



TSA Management Pty Limited
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26 October 2021

Planning Secretary
NSW Department of Planning, Industry and Environment
320 Pitt Street, Sydney NSW 2000

Dear Planning Secretary,

Subject: Santa Sophia Catholic College (SSD 9772) – Roadworks, Access, and car parking provisions – E16

I refer to the Santa Sophia Catholic College project (SSD 9772) that was approved on 21st April 2020.

In accordance with condition E16 of the Development Consent, the attached information has been submitted for the information of the planning secretary.

While the attached has been submitted in response to advice from DPIE, please advise should any additional information be required.

Kind Regards,

Isaac Conway

Project Manager



Best for Project

Level 15, 207 Kent Street, Sydney, NSW 2000

M: +61 401 526 236

isaac.conway@tsamgt.com

William Tseng

From: Ryan Baitz <Ryan.Baitz@stockland.com.au>
Sent: Monday, 25 October 2021 4:57 PM
To: William Tseng
Cc: Kenny Lim
Subject: RE: Santa Sophia - Roadworks Evidence of Completion/Approvals
Attachments: 20211025_Gables TC Roads A&B Signs and Linemarking.pdf; 20211025_Gables TC Roads A&B School Driveways.pdf; 20211025_Gables TC Roads A&B Letter.pdf

Hi Will,

Please see attached the below items:

- Letter from WEM confirming the installation of the signage and line marking as per the approved LTC plan
- Letter from WEM confirming the completion of the Santa Sophia driveways as per the approved CC
- Letter from WEM confirming the completion of Roads A & B as per the approved CC

I can confirm that Roads A & B are operational, and will be open to the public prior to the opening of Santa Sophia.

Cheers,

Ryan Baitz

Development Manager | Residential
Stockland, Level 26, 133 Castlereagh Street, Sydney NSW 2000

E: ryan.baitz@stockland.com.au

T: 02 9035 2138

M: 04 3742 6157

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

From: William Tseng [mailto:William.Tseng@tsamgt.com]
Sent: Friday, 22 October 2021 3:27 PM
To: Ryan Baitz <Ryan.Baitz@stockland.com.au>
Cc: Kenny Lim <Kenny.Lim@tsamgt.com>
Subject: RE: Santa Sophia - Roadworks Evidence of Completion/Approvals

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Hi Ryan,

We have received clarification from the Planning Secretary with regards to what they are seeking to satisfy condition E16.

William Tseng

Subject: FW: SSD9772 - Compliance Enquiry - E16 - Roadworks, access and car parking provisions [TSA-P.NSW.C1363]

From: Sidonie Crepeau <Sidonie.Crepeau@planning.nsw.gov.au>

Sent: Friday, 22 October 2021 2:10 PM

To: Isaac Conway <Isaac.Conway@tsamgt.com>

Subject: RE: SSD9772 - Compliance Enquiry - E16 - Roadworks, access and car parking provisions [TSA-P.NSW.C1363]

Hi Isaac ,

Thank you for your email.

Re condition E16 of the consent (SSD 9772) and based on your description of proposed response below, I am of the view that:

- Subdivision certificates and Letter from Stocklands/consultant are adequate for items (a) and (b).
- Letters from the builders are adequate for items (c) and (e).

To ensure that all items are covered, please also include the documentation for item (d) that relates to the Temporary carpark.

Regarding item (f): the necessary approval from Councils and/or relevant authorities relates to MOD 1 application.

I note through the Department Assessment Report of MOD 1, that the impact of the vehicular crossing on Fontana Drive could pose a safety risk. However, this risk can be mitigated and the truck movement 'supported subject to suitable traffic control measures and the provision of suitable traffic controls via **the Road Occupancy Licence (with approval via Council's Traffic Committee)**'.

Also, the report details that: 'Conditions to this effect have been recommended requiring additional details in the approved Operational Traffic and Access Management Plan and a **Road Occupancy Licence** (where needed).

Additional conditions of consent have also been recommended requiring the Applicant to '**obtain separate construction certificates for the driveway crossings from Council.**' Therefore, it would be required to provide the Department with the Road Occupancy Licence and the separate CC from the Council.

Please let me know if you have any further questions or require clarifications.

Have a great weekend.

Warm regards,
Sidonie

From: Isaac Conway <Isaac.Conway@tsamgt.com>

Sent: Thursday, 21 October 2021 9:47 AM

To: Sidonie Crepeau <Sidonie.Crepeau@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>

Cc: William Tseng <William.Tseng@tsamgt.com>; Kenny Lim <Kenny.Lim@tsamgt.com>

Subject: SSD9772 - Compliance Enquiry - E16 - Roadworks, access and car parking provisions [TSA-P.NSW.C1363]

Good Morning Sidonie and Shiraz,

I hope that you have both been well and your lives are returning to some sort of normality with the easing of COVID restrictions 😊

I am getting in touch with you both to get an understanding of the requirements to demonstrate compliance with condition E16 of SSD9772 (Santa Sophia Catholic School – Box Hill).

The below is what has been proposed to be provided to respond to the condition.

E16

Roadworks, Access and car parking provisions

Within 3 months of issue of the Occupation Certificate and prior to the attendance of students (including CELC students), the Applicant must submit information to the Planning Secretary, demonstrating that the following works have been completed and are operational:

- (a) including construction of future Fontana Drive extension on the western frontage of the site,
 - (b) future Road B on the northern frontage of the site;
 - (c) drop-off / pick-up zone with 12 cars on future Road B and a bus zone (for five buses) on future Fontana Drive (adjoining the site); and
 - (d) temporary car park on the eastern side of the site as approved by DA 29-2020 HA;
 - (e) provision of the required vehicular crossings on future Fontana Drive and future Road B; and
 - (f) evidence of necessary approvals from Council and / or relevant roads authorities (if applicable).
- [SSD-9772-Mod-1]**

Proposed Response

TSA to submit relevant information available. This could include:
i) Subdivision certificate for roads/infrastructure
ii) Letter from Stockland for roads/infrastructure use (as a private road) and progress)
iii) Letter from the bus company on Road B and Bus Zone in accordance with the requirements
iv) Statement from the council for future Fontana Drive to be operational

Could you please confirm that the above would be deemed acceptable (or what other information may be required). Clarity on item (f) would be appreciated as well (e.g. is this approval to construct the road?).

Please give me a call if easier to discuss.

Kind Regards,

Isaac Conway

Project Manager



Best for Project

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I acknowledge the Traditional Owners and Custodians of the lands on which I live and work and pay my respect to Elders past, present and future.

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25 October 2021

The General Manager
The Hills Shire Council
PO Box 75
CASTLE HILL NSW 1765

Attention: Mr Michael Edgar



GABLES TOWN CENTRE ROADS A & B
Council Reference No. CC 85/2020/EC

Property Description:

Lot 2 DP 1237552, Lot 2 DP 1237552 Red Gables Road, BOX HILL NSW 2765

CONSTRUCTION CERTIFICATION

I, Ryan Noney, of Western Earthmoving Pty Ltd, hereby certify that the road pavement and other items for this project has been constructed in accordance with the conditions of the Construction Certificate, the approved pavement design report and in accordance with The Hills Shire Council's "Works Specification Subdivisions/Developments"

Yours Faithfully,
WESTERN EARTHMOVING PTY LTD,



Ryan Noney *BE(Hons) DipProfEngPrac*
Project Manager
money@wem.com.au

25 October 2021

The General Manager
The Hills Shire Council
PO Box 75
CASTLE HILL NSW 1765



Attention: Mr Michael Edgar

GABLES TOWN CENTRE ROADS A & B - STREETScape
Council Reference No. CC 85/2020/EC/A

Property Description:

Lot 2 DP 1237552, Lot 2 DP 1237552 Red Gables Road, BOX HILL NSW 2765

CONSTRUCTION CERTIFICATION

I, Ryan Noney, of Western Earthmoving Pty Ltd, hereby certify that the school driveways, streetscape and other items for this project has been constructed in accordance with the conditions of the Construction Certificate, the approved pavement design report and in accordance with The Hills Shire Council's "Works Specification Subdivisions/Developments"

Yours Faithfully,
WESTERN EARTHMOVING PTY LTD,

Ryan Noney *BE(Hons) DipProfEngPrac*
Project Manager
money@wem.com.au



13 August 2021

Stockland Development Pty Ltd
Level 29 133 Castlereagh St
SYDNEY NSW 2000

Dear Sir/ Madam

CONSTRUCTION CERTIFICATE

In accordance with the Environmental Planning and Assessment Act 1979, Roads Act 1993 and/ or Local Government Act 1993

Notice is given of determination by Council the consent authority of the Certificate described below.

Development:	Subdivision creating three development lots and two residue lots including new road (amended civil plans and landscaping/ public domain details responding to Local Traffic Committee approval of signage, line-marking and other traffic elements associated with Santa Sophia Catholic College)
Construction Certificate No.:	85/2020/EC/A
Property Description:	Lot 2 DP 1237552 Lot 2 DP 1237552 Red Gables Road, GABLES NSW 2765
Applicant:	Stockland Development Pty Ltd
Owner:	AW Bidco 4 Pty Limited
Construction Category	Subdivision/ Engineering Works
Decision:	Approved
Date of Certificate:	13 August 2021
Development Consent No.:	1542/2019/ZB
Date of Issue:	5 June 2020

This subdivision works Construction Certificate is a Part 4A Certificate issued in accordance with Section 109C(1)(b) of the Environmental Planning and Assessment Act 1979 and certifies that the subdivision works, as detailed in the plans and specifications listed below and attached to this certificate, if completed in accordance with these plans and specifications, will comply with the requirements of the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulation 2000.

This approval is issued in accordance with Section 138 of the Roads Act 1993 and/ or Section 68 of the Local Government Act 1993.

The following plans, accompanying documents and specifications comply with the standards and/ or requirements listed below:

LIST OF PLANS, ACCOMPANYING DOCUMENTS AND SPECIFICATIONS:

Plans:	The Gables RGR 1A1B & Town Centre Roads A&B Streetscape Civil Engineering Works Rev 2 prepared by Enspire
	Box Hill North – Precinct E Town Centre Roads A&B & RGR 1A/1B Streetscape Construction Certificate Rev I prepared by Aecom
Documents:	Minutes of the duly convened Ordinary Meeting of The Hills Shire Council held in the Council Chambers on 27 July 2021 Item 10 LTC Recommendation June 2021 – Santa Sophia Catholic College Gables – Proposed Parking Restrictions and Linemarking Plans

STANDARDS AND/ OR REQUIREMENTS TO BE COMPLIED WITH:

The Hills Shire Council's Design Guidelines – Subdivision and Developments
The Hills Shire Council's Works Specifications – Subdivision and Developments

<https://www.thehills.nsw.gov.au/Building/Development-Approvals/Subdivision/Subdivision-Engineering-Specifications-Drawings>

NOTES:

In accordance with Section 6.12 of the Environmental Planning and Assessment Act 1979 the subdivision works covered by this Certificate may not commence until:

The person having the benefit of the development consent has appointed a principal certifier for the subdivision work.

Note: For subdivision work Council must be the principal certifier as per Section 6.5 of the Environmental Planning and Assessment Act 1979. Another certifier cannot carry out inspections of subdivision work without the approval of the principal certifier. To assist Council's subdivision works Construction Certificate/ Subdivision Works Certificate application form incorporates an appointment of principal certifier form.

The person having the benefit of the development consent has given at least 2 days' notice to the Council (as the principal certifier) of their intention to commence the subdivision work.

The development consent referred to above includes a number of conditions under the heading "prior to works commencing on the site" that must be complied with. This includes, but is not limited to, the need for a traffic control plan, service certificates and a pavement design.

A schedule of required inspections, hold points and notification requirements is provided in The Hills Shire Council's Works Specifications – Subdivision and Developments and must be followed. These inspections must be carried out by Council's Construction Engineer.

Please contact Mark Nabua on (02) 9843 0389 or 0481 902 487 if you require any further information.

Yours Faithfully



Ben Hawkins

MANAGER – SUBDIVISION & DEVELOPMENT CERTIFICATION

BOX HILL NORTH - PRECINCT E

TOWN CENTRE ROADS A&B & RED GABLES ROAD 1A/1B

STREETSCAPE

CONSTRUCTION CERTIFICATE

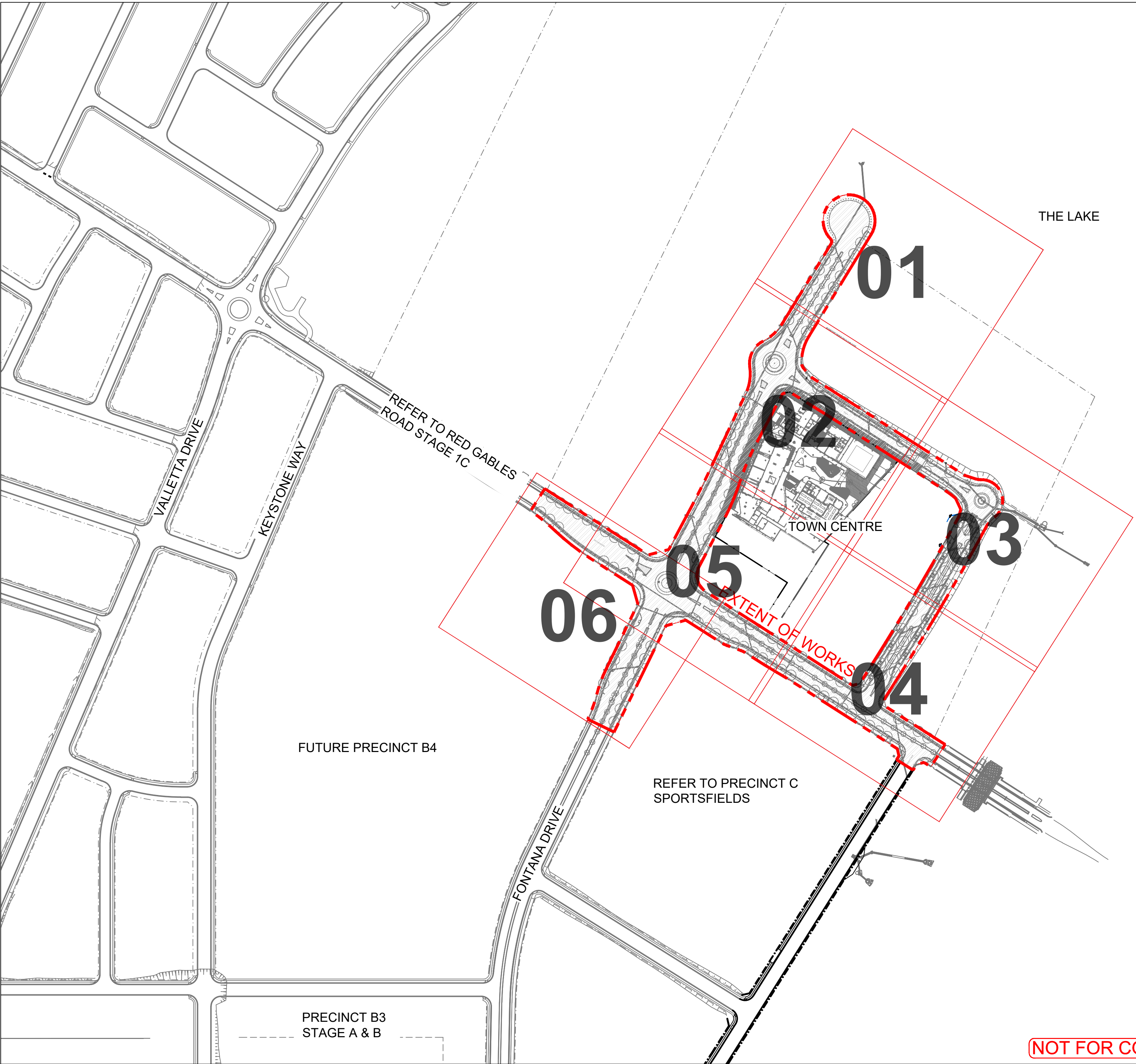
DRAWING REGISTER		
Drawing No.	Drawing Title	
60636281-DRG-20-TCAB-LD-0001	COVER PAGE & DRAWING REGISTER	SHEET 1 of 5
60636281-DRG-20-TCAB-LD-0011	LEGEND AND GENERAL NOTES	SHEET 2 of 5
60636281-DRG-20-TCAB-LD-0012	PLANT SCHEDULE	SHEET 3 of 5
60636281-DRG-20-TCAB-LD-0013	MATERIALS & FINISHES SCHEDULE	SHEET 4 of 5
60636281-DRG-20-TCAB-LD-0014	MATERIALS & FINISHES SCHEDULE	SHEET 5 of 5
60636281-DRG-20-TCAB-LD-0201	MATERIALS AND FINISHES PLAN	SHEET 1 of 6
60636281-DRG-20-TCAB-LD-0202	MATERIALS AND FINISHES PLAN	SHEET 2 of 6
60636281-DRG-20-TCAB-LD-0203	MATERIALS AND FINISHES PLAN	SHEET 3 of 6
60636281-DRG-20-TCAB-LD-0204	MATERIALS AND FINISHES PLAN	SHEET 4 of 6
60636281-DRG-20-TCAB-LD-0205	MATERIALS AND FINISHES PLAN	SHEET 5 of 6
60636281-DRG-20-TCAB-LD-0206	MATERIALS AND FINISHES PLAN	SHEET 6 of 6
60636281-DRG-20-TCAB-LD-0301	PLANTING PLAN	SHEET 1 of 6
60636281-DRG-20-TCAB-LD-0302	PLANTING PLAN	SHEET 2 of 6
60636281-DRG-20-TCAB-LD-0303	PLANTING PLAN	SHEET 3 of 6
60636281-DRG-20-TCAB-LD-0304	PLANTING PLAN	SHEET 4 of 6
60636281-DRG-20-TCAB-LD-0305	PLANTING PLAN	SHEET 5 of 6
60636281-DRG-20-TCAB-LD-0306	PLANTING PLAN	SHEET 6 of 6
60636281-DRG-20-TCAB-LD-0911	DETAILS	SHEET 1 of 8
60636281-DRG-20-TCAB-LD-0912	DETAILS	SHEET 2 of 8
60636281-DRG-20-TCAB-LD-0913	DETAILS	SHEET 3 of 8
60636281-DRG-20-TCAB-LD-0914	DETAILS	SHEET 4 of 8
60636281-DRG-20-TCAB-LD-0915	DETAILS	SHEET 5 of 8
60636281-DRG-20-TCAB-LD-0916	DETAILS	SHEET 6 of 8
60636281-DRG-20-TCAB-LD-0917	DETAILS	SHEET 7 of 8
60636281-DRG-20-TCAB-LD-0921	DETAILS	SHEET 8 of 8

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021



CLIENT



Level 25,
133 Castlereagh Street,
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02 9035 2000 tel
02 8988 2000 fax
www.stockland.com.au
Prepared for:
Stockland Development
Pty Ltd
A.B.N 71 000 064 835

CONSULTANT

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REGISTRATION

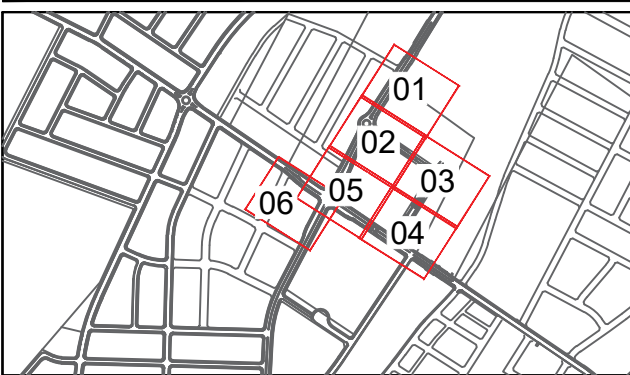
PROJECT MANAGEMENT INITIALS

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

I	05.08.2021	CONSTRUCTION CERTIFICATE
H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION

KEY PLAN



PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
COVER PAGE AND
DRAWING REGISTER

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0001

LEGEND

GENERAL

- EXTENT OF WORKS
- PROPOSED ROAD CONTOUR (0.25m)

SURFACE FINISHES

- PA1a

STONE UNIT: PEDESTRIAN PAVEMENT
REFER DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- PA1b

STONE UNIT: TRAFFICABLE PAVEMENT
REFER DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- STONE UNIT: 600 x 600mm
TO BE CUT DOWN TO SIZE TO LIMIT JOINTS
REFER DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- STONE UNIT: 400 x 800mm
TO BE CUT DOWN TO SIZE TO LIMIT JOINTS
REFER DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- PA3

BROOM FINISH CONCRETE: PEDESTRIAN PAVEMENT
REFER TYPICAL HILLS SHIRE COUNCIL DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- PA3b

BROOM FINISH CONCRETE: TRAFFICABLE PAVEMENT
REFER TYPICAL HILLS SHIRE COUNCIL DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- PA4

COLOURED CONCRETE: CYCLEWAY
REFER TYPICAL HILLS SHIRE COUNCIL DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- TC1

STONE UNIT: TACTILE PAVEMENT
REFER DETAILS AND MATERIALS AND FINISHES SCHEDULE FOR SPECIFICATIONS
- CONTRACTION JOINT: SAW CUT
REFER TO ENSPIRES DRAWINGS
- EXPANSION JOINT
REFER TO ENSPIRES DRAWINGS
- TIMBER EDGE
REFER DETAILS

PLANTING & SOFTSCAPES

- TREE PLANTING
REFER DETAILS AND PLANT SCHEDULE FOR SPECIFICATIONS
- TF1

TURF
REFER DETAILS AND PLANT SCHEDULE FOR SPECIFICATIONS
- GB1

GROUND COVER PLANTING
REFER DETAILS AND PLANT SCHEDULE FOR SPECIFICATIONS
- GB2

TREE SURROUND MULCH
REFER DETAILS AND PLANT SCHEDULE FOR SPECIFICATIONS
- STR

STRUCTURAL SOIL
REFER DETAILS AND PLANT SCHEDULE FOR SPECIFICATIONS
- LINKED TRENCH
REFER DETAILS AND PLANT SCHEDULE FOR SPECIFICATIONS

FURNITURE & FIXTURES

- F3a

FURNITURE TYPE 3a - CONCRETE BOLLARD
REFER DETAILS AND FURNITURE AND FIXTURES SCHEDULE FOR SPECIFICATIONS
- F4

FURNITURE TYPE 4 - TREE GRATE
REFER SURFACE FINISHES PLANS FOR ASSOCIATED MATERIAL INFILL
REFER DETAILS AND FURNITURE AND FIXTURES SCHEDULE FOR SPECIFICATIONS

UTILITIES

- INDICATIVE POST LIGHT LOCATION
FINAL LOCATION TO BE CONFIRMED
- INDICATIVE COMMS PIT LOCATION
FINAL LOCATION TO BE CONFIRMED
- INDICATIVE SERVICE PIT LOCATIONS
FINAL LOCATION TO BE CONFIRMED



SERVICE LOCATIONS

It is the responsibility of the Foreman to control the relevant service authorities to ascertain the exact location of services prior to construction.

ENERGY SERVICE PROVIDERS

NOTE: SERVICE LOCATIONS ARE APPROXIMATE ONLY FROM PROVIDERS PLANS. LOCATIONS ARE TO BE CONFIRMED PRIOR TO START OF CONSTRUCTION. PHONE ENDS SERVICE LOCATIONS ON 1100 FOR DETAILS.

TELECOMMUNICATIONS SERVICE PROVIDERS

NOTE: SERVICE LOCATIONS ARE APPROXIMATE ONLY FROM PROVIDERS PLANS. LOCATIONS ARE TO BE CONFIRMED PRIOR TO START OF CONSTRUCTION. PHONE ENDS SERVICE LOCATIONS ON 1100 FOR DETAILS.

NOTES

GENERAL

1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT TECHNICAL SPECIFICATION FOR LANDSCAPE WORKS, AND ALL RELEVANT CONTRACT DOCUMENTS.

2. THE CONTRACTOR IS REQUIRED TO ORGANISE AN ON-SITE PRE-START / TOOLBOX MEETING WITH THE LANDSCAPE SUPERINTENDENT AND PRINCIPAL PRIOR TO COMMENCEMENT OF ANY SITE WORKS

3. LANDSCAPE DRAWINGS ARE PROVIDED FOR SURFACE TREATMENTS WITHIN THE SCOPE OF WORKS AS DEFINED ON THE DRAWINGS. THESE DRAWINGS SHOULD NOT BE USED FOR LOCATING ANY SUBTERRANEAN SERVICES WITHIN OR OUTSIDE THE SCOPE OF WORKS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SUBTERRANEAN SERVICE LOCATIONS ON SITE PRIOR TO COMMENCING WORKS.

4. ALL DIMENSIONS ARE PROVIDED IN MILLIMETERS UNLESS OTHERWISE NOTED. DIMENSIONS SHOULD NOT BE OBTAINED BY SCALING OFF THE DRAWINGS. ALL DIMENSIONS WITHIN DETAIL PAGES ARE PROVIDED FOR INFORMATION ONLY; ENGINEERING SHOP DRAWINGS ARE TO BE OBTAINED FOR ALL STRUCTURAL ITEMS PRIOR TO COMMENCEMENT OF WORKS. CONTACT THE PROJECT LANDSCAPE ARCHITECT / DESIGN ENGINEER FOR CLARIFICATION OF DIMENSIONS WHERE REQUIRED.

5. SETOUT AND INSPECTION OF THE WORKS AS OUTLINED IN THE LANDSCAPE TECHNICAL SPECIFICATION MUST BE WITNESSED AND APPROVED BY THE LANDSCAPE SUPERINTENDENT PRIOR TO CONSTRUCTION.

SUBTERRANEAN SERVICES:

6. ALL SERVICE LOCATIONS SHOWN ON THE DRAWINGS ARE INDICATIVE AND SHOWN FOR REFERENCE ONLY. FOR SERVICE LOCATIONS REFER AS FOLLOWS:

6.1. REFER TO LOCAL AUTHORITY DRAWINGS WHERE APPROPRIATE FOR ALL SUBTERRANEAN SERVICES

6.2. REFER SEPARATE ENGINEERING DRAWINGS (BY OTHERS) FOR ALL STORMWATER, WATER, AND SEWER SERVICES INCLUDING BUT NOT LIMITED TO CONDUITS, PIPES MAN-HOLES AND ACCESS POINTS

6.3. REFER SEPARATE ELECTRICAL DRAWINGS (BY OTHERS) FOR LOCATION OF ALL ELECTRICAL SERVICES INCLUDING BUT NOT LIMITED TO CONDUITS, CABLES, SWITCH-BOXES AND SERVICE POINT LOCATIONS

6.4. REFER SEPARATE DRAWINGS (BY OTHERS) FOR LOCATION OF ALL TELECOMMUNICATION SERVICES INCLUDING BUT NOT LIMITED TO CONDUITS, CABLES, AND SERVICE POINT LOCATIONS.

6.5. REFER SEPARATE ENGINEERING DRAWINGS (BY OTHERS) FOR CONFIRMATION OF STORM WATER TREATMENTS AND/OR BIO-BASIN LOCATIONS INCLUDING BUT NOT LIMITED TO SERVICE PIPES, INSPECTION AND OVERFLOW PITS.

7. SEEK CONFIRMATION WITH LOCAL AUTHORITIES OR SIMILAR AS APPROPRIATE FOR ALL SERVICE LOCATIONS PRIOR TO COMMENCING ANY EXCAVATION ON SITE. DIAL BEFORE YOU DIG INFORMATION REFER www.1100.com.au OR PHONE 1100.

8. TREES AND PLANTING WORKS

9. ALL TOPSOIL MUST MEET THE REQUIREMENTS AS SETOUT WITHIN THE LANDSCAPE SPECIFICATION. TOPSOIL MUST BE TESTED BY A SUITABLY QUALIFIED PROFESSIONAL, AND RECOMMENDATIONS BE INCORPORATED AS APPROPRIATE. ALL TOPSOIL MUST BE AMELIORATED AND BLENDED WITH ADDITIVES (AS REQUIRED) ON SITE.

10. TYPICAL SAMPLE OF MULCH TO BE INSTALLED WITHIN WORKS TO BE WITNESSED ON SITE BY LANDSCAPE SUPERINTENDENT FOR APPROVAL PRIOR TO INSTALLATION IN ACCORDANCE WITH THE LANDSCAPE SPECIFICATION.

11. A TYPICAL SAMPLE OF PLANT-STOCK TO BE INSTALLED SHALL BE WITNESSED ON SITE BY LANDSCAPE SUPERINTENDENT FOR APPROVAL PRIOR TO INSTALLATION IN ACCORDANCE WITH THE LANDSCAPE SPECIFICATION.

12. ALL PLANT SPECIES MUST BE INSTALLED AS PER THE SPECIFIED PLANT SCHEDULE. ANY VARIATIONS FROM THE PLANT SCHEDULE MUST BE APPROVED IN WRITING PRIOR TO INSTALLATION. SHOULD INCORRECT SPECIES BE INSTALLED WITHOUT PRIOR APPROVAL, THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT WITH CORRECT SPECIES AT THE CONTRACTORS EXPENSE.

13. ALL TREE STOCK INSTALLED (REGARDLESS OF SIZE) MUST BE NATSPEC COMPLIANT. ARBORIST CERTIFICATION AND ALL NATSPEC COMPLIANCE IS RESPONSIBILITY OF CONTRACTOR. THE CONTRACTOR IS TO ENSURE TREES ARE NATSPEC COMPLIANT AT INSTALLATION AND THE COMPLETION OF THE CONTRACTOR MAINTENANCE PERIOD.

14. ALL TREES MUST BE STAKED AND TIED IN ACCORDANCE WITH THE LANDSCAPE SPECIFICATION AND DETAIL DRAWINGS. STAKES AND TIES TO BE REMOVED AT THE END OF THE LANDSCAPE MAINTENANCE PERIOD OR AS ASSESSED ON SITE BY THE LANDSCAPE SUPERINTENDENT. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL STAKES AND TIES.

15. ALL TREES, SHRUBS AND GRASSES ARE TO BE INSTALLED OFFSET FROM KERB, FOOTPATHS, AND HARDSTAND AREAS AS OUTLINED WITHIN THE PLANT SCHEDULE AND TREE PLANTING DETAILS.
- ### LEVELS AND GRADING
16. ALL GRADES NOMINATED ARE MAXIMUM ALLOWABLE GRADES UNLESS NOTED OTHERWISE (U.N.O.).

17. ALL LEVELS AND GRADES ARE AS NOMINATED ON THE CIVIL PLANS. ANY LEVELS WITHIN THESE DRAWINGS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL CONFIRM ALL EXISTING AND PROPOSED LEVELS ONSITE AND ADVISE WHERE ERRORS OCCUR PRIOR TO THE PLACEMENT OF FORMWORKS OR INSTALLATION OF FOOTINGS/SERVICES.

18. TOP OF KERB LEVELS NOMINATED ARE PROVIDED BY THE ROADWORKS ENGINEER. ALL CIVIL LEVELS ARE TO BE CONFIRMED.

19. RAMPS AND FALLS INDICATED ON PLANS ARE TO BE CONFIRM ONSITE. GRADING SHALL CONFORM ACCESS REQUIREMENTS AS OUTLINED WITHIN AS1428. PAVEMENT CROSS-FALLS SHALL NOT EXCEED 1:40 (1:50 TYPICAL). PAVEMENT LONG-FALLS SHALL NOT EXCEED 1:20 (1:21 TYPICAL) AND BE PROVIDED WITH LANDINGS AT 15M INTERVALS UNLESS OTHERWISE NOTED.

20. RAMPS AND FALLS INDICATED ON PLANS ARE TO BE CONFIRM ONSITE. GRADING SHALL CONFORM ACCESS REQUIREMENTS AS OUTLINED WITHIN AS1428. PAVEMENT CROSS-FALLS SHALL NOT EXCEED 1:40 (1:50 TYPICAL). PAVEMENT LONG-FALLS SHALL NOT EXCEED 1:20 (1:21 TYPICAL) AND BE PROVIDED WITH LANDINGS AT 15M INTERVALS UNLESS OTHERWISE NOTED.

21. THE CONTRACTOR SHALL ALLOW FOR SURVEY CONFIRMATION OF ALL AS-CONSTRUCTED PAVEMENT LEVELS AND GRADES. LEVEL CONFIRMATION TO BE UNDERTAKEN AFTER THE COMPLETION OF ALL PAVEMENT FINISHING WORKS (IE. ABRASIVE BLASTING, HONING AND WATER-WASH EXPOSING), WHERE INSTALLED PAVEMENTS EXCEED THE MAXIMUM ALLOWABLE CROSS-FALLS AND LONG-FALLS THESE SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE PROJECT.
- THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021
-
- ### PROJECT
- ## THE GABLES PRECINCT E TOWN CENTRE ROADS
- ### CLIENT
- Stockland

Level 25,
133 Castlereagh Street,
Sydney, 2000, Australia
02 9035 2000 tel
02 9988 2000 fax
www.stockland.com.au
Prepared for:
Stockland Development
Pty Ltd
A.B.N 71 000 064 835
- ### CONSULTANT
- AECOM Australia Pty Ltd
A.B.N 20 093 846 925
www.aecom.com
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- ### REGISTRATION
- ### PROJECT MANAGEMENT INITIALS
- | CL/HC | HC | JB |
|----------|---------|----------|
| DESIGNER | CHECKED | APPROVED |
- ### ISSUE/REVISION
- | H | 22.07.2021 | CONSTRUCTION CERTIFICATE |
|-----|------------|--------------------------|
| G | 04.06.2020 | CONSTRUCTION CERTIFICATE |
| F | 28.05.2020 | CONSTRUCTION CERTIFICATE |
| E | 03.05.2020 | CONSTRUCTION CERTIFICATE |
| D | 16.04.2020 | DRAFT CC |
| I/R | DATE | DESCRIPTION |
- ### KEY PLAN
- ### SCALE
- N.T.S
- ### PROJECT NUMBER
- 60636281
- ### SHEET TITLE
- TOWN CENTRE ROADS
LEGEND AND
GENERAL NOTES
- ### SHEET NUMBER
- 60636281-DRG-20-TCAB-LD-0011
- H
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PLANT SCHEDULES

Code	Botanical Name	Common Name	Mature Height x Spread	Plant Densities	Container Size	Percentage (%)	Quantity
Trees							
ACE rub	<i>Acer rubrum</i>	Red Maple	12 x 8m	As Shown	400L	-	50
COR mac	<i>Corymbia maculata</i>	Spotted Gum	18 x 8m	As Shown	150L	-	7
FIC rub	<i>Ficus rubiginosa</i>	Rusty Fig	18 x 12m	As shown	800-1000L	-	1
LOP con	<i>Lophostemon confertus</i>	Brush Box	18 x 8m	As Shown	200L	-	51
PYR cap	<i>Pyrus capital</i>	Ornamental Pear	12 x 4m	As Shown	200L	-	23
QUE pin	<i>Quercus palustris</i> 'Pingreen'	Green Pillar	10 x 4m	As Shown	200L	-	36
QUE edf	<i>Quercus palustris</i> EDF	Pin Oak EDF (Early defoliant form)	15 x 8m	As Shown	1000L	-	2
ULM par_a	<i>Ulmus parvifolia</i>	Chinese Elm 'Todd'	10 x 8m	As Shown	200L	-	9
ULM par_b	<i>Ulmus parvifolia</i>	Chinese Elm 'Todd'	10 x 8m	As Shown	400L	-	31
Shrubs, Grasses and Groundcovers							
AGA sno	<i>Agapanthus orientalis</i> 'Snowball'	Agapanthus Snowball	0.4 x 0.4m	5/m²	140mm	-	80
BUX jap	<i>Buxus microphylla</i> var. japonica	Japanese Box	0.6 x 1m	0.45m centers	140mm	-	167
COR pac	<i>Coprosma</i> 'Pacific Sunset'	Pacific Sunset	1 x 1m	3/m²	140mm	-	404
ERE gla	<i>Eremophila glabra</i> prostrate 'Blue Horizon'	Blue Horizon	0.25 x 1m	3/m²	140mm	-	265
GAZ rig	<i>Gazania rigens</i> 'New Day'	New Day Gazania	0.2 x 0.6m	4/m²	140mm	-	1117
GRE tam	<i>Grevillea lanigera</i> 'Mt Tamboritha'	Grevillea 'Mt Tamboritha'	0.6 x 6m	4/m²	140mm	-	100
JUN sab	<i>Juniperus sabina</i> 'Tamariscifolia'	Tam Juniper	1.0 x 0.6m	5/m²	140mm	-	455
LIR isa	<i>Liriope muscari</i> 'Isabella'	Isabella Lily	0.5 x 0.5m	3/m²	140mm	-	451
LIR mus	<i>Liriope muscari</i> 'Amethyst'	Lilyturf	0.5 x 0.6m	5/m²	140mm	-	636
LOM lon	<i>Lomandra longifolia</i> 'Verday'	Verday	0.5 x 0.5m	4/m²	140mm	-	161
MYO par	<i>Myoporum parvifolium</i> 'Yareena'	Creeping Boobialla	0.1 x 2m	3/m²	140mm	-	70
PEN alo	<i>Pennisetum alopecuroides</i> 'Nafray'	Swamp Foxtail Grass	0.6 x 0.6m	4/m²	140mm	-	494
RAP ind	<i>Rhaphiolepis indica</i> 'Snow Maiden'	Indian Hawthorn Snow Maiden	0.6 x 0.6m	3/m²	140mm	-	975
TEU fru	<i>Teucrium fruitcans</i>	Shrubby Germander	0.8m x 1m	1/m²	140mm	-	98
TRA asi	<i>Trachelospermum asiaticum</i> 'Flat Mat'	Japanese Star Jasmine 'Flat Star'	0.4m x 4m	2/m²	140mm	-	423
MIX 1: Ground Covers and Grasses							
AGA buc	<i>Agapanthus orientalis</i> 'Buccaneer'	Agapanthus Buccaneer	0.6 x 0.7m	5/m²	140mm	40%	82
LIR mus	<i>Liriope muscari</i> 'Amethyst'	Lilyturf	0.5 x 0.6m	5/m²	140mm	60%	122
MIX 2: Ground Covers and Grasses							
AGA sno	<i>Agapanthus orientalis</i> 'Snowball'	Agapanthus Snowball	0.4 x 0.4m	5/m²	140mm	40%	423
LOM lon	<i>Lomandra longifolia</i> 'Verday'	Verday	0.5 x 0.5m	4/m²	140mm	60%	537
MIX 3: Ground Covers and Grasses							
PEN alo	<i>Pennisetum alopecuroides</i> 'Nafray'	'NAFRAY' Pennisetum	0.6 x 0.6m	5/m²	140 mm	40%	398
POA lab	<i>Poa labillardieri</i> 'Eskdale'	'Eskdale' Poa	0.5 x 0.5m	5/m²	140mm	60%	595
MIX 4: Ground Covers and Grasses							
LOM flu	<i>Lomandra fluviatilis</i> 'Shara'	Shara	0.5 x 0.5m	5/m²	140mm	40%	383
LOM kat	<i>Lomandra longifolia</i> 'Katrinus'	Katrinus	0.7 x 0.7m	5/m²	140mm	60%	575
Turf							
Turf to be A grade, Thin Leaf Couch, speacies either "Wintergreen" or "Nullabor"							3580m²
Notes:							
1) Gasses, Groundcovers and small shrubs to be planted min 300mm back from kerb, footpaths and edges							
2) Mixed planting areas; plant grasses and ground covers in groups of 5-15 and shrubs in groups of 2-3 unless drawn as shown.							
3) Trees to be situated minimum 750mm from back of kerb							
4) Trees to be situated minimum 1.5m from stormwater inlet pit							
5) Trees to be set back min 9m from property boundary corner collectors roads							

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

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CC 85/2020/EC/A

CC APPROVED ON
11/08/2021



PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

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REGISTRATION

PROJECT MANAGEMENT INITIALS

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

I	05.08.2021	CONSTRUCTION CERTIFICATE
H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

N.T.S

PROJECT NUMBER

60636280

SHEET TITLE

TOWN CENTRE ROADS
PLANT SCHEDULE

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0012

ISSUE

I

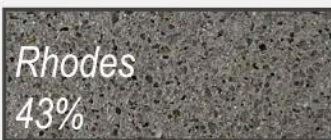


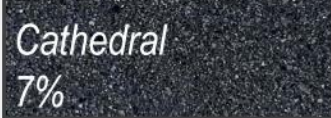
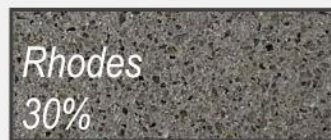








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MATERIALS & FINISHES

No	Code	Image / Sample	Item	Product Description	Finish	Supplier	
1.00 Hardscape Works - refer Materials and Finishes Plans							
PAVEMENTS Note: 1) Min. 2m x 2m Test Panel of all pavement types is required for approval by Superintendent prior to commencement of construction (including the specified surface finish, jointing and sealing) 2) Hold Point - Form work & reinforcement to be approved by engineer & superintendent prior to concrete installation							
1.01	PA1a PA1b	<div>GREY MIX</div> <div></div> <div></div> <div></div> <div></div>	<div>BEIGE MIX</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	Stone Unit Pavement	Supply and installation of paving over reinforced concrete base, including preparation of subbase, subgrade, concrete slab, fixing, stone paving and sealing. Reinforced concrete base variances as per pavement engineers details. 1) Concrete thickness, strength, reinforcement, jointing as per pavement engineers works 2) Subgrade and subbase details and specifications as per pavement engineers works PA1a - 40mm thick pedestrian pavement PA1b - 80mm thick trafficable pavement	Stone Colour: Mixed colours (Refer pavement setout details) consisting of; GREY MIX - 43% 'Rhodes' Concrete/Sandstone; - 29% 'Manhattan' Concrete/Sandstone; - 21% 'Hudson' Concrete/Sandstone; - 7% 'Cathedral' Concrete/Sandstone; BEIGE/GREY MIX - 10% 'Flinders' Concrete/Sandstone; - 10% 'Erskine' Concrete/Sandstone; - 5% 'Botanical' Concrete/Sandstone; - 5% 'Boston' Concrete/Sandstone; - 30% 'Rhodes' Concrete/Sandstone; - 20% 'Manhattan' Concrete/Sandstone; - 15% 'Hudson' Concrete/Sandstone; - 5% 'Cathedral' Concrete/Sandstone; Material: Manufactured stone paver with epoxy-based adhesive Finish: Shot blasted. Refer pavement setout details. Unit Size: 400mm x 600mm (5 mm mortar jointing) *Note: Localised areas of 600mm x 600mm (Road B interface) and 400mm x 800mm are proposed to alleviate the need for small cut pavers Sealant: Apply two coats of "CCS Natural Stone Sealer" to all stone surfaces as per manufacturers specifications. Slip Resistance: Finishes to achieve 'Class V' as defined in AS/NZS 4586:1999 Edge Restraint (<i>where required</i>): 316 grade stainless steel equal angle edging fixed to base slab	Stone Outdoors - Concrete Redefined (or approved equal) Ph: 03 8770 6000
1.02	PA3		Broom Finish	Supply and installation of pedestrian grade concrete including preparation of subgrade and jointing. Note: 1) Concrete thickness, strength, reinforcement, jointing as per engineers drawings 2) Subgrade and subbase as per pavement engineers details & Specifications.	Colour: Standard Grey Finish: Broom finish Joints: Sikaflex Pro to all sealed concrete joints. Colour to match adjoining concrete pavement. Slip Resistance: Finishes to achieve 'Class V' as defined in AS/NZS 4586:1999	By Contractor Hills Shire Typical Detail: SD.18 Refer engineers drawings	
1.03	PA3b		Broom Finish	Supply and installation of driveway grade concrete including preparation of subgrade and jointing. Note: 1) Concrete thickness, strength, reinforcement, jointing as per Hills Shire typical Details 2) Subgrade and subbase as per pavement engineers details & Specifications.	Colour: Standard Grey Finish: Broom finish (pencil round edge - no troweling) Joints: Sikaflex Pro to all sealed concrete joints. Colour to match adjoining concrete pavement. Slip Resistance: Finishes to achieve 'Class V' as defined in AS/NZS 4586:1999	By Contractor Hills Shire Typical Detail: SD.15 Refer engineers drawings	
1.04	PA4		Coloured Concrete (Cycleway)	Supply and installation of cycleway grade concrete including preparation of subgrade and jointing. Note: 1) Concrete thickness, strength, reinforcement, jointing as per Hills Shire typical Details 2) Subgrade and subbase as per pavement engineers details & Specifications.	Colour: Honeycomb Finish: Broom finish Joints: Sikaflex Pro to all sealed concrete joints. Colour to match adjoining concrete pavement. Slip Resistance: Finishes to achieve 'Class V' as defined in AS/NZS 4586:1999	By Contractor Hills Shire Typical Detail: SD.19 Refer engineers drawings	
1.05	TC1		Concrete Unit: Tactile Ground Surface Indicators (TGSi)	Supply and installation of 40mm thick paving over reinforced concrete base, including preparation of subbase, subgrade, concrete slab, fixing, stone paving and sealing. 1) Concrete thickness, strength, reinforcement, jointing as per pavement engineers works 2) Subgrade and subbase details and specifications as per pavement engineers works	Colour: 'Erskine' luminance contrast to be confirmed by access consultant. Material: Manufactured stone paver with epoxy-based adhesive Finish: Shot blasted. Refer pavement setout details. Unit Size: 300mm x 300mm (total width of tactiles to be 600mm) Sealant: Apply two coats of "CCS Natural Stone Sealer" to all stone surfaces as per manufacturers specifications. Slip Resistance: Finishes to achieve 'Class V' as defined in AS/NZS 4586:1999 Edge Restraint (<i>where required</i>): 316 grade stainless steel equal angle edging fixed to base slab	Stone Outdoors - Concrete Redefined (or approved equal) Ph: 03 8770 6000	

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

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PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT



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REGISTRATION

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CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

N.T.S

PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
MATERIALS AND
FINISHES SCHEDULE



SHEET NUMBER

60636281-DRG-20-TCAB-LD-0013

ISSUE

H

FURNITURE & FIXTURES

No	Code	Image / Sample	Item	Product Description	Finish	Supplier
2.00 Furniture & Fixtures - refer to Furniture & Fittings Plans						
Furniture Note: 1) Hold Point - Shop Drawings and engineering design to be provided for custom furniture for review prior to fabrication. 2) It is the responsibility of the contractor to ensure standards, quantities, dimensions, fabrication procedures and techniques are in compliance with the contract documentation. It is the responsibility of the contractor to confirm all dimensions on site prior to producing shop drawings and fabrication.						
2.03	F3a		Concrete Cube Bollard	Contractor to supply and install concrete cube bollard to manufacturers details and specification, concealed fixing to pavement slab. Required shadow line to LD-04/0911	Precast Concrete Bollard: 09-BCC - Concrete Cube Bollard Precase Concrete Sealant: 2 coats of CCS 'Natural Supreme HV (or approved equal) to suppliers specification Size: 500(L) x 500(W) x 500(H)mm Fixing: 09-BC-FC - Gal Steel Pipe Ground Anchor. Fixed to concrete base slab under pavers.	As Urban Email: sales@asurban.com.au Ph: 1300 889 821
2.04	F4		Tree Grate	Contractor to supply and install Tree Grate and Guard to manufacturers details and specifications.	Integrated Tree Grilles: GLCA150 - Invisigrate™ Paver Tree Grate with snorkel inlet Dimensions: 1500 x 1500mm Pavers: Manufactured stone paver to match adjacent surfaces Finish: To match paving Unit Size: 400mm x 600mm Sealant: to match paving Slip Resistance: Finishes to achieve 'Class V' as defined in AS/NZS 4586:1999	CityGreen Contact - Scott Hackett Email: scott.hackett@citygreen.com Ph: 1300 066 949

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

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PROJECT

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PRECINCT E
TOWN CENTRE ROADS

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CONSULTANT

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I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

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PROJECT NUMBER

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SHEET TITLE

TOWN CENTRE ROADS
FURNITURE
SCHEDULE

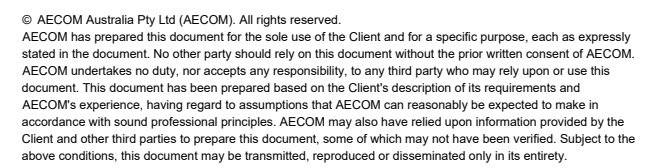
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ISSUE

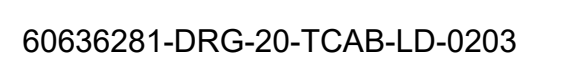
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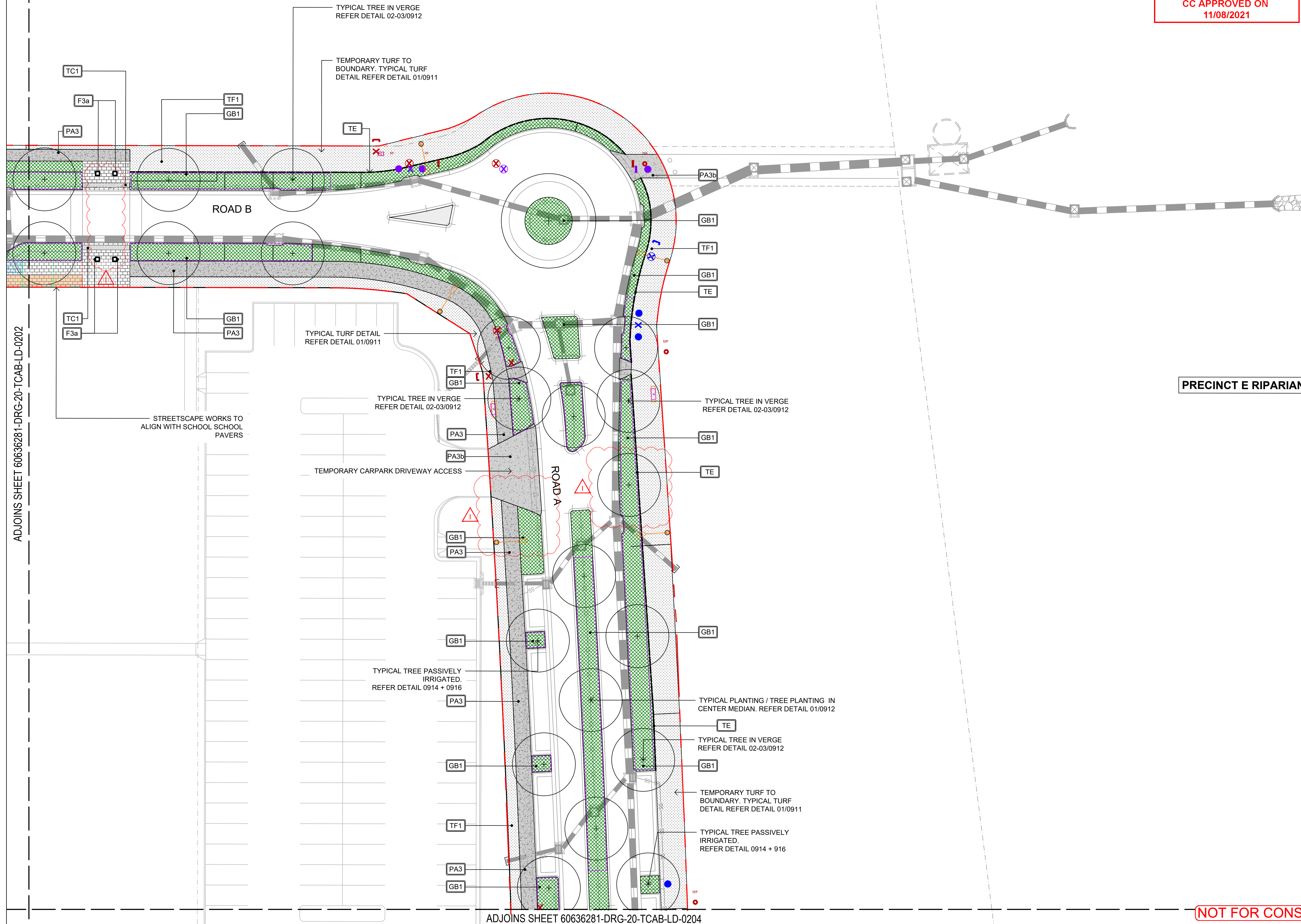


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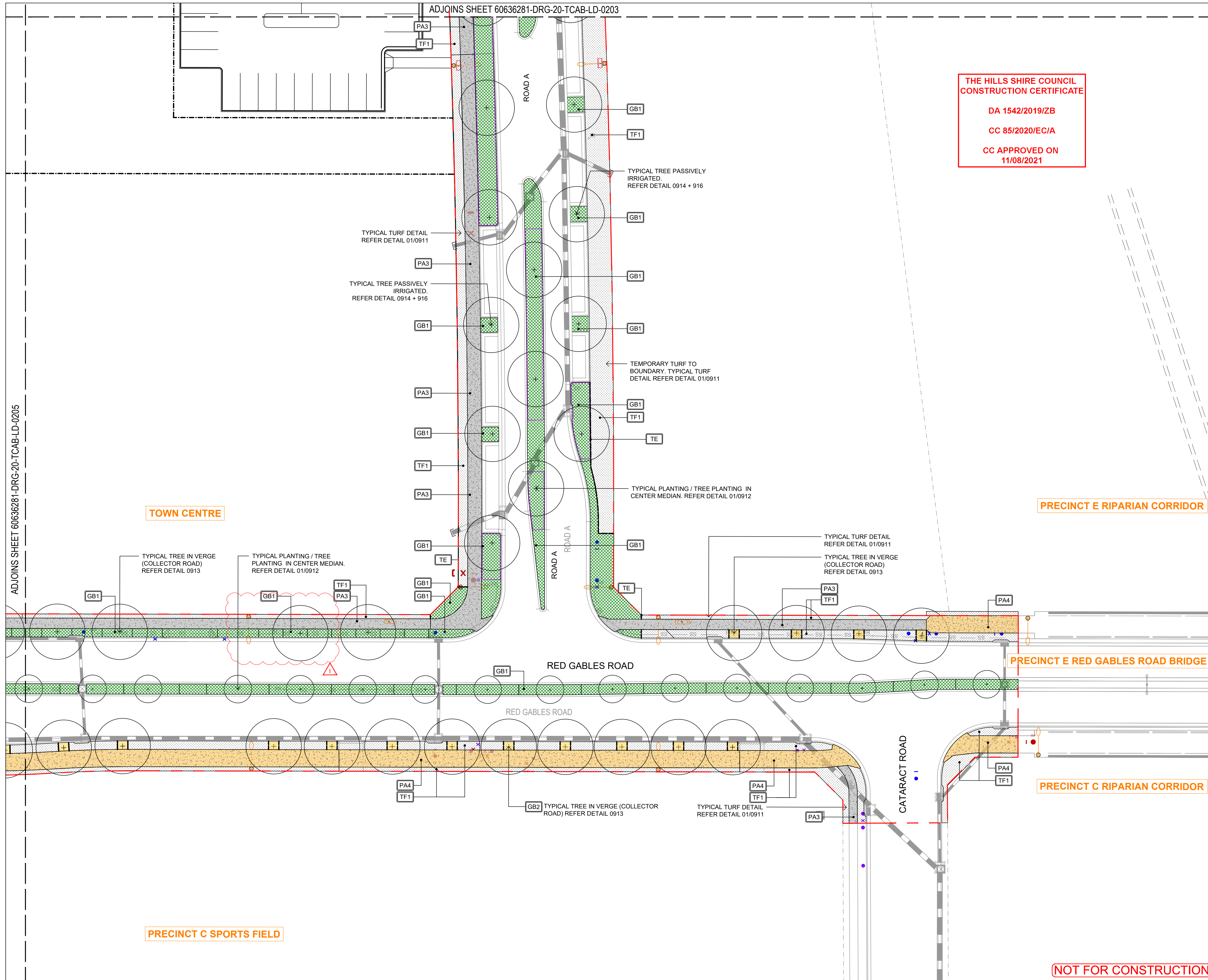
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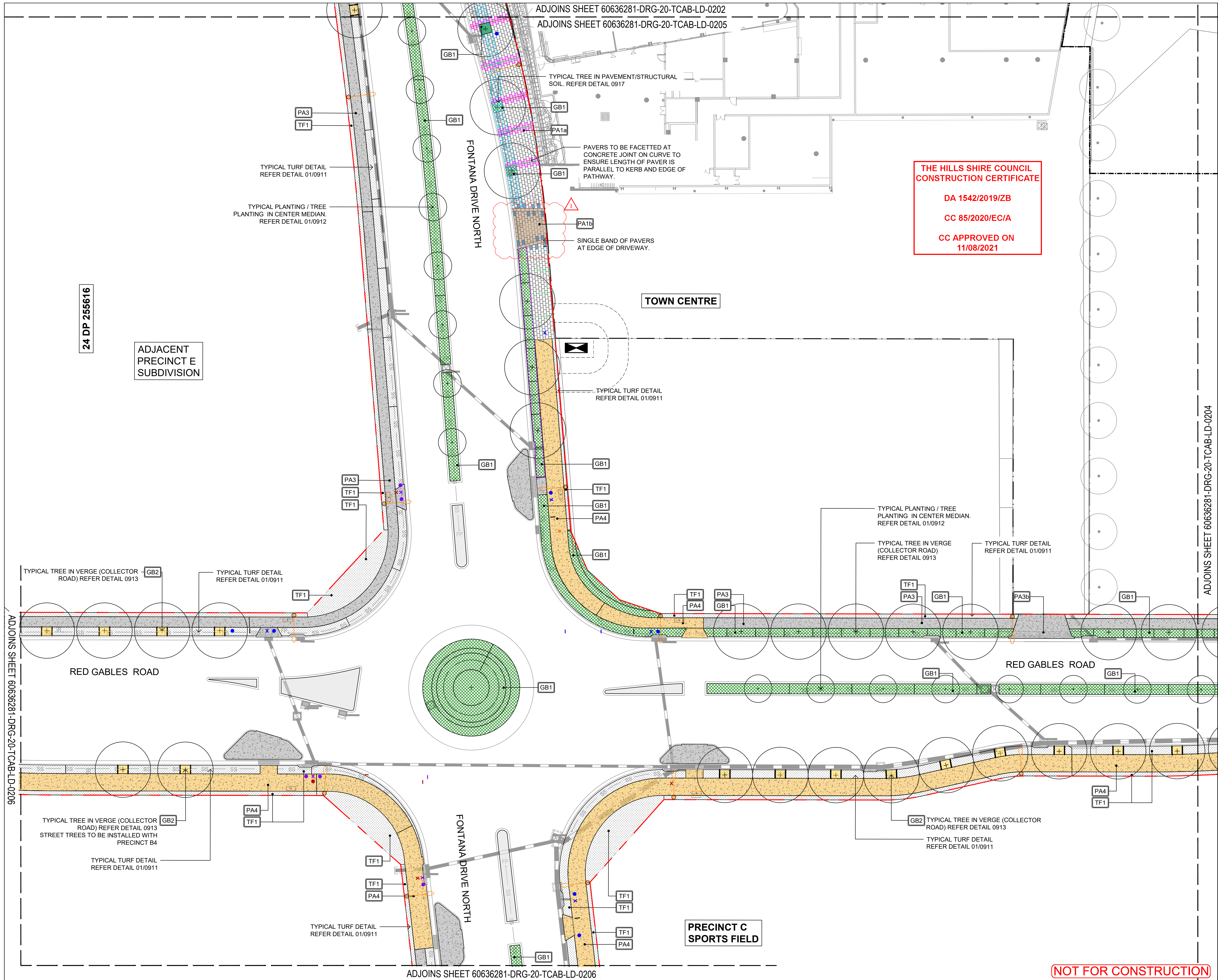
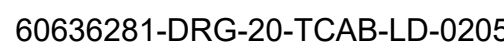
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ADJOINS SHEET 60636281-DRG-20-TCAB-LD-0204

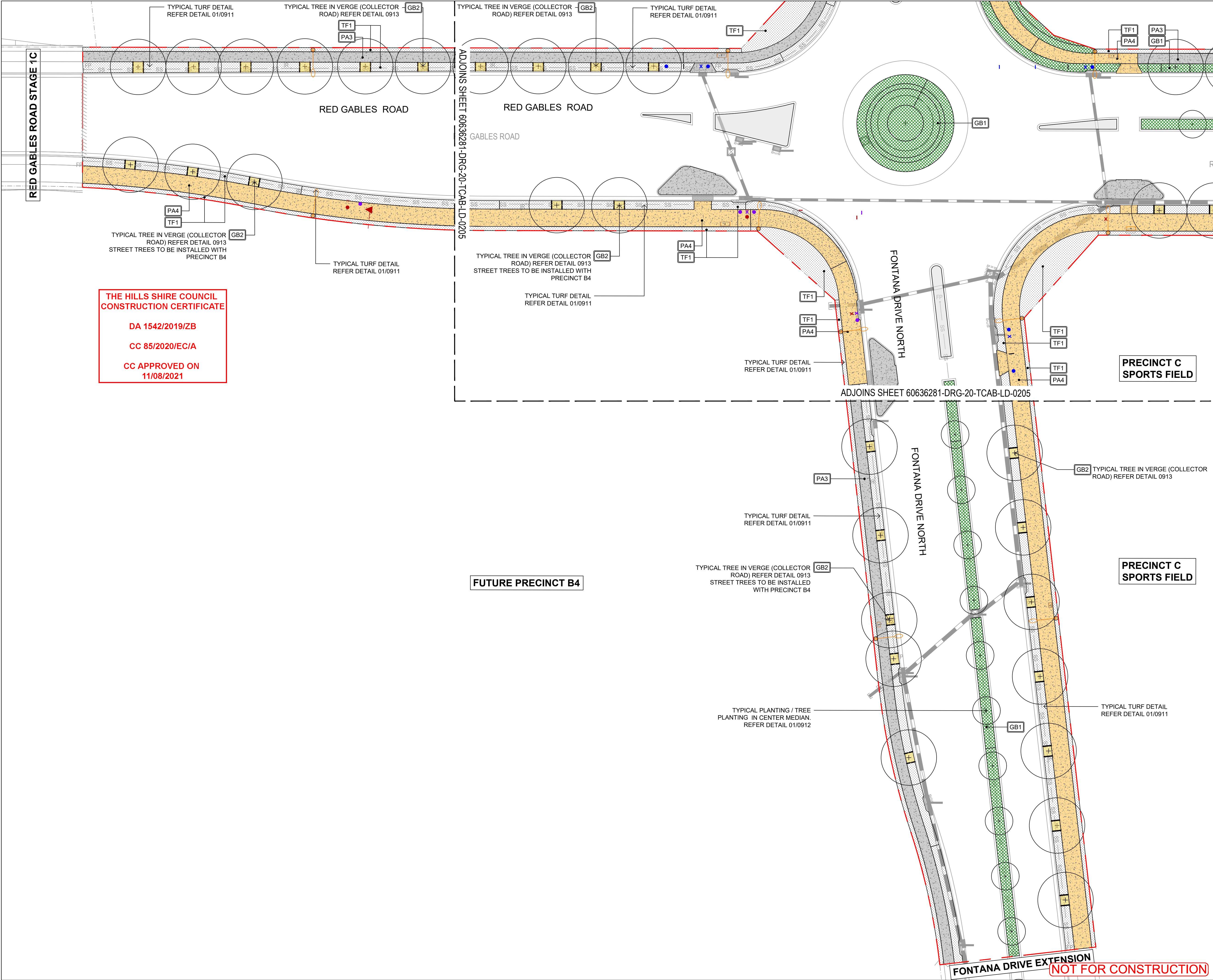


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PROJECT

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REGISTRATION

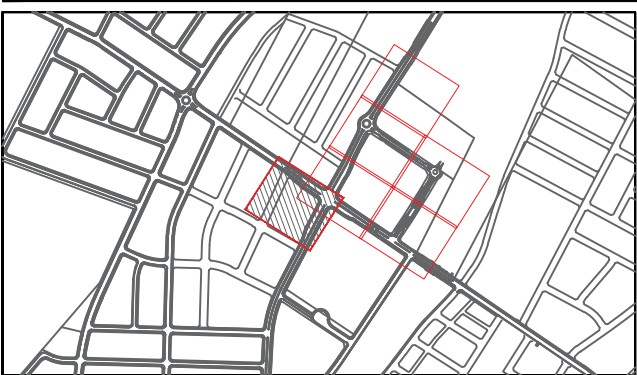
PROJECT MANAGEMENT INITIALS

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

I/R	DATE	DESCRIPTION
H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE

KEY PLAN



SCALE



PROJECT NUMBER

60636281

SHEET TITLE

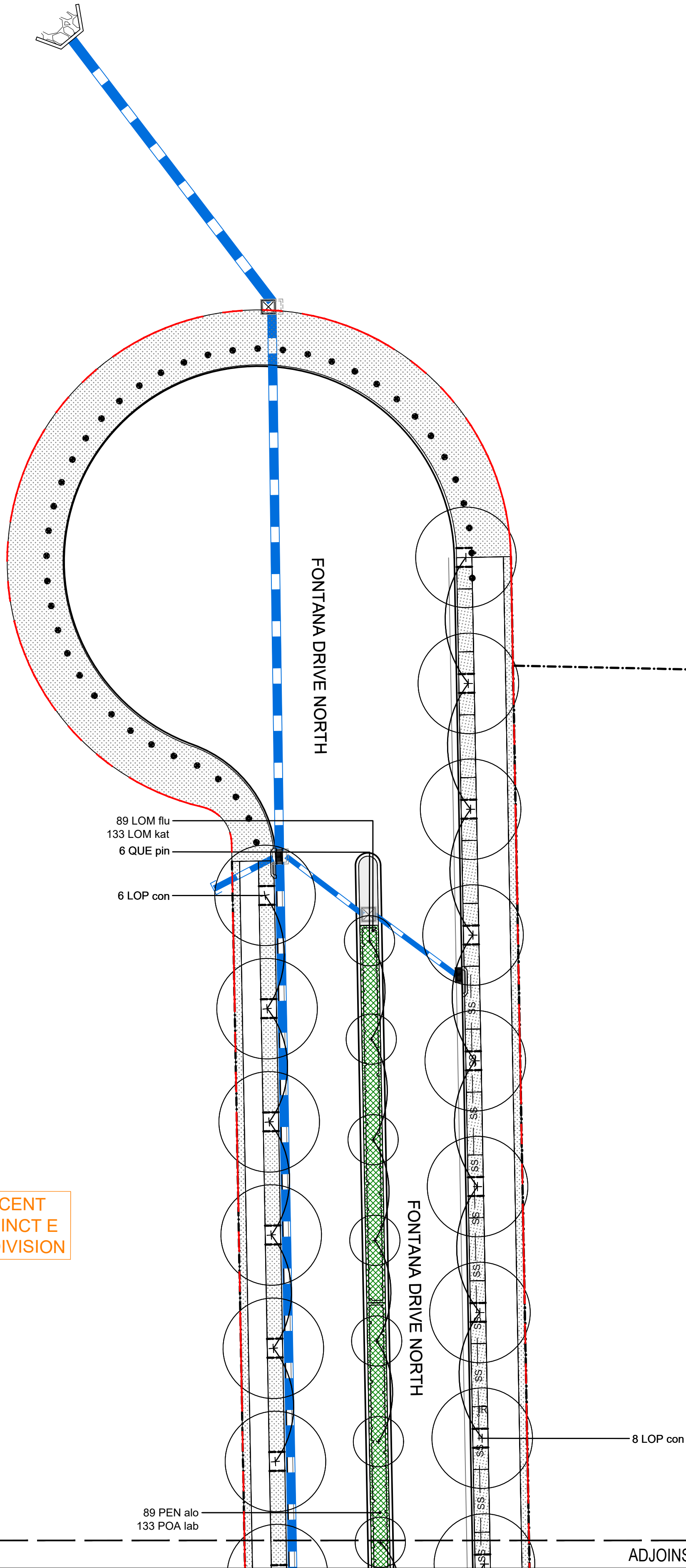
TOWN CENTRE ROADS
MATERIALS AND FINISHES
SHEET 6/6

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0206

ISSUE

H



THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021



PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT



Level 25,
133 Castlereagh Street,
Sydney, 2000, Australia
02 9035 2000 tel
02 8988 2000 fax
www.stockland.com.au
Prepared for:
Stockland Development
Pty Ltd
A.B.N 71 000 064 835

CONSULTANT

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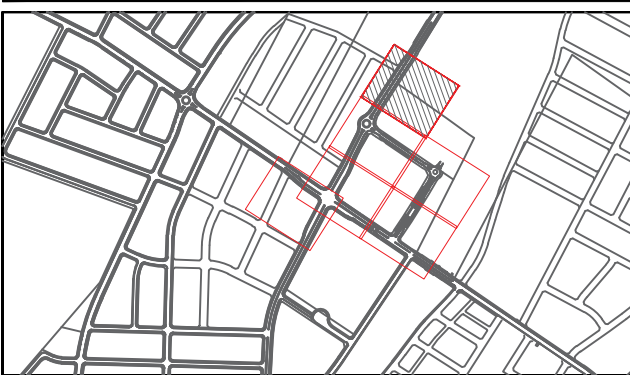
PROJECT MANAGEMENT INITIALS

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DESIGNER	CHECKED	APPROVED

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KEY PLAN



SCALE



PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
PLANTING PLAN
SHEET 1/6

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0301

ISSUE

H

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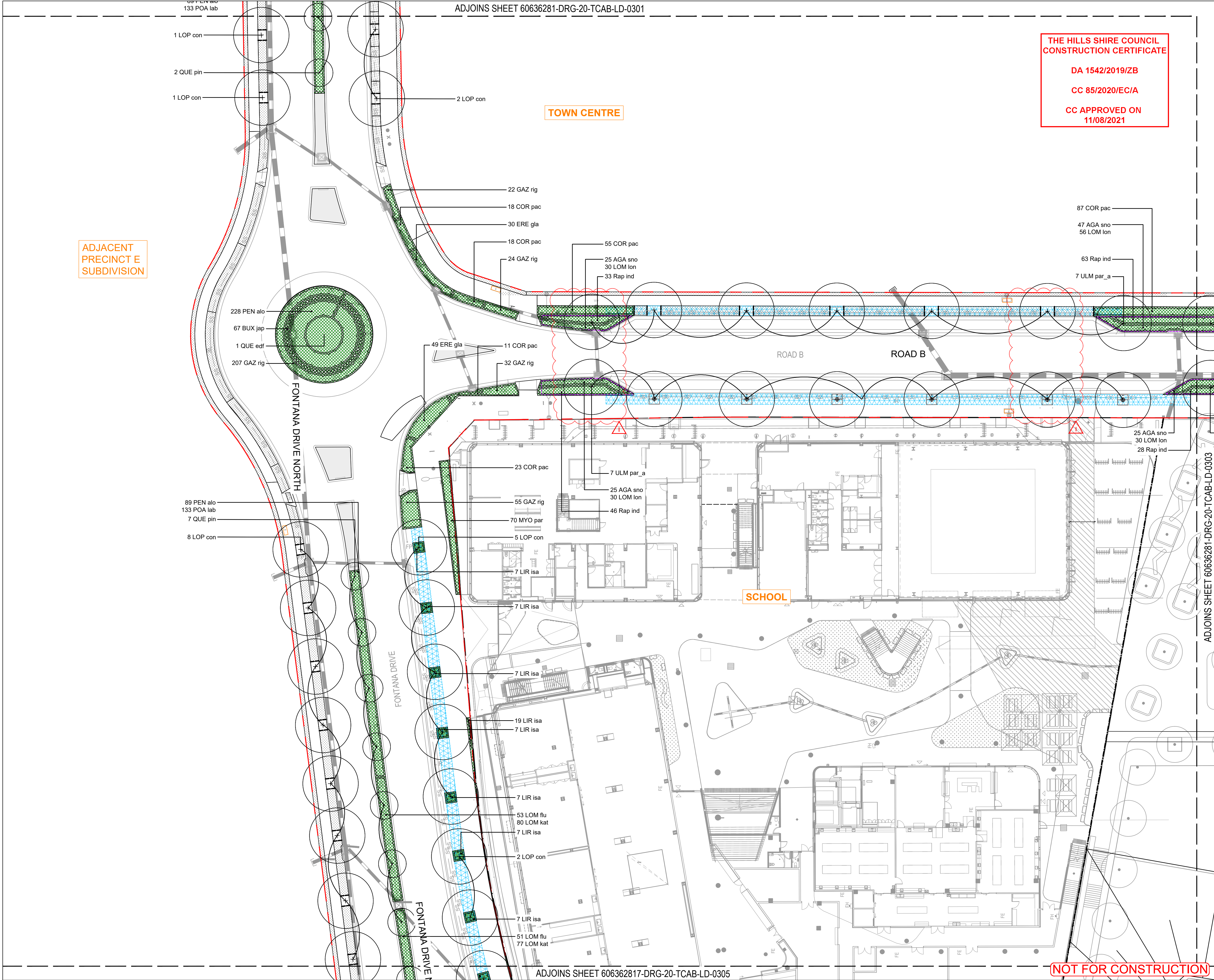
TOWN CENTRE

ADJACENT
PRECINCT E
SUBDIVISION

ADJOINS SHEET 606362817-DRG-20-TCAB-LD-0302

NOT FOR CONSTRUCTION

ISO A1 594mm x 841mm
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CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021



PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT



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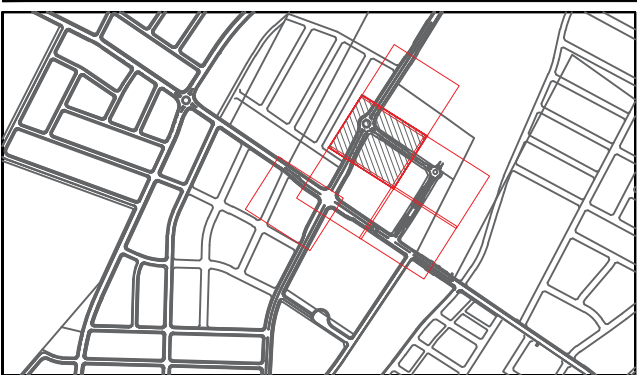
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CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

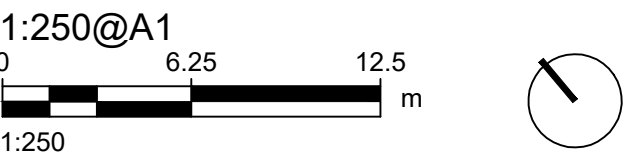
ISSUE/REVISION

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H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION

KEY PLAN



SCALE



PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
PLANTING PLAN
SHEET 2/6

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0302

ISSUE

1

ADJOINS SHEET 60636281-DRG-20-TCAB-LD-0303

ADJOINS SHEET 60636281-DRG-20-TCAB-LD-0301

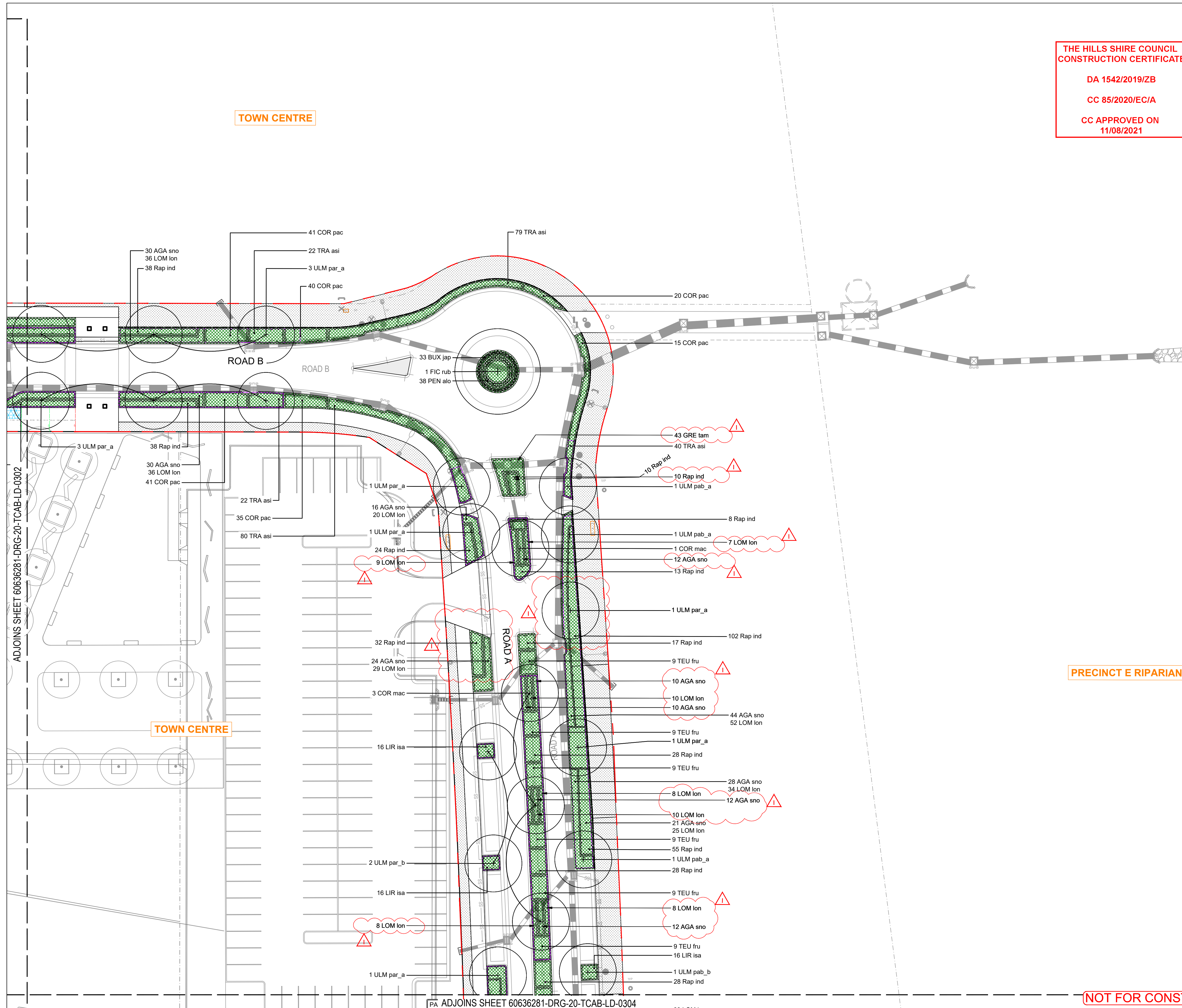
TOWN CENTRE

ADJACENT
PRECINCT E
SUBDIVISION

SCHOOL

NOT FOR CONSTRUCTION

ADJOINS SHEET 606362817-DRG-20-TCAB-LD-0305



THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021

AECOM

PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT

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www.stockland.com.au
Prepared for:
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A.B.N 71 000 064 835

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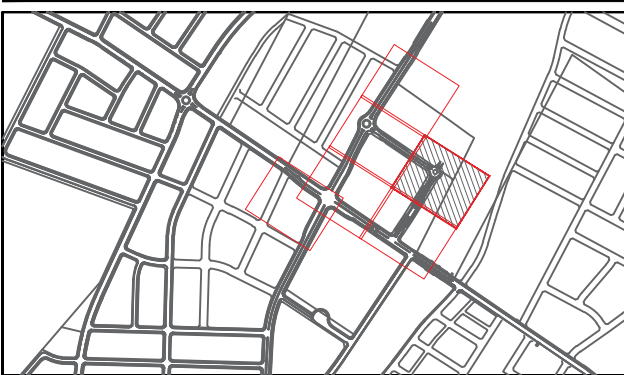
PROJECT MANAGEMENT INITIALS

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

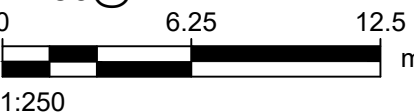
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H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION

KEY PLAN



SCALE

1:250@A1



PROJECT NUMBER

60636281

SHEET TITLE

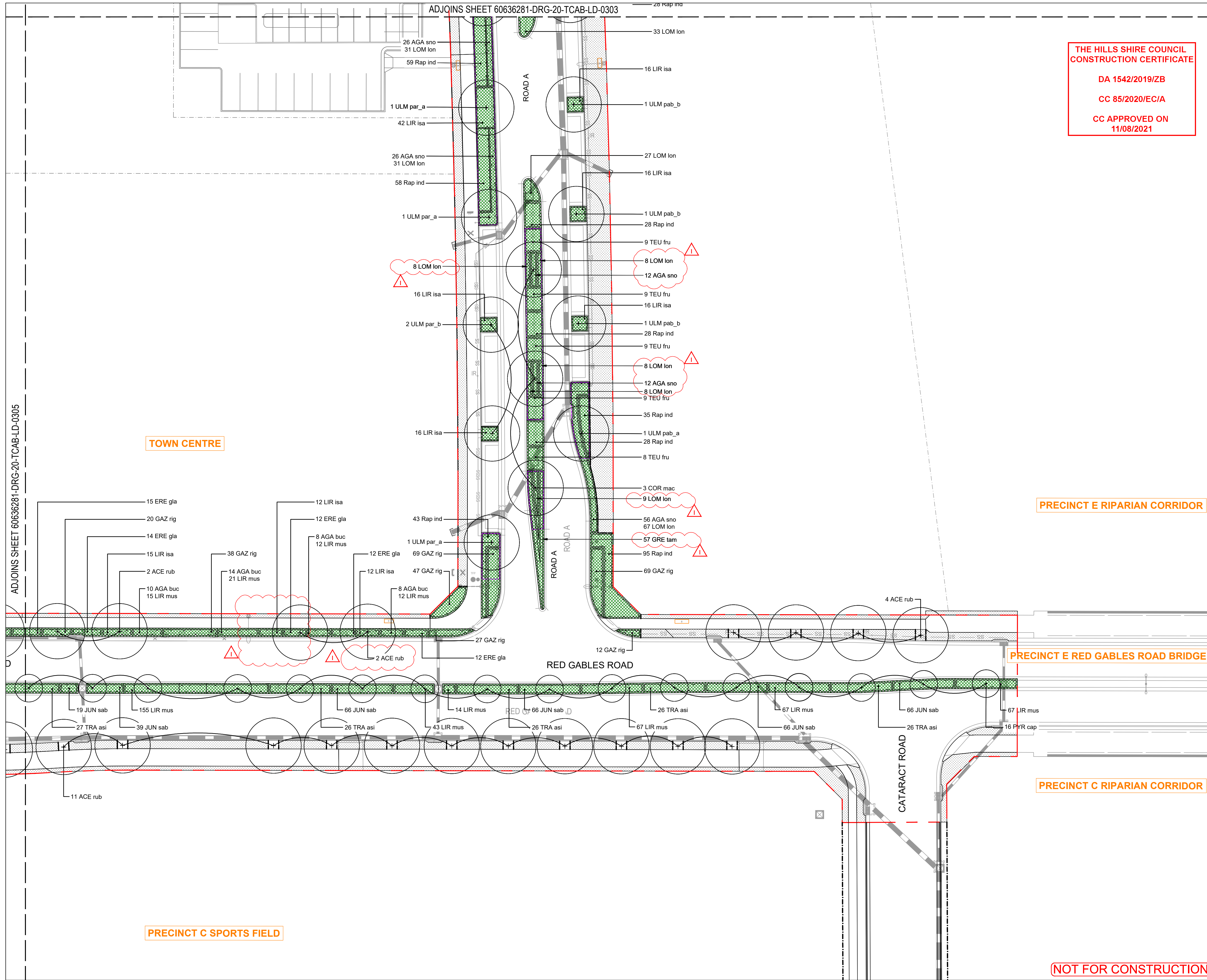
TOWN CENTRE ROADS
PLANTING PLAN
SHEET 3/6

SHEET NUMBER

ISSUE

60636281-DRG-20-TCAB-LD-0303

(NOT FOR CONSTRUCTION)

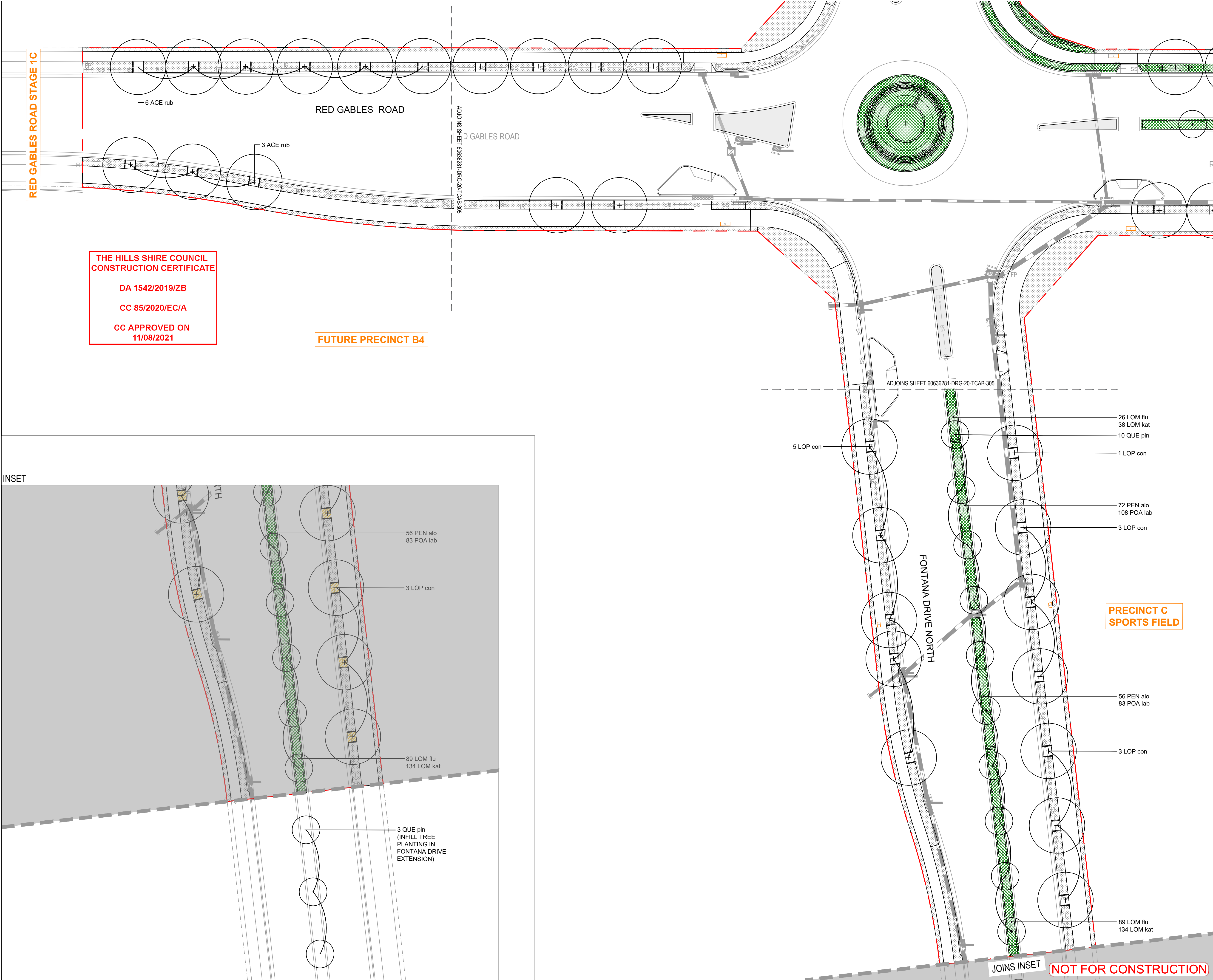


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ISO A1 594mm x 841mm

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CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

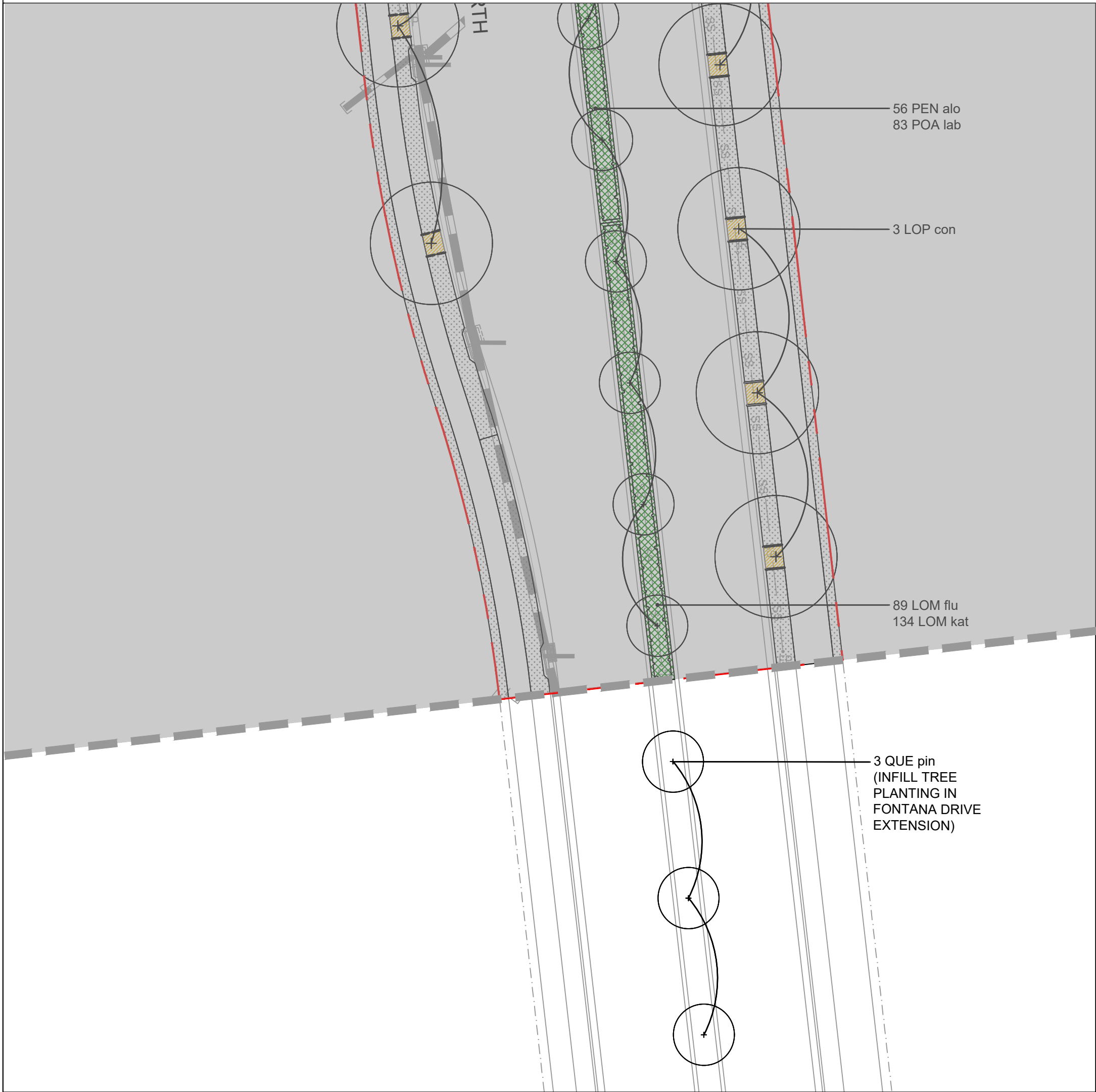
CC 85/2020/EC/A

CC APPROVED ON
11/08/2021

FUTURE PRECINCT B4

PRECINCT C
SPORTS FIELD

INSET



PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT

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REGISTRATION

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F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

1:250@A1

0 6.25 12.5 m

1:250

PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
PLANTING PLAN
SHEET 6/6

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0306

ISSUE

H

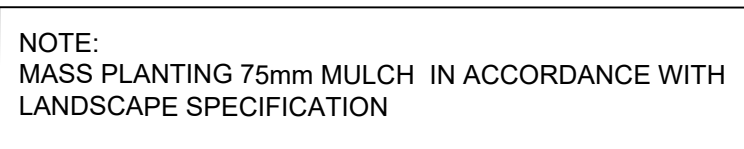
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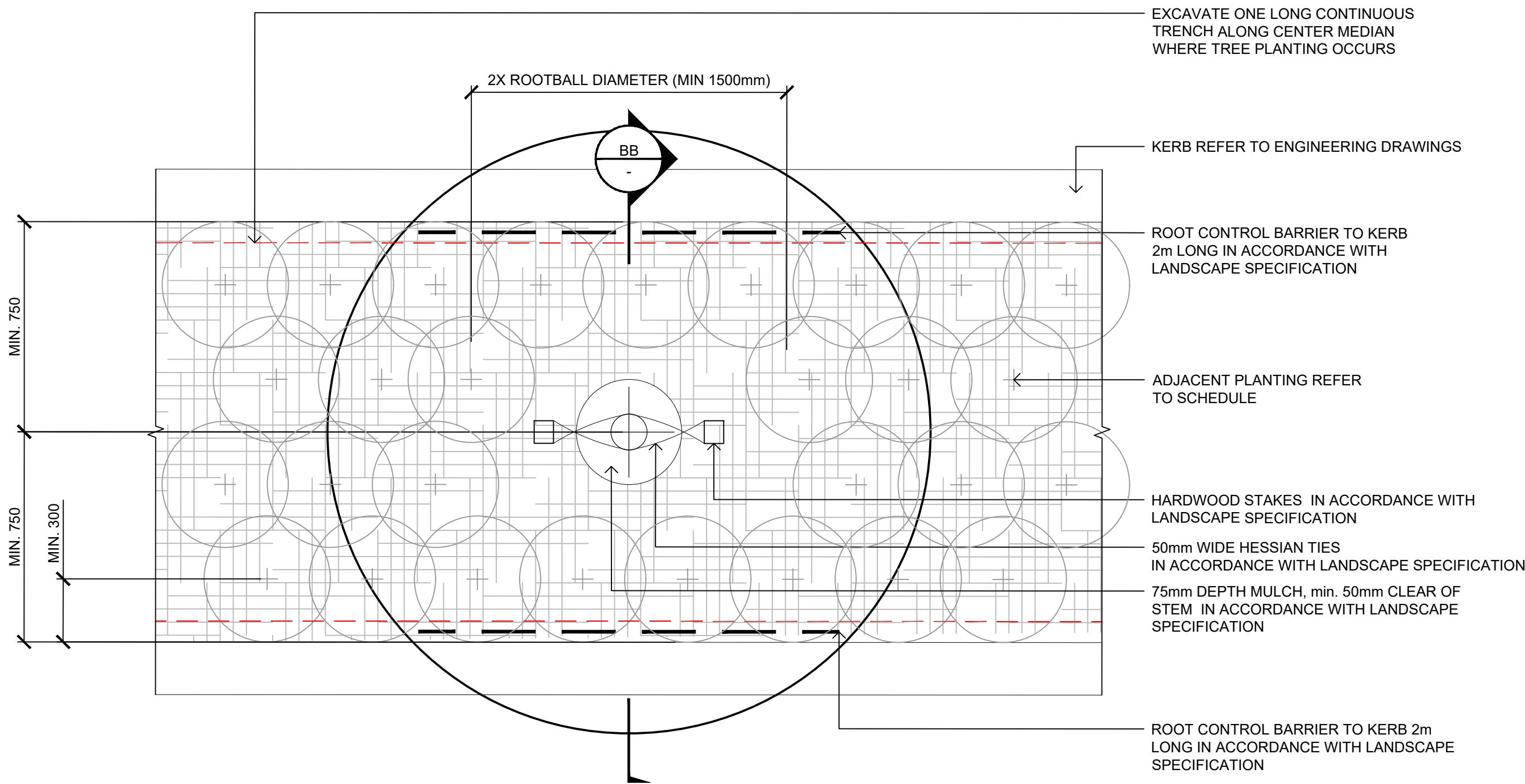
Diagram illustrating the cross-section of a concrete bollard installation, showing the following components and dimensions:

- PRECAST CONCRETE BOLLARD BLOCK AS SPECIFIED
- 15mm THICK MORTAR BED TO BASE OF CONCRETE BOLLARD
- PAVERS WITH MORTAR BED AS PER PAVING DETAILS
- 520x48mm STEEL FIXING PIPE FOR CONCRETE BOLLARD. FIXING TO MANUFACTURERS SPECIFICATION
- SLAB THICKENING TO ENGINEERS DETAILS
- 15mm SHADOW LINE
- 150
- 200

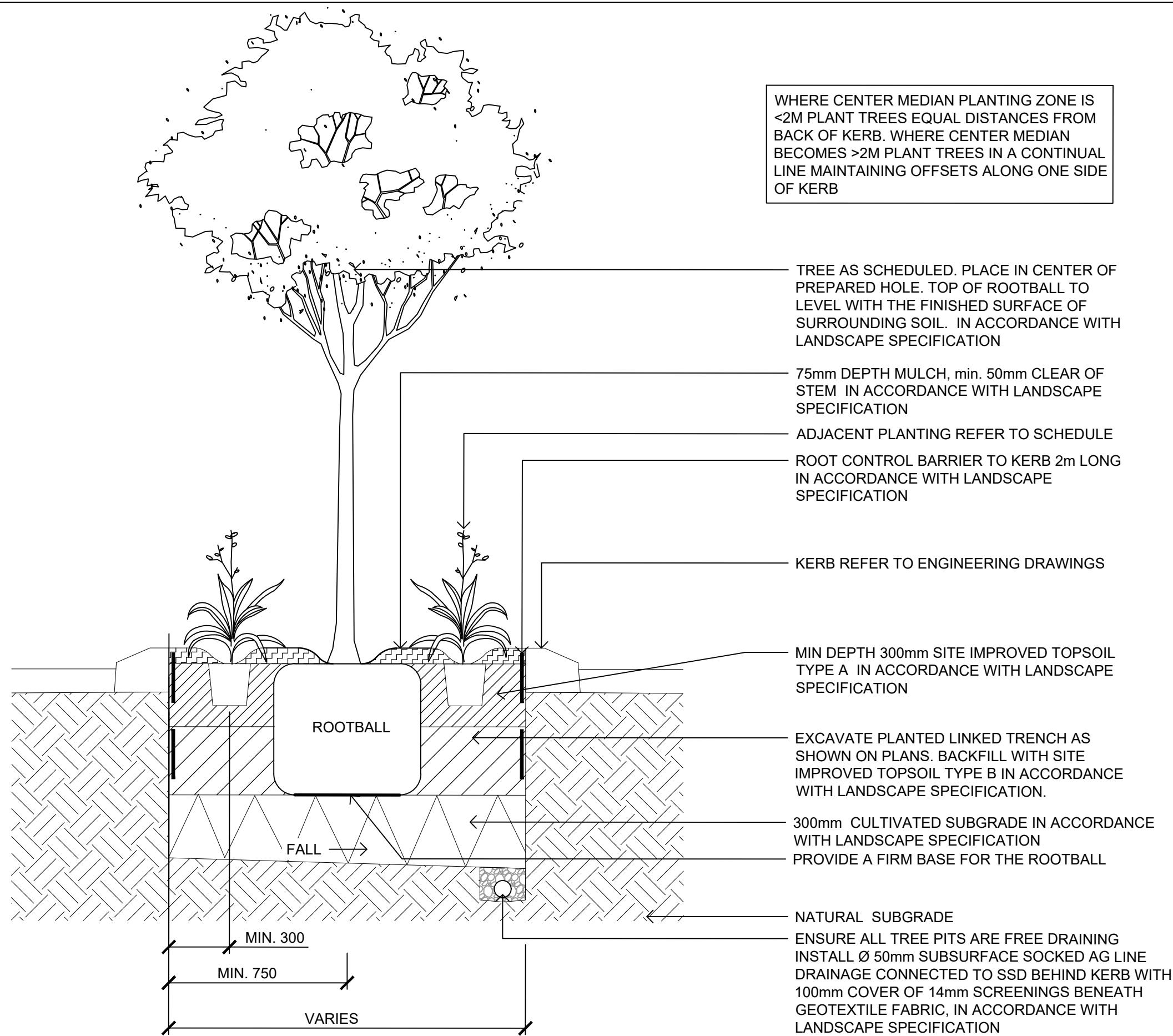
04 TYPICAL CONCRETE BOLLARD (F3a)
0911 1:10 @ A1



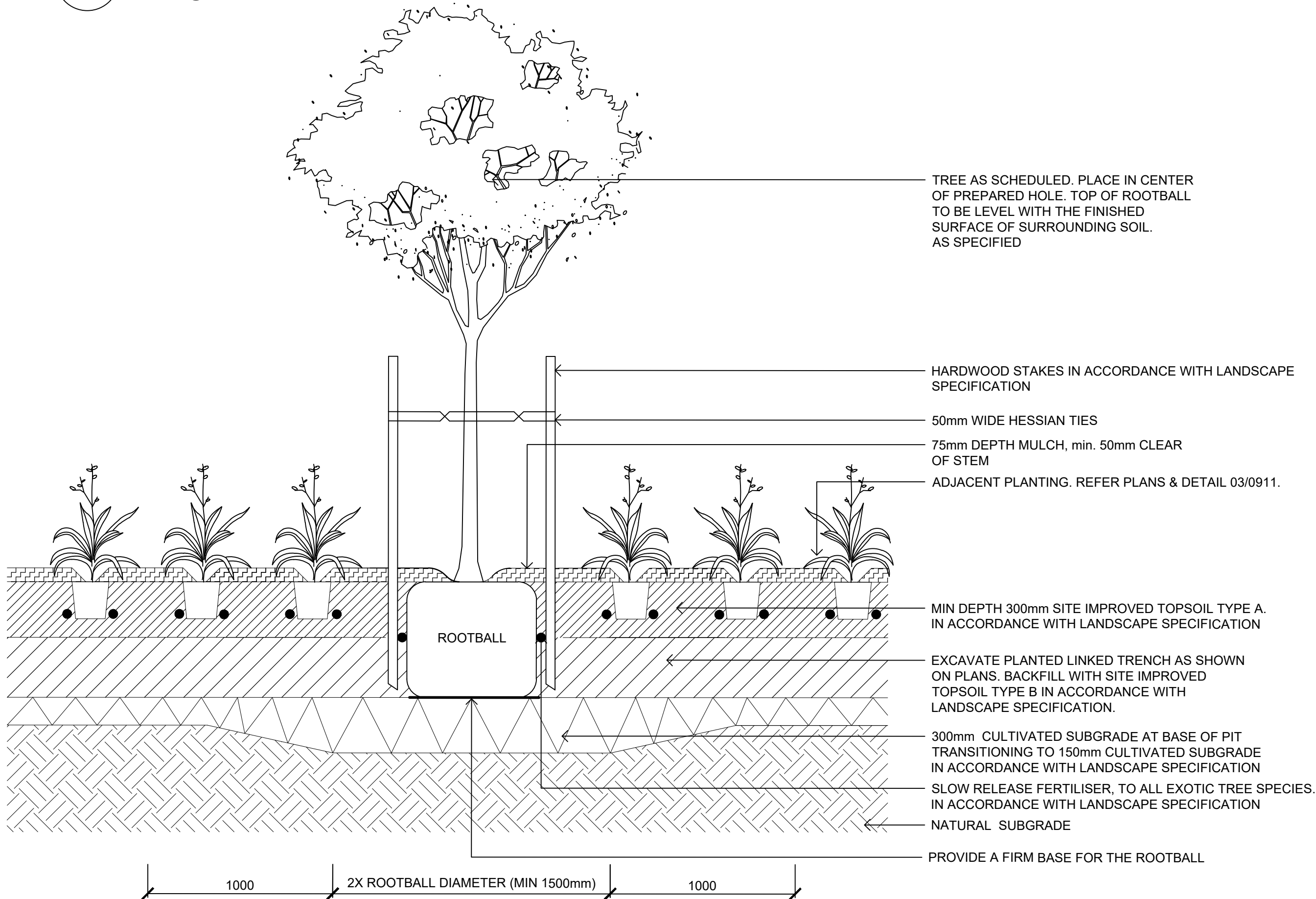
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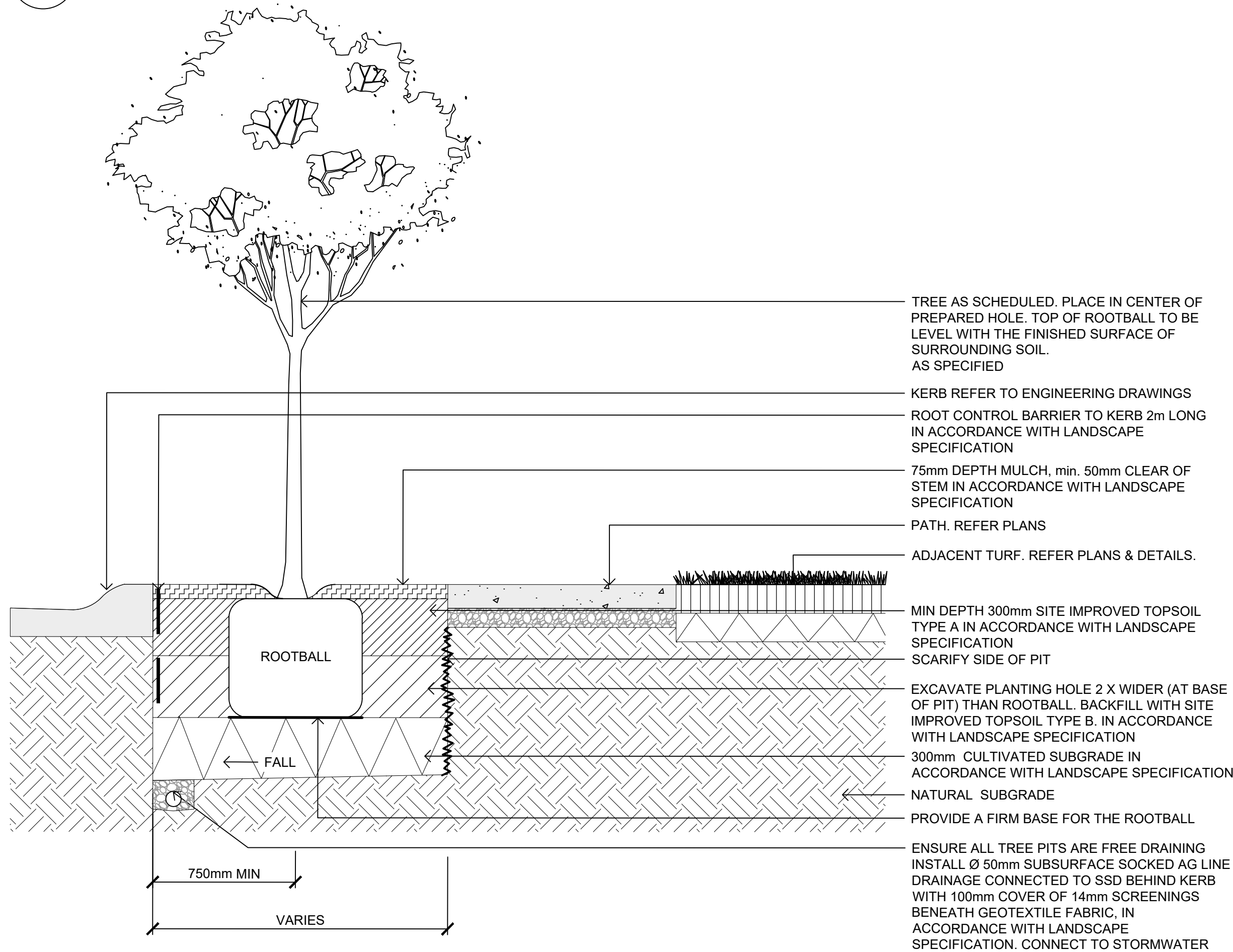
01
0912
TYPICAL PLANTING / TREE PLANTING IN CENTRE MEDIAN
1:20 @ A1



BB
0912
TYPICAL TREE IN CENTRE MEDIAN - SHORT SECTION
1:20 @ A1



02
0912
TYPICAL TREE IN VERGE - LONG SECTION
1:20 @ A1



03
0912
TYPICAL TREE IN VERGE - SHORT SECTION
1:20 @ A1

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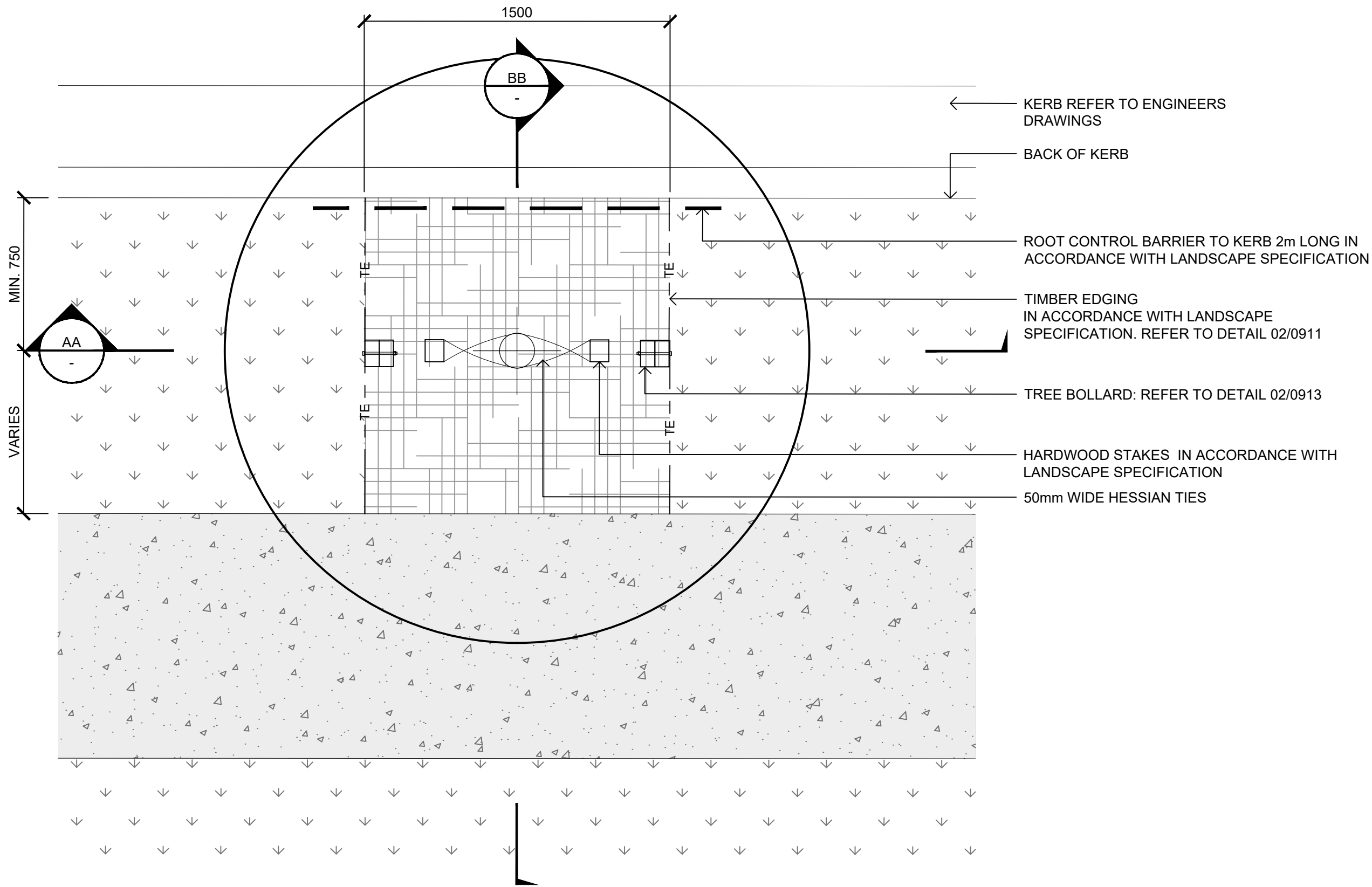
DA 1542/2019/ZB

CC 85/2020/EC/A

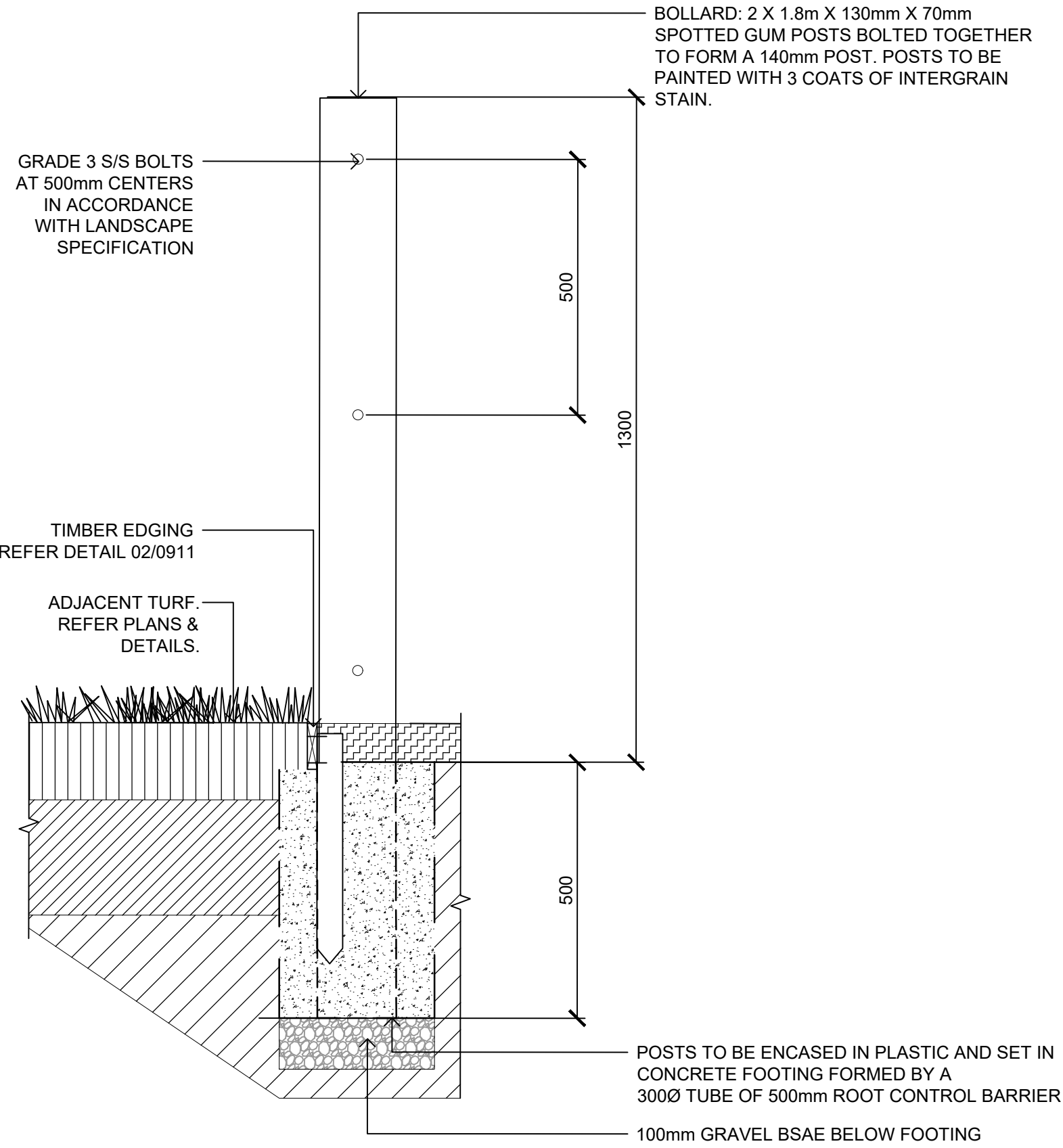
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11/08/2021

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

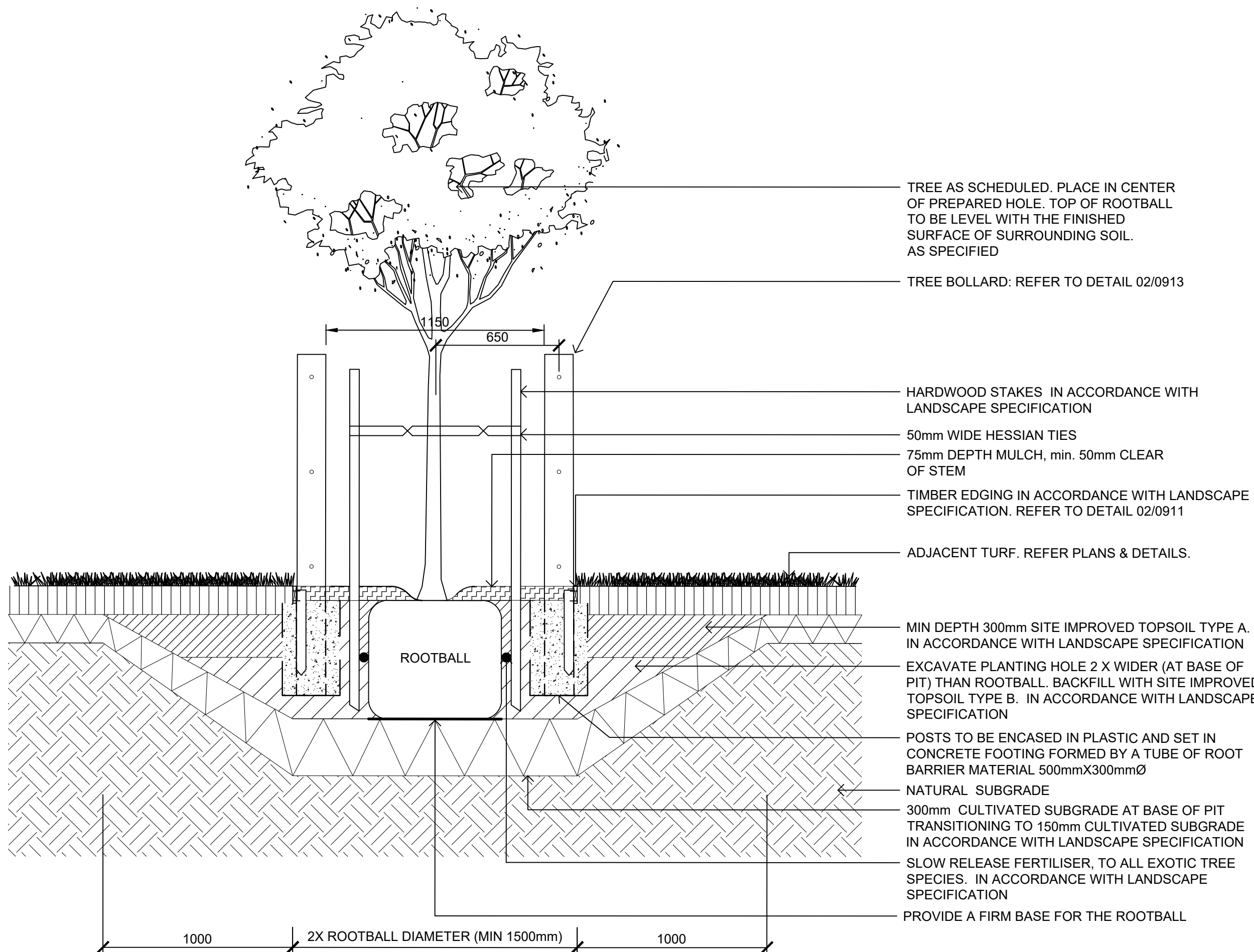
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F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION



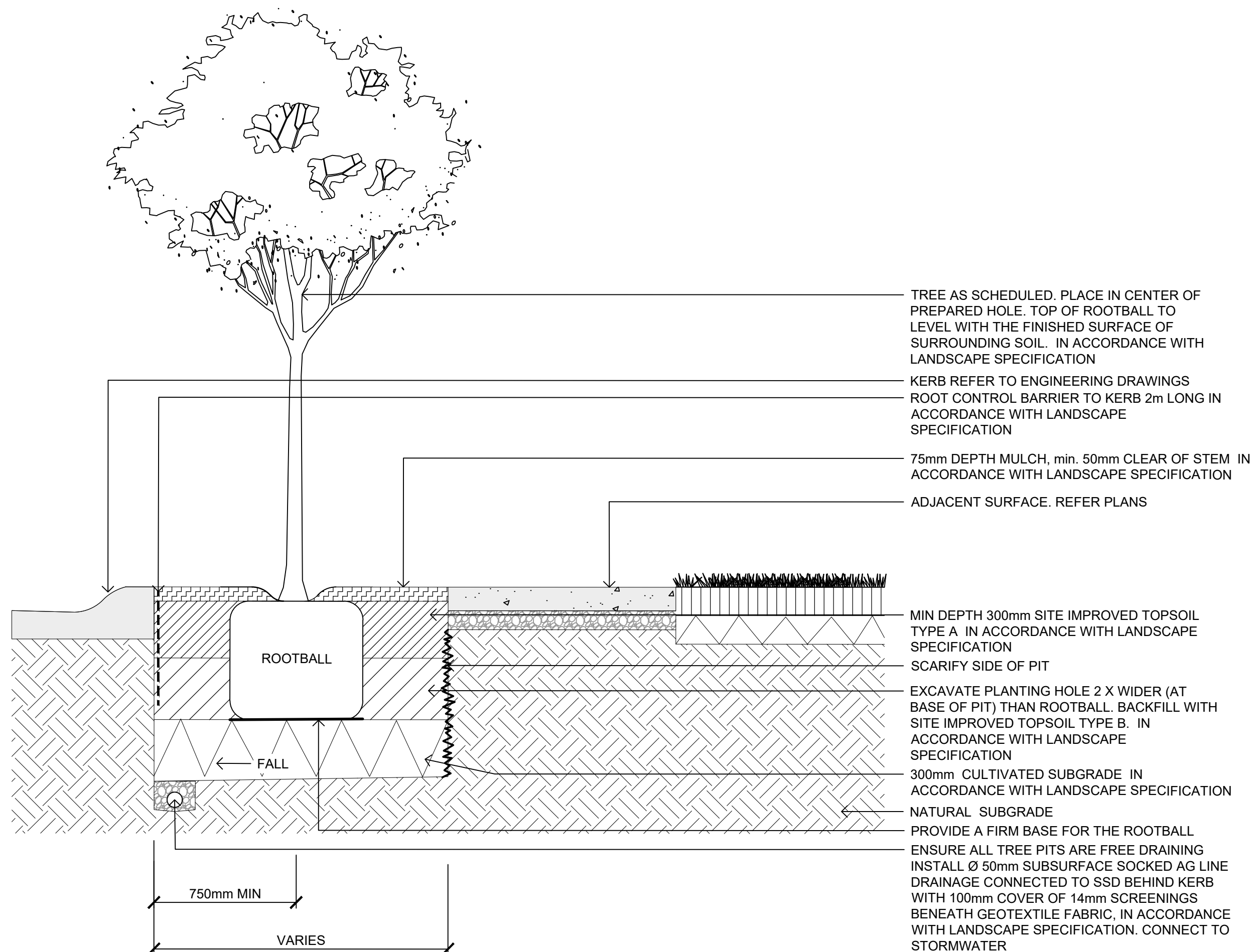
01 TYPICAL TREE IN VERGE: COLLECTOR ROAD (ADJACENT PATH) - PLAN
0913 1:20 @ A1



02 B1 - COLLECTOR ROAD BOLLARD
0913 1:10 @ A1



AA TYPICAL TREE IN VERGE: COLLECTOR ROAD - LONG SECTION
0913 1:20 @ A1



BB TYPICAL TREE IN VERGE: COLLECTOR ROAD - SHORT SECTION
0913 1:20 @ A1

NOT FOR CONSTRUCTION

AECOM

PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT



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133 Castlereagh Street,
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D	16.04.2020	DRAFT CC
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

AS SHOWN

PROJECT NUMBER

60636281

SHEET TITLE

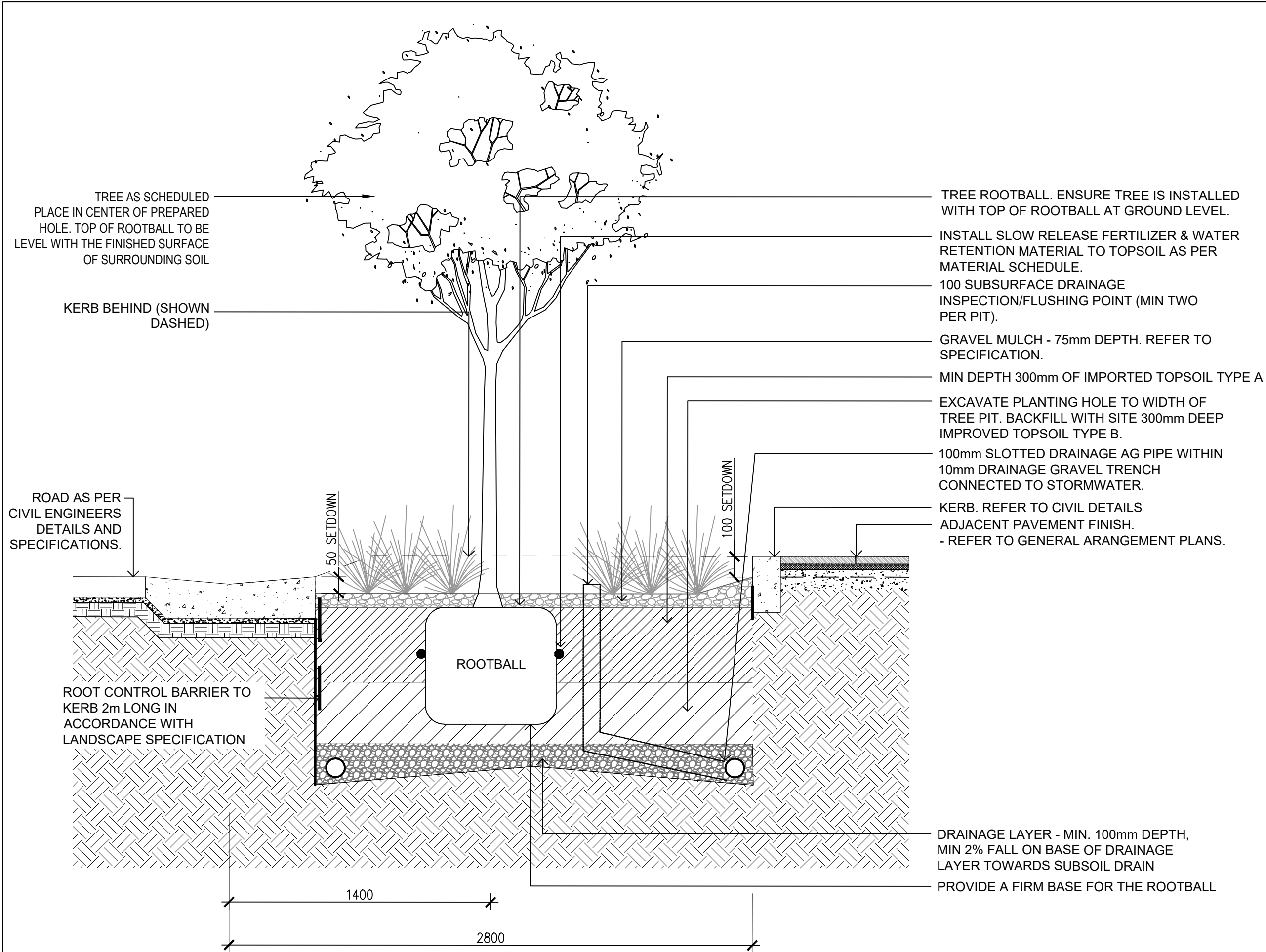
TOWN CENTRE ROADS
DETAILS
SHEET 3/8

SHEET NUMBER

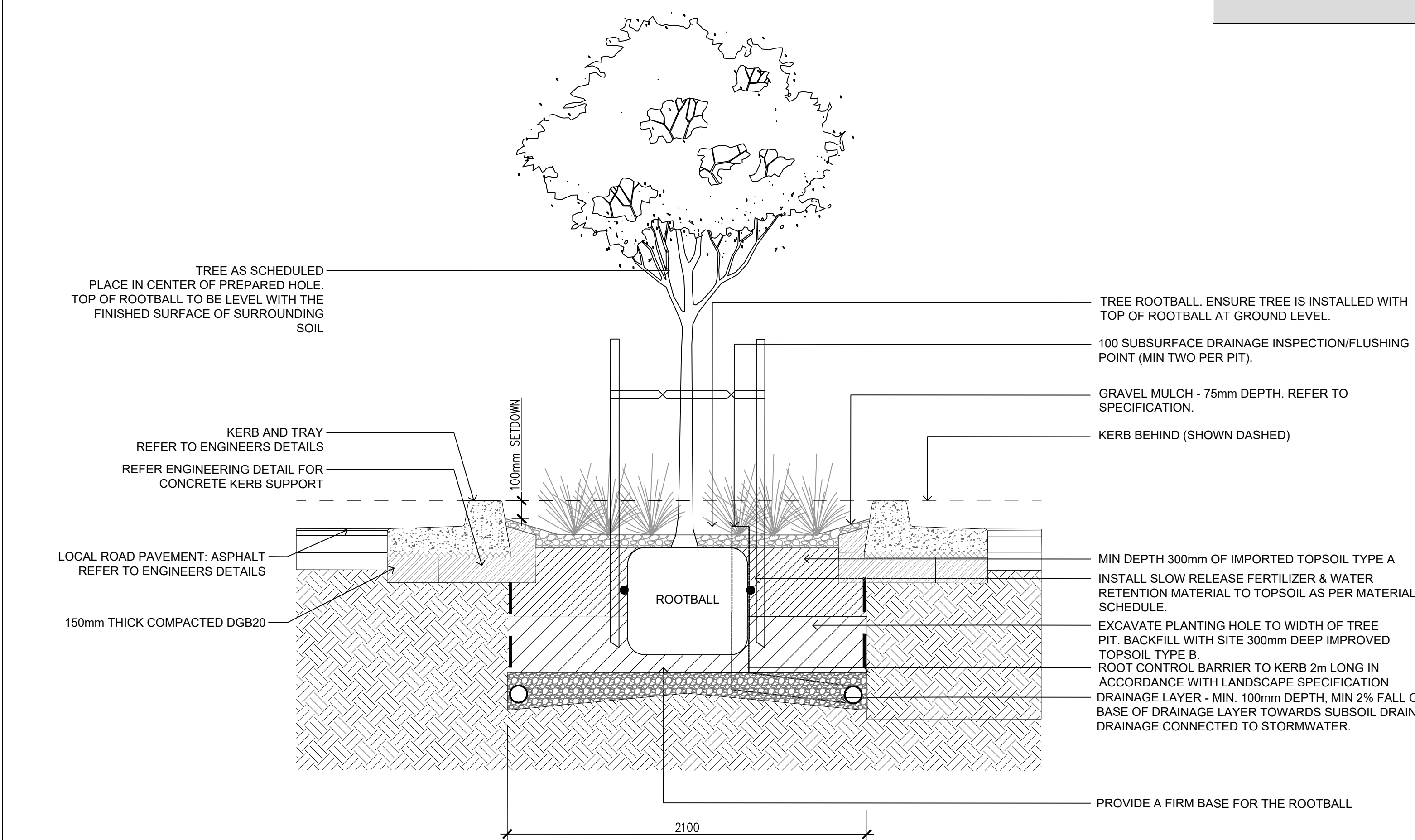
60636281-DRG-20-TCAB-LD-0913

ISSUE

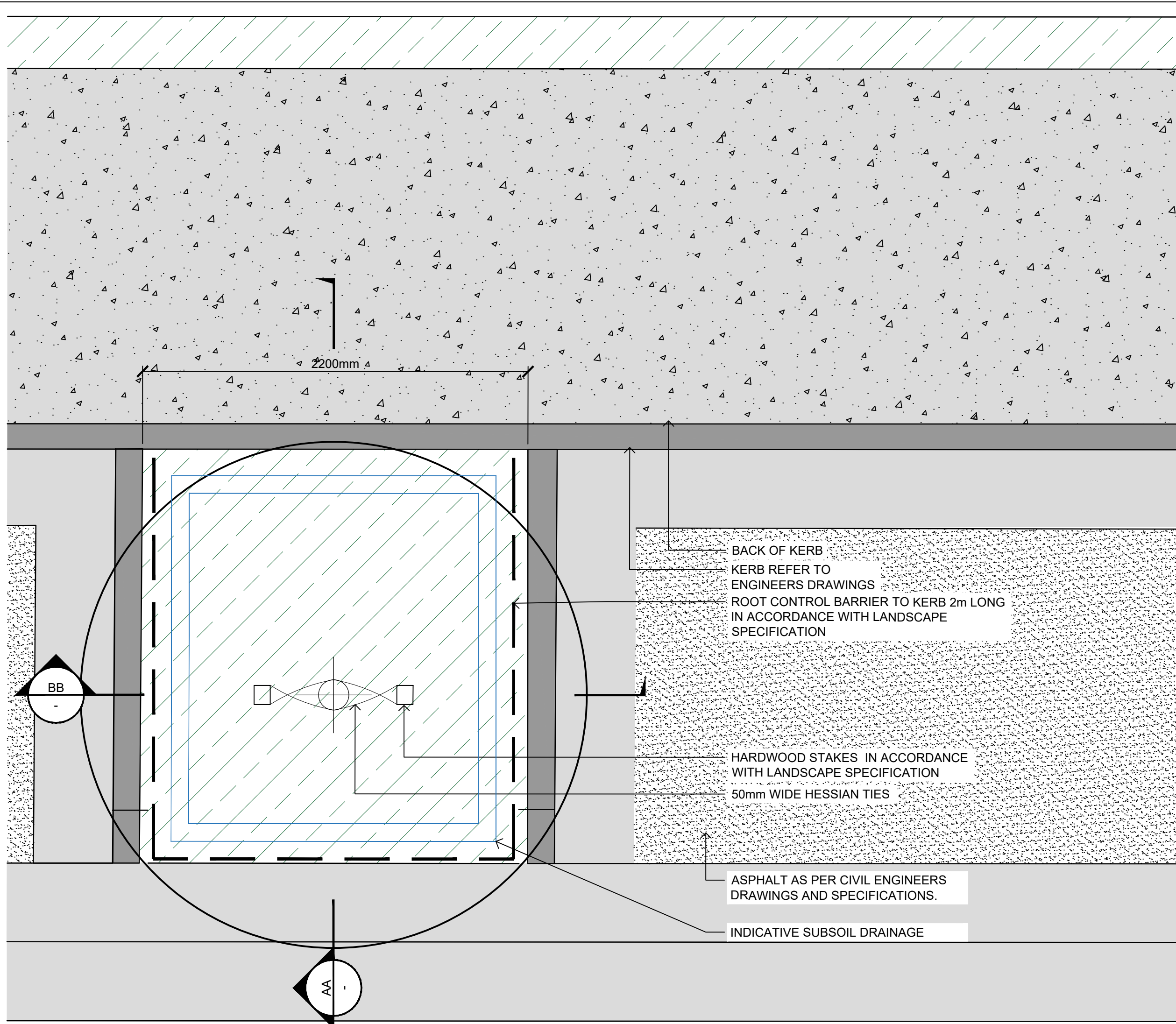
H



AA
0914
TREE PLANTING: PASSIVELY IRRIGATED ADJACENT TO CAR PARKING (ROAD A SECTION A)
1:20 @ A1



BB
0914
TREE PLANTING: PASSIVELY IRRIGATED ADJACENT TO CAR PARKING (ROAD A SECTION B)
1:20 @ A1



**THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE**

DA 1542/2019/ZB

CC 85/2020/EC/A

**CC APPROVED ON
11/08/2021**

AECOM

PROJECT

**THE GABLES
PRECINCT E
TOWN CENTRE ROADS**

CLIENT



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E	03.05.2020	CONSTRUCTION CERTIFICATE

KEY PLAN

SCALE

AS SHOWN

PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
DETAILS
SHEET 4/8

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0914

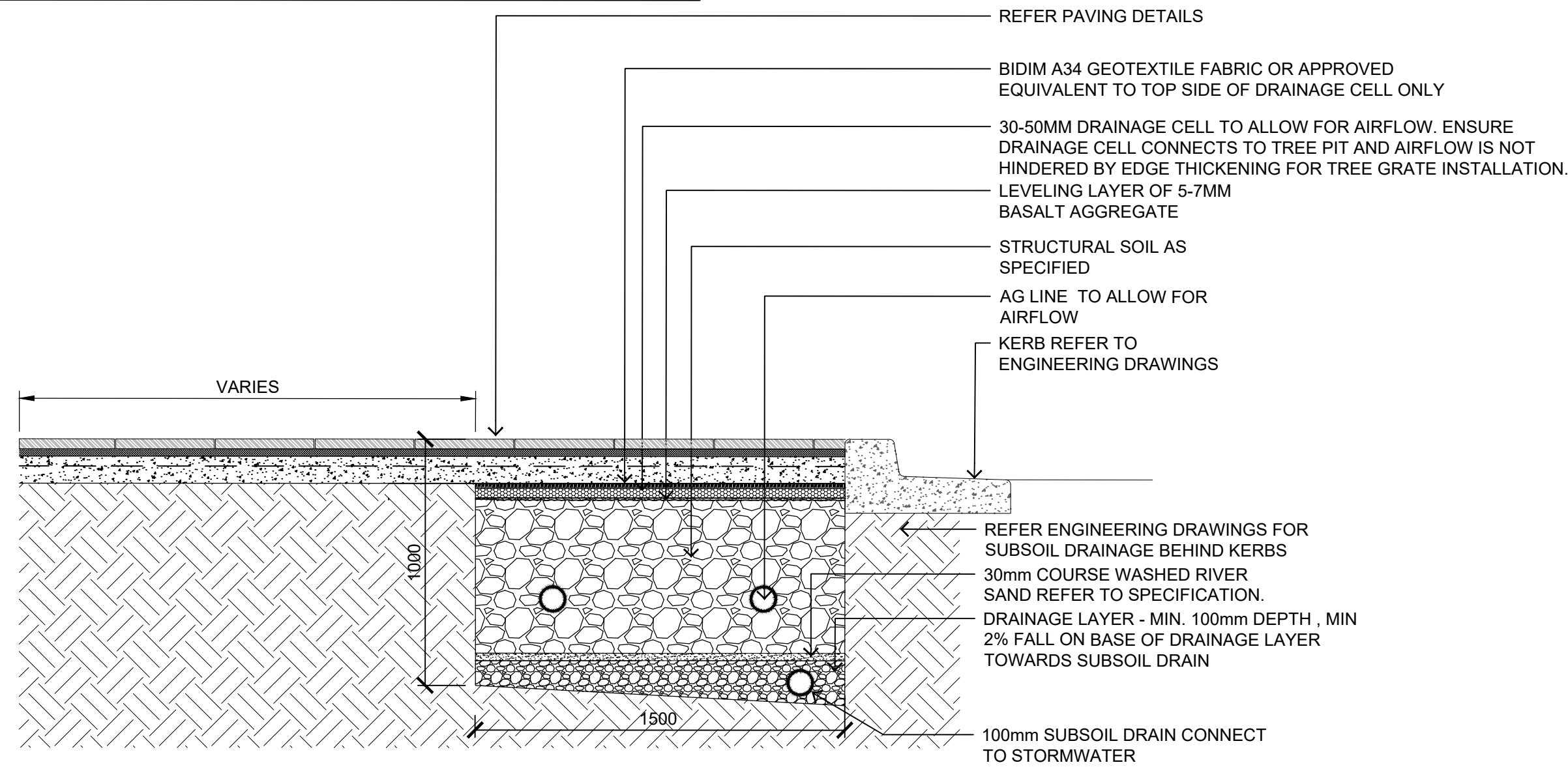
ISSUE

H

(NOT FOR CONSTRUCTION)

NOTE: REFER TO NOTES ON 60636281-DRG-20-TCAB-LD-0011 REGARDING SUBTERRANEAN SERVICES AND LOCATIONS.

CONTRACTOR TO COORDINATE WITH RAR TO DETERMINE WATER SERVICE REQUIREMENTS.



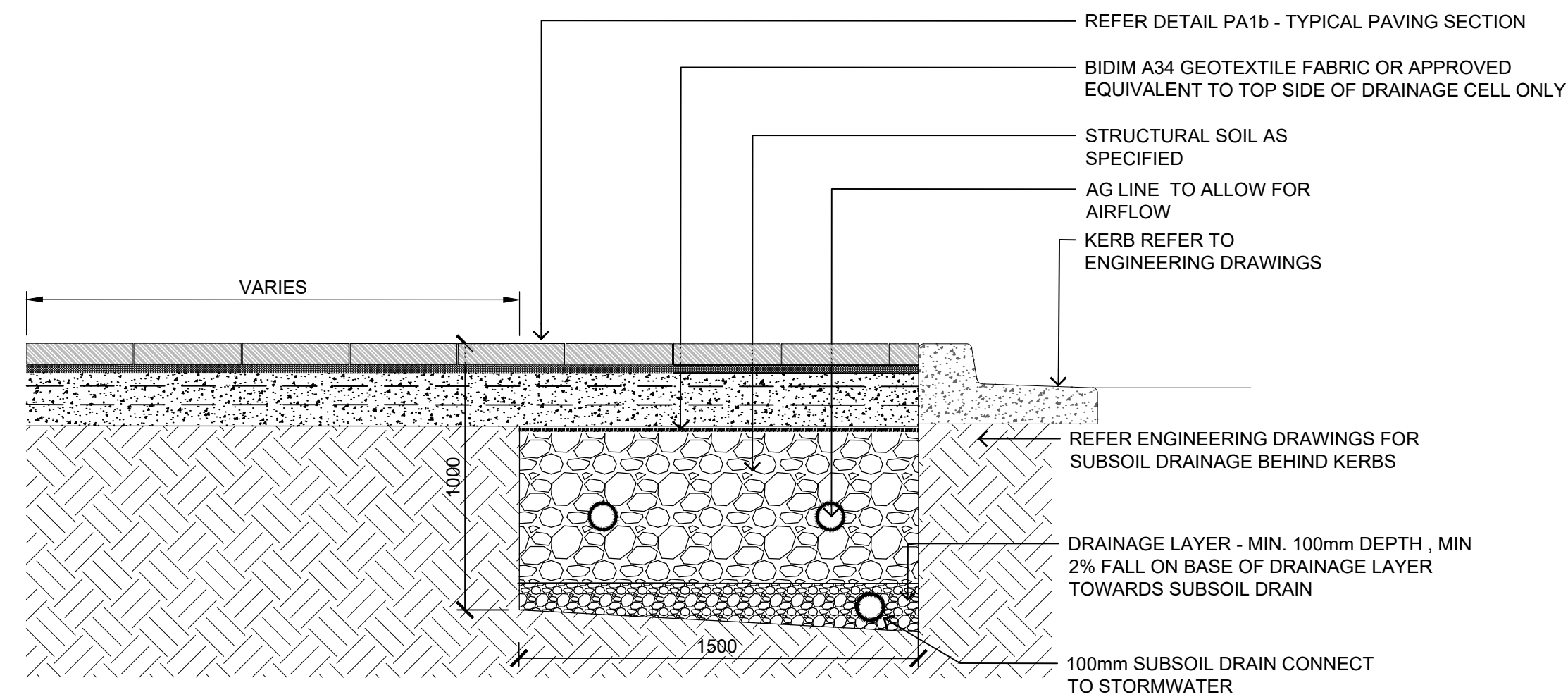
01a TYPICAL PAVING TO KERB OVER STRUCTURAL SOIL TRENCH DETAIL - (ROAD B)
0915 1:20 @ A1

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

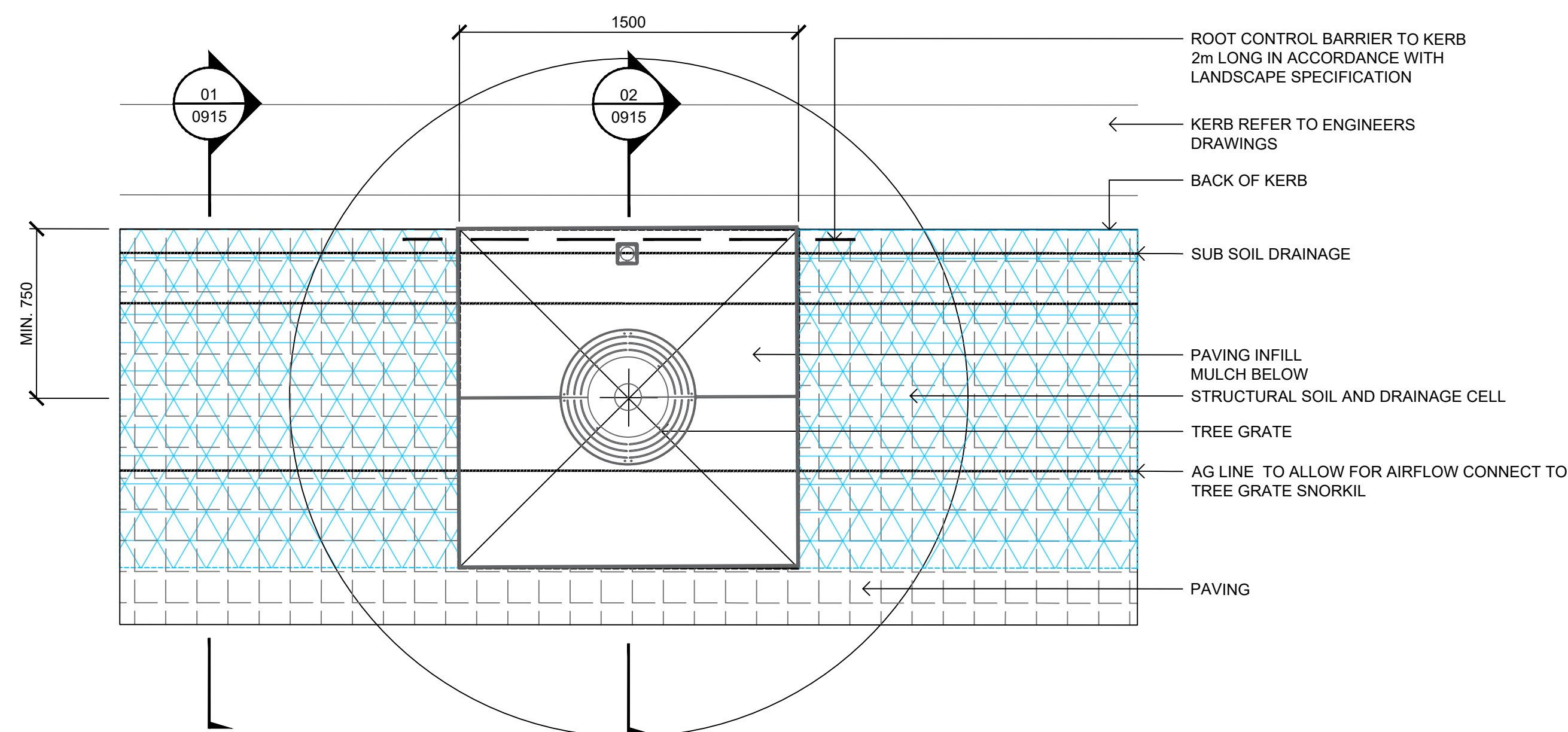
DA 1542/2019/ZB

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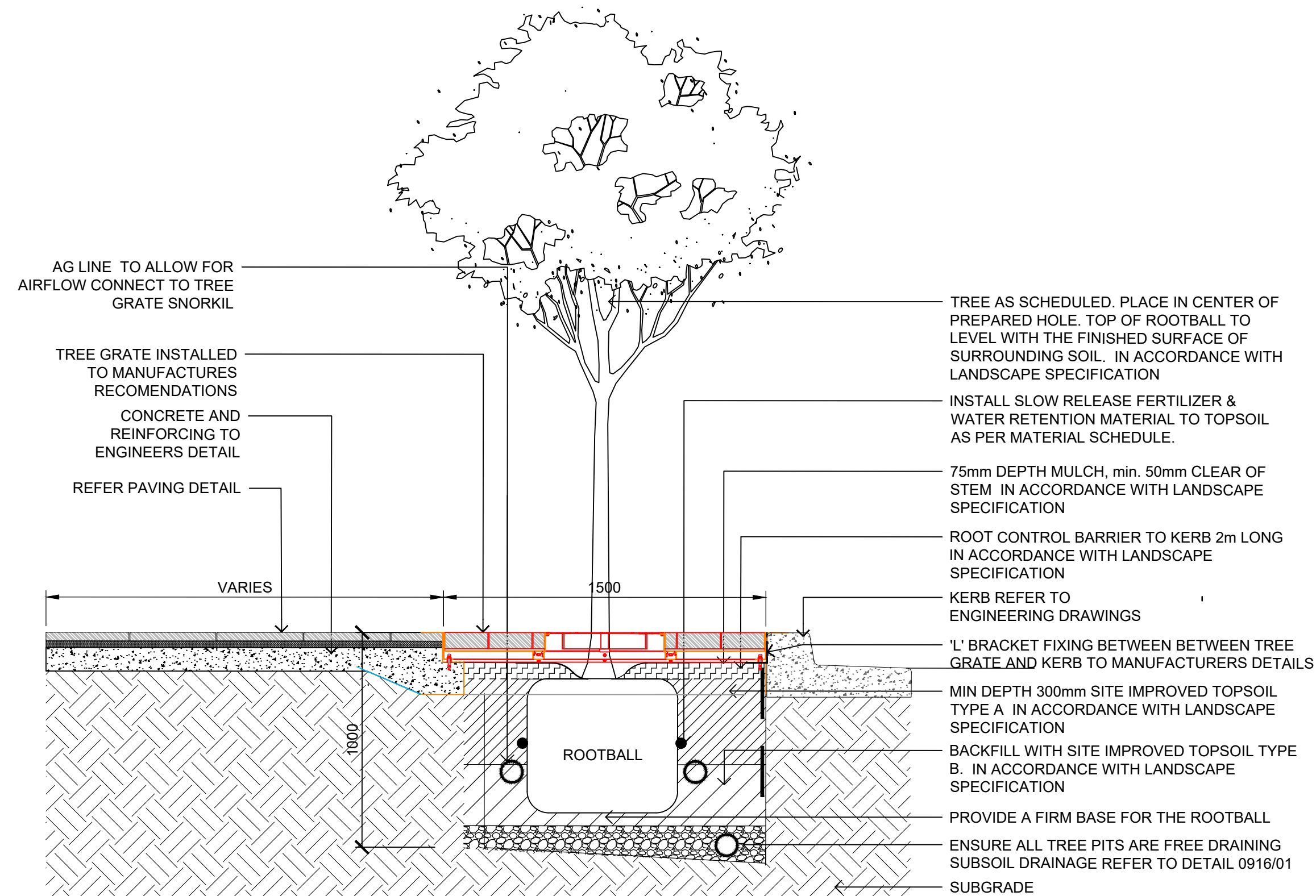
CC APPROVED ON
11/08/2021



01b TYPICAL STRUCTURAL SOIL TRENCH UNDER VEHICLE ACCESS - (ROAD B)
0915 1:20 @ A1



03 TYPICAL PAVING TO KERB OVER STRUCTURAL SOIL TRENCH DETAIL - (ROAD B)
0915 1:20 @ A1



02 TYPICAL TREE GRATE TO KERB OVER STRUCTURAL SOIL TRENCH DETAIL - (ROAD B)
0915 1:20 @ A1

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PROJECT

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PRECINCT E
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Stockland Development
Pty Ltd
A.B.N 71 000 064 835

CONSULTANT

AECOM Australia Pty Ltd
A.B.N 20 093 846 925
www.aecom.com

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REGISTRATION

PROJECT MANAGEMENT INITIALS

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

	DATE	DESCRIPTION
H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	28.05.2020	CONSTRUCTION CERTIFICATE
E	03.05.2020	CONSTRUCTION CERTIFICATE
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

AS SHOWN

PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
DETAILS
SHEET 5/8

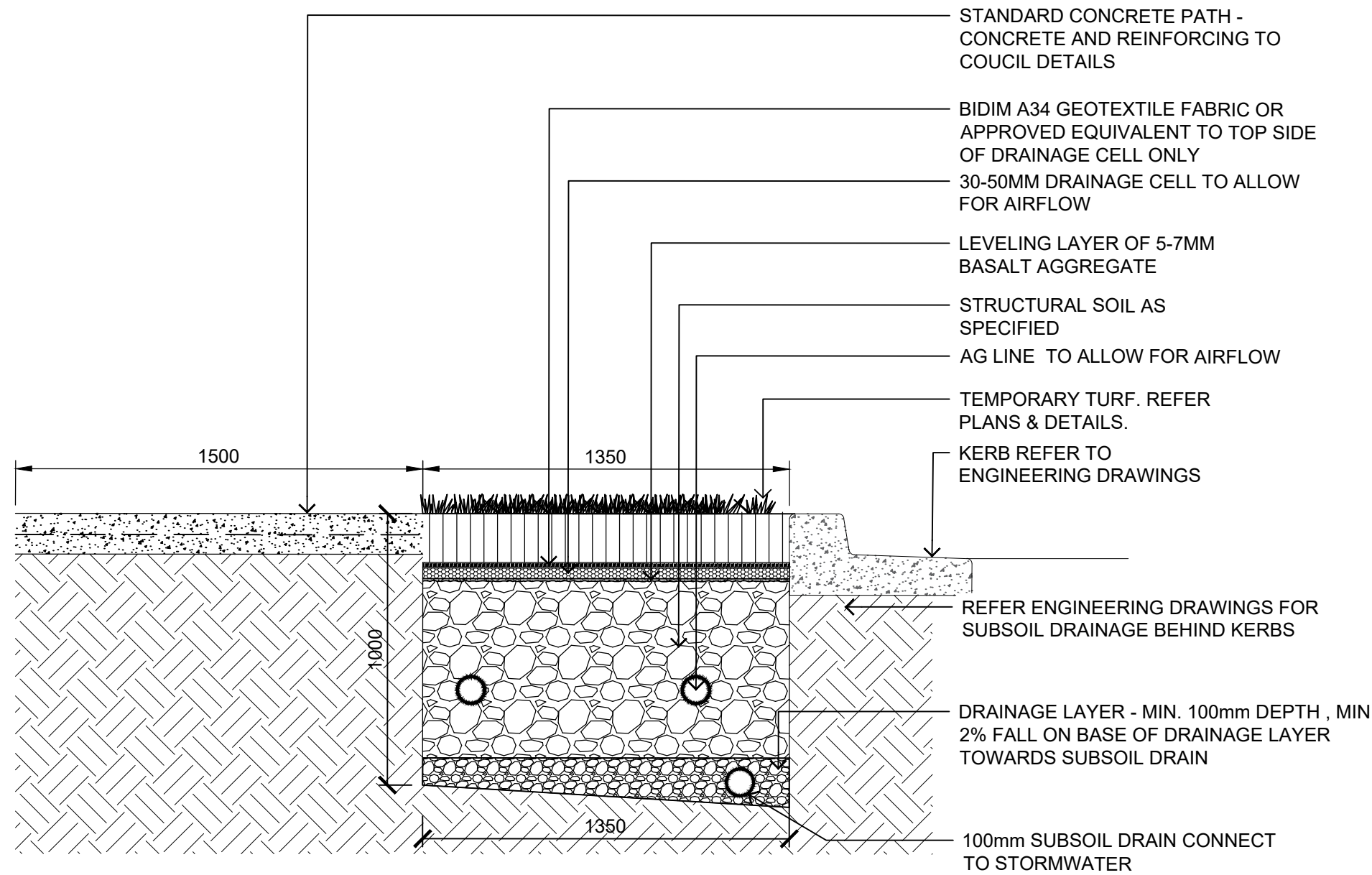
SHEET NUMBER

60636281-DRG-20-TCAB-LD-0915

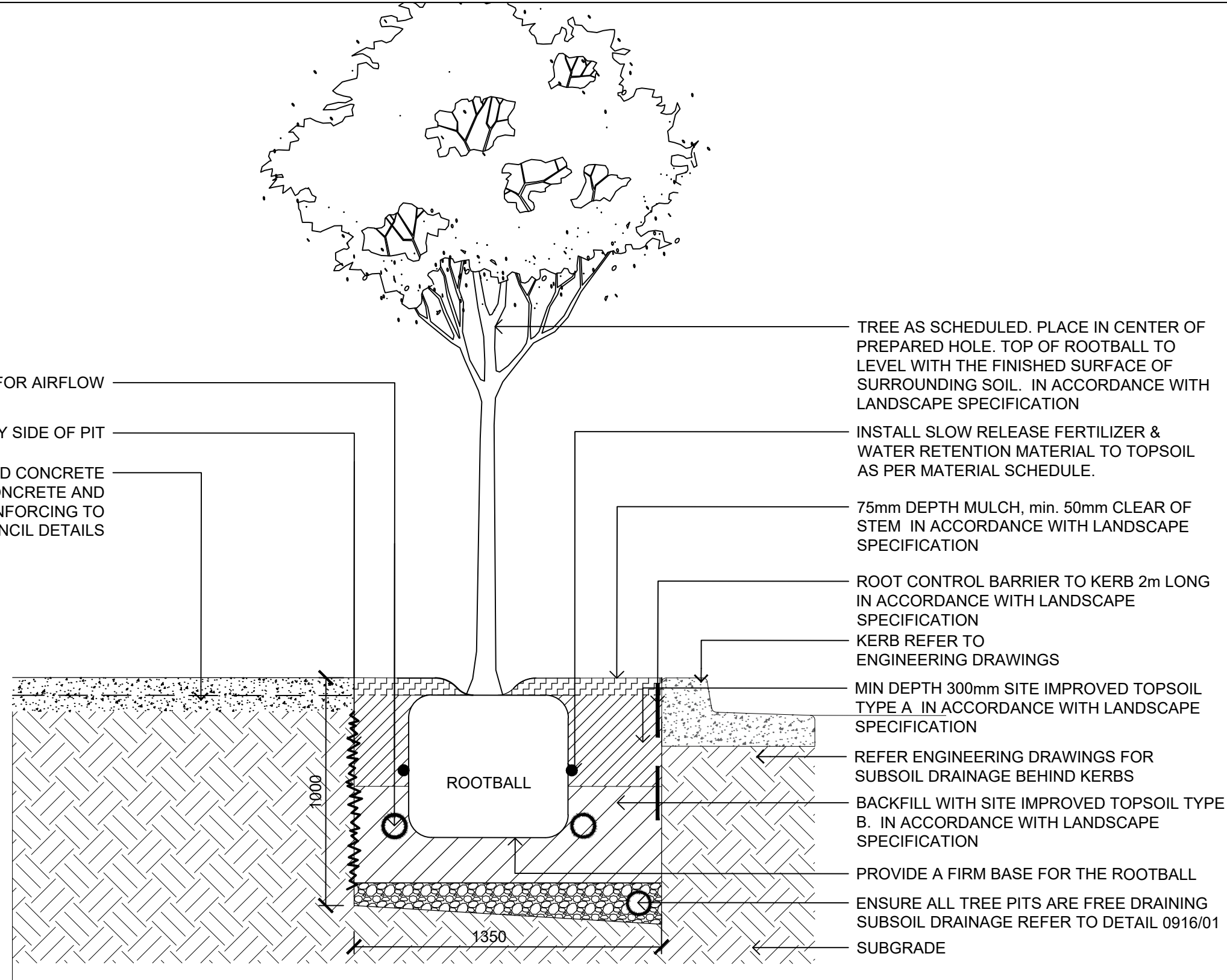
ISSUE

H

NOTE: REFER TO NOTES ON 60636281-DRG-20-CAB-LD-0011 REGARDING SUBTERRANEAN SERVICES AND LOCATIONS.



01
0916 TYPICAL TURF TO KERB OVER STRUCTURAL SOIL TRENCH DETAIL - (ROAD B)
1:20 @ A1



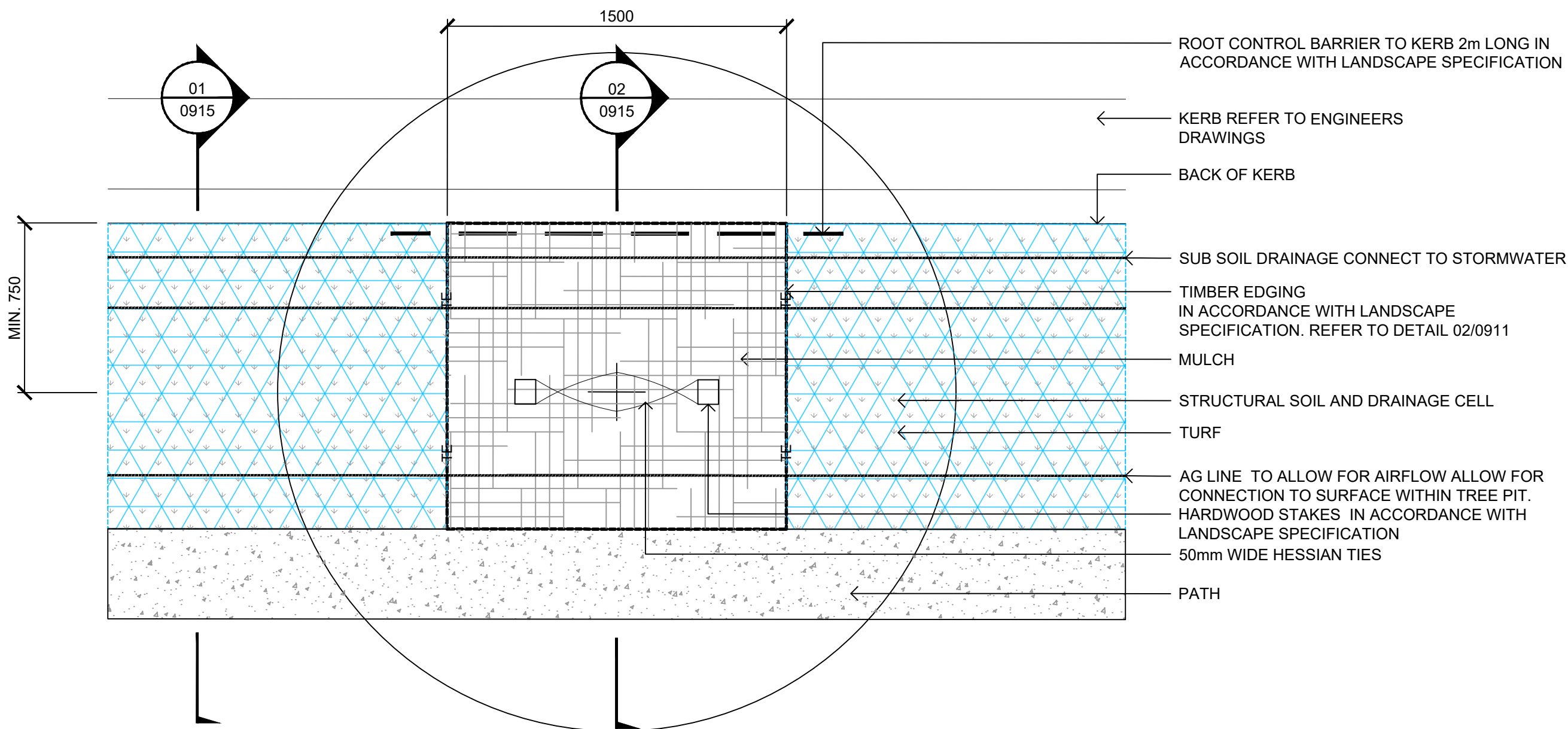
02
0916 TYPICAL TREE PLANTING IN STRUCTURAL SOIL TRENCH DETAIL - (ROAD B)
1:20 @ A1

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021



03
0916 TYPICAL TURF TO KERB OVER STRUCTURAL SOIL TRENCH PLAN - (ROAD B)
1:20 @ A1

AECOM

PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

CLIENT



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133 Castlereagh Street,
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H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
F	04.06.2020	CONSTRUCTION CERTIFICATE
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

AS SHOWN

PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
DETAILS
SHEET 6/8

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0916

ISSUE

H

(NOT FOR CONSTRUCTION)

Diagram illustrating the cross-section of a drainage system, showing the layers and components:

- REFER PAVING DETAILS
- BIDIM A34 GEOTEXTILE FABRIC OR APPROVED EQUIVALENT TO TOP SIDE OF DRAINAGE CELL ONLY
- 30-50MM DRAINAGE CELL TO ALLOW FOR AIRFLOW
- LEVELING LAYER OF 5-7MM BASALT AGGREGATE
- STRUCTURAL SOIL AS SPECIFIED
- AG LINE TO ALLOW FOR AIRFLOW
- KERB REFER TO ENGINEERING DRAWINGS
- DRAINAGE LAYER - MIN. 100mm DEPTH, MIN 2% FALL ON BASE OF DRAINAGE LAYER TOWARDS SUBSOIL DRAIN
- 100mm SUBSOIL DRAIN CONNECT TO STORMWATER

Dimensions and Notes:

- VARIES (horizontal dimension for the topsoil layer)
- 1000 (vertical dimension for the drainage layer)
- 1500 (horizontal dimension for the drainage layer)
- VARIES (horizontal dimension for the subsoil drain)

SCARIFY SIDE OF PIT

REFER PAVING DETAILS

VARIES

ROOTBALL

1500

VARIES

INSTALL SLOW RELEASE FERTILIZER & WATER RETENTION MATERIAL TO TOPSOIL AS PER MATERIAL SCHEDULE.

MIN DEPTH 300mm SITE IMPROVED TOPSOIL TYPE A IN ACCORDANCE WITH LANDSCAPE SPECIFICATION

75mm DEPTH MULCH, min. 50mm CLEAR OF STEM IN ACCORDANCE WITH LANDSCAPE SPECIFICATION

KERB REFER TO ENGINEERING DRAWINGS

SCARIFY SIDE OF PIT. REPLACE WITH ROOT CONTROL BARRIER WHEN ADJACENT TO KERB IN ACCORDANCE WITH LANDSCAPE SPECIFICATION

BACKFILL WITH SITE IMPROVED TOPSOIL TYPE B. IN ACCORDANCE WITH LANDSCAPE SPECIFICATION

PROVIDE A FIRM BASE FOR THE ROOTBALL

ENSURE ALL TREE PITS ARE FREE DRAINING

SUBSOIL DRAINAGE REFER TO DETAIL 0917/01

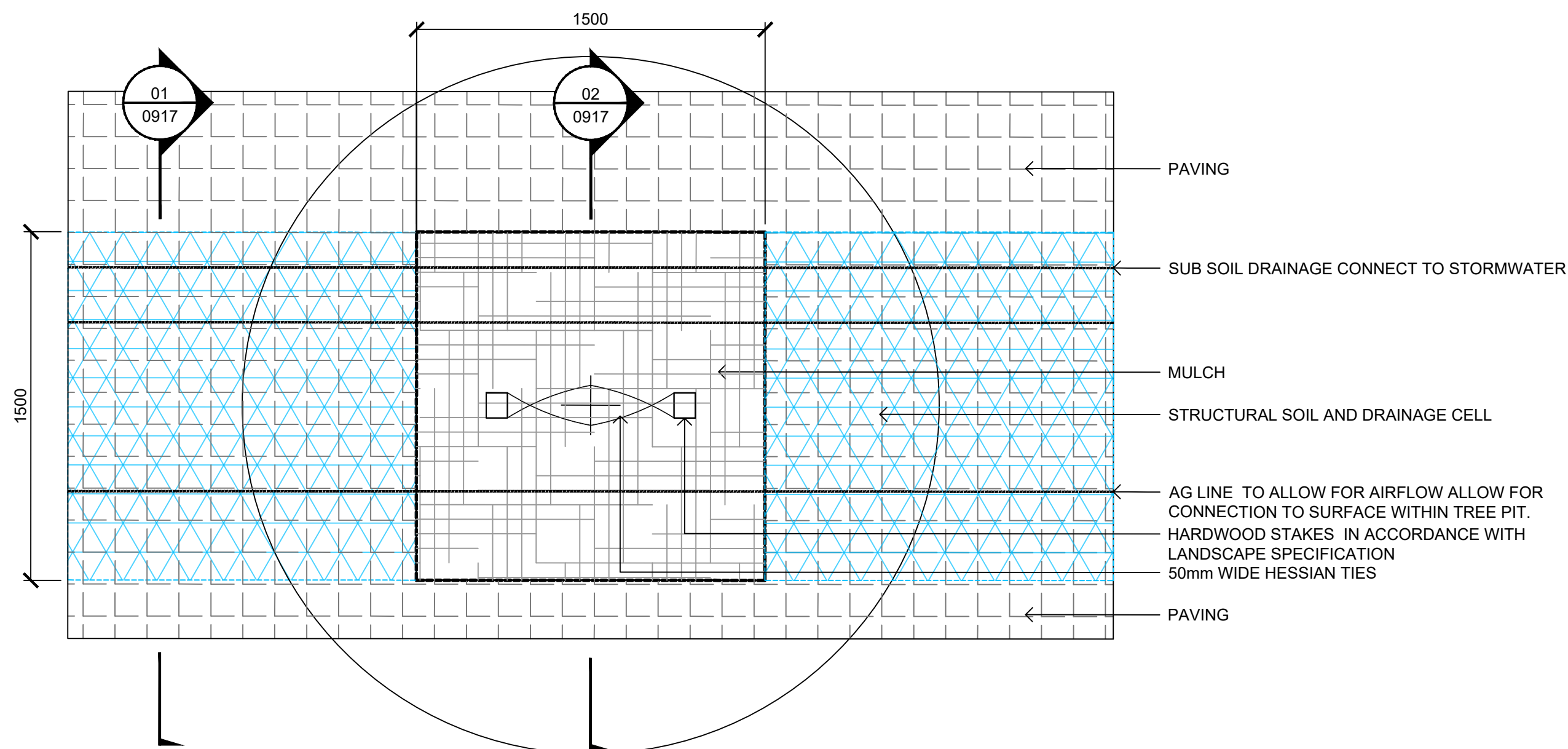
SUBGRADE

**THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE**

DA 1542/2019/ZB

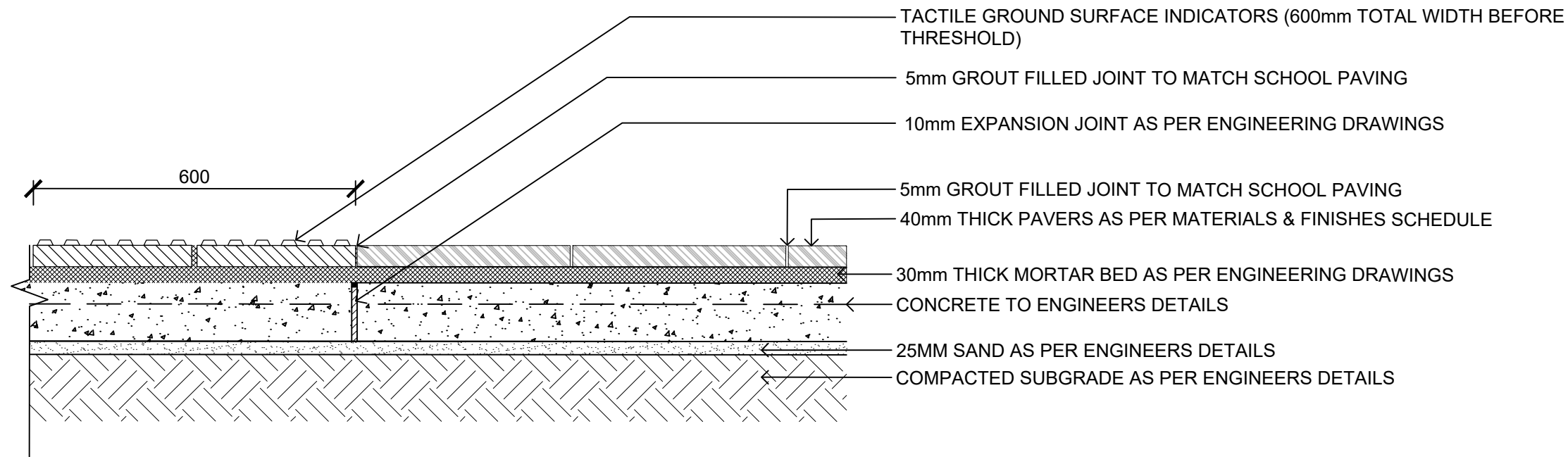
CC 85/2020/EC/A

**CC APPROVED ON
11/08/2021**

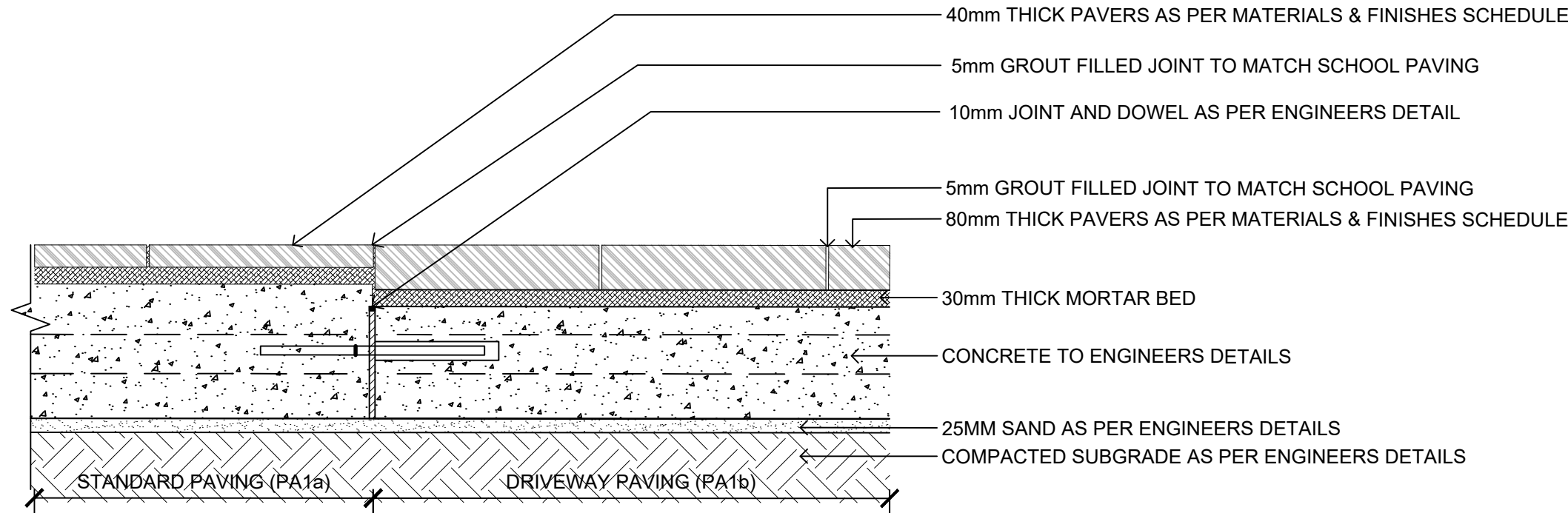


03 TYPICAL PAVING OVER STRUCTURAL SOIL TRENCH PLAN - (FONTANA DRIVE NORTH)
0917 1:20 @ A1

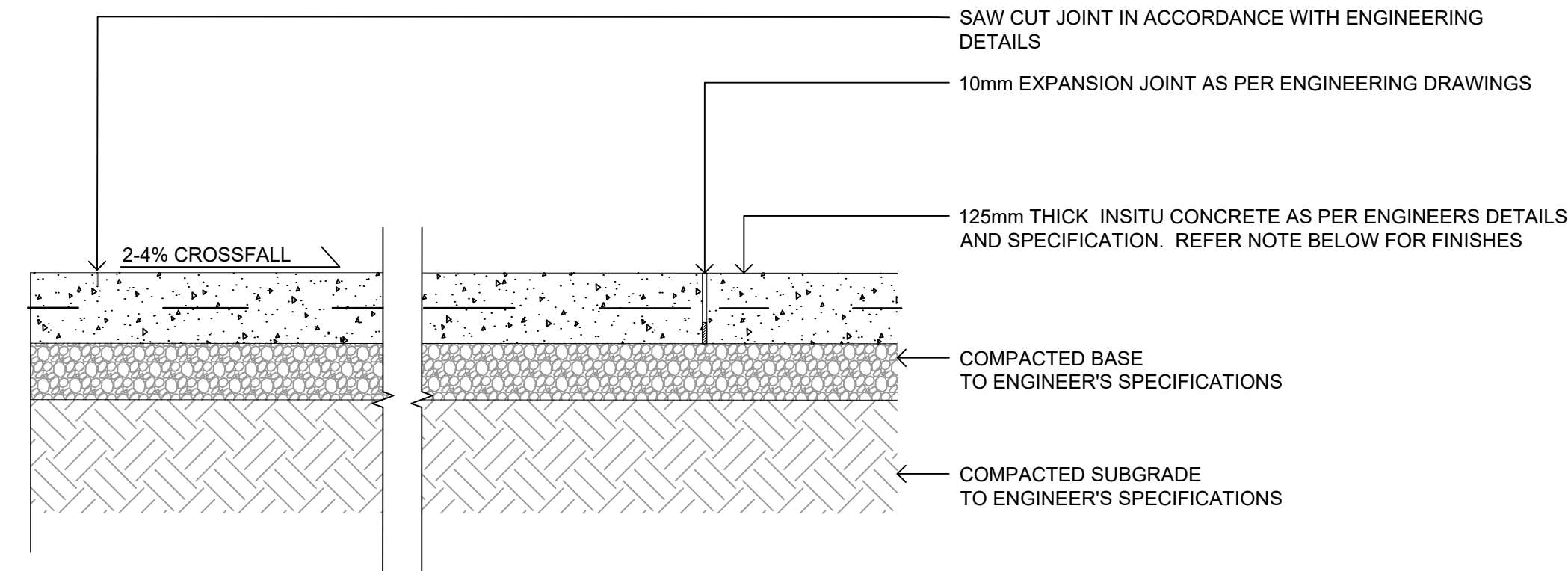
60636281-DRG-20-TCAB-LD-0917



01 PA1a - TYPICAL PAVING SECTION
0921 1:10 @ A1



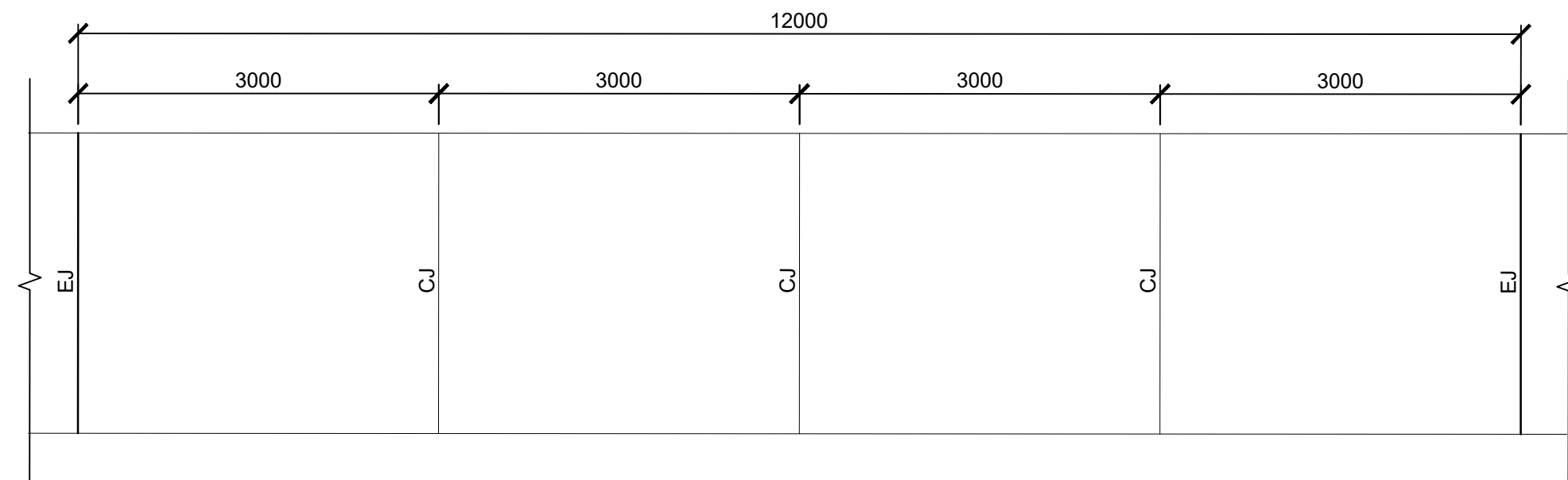
02 PA1b - TYPICAL PAVING SECTION
0921 1:10 @ A1



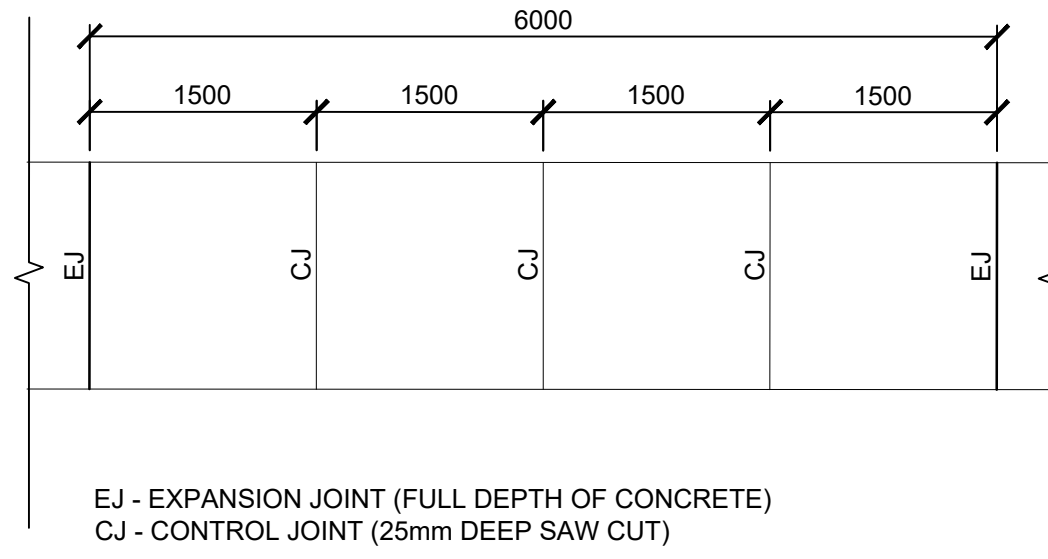
03 PA3/3b/4 - TYPICAL CONCRETE PAVING SECTION (PEDESTRIAN)
0921 1:10 @ A1

NOTE:
ALL CONCRETE PATHS TO CONFORM TO HILLS SHIRE COUNCIL STANDARD DRAWINGS SD.18 & SD.19, ENGINEERING REQUIREMENTS WHERE SPECIFIED, AND AS OUTLINED WITHIN LANDSCAPE TECHNICAL SPECIFICATION

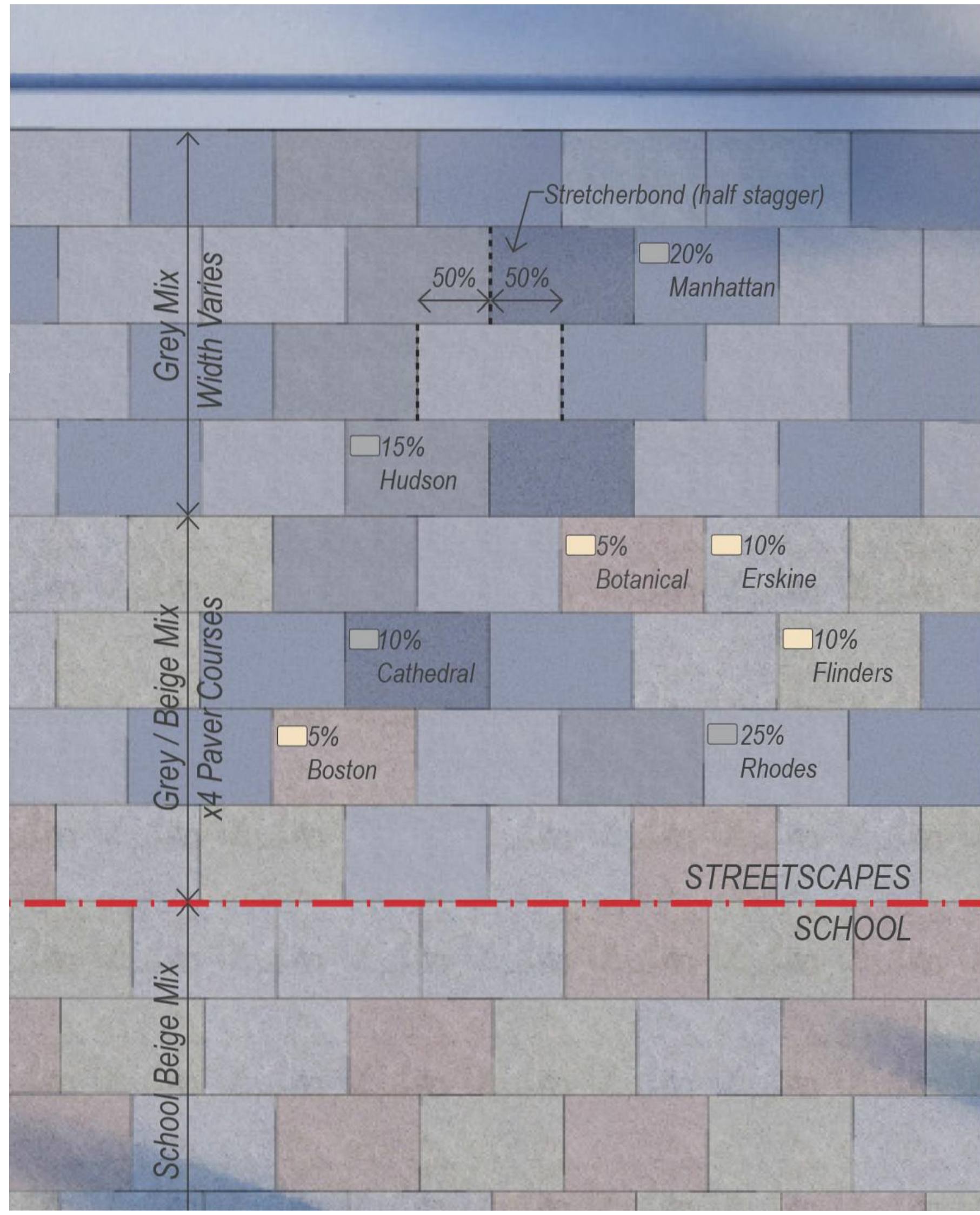
FINISH:
PA3 & PA3b: PAVEMENT TYPE 3 and 3b - STANDARD GREY CONCRETE WITH BROOM FINISH IN ACCORDANCE WITH LANDSCAPE MATERIALS AND FINISHES SCHEDULE.
PA4: PAVEMENT TYPE 4 - HOYNEYCOMB COLOURED CONCRETE WITH BROOM FINISH IN ACCORDANCE WITH LANDSCAPE MATERIALS AND FINISHES SCHEDULE.



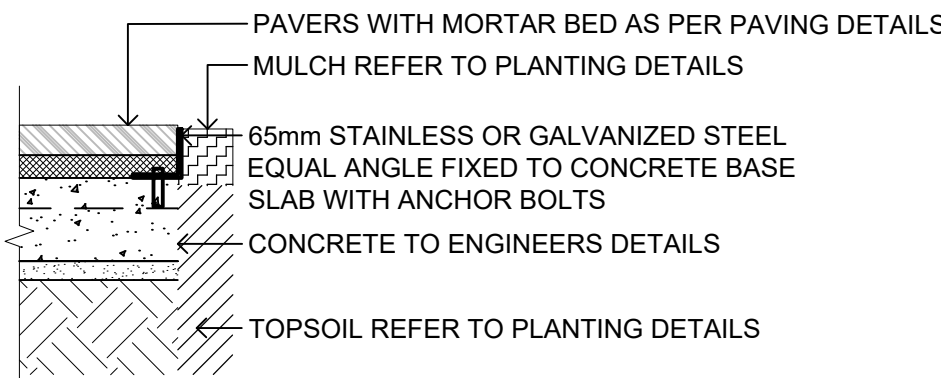
05 PAVEMENT JOINTING SETOUT PLAN - 2.5m OR GREATER CONCRETE PATH
0921 1:50 @ A1



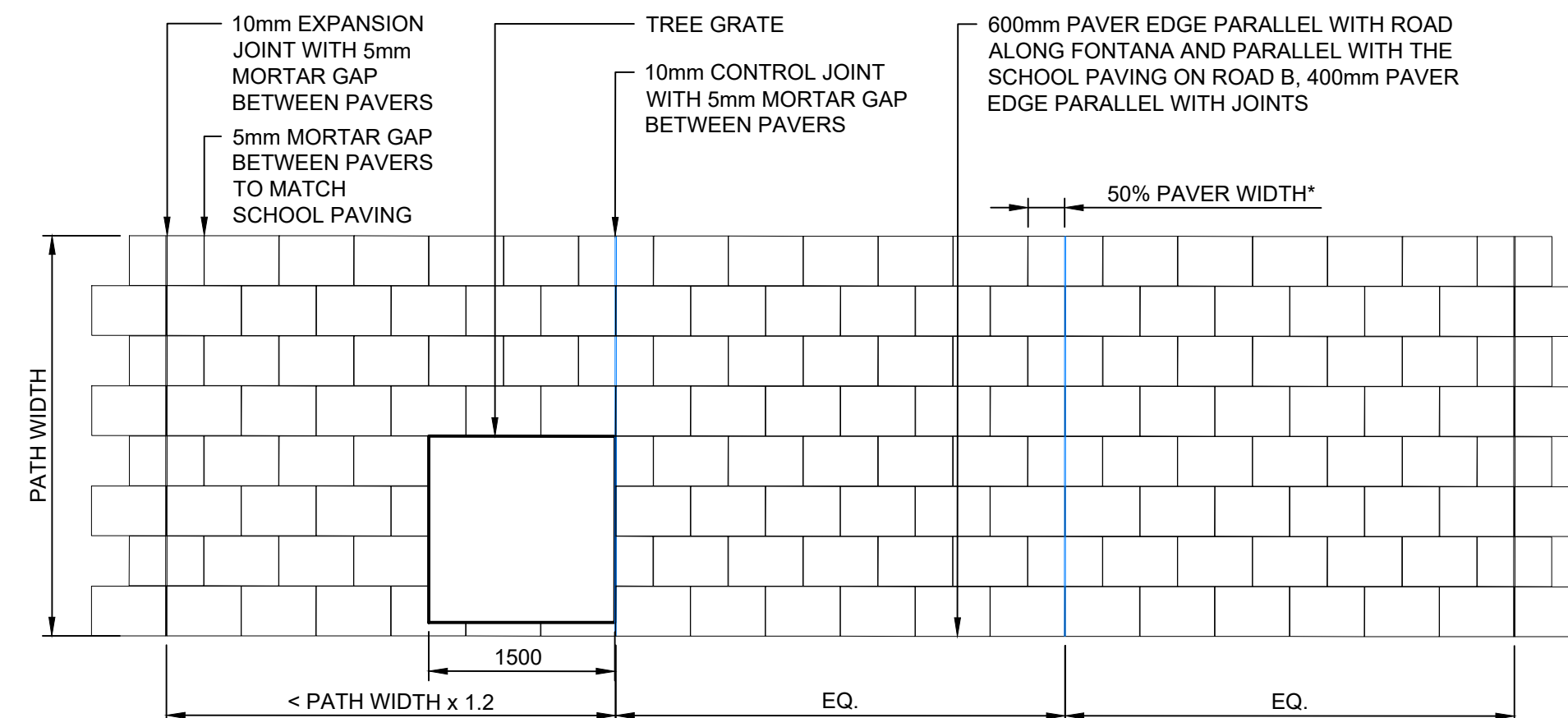
06 PAVEMENT JOINTING SETOUT PLAN - 1.5m CONCRETE FOOTPATH
0921 1:50 @ A1



04 PA1a/b - Typical Mix Setout
0921 NTS



08 PAVING EDGE RESTRAINT ADJACENT TO PLANTING
0921 1:10 @ A1



07 PAVEMENT SETOUT PLAN - UNIT PAVING FOOTPATH
0921 1:50 @ A1

NOTE: PERCENTAGE MIX OF COLOURS AS INDICATED ON THE PLAN REPRESENT THE GREY/BEIGE MIX ONLY. FOR GREY MIX PERCENTAGES REFER TO MATERIALS AND FINISHES SCHEDULE

PROJECT

THE GABLES
PRECINCT E
TOWN CENTRE ROADS

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THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 1542/2019/ZB

CC 85/2020/EC/A

CC APPROVED ON
11/08/2021

REGISTRATION

PROJECT MANAGEMENT INITIALS

CL/HC	HC	JB
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

I	05.08.2021	CONSTRUCTION CERTIFICATE
H	22.07.2021	CONSTRUCTION CERTIFICATE
G	04.06.2020	CONSTRUCTION CERTIFICATE
I/R	DATE	DESCRIPTION

KEY PLAN

SCALE

AS SHOWN

PROJECT NUMBER

60636281

SHEET TITLE

TOWN CENTRE ROADS
DETAILS
SHEET 8/8

SHEET NUMBER

60636281-DRG-20-TCAB-LD-0921

ISSUE

(NOT FOR CONSTRUCTION)

This drawing is confidential and shall only be used for the purpose of this project. The signing of this title block confirms the design and drafting of this project have been prepared and checked in accordance with the AECOM quality assurance system to ISO 9001:2000.

20 October 2021

The General Manager
The Hills Shire Council
PO Box 75
CASTLE HILL NSW 1765

Attention: Mr Michael Edgar



RE: Council Reference No. CC 59/2021/EC

CONSTRUCTION CERTIFICATION

I, Ryan Noney, of Western Earthmoving Pty Ltd, hereby certify that the road pavement and other items for this project has been constructed in accordance with the conditions of the Construction Certificate, the approved pavement design report and in accordance with The Hills Shire Council's "Works Specification Subdivisions/Developments"

Yours Faithfully,
WESTERN EARTHMOVING PTY LTD,

Ryan Noney
Project Manager
rnoney@wem.com.au

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021



THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE



DRAWING SCHEDULE

DRAWING NO.	DESCRIPTION
180004-TCTP-CC-C01.01	COVER SHEET AND DRAWING SCHEDULE
180004-TCTP-CC-C01.21	GENERAL NOTES AND LEGEND SHEET 01
180004-TCTP-CC-C01.22	GENERAL NOTES AND LEGEND SHEET 02
180004-TCTP-CC-C01.41	GENERAL ARRANGEMENT PLAN
180004-TCTP-CC-C03.01	EROSION AND SEDIMENTATION CONTROL PLAN
180004-TCTP-CC-C03.21	EROSION AND SEDIMENTATION CONTROL DETAILS
180004-TCTP-CC-C04.01	BULK EARTHWORKS CUT AND FILL PLAN
180004-TCTP-CC-C04.21	CUT AND FILL SECTIONS - SHEET 01
180004-TCTP-CC-C04.22	CUT AND FILL SECTIONS - SHEET 02
180004-TCTP-CC-C05.01	SITEWORKS AND STORMWATER MANAGEMENT PLAN
180004-TCTP-CC-C06.01	SETOUT PLAN
180004-TCTP-CC-C11.01	PAVEMENT, SIGNAGE AND LINEMARKING PLAN
180004-TCTP-CC-C14.01	SITEWORKS DETAILS SHEET 01
180004-TCTP-CC-C14.02	SITEWORKS DETAILS SHEET 02
180004-TCTP-CC-C17.01	STORMWATER LONGITUDINAL SECTIONS
180004-TCTP-CC-C20.01	STORMWATER CATCHMENT PLAN
180004-TCTP-CC-C22.01	TURNING PATH PLAN
180004-TCTP-CC-C23.01	ZONE OVERLAY PLAN

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
4	19/01/2021	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client

Scale

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North

Enspire Solutions Pty Ltd
205/275 Alfred Street N, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Scale 1:2500	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION
Date 22/01/2020	Project Number/Drawing Number 180004-TC-CC-C01.01
Size A1	Revision 4
Datum AHD	

NOTE: ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE HILLS SHIRE COUNCIL DEVELOPMENT GUIDELINES AND TECHNICAL SPECIFICATIONS. READ IN CONJUNCTION WITH THE NOTES PROVIDED BELOW. IF CONFLICT ARISE THE HILLS SHIRE COUNCIL GUIDELINES AND SPECIFICATIONS TAKE PRECEDENCE. WHERE THE HILLS SHIRE COUNCIL GUIDELINES AND TECHNICAL SPECIFICATIONS ARE SILENT THE SPECIFICATION NOTES BELOW TAKE PRECEDENCE.

ACCESS AND SAFETY

1. THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON AND APPROVED BY COUNCIL / REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.
3. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS ADJACENT THE WORKS IS NOT DISRUPTED.
4. WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE.
5. THE CONTRACTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCILS REQUIREMENTS.

SURVEY

1. THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN SUPPLIED BY REGISTERED SURVEYORS TO PROVIDE A BASIS FOR DESIGN. THE USE OF THIS SURVEY BASE DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.
2. SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT THE DESIGN ENGINEER.
3. THE RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES ARE DIAGRAMMATIC ONLY. WHERE DISANCES AT BOUNDARY ARE CRITICAL THEY SHOULD BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION BY FURTHER SURVEY.

SEDIMENT AND SOIL EROSION

1. THE SEDIMENT & EROSION CONTROL PLAN PRESENTS CONCEPTS ONLY. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT & MANAGEMENT OF A DETAILED SCHEME TO COUNCILS SATISFACTION. OTHER REGULATORY AUTHORITY REQUIREMENTS AND PAY ALL FEES.
2. THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE BLUE BOOK (MANAGING URBAN STORMWATER SOIL AND CONSTRUCTION) ISSUED BY LANDCOM AND COUNCILS POLICIES. THESE MEASURES ARE TO BE INSPECTED AND MAINTAINED ON A DAILY BASIS.
3. THE CONTRACTOR SHALL INFORM ALL SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.
4. WHERE PRACTICAL, THE EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE TO THE END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
 - 4.1. CONSTRUCT TEMPORARY STABILISED SITE ACCESS INCLUSIVE OF SHAKE DOWN / WASH PAD.
 - 4.2. INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER FENCES, WHERE FENCES ADJACENT EACH OTHER, THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE.
 - 4.3. INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.
5. UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINIMUM WORKABLE SIZE.
6. AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL ENSURING CONFORMITY TO REGULATORY AUTHORITY REQUIREMENTS.
7. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
8. WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT BEING FILTERED OUT.
9. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED / REHABILITATED.
10. ALLOW FOR GRASS STABILISATION OF EXPOSED AREAS, OPEN CHANNELS AND BATTERS ON COMPLETION OF CONSTRUCTION.
11. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING RAIN EVENTS.
12. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. CONTRACTOR TO PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL.
13. IF A TEMPORARY SEDIMENT BASIN IS REQUIRED, ENSURE SAFE BATTER SLOPES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. MAINTAIN ADEQUATE STORAGE VOLUME IN ACCORDANCE WITH PLANS. TEMPORARILY PUMP 'CLEAN FLOCULATED' WATER FOR SITE DUST CONTROL. WHERE APPROVED BY COUNCIL, PUMPED WATER MAY BE DISCHARGED TO COUNCIL'S STORMWATER SYSTEM. ENSURE WHOLE SITE RUN-OFF IS DIRECTED TO TEMPORARY SEDIMENT BASIN.

EXISTING SERVICES

1. ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES. THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPALS REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.
2. CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS.
3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS. ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE PRINCIPALS REPRESENTATIVE AT THE CONTRACTORS EXPENSE.
4. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS.
5. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE PRINCIPALS REPRESENTATIVE.
6. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AND MAINTAINED.
7. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FROM THE RELEVANT AUTHORITY AND PRINCIPALS REPRESENTATIVE FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY.
8. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE PRINCIPALS REPRESENTATIVE.

EARTHWORKS

1. AT THE COMMENCEMENT OF FILLING OPERATIONS FOR BULK EARTHWORKS A GEOTECHNICAL ENGINEER IS TO VISIT THE SITE & CONFIRM THE SUITABILITY OF THE METHODOLOGY OF ACHIEVING THE REQUIRED COMPACTION REQUIREMENTS.
 2. STRIP TOPSOIL, VEGETABLE MATTER AND RUBBLE TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE AS DIRECTED BY THE PRINCIPALS REPRESENTATIVE.
 3. WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE, PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A NON-VIBRATING STATIC ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE PRINCIPALS REPRESENTATIVE.
 4. THE CONTRACTOR IS TO ALLOW FOR A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO PROVIDE ADVICE AND CERTIFICATION OF ANY WORKS ASSOCIATED WITH TREATING OR MANAGING UNSUITABLE GROUND CONDITIONS THROUGHOUT THE CONTRACT (e.g. STABILITY OF EXCAVATIONS, POOR SUBGRADE, etc).
 5. ALL SOFT, WET OR UNSUITABLE MATERIAL IS TO BE REMOVED AS DIRECTED BY THE PRINCIPALS REPRESENTATIVE AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS BELOW.
 6. PROVIDE CERTIFICATES VERIFYING THE QUALITY OF IMPORTED MATERIAL FOR THE PRINCIPALS REPRESENTATIVE APPROVAL.
 7. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS (LOOSE) AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR -2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289 2.1.1, AS1289 5.7.1 AND AS1289 5.8.6 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY:
- | LOCATION | COMPACTION REQUIREMENT |
|------------------|---|
| LANDSCAPED AREAS | 95% SMDM |
| ROADS | 100% SMDM (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS) |
| PAVED AREAS | 100% SMDM (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS) |
8. TESTING OF THE SUBGRADE FOR BUILDINGS SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. REGISTERED LABORATORY.
 9. ALLOW THE FOLLOWING COMPACTION TESTING BY N.A.T.A. REGISTERED LABORATORY FOR PLATFORMS AND FILL LAYERS IN ACCORDANCE WITH THE LATEST VERSION OF AS3798 (MINIMUM 3 TESTS PER LAYER) OR 1 TEST PER MATERIAL TYPE PER 250sqm OR 1 TEST.
 10. WHERE TEST RESULTS ARE BELOW THE SPECIFIED COMPACTION REPLACEMENT AND RETEST UNTIL SPECIFIED COMPACTION STANDARDS ARE ACHIEVED. OTHERWISE SUBGRADE REPLACEMENT IS REQUIRED IF COMPACTION STANDARDS ARE NOT ACHIEVED.
 11. ALLOW FOR EXCAVATION IN ALL MATERIALS AS FOUND U.N.O. NO ADDITIONAL PAYMENTS WILL BE MADE FOR EXCAVATION IN WET OR HARD GROUND.
 12. WHERE THERE IS INSUFFICIENT EXCAVATED MATERIAL SUITABLE FOR FILLING OR SUBGRADE REPLACEMENT, THE CONTRACTOR IS TO ALLOW TO IMPORT FILL. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING:
 - 12.1. BE OF VIRGIN EXCAVATED NATURAL MATERIAL OR SUITABLE
 - 12.2. CONTRACTOR TO PROVIDE EVIDENCE IMPORT IS SUITABLE USE
 - 12.3. PLASTICITY INDEX BETWEEN 2-15% AND CBR > 8
 - 12.4. FREE FROM ORGANIC AND DELETERIOUS MATERIAL
 - 12.5. MAXIMUM SIZE 50mm, PASSING 75 MICRON SIEVE (<25%)

EARTHWORKS (cont)

13. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLERS MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED AT THEIR COST.
 14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE AND MAINTAIN THE INTEGRITY OF ALL SERVICES, CONDUITS AND PIPES DURING CONSTRUCTION, SPECIFICALLY DURING THE BACKFILLING AND COMPACTION PROCEDURE. ANY AND ALL DAMAGE TO NEW OR EXISTING SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PRINCIPALS REPRESENTATIVE.
 15. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.
- DEEP EXCAVATIONS
16. PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS GREATER THAN 1.5m IN DEPTH, THE CONTRACTOR SHALL CONFIRM WITH A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO DETERMINE THE STABILITY OF A NATURAL MATERIAL AND BENCHING REQUIREMENTS.
 17. THE CONTRACTOR MUST PROVIDE THE PRINCIPALS REPRESENTATIVE AND THE DESIGN ENGINEER WITH A COPY OF THE GEOTECHNICAL ENGINEERS REPORT.
 18. THE CONTRACTOR IS TO PROVIDE SAFETY BARRIERS / FENCING IN ACCORDANCE WITH OH&S AND REGULATORY AUTHORITY REQUIREMENTS.
- SERVICE TRENCHES
19. SAWCUT EXISTING SURFACES PRIOR TO EXCAVATION. BACKFILL ALL TRENCHES UNDER EXISTING ROADS, PAVEMENTS AND PATHS WITH STABILISED SAND 5% CEMENT OR DGS40 MATERIAL (100% SMDS) COMPACTED IN 200mm THICK LAYERS TO 98% MMDD TO DEFLECTION OF PAVEMENT.
 20. BACKFILL ALL TRENCHES NOT UNDER ROADS, PAVEMENTS, PATHS AND BUILDINGS WITH APPROVED EXCAVATED OR IMPORTED MATERIAL COMPACTED TO 95% SMD.

SITeworks

1. ALL WORKS TO BE IN ACCORDANCE WITH RELEVANT LOCAL COUNCIL / REGULATORY AUTHORITIES REQUIREMENTS, ALL TECHNICAL SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONFLICTS BETWEEN SAID DOCUMENTS SHALL BE REFERRED TO THE PRINCIPALS REPRESENTATIVE FOR DIRECTION.
2. THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH ALL REGULATORY AUTHORITIES, INCLUSIVE OF LOCAL COUNCIL REGULATIONS AND REQUIREMENTS.
3. THE CONTRACTOR IS TO ENSURE ALL AUTHORITY APPROVALS ARE OBTAINED PRIOR TO COMMENCEMENT OF WORKS.
4. RESTORE ALL PAVED, COVERED, GRASSED AND LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE PRINCIPALS REPRESENTATIVE ON COMPLETION OF WORKS, WHERE PLANTING OF NEW GRASS IS NECESSARY REFER TO LANDSCAPE ARCHITECT AND / OR ARCHITECT DOCUMENTATION.
5. ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE PRINCIPALS REPRESENTATIVE, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD FATHWAYS.
6. THE CONTRACTOR SHALL CONFIRM ALL SURVEY SETOUT BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF WORKS.
7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ONSITE PRIOR TO LODGMENT OF TENDER AND ONSITE WORKS. THE PRICE AS TENDERED SHALL BE INCLUSIVE OF ALL WORKS SHOWN ON THE TENDER PROJECT DRAWINGS. ADDITIONAL PAYMENTS FOR WORKS SHOWN ON THE TENDER PROJECT DRAWINGS WILL NOT BE APPROVED.
8. DO NOT OBTAIN DIMENSIONS BY SCALING DRAWINGS.
9. IN CASE OF DOUBT OR DISCREPANCY REFER TO PRINCIPALS REPRESENTATIVE FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. MAKE SMOOTH TRANSITION TO EXISTING FEATURES AND MAKE GOOD WHERE JOINED.
11. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
12. ALL CIVIL ENGINEERING DESIGN HAS BEEN DOCUMENTED UNDER THE ASSUMPTION THAT ALL NECESSARY SITE CONTAMINATION REMEDIATION WORKS HAVE BEEN SATISFACTORILY COMPLETED (IF APPLICABLE) AND THAT THE SITE IS NOT AFFECTED BY ANY SOIL STRATA OR GROUNDWATER TABLE CONTAMINATION.

STORMWATER DRAINAGE

1. ALL PIPES SHALL BE CLASS 2 RUBBER-RING JOINTED RCP U.N.O. WHERE UPVC PIPES HAVE BEEN SPECIFIED, THE FOLLOWING CLASS PIPEWORK IS TO BE ADOPTED U.N.O. Ø100mm OR LESS TO BE CLASS 'SM10' AND ABOVE Ø100mm TO BE CLASS 'SN8'.
 2. FRC PIPES EQUAL TO THAT OF THE STEEL REINFORCED CONCRETE PIPE CLASS SPECIFIED ON THE DRAWINGS MAY BE USED SUBJECT TO APPROVAL FROM THE PRINCIPALS REPRESENTATIVE.
 3. ALL PIPE ARE TO BE LAID AT 1.0% MIN GRADE U.N.O.
 4. COVERS
 - 4.1. USE HOT DIPPED GALVANISED COVERS AND GRATES COMPLYING WITH RELEVANT COUNCIL AND AUSTRALIAN STANDARDS.
 - 4.2. ALL COVERS AND GRATES TO BE POSITION IN A FRAME AND MANUFACTURED AS A UNIT.
 - 4.3. ALL COVERS AND GRATES TO BE FITTING WITH POSITIVE COVER LIFTING KEYS.
 - 4.4. UNLESS DETAILED OR SPECIFIED OTHERWISE, COVERS AND GRATES TO BE CLASS 'D' IN VEHICULAR PAVEMENTS AND CLASS 'B' ELSEWHERE.
 - 4.5. ALL GRATED TRENCH DRAINS SHOULD BE 'CLASS D' GAL STEEL WITHIN VEHICULAR PAVEMENTS AND CLASS 'B' HEEL SAFE WITHIN PEDESTRIAN PAVEMENTS.
 5. ALL PIPE BENDS, JUNCTIONS, ETC ARE TO BE PROVIDED USING PURPOSE MADE FITTINGS OR STORMWATER PITS.
 6. ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
 7. STORMWATER PIPEWORK TO FINISH FLUSH WITH INTERNAL PIT WALLS AND MUST NOT PROTRUDE. CONNECTION TO BE NEATLY RENDER AND MADE NEAT.
 8. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
 9. U.N.O. MATERIAL USED FOR BEDDING OF PIPES SHALL BE APPROVED NON-COHESIVE GRANULAR MATERIAL HAVING HIGH PERMEABILITY AND HIGH STABILITY WHEN SATURATED AND FREE OF ORGANIC AND CLAY MATERIAL.
 10. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN 50mm CONCRETE BED (OR 75mm THICK BED OF 12mm BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK.
 11. BEDDING SHALL BE U.N.O TYPE H2 UNDER ROADS AND H2 UNDER GENERAL AREAS IN ACCORDANCE WITH CURRENT RELEVANT INDUSTRY STANDARDS AND GUIDELINES.
 12. THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION. ANY AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE PRINCIPALS REPRESENTATIVE AND AT NO COST TO THE PRINCIPALS REPRESENTATIVE.
 13. NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER. REFER KERB DETAILS FOR CONFIRMATION.
- SUBSOIL DRAINAGE
14. SUBSOIL DRAINAGE LINES TO COUNCIL SPECIFICATIONS SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS:
 - 14.1. THE HIGH SIDE OF PROPOSED TRAFFICKED PAVEMENT AREAS.
 - 14.2. ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS.
 - 14.3. BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING WALL DETAILS).
 - 14.4. ALL OTHER AREAS SHOWN ON DRAWINGS.
 - 14.5. CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM.
 15. WHERE SUBSOIL DRAINAGE PASSES BENEATH BUILDINGS / PAVED AREAS AND/OR PAVEMENTS, CONTRACTOR TO ENSURE Ø100mm CLASS 'SM10' uPVC UNSLOTTED DRAINAGE LINE IS USED AND THAT PROPRIETARY FITTINGS ARE USED TO RECONNECT SUBSOIL DRAINAGE LINE.
 16. THE CONTRACTOR SHALL INSTALL INSPECTION OPENINGS / CLEAROUTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH COUNCIL SPECIFICATIONS AT MAXIMUM 30m CENTRE AND AT ALL UPSTREAM ENDPOINTS.
 17. PROVIDE 2m LENGTH OF Ø100 SUBSOIL DRAINAGE LINE WRAPPED IN NON-WOVEN GEOTEXTILE FILTER FABRIC TO THE UPSTREAM SIDE OF STORMWATER PITS. LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO DRAINAGE PIT.
 18. IN AREAS WHERE DUMPED / HAND PLACED ROCK IS USED AS A MEANS OF SCOUR PROTECTION, CONTRACTOR IS TO EXCAVATE A MINIMUM OF 100mm FROM PROPOSED SURFACE. LEVEL AND COMPACT SUBGRADE AS SPECIFIED. ROCK TO THEN BE PLACED ON GEOTEXTILE FILTER FABRIC.

PRECAST STORMWATER PITS

1. THE USE OF PRE-CAST STORMWATER PITS MAY BE PERMITTED WHERE THEY COMPLY WITH THE HILLS SHIRE COUNCIL STANDARD STRUCTURAL DETAILS AND SPECIFICATION. THE USE OF PRE-CAST PITS FOR NON-STANDARD DESIGN ELEMENTS WILL NOT BE ACCEPTED WITHOUT APPROVAL FROM THE PRINCIPAL'S REPRESENTATIVE.
2. REFER MANUFACTURERS SPECIFICATIONS FOR INSTALLATION GUIDELINES.
3. PRECAST PIT TO BE PLACED ON MINIMUM 150mm THICK CONCRETE PAD AND BED MINIMUM 50mm WHILST CONCRETE IS STILL PARTIALLY WET.
4. ENSURE PENETRATION IS CORED THROUGH PIT FACE TO ALLOW CONNECTION.
5. ENSURE A SMOOTH SEALED FINISH AT PIPE CONNECTIONS BY HAND APPLYING CONCRETE AROUND THE PIPE ON THE INTERNAL FACE OF THE PIT TO FILL IN ANY VOIDS CREATED WHEN PENETRATION FOR THE PIPE WAS CORED.
6. ENSURE A SEALED FINISH AT PIPE CONNECTIONS BY HAND-APPLYING MINIMUM 150mm THICK CONCRETE AROUND PIPE AT THE EXTERNAL FACE OF THE PIT. ENSURE CONCRETE DOES NOT AFFECT THE INTEGRITY OF THE SUBSOIL DRAINAGE CONNECTED TO THE PIT.
7. ENSURE PIPEWORK DOES NOT PROTRUDE INTO THE PIT BEYOND THE WALL. PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL (UNLESS OTHERWISE NOTED OR DETAILED).
8. FILL THE BASE OF THE PIT WITH MASS CONCRETE (MIN 50mm THICK) OR APPROVED GROUTING COMPOUND (LESS THAN 50mm THICK) TO MATCH THE INVERT OF THE MAIN INLET AND OUTLET PIPES. ENSURE ADEQUATE BOND BETWEEN PIT BASE AND BENCHING
9. PROVIDE CONCRETE BENCHING TO SIDES OF PIT TO SUIT PIPE DIAMETER. HEIGHT TO MATCH MINIMUM 1/3 PIPE DIAMETER.

SIGNAGE AND LINEMARKING

1. ALL SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AUSTRALIAN STANDARDS 1742 / RMS STANDARDS AND SPECIFICATIONS.
2. LINE MARKING AND PAINT SHALL BE IN ACCORDANCE WITH AS1742.3 AND RMS STANDARDS.
3. PAINT SHALL BE TYPE 3 CLASS 'A' AND THE COLOUR SHALL BE WHITE AND NOT SUBJECT TO DISCOLOURATION BY BITUMEN FROM ROAD SURFACE. ALL PAINT TO BE APPLIED BY MECHANICAL SPRAYER.
4. LINE MARKING SHALL BE SPOTTED OUT AND APPROVED PRIOR TO SPRAYING BY PRINCIPALS REPRESENTATIVE.
5. PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm AND 0.40mm.
6. CARPARK LINEMARKING TO BE 80mm WIDE.

LANDSCAPING

1. REFER TO DRAWINGS BY OTHERS FOR DETAILS OF PROPOSED LANDSCAPING TREATMENT.
2. ALL DISTURBED SURFACE TO BE TEMPORARILY STABILISED WITH HYDROMULCH UPON COMPLETION OF WORKS. A 500mm STRIP OF TURF (CT2 COUCH) IS TO BE PLACED BEHIND ALL NEW KERB AND GUTTER / ROLL KERB.

PAVEMENTS

1. ALL PAVEMENT MATERIALS SHALL COMPLY WITH THE CURRENT HILLS SHIRE COUNCIL SPECIFICATIONS, PROVIDE MECHANICAL ANALYSIS FOR EACH BATCH OF PAVEMENT MATERIAL TO ENSURE CONFORMITY.
2. **COMPACTION STANDARDS**

BASE	98% MODIFIED MAXIMUM DRY DENSITY
SUBBASE	95% MODIFIED MAXIMUM DRY DENSITY
SUBGRADE	100% STANDARD MAXIMUM DRY DENSITY
3. THE CONTRACTOR SHALL CONFIRM THE DESIGN CBR WITH A MINIMUM OF 3 TESTS TAKEN AT SUBGRADE LEVEL. WHERE DISCREPANCY IS FOUND, CONTACT THE PRINCIPALS REPRESENTATIVE.
4. ALLOW FOR COMPACTION TESTING BY AN N.A.T.A. REGISTERED LABORATORY FOR BASE LAYER, SUBBASE LAYER AND SUBGRADE LAYER IN ACCORDANCE WITH THE LATEST VERSION OF AS3798 FOR PAVEMENTS (ALLOW 1 TEST EVERY 50m OF PAVEMENT TAKEN 1m FROM THE FACE OF KERB ON THE ALTERNATE SIDES OF PAVEMENT). ALLOW FOR AT LEAST TWO SUCCESSFUL COMPACTION TESTS IN EACH LAYER.
5. MATCH NEW PAVEMENTS NEATLY AND FLUSH WITH EXISTING
6. AFTER BASE IS APPROVED, SWEET CLEAN AND PRIME AT NOMINAL RATE OF 1.0L PER 1.0 sq.m.
7. **PAVEMENT HOLD POINTS**
 - 7.1. SUB-GRADE TO BE ROLL PRIOR TO SET-UP AND FORM FOR CONCRETE POUR
 - 7.2. INSPECTION OF FORMWORK/ STEEL PRIOR TO CONCRETE POUR.
 - 7.3. SUBMISSION OF SUB-GRADE AND BASE DENSITY TESTS.

ASPHALTIC CONCRETE

1. GENERAL
 - 1.1. ALL ASPHALTIC CONCRETE (AC) WORK TO BE PREPARED AND CARRIED OUT IN ACCORDANCE WITH GOOD ASPHALTIC PAVING PRACTICE AS DESCRIBED IN AS2150 "ASPHALT (HOT-MIXED) PAVING - GUIDE TO GOOD PRACTICE" AND CURRENT RMS SPECIFICATIONS.
2. PAVEMENT PREPARATION
 - 2.1. THE FINISHED PAVEMENT SURFACE TO BE SEALED SHALL BE WITHIN +/ - 2% OF THE OPTIMUM MOISTURE CONTENT AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL FOREIGN MATTER.
 - 2.2. PRIME ALL SURFACES TO BE SEALED. ALLOW TIME TO SETTLE FOR A MINIMUM OF 3 DAYS BEFORE APPLYING TACK COAT AND ASPHALT.
 - 2.3. SWEEP PRIMED SURFACES BEFORE APPLYING TACK COAT.
 - 2.4. ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE LAYING OF MAIN COURSE.
 - 2.5. ALL DEFECTS IN THE BASE COURSE INCLUDING CRACKS, SURFACE DEFORMATION AND THE LIKE SHALL BE REPAIRED AS DIRECTED BY THE PRINCIPALS REPRESENTATIVE PRIOR TO PLACEMENT OF TACK COAT AND/OR AC COURSES.
3. PLACEMENTS
 - 3.1. ALL ASPHALT SHALL BE PLACED UTILISING APPROVED MECHANICAL PAVING MACHINES. DO NOT HAND PLACE ASPHALT WITHOUT PRIOR APPROVAL FROM ENGINEER.
4. JOINTS
 - 4.1. THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM.
 - 4.2. THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
5. COMPACTION
 - 5.1. ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS.
 - 5.2. INITIAL ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 105°C USING A STEEL DRUM ROLLER HAVING A MINIMUM WEIGHT OF 8 TONNES AND A MAXIMUM UNIT LOAD ON THE REAR DRUM EQUIVALENT TO 55kN/m² WIDTH OF DRUM.
 - 5.3. SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 80°C USING A PNEUMATIC TYRED ROLLER OF AT LEAST 10 TONNES MASS. A MINIMUM TYRE PRESSURE OF 550KPA AND A MINIMUM TOTAL LOAD OF 1 TONNE ON EACH TYRE.
 - 5.4. ROLLED SURFACES SHALL BE SMOOTH AND FREE OF UNDULATIONS. BONY AND/OR UNEVEN SURFACES WILL BE REJECTED.
 - 5.5. PROVIDE 2 No. MINIMUM COMPACTION TESTS.
6. FINISHED SURFACE PROPERTIES
 - 6.1. FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE OF SHAPE AND SHALL NOT VARY MORE THAN:
 - 6.1.1. 3mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT.
 - 6.1.2. 3mm FROM THE BOTTOM OF A STRAIGHT EDGE LAID TRANSVERSELY.
 - 6.1.3. 5mm FROM THE BOTTOM OF A STRAIGHT EDGE LAID LONGITUDINALLY.
 - 6.1.4. MINUS 0 TO PLUS 2mm ADJACENT TO OTHER ELEMENTS SUCH AS KERBS AND THE LIKE TO AVOID POOLING OF SURFACE WATER.
 - 6.1.5. MINUS 0 FROM THE SPECIFIED THICKNESS.
7. DO NOT STORE PLANT EQUIPMENT OR TRAFFIC NEWLY LAID ASPHALTIC CONCRETE PAVEMENTS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
8. DO NOT APPLY MARKING PANTS UNTIL ASPHALT HAS CURED IN ACCORDANCE WITH PAINT MANUFACTURERS SPECIFICATIONS.

**THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE**

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021

[illegible]

Scale	North
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Project THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE	Scale -	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION	
Title GENERAL NOTES AND LEGENDS	Date 22/01/2020	Size A1	Project Number/Drawing Number 180004-TC-CC-C01.21
SHEET 01	Datum AHD		Revision 3

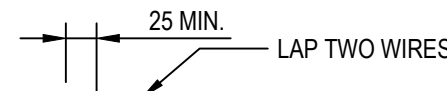
NOTE: ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE HILLS SHIRE COUNCIL DEVELOPMENT GUIDELINES AND TECHNICAL SPECIFICATIONS. READ IN CONJUNCTION WITH THE NOTES PROVIDED BELOW. IF CONFLICT ARISE , THE HILLS SHIRE COUNCIL GUIDELINES AND SPECIFICATIONS TAKE PRECEDENCE. WHERE THE HILLS SHIRE COUNCIL GUIDELINES AND TECHNICAL SPECIFICATIONS ARE SILENT, THE SPECIFICATION NOTES BELOW TAKE PRECEDENCE

CONCRETE PAVEMENTS

- THIS SECTION REFERS TO CIVIL CONCRETE WORKS AND DOES NOT INCLUDE STRUCTURAL ELEMENTS SUCH AS BUILDINGS, BELOW GROUND STRUCTURES OR RETAINING WALLS.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- CONCRETE QUALITY AND REINFORCING COVER
ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	CONCRETE STRENGTH f_c (MPa)	SPECIFIED SLUMP	NOMINAL AGGREGATE SIZE	MAX. 56 DAY DRYING SHRINKAGE	COVER (mm)
KERBS AND PATHS	25	60	20	650microns	TOP 40
PITS AND VEHICULAR PAVEMENTS	32	80	20	650microns	TOP 40

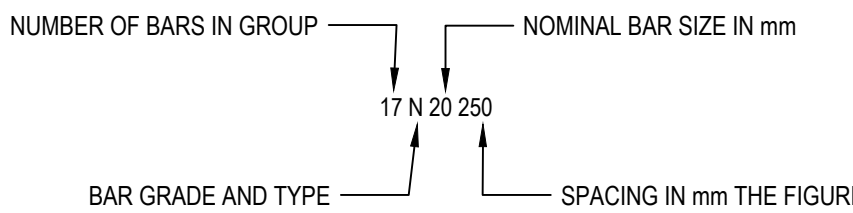
- CONCRETE PROPERTIES SHALL BE VARIED FROM NORMAL CLASS AS FOLLOWS:
 - MINIMUM CEMENT CONTENT 250 kg/m³
 - MAXIMUM 56 DAY SHRINKAGE STRAIN = AS NOMINATED ABOVE
 - PRIOR TO COMMENCEMENT CONCRETE SUPPLIER TO PROVIDE DRYING SHRINKAGE TEST RESULTS FROM PRODUCTION ASSESSMENT AS EVIDENCE THAT SPECIFIED DRYING SHRINKAGE LIMITS CAN BE ACHIEVED USING NORMAL MIX DESIGN.
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL.
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379. TEST CYLINDERS ARE TO BE KEPT ON SITE.
- ALL COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE PRINCIPALS REPRESENTATIVE FOR REVIEW.
- ALL CONCRETE IS TO BE CONTINUOUSLY CURED FOR A MINIMUM PERIOD OF 10 DAYS AFTER PLACING. CURING TO COMMENCE IMMEDIATELY AFTER FINISHING. SPRAY ON CURING COMPOUNDS TO COMPLY WITH AS3799.
- PLACE CONCRETE CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON PLAN. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. ANY REVISIONS OR ADDITIONS TO CONSTRUCTION JOINTS SHOWN ON PLAN REQUIRE APPROVAL FROM THE CIVIL ENGINEER.
- FALLS IN SLAB AS SHOWN ON PLAN MAINTAIN MINIMUM SLAB THICKNESS AS SHOWN.
- NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY THE PRINCIPALS REPRESENTATIVE.
- THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS.
- FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:



FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO AS1304.
- POLYETHYLENE SHEET SHALL BE PLACED BELOW ALL CONCRETE PAVEMENTS.
- ALL PENETRATIONS TO HAVE 2N12 TRIMMER BARS TOP AND BOTTOM TO EACH FACE U.N.O. EXTEND TRIMMERS 700 BEYOND PENETRATION. MAINTAIN 40mm COVER TOP AND BOTTOM.
- FORMWORK CLASS SHALL BE IN ACCORDANCE WITH AS3600.
- SURFACE FINISHES:

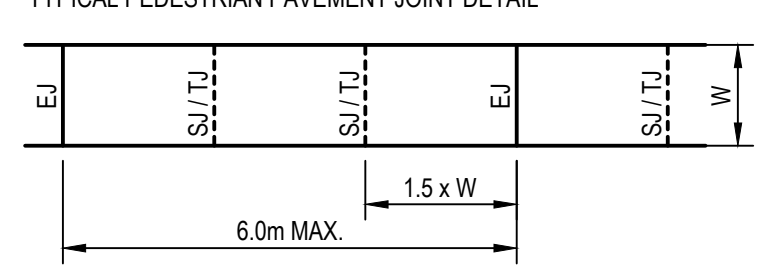
ELEMENT	FORMWORK CLASS
STORMWATER PIT	OFF FORM
PAVEMENTS	MACHINE FLOAT / BROOM FINISH
KERBS	STEEL FLOAT / TROWEL
- REINFORCEMENT SYMBOLS:

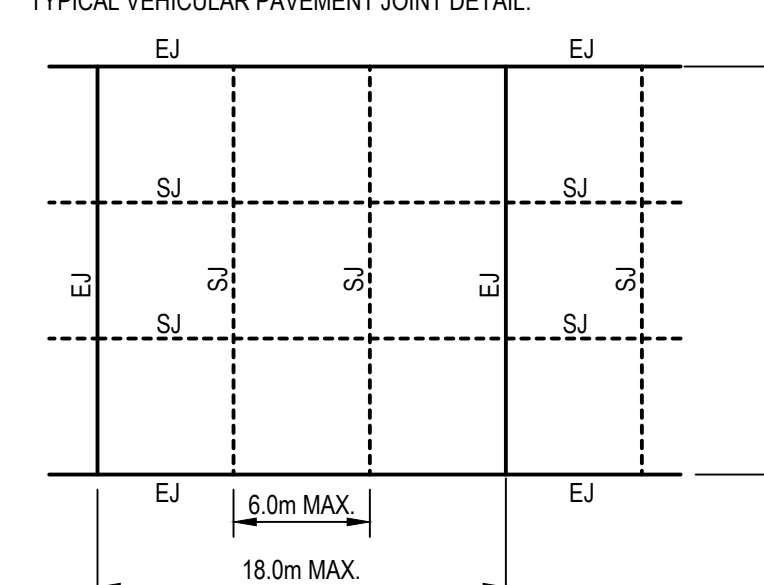
N	DENOTES GRADE 450 N BARS TO AS1302 GRADE N
R	DENOTES 230 R HOT ROLLED PLAIN BARS TO AS1302
SL	DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS1304



PAVEMENT JOINTS

- PROVIDE 10mm ABLEFLEX BETWEEN NEW CONCRETE WORKS AND EXISTING STRUCTURES.
- LOCAL AUTHORITY REQUIREMENTS SHALL TAKE PRECEDENCE WITHIN THE PUBLIC ROAD RESERVE.
- DOWELS TO BE PLACED ON PROPRIETARY CRADLES TO ENSURE CORRECT SPACING AND ALIGNMENT.
- PEDESTRIAN PAVEMENTS
ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS U.N.O. ON THE DESIGN DRAWINGS.
- EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX. 6.0m CENTRES.
- WEAKENED PLANE JOINTS (SAWN OR TOOL JOINTS) ARE TO BE LOCATED AT A MAX. SPACING OF 1.5m x WIDTH OF THE PAVEMENT.
- WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND OR ADJACENT PAVEMENT JOINTS.
- TYPICAL PEDESTRIAN PAVEMENT JOINT DETAIL


- VEHICULAR PAVEMENTS
ALL VEHICULAR PAVEMENTS TO BE JOINTED AS FOLLOWS U.N.O. ON THE DESIGN DRAWINGS.
- TIED KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED LONGITUDINALLY AT A MAX. OF 6.0m CENTRES.
- SAWN JOINTS SHOULD GENERALLY BE LOCATED LATERALLY AT A MAX. OF 6.0m CENTRES WITH DOWELED EXPANSION JOINTS AT MAX. 18.0m CENTRES.
- TYPICAL VEHICULAR PAVEMENT JOINT DETAIL.



- KERB EXPANSION JOINTS SHALL BE FORMED FROM 10mm ABLEFLEX FOR FULL DEPTH OF SECTION.
- KERB EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, TANGENT POINTS OF CURVES / CORNERS AND AT 12m MAX CENTRES.
- KERB TOOLED JOINTS TO BE MIN 3mm WIDE AND LOCATED AT MAX 3m CENTRES.
- INTEGRAL KERB JOINTS SHALL MATCH THE LOCATION OF PAVEMENT JOINTS.

CONCRETE

- CARRY OUT ALL CONCRETE WORK IN ACCORDANCE WITH AS3600 AND NATSPEC CONCRETE STANDARDS.
- CONCRETE PROPERTIES AND COVER TO REINFORCING:

ELEMENT	CONCRETE STRENGTH f_c (MPa)	MAX. 56 DAY DRYING SHRINKAGE	COVER (mm)
SLABS ON GROUND	32	650microns	TOP 40 BTM 40
TANK LID	40	700microns	TOP 40 BTM 40

MAXIMUM AGGREGATE SIZE = 20mm U.N.O.
SLUMP DURING PLACING = 75mm
EXPOSURE CLASSIFICATION = B1
NO ADMIXTURES SHALL BE USED IN CONCRETE MIX UNLESS APPROVED BY STRUCTURAL ENGINEER IN WRITING.

- CONCRETE PROPERTIES FOR SLABS AND BEAMS SHALL BE VARIED FROM NORMAL CLASS AS FOLLOWS:
 - MINIMUM CEMENT CONTENT 250kg/cu.m.
 - PRIOR TO COMMENCEMENT CONCRETE SUPPLIER TO PROVIDE DRYING SHRINKAGE TESTRESULTS FROM PRODUCTION ASSESSMENT AS EVIDENCE THAT SPECIFIED DRYING SHRINKAGE LIMITS CAN BE ACHIEVED USING NORMAL MIX DESIGN.
- SUBMIT FOR APPROVAL THE FOLLOWING TO THE STRUCTURAL ENGINEER:
 - CURING PROCEDURE (PVA MEMBRANES NOT PERMITTED)
 - STRIPPING PROCEDURE
 - DETAILS AND LOCATION OF CAST IN SERVICES
 - CONDUITS, PENETRATIONS AND CONSTRUCTION JOINT LOCATIONS
- ALL CONCRETE MIXES SHALL BE DESIGNED BY A RECOGNISED TESTING LAB AND SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER.
- ALL COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT ON ALL CONCRETE IN ACCORDANCE WITH AS1379. TEST CYLINDERS ARE TO BE KEPT ON SITE.
- ALL CONCRETE IS TO BE CONTINUOUSLY CURED FOR A MINIMUM PERIOD OF 10 DAYS AFTER PLACING. CURING TO COMMENCE IMMEDIATELY AFTER FINISHING. SPRAY ON CURING COMPOUNDS TO COMPLY WITH AS3799.
- FOR TENDER PURPOSES ASSUME MINIMUM STRIPPING TIMES AND EXTENT OF BACK PROPPING AS PER AS3610 SECTION 5.0 AND AS PER GENERAL NOTES FOR FORMWORK AND PROPPING.
- FORMWORK FINISH CLASSIFICATION TO AS3600:

ELEMENT	CLASS
INGROUND FOOTINGS	5
RETAINING WALLS	5 EARTH FACE 3 EXPOSED FACE
COLUMNS	2
BEAMS AND SLABS	2
- SURFACE FINISHES:
 - COLUMNS AND WALLS OFF FORM
- COMPACT ALL CONCRETE INCLUDING FOOTINGS AND SLABS, USING MECHANICAL VIBRATORS.
- PLACE CONCRETE CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON PLAN. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. ANY REVISIONS OR ADDITIONS TO CONSTRUCTION JOINTS SHOWN ON PLAN REQUIRE APPROVAL FROM THE STRUCTURAL ENGINEER.
- CONCRETE PROFILES:
 - BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE THE SLAB THICKNESS.
 - SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
 - NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN SHOWN IN THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
 - PROVIDE DRIP GROOVES AT ALL EXPOSED EDGES, CHAMFERS, DRIP GROOVES, REGLETS ETC TO BE TO ARCHITECTS DETAILS.
- ALL PENETRATIONS TO HAVE 2-N16 TRIMMER BARS TOP AND BOTTOM TO EACH FACE U.N.O. EXTEND TRIMMERS 600 BEYOND PENETRATION.
- SETDOWNS OR FALLS IN FLOOR SURFACES ARE NOT PERMITTED UNLESS SHOWN ON DRAWINGS. MAINTAIN MINIMUM SLAB THICKNESS SHOWN ON PLAN WHERE FALLS OCCUR.

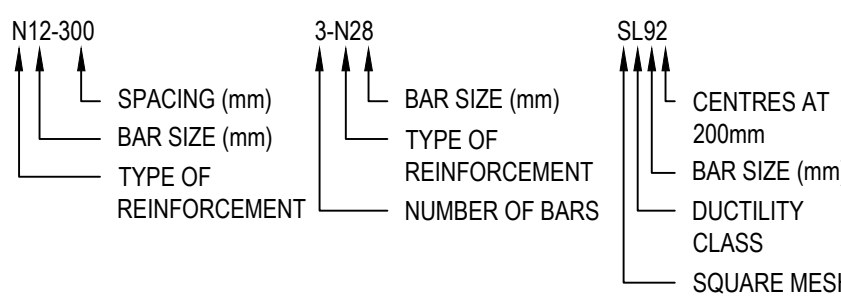
CONCRETE (cont)

- REINFORCEMENT GRADE AND NOTATION:

SYMBOL	BAR SHAPE	STRENGTH GRADE (MPa)	DUCTILITY CLASS	TO COMPLY WITH AUST. STANDARD
N	DEFORMED RIB BAR	500	NORMAL	AS4671
R	PLAIN ROUND BAR	250	NORMAL	AS4671
RL	RECTANGULAR MESH OF DEFORMED RIB BAR	500	LOW	AS4671
SL	SQUARE MESH OF DEFORMED RIB BAR	500	LOW	AS4671
L-TM	TRENCH MESH	500	LOW	AS4671

ALL REINFORCING BARS SHALL BE GRADE D500N TO AS4671 AND ALL MESH SHALL BE GRADE 500L TO AS4671 U.N.O. CLASS L REINFORCEMENT SHALL NOT BE USED U.N.O.

REINFORCEMENT LABELS:



- REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, AND NOT NECESSARILY IN TRUE PROJECTION. BARS SHOWN ARE INDICATIVE ONLY AND LENGTHS MAY VARY. BEAM ELEVATIONS TAKE PRECEDENCE OVER SECTIONS. SLAB PLANS TAKE PRECEDENCE OVER SECTIONS. REFER TO SECTIONS FOR EXTRA BARS THAT MAY BE REQUIRED.
- USE ONLY ALL PLASTIC OR CONCRETE CHAIRS AT EXTERNAL SURFACES.
- SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN AS3600-2001.
- SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR IN POSITIONS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS3600 SECTION 13 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.
- FOR LAPS IN MESH REFER TO SLAB ON GROUND NOTES.
- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER
- AT EXTERNALLY EXPOSED SURFACES NO METALLIC ITEMS INCLUDING FORM BOLTS, FORM SPACERS, METALLIC BAR CHAIRS AND TIE WIRE ARE TO BE PLACED IN THE COVER ZONE.
- ALL REINFORCEMENT, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION AND INSPECTED BY THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.
- HOLD DOWN BOLTS SHALL BE HOT DIPPED GALVANISED.
- U.N.O. ALL MASONRY ANCHORS INTO CONCRETE SHALL BE RAMSET TRUBOLTS (LONGEST VERSION) OR APPROVED EQUIVALENT. BOLTS SHALL BE GALVANISED WHERE THEY ARE ADJOINING NON FERROUS OR PREPAINTED MEMBERS. PROVIDE STAINLESS STEEL BOLTS FOR ALL EXTERNAL CONDITIONS, OR WHERE EXPOSED TO THE WEATHER.

LEGEND

ITEM	EXISTING	PROPOSED	FUTURE
SITE BOUNDARY			
WORKS BOUNDARY			
CONTOUR	??	??	??
BATTER			
KERB AND GUTTER	K&G	K&G	K&G
KERB ONLY	KO	KO	KO
KERB RAMP			
REDUCED LEVEL		• RL. 10.00	
SUBSOIL DRAINAGE LINE	SS SS	SS SS	SS SS
SUBSOIL FLUSHING POINT		o FP 375	
PIPE SIZE		G03-13	
STORMWATER DRAINAGE LINE			
FLOW DIRECTION			
STORMWATER LINE/PIT NUMBER			
KERB INLET PIT			
SURFACE INLET PIT/JUNCTION PIT			
HEADWALL			
GRATED TRENCH DRAIN		GTD	

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH



Scale

North

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Project THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE	Scale -	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION
Title GENERAL NOTES AND LEGENDS	Size A1	Project Number/Drawing Number 180004-TC-CC-C01.22
SHEET 02	Datum AHD	Revision 3

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021

PART TOWN CENTRE SUBDIVISION
BOUNDARIES CREATED UNDER DA
571/2018/ZB.

RED GABLES ROAD
REFER DA 2051/2018/ZB

FONTANA DRIVE (NORTH)

FUTURE SCHOOL

ROAD B

ROAD A/B WITHIN TOWN CENTRE.
REFER DA 1542/2019/ZB FOR
FURTHER DETAILS.

FONTANA DRIVE (SOUTH)

FUTURE SPORTS FIELD
PRECINCT C

RED GABLES ROAD BRIDGE.
REFER DA 981/2019/ZB.

ROAD A

FUTURE TOWN
CENTRE

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client

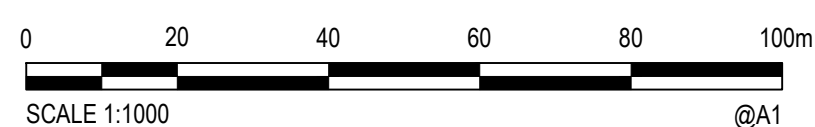


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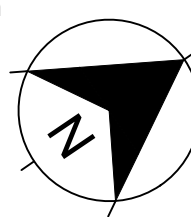
THE GABLES
BOX HILL

Scale



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North



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Project
THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title
GENERAL ARRANGEMENT PLAN

Scale
1:1000

Date
22/01/2020

Size
A1

Datum
AHD

Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION


Project Number/Drawing Number

180004-TC-CC-C01.41


Revision

3


LEGEND




SITE SECURITY FENCE




LOCKABLE ENTRY GATE




TEMPORARY CONSTRUCTION ACCESS




INDICATIVE STOCKPILE LOCATION




SEDIMENT FENCE (SD 6-8)



CATCH DRAIN



MESH AND GRAVEL INLET FILTER (SD 6-11)



STRAWBALE SEDIMENT FILTER (SD 6-7)

- GENERAL NOTES
1.

ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE HILLS SHIRE COUNCIL STANDARDS.
2.

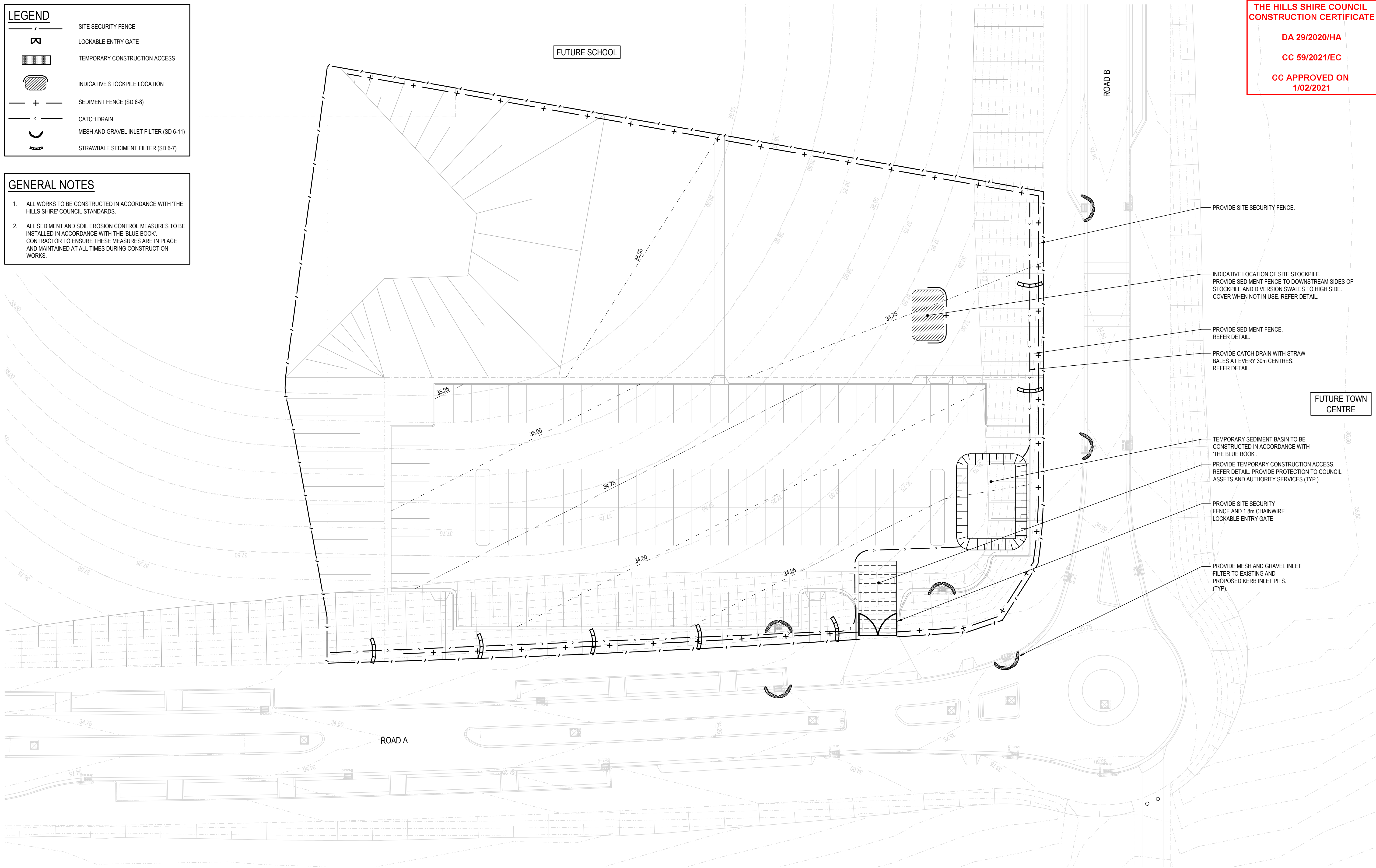
ALL SEDIMENT AND SOIL EROSION CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE 'BLUE BOOK'. CONTRACTOR TO ENSURE THESE MEASURES ARE IN PLACE AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION WORKS.

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA


CC 59/2021/EC

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1/02/2021




REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
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2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client



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THE GABLES

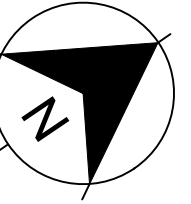
BOX HILL

Scale

0 5 10 15 20 25m

SCALE 1:250 @A1

North



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Project

THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title

EROSION AND SEDIMENTATION CONTROL PLAN

Scale

1:250

Date

22/01/2020

Size

A1

Datum

AHD

Status

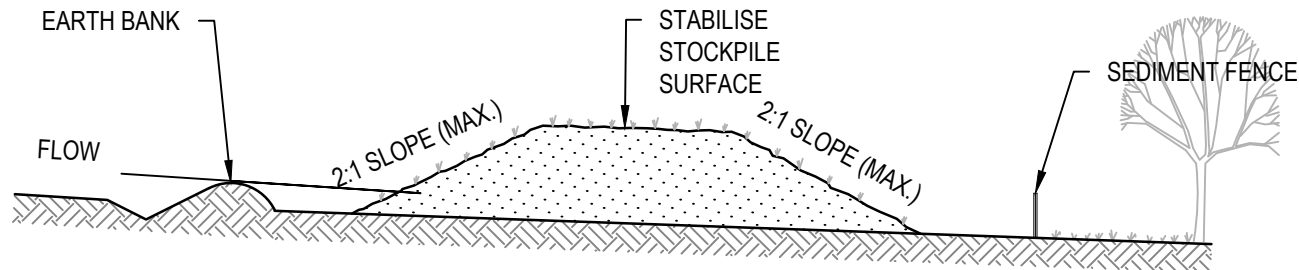
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number

180004-TC-CC-C03.01

Revision

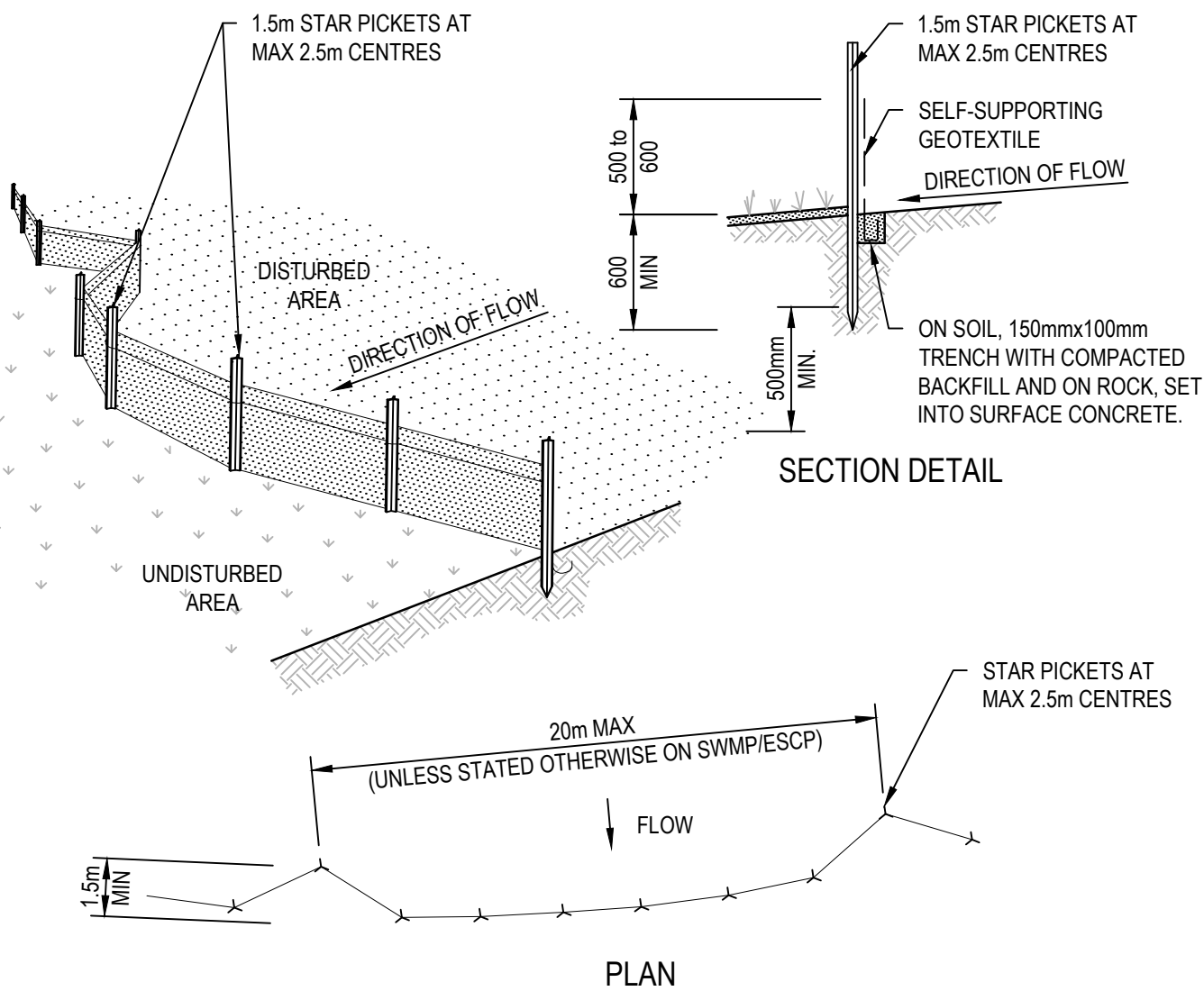
3



CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

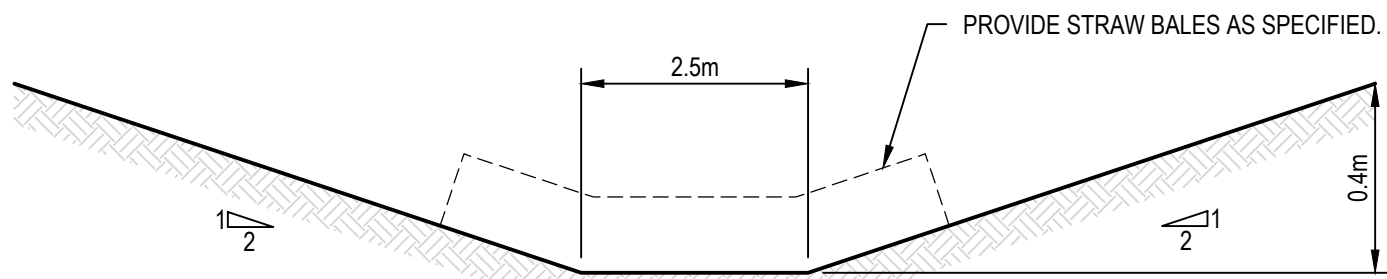
STOCKPILES (SD 4-1)



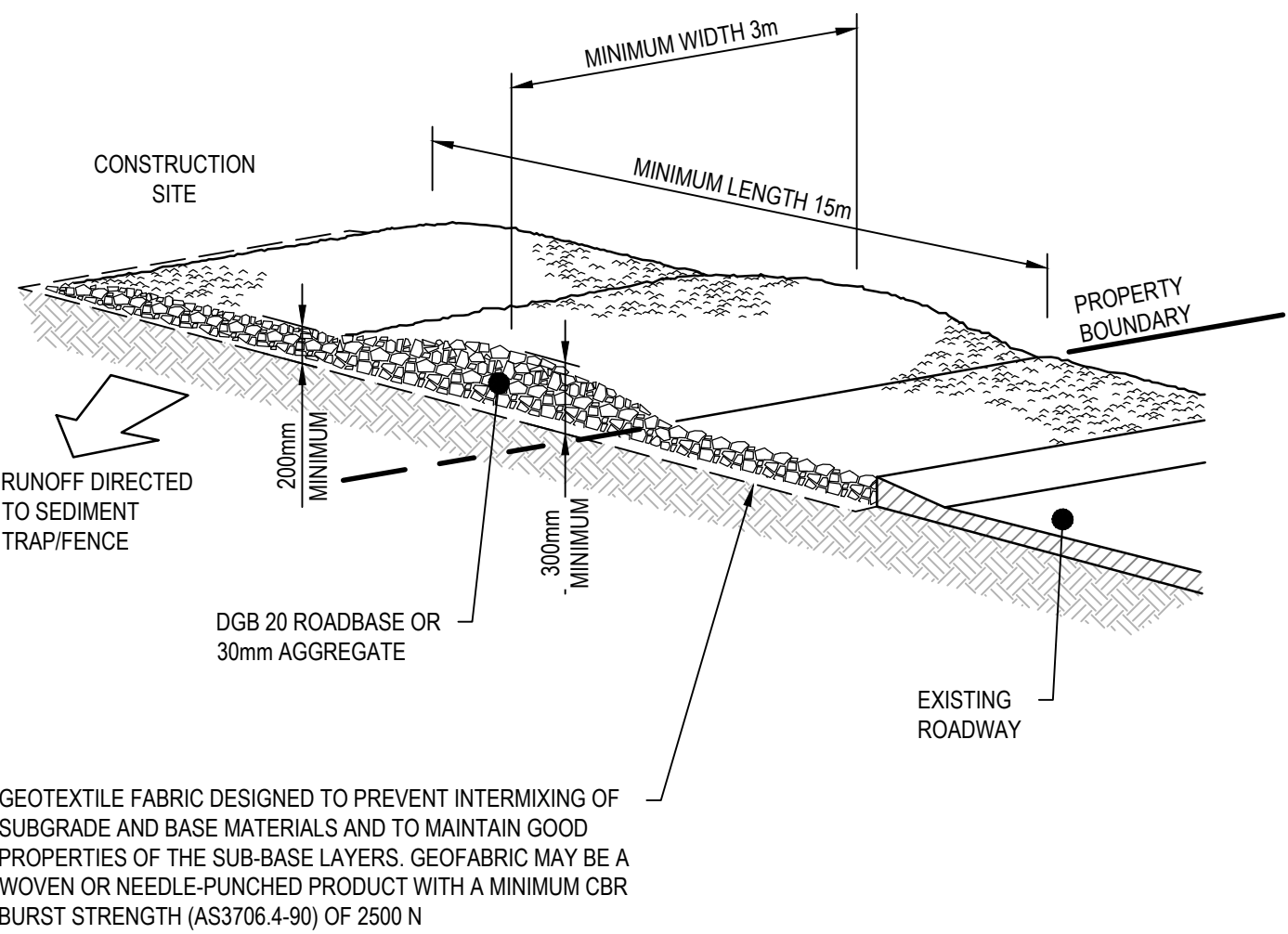
CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE (SD 6-8)



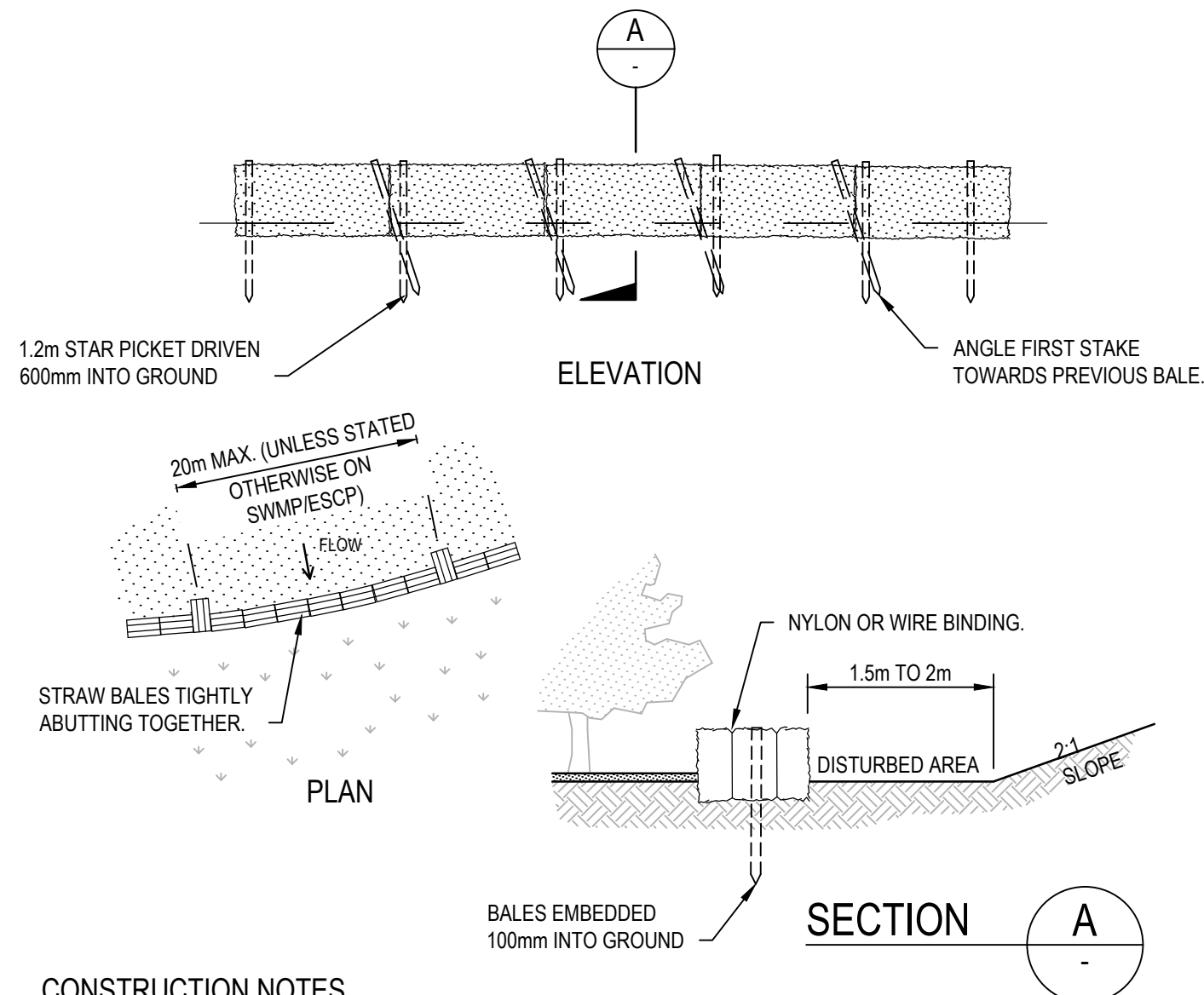
CATCH DRAIN



CONSTRUCTION NOTES

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

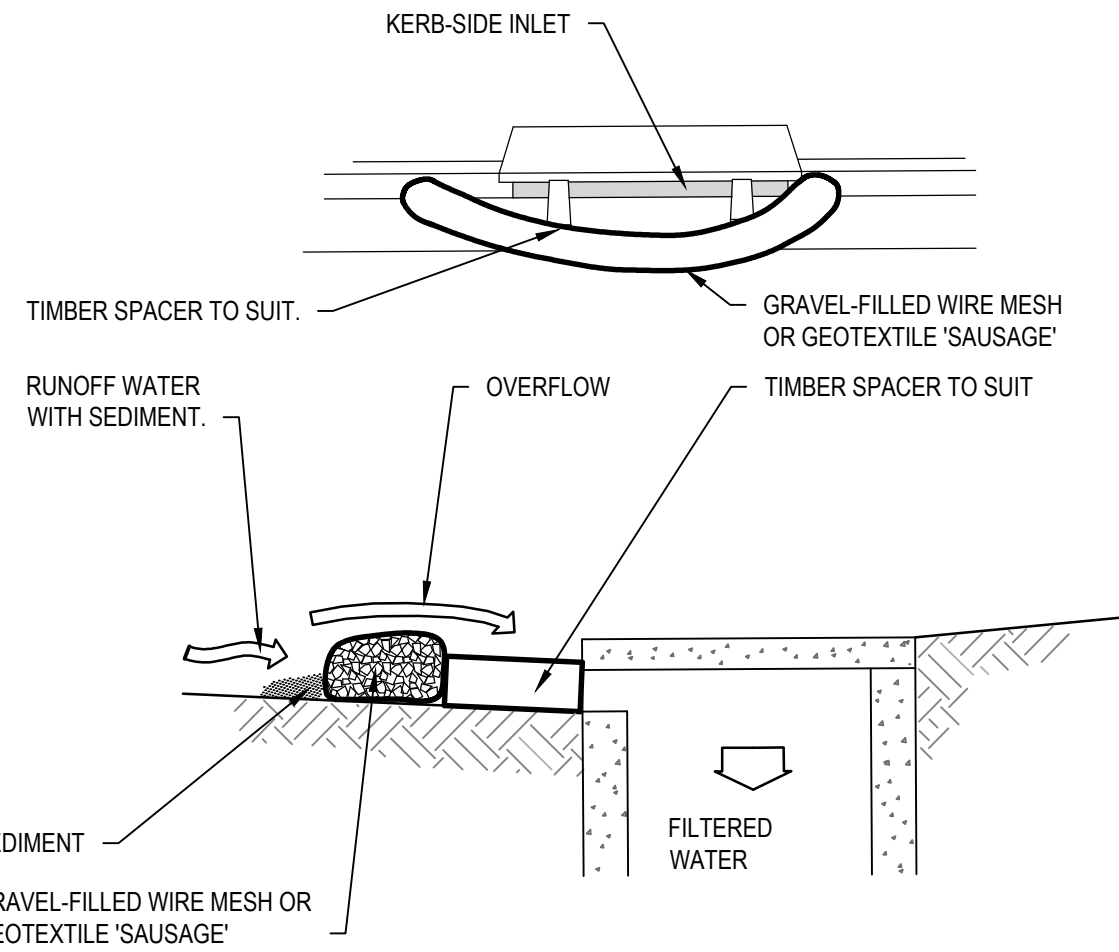
STABILISED SITE ACCESS (SD 6-14)



CONSTRUCTION NOTES

1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

STRAW BALE FILTER (SD 6-7)



NOTE: THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN APPROVED SWMP/ESCP.

CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

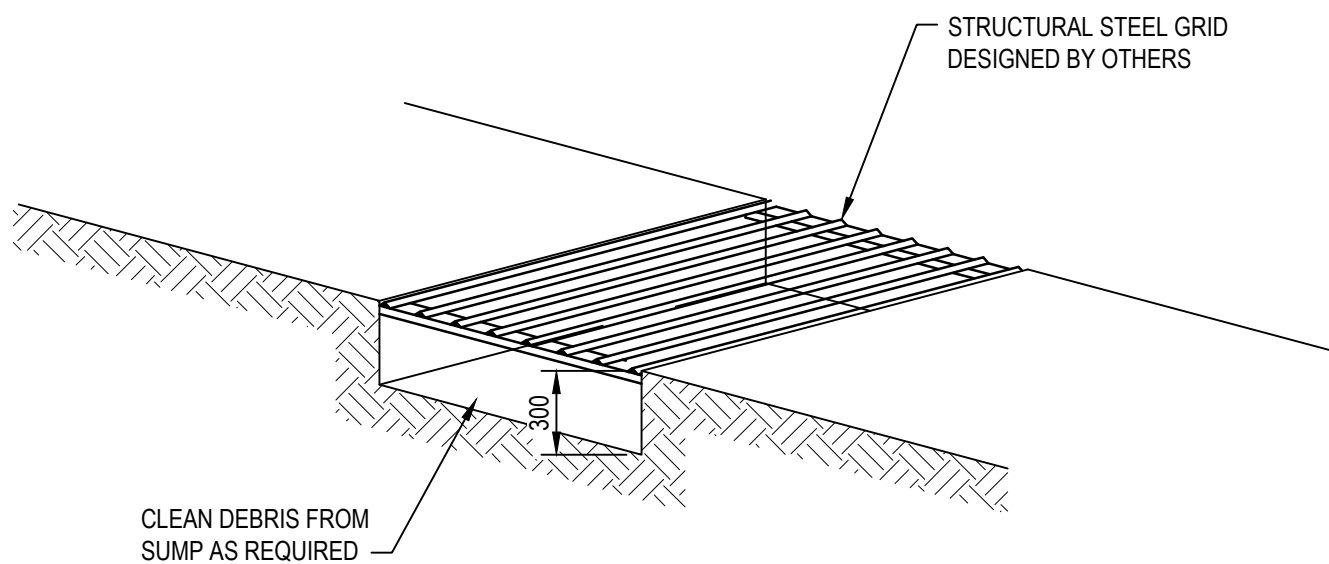
MESH AND GRAVEL INLET FILTER (SD 6-11)

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021



SHAKER PAD

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH



Client	Scale	North
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Project THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE	Scale NTS Date 22/01/2020	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION
Title EROSION AND SEDIMENTATION CONTROL DETAILS	Size A1 Datum AHD	Project Number/Drawing Number 180004-TC-CC-C03.21 Revision 3

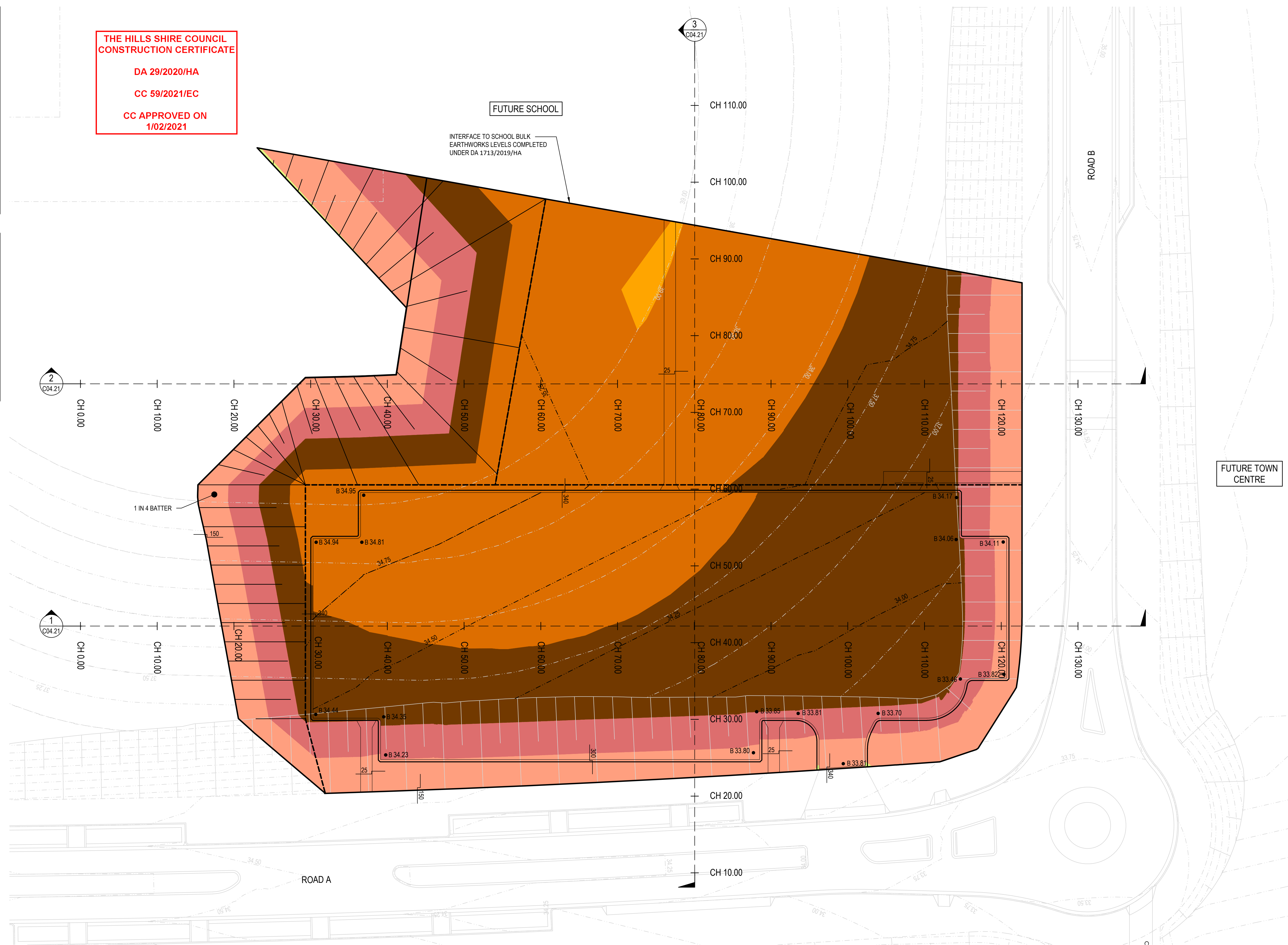
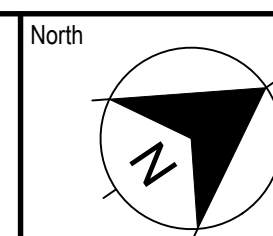
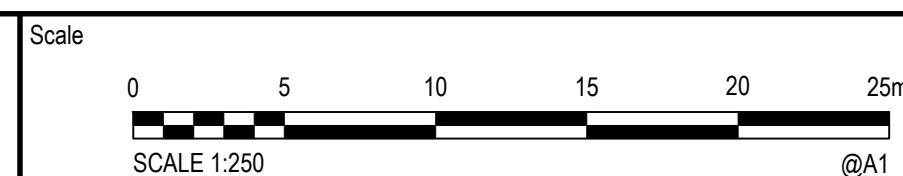
	GREATER THAN 7.0m CUT
	6.0m TO 7.0m CUT
	5.0m TO 6.0m CUT
	4.0m TO 5.0m CUT
	3.0m TO 4.0m CUT
	2.0m TO 3.0m CUT
	1.0m TO 2.0m CUT
	0.0m TO 1.0m CUT

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
2. CUT / FILL CALCULATIONS DEMONSTRATE ULTIMATE CHANGE IN LEVELS. QUANTITIES SHOWN REPRESENT CUT TO FILL TO BULK LEVELS.
3. NO ALLOWANCE HAS BEEN MADE FOR BULKING FACTORS. NOTE ALL VOLUMES ARE CUT / FILL VOLUMES ONLY AND MAY NOT REFLECT DETAILED EARTHWORKS.
4. NO ALLOWANCE HAS BEEN MADE FOR DETAILED EARTHWORKS; ie SERVICE TRENCHING, DETAILED EXCAVATION AND THE LIKE.
5. CUT / FILL VOLUMES ARE BASED ON LEVELS CONSTRUCTED UNDER TOWN CENTRE AND LAKE BULK EARTHWORKS' 1824/2017/2B AS EXISTING.

APPROXIMATE BULK EARTHWORK VALUES AS FOLLOWS;

1.	CUT	-18,470 cu m
2.	FILL	0 cu m
3.	BALANCE	-18,470 cu m EXPORT.

CC APPROVED ON
1/02/2021

[illegible]

Project
**THE GABLES TOWN CENTRE
 TEMPORARY CARPARK
 CONSTRUCTION CERTIFICATE**

Title	BULK EARTHWORKS CUT AND FILL PLAN
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Scale	1:250
Date	22/01/2020
Size	A1
Datum	AHD

Status

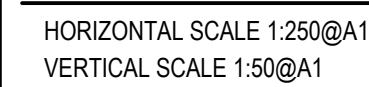
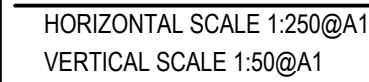
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NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number	180004-TC-CC-C04.01
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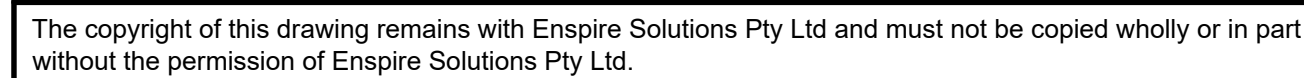
3

EXISTING SURFACE LEVEL REFLECTS BULK
EARTHWORKS COMPLETED AS PART OF ' THE
GABLES TOWN CENTRE AND LAKE BULK
EARTHWORKS' PACKAGE 1824/2017/ZB. REFER
180004-LK-CC FOR FURTHER DETAILS.

CC APPROVED ON
1/02/2021

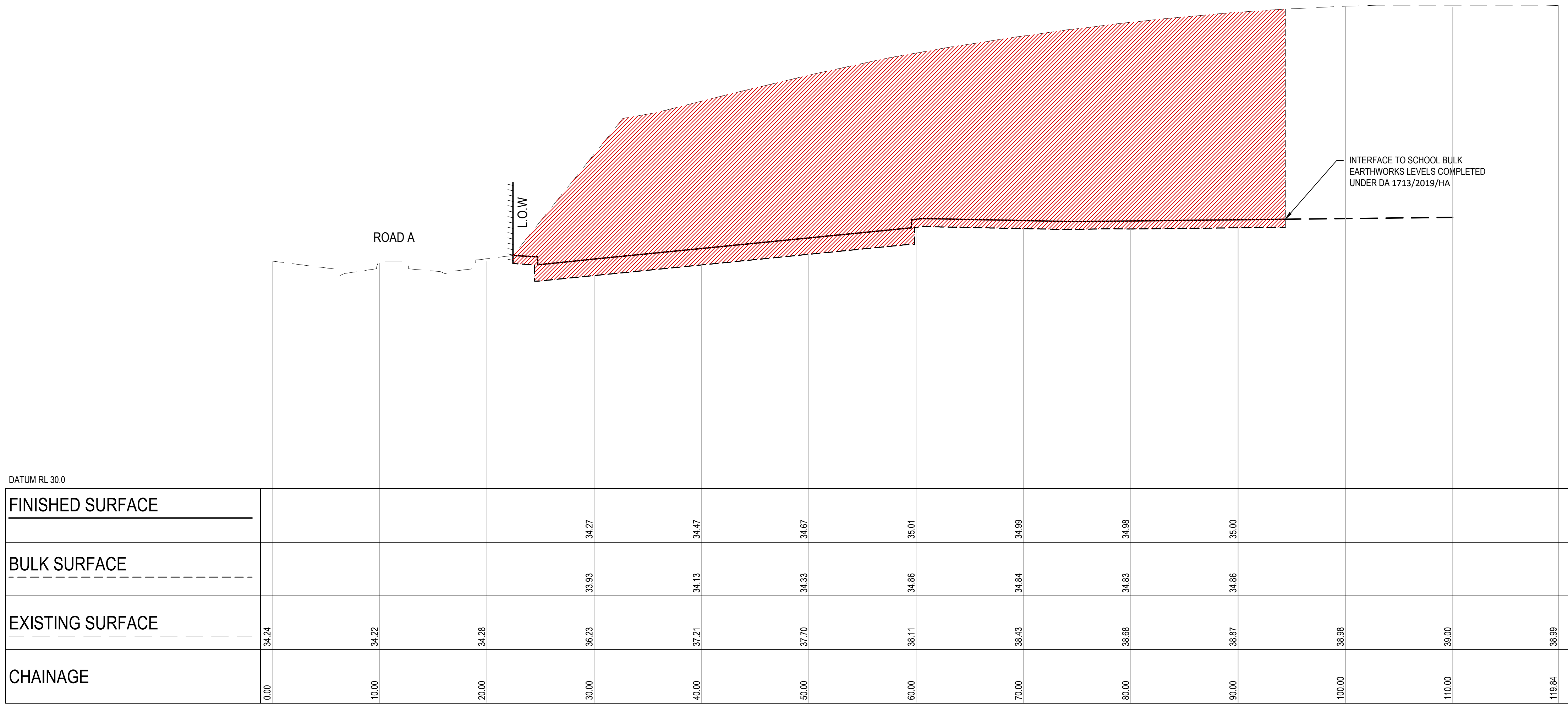


Client



SHEET 01

FOR APPROVAL
BE USED FOR CONSTRUCTION



SECTION 03 - REFER C04.01

HORIZONTAL SCALE 1:250@A1
VERTICAL SCALE 1:50@A1

XREFs: XR-180004-C-LOGO1

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
4	19/01/2021	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client



Stockland

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THE GABLES

BOX HILL

Scale

0 1 2 3 4 5m

SCALE 1:50

0 5 10 15 20 @A1

SCALE 1:250

@A1

North

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Enspire Solutions Pty Ltd
205/275 Alfred Street N, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Project

THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Scale

AS SHOWN

Date

22/01/2020

Title

CUT AND FILL SECTIONS

Size

A1

Datum

AHD

Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number

180004-TC-CC-C04.22


Revision

4

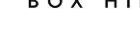
DA 29/2020/HA
CC 59/2021/EC
CC APPROVED ON
1/02/2021



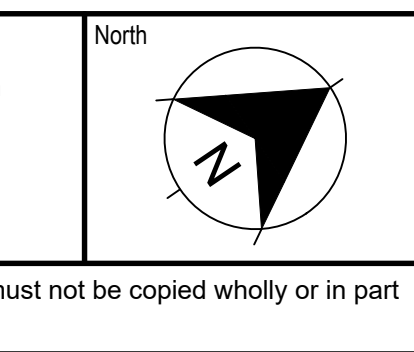
Client



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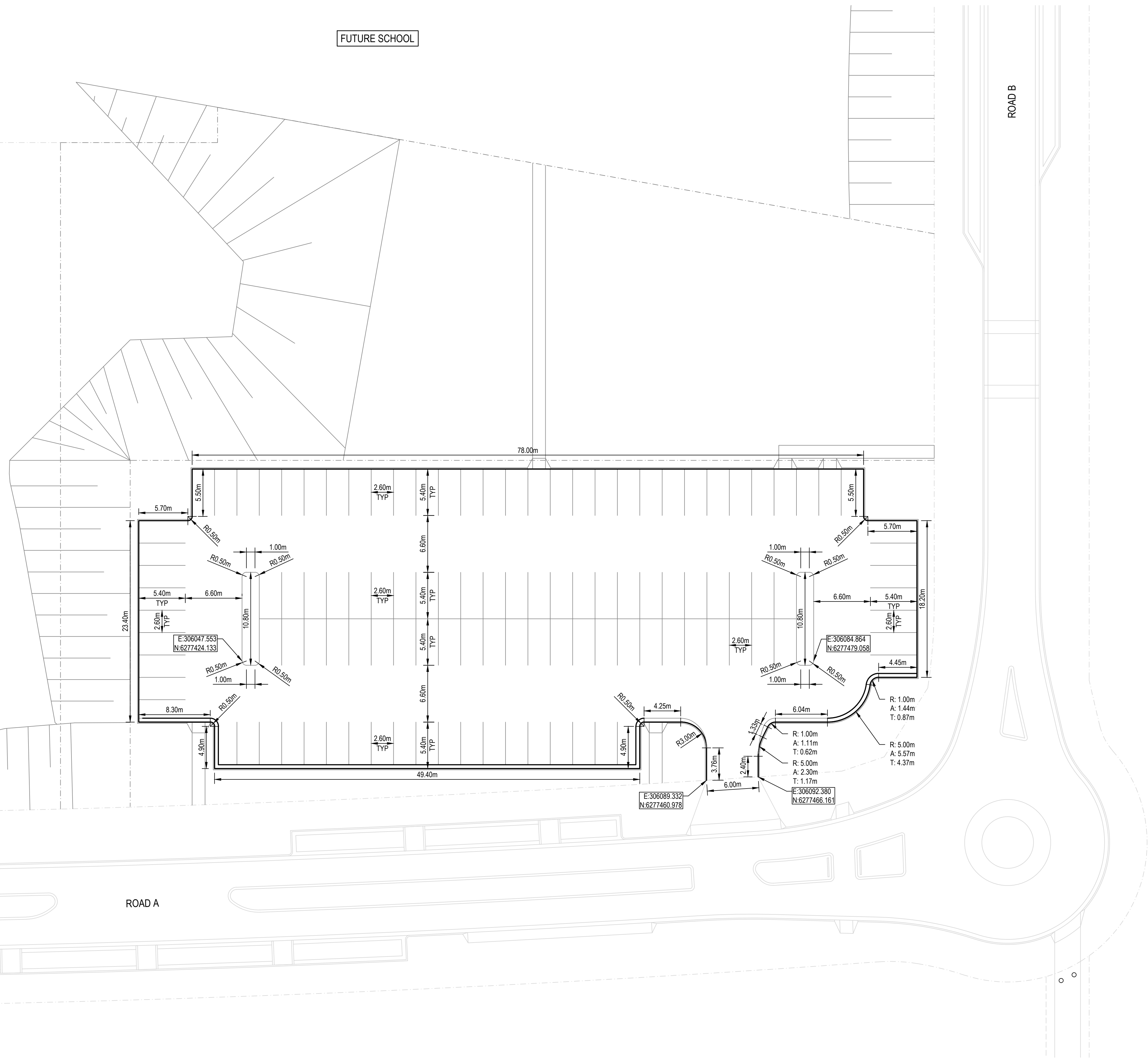
THE GABLES
BOX HILL



Project
THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE
Title
SITeworks AND STORMwater MANAGEMENT PLAN

Scale 1:250	<div style="text-align: center;"> FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION </div>	
Date 22/01/2020		
Size A1	Project Number/Drawing Number 180004-TC-CC-C05.01	Revision 4
Datum AHD		

FUTURE TOWN
CENTRE

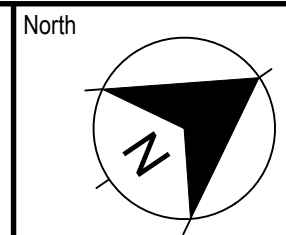
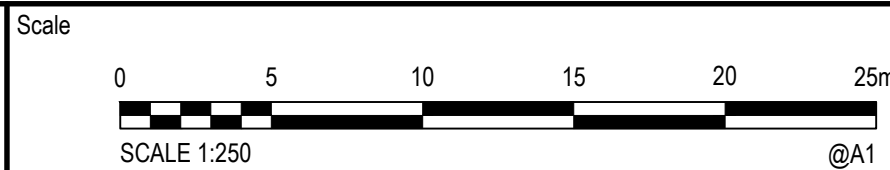


REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
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2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client

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 **THE GABLES**
BOX HILL



 **enspire**

Enspire Solutions Pty Ltd
205/275 Alfred Street N, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Project
THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title
SETOUT PLAN

Scale
1:250

Date
22/01/2020

Size
A1

Datum
AHD

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number
180004-TC-CC-C06.01

Revision
3

LEGEND

- PAVEMENT TYPE 1 - FLEXIBLE CARPARK PAVEMENT
- PAVEMENT TYPE 2 - 1.5m WIDE CONCRETE FOOTPATH
- PAVEMENT TYPE 3 - GENERAL LANDSCAPE AREA
- PAVEMENT ARROW - UA1
- PAVEMENT ARROW - UA3
- STREET SIGN
- BB - BARRIER LINES
- E5 - EDGE LINE

GENERAL NOTES

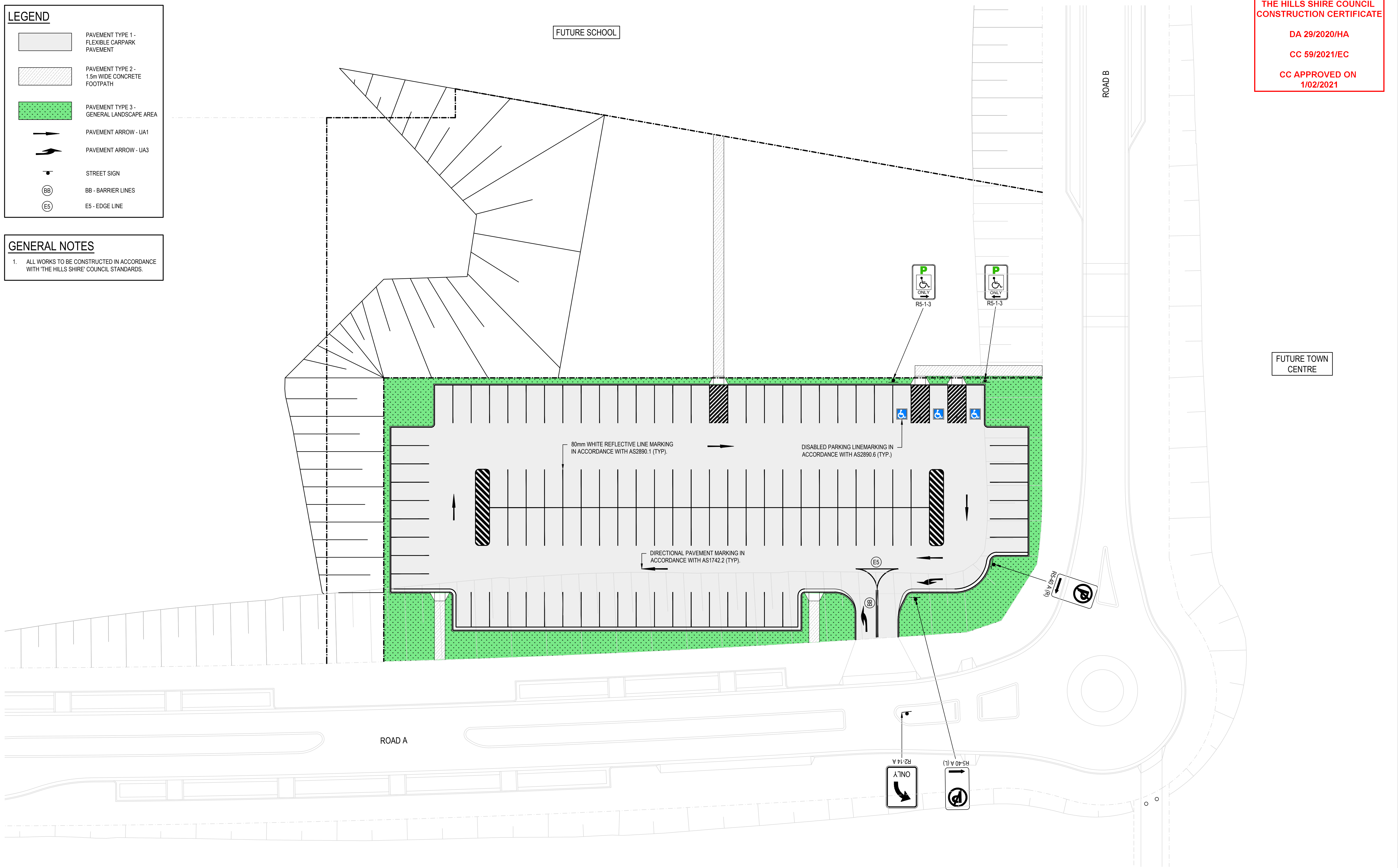
- ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH 'THE HILLS SHIRE' COUNCIL STANDARDS.

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021

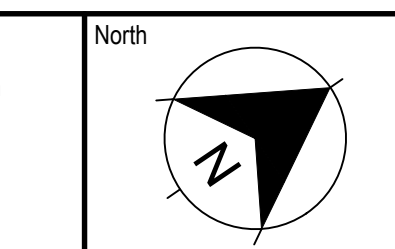
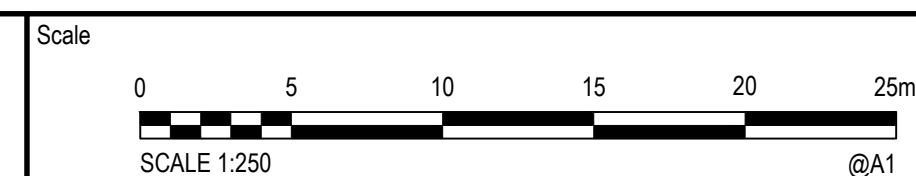


REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
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1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client

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THE GABLES
BOX HILL



enspire

Enspire Solutions Pty Ltd
205/275 Alfred Street N, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Project
THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title
PAVEMENT, SIGNAGE AND LINEMARKING PLAN

Scale
1:250

Date
22/01/2020

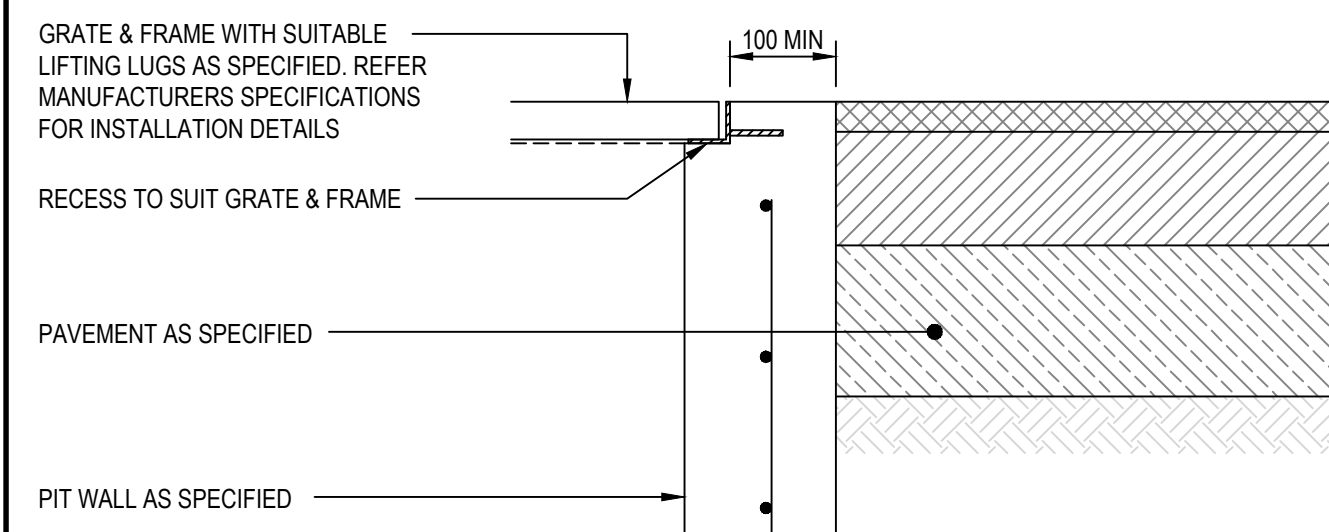
Size
A1

Datum
AHD

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

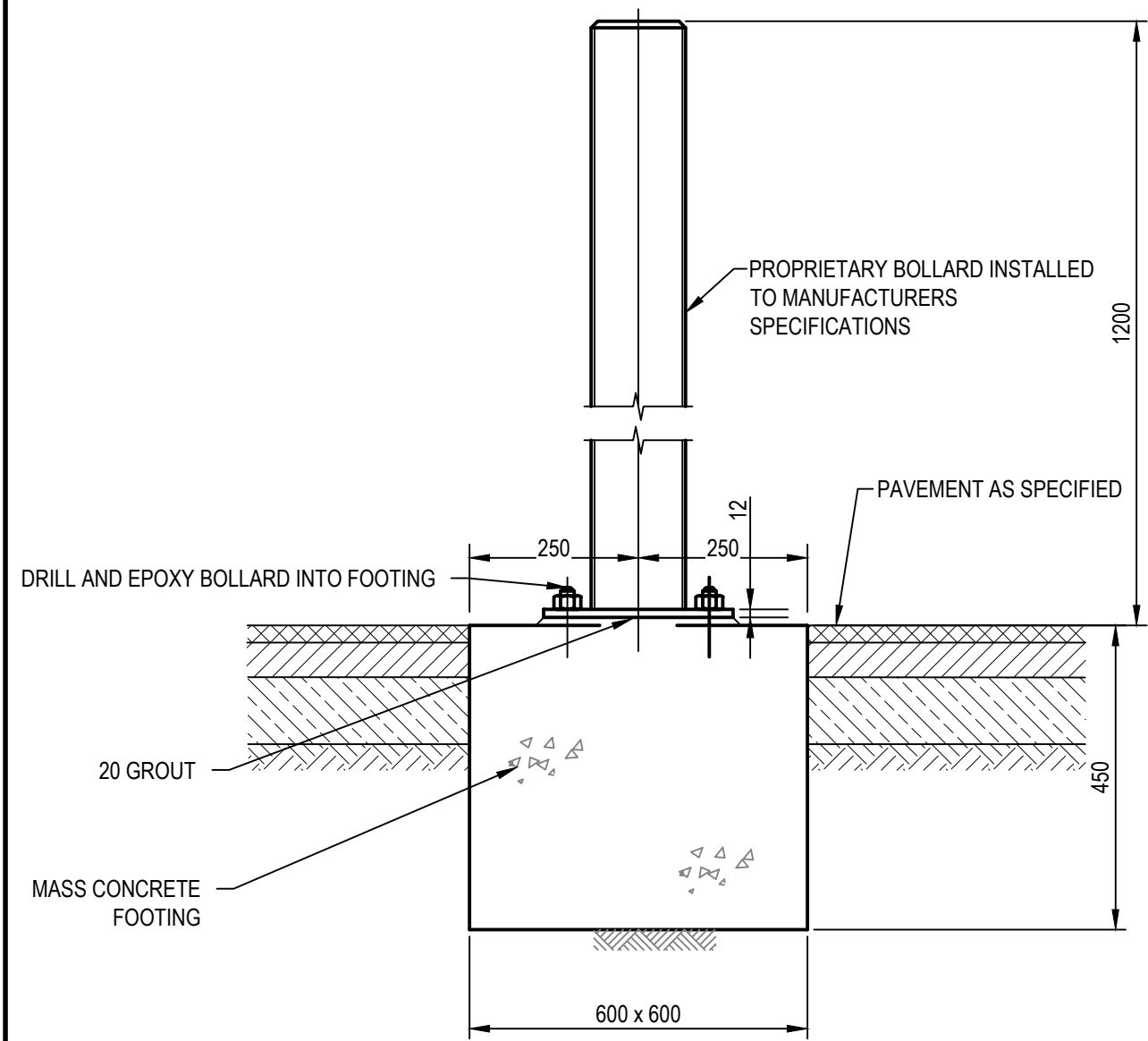
Project Number/Drawing Number
180004-TC-CC-C11.01

Revision
3



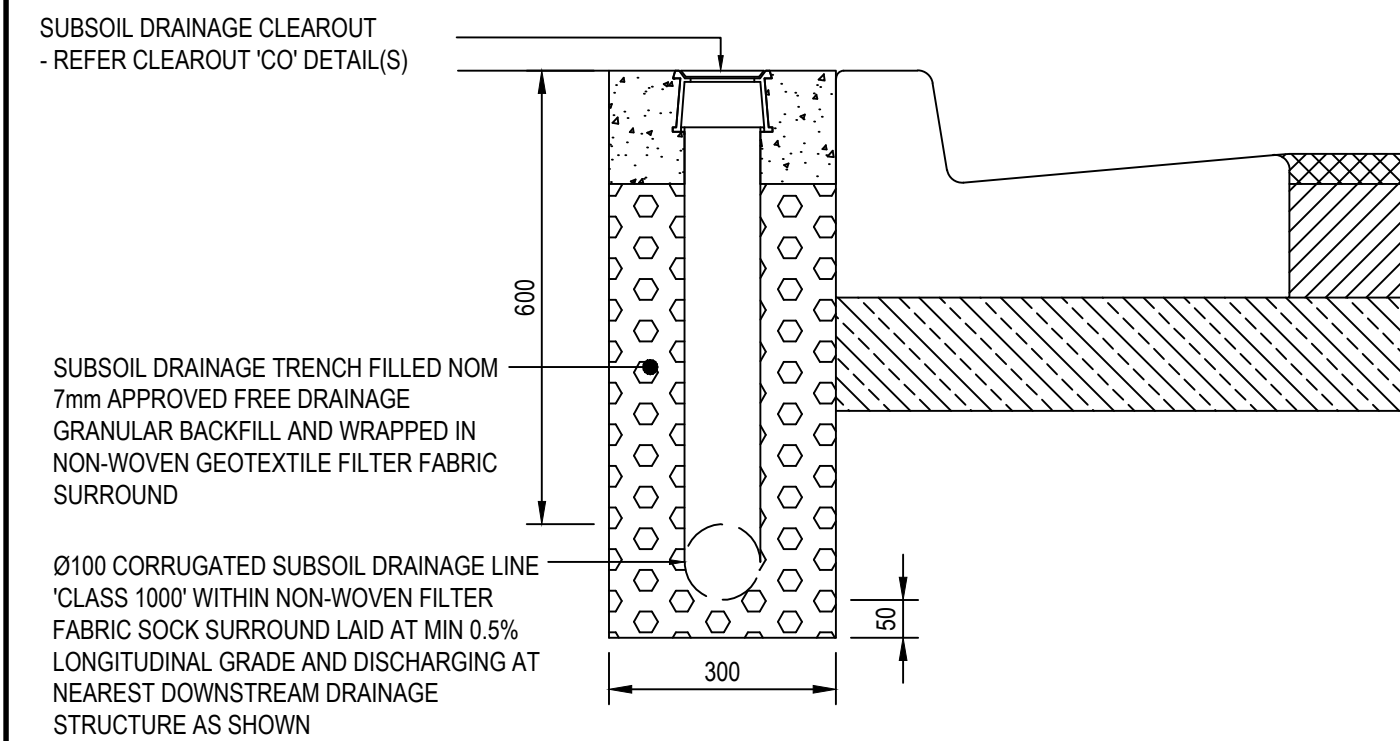
PIT INTERFACE - DETAIL 'A'

SCALE 1:10



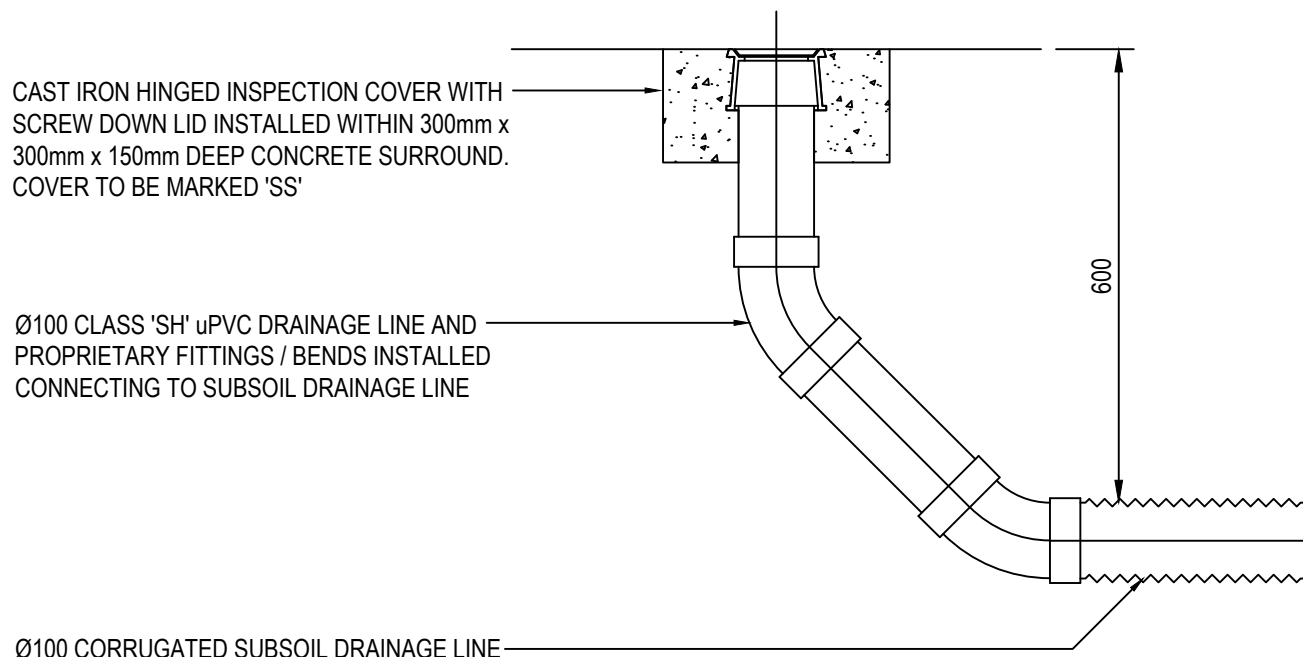
PERMANENT BOLLARD TO FLEXIBLE PAVEMENT

SCALE 1:10



SUBSOIL DRAINAGE TRENCH

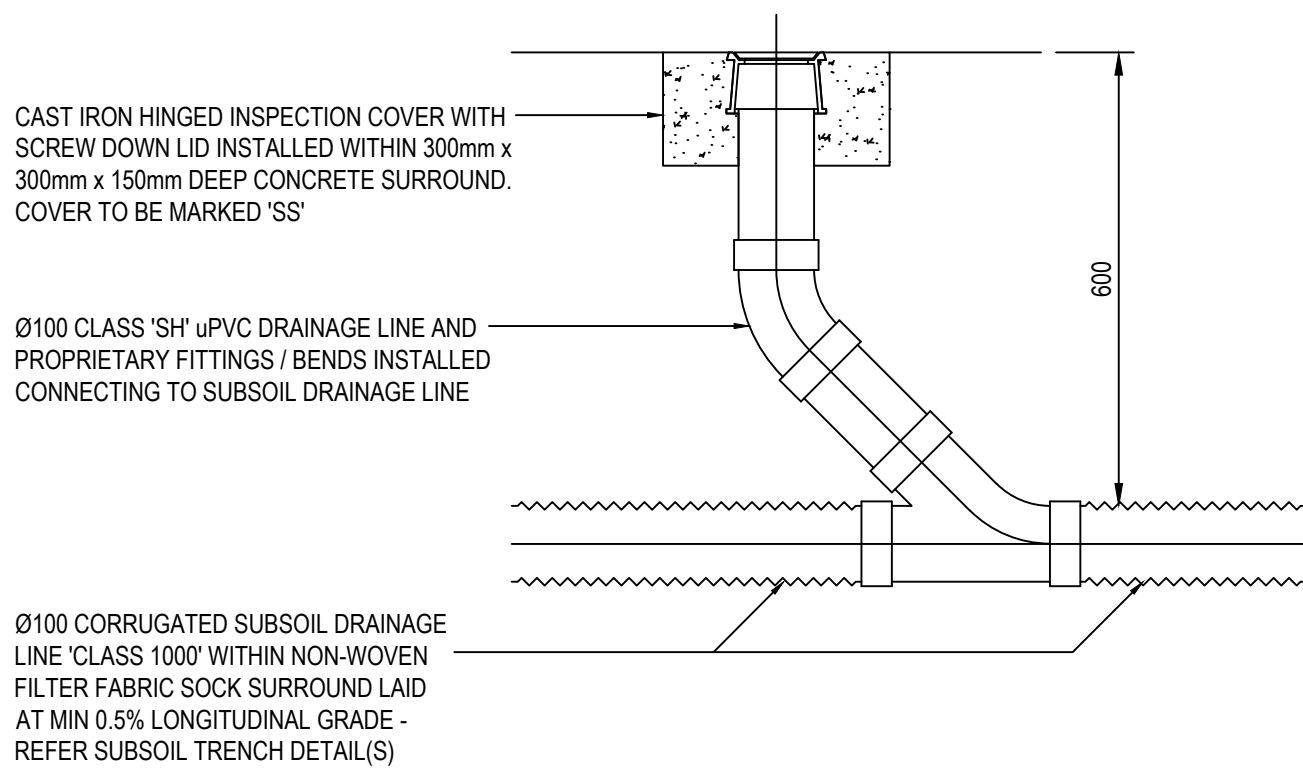
FLUSH POINT TO BE INSTALLED @ MAX 30m CENTRES AND DISCHARGING TO DRAINAGE STRUCTURES @ MAX 60m CENTRES.



SUBSOIL DRAINAGE FLUSH POINT

SCALE 1:10

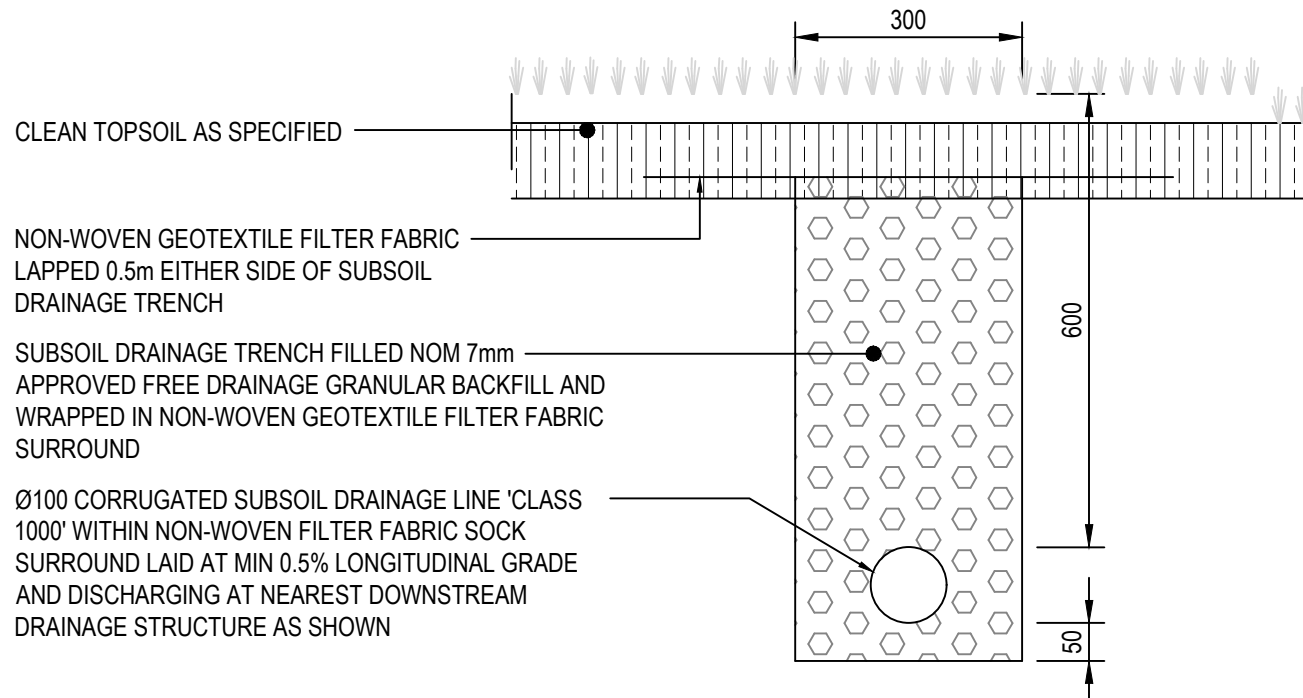
FLUSH POINT TO BE INSTALLED AT UPSTREAM POINTS ALONG SUBSOIL DRAINAGE LINES AT MAX 30 m CENTRES AND DISCHARGING TO DRAINAGE STRUCTURES AT MAX 60m CENTRES.



SUBSOIL DRAINAGE INTERMEDIATE RISER

SCALE 1:10

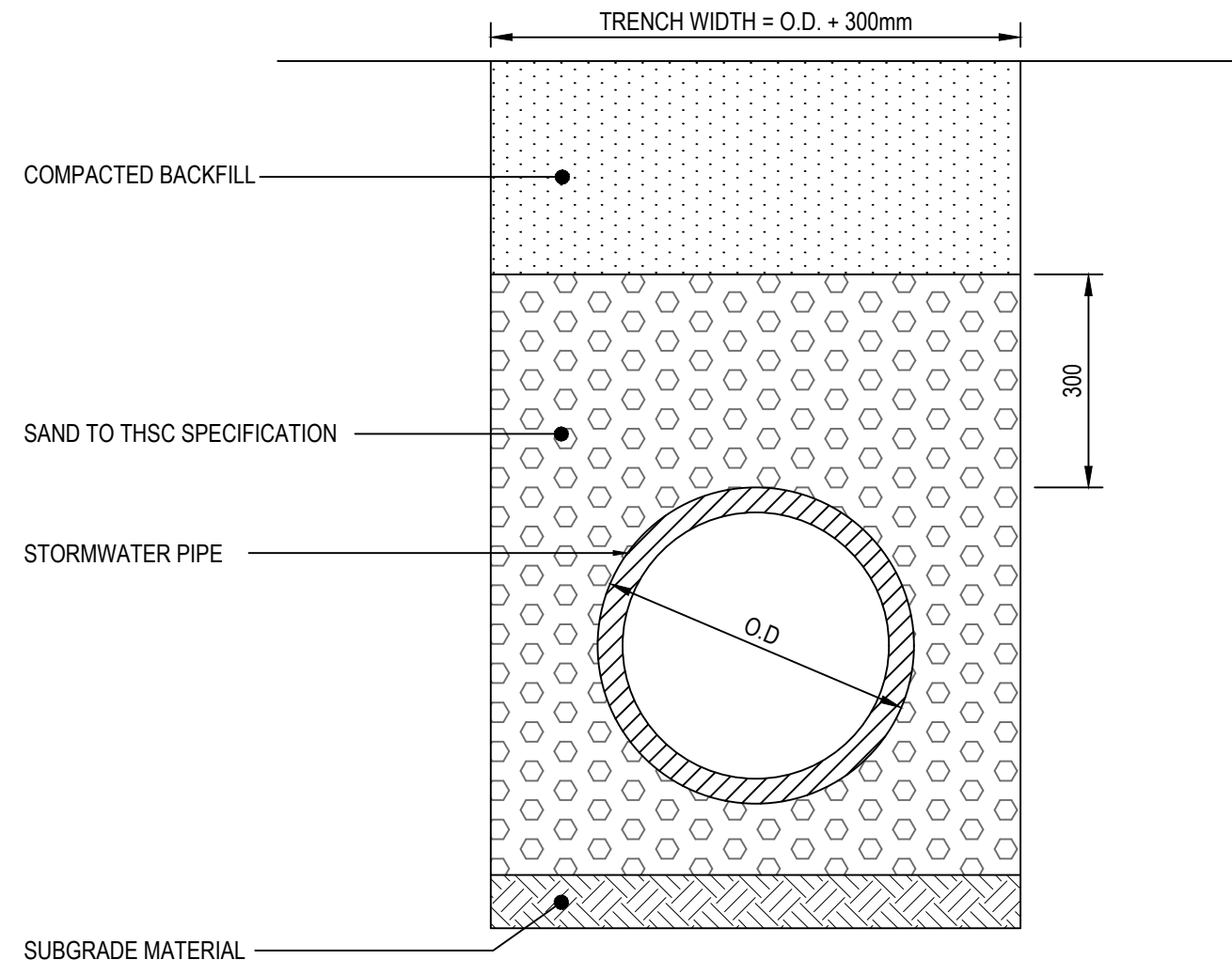
INTERMEDIATE RISER TO BE INSTALLED AT INTERMEDIATE POINTS ALONG SUBSOIL DRAINAGE LINES AT MAX 30 m CENTRES AND DISCHARGING TO DRAINAGE STRUCTURES AT MAX 60m CENTRES.



SUBSOIL DRAINAGE TRENCH - LANDSCAPING

SCALE 1:10

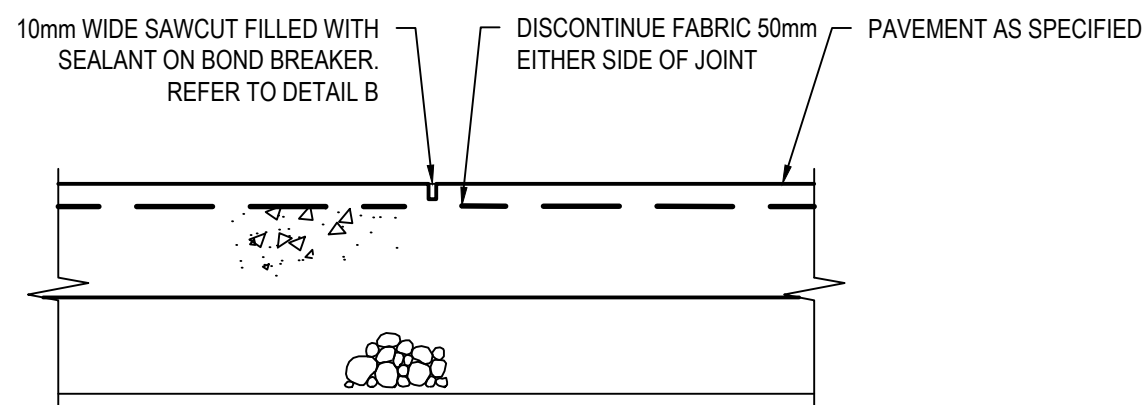
FLUSH POINT TO BE INSTALLED AT MAX 30 m CENTRES AND DISCHARGING TO DRAINAGE STRUCTURES AT MAX 60m CENTRES.



TYPICAL PIPE TRENCH - GENERAL AREAS

SCALE 1:10

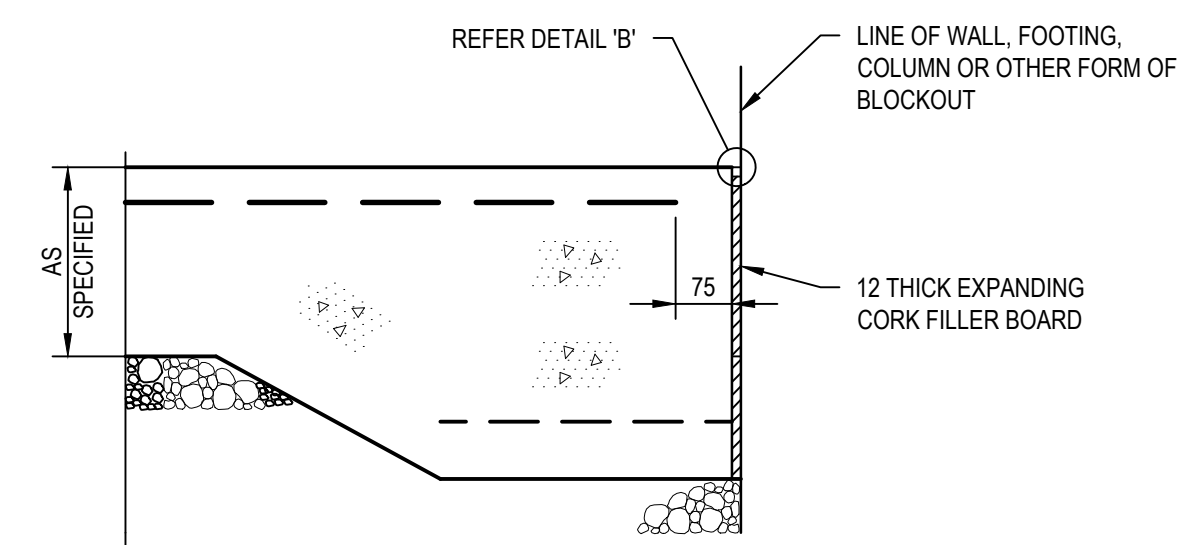
- TRENCH WIDTH MAY NEED TO BE INCREASED SUBJECT TO ACHIEVING COMPACTION. ENSURE MINIMUM 300mm CLEARANCE BETWEEN, WHEN USING MULTIPLE PIPES TO ACHIEVE ADEQUATE COMPACTION.
- MINIMUM PIPE COVER NOT UNDER ROADS TO BE 300mm U.N.O.
- THE CONTRACTOR SHALL ENSURE THAT SHORING OF TRENCHES IS INSTALLED AS REQUIRED BY STATUTORY REQUIREMENTS.
- ENSURE BACKFILLING COMPACTION MEETS THE FOLLOWING STANDARDS:
 - TRENCHES UNDER PAVED AREAS / BUILDINGS - 100% SMDD
 - TRENCHES NOT UNDER PAVEMENTS - 95% SMDD



SAWN JOINT (SJ)

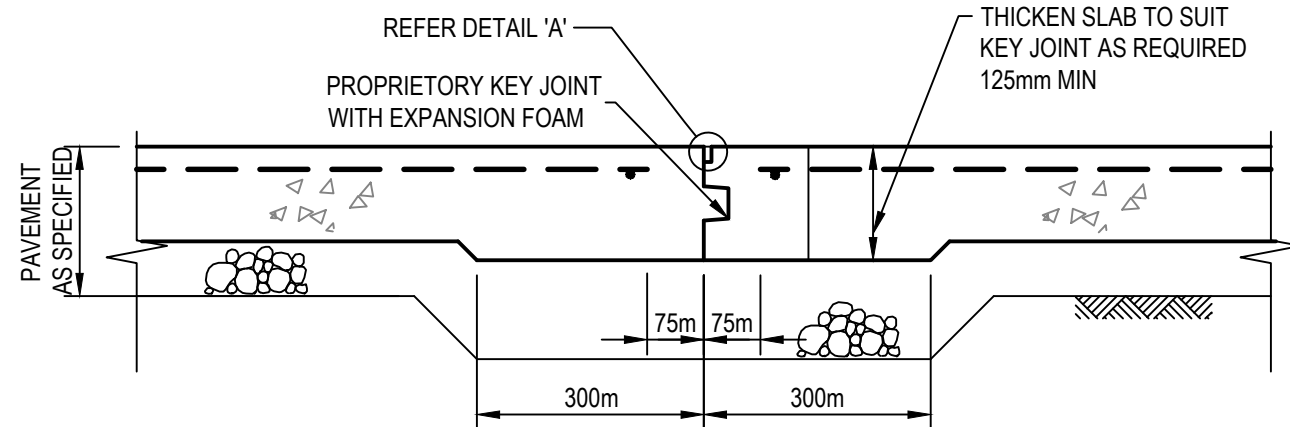
SCALE 1:10

NOTE: SAWCUT TO BE MADE MAXIMUM 24 HOURS AFTER SLAB IS POURED



ISOLATION JOINT (IJ)

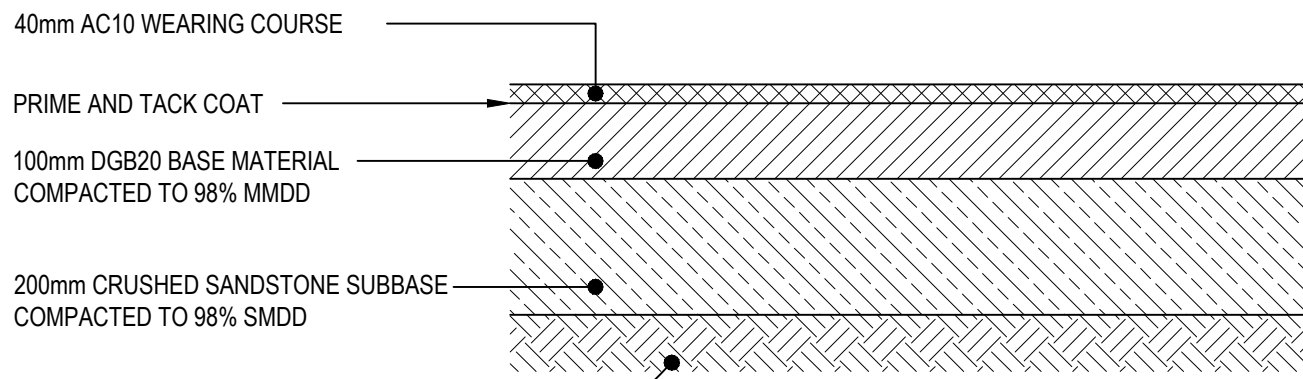
SCALE 1:10



NON-TRAFFICABLE KEYED JOINT (KJ1)

SCALE 1:10

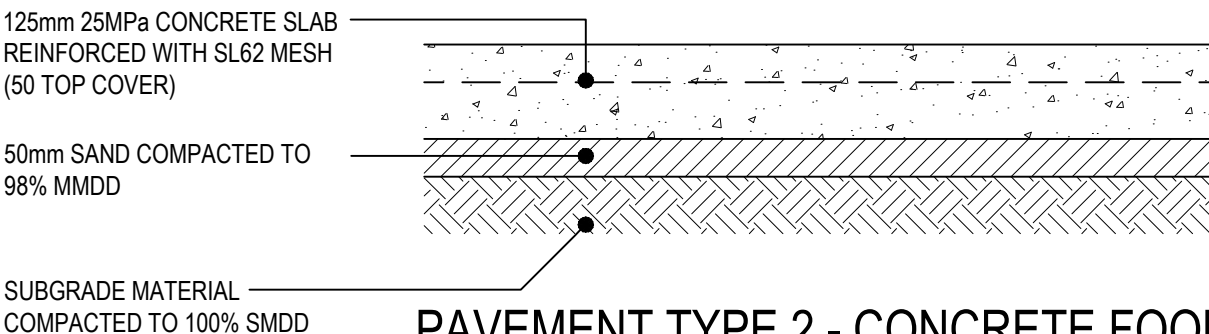
LOCATE JOINTS AS SHOWN ON PLAN



PAVEMENT TYPE 1 - FLEXIBLE CARPARK

SCALE 1:10

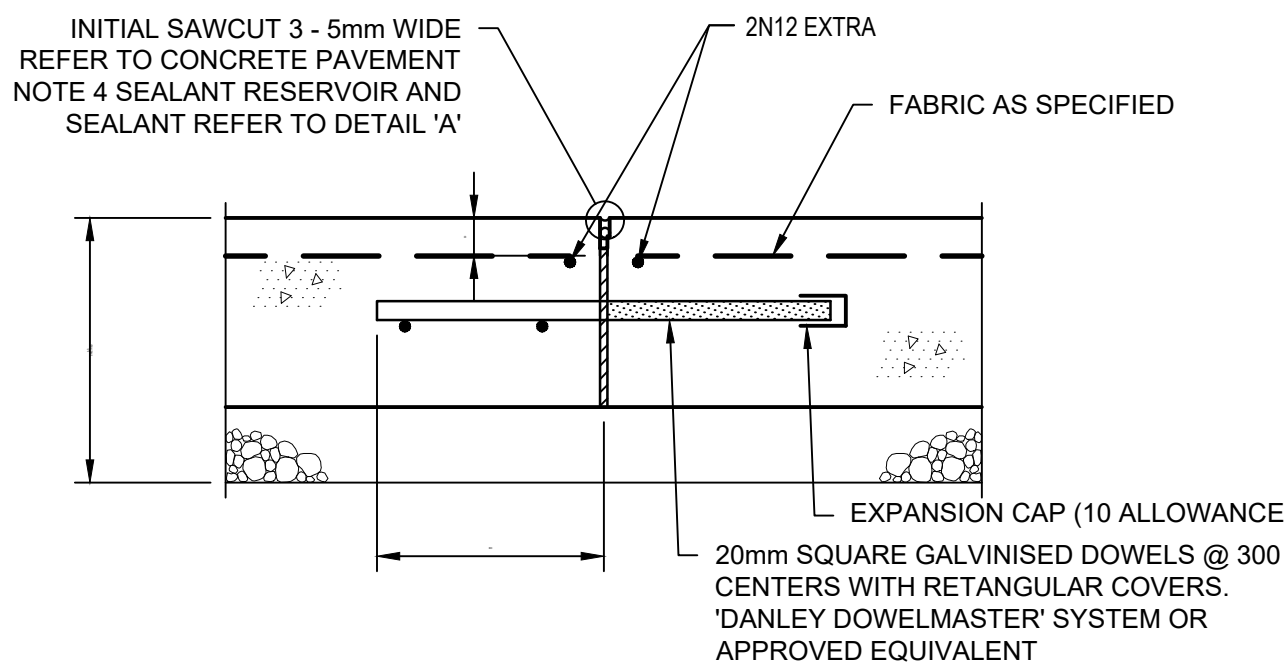
MIN CBR 3% (CONTRACTOR TO CONFIRM ONSITE)
DESIGN LOADING = 2x10° ESA'S



PAVEMENT TYPE 2 - CONCRETE FOOPATH

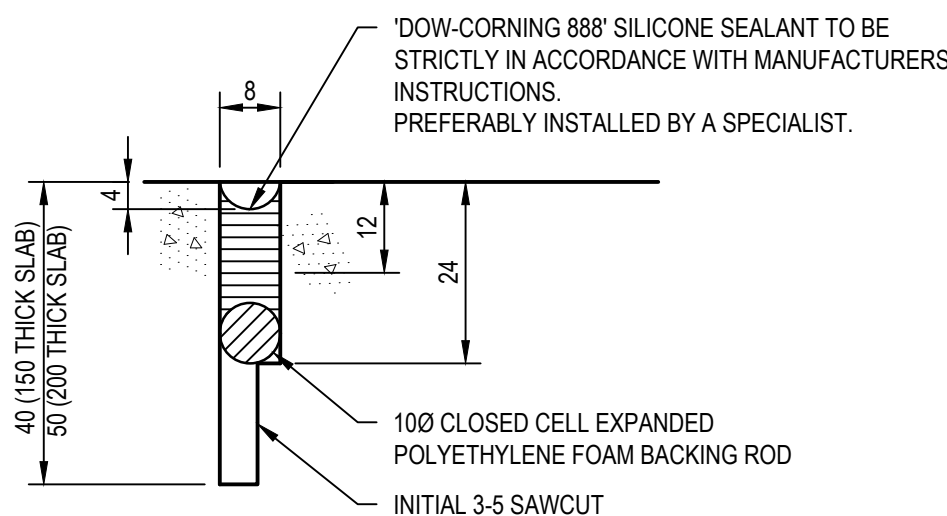
SCALE 1:10

MIN CBR 5% (CONTRACTOR TO CONFIRM ONSITE).
CONTRACTOR TO ALLOW FOR JOINTS - REFER SPECIFICATION NOTES FOR JOINT SPACING.



EXPANSION JOINT (EJ)

SCALE 1:10



DETAIL 'A'

NOT TO SCALE

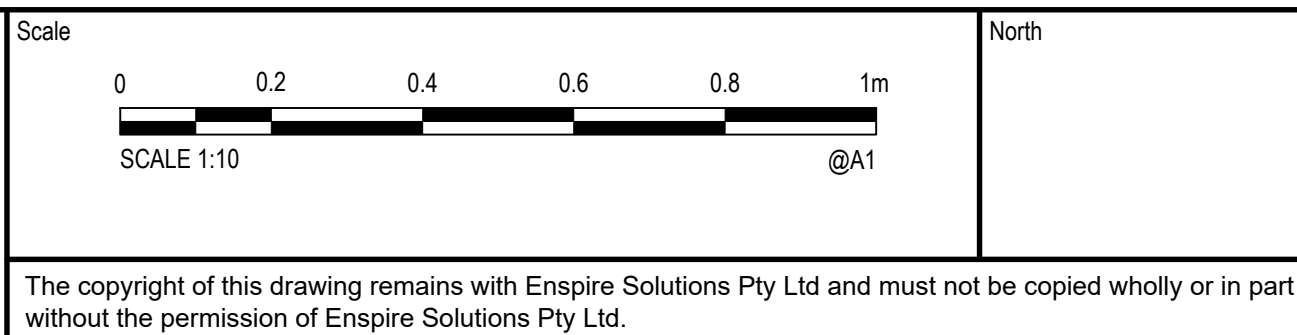
THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
4	19/01/2021	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
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2	22/05/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	MHE	AL	-	RH
1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH



Project	THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE
Title	SITWORKS DETAILS
SHEET 01	

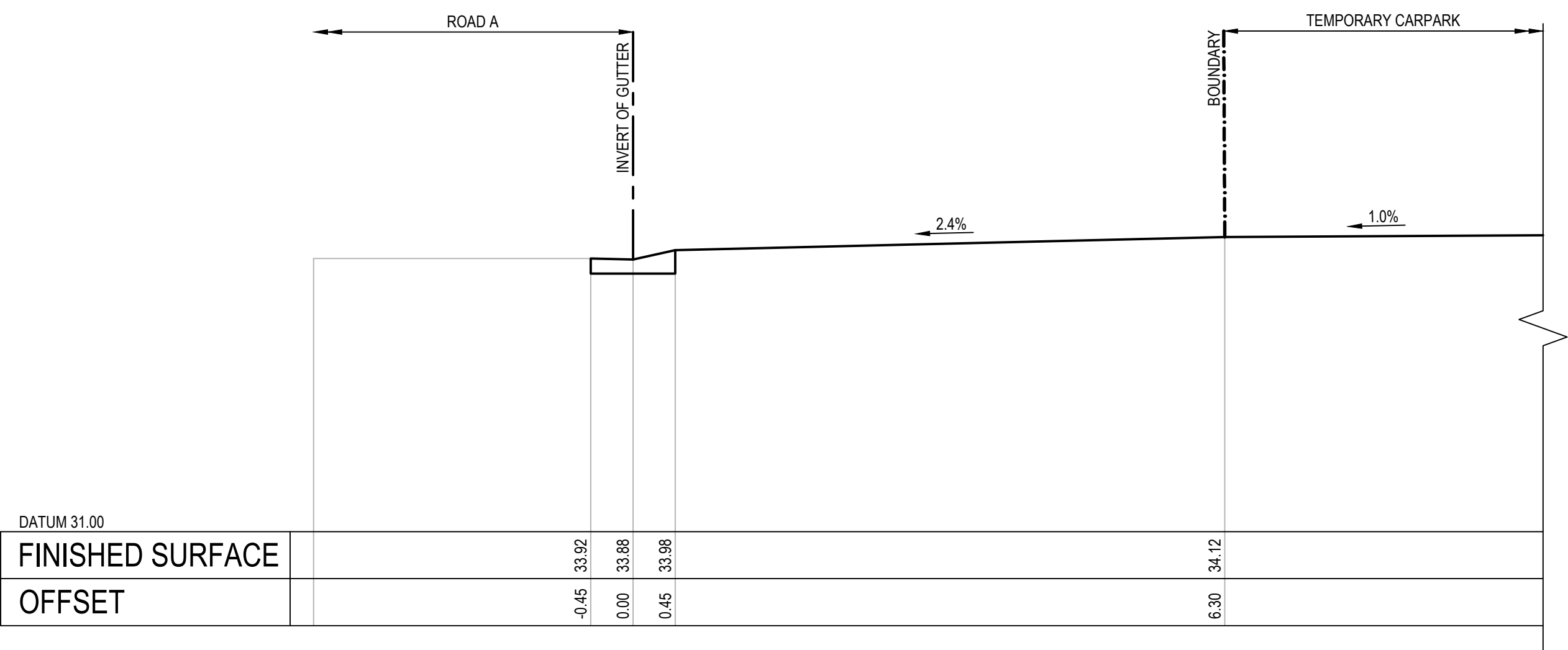
Scale	AS SHOWN	Status	FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION
Date	22/01/2020	Project Number/Drawing Number	180004-TC-CC-C14.01
Size	A1	Revision	4
Datum	AHD		

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

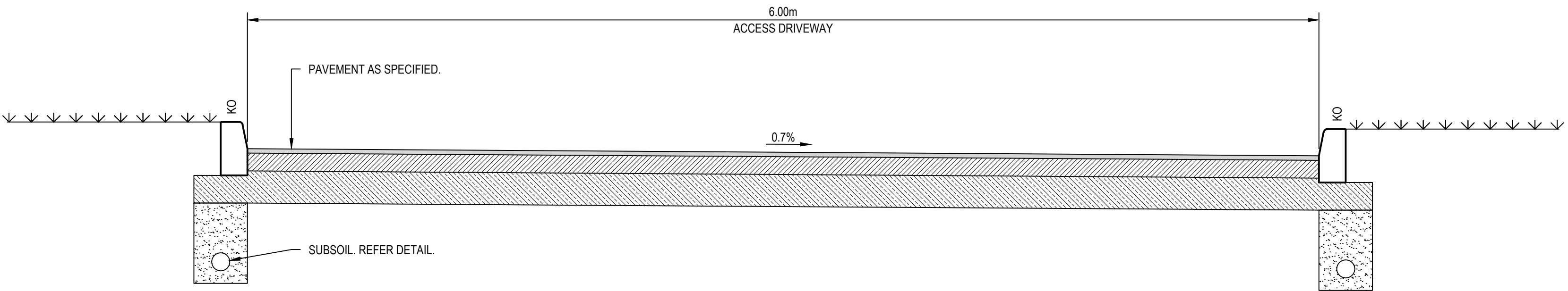
DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021

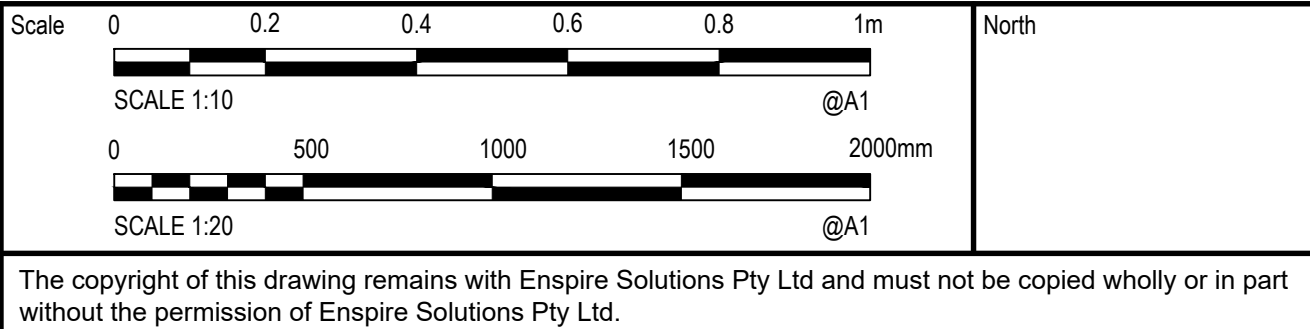


SECTION 1
SCALE 1:50



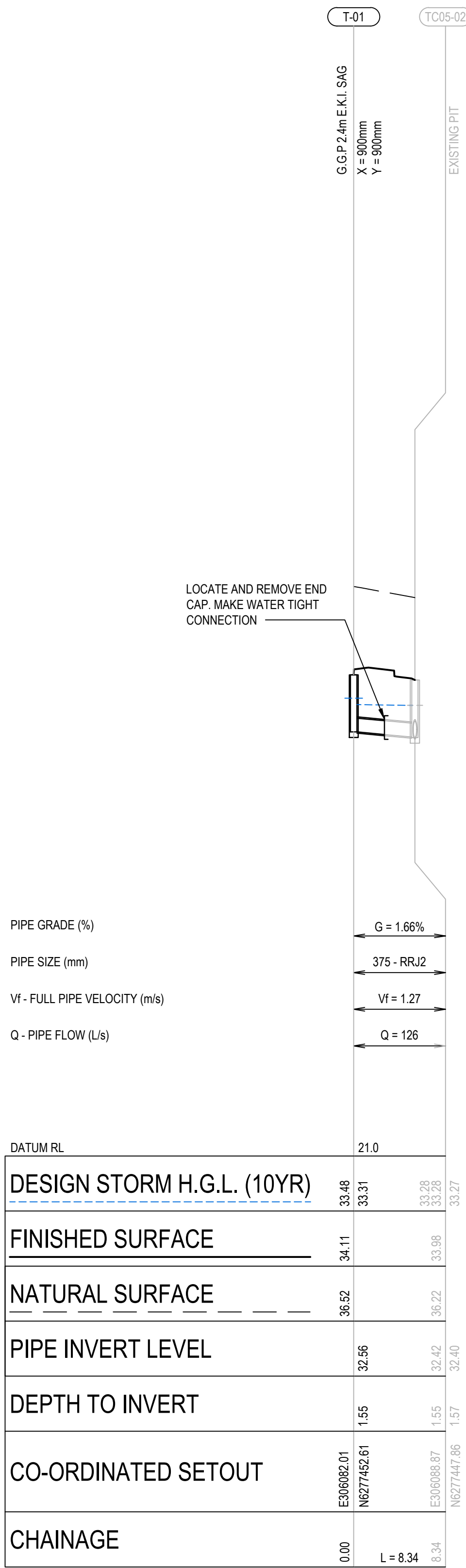
SECTION 2
SCALE 1:20

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
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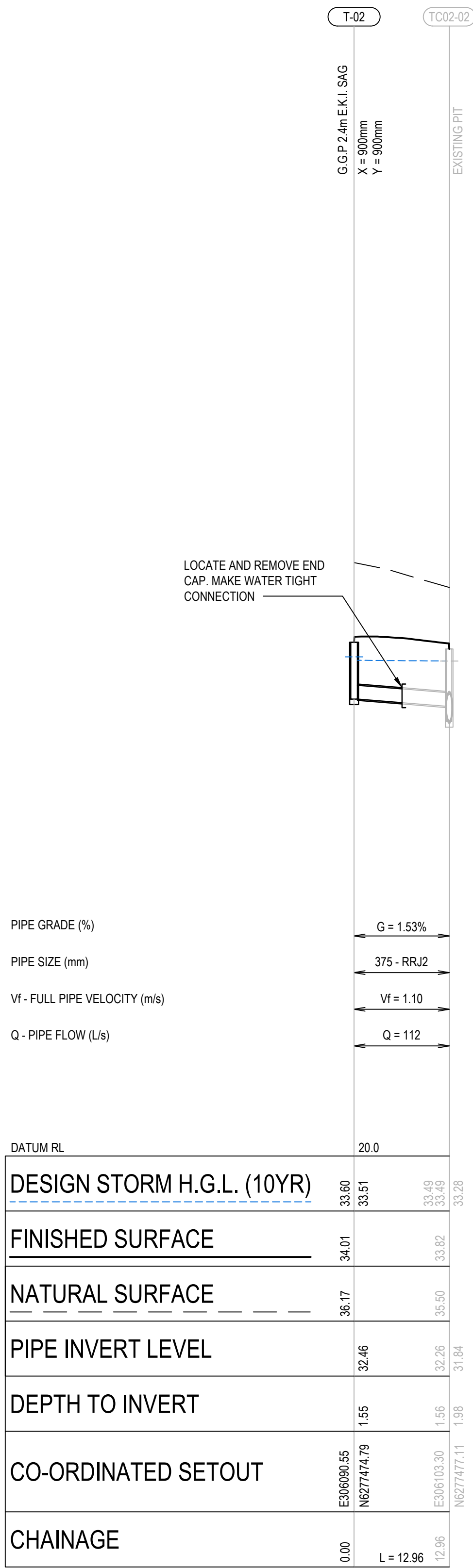


Project	THE GABLES TOWN CENTRE TEMPORARY CARPARK CONSTRUCTION CERTIFICATE
Title	SITEWORKS DETAILS
SHEET 02	

Scale	AS SHOWN	Status	FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION
Date	19/01/2021	Project Number/Drawing Number	180004-TC-CC-C14.02
Size	A1	Revision	1
Datum	AHD		



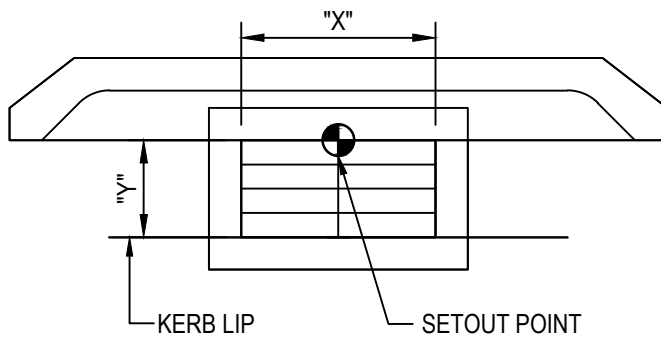
LINE T-01



LINE T-02

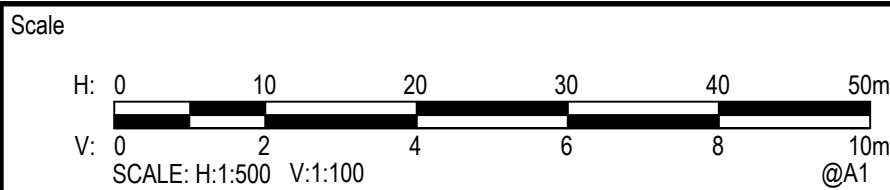
NOTES:

- G.G.P 2.4m E.K.I. SAG ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE HILLS SHIRE COUNCIL STANDARD DETAIL SD.5 (SEPTEMBER 2019) AND SD.6 (SEPTEMBER 2019) UNLESS NOTED OTHERWISE. PITS ARE TO BE FITTED WITH A CLASS 'D' GALVANISED GRATE AND FRAME PLACED CENTRAL TO THE LINTEL.
- INTERNAL PIT CHAMBER SIZES SHOWN ARE MINIMUM VALUES CALCULATED. WHERE PIT CHAMBER SIZES ARE PROPOSED TO BE ADJUSTED BY THE CONTRACTOR APPROVAL FOR SUCH CHANGES IS TO BE PROVIDED BY THE PRINCIPAL'S REPRESENTATIVE PRIOR TO PIT CONSTRUCTION.
- PIPE LENGTHS SHOWN ARE MEASURED BETWEEN SETOUT POINTS AND MAY NOT REPRESENT ACTUAL PIPE LENGTHS FOR CONSTRUCTION.



KERB INLET PIT (SAG) SETOUT
N.T.S

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
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1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH



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Project
THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title
STORMWATER LONGITUDINAL SECTIONS

Scale	AS SHOWN
Date	22/01/2020
Size	A1
Datum	AHD

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number
180004-TC-CC-C17.01

Revision
3



THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA


CC 59/2021/EC

CC APPROVED ON
1/02/2021


REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
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1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

Client

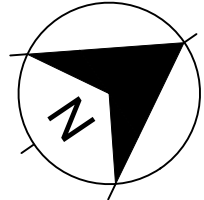
**Stockland**
it's your place

**THE GABLES**
BOX HILL

Scale


SCALE 1:250 @A1

North



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205/275 Alfred Street N, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Project
THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title
STORMWATER CATCHMENT PLAN

Scale
1:250

Date
22/01/2020

Size
A1

Datum
AHD

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number
180004-TC-CC-C20.01

Revision
3

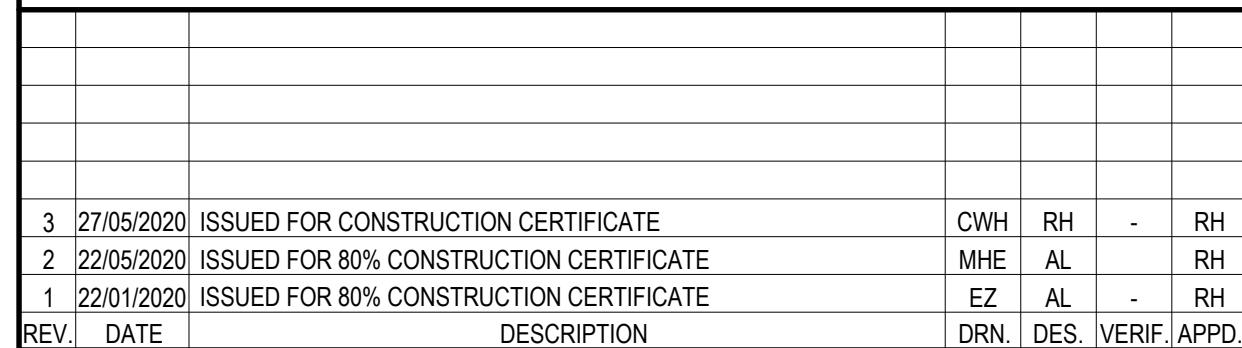


**THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE**


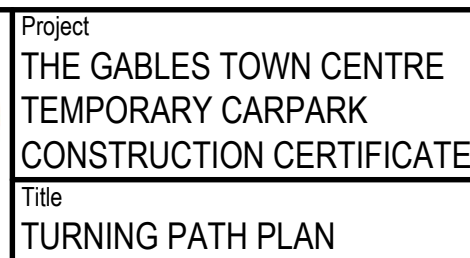
DA 29/2020/HA

CC 59/2021/EC

CC APPROVED ON
1/02/2021



North

A circular compass rose with four black triangular points. The top point is labeled 'N', the bottom 'S', the left 'E', and the right 'W'. The letters are in a stylized, handwritten font.

Scale	1:250
Date	22/01/2020
Size	A1
Datum	AHD

Status	<p>FOR APPROVAL</p> <p>NOT TO BE USED FOR CONSTRUCTION</p>
--------	---

Project Number/Drawing Number	Revision
180004-TC-CC-C22.01	3

LEGEND

- B2 - LOCAL CENTER
- E4 - ENVIRONMENTAL LIVING
- R1 - GENERAL RESIDENTIAL
- R2 - LOW DENSITY RESIDENTIAL
- R3 - MEDIUM DENSITY RESIDENTIAL
- R4 - HIGH DENSITY RESIDENTIAL
- RE1 - PUBLIC RECREATION
- RU6 - RURAL TRANSITION
- NOT OWNED BY STOCKLAND

THE HILLS SHIRE COUNCIL
CONSTRUCTION CERTIFICATE

DA 29/2020/HA
CC 59/2021/EC
CC APPROVED ON
1/02/2021



2019 LEP | ZONING

SCALE 1:2000

REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.
3	27/05/2020	ISSUED FOR CONSTRUCTION CERTIFICATE	CWH	RH	-	RH
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1	22/01/2020	ISSUED FOR 80% CONSTRUCTION CERTIFICATE	EZ	AL	-	RH

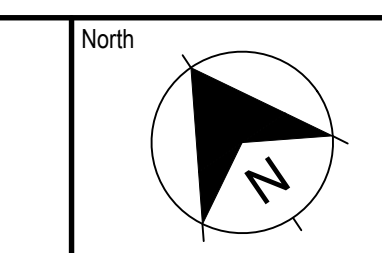
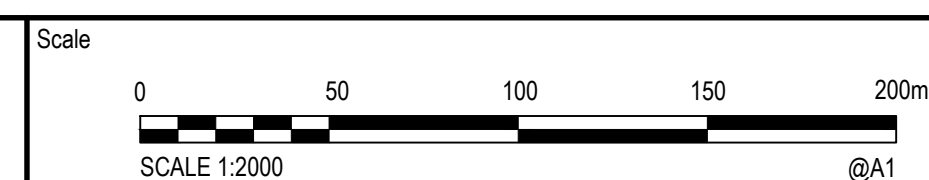
Client



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THE GABLES
BOX HILL



Enspire Solutions Pty Ltd
205/275 Alfred Street N, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Project
THE GABLES TOWN CENTRE
TEMPORARY CARPARK
CONSTRUCTION CERTIFICATE

Title
ZONING PLAN

Scale
1:2000

Date
22/01/2020

Size
A1

Datum
AHD

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number
180004-TC-CC-C23.01

Revision
3

25 October 2021

The General Manager
The Hills Shire Council
PO Box 75
CASTLE HILL NSW 1765

Attention: Mr Michael Edgar



GABLES TOWN CENTRE ROADS A & B – Line Marking and Signs
Council Reference No. CC 85/2020/EC

Property Description:

Lot 2 DP 1237552, Lot 2 DP 1237552 Red Gables Road, BOX HILL NSW 2765

CONSTRUCTION CERTIFICATION

I, Ryan Noney, of Western Earthmoving Pty Ltd, hereby certify that the line marking and signs for the DOPU zone on Road B and the Bus Zone on Fontana Drive has been constructed in accordance with the conditions of the Construction Certificate, the approved LTC plan and in accordance with The Hills Shire Council's "Works Specification Subdivisions/Developments"

Yours Faithfully,
WESTERN EARTHMOVING PTY LTD,

Ryan Noney *BE(Hons) DipProfEngPrac*
Project Manager
money@wem.com.au



28 July 2021

Orion Consulting Engineers
PO Box 7396
NORWEST NSW 2153

Dear Sir/ Madam

SUBDIVISION CERTIFICATE

In accordance with Section 6.4 of the Environmental Planning and Assessment Act 1979

Notice is given of determination by Council the consent authority of the Part 6 Certificate described below.

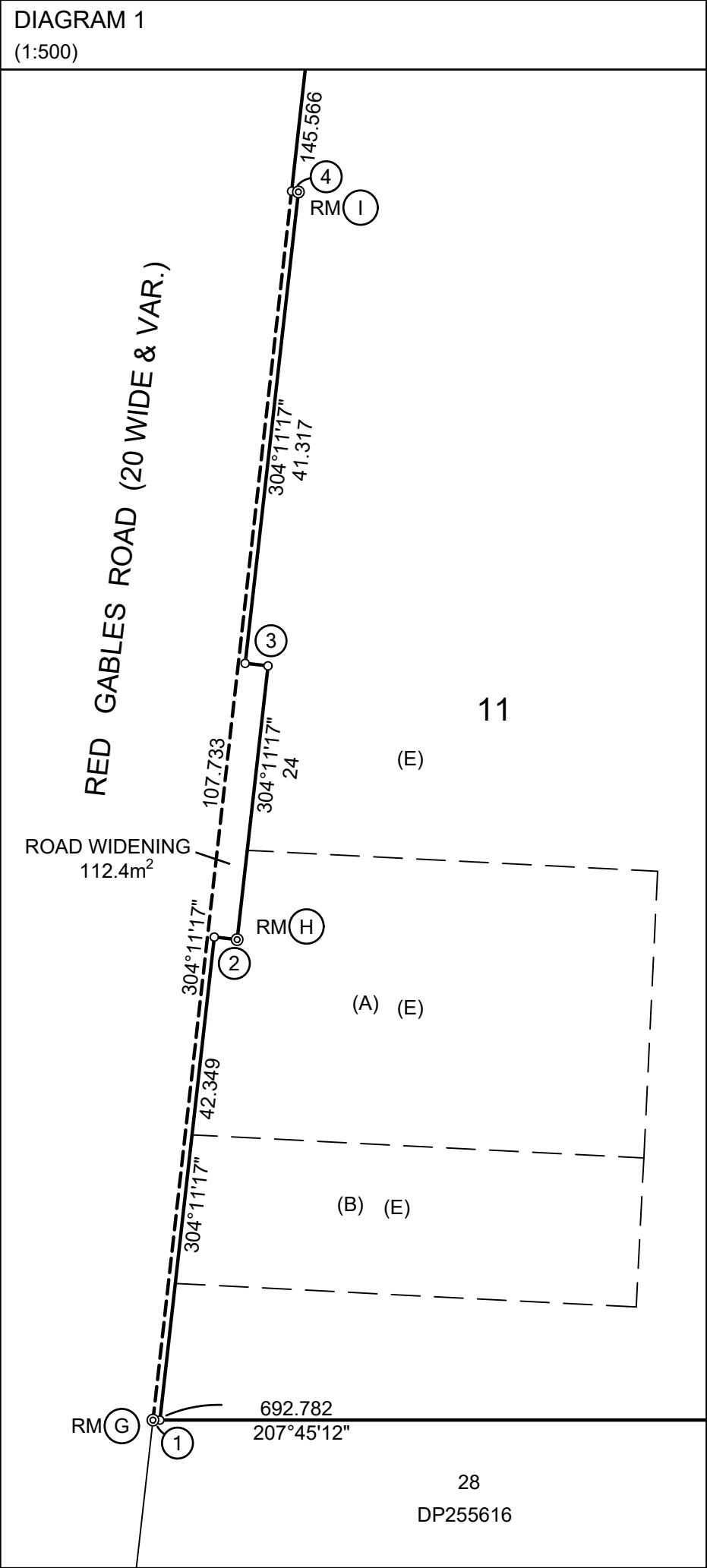
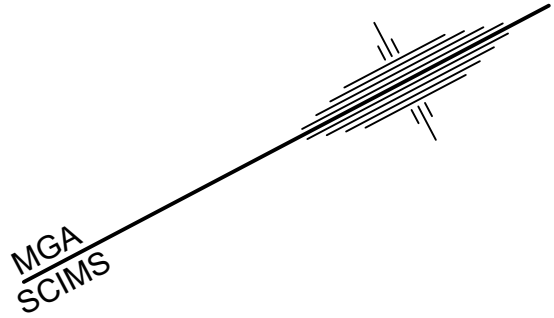
Development:	Stage two of a subdivision creating three residue lots, one town centre/ development lot and one open space lot including new road over four stages (including the staged reconstruction of Red Gables Road between Valletta Drive and Janpieter Road). Stage two creates one residue lot and one town centre/ development lot
Property Description:	Lot 2 DP 1237552 Lot 2 DP 1237552 Red Gables Road, GABLES NSW 2765
Applicant:	Orion Consulting Engineers
Development Application No.:	2051/2018/ZB
Subdivision Certificate No.:	143/2021/SC
Determination:	Approved
Date of Determination:	28 July 2021

This Subdivision Certificate is a Part 6 Certificate issued in accordance with Section 6.4(d) of the Environmental Planning and Assessment Act 1979, and certifies that the requirements of Section 6.15 of the Environmental Planning and Assessment Act 1979 have been met.

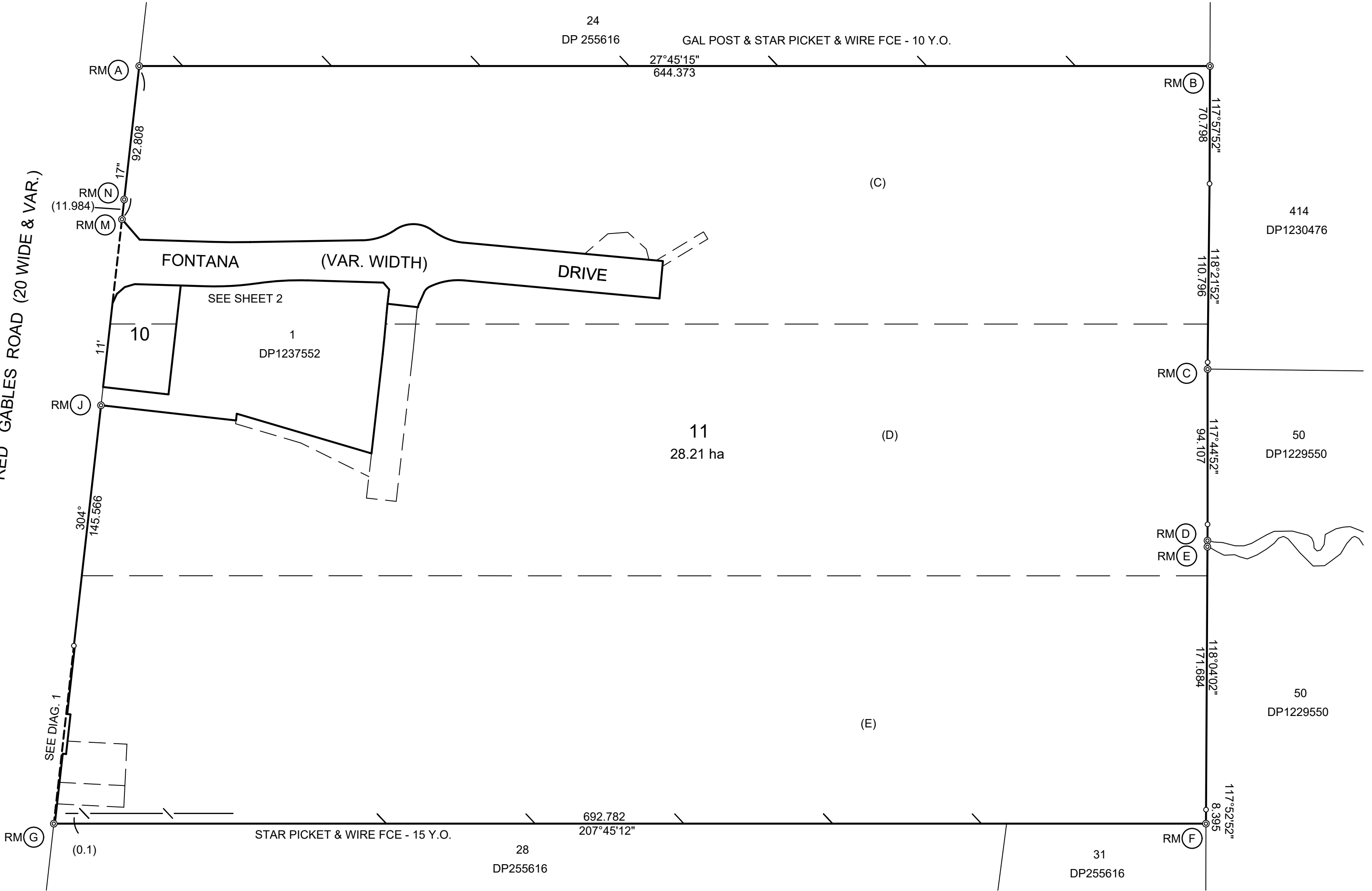
Please contact Leanne Pracy on (02) 8853 1975 if you require any further information.

Yours Faithfully

Ben Hawkins
MANAGER – SUBDIVISION & DEVELOPMENT CERTIFICATION



RED GABLES ROAD (20 WIDE & VAR.)



SHORT LINE SCHEDULE				
No	BEARING	DISTANCE	ARC	RADIUS
1	207°45'12"	0.602		
2	34°11'17"	2		
3	214°11'17"	2		
4	214°11'17"	0.598		

REFERENCE MARK SCHEDULE					
MARK	BEARING	DISTANCE	FROM	ORIGIN	STATE
A	28°02'30"	1.045	RMGIP	DP1237552	FOUND
B	207°44'34"	1.407	RMGIP	DP1237552	FOUND
C	7°11'26"	1.321	RMGIP	DP1229550	FOUND
D	142°38'38"	6.085	RMGIP	DP1229550	FOUND
E	196°45'22"	5.194	RMGIP	DP1229550	FOUND
F	350°12'01"	1.964	RMGIP	DP1237552	FOUND
G	27°45'42"	1	RMGIP	DP255616	FOUND
H	221°25'46"	7.335	RMGIP		PLACED
I	35°32'06"	4.237	RMDH&W		PLACED
	12°05'10"	18.367	RMDH&W		PLACED
J	216°12'55"	1.874	RMGIP	DP1237552	FD NOW GONE
M	199°24'29"	1.012	RMGIP	DP1261072	FOUND
N	34°10'42"	0.5	CONC. BLK.	DP255616	FD NOW GONE

AFFECTING INTEREST SCHEDULE	
No	DESCRIPTION
(A)	EASEMENT TO DRAIN WATER 25 WIDE (DP255616)
(B)	EASEMENT TO DRAIN WATER 13 WIDE (DP610274)
(C)	COVENANT (R422930)
(D)	COVENANT (R560034)
(E)	COVENANT (R894672)


Electronically signed by me Ben Hawkins, affixed by me on 28/07/2021

Surveyor: GLENN BEASLEY
Date of Survey: 17/12/2020
Surveyor's Ref: 23273-FE2

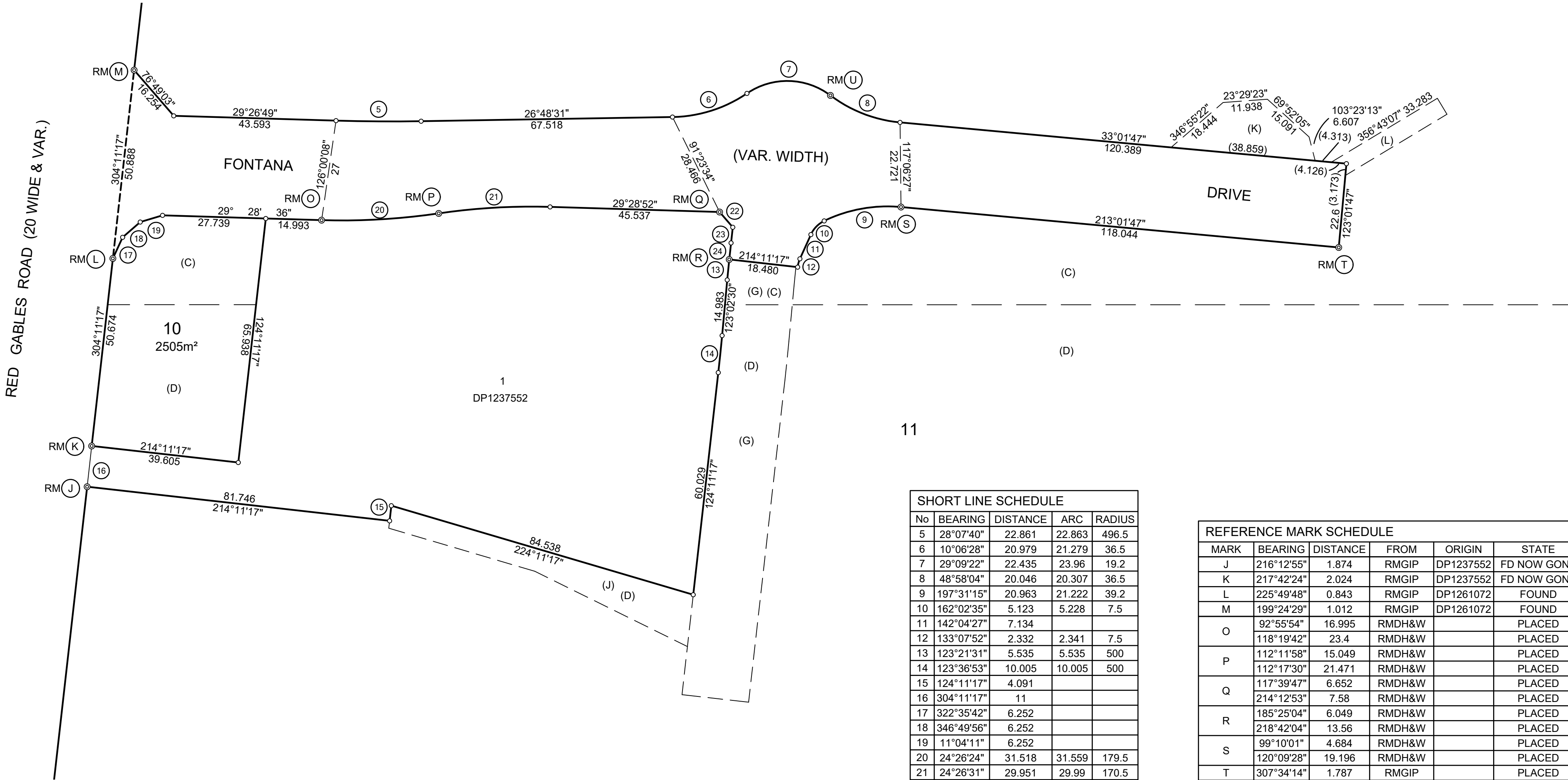
PLAN OF:
SUBDIVISION OF LOT 2 DP1237552

LGA: THE HILLS SHIRE
Locality: GABLES
Subdivision No:
Lengths are in metres. Reduction Ratio 1: 2000

Registered


DP 1267849

AFFECTING INTEREST SCHEDULE	
No	DESCRIPTION
(C)	COVENANT (R422930)
(D)	COVENANT (R560034)
(G)	RIGHT OF CARRIAGEWAY 18 WIDE (DP1237552)
(J)	EASEMENT FOR ACCESS AND RECREATION 6 WIDE & VARIABLE WIDTH (DP1237552)
(K)	RIGHT OF ACCESS VARIABLE WIDTH
(L)	EASEMENT FOR DRAINAGE OF WATER 5 WIDE

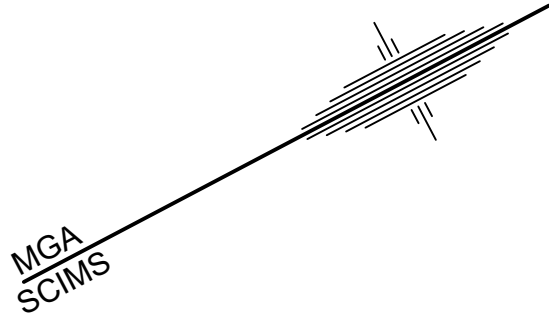


SHORT LINE SCHEDULE				
No	BEARING	DISTANCE	ARC	RADIUS
5	28°07'40"	22.861	22.863	496.5
6	10°06'28"	20.979	21.279	36.5
7	29°09'22"	22.435	23.96	19.2
8	48°58'04"	20.046	20.307	36.5
9	197°31'15"	20.963	21.222	39.2
10	162°02'35"	5.123	5.228	7.5
11	142°04'27"	7.134		
12	133°07'52"	2.332	2.341	7.5
13	123°21'31"	5.535	5.535	500
14	123°36'53"	10.005	10.005	500
15	124°11'17"	4.091		
16	304°11'17"	11		
17	322°35'42"	6.252		
18	346°49'56"	6.252		
19	11°04'11"	6.252		
20	24°26'24"	31.518	31.559	179.5
21	24°26'31"	29.951	29.99	170.5
22	76°50'04"	5.42		
23	124°11'17"	4.213		
24	123°55'55"	4.47	4.47	500

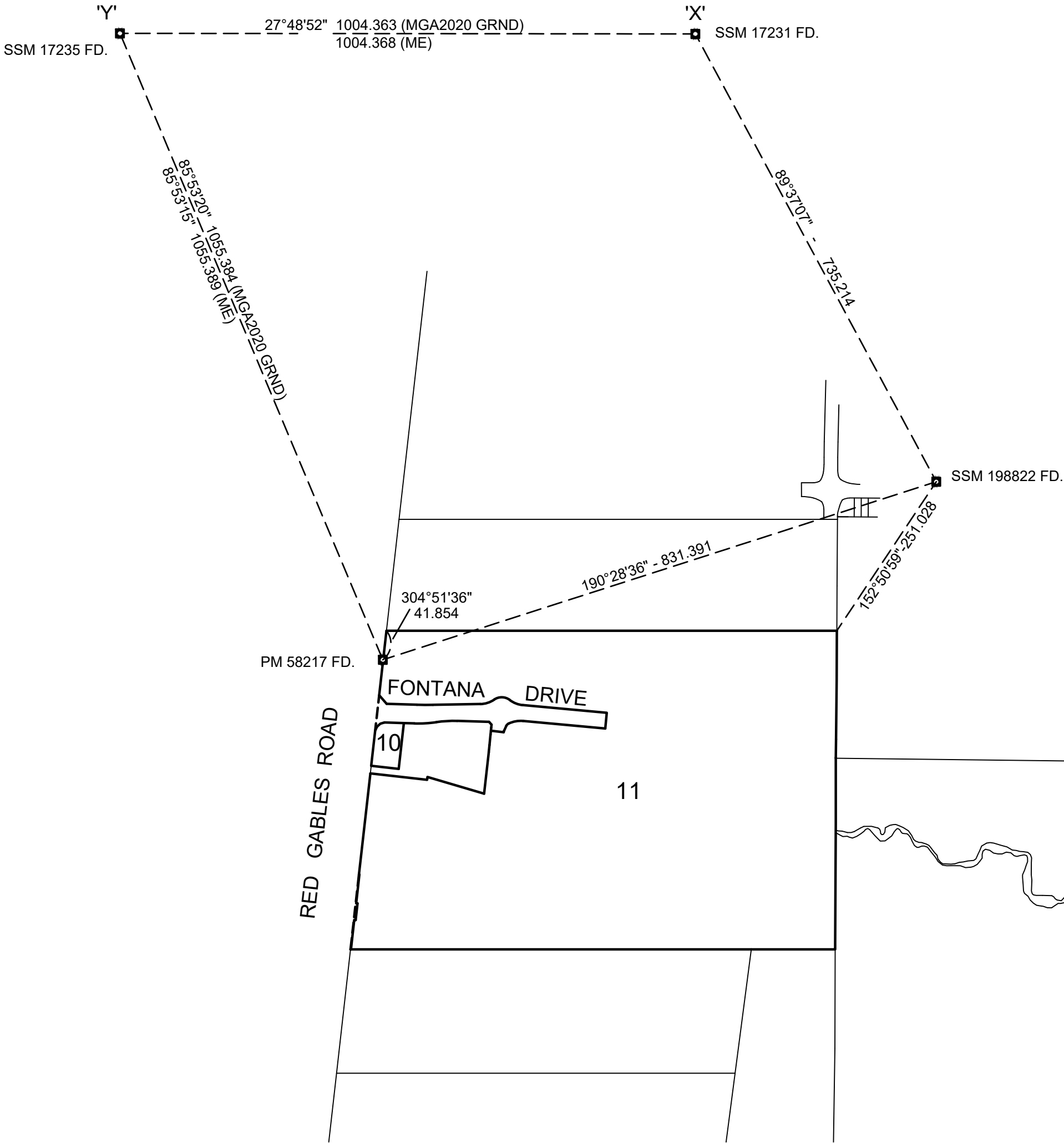
REFERENCE MARK SCHEDULE					
MARK	BEARING	DISTANCE	FROM	ORIGIN	STATE
J	216°12'55"	1.874	RMGIP	DP1237552	FD NOW GONE
K	217°42'24"	2.024	RMGIP	DP1237552	FD NOW GONE
L	225°49'48"	0.843	RMGIP	DP1261072	FOUND
M	199°24'29"	1.012	RMGIP	DP1261072	FOUND
O	92°55'54"	16.995	RMDH&W		PLACED
	118°19'42"	23.4	RMDH&W		PLACED
P	112°11'58"	15.049	RMDH&W		PLACED
	112°17'30"	21.471	RMDH&W		PLACED
Q	117°39'47"	6.652	RMDH&W		PLACED
	214°12'53"	7.58	RMDH&W		PLACED
R	185°25'04"	6.049	RMDH&W		PLACED
	218°42'04"	13.56	RMDH&W		PLACED
S	99°10'01"	4.684	RMDH&W		PLACED
	120°09'28"	19.196	RMDH&W		PLACED
T	307°34'14"	1.787	RMGIP		PLACED
U	329°53'59"	3.271	RMDH&W		PLACED
	331°49'35"	12.314	RMDH&W		PLACED


Electronically signed by me Ben Hawkins, affixed by me on 28/07/2021

Surveyor: GLENN BEASLEY Date of Survey: 17/12/2020 Surveyor's Ref: 23273-FE2	PLAN OF: SUBDIVISION OF LOT 2 DP1237552	LGA: THE HILLS SHIRE Locality: GABLES Subdivision No: Lengths are in metres. Reduction Ratio 1: 800	Registered	DP 1267849
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COORDINATE SCHEDULE						
MARK	M.G.A. CO-ORDINATES		CLASS	PU	METHOD	STATE
	EASTING	NORTHING				
SSM17231	305231.132	6278293.596	B	N/A	FROM SCIMS	FOUND
SSM17235	304762.463	6277405.224	B	0.02	FROM SCIMS	FOUND
PM58217	305815.189	6277480.891	D	N/A	FROM SCIMS	FOUND
SSM198822	305966.4	6278298.5	E	N/A	FROM SCIMS	FOUND
DATE OF SCIMS COORDINATES: 9/12/2020 MGA ZONE: 56 MGA DATUM: GDA2020 COMBINED SCALE FACTOR 1.000055						




Electronically signed by me Ben Hawkins, affixed by me on 28/07/2021

Surveyor: GLENN BEASLEY
Date of Survey: 17/12/2020
Surveyor's Ref: 23273-FE2

PLAN OF:
SUBDIVISION OF LOT 2 DP1237552

LGA: THE HILLS SHIRE
Locality: GABLES
Subdivision No:
Lengths are in metres. Reduction Ratio 1: 6000

Registered

DP 1267849