

2.6 Sediment and erosion controls

Person Responsible	Consulting Engineer, Contractor's Site Manager
Issue	Sediment and erosion control.
Operational policy	To prevent the displacement of sediment and acid sulfate soil material across the site, particularly during storm events.
Performance criteria	All excavated acid sulfate soil material shall be contained in such a manner so as to prevent the displacement of this material across the site. No erosion or sediment accumulation shall result from on-site activities.
Implementation strategy	Erosion and sediment control devices such as (but not limited to) silt fences, bunds and contour drains should be installed prior to commencement of site activities to the reasonable satisfaction of TSC and should be maintained throughout the life of site operations. All excavated material will be placed within bunded areas and tested for acid sulfate soil potential. Material will be placed to a depth of <300mm and limed at the rate indicated by soil testing. Materials used to construct bunds will be free from acid sulfate soils with the bunded area prepared with surface lime at a rate of 5kg/m ² of material to be placed. Upslope runoff shall be diverted around any acid sulfate treatment areas or any cleared or disturbed regions of the site in a way that minimises erosion, the size of the upslope catchment and diverts waters to a legal point of discharge. Sediment control fences should be constructed at the downslope perimeter of acid sulfate soil treatment areas and any cleared or disturbed regions of the site. Where possible, the excavation/construction programme shall be scheduled to minimise the potential for soil loss to occur. Where excavation/construction activities cannot be altered, additional controls shall be implemented in the areas of high erosion potential. All erosion and sediment control measures should be maintained at operational capacity until disturbed land is effectively rehabilitated. Stripped topsoil shall be separated from subsoil materials and shall only be stripped from the areas designated on the appropriate plans. After undergoing any necessary acid sulfate soil treatment, soil should be stockpiled taking into account the following considerations: <ul style="list-style-type: none"> • stockpiles are not to be located on public footpaths, nature strips, roads, road shoulders or any other public land • stockpiles to be protected from upslope surface flows • sediment filters should be provided downslope of stockpiles • all stockpiles should be seeded within a fortnight of final forming with an appropriate seed mix.
Monitoring	Monthly visual inspections will be undertaken to ensure adequate erosion and sedimentation control devices are installed particularly in acid sulfate soil treatment areas.
Auditing	Auditing will be undertaken by the site manager and/or the proponent's nominated representative. Alternatively, auditing may be carried out by an independent consultant during the construction phase of the development. The audit should include an inspection of site activities, complaints, corrective actions and reporting to assess compliance with the ASSMP.
Reporting	Reporting is required if excessive sedimentation and/or erosion is identified. Full details to be available to the contractor together with suggested corrective actions if required.

<p>Identification of incident or failure</p>	<ul style="list-style-type: none"> • Displacement of acid sulfate soil material across the site. • Inadequate bunding of acid sulfate soil treatment areas. • Damaged or failed erosion and sediment control devices.
<p>Corrective action</p>	<p>Identify the source of the problem and take the necessary steps required to prevent a recurrence. This may include:</p> <ul style="list-style-type: none"> • the installation of additional erosion and sediment control measures • maintenance of existing controls • a review of work practices to minimise exposed areas and the duration of exposure.

Commitment 8

The Developer will ensure that appropriate and adequate erosion and sediment control measures are installed and maintained for the duration of the construction works.

3) Administration of the ASSMP

3.1 Amendment of the ASSMP

The Developer may make an application to TSC to amend the provisions of this ASSMP. The application shall:

1. be in writing
2. specify the provisions of the ASSMP to which the application relates
3. state how the proposed amendments achieve the objectives of the provisions to which the amendments relate.

TSC shall approve the amendment where TSC is satisfied acting reasonably that the proposed amendments achieve the objective of the provisions to which the amendment relates.

3.2 Incident management

The Developer and any person appointed by the Developer as having responsibility for a control strategy set out in this ASSMP have clearly defined responsibilities under the *Environmental Planning and Assessment Act 1979* to report any incidents likely to cause material or serious environmental harm.

Appendix 02

Archaeological Assessment

Aboriginal Cultural Heritage Assessment

At

Fraser Drive, Tweed Heads South
New South Wales

May 2007

A Report for: MFS Diversified Group
Po Box 7720
Bundull Qld 9726

Prepared by: Everick Heritage Consultants Pty Ltd
47 Arthur Terrace
Brisbane Qld 4089

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EXECUTIVE SUMMARY

The following report presents the results and outcomes of a Cultural Heritage Assessment at Lot9 on DP 1039569 and Lot 2 on DP 100383 Fraser Drive Tweed Heads South (referred to as the Subject Land). The report includes an archaeological assessment and consultation with the wider Aboriginal community to gain a Traditional Owner perspective on the potential impact of the proposed development upon cultural heritage values, which may apply to the subject land. An archaeological assessment has been carried out over the subject land (Piper 2000) which found that there were neither sites of archaeological significance nor areas of significance to the Tweed Byron LALC. This report conforms to more recent guidelines and procedures that require broader consultation with the Aboriginal community particularly Traditional Owners.

The MFS Diversified Group and Greenview Developments Pty Ltd have commissioned PMM Sydney Pty Ltd to prepare an application to subdivide land for residential development. The subject land might be described as a degraded landscape in the sense that little of the original land surfaces are likely to remain, considering the long term slippage and slumping of the slopes and the coverage of fill over c. 95% of the floodplain proposed for development. This history reduces the potential for Aboriginal archaeological sites to be found in their original context (*in situ*).

The field inspection of the subject land was carried out by the consultant and the Sites Officer of the Tweed Byron LALC Mr. Cyril Scott on April 18, 2007. An assessment of the potential European heritage of the subject land was conducted with reference to the *Tweed Local Environment Plan 2000 (Amendment No 76) Schedule 2* and *The Register of the National Estate*.

To add a Traditional Owner perspective to the cultural heritage assessment a consultative process was undertaken initially with members of the Tweed Byron LALC. Elder Mr. Des Williams and Sites Officer Mr. Cyril Scott undertook to enquire of the Aboriginal community if there were individuals with cultural heritage interests in the subject land. I was informed that Ms. Jacqueline McDonald would be the appropriate person to discuss cultural heritage matters as she and other families are descendent members of the Nganduwal/Minjungbal clans. The response of Ms McDonald to the assessment is contained in Appendix B of this report. The Traditional Owner descendents are concerned that the remains of a badly disturbed midden within a closed road on the southern boundary of the proposed subdivision may extend northward into the proposed subdivision. The site is located in Lot 135 of the Proposed Layout Plan.

The results of the Cultural Heritage Assessment were:

Archaeological Assessment

- A recorded midden site (DEC # 04-2-0088) is located within the proposed residential subdivision at Lot 7 DP 1009074, Tweed Heads South, at the intersection of a closed road (Champagne Drive) and Fraser Drive.

European Cultural Heritage

- No items in the nature of places, buildings or reserves of Indigenous or European heritage were found as a result inspection of a review of the *Tweed Local Environment Plan 2000. Amendment No 76. Schedule 2* or *The Register of the National Estate*.

Aboriginal Cultural Heritage

- The extreme south east corner of the subject land was identified by members of the Nganduwal/Minjungbal descendents as potentially containing cultural remains from a badly disturbed midden, exposed when the adjoining road was constructed, possibly in excess of fifty years ago. The descendents are concerned that earthworks or other disturbances will destructively impact upon undisturbed remains of the site.

The significance assessment concludes that the visible shell remains of the middens site have the potential for having archaeological significance. The Traditional Owners consider the location as a campsite occupied by their forebears and therefore of Aboriginal significance.

In order to avoid destructively impacting the site, investigate the site and to allow the Proponent to proceed concurrently with an application for a residential subdivision over the remainder of the Property, excluding the midden from the subdivision layout by truncating the design of Lot 135 would be the most practical means of mitigating impact upon the site by the proposed development. The location of the midden in relation to the proposed development and the Fraser Drive road reserve has been professionally surveyed. The midden occurs in a buffer area adjacent to Fraser Drive with a small intrusion into the south east portion of Lot 135. Excising an area of approximately 150sq m would retain the remaining cutting in which shell may be retained and also include shell fragments that lie on the surface of the former road reserve. There are no midden materials visible outside this confined area.

Recommendation 1

It is recommended that the Proponent advise Tweed Shire Council, Tweed Byron LALC and Traditional Owners named in this report that the removal of the site from the proposed development layout will in effect relocate the location of the site to the road reserve under the jurisdiction of Tweed Shire Council.

Recommendation 2

It is recommended that the Proponent engage one representative of the Tweed Byron LALC and one representative of the Traditional Owners, the Nganduwal/Minjungbal descendants to assist in any investigation works associated with carrying out the terms of a Section 87 Permit to excavate land to discover an Aboriginal object.

Recommendation 3

It is recommended that contractors engaged in earthworks associated with the construction of the proposed residential development at Lot 2 1009074 at Fraser Drive Tweed Heads South, be advised that under the terms of the N.S.W. National Parks and Wildlife Act (1974) it is an offence for any person to knowingly destroy, deface or damage or permit the destruction, defacement or damage to a relic or Aboriginal place without first obtaining the written consent of the Director General of the Department of Environment and Conservation.

Recommendation 4

In the event that future works at the proposed residential subdivision disturb Aboriginal cultural materials, works at or adjacent to the material must stop immediately. The Regional Archaeologist of the Cultural Heritage Unit of the Department of Environment and Conservation, Coffs Harbour, the Tweed Byron L.A.L.C. and the Ngunduwal/Minjungbal descendents must be informed. They will advise as to the most appropriate course of action to follow. Works must not resume at the location without the prior written consent of the DEC, Tweed Byron L.A.L.C. and the Nganduwal/Minjungbal descendents.

1. INTRODUCTION

1.1 Locality

The subject land is on the western side of Fraser Drive at Tweed Heads South in the Tweed Shire local government area. The land is accessible via Dry Dock Road from the Pacific Highway at the southern approaches to the Boyds Bay Bridge (Figs. 1 & 2).

1.2 Property Description

Lot 9 on DP 1039569 and Lot 2 on DP 100383 under the Tweed Shire LEP (hereforth described as the subject lands).

1.3 Proposed Development

The MFS Diversified Group and Greenview Developments Pty Ltd have commissioned PMM Sydney Pty Ltd to prepare an Application to subdivide land for residential development. The Application seeks approval for the subdivision of land, the provision of roads, open space, recreational areas, associated infrastructure and ancillary works to address minor landslip hazard issues (Fraser Drive, South Tweed. Environmental Assessment 2007:4) (Figs. 3 & 4).



Figure 1 General Locality of Lot 7 DP1009074, Tweed Shire

1.4 Aims of the Assessment

The aims of the assessment are;

- consult with the Tweed Byron LALC to define areas significant or potentially significant to the Land Council;
- consult with Traditional Owners to establish whether the subject land contains places and or cultural heritage values that could be destructively impacted by the proposed development;

- assess previous documentation including published and unpublished reports and the NSW Aboriginal Heritage Information Management System (AHIMS);
- conduct a ground survey with members of the Tweed Byron LALC and Traditional Owners of as much surface area as conditions will allow to identify archaeological sites; and,
- assess the potential for the subject land to contain Aboriginal archaeological sites and areas identified as having cultural heritage values.

2. ABORIGINAL CONSULTATION

The subject land is within that administered by the Tweed Byron LALC. The Land Council were informed of the requirement for a cultural heritage assessment. The Land Council agreed to provide their Sites Officer Mr. Cyril Scott to assist in the field inspection and to consult within the Community to identify those people who may have traditional links with and/or cultural heritage knowledge of the subject land. The Land Councils' written views on the conduct and outcomes of the cultural heritage and archaeological assessment are contained in Appendix A of this report. The field inspection was carried out by Sites Officer Mr. Cyril Scott and the consultant on the 18th April 2007.

To add a Traditional Owner perspective to the cultural heritage assessment a consultative process was undertaken initially with members of the Tweed Byron LALC. Elder Mr. Des Williams and Sites Officer Mr. Cyril Scott undertook to enquire of the Aboriginal community if there were individuals with cultural heritage interests in the subject land. I was informed that Ms. Jacqueline Mc Donald would be the appropriate person to discuss cultural heritage matters as she and other families are descendent members of the Nganduwal/Minjungbal clans. The response of Ms McDonald to the assessment is contained in Appendix B of this report. The Coordinator (Mr Clarence Phillips) of the Tweed Byron LALC undertook to canvass the views of the family groups mentioned in Ms McDonald's letter, in her absence. A visit to the site will also be arranged. The written response of the Land Council is contained in Appendix A of this report.

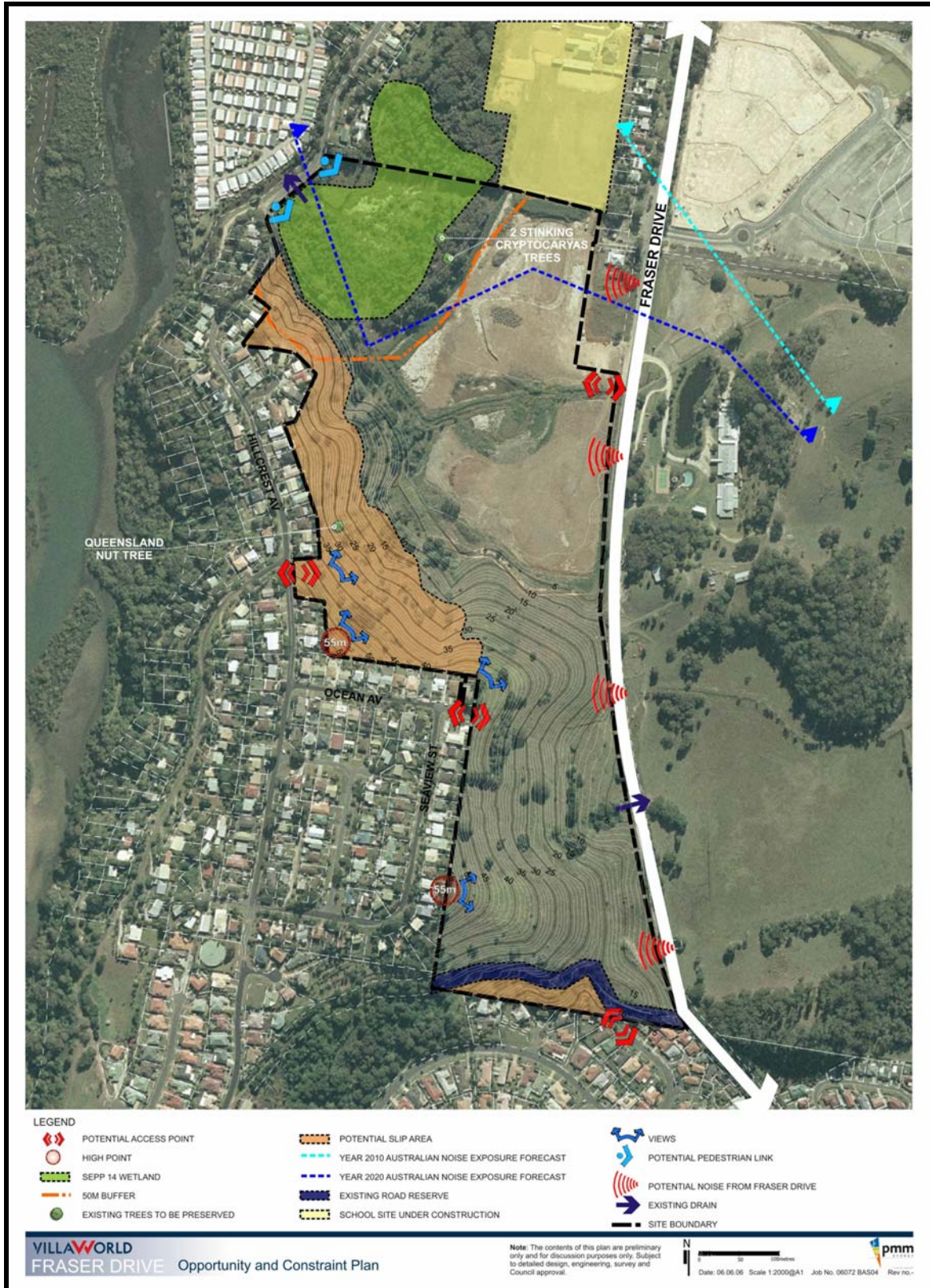


Figure 2 Subject Lands Fraser Drive, Tweed Heads South