Esso Pipeline Replacement Project (Eastern Section)

Replacement pipeline to transport crude oil and condensate between Esso's facilities at Longford and Long Island Point (Longford – Warragul Section)

Interim Cultural Heritage Report

Sponsor: Esso Australia Resources Pty Ltd (ABN 62 091 829 819)

Cultural Heritage Advisors: Ricky Feldman, Melinda Albrecht and David Mathews

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Photo Caption (Coverplate): Property 11010 facing west with moderately inclined hills and rises (Photograph taken on 15 November 2013 by Melinda Albrecht)

TABLE OF CONTENTS

MAPS

TABLES

ABBREVIATIONS

ACHRIS	Aboriginal Cultural Heritage Register and Information System
ALA:	Andrew Long + Associates Pty Ltd
AV:	Average
BP:	Before Present (Years)
CHA:	Cultural Heritage Advisor
CHMP:	Cultural Heritage Management Plan
CHP:	Cultural Heritage Permit
E:	East
GLaWAC	Gunaikurnai Land and Waters Aboriginal Corporation
IA	Investigation Area
IU	Investigation Unit
LDAD	Low Density Artefact Distribution
N:	North
NE:	North East
NW:	North West
OAAV:	Office of Aboriginal Affairs Victoria
RAP:	Registered Aboriginal Party
S:	South
SA:	Salvage Area
SE:	South East
SW:	South West
SU:	Survey Unit
TA:	Testing Area
VAHR:	Victorian Aboriginal Heritage Register
W:	West

1

INTRODUCTION

1.1 Project Overview

This report is an interim assessment intended to review the known cultural heritage values of the proposed activity area and consider the likely management implications that a CHMP may have for the proposed activity. This report is not intended as a Cultural Heritage Management Plan (CHMP) pursuant to the requirements of the *Aboriginal Heritage Act* 2006. Note that the proposed activity area will be subject to a CHMP, which is currently being prepared by Esso for the activity.

The Sponsor of the CHMP is Esso Australia Resources Pty Ltd (ABN 62 091 829 819).

This report and the CHMP have been authored by qualified archaeologists and heritage consultants from Andrew Long and Associates Pty Ltd (ALA), who have been undertaking professional Aboriginal heritage assessment and evaluation since 1991, in accordance with section 189 of the Act.

The Cultural Heritage Advisors for the CHMP are:

- **Ricky Feldman,** Executive Director
- **Melinda Albrecht,** Senior Project Manager
- **David Mathews,** Senior Project Manager

The authors of the CHMP are:

- **Melinda Albrech**t, Senior Project Manager
- **David Mathews**, Senior Project Manager

1.2 Study Scope and Objectives

The CHMP is being prepared by the sponsor as a mandatory CHMP under Section 46 of the *Aboriginal Heritage Act* 2006 (the Act) to allow the management and protection of Aboriginal cultural heritage during the course of activities associated with the proposed Esso Pipeline Replacement Project (Eastern Section) that may disturb Aboriginal cultural heritage places within the activity area. In addition, the CHMP provides contingency arrangements for managing the discovery of any further Aboriginal cultural heritage places identified during construction works associated with the activity.

When is a cultural heritage management plan (CHMP) required?

A mandatory CHMP is required for an activity if (Regulation 6)-

(a) all or part of the activity area for the activity is an area of cultural heritage sensitivity; and
(b) all or part of the activity is a high impact activity.

Is this activity area an area of cultural heritage sensitivity?
Yes. Part of the activity area does overlap with an area of cultural heritage sensitivity as defined as:

Waterways (Regulation 23)
Dunes (Regulation 37)
Parks (Regulation 29)
Coastal Land (Regulation 28)
Registered cultural heritage places (Regulation 22)
Coastal Crown Land (Regulation 27)
Sand sheets (Regulation 38)

Is this activity a high impact activity?
The proposed activity constitutes a high impact activity as defined in Division 5 of the Regulations, as it is a Utility Installation, other than a telecommunication facility (Regulation 43 (1)(b) xxii).

1.3 Study Area

The Sponsor intends to replace an existing 700mm gas pipeline which was constructed in 1969 (partially replacement in 1980) and is approaching the end of its operational life. The replacement pipeline will allow for the continued delivery of crude and condensate and will also allow for natural gas from Esso's offshore Gippsland operations to continue to flow to Australian households and businesses. The new pipeline will be approximately 350mm in diameter and typically located 900-1200mm below the ground surface.

It is intended that the replacement pipeline will be constructed adjacent to the existing pipeline and within existing easements held by Esso, where possible, minimising the need to acquire or disturb additional land.

Excavations in regards to the proposed activity will be extensive where they occur. It is likely that the proposed activity will include:

- Trench excavation or trenchless construction
- Excavations for vehicular roads
- Topsoil clearing
- Grading
- Preparation of off-site premises
- Power supply construction
- Borrow pits

The likely impact on land surfaces across part of the activity area will be extensive and will consist of the removal of topsoil (generally <300 mm) and localised deeper excavations (e.g. trench excavations) into the underlying sub-soil across the property. The specific depth of these excavations will typically be approximately 950-1250 mm below the ground surface.

The study area has been divided into two separate sections. This report relates to the eastern section, extending from Longford to Warragul (Map 1).

1.4 Legislation

The evaluation undertaken as part of the CHMP will determine the likelihood that Aboriginal heritage values will be impacted by the activity. Section 61 of the *Aboriginal Heritage Act* 2006 will review the matters to be considered in relation to the approval of a management plan and allow the management and protection of Aboriginal cultural heritage during the course of activities.

The Aboriginal Heritage Act 2006

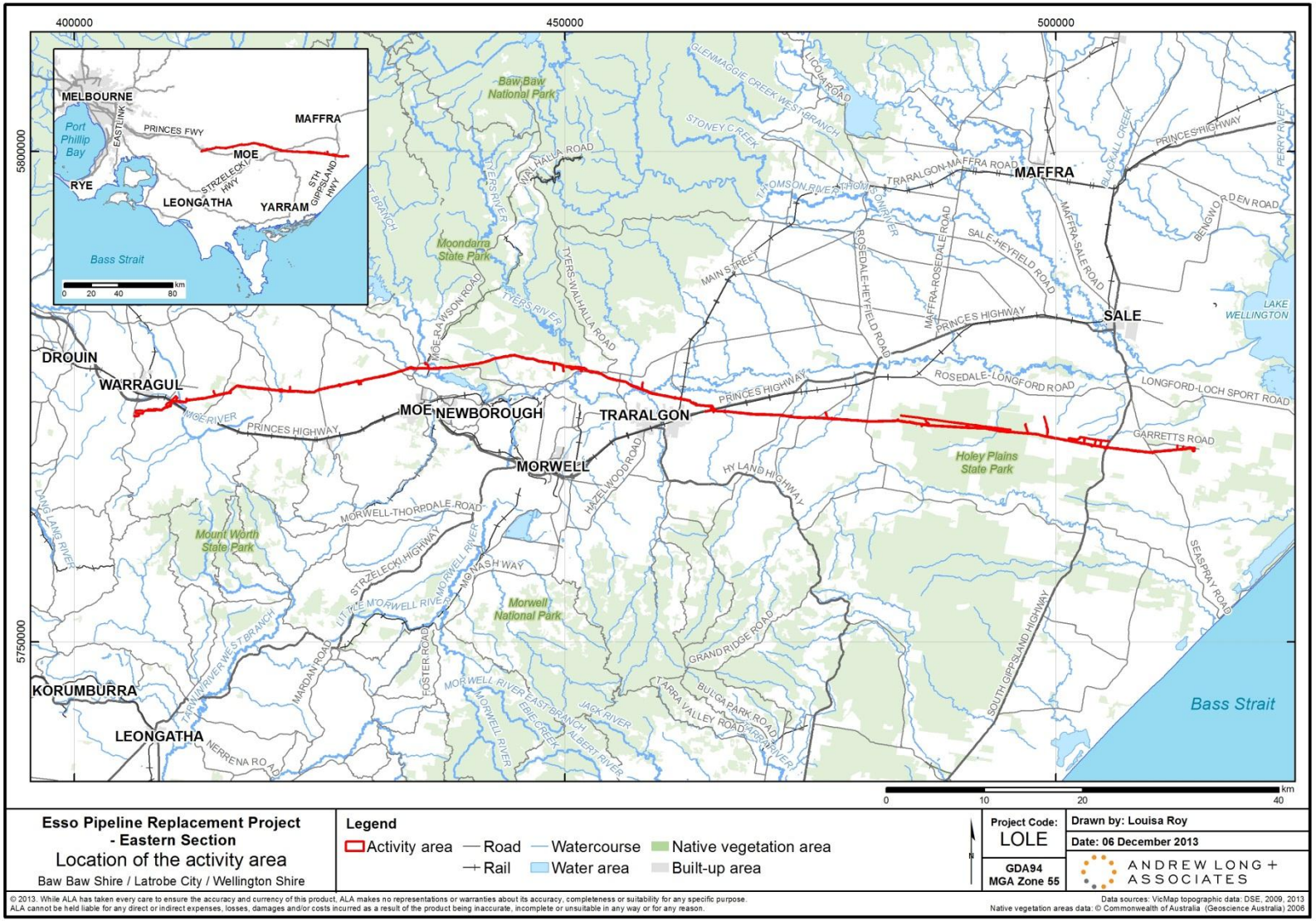
The *Aboriginal Heritage Act* 2006 commenced operation on May 28th 2007. This act provides blanket protection for all Aboriginal heritage sites, places or items in Victoria.

The main aspects of the Act in relation to the development process are as follows:

- An *Aboriginal Heritage Council* (AHC) has been appointed by the Minister, Office of Aboriginal Affairs Victoria, made up of 11 Victorian Aboriginal people.
- Aboriginal community groups with traditional interests in cultural heritage are to apply to the AHC for registration as a *Registered Aboriginal Party* (RAP). RAPs will have the role of endorsing *Cultural Heritage Management Plans* (CHMP) within a given area of interest. There may be two or more RAPs for an area, provided it does not hinder the operation of the legislation.
- Under Section 48, a developer ('sponsor') may be required to submit a CHMP before the issue of a statutory authority by local government or other agency ('decision maker'). A CHMP must be registered with the Secretary, Planning and Community Development (OAAV), and all relevant RAPs notified in writing. If an RAP does not respond, OAAV will act in lieu. A CHMP will contain details of research, field evaluation, consultation and management provisions in regard to the Aboriginal heritage of an area at risk from a development. A *Cultural Heritage Advisor* must be appointed to assist in the preparation of a CHMP. It is the role of an RAP to approve a CHMP if it meets prescribed standards.
- A CHMP will not be considered approved unless it has been approved by all relevant RAPs.

The regulations accompanying the Act specify when a CHMP will be required by law, and prescribe minimum standards for the preparation of a CHMP (Section 53). The approved form for CHMPs specifies the format in which a CHMP should be prepared by a sponsor in order to comply with the Act and the *Aboriginal Heritage Regulations* 2007, and is an approved form under section 190 of the Act.

Other provisions of the Act include Cultural Heritage Permits (Section 36), as required for other works affecting Aboriginal heritage sites, Cultural Heritage Agreements (Section 68), in respect to land containing an Aboriginal heritage site, Inspectors (Part 11) appointed to enforce the Act, Cultural Heritage Audits (Section 80) to be ordered by the Secretary in relation to compliance with a CHMP and a VCAT appeals procedure.



Map 1: Location of the activity area

2

METHODOLOGY

2.1 Consultation

At the time the Notice of Intent to Prepare a CHMP was submitted to the Secretary of the Department of Premier and Cabinet (DPC), the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) were the only Registered Aboriginal Party (RAP) present for the activity area. GLaWAC was granted RAP status on 23 May 2008 and the current activity area falls entirely within the boundaries of the GLaWAC.

The Notice of Intent to Prepare a CHMP, as required by Section 54 of the *Aboriginal Heritage Act* 2006 was submitted to the Secretary DPC, on 10 October 2013 and to the GLaWAC on 11 October 2013. Pursuant with Section 55 of the Act the RAP (GLaWAC) will review the CHMP.

Representatives of GLWAC were consulted throughout the field assessment component of this CHMP. This consultation took the form of both formal meetings and informal discussions that were undertaken prior to and throughout the desktop, standard and complex assessments for this CHMP. These discussions included issues relating to any oral history information known about the Gippsland region.

Name	Abbreviation	RAP Status
Gunaikurnai Land and Waters Aboriginal Corporation land	GLaWAC	Approved

Table 1: Registered Aboriginal Party for the activity area.

GLaWAC provided representatives that participated in the planning, execution and recording of the standard and complex assessment phases for the CHMP already completed. Formal meetings were also held with the RAP, CHA and sponsor to discuss the CHMP assessment.

2.2 Desktop Assessment

This section outlines the aims, methods and results of the desktop assessment of the CHMP. The aims of the desktop assessment are threefold:

- to determine the level of previous investigation of the activity area and the surrounding region;
- to determine the presence of registered Aboriginal cultural heritage places within the activity area; and
- to determine the environmental context of the activity area with regard to landform and geomorphology.

The methods used to undertake the desktop assessment included:

- using appropriate sources, including Victorian government on-line information, reviewing and summarising relevant environmental background;
- searching the Victorian Aboriginal Heritage Register (VAHR) and other research sources (for example, consultancy reports, academic research etc.) for information relating to the activity area and the geographic region (a VAHR search was undertaken on 11 October 2013); and
- reviewing and analysing this information to identify or characterise the Aboriginal cultural heritage site types and locations likely to be present within the activity area.

2.3 Standard Assessment

The aims of the field survey of the CHMP were threefold:

- to inspect all areas with ground surface visibility for Aboriginal cultural heritage places within the activity area; and
- to undertake a general assessment of the overall archaeological potential of the activity area
- Undertake a general assessment of the overall archaeological potential of the activity area

The field survey was conducted over seven days (November 18-22 and November 25-26, 2013). The field survey methodology was dictated by the need to systematically examine and further define the four general landscape areas identified during the desktop assessment (Longford to Holey Plains, Latrobe River Plains, Yallourn North to Tanjil Hills and Moe River Plains). The activity area was divided into a series of investigation areas (IA), which were based largely on property parcels and landforms.

The field survey was undertaken by a combined vehicular and pedestrian survey; pedestrian transects were generally walked east to west across the activity area. Where land access was available the entire activity area was surveyed in this fashion, with each member of the field team spaced approximately 2m apart. This spacing enabled each individual to examine all surface exposures within the activity area in accordance with archaeological practice outlined in Burke and Smith (2004, 65-69).

Pedestrian spacing was sufficient to identify any areas of significant ground exposure. According to r. 59 (3) of the *Aboriginal Heritage Regulations* 2007, which stipulates what a standard assessment must include, the field survey involved the examination of all potential mature trees, caves, rock shelter or cave entrances within the activity area. There were several mature eucalyptus trees growing within the activity area and these were all inspected for cultural scarring, with no scarred trees identified.

As a component of the field survey and as a means of informing the conduct of the subsequent complex assessment, each investigation area was assessed in terms of the overall archaeological sensitivity and the overall disturbance of the area. The initial archaeological sensitivity rating was to some degree based on the outcomes of the desktop assessment, and was subsequently modified as a result of observations made during the field survey. For example, previously identified places within the geographic region containing the activity area were frequently located on elevated rises and ridges and generally on elevated landforms adjacent to watercourses and wetlands. Previous archaeological investigations within the geographic region have also indicated that Aboriginal cultural heritage places such as diffuse stone artefact occurrences are present on landforms located some distance from major watercourses.

On the basis of this data an initial higher sensitivity was expected in similar areas within the activity area. Following this methodology each investigation area was assigned an archaeological sensitivity

rating, reflecting the environmental and cultural value of a location, and a disturbance rating, reflecting the compound impact of past and present land uses.

- Archaeological sensitivity ratings ranged from low to high, and were based on a variety of factors including proximity to water, landform, elevation, vegetation type, RAP viewpoints and the presence or absence of identified cultural heritage.
- Disturbance ratings were based on a range from high to none, with the ratings values sequence reversed.

The disturbance ratings assigned to an investigation area were based on factors such as the extent of landscape modification by activities such as, but not confined to, prior and current cropping regimes (where identifiable) and impacts resulting from stock trampling and previous pipeline trenching.

2.4 Complex Assessment

The aims of the subsurface testing were to fully define the actual archaeological sensitivity of the activity area, to determine the presence / absence of archaeological subsurface deposits and to collect data on the nature and significance of any deposits identified.

There were six distinct landforms identified across the activity area during the standard assessment (Map 2 - Map 5).

- Undulating sandy plains
- Sandy rises and undulating ridges
- Undulating plains
- Alluvial plains
- Hills, undulating plains and rises
- Hills and rises

A series of investigation areas (IAs) was selected from each of the six landform areas, and a total of 18 IAs were subject to complex assessment testing in December 2013. Given the lack of ground surface visibility during the standard assessment, it was often difficult to assess the degree of prior disturbance of IAs within each of the landform areas. Known prior disturbance within all IAs includes vegetation clearance and agricultural activities, as well as the installation of the existing Esso easement and other utilities and services. For this reason a moderate level of disturbance was generally attributed to each IA.

The decision to test a sample of IAs from each landform area was made on the basis of several factors:

- The degree of previous disturbance (where possible to assess)
- The archaeological potential rating – a selection of low-moderate to high potential ratings
- Discussions conducted during the standard assessment with the RAP
- Discussions conducted prior to the complex assessment with the RAP

The subsurface testing programme was designed to confirm the stratigraphy and the general subsurface nature of the six landforms through the controlled excavation of a stratigraphic 1x1m test pit at each landform area. A series of additional 1x1m test pits as well as 40x40cm shovel test

pits transects with approximately 20 to 25m spacing were also excavated at select properties within each landform area.

The 1x1m test pits were excavated to provide a more controlled assessment of the subsurface cultural heritage values and stratigraphy of the activity area. The locations of the 1x1m test pits were based upon the need to define the subsurface stratigraphy of the activity area, and to provide an initial opportunity to sample the landform/topography of the activity area in a stratigraphically controlled manner (as per Burke and Smith 2004).

Please note that the nature, extent and significance of the Aboriginal cultural heritage material identified during the December testing programme has not been defined at this time. This definition will likely take place at a future date that is yet to be determined.

The initial testing programme for the complex assessment was undertaken on 9-13 December and 16-20 December 2013, resulting in ten days of excavation and field recording.

Excavation Methods

Shovel test pits consisting of pits ~400x400mm in area were carefully excavated stratigraphically by shovel in 100 mm spits (The long handled shovel had a blade that measured 20cm wide by 30cm long). A total of 184 shovel test pits were excavated across the activity area during the December testing programme. These shovel test pits were distributed across a selection of properties on landforms identified during the standard assessment as having archaeological potential.

The 1x1 m test pits were excavated in controlled spits (generally 50-100mm depth) with a focus on identifying artefacts *in situ* within their stratigraphic context. The 1x1m test pits were excavated by hand using trowels and all excavated materials were 100% hand sieved (using a 5mm mesh) to determine the presence / absence of stone artefacts and to provide an indicator on the preservation of other types of culturally deposited material (e.g. faunal remains, burnt clay). The presence of bioturbation markers (e.g. cicada burrows, earthworm burrows, tree roots, sediment mixing) and other forms of site disturbance were documented. Datum points were established using the highest corner of each individual excavation.

The geomorphological history of each landform and the comparative data from testing programmes elsewhere in the geographic region were drawn upon to determine the depth of excavation in each trench. In general, this level corresponded with an undulating 'coffee rock' layer or compact clay.

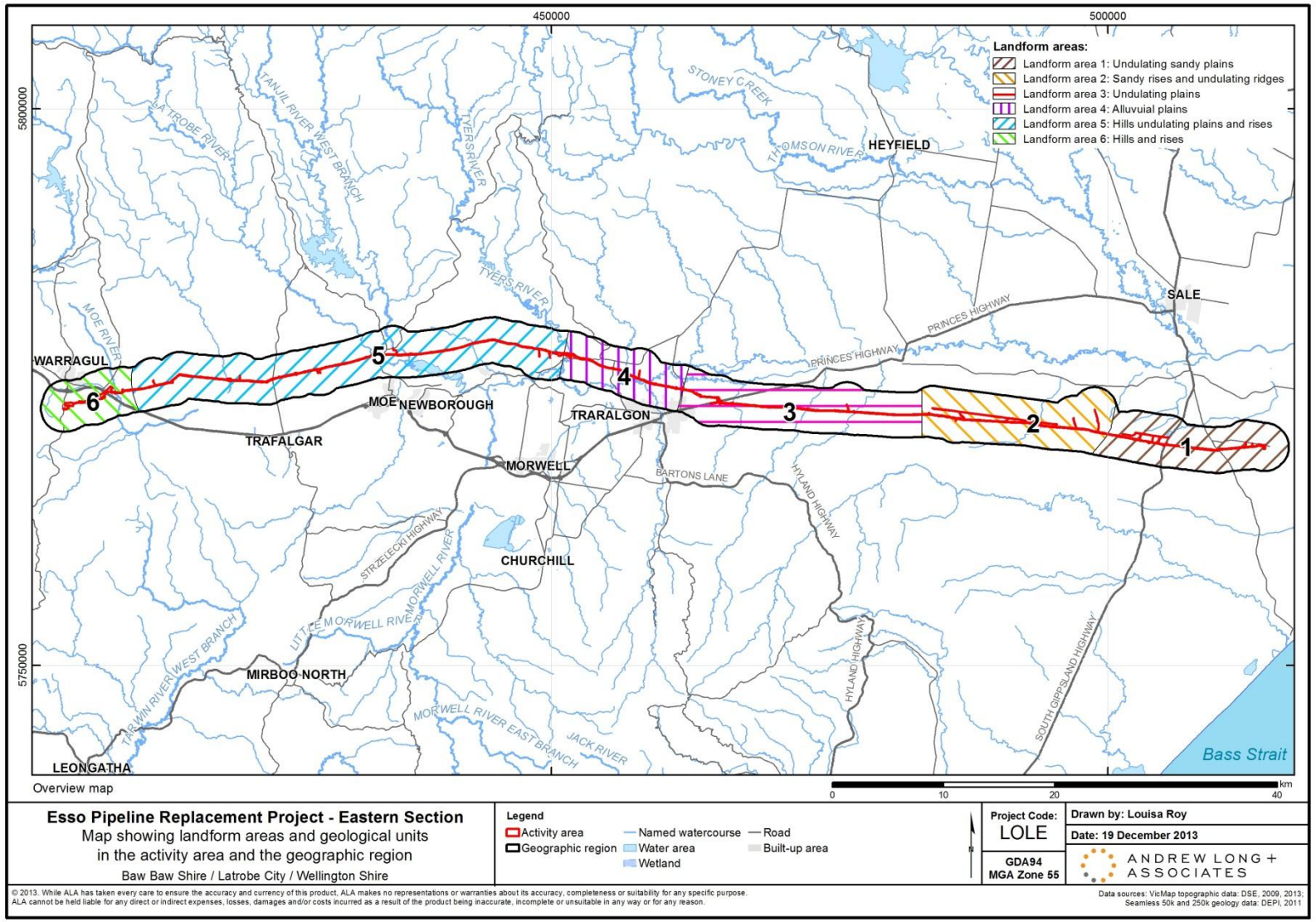
Radiometric dating

No radiometric dates were taken during this phase of testing.

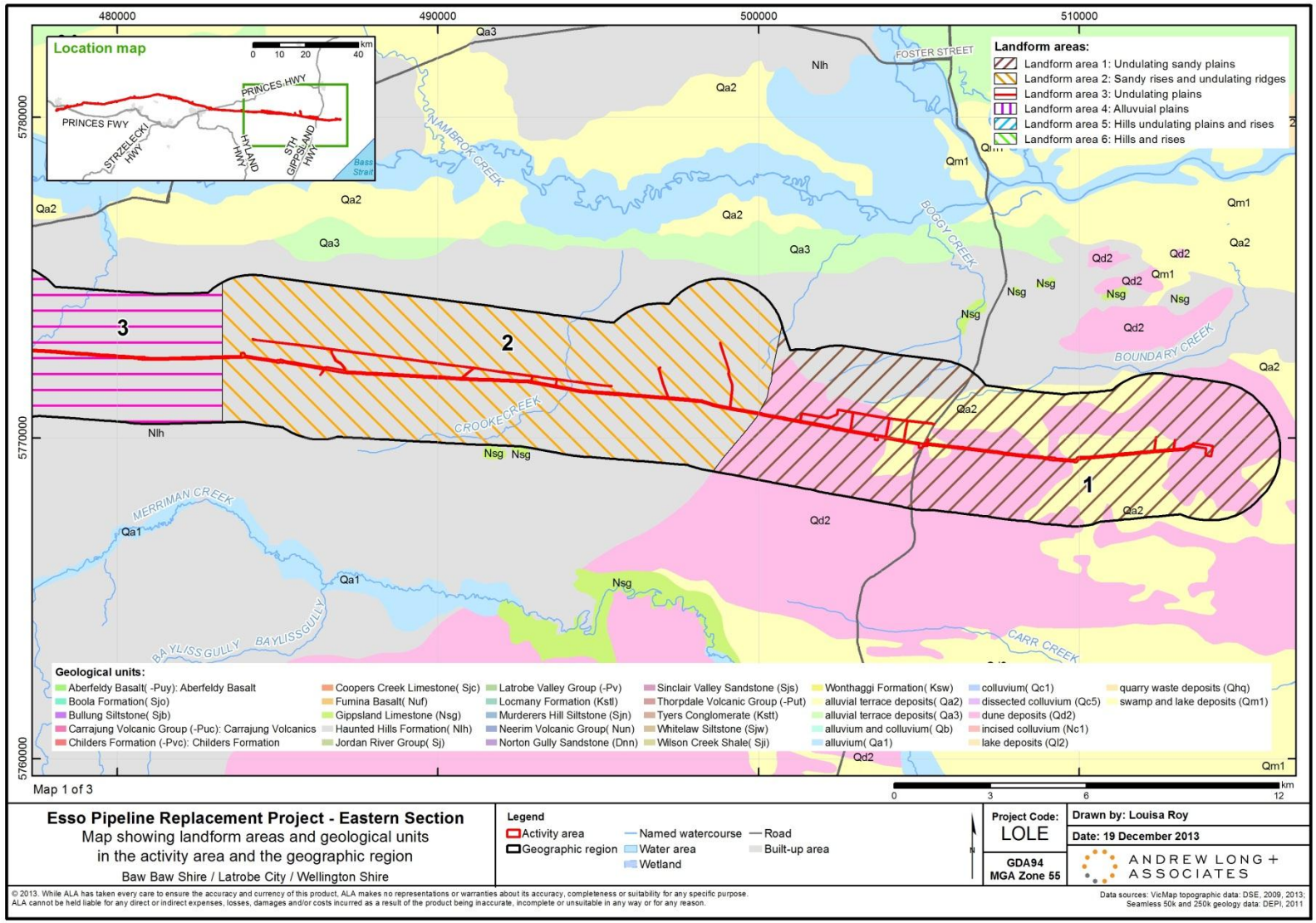
2.5 Key Assumptions and Constraints

The ground surface visibility of the activity area was very limited due to a dense ground cover of introduced grass and weed species, vegetation from the market garden and agricultural cropping. This grass cover obscured visibility across the majority of the activity area. The weather at the time of the standard assessment was very poor with constant showers which hampered pedestrian and vehicular access to the activity area. For this reason many properties were assessed from adjacent roads and fencelines.

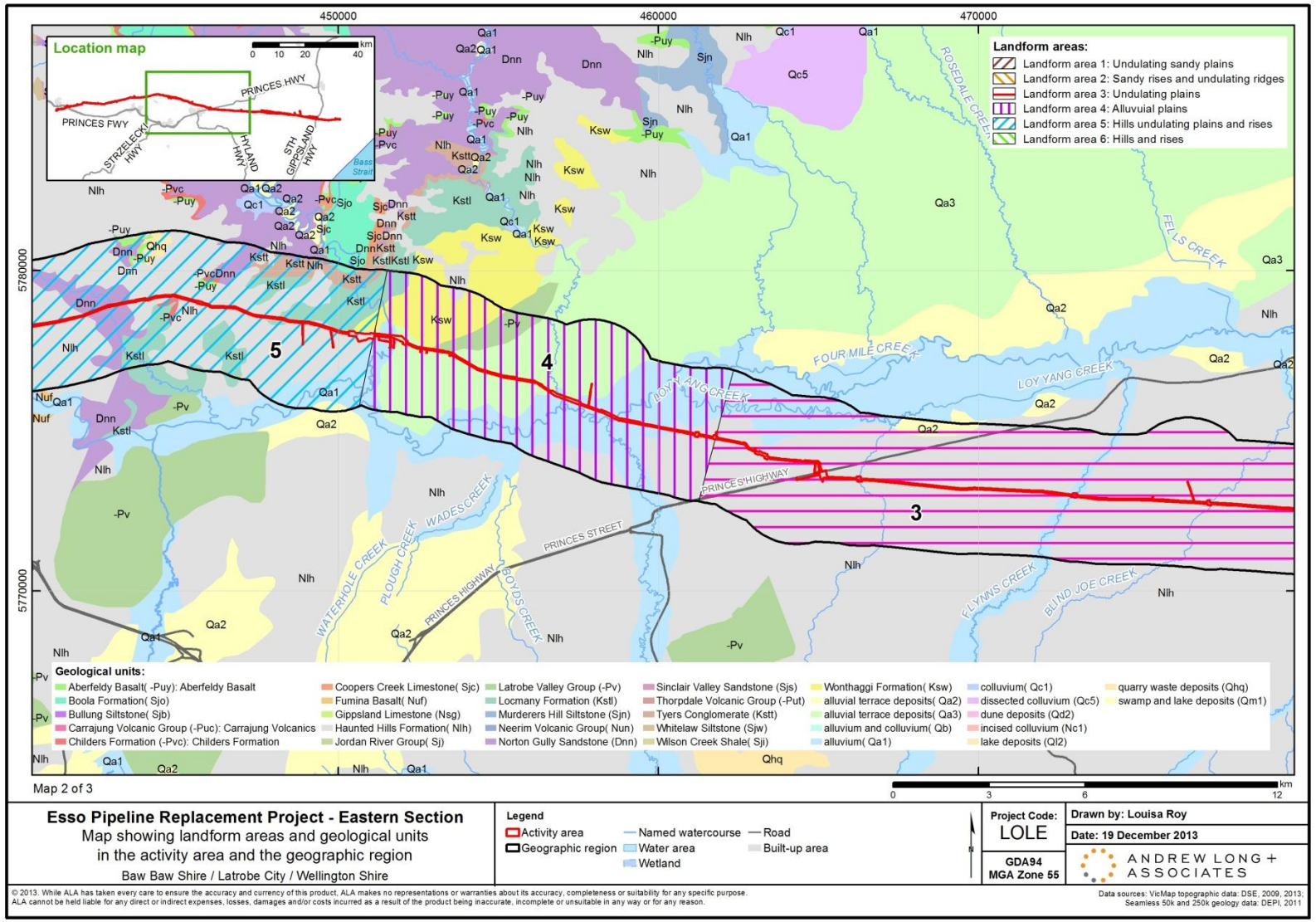
Extreme heat during the first phase of complex assessment testing meant that due to OH&S concerns, subsurface excavations were terminated at several IAs. The testing programme recommenced at these IAs at a later stage when the temperatures were not extreme. No other obstacles were encountered during the complex assessment.



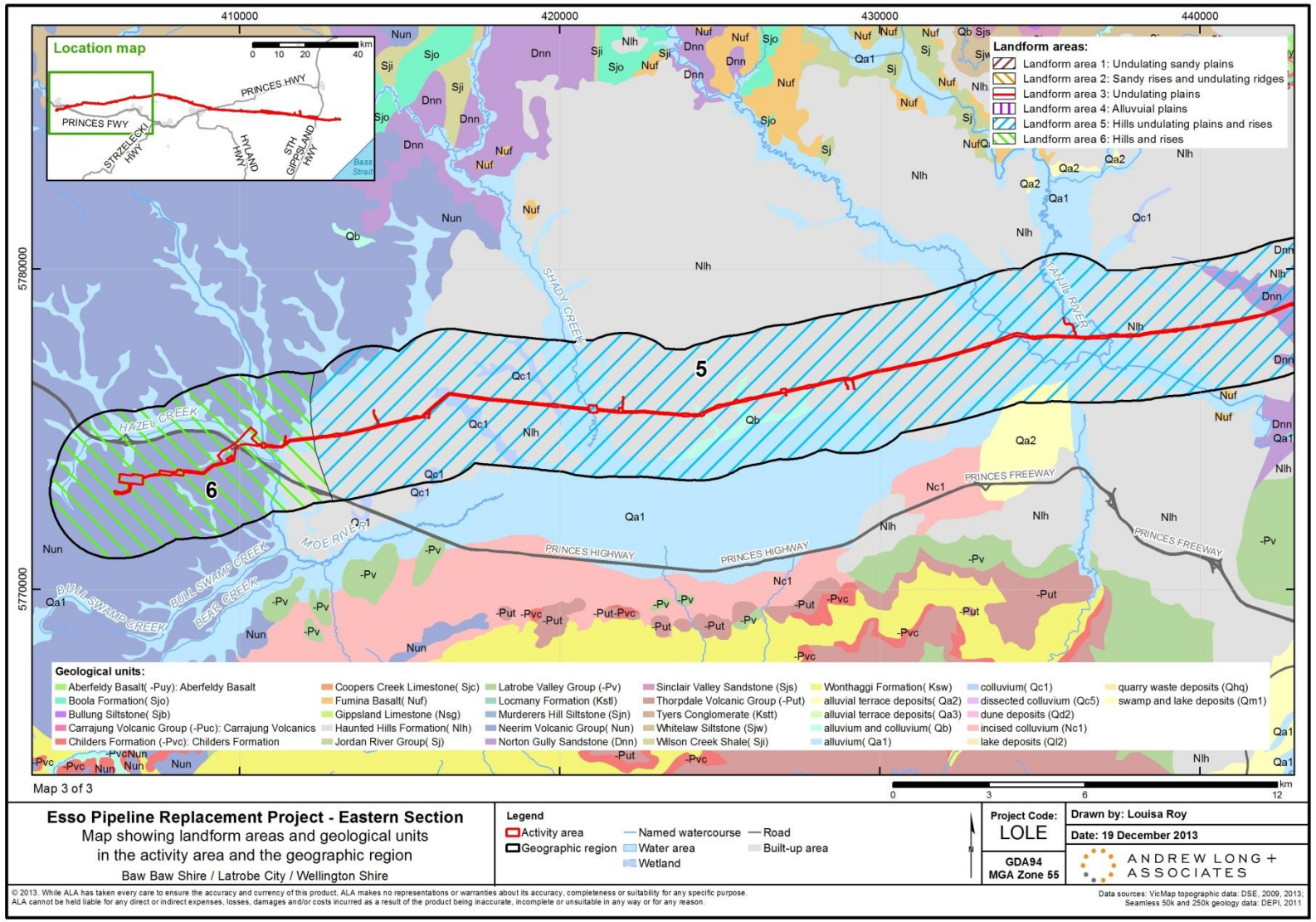
Map 2: Landform Areas present across the activity area – overview map



Map 3: Landform Areas present across the activity area – eastern section



Map 4: Landform Areas present across the activity area – mid section



Map 5: Landform Areas present across the activity area – western section

3

CULTURAL HERITAGE ASSESSMENT

3.1 Existing Conditions

3.1.1 Geology

The geographic region containing the activity area has been defined as the area within a 2km radius of the activity area. From west to east the alignment is characterised by four general landscape sections including Longford to Holey Plains, Latrobe River Plains, Yallourn North to Tanjil Hills and Moe River Plains.

The activity area comprises two geomorphological units – the Victorian Southern Uplands and the Victorian Eastern Plains[1]. The sections of the activity area located within the Eastern Plains unit include: Longford-Holey Plains, Latrobe River Plains and Yallourn North-Tanjil Hills as well as sections of the Moe River Plains. The sections of the activity area that focus on land around Warragul are situated within the Southern Uplands geomorphological unit

The landscape of the Longford-Holey Plains section of the activity area comprises rolling sandy hills that extend from Longford through the Holey Plains State Forest to the area around Crooke Creek. The Holey Plains State Forest is a commercial forestry plantation containing some limited agricultural land. Drainage across this section of the alignment is ephemeral and is characterised by occasional gullies and small swamps.

The Latrobe River Plains extends from the land around Crooke Creek (south of Rosedale) to the Tyers River, north west of Traralgon. The Gippsland basin, of which the Latrobe River Plains form a component, is one of the world's major coal and petroleum producing basins (Gloe 1984, 83). The Latrobe Valley Depression, roughly situated between the towns of Moe and Sale comprises an elongated, asymmetrically pitched syncline, defined to the north by the Central Gippsland highlands and to the south by the South Gippsland Hills. The basin was initially developed during the Lower Cretaceous period, but is perhaps best characterised by the deposition of remarkably thick coal deposits during the Oligocene to Late Miocene periods, known as the Morwell and Yallourn Formations. The land within the Latrobe River Plains consists of flat plains and terraces that extend across the floodplain and are bisected by frequent small tributaries.

The Yallourn North to Tanjil Hills section of the activity area is located on margins of the undulating alluvial plains and slopes of the La Trobe River valley, and extends from the Tyers River to the Tanjil River. The landscape of this area comprises subdued relief that has developed on Pliocene sedimentary rocks and Quaternary alluvium and colluvium with a small area of weathered Oligicene

[1] http://vro.dpi.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphological_framework_7 - accessed 12-10-2013.

basalt (Rosengren 2013). There are no consolidated rock outcrops, and surfaces are covered by a thick weathering and soil profile.

The landscape of the Moe River Plains comprises rolling hills and terraces along the northern edge of the Moe depression, and is bisected by frequent tributaries. This area extends from the Tanjil River through to Warragul.

3.1.2 Historical and Ethno-Historical Aboriginal Occupation and Use of the Activity Area

Available ethno-historical information relating to Aboriginal people in the geographic region is briefly reviewed here. This information can assist in formulating a model of Aboriginal subsistence and occupation patterns in the Gippsland region and also assists in the interpretation of archaeological sites occurring in the activity area, and in predicting the location of archaeological sites and site types. The information presented below is based on ethno-historical accounts of nineteenth century ethnographers such as William Howitt, and Brough-Smythe.

There are several problems concerned with correctly identifying and describing 19th century Aboriginal groups in Victoria, largely as a result of discrepancies in early European accounts and the difficulties early settlers had in understanding Aboriginal languages and social systems. Furthermore, the devastating effects of European settlement, such as the loss of traditional lands and resources, the spread of disease, social breakdown and removal of both groups and individuals to reserves and mission stations have added further complexities. As a result it is hard to identify and document the specific Aboriginal clan groups in the geographic region both before and after the period of initial European settlement.

The ethno-historical information presented within this report is based on the observations and writings of men from the nineteenth century, and certain contextual limitations should be considered when reading these accounts. As pointed out by Barwick (1984, 103), "…their jealousies, ambitions, loyalties and roles in colonial society shaped their inquiries and the content of their publications".

These nineteenth century authors were writing from an Anglo-centric and gender biased viewpoint for a colonial audience who had a very limited and generally negative view on Aboriginal life, heritage, and culture. Despite these shortcomings, nineteenth century ethnographical accounts are a useful resource; the information has often been provided to the author by Aboriginal informants or by first-hand observations and experience. Such information may include knowledge regarding regional Aboriginal stories, life, culture and beliefs, and this data has been utilised to inform the ethno-historical section of this report. Information provided by ethnohistorians such as William Howitt has been utilised in more recent times to support evidence of the *Gunaikurnai* peoples as traditional owners of the Gippsland area for Native Title purposes.

A language group consisted of independent sub-groups of closely related kin, or 'clans', who were spiritually linked to designated areas of land through their association with topographic features connected to mythic beings or deities. Clan lands were inalienable, and clan members had religious responsibilities, (e.g. conducting rituals) to ensure 'the perpetuation of species associated with the particular mythic beings associated with that territory' (Berndt 1982, 4).

There is currently little information available for the Aboriginal population of the geographic region in the 19th century. According to Clark and Barwick, the activity area is located within the territory of the *Kurnai* or *Gunai*/*Ganai* peoples (Clark 1990, 364; Barwick 1984), who occupied East Gippsland between Wilson's Promontory and the New South Wales border. The *Kurnai* or *Gunai*/*Ganai* people include the current RAP, GLaWAC. Historical accounts suggest that the Aboriginal groups who

belonged to the East Kulin were situated immediately west of the Gippsland area, and their social territory may also have incorporated portions of the region. During the post-contact period relations between the *Kurnai* and the peoples based in the Port Phillip area, notably the *Woiwurrung* and *Bunwurrung*, were invariably strained, and there are several accounts of violent raids and reprisals between these groups and the *Kurnai* (Gunson 1968, 7-9; Thomas in Legislative Council 1859, 62). The region of South Gippsland adjoining Westernport Bay was considered to be disputed territory as a result of this antipathy, and presumably acted as a buffer zone to relieve social friction (Gunson 1968, 3; Smyth 1876 vol. 1, 412).

Alfred Howitt, an early anthropologist who spent much time in Gippsland, noted that the *Kurnai* were comprised of five distinct groups: *Brataualung*, *Braiakaulung*, *Tatungalung*, *Brabralung*, *Krauatungalung* (Howitt 1904, 272). According to Wesson (2000, 39) the naming of these groups was based on compass direction taken from the position of the Mitchell River people who called themselves "the" people. According to Wesson, Bulmer said that this naming was sexually specific, for example while a man of the west was one of the *Braiakaulung* (husband+west+father; i.e. we look after/have a duty towards the west country which is the country of our fathers), a woman of the west was one of the Yaktoon worcat (west+woman) (or Yakthun ookah). A man who was from outside *Kurnai* territory was described as a Brajerak whereas his female equivalent was a Louajerak/Lowajerak (Wesson 2000, 39). The five Kurnai groups were further divided into sub-groups that were named (Howitt refers to these sub-groups as divisions, 1904, 272). The names of the sub-groups were often derived from the principal locality occupied by the particular division, with the local groups also sometimes giving their name to a location (Wesson 2000, 20).

According to historical accounts, the current geographic region lies within the traditional territory of two of the Kurnai Groups:

- *Braiakaulung* people
- *Brataualung* people

The divisions within these two Kurnai Groups that have particular relevance to the current geographic region are:

- *Braiakaulung* people: *Bunjil Kraura/Wollum Wollum*
- *Brataualung* people: *Drelin/Delin* and *Yau-ung/Yowung*

Howitt states that the *Braiakaulung* people occupied the Latrobe River Valley, and the valleys of the Thompson, Avon and Macalister Rivers. The southern boundary of this territory occurs along the Strezlecki Ranges (Howitt 1904: Sketch Map of Gippsland). According to Howitt (1904, 76) the *Braiakaulung* claimed all of the country west of Providence Ponds watered by the Avon, Macalister, Thompson and La Trobe Rivers down to the junction of the two latter, following the east side of the Latrobe to Lake Wellington, then eastwards by the lakes to near Roseneath and then northwards towards Providence Ponds. The *Bunjil Kraura* (Clark 1998b, 187-188; Wesson 2000 Figure 6) have been identified as the *Braiakaulung* clan most closely associated with sections of the geographic region. This group has also been known by the name of *Woolloom/Woollam-ba-bellum-bellum* (Hagenauer 1863 and 1866 in Wesson 2000, 28).

The only known references regarding the *Bunjil Kraura* are in relation to a *Birraark*, or medicine man who belonged to the clan (Howitt 1904, 393), a 'leading man', who carried the clan name of *Bunjil-kraura*, meaning 'West Wind' (Howitt 1904, 738). According to Howitt, Bunjil Kraura was the father of Billy Wood's wife, Sarah (or Warrawort) and he lived at the country between Morwell, Rosedale, Toongabbie (Howitt 1053/4a in Wesson 2000, 28).

According to Howitt the *Brataualung* people claimed all the country form the Latrobe River to Cape Liptrap, and from the southern watershed of the Latrobe River to the sea (Howitt 1904, 77). The *Drelin* division of the *Brataualung* were described as belonging to Delin which is Coady Vale and

Merriman's Creek. The *Yowung* were located at Warrigan Creek. One of Howitt's *Kurnai* informers was Bobby Coleman:

> I am Brataua belonging to the Yowung. I am almost half Braiaka. My father belonged to the same mob as Jemmy Fidgett – that is Yowung. Tommmy Hoddinott also belonged to Yowung. The Yowung are real Brataua. My country goes down the Latrobe River from the bridge. Up the river belonged to the Braiaka (Bobby Coleman, n.d. in Wesson 2000, 38).

Headmen of the *Yowung* included Mul-a-ba/Malabar/Mallabar from Old Port (or Port Albert) (Wesson 2004, 38); Monabeet/Bun-geel-koo-run/Bunjil Gworum alias Morgan/Old Morgan who was another Headman who was born c. 1792-94 and died in 1864 (Monabeet was the uncle of Tommy Bungelleen); Maanijuk, who was one of two clever men at *Yowang*; Bunjil Koorambul who was the second clever man; Dulung-ngurrung/Bunjil Brataluk who was born near Prospect and had a son Tommy Hoddinott/Arnott (Wesson 2000, 38). Tommy Hoddinott told Howitt the following story about Dulung-ngurrung:

> He was…called Bunjil Bataluk from carrying a live iguana about with him. When he travelled he used to carry it about on his head. It was about this length (he here measured about 4 feet in length). He kept this iguana in his camp with him but my mother and I lived in a camp of our own close by. He could send the iguana in the night…he used to send the iguana out in the bush to run before him and point out where [eloping couples] were hidden (Tommy Hoddinott n.d. in Wesson 2000, 38).

Howitt states that Bunjil-bataluk was a medicine man, who, according to his dreams and beliefs, was a Lace-Lizard (Howitt 1904, 154). Bunjil-bataluk would aid in the pursuit of couples who wished to elope, using his lace lizard to assist in the hunt (Howitt 1904, 277).

A review of the ethnohistorical literature indicates that there are few direct references to the *Braiakaulung* and *Brataualung* language groups, with most documentation on the *Kurnai* people centring on the *Tatungalung* language group, who were based around the Gippsland lakes. In order to provide information on the Aboriginal occupation of the geographic region, the following section relies on references to the *Kurnai* in general, where specific information is not available for the *Braiakaulung* and *Brataualung*.

Population estimates during the period of European contact for the Kurnai range from 700 to nearly 5,000 (Fison & Howitt 1880, 181; Rhodes 1996, 15; Smyth 1876 vol 2: 36). In the period before pastoral settlement, the effects of introduced disease and resulting inter-tribal conflict effectively decimated the Aboriginal population of Victoria, while aggression, dispossession and alcohol abuse in the first 20 years of European occupation further reduced the survivors. By 1857 there were 50 people left in the *Braiakaulung*, and they considered were the largest language group among the *Kurnai* people at this time (Pepper & de Araugo 1985, 113). According to the Rev. Hagenauer from Ramahyuck Mission, in 1862 there were 54 males and 51 females of the ''Woolloom" clan group (Hagenauer 1862 in Wesson 2000, 28). By 1864, Hagenauer reported that there were 51 persons (Wesson 2000, 28).

Almost all references to *Kurnai* subsistence strategies relate to the people of Gippsland in general, or specifically to those occupying the fringes of the Gippsland Lakes. As a result, there is very little information regarding the types of activities undertaken on the inland plains and foothills, particularly in the Latrobe basin.

The Rev. John Bulmer (Smyth 1876 vol. 1, 141-143) has described the seasonality of the *Kurnai*, who moved between different resource zones on a regular basis. The spring and summer months were spent exploiting seasonal coastal and lake resources such as birds, eels and mullet as well as plant foods (e.g. kangaroo apples). Autumn and winter was spent in the hinterland hunting kangaroo, koalas and wombats as well as collecting various vegetable roots.

Robinson was informed that all the tribes from Gippsland seasonally went to the mountains around Omeo to collect Bogong moths (Clark 1998a vol. 4, 88).

Food procurement tasks were divided between men and women. Men were responsible for hunting, spearing fish, cooking, butchering and dividing meat. Women collected plant foods, shellfish, hunted small animals and fished with lines and nets from canoes on the lake (Rhodes 1996, 17).

The following section documents the occupation of the region by Aboriginal people in the period after direct European contact (post-1839), and details the effects of land displacement, disease and social disruption to the nature of Aboriginal society and behaviour patterns. Most historical references to the *Braiakaulung* during this time concern either inter-tribal conflict or conflict with European settlers.

It has been suggested that disease associated with European contact had a large effect on the decline of the Aboriginal population (Butlin 1983). Butlin (1983) argues that smallpox was by far the most important factor in the destruction of the Aboriginal societies of south-east Australia.

Sealing activities occurred on the Victorian coast from around 1800 to 1829. The major centres were at Wilson's Promontory and Phillip Island (Gaughwin 1983, 46-7). The *Braiakaulung*, close to Wilson's Promontory, would have felt the direct effects of the disruption of groups along the coast and suffered from diseases introduced by sealers.

There is extensive documentation for a state of open warfare between the *Kulin* and *Kurnai* peoples during the early post-contact period (Gaughwin 1983, 57-58; McBryde 1984, 277-278). There are a number of recorded incidences where raiding parties from Gippsland travelled to the Melbourne region to enact vengeance, which generally resulted in further reprisals. It is not clear whether this conflict predates European settlement, but may be related to the spread of disease prior to direct contact. In Aboriginal society, death is invariably interpreted as a malign act on behalf of traditional enemies, usually a neighbouring, but different group. A.W. Howitt (1904, 257), however, notes that the *Bunwurrung* intermarried with the *Kurnai*, indicating that the two peoples were also on amicable terms under certain circumstances.

In 1844 the Chief Protector of Aborigines for Port Phillip, George Robinson journeyed to Gippsland with George Haydon, passing along the coastal plains between Port Albert and Lake Wellington. Although they did not observe Aboriginal people during this section of their trip, they were informed of inter-tribal conflict between Aboriginal people from the Melbourne area and the *Kurnai* (Haydon 1983 vol. 2, 98-99):

> ...it gave them an opportunity of retaliating on their old and formidable enemies, the Gipp's Land Tribes, who had invaded Westernport some years since, and had nearly annihilated the whole tribe (Haydon 1983, 99).

Around 1848, 30 *Kurnai* (probably *Braiakaulung* people) living along the Latrobe River were killed in an attack by a band of *Wurundjeri*. This was followed by the *Kurnai* making reprisal attacks over the following years (Pepper & de Araugo 1985, 92).

Conflicts between different political groups within the *Kurnai* are also known to have occurred. In April 1855 William Dawson, a settler in Sale wrote of an attack by the *Brabralung* on the *Braiakaulung*, while they were camped near settlers houses 'endangering the whites, for the weaker party tries to get shelter indoors' (in Pepper & de Araugo 1985, 108). The *Brabralung* then continued further east, where they attacked another group of Aborigines who were camped at 'The Heart'.

A final inter-tribal battle is said to have taken place on the Tambo River in 1855, involving members of the *Braiakaulong* (Pepper & de Araugo 1985, 108-9). This may have been a reprisal for the raid described by Dawson.

In the early 1840s the rapid settlement of the region by squatters led to conflict with the *Kurnai* as they were dispossessed of their land and forced to rely on Europeans for provisions.

In 1844 Charles Tyers, Commissioner of Crown Lands for Gippsland responded to the conflict between Aboriginal people and settlers by sending an expedition which included the Native Police to

search for a party of *Kurnai* who had been stealing cattle. The party eventually tracked down a group on the La Trobe River. After being fired on, the people ran into the scrub and Tyers proceeded to burn the 'beef' which they had left behind, to demonstrate that 'stealing and killing the settlers' stock must stop'. Tyers later reported that no further complaints were made from Bushy Park and Mewburn Park, however cattle was still being taken from other parts of Gippsland (Pepper & de Araugo 1985, 34).

At Glencoe John Campbell acquired a cannon as defence against the *Braiakaulung* who were in the area. In 1845 the Campbells fired the cannon above the heads of a group of *Braiakaulung* who then prepared to attack. According to J. Darlot:

> …[the Campbells] loaded the gun to the muzzle with nails, broken bottles and anything they could lay hands on, and awaited the final charge of the enemy. As was expected the blacks in a large body and armed with their native weapons made a determined rush to force their way into the building...the gun was discharged right amongst them...many of them were fatally wounded (Pepper & de Araugo 1985, 42).

Despite the intensity of the conflict during the early 1840s, the *Kurnai* on the La Trobe River were still frequently spearing the cattle of run holders as late as 1844 (Synan 1994, 22), indicating a prolonged campaign of resistance to the occupation of their land.

The massacre of Aboriginal people by heavily armed groups of European settlers has been discussed at length by Gardner (1983). Some reported incidences were allegedly in retaliation for the murders of Europeans (1983, 8), while others were killed by 'government' sponsored expeditions carried out in 1847 in search of a 'white woman' thought to be held captive by the *Kurnai* (*ibid*., 10). Henry Meyrick, a squatter who settled at Hastings on the Mornington Peninsula in 1846, wrote of the *Kurnai*:

> No wild beast of the forest was ever hunted down with such unsparing perseverance...Men, women and children are shot whenever they can be met with...It is impossible to say how many have been shot, but I am convinced that not less than 450 have been murdered altogether... (Meyrick 1939, 136-137).

Regardless of the recorded reasons for the massacres, it is probable that many of the atrocities were racially motivated, and undertaken purely to eliminate 'competition' for the resources of the land.

Through the combined influence of disease, conflicts and dispossession, the number of *Kurnai* in the geographic region rapidly dwindled after European contact. People in search of food and other basic items began living on the fringes of Sale or pastoral stations like Bushy Park, at Maffra, where government rations were available (Penney 1997, 116). By 1857 the *Braiakaulung* population was listed as only 50 people (Pepper & de Araugo 1985, 113).

An Aboriginal camp existed in Sale up to a least 1853 when Charles Tyers was told that this group of Aboriginal people were being supplied alcohol by some of the settlers (Pepper & de Araugo 1985, 98). Aboriginal people were also living at 'The Heart' station, 10 km east of Sale, and two *Braiakaulung* worked for a settler in Sale in 1855. In the early 1860s, the *Braiakaulung* were still a distinct cultural entity; in 1861 the Revd. F. A. Hagenauer observed a large camp at the junction of the Thomson and Macalister Rivers where Ramahyuck Mission was later established (Pepper & de Araugo 1985, 127).

Eventually the remaining members of the *Braiakaulung* were forced to formally move onto Ramahyuck Mission, established in 1862 by the Presbyterian Church, or to Lake Tyers, established in 1863 (Synan 1994, 23). It has been documented that *Kurnai* people, including some from Sale, gathered at Lake Tyers in 1863 to celebrate the reservation of land (Pepper & de Araugo 1985, 125).

When Ramahyuck mission closed in 1907, the remaining residents were sent to Lake Tyers Station. *Kurnai* people continue to live at Lake Tyers today, with the granting of land under the *Aboriginal*

Lands Act 1970 giving the station residents formal ownership of the land (Pepper & de Araugo 1985, 221-229 & 262). The *Kurnai* people include the current RAP, GLaWAC.

European settlement of the Gippsland Lowlands began in the 1840s after Angus McMillan first explored the area and established a shipping port at Port Albert, during an expedition from Maneroo in NSW. Further favourable reports by the explorer Count Paul Strezlecki stimulated interest with squatters arriving from Port Phillip or Van Dieman's Land via Port Albert, or from New South Wales via Omeo (LCC 1982, 15-16). This early settlement was principally in the form of squatter's pastoral runs.

A series of Parliamentary land acts during the 1870s and 1880s brought profound changes to the character of rural occupation and ownership in Victoria. These Acts allowed for the division of the large Crown squatting leases into smaller, freehold farm allotments. Such a change in the character of the rural industry enabled a greater number of people to take up allotments to try to earn a living off the land and meet a growing need in the colony for agricultural products.

The current activity area contains Esso's existing easement, sections of which were constructed during the late 1960s. The construction of the existing easement would have brought about a moderate level of ground disturbance to sections of the activity area. On-going maintenance of the easement has further contributed to disturbances within the activity area.

3.1.3 Aboriginal Cultural Heritage Places

According to the Victorian Aboriginal heritage register (ACHRIS), there are no registered Aboriginal cultural heritage places within the activity area. There are, however, 93 registered Aboriginal places in the geographic region containing the activity area with seven places located within 200m of the activity area. The majority of the previously registered Aboriginal places in the geographic region are surface artefact scatters generally containing low numbers of stone artefacts. Silcrete is the predominant raw material present represented, with smaller numbers of quartz, quartzite and occasional flint/chert/mudstone, siltstone and crystal quartz. Artefact scatters have been recorded on landforms associated with water sources, on elevated land, in gullies and also on the flat plains landform. There are also six scarred trees present in the geographic region. Red gum trees are recorded as containing the majority of the cultural scars in the geographic region. The condition of the scarred trees is variable.

The standard assessment field survey for the CHMP was conducted over seven days (November 18-22 and November 25-26, 2013). The field survey methodology was dictated by the need to systematically examine and further define the four general landscape areas identified during the desktop assessment (Longford to Holey Plains, Latrobe River Plains, Yallourn North to Tanjil Hills and Moe River Plains). The activity area was divided into a series of investigation areas (IA), which were based largely on property parcels and landforms.

During the present standard assessment programme, two single silcrete artefacts identified; one located on the Holey Plains (IA 10090b) within the sandy rises and undulating ridges landform area within the eastern section of the activity area, and the other on a vehicular track (IA 10880a) on the hills, undulating plains and rises landform area in the western section of the activity area.

At the time of survey, grass cover inhibited ground surface visibility across much of the activity area and obscured sediments. This grass cover typically ranged from very short to knee height, and these conditions were adequate for the identification of obtrusive types of Aboriginal cultural heritage (such as scarred trees and mounds) and to undertake a general assessment of the archaeological sensitivity of the activity area. The conditions were inadequate for the identification of stone

artefact scatters, except in the sections of the activity area containing good ground surface visibility, such as areas beneath trees, fencelines, market gardens and on the informal vehicle and stock tracks that dissect portions of the activity area. These soil exposures were carefully inspected during the standard assessment.

Archaeological test excavation to determine the actual sensitivity of the activity area was considered the appropriate next phase of evaluation. To this end it was determined that a testing program utilising the excavation of 1m x 1m test pits and a series of 40cm x 40cm shovel test pits would be employed to assess the cultural heritage values of the activity area. After discussions with the RAP, a testing methodology was proposed consisting of the excavation of stratigraphic 1x1m test pits within each of the six landform areas identified during the standard assessment as well as additional 1x1m test pits and a series of 40x40cm shovel test pit transects.

Given the low surface visibility, and the possibility that Aboriginal cultural heritage material may be present within the activity area, it was deemed necessary to undertake a Complex Assessment in accordance with Regulation 60 (1b).

During the initial phase of the complex assessment programme, Investigation Areas from each of the six landform areas were subject to testing, with a total of 18 Investigation Areas tested in December. Of these 18 Investigation Areas, a total of 10 contained Aboriginal cultural heritage material.

Undulating sandy plains

A stratigraphic 1x1m test pit was excavated at IA 10010 along with a series of twenty 40x40cm shovel test pits. There were also 10 shovel test pits excavated at IA 10020 and 11 shovel test pits at IA 10070. Subsurface Aboriginal cultural heritage material was identified at IA 10020 and IA 10070.

Sandy rises and undulating ridges

A stratigraphic 1x1m test pit was excavated at IA 10110 along with a series of nine 40x40cm shovel test pits. There were also 20 shovel test pits excavated at IA 10060 and eight shovel test pits at IA 10090. Subsurface Aboriginal cultural heritage material was identified at IA 10110.

Undulating plains

A stratigraphic 1x1m test pit was excavated at IA 10160 along with a series of five 40x40cm shovel test pits. There were also 19 shovel test pits excavated at IA 10170, and 14 shovel test pits at IA 10430. Subsurface Aboriginal cultural heritage material was identified at IA 10170 and IA 10430.

Alluvial plains

A stratigraphic 1x1m test pit was excavated at IA 10870 along with a series of nine 40x40cm shovel test pits. There were also 10 shovel test pits excavated at IA 10640, 8 shovel test pits at IA 10670, and 5 shovel test pits at IA 10820. Subsurface Aboriginal cultural heritage material was identified at IA 10870.

Hills, undulating plains and rises

A stratigraphic 1x1m test pit was excavated at IA 11000 along with a series of ten 40x40cm shovel test pits. There were also a series of three shovel test pits excavated at IA 11060 and 16 shovel test pits excavated at IA 11330. Subsurface Aboriginal cultural heritage material was identified at IA 11000 and IA 11330.

Hills and rises

A stratigraphic 1x1m test pit was excavated at IA 11500 along with a series of five 40x40cm shovel test pits. There were also two shovel test pits excavated at IA 11470. Subsurface Aboriginal cultural heritage material was identified at IA 11470 and IA 11500.

4

RECOMMENDATIONS

4.1 Recommendations

The complex assessment subsurface testing programme and RAP consultation programme has re-commenced in 2014. Any Section 61 matters and place specific recommendations will be contingent upon the outcomes of this investigation and consultation process. It would therefore be premature to provide any recommendations at this stage.

4.2 Contingencies

In addition to the Aboriginal heritage place management recommendations to be provided as part of the CHMP, a series of contingency responses will be provided that will become compliance requirements once the CHMP is approved.

The contingencies will provide instructions regarding the management of any Aboriginal cultural heritage found during the execution of the activity. This will include a list of actions that must be followed to ensure compliance. The contingencies will also describe the requirements relating to the custody and management of Aboriginal cultural heritage found during the execution of the activity and a protocol for the management of the discovery of human remains. In addition, a section relating to dispute resolution, delay and other obstacles as well as nominating project delegates will be considered.

5

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