

RIVERFIELD SQUARE - STAGE 32

BROWN PROPERTY GROUP

CITY OF CASEY

CONSTRUCTION NOTES

SITE MANAGEMENT

- A1. Prior to commencement of works on site, the contractor must ensure that all matters relating to the Occupational Health & Safety Act 2004, including all relevant regulations, have been addressed. In particular, the required notifications must be conveyed to the Worksafe Victoria - Health & Safety division with respect to trenching operations. Details of the contractors occupational health & safety procedures must be lodged with the superintendent prior to commencement of works.
- A2. All native trees & shrubs to be retained unless road construction necessitates their removal or removal is directed by the engineer. A town planning permit is required for the removal of native trees & / or vegetation. The removal or retention of any existing trees must be in accordance with the approved landscape plan, or else approval will be required from the City of Casey landscape approvals officer.
- A3. Existing dam or watercourses to be excavated to a firm base & backfilled as specified. Consulting engineer to be notified when the dam or watercourses are excavated to a firm base. No filling is to be placed prior to dams being inspected & levels taken. Backfilling is to be carried out to the satisfaction of the Council supervising engineer.
- A4. Prior to commencement of works, the contractor must submit a Site Management Plan (SMP) to the consultant for approval. The contractor must comply with the recommendations of the Environment Protection Authority publication No.275 "Construction techniques for sediment pollution control". Appropriate siltation control is to be maintained throughout the construction & maintenance period of the works.
- A5. Provide temporary safety barrier fence (Farm Fence as per MW Std Dwg 7251/08/203) along extent of outfall drain where the drain is greater than 1.5m in depth & side slopes are steeper than 1 in 3. Safety fence to remain until permanent underground drainage is installed.
- A6. Contractor to remove existing irrigation & drainage pipes & pits encountered on site. Trenches to be backfilled in accordance with notes C2 & C3.

GENERAL

- B1. All works to be carried out in accordance with AS2124-1992 general conditions of contract & the City of Casey current specification & standard drawings & to the satisfaction of the City of Casey works supervisor.
- B2. Council to be notified two (2) clear days prior to commencement of works.
- B3. Before commencement of works on trenches in excess of 1.5m deep, the civil contractors construction supervisor must give notice in writing of such proposals to Worksafe Victoria in accordance with Part 5.1, Division 4 of the Occupational Health & Safety regulations (2017) & undertake safety precautions in trenching operations in accordance with Worksafe Compliance Code - Excavations Edition 2, December 2019.
- B4. Lots to be graded (1 in 150 min slope) & left clean to the satisfaction of the engineer. Finished levels to be compatible with lots adjoining this stage.
- B5. On completion the contractor is responsible for the removal of all rubbish & spoil from site. No surplus trees, vegetation or other material is to be burnt on site.
- B6. Reserves to be free draining & to be left in a condition satisfactory to the City of Casey works supervisor.
- B7. Where works are in the vicinity of existing services these services are to be located & the various authorities notified prior to the commencement of works.
- B8. All TBM's & control points are to be maintained & protected at all times during construction. Should any marks be disturbed, the contractor will immediately notify the consultant to arrange re-installment at the contractors expense.
- B9. Provide painted paling fence along any boundary common to lots & municipal reserves as per Council Std. Dwg. S-706. Palings to be on the reserve side.

ROADWORKS

- C1. 100a agricultural pipe drains (MPA standard drawing EDCM 202) to be placed behind all kerb & channel & buffer pitchers & where directed by the engineer.
- C2. Filling in all properties & road reserves is to be carried out using approved clay fill. Top soil & all vegetable matter to be stripped from site prior to filling. All filling to be carried out in accordance with AS3798-2007 and the geotechnical report. Level 1 inspection and testing to be carried out in accordance with AS3798-2007 Section 8.2. A fill report must be submitted to the Consultant, showing from a NATA registered soil testing laboratory.
- C3. Importing Fill:- All imported fill must be tested by a NATA approved laboratory to ensure it is suitable for use on site, & any contaminants are within accepted levels. Under no circumstances should fill material enter or leave the site without the permission of the supervising engineer & Council works supervisor, prior to it being appropriately tested. All vehicles transporting fill material to & from the site must have appropriate measures in place to ensure that material does not get onto roads & into stormwater systems & natural waterways.
- C4. Batters to be 1 in 5 for fill & 1 in 3 for cut unless noted otherwise.
- C5. Cut batters are to be grassed & mulched with a mixture of chopped grass, straw & bitumen emulsion.
- C6. Where cut batters exceed 700mm an additional 300mm berm shall be formed behind footpath.
- C7. Access ramps are to be constructed where cut batters exceed 1.0m. They are to be graded 1 in 10 for the first 2.5m from the back of path & then at a maximum of 1 in 4 to natural surface.
- C8. The water conduit offset from the lot boundary is given on the water reticulation plan. The contractor must construct conduits to accord with the given offset & ensure that the concreter marks the kerb & footpath exactly above the conduit.
- C9. Irrigation conduits are to be DN100 DWV PVC installed beneath the pavement and/or capping layer, if present. Locations are to be marked using a green dot spray painted on the top of kerb.
- C10. All footpaths are to be 125mm thick 25MPa concrete with SL72 mesh centrally located in accordance with the MPA standard drawing EDCM 401.

- C11. Opticomm to be notified seven (7) days prior to concrete works being placed.
- C12. Electrical distribution pits within footpaths are to be a minimum of 300mm within the edge of the path. Concrete is to be placed around distribution pits to a minimum depth of 200mm.
- C13. All street signs to be constructed & erected to current City of Casey standards including logo. Court street names are to show court name only.
- C14. Traffic control signs, markings & delineators to be installed in accordance with AS1742.2. All line marking is to be long life road marking, with longitudinal lines in thermoplastic & transverse markings in cold applied.
- C15. Driveways to be constructed in accordance with the MPA standard drawings EDCM 501 & EDCM 502. Single driveways to be a minimum 3.5m wide & to be offset 0.75m from side boundary or easement unless otherwise shown.
- C16. Kerb transition to take place in the minor street over a 2.0m length from either the tangent point or TP pit.
- C17. Existing road works to be reconstructed as required to provide, without discontinuity, a connection in accordance with design levels & grades.
- C18. Provide 2.5m wide shared footpath through reserves as shown on a curvilinear alignment to the satisfaction of the engineer.
- C19. Tactile ground surface indicators (TGSIs) are to be installed at all pram crossings & pedestrian cross points in accordance with AS1428.4.1 : 2009 & MPA standard drawing EDCM 403.

DRAINAGE

- D1. Drainage & pits to be set out from offsets shown rather than from centreline pipe chainages.
- D2. Lightweight fibreglass type pit lids are required for all drainage pits & all grates for pits are to be Class D, to comply with AS3996 - 2019 unless otherwise shown. All drainage works are to be constructed to council specifications.
- D3. All pipes up to and including 750mm in diameter shall be rubber ring jointed (RRJ). Pipes above this size may be flush jointed with external sealing bands. For pipes greater than 900mm and changes in direction between 2 connecting pipes exceeding 10° construct segmented curves using splayed pipes with bandage joints, having deflections within the manufacturer's specification.
- D4. All pipes to be Class 'Z' R.C. unless noted otherwise. PVC pipes to be Class SH unless specified.
- D5. Pipe trenches beneath the road pavement, footpath or within 150mm of the kerb & channel to be backfilled with 20mm Class 3 FCR in 150mm layers.
- D6. Property inlets to be constructed as per MPA standard drawing EDCM 701 — EDCM 704.
- D7. All proposed drainage stubs to be blanked off at end of pipe with timber planks to the satisfaction of the supervising engineer.

PAVEMENT

- E1. Modification of the pavement requires approval by the City of Casey works supervisor.

COUNCIL

- F1. As constructed plans and electronic asset information in D-Spec and R-Spec format must be submitted to Council prior to practical completion.
- F2. A CCTV report must be provided for all drainage lines prior to issue of practical completion.
- F3. Street lighting must be provided on all newly created roads and reserves including all intersections, speed humps and LTM devices in accordance with the approved public lighting plan.
- F4. A traffic management plan (TMP) must be submitted to, and approved by Council prior to the commencement of any works on site and all traffic management must be carried out in accordance with this TMP.

DRAWING INDEX

DRAWING No.	TITLE	REVISION
2101578-32-001	COVER SHEET	D
2101578-32-002	TYPICAL ROAD CROSS SECTIONS	B
2101578-32-003	PAVEMENT MAKEUP & GENERAL DETAILS	B
2101578-32-010	LAYOUT PLAN (SHEET 1 OF 2)	D
2101578-32-011	LAYOUT PLAN (SHEET 2 OF 2)	C
2101578-32-100	ROAD LONGITUDINAL SECTIONS GREVILLEA CIRCUIT	B
2101578-32-101	ROAD LONGITUDINAL SECTIONS POPPY SAGE WAY	B
2101578-32-200	ROAD CROSS SECTIONS GREVILLEA CIRCUIT (SHEET 1 OF 3)	B
2101578-32-201	ROAD CROSS SECTIONS GREVILLEA CIRCUIT (SHEET 2 OF 3)	B
2101578-32-202	ROAD CROSS SECTIONS GREVILLEA CIRCUIT (SHEET 3 OF 3)	B
2101578-32-203	ROAD CROSS SECTIONS POPPY SAGE WAY	A
2101578-32-300	INTERSECTION DETAILS (SHEET 1 OF 2)	B
2101578-32-301	INTERSECTION DETAILS (SHEET 2 OF 2)	B
2101578-32-350	SIGNAGE & LINE MARKING PLANS	B
2101578-32-400	DRAINAGE LONGITUDINAL SECTIONS (SHEET 1 OF 4)	B
2101578-32-401	DRAINAGE LONGITUDINAL SECTIONS (SHEET 2 OF 4)	C
2101578-32-402	DRAINAGE LONGITUDINAL SECTIONS (SHEET 3 OF 4)	A
2101578-32-403	DRAINAGE LONGITUDINAL SECTIONS (SHEET 4 OF 4) AND PIT SCHEDULE	C
177-01-S01	MA CIVIL DESIGN RETAINING WALL DETAILS (SHEET 1)	P2
177-01-S02	MA CIVIL DESIGN RETAINING WALL DETAILS (SHEET 2)	P2
177-01-S03	MA CIVIL DESIGN RETAINING WALL DETAILS (SHEET 3)	P2
177-01-S04	MA CIVIL DESIGN RETAINING WALL DETAILS (SHEET 4)	P1

Survey Origin:

Coordinates are on a local plane datum based upon MGA Zone 55 bearings and truncated MGA Zone 55 co-ordinates at PM103 (CRANBOURNE).

Heights are to AHD vide Permanent Mark PM 52 (SHERWOOD) RL 8.611.

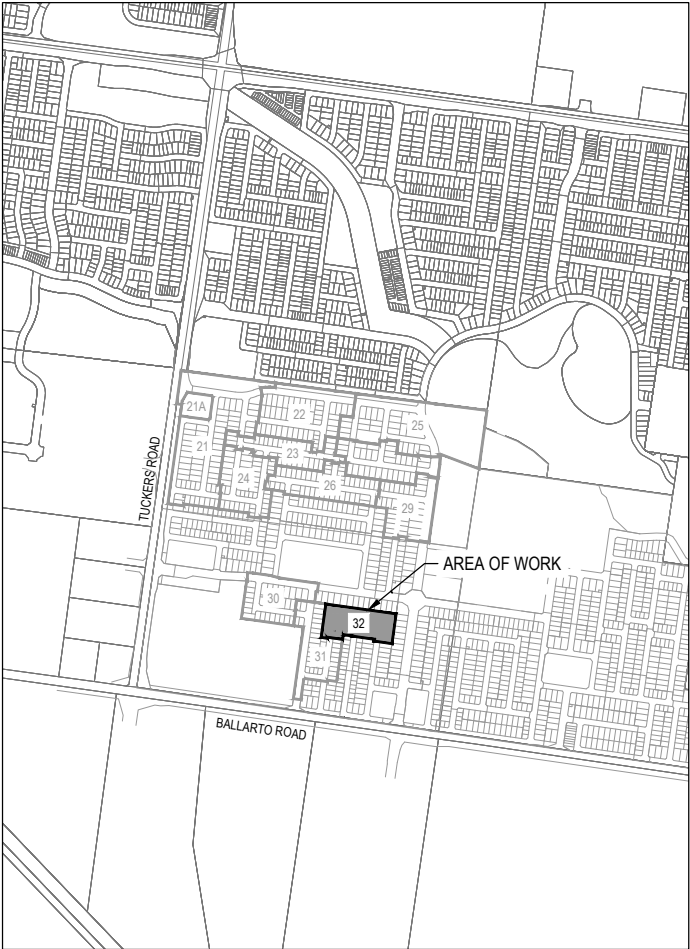
Plane Grid Coordinates to MGA2020 Zone 55 Grid Coordinates Conversion.
(PLANE SHIFT)

Add + 350,000.471 to Eastings
Add + 5,700,001.511 to Northings

(APPLY SCALE FACTOR) Scale by 0.999861 at point PM103

TBM SCHEDULE

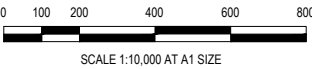
TBM/PSM	EASTING	NORTHING	LEVEL	DESCRIPTION
TBM MA6	4850.46	78259.87	27.97	STEEL PICKET
TBM DR6	4825.94	78161.94	26.59	STEEL PICKET
TBM DR19	5359.48	78196.66	21.77	STEEL PICKET
TBM DR20	4982.89	78175.00	23.84	STEEL PICKET
TBM DR22	5069.42	78086.46	21.89	STEEL PICKET
TBM DR23	5357.54	78052.09	21.27	STEEL PICKET
TBM DR44	5052.46	78289.97	22.40	STEEL PICKET



SITE PLAN

SCALE 1:10,000 @ A1

MELWAY REF: 135 E11



ISSUED FOR
CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
D	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.					
C	DRAWING INDEX UPDATED	29.07.25	AP	SF					
B	DRAWING INDEX UPDATED	16.07.25	KLW	SF					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date 17.02.2025
Drawn L.SUTHERLAND
Checked
Date 17.02.2025
Approved S.YOUNG
Reg. No. PE0006609
Date 17.02.2025
PS Number PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

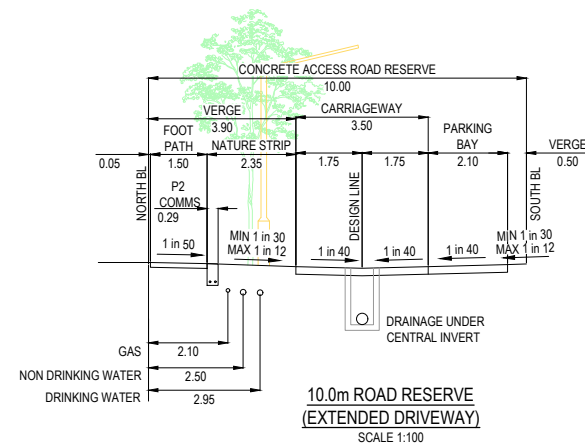
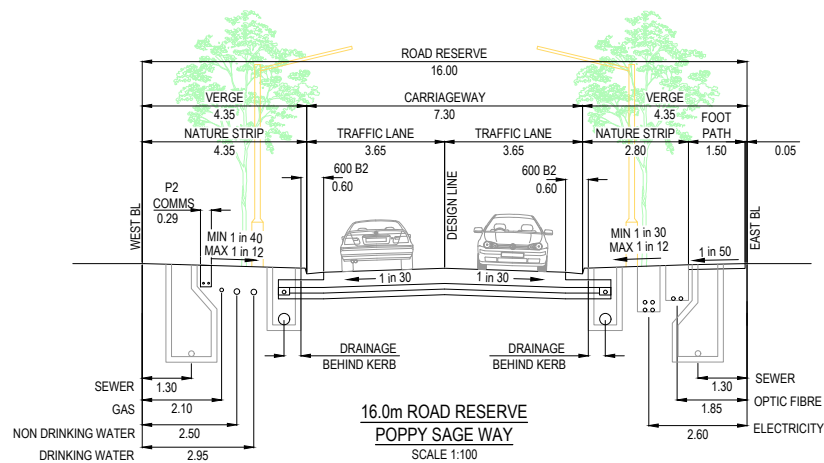
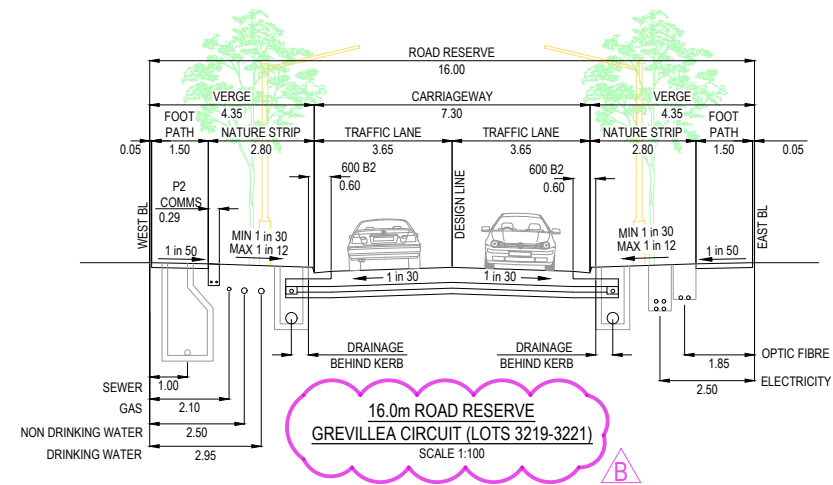
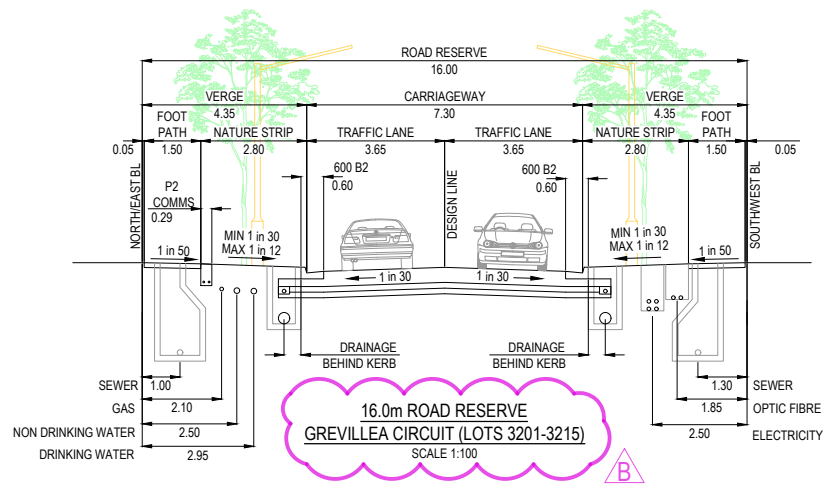
Project
Details RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing
Title COVER SHEET

Sheet 01 of 18

Scale 1:10000 @ A1



Project Ref 2101578 Stage No 32 Drawing No 001 Rev D



ISSUED FOR
CONSTRUCTION

© COPYRIGHT All rights reserved Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose. No unauthorised copying is permitted									
B	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					
REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.



Designed	K.LIM WAN
Date	17.02.2025
Drawn	L.SUTHERLAND
Checked	S.YOUNG
Date	17.02.2025
Approved	S.YOUNG
Reg. No.	PE0005609
Date	17.02.2025
PS Number	PS927119L

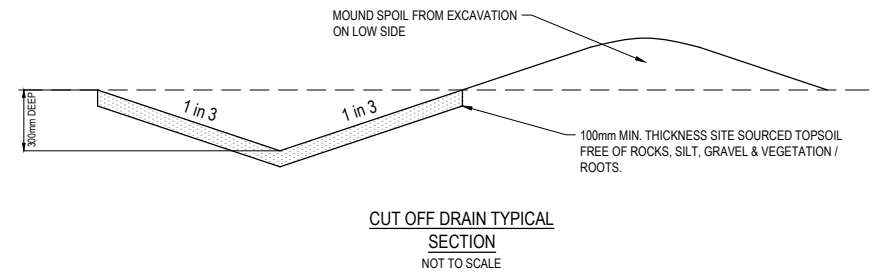
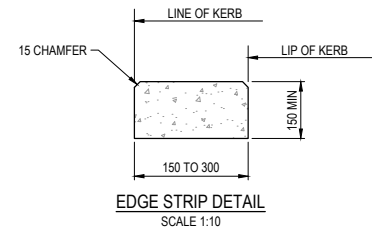
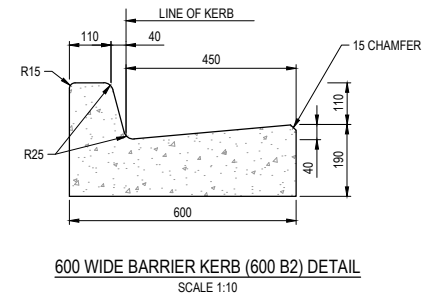
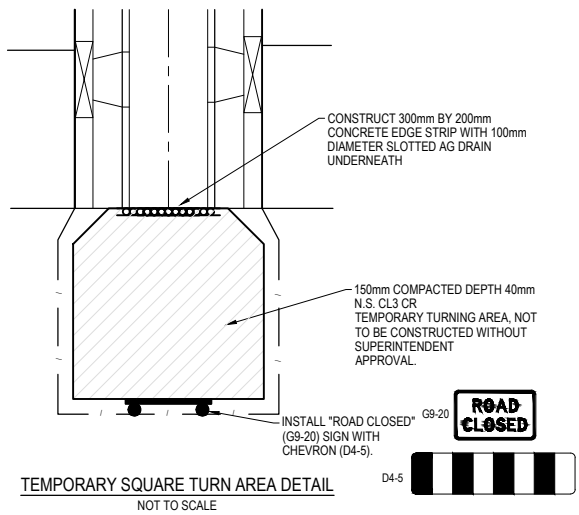
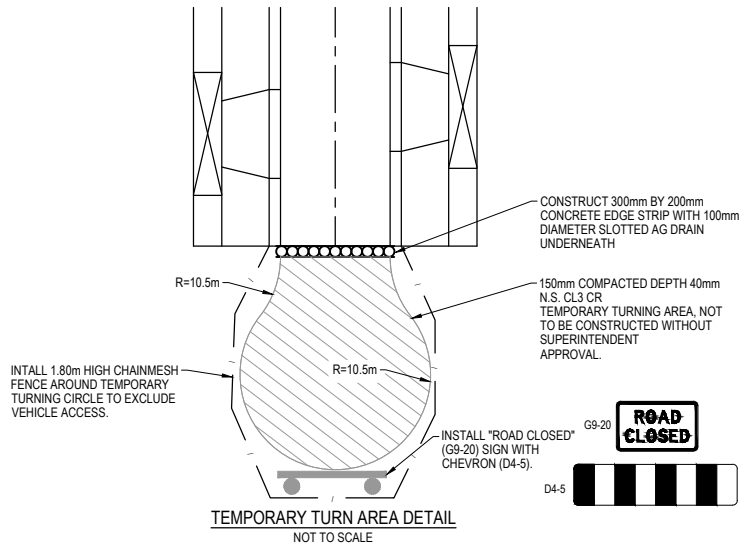
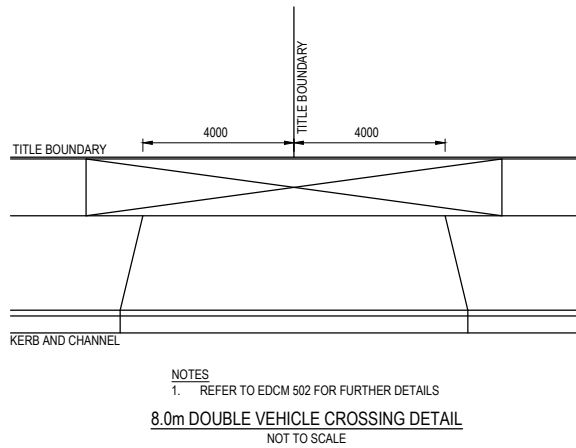
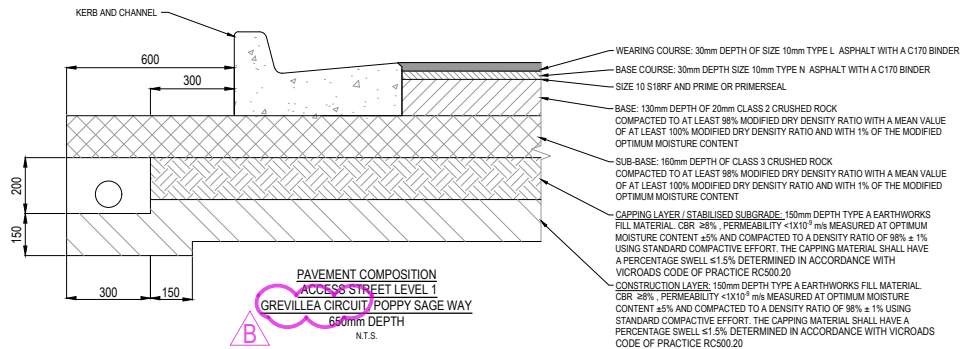
BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project Details	RIVERFIELD SQUARE STAGE 32 CITY OF CASEY
Drawing Title	TYPICAL ROAD CROSS SECTIONS

Sheet 02 of 18

Scale
1:100 @ A1

Project Ref	Stage No	Drawing No	Rev
2101578	32	002	B



ISSUED FOR
CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN	APP.	REV	DESCRIPTION	DATE	DRN	APP.
B	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					

BROWN
COMMUNITIES

Riverfield
square
CLYDE

Designed K.LIM WAN
Date 17.02.2025
Drawn L.SUTHERLAND
Date 17.02.2025
Checked S.YOUNG
Date 17.02.2025
Approved S.YOUNG
Reg. No. PE0006609
Date 17.02.2025
PS Number PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

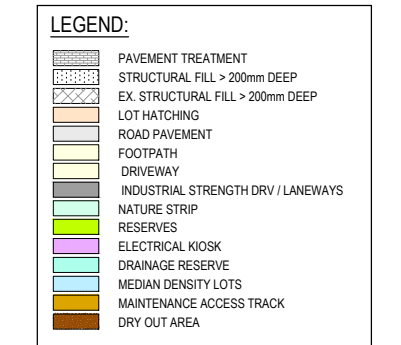
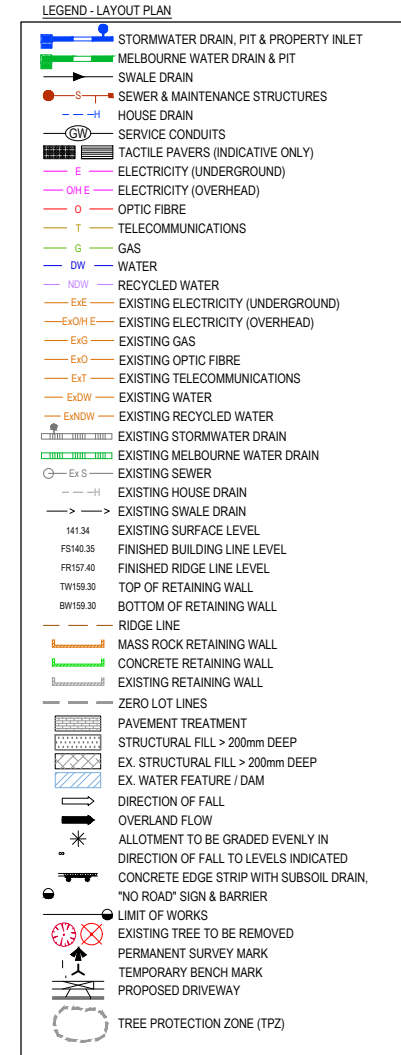
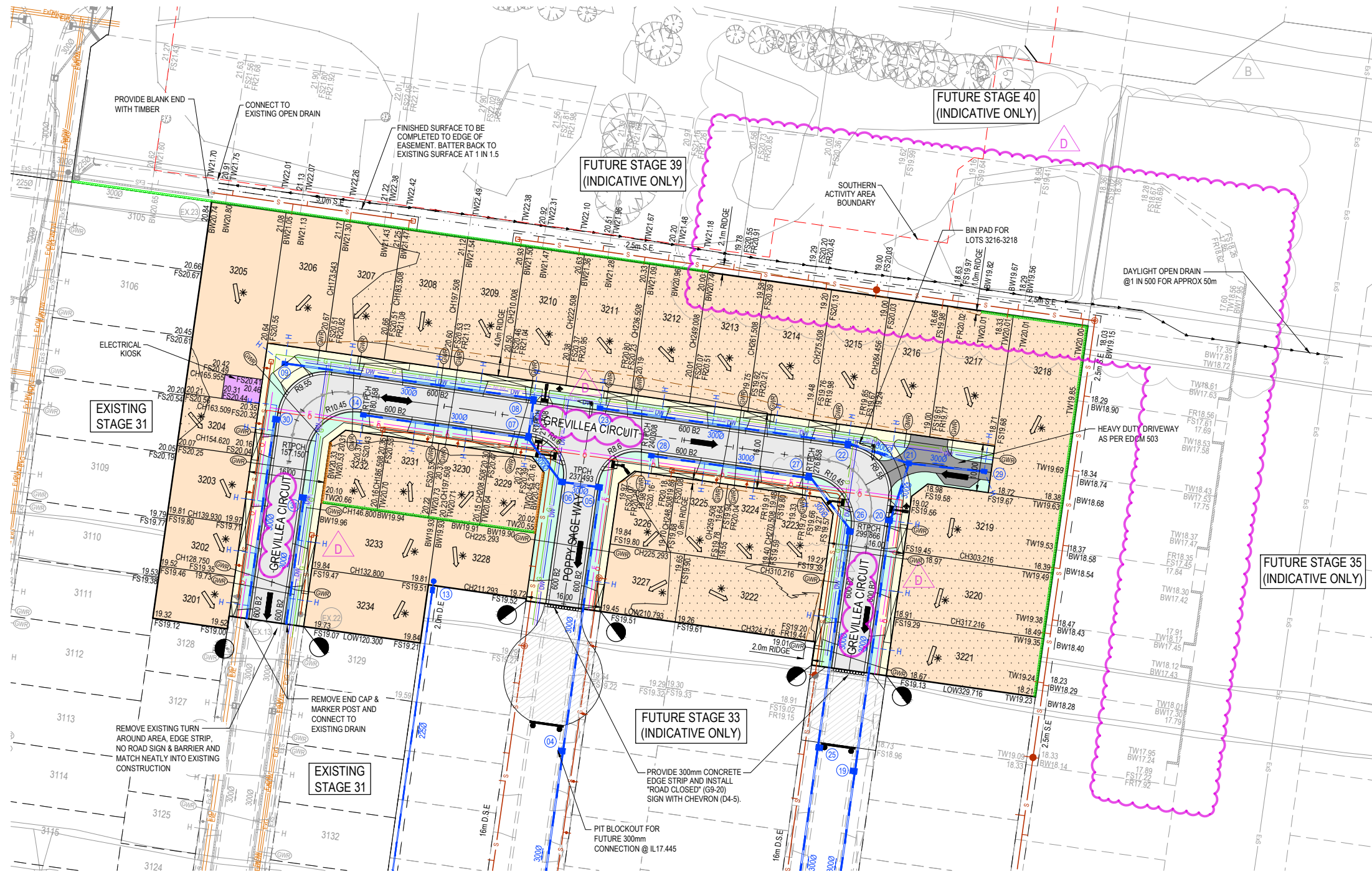
Project Details RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing Title PAVEMENT MAKEUP & GENERAL DETAILS

Sheet 03 of 18

Scale
AS SHOWN

Project Ref 2101578
Stage No 32
Drawing No 003
Rev B

K:\Jobs Data\2101578 - Di Renzo - 1675 Ballarto Road, Clyde\Eng\Stage 32\Drawings\2101578-32-002-DET.dwg

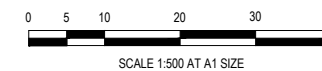


NOTE: DOUBLE DRIVEWAYS ARE TO BE 8m WIDE, REFER TO DWG 003

SERVICE OFFSET TABLE

Location	Gas		ND - Water		Water		Electricity		Telecommunication		Sewer	
	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)
GREVILLEA CIRCUIT (3201-3204)	EAST	2.10	EAST	2.50	EAST	2.95	WEST	2.50	WEST	1.85	W & E	1.3 & 1.0
GREVILLEA CIRCUIT (3206-3215)	NORTH	2.10	NORTH	2.50	NORTH	2.95	SOUTH	2.50	SOUTH	1.85	S	1.3
GREVILLEA CIRCUIT (3219-3221)	WEST	2.10	WEST	2.50	WEST	2.95	EAST	2.60	EAST	1.85	W	1.0
POPPY SAGE WAY	WEST	2.10	WEST	2.50	WEST	2.95	EAST	2.50	EAST	1.85	W & E	1.0 & 1.3

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS



WARNING
BWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site.
No guarantee is given that all existing services are shown.
Locate all underground services before commencement of works
DIAL 1100 BEFORE YOU DIG
www.1100.com.au

ISSUED FOR CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
D	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.					
C	LOT 3223 AND PITS 2627 UPDATED	29.07.25	AP	SF					
B	LOT BOUNDARIES UPDATED FOR STAGES 35 & 40	16.07.25	KLW	SF					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date
17.02.2025
Drawn
L.SUTHERLAND
Checked
Date
17.02.2025
S.YOUNG
Approved
Reg. No.
PE0005809
Date
17.02.2025
PS Number
PS827179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project
Details
RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing
Title
LAYOUT PLAN
(SHEET 1 OF 2)

Sheet 04 of 18

Scale
1:500 @ A1

Project Ref	Stage No	Drawing No	Rev
2101578	32	010	D

EXISTING STAGE 31

REMOVE END CAP & MARKER POST AND CONNECT TO EXISTING DRAIN

REMOVE EXISTING TURN AROUND AREA, EDGE STRIP, NO ROAD SIGN & BARRIER AND MATCH NEATLY INTO EXISTING CONSTRUCTION

EXISTING TEMPORARY RETARDING BASIN/ FUTURE STAGE 31A (INDICATIVE ONLY)

1% AEP TWL RL15.50

FUTURE STAGE 33 (INDICATIVE ONLY)

PROVIDE 300mm CONCRETE EDGE STRIP AND INSTALL "ROAD CLOSED" (G9-20) SIGN WITH CHEVRON (D4-5).

PIT BLOCKOUT FOR FUTURE 300mm CONNECTION @ IL17.445

PIT BLOCKOUT FOR FUTURE 300mm CONNECTION @ IL16.494

PIT BLOCKOUT FOR FUTURE 300mm CONNECTION @ IL15.372

FUTURE STAGE 34 (INDICATIVE ONLY)

FUTURE STAGE 35 (INDICATIVE ONLY)

GREVILLEA CIRCUIT

BALLARTO ROAD

NOTE: DOUBLE DRIVEWAYS ARE TO BE 8m WIDE, REFER TO DWG 003

- ### LEGEND - LAYOUT PLAN
- | | |
|--|---|
| | STORMWATER DRAIN, PIT & PROPERTY INLET |
| | MELBOURNE WATER DRAIN & PIT |
| | SWALE DRAIN |
| | SEWER & MAINTENANCE STRUCTURES |
| | HOUSE DRAIN |
| | SERVICE CONDUITS |
| | TACTILE PAVERS (INDICATIVE ONLY) |
| | E ELECTRICITY (UNDERGROUND) |
| | OH E ELECTRICITY (OVERHEAD) |
| | O OPTIC FIBRE |
| | T TELECOMMUNICATIONS |
| | G GAS |
| | DW WATER |
| | NDW RECYCLED WATER |
| | ExE EXISTING ELECTRICITY (UNDERGROUND) |
| | ExOH E EXISTING ELECTRICITY (OVERHEAD) |
| | ExG EXISTING GAS |
| | ExO EXISTING OPTIC FIBRE |
| | ExT EXISTING TELECOMMUNICATIONS |
| | ExDW EXISTING WATER |
| | ExNDW EXISTING RECYCLED WATER |
| | EXISTING STORMWATER DRAIN |
| | EXISTING MELBOURNE WATER DRAIN |
| | EXISTING SEWER |
| | EXISTING HOUSE DRAIN |
| | EXISTING SWALE DRAIN |
| | 141.34 EXISTING SURFACE LEVEL |
| | FS140.35 FINISHED BUILDING LINE LEVEL |
| | FR157.40 FINISHED RIDGE LINE LEVEL |
| | TW159.30 TOP OF RETAINING WALL |
| | BW159.30 BOTTOM OF RETAINING WALL |
| | — RIDGE LINE |
| | MASS ROCK RETAINING WALL |
| | CONCRETE RETAINING WALL |
| | EXISTING RETAINING WALL |
| | ZERO LOT LINES |
| | PAVEMENT TREATMENT |
| | STRUCTURAL FILL > 200mm DEEP |
| | EX. STRUCTURAL FILL > 200mm DEEP |
| | EX. WATER FEATURE / DAM |
| | DIRECTION OF FALL |
| | OVERLAND FLOW |
| | ALLOTMENT TO BE GRADED EVENLY IN |
| | DIRECTION OF FALL TO LEVELS INDICATED |
| | CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, |
| | "NO ROAD" SIGN & BARRIER |
| | LIMIT OF WORKS |
| | EXISTING TREE TO BE REMOVED |
| | PERMANENT SURVEY MARK |
| | TEMPORARY BENCH MARK |
| | PROPOSED DRIVEWAY |
| | TREE PROTECTION ZONE (TPZ) |

- | LEGEND: | |
|---|------------------------------------|
|  | PAVEMENT TREATMENT |
|  | STRUCTURAL FILL > 200mm DEEP |
|  | EX. STRUCTURAL FILL > 200mm DEEP |
|  | LOT HATCHING |
|  | ROAD PAVEMENT |
|  | FOOTPATH |
|  | DRIVEWAY |
|  | INDUSTRIAL STRENGTH DRV / LANEWAYS |
|  | NATURE STRIP |
|  | RESERVES |
|  | ELECTRICAL KIOSK |
|  | DRAINAGE RESERVE |
|  | MEDIAN DENSITY LOTS |
|  | MAINTENANCE ACCESS TRACK |
|  | DRY OUT AREA |

WARNING
Beware of Underground Services
The locations of underground services are approximate only and their exact position should be proven on site.
No guarantee is given that all existing services are shown.
Locate all underground services before commencement of works
DIAL 1100 BEFORE YOU DIG
www.1100.com.au

ISSUED FOR
CONSTRUCTION

Sheet 05 of 18

1:500 @ A1

Project Ref	Stage No	Drawing No	Rev
2101578	32	011	C

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

[illegible]The logo for Brown Communities, featuring the word "BROWN" in large, bold, black capital letters, with "COMMUNITIES" in smaller, green, sans-serif capital letters below it. To the right is a large, stylized, dark grey letter "B".

**Riverfield
square**
CLYDE

Designed	K.LIM WAN
Date	17.02.2025
Drawn	L.SUTHERLAND
Checked	S.YOUNG
Date	17.02.2025
Approved	S.YOUNG
Reg. No.	PE0005609
Date	17.02.2025
PS Number	PS9271791

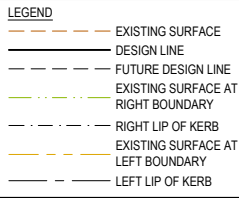
BW Beveridge Williams
Development & Infrastructure Consultants

1 Glenferrie Road
Malvern VIC 3144

ph: 03 9524 8888
www.beveridgewilliams.com.au

Project Details	RIVERFIELD SQUARE STAGE 32 CITY OF CASEY
Drawing Title	LAYOUT PLAN (SHEET 2 OF 2)

K:\Jobs Data\2101578 - Di Renzo - 1675 Ballarto Road, Clyde\ _Eng\Stage 32\Drawings\2101578-32-010-LAY.dwg

The logo for Brown Communities, featuring the word "BROWN" in large, bold, black capital letters, with "COMMUNITIES" in smaller, green, sans-serif capital letters below it. To the right of the text is a large, stylized, dark grey letter "B".

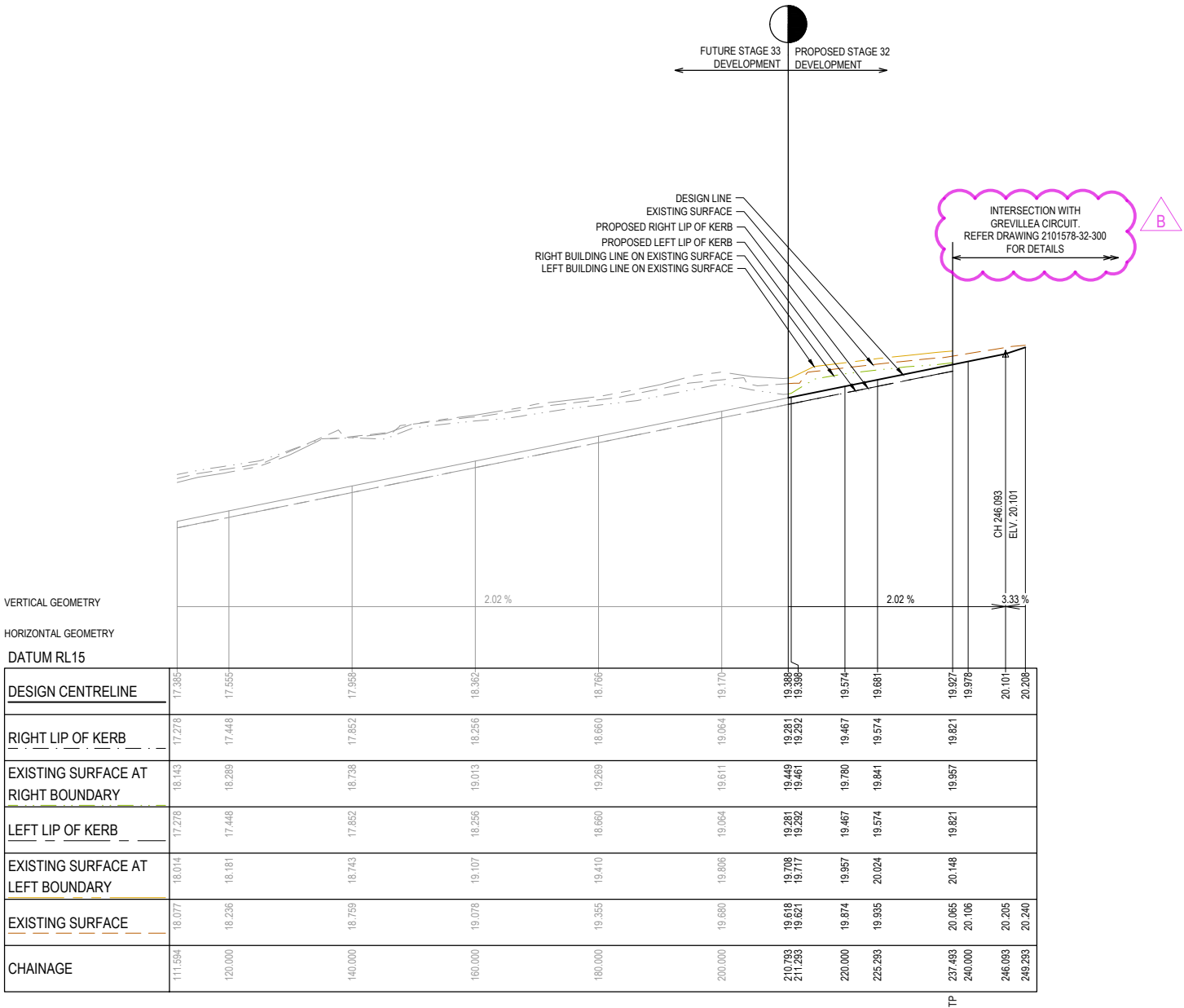
1 Glenferrie Road
Malvern VIC 3144



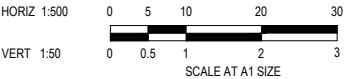
Scale
1:500 H 1:50 V @ A1

K:\Jobs Data\2101578 - Di Renzo - 1675 Ballarto Road, Clyde\ _Eng\Stage 32\Drawings\2101578-32-100-RLS.dwg

LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FUTURE DESIGN LINE
	EXISTING SURFACE AT RIGHT BOUNDARY
	RIGHT LIP OF KERB
	EXISTING SURFACE AT LEFT BOUNDARY
	LEFT LIP OF KERB



POPPY SAGE WAY LONGITUDINAL SECTION



ISSUED FOR CONSTRUCTION

© COPYRIGHT All rights reserved Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose. No unauthorised copying is permitted					
B	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.	
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.	
REV	DESCRIPTION	DATE	DRN.	APP.	REV



Designed
Date

K.LIM WAN
17.02.2025

Drawn

L.SUTHERLAND
17.02.2025

Checked
Date

S.YOUNG
17.02.2025

Approved
Reg. No.
Date

S.YOUNG
PE0006608
17.02.2025

PS Number

PS927179L

Beveridge Williams

Development & Infrastructure Consultants

1 Glenferrie Road
Malvern VIC 3144

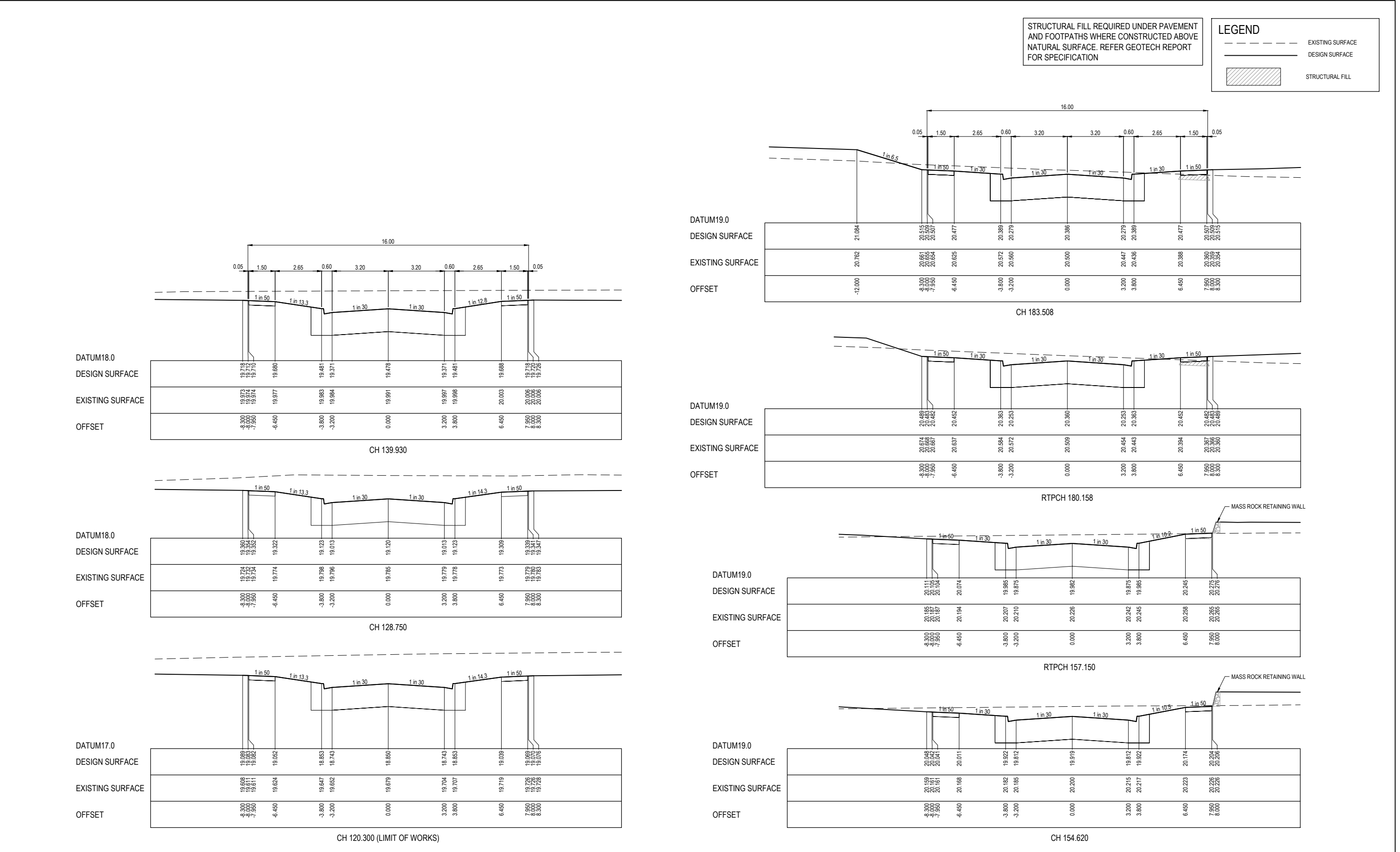
ph: 03 9524 8888
www.beveridgewilliams.com.au

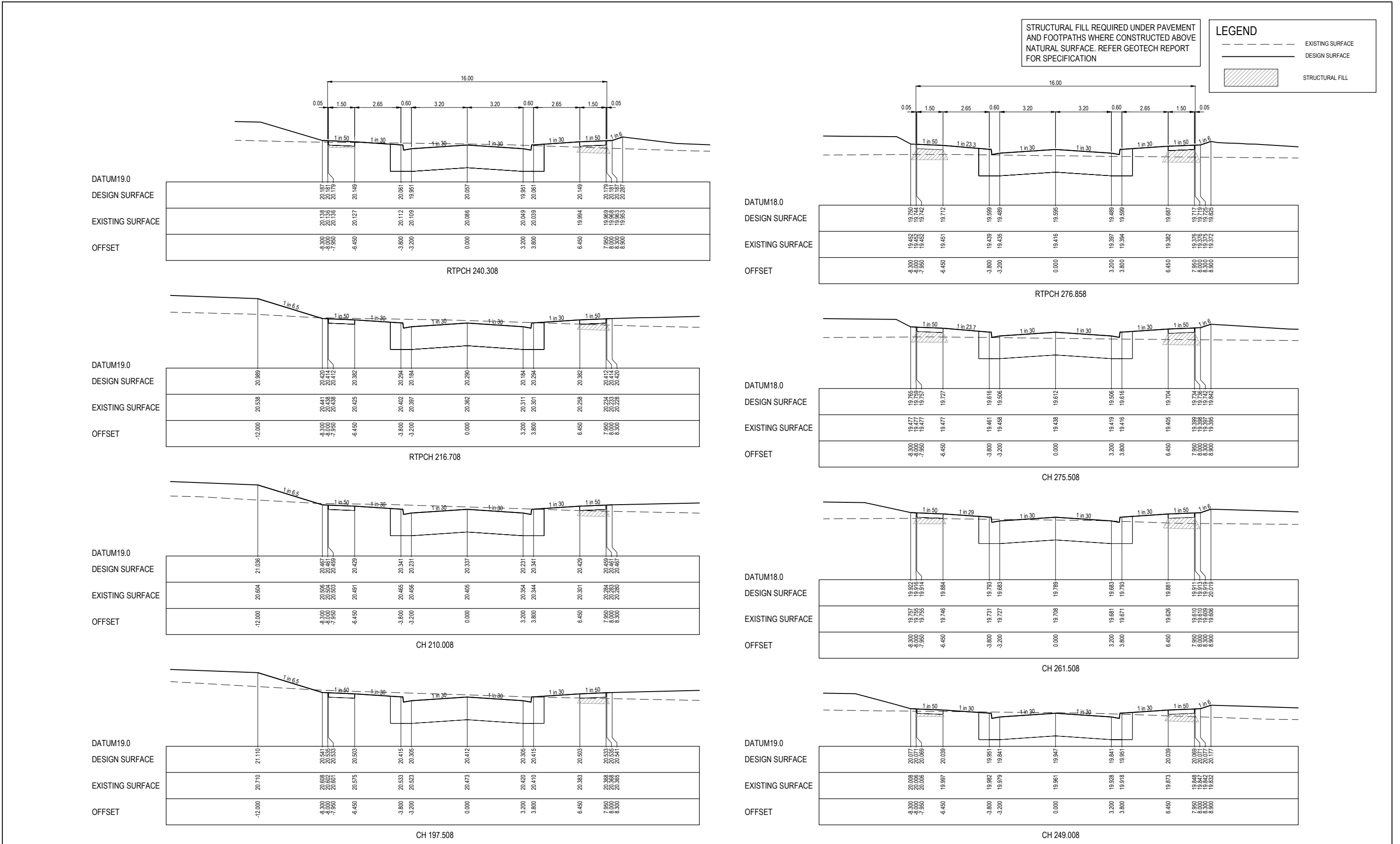
Project Details	RIVERFIELD SQUARE STAGE 32 CITY OF CASEY
Drawing Title	ROAD LONGITUDINAL SECTIONS POPPY SAGE WAY

Sheet 07 of 18

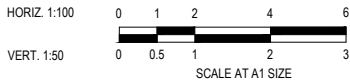
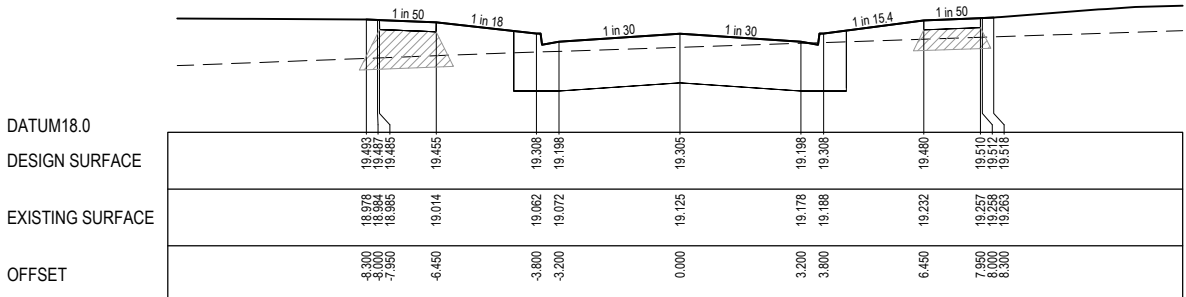
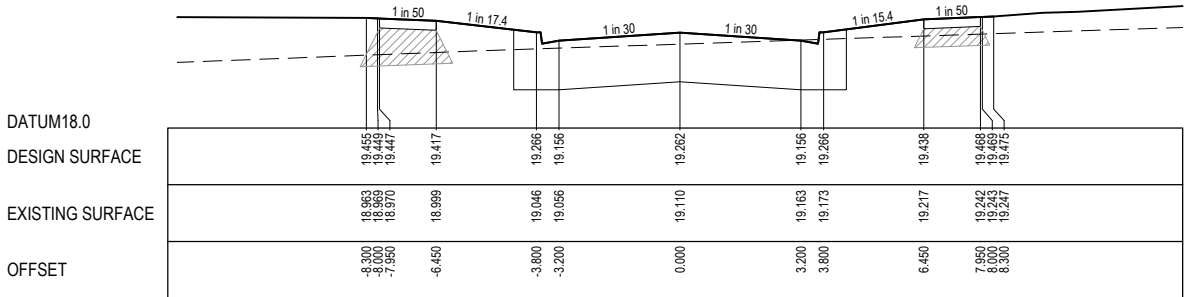
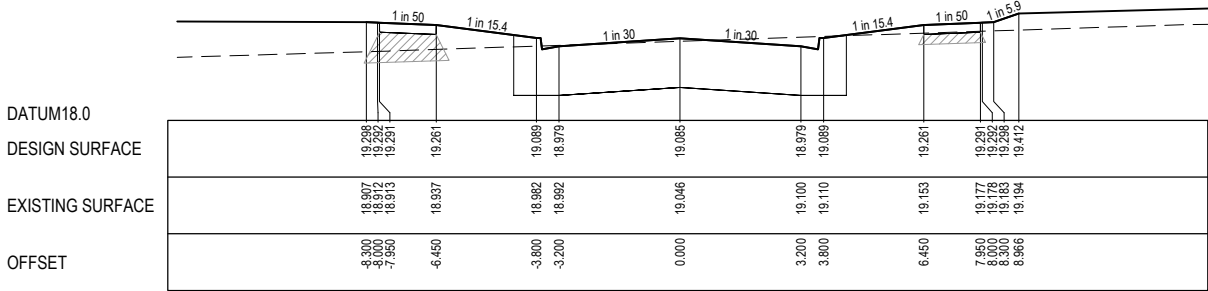
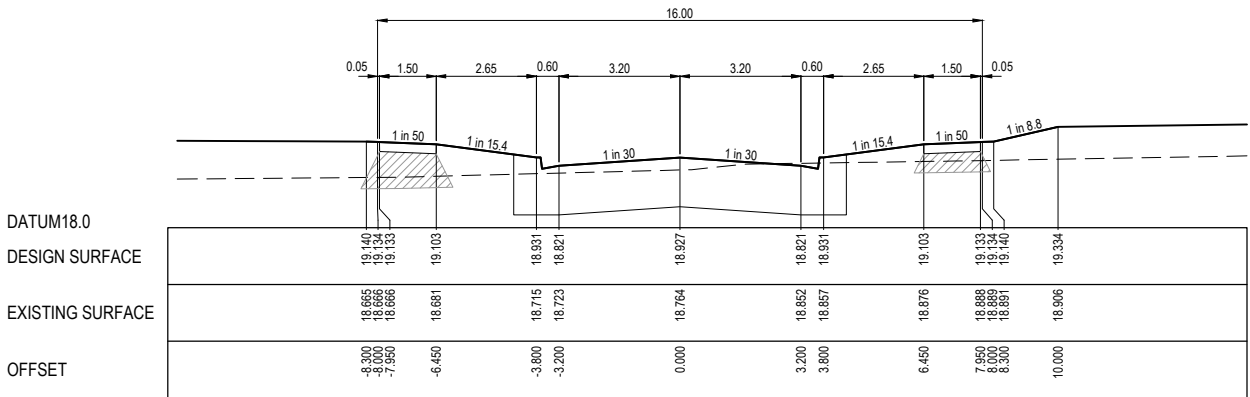
Scale
1:500 H 1:50 V @ A1

Project Ref	Stage No	Drawing No	Rev
2101578	32	101	B





STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION



ISSUED FOR CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
B	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed K.LIM WAN
Date 17.02.2025
Drawn L.SUTHERLAND
Checked S.YOUNG
Date 17.02.2025
Approved S.YOUNG
Reg. No. PE0006606
Date 17.02.2025
PS Number PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project Details
RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing Title
ROAD CROSS SECTIONS
GREVILLEA CIRCUIT
(SHEET 3 OF 3)

Sheet 10 of 18

Scale
1:100 H 1:50 V @ A1

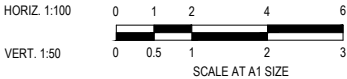
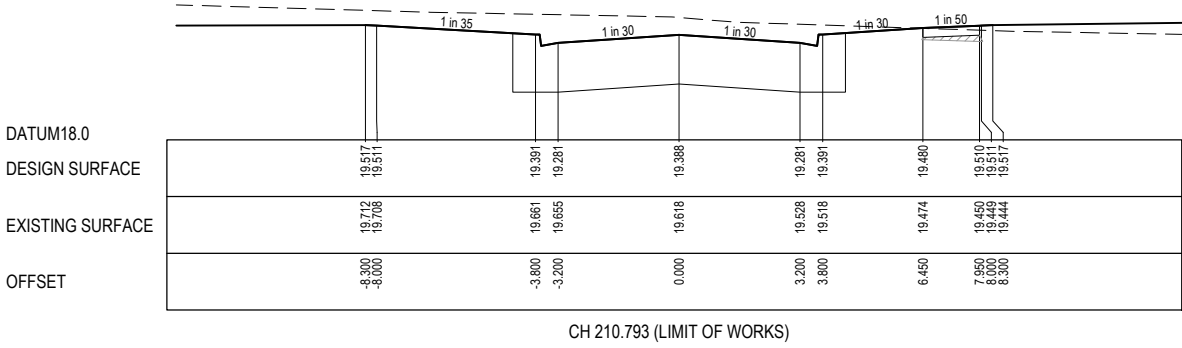
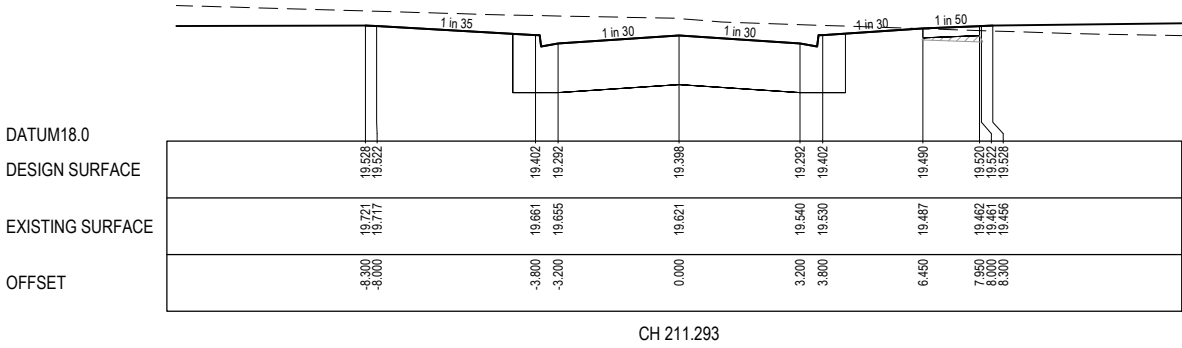
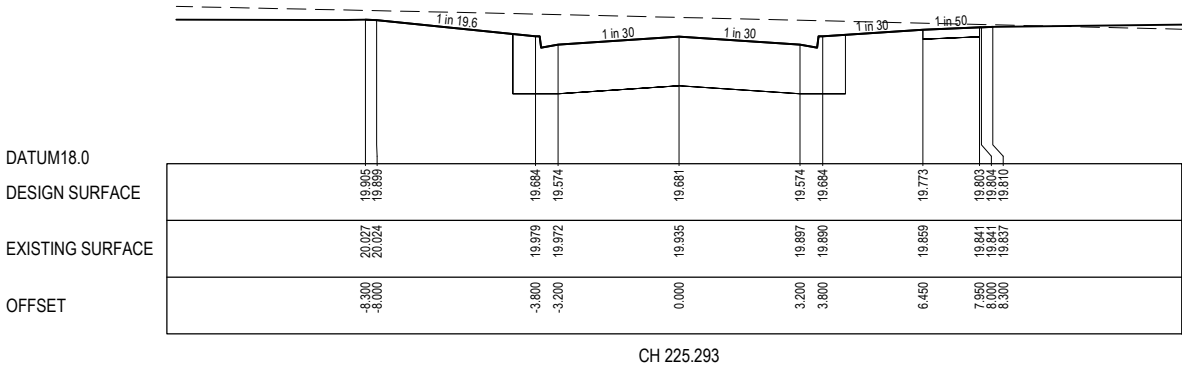
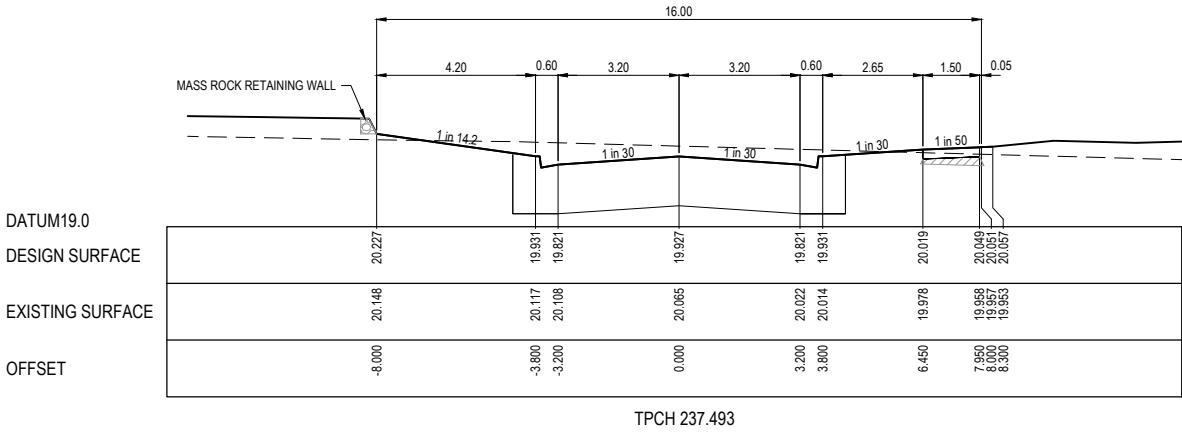
Project Ref	Stage No	Drawing No	Rev
2101578	32	202	B

K:\Jobs Data\2101578 - Di Renzo - 1675 Ballarto Road, Clyde\Eng\Stage 32\Drawings\2101578-32-200-RXS.dwg

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION

LEGEND

EXISTING SURFACE

DESIGN SURFACE

ISSUED FOR CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date
Drawn
Checked
Date
Approved
Reg. No.
Date
PS Number

K.LIM WAN
17.02.2025
L.SUTHERLAND
S.YOUNG
17.02.2025
S.YOUNG
PE000698
17.02.2025
PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

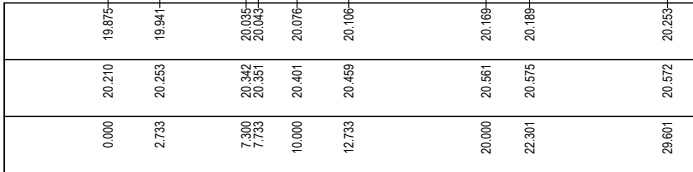
Project
Details
RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY

Drawing
Title
ROAD CROSS SECTIONS
POPPY SAGE WAY

Sheet 11 of 18

Scale
1:100 H 1:50 V @ A1

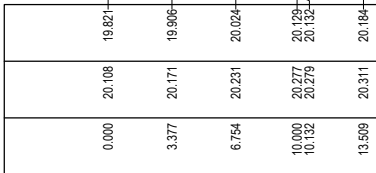
Project Ref	Stage No	Drawing No	Rev
2101578	32	203	A



LIP LINE T

Point no	Easting	Northing	RL
T1	5308.741	78003.235	19.875
T2	5309.764	78010.463	20.035
T3	5320.557	78018.581	20.189
T4	5327.785	78017.559	20.253

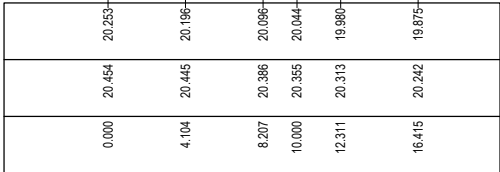
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
T2 - T3	90.000	9.550	15.001	2.797	2.070	3.655	3.098	3.750	20.124



LIP LINE C

Point no	Easting	Northing	RL
O1	5370.389	77996.382	19.82
O2	5363.078	78006.102	20.18

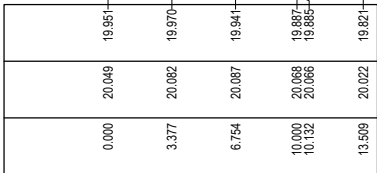
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point R
O1 - O2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	20.024



LIP LINE S

Point no	Easting	Northing	RL
S1	5326.889	78011.222	20.253
S2	5315.078	78002.339	19.875

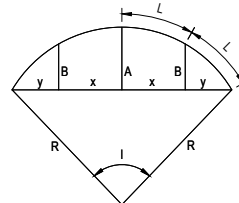
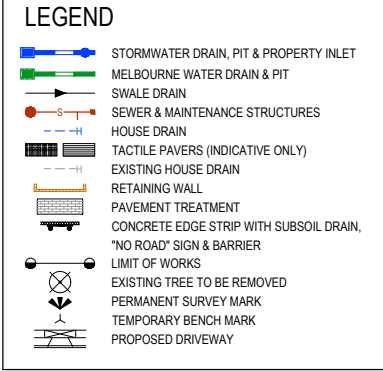
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point R
S1 - S2	90.000	10.450	16.415	3.061	2.265	3.999	3.390	4.104	20.096



LIP LINE P

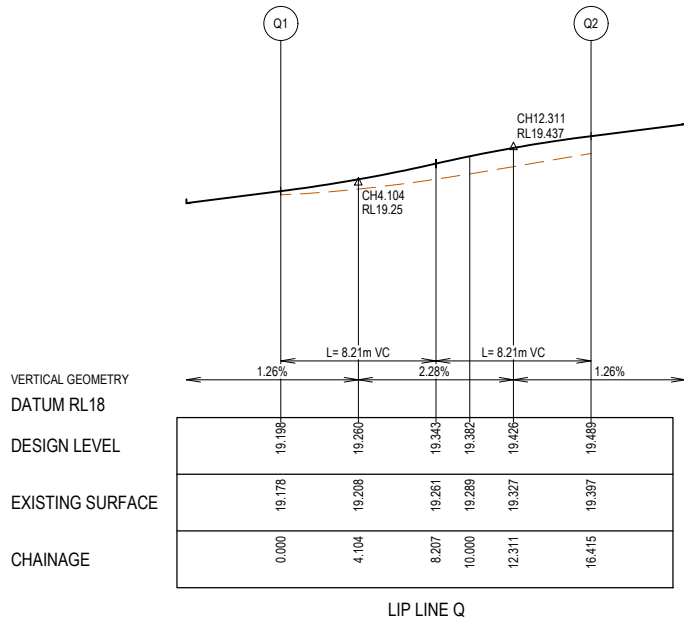
Point no	Easting	Northing	RL
P1	5386.446	78002.796	19.951
P2	5376.726	77995.486	19.821

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point R
P1 - P2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	19.941



LIP PROFILE SETOUT

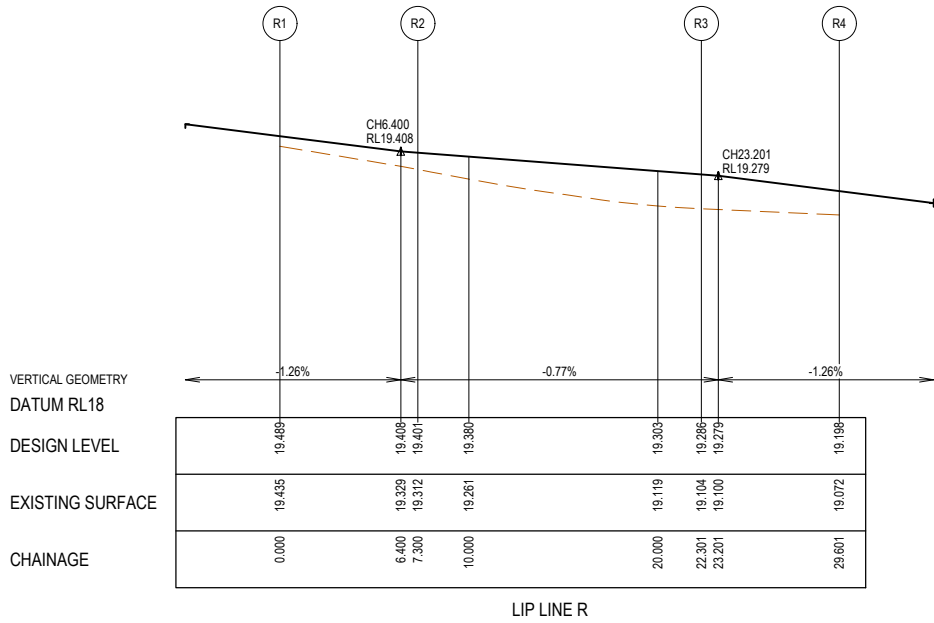
ISSUED FOR
CONSTRUCTION



LIP LINE Q

Point no	Easting	Northing	RL
Q1	5431.518	77985.865	19.198
Q2	5422.635	77997.676	19.489

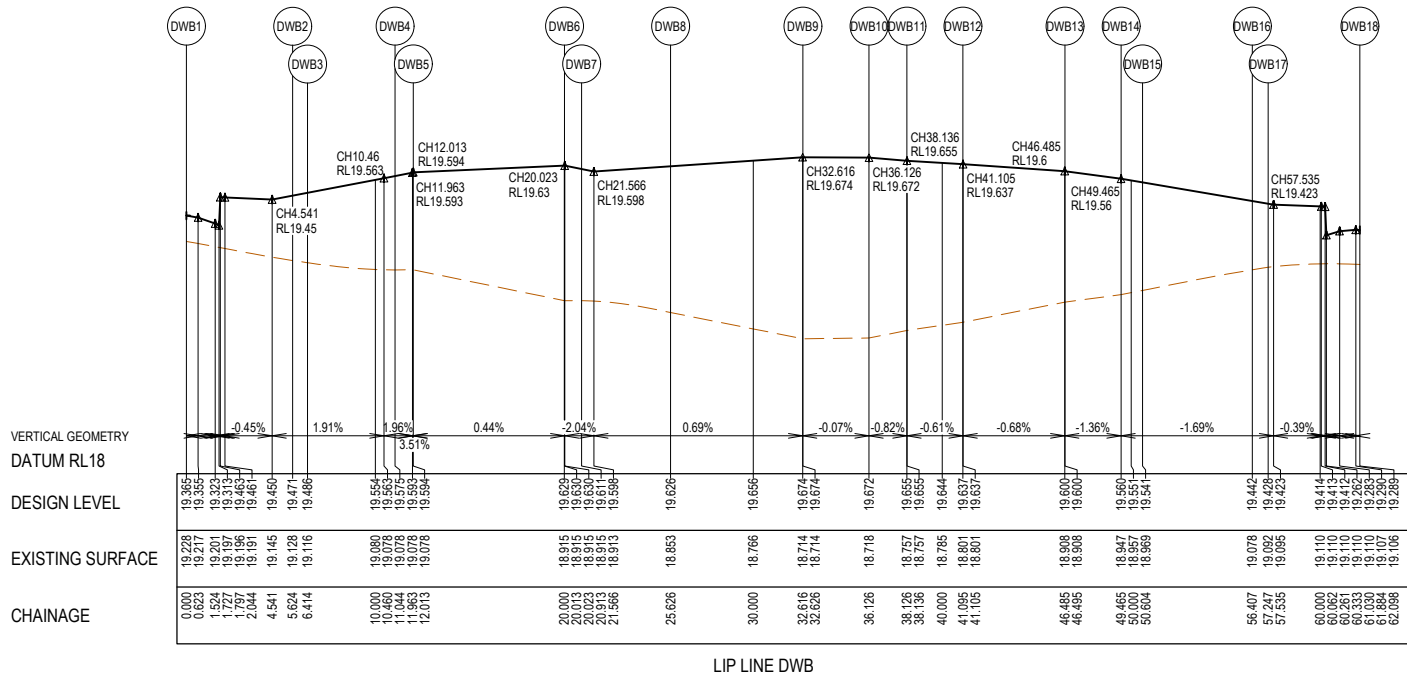
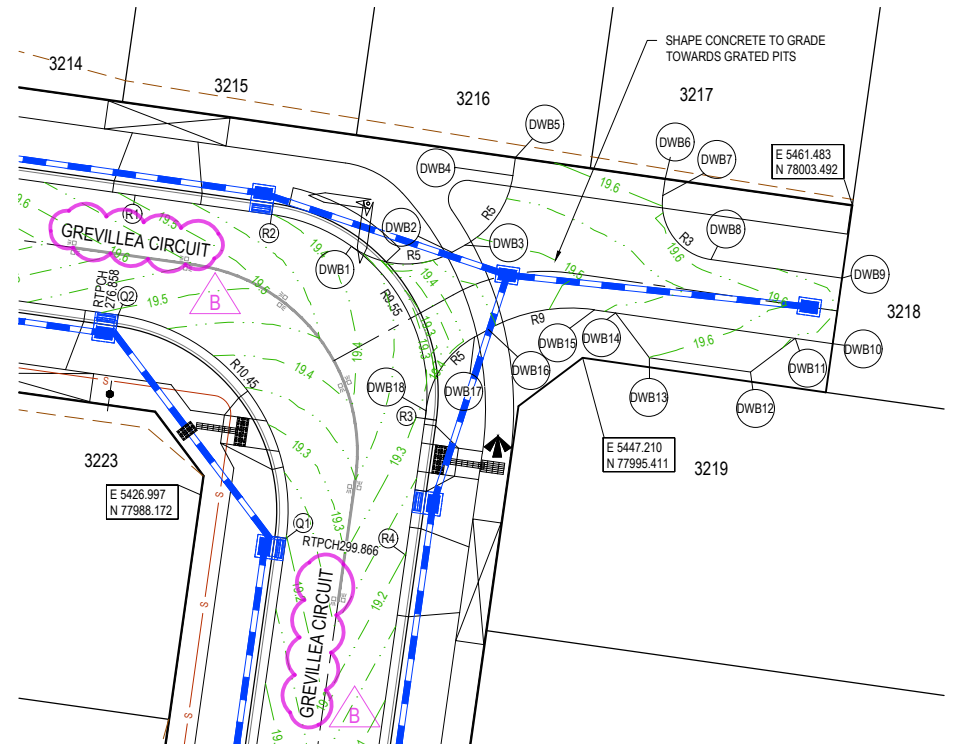
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Q1 - Q2	90.000	10.450	16.415	3.061	2.265	3.999	3.390	4.104	19.343



LIP LINE R

Point no	Easting	Northing	RL
R1	5423.532	78004.013	19.489
R2	5430.760	78002.991	19.401
R3	5438.878	77992.197	19.286
R4	5437.855	77984.969	19.198

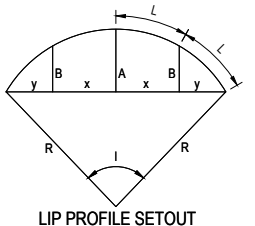
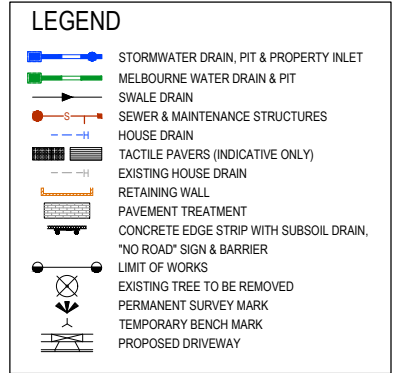
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
R2 - R3	90.000	9.550	15.001	2.797	2.070	3.655	3.098	3.750	19.343



LIP LINE DWB

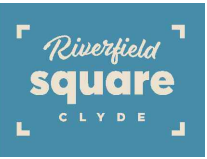
Point no	Easting	Northing	RL
DWB1	5434.975	78001.304	19.365
DWB2	5440.298	78000.995	19.471
DWB3	5440.990	78001.376	19.486
DWB4	5443.525	78005.053	19.575
DWB5	5443.660	78006.013	19.594
DWB6	5451.581	78004.893	19.630
DWB7	5451.455	78004.001	19.611
DWB8	5454.006	78000.611	19.626
DWB9	5460.937	77999.630	19.674
DWB10	5460.446	77996.165	19.672
DWB11	5458.466	77996.445	19.655
DWB12	5456.093	77994.660	19.637
DWB13	5450.746	77995.416	19.600
DWB14	5448.961	77997.790	19.560
DWB15	5447.833	77997.949	19.541
DWB16	5442.224	77996.918	19.442
DWB17	5441.489	77996.512	19.428
DWB18	5438.928	77992.615	19.289

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
DWB1 - DWB2	64.445	5.000	5.624	0.770	0.574	1.388	1.279	1.406	19.458
DWB3 - DWB4	53.056	5.000	4.630	0.526	0.393	1.147	1.086	1.158	19.530
DWB7 - DWB8	90.000	3.000	4.712	0.879	0.650	1.148	0.973	1.178	19.610
DWB15 - DWB16	36.944	9.000	5.803	0.464	0.347	1.445	1.407	1.451	19.492
DWB17 - DWB18	55.585	5.000	4.851	0.577	0.430	1.201	1.131	1.213	19.415



ISSUED FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
B	ROAD NAME AMENDED	08.08.25	M.F.J.	S.F.					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date
Drawn
Checked
Date
Approved
Reg. No.
Date
PS Number

K.LIM WAN
17.02.2025
L.SUTHERLAND
S.YOUNG
17.02.2025
S.YOUNG
PE0005608
17.02.2025
PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project
Details

RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY

Drawing
Title

INTERSECTION DETAILS
(SHEET 2 OF 2)

Sheet 13 of 18

Scale
1:200 H 1:20 V @ A1

Project Ref
2101578

Stage No
32

Drawing No
301

Rev
B



- NOTES**
1. RRPM'S AT MAX 6m SPACING.
 2. LINEMARKING TO BE EXTENDED AT LEAST 6m FROM THE TANGENT POINT
 3. LINEMARKING IN ACCORDANCE WITH AS1742.
 4. TGSi TO BE INSTALLED IN ACCORDANCE WITH AS1428.4.1-2009 & VICROADS SUPPLEMENTARY STANDARD TEM Vol 2 Part 2.23
 5. ALL STREET NAME SIGNS AT INTERSECTIONS TO INCLUDE RELEVANT STREET NUMBERING.
 6. ALL LINE MARKING PAINT SHALL BE LONG LIFE TYPE. LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGADUR PLASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL.
 7. EVERY LOT TO HAVE STREET NUMBER STAMPED ON KERB IN ACCORDANCE WITH COUNCIL REQUIREMENTS. CONTRACTOR TO OBTAIN LATEST STREET NUMBERING FROM SURVEY CONSULTANT PRIOR TO STAMPING.

© COPYRIGHT All rights reserved Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose. No unauthorised copying is permitted									
B	ROAD NAME AMENDED	08.08.26	M.F.J.	S.F.					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					
REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.



Designed	K.LIM WAN
Date	17.02.2025
Drawn	L.SUTHERLAND
Checked	S.YOUNG
Date	17.02.2025
Approved	S.YOUNG
Reg. No.	PE0005609
Date	17.02.2025
PS Number	PS927179L



Beveridge Williams
Development & Infrastructure Consultants

1 Glenferrie Road
Malvern VIC 3144

ph: 03 9524 8888
www.beveridgewilliams.com.au

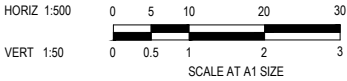
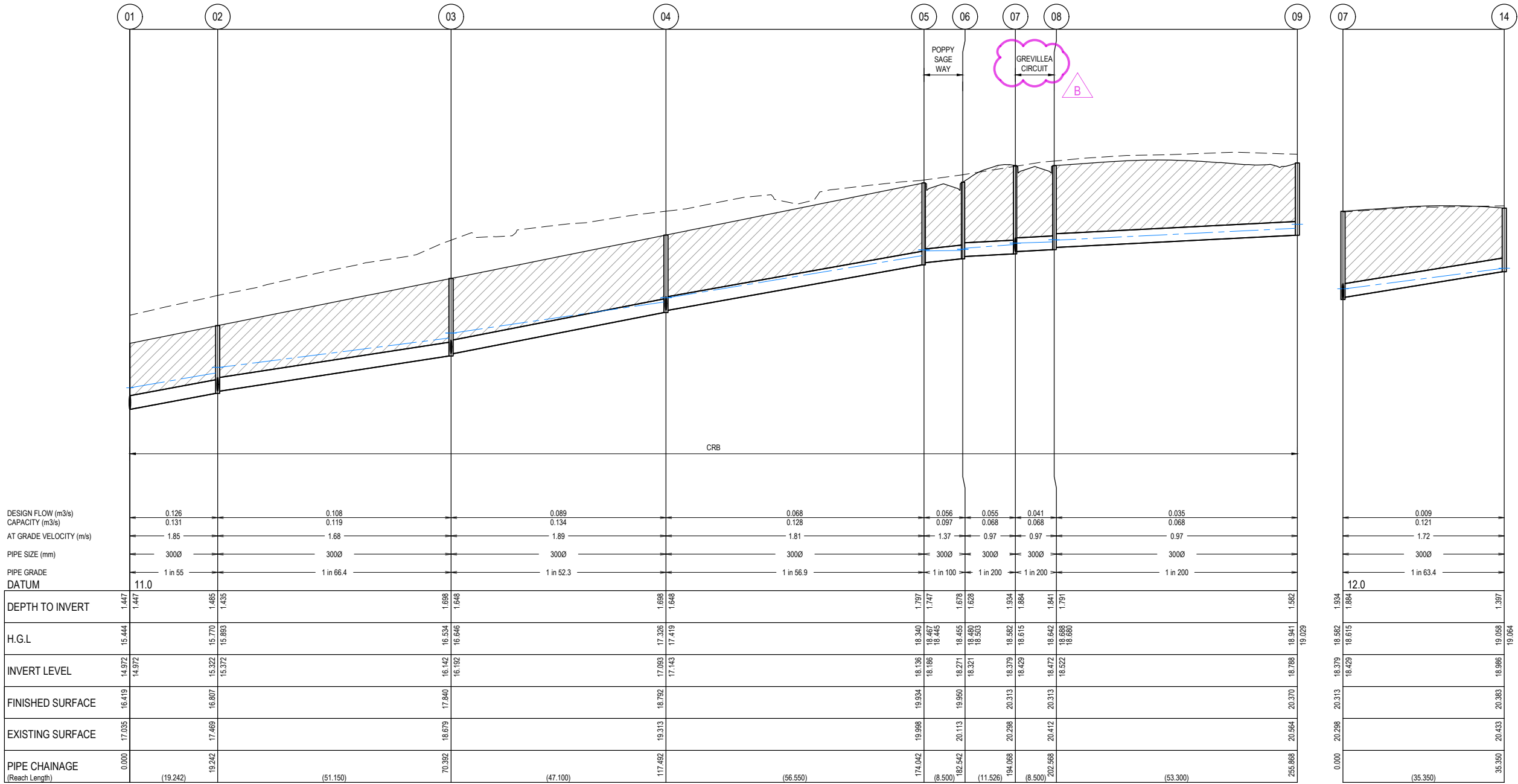
Project Details	RIVERFIELD SQUARE STAGE 32 CITY OF CASEY
Drawing Title	SIGNAGE & LINE MARKING PLANS

ISSUED FOR CONSTRUCTION			
Sheet	14 of 18	Scale	
		1:500 @ A1	
Project Ref	Stage No	Drawing No	Rev
2101578	32	350	B



NOTES:
ALL STORMWATER DRAINS UP TO AND INCLUDING 750mm DIA. ARE TO BE CLASS 2 R.R.J. PIPES UNLESS NOTED OTHERWISE.

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	DENOTES 20mm CLASS 3 FCR BACKFILL



ISSUED FOR
CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
B	ROAD NAME AMENDED	08.08.27	M.F.J.	S.F.					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date
Drawn
Checked
Date
Approved
Reg. No.
Date
PS Number

K.LIM WAN
17.02.2025
L.SUTHERLAND
17.02.2025
S.YOUNG
17.02.2025
S.YOUNG
PE0005608
17.02.2025
PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project
Details
RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing
Title
DRAINAGE LONGITUDINAL SECTIONS
(SHEET 1 OF 4)

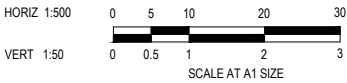
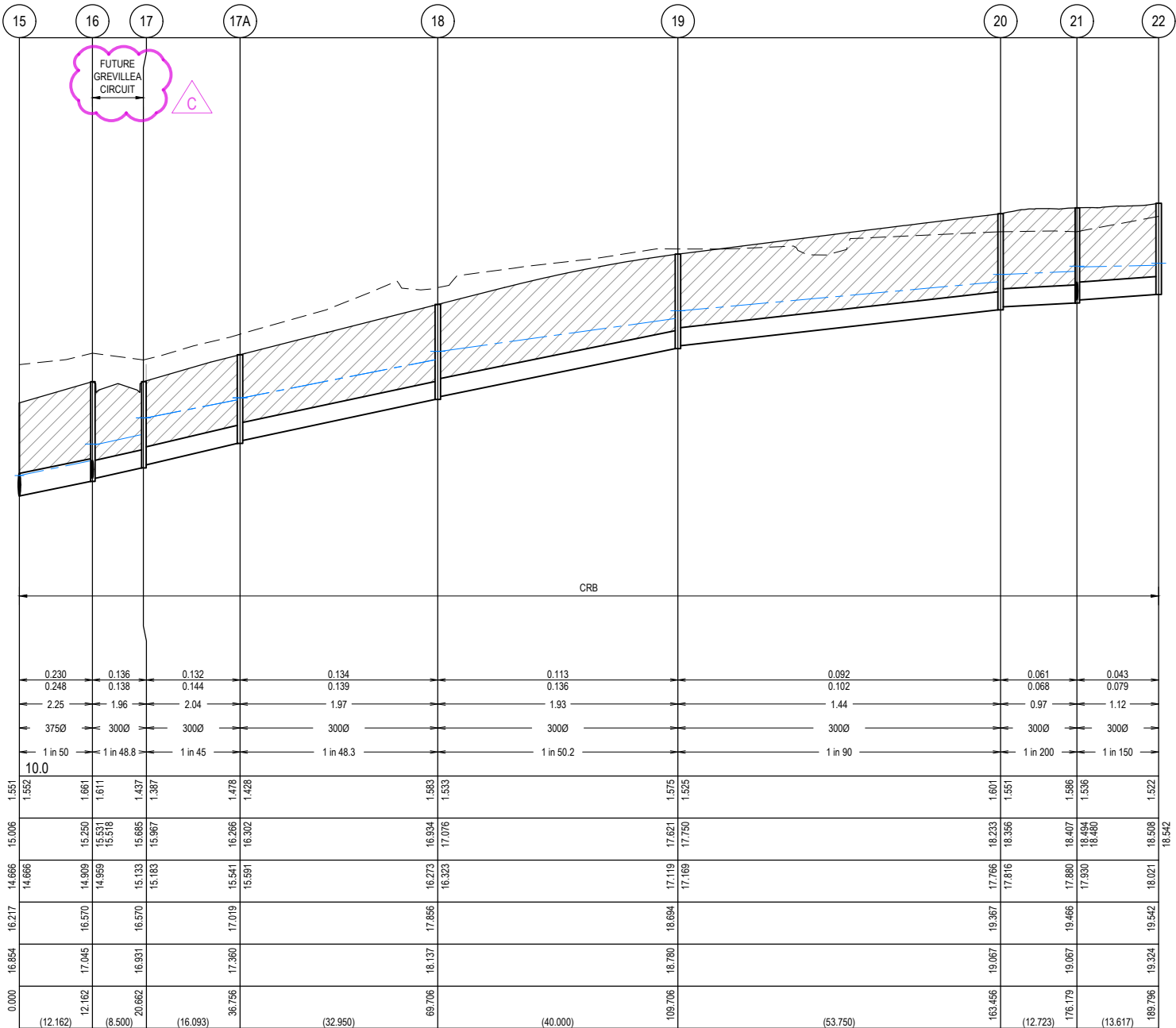
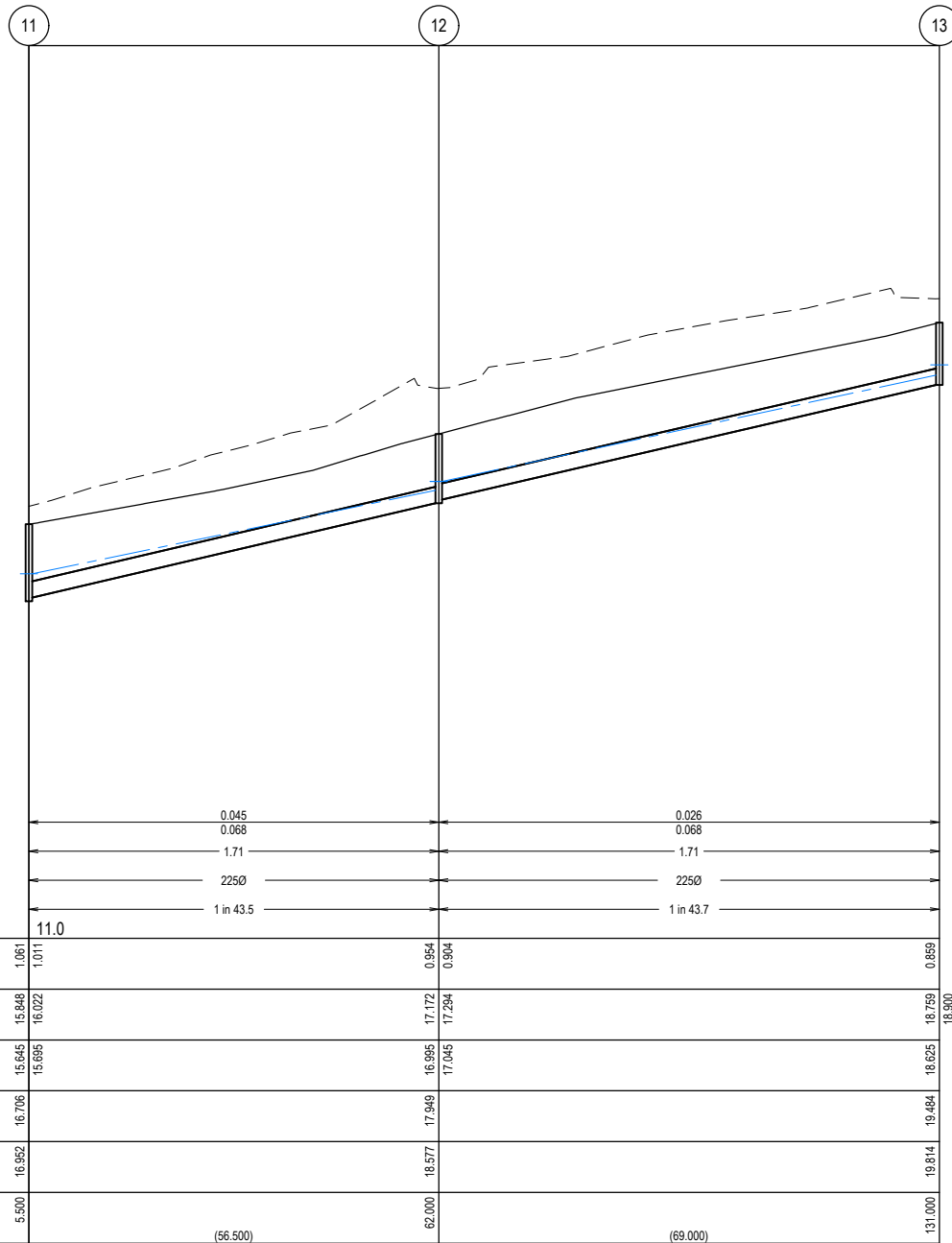
Sheet 15 of 18

Scale
1:500 H 1:50 V @ A1

Project Ref	Stage No	Drawing No	Rev
2101578	32	400	B

NOTES:
ALL STORMWATER DRAINS UP TO AND INCLUDING 750mm DIA. ARE TO BE CLASS 2 R.R.J. PIPES UNLESS NOTED OTHERWISE.

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	DENOTES 20mm CLASS 3 FCR BACKFILL



ISSUED FOR
CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN	APP.	REV	DESCRIPTION	DATE	DRN	APP.
C	ROAD NAME AMENDED	08.08.27	M.F.J.	S.F.					
B	PIT 17A ADDED	16.07.25	KLW	SF					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date
Drawn
Checked
Date
Approved
Reg. No.
Date
PS Number

K.LIM WAN
17.02.2025
L.SUTHERLAND
17.02.2025
S.YOUNG
17.02.2025
S.YOUNG
PE0005609
17.02.2025
PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

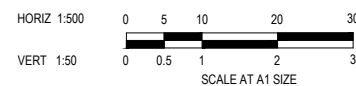
Project
Details
RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing
Title
DRAINAGE LONGITUDINAL SECTIONS
(SHEET 2 OF 4)

Sheet 16 of 18

Scale
1:500 H 1:50 V @ A1

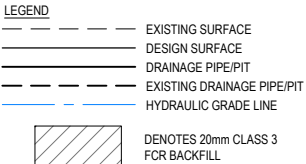
Project Ref	Stage No	Drawing No	Rev
2101578	32	401	C

LEGEND	
— — — — —	EXISTING SURFACE
=====	DESIGN SURFACE
=====	DRAINAGE PIPE/PIT
— — — — —	EXISTING DRAINAGE PIPE/PIT
=====	HYDRAULIC GRADE LINE
	DENOTES 20mm CLASS 3 FCR BACKFILL



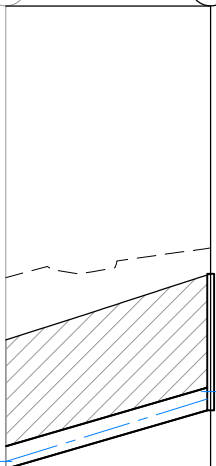
Project Ref	Stage No	Drawing No
2101578	32	402

NOTES:
ALL STORMWATER DRAINS UP TO AND INCLUDING 750mm DIA. ARE TO BE CLASS 2 R.R.J. PIPES UNLESS NOTED OTHERWISE.



EX.22

31



INVERT LEVEL SOURCED FROM
BEVERIDGE WILLIAMS
DESIGN PLANS
DWG No. 2101578-31-401 REV A

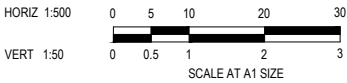
CRB

DESIGN FLOW (m3/s) 0.037
CAPACITY (m3/s) 0.164
AT GRADE VELOCITY (m/s) 2.31
PIPE SIZE (mm) 3000
PIPE GRADE 1 in 35
DATUM 11.0

DEPTH TO INVERT	1.704	1.803
H.G.L.	17.276	18.202
INVERT LEVEL	17.181	17.955
FINISHED SURFACE	18.885	19.759
EXISTING SURFACE	19.709	20.102
PIPE CHAINAGE (Reach Length)	0.000	27.100

PIT SCHEDULE												
PIT NAME	PIT TYPE	LID		INTERNAL		INLET		OUTLET		F.S.L	DEPTH (m)	PIT DETAIL
		WIDTH (mm)	LENGTH (mm)	WIDTH (mm)	LENGTH (mm)	DIAMETER (mm)	INV R.L. (mm)	DIAMETER (mm)	INV R.L. (m)			HAUNCH DETAIL
01	ENDWALL	-	-	-	-	300	14.972	300	14.972	16.419	1.447	-
02	SIDE ENTRY PIT	600	900	600	900	300	15.372	300	15.322	16.807	1.485	EDCM 601
03	SIDE ENTRY PIT	600	900	600	900	300	16.192	300	16.142	17.84	1.698	EDCM 601
04	SIDE ENTRY PIT	600	900	600	900	300	17.143	300	17.093	18.792	1.698	EDCM 601
05	SIDE ENTRY PIT	600	900	600	900	300	18.186	300	18.136	19.934	1.797	EDCM 601
06	SIDE ENTRY PIT	600	900	600	900	300	18.321	300	18.271	19.95	1.678	EDCM 601
07	SIDE ENTRY PIT	600	900	600	900	300	18.429	300	18.379	20.313	1.934	EDCM 601
08	SIDE ENTRY PIT	600	900	600	900	300	18.522	300	18.472	20.313	1.841	EDCM 601
09	JUNCTION PIT	600	900	600	900	-	-	300	18.788	20.37	1.582	EDCM605
11	JUNCTION PIT	600	900	600	900	-	-	300	18.986	20.383	1.397	EDCM605
12	JUNCTION PIT	600	900	600	900	225	15.695	225	15.645	16.706	1.061	EDCM605
13	JUNCTION PIT	600	900	600	900	225	17.045	225	16.995	17.949	0.954	EDCM605
14	JUNCTION PIT	600	900	600	900	-	-	225	18.625	19.484	0.859	EDCM605
15	ENDWALL	-	-	-	-	375	14.666	375	14.666	16.217	1.552	-
16	SIDE ENTRY PIT	600	900	600	900	300	14.959	375	14.909	16.57	1.661	EDCM 601
17	SIDE ENTRY PIT	600	900	600	900	300	15.183	300	15.133	16.57	1.437	EDCM 601
17A	JUNCTION PIT	600	900	600	900	300	15.591	300	15.541	17.019	1.478	EDCM605
18	SIDE ENTRY PIT	600	900	600	900	300	16.323	300	16.273	17.856	1.583	EDCM 601
19	SIDE ENTRY PIT	600	900	600	900	300	17.169	300	17.119	18.694	1.575	EDCM 601
20	SIDE ENTRY PIT	600	900	600	900	300	17.816	300	17.766	19.367	1.601	EDCM 601
21	GRADED PIT	600	900	600	900	300	17.93	300	17.88	19.466	1.586	EDCM 605
22	SIDE ENTRY PIT	600	900	600	900	300	18.071	300	18.021	19.542	1.522	EDCM 601
23	JUNCTION PIT	600	900	600	900	-	-	300	18.789	20.202	1.413	EDCM605
24	SIDE ENTRY PIT	600	900	600	900	300	15.963	300	15.913	17.627	1.715	EDCM 601
25	SIDE ENTRY PIT	600	900	600	900	300	17.071	300	17.021	18.744	1.723	EDCM 601
26	SIDE ENTRY PIT	600	900	900	900	300	17.553	300	17.503	19.33	1.827	EDCM 601
27	SIDE ENTRY PIT	600	900	900	900	300	17.876	300	17.826	19.621	1.795	EDCM 601
28	JUNCTION PIT	600	900	600	900	-	-	300	18.442	20.047	1.606	EDCM605
29	GRADED PIT	600	900	600	900	-	-	300	18.305	19.608	1.303	EDCM605
30	SIDE ENTRY PIT	600	900	600	900	-	-	300	18.487	20.143	1.655	EDCM 601
31	SIDE ENTRY PIT	600	900	600	900	-	-	300	17.955	19.759	1.803	EDCM 601

C



ISSUED FOR
CONSTRUCTION

© COPYRIGHT All rights reserved
Beveridge Williams & Co. Pty Ltd has granted a licence to the principle to use this document for its intended purpose.
No unauthorised copying is permitted

REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
C	PITS 26 & 27 UPDATED	29.07.25	AP	SF					
B	PIT 17A ADDED	16.07.25	KLW	SF					
A	ISSUED FOR CONSTRUCTION	07.07.25	M.F.J.	S.F.					



Designed
Date
17.02.2025
Drawn
L.SUTHERLAND
Checked
Date
17.02.2025
S.YOUNG
Approved
Reg. No.
PE0005609
Date
17.02.2025
S.YOUNG
PS Number
PS927179L

BW Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project
Details
RIVERFIELD SQUARE
STAGE 32
CITY OF CASEY
Drawing
Title
DRAINAGE LONGITUDINAL SECTIONS
(SHEET 4 OF 4)
AND PIT SCHEDULE

Sheet 18 of 18

Scale
1:500 H 1:50 V @ A1

Project Ref	Stage No	Drawing No	Rev
2101578	32	403	C

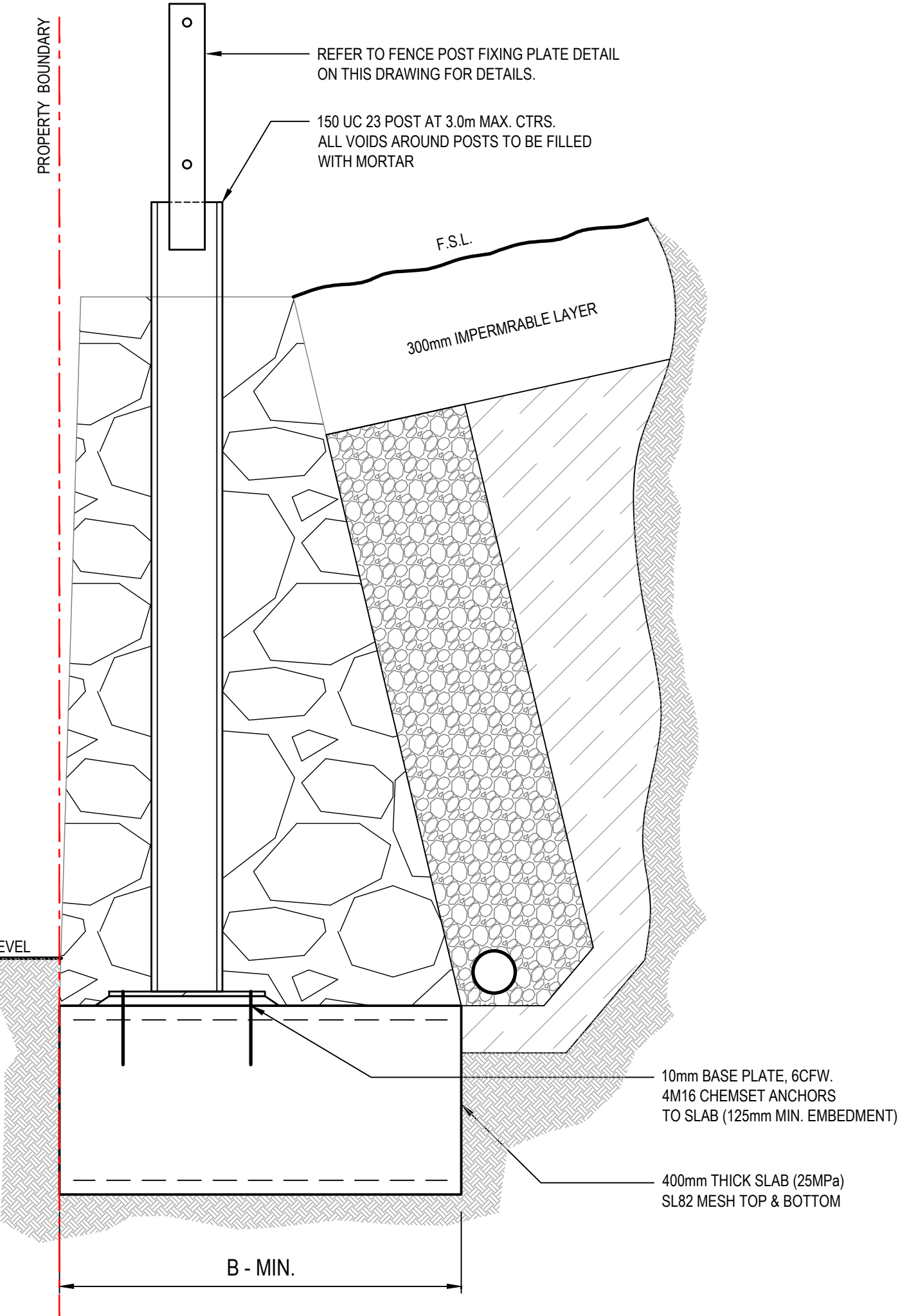


- REFER BEVERIDGE WILLIAMS DRAWINGS FOR WALL LOCATIONS AND HEIGHTS.
- WHERE BASALT IS PRESENT, THE BORED PIER FOOTINGS SHALL BE SOCKETED 900mm MINIMUM INTO SOLID UNDISTURBED BEDROCK

MASS ROCK RETAINING WALL DETAIL

RETAINING WALL NOTE:
THE RETAINING WALL DESIGN ASSUMES THAT ALL FILLING USED ON SITE IS APPROVED IMPORTED MATERIAL THAT HAS BEEN COMPACTED IN LAYERS TO MINIMUM OF 95% STANDARD COMPACTION IN ACCORDANCE WITH A12899 AND THAT THE FILLING HAS BEEN PLACED UNDER CLASS 1 GEOTECHNICAL ENGINEER SUPERVISION IN ACCORDANCE WITH A37398. SHOULD THIS BE FOUND NOT TO BE THE CASE DURING THE CONSTRUCTION PROCESS, REDESIGN OF RETAINING WALLS WILL BE REQUIRED.

NOTE 1:
ALL STEELWORK TO BE HOT DIP GALVANISED
AFTER FABRICATION.



1. ALL CONCRETE BASED ON $f_c = 25\text{MPa}$ NORMAL CONCRETE MIX.
2. CONCRETE SLUMP TO BE 80mm WITH A MAXIMUM AGGREGATE SIZE = 20mm.
3. CONCRETE THICKNESS NOMINATED ARE MINIMUM STRUCTURAL REQUIREMENTS.
4. ALL REINFORCEMENT TO BE 'N' TYPE HOT ROLLED DEFORMED BARS IN COMPLIANCE WITH AS3671 AND BE GRADE 500.
5. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED AND MAINTAINED IN CORRECT POSITION DURING CONCRETING.
6. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
7. ALL WELDING SHALL BE IN ACCORDANCE WITH AS1554.3
8. ALL CONCRETE WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE AS3600 AND OTHER RELEVANT AUSTRALIAN STANDARDS.
9. CONCRETE SHALL BE SUPPLIED BY AN APPROVED MANUFACTURER IN ACCORDANCE WITH AS1379.

CORROSION PROTECTION OF STEELWORK SHALL BE AS FOLLOWS
STEELWORK PERMANENTLY EXPOSED TO WEATHER OR
AGGRESSIVE ENVIROMENT SHALL BE HOT DIPPED GALVANISED.

ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 S.A STEEL STRUCTURES WELDING SHALL BE PERFORMED BY A QUALIFIED OPERATOR IN ACCORDANCE WITH AS1554. UNLESS STATED OTHERWISE,

A. ALL CLEATS, GUSSETS & END PLATES SHALL BE 10mm THICK.
B. WELDING ELECTRODE SHALL BE E48XX.
C. ALL FILLET WELDS SHALL BE 6mm CONTINUOUS.
D. ALL BUTT WELDS SHALL BE FULL PENETRATION.
E. BOLT HOLE CLEARANCE SHALL BE 2mm
F. ALL WELDS SHALL BE STRUCTURAL PURPOSE.

THE GRADE OF STRUCTURAL STEEL SHALL BE AS FOLLOWS U.N.O.

SECTION	GRADE (MPa)
HOT ROLLED SECTIONS	300

TOE OF WALL SHALL PENETRATE THROUGH ANY FILL MATERIAL & THE NATURAL SILT SOILS TO BE FOUNDED AT LEAST 100mm INTO THE UNDERLYING NATURAL STIFF CLAY OR WEATHERED ROCK.

ALL EXCAVATIONS SHALL HAVE FOUNDING DEPTHS & BEARING CAPACITY APPROVED BY THE ENGINEER OR BUILDING SURVEYOR BEFORE CONCRETE IS PLACED.

FOOTING EXCAVATIONS WHICH ARE DEEPEMED TO PENETRATE THROUGH UNSUITABLE SOILS SHALL BE BACKFILLED UP TO UNDERSIDE OF FOOTING WITH 15 MPa BLINDING CONCRETE.

ALL EXCAVATION FOUNDING SURFACES SHALL BE LEVEL (NOT INCLINED),
CLEAN CUT & FREE OF MUD OR WATER.

ALL SEEPAGE INFLOW SHALL BE REMOVED BEFORE PLACEMENT OF CONCRETE.

FOOTINGS SHALL BE FOUNDED IN STIFF NATURAL CLAY HAVING A
SAFE BEARING CAPACITY OF 100 kPa.



REVISIONS				
P2	APPROVAL ISSUE		30.08.2024	MA
P1	APPROVAL ISSUE		26.08.2024	MA
REVISION	DETAILS		DATE	APPROVED

APPROVAL

CIVIL	
Designed M ALLAN	Date APRIL 2023
Drawn M.T	Scale AS SHOWN @ A1 SHEET

**MA CIVIL
DESIGN PTY LTD**

ABN: 75 128 863 445
0424 811 015
+61 3 9830 1101
55 Sir Garnet Rd, Surrey Hills, VIC
design@macivil.com.au
www.macivil.com.au

Project Title :

RIVERFIELD SQUARE ESTATE
1675 BALLATO ROAD,
CLYDE NORTH

Drawing Title :

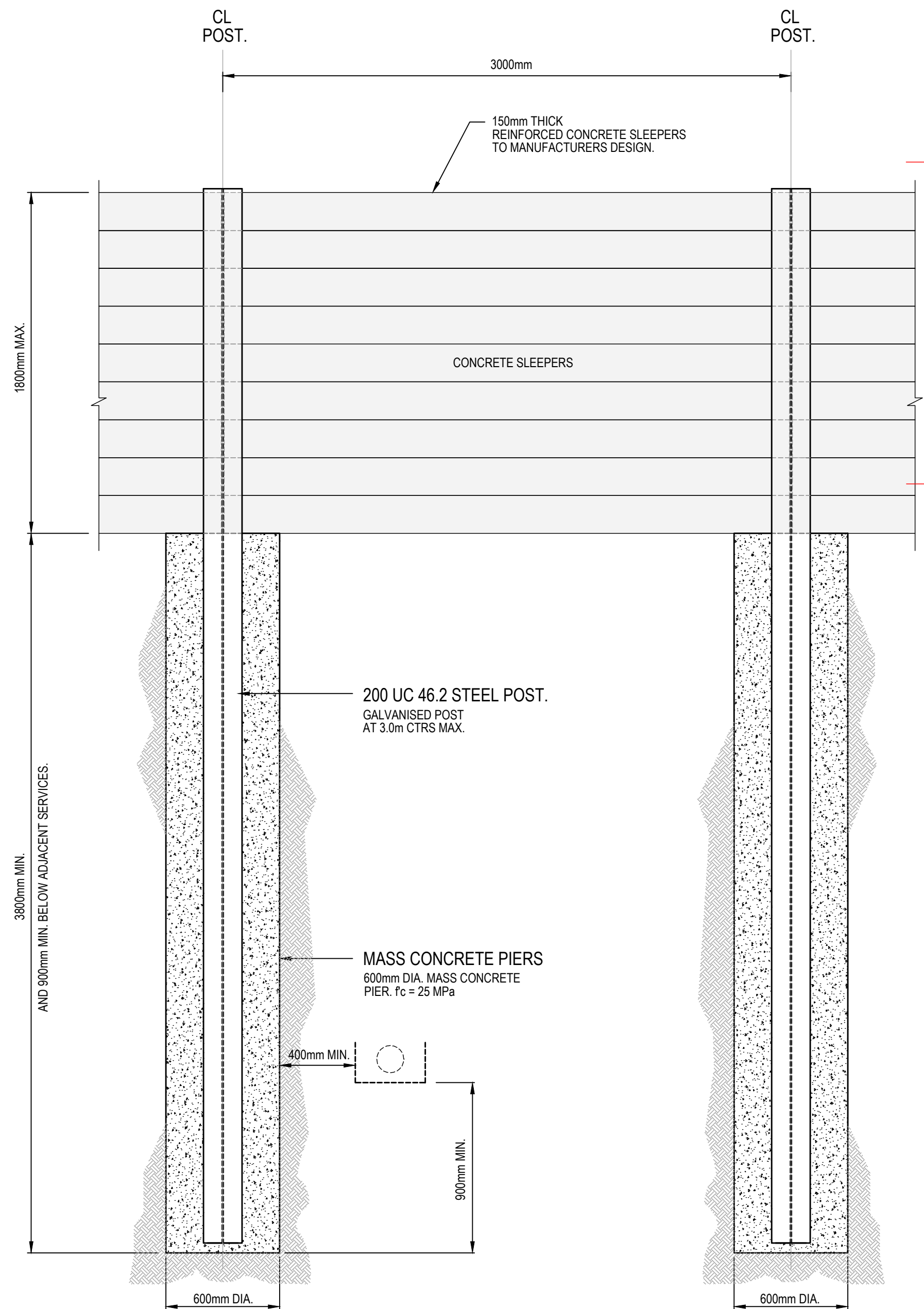
RETAINING WALL DETAILS

SHEET 1

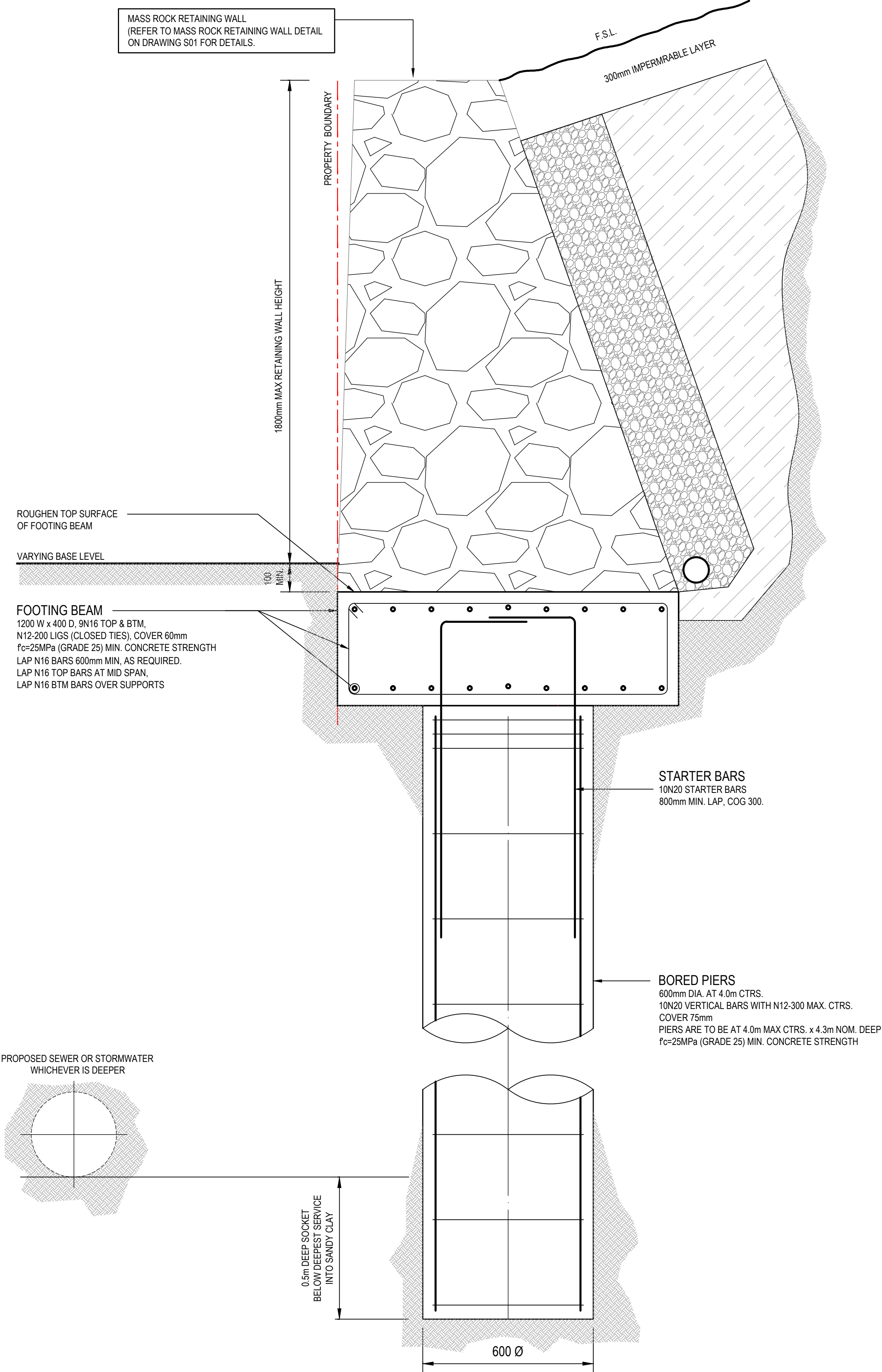
Drawing No :

177-01-S01

P2



RETAINING WALL DETAIL
CONCRETE SLEEPER WITH 3.0m SPAN



MASS ROCK RETAINING WALL ON PIERS NEAR PARALLEL SEWER OR STORMWATER DETAIL
SCALE 1:10



REVISIONS

P2	APPROVAL ISSUE	30.08.2024	MA	
P1	APPROVAL ISSUE	26.08.2024	MA	
REVISION	DETAILS	DATE	APPROVED	

APPROVAL

CIVIL

Designed	Date
M ALLAN	APRIL 2023
Drawn	Scale
M.T	AS SHOWN @ A1 SHEET

MA CIVIL DESIGN
PTY LTD

ABN: 75 128 863 445
0424 811 015
+61 3 9830 1101
55 Sir Garnet Rd, Surrey Hills, VIC
design@macivil.com.au
www.macivil.com.au

Project Title :

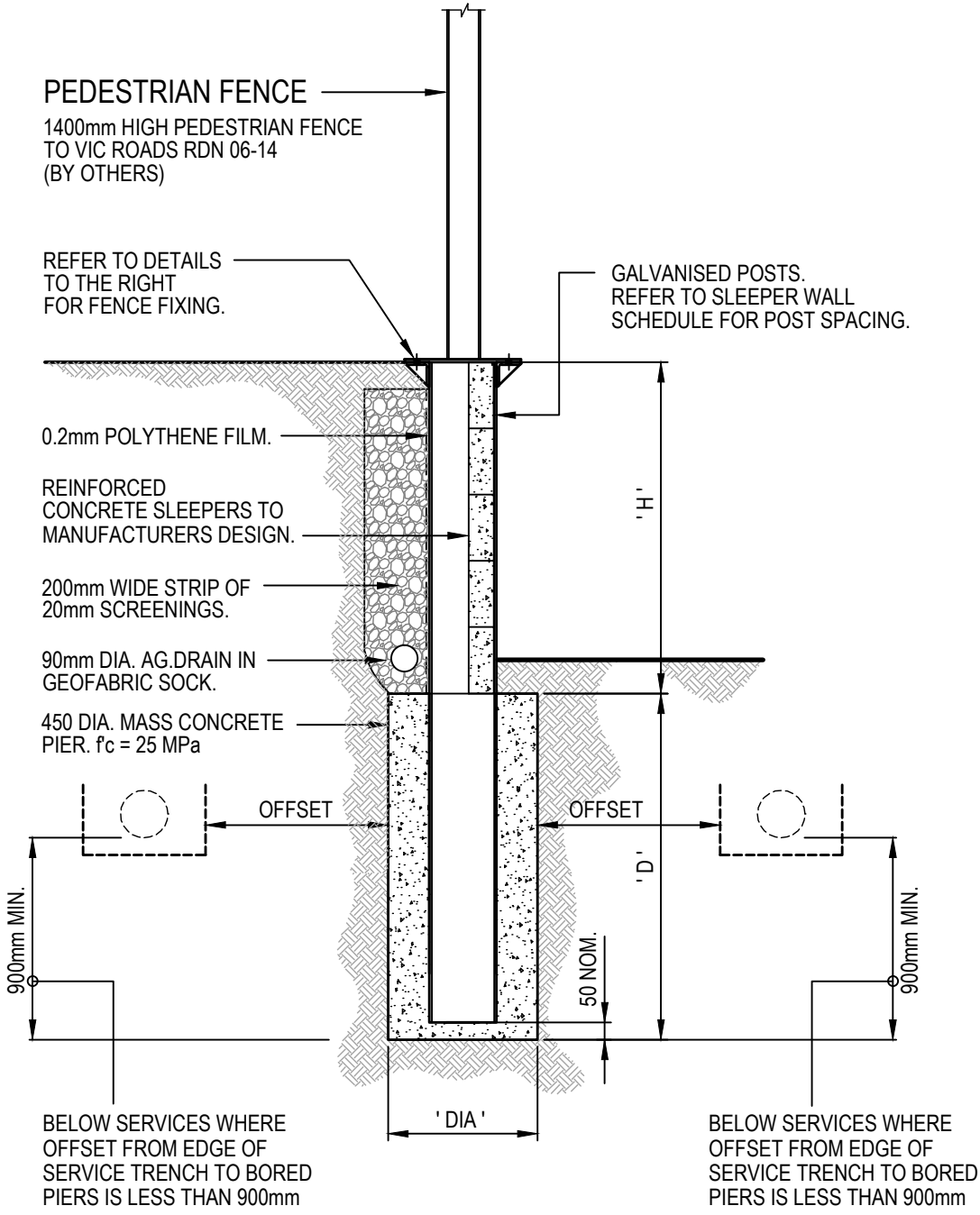
RIVERFIELD SQUARE ESTATE
1675 BALLATO ROAD,
CLYDE NORTH

Drawing Title :

RETAINING WALL DETAILS
SHEET 2

Drawing No :

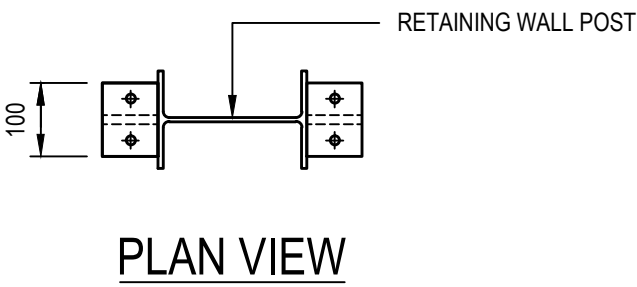
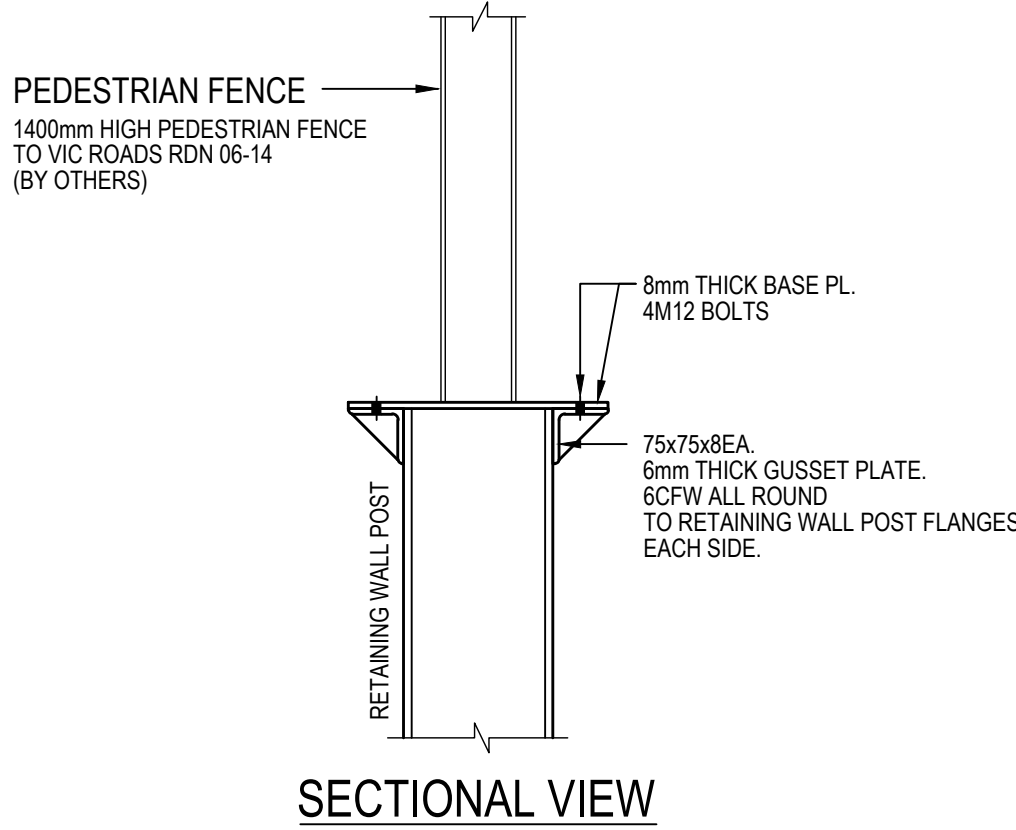
177-01-S02



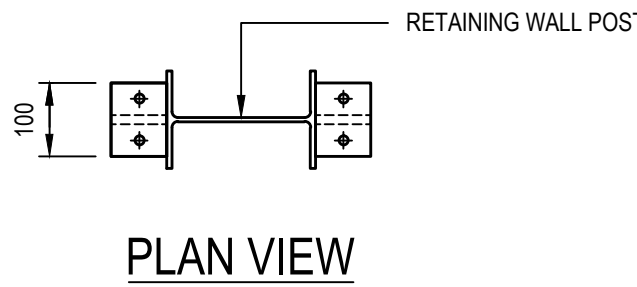
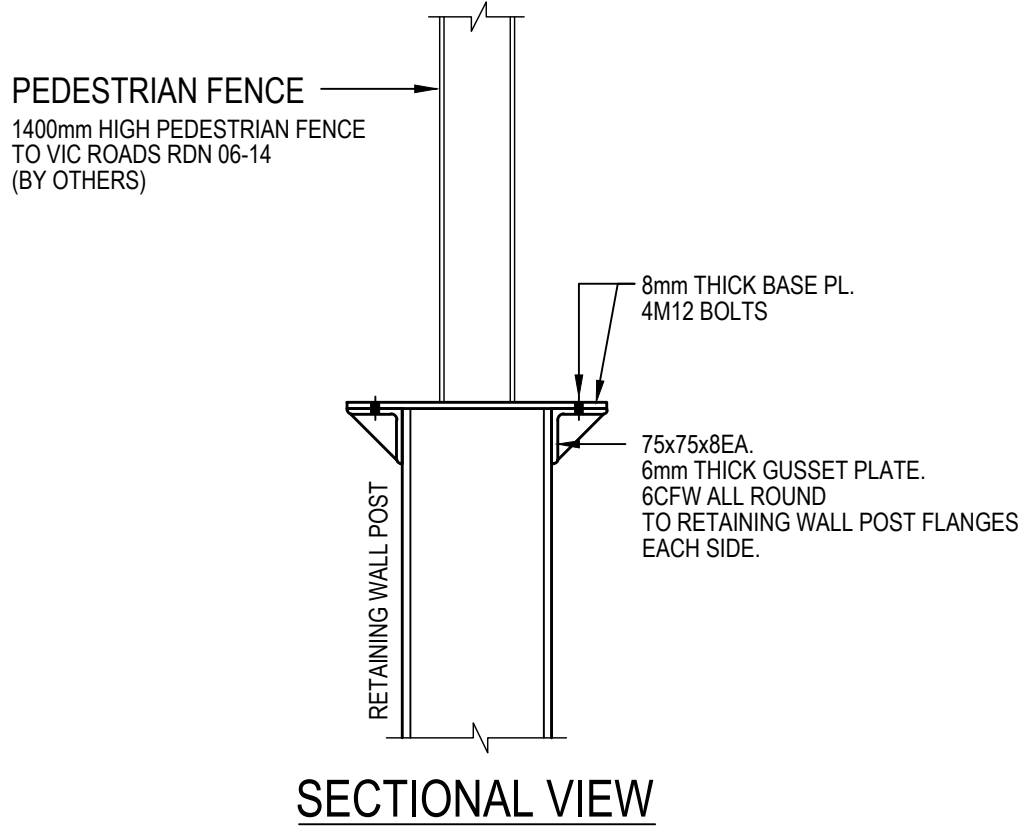
REINFORCED CONCRETE SLEEPER RETAINING WALL
WITH 1.4m HIGH PEDESTRIAN FENCE TO VIC ROADS STANDARDS
SCALE 1:20

- REFER BEVERIDGE WILLIAMS DRAWINGS FOR WALL LOCATIONS AND HEIGHTS.
- WHERE BASALT IS PRESENT, THE BORED PIER FOOTINGS SHALL BE SOCKETED 900mm MINIMUM INTO SOLID UNDISTURBED BEDROCK

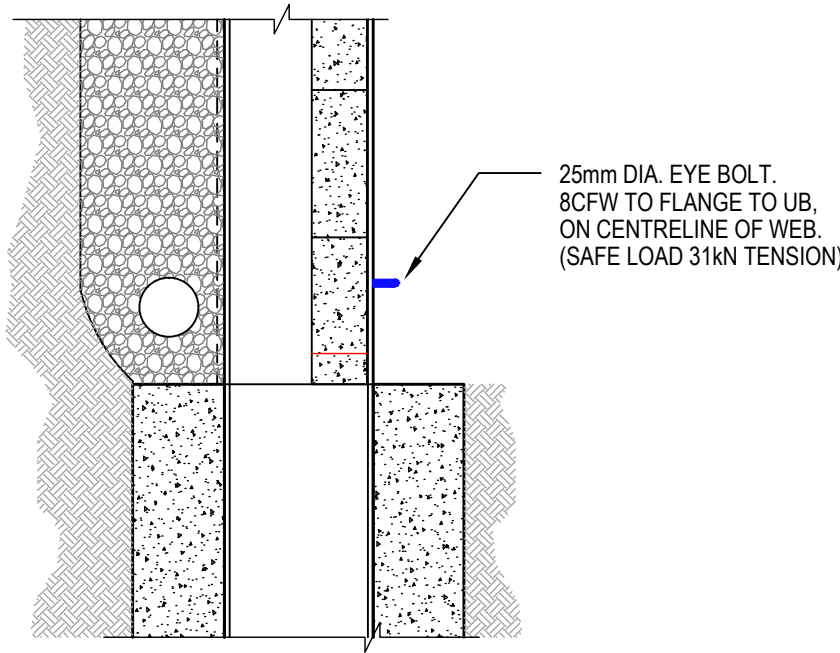
SLEEPER WALL SCHEDULE				
SPACING OF POSTS (mm)	RETAINED HEIGHT 'H' '	DEPTH 'D' '	POST SIZE	DIAMETER 'DIA' OF PIER (mm)
2400	0 - 600mm	1300	150 UB 14	450
2400	601 - 800mm	1700	150 UB 14	450
2400	801 - 1000mm	2000	150 UB 14	450
2400	1001 - 1200mm	2400	150 UB 14	450
2400	1201 - 1400mm	2700	150 UB 18	450
2400	1401 - 1600mm	3000	150 UB 18	450
2400	1601 - 1800mm	3300	200 UB 22	450



FENCE POST BASE FIXING DETAIL TO 150 UB
SCALE 1:10



FENCE POST BASE FIXING DETAIL TO 200 UB
SCALE 1:10



TYPICAL ELECTRICAL EYE BOLT DETAIL
SCALE 1:10



REVISIONS			
P2	APPROVAL ISSUE	30.08.2024	MA
P1	APPROVAL ISSUE	26.08.2024	MA
REVISION	DETAILS	DATE	APPROVED

APPROVAL

CIVIL	
Designed M ALLAN	Date APRIL 2023
Drawn M.T	Scale AS SHOWN @ A1 SHEET

MA CIVIL
DESIGN
PTY LTD

ABN: 75 128 863 445
0424 811 015
+61 3 9830 1101
55 Sir Garnet Rd, Surrey Hills, VIC
design@macivil.com.au
www.macivil.com.au

Project Title :
RIVERFIELD SQUARE ESTATE
1675 BALLATO ROAD,
CLYDE NORTH

Drawing Title :
RETAINING WALL DETAILS
SHEET 3

Drawing No :
177-01-S03

