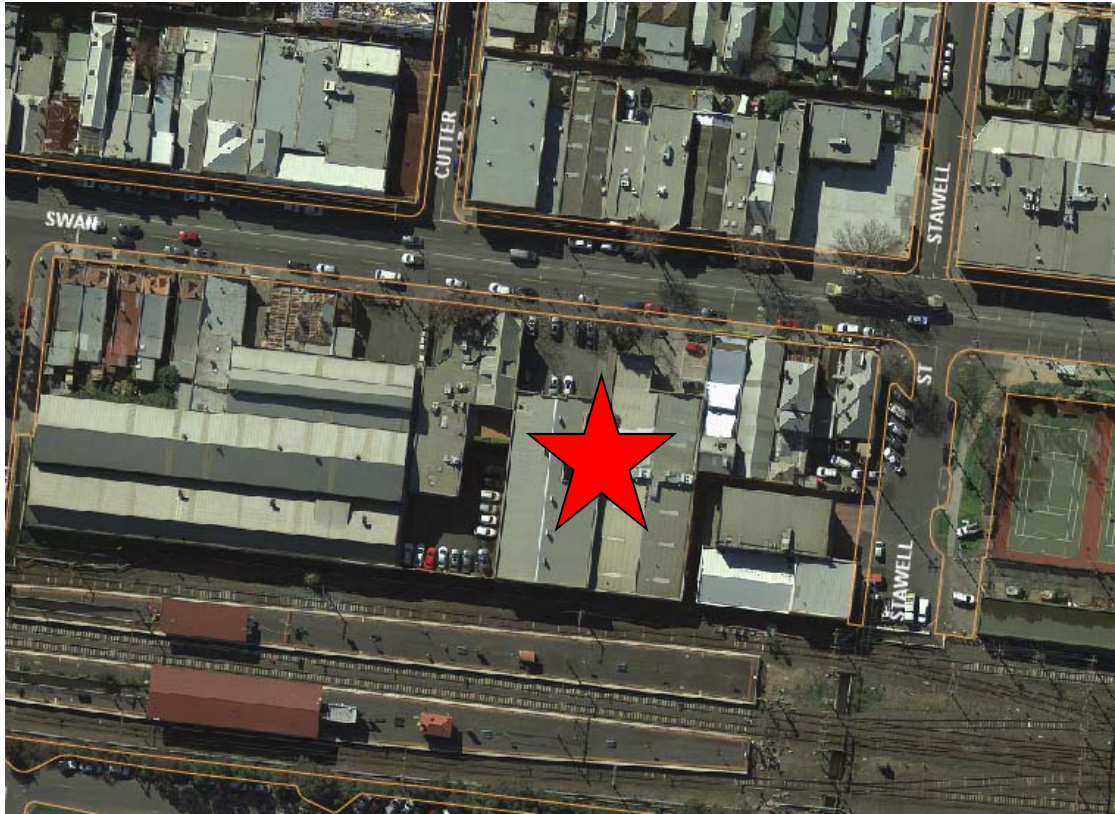


**Attachment 1 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - subject land  
- idac attachments**

**SUBJECT LAND:**



↑ North

★ Subject Site

**Attachment 2 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - referrals final - idac attachment**

**Referrals**

**External Referrals**

**Transport for Victoria**

*The Head, Transport for Victoria pursuant to Section 56(1) of the Planning an Environment Act 1987 does not object to the grant of a planning permit subject to the following conditions:*

*Conditions:*

*Pre Construction*

- 1. Before the development commences, or other time agreed to in writing with Head, Transport for Victoria, amended plans to the satisfaction of the Head, Transport for Victoria must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. These plans must be generally in accordance with the plans submitted to the Head, Transport for Victoria with the application but are to be modified to show:
  - a) self enforcing left in left out only from Swan Street with associated line marking and signs;*
  - b) no parking shown across the frontage of the site with associated signs; and*
  - c) detailed plans / landscaping schedule for the interface with the railway land*to the satisfaction of the Head, Transport for Victoria.*
- 2. Prior to the commencement of the development, detailed construction / engineering plans and computations for the works along the boundary with the railway reserve as shown on the endorsed plans must be submitted and approved by VicTrack and Public Transport Victoria. The Plans must detail all works proposed within the rail environment, including excavation of the site adjacent to the railway corridor and any impact on the rail reserve. The plans must ensure compliance regarding building clearances to aerial power lines as per the applicable Victorian Electrical Safety Regulations, to the satisfaction of Vic Track and Public Transport Victoria.*
- 3. Unless otherwise agreed in writing with Head, Transport for Victoria, before the commencement of works, a Construction Management Plan must be submitted to Public Transport Victoria and Vic Track for approval. The Construction Management Plan must designate operating hours and include details of (but not be limited to) management proposals and actions to protect Vic Track assets, rail infrastructure and the operation of the public transport network during construction and must set out objectives, performance and monitoring requirements to the satisfaction of Vic Track & Public Transport Victoria.*
- 4. Unless otherwise agreed in writing with the Head, Transport for Victoria, before the commencement of works, a Traffic Management Plan must be submitted to Public Transport Victoria which outlines how traffic will be managed throughout the construction of the development and mitigate impacts to public transport, including trains and trams. The Traffic Management Plan must be prepared and implemented to the satisfaction of Public Transport Victoria. All traffic management and mitigation costs will be at the full cost of the permit holder.*
- 5. Unless otherwise agreed in writing with Public Transport Victoria, prior to construction commencing including demolition, a construction control and indemnity agreement as required by Public Transport Victoria must be in place to the satisfaction of Public*

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*Transport Victoria at the full cost to the permit holder. Any costs required to review documents for the construction control and indemnity agreement must be met by the permit holder.*

*General Conditions*

6. *Prior to the occupation of the development, all works outlined on the endorsed plans for the left in left out access must be completed with associated signs, to the satisfaction of the Head, Transport for Victoria at the full cost to the permit holder.*
7. *Unless otherwise agreed in writing with VicTrack, permanent or temporary soil anchors must not be installed on railway land.*
8. *Prior to commencement of works, the Rail Operator must be contacted through the email address [metrositeaccess@metrotrains.com.au](mailto:metrositeaccess@metrotrains.com.au) to obtain the Rail Operator's conditions and safety requirements for works on, over or adjacent to railway land.*
9. *Any Rail Operator costs required to review documents or construction plan works within the rail environment must be met by the permit holder.*
10. *Any damage to public transport infrastructure as a consequence of the construction works must be rectified to the satisfaction of Public Transport Victoria, at the full cost of the permit holder.*
11. *The permit holder must take all reasonable steps to ensure that disruptions to train and tram operation are kept to a minimum during the construction of the development, and in compliance with the Rail and Tram Safety and Environmental requirements.*
12. *Building materials (including glass/window/ balcony treatments) likely to have an effect on train driver operations along the rail corridor must be non-reflective and avoid using red or green colour schemes, to the satisfaction of the Rail Operator.*
13. *No lighting is to be erected that throws light onto the railway tracks or which interferes with the visibility of signals and the rail lines by train drivers, to the satisfaction of the Rail Operator.*
14. *No drainage, effluent, waste, soil or other materials must enter or be directed to railway land or stored or deposited on railway land.*

*Notes for the Permit:*

*Works undertaken within railway land must consider all standards and work practices for work within the railway corridor and conform to all relevant Australian standards including Victorian Rail Industry Operator Group (VRIOG) standards for any interface works and installation of underground utility services to the satisfaction of the Rail Operator and Public Transport Victoria.*

*Entry onto railway land is at the discretion of the Rail Operator and is subject to the Rail Operators Site Access Procedures and conditions.*

**VicRoads & CityLink**

*VicRoads in consultation with CityLink does not object to the development in its current form. If Council regards the proposed development favourably, VicRoads would require that the following conditions be included in any Notice of Decision to issue a Planning Permit or Planning Permit:*

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*Before the use approved by this permit commences the following roadworks on Swan Street, Richmond must be completed at no cost to and to the satisfaction of the Roads Corporation:*

- a) *The installation of signs, line marking, splitter island and associated road works permitting only "left turn in" and "left turn out" vehicular access from Swan Street.*
- b) *Modification or removal of any existing car parking spaces, street tree/s and associated road works on the south side of Swan Street to accommodate the new vehicular access arrangement.*

*Note: Separate consent may be required from VicRoads (the Roads Corporation) under the Road Management Act 2004 for buildings and works (i.e. canopies and architectural features/ projections) undertaken outside the title boundary within a Road Zone Category 1 (i.e. Swan Street). Please contact VicRoads prior to commencing any works.*

**EPA**

*The Environment Protection Authority has reviewed the referral and documents accompanying the application. EPA advises that we do not have concerns with the proposal given the existing development and minor nature of the proposed works with respect to the City Link Exhaust Stack Environs. As such, EPA has no concerns with Council issuing this planning permit according to the information that has been provided.*

**Internal departments**

**Urban Design**

**COMMENTS SUMMARY**

*The redevelopment of this site is supported in principle, but a number of improvements and clarifications are warranted, including the following:*

- *reduce the width of the crossover if possible*
- *provide pedestrian shelter to the Swan St footpath, avoiding conflict with street trees.*

*It is also recommended that discussions be undertaken with Vic Track and the owners of 490 Swan St to optimise the pedestrian network and interfaces along the site's south and east boundaries.*

*There are no known capital works proposed for this area. However, Swan Street Structure Plan advocates an improved pedestrian route along the south boundary of the site. It is therefore recommended that the applicant be required to upgrade this strip, consistent with the works required as part of the development of 476-482 Swan St next door.*

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**Site and Context**

*The site sits within the Swan St Major Activity Centre.*

*DDO2 applies to the north half of the site, given its location on a main road. Relevant objective is "To encourage urban design that provides for a high level of community safety and comfort".*

*The Swan Street Structure Plan, although not referenced in the planning scheme, provides useful guidance – particularly the sections on Urban Design Principles and the Burnley Station Village Precinct.*

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*A large development is proposed at 462-282 Swan St, including a 12-storey tower at the corner of Swan and Burnley Streets and a 10-storey tower immediately west of the subject site.*

*The site area is 2,334 sqm, currently occupied by unremarkable 1- and 2-storey commercial buildings, including some open carparking at the front. A substantial native tree at the northwest corner of the site is proposed for removal.*

*Pedestrian Network*

*The proposed through-block pedestrian link could be of significant value. However, given the lack of a pedestrian crossing opposite the site, there will be a tendency for pedestrians to gravitate to the Burnley St link to access the station. The quality of the new link will therefore be crucial to attracting users, including its landscaping, aesthetics, wind conditions and activation. It is important that the link remain accessible at all hours, so that users are not confronted by a dead-end. Lighting will need to be carefully considered to minimise the risk of crime and ensure that the link feels safe. Pedestrian safety could be further enhanced by requiring long opening hours, such as the anticipated 7am – 11pm (Monday – Sunday). The placement of the building's main entry on the link contributes to pedestrian safety, as do the tenancy and bicycle parking fronting onto the rear lane. The link's width of 6.5 to 8.5m is supported.*

*The north-south link will be of additional value if activated on its east edge, and provisions should be put in place now to facilitate the future implementation of such activation. To this end, it is recommended that discussions be undertaken with the owner of 488 Swan St and that the neighbouring site be provided with pedestrian access rights.*

*Trees are proposed along the link, but their growth prospects would be constrained by the limited soil volume resulting from the basement below. To achieve the 1500mm soil depth proposed in the Landscape Management Plan, space would need to be provided in Basement 1 for tree planters. It appears from Section 2 that this is achievable.*

*The Swan Street Structure Plan proposes that the pedestrian path along the site's south boundary be improved, and I understand that the developer of 462-482 Swan St is being asked to upgrade this path where it adjoins their site. It is recommended that any permit for the subject site also includes a requirement to upgrade the east-west path. Ideally, this would involve the fence being moved further south, providing space for planting and other enhancements to the path. (Consistent with this, the ground floor plan shows notional trees in the public realm adjacent to the east-west pedestrian path, but no clear information is provided.) Enhancement of the east-west path would strongly contribute to the success of the proposed north-south link. The subject proposal includes a 3m setback at ground floor level from the south boundary, which alleviates the minimal width currently available for the east-west path. The tenancies addressing the east-west path will also help significantly.*

*Urbis's Response To Request For Further Information refers to improvements to the public realm which would balance against the overshadowing impacts. However, it is not clear what these improvements would be.*

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The wind report indicates that conditions in the pedestrian link are likely to be unsuitable for sitting, leading to the likely installation of screening devices, which would be regrettable. Wind mitigation responses are requested.

The wide 9.915m crossover and large kerb radius are disruptive to pedestrian movement along Swan St. This is discussed below, under Street Interface.

**Street Interface**

The design is effective in maximising active frontages, with the substation located in the basement and vehicular access limited to a single entry. There is scope for further refinement: The vehicular entry should be narrowed if possible; about 10m wide (plus the kerb radius), it presents a significant break in the footpath and causes the removal of an existing tree pit; also, the large kerb radius may result in vehicles crossing the pedestrian pathway at speed. There appears to be no door or gate to the vehicular entry, and it is unclear how the services immediately east of the vehicular entry are treated.

The ground floor is set back from the front and rear footpaths, with columns and upper podium levels holding the boundary. This is supported, in that it provides for outdoor dining and bike parking. However, consideration should be given to how sight-impaired people would navigate their way past the building.

An awning providing pedestrian shelter would be beneficial along Swan Street. This is shown in perspective, but not on the plans or elevations. Its design should be coordinated with the placement of street trees.

The above advice is limited to public realm and interface urban design issues, and does not address ESD, transport, amenity or heritage, for example.

**Engineering Services Unit**

**CAR PARKING PROVISION**

*Proposed Development*

Under the provisions of Clause 52.06-5 of the Yarra Planning Scheme, the development's parking requirements are as follows:

<i>Proposed Use</i>	<i>Quantity/ Size</i>	<i>Statutory Parking Rate</i>	<i>No. of Spaces Required</i>	<i>No. of Spaces Allocated</i>
Office	15,963 m <sup>2</sup>	3.5 spaces per 100 m <sup>2</sup> of net floor area	558	129
Restricted Retail	226 m <sup>2</sup>	3 spaces per 100 m <sup>2</sup> of leasable floor area	6	2
Food and Drink	2,406 m <sup>2</sup>	4 spaces per 100 m <sup>2</sup> of leasable floor area	96	24
<i>Total</i>			660 Spaces	155 Spaces

The development would have a total car parking shortfall of 505 spaces (429 office spaces, four spaces associated with the restricted retail use and 72 spaces associated with the food

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and drink use). To reduce the number of car parking spaces required under Clause 52.06-5 (including to reduce to zero spaces), the application for the car parking reduction must be accompanied by a Car Parking Demand Assessment.

*Car Parking Demand Assessment*

In reducing the number of parking spaces required for the proposed development, the Car Parking Demand Assessment would assess the following:

- *Parking Demand for the Office Use. Parking associated with office type developments is generally long-stay parking for employees and short term parking (say up to two hours' duration) for customers and clients. The actual parking demand generated by the office is expected to be lower than the statutory parking rate of 3.5 spaces per 100 square metres of floor space, since the area has very good access to public transport services.*

*The development would be providing on-site office parking at a rate of 0.81 spaces per 100 square metres (129 spaces for 15,963 square metres of office floor space). In the nearby Cremorne area, which contains a high concentration of office proposals, a number of developments have been approved with reduced office rates as shown in the table below:*

<i>Development Site</i>	<i>Approved Office Parking Rate</i>
<i>9-11 Cremorne Street PLN16/0171 (Amended) issued 13 June 2017</i>	<i>0.85 spaces per 100 m<sup>2</sup> (20 on-site spaces, 2,329 m<sup>2</sup>)</i>
<i>33 Balmain Street PLN15/0309 issued 21 October 2015</i>	<i>0.78 spaces per 100 m<sup>2</sup> (14 on-site spaces, 1788.1 m<sup>2</sup>)</i>
<i>13 Cubitt Street PLN16/1022 issued 20 December 2016</i>	<i>0.41 spaces per 100 m<sup>2</sup> (3 on-site spaces, 726.25 m<sup>2</sup>)</i>

*The proposed on-site office parking rate of 0.81 spaces is considered appropriate, having regard to the site's excellent accessibility to public transport services and proximity to Melbourne. Providing a reduced office parking rate for this site as well as other sites within the surrounding area encourages a modal shift from private motor based commuting to using more sustainable forms of transport.*

- *Parking Demand for the Restricted Retail and Food and Drink Uses. Ratio Consultants have adopted a staff car parking rate of 1.0 space per 100 square metres of floor area for the restricted retail and food and drink uses. Applying this rate would equate to two staff spaces for the restricted retail use and 24 spaces for the food and drink use. Customers and patrons would park off-site if they choose to drive.*
- *Availability of Public Transport in the Locality of the Land. The site is within walking distance of tram services operating along Swan Street and Church Street. The site has very connectivity to the Burnley railway station.*
- *Multi-Purpose Trips within the Area. Customers, clients and patrons to the development would combine their visit to the development by engaging in other activities or business whilst in the area.*

*Appropriateness of Providing Fewer Spaces than the Likely Parking Demand*

Clause 52.06 lists a number of considerations for deciding whether the required number of spaces should be reduced. For the subject site, the following considerations are as follows:

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- *Availability of Car Parking. The demand for on-street parking in the surrounding area is very high, and on some occasions, close to saturation point. Much of the on-street parking is short-stay time restricted parking, which enables turnover of parking for customers and visitors to the Swan Street activity centre.*
- *The Future Growth and Development of an Activity Centre. Practice Note 22 – Using the Car Parking Provisions indicates that car parking should be considered on a centre-basis rather than on a site/individual basis. This is applicable to activity centres, such as Swan Street, where spare on-street car parking capacity would be shared amongst sites within the centre.*
- *Relevant Local Policy or Incorporated Document. The proposed development is considered to be in line with the objectives contained in Council’s Strategic Transport Statement. The site is ideally located with regard to sustainable transport alternatives and the reduced provision of on-site car parking would potentially discourage private motor vehicle ownership and use.*
- *Car Parking Deficiency associated with Existing Land Use. The existing land is currently occupied by commercial premises. According to Ratio Consultants, the existing site would have an on-site car parking provision of 1.46 spaces per 100 square metres (based on 34 on-site spaces for an area of 2,320 square metres). This parking provision rate would be less than those specified in Clause 52.06-5. Any parking shortfall from the site would likely be accommodated off-site. Any existing parking deficiency attached to this site could potentially be transferrable to the new development.*

**Adequacy of Car Parking**

*From a traffic engineering perspective, the waiver of the office, restricted retail and food and drink spaces is considered appropriate in the context of the development and the surrounding area. The on-street parking demand is very high and close to saturation point. Providing a reduced provision of on-site parking would encourage a modal shift from private vehicle use to more sustainable travel, such as public transport and bicycle use.*

*Engineering Services has no objection to the reduction in the car parking requirement for this site.*

**TRAFFIC GENERATION**

**Trip Generation**

*The traffic generation for the site adopted by Ratio Consultants is as follows:*

Proposed Use	Adopted Traffic Generation Rate	Daily Traffic	Peak Hour	
			AM	PM
Commercial (Office, Restricted Retail, Food and Drink Employees)	0.5 trips per parking space per peak hour (140 on-site staff spaces)	Not Provided	70	70

*The existing site has been estimated to generate around 17 vehicle trips per peak hour. The proposed development would generate an additional 53 vehicle trips per peak hour. For the traffic distribution into and out of the site, Ratio Consultants have adopted an even directional split along Swan Street.*

**Development Access**



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The traffic impact of the site's access on Swan Street was assessed using the SIDRA program, which measures intersection performance. SIDRA modelling works well under free flowing traffic conditions and may have limitations, such as queuing of downstream traffic.

In isolation, the results of the SIDRA analysis of the site's access point (with Cutter Street as one of the approaches) suggest that the increase in the peak hour traffic of the site can be accommodated without adversely impacting on Swan Street.

*Traffic Impacts from Nearby Developments*

The redevelopment of 462-482 Swan Street and to a lesser extent, 429-437 Swan Street, would have a cumulative impact on Swan Street at the junction of Swan Street/Cutter Street/subject site access.

It is understood that 462-482 Swan Street would likely be implementing a number of measures such as the installation of signals at their site access along Swan Street (also incorporating Cutter Street) and the removal of some on-street parking on Swan Street. The subject site's access point is located adjacent to the access point of 462-482 Swan Street. It is not clear how the subject site's access arrangements would operate if signals for Swan Street-Cutter Street-462 Swan Street were to be installed. Clarification on this matter should be provided.

An analysis/modelling of the subject site's access point, incorporating the peak hour volumes of 462-482 Swan Street and 429-437 Swan Street, should be undertaken before further comment is provided on the cumulative traffic impacts on Swan Street.

**DEVELOPMENT LAYOUT DESIGN**

*Layout Design Assessment*

<i>Item</i>	<i>Assessment</i>
<i>Access Arrangements</i>	
<i>Development Entrance</i>	<i>The development entrance has a carriageway width of 6.1 metres and satisfies Design standard 1 – Accessways of Clause 52.06-9 and the Australian/New Zealand Standard AS/NZS 2890.1:2004.</i>
<i>Visibility</i>	<i>A visibility splay of 2.0 metres by 2.5 metres has been provided for the exit lane of the main accessway and satisfies Design standard 1.</i>
<i>Headroom Clearance</i>	<i>Not dimensioned on the drawings.</i>
<i>Internal Ramped Accessways</i>	<i>The widths of the internal ramps have not been dimensioned on the drawings.</i>
<i>Car Parking Modules</i>	
<i>At-grade Parking Spaces</i>	<i>The dimensions of the at-grade parking spaces (2.6 metres by 4.9 metres) satisfy Design standard 2: Car parking spaces.</i>
<i>Numbering of Spaces</i>	<i>Not provided; making space identification difficult.</i>
<i>Accessible Parking Space</i>	<i>The accessible parking spaces and shared areas have not been dimensioned.</i>
<i>Aisles</i>	<i>The 6.4 metre aisles satisfy the requirements of Table 2: Minimum dimensions of car parking spaces and accessways of Clause 52.06-9.</i>
<i>Column Depths and Setbacks</i>	<i>Not dimensioned on the drawings.</i>

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Clearances to Walls	Not provided and/or not dimensioned.
<b>Gradients</b>	
Ramp Grade for First 5.0 metres inside Property	The ramp grade for the first 5.0 metres inside the building line is horizontal (not 'flat') and satisfies Design standard 3: Gradients.
Ramp Grades and Changes of Grade	The ramp grades and the changes of grade for the ramped accessway and the internal ramps satisfy Design standard 3.
<b>Loading Arrangements</b>	
Truck Spaces	Not dimensioned on the drawings.
<b>Swept Path Analysis</b>	
Main Accessway	The swept path diagrams for the B99 design vehicle and an on-coming 10.2 metre truck into and out of the development entrance via Swan Street are considered satisfactory.
Vehicle Passing	The swept path diagrams showing the B99 design vehicle and an on-coming B99 design vehicle travelling in the aisles and internal ramps are also satisfactory.
Truck Manoeuvres	The swept path diagrams for the 10.2 trucks entering and entering the truck parking spaces are considered satisfactory.

*Design Items to be Addressed*

<b>Item</b>	<b>Details</b>
Headroom Clearance	To be dimensioned at the entrance and accessways. Headroom clearance should be a minimum of 2.1 metres. Above accessible parking spaces, a minimum of 2.5 metres headroom clearance is to be provided.
Numbering of Spaces	Spaces should be numbered on the drawings.
Accessible Parking Space	To be dimensioned on the drawings. The shared areas can be 2.4 metres in width and are to be provided with bollards as per the Australian/New Zealand Standard AS/NZS 2890.6:2009.
Column Depths and Setbacks	To be dimensioned on the drawings.
Clearances to Walls	To be provided for spaces abutting walls (minimum 300 mm). Alternatively, spaces adjacent to walls could be widened to comply with minimum requirements of AS/NZS 2890.1:2004.
Ramp Grade Sections	The lengths of each ramp grade section are to be dimensioned on the drawings.
Truck Spaces	To be dimensioned on the drawings.

*Existing Stormwater Pit in Swan Street*

*On the south side of Swan Street, there is an existing grated side entry pit in the area to be occupied by the new vehicle crossing. The construction of the new vehicle crossing will necessitate the conversion of the pit to a grated pit and the construction of a new grated side entry pit to the side of the vehicle crossing. The reason for constructing a new grated side entry pit is to compensate for the loss of capacity when converting the existing pit to a grated*

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*pit. The Permit Holder will be required to undertake these minor drainage modification works when vehicle crossing is constructed.*

### ENGINEERING CONDITIONS

#### *Civil Works*

*Upon the completion of all building works and connections for underground utility services,*

- *The kerb and channel along the property's Swan Street frontage must be reconstructed to Council's satisfaction and at the Permit Holder's cost.*
- *The footpath along the property's Swan Street frontage must be reconstructed to Council's satisfaction and at the Permit Holder's cost. The footpath must have a cross-fall of 1 in 40 or unless otherwise specified by Council.*
- *The half-width road pavement (from the central tram reservation to the south kerb) of Swan Street immediately along the property street frontage must be profiled and re-sheeted to Council's satisfaction and at the Permit Holder's cost. All road pavement reinstatements must be consolidated as single full-width areas of reinstatement to reduce further construction joints in the pavement.*
- *The new vehicle crossing must be constructed to VicRoads geometric requirements and to Council's satisfaction. The vehicle crossing must accommodate the ground clearance of the B99 design vehicle.*
- *To construct the new vehicle crossing, the existing side entry pit must be converted to a grated pit. A new grated side entry pit is to be constructed with a pipe extension to one side of the new vehicle crossing to Council's satisfaction and at the Permit Holder's cost.*
- *The redundant vehicle crossing must be demolished and reinstated to Council's satisfaction and at the Permit Holder's cost.*

#### *Road Asset Protection*

- *Any damaged roads, footpaths and other road related infrastructure adjacent to the development site as a result of the construction works, including trenching and excavation for utility service connections, must be reconstructed to Council's satisfaction and at the developer's expense.*

#### *Construction Management Plan*

- *A Construction Management Plan must be prepared and submitted to Council. The Plan must be approved by Council prior to the commencement of works. A detailed dilapidation report should detail and document the existing and post construction conditions of surrounding road infrastructure and adjoining private properties.*

#### *Impact of Assets on Proposed Development*

- *Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.*
- *Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, valves or meters on Council property will be accepted.*

#### *Discharge of Water from Development*

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- *Only roof runoff, surface water and clean groundwater seepage from above the water table can be discharged into Council drains.*
- *Contaminated ground water seepage into basements from above the water table must be discharged to the sewer system through a trade waste agreement with the relevant authority or in accordance with EPA guidelines.*
- *Contaminated groundwater from below the water table must be discharged to the sewer system through a trade waste agreement from the relevant sewer authority.*
- *Council will not permit clean groundwater from below the groundwater table to be discharged into Council's drainage system. Basements that extend into the groundwater table must be waterproofed/tanked.*

*Removal, Adjustment, Changing or Relocation of Parking Restriction Signs*

- *No parking restriction signs or line-marked on-street parking bays are to be removed, adjusted, changed or relocated without approval or authorisation from Council's Parking Management unit and Construction Management branch.*
- *Any on-street parking reinstated as a result of development works must be approved by Council's Parking Management unit.*
- *The removal of any kerbside parking sensors and any reinstatement of parking sensors will require the Permit Holder to pay Council the cost of each parking sensor taken out from the kerb/footpath.*

**NON-PLANNING ADVICE FOR THE APPLICANT**

*Legal Point of Discharge*

*The applicant must apply for a Legal Point of Discharge under Regulation 610 – Stormwater Drainage of the Building Regulations 2006 from Yarra Building Services unit. Any storm water drainage within the property must be provided and be connected to the nearest Council pit of adequate depth and capacity (legal point of discharge), or to Council's satisfaction under Section 200 of the Local Government Act 1989 and Regulation 610.*

*Preparation of Detailed Road Infrastructure Design Drawings*

*The developer must prepare and submit detailed design drawings of all road infrastructure works associated with this development for assessment and approval.*

*Vehicle Crossing Design – Matching-in Works*

*Since the vehicle access point of 462-482 Swan Street is located adjacent to the access point of the subject site, the applicant needs to liaise with the developer of 462-482 Swan Street regarding the matching-in works for the two vehicle crossings. This items would be addressed when detailed road infrastructure design drawings are submitted to Council/*

*Vehicle Crossing – Cross Sectional Drawing*

*The applicant must prepare and submit a 1 in 20 scale cross sectional drawing of the development's vehicular entrance, showing the actual reduced levels to three decimal places (not interpolated levels from the application drawings) of the Swan Street road profile (from the centre line to the property line). The required levels include the building line level, top of kerb level, invert level, lip level and road pavement levels. The existing road profile of Swan Street and the accessway inside the property must be accurately drawn. The applicant must demonstrate by way of a ground clearance check using the B99 design vehicle that vehicles can traverse the new vehicle crossing and ramp without scraping or bottoming out. The 1 in*

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*20 scale cross sectional drawing must be submitted to Council's Construction Management branch for assessment and approval.*

*Protection of Basement*

*The Permit Holder/developer is responsible for the management and protection of their building from groundwater.*

*The developer needs to ensure that the basement car park and any portions of the development at or below natural surface level have a level of protection to minimise the seepage of subterranean water (groundwater) or any rainfall run-off from penetrating the walls or floors of the site.*

*In the event that any contaminated groundwater seeps through the walls of the basement, this water must not be discharged into Council's stormwater drainage system under any circumstances. Any contaminated groundwater that is present within the site must be treated and disposed of in accordance with a Trade Waste Agreement and as per EPA guidelines and Melbourne Water/City West Water guidelines.*

*It is also the Permit Holder's onus and responsibility to ensure that rainfall run-off does not enter the property in the event of a heavy storm. Adequate measures should be in place to prevent backwash from entering the property.*

*Additional Comments Provided By Construction Management*

*Construction Difficulty Notes:*

- *Overhead power lines on Swan Street may restrict crane lifting operations from this frontage.*
- *VicRoads and Yarra Trams restrictions may apply to construction related works and hours of works on Swan Street roadway (including parking bays).*

*Other Construction Items*

- *Existing street trees on Swan Street overhang into the site. Open Space unit to provide comment.*



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Street tree overhanging into subject site (looking east)

**Strategic Transport**

*Bicycle Parking Provision*

*Statutory Requirement*

Under the provisions of Clause 52.34-3 of the Yarra Planning Scheme, the development's bicycle parking requirements are as follows

<b>Proposed Use</b>	<b>Quantity/ Size</b>	<b>Statutory Parking Rate</b>	<b>No. of Spaces Required</b>	<b>No. of Spaces Allocated</b>
<i>Office (other than specified in the table)</i>	15,963 sqm	<i>1 employee space to each 300 sqm of net floor area if the net floor area exceeds 1000 sqm</i>	<i>52 employee spaces</i>	
		<i>1 visitor space to each 1000 sqm of net floor area if the net floor area exceeds 1000 sqm</i>	<i>16 visitor spaces.</i>	
<i>Retail premises (other than specified in this table) [Food &amp; Drink and Restricted Retail]</i>	2632 sqm	<i>1 employee space to each 300 sqm of leasable floor area</i>	<i>9 employee spaces</i>	
		<i>1 visitor space to each 500 sqm of leasable floor area</i>	<i>5 visitor spaces.</i>	
<i>Bicycle Parking Spaces Total</i>			<i>61 employee spaces</i>	<i>194 resident / employee spaces</i>
			<i>21 visitor spaces</i>	<i>46 visitor spaces</i>
<i>Showers / Change rooms</i>		<i>1 to the first 5 employee spaces and 1 to each additional 10 employee spaces</i>	<i>7 showers / change rooms</i>	<i>24 showers / change rooms</i>

The development provides a total of 133 additional employee spaces, 25 additional visitor spaces, and 17 additional showers/change-rooms above than required by the planning scheme.

*Access and safety*

The location and access arrangements of the visitor and employee spaces is inadequate given primary access to the spaces appears to be from the walkway running along the south of the subject site. Despite assertions within the Traffic Impact Assessment, this path is not a shared path. It also appears this path is owned by VicTrack, and therefore permanent access to this path cannot be guaranteed.

Further, the path is narrow, and links directly to the Burnley Station underpass at its western end. At this point the path is marked with 'No cycling' signage (Figure 1). By locating all bicycle parking at this intersection many cyclists would be encouraged to use this ramp and

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*conflict with pedestrians would significant, especially during peak hours when train passengers would be accessing the station via the underpass.*

*If access to cyclists facilities is from the south, a clearly delineated and cycle-able path to Swan Street should be provided within the east-boundary setback discourage cyclists using the underpass ramp, and to ensure ongoing adequate access to cyclists facilities.*



*Figure 1 (left) – The path at the rear of the site connects to the Burnley Station underpass at its western end, and is marked with “No cycling” signage.*

*Figure 2 (right) – The remainder of the path is narrow.*

*Adequacy of visitor spaces*

*46 spaces are at ground-floor and described as visitor bicycle parking spaces. The following aspects of the visitor parking is acceptable:*

- Best-practice requires a rate of 1 visitor spaces to each 500sqm of office floor space<sup>1</sup>, plus the statutory rate for the retail uses; requiring 31 spaces. This requirement is exceeded.*
- All visitor spaces are at ground-floor in a space accessible to the general public and appear to be at horizontal rails well suited for visitor use.*

*Adequacy of employee spaces*

*Number of spaces*

*Whilst the proposal includes a surplus of 133 employee spaces above the requirements of the planning scheme, it is noted:*

<sup>1</sup> *Category 6 of the Built Environment Sustainability Scorecard (BESS) offers the following best-practice guidance for office visitor bicycle spaces offices should provide 1 visitor space per 500m<sup>2</sup> net lettable area.”*

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- A reduction of 505 (based on Engineering comments) car parking spaces is sought (77% of the statutory requirement);
- the subject site is located in an inner-urban area with already high cycling-to-work demand, and trends indicate demand will continue to increase; and
- both local and state planning policies include objectives to promote sustainable transport modes, including cycling.
- Given the above, best-practice requires a rate of 1 space to each 100sqm of office floor space<sup>2</sup>, plus the statutory rate for the other uses. Therefore, 167 employee spaces should be provided. This requirement has been exceeded and the number of spaces is acceptable.

*Design and location of employee spaces and facilities*

*Employee and resident spaces are inadequately located and designed for the following reasons:*

- Employee bicycle storage facilities are located at ground-floor, basement 1 and basement 2, at four separate storage areas. Each storage area appears to be secure. This is not supported as cyclists may have to travel between multiple facilities to find a parking location.
- At minimum all spaces should be located within two storage areas, at ground-floor or basement 1, with clear and easy access between the two facilities.
- Further, problems with access to the four proposed facilities include:
  - 24 spaces at basement 2 are not directly accessible from the lift shaft, and cyclists must navigate steep (1:5 ramps) to access the storage area. It appears access could be provided to the lift-shaft, like the proposed access at the smaller level 1 storage area, however this is also inadequate.
  - The smaller storage area at basement 1 is directly accessible via the lift shaft, however access includes a narrow (approximately 1.1m walkway), stairs and a right angle-turn; all which will make walking a bicycle to these facilities difficult.
  - The larger storage area at basement 1 is directly accessible via the lift shaft access appears generally adequate.
- As noted previously, primary access to cyclists facilities is from the footpath at the rear. A clear path should be provided to Swan Street through the site for cyclists access.
- It is also suggested reconfiguring the lobby and service lobby so bicycles can be easily wheeled through this entrance.
- Dimensions of bicycle storage spaces, spacing, and access-ways; and whether spaces are horizontal or hanging spaces is not indicated. This information must be included for a full assessment.

*Green Travel Plan*

*It is noted most required information regarding travel options is provided within the Traffic Impact Assessment, however no Green Travel Plan (GTP) has been provided. Given the development has a total non-residential floor area of more than 1,000sqm, pursuant to Clause 22.17-4 a GTP must be provided. This should include:*

- (a) a description of the location in the context of alternative modes of transport;

<sup>2</sup> Category 6 of the Built Environment Sustainability Scorecard (BESS) offers the following best-practice guidance for bicycle parking rates: 'Non-residential buildings should provide spaces for at least 10% of building occupants.' Assuming a floor-space occupancy of 1 staff member to 10sqm (which is the maximum rate allowed under the National Construction Code for fire safety), providing bicycle spaces for 10% of occupants results in a rate of 1 space per 100sqm of floor area



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- (b) *employee welcome packs (e.g. provision of Myki/transport ticketing);*
- (c) *the provision of real time passenger information displays for nearby stops within each lobby;*
- (d) *sustainable transport goals linked to measurable targets, performance indicators and monitoring timeframes;*
- (e) *a designated 'manager' or 'champion' responsible for coordination and implementation;*
- (f) *details of bicycle parking and bicycle routes (which do not refer to the footpath at the south as a 'shared path');*
- (g) *details of GTP funding and management responsibilities;*
- (h) *the types of bicycle storage devices proposed to be used for employee and visitor spaces (i.e. hanging or floor mounted spaces);*
- (i) *the types of lockers proposed within the change-room facilities, with at least 50% of lockers providing hanging storage space;*
- (j) *security arrangements to access the employee bicycle storage spaces; and*
- (k) *signage and wayfinding information for bicycle facilities and pedestrians pursuant to Australian Standard AS2890.3;*
- (l) *provisions for the Green Travel Plan to be updated not less than every 5 years.*

**Recommendations**

*The following should be shown on the plans before endorsement:*

1. *A clearly delineated and cycle-able path within the east-boundary setback from Swan Street to near cycle parking facilities.*
2. *All employee bicycle parking facilities located at ground-floor, or basement 1; in a maximum of two-storage facilities, with adequate access between the storage facilities and end of trip facilities.*
3. *A minimum of 167 employee bicycle spaces should be provided.*
4. *At minimum 20% of employee bicycle spaces should be horizontal ground-level spaces.*
5. *All visitor spaces should be horizontal ground-level spaces.*
6. *The lift and service lobbies should be reconfigured to provide easy access for cyclists to walk bikes to the ground-floor spaces from the main entrance.*
7. *Notations should be added to plans indicating:*
  - a. *Dimensions of bicycle storage spaces and spacing between spaces*
  - b. *Accessways to bicycle facilities*
  - c. *Whether bicycle spaces are horizontal or hanging spaces.*

*A Green Travel Plan should be provided showing the information noted above.*

**Open Space**

- *A landscape plan should be prepared that indicates the location of species proposed and includes a plant schedule identifying the botanical name, mature height and spread, pot size and quantity of all proposed planting. Shade tolerant planting will be an important consideration for planting at the ground level.*
- *The landscape plan should also show extent of planters and where the Ronstan X-tend mesh panels are proposed.*

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- *Please provide further details of the proposed planters – height, materials, depth and type of planting media, irrigation and drainage. NB, the plan notes indicate that trees will be planted in 1500mm depth soil however the planters shown are 600mm depth.*

**Arborist**

- *The proposal will require the removal of one significant tree (Red Iron Bark) located in the front setback of 484 Swan Street Richmond.*
- *The tree has been pruned away from the high voltage wires and is inappropriately located. Its removal is supported subject to sufficient offset planting on the site.*
- *Two (2) Council trees are located adjacent the site within the footpath. A bond of \$20,000 should be applied to each tree based on a combined amenity valuation only of \$32,868*
- *A maturing Lemon Scented Gum is located on the adjacent property at 490 Swan Street. A tree impact and management plan prepared by an appropriately qualified arborist must be submitted to ensure the tree is protected during development.*

**Waste Services**

*The Waste Management Plan prepared by ratio dated 6<sup>th</sup> June 2017 for 484-486 Swan Street Richmond is satisfactory from the City Works Branch's perspective.*

**ESD Advisor**

*The standard of the ESD meets Council's Environmental Sustainable Design (ESD) standards. Should a permit be issued, the following ESD commitments (1) and deficiencies (2) should be conditioned as part of a planning permit to ensure Council's ESD standards are fully met.*

*Furthermore, it is recommended that all ESD commitments (1), deficiencies (2) and the outstanding information (3) are addressed in an updated SMP report and are clearly shown on Condition 1 drawings. ESD improvement opportunities (4) have been summarised as a recommendation to the applicant.*

*Applicant ESD Commitments:*

- *Project has committed to a 4.5 Star NABERS Energy rating and a 5 Star Green Star accredited rating.*
- *NCC energy efficiency standards exceeded by at least 10%.*
- *High efficiency mixed mode HVAC system with Under Floor Air Delivery, to meet Green Star 15 points GHG and 4.5 NABERS Energy rating.*
- *Mechanical ventilation with fresh air rates exceeding AS1668 rates by at least 50%. Air intake/exhaust separated according to ASHRAE 62.1:2013. Mixed mode ventilation.*
- *Access to daylight is good with at least 40% of the office floor area reaching the target daylight factor of 2% or greater.*
- *Shading incorporated into the façade design as a brise soleil, fins and fixed cantilevered shade.*
- *A STORM score of 107% demonstrating best practice in stormwater management has been provided that relies on a minimum of 1475m<sup>2</sup> of roof connected to 50,000 litres of rainwater storage for toilet flushing of all toilets onsite.*
- *LCA analysis of materials to achieve a 10% improvement on the reference building.*

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- *Energy efficient lighting system type unknown, but at least a 10% improvement on NCC DTS requirements.*
- *6 Car share spaces and 12 electric vehicle charging stations.*
- *196 bicycle spaces for staff with end of trip facilities, plus 46 visitor bike spaces (see comments below).*
- *Water efficient taps and fixtures.*

*Application ESD Deficiencies:*

- *The materials legend includes black tinted glass. This is not consistent with the SMP (min 40% VLT). Strongly recommend that tinting has a minimum VLT of 40% to balance daylight and thermal loading and be consistent with the SMP.*
- *"Preference" to be given to low-VOC products, and SMP "aims to include" low formaldehyde products. Giving "preference" and "aiming to include" are not acceptable terms to use in a SMP for town planning. Please re-word this section to avoid any vague or ambiguous language.*

*Outstanding Information:*

- *The SMP claims 196 secure bicycle spaces provided, but the architectural drawings appear to have incorporated 170 spaces plus 46 visitor spaces. Please confirm that the 196 secure bike spaces are shown on the architectural drawings.*
- *Please indicate what type of hot water system will be used and its standard of energy efficiency.*
- *No information has been included in the SMP, but on one roof plan solar panels are noted but not the other roof plan (without adjoining building). Please confirm the system size and location on all roof plans and include some system overview in the SMP. Recommend a solar PV array to contribute to onsite electricity consumption.*
- *Please note the approximate location and size of the rainwater tank is marked on all relevant pages of the architectural drawings.*
- *Green façade elements are clearly identifiable in Figure 6 of the SMP & the architectural Perspectives Render, however they are not included in the landscape plan. Please provide details on the proposed green façade and update relevant documents.*

*ESD Improvement Opportunities*

- *Consider water efficient landscaping provided by rainwater.*
- *Consider onsite energy storage system.*

**External consultants**

**Urban Design (MGS Architects)**

**SUMMARY OF FINDINGS**

- *The site is one that can support higher density development sitting as it does adjacent a major transport interchange and separated from established residential areas.*
- *The inclusion of activities at ground and first floor level that invite the community in and create a destination for the local area and workforce. The link through the site and the location of the major entry mid-block will generate an appropriate vibrancy.*

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- *The inclusion of upper level workplace areas are a logical inclusion in a transit oriented area providing access to future locations for jobs.*

**Scale**

- *The proposition that the development should scale up from development to the west is not logical in an urban design sense. The adjoining site is a major corner and placemaking site of larger scale marking the station entry and should in an urban design sense become the major and dominant marker form in the context. The adjoining site should in my view be more modest in scale. Key principles should include as has already been the case the expression of 2 and 3 level podium forms to the street interface extending the development principles that exist both in new development to the west and the older two level Victorian form to the north.*
- *Upper level form should emulate the setbacks of the new development to the west to ensure there is a clear demarcation between the street wall and upper level form i.e. approximately 5.5m.*
- *Heights of the building should in my view approximate to those of the western interface establishing a clear emergent urban for the precinct. This would imply a further modest setback to 12m from the street interface above level 8 with a maximum height capped at level 9 i.e. 47.75m excluding plant.*
- *The inclusion of a 24 hour, 3m minimum width easement of access through the site is desirable and could form the basis for the inclusion of an additional smaller footprint at level 10 marking this as a new pedestrian street.*

**CONCLUSION**

- *As a minimum, levels 11 to 13 should be deleted.*
- *The inclusion of a level 10 should only be considered subject to a suite selected from the following being agreed by the applicant:*
  - *A 173 Agreement for a publically managed ground level link through the site linking Swan Street and the pedestrian station walk to the south of 3m in width accessible 24/7*
  - *The inclusion of 5% of the office space for low cost affordable workplaces for the creative industries.*
  - *Best Practice ESD outcome including exemplary end of travel facilities for cyclists including shower and change as well as secure cycle storage areas.*
  - *Revisions to the built form and articulation of the office building to ensure the north-south pedestrian lane does not require screens to deliver comfort for seating in these areas (The current Aurecon report indicates screening would be required not currently shown on plans).*
  - *High quality placemaking for the full extent of the pedestrian walk to the south and to the kerb line to the north and all terrace areas to the satisfaction of the responsible authority.*
  - *Enhanced design quality in the investment into the podium form and pedestrian walk and station interface areas, with the existing design lacking ambition. Presently insufficient detail of the landscaping treatments and materials is provided. For example the inclusion of trees in renderings whilst welcome implies significant planter zones not yet shown on plans. The depth of planting and details of stormwater harvesting required to enable their successful inclusion will*

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*be critical to this realisation. The through-block walk shows trees that have not been coordinated with overhanging terraces. These concepts need to be properly coordinated to the satisfaction of the RA.*

- *That a greater level of detail of the proposed detailing of the podium elements and canopies should be provided.*
- *The inclusion of safety by design response should be provided demonstrating how the station walk and links will be enhanced by program, lighting and public realm treatments and signage.*
- *A green travel plan providing real-time public transport information in the open space zone should be provided.*
- *Overshadowing should not occur on the central island platform of the adjoining Burnley station between 9.00am and 2.00pm.*
  
- *Details of metal cladding should be provided given the unsuitability of a number of options.*
  
- *Upper level form should emulate the setbacks of the new development to the west to ensure there is a clear demarcation between the street wall and upper level form i.e. approximately 5.5m.*
  
- *Heights of the building should in my view approximate to those of the western interface establishing a clear emergent urban form for the precinct. This would imply a further modest setback to 12m from the street interface above level 8.*
  
- *A preferred maximum height capped at level 9 i.e. 47.75m excluding plant will ensure integration with a broader Swan Street transit oriented hub emerging built form narrative. The alternative higher form for this site is not warranted given its poor integration with a sound urban form character established by its western neighbour identifying it as a clear and logical landmark focus as the station entrance form on a much larger development footprint scaling down to lower midblock form to the east.*
  
- *The proposition that this site should support a building some 14m or nearly 5 levels taller than its western neighbour is not supported on urban design built form, emerging character and offsite impacts grounds.*
  
- *Subject to a satisfactory response on these issues the project within a reduced scale and footprint could be supported.*

**Acoustics (SLR Consulting)**

*A review of the acoustic report prepared for the office development proposed for 484-486 Swan Street, Richmond is provided above. The report generally addresses the acoustic issues related to the proposal. A summary of our findings and details of the items we would like to see addressed in further detail are summarised below.*

- *Indicative advice is provided for controlling noise from mechanical plant, however the development can be expected to include a large amount of equipment and we would consider the risk of non-compliance with SEPP N-1 to be moderately high. For this reason we recommend the report include the statement that the mechanical design must be reviewed by an acoustical consultant during the detailed design phase of the project.*
  
- *The noise monitoring data is described as both free field and façade reflected. The reporting of these measurement locations should be reviewed and clarified to ensure that they are correct and consistent.*

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- *Potential voice noise impacts from the ground floor outdoor areas associated with the food and beverage tenancies is largely addressed through orientation of the tenancies, however we agree with Acoustic Logic that separate acoustic reports should be submitted for any significant noise generating use, and particularly for any entertainment premises of restaurants proposing to play music above background levels.*
- *Potential voice noise impacts from the west facing terrace, which will be overlooked by residential dwellings, is not addressed in the report. While this area appears to be a low risk of nuisance noise, we nevertheless recommend that the report include the requirement that use of this area is limited to the day and possibly early evening only. If the space is used for functions, it should also meet the patron noise limits nominated in the acoustic report.*

**Wind (MEL Consultants)**

*The review of the Aurecon Wind Impact Statement is based on our experience of wind flow around buildings and structures. This experience has been developed from a company experience of more than 40 years of desktop, wind tunnel, and full scale studies of environmental wind conditions in urban and sub-urban areas. No wind tunnel studies have been undertaken to support the review. Our comments are as follows:*

- *The Aurecon Wind Impact Statement has been prepared based on the experience of the consultancy and no wind tunnel testing by Aurecon has been carried out to support the report. We have no issue with this approach for a desktop study as this is a common approach to provide architects, developers, and responsible authorities' advice on the wind effects of the design.*
- *We have no issue with the Analysis Approach, Site Exposure, and Regional Wind Climate that have been used as the basis for the assessment. Aurecon has clearly identified the process for the desktop assessment and this is consistent with the approach that MEL Consultants would take to prepare a desktop wind impact assessment. A clear description of the proposed development has been provided along with reference drawings in the Appendix of the report.*
- *The desktop assessment has identified the adjacent developments and the heights of the existing buildings and we agree with the comments on the shielding provided by the surrounding buildings.*
- *The assessment criteria that Aurecon have used is based on mean wind speeds, which in the high turbulence wind environment of urban Richmond would be less important than the gust wind, so comparison with gust criteria would be recommended. However, there appears to be an error with the Safety criteria as a mean hourly once per annum wind speed of 20 or 15 metres per second would result in gust wind speed of approximately 37 and 28 metres per second, which are well in excess of Melbourne (1978) safety gust wind speed of 23 metres per second once per annum occurrence. The Melbourne (1978) Safety criterion is an accepted criterion in the wind engineering community.*
- *The Aurecon assessment for Swan Street indicates an expectation of the sitting/standing criteria along the footpaths. MEL Consultants believe that the wind conditions would be up to the walking criterion, considering the building massing of 462-482 Swan Street creates a long frontage of taller buildings, and the wind conditions would be expected to increase as the through site laneway is approached*

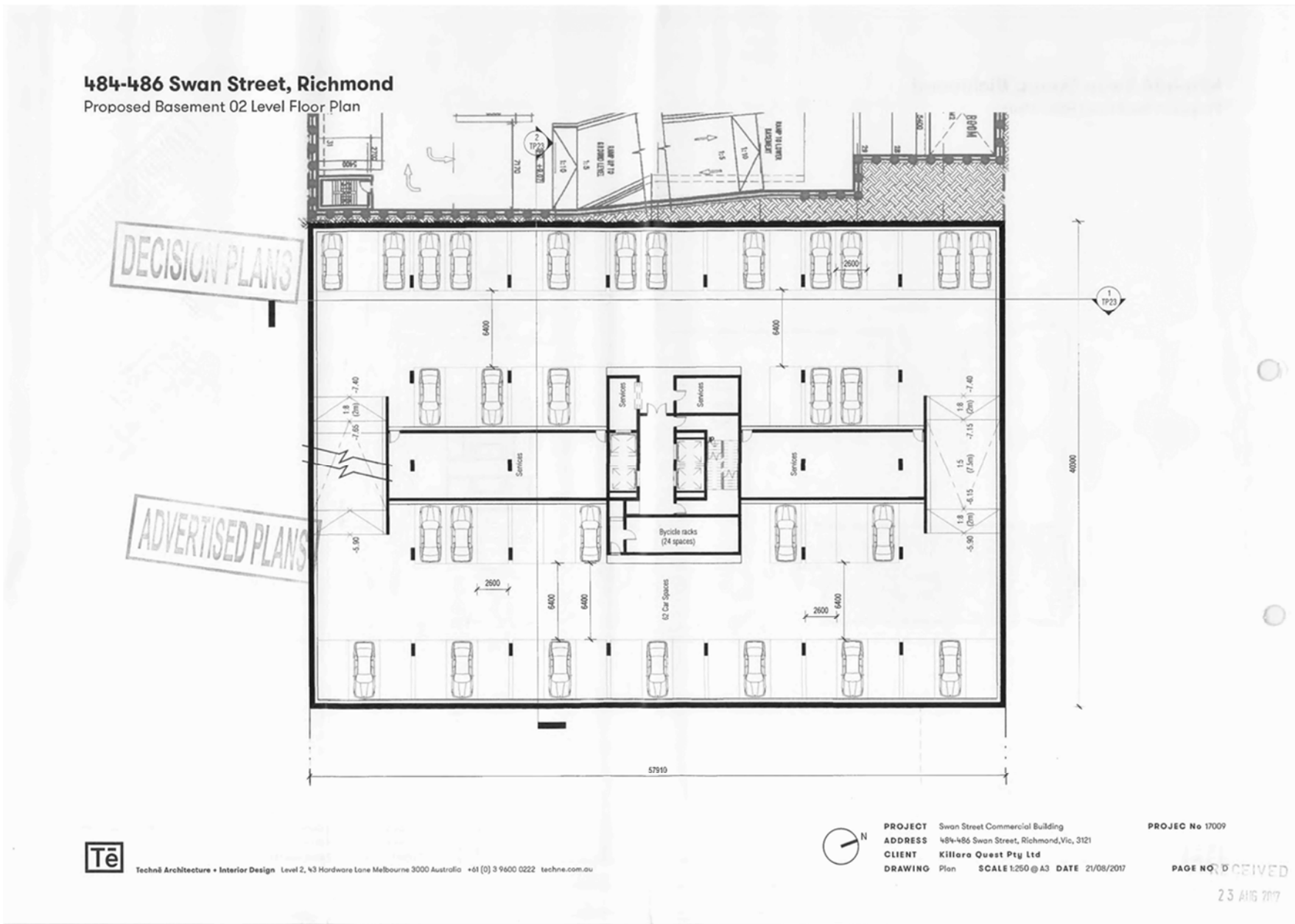
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*due to the wind flow accelerating into the laneway around the building corners. However, there would be an expectation that wind conditions may achieve the short period sitting/standing criterion in the middle of the building face, but local wind break protection would be expected to be necessary for the proposed café to achieve the long period sitting/standing criterion.*

- *Aurecon has assessed the through-block laneway as suitable for leisurely walking and recommend additional wind break features if the seating is important. The town planning documentation submitted by Teche Architecture + Interior Design has provided images of the laneway precedent to support their design. The images show laneways with activation for outdoor dining/café seating suggesting the intention is to use the laneway for long period sitting/standing activation. Additionally, discussions with the City of Yarra about their expectations for the laneway agree with the architect's images. Therefore, MEL Consultants would agree with Aurecon that additional wind break features will be required and would also recommended that these features be developed with the assistance of wind tunnel model measurements. The measurements will need to include quantified gust wind speed data.*
- *Aurecon's assessment of Burnley Station Entrance and Bicycle Parking has only considered the effects of downwash, which MEL Consultants would agree would be mitigated by the tower/podium arrangement. However, the Aurecon assessment has overlooked the potential deflection of wind flow (separated shear layers) from the building towards the station entrances and platforms. This can be assessed during a wind tunnel study.*
- *We agree with Aurecon that the terrace balustrades would assist with mitigating wind conditions on the terraces and that the conditions can be obtained through wind tunnel modelling.*
- *We agree with Aurecon's general commentary on the utilisation of terraces; the need to educate residents on the usage of these spaces, the tethering of objects, and would add that any objects that are not tethered should not be left unattended or permanently on the terraces.*

*In conclusion, the Aurecon's Wind Impact Assessment has been prepared based on the consultant's experience of wind flow around buildings and structures. We have no issues with the Analysis Approach, Site Exposure, Regional Wind Climate, and description of the development used in the preparation of the assessment. This is consistent with the approach MEL Consultants would take to prepare a similar desktop environmental wind assessment. We agree with many aspects of the Aurecon Wind Impact Statement for the assessment of the wind conditions. However, MEL Consultants have concerns that the wind conditions through the through-block laneway given the images provided by the architect and the expectations of the City of Yarra would need additional wind mitigation strategies to achieve the long period sitting/standing criterion. It has been recommended that the mitigation strategies be developed with the assistance of wind tunnel model measurements. MEL Consultant do not support the use of CFD in these situations due to the high turbulence wind conditions of the urban environment and the importance of the pedestrian comfort on the gust wind speeds. The wind tunnel model study of the development should quantify the wind conditions in the surrounding streetscapes and on the terraces due to the relative height of the proposed development compared to the surrounding buildings. We would also recommend that any wind mitigation strategies are presented with and without the reliance existing or future street trees.*

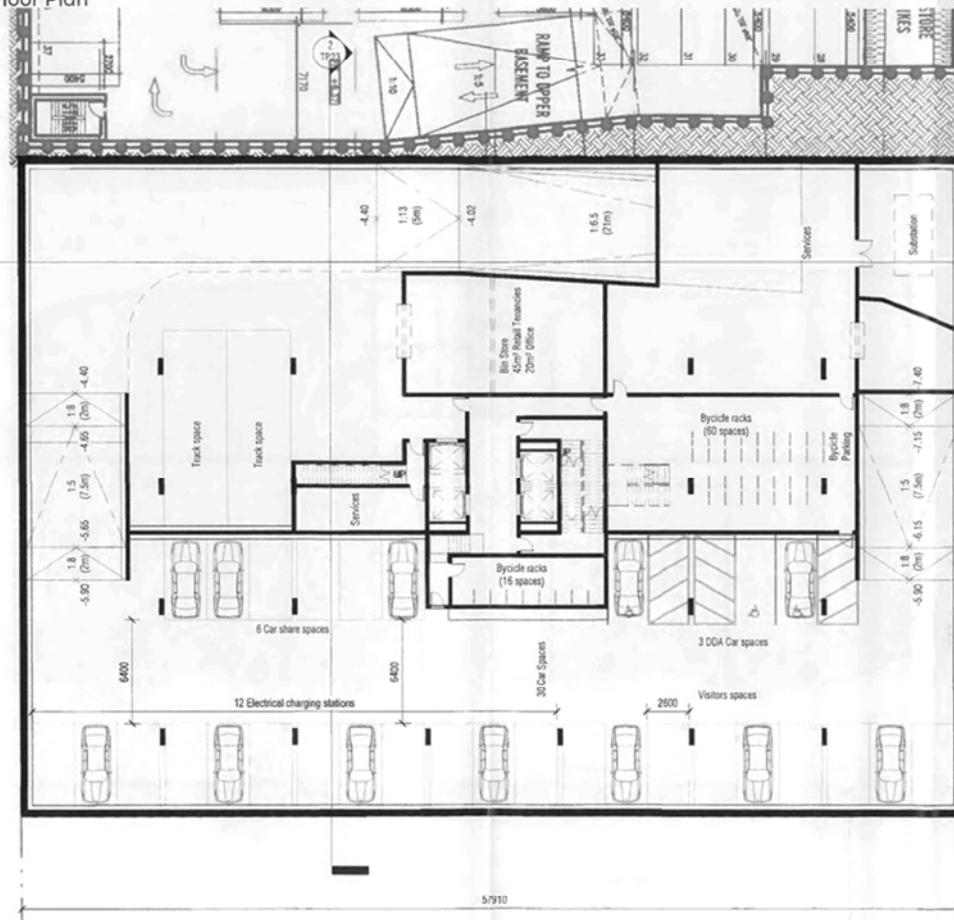
Attachment 3 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - basements 2 & 3 - idac attachment





Attachment 4 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - idac attachment

484-486 Swan Street, Richmond  
Proposed Basement 01 Level Floor Plan



DECISION PLANS

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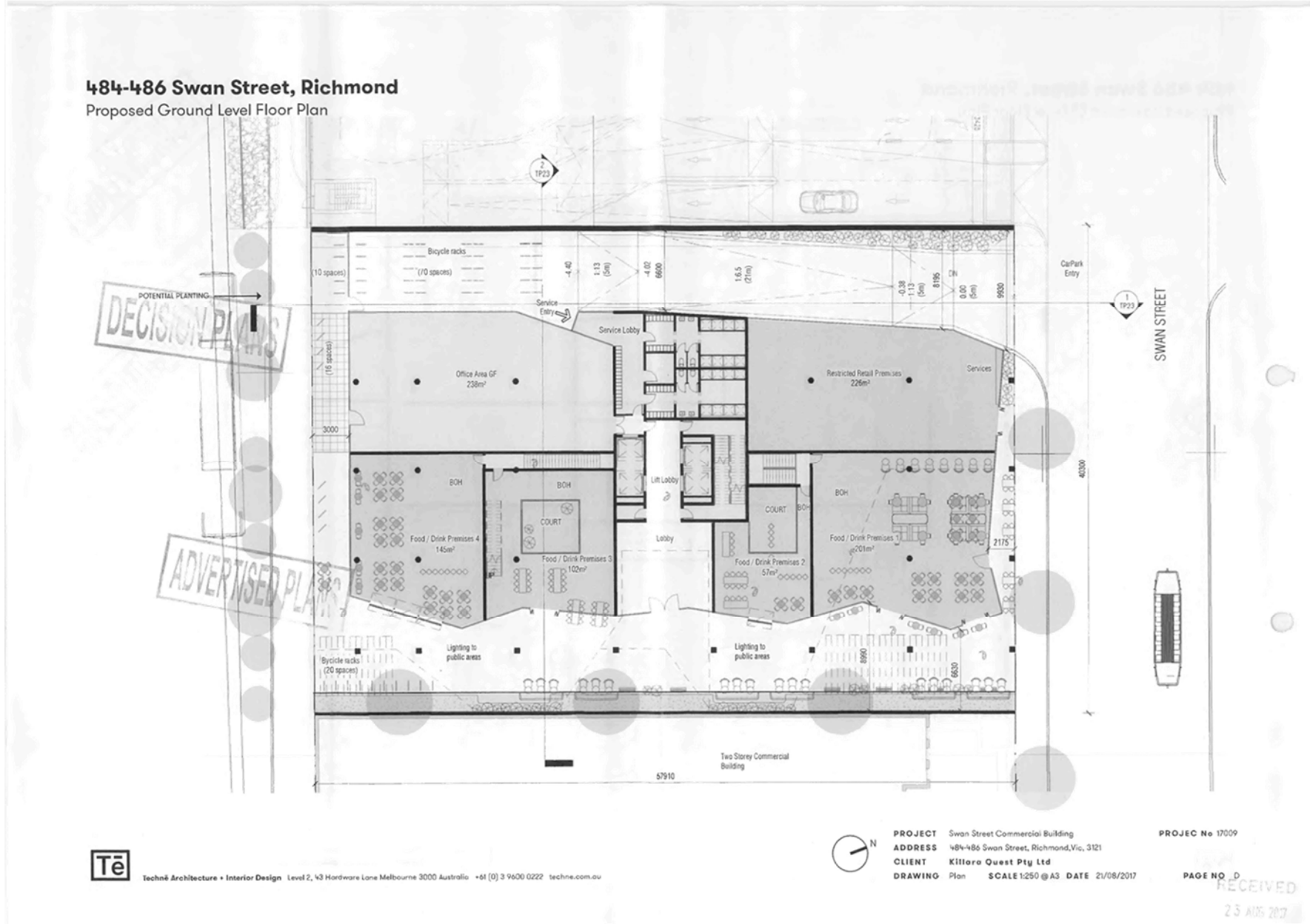
PROJECT Swan Street Commercial Building  
ADDRESS 484-486 Swan Street, Richmond, Vic, 3121  
CLIENT Killara Quest Pty Ltd  
DRAWING Plan SCALE 1:250 @ A3 DATE 21/08/2017

PROJEC No 17009

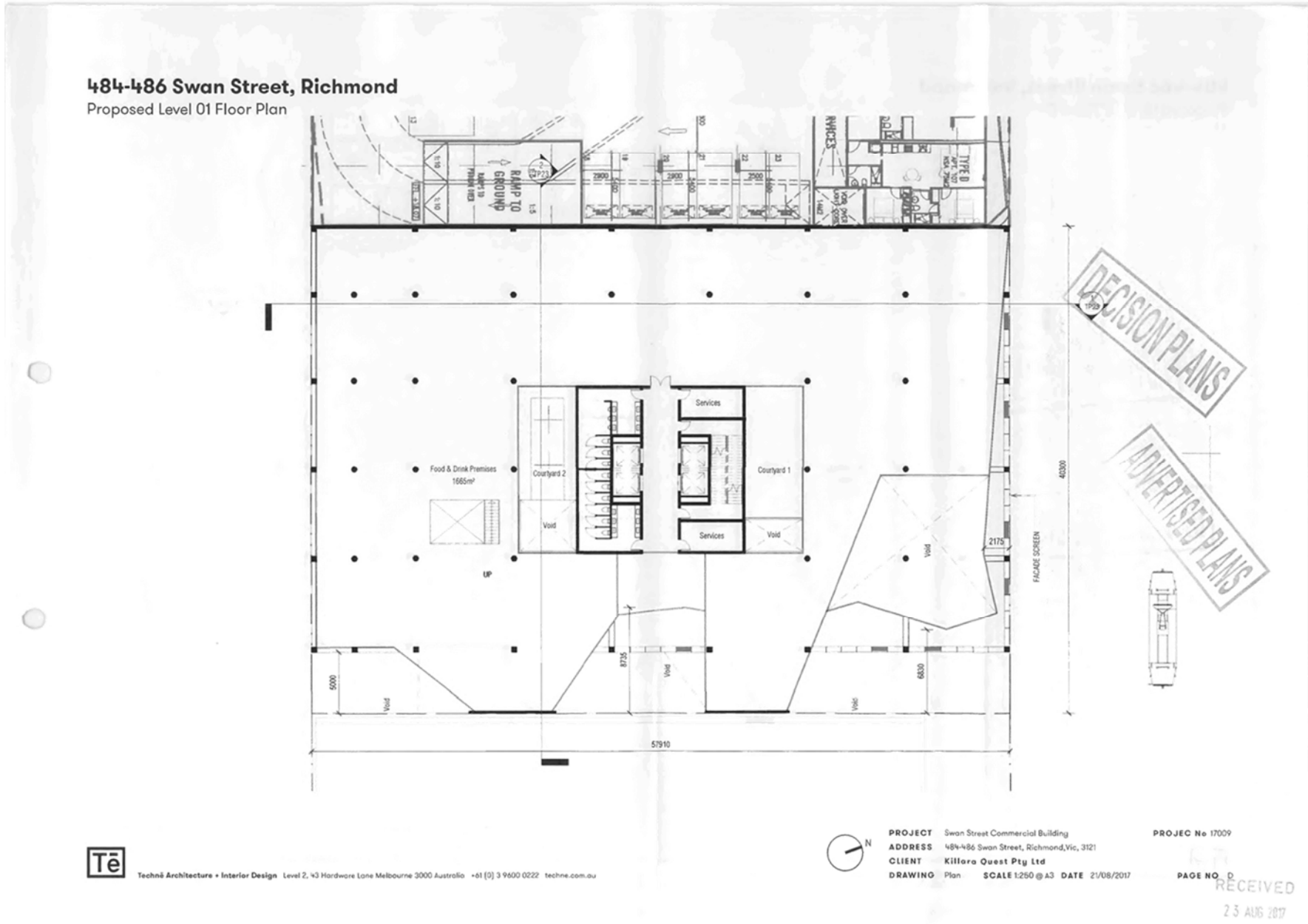
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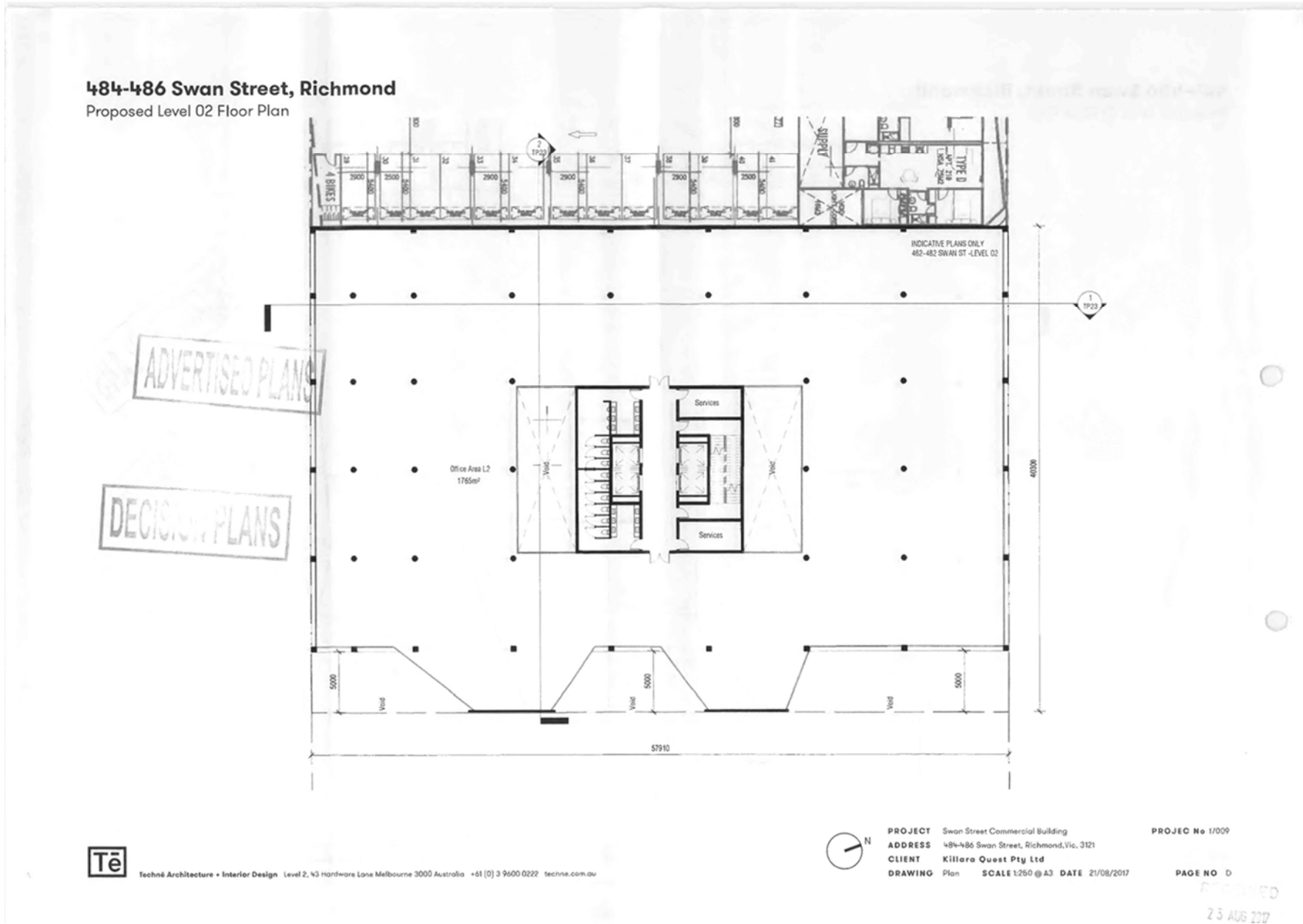
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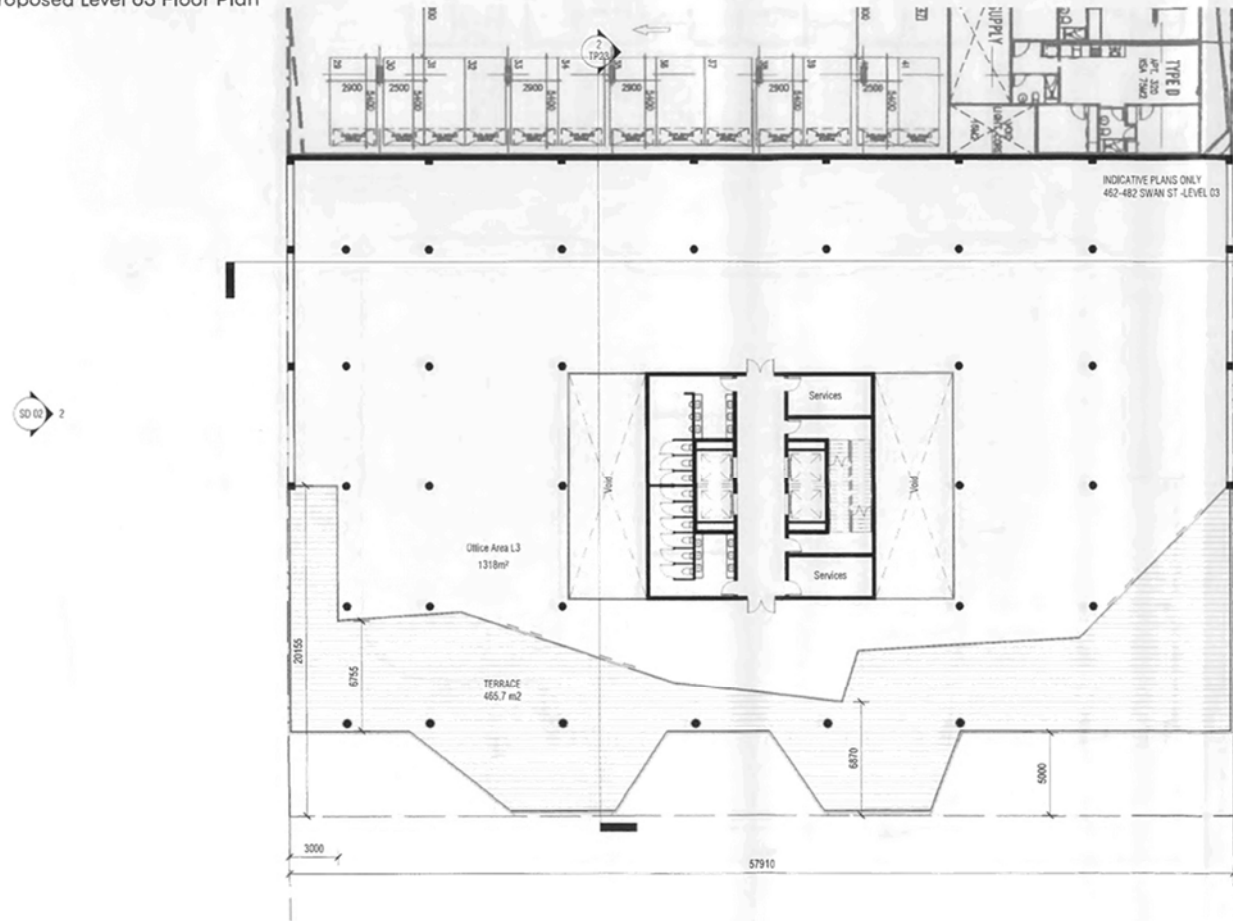


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**484-486 Swan Street, Richmond**  
Proposed Level 03 Floor Plan



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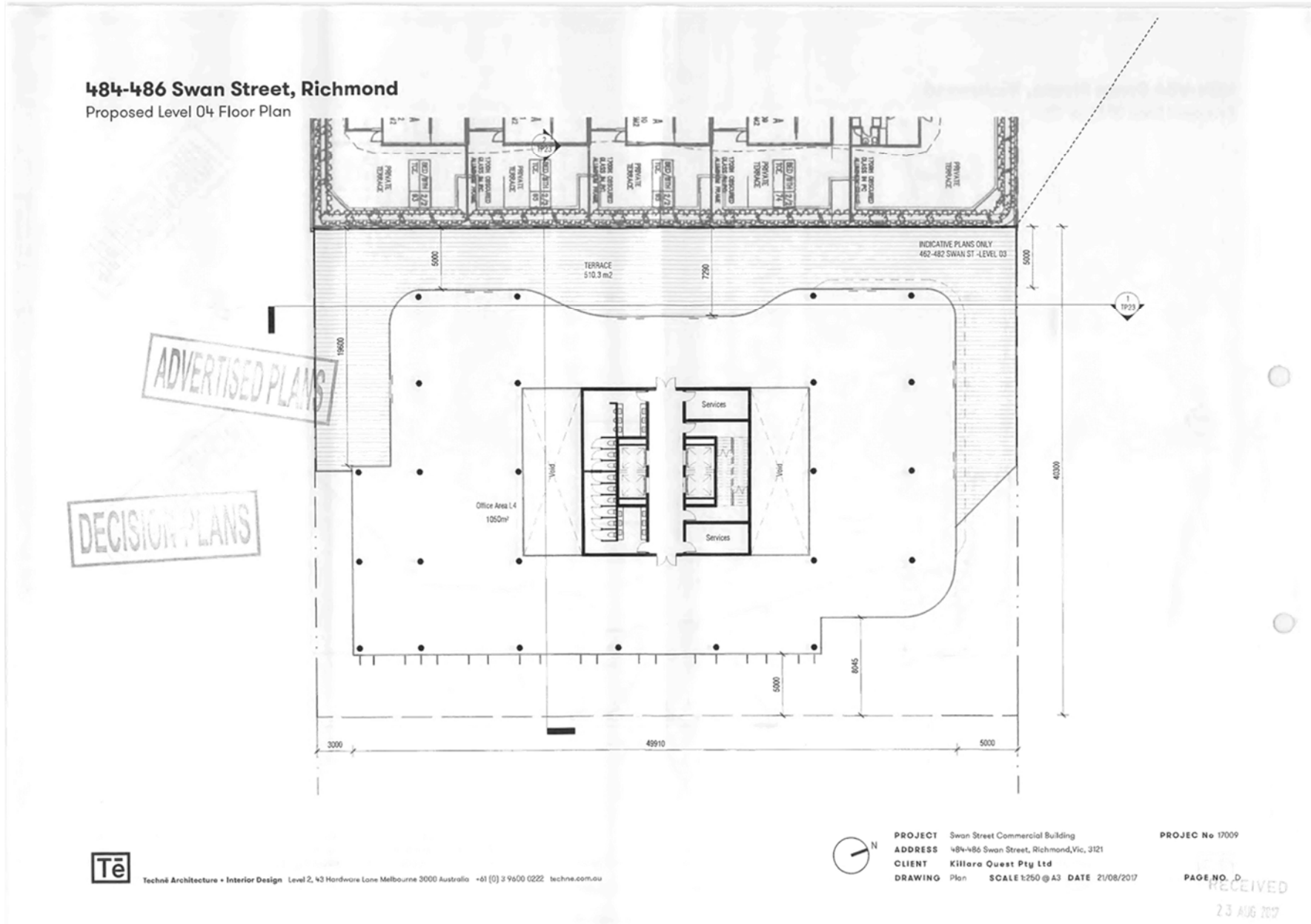


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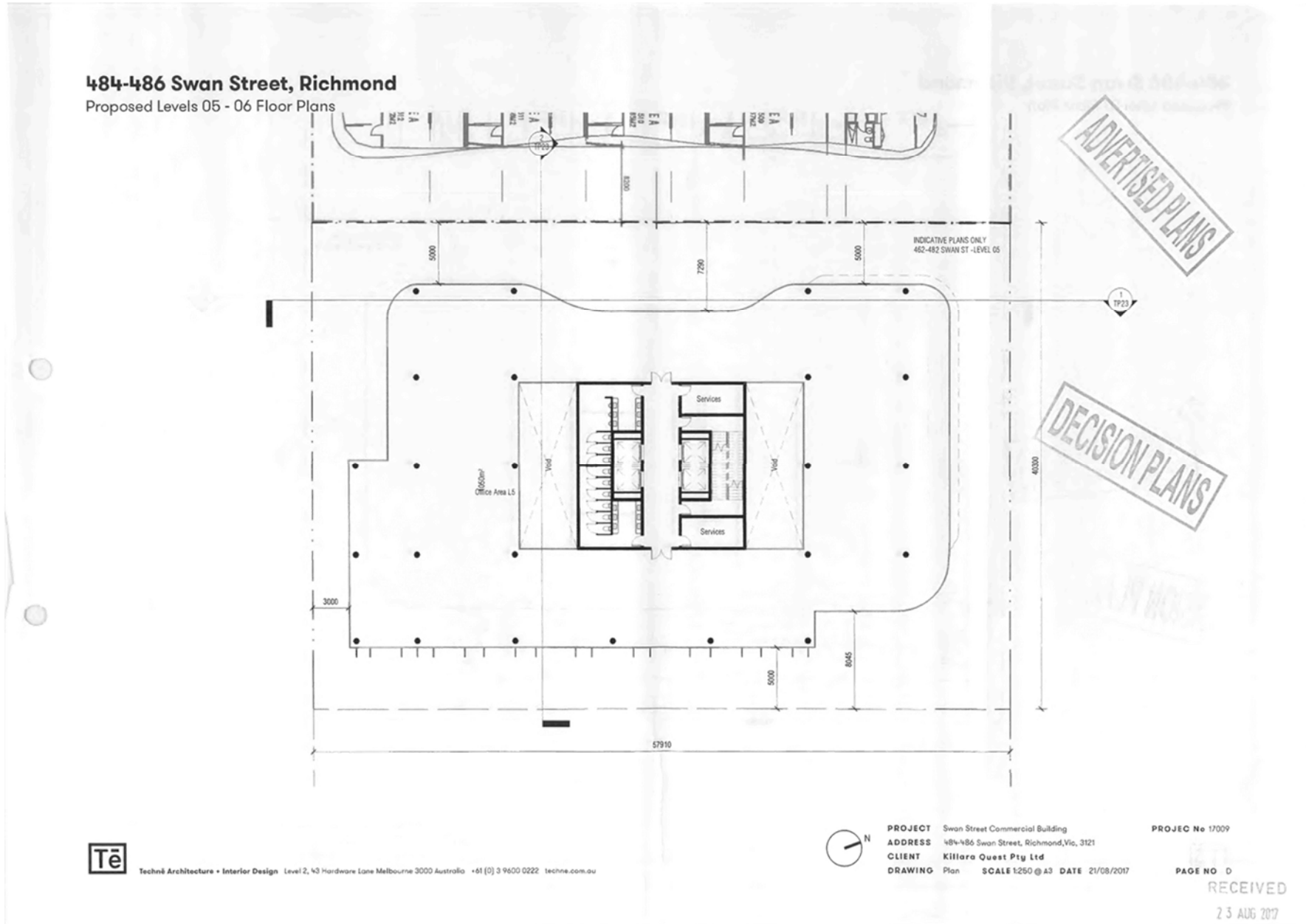
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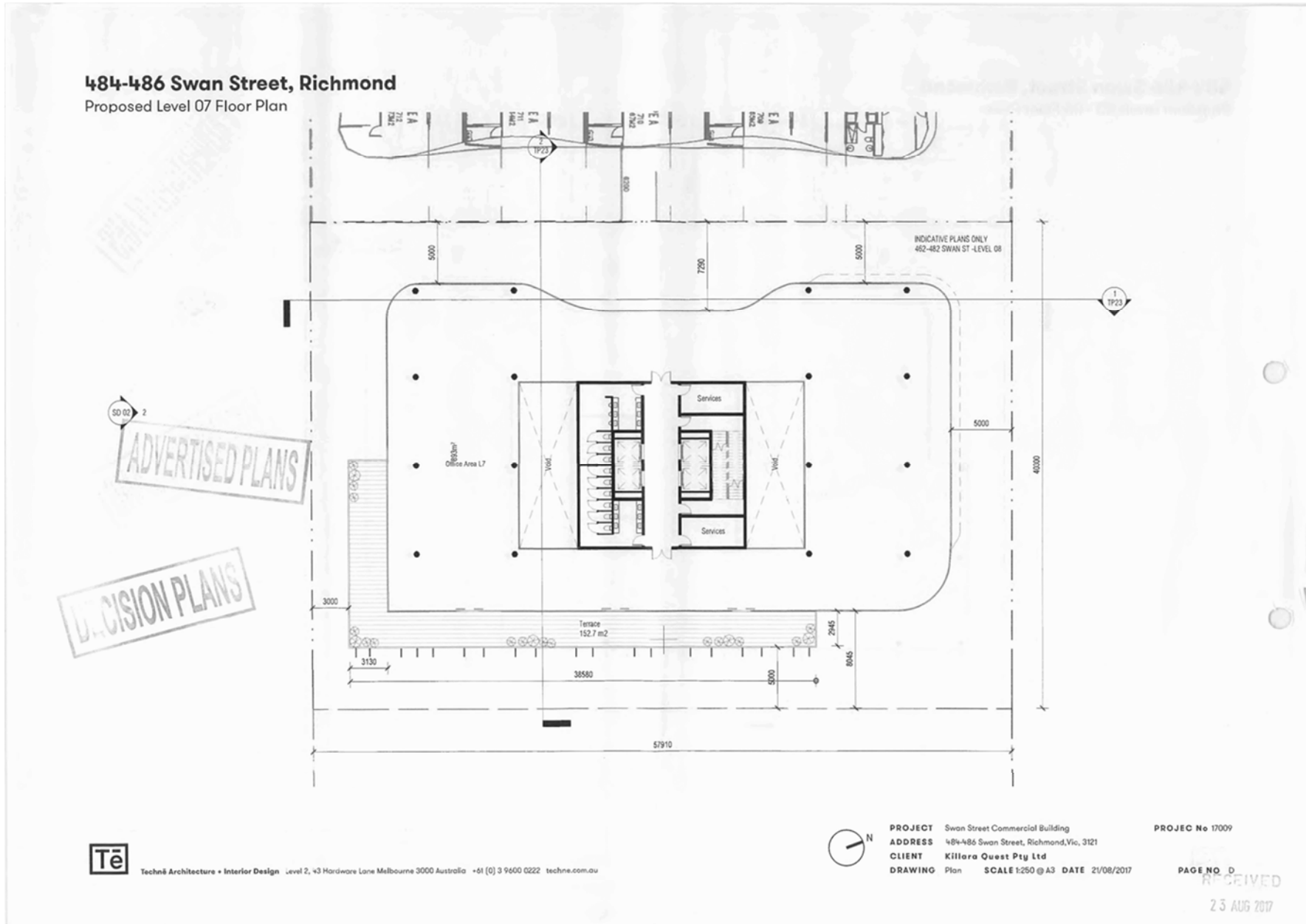
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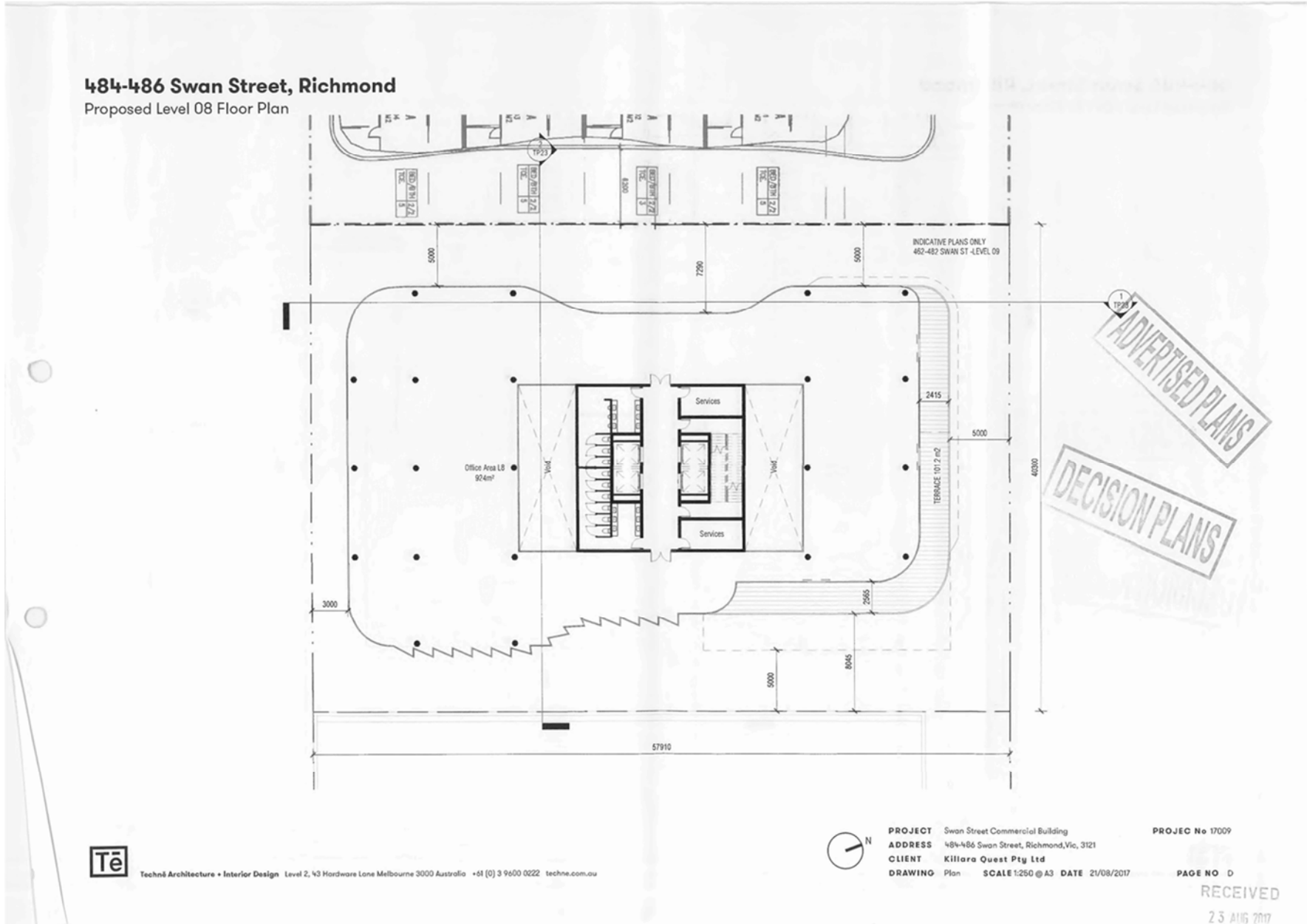


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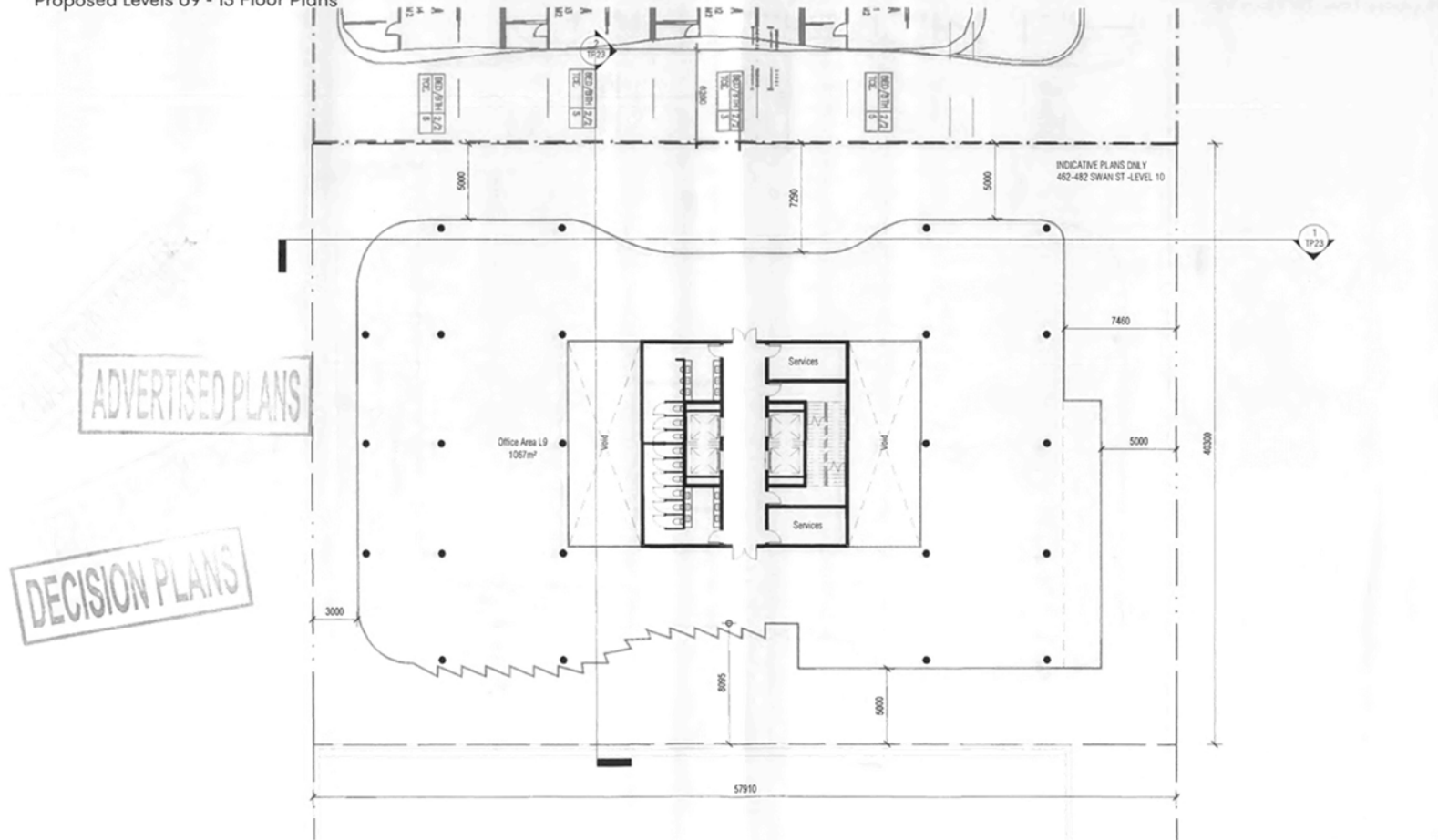
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Attachment 4 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - idac attachment

**484-486 Swan Street, Richmond**

Proposed Levels 09 - 13 Floor Plans



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**PROJECT** Swan Street Commercial Building  
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**CLIENT** Killara Quest Pty Ltd  
**DRAWING** Plan **SCALE** 1:250 @ A3 **DATE** 21/08/2017

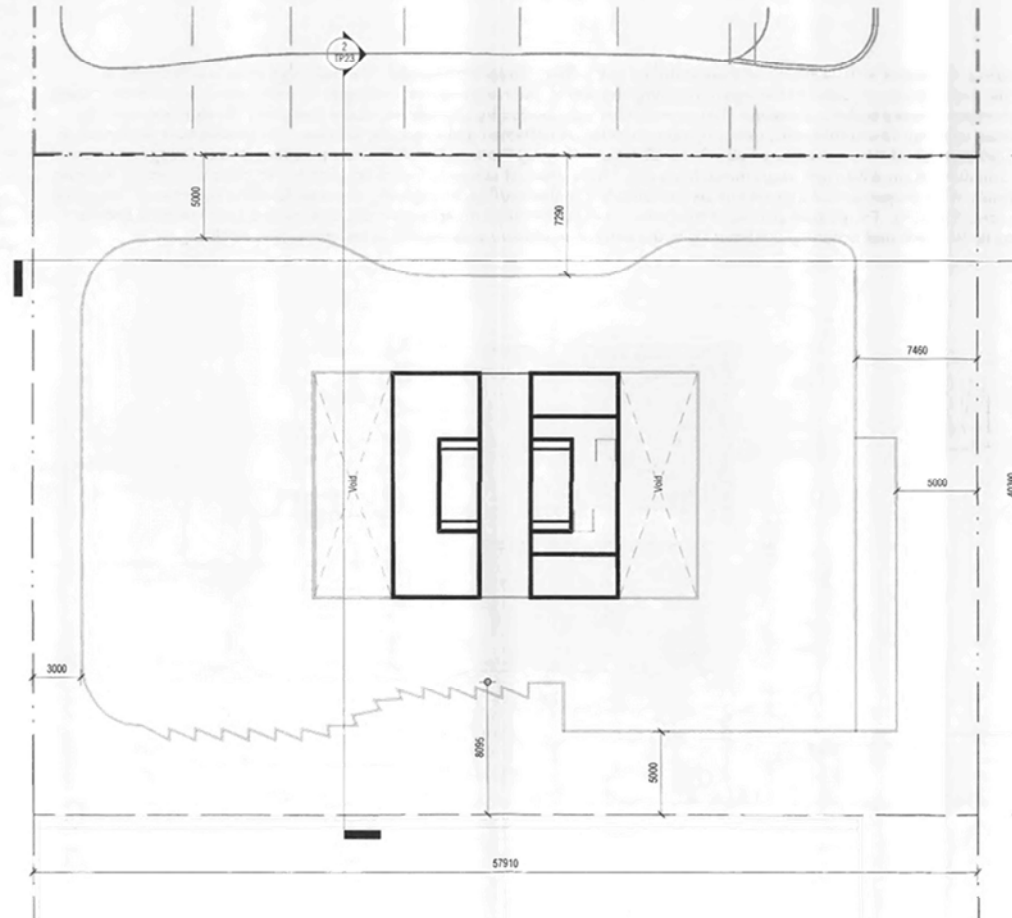
**PROJEC** No 17009

**PAGE** RECEIVED

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Attachment 4 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - idac attachment

**484-486 Swan Street, Richmond**  
Proposed Roof Plan



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**PROJECT** Swan Street Commercial Building **PROJEC No** 17009  
**ADDRESS** 484-486 Swan Street, Richmond, Vic, 3121  
**CLIENT** Killara Quest Pty Ltd  
**DRAWING** Plan **SCALE** 1:250 @ A3 **DATE** 21/08/2017 **PAGE NO** 0

Attachment 4 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - idac attachment

**484-486 Swan Street, Richmond**

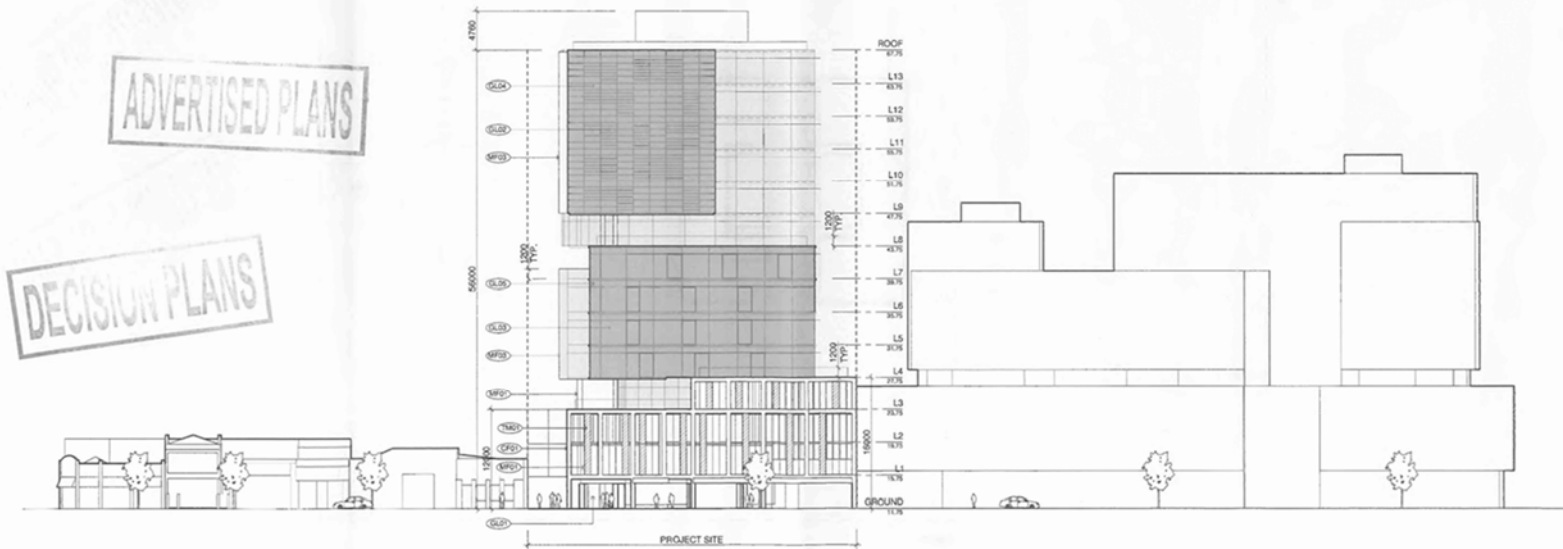
Proposed North Elevation

Architectural Statement:

The proposed building design considers its context in its aesthetic and presentation to the Swan Street streetscape. The building's mass is articulated to segment the form, into proportionate elements, clearly defined through materiality and detail. Each element responding to its atmospheric orientation, clearly communicating intentions of a performance based building envelope. The development is grounded by a pedestrian scale fine grain, of retail and amenity offerings, contained within an exposed concrete structural frame, providing opportunities for activated and engaging facades. The ground floor is setback to allow for a meaningful and significant cross-block link, connecting Swan Street directly to Burnley Station. This deliberate planning gesture, suggests a sort of "transport hub", providing access and destination driven pathways through the site. These areas of concentrated circulation are emphasized through lighting, planting, and seating. The upper levels of the proposed building present as sustainably oriented and technologically informed facades, by external mitigating devices such as louvers, and solar control glazing. The podium portion of the development presents as an approachable and inviting series of retail spaces, using more tactile materials such as timber, steel and concrete, contributing to the visual and sensory success of this important precinct link.

Materials Legend

CF01	Concrete Finish	Sealed
CF02	Concrete Finish	Textured
MF01	Metal Finish	Charcoal
MF02	Metal Finish	White
MF03	Metal Finish	Silver
TM01	Timber Finish	Sealed
GL01	Glazing	Clear
GL02	Glazing	Black Tinted
GL03	Glazing	Grey
GL04	Glazing	Black Tinted - Spandrel
GL05	Glazing	Grey - Spandrel



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**PROJECT** Swan Street Commercial Building  
**ADDRESS** 484-486 Swan Street, Richmond, Vic, 3121  
**CLIENT** Killara Quest Pty Ltd  
**DRAWING** Elevations **SCALE** 1:500 @ A3 **DATE** 21/08/2017

**PROJEC No** 17009  
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Attachment 4 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - idac attachment

**484-486 Swan Street, Richmond**  
Proposed East Elevation

**Materials Legend**

CF01	Concrete Finish	Sealed
CF02	Concrete Finish	Textured
MF01	Metal Finish	Charcoal
MF02	Metal Finish	White
MF03	Metal Finish	Silver
TM01	Timber Finish	Sealed
GL01	Glazing	Clear
GL02	Glazing	Black Tinted
GL03	Glazing	Grey
GL04	Glazing	Black Tinted - Spandrel
GL05	Glazing	Grey - Spandrel



ADVERTISED PLANS  
DECISION PLANS



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**PROJECT** Swan Street Commercial Building  
**ADDRESS** 484-486 Swan Street, Richmond, Vic, 3121  
**CLIENT** Killara Quest Pty Ltd  
**DRAWING** Elevations **SCALE** 1:500 @ A3 **DATE** 21/08/2017

**PROJEC No** 17009

**PAGE NO** 0

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Attachment 4 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - idac attachment

**484-486 Swan Street, Richmond**  
Proposed South Elevation

Materials Legend		
CF01	Concrete Finish	Sealed
CF02	Concrete Finish	Textured
MF01	Metal Finish	Charcoal
MF02	Metal Finish	White
MF03	Metal Finish	Silver
TM01	Timber Finish	Sealed
GL01	Glazing	Clear
GL02	Glazing	Black Tinted
GL03	Glazing	Grey
GL04	Glazing	Black Tinted - Spandrel
GL05	Glazing	Grey - Spandrel

The drawing shows a proposed south elevation of a building. It features a multi-story structure with a prominent central section. Material callouts on the left include GL05, GL04, GL03, GL02, GL01, MF03, MF02, MF01, TM01, CF02, and CF01. Level markers on the right range from GROUND (11.75) to ROOF (47.75), with intermediate levels L1 through L13. Dimensions for various sections are provided, such as 18000, 26000, and 12000. The drawing is overlaid with 'ADVERTISED PLANS' and 'DECISION PLANS' stamps.

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**PROJECT** Swan Street Commercial Building  
**ADDRESS** 484-486 Swan Street, Richmond, Vic, 3121  
**CLIENT** Killara Quest Pty Ltd  
**DRAWING** Elevations SCALE 1:500 @ A3 DATE 21/08/2017

**PROJEC No** 17009  
**PAGE NO.** 0

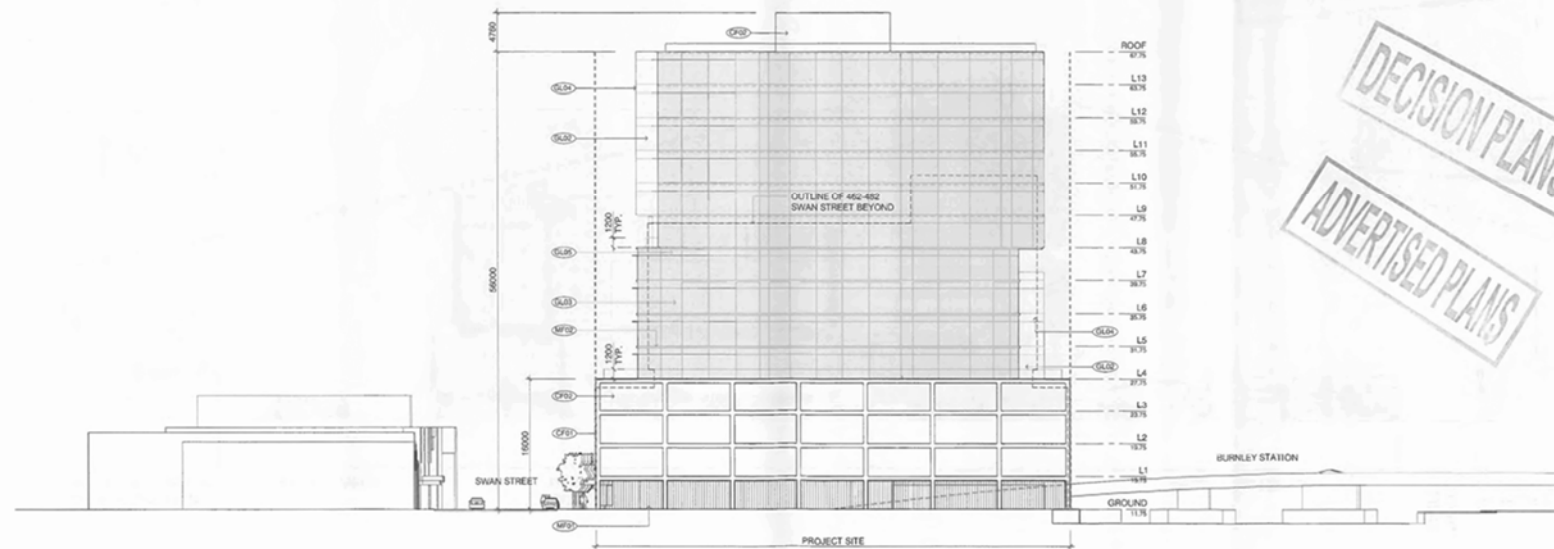
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Attachment 5 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - west elevation - idac attachment

**484-486 Swan Street, Richmond**  
Proposed West Elevation

**Materials Legend**

CF01	Concrete Finish	Sealed
CF02	Concrete Finish	Textured
MF01	Metal Finish	Charcoal
MF02	Metal Finish	White
MF03	Metal Finish	Silver
TM01	Timber Finish	Sealed
GL01	Glazing	Clear
GL02	Glazing	Black Tinted
GL03	Glazing	Grey
GL04	Glazing	Black Tinted - Spandrel
GL05	Glazing	Grey - Spandrel

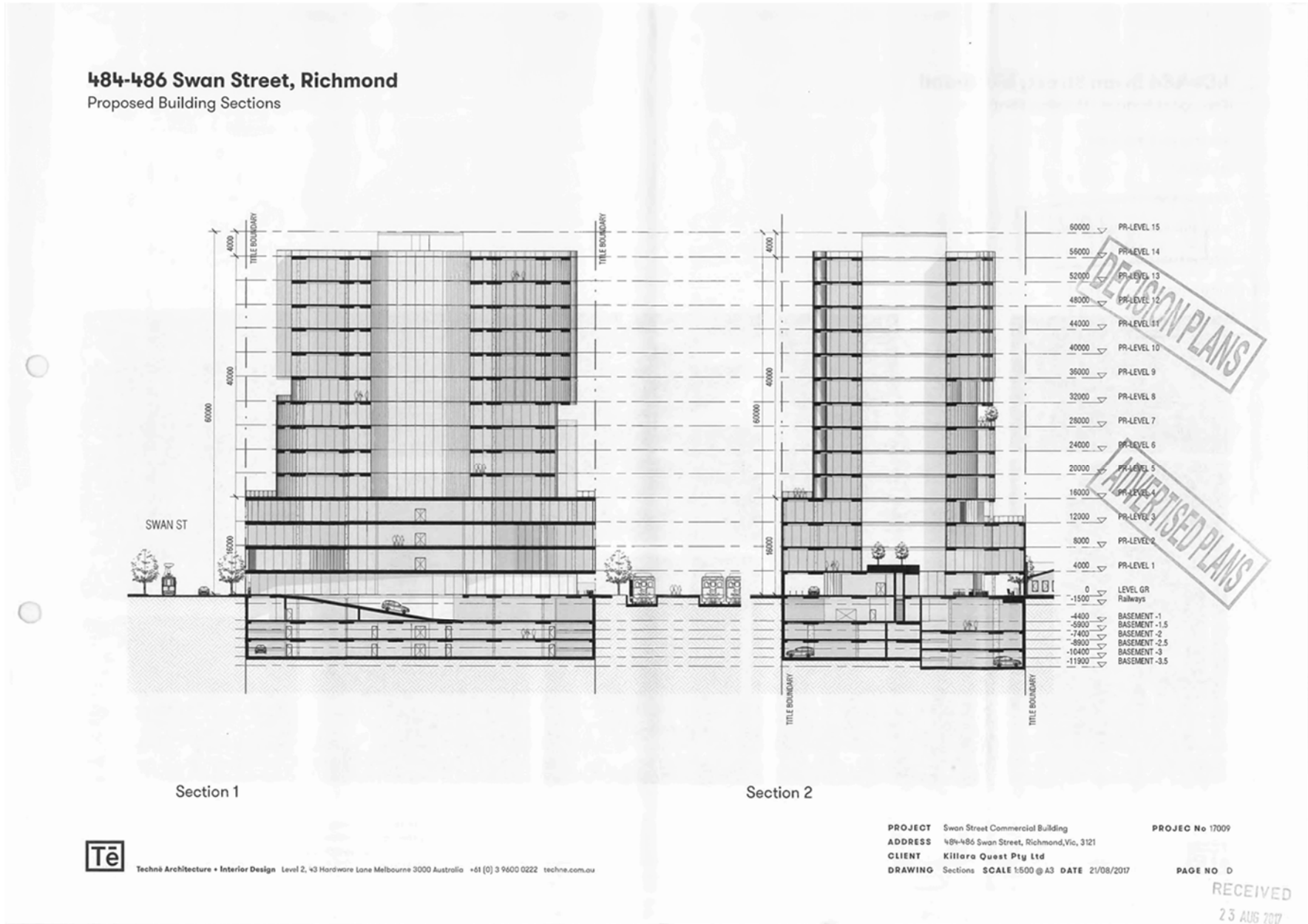


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**PROJECT** Swan Street Commercial Building  
**ADDRESS** 484-486 Swan Street, Richmond, Vic, 3121  
**CLIENT** Killara Quest Pty Ltd  
**DRAWING** Elevations **SCALE** 1:500 @ A3 **DATE** 21/08/2017  
**PROJEC No** 17009  
**PAGE NO** D

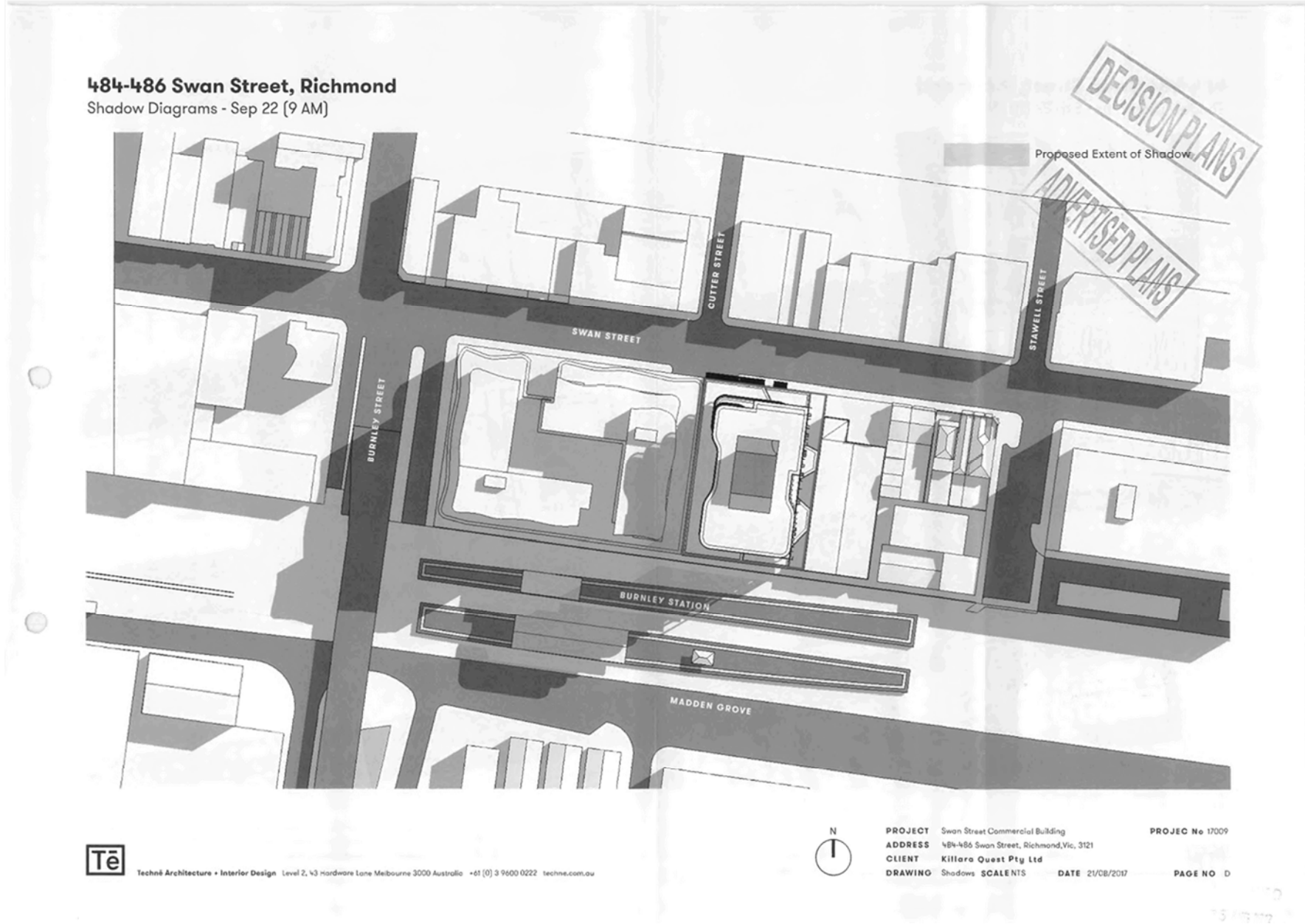
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Attachment 6 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - decision plans - sections - idac attachment

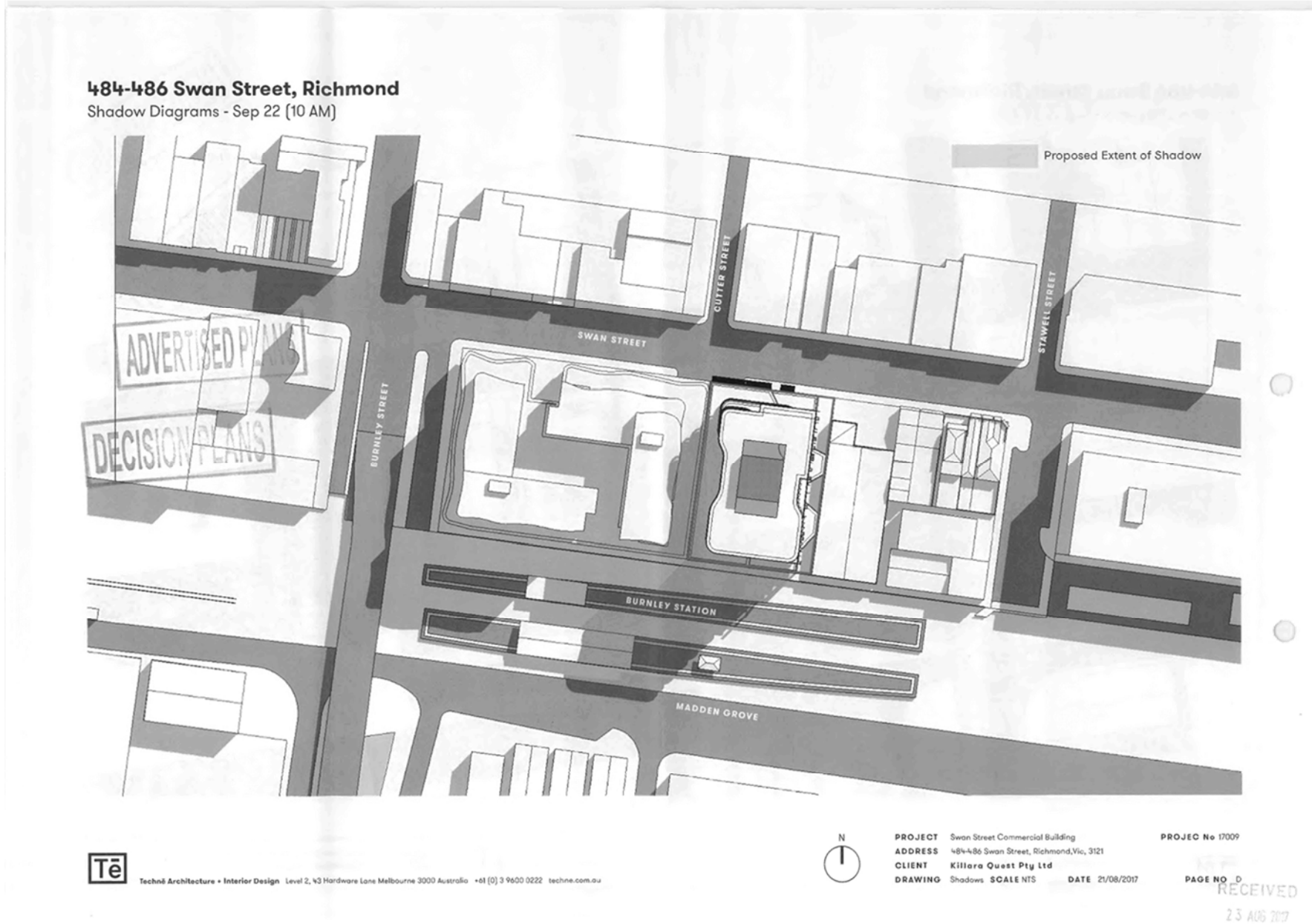




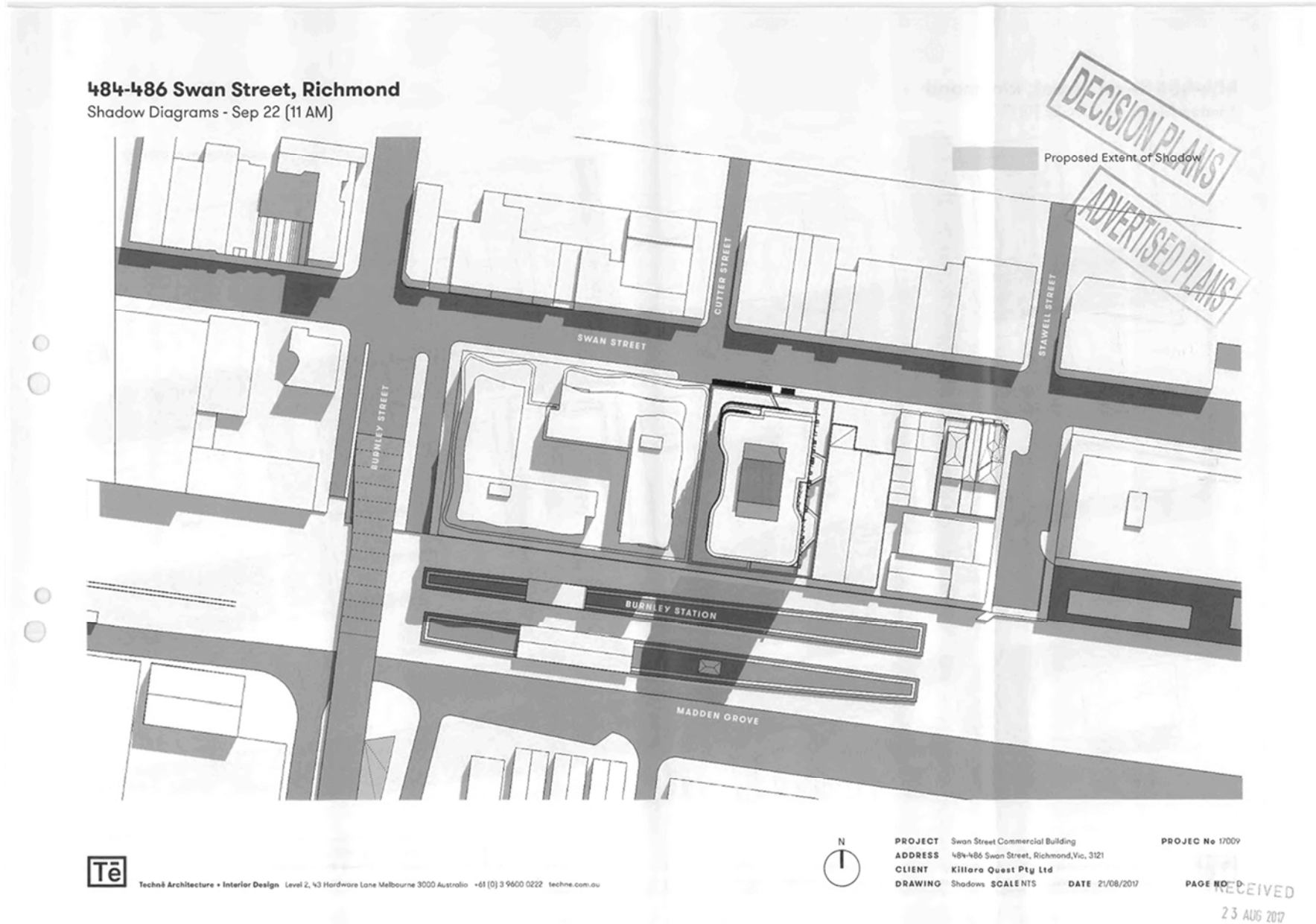
Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment



Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment



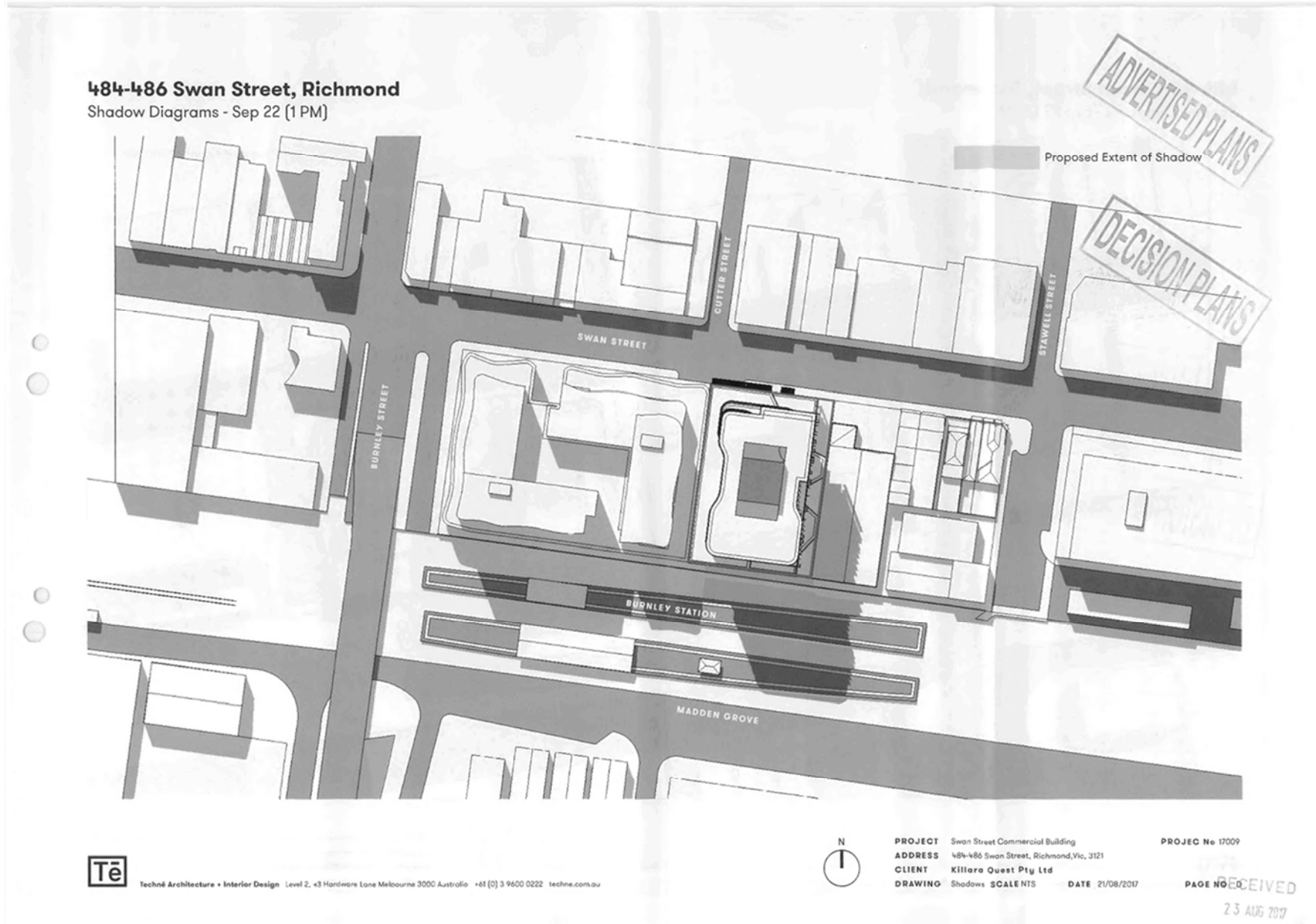
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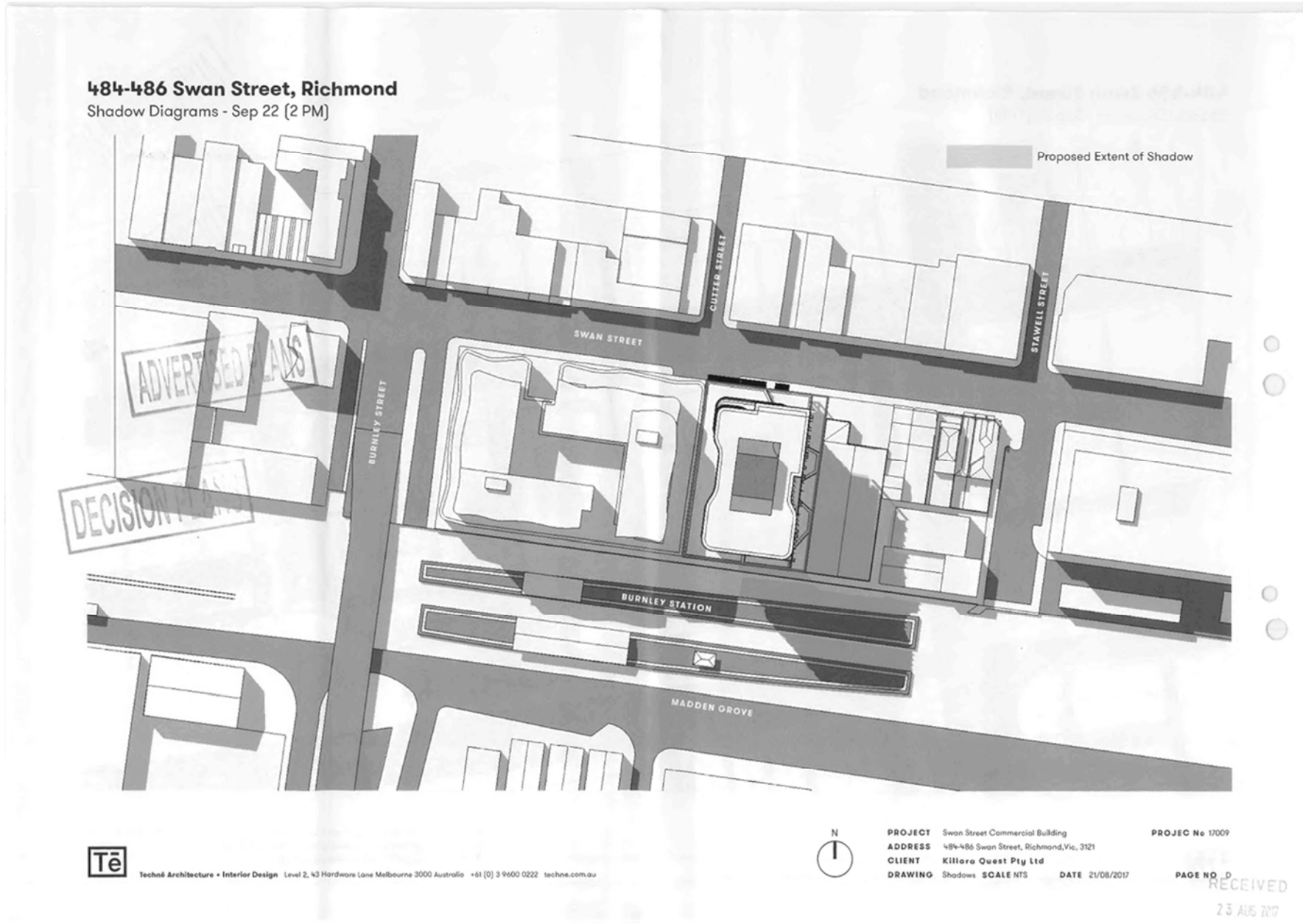
Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment



Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment



Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment



Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment

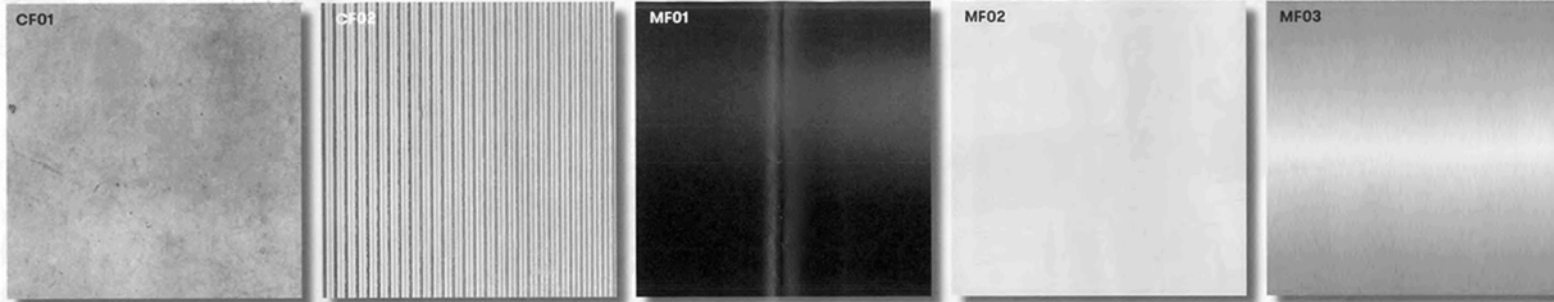


Attachment 7 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - shadows - idac attachment

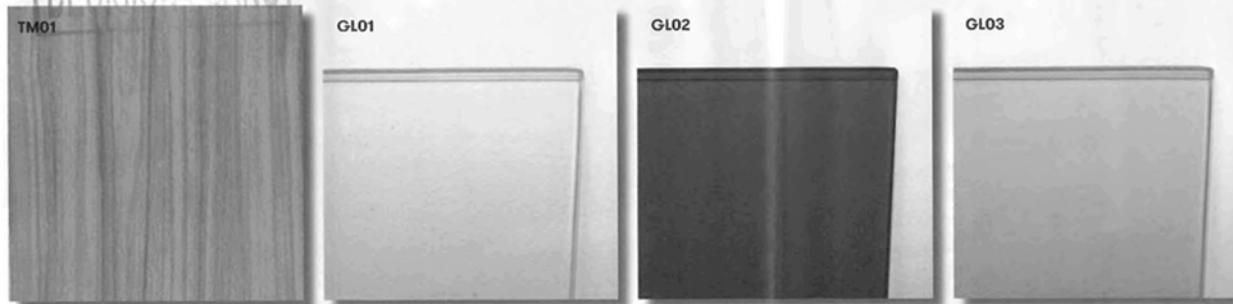
484-486 Swan Street, Richmond

Materials Schedule

ADVERTISED PLANS



DECISION PLANS



Materials Legend

CF01	Concrete Finish	Sealed
CF02	Concrete Finish	Textured
MF01	Metal Finish	Charcoal
MF02	Metal Finish	White
MF03	Metal Finish	Silver
TM01	Timber Finish	Sealed
GL01	Glazing	Clear
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PROJECT Swan Street Commercial Building  
ADDRESS 484-486 Swan Street, Richmond, Vic, 3121  
CLIENT Killara Quest Pty Ltd  
DRAWING SCALE DATE 21/08/2017

PROJEC No 17009

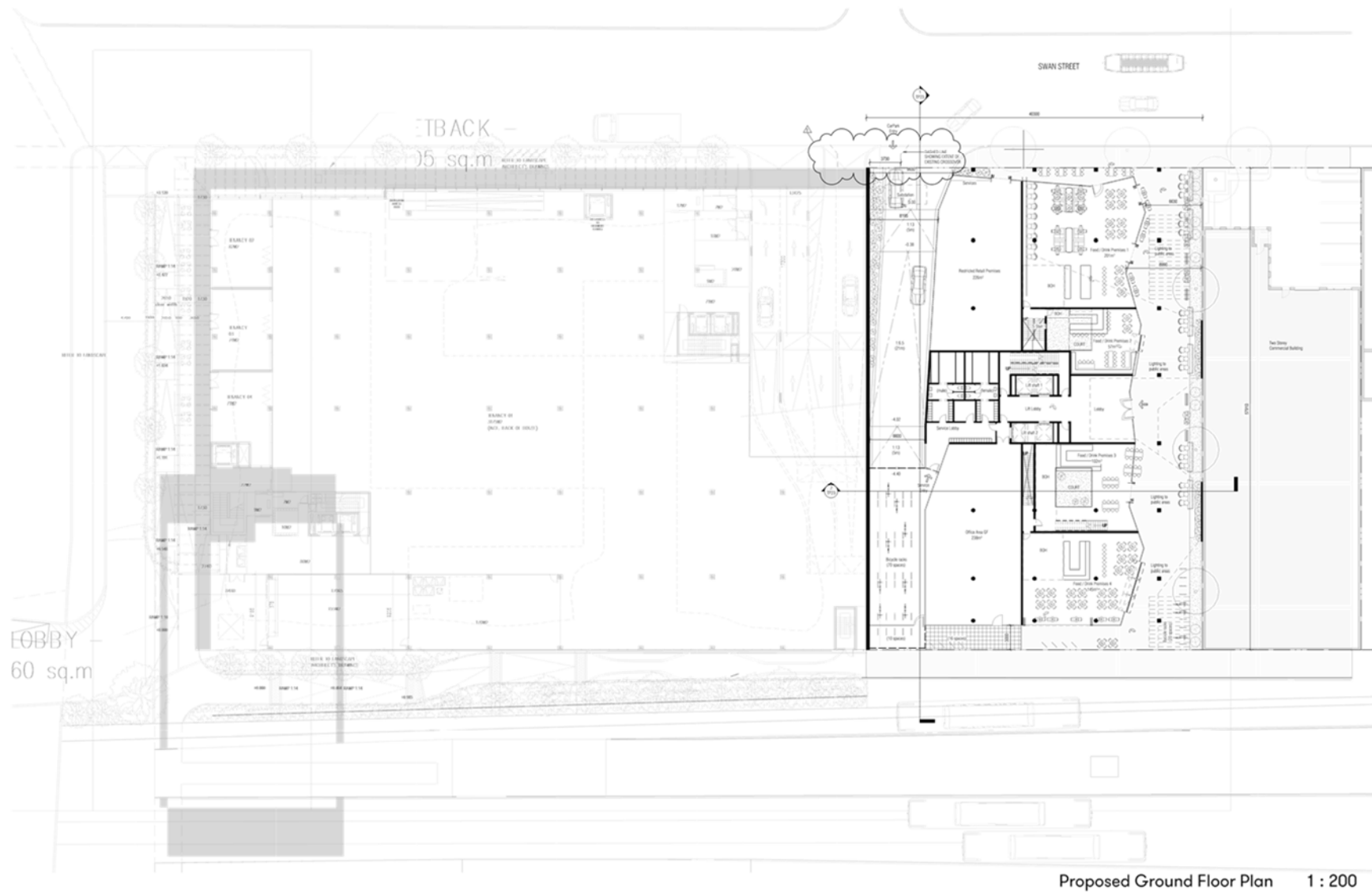
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Attachment 8 - PLN17/0448-03 - 484 - 486 Swan Street Richmond - updated ground floor plan showing crossover - sketch plan



Proposed Ground Floor Plan 1 : 200

CHECK SCALE FROM DRAWING. BUILDING TO CHECK DIMENSIONS ON SITE. TECHNICAL ARCHITECTURE INTERIOR DESIGN & FURNITURE COPY WORKING DRAWINGS TO THIS DRAWING - KEVIN THORNTON.	WORKING FOR THE BELOW SHOWN DATES: A. 21.08.2017 481 Submission B. 08.03.2018 481 Submission
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<b>Technē Architecture</b> • Interior Design Level 2, 43 Hawthorne Lane Melbourne 3000 Australia +61 (0) 3 9050 0222 technē.com.au	<b>SWAN ST COMMERCIAL BUILDING</b> PROJECT NO: 1100P ADDRESS: 484-486 Swan Street Richmond VIC 3121	DRAWING NO: A1 DRAWN BY: DE CHECKED BY: JK DATE ISSUED: 06/06/18 NORTH	<b>TOWN PLANNING</b> <b>TP11 B</b>	
	CLIENT: Bloor/Bre			