

Part C:

Recommendations

C1 Recommendations

Recommendations are tabled in section C1 to incorporate both cultural and archaeological perspectives from the Aboriginal Parties and the technical adviser.

To best describe levels of significance, and appropriate management, a system of sensitivity zones is used. This is described in Sections B13, and Figure B7.

Recommendation 1: Site VC 5

Site VC 5 has a high degree of archaeological significance and protection of this significant Aboriginal area is recommended. Protection should be achieved by the following measures:

- Inclusion in Zone Red sensitivity zone;
- The existing track should be closed in the area of Site VC5. A new track should be prepared in a suitable place no closer than 20 metres from the extent of Site VC5;
- A light soil layer should be spread over the existing track ruts through Site VC5. This should be done manually, so that no further damage is caused by machinery in the area;
- The area where soil has been placed should be re-vegetated with seedlings of native plants growing in the local area.

Recommendation 2: Zone of sensitivity requiring monitoring

Zone Yellow incorporates areas that require monitoring. These areas have surface artefactual material and/or an environmental context that either precludes visibility or indicates that additional cultural heritage finds could be present. Ground visibility in all these areas was zero to poor and this thick grass cover may be masking cultural heritage. It is recommended that monitors be present following initial vegetation removal and topsoil removal down to a sterile layer and collect any artefacts material located, whenever development is being undertaken within Zone Yellow.

Recommendation 3: Zone of sensitivity requiring no further monitoring

Pink Zones are considered to have little or no potential for further cultural heritage finds. No monitoring is required for these areas. The agreement should contain instructions on what actions are required if previously unknown Aboriginal cultural heritage appears during construction of the project in a Pink Zone.



Recommendation 4: Collection of Sites VC 1, 4, 6 and 7

Artefacts located during the survey at these sites should be collected and removed to a place of safety agreed to in the Agreement. Collection should be undertaken in a scientific manner, to protect any scientific values associated with the Aboriginal cultural heritage. Appropriate reporting of collection strategy, nature of material collected, and any scientific observations should be provided to all parties upon completion. Collection should be undertaken by representatives of the Aboriginal parties and a technical adviser with experience in excavation techniques.

Recommendation 5: Management of Site VC 1

Site VC 1 is a reduction site that was undisturbed and in situ within a forest location. It contains potential for further scientific study. It should be mapped before collection to preserve the spatial distribution of flakes during the reduction process. Test pitting should be undertaken on this site to recover any smaller flakes lost during reduction. All sand removed during test pitting should be sieved, to maximize retrieval of all flakes. Collection should be undertaken in a scientific manner, to protect any scientific values associated with the Aboriginal cultural heritage. Appropriate reporting of collection strategy, nature of material collected, and any scientific observations should be provided to all parties upon completion. Collection should be undertaken by representatives of the Aboriginal parties and a technical adviser with experience in excavation techniques.

Recommendation 6: Management of Site VC 6

Location of accommodation units is planned to impact directly on Site VC 6. The site has already been disturbed by previous land clearing, and it is likely that scientific values have been largely or entirely compromised. It is recommended that a series of test pits be dug across the surface of the site to determine whether there is sub surface material, to test whether or not scientific values are still present, and whether there is any levels of sub-surface deposition in the areas of shell density. If scientific values are present, then the site should be mitigated in accordance with recommendations made in Recommendation 5 above. If no or low scientific values are present, then collection of any Aboriginal cultural heritage is all that is required. Artefacts located during the survey along with any other surface artefacts that have become visible should be collected and removed to a place of safety agreed to by the parties in the Agreement. It is further recommended that this area should be monitored during any earthworks.



Recommendation 7: Storage of artefacts

All Aboriginal cultural heritage collected from sites during mitigation work, and during any monitoring should be removed from the areas where present and future development is planned.

QRE should nominate a place within the study area where no construction and landscaping is planned for the life of the project. This place should be suitable for the receiving Aboriginal cultural heritage, i.e., it will not be affected by floods, cyclonic impacts, creeks, landscaping, etc. The position of this place should be acceptable to the Aboriginal Parties.

The Act provides the Aboriginal Parties with the right to choose an appropriate management regime for collected Aboriginal cultural heritage. If they wish to return the collected Aboriginal cultural heritage material to the study area, then it should be deposited at the place nominated by QRE, and agreed to by them.

Recommendation 8: Use of native trees in plantings

The Aboriginal Parties wish to see landscape plantings that reflect local flora habitats. This recommendation aims to protect the overall cultural significance of Curtis Island and help retain its environmental balance.

Recommendation 9: Acknowledgement of Native Title Claimants

The Aboriginal Parties request that acknowledgment of the 'Old People' as the ancestors of the modern PCCC people and other information regarding cultural land use and practices could be included in the proposed development. This could be done through appropriate signage, and/or by the use of names provided by the Aboriginal Parties for streets or other features of the development.

Recommendation 10: Future access

The Aboriginal Parties wish to maintain access to the area, in particular VC 5. It is recommended that agreement be reached over protocols of access to this site, and this should be included in the Agreement.



C2 REFERENCES CITED IN THE TEXT

Alfredson, G.

- 1989 'Report on Initial Archaeological Survey of the Stuart Oil Shale Project'. Unpublished report for Hollingsworth Consultants Pty Ltd, Alfredson Consulting.
- 1991 'Report on an Initial Archaeological Survey for the Gladstone Special Steel Project'. Unpublished report, Alfredson Consulting.
- 1992 'Gladstone Industrial Land Project Studies: Archaeology and Heritage Survey, Stage 2.' Unpublished report, Alfredson Consulting.

Ann Wallin & Associates¹

- 1995a 'A Cultural Heritage Assessment of the Potential QCL Gladstone Expansion Site, Fishermans Landing, and Its Associated Rail Links'. Unpublished report for Connell Wagner. Ann Wallin and Associates, The Gap, Brisbane.
- 1995b 'An Archaeological Assessment of a Deviation of the Proposed Branch Line Corridor and Rail Spur to QCL's Clinker Plant, Port Curtis, Gladstone'. Unpublished report, for Connell Wagner. Ann Wallin and Associates, The Gap, Brisbane.
- 1995c 'A Cultural Heritage Assessment of a Potential High School Site, Tannum Sands, Central Queensland'. Unpublished report, Ann Wallin and Associates, The Gap, Brisbane.
- 1997 'An Analysis of Cultural Heritage Values of the Awoonga Pipeline Duplication and the Proposed Reservoirs at Mount's Toolooa and Miller, Gladstone Area'. Unpublished report, Ann Wallin and Associates, The Gap, Brisbane.
- 1998a 'A Cultural Heritage Analysis of the proposed Comalco Alumina Refinery, waste storage area and services corridor'. Unpublished report for Dames & Moore. Ann Wallin and Associates, The Gap, Brisbane.
- 1998b 'Review of Cultural Heritage Issues Associated with the Stuart Oil Project, Gladstone, Central Queensland'. Unpublished report for Sinclair Knight Mertz Pty Ltd. Ann Wallin and Associates, The Gap, Brisbane.

¹ Now ARCHAEO Cultural Heritage Services)



- 1998c 'A Cultural Heritage Analysis of the proposed Services and Materials Transportation Corridor'. Unpublished report for DSD. Ann Wallin and Associates, The Gap, Brisbane.
- 1999a 'A Cultural heritage assessment of the proposed Orica Development area, Hansen Road, Calliope Shire'. Unpublished report for GTOCHC, Orica Australia Pty. Ltd, & Department of State Development. Ann Wallin and Associates, The Gap, Brisbane.
- 1999b 'An Archaeological Excavation of the Proposed Orica Pipeline, Bashford's Sand ridge, Fisherman's Landing Road, Port Curtis, Calliope Shire'. Unpublished report for GTOCHC, Orica Australia Pty. Ltd, & Department of State Development. Ann Wallin and Associates, The Gap, Brisbane.
- 1999c 'A cultural heritage assessment of the proposed duplication of the Gladstone-Awoonga Dam Water Pipeline and Toolooa Reservoir Site'. Unpublished report for GTOCHC, and Gladstone Area Water Board. Ann Wallin and Associates, The Gap, Brisbane
- 1999d 'Survey Report: Cultural heritage, Stuart Oil Shale Project, Gladstone'. Unpublished report for GTOCHC, and SPPD. Ann Wallin and Associates, The Gap, Brisbane

ARCHAEO Cultural Heritage Services

- 2000 'Cultural Heritage Assessment of the Awoonga Dam Boyne Valley, Calliope Shire. Vol. 1: 'Indigenous Archaeology'. Vol. 2: 'Indigenous Sites Register'. Vol. 3: 'Historical Survey: Archaeology and History'. Vol. 4: 'Glengarry Homestead'. Unpublished report for Gladstone Area Water Board, Gladstone and the Gladstone Traditional Owners. ARCHAEO, Ashgrove, Brisbane.
- 2005 'A predictive Model for the Duplication of the Bruce Highway, Cooroy to Curra.' Unpublished report to Arup on behalf of Department of Main Roads. ARCHAEO, Ashgrove, Brisbane.
- 2006 'Cultural Heritage Survey for the proposed Moranbah-Gladstone gas pipeline; Gladstone section.' Unpublished report for Enertrade. ARCHAEO, Ashgrove, Brisbane.

Barker, B.

- 1993 'An Archaeological Survey of Eastern Boyne Island Gladstone Central Queensland'. Unpublished report, UQASU.

Beaton, J. M.

- 1982 'Fire and water: aspects of Australian Aboriginal management of cycads.' *Archaeology in Oceania* 17: 59-67.



Bell, D.

1986 'Aboriginal Sites in their Environmental Setting'. (in) A. Ross *Planning for Aboriginal Site Management: A Handbook for Local Government Planners*. NSW National Parks and Wildlife Service.

Bowdler, S.

1984 'Archaeological Significance as a Mutable Quality.' In S. Sullivan and S Bowler, eds., *Site Surveys and Significance Assessment in Australian Archaeology*. Canberra: Department of Prehistory, Australian National University.

Burke, C.

1993 'A Survey of Aboriginal Sites on the Curtis coast, Central Queensland'. Unpublished report. Dept. of Environment and Heritage. Brisbane.

Calliope Shire

1979 *Calliope Shire Centenary, 1879-1979*, npd.

Dickson, F.

1977 'Quartz flaking'. (in) Wright, R. (ed.) *Stone Tools as Cultural Markers*. Canberra, Australian Institute of Aboriginal Studies.

Dunnell, R., and W. S. Dancey

1983 'The siteless survey: A regional scale data collection strategy.' *Advances in Archaeological Method and Theory*. 6: 267-287.

Flinders, M.

1814 *A Voyage to Terra Australis undertaken for the purpose of completing the Discovery of that vast country, and prosecuted in the years 1801, 1802 and 1803, in His Majesty's Ship The Investigator, and subsequently in the Armed Vessel Porpoise and Cumberland Schooner. With an Account of the Shipwreck of the Porpoise, Arrival of the Cumberland at Mauritius, and imprisonment of the Commander during six years and a half in that Island*. London: G. and W. Nichols.

Flood, P. G.

1983 'Holocene Sea Level Data from the Southern Great Barrier Reef and Southeastern Queensland - a Review', in D. Hopley, ed., *Sea Levels in the Last 15000 Years: A Review*. Townsville: Occasional Paper No. 3 (Monograph Series), Geography Department.

Gaffney, V. and M. Tingle

1984 'The Tyranny of the site. Method and theory in field survey'. *Scottish Archaeological Review* 3.2: 134-40.



Gillieson, D. S.

1982 'Aboriginal Sites of the Albert Valley, South East Queensland.' Cultural Resource Management Monograph Series 3. Brisbane: Archaeology Branch, Dept of Community Services.

Gorman, A. C.

2002 'Cultural Heritage of the Boyne Valley: Awoonga Dam Raising and Infrastructure Project, Calliope Shire, Central Queensland. Survey, excavation, analysis and management'. Unpublished report for Awoonga Alliance and Gladstone Area Water Board, Gladstone.

Hall, H. J.

1980 'An archaeological assessment of the Alcan smelter site, Gladstone, Queensland'. Report for James B. Croft and Associates, Sydney.

1981 'An archaeological assessment of the Lend Lease Corp. Coke Plant near Gladstone, Queensland'. Report for Oceanics Australia Pty Ltd.

1982 'Sitting on the crop of the bay: An historical and archaeological sketch of Aboriginal settlement and subsistence in Moreton Bay, southeast Queensland.' (In) *Coastal archaeology in eastern Australia: Proceedings of the 1980 Valla Conference on Australian prehistory*. S. Bowdler, ed. pp. 79-95. Canberra: Australian National University Press.

Hill, I. W.

1978a 'An Archaeological Report on Boyne Island Sites and Road Corridors'. Unpublished report.

1978b 'Archaeology in Rundle oil shale proposal environmental study report'. Rankine Hill Consulting Engineers.

Huf, L., L. McDonald and D. Myers (eds.)

1993 *Sin, Sweat and Sorrow: The Making of Capricornia Queensland 1840s - 1940s* Rockhampton, University of Central Queensland Press.

Hughes, P. J. and M. E. Sullivan

1984 'Environmental Approaches to Assessing Archaeological Significance'. In S. Sullivan and S. Bowdler, eds., *Site Surveys and Significance Assessment in Australian Archaeology*. Canberra: Department of Prehistory, Australian National University.



Kirkegaard, A.G., Shaw, R.D. & Murray C. G.

1970 'Geology of the Rockhampton and Port Clinton 1: 250,000 Sheet Areas' *Geological Survey of Queensland Report No. 38.*

Lilley, I.

1978 'Prehistoric subsistence and settlement in the subcoastal zone of the Moreton Region, Southeast Queensland.' Unpublished BA (Hons) thesis, Department of Anthropology, University of Queensland.

1980 'Report on the archaeological impact of the proposed development of the Awoonga Dam, Boyne River, Central Queensland'. Unpublished report for Peter Hollingsworth and Associated Consultants.

1982 'A finger on the pulse: Analysis of site location patterns in subcoastal southeast Queensland.' Unpublished MA thesis, Department of Anthropology, University of Queensland.

1984 'Late Holocene subsistence and settlement in subcoastal Southeast Queensland.' *Queensland Archaeological Research* 1:8-32.

1994 'An Archaeological Assessment of Proposed Sand-Mining on Middle Island, Coastal Central Queensland'. Unpublished report for RZM Pty Ltd. University of Qld Report 244.

MacGillivray, J.

1852 *Narrative of the voyage of H. M. S. Rattlesnake, commanded by the late Captain Owen Stanley. During the years 1845-1850.* Vol. 1. T W Boone. London.

McIver, R. G., L. Coshell, A. K. Finegan and C. R. Fielding.

1991 'A Review of Geological Evolution of The Narrows Basin'. (in) *Proceedings of the 6th Australian workshop on Oil Shale.* University of Queensland, Brisbane.

McDonald, L

1988 *Gladstone: City that Waited* Brisbane, Boolarong Publications.

2001 'An overview of the historical cultural heritage resources of the Curtis Coast.' Report prepared for the Coastal Protection Committee, Environmental Protection Agency, Brisbane.

McLaren, A. P.

2002 'When is a quarry a quarry? A Petrological sourcing study of the Wongawallan jasper outcrop, Southeast Queensland.' Unpublished B.A. (Hons.) thesis. St Lucia: University of Queensland



McNiven, I.

2004 'Saltwater People: spiritscapes, maritime rituals and the archaeology of Australian indigenous seascapes'. *World Archaeology*. Vol 35(3): 329-349.

Marquis-Kyle, P. and M. Walker

1992 *The Illustrated Burra Charter: making good decisions about important places*. Sydney: Australian ICOMOS Inc.

Neidjie, B.S. (Big Bill), Davis, S. and Fox, A.

1985 *Kakadu Man*. Darwin, Resource Managers.

Pickering, M.

2003 *Modelling Hunter-gatherer Settlement Patterns. An Australian Case Study*. BAR International Series 1103.

Plog, S., F. Plog and W. Wait

1978 'Decision making in Modern Surveys' (in) Schiffer, M. *Advances in Archaeological Method and Theory 1*. New York Academic Press.

Robins, R.

1997 'Patterns in the Landscape: A Case Study in Nonsite Archaeology from Southwest Queensland.' *Memoirs of the Queensland Museum, Cultural Heritage Series* 1(1):23-

Roth, W. E.

1898 *The Aborigines of the Rockhampton and Surrounding Districts*. Report to the Commissioner of Police, Queensland. Mitchell Library Uncat. ML. 216 Cy Reel 208.

1901 'Food: Its search, capture and preparation.' (in) *North Queensland Ethnography: Bulletin 3*. Brisbane: Government Printer.

Rowland, M.

1987 'Preliminary Archaeological Survey of Coastal Areas of the Bundaberg 1:250,000 Sheet (KE). Internal Report. Queensland Department of Environment and Heritage, Brisbane.

Rowland, M. and M. Conolly

2002 'Towards GIS Mapping and Spatial Modelling of Archaeological Sites in the Southeast Queensland Bioregion.' *Queensland Archaeological Research* 13: 39-62



Sattler, P. and R. Williams

1999 *The Conservation Status of Queensland's Bioregional Ecosystem*. Queensland Environmental Protection Agency, Brisbane.

Schofield, A. J.

1991 *Interpreting Artefact Scatters. Contributions to Ploughzone Archaeology*. Oxbow Monograph 4.

Sinclair Knight Merz

1998 *Stuart Oil Shale Project: Stage II. Initial Advice Statement*. Report for SPP/CPM. Brisbane.

Skinner, L. E.

1975 *Police of the Pastoral Frontier: Native Police 1849-59*. St. Lucia, University of Queensland Press.

Sullivan, S. and S. Bowdler, (eds.)

1984 *Site Surveys and Significance: Assessment in Australian Archaeology*. Canberra: Department of Prehistory, Research School of Pacific Studies, Australian National University.

Veech, H. H. and J. J. Veevers

1970 'Sea Levels -175m Off the Great Barrier Reef 13,600 to 17,000 Years Ago', *Nature* 226: 536-37.

