



Asbestos Management Plan (AMP)

Health Infrastructure

Broken Hill Key Worker Accommodation (KWA)

Key Worker Accommodation Program, Broken Hill, NSW

JBS&G 66655 | 158,782

5 April 2024





We acknowledge the Traditional Custodians of Country throughout Australia and their connections to land, sea and community.

We pay respect to Elders past and present and in the spirit of reconciliation, we commit to working together for our shared future.

Caring for Country The Journey of JBS&G
Artist: Patrick Caruso, Eastern Arrernte



Table of Contents

Abbreviations	iii
1. Introduction	1
1.1 Background	1
1.2 Objectives.....	1
2. Summary of Asbestos Conditions	2
2.1 Asbestos Overview.....	2
2.2 Known Extent of Asbestos in Soil.....	2
2.3 Asbestos Regulations, Codes of Practice and Guidelines	2
3. Application of AMP Responsibilities	4
3.1 Application of AMP	4
3.2 AMP Responsibilities During Proposed Asbestos Related Works.....	4
3.2.1 Principal Contractor	4
3.2.2 Licensed Asbestos Assessor / Competent Person	4
3.2.3 Licensed Asbestos Removal Contractor	5
4. Health and Safety Management.....	6
4.1 Safe Work Method Statements	6
4.2 Site Access Control.....	6
4.3 Training and Certification.....	7
4.4 Site Safety Induction	7
4.5 Asbestos Awareness Training	7
4.6 Personal Protective Equipment	8
4.7 Plant	8
4.8 Management of Subcontractors.....	9
5. Asbestos Management Procedures	10
5.1 Proposed Excavation Activities	10
5.2 End of Day Works.....	11
5.3 Stockpile Management	11
5.3.1 Temporary Stockpiles	11
5.3.2 Long Term Management	11
5.4 Decontamination	11
5.4.1 Personal Decontamination	11
5.4.2 Hand Tools.....	12
5.4.3 Vehicle, Plant and Equipment	12
5.5 Loading and Transport.....	12

6.	Management Strategy	14
6.1	Long Term Asbestos Management Plan	14
7.	Monitoring Program	15
7.1	Daily Static Airborne Asbestos Fibre Monitoring.....	15
7.2	Contingency for Monitoring Exceedance.....	15
8.	Unexpected Finds Protocol	16
9.	Asbestos Management Records	18
10.	Limitations	19

Appendices

Appendix A	Figures
Appendix B	Proposed Development Plans

Abbreviations

Term	Definition
ACM	Asbestos Containing Material
AF/FA	Asbestos Fines / Friable Asbestos
AMP	Asbestos Management Plan
ARCP	Asbestos Removal Control Plan
DP	Deposited Plan
DSI	Detailed Site Investigation
HI	Health Infrastructure
HSLs	Health Screening Levels
JBS&G	JBS&G Australia Pty Ltd
KWA	Key Worker Accommodation
LAA	Licensed Asbestos Assessor
PCBU	Person Conducting Business or Undertaking
PPE	Personal Protective Equipment
PSI	Preliminary Site Investigation
RPE	Respiratory Protective Equipment
SWMS	Safe Work Method Statement
WHS	Work Health and Safety
VOC	Volatile Organic Compound

1. Introduction

1.1 Background

JBS&G Australia Pty Ltd (JBS&G) was engaged by Health Infrastructure (HI, the client) to prepare a construction Asbestos Management Plan (AMP) for the management of asbestos impacted soils for the proposed Broken Hill Key Worker Accommodation (KWA, the site). The site is formally identified as part Lot 4376 in Deposited Plan (DP) 757298. The overall KWA footprint is approximately 1,200 m². The site location and layout are shown on **Figures 1 and 2** respectively in **Appendix A**, and proposed development plans have been provided as **Appendix B**.

During intrusive investigations as part of the combined Preliminary Site Investigation (PSI) and Detailed Site Investigation (DSI) (JBS&G 2023¹), bonded asbestos containing material (ACM) was encountered within fill in two test pit locations (KW-B3 and KW-B7) and trace level friable asbestos was detected in one sample location (KW-B1), below the adopted Health Screening Levels (HSLs) as shown on **Figure 3**.

This construction AMP is required under the *Work Health and Safety Regulations 2017* as a consequence of asbestos being present within a workplace (the WHS) and has been prepared to ensure that when asbestos impacted soils or materials are being handled at the site, they are appropriately managed to ensure the protection of the health of the site workers (direct workers), future site workers, patients, visitors, hospital facility employees and the neighbouring community. This AMP outlines the management of asbestos impacted soil or materials encountered at the site.

1.2 Objectives

The purpose of this AMP is to outline the required procedures for the handling of asbestos impacted soils or materials during the development works to be undertaken at the site; to outline the measures required to protect the health and safety of site workers who may encounter asbestos impacted soils or materials whilst completing the planned works; and to prevent any adverse health effects on future site workers, patients, visitors, hospital facility employees and the neighbouring community in accordance with relevant National Codes of Practice and Work Health and Safety (WHS) Legislation.

Specifically, the objectives are to:

- Outline legislative requirements for asbestos registers and asbestos management plans;
- Outline, monitor and enforce safe working condition for all site workers;
- Outline, monitor and enforce safe environmental conditions for all persons outside of the site;
- Outline, monitor and enforce procedures to manage works within asbestos contaminated soils identified onsite during works;
- Outline measures for the safe onsite storage and, if required, off-site disposal of asbestos materials in accordance with all relevant legal and statutory requirements; and
- Outline ongoing management requirements of the site to ensure that the risk posed by any potential asbestos impact at the site is properly managed.

¹ *Combined Preliminary and Detailed Site Investigation – Broken Hill Key Worker Accommodation (KWA)*, Health Infrastructure, Reference 150,231 / 63879, dated 29 March 2023 (JBS&G 2023)

2. Summary of Asbestos Conditions

2.1 Asbestos Overview

Friable asbestos is defined by Safe Work NSW in the How to Safely Remove Asbestos - Code of Practice (2022) as being “...material that is in a powder form or that can be crumbled, pulverised or reduced to a powder by hand pressure when dry, and contains asbestos”. This includes asbestos fibre impacted soils and asbestos fines identified by laboratory analysis.

Non-friable asbestos material is defined by Safe Work NSW (2022) as being “...material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.”

ACM can be classified as being present in either a non-friable or friable form.

Mechanical disturbance of fragments of ACM may result in the release of fibres and therefore, such activities should be managed to prevent any fibres becoming airborne. The health effects of asbestos are detailed in enHealth (2005²) Management of Asbestos in the Non-Occupational Environment.

Asbestos materials in a bonded form (e.g. contained within cement or resins) do not present an immediate health risk, if they remain undisturbed and in a good condition. It is the inhalation of fibres from friable forms of asbestos or dusts generated by disturbing bonded materials may lead to the risk of asbestos related disease.

The primary issue associated with the presence of asbestos is inhalation of respirable fibres if the materials were to be disturbed and abraded.

2.2 Known Extent of Asbestos in Soil

Bonded forms of asbestos were identified at two locations with concentrations of 0.002% w/w in sample KW-B3_0.0-0.4A and 0.007 %w/w in sample KW-B7_0.0-0.6A. The results in both samples were below the adopted criterion for bonded ACM (0.04 %w/w). Further, asbestos fines / friable asbestos (AF/FA) was detected in SPLIT05 (triplicate of KW-B1_0.0-0.5), below the adopted criteria of 0.001 %w/w.

Whilst all incidence of asbestos impacts at the site were reported below the adopted site criteria (and therefore don't require remediation to make the site suitable for the proposed landuse), the presence of asbestos in fill material indicates that there may be further asbestos present in disturbed fill material. The presence of asbestos in soil does, however, trigger requirements for asbestos controls to be implemented during remediation/civil works in proximity to the identified impacts, in accordance with SafeWork NSW Codes of Practice.

2.3 Asbestos Regulations, Codes of Practice and Guidelines

The removal, assessment and disposal of asbestos is normally managed in accordance with the following:

- *Work Health and Safety Regulation 2017.*
- *How to safely remove asbestos - Code of Practice, SafeWork NSW, 2022 (SNSW 2022a).*
- *How to manage and control asbestos in the workplace - Code of Practice, SafeWork NSW, 2022 (SNSW 2022b).*
- *Waste Classification Guidelines - Part 1: Classifying waste, NSW EPA, 2014 (EPA 2014).*

² Management of Asbestos in the non-occupational environment. enHealth, 2005 (enHealth 2005).

The hazards that are present from ACM in the soils at the site require the management to be in accordance with the abovementioned code of practice and appropriate guidelines and regulations.

Due to the presence of friable asbestos impacted soils, all works involving removal or disturbance of asbestos on the site must be supervised or performed by a contractor who holds a Class A (friable and/or non-friable) asbestos removal license.

3. Application of AMP Responsibilities

3.1 Application of AMP

This AMP shall apply henceforth throughout the development works until the completion of the development / construction works at the site, inclusive of all intermediary phases of work including remediation.

3.2 AMP Responsibilities During Proposed Asbestos Related Works

The responsibilities for site management with regards to any asbestos impacted soils or materials present at the site apply to all works from the commencement of construction works until the completion of the development / construction at the site, except where a more specific asbestos management or works plan is provided by a person conducting business or undertaking (PCBU).

3.2.1 Principal Contractor

In accordance with the provision of the *Work Health and Safety Regulation 2017*, a principal contractor (Contractor) shall be appointed for the proposed works.

Responsibilities of the Principal Contractor include, but are not limited to the following:

- Be responsible for the proposed project work at all times until the work is completed;
- Ensure that all persons involved with asbestos removal work have undertaken occupational health and safety training;
- Keep records of induction training for site workers and any site specific training;
- Ensure that any subcontractors provide safe work method statements for the activities for which they are engaged;
- Monitor any subcontractors to ensure that they are complying with the safe work method statements; and
- Maintain a hazardous substances register for all hazardous substances used or present on site.

The Principal Contractor is responsible for co-ordinating health and safety activities for the project. Other responsibilities of the Principal Contractor include:

- Compliance with occupational health and safety and environmental legislation, regulations, standards, codes and the site-specific rules relating to safety contained in this AMP;
- Ensuring that sufficient funds are available to procure the necessary health and safety equipment such as personal protective equipment (PPE);
- Managing accident and emergency procedures; and
- Managing workplace injury management and rehabilitation.

The Principal Contractor has the authority to provide for the auditing of compliance with the provisions of this AMP, suspension or modification of work practices, and administration of disciplinary actions for individuals whose conduct does not meet the requirements set forth herein.

3.2.2 Licensed Asbestos Assessor / Competent Person

A Licensed Asbestos Assessor (LAA) (as defined in the *Work Health and Safety Regulation 2017*) for licensed friable asbestos removal works shall be engaged to assess any suspected asbestos containing materials when required. The LAA shall complete airborne asbestos monitoring for the duration of works of significant intrusive works. A competent person may undertake these tasks for bonded ACM removal works.

The LAA/Competent Person shall:

- Complete static asbestos air monitoring during all intrusive and ground disturbance works associated with the asbestos impacted materials including removing, transport and placement until such time that the final clearance inspection has been completed. All daily results of air monitoring activities are to be displayed or be readily available for the information of site workers. All air monitoring events shall be undertaken in accordance with the *National Occupational Health and Safety Commission's Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres* [NOHSC: 3003(2005)];
- Conduct formal clearance inspections and prepare formal clearance certificates;
- Audit of asbestos controls and management implemented on the site;
- Provide on-site advice, if required, in relation to suspected ACM and the management of asbestos issues associated with the works;
- Collaboration with, and audit of, the Licensed Asbestos Removalist to ensure the AMP is being implemented and best practices with regards to asbestos management are being implemented;
- Be available, if required, for consultation with regards to the conditions and requirements of this AMP; and
- Complete a final site walkover upon completion of the bulk earthworks to confirm no visible asbestos is within the top 100 mm of the site surface.

3.2.3 Licensed Asbestos Removal Contractor

A Class A (friable and/or non-friable) or Class B (non-friable) licensed asbestos removal contractor shall be engaged to complete the asbestos related and other associated works present in the work areas.

The licensed asbestos removal contractor will be the primary person responsible and in charge for works on-site involving ACM in soil. Their responsibilities include:

- Prepare a site-specific Asbestos Removal Control Plan (ARCP) prior to any asbestos works being completed;
- Notification of licensed asbestos removal works to SafeWork NSW;
- Ensuring compliance with relevant legislation and the conditions of this AMP;
- Handling and management of ACM or asbestos contaminated soils at the site in accordance with relevant legislation;
- Ensure appropriate environmental and safety controls outlined in this AMP are maintained for the duration of the works; and
- Assisting all site sub-contractors, where required, in complying with relevant legislation and the procedures outlined in this AMP.

The ARCP must satisfy the requirements of *SafeWork NSW Code of Practice – How to Safely Remove Asbestos* (2022) with regards to an ARCP checklist. In addition, the ARCP must provide specific methodologies for the following activities:

- Decontamination of trucks/bogies exiting asbestos work zones OR creation of clean “loading zones” within asbestos work zones (via application of geo-fabric and/or plastic to ground) to eliminate the requirement to decontaminate trucks/bogies transporting ACM impacted soils within the site; and
- Control measures for management of dust during asbestos removal works (such as hose sprays), interim stockpile works (wetting of soils, geo-textile/plastic) and long-term stockpile works (dust-bloc/soil binding products and/or geo-textile/plastic) and potential dust generation from exposed asbestos impacted soils outside of construction hours including nights, weekends and shutdown periods.

4. Health and Safety Management

4.1 Safe Work Method Statements

Safe work method statements (SWMS) must be prepared by the Principal Contractor and their sub-contractors completing works that involve the disturbance, handling, removal and any other activities associated with asbestos hazards at the site prior to those activities commencing.

Safe Work Method Statements must:

- Describe how work is to be carried out;
- Identify the safety risks;
- Describe the control measures that must be applied to the work;
- Describe the equipment used in the work;
- Describe any standards or codes applicable to the work; and
- Training and qualifications required of persons undertaking the work.

Safe work method statements for all workers should be reviewed and approved by the Principal Contractor.

4.2 Site Access Control

The Principal Contractor shall ensure that the area in which works are taking place is designated a construction area and that the construction area is securely fenced and that access is controlled. Entrance to the site will be via a dedicated entry point which will contain the following features in addition to site security measures as required for a construction site as per relevant health and safety provisions:

- Readily identifiable and delineated site access / egress point. Where possible this location shall be visibly identifiable by site fencing / barricading;
- Designated decontamination area for all site personnel to remove PPE and dispose of contaminated articles. The decontamination area will be located in close proximity of the designated site access / egress point;
- Signage including “No Entry Without Required PPE” and a contact number for members of the public to direct any queries / complaints; and
- Emergency contact details.

The overall construction site boundary will be secured by appropriate fencing/barricades. Access to the construction site will be controlled and permitted by the person in charge of the site only after persons entering the site have been advised of the potential contamination hazards. This shall at least include notification of the potential presence of asbestos containing materials and asbestos contaminated soils.

Any authorised person accessing the site should do so in accordance with health and safety requirements as indicated in this AMP. The implementation of the health, safety and environmental requirements should be administered by the Principal Contractor.

Asbestos exclusion zones/removal boundaries shall be determined by the Principal Contractor in consultation with the LAA and the licensed asbestos removal contractor and will vary according to the location and size of the required daily activities. Any asbestos removal boundaries will be designed to allow other site works not involving significant intrusive works to continue without being required to adhere to this AMP. Access to designated asbestos works zones will not be allowed until the site personnel have been inducted into the requirements of this AMP, have signed in, and have donned the required PPE (**Section 4.6**). Upon exiting the site, personnel must remove and dispose of/clean the PPE in the provided decontamination area.

It may be found that the asbestos removal boundaries require to be assigned to the site boundaries, in which case all site workers must adhere to the requirements of this AMP.

4.3 Training and Certification

The Principal Contractor must not allow any person to carry out project works unless they are satisfied that the person has undergone WHS induction training.

The WHS induction training required by the Regulation is as follows:

- General occupational health and safety training for construction work;
- Work activity based health and safety training (job specific training);
- Site-specific health and safety induction training; and
- Asbestos awareness training (formal or site-specific).

For each person carrying out asbestos removal, for a period of three years, the Principal Contractor must keep a record of the following:

- A copy of relevant statements of WHS induction training, or a statement indicating that the Principal Contractor is satisfied that the relevant WHS induction training has been undertaken; and
- A brief description of the site-specific training undertaken by the person.

4.4 Site Safety Induction

It is the responsibility of the Principal Contractor to ensure that all persons carrying out asbestos removal works on-site are given a site-specific induction on relevant work health and safety requirements. The induction shall be undertaken by the Principal Contractor. The induction shall be undertaken as per a standard presentation which will address the following topics as per the requirements of this AMP:

- Identification of any site-specific hazards and risk control measures in relation to the asbestos impacted nature of the site;
- Regulatory requirements or codes of practice relevant to identified site specific hazards as restricted to asbestos impact;
- Directions on what to do if suspected asbestos containing materials within built form are encountered;
- Site orientation at least including location of asbestos decontamination areas at site access / egress points; and
- Site specific safety rules in relation to asbestos.

The Principal Contractor is responsible for establishing site specific safety rules. The rules must be displayed in an easily observable location (nominally in the site office) so as to ensure that all site workers, including any sub-contractors, have ready access.

At the completion of the Induction Presentation, each 'inducted person' shall be required to acknowledge that they have understood the requirements for the site works and health, safety and environmental obligations by completion of a Site Induction Form.

4.5 Asbestos Awareness Training

All workers that will conduct work potentially involving asbestos on the site must have completed the site-specific asbestos awareness training that will be provided by the Principal Contractor or an appropriate representative (e.g. the site LAA/Competent Person).

4.6 Personal Protective Equipment

Prior to any ACM or asbestos contaminated soils being disturbed, no additional PPE is required above the standard construction site PPE outlined by the Principal Contractor for the site.

When the ground surface is disturbed in known asbestos impacted areas, the requirements for PPE will apply in all areas within nominated asbestos removal works boundaries and applies for any ground workers within the asbestos work area, as defined by the supervising Competent Person / LAA.

Type/ Duration of Work	Asbestos Impacted Soil Excavation, handling and disposal
Respirator	Half-face respirator (P2 minimum)
Coveralls	Type 5, category 3 disposable coveralls required
Footwear	Disposable booties/boot covers OR Dedicated steel capped gumboots
Gloves	Disposable latex/ nitrile gloves OR Dedicated asbestos zone gloves

Approved respirators shall be worn in asbestos removal works areas at all times to provide respiratory protection. The minimum protection is an approved properly fitting disposable respirator or half faced respirator fitted with a particulate cartridge.

The Principal Contractor shall supply and keep in good order, a sufficient supply of appropriate PPE for all relevant personnel for the duration of the project.

Respirators should be issued for personal use only and shall be kept in a clean condition. Alcohol based antiseptic swabs should be made available for the cleaning of respirators.

Any respirator defects should be reported for subsequent repair. They should be maintained in a clean and safe working condition.

Employees must receive instruction in the correct method of using the respirator and on the importance of correct facial fit and maintenance. No person with a beard shall be allowed within the asbestos work area except using an approved positive pressure continuous airflow hood.

A fit check should be completed by the wearer of the Respiratory Protective Equipment (RPE) each time the respirator is to be used and should comprise the following steps:

- Close off inlet to filter;
- Inhale gently;
- Hold for 10 seconds; and
- Check face piece remains collapsed.

If the face piece does not remain collapsed, there is likely to be a leak in the seal and the RPE would not be providing adequate protection. RPE should be re-adjusted until the fit check is satisfactory. If a satisfactory result in the fit check cannot be achieved, the person will be unable to work within the asbestos works zone and will be required to attain new RPE and complete a new fit test.

It is further noted that, as part of the SafeWork NSW permitting process, additional PPE may be required. If this occurs, then the above PPE requirements will be upgraded to reflect SafeWork NSW' requirements.

4.7 Plant

All plant operators must close cabin doors and windows and set air conditioning to re-circulate when operating within the asbestos work area.

Where there is a risk of exposure to respirable fibres (e.g. plant with open cabins), plant operators will be required to wear PPE as per **Section 4.6** above.

4.8 Management of Subcontractors

Contractors and subcontractors working on-site will be required to adopt the provisions of this AMP and will be advised of potential safety and environmental issues on-site during site-specific induction training. This induction will include the occupational health and safety responsibilities, requirements and controls for all subcontractors working on site. All subcontractor activities will be monitored by the Principal Contractor, the licensed asbestos removal contractor and/or the LAA to ensure compliance with the requirements of this AMP.

Contractors and subcontractors whose work will be performed on-site, or who otherwise could be exposed to health and safety hazards, will be advised of known hazards through distribution of site information contained in this AMP.

They shall be solely responsible for the health and safety of their employees and shall comply with all applicable laws and regulations. All contractors and subcontractors are responsible for:

- Providing their own personal protective equipment as required by the Principal Contractor and the conditions set out in this AMP;
- Training their employees in accordance with applicable laws;
- Providing medical surveillance and obtaining medical approvals for their employees, as appropriate;
- Ensuring their employees are advised of and meet the minimum requirements of this AMP and any other additional measures required by their site activities; and
- Designating their own site safety officer.

Subcontractors must sign an acceptance form prior to commencing work on-site. Subcontractors may only modify, and then only to improve, the conditions specified in this AMP with approval from the Principal Contractor, or their nominee.

5. Asbestos Management Procedures

The requirements for management of asbestos impacted material during implementation of the various management options are discussed in detail in the following sections. All works are to be undertaken in accordance with the Code of Practice (SNSW 2022a).

The following sections detail the requirements during the movement of asbestos impacted soils.

5.1 Proposed Excavation Activities

Asbestos is present in both friable and non-friable form. As determined by the supervising LAA, the following procedures shall be implemented to ensure workers safety and to mitigate any potential off-site migration of contamination.

Prior to any work commencing:

- Review of the information available for the site;
- A SafeWork permit for friable asbestos removal works or SafeWork notification for friable and non-friable asbestos removal works shall be sought by the appropriately licensed asbestos removal contractor. The asbestos removal notification must be submitted at least 5 days prior to any asbestos being disturbed/removed with approval from SafeWork NSW required to have been received prior to works commencing;
- Workers and visitors to the asbestos work area will be made aware of the encountered asbestos and only authorised people shall enter the asbestos work area;
- The works area must be isolated from casual entry using temporary barriers (where smaller than the secure site boundary fencing) and only personnel inducted in the requirements of the AMP will be permitted to enter the works area;
- Asbestos removal caution signs shall be placed on the perimeter barrier (or exclusion zone barrier, whichever is furthest from the asbestos removal work area), as per AS1319.
- Sufficient room must be provided within the works area to allow accessing of the stockpile and proposed placement location where required, in accordance with **Section 5.2**; and
- A water supply must be provided to the works area for the purpose of maintaining exposed asbestos impacted fill in the excavations and stockpiles in a moist state.

During movement activities:

- All wastes will be classified, managed and disposed in accordance with the *Waste Classification Guidelines: Part 1 Classifying Waste* (EPA 2014);
- Personnel within the asbestos work area shall wear a Tyvek suit, respirator (e.g. minimum requirement of half faced P2 respirator), disposable gloves and laceless steel capped rubber soled work shoes or gumboots at all times when within the asbestos work area and until clearance certification is provided by the LAA;
- The excavation and exposed ground surface shall be kept damp by water spraying at all times during excavation to reduce the possibility of dust generation;
- PPE used during the works shall be disposed of as asbestos waste;
- Airborne asbestos monitoring shall be conducted for the duration of the excavation works in accordance with **Section 7.1**; and

- Any stockpiled excavated material shall be kept moist and controlled if left for more than 24 hours in accordance with **Section 5.3**.

5.2 End of Day Works

At the end of each working day and prior to any site shutdowns, all exposed asbestos impacted soils must be managed via sealing with a coloured soil binding product (e.g., green dyed Dust bloc or similar product) or covered with geo-textile or plastic to prevent the potential generation of dust and airborne asbestos overnight, on weekends or during site shutdown periods.

5.3 Stockpile Management

5.3.1 Temporary Stockpiles

Any temporary stockpiles (proposed to be stored for between 24 hours and 1 month) must be kept damp (not flooded) and covered by geo-fabric/plastic or sealed with a soil binding product as soon as practical. The geo-fabric/plastic will extend beyond the perimeter of the stockpiles and shall be secured to prevent being blown away by wind.

5.3.2 Long Term Management

Long term stockpiles (proposed to be stored for longer than 1 month) must be covered with geo-fabric or sealed with a soil binding product (dust-bloc) or sealed with hydro mulch. Large stockpiles should be bunded to prevent asbestos impacted water runoff. Long term stockpiles must be placed in a secured, signed and excluded location onsite.

Regular inspections of long term stockpiles should be undertaken to ensure the controls implemented are in good condition, no dust is being generated from the stockpile and no runoff is occurring.

When the seal is broken on long term stockpiles, such as moving, excavation or tracking over the stockpile, the interim management measures (**Section 5.3.1**) must be implemented until such a time that the long term controls can be re-implemented on the stockpile.

5.4 Decontamination

The Licenced Asbestos Removal Contractor shall ensure that an area is established on the site for people to personally decontaminate themselves and any tools and equipment when they are entering and leaving each asbestos works zone.

The details for decontamination shall be specified in the Licenced Asbestos Removal Contractor's Asbestos Removal Control Plan and SWMSs for asbestos related work and is to comply with the requirements outlined (SNSW 2022a).

5.4.1 Personal Decontamination

Personal decontamination involves the removal of all visible asbestos dust / residue from PPE and RPE. It must be undertaken each time a worker leaves a designated asbestos work area and should be done within the decontamination unit/area.

Asbestos-contaminated PPE must not be transported outside the asbestos work area except for disposal purposes. Before work clothes and footwear worn during asbestos removal work are removed from the asbestos removal area for any reason, they should be thoroughly vacuumed with an asbestos vacuum cleaner to remove any asbestos fibres and the footwear should also be wet wiped.

RPE must remain on until all contaminated disposable coveralls and clothing has been cleaned and / or removed and bagged for disposal and personal washing has been completed. Any PPE used while carrying out asbestos removal work must not be taken home by a worker.

Personal hygiene and careful washing are essential. Particular attention should be paid to the hands, fingernails, face and head.

5.4.2 Hand Tools

All hand tools used during asbestos removal work should be fully dismantled (where appropriate), cleaned under controlled conditions and decontaminated using either wet or dry decontamination procedures before they are removed from the asbestos work area. The method chosen will depend on its practicality, the level of contamination and the presence of any electrical hazards.

If tools cannot be decontaminated in the asbestos work area, or are to be reused at another asbestos work area, they should be:

- Tagged to indicate asbestos contamination; and
- Double bagged in asbestos labelled bags before removal from the asbestos removal work area.

The bags containing the tools must remain sealed until decontamination or the commencement of the next asbestos related task where equipment can be taken into the removal work area and reused under controlled conditions.

PPE must be worn when opening the bags to clean or reuse the equipment or tools, and decontamination should only be performed in a controlled environment.

In some circumstances it may be better to dispose of contaminated tools and equipment, depending on the level of contamination and ease of replacement.

5.4.3 Vehicle, Plant and Equipment

All equipment, including non-disposable PPE, will be washed or otherwise cleaned to ensure that contaminated soil, water and dust is removed before it leaves the designated asbestos work area.

A plant decontamination area shall be established within designated asbestos work areas comprising a geofabric lined pad to capture washed off sediment. All plant and equipment will have their outer bodies thoroughly cleaned of soil and sediment before being inspected by the LAA. The LAA must provide clearance for any decontamination plant prior to its removal from the designated asbestos work area.

5.5 Loading and Transport

Two primary options are available for loading of asbestos impacted materials into trucks/bogies for movement around/from the site.

Option 1 – “Clean Zone” Load Out Method

Trucks enter the asbestos works zone onto a designated clean/cleared load out bay, which is demarcated by bright orange geo-textile. The excavator carefully loads asbestos impacted materials from a “dirty” zone to the truck in the “clean” zone. An asbestos removalist and/or hygienist must inspect each truck to ensure no impacted material remains on the exterior of the truck or on the geo-textile “clean” zone. If asbestos impacted material is present on the truck it should be brushed or washed off. Should any asbestos impacted material be present on the geo-textile, the fabric should be carefully rolled and disposed to a licensed landfill facility as asbestos waste. A new layer of geo-textile would then be laid to restore the “clean” zone prior to the next truck entering the asbestos works area.

The benefit of this option is to reduce the generation and thus subsequent management requirements of asbestos impacted water at each asbestos works zone.

Option 2 – Wheel Wash Method

Trucks enter the asbestos works zone and traverse asbestos impacted ground whilst being carefully loaded by an excavator or tipping of material. Prior to exiting the asbestos works zone, the truck must pass through a

wheel wash to ensure all asbestos impacted material is removed from the wheels, undercarriage and exterior of the truck. An asbestos removalist and/or hygienist must inspect each truck to ensure no impacted material remain.

6. Management Strategy

6.1 Long Term Asbestos Management Plan

Asbestos impacted fill materials will remain onsite and a Long Term Asbestos Management Plan (LTAMP) will be required. The LTAMP will document provisions for the long-term management of the fill material and detail the required controls for future works.

7. Monitoring Program

To ensure that the control measures being implemented at the site are effective, the following monitoring procedures will be implemented during works associated with the asbestos impacted materials at the site.

7.1 Daily Static Airborne Asbestos Fibre Monitoring

During all excavation, transport and placement works on site, airborne asbestos fibre monitoring will be undertaken by the LAA using calibrated portable air sampling pumps. The number of monitoring locations shall be determined by the LAA in consultation with the Contractor and will depend on the extent and nature of asbestos removal works occurring and climatic conditions. It is anticipated that monitoring locations will be required at (but not limited to):

- Each specific asbestos removal works area;
- The broader project sites boundaries;
- Targeted to sensitive stakeholders nearby;
- Decontamination units; and
- Sensitive onsite areas (such as lunch sheds/offices).

At the end of each monitoring period the pump and attached filter will be collected and analysed at a NATA-accredited laboratory.

Monitoring works shall be conducted in accordance with *NOHSC Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition* (NOHSC:3003 [2005]).

Daily air monitoring reports shall be displayed in a common area outside of the asbestos work area (e.g. site office or lunch shed) or be able to be produced upon request.

The following action levels will be applied upon receipt of daily results, as outlined in the Code of Practice (SNSW 2022a):

- Reading of less than 0.01 fibres/mL – control measures in place are working effectively, site works to continue;
- Reading between 0.01 and 0.02 fibres/mL – a review of control measures shall be completed in the work area; and
- Reading greater than 0.02 fibres/mL – works shall cease until the cause of contamination is identified and rectified.

It is noted that these action levels adopted are more conservative than the exposure standard for airborne asbestos (0.1 fibres/mL) as outlined in Safe Work Australia's *Workplace Exposure Standards to Airborne Contaminants* (SWA 2022) for an 8 hour shift.

7.2 Contingency for Monitoring Exceedance

Any exceedance of the NOHSC airborne asbestos fibre monitoring level of 0.02 fibres/ml specified in **Section 7.1** will result in a stop work direction to the Principal Contractor until such time as a field assessment by an experienced consultant is undertaken to identify the potential source of fibres within the works zone and establish appropriate additional management procedures to appropriately manage the risk of worker exposure and/or asbestos fibre migration to other areas of the site.

8. Unexpected Finds Protocol

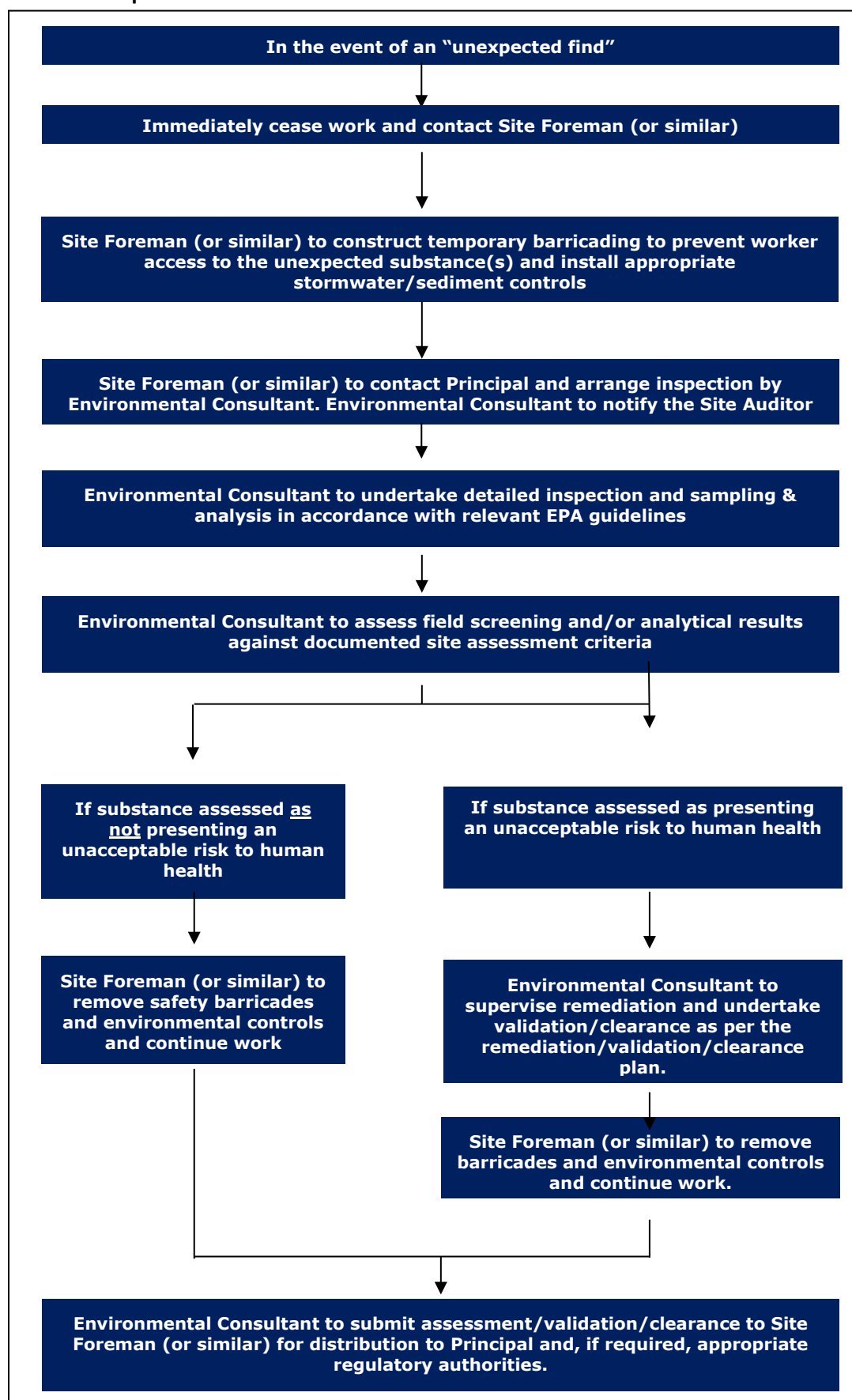
It is acknowledged that previous investigations of the site have been undertaken to assess the identified contaminants of potential concerns, specifically related to the presence of general site fill materials including stockpiles, potential in-filling such as dams, vegetated mounds and trenches. However, ground conditions between sampling points may vary, and further hazards may arise from unexpected sources and / or in unexpected locations during remediation. The nature of any residual hazards which may be present at the site are generally detectable through visual or olfactory means, for example:

- ACM fragments (visible);
- Bottles / containers of chemicals (visible);
- Tar contaminated soils / fill materials (visible); and
- Volatile organic compound (VOC) contaminated soils (odorous) and vapours.

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances be identified (or any other unexpected potentially hazardous substance), the procedure summarised in **Flowchart 8.1** is to be followed.

An enlarged version of the unexpected finds protocol, suitable for use on-site, should be posted in the site office and referred to during the site-specific induction by the remedial / principal contractor.

Flowchart 8.1 – Unexpected Finds Protocol



9. Asbestos Management Records

Asbestos records should be stored and updated as required. The record system should contain but is not limited to:

- Records of training and inductions;
- Records of worker and others involvement in site works;
- Records of inspection and test plans;
- Records of corrective actions;
- Records of notifications/certifications/approvals by statutory authorities;
- Records of inspections, maintenance and test results;
- Records of audits; and
- Records of complaints.

10. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties. The report has been prepared specifically for the client for the purposes of the commission, and no warranties, express or implied, are offered to any third parties and no liability will be accepted for use or interpretation of this report by any third party.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose. This report should not be amended in any way without prior approval by JBS&G, or reproduced other than in full including all attachments as originally provided to the client by JBS&G.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements or agreed scope of work.


Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

Appendix A Figures



Legend
 Approximate Site Boundary




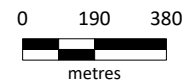
Job No: 66655

Client: Health Infrastructure

Version: R02 Rev A Date 5/03/2024

Drawn By: EP Checked By: DD

Scale 1:20,000 



Coord. Sys. GDA2020 MGA Zone 54

Broken Hill Hospital
170-320 Thomas Street
Broken Hill, NSW

SITE LOCATION

FIGURE 1



- Legend**
- Approximate Site Boundary
 - NSW Cadastre
 - Site Features**
 - Kincumber House
 - KWA Proposed Location



Job No: 66655

Client: Health Infrastructure

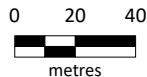
Version: R02 Rev A

Date 5/03/2024

Drawn By: EP

Checked By: DD

Scale 1:2,500



Coord. Sys. GDA2020 MGA Zone 54

Broken Hill Hospital
170-320 Thomas Street
Broken Hill, NSW

SITE LAYOUT

FIGURE 2



Legend

- Approximate Site Boundary
- NSW Cadastre
- Site Features**
- Kincumber House
- KWA Proposed Location
- Sample Locations (JBS&G, 2023)**
- Asbestos Detections

Job No: 66655

Client: Health Infrastructure

Version: R02 Rev A	Date 5/03/2024
Drawn By: EP	Checked By: DD

Scale 1:2,500

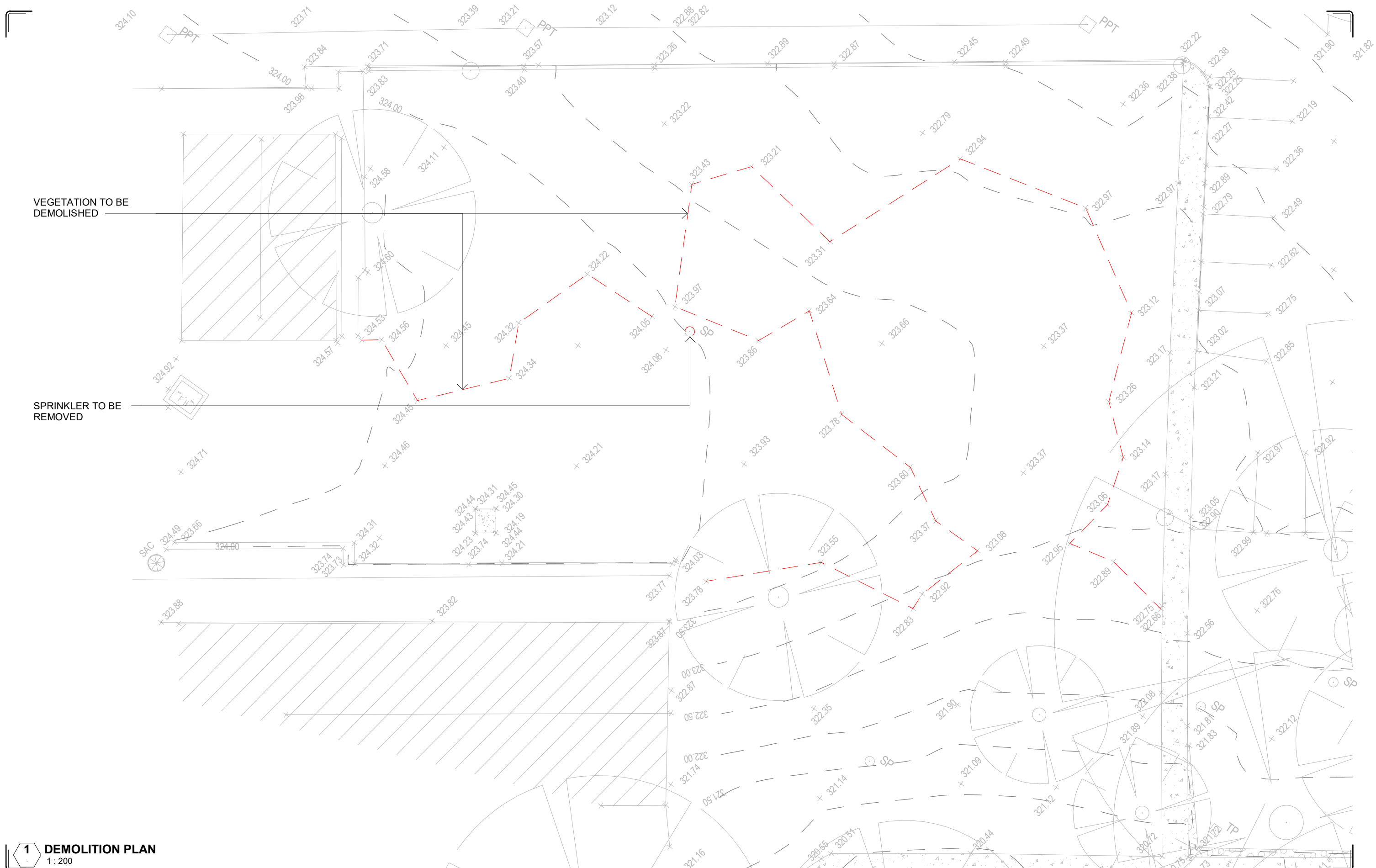
Coord. Sys. GDA2020 MGA Zone 54

Broken Hill Hospital
170-320 Thomas Street
Broken Hill, NSW

ASBESTOS DETECTIONS

FIGURE 3

Appendix B Proposed Development Plans



1 DEMOLITION PLAN

1 : 200

ISSUE HISTORY	ISSUE	DESCRIPTION	DATE	OWN
	B	100% SD ISSUE	19.02.24	MF
	A	75% SD ISSUE	18.01.24	MF



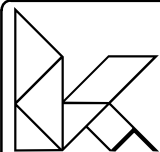
Health Infrastructure

HUTCHINSON
BUILDERS

HUTCHINSON
MODULAR

SCHEDULES AND THE LIKE.

p | 07 4632 5877 e | toowoomba@hutchinsonbuilders.com.au a | 3/1B Kitchener Street
f | 07 4632 5461 w | www.hutchinsonbuilders.com.au Toowoomba Q 4350



KEARNEYARCHITECTURE
NSW NOMINATED ARCHITECT
ARCHITECT: BENJAMIN KEARNEY
REGISTRATION NO: 11990

PROJECT NAME

KEY WORKER
ACCOMMODATION

PROJECT LOCATION
176 THOMAS STREET, BROKEN HILL,
NSW, 2880

CLIENT
NSW GOVERNMENT HEALTH
INFRASTRUCTURE

SHEET DETAIL	AUTHOR	CF
	DESIGNER	
	ORIGINAL SIZE	297 x 420 - A3
	PRINT DATE	19/02/2024 3:03:25 PM
	SCALE	1 : 200

THIS DRAWING IS UNCONTROLLED WITHOUT
DESIGNER/RPEQ SIGNATURE BELOW

No.

RISAT

J. THORNTON

AU

Page 10 of 10

PRELIMIN

REFER TO 'USE DEFINITION'

DEMOLITION PLAN

DWG PROJECT N
1079




FILE CONSULT REF. NO.

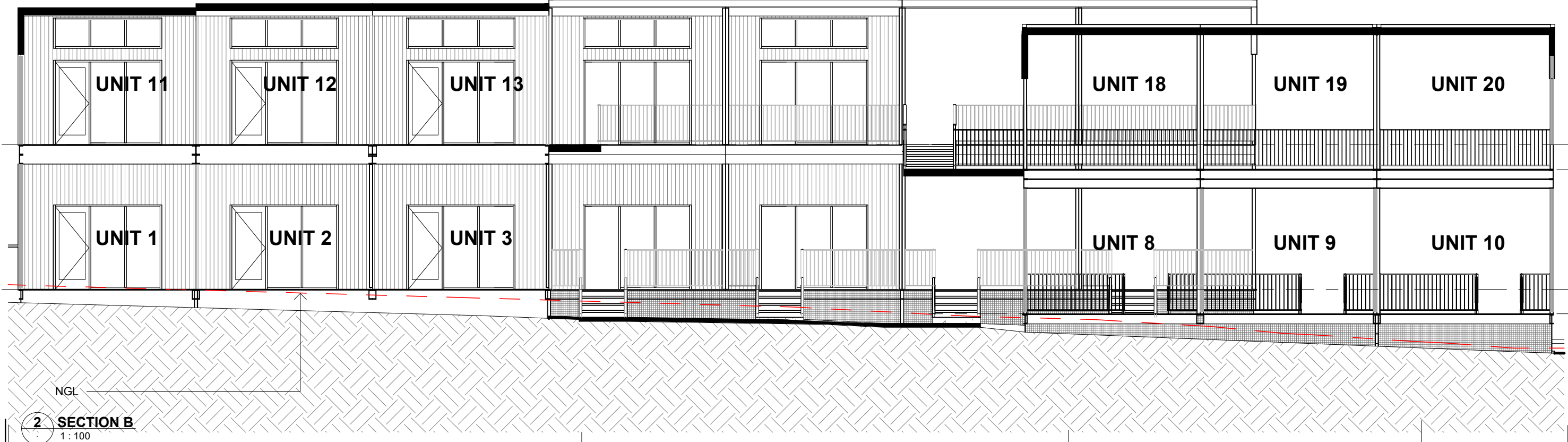
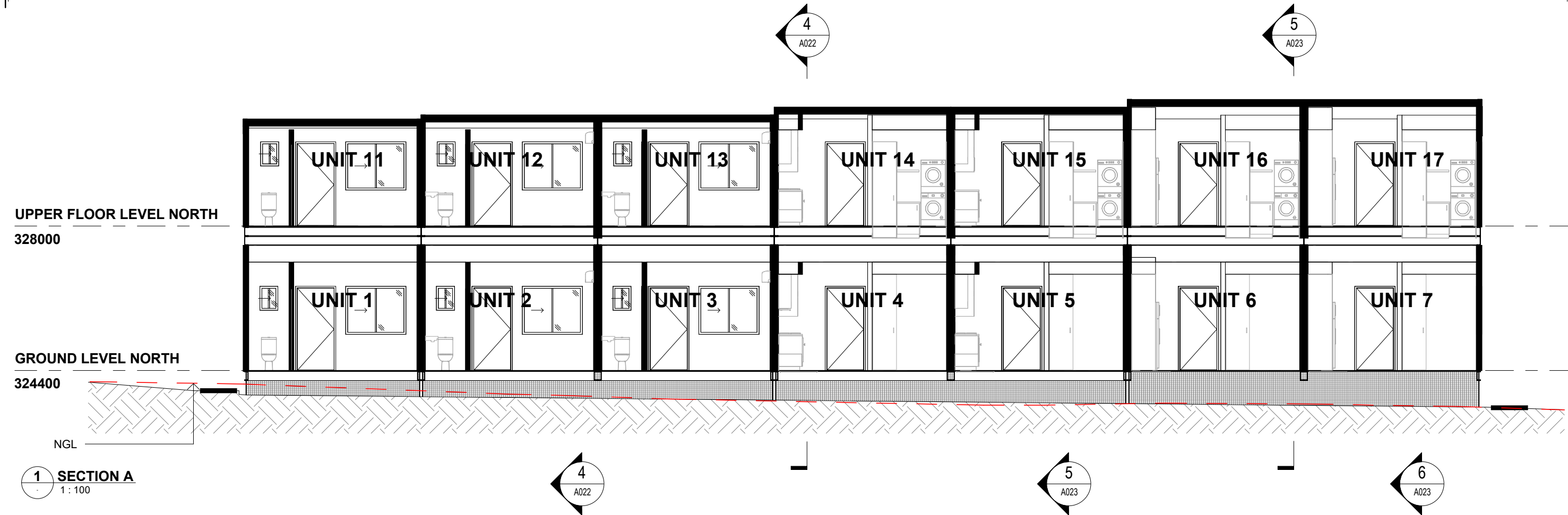
DWG	PHASE	BLD NO.	CONSULT	SHEET NO.	ISS
SD				A003	B

ULT	SHEET NO. A003	ISS E
-----	-------------------	----------



1 SITE PLAN
1:200

ISSUE HISTORY <table border="1"><thead><tr><th>ISSUE</th><th>DESCRIPTION</th><th>DATE</th><th>DWN</th></tr></thead><tbody><tr><td>G</td><td>100% SD ISSUE FOR COORDINATION</td><td>19.02.24</td><td>MF</td></tr><tr><td>F</td><td>75% SD ISSUE</td><td>05.02.24</td><td>MF</td></tr><tr><td>E</td><td>UPDATE</td><td>18.01.24</td><td>MF</td></tr><tr><td>D</td><td>PRELIMINARY</td><td>10.01.24</td><td>MF</td></tr><tr><td>C</td><td>PRELIMINARY</td><td>22.12.23</td><td>MF</td></tr><tr><td>B</td><td>50% SD ISSUE</td><td>13.12.23</td><td>MF</td></tr><tr><td>A</td><td>PRELIMINARY</td><td>5.12.23</td><td>MF</td></tr></tbody></table>	ISSUE	DESCRIPTION	DATE	DWN	G	100% SD ISSUE FOR COORDINATION	19.02.24	MF	F	75% SD ISSUE	05.02.24	MF	E	UPDATE	18.01.24	MF	D	PRELIMINARY	10.01.24	MF	C	PRELIMINARY	22.12.23	MF	B	50% SD ISSUE	13.12.23	MF	A	PRELIMINARY	5.12.23	MF	 Health Infrastructure	 <p>HUTCHINSON BUILDERS HUTCHINSON MODULAR</p>	<p><small>COPYRIGHT THIS INFORMATION REMAINS THE PROPERTY OF J. HUTCHINSON PTY LTD. AUTHORITY IS GRANTED FOR ONCE ONLY USE BY THE CLIENT AT ONLY THE SITE ADDRESS AS NOTED. UNAUTHORISED REPRODUCTION IS PROHIBITED BY LAW.</small></p> <p><small>USE DEFINITION PRELIMINARY - THE SHEET HAS BEEN ISSUED FOR PRELIMINARY USE ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION.</small></p> <p><small>CONSTRUCTION - THE SHEET HAS BEEN ISSUED FOR CONSTRUCTION, SUBJECT TO CONDITIONS OF BUILDING AND DEVELOPMENT APPROVALS.</small></p> <p><small>AS CONSTRUCTED - REFLECTS AS-BUILT INFORMATION PROVIDED BY CONTRACTOR. CONFORMANCE WITH ALL REGULATIONS AND ORIGINAL DESIGN INTENT HAS NOT BEEN CONFIRMED.</small></p> <p><small>THIS SHEET MUST BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS, SCHEDULES AND THE LIKE.</small></p>	 <p>KEARNEY ARCHITECTURE NSW NOMINATED ARCHITECT ARCHITECT BENJAMIN KEARNEY REGISTRATION NO. 11965</p>	<p>PROJECT NAME KEY WORKER ACCOMMODATION</p> <p>PROJECT LOCATION 176 THOMAS STREET, BROKEN HILL, NSW, 2880</p>	<p>CLIENT NSW GOVERNMENT HEALTH INFRASTRUCTURE</p> <p>AUTHOR CF</p> <p>DESIGNER</p> <p>ORIGINAL SIZE 297 x 420 - A3</p> <p>PRINT DATE 19/02/2024 3:03:36 PM</p> <p>SCALE 1:200</p>	<p>THE DRAWING IS UNCONTROLLED WITHOUT DESIGNER/PEO SIGNATURE BELOW</p> <p>PRELIMINARY REFER TO 'USE DEFINITION' ADJACENT</p>	<p>SITE PLAN</p> <p>PROJECT NO. 1079</p> <p>CONSULT REF. NO.</p> <p>PHASE SD</p> <p>BLD NO.</p> <p>CONSULT</p> <p>SHEET NO. A004</p> <p>ISSUE G</p>
	ISSUE	DESCRIPTION	DATE	DWN																																				
	G	100% SD ISSUE FOR COORDINATION	19.02.24	MF																																				
	F	75% SD ISSUE	05.02.24	MF																																				
	E	UPDATE	18.01.24	MF																																				
D	PRELIMINARY	10.01.24	MF																																					
C	PRELIMINARY	22.12.23	MF																																					
B	50% SD ISSUE	13.12.23	MF																																					
A	PRELIMINARY	5.12.23	MF																																					



ISSUE HISTORY

ISSUE	DESCRIPTION	DATE	DWN
A	100% SD ISSUE	19.02.24	MF

HUTCHINSON BUILDERS

HUTCHINSON MODULAR

COPYRIGHT
THIS INFORMATION REMAINS THE PROPERTY OF J. HUTCHINSON PTY LTD. AUTHORITY IS GRANTED FOR ONCE ONLY USE BY THE CLIENT AT ONLY THE SITE ADDRESS AS NOTED. UNAUTHORISED REPRODUCTION IS PROHIBITED BY LAW.

USE DEFINITION
PRELIMINARY - THE SHEET HAS BEEN ISSUED FOR PRELIMINARY USE ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION.
CONSTRUCTION - THE SHEET HAS BEEN ISSUED FOR CONSTRUCTION, SUBJECT TO CONDITIONS OF BUILDING AND DEVELOPMENT APPROVALS.
AS CONSTRUCTED - REFLECTS AS-BUILT INFORMATION PROVIDED BY CONTRACTOR, CONFORMANCE WITH ALL REGULATIONS AND ORIGINAL DESIGN INTENT HAS NOT BEEN CONFIRMED.
THIS SHEET MUST BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS, SCHEDULES AND THE LIKE.

NEW NOMINATED ARCHITECT
ARCHITECT BENJAMIN KEARNEY
REGISTRATION NO. 11995

PROJECT NAME

KEY WORKER ACCOMMODATION

PROJECT LOCATION

176 THOMAS STREET, BROKEN HILL,
NSW, 2880

CLIENT

NSW GOVERNMENT HEALTH INFRASTRUCTURE

AUTHOR	CF
DESIGNER	
ORIGINAL SIZE	297 x 420 - A3
PRINT DATE	19/02/2024 3:04:32 PM
SCALE	1 : 100

AUTHORISATION

THIS DRAWING IS UNCONTROLLED WITHOUT DESIGNER/PPRO SIGNATURE BELOW

NORTH

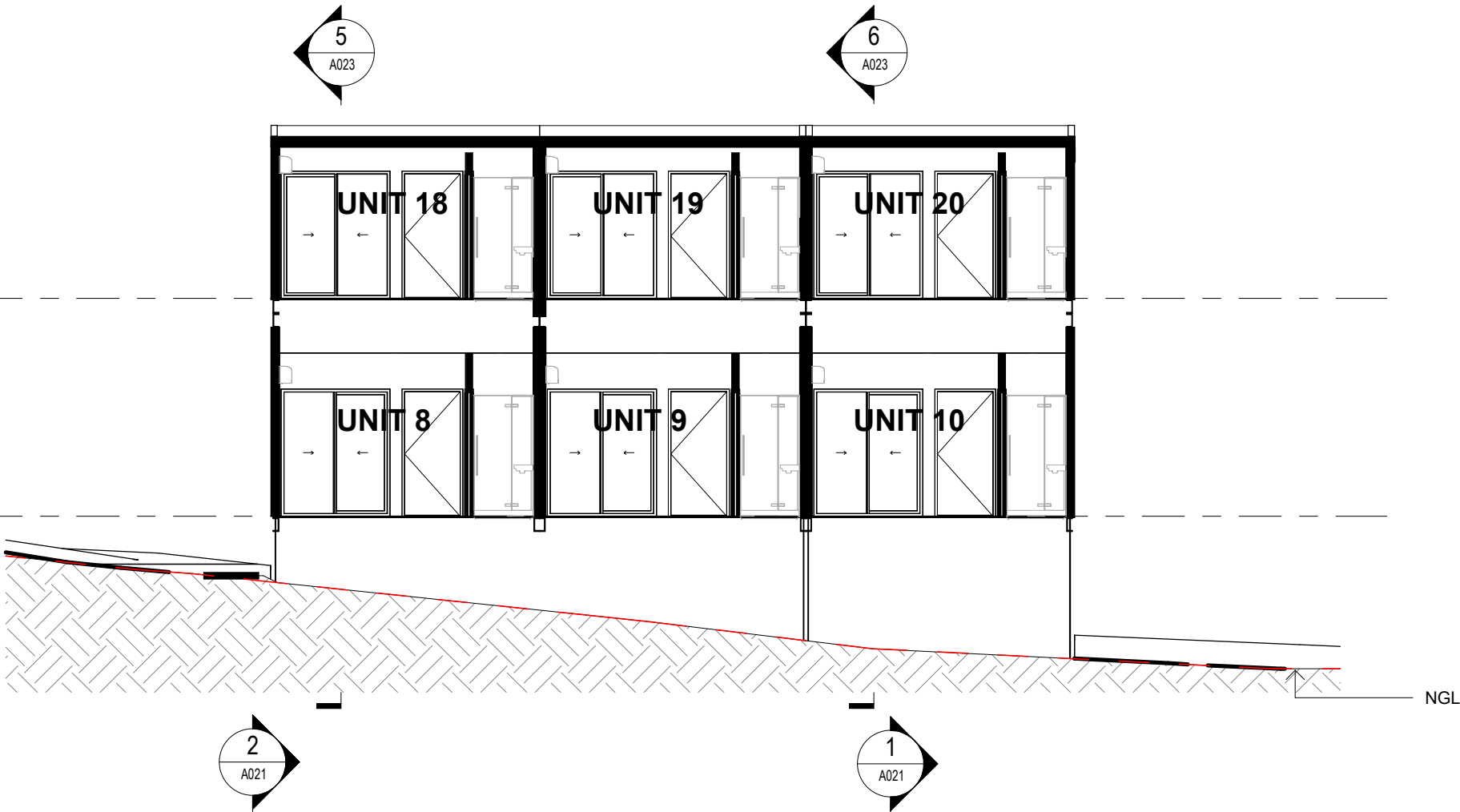
SECTIONS - SHEET 1

PROJECT NO.	1079	CONSULT REF. NO.	
PHASE	SD	SHEET NO.	A021
ISSUE			A

UPPER FLOOR LEVEL SOUTH
327390

GROUND LEVEL SOUTH
323790

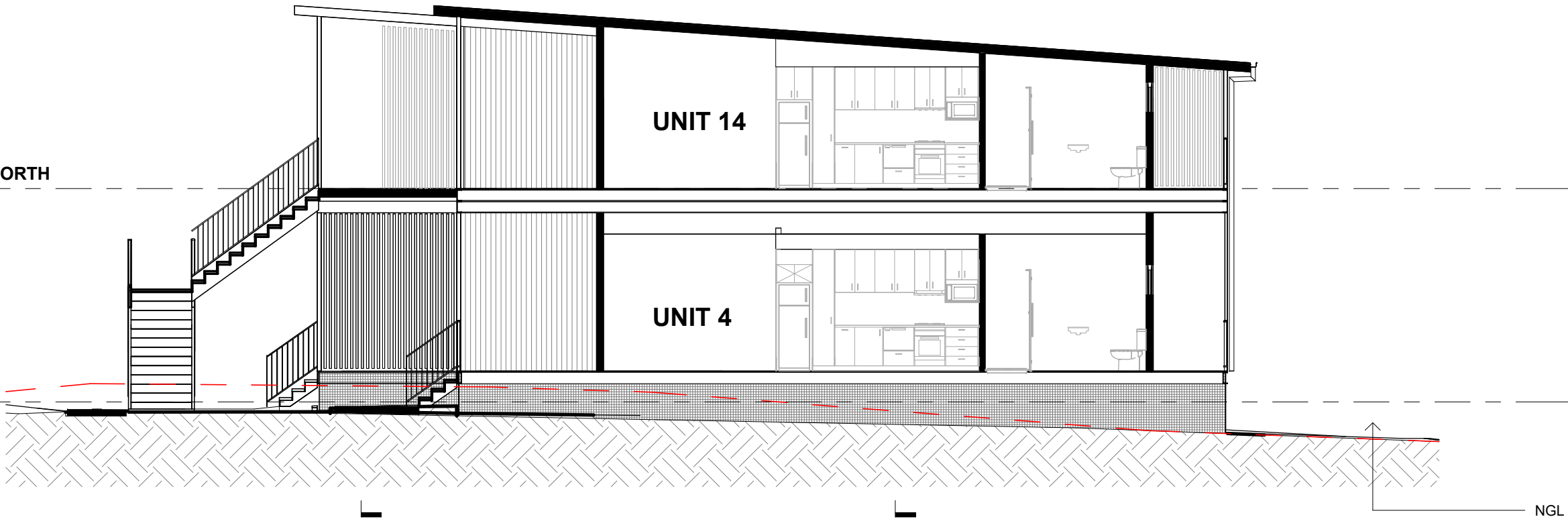
3 SECTION C
1 : 100



UPPER FLOOR LEVEL NORTH
328000

GROUND LEVEL SOUTH
323790

4 SECTION D
1 : 100



ISSUE HISTORY	A 100% SD ISSUE			
	ISSUE	DESCRIPTION	DATE	DWN



HUTCHINSON BUILDERS

HUTCHINSON MODULAR

Copyright

This information remains the property of J. Hutchinson Pty Ltd. Authority is granted for once only use by the client at only the site address as noted. Unauthorised reproduction is prohibited by law.

Use Definition

Preliminary - The sheet has been issued for preliminary use only. It is not to be used for construction.

Construction - The sheet has been issued for construction, subject to conditions of building and development approvals.

As Constructed - Reflects as built information provided by contractor. Conformance with all regulations and original design intent has not been confirmed.

This sheet must be read in conjunction with all other drawings, specifications, schedules and the like.

p | 07 4632 5877 e | toowoomba@hutchinsonbuilders.com.au a | 3/1B Kitchener Street Toowoomba Q 4350

f | 07 4632 5461 w | www.hutchinsonbuilders.com.au



PROJECT NAME
KEY WORKER ACCOMMODATION

PROJECT LOCATION
176 THOMAS STREET, BROKEN HILL, NSW, 2880

CLIENT
NSW GOVERNMENT HEALTH INFRASTRUCTURE

AUTHOR CF

DESIGNER

ORIGINAL SIZE 297 x 420 - A3

PRINT DATE 19/02/2024 3:04:33 PM

SCALE 1 : 100

THE DRAWING IS UNCONTROLLED WITHOUT DESIGNER/PEO SIGNATURE BELOW

AUTHORISATION

USE

PRELIMINARY
REFER TO 'USE DEFINITION' ADJACENT

SECTIONS - SHEET 2

PROJECT NO. 1079

CONSULT REF. NO.

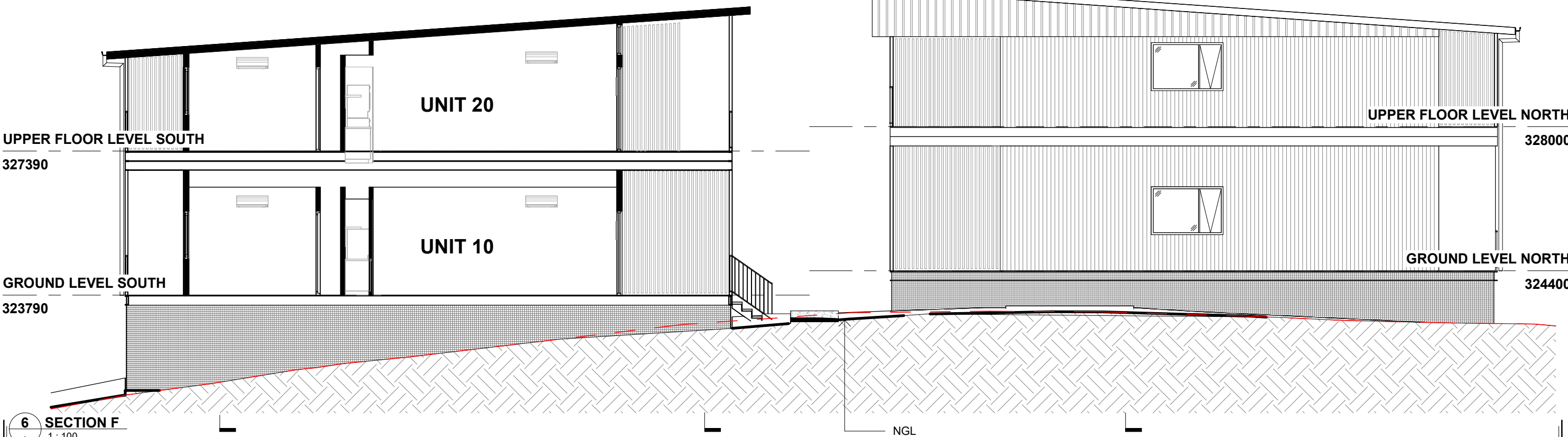
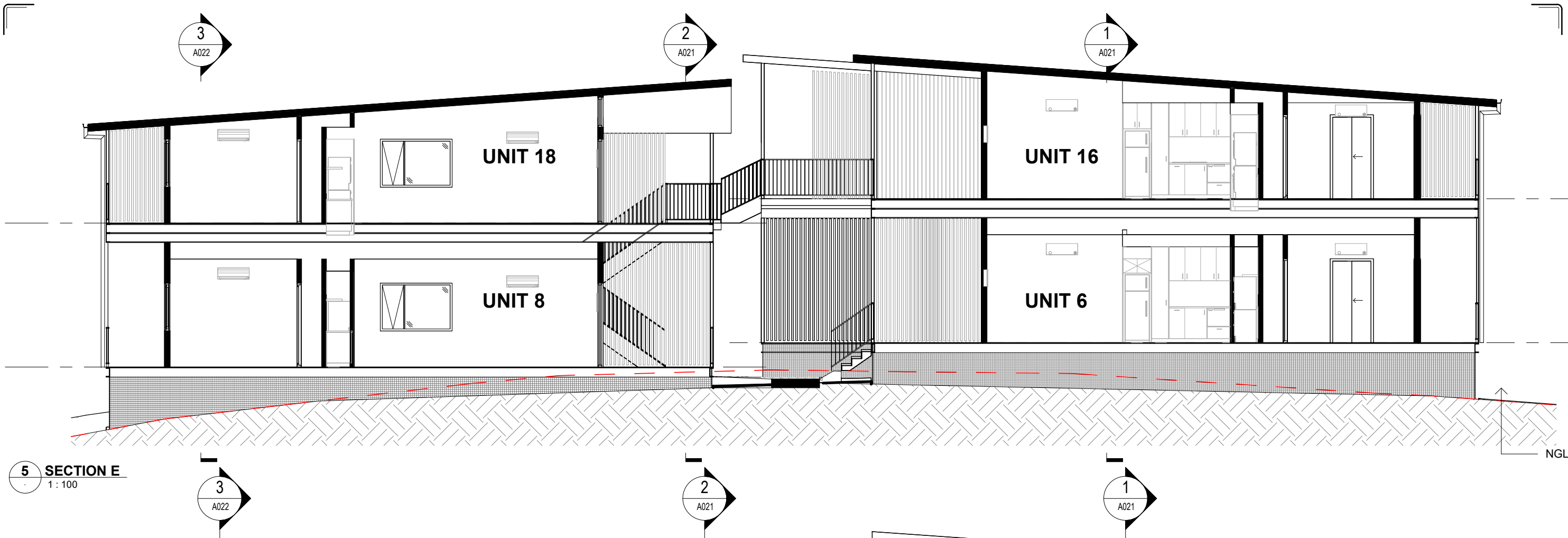
PHASE SD

BLD NO.

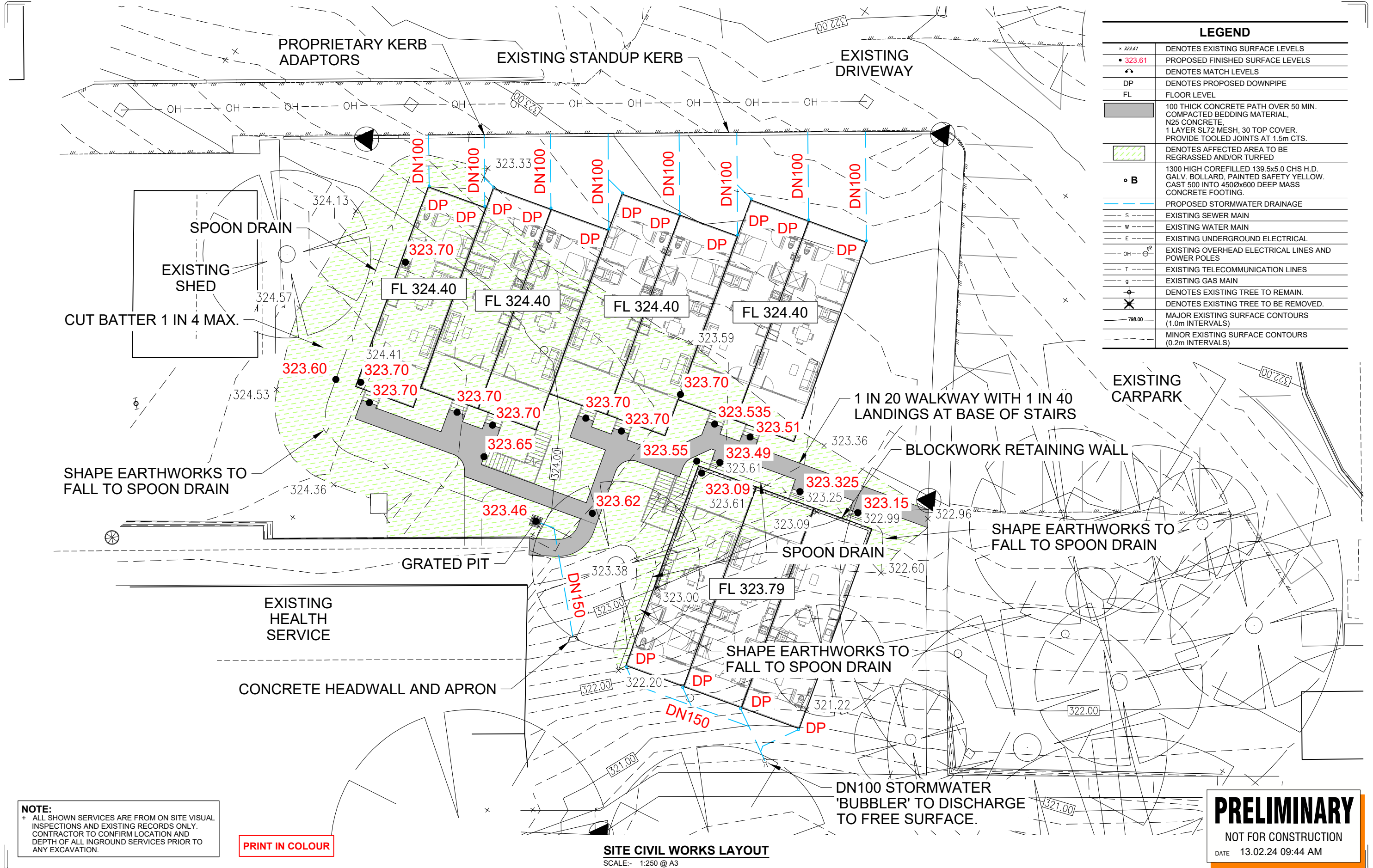
CONSULT

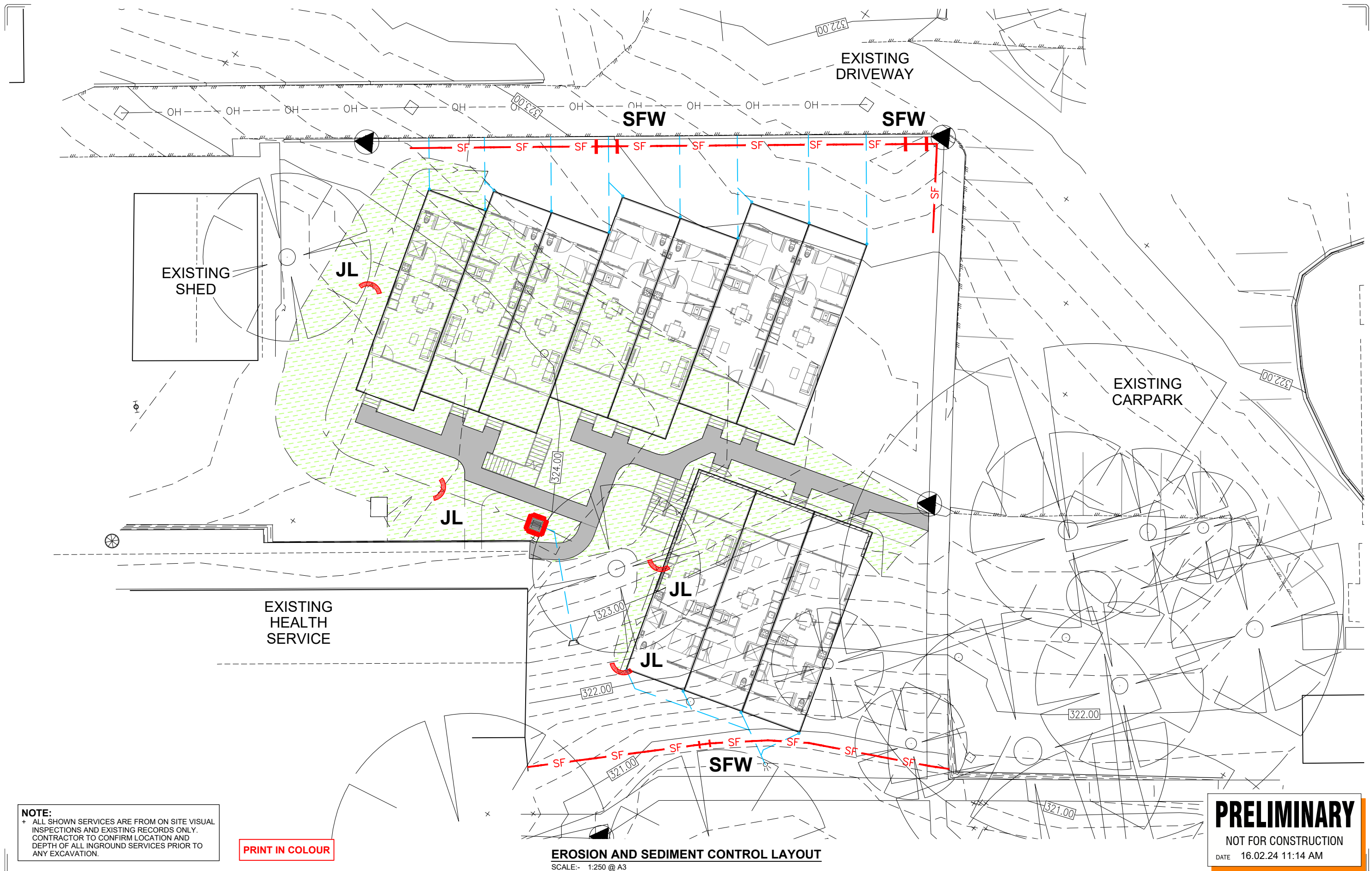
SHEET NO. A022

ISSUE A



ISSUE HISTORY <table border="1"><thead><tr><th>ISSUE</th><th>DESCRIPTION</th><th>DATE</th><th>DWN</th></tr></thead><tbody><tr><td>A</td><td>100% SD ISSUE</td><td>19.02.24</td><td>MF</td></tr></tbody></table>	ISSUE	DESCRIPTION	DATE	DWN	A	100% SD ISSUE	19.02.24	MF		HUTCHINSON BUILDERS HUTCHINSON MODULAR p 07 4632 5877 e toowoomba@hutchinsonbuilders.com.au a 3/1B Kitchener Street Toowoomba Q 4350 f 07 4632 5461 w www.hutchinsonbuilders.com.au	 NSW NOMINATED ARCHITECT ARCHITECT BENJAMIN KEARNEY REGISTRATION NO. 13995	PROJECT NAME KEY WORKER ACCOMMODATION	CLIENT NSW GOVERNMENT HEALTH INFRASTRUCTURE	SECTION TITLE SECTIONS - SHEET 3
	ISSUE	DESCRIPTION	DATE	DWN										
	A	100% SD ISSUE	19.02.24	MF										
	PROJECT LOCATION 176 THOMAS STREET, BROKEN HILL, NSW, 2880	PROJECT NO. 1079	CONSULT REF. NO.											
AUTHOR CF	DESIGNER	PHASE SD	BLD NO.	CONSULT	SHEET NO. A023	ISSUE A								
PRINT DATE 19/02/2024 3:04:34 PM	SCALE 1:100	PRELIMINARY REFER TO 'USE DEFINITION' ADJACENT												



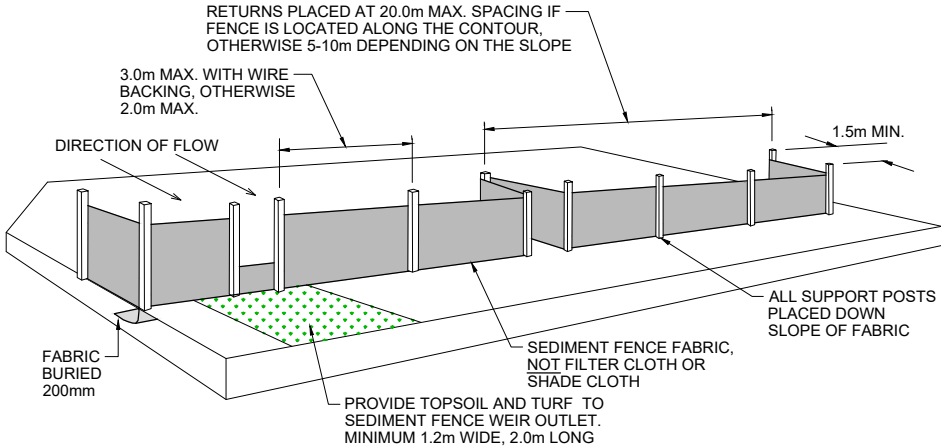


PRELIMINARY
NOT FOR CONSTRUCTION
DATE 16.02.24 11:14 AM

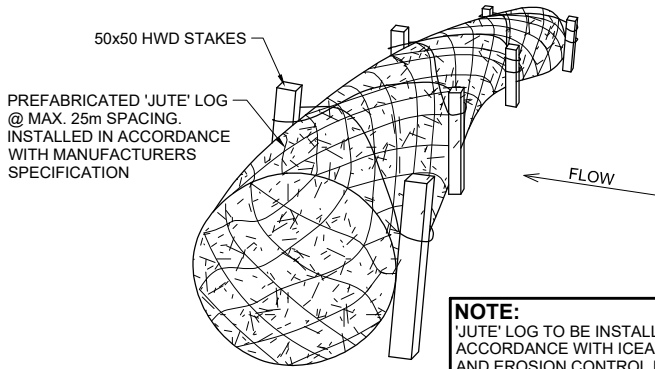
<p>ISSUE HISTORY</p> <table><thead><tr><th>ISSUE</th><th>DESCRIPTION</th><th>DATE</th><th>DWN</th></tr></thead><tbody><tr><td>P1</td><td>FOR INFORMATION</td><td>16.02.24</td><td>DSE</td></tr></tbody></table>	ISSUE	DESCRIPTION	DATE	DWN	P1	FOR INFORMATION	16.02.24	DSE	<p>NSW GOVERNMENT Health Infrastructure</p>	<p>HUTCHINSON BUILDERS</p> <p>HUTCHINSON MODULAR</p> <p>p 07 4632 5877 e toowoomba@hutchinsonbuilders.com.au a 3/1B Kitchener Street Toowoomba Q 4350 f 07 4632 5461 w www.hutchinsonbuilders.com.au</p>	<p>KEY WORKER ACCOMMODATION</p> <p>PROJECT LOCATION 176 THOMAS STREET, BROKEN HILL, NSW, 2880</p>	<p>CLIENT NSW GOVERNMENT HEALTH INFRASTRUCTURE</p> <table><tr><td>AUTHOR</td><td>DSE</td></tr><tr><td>DESIGNER</td><td>DSE</td></tr><tr><td>ORIGINAL SIZE</td><td>297 x 420 - A3</td></tr><tr><td>PRINT DATE</td><td>2/15/2024 2:20:16 PM</td></tr><tr><td>SCALE</td><td></td></tr></table>	AUTHOR	DSE	DESIGNER	DSE	ORIGINAL SIZE	297 x 420 - A3	PRINT DATE	2/15/2024 2:20:16 PM	SCALE		<p>THE DRAWING IS UNCONTROLLED WITHOUT DESIGNER/PEP SIGNATURE BELOW</p> <p>AUTHORISATION</p> <p>USE</p> <p>PRELIMINARY</p>	<p>EROSION AND SEDIMENT CONTROL LAYOUT</p> <table><tr><td>PROJECT NO.</td><td>1079</td><td>CONSULT REF. NO.</td><td>S2324174</td></tr><tr><td>PHASE</td><td>SD</td><td>BLD NO.</td><td>01</td></tr><tr><td>CONSULT</td><td>SCW</td><td>SHEET NO.</td><td>PR02</td></tr><tr><td>ISSUE</td><td>P1</td><td></td><td></td></tr></table>	PROJECT NO.	1079	CONSULT REF. NO.	S2324174	PHASE	SD	BLD NO.	01	CONSULT	SCW	SHEET NO.	PR02	ISSUE	P1		
ISSUE	DESCRIPTION	DATE	DWN																																					
P1	FOR INFORMATION	16.02.24	DSE																																					
AUTHOR	DSE																																							
DESIGNER	DSE																																							
ORIGINAL SIZE	297 x 420 - A3																																							
PRINT DATE	2/15/2024 2:20:16 PM																																							
SCALE																																								
PROJECT NO.	1079	CONSULT REF. NO.	S2324174																																					
PHASE	SD	BLD NO.	01																																					
CONSULT	SCW	SHEET NO.	PR02																																					
ISSUE	P1																																							

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL ENSURE THAT MUD AND SILT IS NOT TRACKED ONTO PUBLIC ROADS BY VEHICLES LEAVING THE SITE.
2. A REPRESENTATIVE OF THE CONTRACTOR SHALL BE ON SITE AT ALL TIMES DURING ANY CONSTRUCTION OPERATIONS AND SHALL RECTIFY ANY FAILURE OF THE SILT CONTROL DEVICES AND CLEAN ANY EXTERNAL ROADS CONTAMINATED BY CONSTRUCTION TRAFFIC.
3. INSPECTION OF THE SURROUNDING ROADWAYS SHALL BE CARRIED OUT ON A DAILY BASIS AND A DIARY RECORDS KEPT WITH RESPECT TO ANY CLEANING WORKS UNDERTAKEN.
4. SUBCONTRACTORS SHALL NOT BE ALLOWED TO WORK UNSUPERVISED.
5. DUST EMISSIONS FROM CONSTRUCTION MACHINERY SHALL BE CONTROLLED BY REGULAR WATERING OR ON AN AS-REQUIRED BASIS.
6. SILT STOP FENCES SHALL BE INSTALLED AT THE START OF WORKS AND SHALL BE MAINTAINED FOR THE FULL DURATION OF THE PROJECT AND UNTIL ESTABLISHMENT OF ANY PLANTINGS.

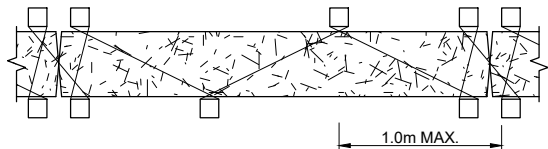


INSTALLATION OF SEDIMENT FENCE
NOT TO SCALE



NOTE:
'JUTE' LOG TO BE INSTALLED IN ACCORDANCE WITH ICEA SEDIMENT AND EROSION CONTROL DESIGN FACT SHEET - IN-STREAM PRACTICES

ANCHORAGE OF 'JUTE' LOG



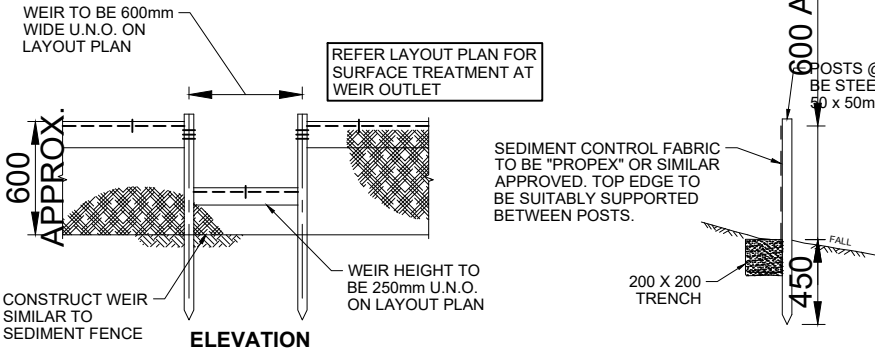
STAKING METHOD

JUTE LOG DETAIL

SCALE:- N.T.S.

SEDIMENT FENCE NOTES

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 2.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.



SEDIMENT FENCE WEIR DETAIL

SCALE:- 1:20 @ A1, 1:40 @ A3

SEDIMENT FENCE DETAIL

SCALE:- 1:20 @ A1, 1:40 @ A3

NOTE:
+ ALL SHOWN SERVICES ARE FROM ON SITE VISUAL INSPECTIONS AND EXISTING RECORDS ONLY. CONTRACTOR TO CONFIRM LOCATION AND DEPTH OF ALL INGROUND SERVICES PRIOR TO ANY EXCAVATION.

PRINT IN COLOUR

PRELIMINARY

NOT FOR CONSTRUCTION

DATE 16.02.24 11:14 AM

ISSUE HISTORY

ISSUE	DESCRIPTION	DATE	DWN
P1	FOR INFORMATION	16.02.24	DSE

Health Infrastructure

HUTCHINSON BUILDERS

HUTCHINSON MODULAR

COPYRIGHT
THIS INFORMATION REMAINS THE PROPERTY OF J HUTCHINSON PTY LTD. AUTHORITY IS GRANTED FOR ONCE ONLY USE BY THE CLIENT AT ONLY THE SITE ADDRESS AS NOTED. UNAUTHORISED REPRODUCTION IS PROHIBITED BY LAW.

USE DEFINITION
PRELIMINARY - THE SHEET HAS BEEN ISSUED FOR PRELIMINARY USE ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION.

CONSTRUCTION - THE SHEET HAS BEEN ISSUED FOR CONSTRUCTION, SUBJECT TO CONDITIONS OF BUILDING AND DEVELOPMENT APPROVALS.

AS CONSTRUCTED - REFLECTS AS-BUILT INFORMATION PROVIDED BY CONTRACTOR. COMPLIANCE WITH ALL REGULATIONS AND ORIGINAL DESIGN INTENT HAS NOT BEEN CONFIRMED.

THIS SHEET MUST BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS, SCHEDULES AND THE LIKE.

p | 07 4632 5877 o | toowoomba@hutchinsonbuilders.com.au a | 3/1B Kitchener Street Toowoomba Q 4350

f | 07 4632 5461 w | www.hutchinsonbuilders.com.au

CONSULTING ENGINEERS

REGISTERED ENGINEERS
REGISTERED ENGINEERS
REGISTERED ENGINEERS

PROJECT INFORMATION

PROJECT NAME

KEY WORKER ACCOMMODATION

PROJECT LOCATION

176 THOMAS STREET, BROKEN HILL, NSW, 2880

CLIENT

NSW GOVERNMENT HEALTH INFRASTRUCTURE

SHEET DETAIL

AUTHOR	DSE
DESIGNER	DSE
ORIGINAL SIZE	297 x 420 - A3
PRINT DATE	2/15/2024 2:20:16 PM
SCALE	

AUTHORISATION

THE DRAWING IS UNCONTROLLED WITHOUT DESIGNER/PEQ SIGNATURE BELOW

USE

PRELIMINARY

PHASE

SD

BLD NO

01

CONSULT

SCW

SHEET NO

PR03

ISSUE

P1

PROJECT NO.

1079

CONSULT REF. NO.

S2324174

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

LANDSCAPE CONCEPT PLAN



- 1 SHADE / SCREEN TREES**
Tree species to provide visual and climatic amenity and landscape softening of the proposed building; Refer Proposed Planting Schedule
(ie: *Brachychiton populneus*, *Brachychiton rupestris*, *Malus tschonoskii*, *Pyrus calleryana* Capital, *Pistacia chinensis*, *Tristanopsis laurina*)
- 2 SCREEN PLANTING**
Dense planting to boundaries so as to provide visual amenity and privacy screening to neighbouring properties; Refer Proposed Planting Schedule
- 3 SHRUBS AND GROUNDCOVERS**
Mass planting to large areas to assist in building presentation to the streetscape and to provide visual amenity; Refer Proposed Planting Schedule

- PROPOSED GARDEN EDGE
To future detail
- - - EXISTING RETAINING WALL
As taken from Survey drawings
- PROPOSED TURF
To future detail
- EXISTING GRASSED AREAS
Retain and protect during construction
Make good any damage. To future detail
- ⊕ EXISTING TREE - RETAINED
As taken from Survey drawings
- ⊖ EXISTING TREE - REMOVED
As taken from Survey drawings

NEARMAP DATED: 11/10/23 (PHOTOMANIPULATED)

© JBS&G

This document is and shall remain the property of JBS&G. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited

Document Distribution

Rev No.	Copies	Recipient	Date
0	1 x Electronic	Allan Follett (Mostyn Copper c/o HINSW)	04/04/2024

Document Status

Rev No.	Author	Reviewer Name	Approved for Issue Name	Signature	Date
0	Alison Smith	Seth Molinari	Seth Molinari		04/04/2024



Adelaide

Kaurna Country | 100 Hutt St,
Adelaide, SA 5000
T: 08 8431 7113

Brisbane

Turrbal/Yuggera Country | Level 37,
123 Eagle Street, Brisbane, QLD 4000
T: 07 3211 5350

Bunbury

Wardandi Country | 177 Spencer
Street Bunbury, WA 6230
T: 08 9792 4797

Canberra

Ngunnawal Country | Level 1, The Realm
18 National Circuit Barton, ACT 2600
T: 02 6198 3278

Darwin

Larrakia Country | Suite G1, Level 1,
48-50 Smith Street, Darwin NT 0800
T: 08 8943 0600

Hobart

Muwununa/Nuenon Country | Level 6,
111 Macquarie Street Hobart, TAS 7000
T: 03 6108 9054

Melbourne

Wurundjeri Country | Level 19,
31 Queen Street, Melbourne VIC 3000
T: 03 9642 0599

Newcastle

Awabakal/Worimi Country | 61 / 63
Parry Street Newcastle West, NSW 2302
T: 02 8245 0300

Perth

Whadjuk Country | Allendale Square,
Level 9, 77 St Georges Terrace, WA 6000
T: 08 9380 3100

Sydney

Gadigal Country | Level 1,
50 Margaret Street, Sydney, NSW 2000
T: 02 8245 0300

Wollongong

Dharawal Country | Suite 1A, 280 - 286
Keira Street, Wollongong, NSW 2500
T: 02 4225 2647