

1. Module details**Module name****Identifying Site Conditions****Module duration**

It is expected that students with the appropriate entry knowledge and skills will successfully complete this module in 36 – 40 hours.

Module code

NUE263

Discipline code

1099105

2. Module purpose

The purpose of this module is to provide participants with an introduction to the broad environmental values of sites, the identification of potential hazards, consultation and notification processes associated with sites and categorisation of sites as per legislative and regulatory codes

3. Prerequisites

Introduction to the Powerline Clearance Industry
.NBB002 Occupational Health and Safety.

4. Relationship to competency standards

NES101, NES450

5. Content**Map Reading****Vegetation values****Land uses****Terrain feature****Site ‘stakeholders’****Land categories****Legislative and workplace required notification procedures****Planning and negotiating site access**

6. Assessment strategy

Assessment methods

The learning outcomes for this module may be assessed orally, by individual or group presentations, or in the form of short written assignments. More than one learning outcome may be assessed at once. Where appropriate, learning outcomes in this module may be assessed in conjunction with learning outcomes in other modules and in particular, Tree and Plant Identification, and Electrical Systems Identification and Powerline Clearance Requirements.

Conditions of assessment

Participants require access to a range of different sites. Educators are encouraged to use field trips to different sites that illustrate different vegetation communities and human uses. Examples of typical enterprise job specifications and site details should be provided to compare with participants site observations. Participants are encouraged, where possible, to interview experienced industry personnel. Negotiation skills should be practised as much as possible using simulated negotiation sessions with at least two people, representing the interests of the workplace and site stakeholders. Negotiations should be planned and undertaken using a case study drawn from the work environment or a case study provided by the educator.

Base plans should be provided for participants to complete simple sketch maps of sites.

Participants may work in pairs or small groups to collect and record information

Practical demonstrations, visual representations, written work, group discussion, oral presentations. Participants should be encouraged to develop an annotated folio of visual details drawn from site visits or indicative pictures from other sources for assessment purposes

7. Learning outcome details

Learning outcome 1

Assessment criteria

Read maps.

- 1.1 Using a major metropolitan street directory, locate four streets/suburbs, nominated by the instructor, using the index of streets.
- 1.2 Using the map number and reference co-ordinates in the index, locate the street and suburb in the body of the directory.
- 1.3 Using the key maps for the city section/region, locate the map number and track the most direct route to the street using major roads *from* a place nominated by the instructor.
- 1.4 Using a country road map locate the key and index of place names.
- 1.5 Locate three places on the map, nominated by the instructor, using the index and map co-ordinates.
- 1.6 Identify the road type the places are on.
- 1.7 Identify symbols/markings for creeks, rivers, railway lines, national parks, mountains and population centres.
- 1.8 Using the intermediate kilometres indicated on the map, determine the distance travelled to the places identified on the country road map previously, *from* a place nominated by the instructor.
- 1.9 Using a set of electricity distribution system maps for a region, use the region map to identify a locale, nominated by the instructor, and identify the number of distribution map sheets for that area.
- 1.10 On a detailed distribution map sheet, nominated by the instructor use the legend to identify on the map sheet: a pole type sub-station; EHV line with tower number; 66kv sub-transmission line; 12.7kv distribution line; spur line; an isolator.

- 1.11 Locate the symbols for roads, rivers, towns, farms, mountains and any other geographic features.
- 1.12 Using the electricity distribution system map in conjunction with a metropolitan or country roadmap, identify the road access route to five places on the electricity distribution system, nominated by the instructor.
- 1.13 Using a Fire Authority set of maps for a region, identify the map number for two places nominated by the instructor.
- 1.14 Using the detailed maps, identify five land holders in the places nominated by the instructor and the fire region identification code for those place.

Learning outcome 2

Describe a variety of vegetation ‘values’ associated with sites.

Assessment criteria

- 2.1 Discuss and define the following ‘values’ with regard to trees and ground cover commonly found at work sites: amenity; bio-diversity; culture and heritage including; Aboriginal and European associations; habitat for native fauna; agricultural/horticultural production; environmental weeds including woody weeds.
- 2.2 In a field situation: identify two examples of trees valued on the basis of amenity; locate two trees bearing scars created by Aboriginal inhabitants; locate two examples of trees with non-Aboriginal cultural and heritage value e.g. old trees indicative of Victorian street-scape styles, remnants of original homesteads; identify and describe the features of at least one site where both ground cover and trees contain important bio-diversity value including habitat for native fauna; identify one site with evidence of re-vegetation/land repair works; identify the use of trees in an agricultural/horticultural situation e.g. windbreaks, shade, erosion/salinity control, plantation; identify two examples of sites containing environmental weeds including woody weeds.

Learning outcome 3

Observe, identify and record work site terrain.

Assessment criteria

- 3.1 Assess and record features of the work site such as site slope, proximity to waterways and/or drainage systems, erosion, rocks and boulders and any other visually recognisable features.
- 3.2 Identify evidence of die-back or other communicable tree and plant diseases.
- 3.3 Identify and record site proximity to roads, footpaths and bicycle tracks.
- 3.4 Identify gas and water utility infrastructure and transmission and distribution infrastructure managed by other electricity utilities.
- 3.5 Identify and record work site proximity to houses and other buildings.
- 3.6 Identify equipment access routes to the work site.
- 3.7 Identify equipment suitable and safe for use at the site.
- 3.8 Identify ways to minimise risk at the work site.

Learning outcome 4

Assess and categorise the worksite using categories defined in relevant legislation and codes of practice.

Assessment criteria

- 4.1 Contrast and compare the categories of land defined as: public land; urban area; rural area; declared area; area of particular significance; power line and other easements; plantation; fire zones and any other land categories appearing in relevant State legislation/Codes/s of Practice.
- 4.2 Inspect and record the name and location of four different sites defined according to four different categories.

Learning outcome 5

Identify site ‘stakeholders’ associated with the site who should be consulted/notified of intended powerline clearance works.

Assessment criteria

- 5.1 Develop a consultation list, relevant to the participant’s region, of stakeholders with a direct interest in management of the site/s: where the site is on private property; where the site is on a roadside; where the site contains rare or endangered vegetation or other significant bio-diversity value; where the site contains Aboriginal scar trees; where the site contains evidence of re-vegetation/land repair; where the site contains examples of heritage value trees or vegetation of significant community interest; where the site is on Crown land or land controlled by a Local Government; where the site contains other utilities e.g. gas, water, infrastructure managed by other electricity utilities.
- 5.2 Identify and record site ‘stakeholders’ whose right to be consulted is enshrined in legislation/regulations/ codes of practice.
- 5.3 Draw and annotate a chart showing the steps and personnel involved in notifying and consulting with ‘site stakeholders’ as per workplace and industry requirements in the participant’s region/State.
- 5.4 Obtain workplace sourced documentation showing details of the notification process and assessment of the site.

Learning outcome 6

Plan and undertake negotiation to achieve site access.

Assessment criteria

- 6.1 With reference to not less than two stakeholders identified in Learning Outcome 5, discuss and identify your and their needs and goals.
- 6.2 Describe the environment required for positive negotiating.
- 6.3 Assess how your relationship with the other party will impact on the negotiation.
- 6.4 Identify your personal requirements and your organisation’s minimum requirements for successful outcome.

- 6.5 Using appropriate interpersonal skills including: language appropriate to the other party; active listening techniques; a variety of questioning techniques.
- 6.6 Use a problem solving process to: describe and agree on process stages; state, clarify and confirm your and others needs and wants; identify the issue/s for both parties; agree on the issue/s with all parties and set agenda/priorities; explore options for satisfying needs of all parties; discuss possible solutions; check likely areas of agreement and viability; confirm areas of agreement.
- 6.7 Record the negotiated agreement.
- 6.8 Decide and record follow-up action.

8. Delivery of the module

Delivery strategy

This module may be delivered through full- or part-time mode. Access to sites which illustrate different vegetation and site values, land uses, and defined land categories is required. Site visits should be undertaken in conjunction with educators specialising in assessing the cultural and heritage (including Aboriginal and European) and vegetation values. Participants should be encouraged to develop a folio of annotated visual information detailing site values.

Presentation from a representative sample of site 'stakeholders' in delivery of Learning Outcome 4 is also encouraged. Participants should be encouraged to draw on the knowledge and experience of work colleagues with extensive field knowledge via interview at the workplace.

Delivery methods must provide for the demonstration of skills and associated knowledge specified in all learning outcomes either in workplace or simulated workplace conditions.

Delivery should take into account current legislation, regulations and by-laws and be consistent with existing industry standards including Australian and international standards

Resource requirements	Metropolitan street directory, country road map, electricity distribution map set, regional fire authority maps, access to representative sites, writing and drawing materials, State/Territory Legislation and Codes of Practice, relevant examples of workplace documentation
Student references	<p>Eliot, W and Jones, D. (1980) <i>Encyclopedia of Australian Plants</i>, Lothian</p> <p>Australian Conservation Foundation <i>Habitat</i> Volume 23, No., 3 June 1995</p> <p><i>Code of Practice for Powerline Clearance (Vegetation) 1996</i> (Vic.), Office of the Chief Electrical Inspector</p> <p><i>Code of Practice on Electrical Safety for Work on or Near High Voltage Electrical Apparatus (The Blue Book)</i>, 1998 (Vic.), Office of the Regulator General.</p> <p><i>Code of Practice – Amenity tree Industry, August 1998</i>, Catalogue no. 34, WorkCover Authority, New South Wales</p> <p><i>WorkCover Certificate of Exemption 5099</i>, WorkCover Authority, New South Wales, 1995</p> <p><i>Electrical Safety Code (Tas.)</i>, Version 1, 1997</p> <p><i>Electrical Industry Safety Code, 1998</i>, Queensland Department of Mines and Energy</p>
Educator references	<p>Groves, R.H. ex (1994) <i>Australian Vegetation</i> 2nd edition Cambridge University Press</p> <p><i>Melbourne Dreaming</i> – Meyer Eidelson (contains clear images of Aboriginal scar trees)</p> <p>Commonwealth <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i></p> <p><i>Victorian Archaeological and Aboriginal Relics Preservation Act 1972</i> or equivalent State/Territory legislation relevant to the place of delivery.</p> <p><i>Trotman J, 1992 Occupational Health and Safety Handbook</i>, Information Australian, Melbourne, Vic.</p> <p>Couchman P. 1991, <i>An easy guide to Occupational Health and Safety</i>, Workplace Video Productions, Wantirna, Vic</p>
Occupational health and safety requirements	All training must comply with current OH & S requirements