

20 August 2014

OUR REF # 14176
ATTN: DONNA GRAHAM
MANAGER DEVELOPMENT & ENVIRONMENT
DOUGLAS SHIRE COUNCIL

RE: YOUR REF: MCUC 15/2014 (424543)
#1 MURPHY STREET, PORT DOUGLAS

Regarding the letter from DSC 16/07/14, we make the following comments:

1. **Stormwater**

The post development discharge for the property has been designed to take all storm water falling on the property (roofs, paved areas etc.) to be taken into an outfall to an existing 450 RCP in Murphy Street near Lot 1. Storm water flows from council land in Murphy Street has not been altered from what already exists.

There is no DSC provision for drainage to council land along Murphy Street. Overland flow from Murphy Street Council land and the Murphy Street road reserve will be collected in the open lined drain along the Eastern edge of the driveway.

We note that it is not the responsibility of the owner of Lot 2 Murphy Street to cope with this overland flow from Murphy Street road reserve. This includes storm water falling on the driveway as Murphy Street contains no stormwater council infrastructure such as K&C.

Stormwater falling on the balance of Lot 2, apart from on the roof and paved areas, has not been altered by the provision of the residence from what it has

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been in the past. The provision of calculations for both the up slope catchment, i.e. In the Murphy Street Road Reserve, and above remains the DSC responsibility.

If a blockage occurs, the open lined drain along the driveway, which falls towards the 450 RCP near Lot 1 Murphy Street, will cope with these flows.

The contour information provided by RPS shows a fall along the driveway in Murphy Street Road reserve toward the North West. As stated above, all roof and paved area storm water run-offs are taken by the storm water pipes provided along the Eastern face of the driveway. Therefore storm water flows to the South have not been exacerbated by the construction.

2. Geotechnical

The geotechnical assessment of the property was undertaken using AGS(2007) Guidelines. Based on analysis in the previous Geotechnical reports, there appears to be no instability problems to the driveway on DSC road reserve. There also appears to be no instability problems in the past in this area. The Eastern corner of the property within DSC road reserve by analysis may require some stability amelioration by use of soil nails. Refer to ICE International drawing 14176-03 & 04.

Following analysis, the Western & Southern face of the site requires some stability amelioration by the use of soil nails at approx. 1.5m centres vertically & 2.0m horizontally overlain by TECCO G65/3 mesh. Nail lengths are to be in the order of 8-10m. Refer to ICE International drawing 14176-03 & 04.

Slope stability analysis shows a F of S not less than 1.433, which is satisfactory.

a) Driveway

The DSC has asked for a Geotechnical stability of the existing concrete drive way and adjacent block and drive way area below the road pavement in the Murphy Street road reserve. Firstly there is no existing concrete drive way, there is an earth drive way existing which has shown no signs of instability in the years that it has been in place. No further earthworks to this drive way are contemplated. A concrete surface is to be placed on the driveway which will reduce water ingress to the drive way and thus improve existing stability.

b) Sewerage Infrastructure

We have requested from the council the point of connection to existing council sewer close to the allotment. This sewer jump up position was marked by council and is shown on ICE International drawings 14176 – 01 & 02.

c) Water supply

There is a 100 diameter AC line in the Murphy street road reserve to the right of the allotment in question. The allotment will be connected to the water supply in this position. Refer to council information provided on the 8/5/14.

d) Landscaping

In discussions with the landscaper, we have indicated to him that the size of the TECCO G65/3 Mesh is in the order of 80mm openings; therefore planting into this mesh cannot include trees but should include ground cover acceptable to council.



Peter J Lennox

RPEQ 1128

QBCC Site Classifier Licence 18267

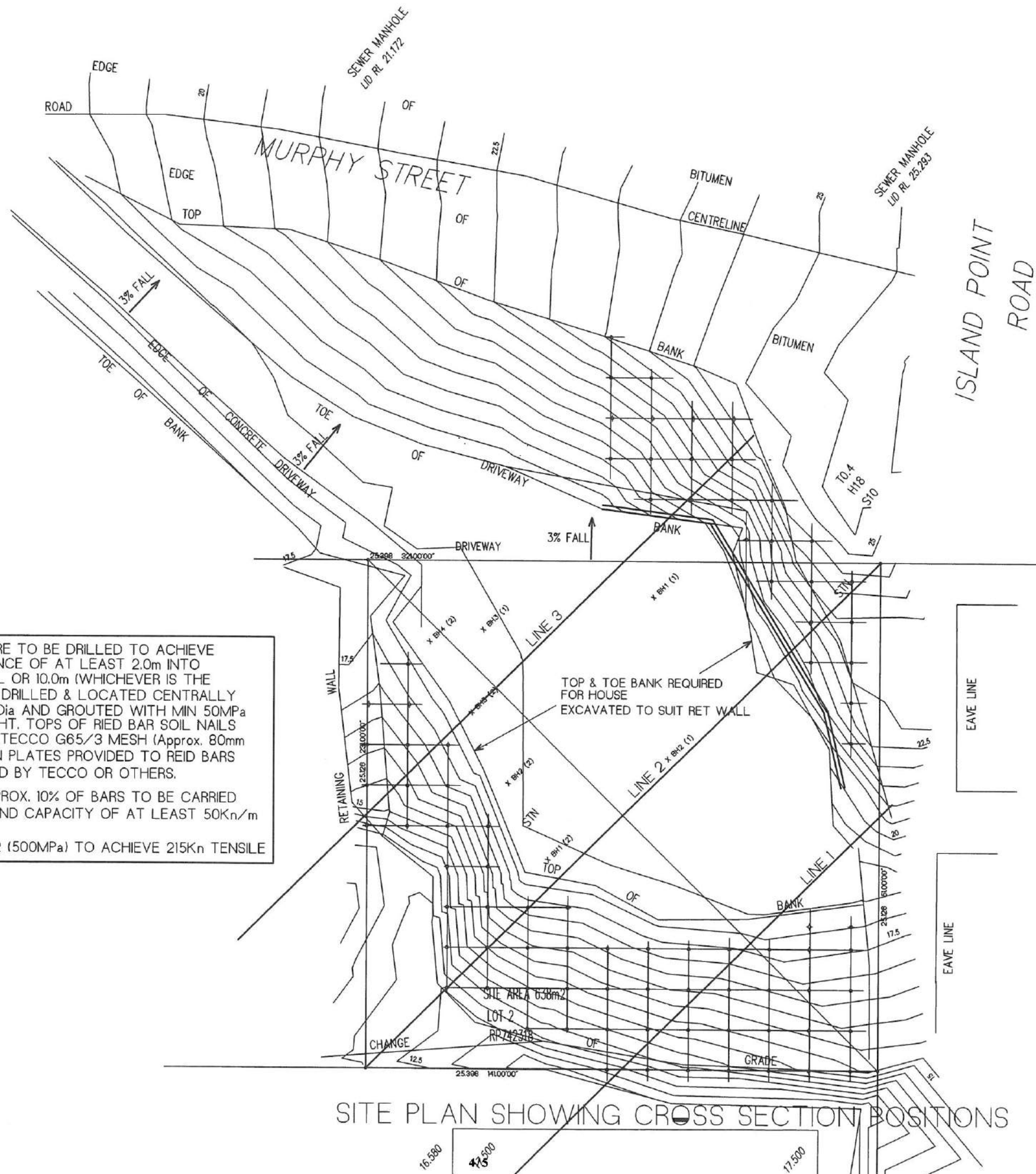
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SITE PLAN SHOWING CROSS SECTION POSITIONS

LOT 2 MURPHY STREET
PORT DOUGLAS

designed PL	drawn KL	drawing no. 03
approved 	job no. 14176	
scale 1:200	date MAY14	rev. no. A

