

Westmead Integrated Mental Health Complex Early Works Project

REF Report

Electrical Services

Prepared for: Health Infrastructure C/ CBRE

Attention: Cameron McClement

Date: 28 March 2023

Prepared by: Allan Wong

Ref: 301350344

Stantec Australia Pty Ltd

Level 6, Building B, 207 Pacific Highway, St Leonards NSW 2065

Tel: +61 2 8484 7000

Revision

Revision	Date	Comment	Prepared By	Approved By
1	23/09/2022	Final Issue	AW	SMB
1	28/03/2023	Final Issue	AW	SMB

Design with **community** in mind



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1. Introduction

Stantec has been engaged by Health Infrastructure NSW to prepare an infrastructure management plan report for the Westmead Integrated Mental Health Complex (IMHC) building at Westmead Hospital on located on the Redbank Rd, Westmead NSW 2145.

This report has been prepared as part of a Review of Environmental Factors for the Early Works Project at Westmead Hospital which proposes a series of infrastructure improvements to accommodate the future development of the Integrated Mental Health Complex (proposed separately as part of State Significant Development Application SSD-44034342).

The purpose of this report is to assess the potential environmental impacts which could arise from the proposed works, which include:

- Demolition of the existing Brain Injury Rehabilitation Unit building, Casuarina Lodge and office buildings;
- Diversion of existing in-ground sewer and water services;
- Construction of a new access way to the P14 staff car park;
- Flood mitigation works; and
- Bulk earthworks and tree removal to accommodate the carrying out of the above works.

The proposed works will be carried out within the boundaries of Westmead Hospital, which is located approximately 1.5km north-west of the Parramatta Central Business District (CBD), the primary metropolitan centre of Western Sydney. The site is legally described as Lot 1 DP1194390 and Lot 4 DP 1077852, with works proposed in the central part of the precinct.

1.1 Design Criteria

The Electrical Services will be designed in accordance with, but not limited to, the following codes, standards and guidelines:

- NSW Health Infrastructure Engineering Services Guidelines
- NSW Health ICT Cabling Standards
- Service and Installation Rules of NSW
- Endeavour Energy Network Standards
- Relevant Australian Standards



2. Electrical Utility Services

2.1 Impact on Existing Supply Authority Infrastructure

The Supply Authority for the Westmead Health Precinct is Endeavour Energy (EE).

Figure 1 below indicates the extent of Endeavour Energy's High Voltage (HV) network, which runs around the boundary of the Westmead Hospital site (Lot 1 DP 1194390).

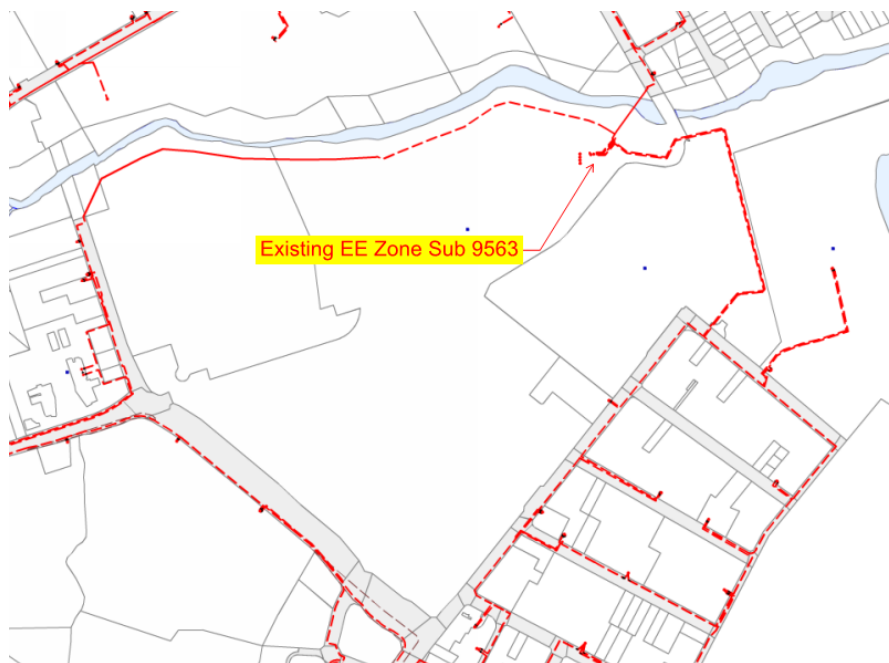


Figure 1 - Existing Endeavour Energy HV Network and Zone Substation 9563

Refer to Appendix A which further illustrates the location of the proposed site in relation to the existing EE HV Network. As can be seen in Appendix A, the proposed site will not impact the existing EE HV network; no augmentation works are required to the existing EE HV network as part of the proposed works.

2.2 Impact on Existing Private HV Network

The Endeavour Energy HV network supplies the Westmead Health Precinct.

The Westmead Health Precinct is a HV customer and there is a private HV network owned by Westmead Hospital that reticulates throughout the precinct.

All HV infrastructure downstream of the Zone Substation 9563 constitutes the Westmead Hospital Private HV Network. Assets are typically either owned by the Western Sydney Local Health District (WSLHD) or the Sydney Children's Hospital Network (SCHN).

Endeavour Energy Zone Substation 9563 provides supply to the privately owned Westmead Hospital Substation No. 1.

Westmead Hospital Substation No. 1 consists of 2 off HV Main Switchboards (HV-MSB 1 and HV-MSB 2)

Refer to Appendix B, which indicates the location of the existing services trench containing the existing private HV assets (cables, conduits, pits, etc).

During demolition works, the existing HV assets are to be protected at all times.

No augmentation works are required to the existing private HV network.



3. Telecommunications Carrier Services

3.1 Impact on Existing Telecommunications Carrier Infrastructure

Existing incoming telecommunication carrier services within the demolition zone will become redundant when the associated buildings (Integrated Project Office Demountable, Brain Injury Unit, Casuarina Lodge, etc) are demolished. These services will be disconnected and removed as required.

Refer to Appendix C, which indicates the location of existing Telstra services within Redbank Rd.

During demolition works, the existing Telstra services are to be protected at all times.

No augmentation works are required to the existing Telstra services within Redbank Rd.



Appendix A Existing EE Zone Substation Location and Proposed Site

C

B

A



FOR INFORMATION	AW	SMB	2022.07.26
Revision	By	Appd	YYYY.MM.DD

ORIGINAL SHEET - E0-A1

Issue Status

PRELIMINARY

NOT FOR CONSTRUCTION

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Notes



Stantec

Level 6, 2078 Pacific Highway
St Leonards NSW 2065
(02) 9484 7000

www.stantec.com

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Client/Project Logo

Client/Project

NSW Health Infrastructure

Westmead Integrated Mental Health Complex

File Name: EL-SK-HV-001.pdf

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SMB

Chkd.

2022.07.26

YYYY.MM.DD

Title

SITE PLAN
EXISTING ENDEAVOUR ENERGY ZONE
SUBSTATION LOCATION AND PROPOSED
BUILDING SITE

Project No.

301350334

Revision

A

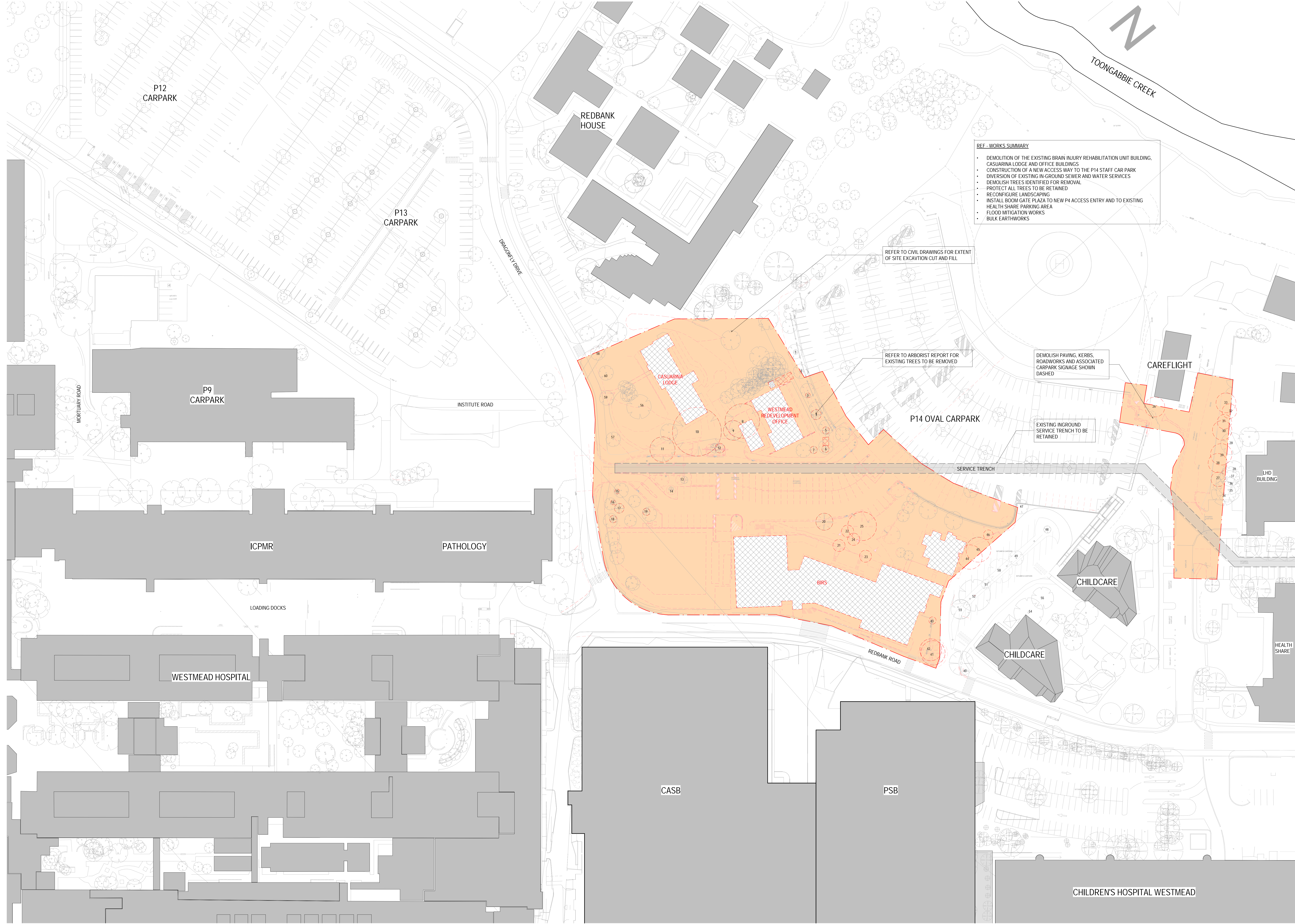
Scale

N.T.S

Drawing No.

EL-SK-HV-001

Appendix B Demolition Site Plan with Existing Services Trench



- REF - WORKS SUMMARY
- DEMOLITION OF THE EXISTING BRAIN INJURY REHABILITATION UNIT BUILDING, CASUARINA LODGE AND OFFICE BUILDINGS
 - CONSTRUCTION OF A NEW ACCESS WAY TO THE P14 STAFF CAR PARK
 - DIVERSION OF EXISTING IN-GROUND SEWER AND WATER SERVICES
 - DEMOLISH TREES IDENTIFIED FOR REMOVAL
 - PROTECT ALL TREES TO BE RETAINED
 - RECONFIGURE LANDSCAPING
 - INSTALL BOOM GATE PLAZA TO NEW P4 ACCESS ENTRY AND TO EXISTING HEALTH SHARE PARKING AREA
 - FLOOD MITIGATION WORKS
 - BULK EARTHWORKS

REFER TO CIVIL DRAWINGS FOR EXTENT OF SITE EXCAVATION CUT AND FILL

REFER TO ARBORIST REPORT FOR EXISTING TREES TO BE REMOVED

DEMOLISH PAVING, KERBS, ROADWORKS AND ASSOCIATED CARPARK SIGNAGE SHOWN DASHED

EXISTING INGROUND SERVICE TRENCH TO BE RETAINED

NOTES

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- COLOUR LEGEND - REF DEMOLITION PLAN
- SITE BOUNDARY
 - BUILDINGS TO BE DEMOLISHED
 - EXISTING INGROUND HIGH VOLTAGE TRENCH TO BE RETAINED & PROTECTED
 - NEW ROADWORKS & BOOM GATES
 - TREE REMOVAL

REV	DATE	DESCRIPTION	AMENDMENT
1	27/03/23	REF UPDATE - BOOMGATES	
2	17/03/23	REF UPDATE	
3	17/03/23	REF UPDATE	
4	17/03/23	TRAFFIC TENDER ISSUE	
5	17/03/23	REF ISSUE	
6	17/03/23	REF ISSUE	
7	17/03/23	REF ISSUE	
8	17/03/23	REF ISSUE	

KEY PLAN

PROJECT MANAGER

CLIENT

Health Sydney Local Health District

Health Infrastructure

Level 7, 177 Pacific Highway,
North Sydney, NSW, 2060
Tel: +61 2 9928 2100
Fax: +61 2 9928 2510
Web: jacobsc.com

PROJECT CUMBERLAND WEST MENTAL HEALTH SERVICES RELOCATION

PROJECT NO. IA250300

DRAWING TITLE
REF - DEMOLITION PLAN
- EARLY WORKS /
ENABLING WORKS

STATUS
FOR INFORMATION

DRAWN SC DESIGNED JACOBS

CHECKED SF APPROVED CY

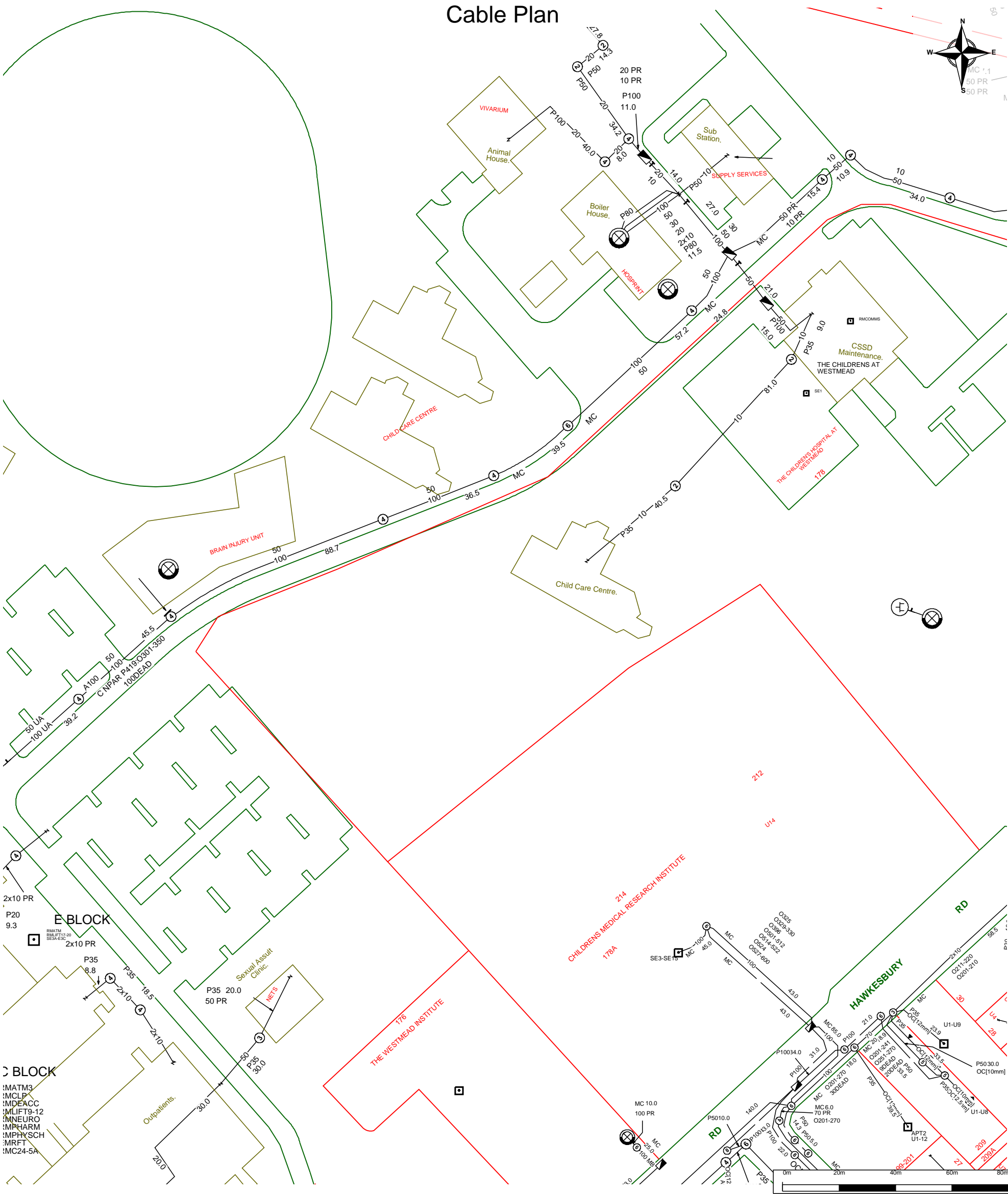
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1 : 500

DRAWING NO. IMHC-AR-DG-0251
REVISION
7

Appendix C Telstra DBYD drawing



Cable Plan



For all Telstra DBYD plan enquiries -
email - Telstra.Plans@team.telstra.com
For urgent onsite contact only - ph 1800 653 935 (bus hrs)

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CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

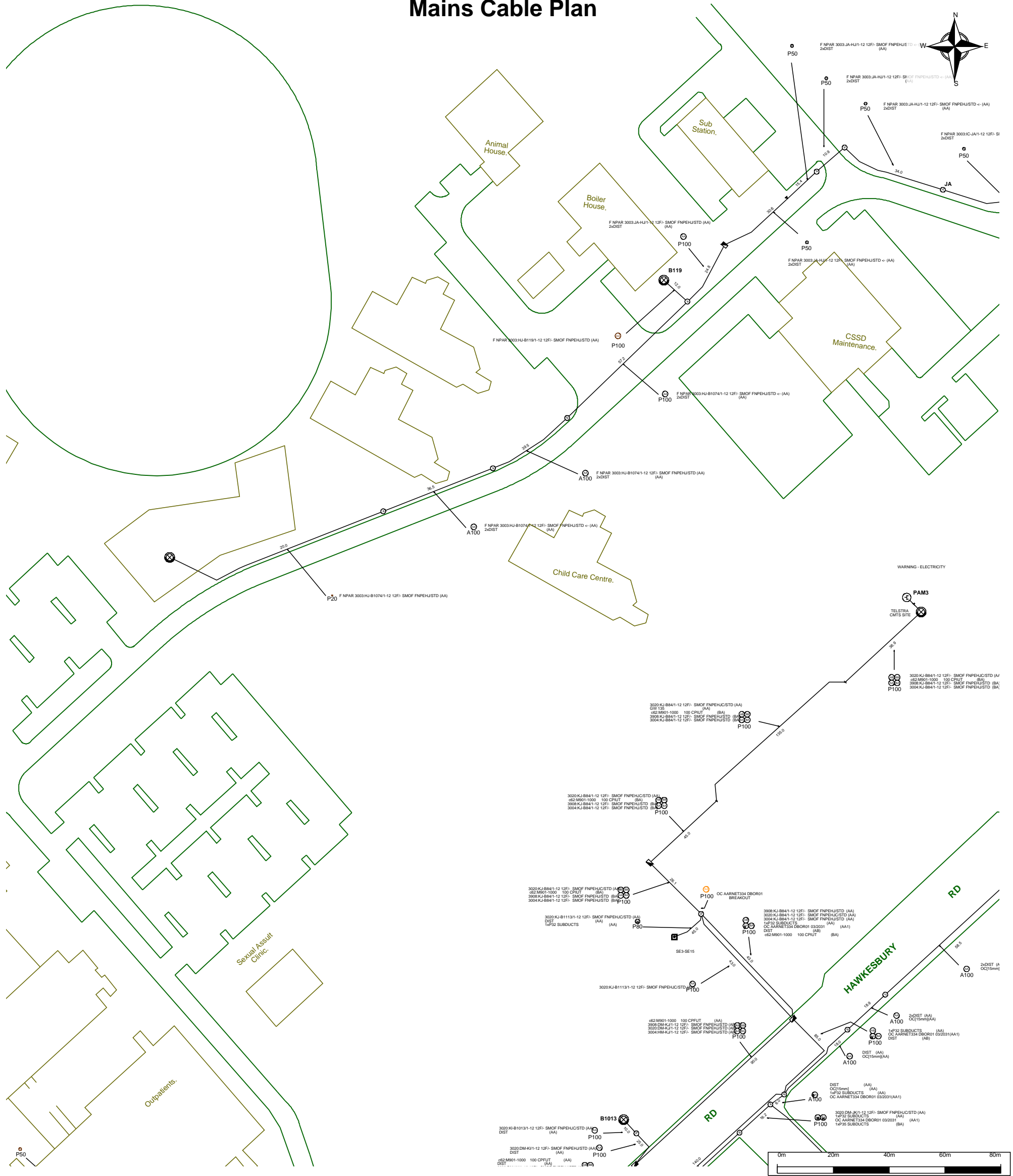
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

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Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Mains Cable Plan



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