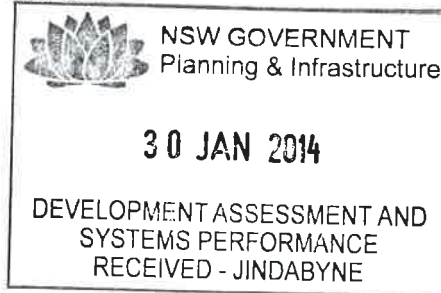


Strategic Design Pty Ltd
PO Box 803
Jindabyne NSW 2627

Attention: Ms Libby Pugh



Project 77363-L1
11 November 2013
CMR

Email: info@strategicdesign.net.au

Dear Ms Pugh

Proposed Additions and Alterations Athol Lodge, Thredbo Village NSW

As requested, the above site was visited by Douglas Partners Pty Ltd (DP) on 8 November 2013 for the purposes of assessing the geotechnical implications (if any) of the proposed additions and alterations to the front of existing lodge. These proposed works are to include: three new external decks (one above another and the third extending in L-shape around the north western corner of the lodge), a retaining wall along an enlarged car parking area at the front of the lodge, and a new staircase and pathway from the car park to the lodge entrance. It is understood a number of new columns are required to support the proposed decks.

The proposed works as detailed on thirteen site sketches provided by Strategic Design Pty Ltd (Strategic Design) indicates that some minor earthworks will be required for the car parking retaining wall and the deck additions. Based on the sketches provided, discussions with Strategic Design and observation made during the site inspection, the following is noted:

- retaining walls up to about 1.6 – 1.8 m in height are to be constructed outside the northern (front) side of the lodge along the edge of the widened car park;
- new deck posts (columns) are to be located approximately 1.8 m from the walls of the existing lodge (northern and western sides);
- the car park edge retaining walls are proposed to be located approximately 2.1 m from the existing lodge (0.3 m out from the proposed deck posts);
- some excavation works at the front of the lodge (mainly to remove existing stacked boulders) is required to create the proposed enlarged car parking area. The excavations would not extend much deeper than the existing car park level but horizontally back by up to about 6 m at the eastern end adjacent to the proposed parking area and stairway; and
- at least one to two trees will be removed as part of the excavation works.

At the time of the inspection, the existing lodge contained a series of suspended decks (eastern end of lodge) and awnings (central entryway and north western corner of lodge). A retaining wall (which a part of an awning is supported on) along the western side of the lodge showed some movement away from the lodge. A number of stacked granite boulders are present with an intermediate bench adjacent to the existing car parking area and are of about 1.6 m in total height to the north (at the front) of the lodge.

Photographs illustrating the site conditions at the time of the inspection are attached.

It is concluded that the proposed development will have negligible geotechnical impact on site conditions from a stability perspective. However for the design and construction of new structure footings it is recommended that:

- a review of existing footing details be undertaken by a structural engineer to assess whether any significant additional loading would be applied to the foundation;
- all new footings associated with the proposed additions be transferred through any filling and overburden soils and found at least 0.5 m within dense residual soils or weathered bedrock;
- all new footings must be founded outside the (45 degree) zone of influence of near by structures (i.e. deck posts footings founded at or near the base of the proposed retaining wall(s) located 0.3 m in front), unless (retaining wall) structures are design to support the surcharge loading.
- the base of the footing excavations be inspected by a suitably qualified engineer to confirm that a suitable bearing stratum has been reached; and
- excavations for footings and for the new retaining wall be kept as small as possible and where necessary the sides temporarily battered at a stable slope.

A completed Form 4 "Minimal Impact Certification" is attached to this report.

We trust the above is in accordance with your present requirements and confirms onsite discussions. This Memorandum should be read in conjunction with the attached notes, *About this Inspection Report*. Should you have any questions at this stage please contact the undersigned.

Please contact either of the undersigned for clarification of the above as necessary.

Yours faithfully
Douglas Partners Pty Ltd


Colin Reid
Associate

Reviewed by


Gary Renfrey
Senior Associate

Attachments: Notes About this Inspection Report
 Photoplates (2 pages)
 Form 4 Certificate

About this Inspection Report

Douglas Partners



Introduction

These notes are provided to amplify DP's inspection report in regard to the limitations of carrying out inspection work. Not all notes are necessarily relevant to this report.

Standards

This inspection report has been prepared by qualified personnel to current engineering standards of interpretation and analysis.

Copyright and Limits of Use

This inspection report is the property of DP and is provided for the exclusive use of the client for the specific project and purpose as described in the report. It should not be used by a third party for any purpose other than to confirm that the construction works addressed in the report have been inspected as described. Use of the inspection report is limited in accordance with the Conditions of Engagement for the commission.

DP does not undertake to guarantee the works of the contractors or relieve them of their responsibility to produce a completed product conforming to the design.

Reports

This inspection report may include advice or opinion that is based on engineering and/or geological interpretation, information provided by the client or the client's agent, and information gained from:

- an investigation report for the project (if available to DP);
- inspection of the work, exposed ground conditions, excavation spoil and performance of excavating equipment while DP was on site;
- investigation and testing that was carried out during the site inspection;
- anecdotal information provided by authoritative site personnel; and

- DP's experience and knowledge of local geology.

Such information may be limited by the frequency of any inspection or testing that was able to be practically carried out, including possible site or cost constraints imposed by the client/contractor(s). For these reasons, the reliability of this inspection report is limited by the scope of information on which it relies.

Every care is taken with the inspection report as it relates to interpretation of subsurface conditions and any recommendations or suggestions for construction or design. However, DP cannot anticipate or assume responsibility for:

- unexpected variations in subsurface conditions that are not evident from the inspection; and
- the actions of contractors responding to commercial pressures.

Should these issues occur, then additional advice should be sought from DP and, if required, amendments made.

This inspection report must be read in conjunction with any attached information. This inspection report should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions from review by others of this inspection report or test data, which are not otherwise supported by an expressed statement, interpretation, outcome or conclusion stated in this inspection report.



Photo 1 – Looking south at site



Photo 2 – View of the front of lodge from the east



Site Photographs
Proposed Additions and Alterations
Athol Lodge, Thredbo

CLIENT: Strategic Design Pty Ltd

PROJECT: 77363

PLATE No: 1

REV: A

DATE: 11-Nov-13



Photo 3 – View from west of boulders and soil to removed



Photo 4 – View of existing retaining wall and awning posts along the western side of site



Site Photographs
Proposed Additions and Alterations
Athol Lodge, Thredbo

CLIENT: Strategic Design Pty Ltd

PROJECT: 77363

PLATE No: 2

REV: A

DATE: 11-Nov-13



Geotechnical Policy – Kosciuszko Alpine Resorts Form 4 – Minimal Impact Certification

Date received: ___/___/___

DA no: _____

This form may be used where minor construction works which present minimal or no geotechnical impact on the site or related land are proposed to be erected within the "G" line area of the geotechnical maps. A geotechnical engineer or engineering geologist must inspect the site and/or review the proposed development documentation to determine if the proposed development requires a geotechnical report to be prepared to accompany the development application. Where the geotechnical engineer determines that such a report is not required then they must complete this form and attach design recommendations where required. A copy of form 4 with design recommendation, if required, must be submitted with the development application.

Please contact the Alpine Resorts Assessments Team in Jindabyne for further information.
Phone 02 6456 1733.

To complete this form, please place a cross in the boxes and fill out the white sections.

1. Declaration made by geotechnical engineer or engineering geologist in relation to a nil or minimal geotechnical impact assessment and site classification

I,

Mr Ms Mrs Dr Other

Gary Edward

Family name

Renfrey

OF

Company/organisation

Douglas Partners Pty Ltd

certify that I am a geotechnical engineer /engineering geologist as defined by the "Policy" and I have ~~inspected the site and~~ reviewed the proposed development known as

Proposed Additions and Alterations, Athol Lodge, Thredbo Village NSW

As a result of my ~~site inspection and~~ review of the following documentation

(List of documentation reviewed)

Architectural Sketches (13 page)

I have determined that;

- the current load-bearing capacity of the existing building will not be exceeded or adversely impacted by the proposed development, and
- the proposed works are of such a minor nature that the requirement for geotechnical advice in the form of a geotechnical report, prepared in accordance with the "Policy", is considered unnecessary for the adequate and safe design of the structural elements to be incorporated into the new works, and
- in accordance with AS 2870.1 Residential Slabs and Footings, the site is to be classified as a type

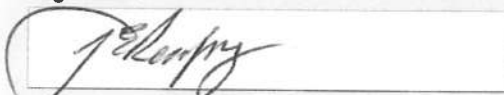
(insert classification type)

- I have attached design recommendations to be incorporated in the structural design in accordance with this site classification.

I am aware that this declaration shall be used by the Department as an essential component in granting development consent for a structure to be erected within the "G" line area (as identified on the geotechnical maps) of Kosciuszko Alpine Resorts without requiring the submission of a geotechnical report in support of the development application.

4. Signatures

Signature



Name

Gary Renfrey

Chartered professional status

CPENG Membership No. 258028

Date

11 November 2013

5. Contact details

Alpine Resorts Assessments team

Snowy River Avenue

PO Box 36 JINDABYNE 2627

t: 02 6456 1733

f: 02 6456 1736

e: alpineresorts_assessments@dipnr.nsw.gov.au