
16.0 STRATEGIC INFRASTRUCTURE

16.1 Current Infrastructure Issues

Within the Office of the Executive Director, QHPSS there is a position of Manager, Infrastructure and Projects. This position is responsible for capital works on all QHPSS facilities including the Kessels Road campus. An Asset Strategic Plan has been developed for QHPSS and a number of projects have been identified for this campus.

In addition the Kessels Road campus is participating in the Knowledge-Based Research and Business (KBRB) / Boggo Road Re-development.

A number of issues have been raised in relation to the overall facility infrastructure such as power supply, air conditioning, security and maintenance arrangements.

Due to previous power failures the management of QHSS approached Energex to incorporate the campus onto the nearby QEII Hospital power grid. This was unsuccessful.

In late 2003/04, Uninterrupted Power Supply (UPS) was established on campus with some computers, scientific instrumentation and security systems linked to the system. Management advised in the event of a power failure, the UPS will only support some of the relevant systems for up to 10 minutes, after which the generator will be required to support the critical functions on the campus. The current generator does not have the capacity to cope with these demands and consequently, the entire system could overload and close down in the event of such emergency.

The main powerboard is also considered to be a high risk to the laboratories as a failure to this ageing equipment could result in extended power outages for the campus.

Another area of concern relates to the campus air conditioning facilities. The water chillers were second hand when they were installed and they are starting to fail. The increased number of staff on campus and the thermal load of additional laboratory equipment have put the cooling towers at capacity.

Security at the campus is a significant issue, given the nature of the work undertaken in some areas of QHSS. There is a need to strengthen physical access points to the campus. It has also been brought to the Taskforce's attention that the refrigeration facility for DNA laboratories has recently failed. This facility has been experiencing problems since the building was commissioned and this recent failure now requires urgent assessment and rectification. Arrangements have been made to house these exhibits in refrigerated shipping containers on a temporary basis pending resolution of this matter.

The Taskforce notes that there has been a series of quotations, condition assessments and reports provided to senior management for consideration. No evidence could be sourced that indicates professional engineering advice had been sought to provide a strategic framework to prioritise and sequence the current and future infrastructure needs of the campus. This is considered to be essential given the highly technical and costly nature of the infrastructure identified and the need to determine whether it is more cost effective to delay some aspects until the proposed relocation of DPI&F and CSIRO as part of KBRB. See Section 16.3 for further details regarding KBRB.

The preliminary estimates for the upgrade and replacement of critical infrastructure indicate that costs could be up to \$5M. In addition, maintenance expenditure as a proportion of the current value of buildings and infrastructure (\$90M) needs to be progressively increased from 1% to 2.5% in line with the expectations placed on other QH facilities. This will require a progressive increase in maintenance funding of \$1.15M. These one-off and recurrent costs will form the basis of a separate funding submission after engineering advice is obtained as outlined above.

16.2 Current Accommodation Issues

The current accommodation plan for the campus is illustrated in Appendix 14.

Given the significant increase in demand for Forensic Sciences in recent years, particularly for Forensic Chemistry and Forensic Biology, the current laboratories and support areas are at maximum capacity. Recent increases in staff to assist with the management of the backlogs in both these areas have been the main catalysts in creating this situation.

Previous sections of this report highlight a range of strategies to further address the backlogs and introduce efficiencies within the laboratories. However, there are a range of matters including workplace health and safety issues that require urgent attention. In view of this, and the ongoing need to bring additional staff into the laboratories for Forensic Chemistry and Forensic Biology, it is apparent that the existing laboratory capacity of these two areas needs to be expanded.

Discussions with management and an analysis of a recent submission on infrastructure issues indicates that the key options currently being considered by QHSS management are very expensive extensions to buildings or the construction of new buildings which will take some years to commission. Other strategies currently under consideration by management include the provision of office/administrative space in Block 6 for approximately 57 staff from Forensic Biology. The Taskforce does not support this approach as it decommissions one third of the existing Forensic Biology laboratory space and does not maximise the use of the existing building and its infrastructure. Implementation of this proposal would create further short term and medium term problems for Forensic Biology through a lack of laboratory capacity and versatility to meet current and future customer demands. The Taskforce believes that other options need to be considered in the first instance to address the space requirements while remaining within the existing building footprints. The options proposed by the Taskforce are as follows:

Forensic Biology – DNA

Phase 1:

- The Taskforce proposes that an existing conference room and other nearby reception areas on Level 1, Block 6 be utilised for the provision of office space for scientists to use for report writing. If developed creatively this will allow for up to 25 scientists to be accommodated outside the main DNA laboratory. This may require some limited use of “hot desking” as scientists have indicated they need a mixture of laboratory and office access to complete their analytical and report writing tasks. This strategy will provide an opportunity to free up approximately one third of the existing laboratory space for more scientific throughput. The estimated cost of this refurbishment is \$200,000.
- The freeing up of the laboratory space therefore provides other opportunities to consider the employment of more scientists as the need for DNA analysis grows. This also allows for other improvements to be made to the laboratory. This cost is not considered significant and is expected to be accommodated through the operating budget for minor works. The Taskforce believes that this issue needs to be incorporated in the engineering advice (refer Section 16.1).

Phase 2:

- If the demand for DNA testing and analysis continued to increase, the Taskforce has been informed by architects that additional laboratory and office space, up to 1,050 square metres, can be constructed around the plant of Level 2, Block 6.

Phase 3:

- Further growth for not only Forensic Biology but other Forensic Sciences could be catered for by extending Block 6 to the West. This option should only be considered after all issues in Phases 1 and 2 are implemented and further demands are comprehensively analysed.

Forensic Chemistry – Clandestine Drug Laboratories

Phase 1:

- Administrative and student clerical areas for EnTox need to be relocated from the current location (formally a science laboratory, Level 2, Block 2) to a demountable building on the campus. The estimated cost is \$150,000.
- QHPSS Information Technology staff currently located next to the administrative and student clerical areas for EnTox need to be re-located to another location within the existing buildings (space to be negotiated);
- Vacated areas from the above need to be refurbished as a laboratory for clan lab scientists and the Analytical Services Unit scientists from FSB, QPS. This laboratory could also be used for research projects and overflow laboratory space when not devoted to clan labs. The estimated cost of refurbishment is \$1,837,000;
- To address workplace health and safety issues with the sampling of clan labs (refer Section 8.6) the Taskforce proposes that a demountable sampling laboratory be located adjacent to the KRPA enabling the clan lab scientists to sample the seized clan labs outside of the main Forensic Chemistry laboratories. The estimated cost and fit out of this is \$200,000; and
- These solutions will provide sufficient bench space for the scientists who would be engaged to work on the clan lab backlog.

Phase 2:

- Provision of building extensions to Block 2 (currently housing Forensic Chemistry) should only be given consideration after all issues in Phase 1 are implemented and future demands are comprehensively analysed.

Other Accommodation Needs

- Given that the joint roles of Director, QHSS and Director, EnTox have recently been split by the Executive Director, QHPSS it is opportune to consider the location of the accommodation of the Director, EnTox. The Taskforce believes that the office for the Director of EnTox should be located on Level 2 Block 3 in close proximity to the EnTox scientists/students. The estimated cost is \$40,000.

16.3 Future Infrastructure Issues

Cabinet has decided that the Knowledge-Based Research and Business (KBRB) / Boggo Road Redevelopment (including Boggo Road and Cooper Plains Science precincts) would proceed. The proposal creates an opportunity to have a critical mass in research skills, facilities and infrastructure by:

- Providing greater collaboration and coordination between the State, Commonwealth and University scientists and researchers;
- Providing a focus for post-graduate research mentored by the best scientific talent; and
- Establishing the “Institute” as a centre of world class research and development facilities that enable efficient use of resources and infrastructure.

The activities to be relocated to the Kessels Road campus include:

- Food science research activities of DPI&F and CSIRO;
- DPI&F animal pathology laboratory; and
- CSIRO’s Entomology and associated insectaries, shade house and glass house development.

Current estimates confirm that gross floor requirements of DPI&F will be 7,888 square metres, and CSIRO will require 3,256 square metres. It is anticipated that the DPI&F capital costs will be \$43.3M and CSIRO will be \$17.3M, bringing it to a total of \$60.6M. However the Department of Public Works is currently investigating the infrastructure plan and costs.

QH supports the relocation of these activities to the Kessels Road campus subject to there being no negative impact on QHSS and no additional funding requirements from QH. It is essential that the KBRB project meets all costs associated with road and site access, water, electricity and other issues associated with the Kessels Road campus. QH also expects to be reimbursed with market rent/lease from the new occupants at the Kessels Road campus.

The Department of State Development and Innovation (DSDI) is preparing a Whole-of-Government budget bid seeking funding for new facilities in the KBRB project. QH's component of the Whole-of-Government budget bid seeks funding for infrastructure to support the additional facilities to be collocated at Kessels Road as a part of an integrated campus. This new infrastructure is critical to the effective operation of current and new facilities. The funding will be used to upgrade existing services such as chilled water and power supply to support the existing campus facilities and also the proposed DPI&F and CSIRO laboratories.

Recommendation 60:

It is recommended that the Chief Executive Officer of the Institute:

- (i) *Commission professional engineering advice to provide a strategic framework to prioritise and sequence the current and future infrastructure needs of the campus by **31 January 2006**;*
 - (ii) *Cease the existing management proposals to house up to 57 scientists in office/administrative space on Level 1, Block 6 **immediately**;*
 - (iii) *Refurbish the conference room and other nearby reception areas of Level 1, Block 6 as office space for up to 25 scientists from Forensic Biology by **31 January 2006**;*
 - (xii) *Move Forensic Biology scientists from the main DNA laboratory on Level 1, Block 6 to the administration area created above and re-commission the freed up DNA laboratory space for DNA processing as required into the future by **31 January 2006**;*
 - (xiii) *Re-locate administrative and student areas for EnTox from Level 2, Block 2 to temporary accommodation such as a demountable in the grounds of the campus to free up critical laboratory space by **31 January 2006** ;*
 - (xiv) *Move the Information Technology Support Unit on Level 2, Block 2 to an alternative location on the Kessels Road campus by **31 January 2006***
 - (xv) *Refurbish the half floor vacated by the movement of the administrative and student clerical areas of EnTox and the Information Technology Support Unit as a laboratory for additional clandestine drug laboratory work and the Analytical Services Unit scientists, Queensland Police Services by **31 January 2006**;*
 - (xvi) *Establish a demountable laboratory adjacent to the Kessels Road Police Annex to address Workplace Health & Safety issues with the sampling of Clandestine Drug Laboratories by **31 January 2006**; and*
 - (xvii) *Construct an office for the Director of EnTox on Level 2, Block 3 by **31 January 2006**.*
- (Estimated non-recurrent cost: \$2,627,000)*