### **Barrett Adolescent Centre**

Options Study

# 1. BACKGROUND

The Barrett Adolescent Centre (BAC) is a residential facility for young people from 13 to 18 years old, who are experiencing complex mental or emotional problems, resulting in a wide range of behaviours. It can accommodate up to 18 residents (8 male, 10 female or vice versa) of which a maximum of 5 may be behaving disruptively at any one time. It provides extended treatment and rehabilitation (2 weeks to 12 months) and is the only facility of its kind in the State.

The residents attend school in an adjacent building.

The origin of this report was a memorandum dated 16<sup>th</sup> March 2004 from Dr Arnold Waugh, then acting Director of Mental Health at Queensland Health, requesting a structural/environmental review of the Barrett Adolescent Centre to determine its suitability to safely accommodate adolescents requiring extended inpatient treatment.

The memorandum pointed out that it was not a purpose-built facility; that it was constructed in 1976; was opened as an adolescent unit in 1984; and was proposed for closure in 1997, but kept open due to strong community pressure.

The memorandum also referred to a report in 2003 following a critical incident at the facility which stated "the building looked dated and ...would benefit from a process to establish whether it could be improved by significant modifications or a new type of facility required".

The memorandum also mentioned a 2003 Mental Health Unit report into child and youth beds in Queensland.

Following this memorandum, a meeting took place on site on 5<sup>th</sup> April 2004 attended by representatives of Queensland Health and Project Services. Project Services was commissioned in July 2004 to prepare this report.



# 2. SCOPE OF THIS REPORT

There are two types of problem with the building:-

- · lack of suitability for its current purpose
- · wear and tear due to its age

The aim of this report is to provide Queensland Health with advice and information, so that informed decisions can be made on the future of the facility. Specifically, it will investigate the cost of bringing the building up to a standard that will extend its useful life, and compare this with the cost of building a completely new purpose—built facility. This will help Queensland Health to make an informed decision on its future.

In compiling this report, information has been obtained from:-

- existing drawings
- maintenance records
- site inspections, and
- · consultation with facility staff

Advice has been obtained from building specialists including:-

- architects
- a structural engineer
- a mechanical engineer
- an electrical engineer
- · a communications / security engineer
- a hydraulics consultant
- · a quantity surveyor, and
- a termite inspector

# The report includes:-

- · suggestions for two upgrade options with cost estimates
- · a cost estimate for a new purpose-built facility, and
- · a suggested time frame

# The report excludes:-

• block C (the adjacent school building)



### **Barrett Adolescent Centre**

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#### THE EXISTING FACILITY 3.

#### 3.1 The building.

The building housing the Barrett Adolescent Centre is one of several similar structures constructed in the 1970s as a ward block forming part of the Wacol Admission and Treatment Centre in the Wolston Park Hospital.

It is a single-storey structure, with a concrete floor-slab-on-ground, and a reinforced concrete frame with brick infill walls internally and externally. There is a sloping metal deck roof incorporating raised areas with clerestory windows over internal corridors, and a deep feature fascia. Windows are aluminium framed.

#### 3.2 Floor plan

The floor plan consists of two dormitory wings running east-west, joined by a central area running northsouth.

Each of the dormitory wings consists of a central corridor, with single- and four-bed dormitories off it, plus a shower / toilet block. One of the dormitory wings has two of the 4-bed dormitories used for other purposes (art room and conference room) reducing the number of beds available to 8. This is currently the boys' wing. The other dorm wing has two of the single rooms used for "time out" purposes, and a 4-bed dorm used for and office and a 'blue' (teenager's retreat) room. This reduces the number of available beds to 10, and the wing is currently the girls' wing. It is understood that the allocation of wings is sometimes changed over, depending on the relative numbers of boys and girls.

The central area contains the entrance, lounge, dining and activities rooms, staff areas, kitchen, laundry, clinic, storage and small toilets, plus some small verandahs.

The main entrance is through the dining area at the north east corner of the central area. There are other potential entry/exit points around the central area, the main one leading out to a covered walkway to the school building. There is also a pair of double doors at the end of each dormitory corridor.

A floor plan of the existing facility is attached in Appendix A. Comparison of this with the original floor plan indicates that there has been little change to the plan since construction, apart from to the staff areas and the kitchen.

#### 3.3 Use and function

It is understood that the building's main function is residential, ie that it provides long-term accommodation to adolescents with mental health problems. Its secondary function is therapeutic, in that it provides opportunities for observation by staff and supervised activities. Medications are also administered plus other treatments, such as tube-feeding. There are also small areas devoted to offices and a conference room. All residents attend school in the adjacent school building.

Main meals are brought in from a kitchen elsewhere on the campus and served from the facility kitchen. This internal kitchen is also used for preparation of minor meals and drinks under supervision. The facility has a domestic-type laundry for use of residents. It is understood that residents are encouraged to participate in domestic activities, but that there are also professional cleaning and care staff.

Most problem behaviour takes place in the residential wing, not in the school. This behaviour includes:-

- / substance abuse
- damage to the building
- disturbance of others
- absconding

Options Study

#### 3.4 Siting, access and external areas.

The facility is housed in Block D on the campus of the Park Centre for Mental Health. Access is via the Park's internal road system. The building's main entrance is off a cul-de-sac with parking to the north of the building. The site is in a very quiet, semi-rural parkland setting.

There is substantial open space consisting of lightly treed grassland to the north, east and west, with Wolston Park golf course close by to the east. To the south (rear) of the building, there are some other Barrett Centre buildings, but sufficiently far away that there is an open prospect in this direction.

The open space immediately around the building is landscaped, and contains facilities for resident activities such as trampolining, putt-putt and vegetable growing. There are a couple or storage sheds containing equipment for outdoor activities.

The natural slope of the land is from south to north, but the site of blocks C (school building) and D (Adolescent Centre) have been cut and filled so that they sit on a level plateau above the access cul-de-sac.

The site is not fully fenced.

#### **Aesthetics** 3.5

Both internally and externally, the building looks institutional rather than domestic.

The external colours (dark brown brick and dark anodised windows), though serviceable and lowmaintenance, reflect the time when the building was constructed (1970s) and contribute to a drab first impression.

Internally, the type of ceilings and lighting, the colours and finishes, confirm the impression that this is an institution rather than a home, although there has been some attempt to improve this aspect as far as the nature of the building allows.

#### 3.6 Condition

Based on a visual inspection by a number of building specialists, and perusal of maintenance reports, the overall condition of the building is good, in terms of wear and tear and maintenance. The cracks in some walls are not considered to be structurally significant.

There are no obvious indications of termite activity, and the form of construction would limit the likelihood and severity of termite attack, however, a termite inspection is to be made early in the new year.

An inspection for asbestos materials has been done by Q-Build. Their report indicates that, although some materials are suspected of containing asbestos, the type, location and condition of these materials does not make their removal urgent.

The initial impression that it is tired and old, is more a function of the age of the building, its style, colours and finishes, than of any major defects in the fabric. Though dated, most visible surfaces appear to have been well maintained. Many materials are low-maintenance ones, which may contribute to the institutional feel.

Of course, with a building of this age, there may be hidden problems, such as deterioration of underground pipework.

#### 3.7 Plans and photographs

Building plans and photographs are attached as appendices to this report.

### **Barrett Adolescent Centre**

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# 4. SOME IDENTIFIED PROBLEMS

The following is a list of problems reported by the users of the building, or resulting from site inspection. which have a bearing on the built environment.

#### 4.1 Resident behaviour

- The institutional ambience of the building, and the drab environment, may be less than therapeutic. and even counter-productive to resident mental health.
- Visual supervision by staff is limited by the layout of the building and solid walls. Undesirable behaviour can occur as a result.
- A number of rooms provide easy opportunities for residents to

When bad behaviour does occur, there is no part of the facility where residents can be isolated, apart from "seclusion" rooms". The design and location of the seclusion rooms is not ideal, and there is no facility for more long term accommodation of disruptive residents.

#### 4.2 **General Environment**

Problems with the general environment include:-

- A tired, drab, appearance.
- An institutional, rather than home-like feel,
- Lack of privacy (most residents are in 4-bed rooms, and no separation between living, dining, TV, games and entry areas)
- Noise between rooms and within rooms (a lot of hard surfaces and no separation of living areas, lack of sound proofing between rooms)
- Very hot in summer in main living areas, which apart from discomfort, can contribute to behaviour problems.
- Generally "tired" looking internal finishes, especially ceilings and roof lights.

#### 4.3 **Functionality**

- Treatment room too small
- Incorrect signage to girls and boys toilets
- There are no bath tubs, only showers. Baths can be useful therapy.
- Facilities for disabled staff or residents are not to current standards.
- Hard surfaces in seclusions rooms which can lead to and enable disturbance of others with noise.
- Unattractive views out of seclusion rooms.
- The "office" in the girls' wing is not used.
- There is no dedicated visitors' room.
- Privacy when using resident telephones is minimal.
- Some offices, currently located in the school might be better located in the residential wing.
- There is a lack of opportunity for recreational activities. Basically there is one noisy main space plus a TV room and a small gym on a verandah. The art room is not generally accessible, and there are no small rooms for varied quiet (or noisy) activities, such as handicrafts, reading, study, homework, internet, individual music. Neither are there many facilities for energetic sports-type activities.

#### 4.4 Safety / Security

- Absconding Residents can get out easily without being unobserved. There are a number of uncontrolled exits, and the front entry is not visible from the staff station.
- The front sliding doors are not very secure or easy to operate.
- Bearing in mind that the presence of teenage girls may attract undesirable attention, and other risk factors associated with resident backgrounds, intruder prevention may not be adequate.
- The fire exits appear to be locked at night to prevent absconding. This creates a risk in the event of a fire at night, and puts heavy responsibility on staff. Locks which automatically release on fire alarm are preferable.

### **Barrett Adolescent Centre**

Options Study

- The existing key system may no longer be restricted, due to expiry of patent (ie it now may be easy to have copies made) and the need to use keys is inconvenient and insecure when compared with electronic swipe cards.
- Some floor finishes are slippery when wet, eg in the main entry.
- There is no secure courtyard.
- Much of the glass is breakable.
- The accessible ceilings have allowed residents to break in to rooms in the past.
- Initially, staff complained about inadequate duress and paging, but it is understood that this has since been rectified

#### 4.5 **Building deterioration**

Problems identified include:-

- Leaking roofs (replaced in 1990s but still a problem, eg over staff toilet)
- Structural cracking (eg in Director's office)
- Rotten fascias
- Possums in roof and consequent ceiling stains.

# SUGGESTED REMEDIES

#### 5.1 Generally

There are a number of levels of upgrading possible, depending on priorities, available finance, and the time span being considered.

#### 5.2 **Priorities**

Staff from the BAC have indicated some priorities, and safety has to be of prime concern. There are also legal obligations which arise, once a major refurbishment is considered, for example the need to provide access for persons with disabilities.

High on the staff list is the provision of a high-dependency unit (HDU).

#### 5.3 **High-Dependency Unit (HDU)**

An HDU is understood to be a sub-unit of the facility where residents exhibiting disruptive behaviour could be accommodated on a medium-term basis (a few days) in a safe environment where they could be kept under close observation and away from other residents. This would eliminate the need for such residents to be removed from the BAC to an acute mental health unit.

In built form, the HDU is expected to consist of two bed-sitting rooms, each with its own en-suite bathroom and secure courtyard. Fixtures and finishes would be designed to minimise self-harm and maximise staff supervision. There should be a discreet exit point for those cases where removal to an acute unit became necessary.

It is understood that a HDU would be in addition to, not instead of, seclusion rooms.

# Other user suggestions

A number of suggestions have been documented by the BAC staff. These are attached as in Appendix E.

#### 5.5 The three options

There exists a whole range of possibilities for upgrading the Barrett Adolescent Centre, from a new coat of paint and a few repairs at one end of the spectrum, to a brand new building at the other.

In order to simplify the task, and to help find the appropriate level, three options have been considered.

- Option 1 consists of a major refurbishment of the existing building to address many of the problems, but without any major alterations or extensions to the building.
- Option 2 consists of most of the refurbishment work in Option 1, plus major internal alterations to address the most pressing problems, and some extensions to provide a HDU and other additional facilities.

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Option 3 is a new purpose built facility on a new site, to a standard comparable to other recentlyconstructed Queensland Health residential facilities, such as the Acquired Brain Injury unit at Sandgate.

More detail of each option follows.

# **OPTION 1**

#### 6.1 Scope

Option 1 consists of the following refurbishment work.

# **Building work**

- Replace all ceilings with seamless, impact-resistant type. Thermal / sound insulation over. Perspex panels over dormitory corridors to be eliminated.
- New floor finishes in communal areas.
- Replace doors to bedrooms, bathrooms, and toilets with light weight ones on lift off hinges, to prevent barricading.
- Re-swing laundry door to open outwards to prevent barricading.
- Replace sliding entry doors with heavy duty hinged ones.
- Provide threshold ramps at all external doorways to improve disability access.
- Complete refurbishment of bathrooms, including floor and wall finishes, joinery, personal lockers, new partitions, reduced opportunities for hanging, and improved disability access.
- Re-key all locks.
- Replace remaining breakable glass with safety glass.
- Crimsafe to all windows.
- Glass panel in the east wall of the staff station wall to improve supervision of dining / entry area.
- Glass panel in the kitchen north wall to improve supervision.
- Bigger pantry and oven in kitchen.
- New soft floor and wall finishes to seclusion rooms with double glazing to internal windows with integral blinds.
- Major renovation to roof to eliminate leaks and possums. Clean out roof space.
- Replace rotten fascias.
- Complete internal and external repaint.
- Upgrade signage generally
- Extend paying and upgrade landscaping in courtyard off activities area.

# **Electrical**

- Provide RCD protection to all electrical installations, including lights.
- New vandal-resistant lights throughout with better lighting levels, especially in dormitory corridors.

### **Electronic**

- CCTV surveillance to critical areas (corridors, seclusion rooms, art room, laundry, TV room, terraces, front and back entrances externally)
- Prox card access to front and rear entrances, staff station, kitchen, clinic and seclusion rooms.

# Mechanical

Air-conditioning to all areas not currently air-conditioned.

# Fire engineering

Change all fire sprinkler heads in resident-accessible areas to vandal-resistant / hang-proof type.

# Other

Minor repairs and maintenance items as necessary.

#### 6.2 Cost

The capital cost of Option 1 is estimated as \$1,290,000 with a Gross Project Cost of \$1,563,509.

### **Barrett Adolescent Centre**

Options Study

#### 6.3 **Advantages**

Apart from cost, the main advantages of Option 1 are:-

- Improved safety and security
- Increased ability of staff to monitor and modify behaviour
- A more pleasant environment for residents and staff
- Increased working efficiency for staff
- Improved facilities for persons with disabilities
- Prolongation of life of building.

#### 6.4 **Disadvantages**

Disadvantages of Option 1 include:-

- Some aspects of safety, security and supervision still not addressed.
- The need for the HDU is not met
- 4-bed dormitories continue
- The continuing lack of varied activity spaces and recreational facilities
- Continued inadequate clinic
- Some offices and other rooms remain in the school building.
- It remains a 30-year-old building with its dated and institutional appearance.
- The work is sufficiently major that it would be necessary to vacate the building and move the residents into temporary accommodation.

#### 7. **OPTION 2**

#### 7.1 Scope

Option 2 consists of major refurbishment plus major internal alterations and some extensions. Specifically:-

- Refurbishment generally as for Option 1
- Internal alterations to provide only 1 and 2 bed dormitories
- Relocation of the staff station to provide better supervision
- Addition of a 2 bed HDU
- Relocation of kitchen, dining room and art room for improved supervision
- Enlarged clinic
- Improved seclusion room
- Better bathroom facilities for wheelchair users, and addition of bath tubs
- Two "blue" rooms (teenage retreats)
- Improved staff facilities.

A plan showing Option 2 is attached as Appendix C

#### 7.2 Cost

The capital cost of Option 2 is estimated as \$1,935,000, with a Gross Project Cost of \$2,317,909.

#### 7.3 **Advantages**

The main advantages of Option 2 are:-

- All the advantages of Option 1
- Improved privacy and environment for residents due to smaller bed rooms etc.
- Greatly improved supervision
- Improved behaviour management due to the HDU
- A safe and efficient clinic
- A greater range of bathroom amenities
- Improved recreational facilities for residents

Options Study

# 7.4 Disadvantages

Disadvantages of Option 2 include:-

- Some aspects of safety, security and supervision still less than ideal.
- Only one seclusion room
- Not all resident recreational needs are met
- Some offices and other rooms remain in the school building.
- There inevitably has to be some compromise due to the nature of an existing building
- After considerable expenditure, there remain substantial parts of the building that are 30 years old, and hence still will look dated, lack a home-like ambience, and have limited life span with potential maintenance problems.
- The work is sufficiently major that it would be necessary to vacate the building and move the residents into temporary accommodation for a prolonged period.

# 8. OPTION 3

# 8.1 Scope

Option 3 consists of a new built facility to replace the existing one, constructed on a different site, either at The Park Centre for Mental Health, or at another location in the greater Brisbane area. It would be purposedesigned to meet the current and foreseeable needs of Queensland Health.

# 8.2 Cost

The capital cost of Option 3 is estimated as \$3,570,000, with a Gross Project Cost of \$4,128,409.

# 8.3 Advantages

The main advantages of Option 3 are:-

- The opportunity to achieve a purpose-designed facility without the compromise of altering an existing building.
- A new building with a fresh look and home-like environment.
- Longer building life and reduced maintenance
- Less disruption to staff and residents because only one move would be necessary.

# 8.4 Disadvantages

The only disadvantage of Option 3 compared with the others is cost.

# 9. COST ESTIMATES

# 9.1 Capital Costs

The estimate for Option 3 is based on the cost of building similar residential facilities for Queensland Health in recent years.

Due to the limitations of cost estimating at this stage, with limited information, these estimates should only be used for the purpose of comparing the three options. A full Project Definition Plan would need to be done before project budgets could be arrived at.

# 9.2 Gross project costs

Gross project cost estimates include capital cost of building works, plus statutory fees and charges and professional fees.

# 9.3 Exclusions

Estimates exclude:-

- Escalation from today's prices
- Temporary accommodation and re-location
- GST
- Demolition of existing building (option 3)
- · Abnormal site conditions
- Site works (eg roads, footpaths, landscape) or external services for Options 1 or 2.

# **Barrett Adolescent Centre**

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- Loose furniture and equipment
- Information technology

# 9.4 Limitations

Due to the limitations of cost estimating at this stage, with limited information, these estimates should only be used for the purpose of comparing the three options. A full Project Definition Plan would need to be done before project budgets could be arrived at.

# 9.5 Recurrent Costs

Recurrent costs have not been considered at this stage.

# 10. PROGRAM

The Project Program is contained in Appendix D, which shows that completion of construction could be achieved by late August 2006.

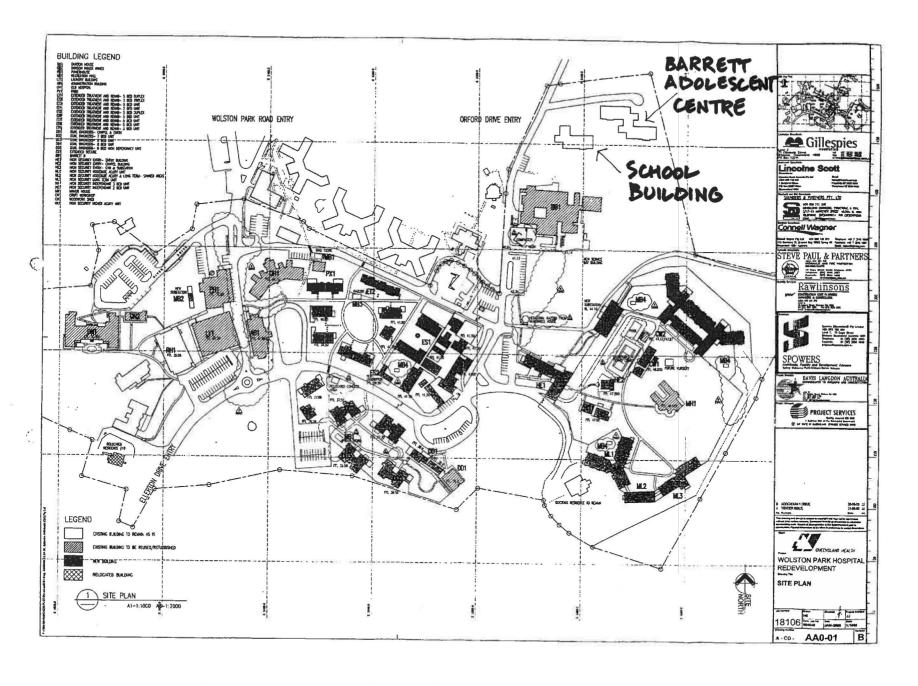


# **APPENDICES**

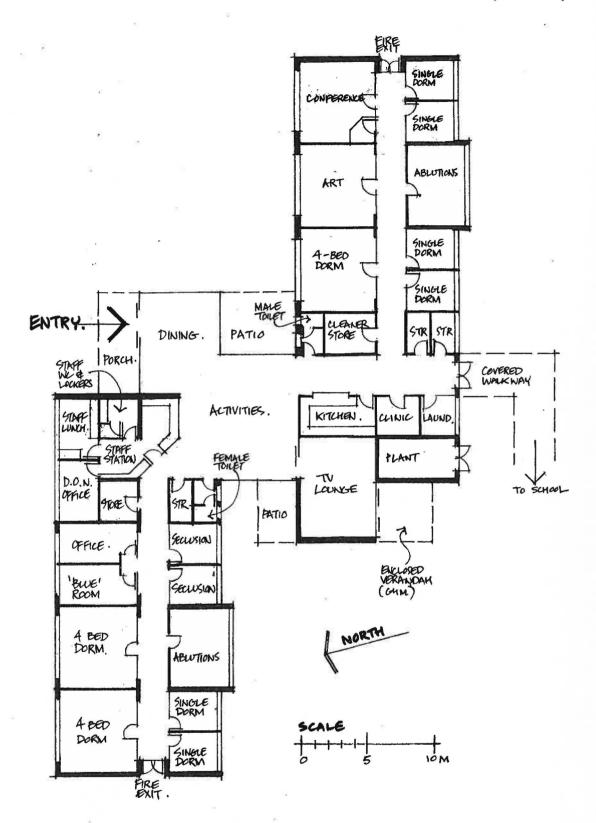


Appendix A – Plans of existing facility





# **Barrett Adolescent Centre**



BARRETT ADOLESCENT CENTRE FLOOR PLAN AS EXISTING. DECEMBER 2004





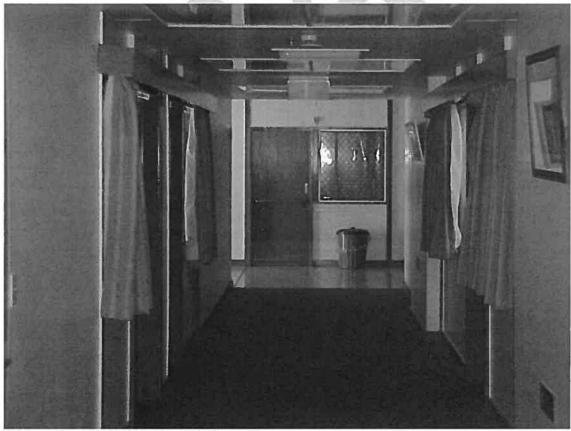
FRONT ENTRANCE.



OVERVIEW FROM SOUTH EAST CORNER.



MAIN ACTIVITIES AREA LOOKING TOWARDS STAFF STATION.

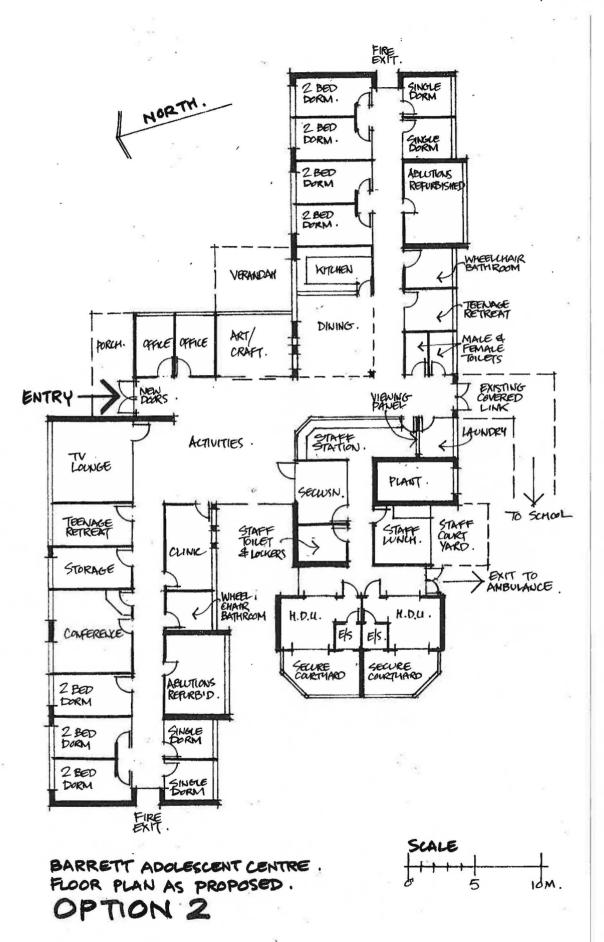


CORRIDOR IN BOYS' DORMITORY WING



Appendix C - Sketch plan of Option 2







Appendix D - Preliminary program



# **Barrett Adolescent Centre**



### **Barrett Adolescent Centre**

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Page 1 of 1

# Greg McGahan - BAC improvements.

From:

Peter Howard

To:

McGahan, Greg

Date:

01/04/2004 14:27

Subject:

BAC improvements.

CC:

BAC Team; Quinn, John

I have consulted with a number of staff regards what Improvements could be made to the ward building which would enhance our capacity to either prevent or deal with critical incidents. I have also indicated level of priority as High (H), Medium (M) or Low (L).

Three essensial more immediate modifications are :-

1) Alterations to doors in the bedrooms and day area toilets to prevent the possibility of

These can be rated from High to Low according to location.

(H)' - exit door, day area windows and doors, rooms opposite seclusion rooms and louvres in day area toilets.
 (M) - windows and doors in bedroom corridors, laundry windows and B locker room.
 (L) - all other existing glass in TV room, Art room and Family Therapy room.

3) Replacement of panelled ceiling with solid ceiling in girls' bathroom. \*\*n

Other high priority modifications are:4) The establishment of a therapeutic locked area. This could double as a HDU if required. Essentially it would be a 2 bed "wing" with tv/games area, ensuite and secure courtyard which could easily be observed and accessed by staff (built adjacent to nurses station). It would allow consumers to be managed in a safe low stimulus area separate from other consumers for short intervals or longer periods if required. (This is in staff's opinions the most highly desired and significant modification if funding allows.)

5) Replacement of entry door with a more secure one. (This would need to happen as a matter of course if the HDU area was built.)

6) Soundproofing of the Seclusion/Time out rooms and offices.

Medium priority modifications are -

7) Installation of enunciator panels and personal duress test strobe lights in both C & D blocks le, the school and ward buildings. This would bring us to the same standard as the rest of The Park-CfMH.

9) Conversion of a 4 bed dorm to 2x 2 bed dorms in female wing.

Low priority modifications are -

10) Replacement of panel ceiling with solid ceiling in day area.

11) Placing "Crimsafe" mesh over all bedroom windows.

12) Conversion of remaining 4 bed dorms to 2 bed dorms.

Please note that these improvements have all been identified as preferred modifications in the past. Some have even been quoted on. There was also a plan drawn up for a HDU and kitchen/dining area which eventually was not funded. In the past we have made some improvements as a matter of priority, eg the replacement of panel ceilings in the bedrooms and seclusion rooms. Unfortunately we have not been able to fund the above 12 suggestions within our yearly budget.

See you on Monday, Regards, Peter H.

file://C:\Temp\GW\00012.HTM

01/04/2004

# SUGGESTIONS FOR THE REBUILDING OR REFURBISHMENT OF BARRETT ADOLESCENT CENTRE

# **Building containing ward**

- Bigger bathrooms
- · Brighter colours on the walls
- Upgrade the Gym in the Unit
- Two bedrooms sharing one bathroom
- · More "blue" rooms
- Professional offices closer to the nursing station
- Art Room to be more accessible -- if it stays in the same area, could there be an external door
- · Separate cooking area for kids and staff
- Make an open kitchen by removing side wall to be easily seen into staff
- Adolescents approaching discharge to have a separate place to prepare for leaving/flatette
- Separate eating area with round tables
- · Visitors room inside
- Blue Room should be an "adolescent only time room" for playing music and talking together without interruptions, make it into an "adolescent common room"
- · Two bed bedrooms

(1)

- Own cabinets in the bathrooms
- Have a high dependency unit which can be secured while the rest of the Unit stays open
- RSO's need larger storage room
- Bigger store room for RSO's with more shelving
- · Bigger pantry in adolescents' kitchen
- Bigger Clinic

# Ward Items cont'd

- Needs to have a separate treatment room
- · Sports store room inadequate in size and style
- Indoor recreation room
- Bigger oven in ward

# **School Requirements**

- 3 classrooms of the same size as the current largest room in school
- Classrooms to be centrally at one end of school
- Craft room
- · Staff room with small kitchenette
- Bigger library
- · Separate Principal's office
- More store rooms
- Brighter colours on the walls
- Separate school building
- "C" block kitchen too small

# "C" Block if Building Structure Remains As Is

# School requirements as above plus

- · Area for students to work in
- 2 interview rooms

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- Reception room/waiting room for "C" block with tea and coffee making facilities
- Lunchtime staff room

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Options Study

# **Outdoor Areas**

- Proposed new smoking area should have chairs and be covered
- Independent living area
- Bigger shed to house horticultural and landscaping equipment and to do a manual arts program
- Recreation hall, gym and pool
- Covered outdoor area

# Items Required Once Unit is Rebuilt/Refurbished

- Airconditioning in day area split system
- · Built-in lockers in staff room in school
- Soundproofing throughout
- Computer that prints and linked to the Dept of Education internet
- Coffee and tea facilities for visitors
- Visitors who are smokers to have seating outside
- Lack of private space for each adolescent
- There should be more TV's one per room and for the "Blue Room"
- · More comfortable chairs in the TV room
- Ward craft room to be set up to be a multi-function room with extra power points and sinks
- Pottery items to be more accessible