



CITY OF HOBART

AGENDA

City Planning Committee Meeting

Open Portion

Monday, 5 September 2022

at 5:00 pm

Council Chamber, Town Hall

THE MISSION

Working together to make Hobart a better place for the community.

THE VALUES

The Council is:

People	We care about people – our community, our customers and colleagues.
Teamwork	We collaborate both within the organisation and with external stakeholders drawing on skills and expertise for the benefit of our community.
Focus and Direction	We have clear goals and plans to achieve sustainable social, environmental and economic outcomes for the Hobart community.
Creativity and Innovation	We embrace new approaches and continuously improve to achieve better outcomes for our community.
Accountability	We are transparent, work to high ethical and professional standards and are accountable for delivering outcomes for our community.

ORDER OF BUSINESS

Business listed on the agenda is to be conducted in the order in which it is set out, unless the committee by simple majority determines otherwise.

APOLOGIES AND LEAVE OF ABSENCE

- 1. CO-OPTION OF A COMMITTEE MEMBER IN THE EVENT OF A VACANCY 5**
- 2. CONFIRMATION OF MINUTES..... 5**
- 3. CONSIDERATION OF SUPPLEMENTARY ITEMS 5**
- 4. INDICATIONS OF PECUNIARY AND CONFLICTS OF INTEREST 6**
- 5. TRANSFER OF AGENDA ITEMS..... 6**
- 6. PLANNING AUTHORITY ITEMS - CONSIDERATION OF ITEMS WITH DEPUTATIONS..... 6**
- 7. COMMITTEE ACTING AS PLANNING AUTHORITY 7**
 - 7.1 APPLICATIONS UNDER THE HOBART INTERIM PLANNING SCHEME 20158**
 - 7.1.1 7 Cane Street, West Hobart - Change of Use to Visitor Accommodation8
 - 7.1.2 215 Churchill Avenue, Sandy Bay - Change of Use to Visitor Accommodation32
 - 7.1.3 1/273 Churchill Avenue, Sandy Bay and Common Land of Parent Title - Change of Use to Visitor Accommodation58
 - 7.1.4 16 Wayne Avenue, Sandy Bay and Adjacent Road Reserve - Partial Demolition and Alterations to Pedestrian and Vehicle Access, Driveway and Parking91
 - 7.1.5 24-26 Weld Street, South Hobart and Adjacent Road Reserve - Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage.....167
- 8. REPORTS 468**
 - 8.1 Proposal for a new kunany/Mount Wellington Cultural Landscape Precinct 468
 - 8.2 Monthly Building Statistics - 1 July - 31 July 2022 471
 - 8.3 Monthly Planning Statistics - 1 July - 31 July 2022..... 478
 - 8.4 City Planning - Advertising Report 485
 - 8.5 Delegated Decision Report (Planning) 491

9. RESPONSES TO QUESTIONS WITHOUT NOTICE.....	495
9.1 Cat-Free Areas	496
9.2 COVID-19 Emergency Provisions.....	498
10. CLOSED PORTION OF THE MEETING.....	500

City Planning Committee Meeting (Open Portion) held Monday, 5 September 2022 at 5:00 pm in the Council Chamber, Town Hall.

This meeting of the City Planning Committee is held in accordance with a Notice issued by the Premier on 31 March 2022 under section 18 of the *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020*.

The title Chief Executive Officer is a term of reference for the General Manager as appointed by Council pursuant s.61 of the *Local Government Act 1993* (Tas).

COMMITTEE MEMBERS

Deputy Lord Mayor Councillor H Burnet
(Chairman)
Alderman J R Briscoe
Councillor W F Harvey
Alderman S Behrakis
Councillor M Dutta
Councillor W Coats

Apologies:

Leave of Absence: Nil.

NON-MEMBERS

Lord Mayor Councillor A M Reynolds
Alderman M Zucco
Alderman Dr P T Sexton
Alderman D C Thomas
Councillor J Fox
Councillor Dr Z Sherlock

1. CO-OPTION OF A COMMITTEE MEMBER IN THE EVENT OF A VACANCY

2. CONFIRMATION OF MINUTES

The minutes of the Open Portion of the City Planning Committee meeting held on [Monday, 22 August 2022](#), are submitted for confirming as an accurate record.

3. CONSIDERATION OF SUPPLEMENTARY ITEMS

Ref: Part 2, Regulation 8(6) of the *Local Government (Meeting Procedures) Regulations 2015*.

Recommendation

That the Committee resolve to deal with any supplementary items not appearing on the agenda, as reported by the Chief Executive Officer.

4. INDICATIONS OF PECUNIARY AND CONFLICTS OF INTEREST

Ref: Part 2, Regulation 8(7) of the *Local Government (Meeting Procedures) Regulations 2015*.

Members of the Committee are requested to indicate where they may have any pecuniary or conflict of interest in respect to any matter appearing on the agenda, or any supplementary item to the agenda, which the Committee has resolved to deal with.

5. TRANSFER OF AGENDA ITEMS

Regulation 15 of the *Local Government (Meeting Procedures) Regulations 2015*.

A Committee may close a part of a meeting to the public where a matter to be discussed falls within 15(2) of the above regulations.

In the event that the Committee transfer an item to the closed portion, the reasons for doing so should be stated.

Are there any items which should be transferred from this agenda to the closed portion of the agenda, or from the closed to the open portion of the agenda?

6. PLANNING AUTHORITY ITEMS - CONSIDERATION OF ITEMS WITH DEPUTATIONS

In accordance with the requirements of Part 2 Regulation 8(3) of the *Local Government (Meeting Procedures) Regulations 2015*, the Chief Executive Officer is to arrange the agenda so that the planning authority items are sequential.

In accordance with Part 2 Regulation 8(4) of the *Local Government (Meeting Procedures) Regulations 2015*, the Committee by simple majority may change the order of any of the items listed on the agenda, but in the case of planning items they must still be considered sequentially – in other words they still have to be dealt with as a single group on the agenda.

Where deputations are to be received in respect to planning items, past practice has been to move consideration of these items to the beginning of the meeting.

RECOMMENDATION

That in accordance with Regulation 8(4) of the *Local Government (Meeting Procedures) Regulations 2015*, the Committee resolve to deal with any items which have deputations by members of the public regarding any planning matter listed on the agenda, to be taken out of sequence in order to deal with deputations at the beginning of the meeting.

7. COMMITTEE ACTING AS PLANNING AUTHORITY

In accordance with the provisions of Part 2 Regulation 25 of the *Local Government (Meeting Procedures) Regulations 2015*, the intention of the Committee to act as a planning authority pursuant to the *Land Use Planning and Approvals Act 1993* is to be noted.

In accordance with Regulation 25, the Committee will act as a planning authority in respect to those matters appearing under this heading on the agenda, inclusive of any supplementary items.

The Committee is reminded that in order to comply with Regulation 25(2), the Chief Executive Officer is to ensure that the reasons for a decision by a Council or Council Committee acting as a planning authority are recorded in the minutes.

7.1 APPLICATIONS UNDER THE HOBART INTERIM PLANNING SCHEME 2015

7.1.1 7 CANE STREET, WEST HOBART - CHANGE OF USE TO VISITOR ACCOMMODATION PLN-22-457 - FILE REF: F22/87352

Address: 7 Cane Street, West Hobart

Proposal: Change of Use to Visitor Accommodation

Expiry Date: 11 October 2022

Extension of Time: Not applicable

Author: Michael McClenahan

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for visitor accommodation, at 7 Cane Street, South Hobart 7004 for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-457 - 7 CANE STREET WEST HOBART TAS 7000 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

PLN 18

Prior to the commencement of the approved use, a management plan for the operation of the visitor accommodation must be submitted and approved as a Condition Endorsement, to the satisfaction of the Council's Director City Life. The management plan must include measures to limit, manage and mitigate unreasonable impacts upon the amenity of long term residents. These measures must include, but are not limited to, the following requirements:

1. To limit, manage, and mitigate noise generated as a result of the visitor accommodation.
2. To limit, manage, and mitigate behaviour issues caused as a result of the visitor accommodation.
3. To maintain the security of the building where the visitor accommodation would be located, including managing and/or limiting access to shared areas and facilities.
4. To specify the maximum permitted occupancy of the visitor accommodation.
5. To specify that there is no onsite car parking. Additionally, at the booking stage, guests should be discouraged from bringing more vehicles than strictly necessary, and guests should be advised that there is a limited amount of available onstreet car parking spaces in Cane Street.
6. To provide a name and contact phone number of a person who will respond to any complaints regarding behaviour of guests. If the property is sold the Visitor Accommodation Management Plan (VAMP) must be updated with new contact details.

Once approved, the management plan must be implemented prior to the commencement of the approved use and must be maintained for as long as the visitor accommodation is in operation. The VAMP must be provided to adjacent property owners and occupiers within 14 days of being approved. If the property is sold, the updated VAMP (in accordance with 6. above) must be provided to adjacent property owners and occupiers within 10 business days of settlement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that visitor accommodation does not cause an unreasonable loss of residential amenity.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

VISITOR ACCOMMODATION

More information on visitor accommodation, including when building approval is required, can be found [here](#).


In all cases, check with your insurance company that you have adequate cover.


If you are in a bushfire prone area there may be a need to create/review the Bushfire Management Hazard Plan for your property.

If you have a spa or a pool at your property then you are required to test for microbiological quality and chemical parameters on a monthly basis, under the *Public Health Act 1997*. If you have any questions about this then please call our Environmental Health team on 6238 2711.

If you are providing food for consumption on the property, you may require a food business registration in accordance with the *Food Act 2003*. Click [here](#) for more information, or call our Environmental Health team on 6238 2711.

Visitor accommodation is also considered to be a commercial use and also not eligible to residential parking permits. Under the current policy for the issuing of residential parking permits, the proposed change of use to visitor accommodation would not entitle the property to a residential parking permit, or a transferable “bed and breakfast” parking permit.

Attachment A: PLN-22-457 - 7 CANE STREET WEST HOBART
TAS 7000 - Planning Committee or Delegated
Report ↓ 

Attachment B: PLN-22-457 - 7 CANE STREET WEST HOBART
TAS 7000 - CPC Agenda Documents ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report: Delegated
Delegated: 30 August 2022
Expiry Date: 11 October 2022
Application No: PLN-22-457
Address: 7 CANE STREET , WEST HOBART
Applicant: Peter Kagwa Nsubuga
7 Cane Street
CATHLENE SAUL
7 CANE STREET
Proposal: Change of Use to Visitor Accommodation
Representations: Four
Performance criteria: Parking and Access Code

1. Executive Summary

- 1.1 Planning approval is sought for a change of use to Visitor Accommodation, at 7 Cane Street, South Hobart.
- 1.2 More specifically the proposal includes:
 - Complete change of use from one bedroom single dwelling to Visitor Accommodation
 - No on-site car parking will be provided for the use
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
 - 1.3.1 Parking and Access Code - Number of Parking Spaces
- 1.4 Four (4) representations objecting to the proposal were received within the statutory advertising period between 01/08/22 - 15/08/22.
- 1.5 The proposal is recommended for approval subject to conditions.

- 1.6 The final decision is delegated to the City Planning Committee, because four representations objecting to the proposal were received during the statutory advertising period.

2. Site Detail

- 2.1 The subject site is located at 7 Cane Street, West Hobart and comprises a single title residential lot approximately 100m² in size. The site presently contains a small two storey cottage with rear deck and outbuilding. There is no on-site parking spaces available on the site. The surrounding area is characterised by a combination of residential and visitor accommodation.



Figure 1: Aerial image of subject site (bordered in blue) and surrounding area.

3. Proposal

- 3.1 Planning approval is sought for a change of use to Visitor Accommodation, at 7 Cane Street, South Hobart.

3.2 More specifically the proposal is for:

- Complete change of use from one bedroom single dwelling to Visitor Accommodation
- No on-site car parking will be provided for the use

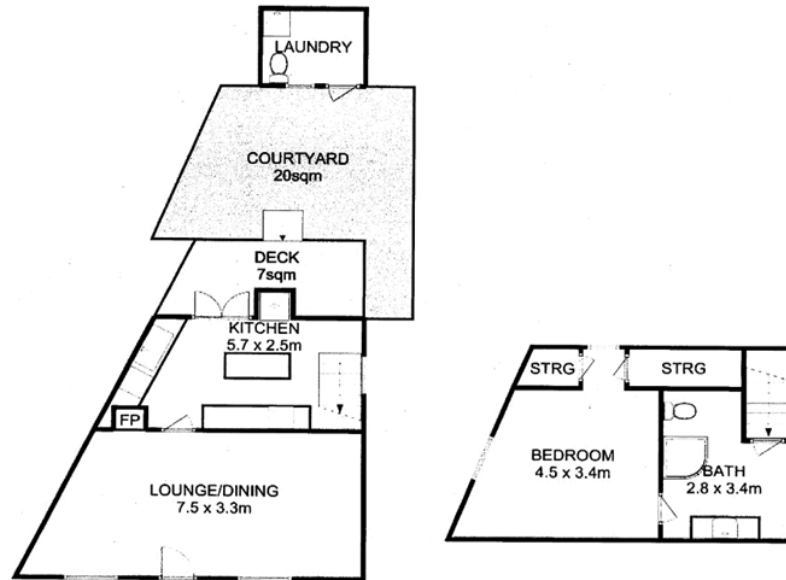


Figure 2: Floor plan of existing single dwelling.

4. Background

4.1 There is no relevant background for this application.

5. Concerns raised by representors

5.1 Four (4) representations objecting to the proposal were received within the statutory advertising period between 01/08/22 - 15/08/22.

5.2 The following table outlines the concerns raised in the representations received. Those concerns which relate to a discretion invoked by the proposal are addressed in Section 6 of this report.

Parking - Lack of on-site parking for the use - Narrow street with limited street parking available in an unconventional street arrangement - No parking yellow lines often disregarded and would be exacerbated by visitor parking, compromising access to existing garages on the street
Residential Amenity - Close knit community of residents so having constantly changing visitors would impact on this - Short term visitors may use outdoor areas for loud gatherings without consideration of long term residents and this could impinge on general amenity - Two other addresses on the street have applied for Visitor Accommodation
Residential Availability - Given the current housing and rental crisis, taking this property out of the long term rental parking seems counter productive
Historical Approvals and Privacy - Deck construction without approval and required retrospective certification. Has privacy impacts - Dormer window overlooks rear garden and adjoining dwelling

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.
- 6.2 The site is located within the General Residential Zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing use is Residential (single dwelling). The proposed use is Visitor Accommodation. The existing use is a no permit required use in the zone. The proposed use is a permitted use in the zone.
- 6.4 The proposal has been assessed against:

- 6.4.1 Planning Directive No.6
- 6.4.2 E6.0 Parking and Access Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
 - 6.5.1 Parking and Access Code:
 - Number of Parking Spaces - E6.6.1 P1*
- 6.6 Each performance criterion is assessed below.
- 6.7 Number of Parking Spaces - E6.6.1 P1
 - 6.7.1 The acceptable solution at clause 6.6.1 A1 requires that the number of on-site car parking spaces must be no less than and no greater than the number specified in Table E6.1, which is one space for a Visitor Accommodation use.
 - 6.7.2 The proposal includes no on-site car parking spaces.
 - 6.7.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.
 - 6.7.4 The performance criterion at clause 6.6.1 P1 provides as follows:
 - The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:*
 - (a) car parking demand;*
 - (b) the availability of on-street and public car parking in the locality;*
 - (c) the availability and frequency of public transport within a 400m walking distance of the site;*
 - (d) the availability and likely use of other modes of transport;*
 - (e) the availability and suitability of alternative arrangements for car parking provision;*

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;

(g) any car parking deficiency or surplus associated with the existing use of the land;

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;

(i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;

(j) any verified prior payment of a financial contribution in lieu of parking for the land;

(k) any relevant parking plan for the area adopted by Council;

(l) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;

(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code.

6.7.5 Referral was made to Council's Development Engineer who has provided the following assessment:

Based on consideration of the above applicable performance criteria, the lack of any parking provision may be accepted under a performance based solution due to the existing deficiency associated with the existing use of land. Furthermore, the lack of available parking would likely be communicated & managed proactively, thus curtailing any significant issues associated with visitor demands.

3 on-street car parking spaces are stated to be available by the representor. Noting the absence of on-site off-street parking provisions as an existing deficiency, the deficiency and 'current parking situation' is effectively conserved and not aggravated by the proposed development.

Development Engineering suggests a visitor management plan which communicates best parking practices (e.g., suggest spaces 4-7 identified) due to the nature of the local road.

- 6.7.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for a change of use to Visitor Accommodation, at 7 Cane Street, South Hobart.
- 7.2 The application was advertised and received four (4) representations. The representations raised concerns including concerns about impacts of the change of use on parking in the street, disturbance from guests to the residential amenity, concerns over long term residential availability, concerns over historical development on the site, and impacts to privacy.
- 7.3 The single discretion under assessment relates to lack of parking for the use and this has been assessed in Section 6 of this report. Council has records of two Visitor Accommodation approvals on the street, at numbers 6 and 9 with a further exemption granted for number 16. The proposal has demonstrated compliance with acceptable solution A1 of Planning Directive No.6 and therefore there is no required assessment or consideration of impacts to residential amenity. A condition on the permit will require lodgement of a Visitor Accommodation Management Plan, prior to the commencement of use, to minimise potential disruption and impacts by visitors to the property. Planning Directive No.6 makes no consideration of housing availability and despite the increased social concern over the issue, it cannot form part of planning assessment.
- 7.4 Reference was made by one representor regarding an "illegal" deck on the property. Council records indicate that works were undertaken in 2004 without Council approval, these included new external doors, rear deck, fencing, and an upper floor dormer window. A planning application was lodged under PLN-04-0129901 seeking retrospective approval for these works, with the assessment being that all works were determined to be exempt from requiring planning approval. The proposal does not intend to amend this deck or window and as such there are no privacy discretions triggered under planning assessment.
- 7.5 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.

- 7.6 The proposal has been assessed by other Council officers, including the Council's Development Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.7 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Visitor Accommodation, at 7 Cane Street, South Hobart satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for Visitor Accommodation, at 7 Cane Street, South Hobart for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-457 - 7 CANE STREET WEST HOBART TAS 7000 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

PLN 18

Prior to the commencement of the approved use, a management plan for the operation of the visitor accommodation must be submitted and approved as a Condition Endorsement, to the satisfaction of the Council's Director City Life. The management plan must include measures to limit, manage and mitigate unreasonable impacts upon the amenity of long term residents. These measures must include, but are not limited to, the following requirements:

1. **To limit, manage, and mitigate noise generated as a result of the visitor accommodation.**
2. **To limit, manage, and mitigate behaviour issues caused as a result of the visitor accommodation.**
3. **To maintain the security of the building where the visitor accommodation would be located, including managing and/or limiting access to shared areas and facilities.**
4. **To specify the maximum permitted occupancy of the visitor accommodation.**
5. **To specify that there is no onsite car parking. Additionally, at the booking stage, guests should be discouraged from bringing more vehicles than strictly necessary, and guests should be advised that there is a limited amount of available onstreet car parking spaces in Cane Street.**
6. **To provide a name and contact phone number of a person who will**

respond to any complaints regarding behaviour of guests. If the property is sold the Visitor Accommodation Management Plan (VAMP) must be updated with new contact details.

Once approved, the management plan must be implemented prior to the commencement of the approved use and must be maintained for as long as the visitor accommodation is in operation. The VAMP must be provided to adjacent property owners and occupiers within 14 days of being approved. If the property is sold, the updated VAMP (in accordance with 6. above) must be provided to adjacent property owners and occupiers within 10 business days of settlement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that visitor accommodation does not cause an unreasonable loss of residential amenity.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

VISITOR ACCOMMODATION

More information on visitor accommodation, including when building approval is required, can be found [here](#).

In all cases, check with your insurance company that you have adequate cover.

If you are in a bushfire prone area there may be a need to create/review the Bushfire Management Hazard Plan for your property.

If you have a spa or a pool at your property then you are required to test for microbiological quality and chemical parameters on a monthly basis, under the *Public Health Act 1997*. If you have any questions about this then please call our Environmental Health team on 6238 2711.

If you are providing food for consumption on the property, you may require a food business registration in accordance with the *Food Act 2003*. Click [here](#) for more information, or call our Environmental Health team on 6238 2711.

Visitor accommodation is also considered to be a commercial use and also not eligible to residential parking permits. Under the current policy for the issuing of residential parking permits, the proposed change of use to visitor accommodation would not entitle the property to a residential parking permit, or a transferable “bed and breakfast” parking permit.



(Michael McClenahan)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Ben Ikin)

Senior Statutory Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 23 August 2022

Attachment(s):

Attachment B - CPC Agenda Documents

Planning: #260996

Property

7 CANE STREET WEST HOBART TAS 7000

People

Applicant *

7 Cane Street
WEST HOBART TAS 7000

Applicant *

Owner *

7 Cane Street

Owner *

Entered By

Use

Visitor accomodation

Details

Have you obtained pre application advice?

☒ No

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. *

☒ Yes

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below. *

☐ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)? *

Residential cottage

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage) *

This is not a development. We have lived in the cottage for 1 1/2 years and now we are looking for a larger home to live in as this cottage is too small to reside in long term. Cottage is approx. 55m² on a parcel of land that is approx. 100m². We wish to use it as short-term accommodation for max. 2 people. The cottage is a walking distance to the CBD, Battery Point and Salamanca attractions. We currently park two cars on the street, but, we will not offer any parking for the visitor accommodation resulting in a positive impact for the street and surrounding residents and visitors.

Estimated cost of development *

0.00

Existing floor area (m²)

55.00

Proposed floor area (m²)

Site area (m²)

Carparking on Site

Total parking spaces

0

Existing parking spaces

0

N/A

☒ Other (no selection chosen)

Other Details

Does the application include signage? *

☐ No

How many signs, please enter 0 if there are none involved in this application? *

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☐ No

Documents

Required Documents

Title (Folio text and Plan and Title (Folio) - 7 Cane Street West Hobart.pdf
Schedule of Easements) *

Plans (proposed, existing) * Floor and Courtyard Diagram - 7 Cane Street West Hobart.pdf

Building self assessment Form permitted visitor accommodation
Building Self-Assessment Form - 7 Cane Street West Hobart.pdf

BUILDING SELF-ASSESSMENT FORM**Director's Determination – Short or Medium Term Visitor Accommodation****Section 20(1)(e) of Building Act 2016**

This building self-assessment form must be completed in the following situations where the property is used or intended to be used for visitor accommodation, and a fee is being charged for such use:

- owner occupiers of residential premises of more than four bookable rooms, or
- investment properties or shacks (not occupied by the owner) that have a gross floor area of not more than 200m² per lot used for visitor accommodation.

The completed form must be lodged with the relevant Permit Authority.

If any premises intended to be let for short-term visitor accommodation is a lot in a strata title scheme, and any other premises in that scheme are occupied as a residence by long term residents, the proponent is not permitted to use the building self-assessment process, unless the premises is located within Activity Area 1.0 Inner City Residential (Wapping) under the Sullivans Cove Planning Scheme 1997.

To: Permit Authority
 Address
 Suburb/postcode

Owner / Occupier details:

(Only an owner or occupier may complete this form)

Owner / Occupier:
(Delete one not applicable)

Postal Address:

West Hobart

7000

Phone
No:

Email address:

Address of Property used or intended to be used for Visitor Accommodation:

Street Address:

7 Cane Street

West Hobart

7000

Certificate of Title
Reference No.

452 89/1

Owner / Occupier Declaration:

I/we, as the owner / occupier of the property, declare that the property meets the following minimum building requirements, as set out below:

Owner/Occupier:
(Delete one not applicable)

Name: [print]

Signed

Date

1/7/22

1-7-22

Occupancy Permit:

(Must tick one)

The owner or occupier is to declare that –

- ☐ (a) if an occupancy permit has been issued, the premises is fit for occupation consistent with that permit, and the maximum number of occupants stated on the permit will not be exceeded;
- OR
- ☒ (b) an occupancy permit or occupancy certificate was not required (as the premises was constructed / altered before 1994).

Plumbing:

(Must tick (a) or (b) and (c) or (d))

The owner or occupier is to declare that –

- ☒ (a) the premises is connected to a reticulated sewerage system;
- OR
- ☐ (b) the premises is connected to an on-site wastewater management system that:
- is in good working order and will be maintained to perform to the same standard as it was designed; and
 - has a land application distribution area designed, installed and in good serviceable condition; and
 - the maximum number of occupants of the premises the system is designed for is not exceeded; and
 - there is a maintenance contract in place for the servicing of the system.
- ☒ (c) the premises is connected to a reticulated drinking water supply system;
- OR
- ☐ (d) a private drinking water supply (including from a tank, well, dam, etc.) is provided for the premises that meets the requirements of the *Public Health Act 1997*.

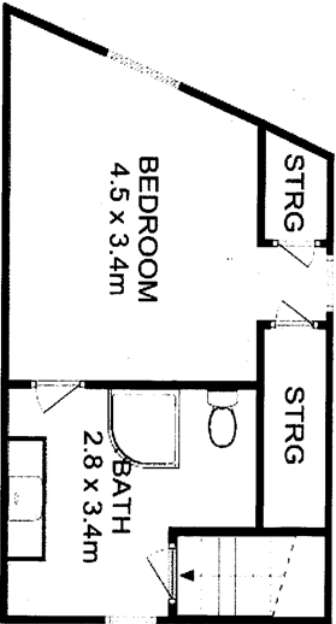
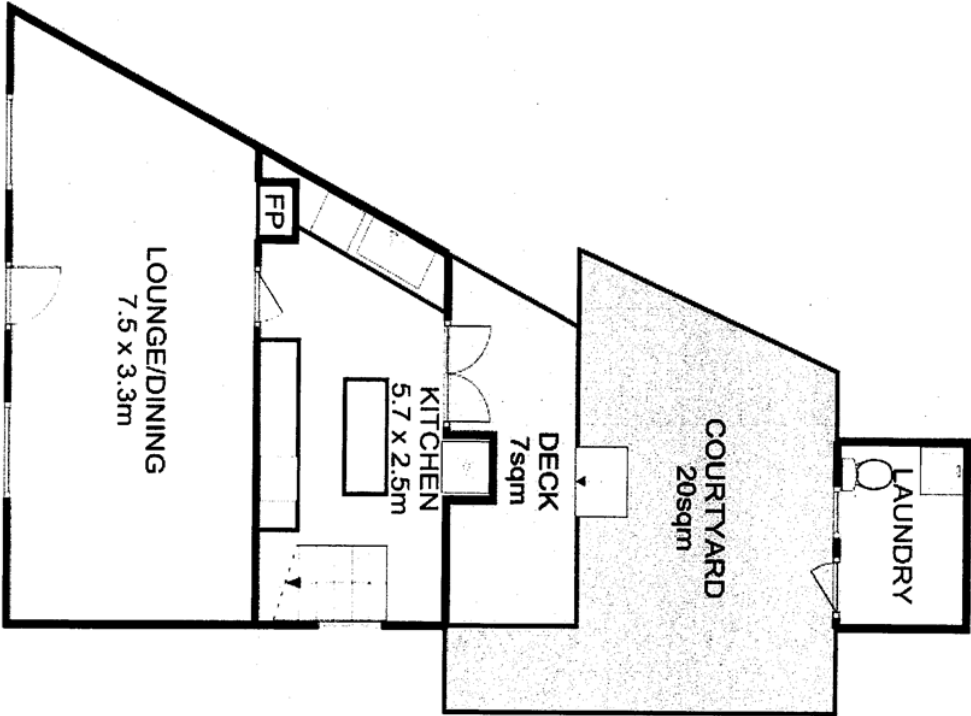
Essential Building Services:

(Must tick one)

The owner or occupier is to declare that –

- ☐ (a) regarding Essential Building Services, the premises has an approved schedule of maintenance, and fire safety features are maintained in accordance with Part 7 (regulations 72 to 78) of the *Building Regulations 2016* and the Director's Maintenance of Prescribed Essential Building Services Determination;
- OR
- ☒ (b) the premises is not required to have an approved essential maintenance schedule, but the following fire safety features are installed and maintained in accordance with manufacturer's instructions:
- a smoke alarm with a 10-year non-removable lithium battery, or
 - a hard wired smoke alarm (and are interconnected where there is more than one alarm fitted);
- (a) if any storey of the premises contains a bedroom –
- (i) installed in every corridor, or hallway, situated in the storey, that is associated with a bedroom; and

- (ii) if there is no corridor, or hallway, situated in the storey, that is associated with a bedroom, between that part of the premises containing the bedroom and the remainder of the premises; and
- (b) in any other storey of the premises that does not contain a bedroom.
- If multistorey premises are let for visitor accommodation:
 - i. emergency evacuation lighting is provided; and
 - ii. exits are provided that are clearly marked and mapped for the visitor.



**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 45289	FOLIO 1
EDITION 4	DATE OF ISSUE 24-Feb-2021

SEARCH DATE : 15-Jul-2022

SEARCH TIME : 01.19 PM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Diagram 45289

Being the land described in Conveyance No. 65/6715

Derivation : Part of Location to Gellie

Prior CT 4688/70

SCHEDULE 1

M869249 TRANSFER to CATHLENE SAUL and PETER KAGWA NSUBUGA
Registered 24-Feb-2021 at 12.02 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

E248270 MORTGAGE to ING Bank (Australia) Limited Registered
24-Feb-2021 at 12.03 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

the **List****FOLIO PLAN**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

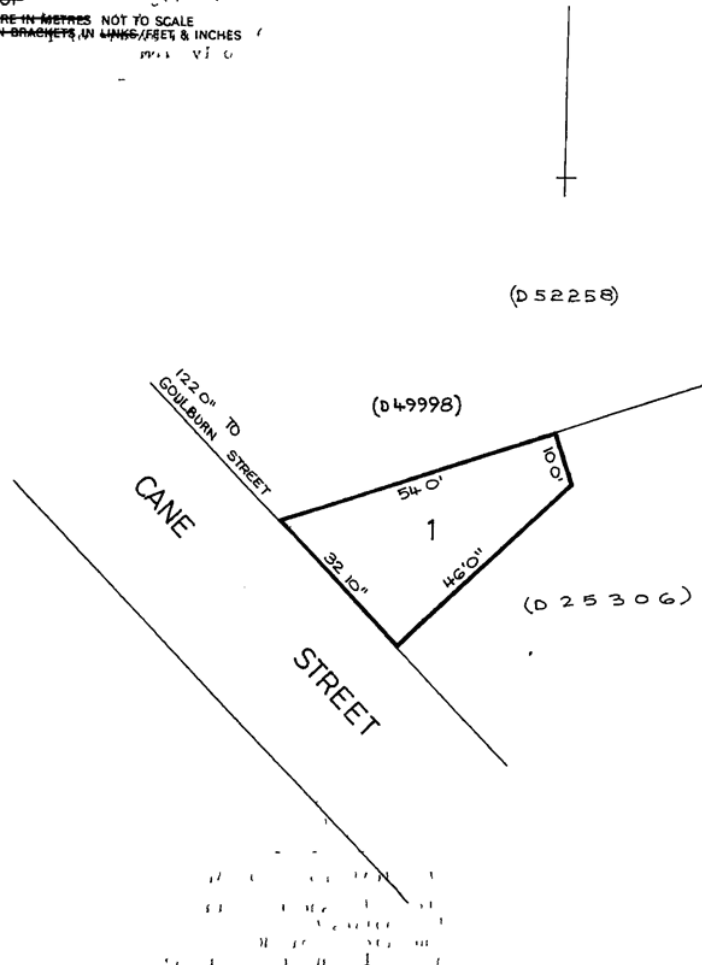


APPROVED 4 AUG 1990 <i>[Signature]</i> RECORDER OF TITLES	CONVERSION PLAN CONVERTED FROM 65/6715	REGISTERED NUMBER D.45289
FILE NUMBER Y 12414	GRANTEE PART OF LOC TO GELLIE	DRAWN <i>[Signature]</i> 1/8/90

SKETCH BY WAY OF ILLUSTRATION ONLY

CITY/TOWN OF HOBART (SEC Z2)
LAND DISTRICT OF
PARISH OF

LENGTHS ARE IN METRES NOT TO SCALE
LENGTHS IN BRACKETS IN LINKS/FEET & INCHES



**7.1.2 215 CHURCHILL AVENUE, SANDY BAY - CHANGE OF USE TO
VISITOR ACCOMMODATION
PLN-22-277 - FILE REF: F22/87596**

Address: 215 Churchill Avenue, Sandy Bay
Proposal: Change of Use to Visitor Accommodation
Expiry Date: 29 August 2022
Extension of Time: Not applicable
Author: Michael McClenahan

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for change of use to visitor accommodation, at 215 Churchill Avenue, Sandy Bay 7005 for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-277 - 215 CHURCHILL AVENUE SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

PLN 18

Prior to the commencement of the approved use, a management plan for the operation of the visitor accommodation must be submitted and approved as a Condition Endorsement, to the satisfaction of the Council's Director City Life. The management plan must include measures to limit, manage and mitigate unreasonable impacts upon the amenity of long term residents. These measures must include, but are not limited to, the following requirements:

1. To limit, manage, and mitigate noise generated as a result of the visitor accommodation.
2. To limit, manage, and mitigate behaviour issues caused as a result of the visitor accommodation.

3. To maintain the security of the building where the visitor accommodation would be located, including managing and/or limiting access to shared areas and facilities.
4. To specify the maximum permitted occupancy of the visitor accommodation.
5. To specify that guests must utilise the site for the parking of vehicles, that the maximum number of vehicles to be parked on the site (1), and detail where the parking spaces are located and how the spaces are to be accessed. Additionally, at the booking stage, guests should be discouraged from bringing more than 1 vehicle and the parking of any additional vehicles in nearby streets should also be discouraged.
6. To provide a name and contact phone number of a person who will respond to any complaints regarding behaviour of guests. If the property is sold the Visitor Accommodation Management Plan (VAMP) must be updated with new contact details.

Once approved, the management plan must be implemented prior to the commencement of the approved use and must be maintained for as long as the visitor accommodation is in operation. The VAMP must be provided to adjacent property owners and occupiers within 14 days of being approved. If the property is sold, the updated VAMP (in accordance with 6. above) must be provided to adjacent property owners and occupiers within 10 business days of settlement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that visitor accommodation does not cause an unreasonable loss of residential amenity.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

RIGHT OF WAY

The private right of way must not be reduced, restricted or impeded in any way, and all beneficiaries must have complete and unrestricted access at all times.

You should inform yourself as to your rights and responsibilities in respect to the private right of way particularly reducing, restricting or impeding the right during and after construction.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

VISITOR ACCOMMODATION

More information on visitor accommodation, including when building approval is required, can be found [here](#).

In all cases, check with your insurance company that you have adequate cover.


If you are in a bushfire prone area there may be a need to create/review the Bushfire Management Hazard Plan for your property.

If you have a spa or a pool at your property then you are required to test for microbiological quality and chemical parameters on a monthly basis, under the *Public Health Act 1997*. If you have any questions about this then please call our Environmental Health team on 6238 2711.

If you are providing food for consumption on the property, you may require a food business registration in accordance with the *Food Act 2003*. Click [here](#) for more information, or call our Environmental Health team on 6238 2711.

Visitor accommodation is also considered to be a commercial use and also not eligible to residential parking permits. Under the current policy for the issuing of residential parking permits, the proposed change of use to visitor accommodation would not entitle the property to a residential parking permit, or a transferable “bed and breakfast” parking permit.

Attachment A: PLN-22-277 - 215 CHURCHILL AVENUE SANDY BAY TAS 7005 - Planning Committee or Delegated Report ↓ 

Attachment B: PLN-22-277 - 215 CHURCHILL AVENUE SANDY BAY TAS 7005 - CPC Agenda Documents ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report: Committee
Council: 12 September 2022
Expiry Date: 15 September 2022
Application No: PLN-22-277
Address: 215 CHURCHILL AVENUE , SANDY BAY
Applicant: (ACN 083 205 467 Pty Ltd)
215 Churchill Avenue
Proposal: Change of Use to Visitor Accommodation
Representations: Zero
Performance criteria: Planning Directive No. 6

1. Executive Summary

- 1.1 Planning approval is sought for a Change of Use to Visitor Accommodation, at 215 Churchill Avenue, Sandy Bay.
- 1.2 More specifically the proposal includes:
 - Complete change of use of a four bedroom single dwelling
 - One on-site parking space will be provided for the use
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
 - 1.3.1 Planning Directive No.6 - Visitor Accommodation
- 1.4 No representations were received during the statutory advertising period between 09/08/22 - 23/08/22.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the Council, because the application has been called in.

2. Site Detail

- 2.1 The subject site is located at 215 Churchill Avenue, Sandy Bay and comprises a single title residential lot approximately 1085m² in size. The site presently comprises a large three storey dwelling, driveway and parking area, and gardens. The site has a frontage to Sandy Bay Road along its south western boundary and is also accessible from Waimea Avenue via an unnamed laneway that runs along the rear northern boundary. The surrounding area is characterised by residential uses.



Figure 1: Aerial image of the subject site (bordered in blue) and surrounding area.

3. Proposal

- 3.1 Planning approval is sought for a Change of Use to Visitor Accommodation, at 215 Churchill Avenue, Sandy Bay.
- 3.2 More specifically the proposal is for:
- Complete change of use of a four bedroom single dwelling
 - One on-site parking space will be provided for the use

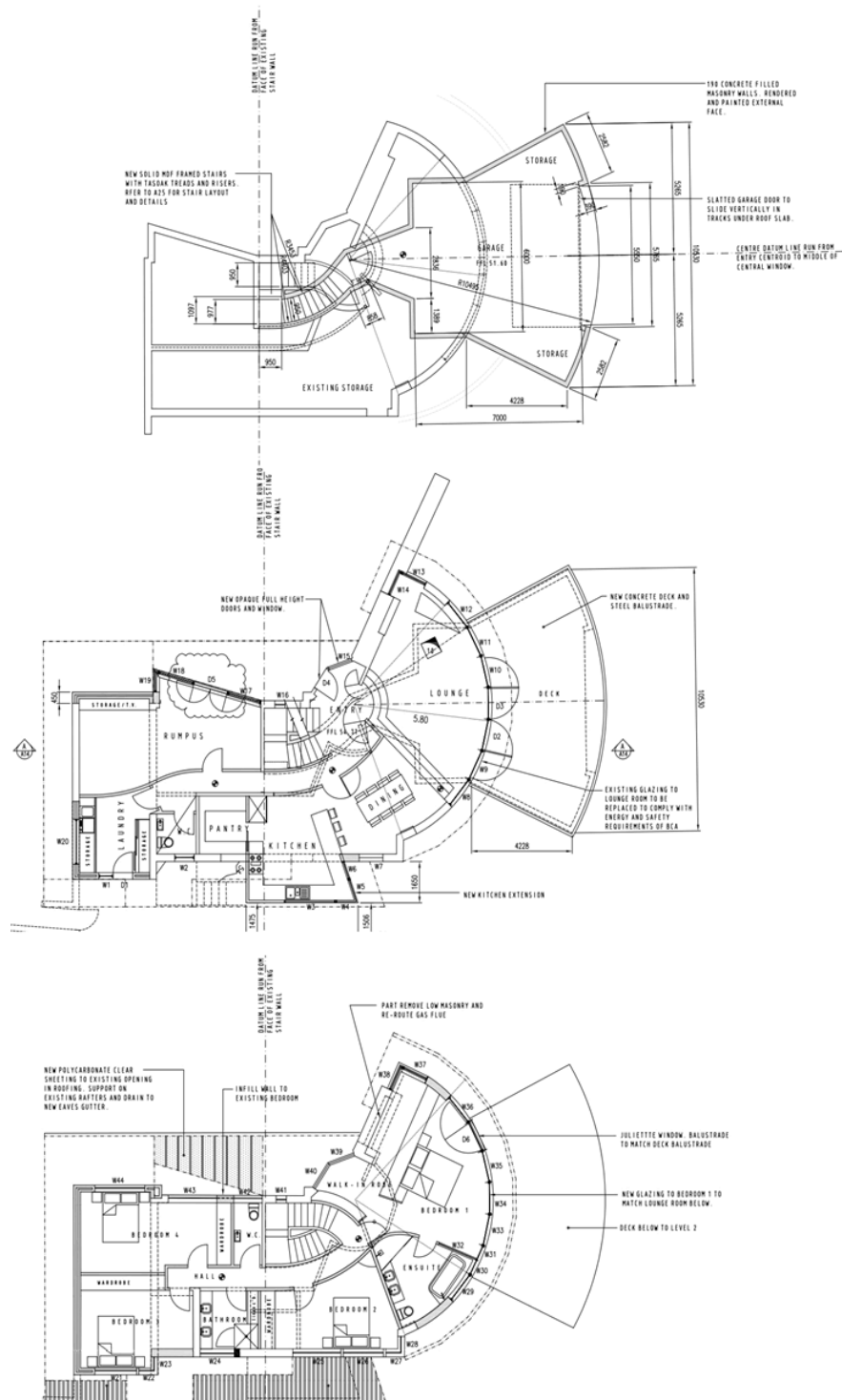


Figure 2: Floor plans of existing dwelling.

4. Background

- 4.1 There is no relevant background for this application.

5. Concerns raised by representors

- 5.1 No representations were received during the statutory advertising period between 09/08/22 - 23/08/22.

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.
- 6.2 The site is located within the General Residential Zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing use is Residential (single dwelling). The proposed use is Visitor Accommodation. The existing use is a no permit required use in the zone. The proposed use is a permitted use in the zone.
- 6.4 The proposal has been assessed against:
- 6.4.1 Planning Directive No.6
- 6.4.2 E6.0 Parking and Access Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
- 6.5.1 Planning Directive No. 6

Visitor Accommodation - 3.1 (e) P1

6.6 Each performance criterion is assessed below.

6.7 Visitor Accommodation - 3.1 (e) P1

6.7.1 The acceptable solution at clause 3.1 (e) A1 requires that Visitor Accommodation must have a gross floor area of not more than 200m² per lot.

6.7.2 The proposal includes a Visitor Accommodation use in a dwelling with a floor area of 235m².

6.7.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.7.4 The performance criterion at clause 3.1 (e) P1 provides as follows:

Visitor Accommodation must be compatible with the character and use of the area and not cause an unreasonable loss of residential amenity, having regard to:

(a) the privacy of adjoining properties;

(b) any likely increase in noise to adjoining properties;

(c) the scale of the use and its compatibility with the surrounding character and uses within the area;

(d) retaining the primary residential function of an area;

(e) the impact on the safety and efficiency of the local road network; and

(f) any impact on the owners and users rights of way.

6.7.5 The proposed change of use is assessed as remaining compatible with the character and the use of the area. There remains reasonable separation between dwellings on adjoining properties that would not see amenity impacts through privacy or noise. The scale is also assessed as remaining appropriate. It is unlikely that a dwelling, of the size and scale would have any greater impact on neighbours if operating as a Residential Use of a Visitor Accommodation use. A Visitor

Accommodation Management Plan will be conditioned as part of any approved operation to appropriately manage the behaviour of guests.

In terms of the impact of this proposal on the character and residential functioning of the area, Council records indicate there have been no recent approvals for Visitor Accommodation in the immediate vicinity on Churchill Avenue or Waimea Avenue. It is not considered that allowing this dwelling to be utilised for Visitor Accommodation would compromise the primarily residential character or functioning of the area.

The proposal includes one on-site car parking space. The proposal is not considered to unreasonably impact on the safety and efficiency of the local road network. There are no rights of way that can be impinged although there is an unnamed laneway that allows access to the rear of the site via Waimea Avenue, access for the proposed use will not have an unreasonable impact on this roadway.

6.7.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for a Change of Use to Visitor Accommodation, at 215 Churchill Avenue, Sandy Bay.
- 7.2 The application was advertised and no representations were received.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Change of Use to Visitor Accommodation, at 215 Churchill Avenue, Sandy Bay satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for Change of Use to Visitor Accommodation, at 215 Churchill Avenue, Sandy Bay for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-277 - 215 CHURCHILL AVENUE SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

PLN 18

Prior to the commencement of the approved use, a management plan for the operation of the visitor accommodation must be submitted and approved as a Condition Endorsement, to the satisfaction of the Council's Director City Life. The management plan must include measures to limit, manage and mitigate unreasonable impacts upon the amenity of long term residents. These measures must include, but are not limited to, the following requirements:

- 1. To limit, manage, and mitigate noise generated as a result of the visitor accommodation.**
- 2. To limit, manage, and mitigate behaviour issues caused as a result of the visitor accommodation.**
- 3. To maintain the security of the building where the visitor accommodation would be located, including managing and/or limiting access to shared areas and facilities.**
- 4. To specify the maximum permitted occupancy of the visitor accommodation.**
- 5. To specify that guests must utilise the site for the parking of vehicles, that the maximum number of vehicles to be parked on the site (1), and detail where the parking spaces are located and how the spaces are to be accessed. Additionally, at the booking stage, guests should be discouraged from bringing more than 1 vehicle and the parking of any additional vehicles in nearby streets should also be discouraged.**

6. To provide a name and contact phone number of a person who will respond to any complaints regarding behaviour of guests. If the property is sold the Visitor Accommodation Management Plan (VAMP) must be updated with new contact details.

Once approved, the management plan must be implemented prior to the commencement of the approved use and must be maintained for as long as the visitor accommodation is in operation. The VAMP must be provided to adjacent property owners and occupiers within 14 days of being approved. If the property is sold, the updated VAMP (in accordance with 6. above) must be provided to adjacent property owners and occupiers within 10 business days of settlement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that visitor accommodation does not cause an unreasonable loss of residential amenity.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

RIGHT OF WAY

The private right of way must not be reduced, restricted or impeded in any way, and all beneficiaries must have complete and unrestricted access at all times.

You should inform yourself as to your rights and responsibilities in respect to the private right of way particularly reducing, restricting or impeding the right during and after construction.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

VISITOR ACCOMMODATION

More information on visitor accommodation, including when building approval is required, can be found [here](#).

In all cases, check with your insurance company that you have adequate cover.

If you are in a bushfire prone area there may be a need to create/review the Bushfire Management Hazard Plan for your property.

If you have a spa or a pool at your property then you are required to test for microbiological quality and chemical parameters on a monthly basis, under the *Public Health Act 1997*. If you have any questions about this then please call our Environmental Health team on 6238 2711.

If you are providing food for consumption on the property, you may require a food business registration in accordance with the *Food Act 2003*. Click [here](#) for more information, or call our Environmental Health team on 6238 2711.

Visitor accommodation is also considered to be a commercial use and also not eligible to residential parking permits. Under the current policy for the issuing of residential parking permits, the proposed change of use to visitor accommodation would not entitle the property to a residential parking permit, or a transferable "bed and breakfast" parking permit.



(Michael McClenahan)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Ben Ikin)

Senior Statutory Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 24 August 2022

Attachment(s):

Attachment B - CPC Agenda Documents

Planning: #255746

Property

215 CHURCHILL AVENUE SANDY BAY TAS 7005

People**Applicant ***

ACN 083 205 467 Pty Ltd

215 Churchill Avenue
SANDY BAY TAS 7005
0407 247141
Tony.m.jubb@gmail.com**Owner ***

ACN 083 205 467 Pty Ltd

215 Churchill Avenue
SANDY BAY TAS 7005
0407 247141
Tony.m.jubb@gmail.com**Entered By**ANTHONY MICHAEL JUBB
0407247141
tony.m.jubb@gmail.com**Use**

Visitor accomodation

Details

Have you obtained pre application advice?

☒ No

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application. *

☒ Yes

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below. *

☒ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)? *

Residential

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage) *

Short to medium term visitor accommodation

Estimated cost of development *

0.00

Existing floor area (m2)

Proposed floor area (m2)

Site area (m2)

Carparking on Site

Total parking spaces

6

Existing parking spaces

N/A

☒ Other (no selection chosen)

Other Details

Does the application include signage? *

☒ No

How many signs, please enter 0 if there are none involved in this application? *

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☒ No

Documents

Required Documents

Title (Folio text and Plan and FolioText-199263-1.pdf
Schedule of Easements) *Title (Folio text and Plan and FolioPlan-199263-1.pdf
Schedule of Easements) *

Plans (proposed, existing) * CHURCHILL A02.pdf

Plans (proposed, existing) * CHURCHILL A08.pdf

Plans (proposed, existing) * CHURCHILL A07.pdf

Plans (proposed, existing) * CHURCHILL A06.pdf

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 199263	FOLIO 1
EDITION 5	DATE OF ISSUE 10-Mar-2020

SEARCH DATE : 06-May-2022

SEARCH TIME : 01.10 PM

DESCRIPTION OF LAND

City of HOBART
Lot 1 on Plan 199263
Derivation : Part of 42 Acres Gtd to J C Firth
Prior CT 2709/96

SCHEDULE 1

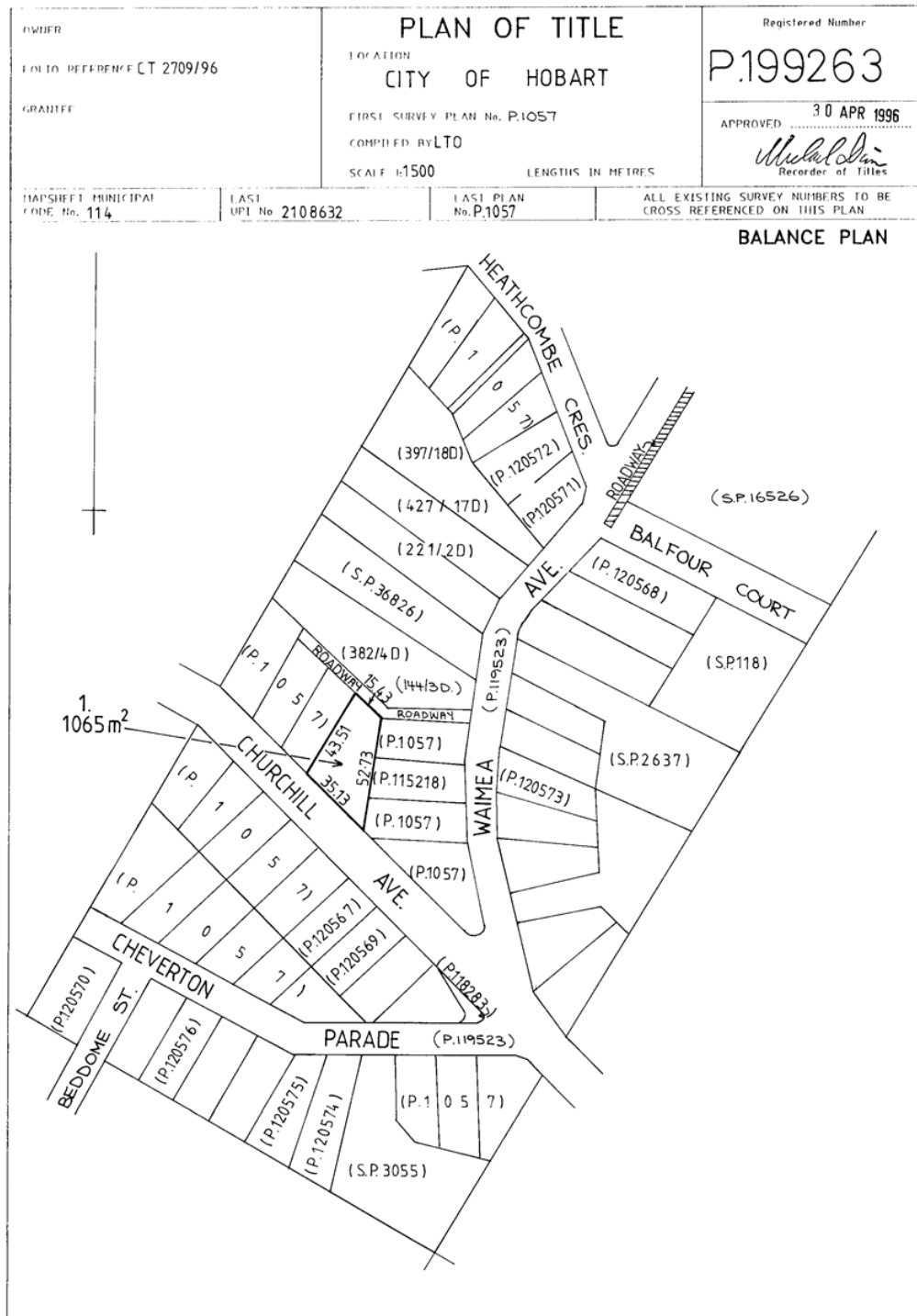
C319496 TRANSFER to ACN 083 205 467 PTY LTD Registered
27-Mar-2002 at 12.02 PM

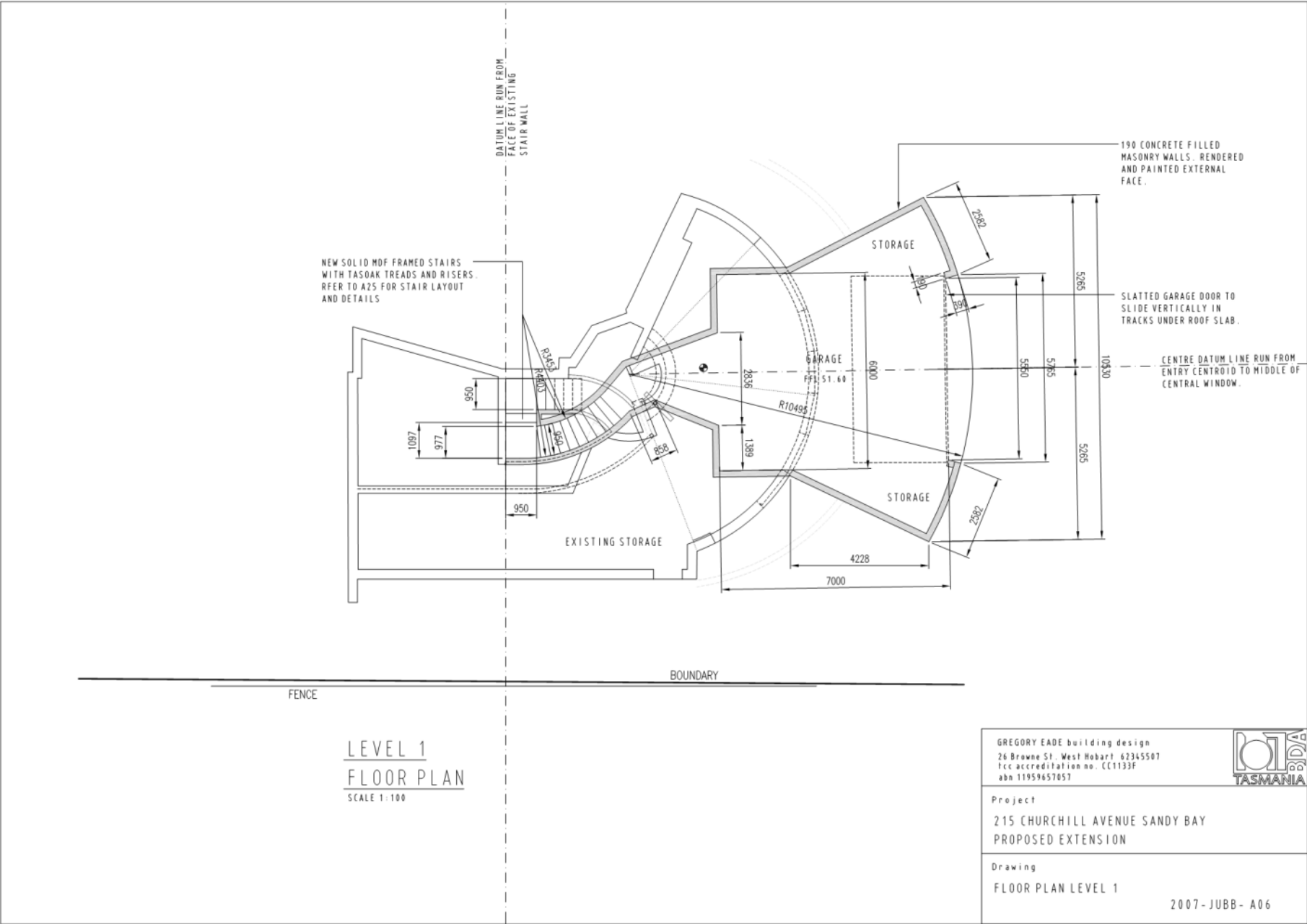
SCHEDULE 2

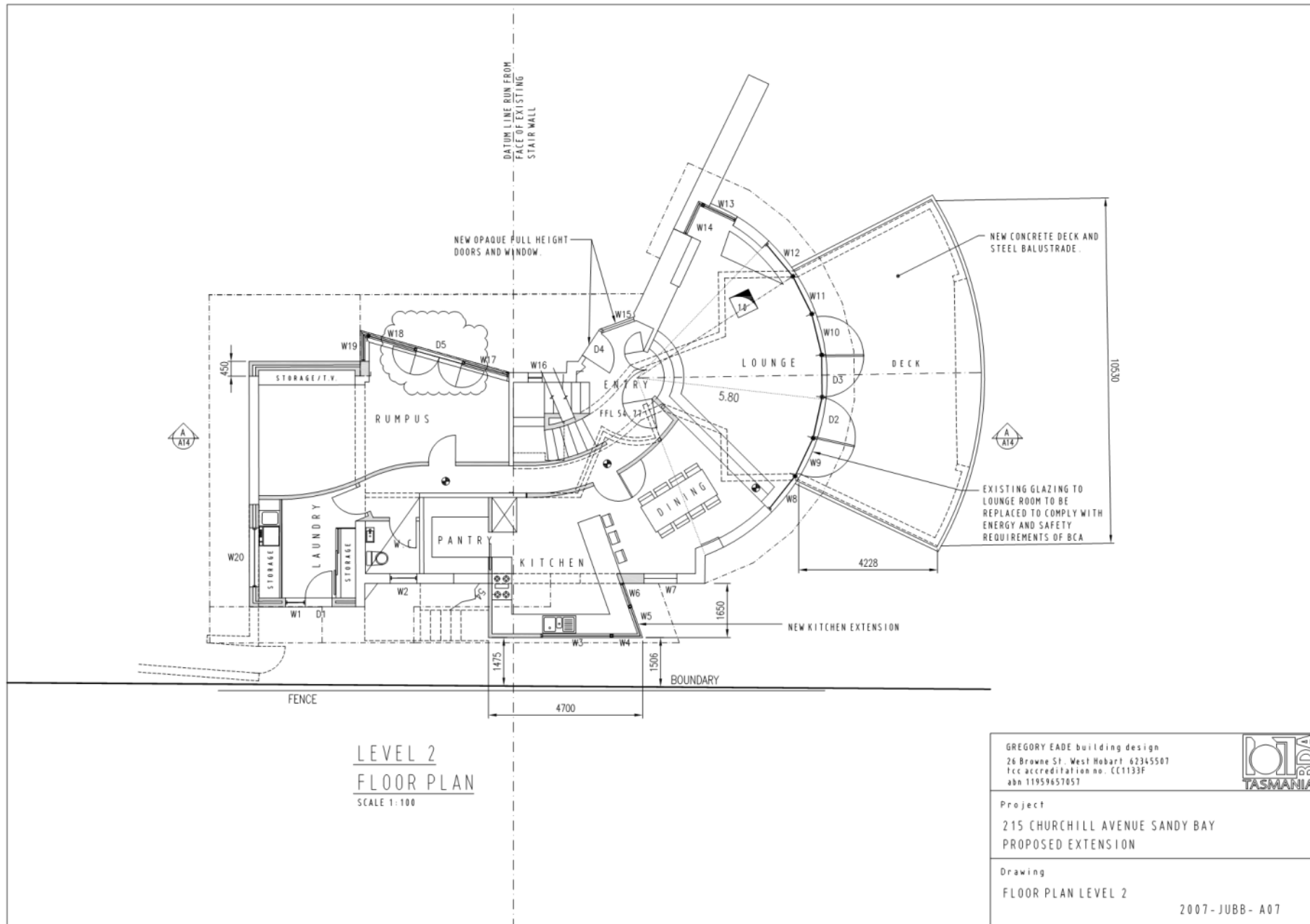
Reservations and conditions in the Crown Grant if any
BENEFITING EASEMENT: a right of carriage way over the land
shown hatched on P 199263
BENEFITING EASEMENT: a right of carriage way over all roadways
delineated on Plan No. 1057
107130 BOUNDARY FENCES AND OTHER CONDITIONS in Transfer
C868965 AGREEMENT pursuant to Section 71 of the Land Use
Planning and Approvals Act 1993 Registered
08-Jul-2008 at noon
M810241 MORTGAGE to Murdoch Clarke Mortgage Management
Limited Registered 10-Mar-2020 at 12.01 PM

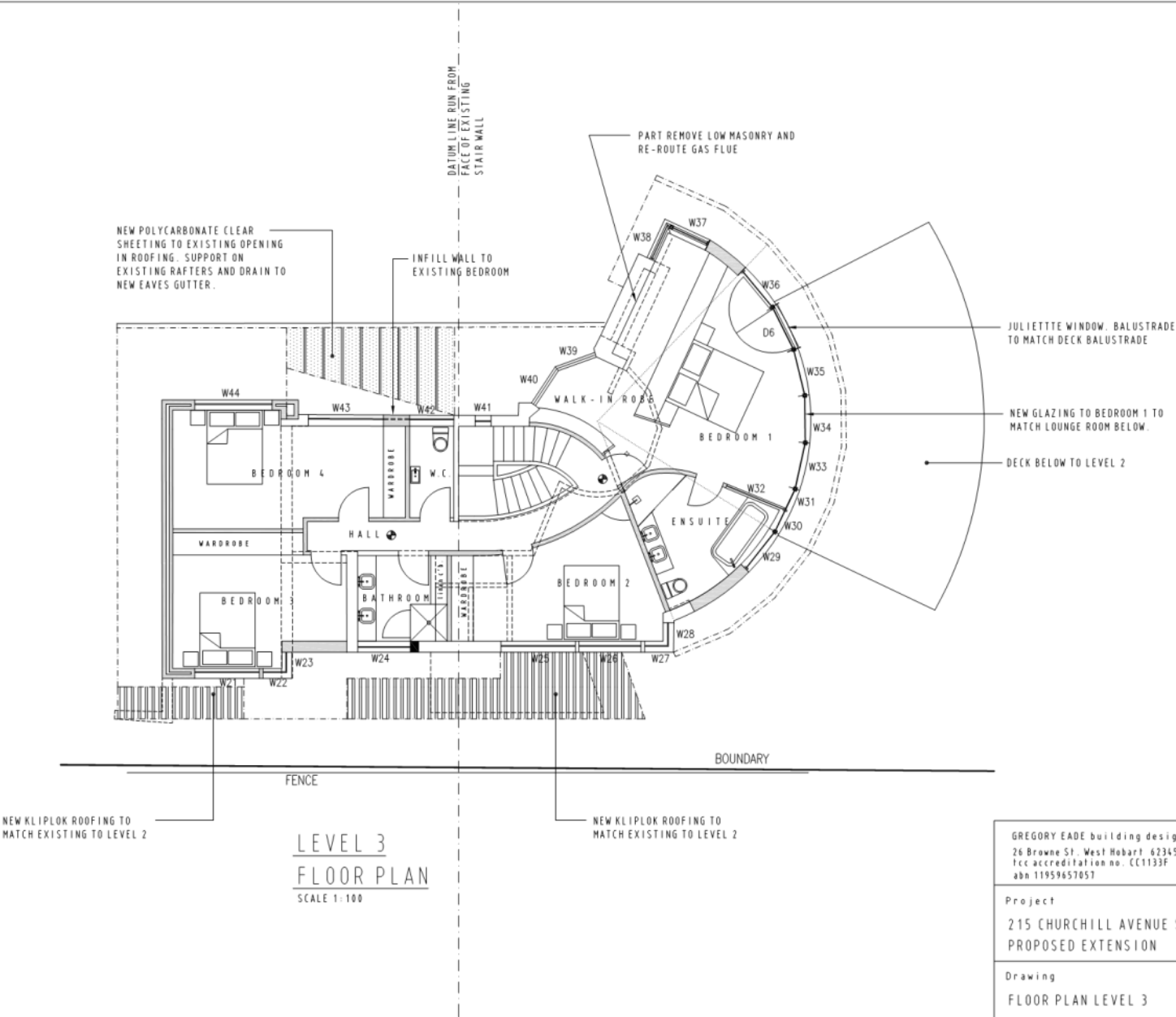
UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations









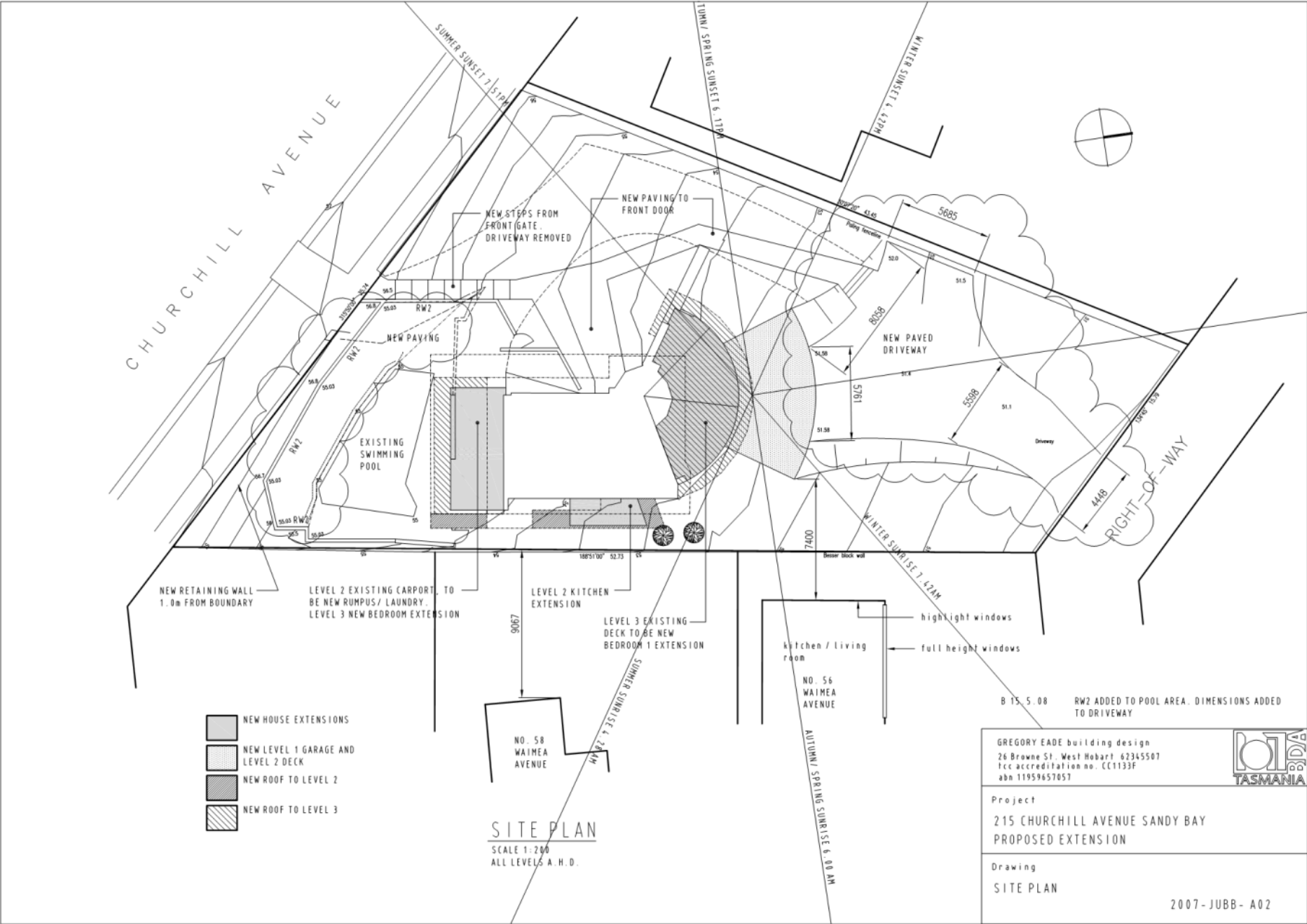
GREGORY EADE building design
26 Browne St. West Hobart 62345507
fcc accreditation no. CC1133F
abn 11959657057



Project
215 CHURCHILL AVENUE SANDY BAY
PROPOSED EXTENSION

Drawing
FLOOR PLAN LEVEL 3

2007-JUBB-A08





127 Bathurst Street
Hobart, Tasmania 7000
Phone (03) 6234 3217

ABN 71 217 806 325
pda.hbt@pda.com.au
www.pda.com.au

Our Ref: 49728HC
1220621, To Hobart City Council re RFI

21st June 2022

PLN-22-277-RFI
General Manager
Hobart City Council

Attention: Michael McClenahan

Dear Michael,

We have been engaged by Mr. Tony Jubb to assist him with a response to Council's RFI dated 23rd May 2022 and wish to advise the following in response to your queries

Parking and Access

Per E6.6.1 a single car space will be provided within the existing garage at the residence as highlighted on the attached plan 2007-JUBB-A06, thus P1 is met.

As the garage area is an existing approved parking area it is assumed that additional plans are no longer required to satisfy E6.7.5.

Roads

The driveway is to remain as currently configured with access from both Churchill Ave and the Right of Way (off Waimea Ave). It is noted that plan 200-JUBB-A02 (Site plan) should be ignored as our client did not realise that this plan had been included in the supplied plan sets. A02 shows external works and changes to the parking and access that were not undertaken at the time of the renovations in 2007/2008.

Yours faithfully,
PDA Surveyors, Engineers & Planners
Per:

Hugh Clement
DIRECTOR and REGISTERED LAND SURVEYOR

HOBART:

C.M. Terry, BSurv (Tas.), M.SSI (Director)
H. Clement, BSurv (Tas.), M.SSI (Director)
M.S.G. Denholm, BGeom (Tas.), M.SSI (Director)
T.W. Walter, Dip. Surv & Map (Director)
M. Westerberg, M.E.M., M.I.E. AUST., C.P.ENG. (Director)
D. Panton, B.E. F.I.E. AUST., C.P.ENG. (Consultant)
A. Collins, Ad. Dip. Surv & Map, (Senior Associate)
L.H. Kiely, Ad. Dip. Civil Eng. Cert IV I.T., (Associate)

KINGSTON:

A.F. (Lex) McIndoe, BSurv (Tas.), M.SSI (Director)
M.M. Stratton, BSurvSpSc, GradDipLandSurv (Tas.) (Associate)

LAUNCESTON:

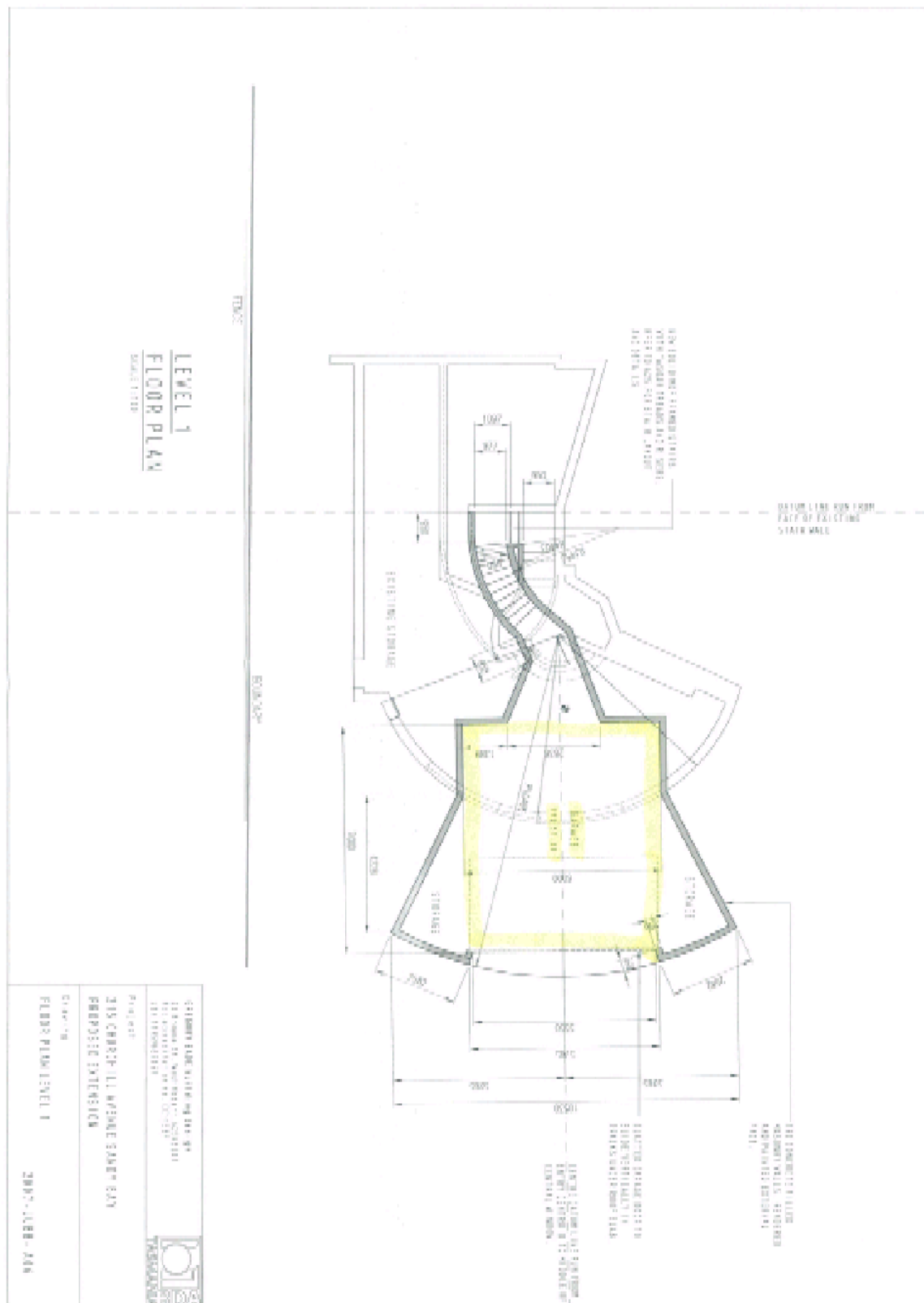
J.W. Dent, OAM, B. Surv (Tas.), M.SSI (Director)
M.B. Reid, BGeom (Honi) (Tas.), M.SSI (Director)
J.M. Brooks, MEnvPg, M.PIA (Director)

BURNIE/DEVONPORT:

A.W. Eberhardt, BGeom (Tas.), M.SSI (Director)
A.J. Hudson, B. SURV. (Tas.), M.SSI (Consultant)

OFFICES ALSO AT:

- 6 Freeman St, Kingston, TAS 7050.
(03) 6229 2131
- 10/16 Main Rd, Huonville, TAS 7109
(03) 6284 1377
- 3 Franklin St, Swansea, TAS 7140
(03) 6130 9099
- 3/23 Brisbane St, Launceston, TAS 7250
(03) 6331 4099
- 16 Emu Bay Rd, Deloraine, TAS 7304
(03) 6362 2999
- 6 Queen Street, Burnie, TAS 7320
(03) 6431 4400
- 77 Gunn St, Devonport, TAS 7310
(03) 6423 6875



**7.1.3 1/273 CHURCHILL AVENUE, SANDY BAY AND COMMON LAND OF
PARENT TITLE - CHANGE OF USE TO VISITOR ACCOMMODATION
PLN-22-482 - FILE REF: F22/88518**

Address: 1/273 Churchill Avenue, Sandy Bay and
Common Land of Parent Title

Proposal: Change of Use to Visitor Accommodation

Expiry Date: 19 September 2022

Extension of Time: Not applicable

Author: Deanne Lang

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for change of use to visitor accommodation at 1/273 Churchill Avenue Sandy Bay 7005 and Common Land of Parent Title for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-482 - 1/273 CHURCHILL AVENUE SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

PLN 18

Prior to the commencement of the approved use, a management plan for the operation of the visitor accommodation must be submitted and approved as a Condition Endorsement, to the satisfaction of the Council's Director City Life. The management plan must include measures to limit, manage and mitigate unreasonable impacts upon the amenity of long term residents. These measures must include, but are not limited to, the following requirements:

1. To limit, manage, and mitigate noise generated as a result of the visitor accommodation.
2. To limit, manage, and mitigate behaviour issues caused as a

result of the visitor accommodation.

3. To maintain the security of the building where the visitor accommodation would be located, including managing and/or limiting access to shared areas and facilities.
4. To specify the maximum permitted occupancy of the visitor accommodation.
5. To specify that guests must utilise the site for the parking of vehicles, that the maximum number of vehicles to be parked on the site (1), and detail where the parking spaces are located and how the spaces are to be accessed. Additionally, at the booking stage, guests should be discouraged from bringing more than 1 vehicle and the parking of any additional vehicles in nearby streets should also be discouraged.
6. To provide a name and contact phone number of a person who will respond to any complaints regarding behaviour of guests. If the property is sold the Visitor Accommodation Management Plan (VAMP) must be updated with new contact details.

Once approved, the management plan must be implemented prior to the commencement of the approved use and must be maintained for as long as the visitor accommodation is in operation. The VAMP must be provided to adjacent property owners and occupiers within 14 days of being approved. If the property is sold, the updated VAMP (in accordance with 6. above) must be provided to adjacent property owners and occupiers within 10 business days of settlement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that visitor accommodation does not cause an unreasonable loss of residential amenity.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

VISITOR ACCOMMODATION

More information on visitor accommodation, including when building approval is required, can be found [here](#).



In all cases, check with your insurance company that you have adequate cover.

If you are in a bushfire prone area there may be a need to create/review the Bushfire Management Hazard Plan for your property.

If you have a spa or a pool at your property then you are required to test for microbiological quality and chemical parameters on a monthly basis, under the *Public Health Act 1997*. If you have any questions about this then please call our Environmental Health team on 6238 2711.

If you are providing food for consumption on the property, you may require a food business registration in accordance with the *Food Act 2003*. Click [here](#) for more information, or call our Environmental Health team on 6238 2711.

Visitor accommodation is also considered to be a commercial use and also not eligible to residential parking permits. Under the current policy for the issuing of residential parking permits, the proposed change of use to visitor accommodation would not entitle the property to a residential parking permit, or a transferable “bed and breakfast” parking permit.

- Attachment A: PLN-22-482 - 1/273 CHURCHILL AVENUE SANDY BAY TAS 7005 - Planning Committee or Delegated Report ↓ 
- Attachment B: PLN-22-482 - 1/273 CHURCHILL AVENUE SANDY BAY TAS 7005 - CPC Agenda Documents ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report:	Committee
Council:	12 September 2022
Expiry Date:	19 September 2022
Application No:	PLN-22-482
Address:	1 / 273 CHURCHILL AVENUE , SANDY BAY COMMON LAND OF PARENT TITLE
Applicant:	Richard Baines 1/273 Churchill Avenue
Proposal:	Change of Use to Visitor Accommodation
Representations:	Nil
Performance criteria:	Planning Directive No. 6 - Exemption and Standards for Visitor Accommodation in Planning Schemes - P2,

1. Executive Summary

- 1.1 Planning approval is sought for Change of Use to Visitor Accommodation at 1/273 Churchill Avenue Sandy Bay and Common Land of Parent Title.
- 1.2 More specifically the proposal includes:
 - change of use of one of three double storey multiple dwelling within the strata lot scheme to visitor accommodation;
 - the remaining multiple dwellings are used as long term residential accommodation;
 - no works are required to convert the multiple dwelling to visitor accommodation;
 - no signage is proposed; and
 - one onsite car parking space is proposed within the existing carport attached to the multiple dwelling.
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
 - 1.3.1 Planning Directive No. 6 - Exemption and Standards for Visitor Accommodation in Planning Schemes - P2

- 1.4 No representations were received during the statutory advertising period between 11-25 August 2022.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the Council because it is of a category of applications that has been called in by an Elected Member.

2. Site Detail

- 2.1 The subject dwelling is one of three conjoined multiple dwellings located on the subject site. The property is situated on the northern side Churchill Avenue, and located within a section which includes a number of properties containing multiple dwelling developments.



Fig. 1 - the subject site is bordered in blue



Fig. 2 - the proposed visitor accommodation unit is the first of the existing conjoined units



Fig. 3 the proposed visitor accommodation unit has a carport and own entrance

3. Proposal

3.1 Planning approval is sought for Change of Use to Visitor Accommodation at 1/273 Churchill Avenue Sandy Bay and Common Land of Parent Title.

3.2 More specifically the proposal is for:

- change of use of one of three double storey multiple dwellings within the strata lot scheme to visitor accommodation;
- the remaining multiple dwellings are used as long term residential accommodation;
- no works are required to convert the multiple dwelling to visitor accommodation;
- no signage is proposed; and
- one onsite car parking space is proposed within the existing carport attached to the multiple dwelling.

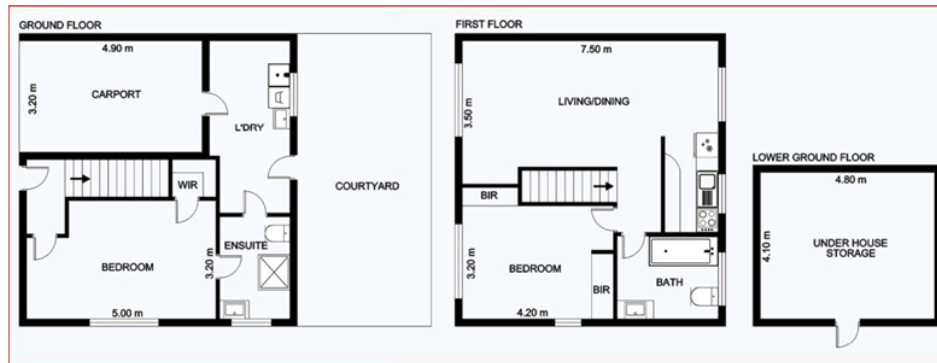


Fig. 4 Existing/Proposed Floor Plan

4. Background

4.1 N/A

5. Concerns raised by representors

5.1 No representations were received during the statutory advertising period between 11-25 August 2022.

6. Assessment

6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.

6.2 The site is located within the General Residential Zone of the *Hobart Interim Planning Scheme 2015*.

6.3 The existing use is multiple dwelling. The proposed use is visitor accommodation. The existing use is a permitted use in the zone. The proposed use is a permitted use in the zone.

6.4 The proposal has been assessed against:

6.4.1 Planning Directive No. 6 - Exemption and Standards for Visitor

Accommodation in Planning Schemes

6.4.2 E6.0 Parking and Access Code

6.5 The proposal relies on the following performance criteria to comply with the applicable standards:

6.5.1 Planning Directive No. 6 - Exemption and Standards for Visitor Accommodation in Planning Schemes - P2

6.6 Each performance criterion is assessed below.

6.7 Planning Directive No. 6P2

6.7.1 There is no acceptable solution for visitor accommodation upon a lot within a strata scheme where another lot within that strata scheme is used for a residential use.

6.7.2 The proposal includes the change of use of one unit within a strata scheme to visitor accommodation. The two other units are used for long term residential use.

6.7.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.

6.7.4 The performance criterion at clause PD6:P2 provides as follows:

Visitor Accommodation within a strata scheme must not cause an unreasonable loss of residential amenity to long term residents occupying other lots within the strata scheme, having regard to:

- (a) the privacy of residents;*
- (b) any likely increase in noise;*
- (c) the residential function of the strata scheme;*
- (d) the location and layout of the lots;*
- (e) the extent and nature of any other non-residential uses; and*
- (f) any impact on shared access and common property.*

6.7.5 The objectives of the visitor accommodation provisions are to ensure that visitor accommodation in a strata scheme does not cause an unreasonable loss of residential amenity, and that it does not impact on the safety and efficiency of local roads or rights of way.

As stated above, the dwelling which is the subject of the application is located in a strata scheme which contains three multiple dwellings. Each dwelling has a carport forming part of the ground floor of the dwelling.

The complex consist of three conjoined brick units. The unit subject to this application is the first unit within the strata scheme .

The subject unit is a double storey, two bedroom unit, with direct access from both the carport and entrance door. The staggering of the units ensures that there is no overlooking or impact on privacy of the other residents within the complex. Being the first unit in the complex ensures that that there is no need for guests or their vehicles to walk/drive past the other units to access the visitor accommodation. As such, the residential function and privacy of the residents in the remaining units will not be affected when the proposed visitor accommodation is occupied.

As stated above, there are three dedicated onsite car parking spaces, each forming part of the ground floor of each dwelling. The existence of an onsite car parking spaces ensures that there is no pressure on the safety or efficiency of the local road network. It is possible to exit the site in a forward position, by manoeuvring on the common land.

It is considered that the change of use to visitor accommodation will not significantly change the privacy and residential function of the remaining units within the strata scheme than would be expected by permanent occupants of the unit. This is due to the nature of visitor accommodation use being similar to residential use.

The applicant has not submitted a management plan for the proposed visitor accommodation as part of their application. It is considered that should the proposal be approved, a condition requiring a management plan will be placed on the permit to protect the residential amenity of the owners/occupiers within the remaining units in the strata scheme, as well as adjoining property owners.

It is noted that no representations have been submitted, indicating a level of support for the proposed change of use of the multiple dwelling to visitor accommodation.

6.7.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for Change of Use to Visitor Accommodation at 1/273 Churchill Avenue Sandy Bay and Common Land of Parent Title.
- 7.2 The application was advertised and no representations were received.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Change of Use to Visitor Accommodation at 1/273 Churchill Avenue Sandy Bay and Common Land of Parent Title. satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for Change of Use to Visitor Accommodation at 1/273 Churchill Avenue Sandy Bay and Common Land of Parent Title for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-482 - 1/273 CHURCHILL AVENUE SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

PLN 18

Prior to the commencement of the approved use, a management plan for the operation of the visitor accommodation must be submitted and approved as a Condition Endorsement, to the satisfaction of the Council's Director City Life. The management plan must include measures to limit, manage and mitigate unreasonable impacts upon the amenity of long term residents. These measures must include, but are not limited to, the following requirements:

1. **To limit, manage, and mitigate noise generated as a result of the visitor accommodation.**
2. **To limit, manage, and mitigate behaviour issues caused as a result of the visitor accommodation.**
3. **To maintain the security of the building where the visitor accommodation would be located, including managing and/or limiting access to shared areas and facilities.**
4. **To specify the maximum permitted occupancy of the visitor accommodation.**
5. **To specify that guests must utilise the site for the parking of vehicles, that the maximum number of vehicles to be parked on the site (1), and detail where the parking spaces are located and how the spaces are to be accessed. Additionally, at the booking stage, guests should be discouraged from bringing more than 1 vehicle and the parking of any additional vehicles in nearby streets should also be discouraged.**

6. To provide a name and contact phone number of a person who will respond to any complaints regarding behaviour of guests. If the property is sold the Visitor Accommodation Management Plan (VAMP) must be updated with new contact details.

Once approved, the management plan must be implemented prior to the commencement of the approved use and must be maintained for as long as the visitor accommodation is in operation. The VAMP must be provided to adjacent property owners and occupiers within 14 days of being approved. If the property is sold, the updated VAMP (in accordance with 6. above) must be provided to adjacent property owners and occupiers within 10 business days of settlement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that visitor accommodation does not cause an unreasonable loss of residential amenity.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

VISITOR ACCOMMODATION

More information on visitor accommodation, including when building approval is required, can be found [here](#).

In all cases, check with your insurance company that you have adequate cover.

If you are in a bushfire prone area there may be a need to create/review the Bushfire Management Hazard Plan for your property.

If you have a spa or a pool at your property then you are required to test for microbiological quality and chemical parameters on a monthly basis, under the *Public Health Act 1997*. If you have any questions about this then please call our Environmental Health team on 6238 2711.

If you are providing food for consumption on the property, you may require a food business registration in accordance with the *Food Act 2003*. Click [here](#) for more information, or call our Environmental Health team on 6238 2711.

Visitor accommodation is also considered to be a commercial use and also not eligible to residential parking permits. Under the current policy for the issuing of residential parking permits, the proposed change of use to visitor accommodation would not entitle the property to a residential parking permit, or a transferable "bed and breakfast" parking permit.



(Deanne Lang)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Ben Ikin)

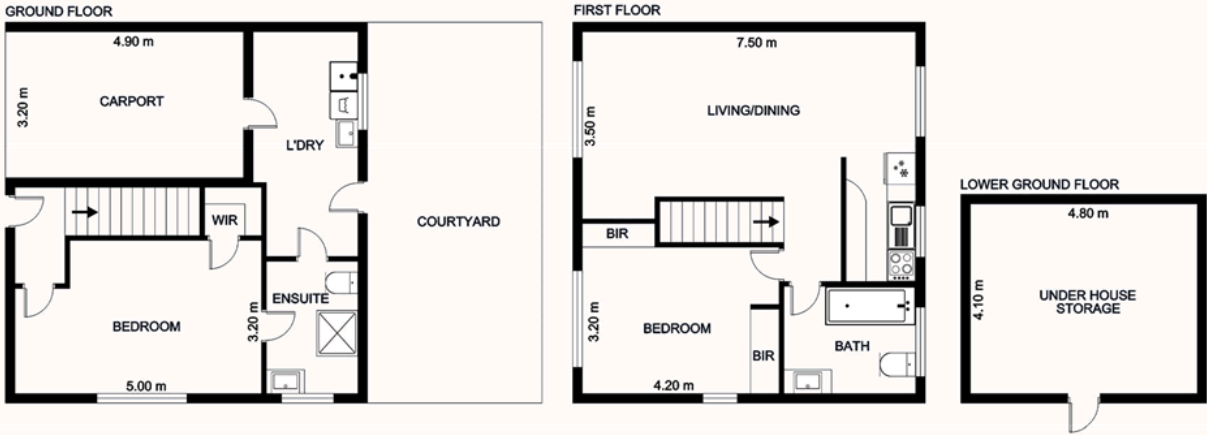
Senior Statutory Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 26 August 2022

Attachment(s):

Attachment B - CPC Agenda Documents



1/273 Churchill Avenue, Sandy Bay
Total approx. floor area: 96m²

Areas and dimensions are approximate and therefore
this floor plan should only be used for illustrative purposes.
Real Estate Marketing by nextcreative.com.au

BLUE / EDGE

Deanne Lang

From: Richard Baines <richardbainesabc@gmail.com>
Sent: Monday, 8 August 2022 4:49 PM
To: Deanne Lang
Subject: Re: PLN-22-482 - 1/273 CHURCHILL AVENUE SANDY BAY TAS 7005
Attachments: Folio Text.pdf

Caution! This message was sent from outside your organization.

Hi Deanne

As discussed attached is the floorplan and the Folio Text with my name on it.

In terms of the other matters:

1. Scaled and dimensioned floor plan of the proposed visitor accommodation

Supplied

2. Total area to be used by the visitor accommodation

All space provided for in floor plan

3. Details of any proposed signage (i.e. size and location)

None

4. Will a portion of the building proposed as the visitor accommodation be occupied by permanent resident;

No

5. On a scaled and dimensioned site plan please confirm all car parking on site and which will be designated as

Listed as "carport"

6. Confirm if any work is to be undertaken to enable the change of use. If work is proposed please provide details

None



On Mon, Aug 8, 2022 at 3:08 PM Deanne Lang <langd@hobartcity.com.au> wrote:

Thanks Richard

I have received the additional information (declaration) and confirmation that you have paid the advertising fee. Your appli

I will let our admin staff know to advertise your application asap

Kind regards

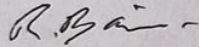
Deanne

My only plan is to use my property as an Airbnb or other similar short-stay accommodation.

Good Afternoon

As discussed in relation to Application PLN-22-482, I can advise that as of 08/08/2022 I have notified the owners of 2/273 Churchill Avenue and 3/273 Churchill Avenue of my intention to make the application.

Kind Regards

A handwritten signature in black ink, appearing to read 'R. Baines'.

Richard Baines – 08/08/2022

From: Richard Baines [mailto:richardbainesabc@gmail.com]
Sent: Monday, 8 August 2022 2:44 PM
To: Deanne Lang <langd@hobartcity.com.au>
Subject: Re: Invalid Application - PLN-22-482 - 1/273 CHURCHILL AVENUE SANDY BAY TAS 7005

Dear Deanne

Thanks for your time on the phone today.

Just advising that the declaration has been submitted and the \$420 has been paid.

If you need anything further please let me know.

Kind Regards

Richard

On Wed, Jul 27, 2022 at 12:18 PM <Langd@hobartcity.com.au> wrote:

Dear Richard

Your planning application is currently invalid.

Please find a link below to a letter detailing why your application is invalid, and what you can do to make your ap

<https://hobartcitycouncil.sharefile.com/d-se6fff7794c3941edab4769f28520ba55>

Note: The above link will expire in 14 days. Please download and save the documents within this time frame.

An additional fee may be payable to re-issue any documents after this period (as per Council's Fees and Charges).

The letter also foreshadows additional information that will be required to assess the planning application once it i

Please submit the required documentation through the City of Hobart online development portal <https://apply.hoba>

Kind regards

(insert DAP email signature)

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
58651	1
EDITION	DATE OF ISSUE
9	04-Aug-2022

SEARCH DATE : 08-Aug-2022

SEARCH TIME : 04.44 PM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Strata Plan 58651 (formerly being STR1188) and a
general unit entitlement operating for all purposes of the
Strata Scheme being a 50 undivided 1/150 interest

Derived from Strata Plan 58651

Derivation : Part of 52A-3R-0Ps. Gtd. to G. Flexmore
Prior CT 3876/15SCHEDULE 1M973967 TRANSFER to RICHARD MICHAEL KIRAN BAINES Registered
04-Aug-2022 at noonSCHEDULE 2Reservations and conditions in the Crown Grant if any
The registered proprietor holds the lot and unit entitlement
subject to any interest noted on common property
Folio of the Register volume 58651 folio 0

SP 4726 EASEMENTS in Schedule of Easements

SP 4726 FENCING PROVISION in Schedule of Easements

E309727 MORTGAGE to Commonwealth Bank of Australia
Registered 04-Aug-2022 at 12.01 PMUNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 58651	FOLIO 0
EDITION 2	DATE OF ISSUE 28-Mar-2006

SEARCH DATE : 09-Jun-2022

SEARCH TIME : 02.51 PM

DESCRIPTION OF LAND

City of HOBART

The Common Property for Strata Scheme 58651 (formerly being STR1188)

Derivation : Part of 52A-3R-0Ps. Gtd. to G. Flexmore
Prior CT 3337/11SCHEDULE 1

STRATA CORPORATION NUMBER 58651, NO 273 CHURCHILL AV HOBART

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

SP 4726 EASEMENTS in Schedule of Easements

SP 4726 FENCING PROVISION in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Conveyancing and Law of Property Act 1884

STRATUM PLAN

No. 1188

REGISTERED NUMBER

Sheet 1 of 5 Sheets

City or Town HOBART

58651

Locality SANDY BAY

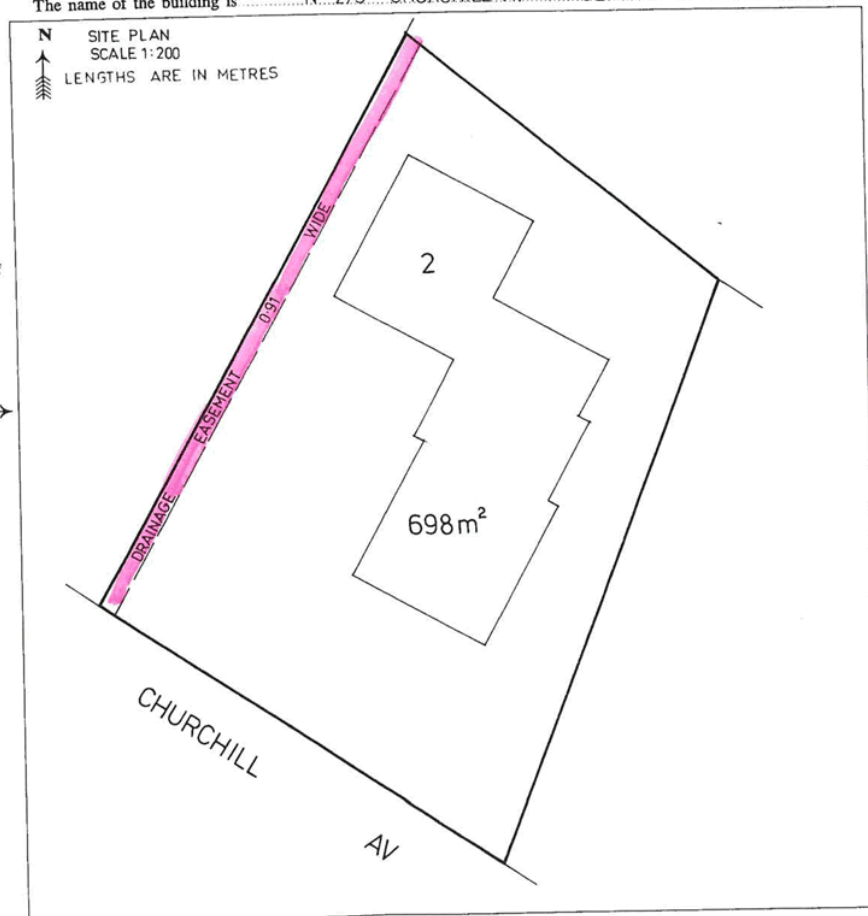
Reference to Title CT 3337-11

Site comprises the whole of Lot 2 on Plan No. SP 4726 in the

Lands Titles Office

The name of the building is No. 273 CHURCHILL AV. HOBART

External
surface
boundaries of
the site and
the location of
the building
in relation
thereto to
be delineated
in this space

REGISTERED this 13th day of February 1951, No. 1188

This plan is lodged for registration by Dobson, Mitchell & Allport

Recorder of Titles

01 1315



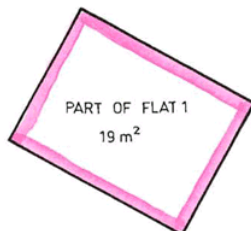
FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 2 of 5 Sheets

LOWER GROUND FLOOR
SCALE 1:100~~As in Clerk/Council Clerk~~

ALL HORIZONTAL FLAT BOUNDARIES ARE SHOWN BY HEAVY UNBROKEN LINES.
ALL BOUNDARIES ARE THE CENTRES OF WALLS, FLOORS AND CEILINGS.



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

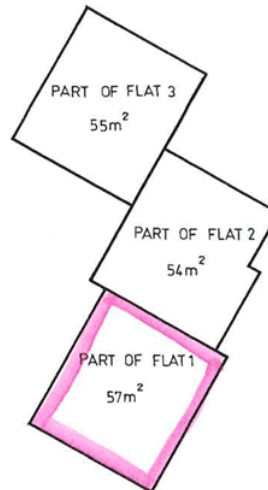


Sheet 3 of 5 Sheets

If further sheets are required to illustrate the flats, the sheets should be pinned here.

Further sheets must be of paper supplied for the purpose by the Recorder of Titles and bearing his seal, and be numbered consecutively, commencing from sheet 4.

GROUND FLOOR
SCALE 1:200



Town Clerk/Council Clerk

ALL HORIZONTAL FLAT BOUNDARIES ARE SHOWN BY HEAVY UNBROKEN LINES.
ALL BOUNDARIES ARE THE CENTRES OF WALLS, FLOORS AND CEILINGS.



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 4 of 5 Sheets

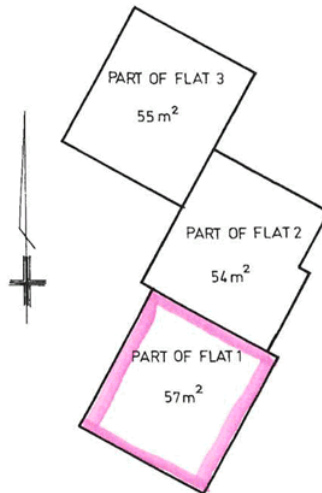
STRATUM PLAN

Drawn Clerk/Council Clerk
of

273 CHURCHILL AVE. HOBART
(insert here name of the building)



FIRST FLOOR
SCALE 1:200



ALL HORIZONTAL FLAT BOUNDARIES ARE SHOWN BY HEAVY UNBROKEN LINES.
ALL BOUNDARIES ARE THE CENTRES OF WALLS, FLOORS AND CEILINGS.

73484



FOLIO PLAN

RECORD OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 5 of 5 Sheets

~~Town Clerk/Council Clerk~~

The address for service of notices on the company is:—

Nº 273 CHURCHILL AV.
SANDY BAY. 700

UNIT ENTITLEMENTS

[illegible]

SURVEYOR'S CERTIFICATE

I, David J. McAvoy
of Prosetta
a surveyor registered under the *Land Surveyor's Act* 1909, hereby certify that the building erected on the site described and delineated on sheet 1 of this plan is within the external boundaries of the title stated on sheet 1.

Dated this 20th day of May 1980

De Cebay
Registered Surveyor

COUNCIL CLERK'S CERTIFICATE

I certify that the subdivision shown in this plan
has been approved by the

HOBART CITY Council

Dated this 16th day of JANUARY 1981

~~Town Clerk/Council Clerk~~

FOR OFFICE USE ONLY

Planning: #261486

Property

1/273 CHURCHILL AVENUE SANDY BAY TAS 7005

**People****Applicant ***

Richard Baines
1/273 Churchill Avenue
SANDY BAY TAS 7005
0434035791
richardbainesabc@gmail.com

Owner *

Richard Baines
1/273 Churchill Avenue
SANDY BAY TAS 7005
0434035791
richardbainesabc@gmail.com

Entered By

RICHARD BAINES
1 / 273 CHURCHILL AVENUE
SANDY BAY TAS 7005
0434 035 791
richardbainesabc@gmail.com

Use

Visitor accomodation

Details

Have you obtained pre application advice?

☒ No

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. *

☒ Yes

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below. *

☒ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)? *

At the moment the unit is just approved/used for living in

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage) *

I plan to Airbnb my property periodically.

Estimated cost of development *

0.00

Existing floor area (m2)

0.00

Proposed floor area (m2)

Site area (m2)

Carparking on Site

Total parking spaces

1

Existing parking spaces

1

N/A

☒ Other (no selection chosen)**Other Details**

Does the application include signage? *

☐ No

How many signs, please enter 0 if there are none involved in this application? *

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☐ No**Documents****Required Documents**Title (Folio text and Plan and Highlighted Title and Plan (1).pdf
Schedule of Easements) *

Plans (proposed, existing) * Baines plan.pdf

**7.1.4 16 WAYNE AVENUE, SANDY BAY AND ADJACENT ROAD
RESERVE - PARTIAL DEMOLITION AND ALTERATIONS TO
PEDESTRIAN AND VEHICLE ACCESS, DRIVEWAY AND PARKING
PLN-22-256 - FILE REF: F22/87432**

Address: 16 Wayne Avenue, Sandy Bay and Adjacent
Road Reserve

Proposal: Partial Demolition and Alterations to Pedestrian
and Vehicle Access, Driveway and Parking

Expiry Date: 4 October 2022

Extension of Time: Not applicable

Author: Cameron Sherriff

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for partial demolition and alterations to pedestrian and vehicle access, driveway, and parking, at 16 Wayne Avenue and adjacent road reserve, Sandy Bay for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-256 - 16 WAYNE AVENUE SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

Prior to first occupation or commencement of use (whichever occurs first), all stormwater from the proposed development (including but not limited to; roofed areas, ag drains, retaining wall ag drains, and impervious surfaces, such as driveways or paved areas) must be drained to the Council's stormwater infrastructure.

Any private or private shared stormwater system passing through

third-party land must have sufficient receiving capacity.

Advice:

Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 3a

Prior to first occupation or commencement of use (whichever occurs first), the parking area (domestic driveway & parking space) must be constructed in accordance with the plans which form part of this permit, prepared by *iC21 design* titled *Retaining Walls, Stairs, Driveway Upgrade* registered 15/7/2022 with the City of Hobart.

Any departure from the approved design documentation, and any works which are not detailed, must either be:

1. approved by the Director City Life, via a Condition Endorsement application, or
2. be designed and constructed in accordance with the Australian Standard AS/NZ 2890.1:2004.

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

Prior to first occupation or commencement of use (whichever occurs first), the parking area (domestic driveway and parking space) approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, pavers, or equivalent Council approved) and surface(s) drained to the Council's stormwater infrastructure.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 5

The total number of off-street car parking spaces approved for use on site, by this permit, is One (1).

Reason for condition

To ensure the provision of parking for the use is safe and efficient.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r3

Prior to the commencement of use, the proposed driveway crossover on the Wayne Avenue highway reservation must be designed and constructed in accordance with:

- Urban - TSD-R09-v3 – Urban Roads Driveways and TSD R14-v3 Type KC vehicular crossing;

Design drawings must be submitted and approved as a Condition Endorsement prior to any approval under the *Building Act 2016*. The design drawings must:

1. Show the cross and long section of the driveway crossover within the highway reservation and onto the property;
2. Detail any services or infrastructure (ie light poles, pits, awnings) at or near the proposed driveway crossover;
3. Show swept path templates in accordance with AS/NZS 2890.1 2004(B85 or B99 depending on use, design template);
4. If the design deviates from the requirements of the TSD, then demonstrate that a B85 vehicle or a B99 depending on use (AS/NZS 2890.1 2004, section 2.6.2), can access the driveway from the road pavement into the property without scraping the vehicle's underside;
5. Show that vehicular and pedestrian sight lines are met as per AS/NZS 2890.1 2004.
6. Be prepared and certified by a suitable qualified person, to satisfy the above requirements.

All work required by this condition must be undertaken in accordance with the approved drawings.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Please note that your proposal does not include adjustment of footpath levels. Any adjustment to footpath levels necessary to suit the design of proposed floor, parking module or driveway levels will require separate agreement from Council's Program Leader Road Services and may require further planning approvals. It is advised to place a note to this effect on construction drawings for the site and/or other relevant engineering drawings to ensure that contractors are made aware of this requirement.

Reason for condition

To ensure that works will comply with the Council's standard requirements.

ENV 2

Sediment and erosion control measures, in accordance with an approved soil and water management plan (SWMP), must be installed prior to the commencement of work and maintained until such time as all disturbed areas have been stabilised and/or restored or sealed to the Council's satisfaction.

A SWMP must be submitted as a Condition Endorsement prior to the issue of any approval under the *Building Act 2016* or the commencement of work, whichever occurs first. The SWMP must be prepared in accordance with the Soil and Water Management on Building and Construction Sites fact sheets (Derwent Estuary Program, 2008), available [here](#).

All work required by this condition must be undertaken in accordance with the approved SWMP.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To avoid the pollution and sedimentation of roads, drains and natural watercourses that could be caused by erosion and runoff from the development.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require an occupational license for structures in the Hobart City Council highway reservation, in accordance with conditions to be established by the Council. Click [here](#) for more information.

You may require a Permit to Open Up and Temporarily Occupy a Highway (for work in the road reserve). Click [here](#) for more information.

EXISTING VEGETATION

Care should be taken to minimise any unnecessary damage to or removal of existing boundary line hedging and vegetation not otherwise approved to be removed (either side of the driveway access) as part of this permit.

STORMWATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK WITHIN THE HIGHWAY RESERVATION

Please note development must be in accordance with the Hobart City Council's Infrastructure by law. Click [here](#) for more information.

DRIVEWAY SURFACING OVER HIGHWAY RESERVATION

If a coloured or textured surface is used for the driveway access within the Highway Reservation, the Council or other service provider will not match this on any reinstatement of the driveway access within the Highway Reservation required in the future.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

WASTE DISPOSAL

It is recommended that the developer liaise with the Council's Cleansing and Solid Waste Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill.



Further information regarding waste disposal can also be found on the Council's [website](#).

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

- Attachment A: PLN-22-256 - 16 WAYNE AVENUE SANDY BAY
TAS 7005 -  Planning Committee or Delegated
Report ↓
- Attachment B: PLN-22-256 - 16 WAYNE AVENUE SANDY BAY
TAS 7005 - CPC Agenda Documents ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report: Committee
Council: 5 September 2022
Expiry Date: 4 October 2022
Application No: PLN-22-256
Address: 16 WAYNE AVENUE , SANDY BAY
ADJACENT ROAD RESERVE
Applicant: Anthony Sullivan (IC21 Design)
61 Esplanade
61, Esplanade
Proposal: Partial Demolition and Alterations to Pedestrian and Vehicle Access,
Driveway, and Parking
Representations: Nil
Performance criteria: Development Standards; Parking and Access Code; Landslide Code

1. Executive Summary

- 1.1 Planning approval is sought for Partial Demolition and Alterations to Pedestrian and Vehicle Access, Driveway, and Parking, at 16 Wayne Avenue and Adjacent Road Reserve, Sandy Bay.

- 1.2 More specifically the proposal includes:
- A replacement access crossover and demolition and replacement of the existing driveway and parking area, involving cutting into the existing slope to provide improved grades for access and parking.
 - Demolition and replacement of the existing retaining walls and steps/entry stairs running up the southern side of the driveway and dwelling, with associated handrail and balustrade.
 - A new retaining wall running across the front of the dwelling at the edge of the replacement driveway/parking area and a new pathway leading to the northern side of the dwelling.
 - At the pedestrian entry to the dwelling on its southern side, a new landing with balustrade is proposed to replace the current tiered and stepped access.
 - An existing 2.4m-3.0m high established hedge running part way along the southern side boundary from the front boundary line and also along the front boundary to the north of the access is for the most part retained adjacent to the proposed works, except for sections to either side of the driveway access to achieve acceptable sight distances.
 - Proposed materials include, concrete, brick and steel.
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
- 1.3.1 General Residential Zone - Privacy
 - 1.3.2 Parking and Access Code - Design of Vehicle Accesses; Layout of Parking Areas.
 - 1.3.3 Landslide Code - Building and Works
- 1.4 No representations were received during the statutory advertising period between 02/08 and 16/08/2022.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the City Planning Committee, because the proposal involves Council-owned Road Reservation and the recommendation is for approval.

2. Site Detail



Fig. 1: Aerial view of the subject property and surrounding locality (Source: Council ArcGIS).

- 2.1 16 Wayne Avenue, Sandy Bay is an 845m² residential property occupied by a single, two storey dwelling with a nor-north-westerly aspect. The subject site slopes upwards in a south-easterly direction from its frontage. The surrounding locality is an established residential area in lower Sandy Bay, just below Churchill Avenue.



Plate 1: The front/southern side of the subject site as viewed from in front on the Wayne Avenue footpath. Note the existing driveway and access steps leading up the side of the dwelling, which are proposed to be replaced (Source: Planner's photo).

3. Proposal

- 3.1 Planning approval is sought for Partial Demolition and Alterations to Pedestrian and Vehicle Access, Driveway, and Parking, at 16 Wayne Avenue and Adjacent Road Reserve, Sandy Bay.

3.2 More specifically the proposal is for:

- A replacement access crossover and demolition and replacement of the existing driveway and parking area, involving cutting into the existing slope to provide improved grades for access and parking.
- Demolition and replacement of the existing retaining walls and steps/entry stairs running up the southern side of the driveway and dwelling, with associated handrail and balustrade.
- A new retaining wall running across the front of the dwelling at the edge of the replacement driveway/parking area and a new pathway leading to the northern side of the dwelling.
- At the pedestrian entry to the dwelling on its southern side, a new landing with balustrade is proposed to replace the current tiered and stepped access.
- An existing 2.4m-3.0m high established hedge running part way along the southern side boundary from the front boundary line and also along the front boundary to the north of the access is for the most part retained adjacent to the proposed works, except for sections to either side of the driveway access to achieve acceptable sight distances.
- Proposed materials include, concrete, brick and steel.



Plate 2: Wide angle view across the interior of the front of the site where the revised access, parking area, replacement retaining walls and commencement of new access steps (foreground) are proposed (Source: Planner's photo).



Plate 3: *The existing stepped/tiered access landing at the southern side of the dwelling, with the access stairs extending away to the front of the site and the street (Source: Planner's photo).*

4. Background

- 4.1 General Manager Consent was granted for the proposed works in the road reservation in May 2022 (GMC-22-33).

5. Concerns raised by representors

- 5.1 No representations were received during the statutory advertising period between 02/08 and 16/08/2022.

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria,

the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.

- 6.2 The site is located within the General Residential Zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing use is Residential (Single Dwelling). The proposal maintains this use. A Residential (Single Dwelling) use is a No Permit Required use in the zone.
- 6.4 The proposal has been assessed against:
 - 6.4.1 Part D - 10 General Residential Zone
 - 6.4.2 E3.0 Landslide Code
 - 6.4.3 E6.0 Parking and Access Code
 - 6.4.4 E7.0 Stormwater Management Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
 - 6.5.1 General Residential Zone:
 - Privacy – Part D 10.4.6 P1*
 - 6.5.2 Landslide Code
 - Buildings and Works, other than Minor Extensions - E3.7.1 P1*
 - 6.5.3 Parking and Access Code:
 - Design of Vehicle Accesses - E6.7.2 P1*
 - Layout of Parking Areas - E6.7.5 P1*
- 6.6 Each performance criterion is assessed below.
- 6.7 Privacy – Part D 10.4.6 P1
 - 6.7.1 The acceptable solution A1 at clause D10.4.6 requires balconies, decks, roof terraces, parking spaces and carports with finished surface levels more than 1m above existing ground level to be screened or otherwise sited at least 3m from a side boundary or 4m from a rear boundary.

6.7.2 The proposal includes a replacement, enlarged entry landing at the southern side of the existing dwelling that is, at its south-western corner, a maximum of 1.2m above existing ground level, and at this point is sited 1m from the southern side boundary of the site. This landing has a typical balustrade and open infill but otherwise is not screened.

6.7.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.7.4 The performance criterion P1 at clause D 10.4.6 provides as follows:

A balcony, deck, roof terrace, parking space or carport for a dwelling (whether freestanding or part of the dwelling) that has a finished surface or floor level more than 1m above existing ground level, must be screened, or otherwise designed, to minimise overlooking of:

(a) a dwelling on an adjoining property or its private open space; or

(b) another dwelling on the same site or its private open space.

6.7.5 The proposed entrance landing replaces an existing, smaller and less uniform landing providing pedestrian access to the dwelling. The existing landing steps down to the boundary line from the access floor level, whereas the proposed landing extends out at the same level, a maximum of around 0.5m above the current stepped down level, such that it is more elevated closer to the boundary line.

The adjoining property to the south of the subject site and proposed landing is set on a rising ground level, in line with the local topography. The dwelling on this adjacent property is set further back, such that it looks over the southern side and across the dwelling and towards the front of the subject site. The private open space of this adjoining site lies to the front of the dwelling given its more rearward position. Typically in front of a dwelling is not the usual location for private open space. Given these circumstances however, the area on the adjacent property is screened to the front and northern side (opposite the proposed landing) by a well maintained hedge and established vegetation (Plate 4). This provides a manageable and effective screen for the adjoining property to prevent privacy impacts from the proposed new landing which, given the more elevated adjoining topography, is prevented from providing an effective elevated position for one to overlook the adjoining site (Plate 5).

Beyond this, there is substantial hedging growing to the front side of the proposed landing on the subject site, providing additional screening. Given existing conditions, the proposal is considered to meet the relevant test of part (a).



Plate 4: Looking across towards the southern side of the subject site and location of the proposed new access landing, from the adjacent site to the south. Note the hedge screening within. The ground level on the subject site on the opposite side of the hedges is lower than on this adjacent site (Source: Planner's photo).



Plate 5: The current conditions around the southern side of the existing access landing, noting the more elevated hedging on the higher ground level of the adjoining property to the south/right (Source: Planner's photo).

- 6.7.6 The proposal complies with the performance criterion.
- 6.8 Buildings and Works, other than Minor Extensions - E3.7.1 P1
- 6.8.1 There is no acceptable solution for building and works within mapped Landslide Hazard Areas.
- 6.8.2 The subject site is covered by Low Landslide Hazard mapping.
- 6.8.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.8.4 The performance criterion P1 at clause E3.7.1 provides as follows:

Buildings and works must satisfy all of the following:

- (a) no part of the buildings and works is in a High Landslide Hazard Area;*
- (b) the landslide risk associated with the buildings and works is either:*
- (i) acceptable risk; or*
 - (ii) capable of feasible and effective treatment through hazard*

management measures, so as to be tolerable risk.

- 6.8.5 The Council's Environmental Development Planner has assessed this aspect of the proposal and advises:

Approval is sought for driveway alterations, paths, stairs and landings at 16 Wayne Avenue, Sandy Bay.

Excavation and fill would be required.

Landslide Code

The Code applies because development is proposed within a Landslide Hazard Area ('Low Landslide Hazard Area'). This is due to a modelled susceptibility to deep-seated landsliding.

No Code exemptions apply.

The relevant standards are under clause E3.7.1. There is no acceptable solution for A1. Performance criterion P1 states the following:

Buildings and works must satisfy all of the following:

(a) no part of the buildings and works is in a High Landslide Hazard Area;

(b) the landslide risk associated with the buildings and works is either:

(i) acceptable risk; or

(ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.

No works are proposed for a High LHA in conformity with P1(a).

With regard to P1(b), 'acceptable risk' is defined as '*a risk society is prepared to accept as it is. That is; without management or treatment*'.

The excavations for the stairs, driveway and paths would all be supported by a highly engineered retaining walls. The new driveway would also be provided with two new stormwater drains. Given this, it is considered unlikely that the works would increase the risk of a

landslide occurring.

In my opinion, a reasonable person would accept the risk associated with the proposed works and the exercise of discretion is recommended.

6.8.6 The proposal complies with the performance criterion.

6.9 Design of Vehicle Accesses - E6.7.2 P1

6.9.1 The acceptable solution A1 at clause E6.7.2 requires vehicle accesses to be designed and constructed to comply with section 3 – “Access Facilities to Off-street Parking Areas and Queuing Areas” of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking to enable their safe, easy and efficient use.

6.9.2 The proposal includes a non-compliant vehicle access.

6.9.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.9.4 The performance criterion P1 at clause E6.7.2 provides as follows:

Design of vehicle access points must be safe, efficient and convenient, having regard to all of the following:

(a) avoidance of conflicts between users including vehicles, cyclists and pedestrians;

(b) avoidance of unreasonable interference with the flow of traffic on adjoining roads;

(c) suitability for the type and volume of traffic likely to be generated by the use or development;

(d) ease of accessibility and recognition for users.

6.9.5 The Council's Development Engineer has assessed this aspect of the proposal and advises:

Submitted design documentation appears to meet the relevant parameters of a performance based solution and therefore may be accepted by the City, given the typical access driveway configuration and minor deviations from the applicable design standard(s).

It is prudent to note that the principal non-standard aspect of the proposed access driveway configuration is the obstruction to pedestrian sight lines due to the 'existing hedge' along the property boundary. However, the property boundary does not immediately abut a pedestrian footpath and appears to be offset 1.73m (as detailed), thus allowing for practical inter-visibility and recognition between road users.

6.9.6 The proposal complies with the performance criterion.

6.10 Layout of Parking Areas - E6.7.5 P1

6.10.1 The acceptable solution A1 at clause E6.7.5 requires parking areas to be designed and constructed to comply with section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking and must have sufficient headroom to comply with clause 5.3 "Headroom" of the same Standard, to ensure that parking areas for cars (including assessable parking spaces), motorcycles and bicycles are located, designed and constructed to enable safe, easy and efficient use.

6.10.2 The proposal includes a non-compliant parking area in terms of finished gradient.

6.10.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.10.4 The performance criterion P1 at clause E6.7.5 provides as follows:

The layout of car parking spaces, access aisles, circulation roadways and ramps must be safe and must ensure ease of access, egress and manoeuvring on-site.

6.10.5 The Council's Development Engineer has assessed this aspect of the proposal and advises:

Submitted design documentation appears to meet the relevant parameters of a performance based solution and therefore may be accepted by the City, given the typical driveway configuration and minor deviations identified.

6.10.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for Partial Demolition and Alterations to Pedestrian and Vehicle Access, Driveway, and Parking, at 16 Wayne Avenue and Adjacent Road Reserve, Sandy Bay.
- 7.2 The application was advertised and no representations were received.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development, Road and Stormwater Engineers, and Environmental Development Planner. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Partial Demolition and Alterations to Pedestrian and Vehicle Access, Driveway, and Parking, at 16 Wayne Avenue and Adjacent Road Reserve, Sandy Bay satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for Partial Demolition and Alterations to Pedestrian and Vehicle Access, Driveway, and Parking, at 16 Wayne Avenue and Adjacent Road Reserve, Sandy Bay for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-256 - 16 WAYNE AVENUE SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

Prior to first occupation or commencement of use (whichever occurs first), all stormwater from the proposed development (including but not limited to; roofed areas, ag drains, retaining wall ag drains, and impervious surfaces, such as driveways or paved areas) must be drained to the Council's stormwater infrastructure.

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice:

Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 3a

Prior to first occupation or commencement of use (whichever occurs first), the parking area (domestic driveway & parking space) must be constructed in accordance with the plans which form part of this permit, prepared by *iC21 design* titled *Retaining Walls, Stairs, Driveway Upgrade* registered 15/7/2022 with the City of Hobart.

Any departure from the approved design documentation, and any works which are not detailed, must either be:

1. approved by the Director City Life, via a Condition Endorsement application, or
2. be designed and constructed in accordance with the Australian Standard AS/NZ 2890.1:2004.

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

Prior to first occupation or commencement of use (whichever occurs first), the parking area (domestic driveway & parking space) approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, pavers, or equivalent Council approved) and surface(s) drained to the Council's stormwater infrastructure.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 5

The total number of off-street car parking spaces approved for use on site, by this permit, is One (1).

Reason for condition

To ensure the provision of parking for the use is safe and efficient.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r3

Prior to the commencement of use, the proposed driveway crossover on the Wayne Avenue highway reservation must be designed and constructed in accordance with:

- Urban - TSD-R09-v3 – Urban Roads Driveways and TSD R14-v3 Type KC vehicular crossing;

Design drawings must be submitted and approved as a Condition Endorsement prior to any approval under the Building Act 2016. The design drawings must:

1. Show the cross and long section of the driveway crossover within the highway reservation and onto the property;
2. Detail any services or infrastructure (ie light poles, pits, awnings) at or

- near the proposed driveway crossover;
3. **Show swept path templates in accordance with AS/NZS 2890.1 2004(B85 or B99 depending on use, design template);**
 4. **If the design deviates from the requirements of the TSD, then demonstrate that a B85 vehicle or a B99 depending on use (AS/NZS 2890.1 2004, section 2.6.2), can access the driveway from the road pavement into the property without scraping the vehicle's underside;**
 5. **Show that vehicular and pedestrian sight lines are met as per AS/NZS 2890.1 2004.**
 6. **Be prepared and certified by a suitable qualified person, to satisfy the above requirements.**

All work required by this condition must be undertaken in accordance with the approved drawings.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Please note that your proposal does not include adjustment of footpath levels. Any adjustment to footpath levels necessary to suit the design of proposed floor, parking module or driveway levels will require separate agreement from Council's Program Leader Road Services and may require further planning approvals. It is advised to place a note to this effect on construction drawings for the site and/or other relevant engineering drawings to ensure that contractors are made aware of this requirement.

Reason for condition

To ensure that works will comply with the Council's standard requirements.

ENV 2

Sediment and erosion control measures, in accordance with an approved soil and water management plan (SWMP), must be installed prior to the commencement of work and maintained until such time as all disturbed areas have been stabilised and/or restored or sealed to the Council's satisfaction.

A SWMP must be submitted as a Condition Endorsement prior to the issue of any approval under the *Building Act 2016* or the commencement of work, whichever occurs first. The SWMP must be prepared in accordance with the Soil and Water Management on Building and Construction Sites fact sheets (Derwent Estuary Program, 2008), available [here](#).

All work required by this condition must be undertaken in accordance with the approved SWMP.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for Condition

To avoid the pollution and sedimentation of roads, drains and natural watercourses that could be caused by erosion and runoff from the development.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require an occupational license for structures in the Hobart City Council highway reservation, in accordance with conditions to be established by the Council. Click [here](#) for more information.

You may require a Permit to Open Up and Temporarily Occupy a Highway (for work in the road reserve). Click [here](#) for more information.

EXISTING VEGETATION

Care should be taken to minimise any unnecessary damage to or removal of existing boundary line hedging and vegetation not otherwise approved to be removed (either side of the driveway access) as part of this permit.

STORMWATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK WITHIN THE HIGHWAY RESERVATION

Please note development must be in accordance with the Hobart City Council's Infrastructure by law. Click [here](#) for more information.

DRIVEWAY SURFACING OVER HIGHWAY RESERVATION

If a coloured or textured surface is used for the driveway access within the Highway Reservation, the Council or other service provider will not match this on any

reinstatement of the driveway access within the Highway Reservation required in the future.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

WASTE DISPOSAL

It is recommended that the developer liaise with the Council's Cleansing and Solid Waste Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill.

Further information regarding waste disposal can also be found on the Council's [website](#).

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.



(Cameron Sherriff)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Ben Ikin)

Senior Statutory Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 23 August 2022

Attachment(s):

Attachment B - CPC Agenda Documents

Planning #255868

Property

16 WAYNE AVENUE SANDY BAY TAS 7005

**People****Applicant ***

IC21 Design
Anthony Sullivan
61 Esplanade
61, Esplanade
ROSE BAY TAS 7015
0416 251 504
anthony.sullivan.ic21@outlook.com

Owner *

Helen Phillips
16 Wayne Ave
SANDY BAY TAS 7005
0439 851 249
H.E.Phillips@utas.edu.au

Entered By

ANTHONY SULLIVAN
0416 251 504
anthony.sullivan.ic21@outlook.com

Use

Single dwelling

Details

Have you obtained pre application advice?

☒ Yes

If YES please provide the pre application advice number eg PAE-17-xx

PAE-22-83

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application. *

☒ No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below. *

☒ No

If this application is related to an enforcement action please enter Enforcement Number

n/a

Details

What is the current approved use of the land / building(s)? *

residential

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage) *

Proposed retaining wall, stairs, driveway upgrade

Estimated cost of development *

50000.00

Existing floor area (m2)

0.00

Proposed floor area (m2)

Site area (m2)

843

Carparking on Site

Total parking spaces

1

Existing parking spaces

1

N/A

☒ Other (no selection chosen)**Other Details**

Does the application include signage? *

☒ No

How many signs, please enter 0 if there are none involved in this application? *

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☒ No**Documents****Required Documents**Title (Folio text and Plan and 16 Wayne Ave_The List_Folio text & plan_29.04.22.pdf
Schedule of Easements) *

Plans (proposed, existing) * 16 Wayne Ave, Sandy Bay_DA drawings_28.04.22.pdf

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
55448	41
EDITION	DATE OF ISSUE
4	26-May-2014

SEARCH DATE : 29-Apr-2022

SEARCH TIME : 10.05 AM

DESCRIPTION OF LAND

City of HOBART

Lot 41 on Plan 55448 (formerly being P1199)

Derivation : Part of 41A-2R-0Ps. Gtd. to G. Cartwright & Anr.

Prior CT 3077/47

SCHEDULE 1

M463276 TRANSFER to HELEN ELIZABETH PHILLIPS Registered
26-May-2014 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

A46890 CONDITIONS in Transfer

M463396 MORTGAGE to Members Equity Bank Pty Limited

Registered 26-May-2014 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

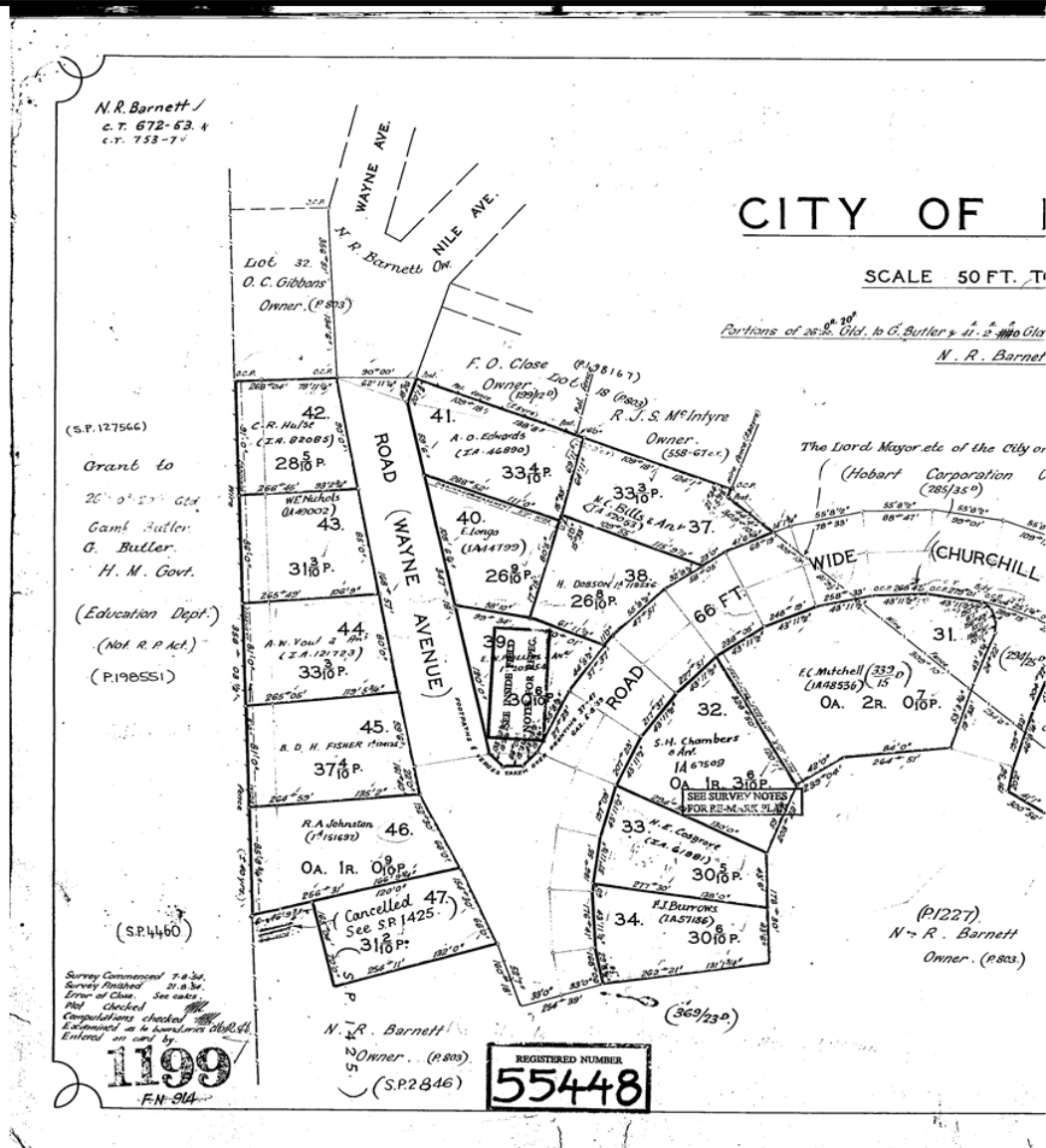
No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

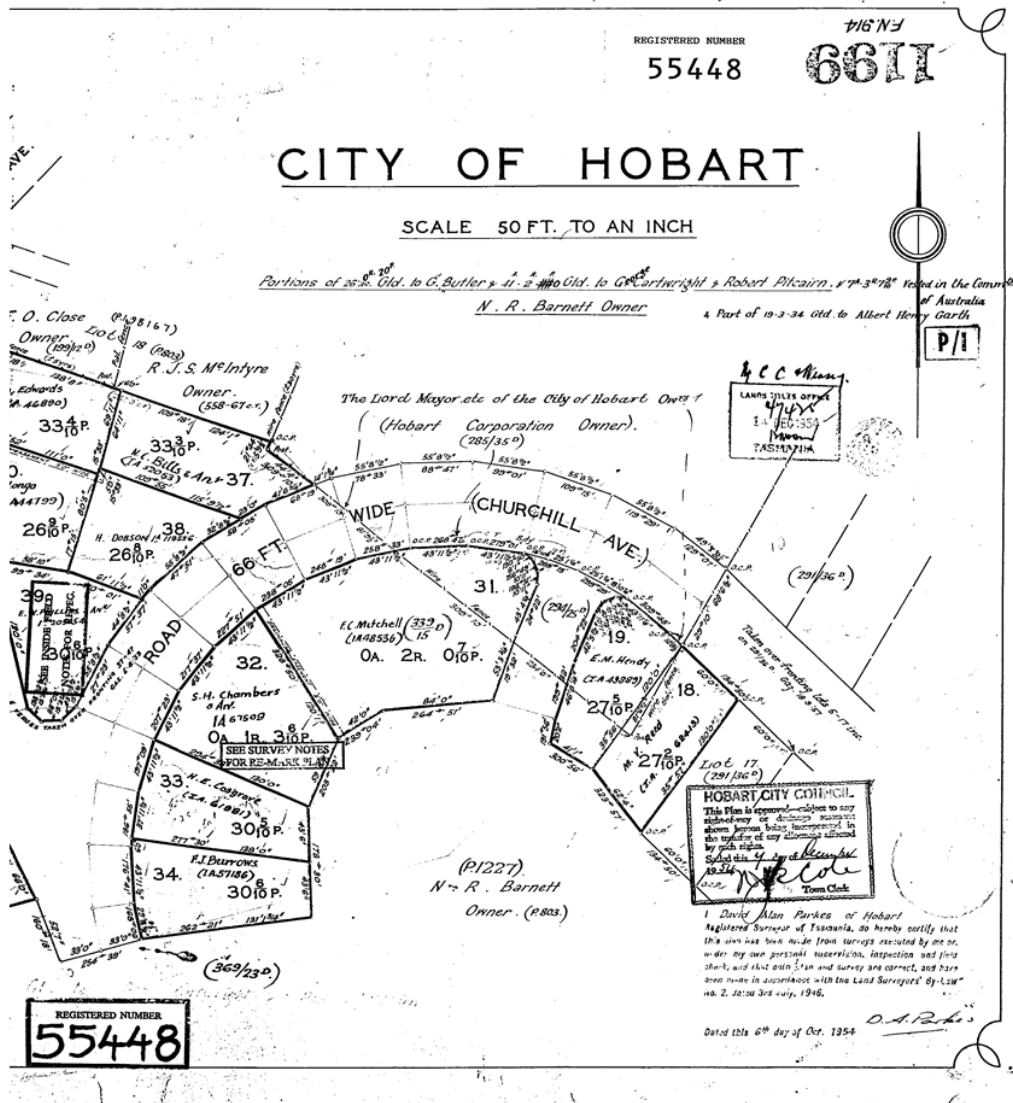




FOLIO PLAN

RECORDED OF TITLES

Issued Pursuant to the Land Titles Act 1980



Anthony Sullivan
(IC21 Design)
61 Esplanade
Rose Bay TAS 7015
M: 0416 251 504
E: anthony.sullivan.ic21@outlook.com

15 July 2022

Hobart City Council
GPO Box 503
Hobart TAS 7001

**Re: 16 Wayne Avenue, Sandy Bay & Adjacent Road Reserve –
Alterations to Access, Driveway and Parking
Application No. PLN-22-256**

Dear Cameron,

Please refer to the uploaded drawings which address Council's request for additional information in the letter dated 24 May 2022.

The drawings have been uploaded as an entire set dated 14 July 2022. Some of the redated drawings contain minor amendments. The set also includes additional drawings provided to address council's additional information request, and the removal of 2 sheets from the original application, which were no longer applicable.

Consequently, please disregard the original drawings dated 28 April 2022 and assess the application on the revised/amended drawings dated 14 July 2022.

Yours sincerely,



Anthony Sullivan

**PROPOSED RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE, for
H PHILLIPS & N BINDOFF, 16 WAYNE AVENUE, SANDY BAY
DEVELOPMENT APPLICATION**

Originally prepared - 28th APRIL 2022; Last Amended 14th JULY 2022

pdf sheet # (revised)	Drawing #	Drawing Title	Amended	pdf sheet # (revised)	Drawing #	Drawing Title	Amended
01 of 20	01a	Contents Page	14/07/22	08 of 20	09	Existing Elevations	
02 of 20	02	Existing Site Plan		09 of 20	10	Proposed Elevations	
03 of 20	03	Proposed Site Plan		10 of 20	11	Section A1	
04 of 20	04	Proposed Plan 01		11 of 20	12	Section B1	
05 of 20	05	Proposed Plan 02		12 of 20	19a	Footings/Retaining Details 02	14/07/22
06 of 20	06	Dimension, Setout Plan 01		13 of 20	21a	Driveway Construction 01	14/07/22
07 of 20	07	Dimension, Setout Plan 02					

ADDITIONAL INFORMATION - REQUESTED 24 MAY 2022; PREPARED 14 JULY 2022

pdf sheet #	Drawing #	Drawing Title
14 of 20	22	Driveway Construction 02
15 of 20	23	Section L1 - Centreline Driveway
16 of 20	24	Section L1 - Vehicle Movement
17 of 20	30	Stormwater Drainage Plan

Note: The proposal documents (inclusive of plans & supporting documentation) have been prepared for the purpose of obtaining Planning approval from Hobart City Council & are therefore, subject to any conditions noted on that approval.

IC21 Design - BUILDING DESIGN & Drafting Services; Mob: 0416 251 504; Accreditation # CC 609V; Address: 61 Esplanade, Rose Bay, TAS 7015; E: anthony.sullivan@ic21design.com

DOCUMENTATION ATTACHMENTS (Information provided by others):

pdf sheet # (revised)	Drawing #	Drawing Title
18 of 20	TSD-R09-v1	IPWEA Standard Drawing - Urban Roads - Driveways
19 of 20	TSD-R14-v1	IPWEA Standard Drawing - Urban Roads - Kerb profiles & dimensions
20 of 20	TSD-R15-v1	IPWEA Standard Drawing - Urban Roads - Kerb construction details
-	TSD-G02.v1	Sheet withdrawn 11/07/22
-	TSD-R11-v1	Sheet withdrawn 11/07/22

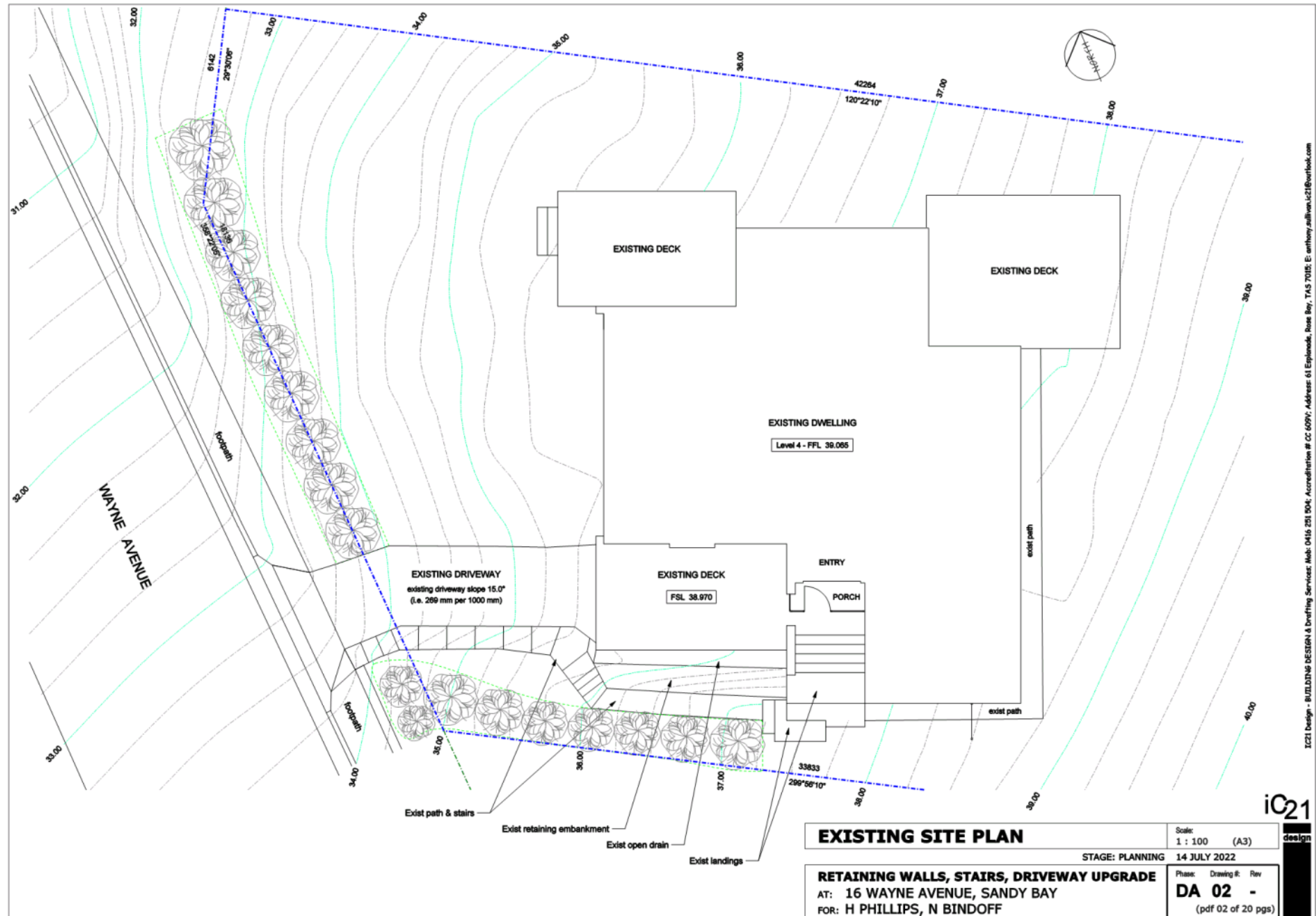
SITE INFORMATION		
Land Title Reference:	PID: 5650432; Volume/Folio: 55448/41	Proposal Details:
Wind Classification:	N3 (assumed)	- Building footprint remains unchanged;
Soil Classification:	M (assumed) - Engineer to confirm on site	- Refer to drawing #03 for proposal specific area details
Climate Zone:	7	
BAL Level:	BAL Low	
Corrosion Environment:	Moderate	
Other Hazards:	n/a	
	Site Area:	843.43 m ²
DIMENSION NOTE: Site & Reduced Levels in metres; All other dimensions in millimetres unless otherwise indicated by unit notation.		

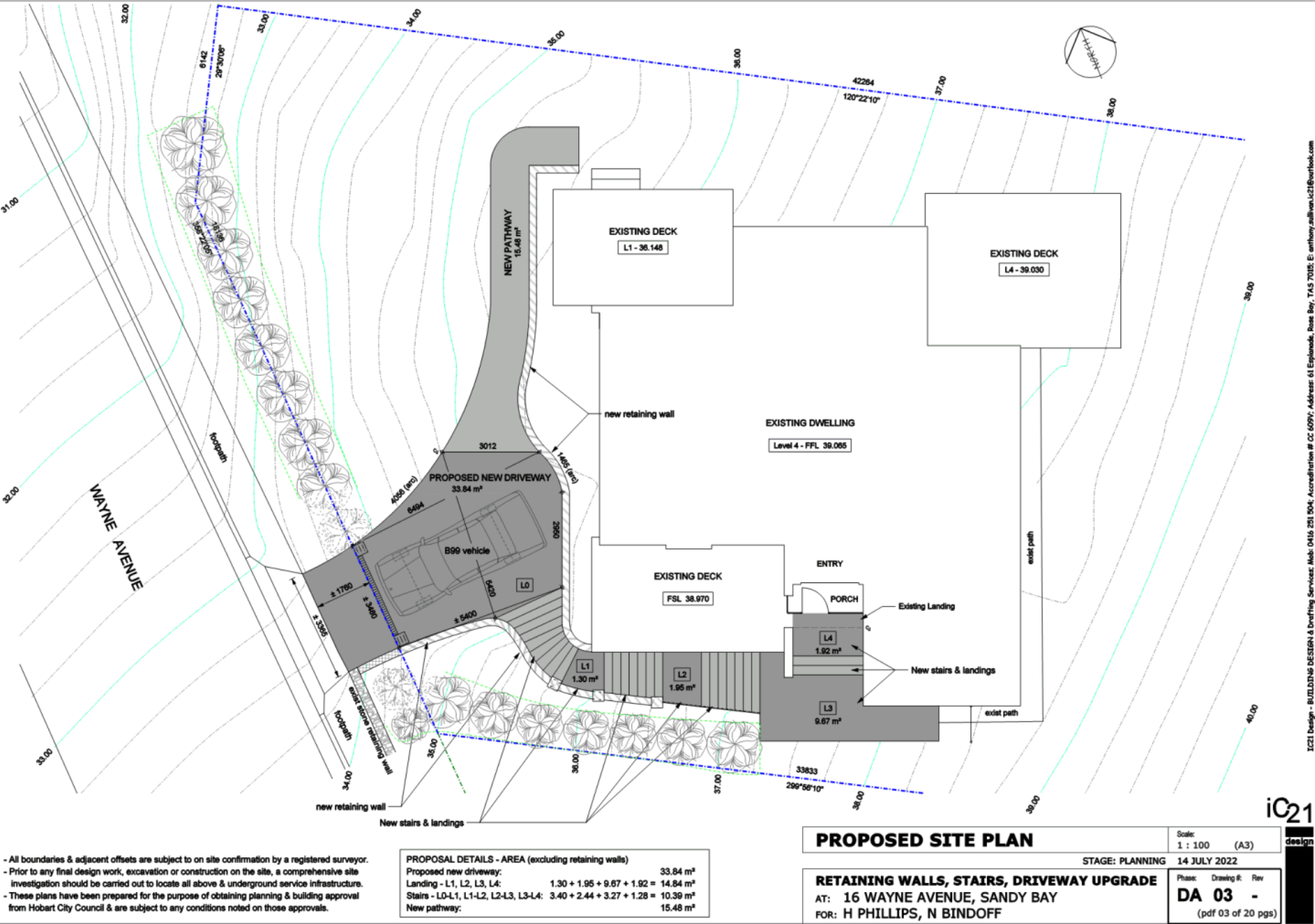
CONTENTS

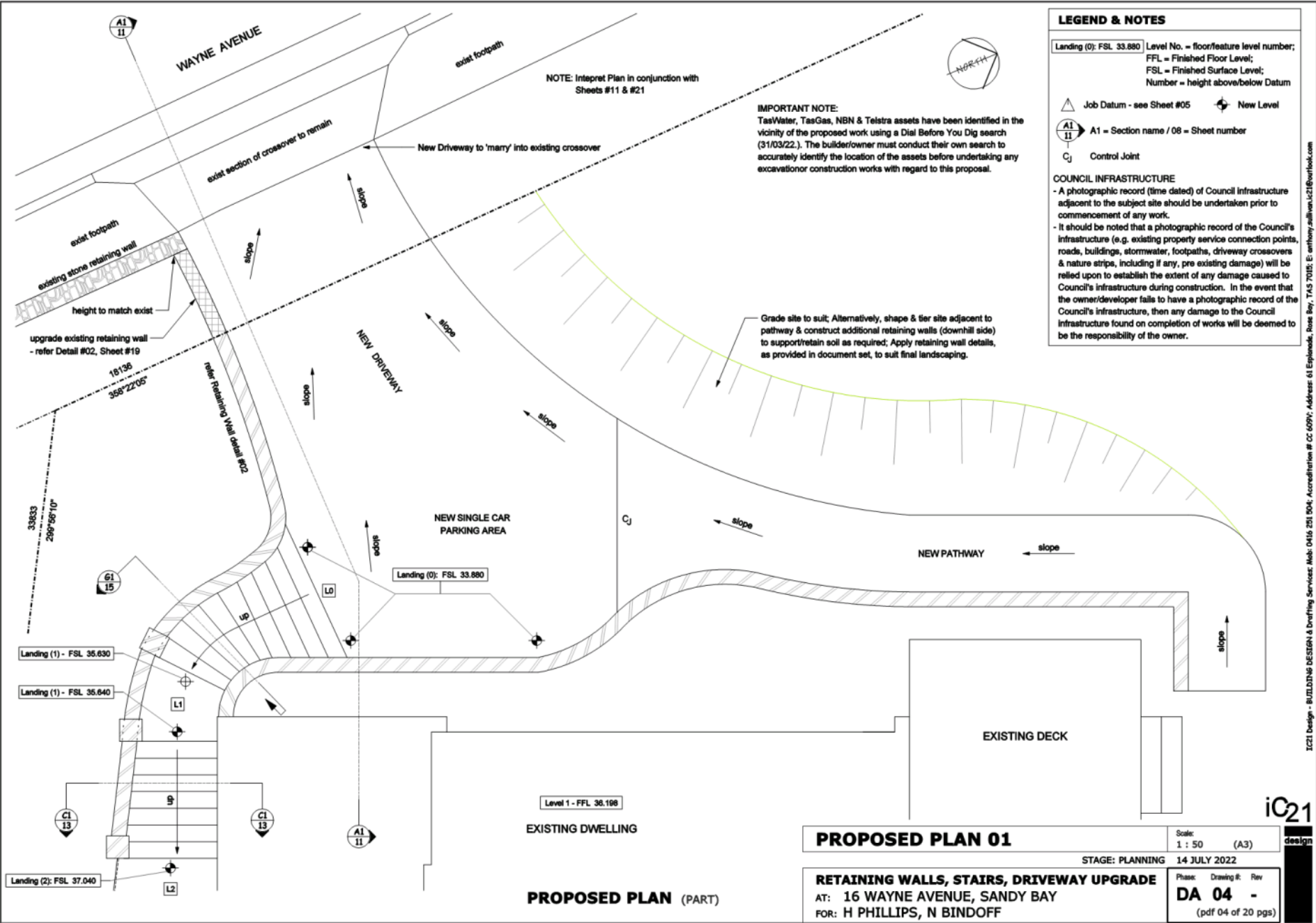
STAGE: PLANNING
RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE
AT: 16 WAYNE AVENUE, SANDY BAY
FOR: H PHILLIPS, N BINDOFF

Scale:
n/a (A3)
14 JULY 2022
Phase: Drawing #: Rev
DA 01 a
(pdf 01 of 20 pgs)

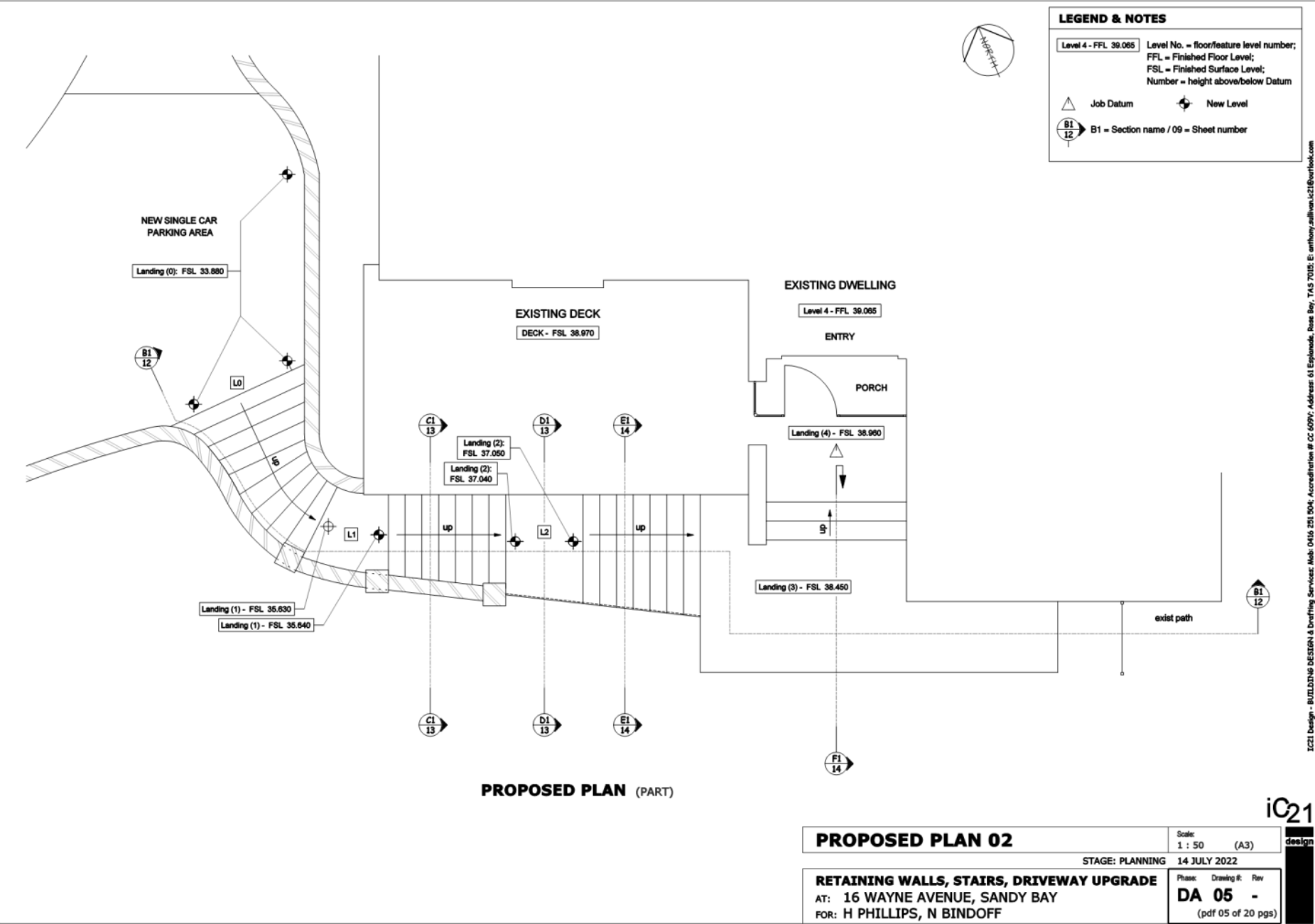
ic21
design

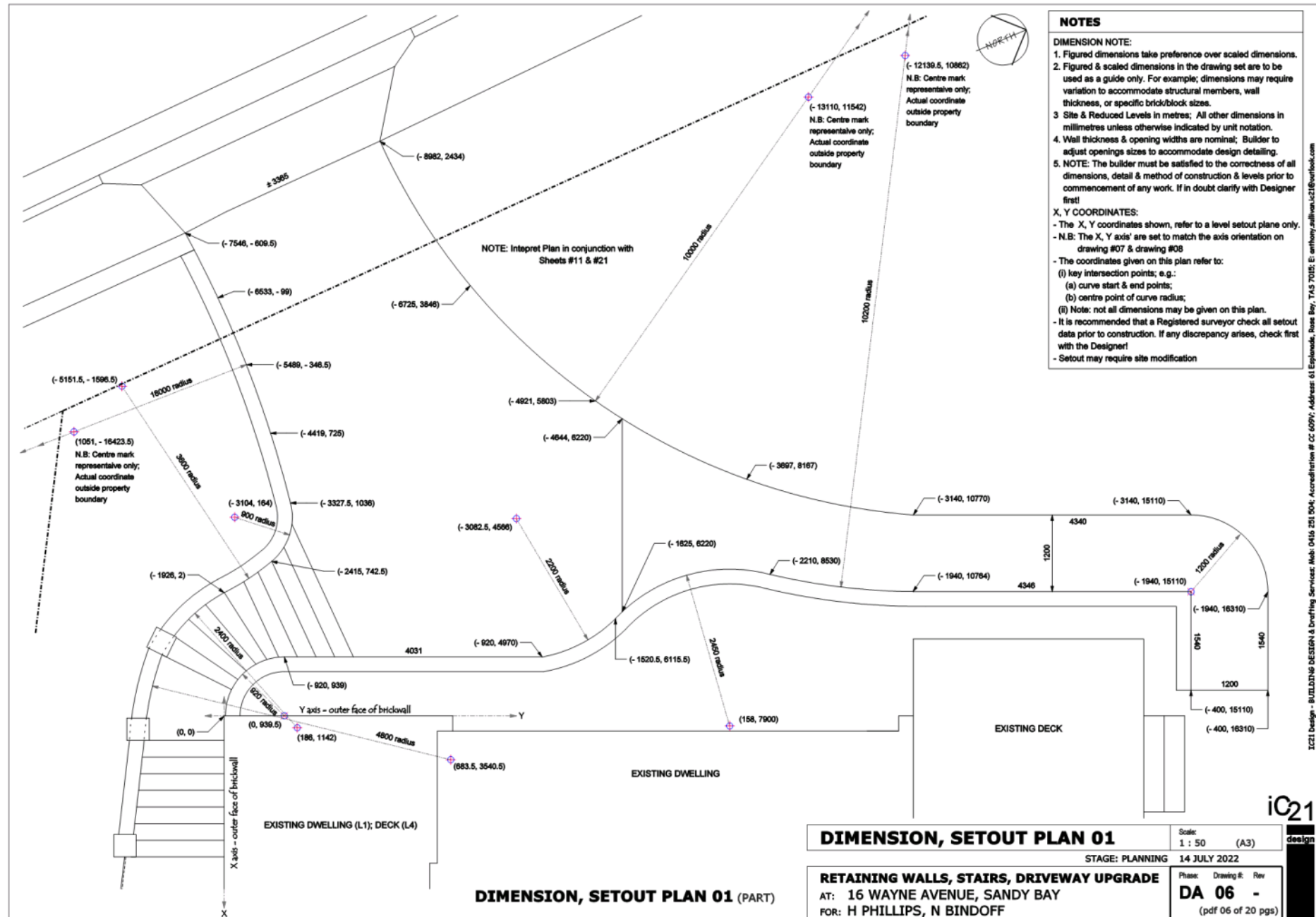


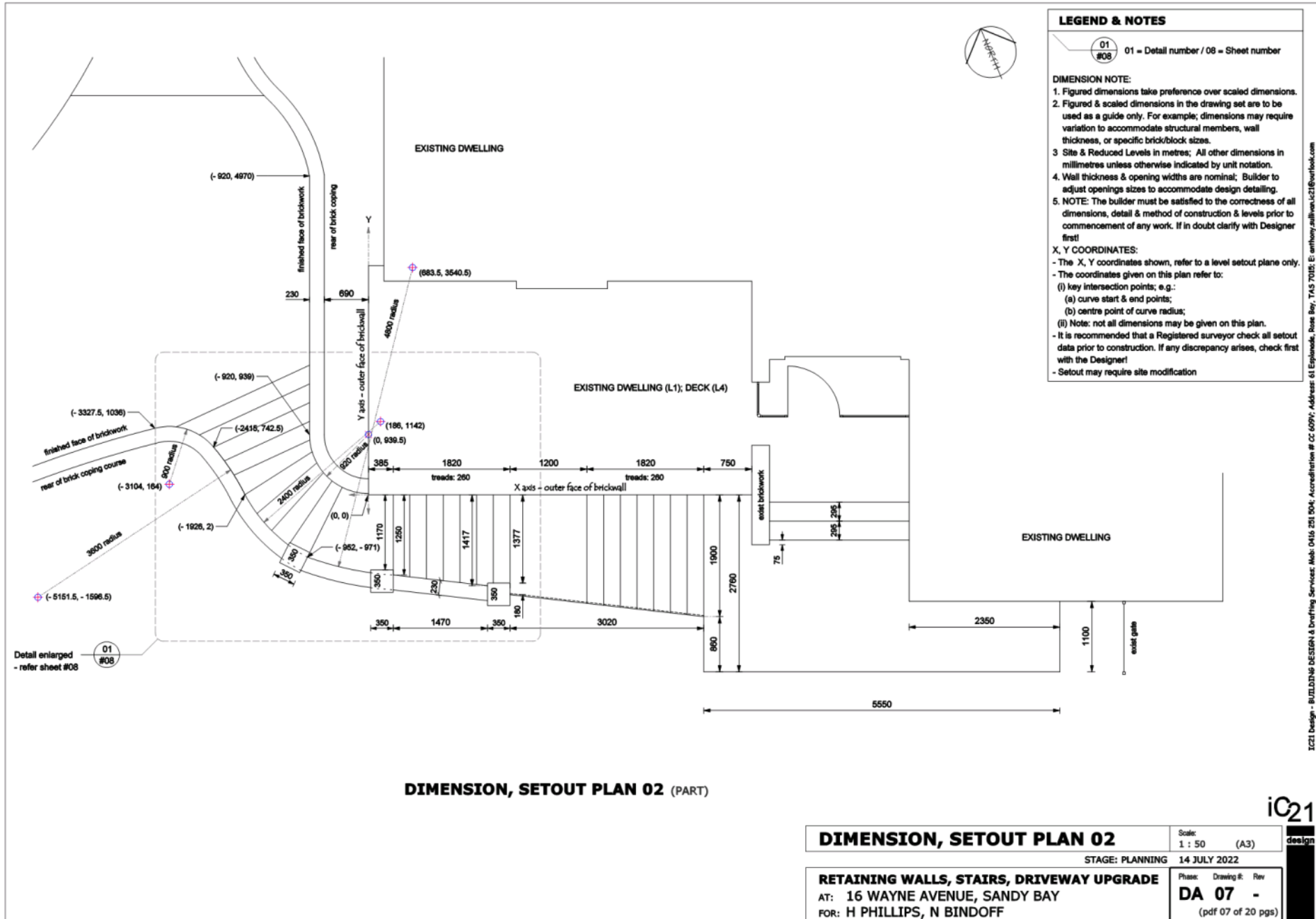


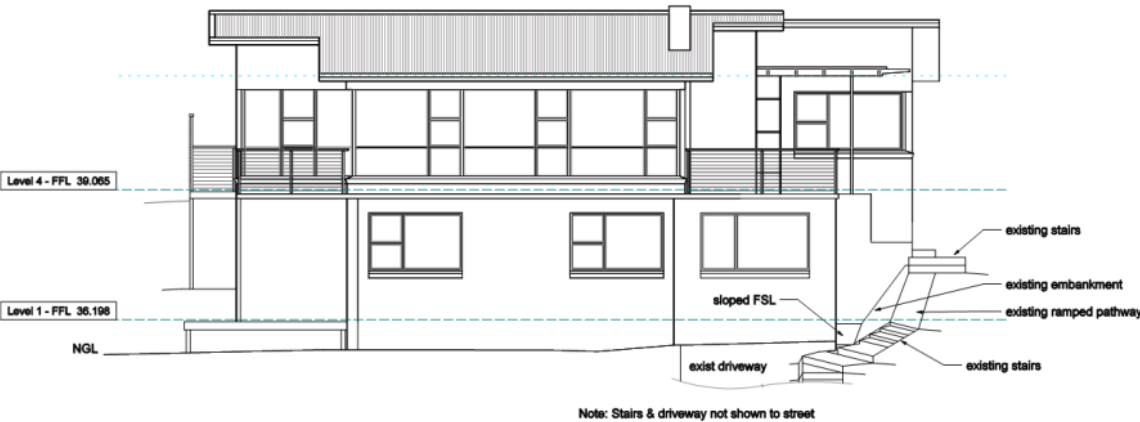
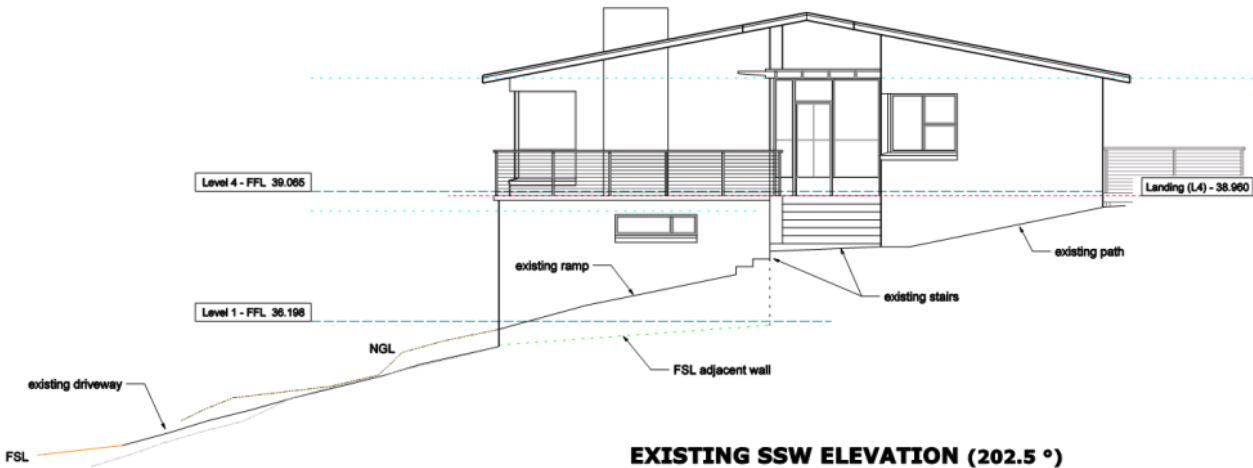


iC21 Design - BUILDING DESIGN & DRAFTING SERVICES: Mob: 0412 251 004, Accreditation # CC 6099; Address: 41 Esplanade, Rose Bay, TAS 7018; E: anthony.sullivan@ic21design.com



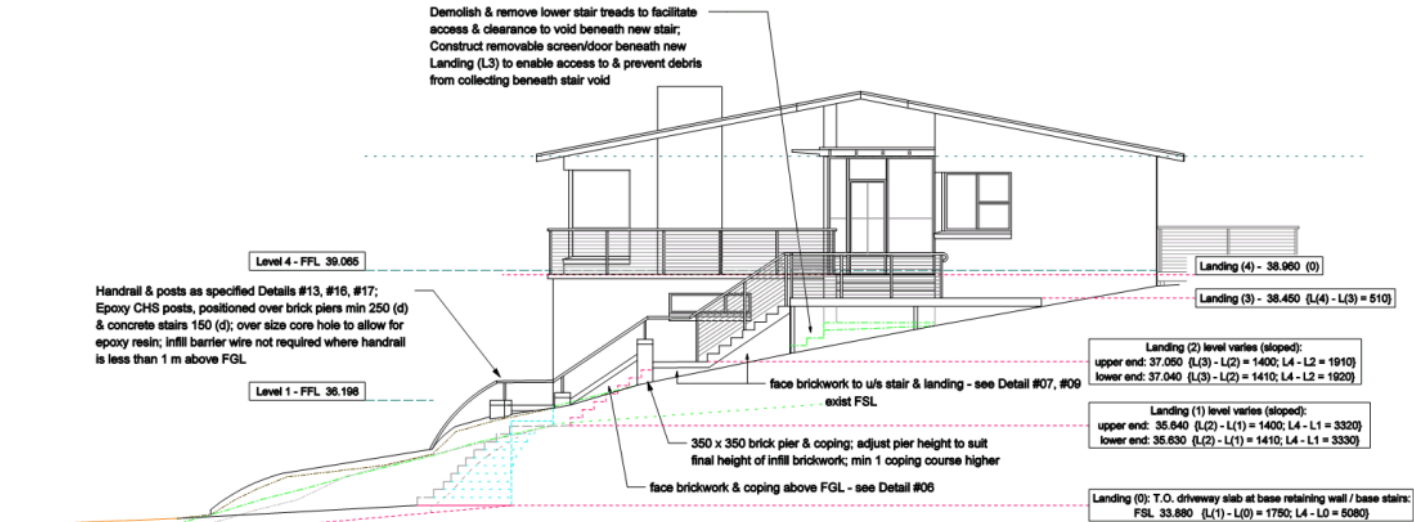




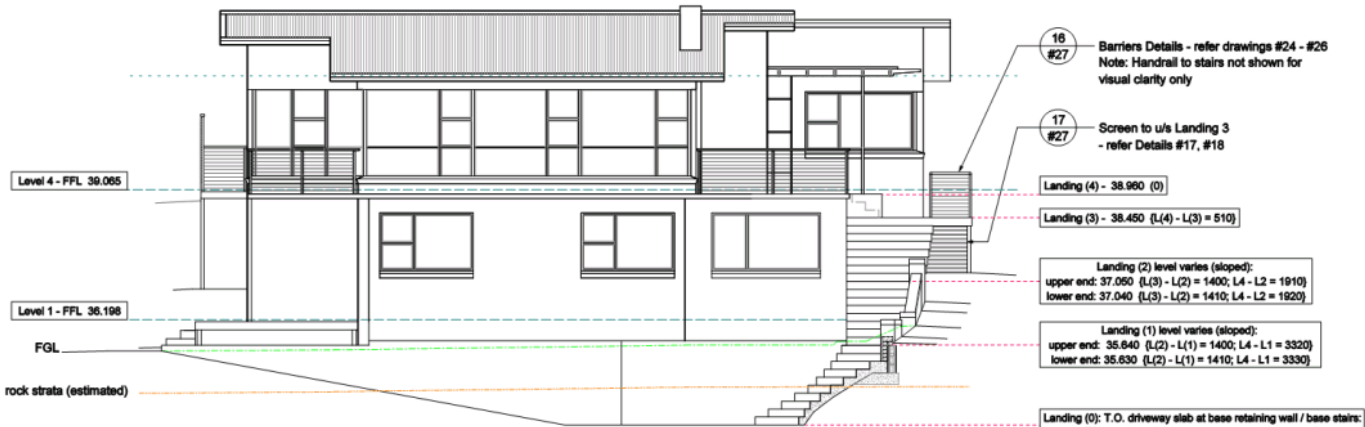


EXISTING WNW ELEVATION (292.5 °)

EXISTING ELEVATIONS		Scale: 1 : 100 (A3)
STAGE: PLANNING		14 JULY 2022
RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE		Phase: Drawing #: Rev
AT: 16 WAYNE AVENUE, SANDY BAY		DA 09 -
FOR: H PHILLIPS, N BINDOFF		(pdf 08 of 20 pgs)



PROPOSED SSW ELEVATION (202.5 °)



PROPOSED WNW ELEVATION (292.5 °)

PROPOSED ELEVATIONS

Scale:
1 : 100 (A3)

STAGE: PLANNING

14 JULY 2022

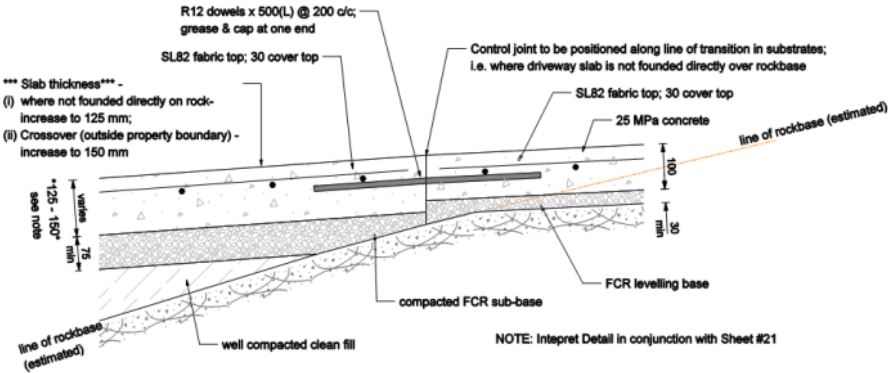
RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE

AT: 16 WAYNE AVENUE, SANDY BAY
FOR: H PHILLIPS, N BINDOFF

Phase: Drawing #: Rev
DA 10 -
(pdf 09 of 20 pgs)

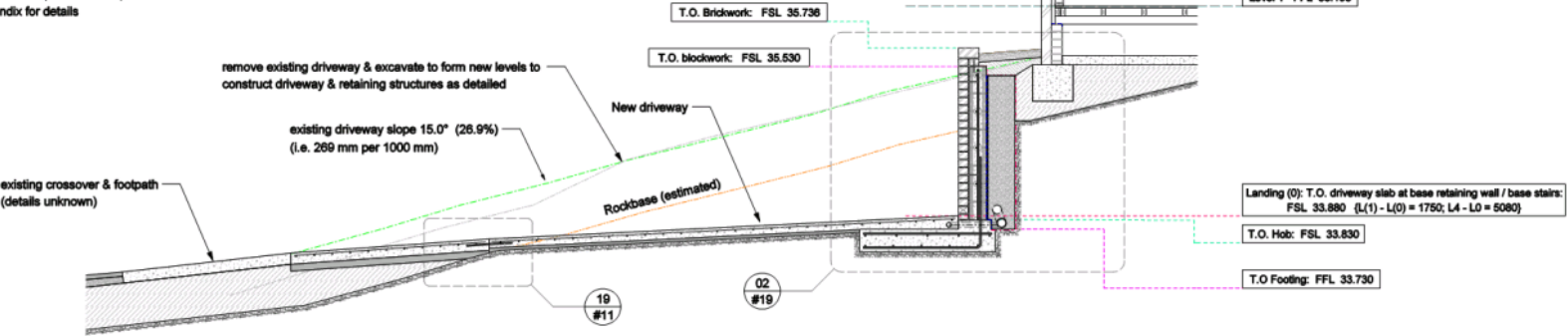
iC21 Design - BUILDING DESIGN & DRAFTING SERVICES: Mob: 0412 251 504, Accreditation # CC 6099; Address: 41 Esplanade, Rose Bay, TAS 7018; E: anthony.allison@ic21build.com

iC21
design



19_DRIVEWAY DETAIL

NOTE:
Where upgrade/replacement of kerb, transition, crossover & footpath
is required across nature strip refer to IPWEA TAS Division drawings
TSD-R09-v1, TSD-R14-v1, TSD-R15-v1;
- see project appendix for details



SECTION A1

SECTION A1

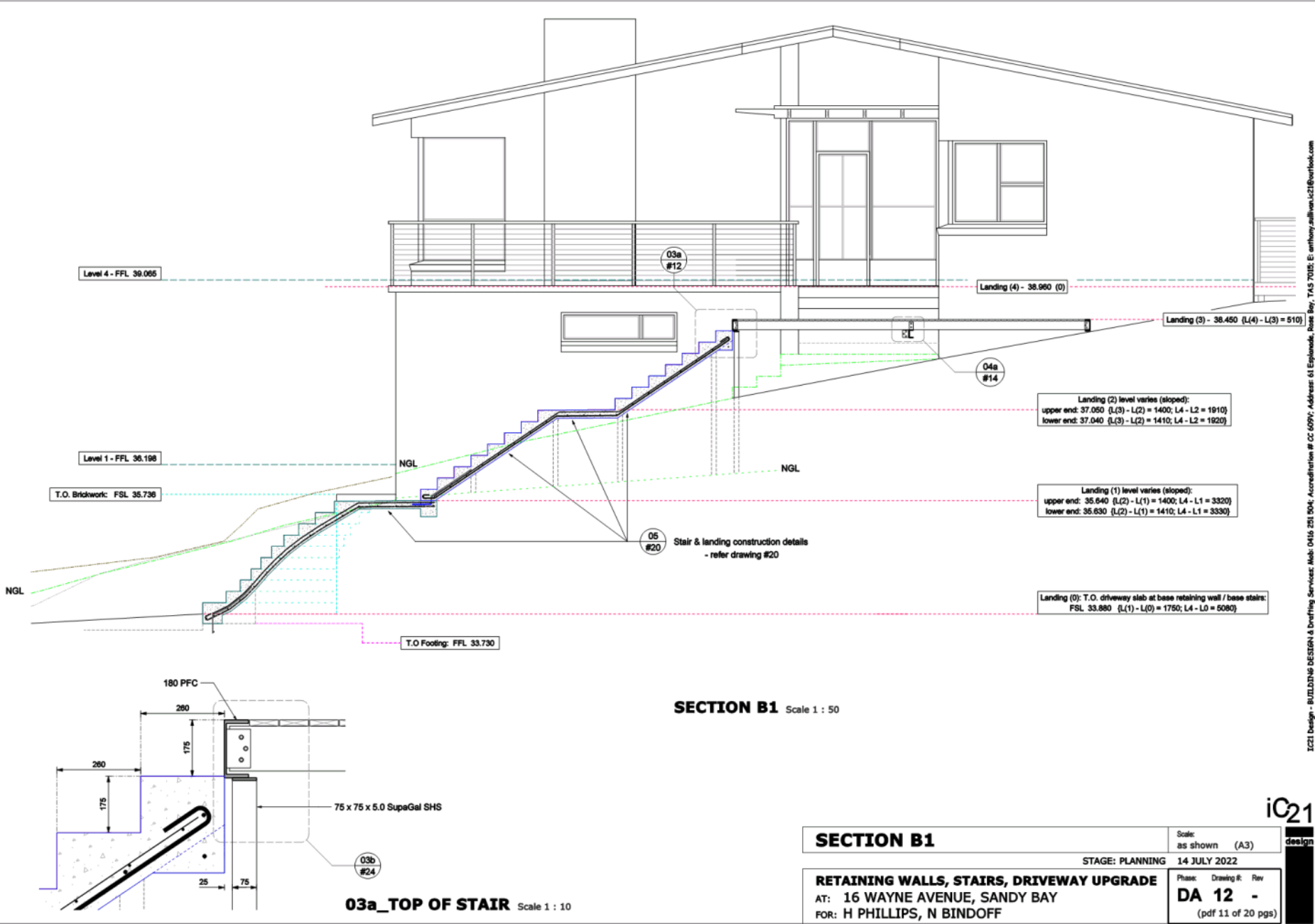
Scale:
1 : 50 (A3)

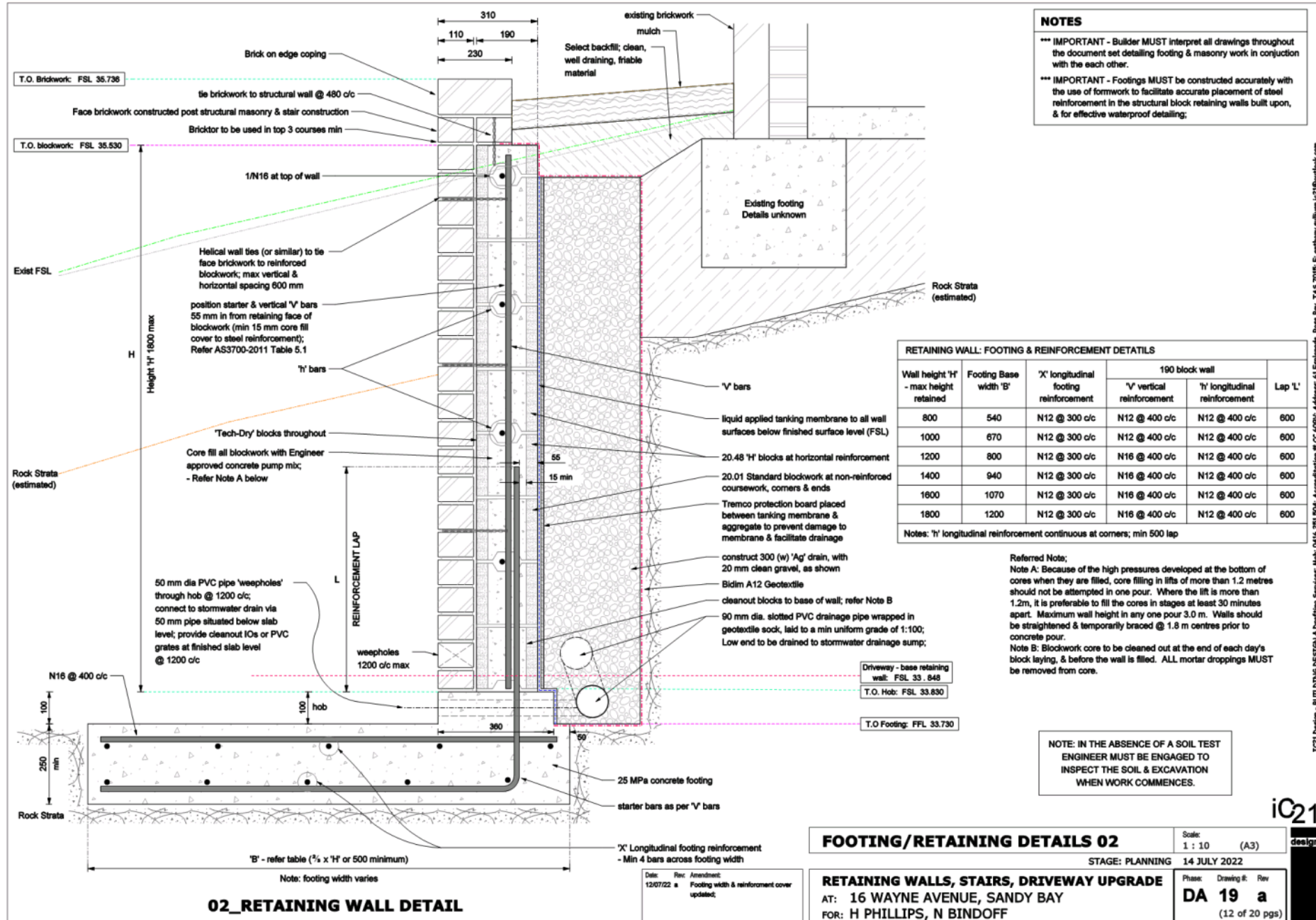
STAGE: PLANNING 14 JULY 2022

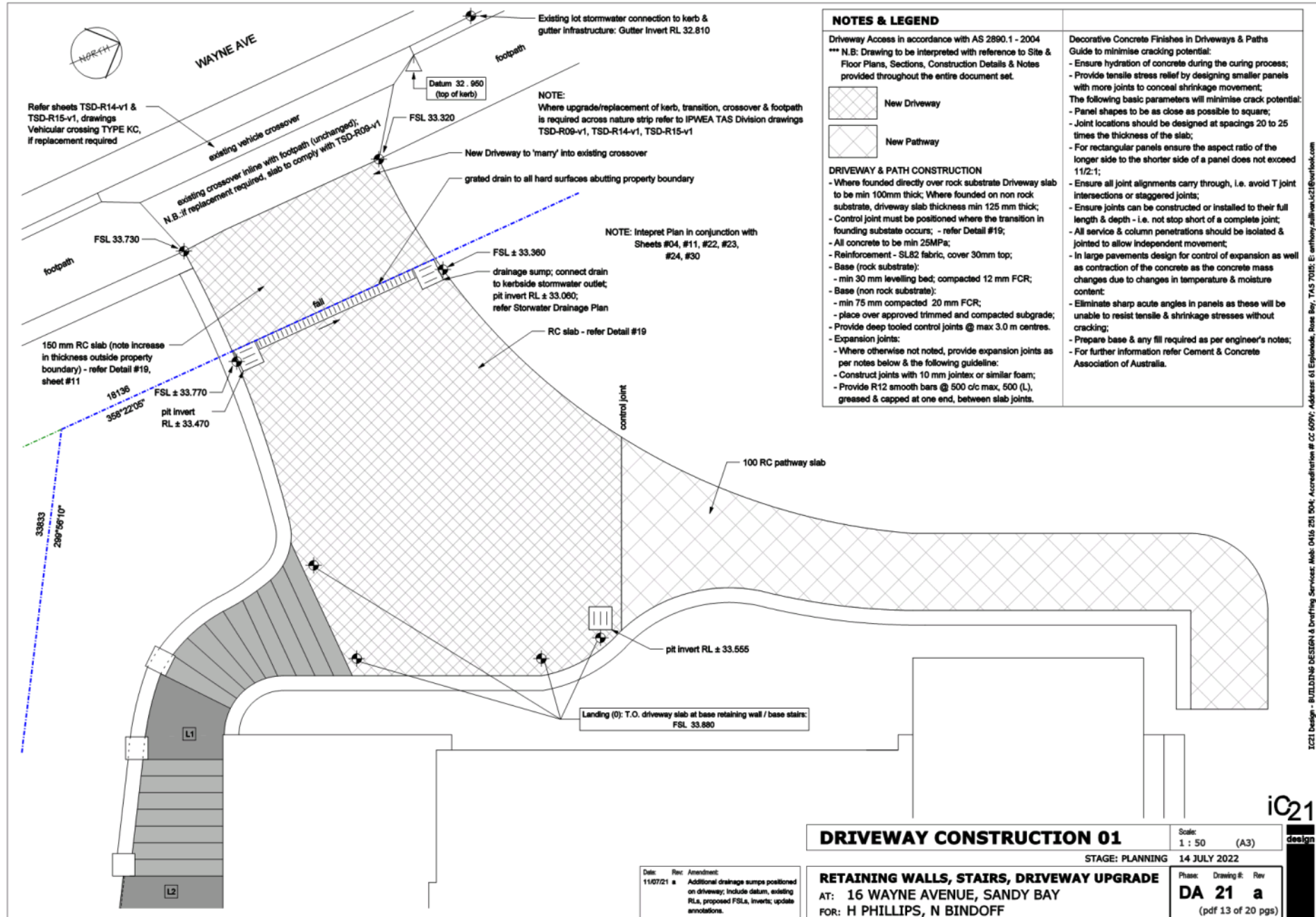
RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE
AT: 16 WAYNE AVENUE, SANDY BAY
FOR: H PHILLIPS, N BINDOFF

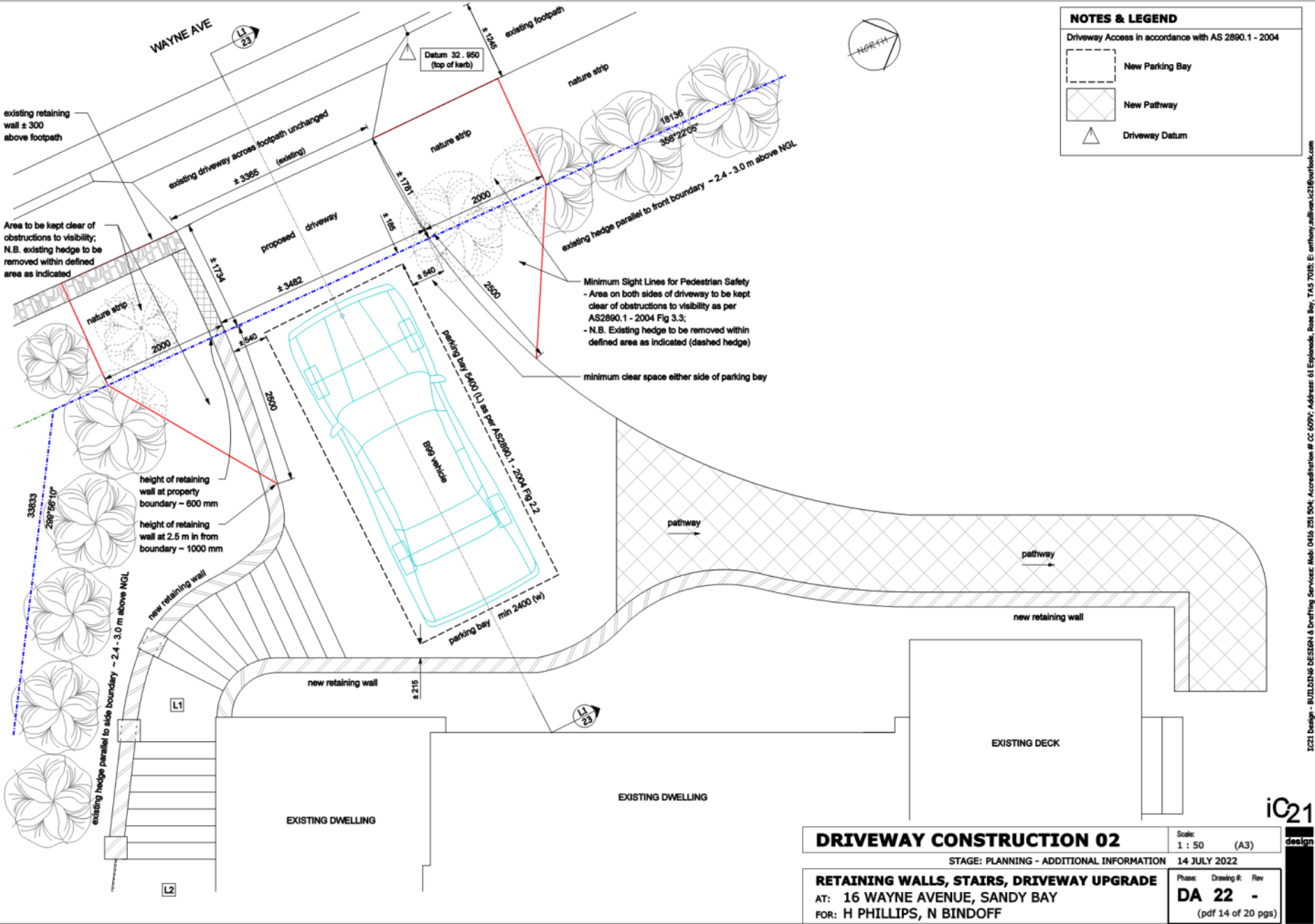
Phase: Drawing #: Rev
DA 11 -
(pdf 10 of 20 pgs)

iC21
design

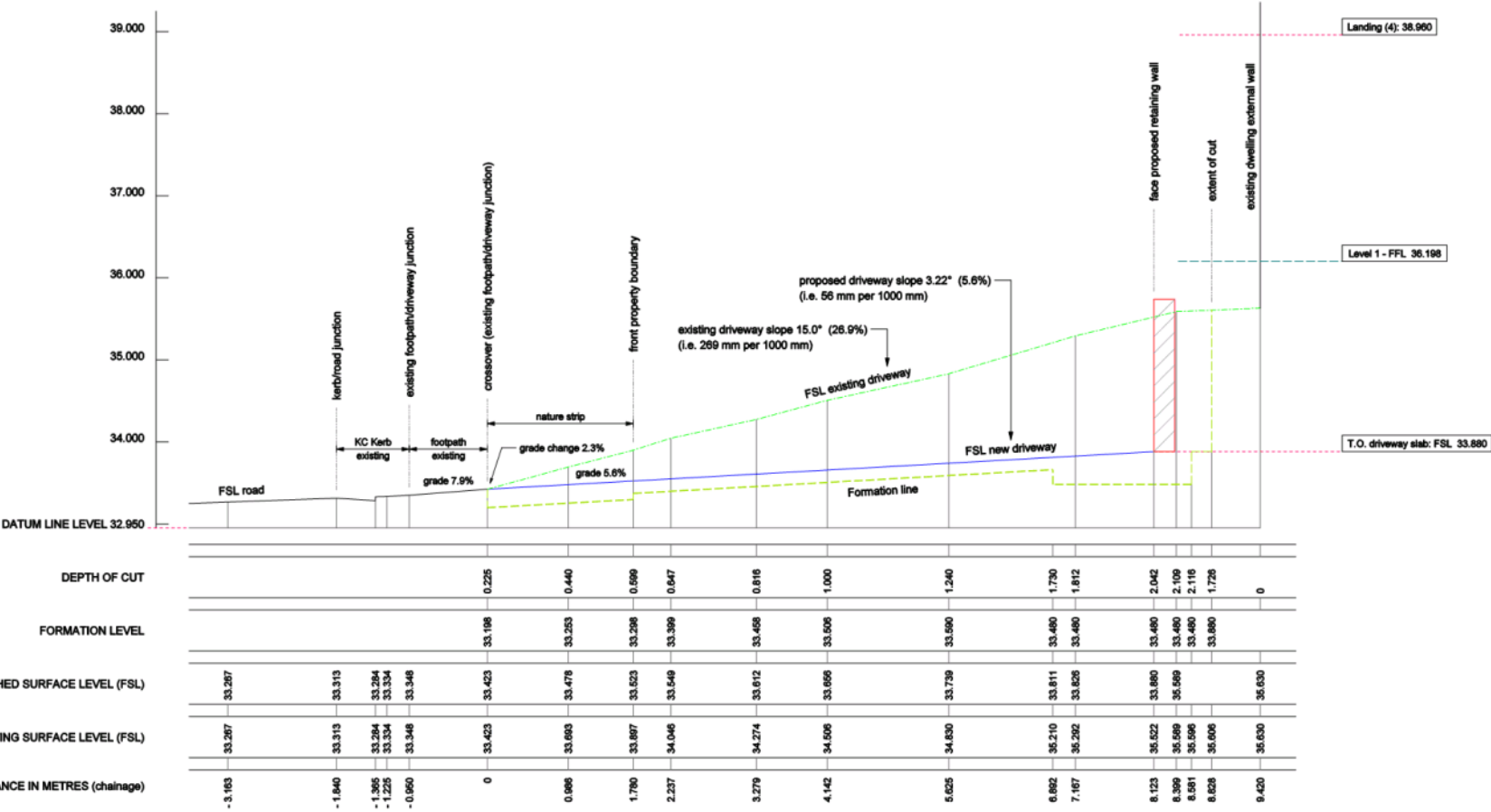








iC21 Design - BUILDING DESIGN & Drafting Services: Mob: 0412 251 504, Accreditation # CC 6099; Address: 41 Esplanade, Rose Bay, TAS 7018; E: anthony.sullivan@ic21build.com



LONGITUDINAL SECTION - L1 - CENTRELINE DRIVEWAY/PARKING SPACE

SECTION L1 - CENTRELINE DRIVEWAY

STAGE: PLANNING - ADDITIONAL INFORMATION

RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE
AT: 16 WAYNE AVENUE, SANDY BAY
FOR: H PHILLIPS, N BINDOFF

Scale:
1 : 50 (A3)

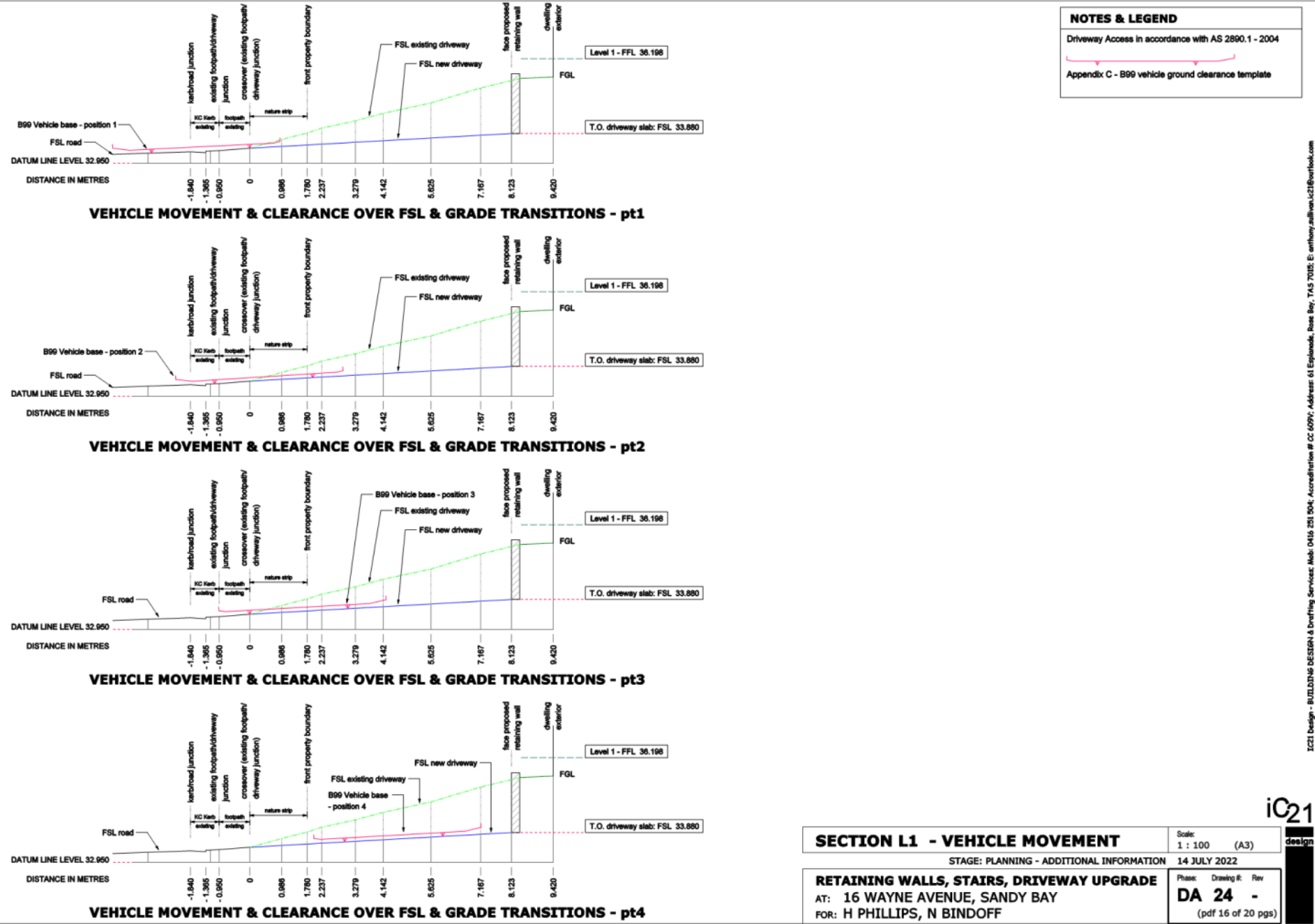
14 JULY 2022

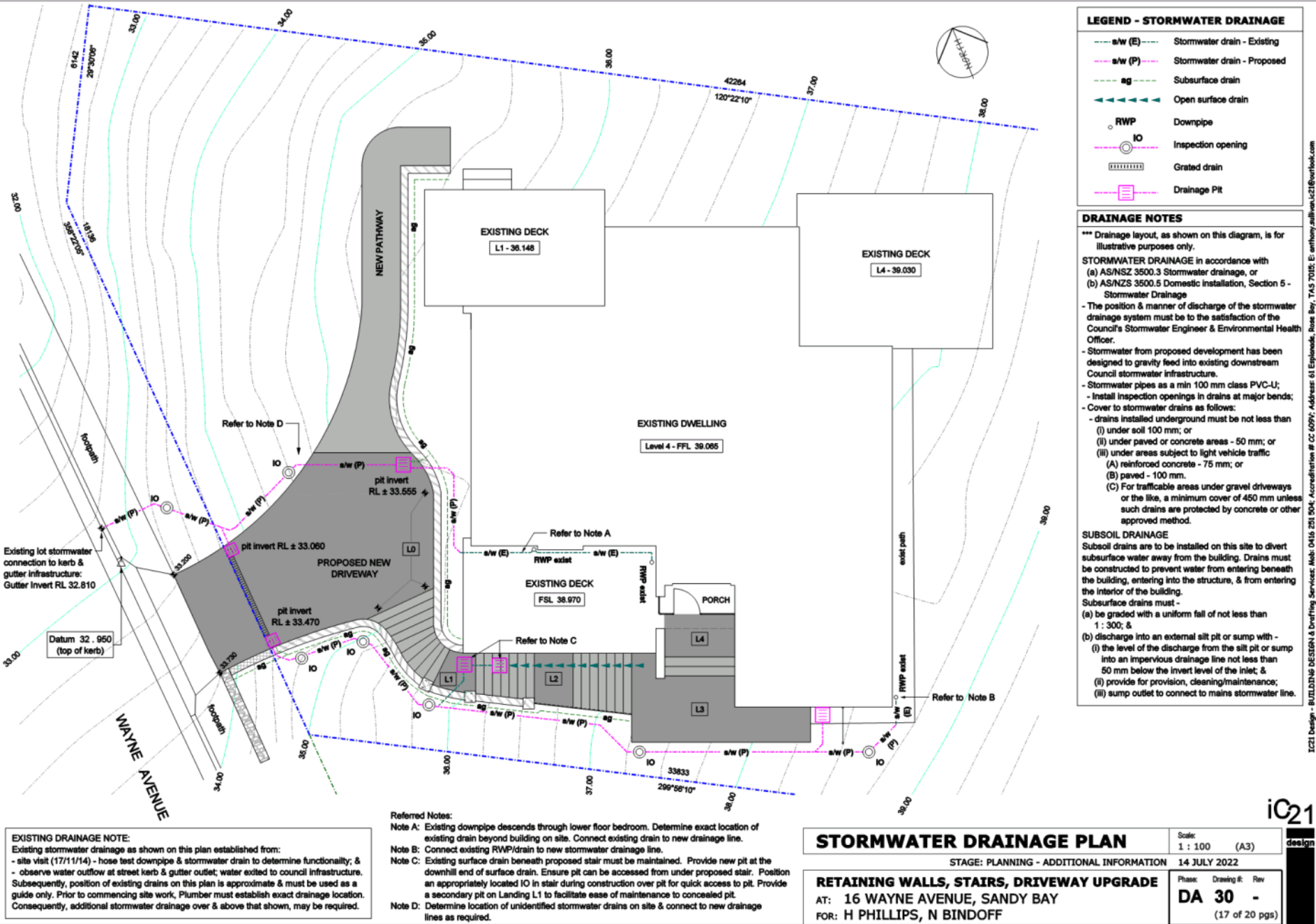
Phase: Drawing #: Rev

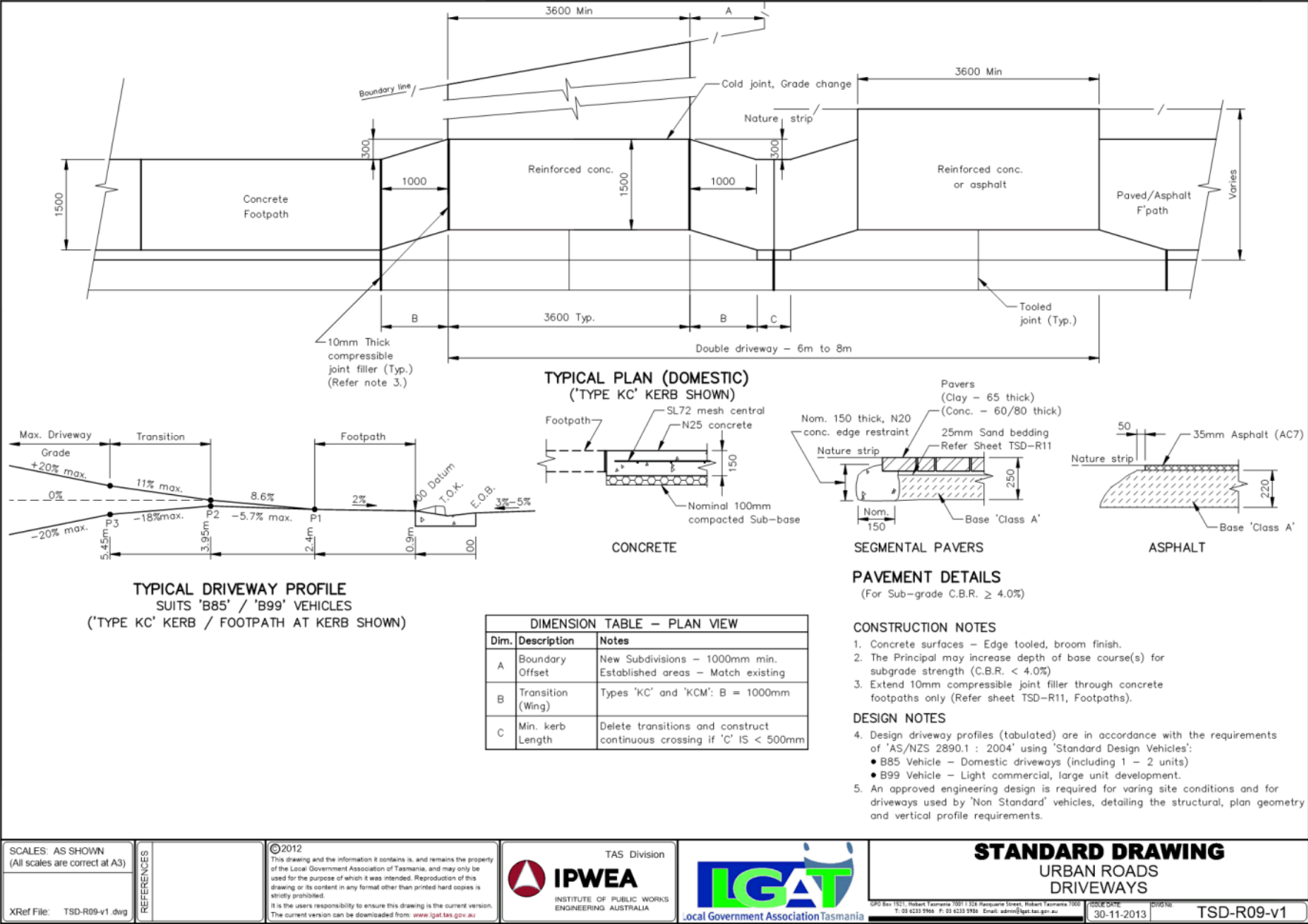
DA 23 -

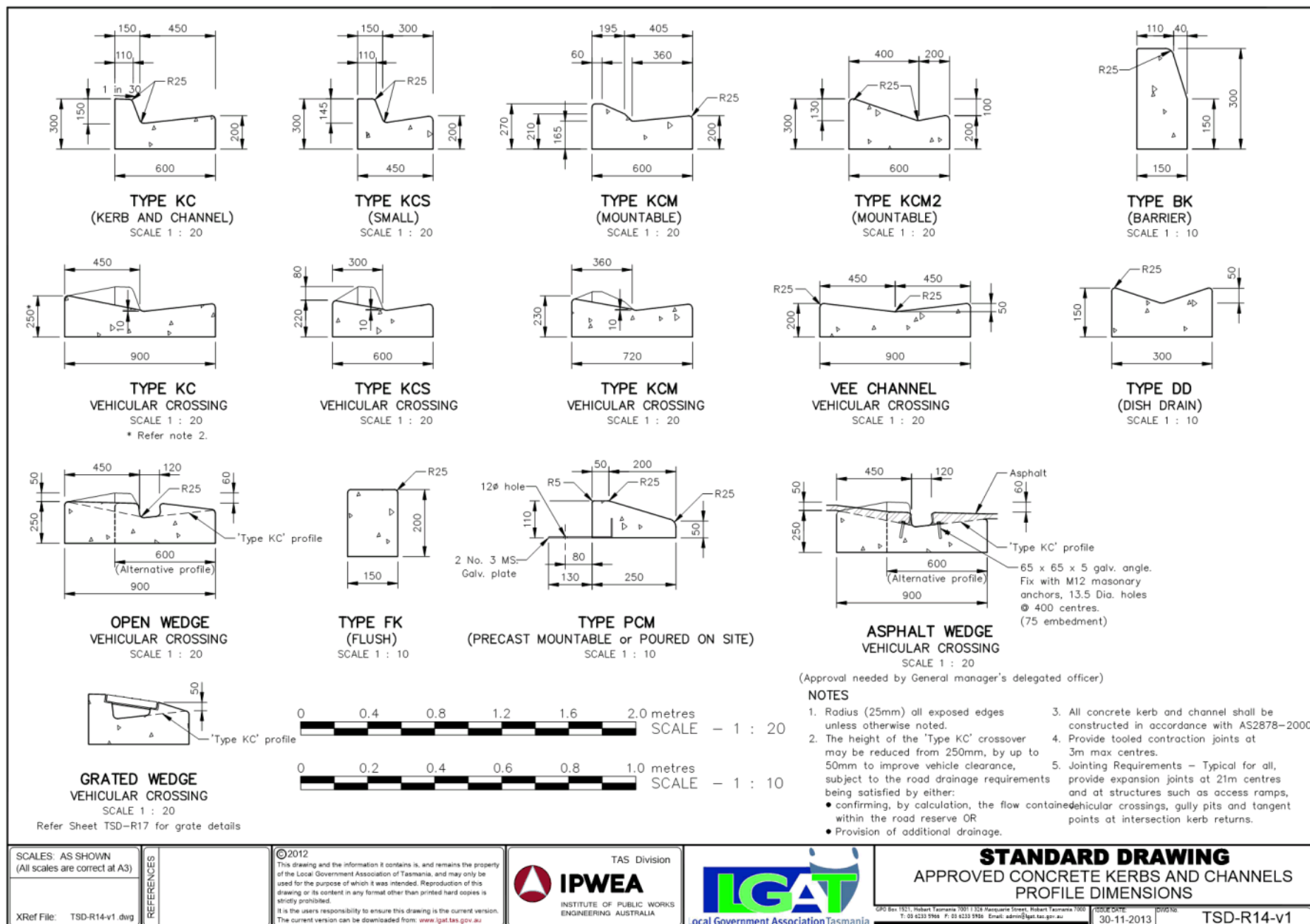
(pdf 15 of 20 pgs)

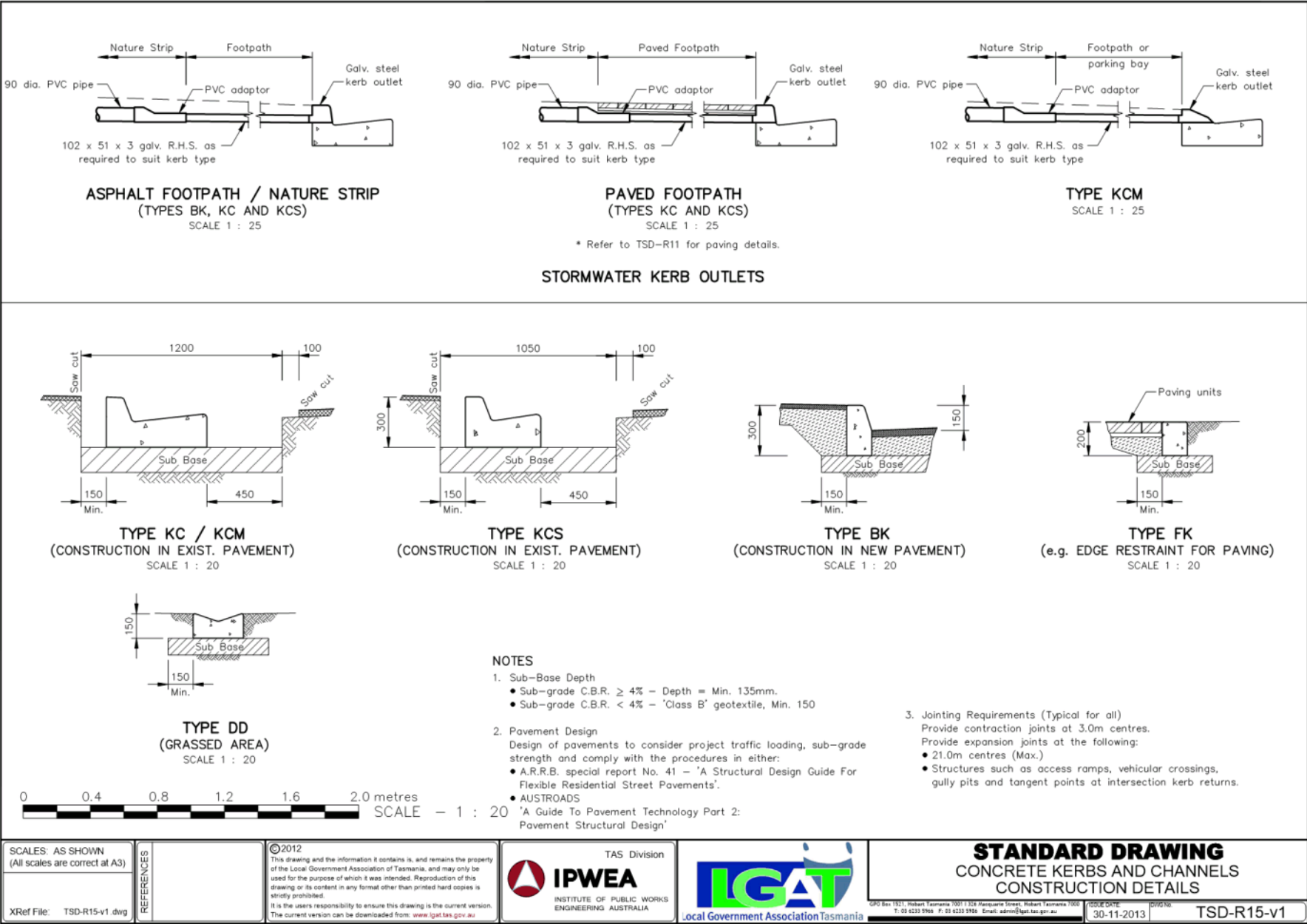
iC21
design













Enquiries to: City Life
Phone: (03) 6238 2711
Email: coh@hobartcity.com.au

13 May 2022

Anthony Sullivan (IC21 Design)
61, Esplanade
ROSE BAY TAS 7015

mailto: anthony.sullivan.ic21@outlook.com

Dear Sir/Madam

**16 WAYNE AVENUE, SANDY BAY & ADJACENT ROAD RESERVE
GMC - UPGRADE OF EXISTING DRIVEWAY, RETAINING WALL, CROSSOVER AND
FOOTPATH NOTICE OF LAND OWNER CONSENT TO LODGE A PLANNING
APPLICATION - GMC-22-33**

Site Address:

16 Wayne Avenue and adjacent road reserve

Description of Proposal:

Alterations to access, driveway and parking

Applicant Name:

Mr Anthony Sullivan
IC21 Design

PLN (if applicable):

PLN-22-256

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents. I granted consent pursuant to delegation, a copy of which is enclosed.

Please note that the granting of the consent is only for the making of the application and in no

Hobart Town Hall
50 Macquarie Street
Hobart TAS 7000

Hobart Council Centre
16 Elizabeth Street
Hobart TAS 7000

City of Hobart
GPO Box 503
Hobart TAS 7001

T 03 6238 2711
F 03 6234 7109
E coh@hobartcity.com.au
W hobartcity.com.au

CityofHobartOfficial
ABN 39 055 343 428
Hobart City Council

way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully



(Glenn Doyle)

HEAD OF CITY PROJECTS

Relevant documents/plans:

Drawings 01 - 07, 09 - 12, 19 & 21 from IC21 dated 28/04/2022

Drawings TSD-G02, R09, R11, R14 & R15 from LGAT dated 30/11/2013



**PROPOSED RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE, for
H PHILLIPS & N BINDOFF, 16 WAYNE AVENUE, SANDY BAY
DEVELOPMENT APPLICATION - 28th APRIL 2022**

pdf sheet #	Drawing #	Drawing Title
01 of 18	01	Contents Page
02 of 18	02	Existing Site Plan
03 of 18	03	Proposed Site Plan
04 of 18	04	Proposed Plan 01
05 of 18	05	Proposed Plan 02
06 of 18	06	Dimension, Setout Plan 01
07 of 18	07	Dimension, Setout Plan 02
08 of 18	09	Existing Elevations
09 of 18	10	Proposed Elevations
10 of 18	11	Section A1
11 of 18	12	Section B1
12 of 18	19	Footing/Retaining Details 02
13 of 18	21	Stair Construction 01

Note: The proposal documents (inclusive of plans & supporting documentation) have been prepared for the purpose of obtaining Planning approval from Hobart City Council & are therefore, subject to any conditions noted on that approval.

IC21 Design - BUILDING DESIGN & Drafting Services; Mob: 0416 251 904; Accreditation # CC 609V; Address: 61 Esplanade, Rose Bay, TAS 7015; E: anthony.sullivan.ic21@outlook.com

DOCUMENTATION ATTACHMENTS (Information provided by others):

pdf sheet #	Drawing #	Drawing Title
14 of 18	TSD-G02.v1	IPWEA Standard Drawing - Urban Roads - Typical Service Locations
15 of 18	TSD-R09-v1	IPWEA Standard Drawing - Urban Roads - Driveways
16 of 18	TSD-R11-v1	IPWEA Standard Drawing - Urban Roads - Footpaths
17 of 18	TSD-R14-v1	IPWEA Standard Drawing - Urban Roads - Kerb profiles & dimensions
18 of 18	TSD-R15-v1	IPWEA Standard Drawing - Urban Roads - Kerb construction details

SITE INFORMATION		
Land Title Reference:	PID: 5650432; Volume/Folio: 55448/41	Proposal Details: - Building footprint remains unchanged; - Refer to drawing #03 for proposal specific area details
Wind Classification:	N3 (assumed)	
Soil Classification:	M (assumed) - Engineer to confirm on site	
Climate Zone:	7	
BAL Level:	BAL Low	
Corrosion Environment:	Moderate	Site Area: 843.43 m²
Other Hazards:	n/a	
DIMENSION NOTE: Site & Reduced Levels in metres; All other dimensions in millimetres unless otherwise indicated by unit notation.		

CONTENTS

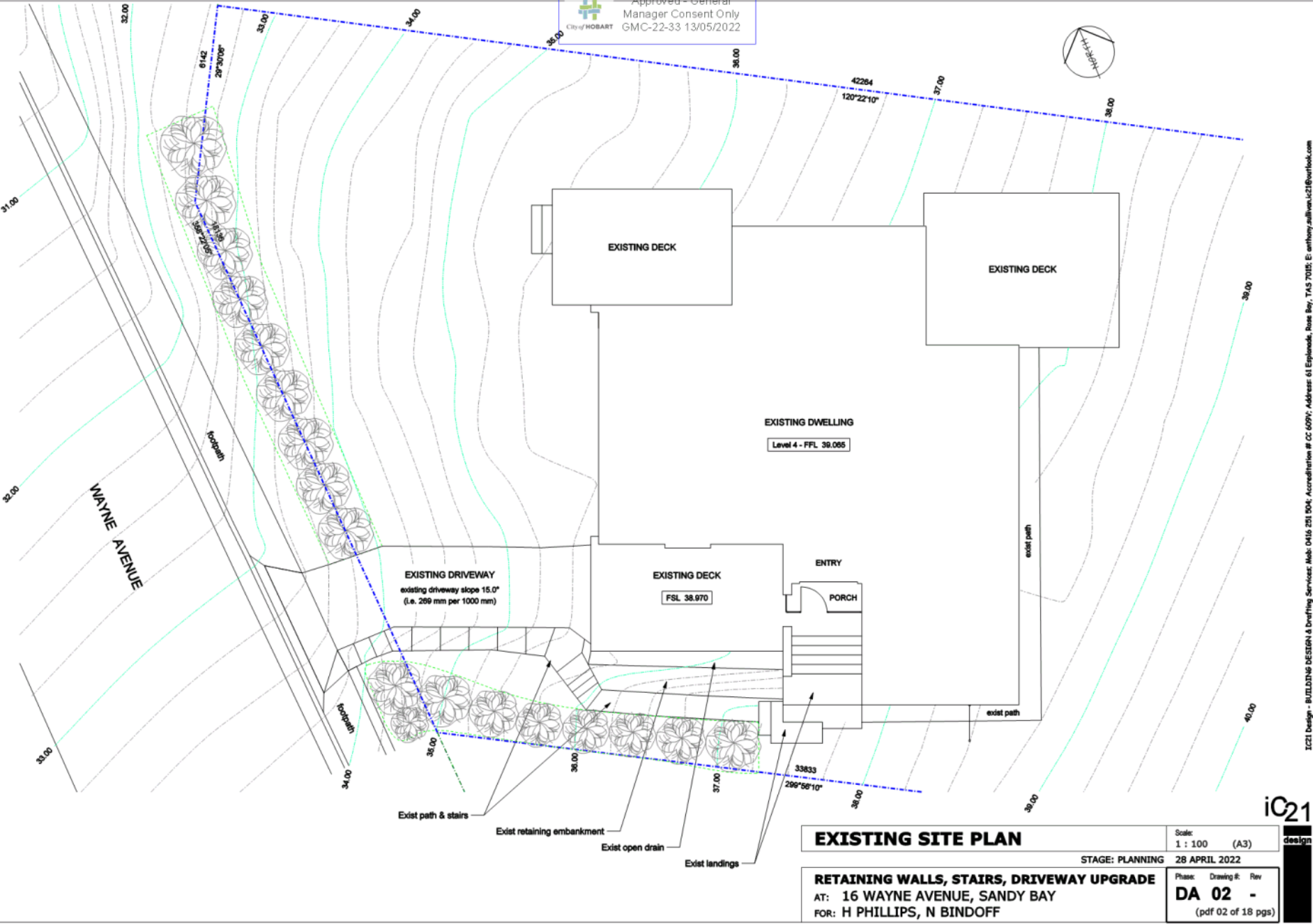
RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE
AT: 16 WAYNE AVENUE, SANDY BAY
FOR: H PHILLIPS, N BINDOFF

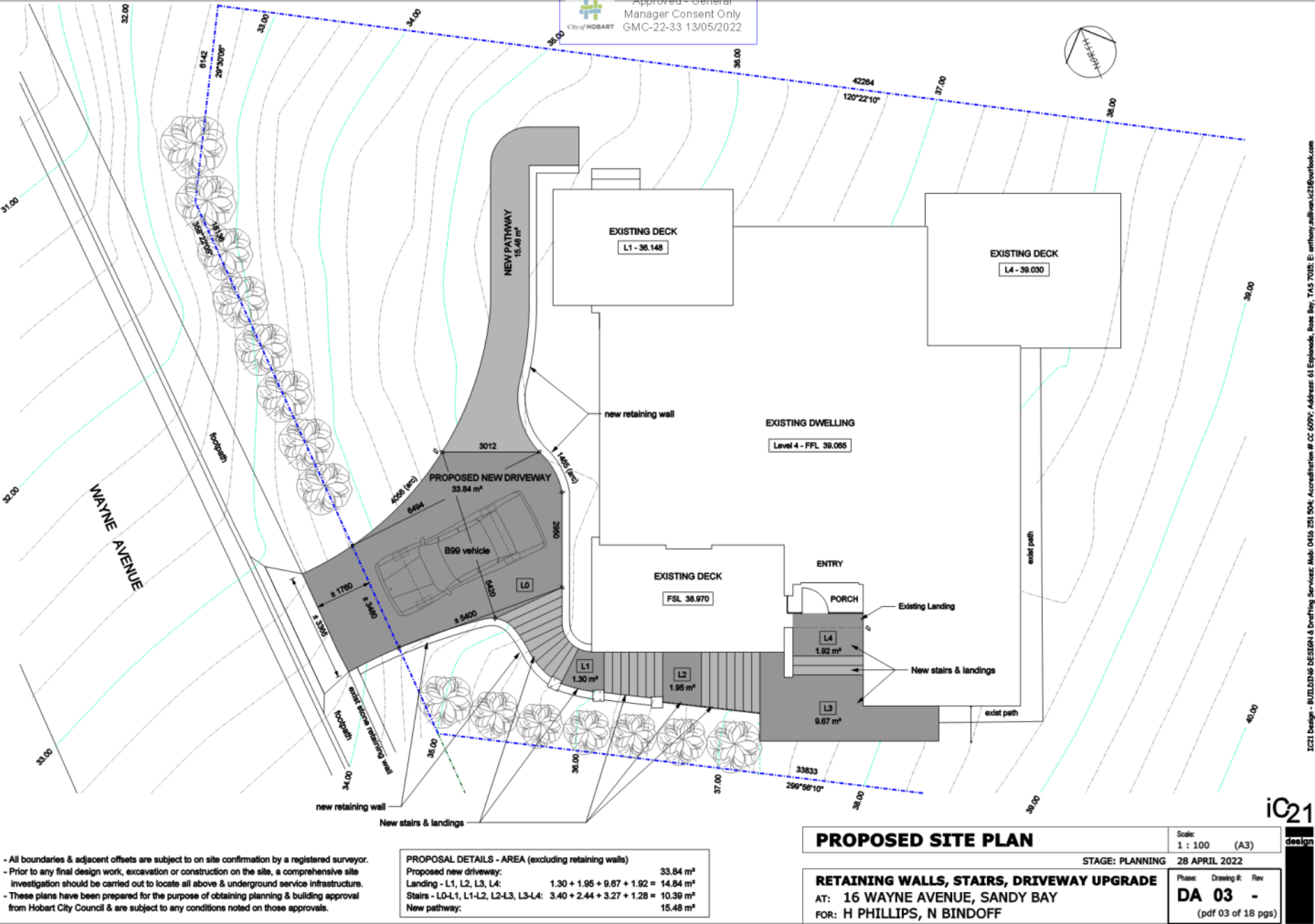
Scale:
n/a (A3)

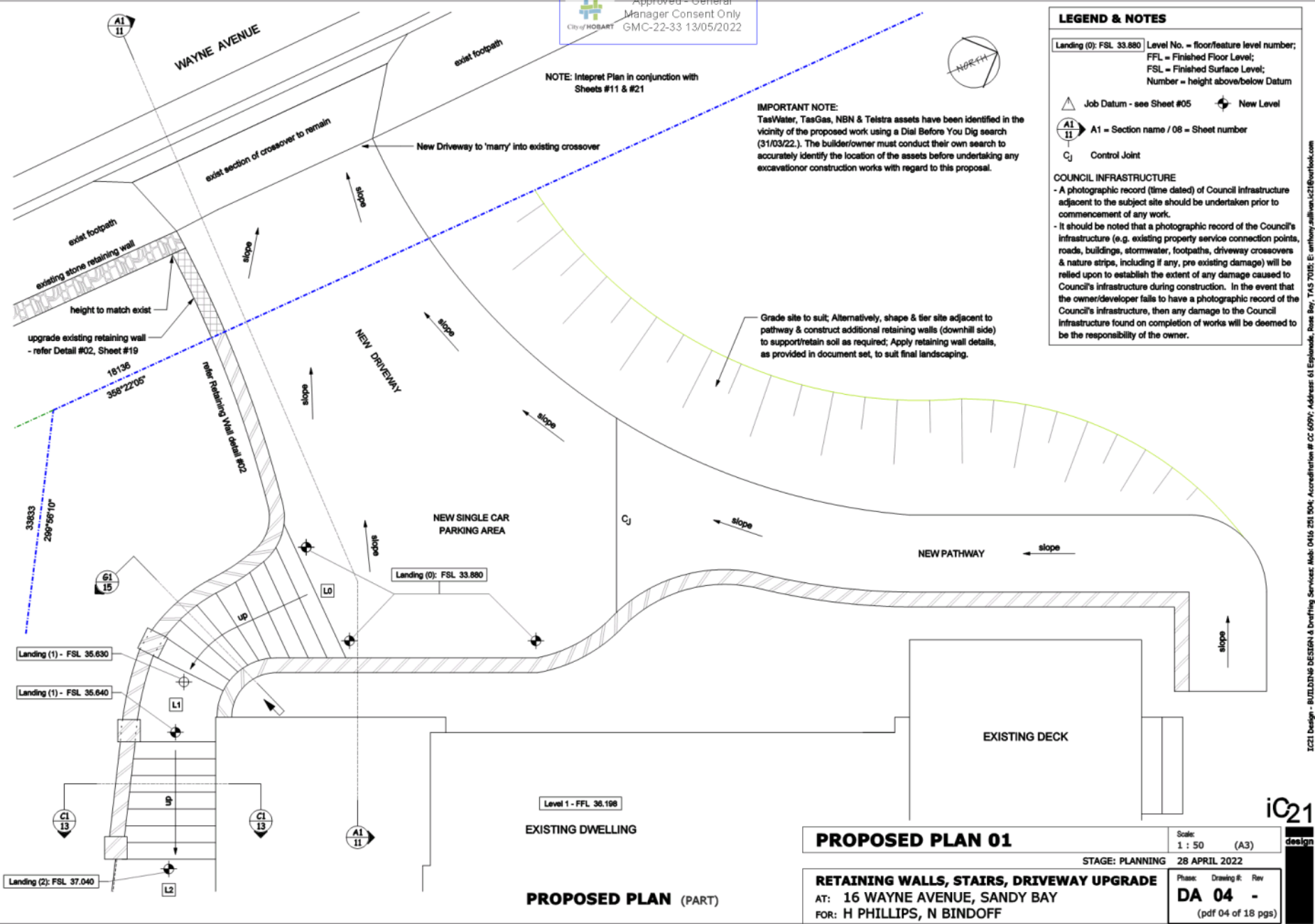
STAGE: PLANNING
28 APRIL 2022

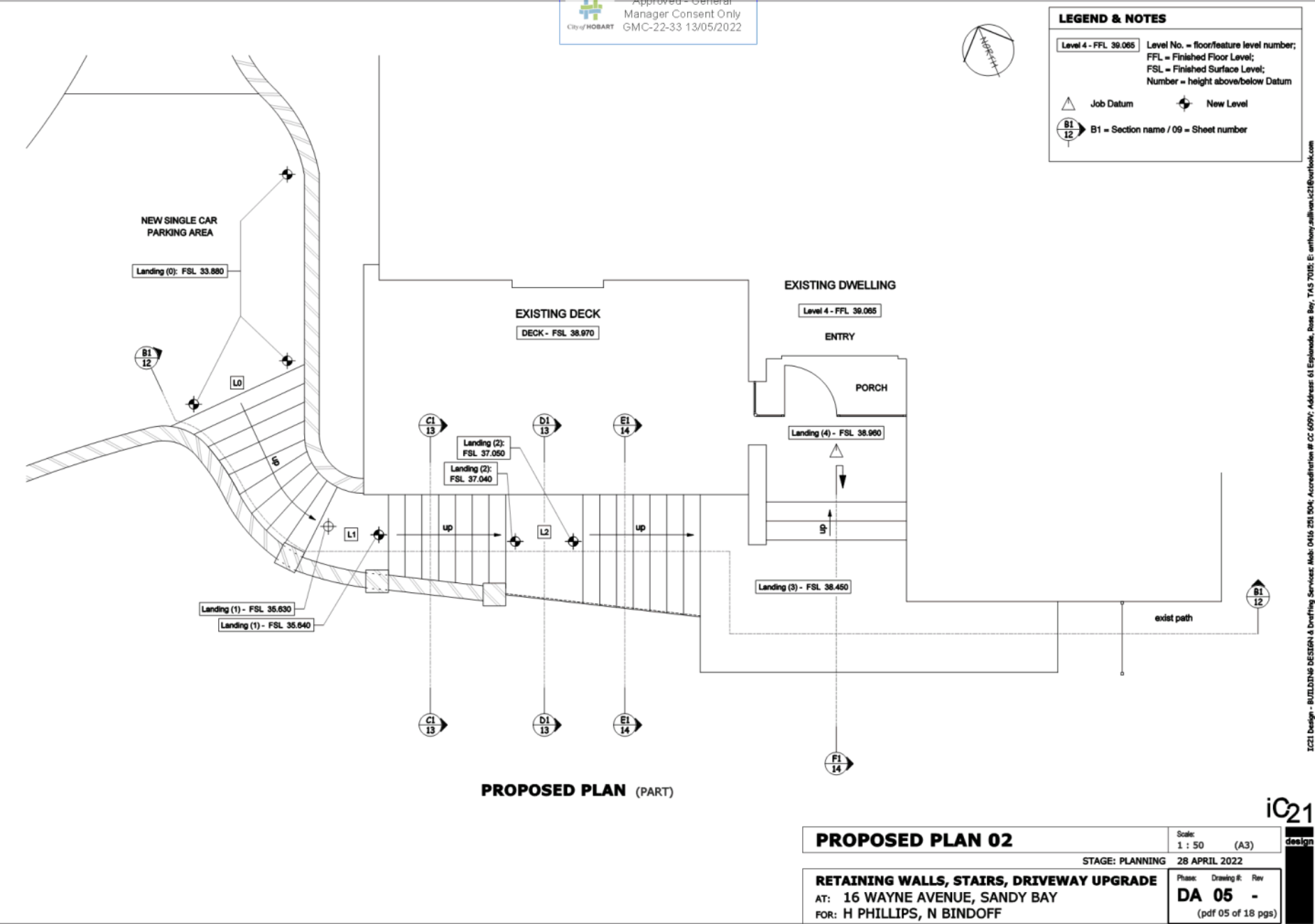
Phase: Drawing #: Rev
DA 01 -
(pdf 01 of 18 pgs)

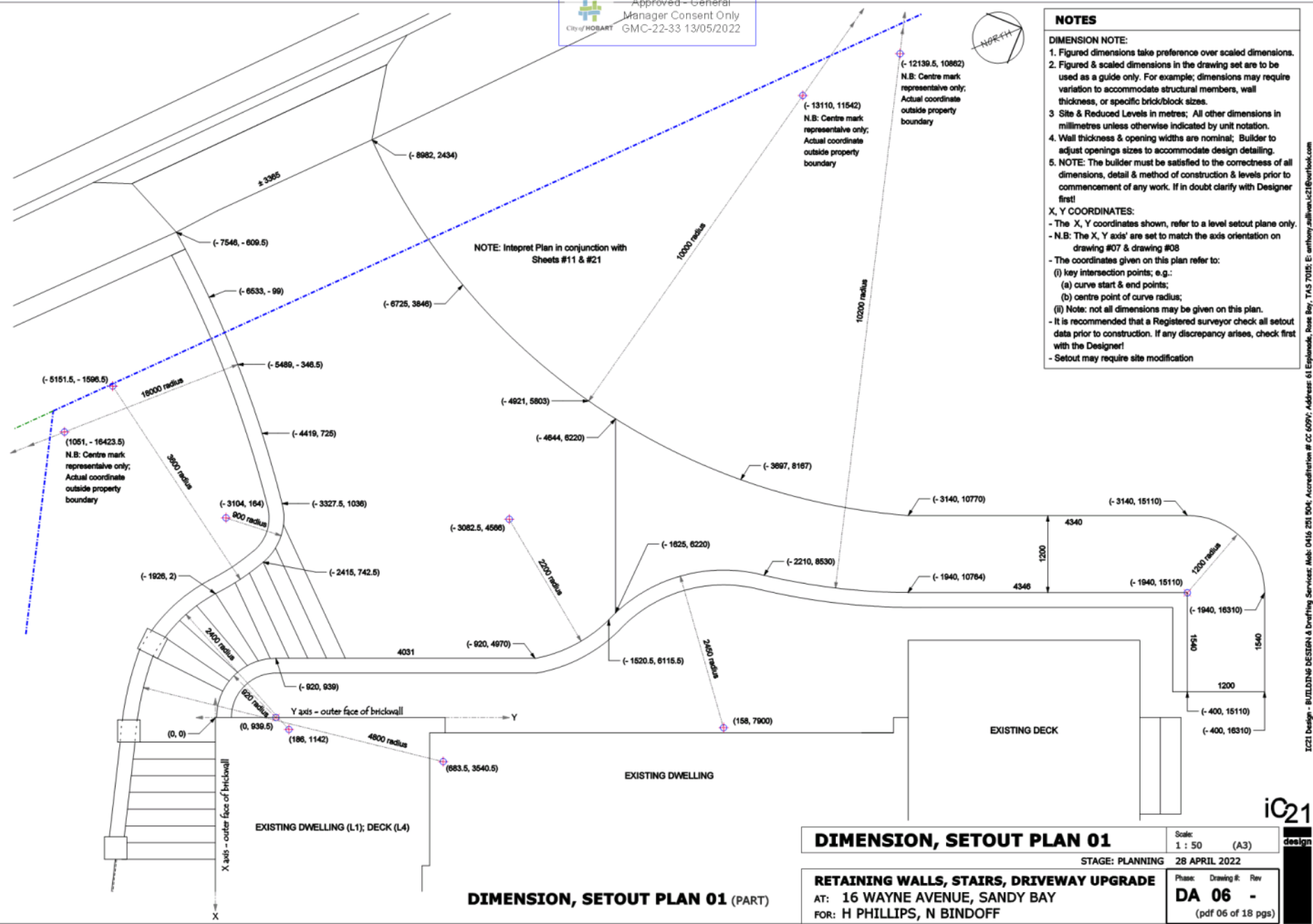
ic21
design



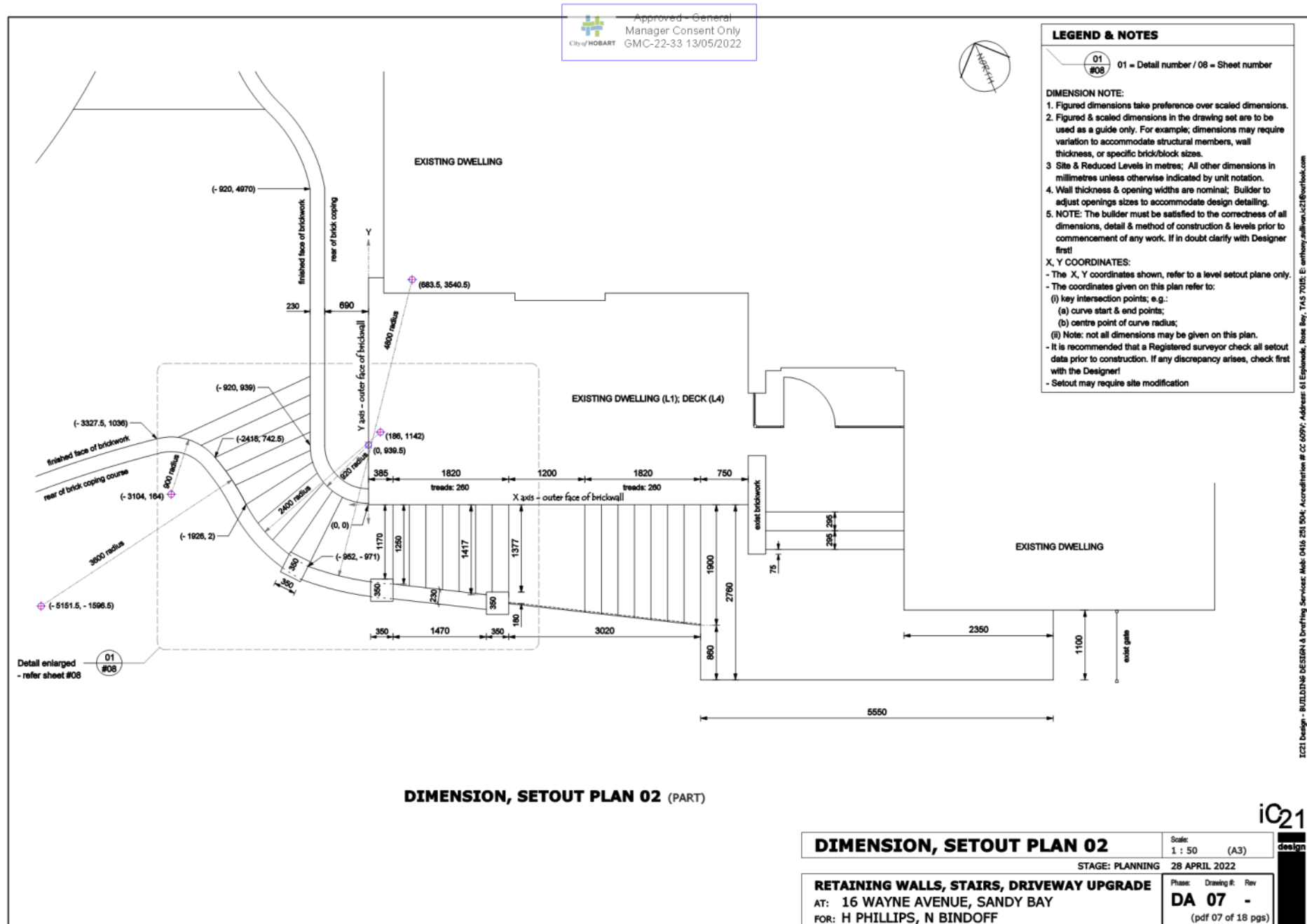




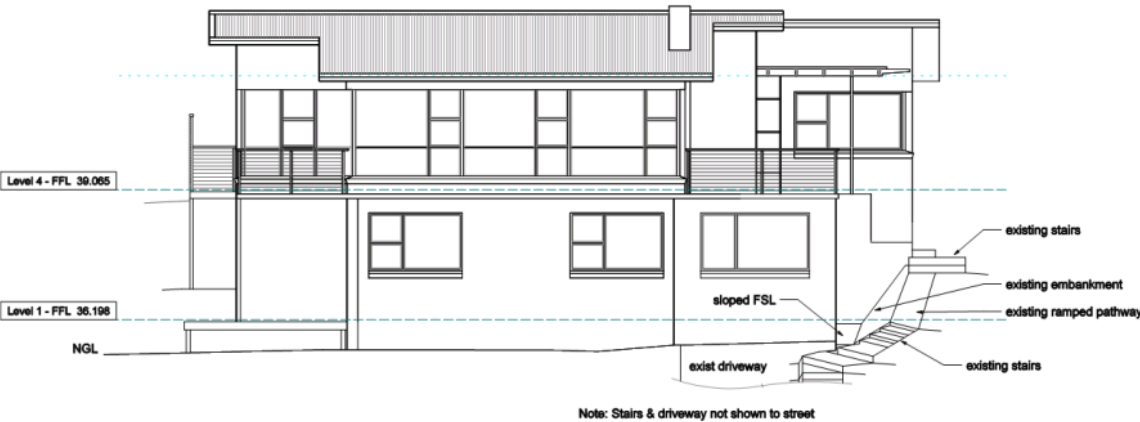
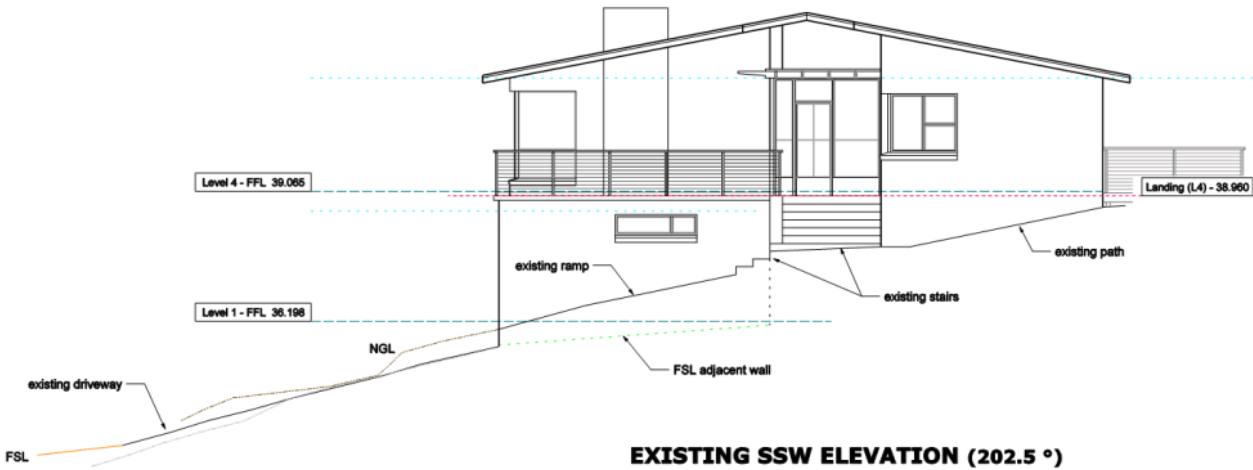




iC21 Design - BUILDING DESIGN & DRAFTING SERVICES: Mob: 0412 251 304, Accreditation # CC 6099; Address: 41 Esplanade, Rose Bay, TAS 7018; E: anthony.sullivan@ic21design.com



Approved - General
Manager Consent Only
City of Hobart GMC-22-33 13/05/2022

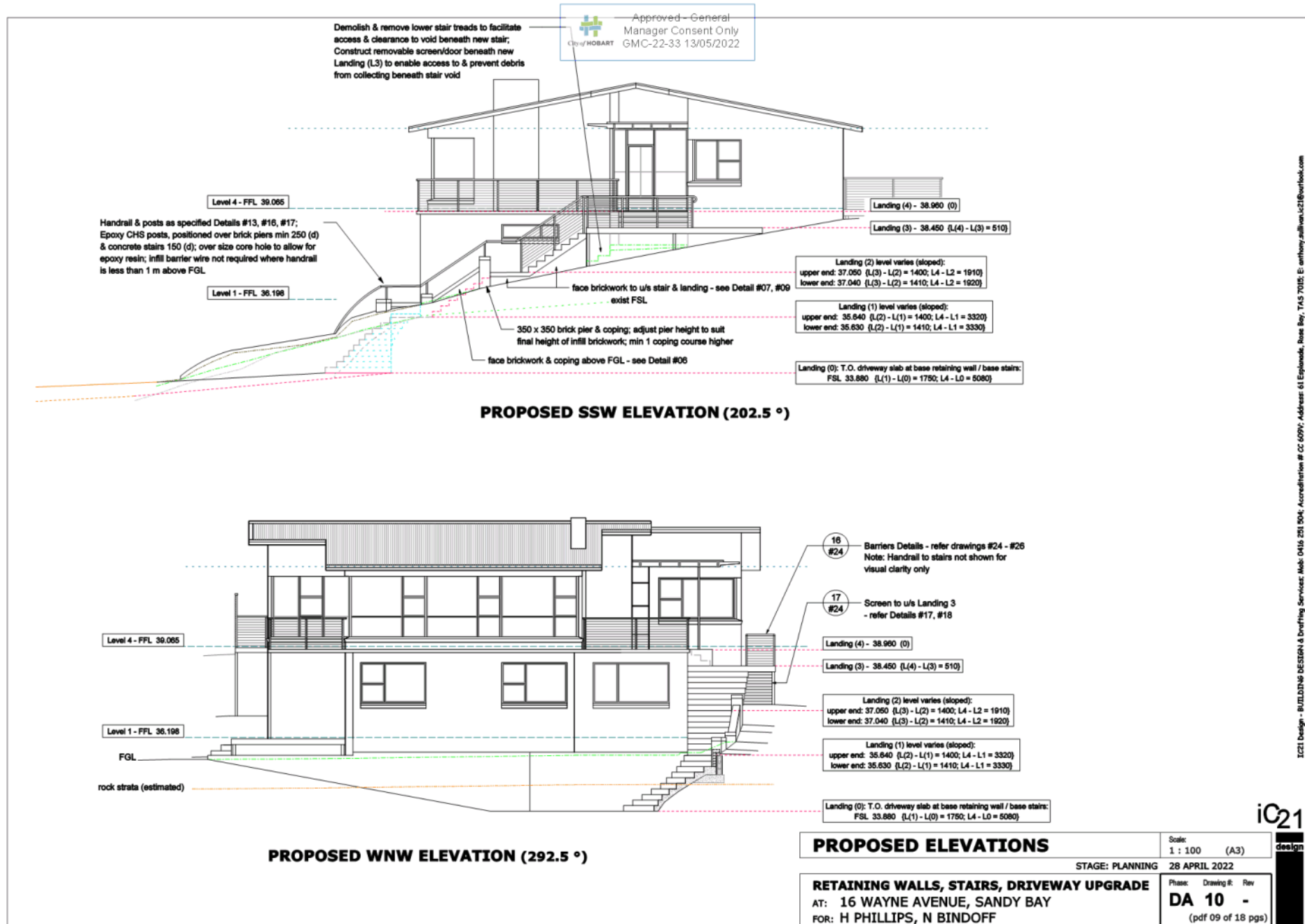


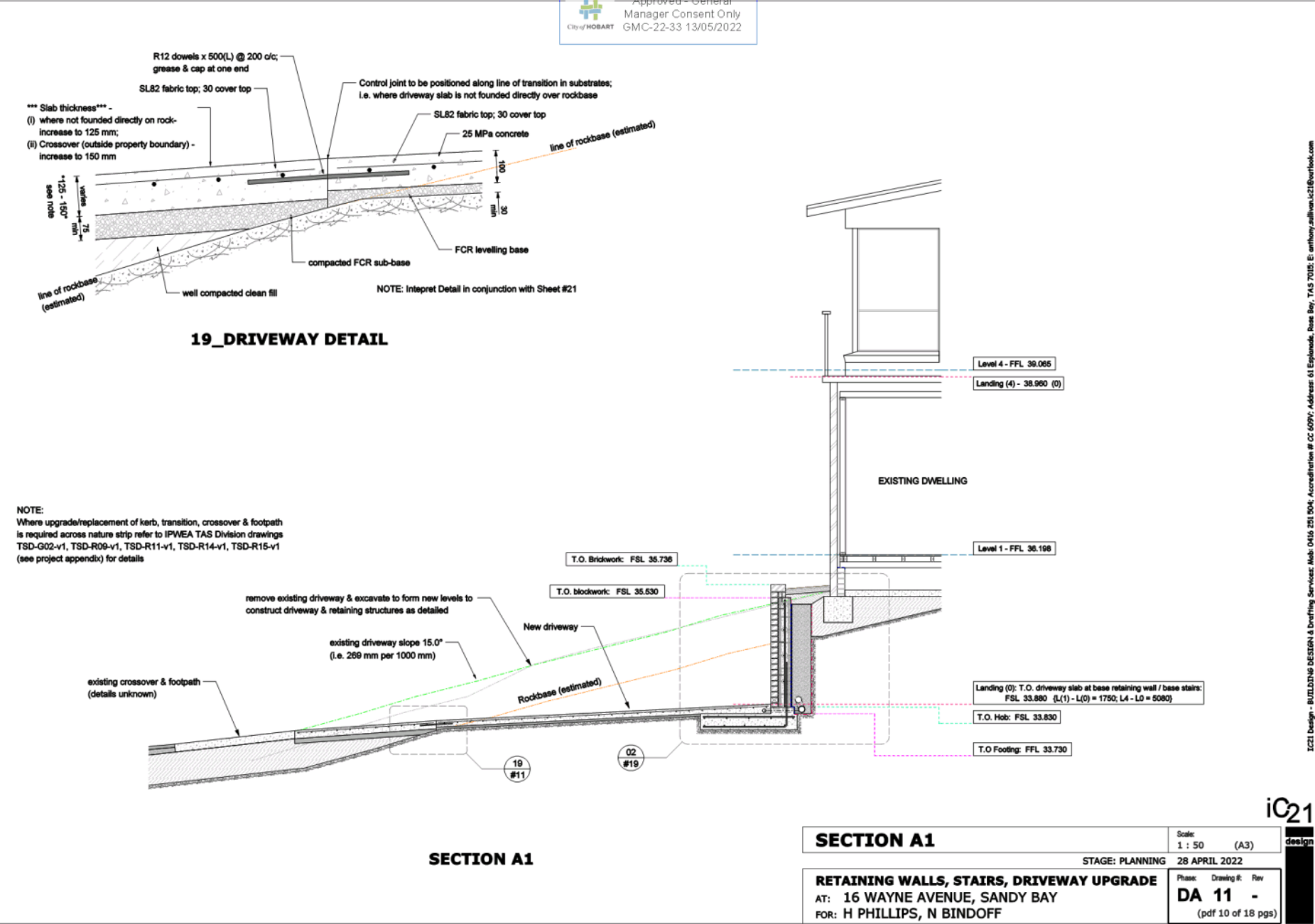
Note: Stairs & driveway not shown to street

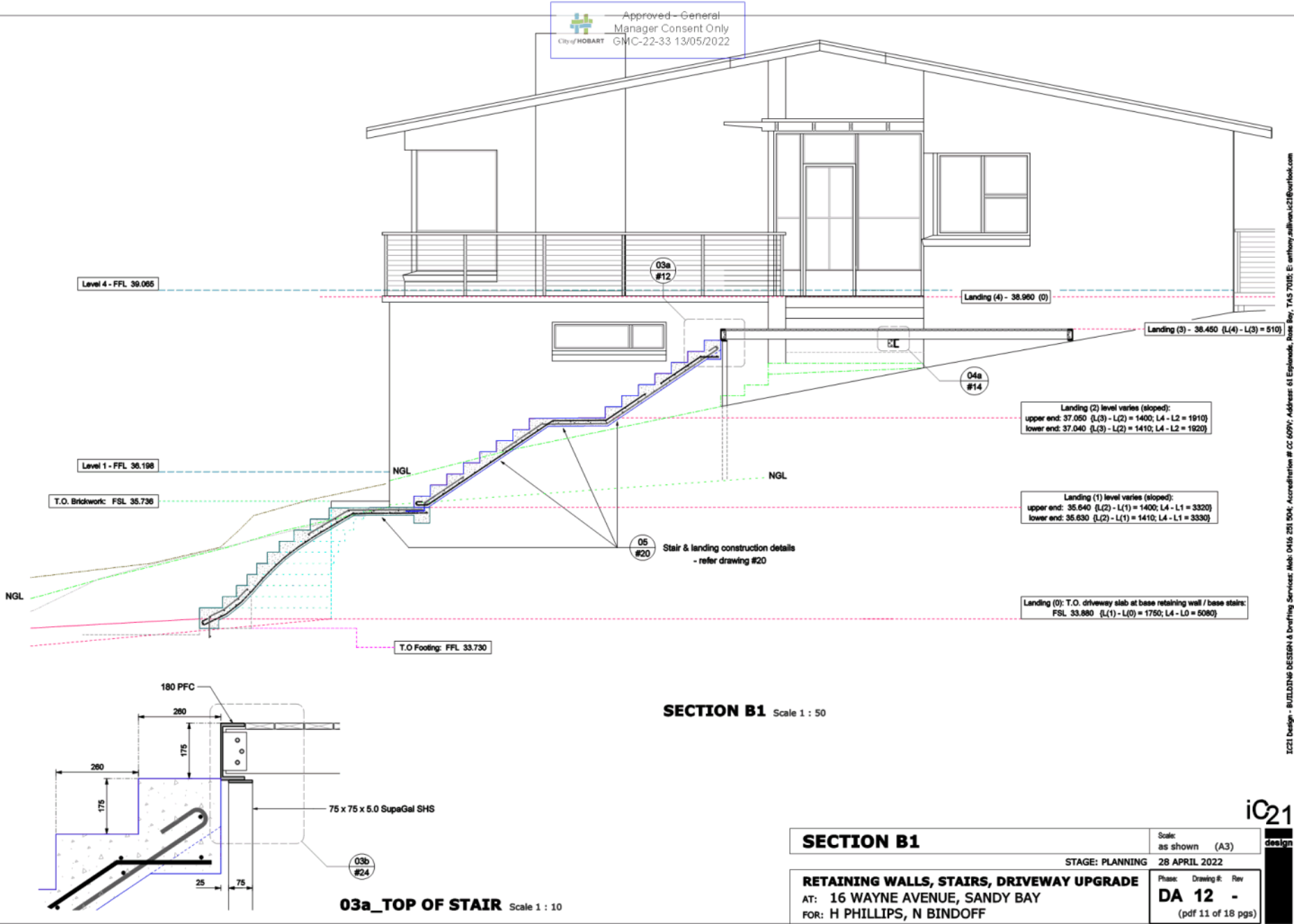
EXISTING WNW ELEVATION (292.5 °)

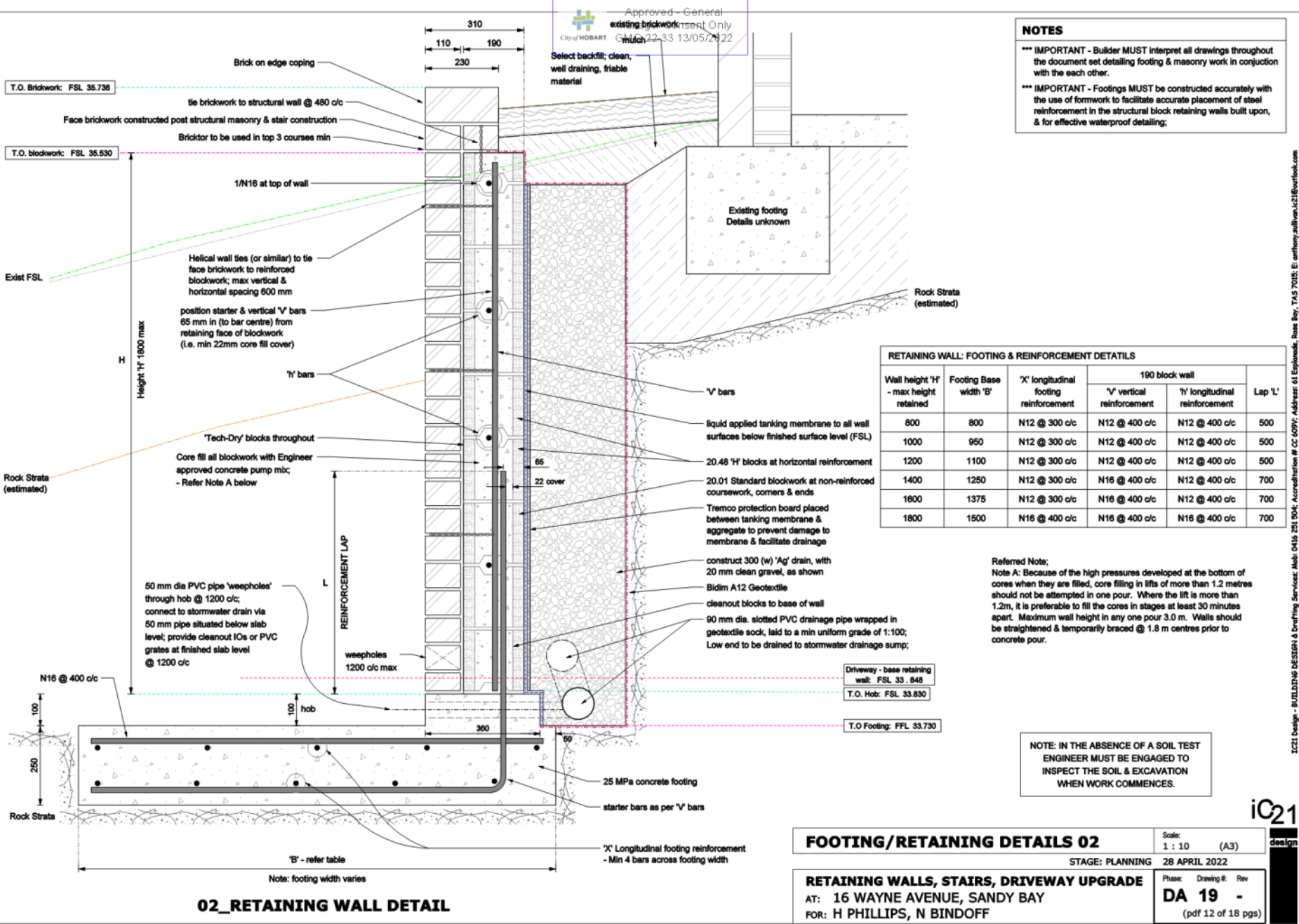
EXISTING ELEVATIONS		Scale: 1 : 100 (A3)
STAGE: PLANNING		28 APRIL 2022
RETAINING WALLS, STAIRS, DRIVEWAY UPGRADE		Phase: Drawing #: Rev
AT: 16 WAYNE AVENUE, SANDY BAY		DA 09 -
FOR: H PHILLIPS, N BINDOFF		(pdf 08 of 18 pgs)

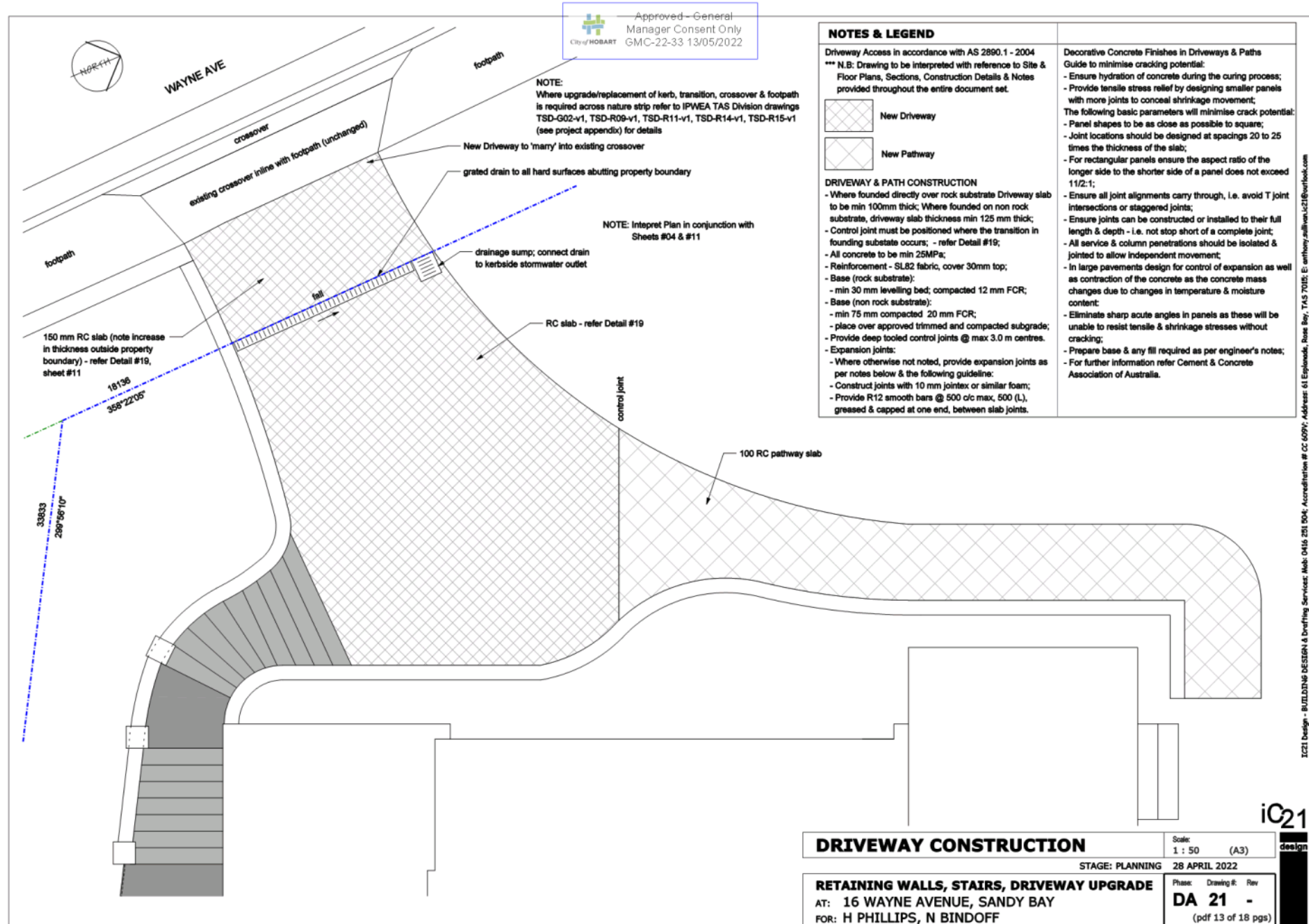
iC21 Design - BUILDING DESIGN & DRAFTING SERVICES: Mob: 0412 251 504, Accreditation # CC 6099; Address: 61 Esplanade, Rose Bay, TAS 7018; E: anthony.sullivan@ic21hobart.com



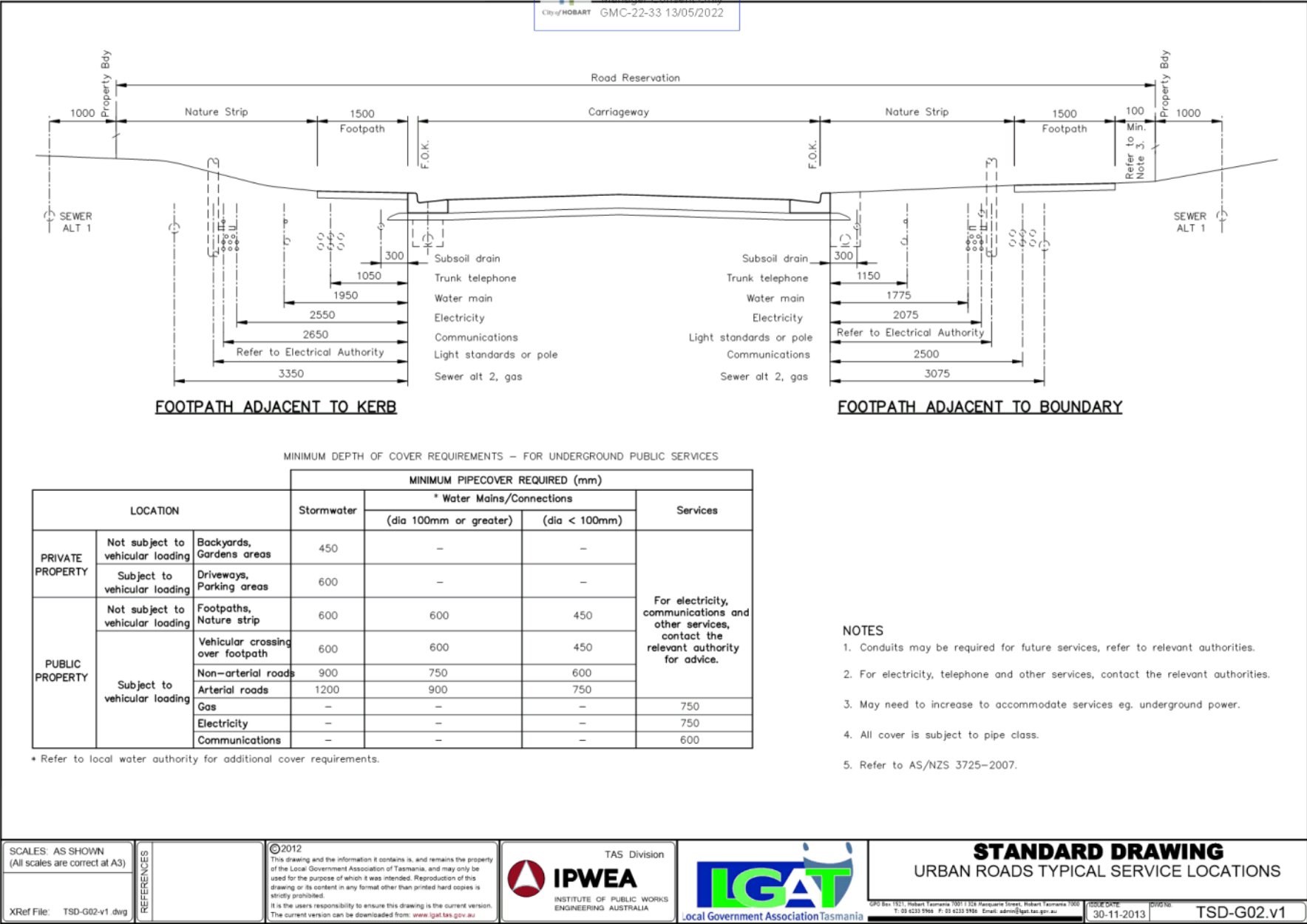


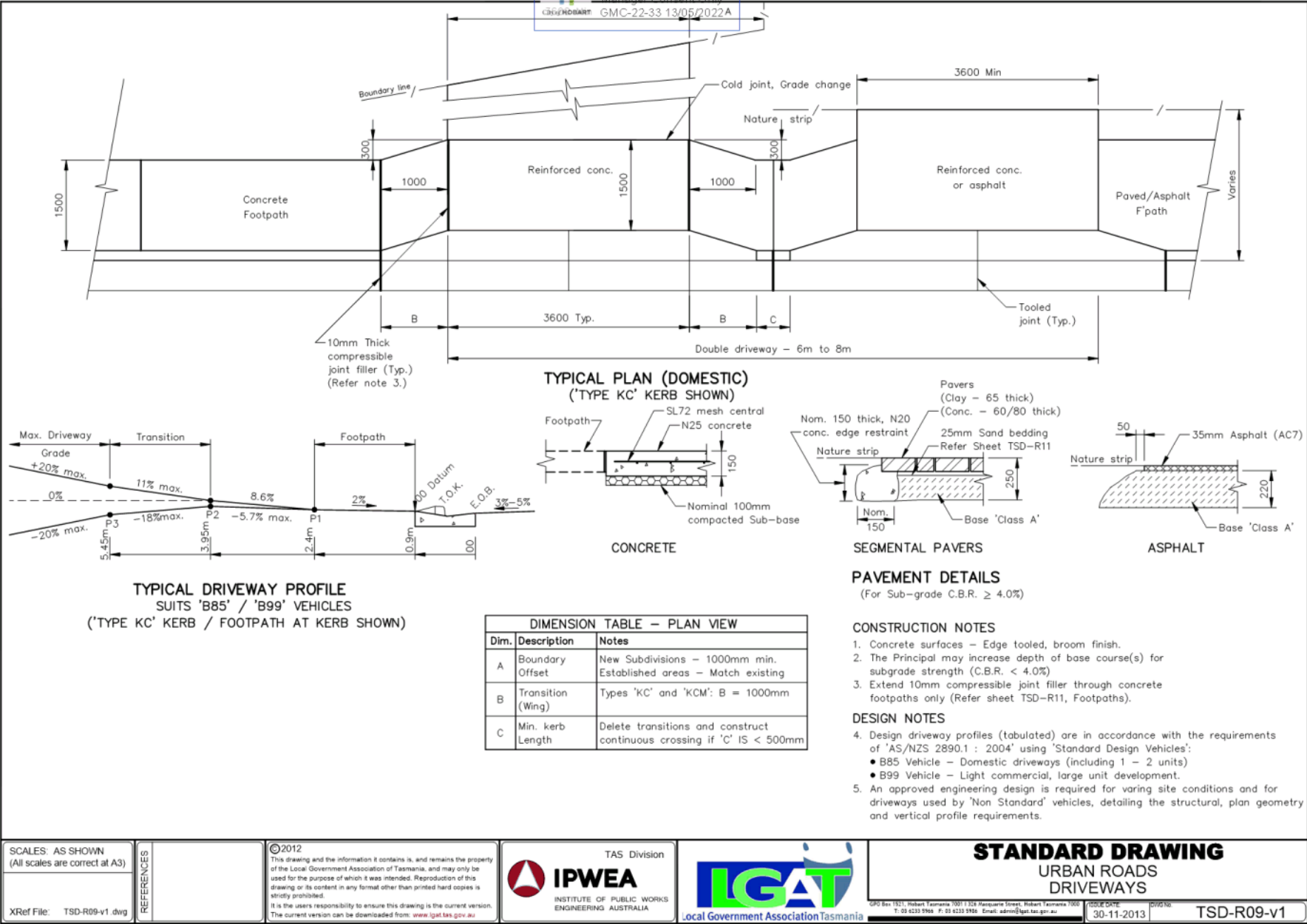


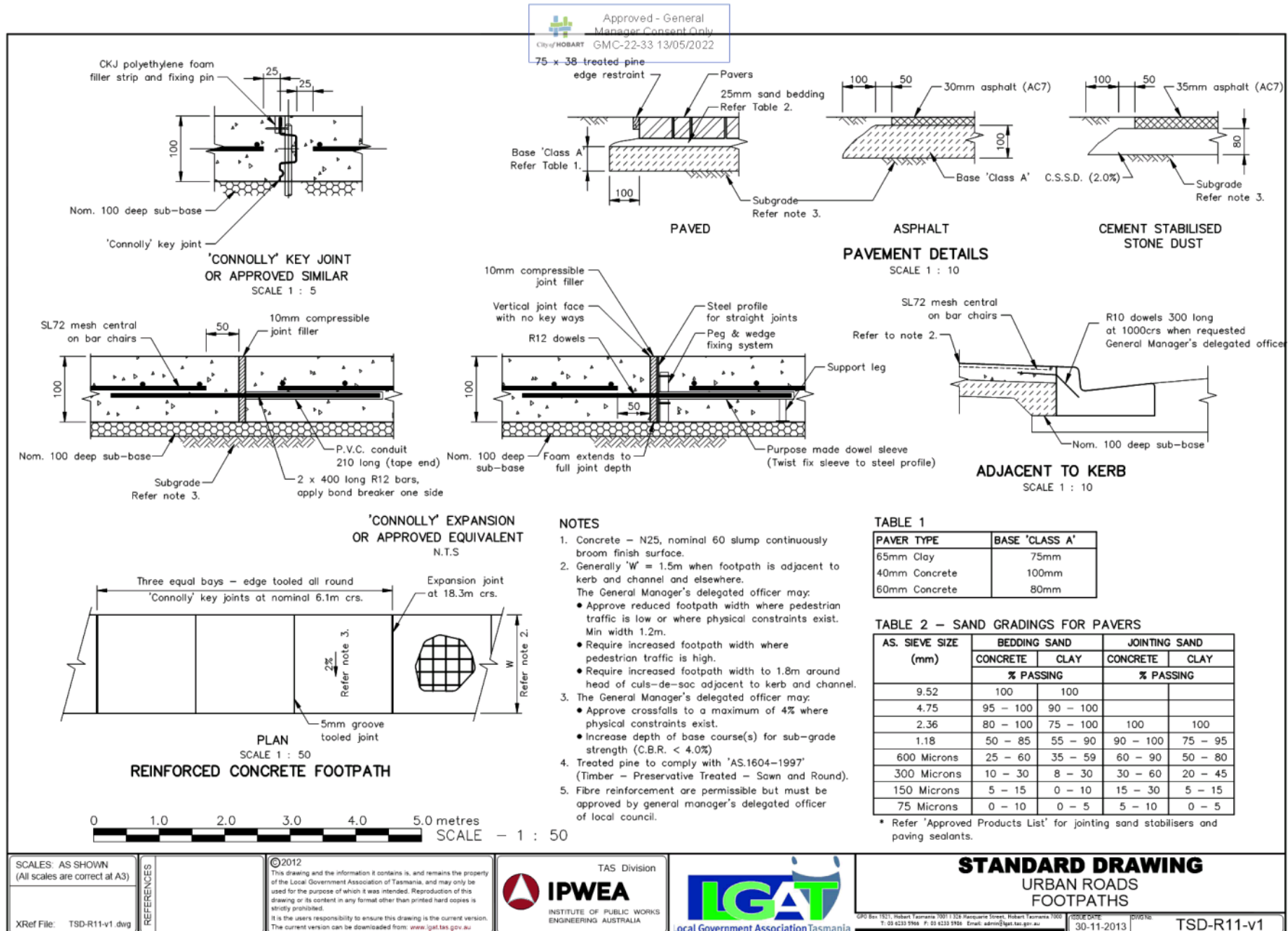


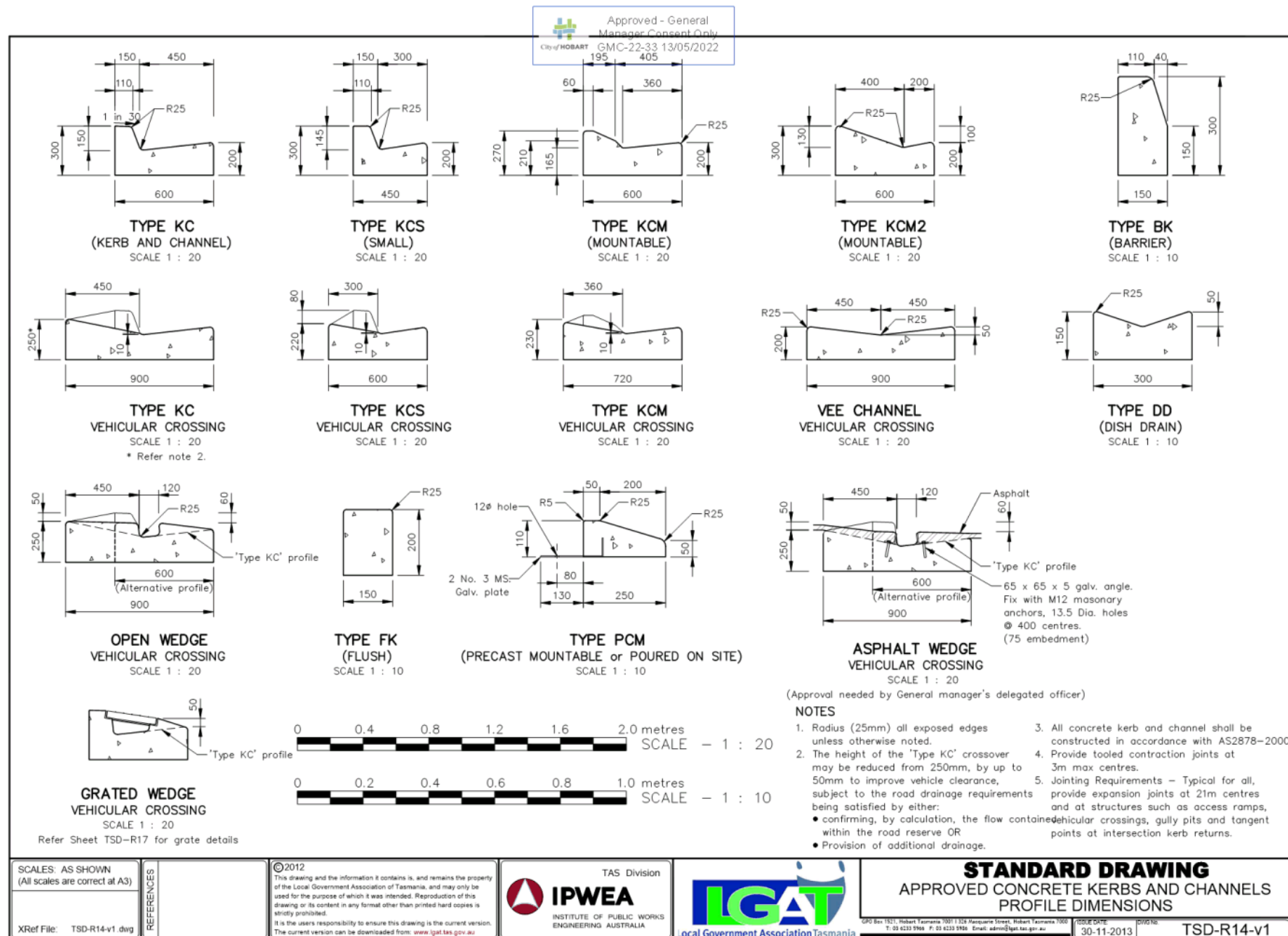


Approved - General
Manager Consent Only
City of Hobart GMC-22-33 13/05/2022

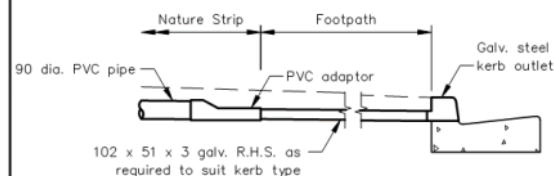




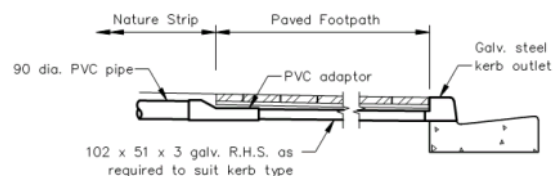




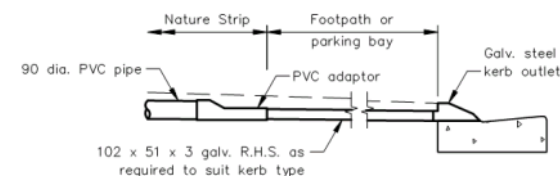
Approved - General
 Manager Consent Only
 City of Hobart GMC-22-33 13/05/2022



ASPHALT FOOTPATH / NATURE STRIP
 (TYPES BK, KC AND KCS)
 SCALE 1 : 25



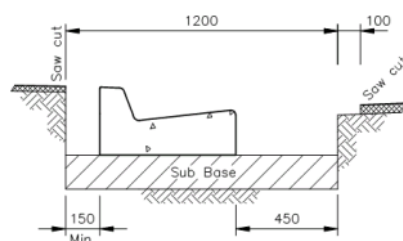
PAVED FOOTPATH
 (TYPES KC AND KCS)
 SCALE 1 : 25



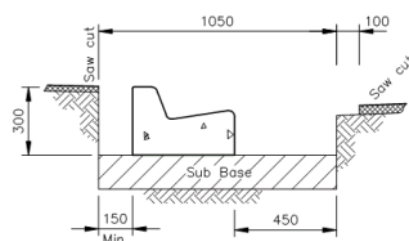
TYPE KCM
 SCALE 1 : 25

* Refer to TSD-R11 for paving details.

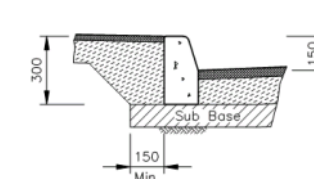
STORMWATER KERB OUTLETS



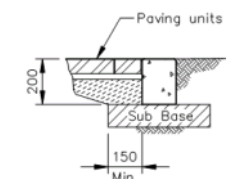
TYPE KC / KCM
 (CONSTRUCTION IN EXIST. PAVEMENT)
 SCALE 1 : 20



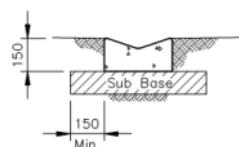
TYPE KCS
 (CONSTRUCTION IN EXIST. PAVEMENT)
 SCALE 1 : 20



TYPE BK
 (CONSTRUCTION IN NEW PAVEMENT)
 SCALE 1 : 20



TYPE FK
 (e.g. EDGE RESTRAINT FOR PAVING)
 SCALE 1 : 20



TYPE DD
 (GRASSED AREA)
 SCALE 1 : 20

NOTES

- Sub-Base Depth
 - Sub-grade C.B.R. $\geq 4\%$ - Depth = Min. 135mm.
 - Sub-grade C.B.R. $< 4\%$ - 'Class B' geotextile, Min. 150
- Pavement Design

Design of pavements to consider project traffic loading, sub-grade strength and comply with the procedures in either:

 - A.R.R.B. special report No. 41 - 'A Structural Design Guide For Flexible Residential Street Pavements'.
 - AUSTROADS
 - 'A Guide To Pavement Technology Part 2: Pavement Structural Design'

- Jointing Requirements (Typical for all)

Provide contraction joints at 3.0m centres.
 Provide expansion joints at the following:

 - 21.0m centres (Max.)
 - Structures such as access ramps, vehicular crossings, gully pits and tangent points at intersection kerb returns.

0 0.4 0.8 1.2 1.6 2.0 metres
 SCALE - 1 : 20

SCALES: AS SHOWN
 (All scales are correct at A3)

XRef File: TSD-R15-v1.dwg

REFERENCES

©2012
 This drawing and the information it contains is, and remains the property of the Local Government Association of Tasmania, and may only be used for the purpose of which it was intended. Reproduction of this drawing or its content in any format other than printed hard copies is strictly prohibited.
 It is the users responsibility to ensure this drawing is the current version. The current version can be downloaded from: www.lgat.tas.gov.au

TAS Division
IPWEA
 INSTITUTE OF PUBLIC WORKS
 ENGINEERING AUSTRALIA

LGAT
 Local Government Association Tasmania

STANDARD DRAWING
CONCRETE KERBS AND CHANNELS
CONSTRUCTION DETAILS

GPO Box 1801, Hobart, Tasmania 7001 T: 03 6233 5946 F: 03 6233 5946 Email: admin@lgat.tas.gov.au

ISSUE DATE: 30-11-2013

DWG NO: TSD-R15-v1

**7.1.5 24-26 WELD STREET, SOUTH HOBART AND ADJACENT ROAD RESERVE - FLOOD MITIGATION WORKS, STORMWATER WORKS, ASSOCIATED WORKS IN THE ROAD RESERVE AND SIGNAGE
PLN-22-352 - FILE REF: F22/88576**

Address:	24-26 Weld Street, South Hobart and Adjacent Road Reserve
Proposal:	Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage
Expiry Date:	6 September 2022
Extension of Time:	Not applicable
Author:	Ben Ikin

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for flood mitigation works, stormwater works, associated works in the road reserve and signage at 24-26 Weld Street 7004 and adjacent road reserve for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-352 - 24-26 WELD STREET SOUTH HOBART TAS 7004 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG 12

A construction waste management plan must be implemented throughout construction.

A construction waste management plan must be submitted and approved as a Condition Endorsement, prior to commencement of work on the site. The construction waste management plan must include:

- Provisions for commercial waste services for the handling, storage, transport and disposal of post-construction solid waste and recycle bins from the development; and
- Provisions for the handling, transport and disposal of demolition material, including any contaminated waste and recycling opportunities, to satisfy the above requirement.

All work required by this condition must be undertaken in accordance with the approved construction waste management plan.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

It is recommended that the developer liaise with the Council's City Resilience Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill. Further information can also be found on the Council's [website](#).

Reason for condition

To ensure that solid waste management from the site meets the Council's requirements and standards.

ENG sw1

All stormwater from the proposed development (including but not limited to: ag drains and impervious surfaces) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

SW 3

The proposed works including foundations must be designed to ensure the protection and access to the Hobart City Council's stormwater infrastructure.

Prior to the issuing of any approval under the *Building Act 2016* or commencement of works (whichever occurs first), a detailed design must be submitted and approved as a Condition Endorsement. The

detailed design must be prepared and certified by a suitably qualified engineer and must:

- a. Demonstrate how the design will provide adequate access to the stormwater main and manhole, impose no additional loads onto the infrastructure and that the structure will be fully independent of the infrastructure and its trenching.
- b. Include cross-sections clearly showing the relationship both vertically and horizontally between Council's stormwater infrastructure and the proposed works (including footings), and stating the minimum setbacks from the works to the nearest external surface of the main.

All work required by this condition must be undertaken in accordance with the approved detailed design.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit. You will need specific permission from Council's Stormwater Unit under s73 of the Building Act 2016 and s13 of the Urban Drainage Act for the final certified detailed design plans.

SW 6

The alterations to the public stormwater infrastructure must be designed and constructed prior to occupancy or the commencement of the approved use (whichever occurs first).

Prior to the issuing of any approval under the *Building Act 2016* or commencement of works (whichever occurs first), detailed engineering drawings must be submitted and approved as a Condition Endorsement. The detailed engineering drawings must be certified by a suitably qualified and experienced civil engineer and must:

1. be substantially in accordance with the Local Government Association of Tasmania: Tasmanian Municipal Standard Drawings (May 2020), as varied by the City of Hobart's published departures from those Drawings, and the Local Government Association of Tasmania, Tasmanian Subdivision Guidelines (October 2013);
2. clearly distinguish between public and private infrastructure;

3. show in both plan and long-section relocation of the existing stormwater branches shown servicing external Lots through the McKenzie St carparking area such that they connect to the main with a minimum of new public pits. These plans must include but not be limited to, pit design, clearances, cover, gradient, sizing, material, pipe class, and inspection openings;
4. detail alterations to the stormwater manhole lid affected by the proposal

All work required by this condition must be undertaken in accordance with the approved detailed engineering drawings.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Council does not wish to take over multiple assets in this area - the connections must connect directly to the pit at the head of the main if possible.

Works to the public stormwater infrastructure will require a Permit to Construct Public Infrastructure.

SW 11

The flood mitigation measures shown in Mitigation Option 6, including but not limited to the proposed private stormwater pits, walls (Anglesea St, McKenzie St and shared boundary with 28 Weld St), raised crossing and gate, must be installed and maintained by the owner in accordance with the approved detailed drawings and reports.

ENG tr2

A construction traffic and parking management plan must be implemented prior to the commencement of work on the site (including demolition).

The construction traffic (including cars, public transport vehicles, service vehicles, pedestrians and cyclists) and parking management plan must be submitted and approved as a Condition Endorsement, prior to commencement work (including demolition). The construction traffic and parking management plan must:

1. Be prepared by a suitably qualified person.
2. Consider temporary parking spaces while works are impacting the existing parking provisions.
3. Develop a communications plan to advise the wider community of the traffic and parking impacts during construction.
4. Include a start date and finish dates of various stages of works.
5. Include times that trucks and other traffic associated with the works will be allowed to operate.
6. Nominate a superintendent, or the like, to be responsible for the implementation of the approved traffic management plan and available as a direct contact to Council and/or members of the community regarding day to day construction traffic operations at the site, including any immediate traffic issues or hazards that may arise.

All work required by this condition must be undertaken in accordance with the approved construction traffic and parking management plan.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure the safety of vehicles entering and leaving the development and the safety and access around the development site for the general public and adjacent businesses.

ENG 5

All parking spaces must be delineated by means of white or yellow lines 80mm to 100mm wide, or white or yellow pavement markers in accordance with Australian Standards AS/NZS 2890.1 2004, prior to commencement of use.

Reason for condition

To ensure the provision of parking for the use is safe and efficient.

ENG 9

All car parking spaces for people with disabilities must be delineated to Australian/NZS Standard, Parking facilities Part 6: Off-street parking for people with disabilities AS/NZS 2890.6: 2009, prior to the commencement of the use.

Reason for condition

In the interests of vehicle user safety and the amenity of the development.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r1

Detailed design drawings, structural certificates of the wall within the Anglesea Street highway reservation must be submitted and approved as a Condition Endorsement, prior to the commencement of work and must:

1. Be prepared and certified by a suitable qualified person and experienced engineer;

2. Not undermine the stability of the highway reservation;
3. Be designed in accordance with AS 4678, with a design life in accordance with table 3.1 typical application major public infrastructure works;
4. Take into account any additional surcharge loadings as required by relevant Australian Standards;
5. Take into account and reference accordingly any Geotechnical findings;
6. Detail any mitigation measures required;
7. Detail the design and location of the footing adjacent to the Anglesea Street highway reservation; and
8. Include a structural certificate which notes the driveway slab will not transfer additional loads onto the existing retaining wall.

The structure certificated and/or drawings should note accordingly the above

All work required by this condition must be undertaken in accordance with the approved select design drawing and structural certificates.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Permit to Construct Public Infrastructure will need to be applied at least 14 days prior starting the works.

Reason for condition

To ensure that the stability and integrity of the Council's highway reservation is not compromised by the development.

ENV 2

Sediment and erosion control measures, sufficient to prevent sediment leaving the site and in accordance with an approved soil and water management plan (SWMP), must be installed prior to the commencement of work and maintained until such time as all disturbed areas have been stabilised and/or restored or sealed to the Council's satisfaction.

A SWMP must be submitted as a Condition Endorsement prior to the issue of any approval under the *Building Act 2016* or the commencement of work, whichever occurs first. The SWMP must be

prepared in accordance with the Soil and Water Management on Building and Construction Sites fact sheets (Derwent Estuary Program, 2008), available [here](#).

All work required by this condition must be undertaken in accordance with the approved SWMP.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To avoid the pollution and sedimentation of roads, drains and natural watercourses that could be caused by erosion and runoff from the development.

ENVHE 1

Recommendations in the report 'Environmental Site Assessment South Hobart Primary School 24-26 Weld Street dated Amended December 2016' must be implemented, prior to, during, and post construction, as appropriate.

Reason for condition

To ensure that the risk to future occupants of the building remain low and acceptable.

OPS 3

Installation and maintenance of the shrub and grass plantings within the planter wall section of the flood wall remain the on-going responsibility of the Department of Education.

Reason for condition:

To ensure that the amenity of the Anglesea Street streetscape is maintained or enhanced.

OPS 4

Removal of one street tree, a *Liriodendron tulipifera* (Tulip Tree) in Anglesea Street, is approved on condition that a fee for a replacement tree is paid, being \$880. This fee must be paid prior to the tree's removal. The applicant is also responsible for all tree removal costs and works including stump removal.

To arrange payment of the fee, please contact the City's Arboriculture and Nursery Unit on 6238 2807.

Reason for condition

To maintain the amenity value of street trees as per the City of Hobart Street Tree Strategy.

OPS 5

The *Liriodendron tulipifera* (Tulip Tree) street tree to be retained in Anglesea Street must be protected from damage to the satisfaction of the Director City Life. No vehicular access or parking, excavation, placement of fill, storage of materials or soil disturbance is to occur within 2.2 m of the tree, and fencing is to be placed around the tree that extends from the kerb on Anglesea Street to the edge of the new concrete path north-east of the tree, and at least 2.5 m either side along the grass verge. There must be no pruning, lopping or damage to the street tree, including its trunk and roots.

Details of the tree protection fencing must be clearly shown on any plans submitted to the Council under the *Building Act 2016*.

Advice:

Before works commence on-site but after the tree protection measures have been put in place, the applicant is to inform the City's Arboriculture and Nursery Unit on 6238 2807, so that a site inspection can occur. After satisfactory tree protection measures have been installed, the City will issue a condition endorsement. It is recommended that documentation for condition endorsement be submitted well before submitting documentation for other approvals. Failure to address condition endorsement requirements may result in unexpected delays.

Reason for condition:

To ensure that works are undertaken in accordance with the City of Hobart Street Tree Strategy 2017 and Australian Standard AS 4970 Protection of Trees on Development Sites.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of

any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require a permit for the occupation of the public highway for construction or special event (e.g. placement of skip bin, crane, scissor lift etc). Click [here](#) for more information.

You may require an occupational license for structures in the Hobart City Council highway reservation, in accordance with conditions to be established by the Council. Click [here](#) for more information.

You may require a road closure permit for construction or special event. Click [here](#) for more information.

You may require a Permit to Open Up and Temporarily Occupy a Highway (for work in the road reserve). Click [here](#) for more information.

PERMIT TO CONSTRUCT PUBLIC INFRASTRUCTURE

You may require a permit to construct public infrastructure, with a 12 month maintenance period and bond (please contact the Hobart City Council's City Life Division to initiate the permit process).

STORMWATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK WITHIN THE HIGHWAY RESERVATION

Please note development must be in accordance with the Hobart City Council's Infrastructure by law. Click [here](#) for more information.

STORM WATER / ROADS / ACCESS

Services to be designed and constructed in accordance with the (IPWEA) LGAT – standard drawings. Click [here](#) for more information.

WORK PLACE HEALTH AND SAFETY

Appropriate occupational health and safety measures must be employed during the works to minimise direct human exposure to potentially-contaminated soil, water, dust and vapours. Click [here](#) for more information.

PROTECTING THE ENVIRONMENT

In accordance with the *Environmental Management and Pollution Control Act 1994*, local government has an obligation to "use its best endeavours to prevent or control acts or omissions which cause or are capable of causing pollution." Click [here](#) for more information.

LEVEL 1 ACTIVITIES

The activity conducted at the property is an environmentally relevant activity and a Level 1 Activity as defined under s.3 of the *Environmental Management and Pollution Control Act 1994*. For further information on what your responsibilities are, click [here](#).

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

FEES AND CHARGES


Click [here](#) for information on the Council's fees and charges.


DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

HERITAGE

It is recommended that should any unanticipated archaeological material or features be found during excavation and ground disturbance, a suitably qualified archaeologist is engaged to provide advice to the applicant.

Attachment A: PLN-22-352 - 24-26 WELD STREET SOUTH
HOBART TAS 7004 - Planning Committee or
Delegated Report ↓ 

Attachment B: PLN-22-352 - 24-26 WELD STREET SOUTH
HOBART TAS 7004 - CPC Agenda Documents ↓


**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report:	Committee
Committee:	5 September 2022
Expiry Date:	6 September 2022
Application No:	PLN-22-352
Address:	24 - 26 WELD STREET , SOUTH HOBART ADJACENT ROAD RESERVE
Applicant:	TIM HODGE GPO BOX 169
Proposal:	Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage
Representations:	Three
Performance criteria:	Potentially Contaminated Land Code, Historic Heritage Code, Inundation Prone Areas Code, Signs Code

1. Executive Summary

- 1.1 Planning approval is sought for Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage at 24-26 Weld Street and Adjacent Road Reserve.
- 1.2 More specifically the proposal includes:
 - Within the school grounds: a new curved wall with signage; landscaping; and retaining walls.
 - Within the road reserve: demolition and replacement footpath, kerb and guttering; removal of refuge island; replacement of stormwater manhole and stormwater pits; new stormwater connections; tree removal; retaining and free standing walls; and landscaping.
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
 - 1.3.1 Potentially Contaminated Land Code - Excavation
 - 1.3.2 Historic Heritage Code - Demolition, Building, and Works on a Listed Place

- 1.3.3 Inundation Prone Areas Code - Walls and Mitigation Measures in a Riverine Inundation Hazard Area
 - 1.3.4 Signs Code - Use of Signs and Sign Standards
- 1.4 Three representations objecting to the proposal was received within the statutory advertising period between 12 and 26 August 2022.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the City Planning Committee, because the proposal includes works in the Council's road reserve.

2. Site Detail

- 2.1 The site is 24-26 Weld Street, and the adjacent road reserve. The site is the South Hobart Primary School. The site is located within a residential zone, but is surrounded by a mix of uses. Its northern boundary adjoins the Hobart Rivulet.



Figure 1: The site is outlined in blue. The road works are located on Anglesea Street and McKenzie Street.



Figure 2: The McKenzie St frontage of the School.



Figure 3: The Anglesea St frontage of the School.

3. Proposal

- 3.1 Planning approval is sought for Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage at 24-26 Weld Street and Adjacent Road Reserve.

3.2 More specifically the proposal includes:

- Within the school grounds: a new curved wall with signage; landscaping; and retaining walls.
- Within the road reserve: demolition and replacement footpath, kerb and guttering; removal of refuge island; replacement of stormwater manhole and stormwater pits; new stormwater connections; tree removal; retaining and free standing walls; and landscaping.
- The sign is indicated to be as follows: Lettering to be Stainless Steel mounted lettering on a backing powder coated fascia. Lettering will be 200mm high and backing fascia to suit (2600 x 300) Allow for LED strip light (back/side lit with spill only - no direct light source outwards). Sign mounted to face of wall - centre of curve.

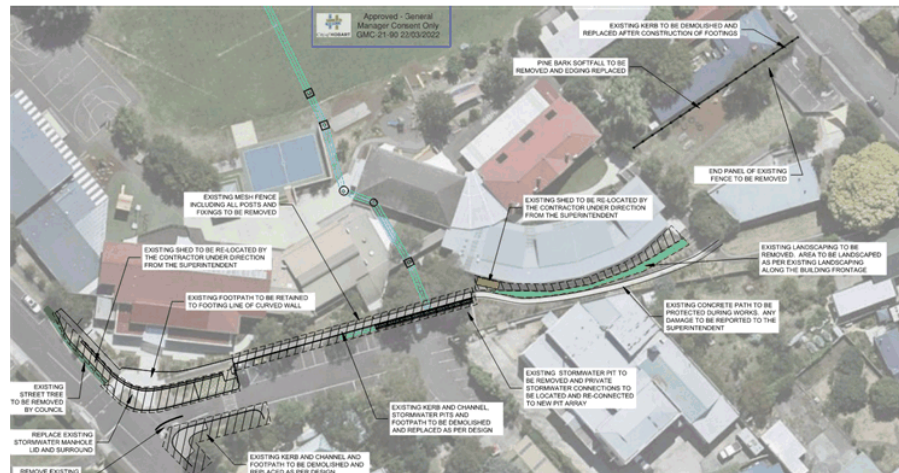


Figure 4: Site plan showing the proposed works. Source: Applicant documentation.

3.3 The applicant has provided the following description of the proposal, with the numbers corresponding to the image that follows:

- 1: McKenzie Street road reservation, no PID, no title reference. Council land. Proposed demolition and replacement of kerb and gutter and footpath. Removal of existing refuge island within road pavement.
2. McKenzie Street acquired road. No PID. Title reference: CT-151668/1. Crown land. Works include replacement of existing stormwater manhole and surround, existing kerb and channel, stormwater pits and footpath to be demolished and replaced, existing stormwater pit to be removed and private stormwater connections to be located and connected to new pit array, new curved wall with proposed landscaping within, new school sign to be attached to curved wall, existing mesh boundary fence to be removed.
3. Anglesea Street road reservation. No PID. No title reference. Council land. Works include replacement of existing stormwater manhole and surround, existing street tree to be removed by Council, new curved wall with proposed landscaping within.
4. South Hobart Primary School title. PID: 5596894. No title reference. Department of Education land. Works include new curved wall with proposed landscaping within, new school sign to be attached to curved wall.
5. South Hobart Primary School title. PID: 5596894. No title reference. Department of Education land. Works include new concrete retaining wall, new landscaping and dismantling of existing small storage shed to be reassembled post works.
6. South Hobart Primary School title. PID: 5596894. No title reference. Department of Education land. Works include new concrete retaining wall, new landscaping.
7. South Hobart Primary School title. PID: 5596894. Title reference: CT-96053/8. Crown land noted as owner on the title. Works include new timber and concrete retaining wall and new landscaping



Figure 5: Site plan showing location of proposed works, corresponding to the description above at paragraph 3.3.

4. Background

- 4.1 None relevant.

5. Concerns raised by representors

- 5.1 Three representations were received during the statutory advertising period, 12 to 26 August 2022.
- 5.2 The following table outlines the concerns raised in the representations received. Those concerns which relate to a discretion invoked by the proposal are addressed in Section 6 of this report.

This submission concerns the cultural heritage of the site. The planning document prepared by "grayplanning" Para E13.0 concludes that the site does not comprise a "place of Archaeological potential". The South Hobart Local History Group believes that this may not be the case. Even if the site is not within any formally identified zone of interest, we believe there may be undocumented heritage infrastructure underground. We recommend that the HCC Cultural Heritage Unit take a keen interest in the proposed works. We recommend that any excavation be undertaken with great care, with any items of possible archaeological interest being, at the least, photographically recorded by qualified heritage consultants.

I have lived directly opposite where it is proposed to build the school flood barrier, since 1997 and during that period the back of my property has frequently been flooded by water coming across the road and down my driveway.

In 2020 Hobart City Council did extensive road and footpath reconstruction and altered the gutters and this has improved the stormwater situation somewhat, although in heavy rain my backyard and my garage still get flooded.

If this proposed wall is constructed at the School/Lady Gowrie Child Care site, while it may direct rainwater away from the School and Child Care centre, it will cause the water to come across Weld St and down the driveways of 33 and 35 Weld St once again causing unnecessary flooding.

When your surveyor came earlier this year I showed him where the flood waters had reached more than a metre inside the shed. He took notes and photos and said he would include my concerns in his report. I also showed him where the rainwater came into my yard from no.31.

This water comes from down McKenzie St, across Weld St into the driveway of 31 Weld St and gushes under the side fence and into 33 like a waterfall! This is because each house going up the street is considerably higher than the house below it. In the late 1800s there was a large mill stream which ran just above McKenzie St carrying water down to the mill which used to be in Gore St. Now fully underground, the stream still carries water and causes underground flooding in heavy rain and this too, affects the amount of water causing nuisance in this area.

Reading through the proposed plans, only Option 6 seems to mention reducing the impact on neighbours. Would it be possible to look further into this issue please? It seems very unfair if people living nearby have to suffer for the sake of this project.

The whole area sits on a large water table and perched aquifer which is replenished by rainwater. Much of the stormwater coming down to the school comes from (naturally) higher ground towards Lynton Avenue.

When water is under pressure due to heavy rainfall, it can push upwards to the surface and cause saturated land and flooding. This is what happens in this area.

If further flooding occurs to my property after these proposed works, would I be eligible for some kind of compensation?

Hoping you will consider this opinion before the proposed work is started.

We live on the eastern side of Weld Street directly opposite the proposed flood prevention wall that is stated as "A reinforced fence, with a waterproof height of at least 0.5 m, is proposed on the northern side of the childcare playground area adjacent to 30 Weld Street. This fence directs additional flows through this area, generated by the flood barrier upstream of the school buildings, onto Weld Street and into the Weld Street gutters and drainage system, as opposed to through the 30 Weld Street property boundaries."

Our understanding is that the proposed wall is adjacent to 28 Weld Street.

Over the past 35 years we have experienced flooding due to inadequate storm water system in our surrounding area.

Our house is situated on the down slope of Weld Street so natural flows impact us to a high degree.

During the last major flood an estimated 4000 litres of water was removed from our workshop.

Recent upgrades to the road and gutter system has alleviated a significant amount of storm water entering our property through both driveways and flooding our workshop situated at the rear of the property.

The proposed mitigation of flood waters for the school would result in increased "directed" water flows from the proposed wall in Lady Gowrie directly (as stated above) thru to Weld Street gutters.

Due to the gradient of the road surface this water travels directly across the road and into the eastern side gutter system and straight down our northern driveway. This water flow occurred as recently as last week with the medium rainfall experienced in the latest minor storm.

When the initial survey for the proposal was conducted the surveyor contacted us to undertake surveying of our property and we discussed our concerns with him. He agreed with our concerns and shot levels down both driveways and advised that he would include them in his report. There is no mitigation of this situation in the proposal even though the proposal states "Mitigation Option 6 expands upon the proposed actions in Mitigation Option 5, including some additional works to reduce impact to dwellings on Weld Street."

As further stated in the proposal the storm water pipes within the area are "undersized underground pipe" and the stormwater pipes from the school out into Weld Street fit this category and are generally blocked with no flow except for the one closest to Mackenzie Street, so water flows out through Lady Gowrie on the surface.

There does not appear to be any consideration of the inundation from Macquarie Street through the warehouse and subsequent flooding

through McKenzie Street onto the proposed retaining wall adjacent to the existing red brick school building wall, during heavy rain. We would request a review of the proposed plan and have excess flood waters re directed down the path to the West of Lady Gowrie through a catchment onto the football oval and subsequent thru the new storm water pipe into the Hobart Rivulet or some other solution to not have excess water flowing into Weld Street. This would alleviate our concerns and be a safer option by not running flood waters through Lady Gowrie. "The focus on most mitigation was redirecting surface flows that occur in a major storm, so they don't flow through the school grounds. The fast flowing, and often deep water, poses an unacceptable hazard to children if they are there when the storm strikes."

For your consideration and advice.

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.
- 6.2 The site is located within the Inner Residential zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing use is Educational and Occasional Care. The proposed works are ancillary to this use. The use, by virtue of clause 9.2.1 is permitted.
- 6.4 The proposal has been assessed against:
 - 6.4.1 D11.0 Inner Residential Zone
 - 6.4.2 E2.0 Potentially Contaminated Land Code
 - 6.4.3 E6.0 Parking and Access Code
 - 6.4.4 E7.0 Stormwater Management Code
 - 6.4.5 E13.0 Historic Heritage Code

- 6.4.6 E15.0 Inundation Prone Areas Code
- 6.4.7 E17.0 Signs Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
 - 6.5.1 Potentially Contaminated Land Code:
Excavation - E2.6.2 P1
 - 6.5.2 Historic Heritage Code:
Demolition, Building and Works on a Listed Place - E13.7.1 P1 and E13.7.2 P1, P2 and P3
 - 6.5.3 Inundation Prone Areas Code:
Walls and Mitigation Measures in a Riverine Inundation Hazard Area - E15.7.4 P1 and P2
 - 6.5.4 Signs Code:
Use of Signs - E17.6.9 P1, P4
Standards for Signs - E17.7.1 P1
- 6.6 Each performance criterion is assessed below.
- 6.7 Potentially Contaminated Land Code - E2.6.2 P1
 - 6.7.1 There is no acceptable solution for E2.6.2 A1.
 - 6.7.2 The proposal includes excavation adjacent to a potentially contaminated site (441 Macquarie Street).
 - 6.7.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.
 - 6.7.4 The performance criterion at clause E2.6.2 P1 provides as follows:
Excavation does not adversely impact on health and the environment, having regard to:

(a) an environmental site assessment that demonstrates there is no evidence the land is contaminated; or

(b) a plan to manage contamination and associated risk to human health and the environment that includes:

(i) an environmental site assessment;

(ii) any specific remediation and protection measures required to be implemented before excavation commences; and

(iii) a statement that the excavation does not adversely impact on human health or the environment.

6.7.5 Council's Environmental Health Officer has assessed the proposal as complying with the above performance criteria, subject to compliance with the prevailing Environmental Site Assessment applicable to the school. This has been recommended as a condition of approval.

6.7.6 The proposal complies with the performance criterion.

6.8 Historic Heritage Code - E13.7.1 P1 and E13.7.2 P1, P2 and P3

6.8.1 There is no acceptable solution for clauses E13.7.1 A1 and E13.7.2 A1, A2 and A3.

6.8.2 The proposal includes Demolition, Building and Works on a Heritage Listed Place.

6.8.3 There are no acceptable solutions; therefore assessment against the performance criterion is relied on.

6.8.4 The performance criterion at clauses E13.7.1 P1 and E13.7.2 P1, P2 and P3 provides as follows:

E13.7.1 P1:

Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;

(a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;

(b) there are no prudent and feasible alternatives;

(c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;

(d) significant fabric is documented before demolition.

E13.7.2 P1

Development must not result in any of the following:

(a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;

(b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.

E13.7.2 P2

Development must be designed to be subservient and complementary to the place through characteristics including:

(a) scale and bulk, materials, built form and fenestration;

(b) setback from frontage;

(c) siting with respect to buildings, structures and listed elements;

(d) using less dominant materials and colours.

E13.7.2 P3

Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

6.8.5 Council's Senior Cultural Heritage Officer has provided the following assessment:

This site is heritage listed in Table E13.1 of the Historic Heritage Code of the Scheme. The heritage listing is described in the datasheet and is restricted to the 1930s wing. In fact it specifically describes the heritage element as "South Hobart Primary School - 1930 Wing" with limited references to other features on the site. There are 3 Statements of Significance including: "The 1930 school building is of cultural heritage significance as it a fine example of an Interwar school building."

This proposal is for stormwater mitigation civil engineering works both

with the subject site and also within Council road reservations.

In summary the works are:

- demolition and replacement of kerb and guttering,
- replacement of stormwater pits and covers
- tree removal
- new curved wall with new school sign lettering 2000mm high on 2.6 m wide x 300mm aluminium panel.
- new concrete and timber retaining walls,
- new landscaping

Some of the proposed works are outside the boundaries of the listed site in the roadway. The subject site has separate titles involved, however, the listing in Table E13.1 of the Code lists the title as 151668/1. This is a narrow strip of land which is currently the roadway/parking area off Anglesea Street. This is clearly an error as Table E13.1 clearly defines the listing as "1930 wing" and "South Hobart Primary School". The correct heritage listing should be CT reference 5596894/0.

The proposed works are within a small part of the south east edge of the listed area of the above CT in the vicinity of the southern edge of the curved school building. The curved building separates the proposed works from the listed building.

The work must be assessed against E13.7.1 P1 Demolition and E13.7.2 P1, P2 and P3 of the Historic Heritage Code of the Scheme.

One (1) representation was received during the advertising period. It raises the issue that although it is not a Place of Archaeological Potential as defined under the Historic Heritage Code of the Scheme, the site may have undocumented infrastructure and that it would be appropriate to have an archaeologist involved in the process. There is no requirement or ability under the Code to impose such a condition, but it could be provided as advice.

There is no loss of fabric that contributes to the significance of the site, therefore the proposal satisfies E13.7.1 P1.

With the proposed work separated by the curved school building, it is not considered that the development results in the loss of heritage significance or diminution of the heritage values through the loss of streetscape elements. The physical separation does not require the proposal to respond to the heritage characteristics of the place. Therefore the proposal satisfies E13.7.2 P1, P2 and P3.

The proposal is considered satisfactory under the Historic Heritage Code of the Scheme. Advice regarding unanticipated finds is appropriate.

6.8.6 The proposal complies with the performance criteria.

6.9 Walls and Mitigation Measures in a Riverine Inundation Hazard Area - E15.7.4 P1 and P2

6.9.1 The acceptable solution at clause E15.7.5 A1 and A2 there is no acceptable solution.

6.9.2 The proposal includes solid walls greater in length than 5m and 0.5m in height, as well as mitigation measures, within a flood prone area.

6.9.3 There are no acceptable solutions; therefore assessment against the performance criterion is relied on.

6.9.4 The performance criterion at clauses E15.7.5 P1 and P2 provides as follows:

P1:

Landfill, or solid walls greater than 5 m in length and 0.5 m in height, must satisfy all of the following:

(a) no adverse affect on flood flow over other property through displacement of overland flows;

(b) the rate of stormwater discharge from the property must not increase;

(c) stormwater quality must not be reduced from pre-development levels.

P2:

Mitigation measures, if required, must satisfy all of the following:

(a) be sufficient to ensure habitable rooms will be protected from flooding and will be able to adapt as sea levels rise;

(b) not have a significant effect on flood flow.

6.9.5 The Council's Technical Officer - Environmental has provided the following assessment.

E15.7.5 P1:

Several flood mitigation walls greater than 5m in length and 0.5m in height

are proposed.

To meet P1a, walls must have no adverse affect on other property.

This must be interpreted somewhat pragmatically to allow for both the limitations of modelling, and impact. Minor variations in depth or velocity within the error range of the modelling or even merely due to different modelling runs (cell locations, rainfall scenarios, etc), with no real impact, are not considered to form an adverse affect.

Impact of the Anglesea and McKenzie St walls can be seen in Mitigation Option 5 hazard mapping, showing no increase in hazard rating on external land, and significant benefit to the School. The impact of the wall along the boundary of 28 Weld St can be seen in Mitigation Option 6 hazard mapping - the wall does not increase overall hazard in Weld St (the extent of 'yellow' H5 rating in the road actually decreases) and provides substantial protection against nuisance flooding to third-party properties as well as the school.

As such it is accepted there is no adverse impact on other property from the walls.

To meet P1b, the walls cannot increase rate of stormwater discharge from the property. There is no increase in stormwater flow from the School grounds from the work.

The wall does however 'concentrate' the flow. The velocity of flows in Anglesea St can most clearly be seen in the velocity maps provided 3/8/22 comparing the existing to Option 5. This shows a very minor widening of the higher velocity flows in the road - not considered by Council to be significant.

This must therefore be considered in the context of the modelling performed. The modelling was a 'worst-case' scenario for the school, where upstream fences are entirely removed - not the 'most accurate or likely' scenario for Anglesea St where the existing paling fences would provide some (though not total) resistance to the floodwaters. This would result in far greater velocity flows within Anglesea St - this is reflected in extreme high velocity shown in the Option 1 modelling where solid walls were modelled (a 'worst-case' for Anglesea St). The reality is somewhere in between - however it is clear that the very minor increase in velocity shown in Option 5 is neither significant nor a 'real' increase rate of stormwater discharge from the property.

The works will have no impact on quality of the flood flows- if anything, preventing the flows from scouring the playground will reduce the amount of sediment/ pine bark in the flows.

P1 met

E15.7.5 P2:

In order to meet P2b, mitigation measures must not have a significant (adverse) effect on flood flow. The impact of the walls is discussed above.

The impact of the raised crossing element of the proposal can be determined by comparing the flood mapping for Mitigation Option 5 vs Option 6.

This shows only a minor increase in depth, but a wider area of mid-range velocity resulting in a wider hazard rating in Anglesea St. The eastern side of the road is already considered unsafe, so the significance of the increase is limited to the area shown as changing hazard rating (the western part of the road).

The modelled increased hazard on the western side of Anglesea St is not considered significant in this case as:

the upper part of Anglesea St is already unsafe to drive in, so additional cars will not be entering the area with increased hazard during an event, the modelled velocity in the areas of increased hazard rating (the western part of the road) is still considered safe for pedestrians the western footpath and majority of the street parking area remains H1 (benign) as can be seen most clearly in the velocity maps provided 3/8/22.

Most importantly however, as discussed in P1, the existing case and option 6 are both overly optimistic re the flooding in Anglesea St, and the road is likely already subject to the higher velocity and hazard rating, meaning the small additional increase modelled is not significant. I note the Option 1 modelling (albeit overly conservative) showed the eastern side of the road and footpath to be unsafe velocities for pedestrians and cars, as is the upper section of Anglesea St in all modelled scenarios.

Council considers roads are appropriate to be designated overland flow paths, and the works will provide a significant safety benefit to the school. The measures will have a minor impact on flood flows in Anglesea St, however this is not considered to be a significant impact.

P2b met

6.9.6 The proposal complies with the performance criterion.

6.10 Signs Code - E17.6.1 P1 and P4, and E17.7.1 P1

6.10.1 The acceptable solution at clauses E17.6.9 A1 and A4, and E17.7.1 A1 require:

- A wall sign to be permitted in the zone.
- A wall sign to be not illuminated.

6.10.2 The proposal includes a wall sign which:

- is discretionary in the zone; and
- will be illuminated;

6.10.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.10.4 The performance criterion at clause E17.6.1 P1 and P4, and E17.7.1 P1 and P2 provides as follows:

E17.6.1 P1

A sign must be a discretionary sign in Table E. 17.3.

E17.6.1 P4

An illuminated sign within 30 metres of a residential use must not have an unreasonable impact upon the residential amenity of that use caused by light shining into windows of habitable rooms.

E17.7.1 P1

A sign not complying with the standards in Table E17.2 or has discretionary status in Table E17.3 must satisfy all of the following:

(a) be integrated into the design of the premises and streetscape so as to be attractive and informative without dominating the building or streetscape;

(b) be of appropriate dimensions so as not to dominate the streetscape or premises on which it is located;

(c) be constructed of materials which are able to be maintained in a satisfactory manner at all times;

(d) not result in loss of amenity to neighbouring properties;

(e) not involve the repetition of messages or information on the same street frontage;

(f) not contribute to or exacerbate visual clutter;

(g) not cause a safety hazard.

6.10.5 The proposed wall sign details are as follows:

"Lettering to be Stainless Steel mounted lettering on a backing powder coated fascia. Lettering will be 200mm high and backing fascia to suit (2600 x 300) Allow for LED strip light (back/side lit with spill only - no direct light source outwards) Sign mounted to face of wall - centre of curve."

- 6.10.6 A wall sign is a discretionary sign in the zone.
- 6.10.7 The illumination of the sign is noted as follows: "LED strip light (back/side lit with spill only - no direct light source outwards." It is not considered that this type of signage will shine into the windows of habitable rooms of any nearby dwellings.
- 6.10.8 Given the sign is a backlit LED wall sign for the school's name and logo, with 20cm high lettering, it is considered to be acceptable in terms of the streetscape. There will be no unnecessary repetition of message, or visual clutter. Refer to Figure 3 above to see the extent of existing signage on the frontage. The materials (stainless steel, powder coated fascia) are considered to be suitably robust to be able to be maintained.
- 6.10.9 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage at 24-26 Weld Street and Adjacent Road Reserve.

- 7.2 The application was advertised and received three representations. One representation raised the concern that even though the site is not formally identified as being of archaeological potential, it is believed that there may be undocumented heritage infrastructure underground. The representation was considered by the Council's Senior Cultural Heritage Officer, and advice in relation to this issue has been recommended.

The remaining two representations raised concern with respect to flooding. In response it is noted that the School has undertaken a flood study, including looking at six mitigation options. In relation to compliance with the requirements of the planning scheme (clauses E15.7.5 P1 and P2), Council's Technical Officer - Environmental has concluded that:

- there is no adverse impact on other property from the proposed walls.
- there is no increase in stormwater flow from the School grounds as a result of the works.
- there will be a very minor increase in velocity of flood water, which is considered to be neither significant nor a 'real' increase in the rate of stormwater discharge from the property.
- the works will have no impact on the quality of flood flows, and may in fact improve them.
- the modelled increased hazard on the western side of Anglesea St is not considered significant.
- Council considers roads are appropriate to be designated overland flow paths, and the works will provide a significant safety benefit to the school. The measures will have a minor impact on flood flows in Anglesea St, however this is not considered to be a significant impact.

- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.

- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer, Cultural Heritage Officer, and Technical Officer - Environmental, Environmental Health Officer, Roads Engineer, and Parks Planner. The officers have raised no objection to the proposal, subject to conditions.

- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage at 24-26 Weld Street and Adjacent Road Reserve satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage at 24-26 Weld Street and Adjacent Road Reserve for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-22-352 - 24-26 WELD STREET SOUTH HOBART TAS 7004 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG 12

A construction waste management plan must be implemented throughout construction.

A construction waste management plan must be submitted and approved as a Condition Endorsement, prior to commencement of work on the site. The construction waste management plan must include:

- **Provisions for commercial waste services for the handling, storage, transport and disposal of post-construction solid waste and recycle bins from the development; and**
- **Provisions for the handling, transport and disposal of demolition material, including any contaminated waste and recycling opportunities, to satisfy the above requirement.**

All work required by this condition must be undertaken in accordance with the approved construction waste management plan.

Advice:

This condition requires further information to be submitted as a Condition

Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

It is recommended that the developer liaise with the Council's City Resilience Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill. Further information can also be found on the Council's [website](#).

Reason for condition

To ensure that solid waste management from the site meets the Council's requirements and standards.

ENG sw1

All stormwater from the proposed development (including but not limited to: ag drains and impervious surfaces) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

SW 3

The proposed works including foundations must be designed to ensure the protection and access to the Hobart City Council's stormwater infrastructure.

Prior to the issuing of any approval under the *Building Act 2016* or commencement of works (whichever occurs first), a detailed design must be submitted and approved as a Condition Endorsement. The detailed design must be prepared and certified by a suitably qualified engineer and must:

- a. Demonstrate how the design will provide adequate access to the stormwater main and manhole, impose no additional loads onto the infrastructure and that the structure will be fully independent of the infrastructure and its trenching.**
- b. Include cross-sections clearly showing the relationship both vertically and horizontally between Council's stormwater infrastructure and the proposed works (including footings), and stating the minimum setbacks from the works to the nearest external surface of the main.**

All work required by this condition must be undertaken in accordance with the

approved detailed design.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit. You will need specific permission from Council's Stormwater Unit under s73 of the Building Act 2016 and s13 of the Urban Drainage Act for the final certified detailed design plans.

SW 6

The alterations to the public stormwater infrastructure must be designed and constructed prior to occupancy or the commencement of the approved use (whichever occurs first).

Prior to the issuing of any approval under the *Building Act 2016* or commencement of works (whichever occurs first), detailed engineering drawings must be submitted and approved as a Condition Endorsement. The detailed engineering drawings must be certified by a suitably qualified and experienced civil engineer and must:

- 1. be substantially in accordance with the Local Government Association of Tasmania: Tasmanian Municipal Standard Drawings (May 2020), as varied by the City of Hobart's published departures from those Drawings, and the Local Government Association of Tasmania, Tasmanian Subdivision Guidelines (October 2013);**
- 2. clearly distinguish between public and private infrastructure;**
- 3. show in both plan and long-section relocation of the existing stormwater branches shown servicing external Lots through the McKenzie St carparking area such that they connect to the main with a minimum of new public pits. These plans must include but not be limited to, pit design, clearances, cover, gradient, sizing, material, pipe class, and inspection openings;**
- 4. detail alterations to the stormwater manhole lid affected by the proposal**

All work required by this condition must be undertaken in accordance with the approved detailed engineering drawings.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

*Council does not wish to take over multiple assets in this area - the connections must connect directly to the pit at the head of the main if possible.
Works to the public stormwater infrastructure will require a Permit to Construct Public Infrastructure.*

SW 11

The flood mitigation measures shown in Mitigation Option 6, including but not limited to the proposed private stormwater pits, walls (Anglesea St, McKenzie St and shared boundary with 28 Weld St), raised crossing and gate, must be installed and maintained by the owner in accordance with the approved detailed drawings and reports.

ENG tr2

A construction traffic and parking management plan must be implemented prior to the commencement of work on the site (including demolition).

The construction traffic (including cars, public transport vehicles, service vehicles, pedestrians and cyclists) and parking management plan must be submitted and approved as a Condition Endorsement, prior to commencement work (including demolition). The construction traffic and parking management plan must:

1. Be prepared by a suitably qualified person.
2. Consider temporary parking spaces while works are impacting the existing parking provisions.
3. Develop a communications plan to advise the wider community of the traffic and parking impacts during construction.
4. Include a start date and finish dates of various stages of works.
5. Include times that trucks and other traffic associated with the works will be allowed to operate.
6. Nominate a superintendent, or the like, to be responsible for the implementation of the approved traffic management plan and available as a direct contact to Council and/or members of the community regarding day to day construction traffic operations at the site, including any immediate traffic issues or hazards that may arise.

All work required by this condition must be undertaken in accordance with the approved construction traffic and parking management plan.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure the safety of vehicles entering and leaving the development and the safety and access around the development site for the general public and adjacent businesses.

ENG 5

All parking spaces must be delineated by means of white or yellow lines 80mm to 100mm wide, or white or yellow pavement markers in accordance with Australian Standards AS/NZS 2890.1 2004, prior to commencement of use.

Reason for condition

To ensure the provision of parking for the use is safe and efficient.

ENG 9

All car parking spaces for people with disabilities must be delineated to Australian/NZS Standard, Parking facilities Part 6: Off-street parking for people with disabilities AS/NZS 2890.6: 2009, prior to the commencement of the use.

Reason for condition

In the interests of vehicle user safety and the amenity of the development.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. **Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or**
2. **Be repaired and reinstated by the owner to the satisfaction of the Council.**

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r1

Detailed design drawings, structural certificates of the wall within the Anglesea Street highway reservation must be submitted and approved as a Condition Endorsement, prior to the commencement of work and must:

1. Be prepared and certified by a suitable qualified person and experienced engineer;
2. Not undermine the stability of the highway reservation;
3. Be designed in accordance with AS 4678, with a design life in accordance with table 3.1 typical application major public infrastructure works;
4. Take into account any additional surcharge loadings as required by relevant Australian Standards;
5. Take into account and reference accordingly any Geotechnical findings;
6. Detail any mitigation measures required;
7. Detail the design and location of the footing adjacent to the Anglesea Street highway reservation; and
8. Include a structural certificate which notes the driveway slab will not transfer additional loads onto the existing retaining wall.

The structure certificated and/or drawings should note accordingly the above

All work required by this condition must be undertaken in accordance with the approved select design drawing and structural certificates.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Permit to Construct Public Infrastructure will need to be applied at least 14 days prior starting the works.

Reason for condition

To ensure that the stability and integrity of the Council's highway reservation is not compromised by the development.

ENV 2

Sediment and erosion control measures, sufficient to prevent sediment leaving the site and in accordance with an approved soil and water management plan (SWMP), must be installed prior to the commencement of work and maintained until such time as all disturbed areas have been stabilised and/or restored or sealed to the Council's satisfaction.

A SWMP must be submitted as a Condition Endorsement prior to the issue of any approval under the *Building Act 2016* or the commencement of work, whichever occurs first. The SWMP must be prepared in accordance with the Soil and Water Management on Building and Construction Sites fact sheets (Derwent Estuary Program, 2008), available [here](#).

All work required by this condition must be undertaken in accordance with the approved SWMP.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for Condition

To avoid the pollution and sedimentation of roads, drains and natural watercourses that could be caused by erosion and runoff from the development.

ENVHE 1

Recommendations in the report 'Environmental Site Assessment South Hobart Primary School 2426 Weld Street dated Amended December 2016' must be implemented, prior to, during, and post construction, as appropriate.

Reason for condition

To ensure that the risk to future occupants of the building remain low and acceptable.

OPS 3

Installation and maintenance of the shrub and grass plantings within the planter wall section of the flood wall remain the on-going responsibility of the Department of Education.

Reason for condition:

To ensure that the amenity of the Anglesea Street streetscape is maintained or enhanced.

OPS 4

Removal of one street tree, a *Liriodendron tulipifera* (Tulip Tree) in Anglesea Street, is approved on condition that a fee for a replacement tree is paid, being \$880. This fee must be paid prior to the tree's removal. The applicant is also responsible for all tree removal costs and works including stump removal.

To arrange payment of the fee, please contact the City's Arboriculture and Nursery Unit on 6238 2807.

Reason for condition

To maintain the amenity value of street trees as per the City of Hobart Street Tree Strategy.

OPS 5

The *Liriodendron tulipifera* (Tulip Tree) street tree to be retained in Anglesea Street must be protected from damage to the satisfaction of the Director City Life. No vehicular access or parking, excavation, placement of fill, storage of materials or soil disturbance is to occur within 2.2 m of the tree, and fencing is to be placed around the tree that extends from the kerb on Anglesea Street to the edge of the new concrete path north-east of the tree, and at least 2.5 m either side along the grass verge. There must be no pruning, lopping or damage to the street tree, including its trunk and roots.

Details of the tree protection fencing must be clearly shown on any plans submitted to the Council under the *Building Act 2016*.

Advice: Before works commence on-site but after the tree protection measures have been put in place, the applicant is to inform the City's Arboriculture and Nursery Unit on 6238 2807, so that a site inspection can occur. After satisfactory tree protection measures have been installed, the City will issue a condition endorsement. It is recommended that documentation for condition endorsement be submitted well before submitting documentation for other approvals. Failure to address condition endorsement requirements may result in unexpected delays.

Reason for condition:

To ensure that works are undertaken in accordance with the City of Hobart Street Tree Strategy 2017 and Australian Standard AS 4970 Protection of Trees on Development Sites.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require a permit for the occupation of the public highway for construction or special event (e.g. placement of skip bin, crane, scissor lift etc). Click [here](#) for more information.

You may require an occupational license for structures in the Hobart City Council highway reservation, in accordance with conditions to be established by the Council. Click [here](#) for more information.

You may require a road closure permit for construction or special event. Click [here](#) for more information.

You may require a Permit to Open Up and Temporarily Occupy a Highway (for work in the road reserve). Click [here](#) for more information.

PERMIT TO CONSTRUCT PUBLIC INFRASTRUCTURE

You may require a permit to construct public infrastructure, with a 12 month maintenance period and bond (please contact the Hobart City Council's City Life Division to initiate the permit process).

STORMWATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK WITHIN THE HIGHWAY RESERVATION

Please note development must be in accordance with the Hobart City Council's Infrastructure by law. Click [here](#) for more information.

STORM WATER / ROADS / ACCESS

Services to be designed and constructed in accordance with the (IPWEA) LGAT – standard drawings. Click [here](#) for more information.

WORK PLACE HEALTH AND SAFETY

Appropriate occupational health and safety measures must be employed during the works to minimise direct human exposure to potentially-contaminated soil, water, dust and vapours. Click [here](#) for more information.

PROTECTING THE ENVIRONMENT

In accordance with the *Environmental Management and Pollution Control Act 1994*, local government has an obligation to "use its best endeavours to prevent or control acts or omissions which cause or are capable of causing pollution." Click [here](#) for more information.

LEVEL 1 ACTIVITIES

The activity conducted at the property is an environmentally relevant activity and a Level 1 Activity as defined under s.3 of the *Environmental Management and Pollution Control Act 1994*. For further information on what your responsibilities are, click [here](#).

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

HERITAGE

It is recommended that should any unanticipated archaeological material or features be found during excavation and ground disturbance, a suitably qualified archaeologist

is engaged to provide advice to the applicant.



(Ben Ikin)

Senior Statutory Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Karen Abey)

Manager Development Appraisal

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 29 August 2022

Attachment(s):

Attachment B - CPC Agenda Documents

PLN-22-352 - 24 - 26 WELD STREET PLN-22-352 - ADJACENT ROAD RESERVE

Application Information

▼ Application Details	PLN-22-352 Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve, and Signage 📄 Submitted on: 01/06/2022 Accepted as Valid on: 01/06/2022 Target Time Frame: 42 Days. Elapsed Time: 64 Days (Stopped: 13 Days) = 51 Days - Granted an extension to the Expiry date of 42 Days = Expiry date: 06/09/2022 Officer: Adam Smee
-----------------------	--

Have you obtained pre application advice?

☒ Yes

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. *

☒ No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below. *

☒ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)? *

Education facility

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage) *

Construction of flood mitigation works and stormwater drainage

Estimated cost of development *

715000.00

Existing floor area (m2)

Proposed floor area (m2)

Site area (m2)

Carparking on Site

Total parking spaces

Existing parking spaces

N/A

☒ Other (no selection chosen)

Hours of Business

Are the proposed hours of business different from the existing?

☒ No

What days and hours of operation are proposed for the business?

Existing		Proposed	
	From	To	
Monday to Friday	<input type="text"/>	<input type="text"/>	Monday to Friday
	<input type="text"/>	<input type="text"/>	
Saturday	<input type="text"/>	<input type="text"/>	Saturday
	<input type="text"/>	<input type="text"/>	
Sunday	<input type="text"/>	<input type="text"/>	Sunday
	<input type="text"/>	<input type="text"/>	

Number of Employees

List the total number of people who will be working on the site.

Proposed number of employees

Existing number of employees

<input type="text"/>	<input type="text"/>
----------------------	----------------------

Goods Deliveries

Will there be any commercial vehicles accessing the site?

☒ No

Type of Vehicle

Trips per Week

Very Large (Semi trailer)

Large

Medium

Small

Outdoor storage / seating / number of beds

Is outdoor storage proposed?

☒ No

Other Details

Does the application include signage? *

☒ Yes

** Please be advised that you are required to lodge plans of the sign. The plans should show: dimensions, location, colours, wording, method of illumination, does it flash, method of fixing to wall, etc.*

How many signs, please enter 0 if there are none involved in this application? *

1

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☒ No

Edit

**FOLIO PLAN**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



OWNER LAND TITLES ACT 1980		PLAN OF TITLE		Registered Number
FOLIO REFERENCE A.21660		LOCATION CITY OF HOBART		P.151668
GRANTEE WHOLE OF (0-0-19 ⁹ / ₁₀), TO THE CROWN		FIRST SURVEY PLAN No. P2708 LO COMPILED BY LDRB SCALE 1: 5000 LENGTHS IN METRES		APPROVED 19 JUN 2007 <i>Alice Kawa</i> Recorder of Titles
MAPSHEET MUNICIPAL CODE No. 114 (5225-52)	LAST UPJ No	LAST PLAN No.	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	

LOT 1
501m²

ANGLESEA STREET

MCKENZIE STREET

MACQUARIE STREET (TO MACQUARIE STREET)

Survey numbers and bearings: 6.99, 26.71, 74.96, 21.82, 20.68, 14.8, (P2708)LO, (P250122), (P205274), (D105869), (D41140), (P134725), (D31101), DJB

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 96053	FOLIO 8
EDITION 2	DATE OF ISSUE 23-Jul-1999

SEARCH DATE : 20-May-2022

SEARCH TIME : 12.05 PM

DESCRIPTION OF LAND

City of HOBART

Lot 8 on Plan 96053 (formerly being P570)

Derivation : Part of 3A-3R-29 1/2Ps originally gtd to sir Neil

Elliott Lewis & Anr and duly surrendered by Transfer A391146

Prior CT 3281/73

SCHEDULE 1

A391146 TRANSFER: THE CROWN

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 151668	FOLIO 1
EDITION 1	DATE OF ISSUE 03-Aug-2007

SEARCH DATE : 26-May-2022

SEARCH TIME : 02.49 PM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Plan 151668

Derivation : Whole of 0A-0R-19 8/10 Gtd to The Crown

Derived from A21660

SCHEDULE 1

THE CROWN

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

UNREGISTERED DEALINGS AND NOTATIONS

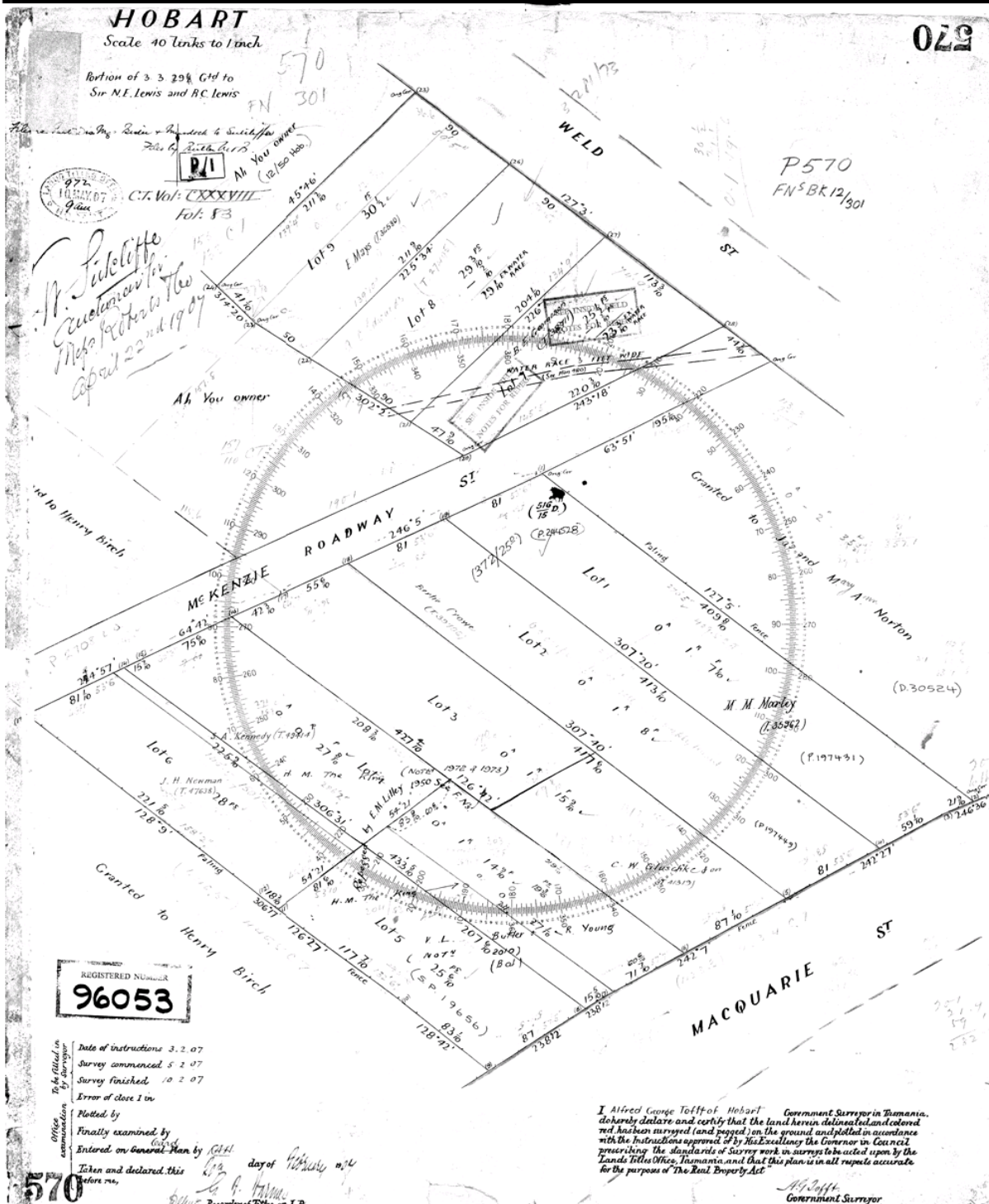
No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980





**Town Planning compliance review and advice
For Department of Education
South Hobart primary School
24-26 Weld Street, South Hobart and Council road reserves
within Anglesea Street and McKenzie Street**

31 May 2022



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

2

Gray Planning
224 Warwick Street
West Hobart TAS 7000

31 May 2022

The Department of Education
c/- Mr Tim Hodge

Dear Tim,

I refer to discussions with yourself and your engineer Mr Brad Deeks at Sustainable Engineering Tasmania with respect to town planning advice and assistance regarding your property at 24-26 Weld Street, South Hobart (South Hobart Primary School) and proposed storm mitigation civil engineering works at the property.

Please find attached a town planning report outlining the compliance of the proposed works against applicable use and development standards under the *Hobart Interim Planning Scheme 2015*.

It is intended that the information contained therein will assist you in lodging the planning application for approval to the City of Hobart.

Should you have any questions about the content of the report, please do not hesitate to contact me on 0439 342 696.

Yours faithfully



Danielle Gray B.Env.Des. MTP. MPIA
Principal Consultant, Gray Planning



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Table of Contents

1	Introduction	4
1.1	Purpose	4
1.2	Copyright.....	4
1.3	Application Background	4
2	The subject site.....	5
2.1	Request for town planning advice	5
2.2	Existing Site Development at the subject site South Hobart Primary School: 24-26 Weld Street, South Hobart	5
2.3	Location of proposed works at 24-26 Weld Street, South Hobart and road reserves	5
2.4	Titles for the subject site at 24-26 Weld Street, South Hobart	9
2.5	Owners Consent as per S.52(1B).....	12
3	The proposed works	15
4	Photos of the subject site.....	16
5	Classification of the proposed works.....	28
6	Applicable Planning Scheme Zone Use and Development Standards	29
6.1	Use Standards for the Inner Residential zone	29
6.2	Development Standards for the Inner Residential zone.....	30
7	Planning Scheme overlays that apply to the subject site.....	38
8	Planning Scheme Codes	39
9	Summary	48



1 Introduction

1.1 Purpose

The purpose of this report is to provide planning a planning review and confirm compliance of the proposed development comprising stormwater mitigation works at the subject site at South Hobart Primary School 24-26 Weld Street, South Hobart and within Council land in McKenzie and Anglesea Street road reservations.

1.2 Copyright

The report is subject to copyright the owner of which is Danielle Gray Planning, trading as Gray Planning. All unauthorised copying or reproduction of this report or any part of it is forbidden by law and is subject to civil and criminal penalties as asset out in the *Copyright Act 1968*. All requests for permission to reproduce this report or its contents must be directed to Danielle Gray.

This document may only be used for the purposes for which it was commissioned in the latter of engagement dated 13 May 2022 and in accordance with the Terms of Engagement for the commission.

Last updated: 31 May 2022

Report Author: Danielle Gray

Report Version: 1.0

1.3 Application Background

Gray Planning have been engaged on behalf of the Department of Education to provide town planning assistance as part of a proposed application to request approval under the *Hobart Interim Planning Scheme 2015* for stormwater mitigation works at the subject site South Hobart Primary School 24-26 Weld Street, South Hobart and within Council land is McKenzie and Anglesea Street road reservations.

The proposed application involves development works including minor stormwater infrastructure within road reservations, retaining walls, landscaping works, a new sign and dismantling and reconstruction of an existing outbuilding within the Inner Residential Zone under the *Hobart Interim Planning Scheme 2015*.

In addition to plans prepared by Sustainable Engineering Tasmania dated May 2022 and Floor Report from Entura dated February 2022, this planning report forms the basis of the application.

Enquiries relating to planning matters outlined in the following report may be directed to Danielle Gray at Gray Planning on behalf of the Department of Education and Sustainable Engineering Tasmania.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

2 The subject site

2.1 Request for town planning advice

Gray Planning was approach by the client in May 2022 to provide town planning and guidance with respect to the development at South Hobart Primary School.

Gray Planning was engaged to undertake a town planning review and assessment report against applicable standards in the Planning Scheme.

The following report provides responses to address applicable Planning Scheme standards triggered by the proposal.

2.2 Existing Site Development at the subject site South Hobart Primary School: 24-26 Weld Street, South Hobart

The subject site is South Hobart Primary School located at 24-26 Weld Street, South Hobart and has frontage onto McKenzie Street, Anglesea Street and Weld Street as well as Weld Street public open space to the north of the subject site.

The subject site contains multiple predominantly single storey buildings from a variety of eras of construction with the earliest being a red brick traditional school house building dating from approximately 1900-1920.

The subject site also contains landscaping along site perimeters as well as within the subject site itself.

The subject site is spread across multiple titles and is fully serviced with sewer, water and stormwater infrastructure. The subject site overall has an irregular rectangular configuration with a gentle gradient that is generally less than (flatter than) 1 in 10.

A site inspection was undertaken for this advice on 20 May 2022, with the advice provided within this report providing a summary of compliance against applicable planning use and development standards under the *Hobart Interim Planning Scheme 2015*.

2.3 Location of proposed works at 24-26 Weld Street, South Hobart and road reserves

The subject site is shown in Figure 1. This Figure shows South Hobart Primary School as being made up of multiple titles which are outlined. The block containing the school is bounded by Weld Street, Weld Street public open space, McKenzie Street, Anglesea Street and also contains 2 private dwellings each on their own titles. These are located at 28 Weld Street (CT-225206/1) and 30 Weld Street (CT-2329-909/1). These properties are annotated below in Figure 1. No works will encroach upon these private residential properties.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Figure.1. The subject site shown outlined with surrounding residential development.
Source: TheLIST, sourced May 2022. No nominated scale.

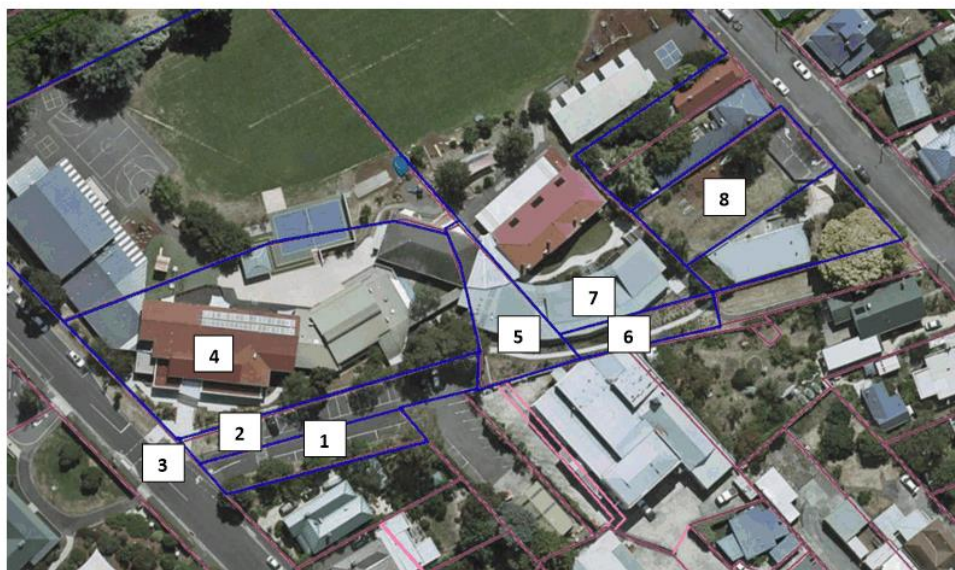


Figure.2. The subject site shown outlined with a key to the locations and individual titles where the proposed works will occur. Source: TheLIST, sourced May 2022. No nominated scale.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

The following is an outline of the affected titles that make up where the proposed works will occur:

- 1: McKenzie Street road reservation, no PID, no title reference. Council land. Proposed demolition and replacement of kerb and gutter and footpath. Removal of existing refuge island within road pavement.
2. McKenzie Street acquired road. No PID. Title reference: CT-151668/1. Crown land. Works include replacement of existing stormwater manhole and surround, existing kerb and channel, stormwater pits and footpath to be demolished and replaced, existing stormwater pit to be removed and private stormwater connections to be located and connected to new pit array, new curved wall with proposed landscaping within, new school sign to be attached to curved wall, existing mesh boundary fence to be removed.
3. Anglesea Street road reservation. No PID. No title reference. Council land. Works include replacement of existing stormwater manhole and surround, existing street tree to be removed by Council, new curved wall with proposed landscaping within.
4. South Hobart Primary School title. PID: 5596894. No title reference. Department of Education land. Works include new curved wall with proposed landscaping within, new school sign to be attached to curved wall.
5. South Hobart Primary School title. PID: 5596894. No title reference. Department of Education land. Works include new concrete retaining wall, new landscaping and dismantling of existing small storage shed to be reassembled post works.
6. South Hobart Primary School title. PID: 5596894. No title reference. Department of Education land. Works include new concrete retaining wall, new landscaping.
7. South Hobart Primary School title. PID: 5596894. Title reference: CT-96053/8. Crown land noted as owner on the title. Works include new timber and concrete retaining wall and new landscaping.

Figure 3 overleaf shows the location of proposed works on a site plan provided by the project engineer dated May 2022.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

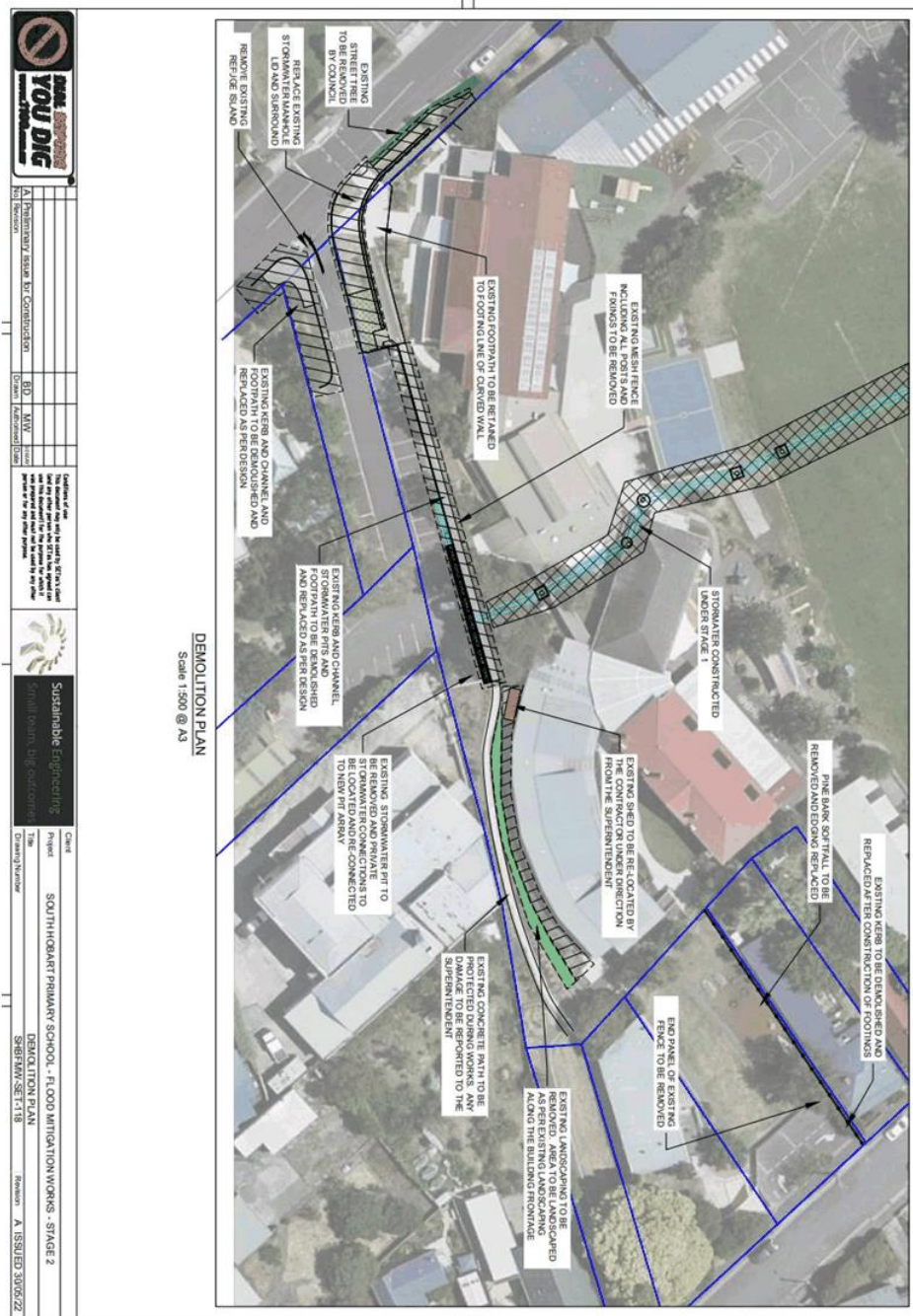


Figure.3. The subject site and location of all proposed works. Source: Sustainable Engineering, provided May 2022. No nominated scale.

2.4 Titles for the subject site at 24-26 Weld Street, South Hobart

The land affected by the proposed development relates to two applicable titles as well as Council road reservation. The affected titles are: CT-151668/1 and CT-96053/8.

A check of the title for the property revealed there is no applicable Schedule of Easements attached to the subject titles. This confirms there are no applicable no covenants, Part 5 Agreements or building areas.

Figures 4 and 5 overleaf are title plans for these titles.



03 6288 8449
0439 342 696

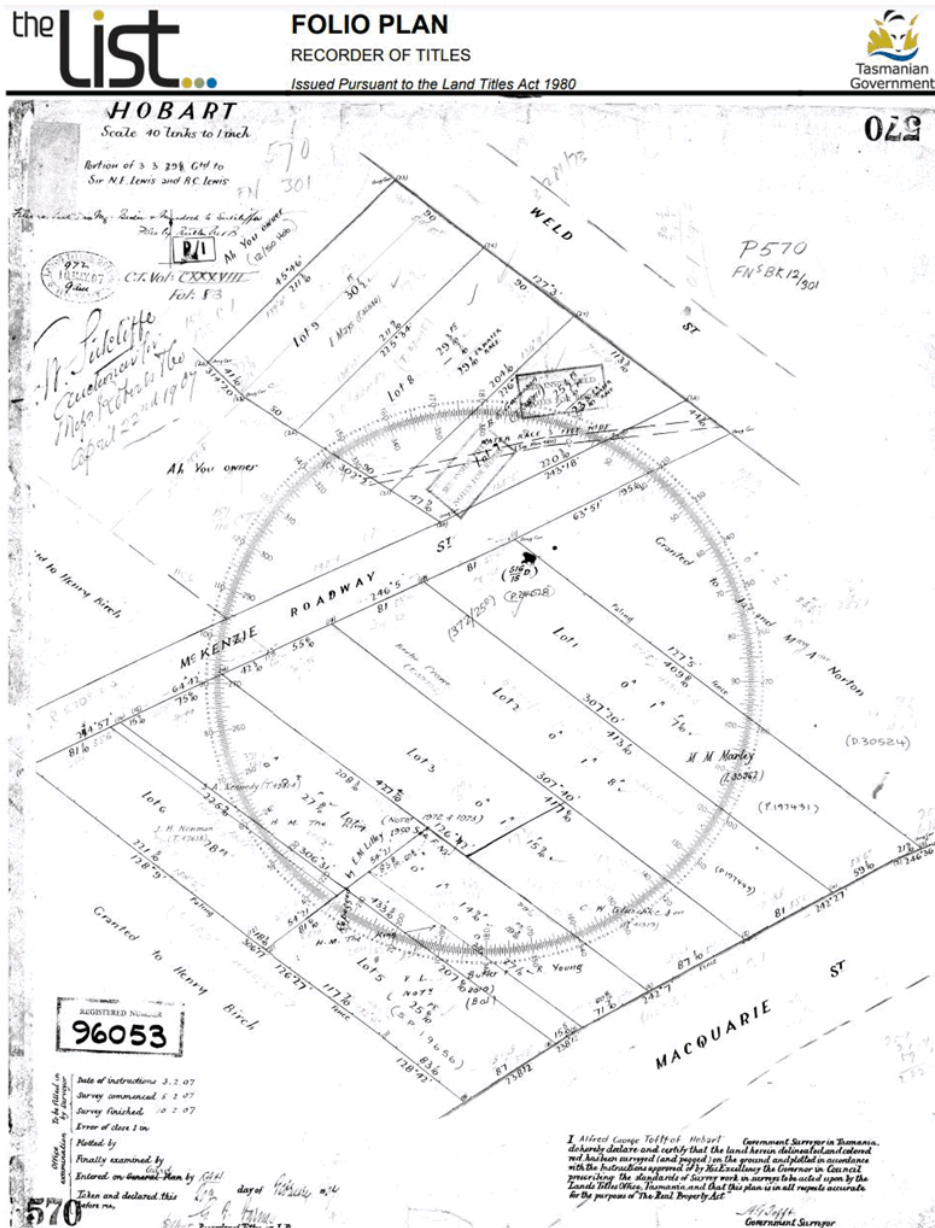


danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

10



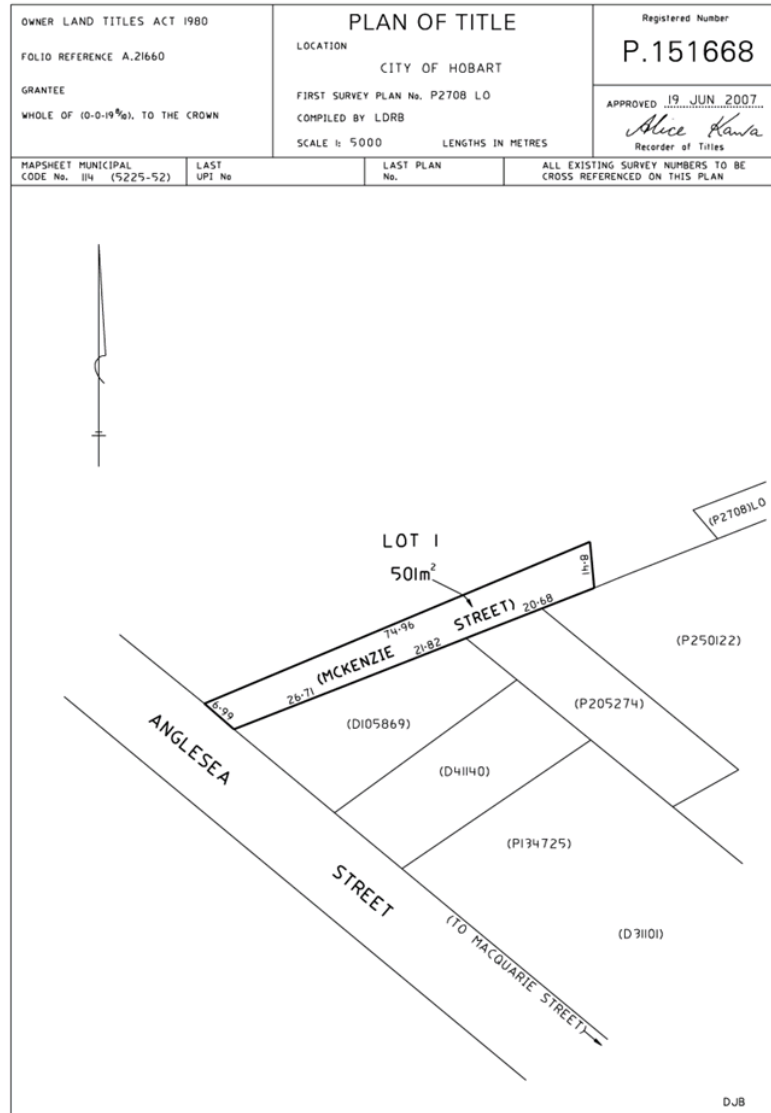
Search Date: 20 May 2022 Search Time: 12:05 PM Volume Number: 96053 Revision Number: 02 Page 1 of 1
Department of Natural Resources and Environment Tasmania www.thelist.tas.gov.au

Figure.4. Title plan for CT-96053/8. Source: TheList, sourced May 2022. No nominated scale.

03 6288 8449
0439 342 696

danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000

grayplanning.com.au
ABN 99148920244



Search Date: 26 May 2022 Search Time: 02:49 PM Volume Number: 151668 Revision Number: 01 Page 1 of 1
Department of Natural Resources and Environment Tasmania www.thelist.tas.gov.au

Figure.5. Title plan for CT-151668/1. Source: TheList, sourced May 2022. No nominated scale.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

2.5 Owners Consent as per S.52(1B)

The proposed works will occur within Crown land and also Council road reservation land.

Council provided their consent in a letter to the Department of Education dated 22 March 2022. That consent has been provided as part of documentation submitted for approval.

The Department of Education have an instrument of delegation in terms of Crown consent for the proposed works. This has also been provided as part of documentation submitted for approval. It is also reproduced below as Figure 6.

Land owner consent as per s.52(1B) of the Act with respect to the Department of Education has been provided in Figure 7. This consent also confirms that the Department of Education has provided Sustainable Engineering Tasmania consent to lodge the application for approval to Council.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Minister for Education, Children & Youth
Minister for State Growth
Minister for Skills, Training & Workforce Growth
Minister for Environment
Minister for Aboriginal Affairs

Level 9 15 Murray Street HOBART TAS 7000 Australia
GPO Box 123 HOBART TAS 7001 Australia
Ph: +61 3 6165 7670
Email: ministerjaensch@dpac.tas.gov.au



LAND USE PLANNING AND APPROVALS ACT 1993 INSTRUMENT OF DELEGATION

I, **Hon Roger Jaensch MP**, being and as the Minister for Education, Children and Youth acting pursuant to section 52(1F) of the *Land Use Planning and Approvals Act 1993* ("the Act"), hereby:

- Delegate the functions described (by reference to the relevant provision of the Act and generally) in the below Schedule to the persons holding the following offices in the Department of Education:
 - o Director, Facility Services (position number 971277)
 - o Capital Works Manager, Facility Services (position number 971943)

SCHEDULE

Provision	Description of functions
Section 52(1B)	Signing and providing written permission for the making of, applications for permits in relation to Crown land (being Crown land within the meaning of the <i>Crown Lands Act 1976</i> for which I, as Minister, am responsible for administering).

Dated this 3rd day of March 2022

Hon Roger Jaensch MP
Minister for Education, Children and Youth

Figure.6. Instrument of delegation with respect to Crown consent. Source: Department of Education, provided to Gray Planning May 2022.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Department of Education
FACILITY SERVICES

Letitia House, Olinda Grove, Mt Nelson TAS 7007
GPO Box 169, Hobart, TAS 7001 Australia
Ph (03) 6165 6321



DOC/22/77306

30 May 2022

Ms Kelly Grigsby
Chief Executive Officer
Hobart City Council
16 Elizabeth Street
Hobart TAS 7000

Dear Ms Grigsby

South Hobart Primary School – Flood Mitigation Works – Stage 2

Section 52 (1B) of the *Land Use Planning and Approvals Act 1993* requires an "owner's declaration" to be completed to enable a Development Application to be considered by Council.

The Minister administering the *Education Act 2016* has delegated this responsibility to me.

Accordingly, my written permission for redevelopment at South Hobart Primary School is hereby given.

I also hereby provide my written permission for Brad Deeks of Sustainable Engineering Tas to act as agent in relation to all required permit applications for the proposed redevelopment.

Yours sincerely

Todd Williams
Director
Facility Services

Figure.7. Owner consent. Source: Department of Education, provided to Gray Planning May 2022.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

3 The proposed works

The proposed works are summarised as follows:

- 900mm high rendered blockwork wall to be constructed to curve around the corner of the subject site fronting Anglesea Street and McKenzie Street;
- New sign to be attached to the 900mm curved wall: Lettering to be 200mm high and mounted on a 2.6m wide x 300mm high black powder coated aluminium fascia. South Hobart primary school logog to be fixed adjacent to lettering. LED strip light back and side lit.
- New landscaping in McKenzie Street and Angelsea Street as well as within school grounds;
- New flood mitigation stormwater pit array within existing car parking spaces within McKenzie Street;
- McKenzie Street and Anglesea Street intersection works including removal of existing refuge island, raised threshold relocated, ner kerb, gutter and footpath to be reinstated;
- New disabled ramp from existing disabled parking space in McKenzie Street;
- Existing street tree in Anglesea Street to be removed;
- New footpath in Anglesea Street;
- New concrete footpath and wall in McKenzie Street;
- New floor mitigation retaining wall adjacent to existing building near McKenzie Street (minimum 800mm high, maximum 1400m high);
- 750mm high sleeper wall to be set 600mm from side boundary shared with 28 Weld Street.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

4 Photos of the subject site

The following images were taken by the report author on Friday 20 May 2022.



Image.1. Looking east from within the Anglesea Street road reservation toward the South Hobart Primary School entrance and McKenzie Street. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.2. Looking north from within the Anglesea Street road reservation toward the South Hobart Primary School entrance with McKenzie Street intersection to the right of the image. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.3. Looking west from within the McKenzie Street road reservation toward the intersection with Anglesea Street intersection. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.4. Looking south from within the Anglesea Street road reservation toward the McKenzie Street intersection. The tree in the foreground is proposed to be removed by Council to facilitate the proposed works. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.5. The existing sub station. To remain as existing and unaffected by the proposed works. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.6. Looking west along McKenzie Street. New stormwater pits are proposed within these parking spaces. No parking spaces will be lost or relocated as part of the proposed works. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.7. Looking west from within the subject site toward the existing storage shed to be dismantled and reconstructed post works. A new retaining wall and landscaping is proposed adjacent to the existing red brick school building wall. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.8. Looking west along McKenzie Street. New stormwater pits are proposed within these parking spaces as a continuation of the existing pits photographed here. No parking spaces will be lost or relocated as part of the proposed works. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.9. Looking west from within the subject site to McKenzie Street beyond and toward the existing storage shed to be dismantled and reconstructed post works. A new retaining wall and landscaping is proposed adjacent to the existing red brick school building wall.
Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.10. Looking north from within the subject currently occupied by Lady Gowrie and the proposed location of a timber and concrete wall to be constructed running parallel to the existing paling boundary fence shared with 28 Weld Street. The birch tree in this image is to remain unaffected by the proposed works and be protected during construction. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.11. Looking north from within the subject currently occupied by Lady Gowrie and the proposed location of a timber and concrete wall to be constructed running parallel to, and setback 600mm from the existing paling boundary fence shared with 28 Weld Street. The birch tree in this image is to remain unaffected by the proposed works and will be protected during construction. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Image.12. Looking north from within the subject currently occupied by Lady Gowrie and the proposed location of a timber and concrete wall to be constructed running parallel to the existing paling boundary fence shared with 28 Weld Street. Source: Gray planning, taken 20 May 2022, 10-11:15am.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

5 Classification of the proposed works

The proposed stormwater works (kerb, gutter, stormwater pits etc) are considered to fall within the use class of 'Utilities' and are considered to be 'Minor Utilities' which are defined as:

means use of land for utilities for local distribution or reticulation of services and associated infrastructure such as a footpath, cycle path, stormwater channel, water pipes, retarding basin, telecommunication lines or electricity substation and power lines up to but not exceeding 110Kv.

The proposed new curved wall with landscaping that runs along the McKenzie Street frontage, the new wall that runs adjacent to the boundary shared with 28 Weld Street and the new wall that runs along the existing brick school building are considered to fall within the Utilities use class. They are not considered to be minor. These are considered to be Utilities as they are directly associated with the collection and disposing of storm and floodwater. Utilities are defined as:

use of land for utilities and infrastructure including:

- (a) telecommunications;
- (b) electricity generation;
- (c) transmitting or distributing gas, oil, or power;
- (d) transport networks;
- (e) collecting, treating, transmitting, storing or distributing water; or
- (f) collecting, treating, or disposing of storm or floodwater, sewage, or sullage.

Examples include an electrical sub-station or powerline, gas, water or sewerage main, optic fibre main or distribution hub, pumping station, railway line, retarding basin, road, sewage treatment plant, storm or flood water drain, water storage dam and weir.

The proposed walls fall within the definition of a 'building' under the Act. Therefore, zone development standards apply to these structures and works.

The proposed works also seek approval for a sign directly associated with the school. This sign has been assessed under the Code for signage.

Under Use Table 11.2, Minor Utilities are No Permit Required in the Inner Residential zone.

Under Use Table 11.2, Utilities are Discretionary in the Inner Residential zone.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

6 Applicable Planning Scheme Zone Use and Development Standards

The subject site at 24-26 Weld Street South Hobart is currently wholly zoned as Inner Residential under the *Hobart Interim Planning Scheme 2015* (the 'Planning Scheme').



Figure.7. The subject site at 24-26 Weld Street is shown outlined and located within the (red) Inner Residential zone area of South Hobart which is the primary residential zoning in the area. Source: TheLIST May 2021. No nominated scale.

6.1 Use Standards for the Inner Residential zone

Use standards can be found in Part 11.3 of the Planning Scheme with respect to the Inner Residential zone.

In terms of clause 11.3.1.A1, the proposed Utilities uses do not have applicable hours of operation. Therefore, this clause is not relevant or triggered.

In terms of clause 11.3.1.A2, the proposed works and development for which approval is sought will not make any noise emissions and do not seek approval for the installation of any noise generating machinery. Therefore, this clause is not triggered.

In terms of clause 11.3.1.A3, the proposed works and development for which approval is sought do not seek approval for the installation of any new lighting. Therefore, this clause is not triggered.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

In terms of clause 11.3.1.A4, the proposed works and development for which approval is sought will not trigger any new or additional commercial vehicle movements. Therefore, this clause is not triggered.

Clause 11.3.2.A1 and A2 with respect to Visitor Accommodation is not triggered as no Visitor Accommodation use is proposed. Therefore, this clause is not triggered.

6.2 Development Standards for the Inner Residential zone

Comments are made against the following Planning Scheme zoning development standards for development in the Inner Residential zone:

Clause 11.4.1.A1 Multiple dwelling density:

Planning Comment: The proposed development does not seek approval for any multiple dwelling development and this clause is not applicable.

Clause 11.4.2.A1 Setbacks and building envelope for all dwellings: Frontage Setbacks:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.2.A2 Setbacks and building envelope for all dwellings: Frontage Setbacks for garages and carports:

Planning Comment: The proposed development does not seek approval for any garage or carport associated with a 'dwelling' development and this clause is not applicable.

Clause 11.4.2.A3 Setbacks and building envelope for all dwellings: building envelope for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause and the associated building envelope is not applicable.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause 11.4.3.A1 Site coverage and private open space for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.3.A2 Site coverage and private open space for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.4.A1 Sunlight to private open space for multiple dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.5.A1 Width of openings for all garages and carports for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.6.A1 Privacy for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.6.A2 Privacy for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.6.A3 Privacy for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause 11.4.7.A1 Frontage fences for all dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.8.A1 Waste storage for multiple dwellings:

Planning Comment: The proposed development does not seek approval for any 'dwelling' development and this clause is not applicable.

Clause 11.4.9.A1 Non dwelling development:

This clause requires the following:

Non-dwelling development must comply with all of the following acceptable solutions as if it were a dwelling:

(a) 11.4.2 A1 and A3;

(b) 11.4.3 A1 (a) and (c);

(c) 11.4.7 A1.

Planning Comment 11.4.2.A1:

11.4.2.A1 requires that any 'building' is setback 3m from a primary frontage and 2m from a frontage not a primary frontage.

The proposed development seeks approval for a new walls within McKenzie Street and Anglesea Street that do not comply and therefore need to be considered under the P1 Performance Criteria:

P1

A dwelling must have a setback from a frontage that is compatible with the streetscape having regard to any topographical constraints.

It is considered that there are existing retaining walls and minor structures along the McKenzie and Anglesea Street frontages that do not comply with the A1 setbacks. It is considered new walls within these street frontage setbacks will be compatible with existing streetscape features and patterns of development observed in the surrounding area.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000

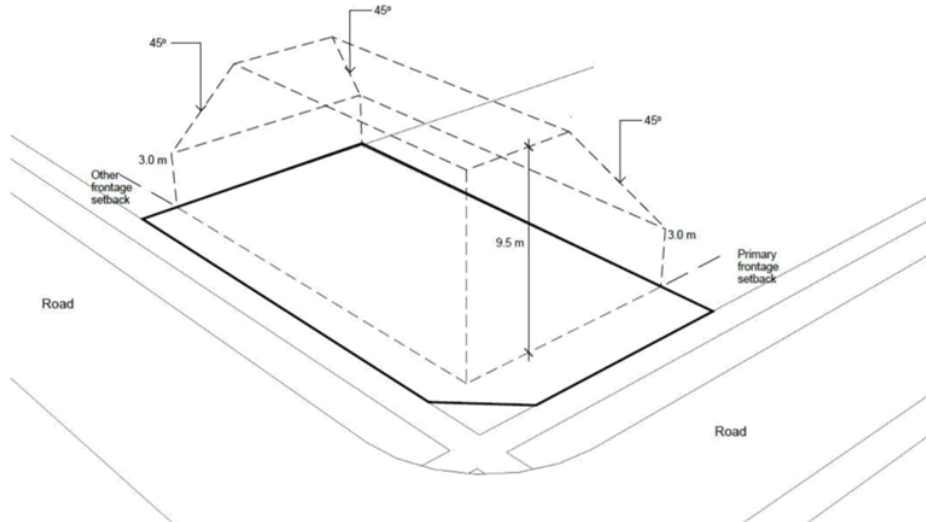


grayplanning.com.au
ABN 99148920244

Planning Comment 11.4.2.A3:

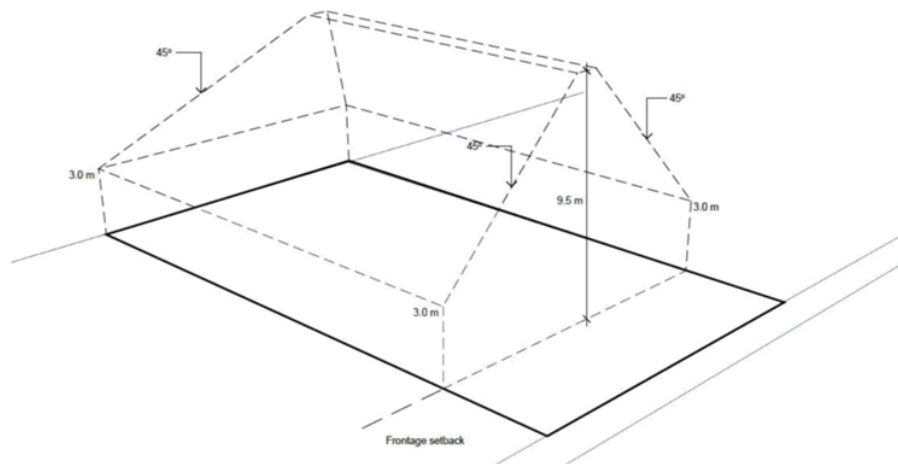
11.4.2.A3 requires that any 'building' is located within the following building envelopes for corner sites and ordinary lots (the subject site is made up of titles that are both corner lots and ordinary lots):

Figure 11.2 Building envelope for corner lots as required by clause 11.4.2 A3(a):



And the following building envelope for ordinary lots:

Figure 11.1 Building envelope as required by clause 11.4.2 A3(a):



The proposed development seeks approval for a new (retaining and flood mitigation walls) walls within McKenzie Street and Anglesea Street that do not comply as they would not be



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

wholly contained within the above building envelopes as they do not comply with frontage setbacks.

The proposed new 750mm wall to run 600m offset from the side boundary shared with 28 Weld Street also does not comply with the required 1.5m setback under clause A3(b). Therefore, the proposed development needs to be considered under the P3 Performance Criteria:

P3

The siting and scale of a dwelling must:

(a) not cause an unreasonable loss of amenity to adjoining properties, having regard to:

- (i) reduction in sunlight to a habitable room (other than a bedroom) of a dwelling on an adjoining property;*
- (ii) overshadowing the private open space of a dwelling on an adjoining property;*
- (iii) overshadowing of an adjoining vacant property; or*
- (iv) visual impacts caused by the apparent scale, bulk or proportions of the dwelling when viewed from an adjoining property; and*

(b) provide separation between dwellings on adjoining properties that is consistent with that existing on established properties in the area.

It is considered that the proposed landscaping and retaining walls and minor structures along the McKenzie and Anglesea Street frontages as well as the new wall that will run adjacent to the boundary shared with 28 Weld Street will not cause any unreasonable loss of amenity in terms of reduction of sunlight, overshadowing or visual impacts to any residential dwelling. These walls are of a scale and location that would not have any impact at all in terms of solar access and amenity to a nearby residential dwelling.

It is also considered these walls will provide separation to buildings on adjacent properties that are consistent with that existing in the surrounding area.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Planning Comment 11.4.3.A1(a):

11.4.3.A1(a) requires a maximum site coverage of not more than 65%.

The proposed development does not trigger this clause as no new buildings are proposed that contribute to site coverage. The existing site coverage will remain unaffected.

Planning Comment 11.4.3.A1(c):

11.4.3.A1(c) has been removed from the Planning Scheme.

Planning Comment 11.4.7.A1:

11.4.7 relates to frontage fences and A1 has no Acceptable Solution.

The P1 Performance Criteria requires:

P1

A fence (including a free-standing wall) for a dwelling within 4.5m of a frontage must:

- (a) provide for security and privacy while allowing for passive surveillance of the road; and*
- (b) be compatible with the height and transparency of fences in the street, having regard to:*
 - (i) the topography of the site; and*
 - (ii) traffic volumes on the adjoining road.*

The proposed development seeks approval for walls within 4.5m of a frontage. Privacy is not considered to be relevant given the school setting. The walls proposed are for flood mitigation and will provide a degree of security in terms of enclosure of the subject site close to title boundaries and accesses into the subject site.

The height and transparency of the walls proposed are considered to be compatible with respect to the topography (most are intended as retaining features to mitigate flood waters) as there are many solid wall structures within 4.5m of frontages that are intended to provide a retaining function.

In terms of the height and transparency of the walls proposed, the walls are intended to mitigate flood waters and therefore traffic volumes are irrelevant given the intended function, height and location of each of the walls proposed.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause 11.4.9.A2 Non dwelling development:

This clause relates to garages and carports for non dwelling development. As none are proposed as part of the application, this clause is not relevant.

Clause 11.4.9.A3 Non dwelling development:

This clause requires the following:

A3

Outdoor storage areas must comply with all of the following:

- (a) be located behind the building line;*
- (b) all goods and materials stored must be screened from public view;*
- (c) not encroach upon car parking areas, driveways or landscaped areas.*

Planning Comment: The proposed development involves the dismantling and reconstruction of a small storage shed in front of the building line close to the McKenzie Street frontage.

This small storage shed is existing but will be reduced in size when reconstructed in the same location.

The storage shed is not located behind the building line and does not comply with (a). The goods to be stored (gardening maintenance equipment) will be screened from public view within the shed and therefore (b) is not considered relevant. The proposed dismantling and reconstruction of this storage shed already does not encroach upon car parking areas, driveways or landscaped areas and therefore complies with (c).

The proposal therefore needs to be assessed under the following P3 Performance Criteria:

P3

Outdoor storage areas must satisfy all of the following:

- (a) be located, treated or screened to avoid unreasonable adverse impact on the visual amenity of the locality;*
- (b) not encroach upon car parking areas, driveways or landscaped areas.*

The proposed dismantling and reconstruction of this storage shed already does not encroach upon car parking areas, driveways or landscaped areas and therefore complies with P3(b). The existing location of the storage shed is located at the base of an existing retaining wall (see Image 7) and has landscaping adjacent.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

The floor level of the shed is substantially lower (approximately 0.5m-0.75m) than adjacent footpath and road levels where pedestrians can access and this level difference is considered to minimise visual impact of the shed. It is also considered that the shed as existing is approximately 0.9m longer than proposed so the development t will result in a reduction of the size of the shed, also minimising visual impact.

It is not considered to cause any unreasonable impact on the visual amenity of the locality and the dismantling and reconstruction of the storage shed is considered to comply with applicable Performance Criteria.

Part 11.5 Subdivision

This clause relates to subdivision. As none are proposed as part of the application, this clause is not relevant.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

7 Planning Scheme overlays that apply to the subject site

The subject site was checked for Planning Scheme overlays.
There is a single overlay relevant to the subject site. This is the Bushfire Prone Areas overlay.
This is shown below in Figure 8.

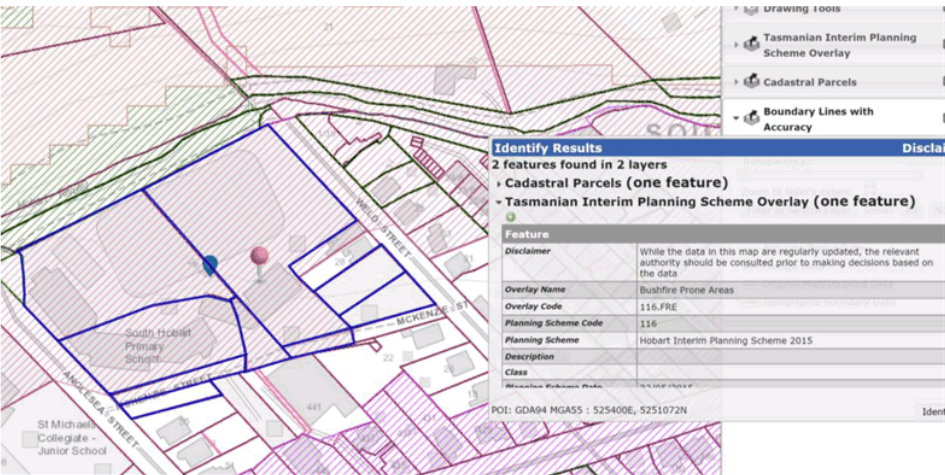


Figure.8. The subject site at 24-26 Weld Street is shown outlined and located partially within a Bushfire Prone Areas overlay that affects most of the titles. Source: TheLIST May 2021. No nominated scale.

This overlay is of no implications as the proposed works and for signage and Utilities and do not seek approval of any new use defined as being 'hazardous' or 'vulnerable' or the extension of a use defined as being 'hazardous' or 'vulnerable'.

8 Planning Scheme Codes

Comment has been provided under each Planning Scheme Code:

Code E1.0 Bushfire Code:

The Planning Scheme defines bushfire prone as being:

where there is no overlay on a planning scheme map, land that is within 100m of an area of bushfire-prone vegetation equal to or greater than 1ha

The subject site is partially covered with an overlay. The proposed works are considered to be exempt under this Code as while the site is partially affected by a Bushfire Prone Areas Overlay, the proposed uses are not defined as being either 'Vulnerable' or 'Hazardous'.

In accordance with clause E1.4(a) advice from an accredited bushfire practitioner can be provided if Council require.

Code E2.0 Potentially Contaminated Land Code:

The use proposed (Utilities) is not a 'sensitive use' or one outlined in Table E2.2.1 and the site has no overlay. The proposal is therefore exempt under this Code.

Code E3.0 Landslide Code

The site has no overlay. The proposal is therefore exempt under this Code as per E3.4 of this Code.

Code E4.0 Not used in the Hobart Interim Planning Scheme 2015



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Code E5.0 Road and Railway Assets Code

The proposal does not involve any new access, does not involve any new junction and does not involve a 'sensitive use' within 50m of a Utilities zone that involves a rail network or a category 1 or 2 road.

Code E6.0 Parking and Access Code

Most uses require parking to be provided. This Code outlines the number of parking spaces required for use classes.

Utilities are not required to provide any parking spaces under Table E6.1.

No existing parking spaces will be lost or altered as a result of the proposed development.

Code E7.0 Stormwater Management Code

This Code applies to any development. The proposal plans provided by Sustainable Engineering Tasmania and Flood Inundation Assessment by Entura dated February 2022 have been produced to address the requirements of this Code.

Further information can be provided if required.

Code E8.0 Electricity Transmission Infrastructure Protection Code

This Code is triggered as the proposed development is within 65m of a substation. This substation will remain entirely unaffected by the proposed works as noted on the engineering plans submitted for approval.

If required, advice can be provided by the electricity transmission entity as per clause E.8.7.3.P1.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

E9.0 Attenuation Code

This Code is not relevant as the proposed use is not a use in Table E9.1. and there are no known nearby uses noted in this Code.

E10.0 Biodiversity Code

This Code is not relevant as the subject site does not have any vegetation that is mapped in an overlay.

E11.0 Waterways and Coastal Protection Code

This Code does not apply to use as the site is not mapped with an overlay.

E12.0 Not used in the *Hobart Interim Planning Scheme 2015***E13.0 Historic Heritage Code**

This Code does not apply as the subject site is not confirmed as comprising any of the following:

- A Heritage Place;
- A Heritage Precinct;
- A Cultural Landscape Precinct; or
- A Place of Archaeological Potential.

E14.0 Scenic Landscape Code

This Code does not apply as the site is not mapped with any overlay confirming it is in a scenic protection area.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

E15.0 Inundation Prone Areas Code

This Code does not apply as the site is not in a mapped area.

E16.0 Coastal Erosion Hazard Area

This Code does not apply as the site is not in a mapped area.

E17.0 Signs Code

This Code does apply as a sign is proposed as shown in the submitted drawings.

The proposed sign is as follows (as per submitted drawings):

*Lettering to be Stainless Steel mounted lettering on a backing powder coated fascia.
Lettering will be 200mm high and backing fascia to suit (2600 x 300) Allow for LED strip light
(back/side lit with spill only - no direct light source outwards) Sign mounted to face of wall -
centre of curve. Allow for 400 dia. logo adjacent to sign*

The proposed sign to be located on the fascia of the curved wall that runs around the corner of Angelsea Street and McKenzie Street is considered to be a 'wall' sign.

A 'wall' sign has the following requirements:

- (a) No more than 1 Wall Sign per building.*
- (b) Must not be illuminated.*
- (c) The sign is not at a Heritage Place subject to the Historic Heritage Code or within a Heritage Precinct or Cultural Landscape Precinct.*

A 'wall' sign is a discretionary sign in the Inner Residential zone.

The following clauses apply to the proposed sign:

Clause E17.6.9.1.A1 Use of Signs:

The proposed sign is a discretionary sign in the Inner Residential zone and meets P1.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause E17.6.9.1.A2 Use of Signs:

The A2 Acceptable Solution states: *A sign associated with the sale of goods or services must relate directly to the use of the building or site to which it is affixed.*

The proposed sign relates to South Hobart Primary and announces the primary and main school entrance on the corner of Anglesea and McKenzie Streets.

The sign is directly related to the use of the site on which it is affixed and therefore complies with the A2 Acceptable Solution.

Clause E17.6.9.1.A3 Use of Signs:

The A3 Acceptable Solution states: *A sign must not contain flashing lights, moving parts or moving or changing messages or graphics, except if a Statutory Sign.*

The proposed sign does not contain any flashing lights, moving parts or moving or changing messages or graphics.

Compliance is therefore achieved with the A4 Acceptable Solution.

Clause E17.6.9.1.A4 Use of Signs:

The A4 Acceptable Solution states: *An illuminated sign must not be located within 30 metres of a residential use, except if a Statutory Sign.*

The proposed sign is proposed to be illuminated and is within 30m of a residential use.

The proposed sign therefore needs to be considered under the following P4 Performance Criteria:

P4

An illuminated sign within 30 metres of a residential use must not have an unreasonable impact upon the residential amenity of that use caused by light shining into windows of habitable rooms.

The proposed illumination as noted on the application drawings is as follows:

LED strip light (back/side lit with spill only - no direct light source outwards)

It is considered the illumination details will be of a lux so low and with minimal spill to ensure that no adverse impact will occur to any residential use within 30m.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause E17.7.7.1.A1 Standards for Signs:

The A1 Acceptable Solution states:

A1

A sign must comply with the standards listed in Table E.17.2 and be a permitted sign in Table E17.3.

The proposed sign is illuminated and is a discretionary sign. Therefore, the proposed sign must be assessed under the following P1 Performance Criteria:

P1

A sign not complying with the standards in Table E17.2 or has discretionary status in Table E17.3 must satisfy all of the following:

- (a) be integrated into the design of the premises and streetscape so as to be attractive and informative without dominating the building or streetscape;*
- (b) be of appropriate dimensions so as not to dominate the streetscape or premises on which it is located;*
- (c) be constructed of materials which are able to be maintained in a satisfactory manner at all times;*
- (d) not result in loss of amenity to neighbouring properties;*
- (e) not involve the repetition of messages or information on the same street frontage;*
- (f) not contribute to or exacerbate visual clutter;*
- (g) not cause a safety hazard.*

It is considered the proposed sign complies with all of the above as the sign is low key, constructed of durable and high quality materials that are easily maintained, incorporated into a flood mitigation wall as part of the streetscape improvements proposed and is of a small scale and low illumination that will not result in any visual clutter or loss of residential amenity to any neighbouring property.

Furthermore, the dimensions of the sign and its inclusion as part of a flood mitigation wall will not result in the sign becoming a dominating feature in the streetscape or school premises.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause E17.7.7.1.A2 Standards for Signs:

The A2 Acceptable Solution states there is a maximum of 1 type of sign per street frontage. The proposed sign includes a school logo as part of its graphics. There is already a school logo on the building façade that faces Anglesea Street (see Image 2). Therefore, the proposed sign must be assessed against the following P2 Performance Criteria:

P2

The number of signs per business per street frontage must:

- (a) minimise any increase in the existing level of visual clutter in the streetscape; and where possible, shall reduce any existing visual clutter in the streetscape by replacing existing signs with fewer, more effective signs;*
- (b) reduce the existing level of visual clutter in the streetscape by replacing, where practical, existing signs with fewer, more effective signs;*
- (c) not involve the repetition of messages or information.*

It is considered the duplication of the school logo on the proposed new sign to be located on the floor mitigation wall will not result in any visual clutter and does not involve any repetition of messages or information as the school logo comprises graphics only.

The two logos (existing and proposed) are different enough in terms of construction, size, location and scale as the proposed new sign is intended for pedestrians at street level while the other existing school logo is intended to identify the school building from a distance. The Performance Criteria is considered satisfied.

Clause E17.7.7.1.A3 Standards for Signs:

The A3 Acceptable Solution states: *Signs must not obscure or prevent or delay a driver from seeing a Statutory Sign or a Tourist Information Sign.*

The proposed new sign is located less than 1m above footpath level and spreads across a curved wall topped with plantings. The wall itself is intended to be for flood water mitigation to the school entrance and administration building. The sign seeks to inform visitors of the primary school entrance location and administration building.

The proposed sign in terms of its design and location on the curved wall does not, in any way, obscure or delay a driver from seeing a Statutory Sign or Tourist Information Sign given its low location close to footpath level and NGL.

The proposed sign therefore complies with the A3 Acceptable Solution.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

Clause E17.7.7.1.A4 Standards for Signs:

The A4 Acceptable Solution states: *Signs must not resemble Statutory Signs because of the same or similar shape, size, design, colour, letter size or lighting.*

The proposed sign does not resemble statutory signs in any way and therefore the A4 Acceptable Solution is met.

E18.0 Wind and Solar Energy Code

The proposal does not seek approval for any development involving wind or solar energy and therefore this Code is not relevant.

E19.0 Telecommunications Code

This Code is not relevant as this Code applies to telecommunications developments.

E20.0 Acid Sulphate Soils Code

This Code is not relevant as the site is not mapped with an overlay.

E21.0 Dispersive Soils Code

This Code is not relevant as the site is not mapped with an overlay.

E22.0 Not used in the Hobart Interim Planning Scheme 2015

03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

E23.0 On Site Wastewater Management Code

This Code is not relevant as the site is not within a wastewater (septic) serviced area.

E24.0 Significant Trees Code

This Code is not relevant as the site does not contain any vegetation formally listed as 'significant trees'.

Part F Specific Area Plans

None of these apply as the site is not located in an area covered by a Specific Area Plan.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244

9 Summary

There are no title impediments such as building areas, covenants or Part 5 Agreements that impact upon the proposed development.

The majority of zone use and development standards are considered to be satisfactorily met with respect to the proposed development.

The development seeks to minimise ongoing floodwater inundation experienced at the school site and has been designed to be minimal in extent but effective in terms of directing stormwater inundation away from buildings and entrances and into new upgraded flood mitigation pits to be located along McKenzie Street with increased capacity for effective stormwater discharge away from school property.



03 6288 8449
0439 342 696



danielle@grayplanning.com.au
224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au
ABN 99148920244



Enquiries to: City Life
Phone: (03) 6238 2711
Email: coh@hobartcity.com.au

22 March 2022

Steve Gerard (Department of Education)
Olinda Grove
MOUNT NELSON TAS 7008

mailto: steve.gerard@education.tas.gov.au

Dear Sir/Madam

**24 - 26 WELD STREET, SOUTH HOBART & ADJACENT ROAD RESERVE
WORKS TO COUNCIL STORMWATER NOTICE OF LAND OWNER CONSENT TO
LODGE A PLANNING APPLICATION - GMC-21-90**

Site Address:

24-26 Weld Street South Hobart & Adjacent Road Reserve

Description of Proposal:

Flood Mitigation Works & Works in Road Reserve

Applicant Name:

Mr Steve Gerard
Department of Education

PLN (if applicable):

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents. I granted consent pursuant to delegation, a copy of which is enclosed.

Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make

Hobart Town Hall
50 Macquarie Street
Hobart TAS 7000

Hobart Council Centre
16 Elizabeth Street
Hobart TAS 7000

City of Hobart
GPO Box 503
Hobart TAS 7001

T 03 6238 2711
F 03 6234 7109
E coh@hobartcity.com.au
W hobartcity.com.au

CityofHobartOfficial
ABN 39 055 343 428
Hobart City Council

as the statutory planning authority.

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully



(Glenn Doyle)

HEAD OF CITY PROJECTS

Relevant documents/plans:

DA-22-11154 - Set of drawings by Sustainable Engineering

DA-22-6876 - Flood Inundation Assessment by entura dated February 2022

DA-21-67545 - Technical Specification by Sustainable Engineer dated 02/09/2020



City of Hobart

INSTRUMENT OF DELEGATION

General Delegation

Head of Intergovernmental Relations and Partnerships

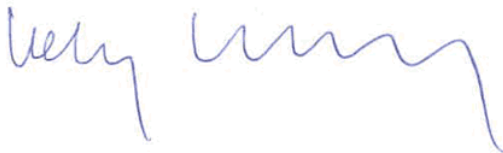
Section 64 of the Local Government Act 1993

I, Kelly Grigsby, Chief Executive Officer, being the General Manager as appointed by Council pursuant to Section 61 of the *Local Government Act 1993 (Tas)* ("the Act") hereby delegate pursuant to Section 64 of the Act, the following powers and functions to the Head of City Projects:

1. to sign an application; and
2. to provide written permission to make an application;

pursuant to section 52(1B) of the *Land Use Planning and Approvals Act 1993*, except where an application pursuant to that section is recommended for refusal by Council officers.

Dated this 24th day of February 2022



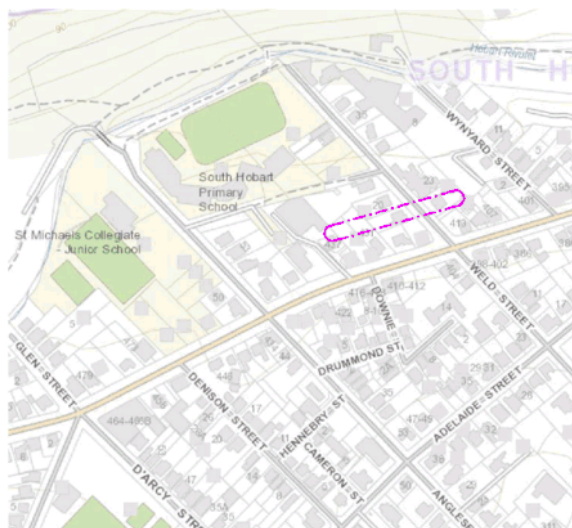
SIGNED

Kelly Grigsby
(Chief Executive Officer)

Being the General Manager as appointed by Council pursuant to section 61 of the *Local Government Act 1993 (Tas)*



SOUTH HOBART PRIMARY SCHOOL FLOOD MITIGATION PROJECT STAGE 2 - FLOOD WALL AND CARPARK WORKS



LOCALITY PLAN

DRAWING INDEX

DRAWING 101	COVER PAGE AND DRAWING LIST	DRAWING 115	CROSS SECTIONS 4
DRAWING 102	NOTES AND SET OUT DATA	DRAWING 116	CROSS SECTIONS 5
DRAWING 103	NOTES AND SCHEDULE	DRAWING 117	CROSS SECTIONS 6
DRAWING 104	GENERAL ARRANGEMENT 1	DRAWING 118	CROSS SECTIONS 7
DRAWING 105	GENERAL ARRANGEMENT 2	DRAWING 119	CROSS SECTIONS 8
DRAWING 106	GENERAL ARRANGEMENT 3	DRAWING 120	CROSS SECTIONS 9
DRAWING 107	PIT DETAILS	DRAWING 120	SURVEY DATA
DRAWING 108	WALL A DETAILS	DRAWING 121	DEMOLITION PLAN
DRAWING 109	WALL B DETAILS		
DRAWING 110	GENERAL DETAILS		
DRAWING 111	STORMWATER LONG SECTION		
DRAWING 112	CROSS SECTIONS 1		
DRAWING 113	CROSS SECTIONS 2		
DRAWING 114	CROSS SECTIONS 3		



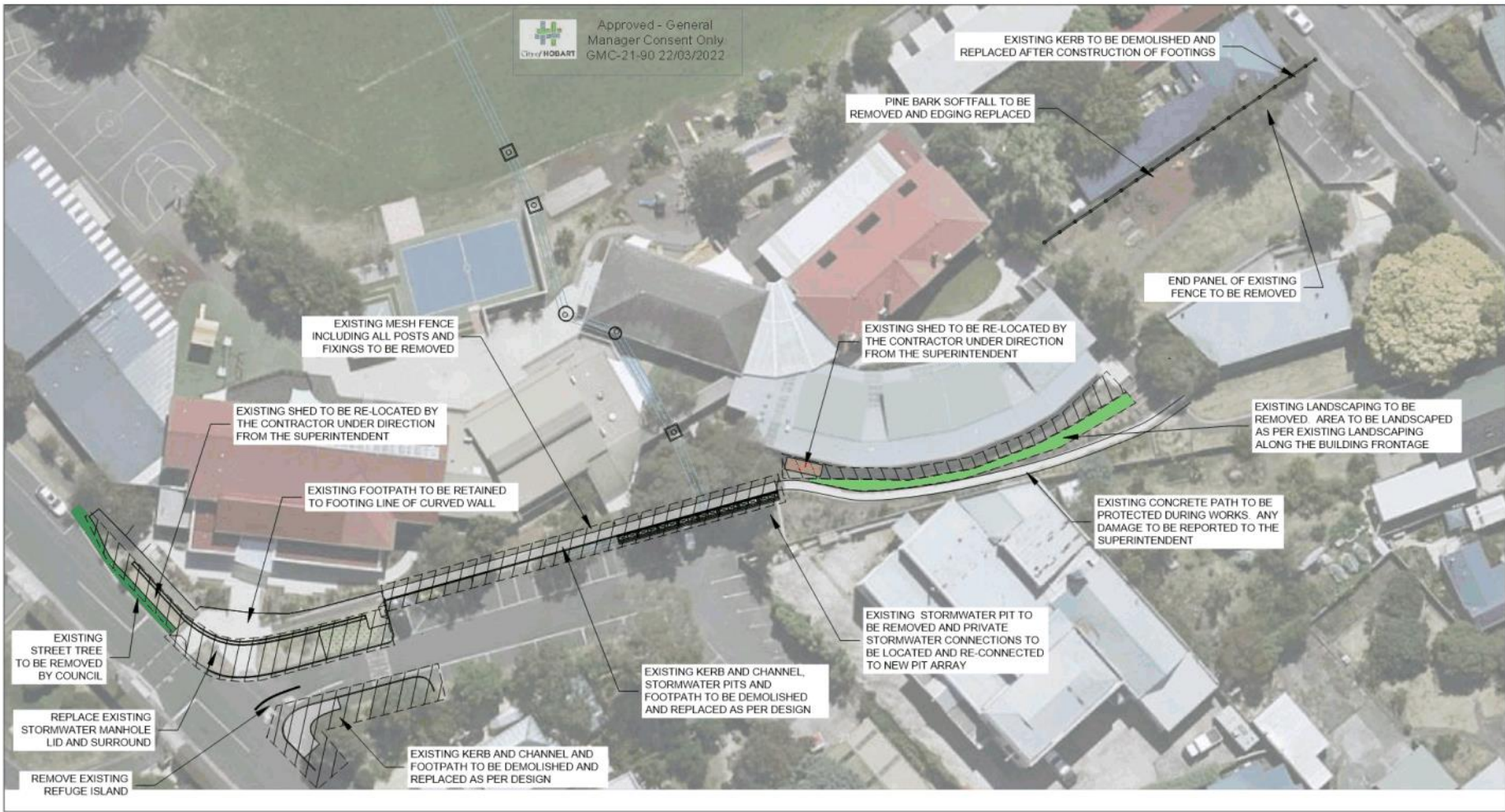
B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	COVER PAGE AND DRAWING LIST		
Drawing Number	SHBFMW-SET-101	Revision	B ISSUED 21/12/21



DEMOLITION PLAN
Scale 1:500 @ A3



A Preliminary issue for Tender		SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

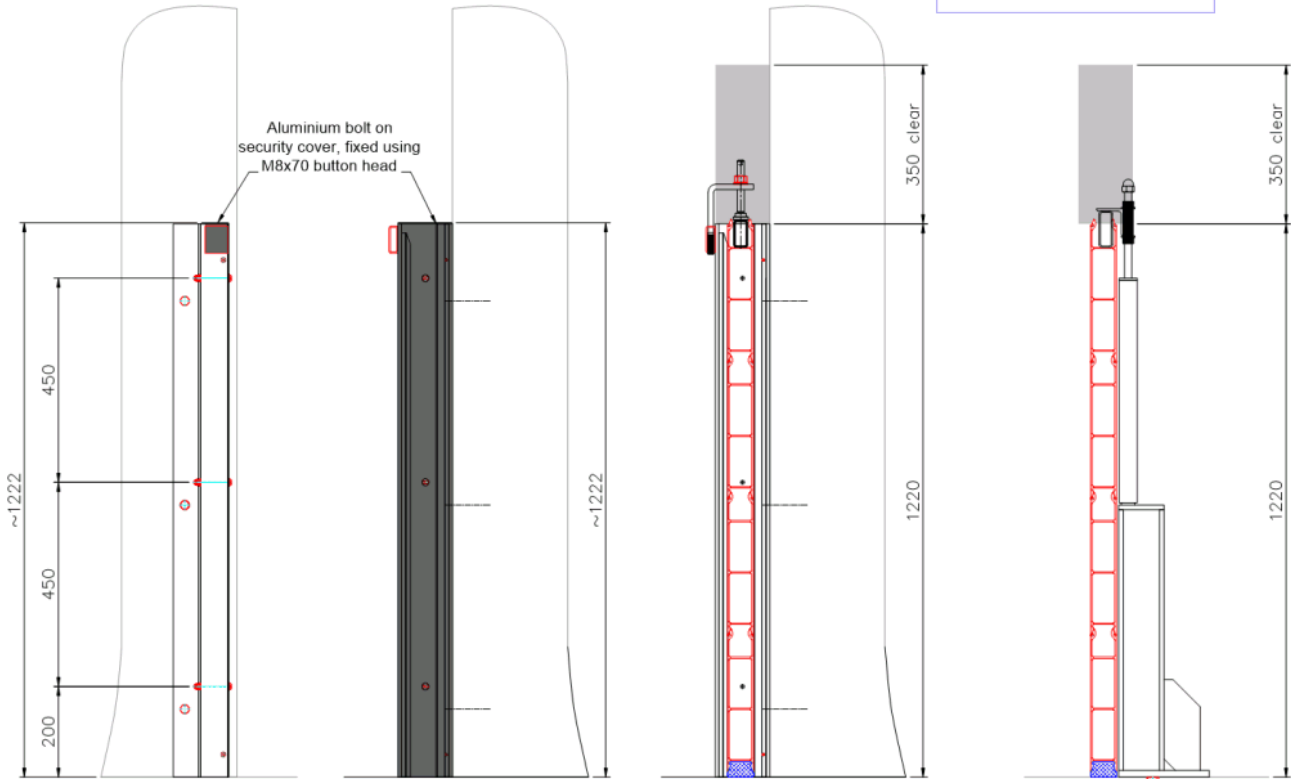
Client	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Project			
Title	DEMOLITION PLAN		
Drawing Number	SHBFMW-SET-121	Revision	A ISSUED 22/06/21

Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

- Notes:
- 1. Walls & floor prepared with Sika Primer (if necessary) and sealed with grey Sikaflex at end support locations.
 - 2. Structural foundations and/or walls required are to be built and checked by others. Dimensions shown are minimum for fixings criteria which does not include any structural check such as sliding, overturning and bearing checks which must be carried out by a third party/others.
 - 3. It is the client's responsibility to check wall strength and stability to withstand flood loading. Loads available on request.
 - 4. Finished floor and walls to have a smooth, flat, level, impervious surface. $\pm 5\text{mm}$ tolerance across barrier length off of plumb.

Fixing Schedule		
Item	Fixing	Qty.
1	Hilti HUS-HR 10x85	6
2	M8x70 button head bolt A4	6
3	M8 washer A4	6

Tools required	
24mm spanner for clamp	
8mm Allen key for clamp	
5mm Allen key for covers	



LHS Elevation
Dam board not in place

Section A - A
Dam board not in place

Section A - A

Section B - B



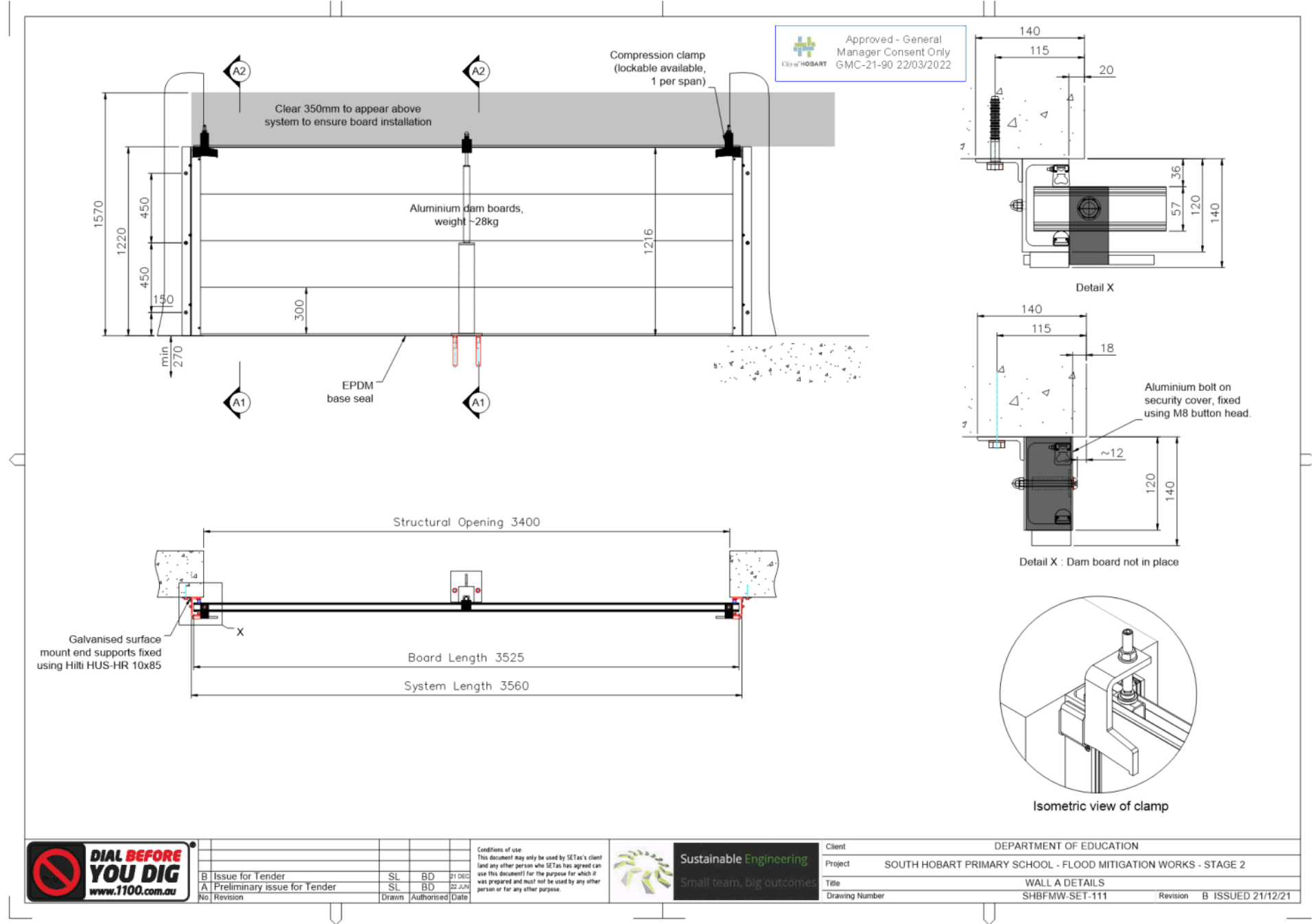
B Issue for Tender	SL	BD	21 DEC
A Preliminary issue for Tender	SL	BD	22 JUN
No Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-112	Revision	B ISSUED 21/12/21



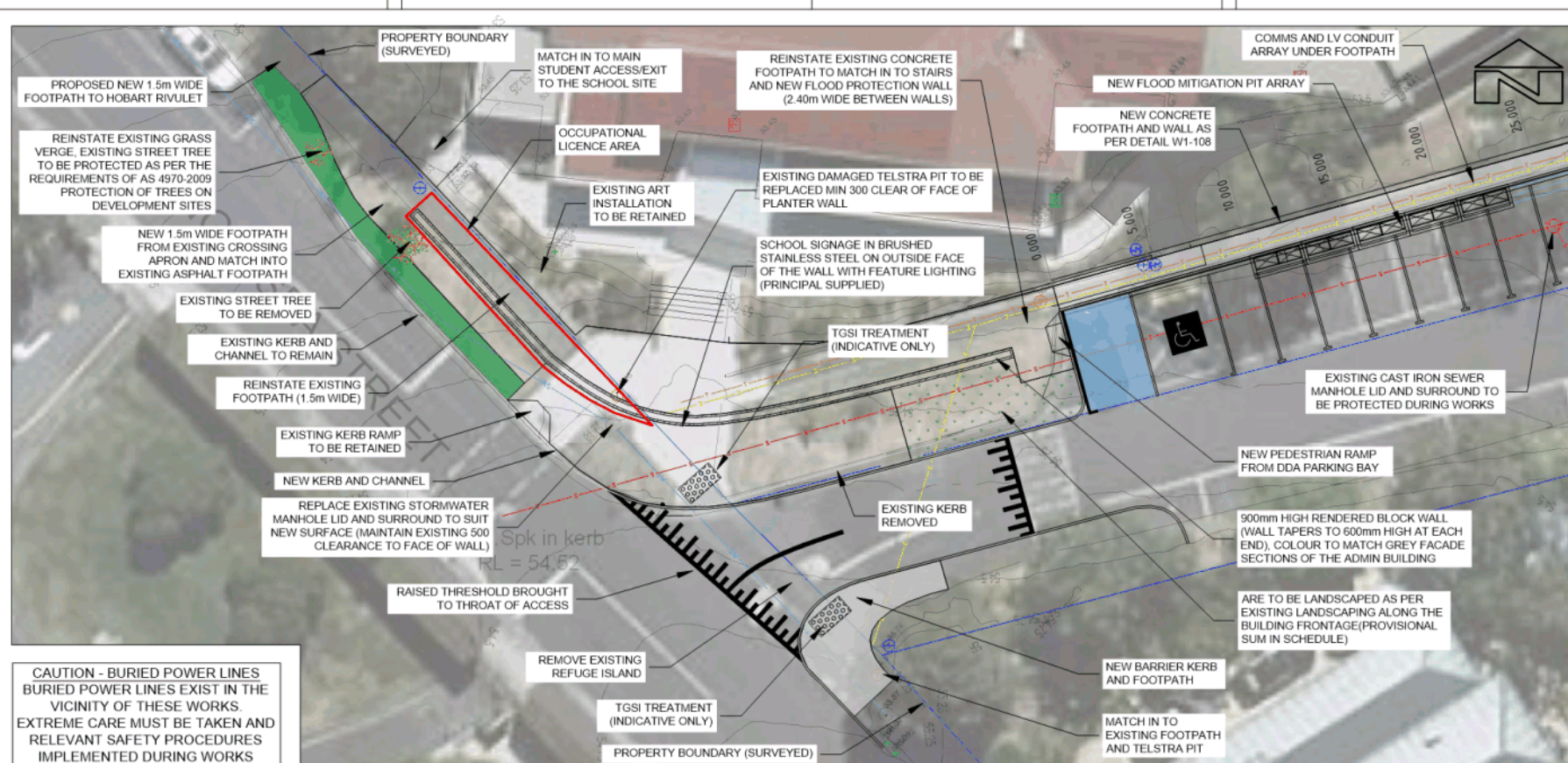
B Issue for Tender	SL	BD	21 DEC
A Preliminary issue for Tender	SL	BD	22 JUN
No Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-111	Revision	B ISSUED 21/12/21



CONTINUED ON SHEET 5

NOTES

- ALL LEVELS IN METRES TO AHD. ALL COORDINATES IN METRES TO AMG. (ALL SETOUT TO LOCAL DATUM).
- ALL SET OUT DIMENSIONS TO BE CONFIRMED ON SITE.
- LINEMARKING, SIGNS AND RRPMS SHALL BE INSTALLED IN ACCORDANCE WITH AS1742.3-2009 MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES.
- LINEMARKING PAINT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS4049.3.
- RETROFLECTIVE GLASS BEADS TO AS2009 WHERE SPECIFIED.

- BLACK OUT SUPERFLUOUS LINEMARKING AND MAKE SMOOTH NEAT CONNECTION TO EXISTING LINEMARKING.
- ALL WHEELSTOPS TO COMPLY WITH AS2890.1.
- ALL KERB RAMPS TO COMPLY WITH AS1428.1-2021 AND TACTILES TO AS1428.4-2009.
- REFER TO LGAT STANDARD DRAWING TSD-RF02 FOR PAVEMENT MARKING LINE TYPE DETAILS.
- ROAD SAFETY SIGNS TO BE IN ACCORDANCE WITH AS1742 AND INSTALLED IN ACCORDANCE WITH DoSG STANDARD DRAWINGS.
- SPACE IDENTIFICATION AND DELINEATION OF DISABLED SPACES TO BE IN ACCORDANCE WITH SECTION 3 OF AS2890.6.

GENERAL ARRANGEMENT

Scale 1:200 @ A3



AN OCCUPATION LICENCE
WILL BE APPLIED FOR ALL
PRIVATE INFRASTRUCTURE IN
THE ROAD RESERVATION

Approved - General
Manager Consent Only
GMC-21-90 22/03/2022



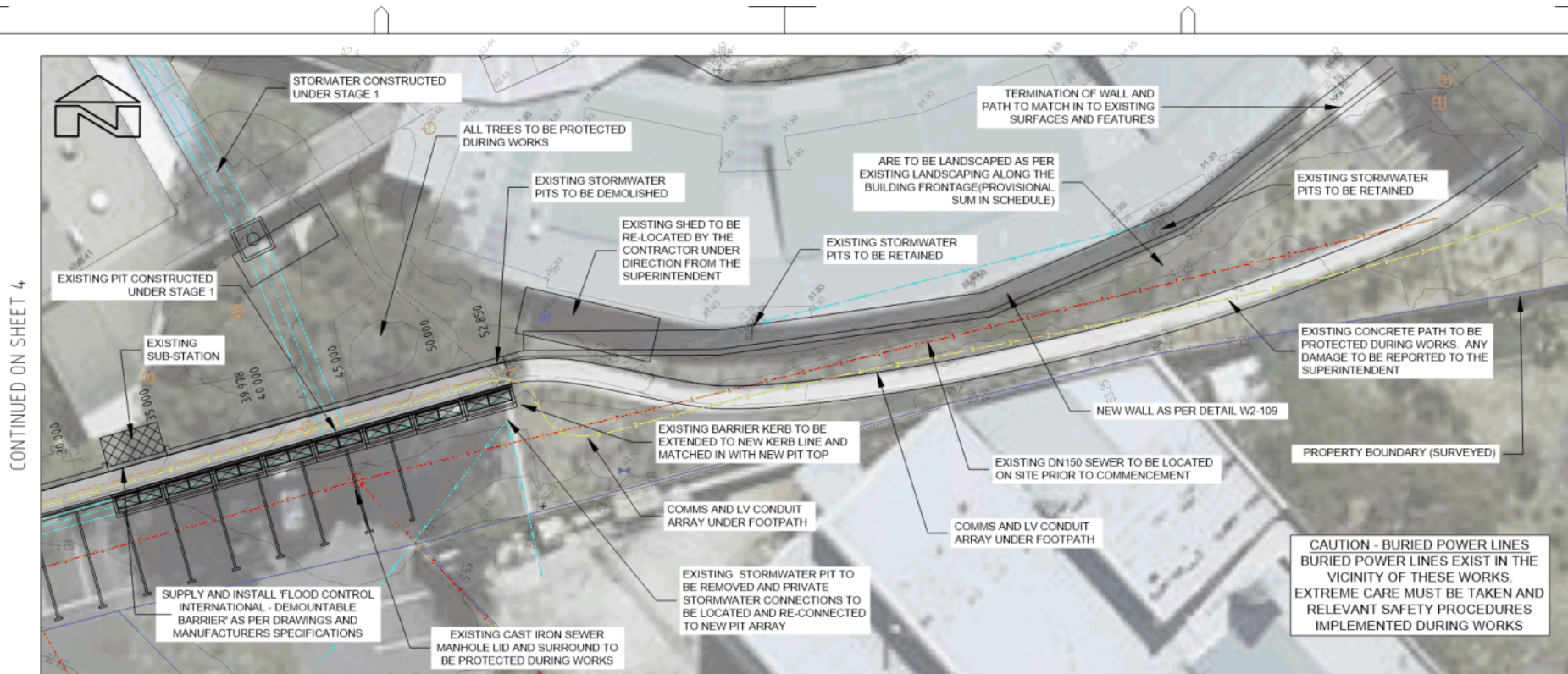
B Issue for Tender	SL	BD	21 DEC
A Preliminary issue for Tender	SL	BD	22 JUN
No. Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETac's client
(and any other person who SETac has agreed can
use this document) for the purpose for which it
was prepared and must not be used by any other
person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	GENERAL ARRANGEMENT 1 of 3		
Drawing Number	SHBFMW-SET-105	Revision	B ISSUED 21/12/21



PIPEWORK NOTES

1. REFER TO GENERAL NOTES.
2. PIPELINE ALIGNMENTS AND LEVELS SHALL NOT BE VARIED WITHOUT DESIGN ENGINEERS WRITTEN APPROVAL.
3. MINIMUM VERTICAL CLEARANCE AT CROSSINGS OF EXISTING SERVICES TO BE 200mm.
4. CONFIRM ALL PIPE LENGTHS ON SITE PRIOR TO CUTTING OR FABRICATION.
5. REFER TYPICAL TRENCH DETAILS AND NOTES FOR PIPE INSTALLATION REQUIREMENTS.
6. ALL PRECAST CONCRETE COMPONENT JOINTS (MH RISERS) TO BE SEALED WITH AN APPROVED ELASTOMERIC JOINT RING OR JOINT SEALANT (CONSEAL CS-231 OR APPROVED EQUIVALENT) AND A SELF ADHESIVE BITUMEN BASED JOINT SEALING MEMBRANE OVER JOINT (GEOFABRICS BITAC AND PRIMER SYSTEM OR APPROVED EQUIVALENT).
7. REDUNDANT PIPES TO BE REMOVED OR CAPPED AND FILLED WITH APPROVED FLOWABLE SELF-LEVELING, SELF COMPACTING CEMENTITIOUS GROUT.
8. ALL PIPEWORK, MH'S, MH PIPE DROPS AND ASSOCIATED STRUCTURES / WORKS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATION.
9. GRAVITY SEWERS TO COMPLY WITH AS3500
10. CONCRETE ANCHOR & THRUST BLOCKS SHALL BE CONSTRUCTED AT ALL PRESSURE PIPEWORK BENDS, TEES, VALVES AND ELSEWHERE SHOWN ON THE DRAWINGS. REFER TO THE PROJECT SPECIFICATION FOR PIPE ANCHOR AND THRUST BLOCK REQUIREMENTS

GENERAL ARRANGEMENT

Scale 1:200 @ A3



TYPICAL TRENCH NOTES

1. TYPICAL TRENCH DETAIL APPLICABLE TO PIPES LAID IN NATURAL SOLID GROUND. PIPES LAID IN OTHER CIRCUMSTANCES REQUIRE A SPECIAL DESIGN TO THE APPROVAL OF THE SUPERINTENDENT.
2. MINIMUM WIDTH OF TRENCH IS THE WIDTH OF UNSUPPORTED TRENCH OR THE CLEAR WIDTH INSIDE A TRENCH SUPPORT.
3. SIDES OF TRENCHES SHALL BE KEPT VERTICAL TO A MINIMUM OF 150mm ABOVE THE EMBEDMENT ZONE.
4. OVER EXCAVATION OF TRENCHES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR BED ZONE.
5. IF LOW STRENGTH (CBR <1%) TRENCH FOUNDATIONS ARE ENCOUNTERED REFER DESIGN ENGINEER FOR SOFT SOILS TRENCH DETAIL.
6. GEOTEXTILE FILTER FABRIC TO SURROUND EMBEDMENT ZONE OF PIPES WHERE REQUIRED, BY AS/NZS 2566.2, OR DIRECTED TO PREVENT THE MIGRATION OF FINES. GEOTEXTILE FILTER FABRIC TO BE A NON-WOVEN FABRIC COMPLYING WITH APPENDIX J OF AS/NZS 2566.2. LAP JOINTS MINIMUM 200mm.
7. EMBEDMENT AND BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN MAXIMUM LAYER THICKNESS NOMINATED IN TABLE 1 AND MOISTURE CONDITIONED AS REQUIRED TO ACHIEVE COMPACTION REQUIREMENTS NOMINATED IN TABLE 1
8. FOR PIPES UNDER TRAFFICKED AREAS, ROAD PAVEMENT, ROAD SHOULDERS, DRIVEWAYS AND FOOTPATHS USE DSG APPROVED BASE A. COMPACT IN 150mm LAYERS TO ACHIEVE DENSITY REQUIREMENTS OUTLINED IN THE SPECIFICATIONS. REFER LONGITUDINAL SECTION FOR LOCATIONS.



B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SET's client
(and any other person who SET has agreed can
use this document) for the purpose for which it
was prepared and must not be used by any other
person or for any other purpose.



Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	GENERAL ARRANGEMENT 2 of 3		
Drawing Number	SHBFMW-SET-105	Revision	B ISSUED 21/12/21

GENERAL NOTES

1. CONFIRM THE LOCATION, EXTENT AND DEPTH OF ALL ABOVE AND BELOW GROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS. ALL SERVICES MAY NOT BE SHOWN ON THE DESIGN DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND LOCATE ALL SERVICES. EXISTING SERVICES TO REMAIN IN SERVICE AND TO BE PROTECTED FROM DAMAGE FOR DURATION OF WORKS.
2. ALL COSTS FOR DAMAGE TO EXISTING SERVICES SHALL BE BORNE BY THE CONTRACTOR.
3. REFER ANY CONFLICT BETWEEN NEW WORKS AND EXISTING SERVICES TO THE SUPERINTENDENT.
4. TOPS OF MANHOLES, PITS & SERVICE UTILITY COVERS ARE TO BE ADJUSTED TO MATCH ADJACENT FINISHED SURFACE LEVELS AND GRADES.
5. DO NOT OBTAIN DIMENSIONS BY SCALING FROM THE DRAWINGS. UNLESS OTHERWISE NOTED.
6. ALL DETAIL DIMENSIONS ARE IN MILLIMETRES.
7. VERIFY SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED.
8. ALL PRE-CAST COMPONENTS ARE TO BE INSTALLED AS PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND RELEVANT STANDARD DRAWINGS AS APPLICABLE.
9. SUB-GRADE TO BE INSPECTED PRIOR TO PLACEMENT OF BEDDING AND PLACEMENT OF BOX CULVERT SECTIONS.
10. POWER AND TELECOMMUNICATIONS CONDUIT ARRAY TO BE PROTECTED AT ALL TIMES. ANY DAMAGE IS TO BE IMMEDIATELY REPORTED TO THE SUPERINTENDENTS REPRESENTATIVE AND TASNWORKS. CONTRACTOR IS TO ISOLATE SITE AND CEASE WORKS UNTIL DAMAGE IS INSPECTED AND REPAIRS MADE AS NECESSARY.
11. EXCAVATION WITHIN 1.0m OF POWER ARRAY TO BE BY VACUUM TRUCK UNLESS APPROVAL IS OBTAINED FROM THE SERVICE AUTHORITY TO USE MECHANICAL OR HAND EXCAVATION.

40AC DG7 FOOTPATH ON
MIN 150mm 20FCR
COMPACTED TO 95% MMDD

HUDSON CIVIL PRODUCTS
2400mm DOUBLE GRATED
PIT TOP WITH GALVANISED
LINTEL

A
108

PLAN VIEW
1:25 AT A3

P1
108

Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

40AC DG7 FOOTPATH ON
MIN 150mm 20FCR
COMPACTED TO 95% MMDD

HUDSON CIVIL PRODUCTS
2400mm DOUBLE GRATED
PIT TOP WITH GALVANISED
LINTEL

40AC DG10 C170
150mm BASE A
200mm BASE B

WARNING
DIRECT BURIED
LV CABLES

SLABBING
DN20 PVC COMMS
75Ø LV DICT BURIED
20Ø LV DIRECT BURIED

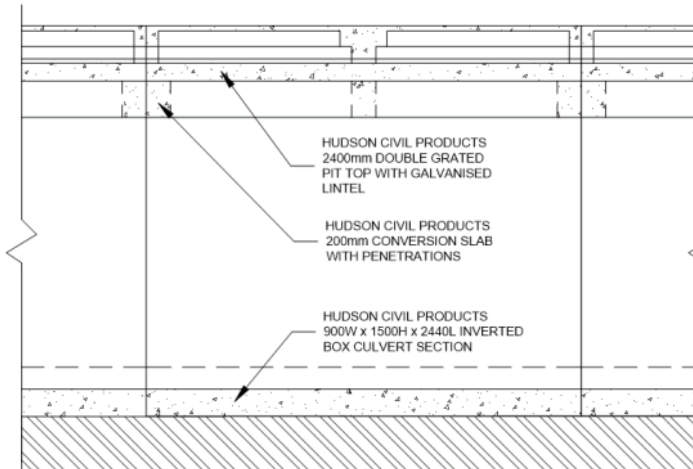
HUDSON CIVIL PRODUCTS
200mm CONVERSION SLAB
WITH PENETRATIONS

HUDSON CIVIL PRODUCTS
900W x 1500H x 2440L INVERTED
BOX CULVERT SECTION

200MM 20FCR COMPACTED TO
95% MMDD ON APPROVED
SUBGRADE

SECTION
1:25 AT A3

A
108



SECTION
1:25 AT A3

B
108



B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

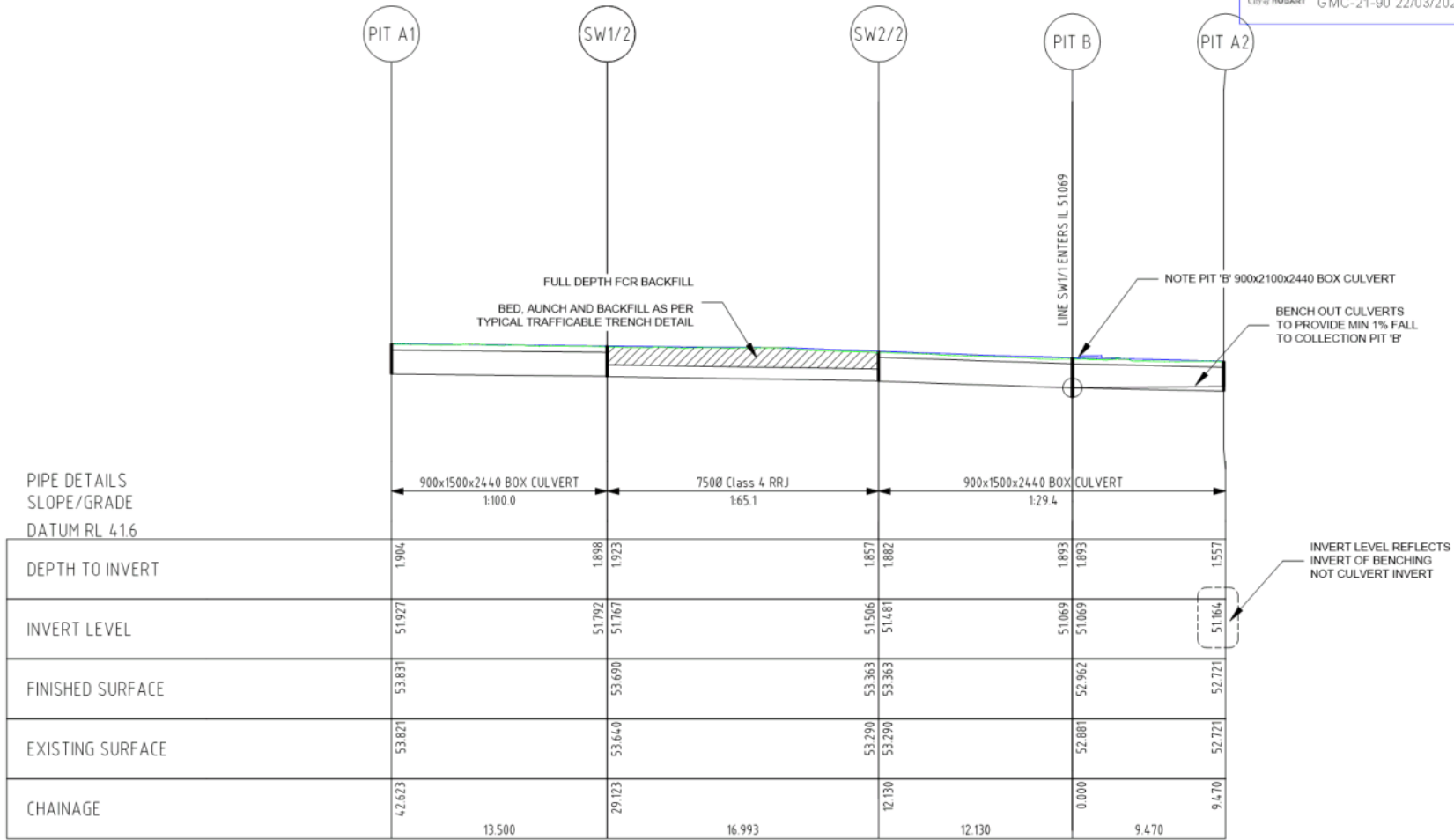
Conditions of use:
This document may only be used by SETas's client
(and any other person who SETas has agreed can
use this document) for the purpose for which it
was prepared and must not be used by any other
person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2
Title	PIT DETAILS
Drawing Number	SHBFMW-SET-107
Revision	B ISSUED 21/12/21

Approved - General
Manager Consent Only
GMC-21-90 22/03/2022



DRAINAGE LONGITUDINAL SECTION FOR LINE 2
SCALES: HORIZONTAL 1:250 VERTICAL 1:250



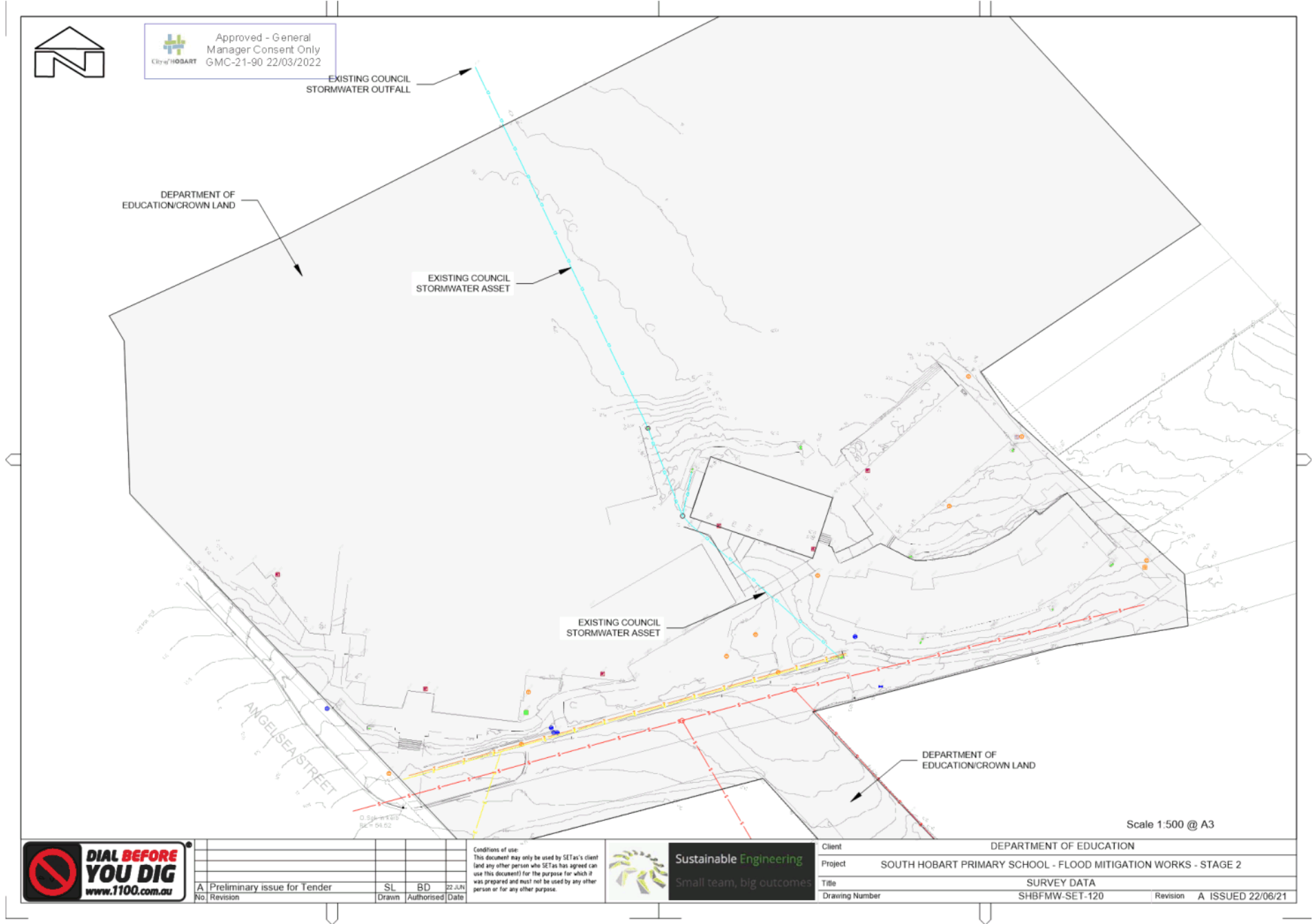
B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

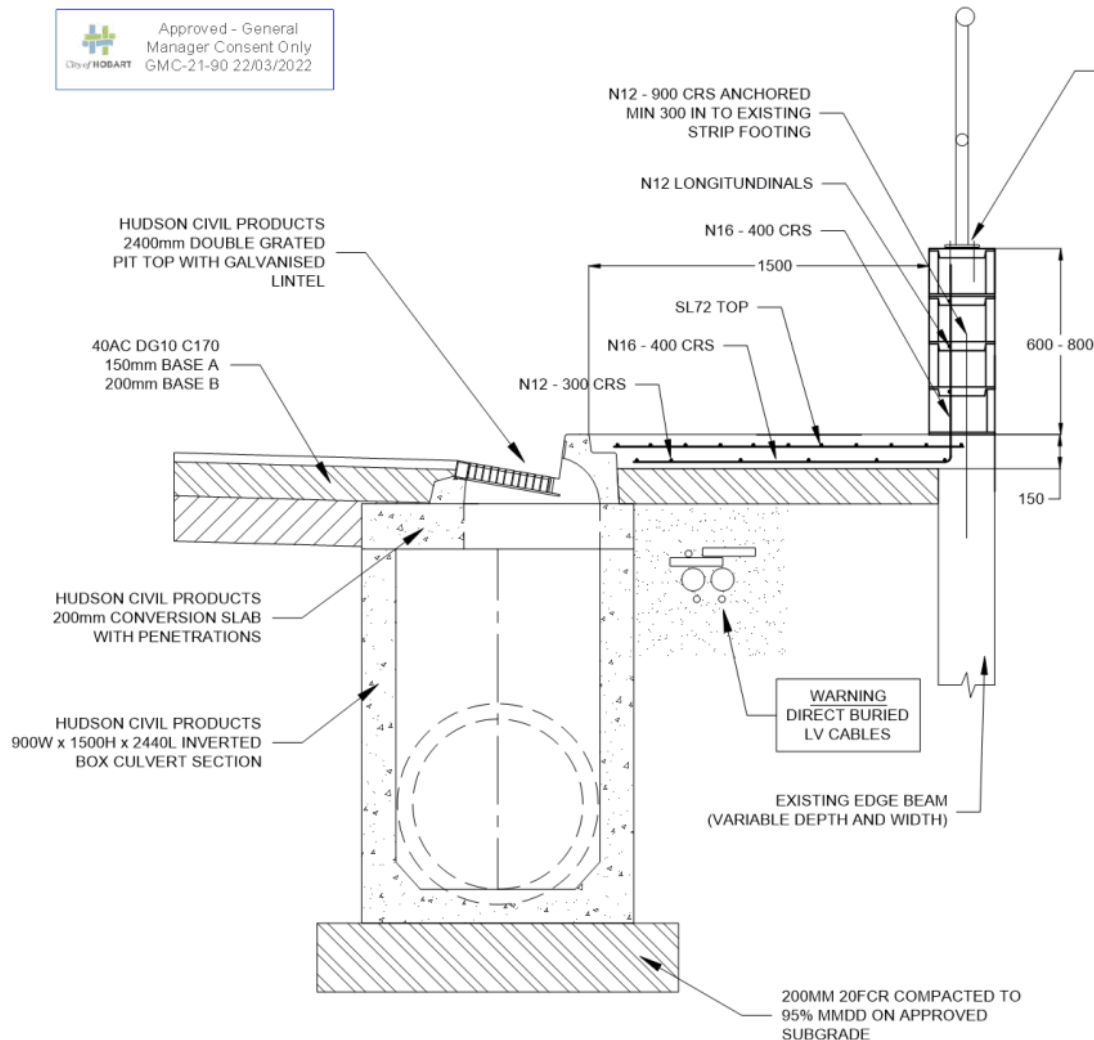


Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	STORMWATER LONG SECTION		
Drawing Number	SHBFMW-SET-113	Revision	B ISSUED 21/12/21



Approved - General
Manager Consent Only
City of Hobart GMC-21-90 22/03/2022



100x100x6 GALVANISED BASE PLATE WITH 2 off N12 COGS

EXISTING FENCE POSTS TO BE TRIMMED AND WELDED TO BASE PLATES AS PER MANUFACTURERS INSTALLATION REQUIREMENTS

MASONRY

- M1 ALL BRICKWORK SHALL COMPLY WITH AS3700. BRICKS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 30MPa UNLESS NOTED OTHERWISE.
- M2 ALL ROCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5mPa
- M3 ALL BLOCKWORK SHALL COMPLY WITH AS3700. BLOCKS TO BE AS/NZS4455 GRADE 15 U.N.O.
- M4 MORTAR SHALL COMPLY WITH AS3700 AND SHALL CONSIST OF:

MASONRY UNIT	MORTAR COMPOSITION (CEMENT : LIME : SAND)
NON LOAD BEARING	1 : 1 : 6
LOAD BEARING	1 : 0.5 : 4.5
REINFORCED	1 : 0.25 : 3

- M5 LOAD BEARING WALLS SHALL HAVE FULL BED JOINTS. JOINTS SHALL HAVE SHALLOW TOOLING AS IN "IRONED" JOINTS BUT NO RAKING OUT OF JOINTS. THE CONTRACTOR IS TO TAKE PARTICULAR CARE TO ENSURE THAT ALL PERPENDS AND BEDS ARE PROPERLY FILLED WITH MORTAR.
- M6 TIES AND NOMINAL WALL REINFORCEMENT SHALL BE AS SPECIFIED
- M7 ALL ANCHORS AND RESTRAINTS CALLED UP CAN BE PURCHASED FROM BRUNSWICK SALES OR AN APPROVED EQUIVALENT SUPPLIER. ALL ANCHORS MUST BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH AS/NZS2699 AND AS3700.
- M8 VERTICAL CONTROL JOINTS SHALL BE PROVIDED WITH A MAXIMUM SPACING OF 6m AND SHALL BE KEPT FREE OF NON-COMPRESSIBLE MATERIAL. ALL GAPS ARE TO BE BUILT TO A TOLERANCE OF (-0mm, +3mm) ALL GAPS ARE TO BE FILLED WITH COMPRESSIBLE EXPANDABLE FILLER. GREAT CARE MUST BE TAKEN TO ENSURE THAT MORTAR DROPPINGS AND OTHER HARD MATERIALS DO NOT FALL OR REMAIN IN THE CONTROL JOINTS. POLYSTYRENE TO BE PLACED IN ALL VERTICAL JOINTS DURING CONSTRUCTION OF MASONRY TO AVOID MORTAR DROPPINGS FILLING THE JOINTS.
- M9 ALL WALL FINISHES MUST BE JOINTED AT MASONRY CONTROL JOINTS TO PREVENT UNCONTROLLED CRACKS IN THE WALL FINISHES.
- M10 ALL STEELWORK PROJECTING INTO CAVITIES SHALL BE GALVANISED UNLESS NOTED OTHERWISE. REFER ARCHITECT FOR LINTEL SPECIFICATION UNLESS NOTED OTHERWISE.
- M11 CONCRETE BEAMS AND SLABS TO BE SEPARATED FROM SUPPORTING MASONRY BY 2 LAYERS OF MALTHOID OR SIMILAR ON TOP OF MORTAR LEVELING SCREED. TOP ROW OF LOAD BEARING BLOCKWORK SHALL BE SOLID BLOCKS.
- M12 UNLESS APPROVED OTHERWISE, PROVIDE CLEANOUT BLOCKS AT THE BASE OF GROUT FILLED WALLS AND AT THE BASE OF EACH GROUT POUR. ALL EXCESS AND LOOSE GROUT IS TO BE REMOVED PRIOR TO FILLING THE VOIDS.
- M13 CONCRETE TO REINFORCED MASONRY SHALL BE MINIMUM 20 MPa, 10mm MAXIMUM AGGREGATE, 230mm MAXIMUM SLUMP, IN 1200mm MAXIMUM LIFTS, CLEAN OUT OPENINGS SHALL BE PROVIDED AT BASE OF REINFORCED WALLS AT 2400mm CTS. MAXIMUM FOR REINFORCED CAVITY WALLS AND AT EACH REINFORCING BAR FOR REINFORCED BLOCKWORK WALLS. CAVITY SHALL BE CLEANED OF ALL MORTAR PRIOR TO PLACEMENT OF GROUT. GROUT SHALL BE THOROUGHLY COMPACTED BY RODDING AND TAMPING.
- M14 ALL CAVITIES BELOW GROUND LEVEL SHALL BE FILLED AS PER NOTE M13 ABOVE.

RETAINING WALL W1
1:20 AT A3
108



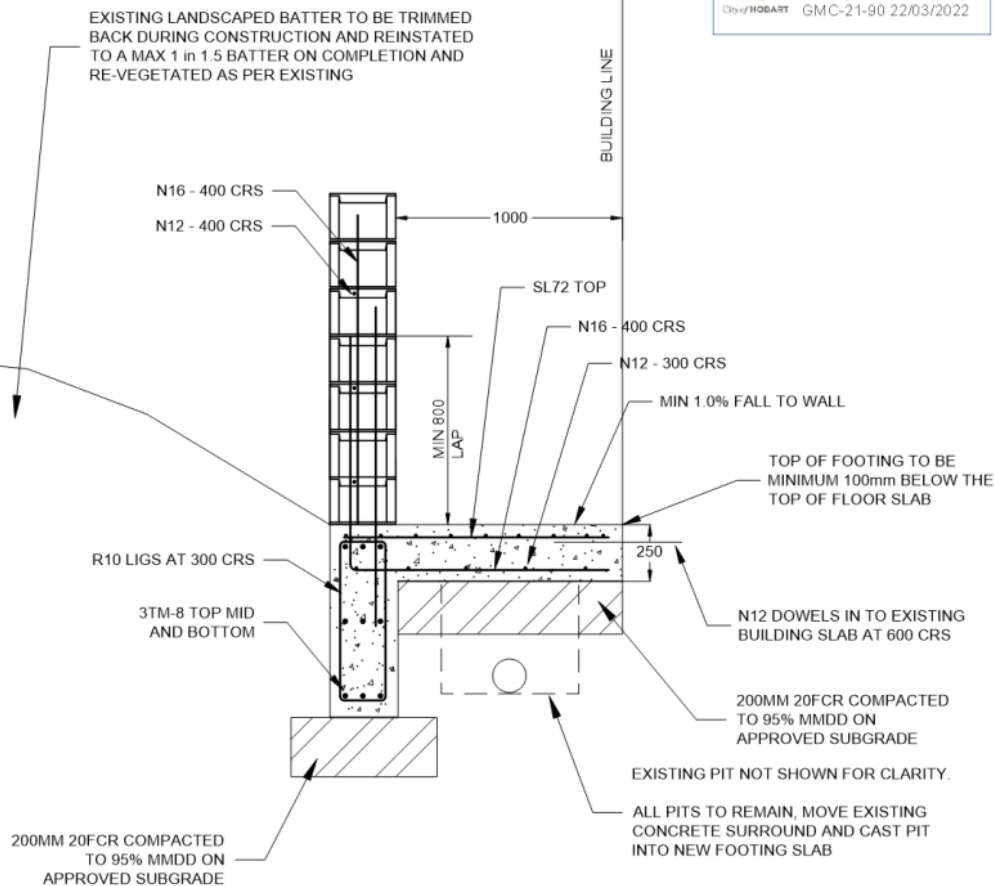
B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-108	Revision	B ISSUED 21/12/21



RETAINING WALL W2
1:20 AT A3

Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

MASONRY

- M1 ALL BRICKWORK SHALL COMPLY WITH AS3700. BRICKS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 30MPa UNLESS NOTED OTHERWISE.
- M2 ALL ROCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5mPa
- M3 ALL BLOCKWORK SHALL COMPLY WITH AS3700. BLOCKS TO BE AS/NZS4455 GRADE 15 U.N.O.
- M4 MORTAR SHALL COMPLY WITH AS3700 AND SHALL CONSIST OF:

MASONRY UNIT	MORTAR COMPOSITION (CEMENT : LIME : SAND)
NON LOAD BEARING	1 : 1 : 6
LOAD BEARING	1 : 0.5 : 4.5
REINFORCED	1 : 0.25 : 3

- M5 LOAD BEARING WALLS SHALL HAVE FULL BED JOINTS. JOINTS SHALL HAVE SHALLOW TOOLING AS IN "IRONED" JOINTS BUT NO RAKING OUT OF JOINTS. THE CONTRACTOR IS TO TAKE PARTICULAR CARE TO ENSURE THAT ALL PERPENDS AND BEDS ARE PROPERLY FILLED WITH MORTAR.
- M6 TIES AND NOMINAL WALL REINFORCEMENT SHALL BE AS SPECIFIED
- M7 ALL ANCHORS AND RESTRAINTS CALLED UP CAN BE PURCHASED FROM BRUNSWICK SALES OR AN APPROVED EQUIVALENT SUPPLIER. ALL ANCHORS MUST BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH AS/NZS2699 AND AS3700.
- M8 VERTICAL CONTROL JOINTS SHALL BE PROVIDED WITH A MAXIMUM SPACING OF 6m AND SHALL BE KEPT FREE OF NON-COMPRESSIBLE MATERIAL. ALL GAPS ARE TO BE BUILT TO A TOLERANCE OF (-0mm, +3mm) ALL GAPS ARE TO BE FILLED WITH COMPRESSIBLE EXPANDABLE FILLER. GREAT CARE MUST BE TAKEN TO ENSURE THAT MORTAR DROPPINGS AND OTHER HARD MATERIALS DO NOT FALL OR REMAIN IN THE CONTROL JOINTS. POLYSTYRENE TO BE PLACED IN ALL VERTICAL JOINTS DURING CONSTRUCTION OF MASONRY TO AVOID MORTAR DROPPINGS FILLING THE JOINTS.
- M9 ALL WALL FINISHES MUST BE JOINTED AT MASONRY CONTROL JOINTS TO PREVENT UNCONTROLLED CRACKS IN THE WALL FINISHES.
- M10 ALL STEELWORK PROJECTING INTO CAVITIES SHALL BE GALVANISED UNLESS NOTED OTHERWISE. REFER ARCHITECT FOR LINTEL SPECIFICATION UNLESS NOTED OTHERWISE.
- M11 CONCRETE BEAMS AND SLABS TO BE SEPARATED FROM SUPPORTING MASONRY BY 2 LAYERS OF MALTHOID OR SIMILAR ON TOP OF MORTAR LEVELING SCREED. TOP ROW OF LOAD BEARING BLOCKWORK SHALL BE SOLID BLOCKS.
- M12 UNLESS APPROVED OTHERWISE, PROVIDE CLEANOUT BLOCKS AT THE BASE OF GROUT FILLED WALLS AND AT THE BASE OF EACH GROUT POUR. ALL EXCESS AND LOOSE GROUT IS TO BE REMOVED PRIOR TO FILLING THE VOIDS.
- M13 CONCRETE TO REINFORCED MASONRY SHALL BE MINIMUM 20 MPa, 10mm MAXIMUM AGGREGATE, 230mm MAXIMUM SLUMP, IN 1200mm MAXIMUM LIFTS, CLEAN OUT OPENINGS SHALL BE PROVIDED AT BASE OF REINFORCED WALLS AT 2400mm CTS. MAXIMUM FOR REINFORCED CAVITY WALLS AND AT EACH REINFORCING BAR FOR REINFORCED BLOCKWORK WALLS. CAVITY SHALL BE CLEANED OF ALL MORTAR PRIOR TO PLACEMENT OF GROUT. GROUT SHALL BE THOROUGHLY COMPACTED BY RODDING AND TAMPING.
- M14 ALL CAVITIES BELOW GROUND LEVEL SHALL BE FILLED AS PER NOTE M13 ABOVE.



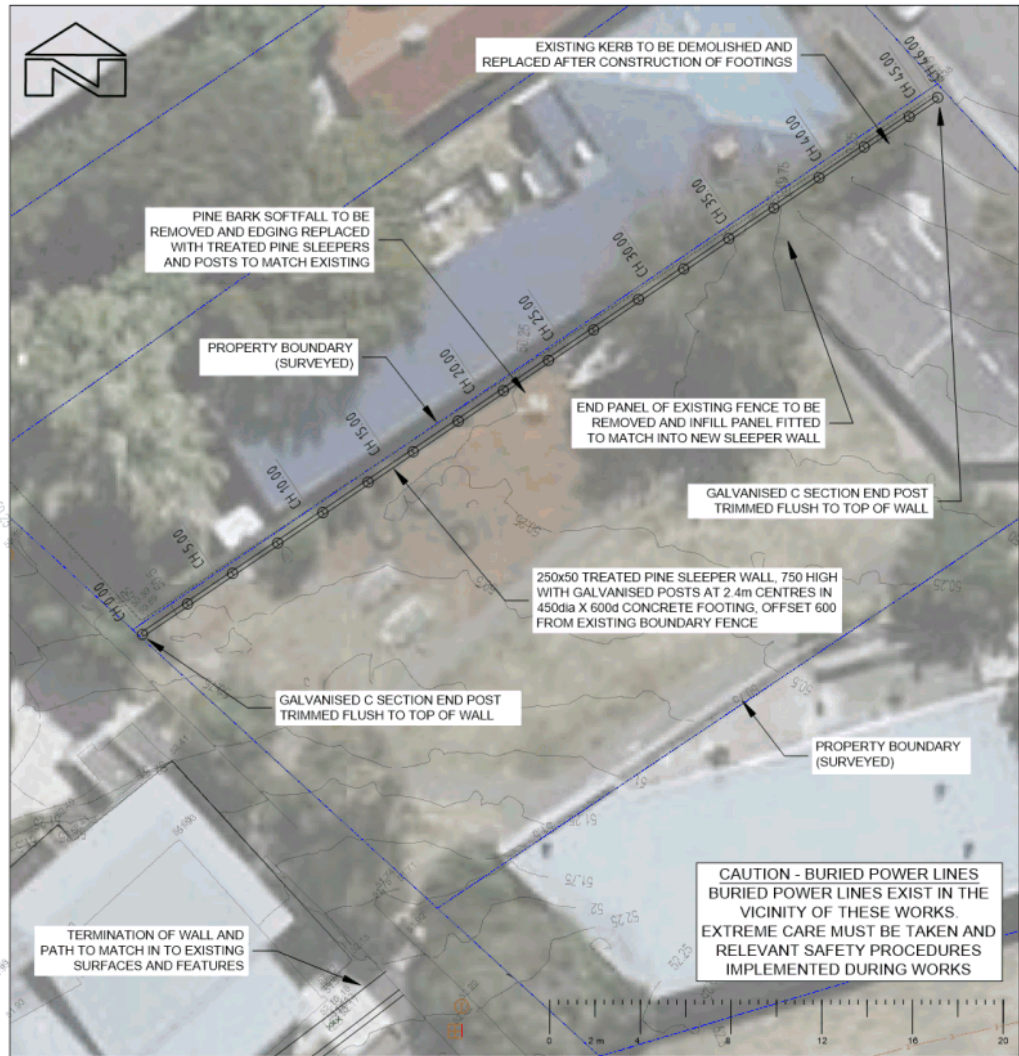
B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SET's client (and any other person who SET has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL B DETAILS		
Drawing Number	SHBFMW-SET-109	Revision	B ISSUED 21/12/21



GENERAL ARRANGEMENT
Scale 1:200 @ A3

Approved - General
Manager Consent Only
GMC-21-90 22/03/2022



POST END FINISH
NTS



FENCE PANEL ARRANGEMENT
NTS



B Issue for Tender		SL	BD	21 DEC
A Preliminary issue for Tender		SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

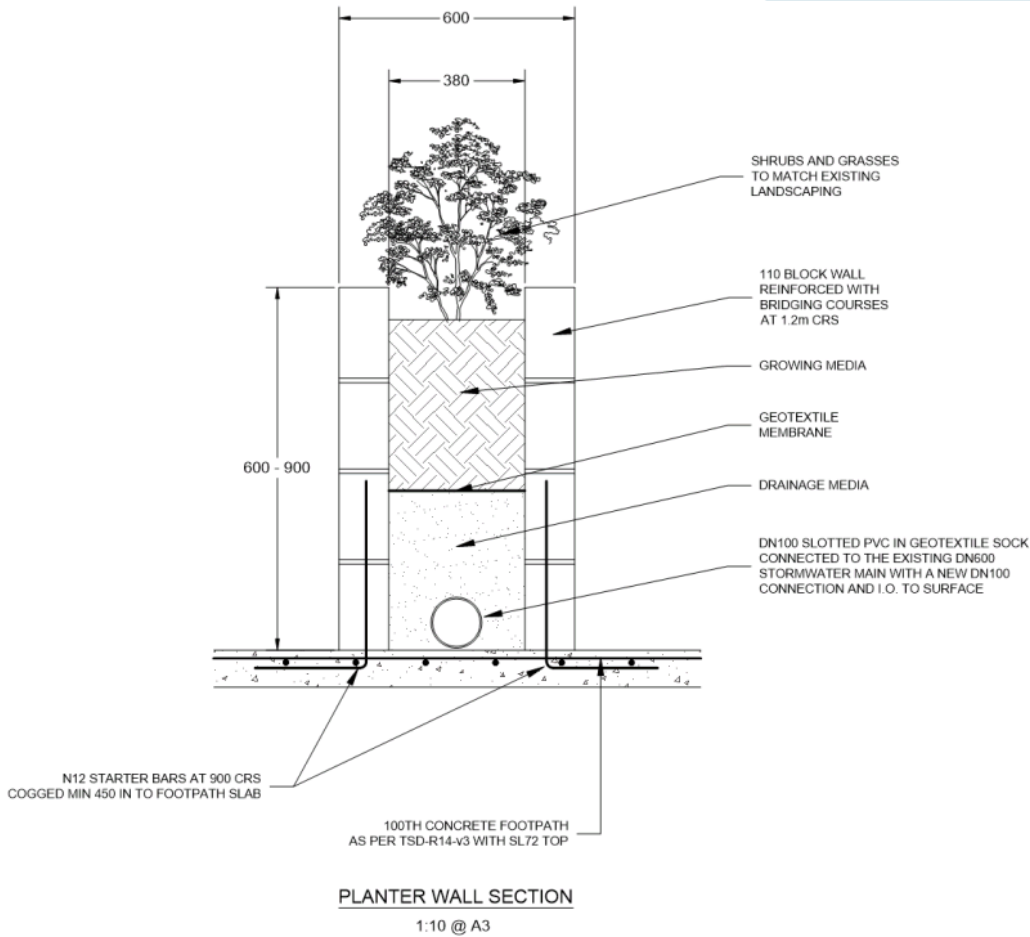
Conditions of use:
This document may only be used by SETac's client (and any other person who SETac has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	GENERAL ARRANGEMENT 3 of 3		
Drawing Number	SHBFMW-SET-106	Revision	B ISSUED 21/12/21

Approved - General
Manager Consent Only
City of HOBART GMC-21-90 22/03/2022



MASONRY

- M1 ALL BRICKWORK SHALL COMPLY WITH AS3700. BRICKS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 30MPa UNLESS NOTED OTHERWISE.
- M2 ALL ROCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5mPa
- M3 ALL BLOCKWORK SHALL COMPLY WITH AS3700. BLOCKS TO BE AS/NZS4455 GRADE 15 U.N.O.
- M4 MORTAR SHALL COMPLY WITH AS3700 AND SHALL CONSIST OF:

MASONRY UNIT	MORTAR COMPOSITION (CEMENT : LIME : SAND)
NON LOAD BEARING	1 : 1 : 6
LOAD BEARING	1 : 0.5 : 4.5
REINFORCED	1 : 0.25 : 3

- M5 LOAD BEARING WALLS SHALL HAVE FULL BED JOINTS. JOINTS SHALL HAVE SHALLOW TOOLING AS IN "IRONED" JOINTS BUT NO RAKING OUT OF JOINTS. THE CONTRACTOR IS TO TAKE PARTICULAR CARE TO ENSURE THAT ALL PERPENDS AND BEDS ARE PROPERLY FILLED WITH MORTAR.
- M6 TIES AND NOMINAL WALL REINFORCEMENT SHALL BE AS SPECIFIED
- M7 ALL ANCHORS AND RESTRAINTS CALLED UP CAN BE PURCHASED FROM BRUNSWICK SALES OR AN APPROVED EQUIVALENT SUPPLIER. ALL ANCHORS MUST BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH AS/NZS2699 AND AS3700.
- M8 VERTICAL CONTROL JOINTS SHALL BE PROVIDED WITH A MAXIMUM SPACING OF 6m AND SHALL BE KEPT FREE OF NON-COMPRESSIBLE MATERIAL. ALL GAPS ARE TO BE BUILT TO A TOLERANCE OF (-0mm, +3mm) ALL GAPS ARE TO BE FILLED WITH COMPRESSIBLE EXPANDABLE FILLER. GREAT CARE MUST BE TAKEN TO ENSURE THAT MORTAR DROPPINGS AND OTHER HARD MATERIALS DO NOT FALL OR REMAIN IN THE CONTROL JOINTS. POLYSTYRENE TO BE PLACED IN ALL VERTICAL JOINTS DURING CONSTRUCTION OF MASONRY TO AVOID MORTAR DROPPINGS FILLING THE JOINTS.
- M9 ALL WALL FINISHES MUST BE JOINTED AT MASONRY CONTROL JOINTS TO PREVENT UNCONTROLLED CRACKS IN THE WALL FINISHES.
- M10 ALL STEELWORK PROJECTING INTO CAVITIES SHALL BE GALVANISED UNLESS NOTED OTHERWISE. REFER ARCHITECT FOR LINTEL SPECIFICATION UNLESS NOTED OTHERWISE.
- M11 CONCRETE BEAMS AND SLABS TO BE SEPARATED FROM SUPPORTING MASONRY BY 2 LAYERS OF MALTHOID OR SIMILAR ON TOP OF MORTAR LEVELING SCREED. TOP ROW OF LOAD BEARING BLOCKWORK SHALL BE SOLID BLOCKS.
- M12 UNLESS APPROVED OTHERWISE, PROVIDE CLEANOUT BLOCKS AT THE BASE OF GROUT FILLED WALLS AND AT THE BASE OF EACH GROUT POUR. ALL EXCESS AND LOOSE GROUT IS TO BE REMOVED PRIOR TO FILLING THE VOIDS.
- M13 CONCRETE TO REINFORCED MASONRY SHALL BE MINIMUM 20 MPa, 10mm MAXIMUM AGGREGATE, 230mm MAXIMUM SLUMP, IN 1200mm MAXIMUM LIFTS, CLEAN OUT OPENINGS SHALL BE PROVIDED AT BASE OF REINFORCED WALLS AT 2400mm CTS. MAXIMUM FOR REINFORCED CAVITY WALLS AND AT EACH REINFORCING BAR FOR REINFORCED BLOCKWORK WALLS. CAVITY SHALL BE CLEANED OF ALL MORTAR PRIOR TO PLACEMENT OF GROUT. GROUT SHALL BE THOROUGHLY COMPACTED BY RODDING AND TAMPING.
- M14 ALL CAVITIES BELOW GROUND LEVEL SHALL BE FILLED AS PER NOTE M13 ABOVE.



B Issue for Tender	SL	BD	21 DEC
A Preliminary issue for Tender	SL	BD	22 JUN
No Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-110	Revision	B ISSUED 21/12/21

SAFETY IN DESIGN

1. THE DESIGN OF WORKS SHOWN ON THESE DRAWINGS ACCOUNTS FOR THE SAFETY OF USERS BY COMPLIANCE WITH DESIGN CODES INCLUDING:

- Austroads Guides to Road Design
- IPWEA Standard Drawings as issued by LGAT 30/11/2013

2. THE SAFETY OF THE DESIGN IS CONDITIONAL UPON THE WORKS BEING COMPLETED IN THEIR ENTIRETY BY COMPETENT CONTRACTORS AND DOES NOT NECESSARILY ACCOUNT FOR RISKS THAT MAY OCCUR DURING THE CONSTRUCTION, COMMISSIONING, OPERATION, MAINTENANCE OR DEMOLITION PHASES OF THE WORKS.

3. DURING THE CONSTRUCTION, COMMISSIONING, OPERATION, MAINTENANCE AND DEMOLITION PHASES OF THE WORKS THE CONTRACTORS AND OWNERS ARE RESPONSIBLE FOR IMPLEMENTING A SAFE WORKPLACE IN ACCORDANCE WITH THE (TAS) WORK HEALTH AND SAFETY ACT 2012 AND THE REGULATIONS THERETO (THE ACT) AND SHALL HAVE IN PLACE A WORKPLACE HEALTH & SAFETY POLICY AND SHALL UNDERTAKE A CONTRACT RISK REVIEW PRIOR TO UNDERTAKING THE CONTRACT.

4. THE INCLUSION OR OMISSION OF ANY ITEM FROM THE DESIGN OR DRAWINGS OR SPECIFICATION OR SCHEDULE OR CONTRACT DOES NOT DIMINISH THE RESPONSIBILITY OF CONTRACTORS, OWNERS, USERS, OPERATORS, MAINTENANCE AND DEMOLITION CONTRACTORS TO ENSURE SAFE WORK PRACTICES ARE EMPLOYED IN ACCORDANCE WITH THE ACT DURING ANY PHASE OF THE LIFE OF THE WORKS.

5. THE FOLLOWING ITEMS ARE LISTED AS RELEVANT TO ENSURING THAT SAFE WORK PRACTICES ARE EMPLOYED ON SITE DURING THE CONSTRUCTION PHASE, BUT IS NOT INTENDED TO BE A COMPREHENSIVE LIST OR TO REPLACE THE CONTRACTOR'S OWN PROJECT SPECIFIC ASSESSMENT AND CONTROL OF SITE RISKS AS REQUIRED BY THE ACT:

- Prepare Workplace Health & Safety Plan for the site
- Undertake site service locations and identify O/H electricity
- Provide separation of work site and access, storage and stockpiles
- Provide barriers, warning notifications to prevent the unauthorized access to the site by the public
- Prevent the impact of any work procedures including the use of directional lasers on workers or the public
- Provide traffic control in compliance with DEPT OF STATE GROWTH "Traffic Control at Worksites" Code of Practice
- Provide safety barriers at excavations and trenches per the Act
- Assess the requirement for confined space procedures

6. PRIOR TO HANDOVER ENSURE THAT SAFETY SIGNAGE IS IN PLACE ON ANY ROAD TERMINATIONS AND ON ANY UNCOMPLETED TRENCHING WORKS

7. ATTEND TO ANY EMERGENCY WORKS THAT MAY BE REQUIRED DURING THE DEFECTS LIABILITY (MAINTENANCE) PERIOD TO ENSURE THE CONTINUING SAFETY OF THE USERS OF THE WORKS AND ATTEND TO THE RECTIFICATION OF ANY DEFECTS

8. AFTER THE END OF THE DEFECTS LIABILITY PERIOD THE LOCAL GOVERNMENT AREA COUNCIL, TASWATER, TASNETWORKS, TELSTRA/NBN, NBNCO TO MAINTAIN THE WORKS IN ACCORDANCE WITH THE LOCAL GOVERNMENT ACT, THE STATE TRAFFIC ACT AND ACTS AND SAFETY PROCEDURES RELATING TO TASWATER, TASNETWORKS, TELSTRA/NBN & NBNCO.

9. DEMOLITION, IF REQUIRED, TO BE UNDERTAKEN IN ACCORDANCE WITH LOCAL GOVERNMENT PERMITS AND SERVICE AUTHORITY CODES OF PRACTICE.

GENERAL NOTES

1. READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS AND SPECIFICATIONS, AND WITH SUCH OTHER WRITTEN INSTRUCTIONS ISSUED. REFER TO CONCRETE DRAWINGS FOR SETTING OUT AND DETAIL DIMENSIONS. IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS, THEN NOTES, THEN SPECIFICATION.

2. CARRY OUT WORK IN A SAFE MANNER IN ACCORDANCE WITH APPLICABLE LEGISLATION, STATUTORY REGULATIONS, BY LAWS OR RULES. CONTRACTOR IS RESPONSIBLE FOR OCCUPATIONAL HEALTH AND SAFETY OF SITE PERSONNEL AND GENERAL PUBLIC IN ACCORDANCE WITH ALL CURRENT WORK HEALTH AND SAFETY ACTS, LEGISLATIVE REQUIREMENTS, ASSOCIATED REGULATIONS AND CODES OF PRACTICE, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.

3. REFER DISCREPANCIES TO SUPERINTENDENT BEFORE PROCEEDING WITH WORK.

4. SUBMIT DETAILS OF PROPOSED CHANGES TO SCOPE, WORK METHODS OR MATERIALS etc. FOR APPROVAL BEFORE PROCEEDING. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT.

5. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE, BUT INDICATES REQUIRED PROPERTIES OF ITEM. SIMILAR ALTERNATIVES HAVING REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.

6. OBTAIN NECESSARY PERMITS AND APPROVALS FROM RELEVANT AUTHORITIES BEFORE COMMENCING WORK ON SITE. NOTIFY RELEVANT SERVICE AUTHORITIES BEFORE COMMENCING WORK ON SITE.

7. GIVE TWO WORKING DAYS' (48 HOURS) NOTICE SO THAT INSPECTION MAY BE MADE OF CRITICAL STAGES OF WORK.

8. INSPECTIONS AND REVIEWS UNDERTAKEN BY SUPERINTENDENT OR OTHERS DO NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.

9. DO NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWINGS.

10. DIMENSIONS ARE IN MILLIMETRES, LEVELS ARE IN METRES UNO, CHAINAGES ARE IN METRES UNO.

11. DATUM FOR LEVELS IS AHD (AUSTRALIAN HEIGHT DATUM).

12. HAVE SURVEY AND SETTING OUT UNDERTAKEN BY A REGISTERED SURVEYOR.

13. VERIFY ON SITE SETTING OUT DIMENSIONS AND EXISTING MEMBER SIZES SHOWN ON CONCRETE DRAWINGS BEFORE SHOP DRAWINGS, CONSTRUCTION AND FABRICATION IS COMMENCED. EXISTING STRUCTURES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY.

14. USE STANDARD BOLT PATTERNS etc. THROUGHOUT THE WORKS TO AVOID CONFUSION OR AMBIGUITY.

15. TAKE CARE OF HAZARDS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS AND WORKMANSHIP UNDERTAKE EXPLORATION TO ESTABLISH LOCATION OF AND PROTECT EXISTING SERVICES AT SITE. SERVICES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE, AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF INGROUND SERVICES.

16. DISPOSE OF SURPLUS MATERIAL OFF SITE IN ACCORDANCE WITH LOCAL AUTHORITY WASTE REGULATIONS.

17. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS.

18. WORKMANSHIP AND MATERIALS TO COMPLY WITH REQUIREMENTS OF AUSTRALIAN STANDARDS, NATIONAL CONSTRUCTION CODE (NCC) AND BY LAWS AND ORDINANCES OF RELEVANT BUILDING AUTHORITIES. ALL STANDARDS REFERRED TO ARE THOSE CURRENT (AS AMENDED) AT COMMENCEMENT OF CONTRACT.

19. OBTAIN REQUIREMENTS FOR SERVICES, ADJOINING ELEMENTS etc TO BE EMBEDDED IN, FIXED TO OR SUPPORTED ON WORK AND PROVIDE FOR REQUIRED FIXINGS. PROVIDE FOR TEMPORARY SUPPORT OF ADJOINING ELEMENTS DURING CONSTRUCTION. DRAWINGS DO NOT SHOW DETAILS OF ALL FIXTURES, INSERTS, SLEEVES, RECESSES OR OPENINGS etc REQUIRED.

20. PROTECT EXISTING STRUCTURES FROM DAMAGE OR CRACKING. MAKE GOOD ANY DAMAGE TO EXISTING ELEMENTS AT COMPLETION OF WORKS.

21. WHERE NEW WORK ABUTS EXISTING, PROVIDE SMOOTH TRANSITION FREE OF ABRUPT CHANGES.

22. NEATLY CUT BACK CONCRETE TO BE REMOVED TO A CLEAN TRUE FACE USING A DIAMOND SAW.

23. HAVE TESTING PERFORMED BY AN INDEPENDENT NATA (NATIONAL ASSOCIATION OF TESTING AUTHORITIES) ACCREDITED AUTHORITY, AND PROVIDE TEST REPORTS TO SUPERINTENDENT.

24. SUPPLY RELEVANT NOTES, DRAWINGS AND SPECIFICATIONS etc TO SUB-CONTRACTORS.

25. BUILD, FABRICATE AND PROCURE ONLY FROM DRAWINGS 'ISSUED FOR CONSTRUCTION'.

26. KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS) AND SITE INSTRUCTIONS. TEMPORARY WORKS

27. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE RESPONSIBILITY OF THE CONTRACTOR.

28. PROVIDE SCAFFOLDING, BARRIERS, FALL RESTRAINT, HAND-MID RAILS AND TOE BOARDS FOR WORK AT HEIGHT. ERECT ACCESS STAIRS AT EARLIEST OPPORTUNITY TO REDUCE OPEN SHAFT HAZARDS AND FACILITATE ACCESS. MAINTAIN SAFETY MESH AND BARRIERS TO ALL OPENINGS AND ELEVATED EDGES.

29. MAINTAIN STRUCTURES IN A STABLE CONDITION DURING CONSTRUCTION AND PROVIDE TEMPORARY BRACING AND/OR SUPPORT AS REQUIRED.

30. DO NOT PLACE OR STORE BUILDING MATERIALS ON, SUPPORT FORMWORK OR PROP FROM STRUCTURAL MEMBERS WITHOUT SUPERINTENDENT'S APPROVAL. PROVIDE CALCULATIONS BY SUITABLY QUALIFIED STRUCTURAL ENGINEER TO PROVE ADEQUACY OF STRUCTURE FOR PROPOSED CONSTRUCTION SEQUENCE, METHODS AND LOADS INCLUDING PROPPING, CRANE LIFTS etc.

INSPECTIONS**GENERAL**

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PROGRAMME TO THE SATISFACTION OF THE SUPERVISING ENGINEER AND SUBJECT TO PERIODICAL INSPECTION AND WRITTEN STAGED APPROVAL. ADDITIONAL INSPECTIONS CAN BE REQUESTED AT 24 HOURS NOTICE.

EXTERNAL

ALL WORKS IN ROAD RESERVATIONS SHALL REQUIRE WRITTEN APPROVAL OF THE COUNCIL'S SUPERINTENDENT AND ARE SUBJECT TO SEPARATE INSPECTIONS. SEVEN DAYS NOTICE TO BE GIVEN OF WORK COMMENCING. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY ROAD OPENING PERMITS AND AUTHORITY APPROVALS PRIOR TO COMMENCING WORKS.

PAVEMENTS**SAWCUTTING**

ALL EXISTING PAVEMENT ADJACENT TO PROPOSED KERB OR PROPOSED JOINTS SHALL BE SAWCUT IN A NEAT LINE TO THE SATISFACTION OF THE SUPERVISING ENGINEER, AND TO HAVE 300mm OVERLAP. REFER TO STANDARD DETAILS.

TRENCHING

ALL TRENCHING WORKS IN EXISTING PAVEMENTS SHALL HAVE SAWCUT EDGES AND NEW PAVEMENT REINSTATED TO NEATLY MATCH EXISTING LEVELS.

REMAINING

EXISTING PAVEMENT AREAS THAT REMAIN, WHERE CRACKING IS EVIDENT SHALL BE SEALED WITH A PROPRIETARY BITUMINOUS PRODUCT TO THE MANUFACTURERS' SPECIFICATIONS.

CONCRETE JOINTING

SAWCUT OR TOOLED CONSTRUCTION JOINTS SHALL BE PROVIDED AT MAX. 2.0m CENTRES TO ALL FOOTPATHS OR PEDESTRIAN PAVING UNLESS NOTED OTHERWISE. A 19mm EXPANSION JOINT SHALL BE PROVIDED WHENEVER RIGID PAVEMENTS ABUT FIXED STRUCTURES OR AT MAX. 15m CENTRES TO FOOTPATHS.

DOWELLED SAWCUT AND CONSTRUCTION JOINTS SHALL BE PROVIDED TO ALL VEHICULAR PAVEMENTS AS DETAILED ON THE DRAWINGS, TYPICALLY NOT GREATER THAN 6.0m CENTRES AND JOINT SPACING SHALL ENSURE SLAB LENGTH (L) ≥ 1.5 SLAB WIDTH.

PAVEMENT TESTING

EACH ROAD PAVEMENT LAYER SHALL BE TEST FOR COMPACTION BY A NATA REGISTERED GEOTECHNICAL ENGINEER IN ACCORDANCE WITH AS1289 AND SHALL MEET THE FOLLOWING STANDARDS:

ASPHALT LAYERS UP TO 50mm THICKNESS - 94% CHARACTERISTIC VALUE OF DENSITY RATIO

GREATER THAN 50mm THICKNESS - 96% CHARACTERISTIC VALUE OF DENSITY RATIO

BASE LAYER 98% MODIFIED DRY DENSITY

SUB BASE LAYER 98% MODIFIED DRY DENSITY

SUB GRADE 98% STANDARD DRY DENSITY

COMPACTION TEST RESULT SHALL BE FORWARDED TO THE SUPERINTENDENT AND COUNCIL'S SUPERVISING ENGINEER FOR APPROVAL PRIOR TO THE PLACEMENT OF SUBSEQUENT PAVEMENT LAYERS. TESTING RATES SHALL BE:

ARTERIAL ROADS 6 TESTS/SLOT

OTHER 3 TESTS/SLOT

A LOT SHALL BE THE SMALLER OF 5000m² OR ONE DAYS PRODUCTION.

WHERE SO REQUIRED, THE CONTRACTOR SHALL PROVIDE ADDITIONAL TEST TO THE SUPERINTENDENT'S SATISFACTION.

KERBS**PROPOSED**

WHERE REQUIRED MATCH ALL NEW KERBS TO EXISTING LEVEL NEATLY, ENSURING MINIMUM 1 IN 250 GRADE, SAW CUTTING AND REINSTATING PAVEMENT IN FRONT OF KERB TO FALL TO NEW KERB LEVEL.



Approved - General
 Manager Consent Only
 GMC-21-90 22/03/2022

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	NOTES AND TRENCH DETAILS		
Drawing Number	SHBFMW-SET-103	Revision	B ISSUED 21/12/21



B Issue for Tender		SL	BD	21 DEC
A Preliminary issue for Tender		SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
 This document may only be used by SET's client (and any other person who SET has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
 Small team, big outcomes

1. GENERAL ELECTRONIC PLANS	ELECTRONIC PLANS MAY BE PROVIDED TO ASSIST THE CONTRACTOR BUT DO NOT FORM PART OF THE CONTRACT. IN THE CASE OF DISCREPANCY BETWEEN THE ELECTRONIC INFORMATION AND THE HARD COPY PLANS THE HARD COPY PLANS TAKE PRECEDENT.
2. SURVEY SURVEY DATUM	THESE PLANS ARE BASED UPON THE EXISTING CONDITIONS SURVEY PREPARED BY COVA. LEVELS SHOWN ARE TO A.H.D.
LIMITATIONS	LEVELS & GRADES ARE INDICATIVE ONLY. THE CONTRACTOR IS TO DISCUSS ANY MAJOR DISCREPANCIES WITH SITE SUPERINTENDENT PRIOR TO CONSTRUCTION.
SET OUT	THE CONTRACTOR SHALL SET OUT THE WORKS FROM THE NOMINATED DESIGN LINES, SURVEY BENCHMARKS AND CONTROL POINTS SHOWN ON THE PLANS AND TO THE SPECIFIED DETAILS. UPON REQUEST AN ELECTRONIC BASE PLAN OF THE CIVIL DRAWING CAN BE SUPPLIED. WHERE COMPUTER MODELS ARE UTILISED FOR SET OUT IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT THE PROPOSED VERTICAL AND HORIZONTAL ALIGNMENT ARE CONSISTENT WITH THE INFORMATION SHOWN ON THE DRAWINGS. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT PRIOR TO CONSTRUCTION.
REFERENCES PROTECTION	THE CONTRACTOR SHALL MAINTAIN AND PROTECT THE PEGS AND SURVEY MARKS FOR THE DURATION OF THE WORKS.
AS-CONSTRUCTED SURVEY	UPON COMPLETION OF THE CIVIL WORKS THE CONTRACTOR SHALL PROVIDE CERTIFIED AS-CONSTRUCTED PLANS OF THE WORKS AND AN AS-CONSTRUCTED SURVEY OF ALL HOBART CITY COUNCIL DRAINAGE WORKS.
3. EARTHWORKS GENERAL	EARTHWORKS SHALL BE CARRIED OUT TO THE FINISHED SURFACE LEVELS SHOWN ON THE PLANS AND CROSS SECTIONS.
GEOTECHNICAL DATA	THE DESIGN OF THE REPAIRS HAS BEEN BASED ON ASSUMED STRATIGRAPHY AND GEOTECHNICAL PARAMETERS BASED ON LOCAL GEOLOGY AND NON-INTRUSIVE INSPECTIONS AND OBSERVATIONS. THE ASSUMED STRATIGRAPHY SHALL BE CONFIRMED BY A SUITABLY EXPERIENCED AND QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. SHOULD THE STRATIGRAPHY ENCOUNTERED ON-SITE DIFFER SIGNIFICANTLY FROM THE ASSUMED STRATIGRAPHY, MODIFICATION TO THE DESIGN MAY BE REQUIRED AND THE SUPERINTENDENT SHOULD BE NOTIFIED. NO MODIFICATIONS TO THE DESIGN SHOULD BE MADE WITHOUT THE APPROVAL OF THE SUPERINTENDENT.
SUBGRADE CONDITIONS	EXISTING SUBGRADES ARE VARIABLE AND MAY INCLUDE FILL, CLAYS AND SANDY/SILTY MATERIAL AND MAY BE OF VARIABLE IN-SITU STIFFNESS OR DENSITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SITE GRADING AND DRAINAGE AND TO PROTECT AND MAINTAIN SUBGRADES IN A SUITABLE CONDITION. DRAINAGE AND GRADING SHOULD DIRECT WATER AWAY FROM EXPOSED SUBGRADES AND ALLOW THE SUBGRADE TO SHED WATER. SHOULD SUBGRADES BECOME SATURATED, THEY SHOULD BE REMEDIATED BY EITHER: -ALLOWING SOFTENED AREAS TO DRY BEFORE RIPPING AND REWORKING SUBGRADE AND THEN CONDUCTING A PROOF ROLL ON THE SUBGRADE TO CONFIRM ALL SOFTENED AREAS HAVE BEEN REMEDIATED -RIPPING OUT SOFTENED MATERIALS AND REPLACING WITH WELL GRADED CRUSHED ROCK (EQUIVALENT TO VICROADS TYPE A FILL) COMPACTED IN LAYERS.
COMPACTION TO AS1289	THE CONTRACTOR SHALL OBTAIN 95% STANDARD MINIMUM DRY DENSITY COMPACTION ON ALL FINISHED SUBGRADES AND FORMATIONS.
FILLING	FILL IN LANDSCAPING ZONES: EXISTING EMBANKMENT TO BE EXCAVATED AND REPLACED WITH APPROVED MATERIAL EITHER IMPORTED OR SITE WON FREE DRAINING CRUSHED ROCK FILL. REPLACEMENT FILL MUST BE WELL GRADED, FREE DRAINING AND FREE OF SIGNIFICANT FINES CONTENT, AND FREE OF ORGANICS, BUILDING RUBBLE AND OTHER DELETERIOUS MATERIAL AND PLACED AND COMPACTED IN 150MM LAYERS TO AT LEAST 95% SDD.
REINSTATEMENT	THE CONTRACTOR SHALL REGRADE, SHAPE, TOPSOIL AND GRASS ALL ADJACENT EXISTING GRASSED AREAS THAT ARE DISTURBED OR ALTERED AS A CONSEQUENCE OF THE PROPOSED WORKS INCLUDING ACCESS TRACKS.
4. LANDSCAPING LANDSCAPE AREAS	FOR DETAILS OF LANDSCAPE AREAS & FINISH, REFER TO LANDSCAPING PLANS.
5. SITE CLEARANCE DEMOLITION	ALL EXISTING REDUNDANT CONCRETE, PAVEMENT, SOIL, RUBBISH AND CONSTRUCTION DEBRIS SHALL BE TAKEN UP AND REMOVED FROM SITE.
CLEAN UP	PRIOR TO COMPLETION, THE CONTRACTOR SHALL ENSURE THE SITE OF WORKS IS TIDIED AND OBTAIN A CLEARANCE FROM THE SUPERVISING ENGINEER OR THE PROJECT MANAGER.

6. DRAINAGE PIPES	DRAINAGE PIPES ABOVE 2250 TO BE MINIMUM OF CLASS SN8 uPVC SWJ UNLESS OTHERWISE SPECIFIED. COMPACTED CLASS 2 FCR BACKFILL SHALL BE INSTALLED TO PIPES UNDER ROAD PAVEMENTS AND BUILDING SLABS. TRENCHES IN LANDSCAPE AREAS CAN BE BACKFILLED WITH SELECTED CLAY FILL.																					
7. TRAFFIC MANAGEMENT GENERAL	TRAFFIC MANAGEMENT SHALL BE ARRANGED BY THE CONTRACTOR FOR THE DURATION OF THE WORKS IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742.3-2002 FOR CONSTRUCTION TRAFFIC MANAGEMENT AND TO THE SATISFACTION OF ALL PARTIES, INCLUDING THE PROVISION OF ALL NECESSARY SIGNAGE, LIGHTING AND BARRICADING. TRAFFIC FLOWS IN ALL ABUTTING ROADWAYS AND ACCESS TO THE SITE SHALL REMAIN UNIMPEDED FOR THE DURATION OF THE CONTRACT. A TRAFFIC MANAGEMENT PLAN FOR ANY EXTERNAL ROADWORKS SHALL BE SUBMITTED TO HOBART CITY COUNCIL FOR APPROVAL A MINIMUM OF TWO WEEKS PRIOR TO COMMENCEMENT OF WORKS.																					
8. LINEMARKING EXISTING	ALL REDUNDANT LINEMARKING SHALL BE PERMANENTLY REMOVED BY APPLICATION OF A SPRAY SEAL OR BY GRINDING.																					
GENERAL	LINEMARKING AND R.R.P.M'S ARE TO BE INSTALLED IN ACCORDANCE WITH THESE PLANS AND TO VICROADS SPECIFICATIONS. ALL PARKING BAYS TO BE FULLY LINEMARKED TO VICROADS STANDARDS AND SPECIFICATION. WIDTH OF CAR PARKING BAYS TO BE 2.60m WIDE EXCEPT FOR THE DISABLED PARKING BAYS WHERE THE WIDTH TO BE INCREASED TO 3.2 m WIDE UNLESS OTHERWISE NOTED.																					
INTERNAL WORKS	ALL LINEMARKING TO BE APPROVED LONG LIFE ROAD MARKING PAINT UNLESS OTHERWISE NOTED.																					
EXTERNAL WORKS	PARKING BAYS TO BE APPROVED LONG LIFE ROAD MARKING PAINT. LATERAL WORKS, PAVEMENT MARKINGS, ARROWS ETC. ARE TO BE COLD APPLIED PLASTIC TROWELLED INTO PLACE (DEGADUR, PLASTELINE OR EQUIVALENT). LONGITUDINAL LINENWORK TO BE EXTRUDED THERMAL PLASTIC MARKINGS.																					
9. SIGNAGE GENERAL	ALL REGULATORY AND HAZARD DIRECTIONAL SIGNS TO BE INSTALLED IN CLASS 1 REFLECTIVE MATERIAL AND ALL WARNING SIGNS TO BE INSTALLED IN CLASS 2 REFLECTIVE MATERIAL TO APPROVED AUSTRALIAN STANDARDS. FOR TEMPORARY SIGNAGE DURING CONSTRUCTION WORKS, REFER TO VICROADS ROADWORKS SIGNAGE CODE.																					
EXISTING	WHERE NECESSARY, EXISTING TRAFFIC CONTROL SIGNS SHALL BE RELOCATED CLEAR OF PROPOSED WORKS. REDUNDANT SIGNS SHALL BE TAKEN UP AND REMOVED.																					
EXTENT	NEW TRAFFIC CONTROL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND THE RELEVANT SPECIFICATION.																					
10. SERVICES EXISTING	ALL STATUTORY AUTHORITY SERVICES MUST BE MAINTAINED AND PROTECTED BY THE CONTRACTOR AT ALL TIMES UNLESS OTHERWISE SHOWN. EXISTING SERVICE LOCATIONS SHOWN HAVE BEEN OBTAINED FROM STATUTORY AUTHORITY RECORDS AND/OR SITE PLANS. WHERE AVAILABLE, NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN AND ALL SERVICES SHOULD BE PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF WORKS IN THEIR VICINITY.																					
CONTACTS	CIVIL CONTRACTOR TO CONTACT THE FOLLOWING AUTHORITIES FOR RELOCATION OF CABLES, U/G MAINS OR POLES WHERE REQUIRED. <table><tr><td><u>UTILITY</u></td><td><u>OFFICE NO.</u></td><td><u>EMERGENCY/AH No.</u></td></tr><tr><td>TAS NETWORKS</td><td>1300 137 008</td><td>132 004</td></tr><tr><td>TELSTRA</td><td>1800 653 935</td><td>.....</td></tr><tr><td>TAS GAS</td><td>03 6336 9350</td><td>180 2111</td></tr><tr><td>TAS WATER</td><td>1300 862 066</td><td>13 6992</td></tr><tr><td>NBN</td><td>.....</td><td>1800 625 329</td></tr><tr><td>CITY OF HOBART.</td><td>.....</td><td>03 6278 0200</td></tr></table>	<u>UTILITY</u>	<u>OFFICE NO.</u>	<u>EMERGENCY/AH No.</u>	TAS NETWORKS	1300 137 008	132 004	TELSTRA	1800 653 935	TAS GAS	03 6336 9350	180 2111	TAS WATER	1300 862 066	13 6992	NBN	1800 625 329	CITY OF HOBART.	03 6278 0200
<u>UTILITY</u>	<u>OFFICE NO.</u>	<u>EMERGENCY/AH No.</u>																				
TAS NETWORKS	1300 137 008	132 004																				
TELSTRA	1800 653 935																				
TAS GAS	03 6336 9350	180 2111																				
TAS WATER	1300 862 066	13 6992																				
NBN	1800 625 329																				
CITY OF HOBART.	03 6278 0200																				
OLD TOWN GAS	ABANDONED OLD TOWN GAS (COAL GAS) PIPES POTENTIALLY EMITTING GASES AND VOLATILE ORGANIC COMPOUNDS (VOCs) MAY BE FOUND IN MANY OF THE CITY. REFER TO THE HOBART COUNCIL INFORMATION SHEET FOR MORE DETAIL.																					


 Approved - General
 Manager Consent Only
 GMC-21-90 22/03/2022



B	Issue for Tender	SL	BD	21 DEC
A	Preliminary issue for Tender	SL	BD	22 JUN
No	Revision	Drawn	Authorised	Date

Conditions of use:
 This document may only be used by SET's client (and any other person who SET has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
 Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	NOTES AND SET OUT DATA		
Drawing Number	SHBFMW-SET-102	Revision	B ISSUED 21/12/21



Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

SOUTH HOBART PRIMARY SCHOOL

Flood Inundation Assessment

**ENTURA-11EB8F
February 2022**

Prepared by Hydro-Electric Corporation
ABN48 072 377 158

t/a Entura 89 Cambridge Park Drive,
Cambridge TAS 7170 Australia



WE OWN. WE OPERATE. WE CONSULT.



Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

Entura in Australia is certified to the latest version of ISO9001, ISO14001, and OHSAS18001.

©Entura. All rights reserved.

Entura has prepared this document for the sole use of the client and for a specific purpose, as expressly stated in the document. Entura undertakes no duty nor accepts any responsibility to any third party not being the intended recipient of this document. The information contained in this document has been carefully compiled based on the client's requirements and Entura's experience, having regard to the assumptions that Entura can reasonably be expected to make in accordance with sound professional principles. Entura may also have relied on information provided by the client and/or other parties to prepare this document, some of which may not have been verified. Subject to the above conditions, Entura recommends this document should only be transmitted, reproduced or disseminated in its entirety.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F






Revision No: 3
 11 February 2022

Document information


Title	South Hobart Primary School Flood Inundation Assessment
Client organisation	Sustainable Engineering Tas
Client contact	Brad Deeks
Document number	ENTURA-11EB8F
Project manager	Colin Terry
Project reference	E308017 - P515222

Revision history

Revision 3

Revision description	Updated report with extension to Weld Street and option 6		
Prepared by	Kylee Smith and Alice Hines		11/2/2022
Reviewed by	Colin Terry		11/2/2022
Approved by	Colin Terry		11/2/2022
	(name)	(signature)	(date)
Distributed to	Brad Deeks	Sustainable Engineering Tas	
	(name)	(organisation)	(date)

Revision 2

Revision description	Finished report		
Prepared by	Kylee Smith		10/5/2019
Reviewed by	Colin Terry		10/5/2019
Approved by	Colin Terry		10/5/2019
	(name)	(signature)	(date)
Distributed to	Brad Deeks	Sustainable Engineering Tas	10/5/2019
	(name)	(organisation)	(date)



Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

South Hobart Primary School - Flood Impact Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

Contents

1. Introduction	6
1.1 Background	6
1.2 Terminology	9
2. 9	
3. Data	11
4. Hydrology	12
4.1 General	12
4.2 Data	12
4.3 Hydrologic model	13
4.4 Direct Rainfall	13
4.5 Hobart Rivulet	14
4.6 Weld Street	14
5. Hydraulics	15
5.1 Model Setup	15
5.1.1 Modelling software	15
5.1.2 Model Setup	15
5.1.3 Manning's n values adopted	16
5.2 Existing Conditions	17
5.2.1 Flood Behaviour	17
5.2.2 Flood Hazard	19
5.3 Mitigation Options	20
5.3.1 Mitigation Option 1	20
5.3.2 Mitigation Option 2	22
5.3.3 Mitigation Option 3	23
5.3.4 Mitigation Option 4	24
5.3.5 Mitigation Option 5	25
5.3.6 Mitigation Option 6	26
5.3.7 Flood hazard after mitigation	28
5.3.8 Other mitigation options	28
5.4 Minor storms	28
6. Conclusions	30
7. References	32
8. Appendices	33

Appendices

A Hobart Rivulet flows

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

B Flood Depth and Hazard Maps 1% AEP

C Flood Depth Maps 5% AEP

List of figures

Figure 1.1: client provided site plan and recent flooding areas	6
Figure 1.2: client photos near building 4 after rain storm	7
Figure 1.3: Client showing level of flood debris on building 4 from major rain storm	8
Figure 3.1: Hydrology sub-catchment boundaries	12
Figure 3.2: Hyetograph used for direct rainfall onto the internal hydraulic model	14
Figure 4.1: Hydraulic model Schematic	16
Figure 4.2: Schematic of terrain roughness values	17
Figure 4.3: Schematic of building footprints with gaps in lines representing potential ingress locations (doorways - D).	18
Figure 4.4: Hazard curves from ARR (Ball <i>et al</i> , 2016)	20
Figure 4.5: Mitigation Option 1 barrier location	21
Figure 4.6: Mitigation Option 2 proposed barrier location	22
Figure 4.7: Mitigation Option 3 proposed barrier location	23
Figure 4.8: Mitigation Option 4 proposed barrier location	24
Figure 4.9: Mitigation Option Five Proposed Barrier and Underground Pipe combination	26
Figure 4.10: Mitigation Option Six	27

List of tables

Table 2.1: Summary of data used throughout the study	11
Table 3.1: Summary of RORB adopted parameters	13



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

Table 4.1: Hydraulic model parameters	15
Table 4.2: Model roughness values adopted	16

South Hobart Primary School - Flood Impact Assessment
ENTURA-11EB8F



Revision No: 3
11 February 2022

1. Introduction

1.1 Background

South Hobart Primary School has experienced a number of floods from the hillside above the school in recent years. This flooding has caused damage to school property and playgrounds, and more importantly for the Department of Education, it has meant that the school has not been able to operate at times. Fortunately, there have been no people at risk or hurt due to these incidents.

Entura was commissioned by Sustainable Engineering Tas to support their work with the Department of Education in understanding the current flood risks in major rainstorms and producing conceptual options to reduce this risk to acceptable levels.

The school is located close to the Hobart Rivulet in South Hobart below Macquarie Street, between Anglesea and Weld streets (Figure 1.1). With recent building renovations, there is now a line of buildings across the contour of the site, and local piped infrastructure is limited. For example from the carpark next to the school (part of McKenzie Street) there was only a 225 mm diameter stormwater pipe to the rivulet (owned by Hobart City Council (HCC)) – which during the first stage of this project has been now upgraded – but for the purposes of this work is part of the base case for looking at impacts.

Some of the flood impacts have photographic evidence as shown in Figure 1.2 and Figure 1.3.

The three elements of this project are (a) land survey of the balance around the buildings from the Rogerson and Birch survey. This would include key doorways, the balance of HCC pipes within the site, and Anglesea Street without pipe inverts up from the site to include north kerbs in Macquarie Street either side of the entry down into Anglesea Street, (b) a flood study on the school with a focus on major storms and overland flows at the school, (c) extension of work to include Weld Street.

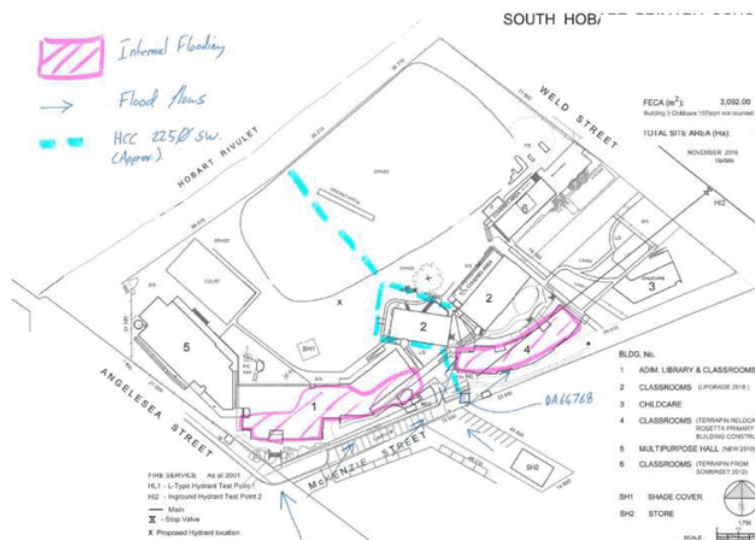


Figure 1.1: client provided site plan and recent flooding areas



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

South Hobart Primary School - Flood Incident Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022



Figure 1.2: client photos near building 4 after rain storm

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

Revision No: 3
11 February 2022



Figure 1.3: Client showing level of flood debris on building 4 from major rain storm

South Hobart Primary School - Flood Insurance Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

1.2 Terminology

AEP	Annual Exceedance Probability, the chance of an event being at least as big each year
AHD	Australian Height Datum, the datum adopted within the majority of Australia that represents the height in metres above a mean sea level
Hydraulics	The study of water flow: in this study, flood levels, depth, velocity and hazard
Hydrology	Rainfall and runoff processes: in this study, climate, rainfall and flow rates
LiDAR	Laser scanning of the ground to give the elevations on a grid
Manning's n	Represents the roughness or friction applied to a surface for water flow



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

This page is intentionally blank.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

3. Data

The data in Table 3.1 below was obtained and incorporated into the Flood Study.

Table 3.1: Summary of data used throughout the study

Name of data	Source
Rogerson and Birch laser scan	Supplied by client
Survey & Alignment Services ground survey of Weld Street	Supplied by client
LiDAR	From MRT combined LiDAR at 1m grid size for the balance of the model area, supplied by Hydro Tasmania
Entura Survey	South of the school buildings, surveyed by Natalie Williams of Entura
Entura Survey	Top part of Anglesea Street into Macquarie Street and below. Surveyed by Natalie Williams of Entura.
Weld Street Survey	Survey and Alignment Services (Dave Tompkins)
Combined DWG File	3D surface created from other surfaces listed above, plus building footprints as polygons created from floor levels, plus patches – Civil3D compilation by Colin Terry
Exported ASC File	0.1 m export from combined DWG file – exported by Colin Terry

South Hobart Primary School - Flood Impact Assessment
ENTURA-11EB8F



Revision No: 3
11 February 2022

4. Hydrology

4.1 General

The hydrology was undertaken utilising the most up-to-date Australian Rainfall and Runoff 2016 guidelines (Ball, Babister, et. Al., 2016) incorporating the impacts of climate change on rainfall, with a 20% increase in rainfall adopted from a relevant study on the Hobart Rivulet (Entura, 2014).

The terrain data was studied during a site visit and with terrain contours, a preliminary assessment was made for flow paths through the catchment. Sub-catchment boundaries upstream of South Hobart Primary School were subsequently drawn using the 0.5 m contours (generated from the LiDAR and survey as discussed in Section 3 above). These sub-catchments are shown below in Figure 4.1.

Due to the staging of the project, additional hydrology for the smaller Weld Street catchment was added after the main catchment hydrology. This was done by scaling the main catchment flows, and using Manning's equation to subtract the approximate capacity of the Weld Street pipes.



Figure 4.1: Hydrology sub-catchment boundaries

4.2 Data

Rainfall data was obtained from the ARR Datahub for the 1% and 5% AEP events (Babister, Trim, et.al, 2016). The catchment boundary, latitude and longitude were input into the Datahub and all rainfall data was returned, including the 10 temporal pattern increments for frequent, intermediate and rare events, as well as the rainfall depths. These increments and depths are multiplied together

South Hobart Primary School - Flood Impact Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

to form a hyetograph for input into the hydrologic model. This data processing is all undertaken within the model itself.

4.3 Hydrologic model

The RORB hydrological model was used to generate a hydrograph (graph of flow versus time), at the outlet of the catchment which was located near the corner of Macquarie Street and Anglesea Street.

RORB is a general runoff and streamflow routing program, used to calculate flood hydrographs from rainfall and other channel inputs. It subtracts losses from rainfall to produce rainfall-excess and routes this through catchment storage to produce the hydrograph (Laurenson, Mein & Nathan, 2010).

Table 4.1 below, summarises the parameters adopted for the hydrologic model.

Table 4.1: Summary of RORB adopted parameters

Parameter	Adopted Value
K_c	0.69 – Using the Aus Wide Dyer equation (1994) as cited in Pearse et al (2002) as obtained directly from the RORB software.
Initial loss	5 mm – for urban areas
Runoff Co-efficient	0.6 – for urban areas
Fraction Impervious	0.6
Critical Duration	15 minutes
Temporal Pattern	TP10
Peak of output hydrograph	7.93 m ³ /s

The model was run for rainfall durations from 10 minutes to 6 hours to determine the maximum duration. As per ARR2016 (Ball, Babister, et.al., 2016), the median temporal pattern was chosen for the maximum duration. This duration and temporal pattern was tested for a range of fraction impervious values and k_c values and sensitivity checked against the results from a simple rational method calculation.

Finally, the final peak value was adjusted down to account for the flow taken by the underground network. The capacity of the underground network was calculated using Manning's equation with the ground slope in Macquarie Street and Weld Street to represent the pipe slope (as there was no survey of the pipe inverts undertaken for this study). This is an approximate approach suitable when the focus is on major storms where the pipe network is expected to be overwhelmed, and point of interest is further downslope. More detailed modelling of the pipework would require a survey of the inverts and confirmation of the diameters in the HCC GIS.

4.4 Direct Rainfall

The same data obtained from the ARR Data Hub above was used to create a Hyetograph for direct application to the model extents on the hydraulic model. The hyetograph is shown in Figure 4.2 below.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

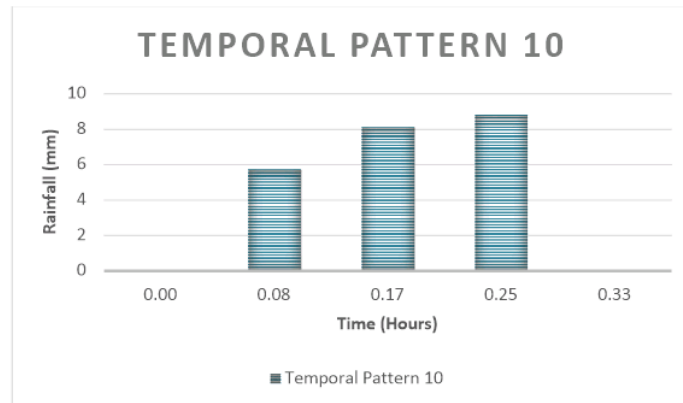


Figure 4.2: Hyetograph used for direct rainfall onto the internal hydraulic model

4.5 Hobart Rivulet

The Hobart Rivulet flow was entered into the model as a steady state flow to provide a downstream tailwater level to the hydraulic model outfall. The peak flow for the 10% AEP with the current climate event was chosen as being representative of a likely tailwater level that would occur at the time of an upstream 1% AEP at the future climate event due to very different times of concentration. The peak 10% AEP flow for the Hobart Rivulet in the current climate is 26 m³/s (Entura, 2014).

4.6 Weld Street

Based on catchment area, a hydrograph for Weld St (at Macquarie Street) was generated by

- Catchment area ratio (3.6 ha / 50.3 ha) to the power of 0.8 times the main catchment flows, subtracting pipe capacity
- 375 mm diameter pipe capacity was a simple Manning's equation approximate capacity (0.7 m³/s). This compares to the 1.8 m³/s capacity for the 600 mm diameter pipe in Anglesea Street.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

5. Hydraulics

5.1 Model Setup

5.1.1 Modelling software

The hydraulic modelling software TufLOW was chosen to assess the flood inundation of South Hobart Primary School. The Heavily Parallelised Compute (HPC) version of TufLOW used is a 1-dimensional (1D) / 2-dimensional (2D) finite volume numerical model that is used to simulate hydrodynamic behaviour in rivers, floodplains and urban drainage environments (BMT Group, 2018).

5.1.2 Model Setup

The following hydraulic model parameters adopted for this project are shown below in Table 5.1.

Table 5.1: Hydraulic model parameters

Parameters	
Model Used and Version	TufLOW-2018-03-AD & TUFLOW-2020-10-AC
Terrain Data	0.1 m exported ASC file as discussed in Section 3 above.
Grid Cell Size	0.5 m
Inflow Hydrographs	As discussed in Section 4
Inflow – Direct Rainfall	As discussed in Section 4.4
Terrain Roughness	See Table 5.2 below
Terrain Modifiers	<ol style="list-style-type: none"> 1. Rivulet Smoothing 2. Building Footprints / Walls 3. New kerb adjacent to footpath enforced 4. Mitigation “Walls” 5. Pipe inlet terrain modification 6. Enforced floor levels of properties on Weld St
Downstream Boundary Condition	Free outfall based on terrain slope
Structures	Main underground pipe system through school; existing and proposed; no other bridges or culverts included.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

A schematic of the model setup is provided in Figure 5.1 below.



Figure 5.1: Hydraulic model Schematic

5.1.3 Manning's n values adopted

The terrain representation is modelled via the use of Manning's n values. These are illustrated in the schematic in Figure 5.2 below and detailed in Table 5.2.

Table 5.2: Model roughness values adopted

Id	Terrain Type	Manning's n adopted
1	Urban residential building footprints	0.01 when <0.03 m, 0.35 when > 0.05 m, interpolated in between
2	Roads, car parks, pavements	0.03 when <0.005 m, 0.016 when > 0.01 m, interpolated in between
3	Gravel tracks and tennis courts	0.03 when <0.005 m, 0.02 when > 0.01 m, interpolated in between
4	Open pervious areas – grass/lawn	0.06 when <0.03 m, 0.03 when > 0.07 m, interpolated in between
5	Waterways	0.1 when <0.1 m, 0.035 when > 0.2 m, interpolated in between

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Approved - General
 Manager Consent Only
 CMC-21-90 22/03/2022

Revision No: 3
 11 February 2022

6	Open pervious areas – forest and dense shrubs	0.1 when <0.2 m, 0.07 when > 0.5 m, interpolated in between
7	Urban hard landscaping and backyards	0.07 when <0.1 m, 0.06 when > 0.5 m, interpolated in between



Figure 5.2: Schematic of terrain roughness values

5.2 Existing Conditions

5.2.1 Flood Behaviour

For the following discussion, please refer to the building numbers indicated in Figure 1.1 and the schematic of building ingress details in Figure 5.3 below.

The focus of this study is overland flow from south of the school. While the flooding from the Hobart Rivulet is considered, it's not modelled in detail. Another project by Entura looking at the potential for two demountable buildings goes into more detail for Hobart Rivulet flooding and the potential for blockage of the bridge at Anglesea Street (Entura, 2022). So take the following description in that context.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

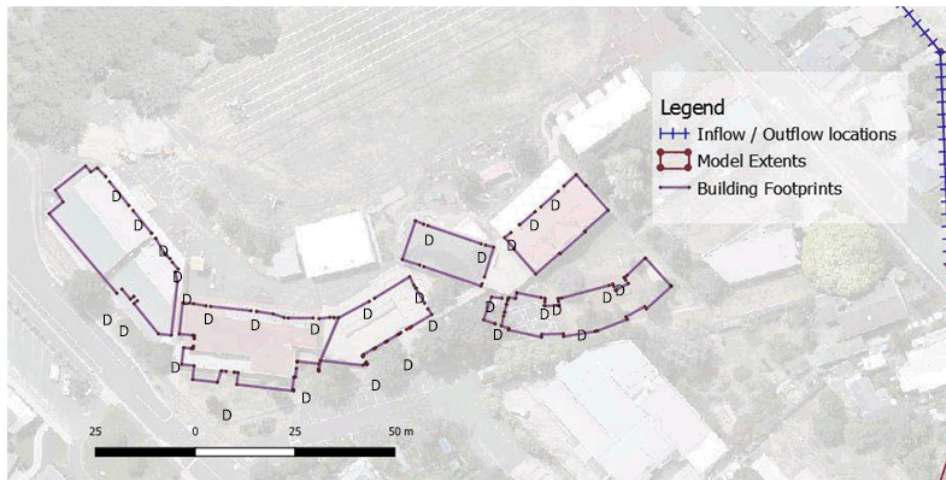


Figure 5.3: Schematic of building footprints with gaps in lines representing potential ingress locations (doorways - D).

Modelling of the existing conditions flooding for South Hobart Primary School demonstrates that flooding in and around the school is quite significant during a major storm.

The floodwaters travel down Anglesea Street from the upstream catchment, and for a 1% AEP event with climate change the water arrives at the reception building of the school within 10 minutes. Within 12 minutes, building five and building four have started flooding as the water continues down Anglesea Street and turns onto McKenzie Street, travelling east. Building two begins to flood after approximately 13 minutes through the east-facing door between the two buildings.

The reception building floods first as water arrives from Anglesea Street and flows down the steps into the foyer of the building. The depth of flooding above floor level is approximately 200 mm in a 1% AEP with climate change event.

Similarly, building five floods via the west-facing doorway, to a depth of approximately 200 mm as water continues to travel down Anglesea Street towards the Hobart Rivulet.

For building four on the east, flooding is entering the building above floor level, via the entry door that is within the passageway where the student toilets are located. The flooding ponds upstream of the building to a depth of 700–800 mm and enters the passageway to a depth of approximately 500 mm. Upon entering the classroom, water travels east above floor level and ponds within the building to a depth of approximately 150 mm.

Finally, building two begins flooding from the east-facing door that is located between the two buildings. Water ponds above floor level in the west part of the building to a depth of approximately 200–300 mm, whilst the eastern classrooms of building two only flood after the water has travelled north to the rivulet and water enters via the north facing doors to a depth of approximately 30–50 mm.

The previous 225 mm diameter underground pipe that takes water from the car park pit to the Hobart Rivulet, only carries approximately 0.05 m³/s to past the school and flow is reduced to

South Hobart Primary School - Flood Impact Assessment
ENTURA-11EB8F



Revision No: 3
11 February 2022

0.02 m³/s between the school and the rivulet. This pipe has been upgraded as part of stage one of this project. As this report is revised after stage one, there are some options and descriptions which refer to the DN225. For the purposes of impacts assessment, the DN225 is considered part of the “existing” or “base” case.

5.2.2 Flood Hazard

Flood hazard is a function of the depth and velocity of overland water flow, and based on extensive laboratory and field-testing. The hazard categories are based on the maximum depth and velocity (Figure 5.4). The risk of flooding is a function of the flood hazard and likelihood of a storm event and people and property being in harm’s way. The school does not have habitable areas (for living and sleeping), and so with enough warning people can be moved from site, but property is harder to move (cars can be moved, but not buildings). The warning time for flash flooding is very small, however (a matter of 12 minutes to the peak of the storm from the start of the rain burst), so evacuation may not be practical. This study does not investigate evacuations and other emergency management planning, but it is expected that this would be done for the school to manage existing residual risks. The residual risks are from hazards posed by stormwater not mitigated by structural options in the design events, or events larger than the design event.

In existing conditions, the flooding immediately surrounding the buildings of the school falls under ARR hazard categories H2, H3, H4 and H5, which is “unsafe for small vehicles”, “unsafe for small children and the elderly”, “unsafe for all vehicles” and “H4 + buildings require special design” respectively. Once the category rises above H3, the floodwaters are unconditionally unsafe for children and the elderly. That is to say, in a 1% AEP event, it is imperative that these floodwaters are mitigated from the surrounding areas of the buildings in case children should be present at the time of such a heavy rainfall.

Once floodwaters exceed the capacity of the pipework and kerbs in Macquarie and Anglesea Streets, the water flows to the school. So even for a 5% AEP storm (or 1 in 20 year average recurrence interval) storm, the hazard category surrounding the buildings reaches a H4 category – “unsafe for all vehicles”, which is unconditionally unsafe for children and the elderly.

Hazard maps for the 1% AEP events can be found in Appendix B. Hazard maps for the 5% AEP can be provided upon request, however, they are quite similar to the 1% AEP event.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

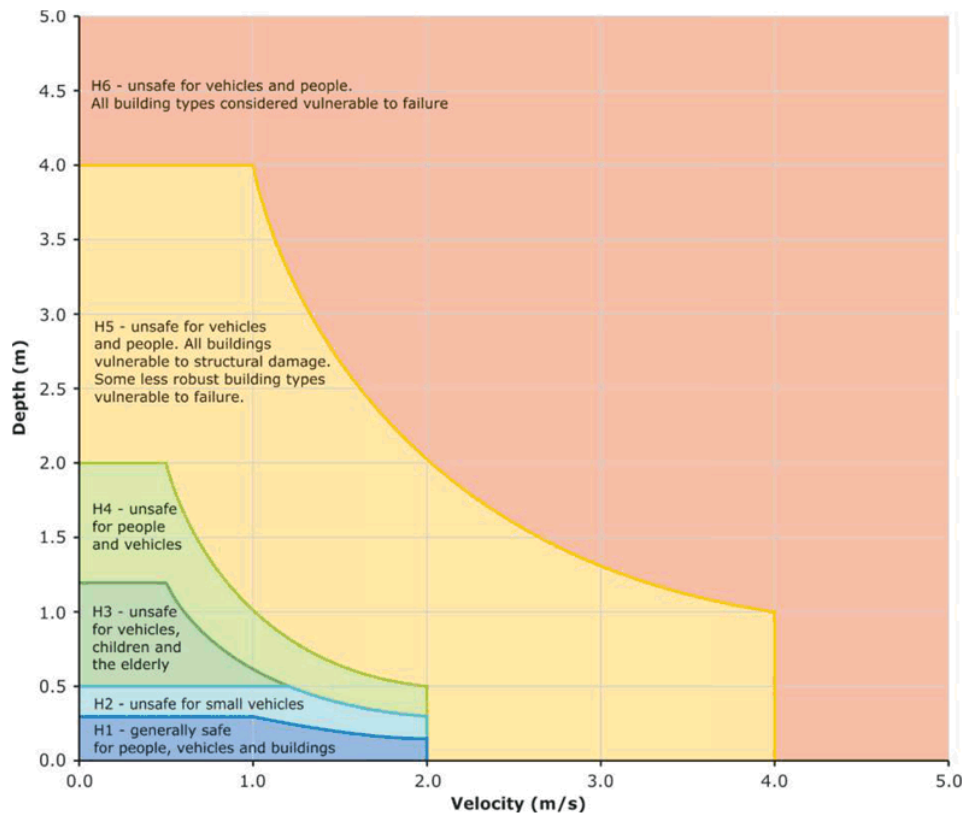


Figure 5.4: Hazard curves from ARR (Ball *et al*, 2016)

5.3 Mitigation Options

The focus on most mitigation was redirecting surface flows that occur in a major storm, so they don't flow through the school grounds. The fast flowing, and often deep water, poses an unacceptable hazard to children if they are there when the storm strikes.

There would be other options for flood-gates to protect buildings, but these wouldn't protect people outside the buildings and would be difficult to retrofit without major works.

5.3.1 Mitigation Option 1

The first option explored was a raised barrier running the full length of Anglesea Street between Macquarie Street and McKenzie Street and part of the length of Macquarie Street between Anglesea Street and Weld Street. Figure 5.5 indicates the location of the proposed barrier. Conceptually this barrier represents raised ramps in driveways, flood gates on fence gates and raised roadway in McKenzie Street (which could also be a pedestrian crossing). The aim of this modelling was to introduce an impermeable barrier and see how high the floodwaters rose against it, and thereby determining the required height of the barrier.

South Hobart Primary School - Flood Insurance Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

Note that the top of the barrier would need to be higher than the modelled smooth water surface to account for local hydraulic phenomena not included in the hydraulic model, such as hydraulic jumps on fast flows, wind waves and car wakes. This extra allowance is called freeboard, and would typically be 0.3 m, but with more detailed future work could be reduced to 0.2 m or even 0.1 m in some cases. This future work would more closely examine the potential and calculate the size of, these other phenomena. At this point a freeboard of 0.3 m is recommended on the flood depths.



Figure 5.5: Mitigation Option 1 barrier location

The results of the Mitigation Option 1 barrier shows that flooding is significantly reduced within the school. However, due to the flooding from the local rainfall on the block bounded by Macquarie Street, Anglesea Street and McKenzie Street and due to the undersized underground pipe, floors may be still flooded to a depth of 30–50 mm.

A flood map for the results of Mitigation Option One is included in Appendix B.

South Hobart Primary School - Flood Insurance Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

5.3.2 Mitigation Option 2

The second option that was explored was a raised barrier similar to Mitigation Option 1, but broken up into parts where the barrier would only be located along critical pathways. This barrier is more achievable than Option 1 and Figure 5.6 shows the proposed location of this barrier.



Figure 5.6: Mitigation Option 2 proposed barrier location

Results of Option Two shows that floodwater bypasses the barrier on every side and does not significantly reduce the above floor flooding.

A flood map for the results of Mitigation Option Two is included in Appendix B.

South Hobart Primary School - Flood Impact Assessment
 ENTURA-11EB8F



Approved - General
 Manager Consent Only
 CMC-21-90 22/03/2022

Revision No: 3
 11 February 2022

5.3.3 Mitigation Option 3

The third option that was explored was a raised barrier along the rear of the footpath next to the staff car park on McKenzie Street, and across the entry to reception at the top of the stairs. This would effectively raise the top of the kerb or be a short wall at the back of the footpath, and Figure 5.7 shows the proposed location of this barrier.



Figure 5.7: Mitigation Option 3 proposed barrier location

Results of Mitigation Option 3 modelling showed a significant drop in flood levels within the school area, however, overland flooding was diverted due to the barrier and caused an increase in flooding on the upstream warehouse of up to 500 mm and an increase in flooding on the residents to the east of up to 150 mm. This amount of offset impact would not be an acceptable solution.

A flood map for the results of Mitigation Option Three is included in Appendix B. The maximum flood depths behind the barrier are up to 1.7 m.

South Hobart Primary School - Flood Impact Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

5.3.4 Mitigation Option 4

Mitigation Option 4 is a combination of Mitigation Options two and three. Figure 5.8 shows a plan of this proposed option.



Figure 5.8: Mitigation Option 4 proposed barrier location

The results of Mitigation Option Four are very similar to Option Three. Whilst the flood depths are significantly reduced within the school, the overland flooding is diverted upstream onto the warehouse and to the east onto the residential properties, increasing flood levels upstream by up to 500 mm and eastwards by up to 200–300 mm, which would not be acceptable.

A flood map for the results of Mitigation Option Four is included in Appendix B.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

5.3.5 Mitigation Option 5

Mitigation Option 5 proposes to include the same barrier as Mitigation Option 3 plus an upsized underground pipe from the main inlet pit adjacent to the staff carpark down to the rivulet, to divert the ponded waters from the carpark to the oval (a bubble up pit) and the Hobart Rivulet (Figure 5.9).

Different underground pipe sizes and grated trench inlet systems were trialled and it was decided that a DN1800 would be the most appropriate to capture and carry the water from the staff carpark, upstream of the proposed barrier, down to the oval and ultimately to the rivulet. This was combined with a 60 m grated trench. However, if this option were to be selected for detailed design, we expect that with some optimisation a smaller pipe size may be acceptable, potentially down to a DN1200. This optimisation would include the collection grated trench sizing.

The construction of a large pipe between the school buildings will involve demolition and remaking of pathways and play areas. The minimum gap between buildings on the route is 3.5 m, and trench between buildings will require shoring and potentially underpinning of building edges. Barrier walls near McKenzie St would need to be water proof at the design flood depths (including being overtopped in the case of a pipe blockage).

Ideally the inlet grated trench could be designed as a continuous grated tray and side entry along the footpath's kerb, but more detailed hydraulic modelling would be required to confirm the grated trench design. The final extent and alignment of the barrier and grated trench will require optimisation, in particular near the corner of McKenzie and Anglesea Streets where the barrier will be created through changing the ground levels, which will require compliance with the standards to allow safe access for people with mobility disabilities.

As this option relies heavily on the collection and underground piping of stormwater, it is more prone to blockage than options that are just overland flow options (eg. option 1). This means maintenance of the system is required, but even with regular maintenance grates can block during a storm, so safe management of the inlet system needs to be incorporated into the emergency management planning.

The cut-off grated trench does most of the mitigation, but water will pond over the trench at the peak of the storm which requires the barrier on the low side of the inlet structure. A key element in the barrier is the flood gate into the school grounds. As storms can occur at any time of the day and at short notice, the flood barrier would ideally be automatically closed. There are systems to automatically close flood barriers that are driven by the overland flood water itself. Any mechanical system would require regular maintenance and testing, and has the potential to fail.

Should the floodgate fail to be closed there is still a reduction in flood risk from the water captured in the grated trench. Should the floodgate fail at the peak of the storm with water impounded behind the barrier, there is the risk a fast moving wave of water will wash through the school ground. Further assessment would be required to assess the impact of this "dambreak", and look at measures to ensure the hazard from this scenario did not produce a higher flood risk than without the barriers in place. Failure of barriers is an issue common to all the options, but in the options where the barrier is close to the school the impacts of a barrier failure are higher.

South Hobart Primary School - Flood Impact Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

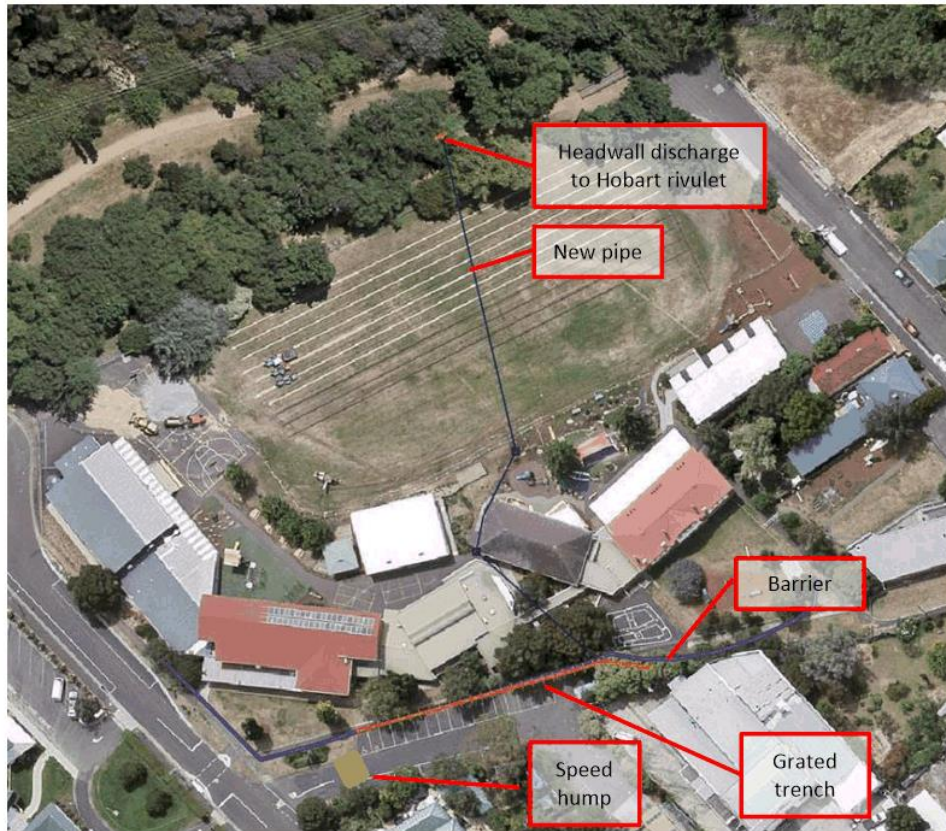


Figure 5.9: Mitigation Option Five Proposed Barrier and Underground Pipe combination

Figure 5.9, above, shows the proposed barrier – the purple east-west line, the underground pipe network in navy blue and the orange hatched line represents a proposed very large grated trench to capture water from the car park.

Similar to Option Three, the flooding within the school and above floor flooding is significantly reduced. However, in this case, there is no diversion sideways of overland flows as in Options three and four. The upstream impact on the warehouse is reduced to +/- 15 mm and there is a decrease in flooding on the residential properties to the east. The water is successfully transferred to the oval where a bubble-up pit would be located and there is a minor increase in flooding here of 175 mm.

A flood map of Option Five is provide within Appendix B. The maximum water depths behind the flood barrier range from 100 mm to 700 mm, typically 300 mm. Optimisation of this option with alignment of the barrier and extent of the trench, could reduce the maximum depths.

5.3.6 Mitigation Option 6

Mitigation Option 6 expands upon the proposed actions in Mitigation Option 5, including some additional works to reduce impact to dwellings on Weld Street and divert as much water as possible

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

away from the school on Anglesea Street. It doesn't have any flood gates, as the route from the parking for people with a disability is around in from Anglesea Street, and so the route that required a flood gates will be a solid wall.

A reinforced fence, with a water proof height of at least 0.5 m, is proposed on the northern side of the childcare playground area adjacent to 30 Weld Street. This fence directs additional flows through this area, generated by the flood barrier upstream of the school buildings, onto Weld Street and into the Weld Street gutters and drainage system, as opposed to through the 30 Weld Street property boundaries.

A speed hump at the entrance to the carpark is also proposed to improve outcomes of Mitigation Option 5, with it moving closer Anglesea Street. This speed hump, of approximate 100 mm in height, encourages the flow of water down Anglesea Street to remain in the road gutter rather than flowing east into the school bypass (flood barrier) and across towards Weld Street. Adding the speed hump in this location was found to be a cost-effective solution to minimising any impacts of the changed flow path to the surrounding properties.

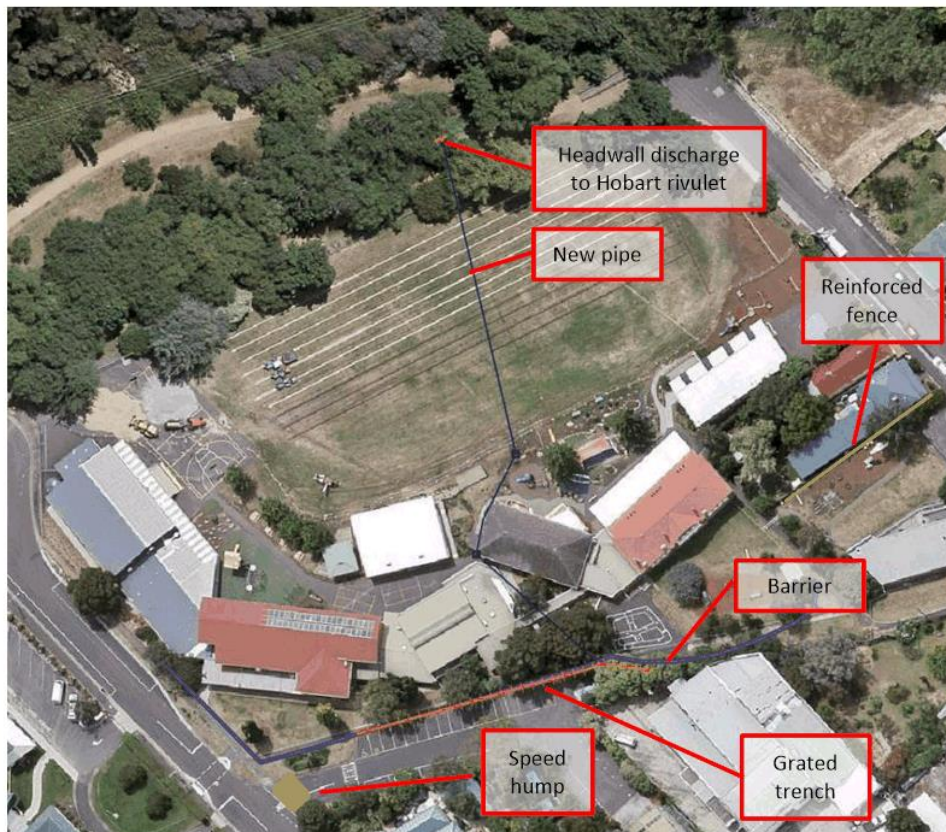


Figure 5.10: Mitigation Option Six

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

5.3.7 Flood hazard after mitigation

Mitigation Option 1 shows that the flood hazard is significantly decreased around the school buildings, as low as H1 – “relatively benign”. Mitigation Option 2 does not significantly alter the flooding regime from existing as discussed above. Mitigation Option 3 and 4 both reduce the hazard category to H1 within the school but increase the upstream hazard category to an H5. Mitigation Options 5 and 6 significantly reduce the flood hazard surrounding the buildings but have a very minor local increase adjacent to the bubble-up pit.

5.3.8 Other mitigation options

The focus of mitigation options has been on those that will reduce the risks to the people and property within the school grounds, both inside and outside the buildings. There are other options that are possible, which would have some benefit but have not been considered in detail due to their limited effectiveness or impracticability. This includes:

- **Detention upstream of the school** to retard peak flows, and release them slowly. The volume of the hydrograph during the 1% AEP with climate change storm of a duration critical to the school as it flows towards the intersection of Macquarie St and Anglesea St is approximately 8200 m³, of which 5500 m³ is overland flow. There is no readily available open space on the overland flow path, which winds its way along roads and in backyards. To contain a significant proportion of this overland flow volume would require an underground tank that wasn't too deep it could be drained by gravity and was on the major flow lines, for example
 - Storage under Macquarie Street that is 7 m wide, 2 m deep, 440 m long
 - Effectively all of South Hobart Oval with a 1 m deep tank, and a large pump and pipe system to transfer overland flow up into the tank, as the oval isn't on the main flow lines
 - Widescale retrofitting of rainwater tanks to all roofs in the catchment, which are kept dry with small outlets in readiness of a storm. This option would reduce the size of main detention storage, but not eliminate the need for a main storage as the roof area in the catchment is less than half the catchment area.
- **Flood gates to each building entry** within the school, and waterproofing of building walls to design flood depths. This could reduce damage within buildings, but would not reduce the risk to people safety for fast and deep flood waters between buildings.

5.4 Minor storms

Modelling was undertaken for the 5% AEP event (with a possible occurrence of 1 in every 20 years on average). The flood extents are very similar and for the existing conditions, flooding of the school forms a very similar pattern. Once the mitigation option barriers are in place, the flooding is significantly minimised to the school for all mitigation scenarios.

Flood depth maps for the 5% AEP event provided in Appendix C. Flood hazard maps for the 5% AEP have not been provided as they are very similar to the 1% AEP maps.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F



Revision No: 3
11 February 2022

There is a threshold behaviour for the flood risk at the site. Until the overland flows in Anglesea Street are contained within the kerb line, then there will be unacceptable flood hazard at the school. A more detailed study of the pipe network and larger number of storm events would need to be studied to work out the storm event that exceeds the threshold where the kerbs are exceeded.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

6. Conclusions

A computer based flood model has been successfully set up to calculate the surface flows immediately up slope and through the school for existing conditions and some mitigation options during a major rainstorm. A major storm for this study has a rarity of 1% annual exceedance probability (AEP) or in other words a probability of 1 in a 100 years. Note the Australian Building Code requires that new buildings have water proofing during the 1% AEP rainstorm, and within this the Plumbing Code requires overland flows to be kept away from habitable floor levels during this same event. The climate basis for the rainfall was a future climate with the impacts of climate change to the year 2100, where rainfall is expected to be more intense during rain storms.

The computer model storm flow rates were not calibrated, as there is not stream gauging within the urban catchment above the school. There was no modelling of specific historical events to validate the model. That said, the behaviour of the model was consistent with site observations during a major storm. The computer modelling confirms site observations that the overland flow during a major rainstorm can't be contained within Macquarie Street and Anglesea Street and the underground pipe network, and how this overland stormwater flowed within the school. This stormwater flows down roads and within private property to the school, and flows between school buildings and the playground. Where it ponds against buildings it seeps through ventilation openings and through open doorways to flow into buildings.

The computer modelling shows to current Australian Rainfall and Runoff guidelines there unacceptable drowning risks to children in some areas of the school ground between buildings during a 1% AEP event, should the site be occupied during the event.

Fortunately for South Hobart Primary School the road network has the potential to take overland flow in a major storm. That is Anglesea Street, which with enough site works could allow surface water from Macquarie Street to flow to the Hobart Rivulet. The challenge is in containing the flood within the roadway during a major storm whilst still allowing access to properties at other times. Conceptual options have been developed that are barriers to flow located at the back of the footpaths in Macquarie Street and Anglesea Street, which could be implemented as walls, ramps and moveable flood gates (potentially automatically).

Of the mitigation strategies assessed, the most effective are those blocking the flow at Macquarie Street and Anglesea Street, and directing it into Anglesea Street and then into the Hobart Rivulet (option one). This has the added benefit of protecting some private properties that are currently at risk of flooding, although this private land protection is not a focus of this study. Unfortunately this option will require changing the levels of many driveway and gates to several private properties, which may make access difficult for them. The options (five and six) which deal with the flood water at the school buildings require a very large grated trench (60 m long) and piped system (eg. 1–2 m diameter pipe), which would be difficult to construct between the school buildings, but would be works that are more in control of the Department of Education (in consultation and approval of Hobart City Council). Other options (two, three and four) are not effective enough or have undesirable offsite impacts on neighbours.

Based on the flood modelling completed, and in alignment with the goals and constraints outlined by the Department of Education, the preferred option has been identified to be Option 6. The overall impact to flooding on the school site and in the adjacent properties has been provided in Appendix D.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F



Revision No: 3
 11 February 2022

These results show a reduction in flood risk to the school and downstream neighbours, with a slight increase in flood risk within Anglesea Street and the Hobart Rivulet – which is considered the best practical solution (not considered unreasonable options such as piping all 1% AEP flood flows).

Note

- The focus of this study has been on major storm events (eg. 1% AEP), where the minor piped system is not as important (as its capacity is much smaller than the storm flow rates). There was as similar extent of flood for the more common 5% AEP rainstorm, as this too exceeded the capacity of the pipe network and was also not contained in the road corridor.
- The piped network was not explicitly modelled in the computer simulation for this project. There are however, some unusual pipe configurations within the Macquarie Street/Anglesea Street intersections and within Anglesea Street, which may not provide the school an optimum protection for nuisance flooding in minor events (which is the role of the piped network). For example, in Anglesea Street, there are two large pipes that join into a single pipe just up slope from McKenzie Street.
- The previous 225 mm diameter pipe from McKenzie Street was grossly undersized to deal with current flows from a major storm. While not investigated, it is also likely to be undersized to deal with local flows during minor events. Here local means the catchment up slope to Macquarie Street and Anglesea Street, but not the current major storm catchment up slope of Macquarie Street.

Going forward the recommendations are to:

1. Develop concept engineering design drawings for the preferred mitigation option (six) (with variations and combinations of options) in consultation with the school community, Hobart City Council and residents directly affected. Barriers would have a freeboard of 0.3 m above maximum water height, unless further more detailed investigations could demonstrate a lower value was warranted.
2. Reconfirm effectiveness of concept design performance with further hydraulic modelling, in particular where ideal barrier location and heights may not be achievable due to site constraints and stakeholder feedback.
3. Check impacts of the failure of any temporary barrier option during the peak of the storm, and ensure through a design response that the flood hazard from this “dambreak” is no greater than without the barrier in place (not part of the preferred option 6).
4. If there is interest in a system with a lower level of protection to 1% AEP, then survey pipe network in the Macquarie Street/Anglesea Street intersections and within Anglesea Street, and model the hydraulics of this during minor storms to look for opportunities for other improvements in flood protection.
5. Undertake emergency management planning to manage current and post mitigation residual risks due to flooding from Hobart Rivulet and more importantly the hillside catchment directly above the school. This would focus would be on reducing risk to people and property. This consultative process with the school community and authorities would consider on-site and off-site issues relevant during a major storm and be part of other site emergency planning. An understanding of the storm and flooding behaviour on and off site is key part of this planning. This report will form an input to the planning, but further technical input may be required.

South Hobart Primary School - Flood Impact Assessment
ENTURA-11EB8F



Revision No: 3
11 February 2022

7. References

Babister, M., Trim, A., Testoni, I. & Retallick, M. (2016). The Australian Rainfall & Runoff Datahub, 37th Hydrology and Water Resources Symposium Queenstown NZ, <http://data.arr-software.org/>, last accessed 29/4/2019.

Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors) Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia (Geoscience Australia), 2016.

BMT Group Ltd (2018), TufLOW Products, <https://www.tufLOW.com/>, last accessed 17/1/2019

Entura (2014), Hobart Rivulet Flood Study 2013, ENTURA-6A9C5

Entura (2022), Two demountable buildings South Hobart Primary School, ENTURA-1EAB91

Laurenson, E.M., R.G. Mein, R.J. Nathan, 2010, RORB Version 6, Runoff Routing Program User Manual, Monash University Department of Civil Engineering, HARC Pty Ltd, Melbourne Water Corporation.



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

8. Appendices

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

Revision No: 3
11 February 2022

This page is intentionally blank.



Approved - General
 Manager Consent Only
 CMG-21-90 22/03/2022

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F

Revision No: 3
 11 February 2022

A Hobart Rivulet flows

Hobart Rivulet - Flood Study 2013
 ENTURA-6A9C5

Revision No: 1
 24 February 2014

Table 5.1: Peak water levels and peak discharges at key locations for the modelled flood events

Chainage (m)	1:10 AEP		1:20 AEP		1:50 AEP		1:100 AEP		1:200 AEP		1:500 AEP		1:100 AEP with climate change		Description
	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	
15	99.8	9.0	100.0	12.4	100.2	17.8	100.4	22.9	100.7	33.7	100.9	40.9	100.5	28.5	U/S of Old Farm Road Bridge
150	94.4	8.9	94.6	12.4	94.9	17.7	95.1	22.8	95.5	33.6	95.7	40.8	95.3	28.4	U/S of bridge at Entrance to Cascade Brewery
560	81.1	12.5	81.2	17.5	81.3	25.4	81.4	35.1	81.7	58.5	81.9	71.2	81.5	43.7	U/S of bridge at Cascade Boulder Trap
669	78.2	12.5	78.4	17.5	78.8	25.5	79.1	35.2	79.9	58.9	80.3	71.9	79.4	43.8	U/S of McRobbies Road
916	71.3	15.8	71.6	22.4	72.1	32.9	72.5	44.8	73.7	77.2	74.2	94.2	72.9	55.9	U/S of Apsley Street Bridge
1023	69.3	15.8	69.5	22.4	69.8	32.9	70.2	44.7	71.0	77.1	71.4	94.2	70.5	55.8	U/S of Tara Street Bridge
1362	59.8	15.8	60.0	22.4	60.3	32.9	60.6	44.7	61.2	77.1	61.5	94.2	60.8	55.8	U/S of foot bridge of Macfarlane Street
1867	50.0	25.9	50.3	35.0	50.7	48.8	51.1	61.3	51.8*	89.1	52.2*	103.7	51.5*	74.9	U/S of Anglessea Street Bridge
2049*	46.2*	25.9	46.3*	35.0	46.6*	48.8	46.8*	61.3	47.2*	91.3	47.4*	108.6	47.0*	75.6	U/S of foot bridge at Weld St
2168	44.0	25.9	44.3	35.0	44.9*	47.6	45.2*	57.2	45.5*	95.4	45.5*	113.7	45.5*	80.7	U/S of foot bridge at Wynyard Street
2576	34.7	25.9	34.9	35.0	35.7	48.7	35.3	61.2	36.4	91.8	36.7	110.1	36.4	88.1	U/S of Gore Street Bridge
3090	24.1	31.8	24.5	42.2	24.9	58.8	25.2	71.4	25.9	99.6	26.4	117.7	25.7	92.9	U/S of Moile Street Bridge
3246	20.7	33.4	21.0	44.4	21.7	60.2	22.3*	72.2	23.1*	91.4	23.5*	103.6	22.9*	87.7	U/S of Collins Street Bridge
3339	18.2	33.8	18.5	45.0	18.9	62.6	19.2	77.7	19.8	108.4	20.2	128.2	19.6	94.7	U/S of Barrack Street Bridge
3592	13.4	33.8	13.6	44.9	13.9	61.2	14.1	74.1	14.6	102.6	15.9	118.5	14.4	94.4	U/S of Harrington St Bridge
3878	8.4	33.8	8.7	44.9	9.0	61.2	9.4	74.1	11.1	102.6	12.5	118.5	10.7	94.4	Below McDonalds
3896	8.1	33.8	8.3	44.9	8.7	61.2	9.2	74.1	11.0	102.6	12.3	118.5	10.6	94.4	Below Myer Development
4303	4.2	44.6	4.4	58.5	4.5	77.7	4.6	91.1	4.8	115.6	4.9	131.1	4.8	110.6	Gauging station at Collins St
4361*	4.2*	38.7	4.3*	52.0	4.4*	69.1	4.5*	79.5	4.6*	95.0	4.7*	103.6	4.6*	92.0	Open channel at Collins Street near Hospital
4399*	4.3*	28.5	4.6*	31.3	4.8*	35.2	4.9*	37.4	5.1*	42.0	5.2*	44.2	5.1*	40.4	U/S of Campbell Street Bridge

Note: Location of breakout flow from channel is denoted by ***.

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

Revision No: 3
11 February 2022

This page is intentionally blank.



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

B Flood Depth and Hazard Maps 1% AEP

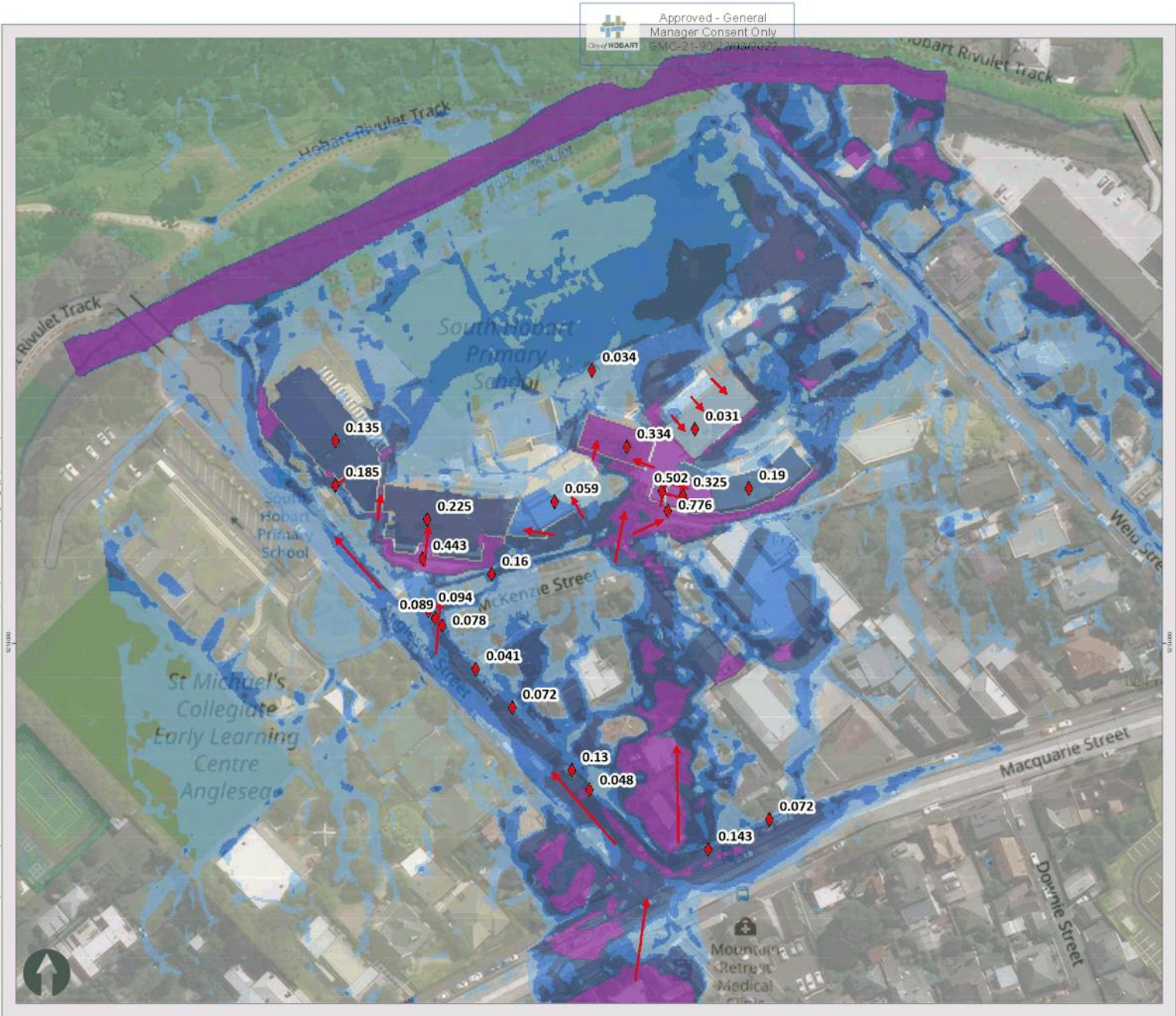
South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

Revision No: 3
11 February 2022

This page is intentionally blank.



Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Existing Conditions 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers
- Flow Direction

1% Flood Depth - Existing Conditions

- <0.01 m
- 0.01 m - 0.05 m
- 0.05 m - 0.1 m
- 0.10 m - 0.25 m
- > 0.25 m

Scale

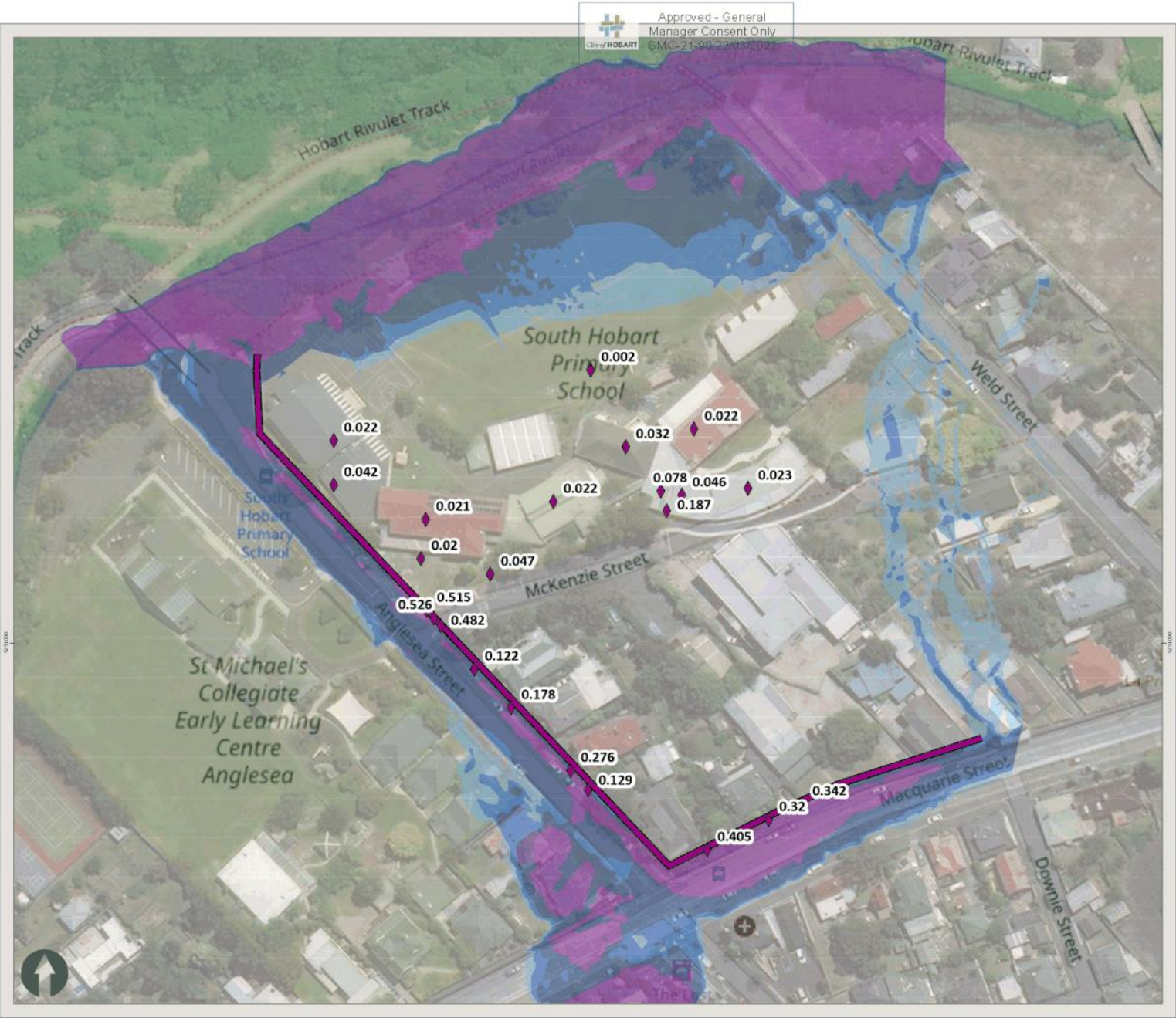
10 0 10 20 30 Meters

1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map is based on data supplied and recorded by the information shown on this map. entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2022 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 1 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

◆ Depth Markers

■ Mitigation Option 1 Barrier

1% Flood Depth - Mitigation Option 1

m

□ <0.01

■ 0.01 - 0.05

■ 0.05 - 0.1

■ 0.10 - 0.25

■ > 0.25

Scale

10 0 10 20 30 Meters

1:1,000 @ A3 GDA 1994 MGA Zone 55

entura

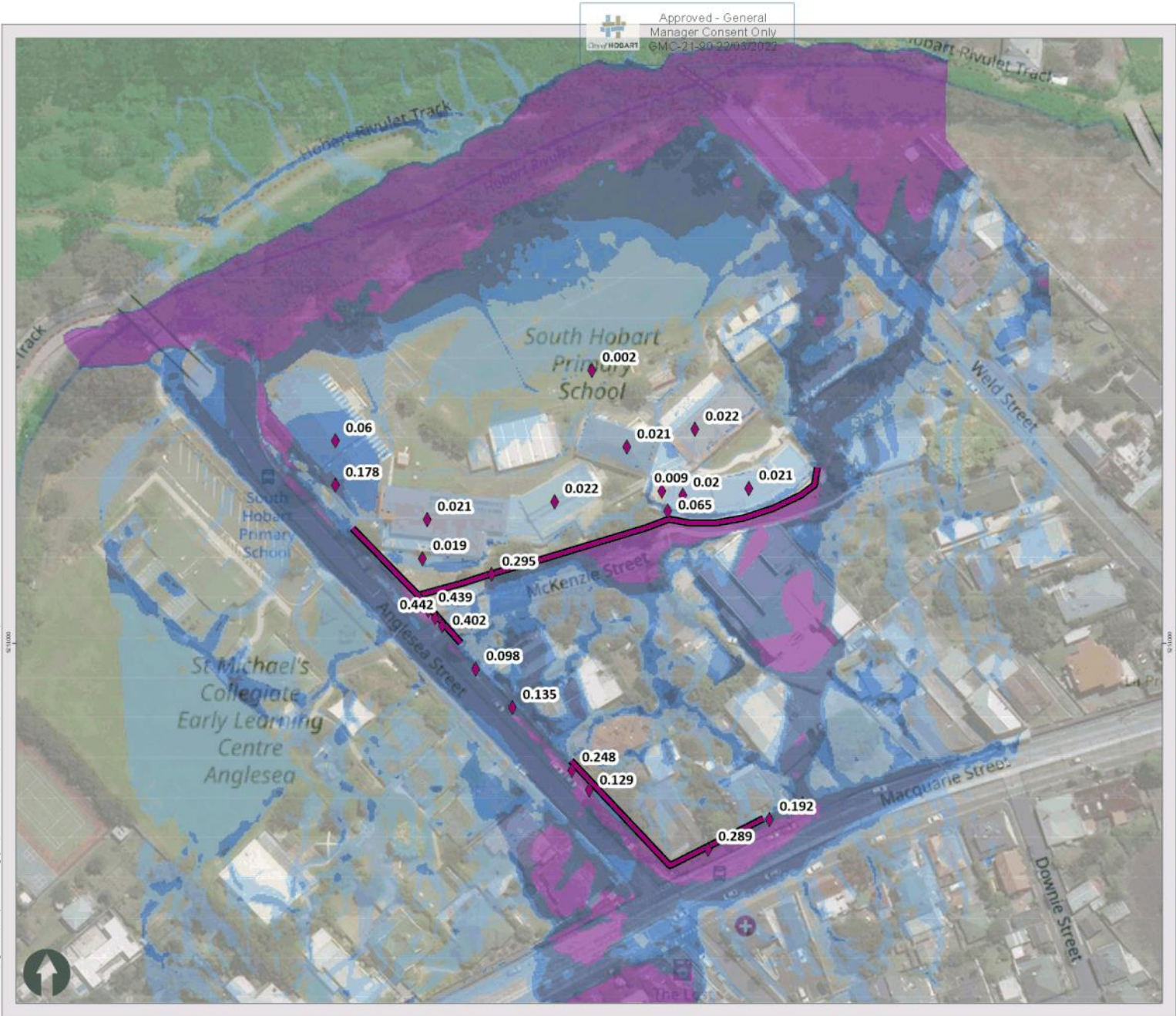
All information on this map is based on data supplied by the client and is not intended to be used for any purpose other than that for which it was supplied. The client warrants that the information is true and correct to the best of their knowledge and belief. The client also warrants that the information is not misleading, deceptive or fraudulent in any way. The client accepts full responsibility for any loss or damage arising from the use of this information. © 2019 Entura Pty Ltd





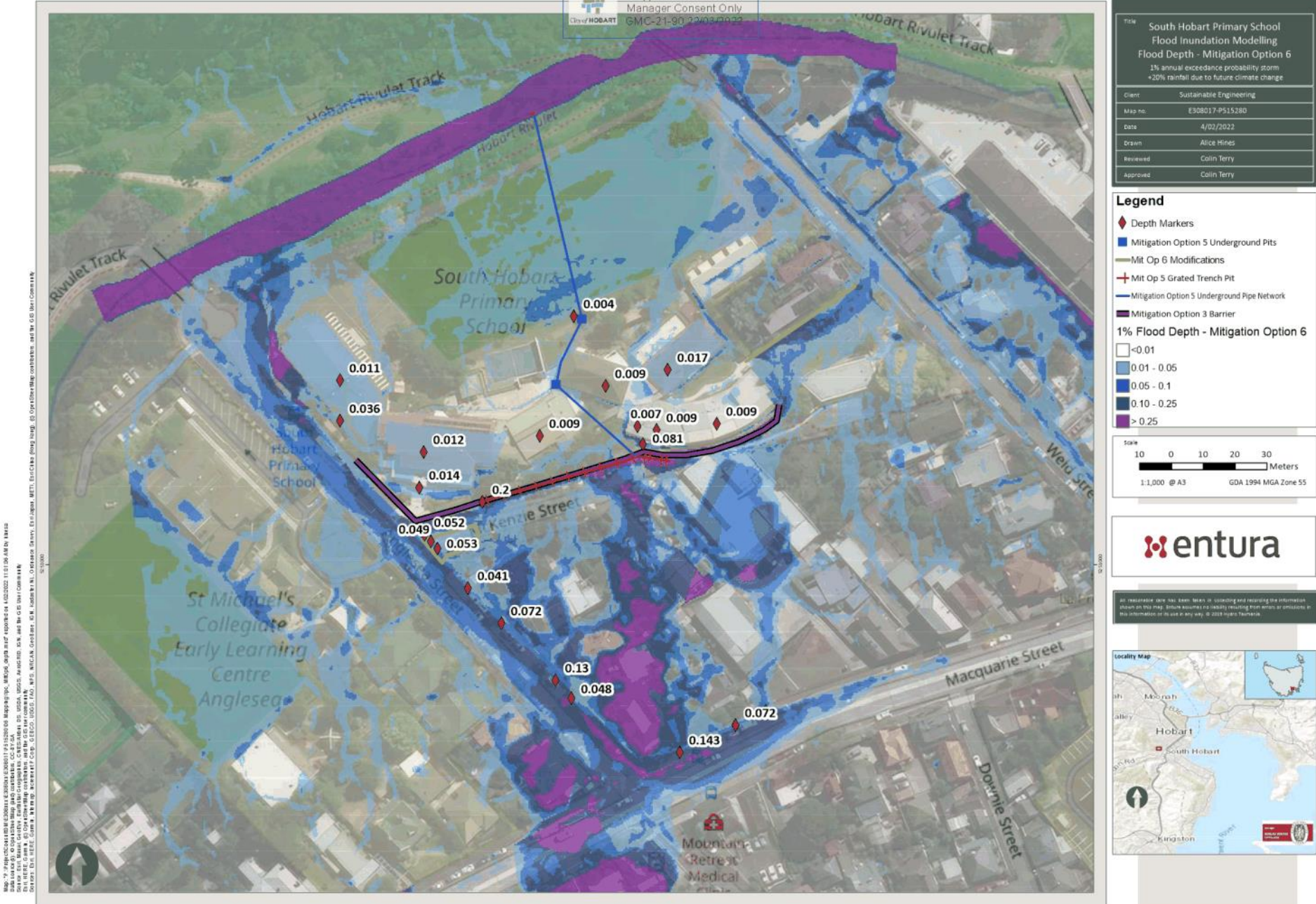


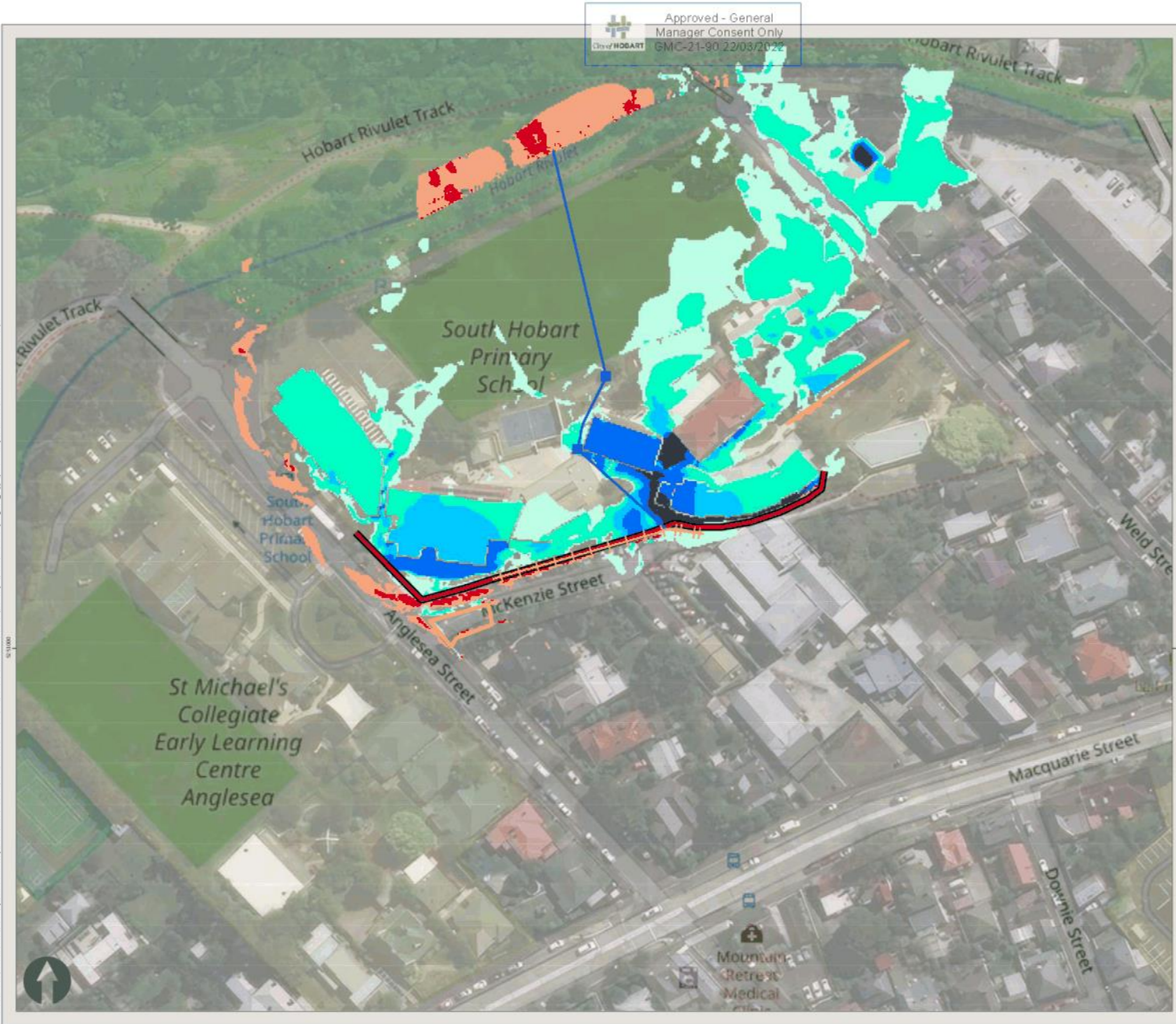
17. <https://doi.org/10.1007/s10260-019-00499-3> (2019) 237–248. <https://doi.org/10.1007/s10260-019-00499-3>





bioRxiv preprint doi: <https://doi.org/10.1101/256030>; this version posted April 24, 2018. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.





Approved - General
Manager Consent Only
GMC-21-90 22/03/2022

Title	South Hobart Primary School Flood Inundation Modelling Flood Depth Difference Existing vs Mitigation Option 6 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Mitigation Option 5 Underground Pits
- Mit Op 6 Modifications
- Mit Op 5 Grated Trench Pit
- Mitigation Option 5 Underground Pipe Network
- Mitigation Option 3 Barrier

EXG - Mit Op 6 - Depth Difference

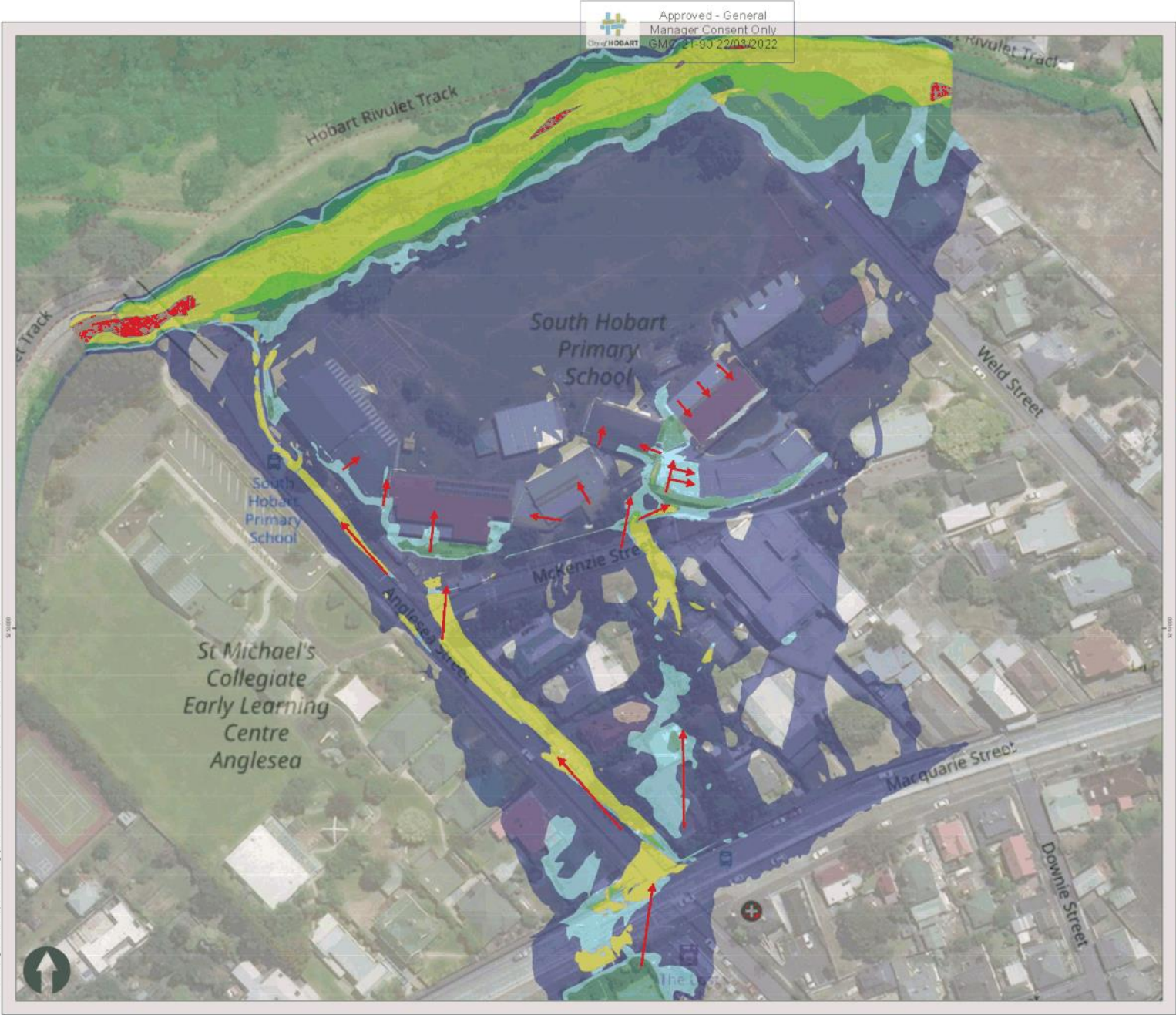
- <= -0.5 m
- 0.5 m - -0.3 m
- 0.3 m - -0.2 m
- 0.2 m - -0.1 m
- 0.1 m - -0.05 m
- 0.05 m - 0.05 m
- 0.05 m - 0.1 m
- >= 0.1 m

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55

entura

All information on this map has been taken from publicly available information. entura does not warrant the accuracy or completeness of the information shown on this map. entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2022 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Existing Conditions 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

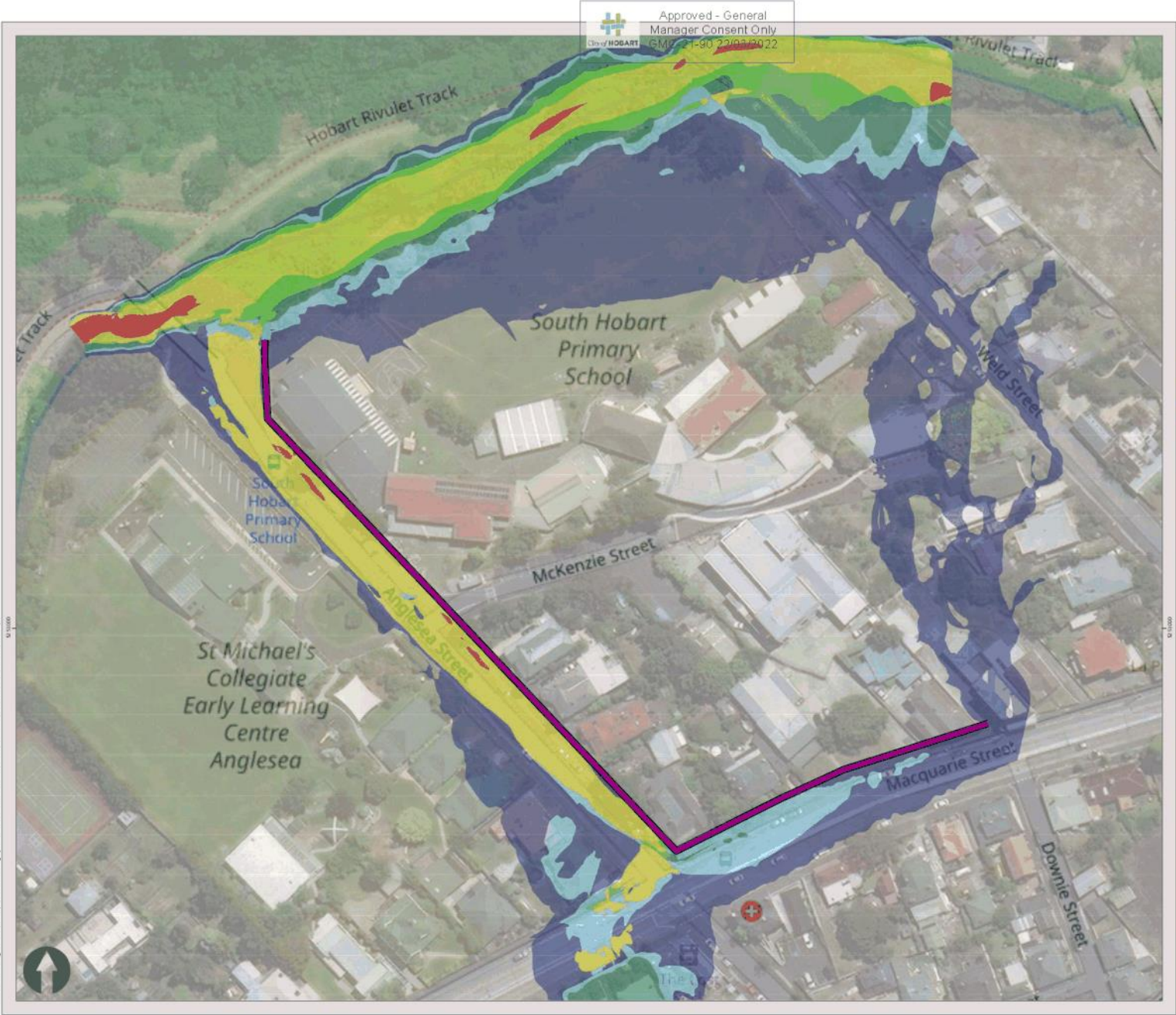
- Flow Direction
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map has been based on the information provided on this map. entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 1 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

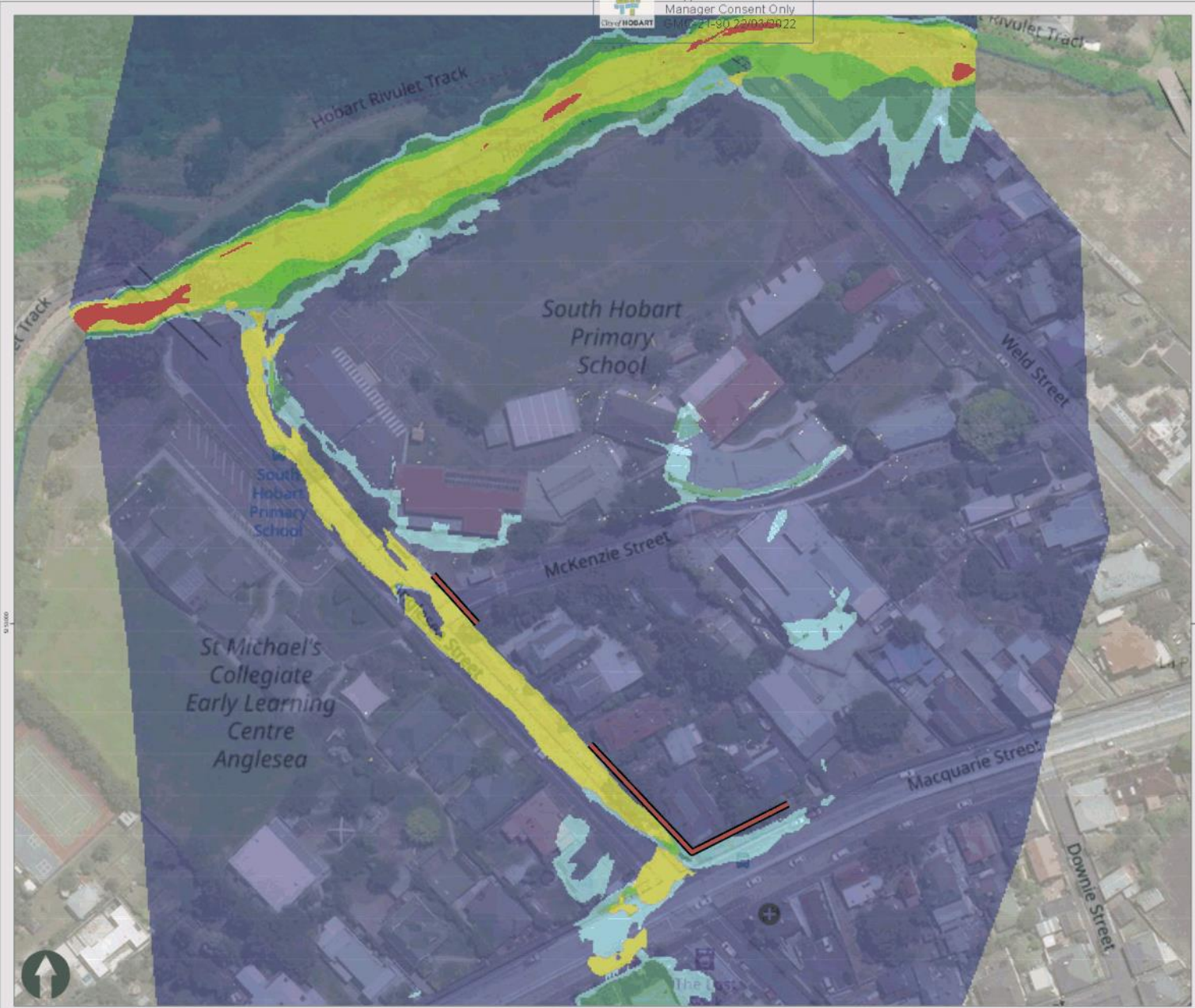
- Mitigation Option 1 Barrier
- 1% Flood Hazard - Mitigation Option 1
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All reasonable care has been taken in collecting and presenting the information shown on this map. Entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 Entura Pty Ltd

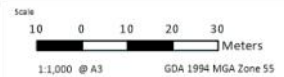




Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 2 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

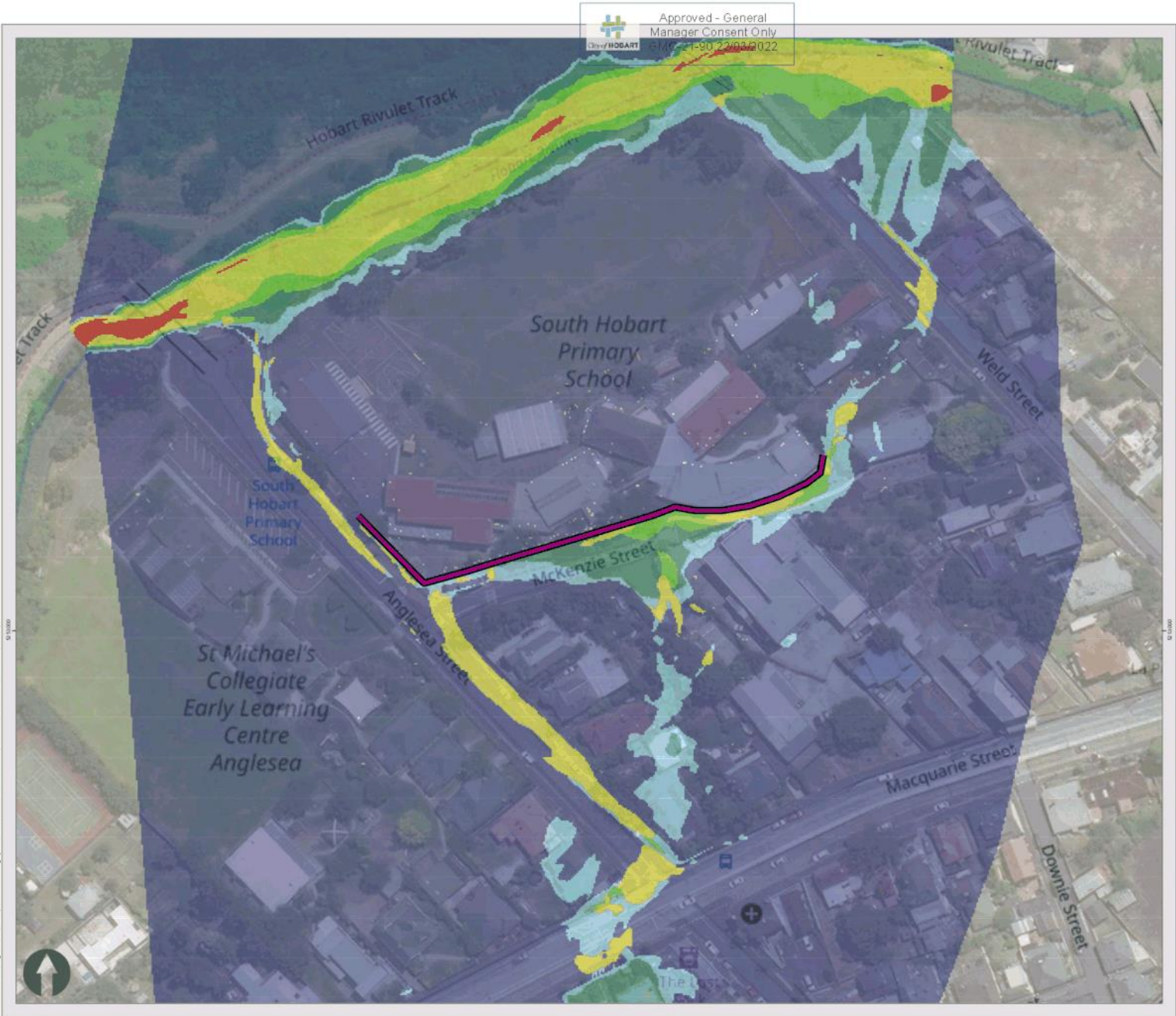
Legend

- Mitigation Option 2 Barrier
- 1% Flood Hazard - Mitigation Option 2
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous



All information on this map has been based on existing and measured information shown on this map. entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 3 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 3
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

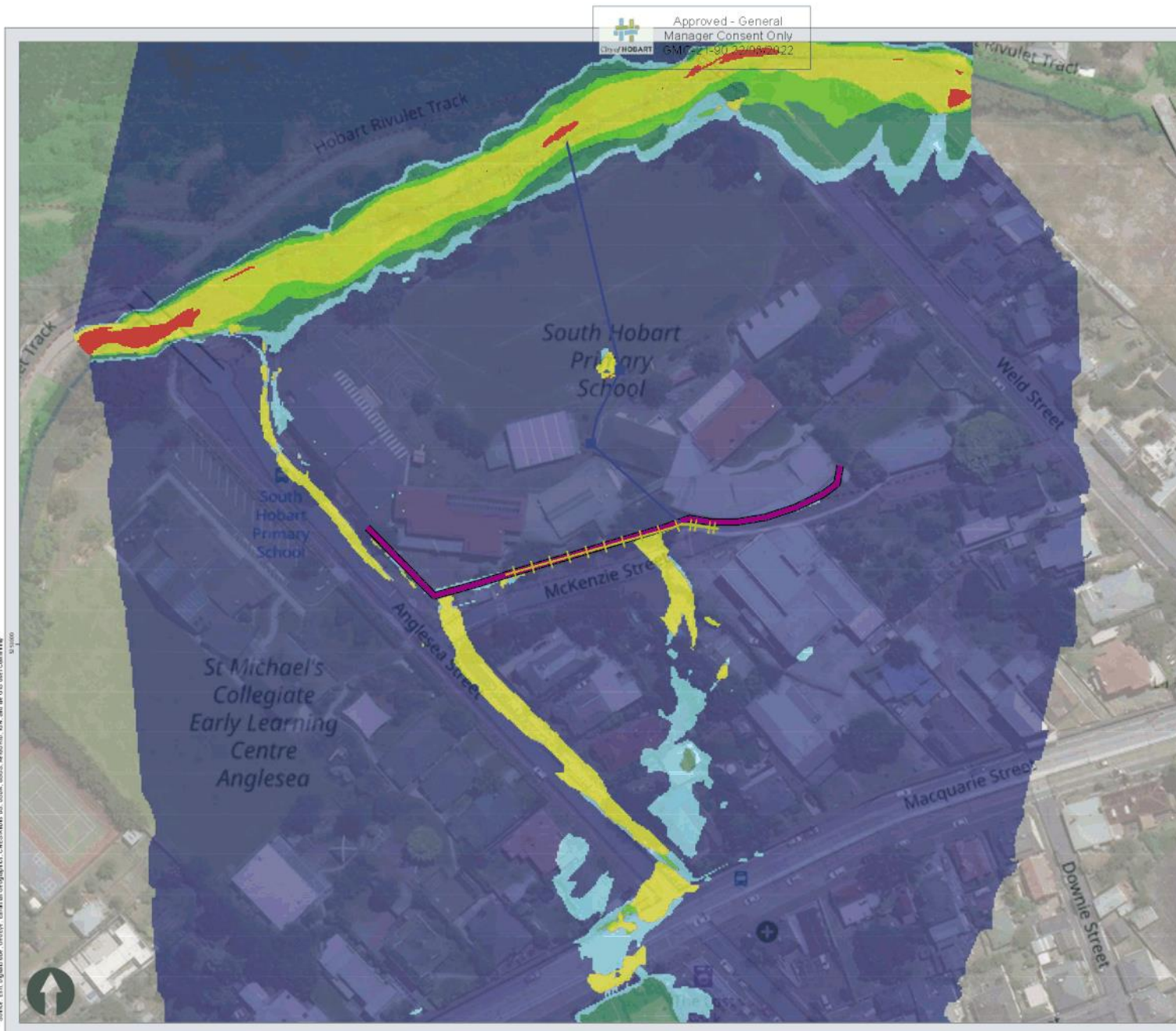
Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map has been based on the best available information at the time of preparation. entura does not accept liability for any errors or omissions in this information or its use in any way. © 2019 entura







Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 5 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS1528D
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

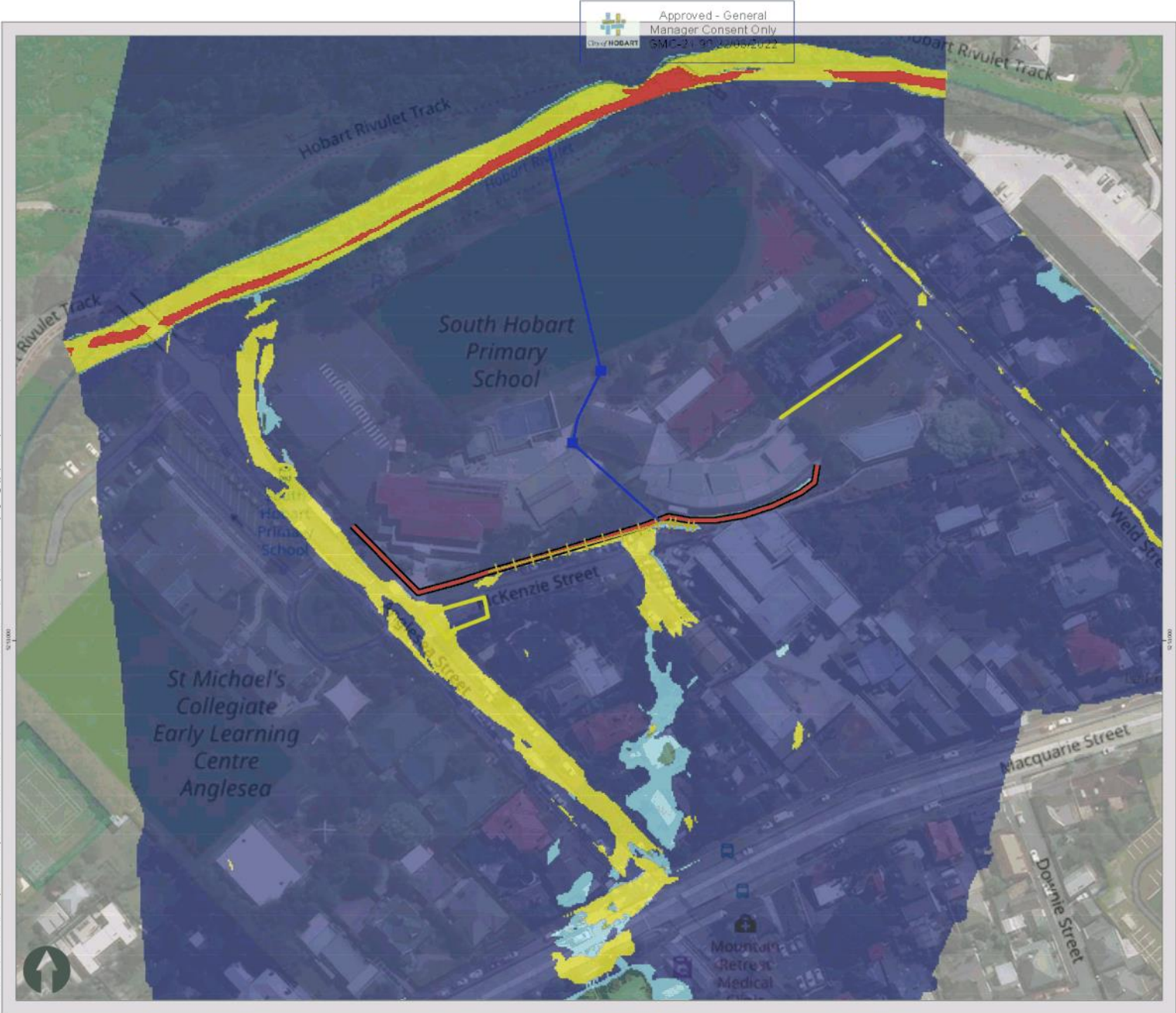
- Mitigation Option 5 Underground Pits
- + Mit Op 5 Grated Trench Pit
- Mitigation Option 5 Underground Pipe Network
- Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 5
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55

entura

All reasonable care has been taken in collecting and recording the information shown on this map. Errors assumed the liability resulting from errors or omissions in this information or its use in any way. © 2019 Hydro Tasmania





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 6 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

- Legend**
- Mitigation Option 5 Underground Pits
 - Mit Op 6 Modifications
 - Mit Op 5 Grated Trench Pit
 - Mitigation Option 5 Underground Pipe Network
 - Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 6**
- H1 - Relatively Benign
 - H2 - Unsafe for small vehicles
 - H3 - Unsafe for all vehicles, children & elderly
 - H4 - Unsafe for all vehicles
 - H5 - H4 plus buildings require special design
 - H6 - Unconditionally dangerous



All information on this map is based on data received and recorded by the information provider on this map. entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2022 entura





Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

C Flood Depth Maps 5% AEP

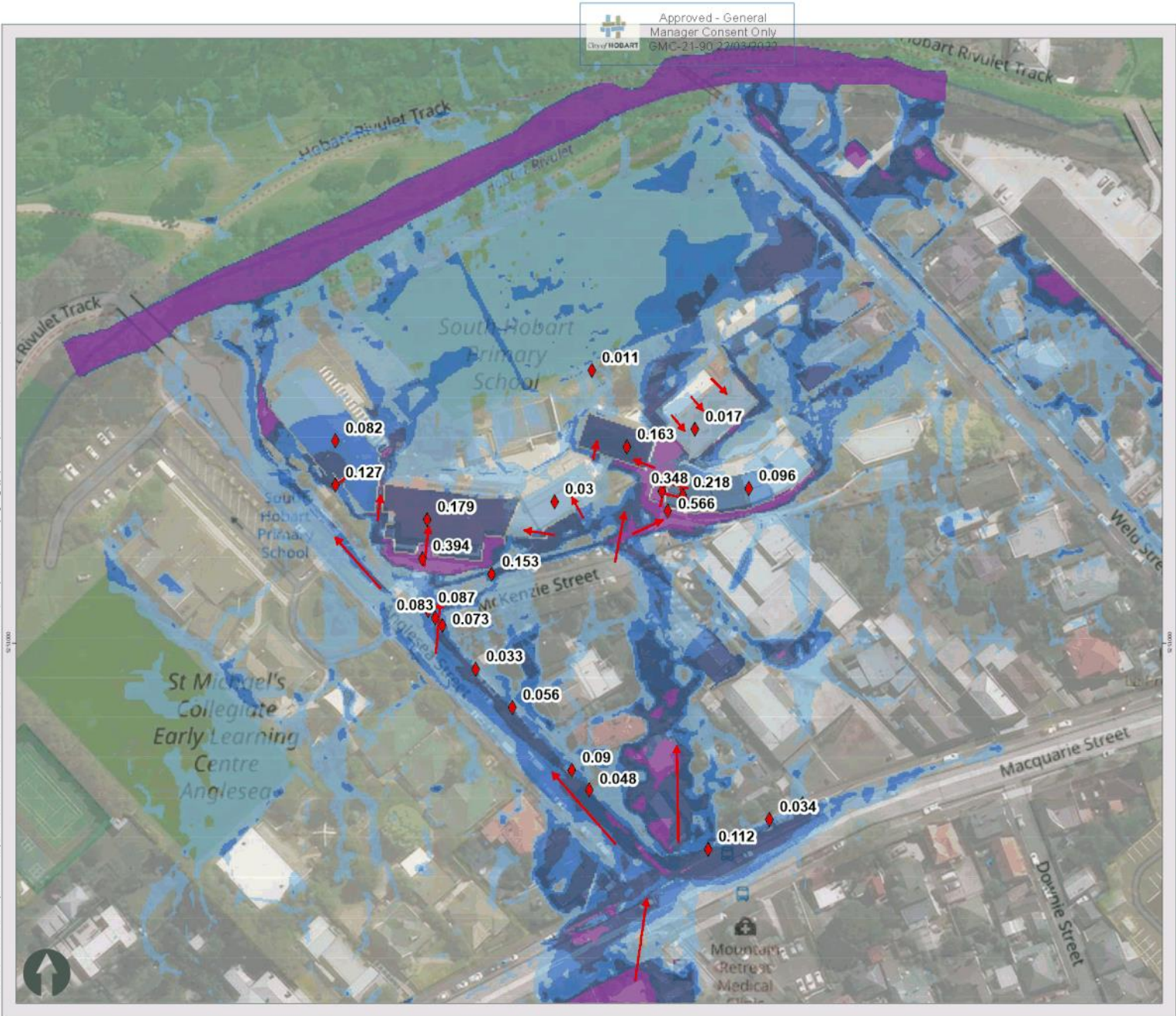
South Hobart Primary School - Flood Insurance Assessment
ENTURA-11EB8F



Approved - General
Manager Consent Only
CMC-21-90 22/03/2022

Revision No: 3
11 February 2022

This page is intentionally blank.



Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Existing Conditions 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers
- Flow Direction

5% Flood Depth - Existing Conditions

<0.01
0.01 - 0.05
0.05 - 0.1
0.10 - 0.25
> 0.25

Scale

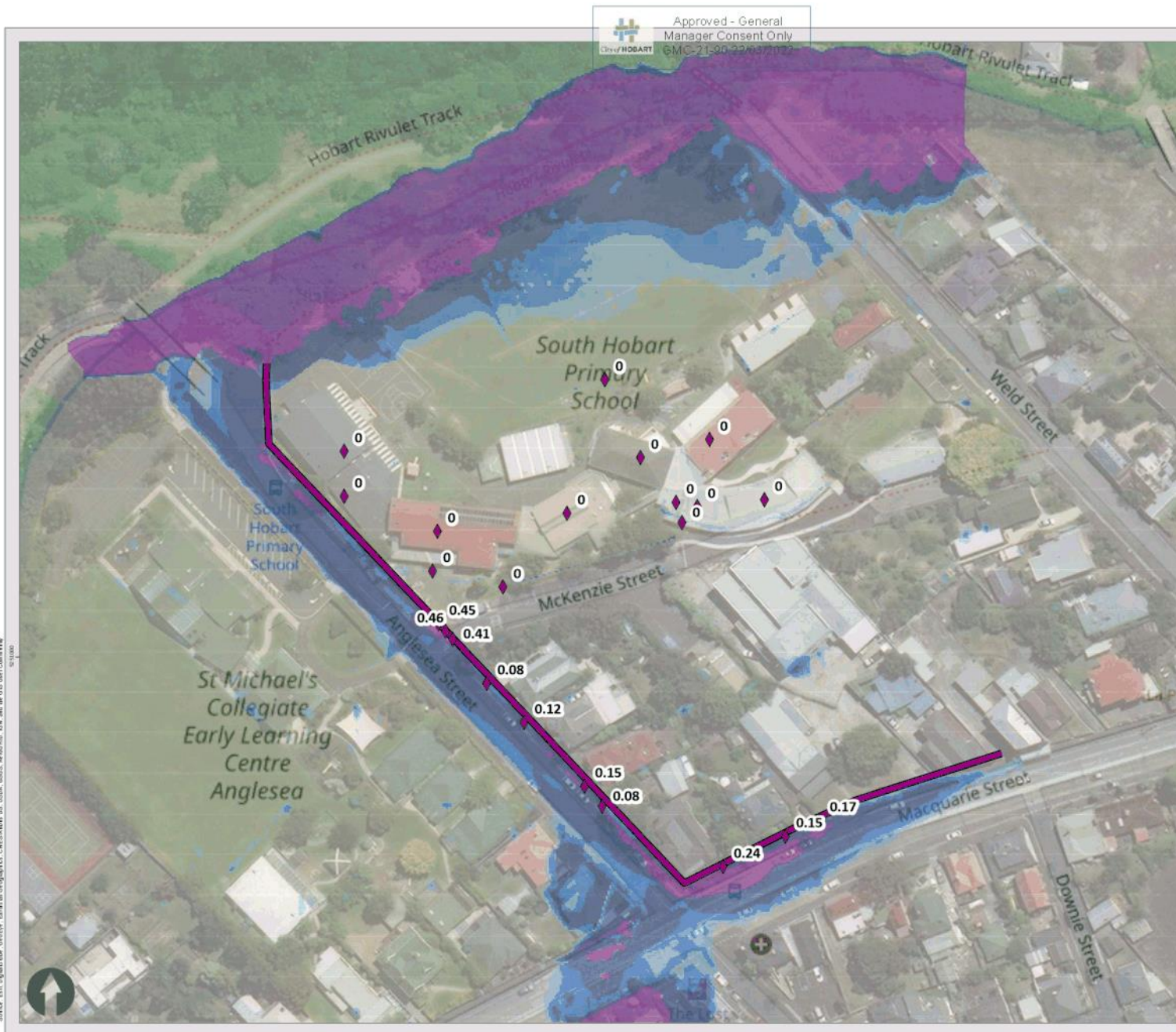
10 0 10 20 30 Meters

1:1,000 @ A3 GDA 1994 MGA Zone 55








All information on this map has been derived from publicly available information. entura does not warrant the accuracy or completeness of this information or its use in any way. © 2022 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 1 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	2/05/2019
Drawn	Kylie Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers**
- Mitigation Option 1 Barrier
- 5% Flood Depth - Mitigation Option 1
- (m)
- | | |
|---|-------------|
|  | <0.01 |
|  | 0.01 - 0.05 |
|  | 0.05 - 0.1 |
|  | 0.10 - 0.25 |
|  | > 0.25 |

Scale
10 0 10 20 30
Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55

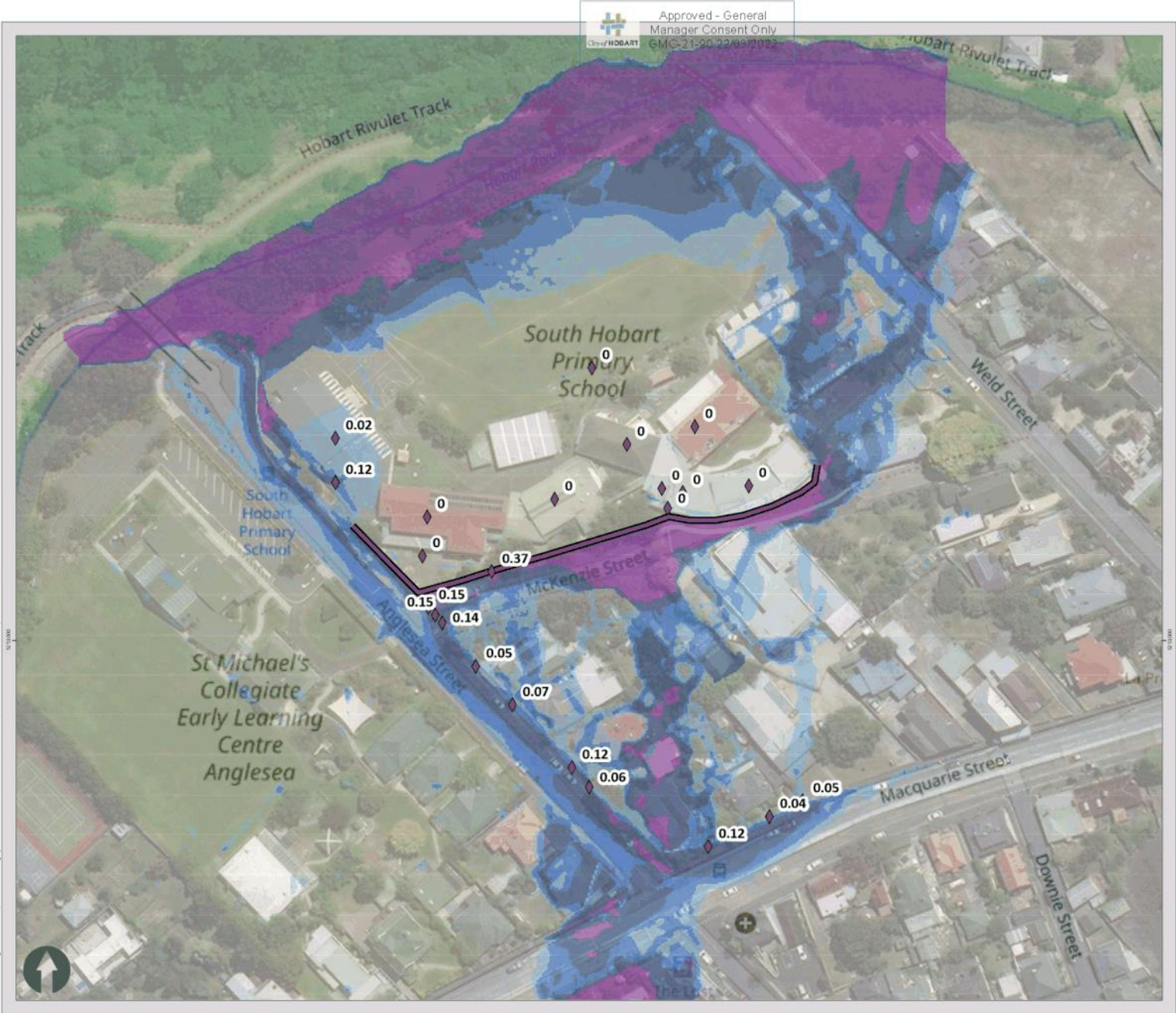


All reasonable care has been taken in collecting and recording the information shown on this map. Hydrex assumes no liability resulting from errors or omissions in this information or its use in any way. © 2005 Hydrex Tasmania





1. *Journal of the American Medical Association* 2005;293:1302-10. <http://www.jama.com>



Approved - General
Manager Consent Only
GMC-21-80 22/03/2022

Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 3 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

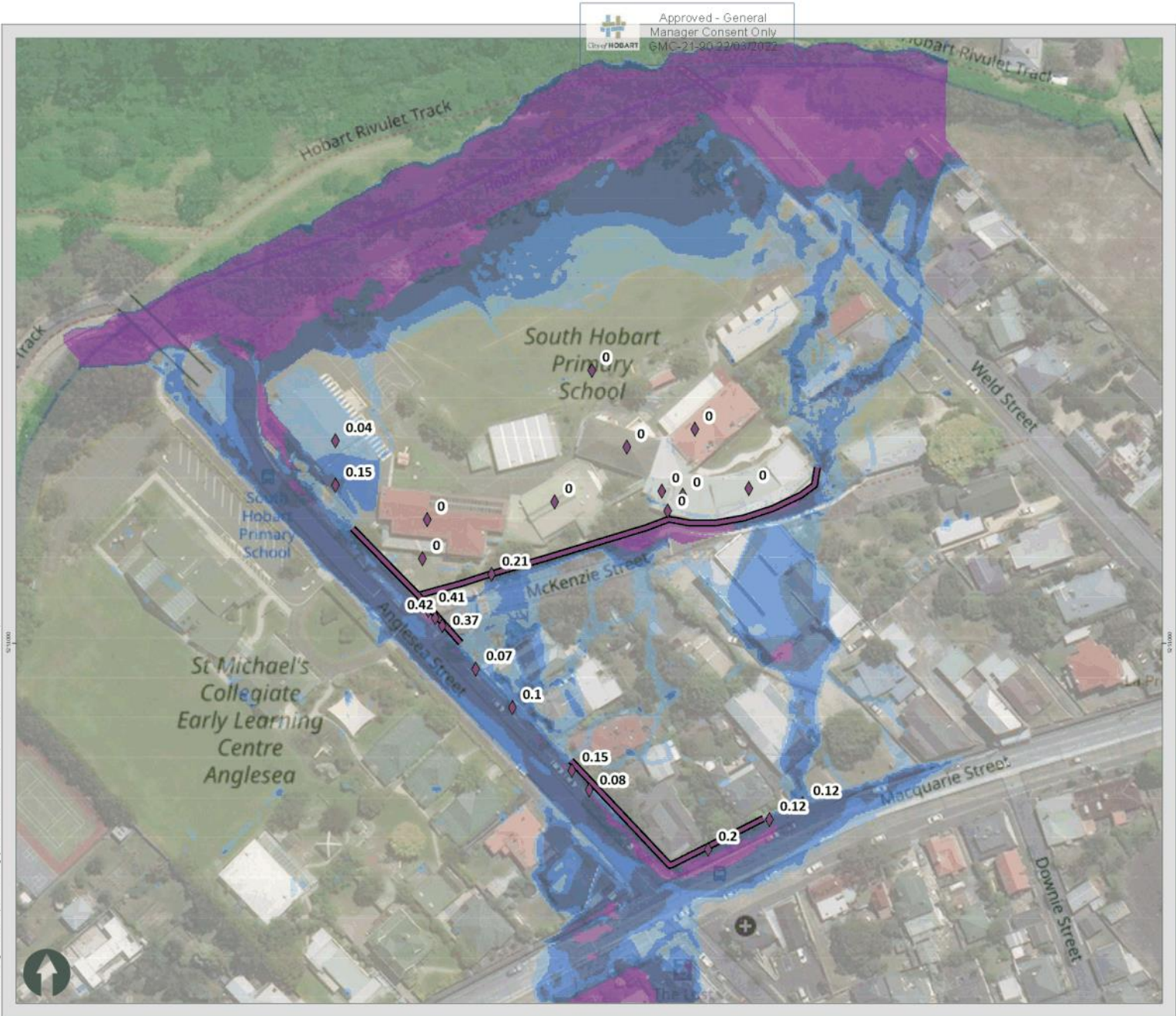
- Depth Markers
 - Mitigation Option 3 Barrier
 - 5% Flood Depth - Mitigation Option 3
- (m)
- <0.01
 - 0.01 - 0.05
 - 0.05 - 0.1
 - 0.10 - 0.25
 - > 0.25

Scale
10 0 10 20 30
Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55

entura

All information on this map is based on the best available information and is not a guarantee of accuracy. entura is not responsible for any errors or omissions in this information or its use in any way. © 2019 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 4 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

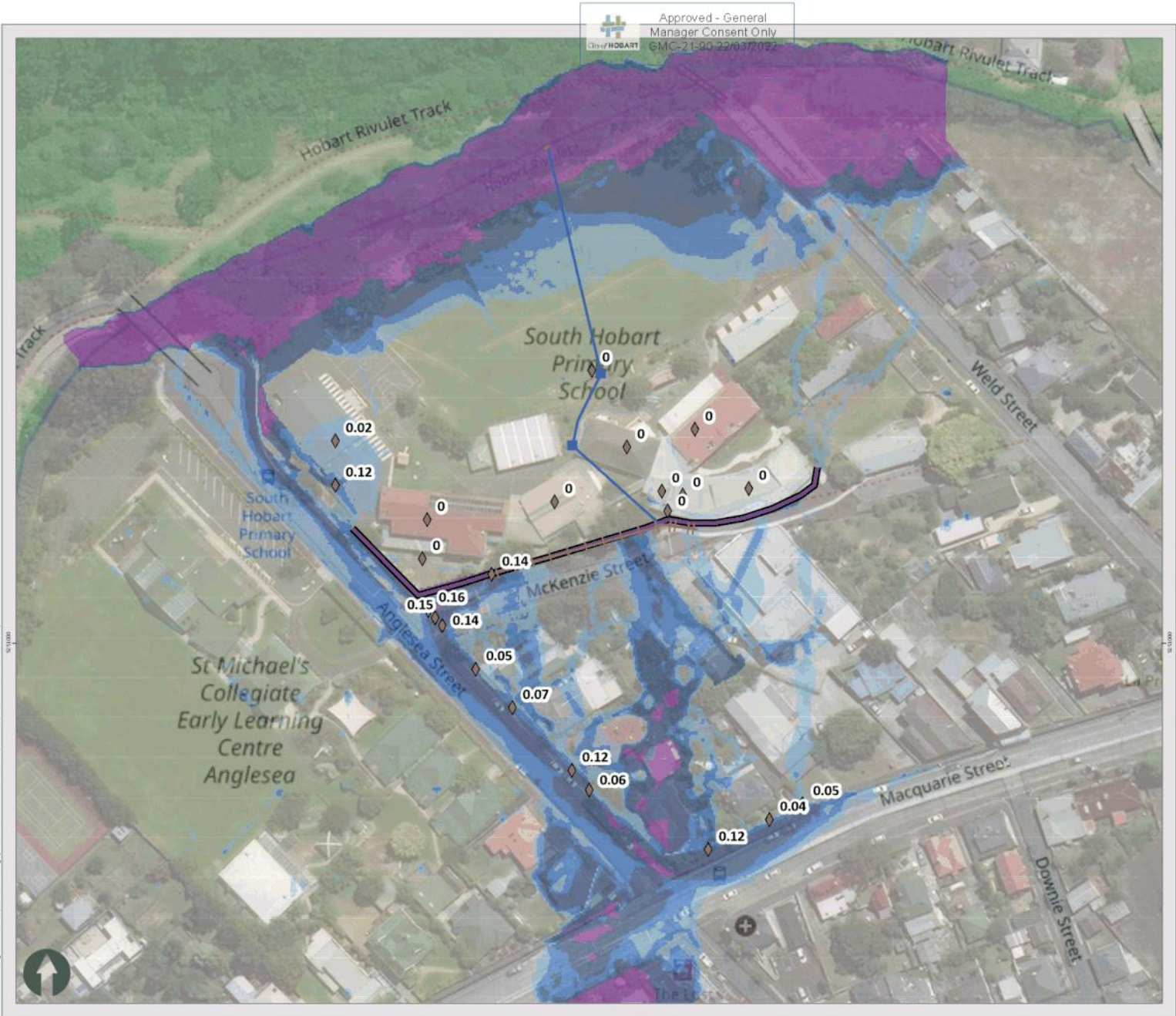
- Depth Markers
 - Mitigation Option 2 Barrier
 - Mitigation Option 3 Barrier
 - 5% Flood Depth - Mitigation Option 4
- (m)
- <0.01
 - 0.01 - 0.05
 - 0.05 - 0.1
 - 0.10 - 0.25
 - > 0.25



entura

All information on this map is based on data collected and recorded by the information shown on this map. Entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 Entura Tasmania





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 5 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers
- Mitigation Option 5 Underground Pits
- Mit Op 5 Grated Trench Pit
- Mitigation Option 5 Underground Pipe Network
- Mitigation Option 3 Barrier
- 5% Flood Depth - Mitigation Option 5

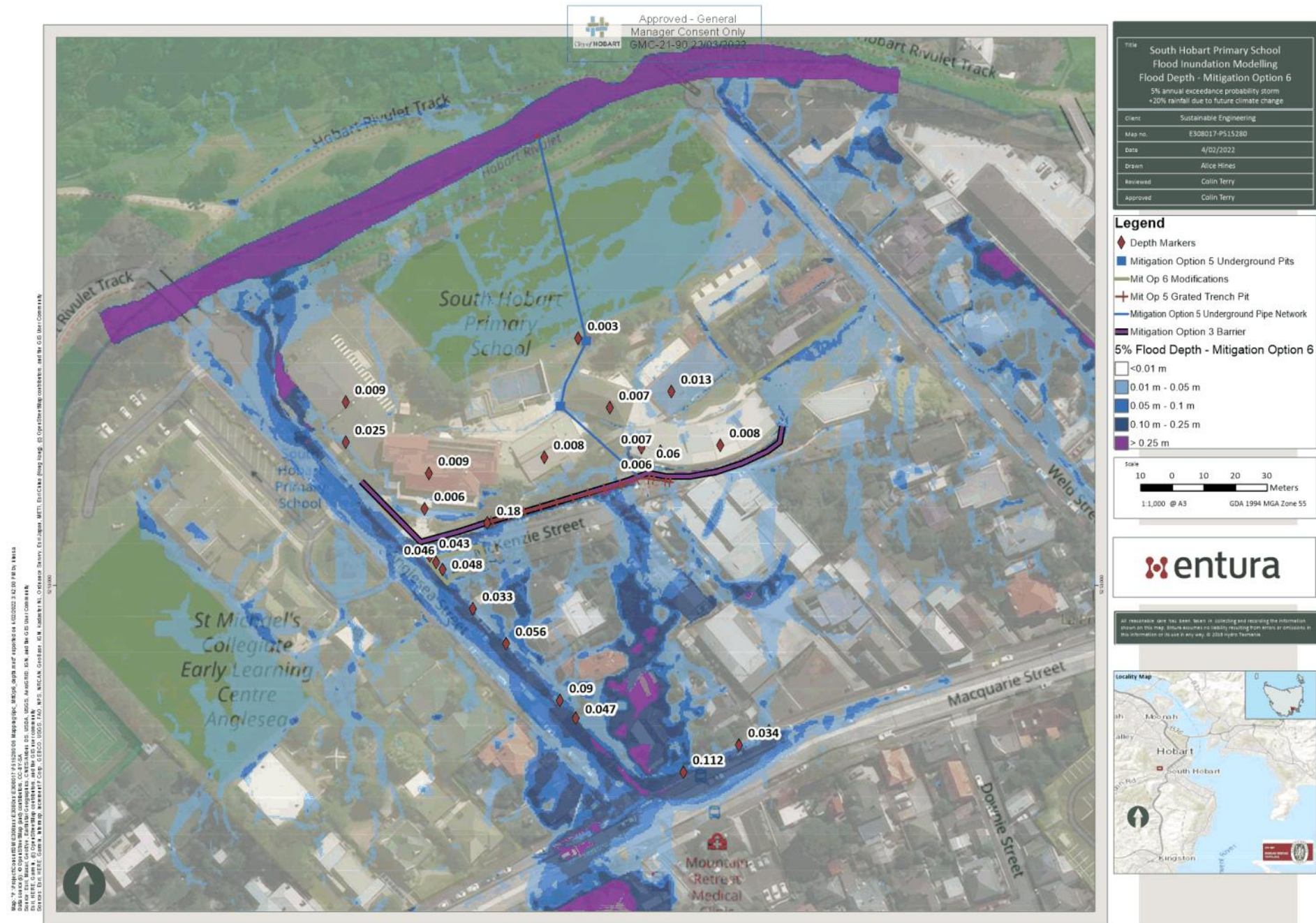
(m)

- <0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.10 - 0.25
- > 0.25



All information on this map has been derived from publicly available information. entura does not warrant the accuracy or completeness of this information. entura is not responsible for any loss or damage arising from the use of this information.





 Approved - General
Manager Consent Only
GMC-21-90-22/03/2022
Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

Department of Education

South Hobart Primary School Flood Mitigation Works – Stage 2

TECHNICAL SPECIFICATION

21 December 2021



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

Document Approval and Issue Notice

The South Hobart Primary School Flood Mitigation Works Specification is a controlled document. Recipients should remove superseded versions from circulation. This document is authorised for issue once it has been approved.

PREPARED:

(for release) Sustainable Engineering Tas P/L

Date: 02/09/2020

1.1 Build Status:

Version	Date	Author	Reason	Sections
1.0	14/02/2020	SETas	Issue for Tender	
1.1	09/04/2020	SETas	Issue for Tender	
2.0	11/08/2020	SETas	Revised scope	
2.1	02/09/2020	SETas	Issue for Construction	
2.2	21/12/2021	SETas	Issue for Tender	

Distribution:

Copy No	Version	Issue Date	Issued To
1	1.0	09/04/2020	Steve Gerard
1	2.0	11/08/2020	Steve Gerard
1	2.1	02/09/2020	Steve Gerard
1	2.2	21/12/2021	Steve Gerard



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

Table of Contents

2	INTRODUCTION.....	4
3	CONSTRUCTION	7
4	Works Description and Requirements	Error! Bookmark not defined.
5	Hold Points	Error! Bookmark not defined.
6	Environment Management	Error! Bookmark not defined.
7	Work Health and Safety	Error! Bookmark not defined.
8	Customer service and communication	Error! Bookmark not defined.
9	Reporting.....	Error! Bookmark not defined.
10	Supervision of contract	Error! Bookmark not defined.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

2 INTRODUCTION

2.1 Background

This Contract is for Works to improve stormwater capacity and protection of the South Hobart Primary School, South Hobart.

During a storm event on the 10 May 2018, several buildings and areas were inundated, advancing the need for these works.

The South Hobart Primary School site has suffered flood damage on several occasions since 2017. These events have caused severe disruption to site operations but of more concern is the risk to people on site. It is the risk to people that is driving the project.

2.2 Objectives

The objective of the Works is to reduce further inundation and subsequent damage to school property resulting from runoff from Anglesea Street and the catchment above Macquarie Street.

2.3 Scope

The Works include but are not limited to:

Contract Specific -

- (a) Trenching for installation of stormwater pipe and manholes
- (b) Supply and install DN750 pipework
- (c) Supply and install inverted culvert sections
- (d) Construction of core filled, reinforced block flood walls (Type A, Type B and landscaped walls)
- (e) Construction of footpaths
- (f) Construction of kerb and channel
- (g) Construction of kerb ramps
- (h) Supply and Installation of flood gates
- (i) Protection and/or relocation of existing services as required to facilitate works
- (j) Demolition of existing footpaths, pits, stormwater pipes, landscaping and ancillary works
- (k) Landscaping and reinstatement
- (l) Construction of rock armouring
- (m) Providing CCTV documentation of finished works.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

General:

- Ensuring all persons working at, and attending site have current Working with Vulnerable People card;
- Scheduling works to minimise impacts to the school function and amenity including proactive management of noise and dust. It is hoped works will start during a term break in 2022, exact timing to be negotiated.
- Identifying, locating, exposing and protecting of all underground services;
- Notifying the private or public service infrastructure owner/provider of the intention to carry out the works near their assets/infrastructure;
- Undertaking relevant dilapidation/condition surveys prior to works;
- Management, supervision and administration of the works;
- Ground water management and control;
- Protection of the site, including bolted safety fence sections to make site child-proof;
- Provision of all necessary labour, equipment and materials;
- All reinstatements to ensure the site, TasWater's assets and the surrounding areas are left in the as-found condition;
- Spoil and waste disposal in accordance with legislative requirements;
- Customer and other stakeholder liaison;
- Creation of, recording of and submission of inspection and test plans;
- Collation and provision of all specified asset data, as-constructed data, condition assessment data and other information required to be given to Department of Education Council and TasWater;
- Carrying out of any necessary excavation and cutting;
- Maintaining the site and adjacent areas in a clean, tidy and safe condition;
- Compliance with WSAA Water, Sewerage and Pressure Sewerage Supply Codes of Australia MRWA Editions and relevant Principal's supplements and TasWater's standards and guidelines (available at <http://www.taswater.com.au/Development/Development-Standards>);
- Coordination with Taswater, Hobart City Council and other statutory authorities as necessary in relation to permits and approvals;
- Respond in conjunction with The Department to any complaints from stakeholders arising from defective work;
- Management of all incidents that might occur, in accordance with Department of Education, Council and TasWater's guidelines, policies and procedures, work health and safety legislation, regulations, standards and codes of practice;
- Any other activities necessary for completion of the Works in accordance with the requirements of the Contract.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

2.4 Hold Points

NOTICE: So that inspections can be undertaken (if required) give the Superintendent a minimum of 48 hours notice prior to the following hold points being reached:

General

- Submission and sighting by the Superintendent of all management plans (prior to commencement of any works on site);
- Prior to the commencement of high risk construction work (as defined in The Work Health and Safety Act 2012 and subordinate regulations) submission of SWMS and SOP's;
- Nomination of materials and components;
- Any non-compliances with respect to material quality;
- Proposed changes in nominated materials and components;
- Submission of Council permits:
 - A fully completed Application to construct public infrastructure;
 - Application for work in a watercourse or riparian zone;
 - Application to undertake works in a public space;
 - Application to for the box culverts, being classed as Notifiable Plumbing Work.

Preliminary investigation

- Service locations in particular detailed investigation and proving of the LV and HV power services;

Earthworks/Site Works

- Demolition of existing features as per the design;

Pipe line works

- Trenches excavated and ready for laying of pipes & placing of pits and inverted culvert sections;
- Pipe bedding and haunching (including no fines concrete bed/haunch);
- Completed work ready to be covered up, concealed or backfilled;
- Completed trench backfill prior to surface reinstatement.

Sewer protection works (if required)

- Exposure of sewer bedding zone;
- Steel placement for pier and beam detail;
- Re-haunching and backfill of pipe;
- Reinstatement and compaction of disturbed local material.
- NOTE – Taswater will not accept pre-cast culvert sections for the bridging.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

Surface reinstatement works (concrete)

- Subgrade preparation;
- Base preparation;
- Steel placement;
- Finishing.

Surface reinstatement works (asphalt)

- Subgrade preparation;
- Base preparation;
- Sealing preparations;
- Finishing.

Flood wall works

- Subgrade preparation;
- Base preparation;
- Steel up;
- Finishing.

Flood gate

- Preparation of sub-station wall returns;
- End restraint and mid span compression post fix off and alignment check;
- Test fit and confirmation of operation.

3 CONSTRUCTION

3.1 General

3.1.1 Materials and Workmanship

The Contractor will provide all skilled and unskilled labour required to complete the Works. The quality of workmanship will be to the highest standard of the respective trades and in accordance with best modern practices and methods.

The Contractor will ensure that the plant provided is designed, manufactured, and tested so that its operation and maintenance will not cause harm to any person.

All machinery will be designed and installed in accordance with all applicable Australian Safety Standards so that potential hazards are eliminated or isolated.

All materials and equipment supplied will be handled, stored, prepared and used or fixed in accordance with the manufacturer's written recommendations.

Where approval of products or materials is specified, the Contractor will submit samples or other evidence of suitability.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

3.1.2 Access to Site

Access is via Anglesea and McKenzie Streets South Hobart, and other relevant Council maintained roads.

3.1.3 Site Security

Access to the work site is to be controlled at all times to prevent unauthorised access.

All barriers shall be constructed with bolted fence panels to ensure child-proof work and storage zones are maintained.

3.1.4 Hours of work

Work shall be undertaken only between the following hours, ensuring compliance with the requirements of local authorities and EMPCA:

Monday – Friday 7.00am - 6.00pm

No works of the contract shall proceed outside normal working hours without the prior written approval of the Superintendent's Representative and such other Statutory Authorities as may be required. This applies to work before 7.00 a.m. on any day or later than 5.00 p.m. on any day, and on Saturdays, Sundays, Public Holidays and Bank Holidays. The Contractor shall pay the costs of any additional supervision or inspections made necessary by work outside the times specified.

The contract period is inclusive of all holiday periods.

3.1.5 Storage on Site

GENERALLY: Store materials and equipment on site so as to prevent damage to the site and minimise hazards to persons, materials and equipment. Keep storage areas neat and tidy.

Handle and store all products and materials in accordance with the manufacturers' recommendations and in a manner that prevents damage or deterioration or excessive distortion.

Do not store plastic pipe and fittings and plastic coated pipe and fittings near generators or other heat emitting equipment.

Store rubber sealing rings, lip seals and gaskets away from sunlight and in an unstrained condition.

Except for checking against the purchase order, keep pipe, fittings, valves, seals and other components delivered within protective crating or packaging, until immediately prior to use.

STORAGE ON THE WORKS: Do not use roads, driveways, paths, hard standings and the like forming part of the Works for access or storage unless prior written approval from the Superintendent has been given.

In this instance, McKenzie Street as shown on the design drawings is available for storage.

STORAGE OF PLANT AND MATERIALS/EQUIPMENT: The Contractor shall be responsible for the safe and secure storage of all plant, materials and equipment. The storage of all plant, materials and equipment by the Contractor shall be in designated areas or areas approved by the Superintendent, and be clear of all traffic, accesses and impediment to the public. Wherever possible plant, materials and equipment shall be stored within the immediate works area. When



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

plant, materials and equipment is not in use, they shall be removed from the works area. All plant, materials and equipment in use within the works area shall be protected by appropriate signs, lights, warning devices and safety barriers.

The Principal and Superintendent take no responsibility for the safe and secure storage of all plant, materials and equipment, with the Contractor taking all responsibility and liability for storage.

3.1.6 Site Amenities

REQUIREMENT: Provide statutory and necessary amenities and sanitary facilities for workers and other persons lawfully upon the site and remove them on completion of the Works.

3.2 EARTHWORKS AND TRENCHING

3.2.1 Extent of clearing

No clearing shall be undertaken until a joint inspection by the Contractor and Superintendent has been carried out and the limits of the clearing have been determined.

3.2.2 Clearing, Grubbing and Stripping

The Contractor will only remove such areas as are required for the carrying out of the Works as further described herein and on the Drawings. Disruption to roots of adjacent trees should be minimised. Refer also to Section “Excavation in Root Zones”.

No tree removal is required to execute the works and is strictly prohibited.

Burning of materials on site is not permitted.

3.2.3 Stripping of Topsoil

The topsoil shall be stripped from all required areas to be disturbed. Unless otherwise directed by Council, topsoil shall comprise all organic soils to a minimum depth of 100mm.

Topsoil shall be stockpiled adjacent to the site so as not to hamper construction operations and spread to designate or rehabilitation areas on completion of the Works. Topsoil will not be mixed with subsoil.

Topsoil shall not be removed from the Site. If additional topsoil is required during reinstatement, certified weed free loam shall be used.

3.2.4 Spoil and Waste Disposal

Any unsuitable or surplus material excavated from Site is to be disposed of offsite. Authorisation from Principal is required prior to the removal of any surplus materials.

3.2.5 Excavation

3.2.5.1 Ground Conditions

The Contractor has satisfied itself as to the different kinds of ground likely to be met during construction and has made due allowance for excavation of all types of materials under this Contract. No variation to the lump sum price will be made on account of the nature or location of the material, including rock and concrete landfill, encountered in excavation.

3.2.5.2 Safety



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

The Contractor is not to commence any excavation until all equipment and materials necessary to make the excavation safe are on site and available for use. This includes any necessary fencing and barriers, as well as trench shoring support systems (if needed).

The Contractor has assessed the Site for prior excavations and the extent or type of fill material likely to be encountered and consider and mitigate their impact on the new excavations.

3.2.5.3 Limits of Excavation

The Contractor shall keep the extent of excavation to the minimum possible to allow efficient construction of the Works while meeting the requirements shown on relevant Drawings.

Unless specified otherwise, keep the sides of excavations as vertical as possible to at least 150mm above the pipework.

Excavate trenches to allow bedding and pipework to be installed to the specified levels. Ensure that the minimum cover requirements shown on relevant Drawings are satisfied.

3.2.5.4 Groundwater

The Contractor will manage all groundwater in excavations and through the Site generally including during wet weather events. The cost for managing groundwater has been included in the Contract Sum. No claims for additional costs or time will be considered by the Principal with regard to managing wet ground conditions and dewatering.

3.2.5.5 Existing Services

The Contractor shall verify the position of existing underground, overhead and other services before commencing the excavation of each section of pipeline. No responsibility is taken by Council for services omitted from the documents or information shown. Any information relative to underground services set out in the contract documents shall be taken as tentative only and merely indicative of their presence in the area.

The Contractor shall be responsible for proving the location of all services, both horizontally and vertically prior to the commencement of works in their vicinity.

Where the location of the service differs to that shown on the Drawings and this difference will require a change to the designed pipeline alignment the Contractor shall advise Council of the actual location so as redesign of the subject area can be undertaken.

It shall be the Contractor's responsibility to locate the services sufficiently in advance of the pipeline laying works so as to allow for any redesign to occur. No claim for lost time shall be considered as a result of the Contractor not undertaking checks of services at least 3 working days in advance of pipe installation.

Unless otherwise stated, a minimum of 300mm separation shall be maintained between the pipe works and all other services. If 300mm separation cannot be achieved, approval must be sought from the Superintendent's Representative. A Dial Before You Dig survey should be carried out before commencing any excavations.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

CONTRACTOR TO NOTE – There is a TasWater gravity main and TasNetwork in ground cables in close proximity to the works. It is critical that these assets are protected at all times and any site or operational conditions that may pose a risk to the stability of the assets are immediately reported to the Superintendent, TasWater and/or TasNetworks nominated representative. Works are to cease immediately unless emergency remedial or protection works are required.

3.2.5.6 Support or Benching of Excavations

Due to the proximity of critical assets, benching out of the excavation zone will not be permitted. Support all trenches of depth 1.5m or greater or in unstable ground strata. All formwork must be removed on completion of installation.

3.2.5.7 Shoring

The Contractor shall submit, at least 5 working days prior to undertaking trench excavation, a work methodology statement for all shoring in trenches greater than 1.5m in depth or areas where ground water has been identified as being likely to make excavation works unstable, for approval by the Superintendent's Representative.

The Contractor shall be responsible for the design of temporary supports to the sides of excavations and shall take into account the following;

- Dimensions of the excavation
- Soil and groundwater properties
- Adjacent structures
- Types of excavating equipment being used
- Transient surcharge loading
- Time the excavation will be left open
- Working area

All excavations shall, if so required by the provisions of the Industrial Safety, Health and Welfare Act and its Regulations, be shored to the satisfaction of the Superintendent's Representative. The Superintendent's Representative may require the Contractor to submit details of its proposals for shoring the excavations, but the approval of such details shall not relieve the Contractor of any responsibility for the safety of the work.

Timbers, sheet piling or other materials which support the side of the excavations shall be removed as the work proceeds. In removing the shoring, care shall be taken that no injury to the works is caused thereby.

At all times during the course of the excavation deeper than one metre, a suitable access ladder shall be provided.

3.2.5.8 Alternative Methods of Installation

The Contractor may submit alternative methods of construction to shoring and these will be considered on their merits. A supporting work methodology statement must be submitted for any alternative method proposed, where excavation will exceed 1.5m in depth or areas where ground water may be encountered to ensure all works remain stable, for approval by the Superintendent's Representative.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

The Contractor shall be responsible for the design and operation of supports and equipment proposed for the excavations and shall take into account the following;

- Dimensions of the excavation
- Soil and groundwater properties
- Adjacent structures
- Types of excavating equipment being used
- Transient surcharge loading
- Time the excavation will be left open
- Working area

All excavations shall, if so required by the provisions of the Industrial Safety, Health and Welfare Act and its Regulations, be carried out to the satisfaction of the Superintendent's Representative. The Superintendent's Representative may require the Contractor to submit details of its proposals for carrying out the excavations, but the approval of such details shall not relieve the Contractor of any responsibility for the safety of the work.

The process, equipment and materials used shall at all times ensure the protection and safety of all adjacent council and third party utility infrastructure.

At all times, care shall be taken that no injury to the works is caused thereby.

At all times during the course of the excavation deeper than one metre, a suitable access ladder shall be provided.

3.2.5.9 Maintain Excavations

The Contractor will adequately maintain all excavations and keep them clear of water, mud and fallen material.

The Contractor shall carry out all work necessary to divert or remove and dispose of any water which interferes with the work and shall make good any damage to the works caused by water from rain, floods, springs and other sources.

The Contractor shall be entirely responsible for ensuring that all excavations are kept dewatered and that no scouring is caused to surrounding areas by dewatering operations.

All water entering an excavation which does not drain naturally shall be removed by pumping or siphoning methods.

Do not discharge dewatering to sewers, stormwater drains or watercourses without appropriate authorisation and without complying with the Council's or Regulator's requirements.

The Contractor shall maintain adequate pumping equipment to ensure excavations are kept dewatered.

3.2.5.10 Disposal of Excavated Material

All excavated material that is surplus to, or unsuitable for use as select backfill shall be removed from site. Surplus excavated materials shall become the property of the Contractor and the Contractor shall bear full responsibility and pay any costs associated with the transport and disposal of surplus materials.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

3.3 BACKFILLING

3.3.1 Bedding and Backfill Material

Requirements for bedding and backfilling of trenches are indicated as per standard drawing TSD-G01-v1 and MRWA-W-202. Trench reinstatement type shall be to match the existing surface type.

Materials used for refilling of trenches shall conform with the following requirements:

- (i) Granular bedding and material shall be sand or uniformly graded crusher dust of basalt or doleritic origin in accordance with product specification WSA-PS-360;
- (ii) Selected backfill material may be used in all areas other than under roadways and shall be free from clay lumps or stones retained on a 75mm sieve and from dangerous and noxious weeds to the approval of Council. Non-cohesive material shall be used in preference to clayey material. The Contractor has allowed for importation of material at its own cost if the on-site material is unsuitable;
- (iii) If excavated material does not meet the selected backfill material requirements, selected backfill shall be imported and placed above the top of the fine granular surround up to a minimum level of 150mm above the obvert of the pipe. The selected backfill shall be placed in layers of not more than 150mm of uncompacted thickness.

3.3.2 Backfilling Generally

As soon as a reasonable length of pipe has been laid, tested and approved, the trench shall be filled in as specified without delay. Before backfilling is commenced, pipe bedding shall be carefully packed round and under the pipe to a depth shown on the Drawings. Marker tape, with a detectable metallic strip, shall be laid on top of the pipe embedment material prior to placement of trench fill.

Should the excavation collapse or extend beyond intended limits, backfilling shall be carried out with such special precautions or selected materials as may be directed by the Superintendent's Representative and no extra payment will be made in respect thereof.

After the completion of backfilling the Contractor shall be responsible for making good without delay and, from time to time, all subsidence of backfilling occurring within the time specified by under the Contract.

3.3.3 Special Embedment

Where the trench embedment is in uncontrolled fill or native soils with a bearing capacity < 50 kPa, the Contractor shall notify Superintendent's Representative and seek direction as to any special pipe support requirements which may be required.

3.3.4 Refilling and Compaction of Trenches in Non-Trafficable Areas

Granular bedding material or concrete bedding shall be placed and compacted under the pipes to the requirements as shown on the Drawings.

The granular bedding material shall be carefully placed around the pipe in layers not exceeding 150mm uncompacted thickness, to the approval of Superintendent's Representative or its representative and shall be carefully rammed and compacted around the pipe with suitable



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

tools without damaging the pipe or its coating to provide a firm homogeneous support for the pipeline. The standard of compaction of the fine granular surround shall be to the approval of Superintendent's Representative or its representative and shall achieve a density ratio for the material of not less than ninety percent (90% of maximum dry density using standard compaction).

If excavated material does not meet the selected backfill material requirements, selected backfill shall be imported and placed above the top of the fine granular surround up to a minimum level of 300mm above the fine granular surround. The selected refill shall be placed in layers of not more than 150mm uncompacted thickness and shall be carefully compacted with mechanical equipment without damaging the pipe or its coating to not less than ninety five percent (95%) of maximum modified dry density. NATA accredited testing is not required. Ordinary fill may be placed over select fill up to such depth as to allow surface reinstatement to match adjacent conditions.

3.3.5 Re-Grassing of Topsoil on Excavated Areas

In all areas where existing grass surfacing has been removed to carry out the works, these shall be re-instated with topsoil in accordance with Section 2.2.3 and re-surfaced with appropriate grass types to match existing grass varieties at the site.

Should seeding be proposed by the contractor in lieu of re-grassing, the species of seeding must be a local provenance rye grass blend unless advised otherwise by the Superintendents Representative.

3.4 PIPEWORKS

This section of the Contract includes the provision of all plant, labour and materials for the installation, testing, and commissioning of pipeworks and associated infrastructure as shown on the drawings.

The work includes (but is not limited to):

- Trenching and backfilling;
- Laying and jointing pipework;
- Manhole installation;
- Live connection works;
- Rehabilitation.

The following standards are referred to in this section. All works shall be undertaken in accordance with these standards:

LGAT Tasmanian Standard Drawings - April 2020

All relevant AS/NZS standards referred to on the drawings and in this specification

- AS2566 Buried flexible pipelines
- AS 3600 Concrete Structures
- AS 1726 Geotechnical Site Investigations
- AS 1379 Specification and Supply of Concrete
- AS 1289 Methods of Testing Soils for Engineering Purposes
- AS 1254 PVCU Pipes and Fittings for Storm and Surface Water Applications



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

- AS 1012 Methods of Testing Concrete

Tasmanian Municipal Standard Specification – March 2020

Water Services Association of Australia

- WSA 02-2014-3.1 Sewerage Code of Australia Melbourne Retail Water Agencies Integrated Code Version 2.0
- TasWater – Supplement to Sewerage Code of Australia MRWA Code WSA 02 -2014 -3.1 MRWA Edition - Version 2.0

3.4.1 Supply of Pipes, Fittings and Equipment

The extent of work in the Conditions of Contract also comprises the supply of pipe, fittings, appurtenances and other associated items. The Contractor shall supply all materials necessary to complete the works to limits shown on the Drawings, and as indicated in this Specification.

It shall be the responsibility of the Contractor to determine in detail all the fittings, etc. required for every section of pipework and to obtain from the Superintendent's Representative approval in writing for any proposed variation from the arrangement shown on the drawings.

3.4.2 Laying of Pipelines and Fittings

Special care shall be taken in bedding the pipes in order to ensure solid and uniform support except beneath sockets and collars to enable jointing to be properly carried out.

Before installation, all pipes and fittings shall be thoroughly cleaned of all dirt on the inside. Avoid the ingress of dirt or any foreign matter into the pipes during the operation of laying and jointing.

Where it is necessary to cut a pipe or fitting before jointing, the pipe shall be cut with an approved cutter perpendicular to the longitudinal axis of the pipe. Any machining required shall be carried out using the tools and methods specified by the manufacturer. Ends of pipe shall be chamfered in accordance with the manufacturer's requirements.

Incorporate measures to prevent flotation of pipelines at all times.

After laying, the open ends of pipes and fittings shall be effectively blocked by means of wooden or metal caps or other approved means, so as to prevent the ingress of storm water, rubbish, animals or any foreign matter. No material likely to be carried into the pipe, such as hessian bags, will be permitted for this purpose. The Contractor shall be responsible for the location and removal, at its own expense, of any material carried into the pipeline.

3.4.3 Protection of Pipelines and Fittings

The methods of handling pipes and fittings shall be in accordance with the manufacturer's recommendations. Slings, skids or other approved devices shall be provided and used to ensure that pipes are not dropped or bumped during loading, cartage, unloading or while being laid in the trench.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

The Contractor shall not place any cracked, damaged or unsound pipes or fittings in the works. Use of undamaged sections of partially damaged material shall not occur without first having obtained permission of the Superintendent's Representative who will in any such case direct as to whether the pipe or fitting shall be rejected or cut or repaired and placed in the work.

3.4.4 Cleanliness

The Contractor shall remove any soil, gravel or other foreign matter from the interior of every pipe and fitting before it is placed in position. At all times when the pipe laying is in progress, steps shall be taken to prevent the entry of foreign material. During interruptions to pipe installation, all open ends in the laid pipe shall be plugged, capped or otherwise tightly sealed to prevent the entry of foreign material into the pipes already laid.

3.4.5 Jointing**3.4.5.1 General**

In general the making of all joints will be in accordance with the manufacturer's recommendation, carried out with the greatest of care and to the entire satisfaction of the Superintendent's Representative.

All pipes shall be in their correct positions, and grade before the joints are made, and no springing of joints will be permitted.

3.5 CONCRETE WORKS

The scope of works shall include all concrete works necessary under this Contract, including but not limited to the following:

- Benching of manholes as required

The following standards are referred to in this section:

- AS 1012 Methods of Testing Concrete
- AS 1379 Specification and Supply of Concrete
- AS 3600 Concrete Structures Code
- AS 3610 Formwork Code
- AS 4198 Precast concrete access chambers for sewerage applications
- AS 4671 Steel Reinforcing Materials

3.5.1 Quality Control

REQUIREMENT: Where there is a recognised quality assurance program applicable to a specified product, provide assurance of product quality under the authority of that program. The program shall be one in which the manufacturer has in place a quality control management system which is subject to continual monitoring through quality audits by a recognised independent organisation.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

3.5.2 Concrete Materials

Concrete Materials Generally

STANDARD: To AS 3600

RESTRICTIONS ON CHEMICAL CONTENT: Chemical admixtures shall comply with AS 1478. Use of the admixtures shall be as agreed with the Superintendent.

Fly ash or blended cement shall not be used without the written approval of the Superintendent.

AGGREGATE SIZE: Maximum aggregate size shall be 20 mm.

Ready Mixed Supply

STANDARD: To AS 1379. Deliver in agitating trucks.

ADDITION OF WATER: Obtain approval before adding water at the site.

ELAPSED DELIVERY TIME: Concrete is liable to be rejected if the elapsed time between the wetting of the mix and the discharge of the mix at the site exceeds the following:

Concrete Temperature (at time of discharge °C)	Maximum elapsed time (hours)
10-24	2.00
24-27	1.50
27-30	1.00
30-32	0.75

DELIVERY DOCKET: For each batch, supply a docket listing the information required by AS 1379 including the following:

- The works for which the concrete was ordered.
- The total amount of water added to the plant.
- The maximum amount of water permitted to be added at site.
- Slump achieved and the design slump.
- Cement content in the mix.

Supply the following additional information:

- The concrete element or part of the Works for which the concrete was ordered.
- The total amount of water added at the plant and the maximum amount permitted to be added at the site.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

RESTRICTIONS ON CHEMICAL CONTENT: Chemical admixtures shall comply with AS 1478. Use of the admixtures shall be as agreed with the Superintendent.

Fly ash or blended cement shall not be used without the written approval of the Superintendent.

AGGREGATE SIZE: Maximum aggregate size shall be 20 mm.

Ready Mixed Supply

STANDARD: To AS 1379. Deliver in agitating trucks.

ADDITION OF WATER: Obtain approval before adding water at the site.

Site Mixed Supply

MANUFACTURE: Site mixed concrete shall not be used unless approved in writing by the Superintendent.

Mix concrete in an approved plant located on the construction site but complying with the relevant requirements of AS 1379.

HAND MIXING: Hand mixing is not permitted.

3.5.3 Placing

Placing and Compaction

STANDARD: To AS 3600.

GENERAL: All concrete shall be placed in dry conditions. No concrete shall be placed until the forms, reinforcing and foundations as applicable have been inspected and approved by the Superintendent's Representative.

Place concrete in layers such that each succeeding layer is blended into the preceding one by the compaction process. Concrete exposed to rain before it has set, shall be protected by suitable covers.

HORIZONTAL MOVEMENT: Movement may be by means of suitable clean chutes, troughs or pipes. Do not use water to facilitate the movement.

VERTICAL MOVEMENT: In vertical elements, limit the free fall of concrete to 1500 mm per 100 mm element thickness, up to a maximum free fall of 3000 mm, by means such as enclosed chutes, access hatches in forms, and the like. As far as practicable keep chutes vertical and full of concrete during placement, with ends immersed in the placed concrete.

LAYERS: Place concrete in layers such that each succeeding layer is blended into the preceding one by the compaction process.

RAIN: Concrete exposed to rain before it has set, including during mixing, transport or placing, shall be liable to rejection.



Specification – South Hobart Primary School, Flood Mitigation Works – Stage 2

COMPACTION: Use immersion and screed vibrators accompanied by hand methods as appropriate to remove air bubbles and compact the mix. Use form vibrators where the use of immersed vibrators is impracticable. Ensure concrete is fully compacted and entrapped air removed, but avoid over vibration that may cause segregation. Do not allow vibrators to come into contact with partially hardened concrete, or reinforcement embedded in it. Do not use vibrators to move concrete along the forms.

PLACING RECORDS; Keep on site and make available for inspection a log book recording each placement of concrete including:

- Date
- The portion of work
- Specified grade and source of concrete
- Slump measurements
- Volume placed

3.6 FLOOD BARRIER

Flood barrier fixings and installation requirements are specified by Flood Control International technical documentation and will be supplied with the equipment and as per the design drawings.

All materials are to be checked on delivery for compliance with the design and site measurements checked prior to installation.

Any deviation from the design dimensions or configuration is to be referred to the Superintendent for review.

Substitute products will not be accepted.

Department of Education
FACILITY SERVICES

Letitia House, Olinda Grove, Mt Nelson TAS 7007
GPO Box 169, Hobart, TAS 7001 Australia
Ph (03) 6165 6321



DOC/22/77306

30 May 2022

Ms Kelly Grigsby
Chief Executive Officer
Hobart City Council
16 Elizabeth Street
Hobart TAS 7000

Dear Ms Grigsby

South Hobart Primary School – Flood Mitigation Works – Stage 2

Section 52 (1B) of the *Land Use Planning and Approvals Act 1993* requires an "owner's declaration" to be completed to enable a Development Application to be considered by Council.

The Minister administering the *Education Act 2016* has delegated this responsibility to me.

Accordingly, my written permission for redevelopment at South Hobart Primary School is hereby given.

I also hereby provide my written permission for Brad Deeks of Sustainable Engineering Tas to act as agent in relation to all required permit applications for the proposed redevelopment.

Yours sincerely

Todd Williams

Director
Facility Services

Minister for Education, Children & Youth
Minister for State Growth
Minister for Skills, Training & Workforce Growth
Minister for Environment
Minister for Aboriginal Affairs

Level 9 15 Murray Street HOBART TAS 7000 Australia
GPO Box 123 HOBART TAS 7001 Australia
Ph: +61 3 6165 7670
Email: minister.jaensch@tactas.gov.au



LAND USE PLANNING AND APPROVALS ACT 1993 INSTRUMENT OF DELEGATION

I, **Hon Roger Jaensch MP**, being and as the Minister for Education, Children and Youth acting pursuant to section 52(1F) of the *Land Use Planning and Approvals Act 1993* ("the Act"), hereby:

- Delegate the functions described (by reference to the relevant provision of the Act and generally) in the below Schedule to the persons holding the following offices in the Department of Education:
 - o Director, Facility Services (position number 971277)
 - o Capital Works Manager, Facility Services (position number 971943)

SCHEDULE

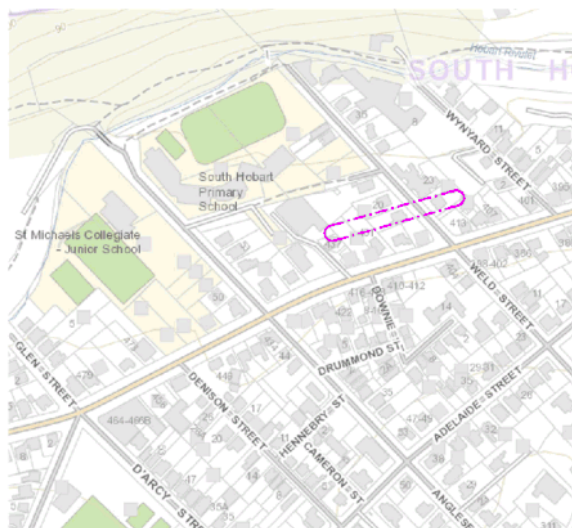
Provision	Description of functions
Section 52(1B)	Signing and providing written permission for the making of, applications for permits in relation to Crown land (being Crown land within the meaning of the <i>Crown Lands Act 1976</i> for which I, as Minister, am responsible for administering).

Dated this 3 day of March 2022

Hon Roger Jaensch MP
Minister for Education, Children and Youth



SOUTH HOBART PRIMARY SCHOOL FLOOD MITIGATION PROJECT STAGE 2 - FLOOD WALL AND CARPARK WORKS



LOCALITY PLAN

DRAWING INDEX

DRAWING 101	COVER PAGE AND DRAWING LIST	DRAWING 115	CROSS SECTIONS 2
DRAWING 102	NOTES AND SET OUT DATA	DRAWING 116	CROSS SECTIONS 3
DRAWING 103	NOTES AND SCHEDULE	DRAWING 117	CROSS SECTIONS 4
DRAWING 104	GENERAL ARRANGEMENT 1	DRAWING 118	DEMOLITION PLAN
DRAWING 105	GENERAL ARRANGEMENT 2	DRAWING 119	SURVEY DATA
DRAWING 106	GENERAL ARRANGEMENT 3		
DRAWING 107	PIT DETAILS		
DRAWING 108	WALL A DETAILS		
DRAWING 109	WALL B DETAILS		
DRAWING 110	GENERAL DETAILS		
DRAWING 111	FLOOD GATE DETAILS 1		
DRAWING 112	FLOOD GTE DETAILS 2		
DRAWING 113	STORMWATER LONG SECTION		
DRAWING 114	CROSS SECTIONS 1		



A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	COVER PAGE AND DRAWING LIST		
Drawing Number	SHBFMW-SET-101	Revision	A ISSUED 30/05/22

GENERAL ELECTRONIC PLANS	ELECTRONIC PLANS MAY BE PROVIDED TO ASSIST THE CONTRACTOR BUT DO NOT FORM PART OF THE CONTRACT. IN THE CASE OF DISCREPANCY BETWEEN THE ELECTRONIC INFORMATION AND THE HARD COPY PLANS THE HARD COPY PLANS TAKE PRECEDENT.	6. DRAINAGE PIPES	DRAINAGE PIPES ABOVE 2250 TO BE MINIMUM OF CLASS SN8 uPVC SWJ UNLESS OTHERWISE SPECIFIED. COMPACTED CLASS 2 FCR BACKFILL SHALL BE INSTALLED TO PIPES UNDER ROAD PAVEMENTS AND BUILDING SLABS. TRENCHES IN LANDSCAPE AREAS CAN BE BACKFILLED WITH SELECTED CLAY FILL.																					
2. SURVEY SURVEY DATUM	THESE PLANS ARE BASED UPON THE EXISTING CONDITIONS SURVEY PREPARED BY COVA. LEVELS SHOWN ARE TO A.H.D.	7. TRAFFIC MANAGEMENT GENERAL	TRAFFIC MANAGEMENT SHALL BE ARRANGED BY THE CONTRACTOR FOR THE DURATION OF THE WORKS IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742.3-2002 FOR CONSTRUCTION TRAFFIC MANAGEMENT AND TO THE SATISFACTION OF ALL PARTIES, INCLUDING THE PROVISION OF ALL NECESSARY SIGNAGE, LIGHTING AND BARRICADING. TRAFFIC FLOWS IN ALL ABUTTING ROADWAYS AND ACCESS TO THE SITE SHALL REMAIN UNIMPEDED FOR THE DURATION OF THE CONTRACT. A TRAFFIC MANAGEMENT PLAN FOR ANY EXTERNAL ROADWORKS SHALL BE SUBMITTED TO HOBART CITY COUNCIL FOR APPROVAL A MINIMUM OF TWO WEEKS PRIOR TO COMMENCEMENT OF WORKS.																					
LIMITATIONS	LEVELS & GRADES ARE INDICATIVE ONLY. THE CONTRACTOR IS TO DISCUSS ANY MAJOR DISCREPANCIES WITH SITE SUPERINTENDENT PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL SET OUT THE WORKS FROM THE NOMINATED DESIGN LINES, SURVEY BENCHMARKS AND CONTROL POINTS SHOWN ON THE PLANS AND TO THE SPECIFIED DETAILS. UPON REQUEST AN ELECTRONIC BASE PLAN OF THE CIVIL DRAWING CAN BE SUPPLIED.	8. LINEMARKING EXISTING	ALL REDUNDANT LINEMARKING SHALL BE PERMANENTLY REMOVED BY APPLICATION OF A SPRAY SEAL OR BY GRINDING.																					
SET OUT	WHERE COMPUTER MODELS ARE UTILISED FOR SET OUT IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT THE PROPOSED VERTICAL AND HORIZONTAL ALIGNMENT ARE CONSISTENT WITH THE INFORMATION SHOWN ON THE DRAWINGS. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT PRIOR TO CONSTRUCTION.	GENERAL	LINEMARKING AND R R P M'S ARE TO BE INSTALLED IN ACCORDANCE WITH THESE PLANS AND TO VICROADS SPECIFICATIONS. ALL PARKING BAYS TO BE FULLY LINEMARKED TO VICROADS STANDARDS AND SPECIFICATION. WIDTH OF CAR PARKING BAYS TO BE 2.6m WIDE EXCEPT FOR THE DISABLED PARKING BAYS WHERE THE WIDTH TO BE INCREASED TO 3.2 m WIDE UNLESS OTHERWISE NOTED.																					
REFERENCES PROTECTION	THE CONTRACTOR SHALL MAINTAIN AND PROTECT THE PEGS AND SURVEY MARKS FOR THE DURATION OF THE WORKS.	INTERNAL WORKS	ALL LINEMARKING TO BE APPROVED LONG LIFE ROAD MARKING PAINT UNLESS OTHERWISE NOTED.																					
AS-CONSTRUCTED SURVEY	UPON COMPLETION OF THE CIVIL WORKS THE CONTRACTOR SHALL PROVIDE CERTIFIED AS-CONSTRUCTED PLANS OF THE WORKS AND AN AS-CONSTRUCTED SURVEY OF ALL HOBART CITY COUNCIL DRAINAGE WORKS.	EXTERNAL WORKS	PARKING BAYS TO BE APPROVED LONG LIFE ROAD MARKING PAINT. LATERAL WORKS, PAVEMENT MARKINGS, ARROWS ETC. ARE TO BE COLD APPLIED PLASTIC TROWELLED INTO PLACE (DEGADUR, PLASTELINE OR EQUIVALENT). LONGITUDINAL LINENWORK TO BE EXTRUDED THERMAL PLASTIC MARKINGS.																					
3. EARTHWORKS GENERAL	EARTHWORKS SHALL BE CARRIED OUT TO THE FINISHED SURFACE LEVELS SHOWN ON THE PLANS AND CROSS SECTIONS.	9. SIGNAGE GENERAL	ALL REGULATORY AND HAZARD DIRECTIONAL SIGNS TO BE INSTALLED IN CLASS 1 REFLECTIVE MATERIAL AND ALL WARNING SIGNS TO BE INSTALLED IN CLASS 2 REFLECTIVE MATERIAL TO APPROVED AUSTRALIAN STANDARDS. FOR TEMPORARY SIGNAGE DURING CONSTRUCTION WORKS, REFER TO VICROADS ROADWORKS SIGNAGE CODE.																					
GEOTECHNICAL DATA	THE DESIGN OF THE REPAIRS HAS BEEN BASED ON ASSUMED STRATIGRAPHY AND GEOTECHNICAL PARAMETERS BASED ON LOCAL GEOLOGY AND NON-INTRUSIVE INSPECTIONS AND OBSERVATIONS. THE ASSUMED STRATIGRAPHY SHALL BE CONFIRMED BY A SUITABLY EXPERIENCED AND QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. SHOULD THE STRATIGRAPHY ENCOUNTERED ON-SITE DIFFER SIGNIFICANTLY FROM THE ASSUMED STRATIGRAPHY, MODIFICATION TO THE DESIGN MAY BE REQUIRED AND THE SUPERINTENDENT SHOULD BE NOTIFIED. NO MODIFICATIONS TO THE DESIGN SHOULD BE MADE WITHOUT THE APPROVAL OF THE SUPERINTENDENT.	EXISTING	WHERE NECESSARY, EXISTING TRAFFIC CONTROL SIGNS SHALL BE RELOCATED CLEAR OF PROPOSED WORKS. REDUNDANT SIGNS SHALL BE TAKEN UP AND REMOVED.																					
SUBGRADE CONDITIONS	EXISTING SUBGRADES ARE VARIABLE AND MAY INCLUDE FILL, CLAYS AND SANDY/SILTY MATERIAL AND MAY BE OF VARIABLE IN-SITU STIFFNESS OR DENSITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SITE GRADING AND DRAINAGE AND TO PROTECT AND MAINTAIN SUBGRADES IN A SUITABLE CONDITION. DRAINAGE AND GRADING SHOULD DIRECT WATER AWAY FROM EXPOSED SUBGRADES AND ALLOW THE SUBGRADE TO SHED WATER. SHOULD SUBGRADES BECOME SATURATED, THEY SHOULD BE REMEDIATED BY EITHER: -ALLOWING SOFTENED AREAS TO DRY BEFORE RIPPING AND REWORKING SUBGRADE AND THEN CONDUCTING A PROOF ROLL ON THE SUBGRADE TO CONFIRM ALL SOFTENED AREAS HAVE BEEN REMEDIATED -RIPPING OUT SOFTENED MATERIALS AND REPLACING WITH WELL GRADED CRUSHED ROCK (EQUIVALENT TO VICROADS TYPE A FILL) COMPACTED IN LAYERS.	EXTENT	NEW TRAFFIC CONTROL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND THE RELEVANT SPECIFICATION.																					
COMPACTION TO AS1289	THE CONTRACTOR SHALL OBTAIN 95% STANDARD MINIMUM DRY DENSITY COMPACTION ON ALL FINISHED SUBGRADES AND FORMATIONS.	10. SERVICES EXISTING	ALL STATUTORY AUTHORITY SERVICES MUST BE MAINTAINED AND PROTECTED BY THE CONTRACTOR AT ALL TIMES UNLESS OTHERWISE SHOWN. EXISTING SERVICE LOCATIONS SHOWN HAVE BEEN OBTAINED FROM STATUTORY AUTHORITY RECORDS AND/OR SITE PLANS. WHERE AVAILABLE, NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN AND ALL SERVICES SHOULD BE PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF WORKS IN THEIR VICINITY.																					
FILLING	FILL IN LANDSCAPING ZONES: EXISTING EMBANKMENT TO BE EXCAVATED AND REPLACED WITH APPROVED MATERIAL EITHER IMPORTED OR SITE WON FREE DRAINING CRUSHED ROCK FILL. REPLACEMENT FILL MUST BE WELL GRADED, FREE DRAINING AND FREE OF SIGNIFICANT FINES CONTENT, AND FREE OF ORGANICS, BUILDING RUBBLE AND OTHER DELETERIOUS MATERIAL AND PLACED AND COMPACTED IN 150MM LAYERS TO AT LEAST 95% SDD.	CONTACTS	CIVIL CONTRACTOR TO CONTACT THE FOLLOWING AUTHORITIES FOR RELOCATION OF CABLES, U/G MAINS OR POLES WHERE REQUIRED.																					
REINSTATEMENT	THE CONTRACTOR SHALL REGRADE, SHAPE, TOPSOIL AND GRASS ALL ADJACENT EXISTING GRASSED AREAS THAT ARE DISTURBED OR ALTERED AS A CONSEQUENCE OF THE PROPOSED WORKS INCLUDING ACCESS TRACKS.		<table><tr><td>UTILITY</td><td>OFFICE NO.</td><td>EMERGENCY/AH No.</td></tr><tr><td>TAS NETWORKS</td><td>1300 137 008</td><td>132 004</td></tr><tr><td>TELSTRA</td><td>1800 653 935</td><td>.....</td></tr><tr><td>TAS GAS</td><td>03 6336 9350</td><td>180 2111</td></tr><tr><td>TAS WATER</td><td>1300 862 066</td><td>13 6992</td></tr><tr><td>NBN</td><td>.....</td><td>1800 626 329</td></tr><tr><td>CITY OF HOBART.</td><td>.....</td><td>03 6278 0200</td></tr></table>	UTILITY	OFFICE NO.	EMERGENCY/AH No.	TAS NETWORKS	1300 137 008	132 004	TELSTRA	1800 653 935	TAS GAS	03 6336 9350	180 2111	TAS WATER	1300 862 066	13 6992	NBN	1800 626 329	CITY OF HOBART.	03 6278 0200
UTILITY	OFFICE NO.	EMERGENCY/AH No.																						
TAS NETWORKS	1300 137 008	132 004																						
TELSTRA	1800 653 935																						
TAS GAS	03 6336 9350	180 2111																						
TAS WATER	1300 862 066	13 6992																						
NBN	1800 626 329																						
CITY OF HOBART.	03 6278 0200																						
4. LANDSCAPING LANDSCAPE AREAS	FOR DETAILS OF LANDSCAPE AREAS & FINISH, REFER TO LANDSCAPING PLANS.	OLD TOWN GAS	ABANDONED OLD TOWN GAS (COAL GAS) PIPES POTENTIALLY EMITTING GASES AND VOLATILE ORGANIC COMPOUNDS (VOCs) MAY BE FOUND IN MANY OF THE CITY. REFER TO THE HOBART COUNCIL INFORMATION SHEET FOR MORE DETAIL.																					
5. SITE CLEARANCE DEMOLITION	ALL EXISTING REDUNDANT CONCRETE, PAVEMENT, SOIL, RUBBISH AND CONSTRUCTION DEBRIS SHALL BE TAKEN UP AND REMOVED FROM SITE.																							
CLEAN UP	PRIOR TO COMPLETION, THE CONTRACTOR SHALL ENSURE THE SITE OF WORKS IS TIDIED AND OBTAIN A CLEARANCE FROM THE SUPERVISING ENGINEER OR THE PROJECT MANAGER.																							



A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	NOTES AND SET OUT DATA		
Drawing Number	SHBFMW-SET-102	Revision	A ISSUED 30/05/22

SAFETY IN DESIGN

1. THE DESIGN OF WORKS SHOWN ON THESE DRAWINGS ACCOUNTS FOR THE SAFETY OF USERS BY COMPLIANCE WITH DESIGN CODES INCLUDING:

- Austroads Guides to Road Design
- IPWEA Standard Drawings as issued by LGAT 30/11/2013

2. THE SAFETY OF THE DESIGN IS CONDITIONAL UPON THE WORKS BEING COMPLETED IN THEIR ENTIRETY BY COMPETENT CONTRACTORS AND DOES NOT NECESSARILY ACCOUNT FOR RISKS THAT MAY OCCUR DURING THE CONSTRUCTION, COMMISSIONING, OPERATION, MAINTENANCE OR DEMOLITION PHASES OF THE WORKS.

3. DURING THE CONSTRUCTION, COMMISSIONING, OPERATION, MAINTENANCE AND DEMOLITION PHASES OF THE WORKS THE CONTRACTORS AND OWNERS ARE RESPONSIBLE FOR IMPLEMENTING A SAFE WORKPLACE IN ACCORDANCE WITH THE (TAS) WORK HEALTH AND SAFETY ACT 2012 AND THE REGULATIONS THERETO (THE ACT) AND SHALL HAVE IN PLACE A WORKPLACE HEALTH & SAFETY POLICY AND SHALL UNDERTAKE A CONTRACT RISK REVIEW PRIOR TO UNDERTAKING THE CONTRACT.

4. THE INCLUSION OR OMISSION OF ANY ITEM FROM THE DESIGN OR DRAWINGS OR SPECIFICATION OR SCHEDULE OR CONTRACT DOES NOT DIMINISH THE RESPONSIBILITY OF CONTRACTORS, OWNERS, USERS, OPERATORS, MAINTENANCE AND DEMOLITION CONTRACTORS TO ENSURE SAFE WORK PRACTICES ARE EMPLOYED IN ACCORDANCE WITH THE ACT DURING ANY PHASE OF THE LIFE OF THE WORKS.

5. THE FOLLOWING ITEMS ARE LISTED AS RELEVANT TO ENSURING THAT SAFE WORK PRACTICES ARE EMPLOYED ON SITE DURING THE CONSTRUCTION PHASE, BUT IS NOT INTENDED TO BE A COMPREHENSIVE LIST OR TO REPLACE THE CONTRACTOR'S OWN PROJECT SPECIFIC ASSESSMENT AND CONTROL OF SITE RISKS AS REQUIRED BY THE ACT:

- Prepare Workplace Health & Safety Plan for the site
- Undertake site service locations and identify O/H electricity
- Provide separation of work site and access, storage and stockpiles
- Provide barriers, warning notifications to prevent the unauthorized access to the site by the public
- Prevent the impact of any work procedures including the use of directional lasers on workers or the public
- Provide traffic control in compliance with DEPT OF STATE GROWTH "Traffic Control at Worksites" Code of Practice
- Provide safety barriers at excavations and trenches per the Act
- Assess the requirement for confined space procedures

6. PRIOR TO HANDOVER ENSURE THAT SAFETY SIGNAGE IS IN PLACE ON ANY ROAD TERMINATIONS AND ON ANY UNCOMPLETED TRENCHING WORKS

7. ATTEND TO ANY EMERGENCY WORKS THAT MAY BE REQUIRED DURING THE DEFECTS LIABILITY (MAINTENANCE) PERIOD TO ENSURE THE CONTINUING SAFETY OF THE USERS OF THE WORKS AND ATTEND TO THE RECTIFICATION OF ANY DEFECTS

8. AFTER THE END OF THE DEFECTS LIABILITY PERIOD THE LOCAL GOVERNMENT AREA COUNCIL, TASWATER, TASNETWORKS, TELSTRA/NBN, NBNCO TO MAINTAIN THE WORKS IN ACCORDANCE WITH THE LOCAL GOVERNMENT ACT, THE STATE TRAFFIC ACT AND ACTS AND SAFETY PROCEDURES RELATING TO TASWATER, TASNETWORKS, TELSTRA/NBN & NBNCO.

9. DEMOLITION, IF REQUIRED, TO BE UNDERTAKEN IN ACCORDANCE WITH LOCAL GOVERNMENT PERMITS AND SERVICE AUTHORITY CODES OF PRACTICE.

GENERAL NOTES

1. READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS AND SPECIFICATIONS, AND WITH SUCH OTHER WRITTEN INSTRUCTIONS ISSUED. REFER TO CONCRETE DRAWINGS FOR SETTING OUT AND DETAIL DIMENSIONS. IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS, THEN NOTES, THEN SPECIFICATION.

2. CARRY OUT WORK IN A SAFE MANNER IN ACCORDANCE WITH APPLICABLE LEGISLATION, STATUTORY REGULATIONS, BY LAWS OR RULES. CONTRACTOR IS RESPONSIBLE FOR OCCUPATIONAL HEALTH AND SAFETY OF SITE PERSONNEL AND GENERAL PUBLIC IN ACCORDANCE WITH ALL CURRENT WORK HEALTH AND SAFETY ACTS, LEGISLATIVE REQUIREMENTS, ASSOCIATED REGULATIONS AND CODES OF PRACTICE, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.

3. REFER DISCREPANCIES TO SUPERINTENDENT BEFORE PROCEEDING WITH WORK.

4. SUBMIT DETAILS OF PROPOSED CHANGES TO SCOPE, WORK METHODS OR MATERIALS etc. FOR APPROVAL BEFORE PROCEEDING. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT.

5. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE, BUT INDICATES REQUIRED PROPERTIES OF ITEM. SIMILAR ALTERNATIVES HAVING REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.

6. OBTAIN NECESSARY PERMITS AND APPROVALS FROM RELEVANT AUTHORITIES BEFORE COMMENCING WORK ON SITE. NOTIFY RELEVANT SERVICE AUTHORITIES BEFORE COMMENCING WORK ON SITE.

7. GIVE TWO WORKING DAYS' (48 HOURS) NOTICE SO THAT INSPECTION MAY BE MADE OF CRITICAL STAGES OF WORK.

8. INSPECTIONS AND REVIEWS UNDERTAKEN BY SUPERINTENDENT OR OTHERS DO NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.

9. DO NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWINGS.

10. DIMENSIONS ARE IN MILLIMETRES, LEVELS ARE IN METRES UNO, CHAINAGES ARE IN METRES UNO.

11. DATUM FOR LEVELS IS AHD (AUSTRALIAN HEIGHT DATUM).

12. HAVE SURVEY AND SETTING OUT UNDERTAKEN BY A REGISTERED SURVEYOR.

13. VERIFY ON SITE SETTING OUT DIMENSIONS AND EXISTING MEMBER SIZES SHOWN ON CONCRETE DRAWINGS BEFORE SHOP DRAWINGS, CONSTRUCTION AND FABRICATION IS COMMENCED. EXISTING STRUCTURES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY.

14. USE STANDARD BOLT PATTERNS etc. THROUGHOUT THE WORKS TO AVOID CONFUSION OR AMBIGUITY.

15. TAKE CARE OF HAZARDS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS AND WORKMANSHIP UNDERTAKE EXPLORATION TO ESTABLISH LOCATION OF AND PROTECT EXISTING SERVICES AT SITE. SERVICES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE, AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF INGROUND SERVICES.

16. DISPOSE OF SURPLUS MATERIAL OFF SITE IN ACCORDANCE WITH LOCAL AUTHORITY WASTE REGULATIONS.

17. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS.

18. WORKMANSHIP AND MATERIALS TO COMPLY WITH REQUIREMENTS OF AUSTRALIAN STANDARDS, NATIONAL CONSTRUCTION CODE (NCC) AND BY LAWS AND ORDINANCES OF RELEVANT BUILDING AUTHORITIES. ALL STANDARDS REFERRED TO ARE THOSE CURRENT (AS AMENDED) AT COMMENCEMENT OF CONTRACT.

19. OBTAIN REQUIREMENTS FOR SERVICES, ADJOINING ELEMENTS etc TO BE EMBEDDED IN, FIXED TO OR SUPPORTED ON WORK AND PROVIDE FOR REQUIRED FIXINGS. PROVIDE FOR TEMPORARY SUPPORT OF ADJOINING ELEMENTS DURING CONSTRUCTION. DRAWINGS DO NOT SHOW DETAILS OF ALL FIXTURES, INSERTS, SLEEVES, RECESSES OR OPENINGS etc REQUIRED.

20. PROTECT EXISTING STRUCTURES FROM DAMAGE OR CRACKING. MAKE GOOD ANY DAMAGE TO EXISTING ELEMENTS AT COMPLETION OF WORKS.

21. WHERE NEW WORK ABUTS EXISTING, PROVIDE SMOOTH TRANSITION FREE OF ABRUPT CHANGES.

22. NEATLY CUT BACK CONCRETE TO BE REMOVED TO A CLEAN TRUE FACE USING A DIAMOND SAW.

23. HAVE TESTING PERFORMED BY AN INDEPENDENT NATA (NATIONAL ASSOCIATION OF TESTING AUTHORITIES) ACCREDITED AUTHORITY, AND PROVIDE TEST REPORTS TO SUPERINTENDENT.

24. SUPPLY RELEVANT NOTES, DRAWINGS AND SPECIFICATIONS etc TO SUB-CONTRACTORS.

25. BUILD, FABRICATE AND PROCURE ONLY FROM DRAWINGS 'ISSUED FOR CONSTRUCTION'.

26. KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS) AND SITE INSTRUCTIONS. TEMPORARY WORKS

27. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE RESPONSIBILITY OF THE CONTRACTOR.

28. PROVIDE SCAFFOLDING, BARRIERS, FALL RESTRAINT, HAND-MID RAILS AND TOE BOARDS FOR WORK AT HEIGHT. ERECT ACCESS STAIRS AT EARLIEST OPPORTUNITY TO REDUCE OPEN SHAFT HAZARDS AND FACILITATE ACCESS. MAINTAIN SAFETY MESH AND BARRIERS TO ALL OPENINGS AND ELEVATED EDGES.

29. MAINTAIN STRUCTURES IN A STABLE CONDITION DURING CONSTRUCTION AND PROVIDE TEMPORARY BRACING AND/OR SUPPORT AS REQUIRED.

30. DO NOT PLACE OR STORE BUILDING MATERIALS ON, SUPPORT FORMWORK OR PROP FROM STRUCTURAL MEMBERS WITHOUT SUPERINTENDENT'S APPROVAL. PROVIDE CALCULATIONS BY SUITABLY QUALIFIED STRUCTURAL ENGINEER TO PROVE ADEQUACY OF STRUCTURE FOR PROPOSED CONSTRUCTION SEQUENCE, METHODS AND LOADS INCLUDING PROPPING, CRANE LIFTS etc.

INSPECTIONS**GENERAL**

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PROGRAMME TO THE SATISFACTION OF THE SUPERVISING ENGINEER AND SUBJECT TO PERIODICAL INSPECTION AND WRITTEN STAGED APPROVAL. ADDITIONAL INSPECTIONS CAN BE REQUESTED AT 24 HOURS NOTICE.

EXTERNAL

ALL WORKS IN ROAD RESERVATIONS SHALL REQUIRE WRITTEN APPROVAL OF THE COUNCIL'S SUPERINTENDENT AND ARE SUBJECT TO SEPARATE INSPECTIONS. SEVEN DAYS NOTICE TO BE GIVEN OF WORK COMMENCING. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY ROAD OPENING PERMITS AND AUTHORITY APPROVALS PRIOR TO COMMENCING WORKS.

PAVEMENTS**SAWCUTTING**

ALL EXISTING PAVEMENT ADJACENT TO PROPOSED KERB OR PROPOSED JOINTS SHALL BE SAWCUT IN A NEAT LINE TO THE SATISFACTION OF THE SUPERVISING ENGINEER, AND TO HAVE 300mm OVERLAP. REFER TO STANDARD DETAILS.

TRENCHING

ALL TRENCHING WORKS IN EXISTING PAVEMENTS SHALL HAVE SAWCUT EDGES AND NEW PAVEMENT REINSTATED TO NEATLY MATCH EXISTING LEVELS.

REMAINING

EXISTING PAVEMENT AREAS THAT REMAIN, WHERE CRACKING IS EVIDENT SHALL BE SEALED WITH A PROPRIETARY BITUMINOUS PRODUCT TO THE MANUFACTURERS' SPECIFICATIONS.

CONCRETE JOINTING

SAWCUT OR TOOLED CONSTRUCTION JOINTS SHALL BE PROVIDED AT MAX. 2.0m CENTRES TO ALL FOOTPATHS OR PEDESTRIAN PAVING UNLESS NOTED OTHERWISE. A 19mm EXPANSION JOINT SHALL BE PROVIDED WHENEVER RIGID PAVEMENTS ABUT FIXED STRUCTURES OR AT MAX. 15m CENTRES TO FOOTPATHS.

DOWELLED SAWCUT AND CONSTRUCTION JOINTS SHALL BE PROVIDED TO ALL VEHICULAR PAVEMENTS AS DETAILED ON THE DRAWINGS, TYPICALLY NOT GREATER THAN 6.0m CENTRES AND JOINT SPACING SHALL ENSURE SLAB LENGTH (L) ≥ 1.5 SLAB WIDTH.

PAVEMENT TESTING

EACH ROAD PAVEMENT LAYER SHALL BE TEST FOR COMPACTION BY A NATA REGISTERED GEOTECHNICAL ENGINEER IN ACCORDANCE WITH AS1289 AND SHALL MEET THE FOLLOWING STANDARDS:

ASPHALT LAYERS UP TO 50mm THICKNESS - 94% CHARACTERISTIC VALUE OF DENSITY RATIO

GREATER THAN 50mm THICKNESS - 96% CHARACTERISTIC VALUE OF DENSITY RATIO

BASE LAYER 98% MODIFIED DRY DENSITY

SUB BASE LAYER 98% MODIFIED DRY DENSITY

SUB GRADE 98% STANDARD DRY DENSITY

COMPACTION TEST RESULT SHALL BE FORWARDED TO THE SUPERINTENDENT AND COUNCIL'S SUPERVISING ENGINEER FOR APPROVAL PRIOR TO THE PLACEMENT OF SUBSEQUENT PAVEMENT LAYERS. TESTING RATES SHALL BE:

ARTERIAL ROADS 6 TESTS/SLOT

OTHER 3 TESTS/SLOT

A LOT SHALL BE THE SMALLER OF 5000m² OR ONE DAYS PRODUCTION.

WHERE SO REQUIRED, THE CONTRACTOR SHALL PROVIDE ADDITIONAL TEST TO THE SUPERINTENDENT'S SATISFACTION.

KERBS**PROPOSED**

WHERE REQUIRED MATCH ALL NEW KERBS TO EXISTING LEVEL NEATLY, ENSURING MINIMUM 1 IN 250 GRADE, SAW CUTTING AND REINSTATING PAVEMENT IN FRONT OF KERB TO FALL TO NEW KERB LEVEL.



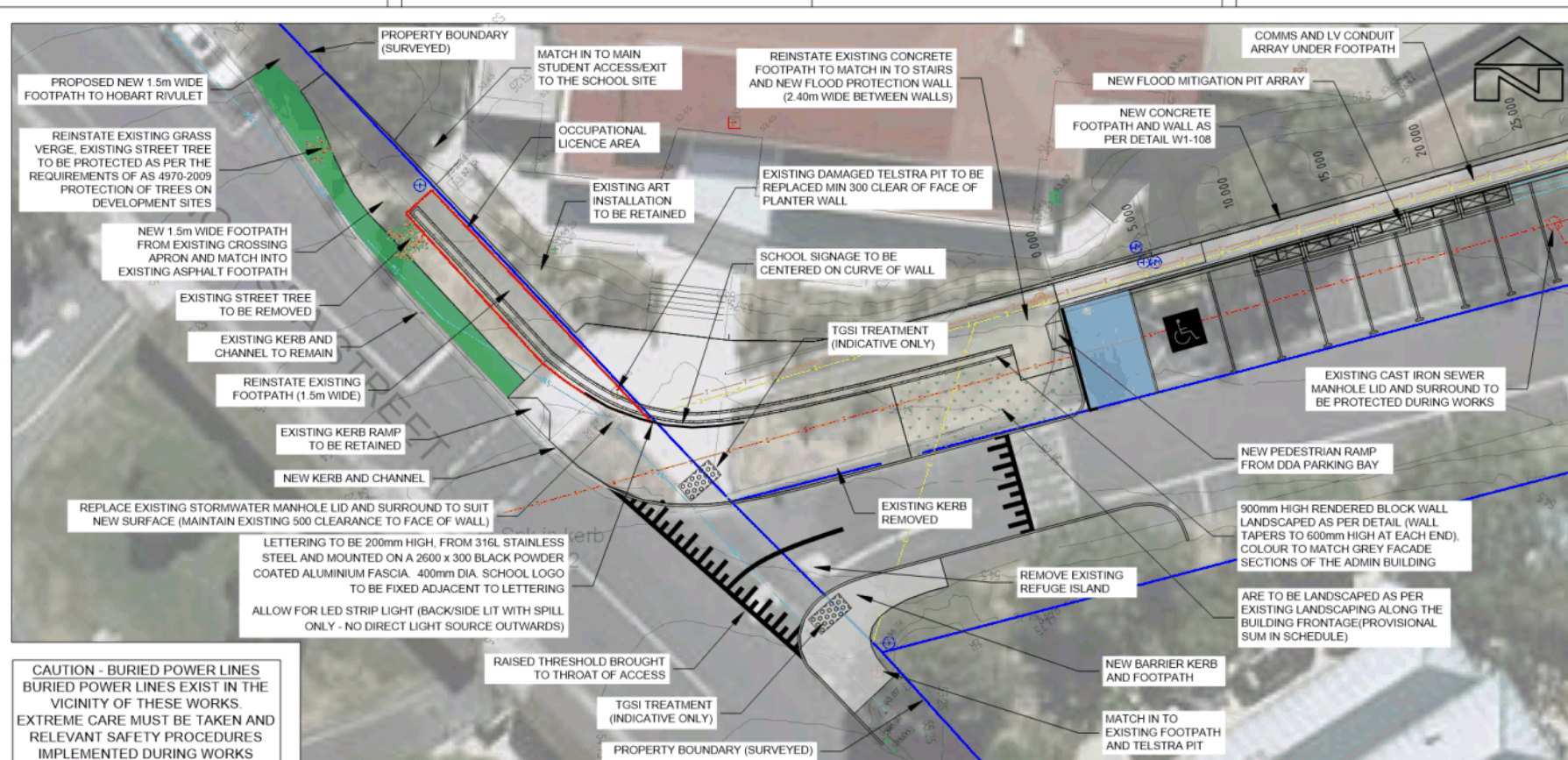
A	Preliminary issue for Construction	BD	MW	30 MAY	
No	Revision	Drawn	Authorised	Date	

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	NOTES AND TRENCH DETAILS		
Drawing Number	SHBFMW-SET-103	Revision	A ISSUED 30/05/22



CONTINUED ON SHEET 5

NOTES

1. ALL LEVELS IN METRES TO AHD. ALL COORDINATES IN METRES TO AMG. (ALL SETOUT TO LOCAL DATUM).
2. ALL SET OUT DIMENSIONS TO BE CONFIRMED ON SITE
3. LINEMARKING, SIGNS AND RRP/MS SHALL BE INSTALLED IN ACCORDANCE WITH AS1742.3-2009 MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES.
4. LINEMARKING PAINT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS4049.3.
5. RETROFLECTIVE GLASS BEADS TO AS2009 WHERE SPECIFIED.

6. BLACK OUT SUPERFLUOUS LINEMARKING AND MAKE SMOOTH NEAT CONNECTION TO EXISTING LINEMARKING.

7. ALL WHEELSTOPS TO COMPLY WITH AS2890.1.

8. ALL KERB RAMPS TO COMPLY WITH AS1428.1-2021 AND TACTILES TO AS1428.4-2009

9. REFER TO LGAT STANDARD DRAWING TSD-RF02 FOR PAVEMENT MARKING LINE TYPE DETAILS.

10. ROAD SAFETY SIGNS TO BE IN ACCORDANCE WITH AS1742 AND INSTALLED IN ACCORDANCE WITH DoSG STANDARD DRAWINGS.

11. SPACE IDENTIFICATION AND DELINEATION OF DISABLED SPACES TO BE IN ACCORDANCE WITH SECTION 3 OF AS2890.6

GENERAL ARRANGEMENT

Scale 1:200 @ A3



AN OCCUPATION LICENCE
WILL BE APPLIED FOR ALL
PRIVATE INFRASTRUCTURE IN
THE ROAD RESERVATION



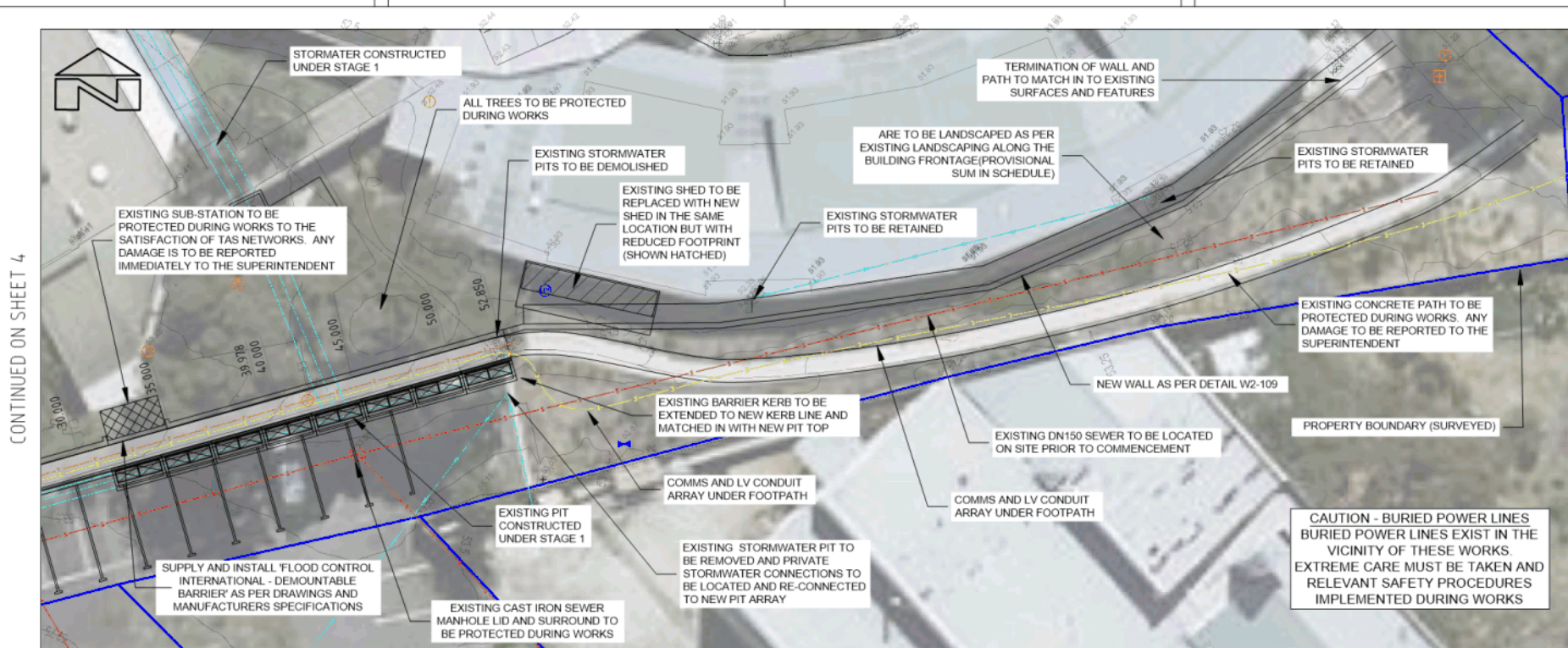
A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SET's client (and any other person who SET's client has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION			
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2			
Title	GENERAL ARRANGEMENT 1 of 3			
Drawing Number	SHBFMW-SET-105	Revision	A	ISSUED 30/05/22



PIPEWORK NOTES

1. REFER TO GENERAL NOTES.
2. PIPELINE ALIGNMENTS AND LEVELS SHALL NOT BE VARIED WITHOUT DESIGN ENGINEERS WRITTEN APPROVAL.
3. MINIMUM VERTICAL CLEARANCE AT CROSSINGS OF EXISTING SERVICES TO BE 200mm.
4. CONFIRM ALL PIPE LENGTHS ON SITE PRIOR TO CUTTING OR FABRICATION.
5. REFER TYPICAL TRENCH DETAILS AND NOTES FOR PIPE INSTALLATION REQUIREMENTS.
6. ALL PRECAST CONCRETE COMPONENT JOINTS (MH RISERS) TO BE SEALED WITH AN APPROVED ELASTOMERIC JOINT RING OR JOINT SEALANT (CONSEAL CS-231 OR APPROVED EQUIVALENT) AND A SELF ADHESIVE BITUMEN BASED JOINT SEALING MEMBRANE OVER JOINT (GEOFABRICS BITAC AND PRIMER SYSTEM OR APPROVED EQUIVALENT).
7. REDUNDANT PIPES TO BE REMOVED OR CAPPED AND FILLED WITH APPROVED FLOWABLE SELF-LEVELING, SELF COMPACTING CEMENTITIOUS GROUT.
8. ALL PIPEWORK, MH'S, MH PIPE DROPS AND ASSOCIATED STRUCTURES / WORKS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATION.
9. GRAVITY SEWERS TO COMPLY WITH AS3500
10. CONCRETE ANCHOR & THRUST BLOCKS SHALL BE CONSTRUCTED AT ALL PRESSURE PIPEWORK BENDS, TEES, VALVES AND ELSEWHERE SHOWN ON THE DRAWINGS. REFER TO THE PROJECT SPECIFICATION FOR PIPE ANCHOR AND THRUST BLOCK REQUIREMENTS

GENERAL ARRANGEMENT

Scale 1:200 @ A3



TYPICAL TRENCH NOTES

1. TYPICAL TRENCH DETAIL APPLICABLE TO PIPES LAID IN NATURAL SOLID GROUND. PIPES LAID IN OTHER CIRCUMSTANCES REQUIRE A SPECIAL DESIGN TO THE APPROVAL OF THE SUPERINTENDENT.
2. MINIMUM WIDTH OF TRENCH IS THE WIDTH OF UNSUPPORTED TRENCH OR THE CLEAR WIDTH INSIDE A TRENCH SUPPORT.
3. SIDES OF TRENCHES SHALL BE KEPT VERTICAL TO A MINIMUM OF 150mm ABOVE THE EMBEDMENT ZONE.
4. OVER EXCAVATION OF TRENCHES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR BED ZONE.
5. IF LOW STRENGTH (CBR <1%) TRENCH FOUNDATIONS ARE ENCOUNTERED REFER DESIGN ENGINEER FOR SOFT SOILS TRENCH DETAIL.
6. GEOTEXTILE FILTER FABRIC TO SURROUND EMBEDMENT ZONE OF PIPES WHERE REQUIRED, BY AS/NZS 2566.2, OR DIRECTED TO PREVENT THE MIGRATION OF FINES. GEOTEXTILE FILTER FABRIC TO BE A NON-WOVEN FABRIC COMPLYING WITH APPENDIX J OF AS/NZS 2566.2. LAP JOINTS MINIMUM 200mm.
7. EMBEDMENT AND BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN MAXIMUM LAYER THICKNESS NOMINATED IN TABLE 1 AND MOISTURE CONDITIONED AS REQUIRED TO ACHIEVE COMPACTION REQUIREMENTS NOMINATED IN TABLE 1
8. FOR PIPES UNDER TRAFFICKED AREAS, ROAD PAVEMENT, ROAD SHOULDERS, DRIVEWAYS AND FOOTPATHS USE DSG APPROVED BASE A. COMPACT IN 150mm LAYERS TO ACHIEVE DENSITY REQUIREMENTS OUTLINED IN THE SPECIFICATIONS. REFER LONGITUDINAL SECTION FOR LOCATIONS.



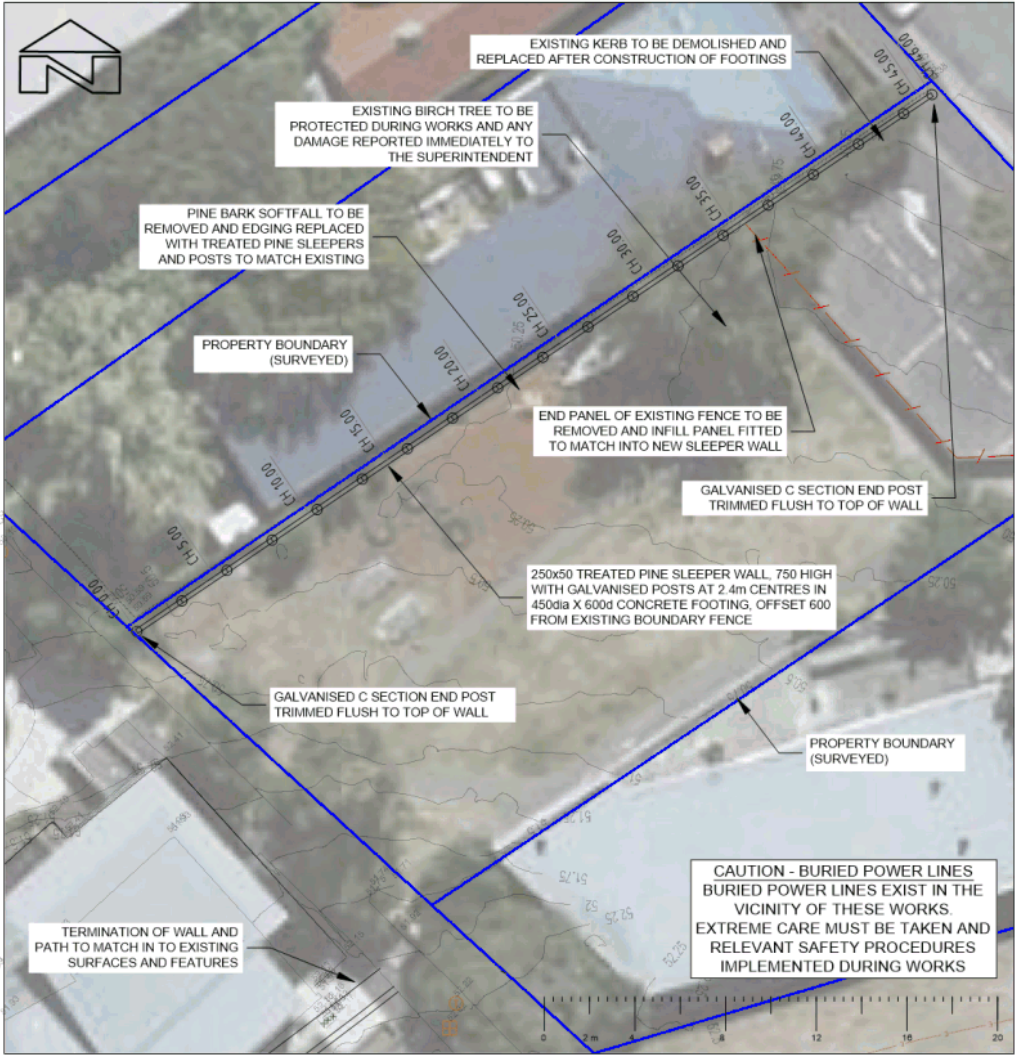
A Preliminary issue for Construction		BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	GENERAL ARRANGEMENT 2 of 3		
Drawing Number	SHBFMW-SET-105	Revision	A ISSUED 30/05/22



GENERAL ARRANGEMENT
Scale 1:200 @ A3



POST END FINISH
NTS



FENCE PANEL ARRANGEMENT
NTS



A Preliminary issue for Construction		BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client
(and any other person who SETas has agreed can
use this document) for the purpose for which it
was prepared and must not be used by any other
person or for any other purpose.

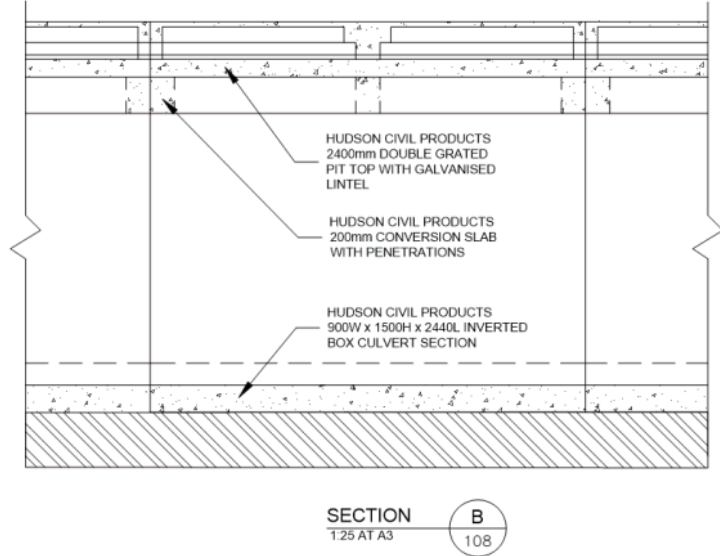
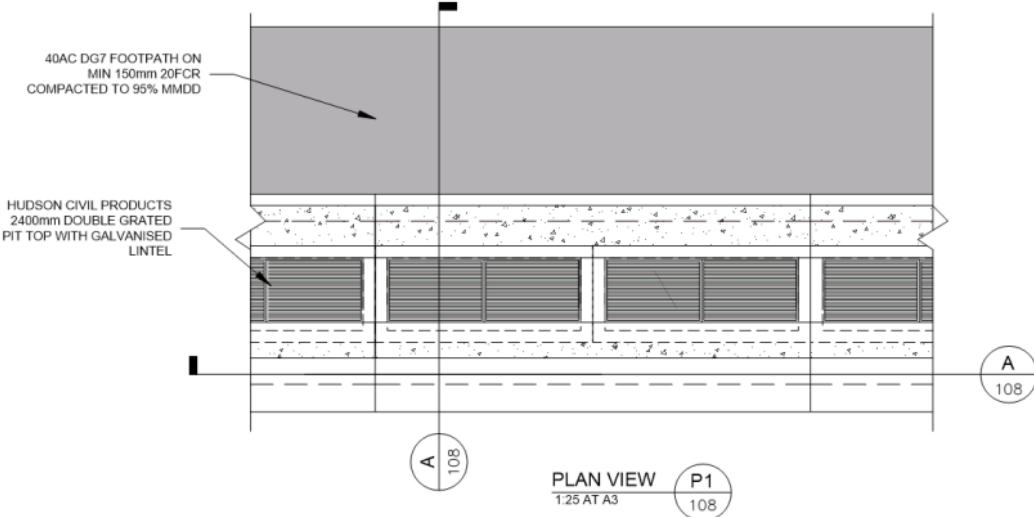
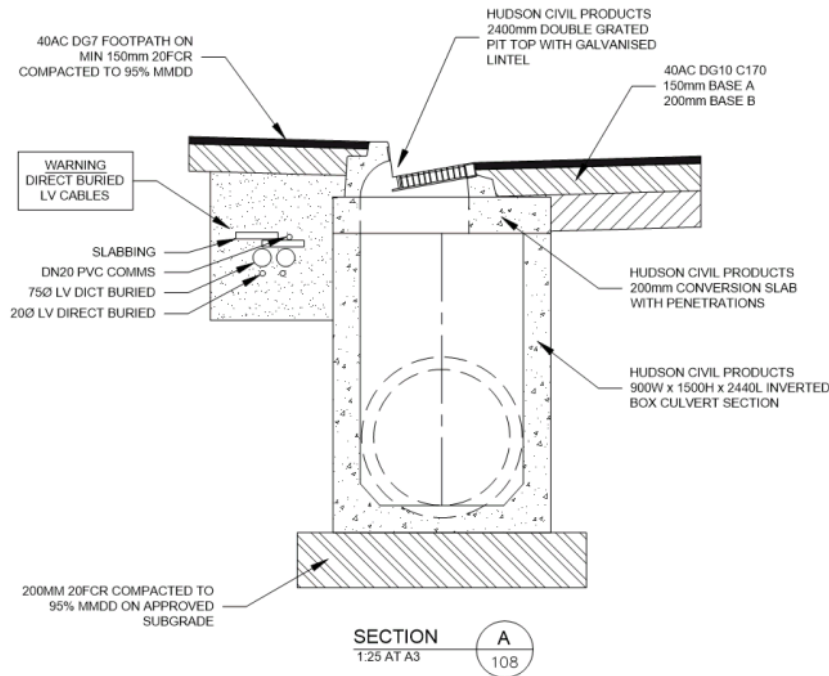


Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	GENERAL ARRANGEMENT 3 of 3		
Drawing Number	SHBFMW-SET-106	Revision	A ISSUED 30/05/22

GENERAL NOTES

1. CONFIRM THE LOCATION, EXTENT AND DEPTH OF ALL ABOVE AND BELOW GROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS. ALL SERVICES MAY NOT BE SHOWN ON THE DESIGN DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND LOCATE ALL SERVICES. EXISTING SERVICES TO REMAIN IN SERVICE AND TO BE PROTECTED FROM DAMAGE FOR DURATION OF WORKS.
2. ALL COSTS FOR DAMAGE TO EXISTING SERVICES SHALL BE BORNE BY THE CONTRACTOR.
3. REFER ANY CONFLICT BETWEEN NEW WORKS AND EXISTING SERVICES TO THE SUPERINTENDENT.
4. TOPS OF MANHOLES, PITS & SERVICE UTILITY COVERS ARE TO BE ADJUSTED TO MATCH ADJACENT FINISHED SURFACE LEVELS AND GRADES.
5. DO NOT OBTAIN DIMENSIONS BY SCALING FROM THE DRAWINGS. UNLESS OTHERWISE NOTED.
6. ALL DETAIL DIMENSIONS ARE IN MILLIMETRES.
7. VERIFY SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED.
8. ALL PRE-CAST COMPONENTS ARE TO BE INSTALLED AS PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND RELEVANT STANDARD DRAWINGS AS APPLICABLE.
9. SUB-GRADE TO BE INSPECTED PRIOR TO PLACEMENT OF BEDDING AND PLACEMENT OF BOX CULVERT SECTIONS.
10. POWER AND TELECOMMUNICATIONS CONDUIT ARRAY TO BE PROTECTED AT ALL TIMES. ANY DAMAGE IS TO BE IMMEDIATELY REPORTED TO THE SUPERINTENDENTS REPRESENTATIVE AND TASNWORKS. CONTRACTOR IS TO ISOLATE SITE AND CEASE WORKS UNTIL DAMAGE IS INSPECTED AND REPAIRS MADE AS NECESSARY.
11. EXCAVATION WITHIN 1.0m OF POWER ARRAY TO BE BY VACUUM TRUCK UNLESS APPROVAL IS OBTAINED FROM THE SERVICE AUTHORITY TO USE MECHANICAL OR HAND EXCAVATION.



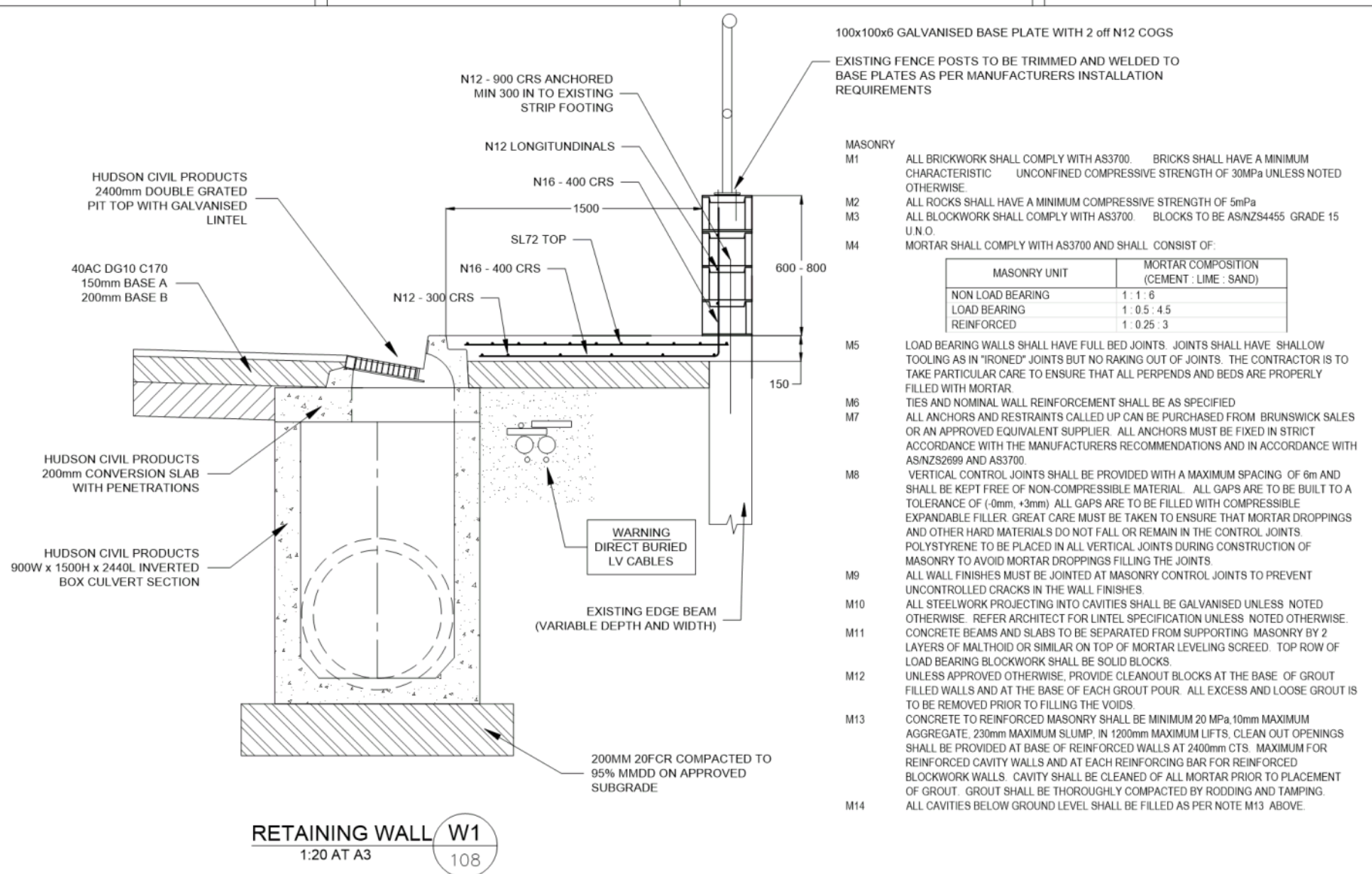
A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client
(and any other person who SETas has agreed can
use this document) for the purpose for which it
was prepared and must not be used by any other
person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2
Title	PIT DETAILS
Drawing Number	SHBFMW-SET-107
Revision	A ISSUED 30/05/22



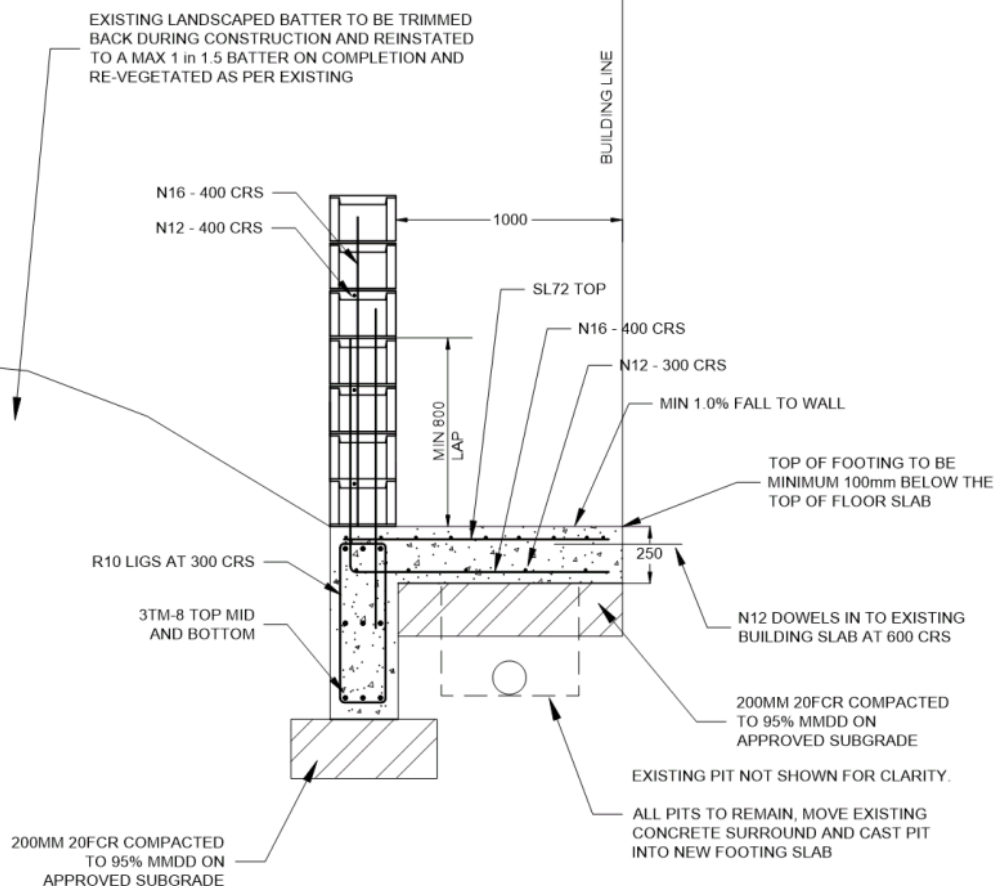
A Preliminary issue for Construction		BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-108	Revision	A ISSUED 30/05/22



RETAINING WALL W2
1:20 AT A3

109

MASONRY

- M1 ALL BRICKWORK SHALL COMPLY WITH AS3700. BRICKS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 30MPa UNLESS NOTED OTHERWISE.
- M2 ALL ROCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5mPa
- M3 ALL BLOCKWORK SHALL COMPLY WITH AS3700. BLOCKS TO BE AS/NZS4455 GRADE 15 U.N.O.
- M4 MORTAR SHALL COMPLY WITH AS3700 AND SHALL CONSIST OF:

MASONRY UNIT	MORTAR COMPOSITION (CEMENT : LIME : SAND)
NON LOAD BEARING	1 : 1 : 6
LOAD BEARING	1 : 0.5 : 4.5
REINFORCED	1 : 0.25 : 3

- M5 LOAD BEARING WALLS SHALL HAVE FULL BED JOINTS. JOINTS SHALL HAVE SHALLOW TOOLING AS IN "IRONED" JOINTS BUT NO RAKING OUT OF JOINTS. THE CONTRACTOR IS TO TAKE PARTICULAR CARE TO ENSURE THAT ALL PERPENDS AND BEDS ARE PROPERLY FILLED WITH MORTAR.
- M6 TIES AND NOMINAL WALL REINFORCEMENT SHALL BE AS SPECIFIED
- M7 ALL ANCHORS AND RESTRAINTS CALLED UP CAN BE PURCHASED FROM BRUNSWICK SALES OR AN APPROVED EQUIVALENT SUPPLIER. ALL ANCHORS MUST BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH AS/NZS2699 AND AS3700.
- M8 VERTICAL CONTROL JOINTS SHALL BE PROVIDED WITH A MAXIMUM SPACING OF 6m AND SHALL BE KEPT FREE OF NON-COMPRESSIBLE MATERIAL. ALL GAPS ARE TO BE BUILT TO A TOLERANCE OF (-0mm, +3mm) ALL GAPS ARE TO BE FILLED WITH COMPRESSIBLE EXPANDABLE FILLER. GREAT CARE MUST BE TAKEN TO ENSURE THAT MORTAR DROPPINGS AND OTHER HARD MATERIALS DO NOT FALL OR REMAIN IN THE CONTROL JOINTS. POLYSTYRENE TO BE PLACED IN ALL VERTICAL JOINTS DURING CONSTRUCTION OF MASONRY TO AVOID MORTAR DROPPINGS FILLING THE JOINTS.
- M9 ALL WALL FINISHES MUST BE JOINTED AT MASONRY CONTROL JOINTS TO PREVENT UNCONTROLLED CRACKS IN THE WALL FINISHES.
- M10 ALL STEELWORK PROJECTING INTO CAVITIES SHALL BE GALVANISED UNLESS NOTED OTHERWISE. REFER ARCHITECT FOR LINTEL SPECIFICATION UNLESS NOTED OTHERWISE.
- M11 CONCRETE BEAMS AND SLABS TO BE SEPARATED FROM SUPPORTING MASONRY BY 2 LAYERS OF MALTHOID OR SIMILAR ON TOP OF MORTAR LEVELING SCREED. TOP ROW OF LOAD BEARING BLOCKWORK SHALL BE SOLID BLOCKS.
- M12 UNLESS APPROVED OTHERWISE, PROVIDE CLEANOUT BLOCKS AT THE BASE OF GROUT FILLED WALLS AND AT THE BASE OF EACH GROUT POUR. ALL EXCESS AND LOOSE GROUT IS TO BE REMOVED PRIOR TO FILLING THE VOIDS.
- M13 CONCRETE TO REINFORCED MASONRY SHALL BE MINIMUM 20 MPa, 10mm MAXIMUM AGGREGATE, 230mm MAXIMUM SLUMP, IN 1200mm MAXIMUM LIFTS, CLEAN OUT OPENINGS SHALL BE PROVIDED AT BASE OF REINFORCED WALLS AT 2400mm CTS. MAXIMUM FOR REINFORCED CAVITY WALLS AND AT EACH REINFORCING BAR FOR REINFORCED BLOCKWORK WALLS. CAVITY SHALL BE CLEANED OF ALL MORTAR PRIOR TO PLACEMENT OF GROUT. GROUT SHALL BE THOROUGHLY COMPACTED BY RODDING AND TAMPING.
- M14 ALL CAVITIES BELOW GROUND LEVEL SHALL BE FILLED AS PER NOTE M13 ABOVE.



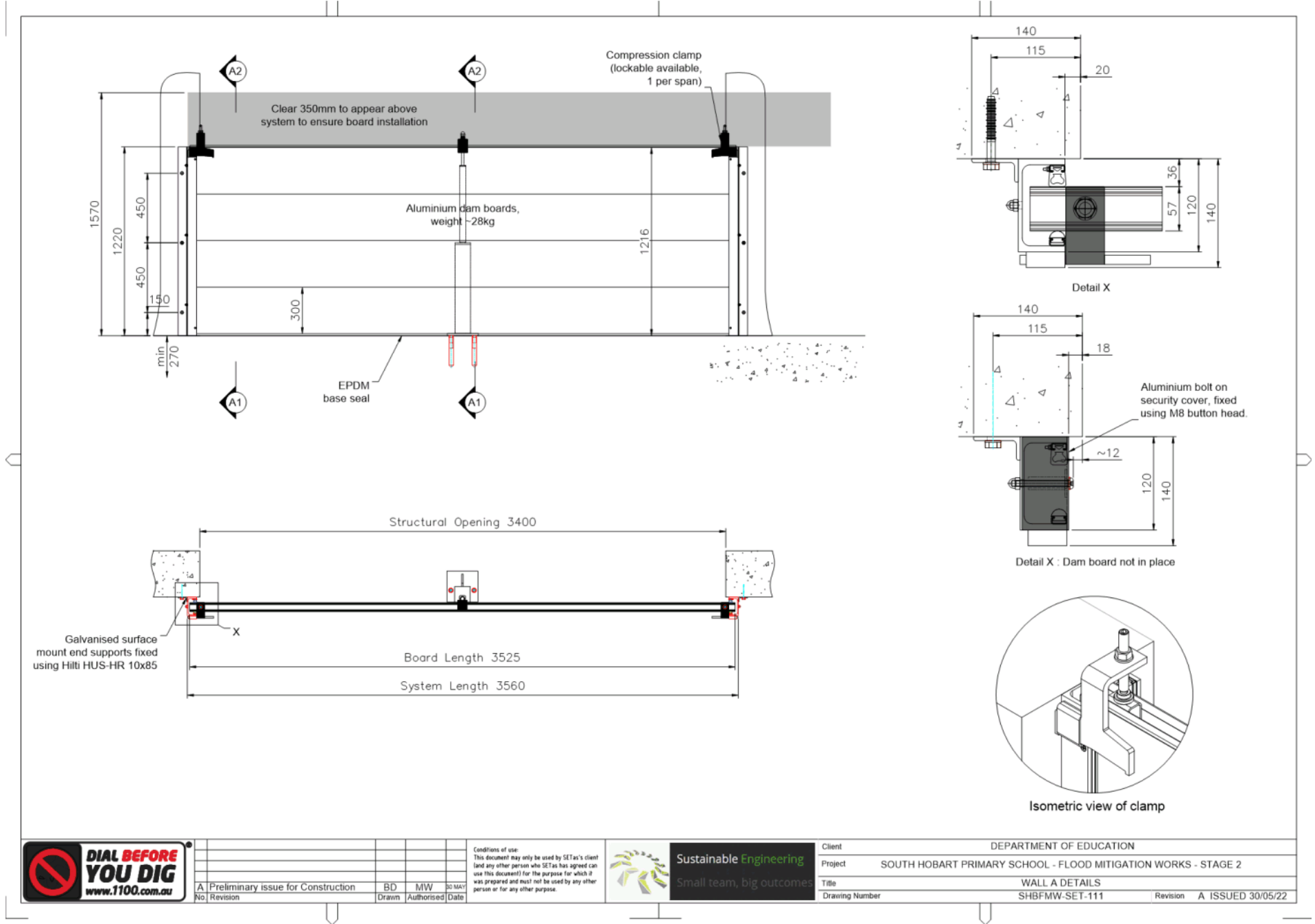
A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

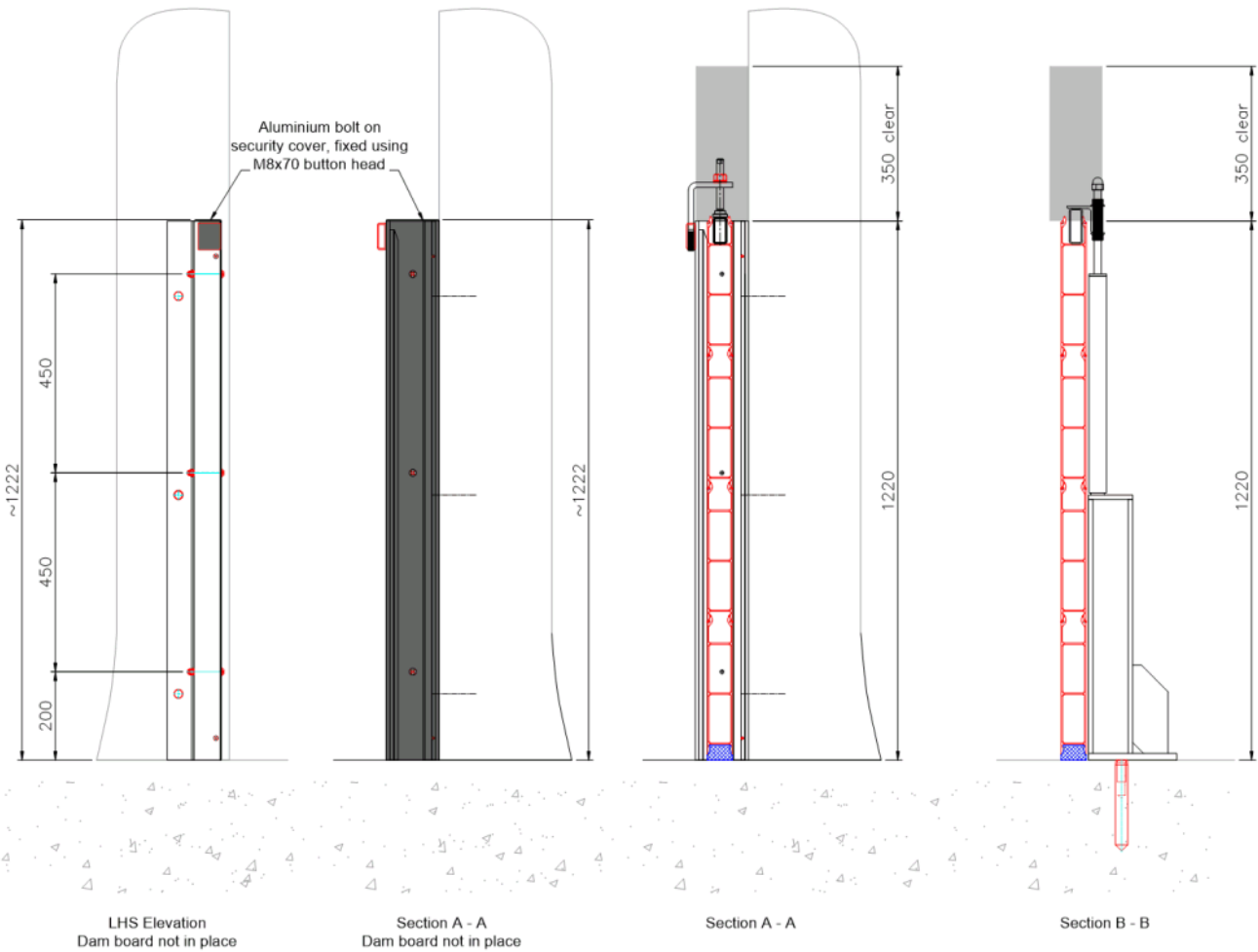
Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL B DETAILS		
Drawing Number	SHBFMW-SET-109	Revision	A ISSUED 30/05/22





- Notes:
1. Walls & floor prepared with Sika Primer (if necessary) and sealed with grey Sikaflex at end support locations.
 2. Structural foundations and/or walls required are to be built and checked by others. Dimensions shown are minimum for fixings criteria which does not include any structural check such as sliding, overturning and bearing checks which must be carried out by a third party/others.
 3. It is the client's responsibility to check wall strength and stability to withstand flood loading. Loads available on request.
 4. Finished floor and walls to have a smooth, flat, level, impervious surface. $\pm 5\text{mm}$ tolerance across barrier length off of plumb.

Fixing Schedule		
Item	Fixing	Qty.
1	Hilti HUS-HR 10x85	6
2	M8x70 button head bolt A4	6
3	M8 washer A4	6

Tools required	
24mm spanner for clamp	
8mm Allen key for clamp	
5mm Allen key for covers	



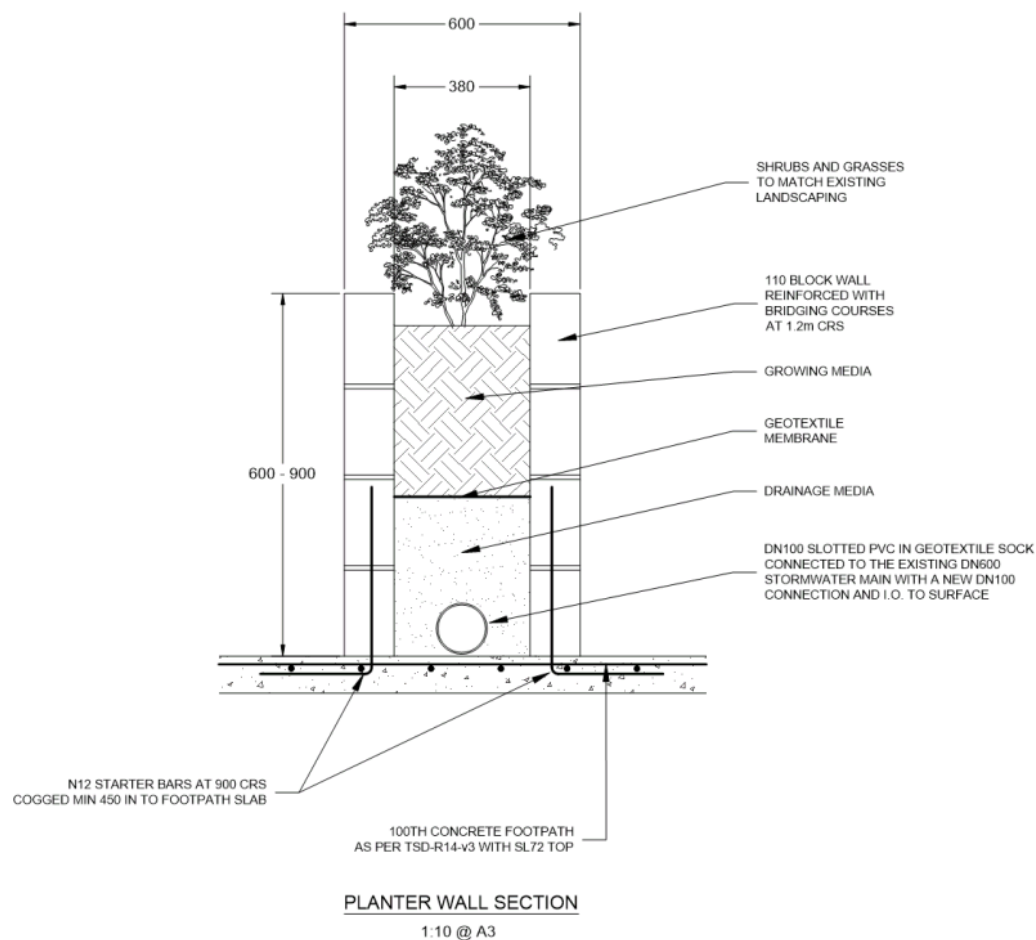
A Preliminary issue for Construction		BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-112	Revision	A ISSUED 30/05/22



MASONRY

- M1 ALL BRICKWORK SHALL COMPLY WITH AS3700. BRICKS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 30MPa UNLESS NOTED OTHERWISE.
- M2 ALL ROCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5mPa
- M3 ALL BLOCKWORK SHALL COMPLY WITH AS3700. BLOCKS TO BE AS/NZS4455 GRADE 15 U.N.O.
- M4 MORTAR SHALL COMPLY WITH AS3700 AND SHALL CONSIST OF:

MASONRY UNIT	MORTAR COMPOSITION (CEMENT : LIME : SAND)
NON LOAD BEARING	1 : 1 : 6
LOAD BEARING	1 : 0.5 : 4.5
REINFORCED	1 : 0.25 : 3

- M5 LOAD BEARING WALLS SHALL HAVE FULL BED JOINTS. JOINTS SHALL HAVE SHALLOW TOOLING AS IN 'IRONED' JOINTS BUT NO RAKING OUT OF JOINTS. THE CONTRACTOR IS TO TAKE PARTICULAR CARE TO ENSURE THAT ALL PERPENDS AND BEDS ARE PROPERLY FILLED WITH MORTAR.
- M6 TIES AND NOMINAL WALL REINFORCEMENT SHALL BE AS SPECIFIED
- M7 ALL ANCHORS AND RESTRAINTS CALLED UP CAN BE PURCHASED FROM BRUNSWICK SALES OR AN APPROVED EQUIVALENT SUPPLIER. ALL ANCHORS MUST BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH AS/NZS2699 AND AS3700.
- M8 VERTICAL CONTROL JOINTS SHALL BE PROVIDED WITH A MAXIMUM SPACING OF 6m AND SHALL BE KEPT FREE OF NON-COMPRESSIBLE MATERIAL. ALL GAPS ARE TO BE BUILT TO A TOLERANCE OF (-0mm, +3mm). ALL GAPS ARE TO BE FILLED WITH COMPRESSIBLE EXPANDABLE FILLER. GREAT CARE MUST BE TAKEN TO ENSURE THAT MORTAR DROPPINGS AND OTHER HARD MATERIALS DO NOT FALL OR REMAIN IN THE CONTROL JOINTS. POLYSTYRENE TO BE PLACED IN ALL VERTICAL JOINTS DURING CONSTRUCTION OF MASONRY TO AVOID MORTAR DROPPINGS FILLING THE JOINTS.
- M9 ALL WALL FINISHES MUST BE JOINTED AT MASONRY CONTROL JOINTS TO PREVENT UNCONTROLLED CRACKS IN THE WALL FINISHES.
- M10 ALL STEELWORK PROJECTING INTO CAVITIES SHALL BE GALVANISED UNLESS NOTED OTHERWISE. REFER ARCHITECT FOR LINTEL SPECIFICATION UNLESS NOTED OTHERWISE.
- M11 CONCRETE BEAMS AND SLABS TO BE SEPARATED FROM SUPPORTING MASONRY BY 2 LAYERS OF MALTHOID OR SIMILAR ON TOP OF MORTAR LEVELING SCREED. TOP ROW OF LOAD BEARING BLOCKWORK SHALL BE SOLID BLOCKS.
- M12 UNLESS APPROVED OTHERWISE, PROVIDE CLEANOUT BLOCKS AT THE BASE OF GROUT FILLED WALLS AND AT THE BASE OF EACH GROUT POUR. ALL EXCESS AND LOOSE GROUT IS TO BE REMOVED PRIOR TO FILLING THE VOIDS.
- M13 CONCRETE TO REINFORCED MASONRY SHALL BE MINIMUM 20 MPa, 10mm MAXIMUM AGGREGATE, 230mm MAXIMUM SLUMP, IN 1200mm MAXIMUM LIFTS, CLEAN OUT OPENINGS SHALL BE PROVIDED AT BASE OF REINFORCED WALLS AT 2400mm CTS. MAXIMUM FOR REINFORCED CAVITY WALLS AND AT EACH REINFORCING BAR FOR REINFORCED BLOCKWORK WALLS. CAVITY SHALL BE CLEANED OF ALL MORTAR PRIOR TO PLACEMENT OF GROUT. GROUT SHALL BE THOROUGHLY COMPACTED BY RODDING AND TAMPING.
- M14 ALL CAVITIES BELOW GROUND LEVEL SHALL BE FILLED AS PER NOTE M13 ABOVE.



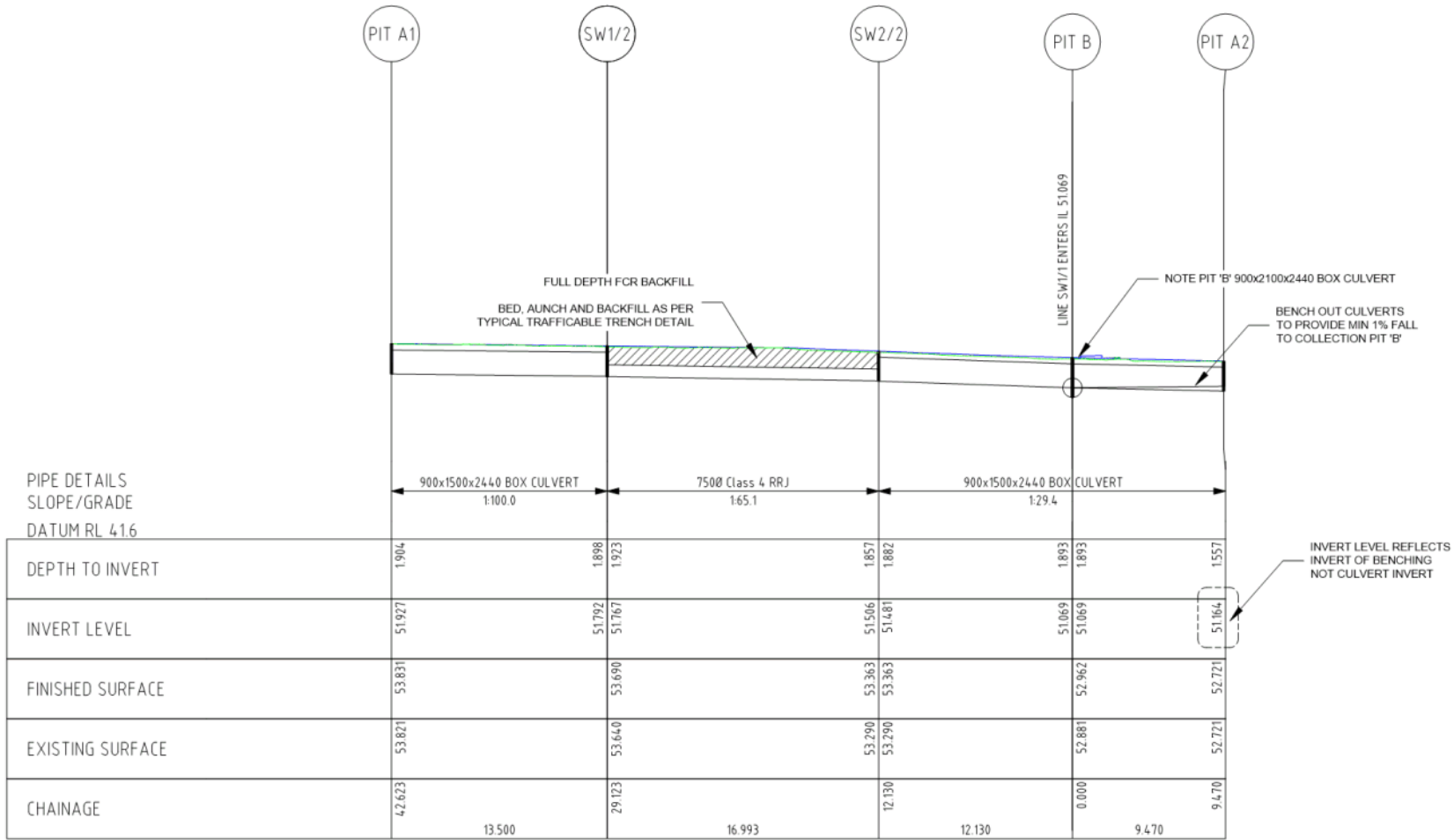
A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	WALL A DETAILS		
Drawing Number	SHBFMW-SET-110	Revision	A ISSUED 30/05/22



DRAINAGE LONGITUDINAL SECTION FOR LINE 2
SCALES: HORIZONTAL 1:250 VERTICAL 1:250



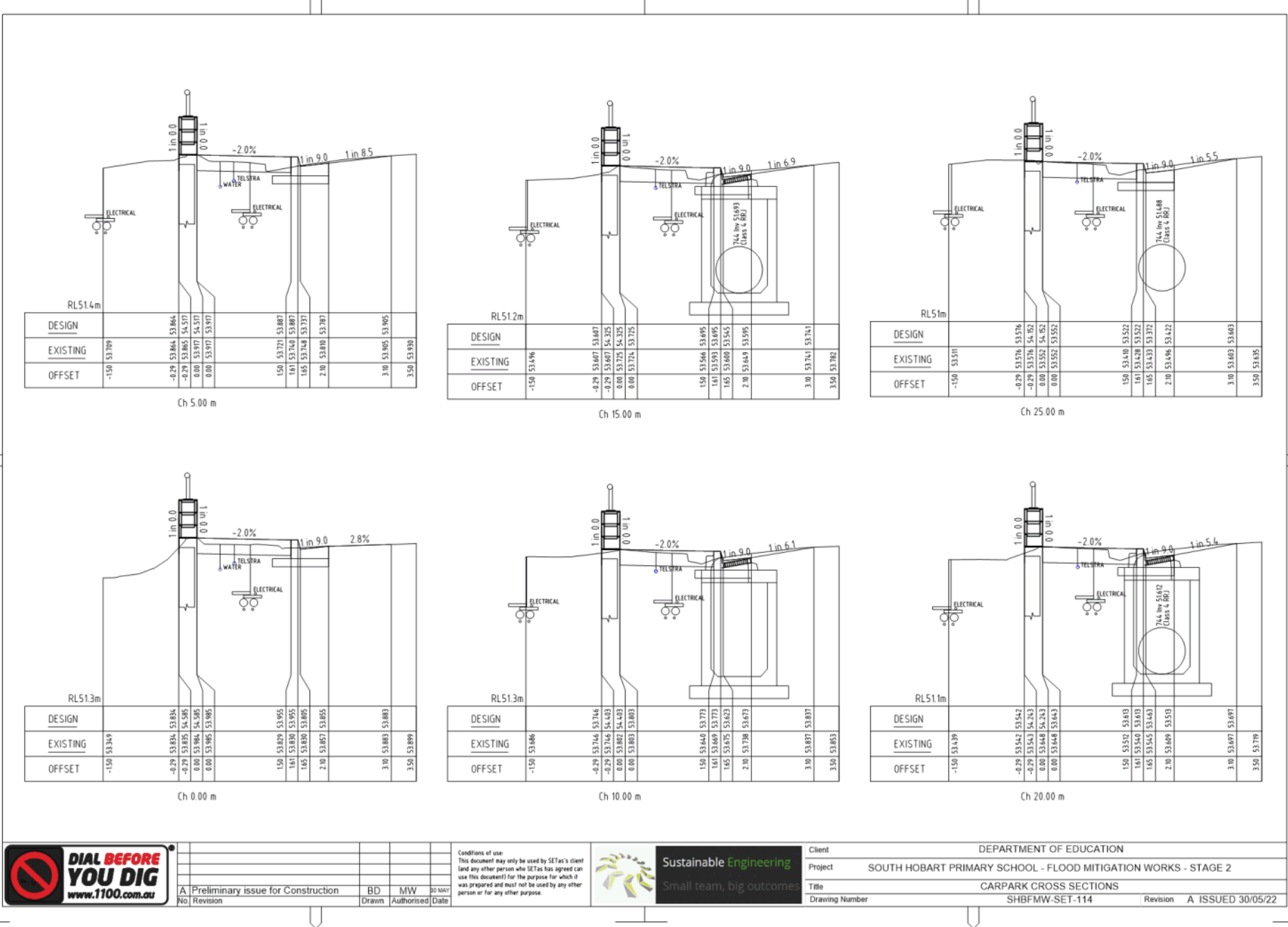
A Preliminary issue for Construction		BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

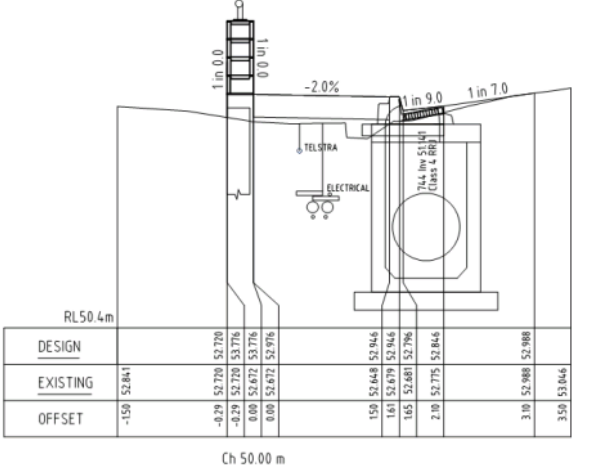
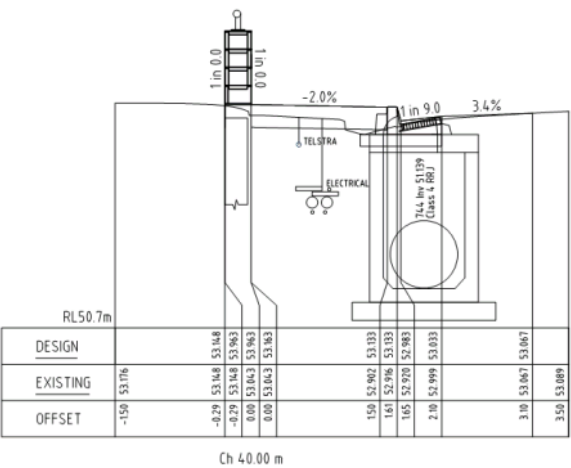
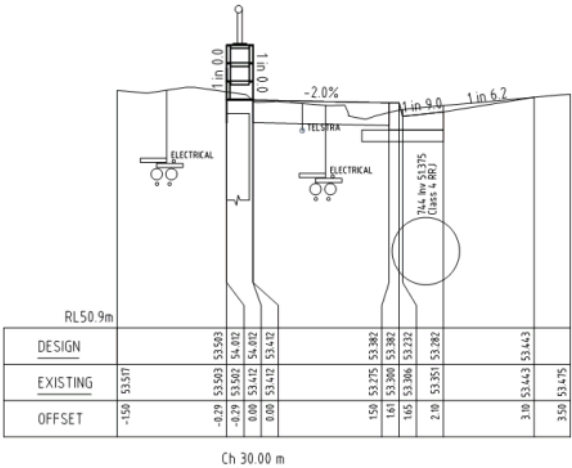
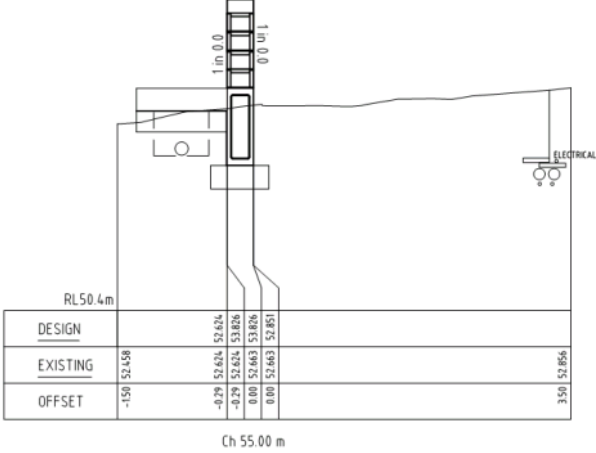
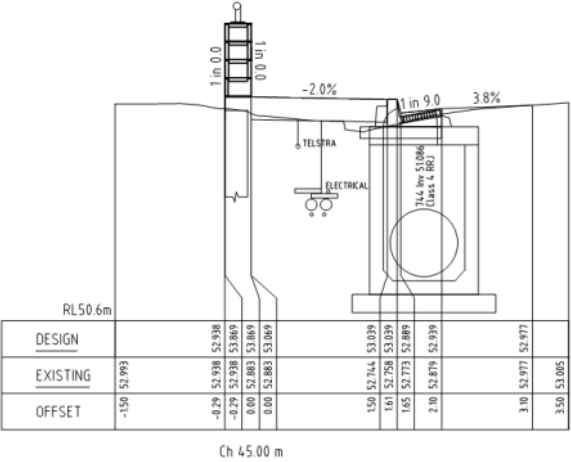
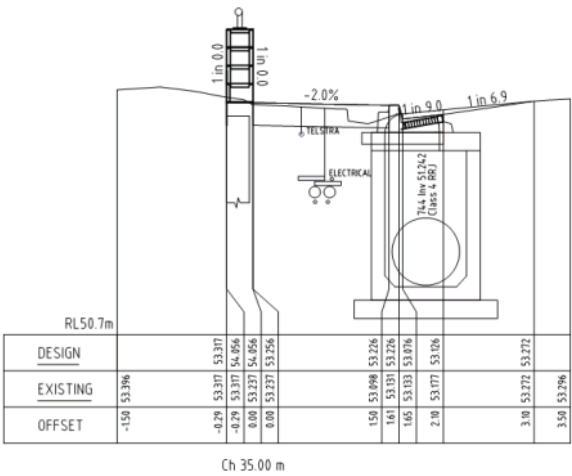
Conditions of use:
This document may only be used by SETas's client
(and any other person who SETas has agreed can
use this document) for the purpose for which it
was prepared and must not be used by any other
person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	STORMWATER LONG SECTION		
Drawing Number	SHBFMW-SET-113	Revision	A ISSUED 30/05/22





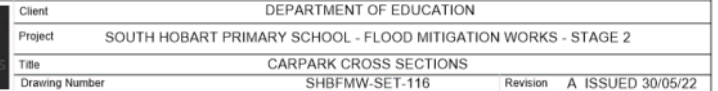
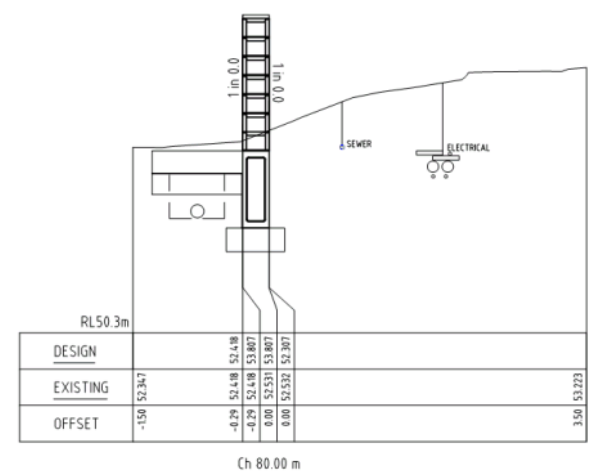
A	Preliminary issue for Construction	BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

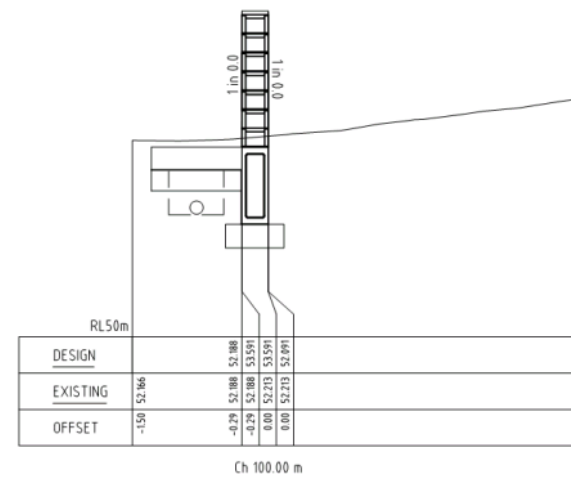
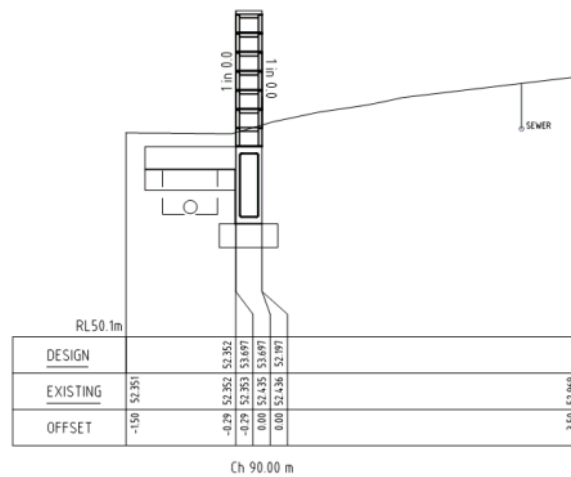
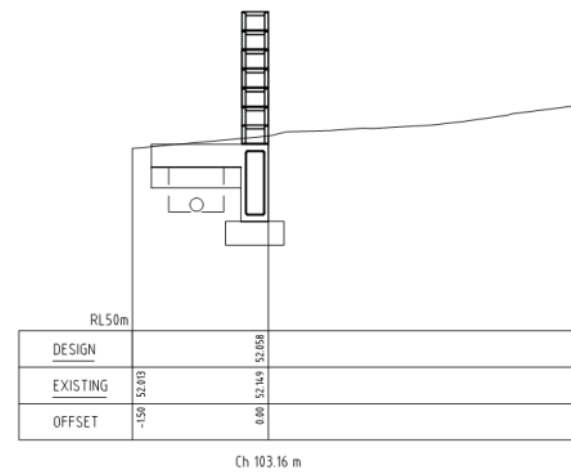
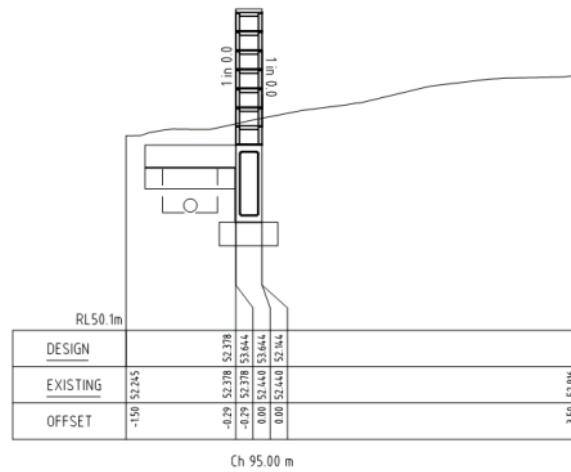
Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2
Title	CARPARK CROSS SECTIONS
Drawing Number	SHBFMW-SET-115
Revision	A ISSUED 30/05/22





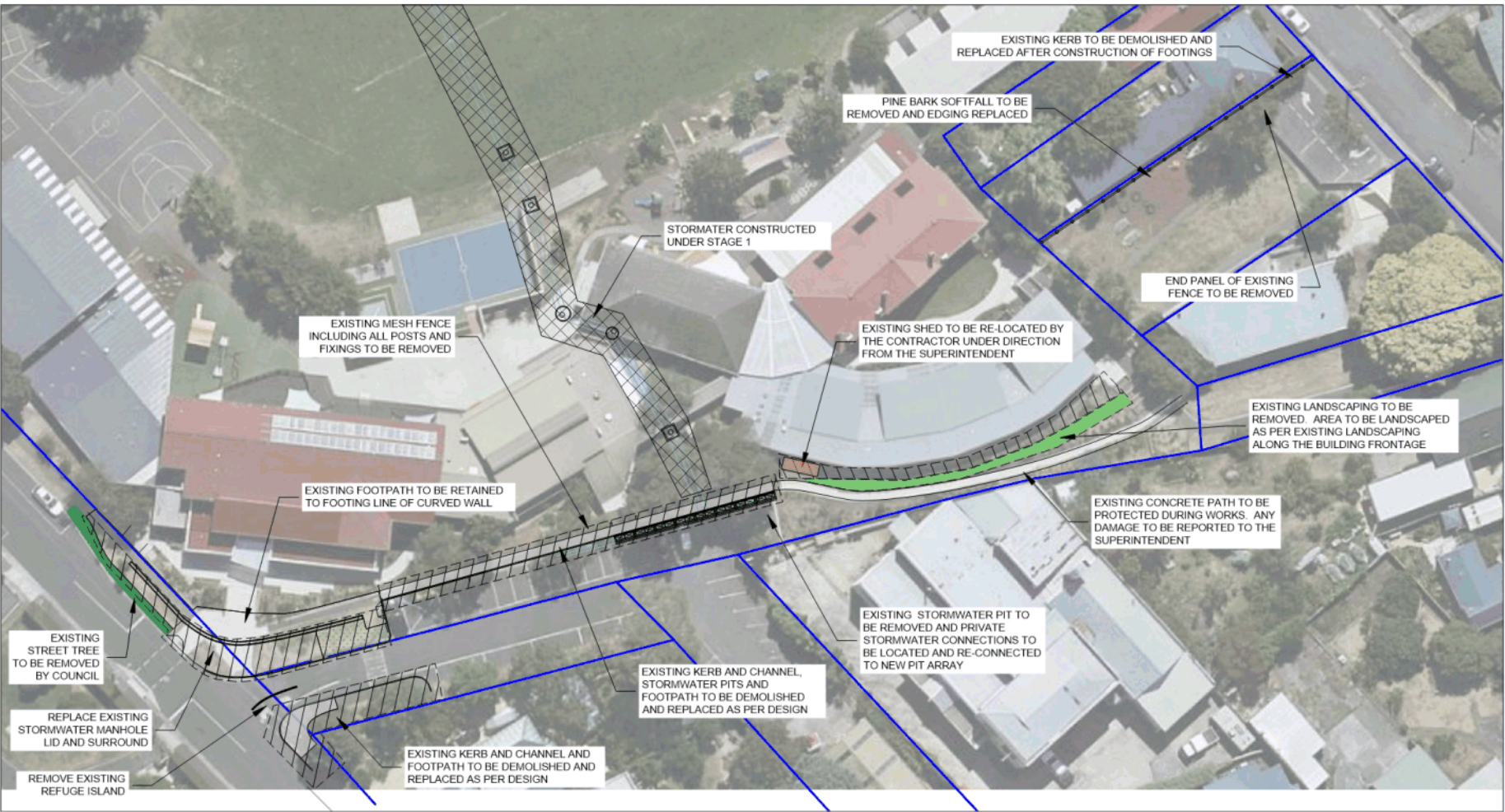
A Preliminary issue for Construction	BD	MW	30 MAY
No. Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	DEPARTMENT OF EDUCATION		
Project	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Title	CARPARK CROSS SECTIONS		
Drawing Number	SHBFMW-SET-117	Revision	A ISSUED 30/05/22



DEMOLITION PLAN
Scale 1:500 @ A3



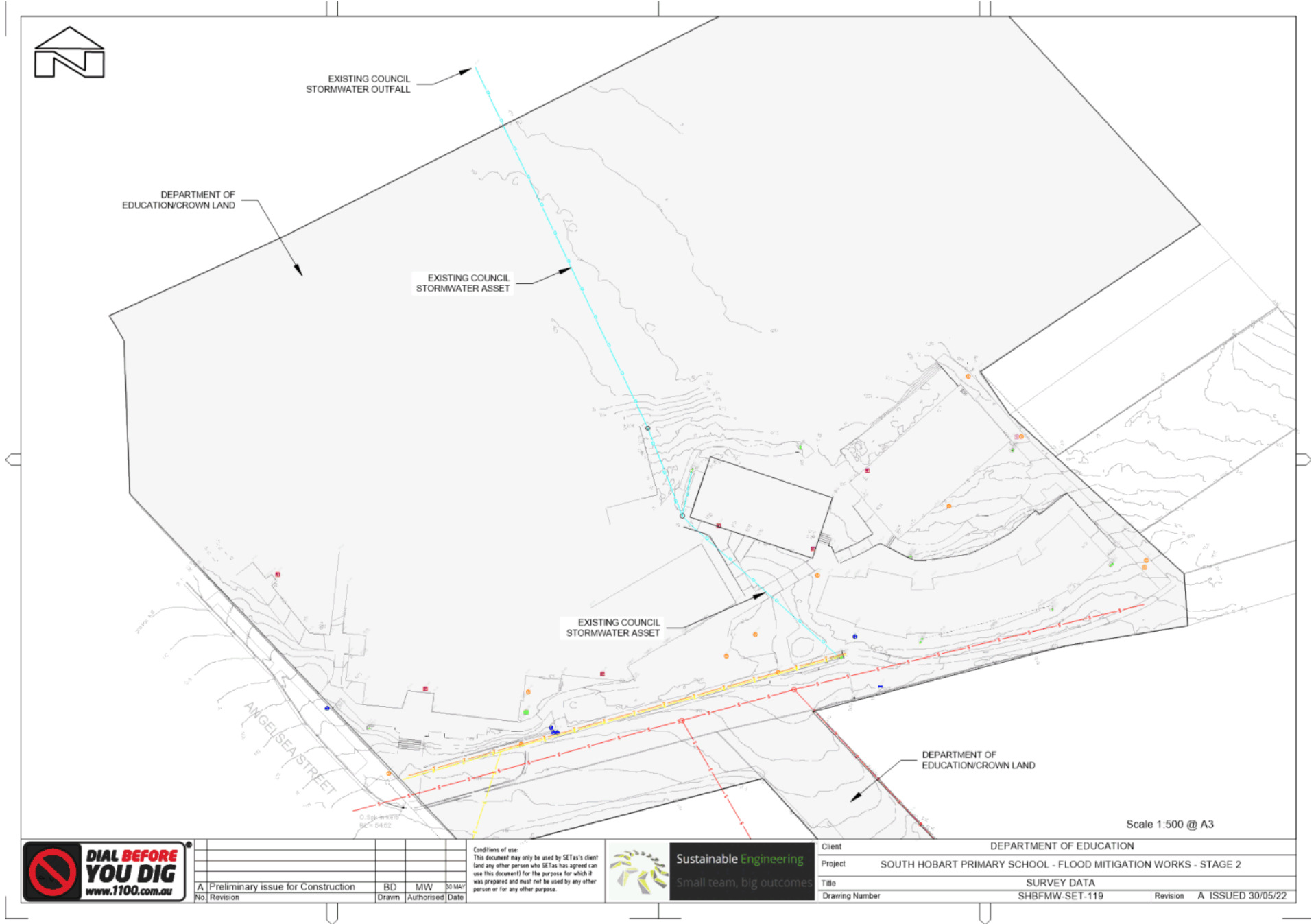
A Preliminary issue for Construction		BD	MW	30 MAY
No	Revision	Drawn	Authorised	Date

Conditions of use:
This document may only be used by SETas's client (and any other person who SETas has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Sustainable Engineering
Small team, big outcomes

Client	SOUTH HOBART PRIMARY SCHOOL - FLOOD MITIGATION WORKS - STAGE 2		
Project			
Title	DEMOLITION PLAN		
Drawing Number	SHBFMW-SET-118	Revision	A ISSUED 30/05/22





SOUTH HOBART PRIMARY SCHOOL

Flood Inundation Assessment

**ENTURA-11EB8F
February 2022**

Prepared by Hydro-Electric Corporation
ABN48 072 377 158

t/a Entura 89 Cambridge Park Drive,
Cambridge TAS 7170 Australia



WE OWN. WE OPERATE. WE CONSULT.

Entura in Australia is certified to the latest version of ISO9001, ISO14001, and OHSAS18001.

©Entura. All rights reserved.

Entura has prepared this document for the sole use of the client and for a specific purpose, as expressly stated in the document. Entura undertakes no duty nor accepts any responsibility to any third party not being the intended recipient of this document. The information contained in this document has been carefully compiled based on the client's requirements and Entura's experience, having regard to the assumptions that Entura can reasonably be expected to make in accordance with sound professional principles. Entura may also have relied on information provided by the client and/or other parties to prepare this document, some of which may not have been verified. Subject to the above conditions, Entura recommends this document should only be transmitted, reproduced or disseminated in its entirety.




South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8FRevision No: 3
11 February 2022

Document information




Title	South Hobart Primary School Flood Inundation Assessment
Client organisation	Sustainable Engineering Tas
Client contact	Brad Deeks
Document number	ENTURA-11EB8F
Project manager	Colin Terry
Project reference	E308017 - P515222

Revision history

Revision 3

Revision description	Updated report with extension to Weld Street and option 6		
Prepared by	Kylee Smith and Alice Hines		11/2/2022
Reviewed by	Colin Terry		11/2/2022
Approved by	Colin Terry		11/2/2022
	(name)	(signature)	(date)
Distributed to	Brad Deeks (name)	Sustainable Engineering Tas (organisation)	(date)

Revision 2

Revision description	Finished report		
Prepared by	Kylee Smith		10/5/2019
Reviewed by	Colin Terry		10/5/2019
Approved by	Colin Terry		10/5/2019
	(name)	(signature)	(date)
Distributed to	Brad Deeks (name)	Sustainable Engineering Tas (organisation)	10/5/2019 (date)

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

Contents

1. Introduction	6
1.1 Background	6
1.2 Terminology	9
2. 9	
3. Data	11
4. Hydrology	12
4.1 General	12
4.2 Data	12
4.3 Hydrologic model	13
4.4 Direct Rainfall	13
4.5 Hobart Rivulet	14
4.6 Weld Street	14
5. Hydraulics	15
5.1 Model Setup	15
5.1.1 Modelling software	15
5.1.2 Model Setup	15
5.1.3 Manning's n values adopted	16
5.2 Existing Conditions	17
5.2.1 Flood Behaviour	17
5.2.2 Flood Hazard	19
5.3 Mitigation Options	20
5.3.1 Mitigation Option 1	20
5.3.2 Mitigation Option 2	22
5.3.3 Mitigation Option 3	23
5.3.4 Mitigation Option 4	24
5.3.5 Mitigation Option 5	25
5.3.6 Mitigation Option 6	26
5.3.7 Flood hazard after mitigation	28
5.3.8 Other mitigation options	28
5.4 Minor storms	28
6. Conclusions	30
7. References	32
8. Appendices	33

Appendices

A Hobart Rivulet flows

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

B Flood Depth and Hazard Maps 1% AEP

C Flood Depth Maps 5% AEP

List of figures

Figure 1.1: client provided site plan and recent flooding areas	6
Figure 1.2: client photos near building 4 after rain storm	7
Figure 1.3: Client showing level of flood debris on building 4 from major rain storm	8
Figure 3.1: Hydrology sub-catchment boundaries	12
Figure 3.2: Hyetograph used for direct rainfall onto the internal hydraulic model	14
Figure 4.1: Hydraulic model Schematic	16
Figure 4.2: Schematic of terrain roughness values	17
Figure 4.3: Schematic of building footprints with gaps in lines representing potential ingress locations (doorways - D).	18
Figure 4.4: Hazard curves from ARR (Ball <i>et al</i> , 2016)	20
Figure 4.5: Mitigation Option 1 barrier location	21
Figure 4.6: Mitigation Option 2 proposed barrier location	22
Figure 4.7: Mitigation Option 3 proposed barrier location	23
Figure 4.8: Mitigation Option 4 proposed barrier location	24
Figure 4.9: Mitigation Option Five Proposed Barrier and Underground Pipe combination	26
Figure 4.10: Mitigation Option Six	27

List of tables

Table 2.1: Summary of data used throughout the study	11
Table 3.1: Summary of RORB adopted parameters	13

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

Table 4.1: Hydraulic model parameters	15
Table 4.2: Model roughness values adopted	16

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

1. Introduction

1.1 Background

South Hobart Primary School has experienced a number of floods from the hillside above the school in recent years. This flooding has caused damage to school property and playgrounds, and more importantly for the Department of Education, it has meant that the school has not been able to operate at times. Fortunately, there have been no people at risk or hurt due to these incidents.

Entura was commissioned by Sustainable Engineering Tas to support their work with the Department of Education in understanding the current flood risks in major rainstorms and producing conceptual options to reduce this risk to acceptable levels.

The school is located close to the Hobart Rivulet in South Hobart below Macquarie Street, between Anglesea and Weld streets (Figure 1.1). With recent building renovations, there is now a line of buildings across the contour of the site, and local piped infrastructure is limited. For example from the carpark next to the school (part of McKenzie Street) there was only a 225 mm diameter stormwater pipe to the rivulet (owned by Hobart City Council (HCC)) – which during the first stage of this project has been now upgraded – but for the purposes of this work is part of the base case for looking at impacts.

Some of the flood impacts have photographic evidence as shown in Figure 1.2 and Figure 1.3.

The three elements of this project are (a) land survey of the balance around the buildings from the Rogerson and Birch survey. This would include key doorways, the balance of HCC pipes within the site, and Anglesea Street without pipe inverts up from the site to include north kerbs in Macquarie Street either side of the entry down into Anglesea Street, (b) a flood study on the school with a focus on major storms and overland flows at the school, (c) extension of work to include Weld Street.

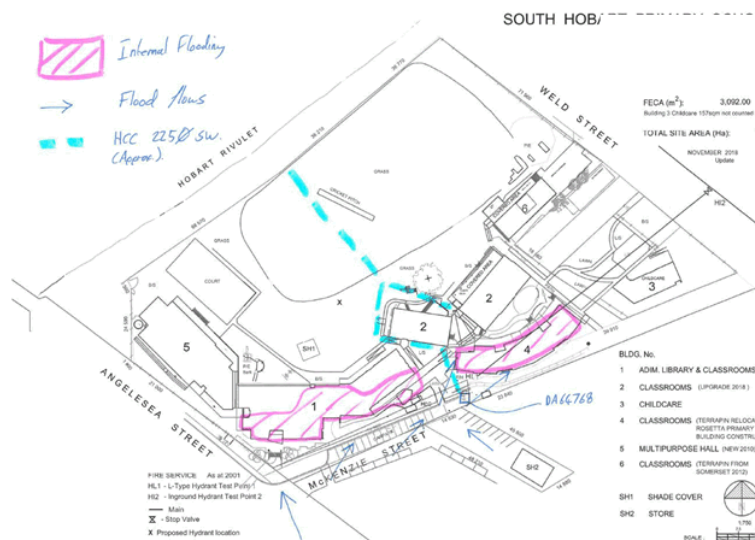


Figure 1.1: client provided site plan and recent flooding areas

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022



Figure 1.2: client photos near building 4 after rain storm

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022



Figure 1.3: Client showing level of flood debris on building 4 from major rain storm

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

1.2 Terminology

AEP	Annual Exceedance Probability, the chance of an event being at least as big each year
AHD	Australian Height Datum, the datum adopted within the majority of Australia that represents the height in metres above a mean sea level
Hydraulics	The study of water flow: in this study, flood levels, depth, velocity and hazard
Hydrology	Rainfall and runoff processes: in this study, climate, rainfall and flow rates
LiDAR	Laser scanning of the ground to give the elevations on a grid
Manning's n	Represents the roughness or friction applied to a surface for water flow

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

This page is intentionally blank.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

3. Data

The data in Table 3.1 below was obtained and incorporated into the Flood Study.

Table 3.1: Summary of data used throughout the study

Name of data	Source
Rogerson and Birch laser scan	Supplied by client
Survey & Alignment Services ground survey of Weld Street	Supplied by client
LiDAR	From MRT combined LiDAR at 1m grid size for the balance of the model area, supplied by Hydro Tasmania
Entura Survey	South of the school buildings, surveyed by Natalie Williams of Entura
Entura Survey	Top part of Anglesea Street into Macquarie Street and below. Surveyed by Natalie Williams of Entura.
Weld Street Survey	Survey and Alignment Services (Dave Tompkins)
Combined DWG File	3D surface created from other surfaces listed above, plus building footprints as polygons created from floor levels, plus patches – Civil3D compilation by Colin Terry
Exported ASC File	0.1 m export from combined DWG file – exported by Colin Terry

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

4. Hydrology

4.1 General

The hydrology was undertaken utilising the most up-to-date Australian Rainfall and Runoff 2016 guidelines (Ball, Babister, et. Al., 2016) incorporating the impacts of climate change on rainfall, with a 20% increase in rainfall adopted from a relevant study on the Hobart Rivulet (Entura, 2014).

The terrain data was studied during a site visit and with terrain contours, a preliminary assessment was made for flow paths through the catchment. Sub-catchment boundaries upstream of South Hobart Primary School were subsequently drawn using the 0.5 m contours (generated from the LiDAR and survey as discussed in Section 3 above). These sub-catchments are shown below in Figure 4.1.

Due to the staging of the project, additional hydrology for the smaller Weld Street catchment was added after the main catchment hydrology. This was done by scaling the main catchment flows, and using Manning's equation to subtract the approximate capacity of the Weld Street pipes.



Figure 4.1: Hydrology sub-catchment boundaries

4.2 Data

Rainfall data was obtained from the ARR Datahub for the 1% and 5% AEP events (Babister, Trim, et.al, 2016). The catchment boundary, latitude and longitude were input into the Datahub and all rainfall data was returned, including the 10 temporal pattern increments for frequent, intermediate and rare events, as well as the rainfall depths. These increments and depths are multiplied together

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

to form a hyetograph for input into the hydrologic model. This data processing is all undertaken within the model itself.

4.3 Hydrologic model

The RORB hydrological model was used to generate a hydrograph (graph of flow versus time), at the outlet of the catchment which was located near the corner of Macquarie Street and Anglesea Street.

RORB is a general runoff and streamflow routing program, used to calculate flood hydrographs from rainfall and other channel inputs. It subtracts losses from rainfall to produce rainfall-excess and routes this through catchment storage to produce the hydrograph (Laurenson, Mein & Nathan, 2010).

Table 4.1 below, summarises the parameters adopted for the hydrologic model.

Table 4.1: Summary of RORB adopted parameters

Parameter	Adopted Value
K_c	0.69 – Using the Aus Wide Dyer equation (1994) as cited in Pearse et al (2002) as obtained directly from the RORB software.
Initial loss	5 mm – for urban areas
Runoff Co-efficient	0.6 – for urban areas
Fraction Impervious	0.6
Critical Duration	15 minutes
Temporal Pattern	TP10
Peak of output hydrograph	7.93 m ³ /s

The model was run for rainfall durations from 10 minutes to 6 hours to determine the maximum duration. As per ARR2016 (Ball, Babister, et.al., 2016), the median temporal pattern was chosen for the maximum duration. This duration and temporal pattern was tested for a range of fraction impervious values and k_c values and sensitivity checked against the results from a simple rational method calculation.

Finally, the final peak value was adjusted down to account for the flow taken by the underground network. The capacity of the underground network was calculated using Manning's equation with the ground slope in Macquarie Street and Weld Street to represent the pipe slope (as there was no survey of the pipe inverts undertaken for this study). This is an approximate approach suitable when the focus is on major storms where the pipe network is expected to be overwhelmed, and point of interest is further downslope. More detailed modelling of the pipework would require a survey of the inverts and confirmation of the diameters in the HCC GIS.

4.4 Direct Rainfall

The same data obtained from the ARR Data Hub above was used to create a Hyetograph for direct application to the model extents on the hydraulic model. The hyetograph is shown in Figure 4.2 below.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F

Revision No: 3
 11 February 2022

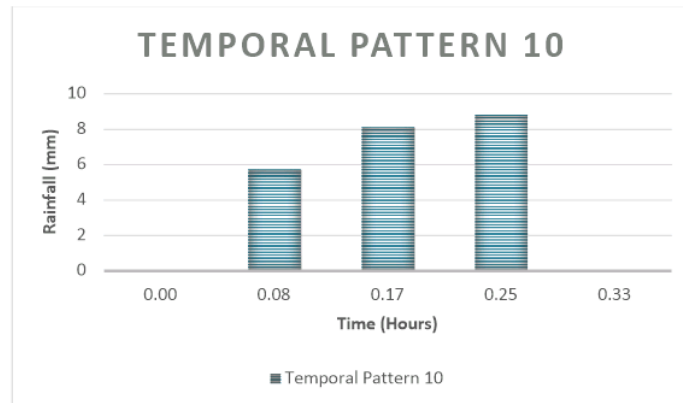


Figure 4.2: Hyetograph used for direct rainfall onto the internal hydraulic model

4.5 Hobart Rivulet

The Hobart Rivulet flow was entered into the model as a steady state flow to provide a downstream tailwater level to the hydraulic model outfall. The peak flow for the 10% AEP with the current climate event was chosen as being representative of a likely tailwater level that would occur at the time of an upstream 1% AEP at the future climate event due to very different times of concentration. The peak 10% AEP flow for the Hobart Rivulet in the current climate is 26 m³/s (Entura, 2014).

4.6 Weld Street

Based on catchment area, a hydrograph for Weld St (at Macquarie Street) was generated by

- Catchment area ratio (3.6 ha / 50.3 ha) to the power of 0.8 times the main catchment flows, subtracting pipe capacity
- 375 mm diameter pipe capacity was a simple Manning's equation approximate capacity (0.7 m³/s). This compares to the 1.8 m³/s capacity for the 600 mm diameter pipe in Anglesea Street.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

5. Hydraulics

5.1 Model Setup

5.1.1 Modelling software

The hydraulic modelling software TufLOW was chosen to assess the flood inundation of South Hobart Primary School. The Heavily Parallelised Compute (HPC) version of TufLOW used is a 1-dimensional (1D) / 2-dimensional (2D) finite volume numerical model that is used to simulate hydrodynamic behaviour in rivers, floodplains and urban drainage environments (BMT Group, 2018).

5.1.2 Model Setup

The following hydraulic model parameters adopted for this project are shown below in Table 5.1.

Table 5.1: Hydraulic model parameters

Parameters	
Model Used and Version	TufLOW-2018-03-AD & TUFLOW-2020-10-AC
Terrain Data	0.1 m exported ASC file as discussed in Section 3 above.
Grid Cell Size	0.5 m
Inflow Hydrographs	As discussed in Section 4
Inflow – Direct Rainfall	As discussed in Section 4.4
Terrain Roughness	See Table 5.2 below
Terrain Modifiers	<ol style="list-style-type: none"> 1. Rivulet Smoothing 2. Building Footprints / Walls 3. New kerb adjacent to footpath enforced 4. Mitigation “Walls” 5. Pipe inlet terrain modification 6. Enforced floor levels of properties on Weld St
Downstream Boundary Condition	Free outfall based on terrain slope
Structures	Main underground pipe system through school; existing and proposed; no other bridges or culverts included.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

A schematic of the model setup is provided in Figure 5.1 below.

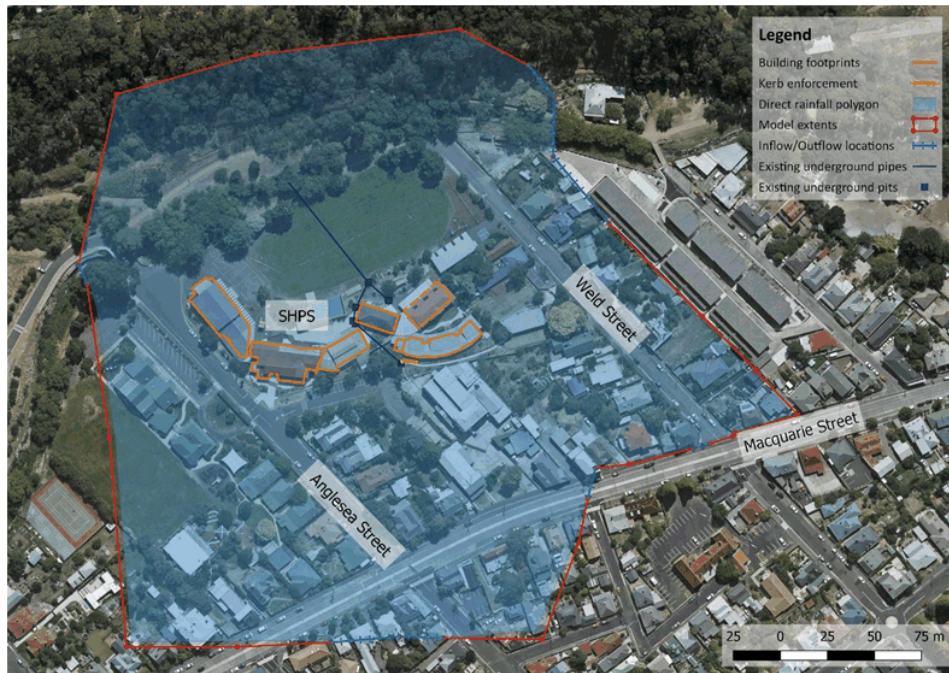


Figure 5.1: Hydraulic model Schematic

5.1.3 Manning's n values adopted

The terrain representation is modelled via the use of Manning's n values. These are illustrated in the schematic in Figure 5.2 below and detailed in Table 5.2.

Table 5.2: Model roughness values adopted

Id	Terrain Type	Manning's n adopted
1	Urban residential building footprints	0.01 when <0.03 m, 0.35 when > 0.05 m, interpolated in between
2	Roads, car parks, pavements	0.03 when <0.005 m, 0.016 when > 0.01 m, interpolated in between
3	Gravel tracks and tennis courts	0.03 when <0.005 m, 0.02 when > 0.01 m, interpolated in between
4	Open pervious areas – grass/lawn	0.06 when <0.03 m, 0.03 when > 0.07 m, interpolated in between
5	Waterways	0.1 when <0.1 m, 0.035 when > 0.2 m, interpolated in between

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

6	Open pervious areas – forest and dense shrubs	0.1 when <0.2 m, 0.07 when > 0.5 m, interpolated in between
7	Urban hard landscaping and backyards	0.07 when <0.1 m, 0.06 when > 0.5 m, interpolated in between

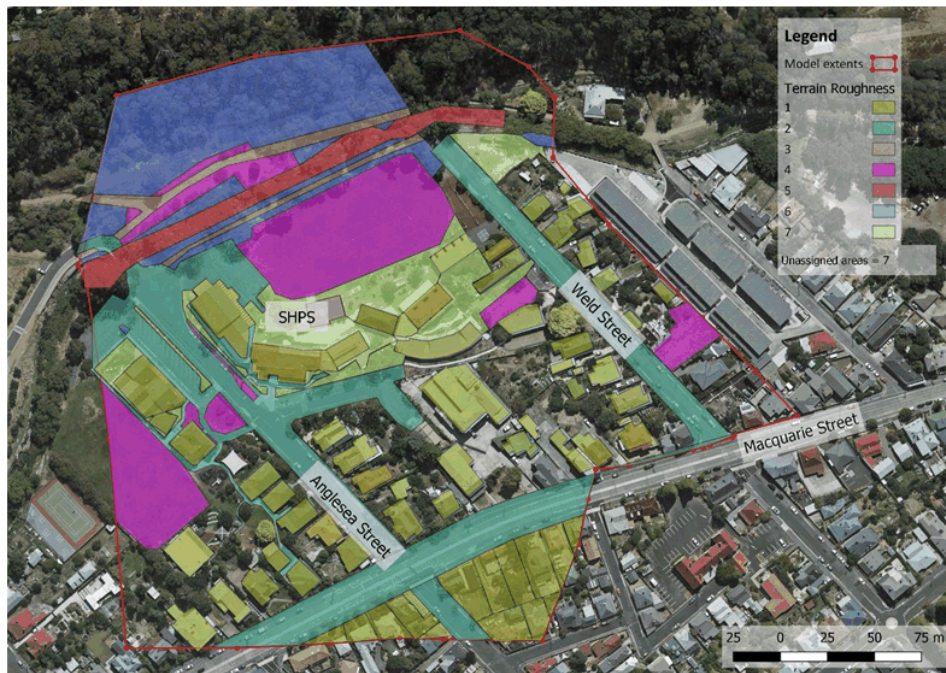


Figure 5.2: Schematic of terrain roughness values

5.2 Existing Conditions

5.2.1 Flood Behaviour

For the following discussion, please refer to the building numbers indicated in Figure 1.1 and the schematic of building ingress details in Figure 5.3 below.

The focus of this study is overland flow from south of the school. While the flooding from the Hobart Rivulet is considered, it's not modelled in detail. Another project by Entura looking at the potential for two demountable buildings goes into more detail for Hobart Rivulet flooding and the potential for blockage of the bridge at Anglesea Street (Entura, 2022). So take the following description in that context.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

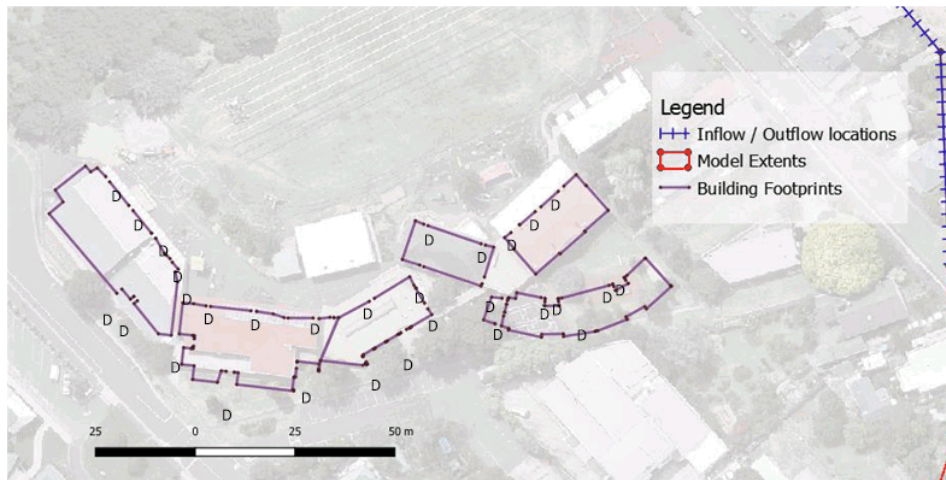


Figure 5.3: Schematic of building footprints with gaps in lines representing potential ingress locations (doorways - D).

Modelling of the existing conditions flooding for South Hobart Primary School demonstrates that flooding in and around the school is quite significant during a major storm.

The floodwaters travel down Anglesea Street from the upstream catchment, and for a 1% AEP event with climate change the water arrives at the reception building of the school within 10 minutes. Within 12 minutes, building five and building four have started flooding as the water continues down Anglesea Street and turns onto McKenzie Street, travelling east. Building two begins to flood after approximately 13 minutes through the east-facing door between the two buildings.

The reception building floods first as water arrives from Anglesea Street and flows down the steps into the foyer of the building. The depth of flooding above floor level is approximately 200 mm in a 1% AEP with climate change event.

Similarly, building five floods via the west-facing doorway, to a depth of approximately 200 mm as water continues to travel down Anglesea Street towards the Hobart Rivulet.

For building four on the east, flooding is entering the building above floor level, via the entry door that is within the passageway where the student toilets are located. The flooding ponds upstream of the building to a depth of 700–800 mm and enters the passageway to a depth of approximately 500 mm. Upon entering the classroom, water travels east above floor level and ponds within the building to a depth of approximately 150 mm.

Finally, building two begins flooding from the east-facing door that is located between the two buildings. Water ponds above floor level in the west part of the building to a depth of approximately 200–300 mm, whilst the eastern classrooms of building two only flood after the water has travelled north to the rivulet and water enters via the north facing doors to a depth of approximately 30–50 mm.

The previous 225 mm diameter underground pipe that takes water from the car park pit to the Hobart Rivulet, only carries approximately 0.05 m³/s to past the school and flow is reduced to

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

0.02 m³/s between the school and the rivulet. This pipe has been upgraded as part of stage one of this project. As this report is revised after stage one, there are some options and descriptions which refer to the DN225. For the purposes of impacts assessment, the DN225 is considered part of the “existing” or “base” case.

5.2.2 Flood Hazard

Flood hazard is a function of the depth and velocity of overland water flow, and based on extensive laboratory and field-testing. The hazard categories are based on the maximum depth and velocity (Figure 5.4). The risk of flooding is a function of the flood hazard and likelihood of a storm event and people and property being in harm’s way. The school does not have habitable areas (for living and sleeping), and so with enough warning people can be moved from site, but property is harder to move (cars can be moved, but not buildings). The warning time for flash flooding is very small, however (a matter of 12 minutes to the peak of the storm from the start of the rain burst), so evacuation may not be practical. This study does not investigate evacuations and other emergency management planning, but it is expected that this would be done for the school to manage existing residual risks. The residual risks are from hazards posed by stormwater not mitigated by structural options in the design events, or events larger than the design event.

In existing conditions, the flooding immediately surrounding the buildings of the school falls under ARR hazard categories H2, H3, H4 and H5, which is “unsafe for small vehicles”, “unsafe for small children and the elderly”, “unsafe for all vehicles” and “H4 + buildings require special design” respectively. Once the category rises above H3, the floodwaters are unconditionally unsafe for children and the elderly. That is to say, in a 1% AEP event, it is imperative that these floodwaters are mitigated from the surrounding areas of the buildings in case children should be present at the time of such a heavy rainfall.

Once floodwaters exceed the capacity of the pipework and kerbs in Macquarie and Anglesea Streets, the water flows to the school. So even for a 5% AEP storm (or 1 in 20 year average recurrence interval) storm, the hazard category surrounding the buildings reaches a H4 category – “unsafe for all vehicles”, which is unconditionally unsafe for children and the elderly.

Hazard maps for the 1% AEP events can be found in Appendix B. Hazard maps for the 5% AEP can be provided upon request, however, they are quite similar to the 1% AEP event.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

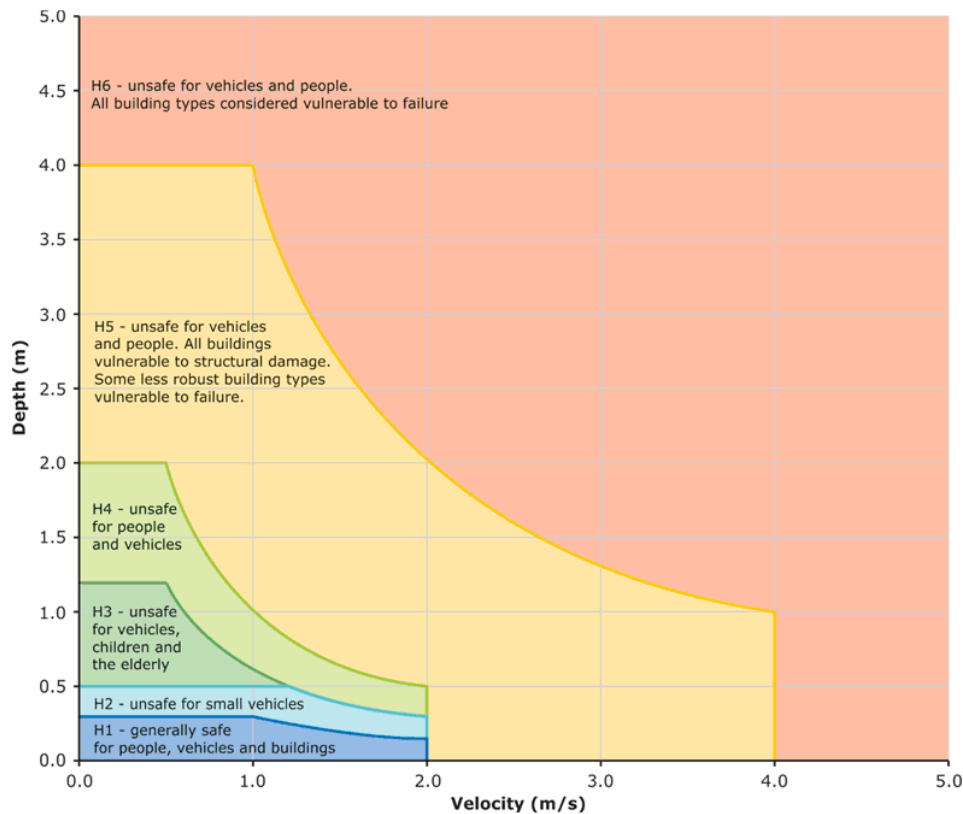


Figure 5.4: Hazard curves from ARR (Ball *et al*, 2016)

5.3 Mitigation Options

The focus on most mitigation was redirecting surface flows that occur in a major storm, so they don't flow through the school grounds. The fast flowing, and often deep water, poses an unacceptable hazard to children if they are there when the storm strikes.

There would be other options for flood-gates to protect buildings, but these wouldn't protect people outside the buildings and would be difficult to retrofit without major works.

5.3.1 Mitigation Option 1

The first option explored was a raised barrier running the full length of Anglesea Street between Macquarie Street and McKenzie Street and part of the length of Macquarie Street between Anglesea Street and Weld Street. Figure 5.5 indicates the location of the proposed barrier. Conceptually this barrier represents raised ramps in driveways, flood gates on fence gates and raised roadway in McKenzie Street (which could also be a pedestrian crossing). The aim of this modelling was to introduce an impermeable barrier and see how high the floodwaters rose against it, and thereby determining the required height of the barrier.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

Note that the top of the barrier would need to be higher than the modelled smooth water surface to account for local hydraulic phenomena not included in the hydraulic model, such as hydraulic jumps on fast flows, wind waves and car wakes. This extra allowance is called freeboard, and would typically be 0.3 m, but with more detailed future work could be reduced to 0.2 m or even 0.1 m in some cases. This future work would more closely examine the potential and calculate the size of, these other phenomena. At this point a freeboard of 0.3 m is recommended on the flood depths.



Figure 5.5: Mitigation Option 1 barrier location

The results of the Mitigation Option 1 barrier shows that flooding is significantly reduced within the school. However, due to the flooding from the local rainfall on the block bounded by Macquarie Street, Anglesea Street and McKenzie Street and due to the undersized underground pipe, floors may be still flooded to a depth of 30–50 mm.

A flood map for the results of Mitigation Option One is included in Appendix B.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

5.3.2 Mitigation Option 2

The second option that was explored was a raised barrier similar to Mitigation Option 1, but broken up into parts where the barrier would only be located along critical pathways. This barrier is more achievable than Option 1 and Figure 5.6 shows the proposed location of this barrier.



Figure 5.6: Mitigation Option 2 proposed barrier location

Results of Option Two shows that floodwater bypasses the barrier on every side and does not significantly reduce the above floor flooding.

A flood map for the results of Mitigation Option Two is included in Appendix B.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

5.3.3 Mitigation Option 3

The third option that was explored was a raised barrier along the rear of the footpath next to the staff car park on McKenzie Street, and across the entry to reception at the top of the stairs. This would effectively raise the top of the kerb or be a short wall at the back of the footpath, and Figure 5.7 shows the proposed location of this barrier.



Figure 5.7: Mitigation Option 3 proposed barrier location

Results of Mitigation Option 3 modelling showed a significant drop in flood levels within the school area, however, overland flooding was diverted due to the barrier and caused an increase in flooding on the upstream warehouse of up to 500 mm and an increase in flooding on the residents to the east of up to 150 mm. This amount of offset impact would not be an acceptable solution.

A flood map for the results of Mitigation Option Three is included in Appendix B. The maximum flood depths behind the barrier are up to 1.7 m.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

5.3.4 Mitigation Option 4

Mitigation Option 4 is a combination of Mitigation Options two and three. Figure 5.8 shows a plan of this proposed option.



Figure 5.8: Mitigation Option 4 proposed barrier location

The results of Mitigation Option Four are very similar to Option Three. Whilst the flood depths are significantly reduced within the school, the overland flooding is diverted upstream onto the warehouse and to the east onto the residential properties, increasing flood levels upstream by up to 500 mm and eastwards by up to 200–300 mm, which would not be acceptable.

A flood map for the results of Mitigation Option Four is included in Appendix B.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

5.3.5 Mitigation Option 5

Mitigation Option 5 proposes to include the same barrier as Mitigation Option 3 plus an upsized underground pipe from the main inlet pit adjacent to the staff carpark down to the rivulet, to divert the ponded waters from the carpark to the oval (a bubble up pit) and the Hobart Rivulet (Figure 5.9).

Different underground pipe sizes and grated trench inlet systems were trialled and it was decided that a DN1800 would be the most appropriate to capture and carry the water from the staff carpark, upstream of the proposed barrier, down to the oval and ultimately to the rivulet. This was combined with a 60 m grated trench. However, if this option were to be selected for detailed design, we expect that with some optimisation a smaller pipe size may be acceptable, potentially down to a DN1200. This optimisation would include the collection grated trench sizing.

The construction of a large pipe between the school buildings will involve demolition and remaking of pathways and play areas. The minimum gap between buildings on the route is 3.5 m, and trench between buildings will require shoring and potentially underpinning of building edges. Barrier walls near McKenzie St would need to be water proof at the design flood depths (including being overtopped in the case of a pipe blockage).

Ideally the inlet grated trench could be designed as a continuous grated tray and side entry along the footpath's kerb, but more detailed hydraulic modelling would be required to confirm the grated trench design. The final extent and alignment of the barrier and grated trench will require optimisation, in particular near the corner of McKenzie and Anglesea Streets where the barrier will be created through changing the ground levels, which will require compliance with the standards to allow safe access for people with mobility disabilities.

As this option relies heavily on the collection and underground piping of stormwater, it is more prone to blockage than options that are just overland flow options (eg. option 1). This means maintenance of the system is required, but even with regular maintenance grates can block during a storm, so safe management of the inlet system needs to be incorporated into the emergency management planning.

The cut-off grated trench does most of the mitigation, but water will pond over the trench at the peak of the storm which requires the barrier on the low side of the inlet structure. A key element in the barrier is the flood gate into the school grounds. As storms can occur at any time of the day and at short notice, the flood barrier would ideally be automatically closed. There are systems to automatically close flood barriers that are driven by the overland flood water itself. Any mechanical system would require regular maintenance and testing, and has the potential to fail.

Should the floodgate fail to be closed there is still a reduction in flood risk from the water captured in the grated trench. Should the floodgate fail at the peak of the storm with water impounded behind the barrier, there is the risk a fast moving wave of water will wash through the school ground. Further assessment would be required to assess the impact of this "dambreak", and look at measures to ensure the hazard from this scenario did not produce a higher flood risk than without the barriers in place. Failure of barriers is an issue common to all the options, but in the options where the barrier is close to the school the impacts of a barrier failure are higher.

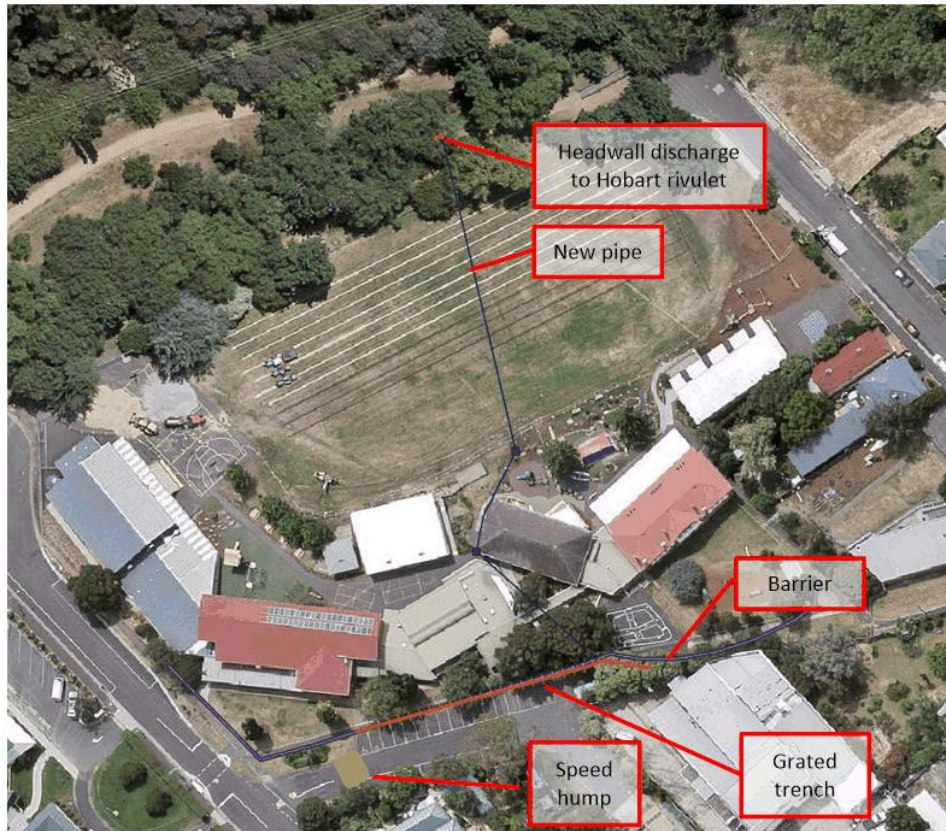
South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8FRevision No: 3
11 February 2022

Figure 5.9: Mitigation Option Five Proposed Barrier and Underground Pipe combination

Figure 5.9, above, shows the proposed barrier – the purple east-west line, the underground pipe network in navy blue and the orange hatched line represents a proposed very large grated trench to capture water from the car park.

Similar to Option Three, the flooding within the school and above floor flooding is significantly reduced. However, in this case, there is no diversion sideways of overland flows as in Options three and four. The upstream impact on the warehouse is reduced to +/- 15 mm and there is a decrease in flooding on the residential properties to the east. The water is successfully transferred to the oval where a bubble-up pit would be located and there is a minor increase in flooding here of 175 mm.

A flood map of Option Five is provide within Appendix B. The maximum water depths behind the flood barrier range from 100 mm to 700 mm, typically 300 mm. Optimisation of this option with alignment of the barrier and extent of the trench, could reduce the maximum depths.

5.3.6 Mitigation Option 6

Mitigation Option 6 expands upon the proposed actions in Mitigation Option 5, including some additional works to reduce impact to dwellings on Weld Street and divert as much water as possible

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

away from the school on Anglesea Street. It doesn't have any flood gates, as the route from the parking for people with a disability is around in from Anglesea Street, and so the route that required a flood gates will be a solid wall.

A reinforced fence, with a water proof height of at least 0.5 m, is proposed on the northern side of the childcare playground area adjacent to 30 Weld Street. This fence directs additional flows through this area, generated by the flood barrier upstream of the school buildings, onto Weld Street and into the Weld Street gutters and drainage system, as opposed to through the 30 Weld Street property boundaries.

A speed hump at the entrance to the carpark is also proposed to improve outcomes of Mitigation Option 5, with it moving closer Anglesea Street. This speed hump, of approximate 100 mm in height, encourages the flow of water down Anglesea Street to remain in the road gutter rather than flowing east into the school bypass (flood barrier) and across towards Weld Street. Adding the speed hump in this location was found to be a cost-effective solution to minimising any impacts of the changed flow path to the surrounding properties.

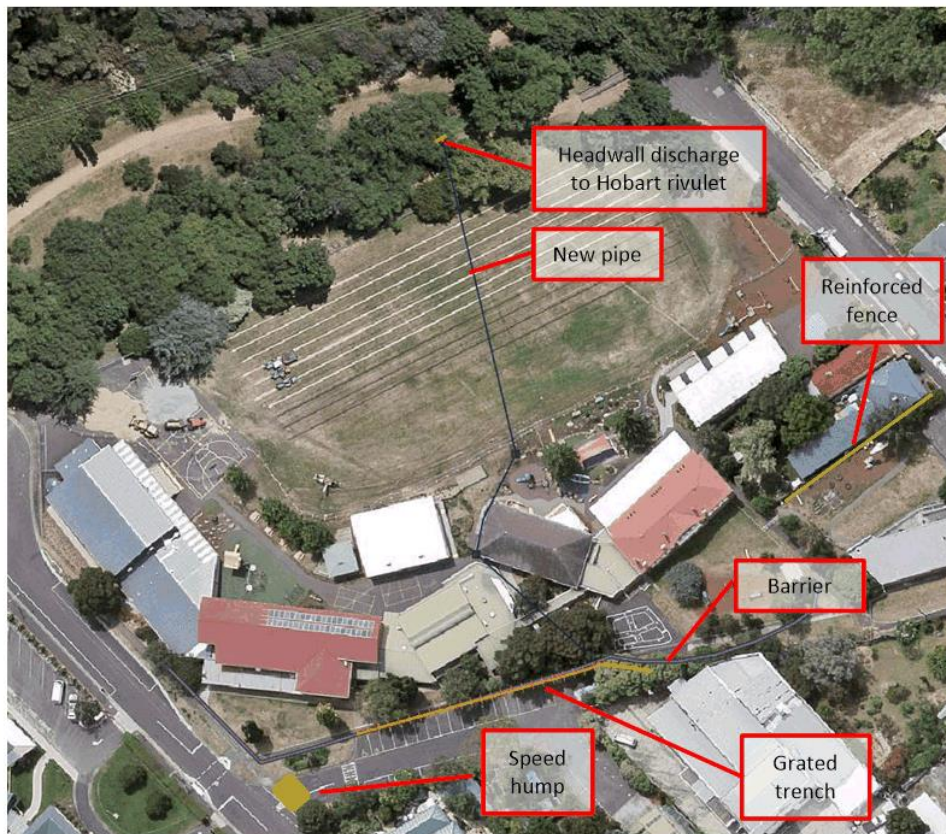


Figure 5.10: Mitigation Option Six

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

5.3.7 Flood hazard after mitigation

Mitigation Option 1 shows that the flood hazard is significantly decreased around the school buildings, as low as H1 – “relatively benign”. Mitigation Option 2 does not significantly alter the flooding regime from existing as discussed above. Mitigation Option 3 and 4 both reduce the hazard category to H1 within the school but increase the upstream hazard category to an H5. Mitigation Options 5 and 6 significantly reduce the flood hazard surrounding the buildings but have a very minor local increase adjacent to the bubble-up pit.

5.3.8 Other mitigation options

The focus of mitigation options has been on those that will reduce the risks to the people and property within the school grounds, both inside and outside the buildings. There are other options that are possible, which would have some benefit but have not been considered in detail due to their limited effectiveness or impracticability. This includes:

- **Detention upstream of the school** to retard peak flows, and release them slowly. The volume of the hydrograph during the 1% AEP with climate change storm of a duration critical to the school as it flows towards the intersection of Macquarie St and Anglesea St is approximately 8200 m³, of which 5500 m³ is overland flow. There is no readily available open space on the overland flow path, which winds its way along roads and in backyards. To contain a significant proportion of this overland flow volume would require an underground tank that wasn't too deep it could be drained by gravity and was on the major flow lines, for example
 - Storage under Macquarie Street that is 7 m wide, 2 m deep, 440 m long
 - Effectively all of South Hobart Oval with a 1 m deep tank, and a large pump and pipe system to transfer overland flow up into the tank, as the oval isn't on the main flow lines
 - Widescale retrofitting of rainwater tanks to all roofs in the catchment, which are kept dry with small outlets in readiness of a storm. This option would reduce the size of main detention storage, but not eliminate the need for a main storage as the roof area in the catchment is less than half the catchment area.
- **Flood gates to each building entry** within the school, and waterproofing of building walls to design flood depths. This could reduce damage within buildings, but would not reduce the risk to people safety for fast and deep flood waters between buildings.

5.4 Minor storms

Modelling was undertaken for the 5% AEP event (with a possible occurrence of 1 in every 20 years on average). The flood extents are very similar and for the existing conditions, flooding of the school forms a very similar pattern. Once the mitigation option barriers are in place, the flooding is significantly minimised to the school for all mitigation scenarios.

Flood depth maps for the 5% AEP event provided in Appendix C. Flood hazard maps for the 5% AEP have not been provided as they are very similar to the 1% AEP maps.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

There is a threshold behaviour for the flood risk at the site. Until the overland flows in Anglesea Street are contained within the kerb line, then there will be unacceptable flood hazard at the school. A more detailed study of the pipe network and larger number of storm events would need to be studied to work out the storm event that exceeds the threshold where the kerbs are exceeded.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

6. Conclusions

A computer based flood model has been successfully set up to calculate the surface flows immediately up slope and through the school for existing conditions and some mitigation options during a major rainstorm. A major storm for this study has a rarity of 1% annual exceedance probability (AEP) or in other words a probability of 1 in a 100 years. Note the Australian Building Code requires that new buildings have water proofing during the 1% AEP rainstorm, and within this the Plumbing Code requires overland flows to be kept away from habitable floor levels during this same event. The climate basis for the rainfall was a future climate with the impacts of climate change to the year 2100, where rainfall is expected to be more intense during rain storms.

The computer model storm flow rates were not calibrated, as there is not stream gauging within the urban catchment above the school. There was no modelling of specific historical events to validate the model. That said, the behaviour of the model was consistent with site observations during a major storm. The computer modelling confirms site observations that the overland flow during a major rainstorm can't be contained within Macquarie Street and Anglesea Street and the underground pipe network, and how this overland stormwater flowed within the school. This stormwater flows down roads and within private property to the school, and flows between school buildings and the playground. Where it ponds against buildings it seeps through ventilation openings and through open doorways to flow into buildings.

The computer modelling shows to current Australian Rainfall and Runoff guidelines there unacceptable drowning risks to children in some areas of the school ground between buildings during a 1% AEP event, should the site be occupied during the event.

Fortunately for South Hobart Primary School the road network has the potential to take overland flow in a major storm. That is Anglesea Street, which with enough site works could allow surface water from Macquarie Street to flow to the Hobart Rivulet. The challenge is in containing the flood within the roadway during a major storm whilst still allowing access to properties at other times. Conceptual options have been developed that are barriers to flow located at the back of the footpaths in Macquarie Street and Anglesea Street, which could be implemented as walls, ramps and moveable flood gates (potentially automatically).

Of the mitigation strategies assessed, the most effective are those blocking the flow at Macquarie Street and Anglesea Street, and directing it into Anglesea Street and then into the Hobart Rivulet (option one). This has the added benefit of protecting some private properties that are currently at risk of flooding, although this private land protection is not a focus of this study. Unfortunately this option will require changing the levels of many driveway and gates to several private properties, which may make access difficult for them. The options (five and six) which deal with the flood water at the school buildings require a very large grated trench (60 m long) and piped system (eg. 1–2 m diameter pipe), which would be difficult to construct between the school buildings, but would be works that are more in control of the Department of Education (in consultation and approval of Hobart City Council). Other options (two, three and four) are not effective enough or have undesirable offsite impacts on neighbours.

Based on the flood modelling completed, and in alignment with the goals and constraints outlined by the Department of Education, the preferred option has been identified to be Option 6. The overall impact to flooding on the school site and in the adjacent properties has been provided in Appendix D.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

These results show a reduction in flood risk to the school and downstream neighbours, with a slight increase in flood risk within Anglesea Street and the Hobart Rivulet – which is considered the best practical solution (not considered unreasonable options such as piping all 1% AEP flood flows).

Note

- The focus of this study has been on major storm events (eg. 1% AEP), where the minor piped system is not as important (as its capacity is much smaller than the storm flow rates). There was as similar extent of flood for the more common 5% AEP rainstorm, as this too exceeded the capacity of the pipe network and was also not contained in the road corridor.
- The piped network was not explicitly modelled in the computer simulation for this project. There are however, some unusual pipe configurations within the Macquarie Street/Anglesea Street intersections and within Anglesea Street, which may not provide the school an optimum protection for nuisance flooding in minor events (which is the role of the piped network). For example, in Anglesea Street, there are two large pipes that join into a single pipe just up slope from McKenzie Street.
- The previous 225 mm diameter pipe from McKenzie Street was grossly undersized to deal with current flows from a major storm. While not investigated, it is also likely to be undersized to deal with local flows during minor events. Here local means the catchment up slope to Macquarie Street and Anglesea Street, but not the current major storm catchment up slope of Macquarie Street.

Going forward the recommendations are to:

1. Develop concept engineering design drawings for the preferred mitigation option (six) (with variations and combinations of options) in consultation with the school community, Hobart City Council and residents directly affected. Barriers would have a freeboard of 0.3 m above maximum water height, unless further more detailed investigations could demonstrate a lower value was warranted.
2. Reconfirm effectiveness of concept design performance with further hydraulic modelling, in particular where ideal barrier location and heights may not be achievable due to site constraints and stakeholder feedback.
3. Check impacts of the failure of any temporary barrier option during the peak of the storm, and ensure through a design response that the flood hazard from this “dambreak” is no greater than without the barrier in place (not part of the preferred option 6).
4. If there is interest in a system with a lower level of protection to 1% AEP, then survey pipe network in the Macquarie Street/Anglesea Street intersections and within Anglesea Street, and model the hydraulics of this during minor storms to look for opportunities for other improvements in flood protection.
5. Undertake emergency management planning to manage current and post mitigation residual risks due to flooding from Hobart Rivulet and more importantly the hillside catchment directly above the school. This would focus would be on reducing risk to people and property. This consultative process with the school community and authorities would consider on-site and off-site issues relevant during a major storm and be part of other site emergency planning. An understanding of the storm and flooding behaviour on and off site is key part of this planning. This report will form an input to the planning, but further technical input may be required.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

7. References

Babister, M., Trim, A., Testoni, I. & Retallick, M. (2016). The Australian Rainfall & Runoff Datahub, 37th Hydrology and Water Resources Symposium Queenstown NZ, <http://data.arr-software.org/>, last accessed 29/4/2019.

Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors) Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia (Geoscience Australia), 2016.

BMT Group Ltd (2018), TufLOW Products, <https://www.tufLOW.com/>, last accessed 17/1/2019

Entura (2014), Hobart Rivulet Flood Study 2013, ENTURA-6A9C5

Entura (2022), Two demountable buildings South Hobart Primary School, ENTURA-1EAB91

Laurenson, E.M., R.G. Mein, R.J. Nathan, 2010, RORB Version 6, Runoff Routing Program User Manual, Monash University Department of Civil Engineering, HARC Pty Ltd, Melbourne Water Corporation.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

8. Appendices

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

This page is intentionally blank.

South Hobart Primary School - Flood Inundation Assessment
 ENTURA-11EB8F

Revision No: 3
 11 February 2022

A Hobart Rivulet flows

Hobart Rivulet - Flood Study 2013
 ENTURA-6A9C5

Revision No: 1
 24 February 2014

Table 5.1: Peak water levels and peak discharges at key locations for the modelled flood events

Chainage (m)	1:10 AEP		1:20 AEP		1:50 AEP		1:100 AEP		1:200 AEP		1:500 AEP		1:100 AEP with climate change		Description
	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	Peak Water Level (mAHN)	Peak Channel Discharge (m ³ /s)	
15	99.8	9.0	100.0	12.4	100.2	17.8	100.4	22.9	100.7	33.7	100.9	40.9	100.5	28.5	U/S of Old Farm Road Bridge
150	94.4	8.9	94.6	12.4	94.9	17.7	95.1	22.8	95.5	33.6	95.7	40.8	95.3	28.4	U/S of bridge at Entrance to Cascade Brewery
560	81.1	12.5	81.2	17.5	81.3	25.4	81.4	35.1	81.7	58.5	81.9	71.2	81.5	43.7	U/S of bridge at Cascade Boulder Trap
669	78.2	12.5	78.4	17.5	78.8	25.5	79.1	35.2	79.9	58.9	80.3	71.9	79.4	43.8	U/S of McRobbies Road
916	71.3	15.8	71.6	22.4	72.1	32.9	72.5	44.8	73.7	77.2	74.2	94.2	72.9	55.9	U/S of Apsley Street Bridge
1023	69.3	15.8	69.5	22.4	69.8	32.9	70.2	44.7	71.0	77.1	71.4	94.2	70.5	55.8	U/S of Tara Street Bridge
1362	59.8	15.8	60.0	22.4	60.3	32.9	60.6	44.7	61.2	77.1	61.5	94.2	60.8	55.8	U/S of foot bridge of Macfarlane Street
1867	50.0	25.9	50.3	35.0	50.7	48.8	51.1	61.3	51.8*	89.1	52.2*	103.7	51.5*	74.9	U/S of Anglessea Street Bridge
2049*	46.2*	25.9	46.3*	35.0	46.6*	48.8	46.8*	61.3	47.2*	91.3	47.4*	108.6	47.0*	75.6	U/S of foot bridge at Weld St
2168	44.0	25.9	44.3	35.0	44.9*	47.6	45.2*	57.2	45.5*	95.4	45.5*	113.7	45.5*	80.7	U/S of foot bridge at Wynyard Street
2576	34.7	25.9	34.9	35.0	35.7	48.7	35.3	61.2	36.4	91.8	36.7	110.1	36.4	88.1	U/S of Gore Street Bridge
3090	24.1	31.8	24.5	42.2	24.9	58.8	25.2	71.4	25.9	99.6	26.4	117.7	25.7	92.9	U/S of Mollie Street Bridge
3246	20.7	33.4	21.0	44.4	21.7	60.2	22.3*	72.2	23.1*	91.4	23.5*	103.6	22.9*	87.7	U/S of Collins Street Bridge
3339	18.2	33.8	18.5	45.0	18.9	62.6	19.2	77.7	19.8	108.4	20.2	128.2	19.6	94.7	U/S of Barrack Street Bridge
3592	13.4	33.8	13.6	44.9	13.9	61.2	14.1	74.1	14.6	102.6	15.9	118.5	14.4	94.4	U/S of Harrington St Bridge
3878	8.4	33.8	8.7	44.9	9.0	61.2	9.4	74.1	11.1	102.6	12.5	118.5	10.7	94.4	Below McDonalds
3896	8.1	33.8	8.3	44.9	8.7	61.2	9.2	74.1	11.0	102.6	12.3	118.5	10.6	94.4	Below Myer Development
4303	4.2	44.6	4.4	58.5	4.5	77.7	4.6	91.1	4.8	115.6	4.9	131.1	4.8	110.6	Gauging station at Collins St
4361*	4.2*	38.7	4.3*	52.0	4.4*	69.1	4.5*	79.5	4.6*	95.0	4.7*	103.6	4.6*	92.0	Open channel at Collins Street near Hospital
4399*	4.3*	28.5	4.6*	31.3	4.8*	35.2	4.9*	37.4	5.1*	42.0	5.2*	44.2	5.1*	40.4	U/S of Campbell Street Bridge

Note: Location of breakout flow from channel is denoted by *#*#.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

This page is intentionally blank.

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

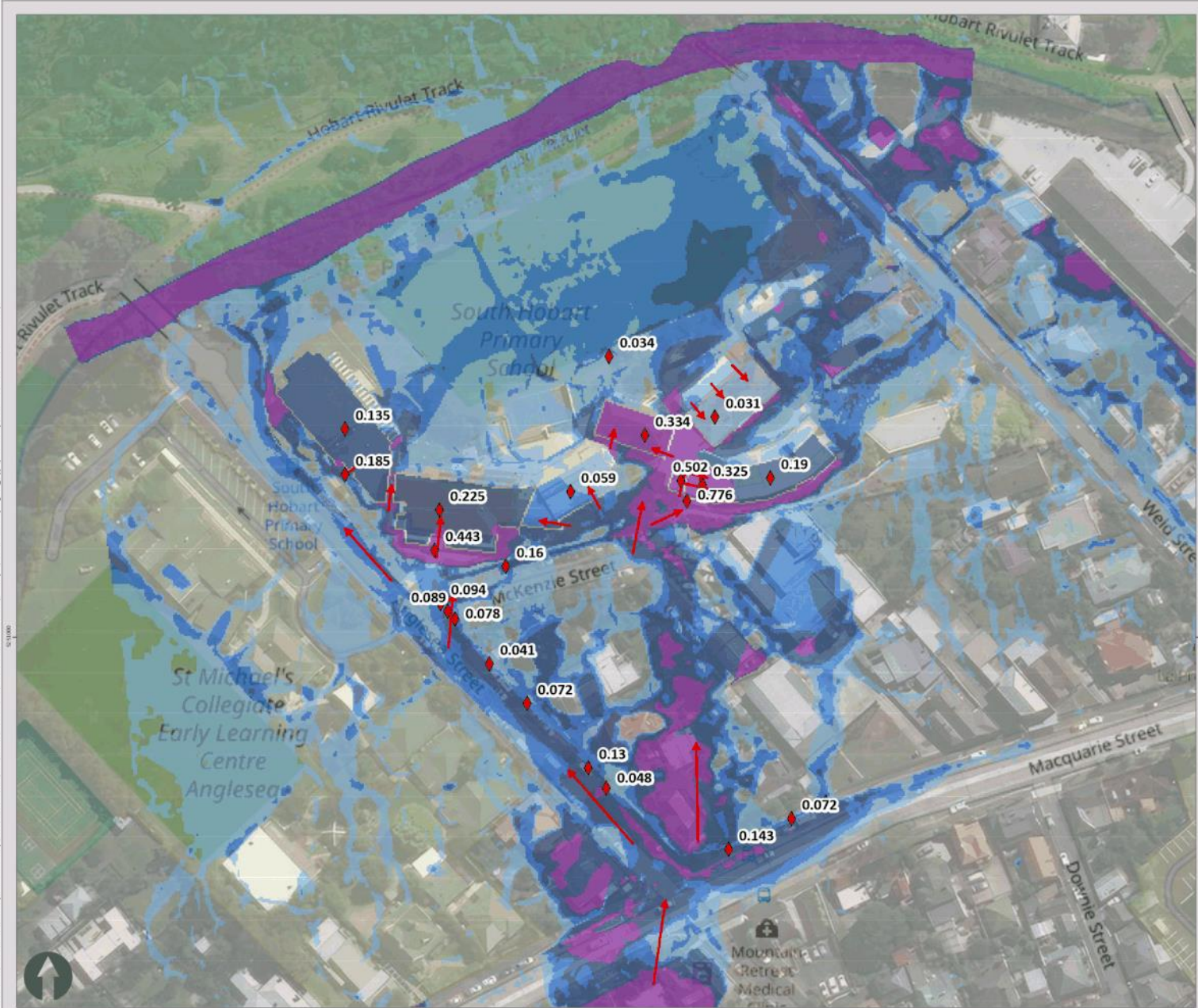
Revision No: 3
11 February 2022

B Flood Depth and Hazard Maps 1% AEP

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

This page is intentionally blank.



Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Existing Conditions 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers
- Flow Direction

1% Flood Depth - Existing Conditions

- <0.01 m
- 0.01 m - 0.05 m
- 0.05 m - 0.1 m
- 0.10 m - 0.25 m
- > 0.25 m

Scale

10 0 10 20 30 Meters

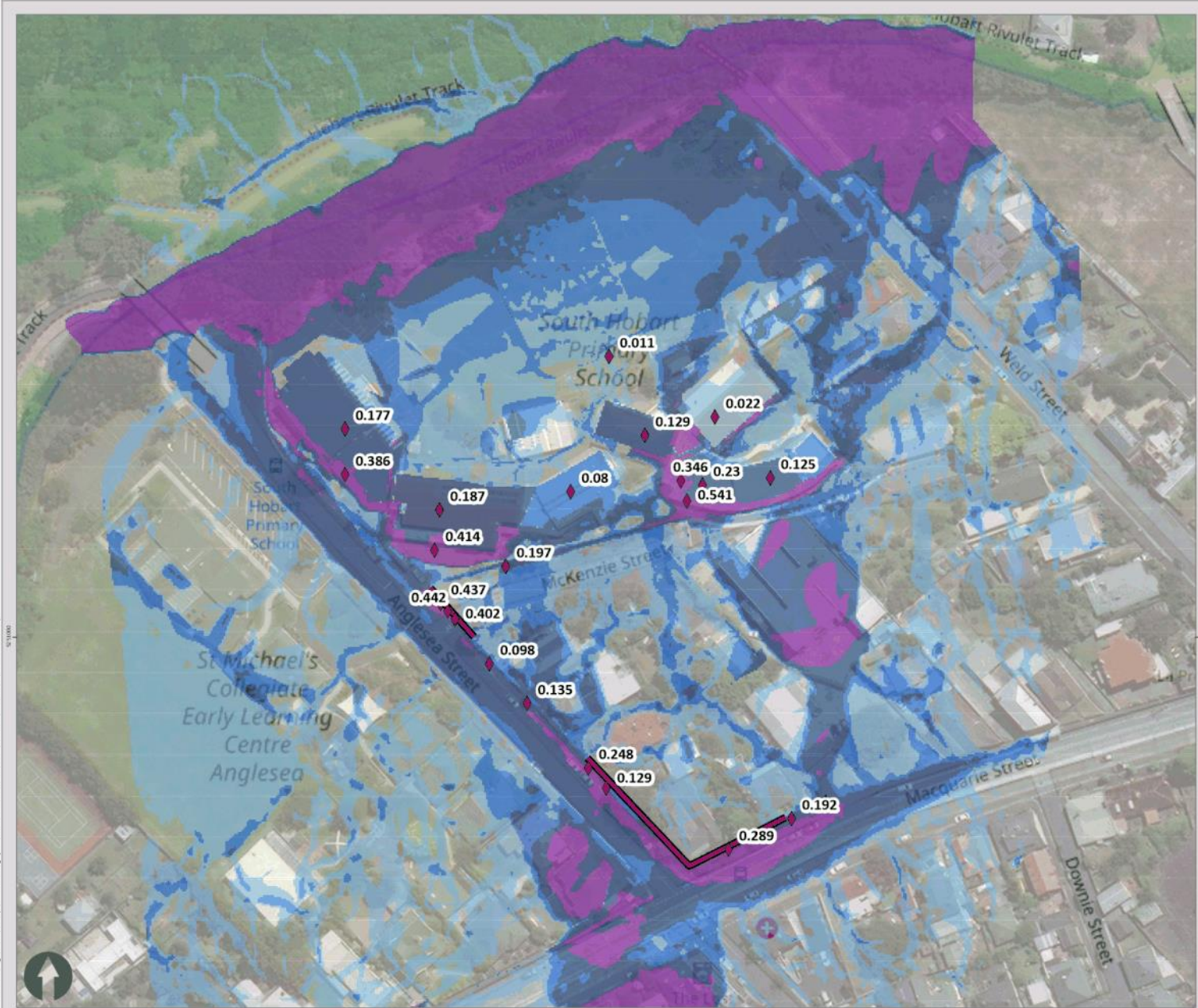
1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map is based on the best available information and is not a guarantee of accuracy. The information is provided for general information only and should not be used for any other purpose.





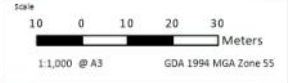


Map of Hobart, Tasmania, Australia, showing flood inundation modelling results for the South Hobart Primary School area. The map is based on a 1:1,000 scale and uses a GDA 1994 MGA Zone 55 projection. The map is titled 'South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 2' and is dated 2/05/2019. The map is drawn by Kyle Smith and reviewed by Colin Terry. The map is based on a 1:1,000 scale and uses a GDA 1994 MGA Zone 55 projection. The map is titled 'South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 2' and is dated 2/05/2019. The map is drawn by Kyle Smith and reviewed by Colin Terry.

Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 2 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kyle Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- ◆ Depth Markers
- Mitigation Option 2 Barrier
- 1% Flood Depth - Mitigation Option 2
 - <0.01
 - 0.01 - 0.05
 - 0.05 - 0.1
 - 0.10 - 0.25
 - > 0.25

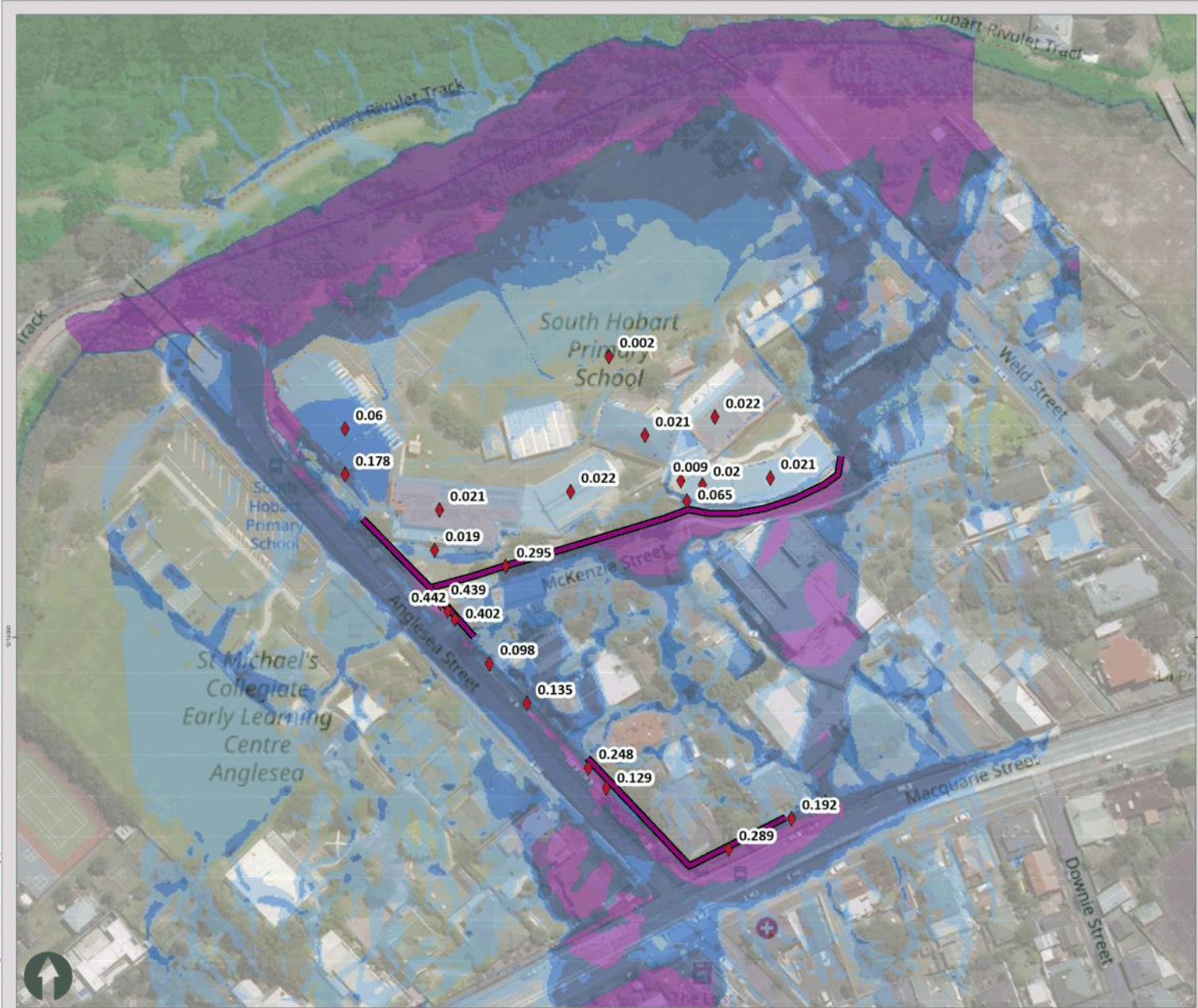


All information on this map is based on the best available information at the time of preparation. entura does not warrant the accuracy or completeness of the information on this map. entura assumes no liability for any errors or omissions in this information or its use in any way. © 2019 entura





© 2010 The Authors
Journal compilation © 2010 Blackwell Publishing Ltd
Journal of Internal Medicine 268: 205–214 (2010)



Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 4 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers
- Mitigation Option 2 Barrier
- Mitigation Option 3 Barrier

1% Flood Depth - Mitigation Option 4

<0.01
0.01 - 0.05
0.05 - 0.1
0.10 - 0.25
> 0.25

Scale

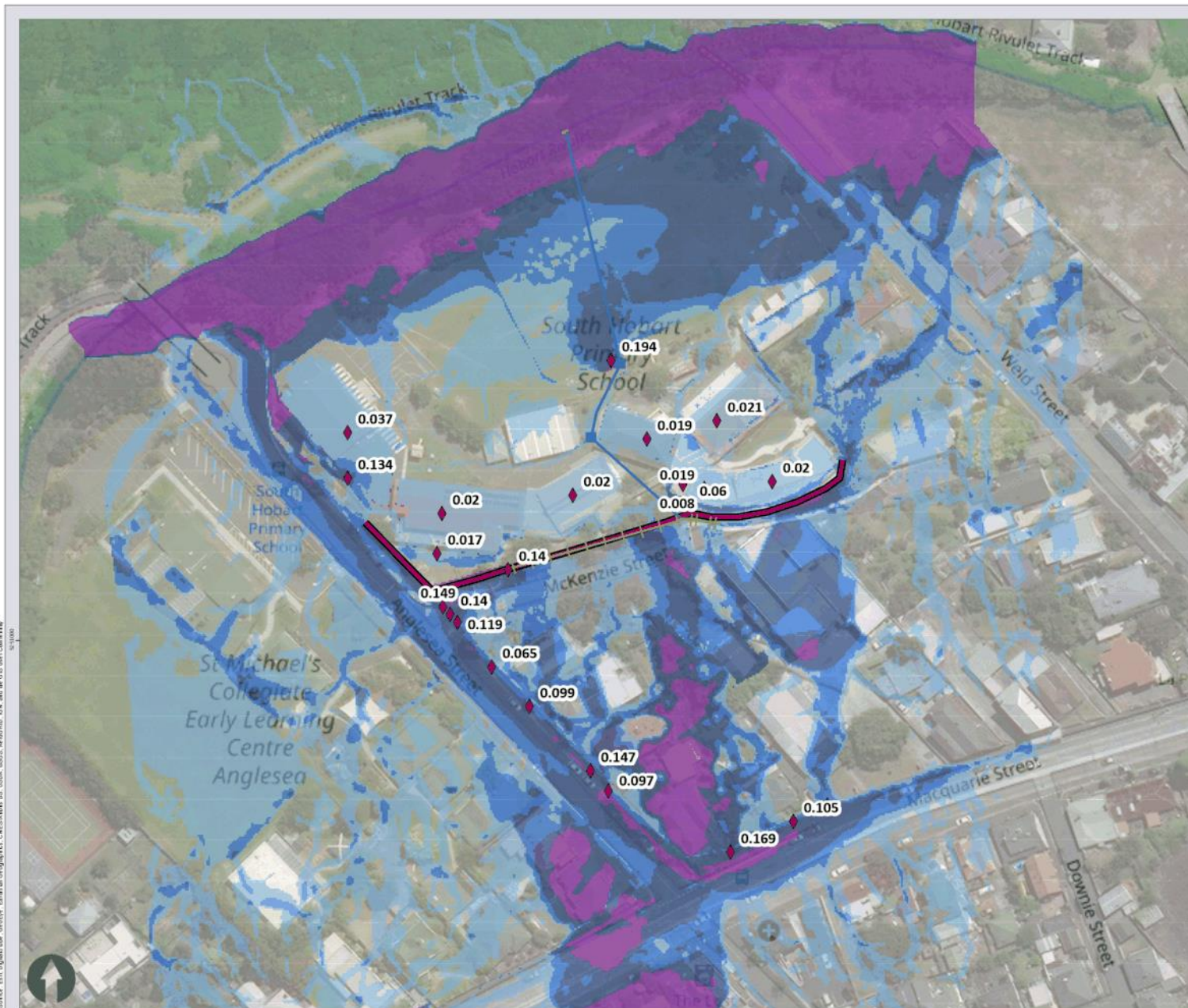
10 0 10 20 30 Meters

1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map is based on the best available information at the time of publication. entura does not warrant the accuracy or completeness of this information or its use in any way. © 2019 entura



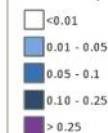


Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 5 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P51528D
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- ◆ Depth Markers
- Mitigation Option 5 Underground Pits
- + Mit Op 5 Grated Trench Pit
- Mitigation Option 5 Underground Pipe Network
- Mitigation Option 3 Barrier

1% Flood Depth - Mitigation Option 5

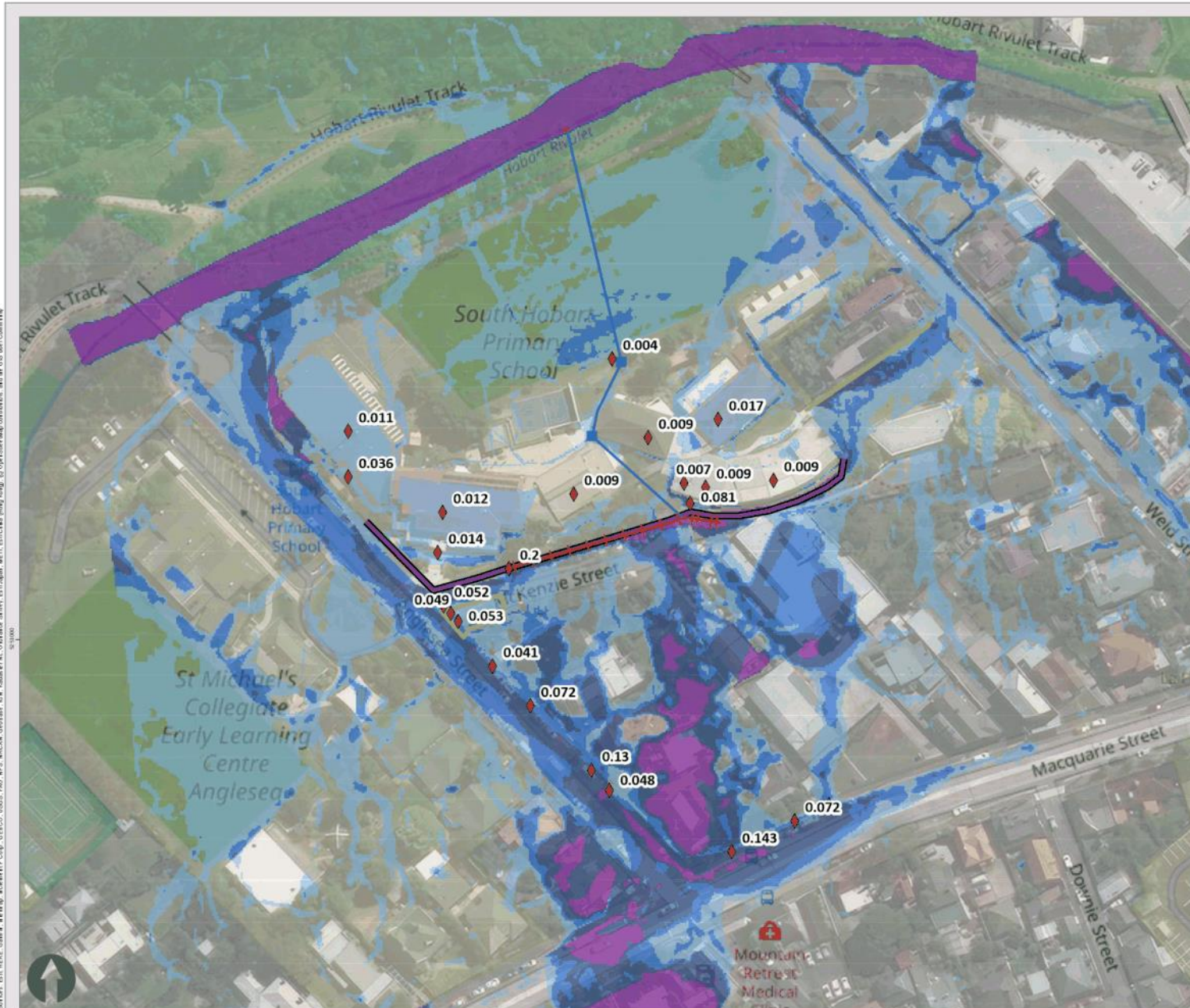


Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All reasonable care has been taken in collecting and recording the information shown on this map. Bruford assumes no liability resulting from errors or omissions. This information or its use in any way. © 2019 Hydrex Tasmania



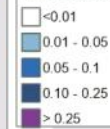


Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 6 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

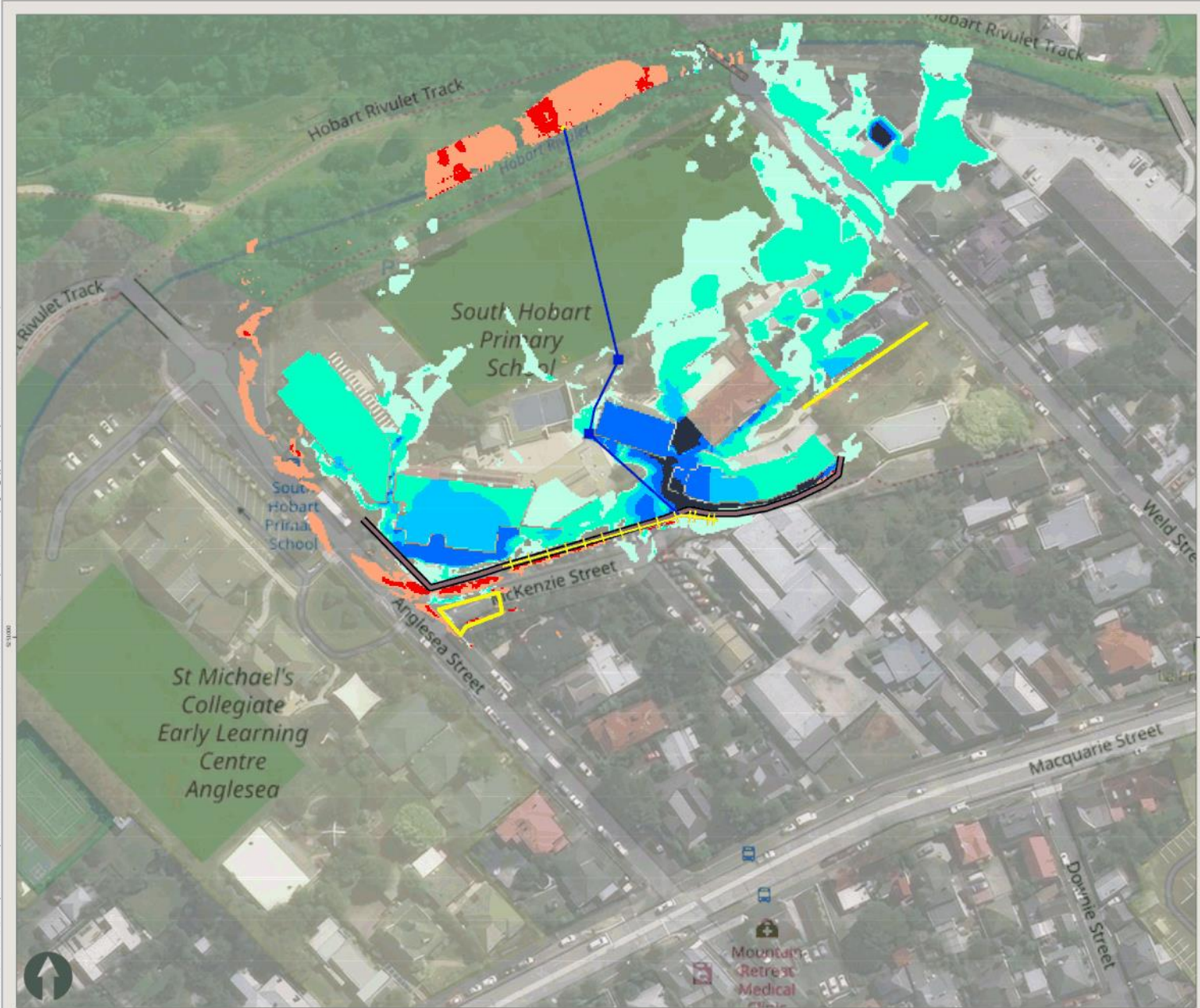
- Depth Markers**
- Mitigation Option 5 Underground Pits
 - Mit Op 6 Modifications
 - Mit Op 5 Grated Trench Pit
 - Mitigation Option 5 Underground Pipe Network
 - Mitigation Option 3 Barrier

1% Flood Depth - Mitigation Option 6



All reasonable care has been taken in collecting and recording the information shown on this map. It does not assume any liability resulting from errors or omissions in this information or its use in any way. © 2018 Hydro Tasmania





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth Difference Existing vs Mitigation Option 6 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Mitigation Option 5 Underground Pits
- Mit Op 6 Modifications
- Mit Op 5 Grated Trench Pit
- Mitigation Option 5 Underground Pipe Network
- Mitigation Option 3 Barrier

EXG - Mit Op 6 - Depth Difference

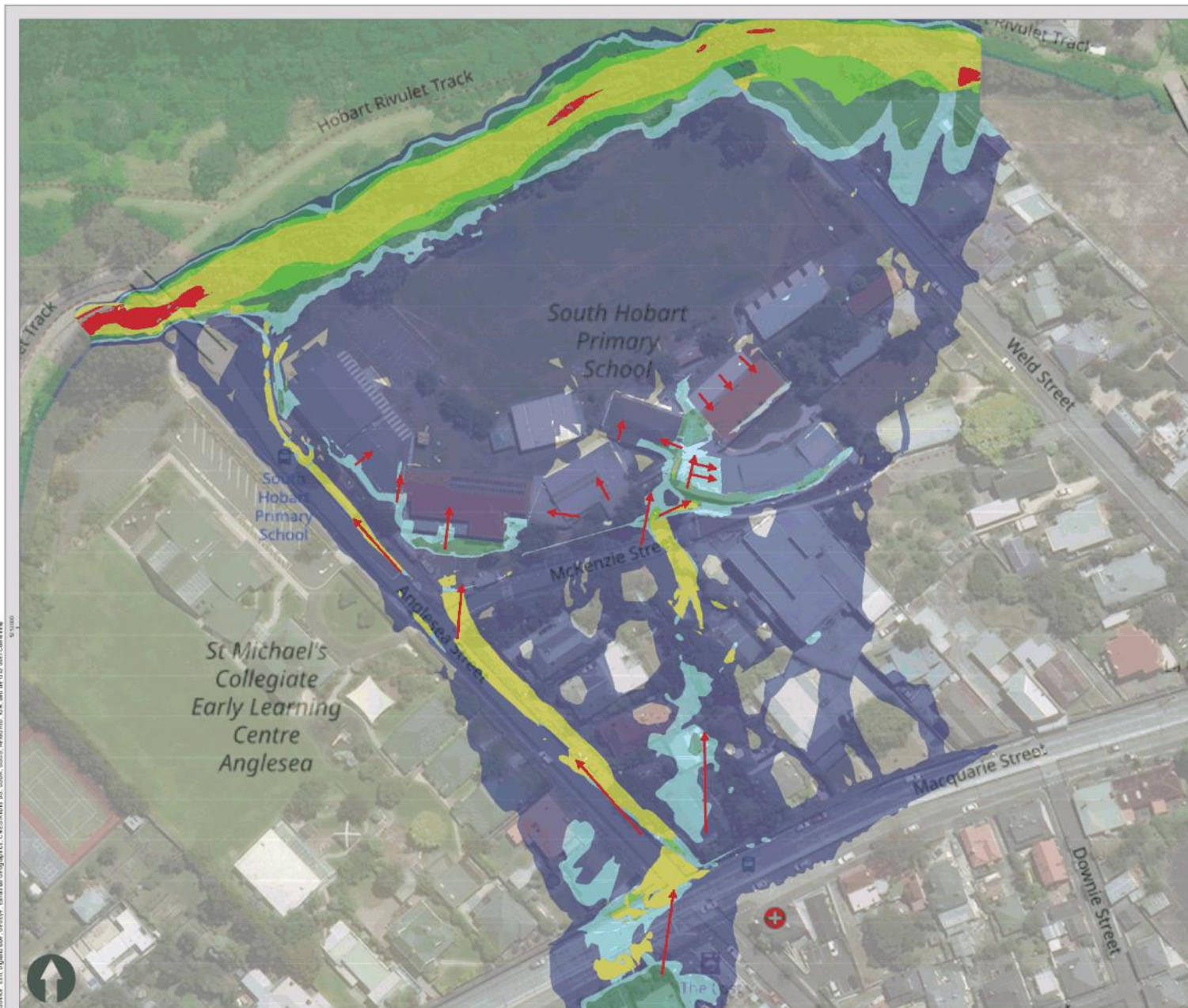
- <= -0.5 m
- 0.5 m - -0.3 m
- 0.3 m - -0.2 m
- 0.2 m - -0.1 m
- 0.1 m - -0.05 m
- 0.05 m - 0.05 m
- 0.05 m - 0.1 m
- >= 0.1 m

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55

entura

All information on this map has been derived from publicly available information and is provided as a guide only. entura does not warrant the accuracy or completeness of this information or its use in any way. © 2022 entura





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Existing Conditions 1% annual exceedance probability storm ~20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	ES08017-PS15280
Date	1/05/2019
Drawn	Kylie Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

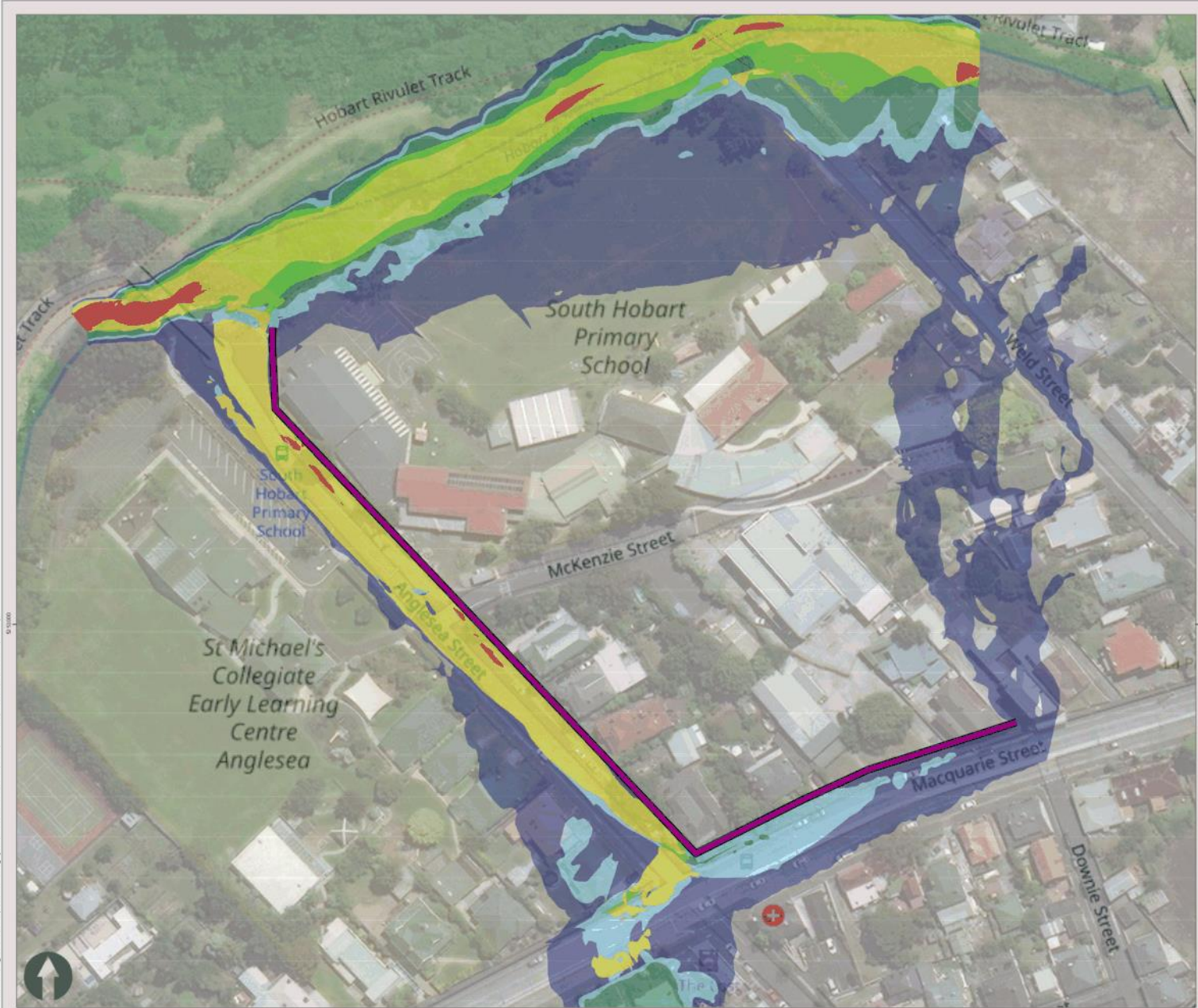
- Flow Direction
- H1 - Relatively Benign
 - H2 - Unsafe for small vehicles
 - H3 - Unsafe for all vehicles, children & elderly
 - H4 - Unsafe for all vehicles
 - H5 - H4 plus buildings require special design
 - H6 - Unconditionally dangerous

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All reasonable care has been taken in collecting and recording the information shown on this map. Errors assumed the liability resulting from errors or omissions in this information or its use in any way. © 2019 Hydro Tasmania





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 1 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Mitigation Option 1 Barrier
- 1% Flood Hazard - Mitigation Option 1
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

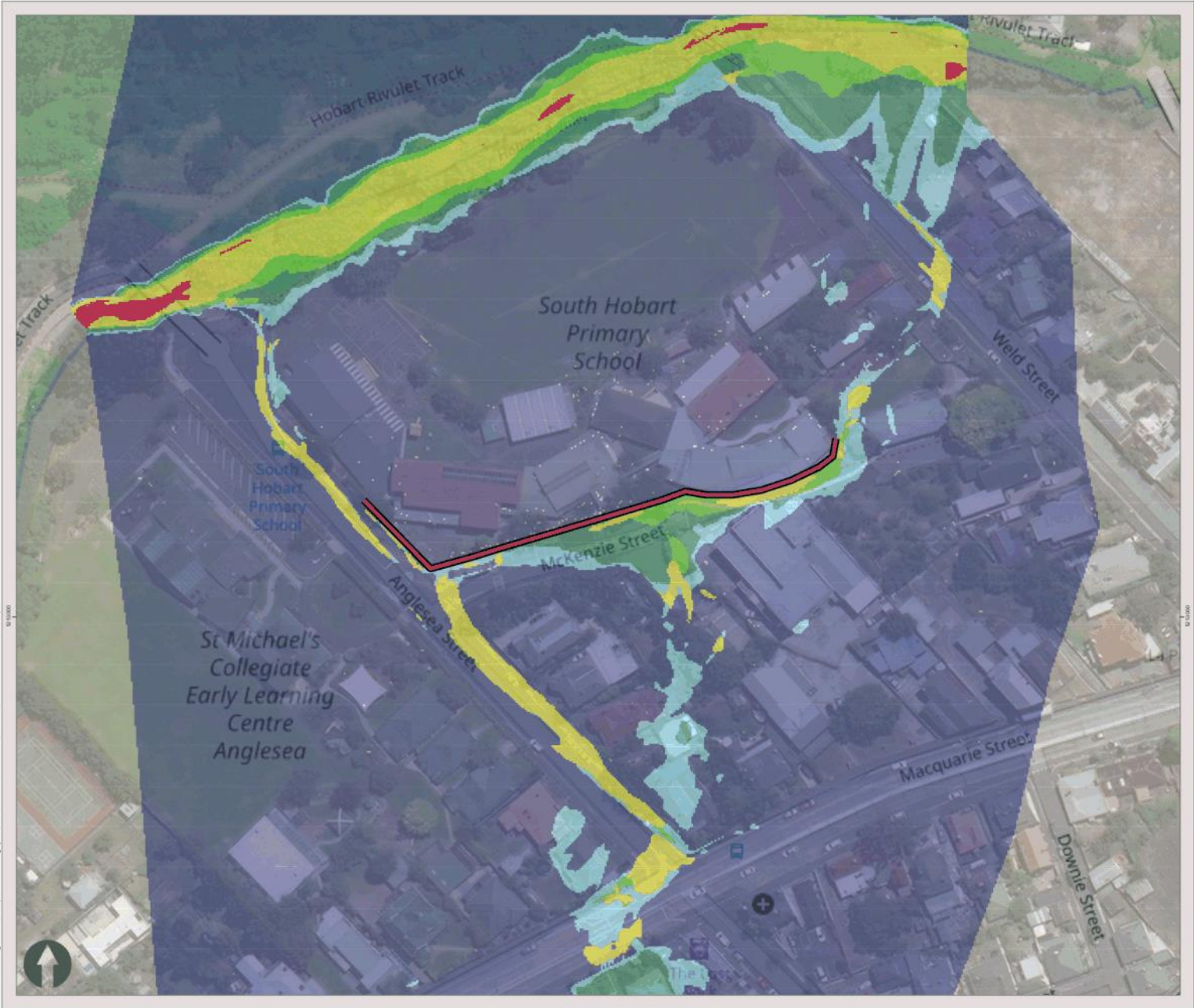
Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All reasonable care has been taken in collecting and measuring the information shown on this map. entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 entura Tasmania







Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 3 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

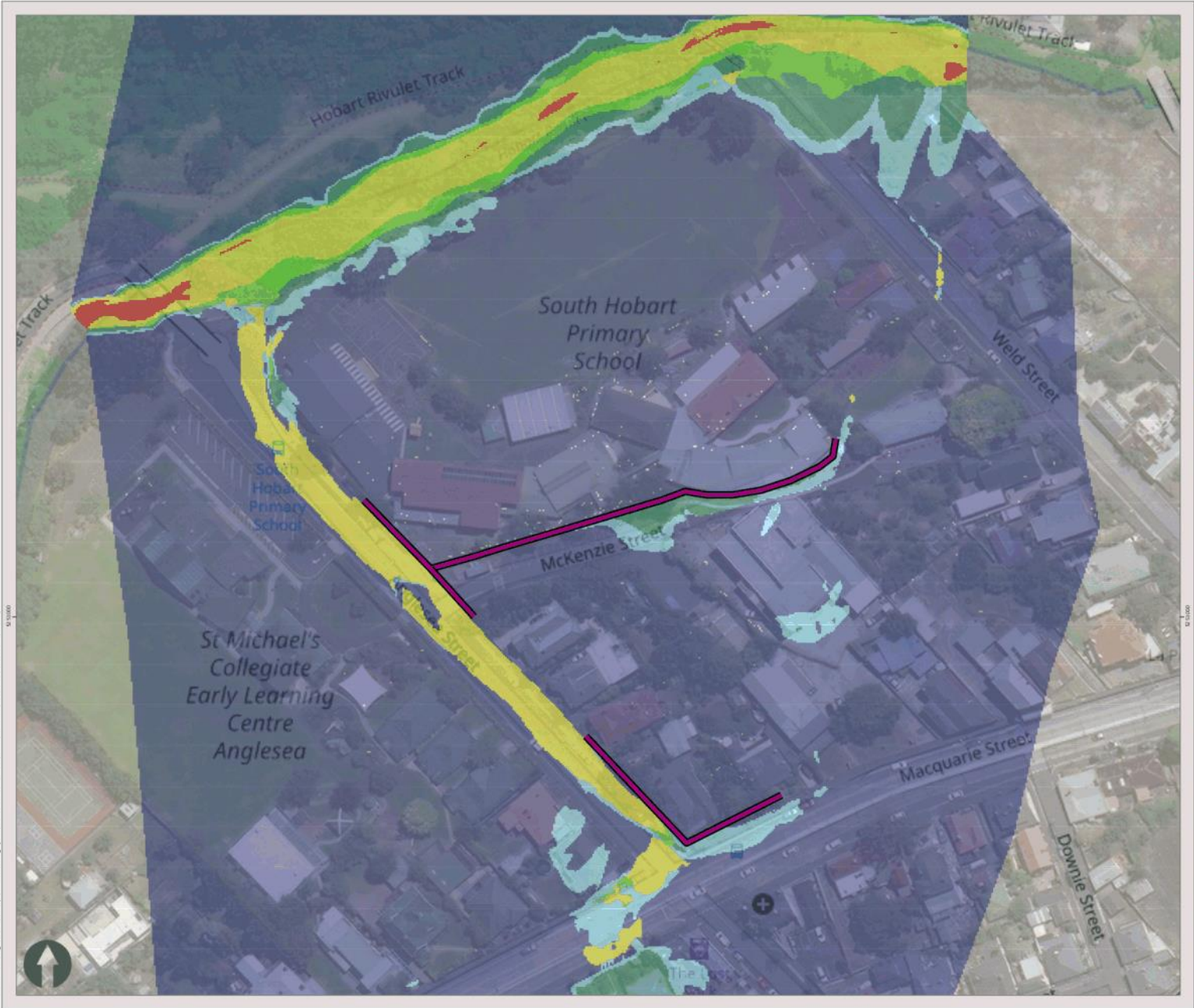
- Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 3
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All information shown has been based on existing and historical information shown on this map. Entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 Entura Tasmania





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 4 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	1/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Mitigation Option 2 Barrier
- Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 4
- H1 - Relatively Benign
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children & elderly
- H4 - Unsafe for all vehicles
- H5 - H4 plus buildings require special design
- H6 - Unconditionally dangerous

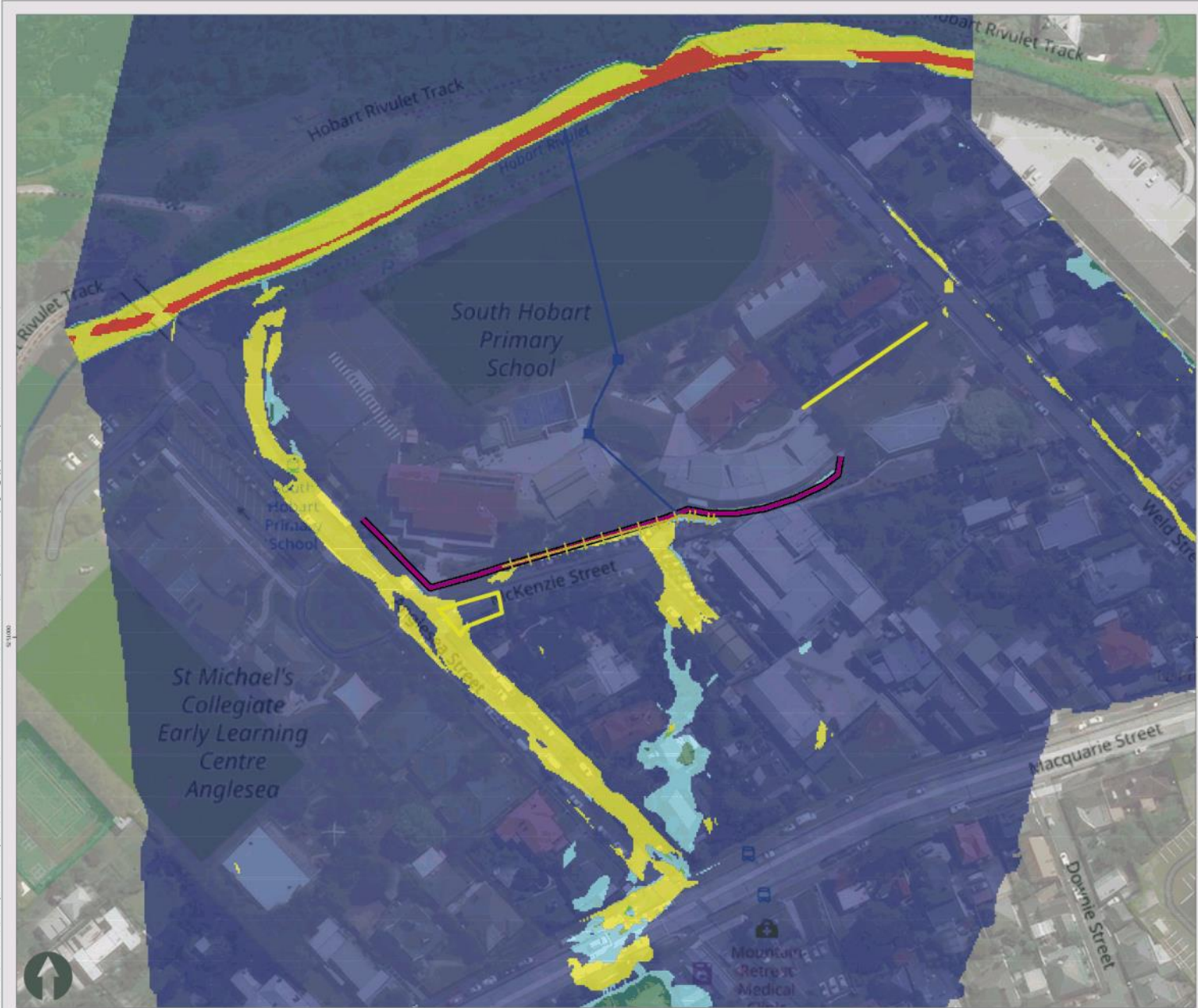
Scale
10 0 10 20 30 Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map has been based on the best available information at the time of publication. entura does not accept liability for any errors or omissions in this information or its use in any way. © 2019 entura

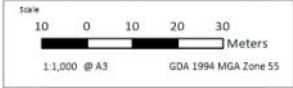






Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 6 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

- Legend**
- Mitigation Option 5 Underground Pits
 - Mit Op 6 Modifications
 - Mit Op 5 Grated Trench Pit
 - Mitigation Option 5 Underground Pipe Network
 - Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 6**
- H1 - Relatively Benign
 - H2 - Unsafe for small vehicles
 - H3 - Unsafe for all vehicles, children & elderly
 - H4 - Unsafe for all vehicles
 - H5 - H4 plus buildings require special design
 - H6 - Unconditionally dangerous



All information on this map is based on the best available information. entura does not warrant the accuracy or completeness of this information or its use in any way. © 2022 entura



South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

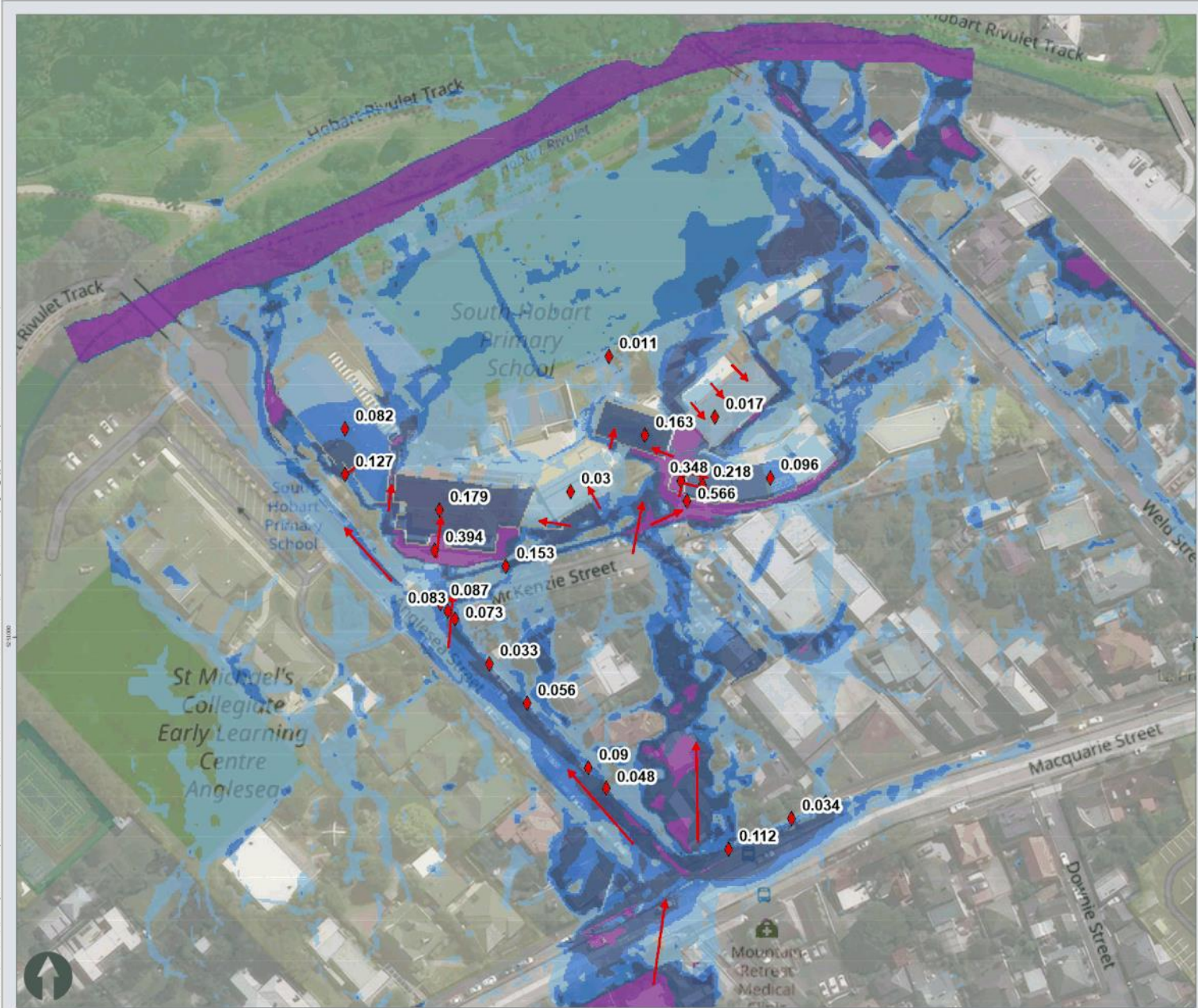
Revision No: 3
11 February 2022

C Flood Depth Maps 5% AEP

South Hobart Primary School - Flood Inundation Assessment
ENTURA-11EB8F

Revision No: 3
11 February 2022

This page is intentionally blank.



Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Existing Conditions 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

◆ Depth Markers
→ Flow Direction

5% Flood Depth - Existing Conditions

<0.01
0.01 - 0.05
0.05 - 0.1
0.10 - 0.25
> 0.25

Scale

10 0 10 20 30 Meters

1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map has been derived from publicly available information. entura does not warrant the accuracy or completeness of this information or its use in any way. © 2022 entura








Map by entura, using aerial imagery from Google Earth, and flood modelling data from Sustainable Engineering. All other content is the property of entura. This map is for informational purposes only and should not be used for any other purpose. entura does not warrant the accuracy or completeness of this information or its use in any way. © 2022 entura



Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 1 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers**
- Mitigation Option 1 Barrier
- 5% Flood Depth - Mitigation Option 1
- (m)
- | | |
|---|-------------|
|  | <0.01 |
|  | 0.01 - 0.05 |
|  | 0.05 - 0.1 |
|  | 0.10 - 0.25 |
|  | > 0.25 |

Scale
10 0 10 20 30
Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55



All reasonable care has been taken in collecting and recording the information shown on this map. Infocare assumes no liability resulting from errors or omissions in this information or its use in any way. © 2011 Hyatt-Taumänki.





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 2 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

◆ Depth Markers

▬ Mitigation Option 2 Barrier

5% Flood Depth - Mitigation Option 2

(m)

<0.01
0.01 - 0.05
0.05 - 0.1
0.10 - 0.25
> 0.25

Scale

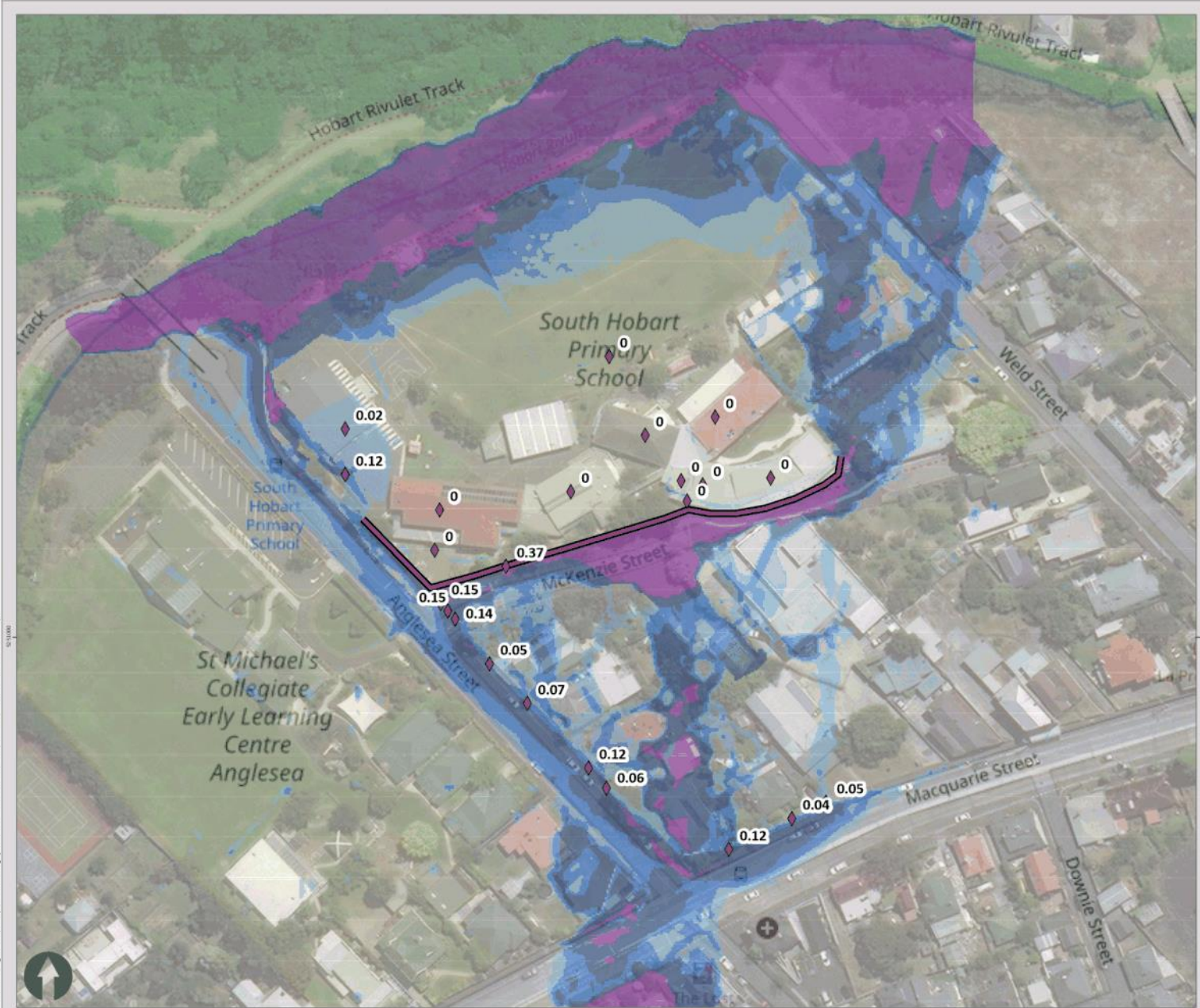
10 0 10 20 30 Meters

1:1,000 @ A3 GDA 1994 MGA Zone 55



All information on this map has been prepared by entura Pty Ltd. entura Pty Ltd. does not warrant the accuracy or completeness of the information on this map. entura Pty Ltd. assumes no liability for any errors or omissions in this information. It is to be used as a guide only. © 2019 entura Pty Ltd.





Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 3 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Depth Markers
 - Mitigation Option 3 Barrier
 - 5% Flood Depth - Mitigation Option 3
- (m)
- <0.01
 - 0.01 - 0.05
 - 0.05 - 0.1
 - 0.10 - 0.25
 - > 0.25

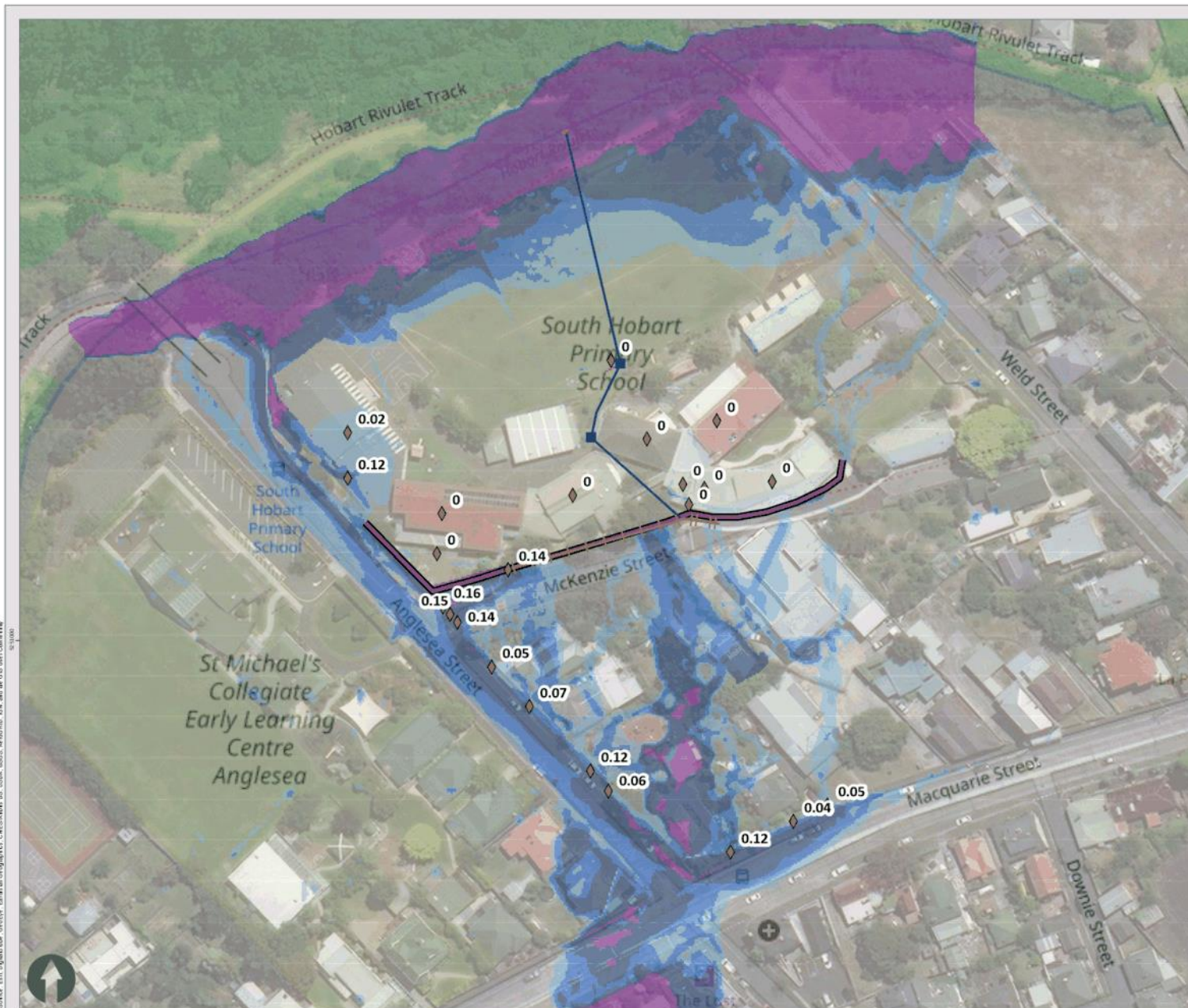
Scale
10 0 10 20 30
Meters
1:1,000 @ A3 GDA 1994 MGA Zone 55

entura

For information only. This data is collected and reported for information only. It is not intended to be used for any other purpose. It is not intended to be used for any other purpose. It is not intended to be used for any other purpose.



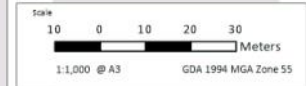




Title	South Hobart Primary School Flood Inundation Modelling Flood Depth - Mitigation Option 5 5% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-PS15280
Date	2/05/2019
Drawn	Kylee Smith
Reviewed	Colin Terry
Approved	Colin Terry

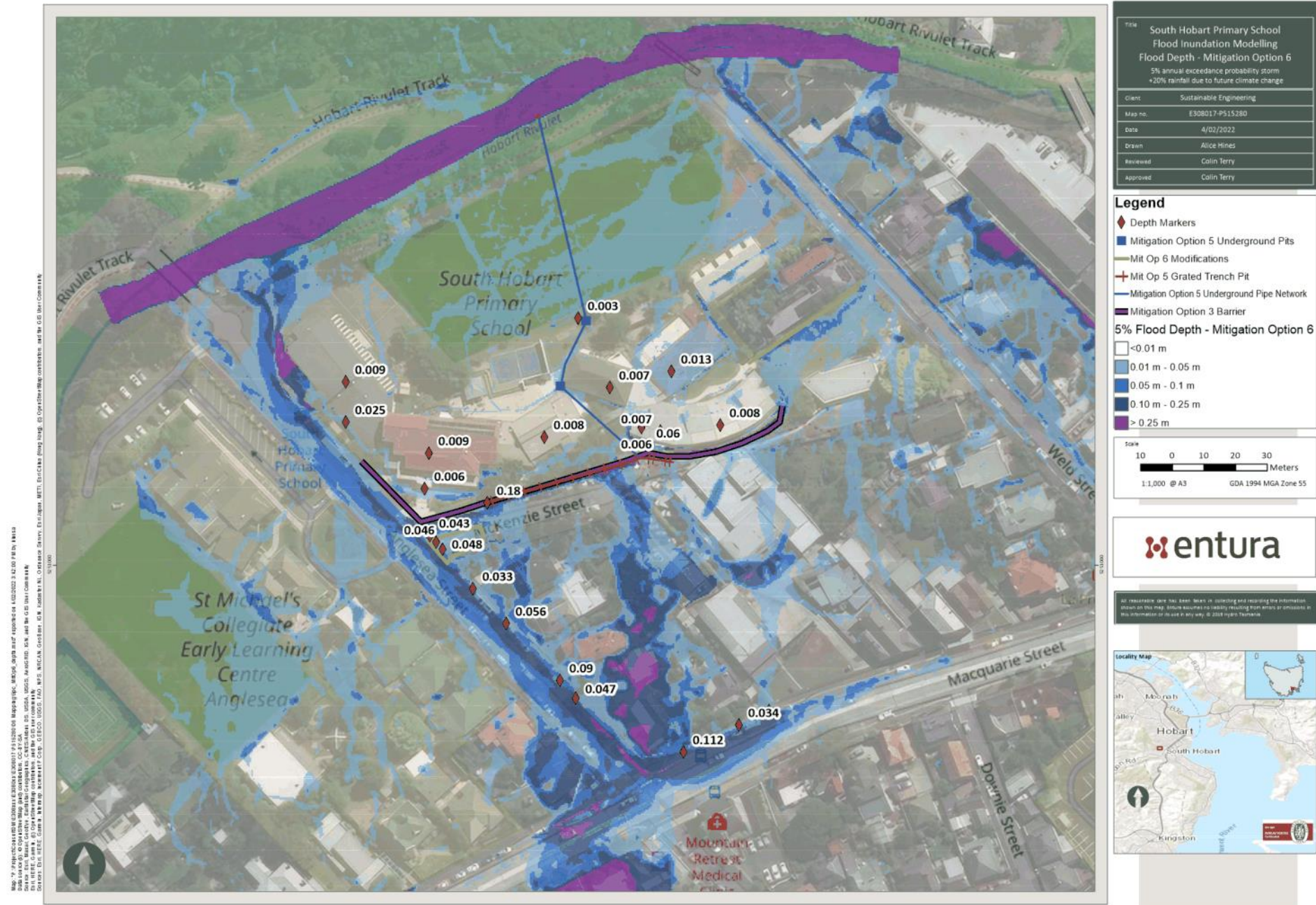
Legend

- Depth Markers**
- Mitigation Option 5 Underground Pits
 - Mit Op 5 Grated Trench Pit
 - Mitigation Option 5 Underground Pipe Network
 - Mitigation Option 3 Barrier
- 5% Flood Depth - Mitigation Option 5
- (m)
- <0.01
 - 0.01 - 0.05
 - 0.05 - 0.1
 - 0.10 - 0.25
 - > 0.25



All reasonable care has been taken in collecting and recording the information shown on this map. Endure assumes no liability resulting from errors or omissions in this information or its use in any way. © 2008 Hydro Tasmania.







1 July 2022

Our ref: E308017\P515280

Tim Hodge
Capital Project Manager
Department of Education
GPO Box 169 Hobart TAS 7000

Dear Tim

Additional information request – PLN 22-352 – South Hobart Primary School flood defence

As part of the approval for the above project Hobart City Council have requested further information about the impacts of the works on flood risk in their letter of 21 June 2022. Their first question was which is the preferred option. You can confirm that option six is the preferred one. This letter gives further explanation of the flood impacts of option six.

Hobart City Council have asked for more information about the change in velocity and flood hazard during the design event (1% annual exceedance probability (AEP) rainstorm). There were hazard plots for the existing and proposed system in the 11 February 2022 Entura "South Hobart Primary School Flood Inundation Assessment report", and we've included them here along with new plots for velocity, as they asked for more information about velocity.

In summary, during a 1% AEP event the proposed works will have a large reduction in flood risk for the school and some downhill neighbours. The works will not change the nature of the hazard in the surrounding roads (ie. the keeping the same maximum flood hazard classification), but will increase the extent of flooding in the roadways (more of the same hazard level). This is a prudent approach to flood management. That is, using roadways as overland flow paths compared to having overland flow paths through a school.

The works and flood behaviour

The civil works for the project include a raised threshold at the entry into McKenzie Street (the car park), walls (corner of Anglesea Street and McKenzie Street, along north side of the carpark and continue almost to the child care, and then again in the child care playground), extra grated pits and piped connections to the recently constructed pipe (built in stage 1). The effect of this wall across the slope, is to shed water to the left (west) and right (east) of the school, and drain more water through the new pipe for some of the water that's flowing overland down Anglesea Street and through backyards (coming from the corner of Macquarie Street and Anglesea Street).

The stormwater in the new DN1200 pipe goes towards Hobart Rivulet, with some bubbling up onto the school's oval and flowing overland to the Rivulet. The surface water that is shed by the walls goes to Anglesea Street and Weld Street. There is a wall in the child care playground to get most of east heading water into Weld Street.

We own. We operate. We consult.

Changes to flood risk from proposed works

The attached hazard and velocity maps show the results of the modelling for the existing and proposed cases. The models were undertaken with slightly different surveys, so some apparent changes to the flooding on the east side of Weld Street are just due to that. The Council are correct in that some of the changes noted are modelling/mapping issues, but the focus on this letter will be the substantive changes due to the proposal. The modelling/mapping issues are related to the long history of the modelling, and while these could be removed with further work, it's unclear if that will add value at this stage of the project.

The key changes due to the proposal are

- Protection of the school for the design event
- Limited protection for two neighbouring properties at 28 and 30 Weld Street (due to wall in child care playground)
- Modest increase in the extent of velocity in the range 2-3 m/s within Anglesea Street adjacent to the school's gymnasium, but no effective change to the flood hazard as there are other similar velocities at a similar scale in the roadway already. In terms for hazard, this larger area of high velocity translates into an equivalent increase in the H4 hazard classification area.

Of these changes its mostly positive, and the negative changes are theoretical and don't have a material impact on the community flood risk. This is because any person or vehicle knocked over or washed downstream by the sheet flow in Anglesea Street, would end up in the eastern gutter (where there is the deepest and fastest water) in both the existing and proposed cases.

In both cases there is a continuous path of water in a 1% AEP event that is unsafe for people and vehicles in Anglesea Street between Macquarie Street and the Hobart Rivulet. That's not to say someone that is walking in Macquarie Street will be washed into the Rivulet in both cases. But anyone caught in these waters is likely to be knocked over, tumbled down the roadway, potentially becoming unconscious and potentially drowning. This flood risk is effectively unchanged with the development from a practical point of view. Vehicles caught in these floodwaters have the potential to slide or float a short distance (where depths exceed their belly pan levels), and people getting out of vehicles would be unsafe.

The area of higher velocity water in Anglesea Street could result in an increase to the area of roadway damaged if the velocities were high enough to strip the seal off the road, but as there are already higher velocity areas uphill of the area near the gymnasium, any initiation of damage would have occurred uphill and spread downstream as the seal unravelled and eroded from a weak point. So from a practical point of view, the impact of the development would not be measurable on asset damage.

Planning Scheme

Council notes the requirements of their planning scheme Code E15.7.5 P1 and P2, which should be addressed. These conditions state:

P1

Landfill, or solid walls greater than 5 m in length and 0.5 m in height, must satisfy all of the following:

- (a) no adverse affect on flood flow over other property through displacement of overland flows;*
- (b) the rate of stormwater discharge from the property must not increase;*

(c) stormwater quality must not be reduced from pre-development levels.

P2

Mitigation measures, if required, must satisfy all of the following:

- (a) be sufficient to ensure habitable rooms will be protected from flooding and will be able to adapt
- (b) not have a significant effect on flood flow.

Addressing these points one at a time:

- P1 (a) The displacement of overland flow doesn't negatively affect private property and has no material impact on the public road reserve flood risks
- (b) The discharge from the school site into Hobart Rivulet is the same, with some minor variations on where it gets into this water course
- (c) While stormwater quality has not been modelled or has been the focus of this project, it's expected that with stormwater flowing more through roadways and less through the school, there would be less debris in Hobart Rivulet during the design event. Note, stream water quality is more about the average monthly rainfall events and changes in landuse, and at this event scale it's about the piped system which has no real change and so it's expected the stream quality will be similar (with no changes in landuse).
- P2 (a) The works will protect habitable areas in the school during the design event, with no increase in flood hazard offsite for habitable rooms
- (b) While locally for the school site there is a significant effect on decreasing flood flow (in a positive way), the offsite impacts have no material or practical change in flood risk

I hope this addresses Council's questions, but I'm available to meet with Council officers and yourself to discuss further if required.

Yours sincerely



Colin Terry

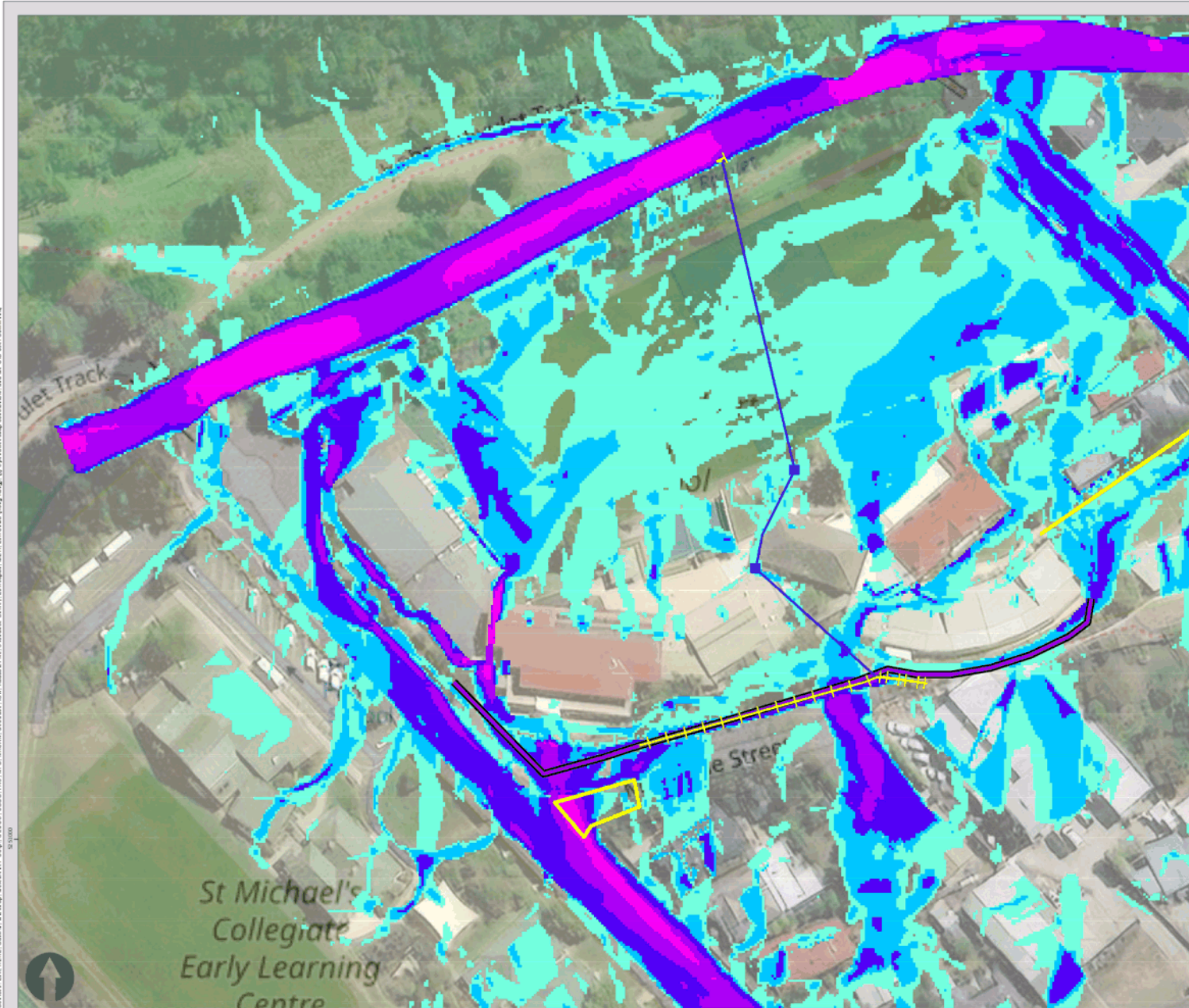
Specialist Water Resources Engineer

t 0448 991 266

e colin.terry@entura.com.au

PS. I note as an aside, the videos you sent me of the rainstorms on 6 May 2022 with overland flow in Anglesea Street, surcharging of Council's piped system and flooded down the main front steps of the school, and in from the carpark. This was much smaller than the design event, and the proposed works would have protected the school from that rainstorm.

We have not looked into the capacity of the Council's piped system in detail, but note where the pit can be seen to surcharge near the start of McKenzie Street (HCC asset business ID DM34828), two Council DN600 pipes join into a DN600 and DN150 pipe on the south side of McKenzie Street and then become a single DN600 pipe on the north side of McKenzie Street (HCC asset business ID DM34775). While the grade of the pipe would increase slightly at the southside manhole, it is certainly an unusual arrangement and has the potential to contribute to flooding in the school.



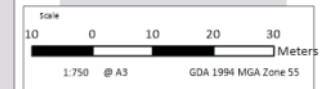
South Hobart Primary School Flood Inundation Modelling Flood Velocity Existing system 1% annual exceedance probability storm +20% rainfall due to future climate change	
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	23/06/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

Legend

- Mitigation Option 5 Underground Pits
- Mit Op 6 Modifications
- Mit Op 5 Grated Trench Pit
- Mitigation Option 5 Underground Pipe Network
- Mitigation Option 3 Barrier

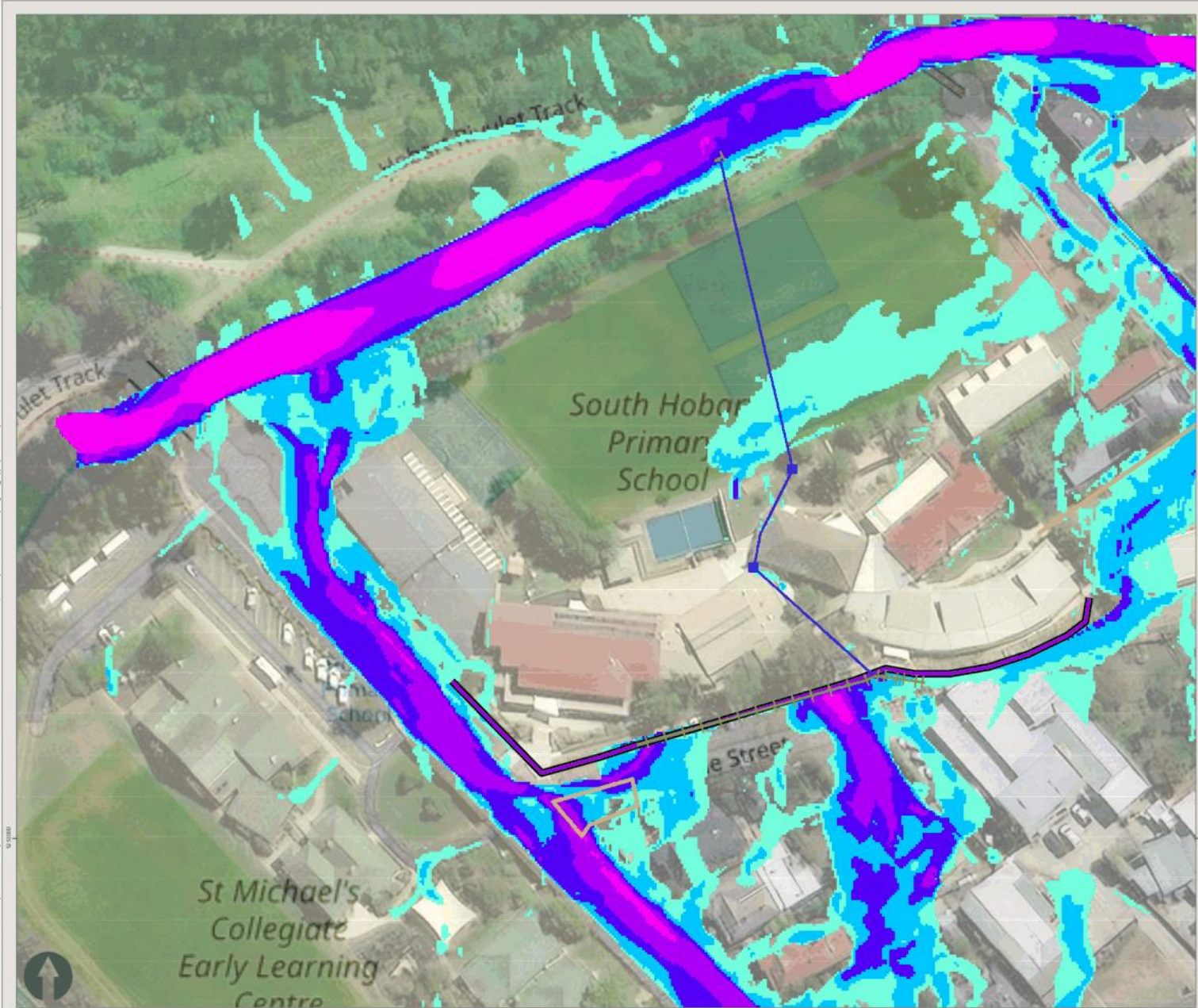
1% Velocity - Existing system

- 0 - 0.25 m/s
 0.25 - 0.5 m/s
 0.5 - 1 m/s
 1 - 2 m/s
 2 - 3 m/s
 >3 m/s



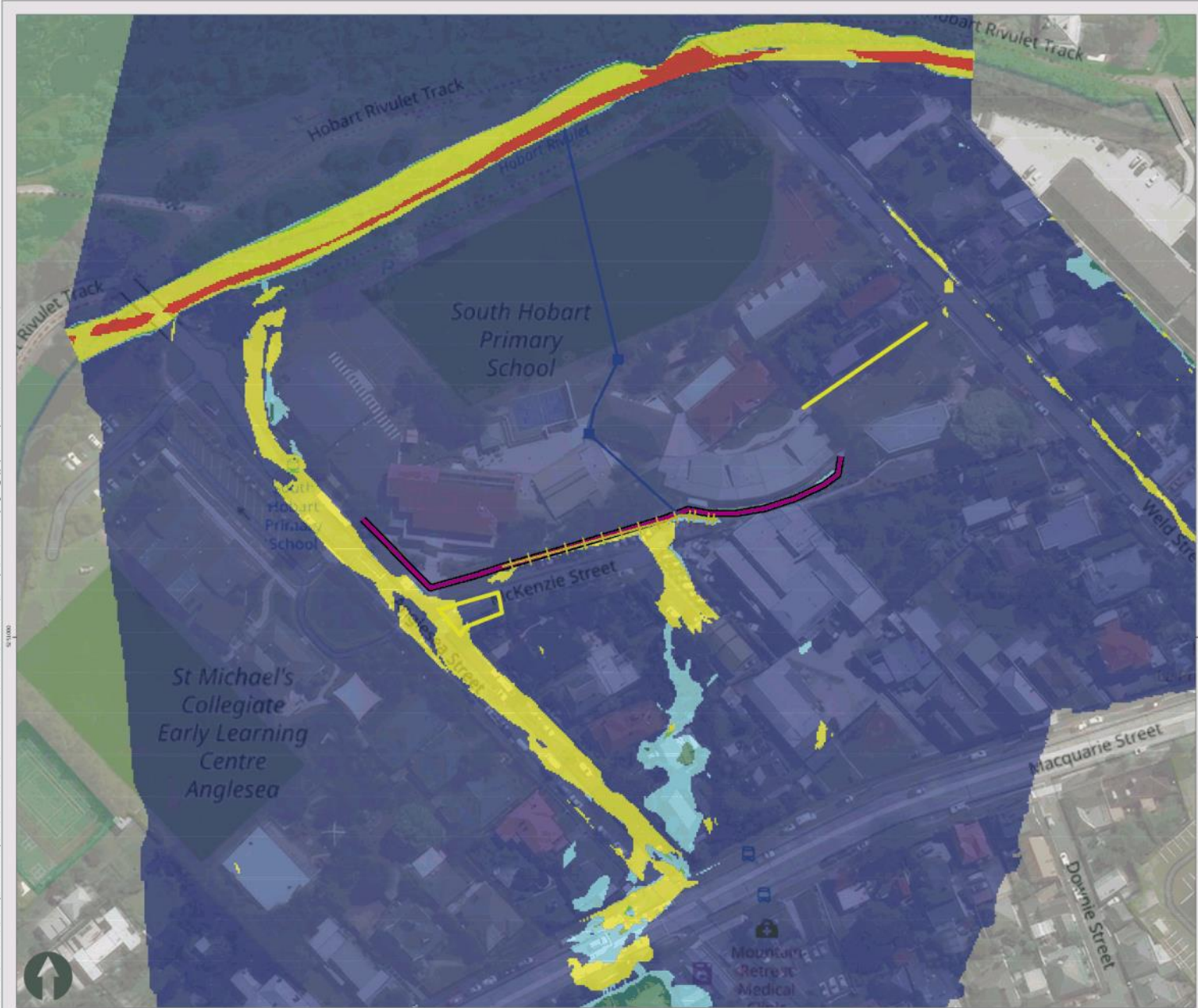
All reasonable care has been taken in collecting and recording the information shown on this map. Entura assumes no liability resulting from errors or omissions in this information or its use in any way. © 2019 Hydro Tasmania.





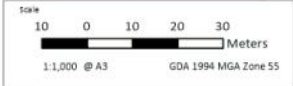
Map by entura, using aerial imagery from Google Earth, and flood data from the Tasmanian Government. The map is for informational purposes only and should not be used for any other purpose. The map is not a guarantee of accuracy and should not be used for any other purpose. The map is not a guarantee of accuracy and should not be used for any other purpose.





Title	South Hobart Primary School Flood Inundation Modelling Flood Hazard - Mitigation Option 6 1% annual exceedance probability storm +20% rainfall due to future climate change
Client	Sustainable Engineering
Map no.	E308017-P515280
Date	4/02/2022
Drawn	Alice Hines
Reviewed	Colin Terry
Approved	Colin Terry

- Legend**
- Mitigation Option 5 Underground Pits
 - Mit Op 6 Modifications
 - Mit Op 5 Grated Trench Pit
 - Mitigation Option 5 Underground Pipe Network
 - Mitigation Option 3 Barrier
- 1% Flood Hazard - Mitigation Option 6**
- H1 - Relatively Benign
 - H2 - Unsafe for small vehicles
 - H3 - Unsafe for all vehicles, children & elderly
 - H4 - Unsafe for all vehicles
 - H5 - H4 plus buildings require special design
 - H6 - Unconditionally dangerous



All information on this map is based on the best available information at the time of preparation. entura does not warrant the accuracy or completeness of the information or the results of any use of the information.




Reply Delete Junk Block ...

Extra information about South Hobart Primary School flood defence impacts

CT Colin Terry <Colin.Terry@entura.com.au>
To: Hodge, Tim; zehmeisters@hobartcity.com

Icons: calendar, link, mail, trash, thumbs up, reply, reply all, forward, more options
Wed 3/08/2022 2:40 AM

 E308017_P515280_SHPS Flood Inu...
683 KB

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Tim

Please find attached my extra information.

Sarah, thank you for your time that other day. This copy of the letter is for your information, and we would appreciate if you can see anything that isn't clear or needs more work. We've reached the end of what our current modelling can do without an other big step in survey and modelling effort, so I hope there is enough in this for Council to make a decision.

As noted in the letter

- if we need to get into a more detailed investigations about the proportions of overland flow down Anglesea Street and a better description of the kerbs, then prior to more modelling we'd need a full survey of the Macquarie – Anglesea Street intersection and down Anglesea Street, and the piped network – which is a large time and effort
- there is a negative impact on the site flood risk in the McKenzie Street carpark if we move or remove the wombat, and the stage 1 design and constructed DN1200 pipe assumed a wombat crossing would be as per option 6.

Cheers
Colin

Colin Terry | Specialist Water Resources Engineer
BE (Hons), PhD, MIEAust, CPEng



m +61 0448 991 266
e colin.terry@entura.com.au | w entura.com.au
a 4 Elizabeth Street, Hobart TAS 7000, Australia
Connect with us on [Facebook](#), [Twitter](#) and [LinkedIn](#)

We own. We operate. We consult.

Please consider the environment before printing my email

This e-mail and any attachments may contain confidential, proprietary or legally privileged information. If you are not the intended recipient, you must not keep, forward, disclose, adapt or copy the material and any such action is unauthorised and prohibited. If you have received this e-mail in error, please immediately advise the sender by return email and delete this e-mail and any attachments from your system. Hydro-Electric Corporation ABN 48 072 377 158



3 August 2022

Our ref: E308017\P515280

Tim Hodge
Capital Project Manager
Department of Education
GPO Box 169 Hobart TAS 7000

Dear Tim

Additional information part 2 – South Hobart Primary School flood defence

Following the meeting you and I had with Sarah Zehmeister and Karen Abey from Hobart City Council on 1 August 2022, this letter provides extra details around the risks to pedestrians in Anglesea Street due to the proposed school flood defence at South Hobart Primary School.

The planning scheme requires there be no adverse impact to flood flows due to the proposed wall and no significant impact due to the lower “wombat” pedestrian crossing (a different requirement, as it’s lower than 0.5 m). Note while the wording of the scheme says no adverse impact on “flood flows”, the expression “flood risk” is a more helpful term. With either terminology a key part of the process in measuring impacts of the project, it choosing a reasonable scenario that is representative of the expected system behaviour.

Which base case should be used for the existing system?

The previous work has modelled the existing system and proposed works with scenarios for the purpose of sizing the engineering infrastructure up to the design flood of 1:100 annual exceedance probability (AEP). In this design scenario there are no existing fences included in the model, in particular at the backs of the footpaths on Macquarie Street and Anglesea Street. This was done to give conservatively large flows to the carpark in McKenzie Street. It’s a conservative assumption because during the actual 1:100 AEP flood, a more likely scenario is these wooden boundary fences will remain in tact for the small depths of water against them (in the order of 200 mm).

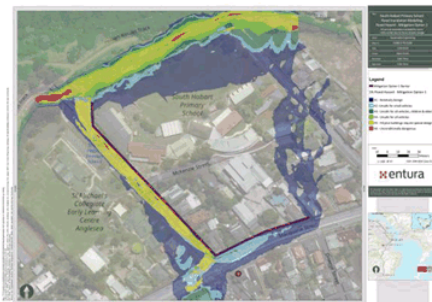
Using different scenarios for the behaviour of the fences behind the footpaths on Macquarie and Anglesea streets during a flood as a base case, will give different relative impacts of the proposal, even with the same rain storm being applied. These existing fences weren’t designed as flood walls, and as part of the South Hobart Primary School Flood Inundation Assessment (Entura, Feb 2022) there were options to water proof them. These options were for a complete or partial flood wall: mitigation options 1 and 2 in report. These options weren’t pursued because of the challenge of providing access to properties through the flood wall, but the model results provide an insight into a scenario where the existing walls can hold the small depth of flood waters within the roadways. They show a H5 hazard using the Australian Rainfall and Runoff, 2019 (ARR) criteria used in the report, across and along nearly all of Anglesea Street below Macquarie Street. For option 1, there also has a

We own. We operate. We consult.

small areas of H6 hazard. This is of interest if the expected scenario used to assess the impact of the proposal has these fences holding flood water as the base for the existing system.

If the flood hazard maps for the proposed works are modelled with the no Macquarie and Anglesea street fences, and this is compared to the existing system with the fences holding flood waters, it's clear for the same 1:100 AEP flood the existing system with the fences blocking the flow has the potential to be more hazardous than the proposal working as designed with its design scenario (without the fences).

Below are the results extracted from the full report, noting for option 6 there was a different approach to the analysis with extra rainfall also directly applied to the 2D model domain – which is why there is low hazard across a larger area. Below are the hazard maps for options 1 and 6.



Mitigation option 1



Mitigation option 6

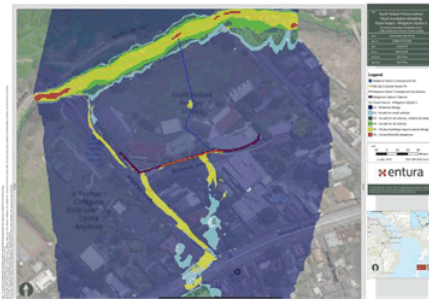
There is uncertainty about how the existing system will behave during a flood, in particular how the fences will behave, which in turn has a bearing on the impacts of the proposal. It is expected that should the fences behave like option 1 (compared to option 6 where there were no fences), then the impacts of the proposal would not be adverse. We have not modelled a case with some fences staying up and the works in option 6 at the site, but expect the model results would have a similar mixture of flood hazard H5 and H6 as option 1. While there is uncertainty about the way fences will behave, the nature of the flood risk from the proposed option (6) does not change the nature of existing risk in Anglesea Street.

Note if further modelling of the role walls played in the proportion of water down Anglesea Street was required, a detailed survey of the Macquarie and Anglesea street intersection, road corridor down Anglesea Street and piped system would be required. While the description above is just about fences containing the flow in Anglesea Street, the road kerbs would also play a role, and these are not accurately described in the model as they are based on 1 m x 1 m gridded LIDAR.

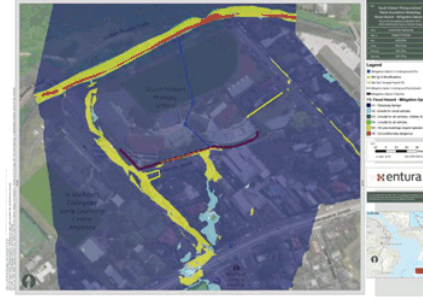
Relative impact of different parts of the flood defence on flood risk

As the planning scheme requirements are different for the wall (being higher than 0.5 m or longer than 5 m) than the "wombat" pedestrian crossing (being less than 0.5 m), there is merit in understanding how each of these two parts of the broader proposal impact the flood risk in Anglesea Street.

Below are the hazard maps for options 5 and 6:



Mitigation option 5



Mitigation option 6

Comparing these options shows that in Anglesea Street there is an increase in hazard between option 5 to option 6. Note the inputs are slightly different as well, as can be seen the flow in Anglesea Street above McKenzie Street is a little different. The two main geometry differences between the options are moving the wombat crossing closer to Anglesea Street and the inclusion of a wall in the childcare playground off Weld Street (which doesn't impact the flood risks in Anglesea Street). While it's not a like-for-like comparison, moving the wombat crossing does seem to have a disproportionate impact on increasing the hazard in Anglesea Street. The flood wall makes most of the change in redirecting flow from Anglesea Street, but not enough to change the hazard rating. Even though the wombat crossing is less important in managing flood risk, its change in location is enough to push the velocities up into next the hazard category in Anglesea Street. It's like the straw that broke the camel's back, but with a wombat instead.

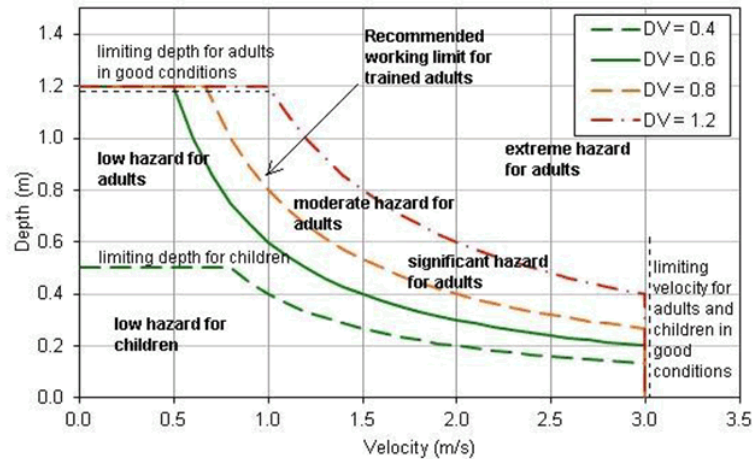
Given the wall is the key element in the flood defence and the wombat crossing is secondary, there wouldn't be a design with the wombat and no wall, but there could in theory be a wall without the wombat (see note below). So in terms of measuring the relative impacts of these two elements, without having done the modelling of a like-for-like comparison, it appears

- the wall causes no change in flood risk measured as area of H5 in Anglesea Street, and
- the wombat (when the wall is part of the solution) has a small increase in flood risk, but this is not significant in the nature of the street's existing flood risk.

Note if the wombat was moved closer to the Mackenzie Street carpark or removed from the design, there are other impacts for the design including higher walls in the Mackenzie Street carpark and a greater risk to those in the lowest parts of the carpark due to deeper water. The existing DN1200 pipe constructed in stage 1 was sized assuming the wombat would be located as it is in option 6.

Flood risks for pedestrians

The previous maps in this letter and the report have used a generic flood hazard classification from ARR. This covers risks to people, cars and buildings, and gives hazard categories that are generic to a wide range of flood situations. When we look in detail at just the pedestrian risk in Anglesea Street, there is a specific pedestrian hazard classification from ARR. This is similar to the generic hazard graph, but increases the safe velocity to 3 m/s (from 2 m/s), see over:



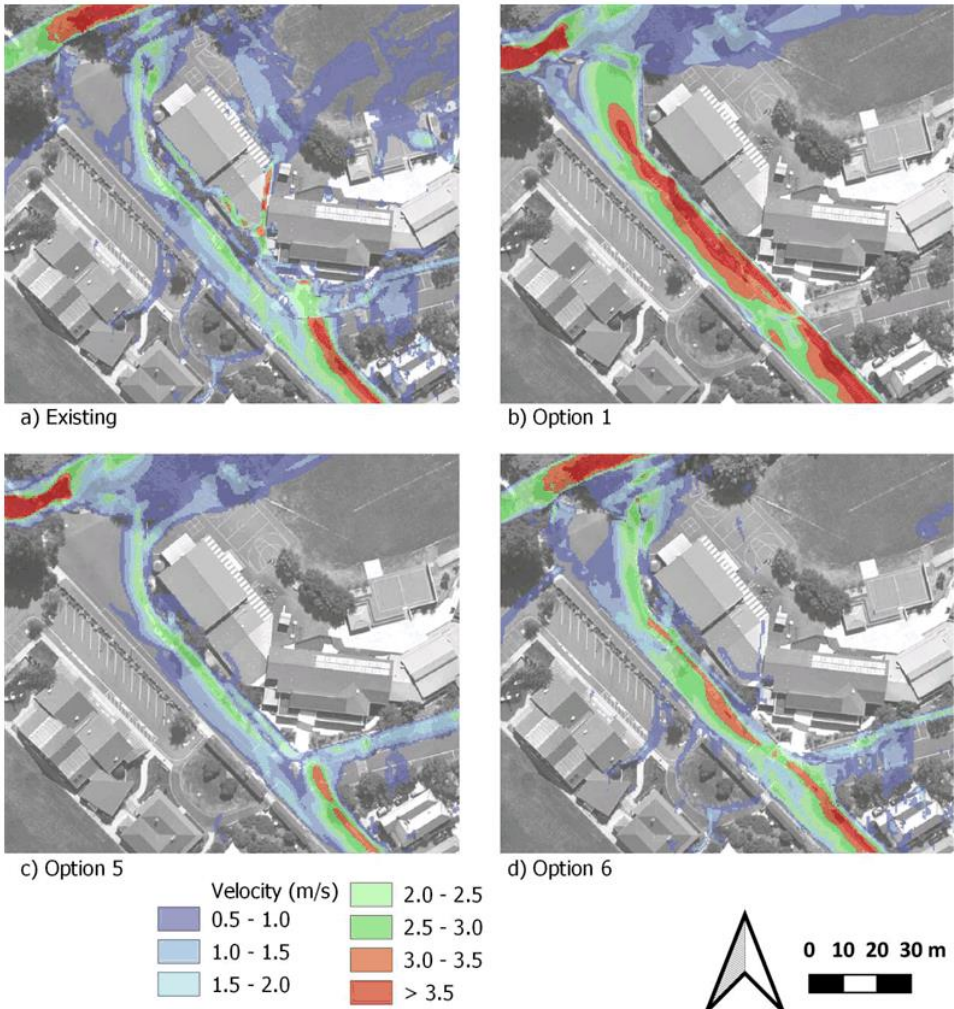
With this criteria in mind, which says it can be unsafe for pedestrians when flood waters are faster than 3 m/s, even when shallow like in Anglesea Street during a 1:100 AEP flood, over the page is a set of four peak velocity maps for a 1:100 AEP flood (15 min duration burst). The

- (a) existing system assuming the no fences around Macquarie and Anglesea streets
- (b) option 1 with a barrier at the back of the footpath on Macquarie and Anglesea streets
- (c) option 5 with wombat crossing closer to the McKenzie Street school carpark
- (d) option 6 (preferred) with wombat closer to Anglesea Street.

Note the a) Existing and d) Option 6 maps used some additional rainfall directly in the 2D model domain, so are more conservative than the b) Option 1 and c) Option 5 maps. So care is required when comparing between the results.

From this (noting the warning above):

1. a) and b) are potential extremes for how the fences on the footpaths of Macquarie and Anglesea can respond to a flood waters, which sets the potential base case for d) which is the preferred option
2. c) is similar to a), which means in the existing case with no fences behind footpaths, the impact of the wall (with the wombat closer to the carpark) is not adverse for pedestrians
3. While not a like-for-like comparison (as some remodelling appears to be required), c) compared to d) gives the impact of the wombat compared to the wall, which shows the extra water pushed into Anglesea Street by the wall does make areas potentially unsafe for pedestrians
4. d) compared to b) shows that there are potential existing scenarios if the fences held, which are far more hazardous to pedestrians that the proposed design if the fences did not hold.



I hope this addresses Council's questions.

Yours sincerely

Colin Terry

Colin Terry
Specialist Water Resources Engineer
t 0448 991 266
e colin.terry@entura.com.au

8. REPORTS

8.1 Proposal for a new kunany/Mount Wellington Cultural Landscape Precinct File Ref: F22/84388

Memorandum of the Development Planner of 30 August 2022.

Delegation: Committee



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

Proposal for a new kunany/Mount Wellington Cultural Landscape Precinct

A community group, known as 'Enshrine', intend to submit an application for a planning scheme amendment to the Hobart Interim Planning Scheme 2015 (HIPS) to insert a new Cultural Landscape Precinct over part of kunanyi/Mount Wellington (see extent of the proposed precinct area in Figure 1 below):



Figure 1: Extent of proposed Cultural Landscape Precinct (within red outline)

'Enshrine' intend to brief the City Planning Committee on its proposal prior to it being formally considered.

The subject area is approximately 1200 hectares of City-owned land, covering approximately 7% of Wellington Park. The area does not include any privately owned land, Crown land, or land outside the City of Hobart municipal area.

A Cultural Landscape Precinct is a precinct identified in the Historic Heritage Code of the HIPS for its built and natural landscape values.

The definition of a Cultural Landscape Precinct under the HIPS is as follows:

Means an area shown on the planning scheme maps as a cultural landscape precinct and described in Table E13.3 as having particular historic cultural heritage significance because of the collective heritage value of individual elements and features, both natural and constructed, as a group for their landscape value.

Enshrine consider that the eastern face of kunanyi/Mount Wellington meets the definition of a Cultural Landscape Precinct due to its natural features, tracks, buildings and historical use.

Enshrine recently submitted an application for General Manager Consent to lodge a planning scheme amendment. Landowner consent is required because planning scheme amendments in respect of 'one or several parcels' require the consent of all landowners of those parcels, in accordance with clause 33(2A) of the former provisions of the *Land Use Planning and Approvals Act 1993* (LUPAA).

City officers are currently reviewing the General Manager Consent application to ensure adequate information is provided, and seeking legal advice about the interaction between the Wellington Park Management Plan 2013 (WPMP) and the HIPS.

Due to the large area proposed to be covered by the precinct, the relevance of the mountain to the community and previous proposals for development on the mountain, it is considered appropriate that the decision about whether to grant landowner consent is considered by full Council.

A report on the landowner consent application will be prepared for the Parks and Recreation Committee and Council following the caretaker mode and obtaining the necessary further information.


RECOMMENDATION

That: 1. The memorandum regarding a proposal for a new kunanyi/Mount Wellington Cultural Landscape Precinct be received and noted.

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



Sarah Crawford
DEVELOPMENT PLANNER



Neil Noye
DIRECTOR CITY LIFE

Date: 30 August 2022
File Reference: F22/84388

8.2 Monthly Building Statistics - 1 July - 31 July 2022
File Ref: F22/85962

Memorandum of the Director City Life of 31 August 2022 and attachments.

Delegation: Council



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

Monthly Building Statistics - 1 July - 31 July 2022

Attached is the Building Permit Statistics for the period 1 July – 31 July 2022

RECOMMENDATION

That:

The Director City Life reports:

Building Statistical Report:

During the period 1 July 2022 to 31 July 2022, 37 permits were issued to the value of \$33,650,680 which included:

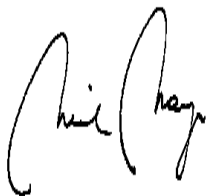
- (i) 19 for extensions/alterations to dwellings to the value of \$2,317,550;
- (ii) 3 new dwellings (2 ancillary dwellings) to the value of \$560,000;
- (iii) 26 multiple dwellings to the value of \$12,400,000; and
- (iv) 3 major projects:
 - (a) 87-91 Campbell Street, Hobart – New Commercial Building (26 New Multiple Dwellings) – \$12,400,000;
 - (b) 94 Barrack Street, Hobart – Demolition, Alterations and Additions – \$5,388,000;
 - (c) 36 Davey Street, Hobart – Commercial Internal Alterations – \$5,000,000;

During the period 1 July 2021 to 31 July 2021, 50 permits were issued to the value of \$47,662,084 which included:

- (i) 34 for extensions/alterations to dwellings to the value of \$5,595,385;
- (v) 4 new dwellings to the value of \$1,365,000;
- (vi) 75 new multiple dwellings to the value of \$32,437,499; and
- (vii) 4 major projects:





- (a) 62 Patrick Street, Hobart - Multiple New Dwellings - 68 Apartments - \$29,195,499;
- (b) 26 Lower Jordan Hill Road, West Hobart - Multiple New Dwellings x 5 - \$3,212,000;
- (c) 410 Sandy Bay Road, Sandy Bay - Commercial Internal Alterations - \$2,800,000;
- (d) 33 Argyle Street - Hobart - Commercial Internal Alterations - \$2,348,000;

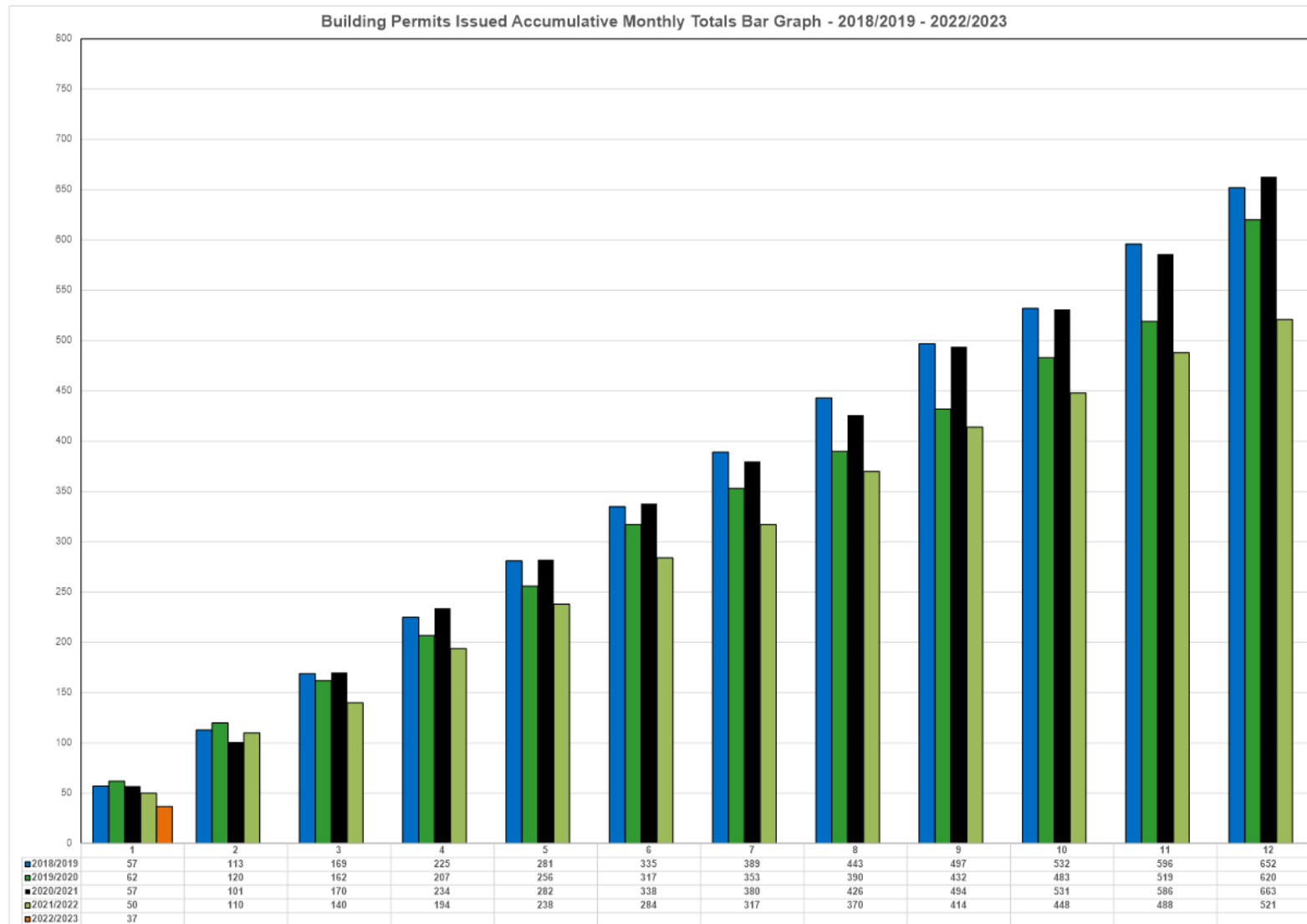
As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



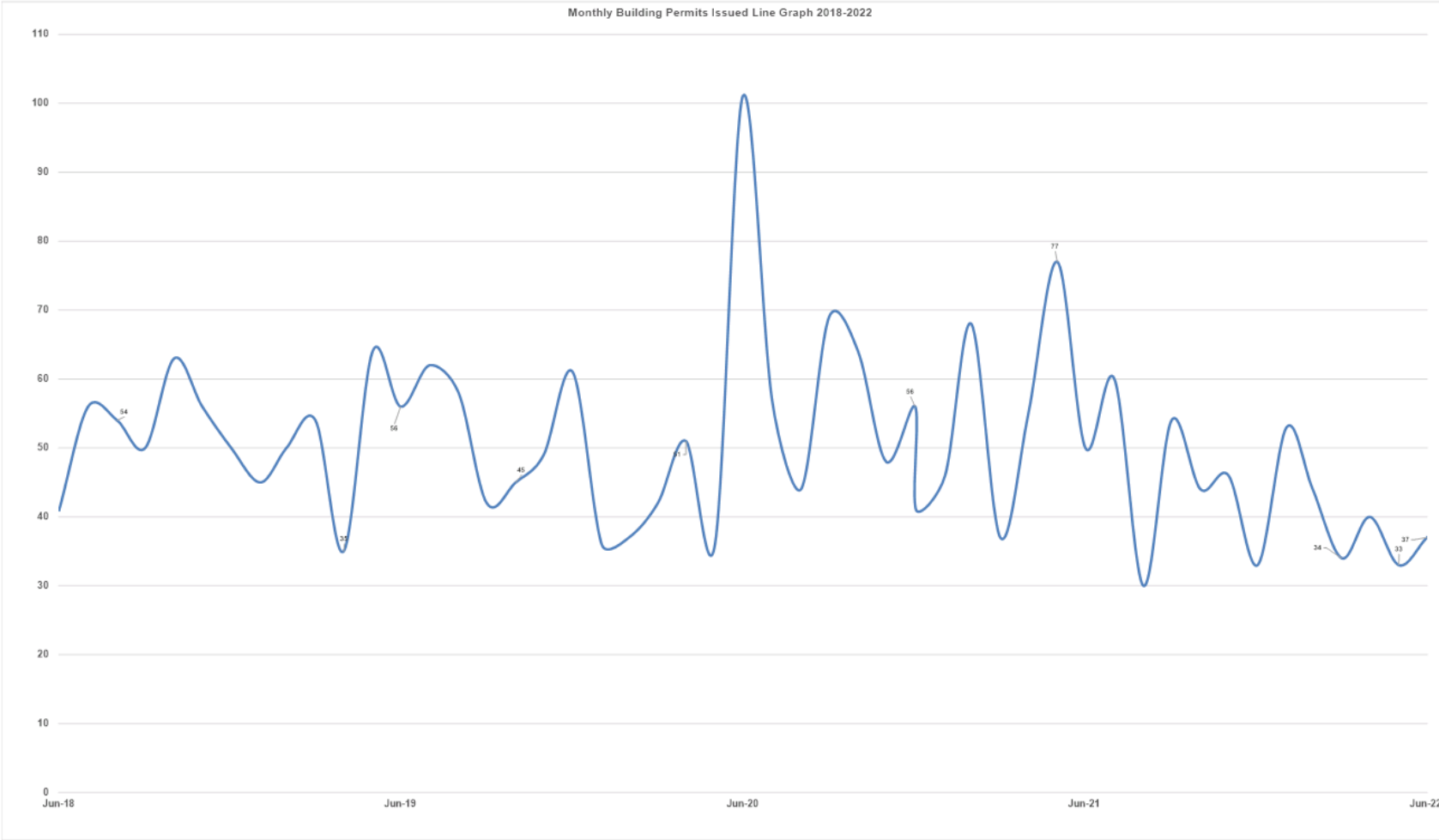
Neil Noye
DIRECTOR CITY LIFE

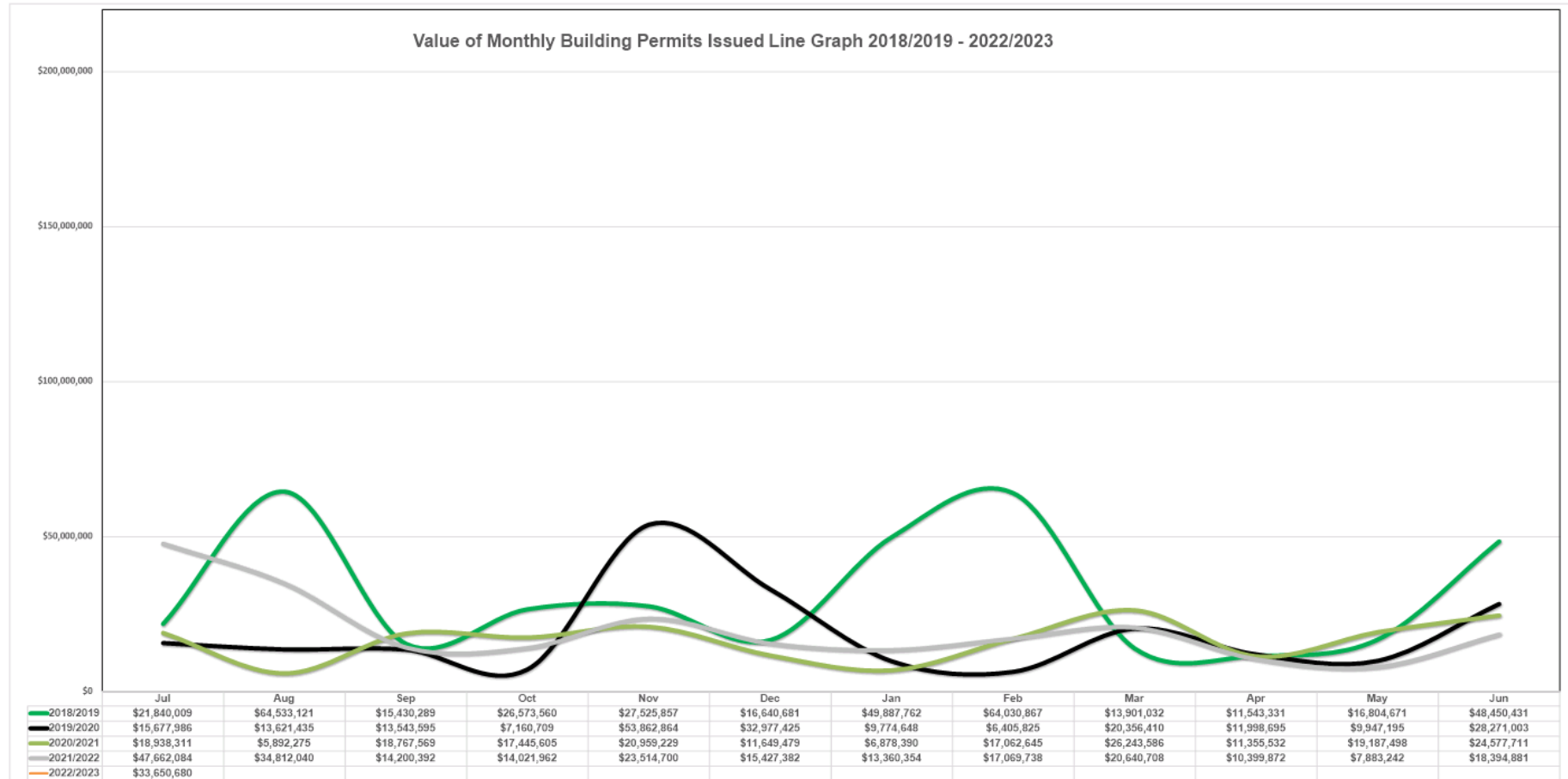
Date: 31 August 2022
File Reference: F22/85962

- Attachment A: Building Permits Issued Accumulative Monthly Totals Bar Graph - July 2022 ↓ 
- Attachment B: Building Permits Value Accumulative Monthly Bar Graph - July 2022 ↓ 
- Attachment C: Monthly Building Permits Issued Line Graph - July 2022 ↓ 
- Attachment D: Value of Monthly Building Permits Issued Line Graph - July 2022 ↓ 



Year	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
1	\$21,840,010	\$15,677,986	\$18,938,311	\$47,662,084	\$33,650,680
2	\$49,365,867	\$29,299,421	\$24,830,586	\$82,474,124	
3	\$76,891,724	\$42,843,016	\$43,598,155	\$96,674,516	
4	\$104,417,581	\$50,003,725	\$61,043,760	\$110,696,478	
5	\$131,943,438	\$103,866,589	\$82,002,989	\$134,211,178	
6	\$145,844,470	\$136,844,014	\$93,652,468	\$149,638,560	
7	\$159,745,502	\$146,618,662	\$101,930,858	\$162,998,914	
8	\$173,646,534	\$153,024,487	\$118,993,503	\$180,068,652	
9	\$187,547,566	\$173,380,897	\$145,237,089	\$200,709,360	
10	\$199,090,897	\$185,379,592	\$156,592,621	\$211,109,232	
11	\$215,895,568	\$195,326,787	\$175,780,119	\$218,992,474	
12	\$264,345,999	\$223,597,790	\$200,357,830	\$252,643,154	





8.3 Monthly Planning Statistics - 1 July - 31 July 2022
File Ref: F22/85978

Memorandum of the Director City Life of 31 August 2022 and attachments.

Delegation: Council



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

Monthly Planning Statistics - 1 July - 31 July 2022

Attached is the Planning Permit statistics for the period 1 July 2022 – 31 July 2022.

RECOMMENDATION

That:

The Director City Life reports:

Planning Statistical Report:

During the period 1 July 2022 to 31 July 2022, 64 permits were issued to the value of \$14,358,773 which included:

- (i) 8 new single dwellings to the value of \$3,493,900;
- (ii) 7 multiple dwellings to the value of \$5,000,000;
- (iii) 28 extensions/alterations to dwellings to the value of \$5,082,067;
- (iv) 5 extensions/alterations to commercial properties to the value of \$460,000;
- (v) 1 major project;
 - (a) 345 Sandy Bay Road, Sandy Bay - Demolition, New Building for 7 Multiple Dwellings and Associated Works - \$5,000,000;

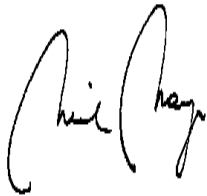
During the period 1 July 2021 to 31 July 2021, 61 permits were issued to the value of \$10,800,580 which included:

- (i) 5 new single dwellings to the value of \$1,510,000;
- (ii) 2 multiple dwellings to the value of \$580,000;

- (iii) 27 extensions/alterations to dwellings to the value of \$4,229,000;
- (iv) 7 extensions/alterations to commercial properties to the value of \$4,209,980;
- (v) 1 major project:
 - (a) 180 Harrington Street, Hobart - Partial Demolition, Alterations and Extension - \$4,000,000;





This report includes permits issued, exempt and no permit required decisions.

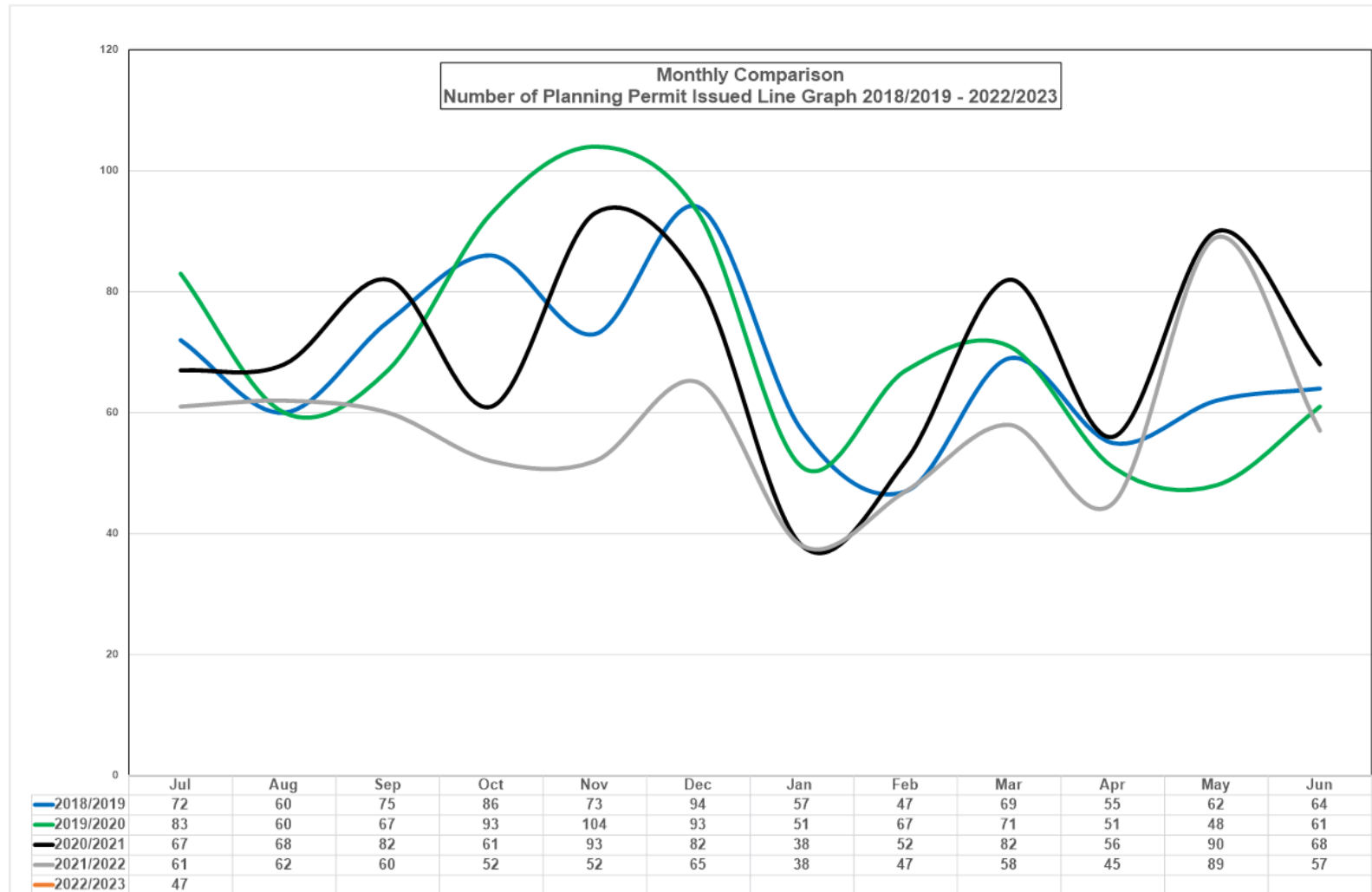
As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

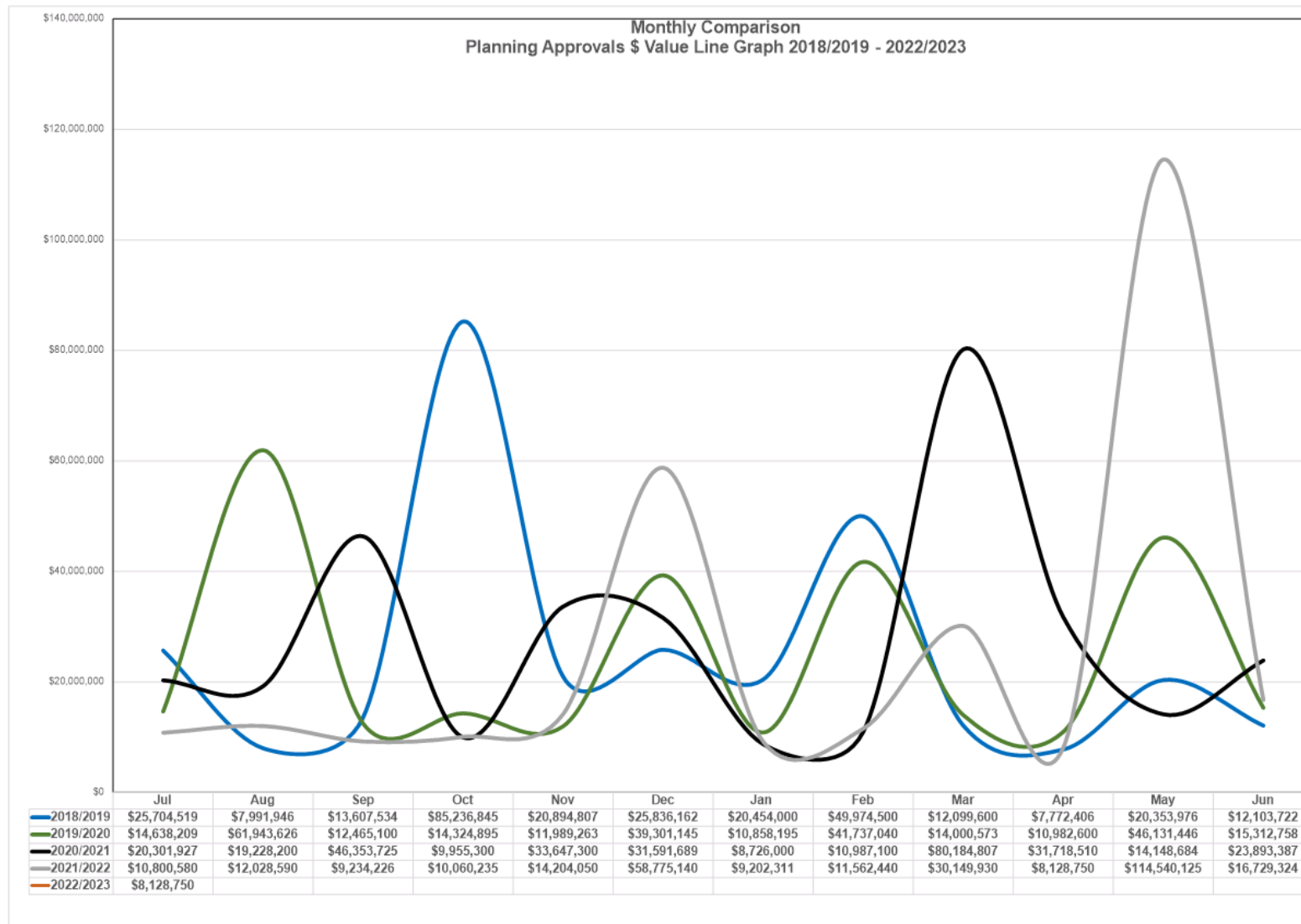


Neil Noye
DIRECTOR CITY LIFE

Date: 31 August 2022
File Reference: F22/85978

- Attachment A: Monthly Comparison Number of Planning Permit Issued Line Graph July 2022 ↓ 
- Attachment B: Monthly Comparison Planning Approvals Value Line Graph - July 2022 ↓ 
- Attachment C: Number of Planning Permit Issued Accumulative Monthly Comparison Bar Graph - July 2022 ↓ 
- Attachment D: Value of Planning Permit Issued Bar Graph - July 2022 ↓ 





8.4 City Planning - Advertising Report
File Ref: F22/85809

Memorandum of the Director City Life of 24 August 2022 and attachment.

Delegation: Committee



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

City Planning - Advertising Report

Attached is the advertising list for the period 9 August 2022 to 22 August 2022

RECOMMENDATION

That:

- 1. That the information be received and noted.***

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Neil Noye
DIRECTOR CITY LIFE

Date: 24 August 2022
File Reference: F22/85809

Attachment A: City Planning - Advertising Report ↓

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-22-447	374 MURRAY STREET	NORTH HOBART	Partial Change of Use to Visitor Accommodation	\$60,000	05/09/2022	ayersh	Council (Called In)	15/08/2022	29/08/2022
PLN-22-483	1/8 OBERON COURT COMMON LAND OF PARENT TITLE	DYNNYRNE	Change of Use to Visitor Accommodation	\$0	25/09/2022	ayersh	Council (Called In)	19/08/2022	02/09/2022
PLN-22-384	48 STRICKLAND AVENUE	SOUTH HOBART	Subdivision (One Additional Lot) and Two Multiple Dwellings (One Existing, One New)	\$0	07/09/2022	baconr	Director	09/08/2022	23/08/2022
PLN-22-24	1 / 4 A BEN STREET	WEST HOBART	Deck	\$20,000	08/09/2022	baconr	Director	10/08/2022	24/08/2022
PLN-22-482	1 / 273 CHURCHILL AVENUE	SANDY BAY	Change of Use to Visitor Accommodation	\$0	19/09/2022	langd	Council (Called In)	11/08/2022	25/08/2022
PLN-22-498	39 KELLY STREET	BATTERY POINT	Front Fencing	\$12,000	09/09/2022	langd	Director	11/08/2022	25/08/2022
PLN-22-454	42 QUEEN STREET	SANDY BAY	Partial Demolition, Alterations and Extension	\$200,000	03/09/2022	langd	Director	16/08/2022	30/08/2022
PLN-22-509	6 ROSEHILL CRESCENT	LENAH VALLEY	Driveway Alterations	\$18,000	16/09/2022	langd	Director	18/08/2022	01/09/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-22-526	10 DAVID AVENUE	SANDY BAY	Outbuilding	\$40,000	21/09/2022	langd	Director	22/08/2022	05/09/2022
PLN-22-337	285 A LENA VALLEY ROAD	LENA VALLEY	Partial Demolition, Alterations, Outbuilding and Front Fencing	\$150,000	23/08/2022	maxwellv	Director	10/08/2022	24/08/2022
PLN-22-440	13 THELMA DRIVE	WEST HOBART	Partial Demolition, Alterations, and Extension	\$90,000	28/08/2022	maxwellv	Director	11/08/2022	25/08/2022
PLN-22-452	11 SCOTT STREET	GLEBE	Change of Use to Visitor Accommodation	\$4,000	04/10/2022	maxwellv	Council (Called In)	16/08/2022	30/08/2022
PLN-22-292	2/10 BECTIVE STREET AND COMMON LAND OF PARENT TITLE	SANDY BAY	Partial Demolition, Alterations and Extension	\$300,000	06/09/2022	maxwellv	Director	19/08/2022	02/09/2022
PLN-22-456	28 CLARKE AVENUE	BATTERY POINT	Alterations and Extension to Jetty and Landscaping	\$100,000	16/09/2022	maxwellv	Director	19/08/2022	02/09/2022
PLN-22-277	215 CHURCHILL AVENUE	SANDY BAY	Change of Use to Visitor Accommodation	\$0	15/09/2022	mcclenahanm	Council (Called In)	09/08/2022	23/08/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-22-99	113 PROCTORS ROAD	KINGSTON	Ancillary Dwelling	\$220,000	13/10/2022	mcclenahanm	Director	18/08/2022	01/09/2022
PLN-22-251	18 MCDEVITT AVENUE	DYNNYRNE	Two Multiple Dwellings	\$1,800,000	10/09/2022	mcclenahanm	Director	18/08/2022	01/09/2022
PLN-22-521	66 HAMPDEN ROAD	BATTERY POINT	Signage	\$0	21/09/2022	mcclenahanm	Director	18/08/2022	01/09/2022
PLN-22-494	677 SANDY BAY ROAD	SANDY BAY	Partial Demolition, Alterations and Extension	\$180,000	07/09/2022	mcclenahanm	Director	19/08/2022	02/09/2022
PLN-22-490	3 ANDREW STREET	NORTH HOBART	Partial Demolition, Alterations and Extension	\$300,000	10/09/2022	obrienm	Director	16/08/2022	30/08/2022
PLN-22-492	189 ELIZABETH STREET	HOBART	Extension to Operating Hours	\$0	07/09/2022	obrienm	Director	16/08/2022	30/08/2022
PLN-22-520	UNIT 2 6 NELSON ROAD AND COMMON LAND OF PARENT TITLE	SANDY BAY	Change of Use to Visitor Accommodation	\$0	21/09/2022	obrienm	Council (Called In)	19/08/2022	02/09/2022
PLN-22-214	376 ARGYLE STREET	NORTH HOBART	Carport	\$4,000	31/08/2022	sherriffc	Director	12/08/2022	26/08/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-22-513	196 MELVILLE STREET	WEST HOBART	Partial Demolition, Alterations and Front Fencing	\$45,000	19/09/2022	sherriffc	Director	18/08/2022	01/09/2022
PLN-22-352	24 - 26 WELD STREET	SOUTH HOBART	Flood Mitigation Works, Stormwater Works, Associated Works in the Road Reserve and Signage	\$715,000	06/09/2022	smeea	Committee Delegation	12/08/2022	26/08/2022
PLN-22-268	95 LANSLOWNE CRESCENT	WEST HOBART	Partial Demolition, Alterations to Driveway and Outbuilding	\$40,000	15/09/2022	smeea	Director	22/08/2022	05/09/2022
PLN-22-493	66 BURNETT STREET	NORTH HOBART	Partial Change of Use to Visitor Accommodation	\$0	07/09/2022	smeea	Director	22/08/2022	05/09/2022

8.5 Delegated Decision Report (Planning)
File Ref: F22/87127

Memorandum of the Director City Life of 29 August 2022 and attachment.

Delegation: Committee



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

Delegated Decision Report (Planning)

Attached is the delegated planning decisions report for the period 16 August 2022 to 26 August 2022.

RECOMMENDATION

That:

- 1. That the information be received and noted.***

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Neil Noye
DIRECTOR CITY LIFE

Date: 29 August 2022
File Reference: F22/87127

Attachment A: Delegated Decision Report (Planning) ↓

29 August 2022

Delegated Decisions Report (Planning)

25 applications found.

Planning Description	Address	Works Value	Decision	Approved	All
				Authority	
PLN-20-534 Two Multiple Dwellings (One Existing, One New)	337 NELSON ROAD MOUNT NELSON TAS 7007	\$ 550,000	Approved	Delegated	
PLN-21-838 Two Multiple Dwellings (One Existing and One New)	426 MACQUARIE STREET SOUTH HOBART TAS 7004	\$ 300,000	Approved	Delegated	
PLN-22-126 Partial Demolition, Alterations and Extension	9 ASCOT AVENUE SANDY BAY TAS 7005	\$ 750,000	Approved	Delegated	
PLN-22-157 Change of Use to Business and Professional Services and Signage	199 DAVEY STREET SOUTH HOBART TAS 7004	\$ 5,000	Approved	Delegated	
PLN-22-182 Partial Demolition, Alterations, and Extension	5D ZOMAY AVENUE DYNMYRNE TAS 7005	\$ 250,000	Approved	Delegated	
PLN-22-213 Two Multiple Dwellings	548 NELSON ROAD MOUNT NELSON TAS 7007	\$ 890,000	Approved	Delegated	
PLN-22-307 Partial Demolition, Alterations, Extension, Ancillary Dwelling, and Front Fencing	2 PRINCES STREET SANDY BAY TAS 7005	\$ 250,000	Approved	Delegated	
PLN-22-351 Change of Use to Visitor Accommodation	2/31 POETS ROAD WEST HOBART TAS 7000	\$ 0	Approved	Delegated	
PLN-22-355 Partial Demolition, Alterations and Outbuilding	28 QUEEN STREET SANDY BAY TAS 7005	\$ 20,000	Approved	Delegated	
PLN-22-379 Partial Demolition, Alterations, and Extension	1/5A FITZROY PLACE SANDY BAY TAS 7005	\$ 200,000	Approved	Delegated	
PLN-22-396 Ancillary Dwelling	17 CLARENDON STREET NEW TOWN TAS 7008	\$ 150,000	Approved	Delegated	
PLN-22-398 Change of Use to Visitor Accommodation	14 SUN STREET HOBART TAS 7000	\$ 0	Approved	Delegated	
PLN-22-400 Partial Demolition, Alterations, Studio, Outbuilding, Driveway and Front Fencing	17B SUMMERHILL ROAD WEST HOBART TAS 7000	\$ 250,000	Approved	Delegated	
PLN-22-414 Alterations	500 NELSON ROAD MOUNT NELSON TAS 7007	\$ 20,000	Approved	Delegated	
PLN-22-435 Partial Demolition and Alterations	11 MARY STREET NORTH HOBART TAS 7000	\$ 20,000	Approved	Delegated	
PLN-22-437 Alterations (Solar Panels)	45 RUNNYMEDE STREET BATTERY POINT TAS 7004	\$ 8,000	Approved	Delegated	
PLN-22-461 Alterations	123 HAMPDEN ROAD BATTERY POINT TAS 7004	\$ 30,000	Approved	Delegated	
PLN-22-467 Change of Use to Visitor Accommodation	11 BEACH ROAD SANDY BAY TAS 7005	\$ 0	Approved	Delegated	
PLN-22-474 Partial Demolition and Alterations	71 NELSON ROAD SANDY BAY TAS 7005	\$ 350,000	Approved	Delegated	
PLN-22-489 Partial Change of Use to Visitor Accommodation	42-44 GEORGE STREET NORTH HOBART TAS 7000	\$ 0	Approved	Delegated	
PLN-22-497 Alterations (Umbrellas)	36 FORSTER STREET NEW TOWN TAS 7008	\$ 71,912	Approved	Delegated	
PLN-22-523 Change of Use to Visitor Accommodation	12 WAVERLEY AVENUE MOUNT STUART TAS 7000	\$ 0	Approved	Delegated	
PLN-22-530 Signage	144-160 MURRAY STREET HOBART TAS 7000	\$ 0	Approved	Delegated	
PLN-22-540 Demolition	42 DYNMYRNE ROAD DYNMYRNE TAS 7005	\$ 20,000	Approved	Delegated	

CITY OF HOBART

Planning Description	Address	Works Value	Decision	Authority
PLN-22-90 Pontoon and Gangway Adjacent to Elizabeth Street Pier	64/4 FRANKLIN WHARF HOBART TAS 7000	\$ 300,000	Approved	Delegated

9. RESPONSES TO QUESTIONS WITHOUT NOTICE

Regulation 29(3) *Local Government (Meeting Procedures) Regulations 2015*.
File Ref: 13-1-10

The Chief Executive Officer reports:-

"In accordance with the procedures approved in respect to Questions Without Notice, the following responses to questions taken on notice are provided to the Committee for information.

The Committee is reminded that in accordance with Regulation 29(3) of the *Local Government (Meeting Procedures) Regulations 2015*, the Chairman is not to allow discussion or debate on either the question or the response."

9.1 Cat-Free Areas**File Ref: F22/50405; 13-1-10**

Memorandum of the Director City Life of 15 August 2022.

9.2 COVID-19 Emergency Provisions**File Ref: F22/81275**

Memorandum of the Manager Legal and Governance of 30 August 2022.

That the information be received and noted.

Delegation: Committee



City of **HOBART**

**MEMORANDUM: LORD MAYOR
DEPUTY LORD MAYOR
ELECTED MEMBERS**

CAT-FREE AREAS

Meeting: City Planning Committee

Meeting date: 23 May 2022

Raised by: Councillor Harvey

Question:

Can the Director advise if Council has ever considered declaring all of our reserves cat free areas? And could we please do so?

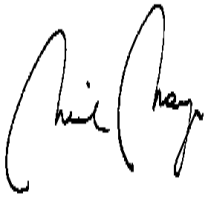
Response:

The Council has considered declaring Council reserves as prohibited areas under the *Cat Management Act 2009*. However, the declaration of areas as a prohibited area under the *Cat Management Act 2009* does not expand the range of measures available to the Council to manage feral cats. There is limited evidence available to officers that biodiversity values in Council's reserves are under threat by free-roaming domestic cats.

The declaration of areas as prohibited brings with it community expectation that Council will undertake compliance activity in response to any cat found in a prohibited area. This may include trapping, seizing, detaining or humanely destroying cats. The Council does not currently have sufficient resources to meet this expectation.

Under the *Cat Management Act 2009* all state reserves are prohibited areas. If Council wish to declare all Council reserves as cat prohibited areas, a more appropriate response would be to seek legislative amendment to extend the legislative provisions to include Council reserves.

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

A handwritten signature in black ink, appearing to read "Neil Noye". The signature is stylized with a large, looping "N" and a cursive "y".

Neil Noye
DIRECTOR CITY LIFE

Date: 15 August 2022
File Reference: F22/50405; 13-1-10



City of **HOBART**

**MEMORANDUM: LORD MAYOR
DEPUTY LORD MAYOR
ELECTED MEMBERS**

COVID-19 EMERGENCY PROVISIONS

Meeting: City Planning Committee

Meeting date: 8 August 2022

Raised by: Alderman Briscoe

Question:

Can the Director advise when the emergency provisions will cease under the *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020* and will this mean we cannot use Zoom for meetings?

Response:

The process for the Notice to cease that was issued under the *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020* in relation to the virtual attendance at Council meetings is as follows:

1. Director of Public Health advises the Premier that the emergency has ceased (S. 27 of COVID Act).
2. The Premier then has 90 days to declare the emergency cessation day.
3. The Notices allowing things such as remote meetings, electronic signatures and advertising etc cease 60 days after the emergency cessation day.

In short, there could be anywhere from 60 to 150 days before the notices cease from when the Director advises the Premier that the emergency has ceased.

LGAT has advised that the actions of the Director under point 1 above has yet to occur and so there is no change to the operation of the Notice under the legislation.

LGAT has also advised that there is work occurring on a Bill to incorporate things enabled through the legislation that it would be useful to continue beyond the acute phase of the pandemic. It's likely that consultation on that will occur and it would be open to suggest that virtual attendance at meetings be able to continue.

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

A handwritten signature in black ink, appearing to read 'Paul Jackson', with a stylized, flowing script.

Paul Jackson
**MANAGER LEGAL AND
GOVERNANCE**

Date: 30 August 2022
File Reference: F22/81275

10. CLOSED PORTION OF THE MEETING

That the Committee resolve by majority that the meeting be closed to the public pursuant to regulation 15(1) of the *Local Government (Meeting Procedures) Regulations 2015* because the items included on the closed agenda contain the following matters:

- Minutes of the Closed portion of the meeting
- Questions without notice in the Closed portion

The following items were discussed: -

- | | |
|------------|--|
| Item No. 1 | Minutes of the last meeting of the Closed Portion of the Committee Meeting |
| Item No. 2 | Consideration of supplementary items to the agenda |
| Item No. 3 | Indications of pecuniary and conflicts of interest |
| Item No. 4 | Questions Without Notice |