

15 June 2020

Michelle King
Acting Principal Planner
Yarra City Council
333 Bridge Road
Richmond VIC 3121

Dear Michelle

**WITHOUT PREJUDICE
RESPONSE TO MGS ARCHITECTS URBAN DESIGN REFERRAL
PLN20/0006 - 462-482 SWAN STREET, RICHMOND**

Human Habitats continues to act on behalf of the applicant, Charter Hall, in relation to the planning permit application (PLN20/0006) for the land at 462 – 482 Swan Street, Richmond (the subject site) and provide letter that builds upon the without prejudice letter dated 05 June 2020. This letter is accompanied by the following supporting material:

1. Façade Package
2. Roof/Plant Plan
3. Shadow Diagrams

1 Urban Design (MGS Architects)

The following provides a supplementary responses to the responses provided in the without prejudice letter dated 05 June 2020.

1.1 Recommendation 1 (Podium & Street Wall Interfaces)

Recommendation 1 seeks to provide greater diversity of expression of the podium and requires that the podium expression is further developed to capture the character and history of the area. We have undertaken a detailed review of the podium composition following the receipt of the MGS Architects Recommendation 1.

In response to Recommendation 1, Architectus have prepared a revised façade package, which further details the design methodology behind the RFI podium response, which we believe generally captured the variance in the architectural expression of built form along Swan Street and within the local area.

The façade package details how the proposed façade responds to “frame”, “grain”, and “punctures”. This is highlighted in the below extracts from the façade package:

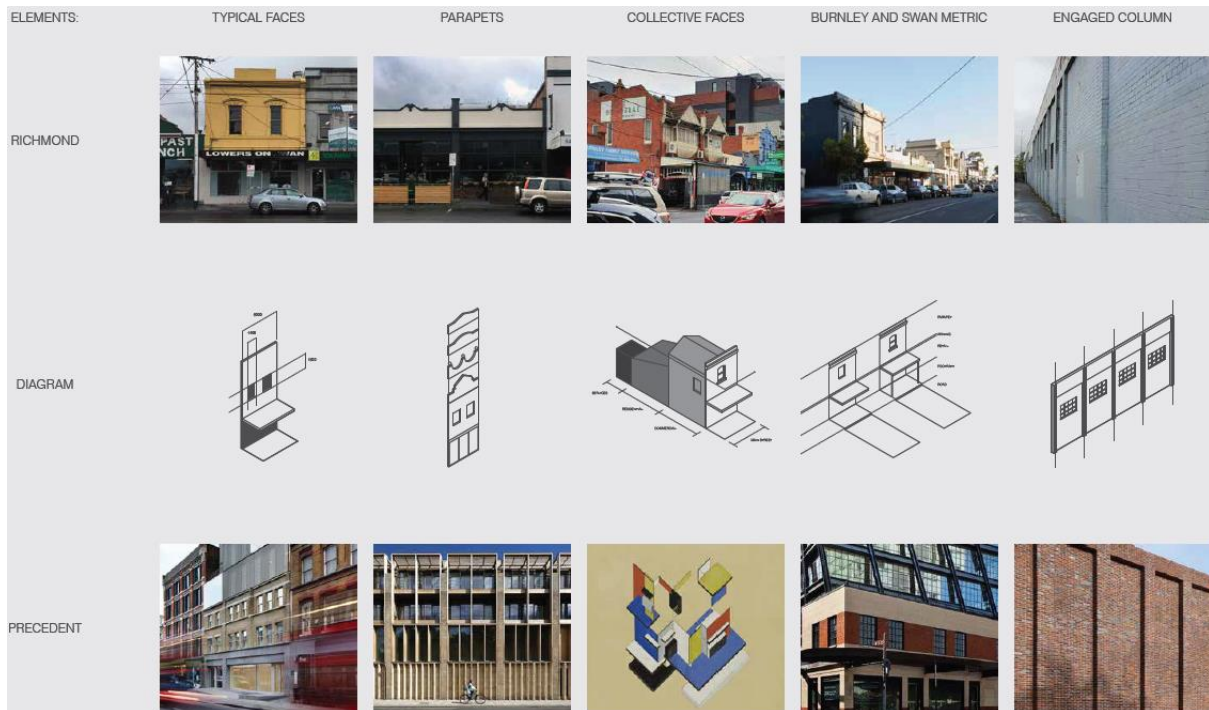


Figure 1 – Extract from the façade package, page 7

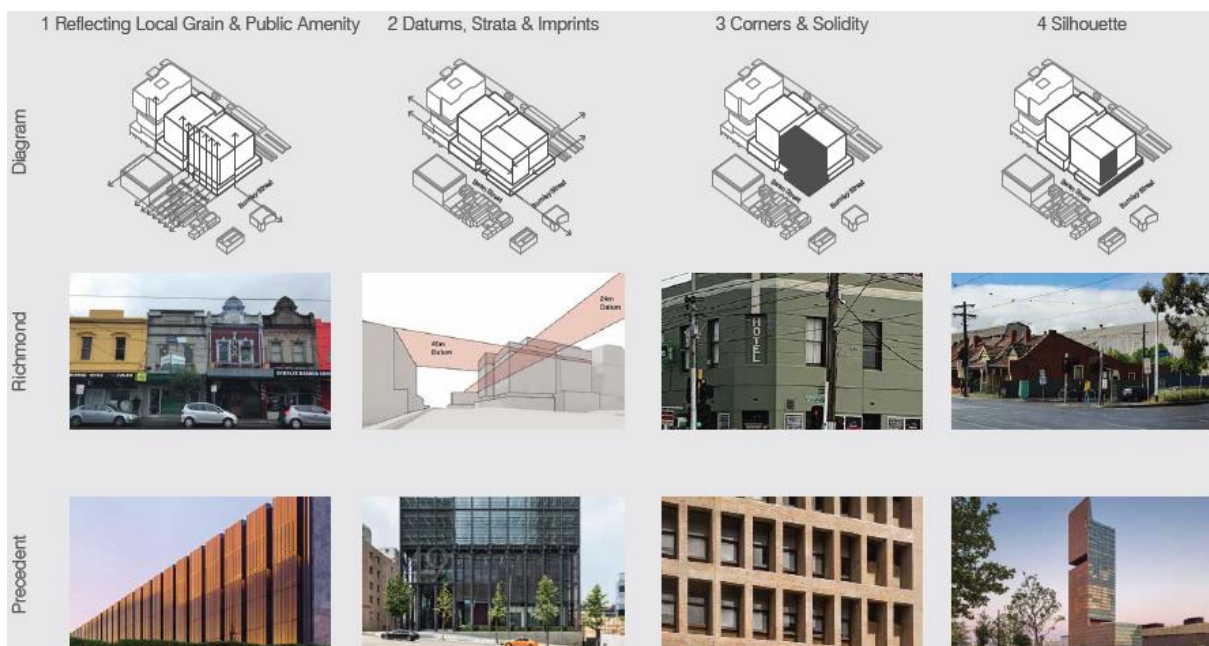


Figure 2 – Extract from the façade package, page 8

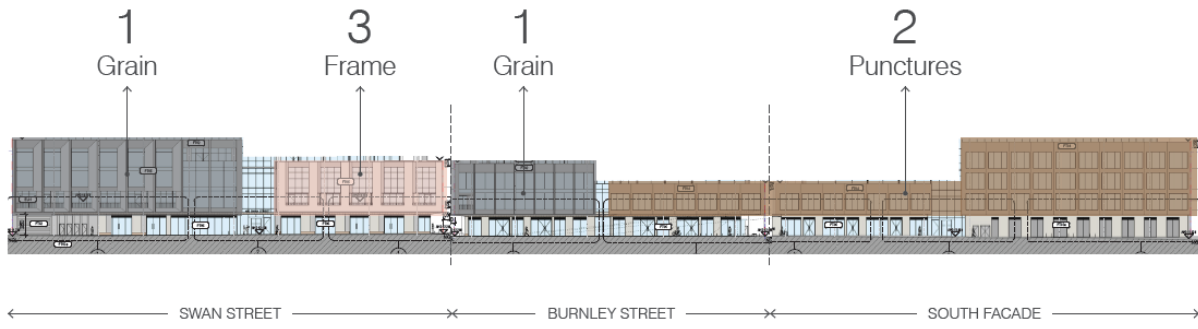


Figure 3 – Extract from the façade package, page 10

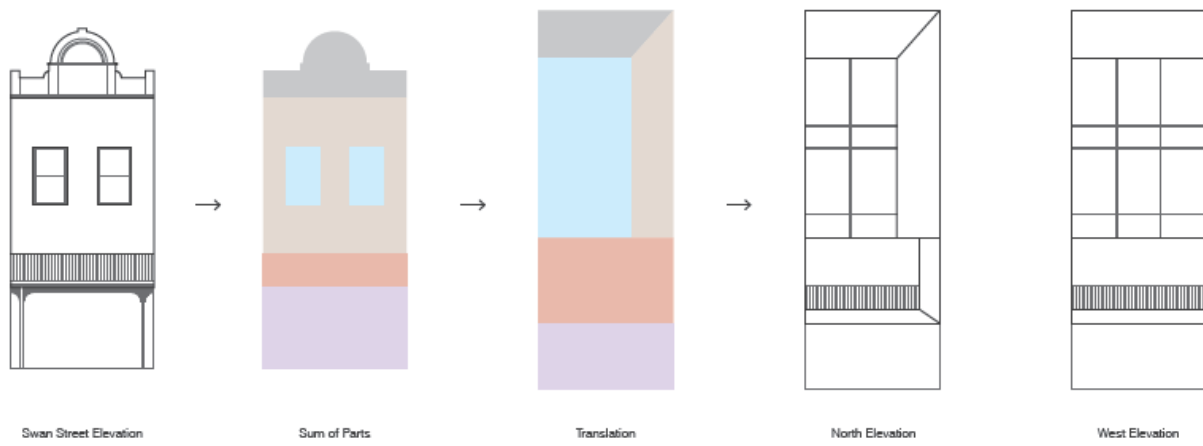


Figure 4 – Frame: Extract from the façade package, page 11

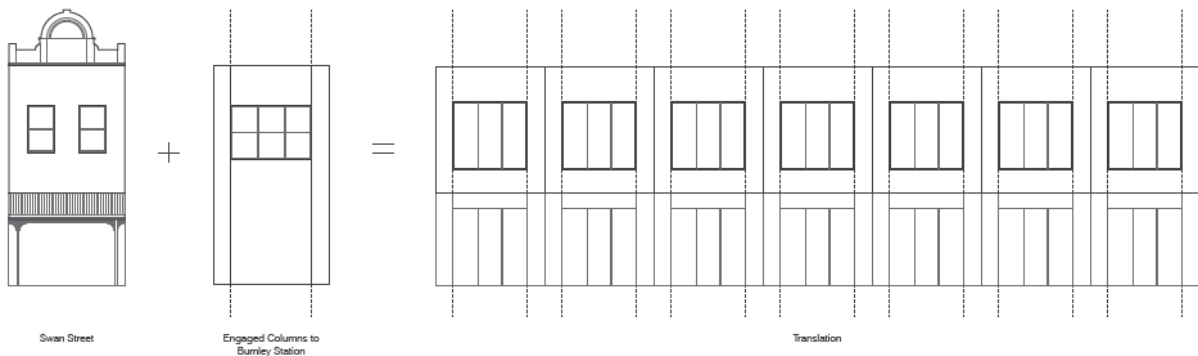


Figure 5 – Punctures: Extract from the façade package, page 12

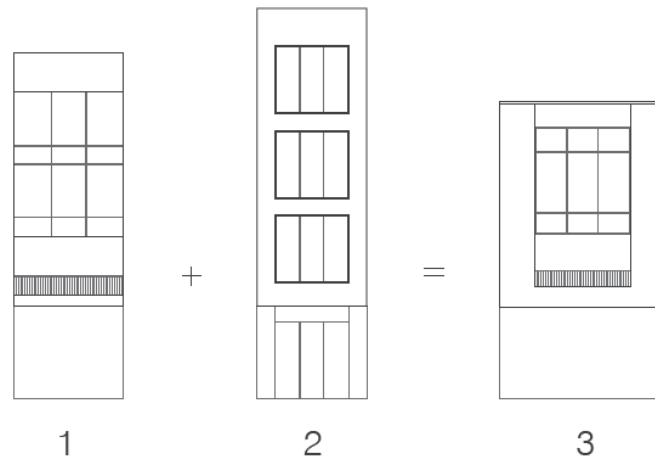


Figure 6 – Frame: Extract from the façade package, page 13

The above said, it is acknowledged that the eastern portion of the Swan Street façade and the northern portion of the Burnley Street façade relied upon a similar architectural expression to clearly link the Burnley and Swan Street podiums. However, acknowledging that MGS Architects cites this treatment as being overly uniform, we have sought to provide greater differentiation to the eastern portion of the Swan Street façade. This has been achieved through the introduction of a new element, “piers”.

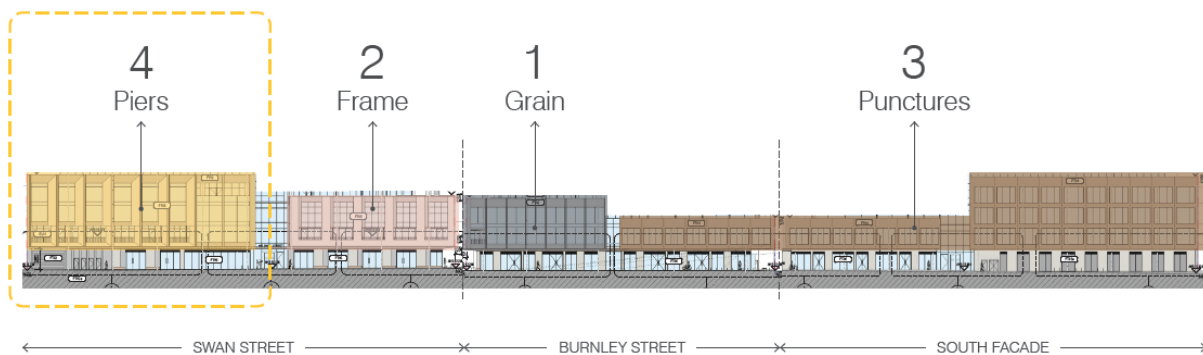


Figure 7 – Piers: Extract from the façade package, page 18

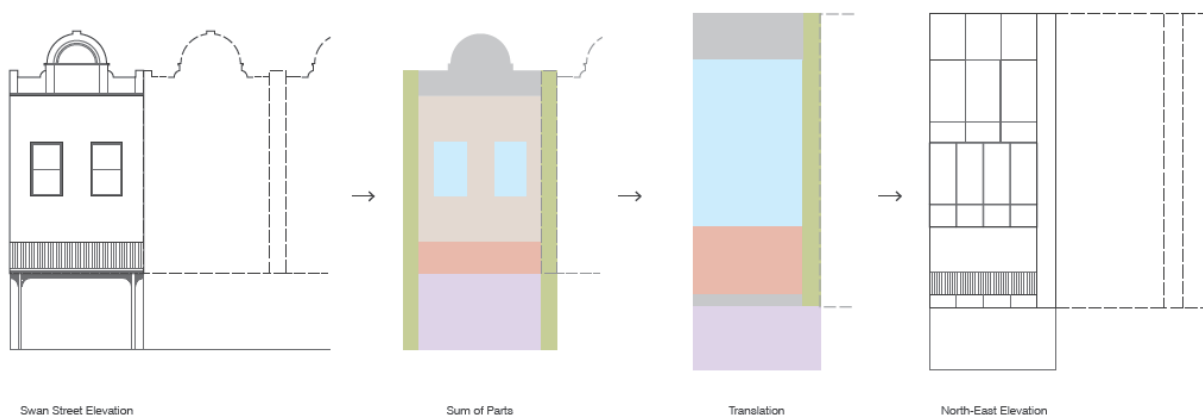
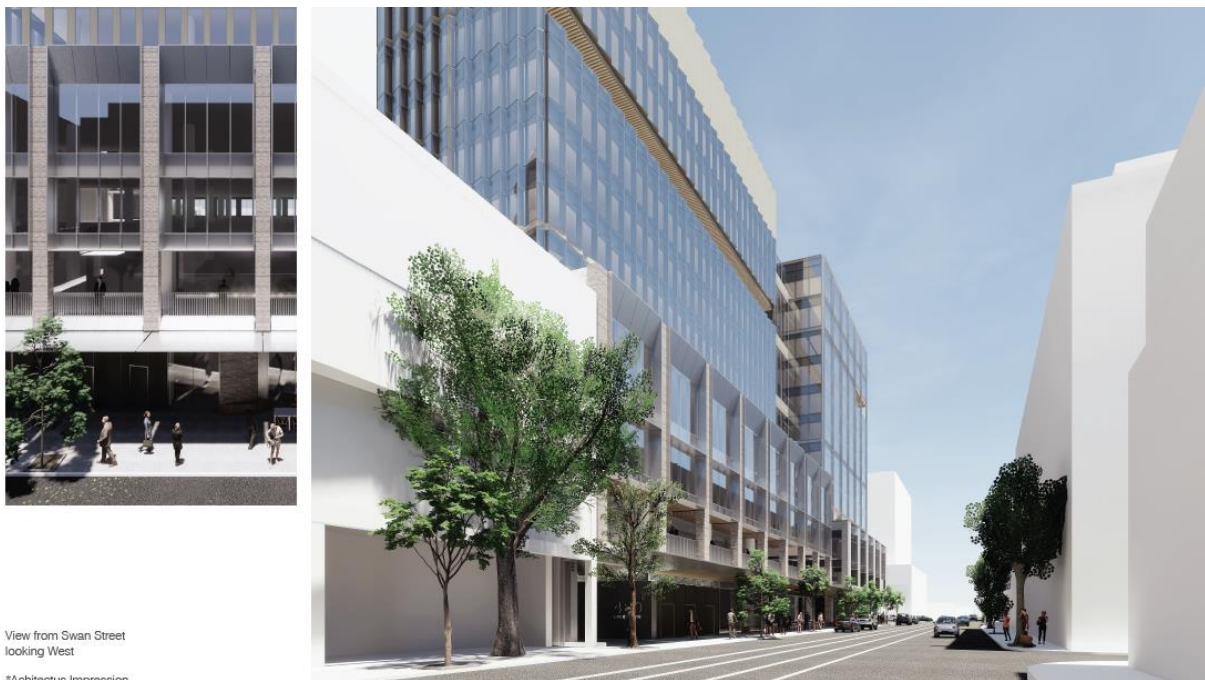


Figure 8 – Extract from the façade package, page 20

The introduction of the piers adds an additional element of rigidity to this part of the podium and emphasising the vertical elements of the podium expression. It is considered that this suitably differentiates the podium presentation in acknowledgement of the rich architectural character of Richmond.



View from Swan Street
looking West
*Architectural Imagination

Figure 9 – The proposed podium treatment, extract from façade package, page 22

1.2 Recommendations 2 & 3 (A – South-West Interface)

In addition to the previously provided without prejudice Level 10 and Level 11 floor plates, we now provide a roof plan, which includes minimum dimensions from the boundaries. We note that the project is still within the early stages of detailed design and the true spatial requirements of the plant yet to be confirmed.

Building on the previous responses to MGS Architects Recommendations 2 & 3 (A) we provide the enclosed shadow diagrams which illustrate the shadow impacts of the proposed setbacks between the hours of 9am and 3pm on the 22nd September. In order to clearly demonstrate the differences between the shadows cast by the RFI the reduced shaded areas have also been tabulated.

2 Summary

We trust that the above response will provide Council with the additional information required to complete their assessment and potential conditions in relation to the above matters.

If there are any further matters at this time, please do not hesitate to contact the undersigned on 03 9909 2202 or by email to jgrech@humanhabitats.com.au.

Yours sincerely



Joe Grech
Senior Planner



Prepared for: Charter Hall
Date: June 12, 2020

Facade Design Review

480 Swan Street

Contents

1	Summary of Feedback
2	Consolidation of Podium Design Strategy
3	Current Podium Design Views
4	Additional Alternative Facade Type

1 Summary of Feedback

Summary of Feedback

Recommendation 1

COMMENTARY AND RECOMMENDATIONS

Podiums and Street wall interfaces.

- 88. In the pre-application meeting with the applicant attention was brought to the emphasis council south in the response to key elements of Local Urban Design Policy and the site specific Design and Development overlay outlined in Schedule 14.
- 89. In particular I was keen to see responses to the following criteria through greater diversity of expression and scale.

Commentary and recommendations

- 90. The massing of street-wall lower tier elements is in my view appropriately stepped along the Swan Street corner to Burnley Street and down to the Station to the corner of Burnley Street and Swan Street and downwards to the east and South.
- 91. In my view the proposed scale of these elements is appropriate, and provide the framework for an appropriate response.
- 92. Of concern currently however, is the uniformity of the proposed treatment of these responses with the eastern end of the Swan Street frontage, a location in an infill setting, given the same design language and finish as the primary corner façade on Burnley Street at the principle interface of the two roads.
- 93. This continuity amplifies the notion of a single institution expression and conceptual solution rather than addressing the fine grain character, diversity and richness of detail and materiality characteristic of this part of Richmond.
- 94. The response is inconsistent with the richness of response to context sort in the Local Policy and DDO provisions in my view and as underlined in the report.



- 95. An opportunity for example may exist to draw on the earlier industrial history of the site as a Timber Yards and Mills in the hinterland Station interface expression noting the use in a more polished and corporate manner I n the soffit treatments of the projecting canopy corner.

Recommendation 1

I would invite the applicant to review the design expression east of the primary north south entrance in Swan Street for each of the podium levels and the Burnley Street zone south of the projecting corner form to explore opportunities to invest the narrative of the site with a deeper and more diversified response to the precinct, its subdivision character and its history consistent with the Objectives and Guidelines goals outlined in CI 22.10-3.2 Urban form and character.



22.10-3.2 Urban form and character

Design Objectives

- To retain and extend the City's fine grain of street pattern and urban form.
- To ensure that developments contribute positively to the urban fabric and public realm.
- To improve the transparency and legibility of the city's urban form and structure.
- To achieve continuity in the built form having regard to rhythm and spacing of buildings and any distinctive street pattern (as identified in the Site Analysis Plan and Design Response).

Design Guidelines

- Within large redevelopment sites, design a vehicle and pedestrian network that ensures a high level of access within the development for all vehicular and non-vehicular traffic that connects and integrates with the broader network.
- New development on large remnant sites should respect any existing prevailing subdivision pattern (as identified in the Site Analysis Plan and Design Response) by providing adequate separation between buildings and modular building bulk rather than unbroken mass.

Express the original fine-grained subdivision pattern in building design, massing, modulation and facade articulation.

Within sites removed from the small lot, fine-grain areas of the city, create a new urban character that adds to the layering of the city's historical evolution.

Summary of Feedback

Key Design Items

Commentary

92. Of concern currently however, is the uniformity of the proposed treatment of these responses with the eastern end of the Swan Street frontage, a location in an infill setting, given the same design language and finish as the primary corner façade on Burnley Street at the principle interface of the two roads.

95. An opportunity for example may exist to draw on the earlier industrial history of the site as a Timber Yards and Mills in the hinterland Station interface expression noting the use in a more polished and corporate manner in the soffit treatments of the projecting canopy corner.

explore opportunities to invest the narrative of the site with a deeper and more diversified response to the precinct, its subdivision character and its history consistent with the Objectives and Guidelines goals outlined in CI 22.10-3.2 Urban form and character.

Express the original fine-grained subdivision pattern in building design, massing, modulation and facade articulation.

Within sites removed from the small lot, fine-grain areas of the city, create a new urban character that adds to the layering of the city's historical evolution.

Facade Design Item

1. Further distinguish North East facade from corner treatment

2. Draw further on the historic industrial materiality and architectural language of the Mills

3. Express a clearer connection to site, with more legible distinct facade types

4. Express the original subdivision pattern in the facade articulation

5. Where the site was not previously finely articulated, the new facade should draw on and build upon the historic architectural character

2 Consolidation of Podium Design Strategy

Summary of Urban Analysis

Urban Context

ELEMENTS:

TYPICAL FACES

PARAPETS

COLLECTIVE FACES

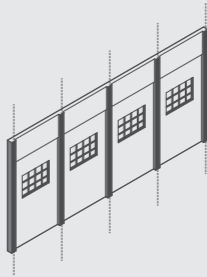
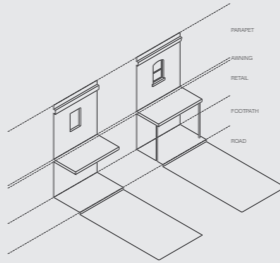
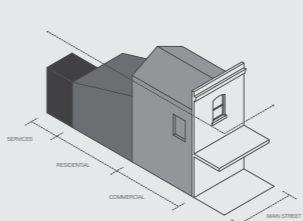
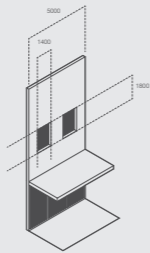
BURNLEY AND SWAN METRIC

ENGAGED COLUMN

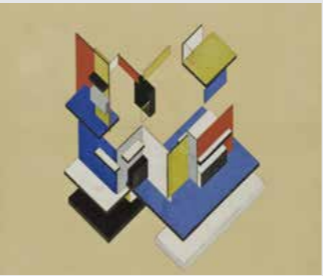
RICHMOND



DIAGRAM

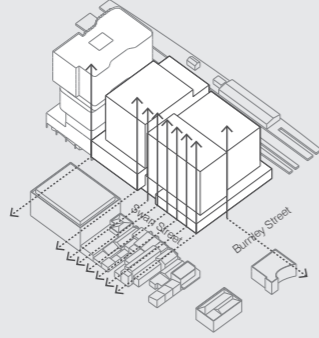
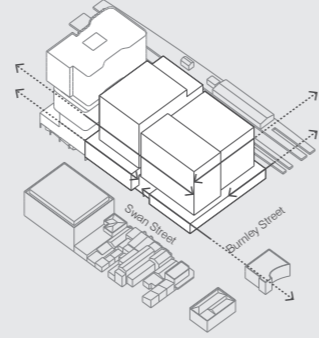
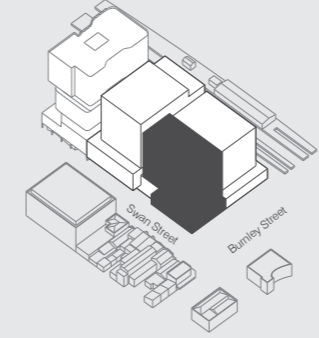
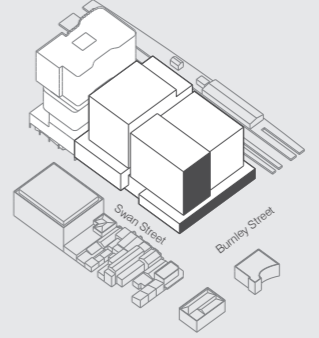

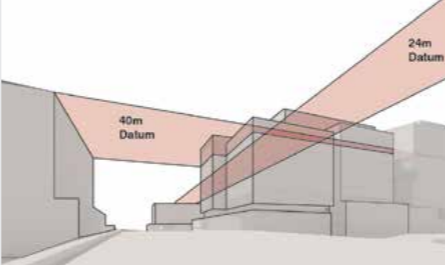








PRECEDENT

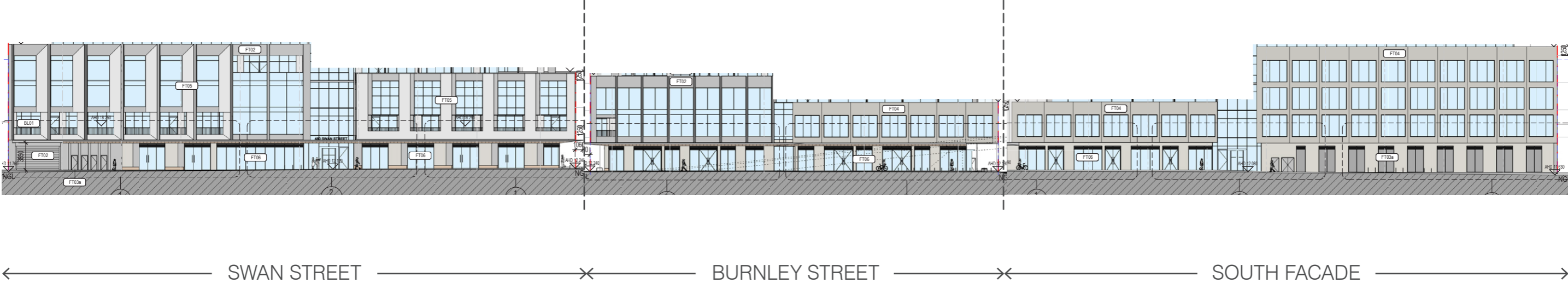


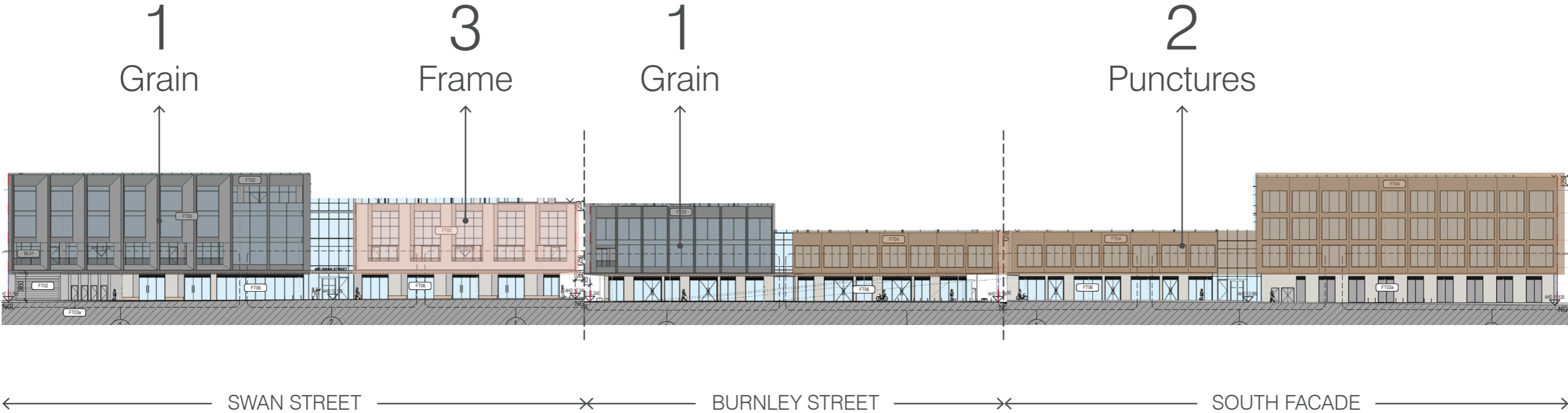
Summary of Design Principles

Design Principles

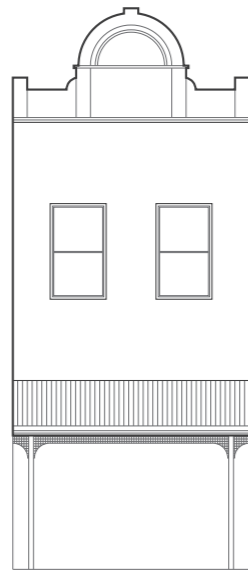
	1 Reflecting Local Grain & Public Amenity	2 Datums, Strata & Imprints	3 Corners & Solidity	4 Silhouette
Diagram				
Richmond				
Precedent				

Review of Proposed Unfolded Podium Elevation 17.04.2020

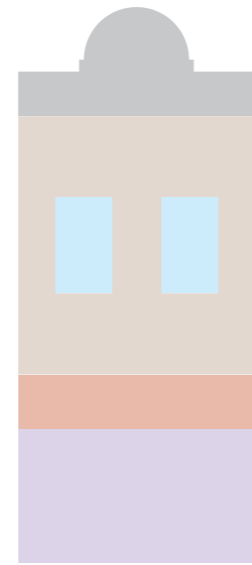




Type 1 - Grain



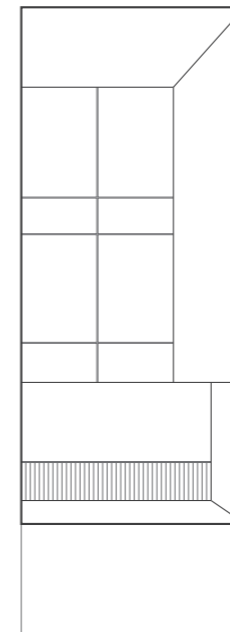
Swan Street Elevation



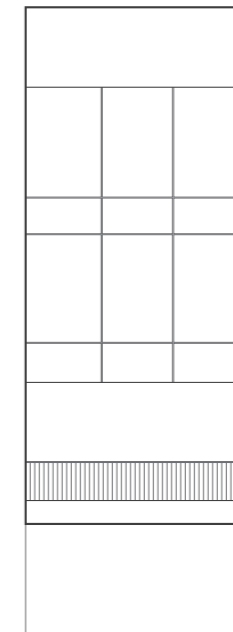
Sum of Parts



Translation



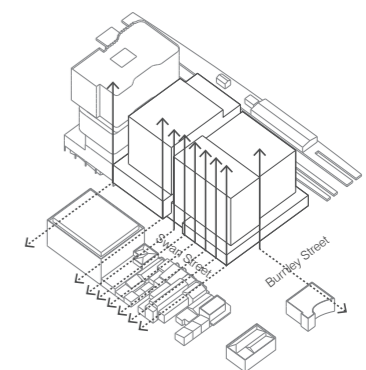
North Elevation



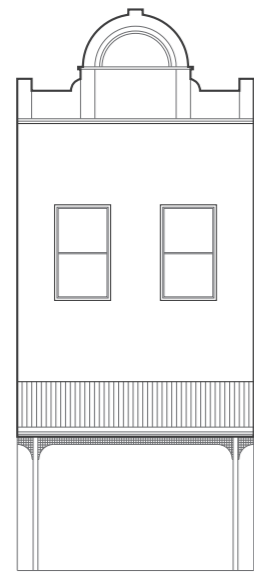
West Elevation

Facade Type 1 draws from the architectural elements along Swan Street by consolidating them into a 'sum of parts'. A process of translation was conducted to produce a final assemblage. This was then applied to the North and West Facade in order to reflect the local grain through materiality and proportion.

1 Reflecting Local Grain & Public Amenity

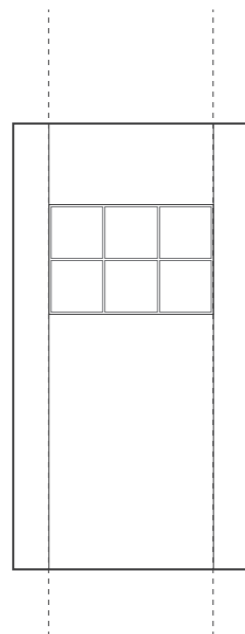


Type 2 - Punctures



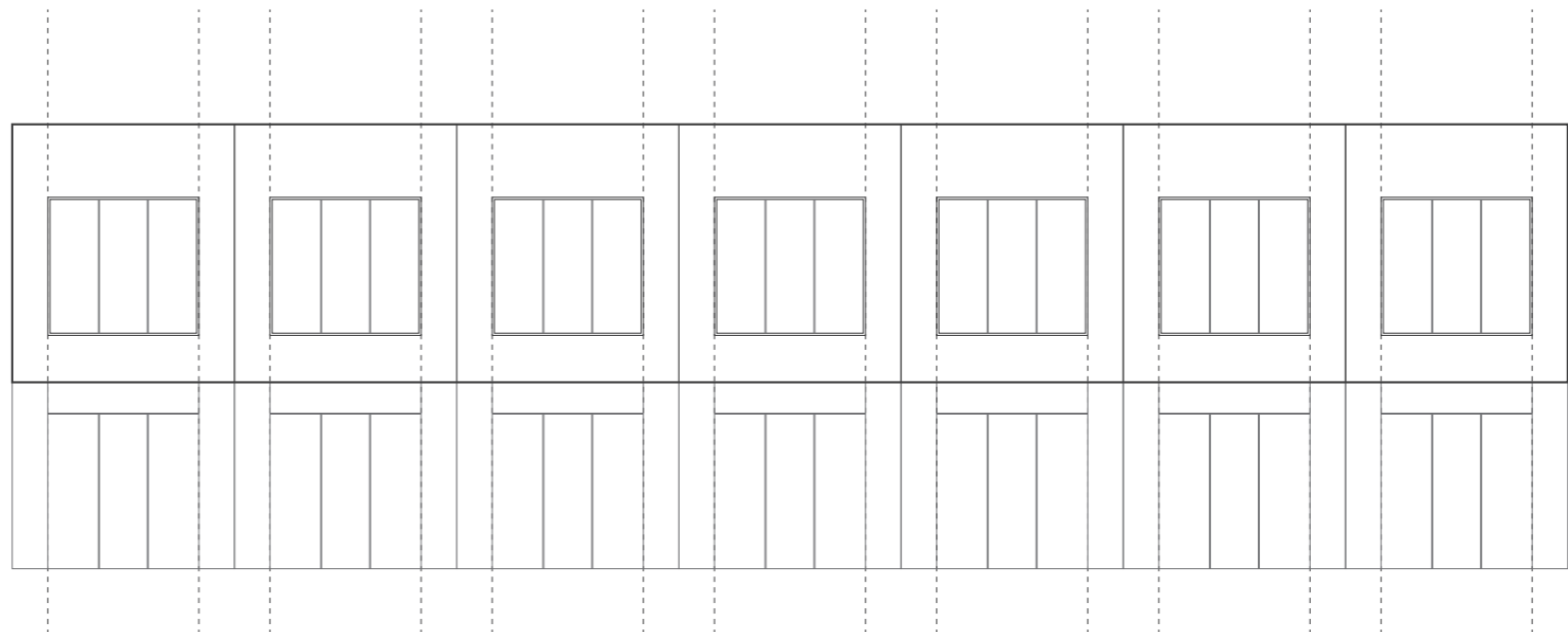
Swan Street

+



Engaged Columns to
Burnley Station

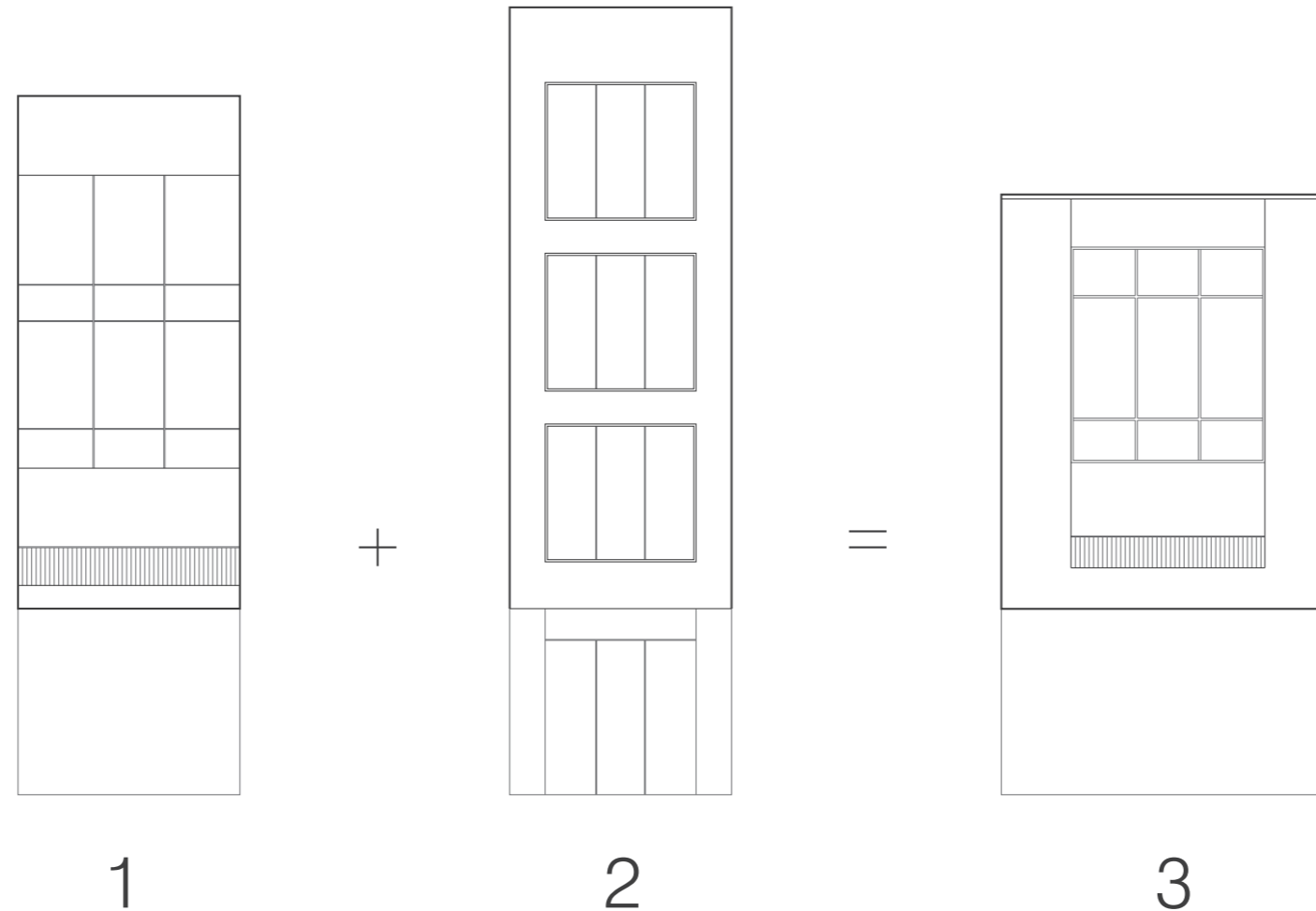
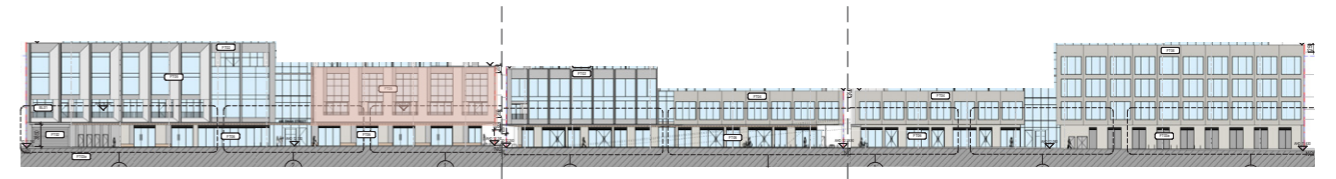
=



Translation

Facade Type 2 is formed by a civic and industrial conversation between historical and infrastructural contexts. The architectural element, 'engaged columns,' also contributes to the articulation of this facade. The punctured windows pay homage to the utilitarian industrial steel windows typically found in Richmond's built fabric.

Type 3 - Frame



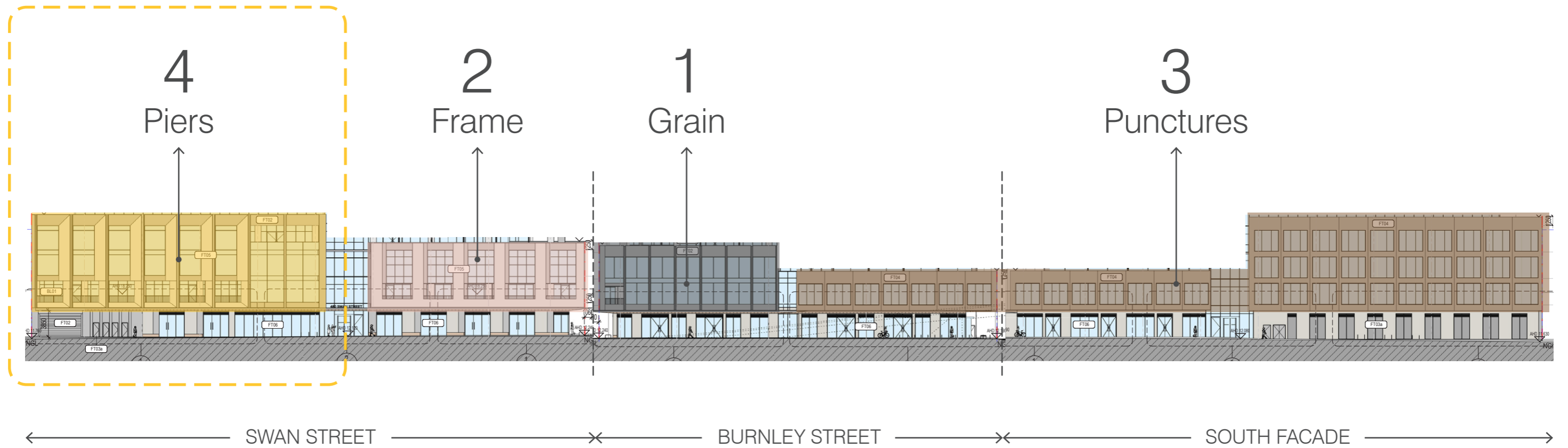
Facade Type 3 is formed by combining Facade Types 1 and 2. Which further reinforces the design principles 'Corners & Solidity' and 'Silhouette.' It presents itself as a solid framed addition to the suite of corner buildings that intersect Swan and Burnley Street.

3 Current Podium Design Views





4 Additional Alternative Facade Type

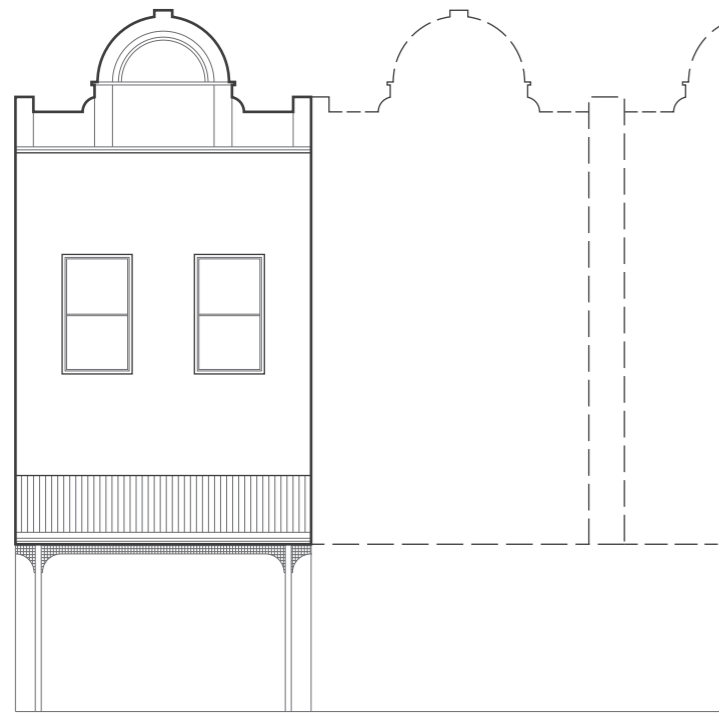
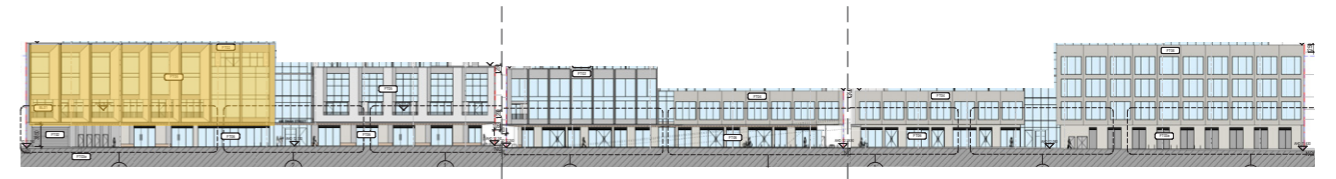


4 Piers

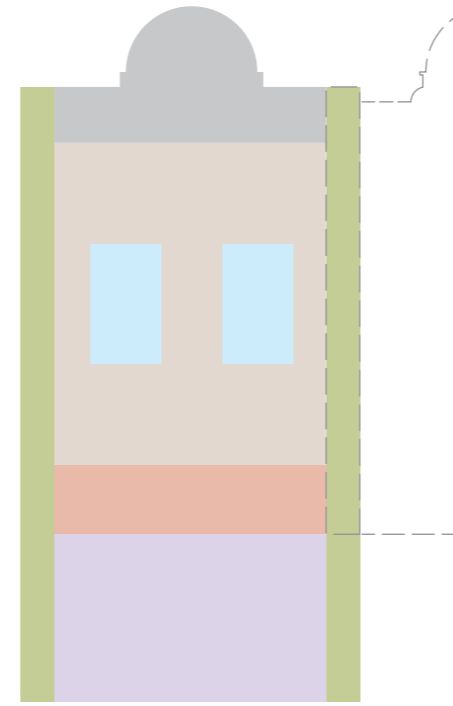


Expresses Original
Subdivision Pattern

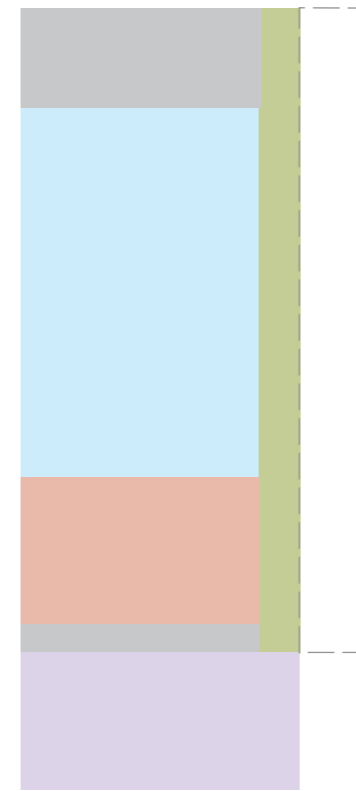
Type 4 - Piers



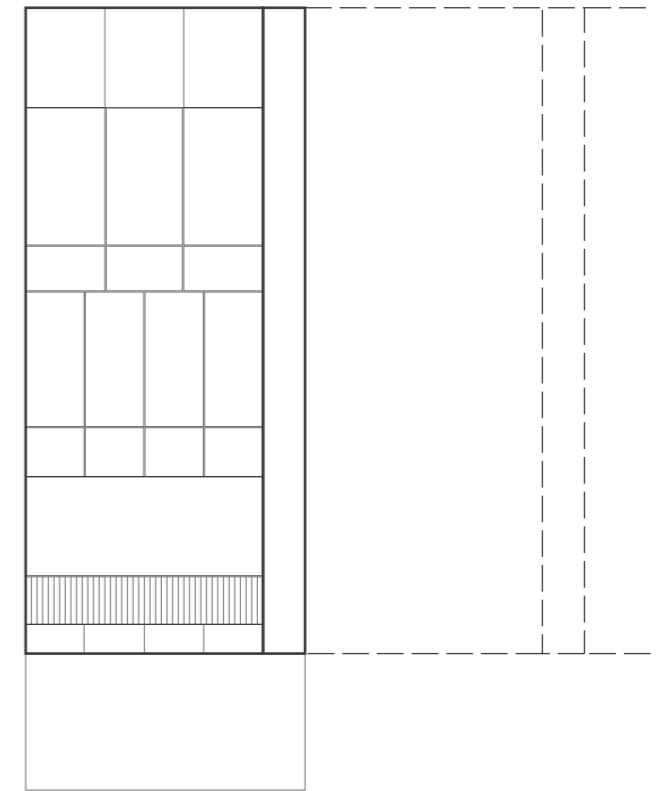
Swan Street Elevation



Sum of Parts



Translation



North-East Elevation

Facade Type 4 develops on the current facade proposal by emphasising the design principle, 'Reflecting Local Grain,' through masonry piers. These piers simultaneously reference both the pattern of subdivision on the existing site and the materiality of the historic Mills buildings.

1 Reflecting Local Grain





View from Swan Street
looking West

*Architectus Impression

Facade Type - Alternative 12.06.2020

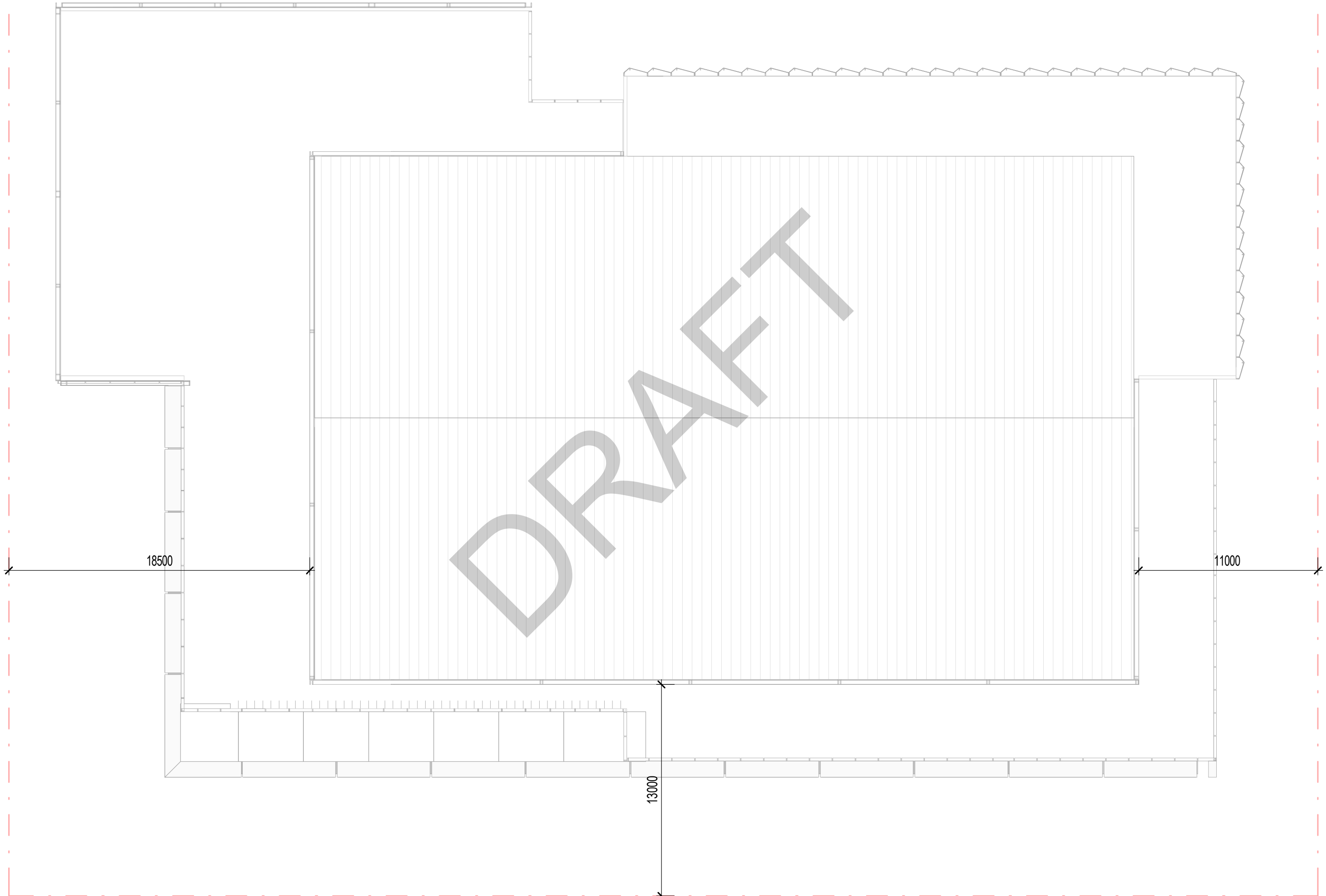


View from Swan Street
looking West

*Architectus Impression



architectus™

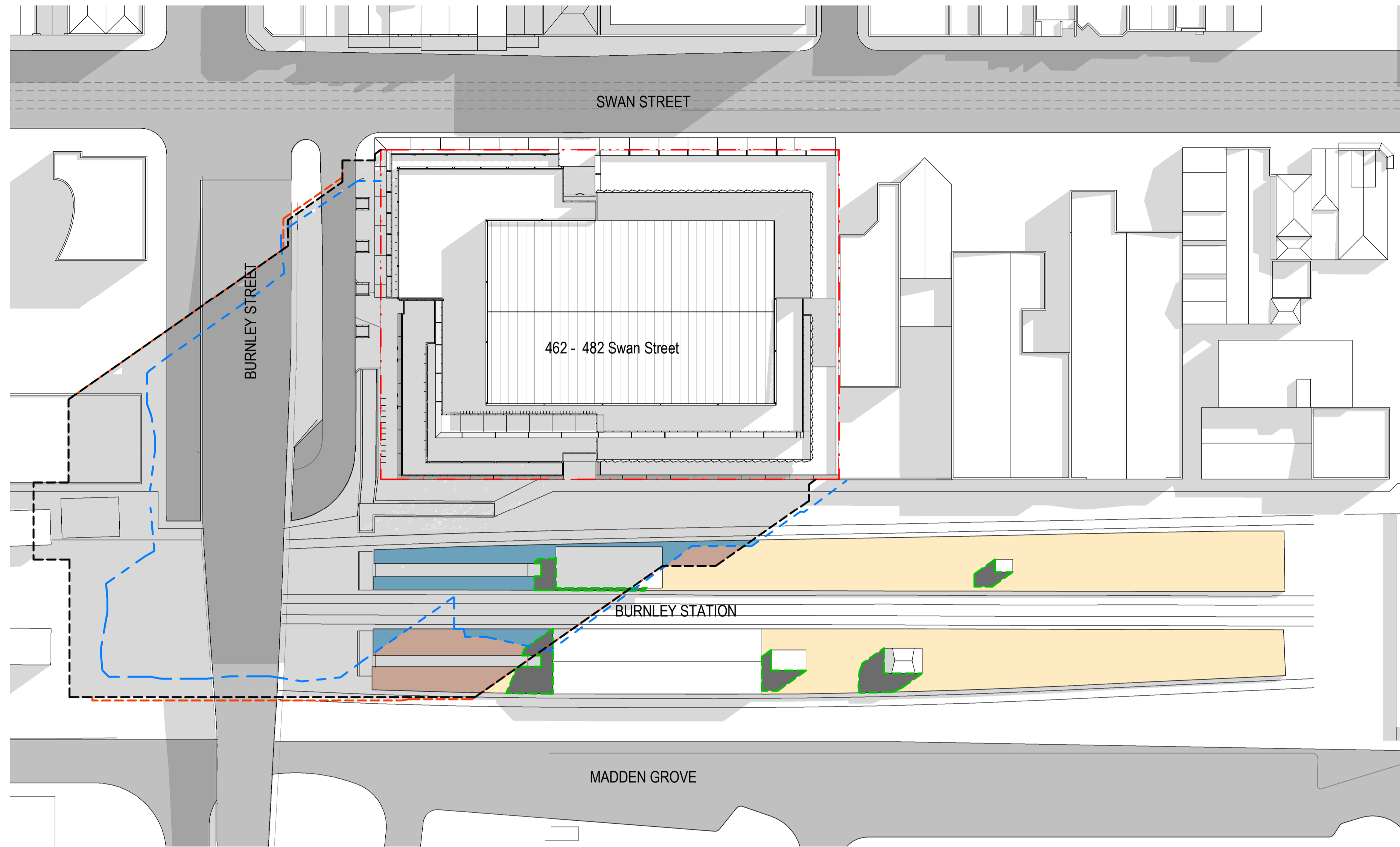


18500

11000

13000

DRAFT



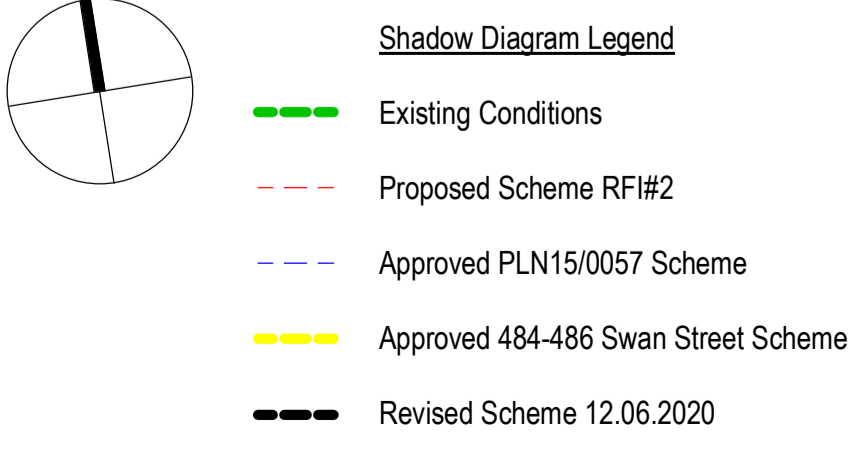
1 Revised vs Approved - 9am - 22 September
SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshaded Area (m2)	Approved Additional Shadows (m2)	Approved Unshaded Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshaded Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshaded Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	41	1,206	196	1,010	226	980	30	226	980	30
South	1,166	117	1,049	42	1,007	231	818	189	231	818	189
Both	2,413	158	2,255	238	2,017	457	1,798	219	457	1,798	219

NOTE:
 Existing Building Shadows + Existing Unshaded Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshaded Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshaded Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus
 Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.
 Nominated Architect
 Ray Brown, NSWARB 6359

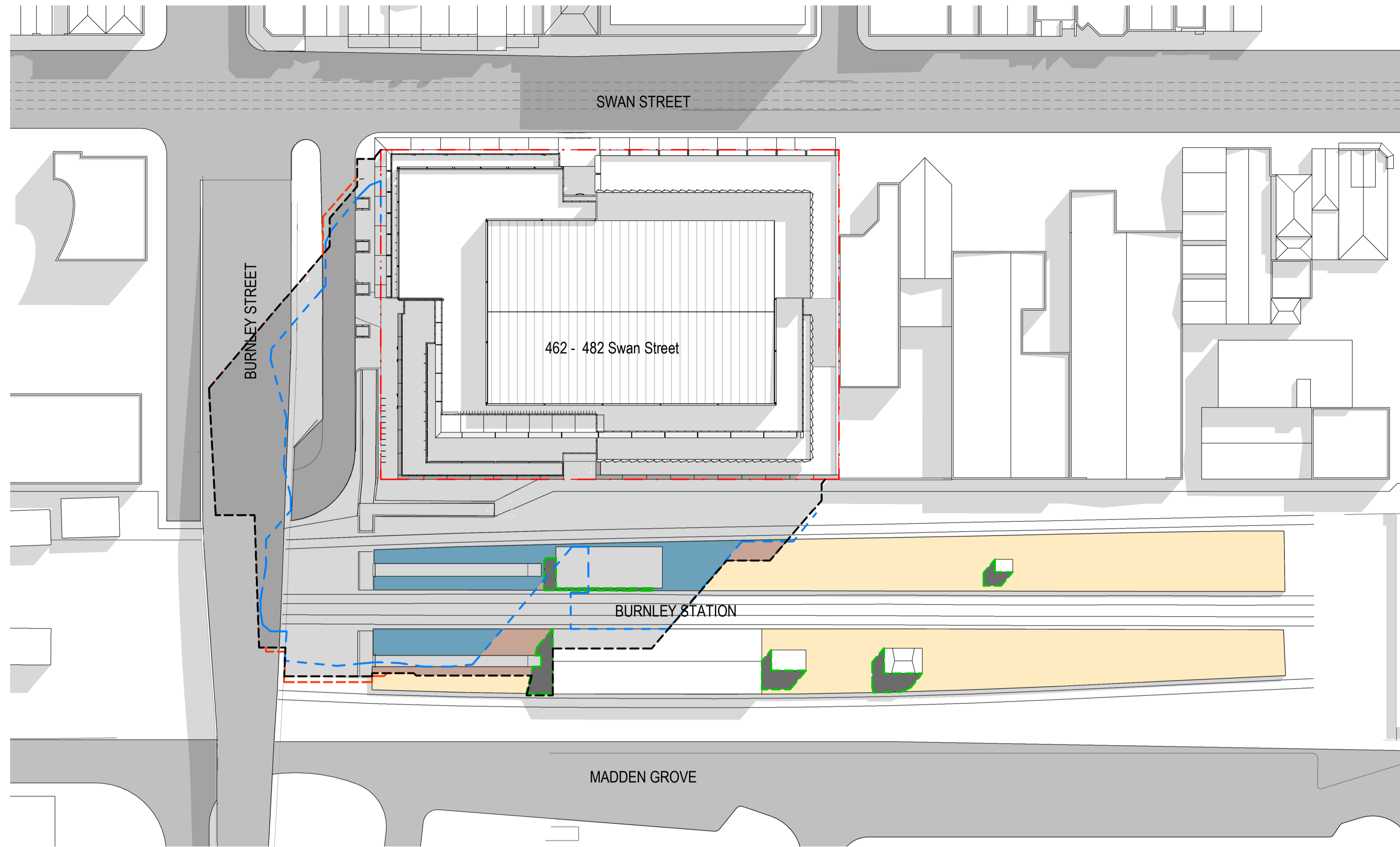
issue	amendment	date
A	Issue for Information	12/06/2020



architectus™
 Sydney
 Melbourne
 Adelaide
 Perth
 Auckland
 Christchurch
 Brisbane
Architectus Melbourne
 Level 25, 385 Bourke Street
 Melbourne
 VIC 3000
 T (61 3) 9429 5733
 Auckland
 Christchurch
 melbourne@architectus.com.au
 ABN 90 131 245 684
 checked Checker scale 1 : 500@A1
 drawn Author project no 190060

project 480 Swan Street
 drawing Shadow Studies - Revised vs Approved
 drawing no. DA0136 issue A
 15/06/20 4:20:46 PM

Do not scale drawings. Verify all dimensions on site



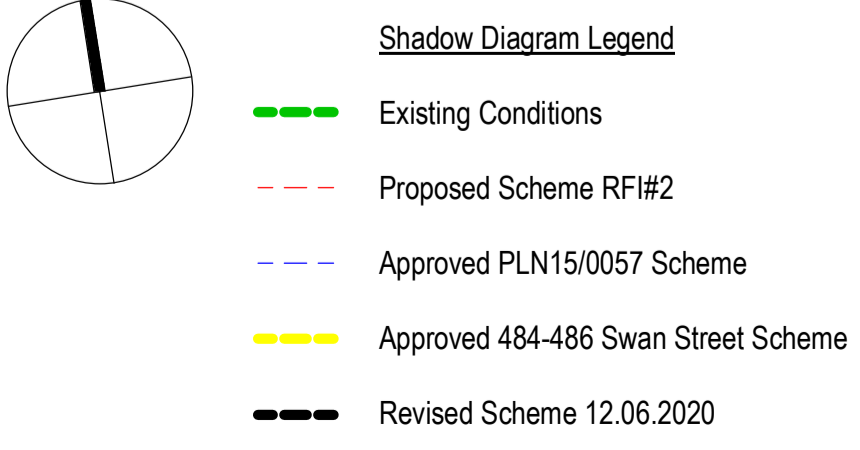
1 Revised vs Approved - 10am - 22 September
SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshaded Area (m2)	Approved Additional Shadows (m2)	Approved Unshaded Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshaded Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshaded Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	31	1,216	270	946	298	918	28	298	918	28
South	1,166	88	1,078	97	981	180	898	83	179	899	82
Both	2,413	119	2,294	367	1,927	478	1,816	111	477	1,817	110

NOTE:
 Existing Building Shadows + Existing Unshaded Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshaded Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshaded Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus™
 Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.
 Nominated Architect
 Ray Brown, NSWARB 6359

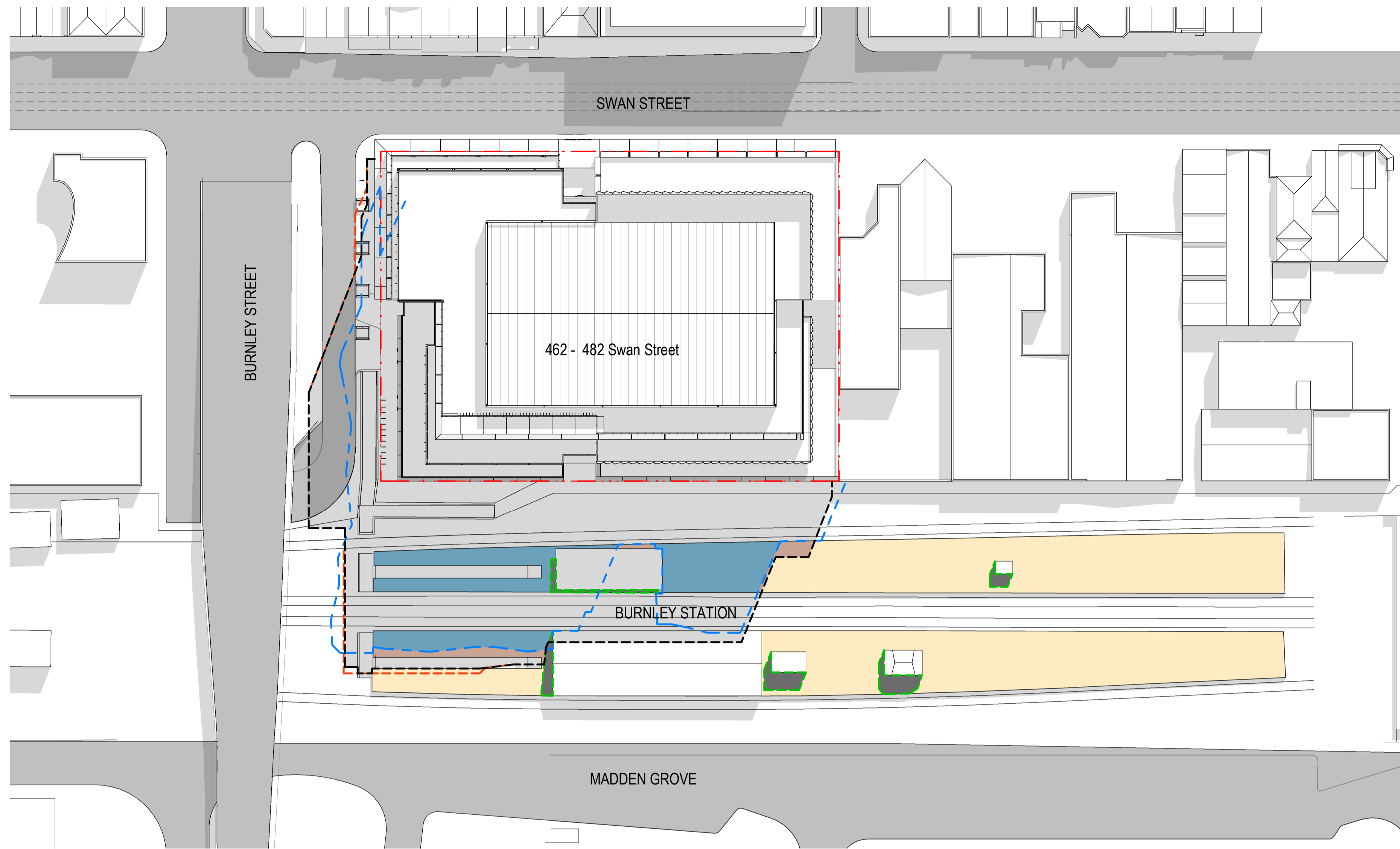
issue	amendment	date
A	Issue for Information	12/06/2020



architectus™
 Sydney
 Melbourne
 Adelaide
 Perth
 Auckland
 Christchurch
 Brisbane
 Architectus Melbourne
 Level 25, 385 Bourke Street
 Melbourne
 VIC 3000
 T (61 3) 9429 5733
 Auckland
 Christchurch
 melbourne@architectus.com.au
 ABN 90 131 245 684
 checked Checker scale 1 : 500@A1
 drawn Author project no 190060

project 480 Swan Street
 drawing Shadow Studies - Revised vs Approved
 drawing no. DA0137 issue A
 15/06/20 4:21:06 PM

Do not scale drawings. Verify all dimensions on site



1 Revised vs Approved - 11am - 22 September

SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshadowed Area (m2)	Approved Additional Shadows (m2)	Approved Unshadowed Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshadowed Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshadowed Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	22	1,225	343	881	369	855	26	369	855	26
South	1,166	64	1,102	101	1,001	160	942	59	144	958	43
Both	2,413	86	2,327	444	1,882	530	1,797	85	513	1,813	69

NOTE:

Existing Building Shadows + Existing Unshadowed Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshadowed Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshadowed Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus™

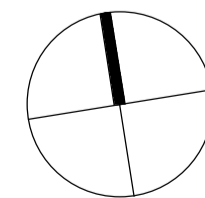
Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.

Nominated Architect
Ray Brown, NSWARB 6359



Do not scale drawings. Verify all dimensions on site

issue	amendment	date
A	Issue for Information	12/06/2020



Shadow Diagram Legend

- Existing Conditions
- Proposed Scheme RFI#2
- Approved PLN15/0057 Scheme
- Approved 484-486 Swan Street Scheme
- Revised Scheme 12.06.2020

architectus™

Architectus Melbourne
Level 25, 385 Bourke Street
Melbourne
VIC 3000
T (61 3) 9429 5733
Auckland
Christchurch
Brisbane
F (61 3) 9429 8480
melbourne@architectus.com.au
ABN 90 131 245 684

checked Checker scale 1 : 500@A1
drawn Author project no 190060

project

480 Swan Street

drawing

Shadow Studies - Revised vs Approved

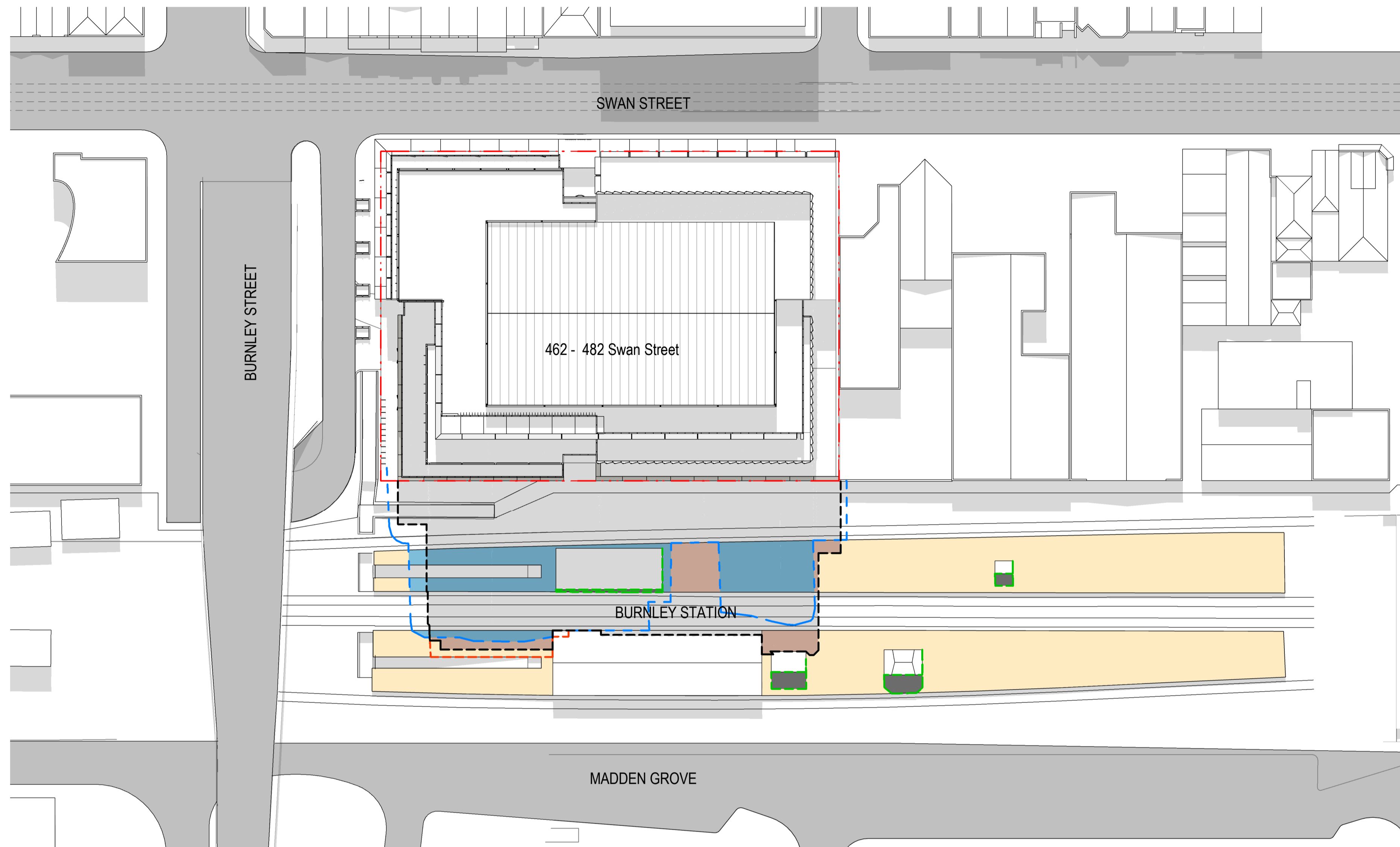
drawing no.

DA0138

issue

A

15/06/20 4:21:26 PM



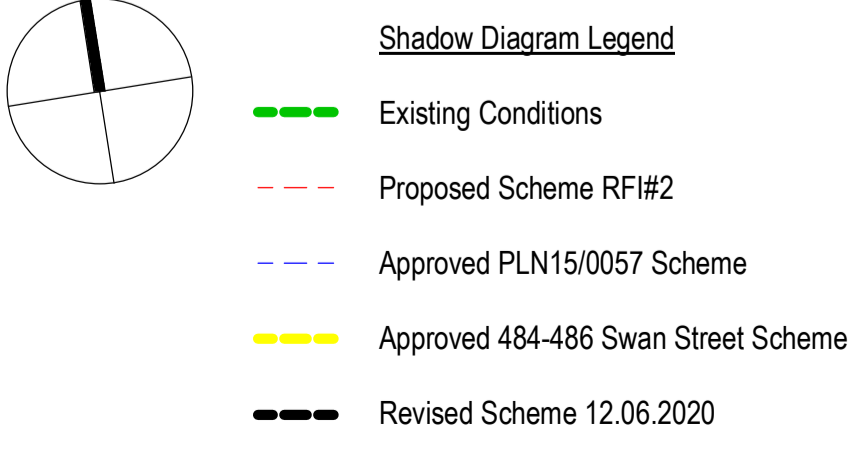
1 Revised vs Approved - 12pm - 22 September
SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshadowed Area (m2)	Approved Additional Shadows (m2)	Approved Unshadowed Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshadowed Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshadowed Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	15	1,231	319	912	394	837	75	394	837	75
South	1,166	39	1,127	38	1,089	139	988	101	108	1,019	71
Both	2,413	54	2,358	357	2,002	534	1,825	177	502	1,856	146

NOTE:
 Existing Building Shadows + Existing Unshadowed Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshadowed Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshadowed Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus
 Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.
 Nominated Architect
 Ray Brown, NSWARB 6359

issue	amendment	date
A	Issue for Information	12/06/2020

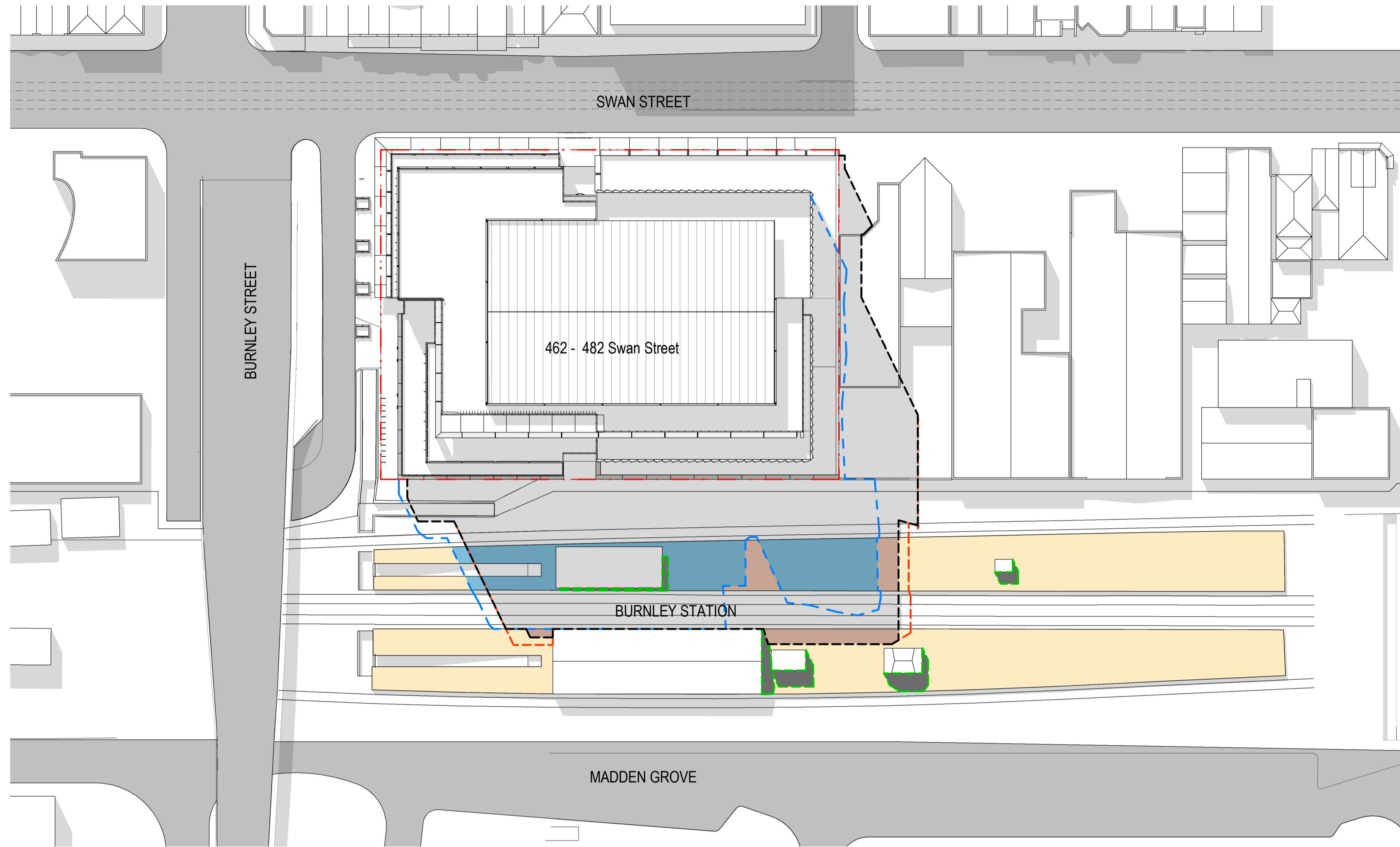


architectusTM
 Sydney
 Melbourne
 Adelaide
 Perth
 Auckland
 Christchurch
 Brisbane
 Architectus Melbourne
 Level 25, 385 Bourke Street
 Melbourne
 VIC 3000
 T (61 3) 9429 5733
 Auckland
 Christchurch
 melbourne@architectus.com.au
 ABN 90 131 245 684

checked	Checker	scale	1 : 500@A1
drawn	Author	project no	190060

project
 480 Swan Street
 drawing
 Shadow Studies - Revised vs Approved
 drawing no.
 DA0139
 issue
 A
 15/06/20 4:21:45 PM

Do not scale drawings. Verify all dimensions on site



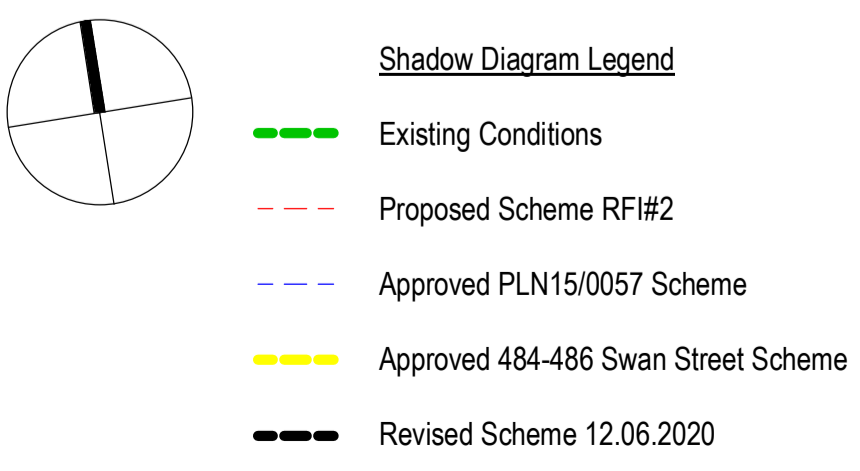
1 Revised vs Approved - 1pm - 22 September
SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshaded Area (m2)	Approved Additional Shadows (m2)	Approved Unshaded Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshaded Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshaded Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	22	1,224	402	823	480	744	79	463	761	62
South	1,166	63	1,103	0	1,103	86	1,016	86	69	1,034	69
Both	2,413	86	2,327	402	1,925	567	1,760	165	532	1,795	131

NOTE:
 Existing Building Shadows + Existing Unshaded Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshaded Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshaded Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus™
 Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.
 Nominated Architect
 Ray Brown, NSWARB 6359

issue	amendment	date
A	Issue for Information	12/06/2020

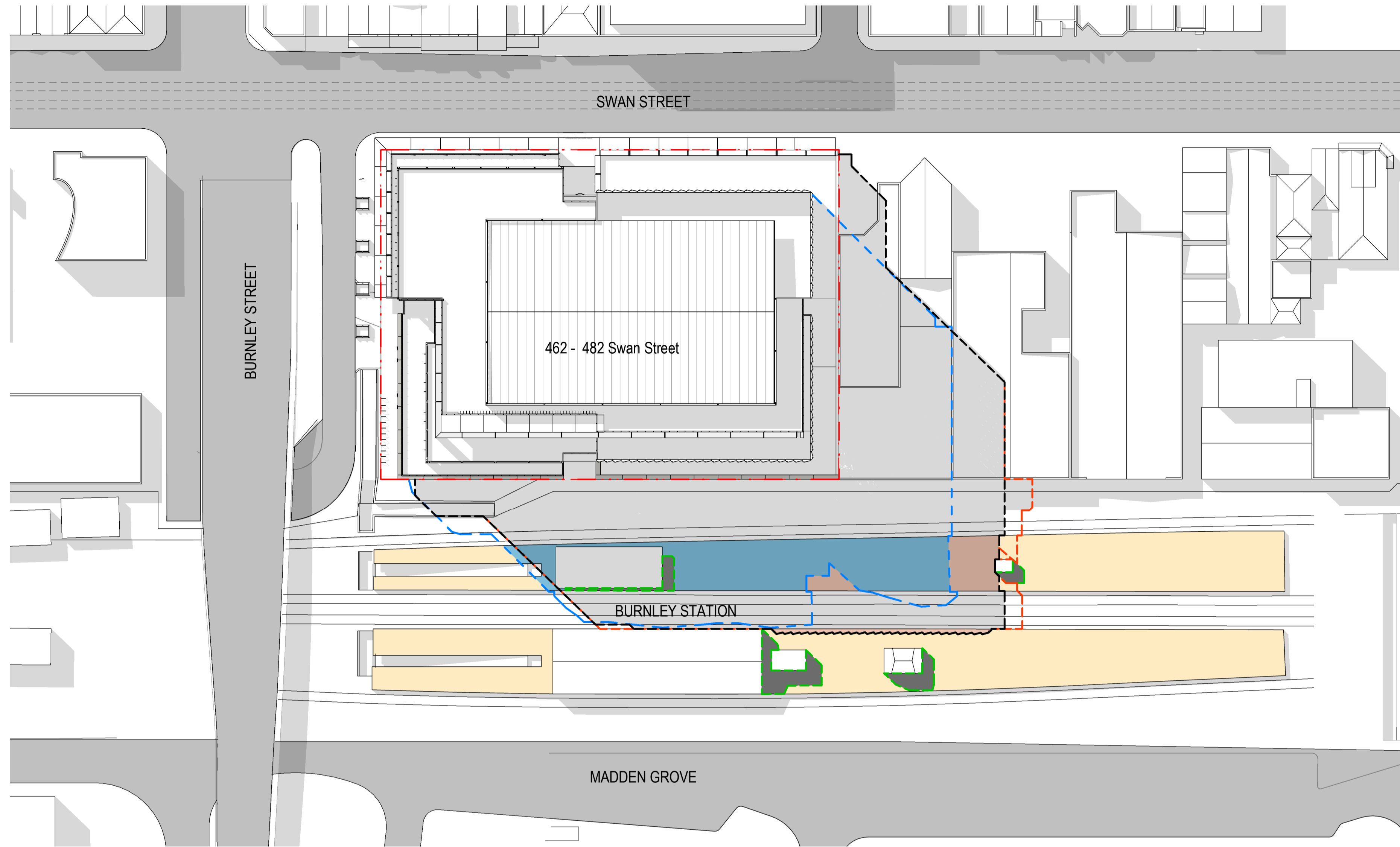


architectus™
 Sydney
 Melbourne
 Adelaide
 Perth
 Auckland
 Christchurch
 Brisbane
Architectus Melbourne
 Level 25, 385 Bourke Street
 Melbourne
 VIC 3000
 T (61 3) 9429 5733
 Auckland
 Christchurch
 melbourne@architectus.com.au
 ABN 90 131 245 684

checked	Checker	scale	1 : 500@A1
drawn	Author	project no	190060

project
 480 Swan Street
 drawing
 Shadow Studies - Revised vs Approved
 drawing no.
DA0140
 issue
A
 15/06/20 4:22:06 PM

Do not scale drawings. Verify all dimensions on site



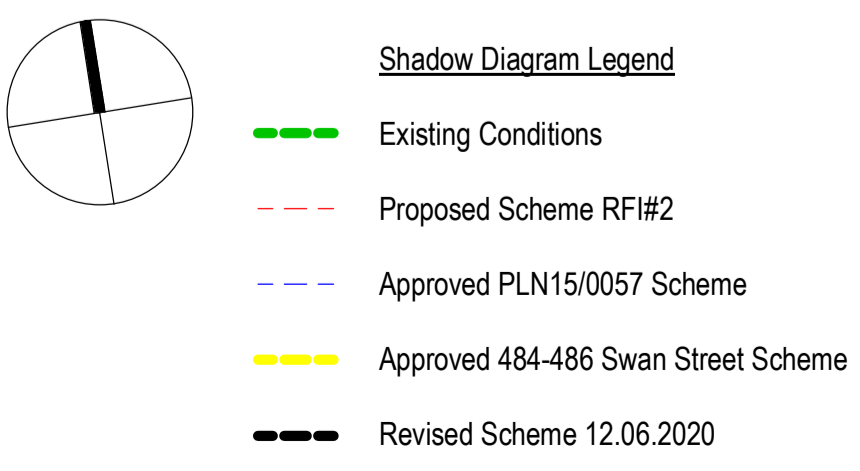
1 Revised vs Approved - 2pm - 22 September
SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshaded Area (m2)	Approved Additional Shadows (m2)	Approved Unshaded Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshaded Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshaded Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	30	1,216	472	744	585	631	113	566	650	95
South	1,166	81	1,085	0	1,085	29	1,056	29	29	1,056	29
Both	2,413	111	2,302	472	1,830	615	1,687	143	595	1,706	124

NOTE:
 Existing Building Shadows + Existing Unshaded Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshaded Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshaded Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus™
 Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.
 Nominated Architect
 Ray Brown, NSWARB 6359

issue	amendment	date
A	Issue for Information	12/06/2020

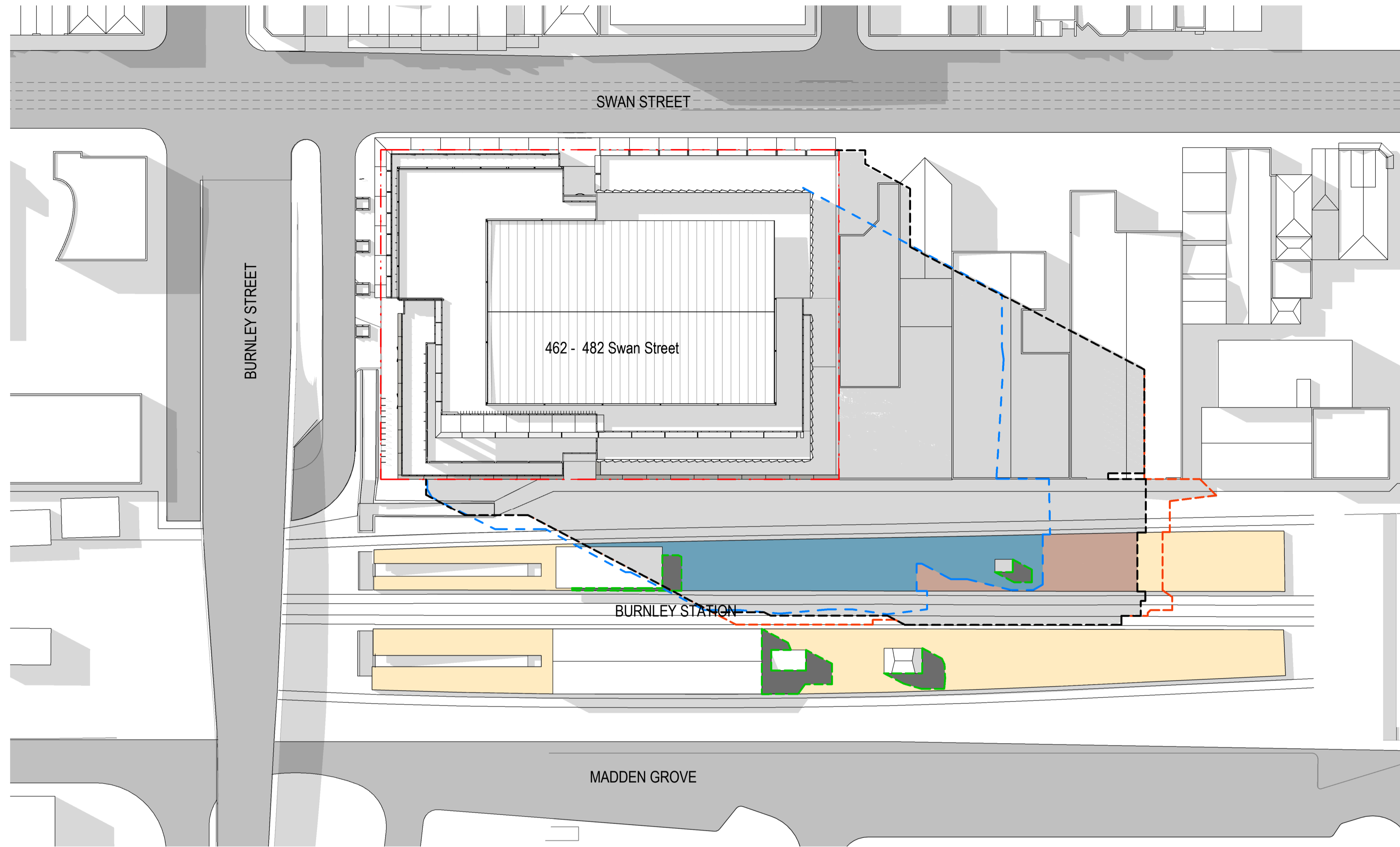


architectus™
 Sydney
 Melbourne
 Adelaide
 Perth
 Auckland
 Christchurch
 Brisbane
Architectus Melbourne
 Level 25, 385 Bourke Street
 Melbourne
 VIC 3000
 T (61 3) 9429 5733
 Auckland
 Christchurch
 melbourne@architectus.com.au
 ABN 90 131 245 684

checked Checker scale 1 : 500@A1
 drawn Author project no 190060

project 480 Swan Street
 drawing Shadow Studies - Revised vs Approved
 drawing no. DA0141 issue A
 15/06/20 4:22:26 PM

Do not scale drawings. Verify all dimensions on site



1 Revised vs Approved - 3pm - 22 September
SCALE: 1 : 500

Platforms	Total Platform Area (m2) Excluding Ramp and Station Buildings	Existing Building Shadows (m2)	Existing Unshaded Area (m2)	Approved Additional Shadows (m2)	Approved Unshaded Area (m2)	Proposed Additional Shadows (m2)	Proposed Unshaded Area (m2)	Net Additional Proposed Shadows (m2)	Revised Additional Shadows (m2)	Revised Unshaded Area (m2)	New Net Additional Shadows (m2) 12.06.2020
North	1,247	41	1,205	548	658	800	406	252	753	452	205
South	1,166	105	1,061	0	1,061	0	1,061	0	0	1,061	0
Both	2,413	146	2,267	548	1,719	800	1,467	252	753	1,513	205

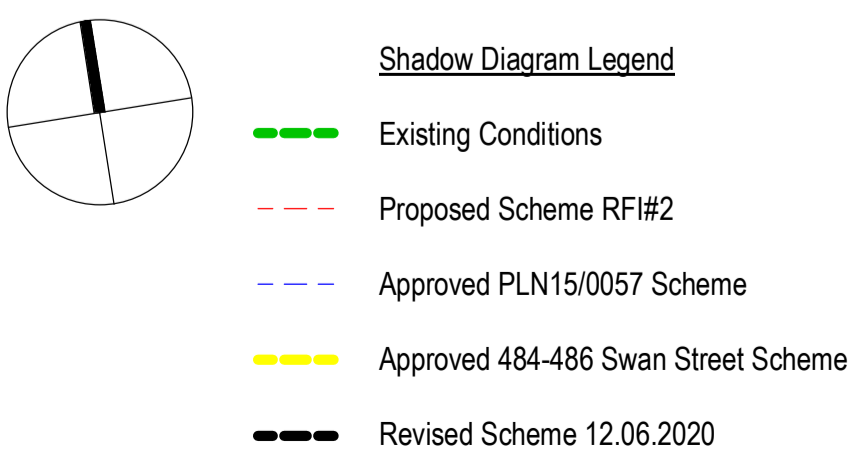
NOTE:

Existing Building Shadows + Existing Unshaded Area = Total Platform Area
 Existing Building Shadows + Approved Additional Shadows + Approved Unshaded Area = Total Platform Area
 Existing Building Shadows + Proposed Additional Shadows + Proposed Unshaded Area = Total Platform Area
 Proposed Additional Shadows - Approved Additional Shadows = Proposed and Approved Difference
 Revised Additional Shadows - Approved Additional Shadows = New Net Additional Shadows

architectus™
 Architectus Group Pty Ltd is the owner of the copyright subsisting in these drawings, plans, designs and specifications. They must not be used, reproduced or copied, in whole or in part, nor may the information, ideas and concepts therein contained (which are confidential to Architectus Group Pty Ltd) be disclosed to any person without the prior written consent of that company.

Nominated Architect
 Ray Brown, NSWARB 6359

issue	amendment	date
A	Issue for Information	12/06/2020



architectus™
 Sydney
 Melbourne
 Adelaide
 Perth
 Auckland
 Christchurch
 Brisbane

Architectus Melbourne
 Level 25, 385 Bourke Street
 Melbourne
 VIC 3000
 T (61 3) 9429 5733
 Auckland
 Christchurch
 melbourne@architectus.com.au
 ABN 90 131 245 684

checked	Checker	scale	1 : 500@A1
drawn	Author	project no	190060

project
 480 Swan Street

drawing
 Shadow Studies - Revised vs Approved

drawing no.
DA0142

issue
A

Do not scale drawings. Verify all dimensions on site