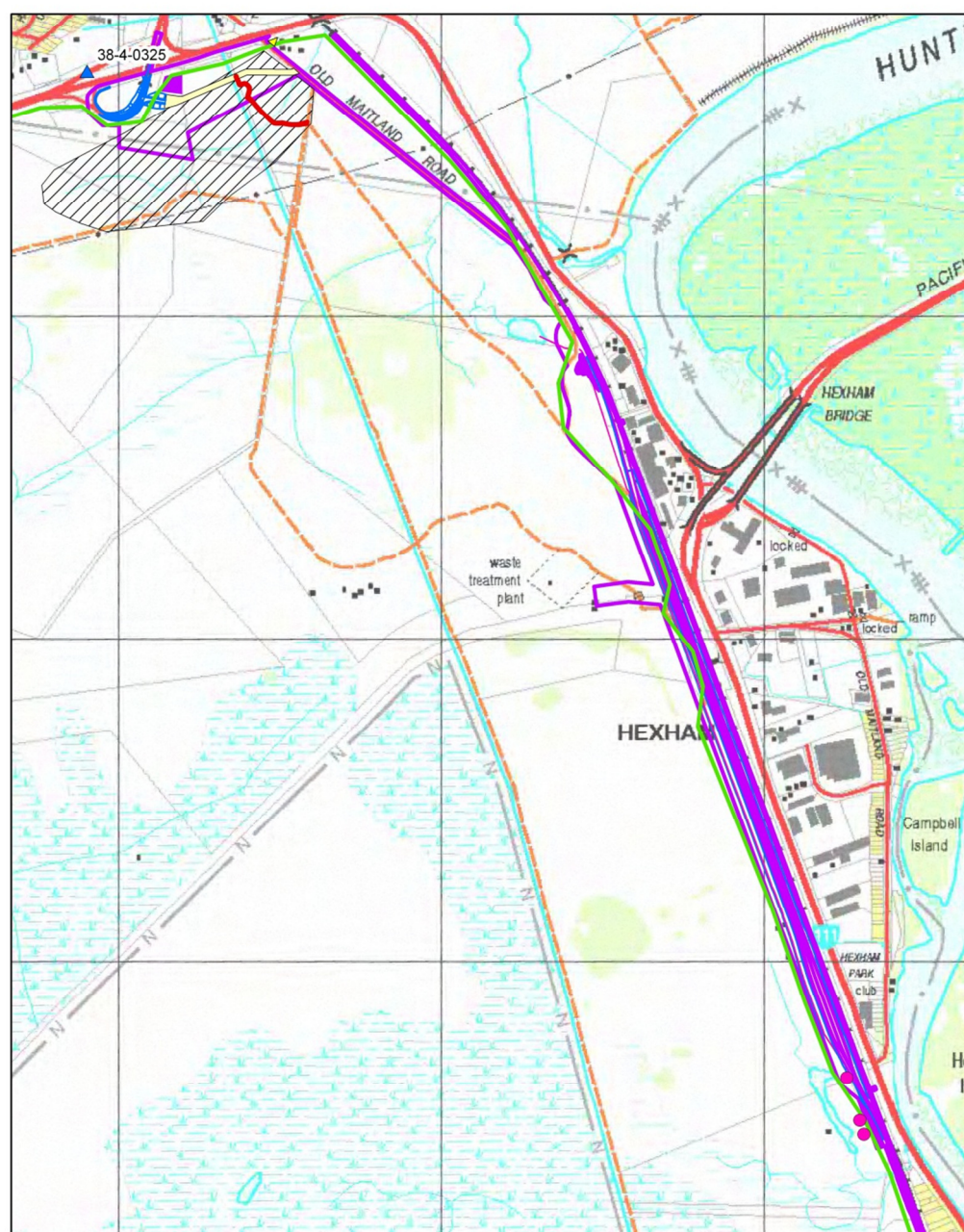




Legend

- Items located during survey on 31/8/11
 - Study Area (Project Signalling Area)
 - Access Road Options
 - HS1 (approx visible extent)
 - Indicative Tarro Interchange Access Road
 - Relief Roads
 - HS1 (possible approx potential extent)
 - Tarro Interchange Access
 - Swale Drain
 - Rise of land on Woodlands Close
 - Proposed Compound Areas
 - Hexham Swamp margins (approx)
- 0 0.1250.25 0.5 0.75 1 Kilometres
- Topographic data © Copyright Commonwealth of Australia (Geoscience Australia) 2001
Horizontal datum: GDA94/MGA Zone 56

Figure 6.5 Registered Aboriginal sites and items located during survey.

**Legend**

- Items located during survey
- Relief Roads
- Access Road Options
- Proposed Compound Areas
- Swale Drain
- Study Area (Project Signalling Area)

0 15 30 60 90 120 Metres

Topographic data © Copyright Commonwealth of Australia (Geoscience Australia) 2001
Horizontal datum: GDA94/MGA Zone 56



Figure 6.6 Detail of items located during the survey on 31/08/11.



Figure 6.7 Area of fill where shells were found.



Figure 6.8 Rounded stone found during the survey on 31/08/11.



Figure 6.9 Tree to which rounded stone was moved during the survey on 31/08/11.

On the north-eastern side of the intersection of Woodlands Close and the New England Highway, the land appears to naturally rise above the level of the swamp (Figure 6.10). Although this land would have been disturbed to some extent by construction of the Highway, it may have presented a good outlook over the swamp, and been favourable for camping. The area is quite small, and it is not proposed to be impacted by the Project (see Figure 6.5).



Figure 6.10 Rise of land on northern side of Woodlands Close intersection with New England Highway.

6.3.2 Less Disturbed Land in Northern Section of Study Area

The less disturbed land in the northern section of the study area was surveyed on 23 November 2011. This comprised land on the margins of the swamp, to the south of the Anderson Drive interchange. No access to land adjacent to Anderson Drive, north of the New England Highway, was granted for the survey, and as such, the location of site 38-4-0325 was unable to be confirmed (see Section 5.2.2). The majority of the surveyed area was heavily vegetated, with the only areas of exposure on land that had been used by vehicles, to access an area while installing a water trunk main (Figure 6.11). As such, this was the only area which was walked over during the survey.

The study area has evidently been disturbed in certain areas by construction of the adjacent road, installation of several pipelines and electricity lines, and some pastoral activities including cattle grazing. Some areas of disturbance had been the result of constructing gravel embankments to create access roads during installation. Nevertheless, substantial evidence of Aboriginal heritage material (designated site Hexham Swamp 1 [HS1]; see Appendix C for a copy of the site card) was seen in the area exposed by vehicle use and disturbance, including shells and stone artefacts (Figure 6.12). The extent of material seen prohibited detailed recording; however, several types of stone material were noted, predominantly chert (also known as Indurated Mudstone/Tuff/Chert [IMTC]), as well as some quartz and volcanic material (Figure 6.13). Many of these artefacts were seen to have been damaged by vehicles or machinery, which would have churned up the area during access for installation of the pipeline. The extent of the exposed Aboriginal heritage material is marked on Figure 6.14, and extends beyond the study area as well. There is thus, evidence of substantial Aboriginal heritage material below the surface in this area on the margins of the swamp, and such areas are therefore considered to be archaeologically sensitive. It is also worth noting that the low-lying swamp margin/creekline landform of this area was not expected to contain such an extensive site, given the predictive model of the area, which has generally considered that the low-lying land of Hexham Swamp would have been unfavourable for camping because of water saturation.

At the time of survey, as the full extent of the study area was still to be determined, a discussion was undertaken with Aboriginal representatives in the field, regarding the potential for any additional areas to be assessed for the project. The Aboriginal representatives confirmed the importance of this area on the margins of Hexham Swamp, to the south of the Anderson Road Interchange, and considered that a program of archaeological test/salvage excavation should be undertaken in this area if any impacts are proposed. Given the lack of exposure in this area, the Aboriginal field representatives agreed that additional survey in this very vegetated area south of Anderson Drive interchange would not be necessary, but that any such additional land to be impacted in the area should be included in the program of test/salvage excavation. The Aboriginal representatives also considered that there would likely be more artefacts in the area north of the Anderson Drive interchange where registered site #38-4-0325 has been recorded, and that further survey of this area should be undertaken if it is proposed to be impacted. The northern section of the study area extending north of Anderson Drive is proposed for installation of a temporary traffic safety barrier in the middle of the road, and won't involve any work or impact on the road verges. As such, no further survey of this road area is required.



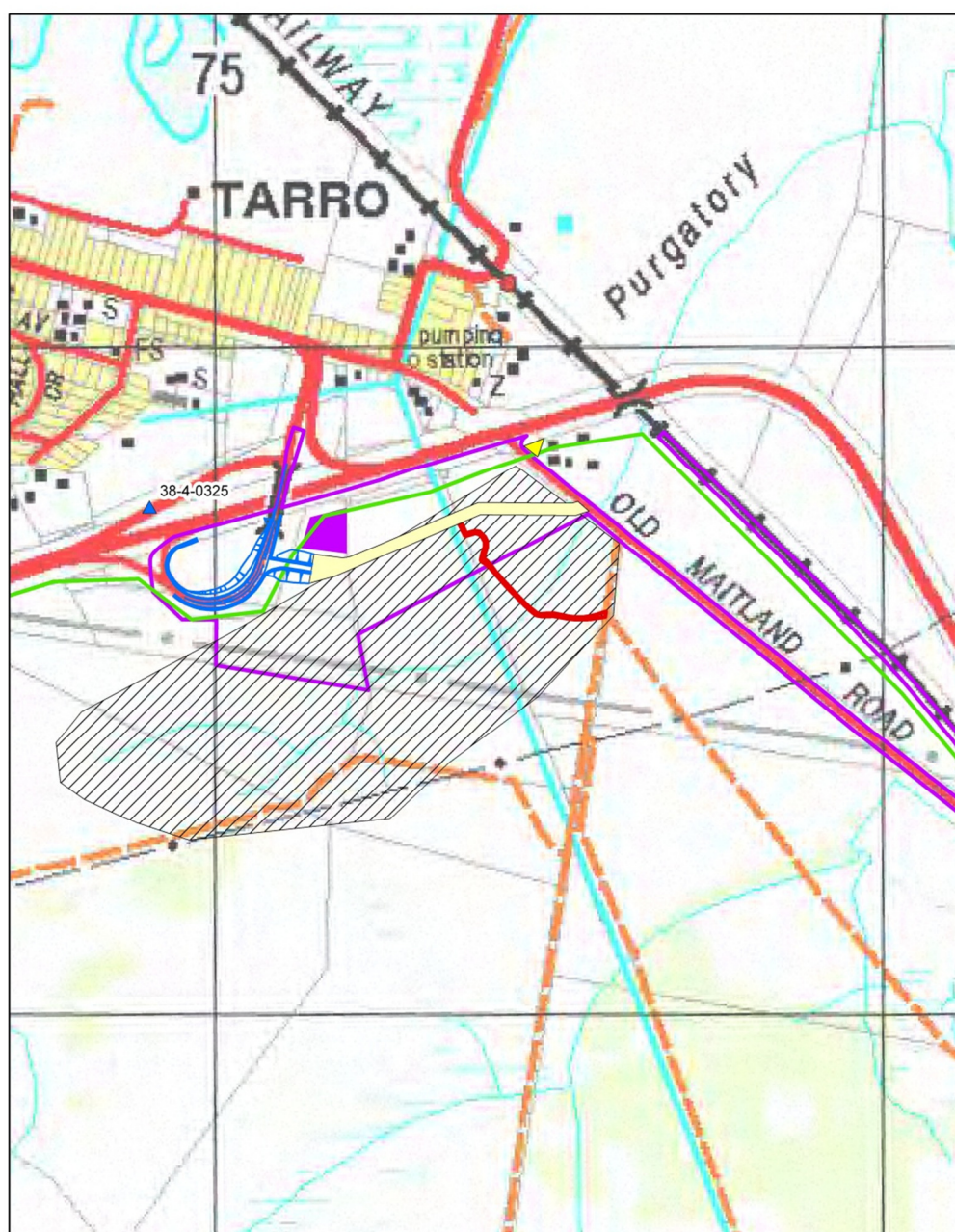
Figure 6.11 View to north east across land on margin of swamp, showing lack of exposure apart from disturbed area in centre of photograph.



Figure 6.12 Area of exposure created by vehicles to access pipeline area.



Figure 6.13 Stone artefacts (designated as site HS1) seen in exposed area damaged by vehicles/machinery.



Legend

- | | |
|--|--|
| HS1 (approx visible extent) | Indicative Tarro Interchange Access Road |
| HS1 (possible approx potential extent) | — Tarro Interchange Access |
| Rise of land on Woodlands Close | Proposed Compound Areas |
| — Hexham Swamp margins (approx) | Study Area (Project Signalling Area) |
- Topographic data © Copyright Commonwealth of Australia (Geoscience Australia) 2001
Horizontal datum: GDA94/MGA Zone 56
- 0 60 120 240 360 480 Metres



Figure 6.14 Detail of registered Aboriginal sites, rise of land on Woodlands Close, and approximate extent of site HS1, in relation to the study area.

7 Assessment of Significance

7.1 Preamble

The assessment of Aboriginal cultural heritage significance has been undertaken in accordance with OEH guidelines. The OEH *Code of Practice for Aboriginal Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) states that archaeological values should be identified and their significance assessed using criteria reflecting best practice assessment processes as set out in the Burra Charter.

The criteria for assessing Aboriginal significance is derived from the Burra Charter criteria of aesthetic, historic, scientific, social or spiritual value, for assessing cultural significance for past, present and future generations (Article 1.2). Assessments of significance of Aboriginal sites, objects and places discuss two types of significance: cultural significance and archaeological/scientific significance (NPWS 1997:5-11). Aboriginal heritage significance comprises both scientific (roughly corresponding to the Burra Charter criteria of aesthetic, historic and scientific value) and cultural (roughly corresponding to the Burra Charter criteria of social and spiritual value) significance.

Scientific heritage significance relating to Aboriginal sites, objects and places in NSW is generally assessed against the scientific criteria as defined by the OEH guidelines. Cultural heritage significance represents the tangible and intangible values of a place or item to the Aboriginal communities/traditional owners, and as such can only be informed by their participation in the consultation process.

Not all sites are equally significant and not all are worthy of equal consideration and management. The significance of a site is not fixed for all time; what is considered as significant at the time of assessment may change as similar items are located, more research is undertaken and community values change. This does not lessen the value of the heritage approach, but enriches both the process and the long-term outcomes for future generations as the nature of what is conserved and why also changes over time (Pearson and Sullivan 1995:7).

7.2 Aboriginal Heritage Significance

7.2.1 Scientific Significance

Scientific significance is assessed using criteria to evaluate the contents of a site, state of preservation, integrity of deposits, representativeness of the site type, rarity/uniqueness and potential to answer research questions on past human behaviour (NPWS 1997:5-7). The OEH guidelines recommend the following criteria for assessing archaeological significance:

- *Archaeological Research Potential* – significance may be based on the potential of a site or landscape to explain past human behaviour. It can incorporate the intactness, stratigraphic integrity or state of preservation of a site, the association of the site to other sites in the region or a datable chronology;
- *Representativeness* – all sites are representative of those in their class (site type/subtype); however, this issue relates to whether particular sites should be conserved to ensure that a representative sample of the archaeological record is retained. Representativeness is based on an understanding of the regional archaeological context in terms of site variability in and around the Study Area, the resources already conserved and the relationship of sites across the landscape; and
- *Rarity* – defines how distinctive a site may be, based on an understanding of what is unique in the archaeological record and consideration of key archaeological research questions (i.e.