Application for Planning Approval

Land Use Planning and Approvals Act 1993

APPLICATION NO.

DA2022/177

LOCATION OF AFFECTED AREA

116 & 118 COVE HILL RD, BRIDGEWATER

DESCRIPTION OF DEVELOPMENT PROPOSAL

RECYCLING & WASTE DISPOSAL (VEHICLE WRECKING YARD)

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT www.brighton.tas.gov.au AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M., MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS CONCERNING AN APPLICATION UNTIL 4:45 P.M. ON **18/08/2023**. ADDRESSED TO THE GENERAL MANAGER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT development@brighton.tas.gov.au.
REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

JANINE BANKS
ACTING General Manager

SCAN ME

Brighton
going places

PROJECT INFORMATION

BUILDING DESIGNER:	MICHAEL EASTWOOD
ACCREDITATION No:	CC 1066 S
LAND TITLE REFERENCE NUMBER:	144927/6
FLOOR AREA	2040m^2 + 145m2 of ancillery buildings. (temp office, ablusions, crib)
DECK FLOOR AREA	NA
DESIGN WIND SPEED:	N3
SOIL CLASSIFICATION:	M
CLIMATE ZONE:	7
BUSHFIRE-PRONE BAL RATING:	NA
ALPINE AREA:	NOT APPLICABLE
CORROSION ENVIRONMENT:	LOW
FLOODING:	Unknown
LANDSLIP:	NO
DISPERSIVE SOILS:	UNKNOWN
SALINE SOILS:	UNKNOWN
SAND DUNES:	UNKNOWN
MINE SUBSIDENCE:	NO
LANDFILL:	UNKNOWN
DATUM LEVEL AT KERB:	UNKNOWN
GROUND LEVEL:	VARYING
FINISHED FLOOR LEVEL:	RL APPROX. 46300
OVERFLOW RELIEF GULLY LEVEL:	RL46000

Drawing List

Sheet Number	Sheet Name
A0	Title Page
A1	Site Plan
A2	Site Plan 500
A3	Extent of Fill
A4	Logistics Flat bed truck
A4a	Logistics Semi Trailer
A5	Hydronics
A5a	Music Model
A6	Landscaping
A7	3D Visuals
A8	Visuals
A9	Elevations
A10	Elevations
A11	Hardstand
B1	Shed Floor Plan
B2	Office Floor Plan
B3	Elevations
B4	Elevations
B5	Visuals
B6	Visuals
C1	Temp Office Floor Plan
C2	Office Elevations
C3	Office Visuals
D1	Ablusions Block floor plan
D2	Ablusions Elevations
D3	Ablusions Visuals
E4	Crib Floor Plan
E5	Crib Elevations
E6	Crib Visuals

Proposed Recycling sheds For

Broken Car and Truck Investments Pty Ltd

116 Cove Hill Road

Bridgewater 7030

Planning Application
Ammended 04/04/23

Michael Eastwood

Onshore Designs

office 65 South Arm Road, Rokeby, 7019
mail/ 10 Restdown Drive, Otago, 7017
0429901003
onshoredesigns@bigpond.com

FOR FUTURE DEVELOPMENT
due to transportation costs and logistics this area is used at the moment for storing vehicles for future processing.

Lot 7
1568ha

Lot 6
1.616 ha

FOR FUTURE DEVELOPMENT
due to transportation costs and logistics this area is used at the moment for storing vehicles for future processing.

Lot 5
5.43 ha

boundary

60.00

225.39

235.39

21207

SEE SITE PLAN 500

boundary

56899

retaining wall

2400mm security fence

man hole

boundary

2400mm security fence

loading bay

STAGE 2

building 1 (80m*25m)

STAGE 1

loading bay

STAFF PARKING

retaining wall

motorbike

PARKING TOTAL 17 SPACES
5 VISITOR SPACES
12 STAFF SPACES
INCLUDES
1 MOTORBIKE SPACE
2 DISABLED PARKING

temporary ablusions

stormwater controls
Protector

temporary crib

temporary office

retaining wall

VISITOR PARKING

stormwater controls
by protector

location of DN150 sewer main

landscaping

19086

2400mm security fence

drainage easement (3m wide)

sliding security gate

COVE HILL ROAD

driveway

2100mm security fence

ret. wall setback 31200

19034

man hole

shed

shed

1 SITE PLAN
1 : 750

DATE PRINTED: 6/1/2023 1:09:33 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

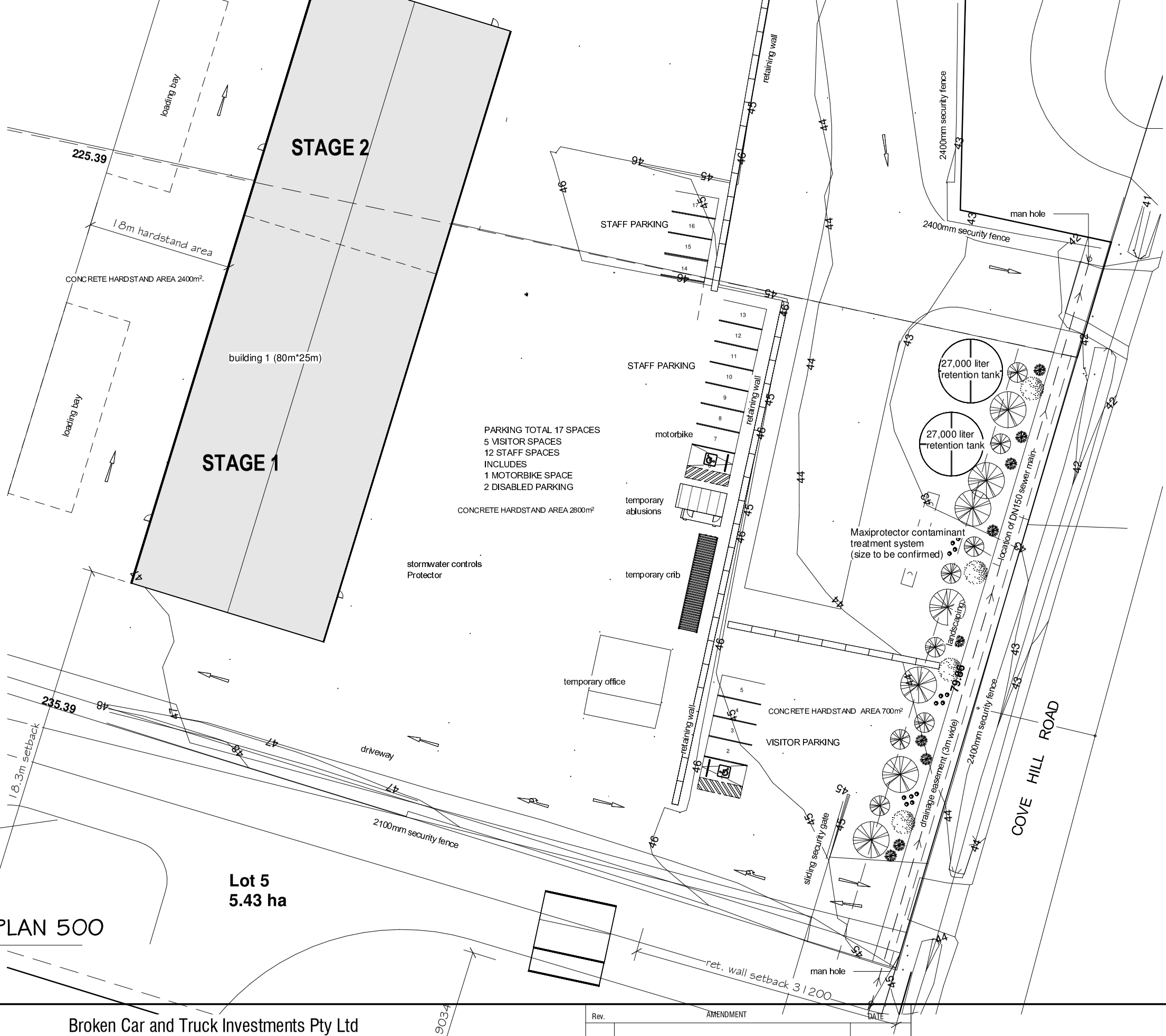
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Site Plan

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 750
DRAWN: ME
DATE: 04/04/23
JOB / DRAWING No. -A1
REVISION



1 SITE PLAN 500
1 : 500

DATE PRINTED: 6/1/2023 1:09:34 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Site Plan 500

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 500	DATE: 04/04/23	JOB / DRAWING No. -A2	REVISION
DRAWN: Author			

NOTE: The complete allotment wasnt surveyed and the areas are approx. taken from site visit and from owner.

boundary

60.00

Lot 7
1568ha

approx. 4000m3 of cut
highest point of cut
approx. 1.2m

Lot 6
1.616 ha

approx. 4000m3 of fill
highest point of fill
1.9m to retaining wall
Fill compacted at 100mm increments. Fill majority bluestone

boundary

boundary

235.39

shed

shed

driveway

VISITOR PARKING

79.86

COVE HILL ROAD

sliding security gate

Lot 5
5.43 ha

1 Extent of fill
1 : 750

DATE PRINTED: 6/1/2023 1:09:35 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

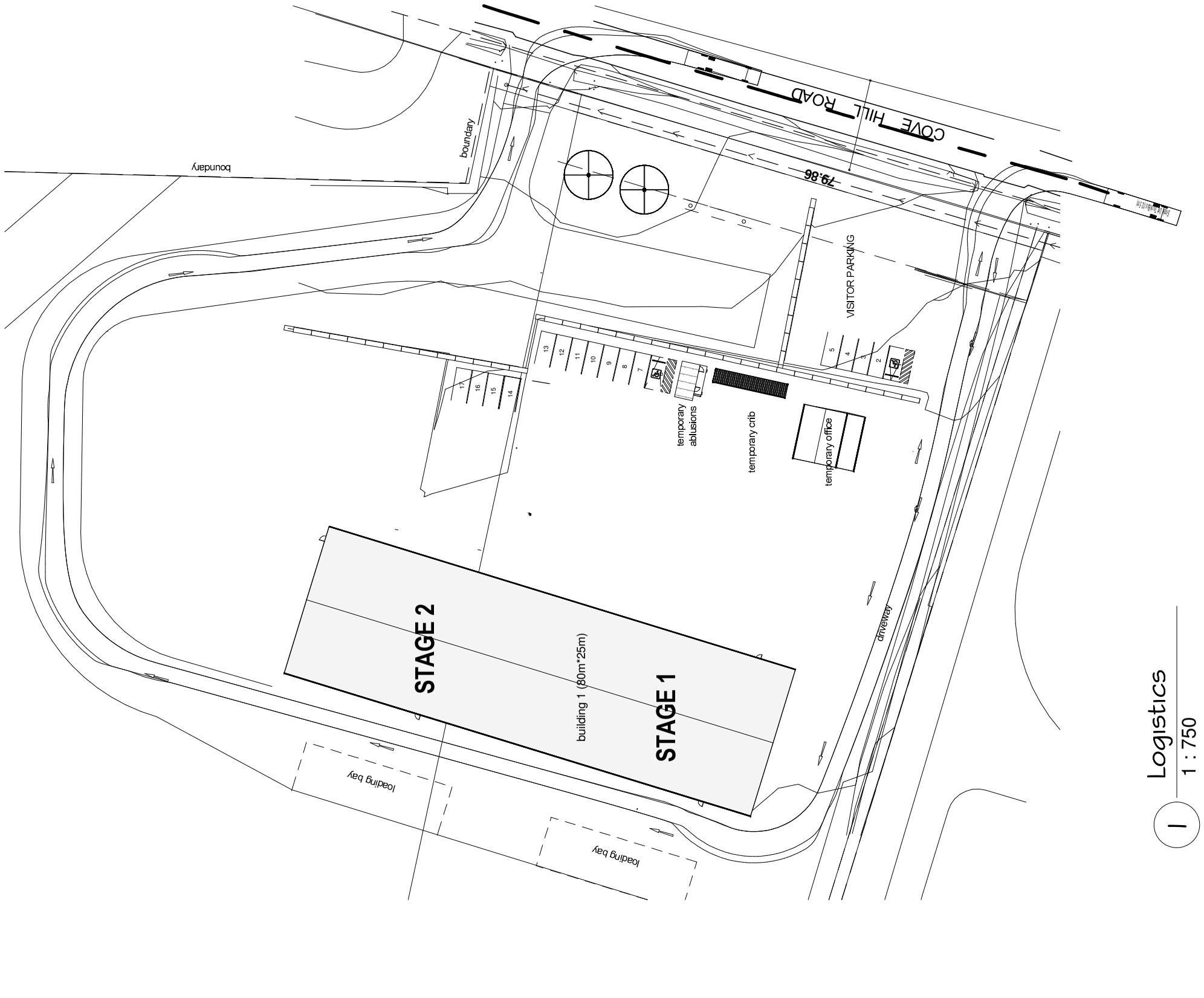
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Extent of Fill

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 750	DATE: 04/04/23	JOB / DRAWING No. -A3	REVISION
DRAWN: Author			



Logistics
1 : 750

DATE PRINTED: 6/1/2023 1:09:35 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

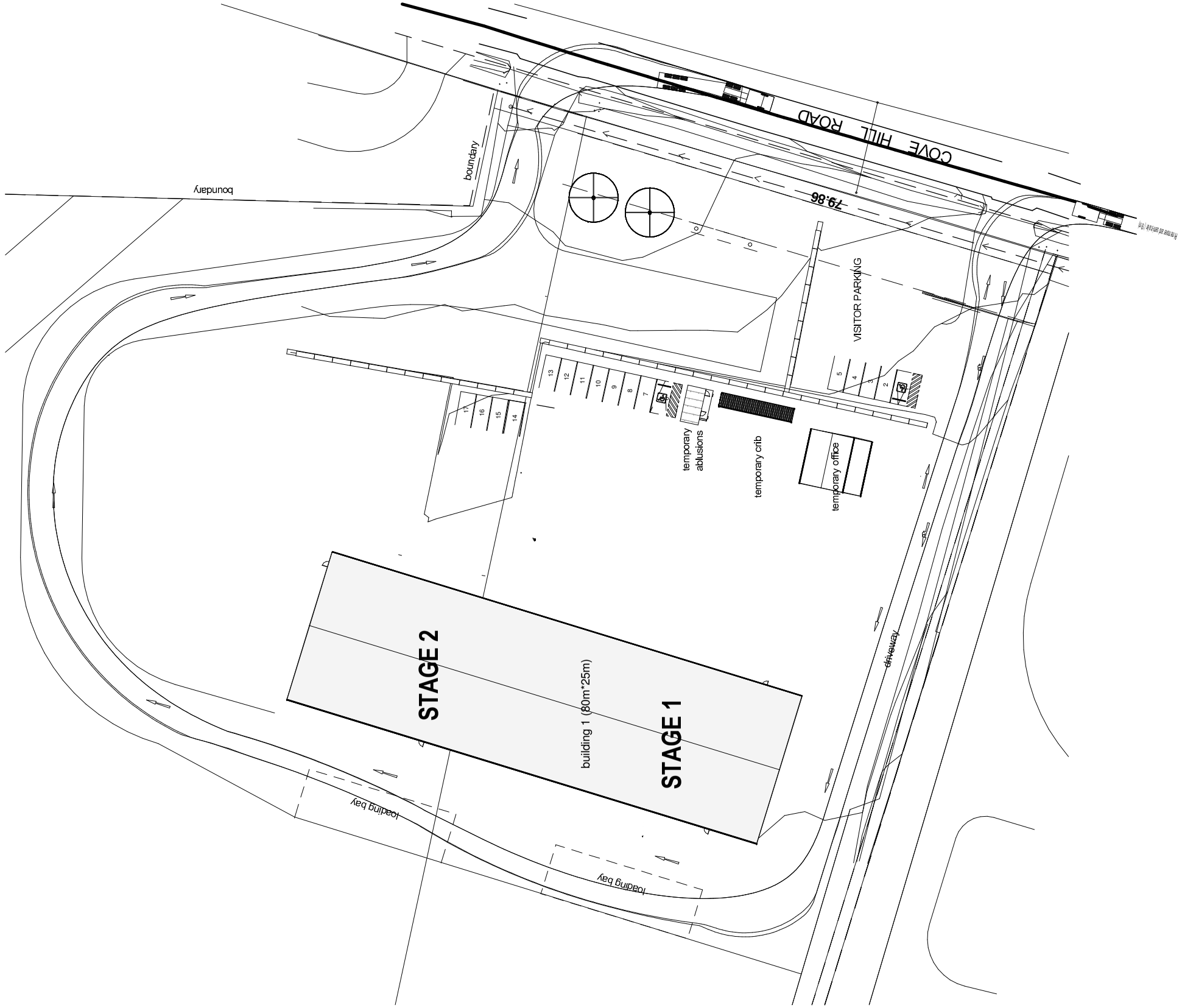
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Logistics Flat bed truck

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 750
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -A4
REVISION



Logistics Semi-trailer
1 : 750

DATE PRINTED: 6/1/2023 1:09:35 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

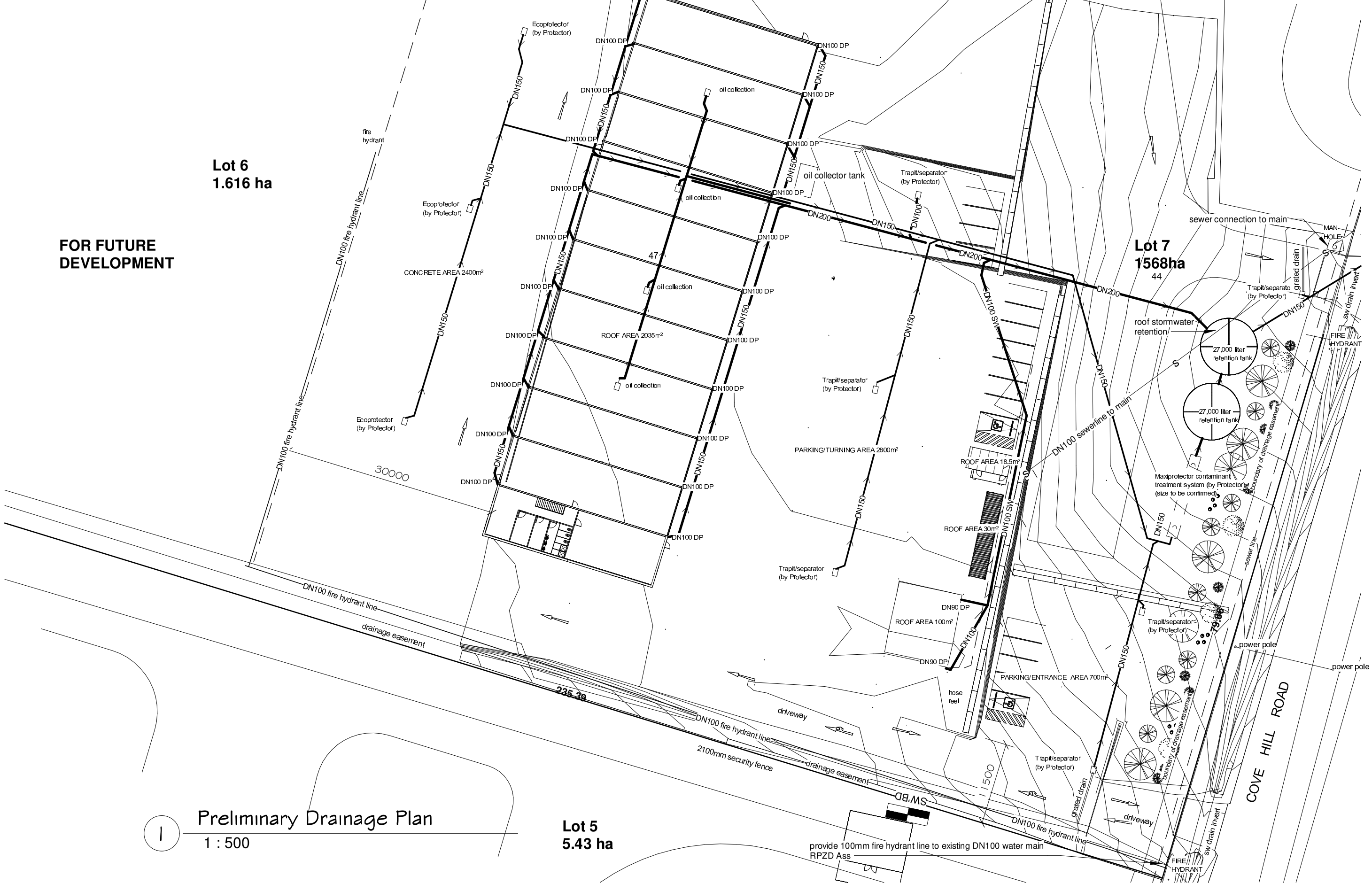
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Logistics Semi Trailer

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 750
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -A4a
REVISION



1 Preliminary Drainage Plan
1 : 500

DATE PRINTED: 6/1/2023 1:09:37 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

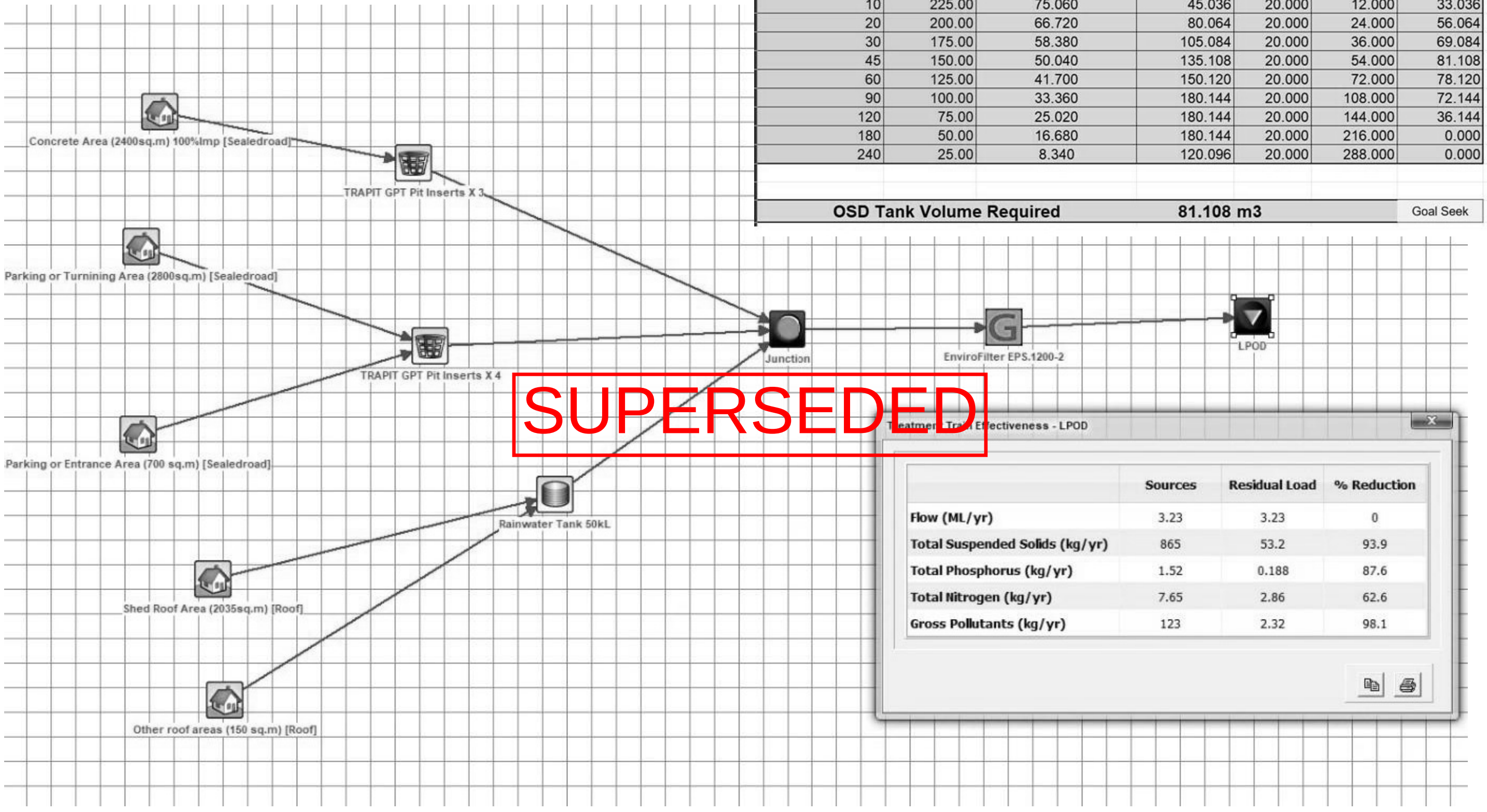
Rev.	AMENDMENT	DATE

Hydronics
116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 500	DATE: 04/04/23	JOB / DRAWING No. -A5	REVISION
DRAWN: Author			

Duration (minutes)	1 in 100 ARI Intensities (mm/hr)	Discharge Rate From Developed Site to OSD (l/s)	Rainfall Volume to OSD (m^3)	Allowable Discharge (l/s)	Allowable Discharge (m^3)	Volume of Storage (m^3)
0	0.00	0.000	0.000	20.000	0.000	0.000
5	250.00	83.400	25.020	20.000	6.000	19.020
10	225.00	75.060	45.036	20.000	12.000	33.036
20	200.00	66.720	80.064	20.000	24.000	56.064
30	175.00	58.380	105.084	20.000	36.000	69.084
45	150.00	50.040	135.108	20.000	54.000	81.108
60	125.00	41.700	150.120	20.000	72.000	78.120
90	100.00	33.360	180.144	20.000	108.000	72.144
120	75.00	25.020	180.144	20.000	144.000	36.144
180	50.00	16.680	180.144	20.000	216.000	0.000
240	25.00	8.340	120.096	20.000	288.000	0.000

OSD Tank Volume Required **81.108 m3** Goal Seek



SUPERSEDED

Treatment Train Effectiveness - LPOD

	Sources	Residual Load	% Reduction
Flow (ML/yr)	3.23	3.23	0
Total Suspended Solids (kg/yr)	865	53.2	93.9
Total Phosphorus (kg/yr)	1.52	0.188	87.6
Total Nitrogen (kg/yr)	7.65	2.86	62.6
Gross Pollutants (kg/yr)	123	2.32	98.1

DATE PRINTED: 6/1/2023 1:09:37 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Music Model

116/118 Cove Hill Road
Bridgewater 7030

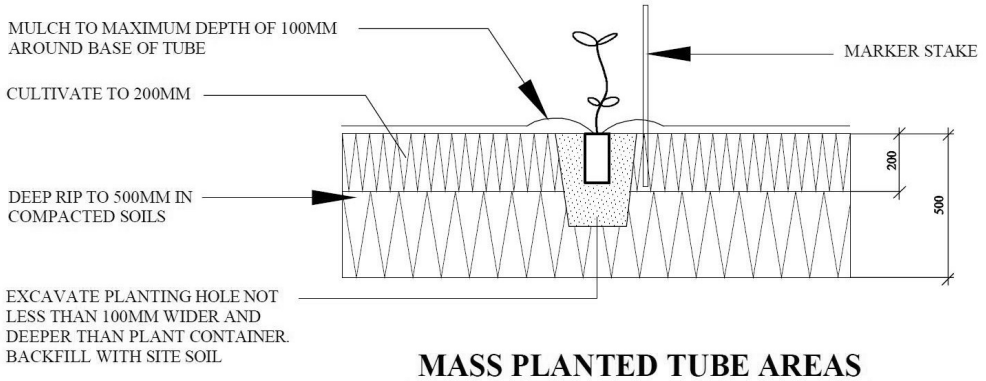
SCALE:

DATE: 04/04/23

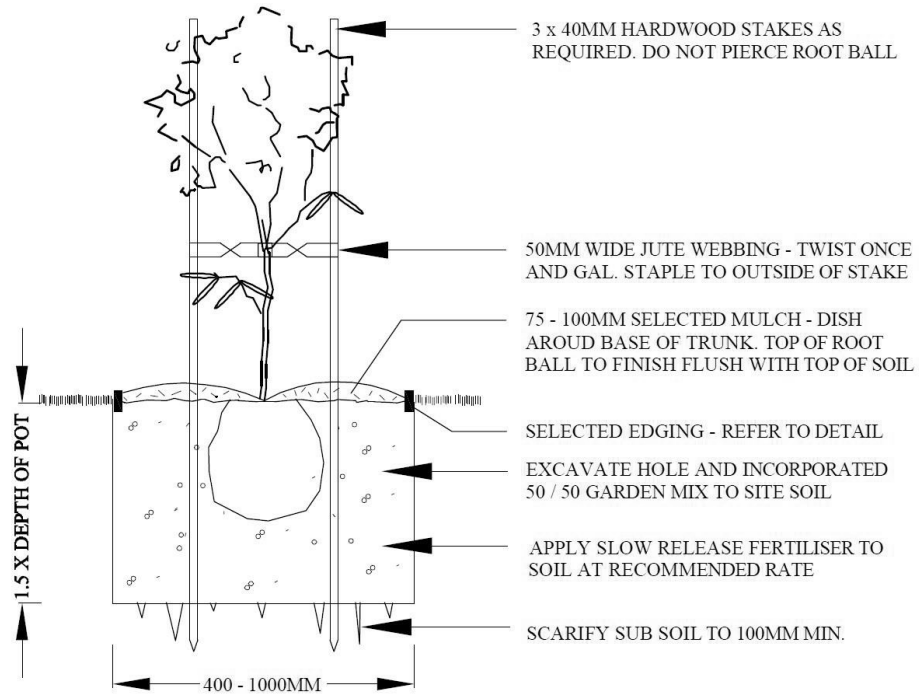
DRAWN: Author

JOB / DRAWING No. -A5a

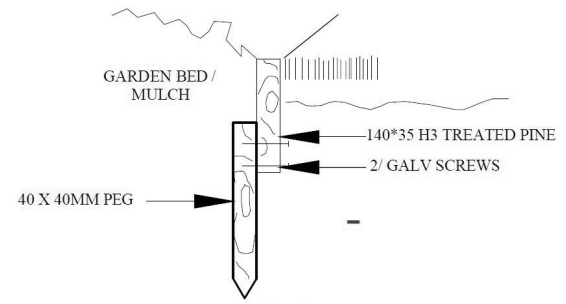
REVISION



MASS PLANTED TUBE AREAS
(NTS)



25 - 75LTR TYPICAL PLANTING
(NTS)



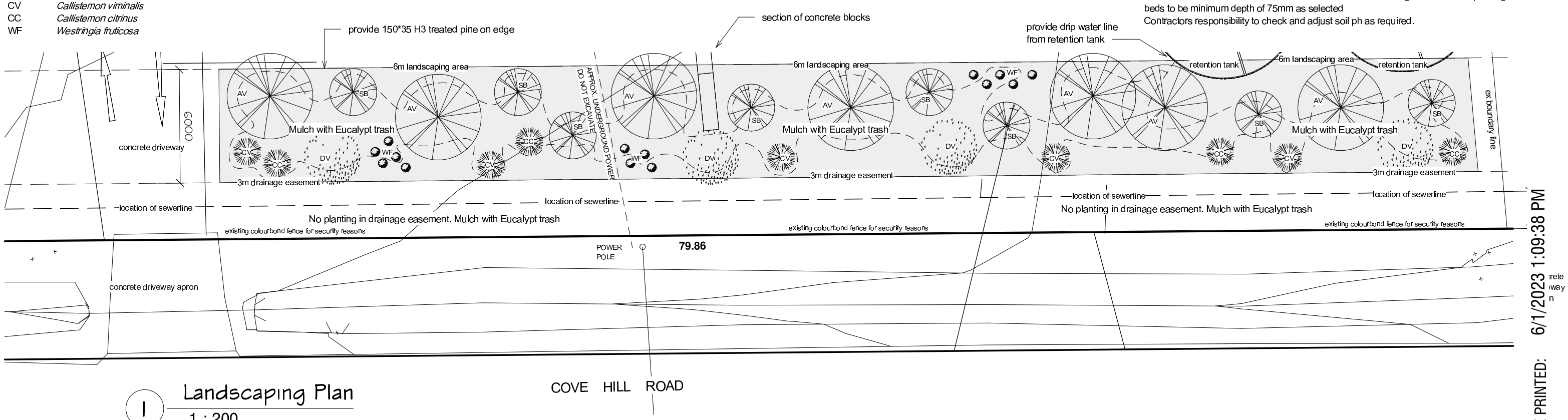
TYPICAL EDGING
(NTS)

Plant Selection.

Plants selected to provide softening to the fenceline with
minimum ground covers for ease of maintenance and watering.
Back drop (upper storey) of *Allocasuarina verticillata* Tree growing between 5–8m. Long weeping branchlets, greygreen. Interesting cone-like fruit.
Intermediate level (middle storey) *Banksia marginata.* Feature tree grows 3–5m. Various forms. Leaves green on top, silver underside
Dodonaea viscosa Erect shrub to 3m, Green flowers in winter turn to striking red seed pods in spring.
Callistemon viminalis, Callistemon citrinus (bottle brushes)
Lower Storey *Westringia fruticosa*

AV	*Allocasuarina verticillata*
SB	*Banksia marginata*
DV	*Dodonaea viscosa*
CV	*Callistemon viminalis*
CC	*Callistemon citrinus*
WF	*Westringia fruticosa*

NOTE: Location of sewermains/lines, waterpipes, underground electricity and other services must be obtained prior to commencement of work on site
DIAL BEFORE YOU DIG 1100.
Glazed or polished planting holes, particularly in clay soils should be avoided. Plants to be mounted within these soil types
Plants should be planted straight, with the top of the root ball level or slightly lower than the soil surface
Plants to be watered as soon as possible after planting. Planting should be avoided at the height of summer.
Plants should be watered at least weekly for six weeks to aid establishment. Water crystals may be used to reduce the ammount of water required
If a fertiliser is to be applied, a slow release 8-9 month plant food prefered. Only species within the landscape plan should be planted.
(on most cases Nuseries can substitute). Stock should be free of pests, disease and weeds and not pot bound.
Replacement plants should be made available for any losses of plant stock that may occur for a minimum 12 month period.
Weeds should be removed on a fortnightly basis. Pest and disease samples to the local nursery for identification and appropriate remedy.
Landscape contractor to check DA conditions and stamped landscape plan before commencing works to ensure no additions/ammendments to plans.
Garden beds in front bed to consist of non floatable decorative gravel. Mulched planting beds to be minimum depth of 75mm as selected
Contractors responsibility to check and adjust soil ph as required.



1 Landscaping Plan
1 : 200

DATE PRINTED: 6/1/2023 1:09:38 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

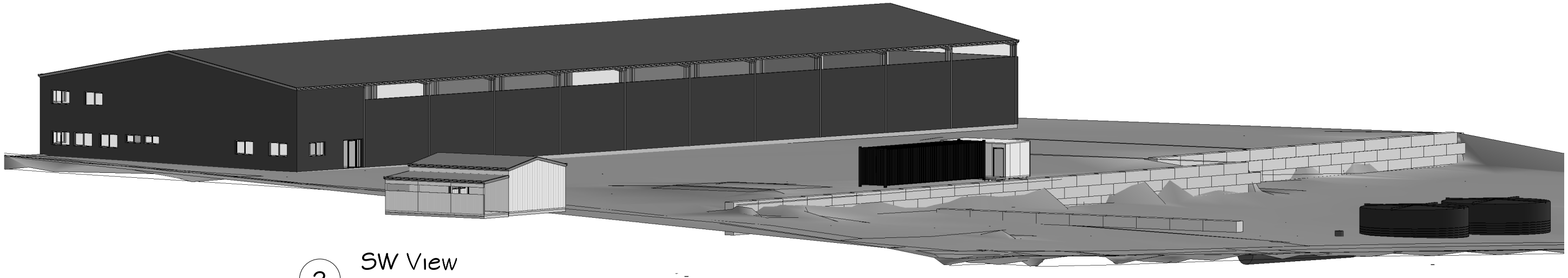
0 10 20 30 40 50mm
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

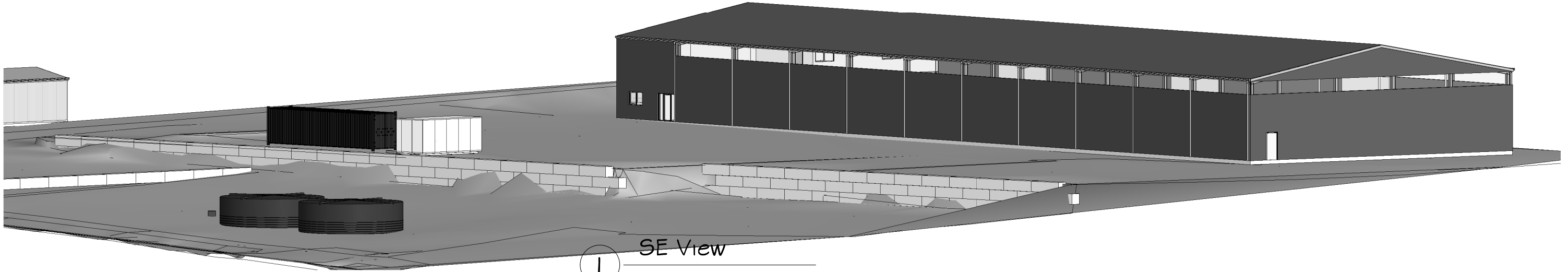
Rev.	AMENDMENT	DATE

Landscaping
116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 200	DATE: 04/04/23	JOB / DRAWING No. -A6	REVISION
DRAWN: Author			



2 SW View



1 SE View

DATE PRINTED: 6/1/2023 1:09:41 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

3D Visuals

116/118 Cove Hill Road
Bridgewater 7030

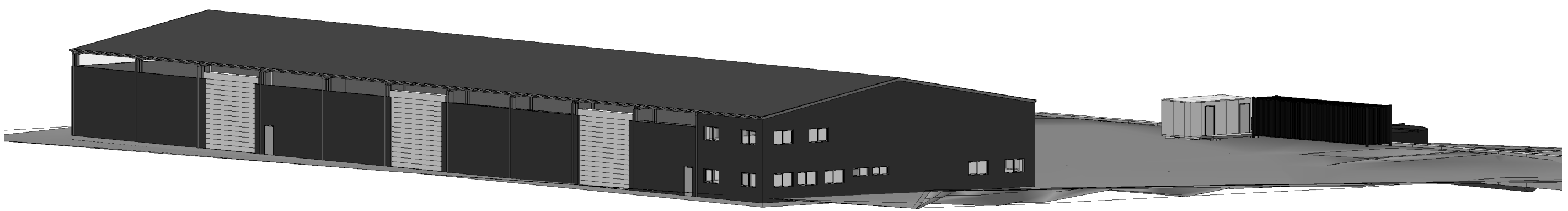
SCALE:

DRAWN: Author

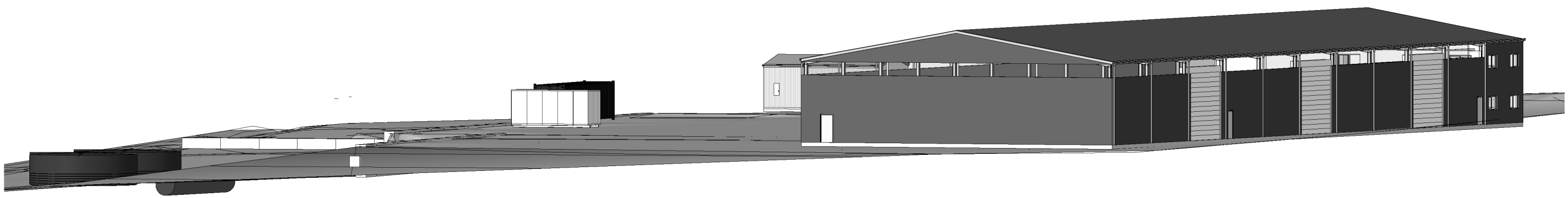
DATE: 04/04/23

JOB / DRAWING No. -A7

REVISION



2 NW View



1 NE View

DATE PRINTED: 6/1/2023 1:09:43 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

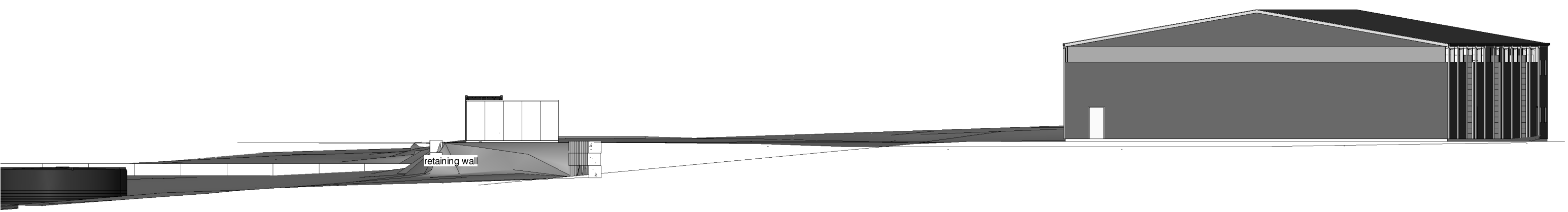
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

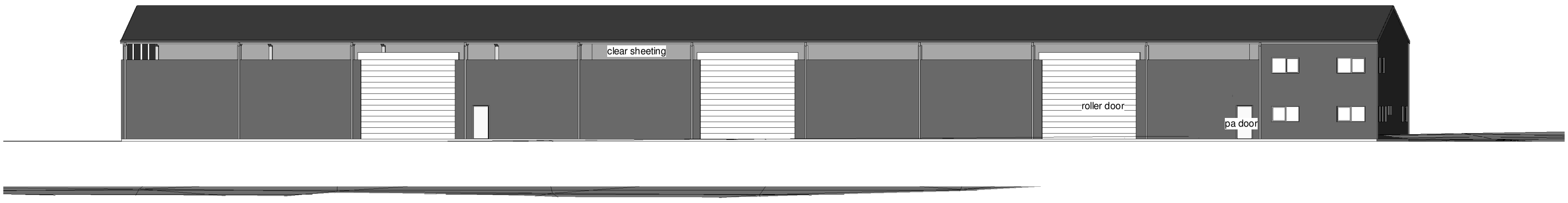
Visuals

116/118 Cove Hill Road
Bridgewater 7030

SCALE:	DATE: 04/04/23	JOB / DRAWING No. -A8	REVISION
DRAWN: Author			



1 East ELEVATION
1 : 250



2 Nth ELEVATION
1 : 250

DATE PRINTED: 6/1/2023 1:09:45 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

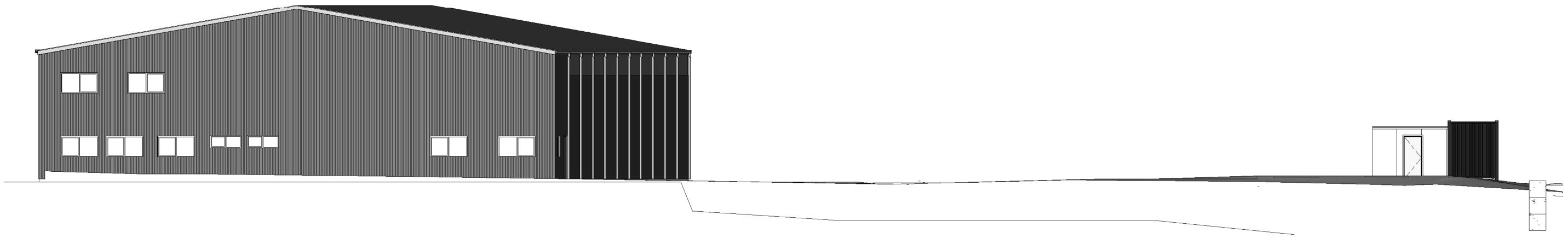
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Elevations

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 250
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -A9
REVISION



1 West ELEVATION
1 : 200

2 Sth ELEVATION
1 : 250

DATE PRINTED: 6/1/2023 1:09:47 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

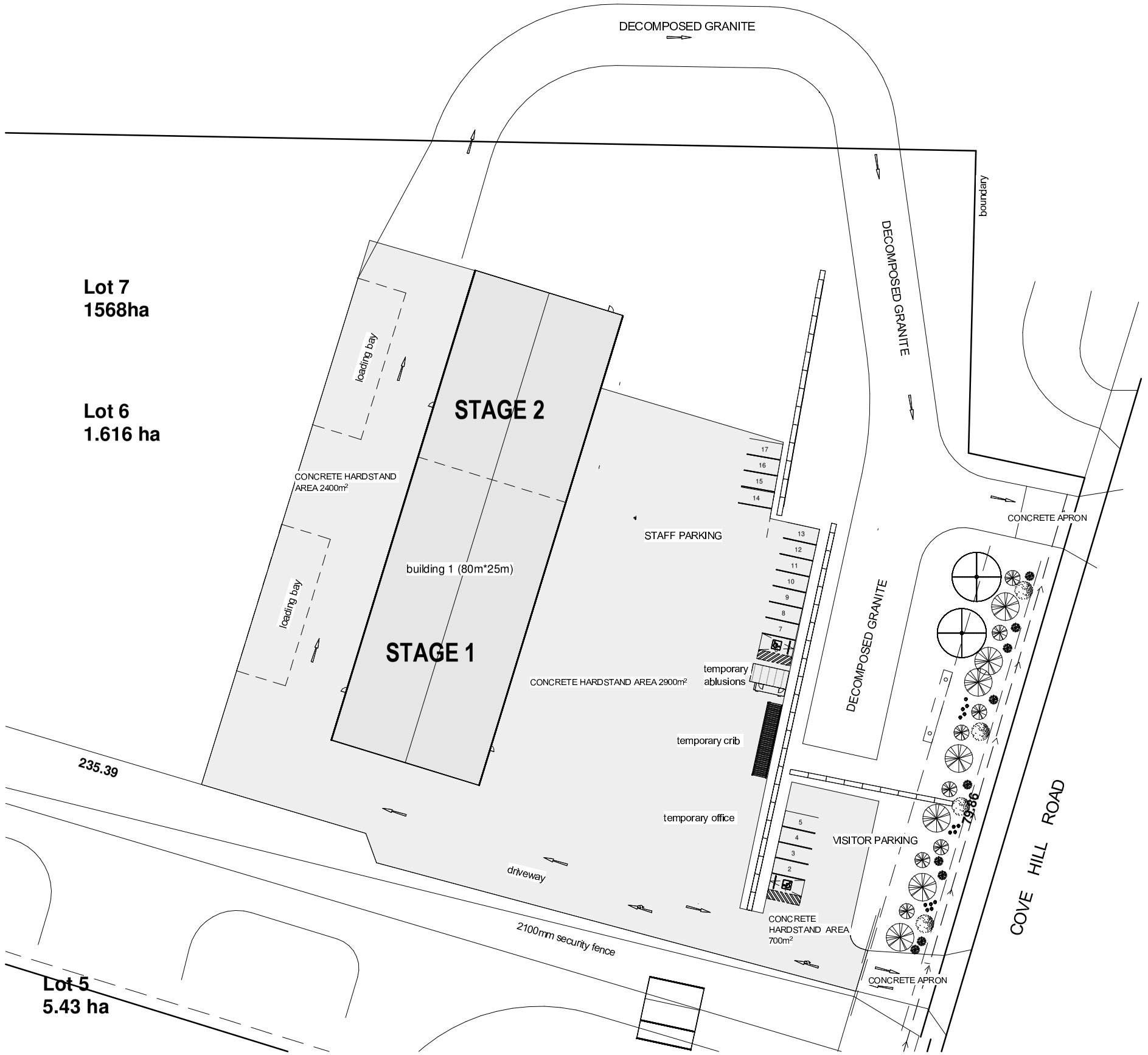
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Elevations

116/118 Cove Hill Road
Bridgewater 7030

SCALE: As indicated
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No.: -A10
REVISION:



1 Hardstand Area
1 : 750

DATE PRINTED: 6/1/2023 1:09:49 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

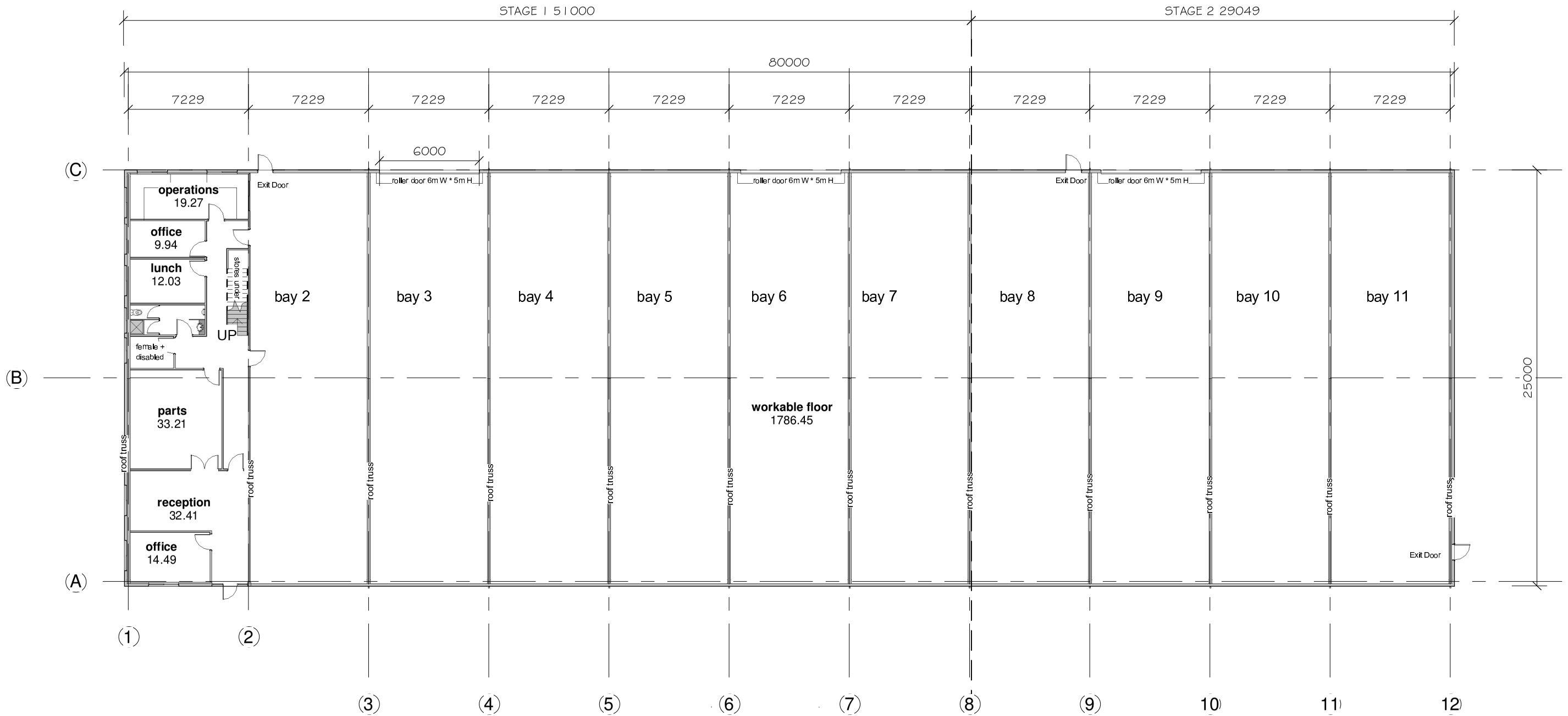
TASTECH BUILDING SYSTEMS
T 03 6263 5800
65 South Arm Road, Rokeby TAS 7019
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Hardstand

116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 750	DATE: 04/04/23	JOB / DRAWING No. -A11	REVISION
DRAWN: Author			



1 FLOOR PLAN

1 : 250

0 5 10 m

DATE PRINTED: 16/05/2023 4:13:19 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

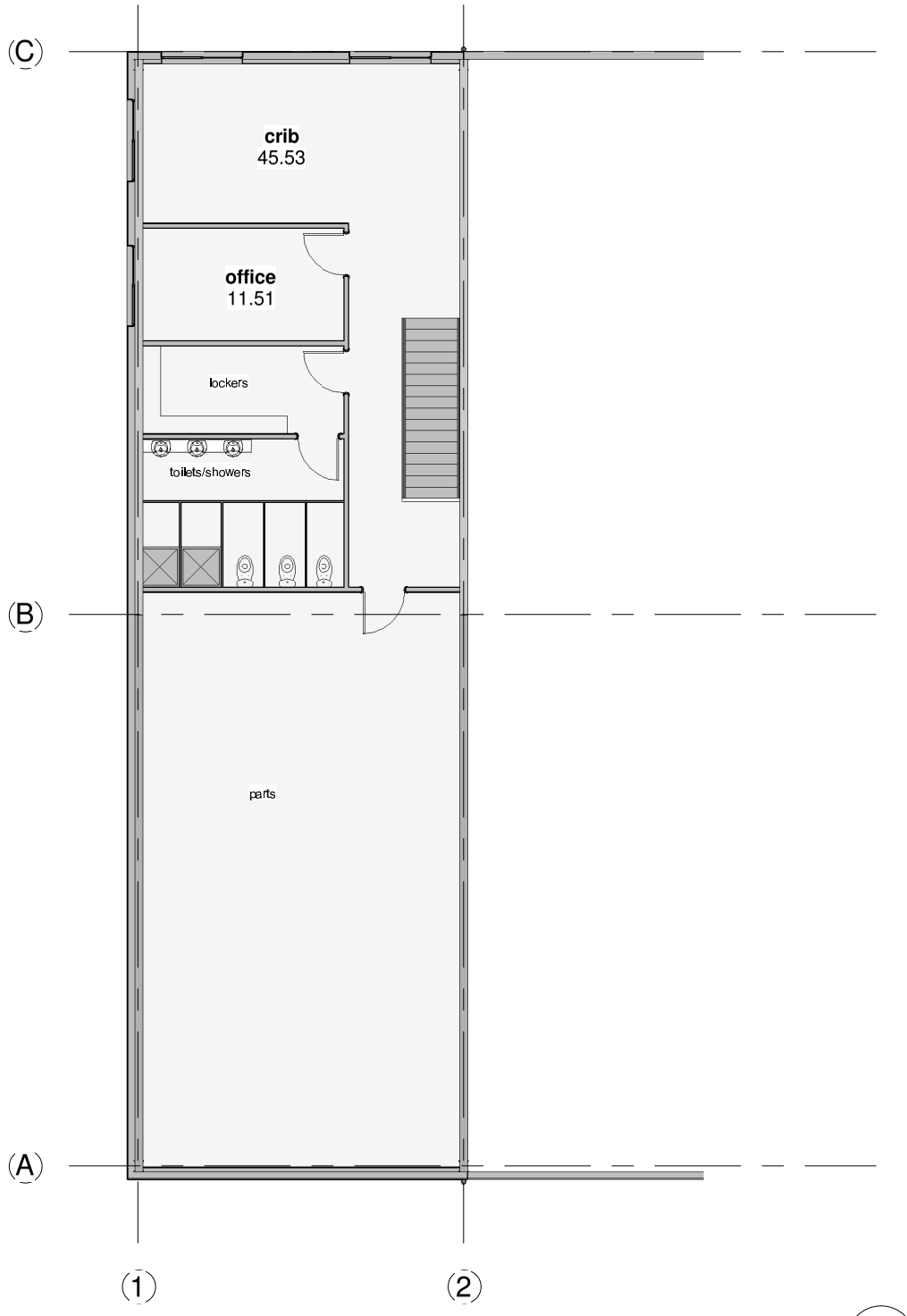
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Proposed Shed 80*25 — Floor Plan
116 /118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 250
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -B1
REVISION



1 Upper floor
1 : 150

DATE PRINTED: 16/05/2023 4:13:20 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

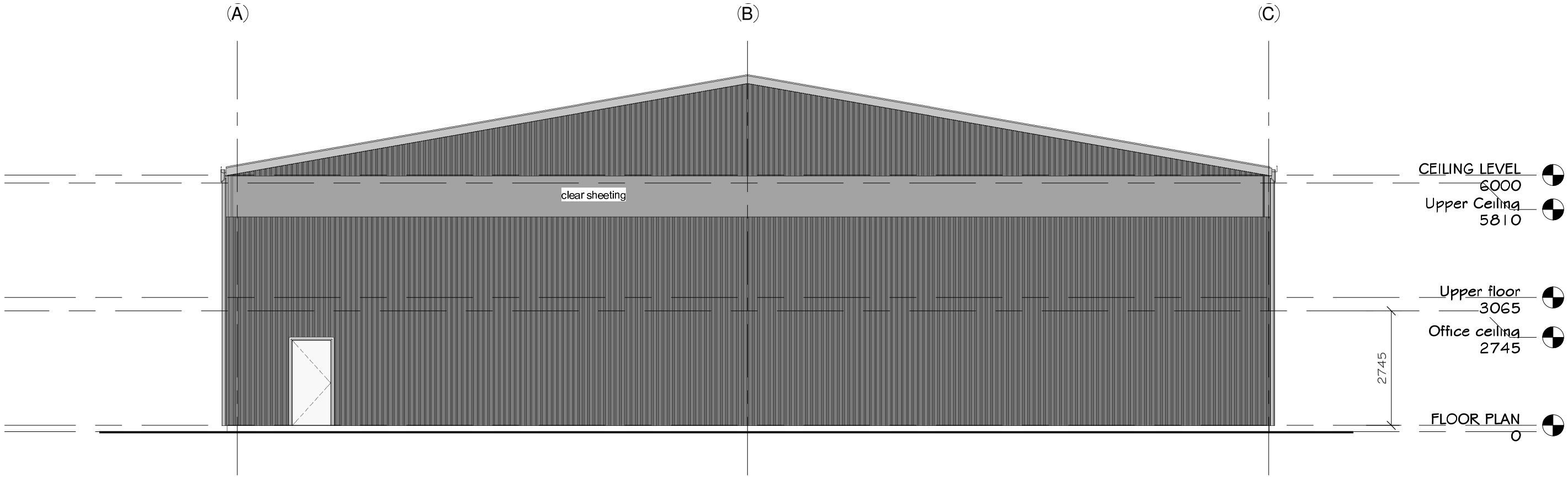
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

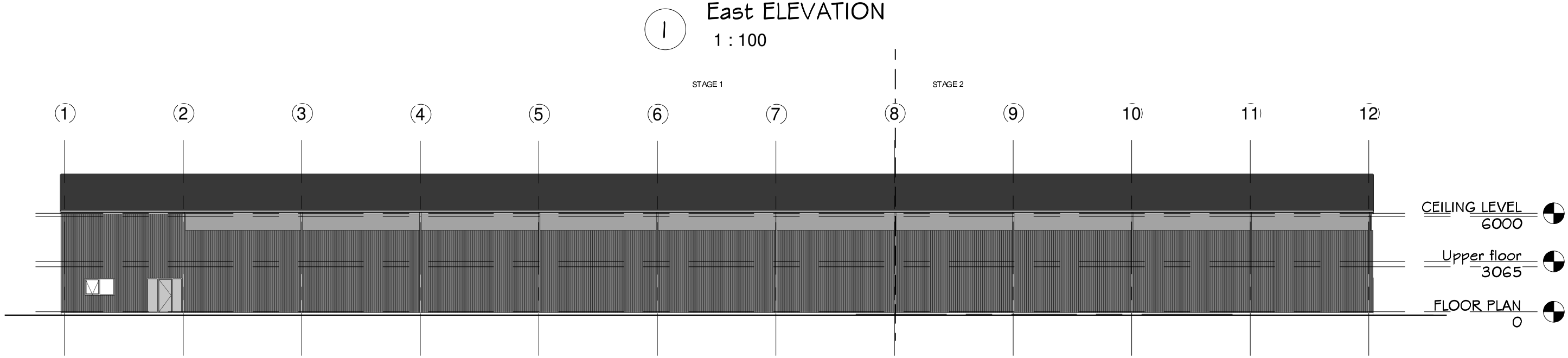
Rev.	AMENDMENT	DATE

Proposed Shed 80*25 — Upper Floor
116 /118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 150
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -B2
REVISION



1 East ELEVATION
1 : 100



2 Sth ELEVATION
1 : 250

DATE PRINTED: 16/05/2023 4:13:20 PM

CLIENT:
Broken Car and Truck Investments Pty Ltd

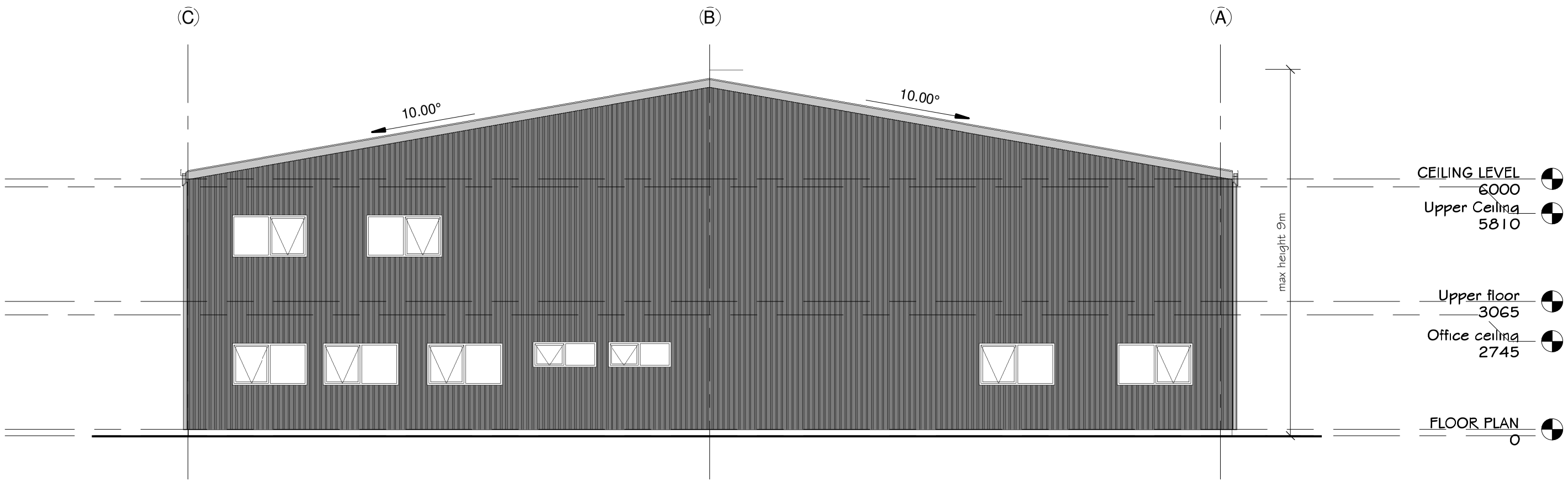
0 10 20 30 40 50mm
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

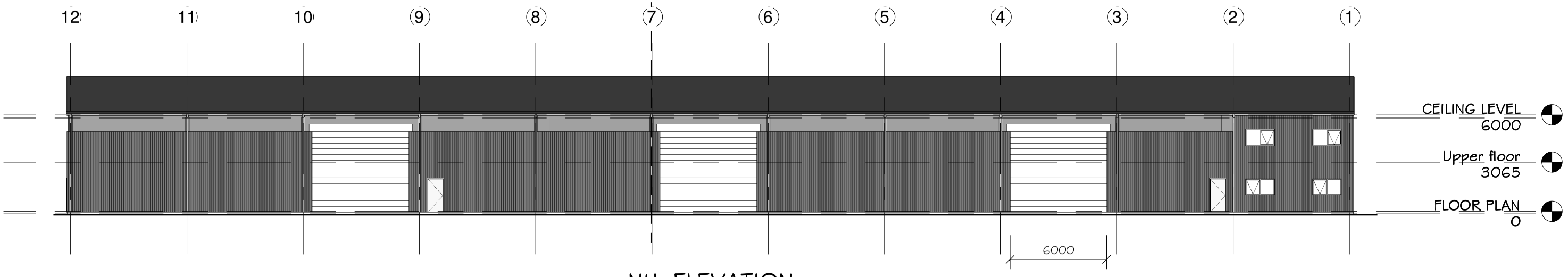
Proposed Shed 80*25 Elevations
116 /118 Cove Hill Road
Bridgewater 7030

SCALE: As indicated
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -B3
REVISION



1 West ELEVATION

1 : 100



2 Nth ELEVATION

1 : 250

DATE PRINTED: 16/05/2023 4:13:20 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

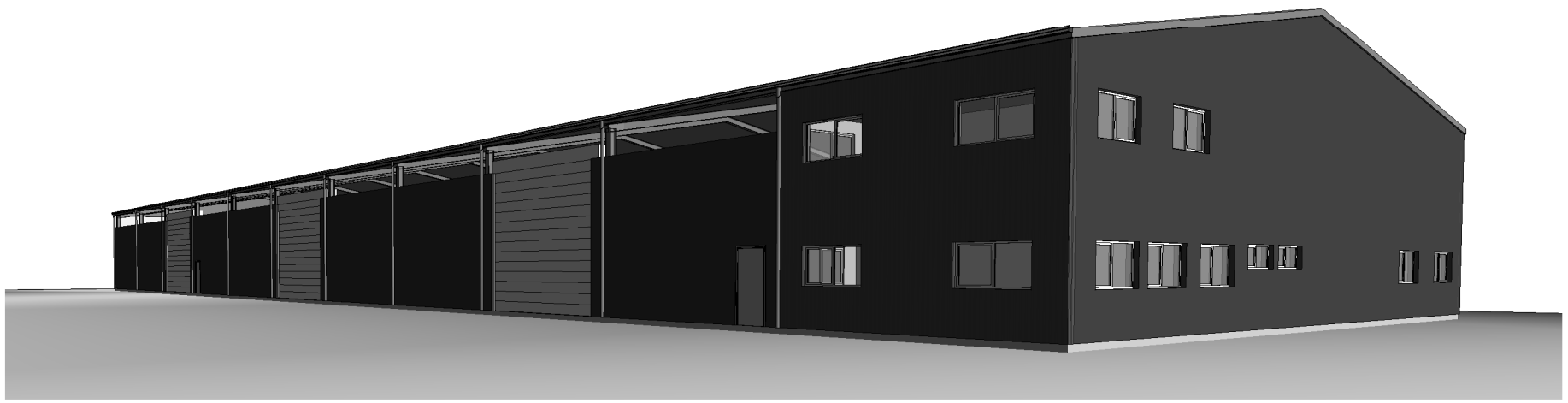
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

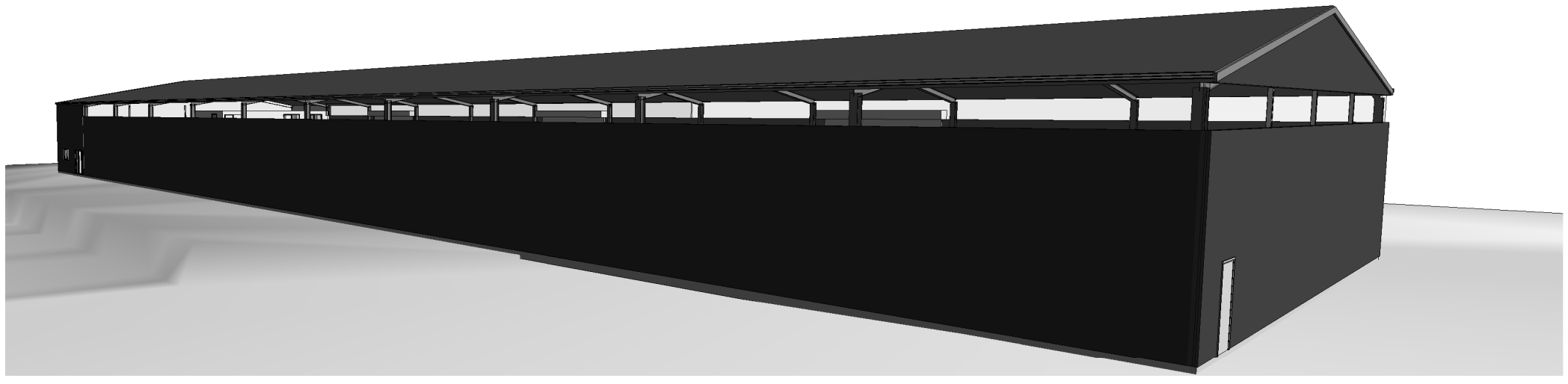
Rev.	AMENDMENT	DATE

Proposed Shed 80*25 — Elevations
116 /118 Cove Hill Road
Bridgewater 7030

SCALE: As indicated
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No.: -B4
REVISION:



3 3D View 3



1 3D View 2

DATE PRINTED: 16/05/2023 4:13:21 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Proposed Shed 80*25 Visuals
116 /118 Cove Hill Road
Bridgewater 7030

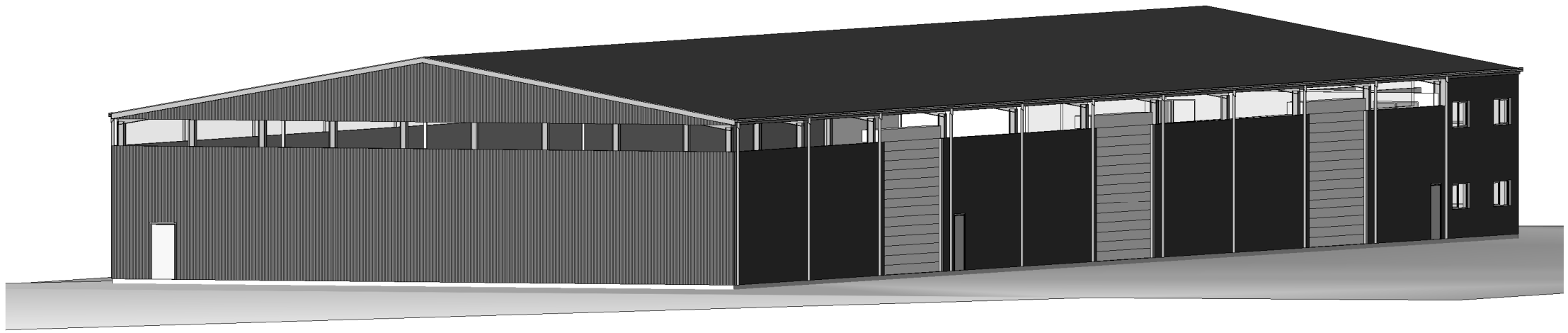
SCALE:

DRAWN: Author

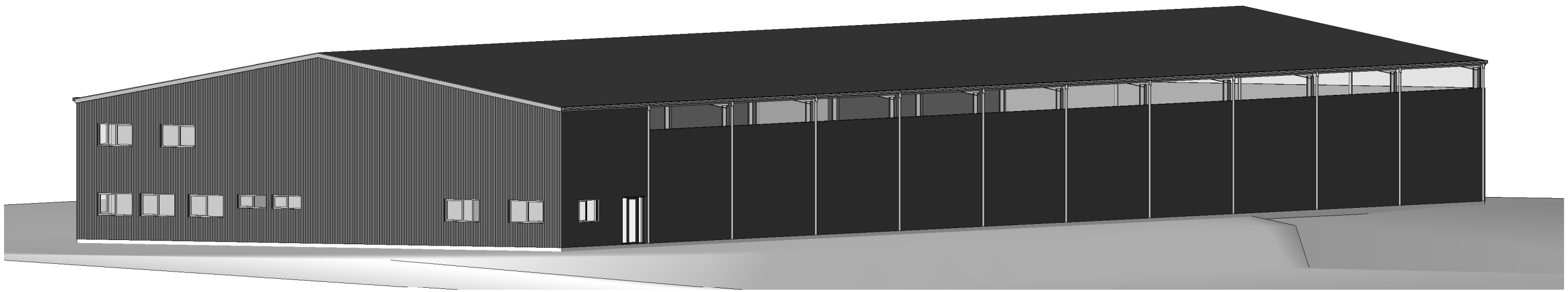
DATE: 04/04/23

JOB / DRAWING No. -B5

REVISION



1 NORTH EAST VISUAL



2 SOUTH WEST VISUAL

DATE PRINTED: 16/05/2023 4:13:21 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Proposed Shed 80*25 — Visuals
116 /118 Cove Hill Road
Bridgewater 7030

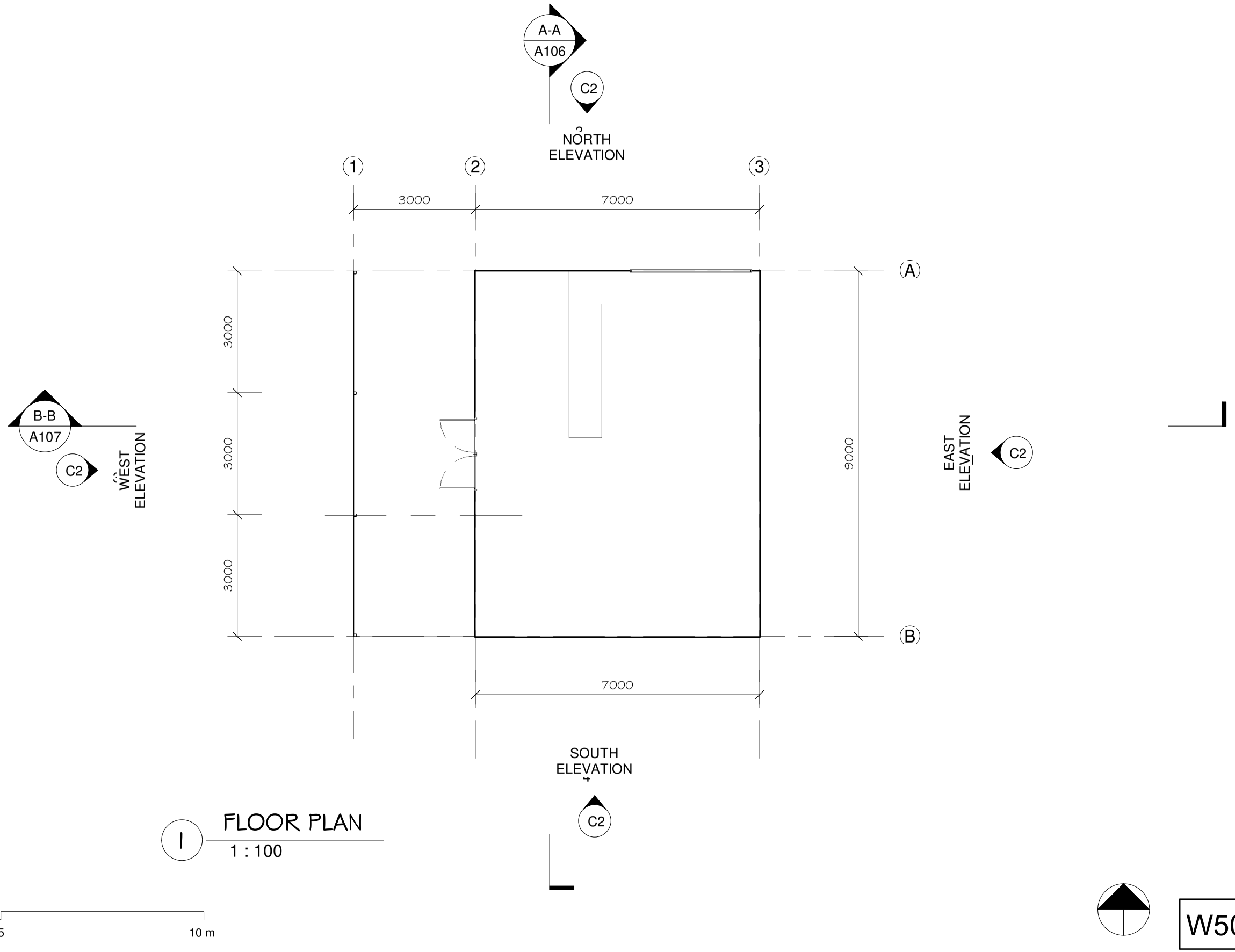
SCALE:

DRAWN: Author

DATE: 04/04/23

JOB / DRAWING No. -B6

REVISION



1 FLOOR PLAN
1 : 100

W50N3

DATE PRINTED: 5/17/2023 1:06:06 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

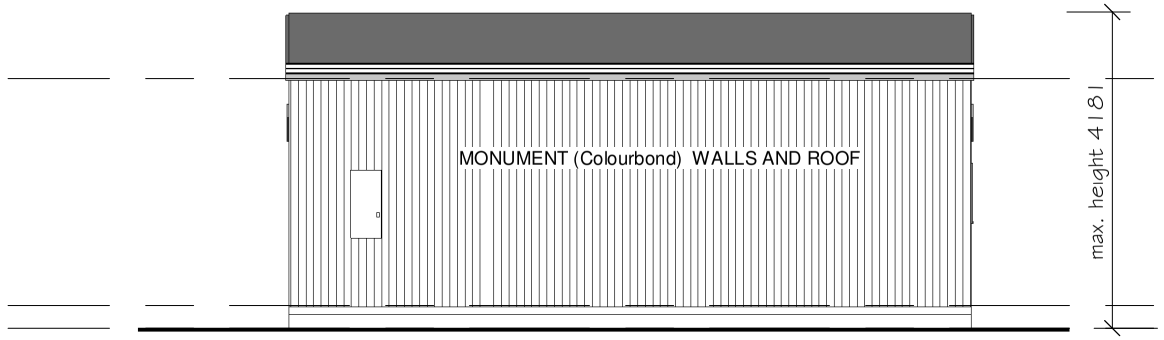
TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

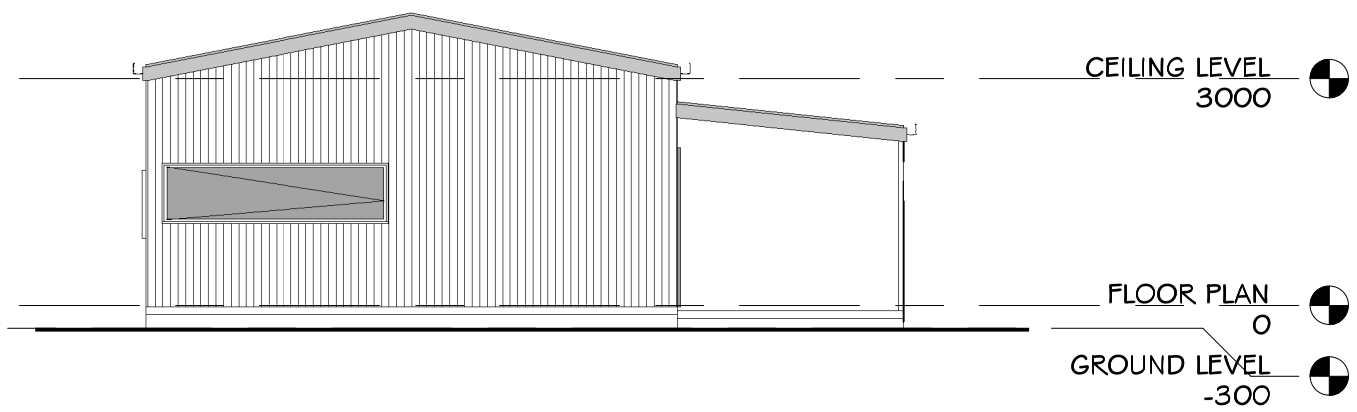
Proposed temp Office
116/118 Cove Hill Road
Bridgewater 7030

Floor Plan

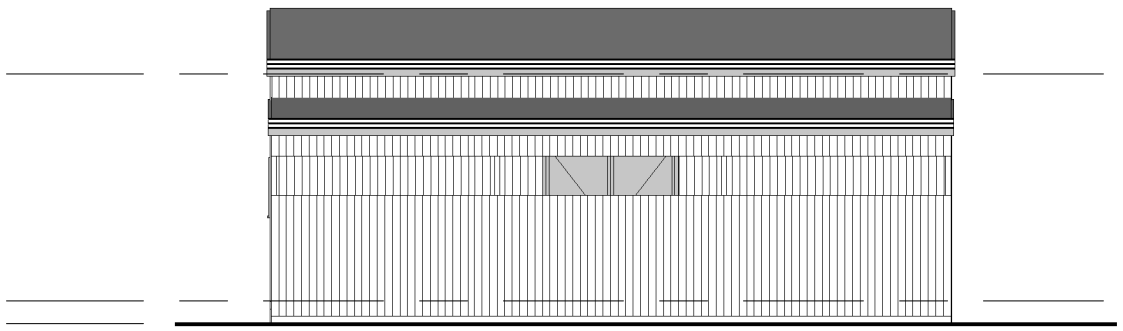
SCALE: 1 : 100	DATE: 04/04/23	JOB / DRAWING No. -C1	REVISION
DRAWN: Author			



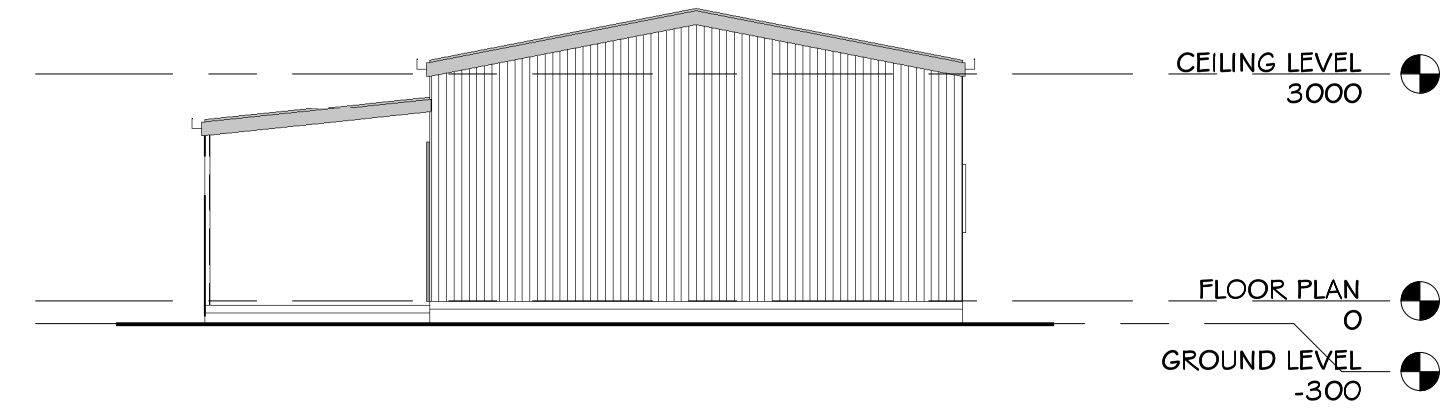
1 EAST ELEVATION
1 : 100



2 NORTH ELEVATION
1 : 100



3 WEST ELEVATION
1 : 100



4 SOUTH ELEVATION
1 : 100

0 5 10 m

DATE PRINTED: 5/17/2023 1:06:06 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

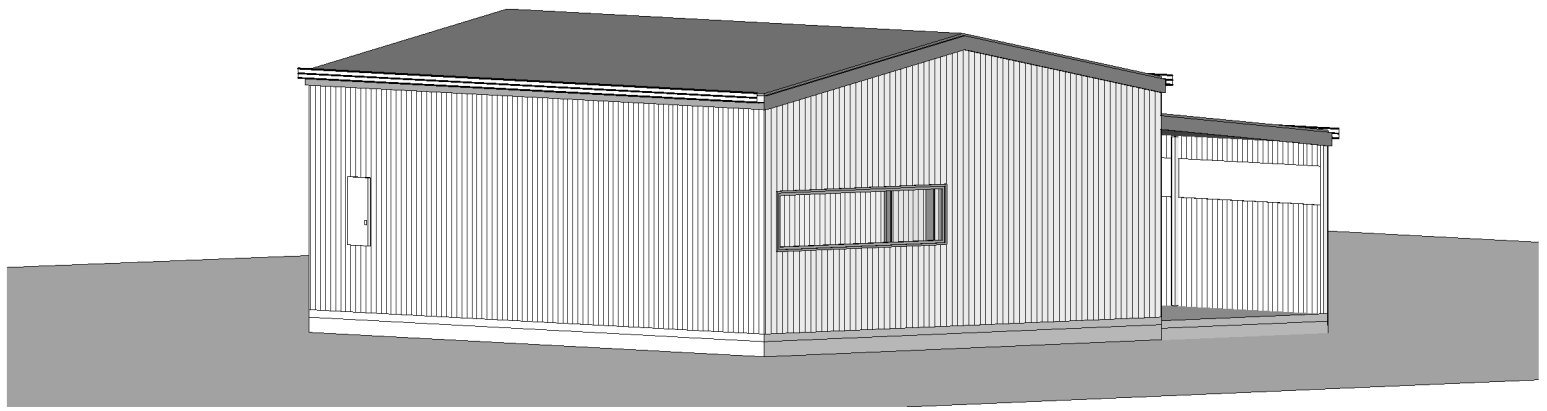
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

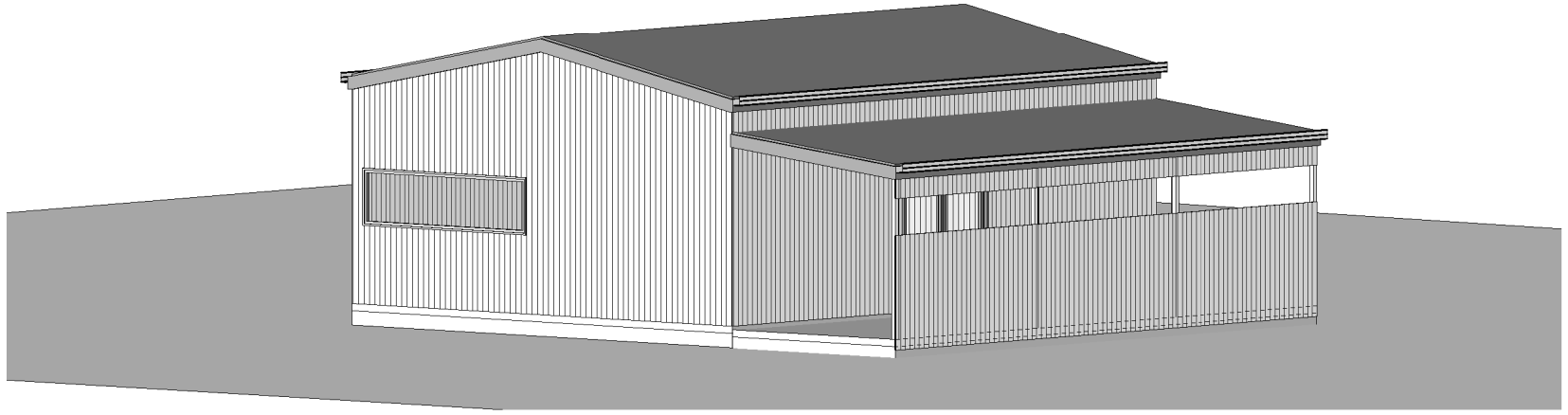
Rev.	AMENDMENT	DATE

Proposed temp Office — Elevations
116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 100
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -C2
REVISION



1 NE VISUAL



2 NW VISUAL

DATE PRINTED: 5/17/2023 1:06:07 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Proposed temp Office
116/118 Cove Hill Road
Bridgewater 7030

3D Visuals

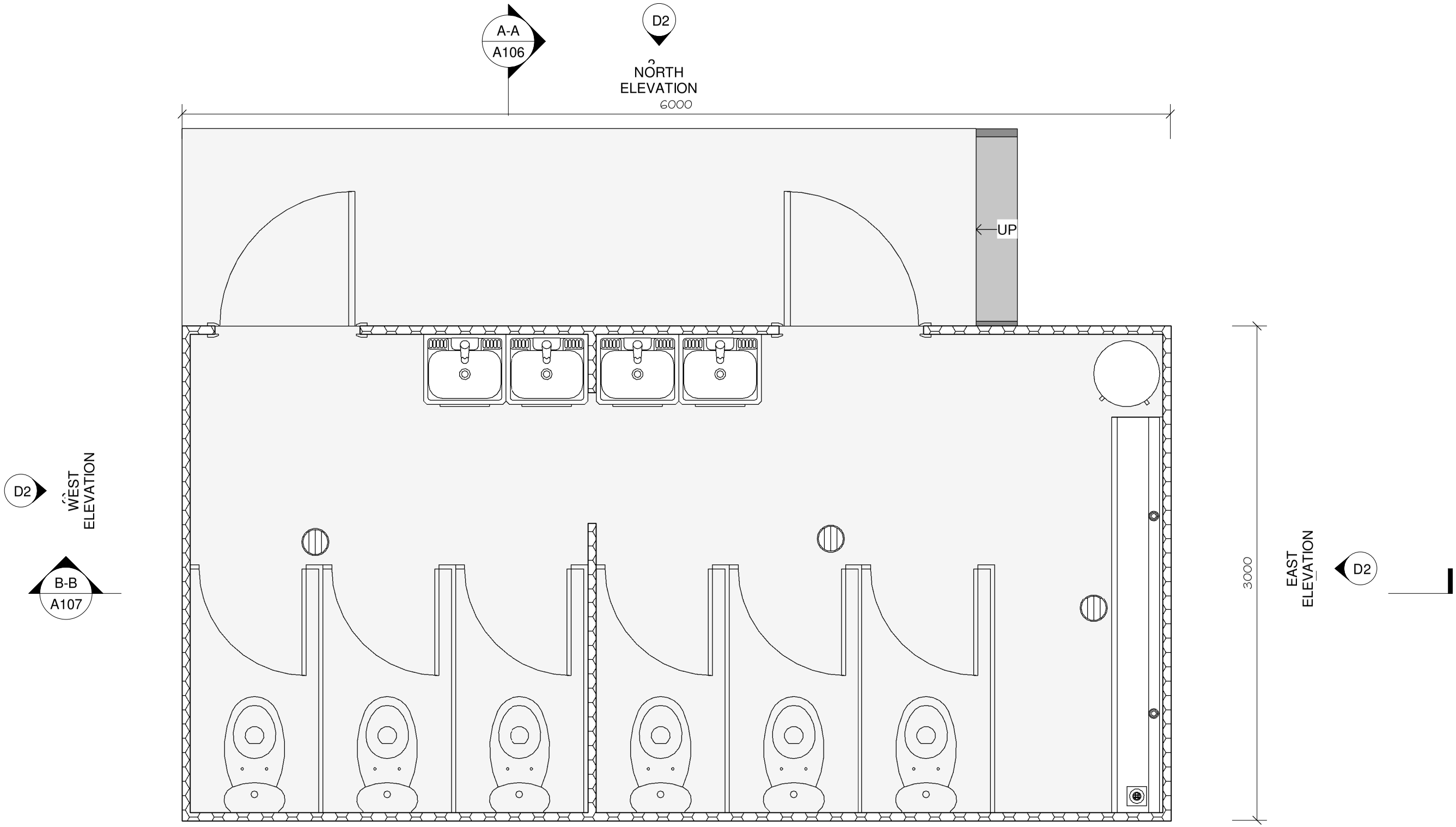
SCALE:

DATE: 04/04/23

DRAWN: Author

JOB / DRAWING No. -C3

REVISION



1 FLOOR PLAN
1 : 25

0 5 10 m

W50N3

DATE PRINTED: 5/17/2023 1:14:18 PM

CLIENT: Broken Car and Truck

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

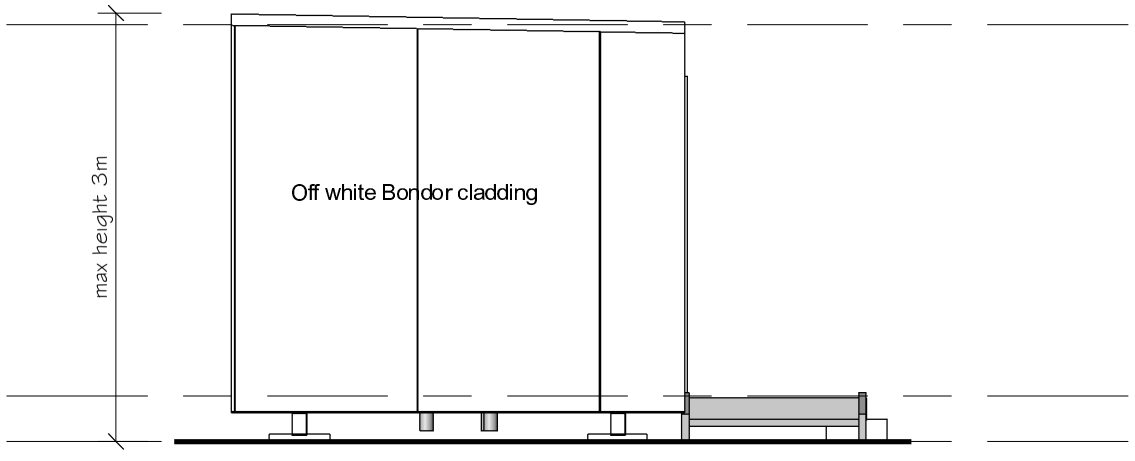
TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

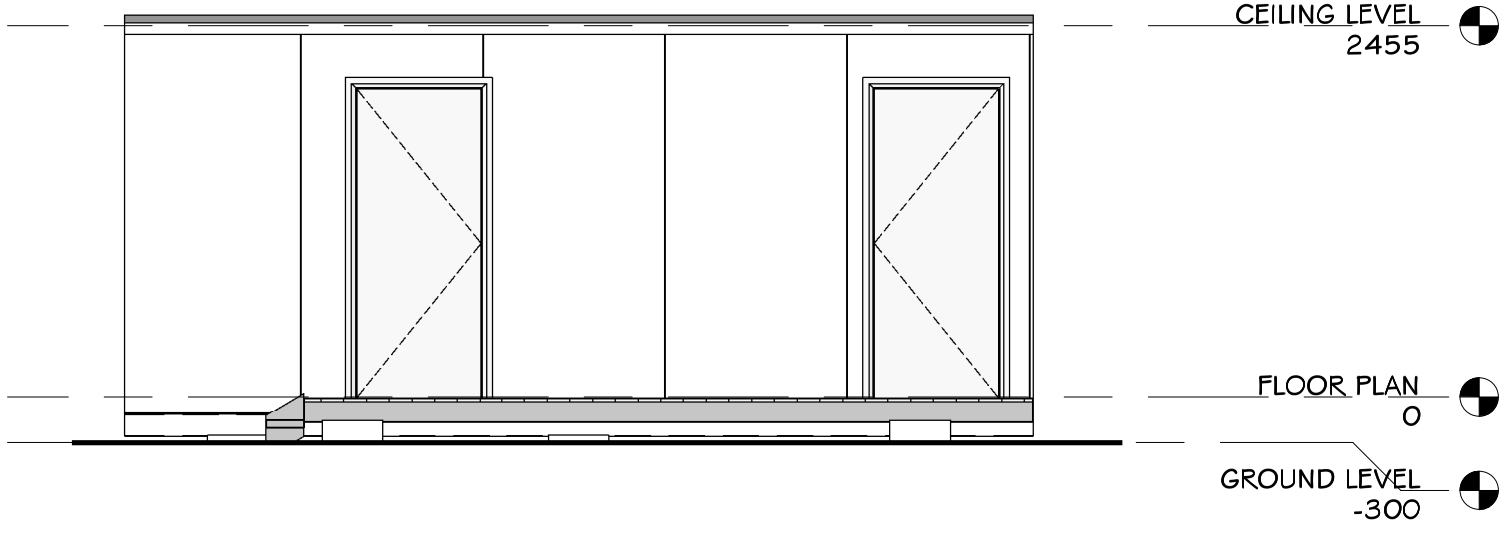
Temp Ablusions
116/118 Cove Hill Road
Bridgewater 7030

Floor Plan

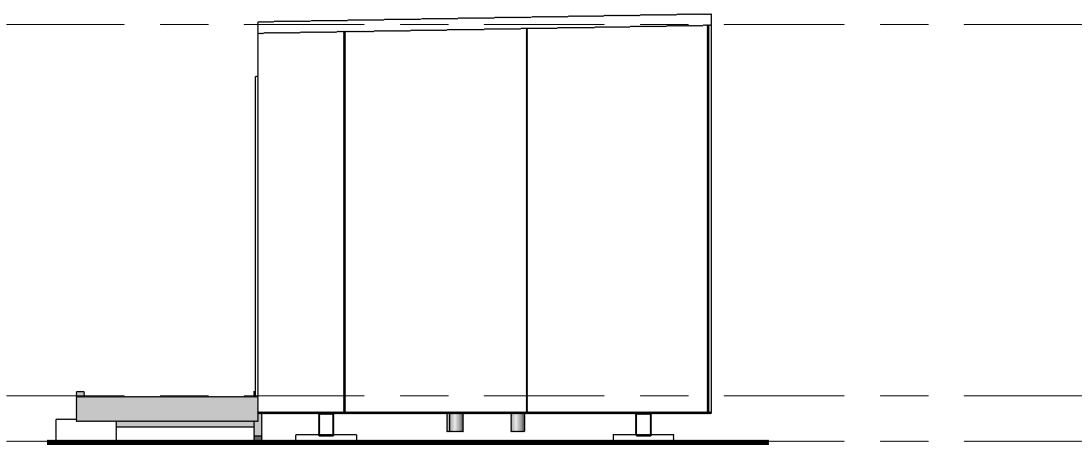
SCALE: 1 : 25
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -D1
REVISION



1 EAST ELEVATION
1 : 50

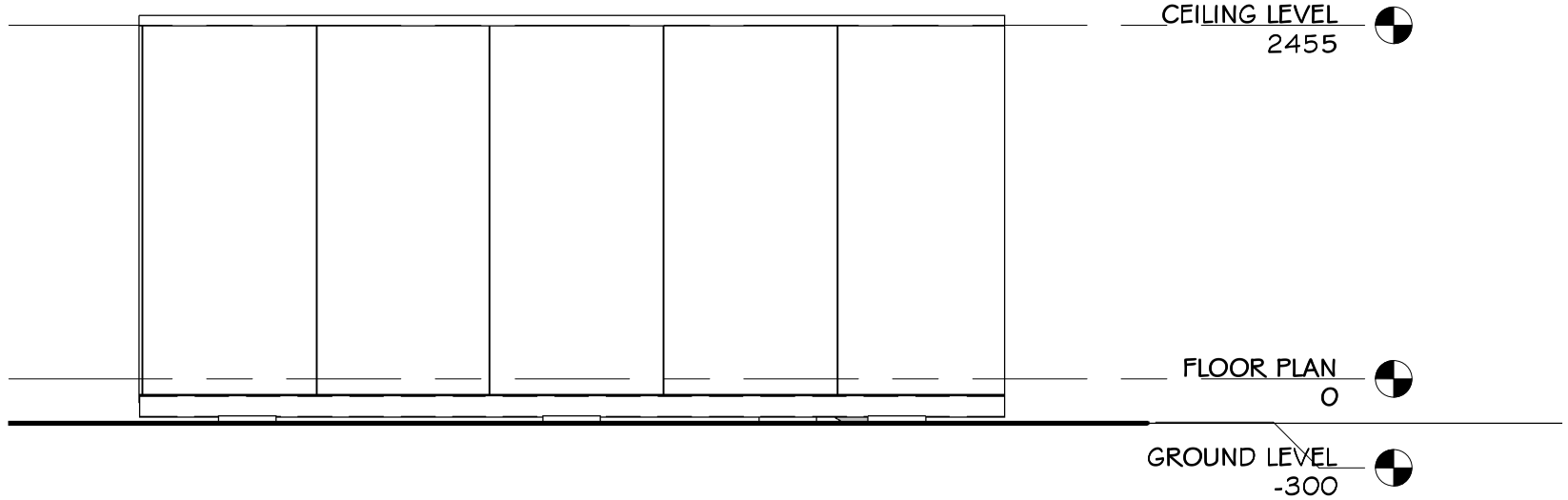


2 NORTH ELEVATION
1 : 50



3 WEST ELEVATION
1 : 50

0 5 10 m



4 SOUTH ELEVATION
1 : 50

DATE PRINTED: 5/17/2023 1:14:18 PM

CLIENT: Broken Car and Truck

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

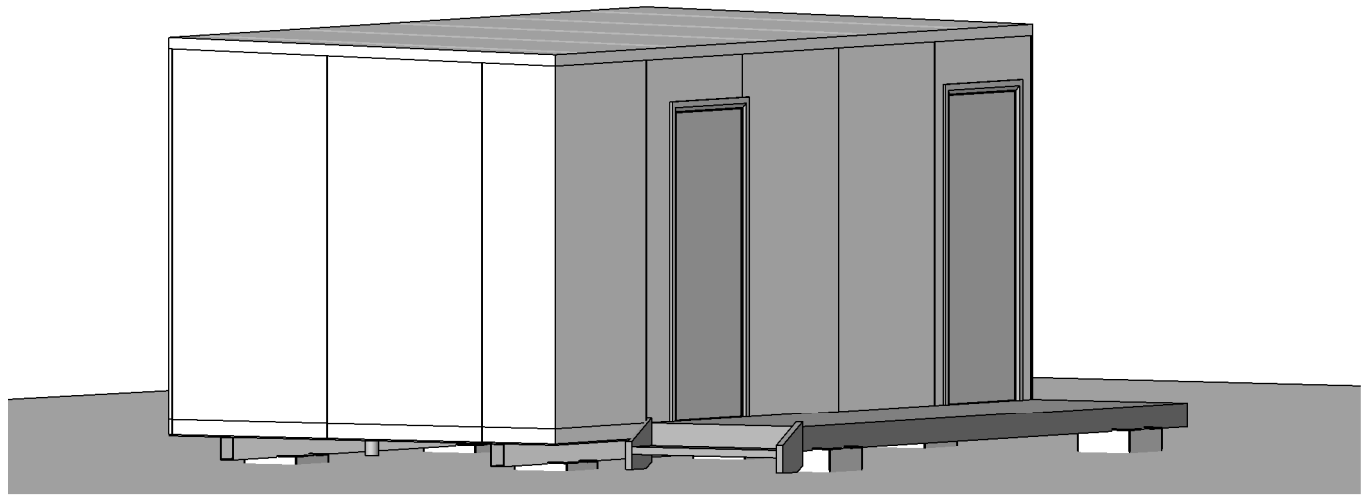
TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

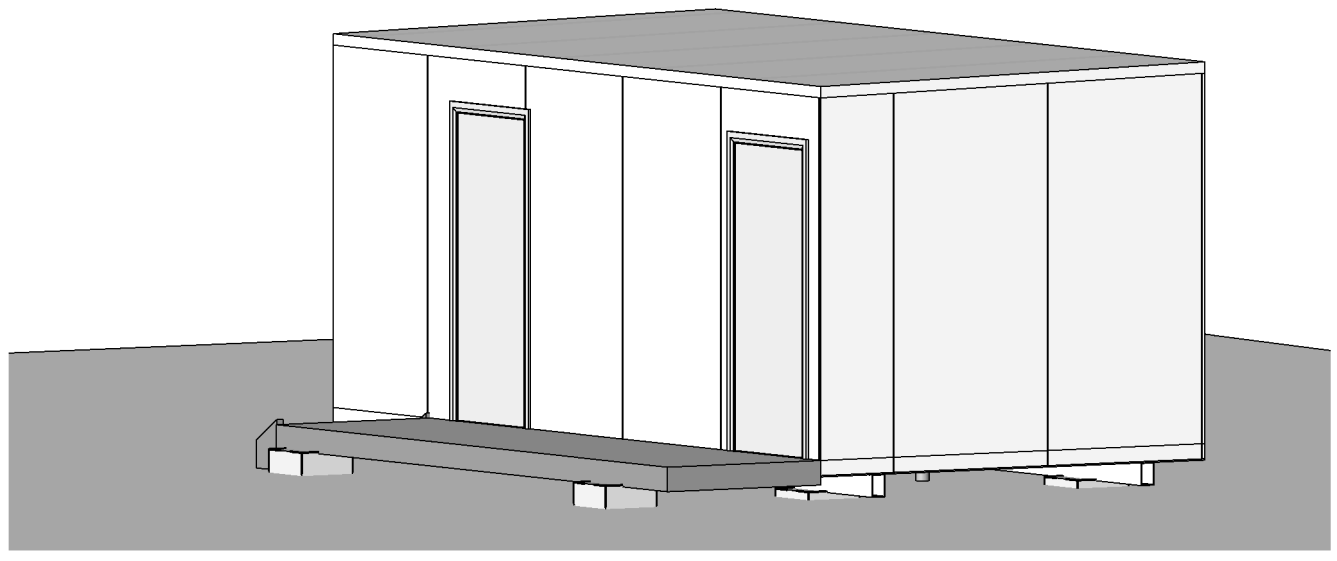
Temp Ablusions
116/118 Cove Hill Road
Bridgewater 7030

Elevations

SCALE: 1 : 50
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -D2
REVISION



1 NE VISUAL



2 NW VISUAL

DATE PRINTED: 5/17/2023 1:14:18 PM

CLIENT: Broken Car and Truck

0 10 20 30 40 50mm

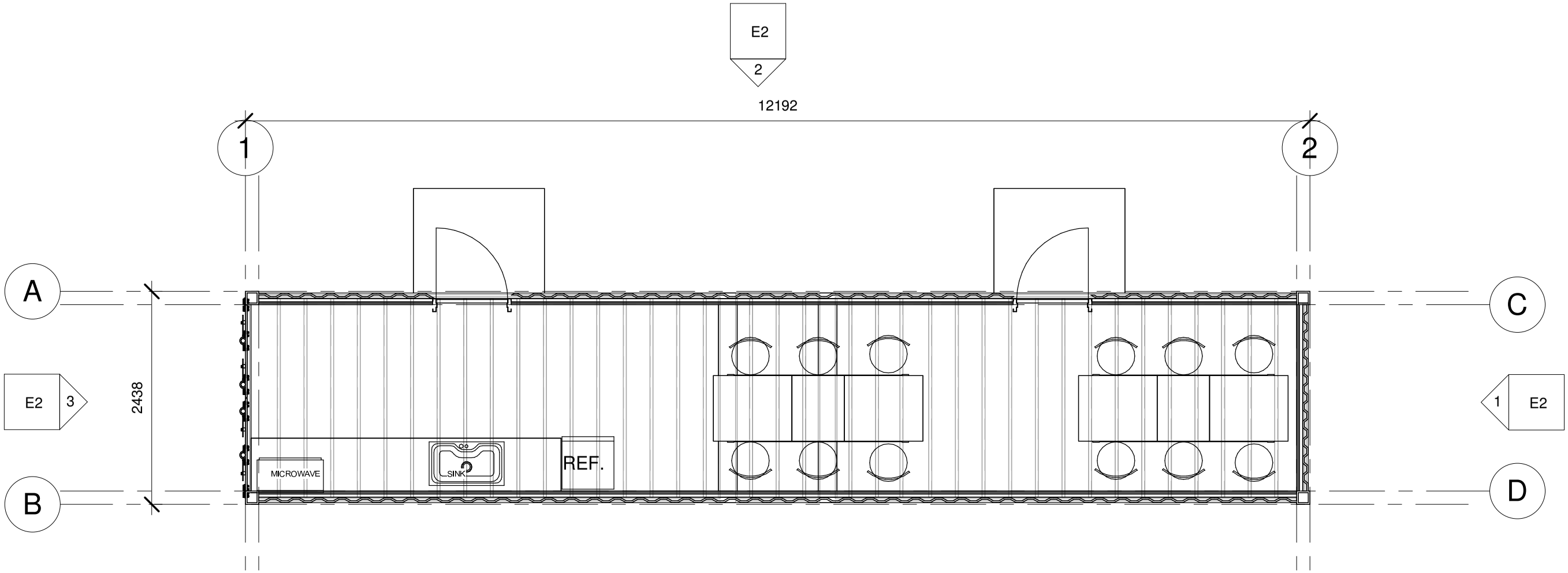
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Temp Ablusions — 3D Visuals
116/118 Cove Hill Road
Bridgewater 7030

SCALE:
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -D3
REVISION



1 Floor Plan
1 : 50

DATE PRINTED: 5/17/2023 1:19:51 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

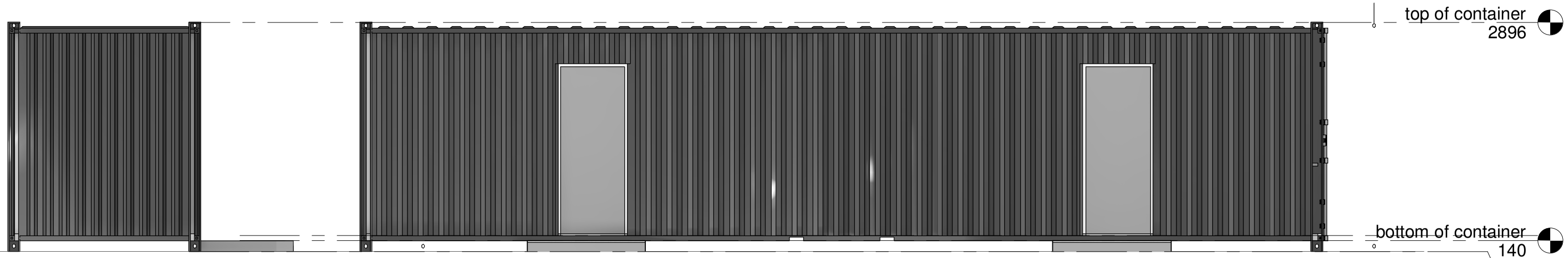
PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

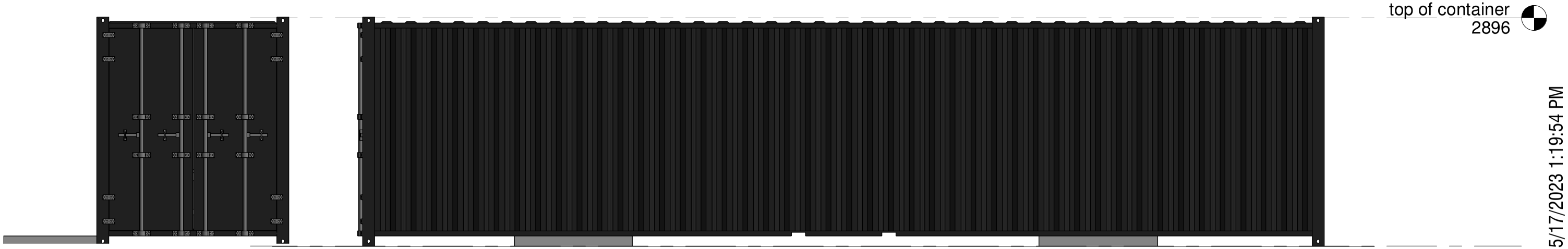
Proposed Crib — Floor Plan
116/118 Cove Hill Road
Bridgewater 7030

SCALE: 1 : 50
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -E1
REVISION



1 East
1 : 50

2 North
1 : 50



3 West
1 : 50

4 South
1 : 50

DATE PRINTED: 5/17/2023 1:19:54 PM

CLIENT:
Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm
PRINT REDUCTION BAR | A3 SHEET

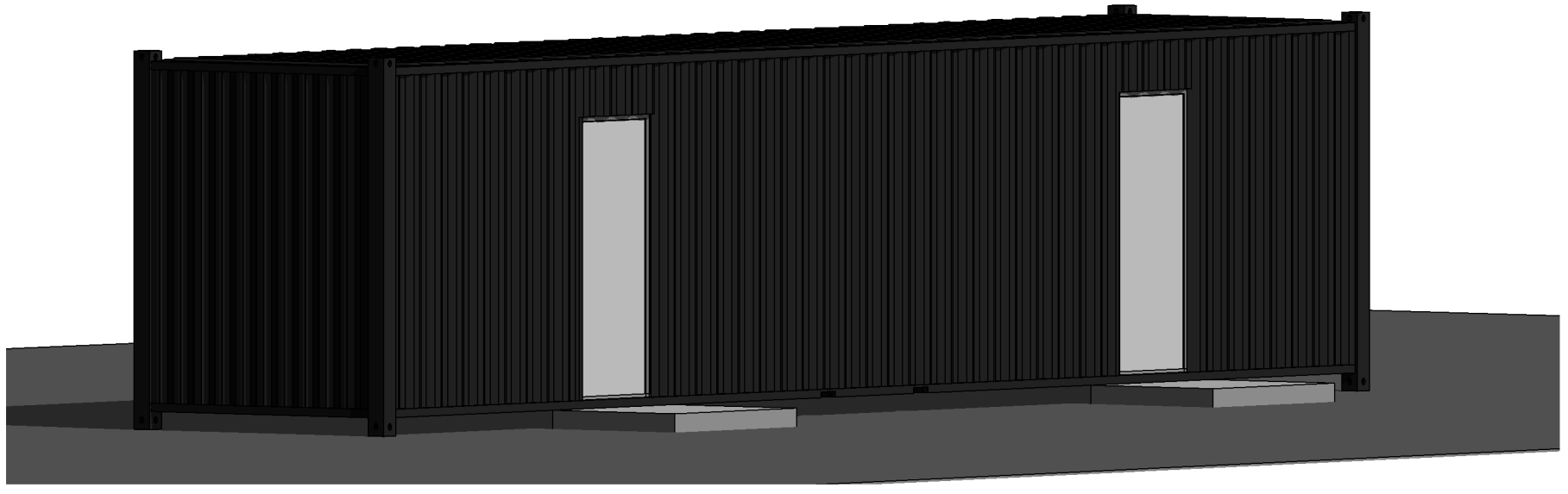
TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

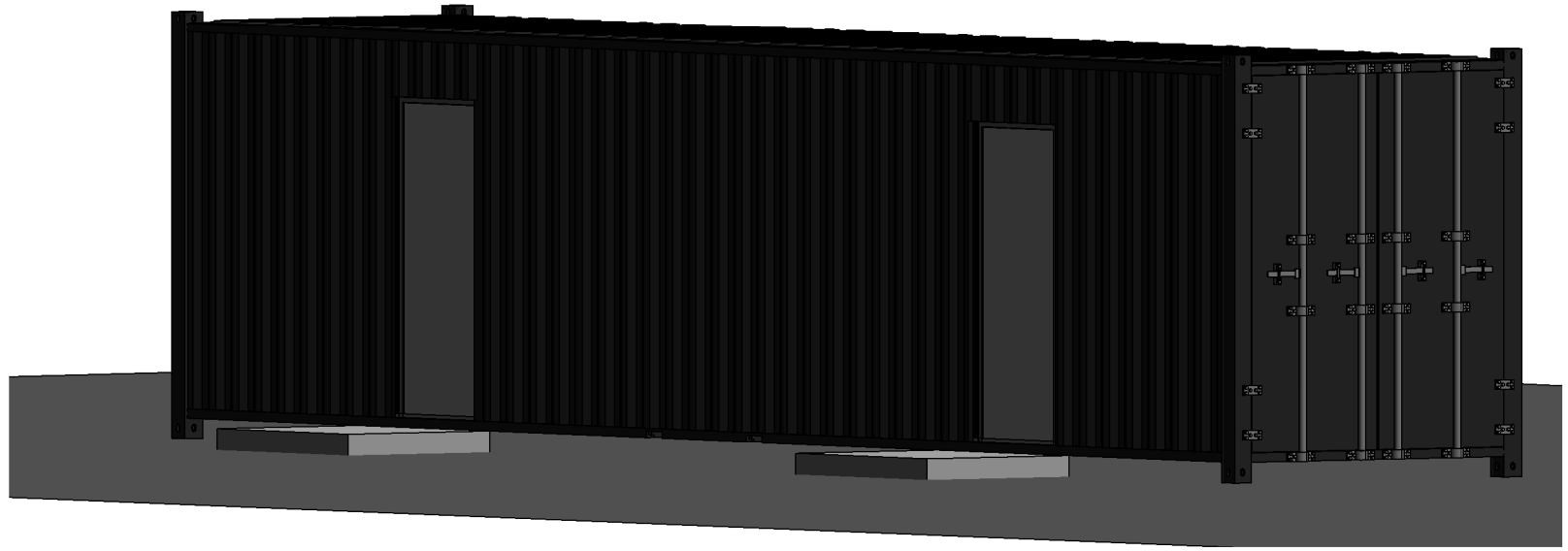
Proposed Crib
116/118 Cove Hill Road
Bridgewater 7030

Elevations

SCALE: 1 : 50
DRAWN: Author
DATE: 04/04/23
JOB / DRAWING No. -E2
REVISION



1 NE Visual



2 NW Visual

DATE PRINTED: 5/17/2023 1:19:55 PM

CLIENT: Broken Car and Truck Investments Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A3 SHEET

TASTECH BUILDING SYSTEMS
T 03 6263 5800 | M 0428995334
80 Cowle Road Bridgewater TAS 7030
E info@tastechbuildings.com.au |
W www.tastechbuildings.com.au

Rev.	AMENDMENT	DATE

Proposed Crib — Visuals
116/118 Cove Hill Road
Bridgewater 7030

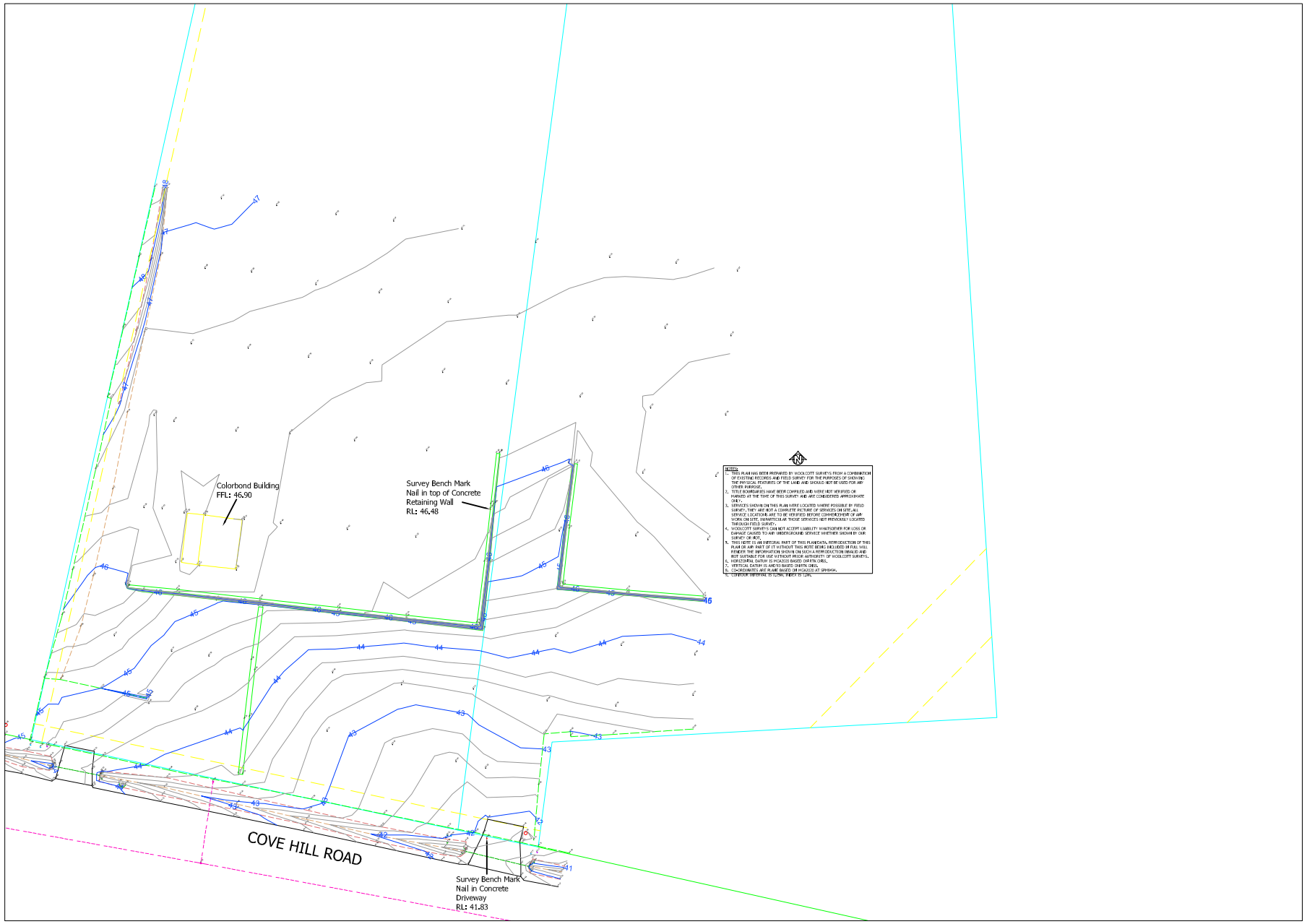
SCALE:

DRAWN: Author

DATE: 04/04/23

JOB / DRAWING No. -E3

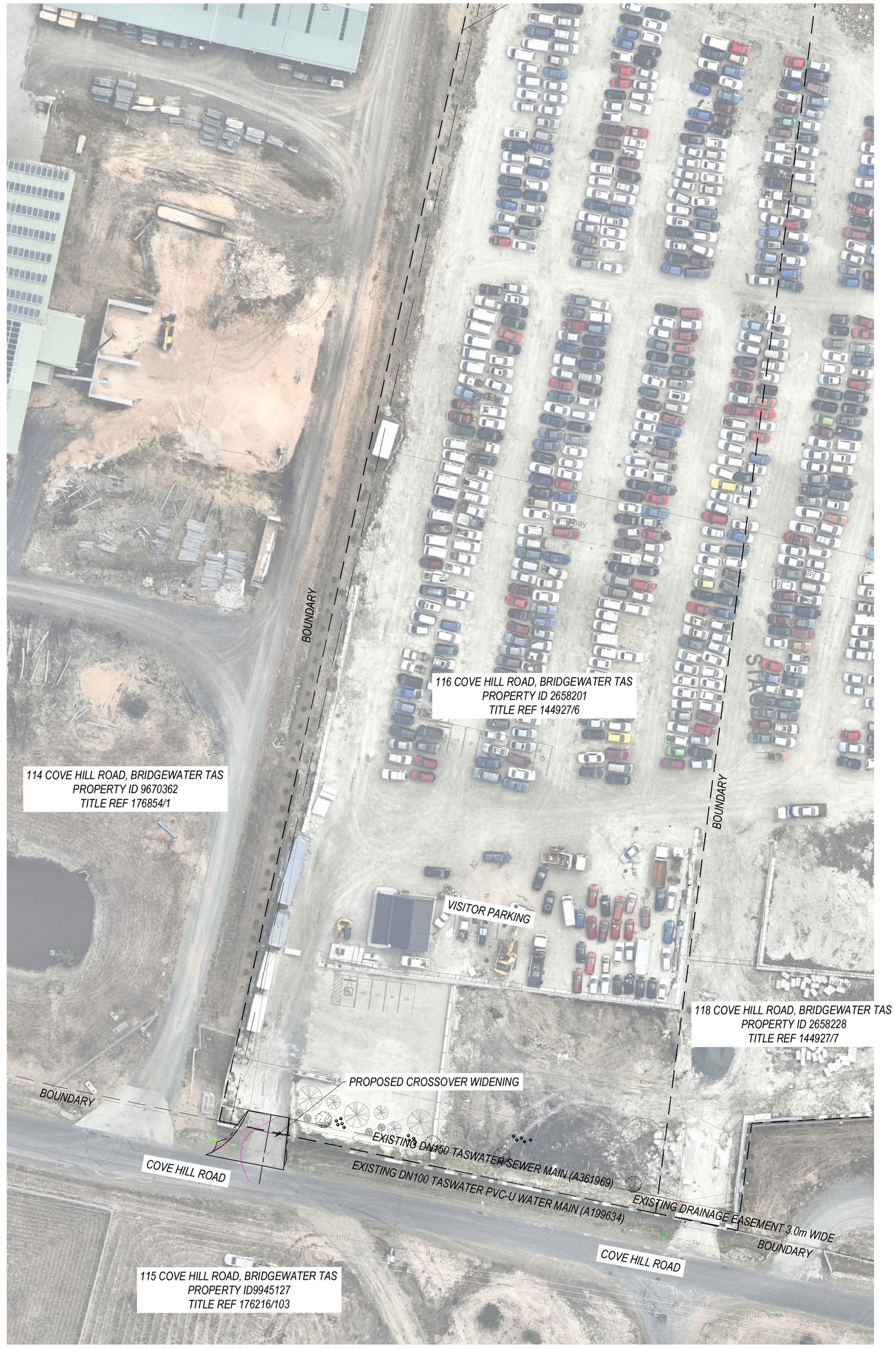
REVISION


Colorbond Building
FFL: 46.90
Survey Bench Mark
Nail in top of Concrete
Retaining Wall
RL: 46.48
Notes:
1. THIS PLAN HAS BEEN PREPARED BY WOOLCOTT SURVEYS FROM A COMBINATION OF EXISTING RECORDS AND FIELD SURVEY FOR THE PURPOSES OF SHOWING THE FEATURES AND CONTOURS OF THE LAND AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.
2. TITLE BOUNDARIES HAVE BEEN COMPILED AND WERE NOT VERIFIED OR MARKED AT THE TIME OF THIS SURVEY AND ARE CONSIDERED APPROXIMATE ONLY.
3. SERVICES SHOWN ON THIS PLAN WERE LOCATED WHERE POSSIBLE BY FIELD SURVEY, THEY ARE NOT A COMPLETE PICTURE OF SERVICES ON SITE. ALL SERVICE LOCATIONS ARE TO BE VERIFIED BEFORE COMMENCEMENT OF ANY WORKS AND ANY ADDITIONAL OR UNREGULAR THOSE SERVICES NOT PREVIOUSLY LOCATED THROUGH FIELD SURVEY.
4. WOOLCOTT SURVEYS CAN NOT ACCEPT LIABILITY WHATSOEVER FOR LOSS OR DAMAGE CAUSED TO ANY UNDERGROUND SERVICE WHETHER SHOWN BY OUR SURVEY OR NOT.
5. THIS NOTE IS AN ESSENTIAL PART OF THIS PLAN/DATA. REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH A REPRODUCTION INVALID AND WOOLCOTT SURVEYS PTY LTD WILL NOT ACCEPT ANY LIABILITY OF SUCH LOSTT SURVEYS.
6. HORIZONTAL DATUM IS MGA2020 BASED ON PM 12861.
7. VERTICAL DATUM IS AHD71 BASED ON PM 12861.
8. CHAINBEARINGS ARE IN LINE BASED ON MGA2020 AT ZP49GHA.
9. CONTOUR INTERVAL IS 0.5M, VERIFY TO 1.0M.
Survey Bench Mark
Nail in Concrete
Driveway
RL: 41.83
COVE HILL ROAD

CIVIL / HYDRAULIC DRAWINGS
PROPOSED DRIVEWAY ALTERATIONS
ONSHORE DESIGNS
116 COVEHILL ROAD, BRIDGEWATER
TAS 7030

DRAWING SCHEDULE

SHEET	DRAWING TITLE	REV	DATE
C01	TITLE & OVERALL PLAN	0	03/07/2023
C02	NOTES & LEGEND	0	03/07/2023
C03	CIVIL GENERAL LAYOUT	0	03/07/2023
C04	LONG SECTION	0	03/07/2023
C05	CROSS SECTIONS	0	03/07/2023



OVERALL PLAN
SCALE 1:500 (mm) (A1)

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
0	FOR DEVELOPMENT APPROVAL	CF	04/07/2023

BASE SURVEY SUPPLIED BY
WOOLCOTT SURVEYS
SURVEYED ON: 13/05/2022
HORIZONTAL DATUM: MGA2020 AHD 83
GRID: GDA2020, ZONE 55
LEVEL DATUM: AHD

CKEMP DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBRIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

PROPOSED DRIVEWAY ALTERATIONS
CLIENT: ONSHORE DESIGNS
116 COVE HILL ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
TITLE AND OVERALL PLAN

SCALE 1:100

DESIGNED	DRAWN	SCALE
CF	CF	1:100 @ A1
PROJECT	SHEET NO.	REVISION
CKD-CIV-086	C01	0

LEGEND

NEW STORMWATER LINE(DN100 DWV SN6 @ MIN 1.0% GRADE

NEW DOMESTIC WATER

NEW DN100 DWV SN6 SEWER @ MIN 1.65% GRADE

NEW DN100 CHARGED STORMWATER LINE @ MIN 1.0% GRADE

SHAPED TABLE DRAIN

BOUNDARY LINE

EXISTING FENCE LINE

EXISTING OVERHEAD POWER LINE

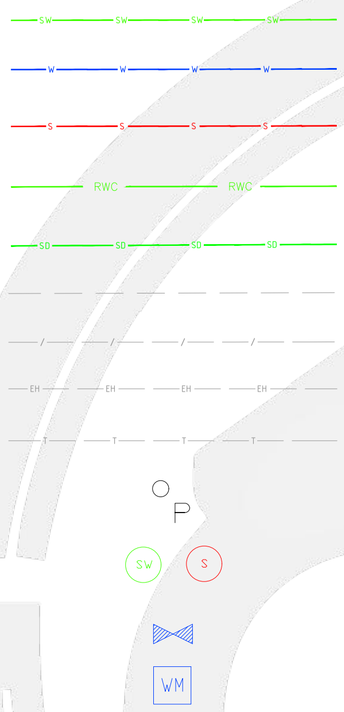
EXISTING TELECOMMUNICATIONS LINE

EXISTING POWER POLE

NEW STORMWATER/SEWER MANHOLE

WATER VALVE

WATER METER



GENERAL NOTES

1. ALL PRIVATE PLUMBING WORKS SHALL GENERALLY BE IN ACCORDANCE WITH THE AS3500, NATIONAL CONSTRUCTION CODE VOL 3 (PLUMBING CODE OF AUSTRALIA), & THE IPWEA MUNICIPAL STANDARD SPECIFICATION AND DRAWINGS AS APPLICABLE.
2. UNLESS NOTED OTHERWISE THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE WORKS INCLUDING ANY WORKS IN THE ROAD RESERVATION AND ON ADJACENT PRIVATE PROPERTIES.
3. THE CONTRACTOR SHALL CONFIRM THE PRESENCE & LOCATION OF ALL EXISTING SERVICES ON THE SITE & WITHIN THE AREA OF WORKS & CLEARLY IDENTIFY ALL DANGEROUS SERVICES UNDERGROUND & OVERHEAD.
4. ALL DRAIN AND SERVICES TIE IN LEVELS & LOCATIONS ARE TO BE CONFIRMED BEFORE COMMENCEMENT OF CONSTRUCTION WORK.
5. UNLESS NOTED OTHERWISE ALL SERVICE CONNECTIONS TO COUNCIL OR WATER AUTHORITY SERVICE SHALL BE UNDERTAKEN BY THE COUNCIL OR WATER AUTHORITY AT THE CONTRACTOR'S COST.
6. ALL REDUNDANT SERVICE LINES SHALL BE CUT AND PLUGGED AT EXTERNAL BOUNDARIES. WITHIN THE SITE BOUNDARY ALL REDUNDANT SERVICES SHALL BE REMOVED AND DISPOSED OF.
7. REDUNDANT SERVICE TRENCHES SHALL BE BACKFILLED WITH FULLY COMPACTED MATERIAL APPROPRIATE FOR THE AREA OF THE DEVELOPMENT SITE.
8. ALL UNDERGROUND WATER AND SEWER WORKS MUST BE TESTED AND INSPECTED BY COUNCIL OR TASWATER PRIOR TO BACKFILL.
9. ALL PIPES UNDER TRAFFIC ABLE AREAS ARE TO BE BACK FILLED FULL DEPTH WITH 20MM F.C.R. AND FULLY COMPACTED.

SERVICES NOTES:

WATER SUPPLY

1. ALL WATER WORKS IN PUBLIC AREAS ARE TO BE IN ACCORDANCE WITH WATER SUPPLY CODE WSA 03-2011-3.1 MRWA ED 2 AND TASWATER'S SUPPLEMENT.
2. ALL WATER SUPPLY WORKS IN PRIVATE AREAS SHALL BE IN ACCORDANCE WITH IN ACCORDANCE WITH WITH AS3500.1 & AS3500.4
3. ALL INTERNAL WATER SUPPLY SERVICES SHALL BE PLANNED AND INSTALLED BY THE PLUMBING CONTRACTOR IN ACCORDANCE WITH AS3500.
4. ALL HOT WATER LINES ARE TO BE FULLY LAGGED.
5. ALL HOT WATER SERVICES TO BE INSTALLED WITH TEMPERING DEVICES PROVIDING WATER AT NO GREATER THAN 45 DEGREES C. IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3500.4.
6. ALL MODIFICATIONS AND ADDITIONS TO WATER SERVICES THAT CONNECT DIRECTLY ONTO TASWATER MAINS MUST BE CARRIED BY TASWATER AT THE CONTRACTOR'S COST.
7. ALL WATER SUPPLY PIPES ARE TO BE LOCATED WITH MINIMUM CLEARANCES TO OTHER SERVICES IN ACCORDANCE WITH THAT SPECIFIED IN THE WATER SUPPLY CODE WSA 03-2011-3.1 MRWA ED E - TABLE 5.5.

SERVICES NOTES:

SEWER

1. ALL SEWER WORKS IN PUBLIC AREAS ARE TO BE IN ACCORDANCE WITH WSA 02-2002-2.3 MRWA EDITION 1.0 AND TASWATER'S SUPPLEMENT.
2. ALL SEWER WORKS IN PRIVATE AREAS SHALL BE IN ACCORDANCE WITH AS3500.2.
3. UNLESS NOTED OTHERWISE ALL SEWER DRAINS SHALL BE PVC SEWER CLASS "SN8" TO AS1260.
4. ALL SEWER MANHOLE LIDS TO BE GATIC TYPE, HEAVY DUTY FOR TRAFFIC AREAS, LIGHT DUTY FOR NON TRAFFIC AREAS.
5. WHERE NECESSARY ALL EXISTING MANHOLE & PIT TOPS SHALL BE ADJUSTED TO SUIT NEW SURFACE LEVELS. PROVIDE AND INSTALL NEW APPROVED LIDS WHERE NECESSARY.
6. PROVIDE ALL NECESSARY TESTING & INSPECTION OPENINGS TO PIPE WORK. WHERE RELEVANT PROVIDE ADDITIONAL INSPECTION OPENINGS TO ALLOW IDENTIFICATION OF THE ORIGIN OF BLOCKAGES.
7. ALL MAINTENANCE STRUCTURES ARE TO BE IN ACCORDANCE WITH WSA SEW1300 DRAWING SERIES.
8. NEW SEWER MAIN DRAINS SHALL BE DN150 UPVC CLASS 'SN8' TO AS 1260 - U.N.O.
9. ALL PRIVATE SEWER DRAINS TO BE DN100 (UNO) PVC TO AS1260.
10. MANHOLES WITH INTERNAL DROPS SHALL BE 1200 INTERNAL DIAMETER MINIMUM.

WORKPLACE HEALTH & SAFETY NOTES:

BEFORE THE CONTRACTOR COMMENCES WORK THE CONTRACTOR SHALL UNDERTAKE A SITE SPECIFIC PROJECT PRE-START HAZARD ANALYSIS / JOB SAFETY ANALYSIS (JSA) WHICH SHALL IDENTIFY IN DOCUMENTED FORM;

- THE TYPE OF WORK.
- HAZARDS AND RISKS TO HEALTH AND SAFETY.
- THE CONTROLS TO BE APPLIED IN ORDER ELIMINATE OR MINIMIZE THE RISK POSED BY THE IDENTIFIED HAZARDS.
- THE MANNER IN WHICH THE RISK CONTROL MEASURES ARE TO BE IMPLEMENTED.

THESE ARE TO BE SUBMITTED TO THE SUPERINTENDENT AND/OR OTHER RELEVANT WORKPLACE SAFETY OFFICERS.

FOR THIS PROJECT; POSSIBLE HAZARDS INCLUDE (BUT ARE NOT LIMITED TO):

- EXCAVATION OF ANY TYPE & DEPTHS
- CONTAMINATED SOILS
- CONSTRUCTION IN GROUND WITH HIGH WATER TABLE
- FELLING / LOPPING &/OR REMOVAL OF EXISTING TREES/VEGETATION
- UNDERGROUND STRUCTURES (MANHOLES / SUMPS / ETC)
- CONFINED SPACES
- OVERHEAD POWER LINES
- UNDERGROUND STORMWATER, WATER AND SEWER PIPES
- TELECOMMUNICATION CABLES - BOTH UNDERGROUND & OVERHEAD
- ELECTRICAL/POWER CABLES - BOTH UNDERGROUND & OVERHEAD
- WORKING AT HEIGHTS
- WORKING WITH ASBESTOS CONTAINING MATERIALS
- TRAFFIC MANAGEMENT

EARTHWORKS & DRIVEWAY NOTES:

1. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".
2. ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED AND GRUBBED IN THE AREA OF PROPOSED WORKS.
3. NEW OR MODIFIED DRIVEWAY CROSSINGS SHALL BE IN ACCORDANCE WITH IPWEA STANDARD DRAWING TSD-R09-v1 AND MUST BE INSPECTED AND APPROVED BY COUNCIL.
4. EXCAVATED AND IMPORTED MATERIAL USED AS FILL IS TO BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
5. FILL MATERIAL SHALL BE WELL GRADED AND FREE OF BOULDERS OR COBBLES EXCEEDING 150mm IN DIAMETER UNLESS APPROVED TO BE OTHERWISE.
6. FILL REQUIRED TO SUPPORT DRIVEWAYS INCLUDING FILL IN EMBANKMENTS THAT SUPPORT DRIVEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
   - TOP SOIL AND ORGANIC MATTER SHALL BE STRIPPED TO A MINIMUM OF 100mm.
   - THE SUB GRADE SHALL HAVE A MINIMUM BEARING CAPACITY OF 100 kPa.
   - FILL IN EMBANKMENTS SHALL BE KEYED 150mm INTO NATURAL GROUND.
   - THE FILL SHALL BE COMPACTED IN HORIZONTAL LAYERS OF NOT MORE THAN 200mm.
   - EACH LAYER SHALL BE COMPACTED TO A MINIMUM DENSITY RATIO OF 95% STD, IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT THIS IS ACHIEVED.
7. WHERE THE ABOVE REQUIREMENTS CANNOT BE ACHIEVED THE ENGINEER SHALL BE CONSULTED AND THE FORMATION SHALL BE PROOF ROLLED (UNDER SUPERVISION OF THE ENGINEER) TO CONFIRM AN APPROVED BASE.
8. CONCRETE PAVEMENTS SHALL BE CURED FOR A MINIMUM OF 3 DAYS USING A CURRENT BEST PRACTICE METHOD.
9. SAWN CONTROL JOINTS SHALL BE CONSTRUCTED AS SOON AS POSSIBLE WITHOUT RAVELLING THE JOINT, GENERALLY THIS SHALL BE WITHIN 24 HOURS.
10. BATTERS SHALL BE SET TO A SAFE ANGLE OF REPOSE IN ACCORDANCE WITH THE BCA VOL 2 AS INDICATED BELOW:

NOTE: WHERE SITE CONDITIONS ARE UNSUITABLE FOR A BATTERED BANK CONSULT THE DESIGNER OR ENGINEER FOR A SUITABLE RETAINING WALL DESIGN. EMBANKMENTS THAT ARE TO BE LEFT EXPOSED MUST BE STABILISED BY VEGETATION OR SIMILAR WORKS TO PREVENT SOIL EROSION.

SEE TABLE BELOW

SOIL TYPE (* REFER BCA 3.2.4)		EMBANKMENT SLOPES H:L	
		COMPACTED FILL	CUT
STABLE ROCK (A*)		2:3	8:1
SAND (A*)		1:2	1:2
SILT (P*)		1:4	1:4
CLAY	FIRM CLAY	1:2	1:1
	SOFT CLAY	NOT SUITABLE	2:3
SOFT SOILS (P)		NOT SUITABLE	NOT SUITABLE

GENERAL NOTES

1. THE LOCATION OF UNDERGROUND SERVICES ARE INDICATIVE ONLY. THE EXACT POSITION OF EACH SERVICE PRESENT SHOULD BE ESTABLISHED ON SITE WITH THE RESPECTIVE SERVICE OWNERS PRIOR TO COMMENCING CONSTRUCTION.
2. ALL WORKS SHALL BE IN ACCORDANCE WITH LGAT STANDARD DRAWINGS (U.N.O.)
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE (U.N.O.)

CIVIL WORKS

1. THE CONTRACTOR SHALL PREPARE AND PROVIDE A SEDIMENT AND EROSION CONTROL PLAN FOR THE WORKS. NO WORK SHALL COMMENCE UNTIL THIS PLAN HAS BEEN APPROVED BY THE SUPERINTENDENT.
2. NO MACHINERY IS TO BE PLACED ON OR HAVE ACCESS TO ANY AREA OUTSIDE THE LIMIT OF WORKS UNLESS APPROVED BY THE PRINCIPAL.
3. THE LIMIT OF WORKS LINE SHALL BE TEMPORARILY FENCED WITH BUNTING BEFORE ANY WORKS COMMENCE.
4. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE FOLLOWING DEPARTMENT OF STATE GROWTH SPECIFICATIONS:
   R21 - CLEARING AND GRUBBING, R22 - EARTHWORKS, R23 - SUBGRADE ZONE, R31 - OPEN DRAINS AND CHANNELS, R36 - KERB AND GUTTER, R40 - PAVEMENT BASE AND SUBBASE, R40.1 NOMINATION OF MATERIALS FORM, EXPLANATORY NOTES, R43 - PAVEMENT AND SHOULDER MAINTENANCE, R51 - SPRAYED BITUMINOUS SURFACING, R55 - ASPHALT PLACEMENT, R64 - PAVEMENT MARKING, R80 - MISCELLANEOUS CONCRETE SLABS.
5. NO CLEARING OF VEGETATION OR REMOVAL OF TOPSOIL IS PERMITTED IN ANY AREA NOT DIRECTLY RELATED TO THE CONSTRUCTION WORKS OR AS NOTED ON THE DRAWINGS OTHER THAN REMOVAL OF TREES IDENTIFIED AS IN A HAZARDOUS CONDITION.
6. ALL STRIPPED TOPSOIL IS TO BE STORED IN AN APPROVED MANNER FOR REHABILITATION WORKS AND VEGETATION RESEEDING.
7. SURFACE REINSTATEMENT & EROSION CONTROL.
   ALL DISTURBED AND BARE GROUND INCLUDING ALL CUT & FILL SURFACES SHALL BE REHABILITATED AS FOLLOWS:
   REPLACE TOPSOIL WITH THAT RESERVED WHEN THE SITE WAS STRIPPED (50 THICK). RE-SEED ALL DISTURBED GROUND USING SEED MIX APPROVED BY THE SUPERINTENDENT.
8. 140mm TWO COAT SEAL TO BE IN ACCORDANCE WITH DEPARTMENT OF STATE GROWTH STANDARD SPECIFICATION R51 - BITUMINOUS SURFACING.
9. SUBGRADE CBR FOR ROAD PAVEMENTS AND FOOTPATHS TO BE A MINIMUM OF 5%
10. ALL PAVEMENT MARKING TO BE STANDARD PAINT IN ACCORDANCE WITH DEPARTMENT OF STATE GROWTH SPECIFICATION R64 - PAVEMENT MARKING.
11. TRAFFIC MANAGEMENT PLAN INDICATING HOW, SAFE USE McROBIES RD WILL BE MAINTAINED DURING CONSTRUCTION SHALL BE SUBMITTED PRIOR TO COMMENCEMENT OF WORK.
12. CONCRETE FOOTPATH TO BE CONSTRUCTED IN ACCORDANCE WITH LGAT STANDARD DRAWINGS TSD-R11-V1.
13. CONCRETE KERBS TO BE CONSTRUCTED IN ACCORDANCE WITH LGAT STANDARD DRAWINGS TSD-R14-V1.

SERVICES NOTES:

STORMWATER

1. ALL STORMWATER WORKS TO BE IN ACCORDANCE WITH AS3500.3.
2. ALL STORM WATER PIPES LESS THAN DN300 TO BE UPVC CLASS "SN8" TO AS 1254 UNO.
3. ALL STORMWATER PIPES DN300 & LARGER TO BE 'BLACKMAX' UNO.
4. ALL SUBSOIL DRAINS SHALL COMPRISE DN80 CLASS 400 SN8 POLYETHYLENE PIPE TO AS2439.1 WITH PROPRIETARY POLYESTER PIPE FILTER SOCK SLEEVING AND FREEE DRAINING BEDDING MATERIAL.
5. PROVIDE ANCHOR BLOCKS IN ACCORDANCE WITH MSD SD-5005 WHERE PIPE GRADES EXCEED 15 %.
6. CONNECTIONS TO LIVE COUNCIL MAINS TO BE CARRIED OUT BY COUNCIL AT DEVELOPERS COST.
7. ALL DRAIN AND TRENCH CONSTRUCTION SHALL COMPLY WITH THE MUNICIPAL STANDARD DRG MSD SD 5001.
8. ALL MANHOLE LIDS IN TRAFFICABLE AREAS SHALL COMPLY WITH CLASS "C" LOAD RATING TO AUSTRALIAN STANDARD AS 3996.
9. PIT DIMENSIONS SHOWN HAVE BEEN DESIGNED BY PIT CAPACITY TABLES. THESE PITS MAY NEED TO BE INCREASED IN MINIMUM INTERNAL SIZE DUE TO THE DEPTH AS PER AS3500.3 AS PER TABLE BELOW WHICH IS THE CONTRACTORS RESPONSIBILITY TO ENSURE COMPLIANCE TO AS3500: (SEE ADJACENT)

DEPTH TO INVERT OF OUTLET		MINIMUM INTERNAL DIMENSIONS mm	
		WIDTH	LENGTH
	≤600	450	450
>600	≤900	600	600
>900	≤1200	600	900
>1200		900	900

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION	DATE
0	FOR DEVELOPMENT APPROVAL CF	04/07/2023

REV	DESCRIPTION	DATE

CKEMP DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBRIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

PROPOSED DRIVEWAY ALTERATIONS
CLIENT: ONSHORE DESIGNS
116 COVE HILL ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
NOTES AND LEGEND

SCALE 1:100 @ A1

DESIGNED	DRAWN	PROJECT	SHEET NO.	REVISION
CF	CF	CKD-CIV-086	C02	0

114 COVE HILL ROAD, BRIDGEWATER TAS
PROPERTY ID 9670362
TITLE REF 176854/1

116 COVE HILL ROAD, BRIDGEWATER TAS
PROPERTY ID 2658201
TITLE REF 144927/6

VISITOR PARKING

EXISTING SECURITY GATE

EXISTING TASWATER SEWER MANHOLE (A360926)

BOUNDARY

BOUNDARY

EXISTING DN100 TASWATER PVC-U WATER MAIN (A199634)

EXISTING DN150 TASWATER SEWER MAIN (A361969)

CH 13

CH 10

CH 0

EXISTING 2.4M SECURITY FENCE TO BE MODIFIED TO SUIT NEW DRIVEWAY WIDENING

EXISTING COUNCIL 300mm CONCRETE CULVERT TO BE EXTENDED TO EXTENTS OF WIDENED CROSSOVER WITH NEW HEADWALL, IN ACCORDANCE WITH LGAT DRAWING TSD-R05-v3 AND TSD-SW17-V3

44.5

44.5

9981

RS

CENTRELINE ALIGNMENT - EXISTING DWWY1

EXISTING DRAINAGE EASEMENT 3.0m WIDE

BOUNDARY

EXISTING DRAINAGE EASEMENT 3.0m WIDE

EXISTING DN150 TASWATER SEWER MAIN (A361969)

EXISTING DN100 TASWATER PVC-U WATER MAIN (A199634)

BOUNDARY

EXISTING COUNCIL PROVIDED DRIVEWAY CROSSOVER TO BE SEALED AND CONSTRUCTED IN ACCORDANCE WITH LGAT DRAWING TSD-R05-V3 AND BRIGHTON COUNCILS SATISFACTION

Prime mover and semi-trailer (19 m

19m SEMI TRAILER ENTRANCE TURNPATH SHOWN

COVE HILL ROAD

115 COVE HILL ROAD, BRIDGEWATER TAS
PROPERTY ID9945127
TITLE REF 176216/103

GENERAL LAYOUT PLAN

SCALE 1:100 (mm)

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
0	FOR DEVELOPMENT APPROVAL	CF	04/07/2023

REV	DESCRIPTION	DATE

CKEMP DESIGN

CKEMP DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBRIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

PROPOSED DRIVEWAY ALTERATIONS

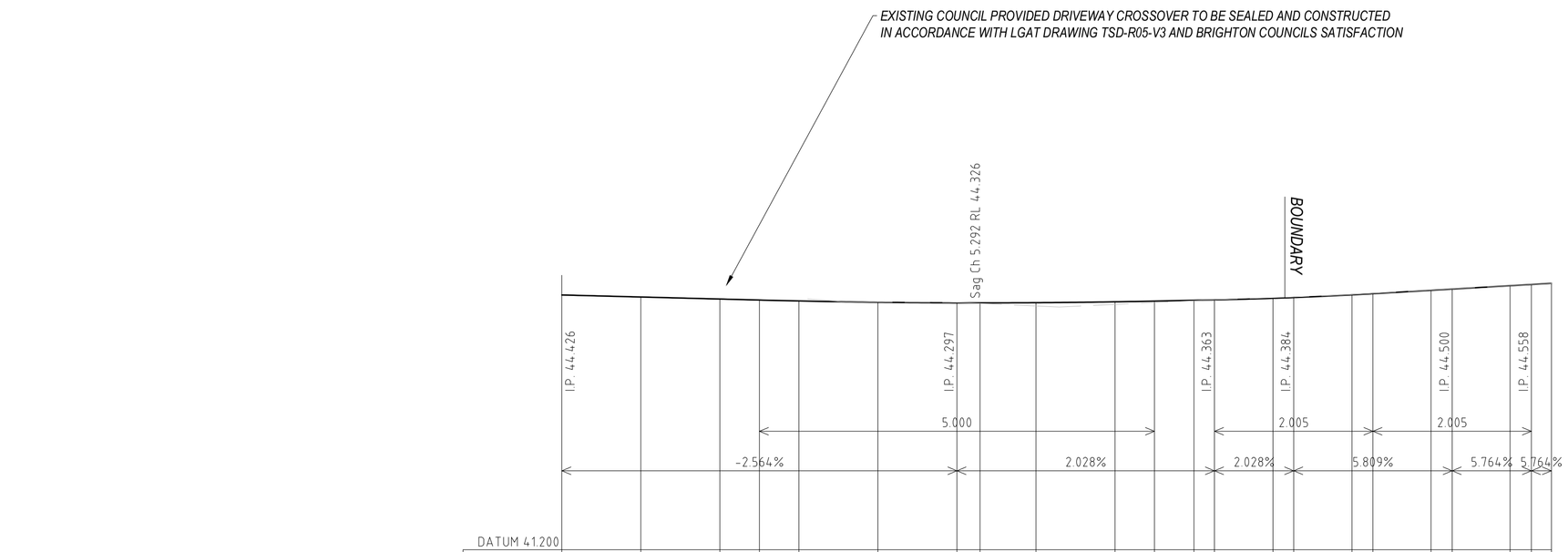
CLIENT: ONSHORE DESIGNS
116 COVE HILL ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE

GENERAL ARRANGEMENT LAYOUT

SCALE 1:100

DESIGNED	DRAWN	SCALE
CF	CF	1:100 @ A1
PROJECT	SHEET NO.	REVISION
CKD-CIV-086	C03	0



DATUM 41.200																							
EXISTING SURFACE	100.00	100.00	100.00	100.00		44.34	44.33	44.32	44.29	44.31	44.33	44.35	44.36	44.39	44.40	44.43	44.45	44.49	44.50	44.54	44.56	44.57	
DESIGN SURFACE	44.429	44.400	44.374	44.361	44.350	44.333	44.326	44.326	44.328	44.339	44.348	44.358	44.363	44.386	44.393	44.427	44.442	44.485	44.500	44.543	44.558	44.573	
Centreline Cut/Fill						-0.003	-0.006	0.008	0.042	0.033	0.019	0.005	-0.002	-0.007	-0.007	-0.003	-0.003	-0.001	-0.001	0.001	0.001	0.002	
CHAINAGE	0.000	1.000	2.000	2.500	3.000	4.000	5.000	5.292	6.000	7.000	7.500	8.000	8.259	9.000	9.262	10.000	10.265	11.000	11.268	12.000	12.270	12.523	

EXISTING DWAY 1 - LONGITUDINAL SECTION

HORIZ 1:50 VERT 1:50

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
0	FOR DEVELOPMENT APPROVAL	CF	04/07/2023

REV	DESCRIPTION	DATE

CKEMP DESIGN

CKEMP DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBRIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 47981973

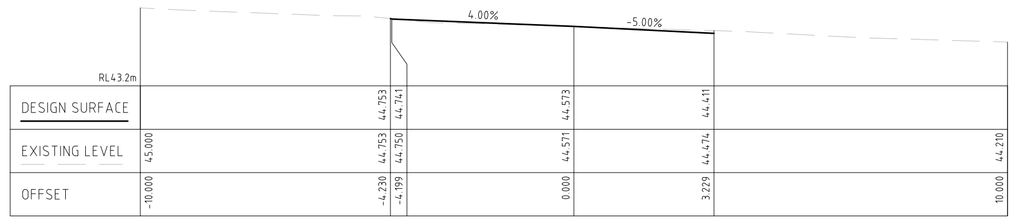
PROPOSED DRIVEWAY ALTERATIONS

CLIENT: ONSHORE DESIGNS
116 COVE HILL ROAD, BRIDGEWATER TAS 7030

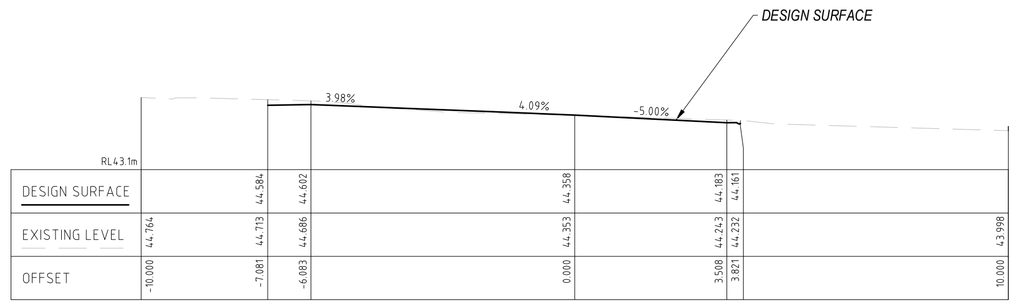
DRAWING TITLE
LONG SECTION

SCALE 1:100

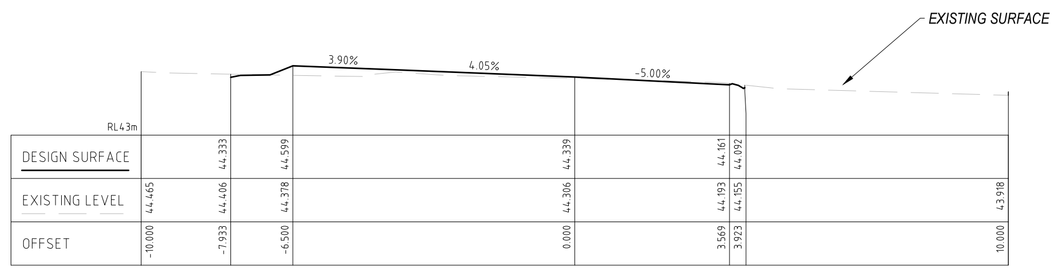
DESIGNED	DRAWN	SCALE
CF	CF	1:100 @ A1
PROJECT	SHEET NO.	REVISION
CKD-CIV-086	C04	0



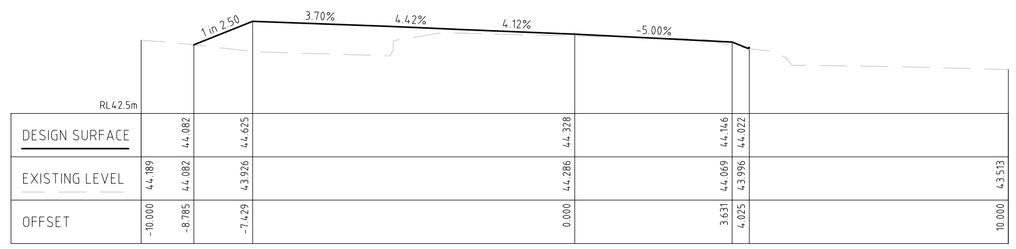
CH 12.52 m



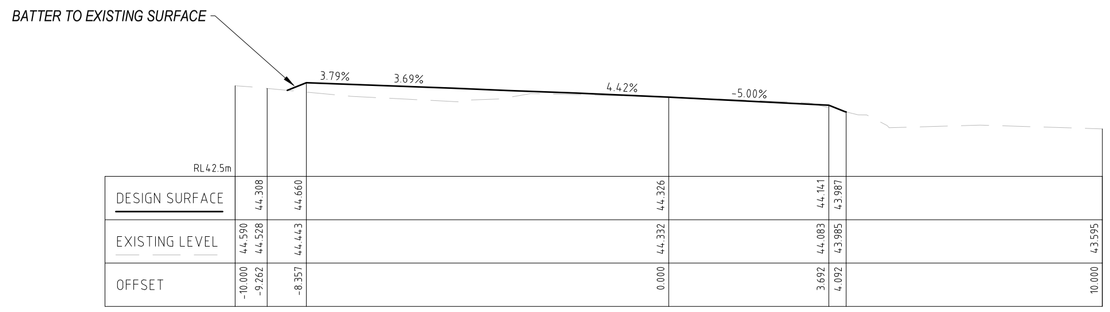
CH 8.00 m



CH 7.00 m



CH 6.00 m



CH 5.00 m

EXISTING DWAY 1 - CROSS SECTIONS

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE
0	FOR DEVELOPMENT APPROVAL CF	04/07/2023

CKEMP DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBRIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

PROPOSED DRIVEWAY ALTERATIONS

CLIENT: ONSHORE DESIGNS
116 COVE HILL ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE
CROSS SECTIONS

SCALE 1:100

DESIGNED	DRAWN	SCALE
CF	CF	1:100 @ A1
PROJECT	SHEET NO.	REVISION
CKD-CIV-086	C05	0

STORMWATER REPORT

Proposed Recycling Sheds
Broken Car and Truck Investments PTY LTD
Onshore Designs

116 Cove Hill Road Bridgewater 7030

CKemp Design Reference: ***CKD-CIV-086***
For Development Approval Rev 1 Dated 26/07/2023

TABLE OF CONTENTS

1. INTRODUCTION AND SCOPE OF ENGAGEMENT

CKemp Design has been engaged to design a stormwater system for the proposed proposed shed and car parking development within the existing site at 116 Cove Hill Road Bridgewater. As a condition of the Brighton Council Interim Planning Scheme – Stormwater water quality and quantity targets must meet water sensitive urban design demands and targets.

2. DETENTION MODEL

CATCHMENT MODEL

Total site area:	≈ 31904m2
Pre-Existing Proposed Undeveloped Area (pervious)	≈ 31864m2
Pre-Existing developed Area (Impervious)	≈ 40m2
Post-development Impervious areas (roofs):	≈ 2000m^2
Post-development Impervious areas (Driveway & Hardstand):	≈ 2900m^2
Post-development Pervious undeveloped areas:	≈ 27004m2
Total proposed developed area	**≈ 4900m2**

Coefficients of run-off adopted for design are as follows:

Pre-development partial site (averaged):	C = 0.60
Impervious areas (Roof):	C = 1.0
Impervious areas (Hardstand):	C = 0.9
Pervious areas:	C = 0.40
5-minute duration - 2% AEP Bridgewater:	I = 101mm/hr (Bridgewater BOM IFD)

Pre-Existing Run off calculations

$$\frac{(4900 \times 0.40) \times 101}{3600} = 54.98\ \mathrm{L/s}$$

Calculations have been based on the Modified Rational Method for stormwater run-off:

$$Q = \frac{C \times I \times A}{3600}$$

Where: Q = Design Volumetric Flow Rate [L/s]
C = Runoff Coefficient
I = Rainfall Intensity [mm/hr] (5 minute - 5% AEP storm)
A = Sum of all equivalent areas [m^2]

Post-Development:

$$Q_{Post} = \frac{(1.0 \times 2000 + 0.9 \times 2900) \times 101}{3600} = \mathbf{129.336\ L/s}$$

As shown above the post development flow Q_{Post} is **74.35** L/s additional than the permissible site discharge Q_{PSD}. and therefore, on-site detention (OSD) is required. To determine the volume of storage required to reduce the post development peak discharge to the permissible site discharge Autodesk Software - Storm and Sanitary Analysis was utilised.
The model simulated a 24000L (5000mm x 4000mm W x 1200mm Deep) below ground in situ concrete detention tank collecting all concrete hardstand runoff. Connected to the main stormwater drainage network for the site with an 80mm low flow orifice outlet and 900 x 900 grated surcharge. As well as a twin 27,000L interconnected above ground polyethylene rainwater tanks connected to the proposed shed roof runoff with a 65mm low flow orifice 225mm & twin overflow. Both outlets from below and above ground detention tanks to connect to proposed stormwater treatment interceptor.

The model simulated a linear rational method simulation of a 1 in 50 storm of 5 minutes. Intensity based off the current ARI's for Bridgewater. (Supplied from BOM's IFD tables for Bridgewater Tasmania, refer to figure 1). (The stormwater arrangement for the site is shown. The outflow hydrograph for the site, as shown in Figure 2 & 3, demonstrates the post-development peak discharge is below permissible site discharge at 24.83 L/s.
(Refer to Figure 3 for proposed hydraulic layout showing stormwater point of discharge)

Table | Chart | Unit: mm/h

	Annual Exceedance Probability (AEP)						
Duration	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	59.8	67.8	94.9	115	136	166	191
2 min	51.6	58.1	79.3	94.2	109	127	141
3 min	45.5	51.4	70.5	84.1	97.9	115	129
4 min	41.0	46.4	64.1	76.8	89.9	107	121
5 min	37.4	42.4	59.0	71.0	83.4	101	114
10 min	27.2	30.9	43.4	52.8	62.7	77.3	89.4
15 min	22.0	25.0	35.3	42.9	51.1	63.1	73.2
20 min	18.9	21.4	30.1	36.6	43.5	53.6	62.1
25 min	16.7	18.9	26.6	32.3	38.2	46.9	54.1
30 min	15.1	17.1	23.9	29.0	34.3	41.9	48.1
45 min	12.0	13.6	18.9	22.7	26.7	32.2	36.7
1 hour	10.2	11.6	16.0	19.1	22.3	26.7	30.1
1.5 hour	8.15	9.22	12.6	15.0	17.4	20.5	22.9
2 hour	6.94	7.85	10.7	12.7	14.6	17.1	19.0
3 hour	5.53	6.26	8.52	10.0	11.5	13.4	14.8
4.5 hour	4.39	4.98	6.79	7.98	9.11	10.6	11.7
6 hour	3.72	4.23	5.78	6.79	7.76	9.04	10.0
9 hour	2.92	3.33	4.58	5.40	6.19	7.26	8.08
12 hour	2.45	2.79	3.87	4.58	5.26	6.21	6.95
18 hour	1.88	2.15	3.00	3.58	4.15	4.95	5.57
24 hour	1.54	1.77	2.48	2.98	3.47	4.16	4.71
30 hour	1.32	1.51	2.13	2.56	2.99	3.61	4.09
36 hour	1.15	1.32	1.86	2.25	2.64	3.19	3.62
48 hour	0.922	1.06	1.50	1.81	2.14	2.58	2.94
72 hour	0.666	0.761	1.08	1.31	1.54	1.86	2.12
96 hour	0.524	0.598	0.841	1.02	1.20	1.44	1.64
120 hour	0.434	0.494	0.691	0.832	0.976	1.17	1.32
144 hour	0.373	0.423	0.588	0.703	0.820	0.979	1.11
168 hour	0.328	0.372	0.512	0.609	0.705	0.841	0.950

FIGURE 1: IFD DESIGN RAINFALL INTENSITY (MM/HR) USED FOR BRIDGEWATER

(Refer to Figure 3 for proposed hydraulic layout)

DETENTION TANK CALCULATION SHEET

Rainfall (mm/hr)	101.00	C
Roof #1 (m2)	2000.00	1.00
Roof #2 (m2)	0.00	1.00
Roof #3 (m2)	0.00	1.00
Impervious (m2)	0.00	0.90
Pervious (m2)	0.00	0.40
Tank area (m2)	Custom 1	
Orifice dia (mm)	65	

Existing site (m2)	2900.00	0.40
Pre-dev flow (L/s)	32.54	
Site allowable (L/s)	32.54	(leave blank if not given)

SUMMARY

Pre-development flow:	32.54	L/s
Tanks footprint area:	7.00	m2
Orifice Diameter:	65	mm
Maximum Flow Rate into tank 1:	56.16	L/s
Maximum Flow Rate into tank 2:	0.00	L/s
Maximum Flow Rate into tank 3:	0.00	L/s
Maximum Flow Rate out (site):	12.07	L/s
Time of Max Flow Rate off site:	8.92	minutes
Maximum head of storage above orifice tank #1:	1786	mm
Maximum head of storage above orifice tank #2:	0	mm
Maximum head of storage above orifice tank #3:	0	mm

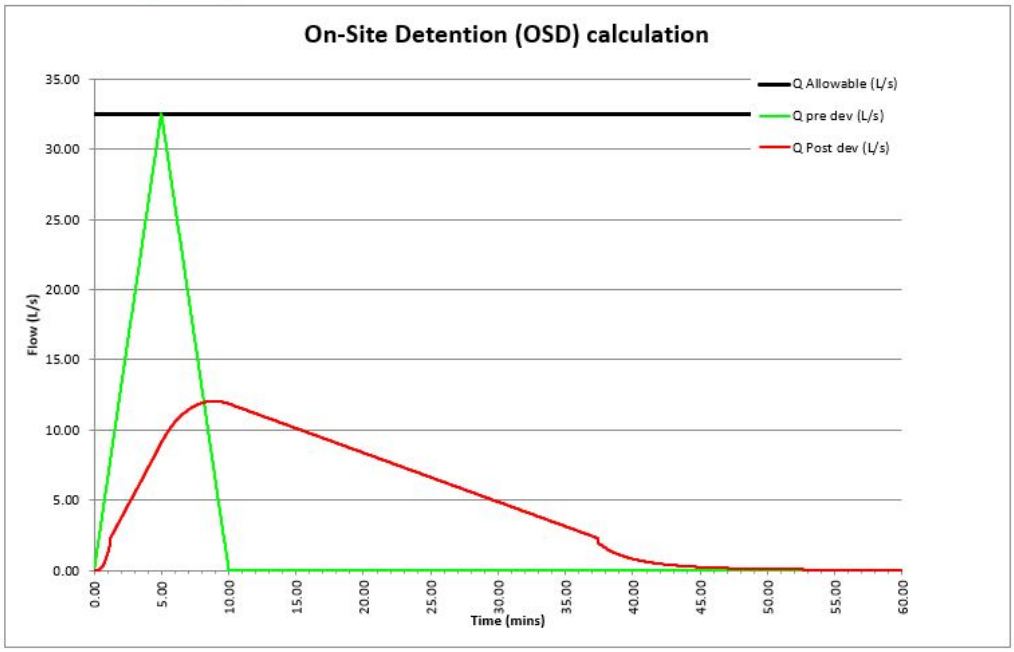


FIGURE 2: POST-DEVELOPMENT PROPOSED ROOF VS EXISTING SITE OUTFLOW HYDROGRAPHS

DETENTION TANK CALCULATION SHEET

Rainfall (mm/hr)	101.00	C
Roof (m2)	0.00	1.00
Impervious (m2)	2900.00	0.90
Pervious (m2)	0.00	0.30
Tank area (m2)	Custom 1	
Orifice dia (mm)	80.00	

Existing site (m2)	2900.00	0.40
Pre-dev flow (L/s)	32.54	
Site allowable (L/s)	32.54	(leave blank if not given)

SUMMARY

Pre-development flow:	32.54	L/s
Tanks footprint area:	20.00	m2
Orifice Diameter:	80	mm
Maximum Flow Rate into tank:	73.28	L/s
Maximum Flow Rate out (site):	12.76	L/s
Time of Max Flow Rate out of tank:	9.12	minutes
Maximum head of storage in tank above orifice:	871	mm
Maximum Storage during storm event:	17,418	Litres

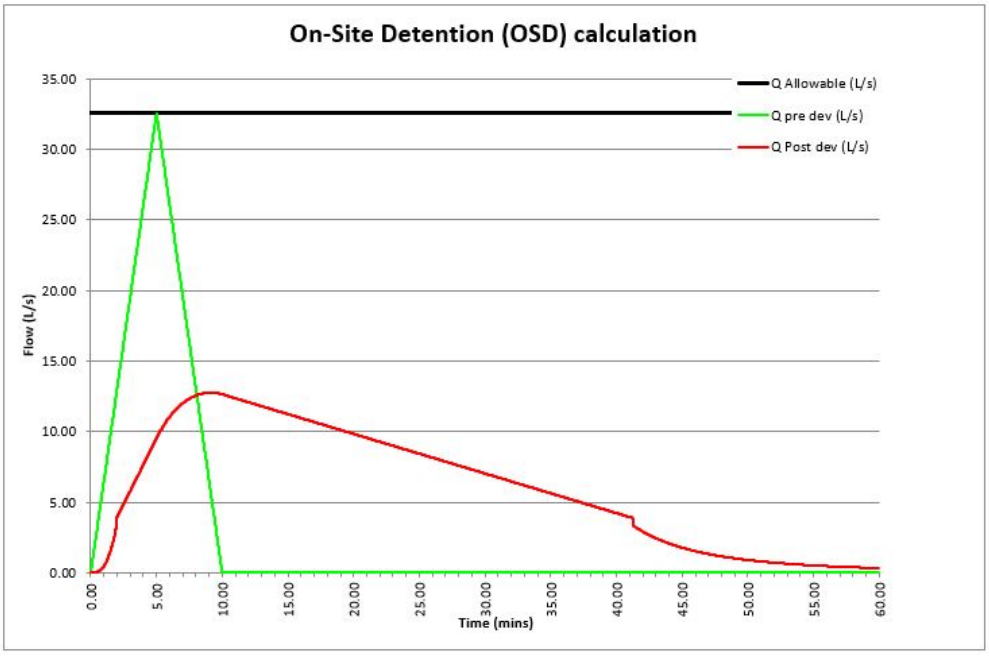


FIGURE 3: POST-DEVELOPMENT PROPOSED DRIVEWAY HARDSTAND VS EXISTING SITE OUTFLOW HYDROGRAPHS

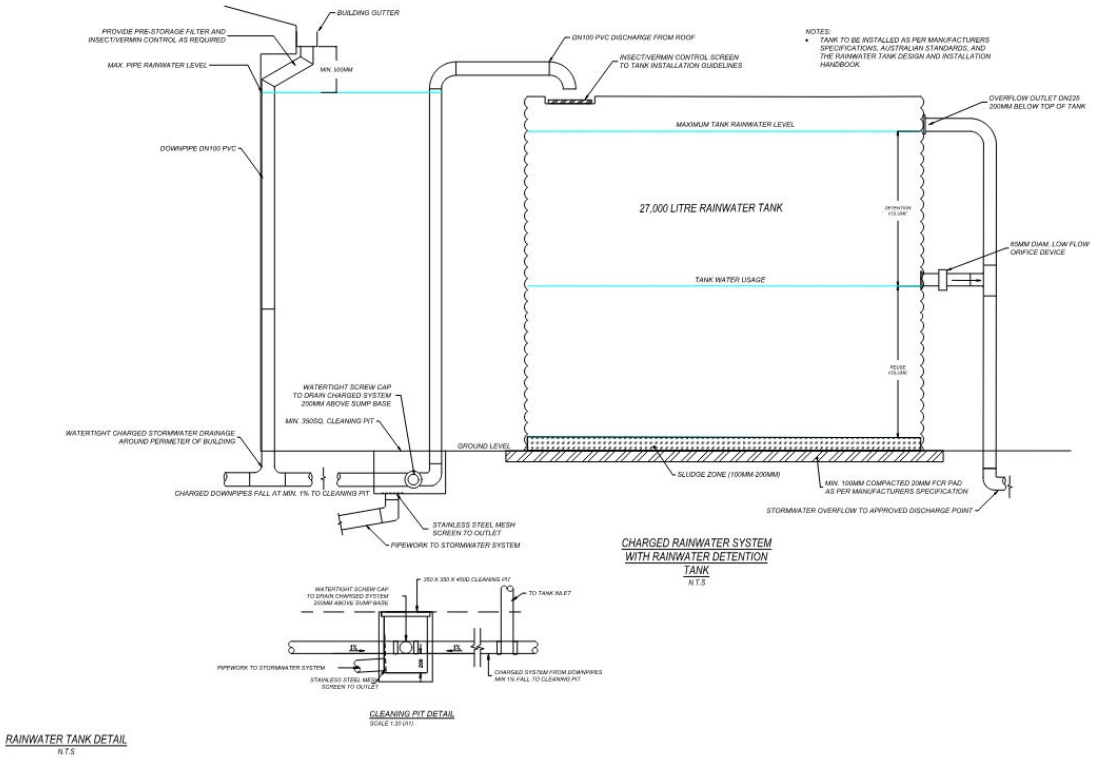


FIGURE 4: ABOVE GROUND RAINTWATER DETENTION TANK DETAIL

Storm Duration (mins)	*Rainfall Intensity (mm/hr) (2% AEP)*	*Peak Discharge (l/s)*	*Volume of storage required (m3)*
5	*101*	*41.98*	*27.00*
10	*77.30*	*21.35*	*18.09*
15	*63.1*	*19.02*	*10.03*
30	*41.9*	*15.01*	*8.76*

MULTIPLE STORM EVENT DETENTION MODEL RESULTS

3. DRAINAGE LAYOUT

A series of 150mm and 225mm gravity stormwater drainage lines and large grated pits are to drain the proposed roof and hardstand areas, driveway areas are drained via a series of 150mm, 225mm and 375mm drainage lines. Drainage lines from hardstand area are consolidated to a main 300mm line which is connected to the onsite Protector onsite stormwater treatment system, then discharging to existing roadside table drain via an approved 150mm pipe and headwall. Refer to figure 5 for further details.

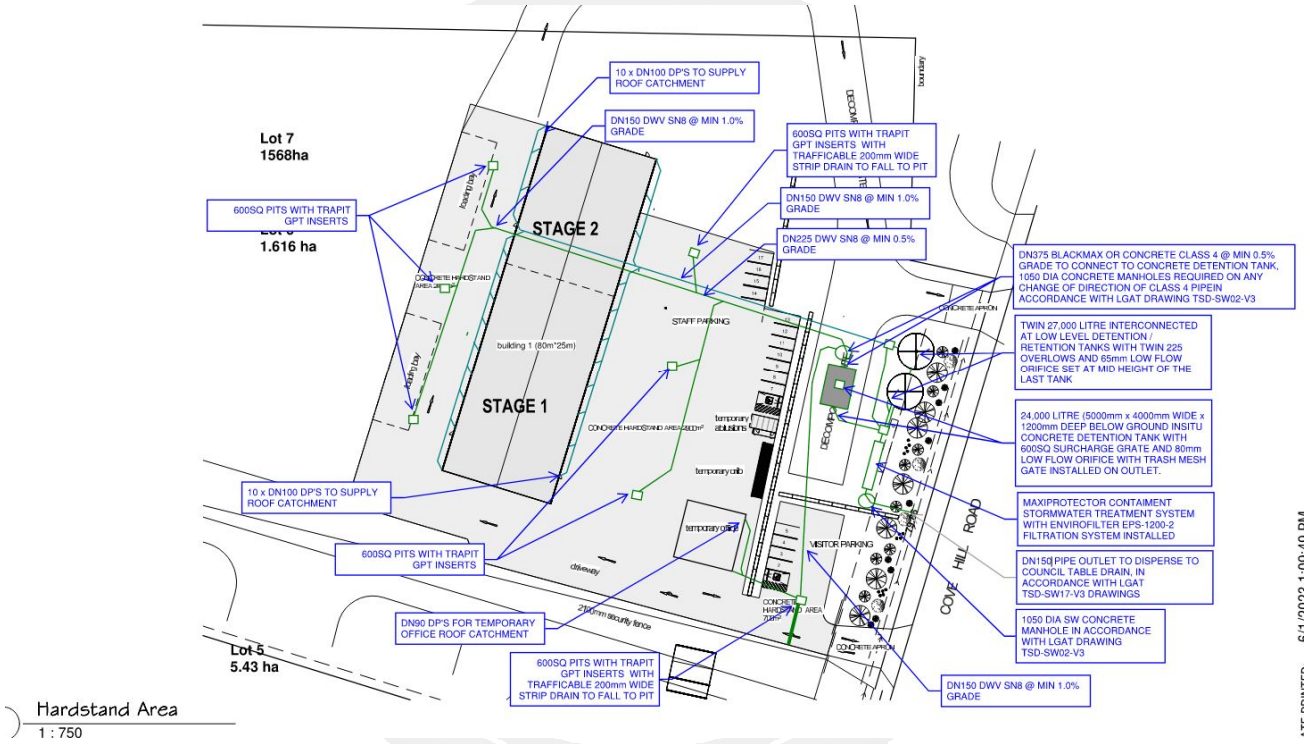


FIGURE 5: PROPOSED STORMWATER SITE LAYOUT

3b. Pipe Sizing

Pipe sizing calculations from proposed roof and hardstand catchments, pits located within pervious catchment areas have been sized to cope with a 2% AEP storm event on the Modified Rational Method and AS3500.3

*Note: only impervious roof, pervious hardstand and driveway and landscaped areas collected by roof and ground pit drainage will be factored in calculations

$$Q = \frac{C \times I \times A}{3600}$$

Where: Q = Design Volumetric Flow Rate [L/s]
C = Runoff Coefficient
I = Rainfall Intensity [mm/hr] (5 minute - 2% AEP storm
A = Sum of all equivalent areas [m^2]

$$Q_{Post} = \frac{(1.0 \times 2000 + 0.90 \times 2900) \text{ x } 101}{3600} = 108.07 \text{ L/s}$$

Calculated detained flows as shown above = 24.83 L/s

Pipework Material Concrete with Colebrook-White roughness coefficient K = 0.6
(From AS3500.3 Table 5.4.11.2)

Minimum grade of pipework of 1% (HG 1:100)

Pipe size selected from AS3500.3 Figure 5.4.11.2(a)

Nearest available size Día outlet = 150mm

4. TREATMENT

A model for Urban Stormwater improvement conceptualisation (MUSIC Version 6.3.0) will be used to model the site roof drainage and impervious areas with effectiveness of various treatment devices to achieve the stormwater quality targets outlined in the State Stormwater Strategy (2010) of:

- An 80% reduction in the average annual load of total suspended solids (TSS)
- An 45% reduction in the average annual load of total phosphorous (TP)
- An 45% reduction in the average annual load of total nitrogen (TN)
- 90% Gross Pollutant Reduction

Figure 5 displays a site area breakdown modeled within the MUSIC software. (by others)

As shown in Figure 5, 7 x Trapit GPT pit inserts are to be installed in grated pits within driveway and hardstand areas. As well as a Envirofilter EPS1200-2 StormFilter system within a dedicated below ground chamber within the proposed site boundaries. MUSIC modelling can be provided to Council to ensure compliance with treatment targets once the detailed design has been completed.

Figure 6 displays MUSIC model outputs displaying stormwater node outputs and quality targets achieved (By Others)

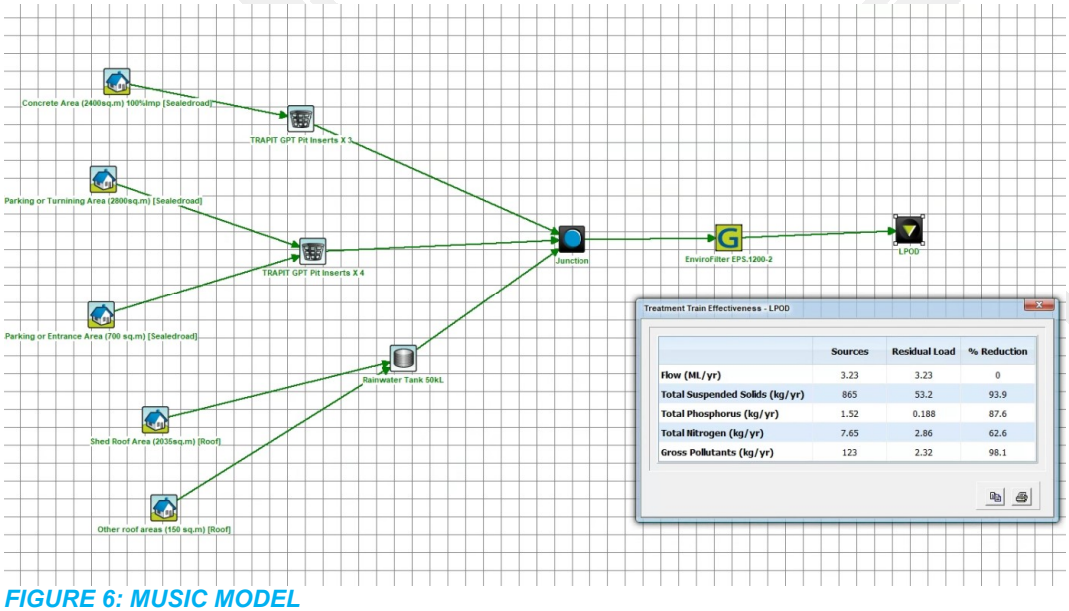


FIGURE 6: MUSIC MODEL

5. MAINTENANCE

Maintenance requirements for below ground detention tank and grated stormwater pits.

Visual inspection is to be performed annually, ensuring sludge zones of the tank does not reach orifice height, regular monthly inspection of the low flow orifice outlet and galvanized trash guard for foreign debris to prevent blockage.
Vacuum tank silt and sediment from detention tank and pits approximately every 4-5 years
Regular inspections and clean outs of grated stormwater pits where required. This should be performed every 6 months to annually, dependent on-site conditions.

Maintenance requirements for Ocean Protect treatment system.
Maintenance of the Trapit GPT pit inserts is simple effective and seldom requires confined space entry or specialized equipment, often being completed by hand without the need of vacuum equipment. Simply remove the Trapit GPT pit inserts from the pit with the tags provided and invert the bag into a waste bin. Inspect the liner and brush by hand or spray with a pressure washer if required to rejuvenate the filtration bag. Record the information and replace the filtration bag.
Inspection & Cleaning
The Trapit GPT pit inserts should be inspected at regular intervals from 1-2 months during the first year of installation to ensure optimum performance. The frequency at which the Trapit GPT pit inserts will need to be maintained will depend on site activities, land uses, catchment area and this size of O Trapit GPT pit inserts installed, 1- 6 times annually (3-4 typ.).
For further information please refer to the Trapit GPT pit inserts Operations and Maintenance Manual.

6. CONCLUSION

This report has demonstrated that the proposed development at 116 Covehill Road Bridgewater complies with the stormwater quality and quantity conditions of Brighton Council Planning scheme requirements.
Please contact cfysh@ckempdesign.com.au if you require any additional information.

Yours sincerely

Chris Fysh

Director

CKemp Design

Building Services Designer Licence: 479819732
Mob: 0414 149 394
Email: cfysh@ckempdesign.com.au

MIDSON traffic pty ltd

Broken Car and Truck Investments

116 Cove Hill Rd, Bridgewater
Traffic Impact Assessment

April 2023

ENGINEERS AUSTRALIA

PROFESSIONAL ENGINEER OF THE YEAR
INDIVIDUAL AWARDS
TASMANIA
WINNER 2016

Contents

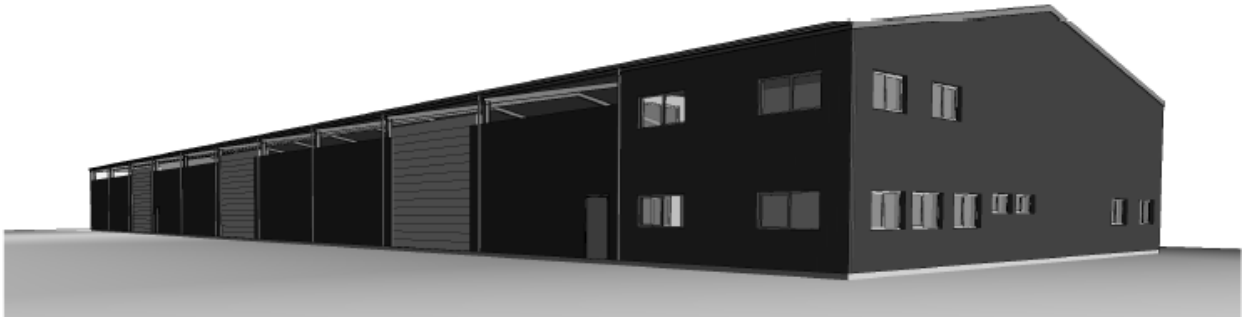
Figure Index

1. Introduction

1.1 Background

Midson Traffic were engaged by Broken Car and Truck Investments Pty Ltd to prepare a traffic impact assessment for a proposed car recycling facility at 116 Cove Hill Road, Bridgewater.

Figure 1 Proposed Development



1.2 Traffic Impact Assessment (TIA)

A traffic impact assessment (TIA) is a process of compiling and analysing information on the impacts that a specific development proposal is likely to have on the operation of roads and transport networks. A TIA should not only include general impacts relating to traffic management, but should also consider specific impacts on all road users, including on-road public transport, pedestrians, cyclists and heavy vehicles.

This TIA has been prepared in accordance with the Department of State Growth (DSG) publication, *Traffic Impact Assessment Guidelines*, August 2020. This TIA has also been prepared with reference to the Austroads publication, *Guide to Traffic Management,* Part 12: *Traffic Impacts of Developments*, 2019.

Land use developments generate traffic movements as people move to, from and within a development. Without a clear understanding of the type of traffic movements (including cars, pedestrians, trucks, etc), the scale of their movements, timing, duration and location, there is a risk that this traffic movement may contribute to safety issues, unforeseen congestion or other problems where the development connects to the road system or elsewhere on the road network. A TIA attempts to forecast these movements and their impact on the surrounding transport network.

A TIA is not a promotional exercise undertaken on behalf of a developer; a TIA must provide an impartial and objective description of the impacts and traffic effects of a proposed development. A full and detailed assessment of how vehicle and person movements to and from a development site might affect existing road and pedestrian networks is required. An objective consideration of the traffic impact of a proposal is vital to enable planning decisions to be based upon the principles of sustainable development.

This TIA also addresses the relevant clauses of C2.0, *Parking and Sustainable Parking Code*, and C3.0, *Road and Railway Assets Code*, of the Tasmanian Planning Scheme – Brighton, 2021.

1.3 Statement of Qualification and Experience

This TIA has been prepared by an experienced and qualified traffic engineer in accordance with the requirements of Council's Planning Scheme and The Department of State Growth's, *Traffic Impact Assessment Guidelines*, August 2020, as well as Council's requirements.

The TIA was prepared by Keith Midson. Keith's experience and qualifications are briefly outlined as follows:

- 27 years professional experience in traffic engineering and transport planning.
- Master of Transport, Monash University, 2006
- Master of Traffic, Monash University, 2004
- Bachelor of Civil Engineering, University of Tasmania, 1995
- Engineers Australia: Fellow (FIEAust); Chartered Professional Engineer (CPEng); Engineering Executive (EngExec); National Engineers Register (NER)

1.4 Project Scope

The project scope of this TIA is outlined as follows:

- Review of the existing road environment in the vicinity of the site and the traffic conditions on the road network.
- Provision of information on the proposed development with regards to traffic movements and activity.
- Identification of the traffic generation potential of the proposal with respect to the surrounding road network in terms of road network capacity.
- Review of the parking requirements of the proposed development. Assessment of this parking supply with Planning Scheme requirements.
- Traffic implications of the proposal with respect to the external road network in terms of traffic efficiency and road safety.

1.5 Subject Site

The subject site is located at 116 – 118 Cove Hill Road, Bridgewater. The site of 116 Cove Hill Road currently contains a warehouse. 118 Cove Hill Road is currently a vacant lot.

The subject site and surrounding road network is shown in Figure 2.

Figure 2 Subject Site & Surrounding Road Network

Image Source: LIST Map, DPIPWE

1.6 Reference Resources

The following references were used in the preparation of this TIA:

- Tasmanian Planning Scheme - Brighton, 2021 (Planning Scheme)
- Austroads, *Guide to Traffic Management,* Part 12: *Traffic Impacts of Developments*, 2019
- Austroads, Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections, 2021
- Department of State Growth, *Traffic Impact Assessment Guidelines*, 2020
- Roads and Maritime Services NSW, *Guide to Traffic Generating Developments*, 2002 (RMS Guide)
- Roads and Maritime Services NSW, *Updated Traffic Surveys,* 2013 (Updated RMS Guide)
- Australian Standards, AS2890.1, *Off-Street Parking*, 2004 (AS2890.1)
- Australian Standards, AS2890.2, *Off-street Commercial Vehicle Facilities*, 2018 (AS2890.2)

2. Existing Conditions

2.1 Transport Network

For the purposes of this report, the transport network consists of Cove Hill Road only.

Cove Hill Road is a collector road that connects between East Derwent Highway at its western end and Briggs Road at its eastern end; a distance of approximately 4.7-kilometres. It provides access to commercial and industrial properties along its length (including Cove Hill Fair shopping centre). It has a sealed pavement width of approximately 6 metres and the posted speed limit is 80-km/h near the subject site. Cove Hill Road carries approximately 3,000 vehicles per day.

Cove Hill Road adjacent to the subject site is shown in Figure 3.

Figure 3 Cove Hill Road

2.2 Road Safety Performance

Crash data can provide valuable information on the road safety performance of a road network. Existing road safety deficiencies can be highlighted through the examination of crash data, which can assist in determining whether traffic generation from the proposed development may exacerbate any identified issues.

Crash data was obtained from the Department of State Growth for a 5+ year period between 1st January 2018 and 30th March 2023 for the full length of Cove Hill Road.

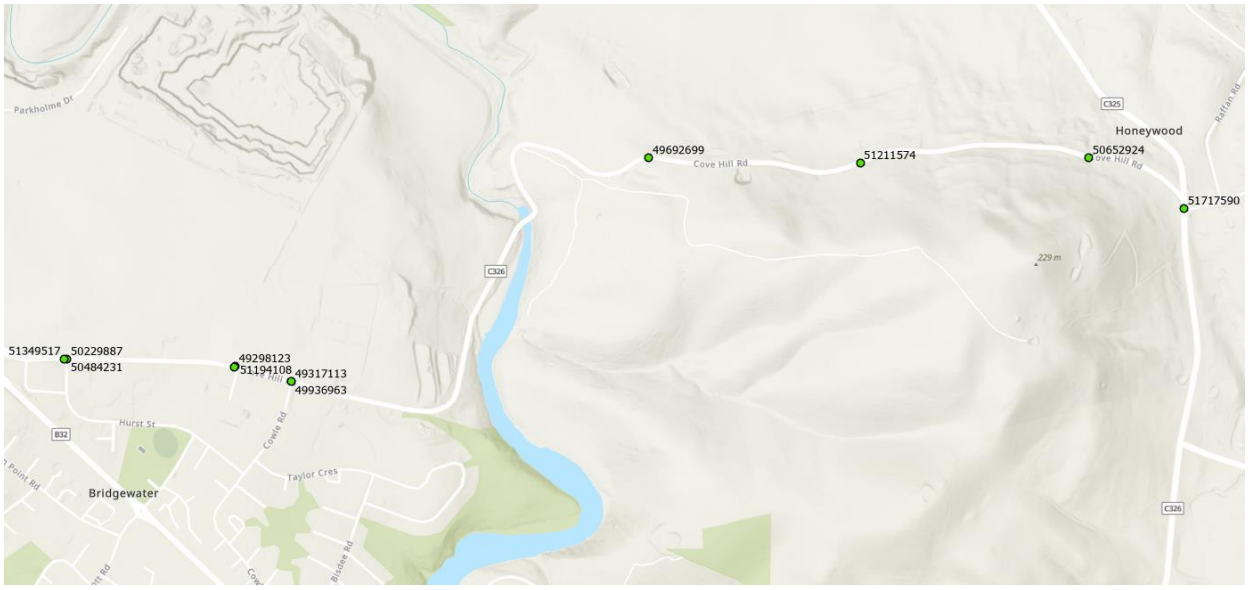
The findings of the crash data is summarised as follows:

- A total of 11 crashes were reported.
- Severity. 2 crashes resulted in serious injury; 2 crashes resulted in minor injury; 1 crash involved first aid at the scene; 6 crashes involved property damage only.

- Time of day. A total of 8 crashes were reported between 9:00am and 6:00pm. 1 crash was reported prior to 7:00am and 2 crashes were reported after 7:00pm.
- Day of week. 3 crashes were reported on Mondays; 2 crashes were reported on Tuesdays, Saturdays and Sundays; 1 crash was reported on a Wednesday and a Thursday; no crashes were reported on Fridays.
- Crash types. 2 crashes involved 'cross-traffic' collisions; 2 crashes involved 'other-curve' collisions; various other crashes were reported with no clear crash trends noted.
- Crash locations. Crashes were distributed relatively evenly along Cove Hill Road. 2 crashes were reported at the Cowle Road intersection; 2 crashes were reported at the Hurst Street intersection; 1 crash was reported at the Briggs Road intersection; 5 crashes were reported at midblock locations; 1 crash was reported in an off-road location. The crash locations are shown in Figure 4.
- Vulnerable road users. No crashes involved vulnerable road users (pedestrians, cyclists or motorcyclists).

The crash data does not provide an indication that there are any pre-existing road safety issues that may be exacerbated by traffic generated by the proposed development.

Figure 4 Crash Locations



Source: Department of State Growth

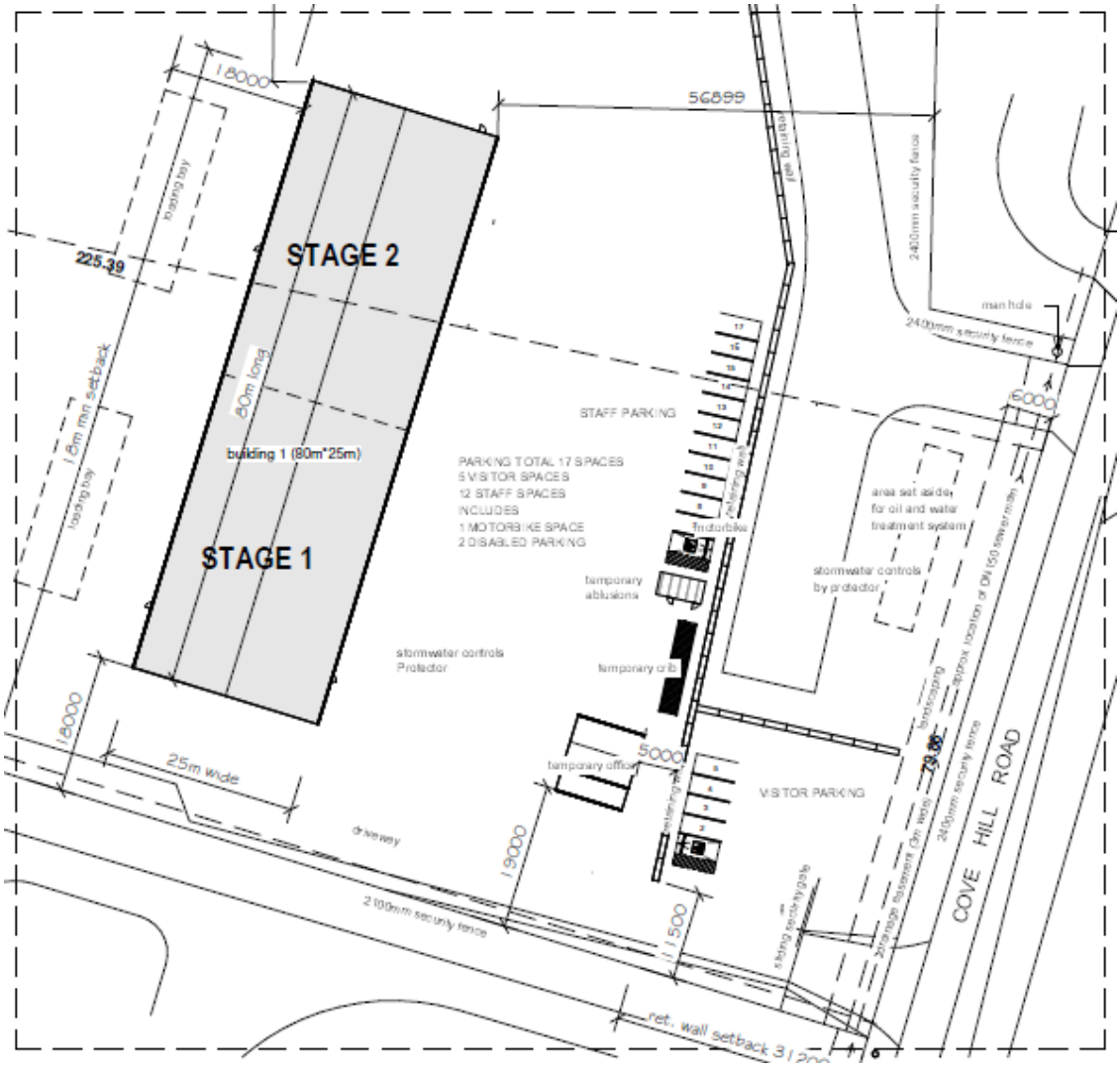
3. Proposed Development

3.1 Development Proposal

The proposed development involves the construction of a large shed and hard stand areas for the storage and disassembly of wrecked cars. Car parts are removed and stored for overseas delivery, and remaining metal is crushed and sent to scrap metal yards.

Trucks will access the site via the western gate and exit at the eastern gate. Any visitors will enter and exit at the western gate where a visitors car park is located immediately to the right as entering the property. A total of 16 on-site car parking spaces are provided. 1 motorcycle parking space is also provided. The proposed development is shown in Figure 5.

Figure 5 Proposed Development Plans



4. Traffic Impacts

4.1 Trip Generation

Traffic generation was determined from first principles. Typically the development will generate the following traffic generation:

- Staff movements 22 vehicles per day (two-way movements), peak 8 vehicles per hour
- Visitor movements 24 vehicles per day (two-way movements), peak 4 vehicles per hour
- Truck movements 8 truck movements per day, peak 1 vehicle per hour
- TOTAL 54 vehicles per day, 13 vehicles per hour

For comparative purposes, the potential traffic generation was assessed using the RMS Guide. The RMS Guide recommends a traffic generation rate of 4 trips per 100m^2 of gross floor area, and a peak of 0.5 trips per 100m^2 of gross floor area. This equates to 80 vehicles per day with a peak of 10 vehicles per hour. The daily traffic generation calculated from first principles is less than the RMS Guide, however the peak generation calculated from first principles is slightly higher than the RMS Guide. The nature of the development is likely to result in a relatively low traffic generation compared to typical warehouse facilities with comparable floor area.

4.2 Trip Assignment

Based on the connectivity of the site with the arterial road network, the majority of traffic will access the site via left-in/ right-out manoeuvres.

4.3 Access Impacts

The proposed development will utilise two existing accesses to the site (one access for each title). The western access will primarily provide access to staff and visitors (light vehicles) and the eastern access will provide access for trucks.

The Acceptable Solution A1.4 of Clause C3.5.1 of the Planning Scheme states "*Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than the amounts in Table C3.1*".

Table C3.1 specifies a maximum increase in daily traffic volume at an access to be 20% or 40 vehicles per day, whichever is greater. In this case the increased traffic generation exceeds 40 vehicles per day and therefore does not meet the requirements of Acceptable Solution A1.4 of Clause C3.5.1 of the Planning Scheme.

The Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme states:

"Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:

(a) any increase in traffic caused by the use;

(b) the nature of the traffic generated by the use;

(c) the nature of the road;

(d) the speed limit and traffic flow of the road;

(e) any alternative access to a road;

(f) the need for the use;

(g) any traffic impact assessment; and

(h) any advice received from the rail or road authority".

The following is relevant with respect to the development proposal:

a. Increase in traffic. The traffic generation of the development is likely to be 54 vehicles per day. The traffic generation is considered to be low compared to industrial sites that could occupy the site. The relatively low peak hour traffic generation of 13 vehicles per hour can be absorbed in at the site's access at a high level of efficiency.

b. Nature of traffic. The traffic will be industrial in nature, consistent with traffic currently utilising the surrounding network.

c. Nature of road. Cove Hill Road is an industrial collector road that provides access to commercial and industrial properties in the surrounding area. The nature of the road is consistent with the type of traffic that will be generated by the development proposal.

d. Speed limit and traffic flow. Cove Hill Road carries approximately 3,000 vehicles per day. The general urban speed limit of 80-km/h is applicable to Cove Hill Road near the subject site.

e. Alternative access. No alternative access is possible or considered necessary.

f. Need for use. The access is required to service the car parking and loading areas associated with the proposed development.

g. Traffic impact assessment. This report documents the findings of a traffic impact assessment.

h. Road authority advice. Council require a TIA to be prepared for the proposed development.

Based on the above assessment, the access arrangements associated with the proposed development satisfy the requirements of Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme.

4.4 Sight Distance

Australian Standards, AS2890.1, provide the sight distance requirements for commercial driveways. Sight distance requirements are lower for driveways compared to road junctions.

AS2890.1 requires a minimum sight distance of 105 metres for a frontage road speed of 80-km/h. The available sight distance exceeds this amount in both directions along Cove Hill Road and therefore the accesses comply with the requirements of AS2890.1.

4.5 Road Safety Impacts

No significant adverse road safety impacts are foreseen for the proposed development. This is based on the following:

- There is sufficient spare capacity in Cove Hill Road and the surrounding road network to absorb the peak hour traffic generated from the proposed development. The estimated increase is estimated to be 13 vehicles per hour peak periods which can be adequately absorbed in the network without any loss of efficiency.
- The existing road safety performance of Cove Hill Road near the subject site does not indicate that there are any specific road safety deficiencies that might be exaggerated by traffic generated by the proposed development.
- The access is existing and is located in a predominantly commercial and industrial area. As such, vehicle movements into and out of the site will not be seen as 'unusual' for motorists.
- There is adequate sight distance from the access for the prevailing vehicle speeds on Cove Hill Road in accordance with AS2890.1 requirements (refer to Section 4.4).

5. Parking Assessment

5.1 Parking Provision

The proposed development provides a total of 16 on-site car parking spaces. This includes:

- 5 visitor parking spaces
- 11 staff spaces

2 disabled parking spaces are included (1 visitor space and 1 staff space). 1 motorcycle parking space is included.

5.2 Planning Scheme Requirements

The Acceptable Solution A1 of Clause C2.5.1 of the Planning Scheme states:

> *"The number of on-site car parking spaces must be no less than the number specified in Table C2.1, excluding if:*
>
> *(a) the site is subject to a parking plan for the area adopted by council, in which case parking provision (spaces or cash-in-lieu) must be in accordance with that plan;*
>
> *(b) the site is contained within a parking precinct plan and subject to Clause C2.7;*
>
> *(c) the site is subject to Clause C2.5.5; or*
>
> *(d) it relates to an intensification of an existing use or development or a change of use where:*
>
> *(i) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is greater than the number of car parking spaces specified in Table C2.1 for the proposed use or development, in which case no additional on-site car parking is required; or*
>
> *(ii) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is less than the number of car parking spaces specified in Table C2.1 for the proposed use or development, in which case on-site car parking must be calculated as follows:*
>
> *N = A + (C- B)*
>
> *N = Number of on-site car parking spaces required*
>
> *A = Number of existing on site car parking spaces*
>
> *B = Number of on-site car parking spaces required for the existing use or development specified in Table C2.1*
>
> *C= Number of on-site car parking spaces required for the proposed use or development specified in Table C2.1".*

For 'recycling and waste disposal' land use, Table C2.1 requires the provision of 1 space per 50m^2 of floor area plus 1 space per employee. This is a requirement for 52 spaces assuming 12 employees. The provision of 16 spaces does not meet this requirement and therefore the Acceptable Solution A1 of Clause C2.5.1 of the Planning Scheme is not met.

The Performance Criteria P1 of Clause C2.5.1 of the Planning Scheme states:

> *"The number of on-site car parking spaces for uses, excluding dwellings, must meet the reasonable needs of the use, having regard to:*
>
> *(a) the availability of off-street public car parking spaces within reasonable walking distance of the site;*
>
> *(b) the ability of multiple users to share spaces because of:*
>
> *(i) variations in car parking demand over time; or*
>
> *(ii) efficiencies gained by consolidation of car parking spaces;*
>
> *(c) the availability and frequency of public transport within reasonable walking distance of the site;*
>
> *(d) the availability and frequency of other transport alternatives;*
>
> *(e) any site constraints such as existing buildings, slope, drainage, vegetation and landscaping;*
>
> *(f) the availability, accessibility and safety of on-street parking, having regard to the nature of the roads, traffic management and other uses in the vicinity;*
>
> *(g) the effect on streetscape; and*
>
> *(h) any assessment by a suitably qualified person of the actual car parking demand determined having regard to the scale and nature of the use and development.*

The following is relevant with respect of the development proposal:

a. Off-street public car parking. No off-street public car parking is available near the subject site.
b. Shared parking. The proposed development is a homogenous land use, and as such there are no principles of shared parking applicable.
c. Public transport. Metro Tasmania operate numerous bus routes through Bridgewater. Routes 510, 520 and 530 operate along Hurst Street approximately 1-kilometre from the subject site.
d. Alternative transport modes. Not applicable.
e. Site constraints. Not applicable.
f. On-street parking. On-street parking is relatively limited. The construction of Cove Hill Road near the subject site is not conducive for on-street parking.
g. Effect on streetscape. Not applicable.

h. Parking assessment. The proposed development is for a specialist type of recycling facility, in the form of wrecked vehicle dismantling. The site will not be open to the public (as a typical public waste disposal facility would be). Wrecked vehicles will be transferred to the site by truck or, with parts removed and stored for transport to wrecking yards, scrap metal, etc. Visitors will be permitted to access the site, but not for the purposes of taking waste disposal to the site. The specialist nature of the development will result in a lower traffic generation and lower parking demands. Furthermore, waste material is not stored indefinitely on the site (as it is in a public refuse site for example), but it is disassembled and removed to other sites as a form of recycling.

Based on the above assessment, the development meets the requirements of Performance Criteria P1 of Clause C2.5.1 of the Planning Scheme. Specifically the parking demands associated with the development are lower than the requirements of Table C2.1 due to the specialist nature of the proposed development.

5.3 Car Parking Layout

The Acceptable Solution A1.1 of Clause C2.6.2 of the Planning Scheme states:

"Parking, access ways, manoeuvring and circulation spaces must either:

(a) comply with the following:

(i) have a gradient in accordance with Australian Standard AS 2890 - Parking facilities, Parts 1-6;

(ii) provide for vehicles to enter and exit the site in a forward direction where providing for more than 4 parking spaces;

(iii) have an access width not less than the requirements in Table C2.2;

(iv) have car parking space dimensions which satisfy the requirements in Table C2.3;

(v) have a combined access and manoeuvring width adjacent to parking spaces not less than the requirements in Table C2.3 where there are 3 or more car parking spaces;

(vi) have a vertical clearance of not less than 2.1m above the parking surface level; and

(vii) excluding a single dwelling, be delineated by line marking or other clear physical means; or

(b) comply with Australian Standard AS 2890- Parking facilities, Parts 1-6".

The parking layout was assessed against the requirements of AS2890.1 (A1.1(b)) in the following sections.

5.3.1 Parking Space Dimensions

The development provides staff and visitor parking. Staff parking is defined as User Class 1 which requires the following minimum dimensions under AS2890.1:

- Space width 2.4 metres
- Space length 5.4 metres
- Aisle width 6.2 metres

Visitor parking is defined as User Class 3 which requires the following minimum dimensions:

- Space width 2.6 metres
- Space length 5.4 metres
- Aisle width 5.8 metres

All spaces comply with the dimensional requirements of AS2890.1, noting that the aisle widths are significantly greater than the minimum.

5.3.2 Access Grade and Parking Grades

Ramp grades accessing the car parking areas are less than the maximum grade of 20% permitted under AS2890.1.

Section 2.4.6 of AS2890.1 states that the maximum grades within a car park shall be:

- Measured parallel to the angle of parking 1 in 20 (5%)
- Measured in any other direction 1 in 16 (6.25%)

All parking spaces and manoeuvring areas have slopes that are less than the above values.

5.3.3 Access Width

AS2890.1 requires a minimum access driveway width of 3.0 to 5.5 metres. The width of the access servicing the car parking exceeds this value as it is shared with heavy vehicles.

5.3.4 AS2890.1 Assessment Summary

The car parking layout and access driveway comply with the requirements of AS2890.1 and therefore comply with the requirements of Acceptable Solution A1.1(b) of Clause C2.6.2 of the Planning Scheme.

5.4 Commercial Parking

The proposed development includes a loading area accessed via a separate driveway connecting to the Cove Hill Road frontage.

The Acceptable Solution A1 of Clause C2.6.6 of the Planning Scheme states: "*The area and dimensions of loading bays and access way areas must be designed in accordance with Australian Standard AS 2890.2–*

2002, Parking facilities, Part 2: Off-street commercial vehicle facilities, for the type of vehicles likely to use the site".

AS2890.2 requires that the loading bay service area is dependent on a combination of:

(a) The maximum size of vehicle likely to use the facility.
(b) The frequency with which vehicles of different classification use the facility; and
(c) Whether the public road from which the facility is accessed is a major or minor road.

The following points are relevant for the site:

- Swept paths of a semi-trailer service vehicle were tested through the site, to and from Cove Hill Road. This is shown in Figure 6.
- The frequency of access to the site will be up to several times per day.
- Access into the site is via a major road.

AS2890.2 requirements and recommendations that the use of the service area for regular use of a major road are as follows:

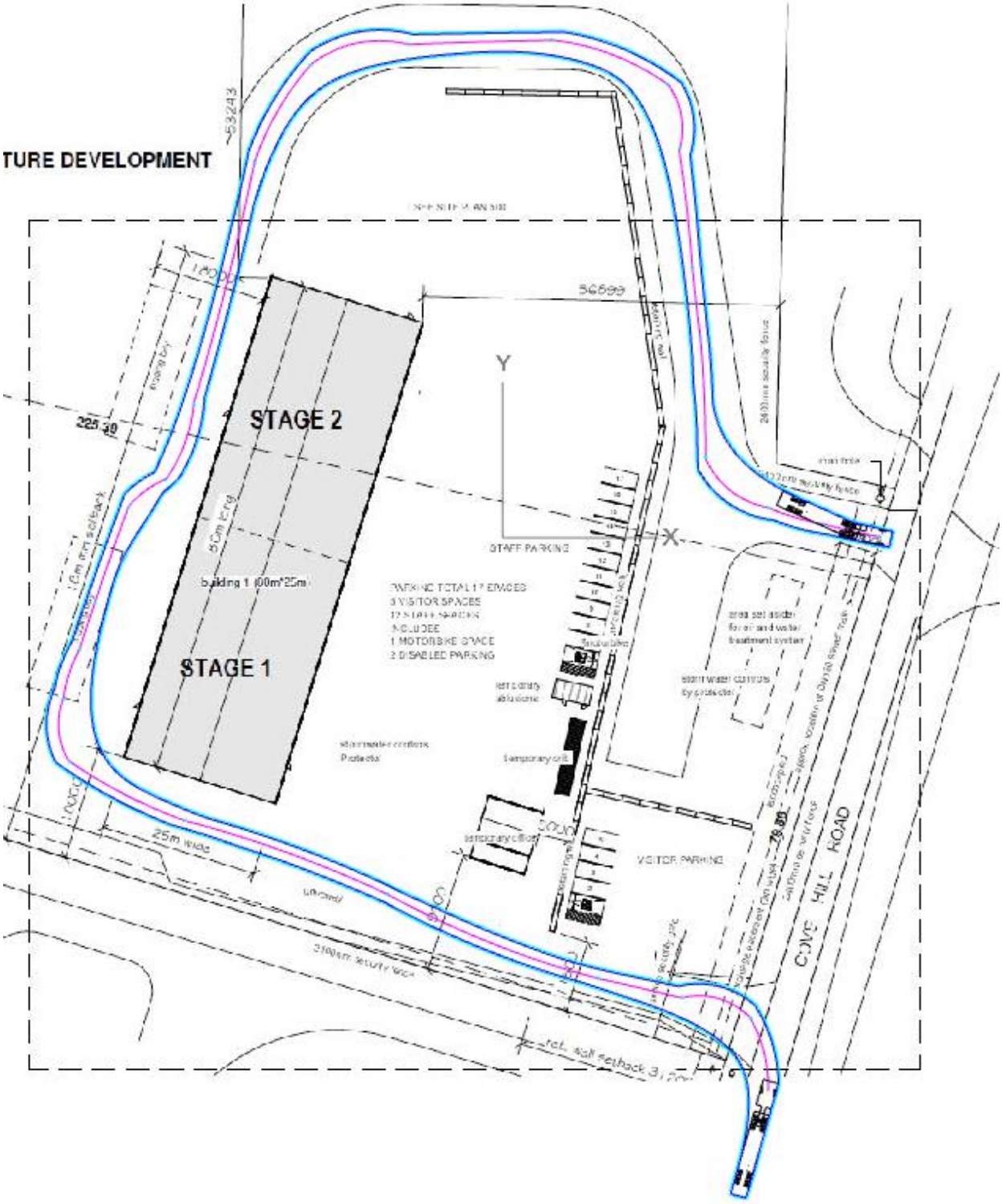
(a) A service area unobstructed by other vehicles or on-site activities shall be provided.
(b) All manoeuvring associated with parking, loading and unloading shall be able to be confined to the service area.
(c) Both entry and exit at the property boundary shall be in the forward direction.
(d) Circulation roadways shall be provided to connect the access driveway with the service area.
(e) Wherever practicable, separate entry and exit access driveways should be provided.

In this case, the following is applicable for the loading area:

a. Customer parking is separated from the service area.
b. All manoeuvring associated with loading activities is contained within the loading area.
c. Entry and exit is via a forward motion for all trucks accessing the site.
d. A service driveway connects between the Cove Hill Road access and the loading area.
e. Entry and exit driveways are separated at Cove Hill Road.

On this basis the loading area complies with the requirements of AS2890.2. The development therefore complies with the requirements of Acceptable Solution A1 of Clause C2.6.6 of the Planning Scheme.

Figure 6 Semi Trailer Vehicle Swept Paths



6. Conclusions

This traffic impact assessment (TIA) investigated the traffic and parking impacts of a proposed car recycling facility at 116-118 Cove Hill Road, Bridgewater.

The key findings of the TIA are summarised as follows:

- The traffic generation of the development is likely to be 54 vehicles per day, with a peak of 13 vehicles per hour.
- The development's access meets the requirements of Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme.
- The car parking provision of 16 on-site parking spaces meets the requirements of Performance Criteria P1 of Clause C2.5.1 of the Planning Scheme.
- The layout of the car park meets the requirements of Acceptable Solution A1(b) of Clause C2.6.2 of the Planning Scheme.
- The loading area associated with the development meets the requirements of Acceptable Solution A1 of Clause C2.6.6 of the Planning Scheme.

Based on the findings of this report the proposed development is supported on traffic and parking grounds.

Midson Traffic Pty Ltd ABN: 26 133 583 025

28 Seaview Avenue
Taroona TAS 7053
T: 0437 366 040 E: admin@midsontraffic.com.au W: www.midsontraffic.com.au

Document Status

Revision	Author	Review	Date
0	Keith Midson	Zara Kacic-Midson	22 April 2023

Submission to Planning Authority Notice

Council Planning Permit No.	DA 2022 / 00177	**Council notice date**	03/01/2023
TasWater details			
TasWater Reference No.	TWDA 2023/00010-BTN	**Date of response**	23/05/2023
TasWater Contact	Jake Walley **Phone No.**	0467 625 805	
Response issued to			
Council name	BRIGHTON COUNCIL		
Contact details	development@brighton.tas.gov.au		
Development details			
Address	116 COVE HILL RD, BRIDGEWATER	**Property ID (PID)**	2658201
Description of development	Shed and offices for recycling cars & trucks		

Schedule of drawings/documents

Prepared by	Drawing/document No.	Revision No.	Date of Issue
TasTech Building Systems	Site Plan A1	--	04/04/2023

Conditions

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater imposes the following conditions on the permit for this application:

CONNECTIONS, METERING & BACKFLOW

1. A suitably sized water supply with metered connection and sewerage system and connection to the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.
2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.
3. Prior to commencing construction/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

INFRASTRUCTURE PROTECTION

4. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.
5. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.

DEVELOPMENT ASSESSMENT FEES

6. The applicant or landowner as the case may be, must pay a development assessment fee of $376.68 to TasWater, as approved by the Economic Regulator and the fee will be indexed, until the date paid to TasWater.

   The payment is required within 30 days of the issue of an invoice by TasWater.

Advice

General

For information on TasWater development standards, please visit https://www.taswater.com.au/building-and-development/technical-standards

For application forms please visit https://www.taswater.com.au/building-and-development/development-application-form

Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

(a) A permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater.

(b) TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit www.taswater.com.au/Development/Service-location for a list of companies.

(c) Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au