

DEPARTMENT OF PLANNING***Major Projects Assessment***

*Director-General's Environmental Assessment Report***SOMERSBY FIELDS PROJECT****PURPOSE**

To supplement the report prepared by Departmental officers prepared under Section 75I relating to the determination of the application for the Somersby Fields Project.

PROPOSED PROJECT

Somersby Fields Partnership (SFP) (the Proponent) is proposing to develop a new sand quarry on Peats Ridge Road, Somersby, on the Central Coast. The site is about 700 metres west of the Somersby Interchange on the F3 Freeway, and about 180 metres east of Somersby Public School.

The proposal, known as the Somersby Fields Project, involves the construction and operation of a new sand quarry at Somersby, including:

- extracting up to 7.4 million tonnes of sand over 18 years, at a maximum rate of 450,000 tonnes of (product) sand a year;
- constructing and using a range of associated infrastructure, including a sand processing plant and new access road off Peats Ridge Road; and
- the progressive rehabilitation of the site.

The project has a capital investment value of \$6 million, and would employ up to 33 people during operations.

PROJECT SETTING

The Somersby Plateau is characterised by rolling agricultural land that has historically supported, and continues to support, a range of agricultural land uses including horticulture and grazing.

The plateau is underlain by large resources of friable (ie. crumbly) sandstone, which breaks down readily to provide a valuable sand resource for the region's construction industry. A number of existing and planned quarries are located in the locality.

The sandstone geology of the plateau also supports a large and high quality groundwater resource, which is highly valued as a domestic, agricultural and commercial (ie. bottled water) water source. It also forms an integral component of the environment, with groundwater dependent ecosystems (such as hanging swamps) reliant on the maintenance of a natural groundwater regime for survival.

At the local scale, the site and surrounding area is dominated by rural and rural-residential land uses (see Figure 1). However, a key surrounding land user is the Somersby Public School, which is located about 180 metres to the west of the proposed extraction area (at the closest point). The proximity of the school to the project site is fundamental to many of the concerns raised by the Somersby community about the project. The site is also situated generally within the social centre of the Somersby Village which includes a shop, service station, a community hall and a number of residences, with the closest approximately 150 metres from the proposed extraction area.

PROJECT NEED

There is an ongoing need to develop new sand deposits to meet the demand of the construction industry both on the Central Coast and the wider Sydney region.

The Somersby Plateau has long been identified as an important current and future source of fine-medium grained sand for the region's construction industry.

Although the Department recognises that need, it also recognises that the site is located in a sensitive area, primarily due to its proximity to Somersby Public School, village and surrounding residences, and of its potential impact on sensitive land uses.

STATUTORY CONTEXT

The proposal is classified as a major project under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), as it is development for the purpose of extractive industry with an extraction rate of more than 200,000 tonnes a year. The Minister is therefore the approval authority.

Although part of the project is prohibited under the *Gosford Interim Development Order 122* – as a small part of the site is zoned Rural (Highway Protection) – most of the project is permissible with consent. The Minister may determine the project in accordance with transitional provisions in the EP&A Regulation (see cl.8OA).

CONSULTATION

The Department received a total of 2,980 submissions on the project, including:

- 11 from public authorities – DECC, DWE, DPI, Somersby Horticultural Field Station (a division of DPI), Hunter-Central Rivers CMA, Hawkesbury-Nepean CMA, Department of Education and Training (DET), NSW Health, RTA, Gosford City Council and Wyong Shire Council;
- 11 from special interest groups; and
- 2,958 from the general public, including 2,757 form letters.

In addition to these formal submissions, the Department has received, and continues to receive, hundreds of representations from the both the local and wider community opposing the proposal.

These submissions demonstrate a very strong opposition and concern about the project.

Public Authority Submissions

Most of the public authorities (including DWE, DPI, the CMAs, DET, NSW Health and Wyong Council) did not object outright to the project, but raised issues for consideration by the Department relevant to their administrative responsibilities. DET and NSW Health raised significant concerns regarding the potential health and amenity-related impacts on Somersby Public School, particularly by way of noise and air quality (dust and silica), and socio-economic impacts associated with the potential for reduced enrolments at the school. Groundwater, surface water and flora and fauna impacts were also raised as significant issues.

DECC initially stated that it could not support the project, because of the potential impact on flora and fauna – in particular that the proposed mitigation measures and offset strategy were inadequate to compensate the impacts on threatened species. The DECC has subsequently agreed in-principle to a revised offset strategy although it has residual concerns regarding the impact of the proposal on the Somersby Mintbush, which it says is in decline for all known populations.

Gosford City Council objects to the project on a number of grounds, including air quality, noise, groundwater and surface water, flora and fauna, socio-economics (including the potential for reduced school enrolments) and justification/need for the project.

Community and Special Interest Groups

Some 99% of the submissions from the community and special interest groups objected to the project.

Special interest groups and organisations that made submissions include:

- Australian Conservation Foundation Central Coast Branch;
- Bourke School Education Office;
- Central Coast Farmers (a branch of NSW Farmers Association);
- Coast & Wetland Society;
- Community Environment Network Inc.;
- Federation of Parents & Citizens' Association of NSW;
- Kariong Neighbourhood Centre & Kariong Outside School Hours Centre;
- Ourimbah District Precinct Group;
- Somersby Action Group;
- Somersby Country Women's Association; and
- Somersby Public School Parents & Citizens Association.

The key grounds for objections from both individuals and special interest groups were (in decreasing order of mention):

- Groundwater and surface water;
- Air quality (dust and silica);
- Noise;
- Flora and fauna;
- Traffic;
- Socio-economic (including the potential for reduced school enrolments);
- Greenhouse gases/climate change;
- Visual amenity; and
- Aboriginal heritage.

Many of the concerns raised were related to the potential for impact on Somersby Public School, as well as impacts on surrounding residents and horticultural land users.

VIEWS OF THE LOCAL MEMBER

The project is located in the Gosford electorate, where Ms Marie Andrews MP, is the local member.

Both Marie Andrews and the Hon. John Della Bosca MLC – Minister for Health (former Minister for Education and Training) and Minister for the Central Coast – made submissions on the project.

The Member for Gosford is opposed to the project, primarily because of its potential dust and noise impacts on Somersby Public School, but also because it could have an adverse impact on the surrounding horticultural enterprises. The Minister for the Central Coast is concerned about the project, and has received representations about the proposal from a wide array of people and organisations on the Central Coast.

INDEPENDENT HEARING AND ASSESSMENT PANEL

On 17 December 2007, the former Minister for Planning directed that an Independent Hearing and Assessment Panel (Panel of Experts) be constituted to:

- consider and advise on key aspects of the project, including:
 - air quality, in particular dust (and silica) impacts;
 - ground and surface water resources;
 - general amenity of surrounding land uses and activities, particularly Somersby Public School;
- consider the issues raised in submissions and the adequacy of SFP's response to those submissions; and
- identify and comment on other issues raised in submissions or during the panel hearings.

The Panel comprised:

- Mr Gary West (chair);
- Dr Nigel Holmes (air quality and noise expert); and
- Assoc. Professor Noel Merrick (surface and ground water expert).

The Panel held hearings with community stakeholders, Government agencies, and SFP in Kariong in March 2008, and reported to the Director-General in July 2008. This report is attached and tagged B.

The report's overall conclusions can be summarised as:

- the project's noise, air quality (dust and silica), ground and surface water impacts can be managed via appropriate controls;
- the general amenity of the surrounding land uses and activities would not be adversely affected by the project subject to the implementation of appropriate controls;
- the impacts on Somersby Public School would not adversely affect its continuing operations, subject to appropriate controls; and
- the project should be subject to independent audits of environmental performance before being allowed to progress to Stage 2.

KEY ISSUES

The assessment report prepared by Departmental officers is attached and tagged A. Key issues to be considered include the following:

Air Quality

Air quality assessment indicates that the project could be managed to comply with the applicable dust criteria at all surrounding properties, including Somersby Public School, subject to design and operational controls.

The potential for dust and silicosis-related health impacts to school students and the community was one of the most cited and emotive issues raised by the community in submissions and to the Panel. Understandably, parents are concerned about the potential for their children's health to be acutely or chronically affected as a result of respiration of crystalline silica and dust associated with emissions from the project. Parents of students attending the school have submitted that they would remove their children from the school should the proposal proceed.

This issue was considered by the Panel, which included the Panel undertaking additional crystalline silica studies and a re-evaluation of SFP's health risk assessment based on the findings of these studies.

The Panel found that the project's predicted worst case airborne crystalline silica levels (ie. $0.57 \mu\text{g}/\text{m}^3$) would be below the applicable internationally accepted criterion (ie. $3 \mu\text{g}/\text{m}^3$) in the areas surrounding the project, including Somersby Public School. The Panel concluded that the project does not present an appreciable health risk to students or teachers at the Somersby Public School or to surrounding residents. It further found that the potential for dust emissions to impact horticultural industries in the area was negligible given that the project is predicted to comply with applicable amenity criteria, and the distance to the nearest sensitive horticultural activities.

Notwithstanding the above, community groups challenge the outcome of the studies and submit that predictions and associated impacts have been largely underestimated.

The Department, whilst accepting the technical findings of the Panel, concedes that should the proposal proceed, there is likely to be an elevated and ongoing concern and anxiety amongst the community, particularly staff, parents and students at the Somersby Public School regarding health related impacts associated with the project.

Furthermore, it is also likely that over the operating life of the proposal that some form of unacceptable operating incidents will occur due to adverse wind conditions and/or lax operating standards. Whilst such incidents may or may not necessarily result in significant environmental damage or health related impacts, they would certainly have the propensity to even further elevate public concern and increase the anxiety of parents who have a right to assume that their children are being educated in a safe and nurturing environment.

The Department therefore considers that the community and business disquiet relating to the project and opposition to the notion of operating a potentially health threatening project so close to Somersby Primary School and to a lesser degree nearby residences will not wane, despite predicted compliance with the worst case airborne silica levels. The Department particularly notes the uncertainties and potential consequence associated with silica-related health impacts in such close proximity to a school.

Noise

Noise assessment indicates that the project could be managed, following implementation of reasonable and feasible mitigation measures, to comply with the relevant operational noise criteria at all surrounding properties (including Somersby Public School), with the exception of one private property (Daniels residence), which is predicted to be significantly impacted (ie. an exceedance of more than 5 decibels) during Stage 2 of the quarry operations.

With regard to Somersby Public School, the Panel and some submissions noted that the assessment in the EA only considered ground-based receivers and did not take into consideration the elevated position of the upper-floor location of some classrooms. The Panel considered that the upper floor classrooms would experience noise levels approximately 2 decibels above the predicted levels, which would take the predicted noise levels equal to the assessment criterion (i.e. the acceptable maximum) during the worst case operational period (ie. during Stage 2 when operating close to the surface).

The potential for noise impact on the school was also one of the most cited issues raised by the community in submissions. Understandably, many of the parents in the community and educators are concerned about the affect that the noise emissions could have on the learning experience of students at the school.

The Department notes the Panels findings that due to topographic and vegetative screening, the project is unlikely to exceed the applicable noise criteria at the school. However, it also concedes that there is a residual noise impact, particularly to the upper floors of the school which will have some impact on the learning experience of the students and further adds to the disquiet and concern amongst the school community regarding the impact of the proposal on the staff and students of the school.

A private property (the Daniels residence), is predicted to be significantly affected by noise (ie. an exceedance of more than 5 decibels) during quarry operations. The level of impact exceeds what the Department would normally accept as manageable through onsite treatment. Furthermore, voluntary acquisition of properties or residences significantly affected by quarry operations is generally not supported by the Department.

Flora and Fauna

The project would disturb about 20 hectares of the 42.3 hectare site, requiring the removal of about 10.8 hectares of good quality native treed vegetation.

Flora and fauna assessment indicates that the project would impact 3 threatened plants, including:

- Somersby Mintbush, listed as endangered;
- *Hibbertia procumbens*, listed as endangered; and
- Black-eyed Susan, listed as vulnerable.

The project also has the potential to impact a number of threatened animal species, including a number of bats and birds, and the Eastern Pygmy-possum and the Red-crowned Toadlet.

The most significant of these is the Somersby Mintbush which is highly endangered. The project would remove up to 40 Somersby Mintbush plants. The impact of the project on threatened species, particularly on the Somersby Mintbush, was a key issue raised in submissions, including those submissions from DECC, Gosford and Wyong Councils, the Environmental Defenders Office as well as the community. Many of the submissions believed that the proposed mitigation and

offsetting measures were inadequate to protect the Somersby Mintbush and other threatened species.

While an offset strategy was formulated and generally agreed to between the Department and the DECC covering a range of species, residual concern remains regarding the impact of the proposal on the Somersby Mintbush, in particular the uncertainty associated with the implementation of the strategy, and its ability to adequately compensate the impacts on such a highly endangered species.

Social Impacts

A large number of submissions from the community expressed concerns about the potential social impacts of the project, particularly the potential for the project to cause a reduction in enrolments at Somersby Public School, with resultant impacts on staffing levels and viability of the school.

The Department accepts that from a technical perspective the project could be managed such that it would not result in unacceptable health or amenity impacts (particularly by way of noise and dust) to the students or teachers at the school. Under normal circumstances, the Department would be satisfied that social impacts would closely correlate in this respect. However, given the proximity of the school to the project (180 metres) and the nature of health-related impacts associated with exposure to airborne silica (silicosis), and to a lesser degree elevated noise levels, many sections of the community will simply never feel assured that the project can be operated safely. This is likely to result in a drop in enrolments at the school and general degradation of the social fabric of the local community.

CONSIDERATION & CONCLUSION

The then Minister for Planning constituted an IHAP to advise on this proposed development. The IHAP Report recommended that the project could proceed subject to strict environmental and other conditions. The Department's (draft) assessment report (also attached) recommends a range of strict conditions of approval to mitigate environmental and amenity impacts should the proposal be approved.

The Minister should, however, be aware that, notwithstanding that the proposal could conceivably be undertaken within environmental and amenity limits, there are broader environmental planning considerations which must be considered in the public benefit when making a decision on this development: This includes:

- The planning setting of the quarry in close proximity to a school and residential area would inevitably introduce land use conflicts which would necessitate ongoing and onerous management. Whilst recognising the need for the resource, the location for extracting the resource in the manner that is being proposed is fundamentally and strategically inconsistent with good land use planning, and therefore with the broader public interest.
- There remains considerable concern and opposition to the proposal amongst the general community, Gosford City Council, a range of special interest groups, local businesses, and in particular, the staff and parents associated with the nearby Somersby Public School. Approving the quarry at this location would inevitably introduce significant adverse social impacts, particularly impacts to the school population. The benefits of the proposal do not appear to outweigh the ensuing and adverse social impacts.
- There remains residual impact and a degree of uncertainty, particularly in relation to air quality and noise. This uncertainty must be considered in the context of the nature of the material, including silicosis and its impact on school children. If approved, these impacts would necessitate a very stringent ongoing management and control regime. Entire reliance on such controls at this location is unacceptable.

Whilst an alternative regime for extracting the resource may have been acceptable by considering a smaller operation further away from the school, at least in the initial stage, an assessment of such an alternative has not been presented.

In conclusion, whilst recognising that technical compliance has been found by the Panel, the Department's concern is with much broader social and environmental planning issues.

There are two options for the Minister to consider:

Option 1 is for an approval, subject to very stringent conditions. As indicated above however, reliance on these conditions cannot guarantee containment of impacts, particularly social impacts.

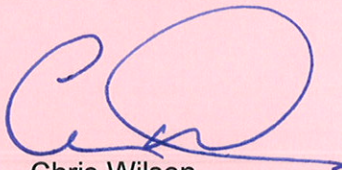
Option 2 is for the development, as proposed, not to be approved.

Overall, it is considered that the benefits of this particular development do not outweigh the impacts, and as such should not be approved.

RECOMMENDATION

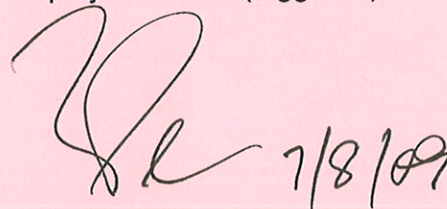
I, the Director-General RECOMMENDED that the Minister:

- consider the findings of the IHAP;
- consider the draft Director-General's report attached and tagged A;
- consider the contents of this submission (being supplementary and constituting the final Director-General's report), and
- refuse the project application by signing the attached project refusal (tagged B).

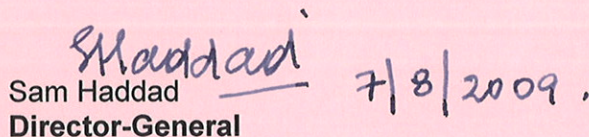


Chris Wilson
Executive Director

7.8.09



Richard Pearson
Deputy Director-General



Sam Haddad
Director-General

7/8/2009.



The Hon Kristina Keneally MP
Minister for Planning

9/8/09

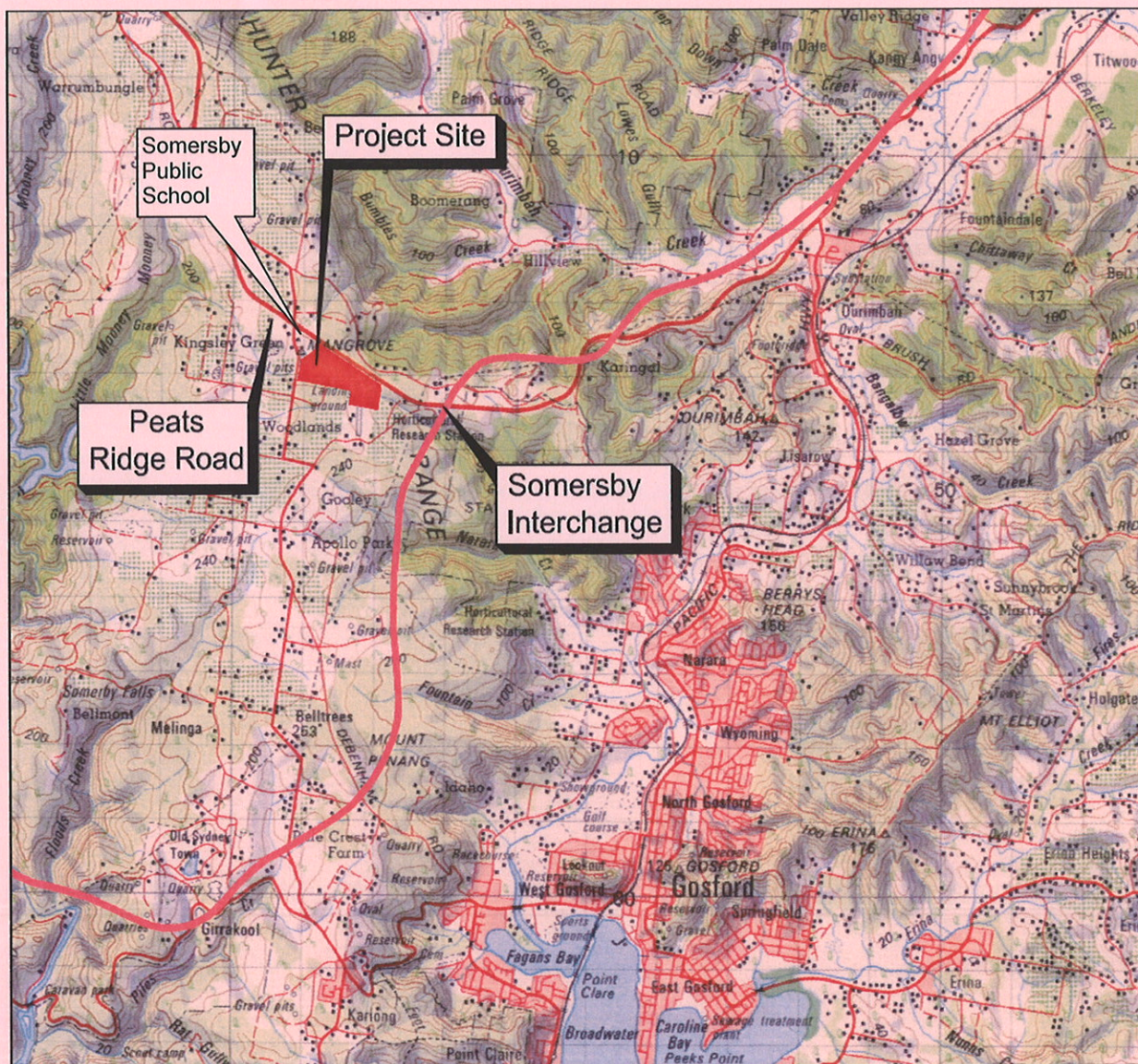


Figure 1: Project Location

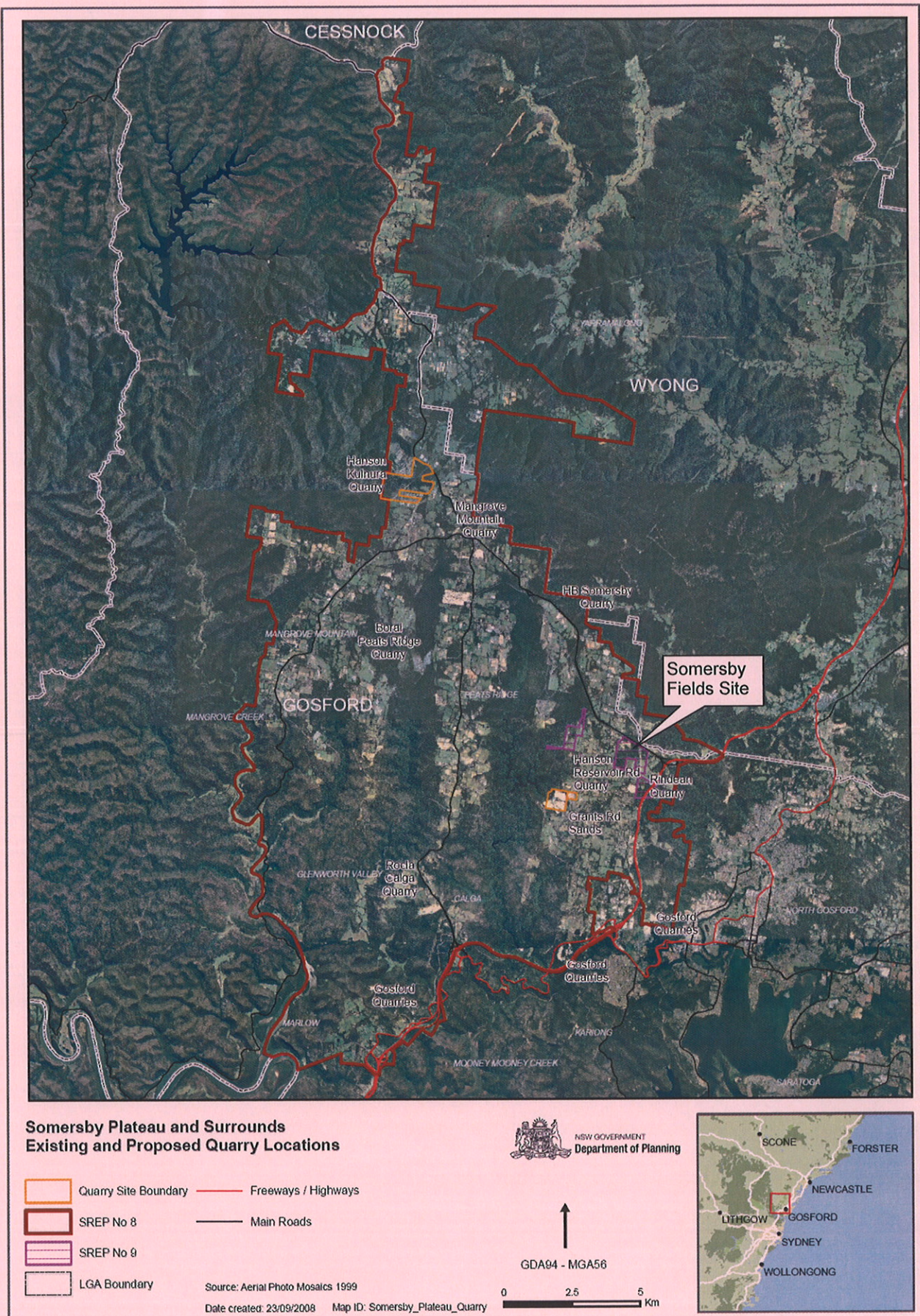


Figure 2: Project Setting

