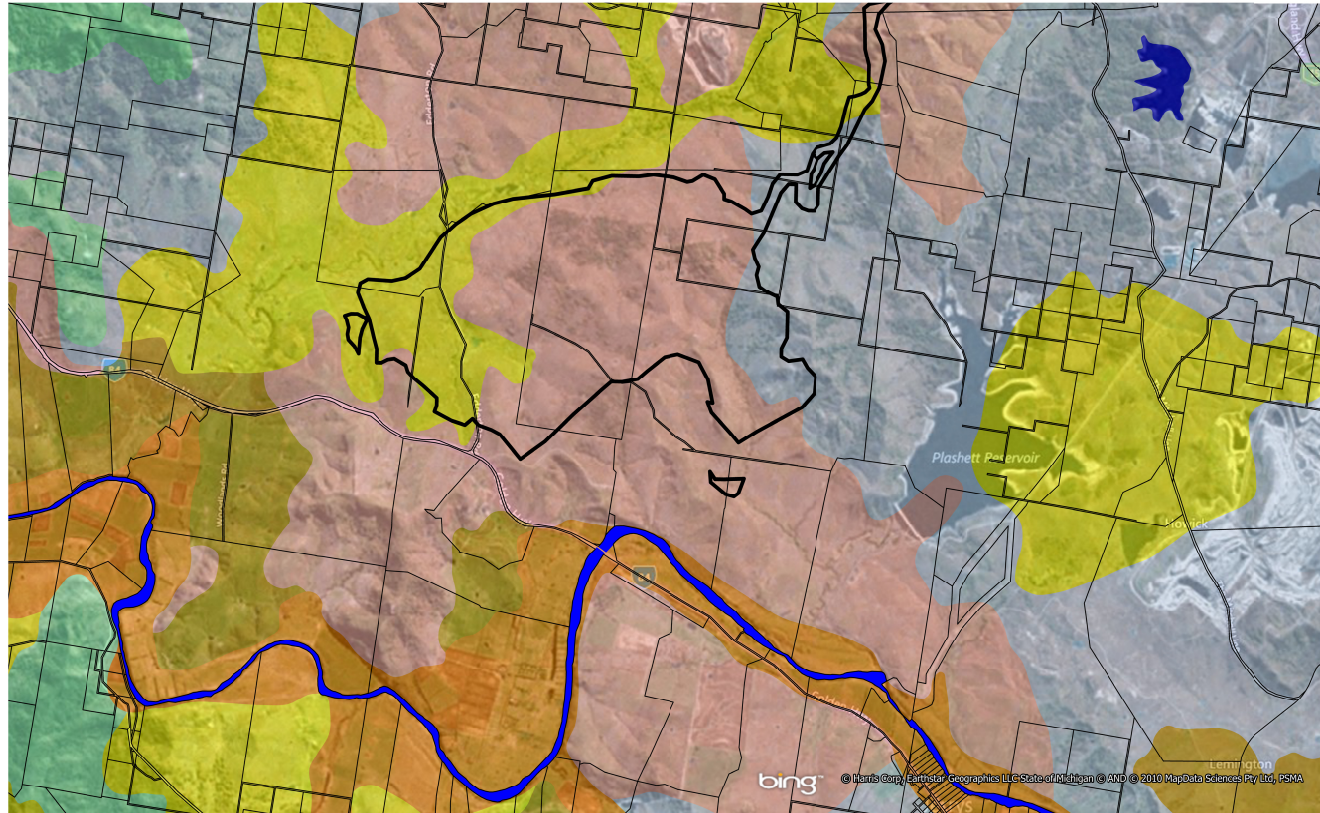


## SOIL MAPPING (Method)

- Scale of mapping unspecified
- Maps appear to be 1:50,000
- 30 test pit observation density does not comply with Mackenzie et al. 2008 guidelines of 1 per 100ha (table 14.4). The 4600 ha site would require some 46 observation sites of which if using a medium intensity survey 15-35% detailed descriptions, 1-5% deep drilling profiles for lab samples – 55 to 83% ground observations
- Method appears not to have used a systematic unique mapping area (UMA) approach to delineate mapping units or the report does not report the analysis or outcomes
- Observation density is at lower end of the recommended rate for 1:100,000 scale
- Criteria to determine agricultural capability not specified
- Criteria for assessment of land suitability not specified





ORIENTATION  
NORTH

SCALE  
0 1000 2000 3000  
metres

ROBINA  
PO Box 4115 Robina QLD4230  
Email: robina@gcses.com.au

07 5578 8944  
www.gcses.com.au

LEGEND

- Soil Type**
- ALLUVIAL SOILS
  - BROWN CLAYS
  - BROWN PLAUZOLIC SOILS
  - RED CLAYS
  - SHALLOW SOILS
  - SOLODIC SOILS
  - SOLUMS
  - WATER



SOURCES  
Aerial image base: Hybrid Bing Aerial  
Soils map base: NSW Department of Environment,  
Climate Change and Water (DECCW) - Soil  
landscape of the Singleton 1:250,000 Sheet  
Disturbance footprint: Hansen Bailey Figure 3,  
response to submissions

PROJECT  
DRAYTON PAC

CLIENT  
IH & RA MOORE  
PARTNERSHIP

DRAWING  
SOILS MAP

SCALE 1:50,000@A3 DATE 09/8/2013 DRAWN BY: BVS CHECKED: NMS PROJECT NO 11311 DRAWING NO 01

Brisbane Sydney Melbourne and regions  
**+ GILBERT SUTHERLAND**  
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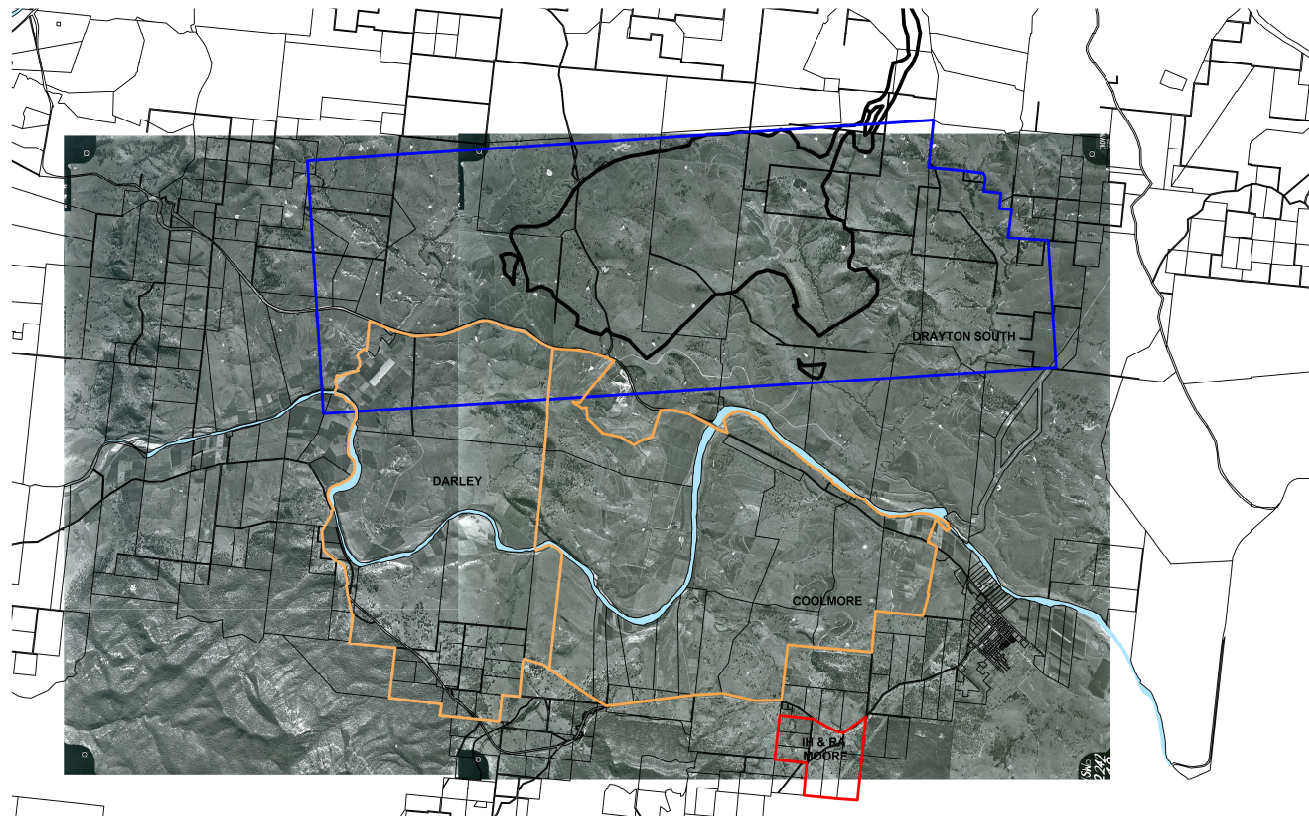
## SOIL MAPPING (Outcomes)

- Given scale of mapping and corresponding accuracy of maps there may be significant variability in soil and land types on the subject site
- Lack of clear criteria for assessment of capability and suitability makes assessment appear subjective with little objective basis
- Given scale and subjectivity of assessment the reliability of the soils, suitability and capability assessment – maps questionable



## AGRICULTURAL ASSESSMENT (Method)

- Agricultural impact assessment assessed against the NSW DPI guideline: NSW Government Strategic Regional Land Use Policy Delivery – Guideline for agricultural impact statements
- Focus of agricultural impacts is on the site itself and the offset site - does not address impacts on neighbouring farms
- Only cursory examination of surrounding properties
- Consequently report fails to address issues
- No sensitivity analysis of assumptions & values used in assessments
- No uncertainty analysis in report
- Impacts of risk and uncertainty are assessed and likelihood of uncertainty eventuating not assessed



ORIENTATION

NORTH

SCALE



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LEGEND

- Drayton South
- Coolmore & Darley
- IH & RA Moore
- Disturbance Area

SOURCES

Disturbance footprint: Hansen Bailey figure 31, response to submissions  
Historical Photography: NSW Government, Land & Property Information, A division of the Department of Finance and Services.

PROJECT  
DRAYTON PAC

CLIENT  
IH & RA MOORE  
PARTNERSHIP

DRAWING  
1974 HISTORICAL  
PHOTOGRAPHY

SCALE  
1:62,500@A3

DATE  
09/02/2013

DRAWN  
PWS

CHECKED  
NWS

PROJECT NO  
11011

DRAWING NO  
05

Brisbane Sydney Melbourne and regions

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