

NSW Roads and Maritime Services

WOOLGOOLGA TO BALLINA | PACIFIC HIGHWAY UPGRADE ENVIRONMENTAL IMPACT STATEMENT

MAIN VOLUME 1B

Appendix D

RMS 12.604B

ISBN 978-1-922041-81-4

Appendix D Glossary of terms and abbreviations

Term	Meaning
A	
AADT	Annual average daily traffic. The total volume of traffic passing a roadside observation point over a period of a year, divided by the number of days per year. It is calculated from mechanically obtained axle counts.
Aboriginal cultural heritage	Aboriginal cultural heritage consists of places and items that are of significance to Aboriginal people because of their traditions, observances, lore, customs, beliefs and history. It provides evidence of the lives and existence of Aboriginal people before European settlement through to the present. It may comprise tangible and intangible elements.
Aboriginal cultural heritage assessment report	A report combining an Aboriginal archaeological assessment and an Aboriginal cultural assessment. Required by OEH for any Part 6 <i>National Parks and Wildlife Act 1974</i> approval. Also prepared for approvals under Part 5.1 of the <i>Environmental Planning and Assessment Act 1979</i> where Aboriginal cultural heritage is a key issue.
Aboriginal place	Any place declared to be an Aboriginal place under section 84 of the National Parks and Wildlife Act 1974.
Aboriginal scarred tree	Aboriginal scarred trees show evidence of bark or timber removal by Aboriginal people for traditional purposes. Scarred trees provide significant evidence of Aboriginal occupation in what is now a highly modified landscape.
Aboriginal stakeholders	Members of a local Aboriginal land council, Aboriginal groups or other Aboriginal people who have registered their interest with the RMS to be consulted about a proposed RMS project or activity.
Abutment	An end support of a bridge.
Acid sulfate soils	Naturally acid clays, mud and other sediments usually found in swamps and estuaries. They may become extremely acidic when drained and exposed to oxygen and may produce acidic leachate run-off that can pollute waters and liberate toxins.
AEP	Annual exceedance probability. The probability of a rainfall or flood event exceeding a nominated level in a year. A 1 per cent AEP is the probability of an event exceeding a nominated level in 100 years.
Afflux	Afflux is an increase in water level resulting from changes to flow paths and/or flood storage areas.
AFG	Aboriginal Focus Group. AFG meetings are held to consult with Aboriginal stakeholders.
Aggregate	A material composed of discrete mineral particles of species size produced from sand, gravel, rock or metallurgical slag by selective extraction, screening, blasting or crushing.
Agribusiness	Agribusinesses are businesses with a particular reliance on agriculture to sustain their operations including cropping, grazing and horticulture.
AHD	Australian Height Datum. The standard reference level used to express the relative height of various features. A height given in metres AHD is essentially the height above sea level. Mean sea level is set as zero elevation.
AHIMS	Aboriginal Heritage Information Management System. A register of NSW Aboriginal heritage information maintained by the Department of Environment, Climate Change and Water (DECCW).
Alignment	The general route (eg of a roadway) in plan and elevation.
Alluvium	Unconsolidated deposit of gravel, sand or mud formed by water flowing in identifiable channels. Commonly well sorted and stratified.

Term	Meaning
Aquifer	Geologic formation, group of formations, or part of a formation capable of transmitting and yielding quantities of water.
Arboreal	To live in, or be connected with, trees.
Archaeological salvage excavation	A program of on-site activities to realise the research potential of a heritage item including excavation, sampling, artefact recovery, photography, drawing and recording; and off-site activities including contextual research, artefact cataloguing and analysis, reporting, conservation and lodgement of artefacts and records.
Archaeological site	A site with any material evidence of past Aboriginal activity that remains within a context or place that can be reliably related to that activity.
Archaeological test excavation	Sub-surface investigation used where potential archaeological resources of a heritage item is unclear, to clarify the potential of the heritage item to establish significance and to determine appropriate further action.
Archaeology	The scientific study of human history, particularly the relics and cultural remains of the distant past.
ARI	Average recurrence interval. Used to describe the frequency or probability of floods occurring. (eg a 100-year ARI flood is a flood that occurs or is exceeded on average once every 100 years).
Arterial roads	The main or trunk roads that make up the majority of the State road network for which the RMS is responsible.
Arterial standard	See Class A
AS	Australian Standard.
AS 14000	Australian Standards for environmental management.
Asphalt or asphaltic concrete	A dense, continuously graded mixture of coarse and fine aggregates, mineral filler and bitumen usually produced hot in a mixing plant.
B	
Background noise level	The ambient sound-pressure noise level in the absence of the sound under investigation exceeded for 90% of the measurement period. Normally equated to the average minimum A-weighted sound pressure level.
Balanced earthworks	Earthworks in which the quantity of material taken from road cuttings along the road mathematically equals the fill required to construct the embankments (after taking into account bulking).
Base case	Also known as the “do nothing” case. Used in evaluating projects to compare the cost and benefit of the existing road (the base case) with another or a number of other projects or options.
Batter	The constructed surface between the road level and the existing ground. A fill batter is where the road is above the existing surface on a filled embankment and refers to the sloping sides of the embankment. A cut batter is where the road is below the existing surface.
Batter drain	A drain formed in a batter to reduce scour.
BCR	Benefit cost ratio. The ratio of the monetary benefits to the costs of a project as a measure of worth to the community.
Bedrock	The side slope of walls, embankments and cuttings or the degree of such slope, usually expressed as a ratio of horizontal distance to one vertical height.
Bench	A ledge constructed in a batter or natural slope to provide sight distance around a curve, greater security against slip or to assist batter drainage.
Biological Oxygen Demand	The amount of oxygen required by aerobic microorganisms to decompose the organic matter in water, such as that polluted by sewage. It is used as a measure of the degree of water pollution.
Blasting	The use of explosive for excavating rock, demolition and other purposes.
Bore	A cylindrical drill hole sunk into the ground from which water is pumped for use or monitoring.

Term	Meaning
Borehole	A hole produced in the ground by drilling for the investigation and assessment of soil and rock profiles.
Borrow	Filling required for the construction of a road obtained by excavating at some point outside the formation.
Borrow pit	An excavation outside the formation limits for obtaining filling.
Box culvert	A culvert of rectangular cross section.
C	
Carriageway	The portion of a roadway devoted to vehicular traffic generally delineated by kerbs, a verge or a median (inclusive of shoulders and ancillary lanes).
Catchment	The area from which a surface watercourse or a groundwater system derives its water.
Centreline	The basic line which defines the axis or alignment of the centre of a road.
CEMP	Construction Environmental Management Plan. A site specific plan developed for the construction phase of a project to ensure that all contractors and sub-contractors comply with the environmental conditions of approval for the project and that environmental risks are properly managed.
CH ₄	Methane.
Class A	Arterial standard. Two lanes in each direction (median width to accommodate future upgrading to three lanes in each direction), 100 km per hour posted speed, limited access condition roadway with at grade intersections. This may include intersections where right turn movements are permissible. Under A class, local traffic and through traffic could share the highway.
Class M	Motorway standard. Two lanes in each direction (median width to accommodate future upgrading to three lanes in each direction), 110 km per hour posted speed, controlled access condition roadway with grade separated interchange access, and a continuous alternative route.
Clearing	The removal of vegetation or other obstacles at or above ground level.
Clear zone	The area that begins at the outer edge of the lane, next to the shoulder and extends for a set distance, which is available for emergency use by errant vehicles.
CMP	Conservation Management Plan. A document explaining the significance of a heritage item or heritage conservation area and proposing policies to retain that significance. May include guidelines for additional development or maintenance of the place.
CO	Carbon monoxide.
CO ₂	Carbon dioxide.
CO _{2-e}	A metric measurement used to compare the emissions from various greenhouse gases based upon their global warming potential.
Compaction	Artificial increase of the dry density of a granular soil by mechanical means such as rolling the surface layers or for deep compaction, driving sand piles, vibration or impact methods.
Compound site	Facilities used to support the operation of a construction site usually based within or near the construction area. For larger projects there may be a number of compound sites. May include a number of activities including site offices, workshops, delivery areas, storage areas, crib sheds, staff vehicle parking, materials, plant and equipment.
Concentration (air quality)	Vehicles emit pollutants to the air, which are transported and diluted resulting in a volume of pollutant per volume of ambient air. Ambient air quality goals are expressed in terms of concentrations, which are measured in parts per million or micrograms per cubic metre.
Concept design	Initial functional layout of a concept, such as a road or road system, to provide a level of understanding to later establish detailed design parameters.
Cost benefit analysis	An economic based approach that considers the merits of a project from the viewpoint of the community at large rather than that of the organisation responsible for the project.
Controlled access	Specified points along a controlled access road at which access to or from the controlled access road may be gained. The means of access may be via grade separated interchanges and free flowing on / off slip ramps.

Term	Meaning
Critical habitat	Habitat declared to be critical habitat under Part 3 of the <i>Threatened Species Conservation Act 1995</i> .
Culvert	One or more adjacent enclosed channels for conveying a stream below formation level.
Curtilage	The land around a bridge, building or any structure or object which is essential or contributes to the value, function and enjoyment of that object (eg a heritage building and surrounding buildings and trees that relate to it form an entire setting).
Cut	The material excavated from a cutting.
Cutting	Formation resulting from the construction of the road below existing ground level – the material is cut out or excavated.
D	
dBA	Decibels using the A-weighted scale measured according to the frequency of the human ear.
Deck	The floor of a bridge directly carrying traffic loads.
Degree of saturation	The ratio of the traffic volume entering an intersection in a specific period to the capacity of the intersection during that period.
Design development	The concept design stage of a project on an agreed route alignment.
Design speed	A nominal speed fixed to determine the geometric features of a road.
Design year	The predicted year in which the design traffic would be reached.
DSEWPAC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities
Discharge	The volumetric rate of water flow.
Dissolved Oxygen (DO)	Amount of oxygen dissolved in a body of water as an indication of the degree of health of the water and its ability to support a balanced aquatic ecosystem.
Diversion drain	A drain leading water away from a given area.
Divided road	A road with a separate carriageway for each direction of travel created by placing a physical obstruction (eg median) between the opposing traffic directions. A dual carriageway.
DGRs	Director General's requirements. Requirements and specifications for an environmental assessment issued by the Director General of the Department of Planning under section 115Y of the <i>Environmental Planning and Assessment Act 1979</i> .
DP	Deposited Plan. A plan of land deposited in Land and Property Information (part of the Land Management Authority) and used for legal identification purposes. They most commonly depict a subdivision of a parcel of land.
DPI	NSW Department of Primary Industries.
DP&I	NSW Department of Planning and Infrastructure
Drainage	Natural or artificial means for the interception and removal of surface or subsurface water.
Driveway	A defined area for vehicles to travel between a carriageway and a property adjacent or near to the road.
Dual carriageway	A divided road. A two-lane dual carriageway is a divided road with two lanes for each travel direction.
E	
Environmental impact statement	A focussed analysis undertaken for the purposes of approval applications under Part 5.1 of the <i>Environmental Planning and Assessment Act 1979</i> , written generally to comply with the requirements issued by the Director General of the Department of Planning and Infrastructure.
Earthworks	All operations involved in loosening, removing, depositing, shaping and compacting soil or rock.

Term	Meaning
Easting	The X–coordinate (the vertical lines that divide a map from west to east) and get larger to the east.
EC	Electrical conductivity. A measure of the ability of water to conduct an electric current between electrodes placed in a sample of the water. The value obtained relates to the nature and amounts of salts present in the water and increases with concentration. It is used as a surrogate measure for salinity. Expressed in microsiemens per centimetre ($\mu\text{S}/\text{cm}$).
ECRTN	Environmental criteria for road traffic noise.
Ecology	The relationship between living things and the environment.
Ecosystem	A functional unit of energy transfer and nutrient cycling in a given place. It includes all relationships within the biotic community and between the biotic components of the system.
Edge effects	A change in species composition, physical conditions or other ecological factors at the boundary between two ecosystems or the ecological changes that occur at the boundaries of ecosystems (including changes in species composition, gradients of moisture, sunlight, soil and air temperature, wind speed and other factors).
EIA	Environmental impact assessment. EIA is the process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of proposals prior to major decisions being taken and commitments made.
Embankment	That portion of a road located on an earthen structure where the subgrade level is above the natural surface.
EMP	Environmental management plan. A plan used to manage environmental impacts during phases of a project's development. It is a synthesis of all proposed mitigation, management and monitoring actions, set to a timeline with responsibility assigned and follow up actions defined.
EMS	Environmental management system. A management approach that enables an organisation to identify, monitor and control its environmental aspects. An EMS is part of an overall management system, which includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.
ENM	Excavated Natural Material Excavated Natural Material (ENM) is naturally occurring rock and soil (including materials such as sandstone, shale, clay and soil) that has been excavated from the ground; contains at least 98% (by weight) natural material; and does not meet the definition of VENM.
ENMM	RMS Environmental Noise Management Manual.
Environment	Including all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings (from EP&A Act).
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i> .
EP&A Regulation	NSW <i>Environmental Planning and Assessment Regulation 2000</i>
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
Ephemeral	Existing for a short duration of time.
ESD	Ecologically sustainable development, the principles of which are set out in clause 7(4) of Schedule 2 of the EP&A Regulation.
Excavated Public Roads Material	Excavated Public Road Materials (EPRM) include rock, soil, bitumen, reclaimed asphalt pavement, gravel, slag from iron and steel manufacturing, fly and bottom ash, concrete, brick and ceramics excavated during the construction and maintenance of public roads and road public infrastructure facilities.
Excavation permit	A permit referred to in section 139 of the <i>Heritage Act 1977</i> .
F	

Term	Meaning
Fill	The material placed in an embankment.
Fly ash	Particulate matter produced by combustion and is emitted with gaseous effluents. It is usually recovered from the flue gas before leaving the stack by cleaning processes, such as electrostatic precipitation. Fly ash is used as a major component in the production of concrete.
FM Act	NSW <i>Fisheries Management Act 1994</i> .
Focus group	A focus group is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs, and attitudes towards a proposal.
Footpath	The paved area in a footway.
Footprint	The scale, extent or mark that a development makes on the land in relation to its surroundings.
Footway	An area open to the public designated for the movement of pedestrians or has one of its main uses for pedestrians.
Formation	The surface of the ground in its final shape after completion of earthworks but before placing any pavement layers.
G	
Grade	The rate of longitudinal rise (or fall) of a carriageway with respect to the horizontal expressed as a percentage. To secure or smooth an earth, gravel or other surface by means of a grader or similar implement.
Grade separation	A vertical separation of intersecting road, rail or other traffic routes that would otherwise conflict (if not for the grade-separation).
Groundwater	Subsurface water contained within the saturated zone of rocks and soil beneath the Earth's surface.
Grubbing	The removal of roots or stumps from below ground level.
Gutter	A table drain which is pitched or paved.
H	
ha	Hectare/s.
Habitat	As defined in the <i>Threatened Species Conservation Act 1995</i> .
Heavy vehicle	A heavy vehicle is classified as a Class 3 vehicle (a two axle truck) or larger, in accordance with the Austroads Vehicle Classification System.
Highway based businesses	Highway-based businesses comprise businesses that are located alongside the existing highway and are dependent on passing traffic for a significant proportion of their trade (eg service stations, accommodation providers, cafes and restaurants).
Hydrocarbon	Any organic compound (gaseous, liquid or solid) consisting only of carbon and hydrogen.
Hydrogeology	The study of subsurface water in its geological context.
Hydrology	The study of rainfall and surface water runoff processes.
I	
Impact	Influence or effect exerted by a project or other activity on the natural, built and community environment.
Indigenous species	Plant species native to the area in which the project is located.
Intensity of rainfall	The rainfall in a unit of time.
Interchange	A grade separation of two or more roads with one or more interconnecting carriageways.
Interoperability	Ability to share key transport nodes and links between different modes of transport.
Intersection	An intersection where carriageways cross at a common level (at-grade).
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i> .
J	
Junction	A place where two or more roads meet.

Term	Meaning
K	
Kerb	A hard stone or concrete shaped to inhibit passage by vehicles. Used for bordering a road and limiting the footway.
L	
LALC	Local Aboriginal Land Council.
Landscape	A tract of land. Also a prospect or piece of scenery or land which may include villages, towns, cities and infrastructure.
Landscape character	The aggregate of built, natural and cultural aspects that make up an area and provide a sense of place. Includes all aspects of a tract of land – built, planted and natural topographical and ecological features.
Landscape character precinct	Precincts with similar landscape properties or strongly defined spatial qualities.
Land use severance	Land use severance refers to the creation of a physical barrier between a property and an existing road access to that property.
Land use sterilisation	Land use sterilisation refers to the situation where properties and their land use are severed into fragments of a size and / or shape that makes on-going use of that land unfeasible.
Lane	A portion of the carriageway allotted for the use of a single line of vehicles.
LEP	Local Environmental Plan.
LGA	Local government area.
Local roads	Roads that have a low speed limit, have a small footprint, serve local communities and that are generally conducive to walking and cycling.
LoS	Level of service. A qualitative measure describing the capacity and performance of a section of roadway or intersection.
Lot	A parcel of land defined by measurement as a lot in a deposited plan (DP) or as a Crown portion or allotment.
Longitudinal section	The section drawn along the length of the route showing vertical elevation.
M	
Median	The central reservation which separates carriageways from traffic travelling in the opposite direction.
mg/L	Milligrams per litre. A unit of concentration.
mL	Millilitre/s. A unit of volume equalling one thousandth of a litre.
ML	Megalitre/s. A unit of volume equalling 1,000,000 litres (about one Olympic sized swimming pool).
Modal split	Proportion of the transport task which is carried by the various carriers (ie road, rail, ferry, bike, pedestrian).
Motorway	A tolled freeway often under private ownership for a set period of time.
Mt	Million tonnes.
MVKT	Million vehicle kilometres travelled.
N	
N ₂ O	Nitrous oxide.
NEPM	National Environment Protection Measure.
NES	National environmental significance. Abbreviation used for matters of NES, as defined under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> .

Term	Meaning
NO	Nitrogen monoxide.
NO ₂	Nitrogen dioxide.
NO _x	Oxides of nitrogen.
Noise catchment area	A noise catchment area comprises the grouping together of sensitive receivers including residential dwellings into a single geographic area. Across the noise catchment area, there is likely to be a similar noise environment audible by residents and passers-by.
Noise logger	A data logging device (data and audio in some cases) which records noise. Usually used for unattended noise monitoring of background or ambient noise.
Noise management level	A Noise Management Level is a noise target for construction activities, as described in the NSW Interim Construction Noise Guideline. Noise management levels can be assigned to noise catchment areas to inform construction noise management.
Northing	The Y-coordinate (the horizontal lines that divide the map from north to south) and get larger to the north.
NPWS	NSW National Parks and Wildlife Service (now part of the Office of Environment and Heritage).
O	
Overbridge	A grade separation where a road passes over the carriageway of the upgraded highway. Otherwise called an overpass.
Overtaking lane	An auxiliary lane provided to allow for slower vehicles to be overtaken. Line marked so that all traffic is initially directed into the left hand lane with the inner lane being used to overtake.
P	
PAD	Potential archaeological deposit. Any location considered to have a moderate to high potential for subsurface archaeological material.
Part 5.1 approvals (EP&A Act)	Relates to the approval of state significant infrastructure under Part 5.1 of the <i>Environmental Planning and Assessment Act 1979</i> .
Pavement	The portion of a carriageway placed above the subgrade for the support of, and to form a running surface for vehicular traffic.
pH	A measure of acidity or alkalinity of a solution. Measured on a scale of 1-14 as follows: pH 7 is neutral. pH < 7: decreasing pH corresponds to increasing acidity. pH > 7: increasing pH corresponds to increasing alkalinity.
Piling — bored	A method of inserting piles using a drilling / boring motion.
Piling — driven	A method of inserting piles using a driving / hammering motion.
PoEO Act	NSW <i>Protection of the Environment Operations Act 1997</i> .
PM	Particulate matter. Is a range of particles that exists in the air we breathe. Particulate matter is commonly called 'dust' and exists naturally in the atmosphere; examples include sea-salt spray and pollens. Particulate matter can be increased due to human activities such as vehicle exhaust, industrial processes, power stations, mining, farming and wood heaters, or smoke from bushfires. Exposure to particulate matter can be associated with health and amenity impacts
PM _{2.5}	Particulate matter less than 2.5 microns in diameter.
PM ₁₀	Particulate matter less than 10 microns in diameter.
PMF	Probable maximum flood. Largest flood that could conceivably occur at a particular location. Defines the extent of flood prone land (the floodplain).
Prime agricultural land	Land with the best combination for soil, climate and topography for agricultural production as mapped by NSW Industry and Investment and often shown in the maps accompanying regional planning strategies and local environmental plans.
Proponent	The person or organisation that proposes carrying out the project or activity.

Term	Meaning
Q	
QA specification	Quality assurance specification. A contractual document that sets out the quality standards that must be achieved by the contractor when carrying out works.
Quarry	An open pit from which stone, sand, gravel or fill is taken.
Quaternary	Geological time period corresponding to the last 2 million years.
R	
Ramsar	An intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
Rating background level (RBL)	The median value of the assessment background levels values for the period over all of the days measured. There is therefore an RBL value for each period – daytime, evening and night-time.
Receptor/receiver	A term used in environmental impact assessment to describe a map reference point or location where the impact is predicted. A sensitive receptor is a home, work place, school or other place where people spend some time. An elevated receptor is a point above ground level.
Regionally significant farmland	Regionally significant farmland includes land capable of sustained use for agricultural production with a reasonable level of inputs and which has the potential to contribute substantially to the ongoing productivity and prosperity of a region.
Revegetation	To revegetate an area by direct seeding with native species using manual or mechanical means such as hydromulching, strawmulching and tractor seeding.
Riparian	Relating to the banks of a natural waterway.
RMS	Roads and Maritime Services.
Road furniture	A general term covering all signs, street lights and protective devices for the control, guidance and safety of traffic and convenience of road users.
Road reserve	A legally defined area of land within which facilities such as roads, footpaths and associated features may be constructed for public travel.
Roadside	The area from the edge of the carriageway to the boundary of the road reserve.
RoTAP	Rare or threatened Australian plant.
Roundabout	An intersection where all traffic travels in one direction around a central island.
Runoff	That part of the rainfall on a catchment which flows as surface discharge past a specified point.
S	
Scour	The erosion of material by the action of flowing water.
Section 170 register	A register established in accordance with section 170 of the <i>Heritage Act 1977</i> to record all heritage items in the ownership of, or under control of, government agencies.
Section 90 consent	An Aboriginal heritage impact permit issues under section 90 of the <i>National Parks and Wildlife Act 1974</i> to manage harm or potential harm to Aboriginal objects and Aboriginal places.
Sedimentation basin	An area where runoff water is ponded to allow sediment to be deposited.
Selected fill	Fill complying with specified requirements.
Selected material zone	The top layer of the sub-grade.
Sensitive receiver	In the context of noise, sensitive receivers are locations likely to be sensitive to construction noise and road traffic noise ie properties that could be residential dwellings or non-residential premises (eg schools, businesses and places of worship).
SEPP	State Environmental Planning Policy.
Shared path	A pathway used for both cyclists and pedestrians, usually located on the side of the road.

Term	Meaning
Shoulder	The portion of the carriageway beyond the traffic lanes adjacent to and flush with the surface of the pavement.
Side track	An ad hoc track adjacent to a road to permit the passage of traffic while the carriageway is temporarily closed.
Sight distance	The distance measured along the carriageway over which objects of defined height are visible to a driver whose eyes are at a specified height above the pavement surface level.
Site compound	Area enclosing construction machinery, stockpiles, site offices and other ancillary facilities.
Slip lane	A lane providing for left turning vehicles allowing them to avoid stopping at an intersection.
Social infrastructure	Social infrastructure refers to community facilities, services and networks which help individuals, families, groups and communities meet their social needs, maximise their potential for development and enhance community well-being, including services and facilities that support quality of life and well-being. They include local, district and regional level community services and facilities.
Soft soils	Soils with a high water content that are highly prone to settlement when placed under load. Widespread in coastal regions of eastern Australia in areas associated with floodplains, waterways and wetlands.
Span	The distance between the centres of adjacent supports of a bridge.
Spoil	Surplus excavated material.
State Heritage Register	A register kept by the NSW Heritage Council that lists places, buildings, works, relics, moveable objects or precincts that the Minister for Planning considers are of significance to the State of NSW.
State significant infrastructure	Development that is declared under section 15U of the EP&A Act to be State significant infrastructure.
Statement of Heritage Impact	An assessment of the impacts of a proposed development on the significance of a heritage item or conservation area.
Station	Any point on a control line selected to provide more detailed information about the cross-section or any other feature mentioned in the drawings. Also known as a chainage.
Stockpile	Temporarily stored materials such as soil, sand, gravel and spoil/waste.
Stock underpass	A structure to permit the passage of stock beneath a road.
Subgrade	The trimmed or prepared portion of the formation on which the pavement is constructed.
Subsoil drain	A drain below the ground surface which collects groundwater throughout its length.
Surface water	Water flowing or held in streams, rivers and other wetlands in the landscape.
Sustainability	Considering present and future needs and costs.
T	
Terrestrial fauna	Mammals that live on land.
Threatened species, populations and ecological communities	A species, population or ecological community that is listed as 'vulnerable', 'endangered' or 'critically endangered' under the NSW <i>Threatened Species Conservation Act 1995</i> and/or Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
TPH	Total petroleum hydrocarbon.
Tributary	A river or stream flowing into a larger river or lake.
TSC Act	NSW <i>Threatened Species Conservation Act 1995</i> .
Typical cross section	A cross section of a carriageway showing typical dimensional details, furniture locations and features of the pavement construction.
Turbidity	A measure of light penetration through a water column containing particles of matter in suspension.
U	
Underpass	A grade separation where a road passes under the carriageway of the upgraded highway.

Term	Meaning
	A tunnel or passageway that allows pedestrians, cyclists, fauna and/or stock to pass under the carriageway of the upgraded highway.
Urban design	The process and product of designing human settlements, and their supporting infrastructure, in urban and rural environments.
V	
VENM	Virgin Excavated Natural Material Natural material that has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities, and that does not contain sulphidic ores or soils.
Viaduct	A long bridge generally composed of a series of spans over land, which carries a road or railway (as opposed to aqueduct which is a bridge for carrying of water).
Vibration	Vibration is a force which can be created during some construction activities (eg rock hammering, drilling). Vibration is commonly expressed in terms of frequency such as cycles per second (cps), or cycles per minute (cpm) and can affect human comfort and the structural integrity of a building.
Viewpoint	A vantage point where the project would be visible, either from a residences or public vantage point such as a local road.
VKT	Vehicle kilometres travelled.
Vulnerable	As defined under the <i>Threatened Species Conservation Act 1995</i> , a species that is likely to become endangered unless the circumstances and factors threatening its survival or evolutionary development cease to operate.
W	
Water-sensitive urban design	A sustainable approach to the design of stormwater drainage systems which integrates natural systems such as open swales, bio-infiltration and wetlands with the public domain in a constructed environment to improve stormwater quality and management.
Waterway	Any flowing stream of water, whether natural or artificially regulated (not necessarily permanent).
WARR Act	<i>Waste Avoidance and Resource Recovery Act 2001</i> .
WHS	Work health and safety
Z	
Zoning	Zoning regulates land use within an environmental planning instrument (usually by different colour codes on a map accompanying a local environmental plan). Land use tables set out the various purposes for which land may or may not be used or developed in each zone.