Site Environmental Plan (SEP)
MAIN ROAD, ST ALBANS

LEVEL CROSSING REMOVAL PROJECT
FURLONG - MAIN BLACKBURN - HEATHERDALE

SEP Scope and Timeframe

This SEP covers the key environmental management measures relevant to activities which will be undertaken during Construction for the Main Road St Albans Grade Separation Project.

Responsible Persons

AM – Alliance Manager CM – Construction Manager EMR – Environmental Management Rep HSM – Health & Safety Manager PE – Project Engineer	SV – Supervisor SM – Stakeholder Manager SE – Site Engineer ProM - Procurement Manager All – ALL (incl Subcontractors)

Sub Plan 1: Water, Sediment & Erosion

Key Management Measures	Who
Erosion and sediment controls must be designed, developed and implemented in consultation with the construction team and project environmental representative	CM
Clean water diversions must be installed prior to the commencement of work.	SV
Erosion and sediment controls must be installed prior to or immediately upon any disturbance to vegetation or soil. These controls must remain in place until revegetation, stabilisation or hard scaping has occurred. If these controls require maintenance notify your supervisor.	SV
Cleared areas must be kept to a minimum and be progressively rehabilitated/revegetated as they become available.	SV
All materials must be stockpiled away from water flow paths.	SV
Sediment laden water (dirty water) captured onsite must be preferentially reused eg. dust control.	SV
Water discharged from site is in strict accordance with the site's dewatering procedure, which is approved by the Environmental Manager.	SV
No transfer/discharge will be made without a Permit To Dewater approved by the project environmental representative.	SV
An adequate number of concrete washout facilities must be maintained at all times. The washout facilities will be isolated from surface water flows using bunds to prevent contamination of clean surface waters and will be lined to prevent contamination of soil and ground water	SV
All hazardous substances (liquids and solids) are stored and managed according to AS1940.	SV
All refuelling points, including refuelling/lube trucks, will carry hydrocarbon spill kits.	SV
The quantity of water consumed on the project from each of the following sources are reported monthly: ▪ Potable water, ▪ Water obtained under an extraction licence or other regulatory authority, ▪ Recycled water sourced from outside the project. Water use will be tracked on site by the use of water tracking forms (LAH-EN-FO-0002)	EMR
A water budget appropriate to the type and scale of the project will be maintained.	PM
Opportunities to minimise the use of high quality water will be continually sought and adopted as appropriate.	PM
Where groundwater is unexpectedly encountered, a management plan shall be developed and implemented to manage the groundwater and protect beneficial uses in accordance with the requirements of the EPA and/or relevant authority.	EMR
Undertake a visual assessment of the site for groundwater daily during all excavations.	SV
Stabilised access, rumble grids must be established for site entries and exits to minimise mud on public roads. Sweepers shall be used periodically to clean public roads where mud has been deposited.	SV
Covering of exposed surfaces (including batters and stockpiles) that would otherwise remain bare for more than 28 days. Cover may include mulch, erosion control mat or seeding with sterile grass	SV
Sedimentation basins will be utilised to manage runoff where space within the rail corridor permits their installation. Such basins will be designed to contain flows from a rainfall event having an Average Recurrence Interval of not less than two years and six hour duration when allowing for a 30% reduction in capacity as a result of sediment accumulation. The sizing and modelling of temporary sedimentation basins shall be undertaken using recognised 'best practice' modelling techniques or 'VicRoads Temporary Sedimentation Basin Design Tool'.	EMR

Sub Plan 2: Flora & Fauna

Key Management Measures	Who
Prior to any disturbance, clearing or grubbing activities in any locations the following must be in place; ▪ A Permit to Clear Land or Vegetation must be obtained from an Environmental Representative. ▪ No-go Zones for significant flora and fauna must be established, fenced/flagged and sign posted prior to commencement of clearing at a minimum of 1 metre from the boundary of the habitat to be protected. ▪ A wildlife catcher/spotter or the Environmental Representative needs to conduct a search for any wildlife that may need to be removed and relocated.	EMR
A suitably qualified ecologist or wildlife specialist with the appropriate permits/licenses shall be present on site during the removal of vegetation to: ▪ identify and examine any trees (including hollow bearing trees) and/or fallen logs affected by works under the Contract to identify, capture and relocate fauna identified within the zone to be cleared; and ▪ provide advice on alternate fauna habitat sites	EMR
If a threat to an animal is evident onsite you must contact your supervisor and/or EMR Project Environmental Representative immediately. Works may need to cease if the animal is in danger or harmed until it has been relocated.	All
Identified wildlife within the project area can only be captured and released by a qualified Wildlife Specialist who holds the relevant permits for capture and release.	EMR
The site speed limits must be obeyed at all times, especially areas where vehicle/fauna interactions are identified as high risk.	All
All plant should remain on haul roads as much as possible so as to minimise damage to vegetation	SV
No-go zones must be obeyed at all times without a Permit to Enter No-go Zone. Any damage to no-go zone fencing or signage must be reported to your supervisor or Project Environmental Representative immediately.	SV/PM
Ensure the No-Go Zone includes the full Tree Protection Zone where trees are present. Where encroachment within the Tree Protection Zone is unavoidable the contractor shall: Engage a suitably qualified arborist to assess the potential impact on the trees; ▪ the arborist assessment shall include the botanical name, diameter at a height of 1.4 metres, useful life expectancy, the tree location and whether the proposed impact on any Tree Protection Zone will significantly impact the future health of the tree(s). ▪ The assessment shall recommend whether the tree can be retained with mitigation measures or whether it should be removed. ▪ Pruning of any vegetation to be retained shall be undertaken by a suitably qualified arborist (minimum Australian Qualification Framework Level 3, Certificate III Horticulture (Arboriculture).	PM
Cleared/removed vegetation will be beneficially used either on or off the project where possible (e.g. for habitat, chipped for mulch and reused)	SV
Where possible revegetation activities will preferentially use only species that are indigenous to the area	PM
Boundaries of allowable disturbance areas on the project are clearly marked and delineated	EMR
Plant, equipment, material or debris shall not be driven, dragged, placed or stored within the No Go Zones. Vegetation management activities required to protect vegetation quality may be undertaken in No Go Zones.	SV
Pre-construction surveys shall be undertaken by qualified Ecologists to identify and map all areas of native vegetation. Vegetation to be protected and or remove shall be clearly marked on the Site Environmental Plan (SEP)	EMR
In the event that significant flora or fauna is discovered within the construction area , cease operation and notify the Environment Manager, who will contact an ecologist to accurately identify and provide advice for the management of the discovered significant flora or fauna	PM/SV
In the event that significant flora or fauna is discovered within the construction area , cease operation and notify the Environment Manager, who will contact an ecologist to accurately identify and provide advice for the management of the discovered significant flora or fauna	SV
Declared weeds, pests and diseases (also referred to as pathogens) shall not be introduced to the site, spread through the site, or removed from the site (if present) as a consequence of work, Machinery that has been in contact with topsoil to be cleaned prior to arriving and leaving site.	SV
Machinery brought to site must be inspected to ensure that it is clean and free of soil and seed- a logbook of inspections is to be maintained.	SV and EM
Activities likely to cause fire are to be undertaken in accordance with project permits and controls to prevent fire occurring on site and spreading to adjacent No-Go Zones	SV
Avoid, minimise and offset (where appropriate) the removal of native vegetation including identified indigenous native trees during design and construction.	EMR
All site staff and contractors must attend an induction session presented by a suitably qualified ecologist prior to the admittance to the project area. The induction must include: ▪ a brief on the identification and conservation status of listed threatened species and communities; ▪ the reason for mitigation measures and practices to minimise impact to threatened species; ▪ stop work procedures should threatened species and communities be identified during construction ▪ details of the EPBC Act Referral 2014/7203 Approval.	EMR

Sub Plan 3 & 4: Noise & Vibration

Key Management Measures	Who
Undertake construction activities within the nominated hours of work to comply with contractual and legal requirements.	PM
Any works that need to occur outside these hours must be approved by the Alliance Manager and project environmental representative.	PM
All equipment must be serviced and maintained according to manufacturer's recommendations, or more frequently if required to minimise noise generated.	SV
Undertake high noise generating works in accordance with project obligations	SV
Where intermittent high frequency noise is a high risk, and pending safety requirements, the least noise-intrusive reversing alarms must be used.	PM
In accordance with contractual requirements early consultation must be conducted with community stakeholders on the likely impacts of activities likely to cause disruption.	SM
Limiting the hours of work in response to community concerns	CM
Noise attenuation of fixed and mobile plant as required in order to achieve compliance is installed.	EM
Construct and maintain noise barriers to shield significant noise generating activities or plant as required in order to comply.	EMR
Adjust the Project Traffic Management Plan/Plans to minimise noise impacts as required.	PM
Activities will be altered or additional controls implemented where predictive modelling indicates potential impacts that exceed compliance limits.	PM
In the event that implementation of all above-stated controls are insufficient to achieve compliance then mitigation measures (e.g. fitting air conditioners and double-glazing windows) are implemented at sensitive receptors.	PM
Noise monitoring conducted in accordance with Australian Standards and at a frequency and at locations to confirm compliance with the regulatory limits will be conducted.	EMR
Noise minimisation activities will include ▪ Planning of works ▪ Where possible schedule noisy activities to daytime hours or before 10pm for night-works ▪ Locate noisy plant such as generators and light towers to minimise the impact of noise on residential areas ▪ Select the lowest noise generating equipment ▪ Where necessary construct and maintain noise barriers to shield significant noise generating activities or plant	PM
Work practices predicted to generate non-compliant vibration must be amended prior to commencing works to the extent required to comply with applicable limits.	PE
In accordance with contractual requirements early consultation must be conducted with community stakeholders on the likely impacts of vibration in particular any high risk activities likely to cause disruption.	SM
All equipment is serviced and maintained according to, as a minimum, the original equipment manufacturers recommendations, or more frequently if required to minimise noise generated. Where the OEM requirements are not available then industry best practice maintenance is applied.	PE and SV
Blasting activities are designed to minimise the impacts relating to vibration	PE
Pre-construction property condition surveys will be completed for properties located within 50m of construction activities where agreed by the owner.	SM
Vibration monitoring will be conducted at a frequency and locations to confirm compliance with the German Standard DIN 4150 – Part 3 – "Structural Vibration in Buildings – Effects on Structures".	EMR
Blasting overpressure must not exceed 133 dBL. Vibration generated by blasting must not exceed the criteria set out in Table VR 177.H3.01 Transient Ground Vibration Criteria for Assessing Potential for Damage to Buildings	PE

Sub Plan 5: Heritage

Key Management Measures	Who
All cultural heritage items and places to be preserved will be fenced/flagged and sign posted as No-go zones and shown on relevant site plans and communicate to relevant workforce. These No-go zones must be observed at all times until a Permit to Enter No-go Zone has been authorised.	EMR and SV
Ground disturbance must not take place until a Permit to Clear Land or Vegetation has been authorised.	SV
If an object is discovered that may be a suspected heritage item, work must cease immediately and the supervisor and project environmental representative notified. No works will be allowed to continue until approval has been received from the project environmental representative. Within 24 hours notify relevant approval authorities and engage a cultural heritage advisor to evaluate the nature, extent and significance of the cultural heritage. Work greater than 50 m away from the area in which the cultural heritage was uncovered and/or identified may recommence and continue. Work in areas less than 50 m from the cultural heritage site may proceed if agreed by the relevant approval authority, and in consultation with any other relevant cultural heritage stakeholders.	SV
Specific training will be provided to persons likely to impact on work in close proximity to heritage items or values.	PE
All Personnel will undertake a Site Induction which includes Aboriginal Heritage. Specific training will be provided to persons likely to impact on heritage items of values.	EMR
All necessary approvals will be obtained prior to commencing any works in areas of known or potential heritage items.	EMR
Formal documented engagement will be maintained with relevant heritage groups or traditional owners throughout the project.	EMR
Work will cease upon the discovery of any object which may be a heritage item within the meaning of the relevant legislation, including likely human remains. No works will be allowed to continue until a permit or clearance has been received from the relevant authority.	SV
A cultural Heritage Advisor is to be engaged to by the project to provide advice and guidance if a heritage item is discovered.	EMR
The following procedure will apply in the event of the discovery of suspected human remains: ▪ all activity in the vicinity shall stop; ▪ the remains must be left in place, and protected from harm or damage; ▪ immediately notify the local office of Victoria Police or the State Coroner's Office and the Superintendent of the discovery ▪ if there are reasonable grounds to believe that the remains are Aboriginal human remains, report the discovery (including the particulars of the location and nature of the human remains) to Aboriginal Affairs Victoria; and ▪ implement appropriate impact mitigation or salvage strategy as determined by the responsible authority and if relevant, in consultation with any Aboriginal person or body with an interest in the Aboriginal human remains.	SV

Sub Plan 6: Contamination

Key Management Measures	Who
Whenever contaminated materials are discovered or suspected, works must cease and the supervisor and project environmental representative notified immediately. Testing by a trained and competent person must be conducted and a management strategy developed.	All
Contaminated land will need to be handled, stockpiled, reused and/or disposed of as per the Projects Contaminated Land Management Strategy.	EMR
The movement of materials must be tracked via the Materials Tracking Form. The Transport of contaminated soil from site must be undertaken in accordance with EPA Victoria requirements, in a permitted vehicle and accompanied by a waste transport certificate.	SV
Water runoff from contaminated land and stockpiles must be contained, treated or disposed to ensure there is no pollution of land or waterways.	SV
All vehicles, plant and other machinery operating in contact with contaminated soil must be decontaminated prior to leaving site.	SV
Testing by a trained and competent person occurs whenever contaminated material is present or believed to be present at the project. Testing shall comply with all legislative requirements.	EMR
Temporary water management works will be put in-place to capture contaminated runoff from stockpiles and contaminated areas. Water and sediment will be monitored for quality and managed in accordance with regulatory requirements.	EMR
Any soil identified as Acid Sulphate Soil (ASS) or Potential Acid Sulphate Soil (PASS) will be managed in accordance to the Manage Acid Sulphate Soil Procedure.	SV
A visual assessment of the site for contaminated soils and materials will be undertaken daily during the following activities, stripping of topsoil, excavations and when importing fill.	SV
All work shall comply with the following requirements in relation to contaminated soil: ▪ soils or materials shall not be contaminated as a consequence of construction; ▪ soil and materials imported to the site shall be free from contamination; ▪ contaminated soil/materials shall only be reused on site following approval from VicTrack and EPA Victoria; Contaminated soil/materials to be temporary stored/reused on site as part of construction shall be temporarily stored and managed to minimise any impact on the site or surrounding environment by means of covering with plastic to prevent odour and rain infiltration and the generation of contaminated runoff;	EMR

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Sub Plan 7: Acid Sulfate Soil

Key Management Measures	Who
Whenever ASS/PASS material is discovered or suspected, works must cease and the site supervisor and project environmental representative notified immediately.	SV
Testing by a trained and competent person must be conducted and an ASS/PASS management strategy developed.	EMR
All known or discovered areas of ASS/PASS will be communicated to those involved via the induction, toolbox talks, pre starts and Site Environmental Plans.	SV
Disturbance of surface and subsurface soils in potential ASS/PASS must be minimised.	SV
All persons likely to be involved with the management of ASS/PASS will be trained in their identification and management.	SV
ASS/PASS will need to be handled, stockpiled, tracked, treated and reused and/or disposed of as per the Projects ASS/PASS management strategy.	EMR
The movement of ASS/PASS materials must be tracked via the Materials Tracking Form	SV
Water runoff from ASS/PASS stockpiles must be contained, treated or disposed to ensure there is no pollution of land or waterways.	SV
All vehicles, plant and other machinery operating in contact with ASS/PASS must be decontaminated prior to leaving site.	SV
A spill of ASS/PASS material outside the ASS/PASS storage and/or treatment areas or evidence of impacts on waterways must be reported to the supervisor and Environmental Representative immediately.	All

Sub Plan 8: Energy

Key Management Measures	Who
Energy efficiency and GHG reduction initiatives identified in the tender Sustainability Workshop will be included in the Start-up energy efficiency opportunities assessment and/or Environment in Design Workshop.	AM
Energy use and emissions metering identified and included in the tender will be included in the start-up works and the detailed design for implementation, as appropriate. Additional metering, or energy use and emissions capturing processes, will be identified to ensure that 100% of energy use sources at 95% accuracy are captured and reported.	EMR
100% of all energy (diesel, gases, electricity, etc.) use will be recorded and entered into JDE for the project (including Subcontractors use), as required by the NGERs Reporting Procedure. Energy use is tracked monthly and assessed against activities carried out.	EM
Opportunities for improving energy efficiency are identified via GEEM Plan at the commencement of the project and reviewed regularly (six monthly as a minimum). The assessment process involves the Alliance Manager, senior site managers whose responsibility includes significant energy using activities, and representative technical and supervisory staff responsible for the energy using activities.	EMR
Identified energy savings opportunities will be assessed and implemented where cost effective to do so.	EMR
The workforce, including subcontractors, will be trained to minimise energy use, including switching off machines and equipment when not in use and purchasing energy efficient plant and equipment. Energy efficiency principles will be communicated through tool box talks and other site communication forums and tools.	EMR
Subcontractors will be required to implement practical energy efficiency initiatives. They are required if requested to provide energy use reports and will be held to account if they are not provided.	EMR
Where relevant, procurement decisions will include energy efficiency and greenhouse gas considerations of the product or service.	ProM

Sub Plan 9: Hazardous Substances

Key Management Measures	Who
Prior to bringing new chemicals to Site, the Project must be provided with the current (Safety Data Sheet) (SDS).	All
Storage and handling of hazardous substances must be in strict accordance with the applicable Standards and SDS.	SV
Hazardous substances must be stored in a bunded area with a minimum holding capacity of 110% of the largest container within the bund or 25% of the total capacity of all containers within it, whichever is the greatest and comply with Dangerous Goods (Storage and Handling) Regulations 2012 and EPA Bunding Guidelines (EPA Publication 347) including the placarding of compounds and bulk storage containers	SV
Spill kits must be located adjacent to all hazardous substance storage units, in refuelling and maintenance areas and at designated locations as per the Site Environment Plan (SEP).	SV
Type and size of spill kits must be selected based on the type and volume of materials stored. Aquatic spill kits shall be available at worksites in close proximity to waterways.	EMR
Training in the use of spill kits must be provided.	EMR
Refuelling must not occur within 30m of a waterway (without appropriate controls in place) refer to Refuelling procedure (LAH-EN-PRO-0004).	SV
Management of hazardous materials will be covered in the site induction. Relevant workers will undergo spill response training, as well as safe handling and storage training.	EMR
Containment devices, including bunds, separators and catch trays, will be used where ever there is a risk of spillage.	SV
Inspections will be carried out weekly to assess the storage and handling of hazardous materials as a part of the HSE inspection program.	EMR
Undertake routine maintenance of plant and equipment for prevention of fuel leaks, visible exhaust emissions or other maintenance issues.	SV
An Emergency Response Plan which incorporates a spill response procedure shall be maintained for the project	EMR
All spills of fuel, oils and hazardous substances to be reported to the Environment Manager for follow up and reporting	SV

Sub Plan 10: Waste

Key Management Measures	Who
All wastes need to be classified, stored, tracked, transported and treated in accordance with contractual and regulatory requirements, including the use of licensed transporters and treatment facilities	CM
The relevant licences of waste facilities utilised for the disposal or handling of waste will be obtained to ensure they are legally compliant.	EMR
Storage containers (bins, skips, tanks, etc) are provided at each work area in sufficient numbers to facilitate segregation of waste at the source of generation, where ever possible. The correct bin type must be used to avoid contamination.	CM
Containers are clearly sign posted to inform all project personnel of the correct material to be placed within each bin type. Containers are emptied at a frequency that is sufficient to ensure their correct use.	CM
Burial or burning of waste is not permitted.	SV
Excess concrete and concrete washout is not to be discharged to land or stormwater; a concrete washout facility must always be used.	SV
Vehicles transporting waste shall be covered and appropriately licensed.	SV
All waste data must be collated and tracked using Material Tracking Forms (LAH-EN-FO-0003).	SV
An adequate number of fully maintained concrete washouts will be maintained on the site at all times to ensure concrete washout is not to be discharged to land or storm water and so concrete wastes can be recycled.	
The Environmental representative will conduct a weekly inspection of site including inspection of waste facilities and instances of inappropriate waste management	EMR

Sub Plan 11: Air

Key Management Measures	Who
Areas in which vegetation will be removed or disturbed need to will be minimised. Rehabilitation, seeding or grassing should occur as soon as they become available.	SV
Disturbed areas and haul roads must be treated with dust suppressants (e.g. water trucks or chemical suppressants) especially in high risk areas and/or on during high risk days.	SV
Stabilised access, rumble grids, wash bays or similar must be established for the entries site and exits to site to minimise mud on public roads. Sweepers shall be used periodically to clean public roads where mud has been deposited.	CM
Traffic speed limit(s) are determined to minimise dust generation and must be adhered to at all times.	CM
All construction plant and equipment must be maintained so they do not emit visible smoke for any period greater than: ▪ 15 consecutive seconds for plant not being registered for use on public roads; and ▪ 10 consecutive seconds for plant registered for use on public roads.	SV
Burning of any materials is prohibited onsite.	SV
Competently designed and constructed rumble pads shall be established for the ingress and egress of all vehicles.	SV
Air quality monitoring conducted in accordance with Australian Standard and at a frequency and at locations to confirm compliance with the regulatory limits will be conducted.	EMR
Emissions of odorous substances, particulates, or dust generated from construction activities shall not create a hazard or nuisance to the public, shall not disperse from the site or across roadways, nor interfere with dust-sensitive receptors. Asbestos containing materials to be assessed and removed	CM
Material that may create a hazard or nuisance dust shall be covered during transport	SV

Licences and Approvals

Out of Hours Permit (LAH-EN-PMT-0005)	To enable works to occur outside of normal working hours
Permit to Discharge LAH-EN-PMT-0001)	To release water to the environment
Vegetation Clearance Permit (LAH-EN-PMT-0004)	To clear an area (vegetation & heritage)
EPBC Act Referral 2014/7203 approval conditions	To protect EPBC listed vegetation
Cultural Heritage Management Plan (CHMP) VAHR 7822-3754 (St Albans Rail Reserve LDAD).	For the protection of sites of cultural heritage significance

Evaluating Performance	Who
Daily, inspect the condition of protection and control measures and arrange maintenance, as required.	SV
Weekly, inspect the condition of protection and control measures and arrange maintenance, as required.	EMR

Points of Contact

Name	Title	Number
	EMR	
	Superintendent Supervisor	
	Senior Project Engineer	
	Community Relations Advisor	

Stakeholders and Consultation Strategies

Plan Ref: Stakeholder and Communication Management Plan. In the event that you need to contact a regulatory organisation please contact the Stakeholder and Communications Manager or the Environment Manager who will contact the relevant organisation on your behalf.

Consultation Strategy

Notification To Community Relations

Contact Community Relations a minimum of 3 weeks prior to the start of the following types of work:
- Noise and vibration generating activities within 300 m of a sensitive location.
- Out of Hours and Sleeping Hours work.

Complaints Handling- If you are contacted by a community member please provide them with the 1800 no below and advise your Community Rep.

- Project 24/7 Community Contact Number **1800 762 667**