



DOCUMENT CONTROL				
SHEET No.	SHEETD ESC.	27/06/2023	xx/xx/xx	xx/xx/xx
		DRAFT REVISION	TENDER REVISION	CONSTRUCTION REVISION
1	COVER SHEET	A		
2	GENERAL NOTES	A		
3	OVERALL LAYOUT & STN CONTROL	A		
4	DETAILED LAYOUT PLAN	A		
5	DETAILED LAYOUT PLAN	A		
6	DETAILED LAYOUT PLAN	A		
7	DETAILED LAYOUT PLAN	A		
8	DETAILED LAYOUT PLAN	A		
9	DETAILED LAYOUT PLAN	A		
10	DETAILED LAYOUT PLAN	A		
11	ROAD LONGITUDINAL SECTION	A		
12	ROAD LONGITUDINAL SECTION	A		
13	ROAD LONGITUDINAL SECTION	A		
14	ROAD LONGITUDINAL SECTION	A		
15	ROAD LONGITUDINAL SECTION	A		
16	ROAD LONGITUDINAL SECTION	A		
17	ROAD LONGITUDINAL SECTION	A		
18	ROAD CROSS SECTIONS	A		
19	ROAD CROSS SECTIONS	A		
20	ROAD CROSS SECTIONS	A		
21	ROAD CROSS SECTIONS	A		
22	ROAD CROSS SECTIONS	A		
23	DRAINAGE LONGITUDINAL SECTION	A		
24	DRAINAGE L.S. & PIT SCHEDULE	A		



APPROVAL TO CONSTRUCT STAMP		PROJECT PLANNING REQUIREMENTS				 CITY OF GREATER BENDIGO	PROJECT DESIGN STATUS		PROJECT DETAILS		SHEET DETAILS					
DO NOT CONSTRUCT WITHOUT STAMP	Item	Required	Approved	Comments			Surveyor:	Adrian Cummins & Ass	23/03/23	Location: HARGREAVES STREET	Suburb: BENDIGO	Works: URBAN UPGRADE	GB No: GB4945	COVER SHEET	Sheet number: 1 of 24	
	Vegetation	Yes	No	-			Designer:	I. Frost	27/06/23						Plan Scale: -	A3
	DTP - Vicroads	No	No	-			Draft Checked:	A. Smith	xx/xx/23						Plotted: 10/08/2023	By: Ian Frost
	CMA	No	No	-			Tender Approved:	N. Sartori	xx/xx/23							
	Planning Permit	No	No	-			SHEET REVISIONS AFTER TENDER									
	Land Acquisition	No	No	-			Revision	Description	Approved by		Date					
	CHMP	No	No	-			-	-	-		-					
Other	No	No	-		-								-			
						PRELIMINARY DESIGN DRAFT 4										

CONSTRUCTION SPECIFICATIONS

All construction undertaken by, or on behalf of, The City of Greater Bendigo (CoGB) shall be undertaken in accordance with all DTP/Vicroads 200-700 series of Standard Specifications.

Compliance with the specifications to the satisfaction of the project Superintendent is required before a project can meet Practical Completion.

Sections of the DTP/Vicroads 200-700 series of standard specifications which are of particular relevance for this project include:

FORMATION

- 201 Site Clearing
- 204 Earthworks
- 205 Rock Fill

FLEXIBLE PAVEMENTS

- 304 Unbound Flexible Pavement Construction
- 306 Cementitious Treated Pavement Subbase
- 307 In Situ Stabilisation of Pavements with Cementitious Binders
- 310 Preparation of Granular Pavements for Bituminous Surfacing

ASPHALT AND SURFACE TREATMENTS

- 402 Removal of Pavement by Cold Planing (profiling)
- 407 Dense Graded Asphalt
- 408 Sprayed Bituminous Surfacing

INCIDENTAL CONSTRUCTION

- 701 Underground Stormwater Drains
- 702 Subsurface Drainage
- 703 General Concrete Paving
- 704 Precast Concrete Kerb
- 705 Drainage Pits and Covers
- 707 Fencing
- 709 Guide Posts
- 710 Fixing Raised Pavement Markers
- 713 Beaching
- 714 Sign Installation
- 721 Pavement Markings
- 731 Road Lighting Installation

MATERIAL SPECIFICATIONS

FOR WORKS DEPARTMENT

All materials used in construction projects undertaken by the CoGB Works department shall be compliant with the specifications setout in the relevant CoGB material panel supply contract.

Where panel supply contract information is not available, material specifications shall be sought from and supplied by the CoGB Engineering Department, and all materials used in construction must comply with those specifications.

FOR EXTERNAL CONSULTANTS (inc. consultants engaged by the Works Dept.)

All materials used by external contractors engaged to undertake CoGB construction projects, or components thereof, shall be as per the material specification supplied within the instrument of engagement (Quote, Tender or Contract), or as per written instruction from the project Superintendents.

PROJECT PLANNING REQUIREMENTS

Permits and approvals

- Project permits and approvals which were required to be obtained prior to construction are listed in the below table
- Construction activities must be compliant with all conditions within the listed permits and approvals.

PROJECT PLANNING REQUIREMENTS			
Item	Required	Approved	Comments
Vegetation	Yes	No	-
DTP - Vicroads	No	No	-
CMA	No	No	-
Planning Permit	No	No	-
Land Acquisition	No	No	-
CHIMP	No	No	-
Other	No	No	-

GENERAL NOTES

STANDARD DRAWINGS

Standard Drawings that are referenced within the design drawings are noted as 'SD', and are sourced from 3 locations. They are available for download online or from the project superintendent:

- 'CoGB SD' are sourced from the City of Greater Bendigo
<https://www.bendigo.vic.gov.au/Services/Roads-and-Drainage/Roads/Construction-standards>
- 'IDM SD' are sourced from the Infrastructure Design Manual
<https://www.designmanual.com.au/>
- 'Vicroads SD' are sourced from Vicroads
<https://www.vicroads.vic.gov.au/business-and-industry/technical-publications/technical-drawings-for-roadworks/standard-drawings-for-roadworks>

SERVICES SHOWN ON PLANS AND DURING CONSTRUCTION

- The location of underground services shown on design drawings have been derived from available information. Accuracy can not be guaranteed and should therefore be treated as indicative only.
- Gas and water property services are not located or shown on design drawings. It is the contractors responsibility to locate and alter these services as required to achieve the project design.
- Prior to undertaking construction activities, exact service locations must be arranged and marked onsite.
- The contractor will be held responsible for any damage caused to services.
- All service pit lids or valve covers within the works area are to be raised or lowered to match the design surface level to the relevant authority standards, unless noted otherwise on the construction plans, or by approval from the superintendent.
- Any service authority marker post found within the works area is to be relocated adjacent to their current position to a point 150mm offset from the nearest property boundary.
- Any PSM covers affected during works are to be renewed to CoGB SD293 unless noted otherwise, or by approval from the superintendent.

DRAINAGE

- Any private storm water pipes discovered during works are to be plumbed to the nearest CoGB drainage pit, or with approval from the superintendent, to the nearest kerb or pipe

CONSTRUCTION MANAGEMENT GUIDANCE

OCCUPATIONAL HEALTH AND SAFETY

Delivery units shall consider appropriate management of occupational health and safety, and develop management plans compliant with ISO45001, and the City of Greater Bendigo integrated management system prior to any works beginning onsite

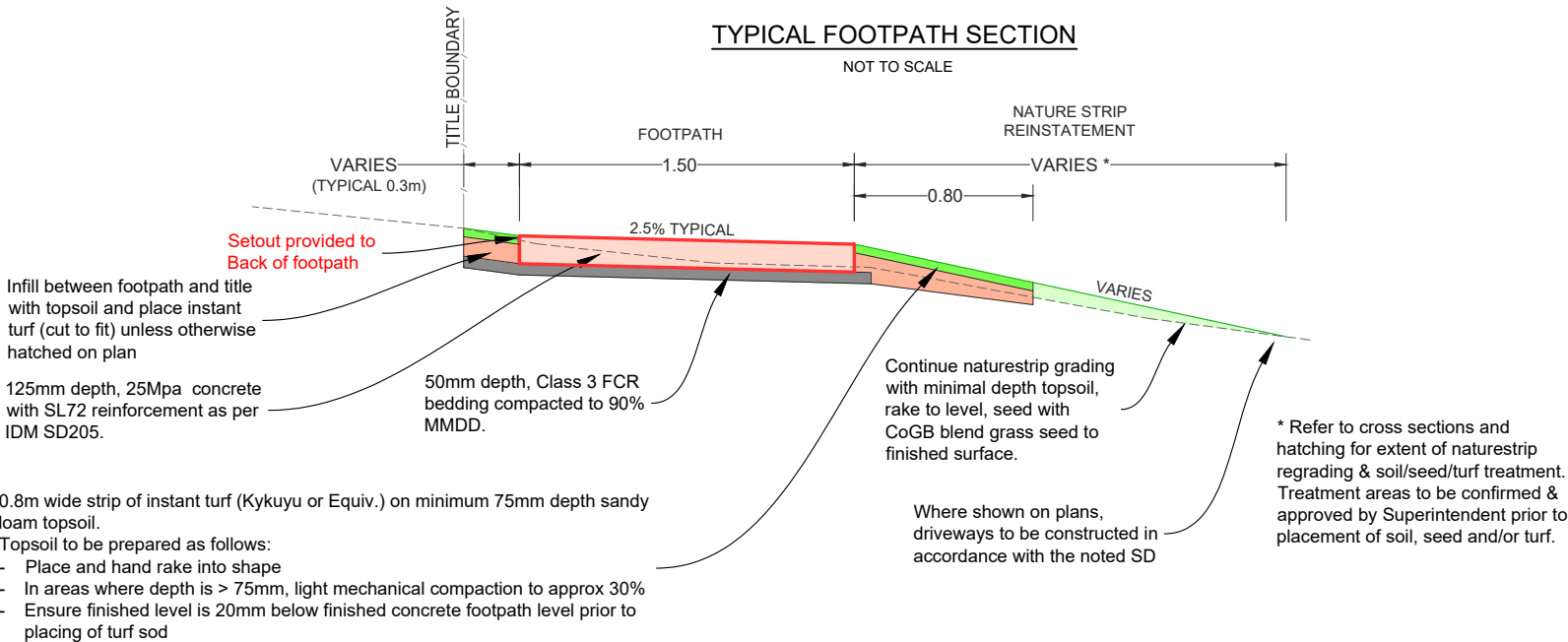
SITE ENVIRONMENTAL MANAGEMENT PLAN

A Site Environmental Management Plan (SEMP) is to be developed by delivery units to manage the project site during the project delivery window. Consideration shall be given to appropriate management of the following, with a SEMP plan filled out and displayed onsite at all times:

- Communication and induction for staff, contractors and sub contractors
- Communication with appropriate adjacent residents/businesses
- Noise and Vibration
- Dust and contamination
- Chemicals
- Erosion and sediment
- Waste
- Vehicle and roadside management
- Vegetation, with particular focus on any relevant permit conditions and AS4970
- Heritage, with particular focus on any relevant permit conditions

TRAFFIC MANAGEMENT PLAN

Where appropriate and prior to any works starting on site, delivery units must organise a AS1742.3 compliant traffic management plan, and have it approved by the relevant road authority.



IMPORTANT!
The location of underground services have been derived from available information, however accuracy cannot be guaranteed. All existing service information should therefore be treated as indicative only, and service locations must be arranged prior to commencement of any excavation. The contractor will be held responsible for any damage caused to underground services.

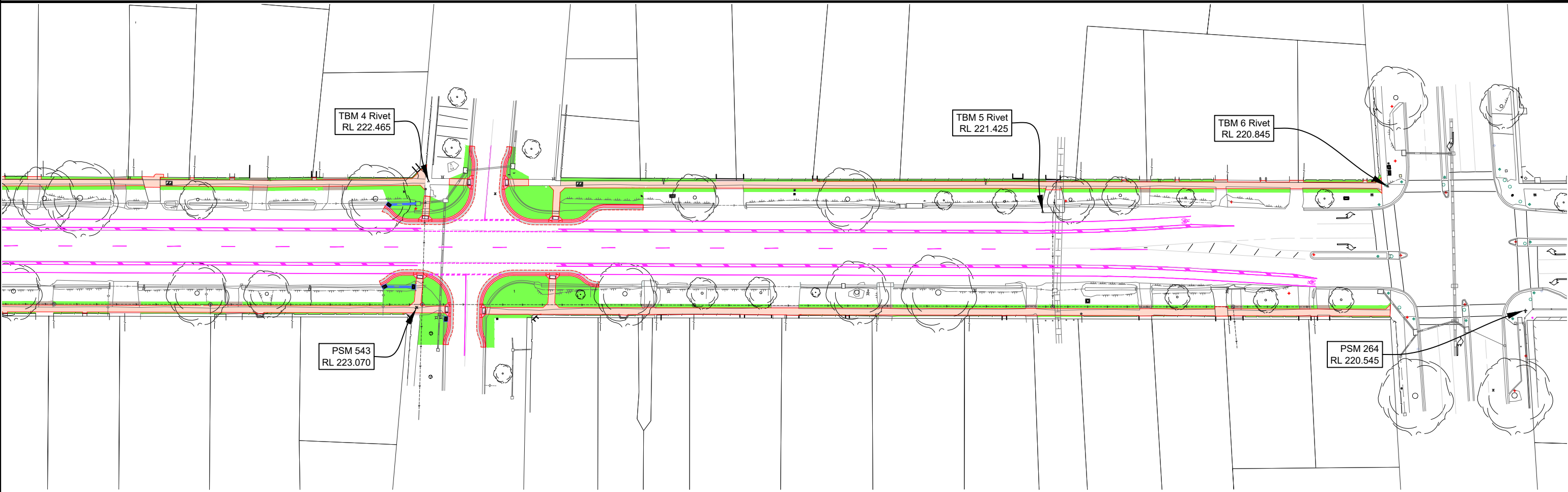


PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23

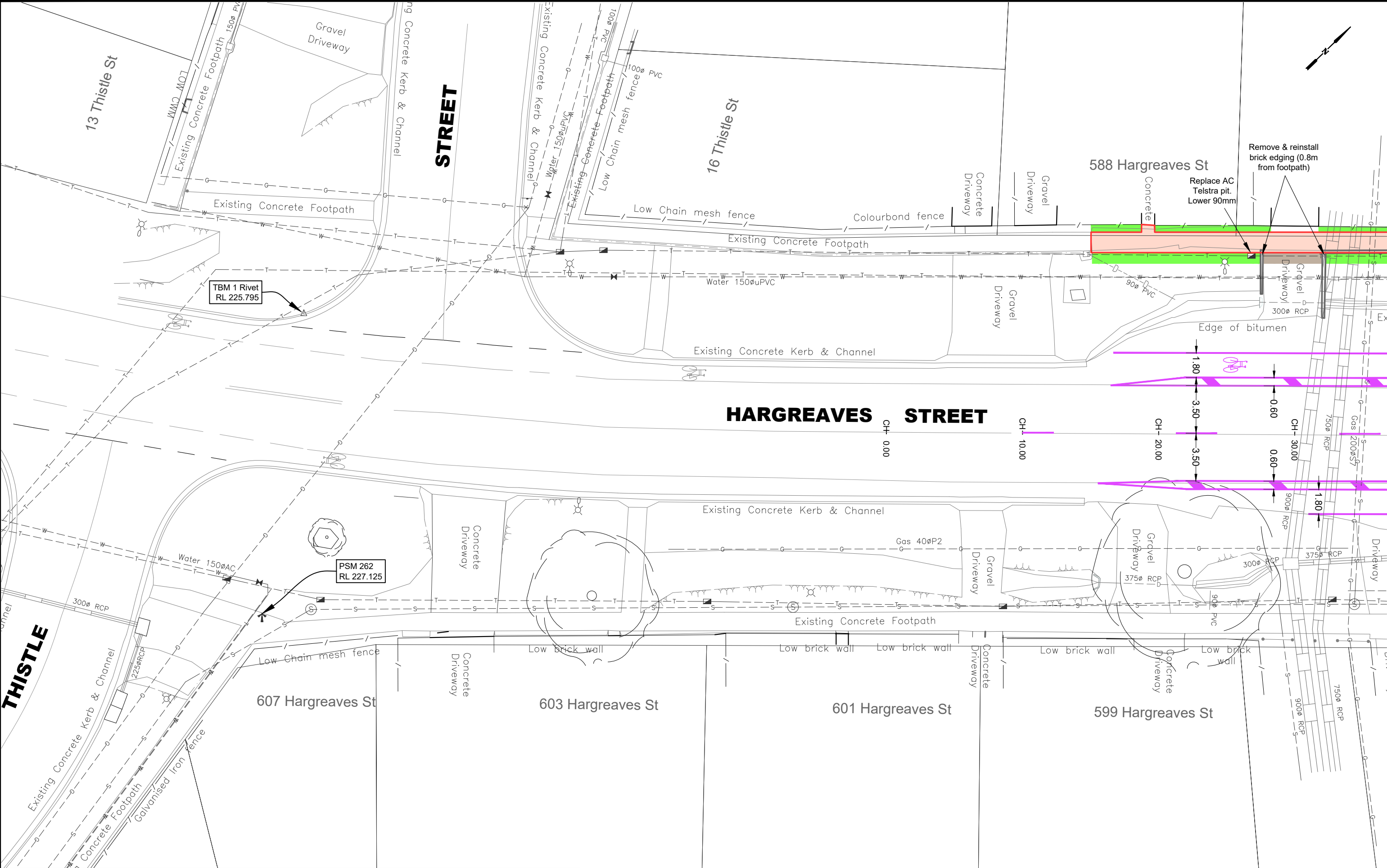
PRELIMINARY DESIGN
DRAFT 4

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS		
GENERAL NOTES		Sheet number: 2 of 24
		Plan Scale: - A3
		Plotted:10/08/2023 By:Ian Frost
SHEET REVISIONS AFTER TENDER		
Revision	Description	Approved by Date
-	-	- -
-	-	- -
-	-	- -



 CITY OF GREATER BENDIGO	PROJECT DESIGN STATUS		PROJECT DETAILS		SHEET DETAILS	
	Surveyor:	Adrian Cummins & Ass 23/03/23	Location:	HARGREAVES STREET	OVERALL LAYOUT & STATION CONTROL	Sheet number: 3 of 24
	Designer:	I. Frost 27/06/23	Suburb:	BENDIGO		Plan Scale: - A3
	Draft Checked:	A. Smith xx/xx/23	Works:	URBAN UPGRADE	Plotted: 10/08/2023 By: Ian Frost	
	Tender Approved:	N. Sartori xx/xx/23	GB No:	GB4945	SHEET REVISIONS AFTER TENDER	
PRELIMINARY DESIGN DRAFT 4			Revision Description		Approved by	Date
			-		-	-
			-		-	-
			-		-	-



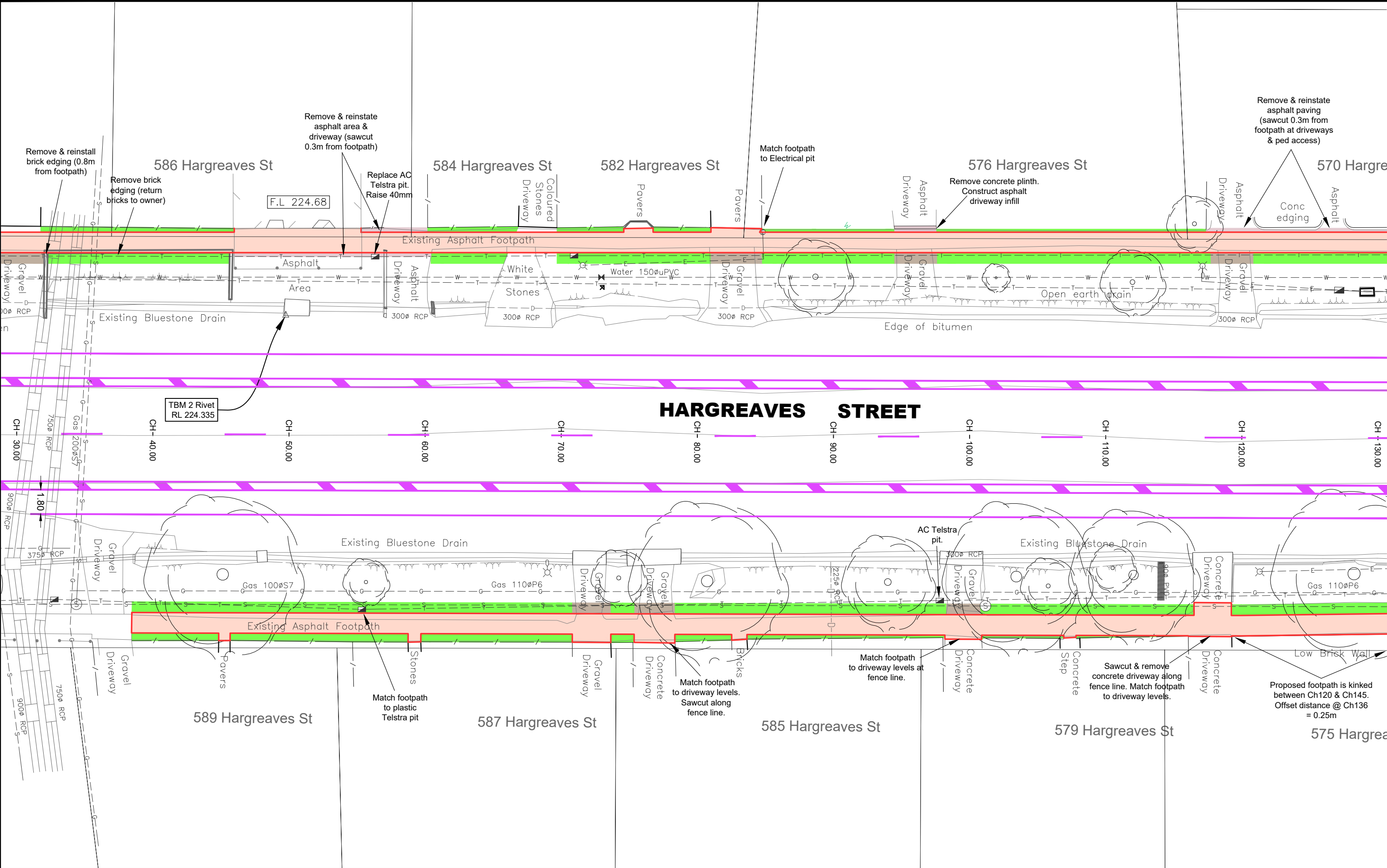
LEGEND			
	DESIGN CONTOURS - Levels to AHD (0.10m interval)		Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210
	EXISTING CONTOURS - Levels to AHD (0.10m interval)		Asphalt Driveway area: (Refer: Typical details pg 2)
	Concrete Kerb area: Normal plain Kerb per IDM SD100 & CoGB SD190,191,192		Landscape work: Instant turf (Refer: Typical details pg 2)
			Landscape work: topsoil and seed (Refer: Typical details pg 2)
			Design Linemarking - White
			Design Linemarking - Yellow
			Design Bicycle Symbol



PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23
PRELIMINARY DESIGN		
DRAFT 4		

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS		
LAYOUT PLAN		Sheet number: 4 of 24
		Plan Scale: 1:250
		Plotted:10/08/2023 By:Ian Frost
SHEET REVISIONS AFTER TENDER		
Revision	Description	Approved by Date
-	-	-
-	-	-
-	-	-



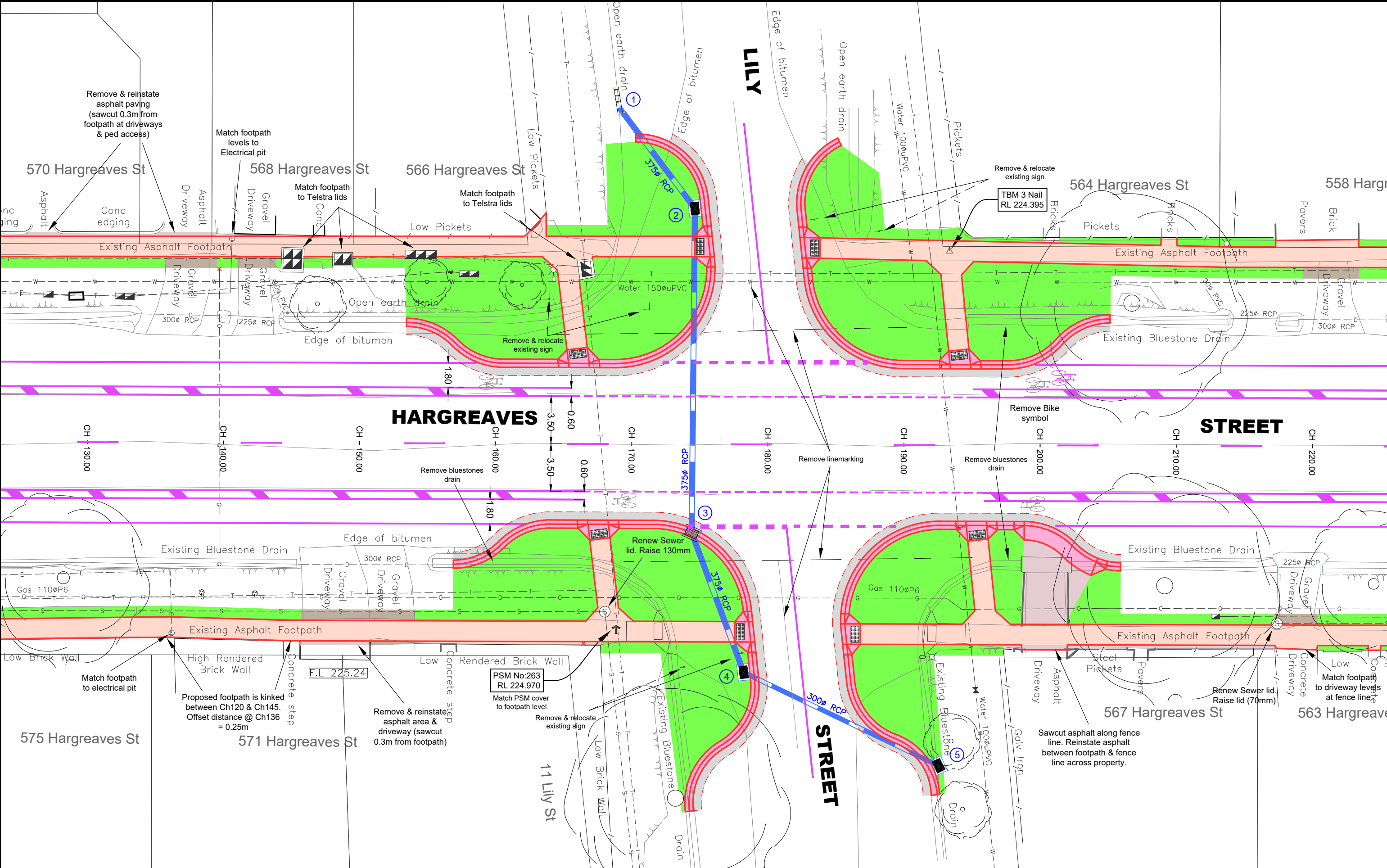
LEGEND			
	DESIGN CONTOURS - Levels to AHD (0.10m interval)		Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210
	EXISTING CONTOURS - Levels to AHD (0.10m interval)		Concrete Driveway area: Normal plain Dwy as per IDM SD240
	Concrete Kerb area: Normal plain Kerb per IDM SD100 & CoGB SD190,191,192		Gravel Driveway area: Compacted FCR (Refer: Typical details pg 2)
	Asphalt Driveway area: (Refer: Typical details pg 2)		Landscape work: Instant turf (Refer: Typical details pg 2)
	Landscape work: topsoil and seed (Refer: Typical details pg 2)		Design Linemarking - White
	Design Linemarking - Yellow		Design Bicycle Symbol



PROJECT DESIGN STATUS	
Surveyor:	Adrian Cummins & Ass 23/03/23
Designer:	I. Frost 27/06/23
Draft Checked:	A. Smith xx/xx/23
Tender Approved:	N. Sartori xx/xx/23
PRELIMINARY DESIGN	
DRAFT 4	

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS			
LAYOUT PLAN			Sheet number: 5 of 24
			Plan Scale: 1:250 A3
			Plotted:10/08/2023 By:Ian Frost
SHEET REVISIONS AFTER TENDER			
Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-



LEGEND

DESIGN CONTOURS - Levels to AHD (0.10m interval)	Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210	Asphalt Driveway area: (Refer: Typical details pg 2)	Design Linemarking - White
EXISTING CONTOURS - Levels to AHD (0.10m interval)	Concrete Driveway area: Normal plain Dwy as per IDM SD240	Landscape work: Instant turf (Refer: Typical details pg 2)	Design Linemarking - Yellow
Concrete Kerb area: Normal plain Kerb per IDM SD100 & CoGB SD190,191,192	Gravel Driveway area: Compacted FCR (Refer: Typical details pg 2)	Landscape work: topsoil and seed (Refer: Typical details pg 2)	Design Bicycle Symbol

CITY OF GREATER BENDIGO

PROJECT DESIGN STATUS

Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23

PRELIMINARY DESIGN
DRAFT 4

PROJECT DETAILS

Location: HARGREAVES STREET

Suburb: BENDIGO

Works: URBAN UPGRADE

GB No: GB4945

SHEET DETAILS

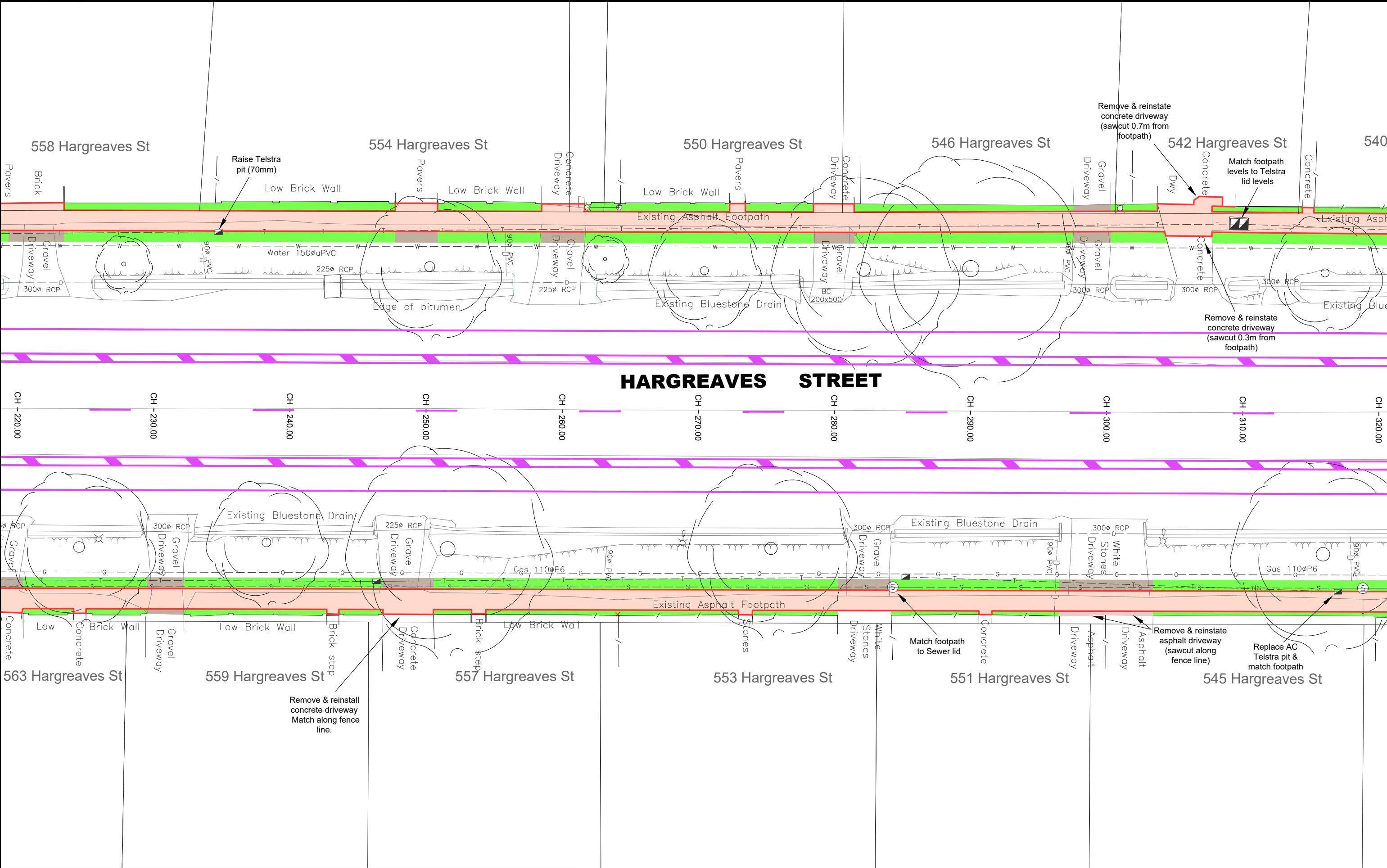
LAYOUT PLAN

Sheet number: 6 of 24

Plan Scale: 1:250

Plotted: 10/08/2023 By: Ian Frost

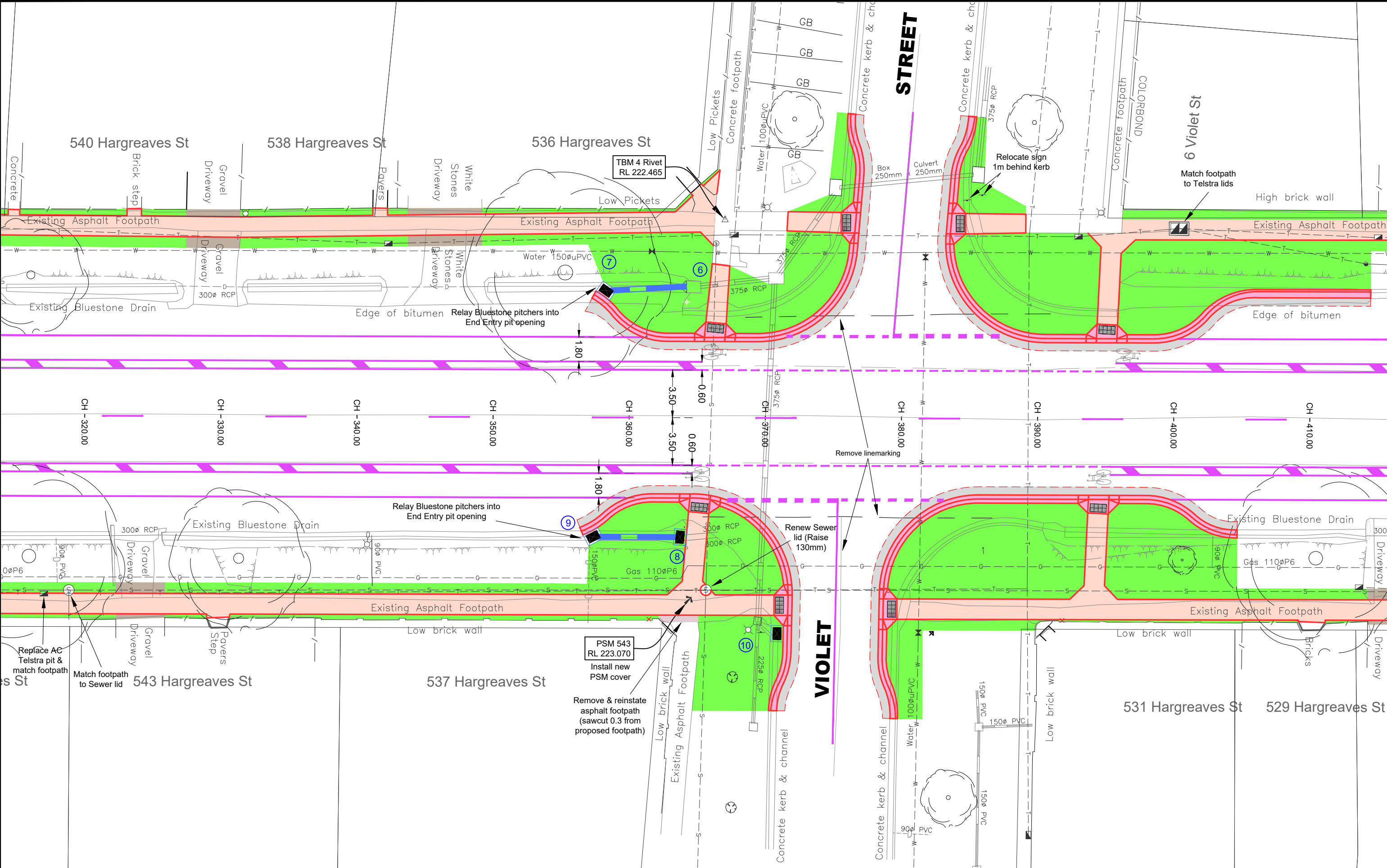
Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-



LEGEND			
	DESIGN CONTOURS - Levels to AHD (0.10m interval)		Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210
	EXISTING CONTOURS - Levels to AHD (0.10m interval)		Concrete Driveway area: Normal plain Dwy as per IDM SD240
	Concrete Kerb area: Normal plain Kerb per IDM SD100 & CoGB SD190,191,192		Gravel Driveway area: Compacted FCR (Refer: Typical details pg 2)
	Asphalt Driveway area: (Refer: Typical details pg 2)		Landscape work: Instant turf (Refer: Typical details pg 2)
	Design Linemarking - White		Landscape work: topsoil and seed (Refer: Typical details pg 2)
	Design Linemarking - Yellow		Design Bicycle Symbol

CITY OF GREATER BENDIGO

PROJECT DESIGN STATUS		PROJECT DETAILS		SHEET DETAILS	
Surveyor:	Adrian Cummins & Ass	23/03/23	Location:	HARGREAVES STREET	
Designer:	I. Frost	27/06/23	Suburb:	BENDIGO	
Draft Checked:	A. Smith	xx/xx/23	Works:	URBAN UPGRADE	
Tender Approved:	N. Sartori	xx/xx/23	GB No:	GB4945	
PRELIMINARY DESIGN DRAFT 4		LAYOUT PLAN		Sheet number:	7 of 24
				Plan Scale:	1:250
				Plotted:	10/08/2023 By: Ian Frost
				SHEET REVISIONS AFTER TENDER	
				Revision	Description
				Approved by	Date
				-	-
				-	-
				-	-



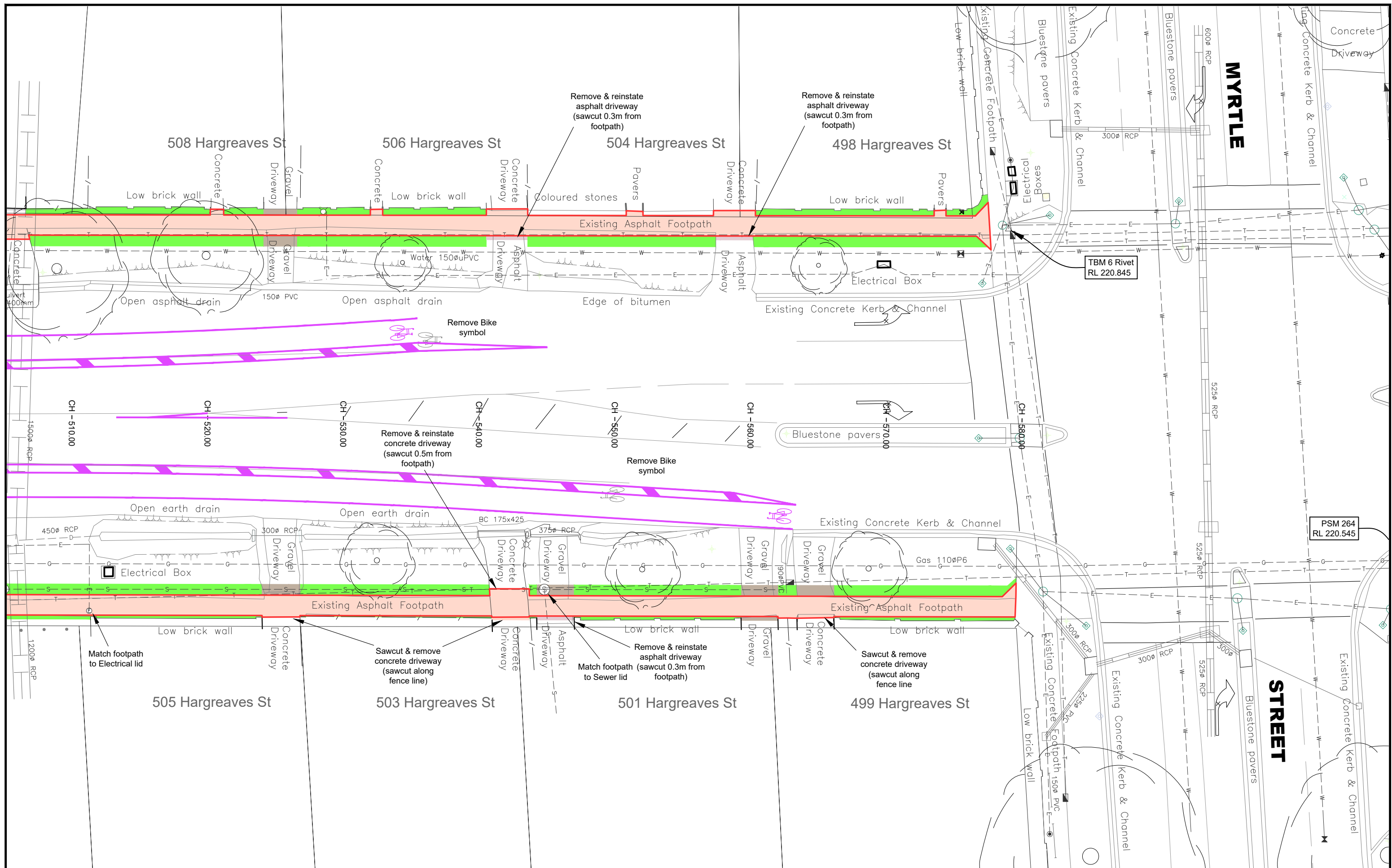
LEGEND			
	DESIGN CONTOURS - Levels to AHD (0.10m interval)		Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210
	EXISTING CONTOURS - Levels to AHD (0.10m interval)		Concrete Driveway area: Normal plain Dwy as per IDM SD240
	Concrete Kerb area: Normal plain Kerb per IDM SD100 & CoGB SD190,191,192		Gravel Driveway area: Compacted FCR (Refer: Typical details pg 2)
	Design Linemarking - White		Asphalt Driveway area: (Refer: Typical details pg 2)
	Design Linemarking - Yellow		Landscape work: Instant turf (Refer: Typical details pg 2)
	Design Bicycle Symbol		Landscape work: topsoil and seed (Refer: Typical details pg 2)



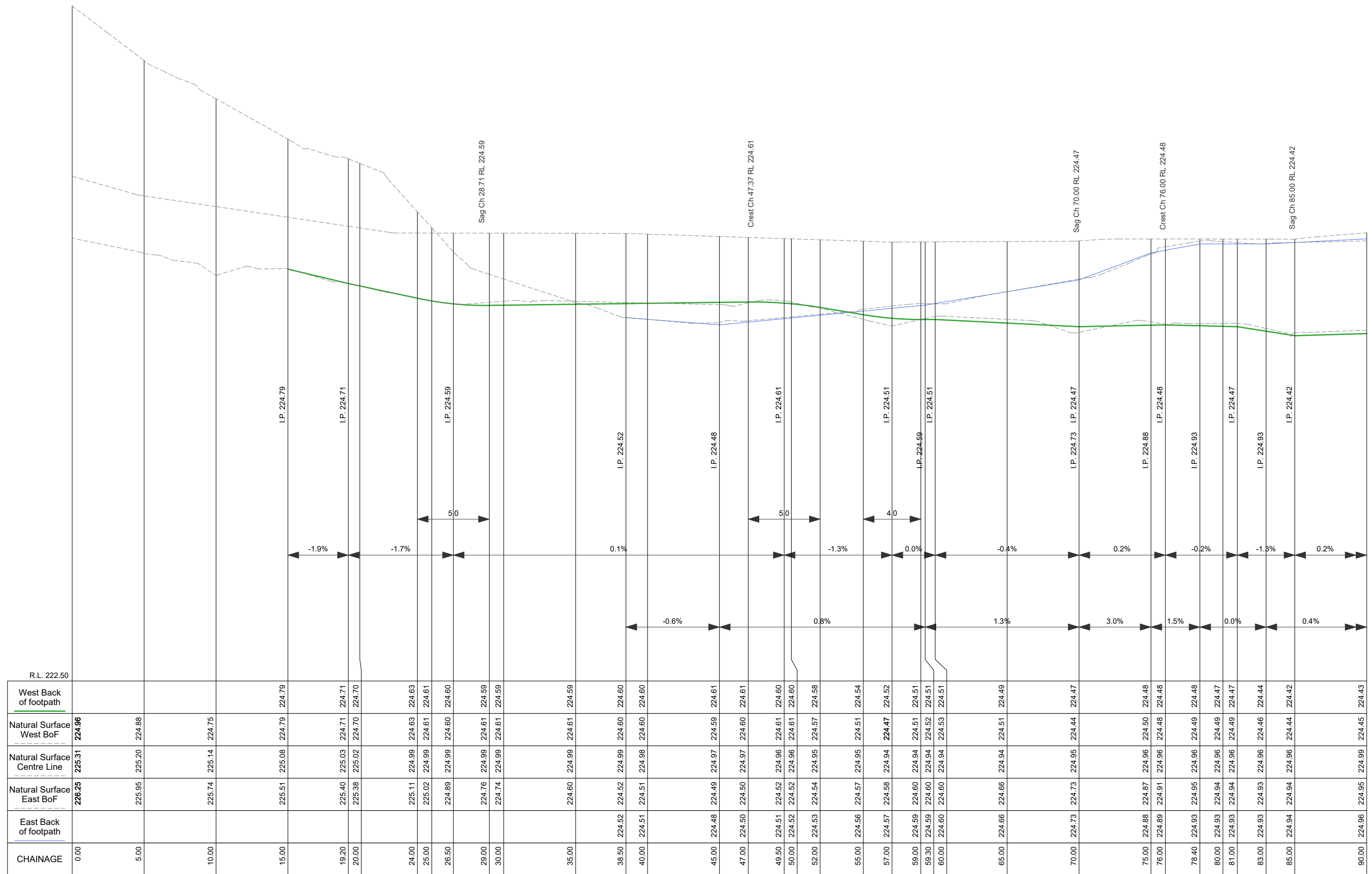
PROJECT DESIGN STATUS	
Surveyor:	Adrian Cummins & Ass 23/03/23
Designer:	I. Frost 27/06/23
Draft Checked:	A. Smith xx/xx/23
Tender Approved:	N. Sartori xx/xx/23
PRELIMINARY DESIGN	
DRAFT 4	

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS			
LAYOUT PLAN			Sheet number: 8 of 24
			Plan Scale: 1:250
			Plotted: 10/08/2023 By: Ian Frost
SHEET REVISIONS AFTER TENDER			
Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-



LEGEND				 CITY OF GREATER BENDIGO	PROJECT DESIGN STATUS		PROJECT DETAILS		SHEET DETAILS																			
 DESIGN CONTOURS - Levels to AHD (0.10m interval)	 Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210	 Asphalt Driveway area: (Refer: Typical details pg 2)	 Design Linemarking - White		Surveyor:	Adrian Cummins & Ass	23/03/23	Location: HARGREAVES STREET	Suburb: BENDIGO	Works: URBAN UPGRADE	GB No: GB4945	LAYOUT PLAN	Sheet number: 10 of 24															
 EXISTING CONTOURS - Levels to AHD (0.10m interval)	 Concrete Driveway area: Normal plain Dwy as per IDM SD240	 Landscape work: Instant turf (Refer: Typical details pg 2)	 Design Linemarking - Yellow		Draft Checked:	A. Smith	xx/xx/23						Plan Scale: 1:250	A3														
 Concrete Kerb area: Normal plain Kerb per IDM SD100 & CoGB SD190,191,192	 Gravel Driveway area: Compacted FCR (Refer: Typical details pg 2)	 Landscape work: topsoil and seed (Refer: Typical details pg 2)	 Design Bicycle Symbol		Tender Approved:	N. Sartori	xx/xx/23						Plotted: 10/08/2023 By:Ian Frost															
					PRELIMINARY DESIGN DRAFT 4					SHEET REVISIONS AFTER TENDER																		
										<table><tr><th>Revision</th><th>Description</th><th>Approved by</th><th>Date</th></tr><tr><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>-</td><td>-</td><td>-</td><td>-</td></tr></table>			Revision	Description	Approved by	Date	-	-	-	-	-	-	-	-	-	-	-	-
Revision	Description	Approved by	Date																									
-	-	-	-																									
-	-	-	-																									
-	-	-	-																									



LONGITUDINAL SECTION CH 0.000 To 90.000



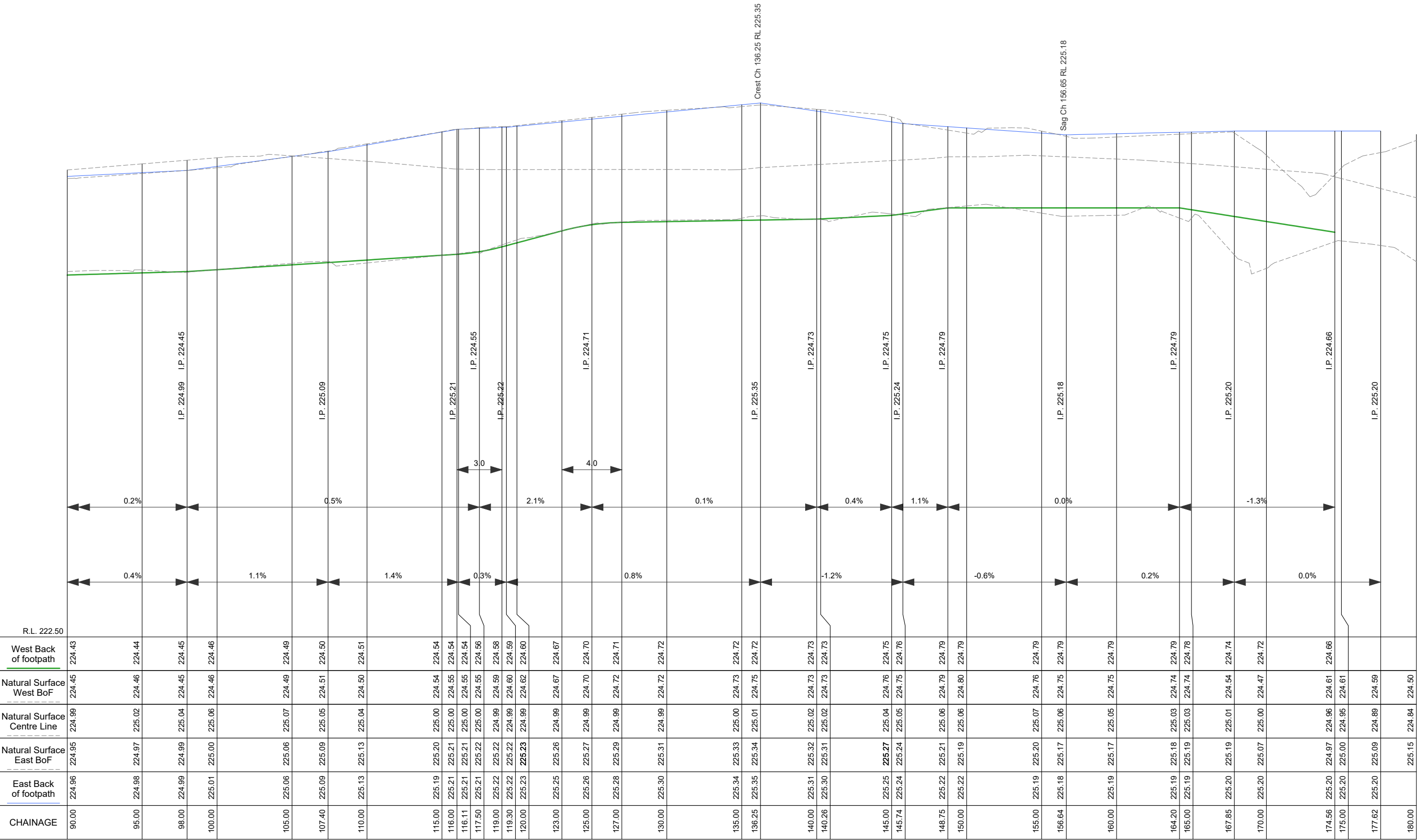
PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23

PRELIMINARY DESIGN

DRAFT 4

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS			
LONGITUDINAL SECTION	Sheet number: 11 of 24		
	Plan Scale: H 1:250 V 1:20		A3
	Plotted: 10/08/2023 By: Ian Frost		
SHEET REVISIONS AFTER TENDER			
Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-



LONGITUDINAL SECTION CH 90.000 To 180.000



PROJECT DESIGN STATUS

Surveyor: Adrian Cummins & Ass 23/03/23

Designer: I. Frost 27/06/23

Draft Checked: A. Smith xx/xx/23

Tender Approved: N. Sartori xx/xx/23

PRELIMINARY DESIGN

DRAFT 4

PROJECT DETAILS

Location: HARGREAVES STREET

Suburb: BENDIGO

Works: URBAN UPGRADE

GB No: GB4945

SHEET DETAILS

LONGITUDINAL SECTION

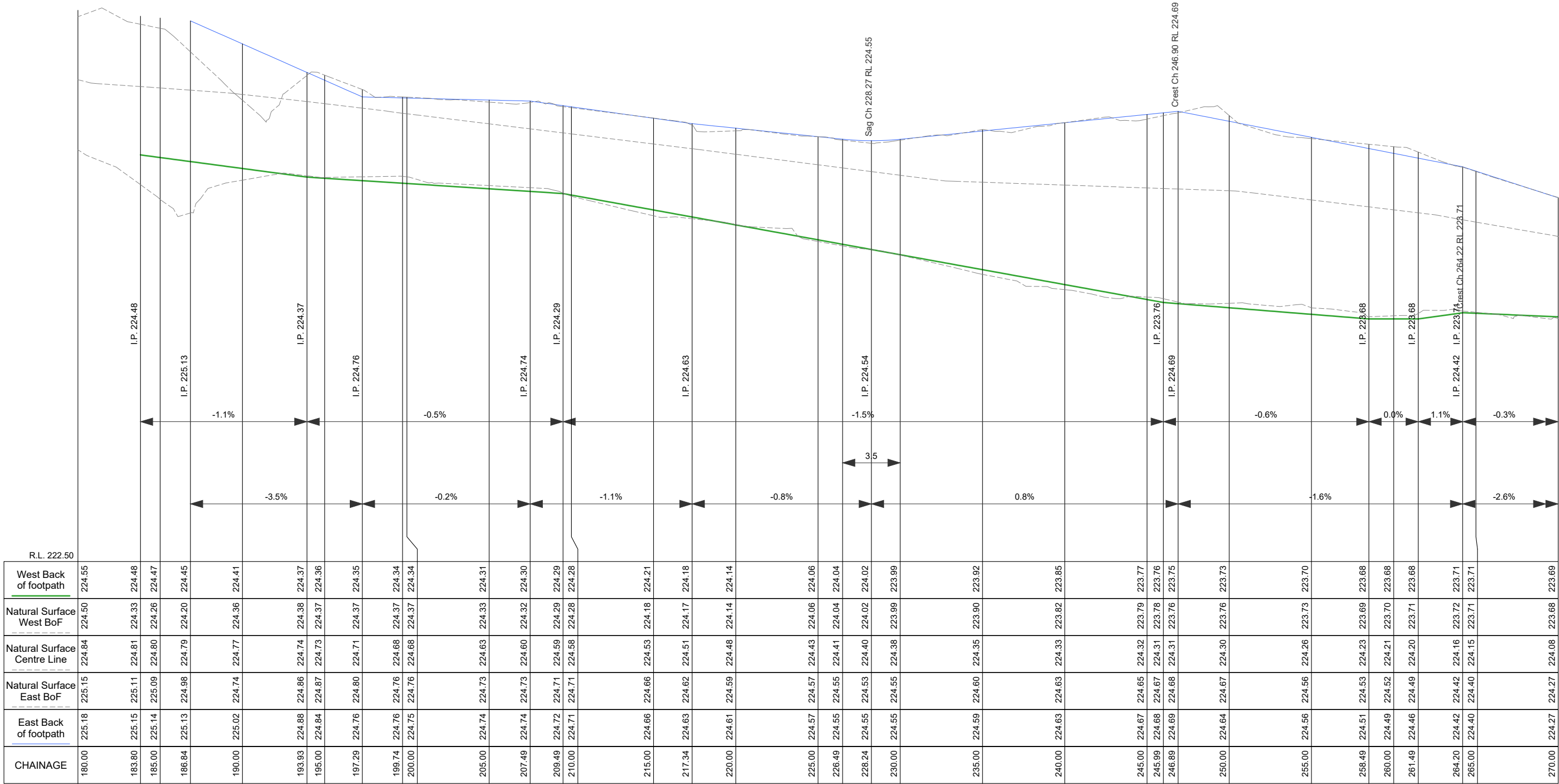
Sheet number: 12 of 24

Plan Scale: H 1:250 V 1:20

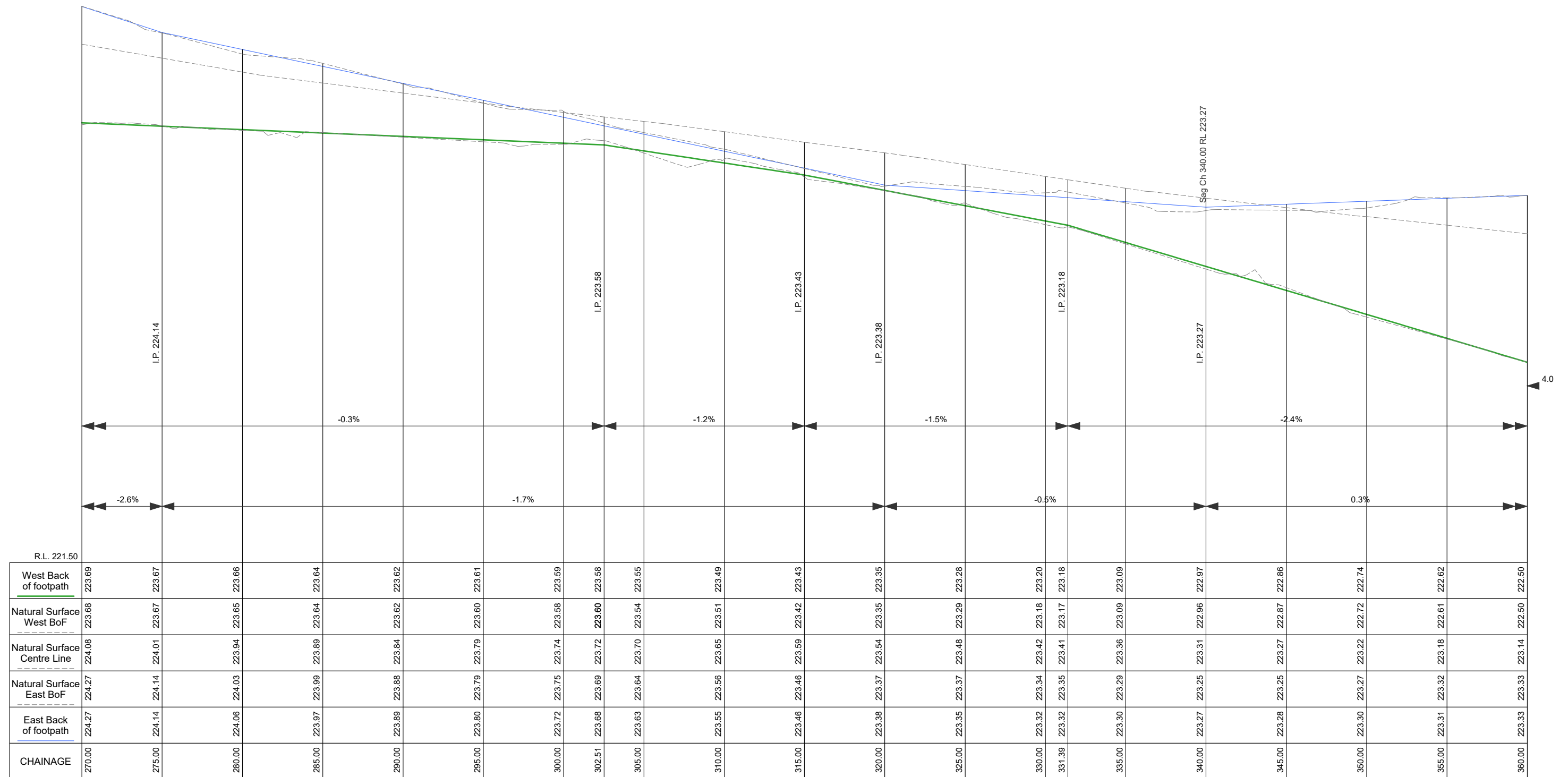
Plotted: 10/08/2023 By: Ian Frost

SHEET REVISIONS AFTER TENDER

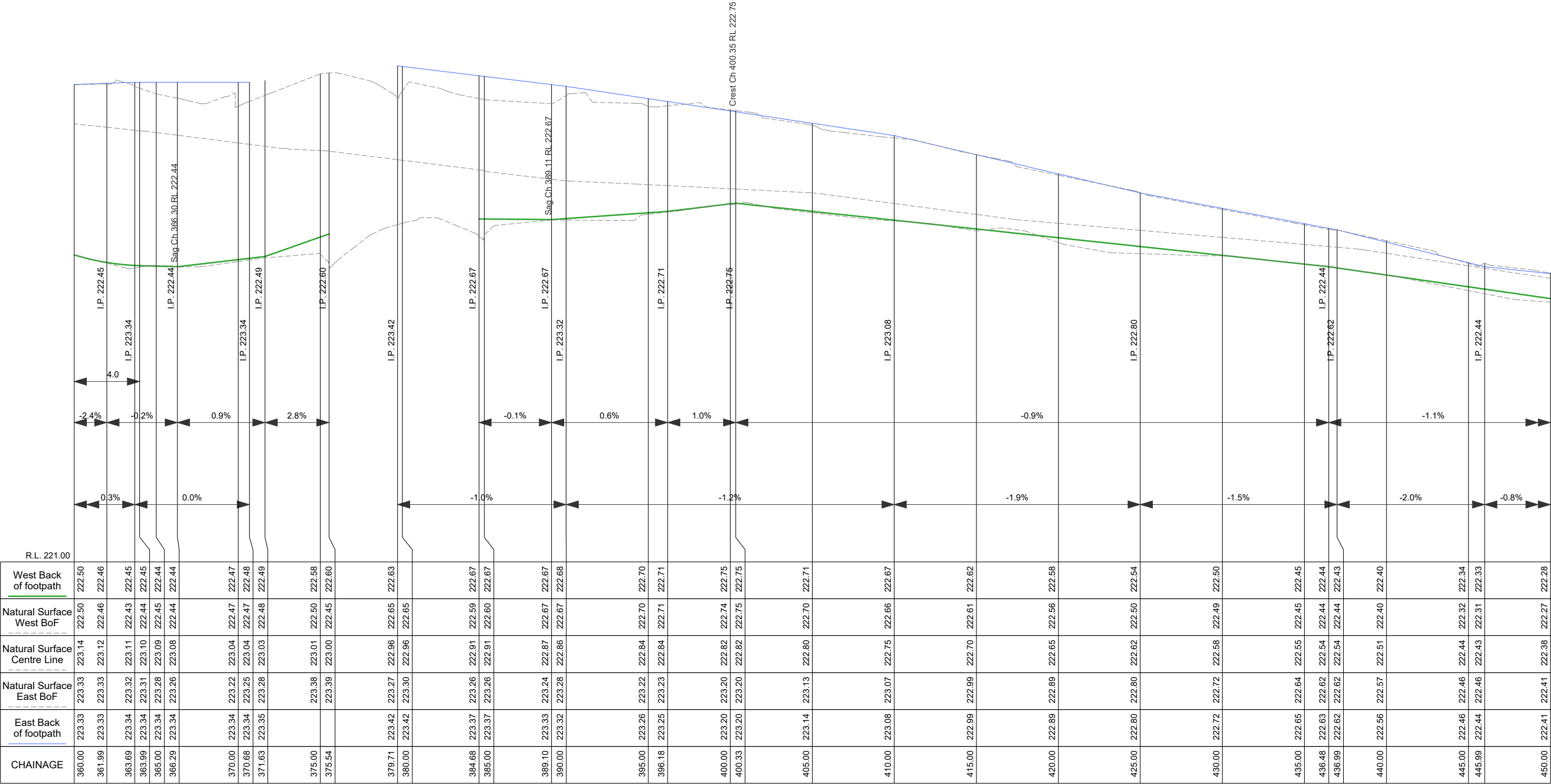
Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-



LONGITUDINAL SECTION CH 180.000 To 270.000



PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945



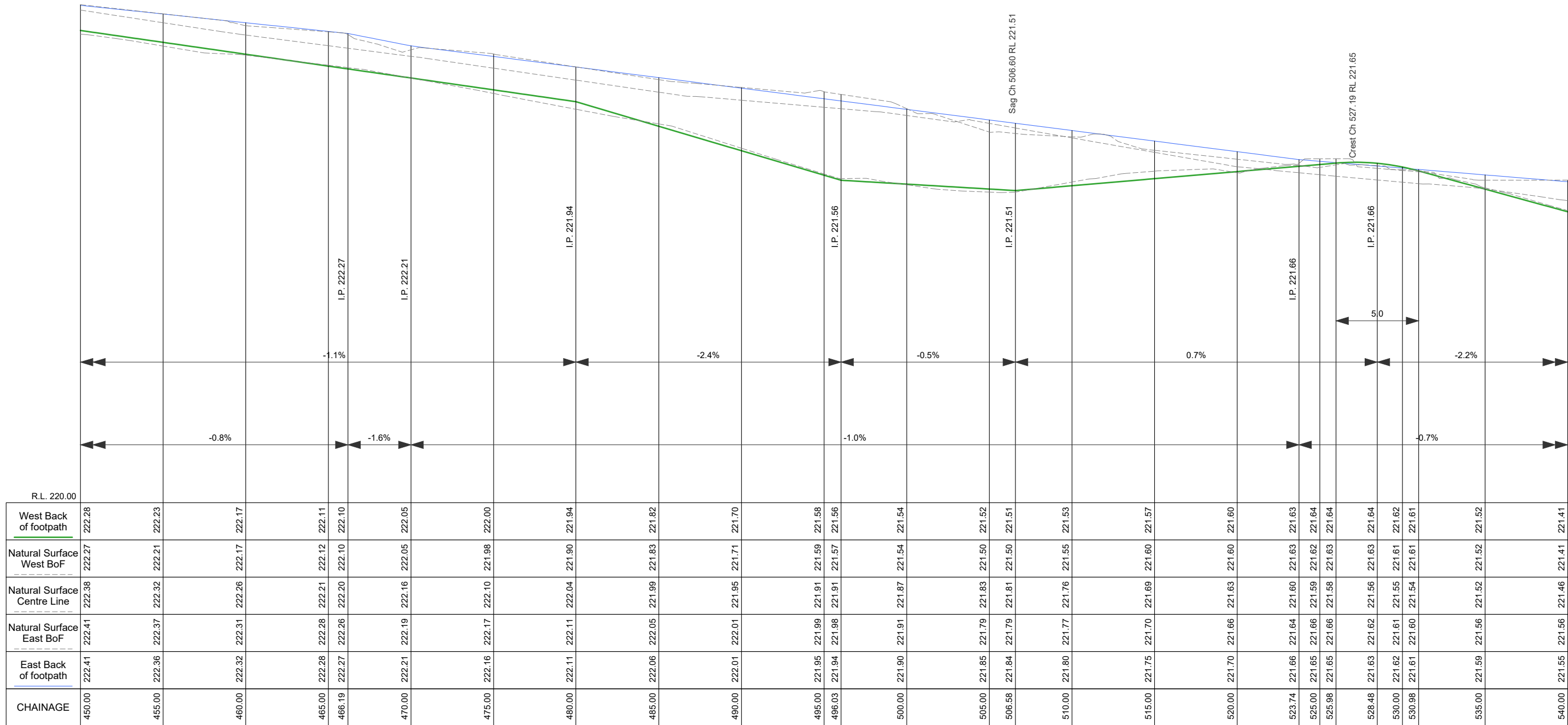
LONGITUDINAL SECTION CH 360.000 To 450.000



PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23
PRELIMINARY DESIGN		
DRAFT 4		

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS		
LONGITUDINAL SECTION		Sheet number: 15 of 24
		Plan Scale: H 1:250 V 1:20 A3
		Plotted: 10/08/2023 By: Ian Frost
SHEET REVISIONS AFTER TENDER		
Revision	Description	Approved by Date
-	-	-
-	-	-
-	-	-



LONGITUDINAL SECTION CH 450.000 To 540.000



PROJECT DESIGN STATUS

Surveyor:

Adrian Cummins & Ass

23/03/23

Designer:

I. Frost

27/06/23

Draft Checked:

A. Smith

xx/xx/23

Tender Approved:

N. Sartori

xx/xx/23

PRELIMINARY DESIGN

DRAFT 4

PROJECT DETAILS

Location:

HARGREAVES STREET

Suburb:

BENDIGO

Works:

URBAN UPGRADE

GB No:

GB4945

SHEET DETAILS

LONGITUDINAL SECTION

Sheet number:

16 of 24

Plan Scale:

H 1:250 V 1:20

A3

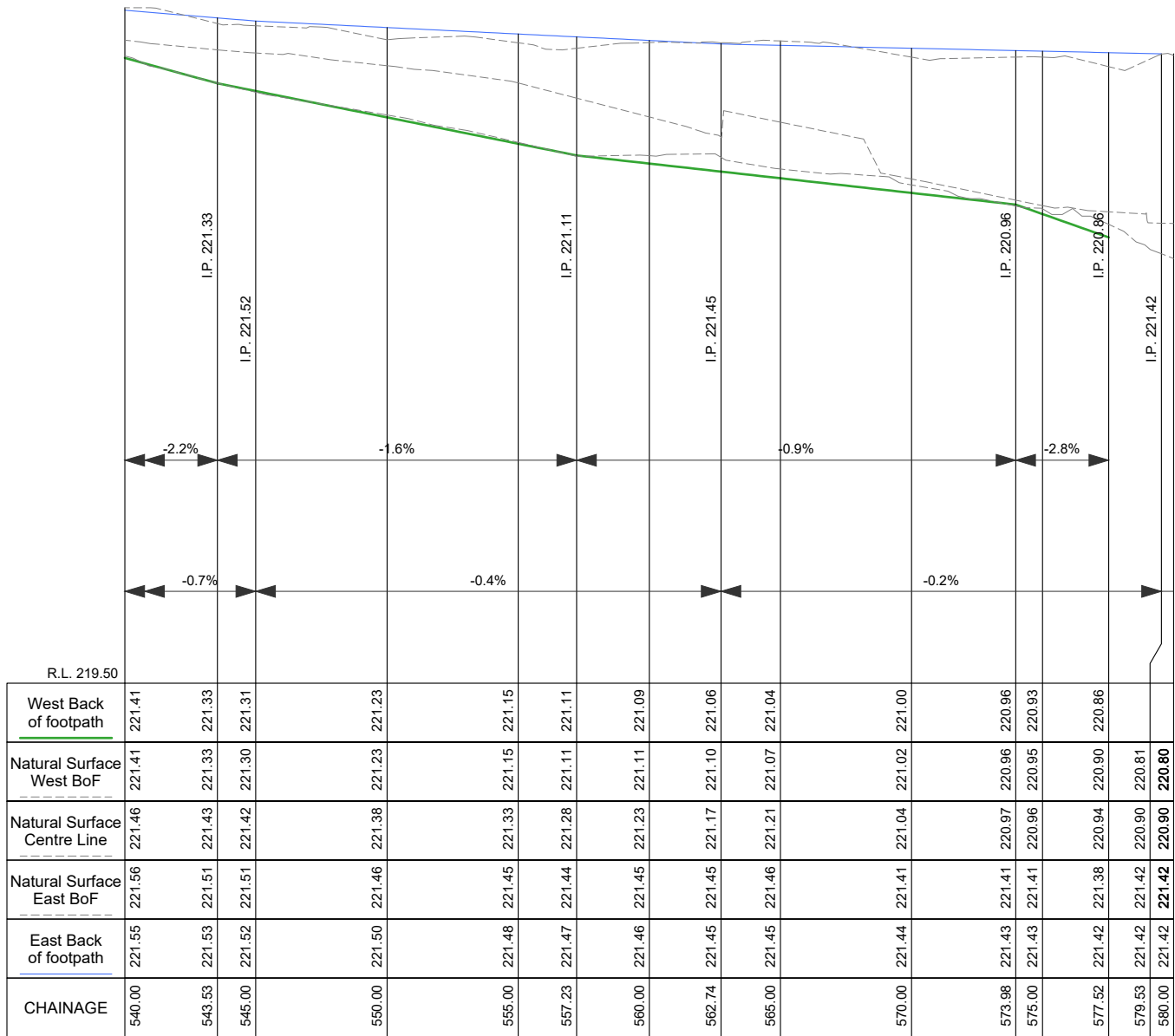
Plotted:

10/08/2023

By: Ian Frost

SHEET REVISIONS AFTER TENDER

Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-



LONGITUDINAL SECTION CH 540.000 To 580.000

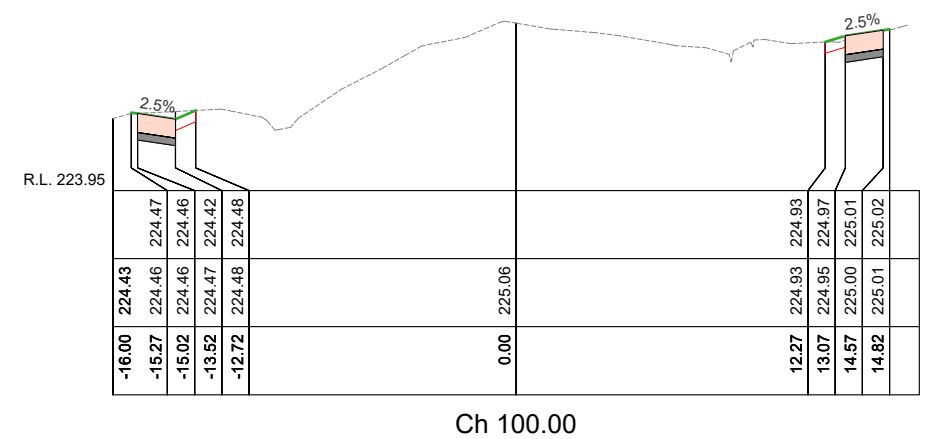
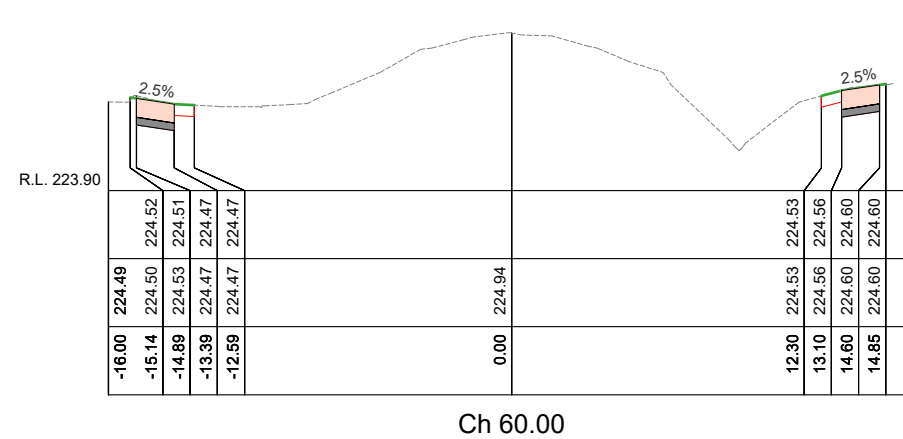
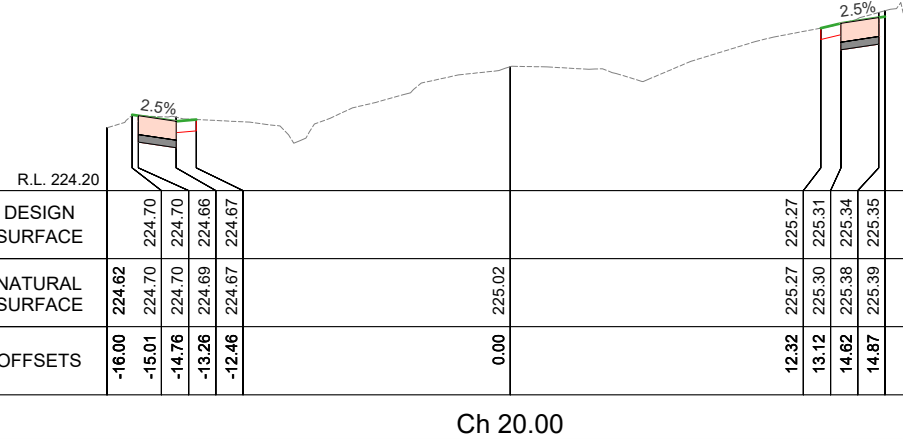
	R.L. 219.50									
West Back of footpath	221.41	221.33	221.31	221.23	221.15	221.11	221.09	221.06	221.04	221.00
Natural Surface West BoF	221.41	221.33	221.30	221.23	221.15	221.11	221.11	221.10	221.07	221.02
Natural Surface Centre Line	221.46	221.43	221.42	221.38	221.33	221.28	221.23	221.17	221.21	221.04
Natural Surface East BoF	221.56	221.51	221.51	221.46	221.45	221.44	221.45	221.45	221.46	221.41
East Back of footpath	221.55	221.53	221.52	221.50	221.48	221.47	221.46	221.45	221.44	221.43
CHAINAGE	540.00	543.53	545.00	550.00	555.00	557.23	560.00	562.74	565.00	570.00
										573.98
										575.00
										577.52
										579.53
										580.00

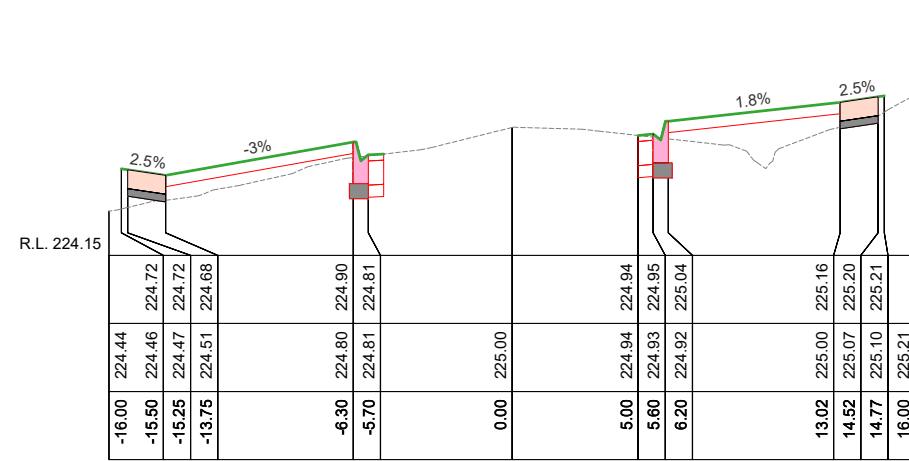


PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23
PRELIMINARY DESIGN DRAFT 4		

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS		
LONGITUDINAL SECTION		Sheet number: 17 of 24
		Plan Scale: H 1:250 V 1:20 A3
		Plotted: 10/08/2023 By: Ian Frost
SHEET REVISIONS AFTER TENDER		
Revision	Description	Approved by Date
-	-	- -
-	-	- -
-	-	- -





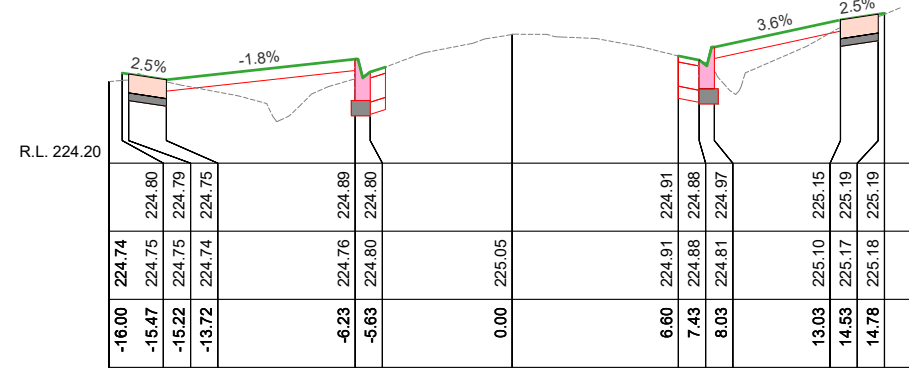
Ch 170.00



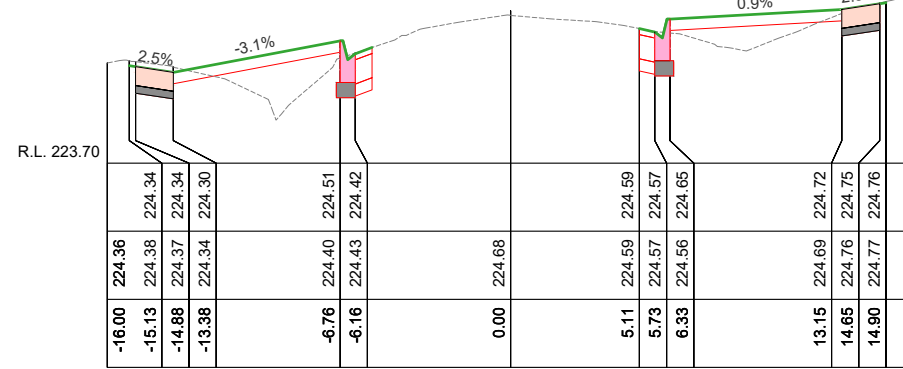
Ch 210.00



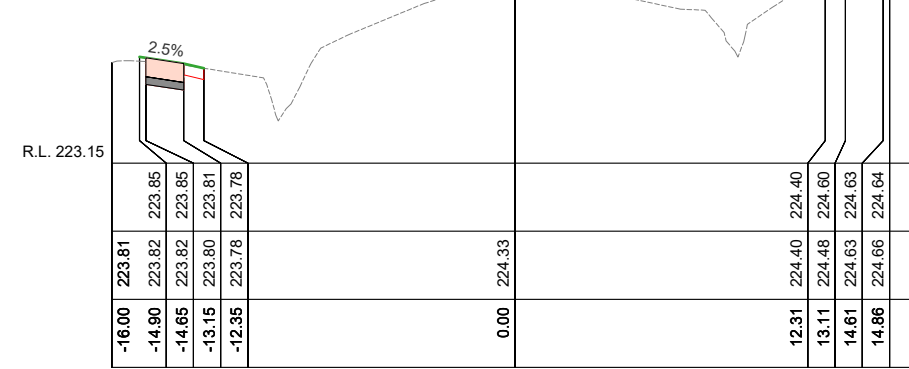
Ch 250.00



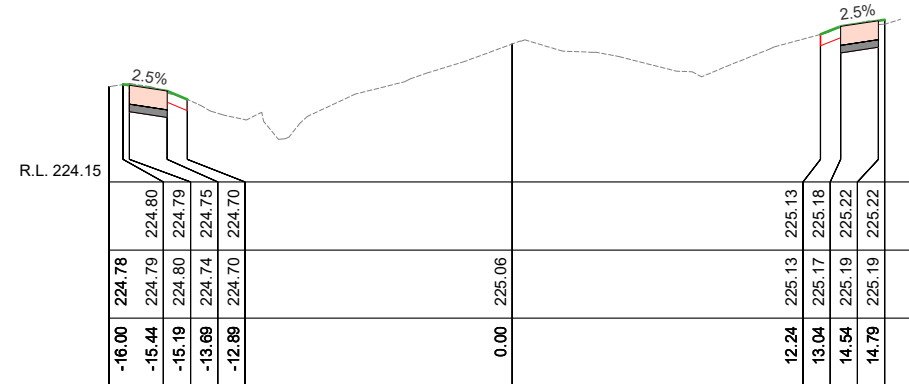
Ch 160.00



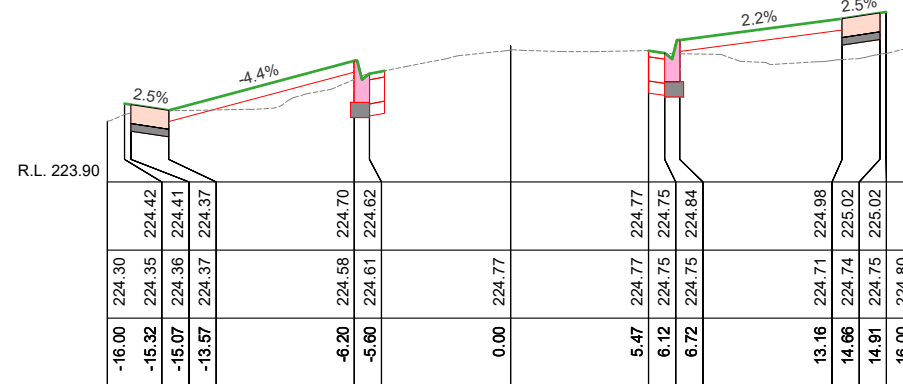
Ch 200.00



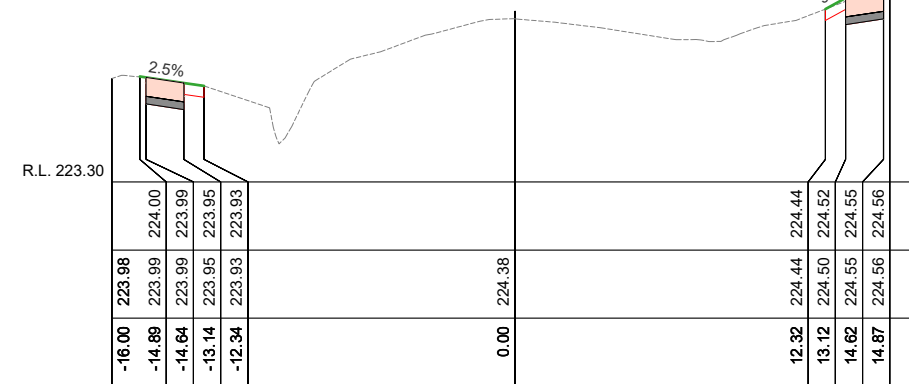
Ch 240.00



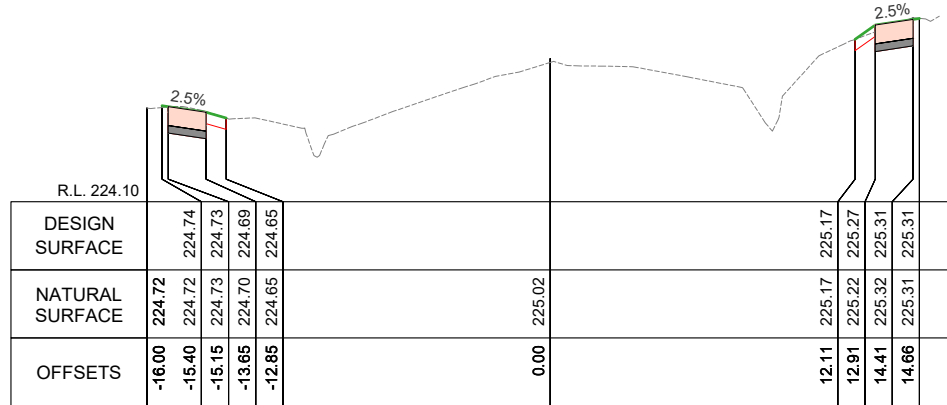
Ch 150.00



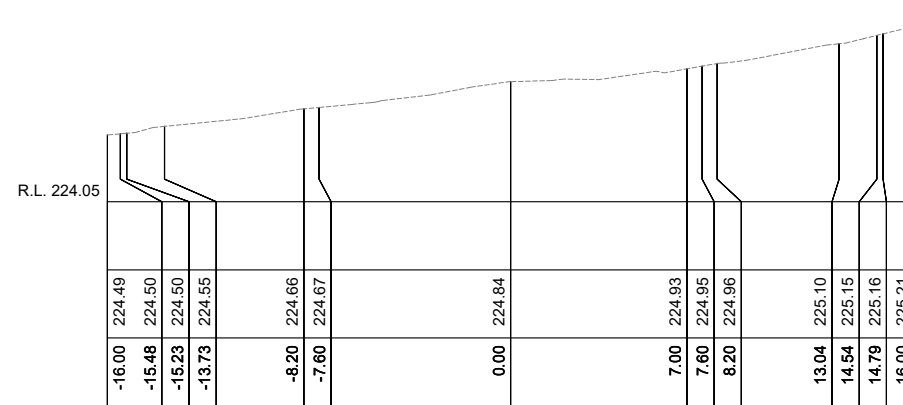
Ch 190.00



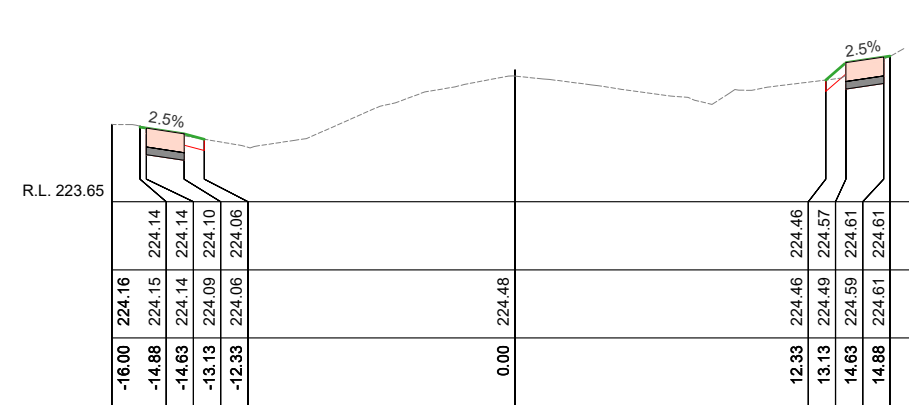
Ch 230.00



Ch 140.00



Ch 180.00



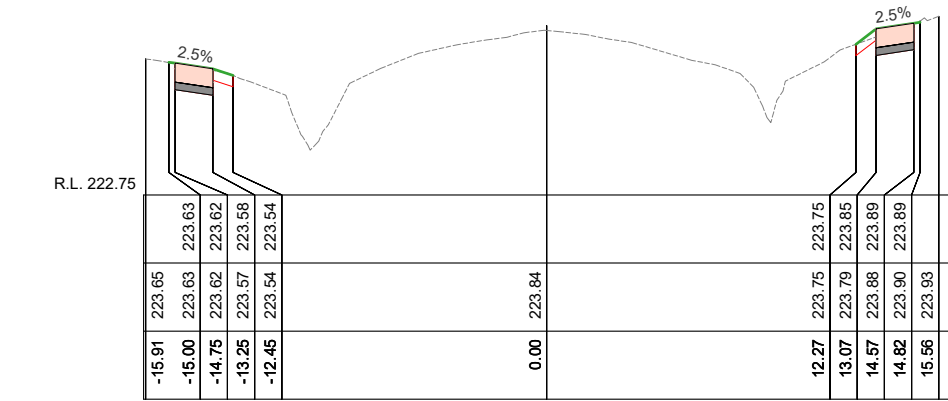
Ch 220.00



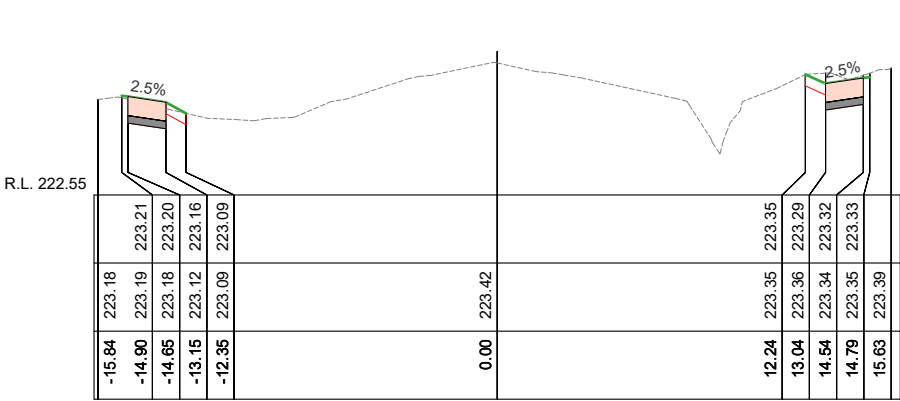
PROJECT DESIGN STATUS			
Surveyor:	Adrian Cummins & Ass	23/03/23	
Designer:	I. Frost	27/06/23	
Draft Checked:	A. Smith	xx/xx/23	
Tender Approved:	N. Sartori	xx/xx/23	
PRELIMINARY DESIGN DRAFT 4			

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

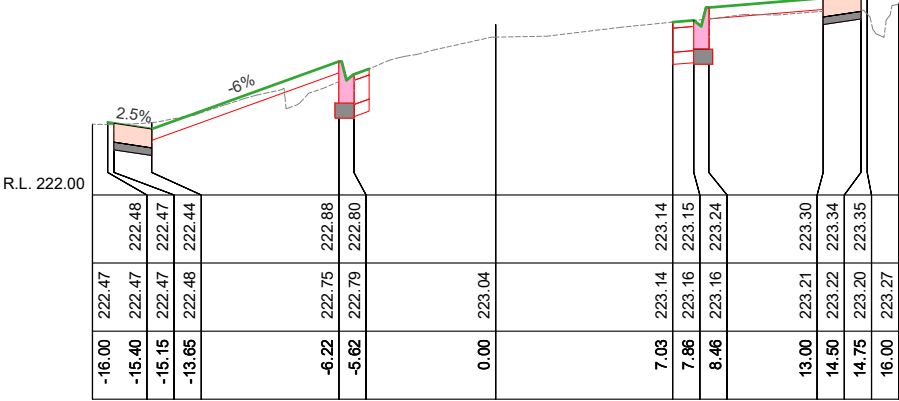
SHEET DETAILS	
CROSS SECTIONS	Sheet number: 19 of 24
	Plan Scale: H 1:300 V 1:50 A3
	Plotted: 10/08/2023 By: Ian Frost
SHEET REVISIONS AFTER TENDER	
Revision	Description
-	-
-	-
-	-



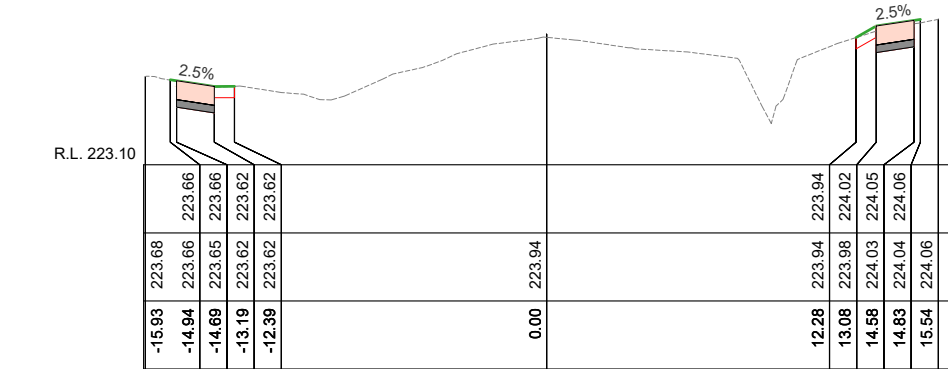
Ch 290.00



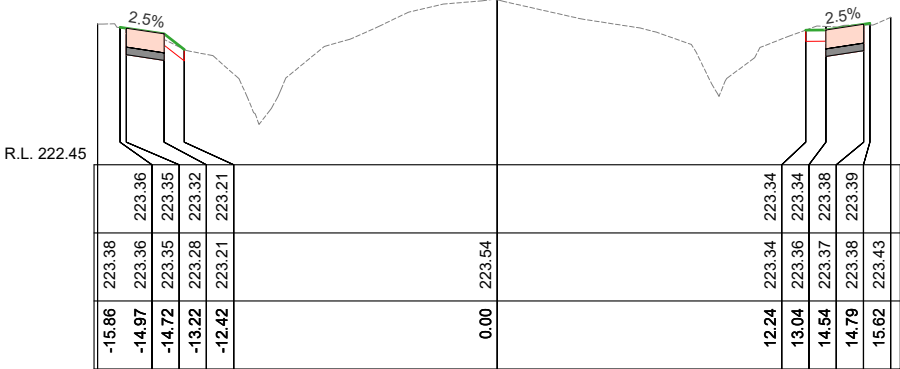
Ch 330.00



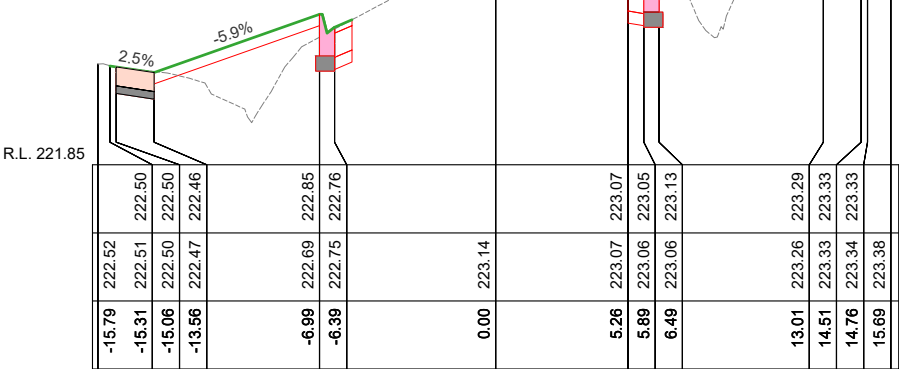
Ch 370.00



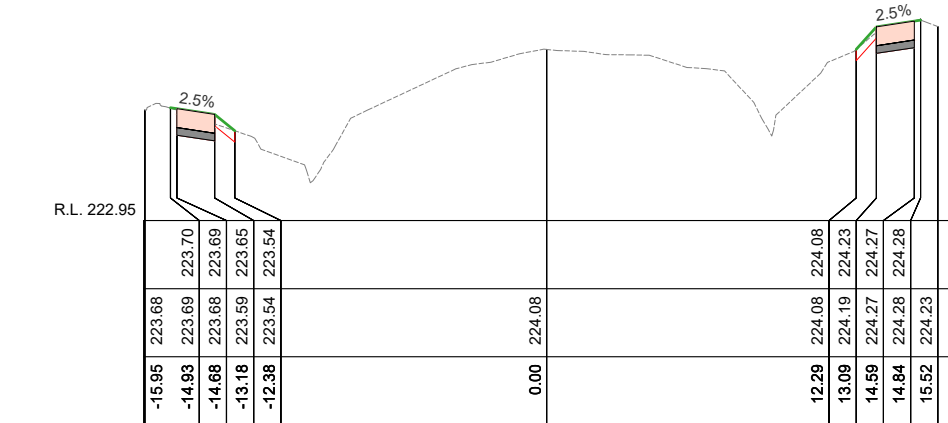
Ch 280.00



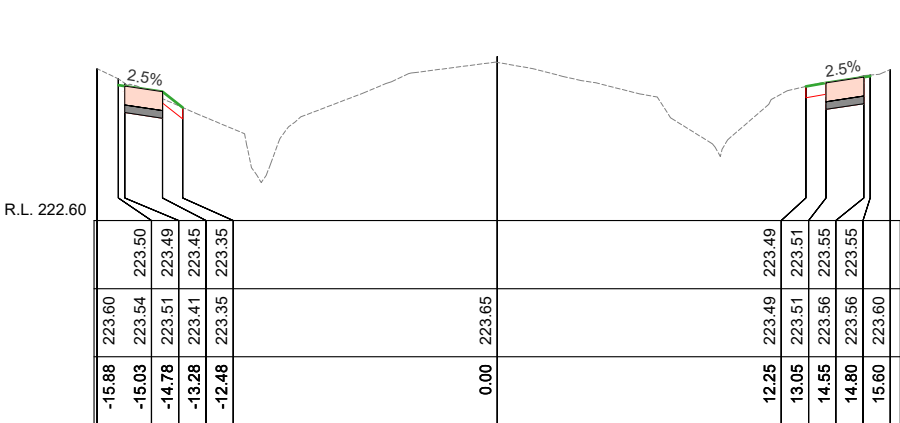
Ch 320.00



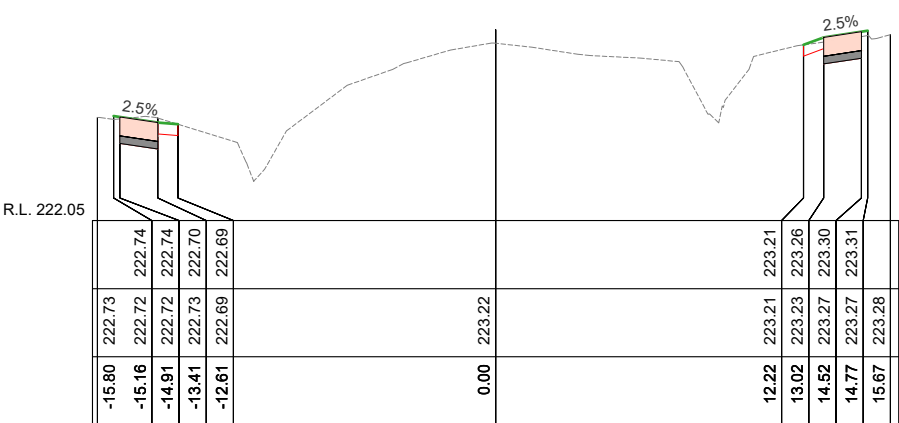
Ch 360.00



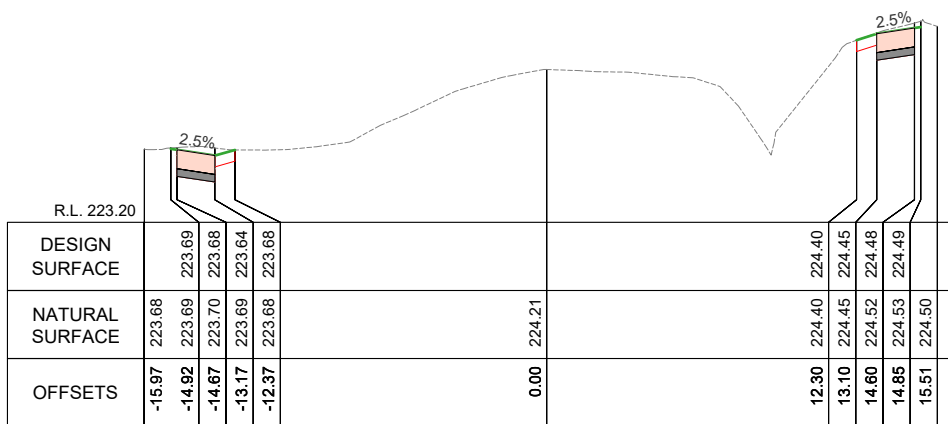
Ch 270.00



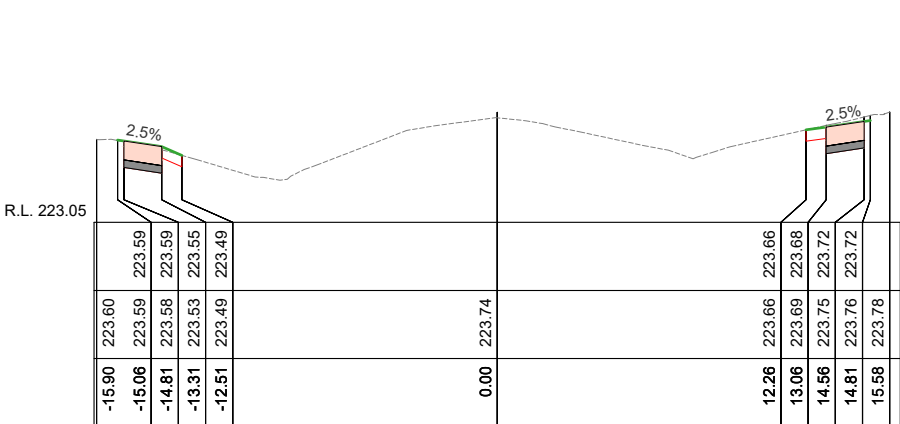
Ch 310.00



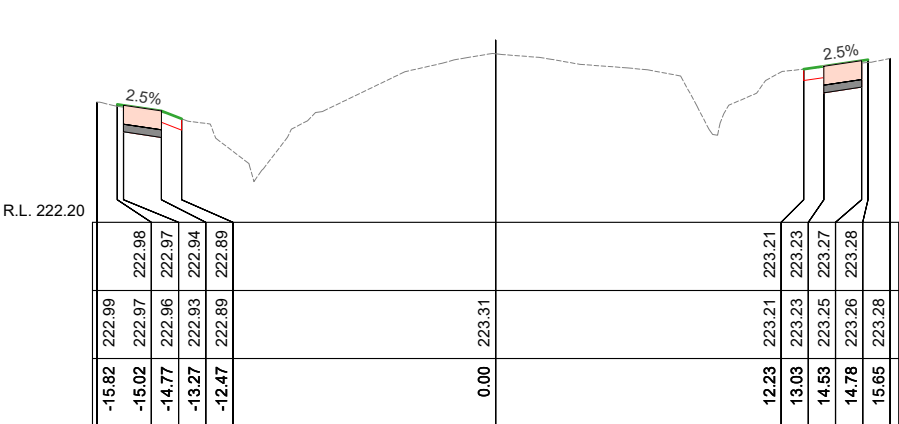
Ch 350.00



Ch 260.00



Ch 300.00



Ch 340.00

DESIGN SURFACE	223.69	223.68	223.68	224.40	224.45	224.48	224.49	224.50
NATURAL SURFACE	223.68	223.70	223.69	223.59	223.54	224.28	224.28	224.23
OFFSETS	-15.97	-14.92	-14.87	-13.17	-12.37	0.00	12.30	13.10

Ch 260.00

DESIGN SURFACE	223.59	223.58	223.55	223.49	223.66	223.68	223.72	223.78
NATURAL SURFACE	223.60	223.59	223.53	223.49	223.60	223.56	223.55	223.60
OFFSETS	-15.90	-15.06	-14.81	-13.31	-12.51	0.00	12.26	13.06

Ch 300.00

DESIGN SURFACE	222.98	222.97	222.94	222.89	223.21	223.23	223.27	223.28
NATURAL SURFACE	222.99	222.97	222.96	222.89	223.21	223.23	223.27	223.28
OFFSETS	-15.82	-15.02	-14.77	-13.27	-12.47	0.00	12.23	13.03

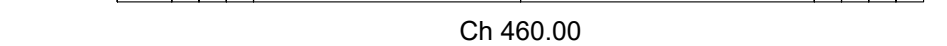
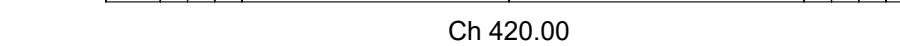
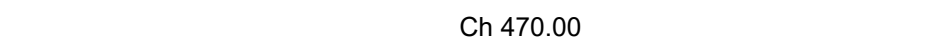
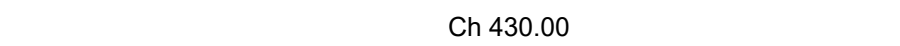
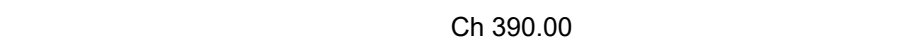
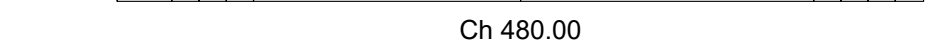
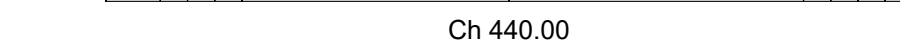
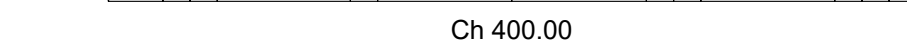
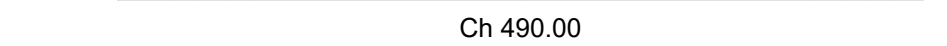
Ch 340.00



PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	I. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23
PRELIMINARY DESIGN		
DRAFT 4		

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

SHEET DETAILS		
CROSS SECTIONS		Sheet number: 20 of 24
		Plan Scale: H 1:300 V 1:50
		Plotted: 10/08/2023 By: Ian Frost
SHEET REVISIONS AFTER TENDER		
Revision	Description	Approved by Date
-	-	-
-	-	-
-	-	-



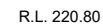
PROJECT DESIGN STATUS		
Surveyor:	Adrian Cummins & Ass	23/03/23
Designer:	J. Frost	27/06/23
Draft Checked:	A. Smith	xx/xx/23
Tender Approved:	N. Sartori	xx/xx/23

PRELIMINARY DESIGN

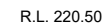
DRAFT 4

PROJECT DETAILS	
Location:	HARGREAVES STREET
Suburb:	BENDIGO
Works:	URBAN UPGRADE
GB No:	GB4945

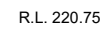
SHEET DETAILS			
CROSS SECTIONS		Sheet number: 21 of 24	
		Plan Scale: H 1:300 V 1:50 A3	
		Plotted: 10/08/2023 By: Ian Frost	
SHEET REVISIONS AFTER TENDER			
Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-



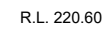
Ch 530.00



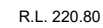
Ch 570.00



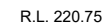
Ch 520.00



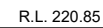
Ch 560.00



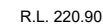
Ch 510.00



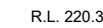
Ch 550.00



Ch 500.00



Ch 540.00



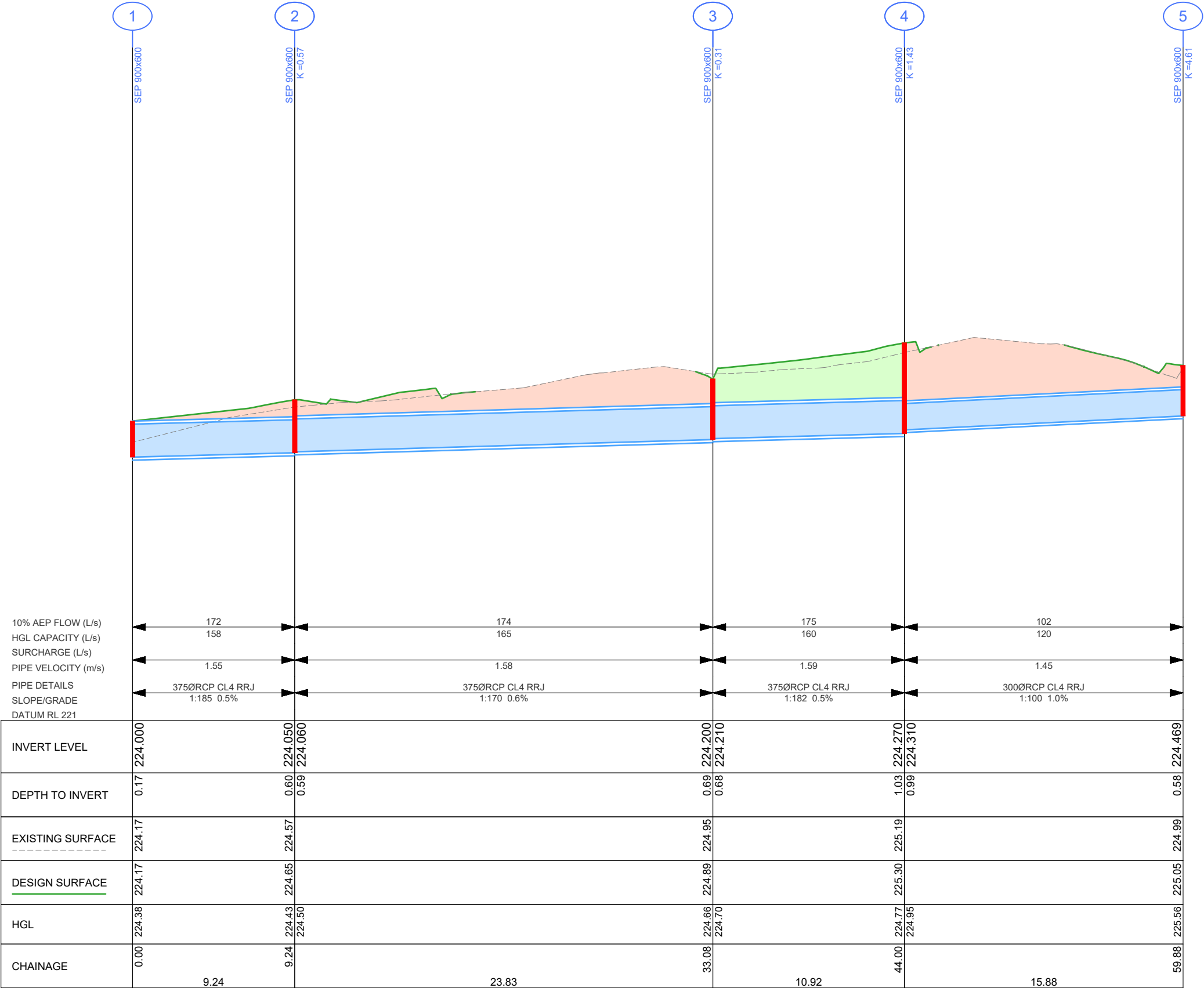
Ch 580.00



PRELIMINARY DESIGN
DRAFT 4

Location: HARGREAVES STREET
Suburb: BENDIGO
Works: URBAN UPGRADE
GB No: GB4945

CROSS SECTIONS		Sheet number: Z2 01 Z4	
		Plan Scale: H 1:300 V 1:50	
		Plotted: 10/08/2023 By: Ian Frost	
SHEET REVISIONS AFTER TENDER		Approved by	Date
Revision	Description		
-	-	-	-
-	-	-	-



LEGEND

EXISTING PIPE TO REMAIN

DESIGN PIPE / PIT or ENDWALL

CoGB SD390 TRENCH BACKFILL (BEHIND KERB)

CoGB SD391 TRENCH BACKFILL (UNDER NEW ROAD)

CoGB SD392 TRENCH BACKFILL (UNDER EXISTING ROAD)

CITY OF GREATER BENDIGO

PROJECT DESIGN STATUS

Surveyor: Adrian Cummins & Ass

23/03/23

Designer: I. Frost

27/06/23

Draft Checked: A. Smith

xx/xx/23

Tender Approved: N. Sartori

xx/xx/23

PRELIMINARY DESIGN

DRAFT 4

PROJECT DETAILS

Location: HARGREAVES STREET

Suburb: BENDIGO

Works: URBAN UPGRADE

GB No: GB4945

SHEET DETAILS

DRAINAGE LONG SECTION

Sheet number: 23 of 24

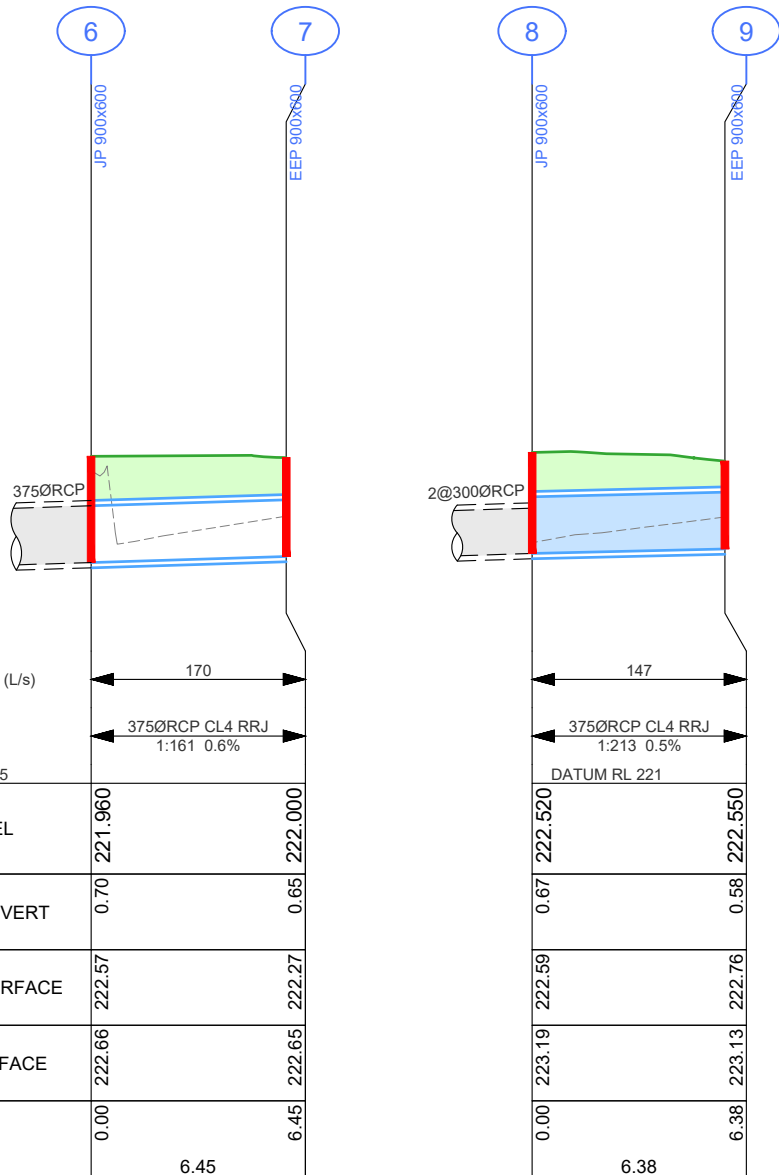
Plan Scale: H 1:250 V 1:50

A3

Plotted: 10/08/2023 By: Ian Frost

SHEET REVISIONS AFTER TENDER

Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-



Pit Schedule											
Pit No.	Pit Type	Standard Drawing	Pit Width	Pit Length	Outlet Diameter	Outlet Invert RL	Inlet Diameter	Inlet Invert RL	Pit Depth	Pit Lid Level	Comment
			(mm)	(mm)	(mm)	(m)	(mm)	(m)	(m)	(m)	
1	Driveable Endwall		-	-			375	224.000	0.400	224.400	
2	Side Entry Pit	CoGB SD590-A-D-G-T	600	900	375	224.050	375	224.060	0.602	224.652	
3	Grated Pit	CoGB SD590-A-D-K-V	600	900	375	224.200	375	224.210	0.691	224.891	
4	Side Entry Pit	CoGB SD590-A-D-G-T	600	900	375	224.270	300	224.310	1.031	225.301	
5	Side Entry Pit	CoGB SD590-A-D-G-T	600	900	300	224.469			0.577	225.046	
6	Junction Pit	CoGB SD590-A-D-L-R	600	900	375	(221.96)	375	221.960	0.703	222.663	Convert existing End Entry pit into Junction Pit
7	End Entry Pit	CoGB SD590-A-D-L-R	600	900	375	222.000			0.654	222.654	Shape bluestone pitchers into pit opening
8	Junction Pit	CoGB SD590-A-D-L-R	600	900	2@300	(222.52)	375	222.520	0.667	223.187	Construct Junction pit adjacent proposed footpath. Extend 300 pipes
9	End Entry Pit	CoGB SD590-A-D-L-R	600	900	375	222.550			0.581	223.131	Shape bluestone pitchers into pit opening
10	Side Entry Pit	CoGB SD590-A-D-G-T	600	900	375	222.700			0.687	223.387	Connect 375ØRCP from Pit 10 into existing End Entry pit

LEGEND

EXISTING PIPE TO REMAIN

DESIGN PIPE / PIT or ENDWALL

CoGB SD390 TRENCH BACKFILL (BEHIND KERB)

CoGB SD391 TRENCH BACKFILL (UNDER NEW ROAD)

CoGB SD392 TRENCH BACKFILL (UNDER EXISTING ROAD)

CITY OF GREATER BENDIGO

PROJECT DESIGN STATUS

Surveyor:

Adrian Cummins & Ass

23/03/23

Designer:

I. Frost

27/06/23

Draft Checked:

A. Smith

xx/xx/23

Tender Approved:

N. Sartori

xx/xx/23

PRELIMINARY DESIGN

DRAFT 4

PROJECT DETAILS

Location:

HARGREAVES STREET

Suburb:

BENDIGO

Works:

URBAN UPGRADE

GB No:

GB4945

SHEET DETAILS

DRAINAGE L.S. & PIT SCHEDULE

Sheet number:

24 of 24

Plan Scale:

H 1:250 V 1:50

A3

Plotted:

10/08/2023

By: Ian Frost

SHEET REVISIONS AFTER TENDER

Revision	Description	Approved by	Date
-	-	-	-
-	-	-	-
-	-	-	-