KCE PTY LTD
PO Box 574, East Maitland, NSW, 2323
ABN 83 059 721 881

Site Specific WHS & Environmental

PROJECT MANAGEMENT PLAN

Job No. 24026

Garden Suburb Subdivision, Intersection Upgrade & Stewardship Site Work

Myall Road, Hillsborough

Copy No.:	**A1**	Controlled / Uncontrolled

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1. General

1.1 Scope of the work

KCE Pty Ltd has been contracted by Landcom to construct the Garden Suburb Subvision, Myall Road Intersection Upgrade & complete remediation works in surrounding Stewardship Site at Myall Road, Hillsborough. All work will be completed to the standards specified on the drawings and to Lake Macquarie City Council Council & contract specifications.

Works under the contract (unless otherwise noted) include the supply of all supervision, labour, plant, materials and consumables as necessary to complete all works to the nominated standards and in accordance with all contract documents, specifications and drawings.

- Project Management and supervision to implement and co-ordinate the work
- Principal Contractor
- Environmental, Safety and Quality Management of civil construction activities
- Site Establishment
- Clearing, Shearing, Tub grinding
- Sediment & Erosion Control
- Traffic Control & Management
- Survey & set out
- Bulk Earthworks
- Regrade
- Stormwater Pipes and Pits
- Pressure Testing
- Pavement Construction
- Primer / Two Coat Seal,
- Asphalt
- Service Trenching
- Water Reticulation
- Electrical Reticulation
- Sewer Reticulation
- Gas Reticulation
- Street Furniture
- Revegetation
- General Concreting
- Kerb & Gutter
- Retaining walls

All work is to be done in a professional way that ensures the safety of workers and the general public but also protects the surrounding environment.

1.2 Scope of this WHS & ENV Project Management Plan

This PMP is an integrated management plan and has been designed to cover the Health, Safety & Environmental aspects of this project.

It contains the necessary forms & information for the site supervisor and/or project engineer to document the management of the project and to ensure compliance to the NSW Work Health and Safety Act 2011 & Regulation 2017, Protection of the Environment Operations Act 1997 (POEA) and the NSW WHS (Mines) Act 2013 & WHS (Mines) Regulation 2022.

The WHS ENV Policy Manual is an additional document to this PMP and is contained within the KCE Business Management System. The manual also includes KCE's Procedures, safety & environmental control measures, Safe Work Procedures Drug and Alcohol and Return to Work processes.

1.3 KCE Personnel

The following table presents the key personnel, their assigned positions and their contact details for their involvement in the project.

Position	Persons Name	Phone Number
KCE Senior Management	Troy Gould	0429 211 863
HSEQ Manager	David Swadling	0423 569 557
Project Manager	Tim Croft	0432 766 281
Project Supervisor	Chris Montague	0418 741 748
Leading Hand	Roland Cartwright	0421 786 428
HSEQ Coordinator	Chris Cashman	0413 466 228

"Responsibility & Accountability" for all levels of KCE personnel.

1.4 Roles and Responsibilities

The Roles & Responsibilities of the different levels of KCE Management, workers & subcontractors are set out below.

The roles and responsibilities for individual projects will be developed on a job-by-job basis and as such may vary slightly from the roles as outlined in the management system. They will be detailed in the WHS ENV Project Management Plan.
A table of key personnel, their assigned positions and their contact details relevant to their involvement in projects shall be maintained by the HSEQ Manager for inclusion in the WHS ENV Project Management Plans.

Directors

- Have overall responsibility for the Health and Safety of all personnel and the management of Environmental aspects involved in the company's operations.
- Defining the WHS and Environmental policy and objectives & targets.
- Identifying personnel accountable and qualified for WHS and Environmental matters.
- Ensuring that sufficient and suitable resources, including personnel, equipment, training and rehabilitation, are available and allocated to manage WHS and environmental matters.
- Ensuring the requirements of the management system are established, implemented and maintained.

HSEQ Manager (Health, Safety, Environment & Quality)

- Manage the compliance of the company's WHS, Environmental and Quality Management System with regards legislation, regulations, standards and codes. In particular, manage compliance with the standards ISO 45001, ISO14001 & ISO 9001 (current versions).
- Ensure that the company systems, including procedures, plans, and regulations are communicated to all employees within the company.
- Conduct or schedule audits & checks to monitor compliance. Identify internal audit requirements and report findings to the relevant Project Manager & Director
- Monitor the work of HSEQ Coordinators
- Report on the performance of the WHS & Environmental Management System to the Directors for review & as a basis for improvement.
- Compilation of all incidents and accidents overall statistics & report to the Directors.
- Maintain the Actions Register & Register of Injuries for KCE as a whole.
- Monitor the standard of WHSE Project Management Plans & Safe Work Method Statements
- Responsible for investigating significant injuries and incidents and initiating control measures to prevent recurrence.
- Preparation and review of emergency procedures as part of the Site Emergency Response Plans
- Assist and consult with personnel in meeting their obligations under the relevant Work Health & Safety and Environmental Legislation
- Verification by inspections and audits of work areas, works methods, materials, plant and equipment that they comply with safety and environmental legislation and regulations, standards and Codes.

- Promote continuous improvement of the management system by encouraging the reporting of non-conformances & the use of the Non-Conformance procedure.
- Planning and conducting general company inductions.
- Liaise with the Training Coordinator regarding ongoing training in safety awareness for all levels of the workforce
- Encourage reporting by workers of WHS and Environmental issues and matters to management.
- Where deemed necessary, forming and managing workplace WHS and Environmental committees.
- Comply with responsibilities for all workers

Project Managers

The Project Manager is responsible for the overall successful outcome of the project. Hence, it is their personal responsibility to implement all particular measures required to ensure the appropriate control of the WHS/ENV PMP during project tasks. The Project Manager can delegate tasks to other competent KCE staff. However, they must ensure delegated tasks are performed with due diligence.

The Project Managers Responsibilities are: -

- Use hazard identification, risk assessment & control (Risk Management) to manage WHS risks & Environmental aspects of project works.
- Ensure a WHS ENV Project Management Plan is developed for every project that requires one. Approve WHS ENV Project Management Plans prepared by others.
- Preparation, approval, monitoring of safe work method statements (SWMS).
- Ensure that all personnel have undergone external or internal WHS and environmental training as applicable
- Have the overall authority to communicate to all personnel, (including government bodies), on issues concerning the project works.
- Ensure that all injury, incidents and dangerous events are promptly and thoroughly investigated and appropriate measures taken to prevent a recurrence
- Quarantining unsafe work areas, materials, plant and equipment.
- Control of project documents & records
- Comply with responsibilities for all workers

HSEQ Coordinators

- Assist the HSEQ Manager & Project Managers to manage compliance with the company's WHS & Environmental standards & legal obligations
- Conduct audits & checks to monitor compliance
- Interact with Supervisors and Project Managers regarding upcoming tasks that require input relating to WHS, Environment & Quality. Assist with planning.
- Build on Supervisor, PM, Subcontractor and field staff understanding of WHS concepts and regulations.
- Assist Supervisors with conducting effective toolbox talks and site inductions.
- Obtain feedback regarding suggestions and improvements to site risks, work methods and safety issues from field staff.
- Organise or carry out training as necessary
- Involvement with preparing WHS/ENV PMP's for new projects.
- Assist with procedure writing.
- Perform site specific tasks & management as assigned by Project Managers
- Inspect, monitor & record condition of safety, environment & quality equipment lifting gear, fire extinguishers, electrical leads, survey equipment & gas detectors.
- Comply with responsibilities for all workers

Return to Work Coordinator

- Co-ordinate the rehabilitation of injured workers and develop Return-to-Work plans.
- The Return-to-Work Coordinator will, in consultation with the injured party, their supervisor and the nominated treating Doctor, develop a list of suitable duties that are within the limits of the SIRA Medical Certificate
- Facilitate all medical treatments and other assistance required to promote a timely return to pre-injury duties.
- Maintain contact with the injured person, their Supervisor/Project Manager and the nominated treating Doctor to review the appropriateness of the suitable duties and where necessary monitor and if required change the duties.
- Review the effectiveness and frequency of the medical treatment being provided.
- Maintain all documentation pertaining to the process of Injury Management.

- Prepare, in consultation with the injured person, their site Supervisor /Project Manager and the nominated treating Doctor a Return-to-Work plan in accordance with a medical certificate.
- Organise medical appointments and ensure all appointments are kept or changed as required.
- Liaise with the Insurer, in relation to notifying requirements and claims processing.
- Review the adequacy, effectiveness and suitability of all policies, procedures and arrangements for Injury Management.

Supervisors

The Supervisor is responsible to the Project Manager for control of the work site.

- Assist the Project Manager in the implementation of the site specific WHS and Environmental Project Management Plan (WHSE PMP).
- Maintain WHS and Environmental Project Management Plan standard forms associated to the job
- Liaise with the Project Manager to develop SWMS. Ensure work is carried out in conformance with the relevant SWMS.
- Perform and register site induction for workers prior to them commencing work
- General responsibility for implementing and enforcing the site specific WHS and Environmental Project Management Plan.
- Conduct and register onsite toolbox meetings to reinforce and inform workers of WHS and Environmental issues and responsibilities
- Monitoring suppliers and subcontractors to ensure they meet the requirements of the WHS ENV PMP
- Be the primary First Aider for the site & manage the initial response to all work site injuries.
- Maintain all first aid stocks and spill kit stocks.
- Manage accident and emergency procedures onsite
- Conduct plant inspections for new plant arriving on site.
- Ensure all documents for public display are presented and maintained in a location accessible to all relevant personnel.
- Delegate certain tasks to the Leading Hand for which they can ensure adequate training has been completed for the tasks to be performed with due diligence.
- If leaving the site while work is being carried out ensure the Leading Hand or other suitable KCE staff member takes over control of the site
- Perform daily inspections on all measuring and monitoring equipment.

- Quarantining unsafe work areas, materials, plant and equipment.
- Comply with responsibilities for all workers

Leading Hand

- Assist the Supervisor by carrying out all tasks delegated to them with due diligence
- Recognise and implement personal responsibilities in maintaining WHS and Environmental Legislation amongst all workers
- Perform and register site inductions and toolbox meetings if delegated by, or in the absence of the Supervisor.
- Attend initial site inductions as well as implementing directions as discussed in on going toolbox meetings as outlined
- Comply and assist in the implementation with all aspects of the WHSE Project Management Plan including the correct undertaking of activities in accordance with safe work procedures and the requirement to wear personal protective equipment
- Report to their immediate Supervisor any unsafe situation or substandard environmental condition which they or other labourers find they cannot rectify
- Report any work-related injury immediately to the supervisor
- Assist the Supervisor
- Comply with responsibilities for all workers

Sub-contractors

- Sub-contractors to carry out task analysis and provide safe work method statements as required or alternatively act directly under the KCE system
- Provide a copy of their SWMS to the supervisor or Project Manager
- Each sub-contractor is required to provide adequate personal protective equipment and in accordance with regulation, properly maintain plant and equipment in a safe and suitable manner
- Sub-contractors shall provide adequate supervision and instruction to their workers to maintain safe work systems.
- Sub-contractors shall make provision for the safe storage, handling and transport of materials, plant and substances
- Each Subcontractor is to be inducted onto the site and is to attend all toolbox meetings as required by KCE.

- Subcontractors & their workers shall comply with the responsibilities for all workers below.

Workers (this includes EVERYONE)

- General duty under legislation to take reasonable care for your own health & safety & for others around you. You are also required by law to comply with reasonable instructions & to cooperate with KCE safety & environmental policies & procedures.
- Attend initial site inductions as well as all ongoing pre-work briefs & toolbox meetings as required
- Comply with all aspects of the WHS ENV Project Management Plan including the correct implementation of all work activities in accordance with safe work procedures, SWMS or SWP.
- Identify & control safety & environmental hazards. Report to their immediate Leading Hand or Supervisor any unsafe situation or substandard condition which they cannot rectify
- Report any injury immediately to the Supervisor

1.5 Document Control

Management Plan Revision Record				
Revision	**Date**	**Revision Description**	**Prepared By**	**Authorised By**
A	28-May-2024	For Construction	Chris Cashman	Tim Croft

Register of Controlled Management Plans Issued		
Location & Person Issued to	**Date**	**Copy No.**
KCE – Supervisor – Chris Montague		A1

Approval of the Management Plan by the Project Manager		
Date:	**Name:**	**Sign:**

Approval of the Management Plan by the Client (where required)		
Date:	**Name:**	**Sign:**

Regular Review (maximum 3 months) of the Management Plan by the Project Manager				
Date	**Date**	**Date**	**Date**	**Date**
Sign	**Sign**	**Sign**	**Sign**	**Sign**
Date	**Date**	**Date**	**Date**	**Date**
Sign	**Sign**	**Sign**	**Sign**	**Sign**

1.6 Initial Risk Assessment & Job Start Up

FORMS

- *OF30 - Pre-project PMP Planner (& initial risk assessment)*
- *SF23 - Pre-start Checklist*
- *Posters for Display*

PROCEDURE – Planner & Initial Risk Assessment

- Project Manager (preferably with the Supervisor or HSEQ) completes the Project Pre-Planner & Initial Risk assessment app on site.
- Project Manager makes arrangements for the preparation of this WHS ENV PMP based on the Planner
- Insert completed form OF30 - Pre-project PMP Planner which includes the initial risk assessment: -

PROCEDURE – Pre-start & Posters

- Supervisor to complete Pre-start Checklist before starting to ensure all signs, emergency equipment & other preparations are in hand
- Supervisor to ensure all items are displayed (Policies Poster, Site Rules & Hazardous Substances poster, Emergency response poster, Traffic Control Plan, Before you Dig Aus plans).

SF23 - Project Pre-Start Checklist

	Task / Objective / Requirement	Yes	No	N/A
1.	Has the most appropriate location for the site offices / amenities and parking of the plant with regards to traffic, noise and security been selected? Separated heavy vehicle & light vehicle parking set up?	❑	❑	❑
2.	Amenities set up? Lunch shed, site shed, toilet, hand washing (running water & soap), drinking water, cooking facility, fridge. Site buildings anchored where required in Project Planner?	❑	❑	❑
3.	Is the site secured? Perimeter fencing & warning signs erected?	❑	❑	❑
4.	Site Identification erected? KCE Construction Site sign board with emergency contact & phone number	❑	❑	❑
5.	Warning & information signs erected? First aid location, safety vest, safety shoes, fire extinguisher location, Visitors to office,	❑	❑	❑
6.	Have neighbours been notified of works? Door-knocks, letters?	❑	❑	❑
7.	Has an WHS & ENV PMP / Blue Book been issued?	❑	❑	❑
8.	Has a QA Project Management Plan or QA folder been issued?	❑	❑	❑
9.	Have all construction drawings been issued by the Project Manager?	❑	❑	❑
10.	Has a geotechnical report been issued by the Project Manager?	❑	❑	❑
11.	Excavation permit & Dig Permits completed?	❑	❑	❑
12.	Are “Before you dig Australia” plans (or services plan) displayed?	❑	❑	❑
13.	Has the Emergency Response Plan been displayed in the site shed?	❑	❑	❑
14.	Are the site safety rules & company policies displayed in the site shed? Traffic Control Plans??	❑	❑	❑
15.	Are all Safety Data Sheets (SDS) present (in folder?) with a hazardous substance register completed & displayed?	❑	❑	❑
16.	Safety Equipment available? • First aid kit (size B for up to 25 people), • Fire extinguishers, • spare PPE (safety glasses, ear plugs, hard hats) • 240L Spill kit. • sunscreen **Are kits full?**	❑	❑	❑

Supervisor:	Signature:	Date:

Forms for General Display

PROCEDURE

These forms are to be displayed in the site shed or lunch room: -

Policies poster
- WHS, Environmental & Quality Policies
- Drug and Alcohol Induction Sheet
- Fatigue Management
- Incident & Injury Reporting
- Injury at Work poster (SIRA)
- Noise Level Guide (SafeWork)

Site Rules Poster
- OF02 - Site Safety & Environmental Rules
- SF26 - Register of Hazardous Substances
- Targets and Objectives

Emergencies Poster
- OF03 - Site Emergency Response Plan
- List of Emergency Contacts List
- Locality & Site Safety Maps

Dig Permit
- 6 Key Hazards
- Area Plan

These items should also be displayed
- Traffic Control Plans
- Before You Dig Australia (BYDA) plans
- Dig Permit Plan
- Sediment & Erosion Control Plan

2. Overhead & Underground Services

PROCEDURE SUMMARY

- *Project Manager & Supervisor must review the Before you Did Australia* (BYDA) *plans and complete the KCE Excavation Permit & associated Dig Permits before excavation work commences (including clearing).* ***See procedure SWP02 – Excavation Permit & Dig Permit*** *in this section.*

- *Underground service location contractors should be used to electronically locate services before potholing by hand or sucker truck to positively locate. Locators and supervisors must complete the phone app or document SF58 "Underground Service Location Record".*

- *All workers read, understand & sign the Dig Permits weekly*

- *Insert Before you Dig Australia plans here & display a copy in site shed or with Dig Permits.*

- ***For full details see safety control SCM06 part 2 ~ Work near Underground Assets****. These can be found in KCE's BMS*

OVERHEAD POWERLINES

- ***Use safety control SCM06 part 1 ~ Work near Overhead Powerlines.*** *Safety Control Measures are available via the phone apps or if required a hard copy can be printed and placed in the back of this WHS ENV PMP.*

- *Overhead Powerline Risk Assessment forms are to be used when Overhead Powerlines are present and safe Approach Distances cannot be maintained.*

- *Use SF39 - OVERHEAD POWERLINE RISK ASSESSMENT WORKSHEET. Insert completed forms here.*

NAME:	*SWP02 – Excavation Permit & Dig Permit*

PURPOSE
This SWP sets out the process for authorising commencement of excavations on KCE sites.

PPE	TOOLS/EQUIPMENT	PERSONNEL
nil	Excavation Permit form	Supervisor
	Before you Dig Aus plans	Project Manager
	Dig Permit form	Operators
	Dig Permit Plan	Spotters
	Fencing or delineation	

RESPONSIBILITIES
Supervisor: –

- identify all services that may affect the project
- complete Excavation Permit with Project Manager
- issue Dig Permits every week
- If required Fence or delineate permit areas & install signs. Ensure delineation stays up.
- Ensure all persons working in the Dig Permit area sign on to the Permit every week
- Revise Dig Permits if conditions change (e.g., new water main is pressurised)

Project Manager: –

- support the Supervisor in performing his duties
- authorise excavations using the Excavation Permit
- obtain Before you Dig Australia plans
- prepare the Dig Permit Plan
- monitor use of Dig Permits

HAZARDS
Unplanned contact with live overhead and underground services (electricity, gas, communications, water, sewer)

RULES

1. Excavation means any digging by hand or machine to a depth of more than 100mm. It also includes driving star pickets, wooden pegs, etc. to a depth of more than 100mm
2. No excavation shall take place until a current set of services plans are received through Before You Dig Australia (BYDA) (www.1100.com.au)
3. No excavation shall take place until an Excavation Permit has been issued by the Project Manager to the Supervisor of the site
4. No excavation shall take place in any area until a Dig Permit has been issued by the Supervisor & all workers in that area have signed onto the Dig Permit.
5. Dig Permits are current for 1 week
6. Dig Permits shall have a Dig Permit Plan & BYDA plans attached.
7. No excavations until all services are identified and located
8. No worker shall enter an area of the site & perform excavation work unless they have signed on to the current Dig Permit.

9. An Excavation Permit & a supply of Dig Permits are to be included in every WHSE Project Management Plan
10. Excavations must be carried out in accordance with SCM06 part 1 ~ Work near Overhead Powerlines and SCM06 part 2 ~ Work Near Underground Assets

PROCEDURE – Planning Stage

1. Identify all underground & overhead services on the job
2. Carry out the investigations & actions set out in the permit
3. Project Manager & Supervisor shall discuss the findings. They need to agree that the investigations are sufficient or if further investigations are necessary.
4. Project Manager & Supervisor shall divide the project into Dig Permit areas.
5. When complete, both the Project Manager & Supervisor shall sign the Excavation Permit
6. Proceed to the Excavation stage and issue Dig Permits.

PROCEDURE – Excavation Stage

1. The Supervisor must issue a Dig Permit to all personnel involved in any excavation (every plant operator, spotter or labourer involved).
2. Even where no services are currently installed a Dig Permit must be issued & completed whenever excavating > 100mm deep.
3. The whole project site (including any lead in works) MUST be covered by a Dig Permit or multiple Dig Permits
4. Each Dig Permit must have: -
    a. Personnel conducting the excavation
    b. The Dig Permit Plan & The BYDA plans attached
    c. Time period that permit is valid for – maximum is 1 week
    d. Hazards - what services are likely
    e. Controls to be used for the hazards
    f. Emergency procedures including isolation points (for isolation of the service in the case of an emergency)
    g. Signature of Personnel conducting the excavation
5. The signed Dig Permits then remain in the site office & can be referred to by anyone at any time.

PROCEDURE – Dig Permit Plans

1. The Dig Permit Plan is a plan of the site showing the dig permit area(s) & showing all services.
2. Prepared by the Project Manager/HSEQ Coordinator from the Before you Dig Australia (BYDA) plans or work as executed plans and or a site survey
3. The BYDA plans must be checked by a second responsible person to make sure ALL services are included.
4. Must have the Dial before you Dig plans attached

RELATED DOCUMENTS

- SF52 - Excavation Permit
- SF59 - Dig Permit
- SCM06 part 1 - Work near Overhead Powerlines
- SCM06 part 2 - Work Near Underground Assets
- SWMS - Potholing

SF51 – Excavation Permit

Project: Garden Suburb Stewardship Site Work	**Job Number:** 24026	**Date:**

1. Site Services Investigation Site Inspection Undertaken

ACTION REQUIRED	Y/N	REMARKS
Have the "Before you Dig Australia" plans been obtained? Are they current?	☐ Yes ☐ No ☐ N/A	
Where relevant, have "Work as Executed" drawings been obtained?	☐ Yes ☐ No ☐ N/A	
Has a site survey been carried out to identify surface indicators of utilities (Household & commercial services, light posts, valve pits, pit covers, markers,)?	☐ Yes ☐ No ☐ N/A	
Have all possible PRIVATE SERVICES (these are not on BYDA *plans) been located?*	☐ Yes ☐ No ☐ N/A	
Are all services marked on a map (or series of maps) that can be issued or displayed in the site shed for reference by all workers?	☐ Yes ☐ No ☐ N/A	
Has the asset owner been notified where excavation is within the minimum distance set out in Safework Guide "Work near Underground Assets"? (See KCE SCM06 Part 2 for distances)	☐ Yes ☐ No ☐ N/A	

2. Underground & Overhead services: **No Services Present ☐**

Services Present:	Y/N	Services Present:	Y/N
Overhead Powerlines	☐ Yes ☐ No	Underground communications	☐ Yes ☐ No
Overhead Fibre optic	☐ Yes ☐ No	Underground Fibre Optic	☐ Yes ☐ No
Underground Power	☐ Yes ☐ No	Water	☐ Yes ☐ No
Underground Gas	☐ Yes ☐ No	Sewer	☐ Yes ☐ No
Stormwater	☐ Yes ☐ No	Other	☐ Yes ☐ No

3. Project Manager & Supervisor agree the investigation is sufficient and have divided the site into Dig Permit areas.

Note: areas without services shall still have a Dig Permit. They should simply note "No services present".

Number of Dig Permit areas required	

4. Project Manager & Supervisor sign the excavation permit

Signed (Supervisor): Name (print):	**Date:**
Signed (Project Manager): Name (print):	**Date:**

Note: Dig Permits are issued by the Supervisor. Use the form KCE SF – 59 "Dig Permit" to authorise excavation in each area.

See SWP02 "Excavation Permits & Dig Permits" for procedure

SF59 - DIG PERMIT

Job No: 24026	**Project:** Garden Suburb Stewardship Site Work Myall Road, Hillsborough	**Date:**
Permit No:		
Description of work activity:		
Person Supervising Task (Name):	**(Position):**	

Known Services in area: ☐ Electrical Services: (O/Head) permit required or (U/G) (HV) or (LV)
☐ Gas (HP) (MP) (LP) ☐ Optical Fibre ☐ Water Main ☐ Sewer ☐ Stormwater ☐ **Telecommunications**
☐ Other:_____*(e.g. fuel pipelines Sydney – Newcastle, Rail signals)* **No Services Present** ☐

EXCAVATION ANALYSIS *If a **NO** response is selected for **steps 1-6** the Permit is not Valid and **work cannot commence.***

MANDATORY

STEP 1: Have "**Before You Dig Australia**" or **Work as Executed Plans** been reviewed?	☐Yes ☐No	**"Before You Dig Australia Plans" Attached?** ☐ Yes ☐ No ☐ N/A **"Work as Executed drawings" Attached?** ☐ Yes ☐ No ☐ N/A
STEP 2: Have all known services within the dig permit area been **physically identified** or has an **electronic cable location** been undertaken?	☐Yes ☐No ☐N/A	**Method:** ☐ Conduit markers ☐ Vacuum excavation ☐ Marked with Spray paint ☐ **Cable** Locator ☐ **Pegs** ☐ Signs ☐ Other: _____ Who did it? :*(name)* _____ *(company)*_____*(date)*_____
STEP 3: Are there any recently laid services that are in vicinity of the excavation which may be struck (i.e., services have been relocated and are not yet on a "Before You Dig Australia")?	☐Yes **or** ☐ N/A	**If YES: _____(type)** • **Request "Work as Executed"** ☐ Yes ☐ No ☐ N/A • **Review "Work as Executed"** ☐ Yes ☐ No ☐ N/A • **Physically show workers the location of services** ☐ Yes ☐ No ☐ N/A • **Services physically marked**
STEP 4: Has the method of excavating around existing services "**potholing**" been determined?	☐**Yes** ☐**No** ☐ **N/A**	**Method:** (tools/equipment) _____ _____ _____ ☐ Mechanically dig to _____(depth) ☐ Hand Dig _____(depth) ☐ Combination - complete indicative depths above ☐ Non-destructive sucker truck
STEP 5: Have all workers involved in the task been briefed (Toolboxed) on the task, SWMS signed and attached?		☐Yes ☐ No
Step 6: Have all workers involved in the task inspected the area and are aware of the service locations?		☐Yes ☐ No ☐ N/A

No BYDA and or Service Plans – No <u>Digging</u>

The above verified by: *(name)* *(signature)*

SIGN-ON

By signing this permit, you are acknowledging that you have discussed

Name:	Signature:	Date:	Name:	Signature:	Date:

No BYDA and or Service Plans – No <u>Digging</u>

APPROVAL

Supervisor: *(Name):* *(Signature):* *(Date):*

Comments/Hold Points:

Client Authorisation: *(Name):* *(Signature):* *(Date):*

SF58 - Underground Service Location Record

- Use Phone app SF58 underground Service location record

SF39 - Work Permit-Risk Assessment: Working Around Overhead Services

WHS Regs 2017; Division 7 Overhead and underground electric lines; Section; 166 (1) Duty of person conducting a business or undertaking

1. A person conducting a business or undertaking at a workplace must ensure, so far as is reasonably practicable, that no person, plant or thing at the workplace comes within an unsafe distance of an overhead or underground electric line.

This Work Permit is to be completed at the start of the project and then for every subsequent activity involving work near overhead powerlines.
NOTE: "Accredited Person'' means persons who have undertaken Safe Electrical Approach Training (as per the Safework NSW Code of Practice 2006: Work Near Overhead Power Lines), also referred to as a "Spotter".

	Permit Number:

SECTION 1: Permit Details

Job No: 24026	**Project:** Garden Suburb Stewardship Site Work	**Date:**

Duration of Permit: **Start Date** ____/_____/_____ **Finish/Completion Date** ____/____/_____

Start Time ____:____ **(am/pm) Estimated Finish Time** ____:____ **(am/pm)**

Company Name:

Supervisor *(Name):* Chris Montague

SECTION 2: Planning the Task

Are there Overhead Services?	❒ In the work area			
	❒ Adjacent to worksite			
Known Services in area:	❒ High Voltage Electrical Cable			
	❒ Low Voltage Electrical Cable			
	❒ Fibre Optic Cable			
The Asset (Powerlines) Owner has been consulted regarding the proposed work	❒ **Yes**	❒ **No**	❒ **N/A**	**Name** / **Ph no.**

Location of Services: *(chainage)*

What is the work activity?

Briefly describe the work process:

Complete the section below if the plant to be used can reach or encroach the exclusion zone of the overhead services

1)Type of Plant to be used:		**Maximum reach:**				
Name of Trained Operator of Plant:		**Is this person "accredited"?**	❒ **Yes**	Proceed to work	❒ **No**	Clearances in **Table 1** to be maintained
Name of Trained Safety Observer "Spotter":		**Is this person "accredited"?**	❒**Yes**	Proceed to work	❒ **No**	Clearances in **Table 1** to be maintained
2)Type of Plant to be used:		**Maximum reach:**				
Name of Operator of Plant:		**Is this person "accredited"?**	❒ **Yes**	Proceed to work	❒ **No**	Clearances in **Table 1** to be maintained
Name of Safety Observer "Spotter":		**Is this person "accredited"?**	❒ **Yes**	Proceed to work	❒ **No**	Clearances in **Table 1** to be maintained
Note: Transport vehicles loaded with plant or equipment must be included in the risk management process when passing under or tipping in the vicinity of the overhead services. **What is the maximum overall height of the vehicle loaded or when required to tip in the vicinity of overhead services?**						
3)Type of vehicle to be used:		**Fleet Number:**				
Name of Driver of vehicle:		**Is this person "accredited"?**	❒ **Yes**	Proceed to work	❒ **No**	**Clearances in Table 1 to be maintained**

SECTION 3: Assessing the Risks

Can we **ELIMINATE** the risks of working near overhead services? By….

❒ Yes	❒ No	Having the Power Supply Authority de-energise and isolate the power supply?	❒ Yes	❒ No	Setting up the plant in a position where work can be done away from the power lines?
Can we **ENGINEER** out the risks of working near overhead powerlines? By….					
❒ Yes	❒ No	Engineering a mechanical limiter to physically limit the reach and slew of the item of plant?	❒ Yes	❒ No	Providing ground barriers to limit the travel of the plant?
Can we **MINIMISE** the risks of working near overhead powerlines? By….					
❒ Yes	❒ No	Using a smaller sized or alternate item of plant for the task?	❒ Yes	❒ No	Organising workflow and travel paths to avoid plant being positioned on stockpiled material (built up ground)?
❒ Yes	❒ No	Ensuring a working communication system (2-way radio) is implemented on site?	❒ Yes	❒ No	Implement a Traffic Management Plan that details safe traffic movement on site?
❒ Yes	❒ No	Undertaking a physical inspection of the area to identify the best method for undertaking the work?	❒ Yes	❒ No	Undertaking a task specific risk assessment to identify all potential hazards and risks?
❒ Yes	❒ No	Implementing controls, such as; Warning signage indicating clearances to operators (fitted to power poles at operator eye level)?	❒ Yes	❒ No	Determining the need for "tiger tail" visual warning devices to be fitted to the power lines?
❒ Yes	❒ No	Assessing the conditions on the day, access, clearances, alternate routes or work methods?	❒ Yes	❒ No	Appointing a trained Electrical Safety Observer (Spotter) to warn the operator of approaching the proximity of the overhead services?
❒ Yes	❒ No	Assessing the likelihood of machines travelling on uneven ground or built-up stockpiles causing machines to tip up or over?	❒ Yes	❒ No	Has the Plant Operator **and** "Spotter" (accredited person) both completed Safe Electrical Approach Training *(as per WorkCover NSW Code of Practice 2006: Work Near Overhead Power Lines)?*
❒ Yes	❒ No	Assessing the likelihood of weather conditions causing the lines to swing or sag?	❒ Yes	❒ No	Using alternate and smaller sized machines to maintain clearances when ground levels change (distances to power lines decrease)?

SECTION 4: Safe Working Distances		
What clearance do you have from ground/working level to overhead services?		
Is there a risk of building up the ground level and reducing the clearance between the machine and the overhead services?	❒ Yes	❒ No
Are control measures in place to review clearances as work progresses? List control measures below:	❒ Yes	❒ No
Have you determined the maximum reach for each item of plant to be used? If Yes, ensure these are listed in **Section 2**. *If No, DO NOT PROCEED* further until **Section 2** is completed.	❒ Yes	❒ No
Have you checked the Safe Approach Distances Tables **Section 9** of this permit to ensure the correct distances are being adhered to?	❒ Yes	❒ No
How will the Safe Approach Distance be determined on site? ☐ Survey ☐ Other: _____		
Date Completed: ____/____/_____ Time: ____:____ (am/pm)		
Will Plant or Equipment be working in the "Accredited Persons" Zone	❒ Yes	❒ No
Have measures been implemented to ensure plant, tools, equipment or other materials do not come into contact with overhead services, stay wires and poles? *List control measures below:*	❒ Yes	❒ No
Can the distances documented in Section 9 Tables 1, 2 & 3 be maintained?	❒ Yes	❒ No
If 'No', has the relevant Utility Owner been notified prior to commencing of the work **and**	❒ Yes	❒ No
Has a risk assessment been prepared and approved by the Utility Owner and the HSEQ Coordinator / Manager?	❒ Yes	❒ No

SECTION 5: Risk Assessment / Safe Work Method Statement (SWMS)		
Has a Risk Assessment or SWMS been prepared for this task?	❒ Yes	❒ No
Does it include detail of all aspects of the work, the clearances between the machine and the overhead services and voltages of powerlines in the area?	❒ Yes	❒ No
Have controls been implemented to increase awareness of overhead services or restrict access?	❒ Yes	❒ No
Does it include protection of the stay wires or poles supporting the overhead services	❒ Yes	❒ No
Is there a need to amend the Risk Assessment/ SWMS (*have conditions changed*)?	❒ Yes	❒ No
Have all workers involved in the task been briefed on the Risk Assessment/SWMS and signed the document?	❒ Yes	❒ No
Is the Safe Work Method Statement completed and signed along with this Risk Assessment / Work Permit? **(If NO – DO NOT PROCEED!)**	❒ Yes	❒ No

SECTION 6: Emergency Procedure		
If a power line strike occurs, do the following:		
If the line has <u>fallen clear</u> of machine:	• Check to see if plant is clear of power lines (min 8m away) • Exit vehicle on the other side of the fallen lines, notify site manager, secure area and call Electricity Authority	
If the line is <u>contacting</u> the machine:	• If unable to move plant the Operator is to remain within the cabin until the Electricity Authority disconnects the power OR • If it is essential to leave the cabin due to fire or other life-threatening reasons, then jump clear of the equipment. Do not touch the equipment and the ground at the same time. When moving away from the equipment, hop or shuffle away from the plant item (with both feet together) until at least eight meters from the nearest part of the crane or plant. Under no circumstances run or walk from the crane or item of plant as voltage gradients passing through the ground may cause electricity to pass through the body resulting in an electric shock.	
INVESTIGATION: *(Supervisor to note)*	• The height of the power line from ground level • The height of the height of the machine • Secure the area for 36 hours	
Is this referred to in the site *Emergency Control Plan*	❒ Yes	❒ No

SECTION 7:	Permit Sign-on		
SIGN - ON	NAME	SIGNATURE	DATE
SECTION 8:	Permit Approval		
APPROVAL	**Site Foreman/Supervisor:** *(Name):* **(***Signature):* *(Date):* ___/___/____		
	Comments:		
	Project Manager: *(Name):* *(Signature):* *(Date):* ___/___/____		
	Comments:		
SECTION 9:	SAFE APPROACH DISTANCES - Tabulated		

Table 1: *Approach distances for work performed by Ordinary Persons*
(Untrained and without a Spotter)

Nominal Phase to Phase a.c. Voltage (Volts)	Approach Distance (Metres)
Up to and including 132,000	**3.0**
Above 132,000 up to and including 330,000	**6.0**
Above 330,000	**8.0**

(Reference: WorkCover NSW Code of Practice 2006 - Work Near Overhead Powerlines)

Table 2: *Approach distances for work performed by Accredited Persons, with a Safety Observer*
(Trained Operator and Spotter)

Nominal Phase to Phase a.c. Voltage (Volts)	Approach Distance (Metres)
Insulated low voltage cable up to 1000	**0.5**
Insulated low voltage conductors up to 1000	**1.0**
Above 1000 up to and including 33,000	**1.2**
Above 33,000 up to and including 66,000	**1.4**
Above 66,000 and including 132,000	**1.8**
Above 132,000 up to and including 220,000	**2.4**
330,000	**3.7**
500,000	**4.6**

(Reference: WorkCover NSW Code of Practice 2006 - Work Near Overhead Powerlines)

Table 3: *Approach distances for* ***vehicles*** *being driven or operated under overhead power lines*
(vehicles up to and including 4.6 metres in height)

Nominal Phase to Phase a.c. Voltage (Volts)	Approach Distance (Metres)
Low voltage conductors up to 1000	**0.6**
Low Voltage up to and including 33,000	**0.9**
Above 33,000 up to and including 132,000	**2.1**
Above 132,000 up to and including 220,000	**2.9**
330,000	**3.4**
500,000	**4.4**

(Reference: WorkCover NSW Code of Practice 2006 - Work Near Overhead Powerlines)

If these distances cannot be maintained, work must not proceed, a risk assessment must be prepared for approval by the Utility Owner and the HSEQ Manager notified.

3. Site Induction

The site induction is designed to ensure all workers on the project: -

- are trained in the requirements of KCE
- have the sufficient information to manage their own safety & the safety of others around them
- have sufficient information to care for the surrounding environment

PROCEDURE:

Before working on the KCE site everyone must complete a Site Induction: -

- Supervisor or qualified labourer (attained a minimum of Level 2/3 in KCE Internal Training Levels) to conduct the KCE site induction following the KCE Site Induction Procedure
- Inductee to complete the KCE Site Induction Form (SF27)
- Sheet to be signed and dated by Supervisor/inductor and inductee
- Supervisor/inductor to complete KCE Site Induction Register (SF01)

KCE Site Induction Procedure

1. INTRODUCTION

- Determine if the person needs Site Induction or is a Visitor. *Visitors do not do any work & do not need to be inducted. They sign in & must be under the control of a fully inducted (WHS Construction Induction card & site induction) responsible person. Visitors without WHS Construction Induction cards are permitted.*
- Site Personnel. *Who is in charge - Supervisor, leading hands, etc.*
- Scope of work. *Describe the work being done & where they fit in.*

2. RECORD INDUCTION CARD, LICENCES, & Letter of Competency

- Site Induction form. *Give them the form & ask them to fill in as you go through the induction*
- Medical details. *Anything we need to know about*
- Sight the Construction Induction card & record the number on the induction form. **NO CARD = NO START**
- Record details of Workers that operate Mobile Plant and/or do High Risk Work.
  - All Operators must have a Letter of Competency from their employer for the plant they are operating.
  - Workers doing High Risk Work (cranes, forklifts, boom EWP, scaffolding, boom concrete pumps, vehicle loading cranes over 10 tonne-metres) must have a national High Risk Work licence.
  - Operators of road registered trucks must have their RMS licence
- Record other tickets (e.g., first aid) and their years of experience in civil construction

3. CONDUCT SITE INDUCTION. Use the display posters or the induction folder (where supplied)

Poster 1 – POLICIES

Briefly cover the policies, 6 Key Hazards, D&A, fatigue, noise

Poster 2 - SITE SAFETY & ENVIRONMENTAL RULES

Site Rules
Overhead & Underground Services. *Show where the "Before you Dig Aus" plans are displayed & highlight HAZARDS*
Hazardous Substances Register
HSEQ Targets & Objectives

Poster 3 - EMERGENCIES

First aider
Emergency procedures & phone numbers
Line of Communications *starting with Supervisor*
Locality map *& nearest hospital*
Site Safety Map *showing location of Muster point, First Aid kit, Spill kit, Site Shed/office/lunch room/container.*

Traffic Guidance Scheme. *Explain TGS where applicable.*

Safe Work Method Statement (SWMS)

Inductee is to read & understand the relevant SWMS for their work.
Inductee is to sign the SWMS on the acknowledgement page **(*VERY IMPORTANT*)**

Safe Plant & Safe Operator Checks

Joint inspection of new plant & safe operator checks before starting work on site. Operators to ensure daily checks are completed as part of their Pre starts

Dig Permits & NO GO Zones

Inductee is to understand & then sign on to Dig Permit. Explain any NO GO zones

SF01 - Induction Register

Job No.	24026	Project Name	Garden Suburb Stewardship Site Work

No	Date	Name	Company	SWMS No. (see SWMS folder) – indicate which SWMS has been reviewed & signed by inductee																													
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

SF27 - Site Specific Induction Form

Site: Garden Suburb Stewardship Site Work	**Job No:** 24026
Name: _____	**Company:** _____
Home/Work Ph: _____	**Mob Ph:** _____

Emergency Contact	**Name:** _____
Home/Work Ph: _____	**Mob Ph:** _____

YOU MUST FILL THIS SECTION IN…IF NOT APPLICABLE PLEASE TICK N/A
Do you suffer from any Medical Condition (this information is kept strictly confidential): **N/A** □
Please List:
Do we need to be aware of any personnel medical medications or procedures: **N/A** □
Please List:
Are you currently taking any daily/regular prescribed medications? □ YES □ NO
If **yes**, please state name and dosage:

OHS General Induction for construction work card number (this is **MANDATORY**)	
What sort of work do you do? (e.g., operator, labourer, supervision). Please specify	
Please insert the number of **years of experience** you have in the Civil Construction Industry	

Do you do **High Risk Work that needs a National Licence**? Yes / No (circle one)
*A national license is needed for cranes, forklifts, dogging, rigging, boom EWP, scaffolding, boom concrete pump, vehicle loading crane over 10 tonne-metres. If **Yes** write in your Licence number below-*

Type of High-Risk Work	**National License number**

Do you operate a **road registered truck**? **Yes / No** (circle one)	
If **Yes**, fill in your TfNSW **licence number** here	HR / HC

Do you operate **Mobile Plant**? **Yes / No** *(circle one)*
*If **Yes** fill in your details below: -*
You must have a Letter of Competency for the type of plant you operate from your company with you.
If you do not have a Letter of Competency with you it can be emailed to training@kce.com.au.
Write in the & confirm your Letter of Competency has been supplied. Add any other certificates you have.

Plant Type	**Letter of Competency supplied Y/N**	**Other certificates e.g., Statement of Attainment, previous WorkCover licenses**

What **other tickets or qualifications** do you hold & need for your work? *For example; first aid ticket, rail induction, confined space ticket*	

Please initial each induction item as they are completed: -

Item	*Description*	*Initial*
1	Who is in charge – names of supervisor & leading hands	
2	Scope of work	
3	KCE Policies for WHS, Environment & Quality	
4	6 Key Hazards – Services, Plant, Excavations, Traffic, Manual Handling, Slips, Trips & Falls	
5	Fatigue Management	
6	Drugs & Alcohol	
7	Noise & Hearing protection	
8	Site Safety & Environmental Rules	
9	Hazardous Substances Register & Safety Data Sheets (SDS)	
10	First aid & Emergency Response	
11	Report all Incidents & injuries to Supervisor	
12	Industrial Relations	
13	Bullying and Harassment	
14	Site specific Traffic Plans	
15	First Movement Forward Policy (No Reversing)	
16	Safe Work Method Statements - SWMS	
17	Safe Plant & Operator Check	
18	Dig Permits & NO GO Zones. Overhead & Underground Services (electricity, gas, water, etc.) – Before you Dig Aus plans	
19	HSEQ Targets and Objectives	

I agree to abide by the KCE Policies, Site Safety Rules & SWMS for this worksite.

Inductee:	**Sign:**	**Date:**
KCE Supervisor / Inductor:	**Sign:**	**Date:**

4. Pre-work Brief & Sign in Register, Toolbox Meetings

Pre-work briefs & Toolbox talks are the formal communication methods used on KCE sites for the exchange of information between workers & KCE management (supervisors).
All workers are encouraged to express their views at these meetings.

PROCEDURE – INDUCTED PERSONNEL

- The Supervisor shall conduct a pre-work briefing before work on the KCE site every day. The briefing shall outline the work to be carried out, the hazards involved and controls to be used. New safety alerts or other matters shall also be raised.
- All personnel are encouraged to raise any safety concerns or other matters.
- All personnel working on the site shall attend the briefing and sign the QR Code pre-work brief section before starting work.
- All personnel working on the site shall sign out before leaving the site.
- People arriving after the briefing shall read the briefing notes and sign the Pre-work Brief sign in section.

PROCEDURE - VISITORS

- Visitors shall inform the KCE Supervisor before entering and then sign on to the KCE Pre-work Brief sign in section.
- Visitors shall be accompanied by a fully inducted designated person at all times

PROCEDURE – TOOLBOX MEETINGS

- To be held by the Supervisor to discuss work issues including: -
  - Safety, Environmental or Quality issues
  - Changes in work processes or new processes starting
  - Prior to working near overhead or underground assets
  - Safety Alerts or Incidents
  - short training sessions e.g., correct PPE use, working in hot weather, storms & lightning, etc. See section 20 for the Safety & Enviro Control Measures (SCM & ECM) for topics
- To be held at the start of the project and at a minimum of once a fortnight.
- To be recorded on the Toolbox form SF04

PROCEDURE – DELIVERY DRIVERS

- Delivery drivers shall contact the supervisor before entering the site
- Drivers shall complete a Delivery & Courier Driver Familiarisation.
- They shall sign a copy of the familiarisation & keep a copy for reference

SF03 - Prework Brief & ToolBox Sign In / Out Sheet

Project Name: Garden Suburb Stewardship Site Work	**Supervisor:** Chris Montague
Work Area:	**Date:**
What didn't we get done yesterday?	
Any Safety Concerns from yesterday?	
What are we doing today?	

Hazards with today's work:	**What controls do we need for these hazards?**

Print Name	Company	Visitor	Employee	Contractor	Mobile Phone	Time In	Time Out	Sign

SF04 - Record of Toolbox Meeting

Job No: 24026	Project: Garden Suburb Stewardship Site Work		Date:
Supervisor: Chris Montague			
Reason for Meeting:			
Persons Present: -			
Print Name	Signature	Print Name	Signature
Comments/Points raised:			

Corrective Action	Action By:	Action Complete	
		Sign Off	Date

SF85 - Delivery and Courier Driver Familiarisation

- **Requirements**

This project has some key hazards that you need to be aware of & site rules you will need to comply with.

- **Site Contacts**

Position	Name	Phone Number
SUPERVISOR	Chris Montague	0418 741 748
LEADING HAND	Roland Cartwright	0421 786 428

Radio contact is on UHF channel .....
Contact the site by radio or phone prior to each time you enter

NO TALKING ON MOBILE PHONES WHILE DRIVING

- **Key Hazards you need to be aware of.**
  - Insert site specific hazards & controls
  - Insert site specific hazards & controls

SITE RULES

- **Personal Protective Equipment**
- High visibility clothing or vest must be worn at all times.
- Steel capped safety boots must be worn at all times.

- **Operating plant**
- At no point shall you operate any equipment that you are not fully competent to operate. If transporting equipment, you must wait for a competent KCE employee or subcontractor to load/ unload.

- **First Aid / Medical Treatment**
- First Aid Facilities / Kits are available at site sheds and in all KCE vehicles.
- Trained First Aiders are available to render assistance if required.

- **Emergencies**
- In the event of an Emergency, you will be instructed as to what action you should take by the supervisor

- **Accidents / incident reporting**
- Delivery and courier drivers must report all injuries, hazards, environmental damage, near miss incidents and plant / vehicle damage immediately to the Supervisor.

DRIVER ACKNOWLEDGEMENT:

I ..... acknowledge the receipt of the above advice by signing below, keeping a copy for myself and returning the original to the Supervisor.

Company Name: _____ **Vehicle Rego No:** _____

Print Name: _____

Signed: **Date:**

5. WHS Checklist

PROCEDURE

- This checklist must be completed every week (preferably on Mondays) or after a significant incident
- Provide comments wherever applicable (e.g., safety hazards that may have been fixed)
- To be completed by the supervisor, or by his delegate (level 3 labourer as a minimum) and signed off by the supervisor

SF07 - WHS Weekly Checklist

WHS Inspection Checklist

(To be completed every Monday or after an WHS event)

Project 24026 Job No Garden Suburb Stewardship Site Work

Date of Inspection ____/____/____.

Task / Objective / Requirement	Yes	No	NA
• Has there been any notable WHS issue since the last Inspection?	❑	❑	❑

If Yes, specify details;

(Complete a Non-conformance / Suggestion / Preventative & Corrective Action Form and / or an Incident Investigation Form if applicable)

• Are the Site Safety Rules still displayed and still adequately relevant?	❑	❑	❑
• Are the toilet facilities in a clean and sanitary condition?	❑	❑	❑
• Is the lunch shed in a clean and tidy condition?	❑	❑	❑

If No for any of the above, specify maintenance required;

• Are the emergency evacuation procedures still in place visible to all workers?	❑	❑	❑
• Are all work areas being maintained free from trip hazards?	❑	❑	❑
• Are all storage areas and containers tidy and properly secured?	❑	❑	❑
• Are all electrical leads and equipment safe, tested and tagged?	❑	❑	❑
• Are all fire extinguishers operational and tagged?	❑	❑	❑
• Are all compressed gas bottles maintained in good condition, upright and free from adverse conditions?	❑	❑	❑
• Are all Plant Daily inspection checklists up to date?	❑	❑	❑
• Are all workers maintaining and conforming to the regulations regarding the use of PPE?	❑	❑	❑
• Are the Safety Data Sheets (SDS) available for all hazardous substances onsite?	❑	❑	❑
• Are Hazardous Substances being maintained / stored properly to protect health and safety?	❑	❑	❑
• If excavation is at a depth of 1.5metres or more is then benched, battered, combination of the two or are shoring boxes being used?	❑	❑	❑
• Is excavated material stationed outside the zone of influence?	❑	❑	❑
• Is natural soil material holding up, void of any significant cracks that can potentially lead to a partial trench collapse?	❑	❑	❑
• Are all open trenches and excavated faces securely fenced or barricaded	❑	❑	❑

Task / Objective / Requirement	Yes	No	NA
● Are adequate traffic control procedures being implemented onsite?	❑	❑	❑

If No to any of the above, please specify details and required action;

● Are all WHS Control Measures being implemented in accordance with the relevant clauses of the safe work method statement (SWMS) for individual employees and subcontractors?	❑	❑	❑

If No provide brief details below and complete the form SF15 - Non-conformance / Suggestion / Corrective and Preventative Action;

● **First aid**. Are there sufficient kits accessible onsite?	❑	❑	❑
● Are the first aid kits stocked adequately? See list below for a type B kit (up to 25 people).	❑	❑	❑

Adhesive dressing strips, sterile - 50	1	Scissors, blunt, short nose, 12.5 cm	1
Adhesive tape – 2.5 x 5 cm	1	Splinter forceps	1
Plastic bags for amputated parts, various	1	Sterile eye wash, 10 ml, single use	6
Dressings, sterile, non-adherent, 7.5 cm^2	2	Swabs, pre-packed, antiseptic, packs of 10	1
Eye pads, sterile	2	Triangular bandages, minimum 10 cm	4
Gauze bandages, 5 cm	1	Wound dressings, sterile, non-medicated, large	3
Gauze bandages, 10 cm	1	First aid pamphlet, SafeWork approved	1
Gloves, disposable, single use	4	*Extras*	
Rescue blanket	1	Medium crepe support bandage, 10 x 2 cm	1
Safety pins, packets	1	Coldpack, instant cold press	1

Additional Job Site Specific Checklist Items

●	❑	❑	❑
●	❑	❑	❑
●	❑	❑	❑
●	❑	❑	❑

NOTES:

Inspected By:

Sign Print Date

Rehabilitation / maintenance from this inspection completed? ❑ Yes ❑ NA

Date: ___/___/___.

Project Manager / Supervisor:

Sign Print Date

6. Environmental Checklist

PROCEDURE

- This checklist must be completed every week, (Preferably on Monday) after a rain event (10mm in a 24 hour period) or after a significant incident

- To be completed by the supervisor or his delegate (level 3 labourer as a minimum) and signed off by the supervisor

SF08 - Environmental Weekly Checklist

Environmental Inspection Checklist

(To be completed preferably Monday or after wet weather)

Job Number: 24026 Project: Garden Suburb Stewardship Site Work

Date of Inspection: ___/___/_____ Previous Inspection: ___/___/_____

Task / Objective / Requirement	Yes	No	NA
• Has it rained since the last reporting period?__ mm/24hrs	❑	❑	❑
• Are all erosion / sediment control measures in place as per the approved contract drawings?	❑	❑	❑
• Are all sediment and erosion controls being inspected on a daily basis?	❑	❑	❑
• Is Bunding provided around all hazardous or dangerous goods to prevent potential spill contamination?	❑	❑	❑
• Are Hazardous Substances being maintained / stored properly to protect Environment?	❑	❑	❑
• Are additional Environmental controls required to satisfy environmental sensitive areas?	❑	❑	❑
If Yes, specify details.			
• Are there any external pressure being placed on erosion / sediment control (i.e. existing open drains)?	❑	❑	❑
If Yes, list areas below and control measures taken to prevent damage.			
• Has any silt / sediment bypassed the controls in place and washed off the site?	❑	❑	❑
• Has any sediment bypassed the controls and entered the stormwater system?	❑	❑	❑
• Is clean water being diverted away from site?	❑	❑	❑
• Are clean water diversions stable and effective?	❑	❑	❑
• Are sediment basin height markers in place and clearly visible?	❑	❑	❑
• Are sediment basins less than 70% of design capacity?	❑	❑	❑
• Does the basin need discharging to environment?	❑	❑	❑
If Yes: Is the turbidity of the water less than 50mg/L?	❑	❑	❑
Is the pH between 6 and 9 pH units?	❑	❑	❑
• Are all silt bags in place and in good order?	❑	❑	❑
• Do all stockpiles have silt fencing in place?	❑	❑	❑
• Are long term stockpiles hand seeded to prevent dusting?	❑	❑	❑
• Are all dust emissions being adequately controlled?	❑	❑	❑
• Are environmental 'no go' areas suitably fenced to prevent any entry and possible disturbance or damage?	❑	❑	❑

• Have all completed work areas been seeded, turfed or mulched?	❑	❑	❑
• Is there any maintenance required following this inspection?	❑	❑	❑

If Yes please specify extent and location of the maintenance

• Are subcontractors providing the required levels of environmental protection measures for the works they perform	❑	❑	❑
• Are subcontractors completing the relevant monitoring of the works they provide?	❑	❑	❑
• Are all Environmental Control Measures being implemented in accordance with the relevant clauses of the work method statement for individual employees and subcontractors?	❑	❑	❑
• **Spill Kit**. Is there a spill kit accessible on the site and is it fully stocked?	❑	❑	❑

Additional Job Site Specific Checklist Items

•	❑	❑	❑
•	❑	❑	❑

If any negative responses provided to questions above; record actions completed below.

Any identified actions that cannot be closed out immediately are to be raised and completed in the actions register.

NOTES:

Inspected By: _____

Sign Print Date

Rehabilitation / maintenance from this inspection completed? ☐ Yes ☐ NA

7. Plant & Equipment

PROCEDURE

Plant & Equipment includes: -

- Mobile plant (excavators, backhoes, trucks, etc.).
- Portable plant (rammers, plate compactors, concrete extruders, poly pipe joiners, petrol pumps, generators, compressors, jack hammers, quick cut saws, etc.).
- Hand held electrical equipment (drills, breakers, extension leads).
- Other equipment such as lifting gear & fire extinguishers

MOBILE PLANT

All mobile plant must be checked for compliance with the requirements of this section before working on the KCE site. This process shall be as follows: -

- Each item of plant must present to site with: -
    - A **risk assessment** or SWMS for that item (to be filed in this section of the WHSE PMP).
    - the manufacturer's **operator manual** (to be kept on the plant)
    - a **summary of maintenance** carried out on that item of plant (to be filed in this section of the WHSE PMP). This must demonstrate regular & up to date servicing of the plant to maintain it in safe working condition
    - **Letter of competency** for the operator (see below for details; to be filed with site induction)

- At the time of arrival on the KCE site all plant & equipment must be **jointly inspected** by the supervisor & the operator and recorded on form SF09.2 Safe Plant & Operator Check (to be filed in this section of the WHSE PMP)
- Any equipment that does not meet requirements for safe operation must not be used until repaired. It shall be stood down, securely **locked out** and an "Out of Service" tag attached until repaired or removed from site.

- The operator must complete his own **daily pre-start checklist** every day prior to starting work. Completed pre-starts shall be presented to the supervisor on the following day.

- The operator of **dry hire equipment** shall use forms "SF09.1a" or "SF09.1b" – Plant Inspections to record daily pre-start checks. The operator shall be appointed by the supervisor & present the completed pre start checklist form to the supervisor or nominated person every week.

- A **register of plant & equipment** on site shall be maintained by the supervisor.

MOBILE PLANT OPERATORS

3 step process to verify competency: -

1. Project Manager or Supervisor arranges to hire plant or for specialist subcontractors to operate the plant on site.
    - All operators of mobile plant must provide a **Letter of Competency** to the Project Manager or Supervisor prior to working on site. This should happen at time of engagement of the contractor & ***before*** the operator arrives on site. The subbie shall email the LoC to training@kce.com.au and the operator should keep a copy with him for verification in step 2.
    - NOTE: a database of operator competencies is being compiled on the KCE computer system
    - Operators of High-Risk Work Plant (includes boom concrete pumps, cranes, VLC larger than 10 tonne capacity at 1 metre, forklift, boom EWP) must produce a Safework National License
    - Operators of Road registered tipper trucks & water-carts must produce the relevant RMS license
2. Supervisor confirms letter of competency & other evidence at site induction & records on the induction form SF27
3. Supervisor then inspects the plant & checks if the operator is competent. Record this on SF09.2 – the top part of the form is for the plant & the bottom part for operator

A **Letter of Competency** from the subcontractor company must state that the operator is competent to operate the plant concerned and include: -

a. Name of operator
b. The plant the operator is competent to operate
c. Years of experience
d. Signed by senior person from subcontractor company (e.g., General Manager, Director, owner)

SAFE OPERATOR CHECK

The supervisor shall check all new operators for their ability to work safely. This shall be recorded on the phone app or *"SF09.2"* Safe Plant & Operator Check.

CRANE & HI-AB WORK PLANT

Operators of all **VLC / Hiab's** must complete a risk assessment & present it to the site supervisor before unloading. If they do not have their own risk assessment tool use the Crane & Hiab On-site Risk Assessment in this section.

PORTABLE PLANT

At the time of arrival on the KCE site all portable plant must be inspected by the supervisor and recorded on form “SF09.2” Safe Plant & Operator Check (to be filed in this section of the WHSE PMP) or have an inspection tag attached from the hire company.

ELECTRICAL EQUIPMENT

Hand held electrical equipment must be tested & tagged as a minimum every 3 months by an electrician or a competent person who has completed Test & Tag training. Additional testing may be required as per site requirements.

A register is to be maintained by the tagger on the KCE central register

LIFTING GEAR

Lifting gear is to be inspected annually (site/client requirements quarterly) by the nominated inspection company. Records of the completed testing are to be forwarded to AWG head office & recorded on the KCE site central register.

FIRE EXTINGUISHERS

Fire extinguishers must be tested & tagged every 6 months by a competent person.

If required a site specific register is to be maintained by the KCE supervisor.

Any new extinguishers purchased by the tagger must be placed on the KCE central register and forwarded onto the accounts department

SF09.2 – Plant & Operator Check

Project: Garden Suburb Stewardship Site Work	**Plant Type:**
	Make & model:
Check by (KCE):	**Identification No.:**
Position (*e.g., supervisor, CW4)*:	**Conditional Rego No:**
	Owner:
	Operator:

Check for Safe Plant & Safe Operator on arrival to site

Safe Plant Check

✓ = acceptable; ✗ = not acceptable; NA = not applicable to this plant

Item	✓ or ✗ or NA	Item	✓ or ✗ or NA
Plant Risk Assessment, Operator Manual, Maintenance Summary present		**Check Quick hitch locking device** (excavators & backhoes) – safety pin in	
Safe working load displayed		**Safe operator access –** ladders, handrails clean & in good condition	
Danger & Out of Service tags present		**Windows & mirrors clean, no damage, good visibility**	
Any obvious damage		**Reversing alarm operational**	
Hydraulic oil leaks		**Flashing light operational**	
Engine oil leaks		**Check steering & brakes**	
Check all fluid levels		**Check warning lights/alarms**	
Tyres / Tracks in good order		**Check horn**	
Guards over moving parts		**ROPS** (when working on steep batters or at risk of roll over)	
Fire Extinguisher – secure, inspection date < 6 months old		**FOPS** (when clearing or at risk of falling objects)	
Burst protection valves – fitted to excavators lifting suspended loads over 1T		*Any other checks?*	
Two-way radio			

Signed (Operator):	**Date:**

Safe Operator Check

Item	Supervisor to Initial	Comments:
Letter of Competency supplied for this plant?		
Has the operator been able to identify the hazards associated with this equipment?		
Does the operator have a reasonable understanding of safety issues in the work environment?		
Could the operator identify key safety aspects of the equipment serviceability & conduct a prestart check?		
Understands isolation & "tag out" procedures		
Does the operator understand the PPE required for safe operation of this equipment?		
Did the operator demonstrate that he could operate the equipment safely?		

Signed (KCE Delegate):	**Date:**

Supervisor or delegate checks plant & operator for safe operation. The delegate is signing for and on behalf of KCE and is not accepting personal liability

SF09.1a- Daily Plant Inspection Checklist (pre-start)

Project: Garden Suburb Stewardship Site Work	**Plant Type:**
Make & model:	**Identification No.:**
Owner:	**Operator:**

NOTE: Operators are required to complete daily pre-start check before starting work.
Faults are to be reported to the supervisor.
Please mark boxes as ✓ for OK no defect, × for defect supervisor notified, NA for not applicable

DATE:							
❑ **Day of the Week**	**Mon**	**Tues**	**Wed**	**Thur**	**Fri**	**Sat**	**Sun**
Cabin – seat, seatbelt, clean condition, windscreen, mirrors,							
Safe operator access – ladders, steps, handrails clean & in good condition							
No obvious damage							
Hydraulic & Engine oil leaks							
2 Way Radio							
Check all fluid levels – Engine, transmission & hydraulic oils, coolant, batteries, steering fluid							
Tyres / Tracks in good order							
Guards over moving parts							
Fire Extinguisher – secure, inspection date < 6 months old							
Check Quick hitch locking device – safety pin in							
Windows & mirrors clean, visibility							
Reversing alarm operational							
Flashing light operational							
Check steering & brakes							
Check warning lights/alarms							
Check horn							
Safe working load displayed							
Comments:							

Signed (Operator):	**Date:**

SF09.1b - Daily Plant Inspection Checklist (pre-start)

PROJECT: _____ PLANT TYPE: _____ COMPANY: _____ MAKE / MODEL: _____

OPERATOR'S NAME: _____ DATE: _____ SHIFT: DAY ☐ UNIT No.: _____ HOURS: _____

NEXT SERVICE HOURS: _____ NIGHT ☐

Ensure that all boxes are marked. E.g.: ☑ for OK ☒ for defect found

CATEGORY 'A' FAULTS: THE MACHINE MUST NOT BE OPERATED. SUPERVISOR MUST BE NOTIFIED IMMEDIATELY								
	Action	Initial		Action	Initial		Action	Initial
Steering			Emergency Steering			Safety Pins / Hitch		
Service / Retarder Brakes			Emergency Brakes			Seat Belts		
Warning Systems			Park Brakes			Lights (Head / Working)		
Fire Extinguisher (In Date / In Green)			Fire Suppression			Lights (Tail / Turn)		
Seat			Emergency Stops			Tyres / Rims (Wheel Nuts, Studs)		

CATEGORY 'B' FAULTS: THE MACHINE MUST NOT BE OPERATED UNLESS FAULT IS RESTRICTED OR APPROVED AND INITIALLED BY WORKSHOP SHIFT L.H. FOREMAN OR SUPERVISOR								
	Action	Initial		Action	Initial		Action	Initial
Two Way Radio			Mirrors & Cab Glass			Horn / Reverse Alarm		
Fuel / Oil Leaks			Coolant Level / Leaks			Seat Belts		
Main Machine Access			Gauges			Lights / Work Lights		

CATEGORY 'C' FAULTS: THE MACHINE MAY BE OPERATED, CORRECTIVE ACTION REQUIRED, REPORT IT TO YOUR SUPERVISOR								
	Action	Initial		Action	Initial		Action	Initial
Minor Oil Leaks			Equipment Damage			Air Leaks		
Wipers / Washers			Other Ladder Rails			Air Conditioner		
Fuel Level			Grease Lines			ID Numbers Secure / Visible		
Clean Cab			Electrical Wiring			Other		

A PRE-START CHECKLIST **MUST** BE COMPLETED AT THE BEGINNING OF EVERY SHIFT OR BEFORE OPERATING OTHER MACHINERY DURING THE SHIFT.
NOTE: THESE ARE INTENDED AS MINIMUM STANDARD AND SHOULD NOT OVER-RIDE SPECIFIC PLANT REQUIREMENTS.

Operator's Name (print): _____ Operator's Signature: _____

Defect	Action	By	Date

Crane & HIAB On-Site Risk Assessment

Site:	Garden Suburb Stewardship Site Work	Date:	

Crane operator's daily maintenance checklist completed: Yes □ No □

Type of Hazard	*Potential hazard? Y/N*	*Risk Low/Med/High*	*Control method*	*Control in place Y/N*	*Type of Hazard*	*Potential hazard? Y/N*	*Risk Low/Med/High*	*Control method*	*Control in place Y/N*
Weather Overcast Wind Rain	 Y / N Y / N Y / N			 Y / N Y / N Y / N	Overhead Power	Y / N			Y / N
Ground Good Soft Muddy Trenches Fill Sloping	 Y / N Y / N Y / N Y / N Y / N Y / N			 Y / N Y / N Y / N Y / N Y / N Y / N	Site Obstructions	Y / N			Y / N
					Communications Visual Audible	 Y / N Y / N			 Y / N Y / N
Traffic Signs Barricades Pedestrian Rail Road Walkway	 Y / N Y / N Y / N Y / N Y / N Y / N			 Y / N Y / N Y / N Y / N Y / N Y / N	Cranes only Load Radius Reeving	 ..... T .... m No. of parts-			 Y / N Y / N
Overhead obstructions Trees Cables Pipes Other	 Y / N Y / N Y / N Y / N			 Y / N Y / N Y / N Y / N	Equipment Lifting gear Boom length Fly-jib	 Y / N .....m Y / N			 Y / N Y / N Y / N

Risk assessed by:

Driver name (print):	Sign:
Dogman name (print):	Sign:
KCE supervisor name (print):	Sign:

SF50 - Plant & Equipment Register

The following register contains details of all plant and equipment to be used by KCE during the course of the work activities.

Plant Type	Serial No. / Registration No.	Make / Model	Owner	Operator	Checked for LOC	Inspection Check List Complete	Copy of License sited e.g. Tipper/WC	Date On Site	Log Book Available

Electrical Register

Company	Asset ID	Description	Make / Model	Re-test Period	Pass Or Fail P/F	Test Date	RE -Test Date	Location	Owner	Comments

Lifting Gear Register

ID	Make / Model	Date last test				Owner	Comment
		1st	2nd	3rd	4th		
		Jan	April	July	Oct		

Fire Extinguisher Register

SIZE KG	UNIT NUMBER	PLANT NO. / REGO NO.	WHERE IT'S KEPT	DATE CHECKED	OWNER NAME	COMMENTS	NEXT TEST DUE DATE

8. Incident Reporting

PROCEDURE

- The first priority is to render aid to any injured persons or control environmental incidents. The supervisor shall take charge of all incidents & implement any emergency procedures necessary. See section 10 “Emergency Procedures”.

- Once under control the supervisor shall verbally report the incident to:

    - The Project Manager

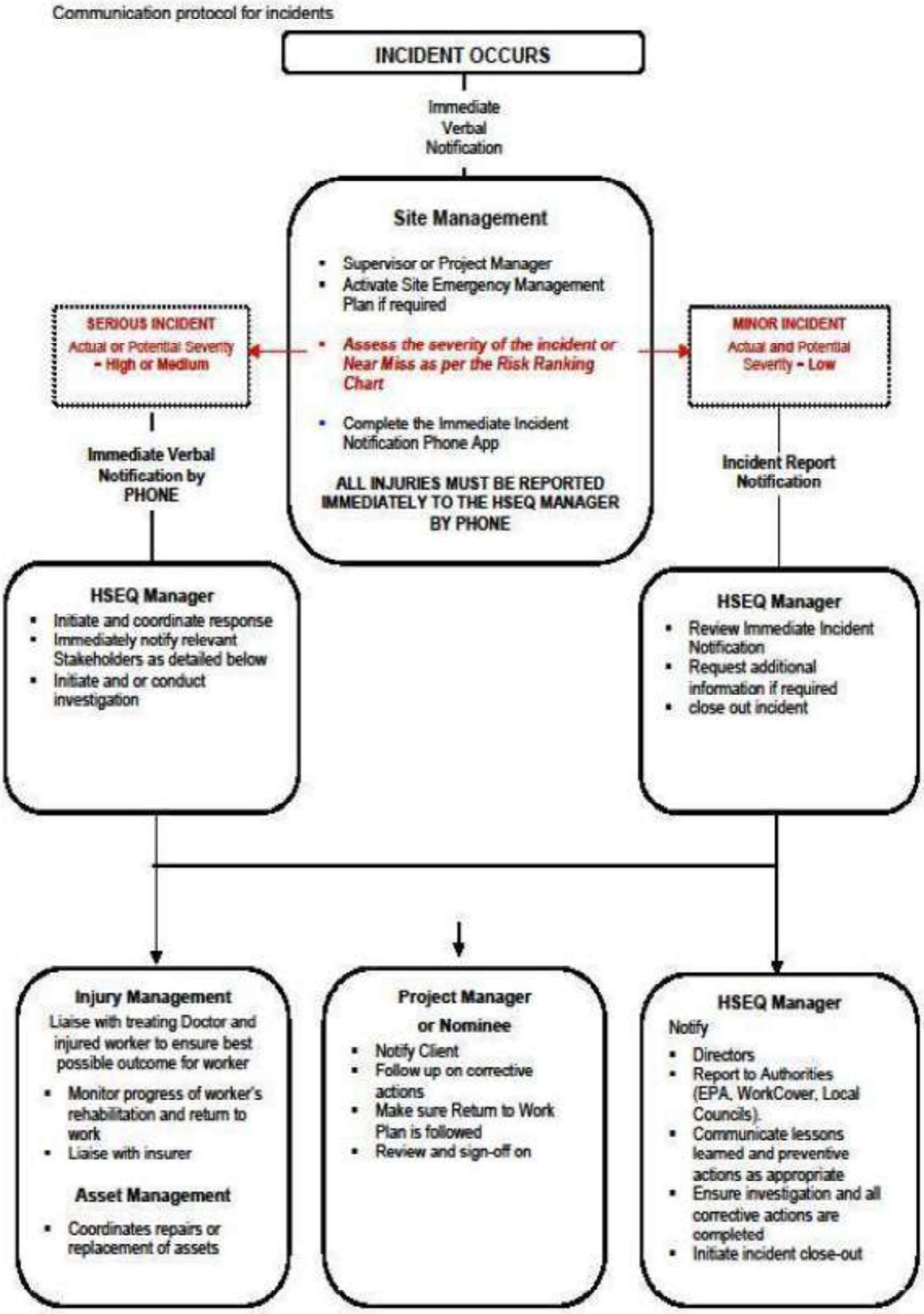
    - HSEQ Manager (for all incidents)

- The supervisor shall then complete the Incident Report on Appenate (which in turn provides a copy to the HSEQ Manager for maintaining the company records).

  Any significant WHS incidents (e.g., lost time or more serious injuries, near misses with potential for serious injury) and any significant environmental incidents (e.g., dirty water escaping from site, chemical spills, dust, noise) or any adverse environmental impact which has occurred, is occurring, or is likely to occur.) MUST be investigated by the Project Manager. The Project Manager may get assistance from the HSEQ Manager (or other KCE personnel) in conducting the investigation.

- See the Incident Management Flowchart on the next page for the full procedure.

INCIDENT REPORTING FLOWCHART



SF05 - Incident Register

Site: Garden Suburb Stewardship Site Work		**Supervisor:** Chris Montague	
Date	**Report Form Number**	**Type of Report (Brief)**	**Persons Involved**

SF06 - Incident Report

Project Number	24026	***Incident Number***	
Project Name	Garden Suburb Stewardship Site Work		

Type of Incident

Injury		*Service hit*		*Near Miss*		*Motor Vehicle Accident*	
Motor Vehicle Damage		*Plant Hire Incident*		*Asset Damage*		*Vandalism*	
Theft		*Environmental*		*Complaint*		*Other*	

Incident Actual Risk:
Incident Potential Risk:

Person involved:		Date and Time of Incident
Occupation:		Employer:
Address:		Phone:
Witness 1 Name: Phone	Witness 2 Name: Phone:	Employee's Signature

Section 1 - Injury

Body part injured:

Cause of injury:

Type of injury:

Treatment:

Actions taken to rectify the issue / prevent it from happening again:

HSEQ or Project Manager:	Name (print):	Sign:	Date:
Supervisor:	Name (print):	Sign:	Date:

Section 2: Service Hit

Type of service hit:

Actions taken to rectify the issue / prevent it from happening again:

Section 3: Asset Damage

AWG Asset Number (Exact Format POW06001):

AWG Asset Number Description:

Section 4: Near Miss, Vandalism, Environmental, Complain, Theft or Other

Please send any relevant photographs concerning the incident to David Swadling via email.

Details of incident:

Section 5: Motor Vehicle Accident / Damage or Plant Hire Incident

Please send any photographs of vehicle damage to HSEQ Manager via email.

Driver 1 details

Employer:

Full name:

Home address:

Mobile phone number:

Licence number:

State driver licence was issued:

Expiry date of licence:

Rego number of driver's vehicle:

Make and model of vehicle:

Driver's insurance details:

Driver 2 details (if applicable)

Employer:

Full name:

Home address:

Mobile phone number:

Licence number:

State driver licence was issued:

Expiry date of licence:

Rego number of driver's vehicle:

Make and model of vehicle:

Driver's insurance details:

9. Non-conformances, Hazard Reporting & Suggestions

PROCEDURE

The Non-conformance report (NCR) form or NCR phone app are to be used to record non-conformances or Hazards actions for improvements.

- Hazards are to be reported to the Site Supervisor immediately. Hazards that cannot be fixed immediately shall be recorded on an NCR form which is forwarded to the Project Manager for rectification

- Non-conformances can be raised by KCE staff, contractors to KCE or the client

- Non-conformances to be recorded include: -
  - quality issues (non-conforming product or service from suppliers or contractors);
  - safety issues that do not result in an incident (e.g., lack of PPE, non-compliant safety systems or SWMS, hazards) and

  environmental issues that do not result in an incident (e.g., insufficient sediment control, non-compliant environmental systems).

- The supervisor shall complete the initial section of the NCR form & the NCR register and provide the form to the Project Manager

- The Project Manager shall investigate and decide on Corrective & Preventative Actions to be taken to prevent recurrence.

- If the NCR was raised by the client or requires the client's concurrence the NCR should be sent to the client for approval.

- When the Corrective & Preventative Actions are complete the Project Manager shall "close out" the NCR form as finalised and provide a copy to the HSEQ Manager for maintaining the company records.

SF16 – Non-conformance & Hazard Register

Site: Garden Suburb Stewardship Site Work			**Supervisor:** Chris Montague		
Report Form Number	**Details of non-conformance or hazard**	**Persons Involved**	**Corrective & Preventative Action**	**Who Responsible**	**Date Closed**

SF15 - Non-Conformance / Corrective and Preventative Action Form

This form is to be completed on the app

10. Emergency Response

In the case of an emergency

1. Contact the Supervisor immediately on the 2-way radio using the emergency call: -

   - Call “emergency, emergency, emergency”
   - Wait for a reply from the operator/supervisor
   - State your **name, location, nature of the emergency** and **assistance required**
   - Confirm that your message has been understood

2. On hearing the emergency call, all other personnel should park up in a fundamentally stable position in a safe location away from the emergency, maintain radio silence and wait for further instructions from the Supervisor. Do not obstruct the path of attending emergency vehicles

3. Stop work and extinguish all possible sources of ignition

4. Disconnect any “live” electrical equipment

5. Close any water, gas or air valves being used to supply any equipment and ensure that equipment being supplied has been properly turned off before shutting off the supply

6. **DO NOT** enter the emergency site unless there are casualties who require your immediate assistance and then **ONLY** if it is safe for you to do so

7. **IF INSTRUCTED** - assemble at the nominated muster point or at a safe place if unable to reach the muster point

Non-disturbance - leave the emergency scene exactly as you found it for investigation purposes unless you need to render assistance to injured persons or prevent environmental damage

Site Emergency Response Plan

General Procedures

- The Supervisor of the project manages the accident and emergency procedures.

- Emergency response equipment maintained on-site shall include: -

  - First aid kit
  - 240L spill kit
  - Fire extinguishers in the site shed & the container
  - Safety Data Sheets (SDS) for hazardous substances on-site

  Designated first aider has received first aid training.

- All workers must fully understand the emergency procedures and the location of the Emergency Response Plan and the assembly areas.

- Copies of the site emergency response plan (including the contact list and site safety map) are located on the notice board in the site office.

- Supervisor and Leading Hand carry mobile phones for emergency use. UHF radios are also used for site communications

- A site safety map is included in the site emergency response plan that clearly shows the locations of:
  - Hazardous / flammable chemicals stored on site,
  - Safety Data Sheets (SDS's)
  - Emergency response equipment such as fire extinguishers, first aid kits, spills kits, etc.
  - Assembly areas.

- All emergency incidents shall be recorded and investigated by the Project Manager to determine the cause(s) of the incidents. The Project Manager shall prepare a report detailing causes and corrective measures taken.

The site emergency response procedures and equipment will be developed at the start of the project and reviewed at regular intervals for the duration of the project.

Emergency Response & Communication - WHS

Emergency	What to do?	Who to contact
All Injuries	• For major injuries, contact the Supervisor, Project Manager & HSEQ Manager • For serious injuries call an ambulance - 000. You should have the contact details of the nearest doctor, Medical centre and hospital. • Immediately inform the First Aider	• Supervisor • Emergency services • Nearest doctor • Medical centre • Project Manager • HSEQ Manager
Fire or Explosion: • Fire on mobile plant or machine • Fire caused by vandalism • Fire caused by natural disaster • Explosion by underground service (gas or electricity)	• Evacuate all personnel to safe area immediately. • Contact Supervisor • If a service is involved contact the relevant asset owner • Call the fire brigade - 000 • If the fire is likely to damage neighbouring property, inform the adjacent residents. • If it is safe, try to put the fire out using the fire extinguishers	• Supervisor • Emergency services • Asset Owner • Adjacent Residents • Project Manager • HSEQ Manager
Bushfire	• On extreme fire danger days, the supervisor is to monitor the situation on radio broadcasts & other media or ring the Bushfire Information line on 1800 NSW RFS (1800 679 737) • If the fire reaches the Emergency Warning level, the supervisor shall evacuate all workers to a safe location.	• Supervisor • Project Manager • HSEQ Manager
Overhead Powerline Contact by a machine	• Operator should try to break contact by moving the machine. • If unable to break contact **Don't panic** – remain in the machine unless absolutely necessary. Wait until power is switched off. • If you need to leave the machine, (e.g., the machine is on fire) jump clear (DO NOT touch the machine & the ground at the same time) then hop or shuffle away. IMPORTANT - keep both feet close together until well clear (8mtrs) • Keep bystanders more than 8 m away	• Ausgrid or Essential Energy • Supervisor • Emergency Services • Project Manager • HSEQ Manager

If a person gets an **electric shock**	• DO NOT attempt rescue until power is isolated – SECONDARY DEATHS OCCUR BECAUSE OTHERS GET ELECTROCUTED TRYING TO HELP • Keep at least 8 m away until power is isolated • After rescue & first aid get victim to hospital or doctor (no matter how well they seem) – delayed heart problems can occur	• Emergency Services • Supervisor • Project Manager • HSEQ Manager
If a **vehicle with rubber tyres contacts Powerlines**	• The massive electrical current can blow out tyres or cause them to burn inside • This burning can cause the tyre to explode up to 24 hours later • The vehicle should be isolated at a safe distance for 24 hours	• Supervisor • Project Manager • HSEQ Manager
Contact with **Gas main**	• Cease work immediately • Shut down equipment UNLESS this may give a spark to ignite the gas • Evacuate to a safe distance. • Do not use anything that might give a spark near the gas leak (mobile phones, 2-way radio). • Keep all workers & the public clear • Ring 000 if life or property threatened • Contact asset owner to shut off	• Supervisor • Asset owner – Jemena • Project Manager • HSEQ Manager
Contact with **Sewage**	• Cease work & make safe • Contact asset owner • If contaminated, wash down with lots of clean water. Remove clothing ASAP • High infection risk if in eyes or swallowed. Flush eyes with lots of drinking water. If swallowed, get medical advice. • Keep the public away. Try to stop it contaminating water courses	• Supervisor • Asset owner – Hunter Water or local council responsible • Project Manager • HSEQ Manager
High pressure fluid injection – from hydraulic oil lines, diesel injectors, compressed air, water from pressure cleaner	• Treat as serious life-threatening injuries • Call ambulance – ring 000	• Supervisor • Project Manager • HSEQ Manager

Emergency Response & Communication - Environmental

Emergencies	What to do?	Who to contact
Spills • Major spill when filling diesel tanks • Spill or release of other hazardous chemical or material. • Runoff of polluted water	• For major spills, immediately call the fire brigade • Identify the source of the spill. • Refer to SDS and quickly evaluate the hazards of the material. • If the material is dangerous, evacuate the site immediately and notify the neighbouring residents • **Control.** If it is safe, stop the source immediately. • **Contain** the spill and control its flow. • Use the 240-litre spill kit located in the container or near the site shed. • Block stormwater drains downstream of the spill. • EPA and local council must be notified by the Project Manager about any spills that are likely to threaten the environment. • **Collect**. Clean up small spills promptly to prevent run-off into the stormwater system.	• Supervisor • Emergency services • Council Inspector • Project Manager • HSEQ Manager
Heavy rainstorm and flood beyond the capacity of the sediment and erosion controls on site.	• Contain / minimise the flow. • Investigate reasons for failure and prepare an incident report. • Contact the Supervisor and / or Project Manager.	• Project Manager • Supervisor • Contact EPA if required as determined by the Project Manager. • HSEQ Manager
Discover items of conservation, value (e.g., flora and fauna, heritage)	• Fence off the area as a no-go zone and contact the Supervisor immediately for further action.	• Supervisor • Project Manager • HSEQ Manager
Discover contaminated material on site.	• Fence off the area as a no-go zone and contact the Project Manager immediately for further action.	• Supervisor • Project Manager • HSEQ Manager

List of Emergency Contacts

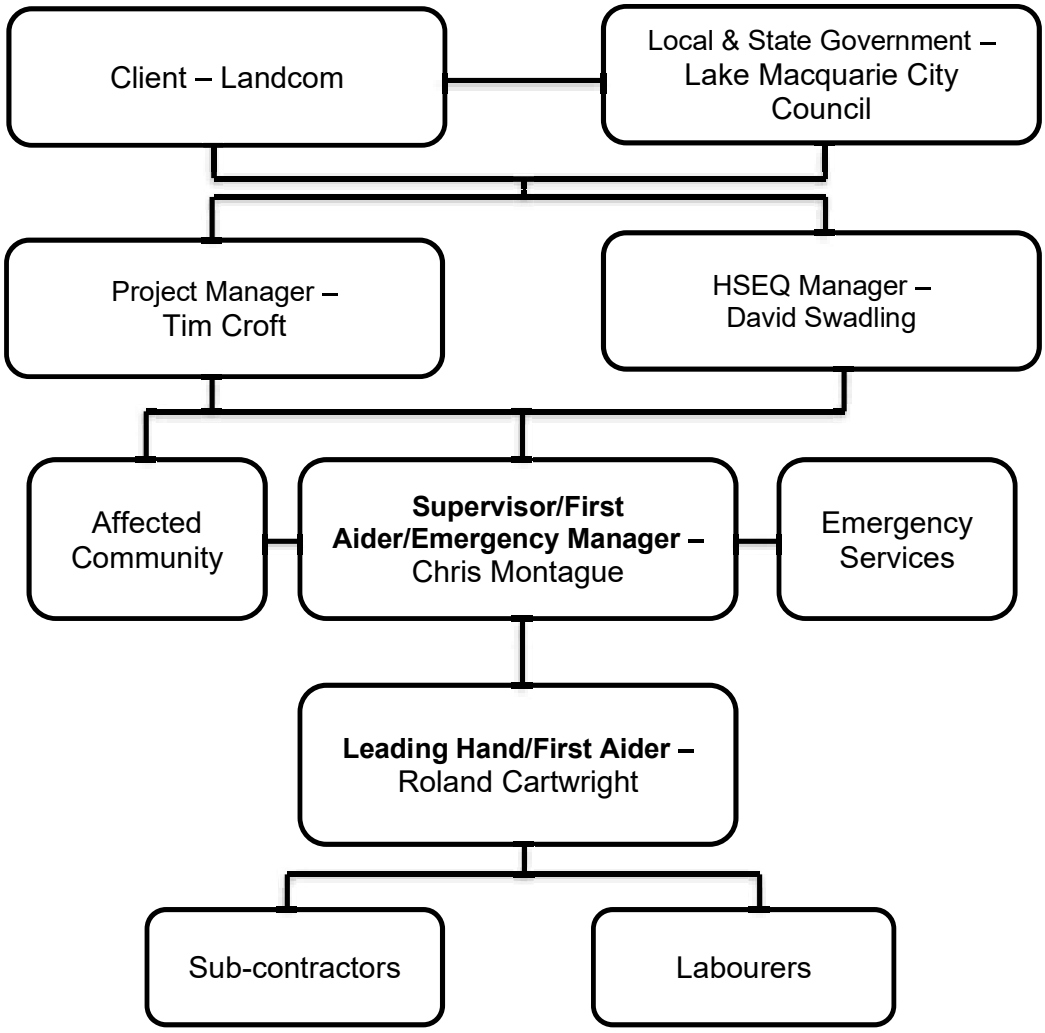
Name	*Contact Details*
Supervisor / First Aider / Emergency Manager – Chris Montague	0418 741 748
Leading Hand**/ First Aider** - Roland Cartwright	0421 786 428
Emergency service including fire brigade, ambulance and police	**000 or 112 (mobiles)**
Police Assistance Line – for reporting vandalism, minor road accidents	131 444
Poisons Information line - 24 hr advice on poisons, medicines, bites/stings.	131 126
BUSHFIRE INFORMATION – phone 1800 NSW RFS or	1800 679 737
WIRES – for injured native animals	1300 094 737
Employee Assistance Program Help Line (EAP)	4934 4533
Nearest Hospital / Medical Centre – John Hunter Hospital – Lookout Road, New Lambton Heights, 2305	4921 3000
KCE staff	
Head Office	02 4922 5000
Project Manager – Tim Croft	0432 766 281
HSEQ Coordinator – Chris Cashman	0413 466 228
HSEQ Manager - David Swadling	0423 569 557
Landcom	
Superintendent - Alexander Seal	0450 111 396
Local Authorities	
Electricity	13 20 80
Gas	131 909
Telstra ~ communications	132 203
NBN ~ communications	1800 626 329
Council	4921 0333

NOTES:

1. ***The Emergency Muster Point is at the site shed (at the sign)***
2. ***A SDS folder is located on site with the supervisor***
3. ***UHF radio communication is on Channel.....***

KCE Communication Flow Chart

The following flowchart outlines the lines of communication between personnel, subcontractors, external bodies in relation to Health, Safety and Environmental issues and emergencies.



The Project Manager is responsible for communicating to all sections. They are the authorised person to contact the project superintendent and HSEQ Manager. In the absence of the Project manager, this authority shall be given to the supervisor.

11. Site Safety & Environmental Rules

Our aim is to prevent all injuries. These rules must be followed at all times by all employees, subcontractors and visitors.

- The person in charge of this site is the Supervisor,Chris Montague
- Please park vehicles only in the designated car park area. To ensure that your first movement is a forward motion. (IE Reverse Park)

- **PPE**. You must wear a high visibility safety vest or shirt and safety footwear. When necessary, wear additional PPE such as; a sun hat, safety glasses, ear plugs and dust masks. You must wear a hard hat when in the swing radius of any excavator or excavation greater than 1.5m in depth. It must also be worn when there is a risk of falling objects (working underneath other workers or during tree clearing).

- **Plant**. A joint plant inspection will be done before starting work.
  An operator's daily checklist must be completed every day.
  Site speed limit is 20 km/hr.
  A flashing light, reversing beeper & UHF radio must be operating when on site.

- **Seat Belts.** MUST BE WORN WHEN OPERATING PLANT.

- **Isolation – TAG OUT/LOCK OUT**. If routine or break-down maintenance of any earthmoving plant, trucks or equipment is carried out on site the item MUST be correctly isolated. The minimum acceptable is for the item to be parked in a safe location, keys removed, a danger tag applied, and all STORED ENERGY released or controlled (the wheels & raised attachments chocked, hydraulic pressure released, electric power sources isolated).
  Locks are preferred to tags. Locks & tags must have the details of the person who applied the lock or tag.

- **Inductions**. Anyone working must have a General WHS Induction card, a site induction and a job induction. Visitors must sign the site register and stay with a responsible, inducted person. Delivery drivers must report to the Supervisor.

- **First Aid**. The first aider is Chris Montague.
  A first aid kit is in the site shed.
  You must report ALL injuries and any incidents or near misses to the Supervisor, **no matter how small**.

- **Hazard Reporting.** Please report any safety or environmental hazards that you cannot fix yourself **immediately** to the Supervisor**.**

- **Chemicals**. Any hazardous chemical you bring onto this site must be reported to the Supervisor, and must have a Safety Data Sheets (SDS). A register of all Hazardous chemicals is on the wall of the site shed.
  Copies of the SDS sheets are in the SDS folder in the site shed. Use these to check that you are using the chemical SAFELY.

- **House-keeping**. Keep your workplace clean and tidy. All rubbish is to be put in the BIN.

- **Barriers, fences, silt fences**. All these are designed to protect people and the environment. Do not take them down without permission. Fix any that are damaged or report it to the Supervisor.

- **Alcohol & other Drugs.** People impaired by Alcohol or drugs are not permitted on site. We conduct random testing for alcohol & illegal drugs

- **Traffic Control.** Traffic Control Procedures must be adhered to at all times.

  Mobile Phones. Mobiles are not to be used when operating or driving. STOP if you must answer a call. When working in or around mobile plant or equipment do not walk while talking on the phone, move to a safe place and stop to complete your call. Keep call length to a minimum while working & return calls during breaks. ***Do not use near flammable liquids***.

  Safety and Environmental Breaches. We strictly enforce safe and environmentally responsible work practices. Our process is designed to be fair & comprises a three-point warning system. Consequences range from verbal warnings, disciplinary action to removal from site.

- **<u>Overhead & Underground Services – DIG PERMITS</u>**.
  These services are located on this site (cross out if not applicable – show location on the Dig Permit plan & Before You Dig Aus plans): -
  - Underground Power.....
  - Overhead Power.....
  - Telstra.....
  - Gas.....
  - Water.....
  - Sewer.....

  NO DIG PERMIT = NO EXCAVATING
  The site is divided into separate areas with a Dig Permit for each area. These permits are to be read, understood & signed by **all workers** in that area. Permits are valid for a week & are to be resigned every week (usually every Monday)

- **Hours of Work.** Weekdays 7am to 5pm
  Saturdays 8am to 1pm

- *Write in any additional site rules necessary: -*

12. Risk Management

The Risk Management Process sets out how the principles of Risk Management are to be applied to this project in line with: -

- the NSW WHS Act 2011 & Regulation 2017,
- the WHS (Mines) Act 2013 & WHS (Mines) Regulation 2022
- SafeWork Code of Practice – How to Manage WHS Risks.
- ISO45001 – WHS Management Systems
- ISO14001 – Environmental Management

Examples of risk management to be used on KCE projects are: -

- Initial project risk assessment
- Broad Brush Risk Assessments
- Pre-work Briefs
- Safe Work Method Statements (SWMS)
- Safety Interactions / SWATs
- Planned Task Observation (PTO)
- KCE 'SAFE' mini-risk assessment cards (where applicable)

The Risk Management Process

1. Establish the context
2. Identify the hazards
3. Assess the risks (Use the KCE Risk Rating Matrix)
4. Apply control measures (use the Hierarchy of Controls)
5. Monitor & review

KCE RISK RATING MATRIX

RISK RANKING CHART				PROBABILITY				
				CERTAIN	LIKELY	POSSIBLE	UNLIKELY	REMOTE
CONSEQUENCES				Commonly Occurs	Has Occurred	Could Occur	Not Likely to Occur	Practically Impossible
Equipment and Operations	Environmental Impact	Personal Injury		A	B	C	D	E
More than $500,000 loss	Catastrophic Environmental Event (publicity)	Fatality or Permanent Disability	1	1	2	4	7	11
Up to $500,000 loss	Major Environmental Event (prosecution)	Major LTI (>7 days lost from work)	2	3	5	8	12	16
Up to $100,000 loss	Serious Pollution (temporary/permanent damage)	Lost Time Injury	3	6	9	13	17	20
Up to $10,000 loss	Minor Pollution (Minor spill –temporary damage)	Medical Treatment Injury	4	10	14	18	21	23
Less than $500 loss/No Damage	Nil Impacts / Affects	First Aid Injury/No injury	5	15	19	22	24	25
LEGEND:		1-6 HIGH RISK			7-15 MEDIUM RISK		16-25 LOW RISK	

LOW and MEDIUM risks must be reviewed and authorised by the Supervisor/Project Manager or authorised competent KCE representative. Where HIGH residual risks remains, work must not commence until further risk control measures are introduced to reduce the risk to as Low as reasonably practicable.

HIERARCHY OF CONTROLS

ELIMINATE – remove the hazard or the need for the task	***MOST EFFECTIVE***
SUBSTITUTE – for a safer alternative	
ENGINEERING / ISOLATION – redesign, enclose, separate people from the hazard	
ADMINISTRATIVE – apply training, rules, procedures	
PPE – wear personal protective equipment	***LEAST EFFECTIVE***

13. Environmental Management

This section sets out how KCE addresses potential environmental aspects and prevents any impacts associated with our projects.

This is in addition to other environmental controls found in other sections of this WHS ENV PMP: -

- Environmental Inspection Checklists (every week & after a rain event) in section 6.
- Incident Reporting in section 8.
- Non-conformances in section 9.
- The Emergency Response to a range of environmental emergencies is set out in section 10 & is displayed in the site shed.
- Site Safety & Environmental Rules in section 11. These are covered in the site induction in section 3.
- The SWMS register for WHS & Environmental Management is contained in section 14.
- Site Erosion & Sediment Control Plan (completed in attachments).
- Dust, Noise, Vibration and Waste Management contained in section 13.
- Hazardous Substances management is set out in section 17. The register is displayed in the site shed.
- The WHS & Environmental Policy Manual including System Procedures, Safety & Environmental Control Measures and relevant Safe Work Procedures can be found within the KCE Business Management System or presented on request.

Dust, Noise, Vibration and Waste Management

Noise & Vibration Management

During construction residents may be exposed to increased levels of noise and vibration from vehicles and construction equipment.

Where construction activities that are likely to affect residences within 100m of the work site. They will be notified at least 7 days prior to commencement of any works associated with activities that may have an adverse noise or vibration impact and consultation undertaken if required. The notification will provide details of:-

- the project
- the construction period and construction hours
- contact information for the project management staff
- complaint and incident reporting
- how to obtain further information

To mitigate noise and vibration impacts resulting from construction activities, the works shall be undertaken during normal working hours.
Standard hours of work have been identified as: Monday to Friday 7:00am – 5:00pm and if required Saturday 8:00am – 1:00pm.

All possible steps shall be made to reduce noise from construction activities. If applicable, very noisy activities shall have further reduced operating times of Monday – Friday 9am to 3pm.

Where construction activities create a risk of damage through vibration to adjoining structures, buildings or their contents, a Building Condition Inspection shall be offered. A written report shall be prepared detailing the findings of the Building Condition Inspection/Dilapidation Report. The report shall be submitted to the owner of each structure and the Verifier before construction activity commences.

Plant & Equipment Management

Construction activities are to be carried out using plant and equipment most appropriate and efficient to the required function.

All plant and equipment wherever possible are to be fitted with exhaust controls and regularly well maintained (as per manufacturer's specifications) to ensure efficient operations to minimise noise and gaseous emissions.

All trucks leaving the site carrying spoil and/or other waste are to be filled to the maximum amount allowable in order to reduce the number of traffic movements required.

Dust Management

“Open” trucks transporting materials (that could generate dust) to and from the Site are to be fitted with “made for purpose” covers to enclose that product being transported.

ALL vehicles (including visitors) and trucks are to travel slowly enough along site accesses so as to generate minimal dust.

During construction the total area disturbed/cleared is to be restricted/minimised to the greatest extent possible. Disturbed areas are to be strategically watered with the use of an onsite watercart.

Excavated and/or other material is too prevented from being deposited on roadways. Each site access / egress is to be left clean at the end of each working day. (If hosing is carried out, loose material must be trapped using E & SC Measures.

Once construction is complete, disturbed areas are to be restored/rehabilitated as soon as possible.

Wind

When the wind velocity is so great that dust generated, either directly or indirectly by construction activities, cannot be effectively controlled by watering or other control means, then construction activities cease. Construction is not to be resumed until the wind velocity has decreased enough that dust generations can be effectively controlled

Waste Management

As a fundamental principle and as the first priority waste reduction practices are to be employed. As further described below, to the greatest extent achievable, waste is to be reused on site.

Particular attention is to be taken when ordering products and/or material for which estimated quantities are required (concrete, imported materials etc.). Surplus and waste supplies are to be minimised.

No unsuitable material (paper, meal waste, product tins, construction debris etc.) is to be disposed of by burial on site.

In the case where waste reduction and reuse are not applicable, recycling will be undertaken wherever practical. Suitably sized waste bins are to be provided with secure lids and are to be emptied regularly.

Where portable chemical toilets are to be provided, they are to be emptied regularly with materials being transported to an approved waste management facility.

All waste is to be strictly disposed of at approved disposal sites only.

Disposal of any materials is to be carried out in accordance with ECM08 – Waste.

As a priority excess/surplus spoil material is to be used on site. In the event that excess/surplus material is to be disposed of offsite. Then this Material is to be classified to meet the requirements of the receiving site as per the Waste Classification Guidelines.

Heritage & Archaeology

At all times KCE ensures that all necessary controls are put in place to prevent damage or loss to heritage places and objects which would result in loss of cultural, historic and educational value to the community.

KCE will;

- Ensure that the appropriate permits & authorisations have been received prior to commencing work
- Where required, contact the heritage consultant, archaeologist or the Local Aboriginal Land Council to conduct a Heritage survey prior to work commencing
- Supervise all construction activities for the discovery of any artefacts or remains of possible Aboriginal or non-Aboriginal heritage.
- If any potential heritage or archaeological material is uncovered cease work in the vicinity. Contact the client to assess & advise suitable actions
- As a minimum, place signs to indicate the area is a “No Go” area and protect the items from further disturbance.
- Conduct a Toolbox Meeting to communicate requirements to all site personnel.
- If skeletal remains are found contact NSW Police

Asbestos (unexpected finds)

Asbestos places worker health at risk and should be treated with care at all times. If the soil is suspected of containing asbestos, the Project Manager must assume the

soil contains asbestos and cease work immediately and notify the client who will advise how to proceed.

With regards to removal of Asbestos, works must comply with the relevant statutory requirements, standards, codes and guidelines in respect of any asbestos removal work, including but not limited to: -

SafeWork Code of Practice How to manage and control asbestos in the workplace
SafeWork Code of Practice How to safely remove asbestos
Environmentally Hazardous Chemicals Act 1985 (NSW)
Waste Avoidance and Resource Recovery Act 2001 (NSW)
SafeWork Guide Managing Asbestos in or on Soil

At completion of the asbestos removal work all documents associated with removal and disposal must be kept including a clearance certificate from an independent licensed asbestos assessor which is presented to the client.

Erosion & Sediment Control Plan (ESCP).

- Erosion & Sediment controls are to be installed on all work sites as per the construction drawings in the Erosion & Sediment Control Plan (ESCP).
- The ESCP (Soil & Water Plan) shall be maintained by the Supervisor. It shall be updated whenever erosion & sediment control devices are added, removed or changed.
- KCE supervisors are to monitor these controls on a daily basis, ensuring they are adequate for the work.

For the prevention of Water run off & soil erosion some or all of following control mechanisms may be adopted: -

- Temporary basins
- Temporary silt fences
- Controls on areas of open ground
- Diversion of upstream catchments around disturbed areas
- Stabilisation of stockpiles of soils
- Site surface water run-off is to be directed into settling basins to prevent sediment escaping from the site

- ***Weather Observations.*** The Supervisor shall maintain a log of Weather Observations at times of inclement weather that may impact the site's environmental controls. The log shall include the weather observations & detail the actions taken.

- ***Basin Log.*** The supervisor shall maintain a log for each basin which details the actions taken to ensure the basin maintains its integrity. E.g., "severe storms predicted for tomorrow, checked turbidity – turbidity is less than 50 NTU - basin is 75% full so pumped down to 25%"
- Before pumping basins, the turbidity of the water must test clear (turbidity tube reading less than 50 NTU) and pH must be in the range 6.5 to 9.0

WEATHER OBSERVATIONS			
Job number:	24026	Job name:	Garden Suburb Stewardship Site Work

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation:				Observation:			
Action:				Action:			

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation:				Observation:			
Action:				Action:			

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation:				Observation:			
Action:				Action:			

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation:				Observation:			
Action:				Action:			

BASIN LOG			
Job number:	24026	Job name:	Garden Suburb Stewardship Site Work
Basin ID:		Volume (m3)	

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation or test result:				Observation or test result:			
Action:				Action:			

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation or test result:				Observation or test result:			
Action:				Action:			

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation or test result:				Observation or test result:			
Action:				Action:			

Date		Time		Date		Time	
Name		Sign		Name		Sign	
Observation or test result:				Observation or test result:			
Action:				Action:			

14. Safe Work Method Statements (SWMS) for KCE

Insert all relevant KCE SWMS & SWP (remove those not relevant): -

Compulsory – all workers to review & sign

Number	*Name*
1	*Start Up & Establishment*
2	*Environmental Protection*
3	*Earthworks & Pavements*
4	*Work near live services*

Activity based – workers doing activity to review & sign

5	*Concreting, Kerb & Gutter*
6	*Pipe-laying (stormwater, sewer, mains water, sub-soil)*
7	*Potholing & Locating*
8	*Operate quick-cut*
9	*Operate Wacker Packer*
10	*Traffic Control*
11	*Jackhammer*
12	*Survey*
13	*Oxy Hot works*
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Insert blank SWMS & SWP forms for use on site

15. Sub-contractors

PROCEDURE

- All subcontractors who do separate works (e.g., electricians, power reticulation, asphalt, etc.) shall submit a SWMS before starting work. **NOTE:** this does not include hourly hire subcontractors (e.g., plant hire subbies) who are working to a KCE SWMS.

- Project Manager shall complete OF16 "SUBCONTRACTOR & SUPPLIER INITIAL APPROVAL CHECKLIST" in Appenate for all subcontractors used. File checklists with the subcontractor's SWMS & SWMS Review in this section of the PMP.

- Subcontractors SWMS should be checked prior to work commencing using OF38 SWMS Review in Appenate.

- Compliance checks shall be completed on subcontractors SWMS.

- Insert all subcontractors' SWMS in this section.

- Complete OF05 Approved Suppliers & Subcontractors list (next page).

OF05 – Approved Suppliers & Subcontractors

Activity	*Supplier / Subcontractor*	*Received SWMS*	*Approval form*
Sediment and Erosion Control			
Clearing, shearing, grinding			
Stormwater pipe-work			
Sewer & water reticulation			
Stormwater Pits			
Concreter			
Concrete Pump			
Kerb extruder			
Road Sealing			
Asphalt			
Geotechnical			
Traffic Controllers			
Communications			
Electrical reticulation			
Retaining Walls			
Sucker truck (non-destructive digging)			
Survey			
Gas			

OF16 – Subcontractors & Suppliers Approval Checklist

Subcontractor / Supplier:		
Company Description:		
Checked By:	**Position:**	**Date:**
DESCRIPTION	**YES/NO/N/A**	**COMMENT**
Has the applicant worked with KCE in the past?		
If yes above, does the applicant have a record of quality, safe work practices and environmental awareness with KCE?		
Was the applicant referred to by an outside source? Attach written documentation if available		
Was the applicant referred to by an outside source? Attach written documentation if available		
Does the applicant hold accreditation with any external authorities? If so list		
Are the applicant's public liability and workers compensation insurances current?		
Are the applicant's Professional Indemnity, Plant & Machinery insurances current?		
Have subcontractors using mobile plant completed a Plant Declaration (minimum requirement) & supplied plant information & operator competencies		
Are all subcontractor plant operators appropriately ticketed & have supplied a Letter of Competency (LoC)?		
Capable of providing their own SWMS, ITP's and Safety, Environmental & Quality Project Management Plans where required? *Note: Plant Hire subcontractors sign onto KCE's SWMS*		
Are the payment terms agreed at 45 days? If not specify. If less than 30 days, has this been approved by KCE Financial Controller?		

General Comments:

Approval Granted	**Yes**	**No**	**Comments**	
Approved By:			**Signature:**	**Date:**

OF38 - SWMS Review

PROJECT: Garden Suburb Stewardship Site Work	JOB NUMBER: 24026	SUBCONTRACTOR:	
PERSON REVIEWING SWMS:		POSITION	REVIEW DATE:
SAFE WORK METHOD TO BE REVIEWED:			
THE SWMS MUST ADDRESS ALL CRITERIA BELOW UNLESS IDENTIFIED AS NOT APPLICABLE (NA). NEEDS IMPROVEMENT (NI) COMPLIANT (C)			

ITEMS TO BE COVERED IN SAFE WORK METHOD STATEMENT	C	NI	N/A	COMMENTS
Organisations letterhead, ABN and address displayed				
Site Specific Project Name and Address				
Documented description of the work to be undertaken				
Step by step sequence for the work involved				
List appropriate risk ranking and risk control measures for each hazard/risk identified? Identify controls that are consistent with the hierarchy of control relevant to risk level?				
Area for SWMS to be signed and dated by all doing the work				
Name of workers who prepared the SWMS				
Senior Management signature to authorise SWMS				
Personnel qualifications and experience required				
Supervision and inspection to be provided				
Legislation, Codes of Practice, Standards applicable				
Engineering details/certificates/SafeWork approvals				
Plant and equipment to be used (excavator, Ladders etc.)				
Maintenance checks to be performed on plant and equipment				
Protective equipment to be used (ROP/FOP's)				
Warning Signs and Control Measures				
Permits required (if any e.g., Excavation, Powerlines, Asbestos)				
List of attachments (if any e.g., sketches, diagrams, SDS etc.)				
List relevant PPE required (not just wear appropriate PPE)				

ACCEPTED ☐	REJECTED ☐	DATE RETURNED TO SWMS OWNER:	/ /
		PERSON WHO IT WAS RETURNED TO:	
Instruction to SWMS Owner:			
Date Revised Document Received:			/ /
Name of person completing Checklist:			Position:
Signature:			Date: / /

16. Traffic Management

- Develop a separate Traffic Management Plan (TMP) for projects on roads

- For projects that require road warning signs on adjacent roads follow the procedure below: -

Traffic Management Plan (TMP)

TMP's are developed to address and manage the general traffic movement during the construction of a specific project.
The intent of this plan is to ensure that the construction personnel are provided with a safe working environment.

The plan covers the preparation and use of Traffic Guidance Schemes (TGS's) and Vehicle Movement Plans (VMP's) to ensure the safety of KCE employees, subcontractors, customers and the public as well as to minimize construction related traffic disruption to the travelling public and pedestrians

KCE has developed procedure WI07 "Traffic Management" to set out the company requirements in the development of the TMP.

This procedure may also be implemented when working on private roads on mines or other developments. In these cases, some standards may be reviewed where there are specific site or client requirements and the risks have been considered and appropriately controlled. TMP's, TGS's etc. should be submitted to the client for approval / comment.

(If required a completed TMP can be located in the TMP folder. All associated forms can be found in appenate or located on the BMS)

17. Hazardous Substances

PROCEDURE

- All chemicals brought on to the site must have a Safety Data Sheet (SDS) or available on appenate
- All chemicals that have been classified as “Hazardous” shall be entered on the site Register of Hazardous Substances.
- The register shall be maintained and displayed in the lunchroom/site shed. Also available on Phone app (Appenate)
- A SDS register shall be maintained and be available for reference in appenate on precautions for use or first aid instructions.
- Before a new hazardous substance is used. The SDS must be reviewed and raised at a Pre-work Brief or toolbox with workers who will utilise the substance.

SF26 - Register of Hazardous Substances

Substance	Use	Location of storage & approx. quantity	SDS		
			Yes	No	N/A
Diesel	fuel	On plant	☑	❑	❑
Oil	lubricant	On plant	☑	❑	❑
Coolant	Corrosion inhibitor in radiators	On plant	☑	❑	❑
Concrete	Kerb, pits	In the job	☑	❑	❑
Marking paint	Mark set outs	10 x cans, container	☑	❑	❑
Gravel, crushed stone	Pavement, construction material	In the job	☑	❑	❑
Sand	Construction material	In the job	☑	❑	❑
Cement	Construction material	10 x 20 kg, container	☑	❑	❑
Petrol (unleaded, pre-mix)	Fuel for small plant	On plant, < 20L in container	☑	❑	❑
			❑	❑	❑
			❑	❑	❑
			❑	❑	❑
			❑	❑	❑

Safety Data Sheets can be found in the BMS or on Appenate

18. Inspections, Audits & Reporting

The purpose of inspections, audits & reporting is to provide assurance that the project is being effectively managed in line with KCE policy & procedures.

INSPECTIONS

ACTIVITY	WHO	FREQUENCY
WHS Checklist (section 5)	Supervisor / Project Engineer	Weekly
Environmental Checklist (section 6)	Supervisor / Project Engineer	Weekly or after rain event
Plant Inspections (section 7)	Supervisor / Leading Hand	On arrival to site
Electric leads & RCDs (section 7)	Leading Hand to arrange	3 monthly

AUDITS

ACTIVITY	WHO	FREQUENCY
Safety Interaction or SWAT (Safety Walk & Talk)	HSEQ Coordinator / Project Manager/Engineers	Minimum Monthly
Planned Task Observation	HSEQ Coordinator / Project Manager/Engineers	Minimum Monthly
Project Management Plan Checklist	HSEQ Coordinator / Project Manager	At least Once for projects that exceed 6 weeks in duration or as required by client
WHS & Environmental Project Management Plan	HSEQ Manager	Per company schedule
Traffic Management Plan	Project Manager	1 per month

REPORTING

Insert client reporting here as required.

NSW Government (TFNSW, Local council, etc.) projects require:-

- *All incidents including near misses, service hits*
- *SafeWork visits*
- *SafeWork notices*
- *Visits by unions, FSC*
- *Results of internal reviews, inspections, ITP*
- *Results of audits including NCRs & corrective actions*

19. WHS ENV Manual

The following documents can be found within the KCE Business Management System or presented on request:

https://sites.google.com/a/kce.com.au/kce-bms/

- *WHS & Environmental Policy Manual (WHS ENV PM)*
- *Management System Procedures (MSP)*
- *Safety Control Measures (SCM)*
- *Environmental Control measures (ECM)*
- *Relevant Safe Work procedures (SWP)*
- *Drug and Alcohol Procedure*
- *Return to Work Program (RTW)*

AEP

BIODIVERSITY | BUSHFIRE | ARBORICULTURE

NEWCASTLE SYDNEY

Construction Environment Management Plan – Retained Lands and Road Works - Myall Road, Hillsborough, NSW

EPBC Ref - 2014/7217 Notice of Approval for Residential Development, Hillsborough, NSW

Prepared For: Landcom

Date: 17 June 2024

AEP Reference: 3043

Revision: 01

Newcastle | Sydney
10 Darvall St Carrington 2294 | 275 Stanmore Rd Petersham 2049
P 0420 624 707 E info@andersonep.com.au ABN 57 659 651 537

Cover Photo: Typical condition of nominated high risk potholes requiring remediation

Declaration of Accuracy

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed	
Full name	Craig John Anderson
Organisation	Rhipidura Pty Ltd ABN ABN 57 659 651 537 t/as Anderson Environment & Planning
Date	17 June 2024

Document Control

Document Name	Construction Environment Management Plan – Retained Lands and Road Works - Lot 10, DP 1011323, Myall Road, Hillsborough, NSW
AEP Project Number	3043
Client Name	Landcom ABN 79 268 260 688
EPBC Reference	2014/7217
EPBC Action	To develop an urban residential subdivision of approximately 9A, 62 and 89 Myall Road, Garden Suburb, Newcastle, New South Wales (NSW)
AEP Project Team	Dennis Neader Kelly Drysdale Craig Anderson

Revision

Revision	Date	Authors	Reviewed	Approved
00 – Draft for Client Review	14 June 2024	Dennis Neader	Kelly Drysdale	Craig Anderson
01	17 June 2024	Dennis Neader	Kelly Drysdale	Craig Anderson

Distribution

Revision	Date	Name	Organisation
00	14 June 2024	Alex Seal	Landcom
01	17 June 2024	Alex Seal	Landcom

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Tables

Figures

Glossary

BAM	Biodiversity Assessment Method Order (2020)
BC Act	*Biodiversity Conservation Act 2016*
BDAR	*Biodiversity Assessment Report* being developed for a proposed 72 lot subdivision at 9A, 69 & 82 Myall Road, Garden Suburb NSW. Current iteration Rev 06, March 2024
Biodiversity Credit Report	Specifies the number and type of biodiversity credits required to offset the impacts of a development.
BAM Calculator (BAM-C)	The online tool used to interpret BSA Site survey data and regional location information to quantify ecosystem and species credits required / generated at a development / stewardship site.
Biodiversity credits	Ecosystem or Species Credits required to offset the loss of biodiversity values on a development site.
Biodiversity offsets	Specific measures that are put in place to compensate for impacts on biodiversity values.
Biodiversity values	The composition, structure and function of ecosystems, and threatened species, populations and ecological communities, and their habitats.
BSA Site	Retained conservation land subject to the Biodiversity Stewardship Site Assessment being developed for parts of Lot 1 DP 1168657, Lot 50 DP 1301215 and Lot 10 DP 1011323, fronting both sides of Myall Road and Newcastle Inner City Bypass, within suburbs of Hillsborough and Garden Suburb, NSW
BSSAR	Biodiversity Stewardship Site Assessment Report
BSSMP	Biodiversity Stewardship BSA Site Management Plan (for approval by BCT and serves the purpose of the Vegetation Management Plan required by DPIE)
Council	Lake Macquarie City Council
BCT	The Biodiversity Conservation Trust, the approval authority for the BSSMP
Development lands or area	Land upon which the development is proposed, assessed under within which impacts upon biodiversity are required to be offset.
DCCEEW	Department of Climate Change, Energy, the Environment and Water, the Approval Authority for the
DPIE	NSW Department of Planning, Industry and Environment
EEC	Endangered Ecological Community (under BC Act).
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999
EPBC - listed species	Threatened species listed under the EPBC Act
EPBC 2014/7217	Notice of EPBC Approval for the Project for the Development issued 19 December, 2023
Project	The construction of the approved residential subdivision and associated infrastructure and proposed remediation of 15 high-risk mine subsidence potholes both within, and immediately adjacent to the BSA Site
PE	Prior to any construction works, Landcom will appoint a Project Ecologist (PE) to ensure compliance with measures to avoid impacts on Protected Matters scheduled in the CEMP, and provide compliance letters to DCEEW within ten working days of completion of works.

Pothole Works.	Douglas Partners have developed a Remediation Works Methodology Memorandum for 15 high-risk potholes both within, and immediately adjacent to the BSA Site.
Protected Matters	Nationally significant animals, plants, habitats or places listed and protected under the EPBC Act
TEC	Threatened Ecological Community.
VMP	Vegetation Management Plan

1.0 Introduction

At the request of Landcom, Anderson Environment & Planning (AEP) have undertaken the necessary investigations to develop this Appendix to a Construction Environmental Management Plan (CEMP). The CEMP's purpose is to consider Protected Matters under section 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (The EPBC Act) and to outline measures to avoid impacts within the Biodiversity Stewardship Agreement Site (the BSA Site) associated with remediation of mine subsidence potholes occurrences and the development site of an approved residential subdivision at 9A, 62 and 89 Myall Road, Garden Suburb, Newcastle, New South Wales (NSW) (the Project).

The Project would occur within parts of Lot 1 DP 1168657, Lot 50 DP 1301215 and Lot 10 DP 1011323, fronting both sides of Myall Road and the Newcastle Inner City Bypass, within the suburb of Garden Suburb A significant portion of the site is proposed to be registered, retained and rehabilitated as a BSA Site.

The current iteration of the Biodiversity Stewardship Site Assessment Report (the BSSAR) for the BSA Site is:

> *Biodiversity Stewardship Site Assessment Report, Proposed BSA Site at 9A, 69 & 82 Myall Road, Garden Suburb, NSW. Rev 06* (AEP, April 2024).

The BSSAR, has been approved in principle and the agreement has been drafted. It is currently with the legal teams of Landcom and the Department for review and contract preparation.

The major risk to EPBC-listed matters concerns potential impacts of the Project on the EPBC-listed threatened species (Vulnerable) *Tetratheca juncea* (Black-eyed Susan) habitat from backfilling of mine subsidence areas and construction of the residential development.

The CEMP will be updated by Landcom prior to the commencement of the Construction Phase to include any additional measures required pursuant to conditions attached to any decision to grant approval.

The CEMP may need to be altered during the lifecycle of construction to take into account monitoring results, permits, legislative changes, outcomes of third-party consultations etc. The appointed contractor will ensure that the CEMP remains up to date for the duration of construction works.

The contractor may propose modifications to the CEMP. However, any such modifications must not give rise to any impacts which are more significant than those already identified and assessed in the approval process.

All of the measures set out in this CEMP will be implemented in full by the appointed contractor and its finalisation will not affect the robustness and adequacy of the information presented and relied upon in the CEMP.

The CEMP must ensure construction does not impact on other listed Protected Matters. The measures scheduled will also mitigate construction impacts on NSW listed threatened species and native flora and fauna in general.

1.1 Project Description

The Project involves the remediation of 15 high-risk potholes both within, and immediately adjacent to the BSA Site and the construction of an approved residential subdivision. Douglas Partners have developed a Remediation Works Methodology Memorandum to identify a standard, as well as a most benign methodology for Pothole Works. Refer **Figure 1.**

The remediation of the identified high-risk potholes within the BSA Site is a requirement for approvals of the Development.

1.2 Conditions of EPBC 2014/7217

The CEMP is required to satisfy conditions of EPBC 2014/7217 to avoid Project construction impacts on Protected Matters. Ecological Conditions within EPBC 2014/7217 are scheduled in **Table 1.**

Table 1 – Conditions of EPBC Approval

EPBC Condition	Requirement	CEMP Reference	Compliance Summary
1	***Disturbance Limits*** *To avoid harm to protected matters, the approval holder must not clear:*		
	a) outside the development area	Y	Y
	b) more than 10.59 hectares of Black-eyed Susan habitat	Y	Y- Access to the potholes in the stewardship site will be via existing access tracks that are approximately 0.5m wide. To calculate any minor impacts to vegetation caused by machinery accessing the potholes, a 1m pathway has been added to either side of the existing tracks. The area of the potholes, which average 4m in diameter, have also been included in the calculation. In total, the additional area of impact is 0.181ha. As detailed in the EPBC referral, the Preliminary Documentation Package and in the EPBC Offset Calculator Justification, the proposed development area is approximately 10.59ha, and of this area approximately 10.4ha contains suitable habitat (native vegetation), excluding cleared/managed areas on the periphery of the development boundary. However, a conservative approach was taken and the full area of the development footprint (10.59ha) was entered into the calculator. In reality the actual area of habitat impacted is 10.4ha as stated in the justification thereby providing a buffer (0.19ha) for any additional impacts that may occur. Further consideration with the use of rubber tracked machinery of 2.25m in width that may cause minor temporary impacts to habitat on track edges but will not significantly disturb the soil surface. Vegetation will pressed down by tracking and naturally regenerate following pothole remediation, so although included as an impact is not permanent removal of habitat.
	c) within the Biodiversity Stewardship Agreement Sites with the exception of clearing specified in the Vegetation Management Plan approved by the Minister in accordance with Condition 2.	Y	Y
2	***Vegetation Management Plan*** *To avoid harm to protected matters within the Biodiversity Stewardship Agreement Sites, the approval holder must submit to the department a Vegetation Management Plan for the Minister's approval…"*	Y	The BSSMP (Vegetation Management Plan) for the BSA Site has been provided to the Department.
3	***Vegetation Management Plan cont.*** *"The approval holder must commence implementing the Vegetation Management Plan approved by the Minister prior to the commencement of the Action and continue to implement the Vegetation Management Plan at least until the expiry of this approval."*	Y	Signed agreements with the Minister and Landowner are to be upheld.

4	***Construction Management Plan*** *"…the Action has no impacts on protected matters within the development area, other than the impacts that are permitted under condition 1…"* *"…the Action has no impacts on protected matters outside the development area…"*	Y	No more than 10.59ha of Black-eyed Susan habitat within the development area will be impacted. No impacts are anticipated outside of the development area other than the impacts that are permitted under condition 1.
5	*The approval holder must commence implementing the Construction Management Plan approved by the **Minister** from the **commencement of the Action** and continue to implement it until the **completion of the Action**.*	Y	Signed agreements with the Minister and Landowner are to be upheld.
6	***Offsets*** *To compensate for the residual significant impacts of the Action on **protected matters**, the approval holder must:* *a) not commence any **clearing** until the **Biodiversity Stewardship Agreements Sites** have been registered in accordance with the Biodiversity Conservation Act 2016 (NSW), and* *b) within 10 business days of the Biodiversity Stewardship Agreement Sites being registered in accordance with the Biodiversity Conservation Act 2016 (NSW), submit written evidence of that registration to the department.*	Y	Signed agreements with the Minister and Landowner are to be upheld.
7	*To compensate for the residual significant impact of the Action on Black-eyed Susan, the approval holder must conserve at least 22.83 hectares of Black-eyed Susan habitat in the Biodiversity Stewardship Agreement Sites, prior to the commencement of the Action.*	Y	A total of 25.56ha of *Tetratheca juncea* habitat will be conserved within the Biodiversity Stewardship Agreement and managed under a 20-year management plan.
8	*To compensate for the residual significant impact of the Action on Black-eyed Susan, the approval holder must conserve at least 22.83 hectares of Black-eyed Susan habitat in the Biodiversity Stewardship Agreement Sites, prior to the commencement of the Action.*	Y	Biodiversity Stewardship Site (Offset Site) Management Plan Attachment 4: Management Plan *Biodiversity Stewardship Agreement ID number: [36999]* *Property Name: [9A, 69 & 82 Myall Road, Garden Suburb]* **Threatened Species Habitat Management Actions** Protect from maintenance and other edge effects along site boundary, easements, and tracks. Ensure protective fencing is installed along the site boundary / development interface adjacent to *T. juncea* populations. Protect from damage during subdivision construction and property boundary maintenance by neighbours. Vehicle movements only on identified access tracks. Monitoring detailed in Section 7: Monitoring Plan. Reduce and maintain weed densities at low levels to ensure minimal competition with weed species. Any weed management action will consider known locations of *T. juncea*.

			Weed control methods are to be limited to the following in areas of known *T. juncea* habitat, subject to target weed species requirements: • Hand removal; • Gas guns; • Scrape and paint; • Cut stump method; • Stem injection; and • Weed wipers **Threatened species habitat management performance measures –** 5yrs of population monitoring indicates an increase in the number of individuals detected during monitoring surveys. Monitoring methodology detailed in Section 7. An increase in population health (species count) occurs at monitoring Point 2, 5, 12 Floristic Plots. T. juncea counts will be undertaken as per LMCC (2012) Flora and Fauna Survey Guidelines, and follow methodology as described by Payne, Stevenson, and Wellington (2002).

1.3 Construction Environmental Management Plan Objectives

The aim of this CEMP is to schedule measures necessary to avoid impacts of Project construction works upon Protected Matters in general and, *Tetratheca juncea* in particular. Refer **Figure 2.**

1.4 Environmental Management Roles and Responsibilities

It is the responsibility of Landcom (the EPBC 2014/7217 Approval Holder) to ensure all measures scheduled in the CEMP are carried out. Landcom will fulfil this requirement in cooperation with to the Principal Contractor and the Project Ecologist.

1.4.1 Landcom

As the approval holder, Landcom must take all reasonable steps to ensure that any person involved in any aspect of Project works is informed of all ecological conditions attached to this approval, has been inducted in measures to meet those conditions and that the other person complies with any such conditions.

1.4.2 The Principal Contractor

Landcom has appointed KCE Pty Ltd (KCE) as the Principal Contractor for the Project. KCE's site specific Environmental responsibilities are scheduled in *Site Specific WHS & Environmental Project Management Plan* (KCE, 2024) (the PMP), developed for the Project. This CEMP forms an **Appendix** of the PMP.

1.4.3 The Project Ecologist

Prior to any construction works, Landcom will appoint a Project Ecologist to ensure compliance with ecological mitigation measures scheduled in the CEMP and PMP. The PE shall undertake all required pre-clearance surveys and limit-of-works marking and supervise clearing of native vegetation to ensure:

- Works avoid impacts upon Protected Matters in general and, *Tetratheca juncea* in particular;
- Only native vegetation scheduled for removal in the approved plans are removed;
- All subcontractors are inducted into avoidance measures scheduled herein;
- All mitigation measures scheduled in the BSSMP are implemented; and
- Compliance where scheduled is reported in required time frames.

1.5 Document Referencing

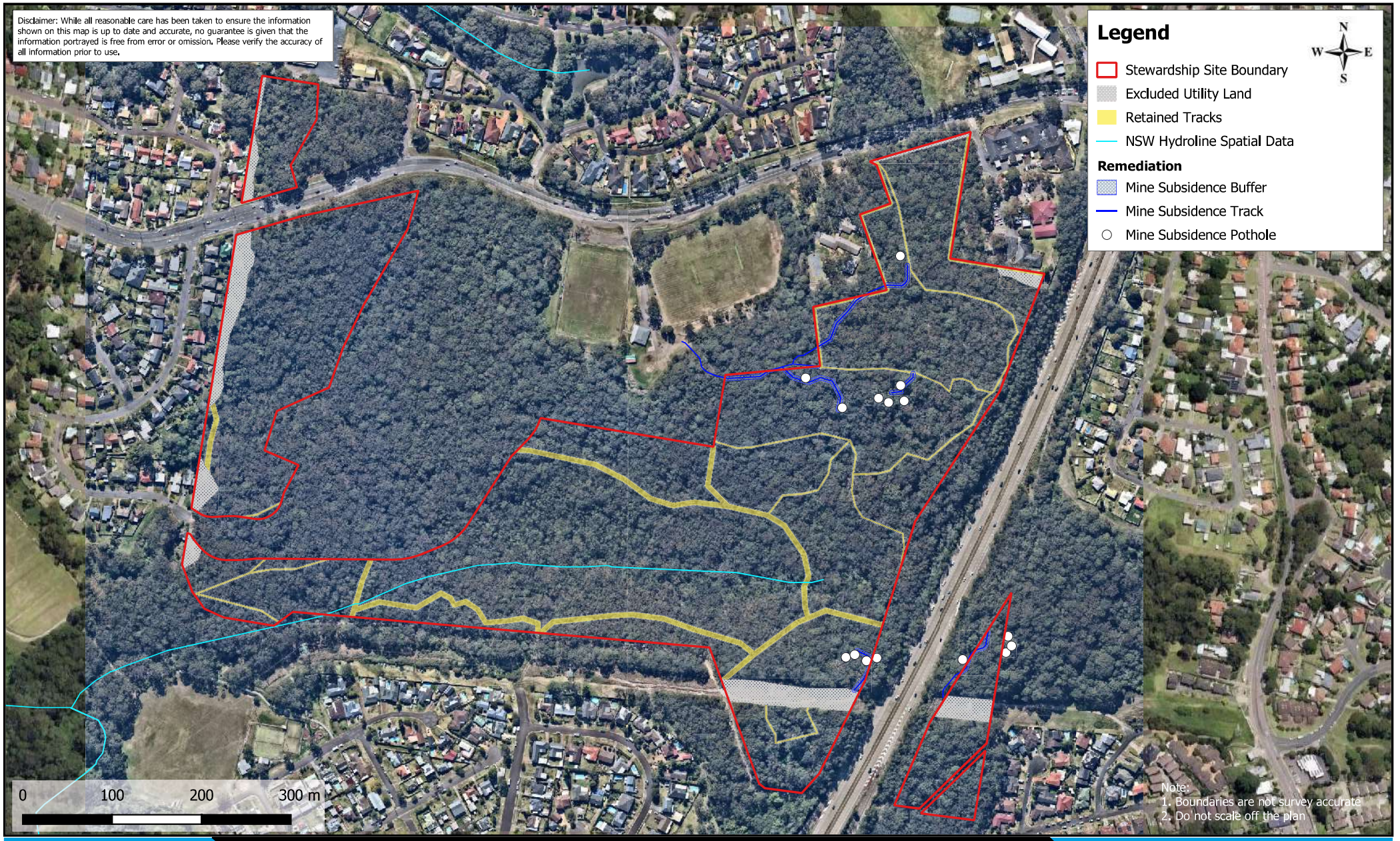
In preparing this plan, reference has been made to the following document:

EPBC Offset Calculator Justification 82, 69, 9A Myall Road, Hillsborough NSW. Unpublished report for Landcom. 20 November 2023.

Biodiversity Stewardship Site Assessment Report Rev6 *Proposed Biodiversity Stewardship Site on 9A, 69 & 82 Myall Road, Garden Suburb NSW*. Unpublished report. Anderson Environment & Planning. 30 April 2024.

Biodiversity Stewardship Site (Offset Site) Management Plan Attachment 4: *Management Plan Biodiversity Stewardship Agreement ID number: [36999] Property Name: [9A, 69 & 82 Myall Road, Garden Suburb]* Anderson Environment & Planning. 30 April 2024.

Douglas Partners, (11 Jan 2023*) Memorandum – Proposed Pothole Remediation Works, Project No. 49427.09. Proposed Biodiversity Stewardship Site, Myall Road, Hillsborough*. Unpublished report for Landcom. Refer **Figure 3.**



AEP

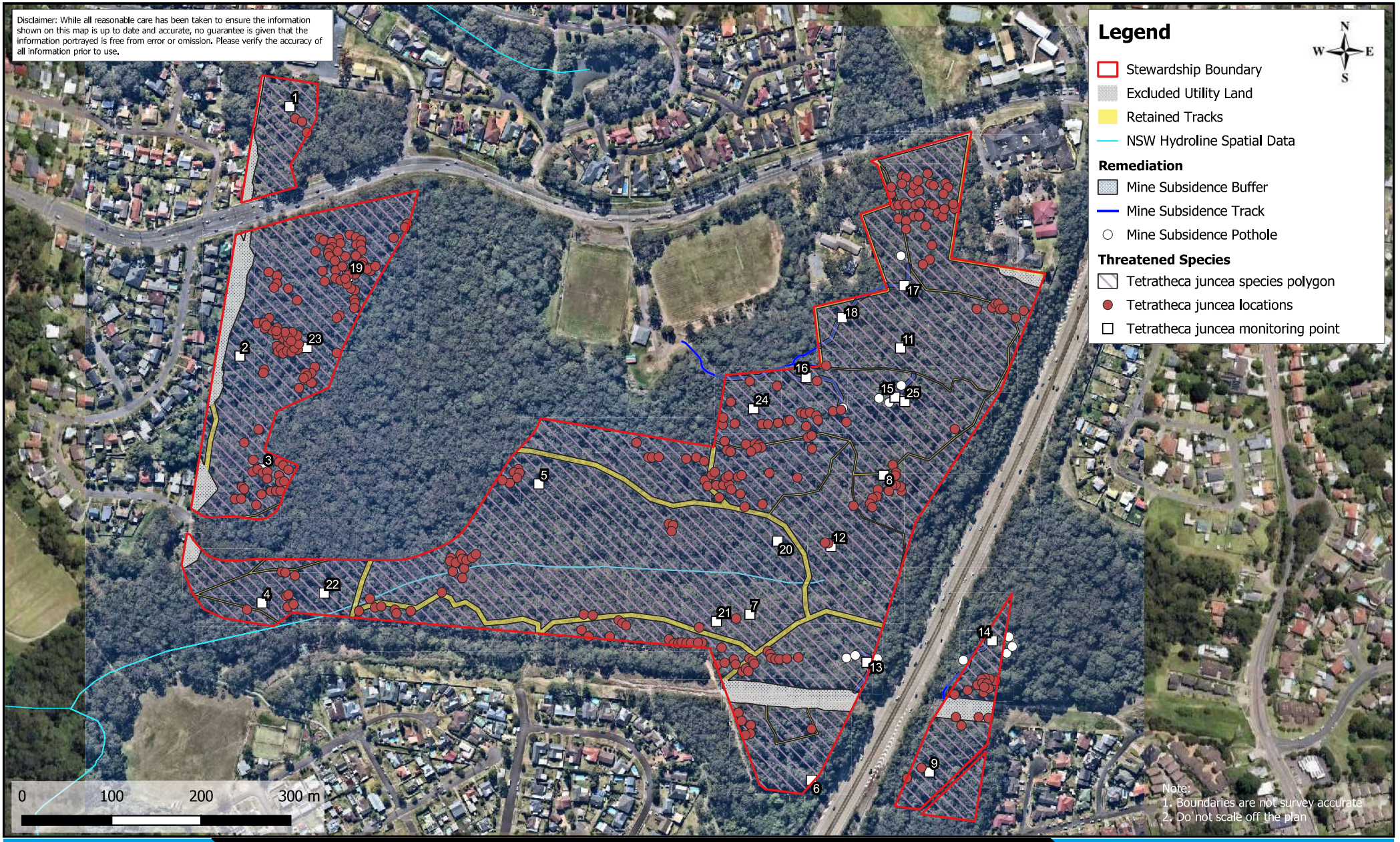
Figure 1 - CEMP Pothole Locations

Date: June 2024

Location: BSA Lands, Hillsborough, NSW

Client: Landcom

AEP Ref: 3043



AEP

Figure 2 - CEMP Tetratheca juncea Locations

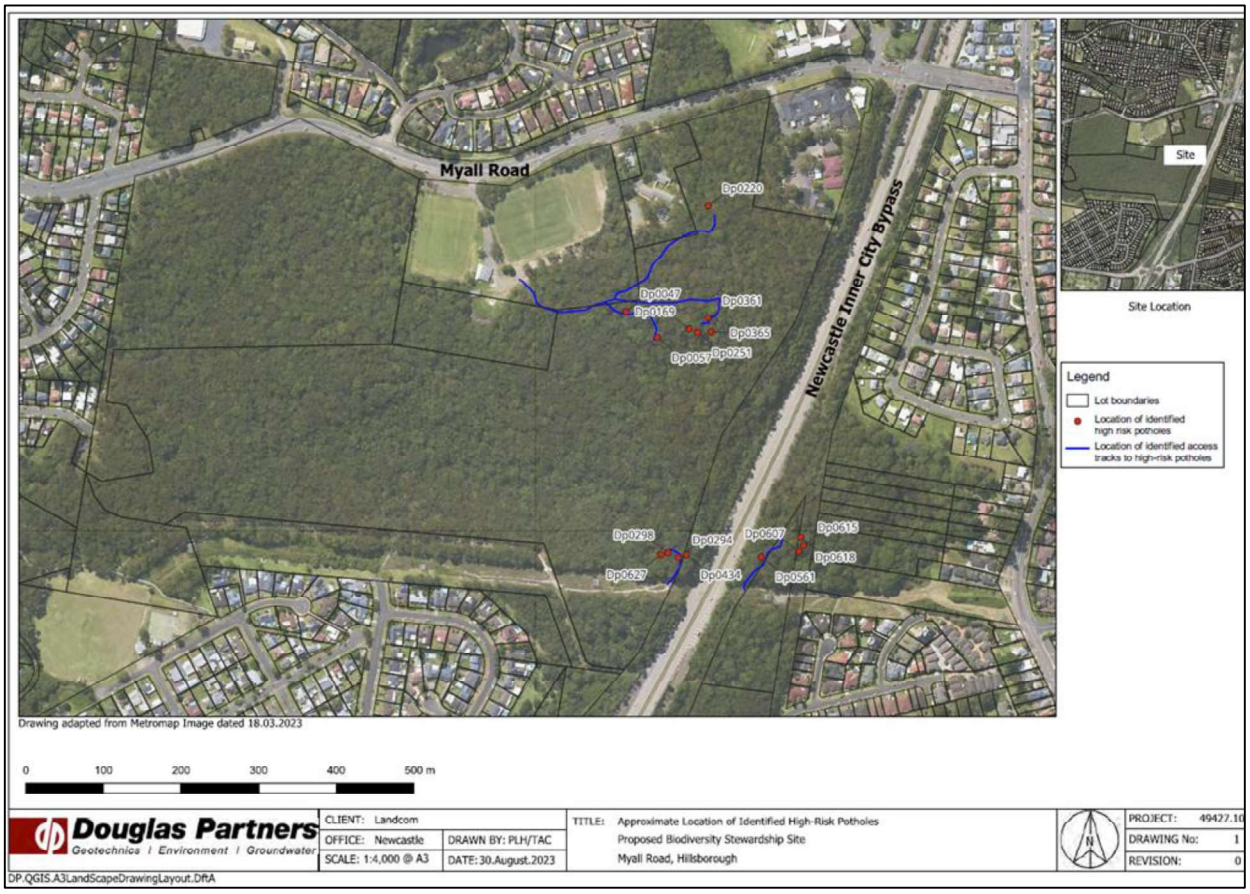
Date: June 2024

Location: BSA Lands, Hillsborough, NSW

Client: Landcom

AEP Ref: 3043

Figure 3 – Potholes for remediation as identified by Douglas Partners



2.0 BSA Site Preparation

As part of the regeneration of the BSA Site, the CEMP Lands must be prepared. The following works have been recommended to assist in BSA Site preparation.

2.1 Fencing

The Owner must install and maintain fencing and signage to deter human disturbance including Rubbish dumping. Signage must be obtained from the NSW BCT.

When installing and maintaining fencing and signage, the Owner must meet the following requirements:

- Existing intact boundary fencing will be maintained. Approximate total length of 1170.24m.
- Bollards and heavy swing gates are to be installed at each of the 19 BSA site pedestrian access points.
- Permanent fencing will be installed along the northern portion of the BSA site adjacent Myall Road, on the western portion to exclude residential APZs and at each BSA site pedestrian access. Fencing to be prefabricated 'hinged joint', galvanised wire mesh fence; mesh size will be in accordance with the BCT Essential Conservation Fencing Guide.
- Permanent fencing will be installed at each pedestrian access point. Fencing length and direction will consider native vegetation coverage at each pedestrian access point and be installed to avoid native vegetation removal. For the purposes of the TFD calculation, 20m of fencing (10m either side) has been mapped at each access point. Fencing to be prefabricated 'hinged joint', galvanised wire mesh fence; mesh size will be in accordance with the BCT Essential Conservation Fencing Guide.
- Total length of permanent fencing will be approximately 1552.77m.
- Temporary fencing and signage will be installed at the start of any walking trail proposed for restoration and will extend 30m either side of the trail. Fencing to be 5 strand plain wire steel post fence. The temporary fencing will remain in place for 5 years.
- A pedestrian access bridge will be installed across the creek in the south west at the existing walking trail crossings. TFD is estimated on a design of 6-10m long, 1500mm wide, balustrade/handrail, FRP Deck, 3kpa loading, concrete entry/exit ramp 5m long each end.
- A pedestrian boardwalk of approximately 40m will be installed across the creek in the south east at the existing walking trail crossings. TFD estimate based on 40m long boardwalk, 1500mm wide, no balustrades or handrails, includes kick rail, FRP Deck, Headstock subject to design and Geotechnical advice.
- Biodiversity Stewardship Site and Responsible Pet Ownership signage is to be displayed at each of the nineteen (19) BSA site pedestrian access points.

2.2 BSA Site induction

Induction for all personnel entering/working on BSA Site should highlight the sensitive nature of the conservation land and discuss the importance of avoiding all impact to this land including all the following activities:

- Introduction and explanation on the species;
- Clearing of vegetation;
- Storage of vehicles or machinery;
- Stockpiling, materials storage;

- Unauthorised access; and
- Dumping of rubbish or building waste.

2.3 Fire Trail Management

Not required for this Application

2.4 Weed / Pathogens / Disease Control

Diseases and which could affect the CEMP Lands include the root-rot fungus (*Phytophthora cinnamomi*) and Myrtle rust (*Puccinia psidii*), affecting Myrtaceous plants including the Eucalyptus species present on BSA Site as well as Amphibian Chytrid fungus disease, Chytridiomycosis, caused by Chytrid fungus (*Batrachochytrium dendrobatidis*).

To minimise the potential for any such introductions, it is recommended that appropriate hygiene controls be employed and hygiene stations supplied:

Plant, Machinery, Tools and Boots Hygiene

- All plant/machinery is to be washed down upon entry to BSA Site and prior to exiting site;
- The location of wash down bays is to be clearly identified within the site;
- All tools being utilised on BSA Site should be sterilised and washed free of soil before use and at the end of each day;
- Boots should be clean and free of soil and seeds before entry to BSA Site and before exiting site;
- Boots should be sterilised in a similar manner to tools after soil and seed removal; and
- Sterilisation of tools and boots shall be undertaken using 60% alcohol, methylated spirits or Phytoclean™ applied via spray bottle or brush dipped in the mixture.

Phytophthora cinnamomi

- Minimisation of work during excessively wet or muddy conditions;
- All personnel to be inducted on Phytophthora identification and management; and
- All plants and soils used/brought into BSA Site must be disease-free.

Amphibian Chytrid fungus

- Minimisation of work during excessively wet or muddy conditions;
- All personnel to be inducted on Chytrid management measures for the site; and
- Handling of frogs only when necessary using fresh disposable gloves to handle individual frogs.

Myrtle Rust

- All personnel to be inducted into the identification and management of Myrtle rust; and
- Should any areas on BSA Site be identified as areas contaminated by the above, additional exclusion measures including, work program directions, soil storage and waste disposal programs must be implemented.

2.5 Erosion and Sedimentation Control

An Erosion and Sedimentation Control Plan (ESCP) should be prepared for the proposed development and may form part of the CEMP. Erosion and Sediment control measures should be implemented in accordance with specifications set out in the latest edition of the Landcom publication "Soils and Constructions – Volume 1 (The Blue Book)".

The potential for erosion to arise from weed control activities is low due to the minimal cover of exotic species. However, large scale removal of weeds may leave bare areas exposed to the elements and prone to erosion. As such, weed control activities and methods employed should weigh the potential to generate erosion. The requirement to implement temporary erosion and sedimentation control as part of weed control activities will be at the discretion of the Bush Regeneration Contractor.

2.6 Rubbish Removal

Rubbish and waste is to be removed from CEMP lands. The need to remove such material should be assessed on a case-by-case basis as in some instances the material is inert, such as concrete, rocks and timber posts, etc. Such material may inadvertently provide geomorphic stability and suitable shelter and habitat for native fauna.

2.7 Monitoring and Reporting

Upon completion of BSA Site preparation, a report outlining compliance with the above will be provided to Council. Monitoring is to occur in accordance with the CEMP.

3.0 Wildlife Management Strategy

The WMS describes methods of pre-clearance surveys and felling methods for HBTs marked in pre-clearing BSA Site surveys, dewatering, and clearing procedures. Clearing procedures also include the collection of salvageable features for remanufacture and / or re-use in the CEMP Lands.

3.1 Nest Box Installation

Upon completion of nest box installation, a nestbox plan including location mapping detailing nest box

3.2 Vegetation Clearing - Habitat Tree Protocol

Clearing of vegetation on BSA Site must follow the procedure below to ensure safety of utilising the BSA Site and best environmental outcomes. All clearing works are to be undertaken under the supervision of the Project Ecologist;

- Prior to clearing:
  - Conduct pre-clearance diurnal and nocturnal surveys to identify native fauna and habitat. All habitat features must be clearly marked with flagging tape;
  - Native seed should be collected by the Project Ecologist or delegated body in all stages of clearing for propagation of plants for revegetation in the VMP Lands; and
  - The boundary between the CEMP area and the impact area of the culvert construction and the construction areas should be clearly flagged.
- In addition, prior to, and following clearing of any vegetation, an Ecologist is to inspect the area for any signs of resident fauna requiring attention;
- Where such is identified, appropriate strategies are to be developed and instigated to minimise impacts;
- Fallen timber and hollow logs identified to be retained and relocated into the CEMP Lands directed by the Project Ecologist at a rate of 100 linear metres per hectare (approx. 50m). Larger logs to be placed along boundary by machinery, while hollows to be sectioned and carried into BSA Site using walkover technique;
- Civil Construction staff to be inducted into pre-clearing and clearing protocols, and to identify environmental features for protection; and
- Live mulch and topsoil that is free of weeds is ideal for reuse in rehabilitation of conservation lands.

3.2.1 Stage 1 Clearing Works

- Stage 1 works will include the clearing of understorey vegetation, ground litter and logs without habitat features;
- Stage 1 works are to be undertaken under the supervision of the Project Ecologist;
- Clearing will be undertaken in a general direction from the east to west towards retained vegetation to enable fauna a safe escape route into the retained vegetation;
- Habitat features, including HBTs, trees and ground habitat are marked. These are not to be disturbed during Stage 1 clearing works;
- Unexpected fauna encounters will be dealt with on a case-by-case basis by the Project Ecologist. Habitat features thought to be occupied will be avoided as far as practicable during Stage 1 works and the Project Ecologist may postpone felling these features until Stage 3 clearing works; and

- Fauna encountered will captured and relocated to retained vegetation area after clearance has ceased for the day, after dark if suitable for the species. And fauna harmed by the clearance will be transported to a nearby vet or wildlife rescue.

3.2.2 Stage 2 Clearing Works

Stage 2 works includes the clearing, felling and windrowing of all non-habitat trees. The following protocols will apply:

- Stage 2 works are to be undertaken under the supervision of the Project Ecologist;
- Clearing will be undertaken in a general direction from the east to west towards retained vegetation to enable fauna a safe escape route into the retained vegetation;
- Suitable logs from felled trees are to be emplaced along the cleared/retained boundary to create a physical barrier between BSA Site and the retained lands;
- All trees should be lowered in the most gradual manner possible;
- Soft-felling techniques are also to be conducted on all trees with DBH >300mm;
- All cleared vegetation is to be mulched on BSA Site and spread to help stabilise any exposed soil and minimise off BSA Site movement of biomass;
- Fallen timber and hollow logs identified to be retained to be relocated into the retained lands;
- Unexpected fauna encounters will be dealt with on a case-by-case basis by the Project Ecologist. Habitat features thought to be occupied will be avoided as far as practicable during Stage 1 works and the Project Ecologist may postpone felling these features until Stage 3 clearing works;
- Fauna encountered will captured and relocated to retained vegetation area after clearance has ceased for the day, after dark if suitable for the species; and
- Fauna harmed by the clearance will be transported to a nearby vet or wildlife rescue.

3.2.3 Stage 3 Clearing Works

- Stage 3 works includes the clearing, felling and windrowing of HBTs and other habitat features, a minimum of 36 hours (two overnights) after Stage 1 under-scrubbing and Stage 2 felling of trees not identified as habitat features. The following protocols will apply:
- Stage 3 works are to be undertaken under the supervision of the Project Ecologist;
- Directly prior to any clearing (i.e. in the same diurnal period) in any area containing vegetation within the BSA Site, the Project Ecologist must make sure:
- All accessible hollows and other habitat features (i.e. bird nests, dreys, burrows, etc.) are to be visually inspected by the Project Ecologist, and hollows blocked with rags or similar material if found to be occupied by resident fauna or if occupation cannot be ruled out.
- Unexpected occupied nests, dreys or burrows shall be dealt with on a case-by-case basis by the Project Ecologist. Potentially occupied habitat features will be avoided as far as practicable in Stage 1 works. Where clearing of habitat features is required as part of Stage 2 clearing works, wildlife carers will be contacted to confirm availability and fauna handling procedures.
- Felling of habitat trees is to be undertaken by tree climbers, inspecting hollows and other habitat features for fauna;
- After inspection, stick nests and dreys will be carefully removed and hollows sectionally dismantled and safely lowered using ropes;
- The Project Ecologist will inspect lowered hollows and manage fauna found;

- Immediately following felling of a habitat tree (or other trees at the Project Ecologist's discretion); the tree and all hollows will be inspected by the Project Ecologist for resident fauna;
- The Project Ecologist will manage fauna relocation of occupied hollows to surrounding retained bushland or to a wildlife carer;
- Felled Stage 3 vegetation should be left in-situ for a minimum of 36 hours (two overnights) prior to being windrowed, processed or removed from site;
- Salvageable hollows and hollow logs will be assessed by the Project Ecologist, and, where practical, taken from BSA Site to be remanufactured for reuse;
- To augment ground habitat for native fauna, where practical, hollows and habitat features not suitable for salvage but suitable for ground habitat will be relocated to CEMP area of retained vegetation;
- Hollows suitable for relocation will be determined at the time of clearing. These hollows will be dismantled in manageable sections, placed in the clearance supervisor's vehicle and driven into the CEMP lands to be relocated;
- Sectional dismantling will be done carefully by shining a torch through the hollow first, to estimate depth and assert occupancy status. If fauna present is deemed possible to remove without injuring, the hollow limb will be carefully sectioned until the individual is reachable by the spotter-catcher;
- If dismantling the hollow limb is deemed too dangerous for the resident fauna, it will be set aside till dusk and monitored to ensure the fauna self-relocate;
- Fauna will be encouraged to self-relocate by tapping the hollow limb in situ;
- The supervising ecologist will have the power to stop work at any time if situation is deemed dangerous for native fauna and/or contravene native wildlife code of ethics/scientific license conditions;
- Unexpected fauna encounters will be dealt with on a case-by-case basis by the Project Ecologist. Habitat features thought to be occupied will be avoided as far as practicable during Stage 1 works and the Project Ecologist may postpone felling these features until Stage 3 clearing works;
- Fauna encountered will captured and relocated to retained vegetation area after clearance has ceased for the day, after dark if suitable for the species. And fauna harmed by the clearance will be transported to a nearby vet or wildlife rescue;
- Once hollows containing or potentially containing fauna are sectionally dismantled, they are to be relocated to retained areas where nest boxes have been installed. Hollows should be placed at the base of trees containing unoccupied nest boxes to allow displaced fauna to migrate to the supplementary habitat; and
- Vegetation clearing is to be timed to avoid fauna breeding periods and cold weather periods where overnight temperatures are forecast to be less than 12°C. Cold weather is likely to make it difficult for resident hollow dependent fauna to successfully relocate. This is particularly relevant for low body-weight species.

3.2.4 Fauna Encounters

To reduce risks of harm to any animals or to the safety of personnel, the Project Ecologist will manage responses to fauna encountered at any stage of Works.

3.2.4.1 Procedure for Handling Wildlife on Site

Wildlife encountered will be managed by the Project Ecologist. It will either be caught and relocated safely at a suitable time in retained bushland or allowed to naturally disperse into surrounding retained lands.

Wildlife carers will be contacted to confirm availability and procedures prior to clearing works.

Gloves are to be worn to reduce the risk of injury to the Project Ecologist. Wildlife will be caught by hand and placed in an appropriate box or bag. All animals to be kept in a safe, quiet, cool, ventilated and dark location away from noisy construction activities prior to relocation.

Relocation of wildlife to nearby retained vegetation in VMP Lands will be undertaken where possible by the Project Ecologist and will be recorded and reported. If the animal is not injured or stressed, it may be released nearby in accordance with the following procedures:

- Sites identified as suitable release points by the Project Ecologist or wildlife rescuer will be determined on a case by case basis;
- Hollow dependant fauna are to be released into BSA Site CEMP Lands where suitable hollows and nest boxes will have recently been installed;
- Nocturnal fauna should be held until dusk before release after dusk;
- Release BSA Site will contain similar habitat from which it was found;
- Release would generally not be undertaken during periods of heavy rainfall;
- Hollow-dependant species, particularly birds with dependant young that will be unable to disperse, and where chances of relocation success are low are to be referred to a wildlife rescue group; and
- If unfeathered young are noted in nests, the nests are to be retained as far as practical and the nests monitored for activity thereafter.

3.2.4.2 Threatened Species

If breeding threatened species with dependent young are identified during clearing, works in the immediately vicinity of the BSA Site will cease and advice from the Project Ecologist will be obtained and, where required, further advice sought from Department of Climate Change, Energy, the Environment and Water. If no dependent young are identified the individual/s will be encouraged to move on into retained vegetation. Methods may include capture, removal of branches away from hollow and further shaking of the tree to encourage the animal to vacate the area.

3.2.4.3 Particular Fauna Handling

Some animals require particular handling and should only be handled by appropriately qualified personnel i.e. Project Ecologist or Fauna Rescue. The Project Ecologist will manage particular fauna requirements, including:

If handling bats, the handler should be vaccinated against the Australian Bat Lyssavirus (a form of rabies).

Frog handling will be undertaken in accordance with the *Hygiene Protocol for the Control of Disease in Frogs* (DECC 2008). This protocol recommends on BSA Site hygiene precautions be undertaken to minimise the transfer of disease between and within wild frog populations. Measures recommended include:

- Cleaning/disinfecting hands between collecting samples/frogs (preference would be given to using bags, rather than bare hands to handle frogs);
- Limiting one frog or tadpole to a bag; and

- Bags should not be reused.

Venomous reptiles, raptors and large birds require particular handling if the animal cannot be handled (i.e. venomous reptiles), the following methods will apply;

- Exclude all personnel from the vicinity with flagging and/or signage; and
- Record the exact location of the animal/s and provide to the Project Ecologist or Fauna Rescue representative.

If Project Ecologist or wildlife carer is not available on BSA Site and the animal is able to be handled safely, to minimise stress to native fauna and/or remove the risk of further injury before a licensed fauna handler arrives on Site, the Project Manager or delegate will:

- If time permits, call Project Ecologist or fauna rescue for advice;
- Cover larger animals with a towel or blanket and place in a cardboard box and/or canvas bag;
- Place smaller animals in a cotton bag, tied at the top; and
- Keep the animal in a quiet, cool, ventilated and dark location away from noisy construction activities.

Call the appropriate rescue agency immediately and follow any advice provided by the agency. Once the rescue agency arrives on Site, they are responsible for the animal. Any decisions regarding the care of the animal will be made by the rescue agency.

In the event the rescue service and/or local veterinary service cannot be contacted, the injured animal will be managed by the Ecologist and delivered to the relevant agency as soon as practically possible.

All fauna encounters and outcomes will be reported in a final Clearance Compliance Report to Council.

4.0 References

DCCEEW 2024, *Environmental Management Plan Guidelines,* Department of Climate Change, Energy, the Environment and Water, Canberra, March. CC BY 4.0.

Douglas Partners, (11 Jan 2023*) Memorandum – Proposed Pothole Remediation Works, Project No. 49427.09. Proposed Biodiversity Stewardship Site, Myall Road, Hillsborough*. Unpublished report for Landcom.

KCE Pty Ltd (9 Feb 2024) *Site Specific WHS & Environmental Project Management Plan, Job No. 24026, Garden Suburb Subdivision, Intersection Upgrade & Stewardship Site Work at Myall Road, Hillsborough*. Unpublished report for Landcom.

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