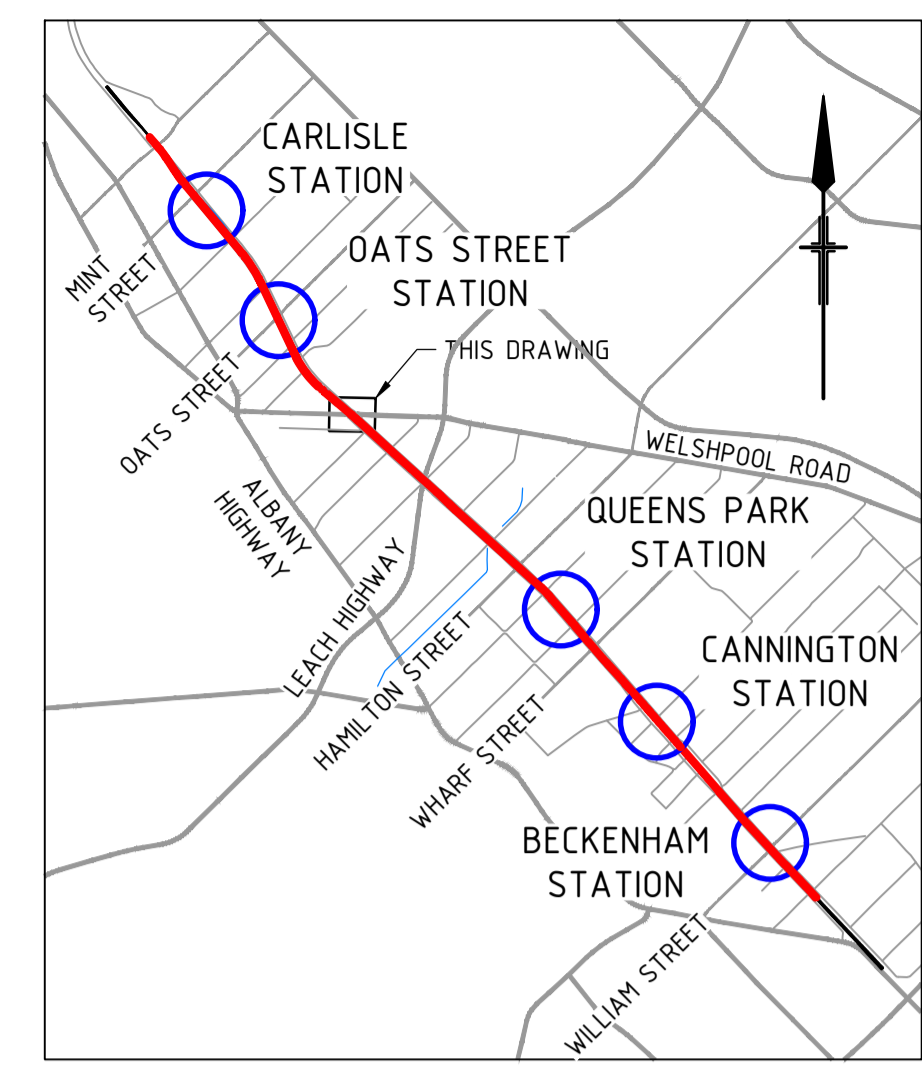
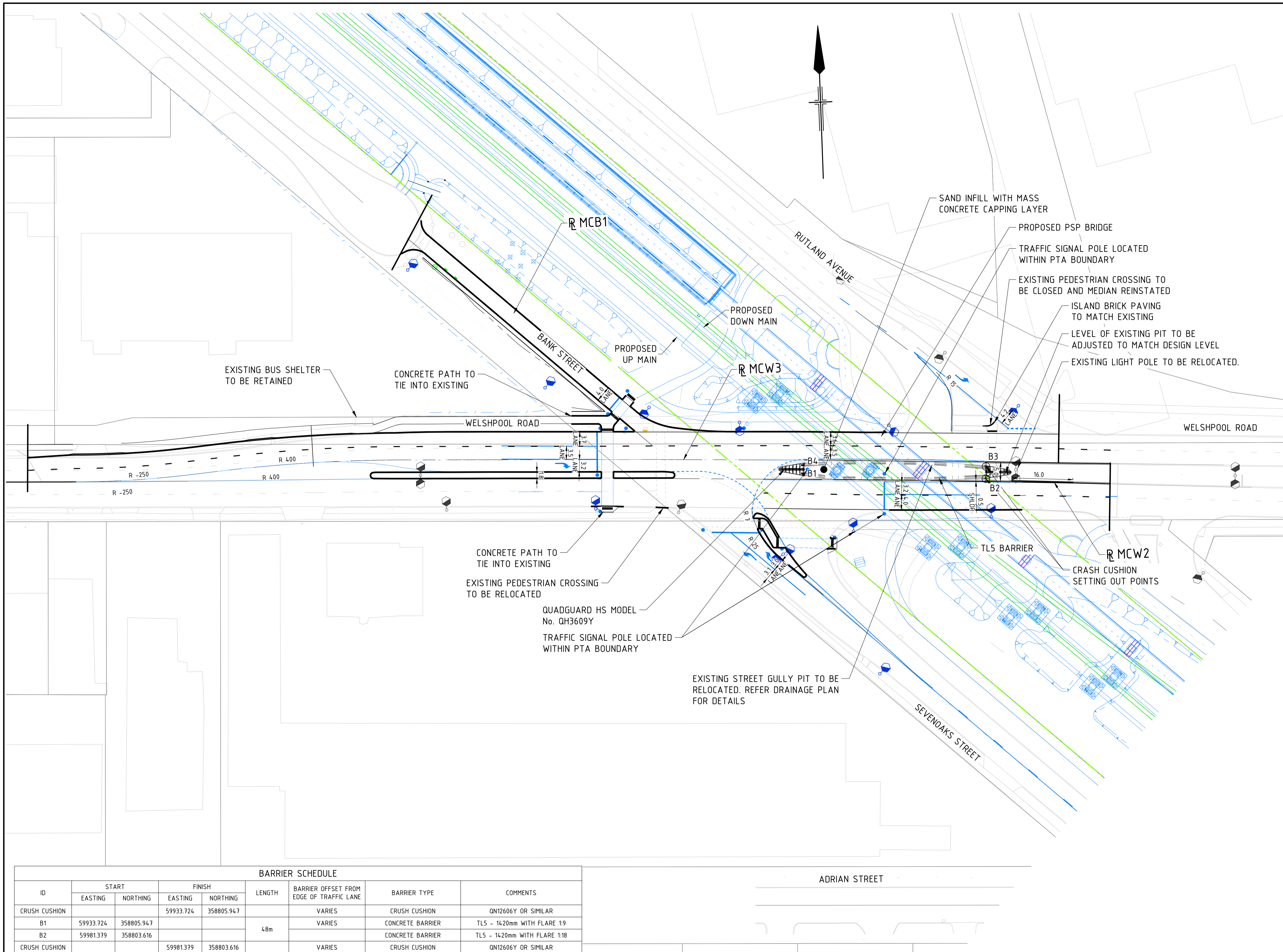


## Appendix N – Civil Road Drawings prepared by ALUA





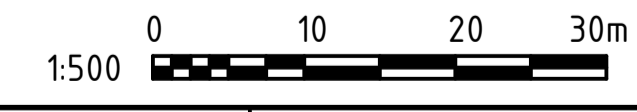
LOCALITY PLAN

- NOTES**
- FOR VERGE AND RAIL CORRIDOR DETAILS REFER TO CIVIL CORRIDOR DESIGN DEVELOPMENT APPLICATION DRAWINGS.
  - FOR DRAINAGE DETAILS REFER TO CIVIL ROADS DRAINAGE DRAWINGS DEVELOPMENT APPLICATION DRAWINGS.
  - SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY. ALL SERVICES ARE TO BE LOCATED AND DEPTED PRIOR TO CONSTRUCTION.
  - FOR SERVICE IMPACT ASSESSMENT AND RELOCATION DETAILS REFER TO CIVIL CORRIDOR PACKAGE CI-102 AND CI-201.
  - REFER TO MRWA DRAWING No. 200631-001 FOR ROAD HUMPS - WOMBAT CROSSING AND 200331-128 FOR ROAD HUMPS - WATTS PROFILE AND DRAWING No. 202231-3006 FOR MID BLOCK PLATEAU.
  - REFER TO MRWA DRAWING 201831-0058-5 FOR CONSTANT SLOPE RIGID BARRIER STRUCTURAL DETAILS AND 201831-0058-TL-5 TRANSITION DETAILS.
  - THE TEMPORARY M.C.R. MUST BE PROTECTED AT ALL TIMES DURING THE CONSTRUCTION WORKS.

- LEGEND**
- CADASTRAL BOUNDARY
  - RAIL RESERVE BOUNDARY
  - PROPOSED ROAD REFERENCE LINE
  - PROPOSED RETAINING WALL
  - PROPOSED NOISE WALL
  - EXISTING ARMADALE PASSENGER RAIL
  - PROPOSED ARMADALE PASSENGER RAIL
  - PROPOSED MONOWILL FENCING
  - PROPOSED 1800 HIGH SECURITY FENCE
  - PROPOSED 1400 HIGH CHAINWIRE FENCE
  - FUTURE ULTIMATE DESIGN
  - X X X X X X X X TO BE REMOVED
  - QUADGUARD TERMINAL QGM10 SYSTEM OR SIMILAR
  - QUADGUARD TERMINAL M10 QS2303Y OR SIMILAR
  - STANDARD TRAILING TERMINAL
  - TL4 CONCRETE BARRIER - 1620mm & 1115mm HIGH
  - TL5 CONCRETE BARRIER - 1420mm HIGH
  - TL4 TRANSITION BARRIER
  - W-BEAM BARRIER
  - THRIEBEAM TRANSITION FROM CONCRETE BARRIER TO W-BEAM
  - PROPOSED FENCING
  - EXISTING FENCING
  - EXISTING SURFACE
  - PROPOSED GULLY PIT / SIDE ENTRY PIT
  - PROPOSED TRENCH DRAIN
  - EXISTING STREET LIGHT / PROPOSED STREET LIGHT
  - TRAFFIC SIGNAL POLE
  - UNDER BRIDGE LIGHTING
  - MRWA PEDESTRIAN RAMP WITH TGS
  - PEDESTRIAN RAMP WITH TGS (REFER TO LANDSCAPING DRAWINGS FOR DETAILS)
  - PROPOSED ROAD CARRIAGEWAY
  - PROPOSED PRINCIPAL SHARED PATH (PSP)
  - PROPOSED FOOTPATH
  - PROPOSED CONCRETE INFILL
  - WORKS BY PTA AND MRWA

BARRIER SCHEDULE								
ID	START		FINISH		LENGTH	BARRIER OFFSET FROM EDGE OF TRAFFIC LANE	BARRIER TYPE	COMMENTS
	EASTING	NORTHING	EASTING	NORTHING				
CRUSH CUSHION						VARIES	CRUSH CUSHION	QN12606Y OR SIMILAR
B1	59933.724	358805.947	59933.724	358805.947	48m	VARIES	CONCRETE BARRIER	TL5 - 1420mm WITH FLARE 1:9
B2	59981.379	358803.616				CONCRETE BARRIER	TL5 - 1420mm WITH FLARE 1:18	
CRUSH CUSHION			59981.379	358803.616	48m	VARIES	CRUSH CUSHION	QN12606Y OR SIMILAR
B3	59981.535	358806.814				CONCRETE BARRIER	TL5 - 1420mm WITH FLARE 1:18	
B4	59933.865	358809.149			CONCRETE BARRIER	TL5 - 1420mm WITH FLARE 1:18		

PLAN



**FINAL DETAILED DESIGN**

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C3.03	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL				
B	01.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	M.D.	P.H.	B.S.	C.S.
A	12.08.22	ISSUED FOR REFERENCE DESIGN	M.D.	P.H.	B.S.	Y.S.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

REFERENCES

SCALE	DESIGNED
1:500 (@A1)	M.DAVIES
	DRAWN P.HAYLES
	CHECKED B.SASHEGYI
	APPROVED C.STEPHENS
DATUM	DATE 28.06.23
HORIZONTAL: PCG20	
VERTICAL: AHD71	

Government of Western Australia  
Public Transport Authority

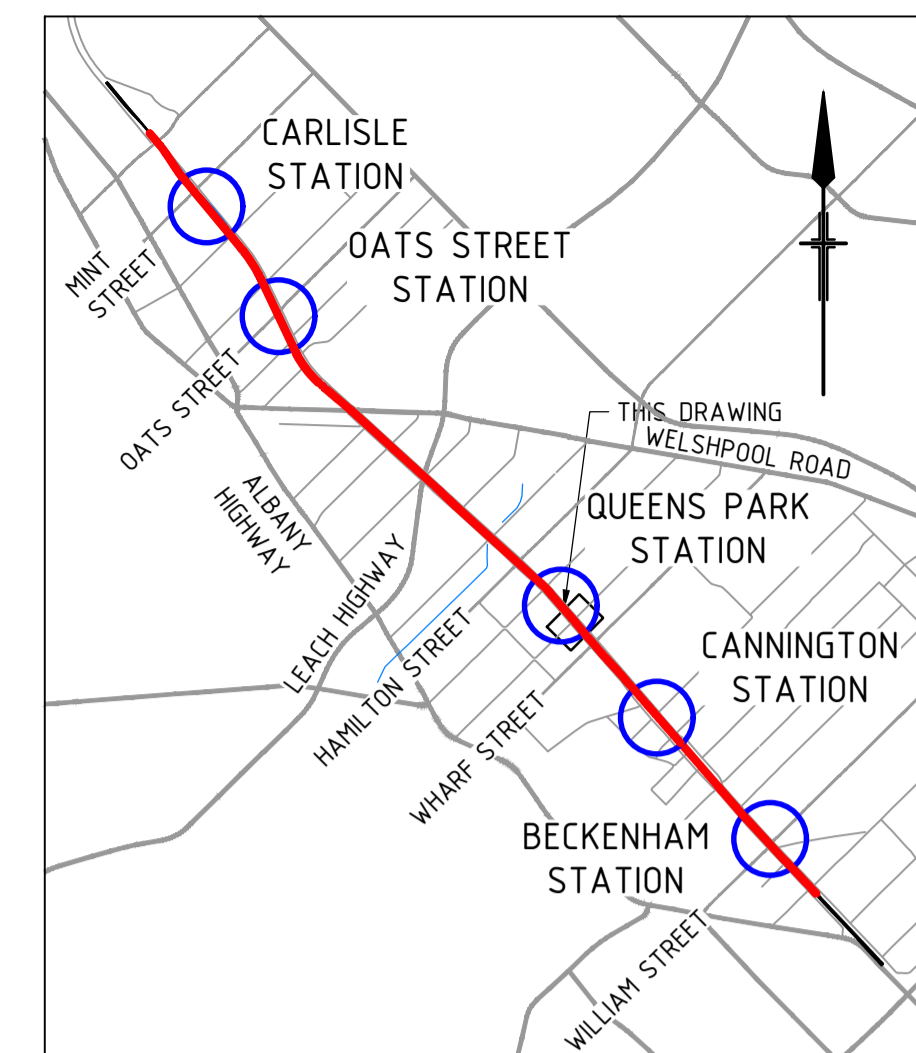
VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - ROAD**  
**WELSHPOOL ROAD LEVEL CROSSING - PACKAGE 1**  
**GENERAL ARRANGEMENT**

Drg No: LXR-P1-Z2-WL-CI-RD-DWG-00404 | Rev: C3.03

Contractor No: LXR-P1-Z2-WL-CI-RD-DWG-00404

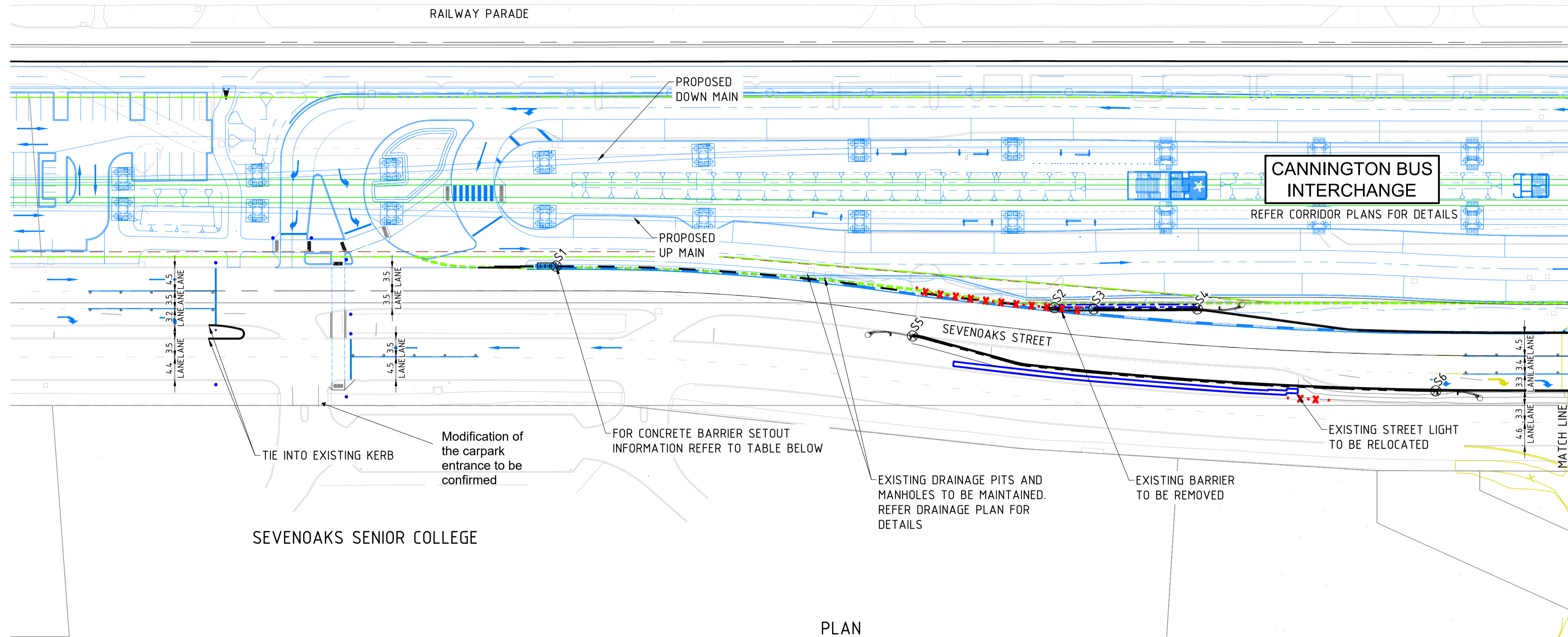




LOCALITY PLAN

NOTES

- FOR VERGE AND RAIL CORRIDOR DETAILS REFER TO CIVIL CORRIDOR DESIGN DEVELOPMENT APPLICATION DRAWINGS.
- FOR DRAINAGE DETAILS REFER TO CIVIL ROADS DRAINAGE DRAWINGS DEVELOPMENT APPLICATION DRAWINGS.
- SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY. ALL SERVICES ARE TO BE LOCATED AND DEPTED PRIOR TO CONSTRUCTION.
- FOR SERVICE IMPACT ASSESSMENT AND RELOCATION DETAILS REFER TO CIVIL CORRIDOR PACKAGE CI-102 AND CI-201.
- REFER TO MRWA DRAWING No. 200631-001 FOR ROAD HUMPS - WOMBAT CROSSING AND 200331-128 FOR ROAD HUMPS - WATTS PROFILE AND DRAWING No. 202231-3006 FOR MID BLOCK PLATEAU.
- REFER TO MRWA DRAWING 201831-0058-5 FOR CONSTANT SLOPE RIGID BARRIER STRUCTURAL DETAILS AND 201831-0058-TL-5 TRANSITION DETAILS.
- THE TEMPORARY M.C.R. MUST BE PROTECTED AT ALL TIMES DURING THE CONSTRUCTION WORKS.



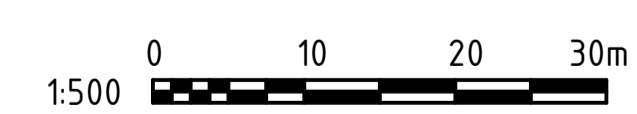
PLAN

LEGEND

- CADASTRAL BOUNDARY
- RAIL RESERVE BOUNDARY
- PROPOSED ROAD REFERENCE LINE
- PROPOSED RETAINING WALL
- PROPOSED NOISE WALL
- EXISTING ARMADALE PASSENGER RAIL
- PROPOSED ARMADALE PASSENGER RAIL
- PROPOSED MONOWILL FENCING
- PROPOSED 1800 HIGH SECURITY FENCE
- PROPOSED 1400 HIGH CHAINWIRE FENCE
- FUTURE ULTIMATE DESIGN
- TO BE REMOVED
- QUADGUARD TERMINAL QGM10 SYSTEM OR SIMILAR
- QUADGUARD TERMINAL M10 QS2303Y OR SIMILAR
- STANDARD TRAILING TERMINAL
- TL4 CONCRETE BARRIER - 1620mm & 1115mm HIGH
- TL5 CONCRETE BARRIER - 1420mm HIGH
- TL4 TRANSITION BARRIER
- W-BEAM BARRIER
- THRIEBEAM TRANSITION FROM CONCRETE BARRIER TO W-BEAM
- PROPOSED FENCING
- EXISTING FENCING
- EXISTING SURFACE
- PROPOSED GULLY PIT / SIDE ENTRY PIT
- PROPOSED TRENCH DRAIN
- EXISTING STREET LIGHT / PROPOSED STREET LIGHT
- TRAFFIC SIGNAL POLE
- UNDER BRIDGE LIGHTING
- MRWA PEDESTRIAN RAMP WITH TGS1
- PEDESTRIAN RAMP WITH TGS1 (REFER TO LANDSCAPING DRAWINGS FOR DETAILS)
- PROPOSED ROAD CARRIAGEWAY
- PROPOSED PRINCIPAL SHARED PATH (PSP)
- PROPOSED FOOTPATH
- PROPOSED CONCRETE INFILL
- WORKS BY PTA AND MRWA

BARRIER SCHEDULE

ID	START		END		LENGTH	BARRIER OFFSET FROM EDGE OF TRAFFIC LANE	BARRIER TYPE	COMMENTS
	EASTING	NORTHING	EASTING	NORTHING				
CRUSH CUSHION			6194.1881	356832.450			CRUSH CUSHION	QS2403Y
S1	6194.1881	356832.450	61999.759	356753.481	97.987	0	CONCRETE BARRIER	TL4 TYPE 1 (REFER TO DRAWING LXR-PW-20-GN-CI-RD-DWG-00026 FOR DETAILS)
S2	61999.759	356753.481	62004.611	356747.472	7.720	0.200	TRANSITION BEAM	THRIEBEAM TRANSITION FROM CONCRETE BARRIER
S3	62004.611	356747.472	62017.932	356732.207	20.284	0.200	W-BEAM	W-BEAM BARRIER
S4	62017.932	356732.207					STANDARD TRAILING TERMINAL	STANDARD BULLNOSE TERMINAL
S5			61977.331	356770.807			STANDARD LEADING TERMINAL	STANDARD BULLNOSE TERMINAL
S6	61977.331	356770.807	62036.425	356686.426	103.400	0.200	W-BEAM	W-BEAM BARRIER
S7	62036.425	356686.426					STANDARD TRAILING TERMINAL	STANDARD BULLNOSE TERMINAL



FINAL DETAILED DESIGN

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C2.04	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	M.D.	P.H.	B.S.	C.S.
B	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	M.D.	P.H.	B.S.	Y.S.
A	03.08.22	ISSUED FOR REFERENCE DESIGN	M.D.	P.H.	B.S.	Y.S.

REFERENCES

SCALE	DESIGNED
1:500 (@A1)	M.DAVIES
	DRAWN P.HAYLES
	CHECKED B.SASHEGYI
	APPROVED C.STEPHENS
DATUM	DATE 28.06.23
HORIZONTAL: PCG20	
VERTICAL: AHD71	

Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

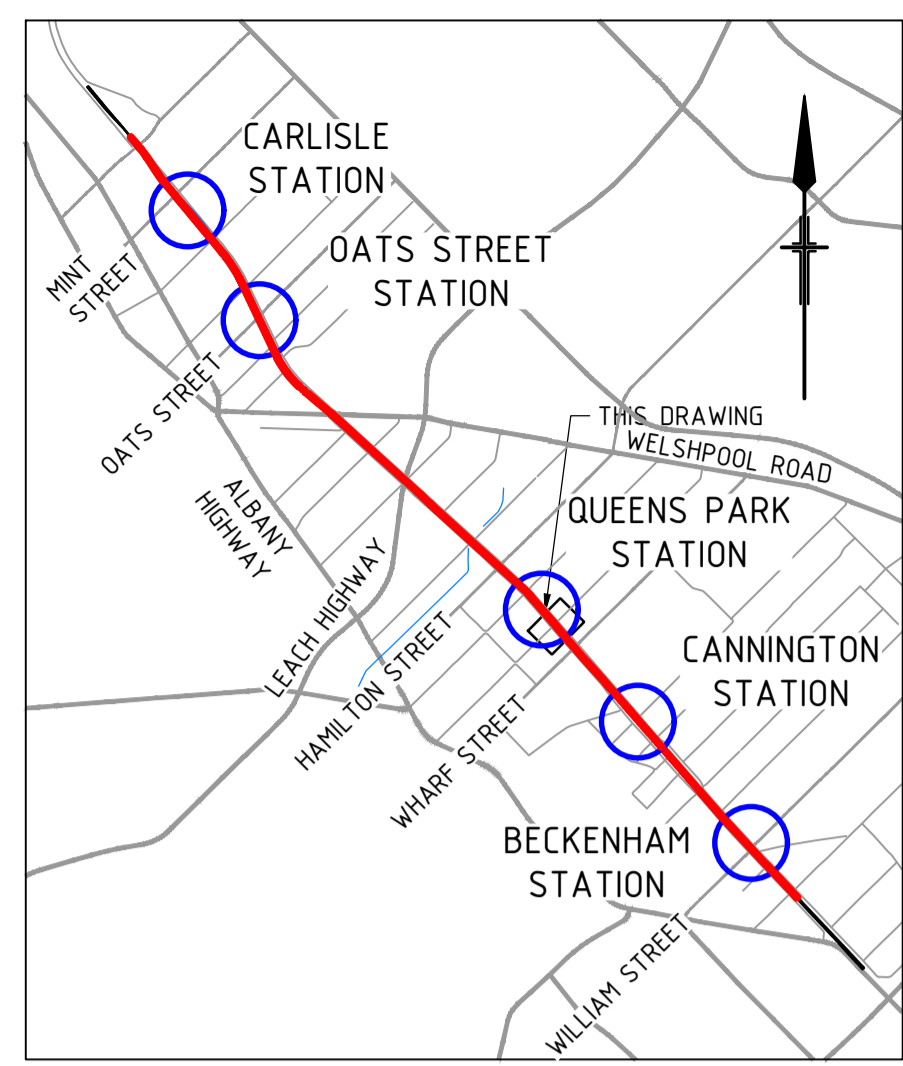
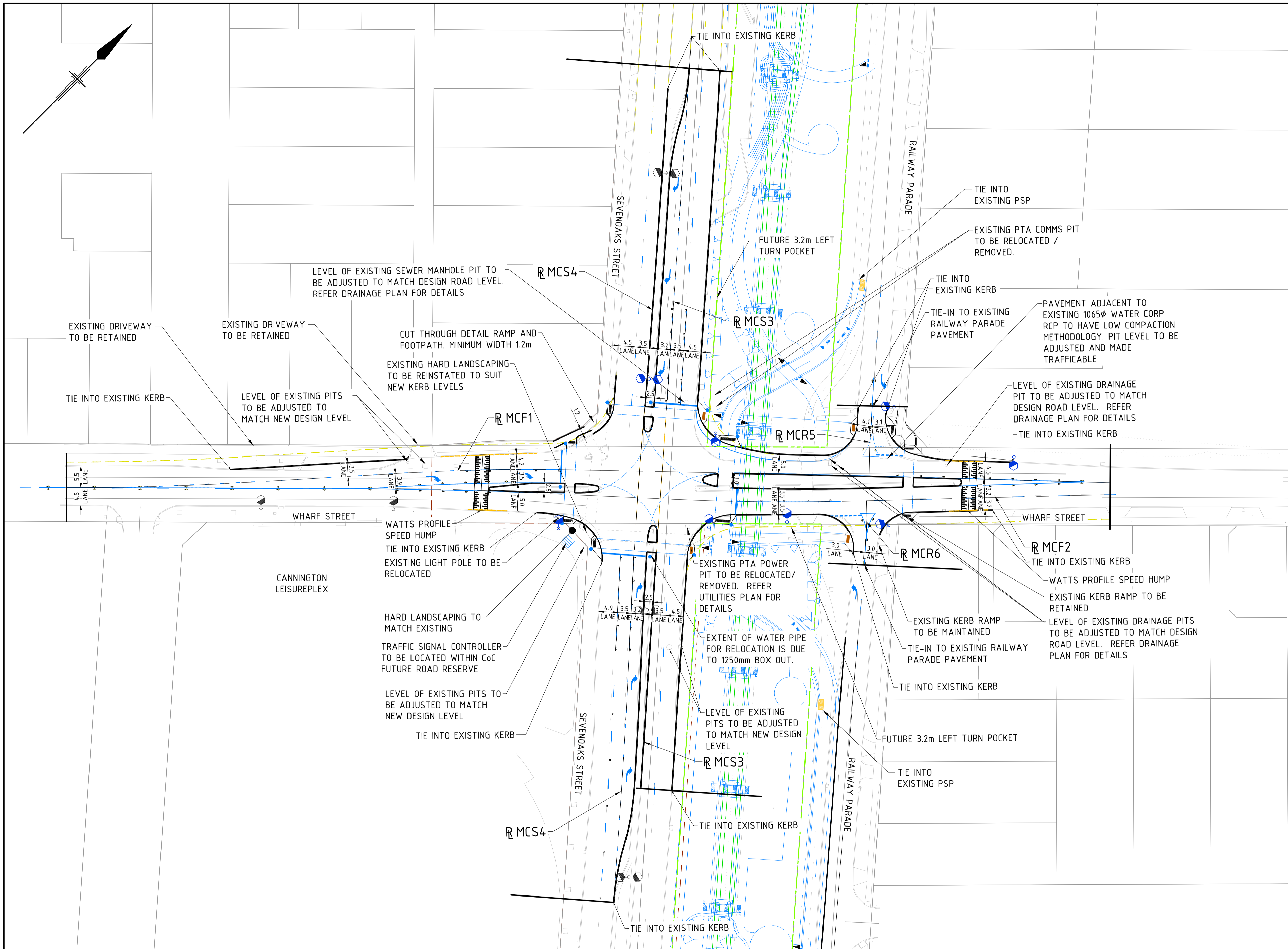
ARMADALE LINE - ROAD  
CANNINGTON BUS STATION EXIT - SEVENOAKS STREET  
GENERAL ARRANGEMENT - SHEET 1  
Drg No: LXR-P2-Z3-CN-CI-RD-DWG-00411 | Rev: C2.04

Contractor No: LXR-P2-Z3-CN-CI-RD-DWG-00411

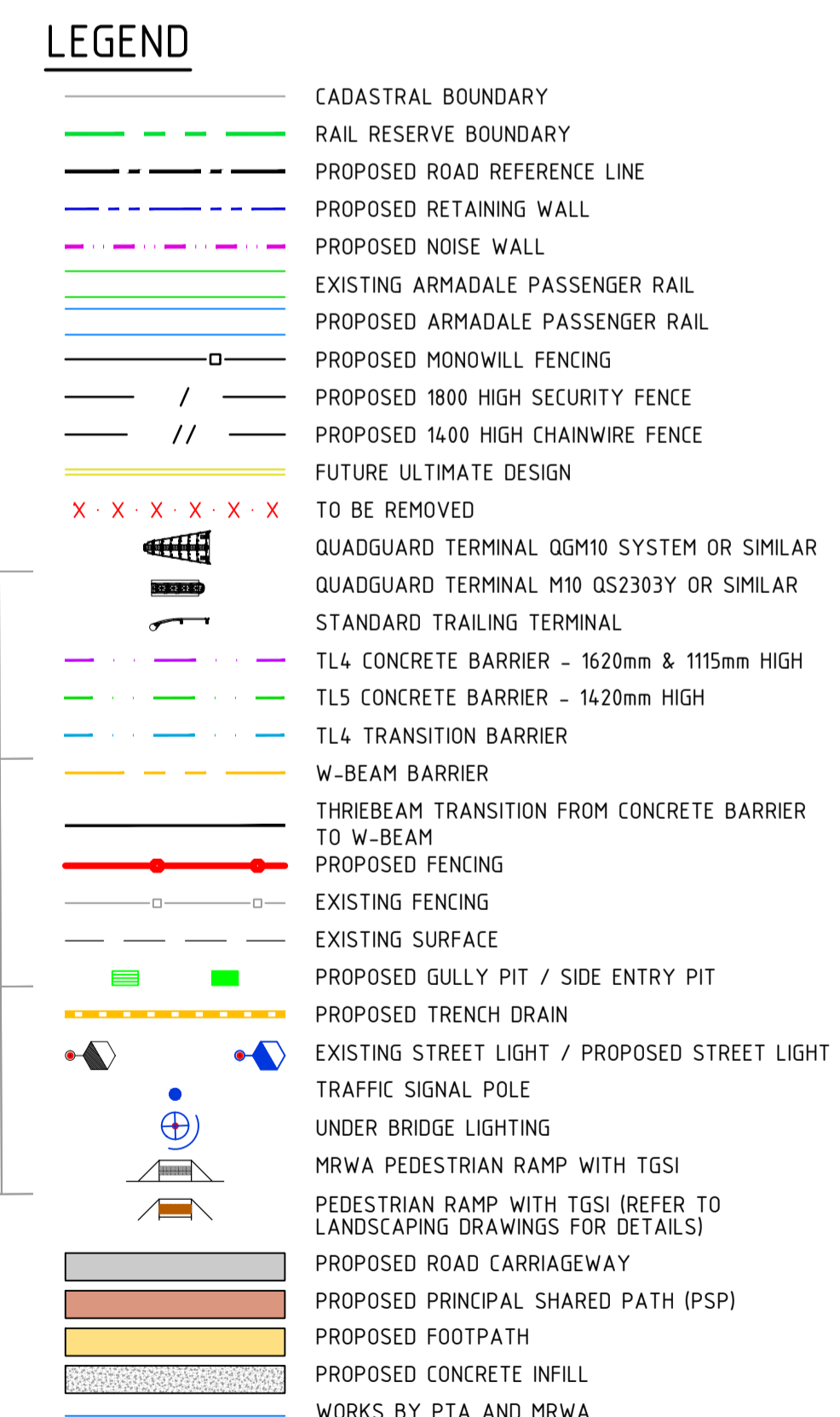








- NOTES**
- FOR VERGE AND RAIL CORRIDOR DETAILS REFER TO CIVIL CORRIDOR DESIGN DEVELOPMENT APPLICATION DRAWINGS.
  - FOR DRAINAGE DETAILS REFER TO CIVIL ROADS DRAINAGE DRAWINGS DEVELOPMENT APPLICATION DRAWINGS.
  - SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY. ALL SERVICES ARE TO BE LOCATED AND DEPTED PRIOR TO CONSTRUCTION
  - FOR SERVICE IMPACT ASSESSMENT AND RELOCATION DETAILS REFER TO CIVIL CORRIDOR PACKAGE CI-102 AND CI-201.
  - REFER TO MRWA DRAWING No. 200631-001 FOR ROAD HUMPS - WOMBAT CROSSING AND 200331-128 FOR ROAD HUMPS - WATTS PROFILE AND DRAWING No. 202231-3006 FOR MID BLOCK PLATEAU.
  - REFER TO MRWA DRAWING 201831-0058-5 FOR CONSTANT SLOPE RIGID BARRIER STRUCTURAL DETAILS AND 201831-0058-TL-5 TRANSITION DETAILS.
  - THE TEMPORARY M.C.R. MUST BE PROTECTED AT ALL TIMES DURING THE CONSTRUCTION WORKS.



**PLAN**

0 10 20 30m  
1:500

**FINAL DETAILED DESIGN**

Government of **Western Australia**  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - ROAD**  
**WHARF STREET LEVEL CROSSING - PACKAGE 2**  
**GENERAL ARRANGEMENT - SHEET 1**  
Drg No: LXR-P2-Z3-FL-CI-RD-DWG-00409 | Rev: C3.02

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C3.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	M.D.	P.H.	B.S.	C.S.
B	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	M.D.	P.H.	B.S.	Y.S.
A	03.08.22	ISSUED FOR REFERENCE DESIGN	M.D.	P.H.	B.S.	Y.S.

ORIG SIZE: A1  
AT ORIGINAL PLOT SIZE

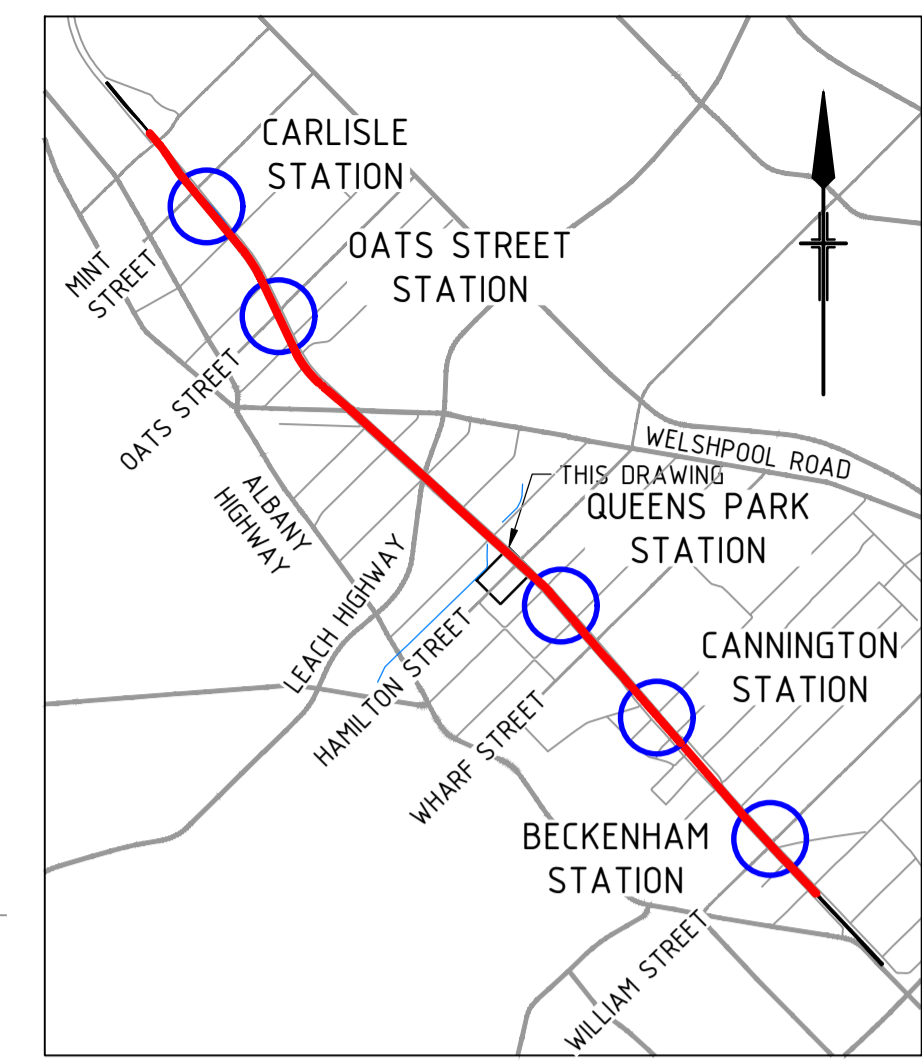
This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-FL-CI-RD-DWG-00409

REFERENCES	SCALE	DESIGNED
	1:500 (@A1)	M.DAVIES
	DATUM	DRAWN
	HORIZONTAL: PCG20	P.HAYLES
	VERTICAL: AHD71	CHECKED
		B.SASHEGYI
		APPROVED
		C.STEPHENS
		DATE
		28.06.23





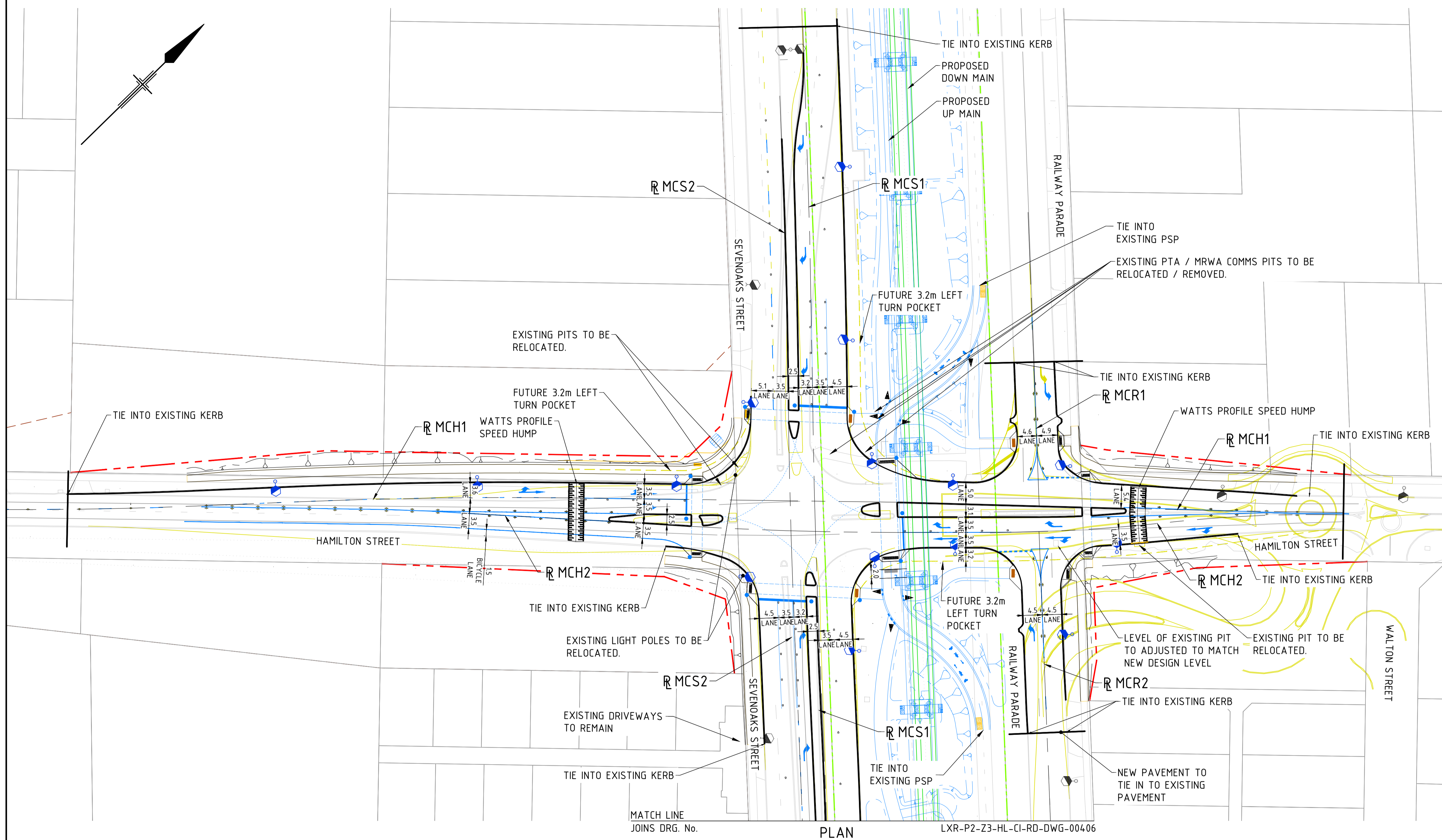
LOCALITY PLAN

NOTES

- FOR VERGE AND RAIL CORRIDOR DETAILS REFER TO CIVIL CORRIDOR DESIGN DEVELOPMENT APPLICATION DRAWINGS.
- FOR DRAINAGE DETAILS REFER TO CIVIL ROADS DRAINAGE DRAWINGS DEVELOPMENT APPLICATION DRAWINGS.
- SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY. ALL SERVICES ARE TO BE LOCATED AND DEPTED PRIOR TO CONSTRUCTION.
- FOR SERVICE IMPACT ASSESSMENT AND RELOCATION DETAILS REFER TO CIVIL CORRIDOR PACKAGE CI-102 AND CI-201.
- REFER TO MRWA DRAWING No. 200631-001 FOR ROAD HUMPS - WOMBAT CROSSING AND 200331-128 FOR ROAD HUMPS - WATTS PROFILE AND DRAWING No. 202231-3006 FOR MID BLOCK PLATEAU.
- REFER TO MRWA DRAWING 201831-0058-5 FOR CONSTANT SLOPE RIGID BARRIER STRUCTURAL DETAILS AND 201831-0058-TL-5 TRANSITION DETAILS.
- THE TEMPORARY M.C.R. MUST BE PROTECTED AT ALL TIMES DURING THE CONSTRUCTION WORKS.

LEGEND

- CADASTRAL BOUNDARY
- RAIL RESERVE BOUNDARY
- PROPOSED ROAD REFERENCE LINE
- PROPOSED RETAINING WALL
- PROPOSED NOISE WALL
- EXISTING ARMADALE PASSENGER RAIL
- PROPOSED ARMADALE PASSENGER RAIL
- PROPOSED MONOWILL FENCING
- PROPOSED 1800 HIGH SECURITY FENCE
- PROPOSED 1400 HIGH CHAINWIRE FENCE
- FUTURE ULTIMATE DESIGN
- TO BE REMOVED
- QUADGUARD TERMINAL QGM10 SYSTEM OR SIMILAR
- QUADGUARD TERMINAL M10 QS2303Y OR SIMILAR
- STANDARD TRAILING TERMINAL
- TL4 CONCRETE BARRIER - 1620mm & 1115mm HIGH
- TL5 CONCRETE BARRIER - 1420mm HIGH
- TL4 TRANSITION BARRIER
- W-BEAM BARRIER
- THREEBEAM TRANSITION FROM CONCRETE BARRIER TO W-BEAM
- PROPOSED FENCING
- EXISTING FENCING
- EXISTING SURFACE
- PROPOSED GULLY PIT / SIDE ENTRY PIT
- PROPOSED TRENCH DRAIN
- EXISTING STREET LIGHT / PROPOSED STREET LIGHT
- TRAFFIC SIGNAL POLE
- UNDER BRIDGE LIGHTING
- MRWA PEDESTRIAN RAMP WITH TGS1
- PEDESTRIAN RAMP WITH TGS1 (REFER TO LANDSCAPING DRAWINGS FOR DETAILS)
- PROPOSED ROAD CARRIAGEWAY
- PROPOSED PRINCIPAL SHARED PATH (PSP)
- PROPOSED FOOTPATH
- PROPOSED CONCRETE INFILL
- WORKS BY PTA AND MRWA



PLAN LXR-P2-Z3-HL-CI-RD-DWG-00406



FINAL DETAILED DESIGN

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C3.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	M.D.	P.H.	B.S.	C.S.
B	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	M.D.	P.H.	B.S.	Y.S.
A	03.08.22	ISSUED FOR REFERENCE DESIGN	M.D.	P.H.	B.S.	Y.S.

ORIG SIZE	SCALE	AT ORIGINAL PLOT SIZE
A1	0 10 20 30 40 50 100mm	

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-HL-CI-RD-DWG-00405

REFERENCES	SCALE	DESIGNED
	1:500 (@A1)	M.DAVIES
		DRAWN P.HAYLES
		CHECKED B.SASHEGYI
		APPROVED C.STEPHENS
		DATE 28.06.23

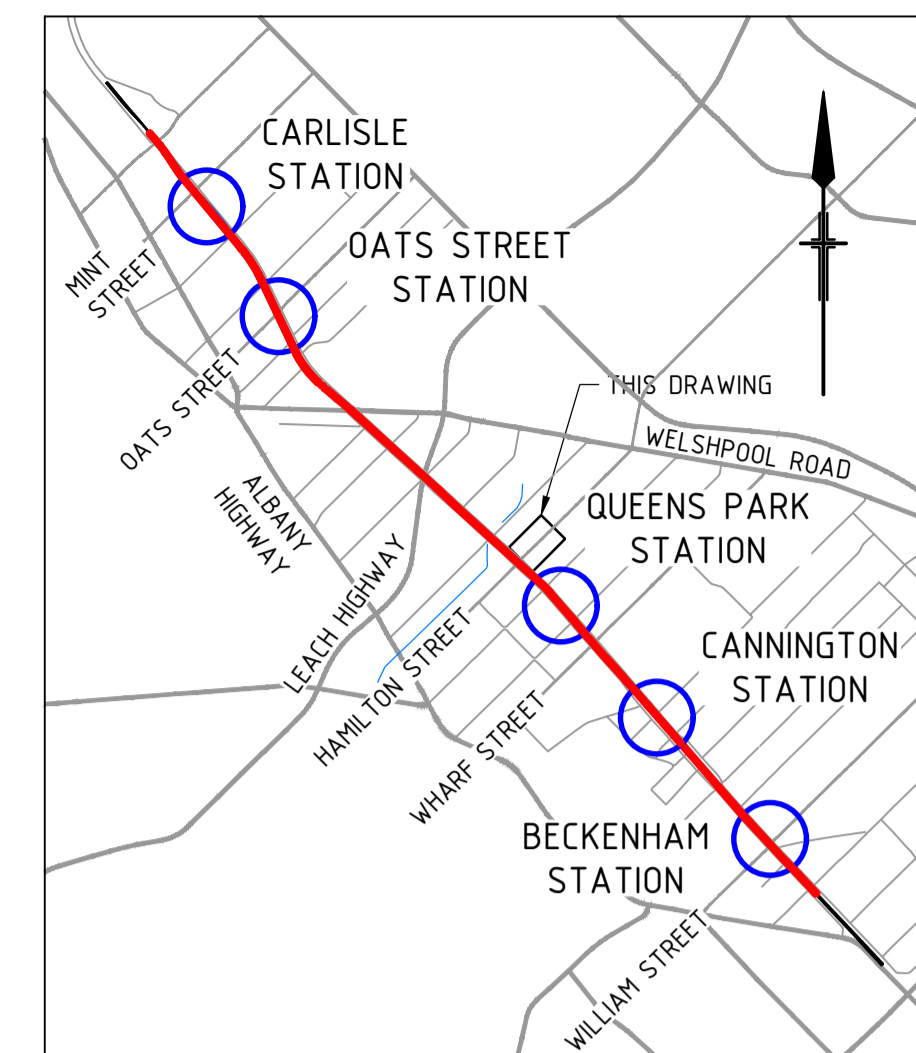
DATUM	HORIZONTAL	VERTICAL
	PCG20	AHD71

Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

ARMADALE LINE - ROAD  
HAMILTON STREET LEVEL CROSSING - PACKAGE 2  
GENERAL ARRANGEMENT - SHEET 1  
Drg No: LXR-P2-Z3-HL-CI-RD-DWG-00405 | Rev: C3.02

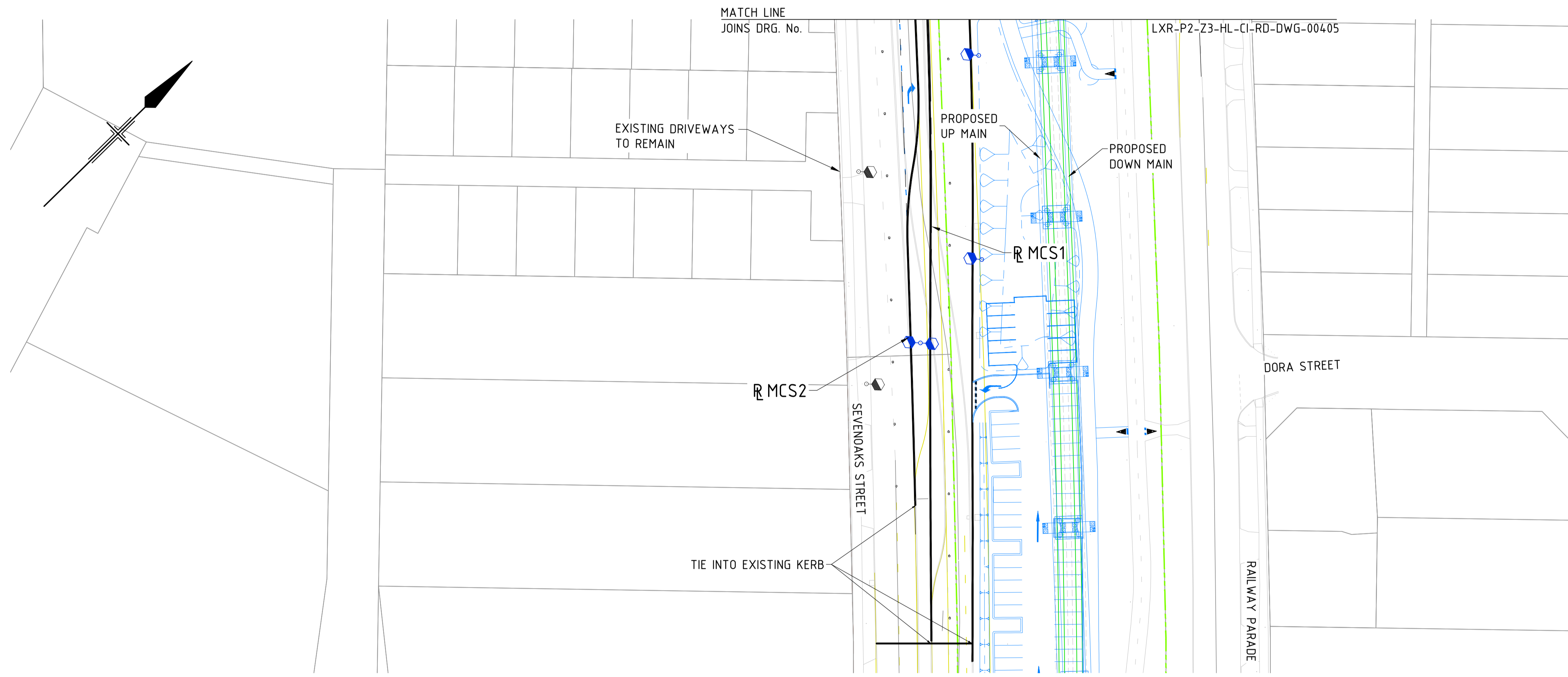




LOCALITY PLAN

NOTES

- FOR VERGE AND RAIL CORRIDOR DETAILS REFER TO CIVIL CORRIDOR DESIGN DEVELOPMENT APPLICATION DRAWINGS.
- FOR DRAINAGE DETAILS REFER TO CIVIL ROADS DRAINAGE DRAWINGS DEVELOPMENT APPLICATION DRAWINGS.
- SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY. ALL SERVICES ARE TO BE LOCATED AND DEPTED PRIOR TO CONSTRUCTION.
- FOR SERVICE IMPACT ASSESSMENT AND RELOCATION DETAILS REFER TO CIVIL CORRIDOR PACKAGE CI-102 AND CI-201.
- REFER TO MRWA DRAWING No. 200631-001 FOR ROAD HUMPS - WOMBAT CROSSING AND 200331-128 FOR ROAD HUMPS - WATTS PROFILE AND DRAWING No. 202231-3006 FOR MID BLOCK PLATEAU.
- REFER TO MRWA DRAWING 201831-0058-5 FOR CONSTANT SLOPE RIGID BARRIER STRUCTURAL DETAILS AND 201831-0058-TL-5 TRANSITION DETAILS.
- THE TEMPORARY M.C.R. MUST BE PROTECTED AT ALL TIMES DURING THE CONSTRUCTION WORKS.



LEGEND

- CADASTRAL BOUNDARY
- RAIL RESERVE BOUNDARY
- PROPOSED ROAD REFERENCE LINE
- PROPOSED RETAINING WALL
- PROPOSED NOISE WALL
- EXISTING ARMADALE PASSENGER RAIL
- PROPOSED ARMADALE PASSENGER RAIL
- PROPOSED MONOWILL FENCING
- PROPOSED 1800 HIGH SECURITY FENCE
- PROPOSED 1400 HIGH CHAINWIRE FENCE
- FUTURE ULTIMATE DESIGN
- TO BE REMOVED
- QUADGUARD TERMINAL QGM10 SYSTEM OR SIMILAR
- QUADGUARD TERMINAL M10 QS2303Y OR SIMILAR
- STANDARD TRAILING TERMINAL
- TL4 CONCRETE BARRIER - 1620mm & 1115mm HIGH
- TL5 CONCRETE BARRIER - 1420mm HIGH
- TL4 TRANSITION BARRIER
- W-BEAM BARRIER
- THRIEBEAM TRANSITION FROM CONCRETE BARRIER TO W-BEAM
- PROPOSED FENCING
- EXISTING FENCING
- EXISTING SURFACE
- PROPOSED GULLY PIT / SIDE ENTRY PIT
- PROPOSED TRENCH DRAIN
- EXISTING STREET LIGHT / PROPOSED STREET LIGHT
- TRAFFIC SIGNAL POLE
- UNDER BRIDGE LIGHTING
- MRWA PEDESTRIAN RAMP WITH TGS
- PEDESTRIAN RAMP WITH TGS (REFER TO LANDSCAPING DRAWINGS FOR DETAILS)
- PROPOSED ROAD CARRIAGEWAY
- PROPOSED PRINCIPAL SHARED PATH (PSP)
- PROPOSED FOOTPATH
- PROPOSED CONCRETE INFILL
- WORKS BY PTA AND MRWA

PLAN



**FINAL DETAILED DESIGN**

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C3.03	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	M.D.	P.H.	B.S.	C.S.
B	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	M.D.	P.H.	B.S.	Y.S.
A	03.08.22	ISSUED FOR REFERENCE DESIGN	M.D.	P.H.	B.S.	Y.S.

ORIG SIZE: A1  
AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

REFERENCES	SCALE	DESIGNED
	1:500 (@A1)	M.DAVIES
		DRAWN: P.HAYLES
		CHECKED: B.SASHEGYI
		APPROVED: C.STEPHENS
		DATE: 28.06.23

Government of Western Australia  
Public Transport Authority

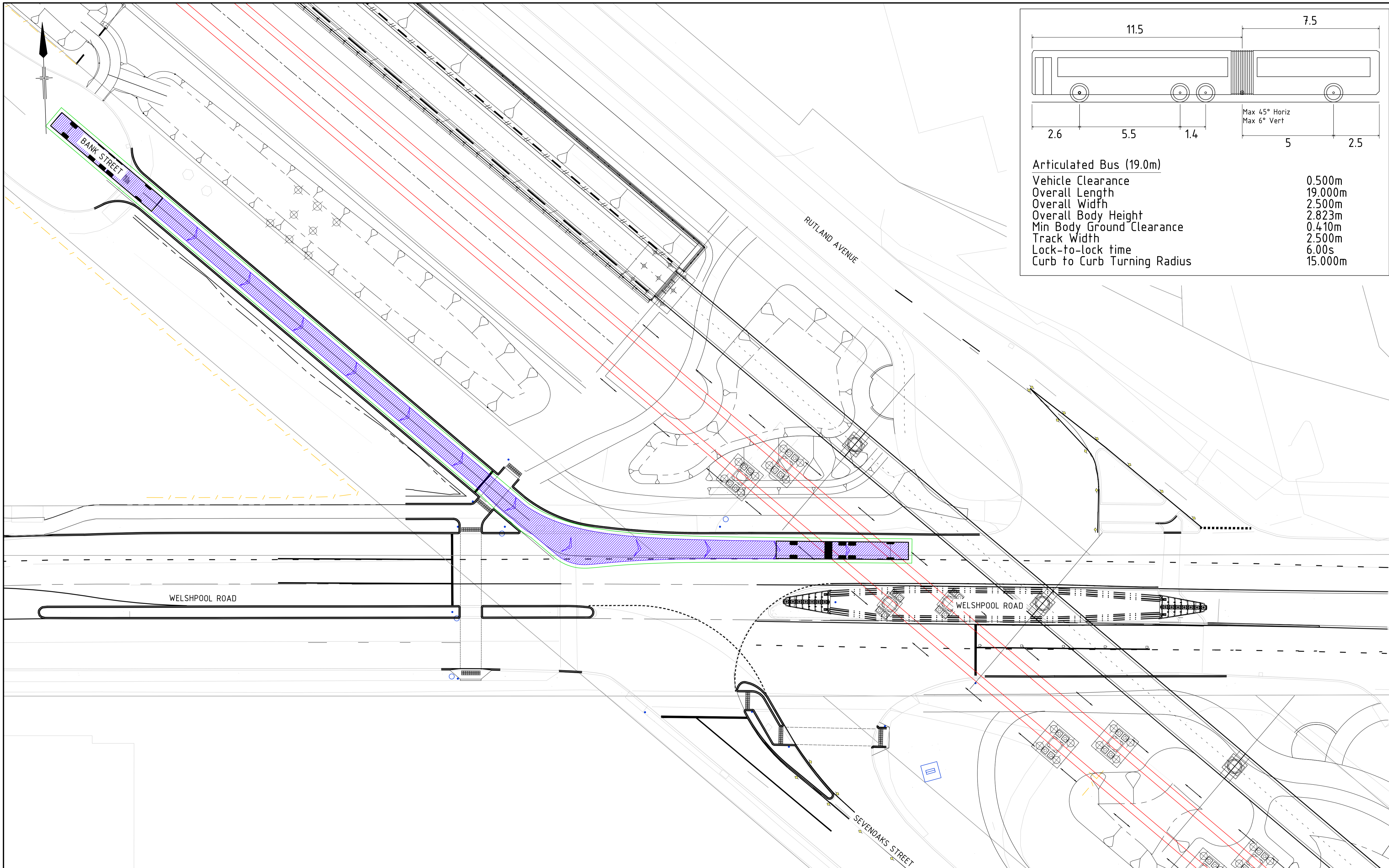
VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - ROAD**  
**HAMILTON STREET LEVEL CROSSING - PACKAGE 2**  
**GENERAL ARRANGEMENT - SHEET 2**

Drg No: LXR-P2-Z3-HL-CI-RD-DWG-00406 | Rev: C3.03

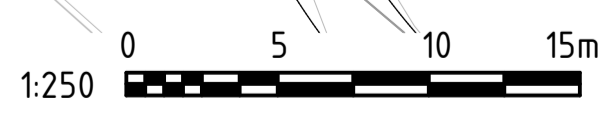
Contractor No: LXR-P2-Z3-HL-CI-RD-DWG-00406





Articulated Bus (19.0m)	
Vehicle Clearance	0.500m
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	2.823m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m

PLAN



**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	MD	PH	BS	CS
A1.04	28.06.23		DSN	DRN	CHK	APP
ORIG SIZE		0 10 20 30 40 50 100mm		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.		
A1		AT ORIGINAL PLOT SIZE				

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P1-Z2-WL-CI-RD-SKT-00009

REFERENCES	SCALE
	1:250 (@A1)
DATUM	HORIZONTAL: PCG20 VERTICAL: AHD71

DESIGNED	M.DAVIES
DRAWN	P.HAYLES
CHECKED	B.SASHEGYI
APPROVED	C.STEPHENS
DATE	28.06.23

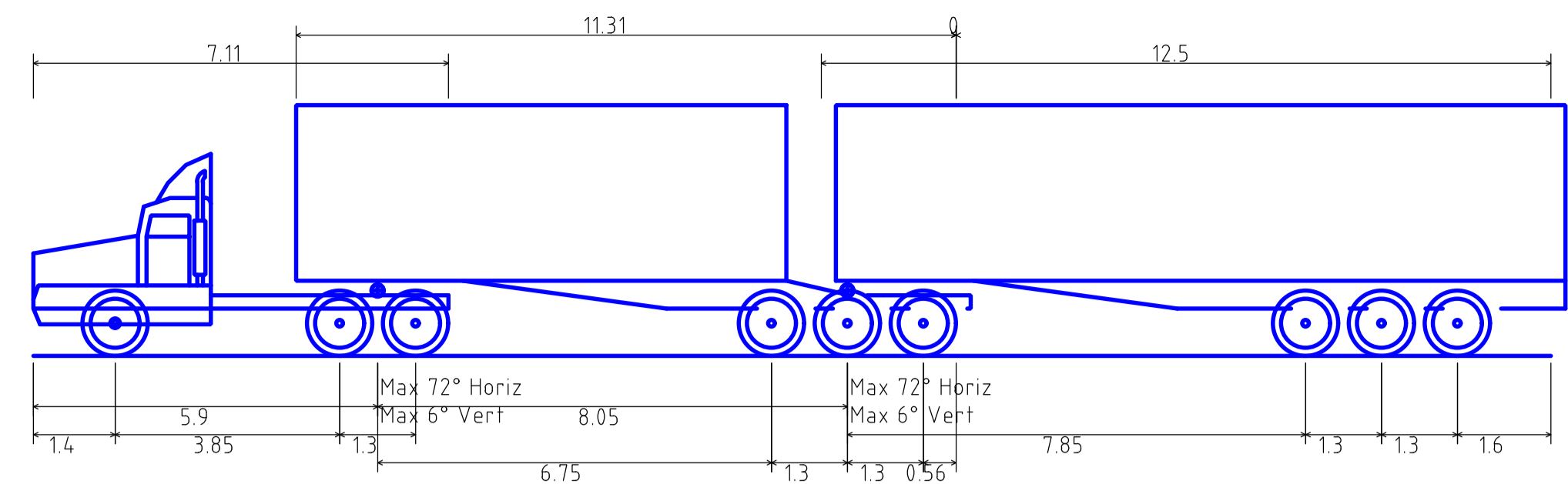
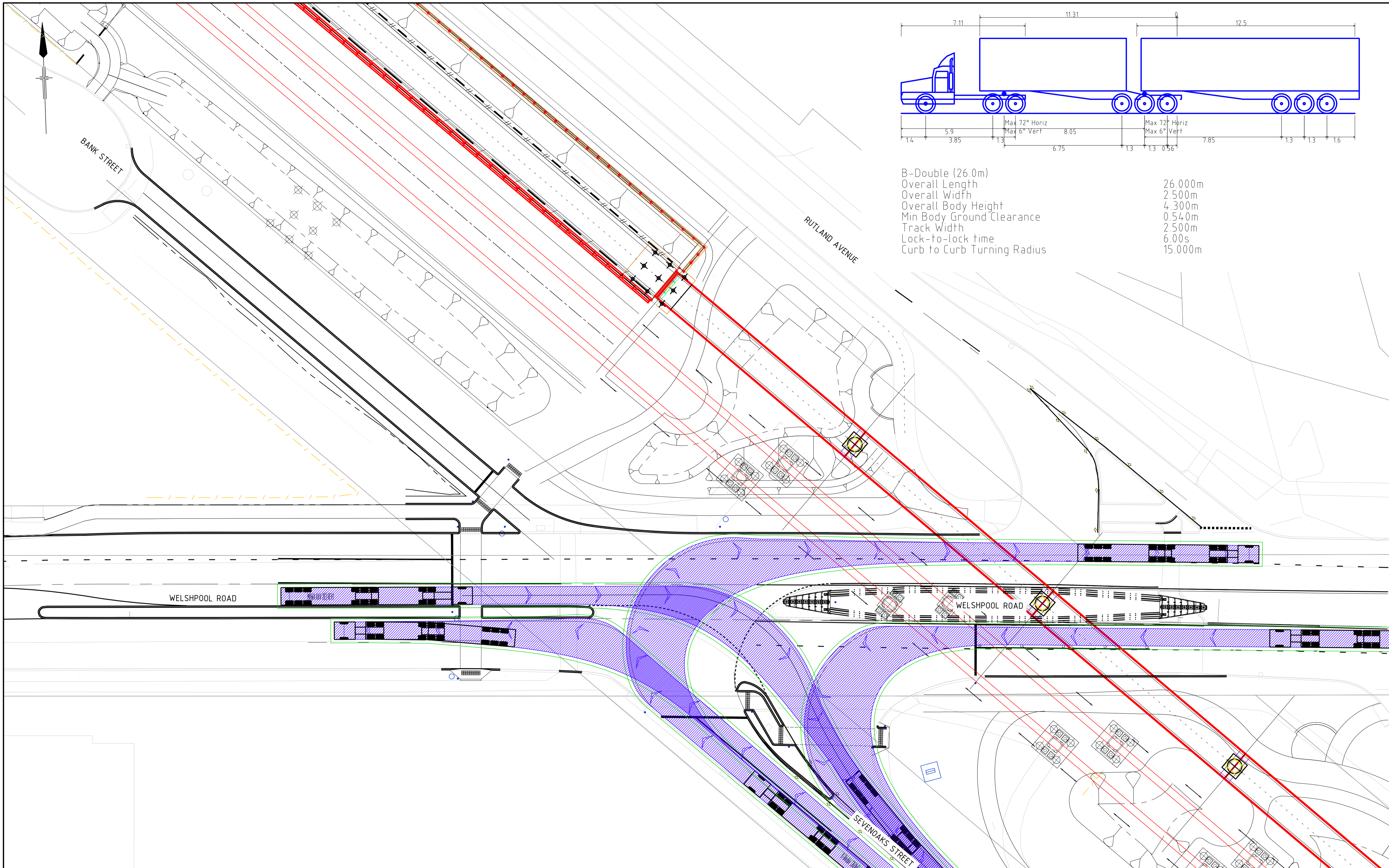
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

ARMADALE LINE - ROAD  
WELSHPOOL LEVEL CROSSING  
SWEEP PATHS - 19M ARTICULATED BUS (DESIGN)

PTA Drawing No: LXR-P1-Z2-WL-CI-RD-SKT-00009 Rev: A1.04





B-Double (26.0m)  
 Overall Length 26.000m  
 Overall Width 2.500m  
 Overall Body Height 4.300m  
 Min Body Ground Clearance 0.540m  
 Track Width 2.500m  
 Lock-to-lock time 6.00s  
 Curb to Curb Turning Radius 15.000m

PLAN

**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	DSN	PH	BS	CS
A1.02	28.06.23		N.A	P.H	B.S	C.S
ORIG SIZE	0 10 20 30 40 50 100mm		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.			
A1	AT ORIGINAL PLOT SIZE		Contractor No: LXR-P1-Z2-WL-CI-RD-SKT-00010			

ARMADALE LINE UPGRADE ALLIANCE  
*Innovation to Reality*

REFERENCES	SCALE
	1:500 (@A1)
DATUM	HORIZONTAL: PCG20 VERTICAL: AHD71

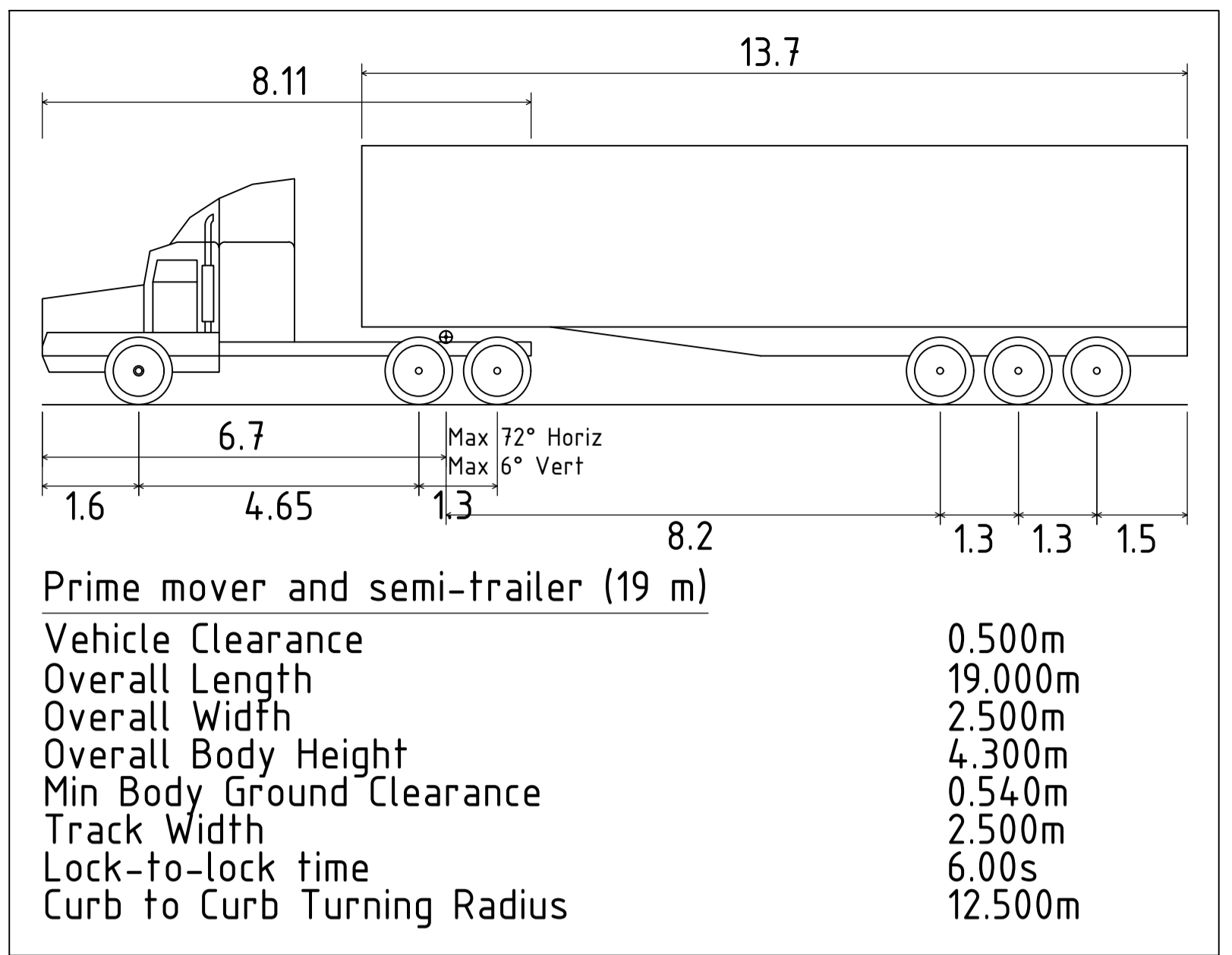
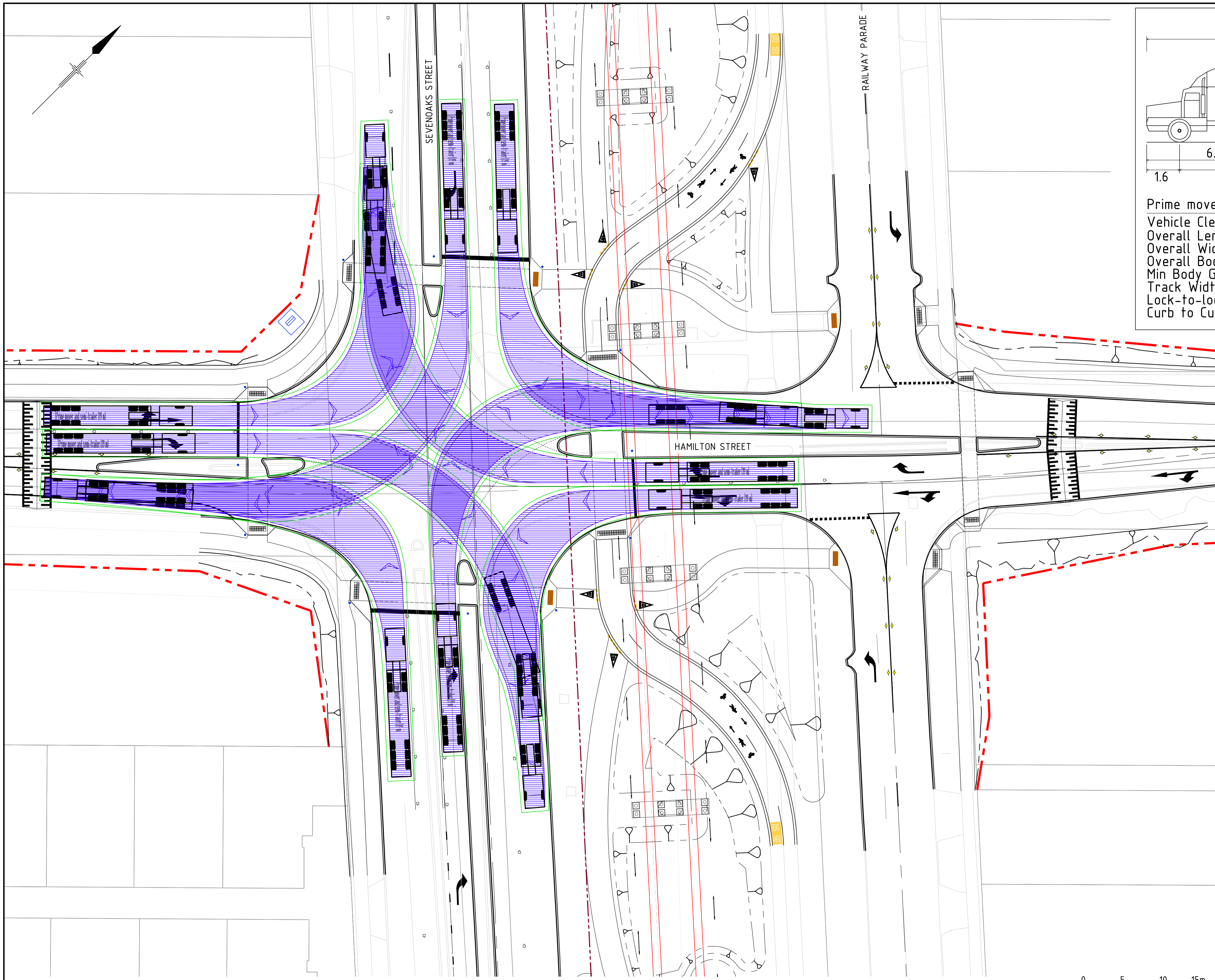
DESIGNED	N.ANDERSON
DRAWN	P.HAYLES
CHECKED	B.SASHEGYI
APPROVED	C.STEPHENS
DATE	28.06.23

Government of Western Australia  
 Public Transport Authority

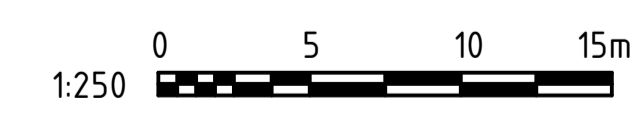
VICTORIA PARK TO CANNING  
 LEVEL CROSSING REMOVAL

ARMADALE LINE - ROAD  
 WELSHPOOL LEVEL CROSSING  
 SWEEP PATHS - 26M B DOUBLE  
 PTA Drawing No: LXR-P1-Z2-WL-CI-RD-SKT-00010 Rev: A1.02





PLAN



**ISSUED FOR INFORMATION**

A1.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	GV	PH	BS	CS
REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
A1						

0 10 20 30 40 50 100mm

AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

**ARMADALE LINE UPGRADE ALLIANCE**  
Innovation to Reality

Contractor No: LXR-P2-Z3-HL-CI-RD-SKT-00023

REFERENCES	SCALE	DESIGNED
	1:250 (@A1)	G.VANBREDA
	DATUM	DRAWN
	HORIZONTAL: PCG20	P.HAYLES
	VERTICAL: AHD71	CHECKED
		B.SASHEGYI
		APPROVED
		C.STEPHENS
		DATE
		28.06.23

DESIGNED		G.VANBREDA
DRAWN		P.HAYLES
CHECKED		B.SASHEGYI
APPROVED		C.STEPHENS
DATE		28.06.23

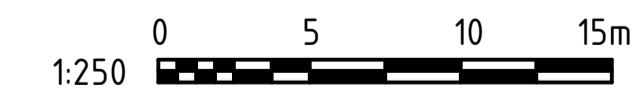
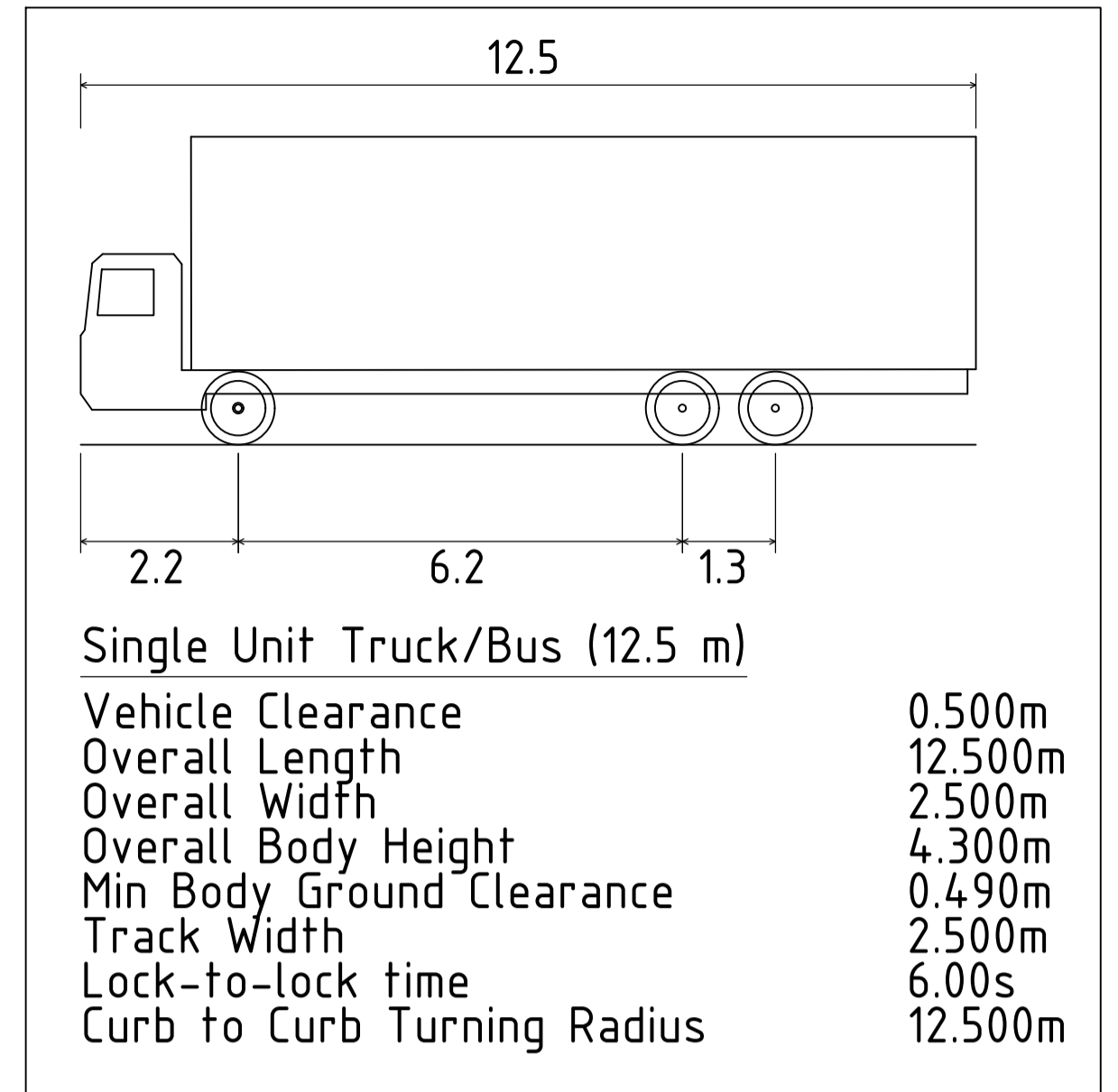
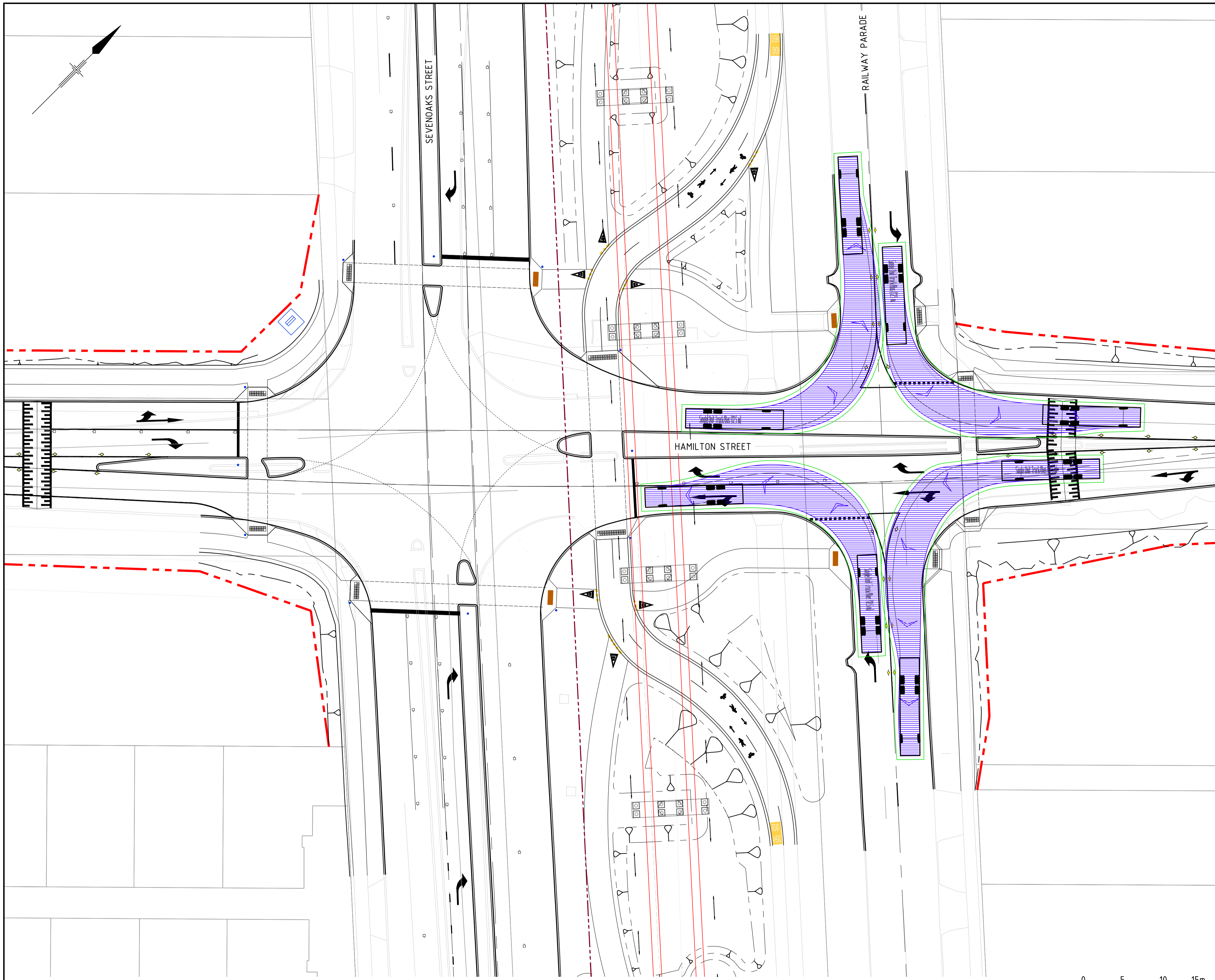
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - ROAD**  
**HAMILTON STREET LEVEL CROSSING**  
**SWEPT PATHS - 19M SEMI TRAILER**

PTA Drawing No: LXR-P2-Z3-HL-CI-RD-SKT-00023 | Rev: A1.02





**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	GV	PH	BS	CS	
DSN	DRN	CHK	APP				
A1.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	GV	PH	BS	CS	
		AMENDMENT	DSN	DRN	CHK	APP	
ORIG SIZE	0 10 20 30 40 50 100mm		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.				
A1	AT ORIGINAL PLOT SIZE		Contractor No: LXR-P2-Z3-HL-CI-RD-SKT-00024				

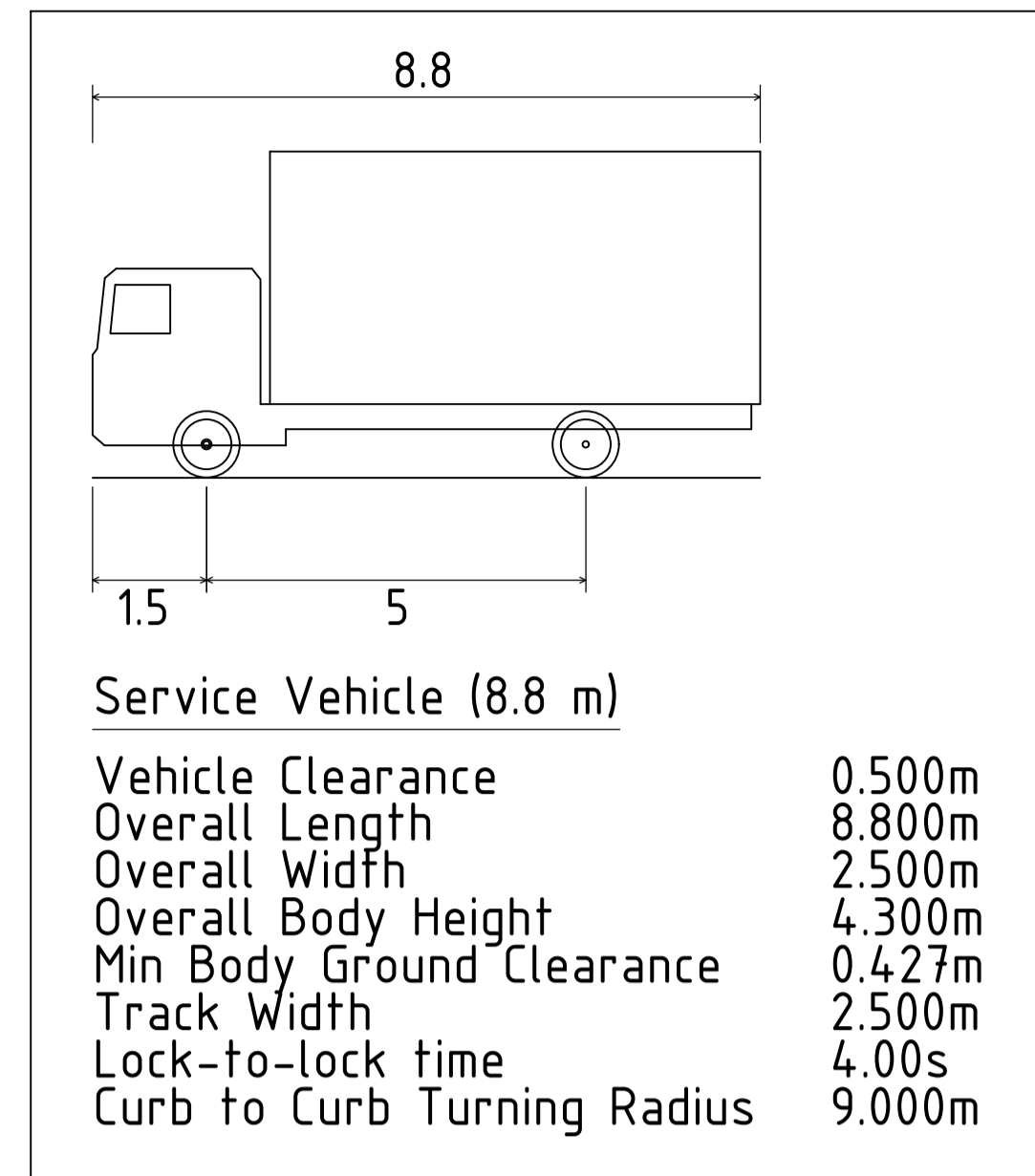
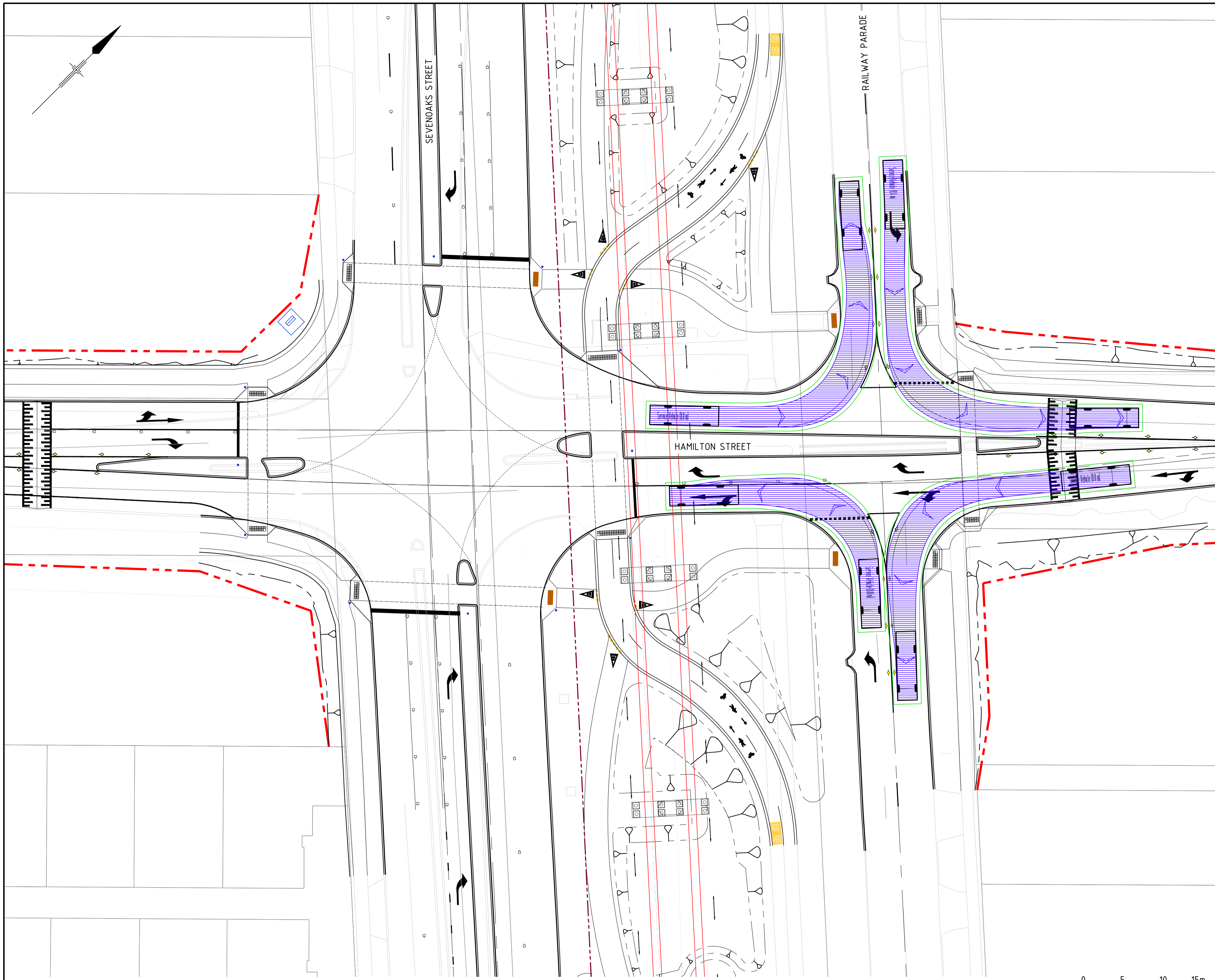
**ARMADALE LINE UPGRADE ALLIANCE**  
*Innovation to Reality*

REFERENCES

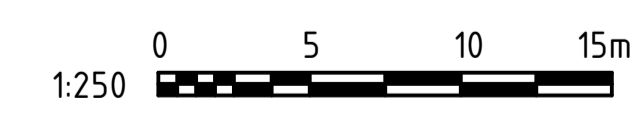
SCALE	DESIGNED
1:250 (@A1)	G.VANBREDA
DATUM	DRAWN
HORIZONTAL: PCG20	P.HAYLES
VERTICAL: AHD71	CHECKED B.SASHEGYI
	APPROVED C.STEPHENS
	DATE 28.06.23

	VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL
ARMADALE LINE - ROAD	
HAMILTON STREET LEVEL CROSSING	
SWEEP PATHS - 12.5M TRUCK	
PTA Drawing No: LXR-P2-Z3-HL-CI-RD-SKT-00024	Rev: A1.02





PLAN



**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	GV	PH	BS	CS
A1	28.06.23		DSN	DRN	CHK	APP

ORIG SIZE: 100mm AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-HL-CI-RD-SKT-00025

DESIGNED	G.VANBREDA
DRAWN	P.HAYLES
CHECKED	B.SASHEGYI
APPROVED	C.STEPHENS
DATE	28.06.23

SCALE	1:250 (@A1)
DATUM	HORIZONTAL: PCG20 VERTICAL: AHD71

REFERENCES	
------------	--

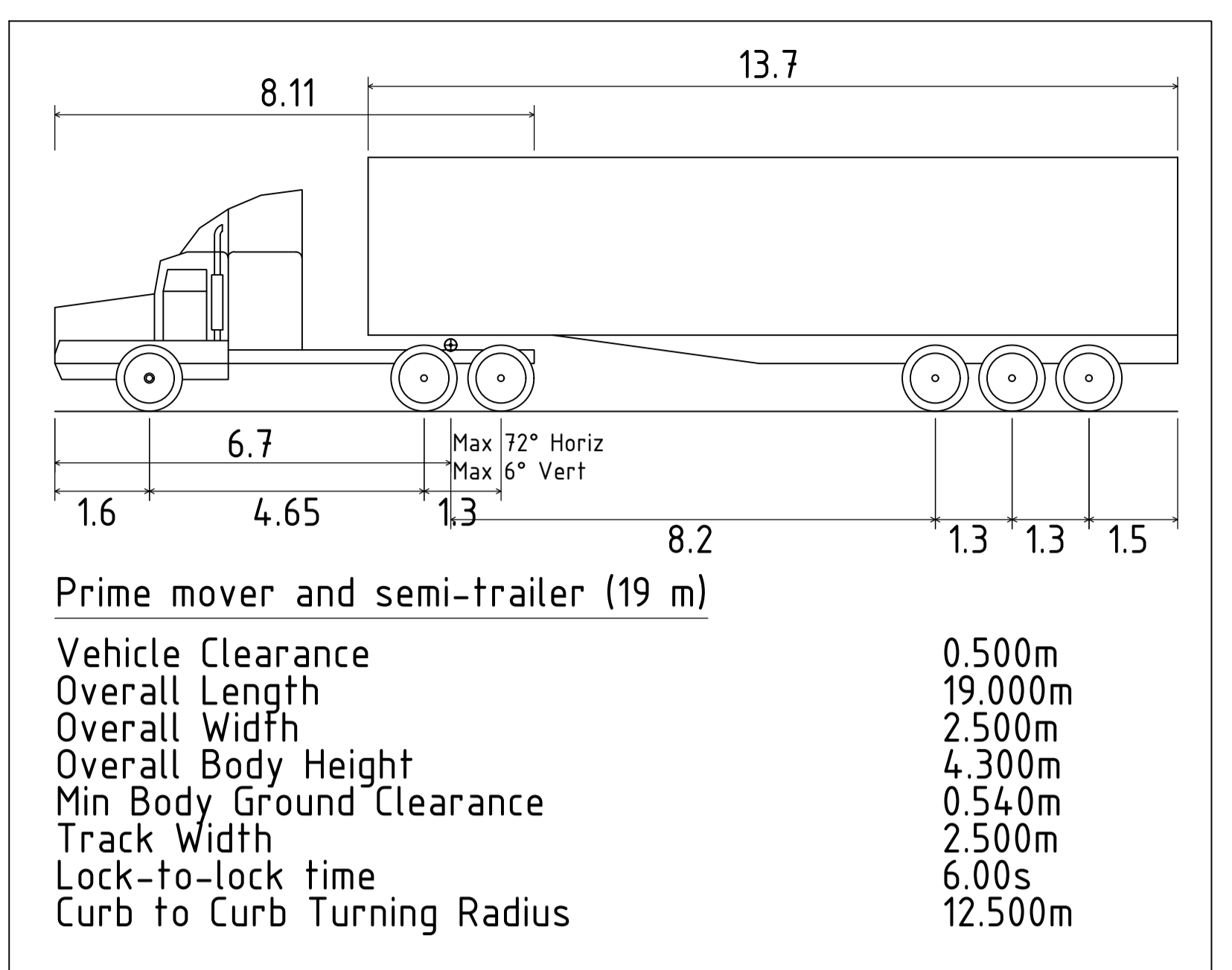
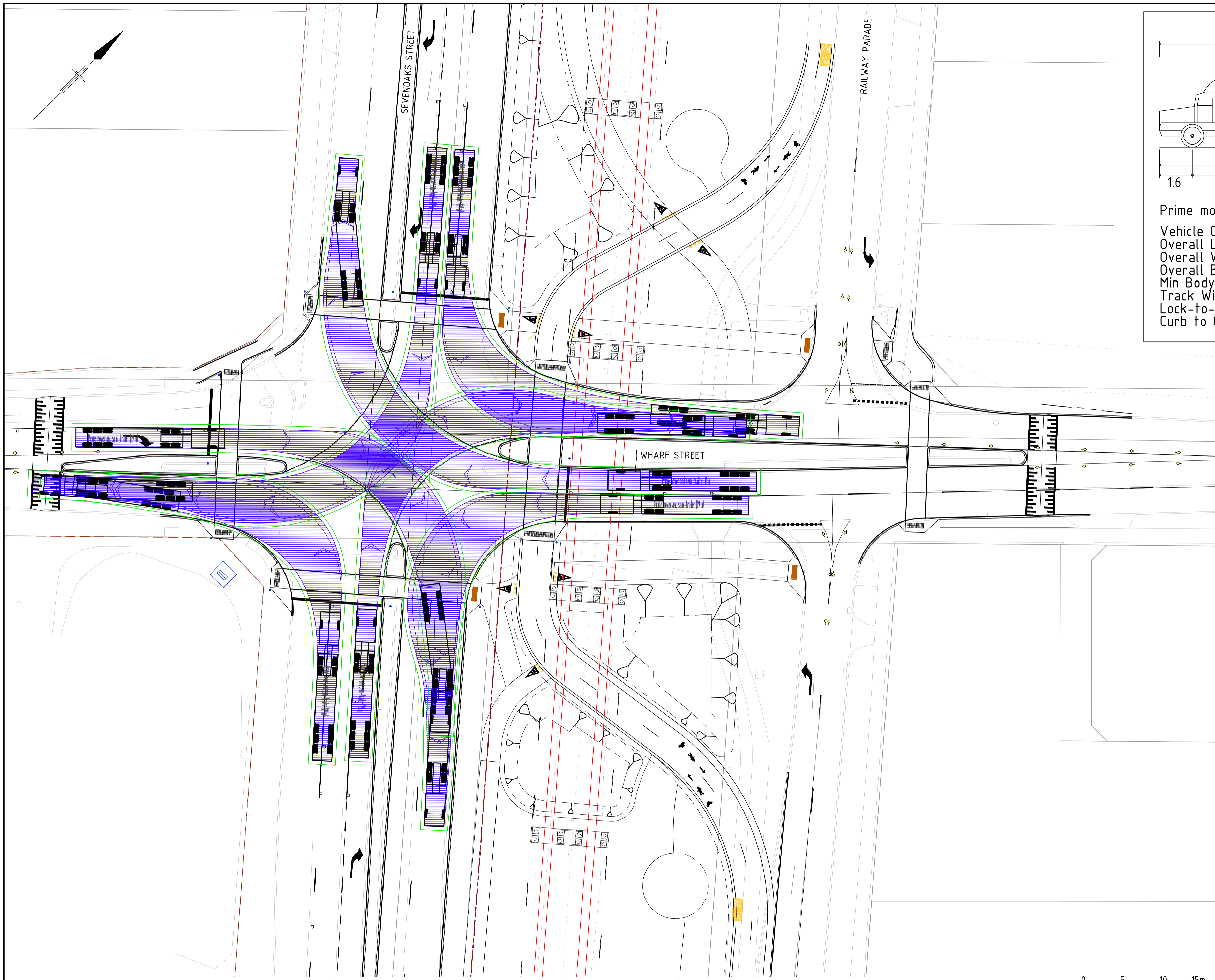
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

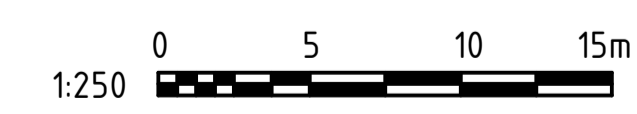
ARMADALE LINE - ROAD  
HAMILTON STREET LEVEL CROSSING  
SWEEP PATHS - 8.8M VAN

PTA Drawing No: LXR-P2-Z3-HL-CI-RD-SKT-00025 | Rev: A1.02





PLAN



**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	GV	PH	BS	CS
A1.02	28.06.23		DSN	DRN	CHK	APP

ORIG SIZE: A1

0 10 20 30 40 50 100mm

AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-FL-CI-RD-SKT-00031

REFERENCES
SCALE
1:250 (@A1)
DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

DESIGNED	G.VANBREDA
DRAWN	P.HAYLES
CHECKED	B.SASHEGYI
APPROVED	C.STEPHENS
DATE	28.06.23

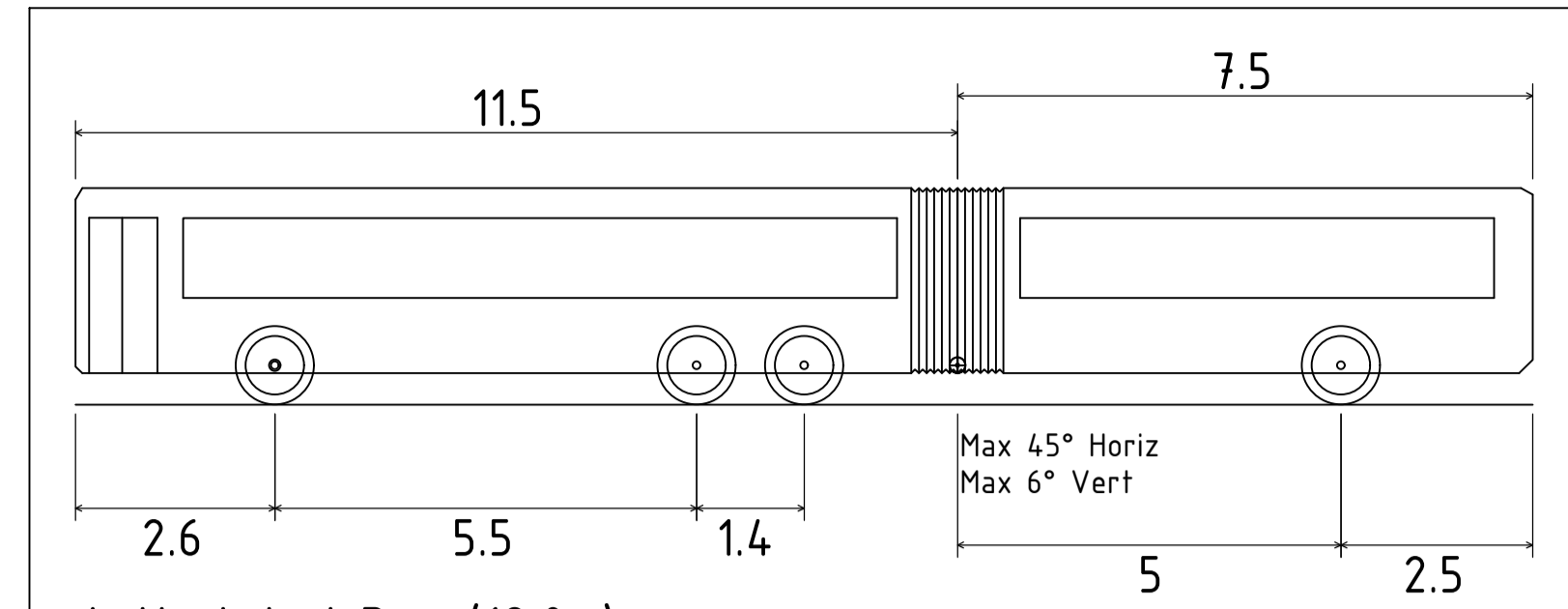
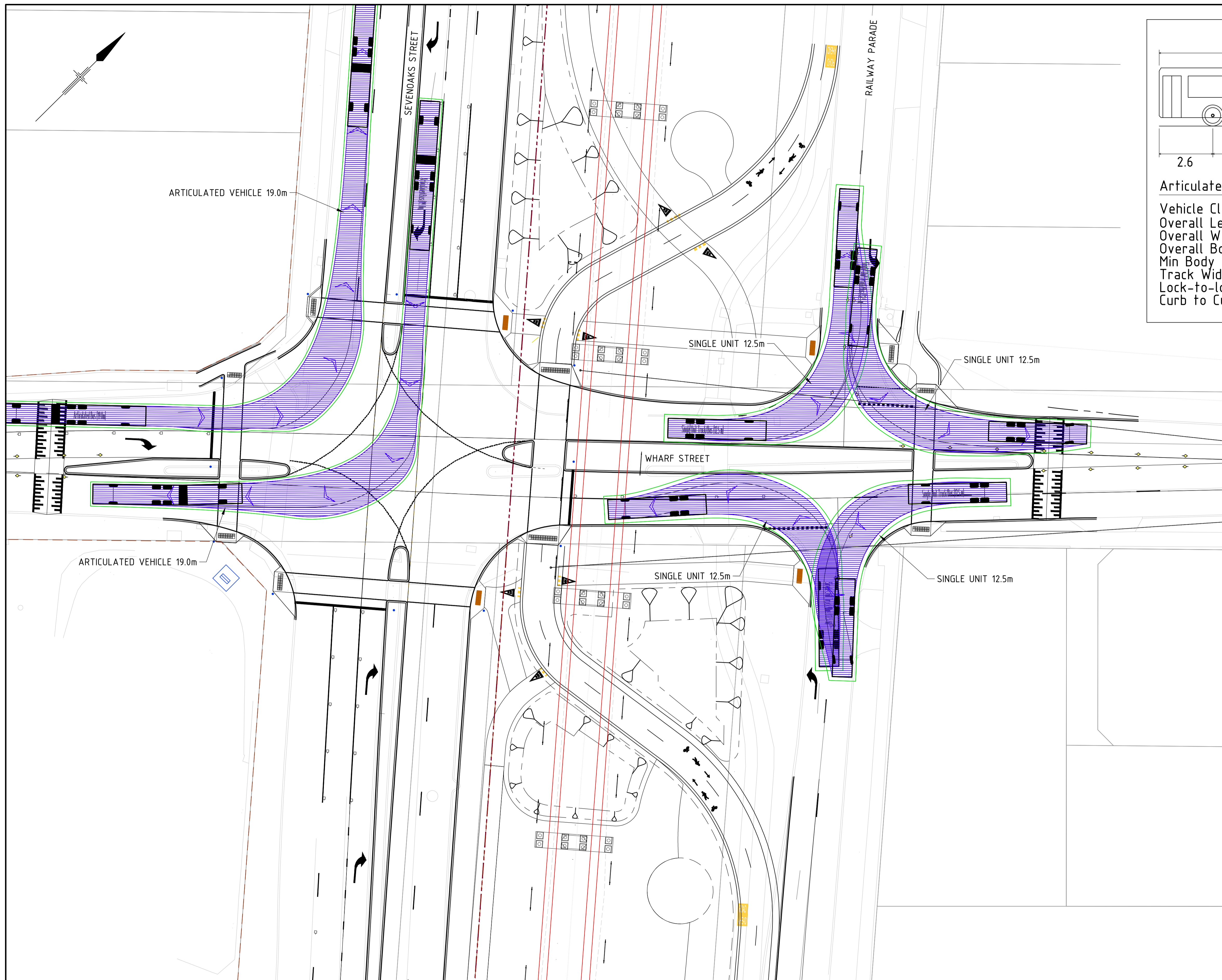
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

ARMADALE LINE - ROAD  
WHARF STREET LEVEL CROSSING  
SWEEP PATHS - 19M SEMI TRAILER

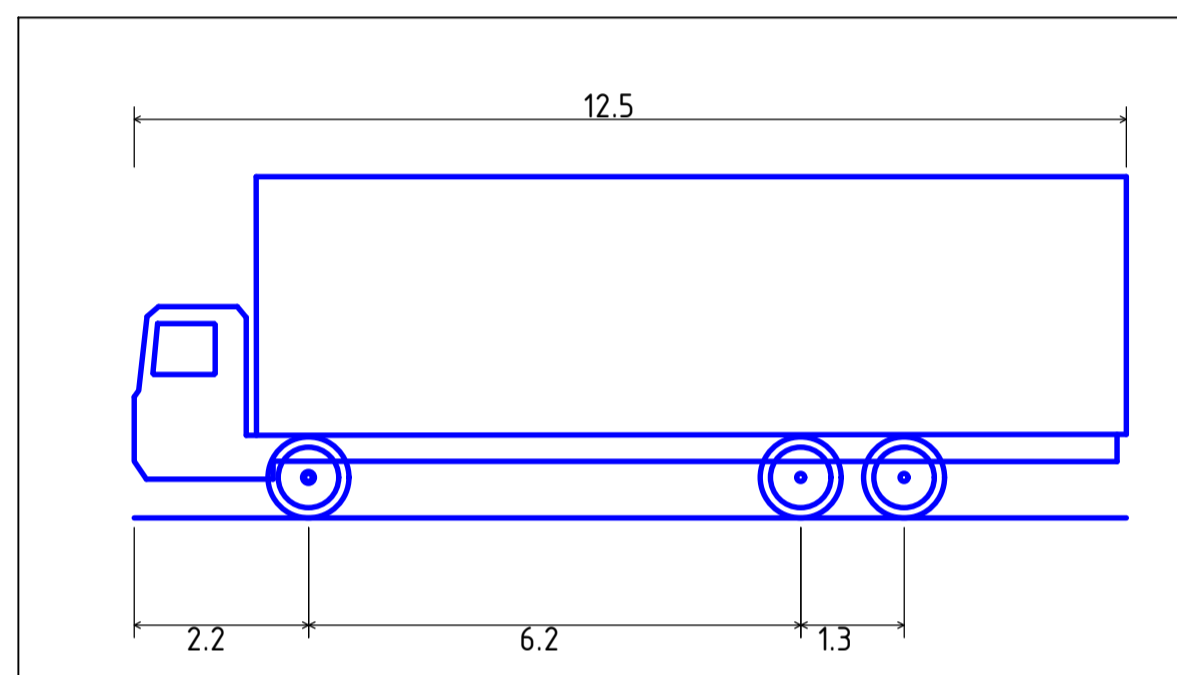
PTA Drawing No: LXR-P2-Z3-FL-CI-RD-SKT-00031 | Rev: A1.02





**Articulated Bus (19.0m)**

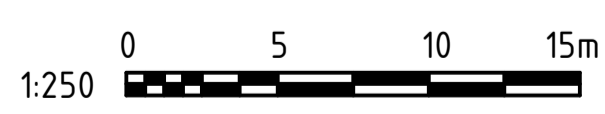
Vehicle Clearance	0.500m
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	2.823m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m



**Single Unit Truck/Bus (12.5 m)**

Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.490m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

PLAN



**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	GV	PH	BS	CS
A1	28.06.23	AMENDMENT	DSN	DRN	CHK	APP

ORIG SIZE: 100mm AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-FL-CI-RD-SKT-00032

REFERENCES	SCALE: 1:250 (@A1)	DESIGNED: G.VANBREDA
	DATUM: HORIZONTAL: PCG20, VERTICAL: AHD71	DRAWN: P.HAYLES
		CHECKED: B.SASHEGYI
		APPROVED: C.STEPHENS
		DATE: 28.06.23

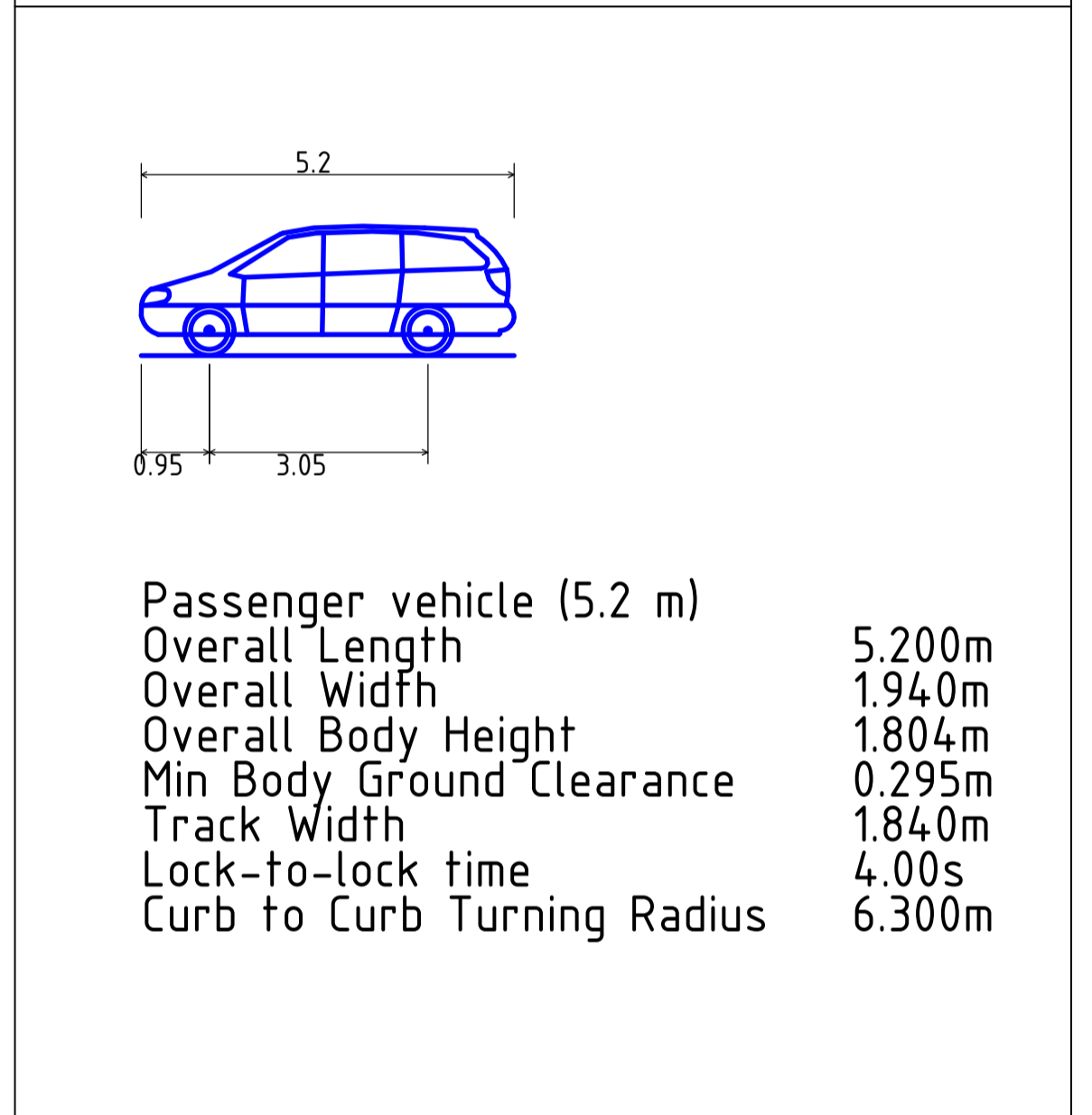
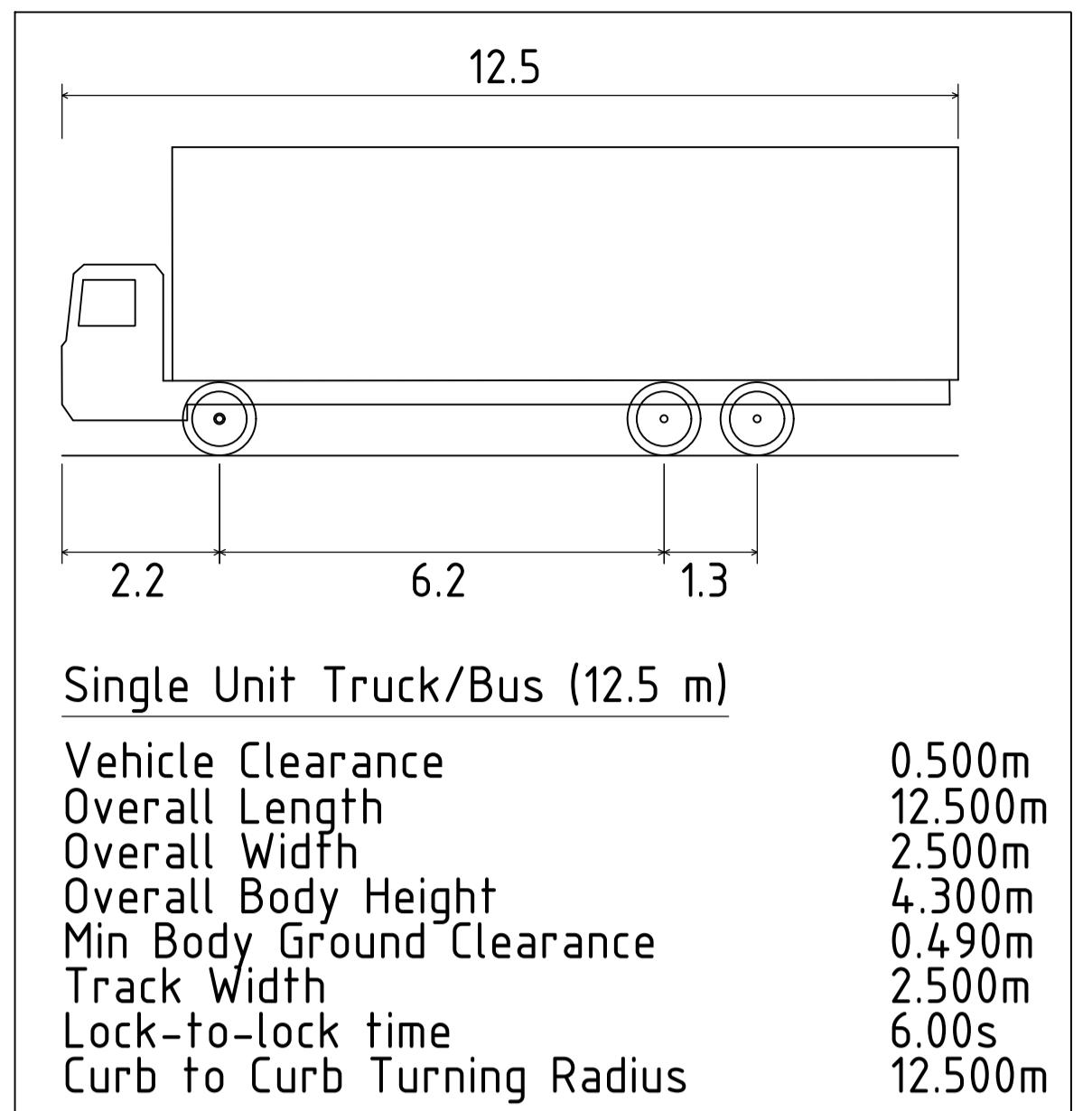
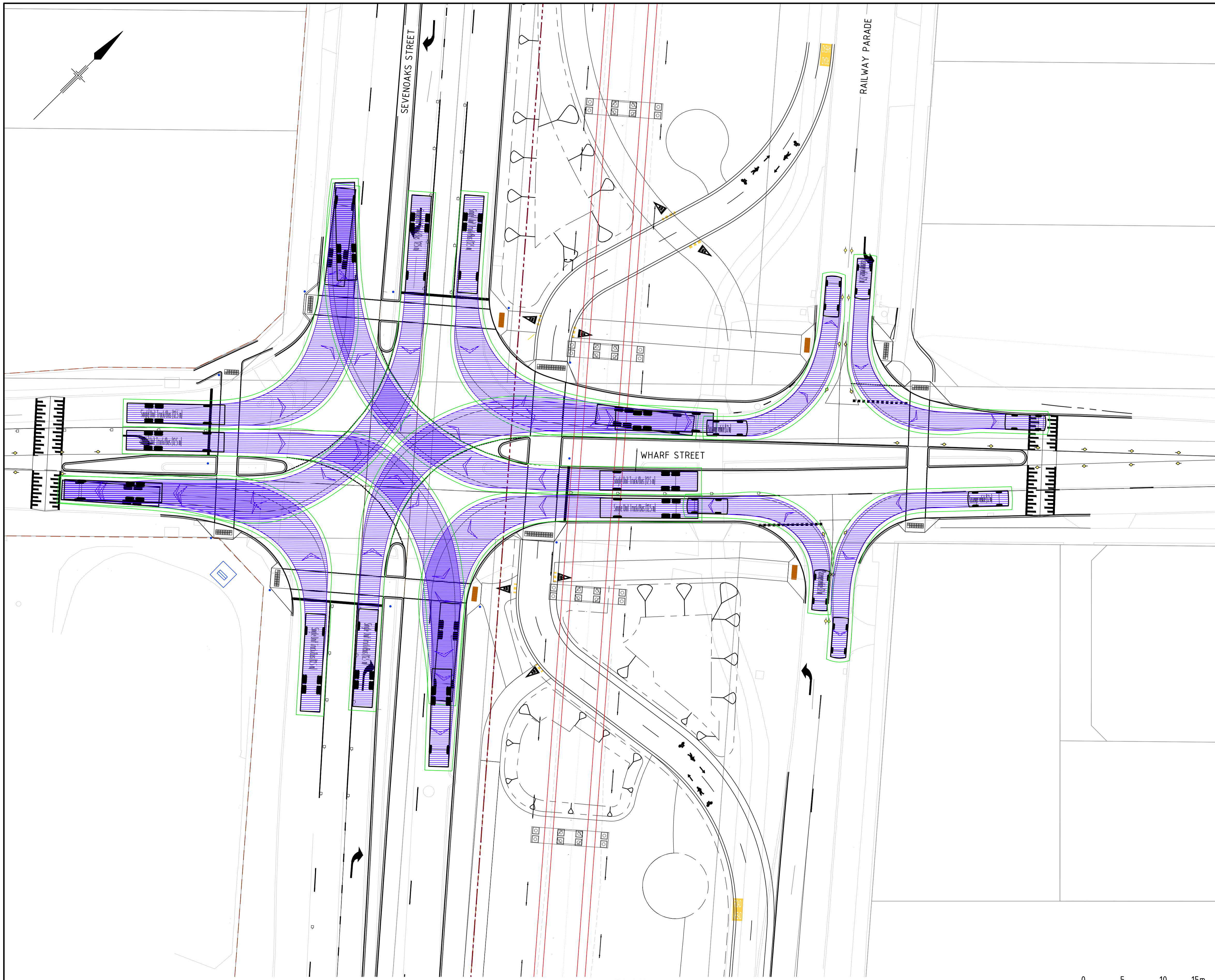
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

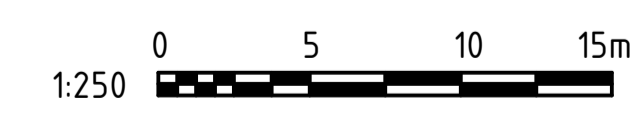
ARMADALE LINE - ROAD  
WHARF STREET LEVEL CROSSING  
SWEEP PATHS - 19M BUS AND 8.8M VAN

PTA Drawing No: LXR-P2-Z3-FL-CI-RD-SKT-00032 Rev: A1.02





PLAN



**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	GV	PH	BS	CS
A1	28.06.23		DSN	DRN	CHK	APP

ORIG SIZE: 0 10 20 30 40 50 100mm  
AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-FL-CI-RD-SKT-00033

REFERENCES	SCALE	DESIGNED	G.VANBREDA
	1:250 (@A1)	DRAWN	P.HAYLES
	DATUM	CHECKED	B.SASHEGYI
	HORIZONTAL: PCG20	APPROVED	C.STEPHENS
	VERTICAL: AHD71	DATE	28.06.23

DESIGNED		G.VANBREDA
DRAWN		P.HAYLES
CHECKED		B.SASHEGYI
APPROVED		C.STEPHENS
DATE		28.06.23

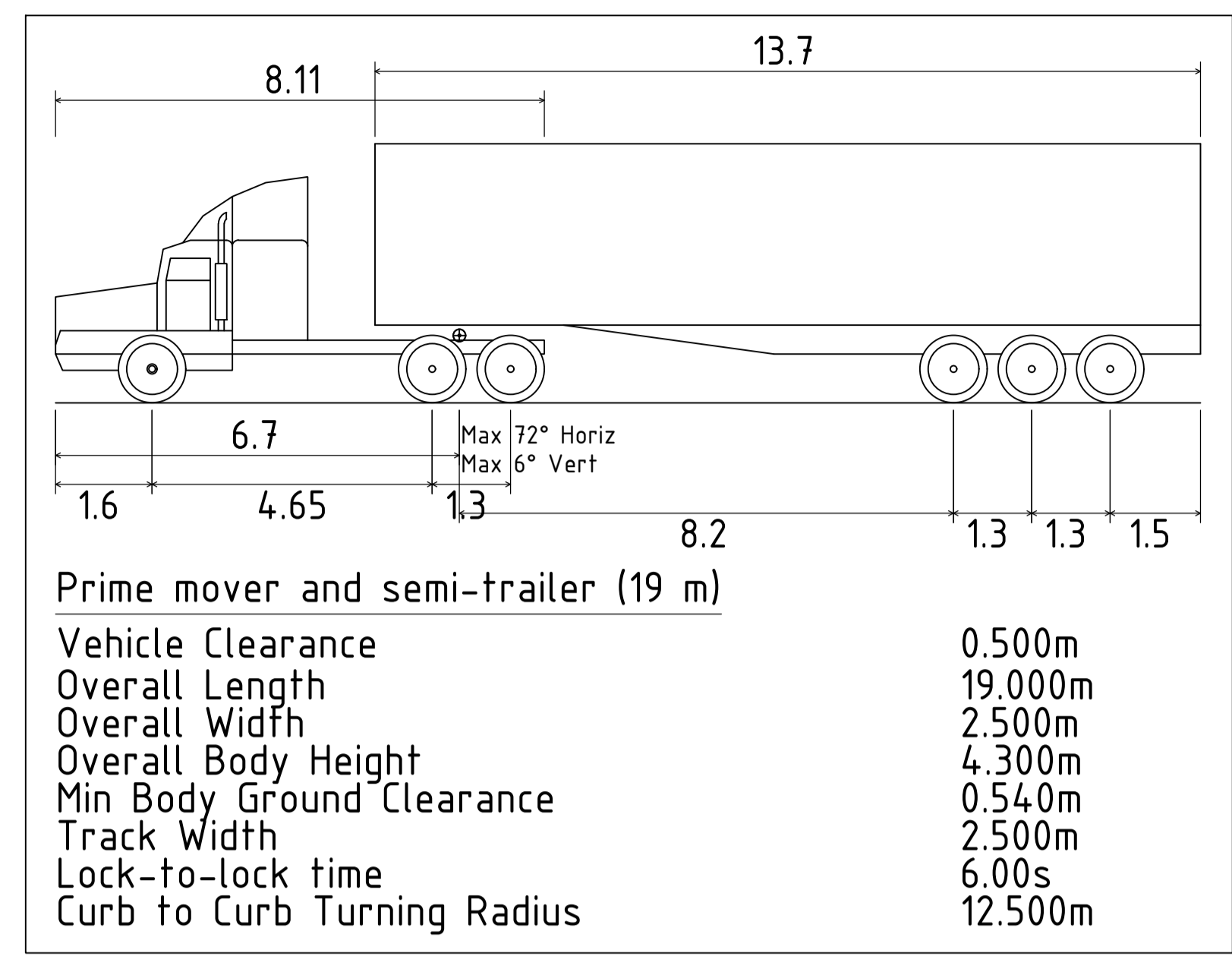
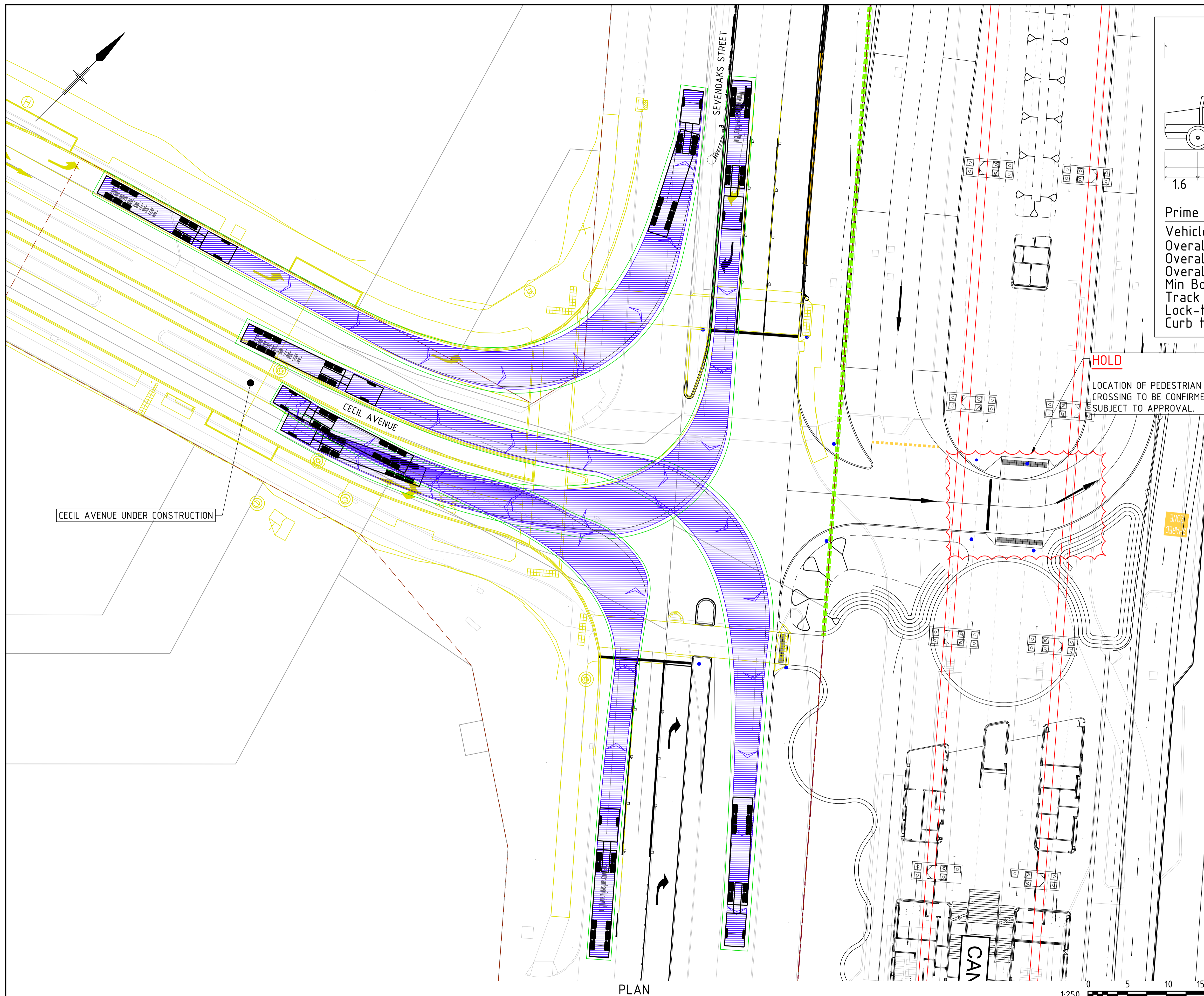
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

ARMADALE LINE - ROAD  
WHARF STREET LEVEL CROSSING  
SWEEP PATHS - 12.5M TRUCK

PTA Drawing No: LXR-P2-Z3-FL-CI-RD-SKT-00033 | Rev: A1.02





**HOLD**  
 LOCATION OF PEDESTRIAN CROSSING TO BE CONFIRMED SUBJECT TO APPROVAL.

CECIL AVENUE UNDER CONSTRUCTION

PLAN

1:250 0 5 10 15m

**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	GV	PH	BS	CS
A104	28.06.23		DSN	DRN	CHK	APP
			<small>This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.</small>			

ARMADALE LINE UPGRADE ALLIANCE  
 Innovation to Reality

Contractor No: LXR-P2-Z3-FL-CI-RD-SKT-00041

REFERENCES	SCALE	DESIGNED
	1:250 (@A1)	G.VANBREDA
	DATUM	DRAWN
	HORIZONTAL: PCG20	P.HAYLES
	VERTICAL: AHD71	CHECKED
		B.SASHEGYI
		APPROVED
		C.STEPHENS
		DATE
		28.06.23

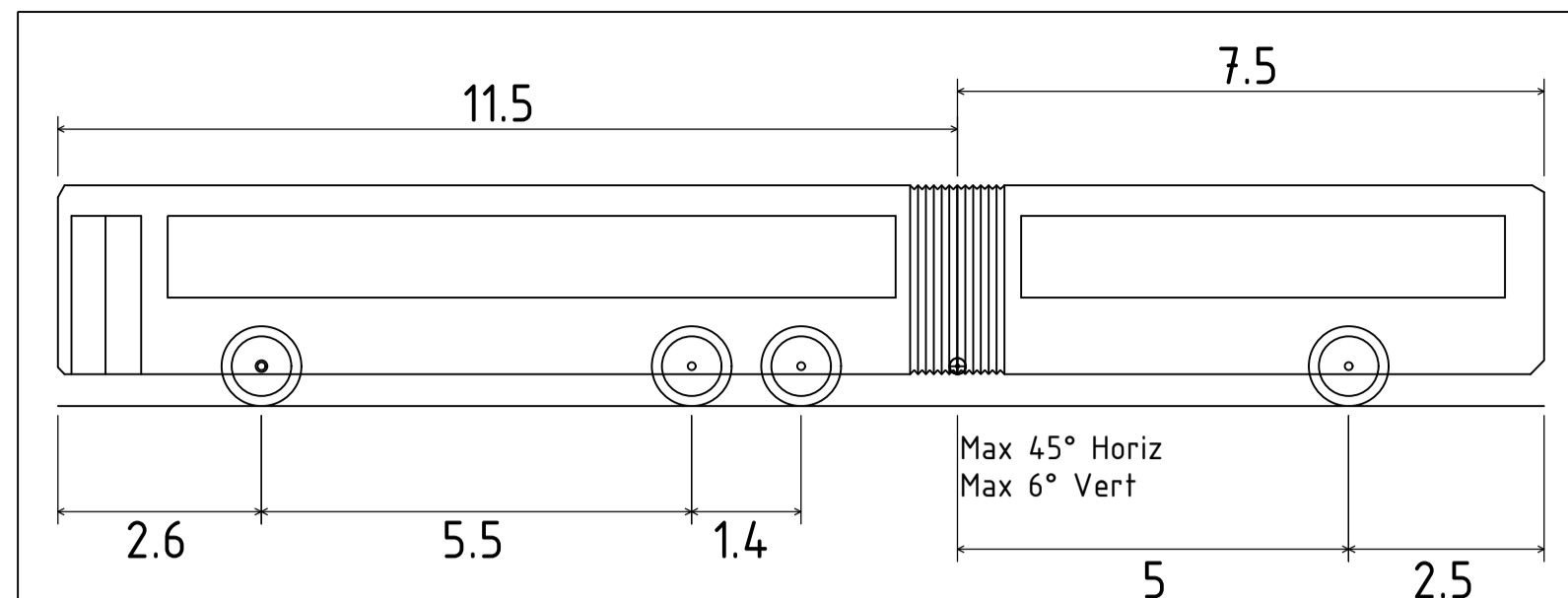
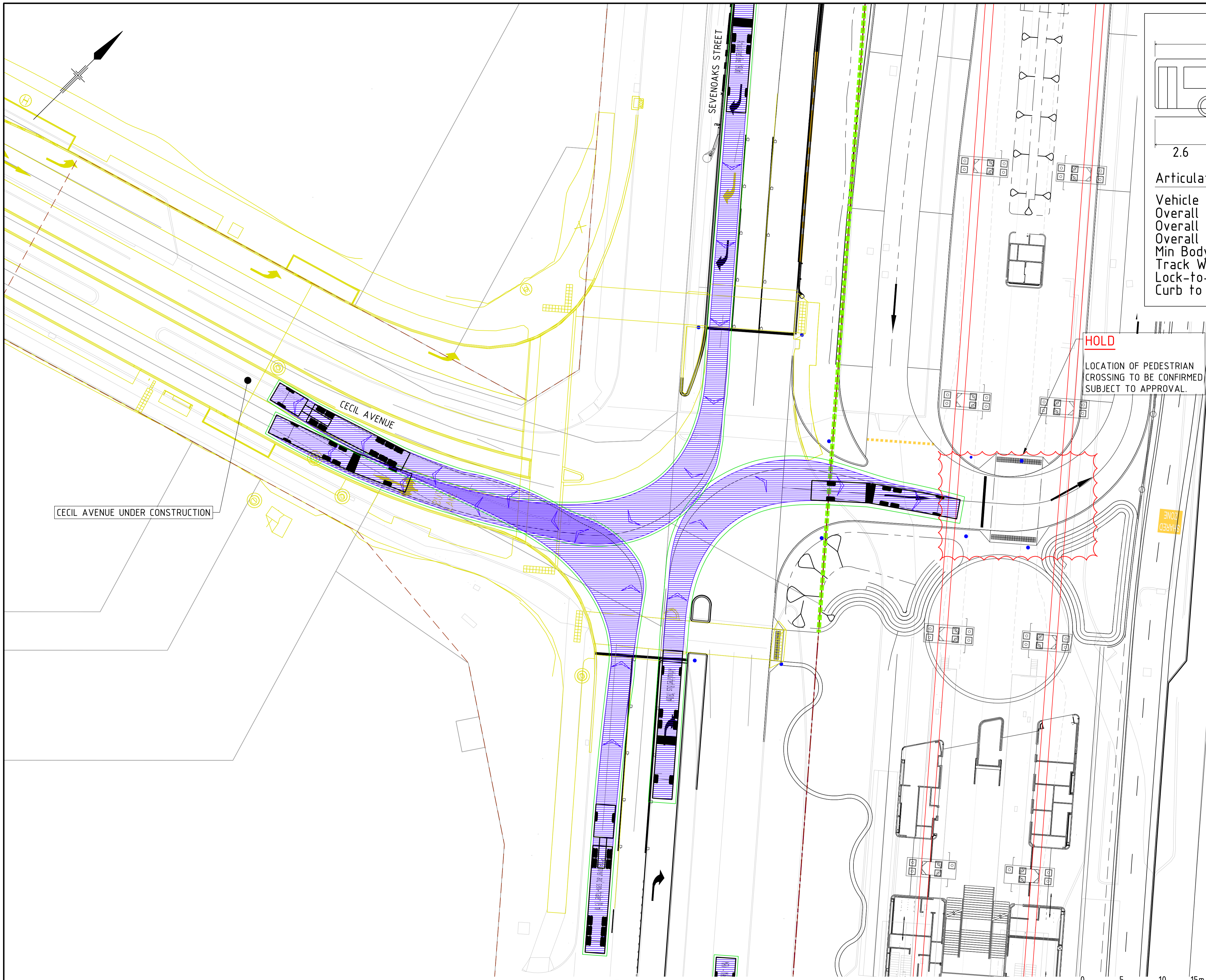
Government of Western Australia  
 Public Transport Authority

VICTORIA PARK TO CANNING  
 LEVEL CROSSING REMOVAL

ARMADALE LINE - ROAD  
 CECIL AVENUE INTERSECTION  
 SWEEP PATHS - 19M SEMI TRAILER

PTA Drawing No: LXR-P2-Z3-FL-CI-RD-SKT-00041 | Rev: A1.04





<b>Articulated Bus (19.0m)</b>	
Vehicle Clearance	0.500m
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	2.823m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m

**HOLD**  
 LOCATION OF PEDESTRIAN CROSSING TO BE CONFIRMED SUBJECT TO APPROVAL.

PLAN

1:250 0 5 10 15m

**ISSUED FOR INFORMATION**

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL AMENDMENT	GV	PH	BS	CS
			DSN	DRN	CHK	APP
ORIG SIZE		0 10 20 30 40 50 100mm	This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.			
A1		AT ORIGINAL PLOT SIZE	Contractor No: LXR-P2-Z3-FL-CI-RD-SKT-00042			

ARMADALE LINE UPGRADE ALLIANCE  
 Innovation to Reality

REFERENCES	SCALE
	1:250 (@A1)
DATUM	HORIZONTAL: PCG20 VERTICAL: AHD71

DESIGNED	G.VANBREDA
DRAWN	P.HAYLES
CHECKED	B.SASHEGYI
APPROVED	C.STEPHENS
DATE	28.06.23

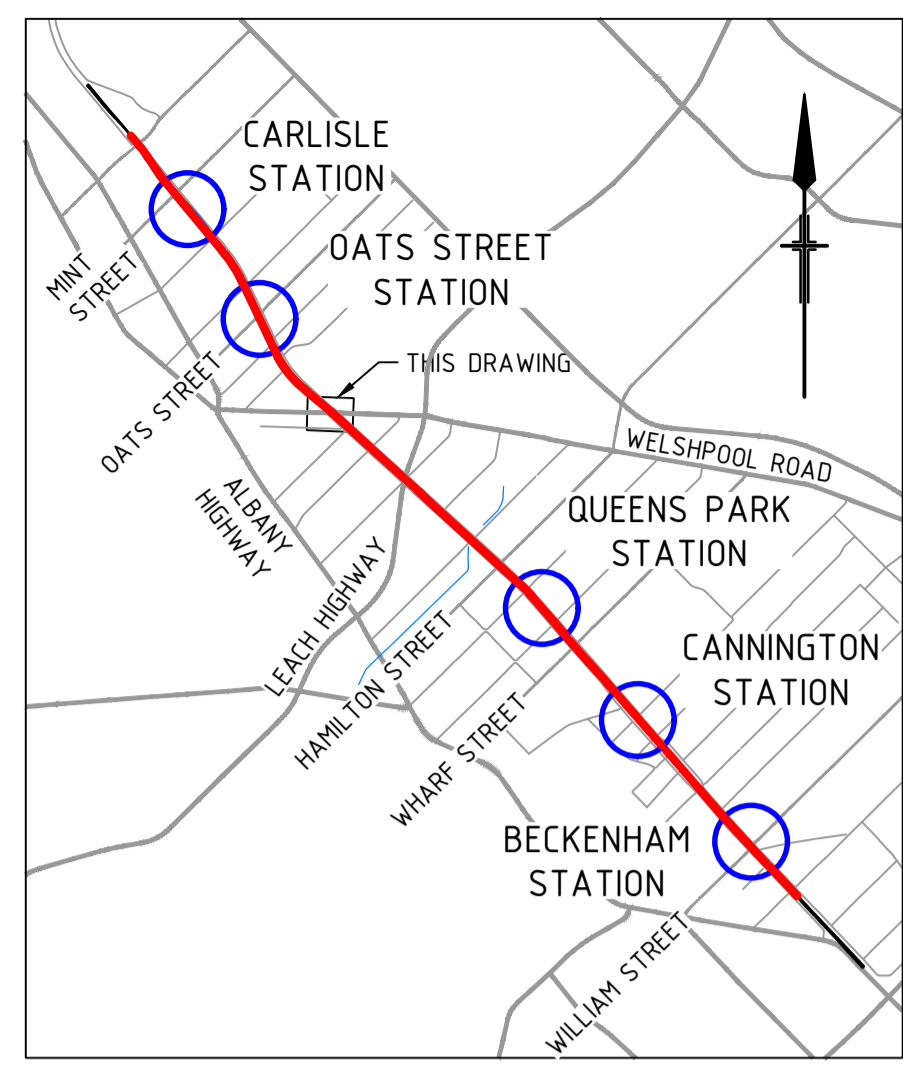
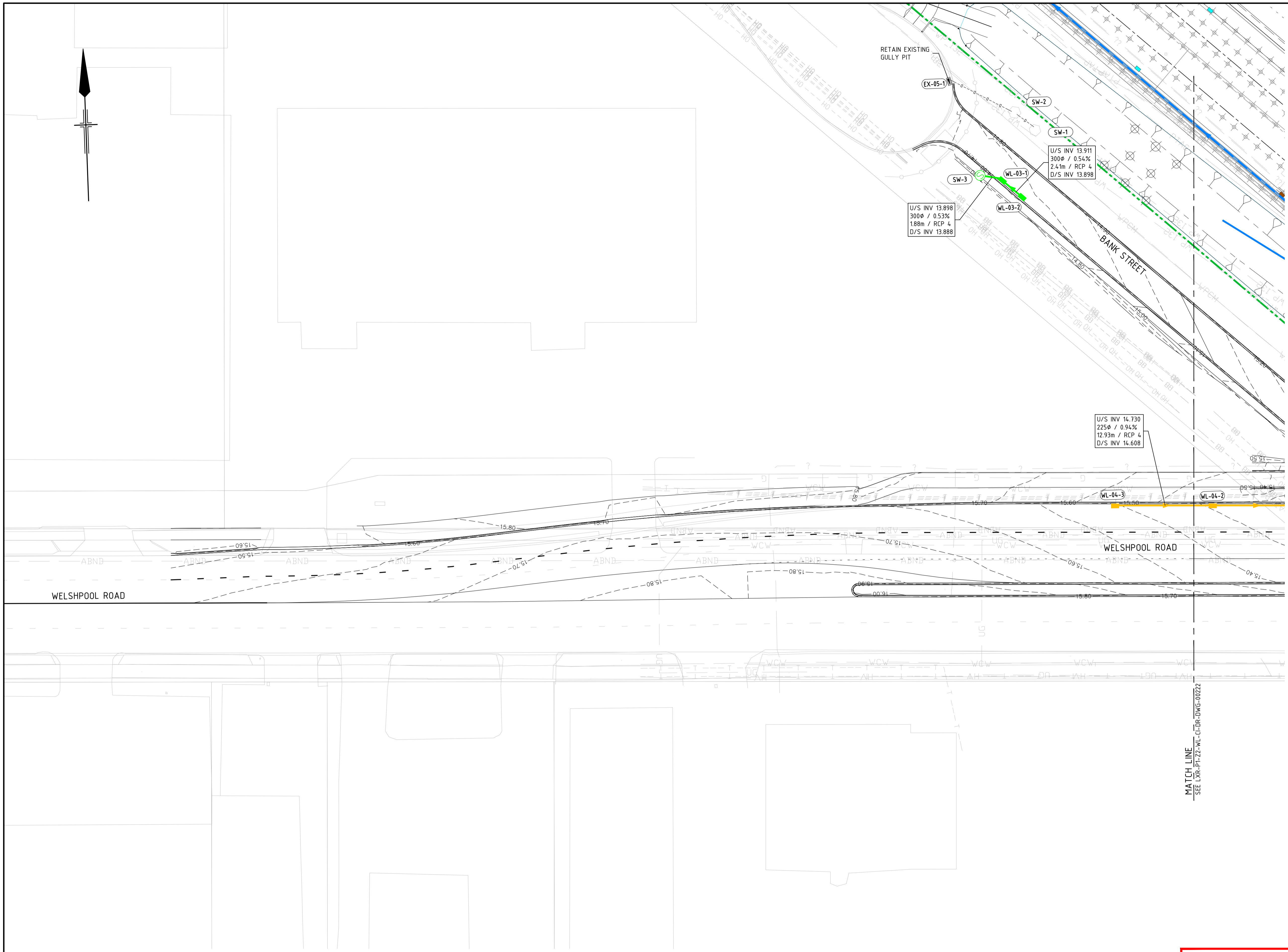
Government of Western Australia  
 Public Transport Authority

VICTORIA PARK TO CANNING  
 LEVEL CROSSING REMOVAL

**ARMADALE LINE - ROAD**  
**CECIL AVENUE INTERSECTION**  
**SWEPT PATHS - 19M BUS**

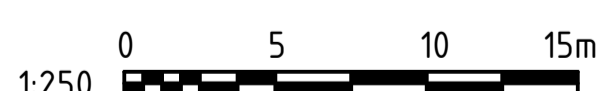
PTA Drawing No: LXR-P2-Z3-FL-CI-RD-SKT-00042 | Rev: A1.02





- NOTES**
- REFER TO CITY OF CANNING STANDARD DRAWING FILE No. CAD315, CAD904 & CAD1156 FOR MANHOLE, SIDE ENTRY PIT AND STORMWATER CONNECTION DETAILS.
  - REFER TO DRAWINGS LXR-P1-Z2-WL-CI-DR-DWG-00223, LXR-P2-Z3-HL-CI-DR-DWG-00233 & LXR-P2-Z3-FL-CI-DR-DWG-00244 FOR DRAINAGE PIT SCHEDULES.
  - REFER TO MRWA DRAWING No. 200231-094-3 FOR CoC GULLY PIT DETAIL.
  - THE DRAINAGE BASIN IN BANK ST IS TO BE REDESIGNED.
  - REFER TO MANUFACTURERS DETAILS FOR INSTALLATION OF ACO DRAIN.

- LEGEND**
- (P2-03-48-1) STRUCTURE NUMBER
  - RAIL RESERVE BOUNDARY
  - RAIL CORRIDOR DRAINAGE:
    - DRAINAGE PIPE
    - MANHOLE
    - GULLY PIT
    - ⊕ CATCHPIT / BUBBLE-UP PIT
    - ▭ DRAINAGE BASIN
  - CoC PROPOSED DRAINAGE:
    - CoC DRAINAGE PIPE
    - CoC MANHOLE
    - CoC SIDE ENTRY PIT
    - ⊕ CoC GULLY PIT
    - ▭ CoC ACO K300 DRAIN
  - ToVP PROPOSED DRAINAGE:
    - ToVP DRAINAGE PIPE
    - ToVP COMBINATION PIT
  - DRAINAGE PIPE INFORMATION:
    - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
  - EXISTING DRAINAGE:
    - EXISTING PIT AND PIPE
    - EXISTING DRAINAGE TO BE REMOVED
    - EXISTING DRAINAGE PIPE INFORMATION:
      - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
  - DESIGN CONTOUR:
    - 20 DESIGN MAJOR CONTOUR
    - 20.1 DESIGN MINOR CONTOUR



**FINAL DETAILED DESIGN**

Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - DRAINAGE**  
WELSHPOOL ROAD LEVEL CROSSING - PACKAGE 1  
GENERAL ARRANGEMENT - SHEET 1  
Drg No: LXR-P1-Z2-WL-CI-DR-DWG-00221 | Rev: C2.01

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C2.01	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	F.S	L.C	B.S	C.S
B	01.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	F.S	L.C	J.L	Y.S
A	12.08.22	ISSUED FOR REFERENCE DESIGN	F.S	L.C	J.L	Y.S

ORIG SIZE: A1

0 10 20 30 40 50 100mm  
AT ORIGINAL PLOT SIZE

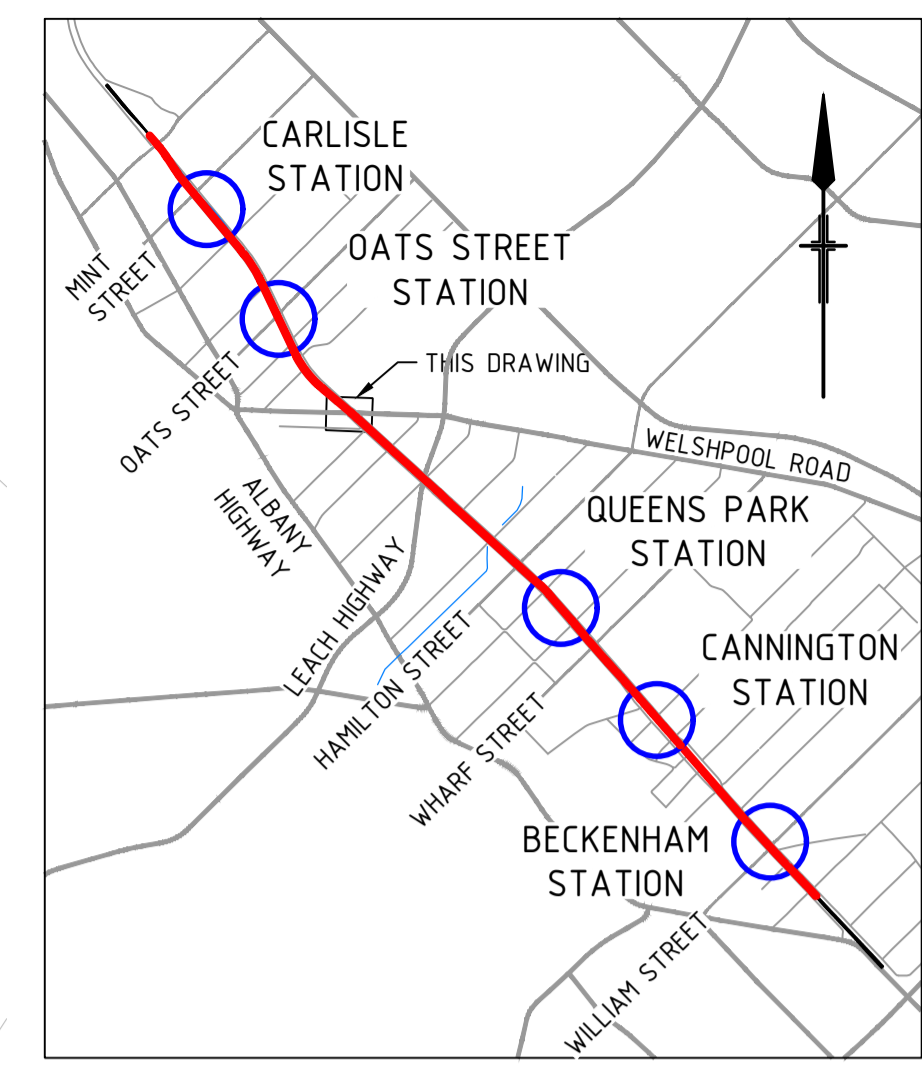
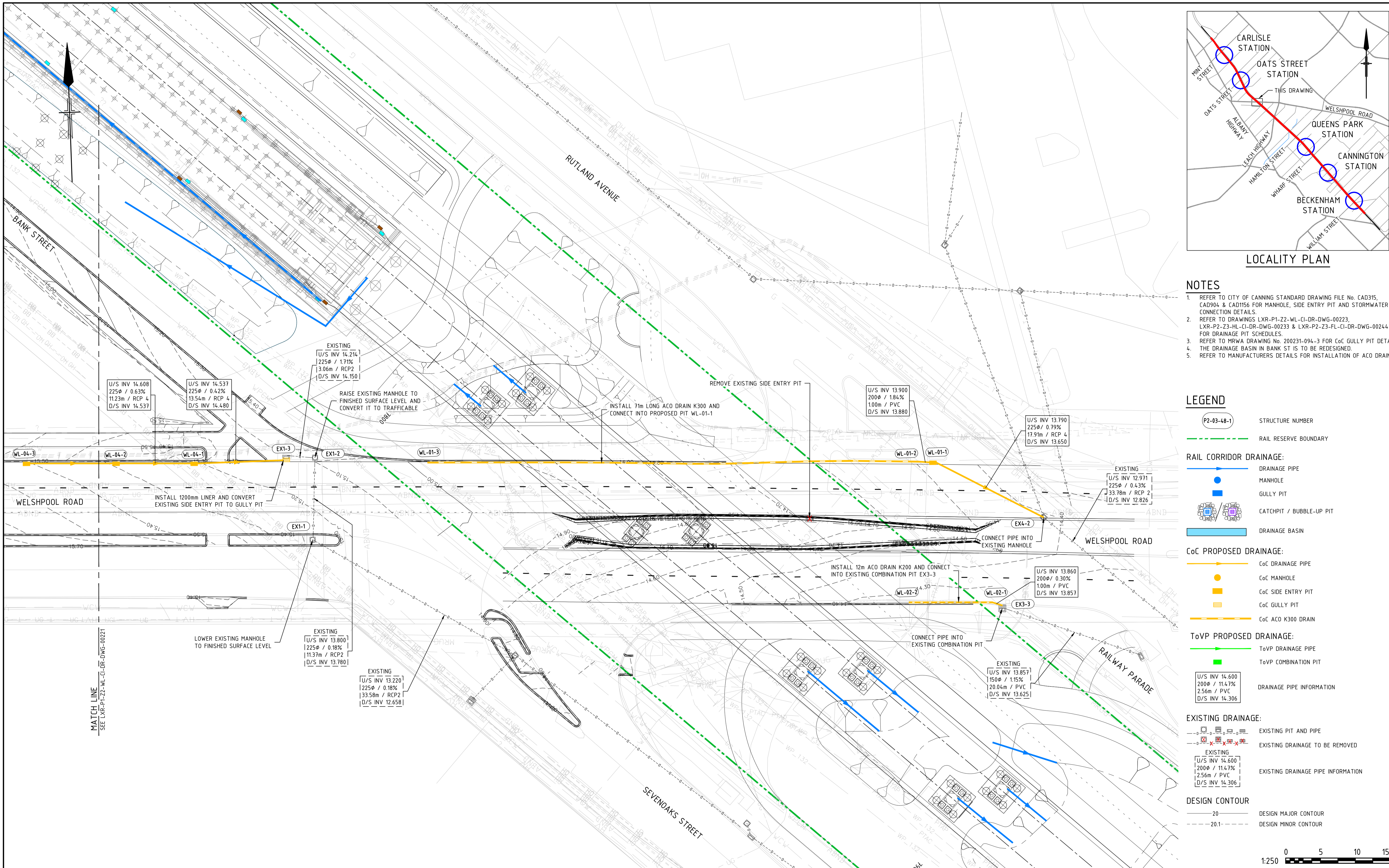
This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

REFERENCES	SCALE	DESIGNED
	1:250 (@A1)	F.SHER
	DATUM	DRAWN
	HORIZONTAL: PCG20	L.CHEN
	VERTICAL: AHD71	CHECKED
		B.SASHEGYI
		APPROVED
		C.STEPHENS
		DATE
		28.06.23

Contractor No: LXR-P1-Z2-WL-CI-DR-DWG-00221



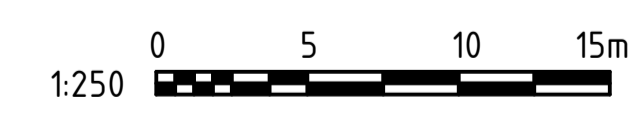


LOCALITY PLAN

- NOTES**
- REFER TO CITY OF CANNING STANDARD DRAWING FILE No. CAD315, CAD904 & CAD1156 FOR MANHOLE, SIDE ENTRY PIT AND STORMWATER CONNECTION DETAILS.
  - REFER TO DRAWINGS LXR-P1-Z2-WL-CI-DR-DWG-00223, LXR-P2-Z3-HL-CI-DR-DWG-00233 & LXR-P2-Z3-FL-CI-DR-DWG-00244 FOR DRAINAGE PIT SCHEDULES.
  - REFER TO MRWA DRAWING No. 200231-094-3 FOR CoC GULLY PIT DETAIL.
  - THE DRAINAGE BASIN IN BANK ST IS TO BE REDESIGNED.
  - REFER TO MANUFACTURERS DETAILS FOR INSTALLATION OF ACO DRAIN.

**LEGEND**

- (P2-03-48-1) STRUCTURE NUMBER
- RAIL RESERVE BOUNDARY
- RAIL CORRIDOR DRAINAGE:**
  - DRAINAGE PIPE
  - MANHOLE
  - GULLY PIT
  - ⊕ CATCHPIT / BUBBLE-UP PIT
  - ▭ DRAINAGE BASIN
- CoC PROPOSED DRAINAGE:**
  - CoC DRAINAGE PIPE
  - CoC MANHOLE
  - CoC SIDE ENTRY PIT
  - ⊕ CoC GULLY PIT
  - ▭ CoC ACO K300 DRAIN
- ToVP PROPOSED DRAINAGE:**
  - ToVP DRAINAGE PIPE
  - ToVP COMBINATION PIT
- DRAINAGE PIPE INFORMATION**
  - U/S INV 14.600  
225φ / 0.63%  
11.23m / RCP 4  
D/S INV 14.537
  - U/S INV 14.537  
225φ / 0.42%  
13.54m / RCP 4  
D/S INV 14.480
  - U/S INV 14.214  
225φ / 1.71%  
3.06m / RCP2  
D/S INV 14.150
  - U/S INV 13.900  
200φ / 1.84%  
1.00m / PVC  
D/S INV 13.880
  - U/S INV 13.790  
225φ / 0.79%  
17.91m / RCP 4  
D/S INV 13.650
  - U/S INV 12.971  
225φ / 0.43%  
33.78m / RCP 2  
D/S INV 12.826
  - U/S INV 13.860  
200φ / 0.30%  
1.00m / PVC  
D/S INV 13.857
  - U/S INV 13.857  
150φ / 1.15%  
20.04m / PVC  
D/S INV 13.625
  - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
- EXISTING DRAINAGE:**
  - EXISTING PIT AND PIPE
  - EXISTING DRAINAGE TO BE REMOVED
  - U/S INV 13.800  
225φ / 0.18%  
11.37m / RCP2  
D/S INV 13.780
  - U/S INV 13.220  
225φ / 0.18%  
33.58m / RCP2  
D/S INV 12.658
  - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
- DESIGN CONTOUR**
  - 20 DESIGN MAJOR CONTOUR
  - 20.1 DESIGN MINOR CONTOUR



**FINAL DETAILED DESIGN**

Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - DRAINAGE**  
WELSHPOOL ROAD LEVEL CROSSING - PACKAGE 1  
GENERAL ARRANGEMENT - SHEET 2  
Drg No: LXR-P1-Z2-WL-CI-DR-DWG-00222 | Rev: C2.02

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	FS	LC	BS	CS
C2.02	28.06.23	AMENDMENT	DSN	DRN	CHK	APP
ORIG SIZE	0 10 20 30 40 50 100mm		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.			
A1	AT ORIGINAL PLOT SIZE		Contractor No: LXR-P1-Z2-WL-CI-DR-DWG-00222			

**ARMADALE LINE UPGRADE ALLIANCE**  
Innovation to Reality

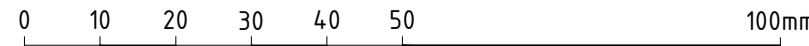
REFERENCES	SCALE	DESIGNED
	1:250 (@A1)	F.SHER
	DATUM	DRAWN
	HORIZONTAL: PCG20	L.CHEN
	VERTICAL: AHD71	CHECKED
		B.SASHEGYI
		APPROVED
		C.STEPHENS
		DATE
		28.06.23

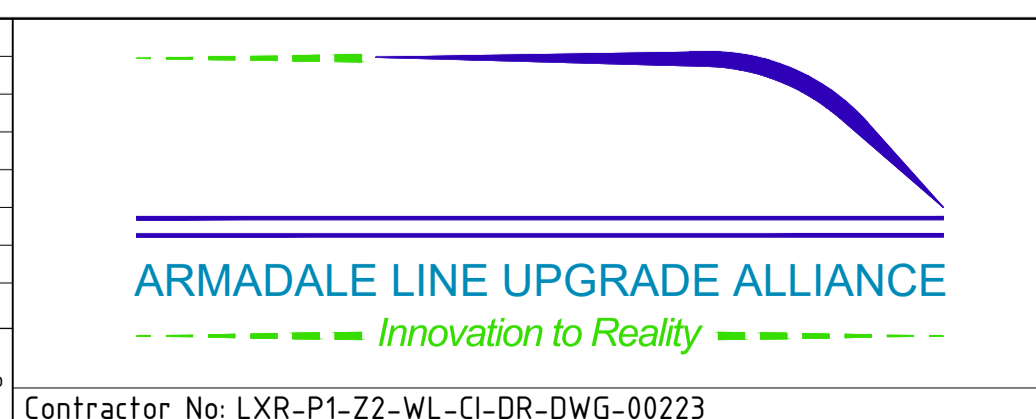


STRUCTURE NO.	STRUCTURE TYPE	COORDINATES		REFERENCE POINT ELEVATION	TOTAL PIT DEPTH	NOTES
		EASTING	NORTHING			
EX1-3	TGT	59892.981	358819.084	15.128	1.139	INSTALL 1200mm LINER TO PROVIDE CONNECTION WITH EXISTING PIPE AND REFER TO MRWA DRAWING No. 200231-094-3 FOR CoC GULLY PIT DETAIL
EX1-2	SWT	59896.716	358819.142	15.108	1.508	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX1-1	SRN	59895.932	358807.793	15.242	2.243	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX5-1	EXISTING PIT	59835.888	358876.887	14.674	TBC	RETAIN EXISTING PIT AND CONNECT PROPOSED PIPE INTO IT
SW-2	EXISTING PIT	59844.148	358872.360	14.835	TBC	EXISTING PIT TYPE AND INVERTS BEING VERIFIED. RAISE EXISTING PIT TO FINISHED SURFACE LEVEL
EX3-3	EXISTING COMBINATION PIT	59995.922	358794.797	14.275	0.675	CONNECT PROPOSED ACO DRAIN INTO EXISTING PIT
EX4-2	EXISTING PIT	60001.740	358807.889	14.388	1.617	CONNECT PROPOSED PIPE INTO EXISTING MANHOLE
WL-01-1	CoC SIDE ENTRY PIT	59985.453	358815.347	14.481	0.891	REFER TO CoC DRAWING CAD904
WL-03-2	ToVP COMBINATION PIT	59844.420	358861.021	14.642	0.789	REFER TO LXR-PW-Z0-GN-CI-DR-DWG-0001
WL-03-1	ToVP COMBINATION PIT	59842.637	358862.640	14.685	1.000	REFER TO LXR-PW-Z0-GN-CI-DR-DWG-0001
WL-04-3	CoC SIDE ENTRY PIT	59855.300	358820.448	15.402	0.872	REFER TO CoC DRAWING CAD904
WL-04-2	CoC SIDE ENTRY PIT	59868.226	358819.986	15.284	0.876	REFER TO CoC DRAWING CAD904
WL-04-1	CoC SIDE ENTRY PIT	59879.447	358819.569	15.204	0.867	REFER TO CoC DRAWING CAD904
SW-1	SOAKWELL	59840.808	358863.082	14.816	1.400	

TRENCH DRAIN					
STRUCTURE NAME	REFERENCE POINT			ACO DRAIN MINIMUM DEPTH (mm)	COMMENTS
	COORDINATES		LEVEL (m)		
	EASTING	NORTHING			
WL-01-6	59913.435	358818.335	14.974	300	INSTALL K300 ACO DRAIN / START OF ACO DRAIN
WL-01-5	59924.649	358817.951	14.902		INSTALL K300 ACO DRAIN
WL-01-4	59951.484	358816.776	14.751		INSTALL K300 ACO DRAIN
WL-01-3	59959.762	358816.458	14.686		INSTALL K300 ACO DRAIN
WL-01-2	59984.372	358815.413	14.551		INSTALL ACO K3-903G IN-LINE PIT
WL-02-2	59990.372	358795.362	14.229	200	INSTALL K200 ACO DRAIN / START OF ACO DRAIN
WL-02-1	59994.927	358794.994	14.214		INSTALL ACO K2-902G IN-LINE PIT

**FINAL DETAILED DESIGN**


C2.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	F.S	L.C	B.S	C.S
B	01.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	F.S	L.C	J.L	Y.S
REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
ORIG SIZE			<small>This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.</small>			
A1	AT ORIGINAL PLOT SIZE		Contractor No: LXR-P1-Z2-WL-CI-DR-DWG-00223			



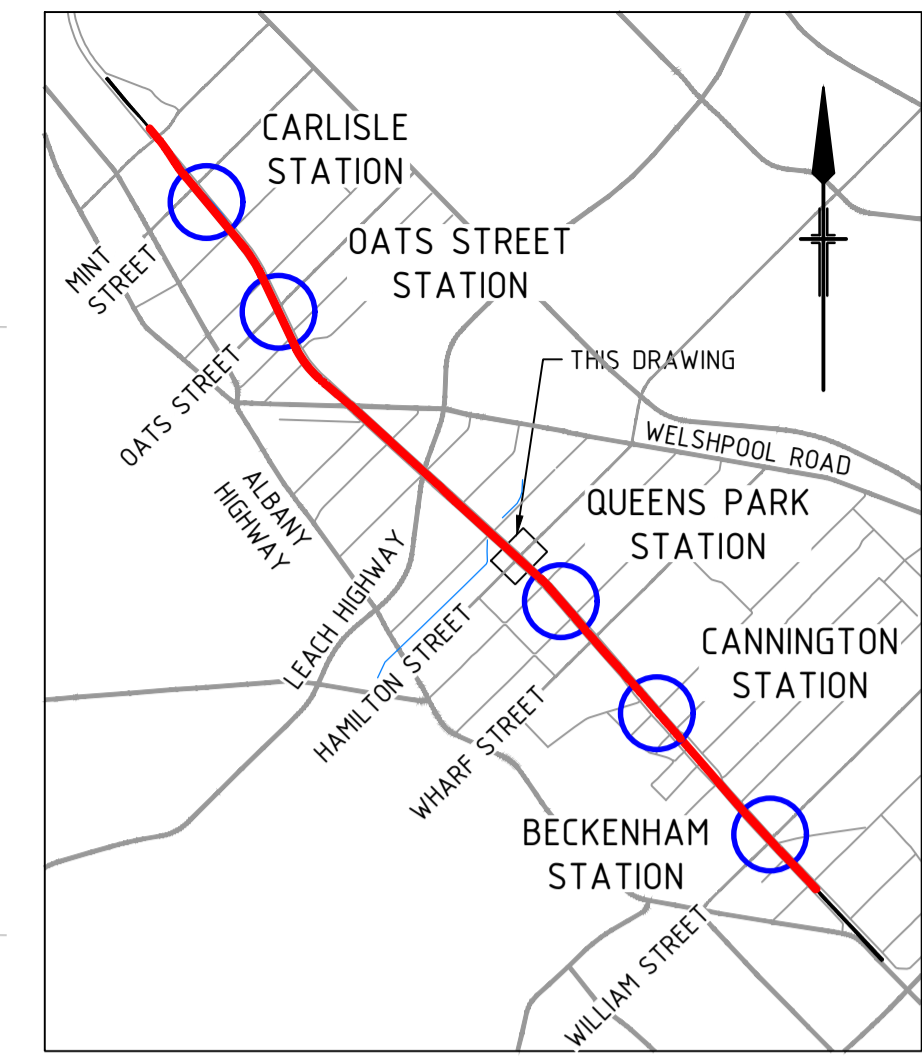
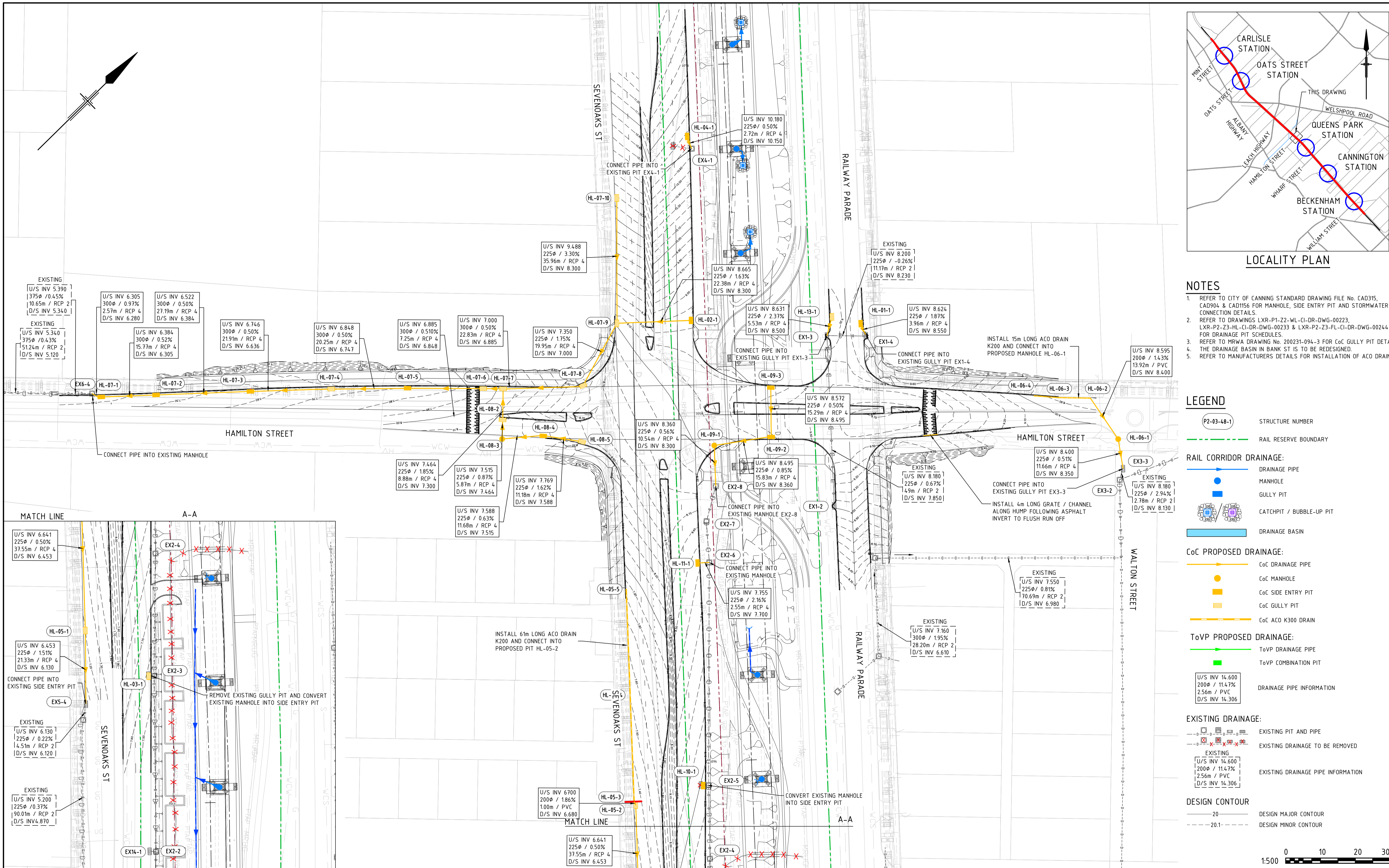
REFERENCES
------------

SCALE	DESIGNED	F.SHER
NTS	DRAWN	L.CHEN
DATUM	CHECKED	B.SASHEGYI
HORIZONTAL: PCG20	APPROVED	C.STEPHENS
VERTICAL: AHD71	DATE	28.06.23

DESIGNED	F.SHER
DRAWN	L.CHEN
CHECKED	B.SASHEGYI
APPROVED	C.STEPHENS
DATE	28.06.23

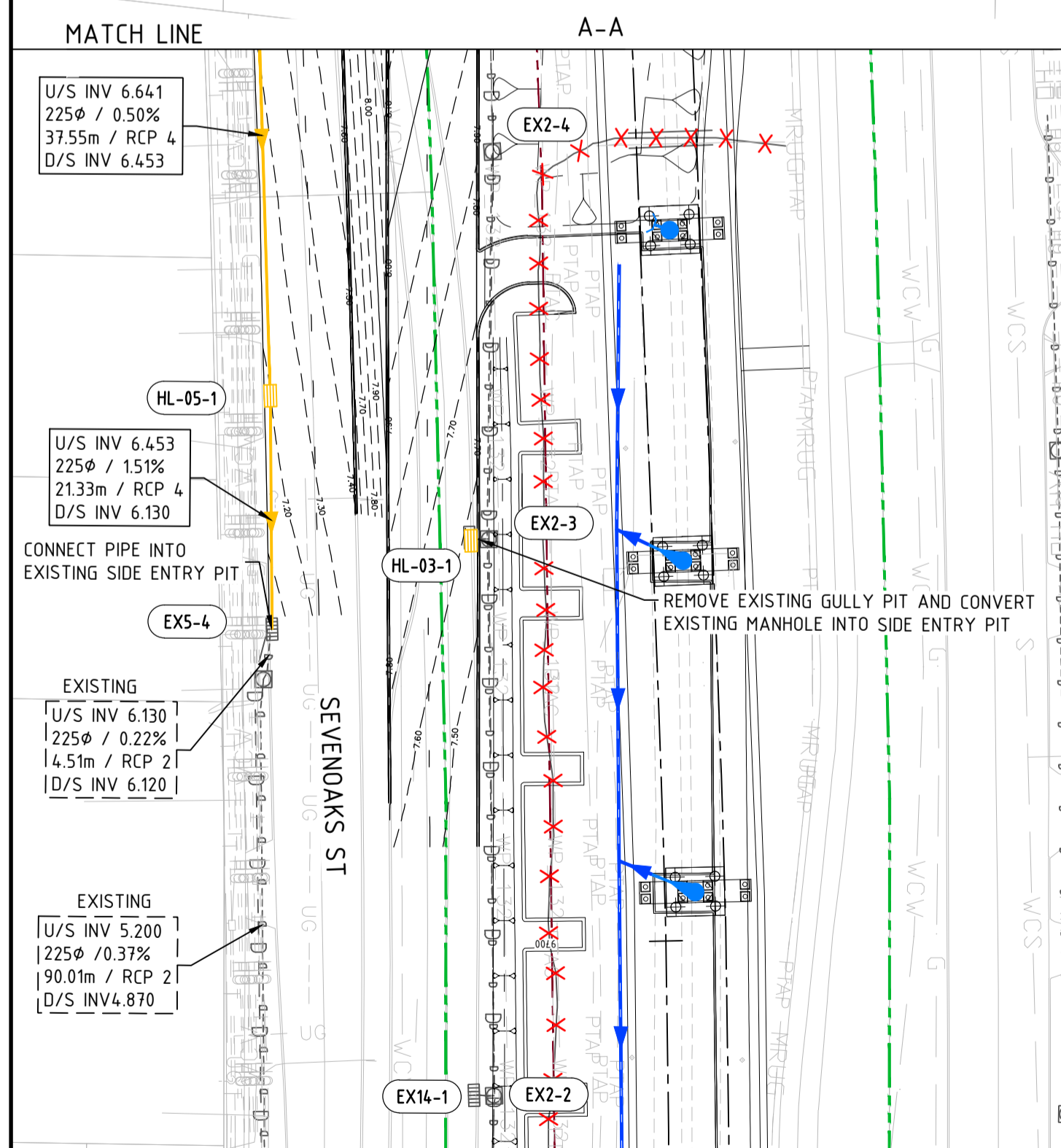
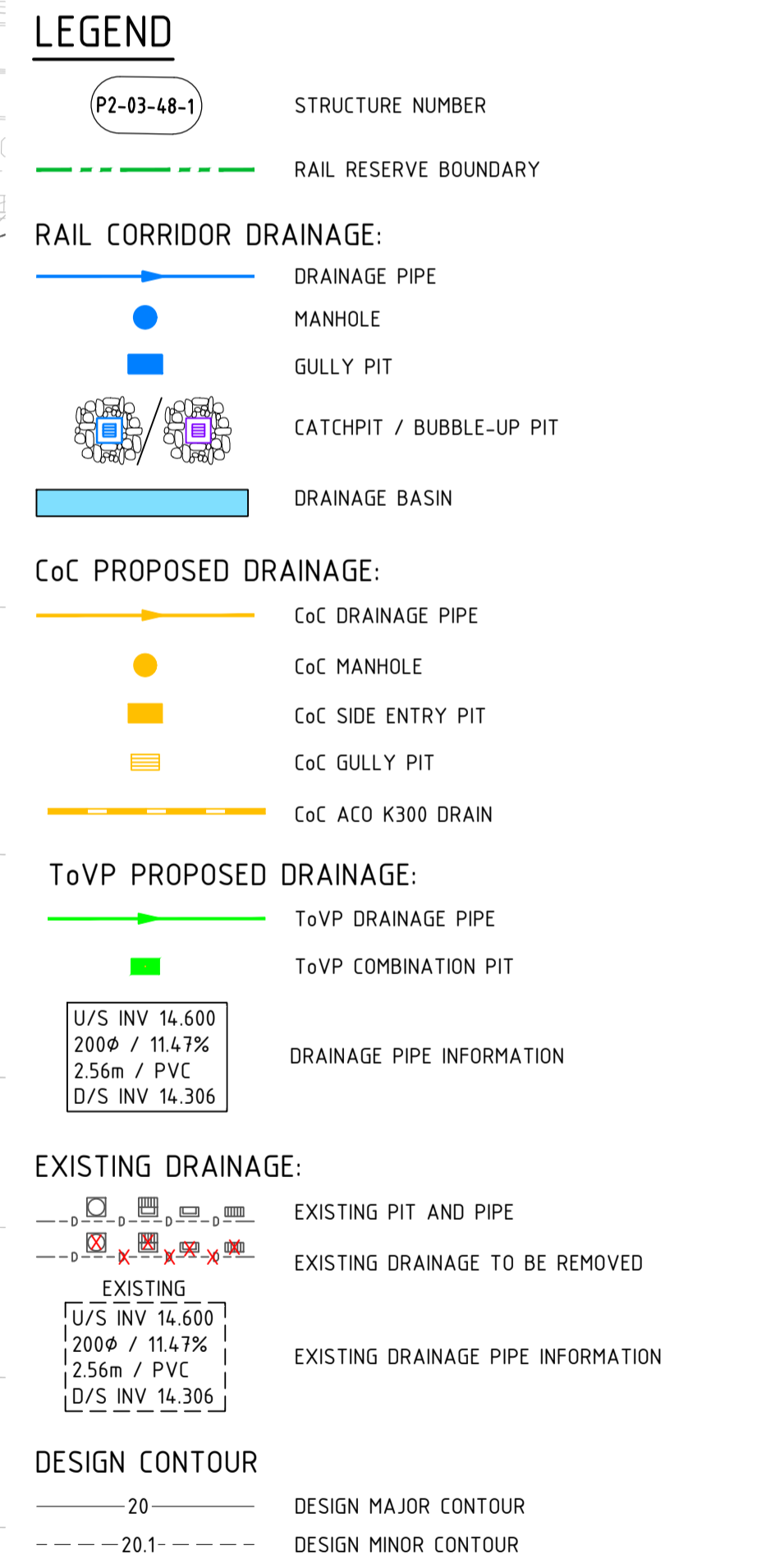
	VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL
ARMADALE LINE - DRAINAGE	
WELSHPOOL ROAD LEVEL CROSSING - PACKAGE 1	
PIT SCHEDULE	
Dwg No: LXR-P1-Z2-WL-CI-DR-DWG-00223	Rev: C2.02





LOCALITY PLAN

- NOTES**
- REFER TO CITY OF CANNING STANDARD DRAWING FILE No. CAD315, CAD904 & CAD1156 FOR MANHOLE, SIDE ENTRY PIT AND STORMWATER CONNECTION DETAILS.
  - REFER TO DRAWINGS LXR-P1-Z2-WL-CI-DR-DWG-00223, LXR-P2-Z3-HL-CI-DR-DWG-00233 & LXR-P2-Z3-FL-CI-DR-DWG-00244 FOR DRAINAGE PIT SCHEDULES.
  - REFER TO MRWA DRAWING No. 200231-094-3 FOR CoC GULLY PIT DETAIL.
  - THE DRAINAGE BASIN IN BANK ST IS TO BE REDESIGNED.
  - REFER TO MANUFACTURERS DETAILS FOR INSTALLATION OF ACO DRAIN.



PLAN

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C2.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	F.S	L.C	B.S	C.S
B	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	F.S	L.C	M.Z	Y.S
A	03.08.22	ISSUED FOR REFERENCE DESIGN	F.S	L.C	M.Z	Y.S

ORIG SIZE: 100mm AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

**ARMADALE LINE UPGRADE ALLIANCE**  
*Innovation to Reality*

Contractor No: LXR-P2-Z3-HL-CI-DR-DWG-00231

REFERENCES	SCALE	DESIGNED
	1:500 (@A1)	F.SHER
		DRAWN: L.CHEN
		CHECKED: B.SASHEGYI
		APPROVED: C.STEPHENS
		DATE: 28.06.23

**FINAL DETAILED DESIGN**

Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - DRAINAGE**  
**HAMILTON STREET LEVEL CROSSING - PACKAGE 2**  
**GENERAL ARRANGEMENT**


Drg No: LXR-P2-Z3-HL-CI-DR-DWG-00231 | Rev: C2.02

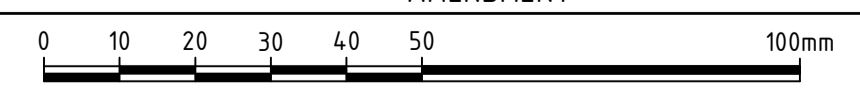


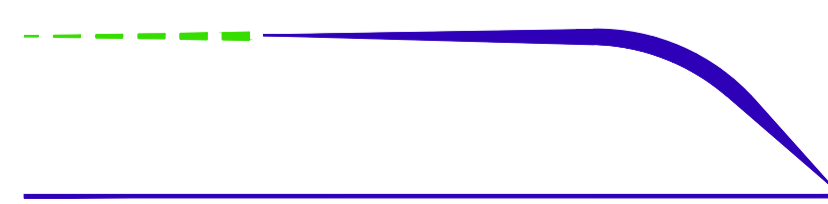
STRUCTURE NO.	STRUCTURE TYPE	COORDINATES		REFERENCE POINT ELEVATION	TOTAL PIT DEPTH	COMMENTS
		EASTING	NORTHING			
EX1-4	EXISTING PIT	61183.0645	357731.6843	9.0250	TBC	RAISE EXISTING RECESSED GULLY PIT TO FINISHED SURFACE LEVELS
EX1-3	EXISTING PIT	61175.1499	357723.7705	9.2100	TBC	RAISE EXISTING RECESSED GULLY PIT TO FINISHED SURFACE LEVELS
EX1-2	EXISTING PIT	61210.6328	357692.6922	9.1060	TBC	RAISE EXISTING RECESSED GULLY PIT TO FINISHED SURFACE LEVELS
EX2-8	EXISTING PIT	61183.3419	357671.1113	8.8480	0.80	CONNECT PROPOSED PIPE INTO EXISTING MANHOLE
EX2-7	EXISTING PIT	61189.1136	357661.8124	8.6310	1.09	RETAIN EXISTING MANHOLE
EX2-6	EXISTING PIT	61197.8844	357654.1741	8.4240	1.40	CONNECT PROPOSED PIPE INTO EXISTING MANHOLE
EX2-5	EXISTING PIT	61243.5457	357609.1551	7.9580	1.25	CONNECT PROPOSED PIPE INTO EXISTING MANHOLE
EX2-4	EXISTING PIT	61258.9171	357594.6585	7.8080	1.36	RETAIN EXISTING MANHOLE
EX2-3	EXISTING PIT	61283.7056	357569.8336	7.5610	1.33	ADJUST EXISTING MANHOLE W.R.T NEW KERB
EX2-2	EXISTING PIT	61320.0815	357534.8161	7.2780	1.22	RETAIN EXISTING MANHOLE
EX3-3	EXISTING PIT	61263.2109	357756.4879	8.8140	TBC	CONNECT PROPOSED PIPE INTO EXISTING GULLY PIT
EX5-4	EXISTING PIT	61275.7798	357549.7774	7.0180	0.9720	"CONNECT PROPOSED PIPE INTO EXISTING GULLY PIT REFER TO CoC DRAWING CAD904"
EX6-4	EXISTING PIT	61039.6508	357561.0832	7.3400	1.4360	CONNECT PROPOSED PIPE INTO EXISTING GULLY PIT
HL-01-1	CoC SIDE ENTRY PIT	61179.6457	357733.6913	9.1020	0.8710	REFER TO CoC DRAWING CAD904
HL-02-1	CoC SIDE ENTRY PIT	61145.0500	357699.3595	9.3300	0.9260	REFER TO CoC DRAWING CAD904
HL-03-1	CoC GULLY PIT	61283.0508	357568.9822	7.5600	TBC	CONNECT PROPOSED PIPE INTO EXISTING GULLY PIT
HL-04-1	CoC SIDE ENTRY PIT	61107.2692	357734.8974	10.7300	TBC	REFER TO CoC DRAWING CAD904
EX4-1	EXISTING PIT	61109.7038	357733.6771	10.6660	0.8670	RETAIN EXISTING MANHOLE
HL-05-2	CoC GULLY PIT	61232.5948	357589.8069	7.3120	0.8670	REFER TO MRWA DRAWING 200231-094-3
HL-05-1	CoC GULLY PIT	61260.2029	357564.3556	7.1790	0.9220	REFER TO MRWA DRAWING 200231-094-3
HL-06-1	CoC MANHOLE	61254.9459	357762.7358	8.6290	0.4290	REFER TO CoC DRAWING CAD315
HL-07-10	CoC GULLY PIT	61104.2810	357707.9391	10.1680	0.8800	REFER TO MRWA DRAWING 200231-094-3
HL-07-9	CoC GULLY PIT	61129.9951	357682.7965	9.0160	1.8660	REFER TO CoC DRAWING CAD904
HL-07-8	CoC GULLY PIT	61136.0997	357663.8068	8.5160	1.7160	REFER TO CoC DRAWING CAD904
HL-07-7	CoC GULLY PIT	61120.5647	357647.0686	8.0110	1.3260	
HL-07-6	CoC GULLY PIT	61115.4218	357641.9564	7.9040	1.2560	"CONNECT PROPOSED PIPE INTO EXISTING MANHOL EREFER TO CoC DRAWING CAD904"
HL-07-5	CoC GULLY PIT	61101.1612	357627.5783	7.6860	1.1400	
HL-07-4	CoC GULLY PIT	61086.0005	357611.7493	7.6410	1.2050	REFER TO MRWA DRAWING 200231-094-3
HL-07-3	CoC SIDE ENTRY PIT	61070.3208	357594.7529	7.5290	1.2090	REFER TO CoC DRAWING CAD904
HL-07-2	CoC SIDE ENTRY PIT	61052.1017	357574.5636	7.4210	1.2370	REFER TO CoC DRAWING CAD904
HL-07-1	CoC SIDE ENTRY PIT	61041.4108	357562.9589	7.3400	1.2350	
HL-09-3	CoC SIDE ENTRY PIT	61174.1168	357702.2245	9.2270	0.8550	REFER TO CoC DRAWING CAD904
HL-09-2	CoC SIDE ENTRY PIT	61185.1273	357691.6217	9.2650	0.9700	REFER TO CoC DRAWING CAD904
HL-09-1	CoC MANHOLE	61176.0014	357678.6810	9.0280	0.8680	REFER TO CoC DRAWING CAD315
HL-10-1	CoC SIDE ENTRY PIT	61242.7998	357608.2800	7.9570	1.0500	REFER TO CoC DRAWING CAD904
HL-11-1	CoC SIDE ENTRY PIT	61196.2735	357652.1982	8.4230	0.8680	REFER TO CoC DRAWING CAD904
HL-13-1	CoC GULLY PIT	61171.8626	357728.2124	9.1910	0.7600	REFER TO MRWA DRAWING 200231-094-3
HL-8-4	CoC GULLY PIT	61147.9039	357651.7240	8.4170	0.8480	REFER TO MRWA DRAWING 200231-094-3
HL-8-3	CoC SIDE ENTRY PIT	61138.9572	357645.0233	8.2570	0.8690	REFER TO CoC DRAWING CAD904
HL-8-2	CoC MANHOLE	61130.9127	357636.5568	8.1830	0.8680	REFER TO CoC DRAWING CAD315
HL-8-1	CoC SIDE ENTRY PIT	61126.7951	357640.7441	8.1240	0.8600	REFER TO CoC DRAWING CAD904

PACKAGE-2-TRENCH DRAIN					
STRUCTURE NAME	REFERENCE POINT			ACO MINIMUM DEPTH (mm)	COMMENTS
	COORDINATES		LEVEL (m)		
	EASTING	NORTHING			
HL-06-4	61231.771	357756.671	9.410	200	INSTALL ACO DRAIN K200/ START OF ACO DRAIN
HL-06-3	61236.001	357760.576	8.868		
HL-06-2	6124.1853	357766.379	8.793	100	INSTALL ACO K2-902G IN-LINE PIT
HL-12-2	61215.210	357723.625	9.486		INSTALL ACO GRATE/CHANNEL ALONG HUMP
HL-12-1	61217.552	357726.476	9.448		
HL-05-5	61186.657	357631.591	7.841	200	INSTALL ACO DRAIN K200/ START OF ACO DRAIN
HL-05-4	61209.142	357611.141	7.508		INSTALL ACO K2-902G IN-LINE PIT/MDDLE PIT
HL-05-3	61231.798	357590.528	7.315		INSTALL ACO K2-902G IN-LINE PIT

**FINAL DETAILED DESIGN**

	<b>VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL</b>
<b>ARMADALE LINE - DRAINAGE</b>	<b>HAMILTON STREET LEVEL CROSSING - PACKAGE 2</b>
<b>PIT SCHEDULE</b>	<b>Drq No: LXR-P2-Z3-HL-CI-DR-DWG-00233</b>
<b>Rev: B2.01</b>	

B2.01	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	F.S	L.C	B.S	C.S
A	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	F.S	L.C	M.Z	Y.S
REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
ORIG SIZE			<small>This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.</small>			
A1	AT ORIGINAL PLOT SIZE					



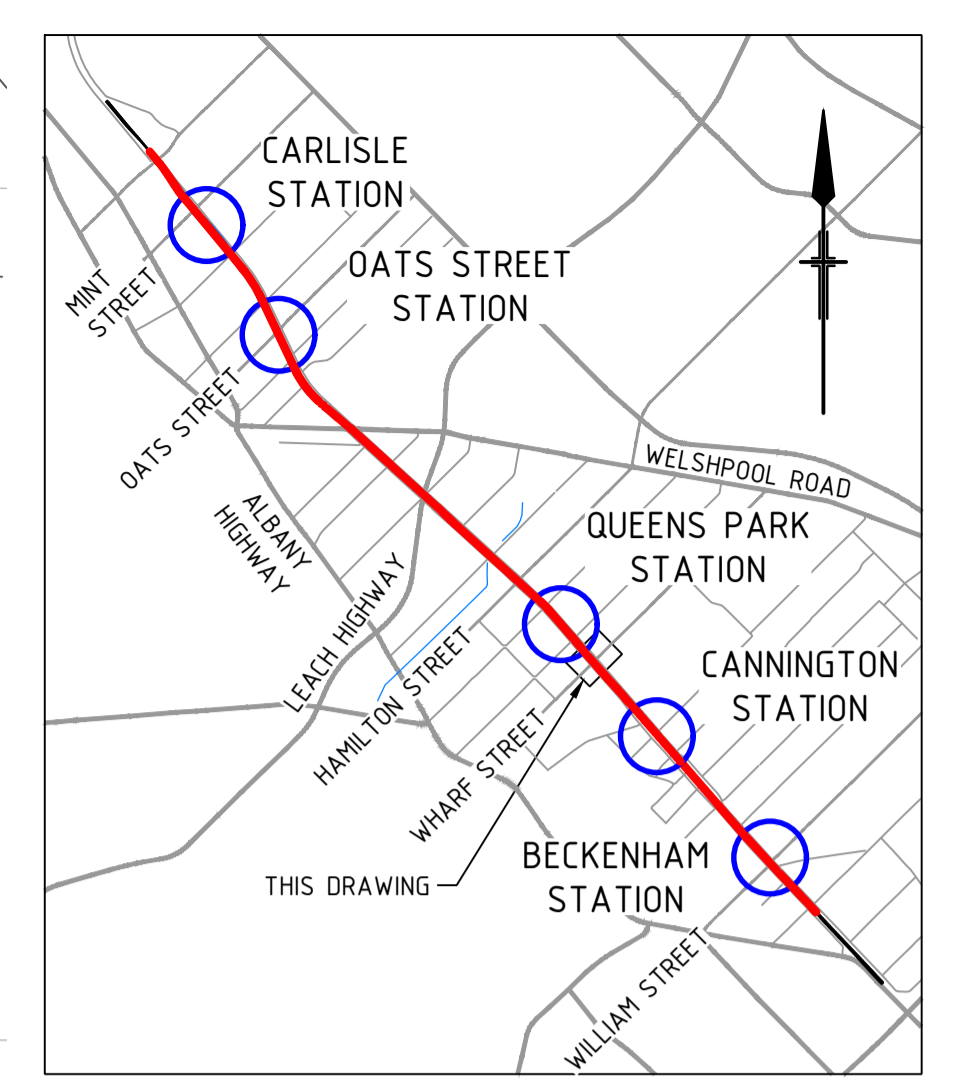
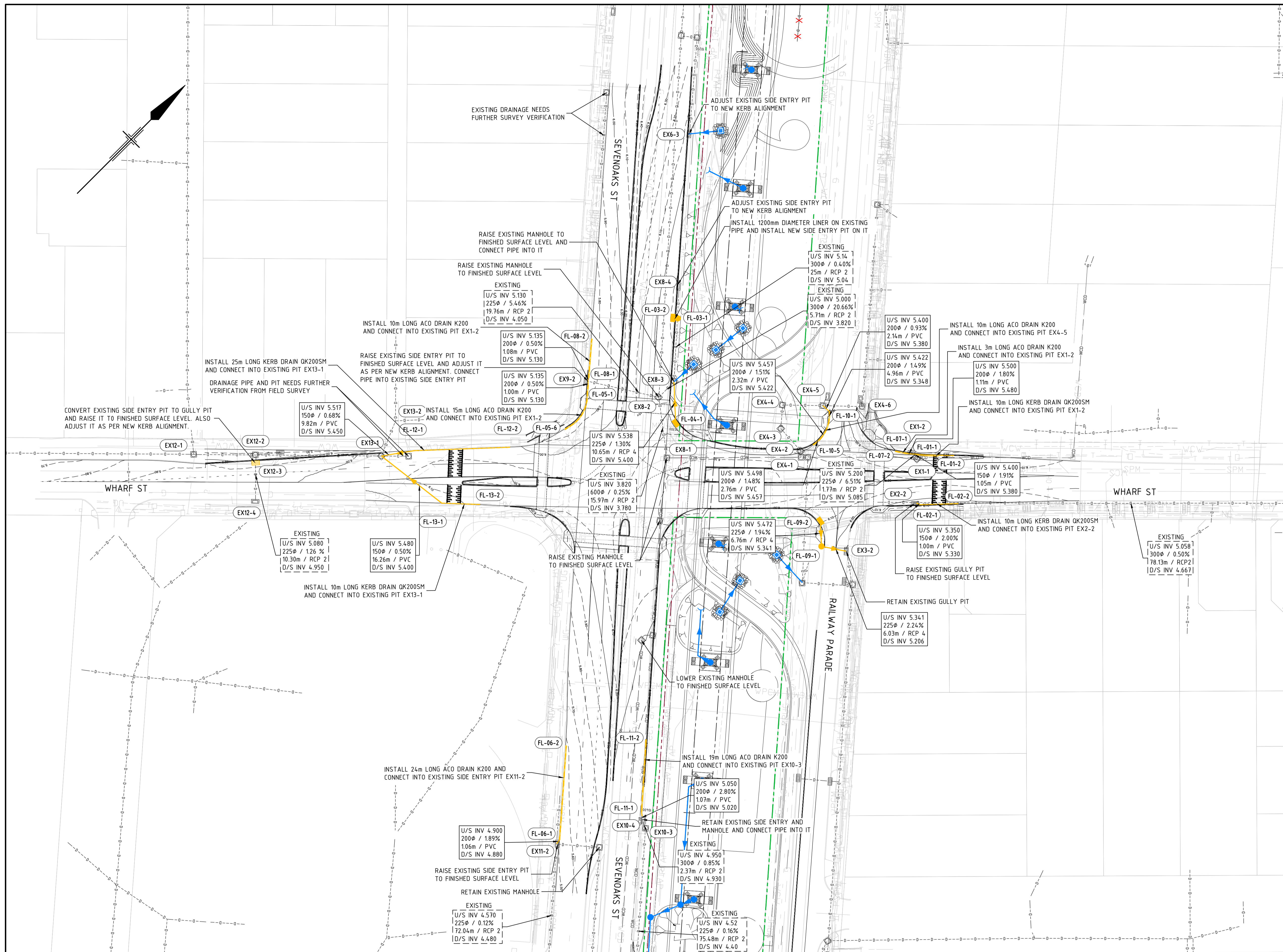
**ARMADALE LINE UPGRADE ALLIANCE**

*Innovation to Reality*

Contractor No: LXR-P2-Z3-HL-CI-DR-DWG-00235

REFERENCES	SCALE	DESIGNED F.SHER
	NTS	DRAWN L.CHEN
	DATUM	CHECKED B.SASHEGYI
	HORIZONTAL: PCG20	APPROVED C.STEPHENS
	VERTICAL: AHD71	DATE 28.06.23



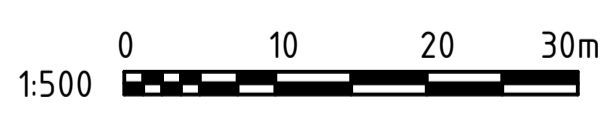


LOCALITY PLAN

- NOTES**
- REFER TO CITY OF CANNING STANDARD DRAWING FILE No. CAD315, CAD904 & CAD1156 FOR MANHOLE, SIDE ENTRY PIT AND STORMWATER CONNECTION DETAILS.
  - REFER TO DRAWINGS LXR-P1-Z2-WL-CI-DR-DWG-00223, LXR-P2-Z3-HL-CI-DR-DWG-00233 & LXR-P2-Z3-FL-CI-DR-DWG-00244 FOR DRAINAGE PIT SCHEDULES.
  - REFER TO MRWA DRAWING No. 200231-094-3 FOR CoC GULLY PIT DETAIL.
  - THE DRAINAGE BASIN IN BANK ST IS TO BE REDESIGNED.
  - REFER TO MANUFACTURERS DETAILS FOR INSTALLATION OF ACO DRAIN.

**LEGEND**

- (P2-03-48-1) STRUCTURE NUMBER
- RAIL RESERVE BOUNDARY
- RAIL CORRIDOR DRAINAGE:
  - DRAINAGE PIPE
  - MANHOLE
  - GULLY PIT
  - ⊕ CATCHPIT / BUBBLE-UP PIT
  - ▭ DRAINAGE BASIN
- CoC PROPOSED DRAINAGE:
  - CoC DRAINAGE PIPE
  - CoC MANHOLE
  - CoC SIDE ENTRY PIT
  - ⊕ CoC GULLY PIT
  - CoC ACO K300 DRAIN
- ToVP PROPOSED DRAINAGE:
  - ToVP DRAINAGE PIPE
  - ToVP COMBINATION PIT
- DRAINAGE PIPE INFORMATION:
  - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
- EXISTING DRAINAGE:
  - EXISTING PIT AND PIPE
  - EXISTING DRAINAGE TO BE REMOVED
  - EXISTING DRAINAGE PIPE INFORMATION:
    - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
- DESIGN CONTOUR:
  - 20 DESIGN MAJOR CONTOUR
  - 20.1 DESIGN MINOR CONTOUR



PLAN

**FINAL DETAILED DESIGN**

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
C2.02	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	F.S	L.C	B.S	C.S
B	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	F.S	L.C	M.Z	Y.S
A	03.08.22	ISSUED FOR REFERENCE DESIGN	F.S	L.C	M.Z	Y.S

ORIG SIZE: A1  
AT ORIGINAL PLOT SIZE

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

ARMADALE LINE UPGRADE ALLIANCE  
Innovation to Reality

Contractor No: LXR-P2-Z3-FL-CI-DR-DWG-00241

REFERENCES	SCALE	DESIGNED
	1:500 (@A1)	F.SHER
		DRAWN L.CHEN
		CHECKED B.SASHEGYI
		APPROVED C.STEPHENS
		DATE 28.06.23

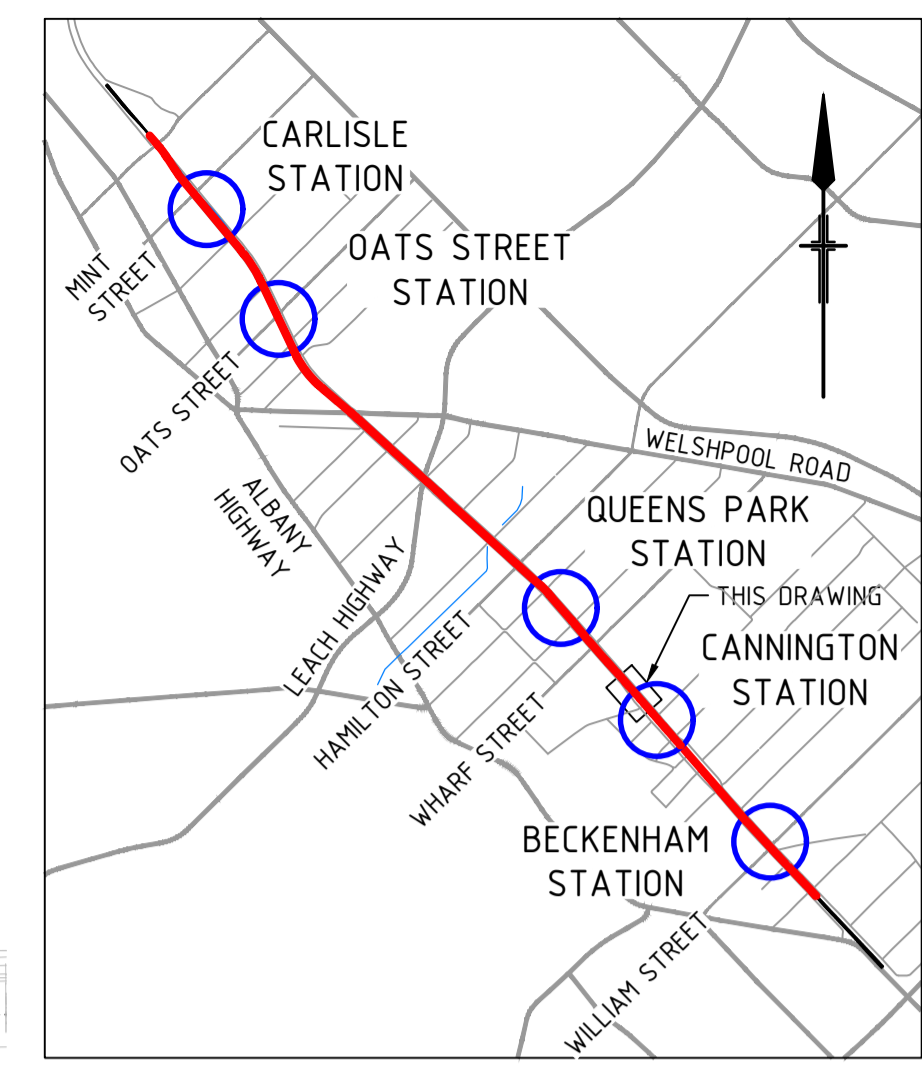
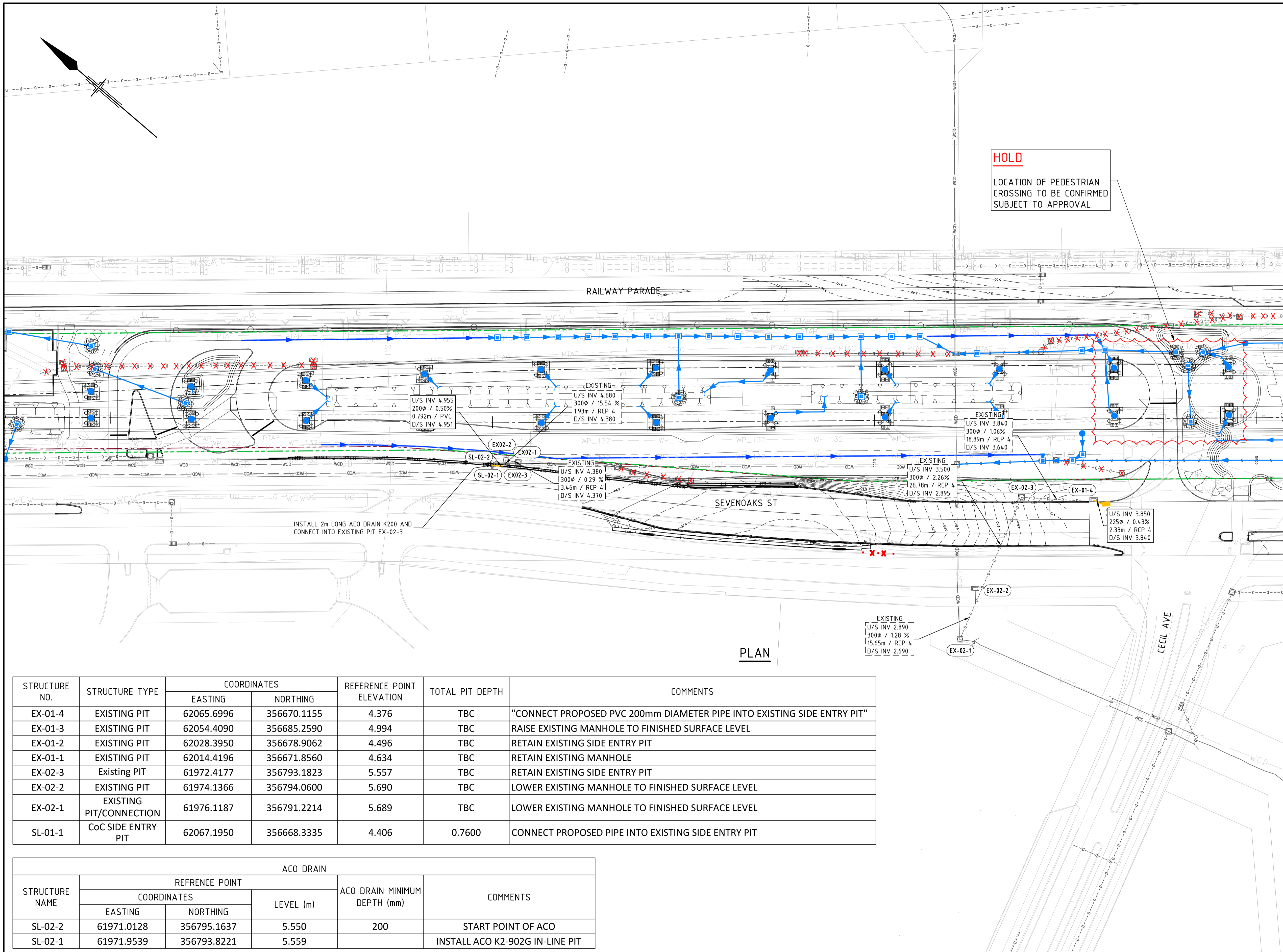
Government of Western Australia  
Public Transport Authority

VICTORIA PARK TO CANNING  
LEVEL CROSSING REMOVAL

**ARMADALE LINE - DRAINAGE**  
WHARF STREET LEVEL CROSSING - PACKAGE 2  
GENERAL ARRANGEMENT

Drg No: LXR-P2-Z3-FL-CI-DR-DWG-00241 | Rev: C2.02

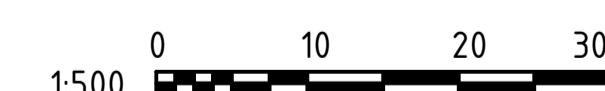




LOCALITY PLAN

- NOTES**
- REFER TO CITY OF CANNING STANDARD DRAWING FILE No. CAD315, CAD904 & CAD1156 FOR MANHOLE, SIDE ENTRY PIT AND STORMWATER CONNECTION DETAILS.
  - REFER BELOW FOR PIT SCHEDULE
  - REFER TO MRWA DRAWING No. 200231-094-3 FOR CoC GULLY PIT DETAIL.
  - THE DRAINAGE BASIN IN BANK ST IS TO BE REDESIGNED.
  - REFER TO MANUFACTURERS DETAILS FOR INSTALLATION OF ACO DRAIN.

- LEGEND**
- (P2-03-48-1) STRUCTURE NUMBER
  - RAIL RESERVE BOUNDARY
  - RAIL CORRIDOR DRAINAGE:**
    - DRAINAGE PIPE
    - MANHOLE
    - GULLY PIT
    - ⊕ CATCHPIT / BUBBLE-UP PIT
    - ▭ DRAINAGE BASIN
  - CoC PROPOSED DRAINAGE:**
    - CoC DRAINAGE PIPE
    - CoC MANHOLE
    - CoC SIDE ENTRY PIT
    - ⊕ CoC GULLY PIT
    - ▭ CoC ACO K300 DRAIN
  - ToVP PROPOSED DRAINAGE:**
    - ToVP DRAINAGE PIPE
    - ToVP COMBINATION PIT
  - DRAINAGE PIPE INFORMATION**
    - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
  - EXISTING DRAINAGE:**
    - EXISTING PIT AND PIPE
    - EXISTING DRAINAGE TO BE REMOVED
    - U/S INV 14.600  
200φ / 11.47%  
2.56m / PVC  
D/S INV 14.306
  - DESIGN CONTOUR**
    - 20 DESIGN MAJOR CONTOUR
    - 20.1 DESIGN MINOR CONTOUR



STRUCTURE NO.	STRUCTURE TYPE	COORDINATES		REFERENCE POINT ELEVATION	TOTAL PIT DEPTH	COMMENTS
		EASTING	NORTHING			
EX-01-4	EXISTING PIT	62065.6996	356670.1155	4.376	TBC	"CONNECT PROPOSED PVC 200mm DIAMETER PIPE INTO EXISTING SIDE ENTRY PIT"
EX-01-3	EXISTING PIT	62054.4090	356685.2590	4.994	TBC	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX-01-2	EXISTING PIT	62028.3950	356678.9062	4.496	TBC	RETAIN EXISTING SIDE ENTRY PIT
EX-01-1	EXISTING PIT	62014.4196	356671.8560	4.634	TBC	RETAIN EXISTING MANHOLE
EX-02-3	EXISTING PIT	61972.4177	356793.1823	5.557	TBC	RETAIN EXISTING SIDE ENTRY PIT
EX-02-2	EXISTING PIT	61974.1366	356794.0600	5.690	TBC	LOWER EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX-02-1	EXISTING PIT/CONNECTION	61976.1187	356791.2214	5.689	TBC	LOWER EXISTING MANHOLE TO FINISHED SURFACE LEVEL
SL-01-1	CoC SIDE ENTRY PIT	62067.1950	356668.3335	4.406	0.7600	CONNECT PROPOSED PIPE INTO EXISTING SIDE ENTRY PIT

STRUCTURE NAME	ACO DRAIN			ACO DRAIN MINIMUM DEPTH (mm)	COMMENTS
	REFERENCE POINT COORDINATES		LEVEL (m)		
	EASTING	NORTHING			
SL-02-2	61971.0128	356795.1637	5.550	200	START POINT OF ACO
SL-02-1	61971.9539	356793.8221	5.559		INSTALL ACO K2-902G IN-LINE PIT

A103 28.06.23 ISSUED FOR DEVELOPMENT APPLICATION APPROVAL  
 REV DATE AMENDMENT  
 ORIG SIZE 100mm  
 A1 AT ORIGINAL PLOT SIZE

F.S. P.H. B.S. C.S.  
 DSN DRN CHK APP

This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.

Contractor No: LXR-P2-Z3-FL-CI-DR-DWG-00243

REFERENCES  
 SCALE 1:500 (@A1)  
 DATUM HORIZONTAL: PCG20 VERTICAL: AHD71

DESIGNED F.SHER  
 DRAWN P.HAYLES  
 CHECKED B.SASHEGYI  
 APPROVED C.STEPHENS  
 DATE 28.06.23

**FINAL DETAILED DESIGN**

Government of Western Australia  
 Public Transport Authority

VICTORIA PARK TO CANNING  
 LEVEL CROSSING REMOVAL

**ARMADALE LINE - DRAINAGE**  
**SEVENOAKS STREET TURN POCKET**  
**GENERAL ARRANGEMENT**  
 Drg No: LXR-P2-Z3-FL-CI-DR-DWG-00243 Rev: A1.03

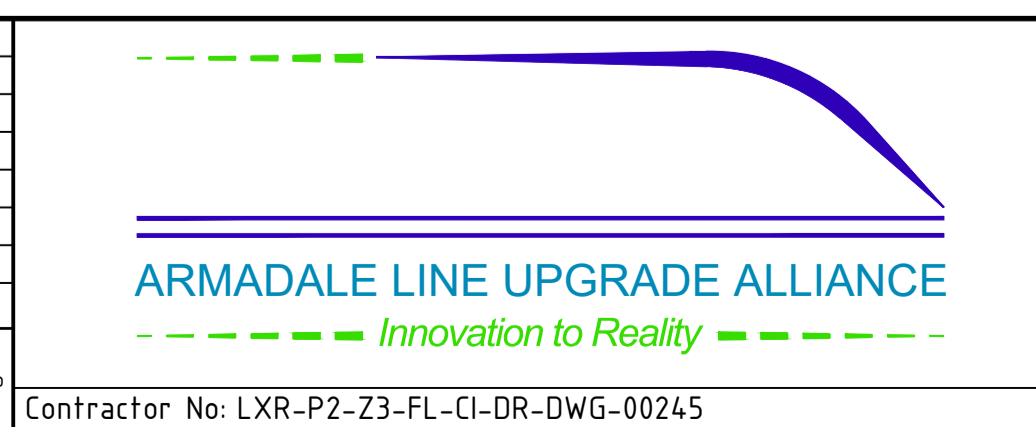


STRUCTURE NO.	STRUCTURE TYPE	COORDINATES		REFERENCE POINT ELEVATION	TOTAL PIT DEPTH	NOTES
		EASTING	NORTHING			
EX1-2	EXISTING PIT	61758.937	357139.055	5.956	0.956	RAISE EXISTING SIDE ENTRY PIT TO FINISHED SURFACE LEVELS AND ADJUST AS PER NEW KERB ALIGNMENT
EX1-1	EXISTING PIT	61760.970	357139.009	5.886	1.017	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX10-4	EXISTING PIT	61776.684	357021.140	5.755	1.005	CONNECT PROPOSED PIPE INTO EXISTING PIT
EX12-3	EXISTING PIT	61638.532	357016.155	5.850	1.170	CONVERT EXISTING SIDE ENTRY PIT TO GULLY PIT AND RAISE IT TO FINISHED SURFACE LEVEL. ALSO ADJUST IT AS PER NEW KERB ALIGNMENT
EX2-2	TGT	61768.977	357130.087	5.897	1.039	RAISE EXISTING GULLY PIT TO FINISHED SURFACE LEVEL
EX3-2	EXISTING PIT	61765.017	357109.047	5.864	0.858	CONNECT PROPOSED PIPE INTO EXISTING GULLY PIT
EX4-6	EXISTING PIT	61741.026	357138.733	5.922	0.872	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX4-5	EXISTING PIT	61733.688	357131.575	5.926	0.996	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX4-4	EXISTING PIT	61725.983	357124.178	6.176	1.406	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX4-3	EXISTING PIT	61730.103	357119.524	6.192	1.562	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX4-2	EXISTING PIT	61738.013	357118.822	6.134	1.644	LOWER EXISTING MANHOLE TO FINISHED SURFACE LEVEL AND CONVERT IT TO TRAFFICABLE MANHOLE
EX4-1	EXISTING PIT	61739.017	357117.849	6.141	1.691	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX6-3	EXISTING PIT	61658.129	357156.771	6.079	1.079	ADJUST EXISTING SIDE ENTRY PIT TO NEW KERB ALIGNMENT
EX8-4	EXISTING PIT	61684.813	357126.924	5.885	0.945	ADJUST EXISTING SIDE ENTRY PIT TO NEW KERB ALIGNMENT
FL-03-1	CoC MANHOLE	61690.449	357120.787	5.891	0.993	REFER TO CITY OF CANNING STANDARD DRAWING FILE.NO CAD315
EX8-3	EXISTING PIT	61701.492	357108.418	6.005	1.205	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX8-2	EXISTING PIT	61701.577	357102.706	6.040	2.420	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX8-1	EXISTING PIT	61714.273	357093.020	6.296	2.716	RAISE EXISTING MANHOLE TO FINISHED SURFACE LEVEL
EX9-2	EXISTING PIT	61685.477	357092.433	5.729	0.799	RAISE EXISTING SIDE ENTRY PIT TO FINISHED SURFACE LEVEL AND ADJUST IT AS PER NEW KERB ALIGNMENT
EX11-2	EXISTING PIT	61765.740	357001.299	5.483	1.113	ADJUST EXISTING SIDE ENTRY PIT TO FINISHED SURFACE LEVEL
FL-03-2	CoC SIDE ENTRY PIT	61689.876	357120.339	5.891	0.781	INSTALL SIDE ENTRY PIT AND 1200mm DIAMETER LINER ON EXISTING PIPE
FL-04-1	CoC SIDE ENTRY PIT	61709.572	357101.479	6.157	0.819	REFER TO CITY OF CANNING STANDARD DRAWING FILE.NO CAD904
FL-09-2	CoC SIDE ENTRY PIT	61754.347	357109.059	6.107	0.835	REFER TO CITY OF CANNING STANDARD DRAWING FILE.NO CAD904
FL-09-1	CoC MANHOLE	61760.111	357105.537	6.012	0.871	REFER TO CITY OF CANNING STANDARD DRAWING FILE.NO CAD315

WHARF INTERSECTION - PACKAGE-2-TRENCH DRAIN					
STRUCTURE NAME	REFERENCE POINT		LEVEL (m)	ACO TRENCH / KERB DRAIN MINIMUM DEPTH (mm)	COMMENTS
	COORDINATES				
	EASTING	NORTHING			
FL-01-2	61767.147	357146.519	5.961	380	START POINT OF ACO / KERB DRAIN QK200SM
FL-01-1	61759.763	357139.703	5.956	380	INSTALL END CAP WITH DN150 OUTLET
FL-02-2	61776.185	357137.722	5.958		START POINT OF ACO / KERB DRAIN QK200SM
FL-02-1	61769.664	357130.818	5.899		INSTALL END CAP WITH DN150 OUTLET
FL-05-6	61689.955	357079.286	5.822	200	START POINT OF ACO
FL-05-5	61690.481	357081.763	5.846		
FL-05-4	61690.555	357083.793	5.847		
FL-05-3	61690.138	357085.895	5.829		
FL-05-2	61688.552	357088.797	5.788		
FL-05-1	61686.130	357091.678	5.738		INSTALL ACO K2-902G IN-LINE PIT
FL-07-2	61755.369	357136.540	5.953	200	START POINT OF ACO
FL-07-1	61758.049	357138.387	5.956		INSTALL ACO K2-902G IN-LINE PIT
FL-08-2	61678.191	357100.973	5.727	200	START POINT OF ACO
FL-08-1	61684.772	357093.249	5.723		INSTALL ACO K2-902G IN-LINE PIT
FL-10-5	61738.859	357122.385	6.099	200	START POINT OF ACO
FL-10-4	61739.067	357125.142	6.057		ACO MIDDLE SECTIONS AT TURNING
FL-10-3	61738.586	357127.408	6.023		ACO MIDDLE SECTIONS AT TURNING
FL-10-2	61735.814	357131.524	5.948		ACO MIDDLE SECTIONS AT TURNING
FL-10-1	61733.669	357131.557	5.926		INSTALL ACO K2-902G IN-LINE PIT
FL-06-2	61748.829	357020.752	5.583	200	START POINT OF ACO
FL-06-1	61765.039	357002.088	5.516		INSTALL ACO K2-902G IN-LINE PIT
FL-11-2	61763.488	357035.973	5.829	200	START POINT OF ACO
FL-11-1	61775.875	357021.839	5.745		INSTALL ACO K2-902G IN-LINE PIT
FL-13-2	61686.293	357047.785	6.100	380	START POINT OF ACO / KERB DRAIN QK200SM
FL-13-1	61677.288	357039.440	6.050		INSTALL END CAP WITH DN150 OUTLET
FL-12-2	61683.706	357066.401	6.010	380	START POINT OF ACO / KERB DRAIN QK200SM
FL-12-1	61666.825	357048.222	6.080		INSTALL END CAP WITH DN150 OUTLET

**FINAL DETAILED DESIGN**

B2.01	28.06.23	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	F.S	L.C	B.S	C.S
A	16.12.22	ISSUED FOR INTERMEDIATE DETAILED DESIGN	F.S	L.C	M.Z	Y.S
REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
ORIG SIZE	0 10 20 30 40 50 100mm		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.			
A1	AT ORIGINAL PLOT SIZE		Contractor No: LXR-P2-Z3-FL-CI-DR-DWG-00245			



Contractor No: LXR-P2-Z3-FL-CI-DR-DWG-00245

REFERENCES	SCALE	DESIGNED	F.SHER
	NTS	DRAWN	L.CHEN
	DATUM	CHECKED	B.SASHEGYI
HORIZONTAL: PCG20		APPROVED	C.STEPHENS
VERTICAL: AHD71		DATE	28.06.23

Government of Western Australia Public Transport Authority	VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL
ARMADALE LINE - DRAINAGE	
WHARF STREET LEVEL CROSSING - PACKAGE 2	
PIT SCHEDULE	
Drg No: LXR-P2-Z3-FL-CI-DR-DWG-00244	Rev: B2.01