

ICI House and the birth of discretionary tall building control in Melbourne (1945–1965)

‘ICI House and the birth of discretionary tall building control in Melbourne (1945–1965)’, *Provenance: The Journal of Public Record Office Victoria*, issue no. 16, 2018. ISSN 1832-2522. Copyright © Giorgio Marfella.

This is a peer reviewed article.

Giorgio Marfella is a graduate of the University of Florence (Italy), a registered architect in the State of Victoria and a lecturer in construction management and architecture in the Melbourne School of Design, University of Melbourne. As a full-time academic, he is engaged in research, teaching and industry engagement activities associated with tall buildings. For his doctoral thesis at the University of Melbourne, he completed a retrospective study on the evolution of tall office buildings in Melbourne and America during the second half of the twentieth century. Giorgio is a member of the Society of Architectural Historians, Australia and New Zealand and is active in the University of Melbourne’s research centre ACAHUC (Australian Centre for Architectural History, Urban and Cultural Heritage), in which he participates with specific focus, expertise and interest in tall building design, technology and construction history.

Author email: giorgio.marfella@unimelb.edu.au

Abstract

In Melbourne, the modernist landmark of ICI House, a tall office building completed in 1958, is symbolic of urban development trends that, after World War II, dissolved building regulations based on height limits. Six decades later, ICI House—the iconic slab of glass and aluminium designed by Bates, Smart & McCutcheon—still represents the point of transition that transformed Melbourne into the tall building city of the present—a city in which architects and builders continue to challenge regulations and propose new ones on a project-specific basis. Documents held at Public Record Office Victoria provide important insights into the events that led to ICI House being approved.

The story of ICI House is the culmination of a public debate on regulations that began in Melbourne in the 1920s. In 1945, Uniform Building Regulations were released that confirmed a traditional building height limit set by fire-ladder lengths. Yet, these regulations left the door open for ad hoc modifications to be assessed on a project-by-project basis. Applications for amendments could be lodged by owners and architects and justified on several grounds, including preventing interference with the course of business. This regulatory ambiguity was the terrain on which a systematic approach of public–private negotiation flowed between architects (as the voices of developer–clients) and public authorities.

Public authorities did not take a passive role. To the contrary, discussions regarding the introduction of new principles of built form controls were initiated by the City of Melbourne in the late 1940s, well before the notorious height limit breaking deal of ICI House.

Private interests and building applications accelerated the process of urban transformation and, eventually, in 1964, led authorities to release new built form controls based on plot ratios. However, private interests coincided significantly with public ones. The positions taken by planning authorities were a fundamental element of causation and encouragement beneath the deregulated explosion of tall building activity that began in Melbourne in the mid-1950s and continues today.

Introduction

ICI House, a tall office building completed in 1958, is symbolic of a moment of change in the history of Melbourne. A modernist landmark, its construction marks the moment when prescriptive building height limits dissolved and a culture of discretionary assessment for high-rise projects began. The 60th anniversary of the completion of ICI House is a timely opportunity to revisit the events that led to the erection of a building that was much taller than what regulations of the time prescribed. Details of discussions and negotiations between the architects, the client and city planners are in documents held at Public Record Office Victoria. The planning commentaries of ICI House and other tall office building projects of the same period in Melbourne provide insight into a critical moment in the city’s history and shed new light on the dynamics between private and public interests that spurred the beginning of modern high-rises in Melbourne and Australia.

Located at 1 Nicholson Street, East Melbourne, ICI House is an undisputed icon of modern architecture. Completed in 1958 to house the headquarters of the Imperial Chemical Industries of Australia and New Zealand (ICIANZ), the building was included on the Australian National Heritage List in 2005[1] and classified as highly significant by the National Trust of Australia (Victoria) as early as 1980[2]—during times when unsympathetic views about modern architecture were dominant. For the National Trust, the legacy of ICI House derives from it being a ‘one of a kind’ example of commercial architecture that anticipated ‘the idea of trade-offs between height and public amenity in Australian cities’ (see Figure 1).[3]



Figure 1: ICI House, 1–4 Nicholson Street, Melbourne, external view from Spring Street, PROV, VPRS 8609/P37, Unit 47, Item MISC G; aerial view showing height of ICI House relative to the rest of the city, 1961, PROV, VPRS 8357/P1, Unit 4, Item 1–14.

Soon after its completion, ICI House was celebrated as one of the first skyscrapers in Australia and as an exemplar of orthodox ideas of modern architecture borrowed from the United States of America.[4] At the same time, the building was acclaimed as an Australian-made success of the postwar boom, above all by influential architect and critic Robin Boyd, who enthusiastically welcomed its ‘non-featurist’ philosophy of design.[5]

In addition to its architectural qualities, technological innovations and aspects of monumental significance (which have been discussed by Philip Goad[6]), ICI House is emblematic of a moment of change in Australian urban history. Thanks to a rule-breaking deal, the iconic tower was built higher than Victorian regulations permitted. Thus, ICI House embodies the birth of discretionary control in Melbourne and signals the beginning of the modern urban spurt of the twentieth century in Australian capital cities.

The history of inner city planning, building and development in Australian city centres after World War II (WWII) has been examined at a national level by Susan Marsden[7] and Miles Lewis has looked at the same processes at work in Melbourne.[8] However, the events that favoured the emergence of a new culture of planning control about building height after WWII have been only partially analysed; for example, there are studies of this nature that focus on Sydney[9] and Perth,[10] but the research on this topic for Melbourne is incomplete. A seminal contribution is the Master of Arts thesis completed at Monash University by Peter Mills in 1997 that focuses on the height limit regime of the first half of the twentieth century in Melbourne, which effectively tamed unregulated tall building activity.[11]

The completion of ICI House might be taken as a watershed in signifying the emergence of new ideas for the regulation of commercial developments in Melbourne’s inner city. As Ben Schrader suggested, the image of metropolitan development that inspired Melburnians before WWII was that of Beaux-Art cities with uniform skylines such as Paris and Washington.[12] For most of the first half of the century, that urban vision—restrained by rigid height limits—appealed to authorities more than American high-rise metropolises such as New York, San Francisco and Chicago. However, after 1958, the latter vision for the inner city took over, as urban planners began to confront the problems of unprecedented metropolitan growth. Within this context, the approval of new height limits for ICI House uncovers the factors that contributed to that epochal shift in Melbourne, explaining why a single private commercial building was erected in apparent defiance of a well-established culture of public control and civic development that endorsed building height limits.

As this article focuses on a single building typology—tall office buildings—it cannot exhaust all aspects of enquiry for this crucial time of transition. Instead, the changes in building regulations in Melbourne after WWII are analysed using a bottom-up approach—that is, evidence is built up from a single project. Precedence is given, wherever possible, to information from Public Record Office Victoria (PROV) archives. Commentaries from other relevant sources, such as professional journals and newspapers, are used for reference; however, for reasons of brevity, these have not been treated exhaustively.

PROV and Melbourne's post-WWII tall buildings

From the late 1940s until the mid-1960s, there were several active City of Melbourne committees that oversaw town planning and building activity in the city, assessing private applications and making recommendations to the building surveyor. From 1945, the office of the building surveyor was the local authority responsible for verifying compliance with the Uniform Building Regulations (UBR) of Victoria.[13] The UBR was a statewide code that controlled building activity. In the absence of a comprehensive town planning scheme (which Melbourne did not adopt until the mid-1960s[14]), the UBR also controlled matters such as building height and setbacks in Melbourne's inner city. The committees responsible for liaising with the building surveyors on UBR-related matters at the City of Melbourne changed names over time. The 'Town Planning Special Committee' was active from 1947 to 1951,[15] the 'Traffic and Building Regulations Committee' was active from 1952 to 1955, [16] and the 'Building and Town Planning Committee' was active from 1955 to 1976.[17] Notes and actions from meetings of these and other committees were recorded in the form of minutes, including project information and statements of endorsement, rejection or amendment of building proposals.

Details of the approval of private commercial buildings of the post-WWII period in Melbourne, like ICI House, are recorded in the minutes of these various planning and building committees. The minutes contain the commentary of councillors in response to building applications received, discussed and recorded for assessment. These contain valuable information about the events associated with the approval of major private buildings in Melbourne,[18] give the perspective of planners, and provide insight into discussions between private and public stakeholders. Information from these sources has been complemented by other City of Melbourne archival collections also held at PROV, including Building Application Files,[19] the Town Clerk's Correspondence Files[20] and Rate Books Cards, which document historic real estate transactions and building values in the city.[21]

From the 1940s to the early 1960s, the minutes of the various building and planning committees are predominantly factual and procedural in tone. They rarely present personal opinions expressed by individual councillors, staff or other attendees involved in specific projects. However, occasionally—as the case presented here demonstrates —some minutes could expand considerably, at times taking a discursive character. The minutes consulted in this study do not record—but, nor

do they exclude—direct evidence of political influence exercised by individuals or arising from pressures of parties or influential networks.

A chronological account based on archival records such as those consulted here is informative because it unveils the environment in which a discretionary culture of building control in the City of Melbourne originated. By revisiting the regulatory shift of ICI House, this paper examines some of the implications for the public assessment and control of tall buildings, including the challenges of fire safety, building density, innovation, public amenity and the quest for flexible, yet not arbitrarily deregulated, building controls.

A new building for Imperial Chemical Industries of Australia and New Zealand

From the mid-1950s to the early 1960s, Melbourne's skyline changed radically due to the rise of a new generation of multistorey office buildings. This was the first of several waves of modern office building activity that, for the rest of the twentieth century, turned the central business district (CBD) into the high-rise city of the present. Initially, office building construction was prompted mainly by corporations willing to create modern headquarters for owner occupation; although, in the same period, speculative and government projects also gave considerable impetus to CBD renewal. New construction converged in the city centre—the Hoddle Grid[22] and along Collins and Queen streets, the traditional addresses for offices in the city. The renewal also spread westwards, converting industrial zones into white-collar hubs along Bourke, William and Lonsdale streets.

In the mid-1950s, the predominant approach to development was modest interventions on small parcels of land. In the most densely occupied streetscapes, new office blocks rose to replace older ones, often aligning with existing parapets established since the 'Marvellous Melbourne' age of the late 1800s.[23] However, by the end of the 1950s, a trend to amalgamate several parcels of land into larger ones emerged. This amplified during the 1960s. Some of the earliest land consolidations for multistorey office buildings did not occur within the Hoddle Grid; rather, they occurred in the inner fringes of the city centre—in South Melbourne, along St Kilda Road and in East Melbourne. In this context of broader urban transformation, ICIANZ selected the corner of Nicholson and Albert streets in East Melbourne to build its Victorian headquarters. Occupying 25,000 square feet, the site comprised several parcels along Nicholson Street, Albert Street and Evelyn Place that ICIANZ had purchased

separately in 1952. The lot was elevated from the city blocks nearby and emerged as a focal point at the eastern end of Lonsdale Street. The prospect of better vehicle access convinced ICIANZ to locate on the eastern fringe of the CBD, rather than in the more congested Hoddle Grid. [24]

Local architects Bates, Smart & McCutcheon (BSM) were commissioned to design the building (see Figure 2). Office accommodation was in 17 levels served by eight lifts located in the side core. After completion, the top 12 floors were directly occupied by ICIANZ, with the remainder available for rent. The ground floor, surrounded by a landscaped entry, comprised a bank tenancy and a theatre. The highest habitable level housed communal areas—a staff kitchen, canteen and cafeteria, as well as a caretaker's flat. The basement housed a car park and part of the mechanical plant. The rest of the mechanical plant was located on a 'penthouse' set back from the parapet on top of the roof.[25]

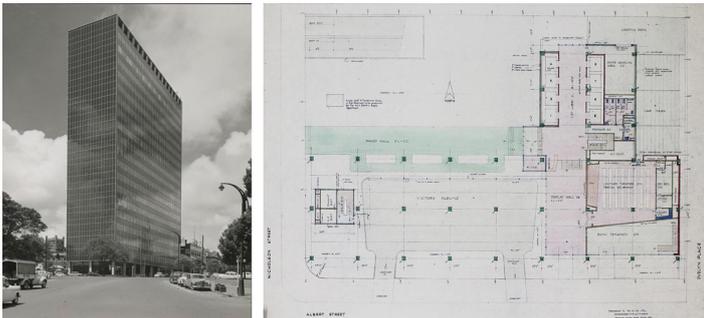


Figure 2: Bates, Smart & McCutcheon, ICI House, external view, 1958, photograph by W. Sievers; [26] ground floor plan, dated 20 April 1956, PROV, VPRS 11200/P0007, Unit 1342, Building Application no. 30056, Sheet no. P230, Amendment C, 4 October 1956.

ICI House introduced new benchmarks of office space and rental price in Melbourne. With a new record-breaking height of 265 feet (80 metres), the bar was set high for panoramic views that could demand premium rents, but height was not all that mattered. Quality office space was a matter of prestige also expressed by floor plate shape, layout and size as well as modern communal spaces, such as the high-rise staff canteen and the semipublic areas at ground floor. Maximising the opportunities given by a large consolidated site, the slab had a plan of 190 feet by 54 feet, which provided a total area about twice the size of any other contemporary major office blocks in the city (see Figure 3). In comparison to other buildings in Melbourne at that time, ICI House was a giant, not only regarding height, but also for its typical floor area of 10,000 square feet. It also had another record-breaking feature—180,000 square feet total floor space provided in a single building.

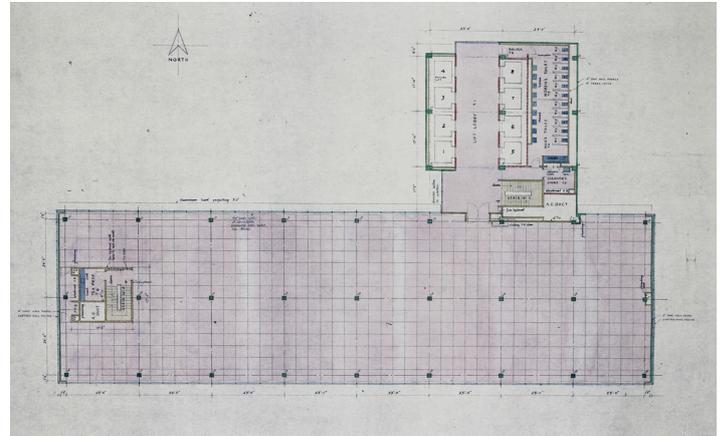


Figure 3: Bates, Smart & McCutcheon, ICI House, typical floor plan, dated 19 June 1956, PROV, VPRS11200/P0001, Unit 1718, Building Application no. 30056, Sheet no. P329, amendment C, 4 October 1956.

ICI House was undoubtedly a remarkable achievement for the 1950s, but it was not an isolated accomplishment. During the same period, owner-occupied tall commercial buildings flourished in Melbourne, and such building activity went hand in hand with a debate between developers, architects and authorities about high-rise building regulations. Discussions originated mainly from concerns about inner city congestion and fire safety. Several stakeholders shared the view that commercial buildings in Melbourne should have been allowed to be taller. However, building taller meant defying the latest building regulations—the 1945 UBR—which controlled building height to a limit of 132 feet (40 metres), a height limit established by city authorities in 1916.[27]

Business abhors a vacuum

The idea that the revenue of property would increase in proportion to the number of floors built upon a site was exploited quite early in the history of Melbourne, with discussions about the issue of high-rise regulations occurring from the early 1900s.[28] During the late 1800s, Melbourne had experienced a significant boom in multistorey construction; however, this was followed by a steep downturn and fall in land prices.[29]

In the mid-1920s, at a time when the city was at the beginning of another building boom driven by economic prosperity and population growth, a case for building taller was advocated by Marcus Barlow, an influential local architect. Barlow is renowned for the design of Art Deco-inspired multistorey office buildings in the Melbourne CBD, including the Manchester Unity Building (91–107 Swanston Street, 1932) and the Century Building (125–133 Swanston Street, 1940).[30]

.....

In 1925, advocating for the erection of taller buildings in Melbourne, Barlow delivered a speech at the Royal Victorian Institute of Architects (RVIA) that drew inspiration from, and referred to, New York, Chicago and San Francisco.[31] The architect's proposal implied a review of building controls, which he saw as an impediment to the best course of 'business': 'It is still necessary to build cities, and the requirements of commerce render it imperative that our cities shall not be wasteful of space. Business "abhors a vacuum"'. [32] The main item of contention was the regulatory control imposing a set height limit of 132 feet, first introduced in the 1910s in response to public concerns for health and safety after a fire in an eight-storey building killed five people in Sydney in 1901.[33] According to Barlow, such limits were obsolete and should be replaced by a new height limit of 300 feet for the main streets of the city.[34]

Members of the RVIA discussed Barlow's idea in the presence of Harrie B Lee, chief officer of the Melbourne Metropolitan Fire Brigade (MMFB). Opposition to the proposal came from some architects who were concerned about prospects of urban congestion and accused Barlow of placing too much importance on private financial matters and not enough on those of public interest.[35] By contrast, Lee opened the door for further discussion. In response to Barlow's question regarding the maximum length of fire ladders available in Melbourne—which the architect claimed was instrumental for setting the building height limit at 132 feet—Lee noted that the MMFB had firefighting equipment that was 'equal to anything in the world'. [36] Rather than resting on firefighting equipment, Lee proposed that the problem of building taller depended on appropriate methods of construction, which, in his view, seemed to be lacking in Melbourne. Some of the construction methods that Lee identified as desirable included water towers on roofs, fire resisting compartments and, most of all, the use of fire-resistant structural construction. Lee concluded that any required height could be built safely, once adequate provisions for fire safety were made.

The debate on building taller in Melbourne was reignited in 1931, with Barlow claiming that the current outdated regulations were constraining the prospects of growth for the city.[37] In the same year, the Building Industry Congress of Victoria appointed a Building Regulations Committee with the task of reorganising into one set of norms the heterogeneous construction-related by-laws of the several municipal councils of Victoria. In 1938, the committee completed a draft of the regulation, initially known as 'The Model Building By-Laws'. [38] The draft was the first step towards the creation of a standardised

code of building for the whole of Victoria. In 1945, the committee's model by-laws were converted into the new code, the UBR.

Regulations and the course of business

The UBR administered building construction, design, activity and processes of approval throughout Victoria, including in the City of Melbourne. Matters that were regulated by the UBR included building height, built form controls and fire-safe construction. Prescriptive measures for 'Fire Resisting Construction', also called 'Type 1' construction,[39] required internal structural columns and other structural elements to have a minimum fire resistance of four hours, and external structures to have a minimum fire resistance of three hours. The UBR also regulated building design and light access, with measures that affected built form. For example, building height was controlled by several restrictive instructions. The most important of these stated that:

The maximum building height in respect to any allotment of land shall be a horizontal plan at a height above the permanent footpath level at the centre of the frontage of the allotment equal to one and one-third times the width of the street to which the allotment has a frontage.[40]

In effect, the UBR reaffirmed the traditional ladder-height limitations of 132 feet, apparently ignoring proposals for reform advocated 20 years earlier by architects such as Barlow. According to the UBR, as the main streets of the Hoddle Grid were 99 feet wide, the maximum building height allowed in Melbourne was equal to 99 feet + 33 feet = 132 feet (see Figure 4). The limit of 132 feet was absolute. Paragraph (d) of clause 901 further clarified that 'the amount by which the width of any street exceeds 99 feet shall not be taken into account in computing the maximum building height'. [41] Some exceptions were granted for decorative features and for mechanical equipment, which the UBR prescribed should not exceed an additional height of 3 feet 6 inches. [42]

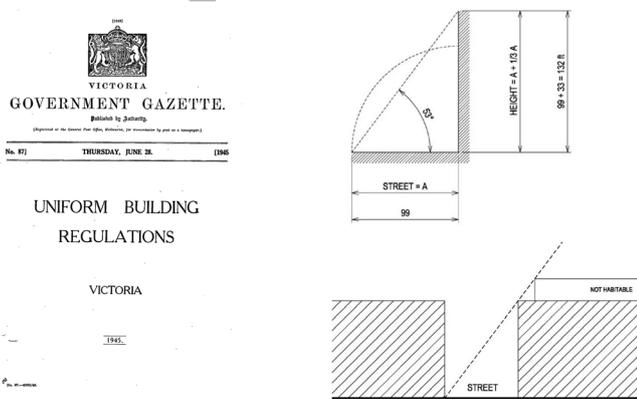


Figure 4: Uniform Building Regulations of Victoria, 1945, building height limit diagram based on clause 901, drawn by author.

Notwithstanding restrictions for building height, the 1945 regulations had an embedded mechanism of general amendment, which allowed that any of its prescriptions could be modified. Amendments could be implemented ad hoc and, as stated by the UBR, 'in the case of any particular building'. [43] The process of change could be initiated by the owner, builder or architect of a building proposal. Requests for amendment were subject to consideration and subsequent approval or refusal by a governmental committee of referees based at the Victorian State Public Works Department, known as the Building Regulations Committee. The UBR also stipulated the motivations in support of the process of amendment; regulations could be amended on a case by case basis whenever provisions might 'needlessly affect with injury the course and operation of business' or 'defeat the object' of the regulations. [44]

The principle of site density

In an ambivalent context of prescriptive regulation on the one hand, and opportunities to modify the regulations on an ad hoc basis on the other, discussion about building height limits began at meetings of the Town Planning Special Committee of the City of Melbourne soon after the release of the UBR in 1945. Such discussion was prompted by plans to redevelop a public block of land in the area bounded by Collins Street, Market Street, Flinders Lane and William Street, known as the Western Market site.

In 1947, following a request of the RVIA, the City of Melbourne launched a competition to appoint an architect for the redevelopment of the site. [45] In August that year, the RVIA asked whether a principle of development based on 'site density' could be considered instead of the height

limit stipulated in the UBR. The suggestion was aimed at allowing a tall building proposal for the site, but the Town Planning Special Committee rejected the proposal. [46]

At around the same time, an internal report prepared by the engineer of the City of Melbourne reached the Town Planning Special Committee, recommending consideration of a planning principle based on site density for the entire inner city. According to the principle, new buildings in the Hoddle Grid would be exempted from the UBR height limit of 132 feet on the condition that they would be set back from main streets, thus providing more light, public space and amenity at ground level, and without exceeding the floor area of an equivalent building designed with the maximum height allowed by the UBR. [47]

The architectural competition to develop the Western Market site was awarded in 1949 to a scheme comprising five buildings, of which the City of Melbourne committed to building only one as a 'height limit' block along Collins Street. The Western Market project, subsequently renamed Hume Square, was delayed for several years due to financial problems caused by rising building costs. [48]

The project was still on hold in 1955 when the 'question of increased building heights for Hume Square' resurfaced. Some members of the Building and Town Planning Committee supported consideration of a new 'shaft' type of building for the project in line with the report of the city engineer. However, seeking to avoid a reimbursement penalty of £50,000 for the winners of the design competition, the committee decided against adopting such a change. Yet, the committee also stated that 'nothing should be committed to paper' and recommended that 'the City Architect should draw a rough sketch for the development of the building having in mind a shaft type building for the remaining portion of the project'. [49] In the meantime, the RVIA and the Institute of Engineers, most likely unaware of the City Council's internal cogitations about Hume Square, continued to exercise pressure, writing to the Building and Town Planning Committee with proposals to override the height limits imposed by the UBR. [50]

A more 'scientific' approach

The question of height controls in the UBR resurfaced in response to private interests. In May 1955, the Traffic and Building Regulations Committee of the City of Melbourne received a request from the state's UBR referees—the Building Regulations Committee—to consider and comment on a proposal to amend the height provisions of

the regulations.[51] The submission included a schematic design for a new office building with a height of 230 feet. The building proposal, with its related request of amendment, was submitted by BSM and ICIANZ (see Figure 5).

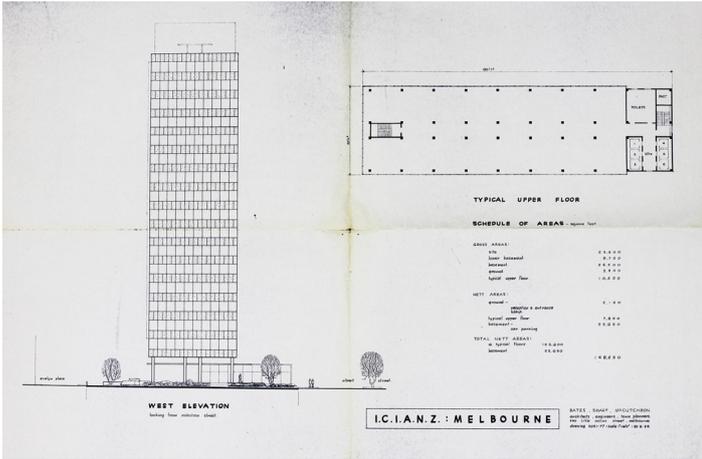


Figure 5: Bates, Smart & McCutcheon, ICI House, early scheme submitted to the Building Regulations Committee, State Public Works Department, for the proposal of amendment of the UBR, clause 901. Drawing dated 20 August 1954, submitted to the Building Regulations Committee in February 1955, PROV, VPRS 3183, Unit 12 Item 55/3047.

BSM justified the requested amendment of the UBR on the basis of the benefits that would derive from conforming with modern principles of design, thus achieving a higher standard of accommodation for their client. The design exceeded the prescribed height limitations, but used only two-thirds of the density allowed by the regulations, providing car parking and gardens on site (see Figure 6). The architects stated that adherence to the UBR height provisions would affect 'with injury the course and operation' of ICIANZ's business. In support of their case, BSM listed a few buildings and structures that already exceeded the height limit of 132 feet in Melbourne, including the offices of the Police Headquarters Building in Russell Street (150 feet, completed in 1940) and the Australian Building in Elizabeth Street (150 feet, completed in 1889).[52]

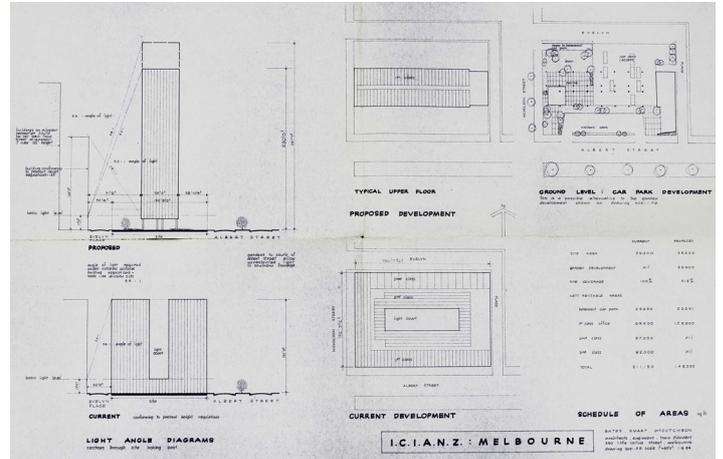


Figure 6: Bates, Smart & McCutcheon, ICI House, comparative diagrams between non-conforming ('proposed') and conforming developments ('current') with UBR building height prescriptions. Drawing dated 1 September 1954, submitted to the Building Regulations Committee in February 1955, PROV, VPRS 3183, Unit 12 Item 55/3047.

In response, the Traffic and Building Regulations Committee stated that it was:

Generally in favour of the application being granted and [they agreed] to review the height without allowing any increase in density,[53] having regard to the more scientific approach to this matter that has evolved of recent years of which the proposed building under review could be regarded as an example.[54]

However, before granting final approval, the Building Regulations Committee (that is, the state's UBR referees) sought further advice from the Traffic and Building Regulations Committee, as well as the City of Melbourne and the building surveyor. A series of internal discussions followed, after which the proposal was discussed by the town clerk, the MMFB and the Melbourne and Metropolitan Board of Works (MMBW). Supported by a letter signed by Edwin Borrie, chief planner of the MMBW, the City of Melbourne eventually approved 'in principle' and 'in general' the construction of buildings in the city above the height limitations prescribed by the UBR.[55]

.....

The ICI House proposal was not the first to amend the building height provisions of the UBR. Architects' and owners' desires to bypass height restrictions had been tested earlier by other office building applications. For example, in 1955, permission to build at 77 feet, instead of the 66 feet prescribed by the UBR for the 'Little' streets of the Hoddle Grid was granted for an office building at 533–543 Little Collins Street.[56] A year earlier, the building surveyor and the Building Regulations Committee approved a request to erect machinery, plant rooms, ventilation equipment and tanks exceeding the prescribed height limit by 26 feet for the new Alliance Insurance building at 408–410 Collins Street.[57] Similar permission had earlier been granted to Gilbert Court, at 100 Collins Street.[58] Moreover, at 200 Little Collins Street, Sydney-based architect Harry Seidler proposed a ten-storey office block with car park podium as tall as 99 feet—double the height limit prescribed by the UBR on that street. The City of Melbourne's building surveyor endorsed the innovative proposal, but the project never went ahead.[59]

The modification to the UBR proposed by ICIANZ and BSM had more substantial repercussions than these earlier examples. BSM and ICIANZ requested approval to build rentable area—not just ancillary space—well above the height limit. Some members of the Traffic and Building Regulations Committee felt that 'any increase in the height limit should be allowed only after a basis of density or floor space index [for the entire inner city] has been established'.[60] Concerns were prompted by media reports that implied that the UBR referees of the state's Public Works Department had, in effect, bypassed the City of Melbourne's authority by endorsing the modification of the UBR for ICI House.[61] Some members of the Traffic and Building Regulations Committee said that the UBR referees had been given excessive powers to approve modifications of the regulations, as 'under the "modification" provision of the Regulations, the granting of approval for this building was a major departure from the Regulations which could hardly be covered by the term "modification"'.[62] In late June 1955, despite public news announcing the approval of Melbourne's 'first skyscraper',[63] significant reservations still remained at the City of Melbourne about ICI House, leaving the provision of adequate fire-safe methods of construction as the most substantial hurdle to be overcome before the final approval of the building surveyor.[64]

Special provisions

On 6 July 1955, architect and design director of BSM, Osborn McCutcheon, and two representatives of ICIANZ, attended the Building Regulations Committee in person to respond to fire safety concerns. McCutcheon stated that, contrary to the position of the chief officer of the MMFB, authorities in other parts of the world had different opinions about the fire safety of buildings taller than ladder-reachable height. He cited the example of the Empire State Building which 'was hit by an aircraft at approximately the 40th floor [and] when 400 gallons of petrol exploded ... the resultant fire was confined'. [65] McCutcheon proceeded to illustrate the fire control devices planned for ICI House, including an electro-thermal alarm system connected via radio to the MMFB, water storage and sprinklers in the basement, two booster pumps and fire-protected steel frame construction. The provision of a general sprinkler system throughout the building was also contemplated by the architect, but it was not included in the final design and sprinklers were only installed in those floors higher than ladder-reachable height.[66]

Despite the concerns of the MMFB, ICI House set a precedent that other projects followed. It led to the development of a practice of addressing fire safety by installing sprinklers on floors above the ladder-reachable height of 132 feet. However, this approach was seen as risky; in other parts of the world, the provision of sprinklers on all floors in tall buildings was not unusual. [67] In 1958, fire authorities attempted to correct this hybrid approach, proposing, without success, to enforce the installation of sprinklers for all floors in buildings taller than 100 feet.[68]

When facing requests for alternatives about fire safety provisions, authorities were less accommodating than they were on matters of building height alone. At ICI House, building regulation authorities ultimately allowed increased height, but did not concede a reduction of safeguards for fireproof construction. Extensive detailing was documented by BSM for the fire protection of the building's steel structure, which was protected with custom-moulded encasings of gypsum plaster. Several detailing iterations for the fireproofing of spandrels of the all-glass curtain walls were prepared by the architects and submitted for approval to the building surveyor. After considering alternatives with terracotta and lightweight stud walls—contemplated by American standards, but not by the UBR—the project was finally built with the conservative provision of concrete parapets behind the curtain wall, acting as a measure to prevent the spread of fire between floors through the facade (see Figure 7).[69]

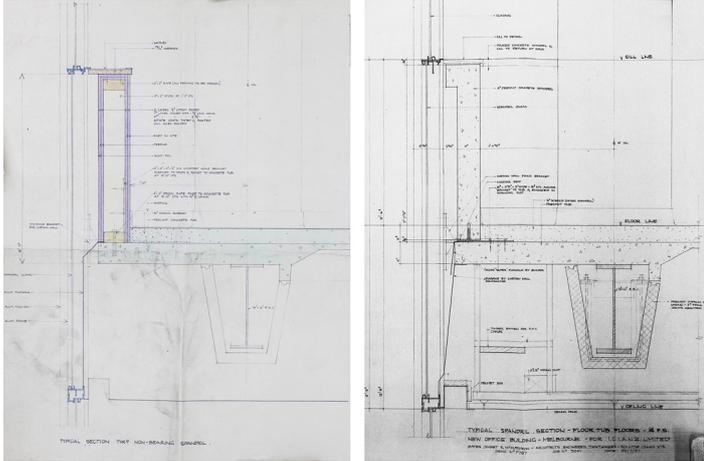


Figure 7: Bates, Smart & McCutcheon, ICI House, typical spandrel details showing alternative methods of fire-resistant construction. Left: light-weight stud wall detail, preliminary, dated 27 May 1957. Right: precast concrete upstand detail, as built, dated 29 July 1957. PROV, VPRS11200/P0007, Units 1350 and 1351, Building Application no. 30056.

Subsequently, and notwithstanding these concerns, the process to request a dispensation from the 132 feet height limit became a norm for building applications in the Melbourne CBD. Applications for modification of the UBR multiplied and extended from building height matters to prescriptions about fire safety.

Methods of fireproof construction were a recurrent object of negotiation between architects and authorities, with the requirement to have three hours of fire rating protection on external walls a common source of contention. In 1958, Buchan, Laird & Buchan, local architects who worked in joint venture with American architects Skidmore Owings Merrill on the Shell Corner project—a modern office block that was demolished in 1991 at the corner of Bourke and William streets (see Figure 8, right)—insisted that authorities lower external wall fireproofing requirements from three to two hours. The request was motivated by the innovative method of fireproofing proposed, which specified sprayed asbestos in place of the more common gypsum plaster.[70] Similarly, in 1960, Bernard Evans & Partners, the architect of the Conzinc Riotinto of Australia office building in Collins Street (see Figure 8, left), sought—without success—to reduce the fire rating of spandrels as prescribed by the UBR by proposing to install asbestos-backed panels.[71]



Figure 8: Left: aerial view of Collins Street in 1962 with Conzinc Riotinto of Australia Building in prominence (Bernard Evans and Partners, completed in 1961 and demolished in 1987), photograph by Wolfgang Sievers.[72] Right: Shell Corner, 147–157 William Street (Skidmore Owings Merrill in association with Buchan Laird and Buchan, completed in 1960 and demolished in 1990), photograph by Wolfgang Sievers.[73]

Private value and public benefit

The rule-breaking deal of ICI House was granted on a principle of exchange between building height in return for public benefits, namely open space at ground floor and parking facilities, but without lowering fire safety performance in construction. The building set an important precedent and anticipated a wave of further applications on the same basis. Two projects worthy of mention that followed are the National Mutual Life Centre (1961–1965) erected on the site of the former Western Market project (see Figure 9, right), and the Colonial Mutual Life Centre at 308–334 Collins Street (1959–1963) (see Figure 9, left), which transplanted the side core typology of ICI House in the heart of the Hoddle Grid. In the face of ongoing requests for amendment of the regulations, public authorities in Melbourne took the opportunity to use negotiations on height controls to gain public benefits, trading approvals in exchange for civic amenities that would help to decongest the CBD, such as open space at ground level and car park facilities.[74]



Figure 9: Left: Colonial Mutual Life Building, 308–334 Collins Street, 1970 (Stephenson and Turner, completed in 1963), photograph by W Sievers. [75] Right: National Mutual Life Centre, 435–455 Collins Street, 1966 (Godfrey and Spowers, Hughes Mewton and Lobb, completed in 1965, demolished in 2016), photograph by W Sievers.[76]

A more tacit, but no less significant, public benefit brought by tall buildings was the opportunity to multiply by many times the income from council rates. Public revenue increased in particular with more efficient modern buildings, which attracted higher council rates. In Melbourne, rates were based on an ‘improved’ land rating system that targeted the value of the net lettable area of developments as taxable, and not the cost of land. [77] With a taxation system based on capital improved values, a prestigious modern office development on a consolidated block of land provided an extraordinary surge of income for the City of Melbourne.

The revenue implications brought by modern tall buildings through this method of taxation are evident in the City of Melbourne’s rate cards related to ICI House. Before ICIANZ consolidated the properties at the corner of Albert and Nicholson streets, the city earned annual rates totalling £363 for all of the parcels on the block. Five years after the completion of ICI House, the same property had multiplied in value and, therefore, in annual rates, by more than 50 times (see Table 1).

Properties before consolidation in 1952 [78]	Site area (sq ft)	Annual value	Annual rates (1955–1956)
510–518 Albert Street	6,969	£700	£103
530 Albert Street	2,520	£180	£26
2 Nicholson Street	4,212	£500	£72
4 Nicholson Street	3,550	£900	£131
1 Evelyn Place	3,550	£130	£18
3 Evelyn Place	2,397	£94	£13
TOTAL	20,678	£2,504	£363
Total adjusted to 1960–1961 [79]		£2,897	£420
Property consolidated by ICIANZ [80]			Annual Rates (1960)
1 Nicholson Street	25,232	£150,000	£21,250

Table 1: Comparison of City of Melbourne annual rate revenues of the land parcels occupied by ICI House before and after the land consolidation required for the project.

These figures confirm the critical importance of the events that led to the approval of that single tall building. However, they also reveal a picture that extends beyond the significance of a one of a kind monument of architecture.

The request submitted in 1955 by BSM and ICIANZ to amend the UBR height controls found fertile ground among city planning authorities who were already aiming to change controls in line with that request. Further, the ICIANZ request stemmed from a mechanism of ad hoc modification that was in keeping with the regulations; indeed, discretionary flexibility was embedded in the statewide code of the UBR.

.....

In the case of the approval of ICI House, the role taken by city planning authorities, as local custodians of the regulations, was not merely passive. To the contrary, the minutes of meetings of the Melbourne City Council show that authorities initiated discussions to introduce a new planning instrument of control based on ‘site density’, or plot ratio, in line with what had been adopted by other cities (Sydney, London and New York) as early as 1947. The instrument envisaged the prescription of a gross floor area allowance to be directly proportional to the site area, thus superseding the built form and light angle guidelines set by height limits. The review of the controls was accelerated, perhaps incidentally, by the private interests of corporations, such as ICIANZ, and the design inputs of architects, such as BSM. The City of Melbourne endorsed the proposal, thus setting a precedent for a new approach to city planning, which, in the end, was conceded less on grounds of fireproofing and more on sought after explanations from the architects that, through innovative provisions in their design, public safety would not be compromised.

With the release of the first inner city planning scheme in 1964, the City of Melbourne addressed the question of built form control in less ambiguous terms than those of the UBR, regulating building height in the Hoddle Grid by the planning instruments of zoning and plot ratio.[81] The 1964 scheme both decreed the success of a New York-inspired high-rise vision for the future of Melbourne[82] and sanctioned the departure of the Beaux-Arts ‘city beautiful’ design, which had had considerable influence among city planners until the 1930s.[83] However, the seed for the rise of that new vision was planted well before ICI House was proposed—at least 30 years earlier, as the polemics sparked by architect Marcus Barlow during the 1920s confirm.

After WWII, pressures to modify the prescriptions of the Victorian building regulations amplified, following the need to test modern ideas of workspace design with communal spaces for staff, flexibility with modular coordination and column-free open space. The implementation of these spatial concepts relied on development rights in land parcels of adequate size and quality. Ideally, developments on prime real estate needed to be free from public encumbrances that created ‘vacuums’—that is, the inefficient use of the land.

Even once the built form controls of the UBR were overridden in 1964, the City of Melbourne continued to administer tall building activity with a project-based culture of assessment. Using seminal projects to test the transformation of the CBD, authorities set the stage for the development of a hub of prestigious corporate

employment in Australia, while negotiating public benefits in return. Similar episodes of rule bending with tall buildings continued until the 1990s, albeit with less historiographical fortune than ICI House, and with circumstances other than building height as the item of negotiation.[84]

Conclusion

In Melbourne, a city where public and private opportunities for prosperity have often converged, the inclination of local developers and designers to challenge prescriptive regulations and propose alternative solutions has deep roots. The city developed a culture of ad hoc assessment for tall building projects that originated as early as the 1940s and continues in the twenty-first century. Commercial tall building activity was the agent that first established the principle that the building code should not interfere with the building owner’s best interests for the ‘operation of business’.[85] However, authorities maintained that preserving the course of business did not mean a compromise in design and construction standards.

Tracking the roots of such a culture is significant, not least because, in many respects, the discretionary approach that emerged after WWII continues in Melbourne today. Arguably, after six decades, that discretionary culture may have gone too far. The original intent of innovative trade-offs in the public interest seems lost, while the present building industry has reached a point of ‘poor culture of compliance’ with regulations, including fire safety provisions, which a public enquiry recently identified as a problematic trait of recent high-rise projects.[86]

The vicissitudes of ICI House are a powerful reminder of the instrumental role that tall buildings have played in the development of regulatory controls in some cities. Arguably more than other building types, skyscrapers seem to trigger the breaking of rigid prescriptive frameworks, such as those about height, fire safety and building form. Yet, as the history of ICI House shows, there are opportunities in which tall buildings may be allowed to prosper in exchange for design innovation and benefits to the public sphere. Such benefits may take the form of economic growth and gain, including tax revenue, as well as architectural amenity, technological progress and long-term significance for the city at large.

Acknowledgments

The findings presented in this article derive, in part, from a doctoral research project supported by an Australian Government Research Training Program Scholarship. The author wishes to express his gratitude to two unknown peer reviewers for making their knowledge about Melbourne's urban history available through in-depth commentary, and to the editors for their overall assistance and for sharing and pointing to additional sources of information that turned out to be essential during the preparation of the article.

Endnotes

[1] Heritage Council Victoria, Victorian Heritage Database, 'ICI House', available at <<http://vhd.heritagecouncil.vic.gov.au/places/391>>, accessed 29 January 2019.

[2] PROV, VPRS 8945/P2, Unit 215, Building Application no. C.M. 3413, 26 September 1980.

[3] Australian Government, Department of the Environment and Energy, 'National Heritage Places: Orica House (formerly the ICI Building)', available at <<http://www.environment.gov.au/heritage/places/national/ici-building>>, accessed 15 July 2017.

[4] 'Melbourne's first skyscraper!', *Architecture and Arts*, vol. 43, May 1957, p. 26. See also 'ICI House, Melbourne's first skyscraper', *Architecture and Arts*, vol. 61, November 1958, p. 26; 'Australia's first skyscraper: ICI House, Melbourne', *Architecture Today*, vol. 1, no. 2, December 1958.

[5] Robin Boyd, *The Australian ugliness*, Cheshire, Melbourne, 1961, pp. 107–108. See also *The puzzle of architecture*, Melbourne University Press, Melbourne, 1965, pp. 15–16.

[6] Philip Goad, 'ICI House, Melbourne', in Jennifer Taylor (ed.), *Tall buildings, Australian business going up: 1945–1970*, Craftsman House, Sydney, 2001, pp. 175, 178–179. See also Philip Goad, *Bates smart, 150 years of Australian architecture*, Thames and Hudson, Fishermans Bend, 2004, pp. 167–180.

[7] Susan Marsden, *Urban heritage: the rise and postwar development of Australia's capital city centres*, Australian Council of National Trusts and Australian Heritage Commission, Canberra, 2000.

[8] Miles Lewis, 'The new image: 1930–1956' and 'The urban spurt' in *Melbourne: the city's history and development*, City of Melbourne, Melbourne, 1995, pp. 106–127 and pp. 127–139.

[9] John Punter, 'Urban design in central Sydney 1945–2002: laissez-faire and discretionary traditions in the accidental city,' *Progress in Planning*, vol. 63, 2005, pp. 11–160. See also Elizabeth M Farrelly, 'Tall tales', in Ann Stephen, Philip Goad & Andrew McNamara (eds), *Modern times: the untold story of modernism in Australia*, Melbourne University Publishing, Carlton, 2008, pp. 86–97.

[10] Jenny Gregory, 'Development pressures and heritage in the Perth central business district, 1950–90', *Australian Economic History Review*, vol. 49, no. 1, March 2009, pp. 34–51.

[11] Peter Mills, *The limited city: building height regulations in the City of Melbourne, 1890–1955*, Master of Arts thesis, Monash University, 1997.

[12] Ben Schrader, 'Paris or New York? Contesting Melbourne's skyline, 1880–1958', *Journal of Urban History*, vol. 36, no. 6, 2010, pp. 814–830.

[13] Victoria, 'Uniform Building Regulations' (UBR), *Victoria Government Gazette*, 28 June 1945.

[15] PROV, VPRS 8945/P2, Unit 28.

[16] PROV, VPRS 8945/P2, Units 137–138.

[17] PROV, VPRS 8945/P2, Units 191–207.

[18] The minutes of the committees analysed for this study do not cover government projects, which were subject to a different process of approval than private ones.

[19] PROV, VPRS 11200 and 11201, City of Melbourne Building Plans and Permits (1916–1960).

[20] PROV, VPRS 3183/P5 Melbourne City Council Town Clerk's Correspondence Files, MCC Series 120 (1910–1985)

[21] PROV, VPRS 5708, City of Melbourne Rate Books (1855–1963).

[22] Melbourne's Hoddle Grid was named after the surveyor Robert Hoddle who marked it out for the first formal settlement plan of the city in 1837–1838. It is generally identified as the part of the inner central district bounded by Flinders Street, Spring Street, La Trobe Street and Spencer Street.

[23] David AL Saunders, 'Office blocks in Melbourne', *Architecture in Australia*, vol. 48, no. 2, June 1959, p. 91.

[24] 'Australia's first skyscraper: ICI House, Melbourne', p. 31.

- [25] PROV, VPRS 11200, Building application plans and files no.30056, 10 May 1956.
- [26] Wolfgang Sievers collection, State Library of Victoria, H2003.100/194, available at <<http://handle.slv.vic.gov.au/10381/284846>>, accessed 11 May 2018.
- [27] Lewis, *Melbourne*, p. 95.
- [28] Schrader, 'Paris or New York?', pp. 815-824.
- [29] Michael Cannon, *The land boomers*, Melbourne University Press, Carlton, 1966; Graeme Davison, *The rise and fall of Marvellous Melbourne*, Melbourne University Press, Carlton, 2004.
- [30] Victorian Heritage Database, 'Manchester Unity Building', available at <<http://vhd.heritagecouncil.vic.gov.au/places/728>>, and 'Century Building', available at <<http://vhd.heritagecouncil.vic.gov.au/places/2966>>, accessed 29 January 2018.
- [31] Marcus R Barlow (with additional commentary by PA Oakley, KA Henderson, RB Hamilton & Harrie B Lee), 'Discussion on "taller buildings for Melbourne"', *Journal of Proceedings of the Royal Victorian Institute of Architects*, vol., 23, no. 5, September 1925, pp. 98–107.
- [32] *Ibid*, p. 98.
- [33] The Anthony Horder's Palace Warehouse in Sydney's Haymarket was destroyed by a fire on 10 July 1901, prompting a prolonged review of building regulations, which the City of Sydney eventually adopted in 1912. The City of Melbourne followed suit in February 1916. See Schrader, 'Paris or New York?', pp. 817–818. See also Sydney Architecture, Anthony Horder's Palace Warehouse, available at <<http://sydneyarchitecture.com/GON/GON057.htm>>, accessed 10 May 2018.
- [34] Barlow suggested 'slightly higher' limits for corner lots, and 'no limits at all' for isolated sites and those facing parks, but did not mention anything about lanes and Little streets. Barlow, 'Discussion', p. 101.
- [35] KA Henderson, quoted in Barlow, 'Discussion', p. 102.
- [36] Barlow, 'Discussion', p. 17.
- [37] Marcus R Barlow, 'Building regulations and the desirability of increasing the heights of buildings in Melbourne', *Journal of the Royal Victorian Institute of Architects*, vol. 29, no. 1, March 1931, p. 17.
- [38] 'Standard building regulations: the new model', *Journal of the Royal Victorian Institute of Architects*, vol. 36, no. 4, September–October 1938, pp. 113–114.
- [39] UBR, clause 705, 'Type 1—Framed Fire Resisting Construction'.
- [40] UBR, clause 901, 'Maximum Building Height'.
- [41] UBR, clause 901.
- [42] UBR, clause 904, 'Decorative Features & c.'.
- [43] UBR, clause 214, 'Power to Modify Regulations'.
- [44] UBR, clause 214.
- [45] PROV, VPRS 8945/P2, Unit 28, City of Melbourne Town Planning Special Committee, Meeting Minutes, 3 March 1947, minute no. 3, 1.
- [46] PROV, VPRS 8945/P2, Unit 28, minute no. 47/3088, 8 [1947].
- [47] PROV, VPRS 8945/P2, Unit 28, minute no. 47/3011, 8 [1947].
- [48] PROV, VPRS 8945/P2, Unit 28, City of Melbourne memorandum of the Town Planning Special Committee, 'Development of Western Market Site', [c. 1950–1951].
- [49] PROV, VPRS 8945/P2, Unit 191, City of Melbourne Building and Town Planning Committee, 5 July 1955, minute no. 2, 44. The site was eventually developed in the early 1960s with a freestanding slab project, the National Mutual Life Centre (1961–1965, demolished in 2016).
- [50] PROV, VPRS 8945/P2, Unit 191, minute 55/4856, 114 [1955].
- [51] PROV, VPRS 3183/P5, Unit 12, City of Melbourne Town Clerk correspondence files, J Firth, chairman of the State Building Regulations Committee, to town clerk, 4 May 1955.
- [52] PROV, VPRS 3183/P5, Unit 12, Item 55/3047, Bates Smart & McCutcheon to secretary, Building Regulations Committee, 21 February 1955.
- [53] ICI House occupied only about 40 per cent of the site with total a gross floor area of 236,400 square feet. It was approved with a plot ratio of 9:1.
- [54] PROV, VPRS 8945/P2, Unit 138, City of Melbourne Traffic and Building Regulations Committee, minute 55/2116, p. 160 [1955].
- [55] PROV, VPRS 3183/P5, Unit 12, City of Melbourne, Town Clerk correspondence files, letter to the property manager of ICIANZ, 23 June 1955.
- [56] PROV, VPRS 8945/P2, Unit 138, City of Melbourne Traffic and Building Regulations Committee, minute 55/423, p. 90A [1954–1955].
- [57] PROV, VPRS/P2, Unit 138, minute no. 54/4254, p. 22A.
- [58] PROV, VPRS/P2, Unit 138, minute no. 54/1824, p. 350.

- [59] PROV, VPRS 8945/P2, Unit 191, Building and Town Planning Committee, minute no. 55/4176.
- [60] PROV, VPRS 8945/P2, Unit 191, minute no. 55/2116, p. 197.
- [61] PROV, VPRS 3183/P5, Unit 12, internal memorandum of the Town Clerk's Office to the chairman and members of the Traffic and Building Regulations Committee, 22 June 1955.
- [62] PROV, VPRS 8945/P2, Unit 191, minute no. 55/2116, p. 197
- [63] 'Approval given for Melbourne's first "Skyscraper"', *Age*, 24 June 1955, p. 1.
- [64] PROV, VPRS 8945/P2, Unit 138, minute no. 55/2116, p. 197.
- [65] PROV, VPRS 8945/P2, Unit 138, minute no. 55/3047, p. 206.
- [66] Rico Bonaldi, project architect of ICI House formerly of Bates, Smart & McCutcheon, in conversation with the author, 1 September 2014. The provision of sprinklers installed only 'above a certain height' is confirmed indirectly also by the facade contractor, John P Halfey, 'The curtain wall', *Architecture Today*, December 1958, p. 25. The 'special provision' of sprinklers only 'in floors above 132-foot limit' was suggested in the first instance by the MMBW as a condition for the approval of ICI House above the height limit. See PROV, VPRS 3183/P5, Unit 12, EF Borrie to town clerk, 24 June 1955.
- [67] Rico Bonaldi in conversation with the author.
- [68] PROV, VPRS 11201/P/0001, Unit 000409, City of Melbourne Building Application File no. 32144, Metropolitan Fire Brigade, 'Report relative to the new building for Shell Co. of Australia, 27 February 1958'.
- [69] PROV, VPRS 11200/0007, Building Application no. 30056, Units 1341, 1350 and 1351.
- [70] PROV, 11201/P/0001, Unit 000409, City of Melbourne Building Application File 32144, Buchan Laird and Buchan to secretary, Building Regulations Committee, 25 March 1958.
- [71] Bernard Evans and Partners to building surveyor, 15 June 1960.
- [72] Wolfgang Sievers photographic archive, National Library of Australia, nla.obj-160773294, available at <<https://trove.nla.gov.au/version/8594671>>, accessed 11 May 2018.
- [73] Wolfgang Sievers collection, State Library of Victoria, H2016.35/14, available at <<http://handle.slv.vic.gov.au/10381/386628>>, accessed 11 May 2018.
- [74] Edwin Fullerton Borrie, *Report on a planning scheme for the Central Business Area of the City Melbourne*, City of Melbourne, Melbourne, 1964, p. 22
- [75] Wolfgang Sievers collection, State Library of Victoria, H98.30/211, available at <<http://handle.slv.vic.gov.au/10381/310451>>, accessed 11 May 2018.
- [76] Wolfgang Sievers collection, State Library of Victoria, H99.50/83, available at <<http://handle.slv.vic.gov.au/10381/91566>> accessed 11 May 2018.
- [77] Saunders, 'Office blocks in Melbourne', p. 91.
- [78] PROV, VPRS 5708, City of Melbourne Rate Books, 1955–56, Latrobe Ward, nos. 2393–2410, 2481–2487, 2440–2450.
- [79] Adjustment factor based on annual average from Australian Bureau of Statistics, 'Consumer Price Index' (6401.0) Canberra, 1997 (Period from 1949/50 to 1996/97).
- [80] PROV, VPRS 5708, City of Melbourne, Rate Books, 1960–1961, Latrobe Ward, nos. 2451–2454.
- [81] Borrie, *Report on a planning scheme*, pp. 60–64.
- [82] Schrader, 'Paris or New York?', pp. 824–827.
- [83] Lewis, 'The city beautiful: 1900–1929', in *Melbourne*, pp. 93–95.
- [84] Historical records that cover matters of negotiations for prominent tall buildings until the late 1980s are contained in PROV, VPRS 8945/P2. For example, for BHP House (130–148 William Street), see Unit 198, Building and Town Planning Committee, 1967–1968, minute 67/5526/173, 68/1920/298, 68/4260/300 [1968]; for Collins Place (17–65 Collins Street), see Unit 201, Building and Town Planning Committee, minutes 71/4765/330, [1971–72]; and for 101 Collins Street (89–105 Collins Street), see Unit 240, Development Approvals Committee, 1988.
- [85] UBR, clause 214.
- [86] Victorian Cladding Taskforce, *Victorian cladding taskforce interim report: November 2017*, Department of Environment, Land, Water and Planning, Melbourne, 2017, p. 4, available at <https://www.planning.vic.gov.au/__data/assets/pdf_file/0016/90412/Victorian-Cladding-Taskforce-Interim-Report-November-2017.pdf>, accessed 29 January 2018.