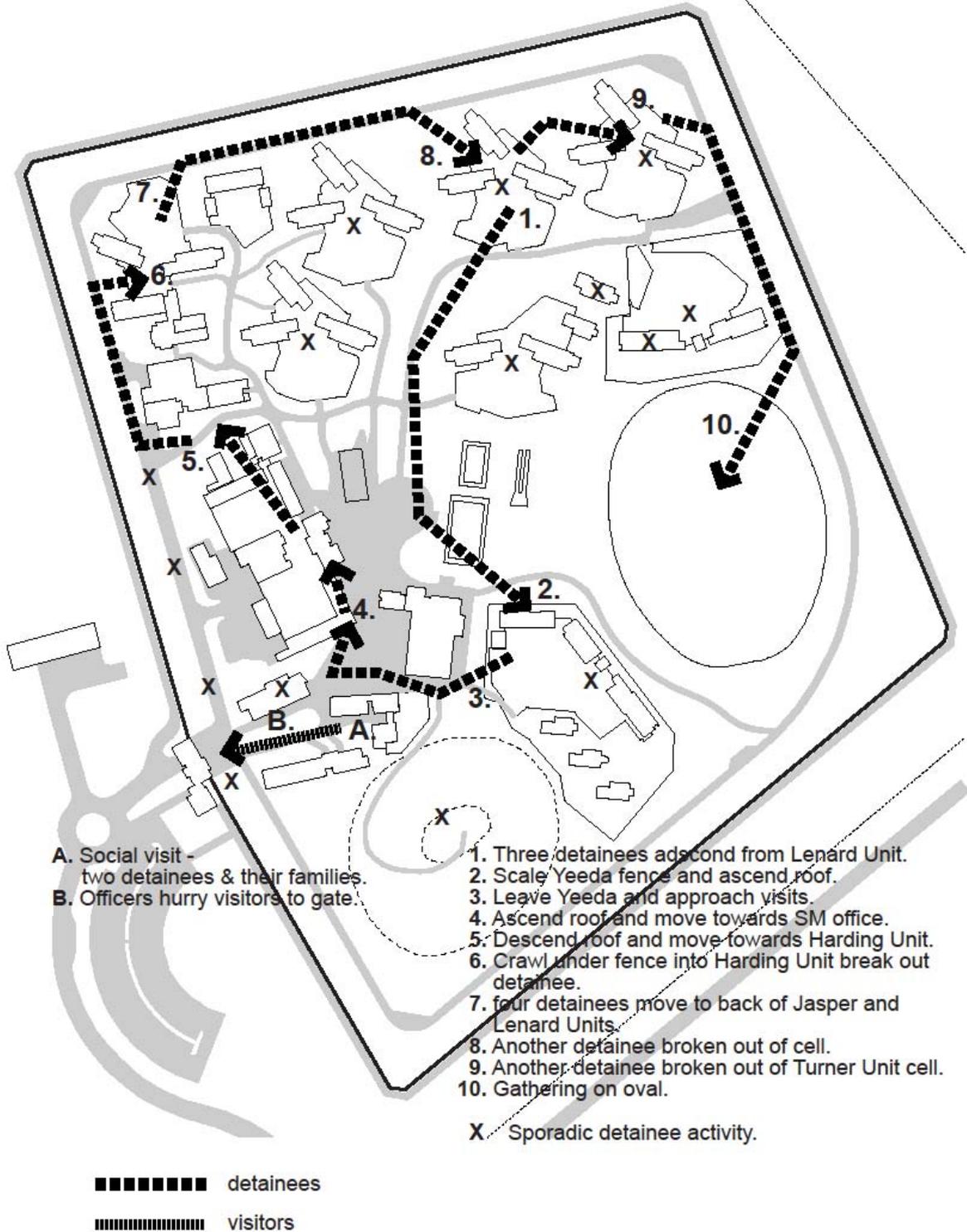
**Photo 37**

*CCTV footage showed the fences being scaled at speed.*

### **Damage caused during the riot**

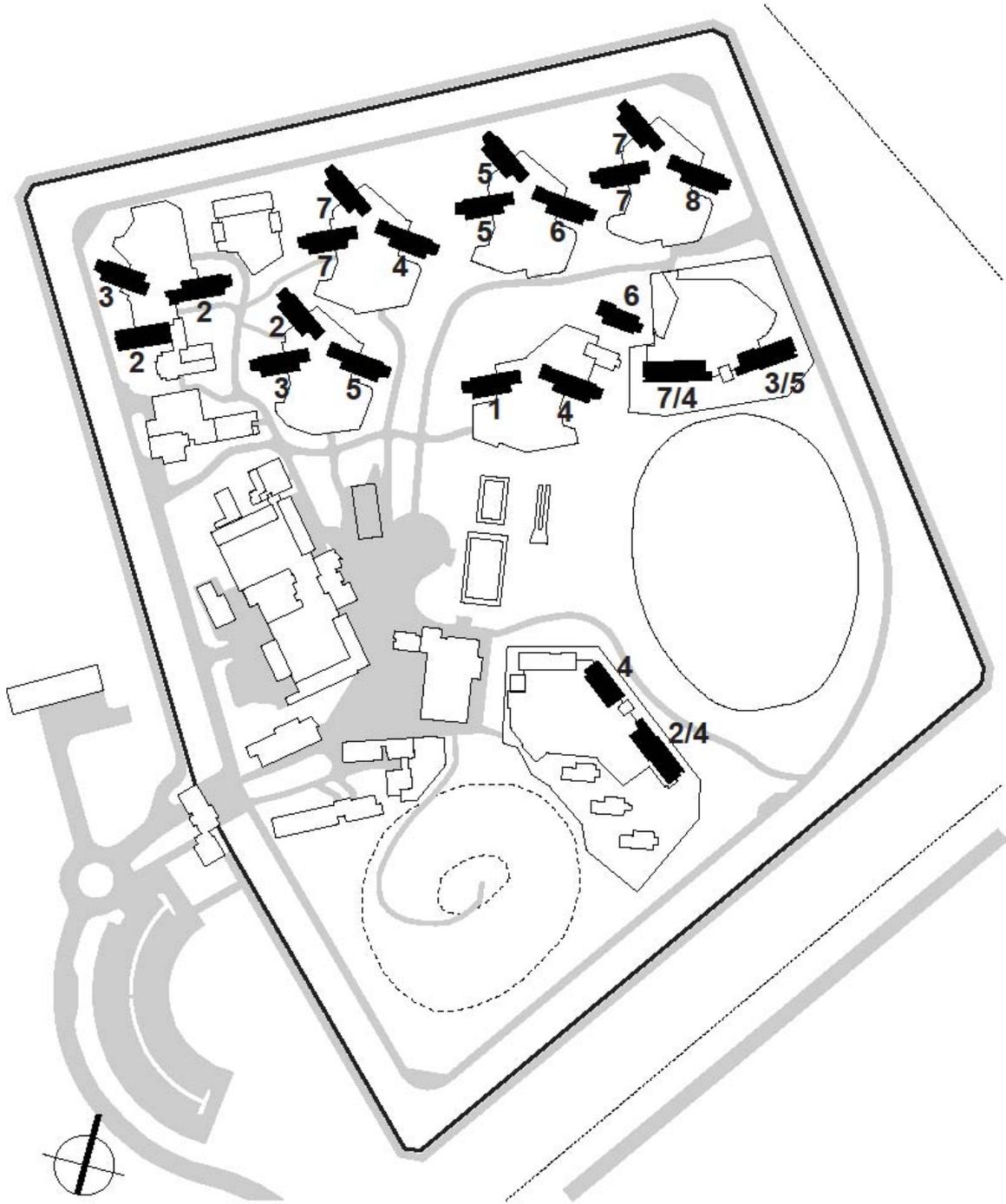
- 5.14 During the riot extensive damage was caused to parts of the buildings, primarily to the cells and also to some equipment and personal property. A number of implements, including building rubble, were used by the detainees to cause damage to the building. The following illustrates the activities of detainees during the riot and the damage caused.

Indicative Primary Activity associated with the riot.



**Figure 5**  
*Incident Activity*

Numbers and locations of Damaged / Unserviceable Cells



**Figure 6**  
*Site Damage*

### **Implements used by detainees to cause damage**

A significant factor which impacted on the extent and type of damage caused to the buildings was the type of material which became available to detainees for use within cells and out of doors.



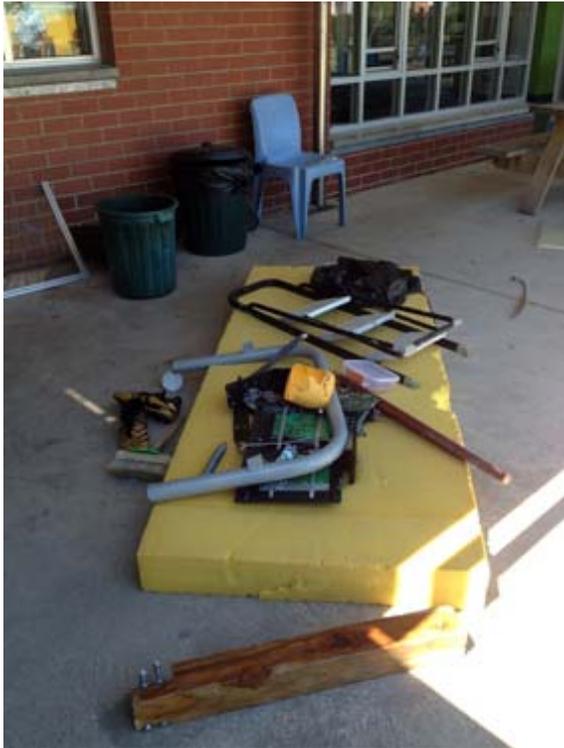
**Photo 38**

*Typical builder's rubble collected from around the site which was available to detainees in outdoor areas during the riot.*



**Photo 39**

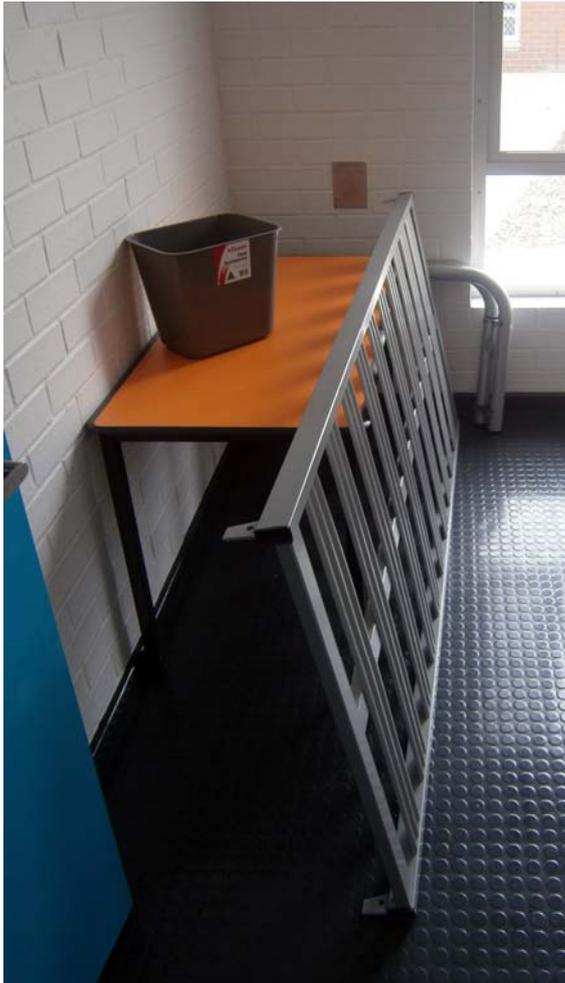
*Unfixed pavers available to detainees as tools to cause damage to the buildings during the riot.*



**Photo 40**  
*Typical items available to detainees and used to cause damage to the buildings during the riot.*



**Photo 41**  
*Typical building rubble available to detainees to cause damage to the buildings during the riot.*



**Photo 42**

*New bed frames left unassembled in the self-care unit were accessed by detainees. Bed ends were utilised by detainees to cause damage to the buildings. .*

### Damage to standard living units and cells

The following pictures illustrate the damage inflicted on the standard living units.



**Photo 43**

*External attack on cell window to free detainee – glazing panel dislodged into the cell space.*



**Photo 44**

*External attack on cell window to free detainee – glazing panel dislodged into the cell space.*



**Photo 45**  
*Smashed laminated glass.*



**Photo 46**  
*Harding Unit Wing.*



**Photo 47**  
*Shattered glazing to cell windows – external attack.*



**Photo 48**  
*Shattered glazing to cell  
windows – external attack.*



**Photo 49**  
*Shattered cell observation  
panels.*



**Photo 50**  
*Breached cell observation panel.*



**Photo 51**  
*Breached cell observation panel.*



**Photo 52**  
*Broken mesh at ventilation  
panels to cells.*



**Photo 53**  
*Broken mesh at ventilation  
panels to cells.*



**Photo 54**  
*Broken mesh at ventilation panels to cells.*



**Photo 55**  
*Cell light fitting cover removed.*



**Photo 56**  
*Smashed light fitting cover in cell.*



**Photo 57**  
*Random attack on glazing at  
Harding Unit between security  
console and secure exercise  
yard.*



**Photo 58**  
*Shattered laminated glazing to  
day space of living unit.*



**Photo 59**  
*Shattered laminated glazing to  
day space of living unit.*



**Photo 60**  
*Damage to day space windows.*



**Photo 61**  
*Shattered laminated glazing to day space.*

## Damage to the newer living units and cells

The following pictures illustrate the damage inflicted on the newer living units.



**Photo 62**

*Random attack to day space glazing at single storey girls unit.*



**Photo 63**

*Random attack to day space glazing - girl's unit upper storey.*



**Photo 64**  
*Door to laundry at girl's unit,  
upper level.*



**Photo 65**  
*Tunnelling under management  
fence at boys unit. Absence of  
concrete plinth.*



**Photo 66**

*Broken ventilation in Urquhart Unit breached by male detainee.*

### **Changes to infrastructure and environment following the riot (photographs as of 4 April 2013)**

- 5.15 After the riot on 20 January 2013, the Department quickly resolved to install additional security around cell windows. Following the design and fabrication of prototype grilles in the week following the riot, they were installed and tested on 1 February 2013.<sup>14</sup> On 6 February 2013, the Deputy Commissioner Community and Youth Justice formally endorsed the decision to install additional grilles to all cell windows and officer stations at Banksia.<sup>15</sup>
- 5.16 The design specifications were referred to the Department's State Security Directorate but do not evidence a consideration of alternative designs that may

---

<sup>14</sup> Department of Corrective Services, *Test of Prototype Cell Window Lozenge Grille* (February 2013).

<sup>15</sup> Department of Corrective Services, *Banksia Hill Decision Items*, Internal memorandum to the Assistant Commissioner Community and Youth Justice (6 February 2013).

have avoided or limited the installation of grilles. For example, the Department reported that no consideration has ever been given to recommendations made in 2009 to fit 'crim mesh' to windows 'susceptible to being broken from the outside by detainees'.<sup>16</sup> Alternatives may arguably have been more cost effective and would have lessened the hardening effect on the physical environment for detainees.

5.17 It can be argued that the strengthening of the physical infrastructure through the installation of bars and grilles), if not supported by changes to staffing and procedural adherence, may undermine safety and security of Banksia Hill for the following reasons:

- The solution is unbalanced – it addresses only one of the three essential components which make up safety and security. While it addresses physical strength (physical security), it ignores procedural and process considerations (process security) and, most importantly, the dynamic interaction between staff and detainees (dynamic security).
- It encourages a separation of staff from detainees – undermining the core management strategy of staff working positively with detainees.
- The solution is overly constructed for what is needed and therefore unnecessarily costly. The Department is required to replace damaged glazing and the significant investment in grilles does not protect the glass from further damage. Other options could have been considered, including appropriately designed mesh or perforated metal screens to windows and increasing the robustness of the common areas of living unit buildings.<sup>17</sup>
- The solution is potentially structurally unsound. It involves the fixing of very heavy steel framing fixed onto domestically constructed, single leaf brickwork.
- The potential negative impact on the psychology of staff, detainees and visitors should not be taken lightly. In turn, it will add to the stress and anxiety associated with detention, for everybody.
- None of the other detention centres around Australia visited during the Inquiry, had grilles over cell windows or staff bases (see Appendix B for photographs of cells, officer stations and living spaces).

5.18 The following images indicate the quality and extent of retrofitting taking place following the riot. These changes are being made to make the Banksia Hill facility ready for transfer of detainees back from Hakea Prison.

---

<sup>16</sup> Advice from the Department dated 3 May 2013. See also: Department of Corrective Services, *Cell and Window Security Test Banksia Hill Detention Centre* (June 2009).

<sup>17</sup> The use of security mesh was previously considered by the Department's *Cell and Window Security Test Banksia Hill Detention Centre* (June 2009).



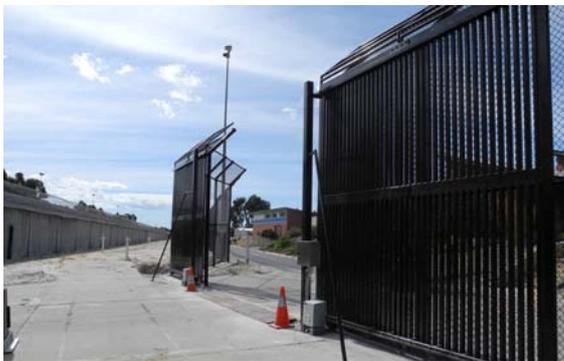
**Photo 67**

*Looking towards the secure side of the entry building showing new pedestrian control doors and sliding vehicle gates. This is part of a new inner perimeter barrier which is under construction.*



**Photo 68**

*Architect's impression of new doors to the vehicle sally port – non-secure side.*



**Photo 69**

*New sliding vehicle gates forming part of the new inner perimeter barrier under construction.*



**Photo 70**

*The new perimeter sterile zone. The inner fence is designed to impede and delay the access of aids which might assist detainees to breach the main barrier.*



**Photo 71**  
*Retrofitting of security grilles to cell windows.*



**Photo 72**  
*Retrofitting lozenge grille. This is the same type as that used within many of the adult prisons (refer to Appendix A for examples). This level of fortification will provide more than what should normally be required to secure the cell space from direct escape to the outside. However, it will not prevent external damage to the glazing.*



**Photo 73**  
*Retrofitting lozenge grilles from inside the cell. They diminish the outlook, particularly the oblique views.*



**Photo 74**

*Retrofitting of horizontal ceiling framework and linings into cells with sloped ceilings. This will generate a large concealed ceiling space and eliminate the thermal value a high volume provides in helping to dissipate heat.*



**Photo 75**

*MDF bench supports which were removed by detainees and used as breaching aids - in the process of being replaced with steel brackets.*



**Photo 76**  
*Steel bar fixed over glazed observation panel of the type that was breached during the riot (refer to Photo 75).*



**Photo 77**  
*Refer to Photo 76 above.*

**Post riot photographs as of 17 May 2013**



**Photo 78**  
*Grilles retrofitted to Urquhart Unit cell windows.*



**Photo 79**  
*Grilles retrofitted to staff bases in Urquhart and Yeeda Units (interior view).*



**Photo 80**  
*Grilles in the process of being retrofitted to staff bases in Urquhart and Yeeda Units (exterior view).*



**Photo 81**  
*Concrete plinths added to management fences at Urquhart Unit.*



**Photo 82**  
*The retrofitted security grille has provided a ladder to facilitate access over the adjacent anti-climb management fence.*



**Photo 83**

*The retrofitting of the bars around the unit office door does not add to the resistance against physical attack but adds hard infrastructure and reduces visibility and staff-detainee interaction.*

## 6 Infrastructure Testing

- 6.1 As mentioned earlier in this Paper a review of the history of testing of physical infrastructure by the Department indicated that the majority of the retrofitting and remedial work has been carried out in response to incidents or perceived concerns. Testing has largely taken place before and after the completion of construction, rather than well prior to final design decisions being taken or the selection of physical elements made.
- 6.2 The Inquiry found there was no process in place to periodically test physical infrastructure using a consistent methodology. This would have identified new physical infrastructure requirements as a result of changes in daily activities at Banksia Hill or lessons learnt from incidents. The testing regime was characterised by a methodology of ‘testing to destruction’. This was not always necessary and ignores the interaction of physical security with process and dynamic security.<sup>18</sup> If accurate records were kept during testing of activity and progress of the physical attack, alongside appropriate monitoring (for example, visual, audio, CCTV and staff response), agreement could be reached regarding the point at which the element being tested appropriately addresses the risk.

---

<sup>18</sup> See this Inquiry’s *Security Review Paper*, Chapter 4 The Security Concept at Banksia

7 **Appendix A:**  
**Examples of Physical Infrastructure at Hakea Prison Units 11 and 12**



**Photo 84**  
*Typical security grilles within the adult prison system.*



**Photo 85**  
*Typical security grilles within the adult prison system.*



**Photo 86**  
*Entry to the domain of Units 11 and 12.*



**Photo 87**  
*3 metre high management  
fence within the general Hakea  
prison precinct.*



**Photo 88**  
*Management fences.*



**Photo 89**  
*Visual screening of the domain  
to Units 11 and 12.*



**Photo 90**  
*Retrofitting of razor wire to management fences around the domain of Units 11 and 12.*



**Photo 91**  
*Razor wire retrofitted to roof edges to prevent ascents.*



**Photo 92**  
*Security grilles to entry lobby.*



**Photo 93**  
*Typical cell window.*

## **8 Appendix B: Visit to Australian Juvenile Detention Centres**

- 8.1 Between 10 to 19 April 2013, visits were made by Inquiry personnel to Juvenile Justice centres in South Australia, Victoria, New South Wales, Queensland and the Australian Capital Territory. Meetings were held with personnel at all levels of responsibility, from senior Executive officers to staff in managerial and direct supervision roles working with young people. A range of detention sites were inspected.
- 8.2 This exercise placed Banksia Hill within a comparative national context, and provided a meaningful reference for the Inquiry. The security ratings of the centres visited are compatible with those of Banksia Hill, and they accommodate comparative juvenile populations, both sentenced and remand.
- 8.3 The interaction with other jurisdictions provided knowledge about what had proven to be successful in supporting and managing young people in detention and about what had failed.
- 8.4 The physical infrastructure of each site visited was examined in alignment with established or emerging operational philosophies and management structures.
- 8.5 In addition to the physical infrastructure, enquiries were made about the quality and extent of case management and about the programs being offered to detainees, as well as other facets of service delivery.
- 8.6 Across all jurisdictions visited, the sentenced and remand juveniles were referred to as 'young people', 'residents', 'clients', 'kids', 'children', etc. as appropriate. There was a noticeable absence of the term 'detainee', 'prisoner' or 'inmate'.
- 8.7 Following is a summary of key observations made across the sites visited. The focus is on the physical environment and security infrastructure. It was observed that:
  - There was a marked absence of lethal barriers, for example, use of razor or barbed wire.
  - There was a noticeable lack of inner barriers, with basic detection systems and CCTV on perimeters.
  - Estates accommodated less young people than at Banksia Hill
  - Use of high fences as management barriers across the sites was minimal and there was a preference for landscaped demarcation, for example, defined pathways, lines on ground, low fences, etc. Where a high level of separation was required, anti-climb material was used in conjunction with half rolled tops or anti grapple drums.

- Maximum integration of high quality, well maintained landscaping was featured across the sites.
- There was an absence of heavy security bars over cell windows with a preference for mesh screening and/or clear secure glazing systems.
- Air conditioning was fitted to residential units including to cells.
- The structured day recreation programmes included provision of well maintained swimming pools.
- There was minimal installation of bunk beds – lockable inter leading rooms were a preference.
- Many facilities used polycarbonate to windows which was considered to achieve better value for money in terms of initial capital cost and replacement cost. Easy surface scratching had been compared to equivalent failure in glass surfaces.
- Generous space was provided within staff bases, particularly in living units.
- There was a focus on systems to secure dangerous items – lockable cupboards, shadow boards/boxes for scissors, knives, cutlery, etc.
- Careful operational and management structures were in place around the activities associated with building sites.
- Apart from one centre visited in Queensland, there was a noticeable absence of anything special which recognised cultural difference.

August 2013

ISSN 1445-3134

Office of the Inspector of Custodial Services  
Level 5 Albert Facey House  
469 Wellington Street  
Perth, Western Australia