

GHD Pty Ltd | ABN 39 008 488 373

180 Lonsdale Street, Level 9 Melbourne, Victoria 3000, Australia

 $\textbf{T}\ 61\mbox{-}3\mbox{-}8687\ 8000\ |\ \textbf{F}\ 8687\ 8522\ |\ \textbf{E}\ melmail@ghd.com}\ |\ \textbf{ghd.com}\ |$

Printed date	7/09/2021 3:42:00 PM
Last saved date	07 September 2021
File name	https://projectsportal.ghd.com/sites/pp17_04/vpaardenpublicspaces/_layouts/15/DocIdRedir.aspx?ID =12544116-64476-29
Author	Luke Morrison
Project manager	Luke Morrison
Client name	Victorian Planning Authority
Project name	VPA - Arden Public Spaces design and costs
Document title	Arden Transport Precinct Public Spaces Design and Costing Report
Revision version	Rev 2
Project number	12544116

Document status

Status	Revision	Author	Reviewer		Approved for issue			
Code			Name	Signature	Name	Signature	Date	
Final	0	L Morrison	L Morrison		M Whalen		03/05/21	
Final	1	L Morrison	L Morrison		M Whalen		02/17/21	
Final	2	L Morrison	L Morrison	L Morrison*	M Whalen	M Whalen*	07/09/21	

© GHD 2021

Contents

1.	Intro	Introduction						
	1.1	Purpose of this report	1					
	1.2	Scope and limitations	1					
2.	Desig	gn Scope	2					
3.	3. Cost summary							
4.	6							
5 .	Stand	7						
6.	Assu	8						
Tal	ble ir	ndex						
Tabl	e 1	Scope summary	2					
Tabl	e 2	Cost Estimate Summary	4					
Tabl	e 3	6						

Appendices

Appendix A Drawings
Appendix B Cost Estimates
Appendix C Supplied Information

1. Introduction

1.1 Purpose of this report

GHD has been engaged by The Victorian Planning Authority (VPA) to prepare concept level designs and associated cost estimates for public realm projects and infrastructure projects to service the Arden Structure Plan area and inform the preparation of the draft Arden Development Contributions Plan (DCP).

1.2 Scope and limitations

This report: has been prepared by GHD for Victorian Planning Authority and may only be used and relied on by Victorian Planning Authority for the purpose agreed between GHD and Victorian Planning Authority as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Victorian Planning Authority arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility nor obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 6 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared the preliminary cost estimates set out in section 3 of this report ("Cost Estimate") using information reasonably available to the GHD employee(s) who prepared this report; and based on assumptions and judgments made by GHD as detailed within section 6 of this report.

The Cost Estimate has been prepared for the purpose of informing the preparation of the draft Arden Development Contributions Plan and must not be used for any other purpose.

The Cost Estimate is a preliminary estimate only. Actual prices, costs and other variables may be different to those used to prepare the Cost Estimate and may change. Unless as otherwise specified in this report, no detailed quotation has been obtained for actions identified in this report. GHD does not represent, warrant or guarantee that the [works/project] can or will be undertaken at a cost which is the same or less than the Cost Estimate.

2. Design Scope

GHD was engaged by the VPA to undertake an infrastructure study in the Arden Transport Precinct. The scope of the project was to:

- Prepare 2D concept designs for the:
 - Design of 14 road upgrades (RD-01 to RD-18)
 - Design of 13 intersection upgrades (IN-01 to IN-14)
 - Design of 4 bike paths (CC-02, CC-03, CC-04, CC-05)
 - Design of a signalised pedestrian crossing PED-01
 - Design of 9 open spaces (LP-01 to LP-06, SR-01, MPC-01, MPC-02)
- Develop a concept design for a pedestrian bridge (BR-01)
- Prepare a summary of costs associated with recoating of a high-pressure gas main

During the project several scope elements were amended, including addition of new scope, a summary table has been provided below which summarises the final scope of works depicted in the drawings included in Appendix A.

Table 1 Scope summary

Refernece	Project	Comments
RD-01	Macaulay Road - Boundary Road	
RD-02	Boundary Road between Macaulay Road and Henderson Street	
RD-03	Henderson Street - Gracie to Fogarty	
RD-04	Fogarty Street - Henderson to Arden	
RD-05	Arden Street- MPC to Fogarty	
RD-06	Arden Street between Fogarty Street and Laurens Street	
RD-07	Arden Street - Laurens to Munster	
RD-08	Fogarty Street - Arden to Barwise	
RD-09	Barwise Street - Fogarty to Laurens	
RD-10	Laurens Street - Arden to Barwise	
RD-11	Laurens Street - Queensberry to Fogarty	Road reserve width was reduced from original cross section by integrating proposed transport and vehicle lanes into a shared zone
RD-12	Laurens Street - Fogarty to Millar	Road reserve width was reduced from original cross section by integrating proposed transport and vehicle lanes into a shared zone
RD-13	Munster Terrace - Arden to Queensberry	
RD-14	Munster Terrace - Queensberry to Victoria	
IN-01	Macaulay Road and Boundary Road intersection	
IN-02	Boundary Road / Henderson Street / Gracie Street	
IN-03	Fogarty Street / Henderson Street	
IN-04	Fogarty Street / Arden Street	
IN-05	Arden Street / Laurens Street	
IN-06	Arden Street / Munster Terrace	
IN-07	Fogarty Street / Barwise Street	

Refernece	Project	Comments
IN-08	Fogarty Street / Queensberry Street	Updated intersection based on revised Laurens Street cross section
IN-09	Laurens Street / Queensberry Street	
IN-10	Munster Terrace / Queensberry Street	Updated intersection based on revised Laurens Street cross section
IN-11	Laurens Street / Fogarty Street	
IN-12	Munster Terrace / Victoria Street	Updated intersection based on revised Laurens Street cross section
IN-13	Arden Street / Langford Street	New project, design of a staggered T signalised intersection which will include PED-02 and include an extension of Langford Street Sth of Arden
CC-02	Western cycling Path – full extent of western precinct boundary from Laurens Street to Macaulay Road	
CC-03	North Melbourne Recreation Reserve,	
CC-04	Queensberry Street cycling path between Abbotsford Street and Laurens Street.	
CC-05	Victoria Street cycling path between Munster Terrace and Dryburgh Street	
PED-01	Signalised pedestrian crossing on Arden 100m west of Fogarty	
BR-01	Pedestrian bridge between Chelmsford Street and Straker Street	
LP-01	Fogarty Street (south of Arden Street) open space (LP-01), as per the 'Arden Open Spaces' document prepared by City of Melbourne	
LP-02	Laurens Street, the corner of Arden and Laurens Street (LP-02), as per the 'Arden Open Spaces' document prepared by City of Melbourne	
LP-03	Queensberry Street open space (LP-03), as per the 'Arden Open Spaces' document prepared by City of Melbourne	
LP-04	Arden Central Neighbourhood Open Space (LP-04), as per the 'Arden Open Spaces' document prepared by City of Melbourne	Scope of works area amended from Arden Open Spaces, Development Contributions Plan
LP-05	Arden North open space (DR-01), as per the 'Arden Open Spaces' document prepared by City of Melbourne	
LP-06	Arden Central western edge (DR-03), as per the 'Arden Open Spaces' document prepared by City of Melbourne	
SR-01	Arden North open space (DR-02), as per the 'Arden Open Spaces' document prepared by City of Melbourne	
MPC-01	Moonee Ponds Creek	
MPC-02	Moonee Ponds Creek	

3. Cost summary

GHD has prepared high level cost estimates for the road, intersection, bike path, open space, bridge and gas protection projects as per the plans shown in Appendix A.

A summary of the proposed development costs is captured below in Table 3 below. Individual project cost sheets have been included in Appendix B which provide further detail and splits between DCP and non-DCP cost items.

Each cost estimate consists of 2 components, Construction and Other Project Costs. Construction Cost provides for the delivery of the hard infrastructure whereas the Other Project Costs include items such as authority fees, design fees and contingencies.

Table 2 Cost Estimate Summary

Project	Construction Cost (excl GST)	Other Project Costs (excl GST)	Total (excl GST)
ROAD			
RD-01	\$ 2,677,000	\$ 1,292,000	\$ 3,969,000
RD-02	\$ 1,563,000	\$ 754,000	\$ 2,317,000
RD-03	\$ 2,308,000	\$ 1,114,000	\$ 3,422,000
RD-04	\$ 2,071,000	\$ 999,000	\$ 3,070,000
RD-05	\$ 1,629,000	\$ 786,000	\$ 2,415,000
RD-06	\$ 2,538,000	\$ 1,225,000	\$ 3,763,000
RD-07	\$ 1,446,000	\$ 698,000	\$ 2,144,000
RD-08	\$ 807,000	\$ 389,000	\$ 1,196,000
RD-09	\$ 1,919,000	\$ 926,000	\$ 2,845,000
RD-10	\$ 1,475,000	\$ 712,000	\$ 2,187,000
RD-11	\$ 2,029,000	\$ 979,000	\$ 3,008,000
RD-12	\$ 1,383,000	\$ 667,000	\$ 2,050,000
RD-13	\$ 2,963,000	\$ 1,430,000	\$ 4,393,000
RD-14	\$ 3,033,000	\$ 1,464,000	\$ 4,497,000
INTERSECTI	ION		
IN-01	\$ 1,704,000	\$ 822,000	\$ 2,526,000
IN-02	\$ 1,068,000	\$ 515,000	\$ 1,583,000
IN-03	\$ 1,374,000	\$ 663,000	\$ 2,037,000
IN-04	\$ 2,006,000	\$ 968,000	\$ 2,974,000
IN-05	\$ 1,407,000	\$ 679,000	\$ 2,086,000
IN-06	\$ 1,192,000	\$ 575,000	\$ 1,767,000
IN-07	\$ 552,000	\$ 266,000	\$ 818,000
IN-08	\$ 1,181,000	\$ 570,000	\$ 1,751,000
IN-09	\$ 1,375,000	\$ 664,000	\$ 2,039,000
IN-10	\$ 878,000	\$ 624,000	\$ 1,302,000
IN-11	\$ 931,000	\$ 449,000	\$ 1,380,000
IN-12	\$ 827,000	\$ 399,000	\$ 1,226,000
IN-13	\$ 3,250,000	\$ 1,588,000	\$ 4,818,000

Project	Const	ruction Cost (excl GST)	Other	Project Costs (excl GST)	Total	(excl GST)
CYCLE PATH					1	
CC-02	\$	359,000	\$	173,000	\$	532,000
CC-03	\$	180,000	\$	87,000	\$	267,000
CC-04	\$	137,000	\$	68,000	\$	203,000
CC-05	\$	74 ,000	\$	36,000	\$	110 ,000
PEDESTRIAN CROS	SING					
PED-01	\$	253,000	\$	122,000	\$	375 ,000
BRIDGE						
BR-01	\$	2,457,000	\$	1,357,500	\$	3,814,500
GAS RECOATING						
	\$	13,970,000	\$	6,740,600	\$	20,710,600
OPEN SPACE						
LP-01	\$	1,924,000	\$	1,025,000	\$	2,949,000
LP-02	\$	928,000	\$	494,000	\$	1,422,000
LP-03	\$	5,796,000	\$	3,086,000	\$	8,882,000
LP-04	\$	3,164,000	\$	1,685,000	\$	4,849,000
LP-05	\$	6,975,000	\$	3,715,000	\$	10,690,000
LP-06	\$	4,866,000	\$	2,591,000	\$	7,457,000
SR-01	\$	15,628,000	\$	8,322,000	\$	23,950,000
MPC-01&02	\$	1,469,000	\$	782,000	\$	2,251,000

4. Supplied information

Table 4 provides a summary of information provided by the VPA including drawings, reports and other sources of information that has informed GHD during the preparation of the concept designs and cost estimated within this report. GHD has also been provided additional information verbally, digitally and through meetings that have been utilised in the preparation of this report.

Table 3 Summary of Supplied Information

Title	Author	Date
Arden Public Realm Open Space Strategy	AECOM	April 2020
Arden Open Spaces, Development Contributions Plan (RFQ Version)	City of Melbourne	November 2020
Arden Macaulay Precinct Working Drainage Strategy	Engeny Water Management	19 June 2020
Arden Vision	Victorian Planning Authority	2018
Draft Arden Structure Plan	Victorian Planning Authority, City of Melbourne	June 2020
Arden and Macaulay Precinct – IWM Strategy	Rain Consulting	September 2020
Moonee Ponds Creek Trail & Open Spaces, Development Contributions Plan (RFQ Version)	City of Melbourne	December 2020
Docklands Design and Construction Standards	City of Melbourne	June 2013
Arden Macaulay Precinct Stages 1 & 2	Engeny Water Management	February 2016

5. Standards

The following standards were used for the preparation of the road and intersection concept designs:

- Austroads Guide to Road Design (AGRD) Part 3: Geometric Design
- Austroads Guide to Road Design (AGRD) Part 4: Intersections and Crossings General
- Austroads Guide to Road Design (AGRD) Part 4A: Unsignalised and Signalised Intersections
- Austroads Guide to Road Design (AGRD) Part 6A: Pedestrian and Cyclist Paths
- Austroads Guide to Road Design (AGRD) Part 5B: Drainage Open Channels, Culverts and
- Floodways
- VicRoads Supplement to the Austroads Guide to Road Design: Part 3 Geometric Design
- VicRoads Supplement to the Austroads Guide to Road Design: Part 3 Geometric Design
- VicRoads Supplement to the Austroads Guide to Road Design: Part 4 Intersections & Crossings –
- VicRoads Supplement to the Austroads Guide to Road Design: Part 6A Pedestrian and Cyclist Paths
- VicRoads Traffic Engineering Manual Volume 2 Chapter 16: Longitudinal Lines
- VicRoads Traffic Engineering Manual Volume 2 Chapter 17: Transverse Lines
- VicRoads Road Design Note RDN03-07 Raised Safety Platforms (RSPs)
- CoM Bike Lane Design Guidelines
- CoM Engineering Standard Drawings
- CoM Design Standards
- Docklands Design and Construction Standards June 2013
- AS2890.05 On-street Parking
- AS1742.10 Pedestrian control and protection
- AS1742.12 Bus, Transit and Truck lanes

6. Assumptions

GHD has made a number of assumptions with the preparation of the concept designs and cost estimates contained within this report as summarised below.

- All soil has been assumed to be contaminated and classed as Category C for disposal in accordance with EPA guidelines
- Cross sections are based on the sections detailed in the Draft Arden structure plan and updated as per direction from VPA
- All civil works are completed in accordance with City of Melbourne Technical Specification Civil Works,
 September 2019
- Landscape works are completed in accordance with Docklands Design and Construction Standards Public Infrastructure Works June 2013
- Bluestone kerbs are in accordance with CoM standard 1P 50401A
- Pavement makeup is Detail 2 from CoM standard 1P 50405A
- Transmission pipeline works are limited to pipeline recoating with a 2 layer fusion bonded epoxy coating and the installation of a protection slab in accordance with APA drawing S91-7-3 Standard – Protection - Concrete Slab Installation – High Pressure Pipelines – Details
- Cost Estimates assume a tradition lump sum competitively tendered procurement method.
- The rates used in the cost estimates are based on recent project data and benchmarked rates for concept cost estimates for projects of a similar nature in the Melbourne region.

Appendices

Appendix A Drawings

VICTORIA PLANNING AUTHORITY



ARDEN URBAN RENEWAL PRECINCT PUBLIC SPACES - DESIGN AND COSTING

12544116

DRAWING LIST

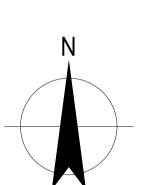
31-36710-C001

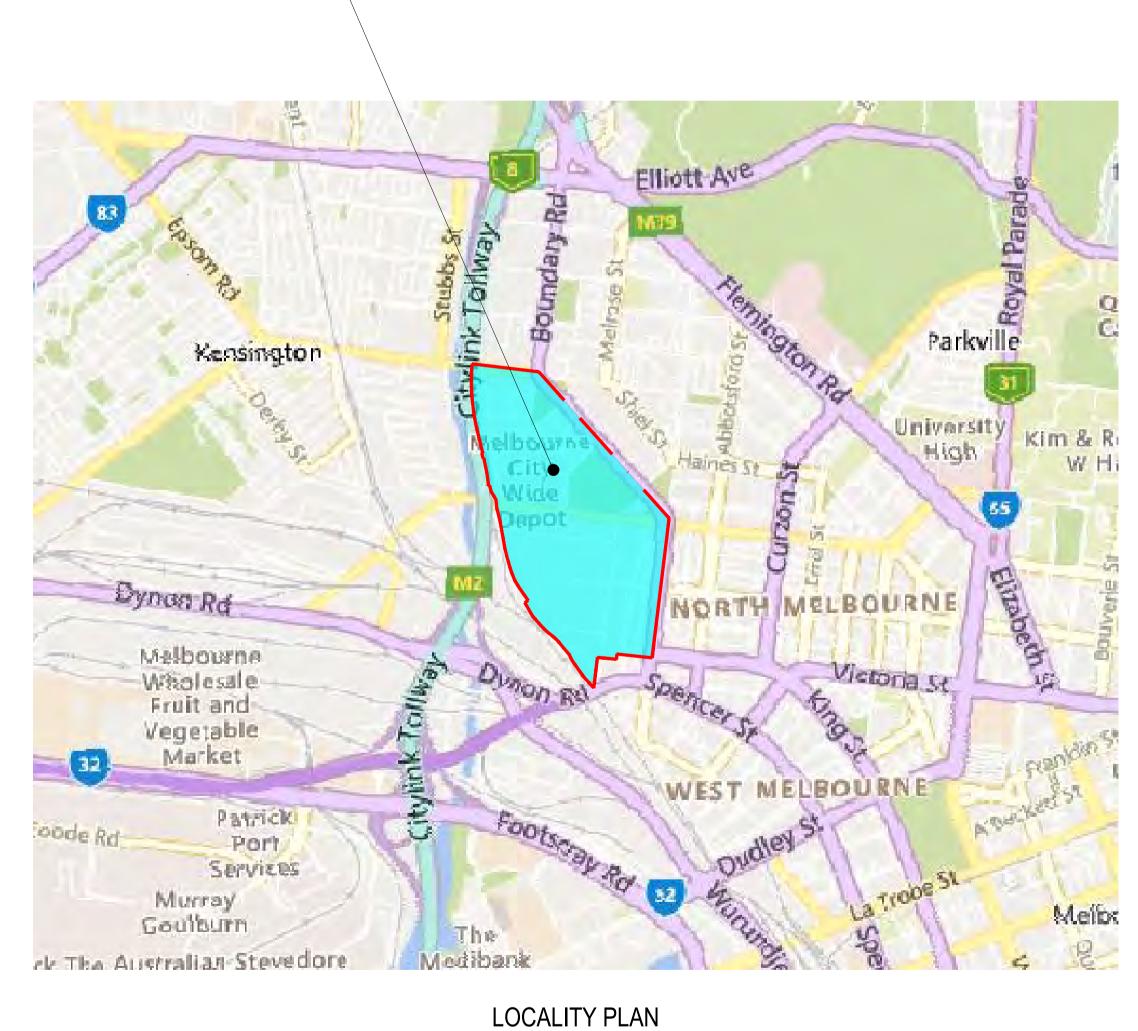
31-36710-C003

31-36710-C010

DRAWING TITLE

SITE LAYOUT & KEY PLAN





31-36710-C011 ROAD CROSS SECTIONS - SHEET 2 OF 9 31-36710-C012 ROAD CROSS SECTIONS - SHEET 3 OF 9 31-36710-C013 ROAD CROSS SECTIONS - SHEET 4 OF 9 31-36710-C014 ROAD CROSS SECTIONS - SHEET 5 OF 9 ROAD CROSS SECTIONS - SHEET 6 OF 9 ROAD CROSS SECTIONS - SHEET 7 OF 9 31-36710-C016 31-36710-C017 ROAD CROSS SECTIONS - SHEET 8 OF 9 ROAD CROSS SECTIONS - SHEET 9 OF 9 31-36710-C018 31-36710-C101 ROAD LAYOUT PLAN - SHEET 1 OF 9 31-36710-C102 ROAD LAYOUT PLAN - SHEET 2 OF 9 31-36710-C103 ROAD LAYOUT PLAN - SHEET 3 OF 9 31-36710-C104 ROAD LAYOUT PLAN - SHEET 4 OF 9 31-36710-C105 ROAD LAYOUT PLAN - SHEET 5 OF 9 31-36710-C106 ROAD LAYOUT PLAN - SHEET 6 OF 9 31-36710-C107 ROAD LAYOUT PLAN - SHEET 7 OF 9 31-36710-C108 ROAD LAYOUT PLAN - SHEET 8 OF 9 31-36710-C109 ROAD LAYOUT PLAN - SHEET 9 OF 9 31-36710-C201 INTERSECTION LAYOUT PLAN - MACAULAY RD / BOUNDARY RD INTERSECTION LAYOUT PLAN - BOUNDARY RD / HENDERSON ST / 31-36710-C202 **GRACIE ST** 31-36710-C203 INTERSECTION LAYOUT PLAN - FOGARTY ST / HENDERSON ST

INTERSECTION LAYOUT PLAN - FOGARTY ST / ARDEN ST

person or for any other purpose

TITLE SHEET, LOCALITY PLAN AND DRAWING LIST

ROAD CROSS SECTIONS - SHEET 1 OF 9

DRAWING TITLE 31-36710-C205 INTERSECTION LAYOUT PLAN - ARDEN ST / LAURENS ST 31-36710-C206 31-36710-C207 31-36710-C208 INTERSECTION LAYOUT PLAN - MUNSTER TERRACE 31-36710-C209 QUEENSBERRY ST 31-36710-C210 31-36710-C211 INTERSECTION LAYOUT PLAN - MUNSTER TERRACE / VICTORIA ST 31-36710-C212 INTERSECTION LAYOUT PLAN - LAURENS ST / MILLER ST 31-36710-C214 INTERSECTION LAYOUT PLAN - ARDEN ST / LANGFORD ST 31-36710-C301 CYCLING PATH LAYOUT PLAN - SHEET 1 OF 9 31-36710-C302 CYCLING PATH LAYOUT PLAN - SHEET 2 OF 9 31-36710-C303 CYCLING PATH LAYOUT PLAN - SHEET 3 OF 9 31-36710-C304 CYCLING PATH LAYOUT PLAN - SHEET 4 OF 9 31-36710-C305 CYCLING PATH LAYOUT PLAN - SHEET 5 OF 9 31-36710-C306 CYCLING PATH LAYOUT PLAN - SHEET 6 OF 9 31-36710-C307 CYCLING PATH LAYOUT PLAN - SHEET 7 OF 9 31-36710-C308 CYCLING PATH LAYOUT PLAN - SHEET 8 OF 9 31-36710-C309 CYCLING PATH LAYOUT PLAN - SHEET 9 OF 9 31-36710-C401 PEDESTRIAN IMPROVEMENT PLAN- SHEET 1 OF 2 31-36710-C402 PEDESTRIAN IMPROVEMENT PLAN - SHEET 2 OF 2 31-36710-C501

BRIDGE LAYOUT PLAN

DRAWING LIST

PRELIMINARY

Α	PRELIMINARY ISSUE	JB	LM	MW	26.02.21
No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job	Project	Date

SITE WORKS





31-36710-C204

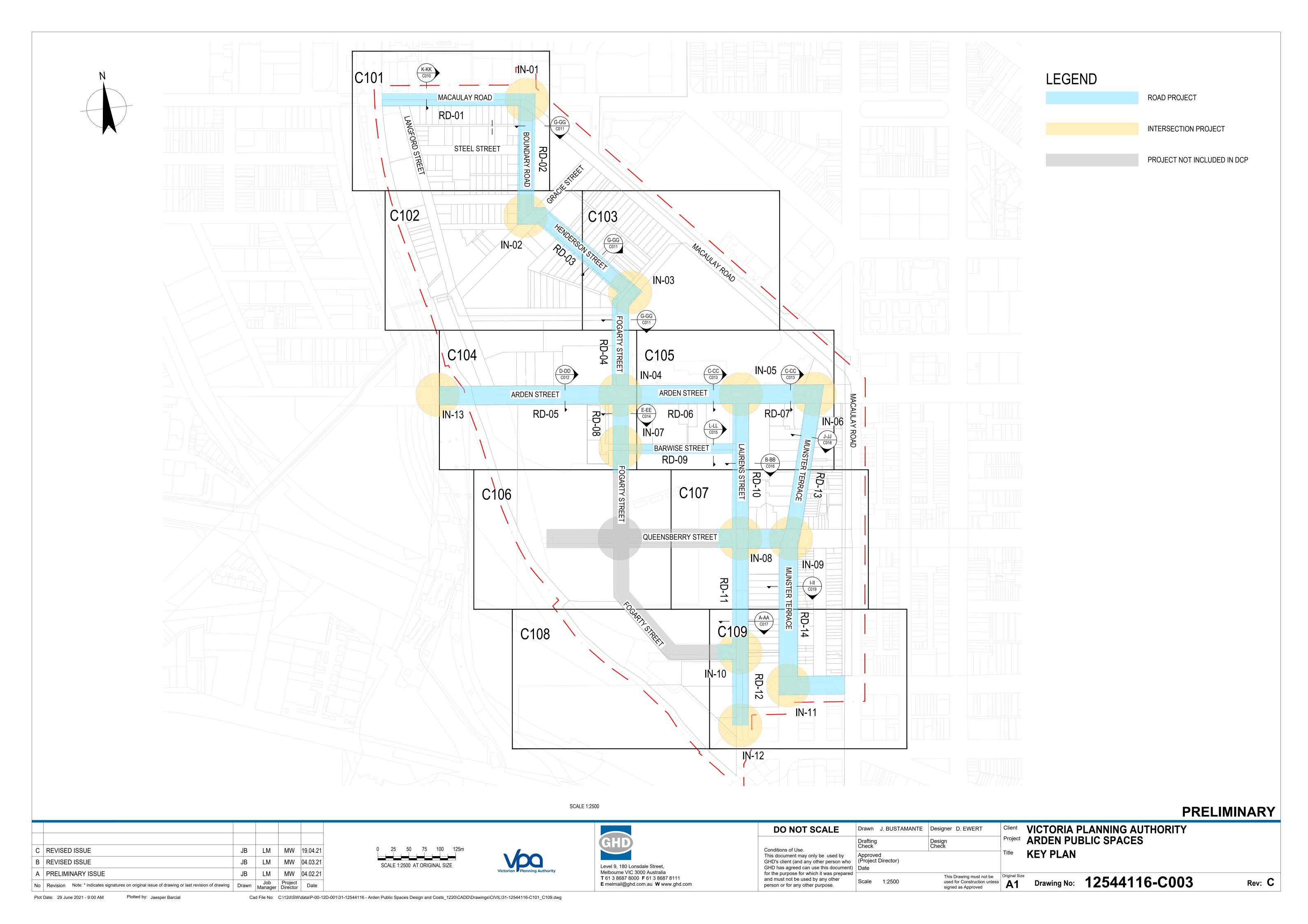
	DO NOT SCALE	Drawn	J. BUSTAMANTE	Designer D. EWERT	Client
	Conditions of Use.	Drafting Check		Design Check	Project
	This document may only be used by GHD's client (and any other person who	Approved (Project I			Title
	GHD has agreed can use this document)	Date			
	for the purpose for which it was prepared and must not be used by any other			This Drawing must not be	Original Size
	and must not be used by any other	Scale	AS SHOWN	used for Construction unless	A 4

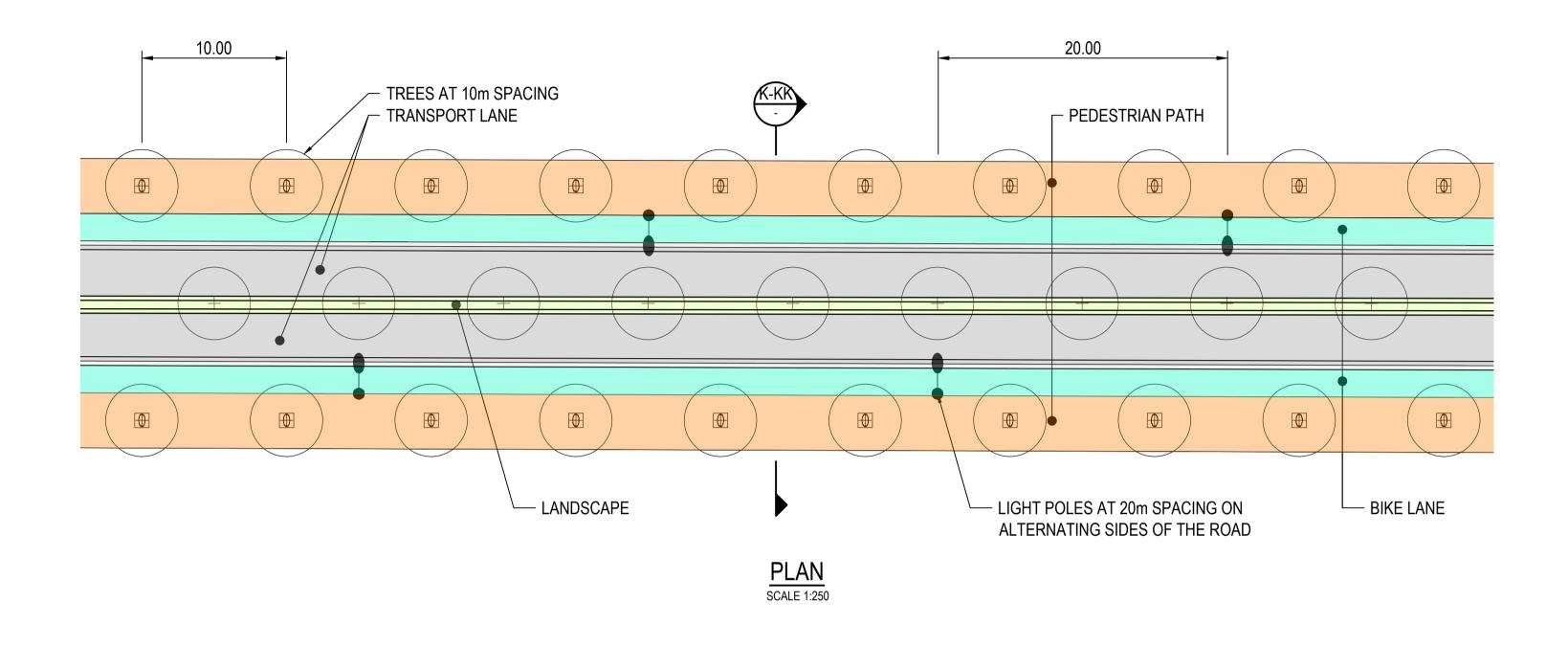
signed as Approved

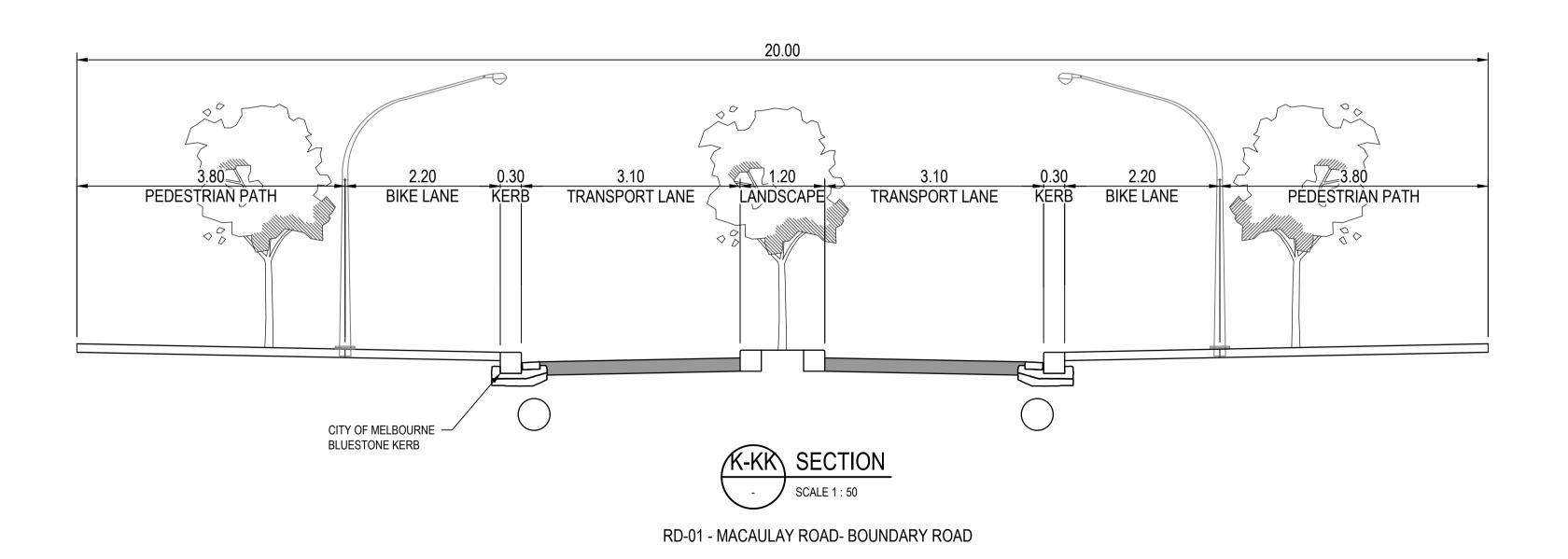
VICTORIA PLANING AUTHORITY ARDEN PUBLIC SPACES TITLE SHEET, LOCALITY PLAN & DRAWING LIST

Drawing No: 12544116-C001

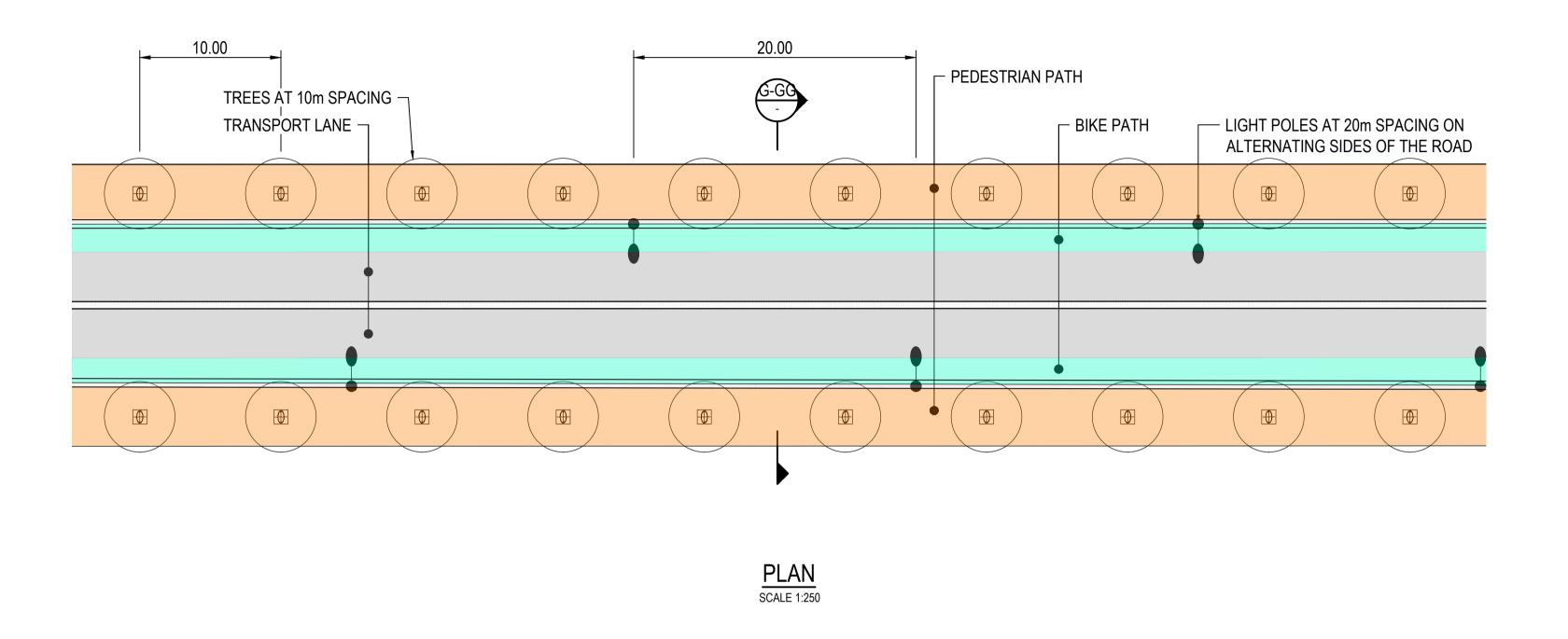
Rev: A

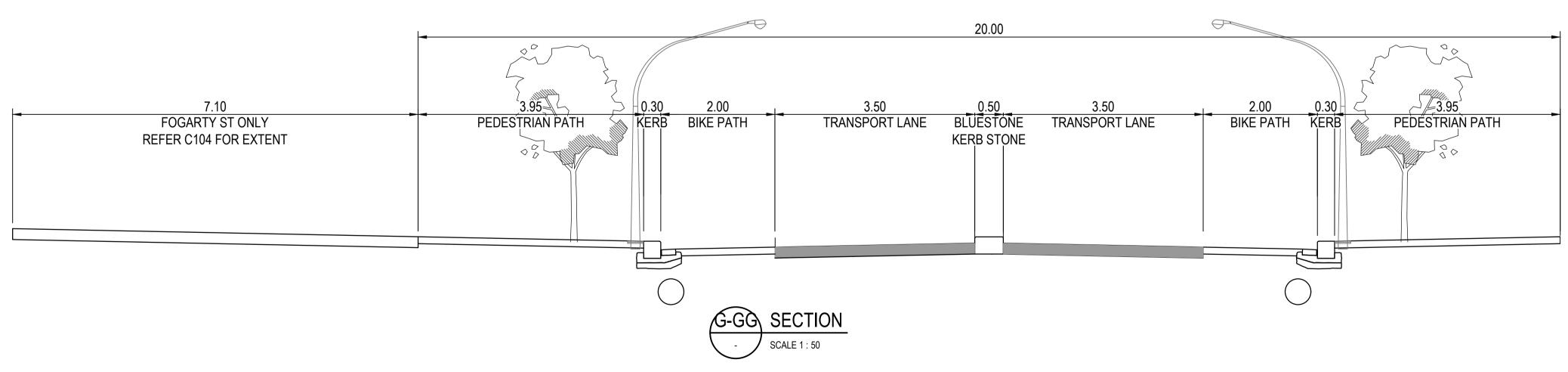






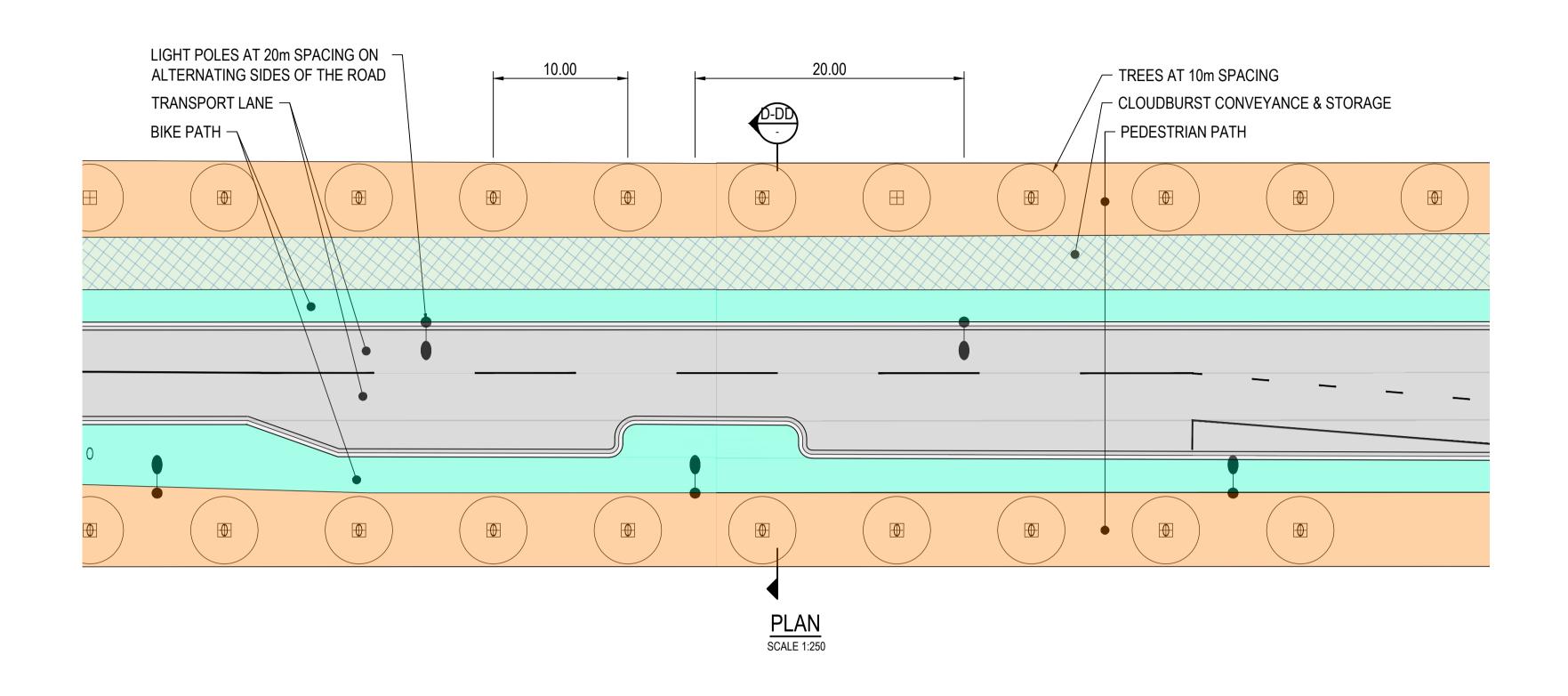
			0 2.5 5 7.5 10 12.5m			DO NOT SCALE	Drawn J. BUSTAMAN	TE Designer D. EWERT		/ICTORIA PLANNING AUTHORITY	
			0 2.5 5 7.5 10 12.5111		GHD		Drafting Check	Design Check	Project /	ARDEN PUBLIC SPACES	
UR UNDER REVISION - FOR INTERNAL GHD USE ONLY			SCALE 1:250 AT ORIGINAL SIZE	- 1		Conditions of Use. This document may only be used by	Approved	Onook	Title	ROAD CROSS SECTIONS	
B REVISED ISSUE	JB LM	MW 04.03.21	0 0.5 1.0 1.5 2.0 2.5m	VPQ	Level 9, 180 Lonsdale Street,	GHD has agreed can use this document)	(Project Director)			SHEET 1 OF 9	
A PRELIMINARY ISSUE	JB LM	MW 04.02.21		Victorian Planning Authority	Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	for the purpose for which it was prepared	Date	This Drawing must not be			
No Revision Note: * indicates signatures on original issue of drawing or last revision of or	drawing Drawn Job Manager	Project Date	SCALE 1:50 AT ORIGINAL SIZE		E melmail@ghd.com.au W www.ghd.com	person or for any other purpose.	Scale AS SHOWN	used for Construction unl signed as Approved	ess A1	Drawing No: 12544116-C010	Rev: UR

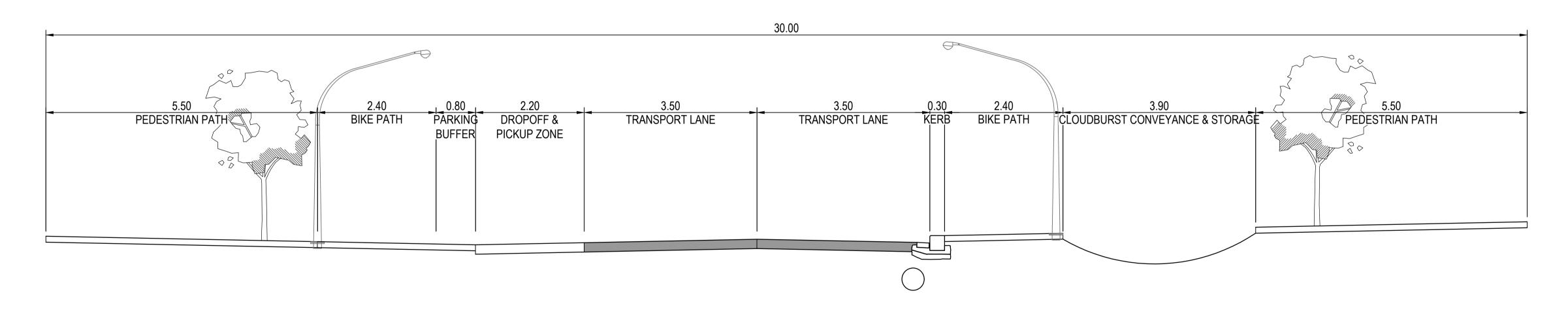




RD-02 - BOUNDARY ROAD BETWEEN MACAULAY ROAD AND HENDERSON STREET RD-03 - HENDERSON STREET BETWEEN GRACIE STREET AND FOGARTY STREET RD-04 - FOGARTY STREET BETWEEN HENDERSON STREET AND ARDEN STREET

			0 25 5 75 10 125m			DO NOT SCALE	Drawn J. BUSTAMANTE	Designer D. EWERT	Client VICTORIA PLANNING AUTHORITY	
			0 2.5 5 7.5 10 12.5111		GHD	0 111	Drafting Check	Design Check	Project ARDEN PUBLIC SPACES	
			SCALE 1:250 AT ORIGINAL SIZE	. 6-		Conditions of Use. This document may only be used by	Approved		Title ROAD CROSS SECTIONS	
B REVISED ISSUE	JB LM MW	04.03.21	0 0.5 1.0 1.5 2.0 2.5m	VPQ	Level 9, 180 Lonsdale Street,	GHD's client (and any other person who GHD has agreed can use this document)	(Project Director)		SHEET 2 OF 9	
A PRELIMINARY ISSUE	JB LM MW	04.02.21		Victorian Planning Authority	Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	for the purpose for which it was prepared and must not be used by any other	- Jane	This Drawing must not be	Original Size	
No Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn Job Project Manager Director	Date	SCALE 1:50 AT ORIGINAL SIZE		E melmail@ghd.com.au W www.ghd.com	person or for any other purpose.	Scale AS SHOWN	used for Construction unless signed as Approved	A1 Drawing No: 12544116-C011	Rev: UR

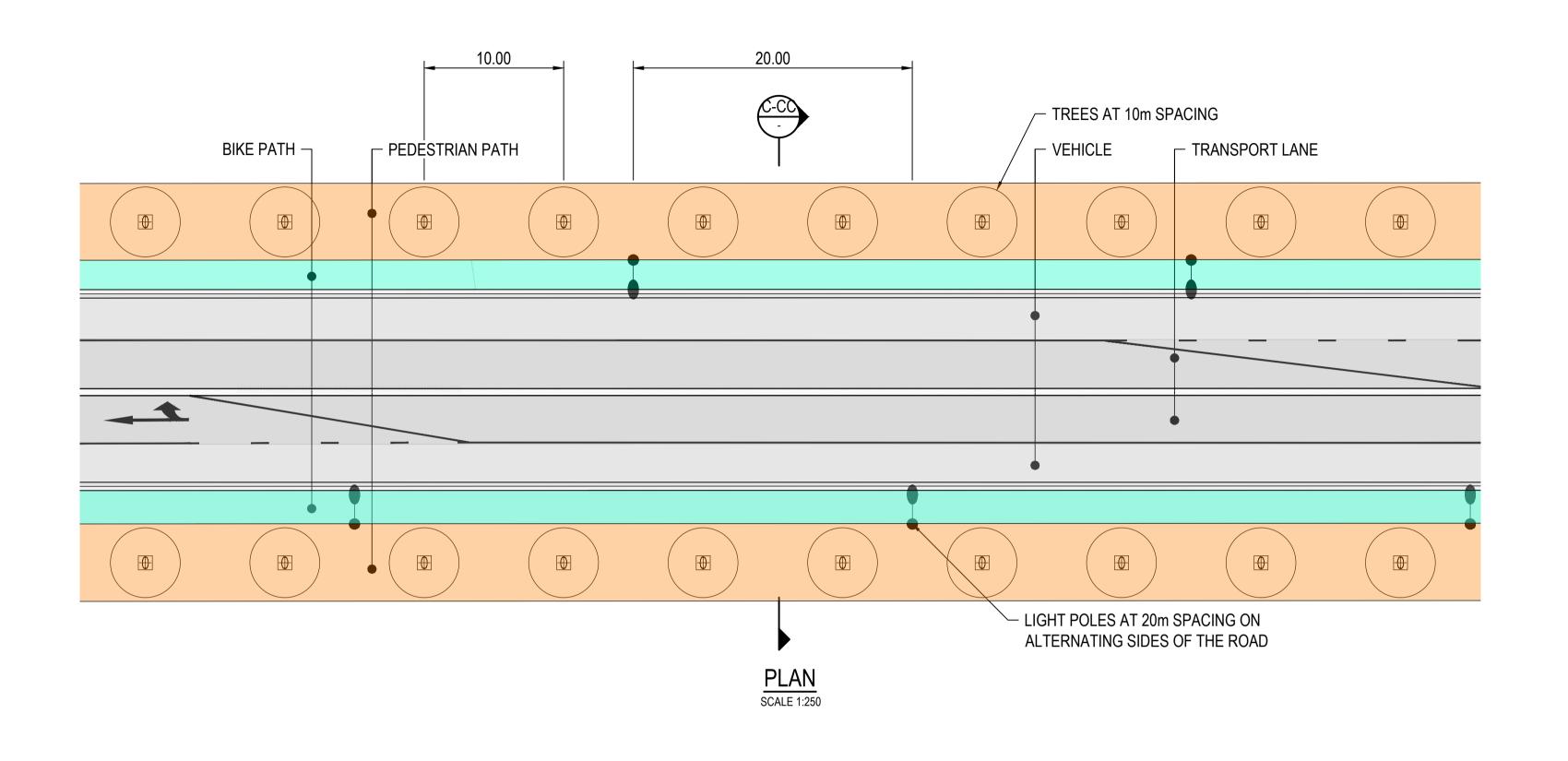


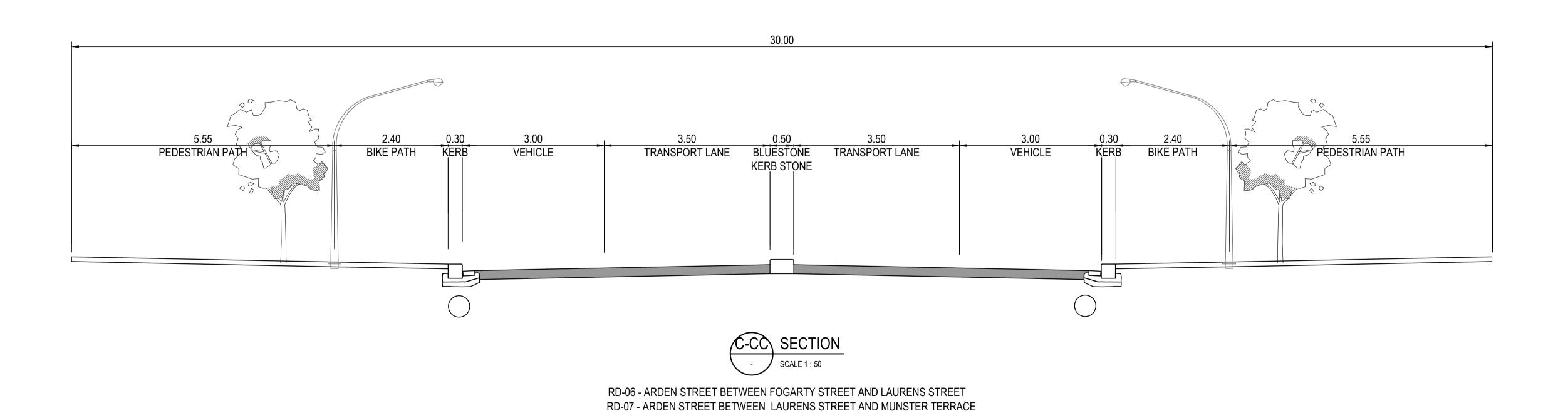




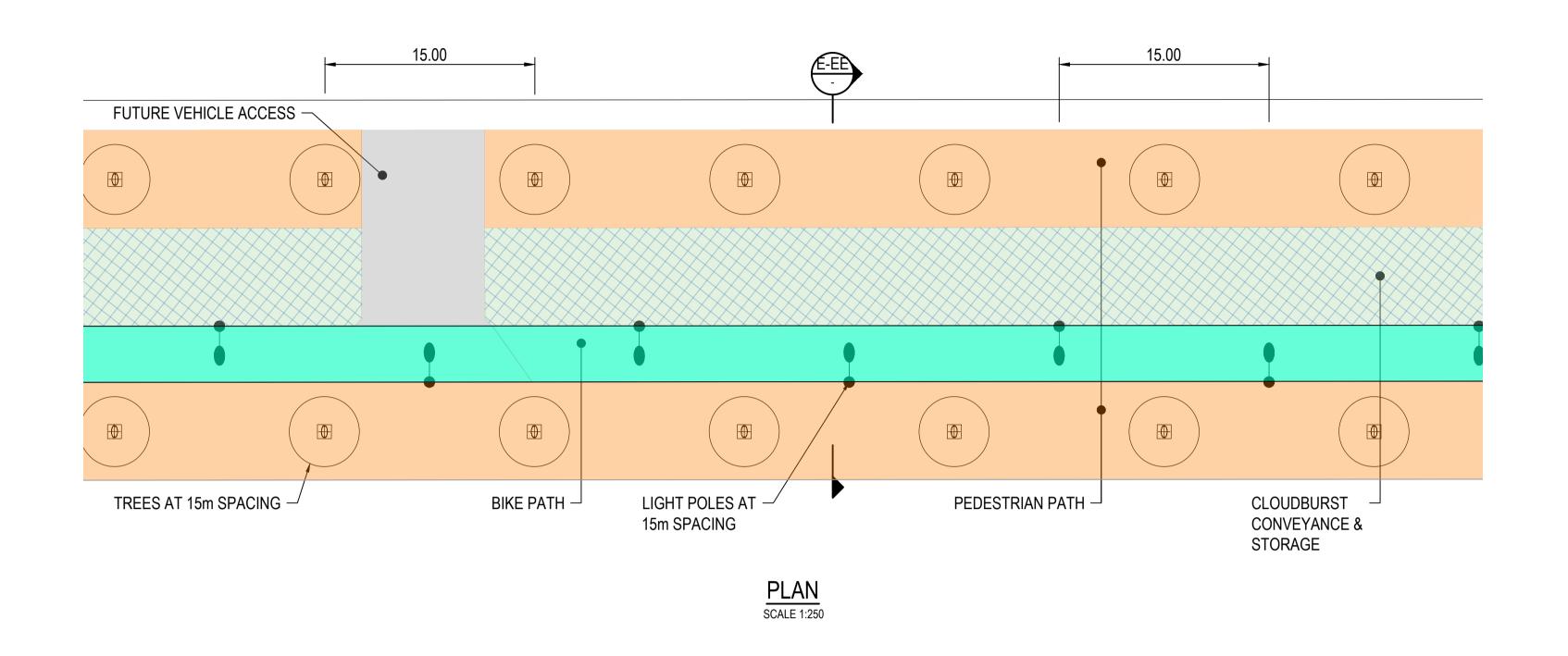
RD-05 - ARDEN STREET BETWEEN MOONEE PONDS CREEK AND FOGARTY STREET

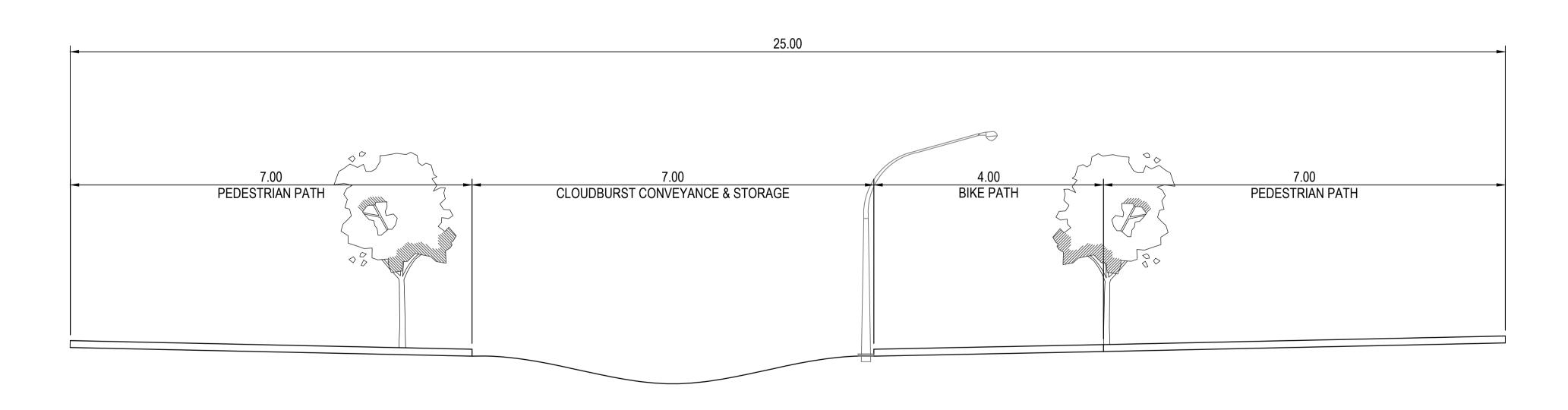
		0 25 5 75 10 125m		DO NOT SCALE Drawn J. BUSTAMANTE	VIOTORIA I EARTINITO AO ITIORITI	
			GHD	Conditions of Use	Design Check Project ARDEN PUBLIC SPACES	
B REVISED ISSUE	JB LM MW 04.03.21	SCALE 1:250 AT ORIGINAL SIZE		This document may only be used by GHD's client (and any other person who (Project Director)	Title ROAD CROSS SECTIONS SHEET 3 OF 9	
A PRELIMINARY ISSUE	JB LM MW 04.02.21	0 0.5 1.0 1.5 2.0 2.5m	Level 9, 180 Lonsdale Street, Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other	Original Size	
No Revision Note: * indicates signatures on original issue of drawing or last rev	vision of drawing Drawn Job Project Date	SCALE 1:50 AT ORIGINAL SIZE	E melmail@ghd.com.au W www.ghd.com	person or for any other purpose. Scale AS SHOWN	used for Construction unless signed as Approved A1 Drawing No: 12544116-C012	Rev: UR





			0 05 5 75 40 405			DO NOT SCALE	Drawn J. BUSTAMANTE	Designer D. EWERT	Client VICTORIA PLANNING AUTHORITY	
			0 2.5 5 7.5 10 12.5m		GHD	GHD Pty Ltd	Drafting Check	Design Check	Project ARDEN PUBLIC SPACES	
ļ	UR UNDER REVISION - FOR INTERNAL GHD USE ONLY		SCALE 1:250 AT ORIGINAL SIZE	. /		Conditions of Use. This document may only be used by	Approved	Clieck	Title ROAD CROSS SECTIONS	
	B REVISED ISSUE JB	LM MW 04.03.21	0 0.5 1.0 1.5 2.0 2.5m	VPQ	Level 9, 180 Lonsdale Street,	GHD has agreed can use this document)	(Project Director)		SHEET 4 OF 9	
	A PRELIMINARY ISSUE JB	LM MW 04.02.21		Victorian Planning Authority	Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	for the purpose for which it was prepared	Date	This Drawing must not be	Original Siza	
	No Revision Note: * indicates signatures on original issue of drawing or last revision of drawing Drawn	Job Project Date	SCALE 1:50 AT ORIGINAL SIZE		E melmail@ghd.com.au W www.ghd.com	person or for any other purpose.	Scale AS SHOWN	used for Construction unle	A1 Drawing No: 12544116-C013	Rev: UR

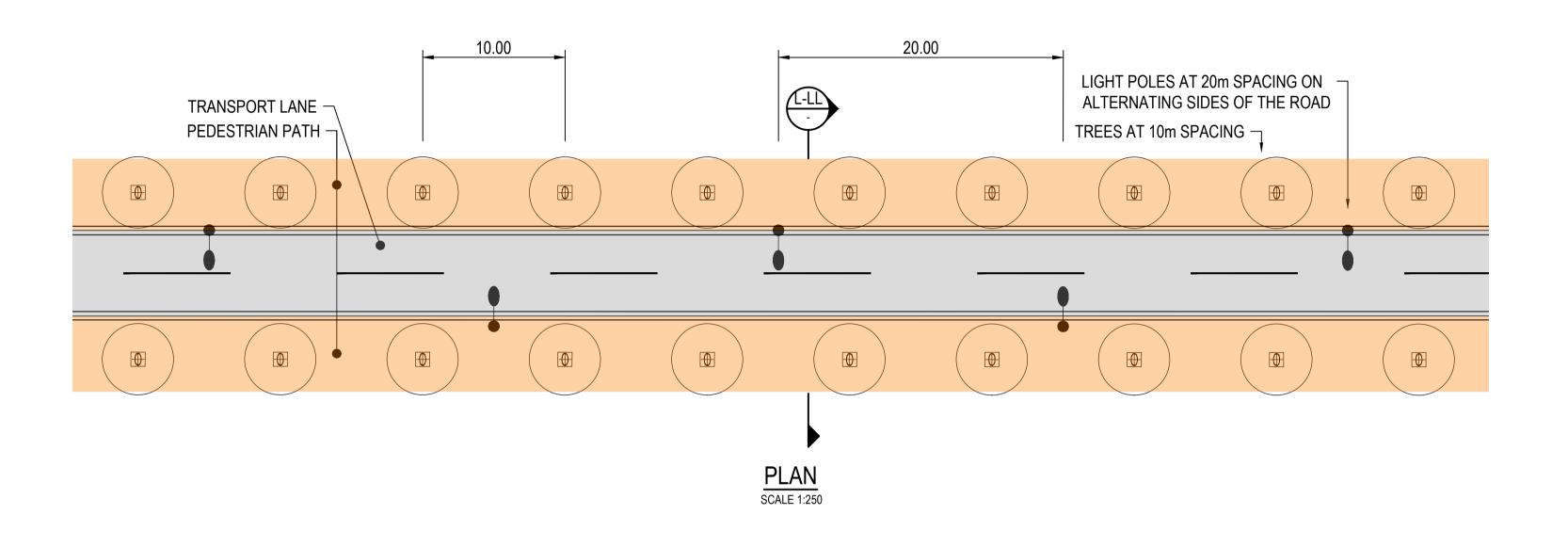


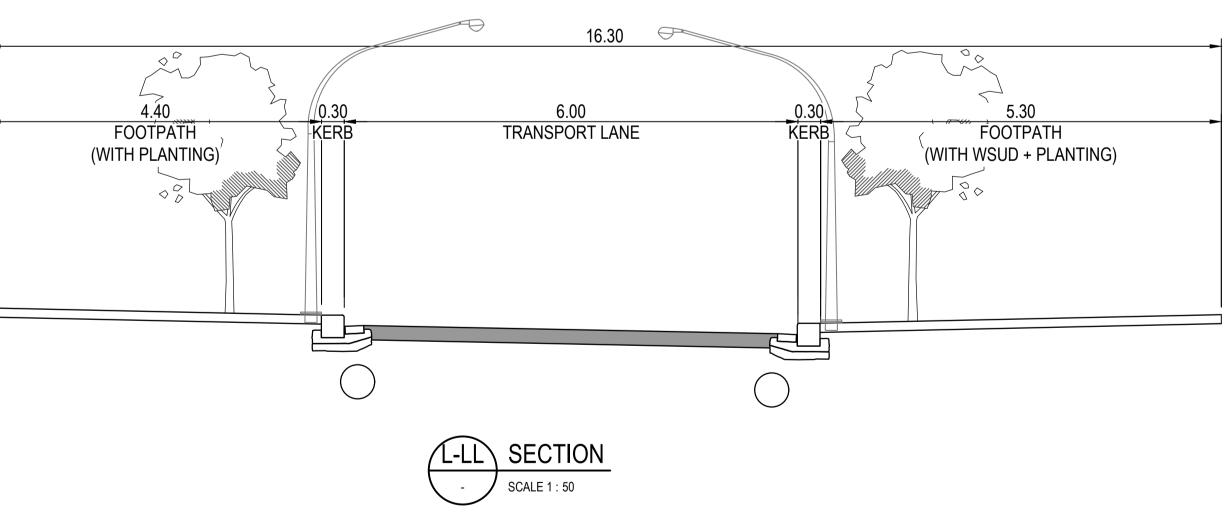




RD-08 - FOGARTY STREET BETWEEN ARDEN STREET AND BARWISE STREET

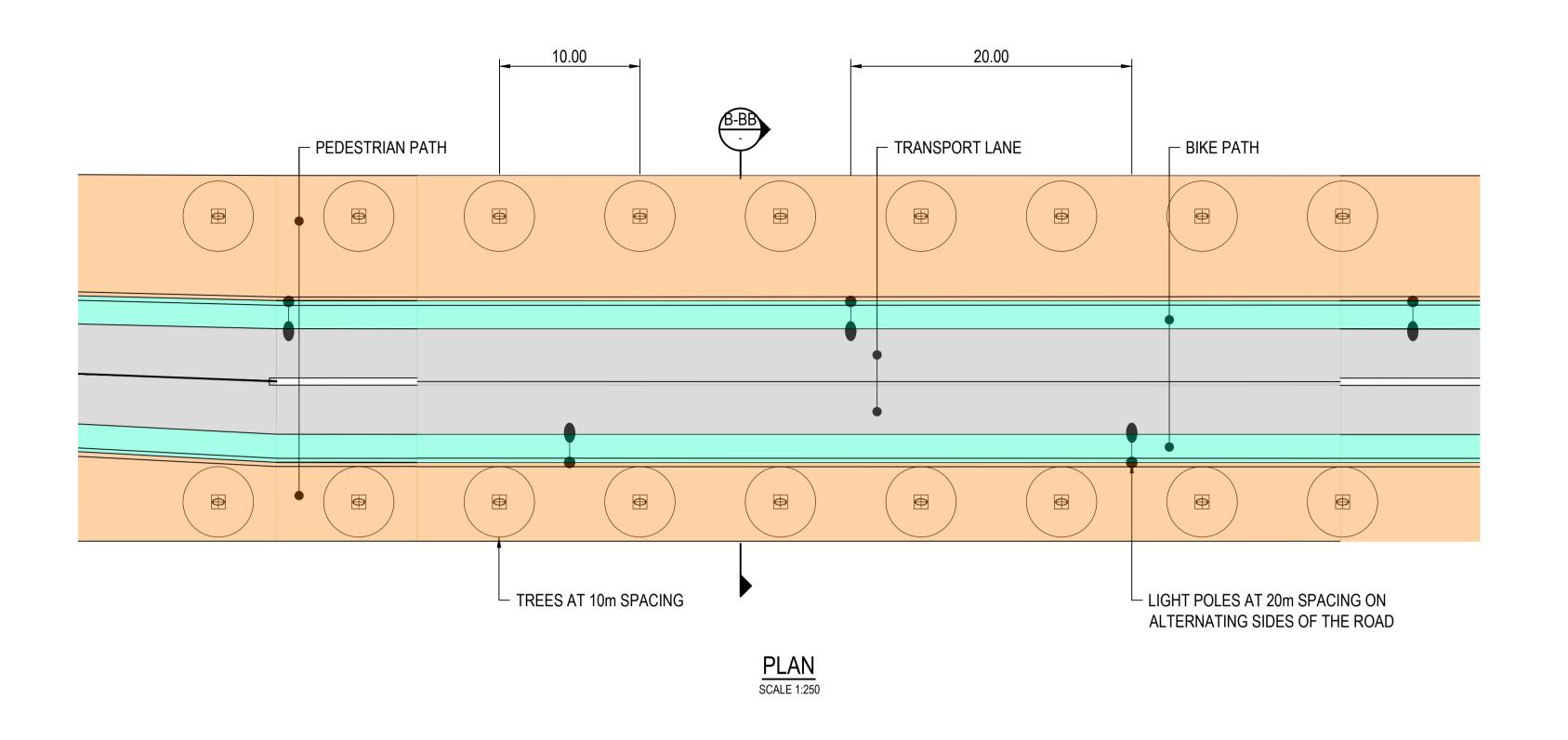
		0 25 5 75 10 125m			DO NOT SCALE	Drawn J. BUSTAMANTE	Designer D. EWERT		ICTORIA PLANNING AUTHORITY	
		2.5 5 7.5 10 12.5111		GHD		Drafting Check	Design Check		ARDEN PUBLIC SPACES	
		SCALE 1:250 AT ORIGINAL SIZE	160		Conditions of Use. This document may only be used by	Approved		Title R	ROAD CROSS SECTIONS	
B REVISED ISSUE	JB LM MW 0	04.03.21 0 0.5 1.0 1.5 2.0 2.5m	VDQ	Level 9, 180 Lonsdale Street,	GHD's client (and any other person who GHD has agreed can use this document)	(Project Director)		S	SHEET 5 OF 9	
A PRELIMINARY ISSUE	JB LM MW 0		Victorian Planning Authority	Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	for the purpose for which it was prepared and must not be used by any other	•	This Drawing must not be	Original Size		LID
No Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn Job Project Manager Director	Date SCALE 1:50 AT ORIGINAL SIZE		E melmail@ghd.com.au W www.ghd.com	person or for any other purpose.	Scale AS SHOWN	used for Construction unless signed as Approved	s A1	Drawing No: 12544116-C014	Rev: UR

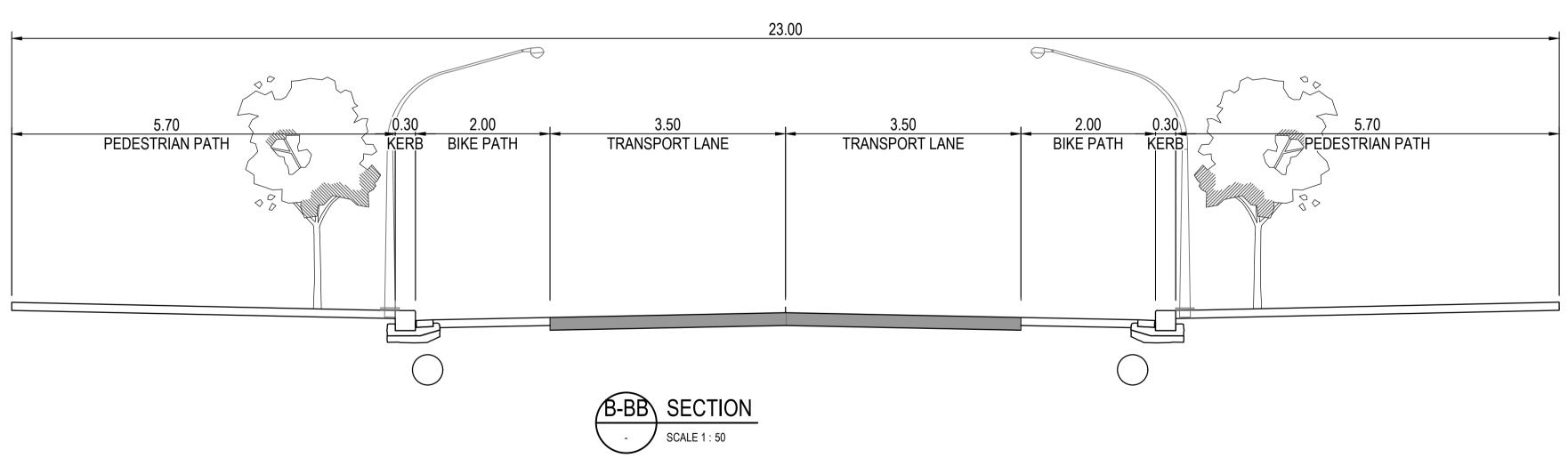




RD-09 - BARWISE STREET BETWEEN FOGARTY STREET AND LAURENS STREET

		0 2.5 5 7.5 10 12.5m			DO NOT SCALE	Drawn J. BUSTAMAN	E Designer D. EWERT		RIA PLANNING AUTHORITY	
				GHD	Conditions of the	Drafting Check	Design Check		I PUBLIC SPACES	
D DEVICED IOCULE	ID I M NAM 04 02 0	SCALE 1:250 AT ORIGINAL SIZE	160		This document may only be used by	Approved (Project Director)			CROSS SECTIONS	
B REVISED ISSUE A PRELIMINARY ISSUE	JB LM MW 04.03.2 JB LM MW 04.02.2	U	Victorian Planning Authority	Level 9, 180 Lonsdale Street, Melbourne VIC 3000 Australia	GHD has agreed can use this document) for the purpose for which it was prepared	Date		SHEET	6 OF 9	
No Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	lah Draiget	COALE 1:50 AT ODICINAL CIZE	victorium > Planning Authority	T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com.au W www.ghd.com	and must not be used by any other person or for any other purpose.	Scale AS SHOWN	This Drawing must not be used for Construction unle- signed as Approved		No: 12544116-C015	Rev: UR



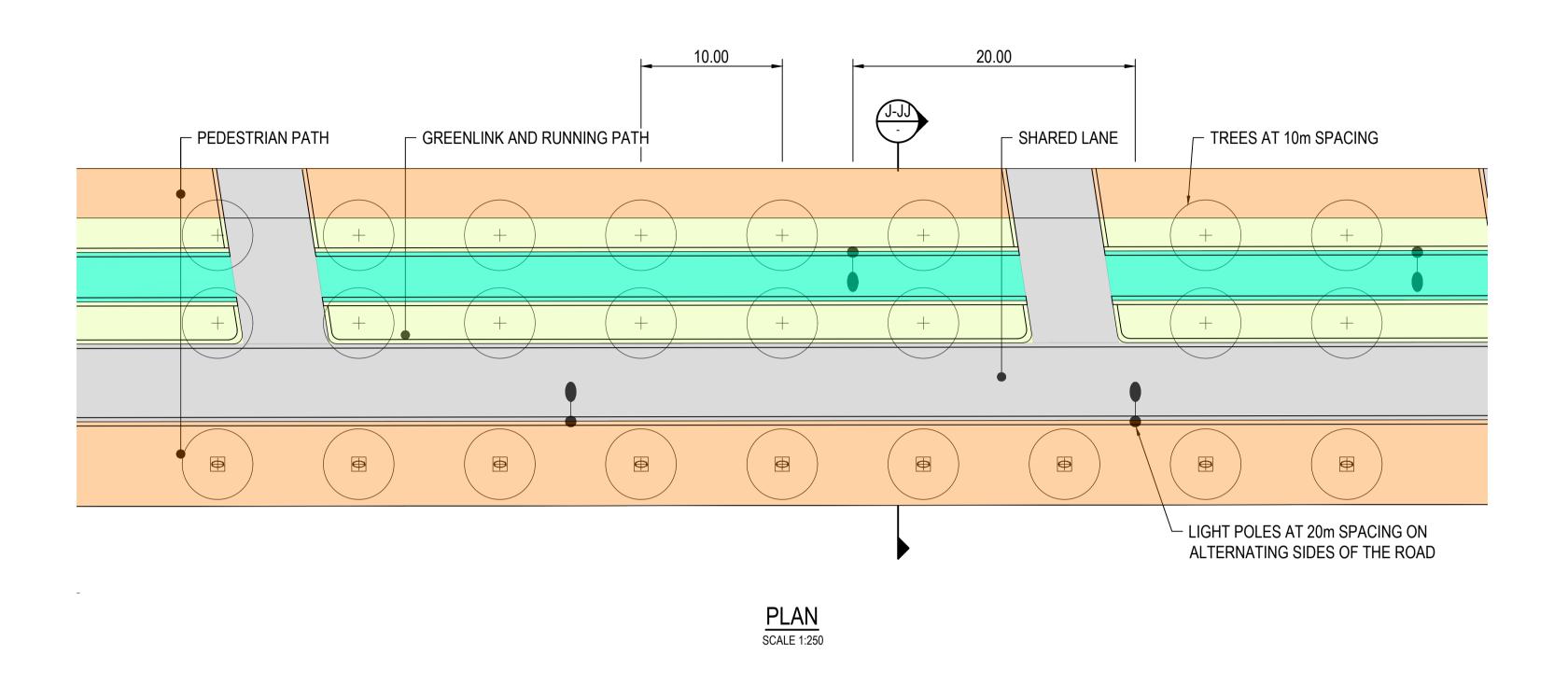


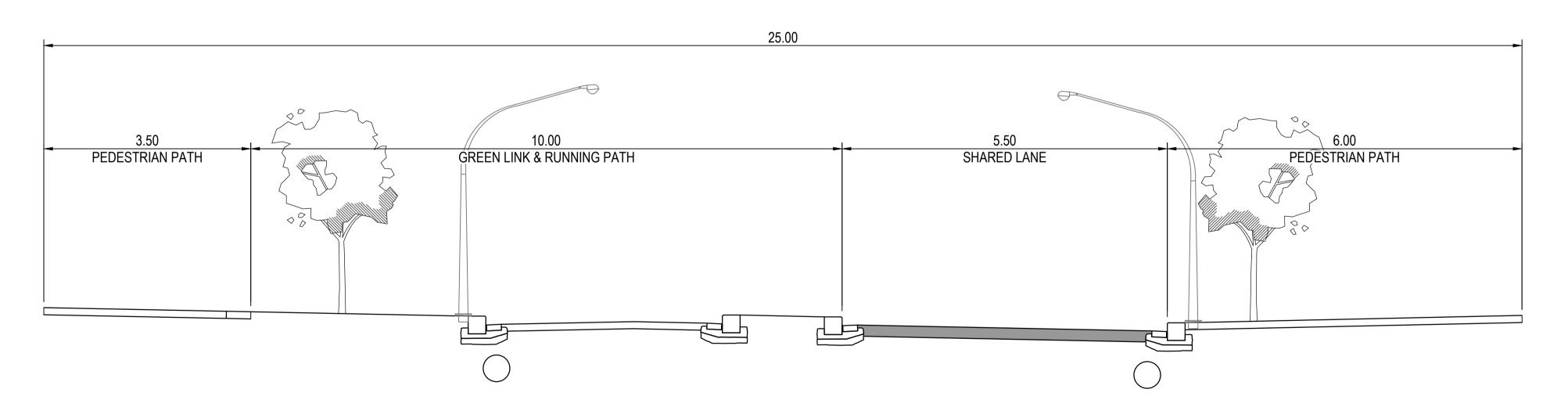
RD-10 - LAURENS STREET BETWEEN ARDEN STREET AND QUEENSBERRY STREET RD-11 - LAURENS STREET BETWEEN QUEENSBERRY STREET AND FOGARTY STREET RD-12 - LAURENS STREET BETWEEN FOGARTY STREET AND MILLER STREET

PRELIMINARY

Rev: UR

		0 2.5 5 7.5 10 12.5m		DO NOT SCALE Drawn J. BUSTAMANT	Designer D. EWERT	Client VICTORIA PLANNING AUTHORITY
			GHD	Drafting Check	Design Check	Project ARDEN PUBLIC SPACES
B REVISED ISSUE	JB LM MW 04.03.21	SCALE 1:250 AT ORIGINAL SIZE 0 0.5 1.0 1.5 2.0 2.5m	Level 9, 180 Lonsdale Street.	Conditions of Use. This document may only be used by GHD's client (and any other person who (Project Director)		Title ROAD CROSS SECTIONS SHEET 7 OF 9
A PRELIMINARY ISSUE	JB LM MW 04.02.21	Victorian	Planning Authority Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other	This Drawing must not be	
No Revision Note: * indicates signatures on original issue of drawing or last	t revision of drawing Drawn Job Project Date	SCALE 1:50 AT ORIGINAL SIZE	E melmail@ghd.com.au W www.ghd.com	person or for any other purpose. Scale AS SHOWN	used for Construction unle signed as Approved	A1 Drawing No: 12544116-C016

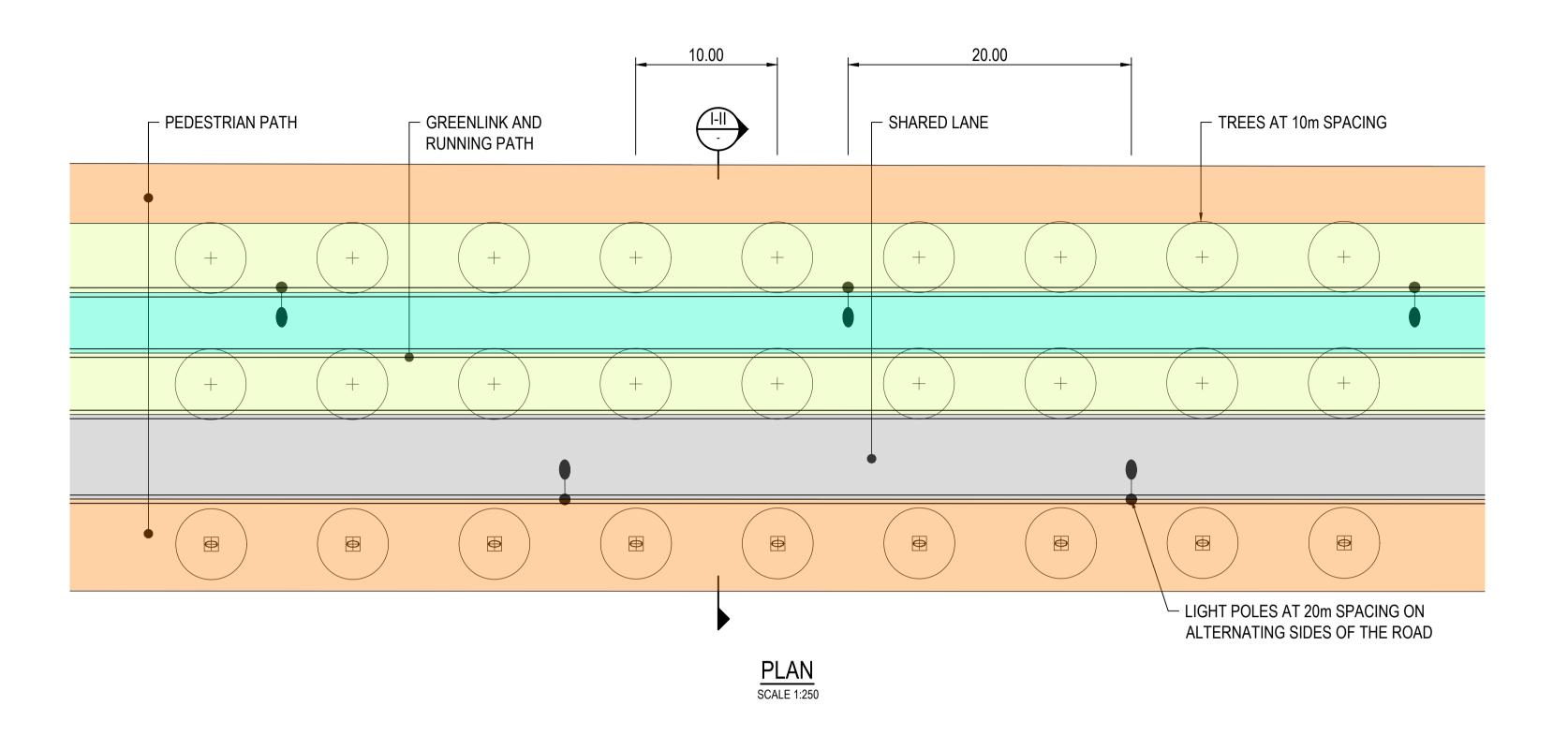


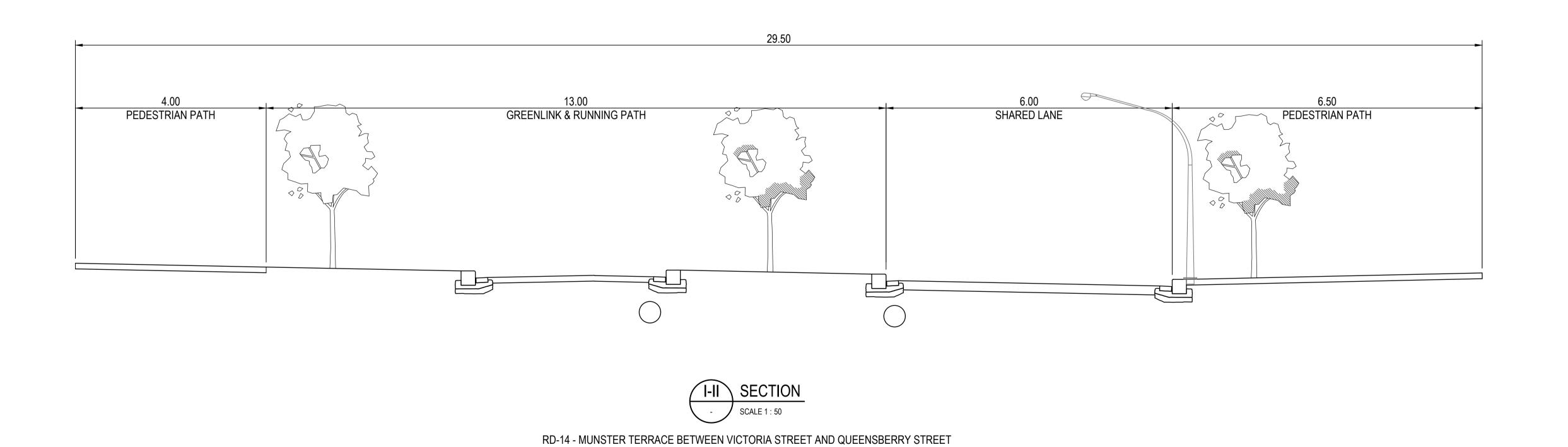




RD-13 - MUNSTER TERRACE BETWEEN ARDEN STREET AND QUEENSBERRY STREET

		0 25 5 75 10 125m		DO NOT SCALE Drawn J. BUSTAMANTE	VIOTORIATEARRING ACTIONITY	
			GHD	Conditions of Use	Design Check Project ARDEN PUBLIC SPACES	
B REVISED ISSUE	JB LM MW 04.03.21	SCALE 1:250 AT ORIGINAL SIZE		This document may only be used by GHD's client (and any other person who Approved (Project Director)	Title ROAD CROSS SECTIONS SHEET 8 OF 9	
A PRELIMINARY ISSUE	JB LM MW 04.02.21	0 0.5 1.0 1.5 2.0 2.5m	Level 9, 180 Lonsdale Street, Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	GHD has agreed can use this document) Date for the purpose for which it was prepared and must not be used by any other Sasta AS CHOWAL	Original Cine	
No Revision Note: * indicates signatures on original issue of drawing or last r	t revision of drawing Drawn Job Project Date	SCALE 1:50 AT ORIGINAL SIZE	E melmail@ghd.com.au W www.ghd.com	person or for any other purpose. Scale AS SHOWN	This Drawing must not be used for Construction unless signed as Approved A1 Drawing No: 12544116-C017	Rev: UR





			0 25 5 75 10 125m			DO NOT SCALE Drawn J. BUSTAI	MANTE Designer D. EWERT	1	ORIA PLANNING AUTHORITY	
			0 2.5 5 7.5 10 12.5111		GHD	Drafting Check	Design Check	Project ARD	EN PUBLIC SPACES	
			SCALE 1:250 AT ORIGINAL SIZE	. 6-		Conditions of Use. This document may only be used by Approved	I	Title ROA	D CROSS SECTIONS	
B REVISED ISSUE	JB LM MW	04.03.21	0 0.5 1.0 1.5 2.0 2.5m	VDQ	Level 9, 180 Lonsdale Street,	GHD's client (and any other person who GHD has agreed can use this document) Date			ET 9 OF 9	
A PRELIMINARY ISSUE	JB LM MW	04.02.21		Victorian Planning Authority	Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111	for the purpose for which it was prepared	This Drawing must not be	Original Size		
No Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	ng Drawn Job Project	Date	SCALE 1:50 AT ORIGINAL SIZE		E melmail@ghd.com.au W www.ghd.com	person or for any other purpose.	/N used for Construction unl signed as Approved	ess A1 Drav	wing No: 12544116-C018	Rev: UR

