

Moreton Geotechnical Services Pty Ltd:
Review of the Latest Subdivision Plan for the Proposed Residential Development at 639 Redbank Plains Road, Redbank Plains (Ref:2016/53/05, 09/11/2018):

Area 1

Area 1 which is outside of all known mine influences and is therefore unconstrained from mining issues.

Area 2

Area 2 is undermined in the north east corner and at different locations falls within the influence zone of two, and locally up to three, levels of mining. Residential development in this area (housing and underground services) is recommended to be designed for ground tilts to a maximum of 1 in 250. These potential impacts should permit the construction of typical sized slab on ground residences (subject to specific first principle engineering input) or stump residences if preferred, with the proviso that flat or waffle raft type construction is used for the slabs. Buried services should be made as flexible as possible e.g. using flexi-polypipe, snaking cables inside PVC pipes etc.

Area 3

Area 3 is undermined on up to two levels. Residential development in this case is recommended to be designed for potential ground tilts to a maximum of 1 in 145. These potential impacts will only permit that construction of residences on stumps within buried services designed and constructed as per comments above. Structurally isolated garages are also considered to be acceptable subject to input from your engineer.

Area 4

Area 4 is undermined on up to two levels and also includes the outcrop location of a fault line (where the fault comes to the surface) based on a strong linear feature recorded in the aerial photogrammetry study. This area is only recommended for parkland or the rear of allotments - i.e. where permanent structures are not permitted and where BLE's also define the Area 3 parts of each lot where residences can be constructed. Any buried services that cross the fault zone in the connector road should be placed at right angles as much as possible to the fault line (as shown) and also made as flexible as possible.

Area 5

Area 5 is the buffer zone established by previous potential Developers in discussion with Council. The lot layout discussed in this report now includes a section of road adjoining Lot 147 - 153 and Lot 123 - 125 that are located within the original established buffer zone.

Bakers Shaft

Bakers Shaft needs to be appropriately capped as per discussion in previous reports.

0 10 20 30 40 50 1:1,500 @ A1

LOT 1 RP102884 REDBANK PLAINS

Moreton Geotechnical Services
Geotechnical Constraints

PLAN REF: **139005 - 40**
 DATE: 06 DECEMBER 2023
 CLIENT: APD PROJECTS
 DRAWN BY: JC
 CHECKED BY: SM

Legend

- Site Boundary
- Area 1 (Digitised) (Moreton Geotechnical Services)
- Area 2 (Digitised) (Moreton Geotechnical Services)
- Area 3 (Digitised) (Moreton Geotechnical Services)
- Area 4 (Digitised) (Moreton Geotechnical Services)
- Area 5 (Digitised) (Moreton Geotechnical Services)
- Bakers Shaft

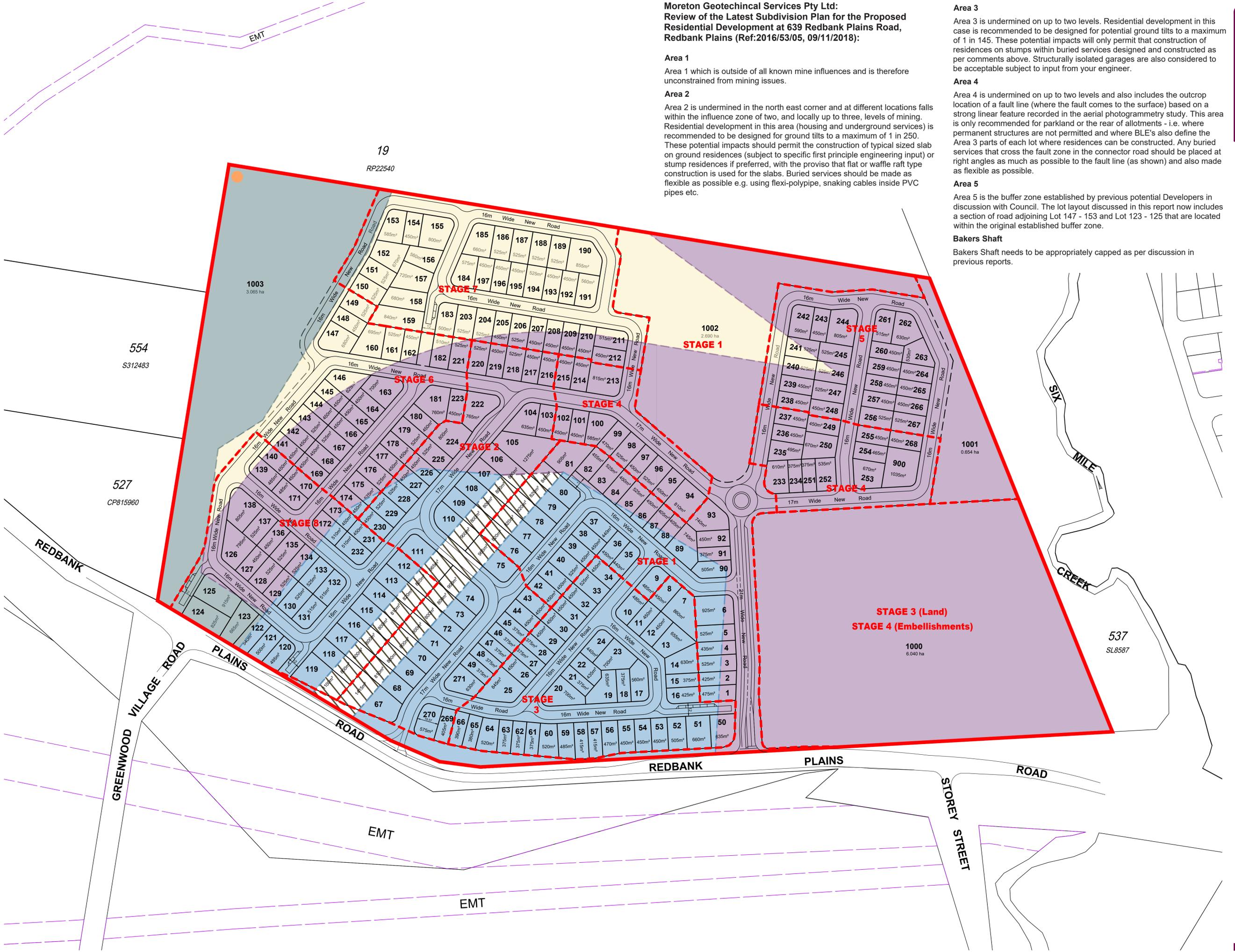
Note:
 All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:
 Site boundaries: RPS
 Adjoining information: DCDB
 Geotech Constraints: Moreton Geotechnical Services Pty Ltd (Review of the latest subdivision plan for the proposed residential development at 639 Redbank Plains Road, Redbank Plains. Ref. 2016/53/05, 09/11/2018)



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