CHATSWOOD EDUCATION PRECINCT – UPGRADES TO CHATSWOOD PUBLIC SCHOOL & HIGH SCHOOL
SSD 9483

DEMOLITION WORK PLAN

17 June 2021

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ACE CIVIL PTY LTD

REVISION REGISTER

REVISION DATE	REVISION DESCRIPTION
07/06/2021	**Revision 1**: Original issue
17/06/2021	**Revision 2**: Re-issue - updated as per RCC comment

CEMP Condition Compliance Table		
Condition	**Condition Requirements**	**Document/Sub-Plan Reference**
B17	Prior to the commencement of demolition, demolition work plans required by AS 2601-2001 The demolition of structures (Standards Australia, 2001) must be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance must be submitted to the Certifier and Planning Secretary.	This demolition work plan has been prepared in accordance with AS2601-2001. The written compliance statement can be found in Appendix 2 The CV of the suitably qualified person who prepared the written statement can be found in Appendix 3

CONTENTS

1 INTRODUCTION

This Demolition Work Plan has been generated in compliance with *AS2601-2001 The Demolition of Structures* and the *NSW Code of Practice: Demolition Work August 2019*.

This plan collates key WHS, methodology and sequence information relevant to the demolition works that are being undertaken for the development works related to SSD 9483.

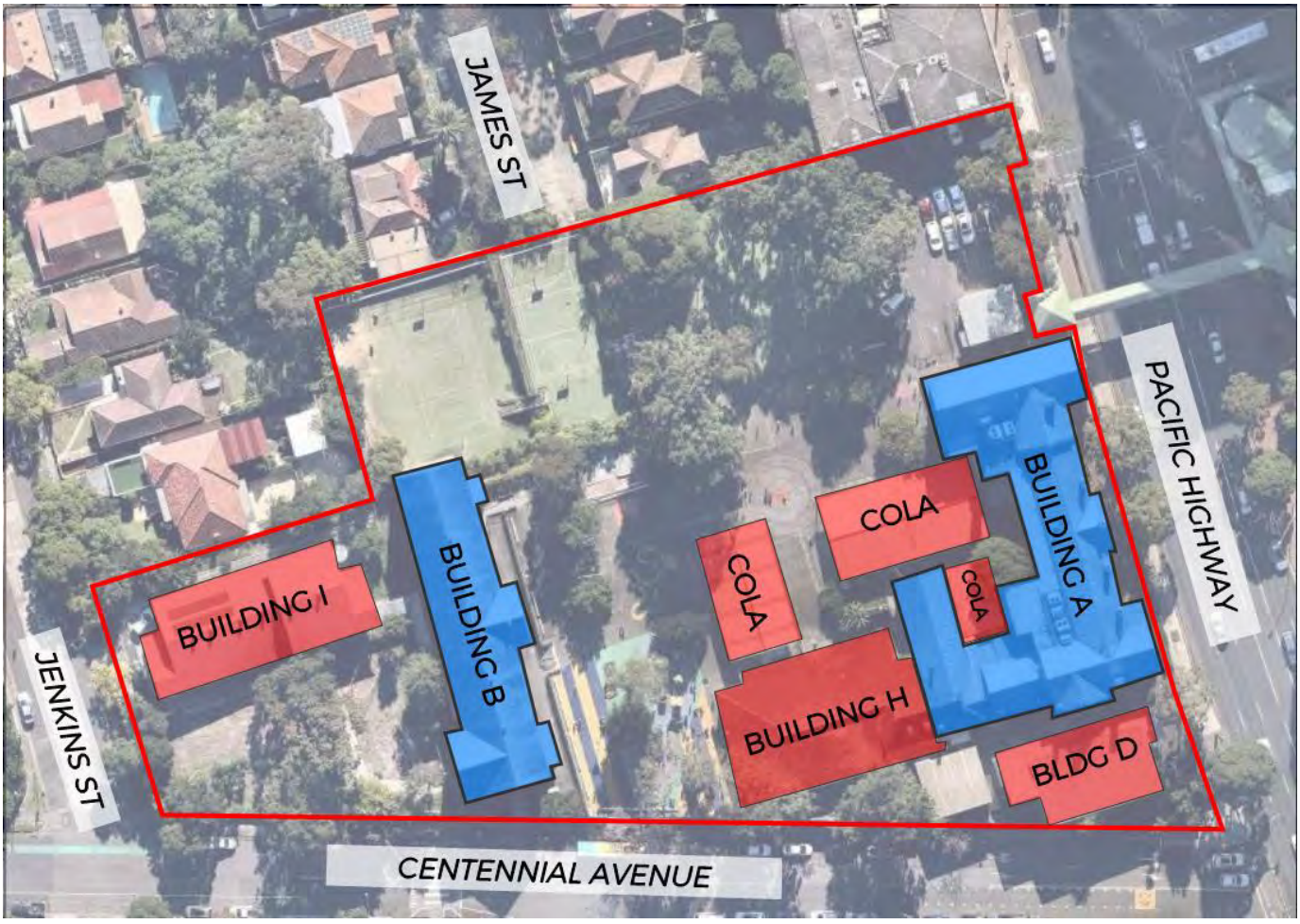
This plan does not duplicate a WHS Management Plan or SWMS, but may reference them.

The structures included in the SSD 9483 demolition works are listed below:

- Building I
- COLA Structures (Awnings)
- Building H
- Building D

For context, the (current) site plan shown below also shows all **structures to be demolished**, and existing **Buildings A and B**, which are to be retained during the SSD 9483 works.

The site where all SSD 9483 Demolition works will take place is located at 5 Centennial Avenue, Chatswood NSW 2067.



Within this plan, the following information will be provided for each structure:

From AS2601-2001 The Demolition of Structures

a) The location of the site on which the structure to be demolished stands.

b) The overall height of the structure above ground level and the least distance from the structure to each site boundary (all to the nearest 0.5m).

c) A brief description of the type of building (occupancy class), its structural support system services and the principal materials of its construction.

d) A description of the methods of demolition proposed to be used and type of major equipment proposed for implementing those methods and the means of moving such equipment from floor to floor.

e) A description of the methods proposed for handling and disposing of demolished materials and, in particular, of hazardous substances.

f) A description of the proposed sequence of carrying out the demolition works and an estimate of the time, in days, that it is likely to take to complete all of each of the stages of the work.

g) Details of protective measures, including overhead protection and scaffolding required by Clauses 1.5. and 1.7.

h) The dimensions of the demolition exclusion zone shall be determined after considering existing conditions and work methods. Depending on the demolition method the zone may need to be larger than the demolition site during key stages of the demolition operation.

i) Any other plans, illustrations, or written documents as may be necessary to clearly define of substantiate the proposals made under Items d) and g).

j) Provision of a traffic management plan for the structure and site.

k) Provision of an environmental management plan for the site and structure.

l) Occupational health and safety system (see AS 4801)

From NSW Code of Practice: Demolition Work August 2019

- *The location and condition of underground essential services including*
- *The location and condition of above ground essential services*
- *The location and condition of hazardous materials including asbestos*
- *The location of underground structures such as a basement, cellars or storage tanks*
- *Confined spaces where work will be undertaken*
- *The general condition of structures on adjoining properties*
- *The effect demolition may have on people working in adjoining properties or seeking entry to and exit from those properties, and*
- *The emergency arrangements, which should include equipment for the rescue of injured persons*

2 HOURS OF WORK

The site working hours will be as per the approved SSD 9483 Condition of Consent, which are copied below for clarity:

C5. Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

a) Between 7am and 6pm, Mondays to Fridays inclusive; and

b) Between 8am and 1pm, Saturdays

No work may be carried out on Sundays or public holidays.

C6. Notwithstanding condition C4, provided noise levels do not exceed the existing background noise level plus 5dB, works may also be undertaken during the following hours:

a) between 6pm and 7pm, Mondays to Fridays inclusive; and

b) between 1pm and 4pm, Saturdays.

C7. Construction activities may be undertaken outside of the hours in Condition C4 and C5 if required:

a) by the Police or a public authority for the delivery of vehicles, plant or materials; or

b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or

c) where the works are inaudible at the nearest sensitive receivers; or

d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works.

C8. Notification of such construction activities as referenced in condition C6 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

C9. Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

a) 9am to 12pm, Monday to Friday;

b) 2pm to 5pm Monday to Friday; and

c) 9am to 12pm, Saturday.

3 GUIDELINES AND LEGISLATION

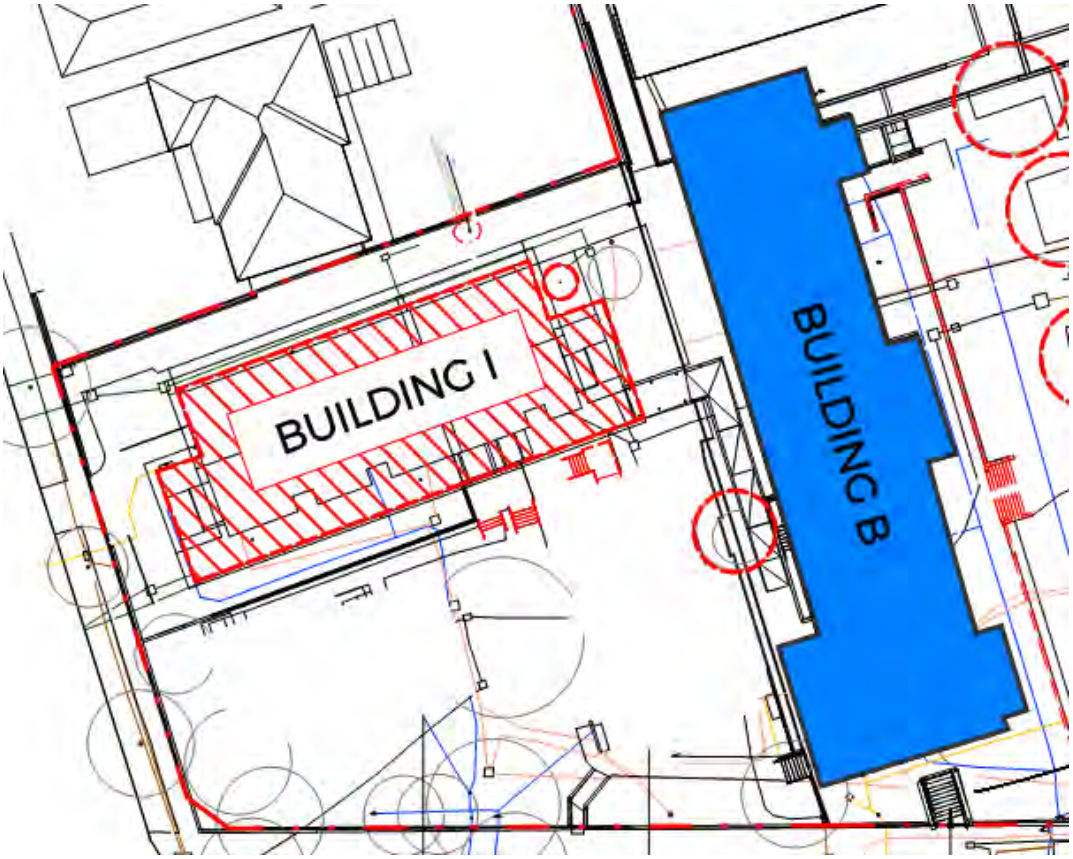
The demolition, removal, storage, handling and disposal of product and materials containing asbestos will be carried out in accordance with the relevant requirements of SafeWork NSW and the NSW Department of Environment & Conservation including:

- Work Health and Safety Act 2011;
- SafeWork NSW Code of Practice for the Safe Removal of Asbestos;
- Australian Standard 2601 ;
- The Protection of the Environment Operation Act 1997 and Protection of the Environment Operations (Waste) Regulation 1996 and;
- Relevant Department of Environment & Conservation (DEC)/Environment Protection Authority (EPA) and SafeWork NSW Guidelines;
- Work Cover NSW - Guidelines and Codes of Practice

4 BUILDING I

a) Site location

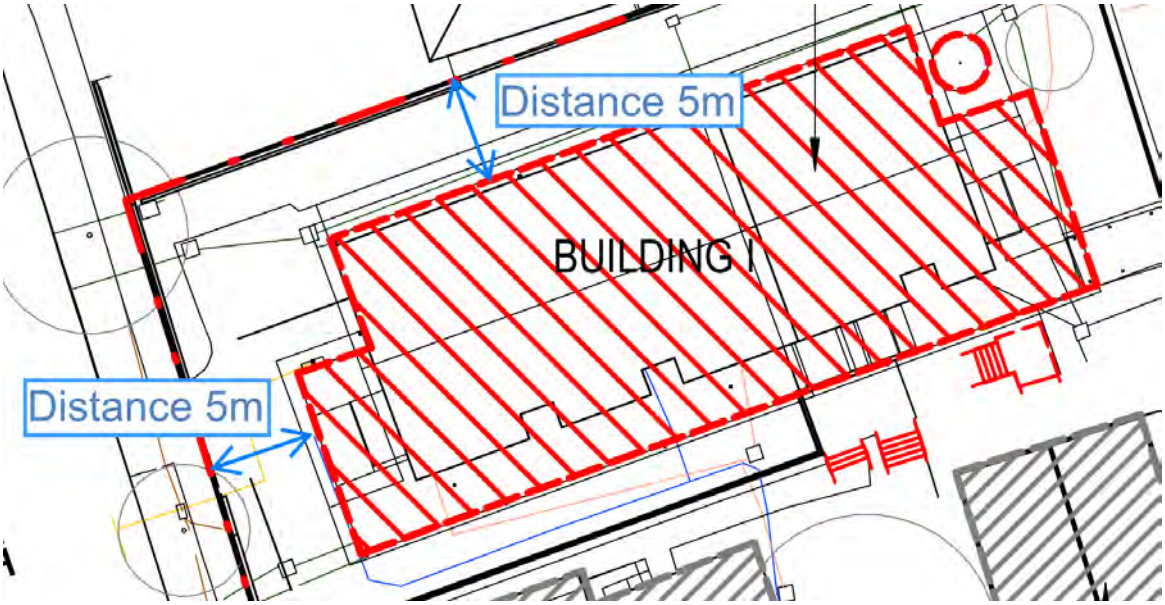
Building I is located on the south western boundary of the Public School site. It is located on the western side of exiting Building B, north of an existing landscaped space.



b) Overall Height of Structure

Building I is approximately 6 metres in height from the adjacent ground level.

The below image indicates the least distances from the nearest site boundaries, which are 5m on the northern and western boundaries.



c) Building Type & Construction

Building I is a Class 9a school building. It is split level, with brick veneer walls and a metal roof. Its primary structural elements are concrete columns, slabs, and a metal framed roof. It's principal materials of construction are concrete, bricks/blocks, metal framing and roofing, plasterboard and cement sheeting.

d) Demolition Methods

The two primary demolition methods that will be utilised for Building I are manual/hand demolition for the soft strip out of internal building elements, and mechanical demolition to the structural elements of the building.

The major equipment that will be utilised to facilitate this demolition are:

- 19-foot scissor lift
- Bobcat
- 5t-10t excavators
- 35t excavator with bucket and hammer attachments
- Rigid vehicles for the transportation of waste

e) Handling & Disposal of Demolished Materials

All concrete and brick materials will be machine loaded into vehicles and transported to a licenced tipping facility for recycling.

All general rubbish will be separated from any recyclable material. It will then be machine loaded into vehicles and transported to tipping facilities licenced to accept that specific waste.

All metal will be isolated, collected and machine loaded into vehicles, then transported to licenced metal recycling yards.

f) Work Sequence & Timeframe

Building I will be demolished in the below sequence.

1. *Permit – 5 Days*

- Prior to the scheduling of any works a SafeWork NSW Permit for Demolition will be obtained from the regulator. A period of five days' notice will be required for the application of the permits.
- SafeWork NSW permits to be issued for all demolition works that trigger the notification requirements listed within the *NSW Code of Practice: Demolition Work August 2019.*
- Consultation with stakeholders and regulators will commence prior to site establishment and will continue throughout the project

2. *Exclusion Zone – 1 Day*

- An exclusion zone will be established around the demolition work area, with safe access maintained to and from this area.

Note

- Signage is to be installed to notify workers of demolition areas, danger areas, exclusion zones and other hazards. Signage to the site perimeter is also required, in accordance with AS1319.
- Spotters to be in place during all demolition works to ensure no unauthorized personnel enter the exclusion zone.

3. *Service Disconnection – 1 Day*

- All services are to be disconnected and/or isolated prior to demolition commencing.
- Disconnection certificates from qualified services trades are to be received before demolition can commence.

4. *Loose Item Removal – 2 Days*

- All loose items such as carpet, chairs and miscellaneous furniture is to be removed prior to soft strip commencing.

5. *Soft Strip – 3 Days*

- Drop zones are to be established, and fenced off accordingly to prevent unintentional access. The Building I drop zones will be located along the southern elevation of the building. The specific location of drop zones will be addressed in daily pre-start meetings to ensure every on-site worker is aware of these areas.
- Soft strip will commence on the upper level of Building I, and progressively work down to the ground floor rooms. This will include the removal of all non-structural elements, including joinery, partition walls and similar.

Note

- Mobile scaffolds to be utilized instead of ladders when access at height is required to the internal areas.
- Spotters are to be in place at all times, with an established radio communication line to the workers using the drop zone.
- Spotters are to sign in and out daily.
- Signage to be securely fixed to all perimeter fencing and drop zone barriers.
- Dust control is to be in place at all times during soft strip, particularly at the drop zone areas.

6. *Mechanical Demolition – 12 Days*

- Establish demolition scaffold along the required elevations of Building I.
- Structural engineer to inspect post soft strip and review the building structure, to provide sign off that the proposed plant can traffic the required slabs.
- Establish 3t - 5t excavators to shift materials in direction show in the markup below (away from leading edge of demolition).
- Demolish roof structure progressively from within the building, remaining away from the leading edge of demolition.
- If roof access is required from the scaffolding, existing harness points are to be used to safely access roof areas.
- Using a 25t long reach excavator with pulverizer and hydraulic hammer attachment, demolish the structure in a sequence the opposite of construction (Slabs -> Beams -> Columns).
- Demolish the building in a top-down manner, reverse of construction manner (slab -> beam -> columns).
- The sequence of demolition, including the extent that the structure can remain standing without propping, must be confirmed by the structural engineer prior to commencing structural demolition.

Note

- The sequence of demolition, including the extent that the structure can remain standing without propping, must be confirmed by the structural engineer prior to commencing structural demolition.
- Any penetrations that will be cut into load-bearing walls, must be confirmed by the structural engineer prior to commencing.
- One spotter is required at all times for every machine in operation.
- Dust control is to be maintained at all times

g) Protective Measures & Site Access

Due to it's proximity to the northern boundary, Building I will require the installation of scaffolding to this elevation, which is shown in the below image.

Site access routes will be amended as required by the demolition work area, and exclusion zone. A minimum 1200mm wide pedestrian access way will be maintained at all times from the work area to an emergency assembly point at the site entrance. The site access and egress route will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes from the previous day are understood.

h) Demolition Exclusion Zone

The demolition exclusion zone will be amended as the works progress, to suit the required dimensions of the work area, in accordance with AS2601-2001. The exclusion zone will be established with warning barriers, fencing, tape and signage as required. The exclusion zone will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes to the exclusion zone are understood.

i) Traffic Management Plan

Construction and Pedestrian traffic will be managed in accordance with the project Construction Traffic & Pedestrian Management Sub-Plan (CTPMSP).

j) Environmental Management Plan

The demolition will be managed in accordance with the project Construction Environmental Management Plan (CEMP).

k) OH&S System

All demolition works will be conducted in accordance with the ACE Civil and Richard Crookes Constructions OH&S systems.

- **Underground Services**

Underground services will be identified through the use of existing surveys, DBYD information and service scanning. If an underground service is known of, or identified within the demolition work area, it will be flagged and the on-site workers will be made aware of it's

presence. Demolition works will be coordinated around these services to ensure they are not damaged.

There are significant underground services in the landscaped area adjacent to Building I. care will be taken in this area so that the demolition does not impact these services.

If machinery is required to traffic over these services, bridging methods (such as tracks or road plates) will be used.

- **Above Ground Services**

  There no above ground services of note in the Building I demolition area.

- **Hazardous Materials**

  There is no asbestos located within Building I. There are some insulation materials, can be disposed of as general waste.

  For further information please refer to the Pre-Demolition Hazardous Materials Survey completed by JBS&G.

- **Underground Structures**

  Not Applicable.

- **Confined Spaces**

  No confined spaces have been identified, if access is required, all licences and safety measures will be in place prior.

- **Condition of Adjacent Structures/Properties**

  The condition of adjacent structures on adjoining properties has been captured in the dilapidation reports required by the SSD 9483 Condition of Consent.

- **Demolition Impacts**

  The demolition impacts will be managed in accordance with the project Construction Environmental Management Plan, and the SSD 9483 Condition of Consent.

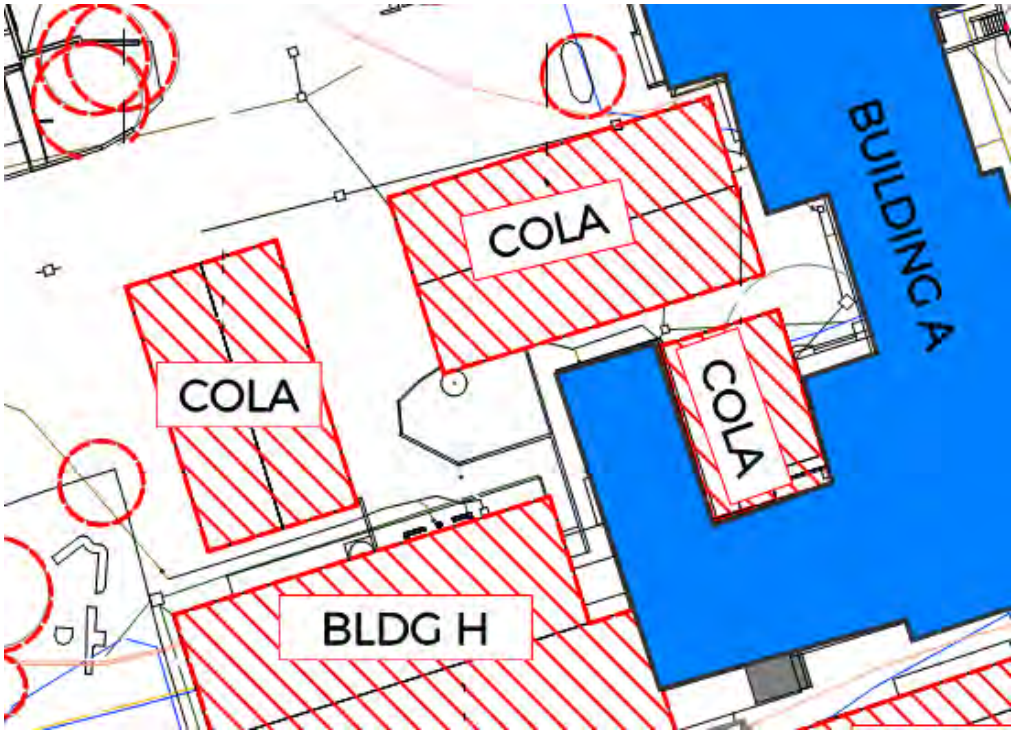
- **Emergency Rescue, Ingress & Egress**

  The construction site will maintain an emergency rescue, ingress and egress plan within the project Emergency Management Plan. This will be communicated to all workers within the demolition area, and the required equipment to conduct an emergency rescue within the demolition area will be retained on site for the duration of the works.

5 COLA STRUCTURES

l) Site location

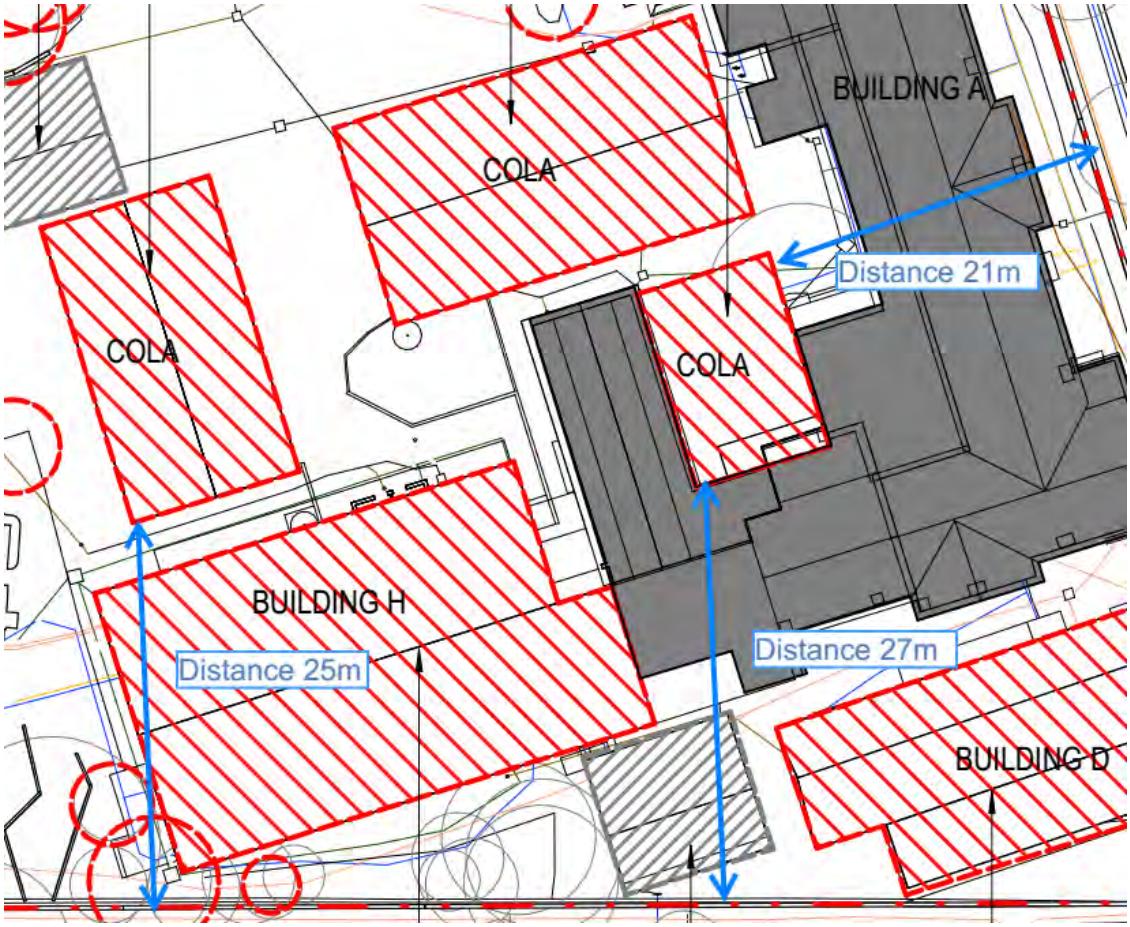
The COLA structures (awnings) are located centrally on the Public-School site. They are in the central play space area, on the west of Building A, and the east of Building B.



m) Overall Height of Structure

The COLA awnings are approximately 4.5 metres in height from the adjacent ground level.

The below image indicates the least distances from the nearest site boundaries, which are 21m on the north/west and approximately 25-27m from the southern boundary of site.



n) Building Type & Construction

The COLA structures are unoccupied, metal awnings that provide covered play space. The are constructed entirely from steel columns, beams and metal roof sheeting.

o) Demolition Methods

The two primary demolition methods that will be utilised for the COLA's are manual/hand demolition for the removal of roof sheeting and mechanical demolition to the structural steel elements.

The major equipment that will be utilised to facilitate this demolition are:

- 19-foot scissor lift
- Boom lift
- 5t-10t excavators
- Rigid vehicles for the transportation of waste

p) Handling & Disposal of Demolished Materials

All metal will be isolated, collected and machine loaded into vehicles, then transported to licenced metal recycling yards.

q) Work Sequence & Timeframe

The COLA Structures will be demolished in the below sequence.

7. *Permit – 5 Days*

- Prior to the scheduling of any works a SafeWork NSW Permit for Demolition will be obtained from the regulator. A period of five days' notice will be required for the application of the permits.
- SafeWork NSW permits to be issued for all demolition works that trigger the notification requirements listed within the *NSW Code of Practice: Demolition Work August 2019.*
- Consultation with stakeholders and regulators will commence prior to site establishment and will continue throughout the project

8. *Exclusion Zone – 1 Day*

- An exclusion zone will be established around the demolition work area, with safe access maintained to and from this area.

Note

- Signage is to be installed to notify workers of demolition areas, danger areas, exclusion zones and other hazards. Signage to the site perimeter is also required, in accordance with AS1319.
- Spotters to be in place during all demolition works to ensure no unauthorized personnel enter the exclusion zone.

9. *Service Disconnection – 1 Day*

- All services are to be disconnected and/or isolated prior to demolition commencing.
- Disconnection certificates from qualified services trades are to be received before demolition can commence.
- Some services such as speakers and lighting will need to be relocated prior to disconnections occurring, and demolition commencing.

10. *Roof sheet removal – 2 Days*

- Once exclusion zones are established, roof sheet removal will commence.
- Workers are to be either fully within a elevated work platform or scissor lift at all times when removing roof sheets. If further access is required, then harnesses can be used when secured to a certified fixing point.

Note

- Mobile scaffolds/scissor lifts and boom lifts to be utilized instead of ladders when access at height is required.
- Spotters are to be in place at all times, with an established radio communication line to the workers using the drop zone.
- Spotters are to sign in and out daily.
- Signage to be securely fixed to all perimeter fencing and drop zone barriers.
- Dust control is to be in place at all times.

11. *Mechanical Demolition – 1 Day*

- Demolish the structures, ensuring the structural members fall in a safe manner to a designated location.

Note

- The COLA's are built in a segmented/modular fashion, and removal is to mimic the reverse of the install. The below photos highlight the sections that the COLA's will be demolished in.

r) Protective Measures & Site Access

A minimum 1200mm wide pedestrian access way will be maintained at all times from the work area to an emergency assembly point at the site entrance. The site access and egress route will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes from the previous day are understood.

s) Demolition Exclusion Zone

The demolition exclusion zone will be amended as the works progress, to suit the required dimensions of the work area, in accordance with AS2601-2001. The exclusion zone will be established with warning barriers, fencing, tape and signage as required. The exclusion zone will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes to the exclusion zone are understood.

t) Traffic Management Plan

Construction and Pedestrian traffic will be managed in accordance with the project Construction Traffic & Pedestrian Management Sub-Plan (CTPMSP).

u) Environmental Management Plan

The demolition will be managed in accordance with the project Construction Environmental Management Plan (CEMP).

v) OH&S System

All demolition works will be conducted in accordance with the ACE Civil and Richard Crookes Constructions OH&S systems.

- **Underground Services**

Underground services will be identified through the use of existing surveys, DBYD information and service scanning. If an underground service is known of, or identified within the demolition work area, it will be flagged and the on-site workers will be made aware of it's presence. Demolition works will be coordinated around these services to ensure they are not damaged.

- **Above Ground Services**

There no above ground services of note in the COLA demolition area.

- **Hazardous Materials**

There are no hazardous materials within the COLA demolition area.

For further information please refer to the Pre-Demolition Hazardous Materials Survey completed by JBS&G.

- **Underground Structures**

Not Applicable.

- **Confined Spaces**

No confined spaces have been identified, if access is required, all licences and safety measures will be in place prior.

- **Condition of Adjacent Structures/Properties**

The condition of adjacent structures on adjoining properties has been captured in the dilapidation reports required by the SSD 9483 Condition of Consent.

- **Demolition Impacts**

The demolition impacts will be managed in accordance with the project Construction Environmental Management Plan, and the SSD 9483 Condition of Consent.

- **Emergency Rescue, Ingress & Egress**

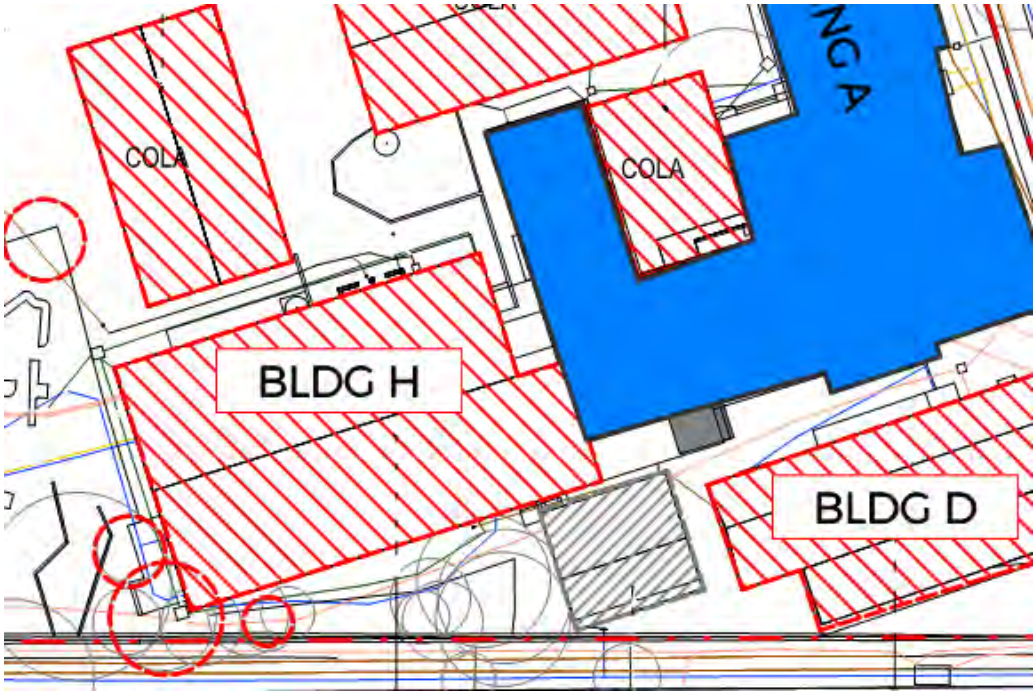
The construction site will maintain an emergency rescue, ingress and egress plan within the project Emergency Management Plan. This will be communicated to all workers within the

demolition area, and the required equipment to conduct an emergency rescue within the demolition area will be retained on site for the duration of the works.

6 BUILDING H

a) Site location

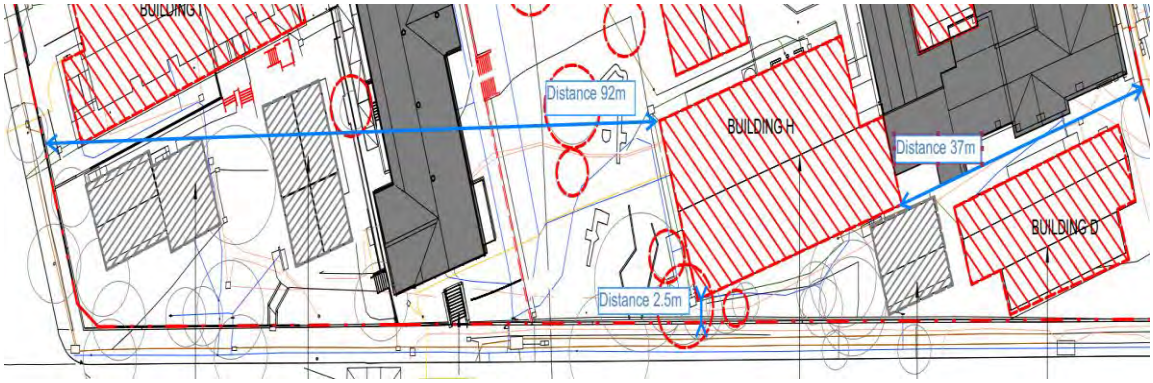
Building H is located on the south eastern corner of the Public School site. It is located on the south/western side of exiting Building A, alongside Centennial Avenue.



b) Overall Height of Structure

Building H is approximately 5.5 metres in height from the adjacent ground level.

The below image indicates the least distances from the nearest site boundaries, which are 92m on the western, 2.5m on the southern, and approx.. 37m from the eastern boundary respectively.



c) Building Type & Construction

Building H is a Class 9a school building. It is single level, with double brick walls and a metal roof. Its primary structural elements are a ground slab, brick walls and a metal framed roof. Its principal materials of construction are concrete, bricks/blocks, metal framing (trusses), roof tiles, plasterboard and cement sheeting.

d) Demolition Methods

The two primary demolition methods that will be utilised for Building H are manual/hand demolition for the soft strip out of internal building elements, and mechanical demolition to the structural elements of the building.

The major equipment that will be utilised to facilitate this demolition are:

- 19-foot scissor lift
- Bobcat
- 5t-10t excavators
- 35t excavator with bucket and hammer attachments
- Rigid vehicles for the transportation of waste

e) Handling & Disposal of Demolished Materials

All concrete and brick materials will be machine loaded into vehicles and transported to a licenced tipping facility for recycling.

All general rubbish will be separated from any recyclable material. It will then be machine loaded into vehicles and transported to tipping facilities licenced to accept that specific waste.

All metal will be isolated, collected and machine loaded into vehicles, then transported to licenced metal recycling yards.

f) Work Sequence & Timeframe

Building H will be demolished in the below sequence.

12. *Permit – 5 Days*
    - Prior to the scheduling of any works a SafeWork NSW Permit for Demolition will be obtained from the regulator. A period of five days' notice will be required for the application of the permits.
    - SafeWork NSW permits to be issued for all demolition works that trigger the notification requirements listed within the *NSW Code of Practice: Demolition Work August 2019.*
    - Consultation with stakeholders and regulators will commence prior to site establishment and will continue throughout the project
13. *Exclusion Zone – 1 Day*
    - An exclusion zone will be established around the demolition work area, with safe access maintained to and from this area.

    Note
        - Signage is to be installed to notify workers of demolition areas, danger areas, exclusion zones and other hazards. Signage to the site perimeter is also required, in accordance with AS1319.
        - Spotters to be in place during all demolition works to ensure no unauthorized personnel enter the exclusion zone.
14. *Service Disconnection – 1 Day*
    - All services are to be disconnected and/or isolated prior to demolition commencing.
    - Disconnection certificates from qualified services trades are to be received before demolition can commence.

15. Loose Item Removal – 2 Days

- All loose items such as carpet, chairs and miscellaneous furniture is to be removed prior to soft strip commencing.

16. Soft Strip – 3 Days

- Stockpile areas are to be established, and fenced off accordingly to prevent unintentional access. The Building H drop zones will be located along the western and northern elevation of the building. The specific location of stockpile areas will be addressed in daily pre-start meetings to ensure every on-site worker is aware of these areas.
- Soft strip will include the removal of all non-structural elements, including joinery, partition walls and similar.

Note

- Mobile scaffolds to be utilized instead of ladders when access at height is required to the internal areas.
- Spotters are to sign in and out daily.
- Signage to be securely fixed to all perimeter fencing and barriers.
- Dust control is to be in place at all times during soft strip.

17. Mechanical Demolition – 12 Days

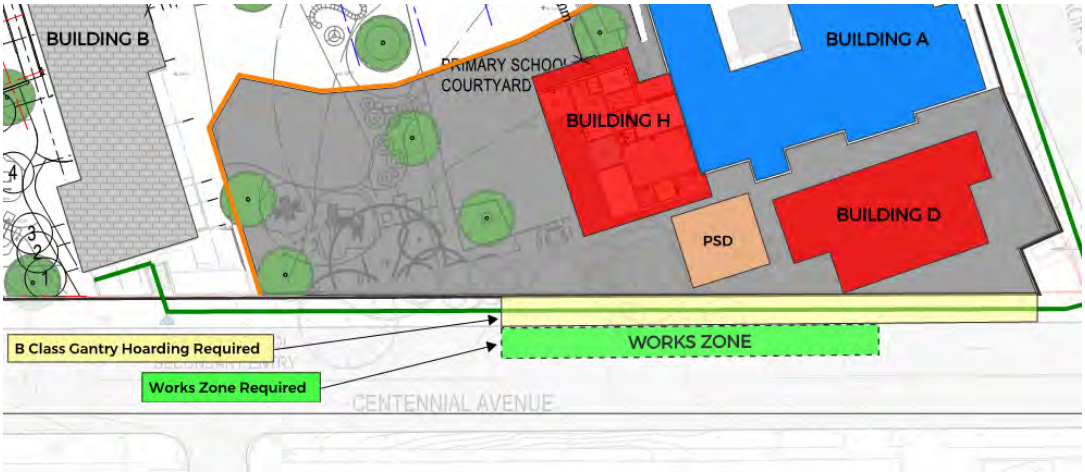
- Establish demolition scaffold along the required elevations of Building H for roof tile removal.
- Structural engineer to inspect post soft strip and review the building structure, to provide sign off that the proposed plant can traffic the required slabs.
- Establish 3t - 5t excavators to shift materials in direction show in the markup below (away from leading edge of demolition).
- Demolish roof structure progressively from within the building, remaining away from the leading edge of demolition.
- If roof access is required from the scaffolding, existing harness points are to be used to safely access roof areas.
- Using a 25t long reach excavator with pulverizer and hydraulic hammer attachment, demolish the structure in a sequence the opposite of construction (Slabs -> Beams -> Columns).
- The sequence of demolition, including the extent that the structure can remain standing without propping, must be confirmed by the structural engineer prior to commencing structural demolition.
- Building H will be demolished in two stages, that are indicated by the below photos. The western most section will be demolished first, with the eastern halve to be demolished several months late.
- Detailed demolition will be required where the building junction is being broken.
- Structural engineer input will be required to assess the remaining section of Building H, to determine is additional propping is required.

Note

- The sequence of demolition, including the extent that the structure can remain standing without propping, must be confirmed by the structural engineer prior to commencing structural demolition.
- Any penetrations that will be cut into load-bearing walls, must be confirmed by the structural engineer prior to commencing.
- One spotter is required at all times for every machine in operation.
- Dust control is to be maintained at all times

g) Protective Measures & Site Access

Due to restricted access during the second stage of demolition, Building H will require the installation of a gantry hoarding to this elevation, which is shown in the below image. This will happen in conjunction with the demolition of Building D.



Site access routes will be amended as required by the demolition work area, and exclusion zone. A minimum 1200mm wide pedestrian access way will be maintained at all times from the work area to an emergency assembly point at the site entrance. The site access and egress route will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes from the previous day are understood.

h) Demolition Exclusion Zone

The demolition exclusion zone will be amended as the works progress, to suit the required dimensions of the work area, in accordance with AS2601-2001. The exclusion zone will be established with warning barriers, fencing, tape and signage as required. The exclusion zone will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes to the exclusion zone are understood.

i) Traffic Management Plan

Construction and Pedestrian traffic will be managed in accordance with the project Construction Traffic & Pedestrian Management Sub-Plan (CTPMSP).

j) Environmental Management Plan

The demolition will be managed in accordance with the project Construction Environmental Management Plan (CEMP).

k) OH&S System

All demolition works will be conducted in accordance with the ACE Civil and Richard Crookes Constructions OH&S systems.

- **Underground Services**

Underground services will be identified through the use of existing surveys, DBYD information and service scanning. If an underground service is known of, or identified within the demolition work area, it will be flagged and the on-site workers will be made aware of it's presence. Demolition works will be coordinated around these services to ensure they are not damaged.

There are significant underground services in the landscaped area adjacent to Building I. care will be taken in this area so that the demolition does not impact these services.

If machinery is required to traffic over these services, bridging methods (such as tracks or road plates) will be used.

- **Above Ground Services**

There no above ground services of note in the Building H demolition area.

- **Hazardous Materials**

  Some hazardous materials are located within Building H.

  All removal will be completed by licenced removalists, under the management of an approved ARCP.

  For further information please refer to the Pre-Demolition Hazardous Materials Survey completed by JBS&G.

- **Underground Structures**

  Not Applicable.

- **Confined Spaces**

  No confined spaces have been identified, if access is required, all licences and safety measures will be in place prior.

- **Condition of Adjacent Structures/Properties**

  The condition of adjacent structures on adjoining properties has been captured in the dilapidation reports required by the SSD 9483 Condition of Consent.

- **Demolition Impacts**

  The demolition impacts will be managed in accordance with the project Construction Environmental Management Plan, and the SSD 9483 Condition of Consent.

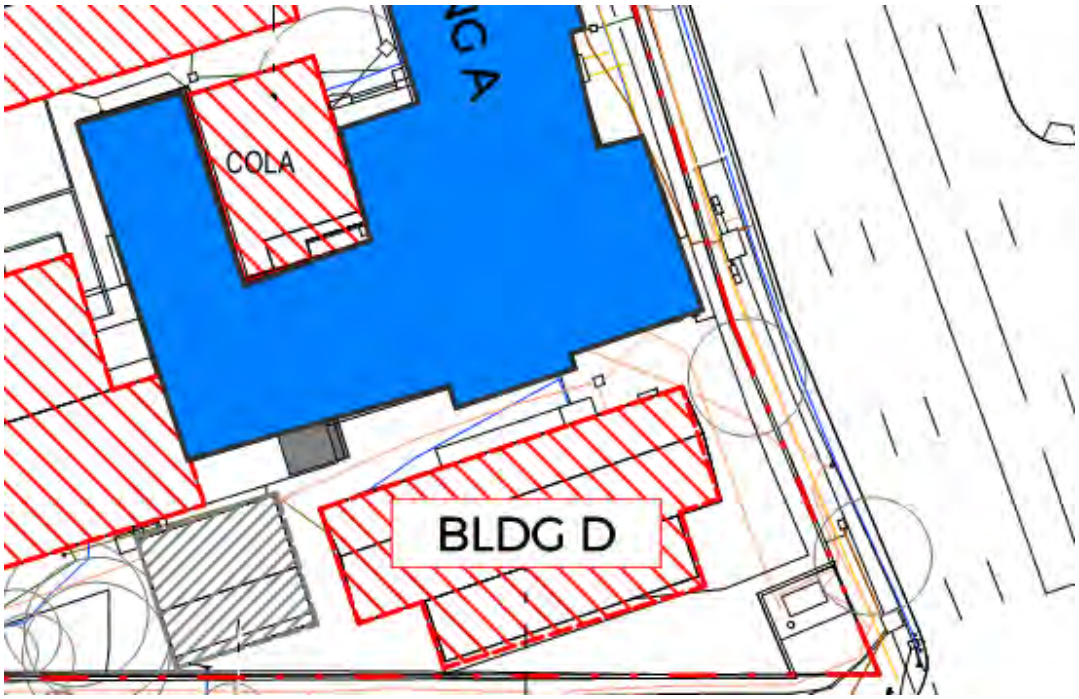
- **Emergency Rescue, Ingress & Egress**

The construction site will maintain an emergency rescue, ingress and egress plan within the project Emergency Management Plan. This will be communicated to all workers within the demolition area, and the required equipment to conduct an emergency rescue within the demolition area will be retained on site for the duration of the works.

7 BUILDINGS D

l) Site location

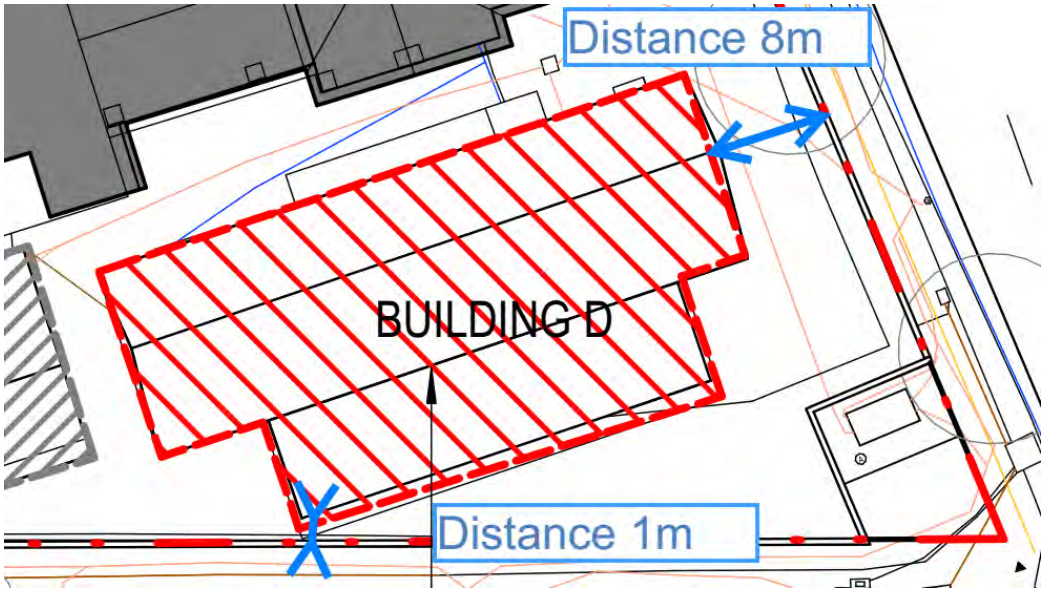
Building D is located on the south eastern corner of the Public School site. It is located on the southern side of exiting Building A, near the corner of the Pacific Highway and Centennial Avenue.



m) Overall Height of Structure

Building D is approximately 7.5 metres in height from the adjacent ground level.

The below image indicates the least distances from the nearest site boundaries, which are 8m on the eastern and 1m on the southern boundary respectively.



n) Building Type & Construction

Building D is a Class 9a school building. It is double level, with metal cladding and a metal roof. Its primary structural elements are concrete columns, slabs, and a metal framed roof. It's principal materials of construction are concrete, bricks/blocks, metal framing and roofing, plasterboard and cement sheeting.

o) Demolition Methods

The two primary demolition methods that will be utilised for Building D are manual/hand demolition for the soft strip out of internal building elements, and mechanical demolition to the structural elements of the building.

The major equipment that will be utilised to facilitate this demolition are:

- 19-foot scissor lift
- Bobcat
- 5t-10t excavators
- 35t excavator with bucket and hammer attachments
- Rigid vehicles for the transportation of waste

p) Handling & Disposal of Demolished Materials

All concrete and brick materials will be machine loaded into vehicles and transported to a licenced tipping facility for recycling.

All general rubbish will be separated from any recyclable material. It will then be machine loaded into vehicles and transported to tipping facilities licenced to accept that specific waste.

All metal will be isolated, collected and machine loaded into vehicles, then transported to licenced metal recycling yards.

q) Work Sequence & Timeframe

Building D will be demolished in the below sequence.

18. *Permit – 5 Days*
    - Prior to the scheduling of any works a SafeWork NSW Permit for Demolition will be obtained from the regulator. A period of five days' notice will be required for the application of the permits.
    - SafeWork NSW permits to be issued for all demolition works that trigger the notification requirements listed within the *NSW Code of Practice: Demolition Work August 2019.*
    - Consultation with stakeholders and regulators will commence prior to site establishment and will continue throughout the project
19. *Exclusion Zone – 1 Day*
    - An exclusion zone will be established around the demolition work area, with safe access maintained to and from this area.

    Note

    - Signage is to be installed to notify workers of demolition areas, danger areas, exclusion zones and other hazards. Signage to the site perimeter is also required, in accordance with AS1319.

- Spotters to be in place during all demolition works to ensure no unauthorized personnel enter the exclusion zone.

20. Service Disconnection – 1 Day

- All services are to be disconnected and/or isolated prior to demolition commencing.
- Disconnection certificates from qualified services trades are to be received before demolition can commence.

21. Loose Item Removal – 2 Days

- All loose items such as carpet, chairs and miscellaneous furniture is to be removed prior to soft strip commencing.

22. Soft Strip – 3 Days

- Drop zones are to be established, and fenced off accordingly to prevent unintentional access. The Building D drop zones will be located along the western and northen elevation of the building. The specific location of drop zones will be addressed in daily pre-start meetings to ensure every on-site worker is aware of these areas.
- Soft strip will commence on the upper level of Building D, and progressively work down to the ground floor rooms. This will include the removal of all non-structural elements, including joinery, partition walls and similar.

Note

- Mobile scaffolds to be utilized instead of ladders when access at height is required to the internal areas.
- Spotters are to be in place at all times, with an established radio communication line to the workers using the drop zone.
- Spotters are to sign in and out daily.
- Signage to be securely fixed to all perimeter fencing and drop zone barriers.
- Dust control is to be in place at all times during soft strip, particularly at the drop zone areas.

23. Mechanical Demolition – 12 Days

- Establish demolition scaffold along the required elevations of Building D for roof sheet removal if required.
- Structural engineer to inspect post soft strip and review the building structure, to provide sign off that the proposed plant can traffic the required slabs.
- Establish 3t - 5t excavators to shift materials in direction show in the markup below (away from leading edge of demolition).
- Demolish roof structure progressively from within the building, remaining away from the leading edge of demolition.
- If roof access is required from the scaffolding, existing harness points are to be used to safely access roof areas.
- Using a 25t long reach excavator with pulverizer and hydraulic hammer attachment, demolish the structure in a sequence the opposite of construction (Slabs -> Beams -> Columns).

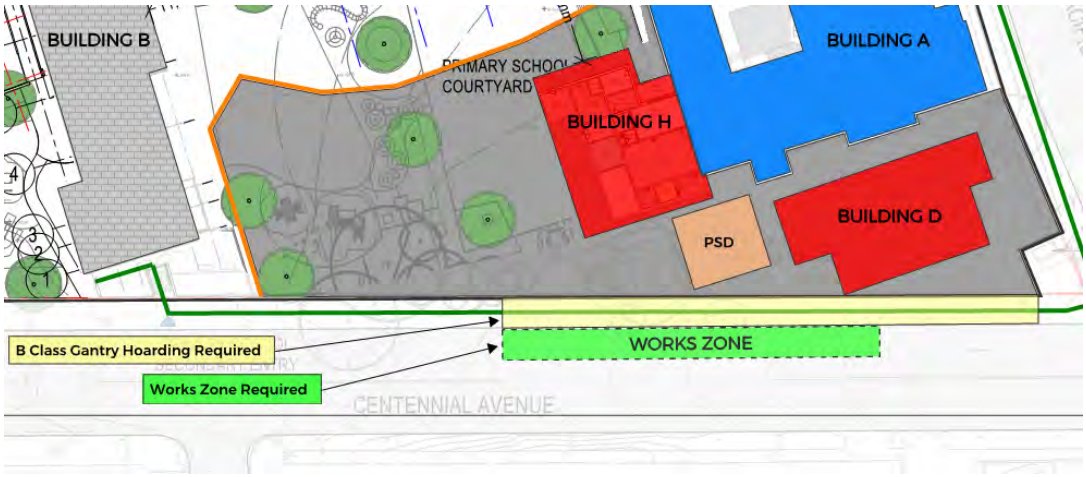
- Demolish the building in a top-down manner, reverse of construction manner (slab -> beam -> columns).
- The sequence of demolition, including the extent that the structure can remain standing without propping, must be confirmed by the structural engineer prior to commencing structural demolition.

Note

- The sequence of demolition, including the extent that the structure can remain standing without propping, must be confirmed by the structural engineer prior to commencing structural demolition.
- Any penetrations that will be cut into load-bearing walls, must be confirmed by the structural engineer prior to commencing.
- One spotter is required at all times for every machine in operation.
- Dust control is to be maintained at all times

r) Protective Measures & Site Access

Due to its proximity to the southern boundary, Building D will require the installation of a gantry hoarding to this elevation, which is shown in the below image.



Site access routes will be amended as required by the demolition work area, and exclusion zone. A minimum 1200mm wide pedestrian access way will be maintained at all times from the work area to an emergency assembly point at the site entrance. The site access and egress route will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes from the previous day are understood.

s) Demolition Exclusion Zone

The demolition exclusion zone will be amended as the works progress, to suit the required dimensions of the work area, in accordance with AS2601-2001. The exclusion zone will be established with warning barriers, fencing, tape and signage as required. The exclusion zone will be communicated daily to the on-site workers in a pre-start meeting, to ensure any changes to the exclusion zone are understood.

t) Traffic Management Plan

Construction and Pedestrian traffic will be managed in accordance with the project Construction Traffic & Pedestrian Management Sub-Plan (CTPMSP).

u) Environmental Management Plan

The demolition will be managed in accordance with the project Construction Environmental Management Plan (CEMP).

v) OH&S System

All demolition works will be conducted in accordance with the ACE Civil and Richard Crookes Constructions OH&S systems.

- **Underground Services**

Underground services will be identified through the use of existing surveys, DBYD information and service scanning. If an underground service is known of, or identified within the demolition work area, it will be flagged and the on-site workers will be made aware of it's presence. Demolition works will be coordinated around these services to ensure they are not damaged.

There are significant underground services in the landscaped area adjacent to Building I. care will be taken in this area so that the demolition does not impact these services.

If machinery is required to traffic over these services, bridging methods (such as tracks or road plates) will be used.

- **Above Ground Services**

There no above ground services of note in the Building D demolition area.

- **Hazardous Materials**

There is no asbestos located within Building D. There are some insulation materials, can be disposed of as general waste.

For further information please refer to the Pre-Demolition Hazardous Materials Survey completed by JBS&G.

- **Underground Structures**

Not Applicable.

- **Confined Spaces**

No confined spaces have been identified, if access is required, all licences and safety measures will be in place prior.

- **Condition of Adjacent Structures/Properties**

The condition of adjacent structures on adjoining properties has been captured in the dilapidation reports required by the SSD 9483 Condition of Consent.

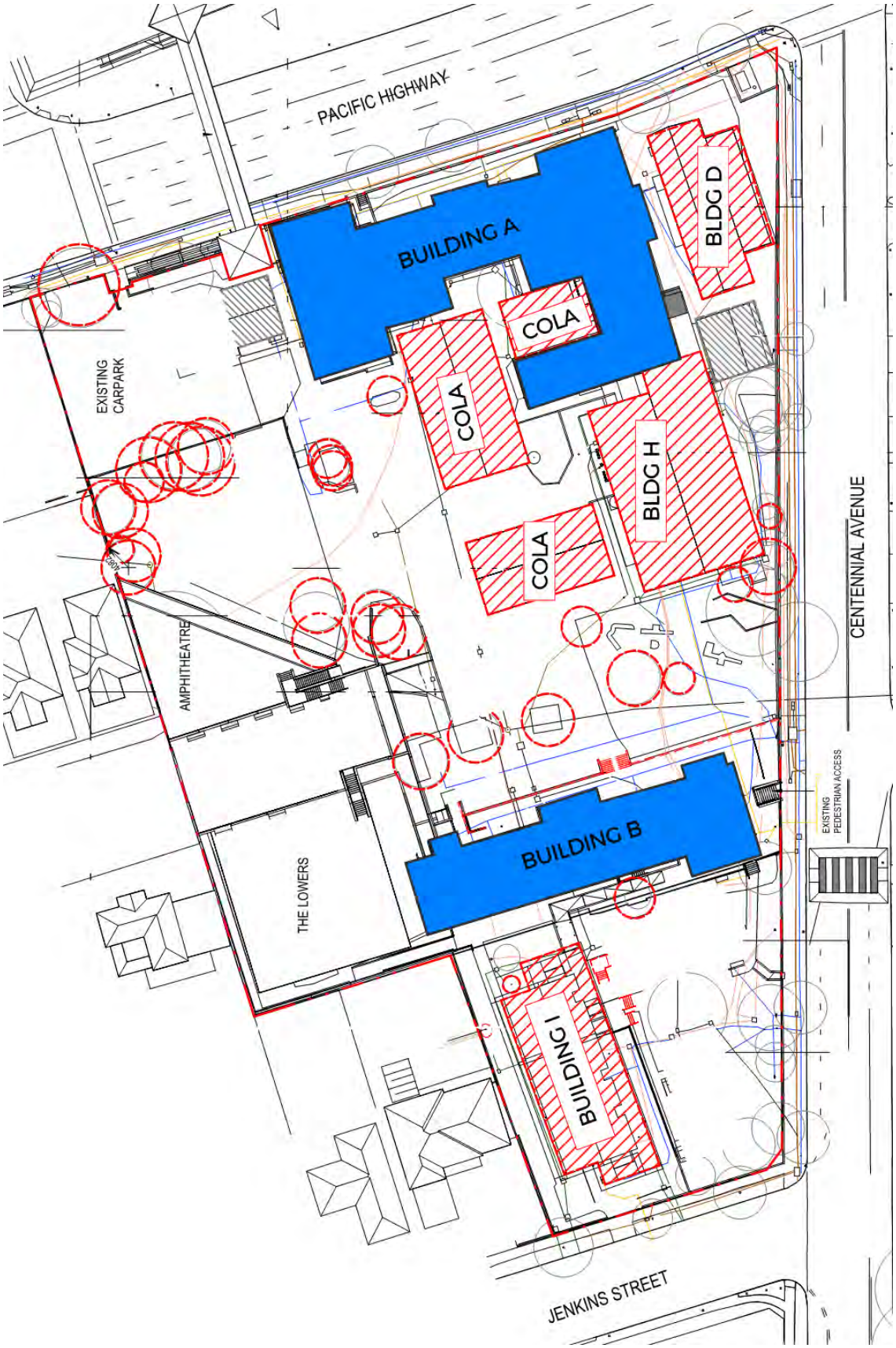
- **Demolition Impacts**

The demolition impacts will be managed in accordance with the project Construction Environmental Management Plan, and the SSD 9483 Condition of Consent.

- **Emergency Rescue, Ingress & Egress**

The construction site will maintain an emergency rescue, ingress and egress plan within the project Emergency Management Plan. This will be communicated to all workers within the demolition area, and the required equipment to conduct an emergency rescue within the demolition area will be retained on site for the duration of the works.

8 APPENDIX 1 – SITE DEMOLITION PLAN



9 APPENDIX 2 – COMPLIANCE STATEMENT

Compliance Statement

DATE	:	**17-06-2021**
PROJECT	:	**Chatswood Public School**
ADDRESS	:	**5 Centennial Avenue, Chatswood NSW**
CLIENT	:	**Richard Crookes Construction Pty Ltd**
TYPE OF BUILDING WORK	:	**Demolition Works**

I Ted Zhang of ACE Civil Pty Ltd

hereby certify that the Demolition Work Plan for Chatswood Education Precinct (SSD 9483) have been prepared in accordance with the Australia Standards AS2601-2001.

The information contained in this statement is true and accurate to the best of my knowledge.

Ted Zhang
BEng | MEng

Email: Ted@acedemolition.com.au
362 Park Road, Regents Park NSW 2143 - PO Box 63, Auburn NSW 2144
Phone: (02) 9644 5596 - Fax: (02) 9644 55952 – www.acedemolition.com.au

10 APPENDIX 3 – CV OF SUITABLY QUALIFIED PERSON

Zhong ZHANG

Education

Master of Professional Engineering (Civil) — **Sept 2013 – Mar 2016**
The University of Sydney

Bachelor of Engineering: Civil Engineering — **Sept 2009 – Jun 2013**
Southwest JiaoTong University

Professional Experience

Anglicare Gordon
$7 million
Taylor Construction Group
Demolition, Piling and Excavation Contract
The old retirement living demolition, heritage Burnham Thorpe building retention, D&C shoring and foundation piling, excavation and civil works

Queens Ave Properties Vaucluse
$3.7 million
Aqualand Delivery Pty Ltd
Demolition work in and around heritage-listed Villa Igiea, D&C of shoring system, Excavation in two stages

Presbyterian Aged Care
Multiplex Pty Ltd
$13 million

Rhodes Central – Stage 2
Billbergia Construction Pty Ltd $11.2 million

Ultimo Public School
Hindmarsh Construction Australia Pty Ltd
$2.2 million

Project Coordinator

Over 8 years experience in construction management, demolition planning and methodology preparation.

- Review subcontract particular conditions, scope of work inclusions and initial subcontract agreement
- Manage procurement process, prepare comparison of quotes from different suppliers in details and report to Director for decision
- Develop task SWMS (Safe Work Method Statement), project Work Method Statements (for demolition, excavation and shoring) and apply for associated Permits
- Project Long Term Programme & Short Term Status Programme development resources allocated to each task based on budget
- Preparation and submission of all QA (Quality Assurance) documents & ITPs (Inspection and Test Plan)
- Preparation and negotiation of subcontract variation and EOT claims
- Subcontractor monthly claim submission
- Process supplier and subcontractor payment claims
- Budget management and project cashflow forecast preparation
- Recommending changes in design details to increase efficiency of construction
- Review head contractor's payment schedules/ RCTI, prepare supplementary evidence for unapproved items and chase overdue payments
- Work and liaise with Customer and stakeholders to ensure satisfaction and relationships maintained to maximise contracted work
- Liaising with clients including Richard Crookes, Billbergia and Deicorp

Email: Ted@acedemolition.com.au
362 Park Road, Regents Park NSW 2143 - PO Box 63, Auburn NSW 2144
Phone: (02) 9644 5596 - Fax: (02) 9644 55952 –
www.acedemolition.com.au

11 APPENDIX 4 - DBYD SERVICE LOCATIONS AND EXISTING SITE SURVEY

Job No 21679001

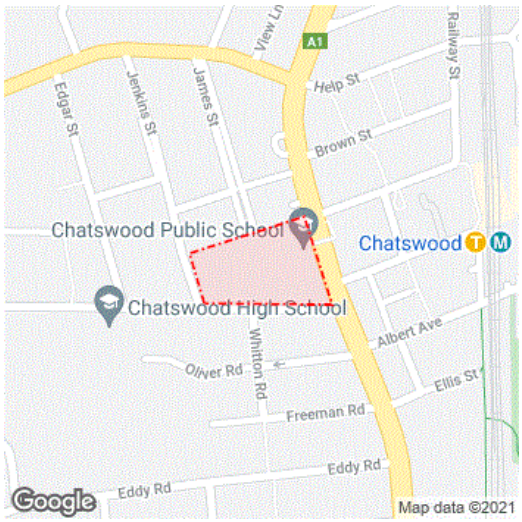
Phone: 1100
www.1100.com.au

Caller Details

Contact:	Mr Ted Zhang	**Caller Id:**	2310075	**Phone:**	0451460330
Company:	Ace Demolition and Excavation	**Mobile:**	Not Supplied	**Fax:**	Not Supplied
Address:	362 park road Regents Park NSW 2143	**Email:**	ted@acedemolition.com.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.



User Reference: Not Supplied
Working on Behalf of: Private

Enquiry Date:	**Start Date:**	**End Date:**
24/05/2021	30/05/2021	31/10/2021

Address:
5 Centennial Avenue
Chatswood NSW 2067

Job Purpose:	**Onsite Activity:**
Excavation	Mechanical Excavation
Location of Workplace:	**Location in Road:**
Private Property	Not Supplied

- Check the location of the dig site is correct. If not submit a new enquiry.
- If the scope of works change, or plan validity dates expire, resubmit your enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:

Your Responsibilities and Duty of Care

- The lodgement of an enquiry does not authorise the project to commence. You must obtain all necessary information from any and all likely impacted asset owners prior to excavation.
- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

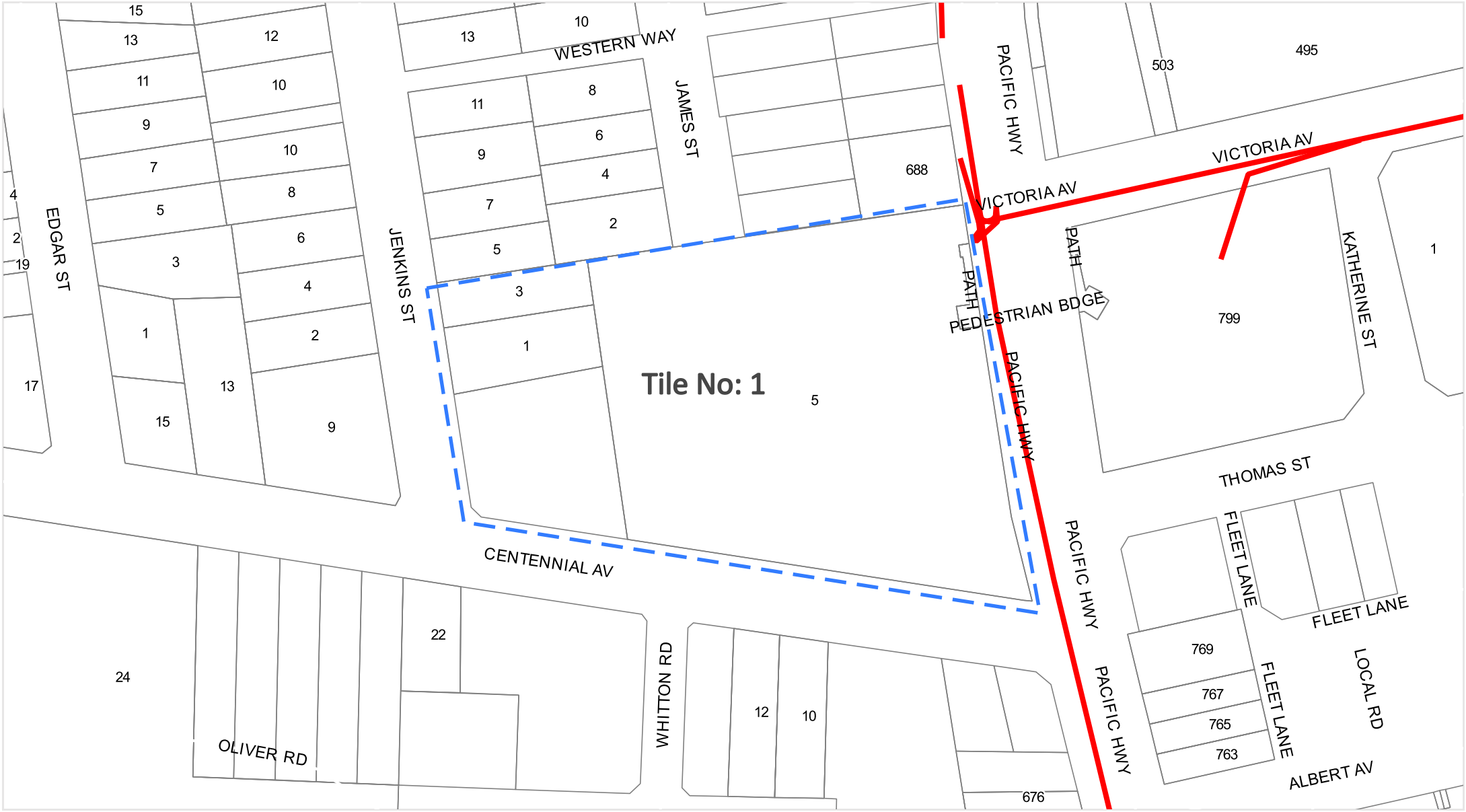
The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days.
Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
110051716	AARNet Pty Ltd, Nsw	1300275662	NOTIFIED
110051711	Ausgrid	0249510899	NOTIFIED
110051714	Jemena Gas North	1300880906	NOTIFIED
110051717	NBN Co, NswAct	1800626329	NOTIFIED
110051709	Nextgen, NCC - NSW	1800032532	NOTIFIED
110051713	Optus and/or Uecomm, Nsw	1800505777	NOTIFIED
110051715	Sydney Water	132092	NOTIFIED
110051712	Telstra NSW, Central	1800653935	NOTIFIED
110051710	TPG Telecom (NSW)	1800786306	NOTIFIED
110051707	Transport for NSW	0288370285	NOTIFIED
110051708	Verizon Business (Nsw)	0294345000	NOTIFIED
110051718	Vocus Communications	0892446114	NOTIFIED
110051706	Willoughby City Council	0297771000	NOTIFIED

aarnet
Australia's Academic and Research Network

Sequence No: 110051716
Job No: 21679001
Location: 5 Centennial Avenue, Chatswood, NSW 2067

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Legend | Scale: 1:1500

N

- Enquiry Area
- AARNet Fibre Optic Assets
- AARNet Power Assets
- Cadastre

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNet or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

GL314 - ET1

3x125 PVC

0.6

0.4

Ref: C9

GL332 - AD1

3 x 125 PVC

0.7-1.0

0.6

Ref: F7

GL332 - AF1

3x125 PVC

0.6

0.4

Ref: C9

GL332 - AM1

2x125 PVC

0.6

0.5

Ref: D10

GL332 - AU1

2x180 PVC

0.6-0.8

0.4-0.6

Ref: E10

GL332 - AV1

0.6

0.6

2x150 PVC

0.5

0.6

Ref: F10

GL332 - EF1

4x125 PVC

NA

0.6

Ref: F5

GL332 - EJ1

6 x 125 PVC

0.9 - 1.2

0.6

Ref: F5

GL31443

GL31444

GL33221

GL33222

CENTENNIAL AVE

JOINT DETAIL REPORT

No....	Blk Pg	PSCer.....	Joint Location .....
Map: GL332			
27	316-51	0.840.61	15.2 W OF PACIFIC HWY WPL
28			
29	SN70-53	0.500.51	8.5 W W PACIFIC HWY PL
57	SN70-61		14.15m west of PACIFIC HWY WPL
58	SN70-51	/0.55	2 W W SUB BOY
86		0.300.46	
196	LN11-1084	0.600.80	8.8 NW OF CENTENNIAL AVE N PL
197	LN11-1084	0.600.80	5.1 NW OF CENTENNIAL AVE N PL

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the area.

Persons working near electricity networks must exercise care and will be held responsible for any damage caused.

You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.

Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in Safework NSW Code of Practice for Excavation and Safework NSW Guide for Work Near Underground Assets

as well as recommendations of Ausgrid's Network Standard NS156.

Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.

Workers must maintain safe approach distances and follow applicable Safework NSW Codes of Practice.

NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property Information (c) 2016, used under Creative Commons licence version 4.0

GL31443 | GL31444 | GL32333
GL33221 | GL33222 | GL34111
GL33223 | GL33224 | GL34113

ISG GRID

GMLA0

Distribution - 110051711

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

Page 1 of 1

24 May 2021

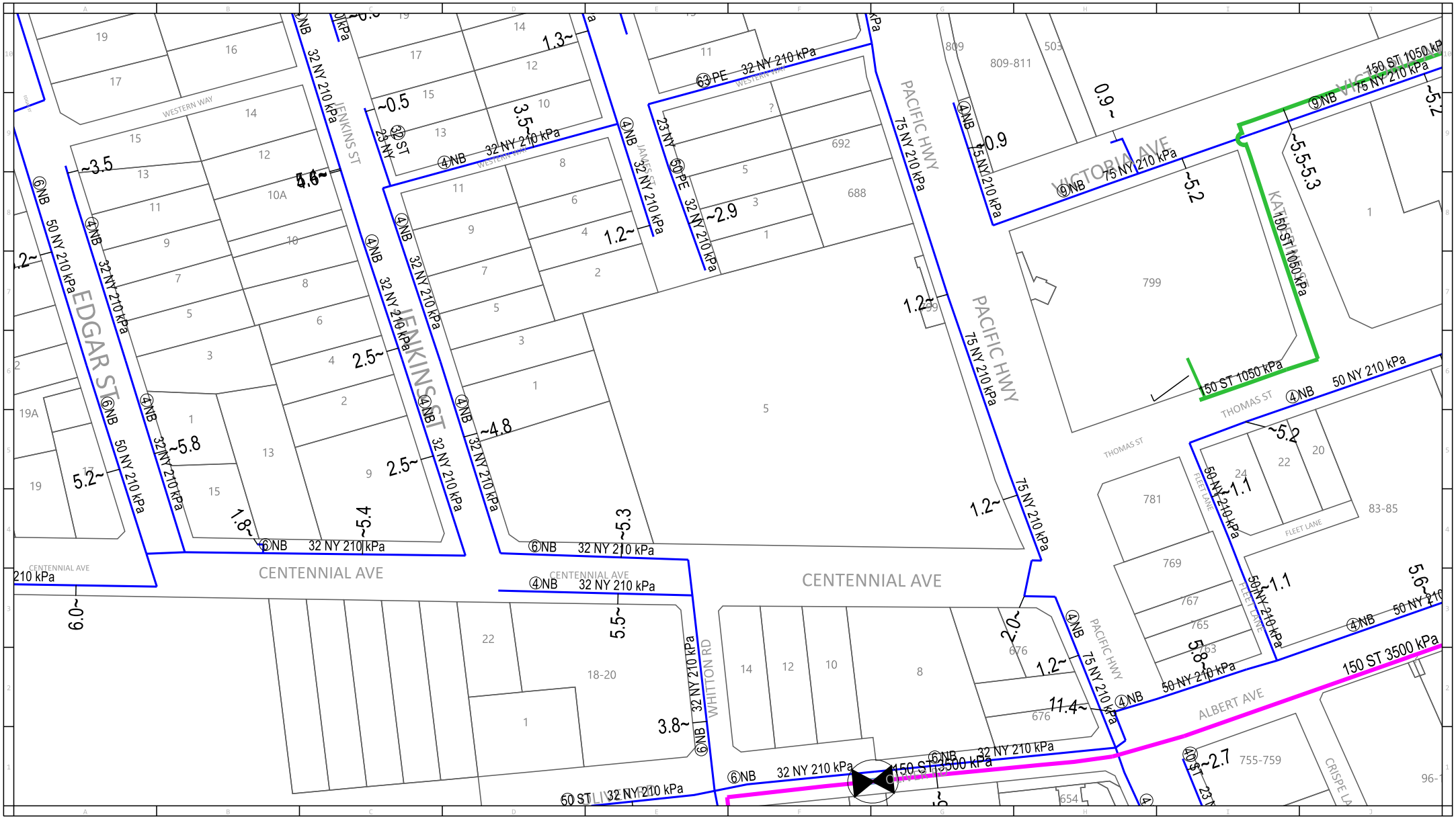
1:254

0 15 metres

Ausgrid

A0 MOCS_std_plot

DBYD Authority: Jemena Gas Networks (NSW) **DBYD Location:** 5 Centennial Avenue Chatswood NSW, 2067



For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.

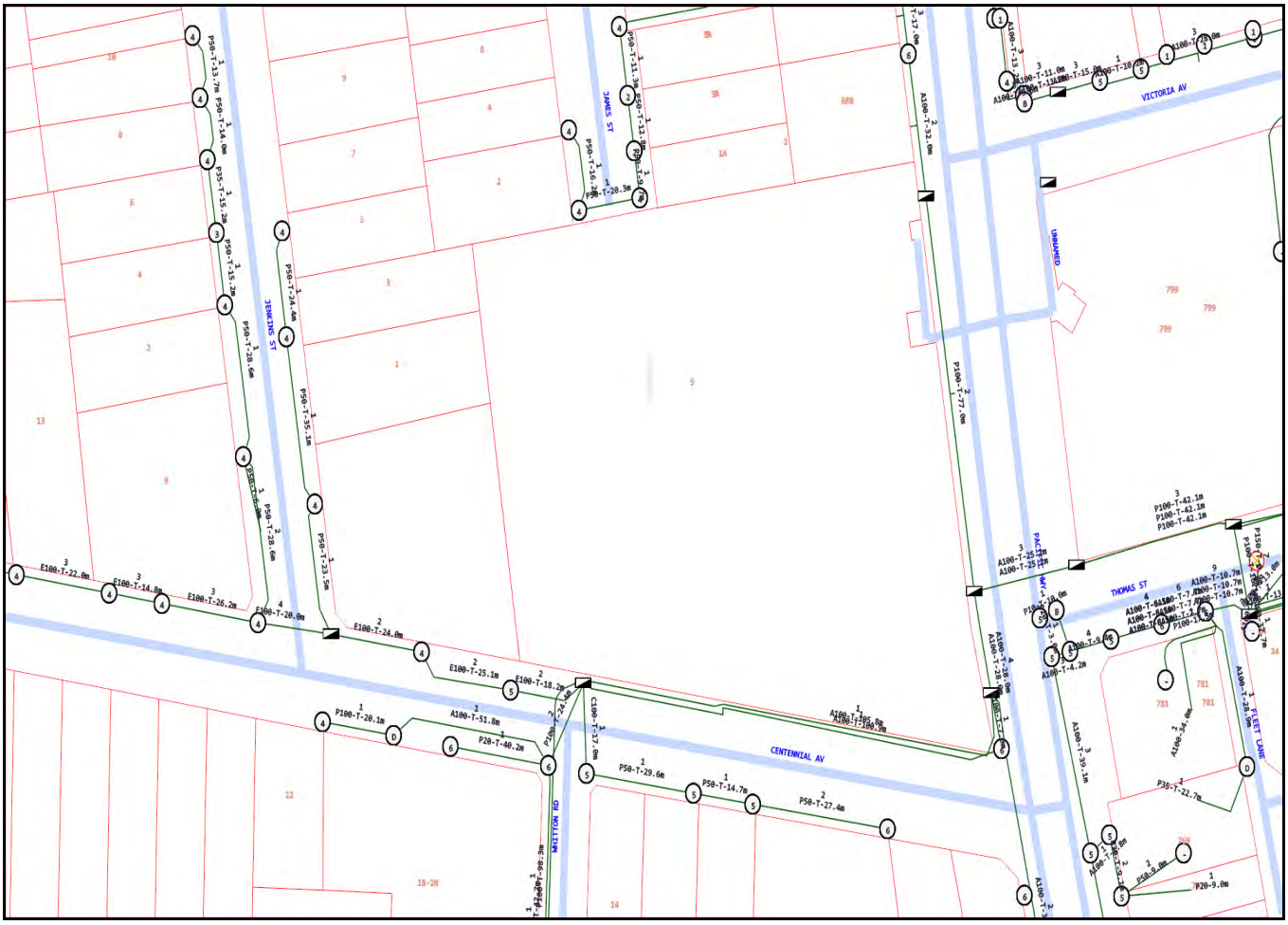
Issue Date: 24/05/2021
DBYD Seq No: 110051714
DBYD Job No: 21679001

Scale: 1:2000

0m 10m 20m 30m 40m 50m 60m 70m 80m

Jemena
ABN 87 003 004 322

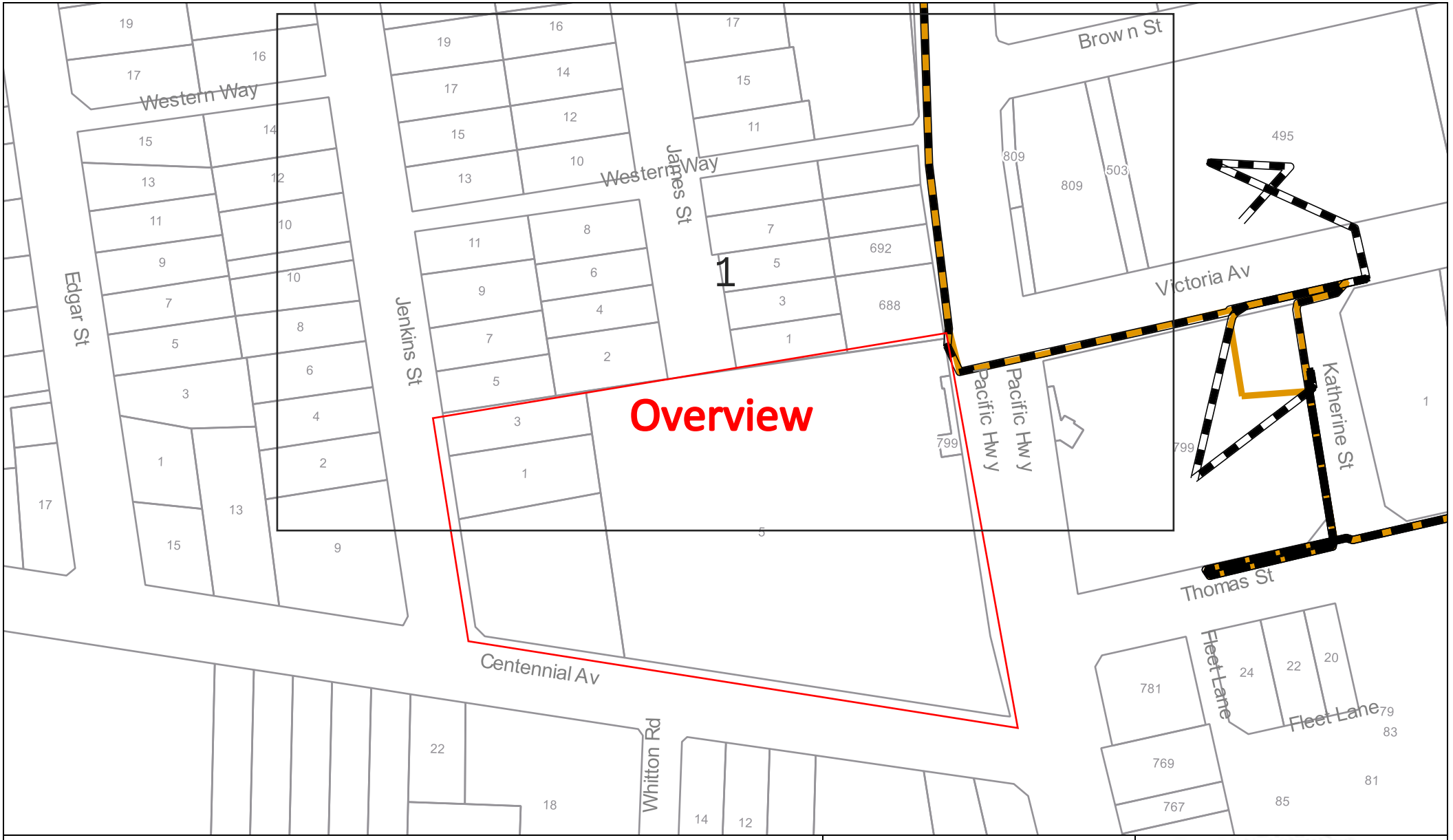
WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagramatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.



Emergency Contacts

You must immediately report any damage to the **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

Email dbyd@nbnco.com.au Web www.nbn.com.au



Sequence Number: 110051709

Date: 24/05/2021

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIALLY SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.

nextgen GROUP

LEGEND

Digsite	Assets
Area	Cable
	3rd Party Duct
	Marker Post

Sequence Number: 110051709

Date: 24/05/2021

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIALLY SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.

nextgen GROUP

LEGEND

Digsite	Assets
Area	Cable
	3rd Party Duct
	Marker Post

Sequence Number: 110051713

Date Generated: 24/05/2021

For all Optus DBYD plan enquiries –
Email: Fibre.Locations@optus.net.au
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208

Uecomm

Cable Uecomm Underground

Scale: #INSERT MAP SCALE#

Printed On: 24/05/2021

Sequence Number: 110051713

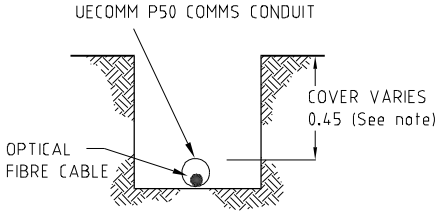
Location: 5 Centennial Avenue

Job Location: Line, Point, Area

Undergound Asset: Uecomm

LEGEND

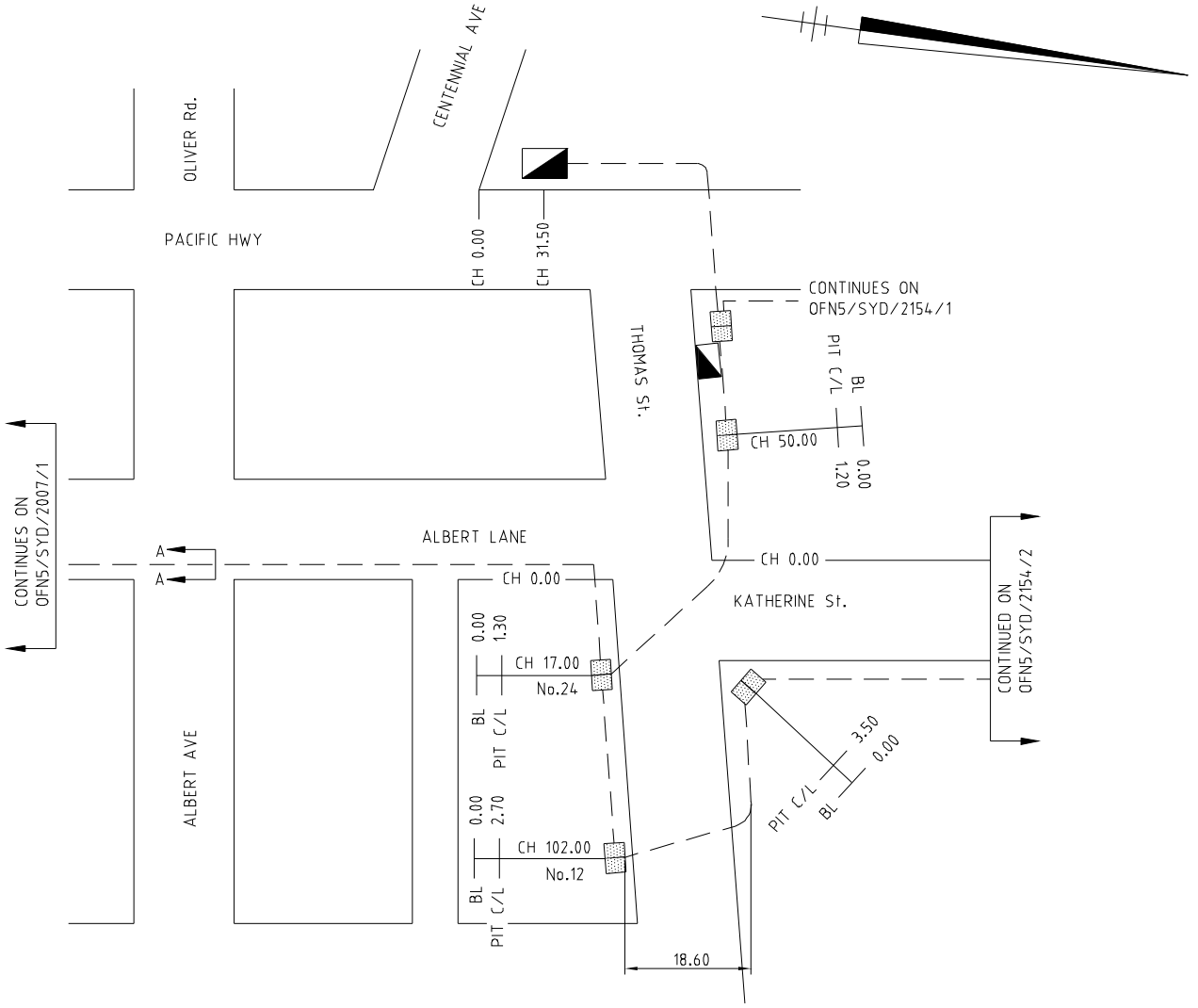
- ○ - ELECTRICITY POLE
- — — — - FIBRE OPTIC CABLE
- ▭ - UE P5 PIT
- ▭ - UE P6 PIT
- B/L - BUILDING LINE
- BOK - BACK OF KERB
- CO - COVER
- \——\ - FENCE LINE
- ◪ - TELSTRA MANHOLE
- (T) - TELSTRA PIT



SECTION A-A

NOTE

Conduit depths quoted are approximate only and may change due to unforseen circumstances. Excavate by hand until conduit depth is determined.



DRAWING NOT TO SCALE

REVISIONS				
23.04.01	B	PIT AT THOMAS & PACIFIC ADDED WITH NEW CABLE	GRQ	
20.02.01	A	TITLE REVISED	GRQ	

COMM
ACN 079 083 195
SYDNEY
Level 3 123 Pitt St
SYDNEY

DRAWN S.FENNEY 27.07.00

APPROVED R.BROWNE 1.9.00

UBD REF. 195 H10

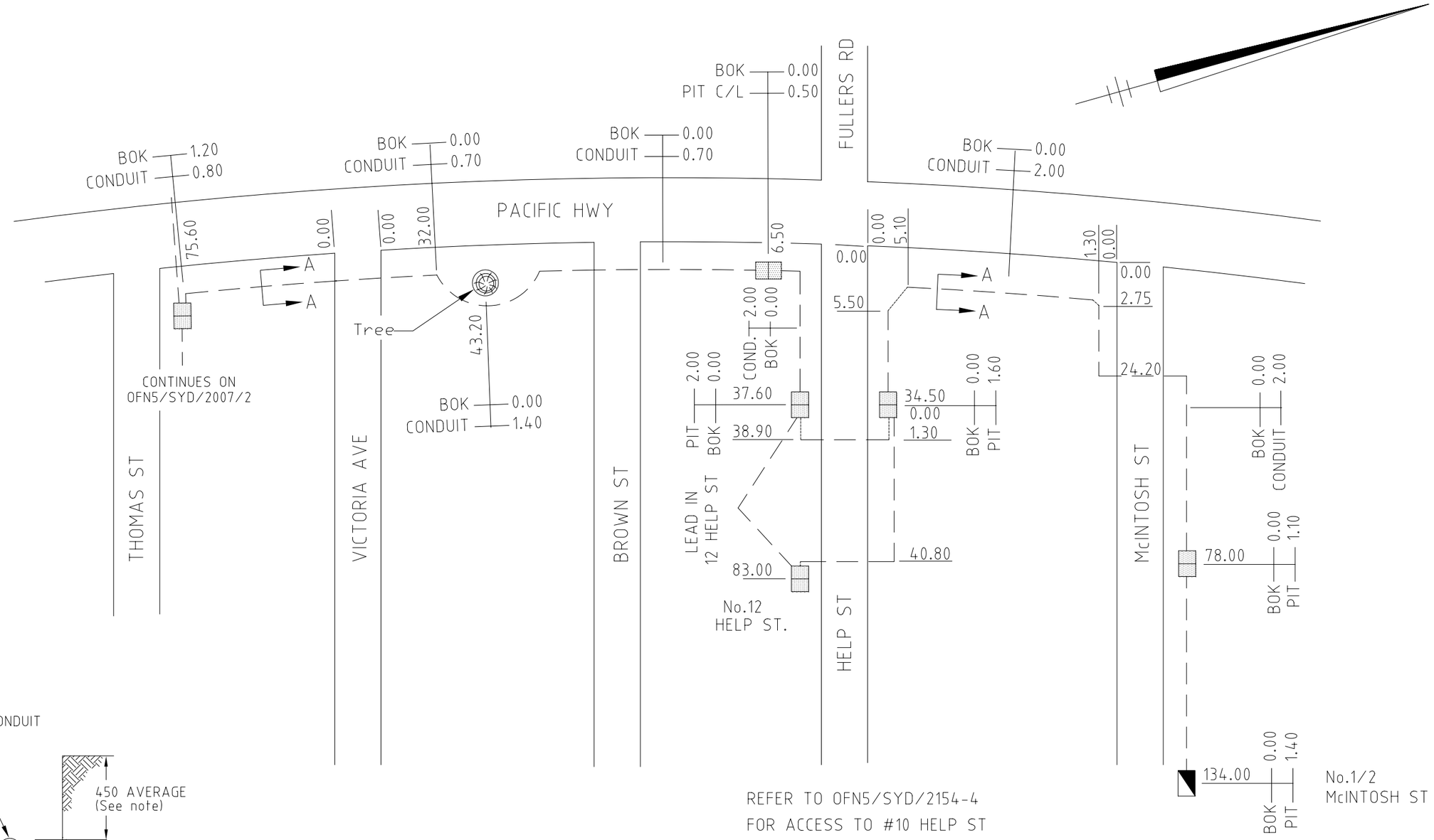
DRG No. OFN5/SYD/2007/2 B

UNDERGROUND OPTICAL FIBRE CABLE RUN
ALBERT AVE TO PACIFIC HWY & KATHERINE ST
VIA ALBERT LANE & THOMAS ST
CHATSWOOD - 2067

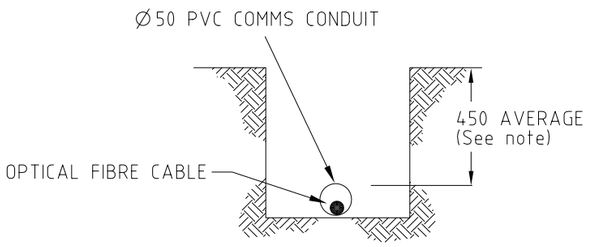
A3

LEGEND

- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- CABLE CONDUIT
- UE P5 PIT
- UE P6 PIT
- B/L - BUILDING LINE
- BOK - BACK OF KERB
- FENCE LINE
- TELSTRA MANHOLE
- (6) - TELSTRA PIT



REFER TO OFN5/SYD/2154-4
FOR ACCESS TO #10 HELP ST



SECTION A-A

Note:
Conduit depths quoted are approximate only and may change due to unforseen circumstances.
Excavate by hand until conduit depth is determined.

DRAWING NOT TO SCALE

REVISIONS			
21.02.07	B	REFERENCE TO 2154-4	
23.04.01	A	PITS ADDED	GRQ

Uecomm™
MAKING THE CONNECTION
ACN 079 083 195
SYDNEY
Suite 902, 20 Berry St
North Sydney - 2060

DRAWN G.R.Quin 27.02.01
APPROVED S.Henry 27.02.01
UBD REF. 23-E10,D9,D8,E8,E7

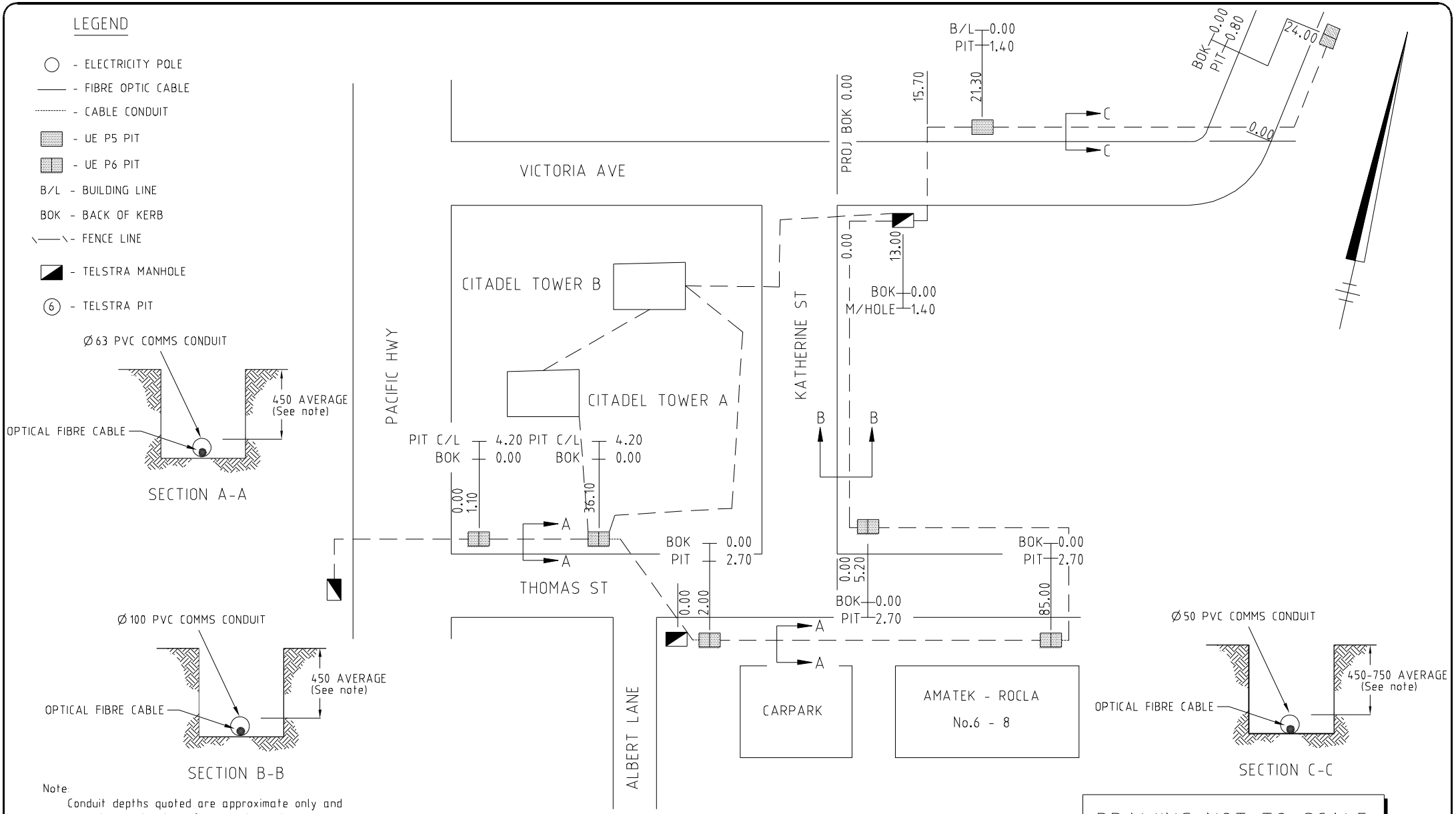
DRG No. OFN5/SYD/2154-1 B

U/G FIBRE OPTICAL CABLE RUN
THOMAS ST TO McINTOSH ST VIA
PACIFIC HIGHWAY & HELP ST
CHATSWOOD NSW 2067

A1

LEGEND

- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- CABLE CONDUIT
- UE P5 PIT
- UE P6 PIT
- B/L - BUILDING LINE
- BOK - BACK OF KERB
- FENCE LINE
- TELSTRA MANHOLE
- (6) - TELSTRA PIT



SECTION A-A

SECTION B-B

SECTION C-C

Note:
Conduit depths quoted are approximate only and may change due to unforseen circumstances.
Excavate by hand until conduit depth is determined.

DRAWING NOT TO SCALE

REVISIONS

Uecomm™ MAKING THE CONNECTION
ACN 079 083 195

SYDNEY
Suite 902, 20 Berry St
North Sydney - 2060

DRAWN G.R.QUIN 27.02.01

APPROVED S.HENRY 27.02.01

UBD REF. 23-E10, F9

DRG No. OFN5/SYD/2154/2

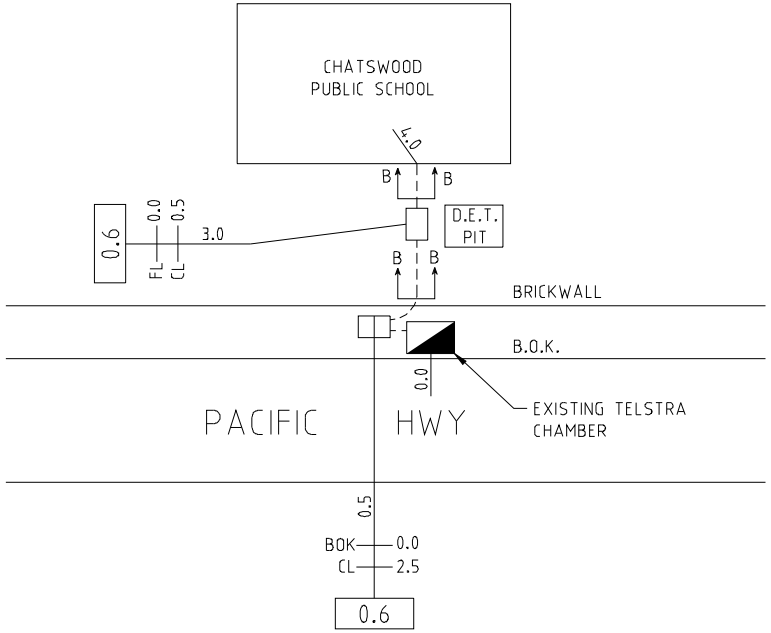
UNDERGROUND FIBRE OPTICAL CABLES
PACIFIC HWY TO VICTORIA AVE VIA
THOMAS ST & KATHERINE ST
CHATSWOOD - 2067

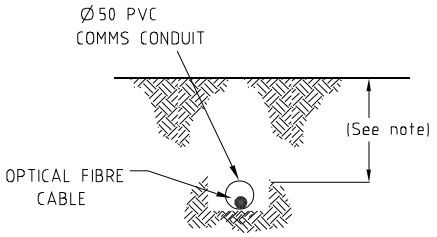
A1

DRAWING NOT TO SCALE

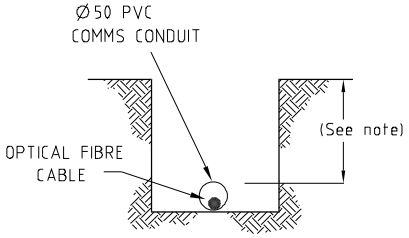
LEGEND

- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- CABLE CONDUIT (TRENCHING)
- CABLE CONDUIT (BORE TUNNELLING)
- UE P2 PIT
- UE P5 PIT
- UE P6 PIT
- UE P8 PIT
- UE P9 PIT
- BL - BUILDING LINE
- BOK - BACK OF KERB
- CL - CENTRELINE OF CONDUIT
- TP - TURNING POINT OF CONDUIT
- FENCE LINE, FL
- TELSTRA MANHOLE
- TELSTRA PIT
- OPTICAL FIBRE JOINT
- JOINT LOOP (m) - POLE / UNDERGROUND
- CABLE HEAD POLE
- 0.6m - CABLE DEPTH





TYPICAL SECTION
BORE



SECTION B-B
TRENCH

ABB Australia Pty Ltd.
109 Bannister Rd
Canning vale WA 6155
QUALITY ENDORSED COMPANY
ISO9001 REGISTRATION No.049
STANDARDS AUSTRALIA

Note:
1. Conduit depths quoted are approximate only and may change due to unforseen circumstances.
2. In all instances it is recommended that the position of conduits & cables should be proved on site by hand, prior to commencement of works.
3. Loop in all pits unless otherwise stated.

REVISION	DATE	REV.	REVISION DESCRIPTION	CHECKED	APP'D.
	26.07.03	0	AS BUILT	MW	DC

CONTACT OFFICER	TREVOR SMITH PH: (02) 8226 3244
PROJECT NUMBER	UEC-DE&TS-470
PLAN No.	-
UBD REF	195-G10

Uecomm
MAKING THE CONNECTION
ACN 079 083 195

UECOMM
MEL/SYD/QLD

DRAWN JMCK	26.07.03
DESIGN CHECKED	M.W. 26.07.03
APPROVED	26.07.03 DC

DRG No. OFN5-SYD-2391

EXTERNAL ROUTE (1 of 1)
CHATSWOOD PUBLIC SCHOOL (7409)
PACIFIC HIGHWAY,
CHATSWOOD WEST 2067

A3

Guide to reading Sydney Water DBYD Plans

February 2015

Asset Information

Legend

Sewer

- Sewer Main (with flow arrow & size type text) — 225 PVC
- Disused Main
- Rising Main
- Maintenance Hole (with upstream depth to invert) — 1.7
- Sub-surface chamber
- Maintenance Hole with Overflow chamber
- Ventshalft EDUCT — VSE
- Ventshaft INDUCT — VS
- Property Connection Point (with chainage to downstream MH) — 10.5
- Concrete Encased Section — Concrete Encased
- Terminal Maintenance Shaft — TMS
- Maintenance Shaft — MS
- Rodding Point — RP
- Lamphole
- Vertical — VERT
- Pumping Station — SP0882
- Sewer Rehabilitation

Pressure Sewer

- Pressure Sewer Main
- Pump Unit (Alarm, Electrical Cable, Pump Unit) — A
- Property Valve Boundary Assembly
- Stop Valve
- Reducer / Taper
- Flushing Point — FP

Vacuum Sewer

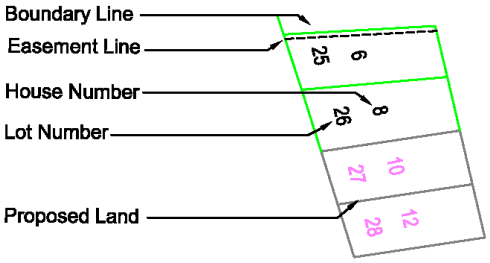
- Pressure Sewer Main
- Division Valve
- Vacuum Chamber
- Clean Out Point

Stormwater

- Stormwater Pipe
- Stormwater Channel
- Stormwater Gully
- Stormwater Maintenance Hole

Property Details

- Boundary Line
- Easement Line
- House Number
- Lot Number
- Proposed Land



- Sydney Water Heritage Site (please call **132 092** and ask for the **Heritage Unit**)

Water

- WaterMain - Potable (with size type text) — 200 PVC
- Disconnected Main - Potable
- Proposed Main - Potable
- Water Main - Recycled
- Special Supply Conditions - Potable
- Special Supply Conditions - Recycled
- Restrained Joints - Potable
- Restrained Joints - Recycled
- Hydrant
- Maintenance Hole
- Stop Valve
- Stop Vale with By-pass
- Stop Valve with Tapers
- Closed Stop Valve
- Air Valve
- Valve
- Scour
- Reducer / Taper
- Vertical Bends
- Reservoir
- Recycled Water is shown as per Potable above. Colour as indicated

Private Mains

- Potable Water Main
- Recycled Water Main
- Sewer Main
- Symbols for Private Mains shown grey

Asset Information

Pipe Types

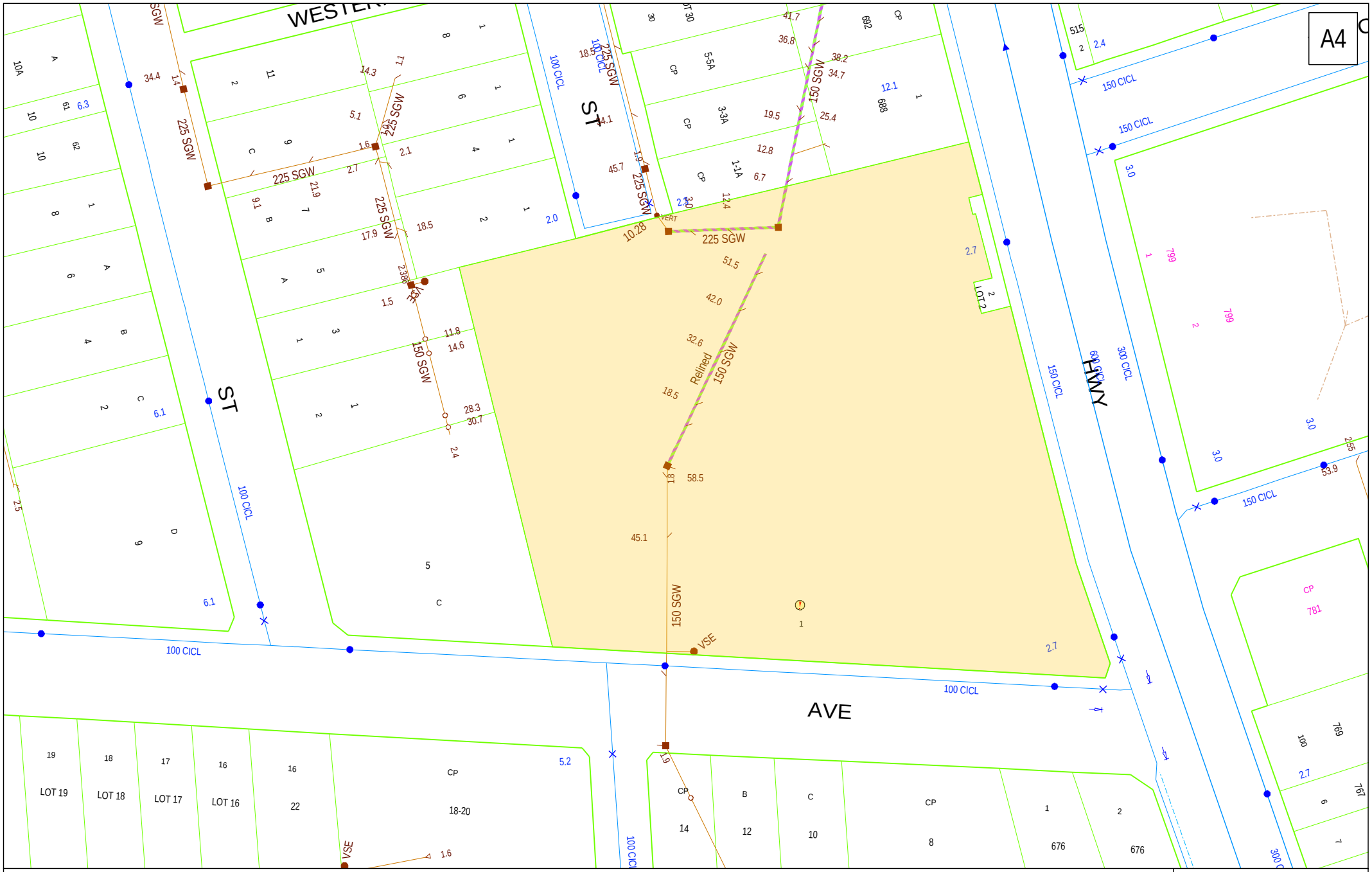
ABS	Acrylonitrile Butadiene Styrene	**AC**	Asbestos Cement
BRICK	Brick	**CI**	Cast Iron
CICL	Cast Iron Cement Lined	**CONC**	Concrete
COPPER	Copper	**DI**	Ductile Iron
DICL	Ductile Iron Cement (mortar) Lined	**DIPL**	Ductile Iron Polymeric Lined
EW	Earthenware	**FIBG**	Fibreglass
FL BAR	Forged Locking Bar	**GI**	Galvanised Iron
GRP	Glass Reinforced Plastics	**HDPE**	High Density Polyethylene
MS	Mild Steel	**MSCL**	Mild Steel Cement Lined
PE	Polyethylene	**PC**	Polymer Concrete
PP	Polypropylene	**PVC**	Polyvinylchloride
PVC - M	Polyvinylchloride, Modified	**PVC - O**	Polyvinylchloride, Oriented
PVC - U	Polyvinylchloride, Unplasticised	**RC**	Reinforced Concrete
RC-PL	Reinforced Concrete Plastics Lined	**S**	Steel
SCL	Steel Cement (mortar) Lined	**SCL IBL**	Steel Cement Lined Internal Bitumen Lined
SGW	Salt Glazed Ware	**SPL**	Steel Polymeric Lined
SS	Stainless Steel	**STONE**	Stone
VC	Vitrified Clay	**WI**	Wrought Iron
WS	Woodstave		

Further Information

Please consult the Dial Before You Dig enquiries page on the Sydney Water website

For general enquiries please call the Customer Contact Centre on **132 092**

In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)



DBYD Address:
5 Centennial Avenue
Chatswood NSW
2067

DBYD Job No: 21679001

DBYD Sequence No: 110051715

No warranty is given that the information shown is complete or accurate.

SYDNEY WATER CORPORATION

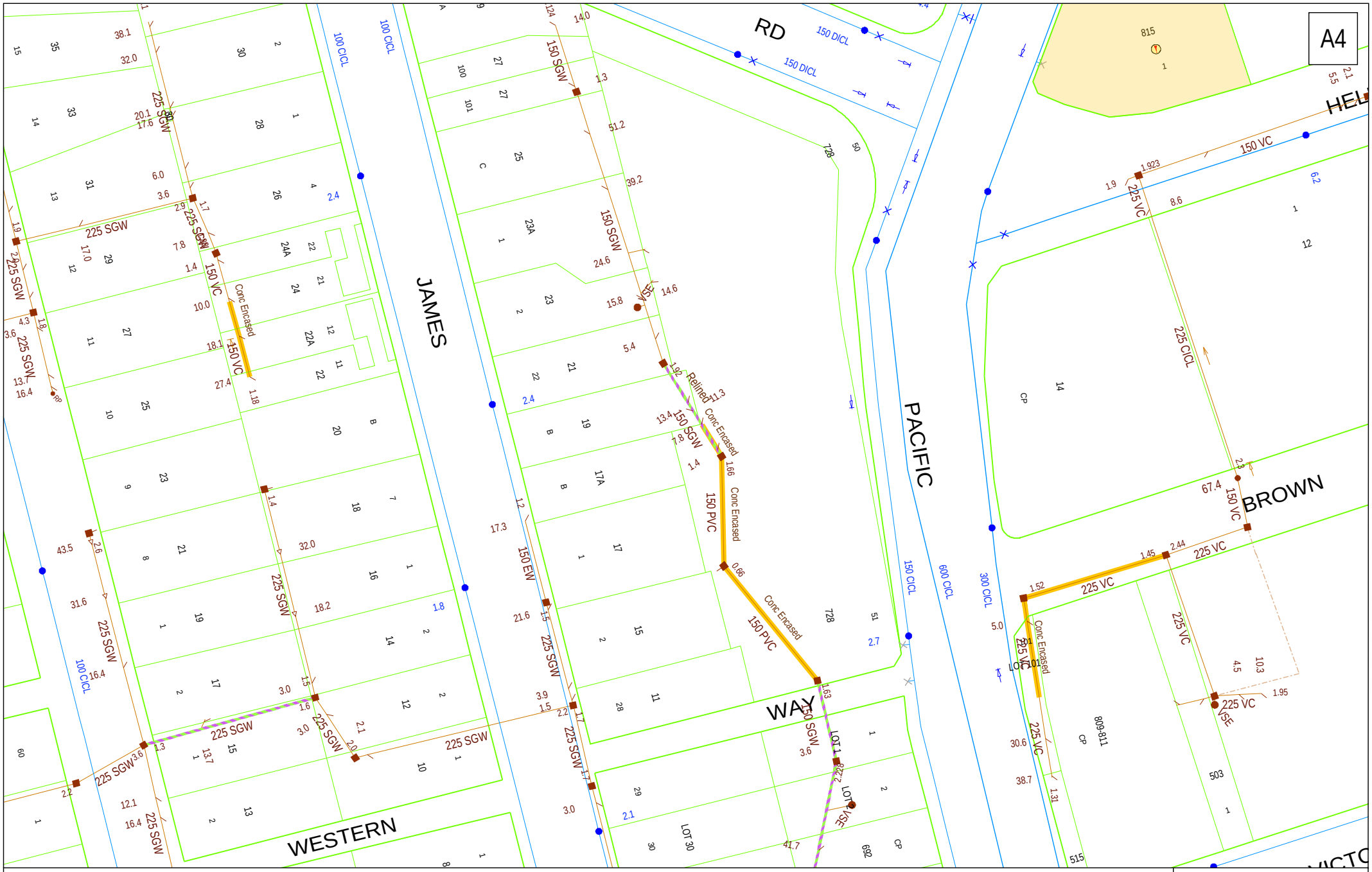
Scale: 1:1000

Date of Production: 24/05/2021

Plan 1 of 2

N

0m 5m 10m 15m 20m



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SYDNEY WATER CORPORATION

Scale: 1:1000

Date of Production: 24/05/2021

Plan 2 of 2

N

0m 5m 10m 15m 20m

LEGEND

IT'S HOW WE CONNECT

For more info contact a Certified Location Organisation or Telstra Plan Services 1800 653 935

Exchange
(Major Cable Present)

Footway Access Chamber
(can vary from 1-lid to 12-lid)

or

Pillar / Cabinet
(above ground / free standing)

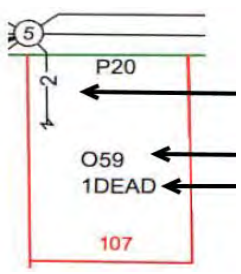
Above ground complex equipment housing (eg RIM)
Please Note: This equipment is powered by 240V Electricity

OC — Other Carrier

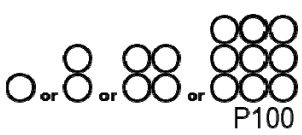
Dist — Distribution cables in Main Cable ducts

MC — Main Cable ducts on a Distribution plan

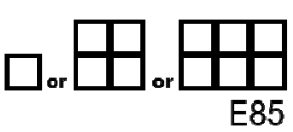
Blocked or damaged duct.



2 pair lead-in to property from pit in street
1 pair working (pair ID 059)
1 pair dead (i.e. spare, not connected)



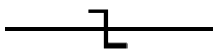
Single to multiple round conduit
Configurations 1,2,4,9 respectively
(attached text denotes conduit typr and size)



Multiple square conduit
Configurations 2, 4, 6 respectively
(attached text denotes conduit typr and size)

Cable Jointing Pit
(number indicating Pit Type)

Elevated Joint
(above ground joint on buried cable)

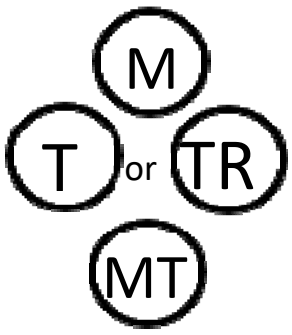


Telstra Plant in shared Utility trench

Aerial Cable

Aerial Cable
(attached to joint Use Pole eg. Power)

Direct Buried Cable



Marker Post Installed

Buried Transponder

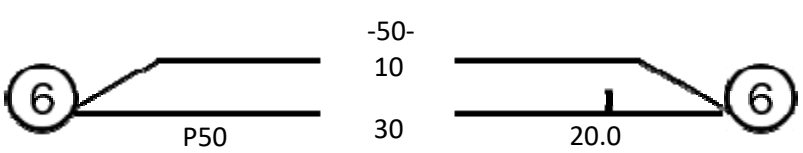
Marker Post, Transponder

Optical Fibre cable direct buried

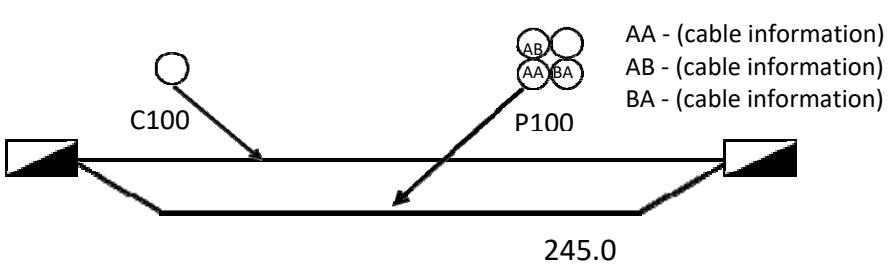
Some examples of conduit type and size:

A - Asbestos cement, P - PVC / Plastic, C - Concrete,
GI - Galanised iron, E - Earthenware
Conduit sizes *nominally* range from 20mm to 100mm
P50 50mm PVC conduit
P100 100mm PVC conduit
A100 100mm asbestos cement conduit

Some Examples of how to read Telstra Plans



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits. 20.0m apart, with a direct buried 30-pair cable along the same route



Two separate conduit runs between two footway access chambers (manholes) 245m apart A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along

WARNING: Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK. A plant location service is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works. The exact position of Telstra assets can only be validated by physically exposing it. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Cable Plan

Telstra	For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	
Generated On 24/05/2021 14:48:08	

Sequence Number: 110051712

CAUTION: Critical Network Route in plot area.
DO NOT PROCEED with any excavation prior to seeking advice from Telstra Plan Services on : 1800 653 935

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

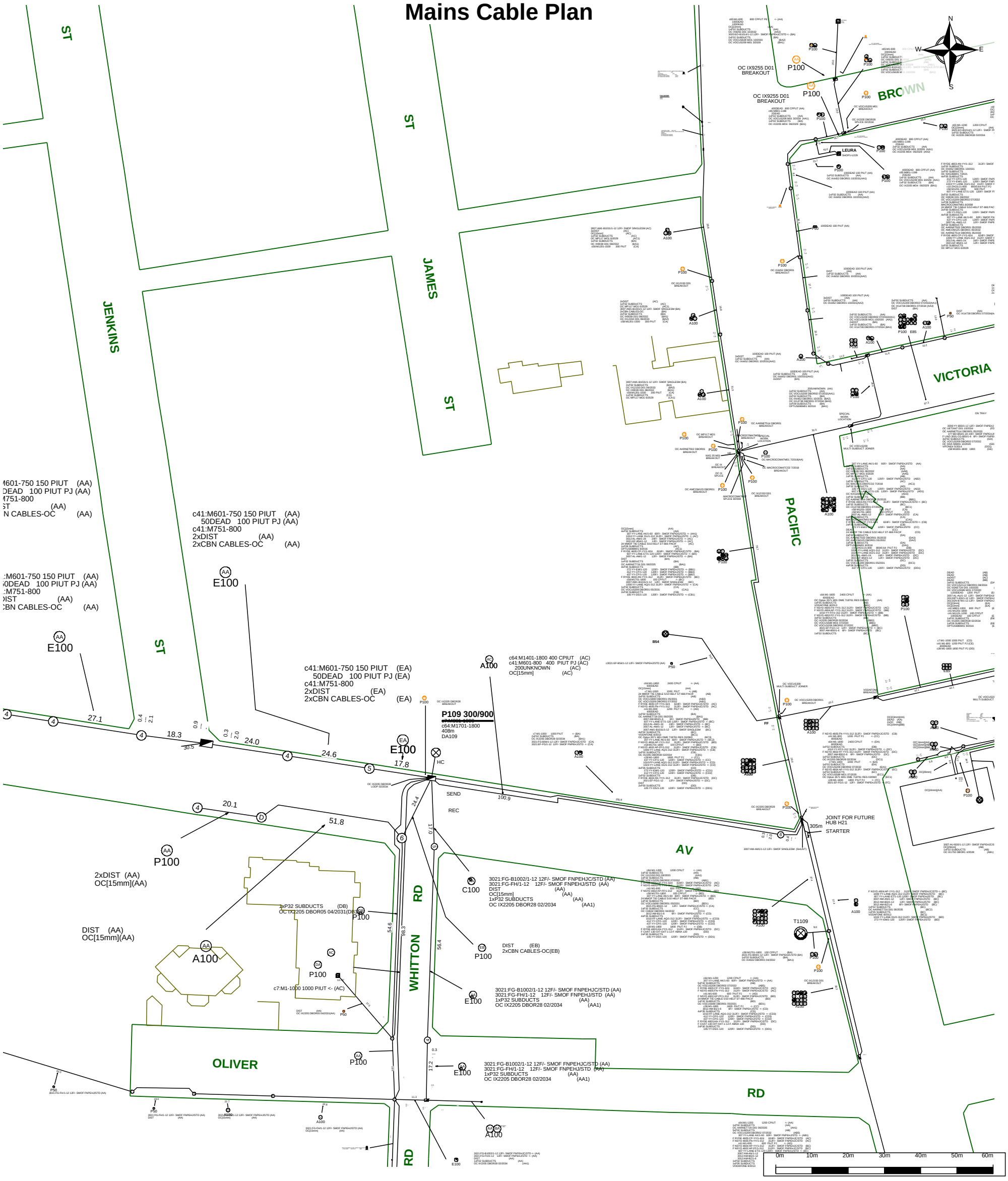
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths 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.

It is your responsibility to locate Telstra's underground plant by careful hand pot-holing prior to any excavation in the vicinity and to exercise due care during that excavation.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

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



For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)	Sequence Number: 110051712
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	CAUTION: Critical Network Route in plot area. DO NOT PROCEED with any excavation prior to seeking advice from Telstra Plan Services on : 1800 653 935
Generated On 24/05/2021 14:48:14	

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.

TPG Corporation Limited
ABN 46 093 058 069
PO Box 1844 Macquarie Centre
North Ryde NSW 2113
Phone: **1800 786 306** (24hrs)

Date: 24/05/2021

Enquirer Name: Mr Ted Zhang
Enquirer Address: 362 park road
Email: ted@acedemolition.com.au
Phone: 0451460330

Dear Mr Ted Zhang

The following is our response on behalf of each of the TPG carriers (listed below) to your Dial Before You Dig enquiry – Sequence 110051710 .
It is provided to you on a confidential basis under the following conditions and must be shredded or securely disposed of after use.

Assets Affected:

Carriers (each a "TPG carrier") and assets affected:

AAPT/PowerTel, PIPE Networks

Location: 5 Centennial Avenue

According to our records, the underground assets in the vicinity of the location stated in your enquiry are **AFFECTED**. Please read the below information and disclaimers in addition to the any attached plans provided prior to any construction activities.

IMPORTANT INFORMATION

- The information provided is valid for 30 days from the date of this response. If your work site area changes or your construction activity is beyond 30 days please contact Dial Before You Dig on 1100 or www.1100.com.au to re-submit a new enquiry.

- Due to the nature of underground assets and the age of some assets and records, our plans are indicative of the general location only and may not show all assets in the location. You should not solely rely on these plans when undertaking construction works. It is also inaccurate to assume depth or that underground network conduit and cables follow straight lines, and careful on-site investigations are essential to locate an asset's exact position prior to excavation. It is your responsibility to locate and confirm the exact location of our infrastructure using non-destructive techniques. We make no warranty or guarantee that our plans are complete, current or error free, and to the maximum extent permitted by law we exclude all liability to you, your employees, agents and contractors for any loss, damage or claim arising out of or in connection with using our plans.

- Please note that some of our conduits carry electrical cables and gas pipes. Please exercise extreme care when working within the vicinity of these conduit and take into account the minimum clearance distances under Duty Of Care below.

- You (and your employee and contractors) must not open, move, interfere, alter or relocate any of our assets without our prior approval.

- **Note** It is a criminal offence under the *Criminal Code Act 1995 (Cth)* to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by us as a result of such unauthorised works may be claimed against you.

DAMAGE

- You must report immediately any damage to our network on **1800 786 306** (24hrs). We will hold you liable and seek compensation for any loss or damage to our network, our property and our customers that is caused by or arises out of your activities.

DUTY OF CARE

You have a duty of care to carefully locate, validate and protect our assets when carrying out works near our infrastructure. For construction activities that may impact on or interfere with our network, you will need to call us on **1800 786 306** to discuss a suitable engineering solution, lead time and cost involved. The below precautions must be taken when working in the vicinity of our network:

- Contact us on **1800 786 306** to discuss and obtain relevant information and plans on our infrastructure in a particular location if the information provided in this response is insufficient.

- Physically locate and mark on-site our network infrastructure using non-destructive techniques i.e. pot holing or hand digging every 5 metres prior to commencing any construction activities. Assets located must be marked to AS5488 standard. **NO CONSTRUCTION WORK IS ALLOWED UNTIL THIS STEP IS COMPLETED**. You must use an approved telecommunications accredited locator, or we can provide a locator for you at your expense. If we provide you with a locator, and this locator attended the site and is proven to be grossly negligent in physically locating and marking our infrastructure, then to the extent any TPG carrier is liable for this locator's negligence, acts and omissions, the total liability aggregated for all TPG carriers is limited, at our option, to attend the site and re-mark the infrastructure or to pay for a third party to re-mark the infrastructure.

- If you require us to locate or monitor our infrastructure, please allow five business days' notice for us to respond.

- Ensure all information, including our network requirements and any associated plans provided by us are kept confidential and remain on-site throughout your construction works.

- Use suitably qualified and supervised professionals, particularly if you are working near assets that contain electricity cables or gas pipes.

- Ensure the below minimum clearance distances between the construction activities and the actual location of our assets are met. If you need clearance distances for our above ground assets, or if the below distances cannot be met, call **1800 786 306** to discuss.

  Minimum assets clearance distances.

  - 300mm when laying asset inline, horizontal or vertical.
  - 1000mm when operating vibrating equipment. Eg: vibrating plates. No vibrating equipment on top of asset.
  - 1000mm when operating mechanical excavators or jackhammers/pneumatic breakers.
  - 2000mm when performing directional bore in-line, horizontal and vertical.
  - No heavy vehicle over 3 tonnes to be driven over asset with less than 600mm of cover.

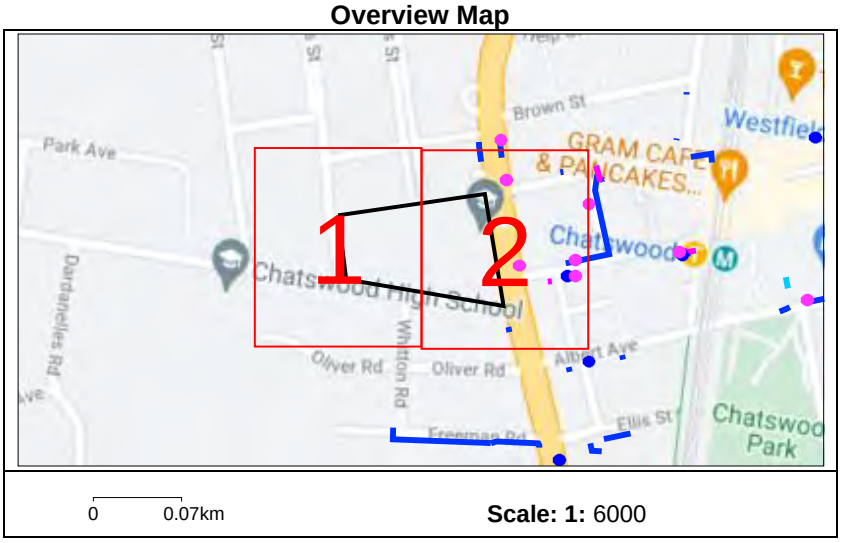
- Reinstate exposed TPG network infrastructure back to original state.

PRIVACY & CONFIDENTIALITY

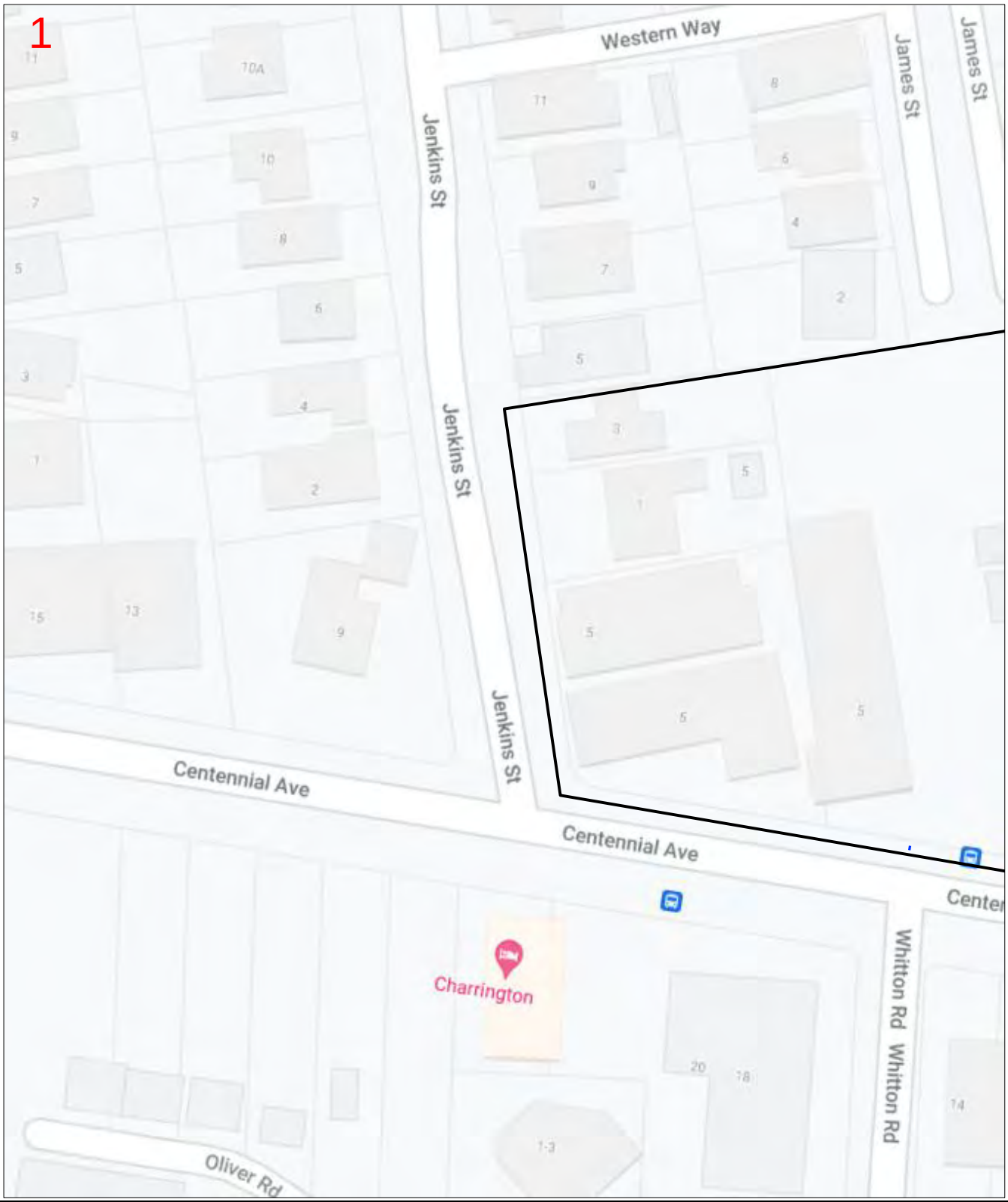
- Privacy Notice – Your information has been provided to us by Dial Before You Dig to respond to your Dial Before You Dig enquiry. We will keep your personal information in accordance with TPG's privacy policy, see www.tpg.com.au/about/privacy.

- Confidentiality – The information we have provided to you is confidential and is to be used only for planning and designing purposes in connection with your Dial Before You Dig enquiry. Please dispose of the information by shredding or other secure disposal method after use. We retain all intellectual property rights (including copyrights) in all our documents and plans.

Overview Map



TPG Corporation Limited



Enquiry Number: 110051710

Map Sheet: 1

Scale: 1: 750

N

0 0.008km

LEGEND

DBYD Work Area

AAPT/PowerTel Pit	TransACT Pit
AAPT/PowerTel Duct	TransACT Duct
DDA Pit	SOUL Pattinson Telecoms Pit
DDA Duct	SOUL Pattinson Telecoms Duct
Agile/Adam Pit	PIPE Networks Pit
Agile/Adam Duct	PIPE Networks Duct

Enquiry Number: 110051710

Map Sheet: 2

Scale: 1: 750

N

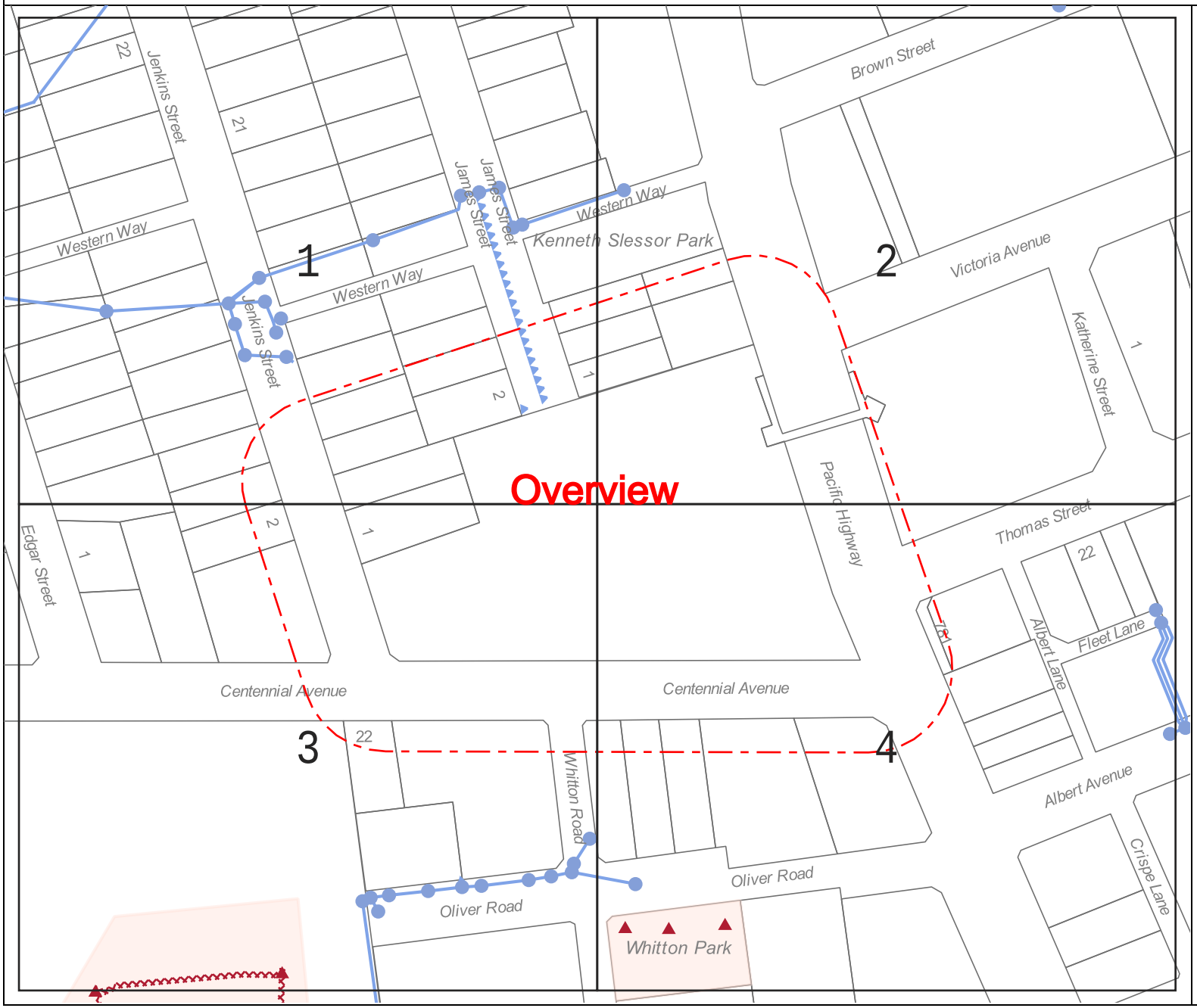
0 0.008km

LEGEND

DBYD Work Area

AAPT/PowerTel Pit	TransACT Pit
AAPT/PowerTel Duct	TransACT Duct
DDA Pit	SOUL Pattinson Telecoms Pit
DDA Duct	SOUL Pattinson Telecoms Duct
Agile/Adam Pit	PIPE Networks Pit
Agile/Adam Duct	PIPE Networks Duct

Name: Mr Ted Zhang
Email: ted@acedemolition.com.au
Sequence no.: 110051706
Job no.: 21679001
Location: 5 Centennial Avenue, Chatswood, NSW 2067



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All electrical apparatus shall be regarded as live until proven to have been de-energised. Contact with live electrical apparatus will cause severe injury or death.

Excavation work must be in accordance with the Work Health and Safety Regulation 2017 and the SafeWork NSW Excavation Work Code of Practice which can be obtained from SafeWork NSW.

Any works within Council's public road reserve or Council property require Council's consent. Council must be contacted on (02) 9777 1000 prior to the commencement of any work to be carried out in Council property or within the vicinity of Council's electrical assets.

- Council Stormwater pipe
- Stormwater pipe shared with or owned by another party
- Council Stormwater node
- Stormwater node shared with or owned by another party
- Area containing electrical assets
- Council underground electrical cables
- Council miscellaneous electrical assets
- Council communication cables
- Council communication pits

N

Map not to scale

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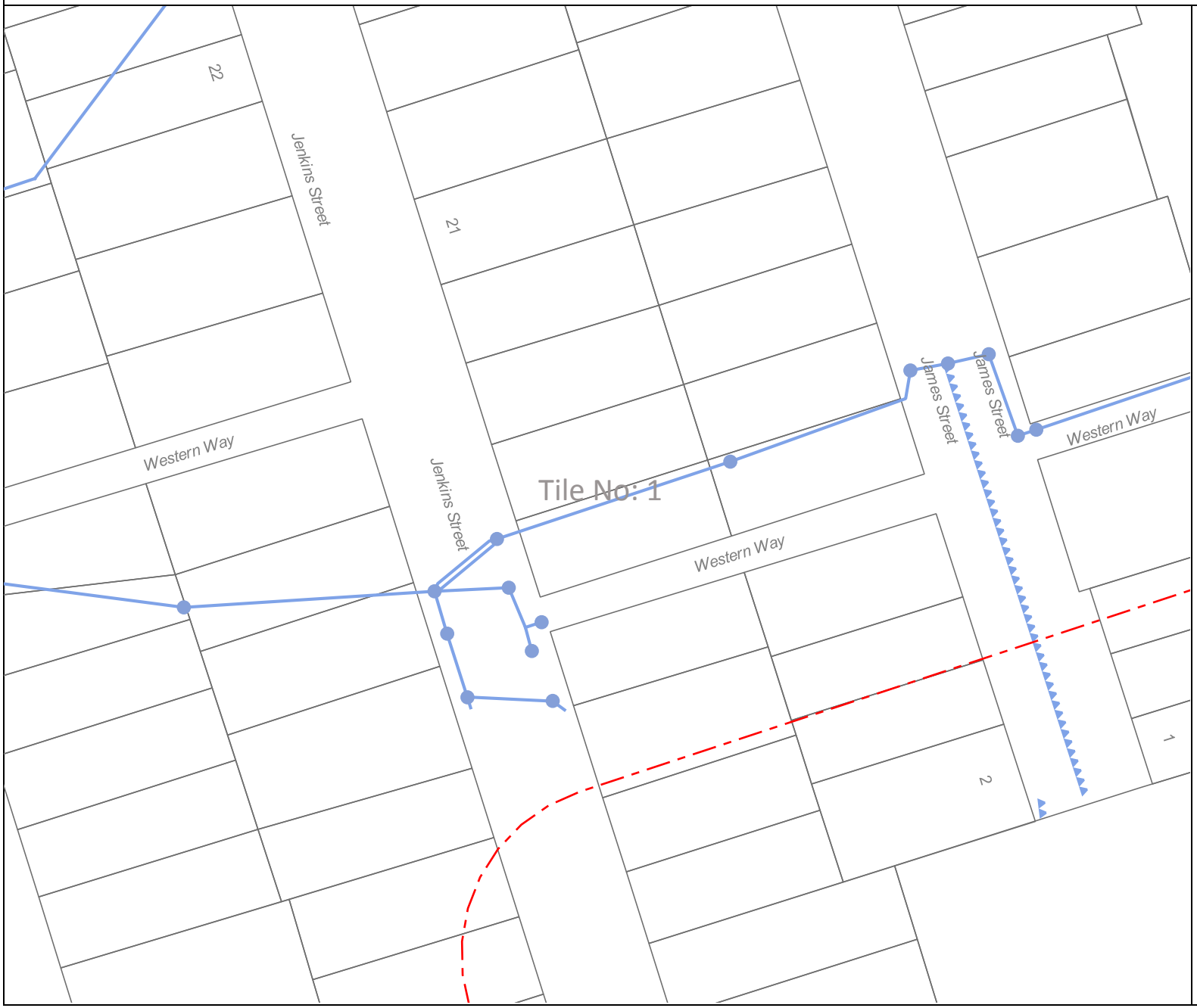

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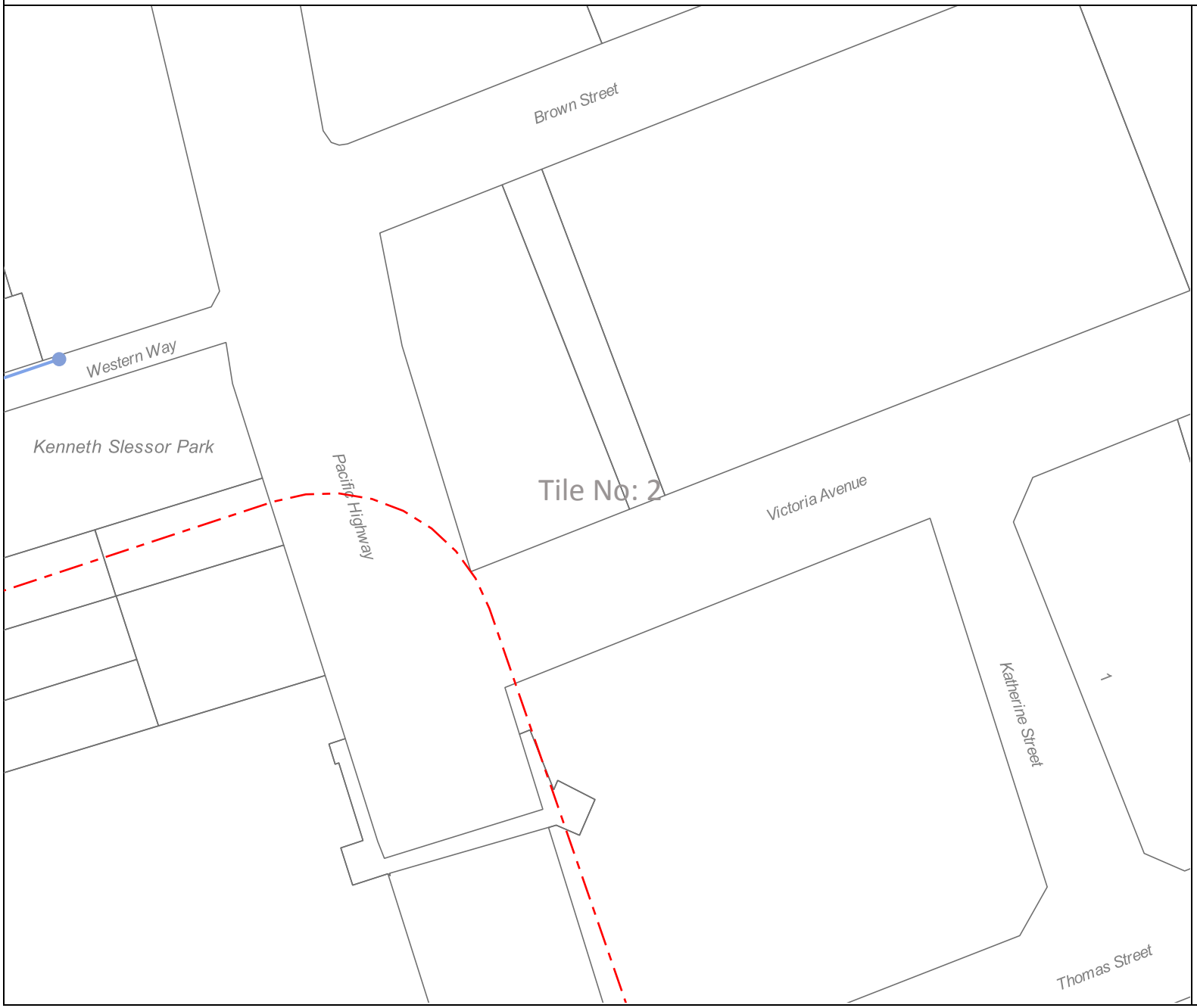

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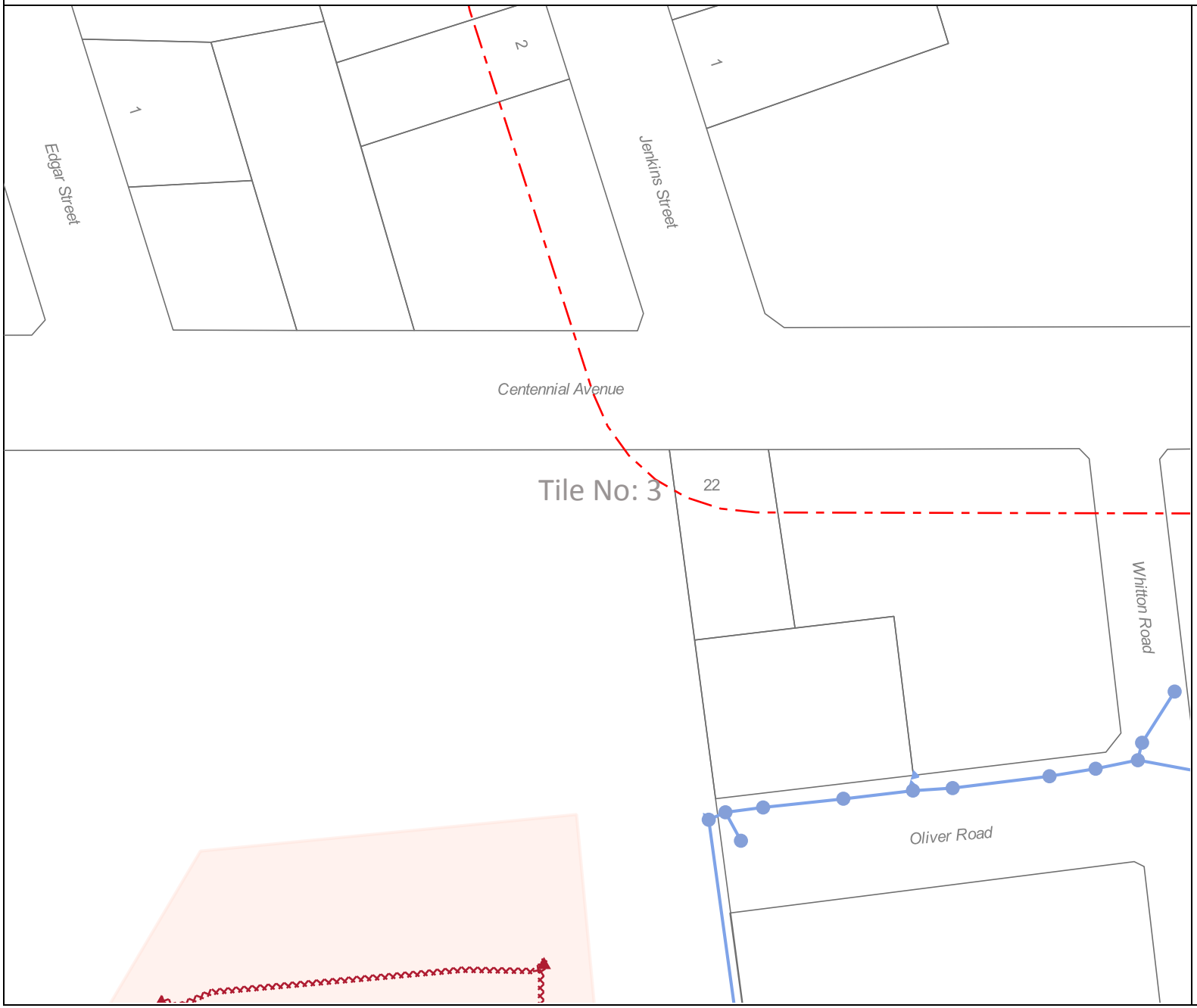

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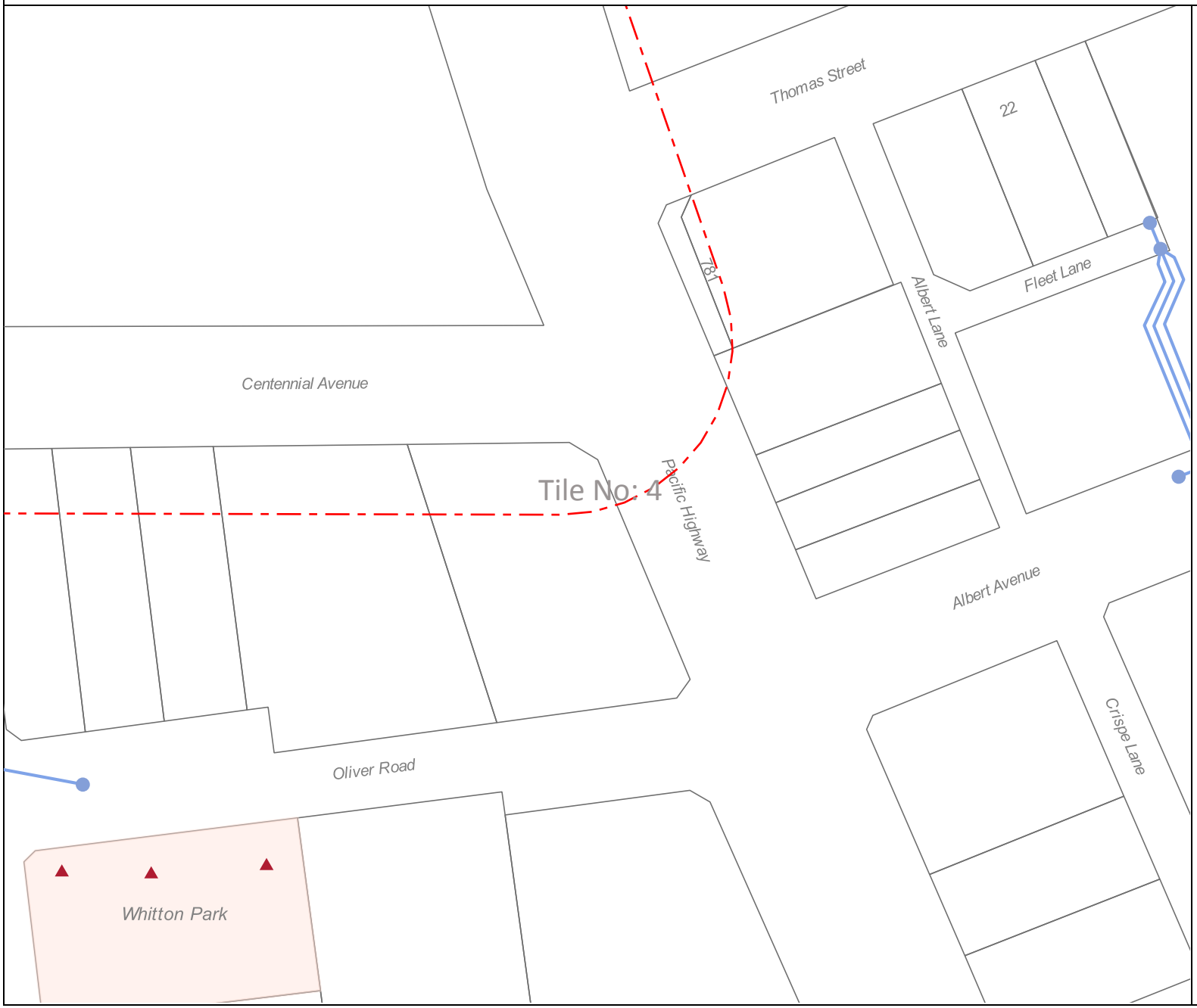

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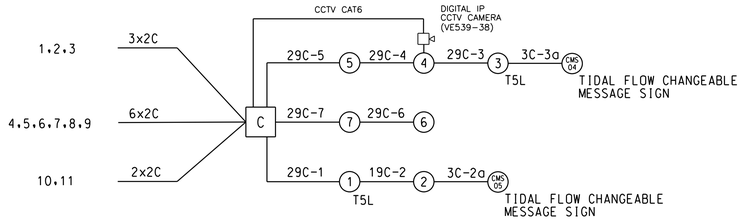
N

Map not to scale

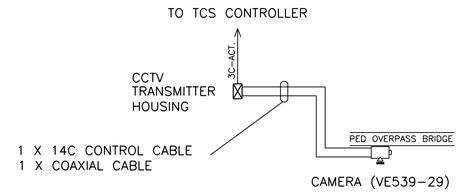
TCS 0718

DRAWN USING CAD
DO NOT AMEND MANUALLY

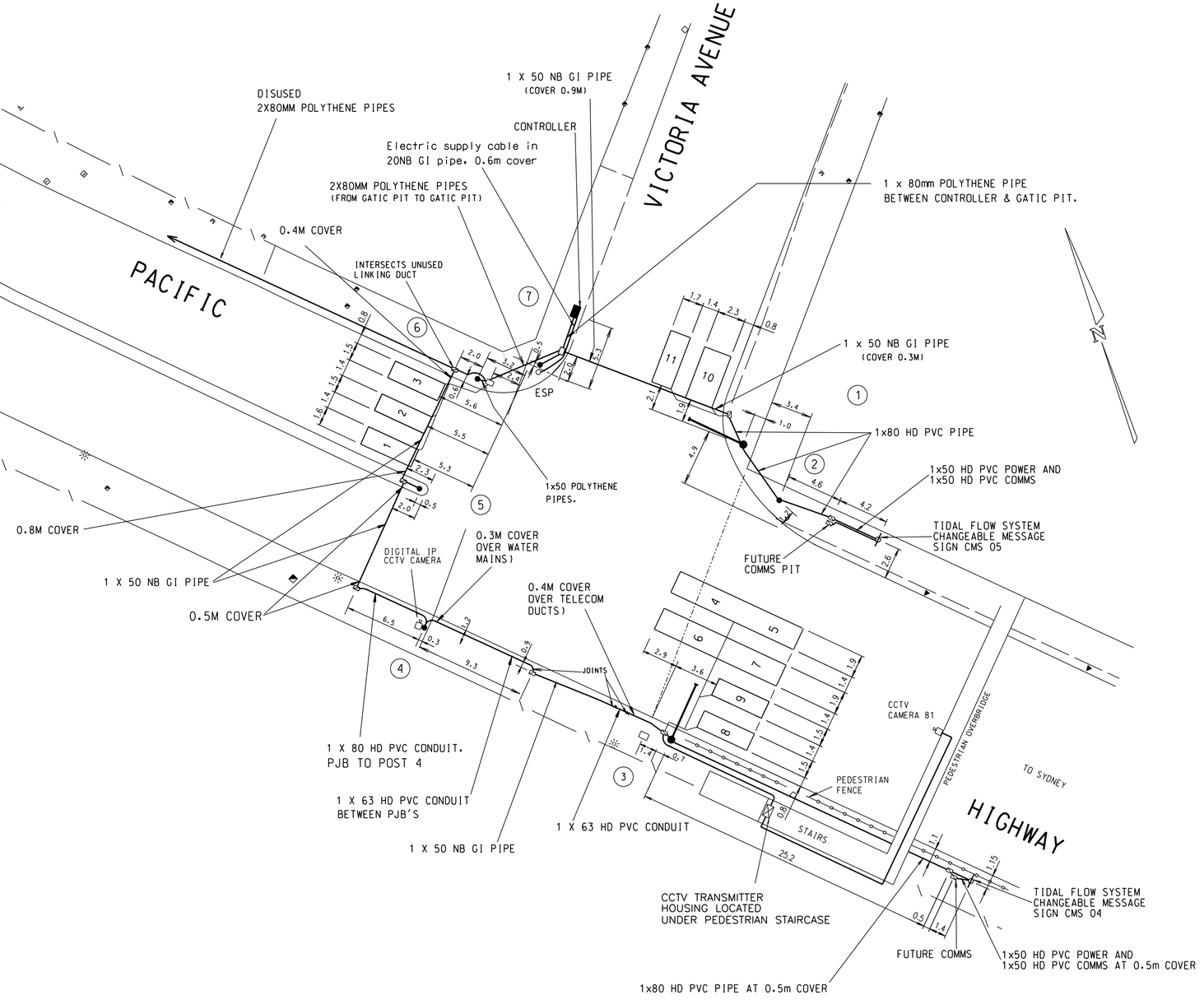
Transport Roads & Maritime Services



CABLE LAYOUT



CCTV CAMERAS
CABLE LAYOUT



NOTES

1. CABLE COVER: IN ROADWAYS 0.75m ABOVE PIPE. IN FOOTWAYS 0.5m ABOVE PIPE UNLESS OTHERWISE STATED.
2. ALL CABLES IN FOOTWAYS ARE INSTALLED IN 1 X 80 HD PVC CONDUIT UNLESS OTHERWISE STATED.
3. CCTV CAMERA 81 MOUNTED ON PEDESTRIAN OVERBRIDGE. A DIGITAL IP CCTV CAMERA IS ALSO MOUNTED ON SIGNAL POST 4 WITH THE CONTROL GEAR IN THE TCS CONTROLLER.

A ORIGINAL ISSUE

'B' ISSUE 16/06/93
REMOVED ORIGINAL POST 4
M.W C.L.Z

'C' ISSUE
RE-CONSTRUCTION WAE
LAWSON/METHER 4/94.

'D' ISSUE JI SE0601
POST 1 CHANGED TO TYPE 5S.
POSTS 1,2 & 7 RELOCATED.
A.SONI 24/01/95 CLZ

'E' ISSUE JI YEN 95/137
PLAN AMENDED TO SUIT W.A.E.
R.W.A. 24/09/95 CLZ

'F' ISSUE
CCTV CAMERA INSTALLED.
A.SONI 27/04/98 CLZ

'G' ISSUE:- WAE
DIGITAL IP CCTV CAMERA FAC'S ADDED. NOTE 3 REVISED.
JF/LC 10-05-2018.

'H' ISSUE:- WAE
CHANGEABLE MESSAGE SIGN AND DETAILS ADDED.
DET S.10 & 11 AND POSTS 1, 3 & 5 POSITIONS AMENDED.
KP 16/07/2020 AL

REFERENCE PLANS	
Specification	S1/TCS/7
Det. Sched. Exp.	VD018-10
SSG Dis. Seq.	VD018-8
Design layout	VV0718-10
Cable chart	VV0718-12

U.B.D.REF. MAP 41 N7
I.S.G. E ..320163.....
CO-ORDS N 1249490.....

MICHAEL MAHINTHAN
DESIGNED
C.L.ZAMUDIO
PASSED
C.L.ZAMUDIO
RECOMMENDED

APPROVED
R.C.BIRD
ELECTRICAL DESIGN MANAGER
DATE 21/05/93

ROADS AND MARITIME SERVICES

CITY OF WILLOUGHBY
S.H.10 PACIFIC HIGHWAY
AND VICTORIA AVENUE
CHATSWOOD

CABLE INSTALLATION

EXISTING ☒ PROPOSED ☐
CADD FILE: VV0718_11H_INS.dgn
SCALE 5 0 (1:200) 5 10
ISSUE H
FILE SF2014/009711
SUPERSEDES SHEET/ISSUE 2
REG No. DS2014/001110
TCS No. 0718
SHEET 11

TCS 0882

DRAWN USING CAD
DO NOT AMEND MANUALLY

Transport Roads & Maritime Services

NOTES:

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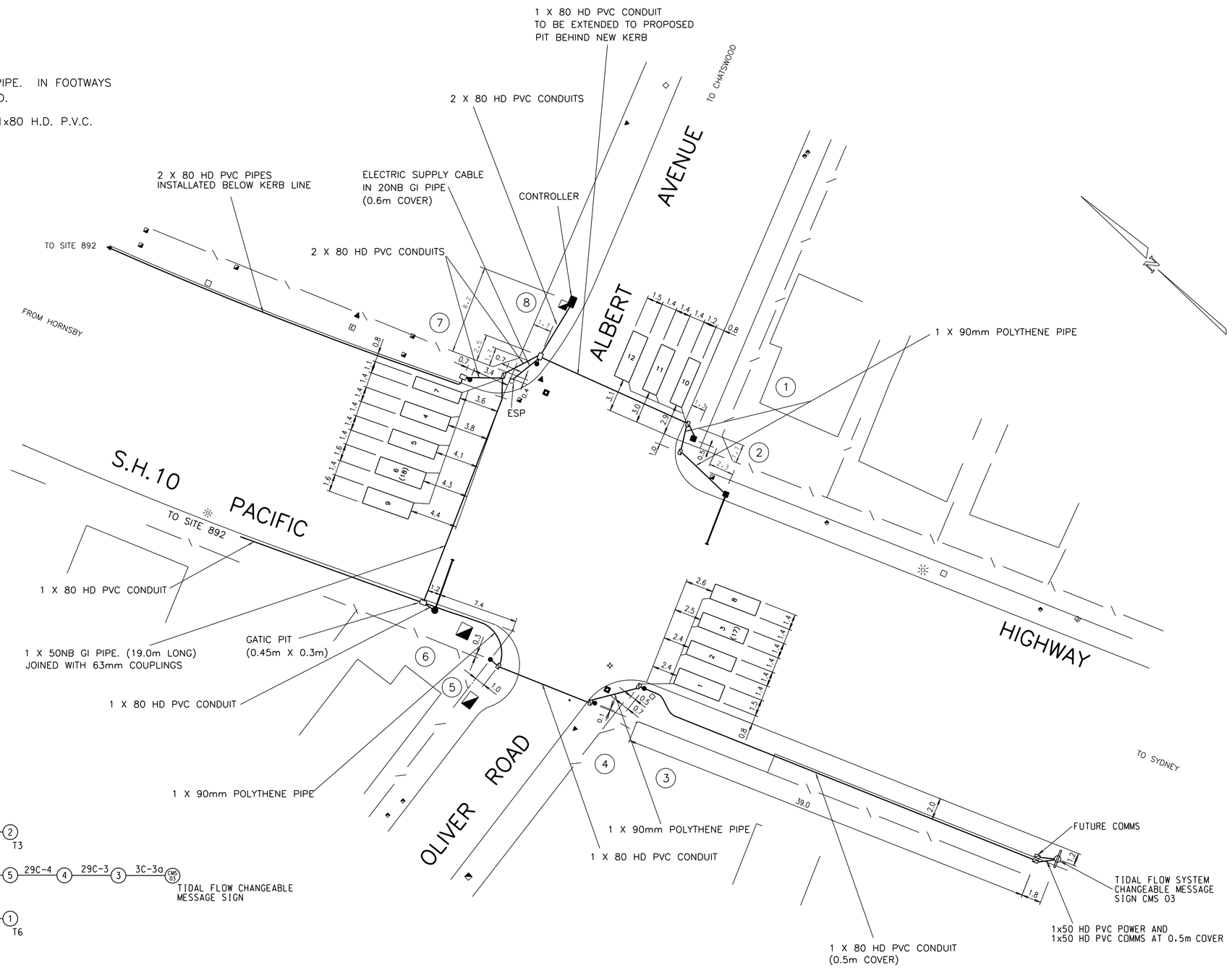


CABLE LAYOUT

A ORIGINAL ISSUE

B ISSUE 30/09/97
PLAN AMENDED TO SUIT WAE.
A.SONI CLZ

C ISSUE: J/I SS 23
DETECTOR NUMBERS ALTERED.
B.K 23-06-99 C.Z

D ISSUE: WAE
CHANGEABLE MESSAGE SIGN ADDED.
DETAILS AND POSTS AMENDED TO SUIT RTA STANDARD PLANS.
KP 28/09/2020 AL

REFERENCE PLANS	
Specification	SI/TCS/7
Det. Sched. Exp.	VD018-10
SSG Dis. Seq.	VD018-8
DESIGN LAYOUT	SHEET 9
CABLE CONN	SHEET 8

U.B.D.REF. MAP195 H11
I.S.G. E 316465
CO-ORDS N 1258614

R.W.A. 24/11/95
DESIGNED
C. L. Zammit
PASSED
RECOMMENDED

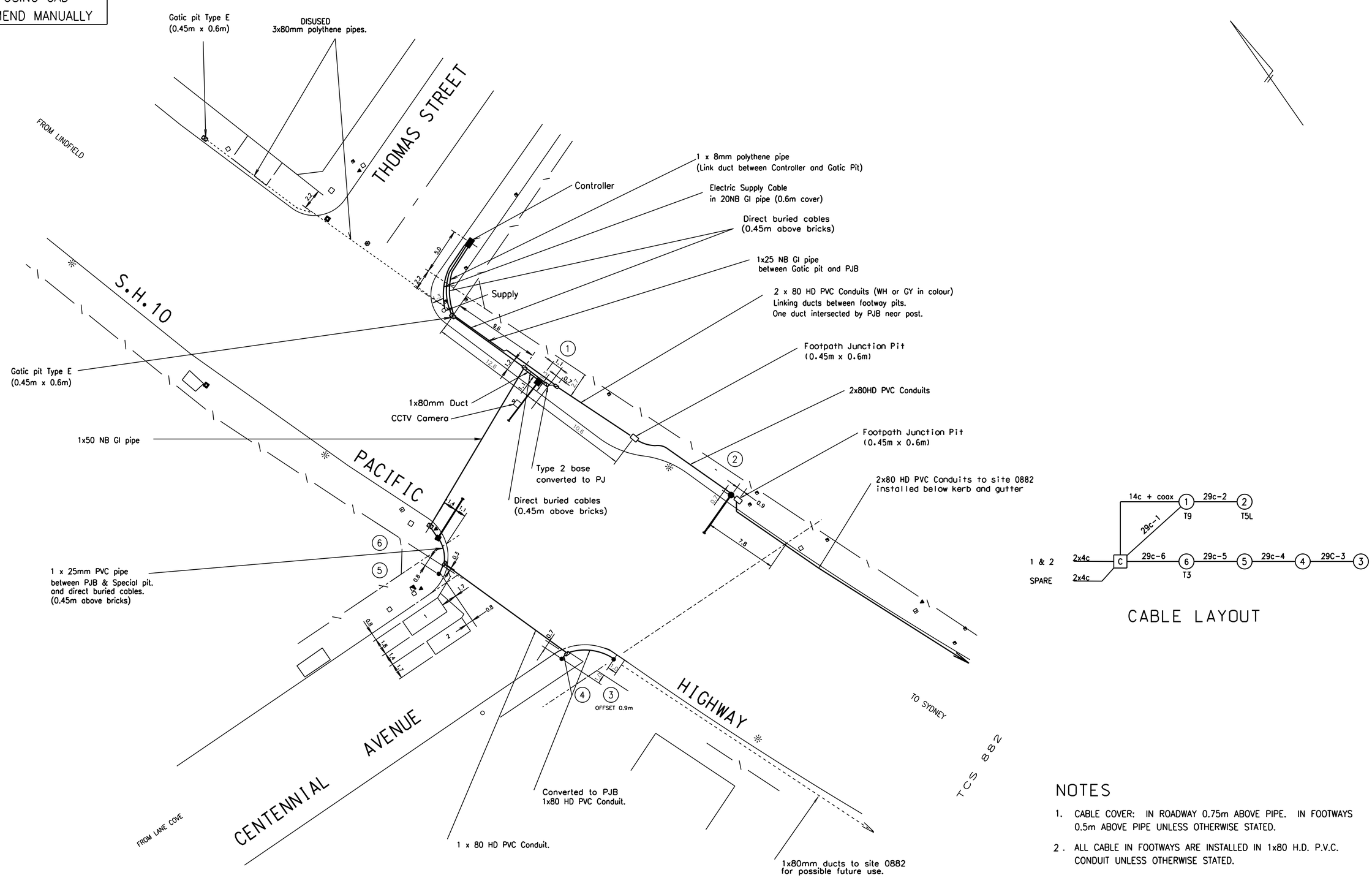
APPROVED
ELECTRICAL DESIGN MANAGER
DATE 24/11/95

ROADS AND MARITIME SERVICES
CITY OF WILLOUGHBY
S.H.10 PACIFIC HIGHWAY, ALBERT AVENUE AND OLIVER ROAD
CABLE INSTALLATION CHATSWOOD

EXISTING ☒ PROPOSED ☐
CADD FILE: VV0882_11D_INS.dgn
SCALE 5 0 (1:200) 5 10
ISSUE D
FILE SF2014/010225
SUPERSEDES SHEET/ISSUE 10/B
REG No. DS2014/001274
TCS No. 0882
SHEET 11

VV0892

DRAWN USING CAD
DO NOT AMEND MANUALLY



CABLE LAYOUT

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CABLE INSTALLATION

A ORIGINAL ISSUE

B ISSUE JI VEN 97/037 17/10/97
PLAN AMENDED TO SUIT MAE
R.W.A. C.L.Z

C ISSUE JI SS/339 27/04/2004
POST 1 TYPE 9 WAS TYPE 2
A.C. 16/03/05

D ISSUE JI SS/541 17/01/2011
CCTV CAMERA ADDED.
MC IH

REFERENCE PLANS	
Specification	SI/TCS/7
Det. Sched. Exp.	VD018-10
SSC Dis. Seq.	VD018-8
DESIGN LAYOUT	SHEET 9
CABLE CHART	SHEET 12

U.B.D.REF. MAP195 H11
I.S.G. E 316433
CO-ORDS N 1258679

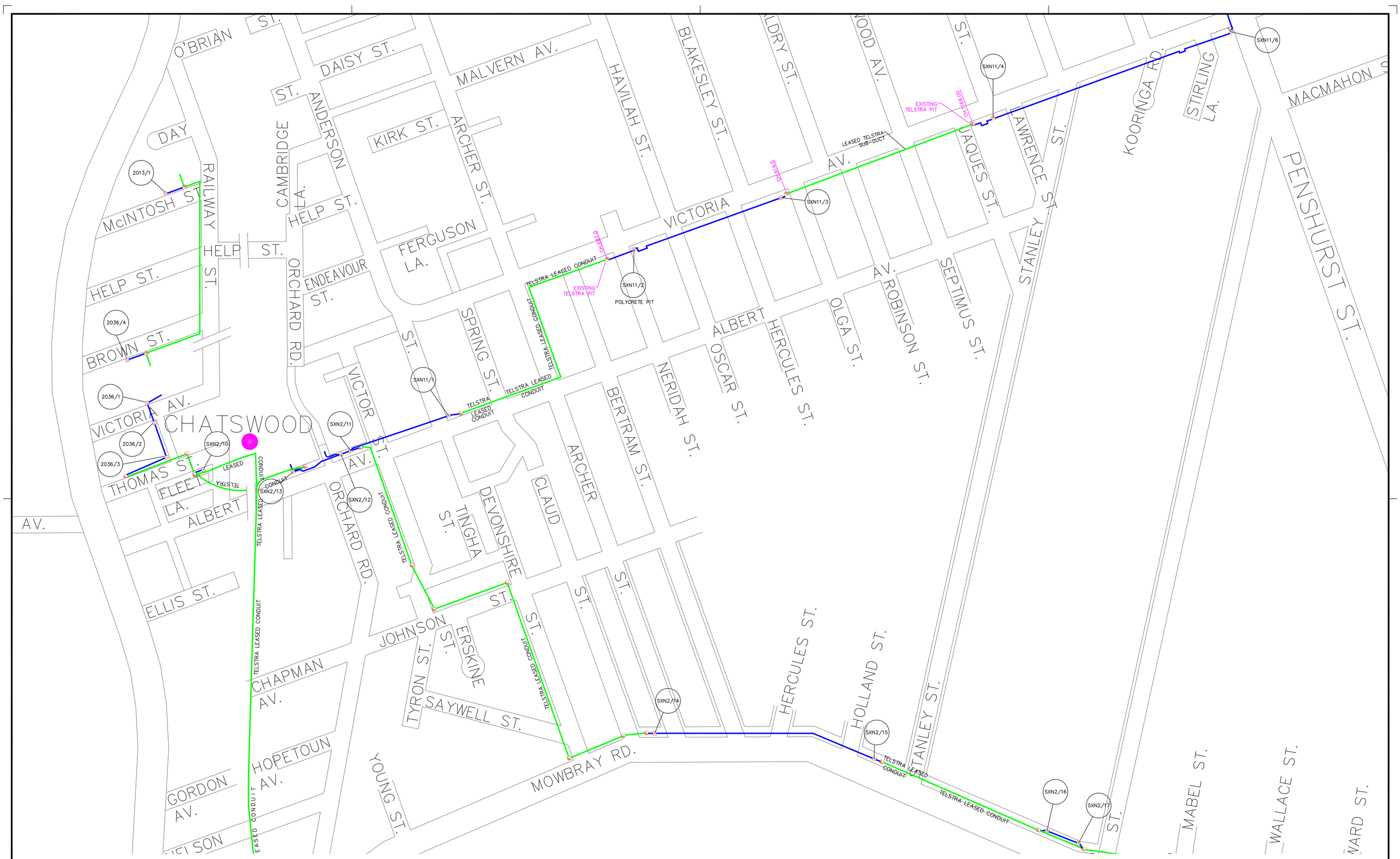
R.W.A.22/11/95 DESIGNED
C. L. Z. PASSED
RECOMMENDED

APPROVED
R.C. BIRD
ELECTRICAL DESIGN MANAGER
DATE 22/11/95

ACCEPTED
DATE

ROADS AND TRAFFIC AUTHORITY OF NSW
CITY OF WILLOUGHBY
S.H.10 PACIFIC HIGHWAY
AND
CENTENNIAL AVENUE
CHATSWOOD

DRAWING FILE : VV0892_11D_INS.DGN.
ARCHIVE LOCATION :
DESIGN OFFICE PARRAMATTA:-SYDNEY TECHNICAL SERVICES
SCALE 5 0 5 10
FILE 490 TS 292
SUPERSEDES SHEET 11A
REGN. 0010.490.VV.0892
SHEET 11
ISSUE A B C D



LEGEND

- VERIZON DUCT
- VERIZON DUCT
- TELSTRA DUCT
- VERIZON PIT
- TELSTRA PIT

REV	DATE(D/M/Y)	DESCRIPTION	DRAWN	CHECKED	APPROVED
C1	20/5/13				

PROJECT
Verizon
SOUTHERN CROSS NORTH

DRAWING TITLE
SOUTHERN CROSS NORTH
SHEET 16 OF 23

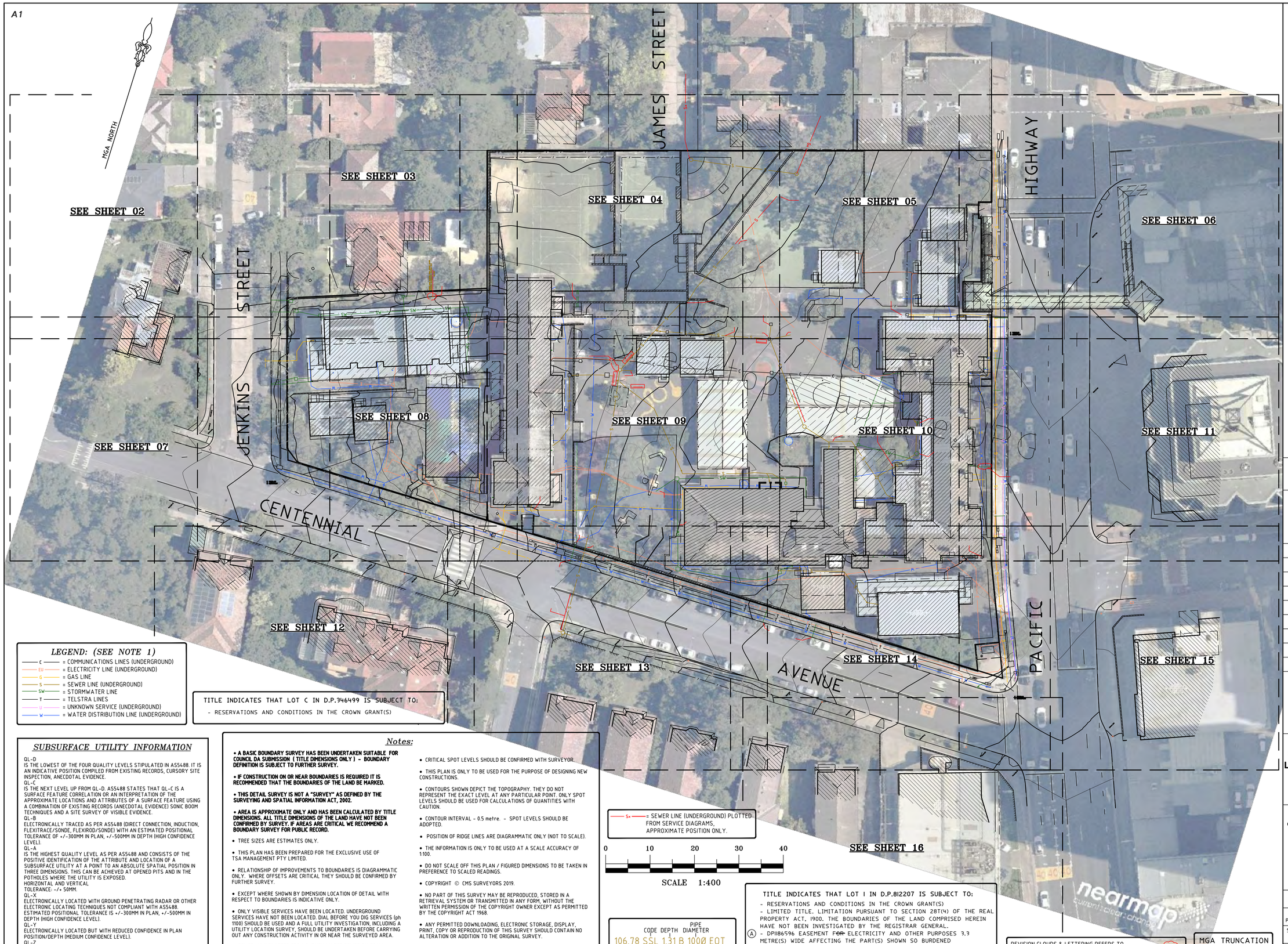
REVISION
C1

DRAWING NUMBER
VZ

SCALE
N.T.S.

SIZE
A1

A1



LEGEND

AT = ASTRO TURF
EQU = PLAY EQUIPMENT
WT = WATER TANK
AW = AWNING
BAL = BALCONY
BIT = BITUMEN
BLD = EXTERNAL BUILDING
BW = BOTTOM WALL
CHI = CHIMNEY
CL = CENTRELINE
COL = COLUMN
CON = CONCRETE
CPIT = COMMUNICATIONS PIT
CSL = COMMUNICATIONS SLA
DP = DOWN PIPE
DS = DOOR SILL LEVEL
EK = ELECTRICITY KIOSK
EOT= END OF TRACE
EPIT = ELECTRICITY PIT
ESL = ELECTRICITY SLA
FCE = FENCE
FHY = FIRE HYDRANT
FL = FLOOR LEVEL
FOD = FULL OF DIRT
FSL = FIBRE OPTIC SLA
GF = GUTTER LEVEL
GM = GAS METER
GRT = GRATE
GSL = GAS SLA
HL = HOOD LEVEL
HYD = HYDRANT
LAN = LANDING
LID = MISCELLANEOUS PIT LID
LP = LIGHT POLE
NS = NATURAL SURFACE
PAR = PARAPET
PAT = PATIO
PAV = PAVING
PIT = TOP OF PIT
POST = POST
PTH = PATH
RF = TOP OF ROOF
RMP = RAMP
RR = ROOF RIDGE
SGW = SALT GLAZED WARE PIPE
SIP = SEWER INSPECTION PIT
SL = SILL LEVEL
SMH = SEWER MAN HOLE
SH = SPOT HEIGHT
SSL = SEWER SLA
STR = STAIRS
SVA = STOP VALVE
SWSL = STORMWATER SLA
TAP = TAP
TFCE = TOP OF FENCE
TG = TOP OF GUTTER
TKB = TOP OF KERB
TLI = TRAFFIC LIGHT
TPIT = TELSTRA PIT
TR = TREE
TSL = TELSTRA SLA
TW = TOP OF WALL
UNS = UNDERSIDE LEVEL
USL = UNKNOWN SERVICE SLA
UTO = UNABLE TO OPEN
WM = WATER METER
WSL = WATER SLA
WT = WATER TANK
WV = WATER VALVE
SLA = SURFACE LEVEL ABOVE

TREE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

6	AERIAL IMAGE UPDATED	01/11/19
5	FURTHER SEWER INVESTIGATION	11/10/19
4	FURTHER SERVICES INVESTIGATION	27/02/19
3	ADD TRUNCATION INFORMATION	04/02/19
2	EXTRA DETAIL ADDED	21/01/19
1	FIRST ISSUE	14/02/18

CLIENT:
SCHOOLS INFRASTRUCTURE NSW
LEVEL 8, 259 GEORGE STREET
SYDNEY NSW 2000

SURVEY PLAN
SHOWING DETAIL & LEVELS OVER
LOT 1 IN DP812207 & LOT C IN DP346499
CHATSWOOD PRIMARY SCHOOL
5 CENTENNIAL AVENUE,
CHATSWOOD NSW 2067

C.M.S. Surveyors Pty Limited
ACN: 096 240 201
PO Box 463 Dee Why NSW 2099
2/99A South Creek Road, Dee Why NSW 2099
Telephone: (02) 9971 4802
Facsimile: (02) 9971 4822
E-mail: info@cmssurveyors.com.au

LGA: WILLOUGHY | SHEET 1 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:400 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: **17485detail** | ISSUE: **5**
CAD FILE: 17485Adetail 5.dwg

LEGEND: (SEE NOTE 1)

- C = COMMUNICATIONS LINES (UNDERGROUND)
- EU = ELECTRICITY LINE (UNDERGROUND)
- G = GAS LINE
- S = SEWER LINE (UNDERGROUND)
- SW = STORMWATER LINE
- T = TELSTRA LINES
- U = UNKNOWN SERVICE (UNDERGROUND)
- W = WATER DISTRIBUTION LINE (UNDERGROUND)

TITLE INDICATES THAT LOT C IN D.P.346499 IS SUBJECT TO:
- RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

SUBSURFACE UTILITY INFORMATION

QL-D
IS THE LOWEST OF THE FOUR QUALITY LEVELS STIPULATED IN AS5488. IT IS AN INDICATIVE POSITION COMPILED FROM EXISTING RECORDS, CURSORY SITE INSPECTION, ANECDOTAL EVIDENCE.
QL-C
IS THE NEXT LEVEL UP FROM QL-D. AS5488 STATES THAT QL-C IS A SURFACE FEATURE CORRELATION OR AN INTERPRETATION OF THE APPROXIMATE LOCATIONS AND ATTRIBUTES OF A SURFACE FEATURE USING A COMBINATION OF EXISTING RECORDS (ANECDOTAL EVIDENCE) SONIC BOOM TECHNIQUES AND A SITE SURVEY OF VISIBLE EVIDENCE.
QL-B
ELECTRONICALLY TRACED AS PER AS5488 (DIRECT CONNECTION, INDUCTION, FLEXITRACE/SONDE, FLEXIROD/SONDE) WITH AN ESTIMATED POSITIONAL TOLERANCE OF +/-300MM IN PLAN, +/-500MM IN DEPTH (HIGH CONFIDENCE LEVEL).
QL-A
IS THE HIGHEST QUALITY LEVEL AS PER AS5488 AND CONSISTS OF THE POSITIVE IDENTIFICATION OF THE ATTRIBUTE AND LOCATION OF A SUBSURFACE UTILITY AT A POINT TO AN ABSOLUTE SPATIAL POSITION IN THREE DIMENSIONS. THIS CAN BE ACHIEVED AT OPENED PITS AND IN THE POTHOLES WHERE THE UTILITY IS EXPOSED.
HORIZONTAL AND VERTICAL
TOLERANCE: -/+ 50MM.
QL-X
ELECTRONICALLY LOCATED WITH GROUND PENETRATING RADAR OR OTHER ELECTRONIC LOCATING TECHNIQUES NOT COMPLIANT WITH AS5488. ESTIMATED POSITIONAL TOLERANCE IS +/-300MM IN PLAN, +/-500MM IN DEPTH (HIGH CONFIDENCE LEVEL).
QL-Y
ELECTRONICALLY LOCATED BUT WITH REDUCED CONFIDENCE IN PLAN POSITION/DEPTH (MEDIUM CONFIDENCE LEVEL).
QL-Z
ELECTRONICALLY LOCATED WITH LOW CONFIDENCE LEVEL IN PLAN POSITION/DEPTH (LOW CONFIDENCE LEVEL).

Notes:

- **A BASIC BOUNDARY SURVEY HAS BEEN UNDERTAKEN SUITABLE FOR COUNCIL DA SUBMISSION (TITLE DIMENSIONS ONLY) - BOUNDARY DEFINITION IS SUBJECT TO FURTHER SURVEY.**
- **IF CONSTRUCTION ON OR NEAR BOUNDARIES IS REQUIRED IT IS RECOMMENDED THAT THE BOUNDARIES OF THE LAND BE MARKED.**
- **THIS DETAIL SURVEY IS NOT A "SURVEY" AS DEFINED BY THE SURVEYING AND SPATIAL INFORMATION ACT, 2002.**
- **AREA IS APPROXIMATE ONLY AND HAS BEEN CALCULATED BY TITLE DIMENSIONS. ALL TITLE DIMENSIONS OF THE LAND HAVE NOT BEEN CONFIRMED BY SURVEY. IF AREAS ARE CRITICAL WE RECOMMEND A BOUNDARY SURVEY FOR PUBLIC RECORD.**
- TREE SIZES ARE ESTIMATES ONLY.
- THIS PLAN HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF TSA MANAGEMENT PTY LIMITED.
- RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES IS DIAGRAMMATIC ONLY. WHERE OFFSETS ARE CRITICAL THEY SHOULD BE CONFIRMED BY FURTHER SURVEY.
- EXCEPT WHERE SHOWN BY DIMENSION LOCATION OF DETAIL WITH RESPECT TO BOUNDARIES IS INDICATIVE ONLY.
- ONLY VISIBLE SERVICES HAVE BEEN LOCATED. UNDERGROUND SERVICES HAVE NOT BEEN LOCATED. DIAL BEFORE YOU DIG SERVICES (ph 1100) SHOULD BE USED AND A FULL UTILITY INVESTIGATION, INCLUDING A UTILITY LOCATION SURVEY, SHOULD BE UNDERTAKEN BEFORE CARRYING OUT ANY CONSTRUCTION ACTIVITY IN OR NEAR THE SURVEYED AREA.
- SEWER MAIN PLOTTED FROM SYDNEY WATER SEWER DIAGRAM. LOCATION SHOULD BE MARKED ON SITE IF CRITICAL.
- CRITICAL SPOT LEVELS SHOULD BE CONFIRMED WITH SURVEYOR.
- THIS PLAN IS ONLY TO BE USED FOR THE PURPOSE OF DESIGNING NEW CONSTRUCTIONS.
- CONTOURS SHOWN DEPICT THE TOPOGRAPHY. THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT. ONLY SPOT LEVELS SHOULD BE USED FOR CALCULATIONS OF QUANTITIES WITH CAUTION.
- CONTOUR INTERVAL - 0.5 metre. - SPOT LEVELS SHOULD BE ADOPTED.
- POSITION OF RIDGE LINES ARE DIAGRAMMATIC ONLY (NOT TO SCALE).
- THE INFORMATION IS ONLY TO BE USED AT A SCALE ACCURACY OF 1:100.
- DO NOT SCALE OFF THIS PLAN / FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED READINGS.
-
-
- ANY PERMITTED DOWNLOADING, ELECTRONIC STORAGE, DISPLAY, PRINT, COPY OR REPRODUCTION OF THIS SURVEY SHOULD CONTAIN NO ALTERATION OR ADDITION TO THE ORIGINAL SURVEY.
- THIS NOTICE MUST NOT BE ERASED.

Sx = SEWER LINE (UNDERGROUND) PLOTTED FROM SERVICE DIAGRAMS, APPROXIMATE POSITION ONLY.

0 10 20 30 40

SCALE 1:400

PIPE
CODE DEPTH DIAMETER
106.78 SSL 1.31 B 100Ø EOT
RL. LOCATION QUALITY NOTE

TITLE INDICATES THAT LOT 1 IN D.P.812207 IS SUBJECT TO:
- RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- LIMITED TITLE. LIMITATION PURSUANT TO SECTION 28T(4) OF THE REAL PROPERTY ACT, 1900. THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.
- (A) DPII86596 EASEMENT FOR ELECTRICITY AND OTHER PURPOSES 3.3 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN DPII86596

REVISION CLOUDS & LETTERING REFERS TO SURVEYORS REPORT ON SERVICE PITS ACCOMPANIED BY THIS PAN. (B)

MGA TRUNCATION
EASTING: 331000
NORTHING: 6258000
ELEVATION: 0

A1

MGA NORTH

Sx = SEWER LINE (UNDERGROUND) PLOTTED FROM SERVICE DIAGRAMS, APPROXIMATE POSITION ONLY.

LEGEND: (SEE NOTE 1)

- C = COMMUNICATIONS LINES (UNDERGROUND)
- EU = ELECTRICITY LINE (UNDERGROUND)
- G = GAS LINE
- S = SEWER LINE (UNDERGROUND)
- SW = STORMWATER LINE
- T = TELSTRA LINES
- = UNKNOWN SERVICE (UNDERGROUND)
- W = WATER DISTRIBUTION LINE (UNDERGROUND)

NOTES

• THE PURPOSE OF THIS PLAN IS FOR DESIGN ONLY. CURRENT PLANS ISSUED BY SERVICE PROVIDERS THROUGH "DIAL BEFORE YOU DIG" ARE STILL REQUIRED. CONTRACTORS AND SUBCONTRACTORS WILL NEED TO EXERCISE THEIR OWN "DUTY OF CARE" AND SHOULD MAKE THEIR OWN DIAL BEFORE YOU DIG ENQUIRY BEFORE EXCAVATION/CONSTRUCTION. YOU MUST ENSURE "DIAL BEFORE YOU DIG" ARE CURRENT AS THEY HAVE VARYING EXPIRATION DATES, AND MAY REQUIRE RE-ISSUE OTHERWISE THE INFORMATION ON THIS PLAN MAY NO LONGER BE CURRENT.

• WARNING: UNKNOWN SERVICES MAY EXIST THAT COULD NOT BE ELECTRONICALLY DETECTED. THE DIAGRAMS OF THE SERVICE PROVIDER MAY NOT DEPICT ALL ASSETS WITHIN THEIR NETWORK AND SERVICE PROVIDERS MAY SHARE CONDUITS AND /OR TRENCHES AT THIS LOCATION.

• WARNING: SINGLE MARKED LINES MAY REPRESENT MULTIPLE CONDUITS, PIPES END/OR CABLES AT THIS LOCATION. THE RECORDING OF DEPTHS AND POSITION OF UTILITIES CANNOT BE GUARANTEED AS CORRECT. WE RECOMMEND NON DESTRUCTIVE DIGGING/POTHOLING TO EXPOSE SERVICES FOR ACCURATE IDENTIFICATION AND DEPTH.

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Point Table	
Pt. No.	Spread, Dia, Height
150	TR 8-3X0.3-8
151	TR 4-0.2-5
152	TR 8-3X0.25-7
153	TR 6-0.3-9
197	TR 8-0.55-15
198	TR 8-0.3-7
199	TR 6-0.3-11
200	TR 6-0.2-5
201	TR 10-0.4-12
202	TR 12-0.5-16
203	TR 4-0.2-7
204	TR 4-0.2-7
205	TR 4-0.2-7
206	TR 4-0.2-7
207	TR 4-0.2-7
246	TR 6-4X0.15-5
370	TR 8-0.4-6
372	TR 8-0.4-6
374	TR 12-0.5-9
375	TR 4-2X0.15-5

Point Table	
Pt. No.	Spread, Dia, Height
376	TR 5-0.2-4
491	TR 8-0.4-10
502	TR 8-0.4-14
503	TR 8-0.4-14
723	TR 8-0.25-9
784	TR 6-0.3-10
785	TR 6-0.3-10
786	TR 4-0.15-7
787	TR 4-0.2-9
788	TR 6-0.25-9
789	TR 6-0.25-9
790	TR 4-0.2-7
791	TR 10-0.4-12
792	TR 10-0.4-12
793	TR 10-0.4-12
5555	TR 8-0.4-10
5556	TR 5-0.3-8
5557	TR 5-0.3-8
5558	TR 14-0.6-12
5593	TR 5-0.2-6

Point Table	
Pt. No.	Spread, Dia, Height
5594	TR 8-0.6-12
5595	TR 6-0.3-5
5646	TR 8-0.25-8
5647	TR 8-M-6
5648	TR 8-0.2-10
5666	TR 6-0.3-5
5727	TR 6-0.3-5
5728	TR 6-2X0.2-5
5729	TR 6-0.4-7
5837	TR 8-0.5-16
5838	TR 10-0.7-16
5839	TR 8-0.4-12
5840	TR 8-0.6-16
5841	TR 8-0.5-15
5842	TR 8-3X0.2-6
5872	TR 8-0.6-18
5873	TR 8-0.6-18
5874	TR 4-0.2-6
5875	TR 8-0.4-14
5876	TR 8-0.6-18

Point Table	
Pt. No.	Spread, Dia, Height
5877	TR 6-0.4-14
5878	TR 10-0.5-18
5879	TR 10-0.5-18
5880	TR 10-0.5-18
5881	TR 10-0.5-18
5882	TR 8-0.3-7
5921	TR 12-2X0.3-8
5936	TR 18-0.9-20
5969	TR 6-0.3-10
5970	TR 4-0.25-8
5985	TR 4-2X0.2-6
6014	TR 4-0.2-7
6015	TR 6-0.3-10
6016	TR 12-0.6-12
6017	TR 10-2X0.3-12
6018	TR 9-0.2-7
6019	TR 6-0.2-5
6020	TR 8-0.3-8

FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

LEGEND

AT = ASTRO TURF
EQU = PLAY EQUIPMENT
WT = WATER TANK
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BAL = BALCONY
BIT = BITUMEN
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SIP = SEWER INSPECTION PIT
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SMH = SEWER MAN HOLE
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SWSL = STORMWATER SLA
TAP = TAP
TFCE = TOP OF FENCE
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TKB = TOP OF KERB
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WM = WATER METER
WSL = WATER SLA
WT = WATER TANK
WV = WATER VALVE
SLA = SURFACE LEVEL ABOVE

TREE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

6	AERIAL IMAGE UPDATED	01/11/19
5	FURTHER SEWER INVESTIGATION	11/10/19
4	FURTHER SERVICES INVESTIGATION	27/02/19
3	ADD TRUNCATION INFORMATION	04/02/19
2	EXTRA DETAIL ADDED	21/01/19
1	FIRST ISSUE	14/02/18

CLIENT:
SCHOOLS INFRASTRUCTURE NSW
LEVEL 8, 259 GEORGE STREET
SYDNEY NSW 2000

SURVEY PLAN
SHOWING DETAIL & LEVELS OVER
LOT 1 IN DP812207 & LOT C IN DP346499
CHATSWOOD PRIMARY SCHOOL
5 CENTENNIAL AVENUE,
CHATSWOOD NSW 2067

C.M.S. Surveyors Pty Limited
ACN: 096 240 201
PO Box 463 Dee Why NSW 2099
2/99A South Creek Road, Dee Why NSW 2099
Telephone: (02) 9971 4802
Facsimile: (02) 9971 4822
E-mail: info@cmssurveyors.com.au

LGA: WILLOUGHBY | SHEET 2 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: 17485detail
ISSUE: 5
CAD FILE: 17485Adetail 5.dwg

A1

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FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

ADJOINS SHEET 2

ADJOINS SHEET 4

ADJOINS SHEET 8

JENKINS STREET (BITUMEN FORMATION)

CONCRETE DRIVEWAY

NO. 1 BRICK HOUSE TILE ROOF

2 STOREY BRICK BUILDING METAL ROOF

1 D.P.401622

2 D.P.401622

C D.P.346499

1 D.P.812207

SAND PIT

WATER TANK

INSPECTION POINT DEPTH TO INV=3.40 TOO DEEP TO IDENTIFY OR TRACE CONNECTING PIPES

SEWER MAIN PLOTTED FROM SYDNEY WATER DIAGRAM APPROXIMATE POSITION ONLY

MGA NORTH

LEGEND

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LID = MISCELLANEOUS PIT LID
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RMP = RAMP
RR = ROOF RIDGE
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SIP = SEWER INSPECTION PIT
SL = SILL LEVEL
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SLA = SURFACE LEVEL ABOVE
TREE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
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SOURCE: S.C.I.M.S. (17/01/18)

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1	FIRST ISSUE	14/02/18

CLIENT:
SCHOOLS INFRASTRUCTURE NSW
LEVEL 8, 259 GEORGE STREET
SYDNEY NSW 2000

SURVEY PLAN
SHOWING DETAIL & LEVELS OVER LOT 1 IN DP812207 & LOT C IN DP346499
CHATSWOOD PRIMARY SCHOOL
5 CENTENNIAL AVENUE,
CHATSWOOD NSW 2067

C.M.S. Surveyors Pty Limited
ACN: 096 240 201
PO Box 463 Dee Why NSW 2099
2/99A South Creek Road, Dee Why NSW 2099
Telephone: (02) 9971 4802
Facsimile: (02) 9971 4822
E-mail: info@cmssurveyors.com.au

LGA: WILLOUGHY | SHEET 3 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: 17485detail
ISSUE: 5
CAD FILE: 17485Adetail 5.dwg

A1

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0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

MGA NORTH

JAMES STREET

NO. 2 BRICK HOUSE TILE ROOF

CARPORT METAL ROOF

1 D.P.960971

S.P.45281

NO. 1 2 STOREY BRICK HOUSE TILE ROOF

1 D.P.812207

ASTRO TURF

SAND PIT

PAVED

AUDITORIUM

GARDEN

SEAT

2 STOREY BRICK BUILDING TILE ROOF

BITUMEN

STEPS

RAMP

STORMWATER PIT BOLTED DOWN UNABLE TO OPEN WITHOUT DISTURBING FENCING

FLEXI-ROD TRACE STOPPED AT A PINCH POINT AT THIS LOCATION, NO TRACE BEYOND THIS POINT

POSSIBLE BURIED PIT IN GARDEN BED VERTICAL INLET VISIBLE IN CCTV FOOTAGE

EMPTY PIT NOT IN USE POSSIBLE REDUNDANT SEWER PIT IL=104.41

CCTV PRODUCES POOR IMAGE CONNECTIVITY CONFIRMED BY SONIC TESTING

PIPE CLOSED NOT IN USE

ADJOINS SHEET 3

ADJOINS SHEET 5

ADJOINS SHEET 9

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CON = CONCRETE
CPIT = COMMUNICATIONS PIT
CSL = COMMUNICATIONS SLA
DP = DOWN PIPE
DS = DOOR SILL LEVEL
EK = ELECTRICITY KIOSK
EOT= END OF TRACE
EPIT = ELECTRICITY PIT
ESL = ELECTRICITY SLA
FCE = FENCE
FHY = FIRE HYDRANT
FL = FLOOR LEVEL
FOD = FULL OF DIRT
FSL = FIBRE OPTIC SLA
GF = GUTTER LEVEL
GM = GAS METER
GRT = GRATE
GSL = GAS SLA
HL = HOOD LEVEL
HYD = HYDRANT
LAN = LANDING
LID = MISCELLANEOUS PIT LID
LP = LIGHT POLE
NS = NATURAL SURFACE
PAR = PARAPET
PAT = PATIO
PAV = PAVING
PIT = TOP OF PIT
POST = POST
PTH = PATH
RF = TOP OF ROOF
RMP = RAMP
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SGW = SALT GLAZED WARE PIPE
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WM = WATER METER
WSL = WATER SLA
WT = WATER TANK
WV = WATER VALVE
SLA = SURFACE LEVEL ABOVE
TREE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

6	AERIAL IMAGE UPDATED	01/11/19
5	FURTHER SEWER INVESTIGATION	11/10/19
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CLIENT:
SCHOOLS INFRASTRUCTURE NSW
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SHOWING DETAIL & LEVELS OVER
LOT 1 IN DP812207 & LOT C IN DP346499
CHATSWOOD PRIMARY SCHOOL
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CHATSWOOD NSW 2067

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LGA: WILLOUGHY | SHEET 4 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: 17485detail | ISSUE: 5
CAD FILE: 17485Adetail 5.dwg

A1

LEGEND: (SEE NOTE 1)

- C = COMMUNICATIONS LINES (UNDERGROUND)
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- W = WATER DISTRIBUTION LINE (UNDERGROUND)

Sx = SEWER LINE (UNDERGROUND) PLOTTED FROM SERVICE DIAGRAMS, APPROXIMATE POSITION ONLY.

FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

S.P.45281
NO. 1
2 STOREY
BRICK HOUSE
TILE ROOF

1
D.P.838366
NO. 688
2 STOREY
BRICK & RENDERED BUILDING
METAL ROOF

1
D.P.812207

2
D.P.812207

2 STOREY
BRICK BUILDING
TILE & METAL ROOF

BITUMEN CARPARK

ASTRO TURF

GARDEN

CONCRETE

DRIVEWAY

VEHICLE CROSSING

HIGHWAY

PEDESTRIAN CROSSING

(BITUMEN FORMATION)

PACIFIC

METAL ROOF OVER CONCRETE FOOT BRIDGE

DEMOUNTABLE BUILDING METAL ROOF

METAL ROOF OVER STEPS

METAL ROOF OVER ESCALATOR

RENDERED RET. WALL

BRICK WALL

METAL FENCE

CHAIN WIRE FENCE

KERB

GUTTER

MGA NORTH

CCTV SEW-IX

SEW-I

SEWER PIT INSPECTION CONFIRMS REDUNDANT CONNECTION AS REFLECTED IN DBYD DIAGRAMS

FLEXI-ROD TRACE STOPPED AT A PINCH POINT AT THIS LOCATION, NO TRACE BEYOND THIS POINT

CONC. PIT INSCRIBED WITH 'GAS' PIT SET IN BITUMEN UNABLE TO OPEN SAFELY

EMPTY PIT NOT IN USE POSSIBLE REDUNDANT SEWER PIT IL=104.41

POOR IMAGE CONFIRMED TESTING

PIPE CLOSED NOT IN USE

100Φ PVC INLET UNABLE TO BE TRACED DUE TO SMALL PIPE SIZE & POSSIBLE BEND IN PIPE POSSIBLE ORIGIN = TAP DRAIN

BENCH MARK
SSM36739 IN KERB
RL 106.82
E 331363.12
N 6258741.21

ADJOINS SHEET 4

ADJOINS SHEET 10

ADJOINS SHEET 6

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LGA: WILLOUGHY
SHEET 5 OF 16

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A1

ADJOINS SHEET 5

ADJOINS SHEET 11

HIGHWAY

VICTORIA AVENUE

PACIFIC HIGHWAY

PEDESTRIAN CROSSING

(BITUMEN FORMATION)

PAVED

GARDEN

CONCRETE

RENDERED RET. WALL

METAL ROOF OVER ESCALATOR

METAL ROOF OVER STEPS

METAL ROOF OVER CONCRETE FOOT BRIDGE

GUTTER

KERB

DRIVEWAY

VEHICLE CROSSING

STEPS

BENCH MARK
SSM36739 IN KERB
RL 106.82
E 331363.12
N 6258741.21

MGA NORTH

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HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
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SOURCE: S.C.I.M.S. (17/01/18)

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LGA: WILLOUGHY | SHEET 6 OF 16

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SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: 17485detail
CAD FILE: 17485Adetail 5.dwg
ISSUE: 5

A1

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FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

LEGEND

AT = ASTRO TURF
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TREE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

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LGA: WILLOUGHY | SHEET 7 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
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SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

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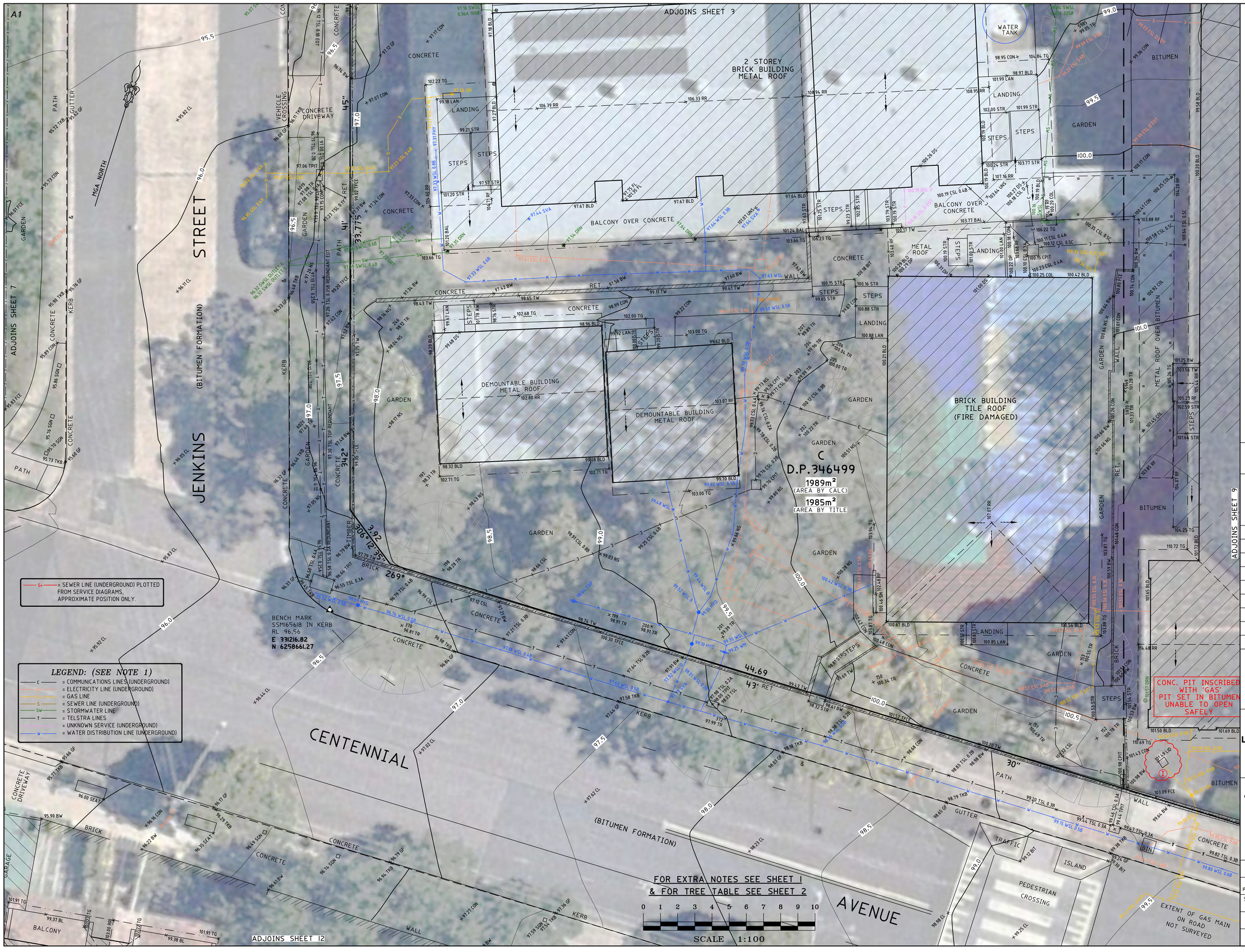
CAD FILE: 17485Adetail 5.dwg



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SHEET 8 OF 16

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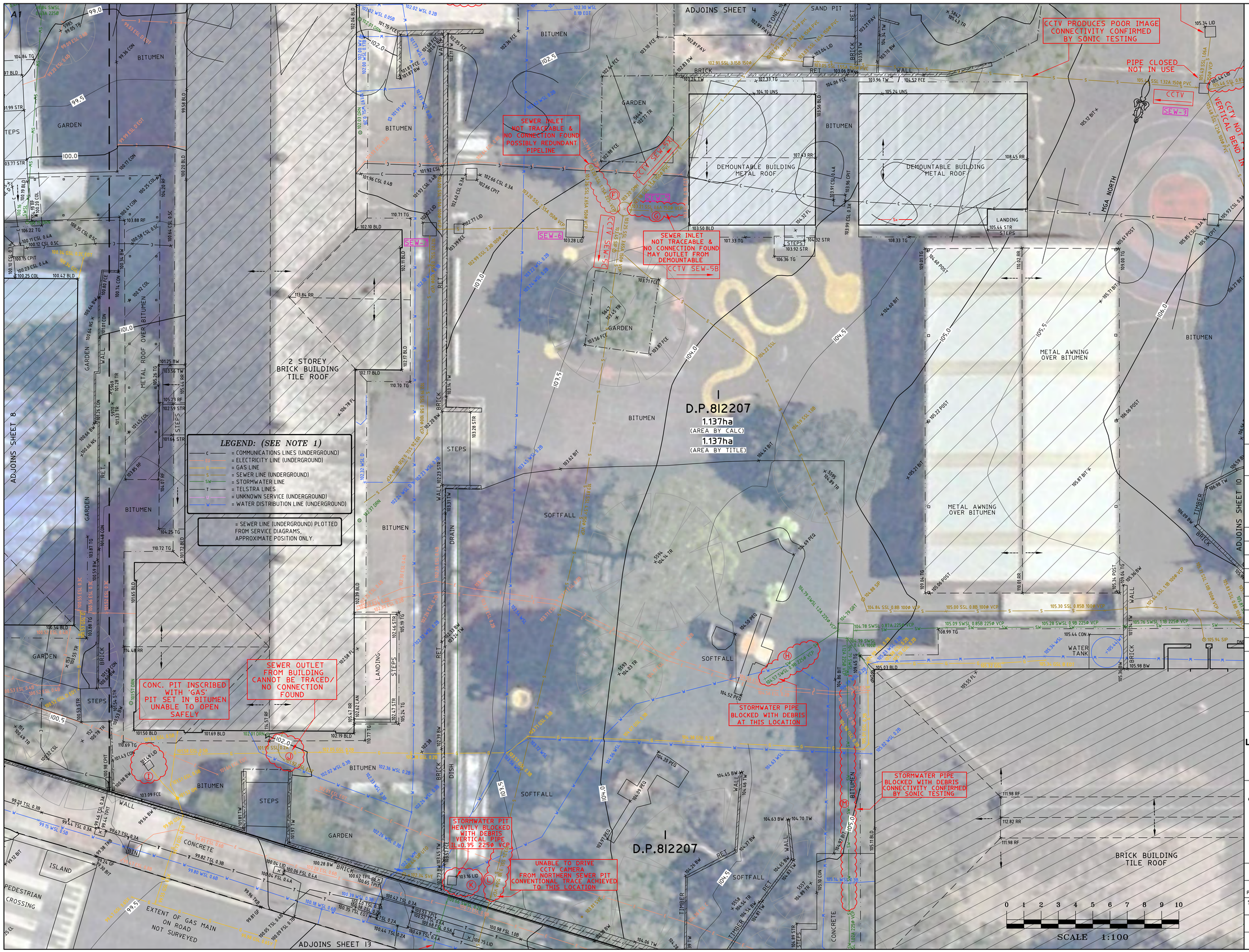

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SLA = SURFACE LEVEL ABOVE
TREE

FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

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CLIENT:
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SYDNEY NSW 2000

SURVEY PLAN
SHOWING DETAIL & LEVELS OVER
LOT 1 IN DP812207 & LOT C IN DP346499
CHATSWOOD PRIMARY SCHOOL
5 CENTENNIAL AVENUE,
CHATSWOOD NSW 2067

C.M.S. Surveyors Pty Limited
ACN: 096 240 201
PO Box 463 Dee Why NSW 2099
2/99A South Creek Road, Dee Why NSW 2099
Telephone: (02) 9971 4802
Facsimile: (02) 9971 4822
E-mail: info@cmssurveyors.com.au

LGA: WILLOUGHBY | SHEET 9 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: 17485detail
ISSUE: 5
CAD FILE: 17485Adetail 5.dwg

A1

POOR IMAGE
CONFIRMED
TESTING

PIPE CLOSED
NOT IN USE

100Φ PVC INLET
UNABLE TO BE TRACED
DUE TO SMALL PIPE SIZE
& POSSIBLE BEND IN PIPE
POSSIBLE ORIGIN = TAP DRAIN

CCTV
SEW-3

CCTV NOT POSSIBLE DUE TO
VERTICAL BEND IN PIPE AT PIT

(POSSIBLE OBSTACLE)
EXTENT OF CCTV FOOTAGE
REVIEW FOOTAGE

SEW-2

CCTV SEW-8X

CCTV SEW-8B

SEW-8

CONCRETE PIT
CONFIRMED SEWER
FULL OF DEBRIS

CONCRETE PIT
CONFIRMED SEWER
REQUIRES
MECHANICAL LIFT
UNABLE TO OPEN

UNKNOWN PIT
UNDER TIMBER RAMP
UNABLE TO OPEN

STORMWATER
TRACE TERMINATES
AT WALL
NO OUTLET VISIBLE

ADJOINS SHEET 5

ADJOINS SHEET 9

ADJOINS SHEET 14

ADJOINS SHEET 11

2 STOREY
BRICK BUILDING
TILE & METAL ROOF

1 STOREY
BRICK BUILDING
METAL ROOF

BRICK BUILDING
TILE ROOF

METAL AWNING
OVER BITUMEN

METAL ROOF
OVER BITUMEN

METAL ROOF
OVER PATIO

BITUMEN

GARDEN

CONCRETE

STEPS

RAMP

WALL

GUTTER

HIGHWAY

(BITUMEN FORMATION)

PACIFIC

D.P.812207

BENCH MARK
SSM36739 IN KERB
RL 106.82
E 331363.12
N 6258741.21

MGA NORTH

162°

56.805

39"

LEGEND

AT = ASTRO TURF
EQU = PLAY EQUIPMENT
WT = WATER TANK
AW = AWNING
BAL = BALCONY
BIT = BITUMEN
BLD = EXTERNAL BUILDING
BW = BOTTOM WALL
CHI = CHIMNEY
CL = CENTRELINE
COL = COLUMN
CON = CONCRETE
CPIT = COMMUNICATIONS PIT
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DP = DOWN PIPE
DS = DOOR SILL LEVEL
EK = ELECTRICITY KIOSK
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GM = GAS METER
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HYD = HYDRANT
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LEGEND: (SEE NOTE 1)

C = COMMUNICATIONS LINES (UNDERGROUND)
E = ELECTRICITY LINE (UNDERGROUND)
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SW = STORMWATER LINE
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SHEET 10 OF 16

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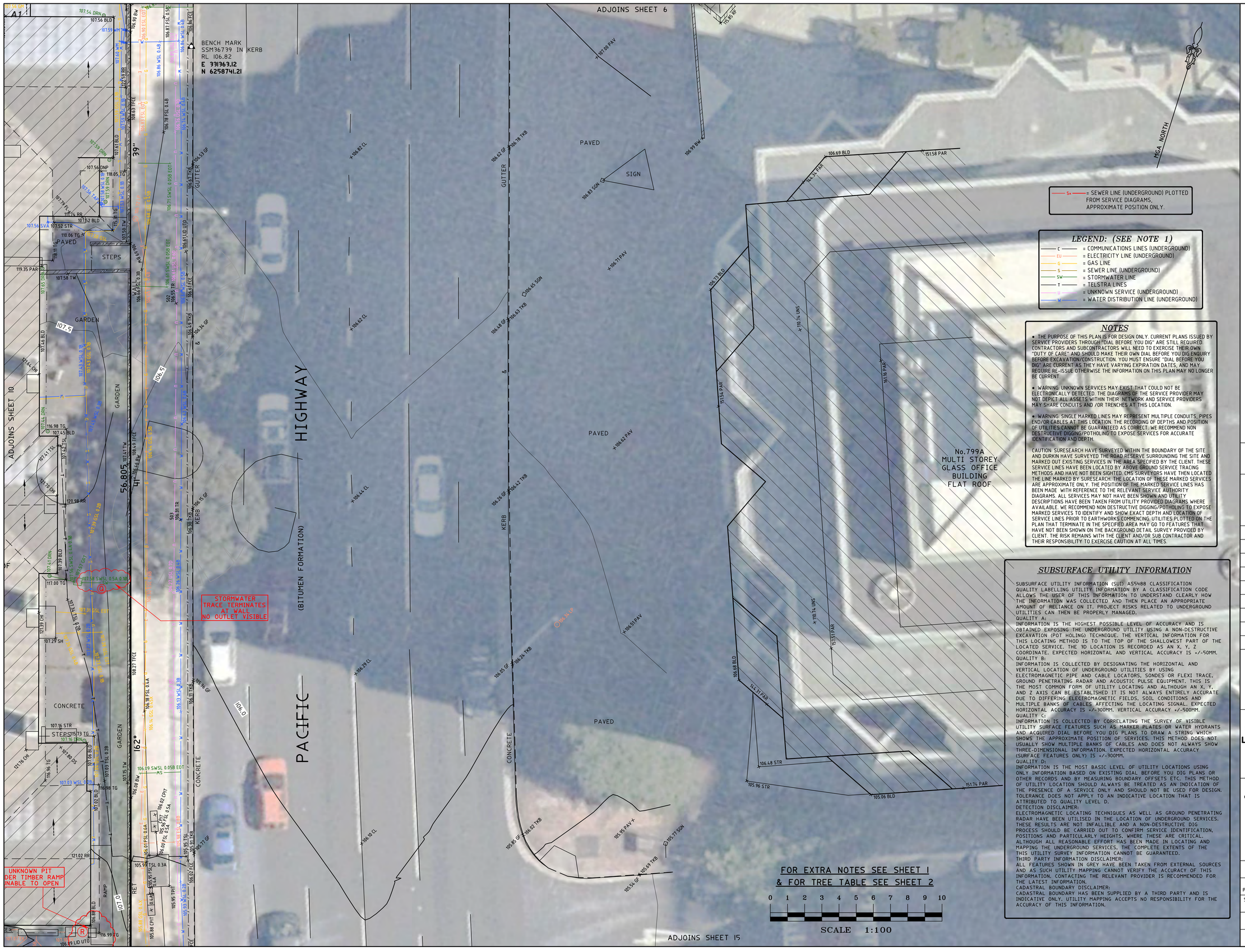

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SUBSURFACE UTILITY INFORMATION

SUBSURFACE UTILITY INFORMATION (SUI) AS5488 CLASSIFICATION
QUALITY LABELLING UTILITY INFORMATION BY A CLASSIFICATION CODE ALLOWS THE USER OF THIS INFORMATION TO UNDERSTAND CLEARLY HOW THE INFORMATION WAS COLLECTED AND THEN PLACE AN APPROPRIATE AMOUNT OF RELIANCE ON IT. PROJECT RISKS RELATED TO UNDERGROUND UTILITIES CAN THEN BE PROPERLY MANAGED.
QUALITY A:
INFORMATION IS THE HIGHEST POSSIBLE LEVEL OF ACCURACY AND IS OBTAINED EXPOSING THE UNDERGROUND UTILITY USING A NON-DESTRUCTIVE EXCAVATION (POT HOLING) TECHNIQUE. THE VERTICAL INFORMATION FOR THIS LOCATING METHOD IS TO THE TOP OF THE SHALLOWEST PART OF THE LOCATED SERVICE. THE 3D LOCATION IS RECORDED AS AN X, Y, Z COORDINATE. EXPECTED HORIZONTAL AND VERTICAL ACCURACY IS +/-50MM.
QUALITY B:
INFORMATION IS COLLECTED BY DESIGNATING THE HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND UTILITIES BY USING ELECTROMAGNETIC PIPE AND CABLE LOCATORS, SONDES OR FLEXI TRACE, GROUND PENETRATING RADAR AND ACOUSTIC PULSE EQUIPMENT. THIS IS THE MOST COMMON FORM OF UTILITY LOCATING AND ALTHOUGH AN X, Y, AND Z AXIS CAN BE ESTABLISHED IT IS NOT ALWAYS ENTIRELY ACCURATE DUE TO DIFFERING ELECTROMAGNETIC FIELDS, SOIL CONDITIONS AND MULTIPLE BANKS OF CABLES AFFECTING THE LOCATING SIGNAL. EXPECTED HORIZONTAL ACCURACY IS +/-300MM. VERTICAL ACCURACY +/-500MM.
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QUALITY D:
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DETECTION DISCLAIMER:
ELECTROMAGNETIC LOCATING TECHNIQUES AS WELL AS GROUND PENETRATING RADAR HAVE BEEN UTILISED IN THE LOCATION OF UNDERGROUND SERVICES. THESE RESULTS ARE NOT INFALLIBLE AND A NON-DESTRUCTIVE DIG PROCESS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION, POSITIONS AND PARTICULARLY HEIGHTS, WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN LOCATING AND MAPPING THE UNDERGROUND SERVICES, THE COMPLETE EXTENTS OF THE THIS UTILITY SURVEY INFORMATION CANNOT BE GUARANTEED.
THIRD PARTY INFORMATION DISCLAIMER:
ALL FEATURES SHOWN IN GREY HAVE BEEN TAKEN FROM EXTERNAL SOURCES AND AS SUCH UTILITY MAPPING CANNOT VERIFY THE ACCURACY OF THIS INFORMATION. CONTACTING THE RELEVANT PROVIDER IS RECOMMENDED FOR THE LATEST INFORMATION.
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DRAWING NAME: **17485detail**
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TREE

Sx = SEWER LINE (UNDERGROUND) PLOTTED FROM SERVICE DIAGRAMS, APPROXIMATE POSITION ONLY.

LEGEND: (SEE NOTE 1)

C = COMMUNICATIONS LINES (UNDERGROUND)
EU = ELECTRICITY LINE (UNDERGROUND)
G = GAS LINE
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B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

6	AERIAL IMAGE UPDATED	01/11/19
5	FURTHER SEWER INVESTIGATION	11/10/19
4	FURTHER SERVICES INVESTIGATION	27/02/19
3	ADD TRUNCATION INFORMATION	04/02/19
2	EXTRA DETAIL ADDED	21/01/19
1	FIRST ISSUE	14/02/18

ADJOINS SHEET 13

CLIENT:
SCHOOLS INFRASTRUCTURE NSW
LEVEL 8, 259 GEORGE STREET
SYDNEY NSW 2000

SURVEY PLAN
SHOWING DETAIL & LEVELS OVER LOT 1 IN DP812207 & LOT C IN DP346499 CHATSWOOD PRIMARY SCHOOL 5 CENTENNIAL AVENUE, CHATSWOOD NSW 2067

C.M.S. Surveyors Pty Limited
ACN: 096 240 201
PO Box 463 Dee Why NSW 2099
2/99A South Creek Road, Dee Why NSW 2099
Telephone: (02) 9971 4802
Facsimile: (02) 9971 4822
E-mail: info@cmssurveyors.com.au

LGA: WILLOUGHY
SHEET 12 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: **17485detail**
ISSUE: **5**
CAD FILE: 17485Adetail 5.dwg

= SEWER LINE (UNDERGROUND) PLOTTED FROM SERVICE DIAGRAMS, APPROXIMATE POSITION ONLY.

LEGEND: (SEE NOTE 1)

- C = COMMUNICATIONS LINES (UNDERGROUND)
- E = ELECTRICITY LINE (UNDERGROUND)
- G = GAS LINE
- S = SEWER LINE (UNDERGROUND)
- SW = STORMWATER LINE
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- W = WATER DISTRIBUTION LINE (UNDERGROUND)

NOTES

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FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

LEGEND

AT = ASTRO TURF
EQU = PLAY EQUIPMENT
WT = WATER TANK
AW = AWNING
BAL = BALCONY
BIT = BITUMEN
BLD = EXTERNAL BUILDING
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CHI = CHIMNEY
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HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
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LGA: WILLOUGHY | SHEET 13 OF 16

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ISSUE: 5

A1

ADJOINS SHEET 10

ADJOINS SHEET 13

ADJOINS SHEET 15

ADJOINS SHEET 16

D.P.812207

BRICK BUILDING
TILE ROOF

2 STOREY
BRICK BUILDING
TILE & METAL ROOF

UNKNOWN PIT
UNDER TIMBER RAMP
UNABLE TO OPEN

METAL SHED

DEMOUNTABLE BUILDING
METAL ROOF

METAL ROOF OVER BALCONY
PATIO UNDER

2 STOREY
METAL CLAD BUILDING
METAL ROOF

RAMP

STEPS

LANDING

GARDEN

BITUMEN

CONCRETE

BRICK

PATH

LAWN

KERB

GUTTER

WALL

DIRT

ELECTRICAL
KIOSK

CONCRETE
DRIVEWAY

BALCONIES

STORMWATER OUTLETS
TRACE TERMINATES AT WALL
UNABLE TO DETERMINE ORIGIN
POSSIBLE DOWNPIPE OUTLETS

HIGHWAY

(BITUMEN FORMATION)

CENTENNIAL

AVENUE

PACIFIC

MGA NORTH

269°

121.4

59"

25.755

17"

43"

157°

15"

FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

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BENCH MARK
NAIL IN CONCRETE
RL 105.42
E 331386.16
N 6258664.47

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LGA: WILLOUGHY | SHEET 14 OF 16

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SUBSURFACE UTILITY INFORMATION

SUBSURFACE UTILITY INFORMATION (SUI) AS5488 CLASSIFICATION
QUALITY LABELLING UTILITY INFORMATION BY A CLASSIFICATION CODE ALLOWS THE USER OF THIS INFORMATION TO UNDERSTAND CLEARLY HOW THE INFORMATION WAS COLLECTED AND THEN PLACE AN APPROPRIATE AMOUNT OF RELIANCE ON IT. PROJECT RISKS RELATED TO UNDERGROUND UTILITIES CAN THEN BE PROPERLY MANAGED.
QUALITY A:
INFORMATION IS THE HIGHEST POSSIBLE LEVEL OF ACCURACY AND IS OBTAINED EXPOSING THE UNDERGROUND UTILITY USING A NON-DESTRUCTIVE EXCAVATION (POT HOLING) TECHNIQUE. THE VERTICAL INFORMATION FOR THIS LOCATING METHOD IS TO THE TOP OF THE SHALLOWEST PART OF THE LOCATED SERVICE. THE 3D LOCATION IS RECORDED AS AN X, Y, Z COORDINATE. EXPECTED HORIZONTAL AND VERTICAL ACCURACY IS +/-50MM.
QUALITY B:
INFORMATION IS COLLECTED BY DESIGNATING THE HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND UTILITIES BY USING ELECTROMAGNETIC PIPE AND CABLE LOCATORS, SONDES OR FLEXI TRACE, GROUND PENETRATING RADAR AND ACOUSTIC PULSE EQUIPMENT. THIS IS THE MOST COMMON FORM OF UTILITY LOCATING AND ALTHOUGH AN X, Y, AND Z AXIS CAN BE ESTABLISHED IT IS NOT ALWAYS ENTIRELY ACCURATE DUE TO DIFFERING ELECTROMAGNETIC FIELDS, SOIL CONDITIONS AND MULTIPLE BANKS OF CABLES AFFECTING THE LOCATING SIGNAL. EXPECTED HORIZONTAL ACCURACY IS +/-300MM. VERTICAL ACCURACY +/-500MM.
QUALITY C:
INFORMATION IS COLLECTED BY CORRELATING THE SURVEY OF VISIBLE UTILITY SURFACE FEATURES SUCH AS MARKER PLATES OR WATER HYDRANTS AND ACQUIRED DIAL BEFORE YOU DIG PLANS TO DRAW A STRING WHICH SHOWS THE APPROXIMATE POSITION OF SERVICES. THIS METHOD DOES NOT USUALLY SHOW MULTIPLE BANKS OF CABLES AND DOES NOT ALWAYS SHOW THREE-DIMENSIONAL INFORMATION. EXPECTED HORIZONTAL ACCURACY (SURFACE FEATURES ONLY) IS +/-300MM.
QUALITY D:
INFORMATION IS THE MOST BASIC LEVEL OF UTILITY LOCATIONS USING ONLY INFORMATION BASED ON EXISTING DIAL BEFORE YOU DIG PLANS OR OTHER RECORDS AND BY MEASURING BOUNDARY OFFSETS ETC. THIS METHOD OF UTILITY LOCATION SHOULD ALWAYS BE TREATED AS AN INDICATION OF THE PRESENCE OF A SERVICE ONLY AND SHOULD NOT BE USED FOR DESIGN. TOLERANCE DOES NOT APPLY TO AN INDICATIVE LOCATION THAT IS ATTRIBUTED TO QUALITY LEVEL D.
DETECTION DISCLAIMER:
ELECTROMAGNETIC LOCATING TECHNIQUES AS WELL AS GROUND PENETRATING RADAR HAVE BEEN UTILISED IN THE LOCATION OF UNDERGROUND SERVICES. THESE RESULTS ARE NOT INFALLIBLE AND A NON-DESTRUCTIVE DIG PROCESS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION, POSITIONS AND PARTICULARLY HEIGHTS, WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN LOCATING AND MAPPING THE UNDERGROUND SERVICES, THE COMPLETE EXTENTS OF THE THIS UTILITY SURVEY INFORMATION CANNOT BE GUARANTEED.
THIRD PARTY INFORMATION DISCLAIMER:
ALL FEATURES SHOWN IN GREY HAVE BEEN TAKEN FROM EXTERNAL SOURCES AND AS SUCH UTILITY MAPPING CANNOT VERIFY THE ACCURACY OF THIS INFORMATION. CONTACTING THE RELEVANT PROVIDER IS RECOMMENDED FOR THE LATEST INFORMATION.
CADASTRAL BOUNDARY DISCLAIMER:
CADASTRAL BOUNDARY HAS BEEN SUPPLIED BY A THIRD PARTY AND IS INDICATIVE ONLY. UTILITY MAPPING ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

HORIZONTAL DATUM:
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LGA: WILLOUGHBY | SHEET 15 OF 16

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A1

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CAUTION: SURESEARCH HAVE SURVEYED WITHIN THE BOUNDARY OF THE SITE AND DURKIN HAVE SURVEYED THE ROAD RESERVE SURROUNDING THE SITE AND MARKED OUT EXISTING SERVICES IN THE AREA SPECIFIED BY THE CLIENT. THESE SERVICE LINES HAVE BEEN LOCATED BY ABOVE GROUND SERVICE TRACING METHODS AND HAVE NOT BEEN SIGHTED. CMS SURVEYORS HAVE THEN LOCATED THE LINE MARKED BY SURESEARCH. THE LOCATION OF THESE MARKED SERVICES ARE APPROXIMATE ONLY. THE POSITION OF THE MARKED SERVICE LINES HAS BEEN MADE WITH REFERENCE TO THE RELEVANT SERVICE AUTHORITY DIAGRAMS. ALL SERVICES MAY NOT HAVE BEEN SHOWN AND UTILITY DESCRIPTIONS HAVE BEEN TAKEN FROM UTILITY PROVIDED DIAGRAMS WHERE AVAILABLE. WE RECOMMEND NON DESTRUCTIVE DIGGING/POTHOLING TO EXPOSE MARKED SERVICES TO IDENTIFY AND SHOW EXACT DEPTH AND LOCATION OF SERVICE LINES PRIOR TO EARTHWORKS COMMENCING. UTILITIES PLOTTED ON THE PLAN THAT TERMINATE IN THE SPECIFIED AREA MAY GO TO FEATURES THAT HAVE NOT BEEN SHOWN ON THE BACKGROUND DETAIL SURVEY PROVIDED BY CLIENT. THE RISK REMAINS WITH THE CLIENT AND/OR SUB CONTRACTOR AND THEIR RESPONSIBILITY TO EXERCISE CAUTION AT ALL TIMES.

SUBSURFACE UTILITY INFORMATION

SUBSURFACE UTILITY INFORMATION (SUI) AS5488 CLASSIFICATION QUALITY LABELLING UTILITY INFORMATION BY A CLASSIFICATION CODE ALLOWS THE USER OF THIS INFORMATION TO UNDERSTAND CLEARLY HOW THE INFORMATION WAS COLLECTED AND THEN PLACE AN APPROPRIATE AMOUNT OF RELIANCE ON IT. PROJECT RISKS RELATED TO UNDERGROUND UTILITIES CAN THEN BE PROPERLY MANAGED.

QUALITY A:
INFORMATION IS THE HIGHEST POSSIBLE LEVEL OF ACCURACY AND IS OBTAINED EXPOSING THE UNDERGROUND UTILITY USING A NON-DESTRUCTIVE EXCAVATION (POT HOLING) TECHNIQUE. THE VERTICAL INFORMATION FOR THIS LOCATING METHOD IS TO THE TOP OF THE SHALLOWEST PART OF THE LOCATED SERVICE. THE 3D LOCATION IS RECORDED AS AN X, Y, Z COORDINATE. EXPECTED HORIZONTAL AND VERTICAL ACCURACY IS +/-50MM.

QUALITY B:
INFORMATION IS COLLECTED BY DESIGNATING THE HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND UTILITIES BY USING ELECTROMAGNETIC PIPE AND CABLE LOCATORS, SONDES OR FLEXI TRACE, GROUND PENETRATING RADAR AND ACOUSTIC PULSE EQUIPMENT. THIS IS THE MOST COMMON FORM OF UTILITY LOCATING AND ALTHOUGH AN X, Y, AND Z AXIS CAN BE ESTABLISHED IT IS NOT ALWAYS ENTIRELY ACCURATE DUE TO DIFFERING ELECTROMAGNETIC FIELDS, SOIL CONDITIONS AND MULTIPLE BANKS OF CABLES AFFECTING THE LOCATING SIGNAL. EXPECTED HORIZONTAL ACCURACY IS +/-300MM. VERTICAL ACCURACY +/-500MM.

QUALITY C:
INFORMATION IS COLLECTED BY CORRELATING THE SURVEY OF VISIBLE UTILITY SURFACE FEATURES SUCH AS MARKER PLATES OR WATER HYDRANTS AND ACQUIRED DIAL BEFORE YOU DIG PLANS TO DRAW A STRING WHICH SHOWS THE APPROXIMATE POSITION OF SERVICES. THIS METHOD DOES NOT USUALLY SHOW MULTIPLE BANKS OF CABLES AND DOES NOT ALWAYS SHOW THREE-DIMENSIONAL INFORMATION. EXPECTED HORIZONTAL ACCURACY (SURFACE FEATURES ONLY) IS +/-300MM.

QUALITY D:
INFORMATION IS THE MOST BASIC LEVEL OF UTILITY LOCATIONS USING ONLY INFORMATION BASED ON EXISTING DIAL BEFORE YOU DIG PLANS OR OTHER RECORDS AND BY MEASURING BOUNDARY OFFSETS ETC. THIS METHOD OF UTILITY LOCATION SHOULD ALWAYS BE TREATED AS AN INDICATION OF THE PRESENCE OF A SERVICE ONLY AND SHOULD NOT BE USED FOR DESIGN. TOLERANCE DOES NOT APPLY TO AN INDICATIVE LOCATION THAT IS ATTRIBUTED TO QUALITY LEVEL D.

DETECTION DISCLAIMER:
ELECTROMAGNETIC LOCATING TECHNIQUES AS WELL AS GROUND PENETRATING RADAR HAVE BEEN UTILISED IN THE LOCATION OF UNDERGROUND SERVICES. THESE RESULTS ARE NOT INFALLIBLE AND A NON-DESTRUCTIVE DIG PROCESS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION, POSITIONS AND PARTICULARLY HEIGHTS, WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN LOCATING AND MAPPING THE UNDERGROUND SERVICES, THE COMPLETE EXTENTS OF THE THIS UTILITY SURVEY INFORMATION CANNOT BE GUARANTEED.

THIRD PARTY INFORMATION DISCLAIMER:
ALL FEATURES SHOWN IN GREY HAVE BEEN TAKEN FROM EXTERNAL SOURCES AND AS SUCH UTILITY MAPPING CANNOT VERIFY THE ACCURACY OF THIS INFORMATION. CONTACTING THE RELEVANT PROVIDER IS RECOMMENDED FOR THE LATEST INFORMATION.

CADASTRAL BOUNDARY DISCLAIMER:
CADASTRAL BOUNDARY HAS BEEN SUPPLIED BY A THIRD PARTY AND IS INDICATIVE ONLY. UTILITY MAPPING ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

FOR EXTRA NOTES SEE SHEET 1
& FOR TREE TABLE SEE SHEET 2

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:100

LEGEND

AT = ASTRO TURF
EQU = PLAY EQUIPMENT
WT = WATER TANK
AW = AWNING
BAL = BALCONY
BIT = BITUMEN
BLD = EXTERNAL BUILDING
BW = BOTTOM WALL
CHI = CHIMNEY
CL = CENTRELINE
COL = COLUMN
CON = CONCRETE
CPIT = COMMUNICATIONS PIT
CSL = COMMUNICATIONS SLA
DP = DOWN PIPE
DS = DOOR SILL LEVEL
EK = ELECTRICITY KIOSK
EOT= END OF TRACE
EPIT = ELECTRICITY PIT
ESL = ELECTRICITY SLA
FCE = FENCE
FHY = FIRE HYDRANT
FL = FLOOR LEVEL
FOD = FULL OF DIRT
FSL = FIBRE OPTIC SLA
GF = GUTTER LEVEL
GM = GAS METER
GRT = GRATE
GSL = GAS SLA
HL = HOOD LEVEL
HYD = HYDRANT
LAN = LANDING
LID = MISCELLANEOUS PIT LID
LP = LIGHT POLE
NS = NATURAL SURFACE
PAR = PARAPET
PAT = PATIO
PAV = PAVING
PIT = TOP OF PIT
POST = POST
PTH = PATH
RF = TOP OF ROOF
RMP = RAMP
RR = ROOF RIDGE
SGW = SALT GLAZED WARE PIPE
SIP = SEWER INSPECTION PIT
SL = SILL LEVEL
SMH = SEWER MAN HOLE
SH = SPOT HEIGHT
SSL = SEWER SLA
STR = STAIRS
SVA = STOP VALVE
SWSL = STORMWATER SLA
TAP = TAP
TFCE = TOP OF FENCE
TG = TOP OF GUTTER
TKB = TOP OF KERB
TLI = TRAFFIC LIGHT
TPIT = TELSTRA PIT
TR = TREE
TSL = TELSTRA SLA
TW = TOP OF WALL
UNS = UNDERSIDE LEVEL
USL = UNKNOWN SERVICE SLA
UTO = UNABLE TO OPEN
WM = WATER METER
WSL = WATER SLA
WT = WATER TANK
WV = WATER VALVE
SLA = SURFACE LEVEL ABOVE

TREE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: MGA GROUND
MARKS ADOPTED: SSM36739, SSM165617

VERTICAL DATUM:
DATUM: AUSTRALIAN HEIGHT DATUM (AHD)
B.M. ADOPTED: SSM 36739
R.L. 106.823 (ORDER L2)
SOURCE: S.C.I.M.S. (17/01/18)

6	AERIAL IMAGE UPDATED	01/11/19
5	FURTHER SEWER INVESTIGATION	11/10/19
4	FURTHER SERVICES INVESTIGATION	27/02/19
3	ADD TRUNCATION INFORMATION	04/02/19
2	EXTRA DETAIL ADDED	21/01/19
1	FIRST ISSUE	14/02/18

CLIENT:
SCHOOLS INFRASTRUCTURE NSW
LEVEL 8, 259 GEORGE STREET
SYDNEY NSW 2000

SURVEY PLAN
SHOWING DETAIL & LEVELS OVER
LOT 1 IN DP812207 & LOT C IN DP346499
CHATSWOOD PRIMARY SCHOOL
5 CENTENNIAL AVENUE,
CHATSWOOD NSW 2067

C.M.S. Surveyors Pty Limited
ACN: 096 240 201
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Facsimile: (02) 9971 4822
E-mail: info@cmssurveyors.com.au

LGA: WILLOUGHBY | SHEET 16 OF 16

SURVEYED	DRAWN	CHECKED	APPROVED
PB/BB/TC/ME	GP	PB/BB/TC/ME	ML/DR

SURVEY INSTRUCTION	SCALE	DATE OF SURVEY
17485A	1:100 @ A1	10-17/01/18,14-15/02/19

DRAWING NAME: **17485detail**
CAD FILE: 17485Adetail 5.dwg
ISSUE: 5