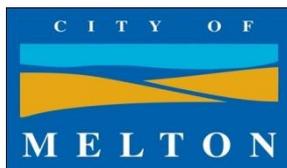


Melton City Council Guidelines for Construction Environmental Management Plans (CEMPs)

Final (Rev1)
13 April 2022



Contents

1. Background	1
2. Scope.....	2
3. Sources of information to use when preparing a CEMP.....	3
3.1 Templates	3
3.2 Standards	3
3.3 Compliance	3
4. Submission Requirements	5
5. Use of Templates and Guidelines	6
5.1 Structure of the Guidelines.....	6
5.2 CEMP template	6
5.2.1 Risk assessment checklist – plan 1.....	6
5.2.2 Designs of environmental protection measures – plan 1.....	7
5.2.3 Significant Environmental Aspects – Plan 2.....	7
5.2.4 Site environmental management plan – plan 2.....	7
6. CEMP Requirements	9
6.1 Training	9
6.2 Management.....	9
6.2.1 Responsibilities	9
6.2.2 Communication of CEMP Requirements	9
6.2.3 Inspections and Maintenance.....	10
6.2.4 Staging of Works.....	10
6.2.5 Consultation with Residents	11
6.2.6 Associated Documents.....	11
6.3 Noise and vibration.....	11
6.3.1 Considerations	12
6.3.2 Mitigation measures.....	12
6.3.3 Monitoring requirements	12
6.4 Dust.....	12
6.4.1 Considerations	13
6.4.2 Mitigation Measures.....	13
6.4.3 Monitoring requirements	13
6.5 Erosion and Sediment Control.....	14
6.5.1 Considerations	14
6.5.2 Mitigation measures	14

6.5.3 Monitoring requirements	16
6.6 Vehicle and Road Management (site access, cleaning vehicles, mud on road)	18
6.6.1 Mitigation measures	18
6.6.2 Monitoring requirements	19
6.7 Waste	19
6.7.1 Considerations	19
6.7.2 Mitigation measures	19
6.7.3 Monitoring requirements	20
6.8 Chemicals	21
6.8.1 Considerations	21
6.8.2 Mitigation measures	21
6.8.3 Monitoring requirements	22
6.9 Significant Flora and Fauna	22
6.9.1 Considerations	22
6.9.2 Mitigations measures	23
6.10 Weeds and Pests	28
6.10.1 Weed Management Plan:	28
6.10.2 Vehicle and machinery hygiene protocols:	28
6.10.3 Weed control	29
6.10.4 Pest Animal Control	29
6.11 Archaeological and Heritage	30
6.12 Fire risk	31
6.12.1 Considerations	31
6.12.2 Mitigation measures	31
6.12.3 Monitoring	31
7. Additional plans and approval requirements	32
7.1 Kangaroo Management Plan	32
7.2 Works in Conservation Areas (WiCA)	32
7.2.1 Biodiversity Conservation Areas	32
7.2.2 Approval for works in Conservation Areas	32
7.3 Growling Grass Frog Management Plans and Standards	33
7.3.1 Growling Grass Frog Conservation Management Plan – Toolern Precinct Structure Plan	33
7.3.2 Growling Grass Frog Conservation Areas	33
7.3.3 Growling Grass Frog Management Protocols	33
8. Reinstatement	36
8.1.1 Topsoil	36

8.1.2 Revegetation	36
8.1.3 Weed and Pest Control	36
8.1.4 Interim period between civil works and landscaping works	36
8.1.5 Other	37
9. Compliance Monitoring	38
9.1 Adaptive Management	38
9.1.1 Monitoring effectiveness of mitigation measures.....	38
9.1.2 Pre-commencement report	38
9.1.3 Pre-commencement meeting	38
9.1.4 Inspections	38
9.1.5 Compliance monitoring report	39
9.2 Incident Reporting	39
10. Site Plan 1 – Types and Locations of Environmental Protection Measures.....	40
11. Site Plan 2 - Designs of Environmental Protection Measures.....	41
Appendix 1 – Risk Assessment Guidance.....	42
A.1.1: Identify Environmental Aspects.....	42
A.1.2: Identify Issues.....	42
A.1.3: Likelihood and Consequence.....	42
A.1.4: Level of Risk	42
A.1.4.1: Risk (before mitigation measures are applied):	42
A.1.4.2: Residual risk (after mitigation):	42
A1.4.3: Example of a risk assessment	45
Appendix 2: CEMP Template	46
Appendix 3: Standard Icon Chart for Hazards and Environmental Protection Measures	52
Appendix 5: Pre-commencement meeting application form	56
Appendix 6: Example information sheet on Growling Grass Frog for use where applicable	59

Figures

Figure 1: Guiding principles underpinning the Guidelines for CEMPs.....	1
Figure 2: Four main sections of the CEMP template	6
Figure 3: Checklist list of significant biodiversity values.....	8
Figure 4: Green card competency content	9
Figure 5: Maximum spacing for support post of sediment fence.....	17
Figure 6: Typical Installation of a sediment fence with and without wire backing	17
Figure 7: Vegetation Protection Zone fencing example. Source: DELWP.....	27
Figure 8: Diagram of Tree Protection Zone in accordance with AS4970 (2009).....	27
Figure 9: Washdown Bay dimensions	28
Figure 10: Machinery washdown checklist. Source: EPA Victoria.	30
Figure 11: Example of Growling Grass Frog exclusion fencing	35

Tables

Table 1: Types of training tools recommended by the EPA and Council.....	10
Table 2: Likelihood: What is the likelihood that the aspect will have an impact on the environment? ..	42
Table 3: Consequence: How severe will the consequences be?	43
Table 4: Standard Icons for Hazards and Assets to be Protected.....	52
Table 5: Standard Icons for Environmental Protection Measures.....	52

1. Background

Construction Environmental Management Plans (CEMPs) are documents that detail the potential environmental impacts of a proposed Project and the ways in which these impacts may be reduced through management strategies and site practices. CEMPs are usually required to support a planning permit application for development to satisfy a permit condition prior to the commencement of an approved development.

This document covers various aspects of construction site environmental management and provides a range of actions and alternatives to remove or mitigate the impacts of these activities on the environment. CEMPs also detail the ongoing management and monitoring activities required as part of the development management.

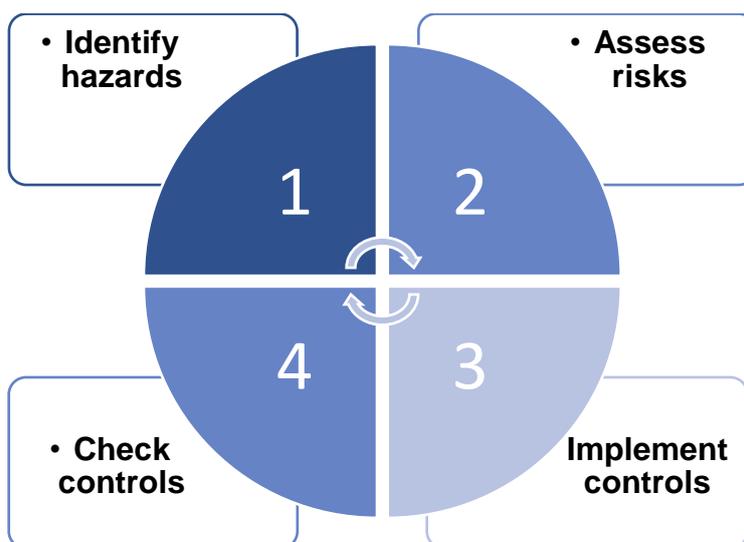
The document will assist the proponent to understand Council’s requirements in relation to the information, quality and submission process that Council reasonably expects to be able to assess and approve CEMPs. Further, a template for use and submission is provided to assist in the preparation and assessment of CEMPs.

By following this document, the development industry will be able to meet and comply with their statutory environmental management responsibilities and reduce the likelihood of Council or other authority enforcement and fines. It will also assist in reducing the impacts of works on the environment and neighbours, and improve working conditions on site.

The Guidelines are built on the four basic steps to successful environmental planning and management (Figure 1):

- Step 1: Know your site
- Step 2: Assess the risks
- Step 3: Identify and document your systems and controls
- Step 4: Monitor your controls

Figure 1: Guiding principles underpinning the Guidelines for CEMPs



2. Scope

All contractors, consultants and developers operating in the City of Melton must comply with these guidelines and standards where applicable, as well as the appropriate legislation, regulations, environmental policies and local planning requirements. All CEMPs submitted to Council for endorsement must adhere to these Guidelines. All CEMPs must reference these Guidelines.

CEMPs must be site specific and address site specific environmental issues and hazards and contain site specific mitigation measures.

Council Officers conduct regular inspections of construction sites and if breaches of legislation or breaches of the CEMP occur, legal action and enforcement proceedings are likely to follow.

Note: These guidelines also apply to Council works.
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3. Sources of information to use when preparing a CEMP

3.1 Templates

Melton City Council (Council) encourages the use of the Melbourne Water and Victorian Environmental Protection Authority (EPA) Site EMP template for the completion and implementation of CEMPs. The Melbourne Water and EPA template was developed with local government, for use by local government, to manage the environmental impacts associated with construction. The template is widely used in the Growth Corridors.

Council has also prepared Guidelines and a template for the preparation of Weed Management Plans (WMP) (Melton City Council 2020), which is a separate set of Guidelines to be used when a WMP is required.

Where the template does not address an environmental aspect relevant to the site, or does not provide enough space to address a risk assessment, mitigation measure or site plan, this information may be appended to Plan 1 and Plan 2.

3.2 Standards

From 1 July 2021, the *Environment Protection Act 2017* (EP Act) and *Environment Protection Regulations 2021* (EP Regulations) came into effect. These laws require all businesses and proponents to take proactive steps to manage risks of harm from pollution and waste.

The following EPA publications and industry standards must also be referenced and adhered to. Noting, this is not an exhaustive list of references and other standards or guidelines are likely to be of relevance.

- *Assessing and controlling risk: A guide for business* (August 2018, Publication 1695.1)
- *Construction – Guide to preventing harm to people and the environment* (July 2021, Publication 1820.1)
- *Civil construction building and demolition guide* (November 2020, Publication 1834)
- *Liquid storage and handling guidelines* (December 2019, Publication 1698)
- *Solid storage and handling guidelines* (July 2019, publication 1730)
- *Erosion and sediment advice for business* (February 2021)
- *How to control dust from your business* (May 2021)
- *Odour advice for businesses* (October 2020)
- *The Environment Reference Standard* (Publication May 2021)

Erosion, sediment and dust

- Melbourne Water, '*Principles of erosion management*'.
- Melbourne Water, '*Sediment management measures*'.

3.3 Compliance

Refer to the planning permit issued by Council for the project, which contains planning permit conditions relating to environmental management and some of the site-specific requirements. The CEMP is a tool used to assist the proponent in adhering to their planning permit.

Once approved by Council, compliance with this CEMP is mandatory. If breaches to the CEMP occur, the Project Manager must immediately notify Council.

Proponents are responsible for adhering to the CEMP requirements for the duration of the project (from the commencement of civil works to the end of the rehabilitation works).

Note:

- Environmental impacts must always be controlled including outside of normal work hours.
- The mitigation measures outline in the CEMP must always be effective and maintained.

4. Submission Requirements

The template provided consists of 2 x A1 (or more if required) plans (electronic versions in PDF or CAD preferred) and associated notes. These plans are ideal for collation on CAD and displaying in the site office. There is likely to be additional supporting information that must also be readily available in the site office e.g. planning permit, specific management plans.

Proponents must be mindful that submitted plans are:

1. Legible (scanning and emailing signed documents at this scale can make them unreadable).
2. Provided at a scale the Council officers can readily assess on their computer desktop and/or desk.
3. Address all the relevant environmental risks, hazards and appropriate mitigation measures for the specific site.
4. Show location of all environmental assets to be protected within and adjoining the site e.g. conservation areas, native vegetation to be retained, waterways, drainage lines and wetlands.
5. Address all the requirements outlined by the relevant planning permit conditions.
6. Simply presented and easy to understand.
7. A plan showing where the site is in relation to the surrounding area (it can be very difficult pinpointing where the site is, when looking at a stage of a future development when there are no current roads marked on the site plan to use as landmarks).
8. CEMP document version numbering must begin at 1 or A (rev1 or revA) from the first plan submitted to council for approval.
9. Use clear, unambiguous language throughout the document. Avoid terms such as “as required”, “if needed”, “where possible” “should”, “may”.

Note:

- Plans and associated documents/attachments that are not legible, provided at an inappropriate size for assessment, and/or are poorly presented and hard to read will not be approved and will require re-submission.
- Plans that do not comply with Council’s requirements for version numbering and/or formatting will not be approved and will require re-submission

5. Use of Templates and Guidelines

5.1 Structure of the Guidelines

Standard CEMP requirements are covered in section 6 and additional plans and requirements for conservation areas/reserves are addressed in section 7. Reinstatement and compliance monitoring are detailed in sections 8 and 9, respectively.

5.2 CEMP template

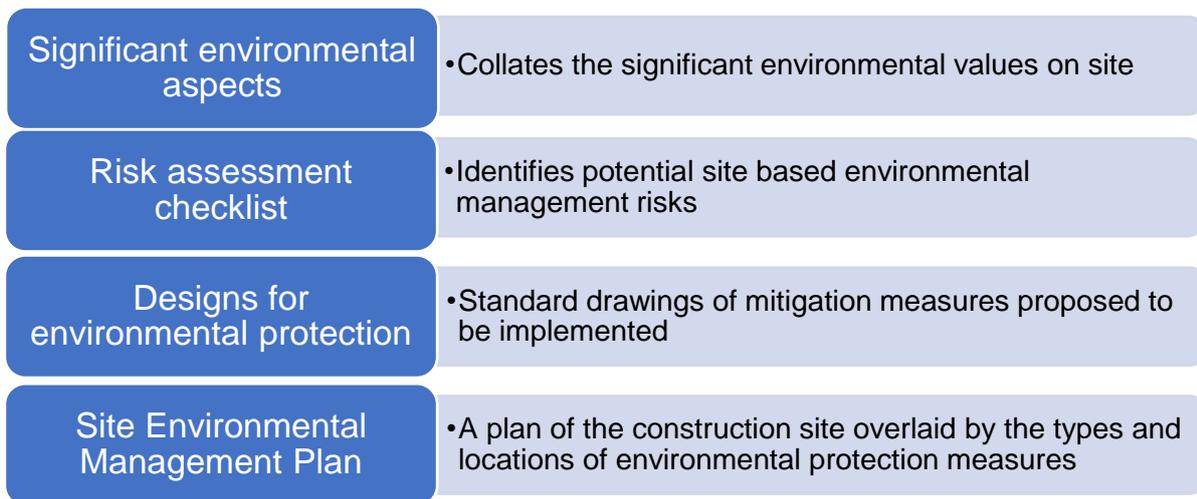
The CEMP template consists of four (4) sections, on two different A1 (electronic) plans (as described in Figure 2).

All sections of the CEMP must be completed and submitted for Council approval.

Note: where criteria are deemed 'Not Applicable' to a site, an explanation that references evidence must be provided.

Each of the above sections is explained in more detail below and in Appendix 1.

Figure 2: Four main sections of the CEMP template



5.2.1 Risk assessment checklist – plan 1

The Risk Assessment Checklist is used to identify any and all potential environmental management issues/aspects on the site, and the risk these aspects/issues pose to the environment.

Environmental Aspects are elements of an organisation's activities, products or services that can interact with the environment.

The checklist provides a space to fill in the sources and causes of potential environmental issues, as well as the proximity and nature of the impacted environment. The checklist is pre-populated with the environmental aspects of noise, lighting, dust, erosion and sediment, waste, chemicals, significant flora and fauna, weeds and pests and archaeological heritage. All pre-populated issues identified on the template must be populated with site specific issues.

Other issues/aspects not included on the template that are present on the site must be added to the bottom of the template. Where additional room is required, an attached document in the same format as the other aspects is to be provided.

The Risk Assessment Checklist requires that the overall risk of each environmental aspect is determined using the likelihood of an issue occurring (without preventative measures) and the severity of the consequence of the issue occurring (without preventative measures). This is determined using the definitions and risk matrix provided in Appendix 1. The likelihood, consequence and overall risk for each aspect must be recorded in the right-hand column of the checklist.

5.2.2 Designs of environmental protection measures – plan 1

Plan 1 – Designs of Environmental Protection Measures provides an area for designs of the proposed environmental protection measures to be documented. These designs must be clear, annotated drawings and notes related to each of the identified environmental aspects that are present on the site.

The standard icon chart must be used (refer to Appendix 3 – Standard Icon Chart for Hazards and Environmental Protection Measures).

5.2.3 Significant Environmental Aspects – Plan 2

The left-hand side and bottom of Plan 2 provides an area to list the Significant Environmental Aspects relevant to the site. These significant aspects will have been identified following the completion of the risk assessment on Plan 1. It provides pre-populated boxes to be completed, addressing different factors that are related to each aspect. Further information is provided regarding each of the CEMP aspects, below.

5.2.4 Site environmental management plan – plan 2

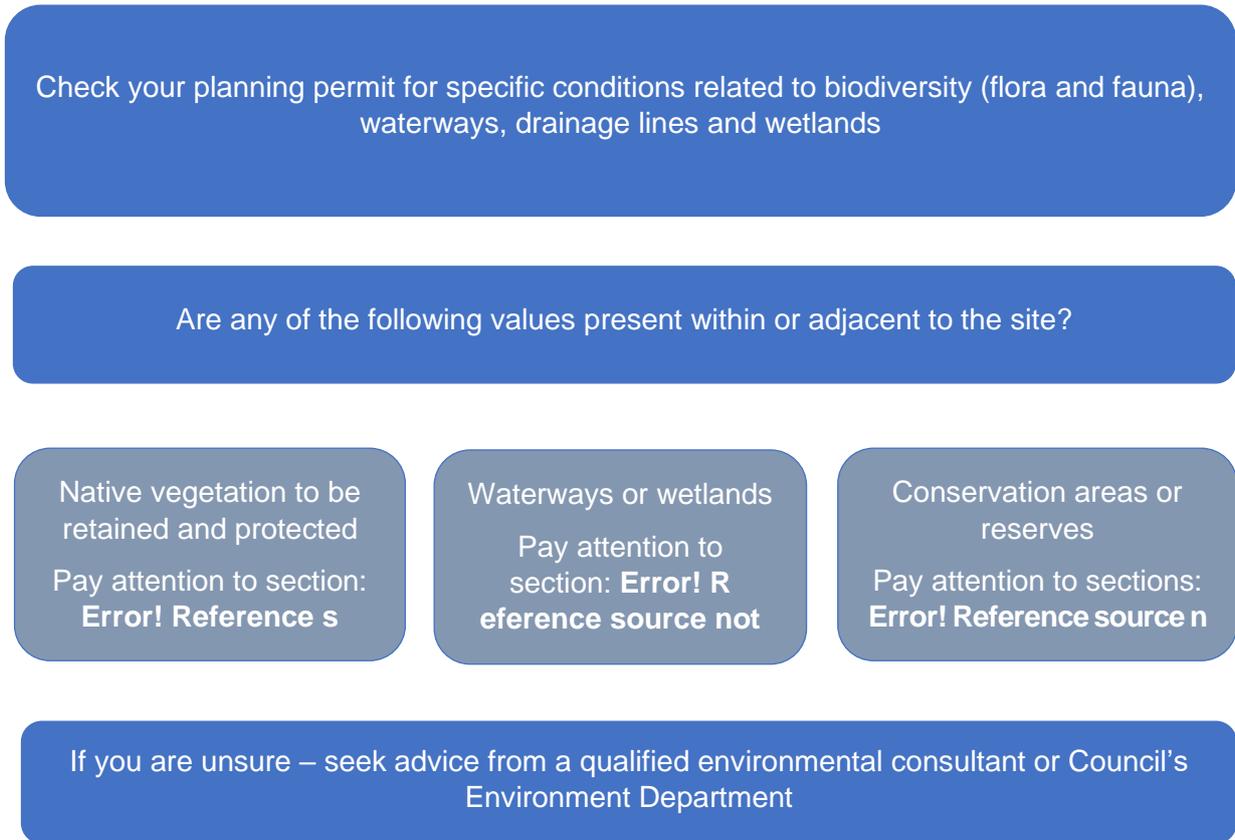
Plan 2 - Types and Locations of Environmental Protection Measures includes a space for a site plan and general notes for details of the types and locations of environmental protection and mitigation measures on the site.

These environmental protection and mitigation measures may be some of those included as part of this document. This list is not exhaustive. Other measures may be used to the satisfaction of Council.

The EMP template is attached as Appendix 2.

The standard icon chart must be used (refer to Appendix 3 – Standard Icon Chart for Hazards and Environmental Protection Measures).

Figure 3: Checklist list of significant biodiversity values



6. CEMP Requirements

The following section will assist in the completion of the CEMP template. They provide a greater level of detail and information/examples of what to include when preparing the document for submission in relation to CEMP requirements and mitigation measures.

6.1 Training

The person(s) responsible for preparation of the CEMP and the person(s) overseeing implementation of the CEMP on site should have adequate training in environmental management, such as Site Environmental Management Level 2 (Green Card), which includes the following competencies: AHCSAW201- Conduct Erosion and Sediment Control & AHCWRK202 - Observe Environment Work Practices (Figure 4).

Figure 4: Green card competency content



Training of staff must include site inductions, toolbox meetings, written procedures and training in those procedures (Table 1).

6.2 Management

Provide details of the overall site management and implementation of the CEMP.

6.2.1 Responsibilities

Include the legal ASIC entity in full (e.g., PTY LTD) (not trading name or ABN or short name) of the responsible proponent, and the names and contact details for those responsible for the implementation of the CEMP and works on site (minimum required: owner, planning consultant, applicant contractor/s site supervisor/engineer, ecological consultant or Wildlife Victoria, and two emergency contacts). All contacts must include a legal entity.

6.2.2 Communication of CEMP Requirements

The CEMP must be communicated to all personnel and visitors to the site, including identified environmental risks, their location and mitigation measures. Note: Council may review induction and toolbox records as part of site inspections/audits. Council may request a copy of such records.

- All contractors, subcontractors and others working on the site must be inducted into CEMP.

- CEMP must be displayed in visible location within site compound/office.
- CEMP environmental risks and mitigation measures must be addressed through other forms of communication such as toolbox meetings
- Records of inductions must be kept and made available to Council upon request.

Table 1: Types of training tools recommended by the EPA and Council

Type of training	Description
Green card	AHCSAW201- Conduct Erosion and Sediment Control & AHCWRK202 - Observe Environment Work Practices.
Inductions	Provide induction training for site staff, contractors and visitors, informing them of the environmental hazards and risks onsite, incident response procedures, and roles and responsibilities.
Toolbox meetings	Undertake toolbox sessions every day, prior to starting work for that day, where possible.
Procedures	Provide staff with documented procedures or instructions for: <ul style="list-style-type: none"> • undertaking specific activities onsite, including handling and storage of • chemicals and waste • responding to incidents (small and major) • anything else where a procedure will help to reduce risk.
Training plan	Develop and implement a training plan, and review and update as required.

6.2.3 Inspections and Maintenance

The contractor and the proponent are responsible for ensuring that all environmental protection measures are in place and working effectively. The CEMP must state when and how inspections and maintenance will occur (nature and frequency). Note: Council may review inspection and maintenance records as part of site inspections/audits.

- * CEMP protection measures must be monitored daily to ensure functionality. More detailed inspections/audits must occur at least once per week and following significant rain events.
- * The contractor must have an environmental site inspection checklist that is used for the above monitoring and inspection.
- * Where mitigation measures are found to not be working effectively, other/additional measures must be incorporated into the plan.

6.2.4 Staging of Works

Provide details of the staging of works to minimise environmental impacts.

- Clearly state that all environmental mitigation measures must be in place, and approved by Council, prior to works commencing
- Clearly state whether works will be staged, and if so, how the staging will occur.

- Staging may be related to weather conditions or proximity to sensitive receptors (e.g. waterway).
- Strip in stages where possible to minimise soil exposure.

6.2.5 Consultation with Residents

State when and how this will occur (if necessary), including which residents will be informed and why.

- Include a copy of the information that will be provided to residents.
- Informing residents may be through signage, newspaper articles etc. but must include doorknocking for closest residents
- Address amenity issues, service provision.
- Seven days' notice must be given to impacted residents.
- 24-hour contact information to direct complaints must be displayed on entry to site at all times
- A process must be included to address and resolve neighbour complaints

6.2.6 Associated Documents

Documents that support the CEMP must be included here. They may include, but not be limited to:

- Inspection checklists, induction records and incident reports.
- Site policies, procedures and plans.
- Site attribute reports (flora and fauna, cultural heritage, soil investigations).
- Site management plans (conservation, salvage and translocation, cultural heritage, weed management).
- Emergency response plans and risk registers.
- Other associated assessments, plans or reports.
- An endorsed planning permit associated with the CEMP (reference the relevant planning permit number).
- Kangaroo Management Plan.
- Weed Management Plan
- Threatened species management plans (e.g. Growling Grass Frog).
- Arboricultural assessment report (where trees are to be retained).
- Relevant Guidelines, Legislation or Standards referred to in the CEMP text

Note: relevant associated documents must be readily available on site for reference and inspection by Council.

6.3 Noise and vibration

This section must provide details on how the site works will meet the legislated noise limit requirements, and address any identified risks. The following information provides some suggestions for acceptable mitigation measures. These may be adjusted where necessary for individual sites provided that the requirements are still met. Additional measures may be proposed or required for some sites.

6.3.1 Considerations

Understand your site and identify areas to implement actions to minimise noise and vibration risks. This includes considering:

- Site planning.
- Site layout.
- Management, selection and maintenance of equipment.
- Noise reduction technology.
- Conduct of workers onsite.
- Community information and consultation.
- Working Hours
 - Document the planned working hours for the project
 - Ensure working hours meet EPA standards and are as per Council approved Traffic Management Plan. 'Normal working hours' are prescribed by the EPA as Monday to Friday, 7am- 6pm, Saturday 7am- 1pm or otherwise agreed to by Council, after evidence/justification of an exemption is provided. It must be stated that no works are to occur within 35 m of residents before 9am, in accordance with these standards. These may vary depending on the work type. Refer to EPA Publication 1834 for further information.
 - Council reserves the right to alter these times if complaints from the neighbouring residents or businesses are received.

6.3.2 Mitigation measures

- Identifying people and sensitive environments (sensitive receivers) that could be affected by your activities.
- For larger scale projects consider engaging an acoustic consultant.
- Conduct regular maintenance and inspection of machinery.
- Choose alternative equipment or methods that generate less noise or vibration.
- Mitigate offsite noise with measures such as respite offers and acoustic treatment.
- All machinery and vehicles used on site to be fitted with standard noise management equipment.
- Locate works that may generate noise as far away from neighbours as possible.
- Schedule noisy activities for least sensitive times of the day.

6.3.3 Monitoring requirements

- Monitor noise generated from the site.
- Record consultation process including details of who has been consulted.
- Enforce work hours.

6.4 Dust

This section must provide details on how the site works will manage dust and address any identified risks. The following set of standards provides some suggestions for acceptable management measures. These may be adjusted where necessary for individual sites provided that

the requirements are still met. Additional measures may be proposed or required for some sites. All measures must adhere to Council and relevant Authority standards.

6.4.1 Considerations

Understand your site first:

- Identify sources of dust and areas of management.
- Identify potential dust receptors (i.e. those that will be impacted from the effects of dust).
- Determine proximity of works to dust receptors.
- Determine the impact of removing vegetation from site and dust production.
- Determine likely wind conditions.
- Extent of exposed earth and duration of time exposed.

6.4.2 Mitigation Measures

- Retain vegetation.
- Avoid stripping large areas.
- Strip in stages.
- Install shade cloth as a wind break to slow down winds and minimise wind carried dust.
- Reduce traffic speeds to 20km/h on unpaved roads.
- Undertake surface toughening.
- Use soil binders.
- Keep to approved truck route and maintain truck route appropriately.
- Any activity involving the handling and moving of soil to be restricted on dry windy days.
- Water spray exposed surfaces as necessary.
- A functioning water truck must be available on site at all times for dust suppression and used in dry windy conditions.
- All soil being taken off site must be covered during transport.
- Use soil binders on haul routes and other high dust generating areas.
- Quickly re-establish vegetation or grass cover/cover crop following completion of works (refer to stockpile management).

6.4.3 Monitoring requirements

- Weather forecasts must be assessed prior to undertaking stripping (using Bureau of Meteorology or equivalent weather prediction site).
- Weather parameters (e.g., temperature thresholds (°C), high winds (km/h) and events (e.g., rainfall (mm/h) must be defined to allow for compliance
- Monitor air quality for dust (PM10, particles with a diameter of 10 micrometres or smaller) with use of ambient dust monitoring equipment located onsite and offsite in the surrounding community to assist with identifying the effectiveness of implemented dust controls.
- Temporarily stop works if dust is visibly discharging or emitting nuisance airborne particles beyond site boundaries. Resume works only when effective controls can be implemented, or weather conditions and air quality improve.

- Conduct post-installation maintenance of established controls (including dust monitoring equipment) and assess control effectiveness at regular intervals.

6.5 Erosion and Sediment Control

This section is to provide details on how the site works will meet the Erosion and Sediment Control requirements and address any identified risks. The following set of standards provides some suggestions for acceptable management measures. These may be adjusted where necessary for individual sites provided that the requirements are still met. Additional measures may be proposed or required for some sites. All measures must adhere to Council and relevant Authority standards.

6.5.1 Considerations

- Topography of land and sloped areas with higher erosion potential
- Structural stability of soil (some soil types are structurally unstable and more prone to erosion, and can collapse in water and lead to sedimentation of waterways)
- Sediment suspension in water (coarse sediment such as sand readily settles in water and is easy to remove, whereas fine sediment such as clay generally remains suspended in water, making it more difficult to remove)
- Existing vegetation cover and the ability of vegetation to protect against soil erosion and sediment transport
- Rainfall that may increase erosion and sediment transport
- Wind that may increase erosion and sediment transport
- The sources and characteristics of dust and sediment from your site activities.

6.5.2 Mitigation measures

Drainage Management

- Incorporate measures to ensure that stormwater runoff from the site reflects the patterns, volume and quality that existed prior to works.
- Divert upslope 'clean' stormwater away from areas that do not have a protective vegetation cover.
- Any contaminated flow generated on site must be diverted to a sediment trap or settlement treatment facility prior to release from site or into receiving waters.
- Outlet drains must be protected by sediment traps placed upstream of outlet points.
- Site runoff must be diverted away from exposed surfaces, batters or stockpiles.
- Include details of wastewater treatment/on site wastewater treatment systems.
- Stormwater drains along haul roads, truck routes and within the site must be protected with appropriate controls that function as intended

Soil Stabilisation

- Grading, excavation and construction must not proceed during periods of heavy rainfall.
- Limit disturbance when excavating and preserve as much existing vegetation as possible to reduce erosion and act as natural sediment filter.
- Re-grass or revegetate disturbed areas immediately after completion of civil works to stabilise exposed soil. Use applicable seed type for area and season, as approved by Council.
- Application of soil binders or hydro mulch with no seed may be required in some instances.

Stockpile Protection

- Minimise the number and size of stockpiles – maximum 2:1 height to width ratio.
- Stockpile must not exceed a height of 3 metres.
- Stockpiles must be placed at least 50 metres away from drainage inlets, open drains, watercourses, native vegetation to be retained and paved areas unless approved by Council.
- A cut off drain with earth bund must be installed on the up-slope side of the stockpile to divert runoff away from the stockpile.
- Sediment control structures must be placed downslope of any stockpile.
- Stockpiles in place for more than 28 days must be stabilised with vegetation.
- Stockpiles in place for less than 28 days must be covered with geotextiles, stabilisation matting, soil binder or other suitable material.
- Stockpile area must remain secure to prevent illegal dumping.
- Stockpiling must not occur within any vegetation protection areas, or within 50 metres of those areas unless approved by Council.
- Topsoil must be kept separate from sub-soil when stockpiling soil.

Sediment Traps

- Acceptable sediment control measures include (but are not limited to): geotextile sediment fences, grass filter strips, rock bunds, synthetic /biodegradable logs, check dams, and gravel sausages. Straw or hay bales must not be used. Designs and specifications of all sediment control measures must be in accordance with relevant Authority guidelines.
- Sediment run-off controls and drainage around all construction areas must be established prior to commencement of any building or works.
- Sediment control measures must have the size and capacity to withstand the flow of a one in five-year storm event.
- All sediment control measures must be maintained and intact for the duration of the works (including reinstatement period) and inspected daily, including prior to (and after) rain events to ensure they are functioning properly.
- Immediately repair any damage to sediment and erosions control measures.
- Extra sediment fencing and other sediment control measures must be stockpiled on site for emergency repairs.
- Sediment fencing (or other acceptable sediment control measures) must be installed downslope of disturbed areas.
- Sediment fencing (or other acceptable sediment control measure) along waterways must be located as far inland as possible.
- Synthetic bales (or other acceptable sediment control measure) must be placed inside all side entry pits and in front of their inlet to form a temporary sediment trap and filtration system.
- Filter socks (or other acceptable sediment control measure) must be implemented in any open channels.
- Storm water pits along established roadways subject to sediment deposits must be either fitted with kerb inlet protectors or (geofabric) filter material to capture sediments.

- All open drains and waterways must have exposed soil and batters stabilised with jute matting and hydro-seeding (or other acceptable sediment control measure). Applicant to provide a timeframe to a maximum of 28 days, to Council's satisfaction (to be assessed on a case-by-case basis).

Dewatering and water quality monitoring

- Where water is of suitable quality, reuse on site (e.g. for dust suppression).
- Monitor the quality of water to be discharged before discharge and before and after treatment. Refer to the Environmental Reference Standard, Part 5, Water (EPA May 2021, Table 5.8). Record pH and salinity.
- Treat contaminated water onsite where appropriate e.g. via flocculation or coagulation. Oils and grease may be removed from the surface of water by use of floating booms, pads and socks. (Refer to EPA Publication 1834 (Civil construction, building and demolition guide).
- Ensure any reuse of water does not cause ponding or run-off of water.
- For discharge to sewer, contact your local water authority to investigate whether the water meets the requirements for discharge to sewer by identifying the trade waste acceptance criteria and apply for a trade waste agreement.
- Treat water if necessary, before discharge. Refer to EPA Publication 1834 (November 2020) (Civil construction, building and demolition guide).
- Site to be graded to avoid water ponding.
- In the event of water ponding, this water must be pumped into a temporary sump pit and filtered through sediment fencing (or other acceptable sediment control measure) prior to discharge into any drains.
- Sump pit must be located 50m away from any outfall drains, drainage inlets, and watercourses unless otherwise approved by Council.

6.5.3 Monitoring requirements

- Measuring and monitoring the size and geometry of the stockpiles. Adjust the height and dimensions of stockpiles as required to attain the desired stability and to control dust and amenity impacts.
- Monitoring of stormwater catchment diversion controls. Ensure catch drains and earthbanks are adequately diverting stormwater.
- Removing accumulated stockpile material adjacent to sediment control fences and reinforce fences as required.

Figure 5: Maximum spacing for support post of sediment fence

Maximum post spacing	Installation condition
2m	No support wire or backing mesh.
3m	Support weir attached along top of the fabric at 1m intervals. Wire mesh or PVC safety mesh backing.

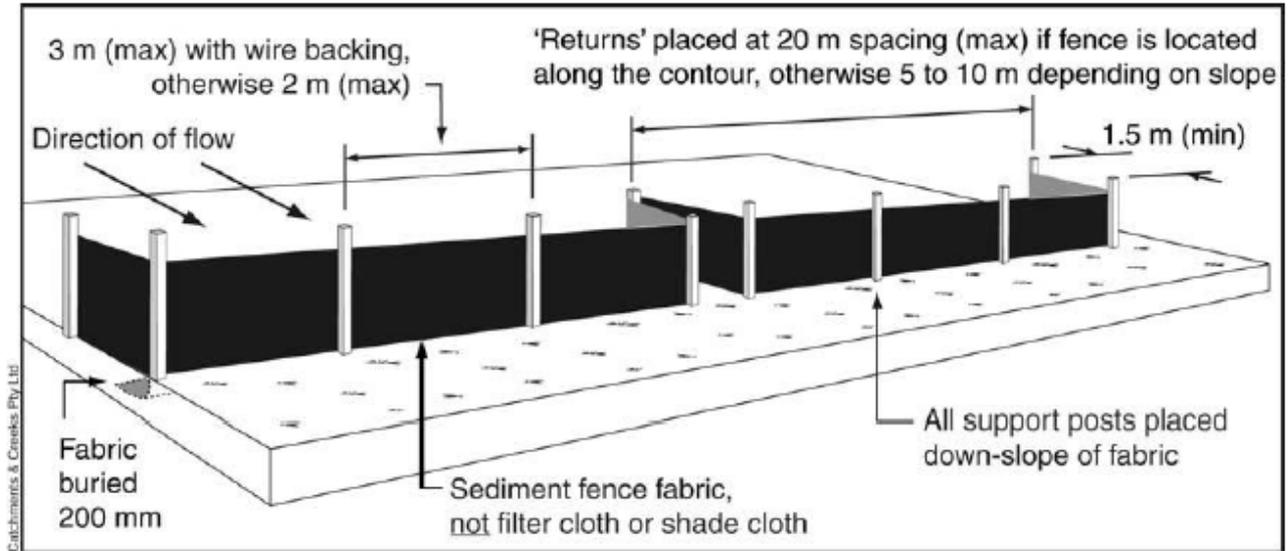


Figure 6: Typical Installation of a sediment fence with and without wire backing

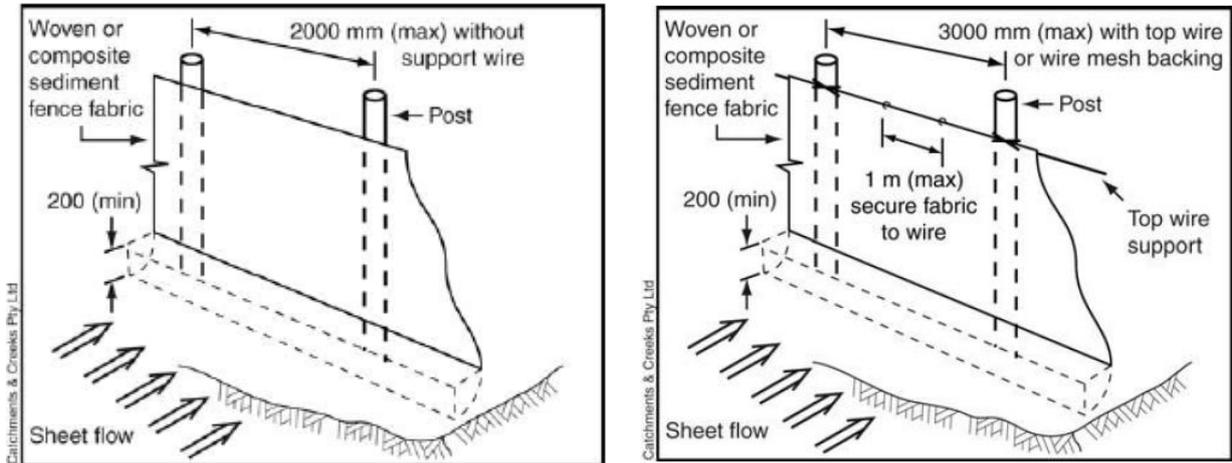


Plate 1: Photo of sediment fences installed correctly



Plate 2: Photo of sediment fences installed correctly (e.g. Sediment fence not securely installed and the sediment fence hasn't been cleared after a storm)



6.6 Vehicle and Road Management (site access, cleaning vehicles, mud on road)

6.6.1 Mitigation measures

- Only one access point to the site to be used (as per your Council approved Traffic Management Plan and truck route).
- Restrict vehicle movement to stabilised access area.
- Vehicle tracks and parking areas within the site must be covered with gravel to reduce soil disturbance and mud formation in wet weather. Wherever possible, vehicles and machinery must remain on gravelled areas.
- Wash all equipment in designated vehicle wash down area (see Figure 9).
- Sediment fencing (or other acceptable sediment control measure) must be erected around vehicle wash down area.
- All vehicles leaving the site must remove any excess sediments and clay.
- Only vehicles and machinery free of weed seed to be allowed on site.
- Install rumble grids at site exit points to shake soil off trucks, taking care not to position them in or over a drainage line. Ensure the road between rumble grids and the site exit is stabilised and with adequate distance and wheel rotations.

- All site entry/exit points must have coarse grained stabilised crushed rock and rumble strips installed, and shown in the site plan.
- The coarse grained stabilized crushed rock must extend a minimum of two (2) full wheel rotations of the largest vehicle entering and exiting the site, either side of the rumble strips.
- Existing and finished roads must be inspected daily, and any sediment deposited there must be fully removed until the end of the maintenance period.
- Roads must be cleaned prior to rain/storm events.
- Street sweepers or other physical sweeps of material deposited on roads must not be used as a primary means of sediment control.
- The access track must be inspected daily and cleaned following inspection if required and at least weekly.
- Imported soils, mulch and aggregate must be free of weeds, debris and other contaminants.

Washdown bay

- A washdown bay must be installed at the entrance to the site.
- All vehicles and machinery entering and leaving the construction area must be inspected and cleaned at the washdown bay before entering or leaving the site.
- Logbooks must be maintained and include recording inspections and cleaning of vehicles and machinery.

6.6.2 Monitoring requirements

- Monitoring of site entry and exit points and performing maintenance as required
- Monitoring the driver compliance of speed limits and the canopy use on trailers
- Monitoring of the condition and effectiveness of rumble grids and periodically removing built-up sediment and soil from under the rumble grids.

6.7 Waste

This section is to provide details on how the site works will meet the specified waste requirement address any identified risks. The following set of standards provides some suggestions for acceptable management measures. These may be adjusted where necessary for individual sites provided that the requirements are still met. Additional measures may be proposed or required for some sites. All measures must adhere to Council and relevant Authority standards.

6.7.1 Considerations

- Prioritise in order: Avoid, Reduce, Reuse, Recycle
- The types, characteristics, and volumes of waste you may generate.
- Waste removal options, waste contractors (including waste transporters and receivers) and accredited waste consigners.

6.7.2 Mitigation measures

Movement of Contaminated Soil

- Indicate whether soil will be moved on or off the site as part of the works.
- Indicate contaminant status of soils.
- Provide details of contamination (if applicable) and risk control methods.

- Refer to EPA guidelines (EPA Publication 1834 (November 2020) (Civil construction, building and demolition guide) for further information regarding contaminated soil management.
- All additional fill that is taken off-site must be taken to a legal place of disposal.
- Nominate the legal place of disposal that will be used and reference the relevant permits/licenses.

Waste Minimisation Methods

- Reduce use of materials/reuse materials where possible – avoid, reduce, reuse, and recycle.
- Separate recyclable waste and materials from general waste for recycling. Recycling bins must be clearly marked to avoid contamination of recyclable materials.

Waste Storage and Disposal

- Secure all litter and hard waste in designated areas to prevent it being washed or blown away before appropriate disposal.
- Litter and waste must not be stockpiled on site.
- Lidded rubbish and recyclables bins must be provided close to site office and/or lunch eating area for non-construction waste generated on site.
- Bins must be locked at the end of each work day to prevent illegal or unwanted waste accumulation.
- Contain all waste material on site in accordance with regulatory requirements.
- Adhere to regulatory requirements for waste disposal.
- Ensure waste types and disposal areas are appropriately signed.
- Waste and recycling area must be large enough to accommodate all waste, including construction waste.

Other

- Worksites must be free of litter - any litter visible on site must be collected daily.
- All equipment, construction materials and waste must be removed from the site in accordance with EPA Waste Regulations. Refer to EPA Publication 1834 (November 2020) (Civil construction, building and demolition guide) for further information regarding waste management.
- Where possible, select recycled materials for use on site.
- Other site-specific waste management measures.

6.7.3 Monitoring requirements

It is recommended that the proponent keep a record of:

- Date and quantity of waste transported and received.
- Registration number of the waste transporter's vehicle.
- Waste receipt dockets from the lawful place to which waste was taken to.
- Waste assessment and categorisation reports, including sampling methodologies and plan, and laboratory analysis reports, for potentially harmful materials such as contaminated soil.

6.8 Chemicals

This section is to provide details on how the site works will meet the specified chemical management requirement and address any identified risks. The following set of standards provides some suggestions for acceptable management measures. These may be adjusted where necessary for individual sites provided that the requirements are still met. Additional measures may be proposed or required for some sites. All measures must adhere to Council and relevant Authority standards.

6.8.1 Considerations

- How chemicals will be managed, including storage and spill response procedures.
- Collection and removal options for chemical waste.
- Inspecting hazardous waste containers to ensure they are sealed and free of cracks or leaks.

6.8.2 Mitigation measures

Chemical Storage

- The types, characteristics and volumes of chemicals you may use.
- Identify all chemicals that will be stored and/or used on site.
- All fuels, oils, chemicals and other hazardous materials must be stored in appropriately designated area (undercover, on an impervious surface and within a suitable bund or drip tray)
- All chemicals used on site are to be stored in accordance with, and with a copy of their respective Material Safety Data Sheets.
- Minimise storage of fuel and other chemicals on site.
- The slope of the site and the potential flow of spills must be considered in siting the storage area. If there is any chance of a spill moving out of the storage area, then bunds are to be built around the storage area.

Refuelling or Chemical Handling Procedures

- An appropriate refuelling and chemical handling point must be clearly designated.
- All refuelling and other hazardous materials use to only occur within appropriate bunded or portable sealed bunded area.
- No refuelling to occur within minimum 30 m of sensitive receivers (any drainage inlet, open drain, wetland, waterway or area of protection (e.g. conservation areas, tree protection zones and recreational infrastructure) unless approved by Council.
- Stormwater/rain protection measures must be installed for bunded areas.
- Minimal refuelling of vehicles to occur on site and wherever possible be conducted off site.

Spill Management

- Spills are to be addressed and cleaned up immediately
- Fuel/chemical spill response plans must be prepared, with key staff trained to undertake emergency containment, clean up and disposal.
- Emergency contact numbers and emergency response flow charts must be distributed and displayed clearly.

- Relevant authorities must be notified if native vegetation, fauna and/or waterbodies are impacted by a spill (i.e. state or federal authorities, wildlife rescue). These contacts must be included in the spill response plans.
- Site compound and designated refuelling areas must be appropriately bunded and graded to a sump at the lowest point where spills collect. Cut-off drains must be installed to direct runoff away from refuelling points.
- All spills must be cleaned up immediately to avoid contamination of the soil or watercourse. All spills must be reported to the superintendent and relevant Authorities.
- All soil contaminated from a spill must be removed and disposed of at an appropriate EPA landfill licensed to receive the waste type. The extent of soil contamination must be assessed, classified and removed in accordance with relevant Authority guidelines.
- Spill kits must be kept with chemical storage and refuelling areas.
- Spill kits must be placed and clearly marked throughout work site. Personnel must be trained in how to deploy spill kits, and do so appropriately.

Other

- Vehicular and machinery maintenance must not occur on site.
- All oily water collected from sumps, interceptors and drip trays must be disposed of at a suitably licensed waste disposal facility as soon as possible.
- Other site specific chemical management measures
- Using the appropriate personal protective equipment (PPE) for worker safety
- Liquid storage and handling guidelines (EPA publication 1698) and Solid storage and handling guidelines (EPA publication 1730) for more information.

6.8.3 Monitoring requirements

It is recommended the proponent keep a record of:

- Location (include source location, and storage locations), type and quantity of chemicals.
- Date and quantity of chemicals transported and received.

6.9 Significant Flora and Fauna

This section is to provide details on how the site works will meet the specified significant flora and fauna requirement and address any identified risks. The following set of standards provides some suggestions for acceptable management measures (where relevant). These standards aim to provide guidance for the level of protection required and may be adapted for individual site requirements. Additional protection measures or changes must be in line with regulatory requirements and are subject to approval by Council and other relevant authorities. Where threatened species are present (e.g. Spiny Rice-flower or Striped Legless Lizard), additional species management plans may be required.

6.9.1 Considerations

Note: Significant Flora or Fauna includes (but is not limited to):

- Native vegetation (includes patches and scattered trees).
- Threatened flora or fauna species (such as Growling Grass Frog and Spiny Rice-flower).
- Native fauna species (e.g. kangaroos).
- Mature or memorial trees.

- Habitats, breeding areas or wildlife corridors for fauna.
- Landscaped vegetation.

Environmental Protection and Biodiversity Act (1999) and Flora and Fauna Guarantee Act (1988) approval may be required before works commence, including:

- Specific species protection requirements and management plans.
- Salvage and translocation plans.

6.9.2 Mitigations measures

Vegetation Protection Zones (VPZs)

- All significant flora, fauna and habitat on or adjacent to the site must be protected and signed accordingly.
- Vegetation Protection Fencing must be erected around all native vegetation (including trees) and protected fauna habitat to be retained (VPZs) in accordance with the planning permit and relevant Native Vegetation Precinct Plan.
- Refer to Figure 7 for an example.
- Fencing must be cyclone fencing (or similar), with specifications to relevant Australian Standards such as AS4970-2009 Protection of Trees on Development Sites and to Council's satisfaction.
- Signage on Vegetation Protection Fencing marking area as a 'Vegetation Protection Area – No Unauthorised Personnel, Materials or Equipment Beyond this Point' must be clearly posted at all times (at 30m intervals) for the duration of works.
- All Vegetation Protection Fencing must be installed from the 'construction side' of the site, with no entry into the VPZs. Vegetation within protection areas must not be impacted during installation of fencing.
- No access at any time to VPZs. Areas within VPZs are not to be used for vehicular or pedestrian access, trenching, soil excavation, storage/dumping of tools, equipment materials or waste and storage of any vehicles, machinery, equipment or other materials.
- VPZs may only be accessed by suitably qualified contractors for the purposes of weed control or other Council or Authority approved maintenance or inspection where necessary. Protected vegetation must not be damaged or destroyed.
- Each VPZ must be established prior to works commencing and fencing and signage must be maintained and intact until completion of works.
- Vegetation Protection Fencing must be monitored regularly. If protection fencing is damaged, it must be immediately repaired and secured along original alignment from construction site, with no entry or damage to VPZ.
- Vegetation Protection Fencing is not to be removed or relocated without prior approval from Council.
- Interface treatment between VPZ and roads/development must be to satisfaction of Council, other relevant Authorities and relevant stakeholders.

NOTE: Encroachment on Vegetation Protection Zones is defined as including clearing and scraping, foot and vehicle traffic, stockpiling or dumping of soil, rubbish or green waste, storage of vehicles or materials, discharge of sediment, soil, dirty water or excessive flooding, and weed incursion caused by site works or non-compliance with Weed Management obligations.

Tree Protection

Typically, vegetation protection requirements are as follows:

- All trees to be retained must be protected in Tree Protection Zones (TPZs), including designated street trees and planted trees to be retained.
- Scattered trees: The Tree Protection Zone must be in accordance with the *Australian Standard for Protection of Trees on Development Sites; AS4970; 2009* - a distance of 12 times the diameter of the tree measured at 1.4m above the ground. The maximum TPZ is 15m and the minimum TPZ is 2m: Tree Protection Zones - TPZ/SRZ Calculator (unless specified otherwise in the planning permit).
- Patches of native vegetation: at least 2m buffer around the patch of vegetation.
- Trees within patches: Tree Protection Zones must be in accordance with the *Australian Standard for Protection of Trees on Development Sites; AS4970/2009* - a distance of 12 times the diameter of the tree measured at 1.4m above the ground. The maximum TPZ is 15m and the minimum TPZ is 2m: Tree Protection Zones - TPZ/SRZ Calculator.
- Trees and patches of native vegetation must be protected by Vegetation Protection Fencing erected around the TPZs.
- Any encroachment into TPZs must only be undertaken in accordance with Council requirements and approval.
- Any works in the vicinity of street trees must only be undertaken in accordance with Council Arborist requirements.
- No disturbance is to occur within the Tree Protection Zone.
- Trenching must not occur within the Tree Protection Zone with a trunk diameter of 10cm without Council approval.
- An approved Tree Management Plan is required for retained trees and any work in the vicinity trees.

NOTE: Encroachment on Vegetation Protection Zones is defined as including clearing and scraping, foot and vehicle traffic, stockpiling or dumping of soil, rubbish or green waste, storage of vehicles or materials, discharge of sediment, soil, dirty water or excessive flooding, and weed incursion caused by site works or non-compliance with Weed Management obligations.

Native Vegetation Removal

- Check whether the native vegetation is permitted to be removed (e.g. refer to the relevant planning permit and Native Vegetation Precinct Plan).
- Check all environmental approvals have been obtained before removing the vegetation. Note in some cases, approvals may be required under other environmental legislation in addition to the Planning and Environment Act 1987 e.g. (The Commonwealth, Environment Protection and Biodiversity Conservation Act 1999, Flora and Fauna Guarantee Act 1988). If in doubt, check with an environmental consultant or Council's Environmental Planner.
- Check the required offsets for the removal of native vegetation have been secured and the required written evidence has been provided to Council prior to removing the native vegetation.
- Restrict the removal of trees and other vegetation to the minimum required.
- Retain hollow bearing trees, hollow logs and trees containing large nests where possible.
 - A maximum of 48 hours prior to removal of trees/stags or complex habitat (e.g. rocky outcrops, fallen logs, rubbish piles), a suitably qualified ecologist must

undertake a fauna inspection. If potential fauna or habitat is identified (e.g. nests, hollows, dreys, reptile harbours), supervision by a suitably qualified ecologist is required during removal.

- Recovered fauna are to be removed and relocated by a suitably qualified ecologist.
 - Suitably qualified wildlife rescue/animal handling contractors must be present during the removal of trees, native vegetation and other potential animal habitat.
 - Such contractors must have authorisation under the Wildlife Act 1975 to handle and relocate fauna.
- Roots and limbs permitted to be removed must be removed by a suitably qualified level (5) arborist.
 - Within the construction site where native grassland has been permitted to be removed, slash grasslands one week prior to removal to a height of 15cm, then again two days prior to 3cm to encourage native fauna to move out.
 - Permits and offsets may be required where vegetation is removed. Illegal damage and removal is enforceable under relevant legislation.

NOTE: Stop works procedures must be provided to address situations where animals transiently or permanently enter the works area, and are subsequently at risk of death or injury. Animals are not to be disturbed and must be allowed to move of their own accord. If an animal requires removal, is injured or killed, only suitably qualified, experienced and permitted personnel are to interfere (e.g., Consultant Ecologist or persons representing Wildlife Victoria).

Vehicle Management

- No parking or storage of any vehicles, equipment or materials outside of the construction site.
- No vehicles, plant or equipment to be driven over or stored on roadside vegetation (including grassed areas).

Other

- Stormwater and dust management controls must be regularly inspected to ensure no damage to native vegetation.
- All contractors, subcontractors and others working on site must be made aware of VPZs and associated requirements.
- Other site-specific flora and fauna management measures.

Figure 7: Vegetation Protection Zone fencing example. Source: DELWP.

The following diagram must be included in the CEMP:

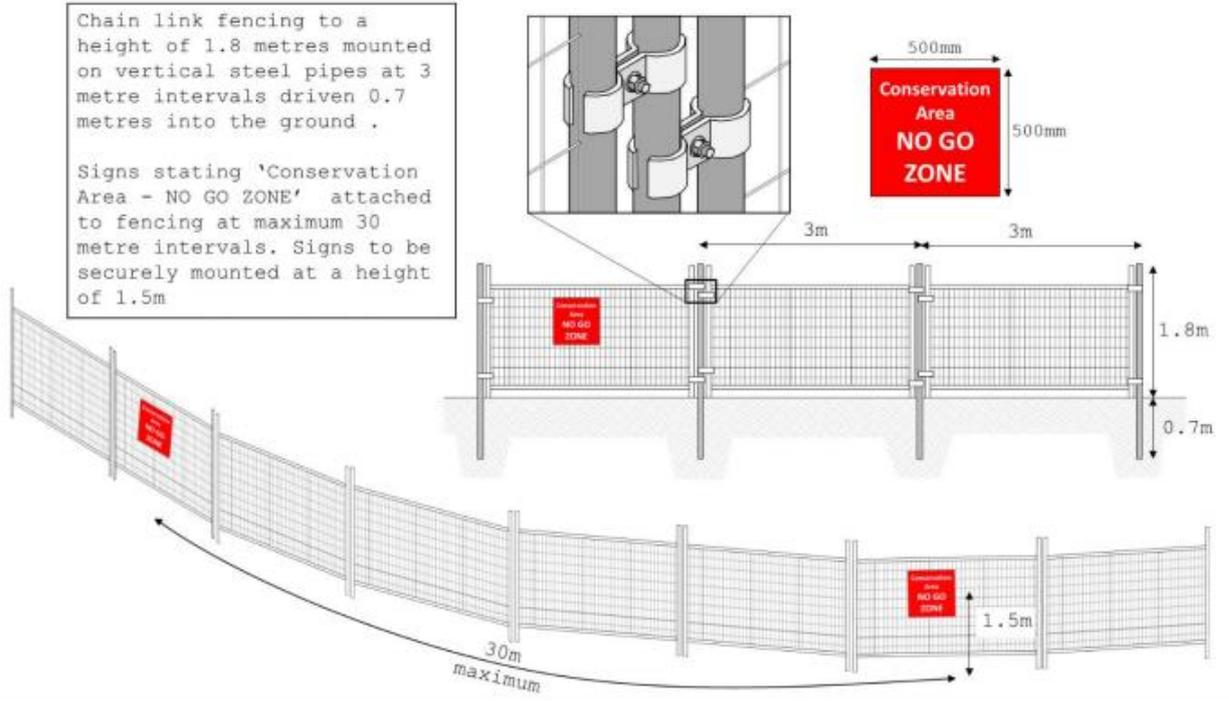
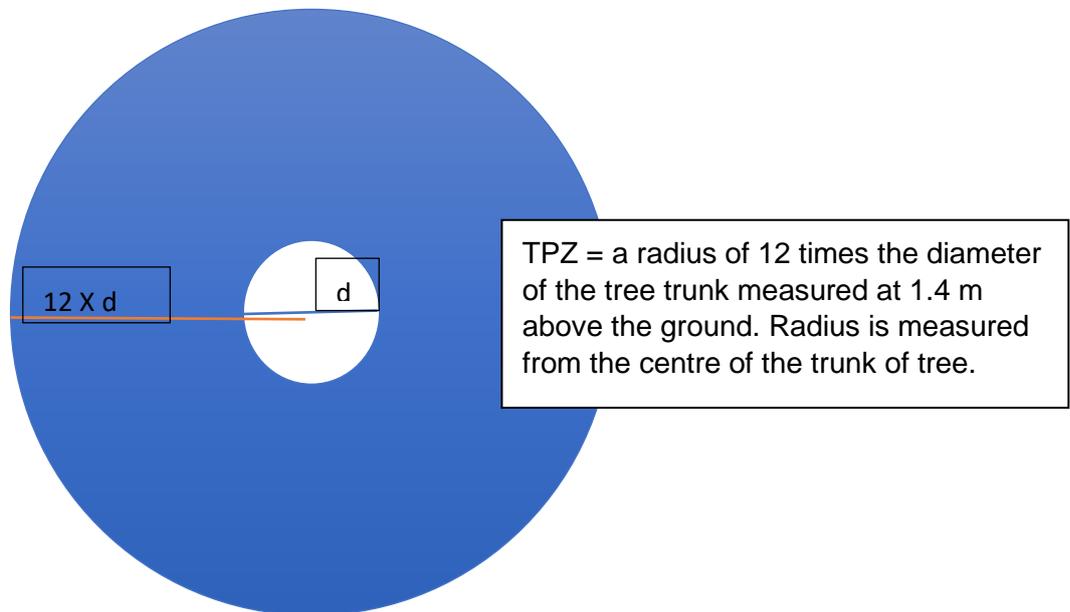


Figure 8: Diagram of Tree Protection Zone in accordance with AS4970 (2009)



6.10 Weeds and Pests

All Council and relevant Authority requirements must be adhered to in relation to weed and pest animal control, in compliance with the *CaLP Act (1994)*. Provide details on weeds or pests present on site and management measures proposed to mitigate their impact and spread. The protection of significant flora and fauna must be taken into account when controlling weeds and pests on site.

Council has prepared a template for the preparation of a Weed Management Plan. Use the template when preparing the Weed Management Plan.

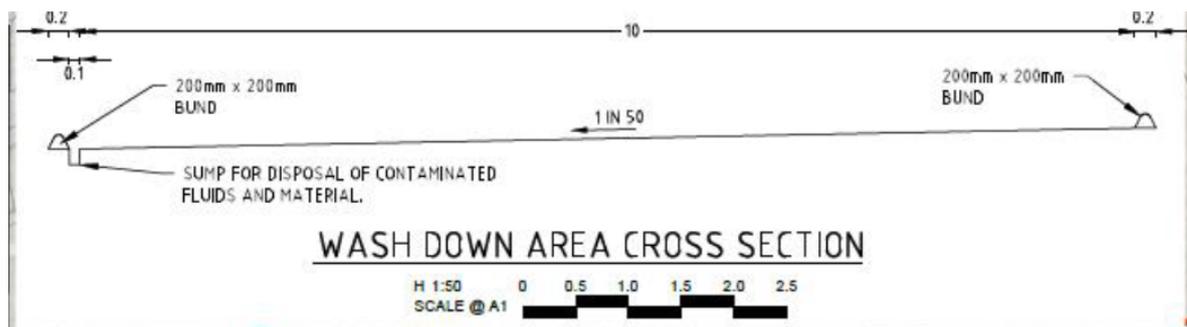
6.10.1 Weed Management Plan:

- Prepare a Weed Management Plan (WMP) following Council's template for preparation of Weed Management Plans.
- Reference the WMP in the CEMP and highlight the key mitigation measures to be implemented in the CEMP.

6.10.2 Vehicle and machinery hygiene protocols:

- Establish a washdown bay for inspection and cleaning of vehicles, machinery and equipment.
- Show the location of the washdown bay on the site plan.
- Refer to Council's specification for Washdown Bay (in the WMP Guidelines) and Figure 9.
- Inspect machinery, vehicles and equipment entering and leaving site and clean excess soil and organic matter in designated wash down areas only (refer to Figure 10).
- Undertake periodic cleaning of excess soil and organic matter from vehicles, machinery and equipment as required in designated area.
- Establish sediment fencing (or other approved sediment control measure) around the wash-down area to prevent water and sediment runoff.

Figure 9: Washdown Bay dimensions



Source: supplied by Melton City Council

- Control all weeds that might germinate from soil accumulated in the wash down area.
- Hose down, air-blast and vacuum vehicles, equipment and machinery to removing weed seeds must occur when entering and leaving site (in designated wash down area only).
- All contractors, sub-contractors and others working on site must be trained in issues relating to weed hygiene at a compulsory induction prior to commencing works.

- Keep logbooks of inspections and cleaning: All inspections and cleaning must be recorded in a logbook. The logbook must be available for Council inspection upon request from Council. Refer to WMP template for inspection and cleaning checklists.
- Maintain the washdown bay and dispose of accumulated sediment containing weed propagules in accordance with the Catchment and Land Protection Act 1994.

6.10.3 Weed control

- All weed control must be completed in accordance with the CaLP Act (1994)
- Undertake weed control of declared noxious weeds (and other weeds specified in the WMP) before stripping of topsoil occurs. Stripping of topsoil is not considered weed control.
- Undertake regular inspections for declared noxious weeds and control during construction and post construction phases (maintenance period).
- Commence working with clean machinery in weed-free areas and subsequently move into weed affected areas where possible.
- The site must be kept free from all target weeds for the duration of works and the reinstatement and maintenance period. Target weeds include all noxious weed species, environmental weeds and other highly invasive weeds.
- All infestations of target weed species must be immediately eliminated prior to seeding during the period of construction and the duration of the reinstatement and maintenance period.
- All weed control is to be undertaken by a suitably qualified contractor.
- Herbicide use in or adjacent to water bodies and drainage lines must be minimised, with waterway sensitive products used where necessary.
- When working near or within native vegetation, use spot spraying with appropriate, non-residual herbicide, to prevent off-target killing of native flora species via herbicide drift/herbicide over spraying.
- Other weed control options may include mechanical and manual removal, subject to native vegetation protection.
- All weed disposal must be undertaken according to relevant Authority standards (noting a permit from Agriculture Victoria is required if transporting declared noxious weeds or soil containing propagules of declared noxious weeds off-site).
- Slashing must not occur when the targeted weeds are setting seed.
- Shade-cloth must be installed on the perimeter fence to catch weed seeds and prevent the spread of seed by wind where necessary. This is of particular concern when Serrated Tussock is present on the site.

6.10.4 Pest Animal Control

- Rabbit baiting (if required) to be conducted twice yearly, in autumn and spring, in conjunction with adjacent landowners (if possible). Adjoining landowner notification and signage required.
- All pest animal control is to be undertaken by a suitably qualified contractor

Figure 10: Machinery washdown checklist. Source: EPA Victoria.



6.11 Archaeological and Heritage

This section is to provide details on how the site works will meet the specified archaeological and heritage requirements and address any identified risks. Management measures should be included on CEMP even when nothing of archaeological or heritage value is present on site or a Cultural Heritage Management Plan is not required. The following set of standards provides some suggestions for acceptable management measures.

- Should any artefacts be uncovered during the process of the works the superintendent must be contacted immediately and relevant procedures implemented.
- Stop works immediately and isolate the area with protection zones.
- Contact Council and community/traditional landowners.
- Determine ongoing procedures and monitoring.
- Arrange Collection and relocation by relevant authorised persons where required.
- Implement any other management measures as identified in approved Cultural Heritage Management Plan.
- Other site specific archaeological and heritage management measures.

6.12 Fire risk

6.12.1 Considerations

- The contractor will be responsible for developing an emergency management plan to deal with issues such as fire.
- Cigarette smoking also poses a risk of fire ignition and this risk will need to be managed by the contractor.

6.12.2 Mitigation measures

- Have a spotter observing any welding or grinding operations, and when chainsaws or machinery with hot exhausts are in use
- No construction works will take place on days of total fire ban (TFB).
- The use of spark or flame emitting equipment such as grinders and welders, or risks posed by hot exhausts on chainsaws and machines, will be monitored by a spotter equipped with a fire extinguisher, rake hoe and suitable water supply.
- No fires will be lit for cooking or warmth by the contractor within or near the project area.
- No fires are to be lit on high risk days or outside fire designated areas.

6.12.3 Monitoring

- Fire risk monitoring must occur during warmer months and daily during high risk days.

7. Additional plans and approval requirements

7.1 Kangaroo Management Plan

For most subdivisions, a Kangaroo Management Plan (KMP) must be prepared by a suitably qualified ecologist and be approved by DELWP. In some precincts, a KMP is an application requirement (e.g. Toolern) but in other precincts the KMP must be prepared and endorsed by DELWP before the certification of the Plan of Subdivision (e.g. Kororoit).

The KMP must follow the Guide to preparing a kangaroo management plan for Melbourne's growth corridors (DELWP draft 2014) and be endorsed by DELWP. The DELWP approved KMP must then be submitted to Council and implemented to the satisfaction of Council and DELWP.

- Reference the KMP in the CEMP.
- Implement the KMP in full.
- All changes to the order of stages of construction will require an updated KMP to be submitted to DELWP for approval.

7.2 Works in Conservation Areas (WiCA)

Some subdivisions adjoin Conservation Areas and/or involve proposed works within Conservation Areas (such as drainage and shared paths). Refer to the Native Vegetation Information Management (NVIM) tool for location of conservation areas and the relevant Precinct Structure Plan (PSP). Conservation areas within the City of Melton include:

- Growling Grass Frog Conservation areas (refer to the Biodiversity Conservation Strategy for Melbourne's Urban Growth Corridors (BCS); DELWP 2013).
- Nature Conservation areas (refer to the BCS), usually supporting native grassland and threatened species populations and/or habitat, such as Spiny Rice-flower.
- Conservation reserves (refer to the PSP), usually includes native vegetation to be retained.
- All areas of native vegetation specified to be retained in a Native Vegetation Precinct Plan (NVPP).

7.2.1 Biodiversity Conservation Areas

- Show all conservation areas that are present within/adjoining the subject site on the site plan. Conservation areas must be accurately shown on site plan – refer to DELWP for latest spatial (GIS) data on conservation area boundaries.
- Include measures specified in the relevant Precinct Structure Plan, i.e. conservation area concept plan or conservation area interface plan. Such measures may include: fencing requirements, buffers, and planting requirements.
- Fence off conservation areas prior to construction commencing with No-Go zone fencing. Fencing must be sturdy (chain mesh/cyclone fencing).
- Erect signs along protection fencing: Conservation Area – No-Go Zone.

7.2.2 Approval for works in Conservation Areas

Any new development or change in land-use within a Conservation Area identified in the Biodiversity Conservation Strategy will require approval. Proponents must submit a Works in a Conservation Area (WICA) application to DELWP.

- No works may be conducted in conservation areas unless approved first by DELWP.

- If works are proposed within the conservation area, then such works must be approved by DELWP before works may proceed: obtain Works in Conservation Area Approval (WICA) from DELWP.
- In such cases, a site-specific CEMP for the works in the conservation area must also be approved by DELWP (not just Council): seek approval of the CEMP from DELWP.
- Provide written evidence of approval of WICA and approval of the CEMP from DELWP when submitting the CEMP to Council for endorsement.
- A flora and fauna survey conducted by a suitably-qualified and experienced person may be required.
- Refer to DELWP Guidance <https://www.msa.vic.gov.au/regulatory-requirements/works-in-a-conservation-area>

7.3 Growling Grass Frog Management Plans and Standards

7.3.1 Growling Grass Frog Conservation Management Plan – Toolern Precinct Structure Plan

If your subdivision or works is within the Toolern Precinct Structure Plan and along the Toolern Creek, then you are likely to require a Growling Grass Frog Conservation Management Plan. Refer to Figure 3 (page 45) of the Toolern Precinct Structure Plan for a map of areas subject to preparation of a Growling Grass Frog Conservation Management Plan (100m offset from the creekline).

- Prepare a Growling Grass Frog Conservation Management Plan (GGF CMP) – refer to GGF mitigation measures below.
- Prior to commencement of works, obtain approval of the Growling Grass Frog Conservation Management Plan (GGF CMP) from DELWP.
- Provide a copy of the DELWP approved GGF CMP to Council.
- Reference the GGF CMP in the CEMP.
- Implement the GGF CMP in full.

7.3.2 Growling Grass Frog Conservation Areas

- Refer to DELWP Growling Grass Frog Habitat Design Standards and Growling Grass Frog Crossing Design Standards.
- All roads and crossings within the conservation areas or other known GGF locations must meet the Growling Grass Frog Crossing Design Standards.

7.3.3 Growling Grass Frog Management Protocols

Amphibian populations in Australia, including the Growling Grass Frog (GGF) are under threat from the Chytrid Fungus (*Batrachochytrium dendrobatidis*; Bd). Bd infects the skin of frogs, destroying its structure and function, and can ultimately cause death. Sporadic deaths occur in some frog populations and 100 per cent mortality occurs in other populations. Infection of amphibians with Bd resulting in chytridiomycosis is listed as a key threatening process under the EPBC Act (DEWHA 2009).

Development abutting the conservation areas and works within conservation areas could introduce and/or spread Bd, if not carefully managed. Although urban development is generally not allowed within the GGF conservation areas, the MSA Program allows for (subject to DELWP approval):

- The construction of some passive recreation areas within GGF conservation areas, such as shared paths and playground/picnic areas.
- The construction of wetlands to provide additional habitat for GGF.

- The construction and operation of stormwater treatment ponds to manage stormwater discharge from abutting urban development.
- The construction of overpasses, bridges and roads at designated locations.

These construction activities require strict Hygiene Protocols to be implemented to prevent the introduction and/or spread of Bd into or between GGF conservation areas.

The following protocols must be included in the CEMP and implemented for all works in GGF conservation areas.

Frog handling procedure

- All personnel working on site must be made aware of the potential presence of Growling Grass Frog and how to recognise this species.
- If Growling Grass Frogs are encountered during works, then:
 - Frogs must not be handled or harmed;
 - Works must cease until a suitably qualified ecologist has relocated the frog to a suitable recipient site in the Conservation Area and within 100 metres of the initial capture point;
 - Latex gloves must be used when handling frogs (new pair to be used for each frog handled);
 - Any injured frogs should be reported immediately to DELWP.
- The EMP must have a contact (qualified ecologist) for relocation of frogs and DELWP contact.
- The EMP must have an information sheet on the Growling Grass Frog – what it looks like and what to do if encountered. All of this information must be available on site.

Plate 3: Photo of Growling Grass Frog



Growling Grass Frog - Photo source: Biosis Pty. Ltd.



Growling Grass Frog - Photo source: Victorian Fauna

Frog exclusion fencing and silt fencing

- Erect frog exclusion fencing and silt fencing on the downward side of the construction area between the construction area and waterway/wetland.
- Frog exclusion fencing must be 1 m high (noting this is higher than typical silt fencing).

- Frog exclusion fencing must be located on the conservation area side, i.e. to prevent frogs getting trapped between the frog exclusion fence and silt fence.
- Silt fencing must be to Melbourne Water standards.

Disinfection of vehicles, machinery and boots

- All vehicles, machinery and equipment and personnel boots must be cleaned and disinfected prior to entering and exiting the works area.
- Establish a washdown and disinfection bay at the entrance to the construction area.
- Establish a boot wash station at the entrance to the conservation area, to be used by all personnel entering or leaving the site to disinfect boots.
- Erect signs at entrance to washdown and disinfection bay and boot wash station:
Conservation area: Before entering or leaving the conservation area, all machinery, vehicles and equipment must be cleaned and disinfected at the washdown and disinfection bay. All personnel must clean and disinfect boots before entering or leaving the conservation area.

Figure 11: Example of Growling Grass Frog exclusion fencing



8. Reinstatement

All reinstatement works and maintenance must be to Council's satisfaction. The following set of standards provides some suggestions for acceptable reinstatement standards and management measures.

8.1.1 Topsoil

- Topsoil must be carefully removed, stored and replaced to maximise the potential for vegetation recovery. All weeds must be controlled.
- If appropriate, topsoil replacement must be evenly spread over the disturbed area. All sites must be top dressed with clean soil. Imported soils, mulch and aggregate must be free of weeds, debris, acid sulphate and other contaminants as per current Australian standards and relevant Authority guidelines.
- No surface rocks or soil clods in areas of mowing are to remain.

8.1.2 Revegetation

- Where possible seed of locally native species is to be collected before commencing construction and/or during construction to provide seed stock for revegetation purposes to the satisfaction of a qualified bushland regeneration specialist.
- Reinstatement/revegetation must include whole work zone, including all disturbed areas.
- Rehabilitate and revegetate works progressively.
- Adequate stabilisation must be maintained until plant cover is established.
- When sowing of a cover crop fails to establish and meet revegetation requirements, re-sowing must occur.
- Erect Vegetation Protection Fencing around all areas to be revegetated or fencing/bollards as detailed in the Council approved landscape/reinstatement plan.
- Re-sown grasses/forbs must be established and percentage groundcover target achieved before temporary fencing can be removed.
- Only timber mulch appropriate to situation must be used in revegetation (and specifically native revegetation).
- Nature strips, batters and other disturbed surfaces must be topsoiled, seeded and cultivated to establish a consistent grass cover to Council's satisfaction.

8.1.3 Weed and Pest Control

- Control target weed species on areas of reinstated soil prior to sowing and following the first significant rainfall event (at least 5mm).
- Undertake follow up weed control (e.g. spot spraying) for revegetation areas every 3 months for the duration of the works and maintenance period.
- Control populations of rabbits that may threaten the success of revegetation works in accordance with relevant legislation and regulations.

8.1.4 Interim period between civil works and landscaping works

- Interval between clearing, soil stabilisation and replanting must be kept to an absolute minimum.
- In cases where there will be any delay between completion of civil works and landscaping works, the site must be continued to be managed to prevent environmental impacts e.g.

sediment and erosion control measures are likely to be required to remain in place for this interim period.

- Stabilise exposed areas of soil to prevent dust generation, erosion and sediment run-off.

8.1.5 Other

- Site must be reinstated and landscaped (if required) to Council's satisfaction before handover.
- Consent must be obtained from Council to work within Council road reserves.
- Other site-specific reinstatement measures.

9. Compliance Monitoring

Inspections must be undertaken to ensure that environmental management is effectively managed onsite.

9.1 Adaptive Management

A CEMP is a working document and must be updated regularly so that it is fit for purpose. Adaptive management is a procedure for implementing management while learning about which management actions are most effective at achieving specified objectives. If mitigation measures are deemed not effective at achieving the required environmental objectives, then those mitigation measures must be modified so that the objectives are achieved.

Adaptive management requires regular monitoring of implementation and effectiveness of mitigation measures.

9.1.1 Monitoring effectiveness of mitigation measures

The following must be included in all CEMPs and implemented:

- All environmental mitigation measures found to be defective and/or ineffective at any time,
 - a. are to be repaired, replaced and/or adequately improved immediately, so as to be effective and sufficient OR within a timeframe that ensures an impact cannot and does not occur;

AND

- b. b. If the defective or ineffective mitigation measure could potentially result in an environmental impact, all works must cease immediately and may not resume until the mitigation measure is repaired, replaced and/or adequately improved, so as to be effective and sufficient.

9.1.2 Pre-commencement report

A number of environmental measures must be put in place before works may commence on site e.g. vegetation protection fencing, washdown bay installation, weed control etc... A report must be submitted to Council prior to commencing works demonstrating that such required environmental mitigation measures have been implemented. The report must include photos and results of inspection undertaken by a suitably qualified environmental practitioner, who has checked that the measures have been adequately installed prior to construction commencing.

9.1.3 Pre-commencement meeting

Prior to starting civil construction works, a Pre-commencement Meeting with Council's Infrastructure Planning team is required. The infrastructure team will invite an Environmental Planner to the pre-commencement meeting, where relevant. The pre-commencement form must be completed and submitted when requesting a pre-commencement meeting (refer to Appendix 5 and council's website: <https://www.melton.vic.gov.au/Services/Estate-Subdivisions/Subdivision-Pre-Construction>).

9.1.4 Inspections

Undertake inspections as a minimum (in accordance with the provided definitions):

- Periodically – depending on risks associated with the site.
- Before rain events (making sure site is prepared).
- During rain events (how well are measures working?).
- After rain events (is rectification or maintenance works required?).

- During extreme wind events (monitor generation of dust).
- During works which generate significant noise.
- During high risk work activities.

What to inspect:

- Site: for evidence of environmental issues and areas requiring management.
- Measures: effectiveness, installed correctly, maintenance required.
- Receiving environment and receptors: impact.
- Processes of works: check individuals are following correct procedures.

9.1.5 Compliance monitoring report

Monthly inspections by a suitably qualified environmental practitioner must be conducted to monitor:

1. Implementation of the endorsed CEMP; and
2. Whether the environmental measures remain fit for purpose (i.e. are achieving the required environmental outcomes and are in accordance with relevant environmental legislation and policies).

Where environmental measures are deemed ineffective or requiring repair/maintenance, then the report must include recommendations on alternative environmental measures to be implemented, repair/maintenance to be undertaken and timeframe for such works.

A copy of the monthly inspection report must be submitted to Council. The report must include:

- Name and contact details for person who conducted the inspection and prepared the compliance report.
- CEMP items inspected.
- Results of inspection: items considered satisfactory, items considered unsatisfactory and requiring repair/maintenance, recommendations for additional environmental mitigation measures, time-frame for rectification.
- Confirmation that all recommended repairs/maintenance/installation of alternative environmental mitigation measures have been completed.

9.2 Incident Reporting

- All breaches of the *Environment Protection Act 2017* (EP Act) must be reported to the EPA.
- If you're the person who operated the activity that caused the incident it's your legal responsibility to report it. This is the duty to notify EPA of notifiable incidents under section 32 of the *Environment Protection Act 2017*.
- This duty also applies when someone should have been reasonably aware of the incident. Not being aware of the impacts of your business activities is not an excuse.

10. Site Plan 1 – Types and Locations of Environmental Protection Measures

Site Plan 1 provides space for a map or plan of the site and surrounding area along with the types and locations of environmental protection measures and other relevant site features. A space for general notes is also provided. The plan must be clear and easily interpreted, with all necessary protection measures and features to Council satisfaction. Site Plan 1 must include (but is not limited to) the following:

- Planning permit number, including all amendments
- Estate name and stage number.
- CEMP revision (use letters A, B, C etc...)
- Aerial image of site and minimum 50m around all sides of work site including locations of noise, dust, erosion and sediment receptors.
- A site plan showing where the site is located in relation to the surrounding area (if part of a staged subdivision, include the staging master plan)
- A clear Legend, North arrow and scale
- Work site boundary
- Site office, parking area, re-fuelling, chemical storage, washdown, spill kits, access points, haul routes, over ground and underground utilities
- Stockpiles and waste management areas
- Site drainage patterns, existing water bodies and waterways
- Sediment and erosion controls
- Conservation areas (e.g. Growling Grass Frog Conservation Areas, Nature Conservation areas specified in the Biodiversity Conservation Strategy) and other conservation reserves (e.g. specified in Precinct Structure Plans).
- Areas of native vegetation including trees (clearly showing vegetation to be retained and vegetation permitted to be removed).
- Areas of non-native vegetation to be retained
- Protection measures for flora and fauna.
- Areas of cultural heritage sensitivity.
- All protection zones (including vegetation, tree and heritage).
- Environmental Significance Overlay (if applicable).

If the site plan is not large enough to accommodate all relevant information, additional site plans can be attached. Note: the overriding requirement is that the plan(s) must be clear and easily interpreted by Council, contractors and site visitors.

11. Site Plan 2 - Designs of Environmental Protection Measures

This plan is to show the designs and specifications of all the environmental protection measures detailed in the CEMP. A space for general notes is also provided. All designs and specifications must meet Council and relevant Authority standards. Designs and specifications must include (but are not limited to):

- Sediment control measures.
- Erosion control measures.
- Bunding.
- Site compound details.
- Site access points.
- Conservation areas (e.g. Growling Grass Frog Conservation Areas, Nature Conservation areas specified in the Biodiversity Conservation Strategy) and other conservation reserves (e.g. specified in Precinct Structure Plans).
- Vegetation and tree protection measures.
- Threatened species management protocols.
- Waste containment measures.
- Water diversion structures.
- Stockpile storage.
- Waste containment measures.
- Vehicle cleaning measures.

Note: the proposed designs should reference the technical documents or manuals that they are sourced from e.g. specific EPA guidelines; PSP and NVPP conditions etc...

Appendix 1 – Risk Assessment Guidance

Fill out the following items on the Risk Assessment Checklist on Plan 1 of the template.

A.1.1: Identify Environmental Aspects

Generic construction related aspects including noise, dust, erosion and sediment, waste, chemicals, flora and fauna and archaeological/heritage have been identified. Other site-specific aspects must also be included based on the site's attributes. These are to be documented in the blank boxes on Plan 1.

A.1.2: Identify Issues

Under issues, document the items that influence the assignment of the level of risk for each aspect. Generic issues have been included, but site-specific details are required for these. In addition to the nominated issues, you must fill out any other site-specific issues next to the blank bullets.

A.1.3: Likelihood and Consequence

Based on the issues, document the likelihood and consequence of an aspect occurring.

A.1.4: Level of Risk

A.1.4.1: Risk (before mitigation measures are applied):

Using the risk assessment table below, determine the level of risk based on the likelihood of occurrence and the potential consequence. Document this on Plan 1 Risk Assessment in the box marked 'overall risk'. The level of risk will determine the type and amount of environmental protection measures that will be required on a site. Where a significant risk to the environment has been identified, environmental protection measures must be introduced to reduce the risk to an acceptable level. Aspects with a medium or low risk should also have practicable management measures implemented if these can further reduce risk.

A.1.4.2: Residual risk (after mitigation):

Repeat the risk assessment after mitigation i.e. using the risk assessment table determine the level of residual risk after the mitigations are implemented. Include results of risk assessment on Plan 1.

Table 2: Likelihood: What is the likelihood that the aspect will have an impact on the environment?

Likelihood	Definition
Rare	Unlikely to occur during a project even if controls are missing
Unlikely	May occur once or twice during the project if preventative measures are not applied
Likely	Will occur more than once or twice but less than weekly if preventative measures are not applied.
Certain	Will occur at a frequency greater than every week if preventative measures are not applied.

Table 3: Consequence: How severe will the consequences be?

Consequence	Definition
Minor	<p>No or minimal adverse environmental or social impacts e.g.:</p> <ul style="list-style-type: none"> • no measurable/ unlikely effect on waterway/ stormwater quality and ecosystems • no or isolated community complaints • no or isolated events where areas of soil <1m² is contaminated • no or unlikely impact on archaeological/heritage places, sites or objects • no likelihood of being fined
Moderate	<p>Moderate undesirable environmental or social impacts e.g.:</p> <ul style="list-style-type: none"> • localised, short term noticeable/measurable change in waterway/ stormwater quality • short term, minor changes to ecosystems • soil contamination over an area <1m² • some annoyance or nuisance to community • isolated, partial disturbance or movement of archaeological/heritage places, sites or objects • fines unlikely
Major	<p>Major adverse environmental or social impacts e.g.:</p> <ul style="list-style-type: none"> • medium-term, noticeable/measurable change in waterway/ stormwater quality • isolated deaths of non-vulnerable fauna/ flora species • noticeable, localised changes to ecosystems • soil contamination over an area 1m² to 10 m² • annoyance or nuisance to community • frequent, partial damage or off site movement of archaeological/heritage places, sites or objects • fining likely or works may be halted
Catastrophic	<p>Significant damage or impact on environment or community e.g.:</p> <ul style="list-style-type: none"> • severe and/or persistent waterway/ stormwater quality pollution • deaths of significant fauna/ flora • widespread and/or significant changes to ecosystems • soil contamination over an area > 10 m² • widespread community impact resulting in illness, injury or inconvenience • loss or destruction of archaeological/heritage places, sites or objects • receiving a fine/s is a certainty or works will be halted

	Consequence			
Likelihood	Minor	Moderate	Major	Catastrophic
Rare	Low	Low	Medium	Medium
Unlikely	Low	Medium	Significant	Significant
Likely	Medium	Significant	Significant	Significant
Certain	Medium	Significant	Significant	Significant

A1.4.3: Example of a risk assessment

Responsi-bility	Operation or activity	Inherent risk (uncontrolled)					Risk after implementation of control measures				
		Environmental aspect	Environmental/heritage impact	C	L	R	Current monitoring/control/ operational procedures	Frequency of monitoring	C	L	R*
Project manager	<ul style="list-style-type: none"> Construct temporary security fence or fence off no go areas with sturdy fencing (no ground disturbance required) 	<ul style="list-style-type: none"> Inadvertent access of vehicles and machinery onto native vegetation. 	<ul style="list-style-type: none"> Damage to native vegetation and/or fauna habitat Soil compaction 	Moderate	Likely	S	<ul style="list-style-type: none"> Surveyor to map out location of fencing with pegs and flagging tape first as shown on site plan. Follow weed management protocols, including inspect and clean vehicles and equipment before commencing works at the designated washdown bay. Secure areas of protected native vegetation 'no go areas' with sturdy protection fencing. Photograph vegetation showing fencing installed/ flagging tape mapped out. Provide 'No Go Area' signage on temporary fencing at 30m intervals. No work, parking of vehicles, machinery or storage of equipment is permitted outside of the designated locations as described on Site Plan. Parking areas and equipment/materials storage areas are to be clearly delineated with high visibility bunting and or rope. 	Daily during construction	Moderate	Rare	L
Project manager	<ul style="list-style-type: none"> Excavation and grading 	<ul style="list-style-type: none"> Inadvertent excavation at incorrect location Uncontrolled assess to native vegetation, historical heritage or areas of cultural heritage sensitivity 	<ul style="list-style-type: none"> Destruction of native vegetation and/or fauna habitat Destruction of cultural heritage or historical heritage 	Major	Likely	S	<ul style="list-style-type: none"> Mark alignment of impact area prior to works commencing. Secure areas of protected native vegetation and heritage areas as shown on the site plan prior to works with high visibility temporary fencing. Follow weed management protocols, including inspect and clean machinery and vehicles before commencing works at the designated washdown bay. Induct staff into EMP and provide training in responding to cultural heritage contingencies provided in this EMP. 	Daily during construction	Major	Rare	M

Appendix 2: CEMP Template

Standard wording required for submission and approval by Melton City Council has been included in the below template. Ensure all relevant standard wording is included with CEMP submission.

NOTE: The below is provided as an example template. The working template is provided in MS Word format on the Council Website.

- The following have been identified as significant environmental aspects for the site:
-
-
-

These aspects shall be managed with the environmental protection measures outlined on this plan.

Site EMP A1 Plan (1)- Types and Locations of Environmental Protection Measures
 Project Name:
 Date and Revision: (use Rev A, B, C)

↪ **Management**

1. Responsibilities:
 Owner:
 Applicant:
 Planning Consultant:
 Contractor:
 Site Supervisor:
 Flora and fauna:
 Other:
 Emergency Contact 1:
 2:

4. Staging of Works:
Environmental protection devices installed prior to commencement

2. Communication of EMP Requirements:

Records of induction sessions & toolbox meetings (regarding EMP requirements) conducted on site with personnel and subcontractors are to be kept by the permit holder on site and made available for inspection at the request of the Local Planning Authority

5. Informing Residents:

*If a complaint arises, we encourage direct contact to rectify the issue:
 In writing to [email address] or
 If the matter is urgent, 24/7 assistance is available on [phone number].*

We will endeavour to respond to all complaints within two business days. Pending the nature of the complaint, response resolution timeframes may vary. If the matter has not been resolved to the complainant's satisfaction, it will be referred to council.

3. Inspections and Maintenance:

*All environmental mitigation measures found to be defective and/or ineffective at any time,
 a. Are to be repaired, replaced and/or adequately improved immediately, so as to be effective and sufficient OR within a timeframe that ensures an impact cannot and does not occur;
 AND
 b. If the defective or ineffective mitigation measure could potentially result in an environmental impact, all works must cease immediately and may not resume until the mitigation measure is repaired, replaced and/or adequately improved, so as to be effective and sufficient*

Records of daily inspections to be kept in a site diary and made available for inspection at the request of the Local Planning Authority

6. Associated Documents:

-

In the instance that an Australian Standard, Guideline or Legislation Referenced in this CEMP becomes invalid, superseded or replaced, the updated standards will apply

▪ **PLAN HERE**



↪ **Noise** **Risk: Significant/Med/Low**

- **Requirement:** EPA Victoria and Council requirements must be adhered to in relation to the level of noise and working hours, to ensure that residents and other applicable neighbours to the site are not disturbed unreasonably. The generation of noise must be minimised.

7. Working Hours:

am to pm
 Mon-Fri

am to pm
 Sat

No work before 9am ≤ 35m of residential dwellings

8. Noise Minimisation Methods:

Refer Ch.4, EPA1834 Civil Construction, Building & Demolition Guide

9. Other:

↪ **Dust** **Risk: Significant/Med/Low**

- **Requirement:** Dust generation must be minimised to ensure there is no health risk or loss of amenity.

10. Minimising Dust Generation: <i>Visual monitoring of area and weather monitoring to occur to ensure compliance with ch.5 EPA1820 & EPA1834 Civil construction, building and demolition guide"</i> <i>Check property boundaries for dust blow-off and implement additional controls if dust is reaching neighbouring properties</i>	12. Contingencies:
11. Dust Suppression:	13. Other:

- Erosion and Sediment Risk: Significant/Med/Low

Requirement: Erosion and sediment must be managed in accordance with current best practice environmental management practices, to prevent sediment-laden water from entering any drainage system or natural waterway.

14. Drainage Management:	17. Sediment Traps:
15. Soil Stabilisation: During Construction: Post Works:	18. Dewatering: <i>When dewatering, water is to be pumped to suitable non-native vegetated area. If there are no suitable vegetated areas, treatment of sediment laden water is required before discharging runoff to a stormwater system, where turbidity exceeds 30 NTUs and is higher than upstream measurements. Hourly measurements of discharge water quality must be taken</i>
16. Stockpile Protection:	19. Vehicle and Road Management: Site Access: Cleaning Vehicles: Street Cleaning: <i>Mud, silt, dirt, rock, and other debris to be removed from streets and gutters daily. Additional removal will occur prior to and after rain events</i> <i>Drains must be protected as outlined. Silt controls must function as intended and not block drains</i>
	20. Other:

Waste Risk: Significant/Med/Low

Requirement: Litter and waste must be contained on site, before disposal in a responsible manner. Waste generation must be minimised.

21. Movement of Soil : Off site/ On Site/ N/A Contaminant Status:	23. Waste Storage and Disposal :
22. Waste Minimisation Methods: <i>Waste controls in accordance with EPA1834 Civil Construction, Building & Demolition Guide & EPA1820 Construction - guide to preventing harm to people and the environment EPA Waste Classification Guidelines (EPA IWRG621, IWRG631).</i>	24. Other:

Chemicals Risk: Significant/Med/Low

Requirement: Storage and spill management practices must be implemented to ensure that no environmental damage can result from the escape or spillage of chemicals or fuels.

25. Storage:	27. Refuelling Procedure:
--------------	---------------------------

Other Site Specific Issues				
<input type="checkbox"/> Significant Flora/ Fauna Risk: Significant/Med/Low	<input type="checkbox"/> Archaeological/ Heritage Significant/Med/Low Risk:	<input type="checkbox"/> Risk: Significant/Med/Low	<input type="checkbox"/> Risk: Significant/Med/Low	



		<p>Requirement: All significant flora and fauna on and adjacent to the site must be protected.</p>	<p>▪ Requirement: Places, sites and objects of archaeological or heritage significance must be protected.</p>	31.	32.
26: Spill Management:	28. Other:	<p>29. Yes/No. Details:</p> <p><i>if an animal enters the site, works within the immediate area will cease and the animal will be allowed to move of its own accord. If the animal does not move, or is injured, Wildlife Victoria or the contracting consultant will be called to remove the animal. No other personnel are to interfere or interact with any animals. Ongoing concerns regarding animal incursion should be reported to Council</i></p> <p><i>If fauna are injured, Wildlife Victoria or ecologist will be notified. A report detailing fauna relocations, deaths and injuries will be provided to Council within 14 days</i></p> <p>Include if NGZs are present: <i>No Go Zones are to be protected from any actions that may disrupt or damage flora and fauna. This includes rubbish, clearing, weeds, foot and vehicle traffic, stockpiling or dumping of soil or green waste, storage of vehicles or materials, discharge of sediment, soil, dirty water or excessive flooding caused by site works</i></p> <p>Include if habitat is being removed: <i>A maximum of 48 hours prior to removal of trees/stags or complex habitat (e.g. rocky outcrops, fallen logs, rubbish piles), a suitably qualified ecologist must undertake a fauna inspection. If potential fauna or habitat is identified (e.g. nests, hollows, dreys, reptile harbours), supervision by a suitably qualified ecologist is required during removal. Recovered fauna are to be removed and relocated by a suitably qualified ecologist</i></p>	30. Yes/No. Details:		

SAMPLE

RISK ASSESSMENT CHECKLIST

Noise	
Issues: <ul style="list-style-type: none"> Nature of Noise Generating Works: Potential Noise Receptors: Proximity of Works to Noise Receptors: 	Likelihood
	Consequence
	Overall Risk

Dust	
Issues: <ul style="list-style-type: none"> Dust Sources: Potential Dust Receptors: Proximity of Works to Dust Receptors: Extent of Exposed Earth and Duration of Time Exposed: Wind Conditions: 	Likelihood
	Consequence
	Overall Risk

Erosion and Sediment	
Issues: <ul style="list-style-type: none"> Erosion and Sediment Sources: Potential Erosion and Sediment Receptors: Proximity of Works to Erosion and Sediment Receptors: Extent of Exposed Earth and Duration of Time Exposed: Soil Type and Erosivity: Slope: Site Drainage Regime: Rainfall: Vehicle Movements On and Off Site: 	Likelihood
	Consequence
	Overall Risk

Waste	
Issues: <ul style="list-style-type: none"> Nature of Waste to be Generated: Presence of Waste On Site Prior to Work Commencement: Quantity of Waste Anticipated: Potential Waste Receptors: Proximity to Potential Waste Receptors: 	Likelihood
	Consequence
	Overall Risk

Chemicals	
Issues: <ul style="list-style-type: none"> Types of Chemicals and Fuels Used and/or Stored On Site: Quantities of Chemicals and Fuels Used and/or Stored On Site: Potential Chemical Receptors: Proximity to Potential Chemical Receptors: 	Likelihood
	Consequence
	Overall Risk

Significant Flora/ Fauna	
Issues: <ul style="list-style-type: none"> Types of Flora/ Fauna: Vulnerability of Flora/ Fauna: Proximity of Flora/Fauna to Works: Work Activities Which May Threaten Flora/ Fauna: Potential Impacts on Flora/ Fauna: 	Likelihood
	Consequence
	Overall Risk

Archaeological/ Heritage	
Issues: <ul style="list-style-type: none"> Traditional Land Owners Consulted? Yes/ No Survey or Assessment Conducted? Yes/ No/ Not Required 	Likelihood
	Consequence

Site EMP A1 Plan (2)- Risk Assessment and Designs of Environmental Protection Measures

Project Name:

Date and Revision:

Environmental protection measures shall be constructed in accordance with the following designs.

SAMPLE DESIGNS HERE

<input type="checkbox"/>	<input type="checkbox"/>
Issues:	Likelihood

<ul style="list-style-type: none"> Probability of Encountering Archaeological/ Heritage Items During Works: 		<ul style="list-style-type: none"> 		<ul style="list-style-type: none"> 	
<ul style="list-style-type: none"> Types of Archaeological/ Heritage Items On Site: 		<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Consequence 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Consequence
<ul style="list-style-type: none"> Proximity of Archaeological/ Heritage Items to Works On Site: Work Activities Which May Threaten Archaeological/ Heritage Items: Potential Impacts on Archaeological/ Heritage Items: 	<p><u>Overall Risk</u></p>	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Overall Risk 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Overall Risk

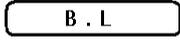
Appendix 3: Standard Icon Chart for Hazards and Environmental Protection Measures

The following standard icons must be used, for hazards, assets to be protected and environmental protection measures.

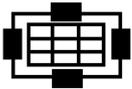
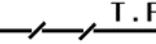
Table 4: Standard Icons for Hazards and Assets to be Protected

Hazard	Standard symbol
Management	
Noise	
Dust	
Sediment and erosion	
Waste	
Chemicals	
Asset to be protected	
Flora and Fauna	
Tree to be protected	
Waterway/wetland to be protected	
Archaeological/heritage	

Table 5: Standard Icons for Environmental Protection Measures

Environmental Protection Measure	Standard Symbol
Bin	
Biodegradable log	
Block and gravel inlet filter	
Bund	
Catch drain	
Coir logs	

Environmental Protection Measure	Standard Symbol
Composite silt curtain	
Culvert entry gravel filter	
Down drain	
Earth bank	
Energy dissipater	
Floating silt curtain	
Grass filter strip	
Gravel sausage	
Level spreader	
Mesh and aggregate drop inlet filter	
Mulch	
Noise barrier	
Portable settling tank	
Rock armouring	
Rock bund	
Rumble grid	
Sediment basin	
Sediment sandbag barrier	
Silt fence	
Silt fence drop inlet filter	
Silt fence sediment trap	

Environmental Protection Measure	Standard Symbol
Silt fence under grate	
Silt filtering bung	
Skip	
Solid waste stockpile	
Spill kit	
Stabilisation matting	
Stabilised access point	
Stockpile	
Straw bales	
Straw bales and silt fence (combined use)	
Straw bale and stone sediment trap	
Straw bale drop inlet filter	
Synthetic straw bale replacement	
Synthetic log	
Temporary fencing	
Temporary pit lid	
Tree Protection Zone	
Vegetation to be retained	
Vegetation to be retained and fenced	
Washdown bay	
Wash up area	

Environmental Protection Measure	Standard Symbol
Weed management	
Wind fence	

Note: Although the symbols are black and white, the use of different colours for different measures is encouraged.

Appendix 5: Pre-commencement meeting application form

Civil Works Pre-commencement Meeting Application Form

- For Early Bulk Earthworks *and* Civil Works



DESCRIPTION	FILL IN BLANKS BELOW
Planning Permit Number – PAXXXX/XXXX	
Estate or Project Name and Stage # <i>add 'bulk earthworks' if relevant</i>	
Consultant – - Company and Contact Name - Phone # / Email Address	
Site Engineer – - Company and Contact Name - Phone # / Email Address	
Contractor – - Company and Contact Name - Phone # / Email Address	
Email addresses for meeting invitees <i>if not listed above</i>	
Date Form submitted	

Pre-requisite to requesting a PC: All Conditions specified by Planning

In line with Council's Engineering Design and Construction Manual, this form shall form the basis of a written application to Council requesting a civil pre-commencement meeting by the developer's contractor or other representative.

A copy of the following documents *must be* provided to Council's Infrastructure Planning team *before* a bulk earthworks or civil works pre-commencement meeting is scheduled by Council's Principal Construction Supervisor:

Information Required		
Document Description	Date Approved/ Endorsed by Council	Do you have a copy of documents to submit with this form? Yes/ No/ Not Applicable & Reason
Approved Bulk Earthworks or Detailed Engineering Plans (R&D)		
Endorsed Construction Environment Management Plans (CEMP) <i>CEMP- Images of setup measures attached</i>		
Endorsed Haulage Route <i>To be included in TMP and CEMP</i>		
Consent to work within a Road Reserve <i>WWRR - if working within existing road</i>		
Authorised Traffic Management Plan (TMP) <i>Mandatory unless other permission given by Traffic & Transport Team</i>		

Sign form below and send, with documentation, to Email: construction@melton.vic.gov.au

By signing this form, I acknowledge the terms and conditions outlined:

I understand that, if all required prerequisites stated are not met, that another form will have to be submitted after outstanding issues are resolved to the satisfaction of Council.

Signature of Applicant: _____ **Date:** _____

FREQUENTLY ASKED QUESTIONS:

If I do not have a copy of the approved/endorsed document, how can I submit the documents to Council?

- The Engineering Plans for Early Bulk Earthworks or Engineering Plans (R&D) must be approved, in writing, by Council. Direct queries to the Engineer for the project or Email: Infrastructureplan@melton.vic.gov.au Allow 10 working days from the date the Infrastructure Planning team receives plans for a written response.
- CEMP (*including haulage route*) - Please refer to the planning permit for project. CEMPs *must be* submitted in PDF format to Email: emp@melton.vic.gov.au . Contact the Planning Support team at T: 9747 7200 if you require further information or to check on a CEMP endorsement. Allow 15 working days from the date submitted for response from Council's Planning Support team.
- WWRR – *authorisation is required if working within an existing road*. See form and related information on the website <https://www.melton.vic.gov.au/Services/Building-Planning-Transport/Roads-and-traffic/Works-within-road-reserve>. Application for consent should be emailed to wrr@melton.vic.gov.au Allow 10 working days for a response to the WWRR application from Council's Traffic and Transport team.
- TMP (*including haulage route*) - refer to your planning permit and website <https://www.melton.vic.gov.au/Services/Building-Planning-Transport/Roads-and-traffic/Traffic-management-plans> . The TMP application form and TMPs *must be* submitted to Email: traffic@melton.vic.gov.au . Allow 10 working days for a response to the TMP submission from Council's Traffic and Transport team. **Note:** *The TMP should not only include truck signs to satisfy requirements.*

What other matters should I know or consider before submitting this form?

- Attach all relevant approval, consent, authorisation or endorsement letters and documents to email submission of civil pre-commencement meeting application form.
- All conditions specified on the planning permit required for the civil pre-commencement meeting must be met before the civil pre-commencement meeting is requested.
- The responsibility for assuring Council requirements are met belongs with the Developer/Consultant for civil project. If unclear of requirement, contact appropriate department. **Note:** Verbal approvals are not adequate; approval or consent must be in writing from Council.
- Council will make initial contact regarding the application within 5 working days. Please direct queries to Email: construction@melton.vic.gov.au
- Council's Principal Construction Supervisor reserves the right to reject the application if there are issues on site or requisite documentation is not received.
- Council's Principal Construction Supervisor will send a confirming calendar invite to relevant parties with civil pre-com date and time. Note: If you need other parties invited to meeting not on invite list, forward invite when received.

Appendix 6: Example information sheet on Growling Grass Frog for use where applicable

The Growling Grass Frog is a nationally threatened species and is protected under Federal legislation (the EPBC Act) and State legislation (the FFG Act).

The Growling Grass Frog can generally be seen basking throughout the day in sunny weather and is recognisable by its warty back, large size (up to 10cm), dull green to olive green back (with most individuals appearing a bright olive- green) and obvious eardrum (dark circular disc just behind the head). Sometimes, the frogs appear as darker brown (as seen in the photo in the bottom corner).

The Growling Grass Frog is known to move over large areas of open land, and so could be encountered away from watercourses and dams.

Frog handling procedure

If you find a Growling Grass Frog, please call the nominated project ecologist immediately.

Contact people:

Contact number:

All personnel working on site must be made aware of the potential presence of Growling Grass Frog and how to recognise this species.

If Growling Grass Frogs are encountered during works, then:

- o Frogs must not be handled or harmed;
- o Works must cease until a suitably qualified ecologist has relocated the frog to a suitable recipient site in the Conservation Area and within 100 meters of the initial capture point;
- o Latex gloves must be used when handling frogs (new pair to be used for each frog handled);
- o Any injured frogs should be reported immediately to the Department Of Environment, land, Water and Planning (DELWP).



Frog exclusion fencing and silt fencing

Erect frog exclusion fencing and silt fencing on the downward side of the construction area between the construction area and waterway/wetland.

Frog exclusion fencing must be 1 m high (noting this is higher than typical silt fencing).

Frog exclusion fencing must be located on the conservation area side, i.e. to prevent frogs being trapped between the frog exclusion fence and silt fence.

Silt fencing must be to Melbourne Water standards.

Disinfection of vehicles, machinery and boots

All vehicles, machinery and equipment and personnel boots must be cleaned and disinfected prior to entering and exiting the works area.

Establish a washdown and disinfection bay at the entrance to the construction area.

Establish a boot wash station at the entrance to the conservation area or habitat area, to be used by all personnel entering or leaving the site to disinfect boots.

Erect signs at entrance to washdown and disinfection bay and boot wash station: e.g. *Conservation area: Before entering or leaving the conservation area, all machinery, vehicles and equipment must be cleaned and disinfected at the washdown and disinfection bay. All personnel must clean and disinfect boots before entering or leaving the conservation area.*

Example frog exclusion fence.



Example boot disinfection station at entrance to conservation area.

