

PLAN 4

PLANNING APPLICATION PLN-20-0174

173 MARLBOROUGH STREET, LONGFORD

ATTACHMENTS

- A Application & plans, correspondence with applicant
- B Responses from referral agencies
- C Representations & applicant's response

1-340
PLANNING APPLICATION

Proposal

ATTACHMENT A

Description of proposal:

4 LOT SUBDIVISION

(attach additional sheets if necessary)

If applying for a subdivision which creates a new road, please supply three proposed names for the road, in order of preference:

1..... 2 N/A..... 3.....

Site address: 173 MARLBOROUGH ST, LONGFORD.

CT no: VOL 173613 Fol 2

Estimated cost of project \$20,000- (include cost of landscaping, car parks etc for commercial/industrial uses)

Are there any existing buildings on this property? ~~Yes~~ / No
If yes - main building is used as

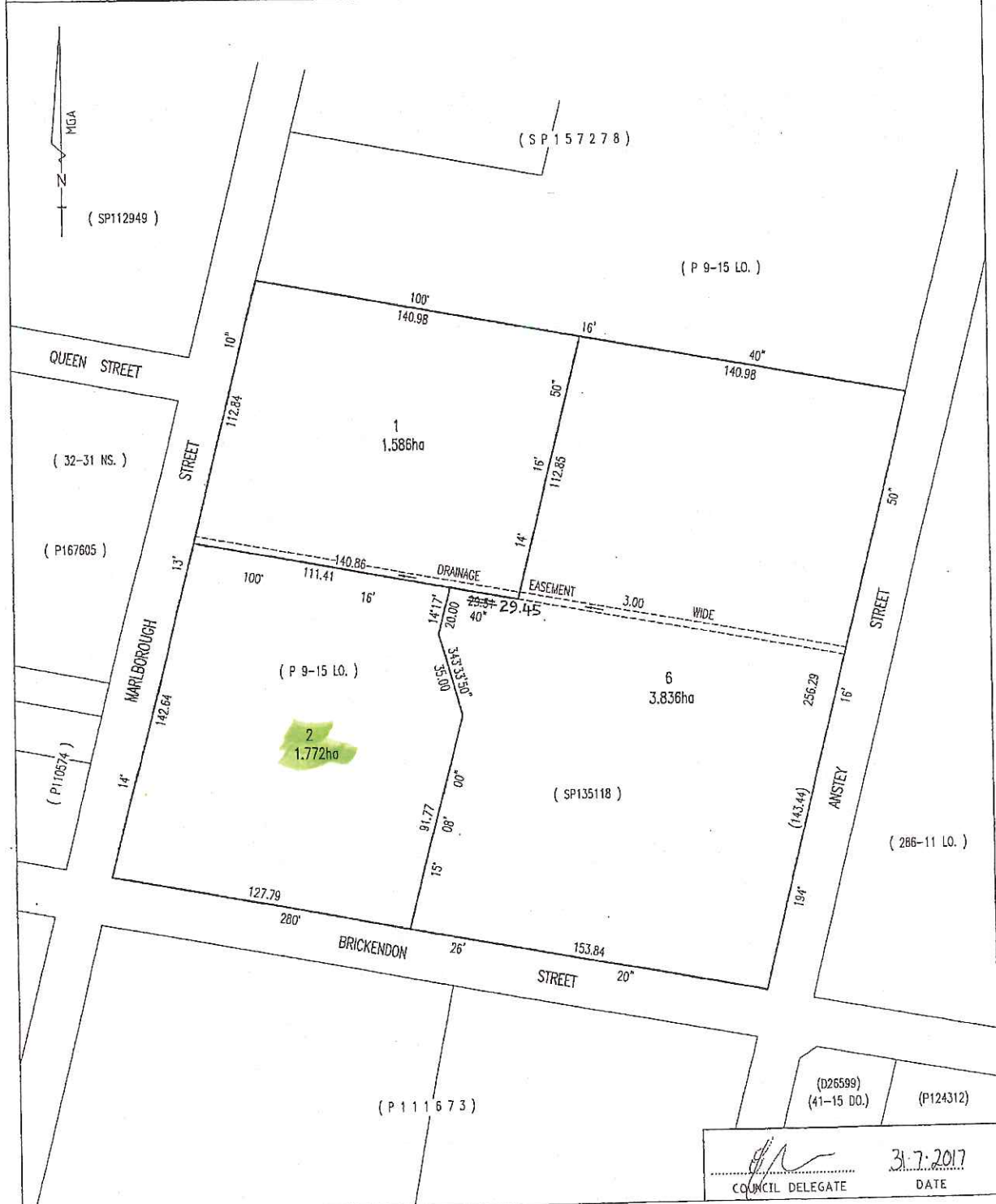
If variation to Planning Scheme provisions requested, justification to be provided:
NO

(attach additional sheets if necessary)

Is any signage required? NO (if yes, provide details)

EXHIBITED

OWNER G.E. & M.J. BLACKER		PLAN OF SURVEY BY SURVEYOR PAUL HODGETTS of MICHELL HODGETTS SURVEYORS 3 DOWLING STREET, LAUNCESTON, 7250 LOCATION TOWN OF LONGFORD Sec.II SCALE 1:1500 LENGTHS IN METRES		REGISTERED NUMBER SP173613
FOLIO REFERENCE F/R 135118-1, F/R 135118-2 F/R 135118-3 GRANTEE WHOLE OF LOT 3, Sec.II, 7.194ha GTD WALTER RODERICK LEAROYD & PAMELA MARY CLARK				APPROVED EFFECTIVE FROM 10 AUG 2017 <i>Alice Kawa</i> Recorder of Titles
MAPSHEET MUNICIPAL CODE No. 123 (5039-43)	LAST UPI No.	LAST PLAN No. SP-135118	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	



[Signature] 31.7.2017
 COUNCIL DELEGATE DATE

EXHIBITED

COMMERCIAL PROJECT DELIVERY

Project + Development + Construction Management



PO Box 210

Newstead TAS 7250

September 28, 2020

Planning Department
Northern Midlands Council
PO Box 156
Longford, TAS, 7301

Dear Erin

Response to RFI PLN-20-0174 – 173 Marlborough Street, Longford

Please see below a response to each of the matters outlined in the RFI dated 28th August 2020

- **Corrected application form** attached. Please note the plan has been amended to propose 4 lots in total.
- **Clause 12.4.3.1 P3 (a)**. Please see response to Clause 12.4.3.1 P3 (a) below:

It is submitted that for a small, infill subdivision as is proposed, that the cost of extending the sewer 250m across unsewered lots is unreasonable. The subdivision considered under *6ty° Pty Ltd v Northern Midlands Council [2019] TASRMPAT 29* was for 25 lots on what is essentially a greenfield site therefore the cost of servicing can be spread across a larger number of lots. The location of the site is such that connection to sewer by gravity is not possible and the cost for installing the pumping station alone would be in the order of \$300 000 with total development costs expected to be \$450 000. Given an expected net return on lots of \$120 000, it is not economically feasible to connect to services.

The permitted lot size under the Low Density Residential zone is 1ha so for a subdivision on the site to achieve the densities encouraged under the zone, it is never going to be feasible to connect to the sewer unless the site is zoned General Residential.

- **Balance lot connections and lot size.** The updated plan has this information now shown.
- **On-site wastewater report.** Please find attached an amended on-site wastewater report which considers the revised design and provides detail of the calculations for stormwater.
- **Clause 12.4.3.1 P4.**
The attached Stormwater Study prepared by Flussig Spatial addresses the requirements of Clause 12.4.3.1 P4. Specifically:
 - The study demonstrates that the discharge during a 1% AEP event differs by $0.018\text{m}^3/\text{s}$ from pre to post development.
 - The recommendations to ensure no difference between pre and post development flows are:
 - Onsite grassed swale drains for the 10min storm duration runoff.
 - Provide an Overland Flow Path to direct 1% runoff around the development site.

Appendix A of the report provides a Stormwater Concept Plan that enables the $0.018\text{m}^3/\text{s}$ additional discharge from the site to be retained on site. It is submitted that the report and plan should form part of the endorsed plans if considered necessary, the requirements reinforced by condition of permit.

- **Public Open Space Consent.** A letter to Council's General Manager requesting cash in lieu payment for public open space contribution is enclosed.

Yours faithfully



Chloe Lyne
Planning and Development Consultant
Commercial Project Delivery
Mobile: +61 (0)408 397 393
www.cpdelivery.com.au

Encl: New application form

Updated proposal plan

Updated On-site wastewater assessment

GM Consent request letter

Stormwater Study

1-345

COMMERCIAL PROJECT DELIVERY

Project + Development + Construction Management



PO Box 210

Newstead TAS 7250

September 28, 2020

Northern Midlands Council
P.O Box 156
Longford, TAS, 7301

Attn: Des Jennings

Dear Des

Consent for Cash in Lieu of Public Open Space – 173 Marlborough Street, Longford

I wish to formally request General Manager's Consent for payment of cash in lieu of public open space in accordance with Clause E10.6.1 A1 (a) in relation to a 4 lot subdivision at 173 Marlborough Street, Longford (proposal plan attached).

Yours faithfully

Chloe Lyne
Planning and Development Consultant
Commercial Project Delivery
Mobile: +61 (0)408 397 393
www.cpdelivery.com.au

PLEASE NOTE

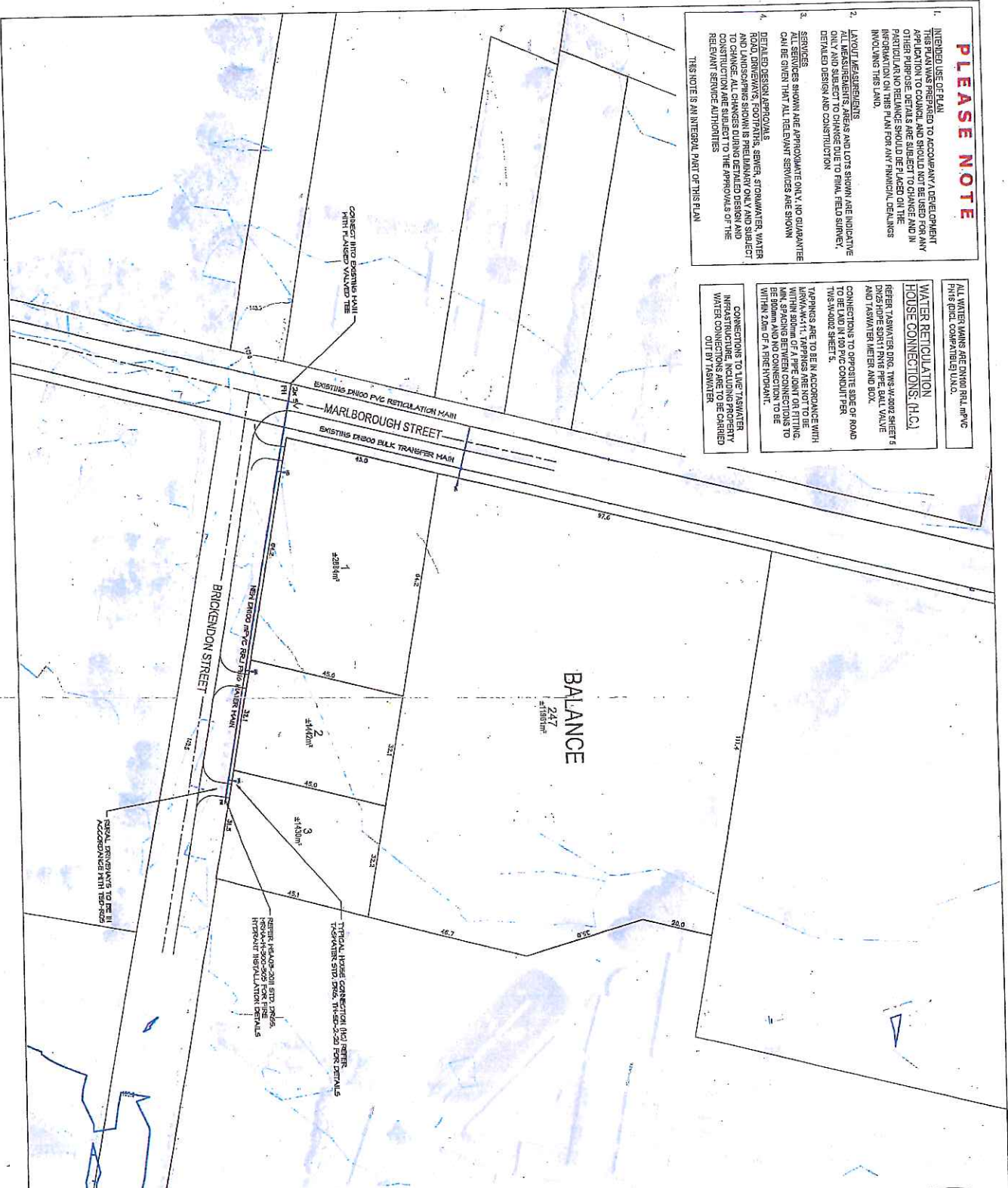
1. INTENDED USE OF PLAN: THIS PLAN WAS PREPARED TO ACCOMPANY A DEVELOPMENT APPLICATION TO COUNCIL AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. DETAILS ARE SUBJECT TO CHANGE AND IN PARTICULAR NO RELIANCE SHOULD BE PLACED ON ANY INFORMATION ON THIS PLAN FOR ANY FINANCIAL DEALINGS INVOLVING THIS LAND.
 2. LAYOUT MEASUREMENTS: ALL MEASUREMENTS, AREAS AND LOTS SHOWN ARE INDICATIVE ONLY AND SUBJECT TO CHANGE DUE TO FINAL FIELD SURVEY, DETAILED DESIGN AND CONSTRUCTION.
 3. SERVICES: SERVICES SHOWN ARE APPROXIMATE ONLY. NO GUARANTEE CAN BE GIVEN THAT ALL RELEVANT SERVICES ARE SHOWN.
 4. DETAILED DESIGN APPROVALS: ROAD, DRAINAGE, FLOODING, SEWER, STORMWATER, WATER SUPPLY AND GAS SERVICES ARE PRELIMINARY ONLY AND SUBJECT TO CHANGE. ALL CHANGES DURING DETAILED DESIGN AND CONSTRUCTION ARE SUBJECT TO THE APPROVALS OF THE RELEVANT SERVICE AUTHORITIES.
- THIS NOTE IS AN INTEGRAL PART OF THIS PLAN

ALL WATER MAINS ARE 2000 RHD 100 PVC
PVC DUCT, COMPATIBLE LUNO.

**WATER RETICULATION
HOUSE CONNECTIONS (H.C.)**
SEWER TANKWATER DRG. TWS-W-0002 SHEET 6
DN25 HOPE SPRING RIVE PIPE, BALL VALVE
AND TANKWATER METER AND BOX.
CONNECTIONS TO APPROPRIATE SIDE OF ROAD
TWS-W-0002 SHEET 5.

CONNECTIONS TO LIVE TANKWATER
INFRASTRUCTURE, INCLUDING PROPERTY
WATER CONNECTIONS, ARE TO BE CHANGED
OUT BY TANKWATER.

TANKWATER ARE TO BE IN ACCORDANCE WITH
TWS-W-0002 SHEET 5. ALL TANKWATER ARE TO BE
MARKED WITH 1.5 OF A PIPE LIGHT ON FITTING,
MIN. SPACING BETWEEN CONNECTIONS TO
BE 300MM AND NO CONNECTION TO BE
WITHIN 2000 OF FIRE HYDRANT.



AMENDMENT
COMPLIANT
WITH THE
DIVERSITY
OF THE
CITY

PRELIMINARY - NOT FOR CONSTRUCTION

Scale	1:1000
North Arrow	True North
Grid	2000 RHD 100 PVC
Sheet	1 of 1



PROPOSAL PLAN

145-172 MARLBOROUGH STREET
LONGFORD TAS
C. DIXON

DATE: 19.01.19

SCALE: 1:1000

PROJECT: 19,019

PLAN: P05

DATE: 19.01.19

SCALE: 1:1000

PROJECT: 19,019

PLAN: P05

EXHIBITED

AMENDED

pitt&sherry

Specialist Knowledge.
Practical Solutions.

20 September 2019

Chloe Lynn
Planning and Development Consultant
Commercial Property Delivery
Launceston TAS 7250.

(Revised 29 July 2020 re modified subdivision boundary)

Dear Chloe,

Re: Noise and Air Assessment – 145-172 Marlborough Street, Longford.

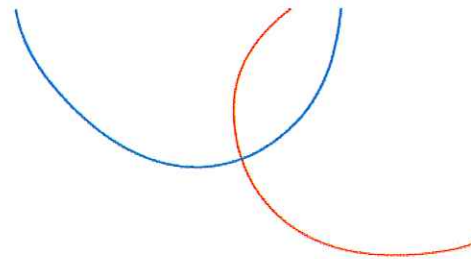
We have completed our assessment of the potential impact of noise and air emissions from the Austral Bricks brickworks at 15 Weston Street, Longford, on the proposed residential subdivision at 152-172 Marlborough Street, Longford.

The proposed subdivision is located diagonally across the Brickendon Street / Marlborough Street intersection, from the brickworks property. This puts it within the 200m attenuation distance for brickworks, specified in the attenuation code of the Northern Midlands Interim Planning Scheme 2013, triggering the requirement for a noise and air emissions assessment. The northern portion of the brickworks property is currently in use as pasture for horses, but the possibility exists that the brickworks operation could expand in the future, to utilise all of the block. The brickworks receives bulk clay deliveries and deliveries of bulk sawdust (which is used to fire the kilns) and dispatches palletised bricks. Heavy vehicle access is from Weston Street. The brickworks normally operates from Monday to Saturday, from 6am to 4pm, although operating hours may be extended during busy periods. Vehicle movements also vary seasonally, with more clay deliveries occurring during the summer months. Although most activities at the brickworks cease overnight and on Sundays, the ventilation and other systems associated with the brick kilns, remain operational 24 hours a day, 7 days a week.

Noise

The operation of the brickworks is required to comply with Environmental Protection Notice (EPN) 9568/1, issued to Austral Bricks by the Tasmanian Environmental Protection Agency, 30th May 2017. The EPN prescribes noise emissions limits for the operation. Noise emissions from the plant must not exceed 50 dB(A) between 0700 and 1800 and 45 dB(A) between 1800 and 0700, as measured at nearby noise sensitive premises. The nearest existing noise sensitive premises are residences, located at 214 and 241 Marlborough Street and 361 Cressy Road. These existing houses are all closer to the brickworks than the nearest lot in the proposed subdivision. 45 dB(A) corresponds to the guideline indicator level included in the Tasmanian Environmental Protection Policy (Noise) for avoiding sleep disturbance and 50 dB(A) to the indicator for avoiding "annoyance" for outdoor recreational activities.

A 10 minute long noise measurement was carried out, outside 241 Marlborough Street at 10:49 am on 13th September 2019, to check if the brickworks was meeting the EPN noise emissions limit. The noise measurement was made using a tripod mounted *Rion* NL-42 sound pressure meter. The weather was fine, overcast with a 7-14kmh breeze blowing from the north. Noise from the brickworks fans was audible along with reversing beepers, local and distant traffic noise, noise of the wind blowing in the trees and birds, horses and dogs. The total ambient noise level measured was 57.5 dB(A), expressed as an "Leq". An Leq can be thought of as the average noise level for a variable noise over a particular time period. This result includes a significant contribution from traffic driving past, close by on Marlborough Street. When the noise peaks corresponding to the vehicle movements were



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Newcastle
Devonport
Wagga Wagga



EXHIBITED

removed, the result reduced to 49.1 dB(A). It may be concluded that the brickworks was operating in compliance with the EPN at the time of the measurement. Note that even with the noise peaks from individual passing vehicles removed, the measured value still includes a significant contribution from wind noise and more distant traffic. The noise emissions just from the brickworks would be a few decibels lower. A night time measurement was not carried out for this noise assessment, but taking into account the other ambient noise present, this result suggests that the 45 dB(A) night time limit is also being met.

As all of the lots of the proposed subdivision are further away from the brickworks than the measurement position, the EPN limits would be being met at the locations of the proposed new residences. Should Austral Bricks plan to expand their operation onto the northern part of their property, they will need to include noise mitigation measures to ensure that the EPN limits continue to be met at the existing residences. This requirement would be assessed by the EPA as part the approval process for a plant expansion. This would also ensure that the limits would continue to be met at the subdivision's residences.



Figure 1 - Location of the Brickworks and the Proposed Subdivision (Base image from theList)

Dust

The brickworks' EPN requires that dust emissions must be controlled to the extent necessary to prevent environmental nuisance beyond the boundary of the property. The brickworks has the potential to generate some dust, mostly associated with the truck deliveries of sawdust and clay. The potential for dust from these activities to cross the plant property boundary and affect the proposed subdivision is mitigated by a number of factors. These include:

- All vehicle access is via Weston Road, which is on the far side of the brickworks, about 450m from the nearest proposed residence. This separation distant along, with the plant buildings, the trees and other vegetation on the northern side of the plant, provide a barrier to the transmission of off the site.

EXHIBITED

- Both sawdust and clay are mostly stored under cover and are only stored externally when the under-cover storage areas are full.
- Both products are sufficiently moist to present a minimal dust raising risk.
- The finished product storage area, carparks and main access roads are sealed. Onsite gravel roads are kept moist by rainfall or are watered if necessary to suppress dust generation.
- As part of its environmental management procedures and to ensure compliance with its EPN, the brickworks actively monitors dust generation from all vehicles or fixed plant operations on site, and takes immediate action to suppress dust generation if and when required.

With these control measures in place, it is considered that dust emissions are highly unlikely to extend beyond the brickworks property boundary and adversely affect the proposed subdivision.

Air Emissions

The brickworks kilns are heated by combustion of sawdust, with supplementary heating using natural gas. Exhaust combustion gasses (including carbon monoxide, oxides of nitrogen and sulphur, hydrogen chloride, fluorine compounds and sulphuric acid mist and fine solid particulates) are discharged to air through three main stacks located on the main process building. The stacks are equipped with pollution control equipment to limit the concentration of pollutants in the exhaust gasses.

The brickworks' EPN provides detailed requirements for air emissions control equipment, regular annual stack testing and regular reporting to the EPA. This ensures that all air emissions comply with the requirements of the Tasmanian Environmental Protection Policy (Air) which specifies regulatory limits for emission levels of all airborne pollutants that may have an adverse impact on health. These control measures were reviewed and approved by the EPA with the objective of protecting the general community, including the existing houses on Marlborough and Brickendon Street, which are closer to the plant than the proposed subdivision. With these control measures in place, particularly the ongoing regular reporting and review by the EPA, it is unlikely that air emissions will have any impact on residents of the proposed subdivision.

Conclusion

On this basis it may be concluded that residents of the proposed subdivision will not be exposed to unacceptable environmental harm or environmental nuisance, as a result of noise, dust or air emissions from the brickworks. It may also be concluded that construction of the proposed subdivision will not impose any new compliance burden on the operation of the brickworks, relating to management of emissions.

Please do not hesitate to contact me should you have any queries regarding this noise assessment.

Yours sincerely



Douglas Ford CPEng RPEQ 21624
Senior Mechanical Engineer / Noise and Air Specialist

EXHIBITED

Amended
19.10.20

1-351

Bushfire Hazard Management Report: Subdivision

Report for: CP& PC Dixon

Property Location: 173 Marlborough Street, Longford

Prepared by: Scott Livingston
Livingston Natural Resource Services
12 Powers Road
Underwood, 7268

Date: 1st September 2020
Version 3

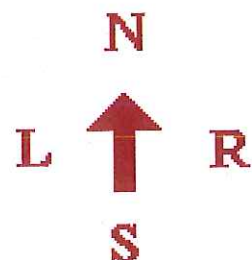


EXHIBIT E

Summary

Client: CP & PC Dixon

**Property
identification:**

Current zoning: Low Density Residential, Northern Midlands Interim
Planning Scheme 2013

CT 157278/2, PID 2018212, 173 Marlborough St Longford

Proposal:

A 4 lot subdivision is proposed from existing title CT 157278/2, 173
Marlborough St Longford.

**Assessment
comments:**

A field inspection of the site was conducted to determine the Bushfire Risk
and Attack Level.

**Assessment
by:**



Scott Livingston,
Master Environmental Management,
Natural Resource Management Consultant.
Accredited Person under part 4A of the Fire Service Act 1979:
Accreditation # BFP-105.

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CERTIFICATE UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS
ACT 1993 16

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EXHIBITED

DESCRIPTION

This report and BHMP supersedes BHMP SRL20/32S2, date 8/7/2020.

A 4 lot subdivision is proposed from existing title CT 157278/2, 173 Marlborough St Longford. The subdivision and surrounding land are mapped as bushfire prone in Planning Scheme overlays.

The property is pasture and contains no existing dwellings. Land to the north is large low density residential zoned lots, containing pasture used for grazing with some tree belts. Land to the east, south and west is low density residential land containing a mosaic of low threat land and pasture.

The subdivision fronts Marlborough and Brickendon Streets. The area is serviced by a water reticulated supply.

See Appendix 1 for maps and site plan, and appendix 2 for photographs.

BAL AND RISK ASSESSMENT

The land is considered to be within a Bushfire Prone Area due to proximity of bushfire prone vegetation to the west, south and east greater than 1 ha in area.

VEGETATION AND SLOPE

	North	East	South	West	
Slope (degrees, over 100m)	Flat /upslope	Flat /upslope	Flat /upslope	Down slope 0-5°	
	Vegetation, within 100m of Lot boundaries				Lot BAL Rating
Lots 1-3	0-100m grassland (balance lot)	0-100m low threat inc road	0-20m low threat (road), 80-100m grassland	0->70m low threat inc road, >70-100m grassland	BAL 19 /BAL 12.5
BAL at boundary	BAL FZ	not bushfire prone	BAL 12.5	BAL Low	
BAL with HMA and setbacks	BAL 19 /BAL 12.5	BAL Low	BAL 12.5	BAL Low	

Balance lot	0-100m grassland	0-100m low threat	0-45m lots 1-4, low threat#, 45-65m road, 65-100m grassland.	0-60m low threat inc road	BAL 19 /BAL 12.5
BAL at boundary	BAL FZ	not bushfire prone	BAL Low	BAL Low	

EXHIBITED

BAL with HMA and setbacks	BAL 19 /BAL 12.5	BAL Low	BAL Low	BAL Low	
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assumes management on Lots 1-4

BUILDING AREA BAL RATING

Setback distances for BAL Ratings have been calculated based on the vegetation that will exist after development and management of land within the subdivision and have also considered slope gradients. Where no setback is required for fire protection other Planning Scheme setbacks may need to be applied, other building constraints such as topography have not been considered.

The BAL ratings applied are in accordance with the Australian Standard AS3959-2009, *Construction of Buildings in Bushfire Prone Areas*, and it is a requirement that any habitable building, or building within 6m of a habitable building be constructed to the BAL ratings specified in this document as a minimum.

Bushfire Attack Level (BAL)	Predicted Bushfire Attack & Exposure Level
BAL-Low	Insufficient risk to warrant specific construction requirements
BAL-12.5	Ember attack, radiant heat below 12.5kW/m ²
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m ²
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m ²
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m ²
BAL-FZ	Direct exposure to flames radiant heat and embers from the fire front

BUILDING SETBACKS

BAL	Slope	Grassland
BAL Low	All slopes	50m
BAL 12.5	Flat/ Upslope	14m
	Down slope 0-5°	16m
BAL 19	Flat/ Upslope	10m
	Down slope 0-5°	11m

PROPOSED LOT BAL RATING

The setbacks shown below assume hazard management on adjacent lots of the subdivision as per this report and BHMP. If the balance lot was managed as low threat for a distance of 50m from a habitable building it and small portions of Lots 1-4 would have building areas at BAL Low. Future fuel management changes to lots south of Brickendon St may also reduce BAL ratings.

EXHIBITED

Lot	BAL Rating	Setback requirements
1 - 3	BAL 12.5	14m from northern boundary
	BAL 19	10m from northern boundary
Balance lot	BAL 12.5	14m from northern and southern boundaries
	BAL 19	10m from northern and southern boundaries

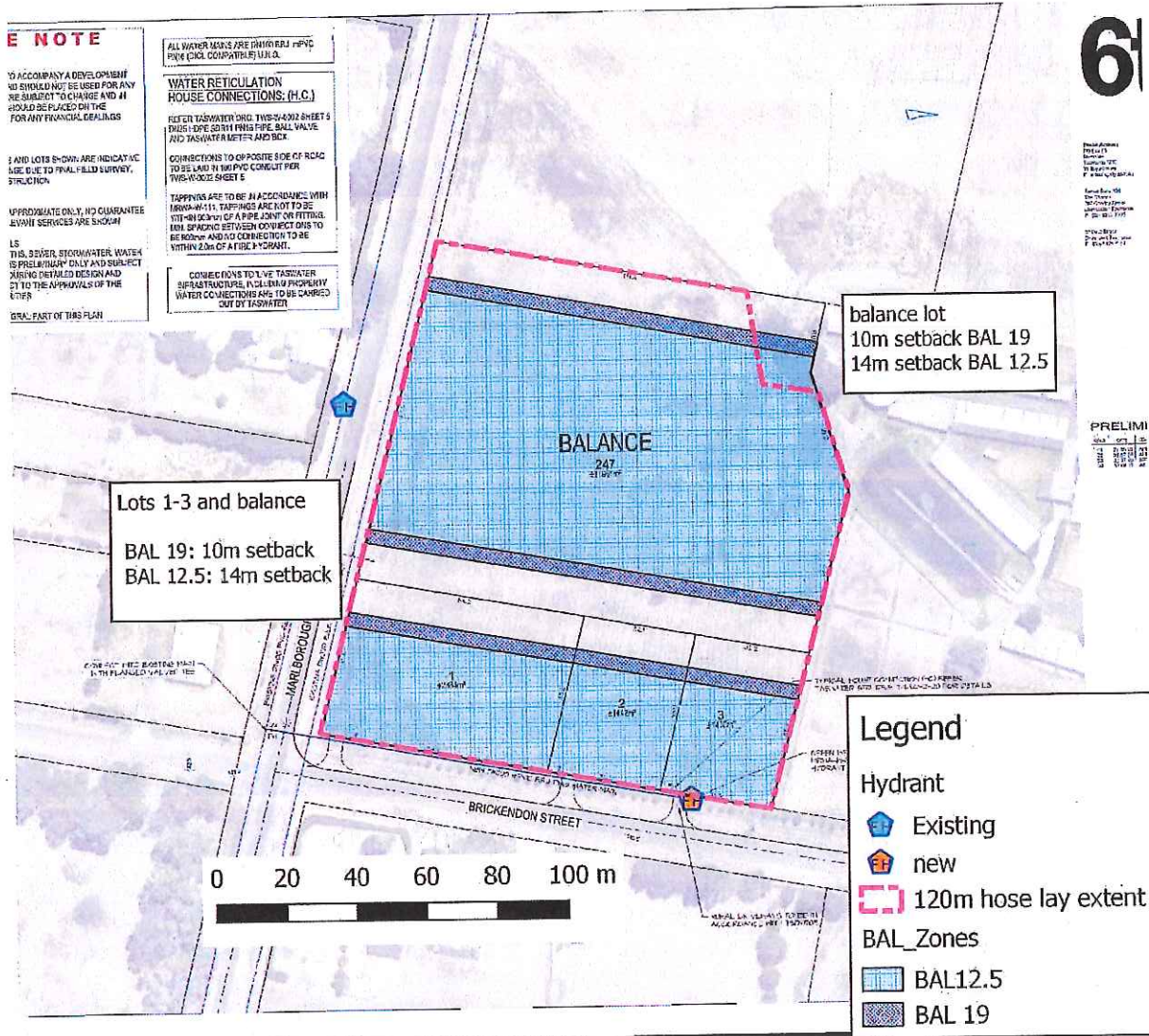


Figure 1: Proposed Lots and building areas

HAZARD MANAGEMENT AREA: STAGED DEVELOPMENT

All land within the subdivision lots 1-3 and within 14m of a lot where construction of a habitable building is to occur must be managed as low threat vegetation from commencement of construction of a habitable building on any of lots 1-4. The owner of a lot is responsible for management of vegetation within a lot.

EXHIBITED

All and within the subdivision and within 10m if BAL 19 construction and 14m if BAL 12.5 construction of a habitable building on the balance lot must be managed as low threat vegetation from commencement of construction of that habitable building.

Low threat vegetation, includes maintained lawns (<100mm in height), gardens and orchards.

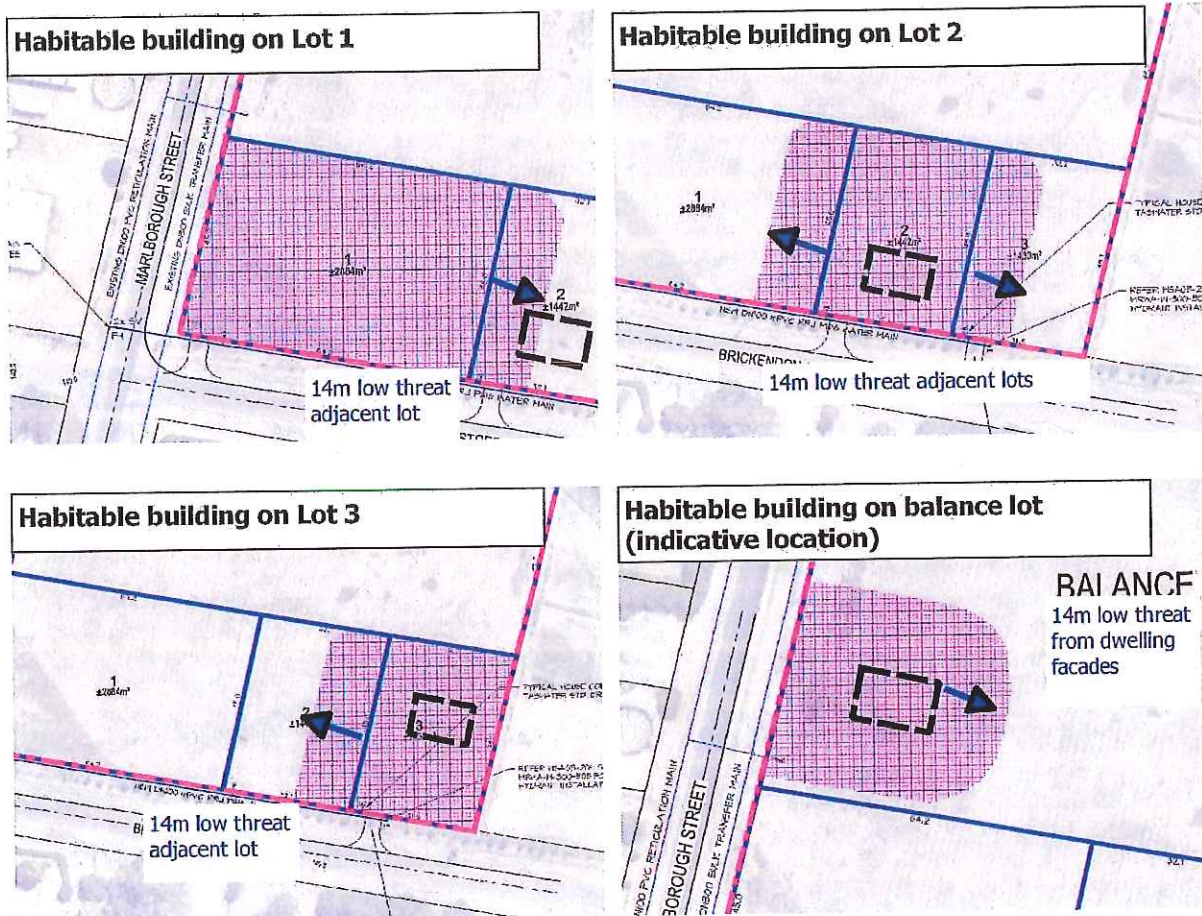


Figure 2: Staged Hazard Management examples

EXHIBITED

ROADS

No subdivision roads are required with all lots having frontage to Marlborough or Brickendon Streets.

PROPERTY ACCESS

No access is required to water supply points, access to Lot 1-3 buildings is unlikely to exceed 30m. Access to habitable building constructed on the balance lot may exceed 30m and be required to meet the standards of the relevant elements of Table E2 Access of Planning Directive No. 5.1 Bushfire-Prone Areas Code.

Table E2: Standards for Property Access

Column 1 Element	Column Requirement
A. Property access length is less than 30 metres; or access is not required for a fire appliance to access a water connection point.	There are no specified design and construction requirements.

<p>B. Property access length is 30 metres or greater; or access for a fire appliance to a water connection point.</p>	<p>The following design and construction requirements apply to property access:</p> <ol style="list-style-type: none"> (1) All-weather construction; (2) Load capacity of at least 20 tonnes, including for bridges and culverts; (3) Minimum carriageway width of 4 metres; (4) Minimum vertical clearance of 4 metres; (5) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway; (6) Cross falls of less than 3 degrees (1:20 or 5%); (7) Dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (8) Curves with a minimum inner radius of 10 metres; (9) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and (10) Terminate with a turning area for fire appliances provided by one of the following: <ol style="list-style-type: none"> (a) A turning circle with a minimum inner radius of 10 metres; or (b) A property access encircling the building; or (c) A hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.
<p>C. Property access length is 200 metres or greater.</p>	<p>The following design and construction requirements apply to property access:</p> <ol style="list-style-type: none"> (1) The Requirements for B above; and (2) Passing bays of 2 metres additional carriageway width and 20 metres length provided every 200
<p>D. Property access length is greater than 30 metres, and access is provided to 3 or more properties.</p>	<p>The following design and construction requirements apply to property access:</p> <ol style="list-style-type: none"> (1) Complies with Requirements for B above; and (2) Passing bays of 2 metres additional carriageway width and 20 metres length must be provided every 100 metres.

9551-1

FIRE FIGHTING WATER SUPPLY

The subdivision is serviced by a reticulated supply. Lots are substantially within 120m of existing hydrants located on Marlborough Street or proposed hydrant on Brickendon Street. A small portion of the northern corn of the balance lot is greater than 120m from these hydrants, however it is unlikely a habitable building will be constructed in that area unless further subdivision occurs.

EXHIBITED

New hydrants must meet the requirements of Table 4 of Directive No. 5.1 Bushfire-Prone Areas Code. Where the furthest extents of any habitable buildings on the balance lot are greater than 120m from a hydrant, static water supplies must be installed prior to construction that meet the requirements of Table E5 of Planning Directive No. 5.1 Bushfire-Prone Areas Code.

Table E4 Reticulated water supply for fire fighting

Element	Requirement
A. Distance between building area to be protected and water supply.	<p>The following requirements apply:</p> <ul style="list-style-type: none"> (a) the building area to be protected must be located within 120m of a fire hydrant; and (b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B. Design criteria for fire hydrants	<p>The following requirements apply:</p> <ul style="list-style-type: none"> (a) fire hydrant system must be designed and constructed in accordance with <i>TasWater Supplement to Water Supply Code of Australia WSA 03 – 2011-3.1 MRWA 2nd Edition</i>; and (b) fire hydrants are not installed in parking areas.
C. Hardstand	<p>A hardstand area for fire appliances must be:</p> <ul style="list-style-type: none"> (a) no more than 3m from the hydrant, measured as a hose lay; (b) no closer than 6m from the building area to be protected; (c) a minimum width of 3m constructed to the same standard as the carriageway; and (d) connected to the property access by a carriageway equivalent to the standard of the property access.

1-360

EXHIBIT E1

CONCLUSIONS

A 4 lot subdivision is proposed from existing title CT 157278/2, 173 Marlborough St Longford. The subdivision and surrounding land is mapped as bushfire prone in Planning Scheme overlays.

There is sufficient area on all lot to provide for a BAL 19 or lower for any future habitable dwellings. Land within the subdivision and adjacent to lots that have habitable buildings constructed must be managed as low threat in accordance with this report and BHMP. Provided hazard management on adjoining lots is undertaken staged development on lots will not affect BAL Ratings of any lot.

Access to and habitable building on the balance lot may be required to comply with the relevant elements of Table E2 Access of Planning Directive No. 5.1 Bushfire-Prone Areas Code.

The subdivision is serviced by a reticulated supply with an additional hydrant proposed on Brickendon Street. New hydrants must meet the requirements of Table 4 of Directive No. 5.1 Bushfire-Prone Areas Code.

Where the furthest extents of any habitable buildings are greater than 120m from an existing or new hydrant, static water supplies must be installed prior to commencement of construction that meet the requirements of Table E5 of Planning Directive No. 5.1 Bushfire-Prone Areas Code.

REFERENCES

Planning Commission (2017), Planning Directive No. 5.1 Bushfire-Prone Areas Code.

Standards Australia. (2009). *AS 3959-2009 Construction of Buildings in Bushfire Prone Areas*

APPENDIX 1 – MAPS

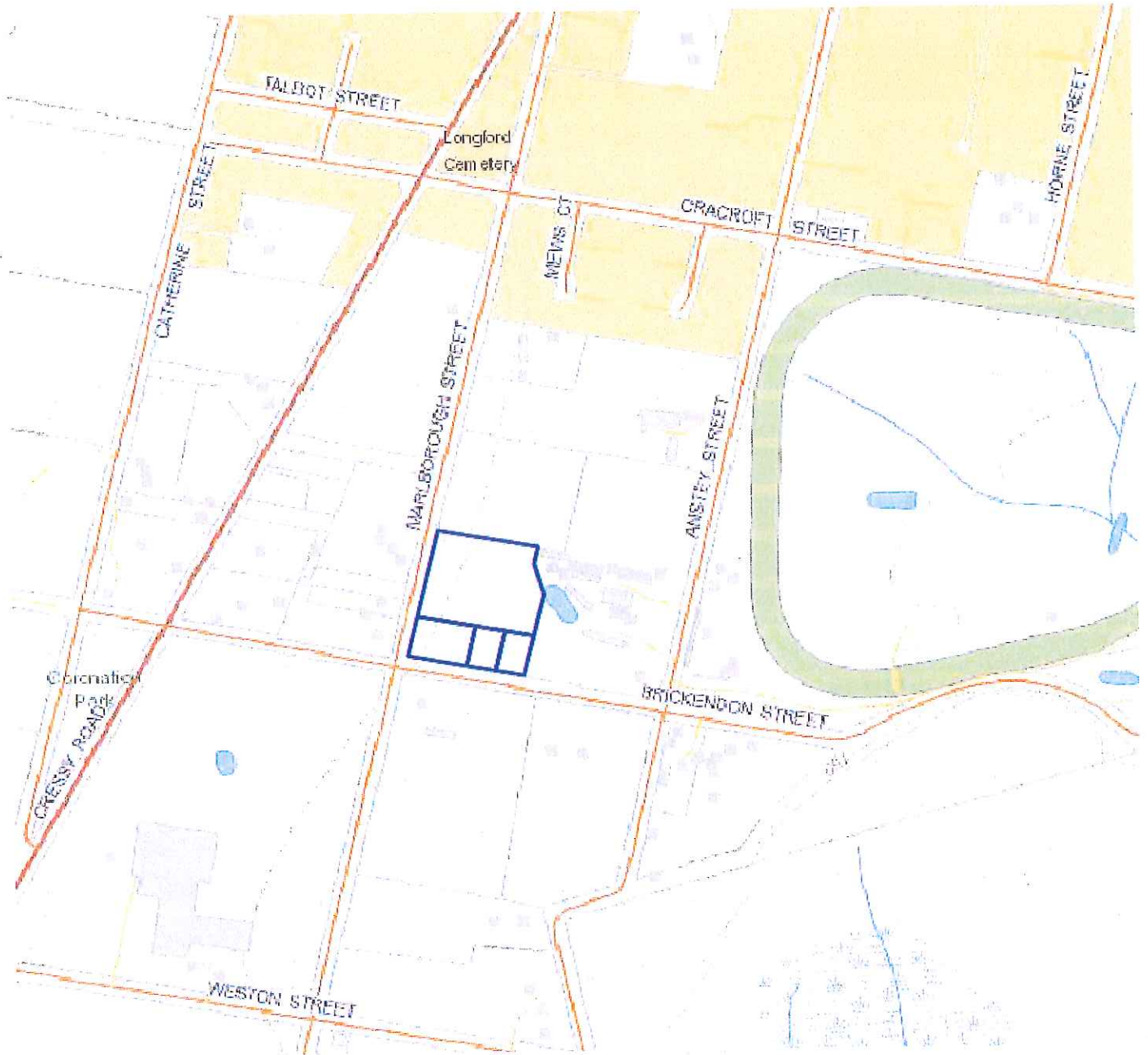


Figure 3: Location proposed lots in blue

EXHIBITED



Figure 4: Aerial Image

EXHIBITED

Figure 5: Proposed Subdivision Plan



Don't Run Down

Tasmanian Natural Resources Commission



Figure 6: south along Marlborough St from north of the subdivision



Figure 7: SW of Marlborough and Brickendon Sts

EXHIBITED



Figure 8: grassland south of Brickendon St

EXHIBITED

Bushfire Hazard Management Plan:

E NOTE

1. ALL INFORMATION AND DOCUMENTS ARE THE PROPERTY OF THE CLIENT AND ARE NOT TO BE REPRODUCED OR DISTRIBUTED WITHOUT THE WRITTEN CONSENT OF THE CLIENT.

2. THE CLIENT IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE CONSULTANT.

3. THE CONSULTANT HAS CONDUCTED VISUAL INSPECTIONS OF THE SITE AND HAS TAKEN REASONABLE CARE TO OBTAIN ALL NECESSARY INFORMATION TO PREPARE THIS PLAN.

4. THIS PLAN IS A PRELIMINARY DESIGN AND IS SUBJECT TO CHANGE WITHOUT NOTICE.

5. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE RELEVANT AUTHORITIES.

6. THE CONSULTANT'S LIABILITY IS LIMITED TO THE SERVICES PROVIDED AND DOES NOT EXTEND TO ANY OTHER DAMAGES OR LOSSES.

7. THE CLIENT SHALL BE RESPONSIBLE FOR THE COST OF ANY MATERIALS AND LABOUR NOT SPECIFIED IN THIS PLAN.

8. THE CONSULTANT'S SERVICES ARE PROVIDED ON AN "AS IS" BASIS AND WITHOUT WARRANTY.

9. THE CLIENT SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND SERVICES UNDERGROUND AND ABOVEGROUND.

10. THE CONSULTANT HAS NOT CONDUCTED ANY TESTING OR ANALYSIS OF THE SOIL OR ROCK CONDITIONS AT THE SITE.

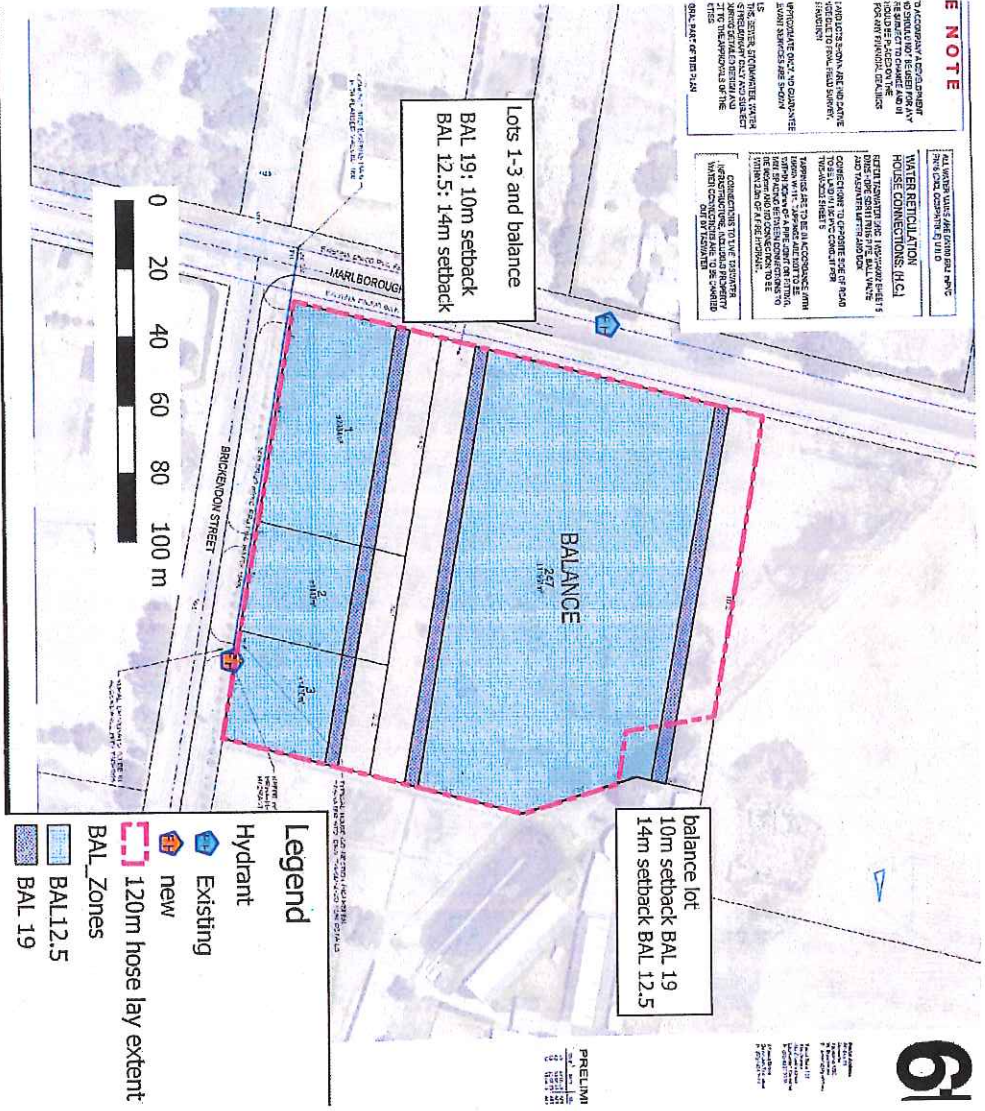
11. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION TO PREPARE THIS PLAN.

12. THE CONSULTANT'S LIABILITY IS LIMITED TO THE SERVICES PROVIDED AND DOES NOT EXTEND TO ANY OTHER DAMAGES OR LOSSES.

13. THE CLIENT SHALL BE RESPONSIBLE FOR THE COST OF ANY MATERIALS AND LABOUR NOT SPECIFIED IN THIS PLAN.

14. THE CONSULTANT'S SERVICES ARE PROVIDED ON AN "AS IS" BASIS AND WITHOUT WARRANTY.

15. THE CLIENT SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND SERVICES UNDERGROUND AND ABOVEGROUND.



This BHMP has been prepared to satisfy the requirements of the Northern Midlands Planning Scheme, 2013 and Planning Directive No. 5.1 Bushfire-Prone Areas Code.

This plan should be read in conjunction with the report titled: Bushfire Hazard Management Report CT 173613-2, 173 Marlborough St Longford v3, Livingston Natural Resource Services

Proposed Development	Subdivision, 4 lots from 1 lot.
Plan of Subdivision	6TY Pty Ltd Proposal Plan POS C, 31/8/2020
Property Owner	New Norfolk Hotels Pty Ltd, Zeekap (no 102) Pty Ltd
Address	173 Marlborough St, Longford, 7301
CT	CT 173613-2
PID	2018212

Lot	BAL Rating	Setback requirements
1 - 3	BAL 12.5	14m from northern boundary
	BAL 19	10m from northern boundary
Balance lot	BAL 12.5	14m from northern and southern boundary
	BAL 19	10m from northern and southern boundary

Construction: BAL 12.5, BAL 19 as shown

Buildings in Bushfire Prone Area to be built in accordance with the Building Code of Australia and Australian Standard AS3959.

Building setbacks / BAL ratings apply to habitable buildings (Class 1, 2, 3, 8 or 9) and class 10a buildings within 6m of a habitable building

Scott Livingston
 Accreditation: BFP - 105: 1, 2, 3A, 3B, 3C
 Date 1/9/2020
 SRL20/3253

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[Signature]

Hazard Management Areas (HMA)

Hazard management areas include the area to protect the buildings as well as the access and water supplies.

All land within the subdivision lots 1-4 and within 14m of a lot where construction of a habitable building is to occur must be managed as low threat vegetation form commencement of construction of a habitable building on any of lots 1-4. The owner of a lot is responsible for management of vegetation within a lot.

All land within the subdivision and within 10m if BAL 19 construction and 14m if BAL 12.5 construction of a habitable building on the balance lot must be managed as low threat vegetation form commencement of construction of that habitable building.

Low threat vegetation, includes maintained lawns (<100mm in height), gardens and orchards

Water Supply

The subdivision will be serviced by a reticulated supply, an additional hydrant must be installed in the vicinity of the access to lot 4 is shown on subdivision plans, and must be to the standards shown below:

The building area to be protected must be located within 120 metres of a fire hydrant and the distance must be measured as a hose lay, between the water connection point and the furthest part of the building area.

Additional Hydrants must comply with

a. Fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia MSA 03 – 2011.3.1 MRWA Edition 2.0; and

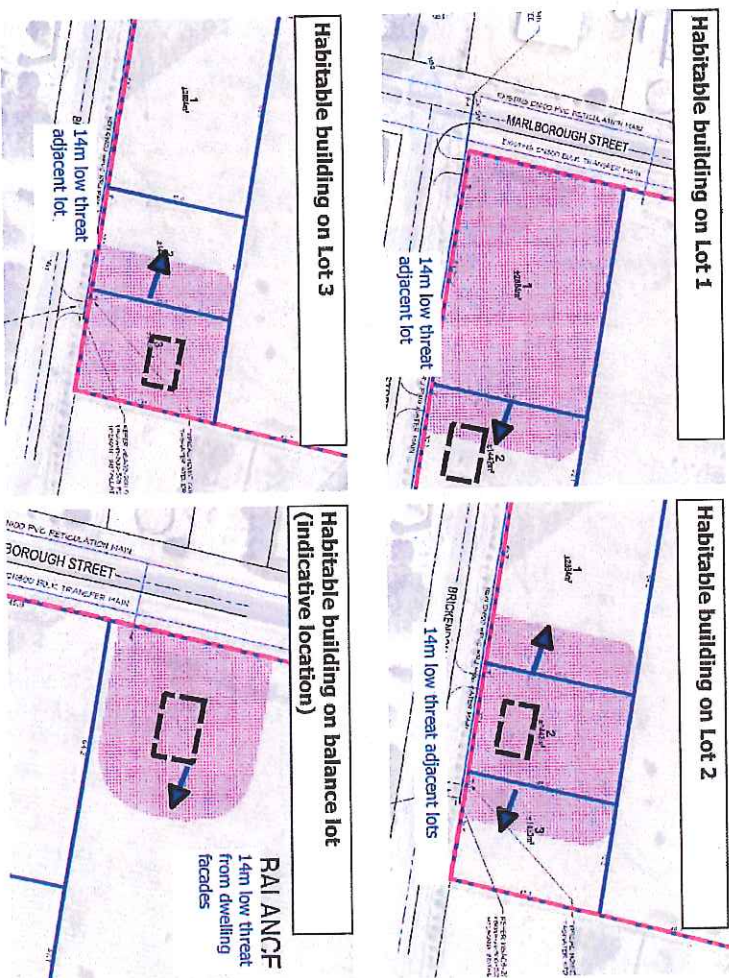
- A handstand area for fire appliances must be provided:
- Fire hydrants are not installed in parking areas
 - Fire hydrants are not installed in parking areas
 - no more than 3m from the hydrant, measured as a hose lay;
 - No closer than six metres from the building area to be protected;
 - With a minimum width of three metres constructed to the same standard as the carriage way; and
 - Connected to the property access by a carriage way equivalent to the standard of the property access

Access

If property access exceeds 30m to a to habitable buildings and or water supply point it must be constructed to

- All-weather construction;
- Load capacity of at least 20 tonnes, including for bridges and culverts;
- Minimum carriage way width of 4m;
- Minimum vertical clearance of 4m;
- Minimum horizontal clearance of 0.5m from the edge of the carriage way;
- Cross falls of less than 3° (1:20 or 5%)
- Dips less than 7° (1:8 or 12.5%)
- Curves with a minimum inner radius of 10m;
- Maximum gradient of 15° (1:3.5 or 28%) for sealed roads, and 10° (1:5.5 or 18%) for unsealed road; and
- Terminate with a turning area for fire appliances provided by one of the following:
 - A turning circle with a minimum inner radius of 10m;
 - A property access encircling the building; or
 - A hammerhead "T" or "Y" turning head 4m wide and 8m long

Example staged Hazard Management



BUSHFIRE-PRONE AREAS CODE**CERTIFICATE¹ UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993****1. Land to which certificate applies**

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:

173 Marlborough St Longford

Certificate of Title / PID:

CT 173613/2, PID 2018212

2. Proposed Use or Development

Description of proposed Use and Development:

4 lot subdivision from 1 existing title

Applicable Planning Scheme:

Northern Midlands Interim Planning Scheme 2013

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Management Report, CT 173613-2, 173 Marlborough St Longford v2	Scott Livingston	1/9/2020	3
Bushfire Hazard Management Plan, CT 173613-2, 173 Marlborough St Longford v2	Scott Livingston	1/9/2020	3
Proposal Plan	Woolcott Surveys	31/8/2020	PO5 C

4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

<input type="checkbox"/>	E1.4 / C13.4 – Use or development exempt from this Code	
	Compliance test	Compliance Requirement
<input type="checkbox"/>	E1.4(a) / C13.4.1(a)	Insufficient increase in risk

<input type="checkbox"/>	E1.5.1 / C13.5.1 – Vulnerable Uses	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.5.1 P1 / C13.5.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.5.1 A2 / C13.5.1 A2	Emergency management strategy
<input type="checkbox"/>	E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan

<input type="checkbox"/>	E1.5.2 / C13.5.2 – Hazardous Uses	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.5.2 P1 / C13.5.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
<input type="checkbox"/>	E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

<input checked="" type="checkbox"/>	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
<input type="checkbox"/>	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement

<input type="checkbox"/>	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access	
	Acceptable Solution	Compliance Requirement

<input type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables,

<input type="checkbox"/> E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes		
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective


5. Bushfire Hazard Practitioner

Name:	Scott Livingston	Phone No:	0438 951 021
Postal Address:	12 Powers Road	Email Address:	scottlivingston.lmra@gmail.com
Accreditation No:	BFP - 105	Scope:	1, 2, 3A, 3B, 3C

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

- Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or
- The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed: <i>certifier</i>			
Name:	Scott Livingston	Date:	1/9/2020
		Certificate Number:	SRL 20/32S3

(for Practitioner Use only)

EXHIBITED

Form **55**

To: Owner /Agent
 Address
 Suburb/postcod.

Qualified person details:

Qualified person:
 Address:
 Phone No:
 Fax No:
 Licence No: Email address:

Qualifications and Insurance details: (description from Column 3 of the Director of Building Control's Determination)

Speciality area of expertise: (description from Column 4 of the Director of Building Control's Determination)

Details of work:

Address: Lot No:
 Certificate of title No:

The assessable item related to this certificate: (description of the assessable item being certified)
 Assessable item includes –
 - a material;
 - a design
 - a form of construction
 - a document
 - testing of a component, building system or plumbing system
 - an inspection, or assessment, performed

Certificate details:

Certificate type: (description from Column 1 of Schedule 1 of the Director of Building Control's Determination)

This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)
 building work, plumbing work or plumbing installation or demolition work:
 or
 a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

EXHIBITED

Documents:

- Bushfire Attack Level Assessment & Report

Relevant calculations:

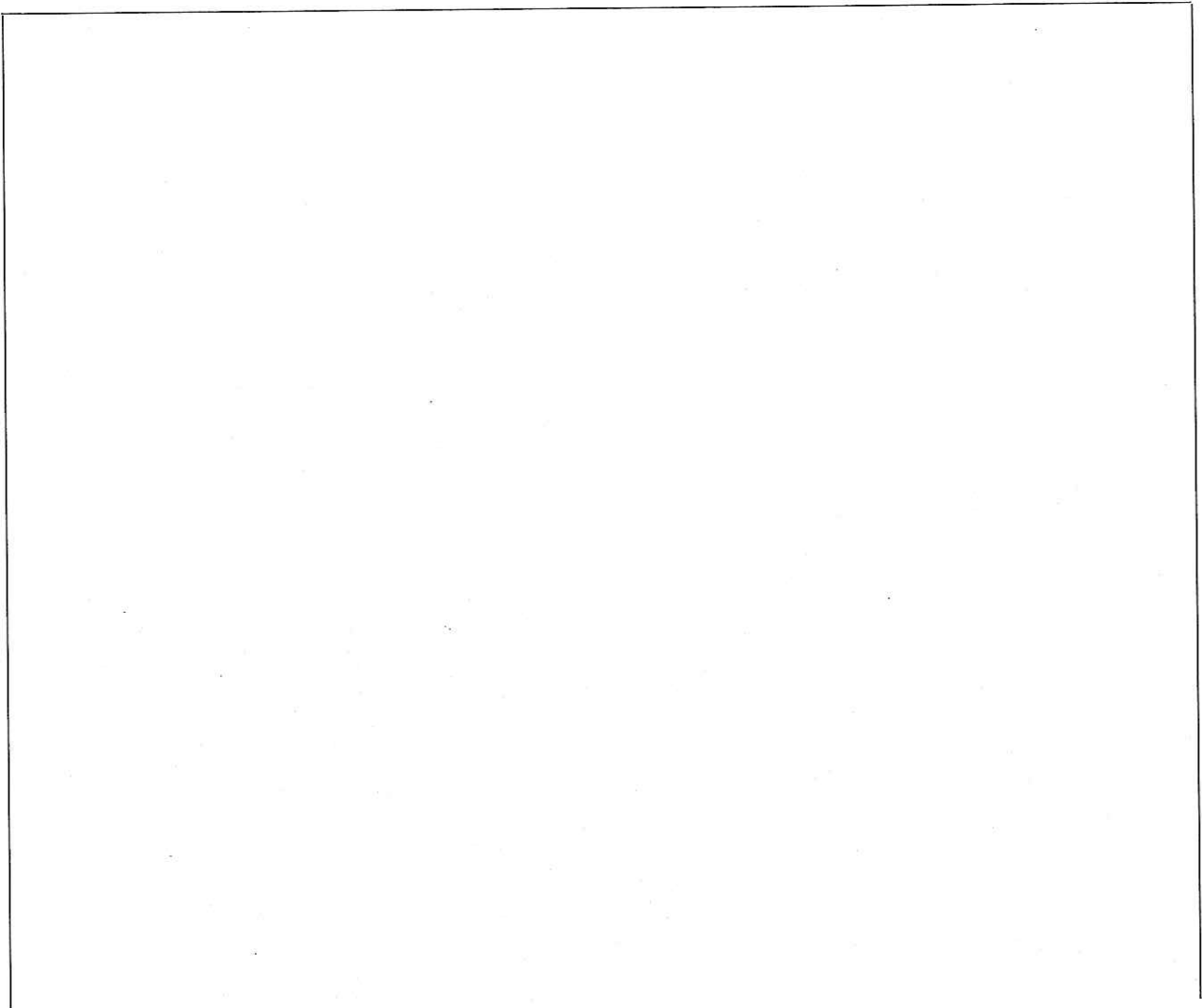
BAL19, BAL 12.5,

References:

- Australian Standard 3959
- Planning Directive No.5.1
- Building Amendment Regulations 2016
- Director of Building Control, Determinations
- Guidelines for development in bushfire prone areas of Tasmania

1-375

Substance of Certificate: (what it is that is being certified)



EXHIBITED

1. Assessment of the site Bushfire Attack Level (BAL) to Australian Standards 3959

Assessed as BAL 12.5, BAL 19

Proposal is compliant with DTS requirements, clauses 4.1, 4.2, 4.3 & 4.4 Directors Determination Requirements for Building in Bushfire Prone Areas (v2.1

2. Bushfire Hazard Management Plan

Scope and/or Limitations

Scope:

This report was commissioned to identify the Bushfire Attack Level for the existing property. All comment, advice and fire suppression measures are in relation to compliance with Planning Directive No 5.1, Bushfire-Prone Areas Code issued by the Tasmanian Planning Commission, the Building Code of Australia and Australian Standards, AS 3959-2009, Construction of buildings in bushfire-prone areas.

Limitations:


The inspection has been undertaken and report provided on the understanding that;-

1. The report only deals with the potential bushfire risk all other statutory assessments are outside the scope of this report.
2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken and cannot be relied upon for any future development.
3. Impacts of future development and vegetation growth have not been considered.

I certify the matters described in this certificate.

Qualified person:

Signed:



Certificate No:

SRL20/32S3

Date:

1/9/2020

EXHIBITED

1-378

AMENDED
2/9/20

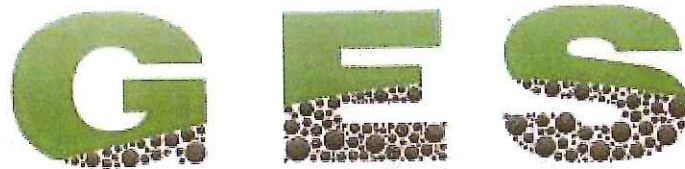
ON-SITE WASTEWATER ASSESSMENT

Proposed Subdivision

173 Marlborough Street

Longford

July 2020



GEO-ENVIRONMENTAL

S O L U T I O N S

Disclaimer: The author does not warrant the information contained in this document is free from errors or omissions. The author shall not in any way be liable for any loss, damage or injury suffered by the User consequent upon, or incidental to, the existence of errors in the information.

EXHIBITED

Introduction

Client: Carlton Dixon
Date of inspection: 29/6/20
Location: 173 Marlborough Street, Longford
Land description: Approx. 1.8ha –
Building type: Proposed subdivision of 3 lots and balance
Investigation: GeoProbe 540UD
Inspected by: A Plummer

Background information

Map: Mineral Resources Tasmania, Great Bay Sheet 1:25000
Rock type: Tertiary aged terrace deposits of pebbles (Brickendon surface)
Soil depth: 2.0m+
Planning overlay Bushfire Prone Areas
Local meteorology: Annual rainfall approx. 650 mm
Local services: Mains water with onsite wastewater disposal required.

Site conditions

Slope and aspect: Approx. 1% slope to the South West
Site drainage: Imperfect subsoil drainage
Vegetation: Pasture species
Weather conditions: Cloudy, approx. 20mm rainfall received in preceding 7 days.
Ground surface: Moist surface conditions

Site Summary

The current development application is for the subdivision of the property into four new lots each with an area of approximately 1400m², plus a larger balance lot of approximately 5500m². The site is currently relatively flat open pasture, and there are no signs of significant previous development or disturbance of the site in the area of the proposed lots.

EXHIBITED

Investigation

A number of excavations were completed to identify the distribution of, and variation in soil materials on the site. Representative excavations from each of the proposed lots indicated on the site plan were chosen for testing and classification according to AS1547-2012 (see profile summaries).

Profile Summary – Typical soils

Depth (m)	Horizon	Category	Description
0.0 - 0.20	A1	2	Brownish Grey Silty SAND (SW) , trace of clay, moderate polyhedral structure, very moist soft consistency, common rootlets, gradual boundary to
0.20 – 0.40	A3	2	Light Grey Gravelly Silty SAND (GP) , weak polyhedral structure, moist medium dense to dense consistency, common fine to medium gravels, clear boundary to
0.40 – 1.0	B1	5	Strong Brown and Yellowish Brown Gravelly SILTY CLAY (CL) , moderate polyhedral structure, slightly moist very stiff consistency, low plasticity, common fine to medium gravels, gradual boundary to
1.0 – 2.0+	B2	6	Reddish Brown and Grey Gravelly Silty CLAY (CH) , strong polyhedral structure, slightly moist stiff to very stiff consistency, medium to high plasticity, common fine to medium gravels, lower boundary undefined

Soil Profile Notes

The soil profiles above have been taken from each of the proposed lots. The soils on the site are developing on the Brickendon surface and feature silty sand topsoils, with a significant content of gravels in the subsurface horizons. Despite the subsoil clay content, the soils have improved permeability due to the gravel content, and a moderate to high cation exchange capacity (CEC) for the retention of nutrients. Full profile descriptions for each lot with permeability test results can be found in appendix 1.

EXHIBITED

Nutrient Balance and Sustainable Wastewater Application

The soils across the site have developed from Tertiary sediments and have a good estimated Cation Exchange Capacity (CEC). The soils returned negative results to all Emerson dispersion tests. Therefore, the soils have a good capacity to retain nutrients in applied wastewater.

Hydrological Balance and Wastewater Disposal

The capability of the proposed new lots to support a typical residential dwelling and on-site wastewater disposal must be evaluated to ensure environmental values are maintained. Modelling of wastewater application on the proposed lot was undertaken utilising the Trench program, long term weather average for Longford, and estimated flows from an average four-bedroom home.

The soils are moderately structured, have a moderate permeability and moderate CEC for retention of nutrients. The soils across the site area classified according to AS/NZS1547-2012 as **Category 5 – Light Clay**. The topsoils are moderately well drained; however, the subsoils have a moderately low permeability in the range of 0.15-0.25m/day. A range of wastewater disposal options are suitable for the proposed lots.

Assuming the construction of a typical four-bedroom dwelling with mains water supply, the expected loading under AS/NZS1547-2012 and the Directors Guidelines for On-site Wastewater 2016 is 900L/day (6 persons @150L/day). Due to the relatively flat topography and the clay subsoils it is expected that secondary treatment of effluent would be utilised on the lots. Based upon secondary treatment with irrigation (surface or subsurface) with a DIR of 3mm/day, an irrigation area of 300m² would be required. Alternatively, if secondary treatment and an absorption bed or mound was employed on the site, then a DLR of 10L/m²/day and an area of 90m² would be required.

Wastewater irrigation areas can generally be replaced relatively quickly and easily within a one to two-day period, such that a reserve area is often not prescribed, or required. However, where a more intensive form of disposal area such as an absorption trench or bed is proposed then a reserve area would be prescribed. Therefore, for standard shallow subsurface

EXHIBITED

irrigation with drippers, or surface irrigation with sprinklers a reserve area would not be required and an area of 300m² would be sufficient for a four bedroom dwelling. If an absorption bed or beds were designed a reserve area would be recommended, such that a total area of 180m² would be required (i.e. 90m² primary and 90m² reserve). This is consistent with AS/NZS1547-2012 which states that a reserve area may be reduced or eliminated for secondary treated effluent.

Based upon the modelling undertaken, a wastewater disposal area in the range of 180-300m² would be required on each lot for a typical four-bedroom dwelling. If this area is combined with a typical dwelling size of 200-250m², and the setbacks calculated below, then there is more than sufficient room for access, parking, and private open space on a lot with an area of over 1400m².

It is recommended the final decision of wastewater system approval rest with the permit authority at the time of site specific design to ensure the most compatible environmental and economic outcomes. Therefore, it is not warranted to restrict the lot to a single wastewater system type at the subdivision approvals stage, as each dwelling will have individual nuances which may be more suited to any one of a range of designs allowable within AS1547-2012. The assessment concludes that the proposed lots would be more than sufficient to accommodate wastewater from future residential development.

Setbacks Distances to Boundaries and Sensitive Features

A number of indicative minimum boundary setbacks applicable to the development have been modelled utilising the Trench program and with reference to the Building Act 2016 wastewater guidelines.

- Boundaries (upslope/across slope) – 1.5m
- Boundaries down slope – secondary effluent – 2.5m (slope 1°)
- Down slope surface water – secondary effluent – 17m (slope 1°)
- Buildings – secondary effluent – 3m

Note -there is no permanent surface water nearby the lots other than a horse training facility approximately 50m to the north east and upgradient of lot 3.

EXHIBITED

On-site stormwater disposal

The deep clay soils in the local area are generally well suited to on site retention of stormwater from roof water tank overflows with an estimated permeability of approximately 0.20m/day. Modelling (in appendix 5) has been undertaken based upon the construction of a typical three bedroom dwelling on each lot with a roof area of approximately 200m².

Stormwater calculations

Stormwater runoff from impervious surfaces on site (new roof area) is calculated according to the rational method taken from *Australian Rainfall and Runoff (ARR)*.

Where the flowrate $Q = 0.00579CIA$

C = Runoff coefficient (taken as 0.945)

I = Intensity of rainfall

A = Catchment area

All 1:20yr scenarios (5 minutes to 72 hours) have been calculated in the attached spread sheet. The Intensity Frequency Duration (IFD) data generated for the site is shown in the attached charts and table.

For typical dwelling with a roof area of approximately 200m²

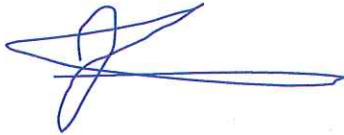
The required stormwater trench area from the stormwater worksheet attached is 35m². Therefore, a design of one 17.5m long by 2m wide by 0.6m deep absorption trench is recommended to accommodate stormwater overflow from the estimated roof area. The resultant stormwater retention area/volume should therefore be sufficient to handle all ARI 1:20 events. Note site specific assessment and design will be required for future dwellings on each lot prior to building and plumbing approvals. However, this initial assessment does show that sufficient area could be set aside on site for stormwater absorption from a typical dwelling on each of the lots in conjunction with wastewater disposal.

EXHIBITED

Conclusions

The current subdivision proposal allows for sufficient space on the proposed lots to be created for the installation and successful operation of a wastewater treatment system and on site stormwater retention from a typical residential dwelling, with adequate setbacks in regards boundaries, buildings, and sensitive features.

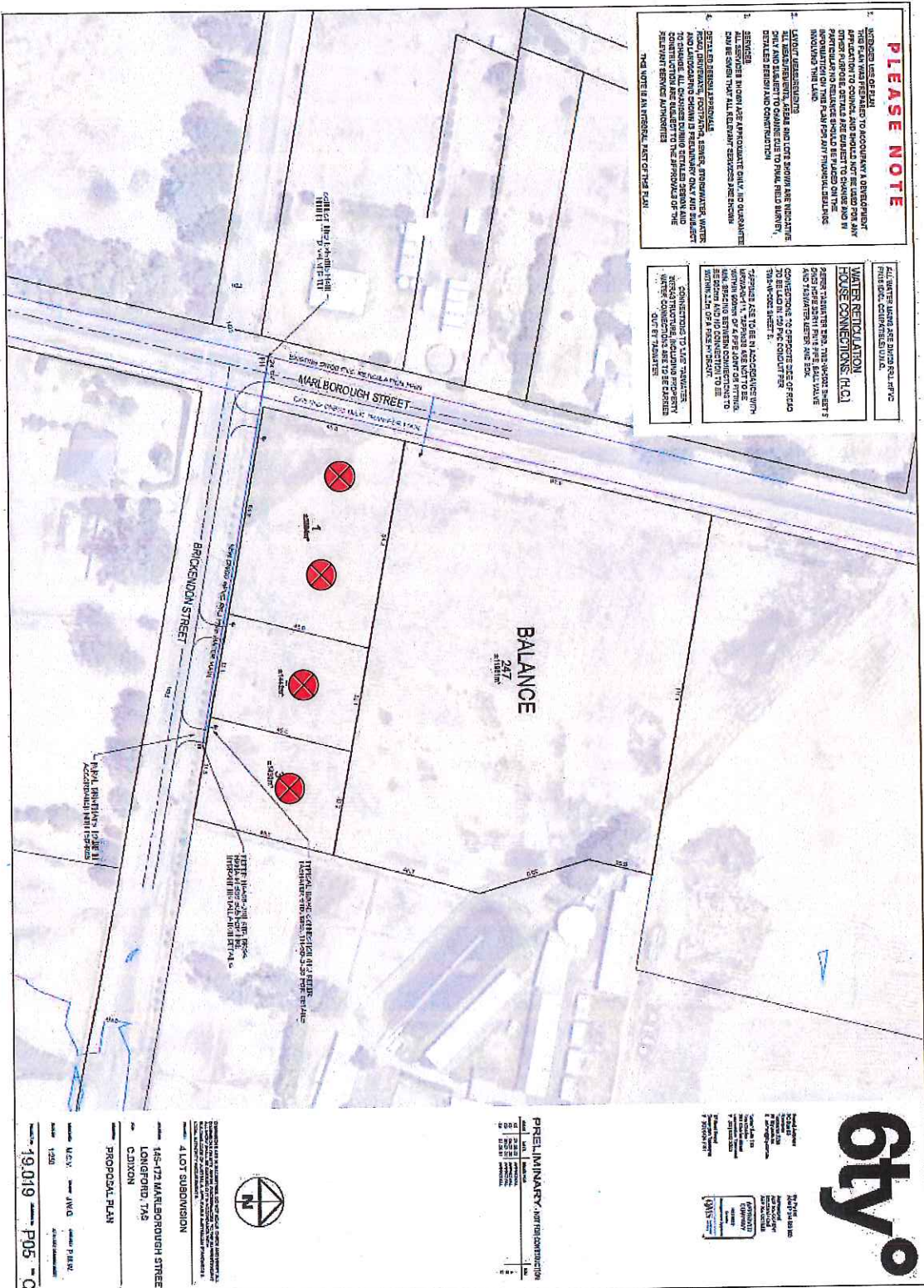
No serious geotechnical impediments were identified for future residential use on the lots and as such the land is suitable for the proposed subdivision.



Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD
Environmental and Engineering Soil Scientist

EXHIBITED

Appendix 1 – Site plan showing location of proposed lots, test holes, and contours



Appendix 2 – Soil Profile Descriptions

Lot 1 – hole 1

Depth (m)	Horizon	Category	Description
0.0 - 0.20	A1	2	Brownish Grey Silty SAND (SW) , trace of clay, moderate polyhedral structure, very moist soft consistency, common rootlets, gradual boundary to
0.20 – 0.40	A3	2	Light Grey Gravelly Silty SAND (GP) , weak polyhedral structure, moist medium dense to dense consistency, common fine to medium gravels, clear boundary to
0.40 – 1.0	B1	5	Strong Brown and Yellowish Brown Gravelly SILTY CLAY (CL) , moderate polyhedral structure, slightly moist very stiff consistency, low plasticity, common fine to medium gravels, gradual boundary to
1.0 – 2.0+	B2	6	Reddish Brown and Grey Gravelly Silty CLAY (CH) , strong polyhedral structure, slightly moist stiff to very stiff consistency, medium to high plasticity, common fine to medium gravels, lower boundary undefined

Notes:

- Constant head permeability reading undertaken at a depth of 0.5m with a result of 8mm/hour or 0.19m/day.
- Emerson dispersion test – negative no dispersion

Lot 1 – hole 2

Depth (m)	Horizon	Category	Description
0.0 - 0.20	A1	2	Brownish Grey Silty SAND (SW) , trace of clay, moderate polyhedral structure, very moist soft consistency, common rootlets, gradual boundary to
0.20 – 0.40	A3	2	Light Grey Gravelly Silty SAND (GP) , weak polyhedral structure, moist medium dense to dense consistency, common fine to medium gravels, clear boundary to
0.40 – 0.90	B1	5	Strong Brown and Yellowish Brown Gravelly SILTY CLAY (CL) , moderate polyhedral structure, slightly moist very stiff consistency, low plasticity, common fine to medium gravels, gradual boundary to
0.90 – 2.0+	B2	6	Reddish Brown and Grey Gravelly Silty CLAY (CH) , strong polyhedral structure, slightly moist stiff to very stiff consistency, medium to high plasticity, common fine to medium gravels, lower boundary undefined

Notes:

- Constant head permeability reading undertaken at a depth of 0.5m with a result of 9mm/hour or 0.22m/day.
- Emerson dispersion test – negative no dispersion

Lot 2

Depth (m)	Horizon	Category	Description
0.0 - 0.20	A1	2	Brownish Grey Silty SAND (SW) , trace of clay, moderate polyhedral structure, very moist soft consistency, common rootlets, gradual boundary to
0.20 – 0.40	A3	2	Light Grey Gravelly Silty SAND (GP) , weak polyhedral structure, moist medium dense to dense consistency, common fine to medium gravels, clear boundary to
0.40 – 0.90	B1	5	Strong Brown and Yellowish Brown Gravelly SILTY CLAY (CL) , moderate polyhedral structure, slightly moist very stiff consistency, low plasticity, common fine to medium gravels, gradual boundary to
0.90 – 2.0+	B2	6	Reddish Brown and Grey Gravelly Silty CLAY (CH) , strong polyhedral structure, slightly moist stiff to very stiff consistency, medium to high plasticity, common fine to medium gravels, lower boundary undefined

Notes:

- Constant head permeability reading undertaken at a depth of 0.5m with a result of 8mm/hour or 0.19m/day.
- Emerson dispersion test – negative no dispersion

Lot 3

Depth (m)	Horizon	Category	Description
0.0 - 0.20	A1	2	Brownish Grey Silty SAND (SW) , trace of clay, moderate polyhedral structure, very moist soft consistency, common rootlets, gradual boundary to
0.20 - 0.30	A3	2	Light Grey Gravelly Silty SAND (GP) , weak polyhedral structure, moist medium dense to dense consistency, common fine to medium gravels, clear boundary to
0.30 - 0.85	B1	5	Strong Brown and Yellowish Brown Gravelly SILTY CLAY (CL) , moderate polyhedral structure, slightly moist very stiff consistency, low to medium plasticity, common fine to medium gravels, gradual boundary to
0.85 - 2.0+	B2	6	Reddish Brown and Grey Gravelly Silty CLAY (CH) , strong polyhedral structure, slightly moist stiff to very stiff consistency, medium to high plasticity, common fine to medium gravels, lower boundary undefined

Notes:

- Constant head permeability reading undertaken at a depth of 0.5m with a result of 7mm/hour or 0.17m/day.
- Emerson dispersion test – negative no dispersion.

Appendix 3 – Trench Report

Geo Environmental Solutions
Land suitability and system sizing for on-site wastewater management
Trench 3.0 (Australian Institute of Environmental Health)

Assessment Report
Site assessment for on-site waste water disposal

Assessment for Carlton Dixon

Assess. Date 27-Jul-20

Ref. No.

Assessed site(s) 173 Marlborough Street

Site(s) inspected 29-Jun-20

Local authority Northern Midlands

Assessed by John Paul Cumming

This report summarises wastewater volumes, climatic inputs for the site, soil characteristics and system sizing and design issues. Site Capability and Environmental sensitivity issues are reported separately, where 'Alert' columns flag factors with high (A) or very high (AA) limitations which probably require special consideration for system design(s). Blank spaces on this page indicate data have not been entered into TRENCH.

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 900 (using the 'No. of bedrooms in a dwelling' method)
 Septic tank wastewater volume (L/day) = 300
 Sullage volume (L/day) = 600
 Total nitrogen (kg/year) generated by wastewater = 2.7
 Total phosphorus (kg/year) generated by wastewater = 1.9

Climatic assumptions for site

(Evapotranspiration calculated using the crop factor method)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	57	46	57	57	43	49	64	62	66	61	56	58
Adopted rainfall (R, mm)	57	46	57	57	43	49	64	62	66	61	56	58
Retained rain (Rr, mm)	51	41	51	51	39	44	58	56	59	55	50	52
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63	84	105	126
Evapotr. less rain (mm)	79	69	40	12	3	-15	-26	-14	4	29	55	74
Annual evapotranspiration less retained rain (mm) =												309

Soil characteristics

Texture = light clay Category = 5 Thick. (m) = 2
 Adopted permeability (m/day) = 0.2 Adopted LTAR (L/sq m/day) = 3 Min depth (m) to water = 5

Proposed disposal and treatment methods

Proportion of wastewater to be retained on site: All wastewater will be disposed of on the site
 The preferred method of on-site primary treatment: In a package treatment plant
 The preferred method of on-site secondary treatment: Above-ground
 The preferred type of in-ground secondary treatment: None
 The preferred type of above-ground secondary treatment: Surface irrigation
 Site modifications or specific designs: Are needed

Suggested dimensions for on-site secondary treatment system

Total length (m) = 30
 Width (m) = 10
 Depth (m) = 0.2
 Total disposal area (sq m) required = 300
 comprising a Primary Area (sq m) of: 300
 and a Secondary (backup) Area (sq m) of:

Sufficient area is available on site

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

Using the DIR of 3mm/day, an irrigation area of 300m² is required to accommodate the expected wastewater flows.

Geo Environmental Solutions
 Land suitability and system sizing for on-site wastewater management
 Trench 3.0 (Australian Institute of Environmental Health)

Site Capability Report
 Site assessment for on-site waste water disposal

Assessment for	Carlton Dixon	Assess. Date	27-Jul-20
		Ref. No.	
Assessed site(s)	173 Marlborough Street	Site(s) inspected	29-Jun-20
Local authority	Northern Midlands	Assessed by	John Paul Cumming

This report summarises data relating to the physical capability of the assessed site(s) to accept wastewater. Environmental sensitivity and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) site limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
	Expected design area	sq m	600	V. high	Moderate	No change	
	Density of disposal systems	/sq km	5	Mod.	Very low		
	Slope angle	degrees	1	High	Very low		
	Slope form	Straight simple		High	Low		
	Surface drainage	Imperfect		High	Moderate		
	Flood potential	Site floods <1:100 yrs		High	Very low		
	Heavy rain events	Rare		High	Low		
	Aspect (Southern hemi.)	Faces SE or SW		V. high	High	Low	
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	900	High	High	Moderate	
	SAR of septic tank effluent		1.7	High	Low		
	SAR of sullage		2.6	High	Moderate		
	Soil thickness	m	2.0	V. high	Very low		
	Depth to bedrock	m	2.5	V. high	Very low		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		6.0	High	Low		
	Soil bulk density	gm/cub. cm	1.6	High	Moderate		
	Soil dispersion	Emerson No.	7	V. high	Very low		
	Adopted permeability	m/day	0.2	Mod.	Very low		
	Long Term Accept. Rate	L/day/sq m	3	High	High	Moderate	Other factors lessen impact

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments
 Wastewater disposal on site is only limited by the lack of lateral site drainage. The site has an open and sunny aspect due to the flat topography.

Geo Environmental Solutions
 Land suitability and system sizing for on-site wastewater management
 Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report
Site assessment for on-site waste water disposal

Assessment for Carlton Dixon	Assess. Date	27-Jul-20
	Ref. No.	
Assessed site(s) 173 Marlborough Street	Site(s) inspected	29-Jun-20
Local authority Northern Midlands	Assessed by	John Paul Cumming

This report summarises data relating to the environmental sensitivity of the assessed site(s) in relation to applied wastewater. Physical capability and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
	Cation exchange capacity	mmol/100g	100	High	Low		
	Phos. adsorp. capacity	kg/cub m	0.7	High	Moderate		
	Annual rainfall excess	mm	-309	High	Very low		
	Min. depth to water table	m	5	High	Very low		
	Annual nutrient load	kg	4.6	High	Very low		
	G'water environ. value	Agric non-sensit		V. high	Low		
	Min. separation dist. required	m	4	High	Very low		
	Risk to adjacent bores		Very low	V. high	Very low		
	Surf. water env. value	Agric non-sensit		V. high	Low		
	Dist. to nearest surface water	m	250	V. high	Moderate		
	Dist. to nearest other feature	m	100	V. high	Low		
	Risk of slope instability		Low	V. high	Low		
	Distance to landslip	m	3300	V. high	Very low		

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

The soil on site has a clay texture and a good CEC, Therefore the soil system has a good capacity to cope with the applied nutrient load from the system.

Appendix 4 – Building Act Compliance Table
Acceptable Solutions

Acceptable Solutions	Performance Criteria	Compliance
<p>A1</p> <p>Horizontal separation distance from a building to a land application area must comply with one of the following:</p> <ul style="list-style-type: none"> a) be no less than 6m; or b) be no less than: <ul style="list-style-type: none"> (i) 3m from an upslope building or level building; (ii) If primary treated effluent to be no less than <ul style="list-style-type: none"> 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m 	<p>P1</p> <ul style="list-style-type: none"> a) The land application area is located so that <ul style="list-style-type: none"> (i) the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low; and (ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation 	<p>Complies with A1 (a)</p> <p>Land application area can be located with minimum separation distance to proposed building of 3m.</p>
<p>A2</p> <p>Horizontal separation distance from downslope surface water to a land application area must with (a) or (b)</p> <ul style="list-style-type: none"> (a) be no less than 100m; or (b) be no less than the following: <ul style="list-style-type: none"> (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and application, 15m plus 2m for every of average gradient to down slope surface 	<p>P2</p> <p>Horizontal separation distance from downslope surface water to a land application area must comply with all of the following:</p> <ul style="list-style-type: none"> a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. 	<p>Complies with A2 (a)</p> <p>No permanent surface water within 100m</p>

<p>water.</p>	<p>A3</p> <p>Horizontal separation distance from a property boundary to a land application area must comply either of the following:</p> <p>(a) be no less than 40m from a property boundary; or</p> <p>(b) be no less than:</p> <p>(i) 1.5m from an upslope or level property boundary; and</p> <p>(ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or</p> <p>(iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a</p>	<p>P3</p> <p>Horizontal separation distance from a property boundary to a land application area must with all of the following:</p> <p>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and</p> <p>(b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.</p>	<p>Complies with A3 (b) (i)</p> <p>Land application area can be located with a minimum separation distance of 1.5m from an upslope or level property boundary</p> <p>Complies with A3 (b) (iii)</p> <p>Land application area can be located with a minimum separation distance of 2.5m of downslope property boundary</p>
<p>A4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient.</p>	<p>P4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following:</p> <p>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and</p> <p>(b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk</p>	<p>Complies with A4</p> <p>No bore or well identified within 50m</p>	

<p>A5</p> <p>Vertical separation distance between groundwater and a land application area must be no less than:</p> <p>(a) 1.5m if primary treated effluent; or (b) 0.6m if secondary treated effluent</p>	<p>P5</p> <p>Vertical separation distance between groundwater and a land application area must comply with the following:</p> <p>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the</p>	<p>Complies with A5 (b)</p> <p>No groundwater encountered</p>
<p>A6</p> <p>Vertical separation distance between a limiting layer and a land application area must be no less than:</p> <p>(a) 1.5m if primary treated effluent; or (b) 0.5m if secondary treated effluent</p>	<p>P6</p> <p>Vertical setback must be consistent with AS/NZS1547 Appendix R.</p>	<p>Complies with A6 (b)</p> <p>No limiting layer identified</p>
<p>A7</p> <p>nil</p>	<p>P7</p> <p>A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties</p>	<p>Complies</p>

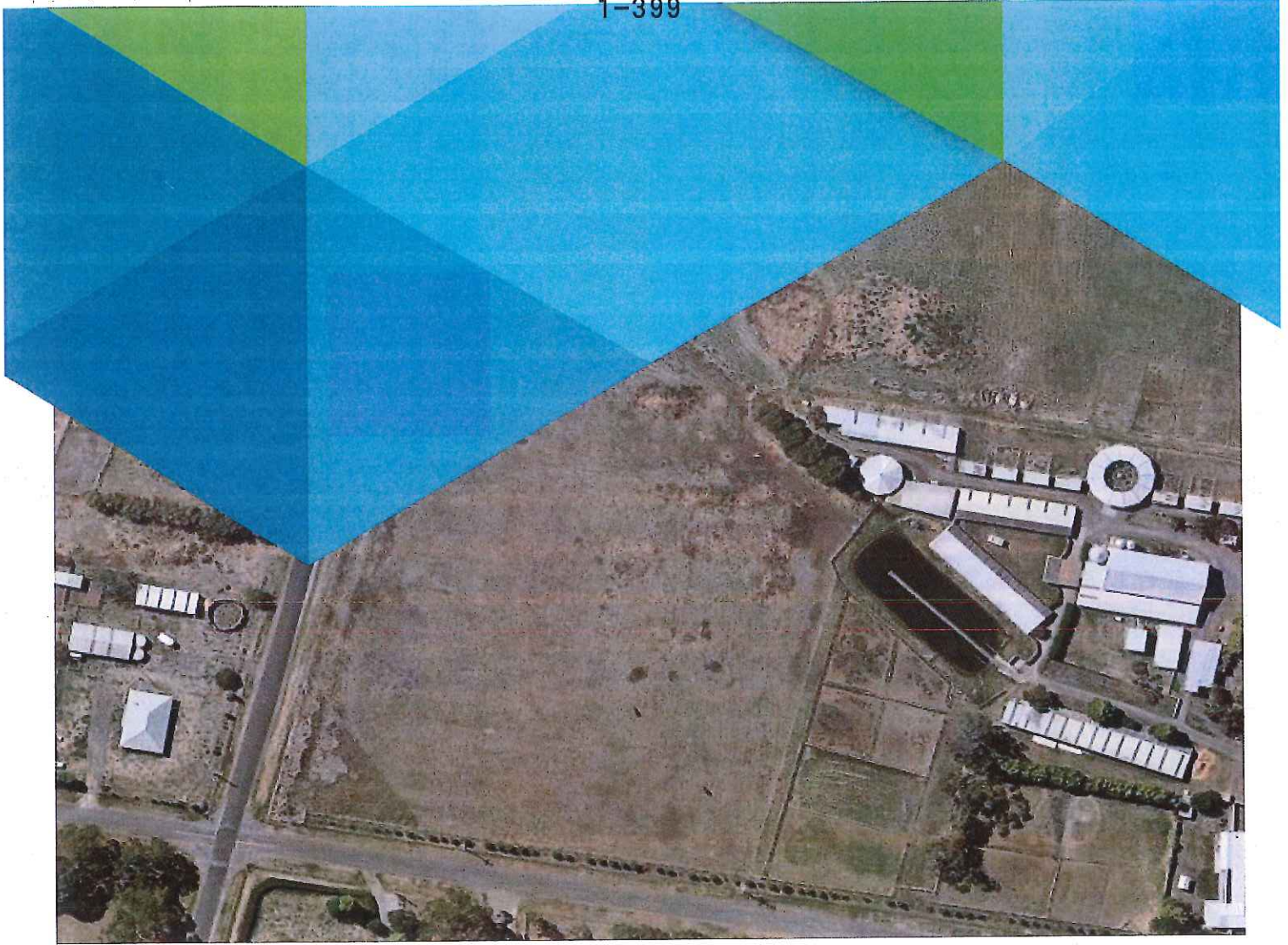
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EXHIBITED

Appendix 5 – Stormwater spreadsheets

Storm Duration	Intensity mm/hr	CATCHMENT AREA Catchment Type Moderation Factor	Flow rate (l/s) (l/m ²)	Infiltration (l/m ²) 200 m ² catchment	Storm Volume (l)	Keel (m/d) Depth (m)	Trench Infiltration (l (Volume-area shown)) 730L - 3125 m ² 1000L - 4.2 m ²	Absorption length (m) Absorption width (m) Absorption depth (m)	17.5 Absorber area (m ²) 2 Absorber perimeter (m)	2500L - 10.45 m ² 2.89	3000L - 12.5 m ² 2500L - 14.5 m ² 3.47	35	39	405	469	5.21	5.79	6.37	6.94	7.52	8.10	8.68	9.26	9.84	10.42	11.00	11.58	12.15	12.73	13.31	13.89	14.47	15.05	15.63	16.21	16.79	17.37	17.95	18.53	19.11	19.69	20.27	20.85	21.43	22.01	22.59	23.17	23.75	24.33	24.91	25.49	26.07	26.65	27.23	27.81	28.39	28.97	29.55	30.13	30.71	31.29	31.87	32.45	33.03	33.61	34.19	34.77	35.35	35.93	36.51	37.09	37.67	38.25	38.83	39.41	39.99	40.57	41.15	41.73	42.31	42.89	43.47	44.05	44.63	45.21	45.79	46.37	46.95	47.53	48.11	48.69	49.27	49.85	50.43	51.01	51.59	52.17	52.75	53.33	53.91	54.49	55.07	55.65	56.23	56.81	57.39	57.97	58.55	59.13	59.71	60.29	60.87	61.45	62.03	62.61	63.19	63.77	64.35	64.93	65.51	66.09	66.67	67.25	67.83	68.41	68.99	69.57	70.15	70.73	71.31	71.89	72.47	73.05	73.63	74.21	74.79	75.37	75.95	76.53	77.11	77.69	78.27	78.85	79.43	80.01	80.59	81.17	81.75	82.33	82.91	83.49	84.07	84.65	85.23	85.81	86.39	86.97	87.55	88.13	88.71	89.29	89.87	90.45	91.03	91.61	92.19	92.77	93.35	93.93	94.51	95.09	95.67	96.25	96.83	97.41	97.99	98.57	99.15	99.73	100.31	100.89	101.47	102.05	102.63	103.21	103.79	104.37	104.95	105.53	106.11	106.69	107.27	107.85	108.43	109.01	109.59	110.17	110.75	111.33	111.91	112.49	113.07	113.65	114.23	114.81	115.39	115.97	116.55	117.13	117.71	118.29	118.87	119.45	120.03	120.61	121.19	121.77	122.35	122.93	123.51	124.09	124.67	125.25	125.83	126.41	126.99	127.57	128.15	128.73	129.31	129.89	130.47	131.05	131.63	132.21	132.79	133.37	133.95	134.53	135.11	135.69	136.27	136.85	137.43	138.01	138.59	139.17	139.75	140.33	140.91	141.49	142.07	142.65	143.23	143.81	144.39	144.97	145.55	146.13	146.71	147.29	147.87	148.45	149.03	149.61	150.19	150.77	151.35	151.93	152.51	153.09	153.67	154.25	154.83	155.41	155.99	156.57	157.15	157.73	158.31	158.89	159.47	160.05	160.63	161.21	161.79	162.37	162.95	163.53	164.11	164.69	165.27	165.85	166.43	167.01	167.59	168.17	168.75	169.33	169.91	170.49	171.07	171.65	172.23	172.81	173.39	173.97	174.55	175.13	175.71	176.29	176.87	177.45	178.03	178.61	179.19	179.77	180.35	180.93	181.51	182.09	182.67	183.25	183.83	184.41	184.99	185.57	186.15	186.73	187.31	187.89	188.47	189.05	189.63	190.21	190.79	191.37	191.95	192.53	193.11	193.69	194.27	194.85	195.43	196.01	196.59	197.17	197.75	198.33	198.91	199.49	200.07	200.65	201.23	201.81	202.39	202.97	203.55	204.13	204.71	205.29	205.87	206.45	207.03	207.61	208.19	208.77	209.35	209.93	210.51	211.09	211.67	212.25	212.83	213.41	213.99	214.57	215.15	215.73	216.31	216.89	217.47	218.05	218.63	219.21	219.79	220.37	220.95	221.53	222.11	222.69	223.27	223.85	224.43	225.01	225.59	226.17	226.75	227.33	227.91	228.49	229.07	229.65	230.23	230.81	231.39	231.97	232.55	233.13	233.71	234.29	234.87	235.45	236.03	236.61	237.19	237.77	238.35	238.93	239.51	240.09	240.67	241.25	241.83	242.41	242.99	243.57	244.15	244.73	245.31	245.89	246.47	247.05	247.63	248.21	248.79	249.37	249.95	250.53	251.11	251.69	252.27	252.85	253.43	254.01	254.59	255.17	255.75	256.33	256.91	257.49	258.07	258.65	259.23	259.81	260.39	260.97	261.55	262.13	262.71	263.29	263.87	264.45	265.03	265.61	266.19	266.77	267.35	267.93	268.51	269.09	269.67	270.25	270.83	271.41	271.99	272.57	273.15	273.73	274.31	274.89	275.47	276.05	276.63	277.21	277.79	278.37	278.95	279.53	280.11	280.69	281.27	281.85	282.43	283.01	283.59	284.17	284.75	285.33	285.91	286.49	287.07	287.65	288.23	288.81	289.39	289.97	290.55	291.13	291.71	292.29	292.87	293.45	294.03	294.61	295.19	295.77	296.35	296.93	297.51	298.09	298.67	299.25	299.83	300.41	300.99	301.57	302.15	302.73	303.31	303.89	304.47	305.05	305.63	306.21	306.79	307.37	307.95	308.53	309.11	309.69	310.27	310.85	311.43	312.01	312.59	313.17	313.75	314.33	314.91	315.49	316.07	316.65	317.23	317.81	318.39	318.97	319.55	320.13	320.71	321.29	321.87	322.45	323.03	323.61	324.19	324.77	325.35	325.93	326.51	327.09	327.67	328.25	328.83	329.41	329.99	330.57	331.15	331.73	332.31	332.89	333.47	334.05	334.63	335.21	335.79	336.37	336.95	337.53	338.11	338.69	339.27	339.85	340.43	341.01	341.59	342.17	342.75	343.33	343.91	344.49	345.07	345.65	346.23	346.81	347.39	347.97	348.55	349.13	349.71	350.29	350.87	351.45	352.03	352.61	353.19	353.77	354.35	354.93	355.51	356.09	356.67	357.25	357.83	358.41	358.99	359.57	360.15	360.73	361.31	361.89	362.47	363.05	363.63	364.21	364.79	365.37	365.95	366.53	367.11	367.69	368.27	368.85	369.43	369.99	370.57	371.15	371.73	372.31	372.89	373.47	374.05	374.63	375.21	375.79	376.37	376.95	377.53	378.11	378.69	379.27	379.85	380.43	381.01	381.59	382.17	382.75	383.33	383.91	384.49	385.07	385.65	386.23	386.81	387.39	387.97	388.55	389.13	389.71	390.29	390.87	391.45	392.03	392.61	393.19	393.77	394.35	394.93	395.51	396.09	396.67	397.25	397.83	398.41	398.99	399.57	400.15	400.73	401.31	401.89	402.47	403.05	403.63	404.21	404.79	405.37	405.95	406.53	407.11	407.69	408.27	408.85	409.43	409.99	410.57	411.15	411.73	412.31	412.89	413.47	414.05	414.63	415.21	415.79	416.37	416.95	417.53	418.11	418.69	419.27	419.85	420.43	421.01	421.59	422.17	422.75	423.33	423.91	424.49	425.07	425.65	426.23	426.81	427.39	427.97	428.55	429.13	429.71	430.29	430.87	431.45	432.03	432.61	433.19	433.77	434.35	434.93	435.51	436.09	436.67	437.25	437.83	438.41	438.99	439.57	440.15	440.73	441.31	441.89	442.47	443.05	443.63	444.21	444.79	445.37	445.95	446.53	447.11	447.69	448.27	448.85	449.43	449.99	450.57	451.15	451.73	452.31	452.89	453.47	454.05	454.63	455.21	455.79	456.37	456.95	457.53	458.11	458.69	459.27	459.85	460.43	461.01	461.59	462.17	462.75	463.33	463.91	464.49	465.07	465.65	466.23	466.81	467.39	467.97	468.55	469.13	469.71	470.29	470.87	471.45	472.03	472.61	473.19	473.77	474.35	474.93	475.51	476.09	476.67	477.25	477.83	478.41	478.99	479.57	480.15	480.73	481.31	481.89	482.47	483.05	483.63	484.21	484.79	485.37	485.95	486.53	487.11	487.69	488.27	488.85	489.43	490.01	490.59	491.17	491.75	492.33	492.91	493.49	494.07	494.65	495.23	495.81	496.39	496.97	497.55	498.13	498.71	499.29	499.87	500.45	501.03	501.61	502.19	502.77	503.35	503.93	504.51	505.09	505.67	506.25	506.83	507.41	507.99	508.57	509.15	509.73	510.31	510.89	511.47	512.05	512.63	513.21	513.79	514.37	514.95	515.53	516.11	516.69	517.27	517.85	518.43	519.01	519.59	520.17	520.75	521.33	521.91	522.49	523.07	523.65	524.23	524.81	525.39	525.97	526.55	527.13	527.71	528.29	528.87	529.45	530.03	530.61	531.19	531.77	532.35	532.93	533.51	534.09	534.67	535.25	535.83	536.41	536.99	537.57	538.15	538.73	539.31	539.89	540.47	541.05	541.63	542.21	542.79	543.37	543.95	544.53	545.11	545.69	546.27	546.85	547.43	548.01	548.59	549.17	549.75	550.33	550.91	551.49	552.07	552.65	553.23	553.81	554.39	554.97	555.55	556.13	556.71	557.29	557.87	558.45	559.03	559.61	560.19	560.77	561.35	561.93	562.51	563.09	563.67	564.25	564.83	565.41	565.99	566.57	567.15	567.73	568.31	568.89	569.47	570.05	570.63	571.21	571.79	572.37	572.95	573.53	574.11	574.69	575.27	575.85	576.43	577.01	577.59	578.17	578.75	579.33	579.91	580.49	581.07	581.65	582.23	582.81	583.39	583.97	584.55	585.13	585.71	586.29	586.87	587.45	588.03	588.61	589.19	589.77	590.
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173 Marlborough Street, Longford Stormwater Study

Prepared For:
Carlton Dixon



Before the flood
we map the risk

Level 4, 116 Bathurst Street
Hobart 7000
TASMANIA- AUSTRALIA

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1. Introduction

Flüssig Spatial has been engaged to undertake a site-specific Stormwater System Management Plan (SSMP) for the subdivision at number 173 Marlborough Street, Longford, including, but not limited to, lot and stormwater drainage analysis and MUSIC Modelling to stated stormwater quality standards. The purpose of this report is to determine the hydraulic characteristics and stormwater infrastructure capacity of a 1% AEP storm event and treatment on the existing and post-development scenarios.

1.1 Scope

This engagement includes:

1. Pre-construction overland flow behaviour of new stormwater design.
2. Post-construction drainage capacity at 1% AEP of new design.
3. Post-construction overland flow behaviour of new stormwater design.

2. Site Characteristics

2.1 Site Location

173 Marlborough Street, Longford is located on the northern border of the Northern Midlands Council municipality and is an approximately 1.8ha proposed development.

The development site is surrounded by farm and rural living areas at the south boundary with Brickendon St and the west boundary onto Marlborough Street (Figure 1).



Figure 1. 173 Marlborough Street, Longford development location

2.2 Topography

173 Marlborough Street, Longford, is approximately 1.8 ha and draining from approximately 149.5m AHD to 148.5m AHD to the outlet. The land use is predominantly low-density residential area.

3. Proposal

3.1 Proposed Development

The proposed development consists of a 3 lot subdivision plus the balance. Private access driveways service each lot. Grassed swale drainage from all impervious surfaces is proposed. Design of the development was not undertaken as part of the engagement by Flüssig Spatial. Figure 2 shows the plan proposed by a third-party designer.



Figure 2. Proposed Subdivision Plan

3.1.1 Survey Data

All survey data was supplied by the client as a processed AutoCAD DEM. The provided data has been incorporated into various software to undertake the analysis.

4. Stormwater Quantity

4.1 Catchment Analysis

The catchment was modelled using the rational method as required by the Northern Midlands Council Stormwater Runoff Management Policy. The catchment characteristics (Coefficient of Runoff, time of concentration etc.) were taken from site plans and policy documents.

4.2 Catchment Conditions

Northern Midlands Council does not have any existing stormwater assets in the area of the 173 Marlborough Street subdivision. The existing ground conditions service the entire catchment area.

4.2.1 Design Intensity Storms

Design storm durations were calculated using Bransby-Williams formula for time of concentration (t_c) which gives a $t_c = 10$ min for this catchment. 1% AEP rainfall amount (mm/hr) was taken from the BOM 2016 IFD curves (Table 1).

Table 1. BoM IFD table

Annual Exceedance Probability (AEP)								
Duration	Duration in min	63.20%	50%	20%	10%	5%	2%	1%
1 min	1	65.3	72.3	96.3	114	133	160	183
2 min	2	57	62.9	82	95.3	108	124	135
3 min	3	50.2	55.5	72.6	84.7	96.9	112	124
4 min	4	45.2	50	65.8	77.1	88.8	104	116
5 min	5	41.3	45.7	60.4	71.1	82.3	97.7	110
10 min	10	30	33.3	44.5	53	62.1	75.5	86.9
15 min	15	24.4	27.1	36.3	43.3	50.8	62	71.5
20 min	20	20.9	23.2	31.1	37.1	43.4	52.8	60.8
25 min	25	18.5	20.6	27.5	32.7	38.2	46.2	52.9
30 min	30	16.8	18.6	24.7	29.4	34.2	41.2	47
45 min	45	13.3	14.8	19.5	23	26.5	31.5	35.5
1 hour	60	11.3	12.5	16.4	19.2	22	25.9	28.9
1.5 hours	90	8.93	9.85	12.8	14.8	16.9	19.5	21.6
2 hours	120	7.53	8.29	10.7	12.3	13.9	16	17.6
3 hours	180	5.9	6.49	8.29	9.49	10.7	12.2	13.3
4.5 hours	270	4.6	5.05	6.42	7.32	8.19	9.34	10.2
6 hours	360	3.84	4.21	5.35	6.1	6.82	7.8	8.55
9 hours	540	2.96	3.25	4.13	4.72	5.29	6.09	6.72
12 hours	720	2.45	2.69	3.43	3.93	4.42	5.13	5.69

4.2.2 Land use

Roughness values for this model were derived from the ARR 2019 Guidelines. The Manning's values are as follows in Table 2.

Table 2. Manning's N coefficients

Land Use	Manning's n
Swale Channel	0.025
Road	0.018
Urban Yards	0.035
Buildings	0.3

4.2.3 Runoff Coefficients

As per ARR2019 guidelines, the following Runoff Coefficient C_{10} values in Table 3 were adopted for the above land use area.

Table 3. Runoff Coefficients

Surface	Co-efficient of Runoff (C_{10})
Pervious	0.3
Impervious	0.9

4.3 Development Runoff

Stormwater runoff from the development site has been assessed under pre- and post-development models to determine the potential impact the development at 173 Marlborough Street has on the immediate local flows. As per planning guidelines it is a requirement that this does not have a negative impact from pre to post development.

Using the above parameters, the site was calculated using the rational method ($Q=CiA$), as required by Northern Midlands Stormwater Runoff Management Policy (SRMP) and request for further information under **PLN-20-0174**. Site Characteristics for the pre- and post-development model are summarised in Table 4.

Table 4. Site Characteristics

Land Use	Pre-Development		Post-Development	
	Area (ha)	% of total land	Area (ha)	% Impervious
Total Impervious	0.00	0.00	0.12	0.216
Total Pervious	1.80	100	1.62	99.78

4.4 Model Results

The pre- and post-development scenarios were calculated using the Rational Method against the 1% AEP storm events. The storm durations derived from the time of concentration for these two events were 10 minutes respectively.

The pre and post conditions can be seen in Table 5 below showing the peak discharge and increase in peak discharge from pre to post development as well as the maximum allowable discharge.

Table 5. Discharge rates pre- and post-development

Design Event (AEP)	Peak Discharge (m ³ /s)		
	Pre-Development	Post-Development	Difference
1%	0.130	0.148	0.018

As per the **Northern Midlands Council's** Stormwater Runoff Management Policy the maximum allowable site discharge must not exceed the rational method calculation using a runoff coefficient of 0.55. As can be seen from Table 5 this is exceeded in the 1% AEP by a peak discharge of 0.018m³/s for site discharge. Therefore, the site must detain the difference incorporating an onsite grassed swale drain system.

4.5 1% AEP Overland Flow Path (OFP)

As per ARR 2019 Best Practice Guidelines, runoff for the 1% AEP is not required to be captured by infrastructure nor detained onsite in an OSD. However, the 1% AEP storm must be able to drain through the site and not cause additional impedance on the neighbours or the unit residents. Figure 3 below shows the pre-development overland flow path (OFP) for the site in the event of a 1% AEP storm.

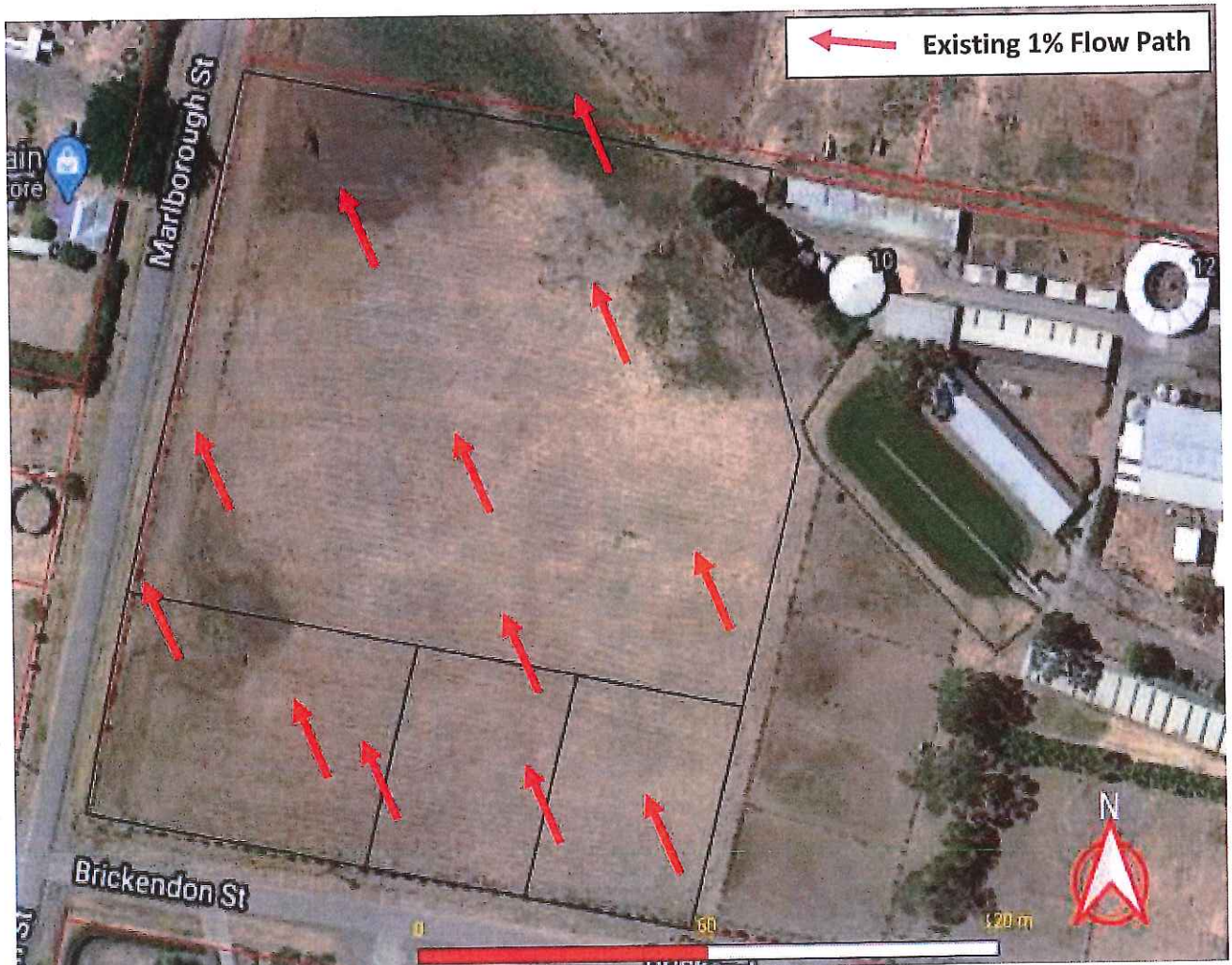


Figure 3. 1% AEP overland flowpath Pre-Development

Also shown in Figure 3 are shallow flow paths forming over the property at <100mm depths. These paths will need to be intercepted and diverted via the access roads and grassed bunds/channels. This should be considered and checked in the design phase. Possible flow paths can be seen in Figure 4. This should include, but not limited to:

- Cut-off drains
- Swales along boundary fences



Figure 4. Possible 1% AEP Flow Paths

4.6 Quantity Summary

This concept quantity report is based off limited available information and guidelines from the Northern Midlands Council Stormwater Runoff Management Policy. The following is a summary of the concept requirements for stormwater management for the development at 173 Marlborough Street, Longford:

1. Site exceeds allowable discharge by $0.018\text{m}^3/\text{s}$
2. Recommended onsite grassed swale drains for the 10 min storm duration runoff
3. Provide OFP to direct 1% runoff around development site.

5. Water Quality

Water quality modelling for the site has been undertaken with the urban stormwater improvement conceptualisation software MUSIC. The modelling conducted in MUSIC has been done in accordance with MUSIC Modelling Guidelines (BMT WBM, August 2019) and the Tasmanian State Stormwater Strategy. This document provides a guide to water quality modelling methodology and outlines the assumptions that should be made when selecting input parameters.

Recommendations for the improvement of the water quality on site would include the diversion of stormwater flows from the subdivision to a primary treatment (treatment train). This would reduce the pollutants in the receiving waters further and be a safe design option if future usage of this sub catchment provides higher pollutant storm water runoff.

5.1 Stormwater Quality Treatment (construction phase)

During construction, many pollutants are generated from various sources. These pollutants can easily be captured in stormwater runoff and introduced into the downstream receiving environment, polluting the waterways. Some of the main construction phase pollutants are described below:

- Litter from construction – material packaging, paper, plastic, food packaging, off-cuts etc.
- Sediment erosion and transports from excavated material and fresh surfaces
- Hydrocarbons – equipment and machinery
- Toxic Material – cement, solvents, paints, cleaning agents etc.
- pH altering substances – cement, cleaning agents etc.

Construction phase pollutants should be planned and mitigated for by a designed site-specific SWMP as part of the drawing set. This should detail controls including, but not limited to:

- Diversion of upslope water (where applicable)
- Stabilised exit/entry points
- Minimise site disturbance where possible
- Implement sediment control along downslope boundaries
- Appropriate location and protection for stockpiles
- Capture on-site runoff that may contain pollutants
- Maintain control measures
- Stabilise site after disturbance (revegetate etc.)

5.2 Stormwater Quality Modelling

Stormwater pollutant modelling for the development at 173 Marlborough Street was undertaken using Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software, version 6.3.0 under the guidelines of the State Stormwater Strategy and Interim Planning Scheme.

This model splits the catchment into the following typical areas:

- Roof Catchment
- Road Catchment (including bank runoff)
- Carpark (including bank runoff and access road)
- Revegetated land

The following fraction impervious and land areas have been adopted in the modelling as per the concept design measurements. Revegetated land was left to freely drain to the node as there is no mechanism to drain this area to a treatment device. See Table 6 below for fraction imperviousness (fi).

Table 6. Adopted Fraction Impervious

Catchment Area (ha)	Roof		Driveway		Revegetated	
	Area (ha)	fi	Area (ha)	fi	Area (ha)	fi
1.8	0.08	1	0.03	0.44	1.62	0

5.2.1 Council Planning Quality Removal Standards

The Northern Midlands Council Interim Planning Scheme 2015 has adopted the pollutant removal targets and best practice from the State Stormwater Strategy 2010. See Table 7 for target removal rates.

Table 7. State Stormwater Strategy Pollutant Removal Targets

Parameter	Result Pollutant Retention on Developed Site
Total Suspended Solids (TSS) (kg/yr)	80%
Total Phosphorous (TP) (kg/yr)	45%
Total Nitrogen (TN) (kg/yr)	45%
Total Pollutants (kg/yr)	100%

5.3 Treatment Train

To achieve stormwater pollutant removal targets outlined above and considering site constraints, this model utilised a primary treatment train (Figure 5). The treatment train consists of a primary grassed swale drains servicing each lot.

5.4 Quality Results

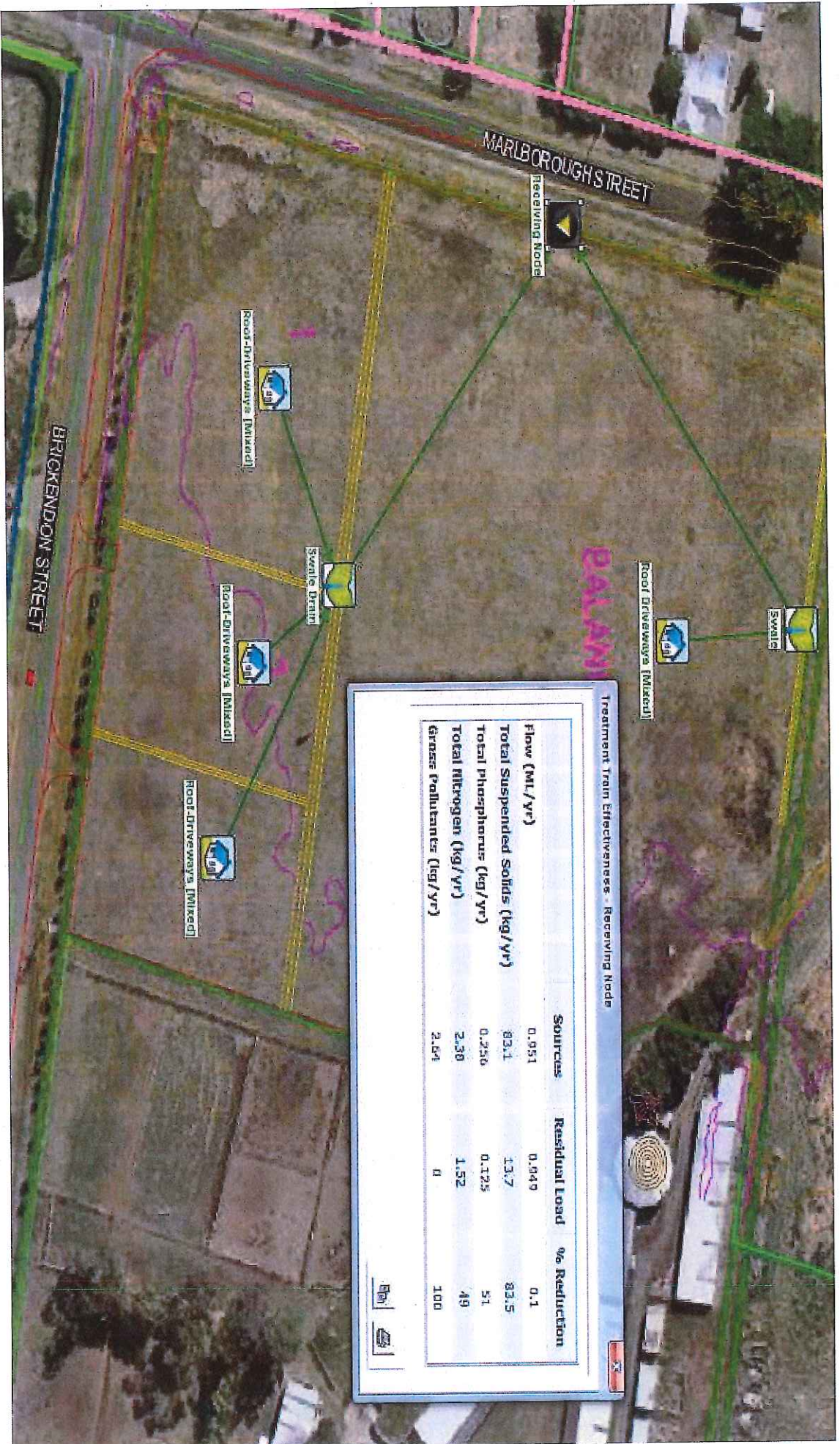
The MUSIC pollutant load reductions can be seen detailed in Table 8 below. As can be seen when comparing the MUSIC results to the required state stormwater strategy target load reductions, the specified treatment train outlined above and as seen in Figure 5, shows that all targets either met or exceed reduction targets.

Table 8. Pollutant Removal Achieved vs Targets

Parameter	Required Load Reduction (%)	MUSIC Modelled Load Reduction (%)	State Stormwater Targets Achieved (Y/N)
Total Suspended Solids (TSS) (kg/yr)	80.0	83.5	Y
Total Phosphorous (TP) (kg/yr)	45.0	51	Y
Total Nitrogen (TN) (kg/yr)	45.0	49	Y
Total Pollutants (kg/yr)	90.0	100	Y

Based on the water quality assessment using the MUSIC software, it is found that the pollutant reduction improvement can be achieved by adopting the proposed grassed swale drain.

Figure 5. MUSIC Treatment Train Effectiveness Result



5.5 Quality Summary

Flüssig Spatial recommends the following be undertaken to ensure the ongoing stormwater quality from the developed site:

1. Construction quality control should be implemented to prevent pollution during construction
2. Installation of primary grassed swale drain in the order specified in this document
3. Maintenance plans need to be created and adhered to ensure the ongoing operation of the systems

6. Conclusion

The Stormwater System Management Plan for 173 Marlborough Street, Longford development site has reviewed the post development quantity and quality scenarios. Post-development quantity and quality has been assessed against the Northern Midlands Council Stormwater Runoff Management Policy and the State Stormwater Strategy to ensure the post-development flows meet specified standards.

The following conclusions were derived in this report:

1. A comparison of the post-development peak flows for the 1% AEP storm event were undertaken against the SRMP allowable discharge and found to meet the allowable discharge using the proposed grassed swale drain.
2. The total volume of 0.018m³ is stored from the roofed areas and as such, driveways and other ground level surface runoff drains freely to the swale drain.
3. 1% OFP is considered through the site and directed away from neighbouring properties and critical infrastructure on site.
4. Grassed swales drain designed and sized using MUSIC can achieve required pollutant removal through the construction and dimensions specified in Appendix A.

Under the Stormwater Management Plan, the development site will meet current specified standards for both quantity and quality control.

7. Limitations

Flüssig Spatial were engaged by the developer of 173 Marlborough Street, Longford for the purpose of a site-specific stormwater management plan as per the Northern Midlands Interim Planning Scheme 2015. This study is deemed suitable for purpose at the time of undertaking the study. If conditions of the subdivision change, the plan will need to be reviewed against all changes.

This report is to be used in full and may not be used in part to support any other objective other than what has been outlined within, unless specific written approval to do otherwise is granted by Flüssig Spatial.

Flüssig Spatial accepts no responsibility for the accuracy of third-party documents supplied for the purpose of this stormwater management plan.

Appendices

Appendix A: FS_HBO_2039-C1001 Stormwater Concept Plan



Before the flood
we map the risk

Level 4,116 Bathurst Street
Hobart, Tasmania 7000

Level 3, 51 Queen Street
Melbourne, Victoria 3000

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SOCIETY OF AUSTRALIA

Submission to Planning Authority Notice

Council Planning Permit No.	PLN-20-0174	Council notice date	10/11/2020
TasWater details			
TasWater Reference No.	TWDA 2020/01877-NMC	Date of response	01/12/2020
TasWater Contact	Amanda Craig	Phone No.	0448 469 386
Response issued to			
Council name	NORTHERN MIDLANDS COUNCIL		
Contact details	Planning@nmc.tas.gov.au		
Development details			
Address	173 MARLBOROUGH ST, LONGFORD	Property ID (PID)	2018212
Description of development	4-lot subdivision		
Schedule of drawings/documents			
Prepared by	Drawing/document No.	Revision No.	Date of Issue
6ty°	19.019 P05 Proposal Plan	G	25/11/2020
Conditions			
Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater imposes the following conditions on the permit for this application:			
CONNECTIONS, METERING & BACKFLOW			
1. A suitably sized water supply with metered connections to each lot of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.			
2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.			
3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.			
ASSET CREATION & INFRASTRUCTURE WORKS			
4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.			
5. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water to TasWater's satisfaction.			
6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.			
7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.			
8. Prior to the issue of a Consent to Register a Legal Document all additions, extensions, alterations or			

upgrades to TasWater's water infrastructure required to service the development, generally as shown on the concept servicing plan, referenced within the schedule of drawings above, are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.

9. After testing/disinfection, to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.
10. At practical completion of the water and sewerage works and prior to TasWater issuing a Consent to a Register Legal Document, the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
 - a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
 - b. A request for a joint on-site inspection with TasWater's authorised representative must be made;
 - c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;
 - d. Work As Constructed drawings and documentation must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.
11. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.
12. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.
13. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.
14. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.

FINAL PLANS, EASEMENTS & ENDORSEMENTS

15. Prior to the Sealing of the Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater as evidence of compliance with these conditions when application for sealing is made.
Advice: Council will refer the Final Plan of Survey to TasWater requesting Consent to Register a Legal Document be issued directly to them on behalf of the applicant.

DEVELOPMENT ASSESSMENT FEES

16. The applicant or landowner as the case may be, must pay a development assessment fee of \$351.28, and a Consent to Register a Legal Document fee of \$149.20 to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date paid to TasWater.
- The payment is required within 30 days of the issue of an invoice by TasWater.
17. In the event Council approves a staging plan, a Consent to Register a Legal Document fee for each stage, must be paid commensurate with the number of Equivalent Tenements in each stage, as approved by Council.

Advice

General

For information on TasWater development standards, please visit <http://www.taswater.com.au/Development/Development-Standards>

For application forms please visit <http://www.taswater.com.au/Development/Forms>

Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

- (a) A permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater
- (b) TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit www.taswater.com.au/Development/Service-location for a list of companies
- (c) TasWater will locate residential water stop taps free of charge
- (d) Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

Authorised by



Jason Taylor
Development Assessment Manager

TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

REFERRAL OF DEVELOPMENT APPLICATION PLN-20-0174 TO WORKS & INFRASTRUCTURE DEPARTMENT

Property/Subdivision No: 109300.658

Date: 8 October 2020

Applicant: Mr Carlton Dixon

Proposal: 4-lot subdivision (vary lot size; servicing and within Attenuation Area)

Location: 173 Marlborough Street, Longford

W&I referral PLN-20-0174, 173 Marlborough Street, Longford

Planning admin: W&I fees paid.

Please inspect the property and advise regarding stormwater/drainage, access, traffic, and any other engineering concerns.

Is there is a house on one of the lots?	No
Is it connected to all Council services?	N/A
Are any changes / works required to the house lot?	N/A
Are the discharge points for stormwater, infrastructure that is maintained by Council? (This requires a check to ensure the downstream infrastructure is entirely owned, maintained, operated by Council and have been taken over as Council assets.)	Yes

Stormwater:

Does the physical location of stormwater services match the location shown on the plan? (Requires an on-site inspection)	Yes
Is the property connected to Council's stormwater services?	Yes
If so, where is the current connection/s?	Shallow open drain on roadside
Can all lots access stormwater services?	Yes
If so, are any works required?	Yes, applicant to provide design
Is stormwater detention required	No
Has a stormwater detention design been submitted	N/A
If so, is it designed for 20- year ARI with overland flow path to road or any other low risk Council approved place of discharge.	N/A
If no to above , has the design for 100 – year ARI been done.	N/A
If yes to any of the above, does it comply with Councils stormwater policy	N/A
Is the design approved by works & infrastructure	N/A
Please quote drawing numbers and any other relate documentation (email etc.)	#:
Additional Comments/information	No
Stormwater works required:	
Works to be in accordance with Standard Drawing TSD-SW25 – a 100mm stormwater connection.	
Multiple Dwellings: Works to be in accordance with Standards – a 150mm stormwater connection	
Is there kerb and gutter at the front of the property?	No
Are any kerb-and-gutter works required?	No

Road Access:

Does the property have access to a made road?	Yes
If so, is the existing access suitable?	No
Does the new lot/s have access to a made road?	Yes
If so, are any works required?	Yes, see below
Is off-street parking available/provided?	Yes
Road / access works required:	
• <i>standard rural access (TSD-R03)</i>	
Is an application for vehicular crossing form required?	Yes
Is a footpath required?	No
Extra information required regarding driveway approach and departure angles	No
Are any road works required?	No
Are street trees required?	No
Additional Comments:	An Engineer's design is not required.

Engineer's comment:

Council services for this subdivision can be addressed by standard conditions.

WORKS & INFRASTRUCTURE DEPARTMENT CONDITIONS**STANDARD CONDITIONS FOR SMALL SUBDIVISIONS**W.1 Stormwater

Each lot must be provided with a connection to the Council's stormwater system, constructed in accordance with Council standards and to the satisfaction of Council's Works & Infrastructure Department.

A Part V agreement shall be placed on each lot requiring:

1. All roof stormwater is connected to the reticulated stormwater system
2. A design is to be submitted prior to the approval of the building permit showing onsite detention for all hardstand areas.
3. Stormwater pits to drain ground water must not be connected to the reticulated stormwater system.

W.2 Access (Rural)

- a) A driveway crossover and hotmix sealed apron must be constructed from the edge of the Street to the property boundary of each Lot in accordance with Council standards.
- b) Access works must not commence until an application for vehicular crossing has been approved by Council.

W.3 As constructed information

As Constructed Plans and Asset Management Information must be provided in accordance with Council's standard requirements.

W.4 Municipal standards & certification of works

Unless otherwise specified within a condition, all works must comply with the Municipal Standards including specifications and standard drawings. Any design must be completed in accordance with Council's subdivision design guidelines to the satisfaction of the Works & Infrastructure Department. Any construction, including maintenance periods, must also be completed to the approval of the Works & Infrastructure Department.

W.5 Works in Council road reserve

- a) Works must not be undertaken within the public road reserve, including crossovers, driveways or kerb and guttering, without prior approval for the works by the Works Manager.
- b) Twenty-four (24) hours notice must be given to the Works & Infrastructure Department to inspect works within road reserve, and before placement of concrete or seal. Failure to do so may result in rejection of the vehicular access or other works and its reconstruction.

W.7 Easements to be created

Easements must be created over all Council owned services in favour of the Northern Midlands Council. Such easements must be created on the final plan to the satisfaction of the General Manager.

W.8 Pollutants

- a) The developer/property owner must ensure that pollutants such as mud, silt or chemicals are not released from the site.
- b) Prior to the commencement of the development authorised by this permit the developer/property owner must install all necessary silt fences and cut-off drains to prevent soil, gravel and other debris from escaping the site. Material or debris must not be transported onto the road reserve (including the nature strip, footpath and road pavement). Any material that is deposited on the road reserve must be removed by the developer/property owner. Should Council be required to clean or carry out works on any of their infrastructure as a result of pollutants being released from the site the cost of these works may be charged to the developer/property owner.

W.9 Nature strips

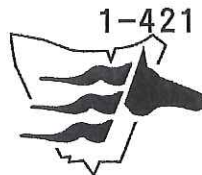
Any new nature strips, or areas of nature strip that are disturbed during construction, must be topped with 100mm of good quality topsoil and sown with grass. Grass must be established and free of weeds prior to Council accepting the development.

Jonathan Galbraith (Engineering Officer)

Stormwater discussed with Leigh McCullagh (Works Manager)

Date: 16/10/20

ATTACHMENT C



LONGFORD EQUINE CLINIC

Phone: (03) 63911000 • Fax: (03) 63912258 • Anstey St, Longford TAS 7307
A Ballymore Stables P/L Enterprise • ABN 12 612 795 939
www.longfordequine.com.au

NORTHERN MIDLANDS COUNCIL					
File No.					
Property					
Attachments					
REC'D 16 NOV 2020					
GM			PLN		
P&DM			BLD		
CSM			MYB		
WM			EA		
HP					
HLT					

Received by
L. Davey
10:45am

16.11.2020

The General Manager
Northern Midlands Council

I wish to object to development application PLN-20-0174, on the following grounds.

1. This proposed subdivision is on land currently being used to spell racehorses. The land is part of a larger area around the Longford thoroughbred training centre, which was previously classified as Particular Purpose Racehorse Training and Stables. That is to say the land was set aside for that purpose in order to support the adjacent Longford Training Centre. The zoning was changed to low residential solely to comply with the statewide planning scheme template (which contained no Particular Purpose Racehorse Training and Stables) and not because the Council had any desire at the time to change the intended use of the land. There is just as much need today to preserve the land for the support of racing as there was when Particular Purpose Racehorse Training and Stables was instituted, and the interim planning scheme still requires that to be the case.

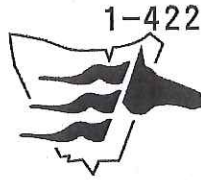
If Council is to now allow or facilitate subdivision and development of this land, not only will it be in breach of the planning scheme, it will have the following repercussions.

- A. It will be risking future conflict between existing trainers and horsemen and future residential owners unused to the implications of living in close proximity to racehorse stables, and driving on roads and streets frequently used by horses. This would clearly conflict with Section 32 of the Land Use Planning and Approvals Act 1993 which requires council to "as far as practicable avoid the potential for land use conflicts with use and development permissible under the planning scheme applying to the adjacent area"
- B. But most importantly it will be signing the slow death warrant of the Longford Training Centre. A training centre can only survive when it has the necessary support structures in place and an essential part of that is the space available for training and spelling, as well as an understanding and sympathetic immediate local community. Those residences presently within the area are almost all involved in and sympathetic to the racing industry. There can be no guarantee of that with this subdivision, which is a requirement of the current interim planning scheme.

Council would be aware that the Longford Training Centre has considerable cultural and colonial significance as the oldest continuously used racetrack in Australia. Sydney's prestigious Banjo Club recognises Australian country racetracks that it believes are an important part of our colonial heritage, in keeping with the spirit of Banjo Paterson, after whom the club was named. The Longford track received this recognition approximately a decade ago. Following the unfortunate and sad demise of the Deloraine track and its historic live steeples, the Longford track is the last remaining iconic country racetrack in Tasmania. The importance of the track and the Longford Cup is not sufficiently recognised by Council in my view. At a time when country tracks are

Michael Morris
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michael@longfordequine.com.au

Chris Cornes
Mobile: 0408 139 244
chris@longfordequine.com.au



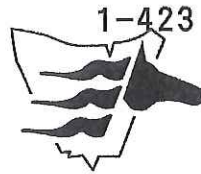
LONGFORD EQUINE CLINIC

Phone: (03) 63911000 • Fax: (03) 63912258 • Anstey St, Longford TAS 7301
A Ballymore Stables P/L Enterprise • ABN 12 612 795 939
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under siege it is imperative, we celebrate and highlight those things that add value to our towns, clubs and institutions, so that it becomes harder for regulators and opponents to shut them down.

If Council were to allow subdivision of land specifically set aside to aid and support training it would be a clear indication it has no regard for our racing history. The land and racetrack should in my view should be added to the historic precinct of which Brickendon and Woolmers are a part.

- C. Approving this subdivision proposal would set a precedent for further subdivision of other land that sits within the referred to Particular Purpose Racehorse Training and Stables area. Mr Dixon has recently acquired much of this land, presumably with subdivision in mind. To allow this to proceed is a very real existential threat to the Longford Training Centre.
 - D. Any subdivided land must be used in accordance with the interim planning scheme, which means it must have a use associated with the racing industry and council has a duty and obligation to ensure this occurs.
2. The application has not adequately addressed the issue of stormwater.
- A. Council would be aware the problem this part of town faces with stormwater as I have complained about it previously with no action forthcoming at all. The area is extremely flat with little to no fall in any direction, which makes water run off almost impossible. Beyond a few poorly constructed roadside drains there is no stormwater infrastructure in this area and it would appear there is no intention to put any in. I live, and run an equine veterinary clinic, opposite the Longford Training Centre in Brickendon St, one block away from the proposed subdivision. Every winter in heavy rain events my house and clinic are cut off for days by the roadside drains holding water that cannot escape. The attached photos were taken 3 days after a rain event finished, and demonstrate the problem.



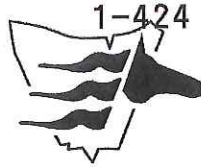
LONGFORD EQUINE CLINIC

*Phone: (03) 63911000 • Fax: (03) 63912258 • Anstey St, Longford TAS 7301
A Ballymore Stables P/L Enterprise • ABN 12 612 795 939
www.longfordequine.com.au*



Michael Morris
Mobile: 0418 130 055
michael@longfordequine.com.au

Chris Cornes
Mobile: 0408 139 244
chris@longfordequine.com.au



LONGFORD EQUINE CLINIC

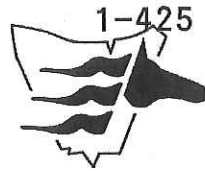
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But at least there are shallow roadside drains outside my property. There are no drains at all adjacent to the proposed subdivision (see photos).

Michael Morris
Mobile: 0418 130 055
michael@longfordequine.com.au

Chris Cornes
Mobile: 0408 139 244
chris@longfordequine.com.au



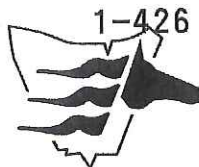
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It is quite evident the existing residents are already disadvantaged by the lack of water and sewerage infrastructure. The area relies on the ability of the land to absorb both stormwater and wastewater as it can't escape, and in winter that ability is already frequently exceeded on multiple occasions by the existing number of residents with attendant buildings and roofs.

To suggest the area can cope with further building development and water runoff, without pumping stations is ludicrous.

- B. The stormwater assessment accompanying the application is at pains to point out it was conducted on the basis the proposed lots were to be residential lots with a typical 3 bedroom home. No mention was made of other buildings, sheds etc. The wastewater assessment on the other hand said there was sufficient scope for a typical 4 bedroom dwelling, so presumably there is NOT sufficient stormwater capacity for a 4 bedroom dwelling or for any sheds, or they would have said so. Given the report was commissioned by Mr Dixon you can be sure it presents the most favourable options available. It sounds like a very small margin for error on the stormwater assessment. In any case it is clear the stormwater assessment was done on the basis of a residential dwelling of limited size and no attendant outbuildings. It most definitely was not done with a view to a commercial property with a much larger roof footprint and runoff, as well as the increased wastewater production and reticulated water use. It is my understanding this is the intended use of one of the lots.

In conclusion, even if Council is to give no regard to its obligations for future use of land within this area, or to the effect this subdivision will have on the future of the Longford Training Centre, it is abundantly clear the topography of this part of town renders any subdivision wholly inappropriate, without the installation of stormwater pits and pumping stations.

Yours Sincerely

Dr Michael Morris B.V.Sc
Senior Veterinarian
Longford Equine Clinic

Dee Alty
Email: dee.alty@gmail.com
Phone: 0438981175

Planning Department
Northern Midlands Council
Smith Street
Longford
Tas 7301

Dear Sir or Madam

I wish to formally object to the 4 lot subdivision at **173 Marlborough Street, Longford** on the following grounds:

1. Firstly, the subdivision does not comply with the proposed plans for this area of South Longford as is being considered for development to revitalize the racecourse area as a general horse centre. This would be in direct conflict with this strategic development and would also pose a problem to any residents who might buy into this subdivision as a pre-existing use would impact them with, noise, smell, traffic impact etc. This is a historic area, thus heritage provisions should also apply, which aren't apparent in this application and discussion.
2. The low density zone was for a reason in that it provides a buffer between a more intensive use and a residential use.
3. According to the submission provided, this developer is not prepared to pay for the proper head-works to ensure water is properly channelled and that sewage and water goes into the Council system and that provision is made for flooding or sewage leaking, on the grounds that it is too expensive! All new subdivisions should provide for the common good of the town and not build up problems for the future. This should not be a discretion. I commend and endorse the comments made by Mike Morris in his objection.
4. It is also in a bushfire prone area and with climate change being made very obvious lately, certainly provision of water for firefighting is essential.
5. If the Northern Midlands is really considering the economic growth for this district, then this development cuts across any chance of rural development activity occurring.
6. Public open space should not be a discretion, it is there for the good of the area and has a role to play in providing amenity for residents.

Yours faithfully,
Dee Alty

Rosemary Jones

From: Northern Midlands Council
Sent: Tuesday, 17 November 2020 12:59 PM
To: NMC Planning
Subject: FW: PLANNING.

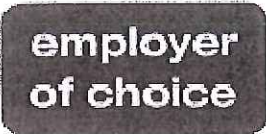
Follow Up Flag: Follow up
Flag Status: Flagged

Our Longford office is open from 8:45am until 4:30pm weekdays, however meetings with Council Officers are by appointment only, and we ask that transactions be conducted via telephone or online wherever possible. Our Customer Service team can be contacted by phone, post, via our website or email at council@nmc.tas.gov.au
Our priority is to keep our community, including staff, ratepayers and residents safe and to minimise the spread of COVID-19.

Tina Butler



Administration Officer - Assets/Finance | Northern Midlands Council
Council Office, 13 Smith Street (PO Box 156), Longford Tasmania 7301
T: (03) 6397 7303 | F: (03) 6397 7331
E: tina.butler@nmc.tas.gov.au | W: www.northernmidlands.tas.gov.au



From: llangan37@dodo.com.au <llangan37@dodo.com.au>
Sent: Tuesday, 17 November 2020 12:43 PM
To: Northern Midlands Council <council@nmc.tas.gov.au>
Subject: PLANNING.



I express grave concern and objection to the subdivision proposal at 173 Marlborough Street, Longford.

This proposal violates a heritage area and tramples on worthy historical associations that ought to be recognised and protected by The Northern Midlands Council.

Len.W.Langan



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Neil Tubb
54 Marlborough St
Longford
TAS 7301

November 17, 2020

Planning Department
Northern Midlands Council
21 Smith Street
Longford TAS 7301

Re: DEVELOPMENT APPLICATION PLN-20-0174

I wish to take the opportunity to advise the Northern Midlands Council that I support the objection of PLN-20-0174 submitted by Mr Michael Morris of 97 Brickendon Street, Longford.

I agree with all the points he has highlighted in his letter dated November 16, 2020, in particular where he states, "the approval of this Plan will be signing a slow death warrant of the Longford Training Centre".

The other points I note are :

1. The subdivision does not comply with the proposed plans for this area of South Longford as stated in 315/20 DRAFT PLANNING SCHEME AMENDMENT 04/2020: LOW DENSITY RESIDENTIAL ZONE, SOUTHERN LONGFORD which is being considered for development to revitalize the racecourse area as a general horse centre.

This is a historic area, thus heritage provisions should also apply, which aren't apparent in this application and discussion.

2. The low density zone is discretionary and provides a buffer between a more intensive residential use and Horse Training and Stables Zone 1995 Planning Scheme.

Yours sincerely,


Neil Tubb

1-431

Dennis & Rhonda Pettyfor
Email: longfordpark@ozemail.com.au
0407 305 786

NORTHERN MIDLANDS COUNCIL					
File No.					
Property					
Attachments					
REC'D 17 NOV 2020					
GM					
P&DM			PLN		
CSM			BLD		
WM			MYR		
HR			EA		
HLT					

Planning Department
Northern Midlands Council
Smith Street
Longford
Tas 7301

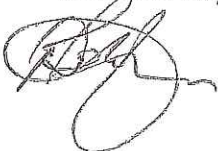
Dear Sir or Madam

I wish to formally object to the 4 lot subdivision at **173 Marlborough Street, Longford** on the following grounds:

1. Firstly, the subdivision does not comply with the proposed plans for this area of South Longford as is being considered for development to revitalize the racecourse area as a general horse centre. This would be in direct conflict with this strategic development and would also pose a problem to any residents who might buy into this subdivision as a pre-existing use would impact them with, noise, smell, traffic impact etc. This is a historic area, thus heritage provisions should also apply, which aren't apparent in this application and discussion.
2. The low density zone was for a reason in that it provides a buffer between a more intensive use and a residential use.
3. According to the submission provided, this developer is not prepared to pay for the proper head-works to ensure water is properly channelled and that sewage and water goes into the Council system and that provision is made for flooding or sewage leaking, on the grounds that it is too expensive! All new subdivisions should provide for the common good of the town and not build up problems for the future. This should not be a discretion. I commend and endorse the comments made by Michael Morris in his objection.
4. Longford Cup Day is an important day for the Longford community bringing families together in the oldest racetrack still in use in Australia. It is extremely important to keep this day on the calendar.
5. If the Northern Midlands is really considering the economic growth for this district, then this development cuts across any chance of rural development activity occurring.
6. Public open space should not be a discretion, it is there for the good of the area and has a role to play in providing amenity for residents.

Yours faithfully,
Dennis Pettyfor

Rhonda Pettyfor



Rosemary Jones

From: Tim Flanagan <tim.flan@bigpond.net.au>
Sent: Friday, 20 November 2020 2:52 PM
To: NMC Planning
Subject: ref PLN-20-0174

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Sir/Madam,

I have three major concerns re this development.

1. Very simply this is the thin edge of the wedge, in diminishing the unique facility and its surrounds which is Longford race course, and training area. Chipping away at the edges is of great concern.
2. Mental health- In a world going mad, where mental health is the major health problems for young, and many older Australians; space, greenery, animals, sport, leisure are all things which this facility and its surrounds bring.
3. Tourism – If this industry again becomes important to Tasmania, depends on having points of difference to attract tourists from other area and towns. People coming from crowded cities have travelled great distances and often at great cost to see vistas, things unlike where they ate from or where else they may have been. An area of trainers, paddocks, horses – or other animals is more likely to attract tourists than generic new homes.

Yours sincerely,

Tim Flanagan
21 William St, Longford

Rosemary Jones

From: Bron's Email <bron_robert@bigpond.com>
Sent: Friday, 20 November 2020 8:53 AM
To: NMC Planning
Subject: Development application

Follow Up Flag: Follow up
Flag Status: Flagged

Mr Des Jennings
General Manager
Northern Midlands Council
13 Smith Street
Longford 7301

Dear Mr Jennings

DEVELOPMENT APPLICATION PLN-20-0174

I would like to express my views on this proposed development in Marlborough St.

In deciding to relocate to Longford, one of the properties we considered was 143 Marlborough St, down the road from this allotment, next door to horse paddocks. We were glad we didn't purchase there, as on many bike rides since have noticed that not only the aroma from paddocks but also the drone of the training circle and nearby brick factory would have been annoying.

This location should remain a precinct for horses, training, racing.

Housing there would be detrimental rather than complimentary for both residents and horse fraternity. In my view, only people involved in the industry would care to reside onsite, as I think is currently the case with surrounding properties.

Regards
Bron Baker

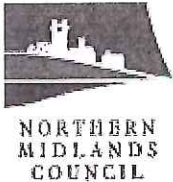
Rosemary Jones

From: Northern Midlands Council
Sent: Thursday, 19 November 2020 11:58 AM
To: NMC Planning
Subject: FW: Development PLN-20-0174

Follow Up Flag: Follow up
Flag Status: Flagged

Our Longford office is open from 8:45am until 4:30pm weekdays, however meetings with Council Officers are by appointment only, and we ask that transactions be conducted via telephone or online wherever possible. Our Customer Service team can be contacted by phone, post, via our website or email at council@nmc.tas.gov.au
 Our priority is to keep our community, including staff, ratepayers and residents safe and to minimise the spread of COVID-19.

Tina Butler



Administration Officer - Assets/Finance | Northern Midlands Council
 Council Office, 13 Smith Street (PO Box 156), Longford Tasmania 7301
 T: (03) 6397 7303 | F: (03) 6397 7331
 E: tina.butler@nmc.tas.gov.au | W: www.northernmidlands.tas.gov.au

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Tasmania's Historic Heart

From: Chris <chris@longfordequine.com.au>
Sent: Thursday, 19 November 2020 10:41 AM
To: Northern Midlands Council <council@nmc.tas.gov.au>
Subject: Development PLN-20-0174

From: Chris <chris@longfordequine.com.au>
Sent: Wednesday, 18 November 2020 9:41 AM
To: 'headlam2@bigpond.com' <headlam2@bigpond.com>
Subject: Council letter

The General Manager
 Northern Midlands Council

I wish to support Michael Morris's objection to development PLN-20-0174.
 This area should be kept as Particular Purpose Training and Stables area; ie. Part of the Longford Track Training precinct.
 As per the NMC minutes 21/09/2020 : "New uses...must be directly associated with and a subservient part of sports and recreation. That is, they must be associated with horse racing."
 And, p.1590 "Use and development permissible under the amendment is expected to have a positive impact in environmental, economic and social terms."
 The above statements show that this development cannot be in keeping with the Longford training centre.
 The local area supports both land and employment to the Longford and regional racing industry.
 This would create a suburban housing which would not be conducive to training of horses.
 Has Tas Racing been informed of this development?

1-435

Yours,
Chris Cornes

Rosemary Jones

From: Kevin <headlam2@bigpond.com>
Sent: Thursday, 19 November 2020 7:05 AM
To: Planning@nmc.tas.gov.au.
Subject: Objection DEVELOPMENT APPLICATION PLN-20-0174

Follow Up Flag: Follow up
Flag Status: Flagged

Mr Des Jennings
General Manager
Northern Midlands Council
13 Smith Street
Longford 7301

Dear Sir

Re: DEVELOPMENT APPLICATION PLN-20-0174

I wish to lodge a formal complaint to this application for a residential subdivision

The very reason that this site has remained undeveloped beyond pastoral grazing for more than the 200 years of this urban settlement is now a prime reason to defer and deflect development of this land to more suitable locations. That reason was and remains that it is so flat and difficult to drain

This natural barrier to development has given the surrounding area more time to choose what growth is complementary.

At the moment the current land use is part of a very effective natural fuel reduction barrier on the immediate southern end of Longford and should be included in a wildfire management plan

I also further acknowledge my support of the objections submitted by Michael Morris submitted on November 16th, together with the objection submitted by Dee Alty

Yours faithfully,

Kevin

Kevin Headlam

Applicant's response to issues raised in representations

Issue	Response
<p>Concerned that the development of the site for residential purposes will result in loss of land to spell racehorses on and erode the viability of the Longford Racetrack and training stables. Noting that the site was previously zoned Particular Purpose Longford Training Centre.</p>	<p>The current owner purchased the property from a previous owner who was a racehorse trainer and decided to divest of the property.</p> <p>The site is now zoned Low Density Residential and therefore subdivision and subsequent development for residential purposes can occur. The previous zoning has no relevance to the subject application.</p>
<p>Concerned re conflict between trainers and horsemen and future residential owners unused to the implications of living next to stables.</p>	<p>The adjoining stables at 10 Anstey Street are owned by George Blacker who has confirmed in writing (copy attached) that he has no issue with dwellings being constructed on the proposed lots.</p> <p>It is noted that the closest point of the subject site to the racetrack is 175 metres. There are 83 residential properties within a closer proximity to the racetrack that n175 metres.</p>
<p>Approval of the subdivision will sign a slow death warrant of the Longford Training Centre.</p>	<p>The site is zoned Low Density Residential and as such subdivision is permissible, albeit the subject application requires discretion due to proposed lot size.</p>
<p>Approving the subdivision would set a precedent for further subdivision of other land that sits within the referred to Particular Purpose Racehorse Training and Stables area.</p>	<p>Neither the site or adjoining properties sit within a Particular Purpose Zone referred to. The adjoining land to the north and east is zoned Low Density Residential as is the land on the opposite side of Marlborough Street and Brickendon Street.</p>
<p>The application has not adequately addressed the issue of stormwater. The report accompanying the application is based on 3 bedroom houses on the lots and doesn't take into account sheds.</p>	<p>Response from Author of report: The Stormwater calculations are based on the ARR2019 the calculated average roof areas for a new residential development are : -180m² roof area plus 20m² shed/ carport areas = 200m² as we have stated in our report total 800m² impervious roofed areas for the 4 lots.</p> <p>Further, it is noted that under Clause 12.4.1.1 A1 site coverage cannot exceed 10%. Discretion to vary this requires consideration of a number of factors including the capacity of the site to absorb runoff.</p> <p>The table below shows the % site coverage of a 200m² development (which is what the stormwater calculations are based on) for each of the proposed lots:</p>

	Lot and area	200m ² development as % site coverage
	1. 2884m ²	6.93%
	2. 1442m ²	13.8%
	3. 1430m ²	13.9%
	Balance: 11961m ²	1.6%
	<p>Based on the above table, the two smaller lots can't even have 200m² worth of roofed development (which the stormwater calculations were based on) without triggering a discretion and requiring specific consideration of how the site can absorb runoff.</p>	
<p>The subdivision does not comply with the proposed plans for this area of South Longford, specifically Draft Amendment 315/20 which is currently being considered for revitalisation of the racecourse as a general horse centre.</p>	<p>It is understood the draft amendment referred to is Amendment 04/2020 which is to amend the Low Density Residential Zone use table to allow Domestic Animal Breeding, Boarding or Training and a Veterinary Centre as permitted uses on a number of identified titles in Southern Longford. The subject site is one of the those identified titles.</p> <p>Firstly, the amendment is not yet approved but more importantly, the amendment does not preclude use of the site for residential purposes it simply allows use of the site for animal training and boarding and as a vet centre. The proposed subdivision is not at odds with the draft amendment.</p>	
<p>This is a historic area thus heritage provisions should apply.</p>	<p>The subject site is not included on the Tasmanian Heritage Register nor within a Heritage Precinct listed in the Heritage Code therefore the provisions of the Heritage Code do not apply to the application.</p>	
<p>Concerned that developer doesn't want to pay headworks charges to have water and sewerage reticulated.</p>	<p>The site is connected to reticulated water. It is not feasible for the lots to be connected to reticulated sewerage or stormwater unless the density is allowed to be increased. It has been demonstrated that on-site stormwater detention and wastewater management is achievable.</p>	
<p>The site is in a bushfire prone area therefore water for firefighting is essential.</p>	<p>The application is accompanied by a Bushfire Hazard Management Report as required by the Bushfire Code. Water for Fire Fighting purposes is addressed in that report on pages 6-7.</p>	
<p>Public open space should not be a discretion.</p>	<p>It is understood Council has a cash in lieu policy so they can channel funds from developers to develop and maintain public open spaces in strategic locations. The site is not a strategic location for provision of public open space.</p>	

The low density residential zone provides a buffer between residential use and more intensive use.

The adjoining stables at 10 Anstey Street are owned by George Blacker who has confirmed in writing (copy attached) that he has no issue with dwellings being constructed on the proposed lots.

It is noted that the closest point of the subject site to the racetrack is 175 metres. There are 83 residential properties within a closer proximity to the racetrack than 175 metres.

1/12/20

George Blacker,
10 Anstey Street,
Longford 7310

Councillors of the Northern Midlands Council

Dear Mayor and Councillors,

I write to you directly to outline my support for the proposed 4-lot subdivision at 173 Marlborough Street, Longford.

I do so because I saw page 3 of the Northern Midlands Courier: "Fears for historic racecourse" and I thought you needed to hear from me – both as a long-time horse trainer (myself and my family) in the Northern Midlands district and as the seller of the land to Carlton Dixon. Also, my property adjoins the proposed subdivision and I am directly opposite the racecourse.

It is simply untrue of some people to say that doing this 4-lot subdivision or development of this land will impact the future of the Longford Racetrack or the training of horses in the area in general. I wouldn't have sold it if I thought this would impact. It won't, and to say so is untrue. There is plenty of land around to conduct horse training and spelling.

In addition, there are already multiple houses much closer to the racetrack than this proposed subdivision.

We need to have more land for housing suitable for younger people in particular, and they, I hope will form part of the future for the town as well as the horse training and racing industry.

All racetracks around the country are surrounded by houses – this is a good thing and supports the industry.

So I ask that you support Mr Dixon for his quest to develop low density residential housing subdivision.

Yours sincerely,

George Blacker