

## RESPONDENT'S EXPERT'S HERITAGE REPORT

### COURT DETAILS

Court	Land and Environment Court of New South Wales
Class	1
Case number	10560 of 2015

### TITLE OF PROCEEDINGS

Applicant	<b>Bunnings Properties Pty Ltd</b>
-----------	------------------------------------

Respondent	<b>Ku-ring-gai Council</b>
------------	----------------------------

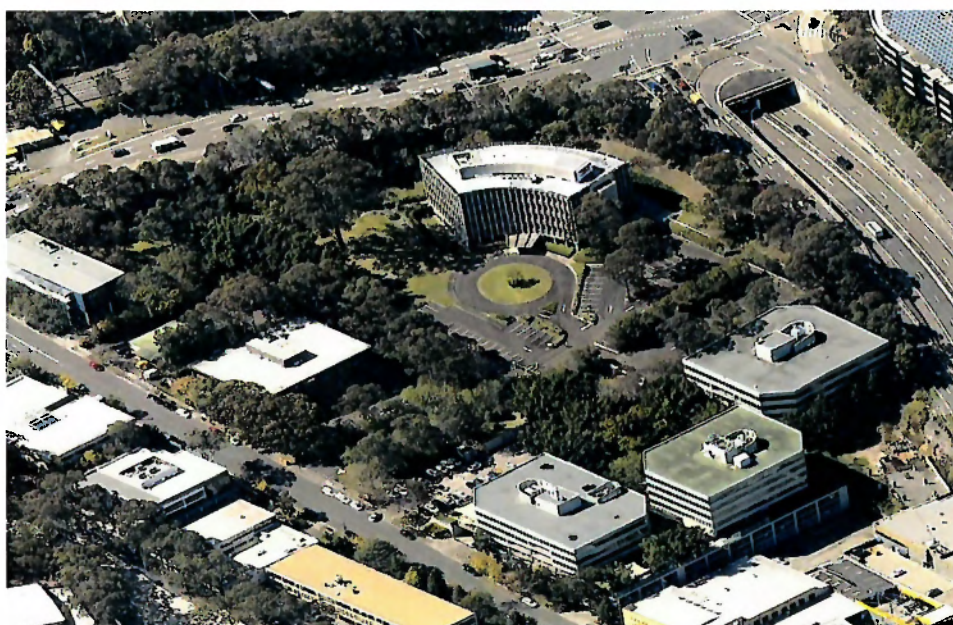
### PREPARATION DETAILS

Prepared for	<b>Ku-ring-gai Council</b> , Respondent
Legal representative	Christopher Drury, Spark Helmore
Legal representative reference	KUR955/64
Contact name and telephone	Catherine Morton: (02) 9373 1447

## HERITAGE STATEMENT OF EVIDENCE

Land and Environment Court 10560 of 2015  
Former 3M Headquarters Site  
950 Pacific Highway, Pymble

26 February 2016



950 Pacific Highway Pymble			
ISSUE	DESCRIPTION	DATE	ISSUED BY
A	Draft for Review	25/02/2016	GB
B	Submission	26/02/2016	gb

GBA Heritage  
 1/71 York St, Sydney  
 NSW 2000 Australia  
 T: (61) 2 9299 8600  
 F: (61) 2 9299 8711  
 E: [gba@gbaheritage.com](mailto:gba@gbaheritage.com)  
 W: [www.gbaheritage.com](http://www.gbaheritage.com)  
 ABN: 56 073 802 730  
 ACN: 073 802 730  
 Nominated Architect: Graham Leslie Brooks – NSW Architects Registration 3836

# EXECUTIVE SUMMARY

## BACKGROUND

This Statement of Evidence – Heritage has been prepared by Graham Brooks, Managing Director, GBA Heritage Pty Ltd.

I appear in the proceedings on behalf of the Respondent, Ku-ring-gai Council.

Appeal 10560 of 2015, in the NSW Land and Environment, concerns the Deemed Refusal by Ku-ring-gai Council of a Development Application DA 2015/1078 for the redevelopment of the combined properties at 950 Pacific Highway, Pymble, known as the former headquarters of the 3M Company.

The whole of the subject property, known as 950 Pacific Highway (Lot 1 DP 718718), with the exception of Lot B DP 371406 (2 Bridge Street) is now listed as an item (no. 593) of the environmental heritage in Schedule 5 of Ku-ring-gai LEP 2015. See over for LEP map



Figure 1

*Extract from Ku-ring-gai LEP 2015 Heritage Map, showing the full extent of the heritage listing*

The proposed development seeks consent for the demolition of the existing buildings, particularly the 1968 former head office, and other structures on the subject site including many major trees, and the construction of a two storey retail hardware centre, with basement car parking by Bunnings.

This Statement of Evidence concentrates primarily on the Heritage Issues raised in the Appeal, primarily Contention 1. It commences with a summary of the initial site selection, design and construction of the building and a detailed assessment of heritage significance undertaken by the author of this Statement. It also briefly discusses Contention 5, Loss of Significant Vegetation on Site.

The important features of the historical development of the site and the former 3M Building are captured in the following Statement of Heritage Significance.



## STATEMENT OF HERITAGE SIGNIFICANCE

The following Statement of Heritage Significance has been formulated by Graham Brooks, on the basis of the comprehensive research undertaken for the preparation of this Statement of Evidence.

The former 3M Building and property at 950 Pacific Highway Pymble is of heritage significance in Ku-ring-gai as an imaginatively conceived and well executed example of the post-war international modernism architectural style applied to a commercial building. It differed from many of its contemporary buildings of this style in Sydney through the use of a self-cleaning pre-cast concrete façade instead of the more commonly used curtain wall. The building was conceived and built as the first and possibly only example in Ku-ring-gai, of an Australian headquarters for a significant and high profile international manufacturer of a wide range of industrial and consumer products. 3M was a major producer of industrial and consumer products, including products marketed under the generic name "Scotch" and remains a well known brand in Australia and internationally.

The mid 1960s change of land use of the subject site from "Services Infrastructure" and "Residential" to "Commercial", was an early and important strategic example in the Municipality of the rezoning of largely residential land for such purposes. The extent of commercial uses in the locality was subsequently expanded to create the current Pymble Business Park on the north western corner of the major intersection of the Pacific Highway and Ryde Road, in Pymble. The rezoning and subsequent commercial development of the site provided Ku-ring-gai Council with a highly desirable opportunity to rejuvenate a redundant but prominently located industrial site (former gas distribution facility) in what had essentially been a residential area. It also provided an opportunity to consolidate and comprehensively redevelop a group of otherwise small individual properties with outdated residential building stock, whose future development was otherwise likely to be severely disadvantaged by the impending road works.

The original (1965) rezoning proposal for the building included a comprehensive, staged development of a large scale office park, enhanced by a fine landscaped setting with ample on-site staff parking. It set an early precedent for the subsequent development of office park projects in regional locations across metropolitan Sydney.

There is some documentary evidence confirming that the final design of the 1967 building and its landscaped setting was directly influenced by US architects associated with, or commissioned by, the 3M Head Office in Minnesota. The completed building is associated with the well established Sydney architectural firm of Hanson Todd and Partners, who were commissioned by 3M to manage the change of zoning and development application submissions, and subsequent design development, tendering and delivery of the project.

It is one of a relatively few examples of post-war international modernism in the Sydney Metropolitan Area to demonstrate a detailed response to the nature of its site. The unusual and distinctive curvilinear plan form of the 3M building in Pymble was widely recognised as being a direct response to the curved corner of the site created by the upgraded highway intersection. By comparison, the majority of commercial buildings of this genre were designed as relatively simple cubic or sculptural forms deliberately devoid of their local context.

While only five storeys in overall height, the building took advantage of the reduced topography from the former gas works site to project two storeys above the Pacific Highway frontage, as constrained by permissible height restrictions. Nevertheless, it achieved landmark status due to the prominent roof level 3M signage at this major, regional traffic intersection. The building retains its external architectural integrity, the presentation of which is enhanced by its landscaped setting and backdrop, combining natural and cultural planting, and curved entry forecourt driveway.

The former 3M building and property has rarity significance in Ku-ring-gai as the Municipality's only commercial building of this quality in the Post War International Modernism architectural

style. The contextual approach adopted by the 3M building was unusual in post war modernism, especially in Sydney, where the only other major example was Qantas House in Chifley Square (1955). Buildings with curved facades such as the AMP Building in Sydney (1962), Ryde Council Chambers (1964) and the UNESCO Headquarters in Paris (1958) or designed as cylindrical or curved masses, such as Australia Square (1967), 17 Wyde Street Potts Point (1951) and the Sofitel Wentworth Hotel in Sydney (1966) tended to create simple, straightforward architectural statements.

As would be anticipated with a building that was used for over 40 years, its interior office spaces have been altered and upgraded.

## DISCUSSION OF THE CONTENTIONS

### CONTENTION 1 - HERITAGE

***The proposed demolition of the former 3M Building and removal of its landscaped setting will adversely impact on the heritage significance of the building and site, which is individually listed as a heritage item in Schedule 5 of Ku-ring-gai LEP 2015.***

The proposed demolition of the former 3M building at Pymble will completely remove all physical evidence of a building and its surrounding landscaped setting that is regarded as being of a sufficient level of significance to Ku-ring-gai Municipality to be heritage listed in Schedule 5 of the LEP.

The proposed demolition of the 3M building will negate any opportunity to optimise and indeed maximise the available mechanisms contained in Ku-ring-gai LEP 2015 for the future development of the heritage listed site. It will also destroy the subject component of Ku-ring-gai's non-indigenous heritage.

The proposed demolition of the former 3M Building, combined with the loss of its garden setting and many mature trees will completely negate the two most relevant objectives set out in LEP Clause 5.10(1).

Any analysis undertaken under sub-clause (4) of LEP Section 5.10 must conclude that the proposed demolition will have a major detrimental effect on the heritage significance of the former 3M building and its setting.

The Applicant has not explored the potential use of the LEP Conservation Incentives contained in Clause 5.10(10) to develop a proposal that can keep the former 3M Building, while exploiting the considerable existing development capacity of the site. There is sufficient scope within the assessed heritage significance of the former 3M Building and its setting, the general condition of the building, the scale of the overall heritage listed site and its location at the eastern, higher, end of the Pymble Business Park to embrace these Incentives. There has been no detailed examination of the potential to formulate a project that upgrades the existing building within a mix of alternative uses. There have been no CMP or SHI reports, or architectural sketches prepared that explore alternative scenarios, and no apparent advice from a Heritage Consultant in this regard. Such an omission for a listed heritage site represents a major flaw in the subject Development Application.

There is nothing in the material submitted with the Development Application to suggest that Applicant has given any serious consideration to the retention and adaptive re-use of the subject building.

The motivation behind the project appears to be to completely ignore the heritage listing of the site and demolish the heritage listed former 3M Building in order to erect a new Bunnings store. Detailed economic and cost feasibility research was prepared for the Applicant by way of Statements of Evidence by Peter David Leyshon, Martin Hill and Simon Hensley, all dated January 2015. By their own admission, each expert was given a narrowly defined set of instructions to only examine the existing free standing 3M Building in its own right, with no

reference to any potential application of the Heritage Incentive provisions of Clause 5.10(10) of Kur-ing-gai LEP 2015.

The preparation of a photographic recording or set of measured drawings of the building and its setting will NOT be a sufficient mitigation action to reduce or offset the impact of the proposed demolition.

In my opinion, the application to demolish the 3M Building is not justified on heritage grounds.

#### **CONTENTION 5 – LOSS OF SIGNIFICANT VEGETATION**

The Statement of Significance for the property emphasises important contribution of the landscape setting to the overall heritage significance of the place.

In this context, the visual character of the now far more mature backdrop formed by the trees in the boundary setback zone and complemented by T135 and the trees down the north western side of the site are an important component of the heritage significance of the property and the former 3M Building.

The removal of T135 in particular will have an adverse impact on the setting of the former 3M Building.

If the removal of this tree is undertaken in the context of the demolition of the building for comprehensive redevelopment, then the assessment made under Contention 1 about the adverse overall heritage impact is only reinforced.

# 1.0

## INTRODUCTION

### 1.1 REPORT OVERVIEW

This Statement of Evidence – Heritage has been prepared by Graham Brooks, Managing Director, GBA Heritage Pty Ltd.

I appear in the proceedings on behalf of the Respondent, Ku-ring-gai Council.

Appeal 10560 of 2015, in the NSW Land and Environment, concerns the Deemed Refusal by Ku-ring-gai Council of a Development Application DA 2015/1078 for the redevelopment of the combined properties at 950 Pacific Highway, Pymble, known as the former headquarters of the 3M Company.

The whole of the subject property, known as 950 Pacific Highway (Lot 1 DP 718718), with the exception of Lot B DP 371406 (2 Bridge Street) is now listed as an item (no. 593) of the environmental heritage in Schedule 5 of Ku-ring-gai LEP 2015. See over for LEP map

The 3M building in Pymble is also

- Classified on the Register of the National Trust of Australia.
- Listed on the Australian Institute of Architects *Register of Significant Architecture in NSW*.
- Said to have been identified by the Twentieth Century Heritage Society of NSW Inc as being worthy of protection as an item of cultural heritage, as per letter to Ku-ring-gai Council dated 6<sup>th</sup> August 2013.<sup>1</sup>

The proposed development seeks consent for the demolition of the existing buildings, particularly the 1968 former 3M Head Office, and other structures on the subject site, including many major trees. They are to be replaced by the construction of a two storey retail hardware centre, with basement car parking for a new Bunnings hardware centre.

This Statement of Evidence concentrates on the Heritage Issues raised in the Appeal, primarily Contention 1. It commences with a summary of the initial site selection, design and construction of the building and a detailed assessment of heritage significance undertaken by the author of this Statement.

The Statement also briefly discusses Contention 5, Loss of Significant Vegetation on site.

### 1.2 CITATION

I have prepared the Statement of Evidence - Heritage in accordance with the Uniform Civil Procedures Rule 2005, and the Expert Witness Code of Conduct and agree to be bound by those provisions. In the preparation of this report, I understand that the expert's primary role is to inform the Court and not be an advocate for either party.

A summary of my expertise and experience is set out in Appendix 1

---

<sup>1</sup> *Ibid.*



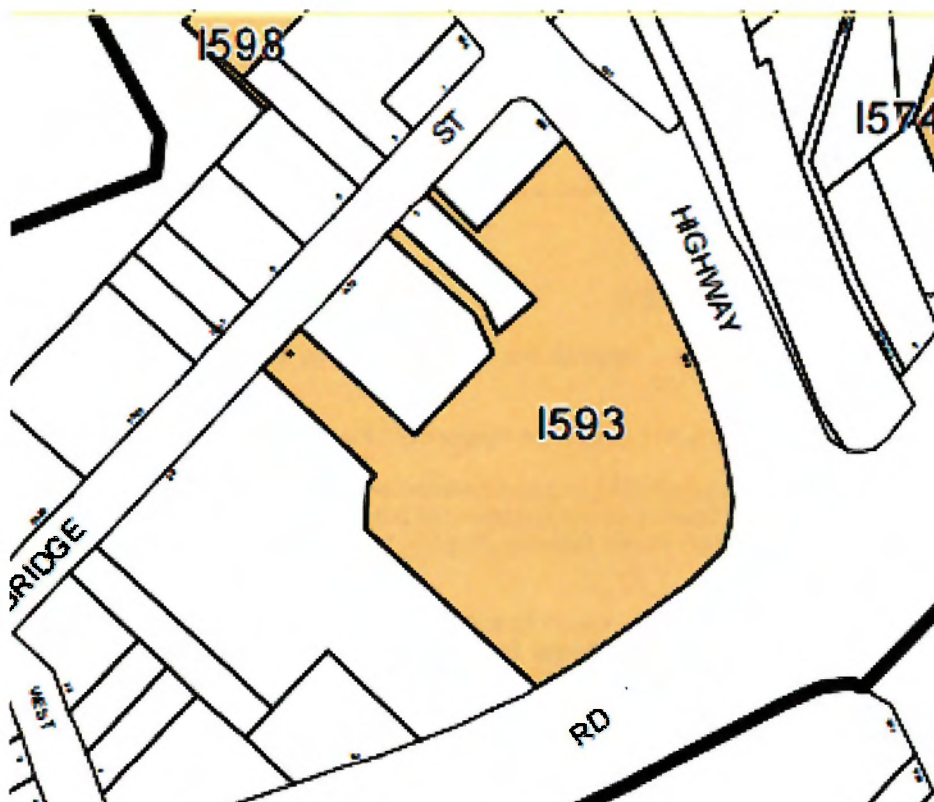


Figure 1  
Extract from Ku-ring-gai LEP 2105 Heritage Map, showing the full extent of the heritage listing



Figure 2  
Contemporary aerial photo with the subject site marked in yellow (six maps)

### 1.3 BACKGROUND

The subject appeal has been lodged against the Council's deemed refusal of Development Application DA 0115/15 for the demolition of the existing structures and the removal of trees on the land at 950-950A Pacific Highway and 2 Bridge Street, Pymble. Specifically, the demolition of all existing structures, including the 5 storey office building known as the former 3M Building, erected in 1968.

The proposed development is described in the Supplementary Statement of Environmental Effects (November 2015) by DFP Planning Consultants, as comprising:

Bulk earthworks, construction and use of a multi storey hardware and building supplies development for Bunnings, with underground parking, vehicle entry from Ryde Road, subdivision of land, parking for 351 cars, associated signage and landscaping and ancillary uses such as staff offices and café.

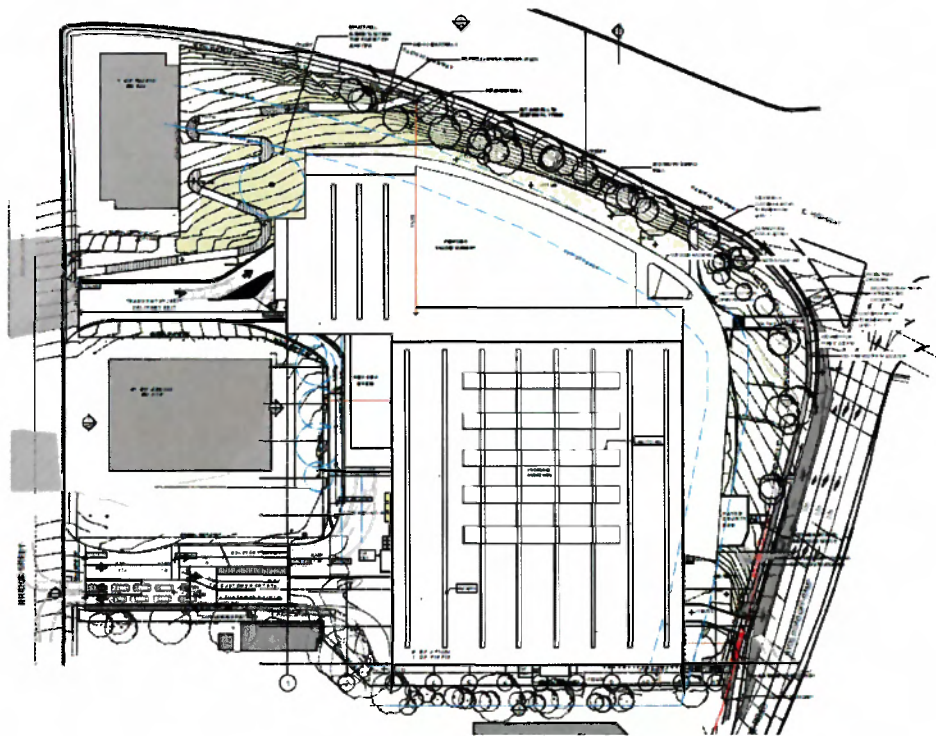


Figure 3  
General Site Plan of the proposed development (STZ Architects)





*Figure 4*  
Aerial of the 3M building at 950 Pacific Highway, Pymble (Nearmap)  
Compare with Figure 2



*Figure 5*  
The 3M Building illustrating its curved form and expressed stairwell (GB)

## 1.4 REFERENCE DOCUMENTS

In addition to those within the historical text, the following sources were reviewed during the preparation of this Statement:

- *Amended Statement of Facts and Contentions* for LEC Appeal 1056 of 2015
- *State Heritage Inventory Sheet for the former 3M Building, Pymble, 2013*, prepared by John Oultram Heritage & Design
- *3M Building, 950 Pacific Highway, Pymble, Heritage Assessment*, October 2013, prepared by John Oultram Heritage & Design
- *Heritage Impact Assessment, Former 3M Building, 950 Pacific Highway, Pymble*, January 2014, prepared by Paul Davies Pty Ltd.
- *Register Listing Report*, National Trust 2013
- *Register of Significant Architecture, Former 3M Building*, Australian Institute of Architects, 2014
- *Assessing Heritage Significance, 2001*, Guidance provided by the NSW Heritage Council
- *Statement of Evidence* of Peter David Leyshon in LEC 10560 of 2015, January 2016
- *Statement of Evidence* of Martin Hill in LEC 10560 of 2016
- *Statement of Evidence* of Simon Hensley, dated January 2016



# 2.0

## HISTORICAL SUMMARY

### 2.1 EARLY TO MID 20<sup>TH</sup> CENTURY INDUSTRIAL USE

A large portion of the south east corner of the subject site had been purchased by AGL in the late 19<sup>th</sup> century for a future gas distribution complex. It came into operation in the mid 1920s. The gas infrastructure on the site primarily comprised a large gasholder, or gasometer, which was used to maintain even pressure in the distribution pipes servicing the surrounding locality, and support infrastructure. Given the importance of gas in the early 20<sup>th</sup> century, the presence of a large gas distribution centre in Pymble would have been an important support service for the expanding residential suburbs generated by the opening of the North Shore Rail Line at the end of the 19<sup>th</sup> century.

Of interest in terms of the future rezoning application by 3M, was the introduction, by Ku-ring-gai Council in the 1920s, of residential district proclamations to exclude factories and businesses from predominantly residential areas, using Section 309 of the Local Government Act, 1919. As AGL had owned the gas distribution site since the 1890s, their land was unaffected by these proclamations and was eventually zoned Special Business (Service Establishments 3D), while the surrounding houses were zoned Residential 2(b). One of the objections to the 1965 commercial rezoning application by 3M raised by the State Planning Authority was that commercial uses were unsuitable for the locality and should be located in a business or commercial zone.



Figure 6  
1943 Aerial photo (Six Maps) showing the former gas holder and surrounding residential houses. The extent of the subject site is overlaid in yellow.

By the 1960s, the gas facility had become redundant and Ku-ring-gai Council was keen to see the land redeveloped for other service related activities. Unfortunately other local light industries and service establishments had shown little interest in such an outcome. Council was therefore inclined to view favourably the initial approach for rezoning from 3M to consolidate the land parcels and seek rezoning for a new, comprehensive commercial development. The State Planning Authority's initial objection to the rezoning was overcome and conditions of consent about access and traffic imposed on future development.

In addition, there was an emerging proposal for a major upgrade of the adjacent intersection, which would have made direct vehicle access into the former AGL site and other residential properties problematic. Council considered that a consolidated redevelopment of this group of properties would overcome some of these issues.

The southern portion of the original AGL site was subsequently subdivided and developed as a separate commercial facility.

## 2.2 SITE SELECTION BY 3M COMPANY

### Affordability

When the Minnesota Mining & Manufacturing Company (3M) established its first administrative and warehousing facilities in Lidcombe in 1952, the site was chosen because it was affordable, at a time "when building space of any kind was almost unobtainable at a reasonable price."<sup>2</sup> It would appear that affordability also played a role in 1965, when 3M bought the site in Pymble, as noted by M Saddington in c1980: "The situation of the land was of prime importance and was large enough for the 3M requirements. The site had a definite advertising value, based on high levels of passing traffic. The land was also cheaper than that available further down the line."<sup>3</sup>

It should be noted that prior to construction of the administrative headquarters at Pymble, the administration, accounting and order planning staff had moved from the manufacturing plant at St Marys to offices at 2 Wentworth Avenue in Sydney, known as "Brash's Building" in 1957.<sup>4</sup> It was the remarkable commercial success of the company that led to its rapid expansion,<sup>5</sup> involving the extension of the St Marys manufacturing plant during the early 1960s the new, larger headquarters in Pymble in 1967, and the restructuring of the national team.<sup>6</sup> As such the subject building provides evidence of the company's rapid expansion in the 1960s and of its ongoing commercial success in the Australian market.

### Decentralisation

In 1966, the managing director of 3M Australia said that the expansion of the company, "while centralising internally, had kept in line with the NSW Government's decentralisation policy."<sup>7</sup>

In 1974, when 3M established a manufacturing plant in Goulburn, the Canberra Times also reported that the company "was pursuing a policy of decentralisation and had already sited its head office in Pymble, on Sydney's north shore", and noting that 3M already had a manufacturing plant in Sydney's outer west (St Marys).<sup>8</sup>

<sup>2</sup> Rimington, C., *From Minnesota Mining and Manufacturing to 3M Australia Pty Ltd*, 2013, p.26

<sup>3</sup> "Pacific Highway, No. 950 Pymble (11 acres): Headquarters of 3M Company," notes by M Saddington, Ku-ring-gai Municipal Library, Local History Collection, File 3889/17, p.2

<sup>4</sup> Rimington, C., *From Minnesota Mining and Manufacturing to 3M Australia Pty Ltd*, 2013, p.33

<sup>5</sup> Minnesota Mining expansion, *SMH*, 4 February 1966, p.13

<sup>6</sup> Rimington, C., *From Minnesota Mining and Manufacturing to 3M Australia Pty Ltd*, 2013, pp.34, 60; U.S. firm is bursting out all over, *Building, Lighting, Engineering*, June 1966, p.35

<sup>7</sup> U.S. firm is bursting out all over, *Building, Lighting, Engineering*, June 1966, p.35

<sup>8</sup> 3M to set up in Goulburn, *The Canberra Times*, 12 March 1974, p.14

### 2.3 SITE REZONING APPLICATION, FEBRUARY 1965

With the exception of the former AGL gas distribution facility, which was zoned Special Business (Service Establishments) 3D, the bulk of the immediate locality at Pymble was zoned as a Residential District under the County of Cumberland Planning Scheme. It was also outside of any of the District Centres as identified in the Sydney Regional Outline Plan developed by the State Planning Authority (SPA).<sup>9</sup>

On February 1965, 3M submitted an application to Ku-ring-gai Council for the rezoning of a series of land parcels on the corner of Pacific Highway and Ryde Road to commercial to permit the development of a Company Headquarters Office Building. 3M had an option to purchase a number of residential lots in addition to the former AGL site, and were keen for the Council to support their application. It appears that there had been a series of preliminary discussions between 3M and the Council during the previous year. Preliminary architectural drawings, prepared by Hanson Todd and Partners, accompanied the rezoning application. (Fig 7)

3M noted that "this project is very important to the company and for that reason we have called for assistance from our parent company in the USA in the form of engineering and architectural advice. The entire site property has been surveyed, test drillings have been carried out, and the latest resumption plans have been obtained from the Department of Main Roads. Mr WS Johnson from our parent company will arrive in Sydney on March 1st to assist in preparation of detailed plans of our proposed development... It is our desire and intention to erect a building which will be a credit to our organisation and to the community", and it was hoped that "3M Company's concept of a prestige building will be welcomed by Council as a contribution to the development of the Municipality."<sup>10</sup>

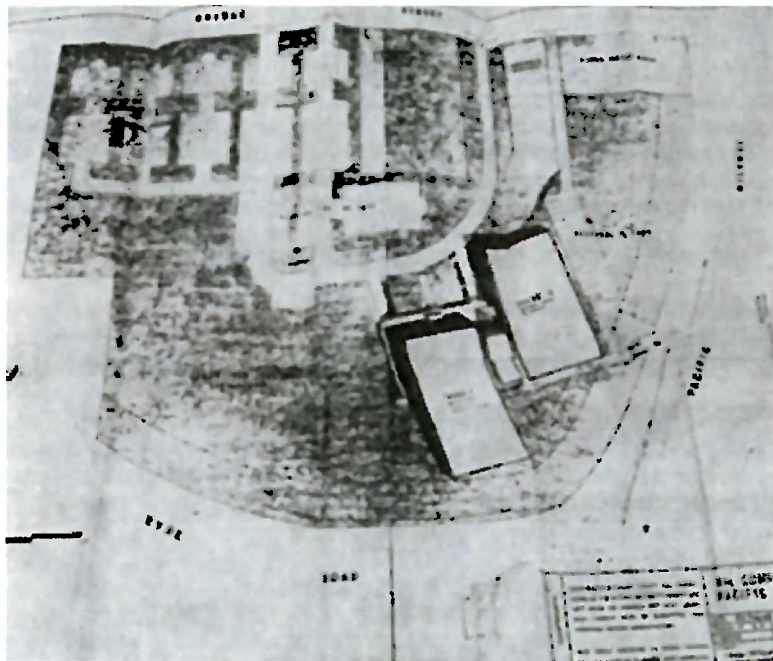


Figure 7

*Preliminary Site Plans by Hanson Todd and Partners dated 4 February 1964, Drawing 479 S1 (Source: Heritage Assessment, 3M Building, 950 Pacific Highway, Pymble, prepared by John Oultram Heritage & Design, October 2013, Fig. 2.2)*

<sup>9</sup> *Heritage Assessment, 3M Building, 950 Pacific Highway, Pymble, prepared by John Oultram Heritage & Design, October 2013, p.22*

<sup>10</sup> *Ibid.*



The Council Officer's report to Ku-ring-gai Council, dated 12 March 1965,<sup>11</sup> set out some useful information:

1. The proposal as submitted was in the form of an outline development project involving approximately 7 acres of land bordered by Ryde Road, Pacific Highway and Bridge Street, Pymble. It involved the acquisition of the AGL land and other lands under various ownerships fronting the Pacific Highway and Ryde Road. It also involved several "aged" dwelling houses and Sherrington's Nursery.
2. Subject to Council's initial concurrence, the company intended to submit detailed plans for the development of a group of office buildings in a landscaped setting complete with visitors' and employees' car park and staff amenities.
3. The indicative plans illustrated the relationship of proposed buildings to the future main road widening.
4. The first stage of the project would be for a six storey office building containing 50,000 sq feet. Due to the terraced nature of the site, only two and a half of the six storeys would project above the Pacific Highway frontage.
5. The preliminary plans indicated that the building would be set back from the future highway realignment by approximately 30 feet.
6. Future stages envisaged three additional buildings.
7. The proposal envisaged that the first building would be built by 1967 and that employment on site would double by 1971.
8. Council's Local Planning Scheme provided that commercial premises were permissible within the Special Business 3D zone under column IV. The submitted scheme appeared to conform to that category.
9. Council was advised to consider very carefully the question of allowing development in small parcels under various ownerships or re-development of the area in the form of a major project. Large scale redevelopment by one owner over a projected time period had much to commend it rather than piecemeal development and an indeterminate period of time.
10. Due to the impending upgrade of the intersection and the high traffic volumes on two frontages it was considered highly undesirable both from planning and traffic viewpoints to encourage any future development that relied for access from either Ryde Road or the Pacific Highway.
11. When the question of changing the zoning from that of a local light industrial area to that of a special business zone was proposed (by 3M) Council officers considered that greater scope for redevelopment had to be permitted within this locality. Due to a number of factors local light industries and service establishments, with minor exceptions, had been unwilling to establish themselves in this area.
12. The 3M proposal would well affect the slow progress of re-development of the land and at the same time, over a period of some six years, cater for the employment of a considerable number of persons from within the Municipality.
13. The 7.2 acres proposed for rezoning by 3M represented some 25.6% of the Service Establishment zoned land, which then totalled 28.1 acres. (The exact extent of this zoned land, and whether it was contiguous with the 3M proposed site, has not been researched to date).

<sup>11</sup> Ku-ring-gai Council Records, Document No 2013/185634, Report by Ku-ring-gai Municipal Council Town Planner dated 12 March 1965, No 65/1686



14. The report recommended that if Council wanted to offset the loss of Service Establishment zoned land it could consider other land. The land on the western side of the Pacific Highway stretching down to Vale Street, was apparently already under investigation for such purposes.
15. The proposed rezoning was recommended for approval, subject to a series of conditions including consent from the State Planning Authority (SPA).

Because of the residential zoning over part of the proposed 3M site, the SPA was initially against the rezoning. It argued that the plans would cause serious traffic issues, were unsuitable to the residential character of the area and would set an undesirable precedent.<sup>12</sup>

Although this view was shared by some local residents and local Aldermen, the initial rezoning application, which had been accompanied by plans illustrating a series of rectangular buildings, was approved by Ku-ring-gai Council in May 1965.

The officer's report to the Council meeting included the comment that "various fringe benefits might well emerge as a direct result of this form of development, e.g. local employment, local enterprises, aesthetic appearance of buildings and landscaping of surrounding land."<sup>13</sup>

The SPA granted consent in September 1965, subject to certain conditions in relation to access, setback and parking.<sup>14</sup>

## 2.4 BUILDING DESIGN

### Development of Curved Form

According to Bill Firth, Architect, who worked at Hanson Todd and Partners at the time and was involved in the design process, "the design as built was sent to us from the USA to replace the Hanson Todd design (from the initial rezoning application). We documented that design, tendered it and supervised the construction."<sup>15</sup>

It is therefore likely that, while the initial concept plans to support the rezoning application, which illustrated several rectangular building blocks, had been developed by Hanson Todd and Partners, these were replaced by a scheme developed by US architects associated with the company's head office. The earliest available plans for the project, preliminary site plans by Hanson Todd and Partners dated 4 February 1964, had envisaged two rectangular buildings on the site (Figure 7).<sup>16</sup>

It appears that the International Division of the parent company, located in St. Paul, Minnesota, USA, became heavily involved in the design process, as noted above in relation to the involvement of Warren E. Johnson from the St. Paul headquarters to "assist in preparation of detailed plans"<sup>17</sup>. At that time, the rezoning proposal illustrated a group of rectangular buildings of which only one was to be constructed in the first stage.

According to Council files, 3M Australia's chief engineer G. Swanbeck went to St. Paul in January 1966, to once more discuss the construction plans "with Mr. Warren Johnson and

<sup>12</sup> *Ibid.*; cf. SPA rejects MMM offices, *North Shore Times*, 14 July 1965, p.25

<sup>13</sup> Ku-ring-gai Council Records, Document No 2013/185634, Report by Ku-ring-gai Municipal Council Engineer/Town Planner dated 25 May 1965, No 65/4299

<sup>14</sup> *Heritage Assessment, Former 3M Building, 950 Pacific Highway, Pymble*, prepared by Paul Davies Pty Ltd, January 2014, p.10

<sup>15</sup> Pers. comm. Bill Firth, 30 September 2014

<sup>16</sup> Ku-ring-gai Council Records, Document No 2013/185632, Plan by Hanson Todd and Partners, dated 4 February 1964, Drawing 479 S1, as illustrated in *Heritage Assessment, 3M Building, 950 Pacific Highway, Pymble*, prepared by John Oultram Heritage & Design, October 2013, p.4 Fig. 2.2

<sup>17</sup> Ku-ring-gai Council Records, Document No 2013/185632, Letter from 3M Australia Chief Engineer G. C. Swanbeck to Council, dated 24 February 1965

others of our Company Staff Engineering Groups.”<sup>18</sup> When the project was featured in the June 1966 issue of *Building, Lighting, Engineering*, the accompanying images still showed three rectangular buildings on the site, within a landscaped setting (Figure 8).<sup>19</sup>

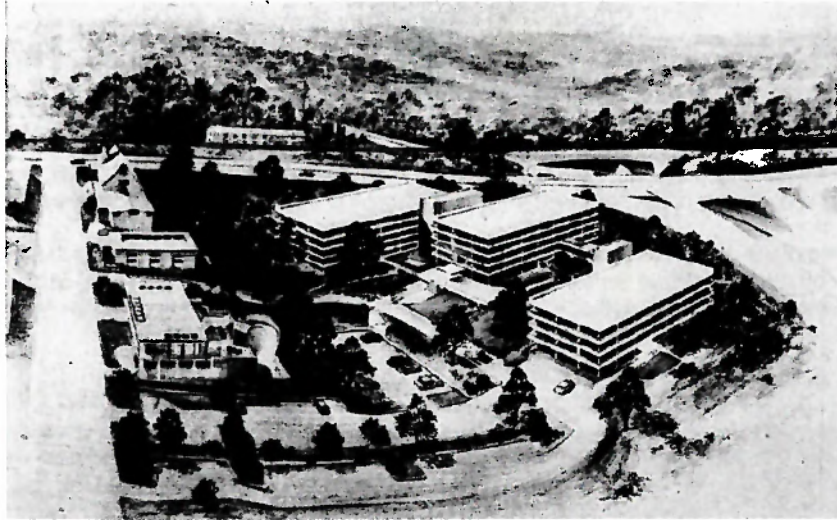


Figure 8

*The June 1966 issue of Building, Lighting, Engineering shows three rectangular proposed for the site at Pymble*

*(Source: U.S. firm is bursting out all over, Building, Lighting, Engineering, June 1966, p.35)*

On 8 August 1966, the architects submitted preliminary sketch drawings to Council, which for the first time showed the new curved design.<sup>20</sup>

These plans were accepted on 15 August 1966, and an official Building Application (No. 67/292) was lodged on 22 February 1967<sup>21</sup> and approved in March 1967.<sup>22</sup>

An amended sketch plan dated September 1966 is provided in Figure 9 below.

Based on Bill Firth's comments, the idea for the curved design had come from the US headquarters, likely the International Division, and Hanson Todd and Partners finalised and signed the detailed plans for submission to Council.

Interestingly, the *Sydney Morning Herald* issue of 19 November 1968 only noted that “Air conditioning was designed by 3M head office engineers in St. Paul, U.S.A., with the local air-conditioning consultants, W. E. Bassett and Partners, working in conjunction,” while Hanson Todd and Partners were the architects of the building.<sup>23</sup>

<sup>18</sup> Ku-ring-gai Council Records, Document No 2013/185632, Letter from 3M Australia Chief Engineer G. C. Swanbeck to Council, dated 4 January 1966

<sup>19</sup> U.S. firm is bursting out all over, *Building, Lighting, Engineering*, June 1966, p.35

<sup>20</sup> Ku-ring-gai Council Records, Document No 2013/185634, Report by Ku-ring-gai Municipal Council Town Planner dated 8 August 1966, No B66/3085

<sup>21</sup> Ku-ring-gai Council Records, Document No 2013/185632, Report by Ku-ring-gai Municipal Council Building Surveyor dated 15 March 1967, No B67/586

<sup>22</sup> *Heritage Assessment, Former 3M Building, 950 Pacific Highway, Pymble*, prepared by Paul Davies Pty Ltd, January 2014, p.11

<sup>23</sup> Ku-ring-gai Council Records, Document No 2013/185634, Report by Ku-ring-gai Municipal Council Engineer/Town Planner dated 8 August 1966, No B66/3085

The 12 March 1968 issue of the Sydney Morning Herald noted that the new building, under construction at that time, followed "a curved plan to suit the contours of the site."<sup>24</sup> Insufficient research has been undertaken to confirm whether the curved design followed a particular prototype, either in Sydney or the US.

#### Other Design Factors

The SMH reported on 19 November 1968, that the building's "shape and position on a seven-acre site at the corner of Pacific Highway and Ryde Road were influenced by height restrictions and other design conditions."<sup>25</sup>

The height restrictions were set by Council who from the beginning insisted that the height of the building should only project above the Highway frontage by no more than 2.5 storeys.<sup>26</sup>

The rezoning plans also provided a setback of 60ft from Pacific Highway to allow for sufficient clearance for future highway widening. While this was initially approved by the SPA, the authority later reduced the setback to 40ft, which appears to have been one of their conditions.<sup>27</sup>

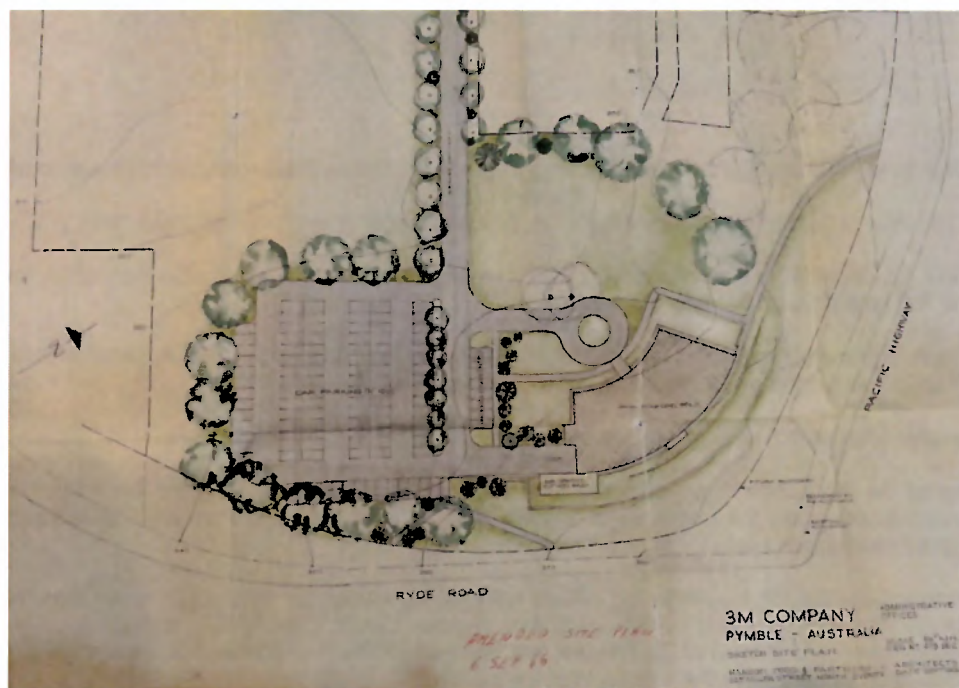


Figure 9

Sketch site plan dated September 1966, showing the curved design of the building that was subsequently constructed. A note at the bottom suggests that this was an amended site plan prepared on 6 September 1966 (Source: Ku-ring-gai Council Records, Document No 2013/185634)

<sup>24</sup> Office facade is curved, *SMH*, 12 March 1968, p.18

<sup>25</sup> Offices designed with curved plan, *SMH*, 19 November 1968, p.21

<sup>26</sup> Council Resolution re Development Application No. 65/18, dated 12 March 1965, Ku-ring-gai Council Records, Document No. 2013/185634

<sup>27</sup> *Heritage Assessment, Former 3M Building, 950 Pacific Highway, Pymble*, prepared by Paul Davies Pty Ltd, January 2014, p.11



The landscape treatment was said to provide "for a Japanese garden, and rockeries near the entrance, extensive lawns, trees and shrubs."<sup>28</sup> The landscaping had always been an important part of the project and it was one of Council's conditions to provide adequate outdoor recreation spaces and facilities for occupants of the building.<sup>29</sup> The prestige aspect of the building was noted in many of the early correspondence files at the Ku-ring-gai Council Archives.<sup>30</sup>

Graeme William received an engineering excellence award for the design of lighting of buildings for this project.<sup>31</sup> This was "a completely new light fitting... with a fully moulded diffuser. It is a semi-exposed unit and provides a soft, high intensity lighting."<sup>32</sup> It should also be noted that many 3M products were used to build and equip the new headquarters. These included weatherproofing for the pre-cast concrete mullions and spandrels with 3M sealers, bonding of internal plywood and plasterboard partitions with a 3M cement preparation, sealing of air-conditioning duct work with a 3M product and bonding of aluminium, plastics and other materials with 3M adhesives.<sup>33</sup> Other products were used to decorate lift finishes and protect furniture fabrics, and a background music system was developed by the company for the staff.

## 2.5 SUBSEQUENT SITE DEVELOPMENT, 1984

Three low rise office buildings were erected on southern portion of the site in the mid 1980s. The DAs for this project ((DA895/85 and 1013/85) included the construction of two free standing wings to the 1968 building. These wings did not proceed. The new buildings were erected on land that was subdivided from the 3M site.

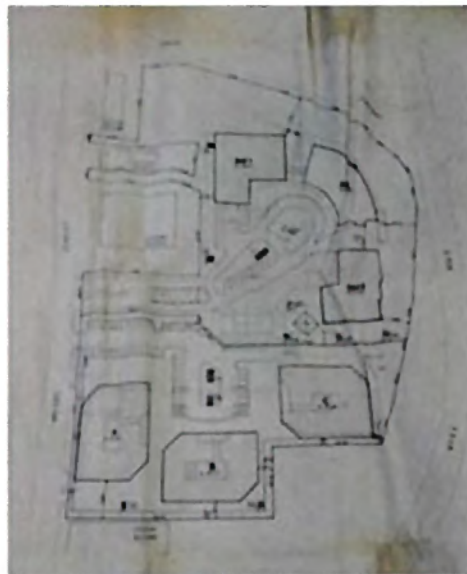


Figure 10  
*Plans for continuing development of the site (Devine Erby Mazlin Architects)*

<sup>28</sup> Offices designed with a curved plan, *SMH*, 19 November 1968, p.21

<sup>29</sup> Ku-ring-gai Council Records, Document No 2013/185634, Report by Ku-ring-gai Municipal Council Town Planner dated 12 March 1965, No 65/1686

<sup>30</sup> Ku-ring-gai Council Records, Documents No 2013/185634 and 2013/185632

<sup>31</sup> IEEE NSW, *Circuit*, July 2002, [http://ewh.ieee.org/r10/nsw/subpages/circuit/2002/circuit\\_02\\_02.htm](http://ewh.ieee.org/r10/nsw/subpages/circuit/2002/circuit_02_02.htm) (accessed 30/09/14)

<sup>32</sup> Offices designed with a curved plan, *SMH*, 19 November 1968, p.21

<sup>33</sup> Offices designed with a curved plan, *SMH*, 19 November 1968, p.21



## 2.6 OTHER CONTEMPORARY CURVED BUILDINGS

According to the Heritage Assessment by Oultram 2013 and the National Trust Classification Report (2013), other curved buildings in the International Style in Sydney and elsewhere include:

- United Nations General Assembly Building, New York (started 1949)
- 17 Wilde Street, Potts Point (completed 1951)
- Qantas Building, Chifley Square (1955-1957)
- AMP Building, 33 Alfred Street, Circular Quay (1962)
- Sofitel Wentworth Hotel, Phillip Street (completed 1966)
- Australia Square, Sydney (c1966)
- 815 Pacific Highway, Chatswood (c1970s-1980s)

Based on further research, the following buildings might be added to this list:

- Former BP House, now known as The Domain, 1 Albert Road, Melbourne
- Toronto City Hall, Toronto, Canada (completed 1967?)
- Chase Circle Building, Indianapolis, USA (former American Fletcher National Bank, 1959)
- UNESCO Building in Paris (1958)
- Ryde Council Chambers (1964)

A search of the Digital Pictures Collection of the Minnesota Historical Society could not identify any historical images showing 1960s buildings with a curved facade in the neighbouring areas of the St. Paul headquarters.

# 3.0

## HERITAGE SIGNIFICANCE

### 3.1 ASSESSMENT OF HERITAGE SIGNIFICANCE

A detailed review of the original historic documentation held by Ku-ring-gai Council in regard to the 1960s applications for change of zoning and development approval was undertaken by GBA Heritage, as part of the preparation of this Statement of Evidence. This review included statements or assessments prepared by John Oultram (2013), the National Trust of Australia (2013) and the Australian Institute of Architects (2014). These are included in Appendix 2.

As the whole of the subject site is now heritage listed as a single entity in Schedule 5 of Ku-ring-gai LEP 2015, the GBA Heritage review concluded that a new, more comprehensive assessment of the heritage significance of the former 3M building would assist the Court in its deliberations.

Guidance from the NSW Heritage Council for *Assessing Heritage Significance* states that “an item will be considered to be of State or Local Heritage Significance if, in the opinion of the Heritage Council of NSW, it meets one or more of the following criteria”. The following assessment clearly justifies the existing heritage listing.

#### ***Historical Significance - Criterion (a)***

***An item is important in the course, or pattern, of the local area’s cultural or natural history***

#### ***Guidelines for Inclusion:***

- *Shows evidence of a significant human activity*
- *Is associated with a significant activity or historical phase*
- *Maintains or shows the continuity of an historical process or activity*

#### ***Guidelines for Exclusion:***

- *Has incidental or unsubstantiated connections with historically important activities or processes*
- *Provides evidence of activities or processes that are of dubious historical importance*
- *Has been so altered that it can no longer provide evidence of a particular association*

The former 3M building and property is of historical heritage significance in Ku-ring-gai for the following reasons:

1. The mid 1960s change of land use of the subject site from Services Infrastructure and Residential to Commercial, was an early and important strategic example in Ku-ring-gai of the rezoning of largely residential land for such purposes. The extent of commercial uses in the locality was subsequently expanded to create the current Pymble Business Park on the north western corner of the major intersection of the Pacific Highway and Ryde Road, in Pymble.
2. The rezoning of the site from largely residential to commercial, as requested by the 3M Company, was originally resisted by the State Planning Authority. It was not located in any of the District Centres identified in the Sydney Regional Outline Plan. The Authority’s eventual support appears to have been encouraged by the capacity of the proposed project to minimise traffic concerns and respond to the proposed major upgrade of the adjacent intersection.

3. The rezoning and subsequent commercial development of the site provided Ku-ring-gai Council with a highly desirable opportunity to rejuvenate a redundant but prominently located industrial site (former gas distribution facility) in what had essentially been a residential area. It also provided an opportunity to consolidate and comprehensively redevelop a group of otherwise small individual properties with outdated residential building stock, whose future development was otherwise likely to be severely disadvantaged by the impending road works.
4. The original (1965) rezoning proposal for the building included a comprehensive, staged development of a large scale office park, enhanced by a fine landscaped setting with ample on-site staff parking. It set an early precedent for the subsequent development of office park projects in regional locations across metropolitan Sydney.
5. When subsequently submitted as a development application, the building was conceived and built as the first and possibly only example in Ku-ring-gai of an Australian headquarters for a significant and high profile international manufacturer of a wide range of industrial and consumer products. Australia was the sixth largest international market for the Minnesota Mining & Manufacturing Company, after France, Great Britain, Germany and Canada. By the mid 1960s 3M had some 900 employees in Australia. The local manufacturing operations distributed products to export markets throughout the Pacific and to the company's subsidiaries in Singapore and the Philippines. The new national headquarters administration building at Pymble reflected the company's growth since entering the Australian market in 1952. The site remained associated with 3M until 2011.
6. When constructed in 1967, the five storey 3M building, containing some 50,000 sq feet of office space, was one of, if not the largest commercial building in Ku-ring-gai. It compared favourably in size with the 1962 Farmers Retail Department Store in Gordon.

In terms of this criterion, the former 3M building and site meets the Inclusion Threshold for LEP heritage listing

***Historical Association - Criterion (b)***

***An item has strong or special association with the life or works of a person, or group of persons, of importance in the cultural or natural history of the local area;***

***Guidelines for Inclusion:***

- *Shows evidence of a significant human occupation*
- *Is associated with a significant event, person or group of persons*

***Guidelines for Exclusion:***

- *Has incidental or unsubstantiated connections with historically important people or events*
- *Provides evidence of people or events that are of dubious historical importance*
- *Has been so altered that it can no longer provide evidence of a particular association*

The former 3M building and property is of historical associational significance in Ku-ring-gai for the following reasons:

1. Although no longer present on site, a portion of the land purchased by Minnesota Mining & Manufacturing (Australia) Pty Ltd in 1965, had contained a strategic gas distribution plant for AGL from the mid 1920s. The facility serviced and facilitated the growth in the residential areas of Ku-ring-gai in the first half of the 20<sup>th</sup> century that had been generated by the opening of the North Shore Railway at the end of the 19<sup>th</sup> century. It is highly likely that the steeply sloping ridge-top topography of the site was cut away to create a level platform for the industrial facility, a topography that facilitated and was exploited by 3M when developing their new Australian headquarters.

2. The mid 1960s development of the site as the first stage of a commercial office park was associated with the 3M Company who selected the site and developed the project as their Australian headquarters. 3M was a major producer of industrial and consumer products, including products marketed under the generic name "Scotch" and remains a well known brand in Australia and internationally. A number of the company's products were reportedly used during the construction of the building. The company continued its presence on the Pymble site until 2011, when it relocated to a new national headquarters in Ryde.
3. There is some documentary evidence confirming that the final design of the 1967 building and its landscaped setting was directly influenced by US architects associated with, or commissioned by, the 3M Head Office in Minnesota.
4. The completed building is associated with the well established Sydney architectural firm of Hanson Todd and Partners, who were commissioned by 3M to manage the change of zoning and development application submissions, and subsequent design development, tendering and delivery of the project. Albert Hanson had won a Sulman Award for his own house in 1945 and Lionel Todd went on to become one of the partners of Hall Todd and Littlemore, charged by the NSW Government with the completion of the Sydney Opera House after the departure of Joern Utzon.
5. The distinctive pre-cast concrete façade panels were fabricated by Melocco Bros, the largest precast concrete manufacturer in Sydney at the time.

In terms of this criterion, the former 3M building and site meets the Inclusion Threshold for LEP heritage listing

***Aesthetic Significance - Criterion (c)***

***An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area;***

***Guidelines for Inclusion:***

- *Shows it is associated with creative or technical innovation or achievement*
- *Is the inspiration for a creative or technical innovation or achievement*
- *Is aesthetically distinctive*
- *Has landmark qualities*
- *Exemplifies a particular taste, style or technology*

***Guidelines for Exclusion:***

- *Is not a major work by an important designer or artist*
- *Has lost its design or technical integrity*
- *Its positive visual or sensory appeal or landmark and scenic qualities have been more than temporarily degraded*
- *Has only a loose association with a creative or technical achievement*

The former 3M building and property is of aesthetic significance in Ku-ring-gai for the following reasons:

1. It is an imaginatively conceived and well executed example of post-war international modernism architectural style applied to a commercial building. It differed from many of its contemporary buildings of this style in Sydney through the use of a self-cleaning pre-cast concrete façade instead of the more commonly used curtain wall.
2. The unusual and distinctive curvilinear plan form of the 3M building in Pymble was widely recognised as being a direct response to the curved corner of the site created by the upgraded intersection. By comparison, the majority of commercial buildings of this genre were designed as relatively simple cubic forms deliberately devoid of their local context, and intended to project a straightforward architectural massing.



3. While five storeys in overall height, the building took advantage of the reduced topography from the former gas works to project only two storeys above the Pacific Highway frontage, where it achieved landmark status due to its association with 3M. The restriction on its projection above the highway frontage was possibly agreed with Ku-ring-gai Council to retain the overall allowable scale of the previously zoned residential site when viewed from the highway.
4. The architectural presentation of the building was enhanced by a "Japanese" style landscaped setting, and a curved entry driveway, providing enhanced amenities for staff and visitors.
5. The building retains its external architectural integrity and much of the early character of its landscaped setting. As would be anticipated with a building that was used for over 40 years, its interior office spaces have been altered and upgraded.

In terms of this criterion, the former 3M building and site meets the Inclusion Threshold for LEP heritage listing

***Social Significance - Criterion (d)***

***An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons;***

***Guidelines for Inclusion:***

- *Is important for its association with an identifiable group*
- *Is important to a community's sense of place*

***Guidelines for Exclusion:***

- *Is only important to a community for amenity reasons*
- *Is retained only in preference to a proposed alternative*

Although a well recognised local landmark at the intersection of the Pacific Highway and Ryde Road, the level of awareness and association with the local community or distinct community group is not sufficiently strong to meet the Inclusion Threshold for LEP heritage listing under this criterion.

***Technical or Research Significance - Criterion (e)***

***An item has potential to yield information that will contribute to an understanding of the cultural or natural history of the local area;***

***Guidelines for Inclusion:***

- *Has the potential to yield new or further substantial scientific and/or archaeological information*
- *Is an important benchmark or reference site or type*
- *Provides evidence of past human cultures that is unavailable elsewhere*

***Guidelines for Exclusion:***

- *The knowledge gained would be irrelevant to research or science, human history or culture*
- *Has little archaeological or research potential*
- *Only contains information that is readily available from other resources or archaeological sites*

While there may be some information regarding the former gas works contained in the archaeological record, it is unlikely that this would meet the Inclusion Threshold for LEP heritage listing under this criterion.

**Rarity Significance - Criterion (f)**

**An item possesses uncommon, rare or endangered aspects of the cultural or natural history of the local area;**

**Guidelines for Inclusion:**

- Provides evidence of a defunct custom, way of life or process
- Demonstrates a process, custom or other human activity that is in danger of being lost
- Shows unusually accurate evidence of a significant human activity
- Is the only example of its type
- Demonstrates designs or techniques of exceptional interest
- Shows rare evidence of a significant human activity important to a community

**Guidelines for Exclusion:**

- Is not rare
- Is numerous but under threat

The former 3M building and property has rarity significance in Ku-ring-gai for the following reasons:

1. It is the only commercial building of this quality in the Post War International Modernism architectural style in Ku-ring-gai.
2. It is one of a relatively few examples of this architectural style and period to demonstrate a detailed response to the nature of the site. The contextual approach adopted by the 3M building was unusual in post war modernism, especially in Sydney, where the only other major example was Qantas House in Chifley Square (1955). The majority of commercial buildings of this genre were designed as relatively simple cubic forms deliberately devoid of their local context. Buildings with curved facades such as the AMP Building in Sydney (1962), Ryde Council Chambers (1964) and the UNESCO Headquarters in Paris (1958) or designed as cylindrical or curved masses, such as Australia Square (1967), 17 Wylde Street Potts Point (1951) and the Sofitel Wentworth Hotel in Sydney (1966) tended to create simple, straightforward architectural statements.

In terms of this criterion, the former 3M building and site meets the Inclusion Threshold for LEP heritage listing.

### **3.2 STATEMENT OF HERITAGE SIGNIFICANCE**

The following Statement of Heritage Significance has been formulated by Graham Brooks, on the basis of the comprehensive research undertaken for the preparation of this Statement of Evidence. It seeks to provide a more comprehensive understanding of the depth and nature of heritage significance than had been revealed by earlier research.

The former 3M Building and property, at 950 Pacific Highway Pymble, is of heritage significance in Ku-ring-gai as an imaginatively conceived and well executed example of the post-war international modernism architectural style applied to a commercial building. It differed from many of its contemporary buildings of this style in Sydney through the use of a self-cleaning pre-cast concrete façade instead of the more commonly used curtain wall. The building was conceived and built as the first and possibly only example in Ku-ring-gai, of an Australian headquarters for a significant and high profile international manufacturer of a wide range of industrial and consumer products. 3M was a major producer of industrial and consumer products, including products marketed under the generic name "Scotch" and remains a well known brand in Australia and internationally.

The mid 1960s change of land use of the subject site from "Services Infrastructure" and "Residential" to "Commercial", was an early and important strategic example in the Municipality of the rezoning of largely residential land for such purposes. The extent of commercial uses in the locality was subsequently expanded to create the current Pymble Business Park on the north western corner of the major intersection of the Pacific Highway and Ryde Road, in Pymble. The rezoning and subsequent commercial development of the site provided Ku-ring-gai Council with a highly desirable opportunity to rejuvenate a redundant but prominently located industrial site (former gas distribution facility) in what had essentially been a residential area. It also provided an opportunity to consolidate and comprehensively redevelop a group of otherwise small individual properties with outdated residential building stock, whose future development was otherwise likely to be severely disadvantaged by the impending road works.

The original (1965) rezoning proposal for the building included a comprehensive, staged development of a large scale office park, enhanced by a fine landscaped setting with ample on-site staff parking. It set an early precedent for the subsequent development of office park projects in regional locations across metropolitan Sydney.

There is some documentary evidence confirming that the final design of the 1967 building and its landscaped setting was directly influenced by US architects associated with, or commissioned by, the 3M Head Office in Minnesota. The completed building is associated with the well established Sydney architectural firm of Hanson Todd and Partners, who were commissioned by 3M to manage the change of zoning and development application submissions, and subsequent design development, tendering and delivery of the project.

It is one of a relatively few examples of post-war international modernism in the Sydney Metropolitan Area to demonstrate a detailed response to the nature of its site. The unusual and distinctive curvilinear plan form of the 3M building in Pymble was widely recognised as being a direct response to the curved corner of the site created by the upgraded highway intersection. By comparison, the majority of commercial buildings of this genre were designed as relatively simple cubic or sculptural forms deliberately devoid of their local context.

While only five storeys in overall height, the building took advantage of the reduced topography from the former gas works site to project two storeys above the Pacific Highway frontage, as constrained by permissible height restrictions. Nevertheless, it achieved landmark status due to the prominent roof level 3M signage at this major, regional traffic intersection. The building retains its external architectural integrity, the presentation of which is enhanced by its landscaped setting and backdrop, combining natural and cultural planting, and curved entry forecourt driveway.

The former 3M building and property has rarity significance in Ku-ring-gai as the Municipality's only commercial building of this quality in the Post War International Modernism architectural style. The contextual approach adopted by the 3M building was unusual in post war modernism, especially in Sydney, where the only other major example was Qantas House in Chifley Square (1955). Buildings with curved facades such as the AMP Building in Sydney (1962), Ryde Council Chambers (1964) and the UNESCO Headquarters in Paris (1958) or designed as cylindrical or curved masses, such as Australia Square (1967), 17 Wyde Street Potts Point (1951) and the Sofitel Wentworth Hotel in Sydney (1966) tended to create simple, straightforward architectural statements.

As would be anticipated with a building that was used for over 40 years, its interior office spaces have been altered and upgraded.



# 4.0

## DISCUSSIONS OF THE CONTENTIONS

### 4.1 CONTENTION 1 - HERITAGE

***The proposed demolition of the former 3M Building and removal of its landscaped setting will adversely impact on the heritage significance of the building and site, which is individually listed as a heritage item in Schedule 5 of Ku-ring-gai LEP 2015.***

Each of the particulars will be discussed in turn.

#### 4.1.1 PARTICULAR A

***The former 3M Building at 950 Pacific Highway, Pymble (Lot 1 DP 718718) is individually heritage listed as Heritage item 593 in Schedule 5 of the LEP. The heritage listing extends across the entirety of the site.***

Response:

Note that the wording in this Particular is not quite accurate. The overall extent of the subject development proposal includes the sliver of land known as 2 Bridge Street (Lot B DP 371406). This small lot is not included in the heritage listing of the main site.

The proposed demolition of the former 3M building at Pymble will completely remove all physical evidence of a building and its surround landscaped setting that he considers to be of a high level of heritage significance to Ku-ring-gai Municipality.

There is nothing in the material submitted with the Development Application to suggest that the Applicant has given any serious consideration to the retention and adaptive re-use of the subject building.

The motivation behind the project appears to be to completely ignore the heritage listing of the site and demolish the heritage listed former 3M Building in order to erect a new Bunnings store. Detailed economic and cost feasibility research was prepared for the Applicant by way of Statements of Evidence by Peter David Leyshon, Martin Hill and Simon Hensley, all dated January 2015. By their own admission, each expert was given a narrowly defined set of instructions to only examine the existing free standing 3M Building in its own right, with no reference to any potential application of the Heritage Incentive provisions of Clause 5.10(10) of Ku-ring-gai LEP 2015.

The preparation of a photographic recording or set of measured drawings of the building and its setting will NOT be a sufficient mitigation action to reduce or offset the impact of the proposed demolition.

#### 4.1.2 PARTICULAR B

*The proposed demolition of the former 3M Building and general redevelopment of the overall site, including the early landscaped setting of the 3M Building, is contrary to two of the particular aims of the LEP, as set out in sections 2(a) and 2(f) of Clause 2.1 of the LEP, which are as follows:*

*(a) to guide the future development of land and the management of environmental, social, economic, heritage and cultural resources within Ku-ring-gai.*

*(f) to recognise, protect and conserve Ku-ring-gai's indigenous and non-indigenous heritage*

Response:

The proposed demolition of the 3M building will negate any opportunity to optimise and indeed maximise the available mechanisms contained in Ku-ring-gai LEP 2015 for the future development of the heritage listed site. It will also destroy the subject component of Ku-ring-gai's non-indigenous heritage.

There is nothing in the material submitted with the Development Application to suggest that the Applicant gave any serious consideration to meeting or responding to these two important Aims of the LEP, both of which are framed to ensure that the heritage item is retained and managed through a development process or long term custodial ownership.

In responding to this Particular, I have reviewed the Statement of Evidence on Economic Impact prepared by Peter David Leyshon, dated January 2010. Mr Leyshon notes at para 1.8 that his report particularly responds to Particular B.

Mr Leyshon provides a detailed analysis of the historic and current trends in the suburban commercial office market in Sydney and the northern suburbs including North Ryde. He then draws the following conclusions:

3.20

*Given the above, it is difficult to envisage the current vacancy rate in the Pymble Business Park falling substantially further under the prevailing market conditions. Specifically, it is my view that the preconditions which gave rise to the demand for, and feasibility of, office development in Pymble have irrevocably changed.*

3.21

*Accordingly, it is my opinion that some process of land-use change needs to be initiated by Council in relation to the Business Park to assist it to adapt in terms of a more sustainable, long term market positioning. This could involve the introduction of other commercial uses such as retailing or residential uses.*

3.24

*Residential development could be considered as a potential alternate use. There is, however, the potential for conflict between residential development and the existing commercial activities of the type often found in business parks. Further, I am instructed that residential accommodation is a prohibited land use.*

4.5

*In summary, it is my considered opinion that the most appropriate strategy for Council to adopt is one of encouraging sympathetic land-use change within the Pymble Business Park...*

4.6

*In view of the above, it is my assessment that mandating the retention of the former 3M building as an office development definitely will not maximise the economic potential of the Pymble Park.*

Response:

By heritage listing the whole of Lot 1 DP 718718, Council has inherently commenced the very process recommended by Mr Leyshon. Clause 5.10(10) of Ku-ring-gai LEP 2015 enables Council to grant consent to the development of any purpose of a heritage listed building, or the land on which it is erected, even though development for that purpose would otherwise not be allowed by the LEP. The granting of consent for another non-conforming use requires the consent authority to be satisfied, among other things, that the conservation of the item will be facilitated by the granting of that consent.

There are a number of issues that suggest the subject site could be considered for re-use under the guidance of Clause 5.10(10):

- The subject site is relatively large when compared with the footprint of the 1968 building and its immediate setting, the majority of which is located within the setback zone to the highway intersection.
- The earlier master planning for the site indicated that there was potential to build new buildings in relatively close proximity to the 3M Building.
- The site is also located at the eastern, upper end of the overall Pymble Business Park and has good vehicle access directly from Bridge Street, indicating that alternative uses may be developed that will have little direct interaction with the adjoining areas of the Business Park.

I have been advised that the current development capacity for the site is well in excess of either the current 3M Building or the proposed Bunnings Retail Centre. This provides another aspect of how Council has already commenced the processes recommended by Mr Leyshon.

It does appear therefore that the Applicant, in preparing the development application did not undertake a thorough assessment of the potential for a development to take place on the subject site that would respond directly to the Aims of the LEP.

#### 4.1.3 PARTICULAR C

*The proposed demolition of the former 3M Building and general redevelopment of the overall site, including the early landscaped setting of the 3M Building, is contrary to two of the particular objectives of Clause 5.10(1) of the LEP, as set out in sections 1(a) and 1(b), which are as follows:*

*(a) to conserve the environmental heritage of Ku-ring-gai*

*(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views.*

The proposed demolition of the former 3M Building, combined with the loss of its garden setting and many mature trees will completely negate the two particular objectives set out in LEP Clause 5.10(1).

The Applicant has not demonstrated that the heritage listing of the site has been taken into account during the formulation of the proposed development. Nor has there been any meaningful attempt to mitigate or minimise the impact of demolition on the heritage significance of the place, the building, associated fabric and setting. Photographic recording or the preparation of an interpretation strategy are not, in the circumstance, a meaningful mitigation approach.



#### 4.1.4 PARTICULAR D

*The proposed demolition of the former 3M Building and general redevelopment of the overall site, including the early landscape setting is contrary to the particular requirement of Clause 5.10(4) of the LEP, as set out in the LEP, which is as follows:*

*The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned.*

Any analysis undertaken under sub-clause (4) of LEP Section 5.10 must conclude that the proposed demolition will have a major detrimental effect on the heritage significance of the former 3M building and its setting.

Subclause (4) continues:

*This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).*

The Applicant has prepared a Statement of Heritage Impact (SHI), but has not prepared a Conservation Management Plan (CMP) for the site.

The Statement of Heritage Impact, dated January 2014, prepared by Paul Davies for the first DA at a time when the 3M Building was only a draft heritage item. Mr Davies concentrated his research on whether the building qualified for heritage listing. His final views, as set out in the final statement on pp23, concluded:

*In summary I can find no reasons to suggest that the building should be a heritage item or that it has any heritage value. Consequently I can find no reasons that would prevent the approval of the current application to demolish the building.*

The lack of any major updates to the January 2014 SHI report and complete lack of any CMP either of which could have explored alternative options for development under Clause 5.10.10, indicates that the Applicant has not responded in any meaningful manner to the reality of the heritage listing of the subject site and the former 3M Building.

#### 4.1.5 PARTICULAR E

*The proposed demolition of the former 3M Building and general redevelopment of the overall site, including the early landscaped setting failed to take into account the imminent heritage listing of the site in the LEP. Accordingly, there is no evidence of any analysis of the potential to take advantage of the conservation incentives in Clause 5.10(10) of the LEP when the redevelopment was being formulated, as follows:*

*The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by the Plan, if the consent authority is satisfied that :*

- (a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and*
- (b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and*
- (c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and*

- (d) the proposed development would not adversely affect the heritage significance of the heritage item, including any setting, or the heritage significance of the Aboriginal place of heritage significance, and*  
*(e) the proposed development would not have any significance adverse effect on the amenity of the surrounding area.*

The Applicant has not explored the potential use of the LEP Conservation Incentives contained in Clause 5.10(10) to develop a proposal that can keep the former 3M Building, while exploiting the considerable existing development capacity of the site. There is sufficient scope within the assessed heritage significance of the former 3M Building and its setting, the general condition of the building, the scale of the overall heritage listed site and its location at the eastern, higher, end of the Pymble Business Park to embrace these Incentives.

There has been no detailed examination of the potential to formulate a project that upgrades the existing building within a mix of alternative uses. There have been no CMP or SHI reports, or architectural sketches prepared that explore alternative scenarios and no apparent advice from a Heritage Consultant in this regard. Such an omission for a listed heritage site represents a major flaw in the subject Development Application.

In addition to the Statement of Evidence by Pater David Leyshon discussed in Section 4.1.2 above, the Statement of Evidence and Expert Valuation report, dated 27 January 2016, by Martin Hill, provides additional support for the concerns that the Applicant did not take account of LEP Clause 5.10(10) in preparing the application.

When describing the Purpose and Basis of Valuation (pp 6-7) he stated:

*I am instructed to assume that the site's potential development capacity is limited to its existing improvements comprising a 5 storey office building... 2 storey car park and hardstand. The surrounding parkland is to be retained as heritage curtilage... On the basis of this assumption, I am instructed to assess the viability of any continued uses of the former 3M Building for commercial purposes.*

*The purpose of this valuation is to assist the Court in assessing the viability of any potential commercial refurbishment of the former 3M Building given the imposed heritage status of the subject site.*

On pages 21-22 of his Statement, Mr Hill sets out the assumptions made in the context of the heritage listing:

*My instructions are to assume a heritage listing depicted below applied to the subject site since 1 May 2015 and that as a condition of consent for and DA seeking consent for refurbishment of the former 3M Building, the existing building envelope must be retained. There is little scope for additional floor space due (to) the requirement to retain the parkland curtilage within the Subject Site that excludes 2 Bridge Street.*

*The improvements must be adapted for re-use. Given the constraints of the floor plate and permitted use under the LEP, I have modelled office space with a small ground floor retail (café).*

In Section of his Statement, Mr Hill effectively provides expert evidence in support of the requirement set out in LEP Clause 5.10(10)(a) – that *the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent*

*The basis of valuation assessment reflects the current form (ie building envelope) being preserved so the highest and best use becomes a commercial investment building or a commercial strata title development to be refurbished at a cost that complies with the heritage conditions...*

*My conclusion is that it is not commercially viable to adaptively reuse the former 3M Building as an office building...*

*Expressed another way, the property is unsaleable with the heritage order imposed and building retained and any refurbishment of the property for office use is improbable given the patently uneconomic feasibility results...*

*As a consequence, the former 3M Building is expected to remain un-refurbished, and continue to deteriorate with a growing stigma reducing the likelihood of any re-development occurring in the foreseeable future.*

The apparent indifference on the part of the Applicant to the potential for seeking to capture the heritage incentive provisions within Clause 5.10(10) is further demonstrated in the Statement of Evidence prepared by Simon Hensley of WT Partnership, Quantity Surveyors.

In his Introduction (pp 1) he states:

*I have been instructed by Norton Rose Fulbright to advise on the cost of remedial and refurbishment works that would be required in order to enable the adaptive reuse of the 3M Building if it was proposed to be re-used, on the basis that the building as commercial and that all floors would require refurbishment, in order to make it tenantable...*

*On 17 December 2014, I attended a site inspection of the property with Nicholas Joannides representing Partridge Remedial, Philip Drew representing Bunnings and Stephen Natill representing McKenzie Group, and I prepared an estimate of costs for remedial and refurbishment works in May 2015. In preparing this report, I have escalated the estimated costs from May 2015 to today's date (January 2016) as described in this report.*

In Section 6, Site Inspections, he states that *site inspections were carried out on 25 and 26 September 2014.*

This confirms that the technical cost analysis contained in his Statement of Evidence was initially prepared in 2014, in the context of the previous Development Application for a generally similar demolition and total site redevelopment proposal that is now before the Court. There is no indication in his Statement that he was instructed to consider the potential refurbishment of the former 3M Building in any other potential use configuration or total site development project.

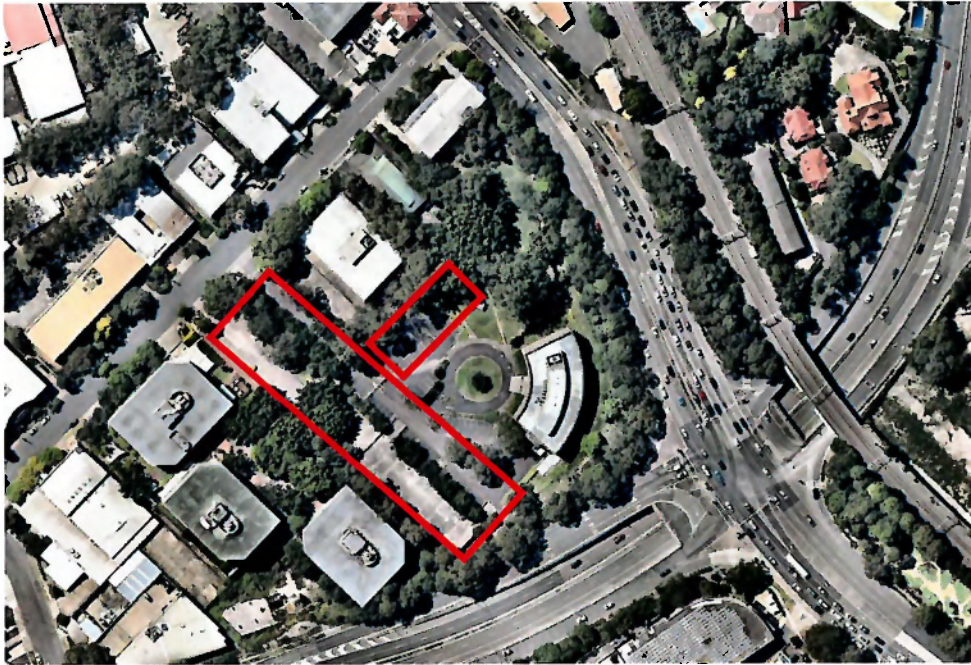
The only conclusion arising from the above analysis and discussion is that the Applicant made no attempt to consider an option to retain the former 3M Building in the context of an overall development scenario that might include a mix of permissible and concessionary uses.



#### 4.1.6 POTENTIAL DEVELOPMENT CURTILAGE

The indicative diagram below sets out a preliminary suggestion for the potential for the overall site to absorb additional development under the Heritage Incentives of LEP Clause 5.10(10), without adversely affecting the heritage significance of the former 3M Building.

This indicative footprint requires detailed analysis by Council and a future proponent before it can be confirmed.



*Figure 11  
Indicative site area that could be considered for additional development under the LEP  
Conservation Incentives in Clause 5.10(10).*

## 4.2 CONTENTION 5 – LOSS OF SIGNIFICANT VEGETATION

*The development will result in the loss of significant vegetation on site.*

The following discussion will be confined to the cultural heritage significance of the the existing vegetation, primarily the mature backdrop of trees, that contribute to the setting of the former 3M Building.



*Figures 12 and 13*

*The backdrop of mature trees and the circular forecourt makes a defining contribution to the landscape setting of the building*



The site development and landscape plans included in the application record the removal of a substantial number of trees across the overall site. Most particularly, one of the trees identified for removal is nominated as T135.

The Particulars for this Contention set out a number of concerns, including in Particular D:

***The removal of Tree 135 is inconsistent with the Objectives of part 20E.3 of Ku-ring-gai Development Control Plan 2015 in that it does not “Retain and conserve the significance of a Heritage Item in its setting” or “Retain and conserve the significant garden elements and structures of Heritage items and to retain an appropriate garden setting”.***

The Statement of Significance for the property includes the following:

*The original (1965) rezoning proposal for the building included a comprehensive, staged development of a large scale office park, enhanced by a fine landscaped setting with ample on-site staff parking. It set an early precedent for the subsequent development of office park projects in regional locations across metropolitan Sydney.*

In this context, the visual character of the now far more mature backdrop formed by the trees in the boundary setback zone and complemented by T135 and the trees down the north western side of the site are an important component of the heritage significance of the property and the former 3M Building.

The removal of T135 in particular will have an adverse impact on the setting of the former 3M Building.

If the removal of this tree is undertaken in the context of the demolition of the building for comprehensive redevelopment, then the assessment made under Contention 1 about the adverse overall heritage impact is only reinforced.



Graham Brooks



# APPENDIX 1

## GRAHAM BROOKS CV

### Positions Held

Managing Director, GBA Heritage Pty Ltd, 2015 -  
Managing Director, Graham Brooks and Associates Pty Ltd, 1996 – 2015  
Director, Schwager Brooks and Associates Pty Ltd, 1984 – 1996  
Associate Director, Travis Partners, 1977 – 1984  
Architect, Pollard Thomas & Edwards, London, 1975 – 1977  
Architect, Commonwealth Department of Works, 1972 - 1975

### Professional Qualifications

Bachelor of Architecture (Hons), Sydney University, 1972  
Master of the Built Environment (B Cons) UNSW 1984  
Associate Australian Institute of Architects, 1974  
Associate Royal Institute of British Architects, 1975  
Registered Architect, New South Wales  
Member, Australia ICOMOS

### Professional Associations

President ICOMOS International Committee on Cultural Tourism, 2001 – 2011  
Chairman, AusHeritage Ltd, 1999-2001  
Chairman, National Trust (NSW) Historic Buildings Committee, 1996-1999  
Former Heritage Adviser, Liverpool City Council c1995-2005  
Member, Senior Advisory Panel, Global Heritage Fund 2010-  
Member, National Trust of Australia (NSW) 1973-  
Member Australia ICOMOS, 1980-  
UNESCO Monitoring Mission to World Heritage Site of Borobudur, 2003, 2006, 2007  
World Heritage Centre Monitoring Mission to Ajanta & Ellora Caves, India, 2004-2010  
Visiting Professor, Institute of Tourism Studies, Macao, 2006  
Former Executive Committee Member, Australia ICOMOS, 1990-1992  
Member Asia and West Pacific Network for Urban Conservation  
Honorary Member, Philippines Heritage Society  
Former Member Heritage Council Technical Advisory Committee on Materials Conservation,  
RAIA Heritage Committee & RAHS Historic Buildings Committee

### CAREER SUMMARY

I have worked in the fields of Architectural design, Heritage Conservation and Cultural Tourism Management for some 40 years, in Australia, the United Kingdom and more recently for UNESCO in Asia.

I have lectured widely to business, heritage, professional and student groups on heritage management, conservation practice, preparing heritage sites for cultural tourism and the methodology of heritage asset management.

I have participated in many appeals before the Land & Environment Court, acting on behalf of both Respondents and Applicants, and have also acted as a Court Appointed Heritage Expert.

## APPENDIX 2

### PREVIOUS ASSESSMENTS OF SIGNIFICANCE

#### Statement of Significance prepared by John Oultram 2013:

1. *The 3M building is an interesting and locally rare example of late Twentieth Century office building in the international style that was constructed in 1967 for the 3M (Minnesota Mining and Manufacturing Company) as their Sydney headquarters.*
2. *The building is an early example of a high rise company headquarters in Ku-ring-gai in an area that was zoned for residential development.*
3. *The building was designed by architects Hanson Todd and Partners on the site of the former Pymble Gas Works that was established by the Australian Gas Light Company in 1888.*
4. *The building is intact externally, but has been altered internally and is set in a well-landscaped site that retains much of the original setting of the building.*
5. *The building represents the establishment of the 3M Company in Australia, was a landmark development for the company reflecting the corporate strength and remained as their headquarters for over 40 years.*
6. *It is likely to have special associations for former employees and is a local landmark.*

#### Statement of Significance prepared by the National Trust 2013:

1. *The former 3M Building at 950 Pacific Highway, Pymble is of high significance as the former purpose-built national head office administrative building for the Minnesota Mining and Manufacturing (Australia) Pty Limited (3M) company. It is a rare and highly competent example of a Post-War International building incorporating a curved facade. It is believed to be the first curvilinear building in this style on Sydney's North Shore and one of a small group of high-quality curved buildings constructed in the 1950s and 1960s in the International Style. Curvilinear buildings of the same era include the AMP Building at Circular Quay and the former Qantas Building, Chifley Square.*
2. *The design was developed by a well-known Sydney firm of architects Hanson, Todd and Partners, in association with 3M in the USA and survives in a highly intact, original state. The building was designed to be prominent and viewed in the round. The surrounding landscaped space, the placement of lawns, and even the car parking areas were designed to provide a lawn setting for the building, enhancing its striking sculptural form.*
3. *The choice of a curved facade was made to take advantage of the site at the intersection of the Pacific Highway and Ryde Road/Mona Vale Road, Pymble, and the building was carefully designed and sited to achieve maximum exposure for the company along the Pacific Highway and to create a landmark building. While trees have partly obscured the building, it remains a highly visible and well-known landmark when travelling north on the Pacific Highway.*
4. *The later building at 924 Pacific Highway on the opposite corner site was also built with a curved facade. The two sites have created a gateway and define the busiest and most prominent road intersection in Ku-ring-gai.*
5. *The 3M Building is also a well-known Sydney landmark, well beyond Ku-ring-gai.*

## Statement of Significance prepared by the Australian Institute of Architects, 2014

- 1. The former 3M Building is significant because of its associations with the architectural practice of Hanson, Todd & Partners. The house that Albert Hanson designed for his family at 55 Illeroy Avenue, Killara, was awarded the Sulman medal by the NSW Chapter of the Royal Australian Institute of Architects in 1948. The firm was also involved with the historically significant 1940s Ryde Housing Scheme and other fine post-war modernist buildings.*
- 2. A landmark building it is a considered response to its site and makes a positive contribution to the local townscape. Early photographs suggest retention of trees on the site was an important consideration, and the curved form may reflect this; it is a rare example of a corporate office building of the 1960s within the Ku-ring-gai local government area. It was one of only two contemporary buildings illustrated in Les Thorne's history, North Shore, Sydney (1968), the other being Harry and Penelope Seidler's house in Killara.*
- 3. The building is a representative example of later 1960s corporate architecture, demonstrating the influence of Modern Movement aesthetics and retaining a substantial amount of original external fabric.*
- 4. The building's curved form is a sensitive response to its site. The use of curves in architecture was a characteristic of the period in which the building was constructed, as demonstrated by Harry Seidler's circular 1967 Australia Square Tower, Peddle Thorp & Walker's 1962 AMP Building and the former Gazebo Hotel at Kings Cross, both of which are listed in the City of Sydney's Local Environmental Plan, and the semi-circular 1968 Travelodge Motel at North Sydney.*
- 5. The building provides evidence of the decentralisation of corporate business in northern Sydney during the 1960s, a period when significant business precincts such as Macquarie Park were being established.*



## APPENDIX 3

### HERITAGE INVENTORY DATA SHEET

The attached Heritage Inventory Data Sheet was prepared by John Oultram to advise Council during its consideration to include the subject site on Schedule 5 of Ku-ring-gai LEP 2015

## APPENDIX 4

### 3M CONSUMER PRODUCTS TIMELINE

The following, incomplete timeline of product development is based on “A Century of Innovation. The 3M Story” (2002):

- 1904 First and only sale of Crystal Bay corundum
- 1906 First sandpaper sale
- 1914 Three-M-ite abrasive cloth introduced
- 1929 Durex is formed to conduct business in Europe
- 1930 Scotch cellophane tape introduced
- 1931 Production of Colorquartz roofing granules
- 1935 Introduction of first automotive underseal coating products  
Sandpaper packages now under the name “Sandy Smooth”
- 1938 Scotchlite reflective sheeting introduced commercially (e.g. for traffic/street signs)
- 1946 Scotch vinyl electrical tape introduced
- 1947 Scotch magnetic audiotape introduced
- 1948 Decorative ribbon for gifts introduced (3M’s first nonwoven product)  
First surgical drape introduced
- 1951 Thermo-Fax copier introduced
- 1952 Scotchlok electrical connectors and Scotchkote insulation introduced
- 1954 Scotch magnetic tape is used to record TV programs for the first time
- 1956 Scotchgard fabric and upholstery protector introduced to textile industry
- 1958 Scotch-Brite cleaning pads marketed for industrial use
- 1960 Scotch Brand Magic transparent tape introduced  
Micropore surgical tape introduced (first hypoallergenic tape, key to success of 3M Health Care business)
- 1962 Tartan Turf introduced (first synthetic grass surface)
- 1967 The first disposable facemasks and respiratory protection products are developed
- 1969 Astronaut Neil Armstrong leaves a footprint on lunar dust in boots made from 3M Fluorel synthetic rubber on 20 July 1969
- 1970 New products include Scotchban paper treatment to protect food packaging and 3M box sealing tapes
- 1975 Buf-Puf skin products introduced by 3M Riker
- 1979 New products include Thinsulate thermal insulation
- 1980 Post-it notes and Scotchcast casting tape introduced
- 1984 3M and NASA conduct joint research experiments on space shuttle Discovery
- 1985 First refastenable diaper tapes introduced  
3M receives award from Academy of Motion Picture Art and Sciences for magnetic film that improves audio capabilities of movie sound tracks  
Tambocor, a drug that controls irregular heartbeats, is approved by the US Food and Drug Administration
- 1986 Scotchcal drag reduction tape, based on microreplication technology, helps the Stars & Stripes yacht win the America’s Cup competition
- 1991 Scotchshield window film introduced (shatter-, heat- and cold-resistant window protection)
- 1994 Post-it easel pads introduced
- 1995 Imation is launched as an independent, publicly owned company

- First metered dose asthma inhaler introduced, free of ozone depleting chlorofluorocarbons
- 1996 New products include flexible circuits for electronic products and HFEs, replacing ozone depleting chlorofluorocarbons
- 1997 Aldara (imiquimod) approved by the US Food and Drug Administration
- 1999 3M acquires outstanding minority interest in Dyneon
- 2000 Michael Johnson wins gold in the 2000 Sydney Olympics' 400 meter sprint wearing shoes made from 24-carat gold Scotchlite fabric developed by 3M
- Vikuiti brand introduced, for light management products that make electronic displays easier to read