

Memorandum

To: Michael Campbell – Campbell Brown Planning Limited

From: Matt Jones

Date: 17 December 2021

Job No: 1628 M7

Subject: Wetland design for the proposed residential subdivision at 2182 East Coast Road, Silverdale, Stages 3 and 4

This Memorandum has been prepared to detail the proposed wetland for the proposed Build Rich Limited Stage 3 and 4 residential development at 2182 East Coast Road, Silverdale. Stages 3 and 4 form the southern portion of the overall East Coast Heights development, please refer to figure 1 below:



Figure 1: overall East Coast Heights development

A possible wetland has been identified straddling the southern boundary of the development. The wetland as surveyed by C&R Surveyors with the ecologist on site is approximately 71m long by 12m wide and 462m² in area. The wetland encroaches into eight proposed lots on the development. Please refer to Figure 2 below:



Figure 2: possible wetland on southern boundary

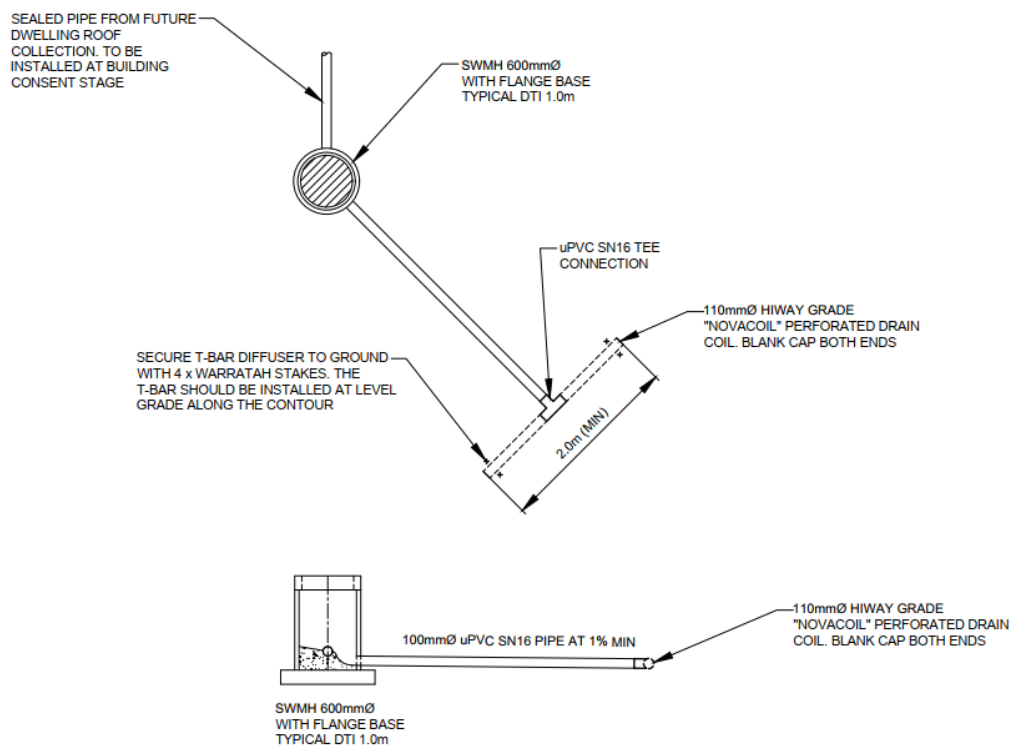
The existing wetland catchment area is approximately 40,182m². The post development catchment area is 27,220m². Please refer to Figure 3 below:



Figure 3: extract of wetland catchment areas

The base flow into the wetland will remain the same as underfill drains and retaining walls drains will be discharged into the wetland.

While the post development catchment area is reduced there will still be significant surface runoff directed to the wetland. The 19 lots (Lots 167 to 175, 220 to 225 and 286 to 289 inclusive) and the southern section of Road-3 upslope from the wetland will discharge into the natural water channel to the south and recharge the wetland on the southern boundary. The eleven lots (Lots 157 to 166 and Lot 114 inclusive) upstream of the wetland will collect the runoff from the dwelling roofs and discharge directly into the wetland via a T-bar diffuser. Please refer to Figure 4 below:



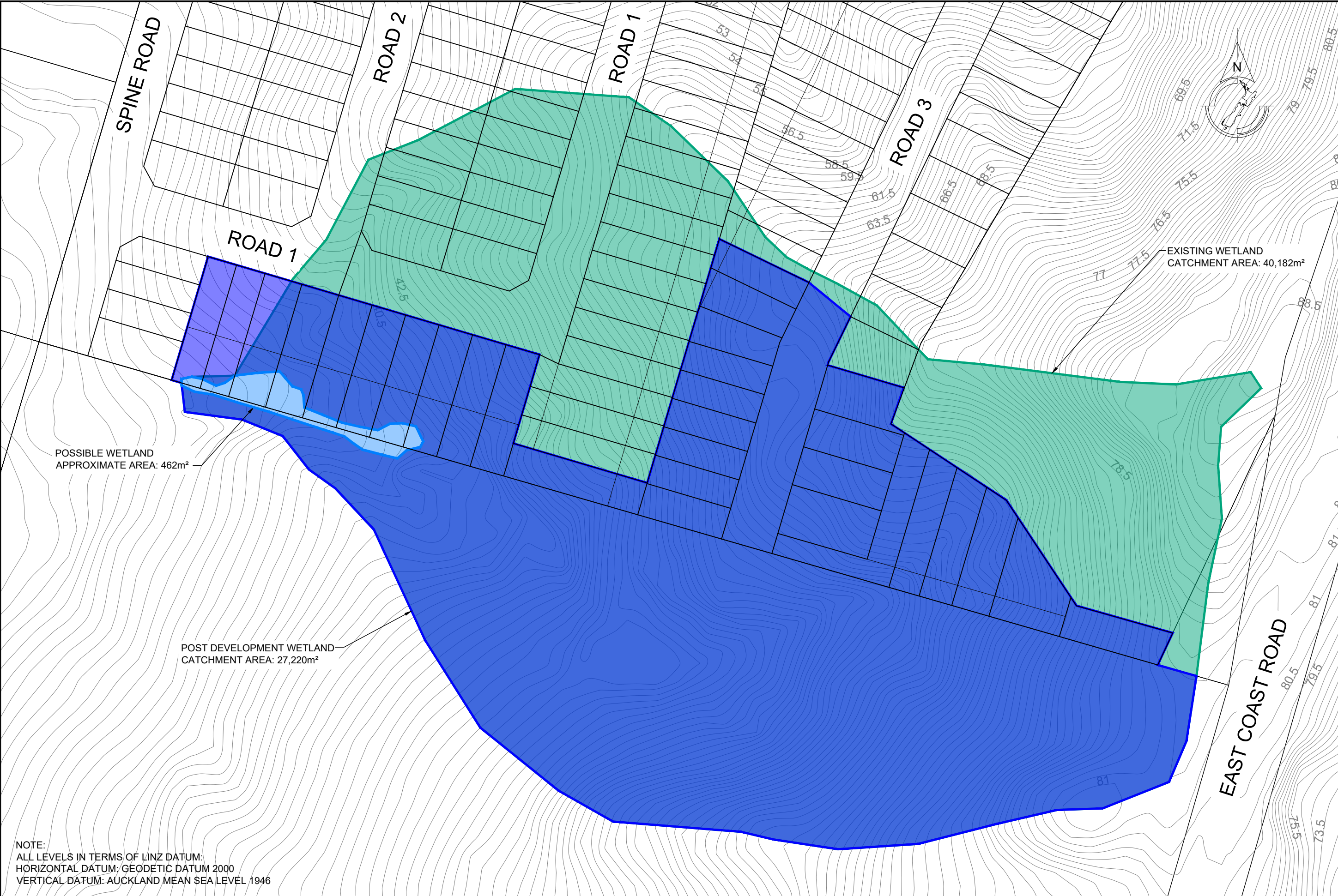
TYPICAL T-BAR DIFFUSER DETAILS

Figure 4: Proposed roof collect to wetland details

It is recommended that the eleven lots (Lots 157 to 166 and Lot 114 inclusive) discharging to the wetland are not subject to the SMAF detention and retention requirements to provide all rainfall to recharge the wetland. This should form a consent notice on the title.

We consider that the base flow and surface flow to the wetland will not be adversely affected by the proposed development. In all likelihood once the wetland is protected and planting is undertaken the wetland will be enhanced.

Please refer to stormwater plan 1628-RC-SW405 attached for the proposed wetland catchment. Please feel free to contact us if you require any further information.



NOTE:
ALL LEVELS IN TERMS OF LINZ DATUM:
HORIZONTAL DATUM: GEODETIC DATUM 2000
VERTICAL DATUM: AUCKLAND MEAN SEA LEVEL 1946

REV.	DESCRIPTION	CHECK	APP'D	DATE	SCALE	1:1000 AT A3
					DESIGN	MJ 12.21
					DRAWN	MJ 12.21
					DRAWING CHECK	MJ 12.21
					DESIGN CHECK	PF 12.21
					APPROVED	PF 12.21

CLIENT
BUILD RICH LIMITED
Conditions of Use: These drawings shall only be used for the purpose for which they were supplied. Do not measure off this drawing. If doubt please contact Engineer.

SITE ADDRESS
2182 EAST COAST ROAD SILVERDALE (STAGE 3 & 4)
DRAWING TITLE
PROPOSED WETLAND CATCHMENT PLAN

DRAWING NUMBER
1628 - RC - SW405
DATE
DEC 2021
REVISION
-



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