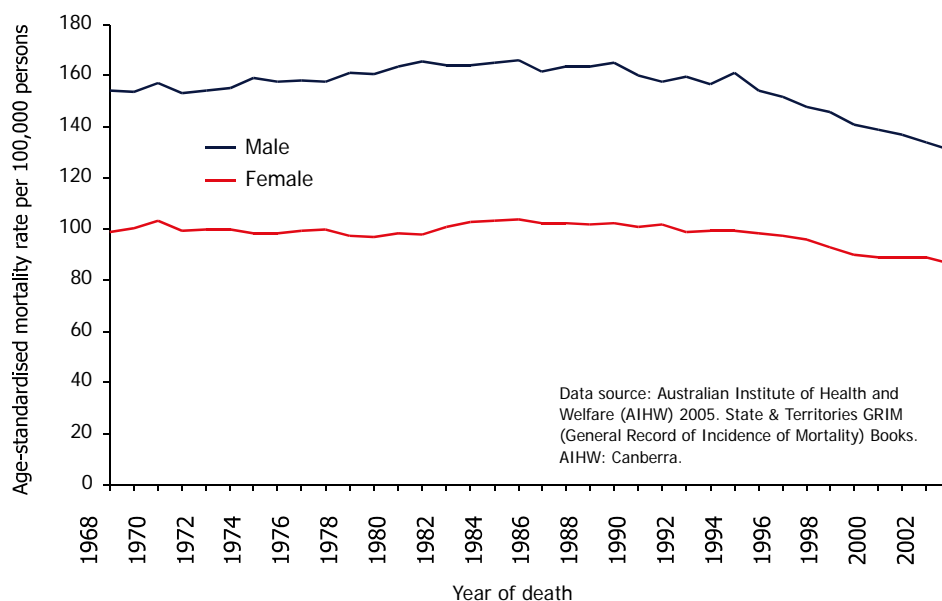




9 Cancer as a Key Current Opportunity

- 211 Health is a major concern of the Australian public. 'Improving health services and hospitals' was a top 3 issue for 63% of some 3,852 electors polled across Australia in a Roy Morgan Research poll³⁷ in 2004. The next most significant issue was 'improving education', a top three issue for 34% of respondents.
- 212 Cancer is Australia's number one cause of preventable and treatable premature mortality and is the number one health concern for Australians – 70% of Australian's regard cancer as the main health problem facing them in the future.³⁸
- 213 While cancer death rates have reduced significantly over the last twenty years (refer to the figure below), reductions in mortality from other causes and longer life expectancy mean that about one third of Australians still die of cancer. As such cancer creates a substantial health burden on Australia, for its population, its governments and for the health system.

*Trends in Cancer Mortality 1968-2003*³⁹



- 214 In Victoria, nearly 22,500 of the population develop cancer other than non-melanocytic skin cancer each year and nearly 10,000 deaths are caused by it. In 2003, 12,286 men and 10,212 women presented with new cancers and 5,351 men and 4,340 women died from cancer in 2002.

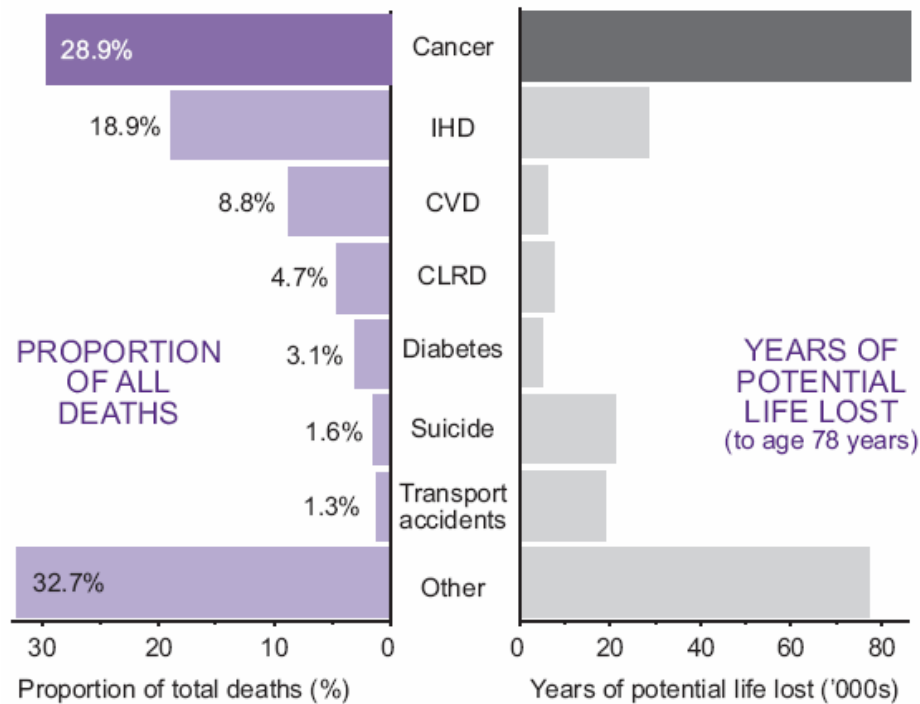
³⁷ Roy Morgan Research. Jan/Feb 2004.

³⁸ Macquarie University. *Survey*, 2005

³⁹ Australian Institute of Health and Welfare (AIHW). 2005



Leading Causes of Death and Potential Life Lost (Victoria, 2003)⁴⁰



IHD = Ischaemic heart disease
 CVD = Cerebrovascular disease (stroke)
 CLRD = Chronic lower respiratory disease (asthma & emphysema)

9.1 An integrated multidisciplinary care approach

215 The optimum treatment of cancer requires an integrated multidisciplinary care approach involving a range of clinical specialists, nursing and allied health professionals, linked closely to research groups, working in patient treatment teams, and tailored to the needs of individual patients. Such an approach has been shown in other jurisdictions to improve health outcomes while reducing total treatment costs.

216 Specific components of such an approach are:

- Research into the causation, prevention, diagnosis and treatment of cancer (long term epidemiological studies are of relevance in this regard) together with particular attention to the rapidly evolving knowledge relating genetic and tissues marker data to choice of optimal treatment regimes;

⁴⁰ Anti-Cancer Council of Victoria. *CANSTAT, No 41 (ISSN 0815-7219)*, December 2004



- Education about cancer at all levels including community, individual patient, undergraduate and postgraduate students in medicine and allied health services, and in service training of young professionals, especially trainee specialists in oncology;
- Patient treatment and care bringing together the critical forms of radiation oncology, medical oncology and surgical oncology incorporated with clinical trials drawing on the most recent research findings;
- Outreach into population-based screening programmes for prevention and early treatment strategies; and
- Commercialisation of research inventions and discoveries through appropriate spin-off companies, licensing or partnership arrangements.

217 Using this approach to maximise cancer health outcomes and minimise total treatment costs requires a critical mass in cancer physician subspecialties and other related services. This can be achieved in a cancer focused treatment centre balancing radiation, medical and surgical oncology services into a fully integrated cancer centre to provide efficient and effective treatment and prevention services across the whole community.

9.2 Current cancer strengths

218 There are a number of international fully integrated cancer centres capable of improving and delivering new cancer treatment. Australia has no comparable centre capable of developing and delivering state-of-the-art, evidence based therapy to cancer patients.

219 Victoria has the potential to develop one of the world's most effective cancer prevention, detection and management systems. It already has a long history of successful initiatives which have improved cancer screening, research and treatment. CCV, the Victorian Cooperative Oncology Group, Breast Screen and the Victorian Breast Cancer Research Consortium, together with RMH and Peter Mac, are acknowledged as world leaders in their field. The Victorian Government has also established a Ministerial Taskforce for Cancer to develop an overall vision for cancer services in Victoria and state-wide strategy for improving outcomes for cancer patients.

220 The presence within a small geographical area of three teaching hospitals (RMH, RWH and RCH) each providing clinical cancer services, internationally recognised research institutes such as WEHI and LICR, UoM, the Bio21 Institute, together with the proximity of Peter Mac and CCV, provides the basis for a collaboration which could link to other metropolitan, regional and rural cancer services in Victoria, and lead to the provision of world class cancer services.

221 The Peter MacCallum Research Division itself employs nearly 300 staff, making it not only Australia's largest, but also one of the world's largest groups dedicated to cancer



research⁴¹. Research at Peter Mac is undertaken within the broad framework of four research programs, namely Cellular & Molecular Biology, Stem Cell, Cancer Immunology and Cancer Genomics & Genetics. The fundamental studies undertaken by its research programs are helping to discover the biology of life and are central to understanding processes in cancer cells.

- 222 Further cancer research strength is provided by RBMRL, founded in 1994 as a joint initiative between RMH and the Bone Marrow Donor Institute.⁴² Their original charter was to research diseases curable by bone marrow transplantation, such as leukaemia, and the genetic blood disorders, thalassemia and sickle cell anaemia. Their research direction has broadened to include breast cancer and associated developmental defects.
- 223 The Precinct therefore is endowed with key capabilities in research, platform technologies and healthcare services needed to support the development of world class integrated cancer capability. This provides an important opportunity for Victoria to build on the current strengths of Parkville institutions to improve healthcare for the Victorian community. The focus on cancer research and patient care would not only benefit hospitals and cancer related research institutions, but also has the potential to link to and include many other healthcare, research and education institutions in Victoria.
- 224 The specific components and functions of the integrated cancer capability should be developed through joint planning by Government and all relevant institutions, and taking into account state-wide policies for cancer being developed by the MTFC.

Rec 12. That the South Parkville zone's current strengths be further developed to establish an integrated cancer research, treatment, education and prevention capability.

9.3 Relocation of the Peter MacCallum Cancer Centre

- 225 Currently under consideration are options for the redevelopment of Peter Mac. DHS has committed to work with Peter Mac and associated stakeholders to undertake service and capital planning to prepare a business case on a number of options for the Peter MacCallum redevelopment, including a move to a new purpose-built facility on an appropriate site adjacent to the RMH.
- 226 The preliminary report of the Cancer Services Framework (CSF) recommended that Peter Mac be co-located with the RMH in Parkville. Peter Mac would retain its independence, identity and role as a specialist cancer hospital and maintain a state-wide leadership role in cancer services.

⁴¹ Peter MacCallum Cancer Centre. *Research Report*, 2004.

⁴² http://www.mh.org.au/Royal_Melbourne_Hospital/DEPARTMENTS/A-C/Bone_Marrow_Research_Laboratories/, July 2005



- 227 In making this recommendation the CSF assessed the option of redevelopment of the present Peter Mac site, but concluded that the capital investment in facilities and infrastructure required for Peter Mac to continue on its current site was prohibitive and that relocation to another site would provide better value for the Government's investment. The option of co-location with the RMH was preferred to other possible relocation sites as it afforded the clinical and research synergies needed to facilitate excellence in cancer care into the future.
- 228 The report also proposed the development of integrated cancer services in metropolitan and regional Victoria as a new service model for cancer care. Within this service system it is envisaged that Peter Mac would maintain its leadership role in cancer services (including highly specialised services for complex treatment) and in clinical and biotechnology research and development. Peter Mac would retain a critical mass of cancer services (including support services such as biomedical statistics) to fulfil its leadership role and ensure an ongoing capacity to support innovation.
- 229 The proposed co-location of Peter Mac with a general tertiary acute hospital such as the RMH would link Peter Mac more effectively into the metropolitan hospital system and provide it with a full range of clinical and clinical support services, and would provide the RMH with co-located radiotherapy services and access to a full range of clinical services.
- 230 Other benefits include improved access to complementary specialist consultation, treatment and diagnostic services and new opportunities created for research and clinical synergies, by building on the combined strengths at Peter Mac and the many clinical, research and academic institutes in the Precinct.
- 231 The co-location of Peter Mac adjacent to the RWH would also provide new opportunities to build on the respective expertise of these two hospitals in providing cancer services and specialist women's services, with particular benefits expected in the provision of gynaecological oncology services.
- 232 The option of Peter Mac moving to such a location within the Precinct, nearby three major teaching hospitals and a number of world class cancer research institutes, has a significant advantage over alternative sites in Melbourne. Indeed the opportunity provided by such co-location within Parkville is not available elsewhere in Australia.
- 233 To ensure that the option of relocating to Parkville is available, DHS seeks a site to be reserved for Peter Mac, including consideration of the FDH site for this purpose, consistent with the *Cancer Services Framework* and the *Metropolitan Health Strategy*.

Rec 13. That the Peter MacCallum Cancer Centre be relocated to an appropriate site adjacent to the Royal Melbourne Hospital – City Campus, to take advantage of the strong benefits of co-location and sharing of cancer services with other clinical and research services in the South Parkville zone.



10 Redevelopment of the former Dental Hospital site

234 The FDH site is a prime location at the junction of Royal Parade and Flemington Road and provides an opportunity for an iconic building on one of Melbourne's most prominent gateway sites. The general shortage of redevelopment sites in Parkville further increases its importance to the future development of the Precinct.

10.1 Precinct opportunity

235 The location of the FDH site at the heart of Parkville means that it has the potential to accommodate a multitude of uses that augment the health, education and research functions in the Precinct. In this regard, a number of institutions, both on and off-precinct, have expressed an interest in the FDH site as a solution to their growth and expansion needs.

236 The broad physical characteristics of the existing FDH site present an opportunity for:

- A building floor area of 70,000 – 80,000 square metres within a nine storey building configuration;
- Integration between the FDH site, RMH site and new RWH site and key institutions including the Bio21 Institute, WEHI and LICR;
- Strong presentation to three street frontages – with three “front doors”; and
- An iconic landmark building that is representative of the Precinct and its activities.

237 The position of the FDH site immediately opposite the RMH provides a clear opportunity for physical linkage across Grattan Street. The decision on how to best integrate the FDH site with the RMH requires a detailed study, including a cost /benefit analysis, to investigate the implications of changing the role of Grattan Street, particularly alternatives for redirecting traffic.

238 There are essentially two basic options for achieving a physical connection between the FDH site and RMH – building on the street, or building a bridge or deck structure over the street. There are also a number of detailed design solutions that would be available under these two broad options.

239 A Grattan Street closure option could provide for extensive integration between the buildings on either side of Grattan Street, remove vehicle/pedestrian conflict, and provide opportunities for excellent public space outcomes. It could also provide an additional 10,000 – 20,000 square metres of building floor space, a significant gain in the context of Parkville. This is a conservative estimate that assumes a relatively low site coverage and medium scale development. This estimate could increase depending on the final site configuration building design. The benefits of improved site integration and additional yield would need to be weighed against impacts on and implications for transportation, traffic and access.



- 240 The option of decking over Grattan Street provides less yield but would still allow for upper level links to achieve a level of integration. It should however be recognised that the RMH and RWH planning processes that are presently underway will need to continue in conjunction with the resolution of the treatment of Grattan Street, and further highlights the importance and urgency of resolving the treatment of Grattan Street.
- 241 **Appendix B** includes a series of perspectives and notes which reflect the exploration of these opportunities, and the two main options for the future of Grattan Street.

10.2 Issues for site redevelopment

- 242 Specific issues associated with the redevelopment of the FDH site that need to be considered include:
- integration with surrounds (physical, functional, operational and visual);
 - management and coordination of services and resources;
 - the island character of the site creating:
 - a finite parcel with little expansion opportunity;
 - accessibility constraints both during development and long term;
 - challenges for staging of the development of the site;
 - activity on surrounding sites both in terms of development of nearby sites as well as the components proposed within these developments;
 - the need to maximise synergies particularly given the potential simultaneous development of other sites in the Precinct;
 - the opportunity cost of partial or full closure of Grattan Street, in terms benefits for physical connections and delivery of service, as well as the impact upon metropolitan traffic flows;
 - addressing community views, values and expectations;
 - appropriate funding strategies and staging of the delivery of the development particularly as this may relate to the preferred use of the site; and
 - agreement to the use of the site having regard to both current and future needs and priorities.
- 243 A fundamental issue for the FDH site is resolution of its preferred use. There are few redevelopment opportunities with the same attributes as the FDH site and it should be developed in a manner that provides the greatest benefit for both the Precinct and the State more broadly. This places a high premium on the site and requires a commitment by all stakeholders to pursue the achievement of these outcomes.



10.3 Options for redevelopment

244 A number of broad use options are possible for the FDH site. The options are not intended to be exhaustive nor mutually exclusive, rather to represent the spectrum of focus and uses that might reasonably be considered for the FDH site given the surrounding land uses, physical site conditions and constraints, the commercial value of the site, and the role of the Precinct overall. The options considered are:

- Translational Research and Healthcare

This option combines basic and translational biomedical research with multidisciplinary patient care as its dominant use. This would comprise dedicated wet and dry laboratory space, inpatient and ambulatory patient care facilities, a small conference facility, and limited retail/commercial offerings to meet basic needs.

- Integrated Precinct Representation

Under this option the building would house a generic set of occupants and uses that reflect the general health, education and research focus of the Precinct. It would potentially cater for key Parkville research institutions known to have expansion needs.

- Commercial Development

This option would involve a building with flexible office and generic laboratory space that is targeted towards biotechnology enterprises. This would be supported by incubator administration and office space. This option could also have a substantial conference and function facility, a range of shops and restaurants, business service outlets.

- Strategic Technology Facility

Under this option, the FDH site would be used to house platform infrastructure and equipment and associated services that would benefit the Precinct overall. An example of this concept is the synchrotron facility within the Monash Strip. While it is beyond the scope of this report to prescribe the type of platform infrastructure that might be required in Parkville, it is likely that such facilities would not occupy the entire building. Space could therefore be provided for associated research activities, a small conference/function facility, and a limited amount of retail/commercial uses at lower levels.

10.4 Assessment of options

245 In evaluating use options for the FDH site, a key consideration is their ability to contribute to the Precinct vision. In this regard, specific objectives for redevelopment of the FDH site should be to:

- Reinforce and strengthen the Precinct as a leading healthcare, research and education location within Victoria and Australia;



- Strengthen physical and operational synergies/linkages with existing and potential users;
- Maximise the redevelopment potential and provide opportunity for other sites to better utilised;
- Relocate organisations which will derive a direct benefit from the location, enhance synergies with other activities proximate to the site and improve existing or create new partnership opportunities;
- Involve organisations which are committed to partnering with other organisations within the Precinct; and
- Establish a strong urban presence and creating an iconic signature for the Precinct.

246 Using these criteria, the preferred use for the FDH site is for *translational research and healthcare* purposes, establishing strong connections to the adjacent tertiary hospitals.

247 Such an integrated *translational research and healthcare* facility requires a holistic approach the development of the FDH site and nearby sites in the South Parkville zone. In particular, the redevelopment of the FDH site should be considered jointly with ongoing development of RMH together with the current planned development of RWH to ensure appropriate integration with the facilities and activities at these sites.

248 Also critical for effective integration is resolution of the role and use of Grattan Street, specifically through a study that identifies alternative transport, traffic and access strategies that would enable partial or full closure of Grattan Street.

Rec 14. That the former Dental Hospital site be designated for integrated translational research and healthcare and redeveloped in a way that enables the Peter MacCallum Cancer Centre to be relocated adjacent to the Royal Melbourne Hospital – City Campus.

Rec 15. That the former Dental Hospital site be redeveloped as part of a coordinated masterplan for the South Parkville zone which enables physical integration with the Royal Melbourne Hospital – City Campus site and the new Royal Women’s Hospital.

Rec 16. That more effective integration of the former Dental Hospital site with the Royal Melbourne Hospital – City Campus site and the new Royal Women’s Hospital would be enabled by partial or full closure of Grattan Street. For this to occur, alternative transport, traffic and access strategies will need to be identified and implemented.

249 Within a broad translational research and healthcare focus, there is strong support for the FDH site to be used to facilitate integration of cancer services as discussed in Chapter 9. This may in fact have elements of both the *translational research and healthcare* and *integrated precinct representation* options described above, and potentially involve a large number of the Precinct’s health, research and education institutions.



- 250 Specific reasons for a cancer focus for FDH include:
- Parkville's institutions and Peter Mac have internationally recognised strengths in cancer research and clinical care;
 - Cancer research and patient care have potential links to many other research and education interests in the Precinct; and
 - The FDH site together with RMH and RWH presents an opportunity to create a focus for cancer services that can link to other health, education, research and cancer services throughout Victoria, and assist Victoria to become one of the world's leading cancer centres and top five biotechnology locations.
- 251 The design of the specific components and functions of the facility on the FDH site requires a collaborative planning process involving Government and all relevant institutions. This should also take into account emerging state-wide policies under consideration by the MTFC. Important decisions will need to be made on the mix and configuration of specific uses within the building and maximisation and synergies with surrounding land use activities. There will also be significant issues relating to urban form and design, integration and access, infrastructure provision and car parking.
- 252 To assist with the evaluation of specific proposals a detailed set of assessment criteria has been prepared, having regard for the opportunities and constraints, and the relationship with surrounding activities. The specific assessment criteria deal with the following issues:
- Urban form considerations;
 - Support for integration, efficiencies and synergies;
 - Ability to address car parking requirements;
 - Accessibility to and around the facilities developed;
 - Alignment with infrastructure requirements; and
 - Alignment with relevant policy objectives.
- 253 The availability of the FDH site provides a critical development opportunity for the Precinct. As an integrated component of a larger potential complex including RMH, RWH, and neighbouring research institutes, it creates the potential to encourage and support high levels of integration amongst key institutions on the Precinct.



11 Other Key Issues

11.1 Planning for change

- 254 It is expected that the Precinct and its immediate surrounds will undergo significant physical change over the coming decade. This will be driven by the continued growth and success of the existing Precinct institutions combined with the emergence of new biotechnology enterprises. Effectively managing growth is a critical issue for the Precinct given the underlying shortage of green-field or infill development sites, as is the interface to surrounding heritage areas and open space.
- 255 It is imperative that physical growth and development occurs in a way that builds on and optimises the existing strengths of the Precinct and its institutions and, at the same time, protects the amenity and character elements of Parkville that are so highly valued. These provide a significant competitive advantage for the Precinct and will be an important factor continuing to attract the best professionals to work and live in the Precinct.
- 256 The range and diversity of stakeholders with a direct interest in development issues is also a key consideration. The Strategic Plan should serve as an instrument to guide decisions about planning and development matters in order that they maximise benefit for the overall Precinct and the State of Victoria.
- 257 The interests of the Precinct will be best served if decisions are made in a holistic way and not on a site-by-site basis. The Strategic Plan should assist in understanding and assessing the Precinct-wide implications of a given site development decision. The draft Structure Plan should guide the more specific planning instruments such as institutional master plans and Melbourne City Council planning policies and controls.
- 258 The Parkville Strategic Plan should also inform more specific planning instruments such as institutional master plans and Melbourne City Council planning policies and controls.

Rec 17. That the key directions and recommendations of the Parkville Precinct Strategic Plan be taken forward in all relevant planning processes. In particular, that the Draft Structure Plan, consistent with the Strategic Plan, be considered for introduction into the Melbourne Planning Scheme.

11.2 Infrastructure integration

- 259 The Precinct members have common needs for many services and facilities which are potentially shareable, such as:
- Clinical facilities;
 - Platform technologies and major equipment investment, including ICT;



- Animal breeding and animal housing;
- Site engineering and facilities management services; and
- Research libraries (or learning hubs), conference and meeting room facilities.

260 Integrating clinical facilities and physical infrastructure capacity, particularly in the form of transport and servicing, will be an issue that requires constant attention as the Precinct grows and evolves. While there do not appear to be any insurmountable servicing limitations facing the Precinct, the retro-fitting of upgraded servicing infrastructure to an established area such as Parkville can be expensive and highly disruptive.

261 Overall demand for servicing infrastructure can be reduced through the uptake of sustainable building technologies and practices, and sharing between organisations. As a centre of knowledge and innovation the Precinct has an obligation to act as a leader in the implementation of ecologically sustainable development (ESD) initiatives. Indeed, the Precinct has made a positive move in this direction with the construction of the Bio21 Institute building.

262 With a coordinated approach to the planning and development of the Precinct, it should be possible to achieve greater efficiencies in the roll-out of servicing infrastructure. Infrastructure provision decisions could be made with an increased knowledge of where and when future development activity is likely to occur.

Rec 18. That the benefits and efficiencies of integration be realised through sharing of infrastructure and facilities where appropriate, such as common clinical services, platform technologies, laboratory space, major specialist equipment, animal breeding and housing, ICT, emergency planning strategies, car parking and conference facilities.

11.3 Transport, traffic and access

263 The Precinct contains a number of roads and public transport connections that are integral to transportation system of Melbourne's northern suburbs and the metropolitan area more generally. Important roads in proximity to the Precinct include the CityLink freeway, primary arterials including Flemington Road, Brunswick Road, Royal Parade, College Crescent and Elizabeth Street, and secondary arterial links such as Swanston Street.

264 The roads network that supports the Precinct has a dual role involving access provision for the local community, and meeting the needs of commuter and commercial transport at a metropolitan and state level. Given its strategic importance, any modifications to transport infrastructure within the Precinct should have regard to its role in the wider metropolitan system.

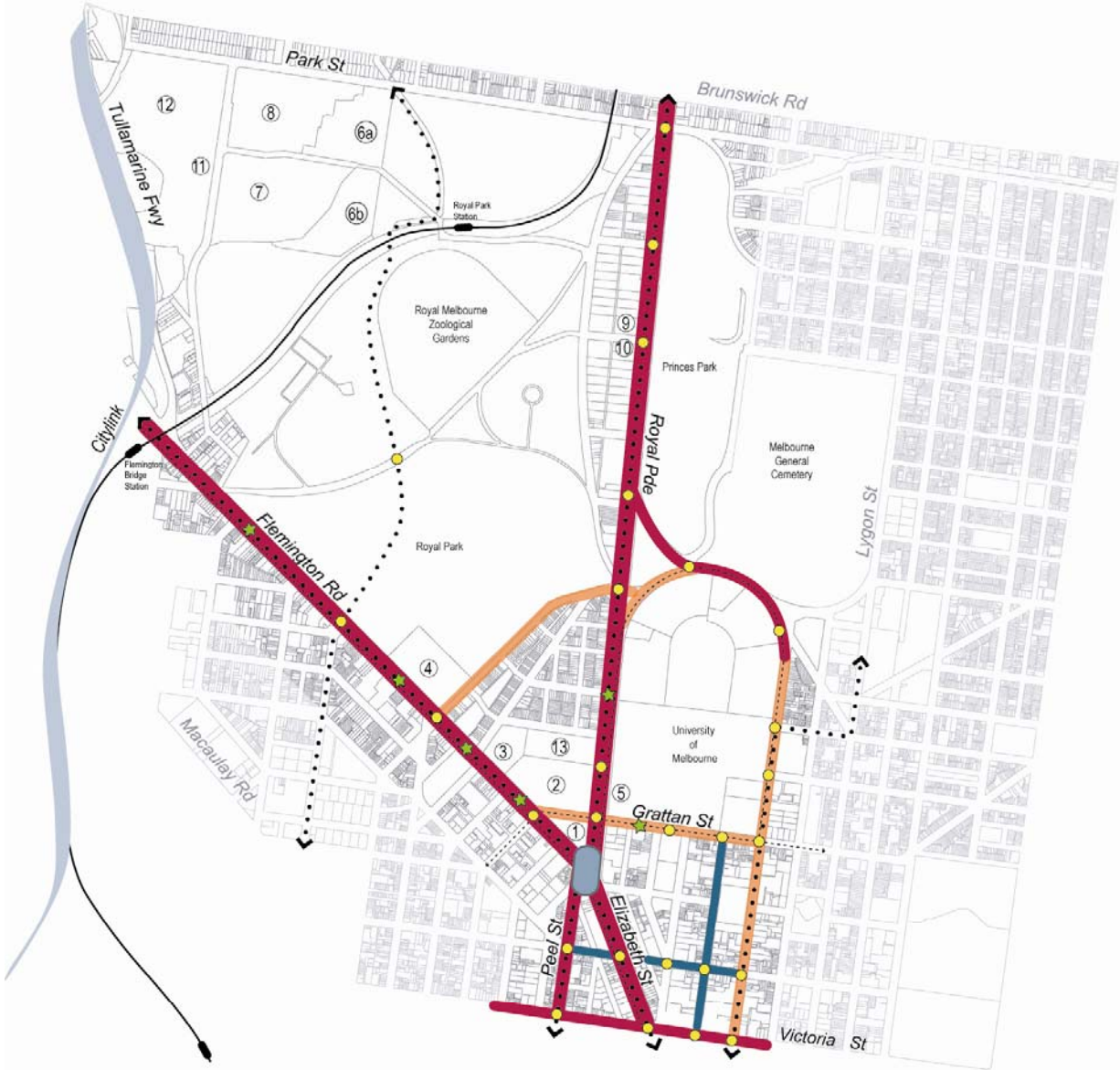
265 The Precinct is relatively well-served by public transport, particularly tram services which operate on Swanston Street, Elizabeth Street, Peel Street and Flemington Road. Bus services connect to the Precinct from all directions with 11 services operating on roads within, or adjacent to, the Precinct.



- 266 Suburban rail services provide indirect access to the Precinct from Melbourne Central Station via Swanston Street or Elizabeth Street; Flinders Street Station via Swanston Street or Elizabeth Street; and Spencer Street Station indirectly via William Street / Peel Street.
- 267 The lack of east-west public transport services was identified in the draft Northern Central City Corridor Strategy (NCCC) as being a weakness of the overall transport system in Melbourne's inner north. It also identified slow travel speeds and poor reliability of road-based public transport services due to traffic congestion as persistent problems.
- 268 There is effective cycle access around the Precinct, with off-road paths adjacent to the UoM on Royal Parade (both sides – through to Brunswick Road) and Grattan Street (north side – adjacent to University). However, there are opportunities to expand the principal bicycle path network and also improve the network of lower-order routes and provide better facilities for cyclists. Many of these initiatives are being carried forward in the City of Melbourne Bike Plan (May 2002).
- 269 Pedestrian traffic is an extremely important way of movement within the Precinct. The Precinct generally provides an attractive environment for pedestrians although improvements could be made to reduce the barrier effect of arterial roads, particularly Royal Parade, Flemington Road, and the Haymarket roundabout.
- 270 The draft NCCC Strategy predicts that population and employment growth in Melbourne's inner north, in combination with metropolitan growth, will have significant implications for the transport system.
- 271 Unless action is taken, the draft NCCC forecasts that by the year 2021 vehicle trips in Melbourne's inner north will increase by 18%, vehicle-kilometres of inner north travel will increase by 21% and vehicle-hours by about 46%. This will give rise to an additional 6.3 million hours of inner north travel time a year (costing about \$55M in lost time) and will reduce all-day average travel speeds in the inner north from 34km/h to 28 km/h. The following transport network diagram shows the predicted increases in traffic volumes on key roads in Melbourne's inner northern region by 2021, assuming no action is taken to address transport issues.
- 272 The efficient use of transport infrastructure is becoming a pressing issue for the Precinct. More efficient and sustainable use of transport infrastructure will require a multi-pronged approach involving a range of travel demand management strategies. This could include organisations preparing 'green travel plans' and cooperating to more effectively utilise existing car parking space.



Transport Network



Source: Victoria Cadastre 2003;
 CData01 with MapInfo
 Produced by: Urbis/JHD Pty Ltd



LEGEND

- | | | | |
|--------------------------|--------------------------------|--|--|
| Primary arterial roads | Haymarket Roundabout | ① Former Dental Hospital Site | ⑦ C.S.L Limited |
| Secondary arterial roads | Signalised pedestrian crossing | ② Hospital / Research | ⑧ Melbourne Juvenile Justice Centre and Parkville Youth Residential Centre |
| Collector | Tram line | ③ University of Melbourne
Western Precinct / Bio 21 Institute | ⑨ Victorian College of Pharmacy - Monash University |
| Traffic signals | Bus route | ④ Royal Children's Hospital | ⑩ CSIRO - Division of Molecular and Human Technologies |
| | | ⑤ Howard Florey Institute | ⑪ Mental Health Research Institute |
| | | ⑥a Royal Melbourne Hospital - Royal Park Campus | ⑫ Commonwealth Games Village 2006 |
| | | ⑥b Poplar Road site including Orygen Health | ⑬ University High School |



- 273 The Precinct is currently undergoing a phase of growth and transformation which will have significant implications for transport and access conditions. This includes:
- the ongoing evolution and upgrade of the RMH and the UoM;
 - the relocation of the RWH;
 - the redevelopment of the RCH;
 - the redevelopment of the FDH site;
 - the growth of key healthcare and research institutions;
 - growth in the commercial biotechnology sector; and
 - continued residential infill development.
- 274 In addition the anticipated urban growth and development within the Precinct and its immediate surrounds, substantial off-site development projects are expected to impact on transport conditions in Parkville. These include Melbourne Docklands and the major urban fringe residential developments projects in the Plenty Valley, Epping North, Hume and Caroline Springs growth areas.
- 275 Increased traffic volumes will obviously place additional pressure on the existing transport infrastructure in Parkville. The draft NCCC investigated transport issues in Parkville and surrounding areas and explored several options to address the problem of limited east-west connectivity in the vicinity of Parkville and Carlton. This included an east-west road tunnel between the Eastern Freeway and Citylink, and a tunnel between the Eastern Freeway and the Melbourne CBD.

Rec 19. That transport, traffic and access implications of the intensification of the Precinct be considered in all relevant state, metropolitan and local planning studies.

11.4 Communication and promotion

- 276 The health, research and educational sectors have a thorough understanding and appreciation of the value, role and contribution of the Precinct to the State of Victoria. However, this is not necessarily the case in the broader community. While some of the institutions within the Precinct are well recognised, the collective value of the Precinct appears to be less understood.
- 277 Effective communication between Precinct stakeholders and the broader community that enables a two-way flow of information would further enhance Precinct activities. Not only would it support further integration of Precinct members, but would assist with integrating the Precinct with the broader community.
- 278 Precinct stakeholders do undertake highly effective individual promotional activities, but this is usually within their specific area. Even though there are established associations and organisations which assist in the promotion of the Precinct, these efforts are often focussed on a particular industry or with a view to obtaining specific funding.



- 279 Bio21 Australia is recognised as having made a significant contribution to promotion of the Precinct. The UoM conducts international promotion in its own right, which includes its associated institutions, and many of them are similarly active independently. The BioMelbourne Network has also contributed through its promotion of biotechnology for the State as a whole.
- 280 The Precinct is already a major national icon and should continue to enhance its international identity as a major biomedical precinct. Further communication and promotion of the Precinct is required to raise awareness of the significance of the Precinct to the local, state and national communities. The benefits of further development of the Precinct need to be better understood by these communities.
- 281 A communication and promotional program should be developed which incorporates both the individual and collective capabilities within the Precinct, expresses the full range and diversity of the Precinct's strengths and ensures that current and future promotional messages are consistent and delivered in concert.
- 282 It should also promote the sale of products and knowledge into export markets, aim to secure investment capital and attract the most talented workforce. The importance of the Precinct identity and any associated promotional activities are likely to increase as the number and size of commercial biotechnology activities on the Precinct continue to grow.

Rec 20. That a communication strategy be developed to promote the Precinct to stakeholders and communities within the Precinct, throughout all Victoria, Australia and internationally.



12 Achieving the Strategy

12.1 Outcomes and benefits

283 The overall goal of the vision and strategy for the Precinct is to deliver economic and social benefits for:

- The community – through the provision of more effective and research and evidence-based multi-disciplinary healthcare and education programs;
- Industry and enterprise – through significant economic returns in terms of intellectual property, product development and commercialisation and flow-on attraction of funds, talent and industry; and
- The workforce – through becoming recognised for the vibrancy of its activities and the quality of its research and education.

284 Specific outcomes sought from the strategy include:

- New more effective modes of healthcare delivery resulting in significant health gains;
- Innovation, productivity and efficiency savings from an interface between biomedical research, education and healthcare, and the sharing of facilities, services and platform technologies;
- Improved access to employees/institutions, information, and complementary technical and managerial skills;
- An increased voice and critical mass for attracting talent and securing investment funding, both domestic and foreign, for key projects and initiatives;
- A recognised community of scientists and clinicians with the identity and facilities to continue to attract and retain the best talent; and
- Heightened awareness of gaps and opportunities, lower barriers to entry for SMEs and new ventures.

285 These outcomes and benefits are not limited to Victoria, but are also at a national and international level, and are pivotal to Victoria becoming one of the world's top five biotechnology locations and recognised as a leading provider of integrated cancer care.



12.2 Challenges

286 The planning horizon for the Precinct strategy requires a ten year plus perspective, and it is difficult to predict all directions of research expertise or need that may occur over that time-frame. As a consequence planning and decision making needs to strike an appropriate balance of:

- Flexibility – to be able to adapt and evolve with biomedical research directions; and
- Focus – to harness and develop the collaborative strengths that exist within the Precinct.

287 Strategic planning and decision making for future developments also need to acknowledge past and current planning decisions and commitments, made prior to the development of the present strategy. It will be important to work within these commitments and to seek opportunities to maximise the investments already made for the benefits of the whole Precinct.

288 In particular, the area encompassing the FDH and the adjacent area north of Grattan Street, which houses major teaching hospitals and a number of research institutes, is the most concentrated and highly developed area within the Precinct, and also the most constrained in terms of site capacity, access and traffic. It will be important to strike an appropriate density of development than accommodating each of the work, student and residential communities, as well supporting opportunities for future growth.

12.3 Implementation

289 To achieve the vision and outcomes identified in this Strategic Plan for the Precinct requires a coordinated commitment by all key Precinct stakeholders. The Victorian Government, the network body and Precinct stakeholders should all support ,and be guided by, the findings and recommendations contained in this Plan.

290 An implementation plan has been developed to assist stakeholders in actioning the Strategic Plan. The implementation plan provides details of the timing, sequencing and tasks required to progress the recommendations of the Strategic Plan. It also outlines prime responsibilities for undertaking the required actions.

291 The Strategic Plan and associated Implementation Plan should be adopted by all stakeholders, referred to in future decision making, and regularly reviewed and updated over the life of the Strategic Plan. With these actions, and the commitment of all Precinct stakeholders, the vision for the Precinct will become a reality.



A Consultations List

Stakeholders consulted

Australian Genome Research Facility

Bio21 Australia Ltd

Bio21 Institute

Cancer Trial Australia

Carlton Residents Association

CSIRO

CSL

Cancer Council of Victoria

Institute of Pharmaceutical Sciences

Murdoch Children's Research Institute

Howard Florey Institute

Ludwig Institute for Cancer Research

Melbourne City Council

Melbourne Health

Melbourne Zoo

Mental Health Research Institute

North & West Melbourne Association

ORYGEN Youth Health

Parkville Association

Peter MacCallum Cancer Centre

Royal Children's Hospital

Royal Women's Hospital

The University of Melbourne

The Walter & Eliza Hall Institute of Medical Research



B Grattan Street Development Concepts



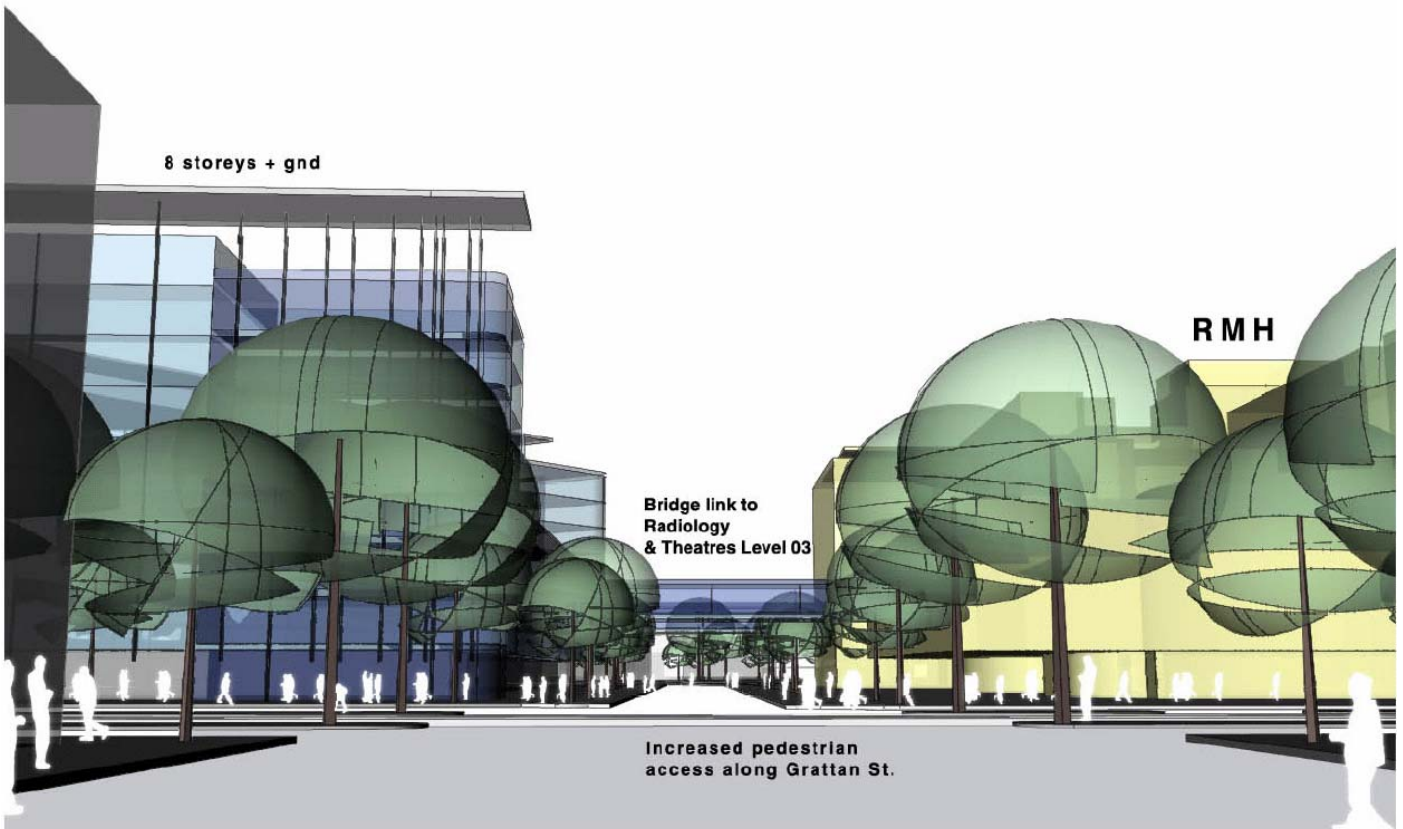
Option A Overall Perspective

Build to site boundary on three sides with central courtyard.

Two bridge option for clinical connection - traffic calmed.

Bridge link to Radiology & Theatres Level 03.

Bridge link to ICU Level 02.





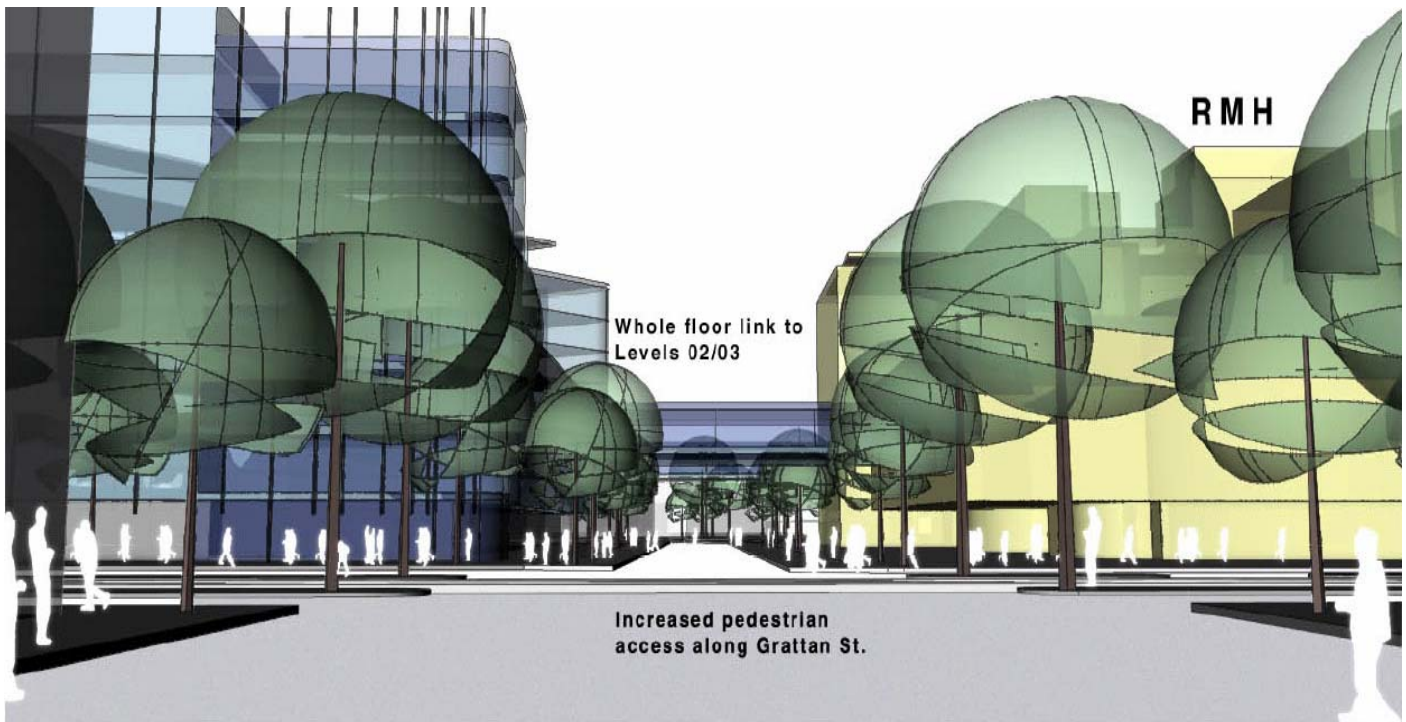
Option B
Overall Perspective

Traffic calmed - i.e. partial closure of Grattan Street.

The street could be closed outside peak hours and include the creation of a pedestrian plaza.

Whole floor link to Levels 02/03.

Bridge link to ICU Level 02.



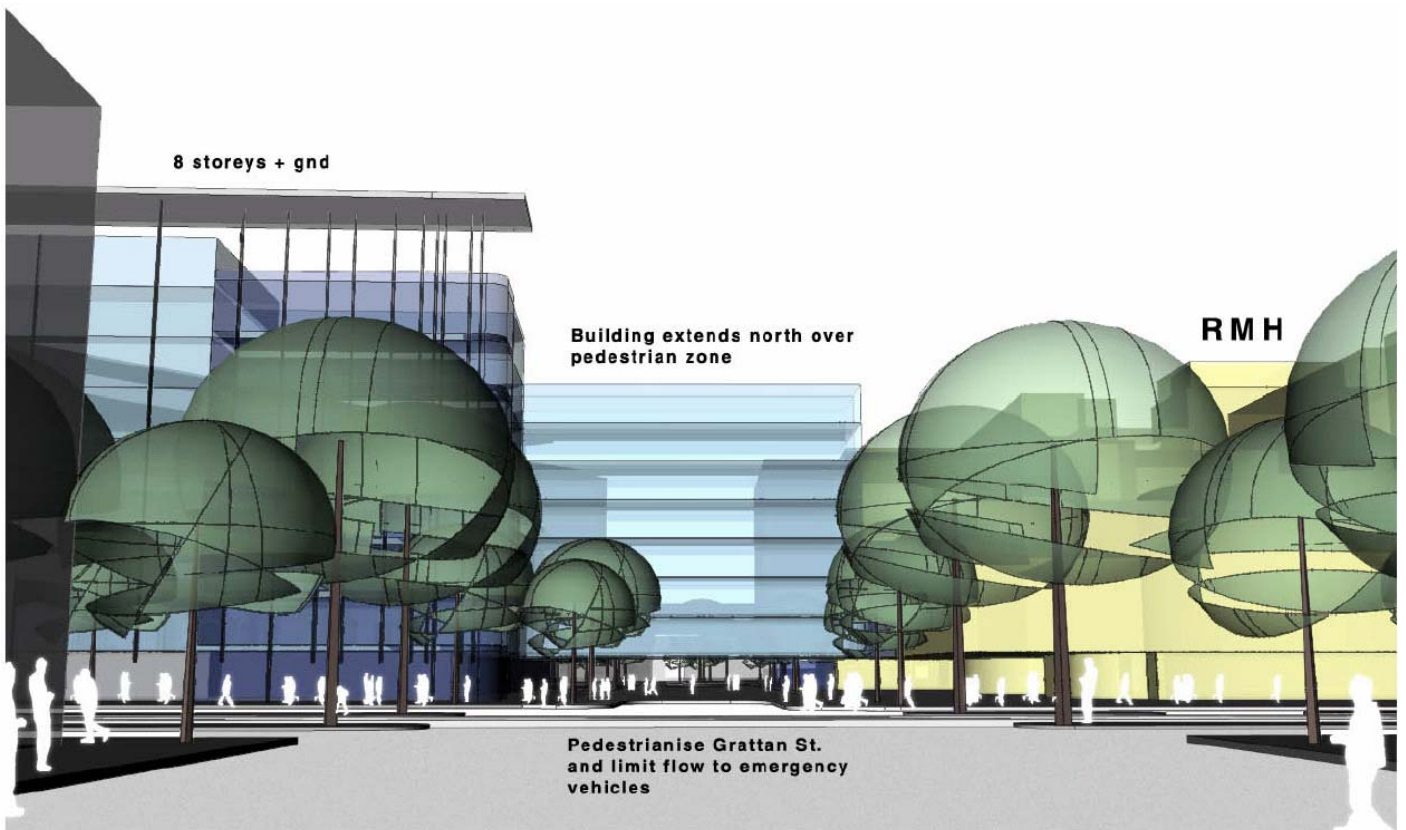


Option C Overall Perspective

Road closure, access either end for drop off and emergency.

Build over Grattan St emergency vehicles access through only.

Bridge link to ICU Level 02.





Option D

Overall Perspective

Campus style environment.

Maximise building floor area by extending RMH buildings south, decking over Grattan Street and part infilling central plaza zone with 3 levels & light wells.

