

Western Sydney Airport

Visual and Landscape Construction Environmental Management Plan

December 2019

Document Control

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Plan Authorisation

Position	Name	Signature	Date
Environment Manager	S Reynolds		06/12/2019

Glossary and Definitions

Item	Definition
The Act	<i>Airports Act 1996 (Cth) (Airports Act)</i>
Airport	The airport located at the Airport Site. Note: The Airport is referred to in the Act as Sydney West Airport and also commonly known as Western Sydney Airport
AEPR	<i>Airports (Environment Protection) Regulations 1997</i>
Airport Lease	An airport lease for the Airport granted under section 13 of the Act
Airport Plan	Means the airport plan for the Airport Site as determined by the Infrastructure Minister under section 96B of the Airports Act in December 2016 as varied from time to time in accordance with the Airports Act
Airport Site	The site for Sydney West Airport as defined by the Airports Act.
Ancillary Developments	An 'ancillary development' as set out in section 96L of the Act
Bulk Earthworks	The large scale earthworks required to flatten the Stage 1 area in preparation for further construction works as described in section 6 of the Construction Plan.
BoM	Bureau of Meteorology
CEMP	Construction Environmental Management Plan
Condition	A condition set out in Part 3 of the Airport Plan in accordance with section 96C of the Act
Construction Impact Zone	The part or parts of the Airport Site or an Associated Site on which Main Construction Works are planned to occur, as detailed in the Construction Plan approved in accordance with Condition 1.
CSEP	Community and Stakeholder Engagement Plan
DoEE	Australian Government Department of the Environment and Energy
DPI	Department of Primary Industries (including Agriculture NSW, Fisheries NSW and NSW Office of Water)
Ecological sustainable development	Using, conserving and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992)
EEW	The Phase of the Stage 1 Development that involves early earthworks as described in section 6 of the Construction Plan.
Environment Minister	The Minister responsible for the EPBC Act
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
ESA	Environmentally Sensitive Area
EWMS	Environmental Work Method Statement
Infrastructure Department	The department responsible for administering the Airports Act, currently the Australian Government Department of Infrastructure, Regional Development and Cities
Infrastructure Minister	The Minister responsible for the Act from time to time

Item	Definition
ISO 14001	AS/NZS ISO 14001:2015 Environmental Management Systems
LDP	Land Disturbance Permit
Main Construction Works	Substantial physical works on a part of the Airport Site (including large scale vegetation clearance, bulk earthworks and the carrying out of other physical works, and the erection of buildings and structures) described in Part 3 of the Airport Plan, other than TransGrid Relocation Works or Preparatory Activities
Non-conformance	Failure to conform to the requirements of the Airport Plan (including the SEMF)
OEH	Office of Environment and Heritage (NSW)
Preparatory Activities	<p>Preparatory Activities mean the following:</p> <ol style="list-style-type: none"> day to day site and property management activities; site investigations, surveys (including dilapidation surveys), monitoring, and related works (e.g. geotechnical or other investigative drilling, excavation, or salvage); establishing construction work sites, site offices, plant and equipment, and related site mobilisation activities (including access points, access tracks and other minor access works, and safety and security measures such as fencing but excluding bulk earthworks); enabling preparatory activities such as: <ol style="list-style-type: none"> demolition or relocation of existing structures (including buildings, services, utilities and roads); the disinterment of human remains located in grave sites identified in the European and other heritage technical report in volume 4 of the EIS; and application of environmental impact mitigation measures; and any other activities which an Approver determines are Preparatory Activities for this definition
the Project	Western Sydney Airport – Stage 1 development
Stage 1 Development	The Developments described in Part 3 of the Airport Plan
SES Officer	An SES employee under the <i>Public Service Act 1999</i> (Cth)
Sydney West Airport	The Airport. Note: this is the name used in the Act. The Airport is known as Western Sydney International (Nancy-Bird Walton) Airport, or, more commonly, Western Sydney International.
Visual sensitivity	The character of a setting, the quality of a view and how critically a change to the existing landscape would be viewed from various viewpoints
Western Sydney International (Nancy Bird Walton) Airport (WSI)	The Airport. Note: Under the Act the Airport is referred to as Sydney West Airport
WSA	<p>WSA Co Limited (ACN 618 989 272), the entity responsible for constructing and operating the Airport in accordance with the Airport Plan.</p> <p>For the purposes of the Airports Act 1996 (Cth), WSA is the “airport-lessee company” for WSI</p>

Acronyms and abbreviations

Item	Definition
ALC	Airport Lessee Company
ALER	Airfield lighting equipment room
ARFFS	Aviation Rescue and Firefighting Services
ATC	Air traffic control
ATCT	Air traffic control tower
BEC	Bulk Earthworks Contract
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CO	Carbon monoxide
CEMP	Construction Environmental Management Plan
DIPNR	NSW Department of Infrastructure, Planning and Natural Resources (now Department of Planning and Environment)
EIS	Environmental Impact Statement
EPA	NSW Environmental Protection Authority
GSE	Ground support equipment
ha	Hectares
HIAL	High intensity approach lighting
ISO 14001	AS/NZS ISO 14001:2015 – Environmental Management Systems
km	kilometres
m, m ² and m ³	Metres, square metres and cubic metres
ML and ML/d	Megalitres and megalitres per day
OEH	NSW Office of Environment and Heritage
OU	Odour unit
POEO Act	<i>NSW Protection of the Environment Operations Act 1997</i>
RMS	NSW Roads and Maritime Services
SES	Senior Executive Service
SEMF	Site Environmental Management Framework
TSP	Total suspended particulate matter
WSI	Western Sydney International

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1 Introduction

1.1 Background/Context

This WSA Visual and Landscape Construction Environmental Management Plan (Visual and Landscape CEMP) (this Plan) has been prepared to satisfy the requirements of the Visual and Landscape CEMP set out in the Conditions for the Stage 1 development of the Western Sydney International (Nancy-Bird Walton) (**WSI**) Airport detailed in Section 3.10.2 of the Airport Plan. Specifically, Section 3.10.2 Condition 14 (1) of the Airport Plan requires that a WSA Visual and Landscape CEMP be approved under the Airport Plan prior to the commencement of Main Construction Works.

This Visual and Landscape CEMP provides the management approach and requirements (including environmental mitigation measures, controls, monitoring and reporting) for managing visual and landscape related matters during construction of the Stage 1 Development. This Plan forms one of nine CEMPs which are collectively covered by the WSA Site Environmental Management Framework (SEMF). To ensure the environmental resources, responsibilities and management measures are implemented during the construction activities, the SEMF is contained within the Construction Plan (Appendix 2). The implementation of the Construction Plan and the SEMF are aligned with Project level management plans including the Community and Stakeholder Engagement Plan and the Sustainability Plan as illustrated in Figure 1.

The Construction Plan, including the SEMF and nine CEMPs provide the environmental management approach and requirements and therefore should not be read in isolation to each other due to interconnecting management outcomes and objectives. Specifically, for the Visual and Landscape CEMP, it is considered that the following management plan linkages can be made:

- Biodiversity CEMP – Management of vegetation on-site and prevention of impacts on adjacent vegetation and fauna habitat will be influential in the management of visual impacts.
- Soil and Water CEMP – Managing the control of runoff and ensuring receiving waters are not impacted by the works is important in minimising visual impacts. Also, the management of surface water flows is considered a key aspect in landscape management. Preventing mud being tracked onto roadways will also be important in minimising visual impacts.
- Air Quality CEMP – Impacts on air quality have the potential to affect the visual amenity and landscape of the receiving environment, particularly with regards to dust generation.
- Waste and Resources CEMP – Effective on-site waste management will be influential in minimising visual impacts resulting from works.
- Community and Stakeholder Engagement Plan – It is anticipated that the surrounding community and stakeholders will be highly receptive to visual impacts, particularly general tidiness of the site and surrounds.
- Sustainability Plan– Management and reduction of greenhouse gas emissions and management of impacts about general health, wellbeing, and quality of life for surrounding communities.

Where relevant, linkages to other CEMPs and management objectives have been included in the risk assessment and the environmental control measures (Section 7).

This Plan is to be read in conjunction with the WSA Construction Plan and any relevant CEMP documents as indicated in Table 1 below which highlights relationships and linkages of this Visual and Landscape CEMP with other CEMPs within the environmental management framework, including key cross-referencing to the Airport Plan and EIS.

Table 1 Visual and Landscape CEMP relationship with other CEMP documentation

CEMP or plan	Airport Plan Condition (3.10.2)	EIS Chapter 28 Table: Management area	EIS Chapter 28 Table: Mitigation measures
Aboriginal Cultural Heritage	11	28-12	28-13
Air Quality	10	28-10	28-11
Biodiversity	7	28-04	28-05
Community and Stakeholder Engagement Plan	15	28-20	28-21
European and other Heritage	12	28-14	28-15
Noise and Vibration	6	28-02	28-03
Soil and Water	8	28-06	28-07
Sustainability	29	28-37	28-38
Traffic and Access	9	28-08	28-09
Visual and Landscape (this Plan)	14	28-18	28-19
Waste and Resources	13	28-16	28-17

Key

Moderate to high relevance to this CEMP

Some relevance to this CEMP

The review and document control process for this Plan are described further in Section 9 of the WSA SEMF.

The context of this Plan in relation to the WSA environmental management system is presented below in Figure 1.

1.2 Document purpose

The purpose of this Plan is to provide the foundation for the management of visual and landscape impacts in accordance with best practice and legal requirements (including environmental mitigation measures, controls, monitoring and reporting) during the construction phase of the Stage 1 development based on the assessment undertaken as part of the EIS.

This Plan details the visual and landscape management requirements that must be satisfied in order to demonstrate compliance with Condition 14 of Section 3.10.2 of the Airport Plan for the construction of the Stage 1 development of the Western Sydney Airport.

Legal and other requirements are identified and maintained in a register within the SEMF (refer SEMF Appendix C). Mitigation measures (specific to visual and landscape impacts) required to satisfy these requirements are derived from the EIS and through risk assessment processes (refer Section 6) and included within this CEMP (refer Section 7).

Implementation of these measures is ensured through monitoring, training, competence, inspection, audit and reporting actions detailed in Sections 9 and 10, with the responsibilities for implementation identified in Section 8. Continual improvement processes in relation to compliance with regulatory requirements are detailed in Section 13.

In summary, this Plan sets out to achieve the following:

Provision of details for the management and mitigation measures to be implemented, including timing and responsibilities;

- Ensuring the commitments of the Conditions (as set out in the Airport Plan) and regulatory requirements are met and satisfied by both WSA and contractors;
- Provision of process for monitoring implementation, reporting, and auditing of visual and landscape impact management and compliance related issues;
- Commitment to meeting the requirements of AS/NZS ISO 14001:2016 Environmental Management Systems including the need for continual improvement;
- Provision of a process to be implemented for the management of complaints, for stakeholder engagement, and for the management of emerging environmental issues as they arise; and
- Provision of a system including procedures, plans and documentation for implementation by WSA personnel and contractors to enable Project completion in accordance with the environmental requirements.

Effective implementation of this Plan will assist WSA and relevant contractors to achieve compliance with necessary environmental regulatory and policy requirements in a systematic manner with an outcome of continual environmental management performance.

1.3 WSA environmental management system overview

WSA co-operates in general accordance with AS/NZS ISO 14001:2016 – *Environmental management systems*. A copy of the WSA environmental policy is provided in Appendix E of the SEMF.

The Stage 1 development will be undertaken in accordance with the Construction Plan including the SEMF and the associated CEMPs (including this Plan).

The SEMF forms an appendix to the Construction Plan and is the overarching environmental plan for the implementation of the nine CEMPs. It provides a structured and systematic approach to environmental management and provides an expectation and guidance with regards to environmental management for the overall construction of the Stage 1 Development.

The structure of the environmental management system for the Project is shown in Figure 1.

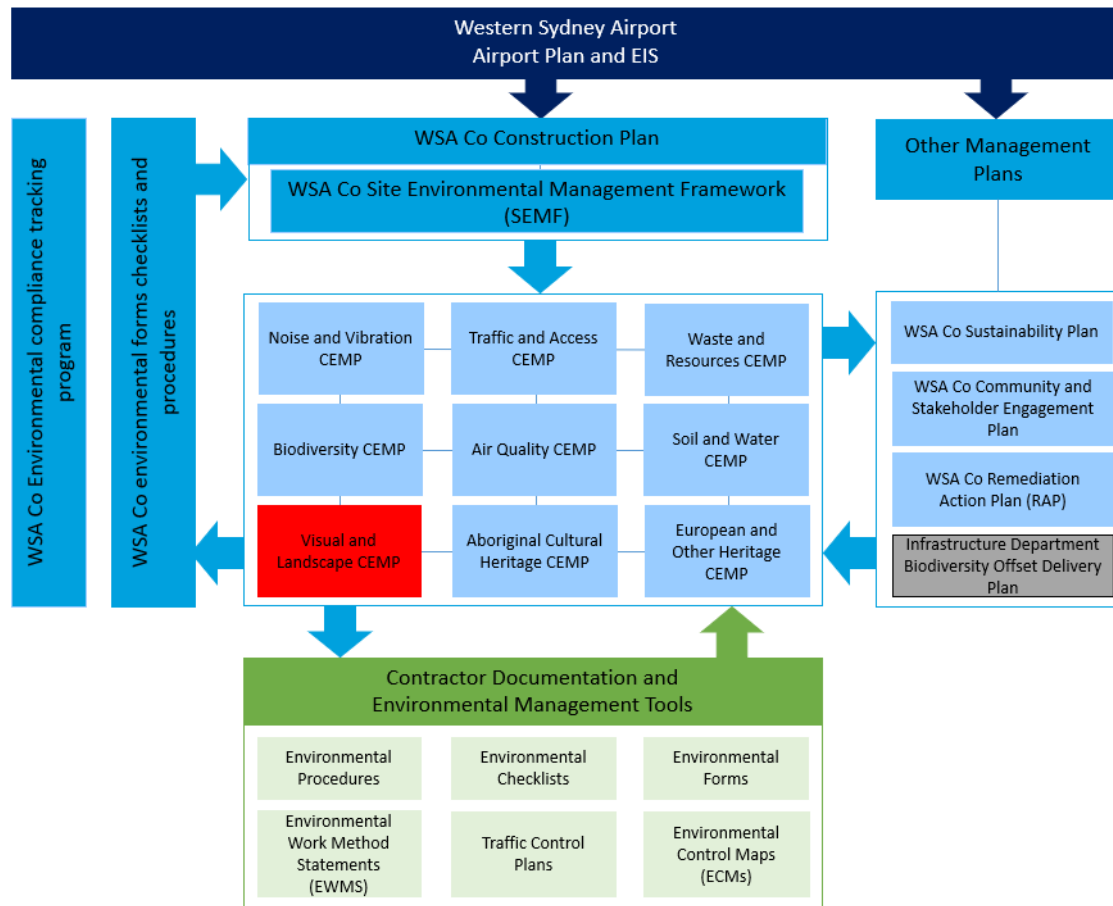


Figure 1 WSA Environmental Management System and CEMP context

1.4 Consultation requirements of this document

Airport Plan Condition 35 outlines the consultation requirements during the preparation of this CEMP and requires consultation with any NSW Government agencies as specified by the NSW Department of Premier and Cabinet. NSW Government agencies specified by Department of Premier and Cabinet for consultation about this Visual and Landscape CEMP, include NSW Department of Planning and Environment, the Government Architect, Liverpool City Council and Penrith City Council.

Further, Airport Plan Condition 14(3) requires that this Visual and Landscape CEMP takes into account Table 28-18 of the EIS which states the CEMP should also be prepared in consultation with the NSW Department of Planning and Environment and relevant local councils.

Consultation has been completed during the development of this CEMP (Revision 0) and subsequently during the review and update of Revision 1 of this document. A summary of the stakeholder and government authority consultation completed and used to inform the review of Revision 1 and finalisation of Revision 2 is presented in Table 2.

Consultation will continue with agencies, councils and other relevant stakeholders throughout the Project where there is a change to a CEMP. The outcomes of this consultation will be documented in subsequent revisions of the relevant CEMPs, with details of such consultation included in the applicable document.

1.4.1 Consultation to inform Revision 2

A consultation plan outlining the process for engaging with stakeholders was prepared by the WSA Community and Engagement team. The plan and a scoping document outlining the Bulk Earthworks project and potential modification of the CEMPs was provided to the stakeholders as required by the Airport Plan Conditions.

Details of the construction phases were described in the correspondence to provide context to the stakeholders on the level of impact that would result from the next phase of construction activities. Prior to contract award, stakeholders were invited to attend a site visit (bus tour) on 9 July 2019 to assist the stakeholders to understand the size and scale of the site elements. Following the Bulk Earthworks Contract (BEC) award, the CEMPs were updated to reflect the next stage of construction. In October 2019, stakeholders were provided with the nine draft CEMPs to review and were requested to provide comment. To facilitate the review stakeholders were invited to attend a workshop on 8th October 2019, where an overview of the Bulk Earthworks phase was presented and key aspects discussed. A summary of the consultation is provided in Table 2.

Table 2 Visual and Landscape CEMP consultation summary

Activity	Date	Invitees	Summary
Consultation Summary			
Site visit for stakeholders	9 July 2019	<ul style="list-style-type: none"> • Liverpool City Council • Penrith City Council • NSW Health • NSW Aboriginal Affairs • Transport for NSW (RMS) • Western Sydney Unit • Department of Energy and Environment • South Western Sydney Local Health District • Rural Fire Service • DFSI – Waste Assets Management Corporation • NSW Government Architect • Planning and Environment (OEH) • Western Sydney Planning Partnership (DPE/GSC/Councils) • Department of Primary Industries – Water • Greater Sydney Commission • City Deal Alliance (Councils) • Department of Planning Industry and Environment 	As part of the continuous improvement of the consultation process, a site visit (bus tour) for stakeholders was organised. This has been included due to the good feedback from the last CEMP round where a workshop was held. It is a useful element to assist stakeholders to understand size and scale and also have discussions related to site elements as they are seen during the bus tour.
CEMPs provided to stakeholders for comment	October 2019	<ul style="list-style-type: none"> • Liverpool City Council • Penrith City Council • NSW Health • NSW Aboriginal Affairs • Transport for NSW (RMS) • Western Sydney Unit • Department of Energy and Environment 	Key themes: <ul style="list-style-type: none"> - Noise during out of hours construction; - Water quality and water source - Air quality and dust management - Source of imported material - Biodiversity surveys

Activity	Date	Invitees	Summary
		<ul style="list-style-type: none"> • South Western Sydney Local Health District • Rural Fire Service • DFSI – Waste Assets Management Corporation • NSW Government Architect • Planning and Environment (OEH) • Western Sydney Planning Partnership (DPE/GSC/Councils) • Department of Primary Industries – Water • Greater Sydney Commission • City Deal Alliance (Councils) Department of Planning Industry and Environment	Heritage management

1.5 Certification and approval

This Visual and Landscape CEMP has been reviewed and approved for issue by the WSA Environment Manager prior to submission to Western Sydney Unit, Australian Government Department Infrastructure, Regional Development and Cities (the Infrastructure Department).

1.6 Distribution

All WSA personnel and contractors will have access to this Visual and Landscape CEMP via the project document control management system. Unless otherwise agreed by the Approver, the Approved Plan must be published on WSA Co's website within one month of being approved and be available until the end of the Construction Period. An electronic copy can be found on the Project website - <http://wsaco.com.au/Project/index.aspx>

This document is uncontrolled when printed. One controlled hard copy will be maintained by the quality manager at the project office.

2 Scope of works

The Construction Plan details the construction staging of the Stage 1 Development as progressing generally from the north-east to the south-west of the Airport Site, allowing for the relocation of the Northern Road and a TransGrid transmission line.

The delivery of the Stage 1 Development will be through a packaging strategy with a wide variety of package sizes, risk profiles and contracting entities. Each package will have different levels of environmental risk and environmental obligations, depending on the scope of works, location of works and sensitivity of the receiving environment and cultural heritage issues and relevant statutory requirements and obligations.

Stage 1 Development of the Project comprises the following key features as described in the Construction Plan (which is consistent with the Airport Plan and EIS Chapter 5):

- | | | |
|--------------------|-------------------------------|-----------------------------|
| ● Site preparation | ● Utilities | ● Ancillary developments |
| ● Airside precinct | ● Ground transport | ● Other building activities |
| ● Terminal | ● Aviation support facilities | |

Details of the Project construction activities, staging and programming including the phases of works are described in Section 6 of the Construction Plan (WSA00-WSA-00000-CN-PLN-000001) as required by the Airport Plan Condition 1(5). This Plan applies to the Bulk Earthworks, Early Earthworks and Material Importation phases of works as described in Section 6 of the Construction Plan (WSA00-WSA-00000-CN-PLN-000001). A variation to this Plan will be submitted before work other than Preparatory Activities is undertaken on any other phases of the Project.

3 Objectives and targets

3.1 Objectives

The key objective of this Visual and Landscape CEMP is to ensure that impacts associated with visual and landscape quality are managed to as far as practicable and within best practice standards during the construction phase to reduce associated impacts to acceptable levels for sensitive receivers and neighbours surrounding the Airport Site.

To achieve this objective, the following will be undertaken:

- Ensure the Airport makes a positive contribution to the changing identity and character of Western Sydney;
- Landscape and visual amenity impacts will be minimised during construction;
- Impacts associated with light spill during construction will be minimised; and
- Appropriate measures will be implemented to comply with all relevant legislation and other requirements as described in Sections 4 and 7 of this Plan.

3.2 Performance criteria

Performance criteria specific to visual and landscape matters have been established for the management of impacts on the visual and landscape quality during the construction phase of the works, as presented in Table 3, which have been, in part, derived from the performance criteria identified in the EIS, Table 28-18.

Table 3 Visual and landscape quality targets

Objective	Target	Document Reference
Ensure the Airport makes a positive contribution to the changing identity and character of Western Sydney	The airport is appropriately integrated into the surrounding region and land uses, taking into account the changing nature of Western Sydney.	Community and stakeholder Engagement Plan Detailed design
Landscape and visual amenity impacts minimised during construction	Appropriate landscape treatments are identified and implemented to reduce visual amenity impacts in accordance with this CEMP and detailed design	Complaints database
Impacts associated with light spill during construction will be minimised	All lights where possible to be downward facing and directed away from receivers	Environmental inspection checklist
Comply with legislation and other requirements	No non-conformance with the requirements of the CEMP	CEMP Audit report

The above targets in Table 3 have been set to provide a benchmark performance objective to which WSA will endeavour to achieve. Failure to achieve the targets will not be considered a non-conformance, however will prompt internal review of environmental management and assessment of potential improvement opportunities.

4 Legal and other requirements

Relevant environmental legislation and other requirements are identified below.

4.1 Relevant legislation and guidelines

As the Western Sydney Airport is to be developed under the Airport Plan determined under the Airports Act, some state laws will not be applicable to the Project (s112 of this Act). Where state law is applicable, this Plan will set out the relevant applicable state legislation and requirements and demonstrate how compliance with those laws including obtaining relevant permits will be achieved. Where state laws are not applicable, there may nonetheless be a requirement to have regard to those laws, for example, through mitigation measures to be incorporated in CEMPs to satisfy conditions under the Airport Plan.

4.1.1 Legislation

Relevant Legislation and regulations for this Plan are summarised in Table 4.

Table 4 Principal legislation and relevance

Legislation or regulation	Relevance	CEMP compliance provisions
Commonwealth		
Airports Act 1996 (Cth) (Airports Act)	<p>The Airports Act and regulations made under the Airports Act set out the framework for the regulation and management of activities at airports that could have potential to cause environmental harm. This includes offences related to environmental harm, environmental management standards, monitoring and incident response requirements.</p> <p>The Airport Plan prepared under the Airports Act covers several environmental matters and details specific measures to be carried out for the purposes of preventing, controlling or reducing the environmental impact associated with the airport. Criminal offences are applicable if these measures are not complied with.</p>	<p>This CEMP forms part of the overall WSA environmental management system which has as a target, full compliance with the Airport Plan.</p> <p>Relevant mechanisms within this CEMP that will contribute to this include but are not limited to:</p> <ul style="list-style-type: none"> • Section 3.1 – Objectives • Section 4.3 – Airport Plan Conditions • Section 4.3.1 – Environmental Impact Statement requirements • Section 6.2 – Risk Assessment • Section 7 – Environmental Control Measures • Section 8 – Environmental Roles and Responsibilities • Section 9 – Environmental Inspection, Monitoring and Auditing • Section 9.6 – Environmental Incidents and complaints management • Section 19.5 – Review of approved plans
Airports (Environment Protection) Regulations 1997 (AEPR)	Imposes various duties including a general duty to prevent or minimise environmental pollution. Promotes improved environmental management practices at airports. Includes provisions setting out acceptable limits as well as	Refer to commentary on Airport Plan above

Legislation or regulation	Relevance	CEMP compliance provisions
	environmental monitoring and reporting requirements.	
NSW As the Airport is to be developed under the Airport Plan determined under the Airports Act, 1996 (Cth), some state laws will not be applicable to the project (see for example S 112 of that Act). Where state laws are not applicable, it is still intended to have regard to relevant laws for example through inclusion of mitigation measures incorporated into this CEMP. These laws are identified below.		
Environmental Planning and Assessment Act 1979 (EPA Act)	Objects of the Act include the encouragement of proper management and conservation of natural and artificial resources and the promotion of the orderly and economic use and development of land in NSW. The EP&A Act also provides for the making of environmental planning instruments including State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs), which include land use controls, such as development standards applicable to the land within the area covered by each instrument.	Section 7 – Environmental Control Measures
Roads Act 1993	Governs the opening, operation and management, and closure, of public roads in NSW.	Section 7 – Environmental Control Measures

4.1.2 Guidelines and standards

Guidelines and standards that are relevant to visual and landscape management and this Plan are summarised in Table 5.

Table 5 Relevant guidelines and standards

Guidelines and standards
<ul style="list-style-type: none"> Creating Places for People – an urban design protocol for Australian Cities (Infrastructure Australia, 2011) Liverpool Local Environmental Plan 2008 Liverpool Development Control Plan 2008 Penrith Local Environmental Plan 2010 Penrith Development Control Plan 2014 Western City District Plan (Greater Sydney Commission 2016) ISO 14001 – Environmental Management Systems AS4282-1997 Control of the obtrusive effects of outdoor lighting Technical guideline for Urban Green Cover in NSW (NSW Office of Environment and Heritage 2015) Crime Prevention through Environmental Design (CPTED) (Queensland Government, 2007) Better Placed - An integrated design policy for the built environment of New South Wales (Government Architect) Sydney Green Grid (Government Architect)

Guidelines and standards

- Beyond the Pavement: urban design policy, procedures and design principles (RMS, 2014)
- Bridge Aesthetics: Design guidelines to improve the appearance of bridges in NSW (RMS, 2012)

4.2 Approvals and other specifications

Functional Specifications

- Western Sydney Airport Plan (2016);
- Western Sydney Airport Environmental Impact Statement;
- WSA Sustainability Plan when approved;
- WSA Community and Stakeholder Engagement Plan; and
- WSA Construction Plan.

4.3 Airport Plan Conditions

Construction conditions relevant to visual and landscape management during construction of the Stage 1 development are provided in Section 3.10.2 of the Airport Plan and summarised in Table 6 below. Compliance with the Airport Plan conditions is a statutory requirement and as such, failure to comply may constitute a criminal offence liable to criminal prosecution under the relevant legislation.

Table 6 Airport Plan Conditions relevant to visual and landscape management

Condition No.	Condition	Timing	Responsibility
1.4	The Site Occupier must ensure that no CEMP is inconsistent with the approved Construction Plan	Ongoing	WSA
1.5	The approved Construction Plan may provide for Main Construction Works to be carried out in phases that commence at different times for different parts of the Airport Site or an Associated Site. If it does, the Site Occupier may prepare a CEMP in relation to one or more phases, and the criteria for approval of such a CEMP are taken to exclude any matter irrelevant to the phases for which approval is sought. A variation of the CEMP must be submitted for approval in accordance with condition 41 (Variation of Approved Plans) prior to commencement of any new phase.	Ongoing	WSA
5.3	In carrying out a Preparatory Activity, the Site Occupier must not act inconsistently with any approved CEMP or the approved Construction Plan.	Ongoing	WSA
14.1	The Site Occupier must not: Commence Main Construction Works until a Visual and Landscape CEMP has been prepared and approved in accordance with this condition; or Carry out any development described in Part 3 of the Airport Plan inconsistently with the approved Visual and Landscape CEMP.	Construction Works	WSA

Condition No.	Condition	Timing	Responsibility
14.2	The Site Occupier must: Prepare; and Submit to an Approver for approval, a Visual and Landscape CEMP in relation to the carrying out of the developments described in Part 3 of the Airport Plan.	Prior to Main Construction Works	WSA
14.3	The criteria for approval of the Visual and Landscape CEMP are that an Approver is satisfied that: In preparing the Visual and Landscape CEMP, the Site Occupier has taken into account Table 28-18 in Chapter 28 of the EIS; and The Visual and Landscape CEMP complies with Table 28-19 in Chapter 28 of the EIS and is otherwise appropriate.	Prior to Main Construction Works	Approver
35	An Approver must not approve a plan referred to in Chapter 28 of the EIS unless he or she is satisfied that the Plan Owner: (a) in preparing the plan, has consulted with any NSW Government agencies specified by the NSW Department of Premier and Cabinet; and (b) has provided: (i) the Approver; and (ii) each consulted agency, with an explanation of how any responses have been addressed.	Ongoing	WSA
37 to 42	Set out requirements in relation to informing other parties of conditions, keeping records, publishing reports, independent audits, variation to approved plans and publication of approved plans.	Ongoing	WSA and Approver

4.3.1 Environmental Impact Statement requirements

The requirements of visual and landscape management to be taken into account and addressed during the construction phase of the Stage 1 development are included in the EIS, specifically Table 28-18 and 28-19.

A summary of these requirements and how they have been addressed in this Visual and Landscape CEMP is presented in Table 7.

Table 7 Summary of EIS Visual and Landscape Management Requirements

EIS Reference	Topic	Summary	Visual and Landscape CEMP Reference
Table 28-18	Objectives and targets	<p>Key management objectives for managing visual and landscape impacts during construction are:</p> <ul style="list-style-type: none"> ensuring the proposed airport makes a positive contribution to the changing identity and character of Western Sydney; minimising the landscape and visual amenity impacts during construction; and minimising impacts associated with light spill during construction <p>Performance criteria include:</p> <ul style="list-style-type: none"> compliance with the approved Visual and Landscape CEMP; appropriate landscape treatments are identified and implemented to reduce visual amenity impacts; and the proposed airport is appropriately integrated into the surrounding region and land uses, taking into account the changing nature of Western Sydney 	Section 3.2 – Performance criteria
Table 28-18	Implementation framework	The Visual and Landscape CEMP will be approved prior to commencement of Main Construction Works for the proposed airport. The Visual and Landscape CEMP will collate measures to mitigate and control visual and landscape impacts including cross-references to other environmental management plans where they are relevant. The Visual and Landscape CEMP will as a minimum:	This Visual and Landscape CEMP
		Detail the management and mitigation measures to be implemented, including those outlined in Table 28-19 (of the EIS)	Section 7 – Environmental control measures
		Describe the process for managing complaints, stakeholder engagement, and emerging environmental management issues as they arise	Section 9.6 – Environmental Incidents and complaints management
		Specify the process for monitoring implementation, reporting, and auditing	Section 9.6 – Environmental Incidents and complaints management
		Identify the party responsible for implementing of the Visual and Landscape CEMP	Section 8 – Environmental Roles and responsibilities
Table 28-18	Monitoring	Monitoring for visual and landscape impacts will occur as part of the monitoring requirements associated with the complaints process outlined in the Community and Stakeholder Engagement Plan.	Section 9 – Environmental inspection, monitoring, auditing and reporting

EIS Reference	Topic	Summary	Visual and Landscape CEMP Reference
Table 28-18	Auditing and reporting	An annual report will be prepared and submitted to the Secretary of the Department of Infrastructure and Regional Development in relation to compliance with the Visual and Landscape CEMP for the period until the airport commences operations.	Section 9.4 – Environmental reporting
Table 28-18	Responsibility	Responsibilities include:	-
		The Visual and Landscape CEMP will be prepared in consultation with the Department of Planning and Environment and relevant local councils	Section 1.4 – Consultation requirements of this Plan
		The Visual and Landscape CEMP will be submitted for approval to the Infrastructure Minister or an SES Officer in the Department of Infrastructure and Regional Development	-
		The design and construct (D&C) contractor will be responsible for implementing site specific environmental procedures and work method statements applicable to the proposed works in accordance with the requirements of the Visual and Landscape CEMP	Section 8 – Environmental Roles and responsibilities

5 Existing environment

The following information is summarised from the EIS and refers to the Airport Site and surrounding environment. Refer to the EIS for more details.

The existing environment described herein is considered consistent and acceptable for consideration in the risk assessment process and the identification of suitable environmental mitigation measures and controls - for details with regards to environmental mitigation measures and controls for the management of visual and landscape impacts refer to Section 7.

5.1 Site context

The Airport Site and surrounding areas include ridgelines and rolling hills within the visual context of the Blue Mountains to the west, which provides the backdrop for many views from the east.

The site and surrounds are typified by gently undulating landform within a highly modified landscape. The overall landscape character is open and rural with expansive views possible from surrounding hill tops and higher elevations to the west. The area's character is also defined by cleared pastureland, and large lot residences (both single and double storey) set back from the road network and punctuated with exotic planting. Patches of remnant vegetation exist within the Airport Site, particularly along creek lines, road edges and near farm dams.

Immediately north of the site, farm buildings are generally well set back from Elizabeth Drive. The area north of Elizabeth Drive is rural pasture land with scattered remnant vegetation, farm dams and open views of the landscape. North-east of the Airport Site is a landfill, which is set back and screened from Elizabeth Drive and therefore has only a minor visual presence. Badgerys Creek runs north-south forming the eastern, and part of the southern, site boundary. The remnant vegetation along its edges establishes a natural character which contrasts with the open rural vegetation along its edges and establishes a natural character which contrasts with the open rural character of the rest of the site.

East of the Airport Site there is a more regular pattern of lots, residences and farm buildings, with smaller lot sizes aligned perpendicular to the streets. Roads in the area have undefined edges and contribute to the overall rural character.

South of the airport is characterised by large, rural residential lots and farms on undulating topography. Homes are generally set back from the road and characterised by a mix of remnant vegetation, exotic planting, farm dams and open lawn.

5.2 Site topography

The topography of the Airport Site and surrounding area is typical of the Cumberland Plains, consisting of gently rolling foot hills with local relief of 10-30 metres. Slopes are generally 5 percent but sometimes 10 percent and occasionally up to 10 – 20 percent. Crests and ridges are broad (200-600 metres) and rounded with convex upper slopes grading into concave lower slopes (Bannerman and Hazelton, 1990).

A ridge line with a high point of 118 metres above the Australian height datum (AHD) occurs in the western portion of the site near The Northern Road. It offers views over the immediate area and the much wider landscape. Areas in the western half of the Airport Site are generally at a higher elevation whereas they are lower and flatter along Badgerys Creek with the lowest point being 43 metres in the northeast corner of the site near Elizabeth Drive. Elevations more typically range between 60 and 90 metres throughout the central areas of the Airport Site.

Site contours of the Airport Site and the area immediately surrounding the site are provided in Figure 2.

5.3 Land use

Pastoral and horticultural land uses remain the primary land uses in the area. Large blocks of agricultural land are found to the north and west, while rural residential and agricultural properties are generally concentrated to the east and south of the site.

A summary of the various land uses immediately surrounding the Airport Site is provided below in Table 8 and shown in Figure 3.

Table 8 Surrounding land use

Site	Description	Impact Source	Impact Level
Elizabeth Drive Landfill (EDL)	Land use contains non-putrescible and industrial waste located approximately one kilometre north of the Airport Site.	Potential for minor increase in traffic on Elizabeth drive and potential for plant/machinery to be seen by line of sight.	The EDL is 500m from the Airport Site and is considered a construction site, impact level is low.
Twin Creeks Golf and Country Club (club)	A 200-lot of residential estate and golf course approximately five kilometres north of the Airport Site.	None	Sparse vegetation is located in between the club and the Airport Site. The impact level is low.
Boral Brickworks (BB)	Brick pit and production facility located approximately one kilometre east of the Airport Site.	None	The Environmental Conservation Zone runs in between the site and the BB eliminating any visual aspect disturbance and/or noise impacts. The impact level is low.
Ingham's Multiplication Farm (farm)	A large commercial agricultural use located approximately one kilometre east of the Airport Site.	None	Sparse vegetation is located between the farm and the Airport Site, the impact level is low.
The University of Sydney, Camden, Wolverson and Coates Park Farms (University farms)	A rural farm located approximately four kilometres southwest of the Airport Site.	None	Given the distance and vegetation present between the University farms and the Airport Site the impact level is very low for the initial early earthworks stage of the project.
Bents Basin State Conservation Area (BBSCA)	A recreational area located approximately five kilometres southwest of the Airport Site.	None	Given the distance and vegetation present between the BBSCA and the Airport Site the impact level is very low for the initial Early Earthworks stage of the project.

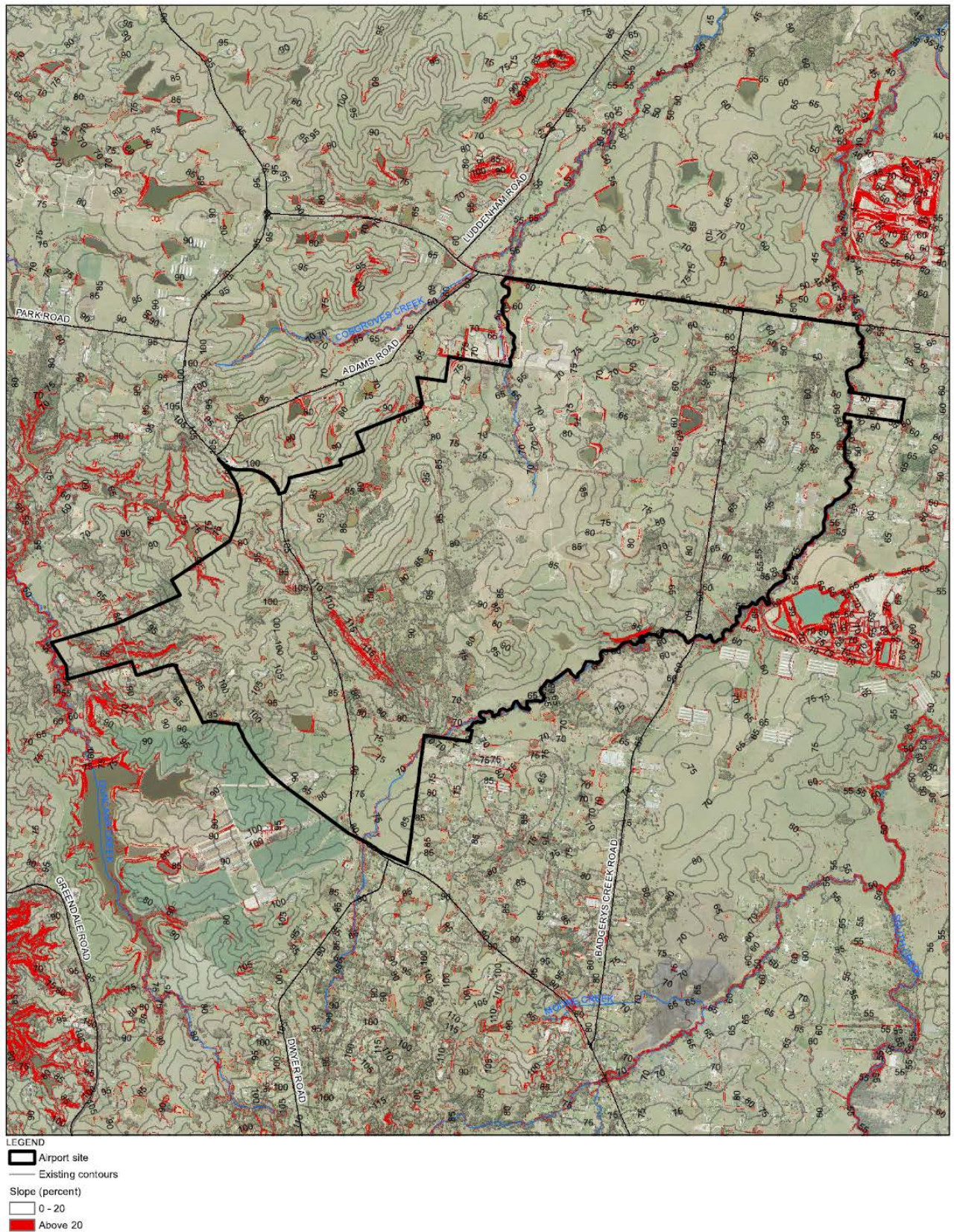
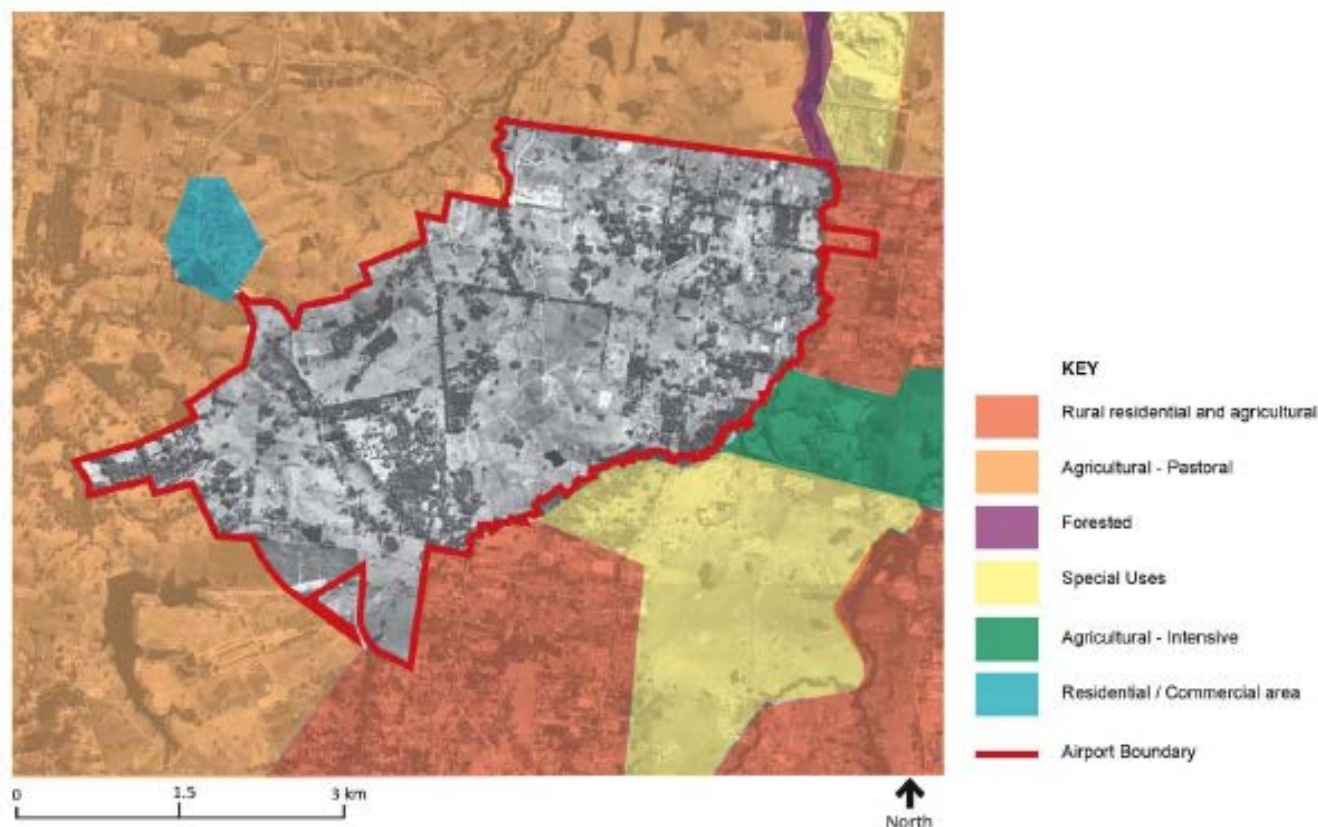


Figure 2 Site topography



Note: There have been some minor changes to the Airport Site boundaries since the publishing of the above figure in the EIS

Figure 3 Surrounding land use

5.4 Visual catchment and viewpoints

The visual catchment of a site is the extent of the landscape that can be viewed from the site and the extent of locations from which the site can be seen. Landscape vegetation, land use and landform all play a large role in determining the visual catchment.

The Airport Site would be theoretically visible from various areas based on existing topography and the maximum allowed building heights of key buildings and structures that would be constructed, such as the airport control tower, terminal buildings and other major structures.

A list of key representative visual viewpoints from the Airport Site, including view point type, elevation and distance from site (taken from the proposed traffic control tower) is provided in Table 9.

Table 9 Relative heights and offsets of representative viewpoints

Viewpoint No.	Location	Height (approx. AHD)	Approx. distance (km)*	Land use type
1	Luddenham Village	100-105	3	Commercial and residential
2	Elizabeth Drive, Badgerys Creek	65-90	2	Road
3	Lawson Road, Badgerys Creek	60-95	3	Rural residential and agricultural

Viewpoint No.	Location	Height (approx. AHD)	Approx. distance (km)*	Land use type
4	Badgerys Creek Road, Bringelly	60-75	2	Rural residential and agricultural
5	Dwyer Road, Bringelly	105	5	Rural residential
6	Mount Vernon Road, Mount Vernon	80	7	Rural residential
7	Rossmore Avenue West, Rossmore	90	7	Rural residential
8	Bents Basin State Conservation Area	45	10	Rural residential
9	Silverdale Road, Silverdale	210	13	Rural residential
10	Warragamba Dam and Recreational Area	155	12	Recreational
11	Glenbrook Nepean Lookout	115	13	Recreational
12	Mount Portal Lookout	150	14	Recreational
13	Twin Creeks Gold and Country Club	45-50	6	Recreational and residential

*Distance calculated from the proposed airport control tower.

6 Visual and landscape aspects and impacts

6.1 Construction activities

Construction activities with the potential to impact visual and landscape covered by this plan include:

- Activities necessary for site preparation;
- Works involved in the establishment of aviation infrastructure;
- Erecting security fencing;
- Establishing site compounds;
- Bulk earthworks including the importing of materials to stockpile on site;
- Topsoil stripping and stockpiling;
- Construction of access roads and services; and
- Construction of aviation infrastructure.

The risk assessment and management process for the Project is detailed in Section 3.3 of the SEMF. The following information has been used in the initial risk assessment. Risks will be reviewed, and the risk register updated periodically.

6.2 Risk assessment

A risk assessment has been undertaken as part of the CEMP and in accordance with Environmental Aspects, Impact and Risk Procedure (Appendix D of the SEMF). The parts of the overall risk assessment relevant to visual and landscape have been extracted and summarised in Table 10 applies to all phases of works that the Construction Plan authorises.

The identification of construction activities and associated impacts that could eventuate during construction of the Project is central to the selection of appropriate environmental safeguards.

The risk management process involved an assessment of all specific Project activities/aspects in or near environmentally sensitive areas and resulted in the development of a list of environmental risks (effects and impacts) and a corresponding risk mitigation strategy and risk ranking.

The identification of risks included a review of the works, and review of the environmental risks identified by the EIS. The mitigations in the risk assessment are in line with the EIS mitigation measures in chapter 7, Table 12.

Table 10 Landscape and visual risk assessment

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level ² pre-mitigation	Mitigation measure ¹	Risk level ² post-mitigation	Management tools
1	Use of site Compound	Light vehicle parking	Visual aesthetic	Visual interruption of landscape due to construction vehicles and plant	D3 (Sig)	VL09	D2 (Mod)	Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction Environmental Control Map (ECM)
2		Installation of temporary fencing during compound establishment	Visual aesthetic	Long runs of fencing will visually interrupt landscape	D3 (Sig)	VL04	D2 (Mod)	Community and Stakeholder Engagement Plan Complaints Procedure Induction ECM
4	Construction works	Multiple construction vehicles onsite	Visual aesthetic	Visual interruption of landscape due to construction vehicles and plant	D3 (Sig)	VL09	D2 (Mod)	Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM
5		Large spoil stockpiles present onsite	Visual aesthetic	Visual interruption of landscape due to stockpiles	E3 (High)	VL11 VL13	E2 (Sig)	Community and Stakeholder Engagement Plan Complaints Procedure Induction ECM

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level ² pre-mitigation	Mitigation measure ¹	Risk level ² post-mitigation	Management tools
6		Plant movement throughout site	Visual aesthetic	Visual interruption of landscape due to plant parked near boundaries of site	C2 (Mod)	VL09	C1 (Low)	Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM
		Out of hours works	Light disturbance	Light disturbance to the nearby community and environmental conservation zone	C2 (Mod)	VL09 VL10	B1 (Low)	Community and Stakeholder Engagement Plan Complaints Procedure Induction ECM

6.3 Visual and landscape impact

Construction of the Stage 1 Development is likely to have temporary visual impacts for the nearest sensitive receivers in Luddenham and Bringelly. This would be largely due to the visual effect of earthworks and the presence of construction plant, equipment, stockpiling areas and storage areas. Viewpoints that are further away would have more restricted views of the site and would therefore be less affected. The location of considered viewpoints (and as indicated in Table 11) is shown in Figure 8. Potential impacts on landscape visual settings specific to heritage values are dealt with in the European and Other Heritage and Aboriginal Cultural Heritage CEMPs.

Recycled water will be used to water landscaping. Management of this water is covered by the Soil and Water CEMP.

Visual sensitivity is based primarily upon the character, land use and quality of views from the surrounding view points and would be relatively consistent throughout each phase of the proposed development. The visual magnitude or effect of the airport would change based on the scale and visibility of activities undertaken during the construction of the Stage 1 development. A summary of the likely visual impacts from the nominated viewpoints (as shown in Figure 4) during construction of the Stage 1 development is provided below in Table 11.

Table 11 Summary of construction impacts from selected viewpoints

Viewpoint	Potential impacts
1 – Luddenham Village	Views of the construction of the airport in the northern areas of Stage 1 are likely from some areas in Luddenham and could include fencing, earthworks, plant and equipment, and day to day operations of the Site Office located off Eaton Road, therefore resulting in a perceived loss of visual amenity. In the longer term, construction activities will be concentrated in the southern portion of the site and further away from viewers therefore visual impacts would be expected to be less.
2 – Elizabeth Drive, Badgerys Creek	Views of the Stage 1 construction of the airport in the northern areas of Stage 1 are generally possible at close distance as well as views of construction vehicles accessing the site from Elizabeth Drive and therefore a perceived loss of visual amenity is expected. It is likely that the stockpile of imported material (refer to Construction Plan Section 6), which will have the dimensions of 250m x 500 m x 5 m high, will be visible from this viewpoint. However, with the implementation of the mitigation measures and controls detailed in Section 7, including surface stabilisation measures, visual impacts are anticipated to be low and are not expected to be significant. Additionally, the stockpile will be temporary, but may be in place for several years. In the longer term, construction areas in the southern portion of the site are further away from the viewer however there may be commercial development near Elizabeth Drive therefore similar or potential for slightly lower visual impacts could be expected.
3 – Lawson Road, Badgerys Creek	In Stage 1, views of the construction of the airport in the northern areas including fencing, earthworks, plant and equipment may be possible however could be filtered by existing vegetation. Views of construction areas in the longer term around the eastern and southern edges of the site will be possible from some properties meaning the anticipated visual impacts would likely remain at a similar level as Stage 1.
4 – Badgerys Creek Road, Bringelly	Views of the construction of the airport such as fencing and earthworks in Stage 1 may be possible but are likely to be filtered or blocked by vegetation and / or topography.
5 – Dwyer Road, Bringelly	When longer term development occurs in the southern airport areas, construction activity will be closer to visual receivers and therefore will be expected to have a greater visual impact.

Viewpoint	Potential impacts
6 – Mount Vernon Road, Mount Vernon	Broad views of the construction of the airport in the northern areas of Stage 1 are likely from some areas in Mount Vernon and could include earthworks, plant and equipment and therefore some loss of visual amenity is expected.
7 – Rossmore Avenue West, Rossmore	Longer term views of the construction of the airport in the southern areas would likely be of a similar extent as Stage 1 due to the extent of the views of the overall airport area.
8 – Bents Basin State Conservation Area	Views of the construction of the airport in either the Stage 1 or longer term are prevented by existing topography and / or vegetation.
9 – Silverdale Road, Silverdale	Broad views of the construction of the airport in the northern areas of Stage 1 are possible but from approximately 10 kilometres and therefore some loss of visual amenity is expected. Longer term views of the construction of the airport in the southern areas would likely be of a similar extent as Stage 1 due to the extent of the views of the overall airport area.
10 – Warragamba Dam and Recreational Area	Views of the construction of the airport in either the Stage 1 or longer term are prevented by existing topography and / or vegetation.
11 – Glenbrook Nepean Lookout	Views of the construction of the airport in either the Stage 1 or longer term are prevented by existing topography and / or vegetation.
12 – Mount Portal Lookout	Views of the construction of the airport in either the Stage 1 or longer term are prevented by existing topography and / or vegetation.
13 – Twin Creeks Gold and Country Club	Views of the construction of the airport in either the Stage 1 or longer term are unlikely as they may be inhibited by existing topography and / or vegetation.

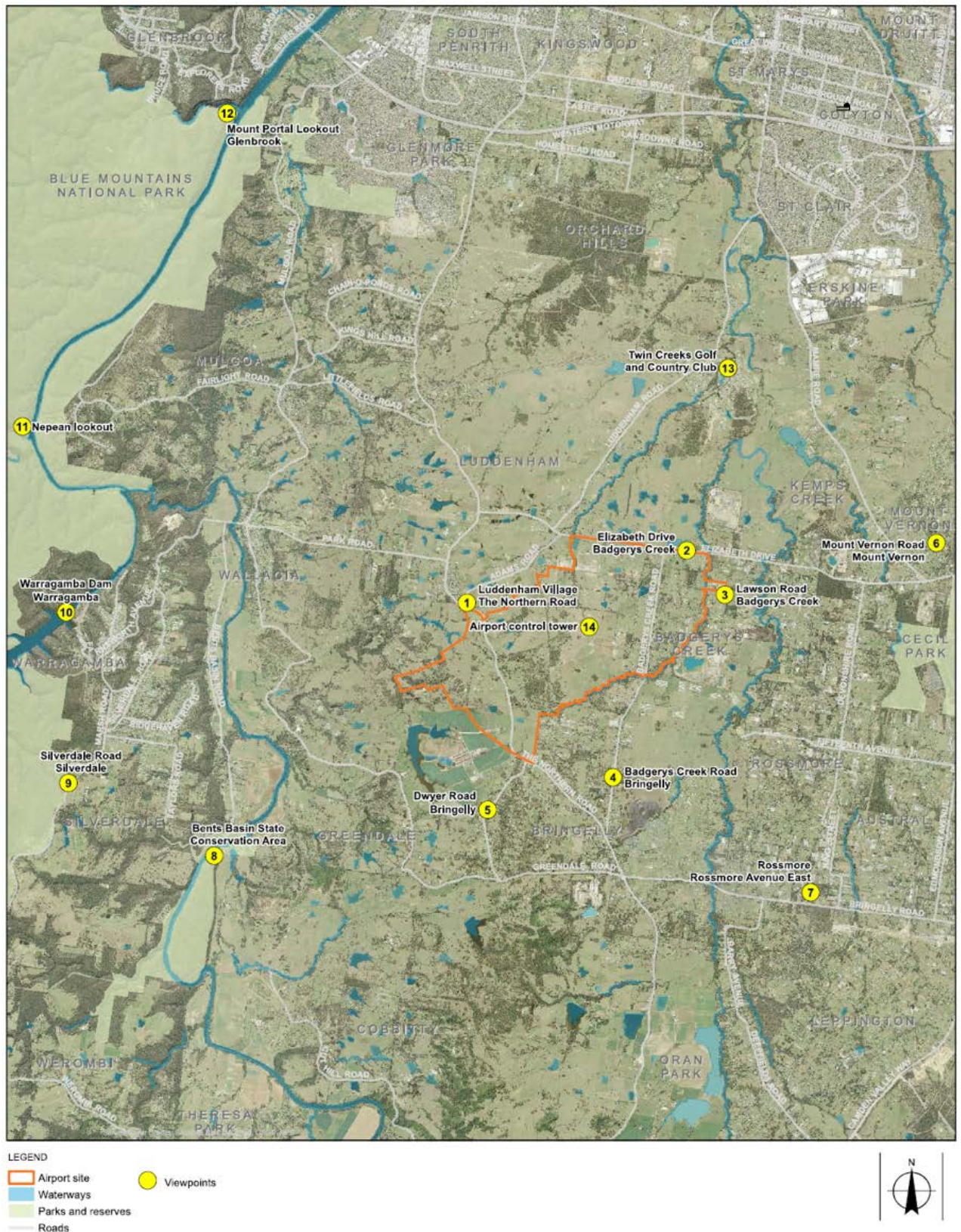


Figure 4 Selected representative viewpoints

7 Environmental control measures

A range of environmental requirements and control measures are identified in the various environmental documents, including the EIS, Submission Report and the Conditions. Specific measures and requirements to address impacts on visual and landscape are outlined in Table 12.

Table 12 Visual and Landscape Management and Mitigation Measures

ID	Measure / Requirement	When to implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract		EEW: Early Earthworks	MI: Material Importation	All Contractors: BEC, EEW, MI and other contractors as delegated by WSA	
URBAN DESIGN					
VL01	Site context analysis to inform the early stages of detailed design	Detailed design Pre-construction	To be incorporated into detailed design.	BEC WSA Design team	EIS Table 28-19
VL02	Consultation with NSW Department of Planning and Environment and relevant local councils, on the detailed design of Stage 1 development	Detailed design Pre-construction	To be incorporated into detailed design.	WSA Design team	EIS Table 28-19
AIRPORT LIGHTING IMPACTS					
VL03	Airport lighting impacts will be mitigated using low angle, cut off LED fixtures in the design of airport infrastructure, where practicable.	Detailed design Pre-construction	To be incorporated into detailed design.	All Contractors	EIS Table 28-19
VISUAL DISTURBANCE AND CLUTTER FROM FENCING					
VL04	Avoiding long, straight continuous runs for fencing	Construction	Incorporate requirement into construction planning	WSA	EIS Table 28-19
VL05	Avoiding finish and colour that is reflective or brightly coloured	Construction	Incorporate requirement into design planning	WSA Design team	EIS Table 28-19

ID	Measure / Requirement	When to implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract		EEW: Early Earthworks	MI: Material Importation	All Contractors: BEC, EEW, MI and other contractors as delegated by WSA	
VL06	Providing a two metre (minimum) setback from the property boundary to allow for perimeter plantings	Construction	Combine the site layout design with the location of sensitive receivers.	BEC	EIS Table 28-19
VL07	Providing a buffer from riparian corridors along the boundary of the Airport Site (nominally two metres).	Construction	Ensure Airport Site boundaries are defined during construction.	BEC	EIS Table 28-19
VISUAL DISTURBANCE AND CLUTTER FROM CONSTRUCTION					
VL08	Large grade cut and fill transitions will be avoided where practicable, particularly near the Airport Site boundary	Construction	Investigate other construction alternatives.	BEC	EIS Table 28-19
VL09	Construction plant, machinery and vehicle parking areas will be located as far as practicable from sensitive receptors	Construction	Combine the site layout design with the location of sensitive receivers.	All Contractors	EIS Table 28-19
VL10	Any night lighting required for construction works will be located as far as practicable from sensitive receptors with appropriate screening as required	Construction	Ensure the location of sensitive receivers are considered when positioning lighting.	All Contractors	EIS Table 28-19
VL11	Earthworks and construction of other infrastructure, earthworks areas will be rehabilitated where it is practical to do so	Construction	Progressively rehabilitate works areas with consideration of the Soil and Water CEMP and urban design requirements.	All Contractors	EIS Table 28-19

ID	Measure / Requirement	When to implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract		EEW: Early Earthworks	MI: Material Importation	All Contractors: BEC, EEW, MI and other contractors as delegated by WSA	
VISUAL SCREENING					
VL12	Retaining existing vegetation on the edges of the construction impact zone where practicable and outside of the construction impact zone to provide visual screening	Construction	ECM to include requirement to minimise vegetation removal and progressively clear areas. Inform all personnel during induction and reinforce through ongoing training.	BEC	EIS Table 28-19
VL13	Opportunities for native vegetation screening will be investigated, particularly in relation to the identified moderate-high impact viewpoints. The appropriateness and use of vegetation for visual screening will take into consideration bushfire risks, airport safety and security, potential impacts on aviation operations, and opportunities for the reestablishment of endemic native species and ecological communities.	Pre-Construction Construction	Combine the site layout design with the location of sensitive receivers to assess opportunities.	BEC	EIS Table 28-19

8 Environmental roles and responsibilities

The key environmental management roles and responsibilities for the construction phase of the work are detailed in Section 4.5 of the SEMF.

WSA will ensure enough resources are allocated on an ongoing basis to ensure effective implementation by both WSA and the responsible contractors.

9 Environmental inspection, monitoring and auditing and reporting

Monitoring, inspection and auditing will be undertaken to measure effectiveness and facilitate continuous improvement of visual amenity and landscape management.

General environmental monitoring, inspection and auditing requirements are summarised in Table 13 of the WSA SEMF.

A summary of the environmental inspection, monitoring and auditing requirements is provided below, with details of how they apply to visual amenity and landscape management where applicable.

9.1 Environmental inspections

WSA environmental inspections

Environmental site inspections at active, exposed work sites will be undertaken by the WSA Environment Manager (or delegate) on a monthly basis to evaluate the effectiveness of environmental controls implemented by the contractor.

The monthly site inspection is to include a visual check of general construction activities and any visual amenity and landscape mitigation measures and or controls, including but not limited to the following:

- Observation of general site cleanliness and housekeeping, ensuring the site is of a reasonable state with consideration given the current stage of work and level of construction activity;
- Observation and of visual screening devices / structures and ensuring they remain effective and fit for purpose;
- Inspection of any sterile cover crops planted on temporary stockpiles to assess their ongoing effectiveness as not only a stabilisation control, but also as a visual screening measure.

The findings of the WSA site environmental inspection will be recorded on a WSA Site Environmental Inspection Checklist with an accompanying photographic style inspection report.

Refer to Appendix C of the SEMF for further details with regards to completing the Site Environmental Inspection Checklist.

Contractor environmental inspections

Regular site inspections will be undertaken to monitor compliance with this plan at active, exposed work sites. Inspection results will be recorded, and the inspection log made available to Infrastructure Department upon request. Any exceedance of soil and water quality criteria will be reported in the monthly report and discussed at the Environmental Coordination meeting and appropriate remedial action will be taken.

More frequent site inspections by the person accountable for soil and water quality issues will be conducted onsite when activities with a high potential to cause erosion are being carried out.

The Contractor's Environmental Manager and/or Environmental Coordinators will undertake inspections in accordance with the Contractor Environmental Management Framework. The Contractor's Environmental Coordinators will record inspection findings on an inspection checklist form.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

The contractor inspections are to be increased frequency for the inspection of visual amenity and landscape management measures following strong winds (in accordance with the Beaufort wind scale number – refer to Appendix A) winds and heavy rainfall (considered to be greater than 10 mm in any 24-hour period).

Pre-start inspection

Prior to the commencement of works on each shift, an informal inspection will be carried out by the relevant contractor and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance. This is to include an inspection of relevant visual amenity and landscape management mitigation measures and controls where applicable. Works are not to commence unless inspections are found to be satisfactory.

The foreman will undertake the pre-work inspections.

9.2 Visual and landscape monitoring

General environmental monitoring requirements are set out in the AEPR which include the following:

- Monitoring must take place under the direction of an appropriately qualified person; and
- The results of the monitoring must be kept in a written record.

Specific visual and landscape monitoring requirements, including timing and responsibilities, are included in Table 13.

Table 13 Visual and landscape monitoring requirements

Reference	Requirement	Timing	Responsibility
VL_M_01	Environmental site inspection to monitor for visual and landscape impacts, particularly in response to any complaints (as per the Community and Stakeholder Engagement Plan).	Construction	All Contractors

9.3 Environmental auditing

Refer to Section 8.2 of the SEMF for environmental auditing requirements, including internal audits, independent audits and audits to be undertaken by contractors.

9.4 Environmental reporting

General environmental reporting requirements are detailed in Section 8.3 the SEMF.

In addition, a summary of reporting requirements required under this Visual and Landscape CEMP (including environmental reporting requirements under the Airport Plan specific to this Visual and Landscape CEMP) is provided below in Table 14.

Table 14 Visual and landscape reporting

Action	Scope	Timing / Frequency	Responsibility
Annual reporting	Unless otherwise agreed in writing by an Approver, an annual report will be prepared in relation to compliance with the Visual and Landscape CEMP (Condition 39). Unless otherwise agreed in writing by an Approver, WSA will publish each of the annual reports on its website within three months of the	Annually	WSA

Action	Scope	Timing / Frequency	Responsibility
	end of the period in respect of which the report was prepared, with evidence providing proof of the date of publication to the Infrastructure Department with a copy to the Environment Department. The report must remain on the website for a period of at least 12 months (Condition 39).		
Monthly compliance reporting	Provide WSA with a monthly summary of the weekly inspection outcomes with regards to the management and compliance with the relevant visual amenity and landscape management mitigation measures and controls.	Monthly	All Contractors
Complaints reporting	Recording of complaints and stakeholder interactions	As required	WSA Environment Manager WSA Community and Stakeholder All contractors
General environmental inspection	Inspection of environmental management controls on site and sighting of site documentation as required by the contractor's CEMP.	Weekly	WSA
General environmental inspection	Inspection of environmental management controls and site documentation for contractor works (as required by the contractor's CEMP).	As per Contractor environmental management system (at least weekly)	All Contractors
Reporting of non-conformances and improvement opportunities	The management and reporting requirements of environmental non-conformances and improvement opportunities will be in accordance with Section 8 of the SEMF.	As required	WSA All Contractors

9.5 Review of approved plans

WSA will review each approved plan at least every five years (from the date of approval) as required by the Airport Plan. A review will also be completed annually to ensure that it continues to meet the approval criteria. Details of the review will be included in the annual report (refer to Section 8.3 of the SEMF). If the review identifies areas where the plan does not continue to meet the approval criteria for that plan, a variation to the approved plan will be prepared and submitted for approval.

WSA may initiate reviews of Approved Plans at other times in response to improvement opportunities, non-conformances, and changes to scope of work or construction methodology or alterations to legal or contractual requirements.

Any changes identified and implemented through the variation and review process identified above will be communicated to relevant contractors through re-issue of the revised WSA Approved Plan and subsequent training and awareness (refer to Section 5 of the SEMF).

9.6 Environmental Incidents and complaints management

The management and reporting of environmental incidents shall be undertaken by the appropriate person as detailed in Section 6 of the SEMF.

All communications and complaints management will be implemented and managed in accordance with Section 7 of the SEMF and the Community and Stakeholder Engagement Plan.

10 Competence, training and awareness

To ensure this Visual and Landscape CEMP is effectively implemented, each level of management is responsible for ensuring that all personnel reporting to them are aware of the requirements within. The WSA Environment Manager will coordinate the necessary and relevant environmental training in conjunction with other training and development activities.

All competence, training and awareness requirements will be implemented as detailed in the SEMF.

11 References

Bannerman and Hazelton (1990). *Soil Conservation Service of NSW, Sydney, Soil Landscapes of the Penrith Area 1:100,000 Sheet.*

Commonwealth Department of Infrastructure and Regional Development, 2016. *Airport Plan (December 2016)*

Commonwealth Department of Infrastructure and Regional Development, 2016. *Western Sydney Airport Environmental Impact Statement, 2016*

Standards Australia 2001. *Australian and New Zealand environmental management international standard (AS/NZS ISO 14001)*

Appendix A

Beaufort Wind Scale

Beaufort Wind Scale

Please note: Beaufort scale numbers and descriptive terms such as 'near gale', 'strong gale' and 'violent storm' are not normally used in Bureau of Meteorology communications or forecasts.

Beaufort scale number	Descriptive term	Units in km/h	Units in knots	Description on Land	Description at Sea
0	Calm	0	0	Smoke rises vertically	Sea like a mirror.
1-3	Light winds	19 km/h or less	10 knots or less	Wind felt on face; leaves rustle; ordinary vanes moved by wind.	Small wavelets, ripples formed but do not break: A glassy appearance maintained.
4	Moderate winds	20 - 29 km/h	11-16 knots	Raises dust and loose paper; small branches are moved.	Small waves - becoming longer; fairly frequent white horses.
5	Fresh winds	30 - 39 km/h	17-21 knots	Small trees in leaf begin to sway; crested wavelets form on inland waters	Moderate waves, taking a more pronounced long form; many white horses are formed - a chance of some spray
6	Strong winds	40 - 50 km/h	22-27 knots	Large branches in motion; whistling heard in telephone wires; umbrellas used with difficulty.	Large waves begin to form; the white foam crests are more extensive with probably some spray
7	Near gale	51 - 62 km/h	28-33 knots	Whole trees in motion; inconvenience felt when walking against wind.	Sea heaps up and white foam from breaking waves begins to be blown in streaks along direction of wind.
8	Gale	63 - 75 km/h	34-40 knots	Twigs break off trees; progress generally impeded.	Moderately high waves of greater length; edges of crests begin to break into spindrift; foam is blown in well-marked streaks along the direction of the wind.
9	Strong gale	76 - 87 km/h	41-47 knots	Slight structural damage occurs - roofing dislodged; larger branches break off.	High waves; dense streaks of foam; crests of waves begin to topple, tumble and roll over; spray may affect visibility.
10	Storm	88 - 102 km/h	48-55 knots	Seldom experienced inland; trees uprooted; considerable structural damage.	Very high waves with long overhanging crests; the resulting foam in great patches is blown in dense white streaks; the surface of the sea takes on a white appearance; the tumbling of the sea becomes heavy with visibility affected.
11	Violent storm	103 - 117 km/h	56-63 knots	Very rarely experienced - widespread damage	Exceptionally high waves; small and medium sized ships occasionally lost from view behind waves; the sea is completely covered with long white patches of foam; the edges of wave crests are blown into froth.
12+	Hurricane	118 km/h or more	64 knots or more	Very rarely experienced - widespread damage	The air is filled with foam and spray. Sea completely white with driving spray; visibility very seriously affected