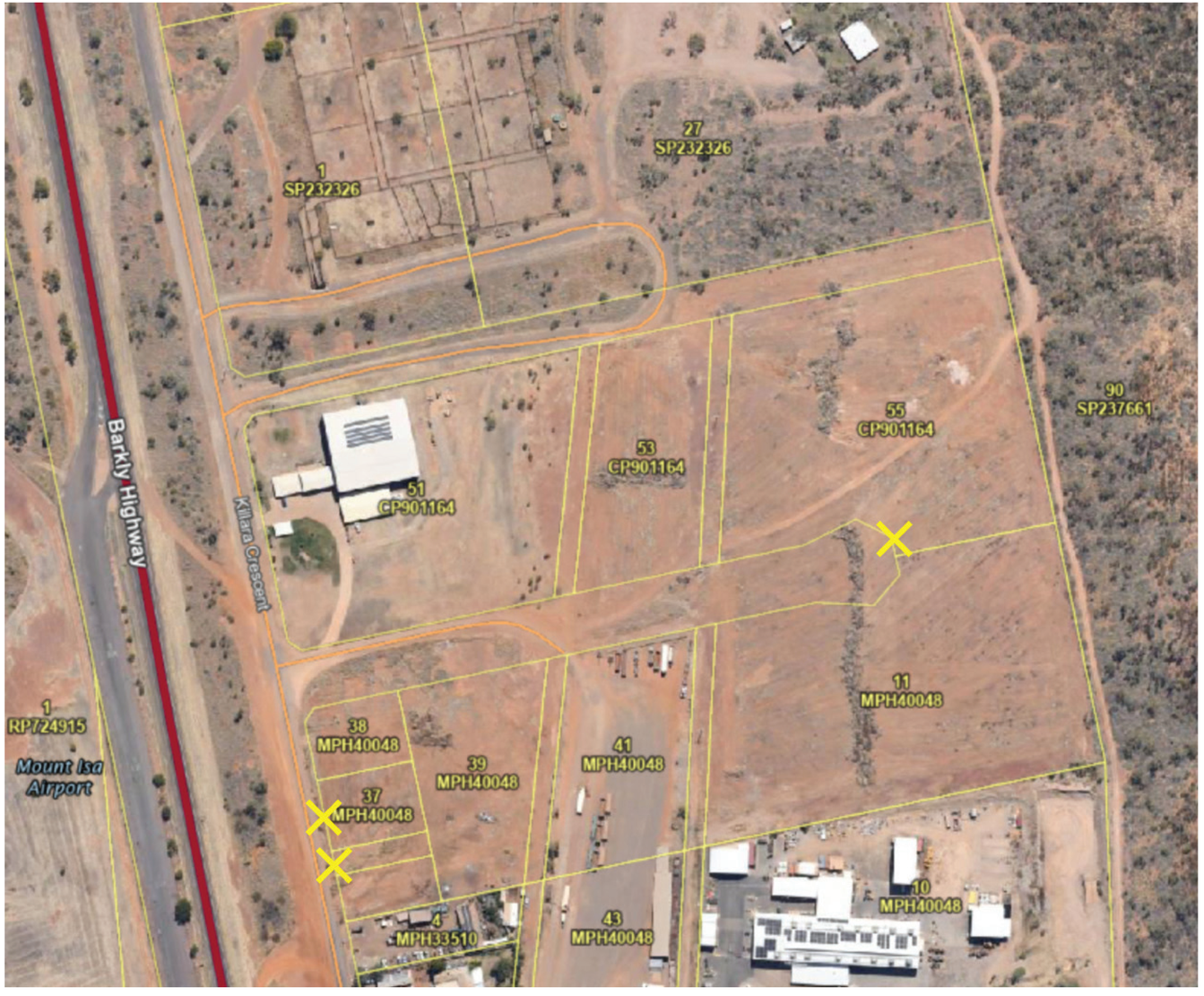


CLIENT
ECONOMIC DEVELOPMENT QLD

SITE PLAN
36 Killara Cres,
Kalkadoon QLD

DATE - 18/06/26

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Metres (M)

SignPortal ENTER OUR WORLD
ph. 07 2104 9933
www.signportal.com.au

CLIENT
ECONOMIC DEVELOPMENT QLD

SITE PLAN
37 & 55 Killara Cres,
Kalkadoon QLD

DATE - 18/06/26

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Metres (M)

SignPortal ENTER OUR WORLD
ph. 07 2104 9933
www.signportal.com.au

36 KILLARA CRESCENT, KALKADOON QLD 4825

STANDARD NOTES

GENERAL

1. **THIS** DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER PROJECT DRAWINGS AND SPECIFICATIONS
2. **IF IN DOUBT,** ASK. DRAWINGS ARE NOT TO BE SCALED, SET OUT DIMENSIONS ARE TO BE VERIFIED WITH THE ARCHITECT.
3. **CONTRACTOR** TO CHECK WORK IN DETAIL PRIOR TO CALLING FOR INSPECTION
4. **WHERE PROPRIETARY** ITEMS HAVE BEEN SPECIFIED, EQUIVALENT PROPRIETARY ITEMS MEETING THE FUNCTIONAL, PERFORMANCE AND TECHNICAL REQUIREMENTS MAY BE SUBSTITUTED WITH WRITTEN APPROVAL. ALL PROPRIETARY PRODUCTS ARE TO BE USED/INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATION AND/OR DETAILS
5. **AS 3600 EXPOSURE CLASSIFICATION**

FOOTING	**A1**
SLAB ON GROUND	**A1**

6. **WIND LOADS**

REGION	**A0**

REFER TO AS 1170.2 FOR ALL WIND VELOCITIES & PRESSURE COEFFICIENTS. ANY SPECIAL REQUIREMENTS ARE LISTED BELOW:

ULT - 43m/s

SLS - 37m/s

7. **DESIGN LOADS**

DEAD LOAD	**- 0.5 KPa**

GEOTECHNICAL INFORMATION NOTES

1. ALL EARTH WORK , FOUNDATION AND SLAB ON GROUND INFORMATION CONTAINED WITHIN THESE DRAWINGS IS PROVISIONAL AND MUST BE CONFIRMED BY A GEOTECHNICAL ENGINEER . SOIL CLASSIFICATION ASSUMED TO BE **CLASS M**.
2. THE OWNER'S ATTENTION IS DRAWN TO CSIRO PUBLICATION BTF18 "FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNERS GUIDE"

FOOTING NOTES

1. **THE CONTRACTOR** SHALL ENSURE THAT ALL FOOTINGS ARE INSPECTED BY A REPRESENTATIVE FROM THE GEOTECHNICAL CONSULTANT. THE COST OF THESE INSPECTIONS SHALL BE BORNE BY THE CONTRACTOR. IF IT IS DEEMED NECESSARY TO MODIFY THE FOOTING DESIGN TO SUIT THE CONDITIONS FOUND ON SITE, THIS WORK WILL BE CONDUCTED AT HOURLY RATES
2. **UNLESS OTHERWISE** NOTED, THE FOUNDATION ELEMENTS SHALL FOUND ON SUITABLE MATERIAL WITH A MINIMUM ALLOWABLE BEARING PRESSURE AS NOTED BELOW:

FOOTING	**100kPa**

3. **WHERE NECESSARY** PROVIDE 10MPa MASS CONCRETE BETWEEN FOUNDING LEVEL AND UNDERSIDE OF FOOTING
4. **THE GEOTECHNICAL** ENGINEER IS TO MONITOR THE EXCAVATION AS IT PROCEEDS AND SHALL BE CONSULTED AT ALL TIMES REGARDING STABILITY OF ROCK FACES AND CONFIRMATION OF, OR CHANGES TO, THE REQUIREMENTS FOR THE ROCK BOLTS, DOWELS, ROCK ANCHORS, CONCRETE PANELS, SOLDIERS, WAILERS, AND DRAIN HOLES

EXCAVATION AND SHORING NOTES

1. **REFER GEOTECHNICAL** INFORMATION NOTE FOR SITE INVESTIGATION INFORMATION
2. **ALL NECESSARY** APPROVALS FROM AUTHORITIES AND ADJACENT PROPERTY OWNERS MUST BE OBTAINED BEFORE COMMENCEMENT OF WORK.
3. I**DENTIFY** AND VERIFY THE LOCATION OF EXISTING ADJACENT SERVICES AND CONFIRM DETAILS WITH CONTRACTOR PRIOR TO EXCAVATION.
4. **THE GEOTECHNICAL** ENGINEER IS TO MONITOR THE EXCAVATION AS IT PROCEEDS AND SHALL BE CONSULTED AT ALL TIMES REGARDING STABILITY OF ROCK FACES AND CONFIRMATION OF, OR CHANGES TO, THE REQUIREMENTS FOR THE ROCK BOLTS, DOWELS, ROCK ANCHORS, CONCRETE PANELS, SOLDIERS, WAILERS, AND DRAIN HOLES

LOCATION OF SERVICES

1. **THE LOCATION** OF SERVICE, SHOWN ON THESE PLANS HAVE BEEN APPROXIMATED FROM KNOWN POSITIONS AND INFORMATION OBTAINED FROM THE SERVICE AUTHORITIES AND SITE SURVEYOR.
2. **DETAILS** OF SERVICES ARE PROVIDED FOR INFORMATION ONLY
3. **THE CONTRACTOR** SHALL ADVISE THE ENGINEER OF ANY CLASH BETWEEN SERVICES AND FOUNDATIONS.

GENERAL CONCRETE NOTES

1. **ALL CONCRETE** AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE SAI CONCRETE STRUCTURES CODE AS3600
2. **CONCRETE** TO HAVE A MAXIMUM AGGREGATE SIZE OF 20mm AND SLUMP OF 80mm. EXCEPT AS NOTED CONCRETE STRENGTHS AS FOLLOWS:

FOOTING	**N25**

3. **ALL CONCRETE** TO BE MECHANICALLY PLACED AND VIBRATED DURING PLACING
4. **SUPERIMPOSED LOADS** WHERE NOT DETAILED BELOW ARE IN ACCORDANCE WITH AS1170.1
5. **CLEAR REINFORCEMENT COVER** IN mm IS TO BE AS FOLLOWS UNLESS DETAILED OTHERWISE

FOOTING	**50**

6. **SURFACE FINISH.** FORMWORK IS TO BE IN ACCORDANCE WITH THE SAI FORMWORK CODE AS 3610. EXCEPT WHERE SPECIFIED OTHERWISE, CONCRETE EXPOSED TO VIEW IN THE FINAL PROJECT IS TO BE **S2** CLASS FINISH AND CLASS
7. **PENETRATIONS.** THE ENGINEER SHOULD BE NOTIFIED BEFORE ANY CONCRETE IS PLACE, OF ANY BEAM PENETRATION NOT DETAILED ON THE ENGINEERING DRAWINGS, AND OF AN SLAB PENETRATION BIGGER THAN 150 X 150mm NOT DETAILED ON THE DRAWINGS. BARS ARE TO BE DISPLACED AROUND SLAB PENETRATIONS AND ARE NOT TO BE CUT.
8. **CONDUIT PIPES**, ETC MUST NOT BE PLACE IN COVER CONCRETE
9. **INSPECTION.** ALL REINFORCEMENT IS TO BE ACCURATELY POSITIONED, ADEQUATELY SUPPORTED, AND THEN INSPECTED BY THE ENGINEER BEFORE ANY CONCRETE IS PLACED.
10. **CURING.** AFTER POURING AND UNTIL FINAL TROWEL ALL EXPOSED SURFACES ARE TO BE SPRAYED WITH ALIPHATIC ALCOHOL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WITHIN ONE HOUR OF FINAL TROWEL, APPLY THE FINAL CURING COMPOUND "MULTICURE AC30" STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
11. **SAFETY MESH.** BUILDER TO PROVIDE SAFETY MESH TO SATISFY ANY SAFE WORKING REQUIREMENTS. WHEN POSITIONING THE SAFETY MESH, COVERS SPECIFIED TO THE REINFORCEMENT STEEL SHOWN ON THESE DRAWINGS IS TO BE MAINTAINED. SAFETY MESH IS NOT SHOWN ON THE DRAWINGS AND IS NOT INCLUDED IN ANY REINFORCING SCHEDULES OR RATES.
12. **STRIPPING.** FORMWORK MAY BE STRIPPED AFTER 7 DAYS, BUT BEAMS AND SLABS MUST REMAIN PROPPED FOR 21 DAYS.
13. **INSPECTION.** ALL REINFORCEMENT IS TO BE ACCURATELY POSITIONED, SUPPORTED AND THEN INSPECTED PRIOR TO GROUT BEING PLACED.

STEELWORK NOTES

1. **ALL STEELWORK** IS TO BE IN ACCORDANCE WITH SAI STEEL STRUCTURES CODE AS 4100 AND COLD FORMED STEEL STRUCTURES AS4600
2. **STEEL GRADES**. UNLESS NOTES OTHERWISE ON THE DRAWINGS, THE FOLLOWING STEEL GRADES SHALL APPLY:

STEEL MEMBER	**GRADE**
HOT ROLLED PLATES	250
UB, UC, PFC, ANGLES, FLATS	300 PLUS
WB & WC	300 PLUS
CHS	250/350
RHS	350/450

3. **MINOR PARTS.** THE STEEL FABRICATOR IS TO PROVIDE ALL BOLTS, NUTS, WASHERS, HD BOLTS ETC.
4. **FIXINGS.** THE STEEL FABRICATOR IS TO PROVIDE ALL FIXINGS, CLEATS AND BOLT HOLES TO TAKE TIMBER AND OTHER WORK SHOWN ON PROJECT DRAWINGS
5. **CHEMICAL AND MECHANICAL ANCHORS.** ALL EMBEDMENT NOTED ON THE DRAWINGS ARE TO BE THE EMBEDMENT INTO THE STRUCTURAL ELEMENT AND ARE TO EXCLUDE THE DEPTH OF ANY APPLIED FINISHES.
6. **CORROSION PROTECTION.** ALL EXTERNAL STRUCTURAL STEELWORK WHICH IS EXPOSED SHALL BE HOT DIP GALVANISED AFTER FABRICATION AND COMPLY WITH AS/NZS 4680.
7. **ALL BOLTS** SHALL BE 4.6S GRADE U.N.O

COPYRIGHT RESERVED IN ALL DRAWINGS AND THE WORK EXECUTED FROM THEM . THE CONTRACTOR SHALL VERIFY **All DIMENSIONS** ON JOB AND BE RESPONSIBLE FOR REPORTING ANY **DISCREPANCIES** TO THE CONSULTANTS BEFORE COMMENCING WORKS.

STAGE:

FOR CONSTRUCTION

AMMENDMENTS:

NO.	DESCRIPTION	DATE	DRAWN BY	DESIGN BY	APPROVED BY
1	FOR CONSTRUCTION	08/05/2026	VV	LA	SF

ARDENT CONSULTING ENGINEERS
PO BOX 31, CAMP HILL, QLD, 4152

CLIENT: JASON HENNAH

PAPER SIZE : A3

PROJECT: 36 KILLARA CRES, KALKADOON QLD 4825

JOB REF. # : 260436

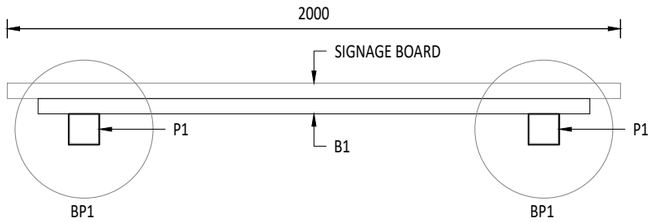
DATE: 08/05/2026

DRAWING: S00

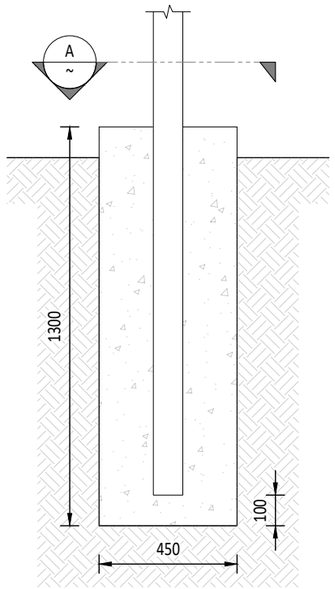
MEMBER SCHEDULE	
P1	100 X 100 X 3 STEEL SHS
B1	50 X 50 X 3 STEEL SHS
BP1	450 Ø X 1300mm DEEP BORED PIER

NOTE:

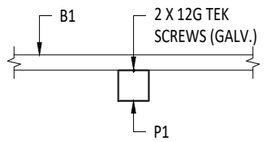
1. **ALL DIMENSIONS** SHALL BE CONFIRMED ON SITE.



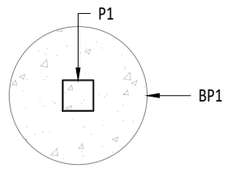
SIGNAGE FRAME PLAN
SCALE 1:20



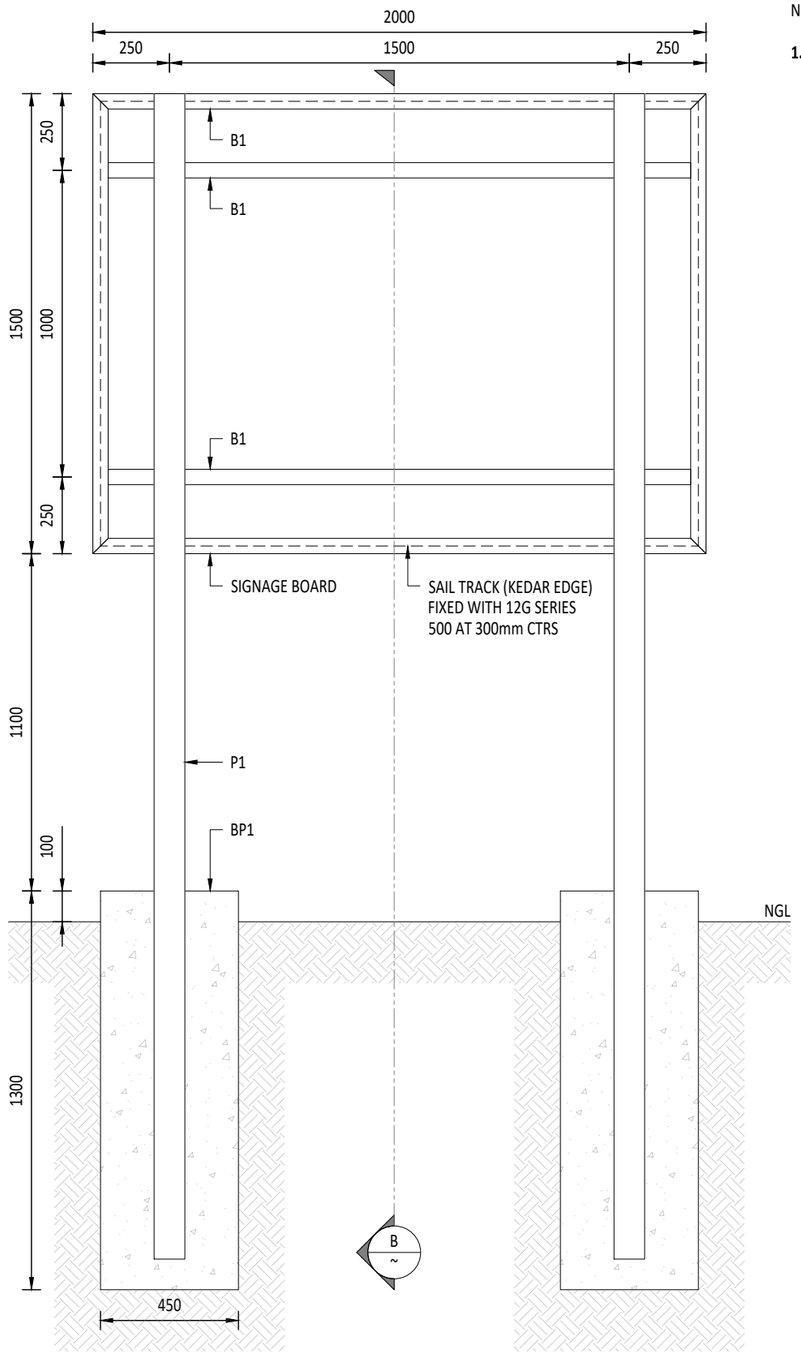
P1 TO BP1 DETAIL
SCALE 1:20



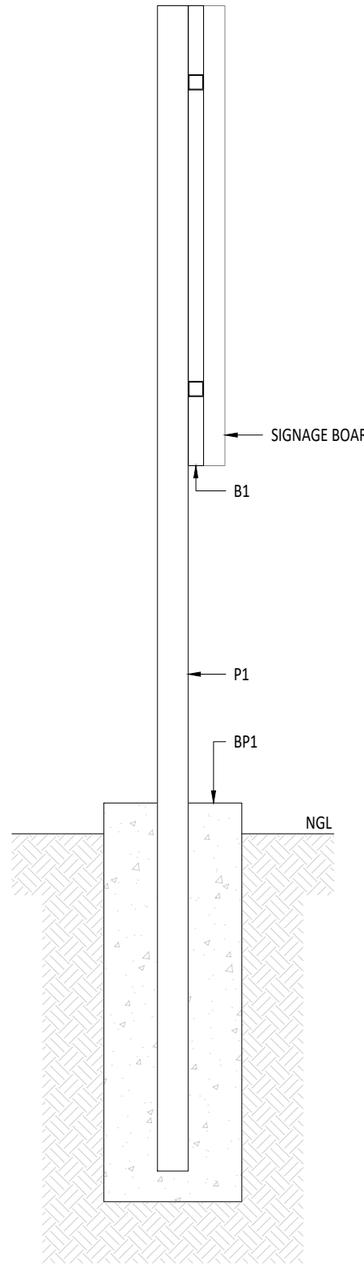
TYPICAL CONNECTION PLAN
SCALE 1:20



SECTION A
SCALE 1:20



SIGNAGE FRAME ELEVATION
SCALE 1:20



SECTION B
SCALE 1:20

COPYRIGHT RESERVED IN ALL DRAWINGS AND THE WORK EXECUTED FROM THEM . THE CONTRACTOR SHALL VERIFY **All DIMENSIONS** ON JOB AND BE RESPONSIBLE FOR REPORTING ANY **DISCREPANCIES** TO THE CONSULTANTS BEFORE COMMENCING WORKS.

STAGE:

FOR CONSTRUCTION

AMMENDMENTS:

NO.	DESCRIPTION	DATE	DRAWN BY	DESIGN BY	APPROVED BY
1	FOR CONSTRUCTION	08/05/2026	VV	LA	SF

ARDENT CONSULTING ENGINEERS
PO BOX 31, CAMP HILL, QLD, 4152

CLIENT: JASON HENNAH

PAPER SIZE : A3

PROJECT: 36 KILLARA CRES, KALKADOON QLD 4825

JOB REF. # : 260436

DATE: 08/05/2026

DRAWING: S90

37 & 55 KILLARA CRESCENT, KALKADOON QLD 4825

STANDARD NOTES

GENERAL

1. **THIS** DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER PROJECT DRAWINGS AND SPECIFICATIONS
2. **IF IN DOUBT,** ASK. DRAWINGS ARE NOT TO BE SCALED, SET OUT DIMENSIONS ARE TO BE VERIFIED WITH THE ARCHITECT.
3. **CONTRACTOR** TO CHECK WORK IN DETAIL PRIOR TO CALLING FOR INSPECTION
4. **WHERE PROPRIETARY** ITEMS HAVE BEEN SPECIFIED, EQUIVALENT PROPRIETARY ITEMS MEETING THE FUNCTIONAL, PERFORMANCE AND TECHNICAL REQUIREMENTS MAY BE SUBSTITUTED WITH WRITTEN APPROVAL. ALL PROPRIETARY PRODUCTS ARE TO BE USED/INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATION AND/OR DETAILS
5. **AS 3600 EXPOSURE CLASSIFICATION**

FOOTING	**A1**
SLAB ON GROUND	**A1**

6. **WIND LOADS**

REGION	**A0**

REFER TO AS 1170.2 FOR ALL WIND VELOCITIES & PRESSURE COEFFICIENTS. ANY SPECIAL REQUIREMENTS ARE LISTED BELOW:

ULT - 43m/s

SLS - 37m/s

7. **DESIGN LOADS**

DEAD LOAD	**- 0.5 KPa**

GEOTECHNICAL INFORMATION NOTES

1. ALL EARTH WORK , FOUNDATION AND SLAB ON GROUND INFORMATION CONTAINED WITHIN THESE DRAWINGS IS PROVISIONAL AND MUST BE CONFIRMED BY A GEOTECHNICAL ENGINEER . SOIL CLASSIFICATION ASSUMED TO BE **CLASS M**.
2. THE OWNER'S ATTENTION IS DRAWN TO CSIRO PUBLICATION BTF18 "FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNERS GUIDE"

FOOTING NOTES

1. **THE CONTRACTOR** SHALL ENSURE THAT ALL FOOTINGS ARE INSPECTED BY A REPRESENTATIVE FROM THE GEOTECHNICAL CONSULTANT. THE COST OF THESE INSPECTIONS SHALL BE BORNE BY THE CONTRACTOR. IF IT IS DEEMED NECESSARY TO MODIFY THE FOOTING DESIGN TO SUIT THE CONDITIONS FOUND ON SITE, THIS WORK WILL BE CONDUCTED AT HOURLY RATES
2. **UNLESS OTHERWISE** NOTED, THE FOUNDATION ELEMENTS SHALL FOUND ON SUITABLE MATERIAL WITH A MINIMUM ALLOWABLE BEARING PRESSURE AS NOTED BELOW:

FOOTING	**100kPa**

3. **WHERE NECESSARY** PROVIDE 10MPa MASS CONCRETE BETWEEN FOUNDING LEVEL AND UNDERSIDE OF FOOTING
4. **THE GEOTECHNICAL** ENGINEER IS TO MONITOR THE EXCAVATION AS IT PROCEEDS AND SHALL BE CONSULTED AT ALL TIMES REGARDING STABILITY OF ROCK FACES AND CONFIRMATION OF, OR CHANGES TO, THE REQUIREMENTS FOR THE ROCK BOLTS, DOWELS, ROCK ANCHORS, CONCRETE PANELS, SOLDIERS, WAILERS, AND DRAIN HOLES

EXCAVATION AND SHORING NOTES

1. **REFER GEOTECHNICAL** INFORMATION NOTE FOR SITE INVESTIGATION INFORMATION
2. **ALL NECESSARY** APPROVALS FROM AUTHORITIES AND ADJACENT PROPERTY OWNERS MUST BE OBTAINED BEFORE COMMENCEMENT OF WORK.
3. I**DENTIFY** AND VERIFY THE LOCATION OF EXISTING ADJACENT SERVICES AND CONFIRM DETAILS WITH CONTRACTOR PRIOR TO EXCAVATION.
4. **THE GEOTECHNICAL** ENGINEER IS TO MONITOR THE EXCAVATION AS IT PROCEEDS AND SHALL BE CONSULTED AT ALL TIMES REGARDING STABILITY OF ROCK FACES AND CONFIRMATION OF, OR CHANGES TO, THE REQUIREMENTS FOR THE ROCK BOLTS, DOWELS, ROCK ANCHORS, CONCRETE PANELS, SOLDIERS, WAILERS, AND DRAIN HOLES

LOCATION OF SERVICES

1. **THE LOCATION** OF SERVICE, SHOWN ON THESE PLANS HAVE BEEN APPROXIMATED FROM KNOWN POSITIONS AND INFORMATION OBTAINED FROM THE SERVICE AUTHORITIES AND SITE SURVEYOR.
2. **DETAILS** OF SERVICES ARE PROVIDED FOR INFORMATION ONLY
3. **THE CONTRACTOR** SHALL ADVISE THE ENGINEER OF ANY CLASH BETWEEN SERVICES AND FOUNDATIONS.

GENERAL CONCRETE NOTES

1. **ALL CONCRETE** AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE SAI CONCRETE STRUCTURES CODE AS3600
2. **CONCRETE** TO HAVE A MAXIMUM AGGREGATE SIZE OF 20mm AND SLUMP OF 80mm. EXCEPT AS NOTED CONCRETE STRENGTHS AS FOLLOWS:

FOOTING	**N25**

3. **ALL CONCRETE** TO BE MECHANICALLY PLACED AND VIBRATED DURING PLACING
4. **SUPERIMPOSED LOADS** WHERE NOT DETAILED BELOW ARE IN ACCORDANCE WITH AS1170.1
5. **CLEAR REINFORCEMENT COVER** IN mm IS TO BE AS FOLLOWS UNLESS DETAILED OTHERWISE

FOOTING	**50**

6. **SURFACE FINISH.** FORMWORK IS TO BE IN ACCORDANCE WITH THE SAI FORMWORK CODE AS 3610. EXCEPT WHERE SPECIFIED OTHERWISE, CONCRETE EXPOSED TO VIEW IN THE FINAL PROJECT IS TO BE **S2** CLASS FINISH AND CLASS
7. **PENETRATIONS.** THE ENGINEER SHOULD BE NOTIFIED BEFORE ANY CONCRETE IS PLACE, OF ANY BEAM PENETRATION NOT DETAILED ON THE ENGINEERING DRAWINGS, AND OF AN SLAB PENETRATION BIGGER THAN 150 X 150mm NOT DETAILED ON THE DRAWINGS. BARS ARE TO BE DISPLACED AROUND SLAB PENETRATIONS AND ARE NOT TO BE CUT.
8. **CONDUIT PIPES**, ETC MUST NOT BE PLACE IN COVER CONCRETE
9. **INSPECTION.** ALL REINFORCEMENT IS TO BE ACCURATELY POSITIONED, ADEQUATELY SUPPORTED, AND THEN INSPECTED BY THE ENGINEER BEFORE ANY CONCRETE IS PLACED.
10. **CURING.** AFTER POURING AND UNTIL FINAL TROWEL ALL EXPOSED SURFACES ARE TO BE SPRAYED WITH ALIPHATIC ALCOHOL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WITHIN ONE HOUR OF FINAL TROWEL, APPLY THE FINAL CURING COMPOUND "MULTICURE AC30" STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
11. **SAFETY MESH.** BUILDER TO PROVIDE SAFETY MESH TO SATISFY ANY SAFE WORKING REQUIREMENTS. WHEN POSITIONING THE SAFETY MESH, COVERS SPECIFIED TO THE REINFORCEMENT STEEL SHOWN ON THESE DRAWINGS IS TO BE MAINTAINED. SAFETY MESH IS NOT SHOWN ON THE DRAWINGS AND IS NOT INCLUDED IN ANY REINFORCING SCHEDULES OR RATES.
12. **STRIPPING.** FORMWORK MAY BE STRIPPED AFTER 7 DAYS, BUT BEAMS AND SLABS MUST REMAIN PROPPED FOR 21 DAYS.
13. **INSPECTION.** ALL REINFORCEMENT IS TO BE ACCURATELY POSITIONED, SUPPORTED AND THEN INSPECTED PRIOR TO GROUT BEING PLACED.

STEELWORK NOTES

1. **ALL STEELWORK** IS TO BE IN ACCORDANCE WITH SAI STEEL STRUCTURES CODE AS 4100 AND COLD FORMED STEEL STRUCTURES AS4600
2. **STEEL GRADES**. UNLESS NOTES OTHERWISE ON THE DRAWINGS, THE FOLLOWING STEEL GRADES SHALL APPLY:

STEEL MEMBER	GRADE
HOT ROLLED PLATES	250
UB, UC, PFC, ANGLES, FLATS	300 PLUS
WB & WC	300 PLUS
CHS	250/350
RHS	350/450

3. **MINOR PARTS.** THE STEEL FABRICATOR IS TO PROVIDE ALL BOLTS, NUTS, WASHERS, HD BOLTS ETC.
4. **FIXINGS.** THE STEEL FABRICATOR IS TO PROVIDE ALL FIXINGS, CLEATS AND BOLT HOLES TO TAKE TIMBER AND OTHER WORK SHOWN ON PROJECT DRAWINGS
5. **CHEMICAL AND MECHANICAL ANCHORS.** ALL EMBEDMENT NOTED ON THE DRAWINGS ARE TO BE THE EMBEDMENT INTO THE STRUCTURAL ELEMENT AND ARE TO EXCLUDE THE DEPTH OF ANY APPLIED FINISHES.
6. **CORROSION PROTECTION.** ALL EXTERNAL STRUCTURAL STEELWORK WHICH IS EXPOSED SHALL BE HOT DIP GALVANISED AFTER FABRICATION AND COMPLY WITH AS/NZS 4680.
7. **ALL BOLTS** SHALL BE 4.6S GRADE U.N.O

COPYRIGHT RESERVED IN ALL DRAWINGS AND THE WORK EXECUTED FROM THEM . THE CONTRACTOR SHALL VERIFY **All DIMENSIONS** ON JOB AND BE RESPONSIBLE FOR REPORTING ANY **DISCREPANCIES** TO THE CONSULTANTS BEFORE COMMENCING WORKS.

STAGE:

FOR CONSTRUCTION

AMMENDMENTS:

NO.	DESCRIPTION	DATE	DRAWN BY	DESIGN BY	APPROVED BY
1	FOR CONSTRUCTION	08/05/2026	VV	LA	SF

ARDENT CONSULTING ENGINEERS
PO BOX 31, CAMP HILL, QLD, 4152

CLIENT: JASON HENNAH

PAPER SIZE : A3

PROJECT: 37 & 55 KILLARA CRES, KALKADOON QLD 4825

JOB REF. # : 260436

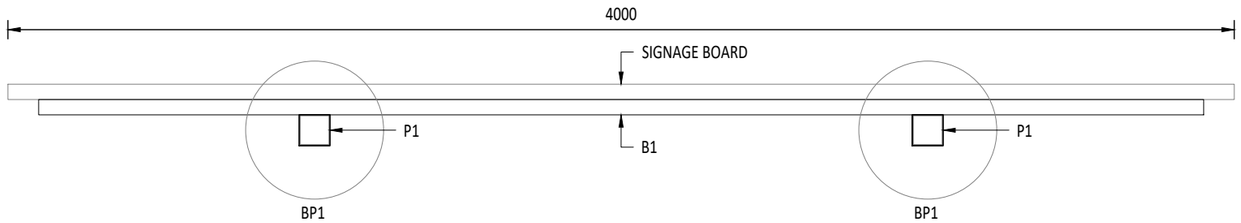
DATE: 08/05/2026

DRAWING: S00

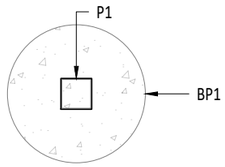
MEMBER SCHEDULE	
P1	100 X 100 X 4 STEEL SHS
B1	50 X 50 X 3 STEEL SHS
BP1	450 Ø X 1800mm DEEP BORED PIER

NOTE:

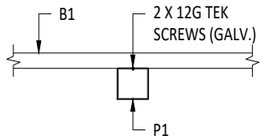
1. **ALL DIMENSIONS** SHALL BE CONFIRMED ON SITE.



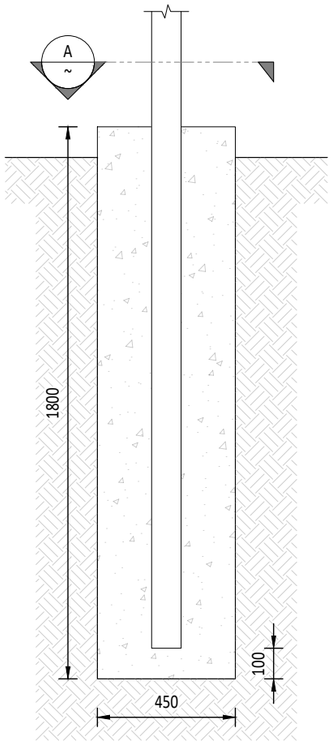
SIGNAGE FRAME PLAN
SCALE 1:20



SECTION A
SCALE 1:20



TYPICAL CONNECTION PLAN
SCALE 1:20



P1 TO BP1 DETAIL
SCALE 1:20

COPYRIGHT RESERVED IN ALL DRAWINGS AND THE WORK EXECUTED FROM THEM . THE CONTRACTOR SHALL VERIFY **All DIMENSIONS** ON JOB AND BE RESPONSIBLE FOR REPORTING ANY **DISCREPANCIES** TO THE CONSULTANTS BEFORE COMMENCING WORKS.

STAGE:

FOR CONSTRUCTION

AMMENDMENTS:

NO.	DESCRIPTION	DATE	DRAWN BY	DESIGN BY	APPROVED BY
1	FOR CONSTRUCTION	08/05/2026	VV	LA	SF

ARDENT CONSULTING ENGINEERS
PO BOX 31, CAMP HILL, QLD, 4152

CLIENT: JASON HENNAH

PAPER SIZE : A3

PROJECT: 37 & 55 KILLARA CRES, KALKADOON QLD 4825

JOB REF. # : 260436

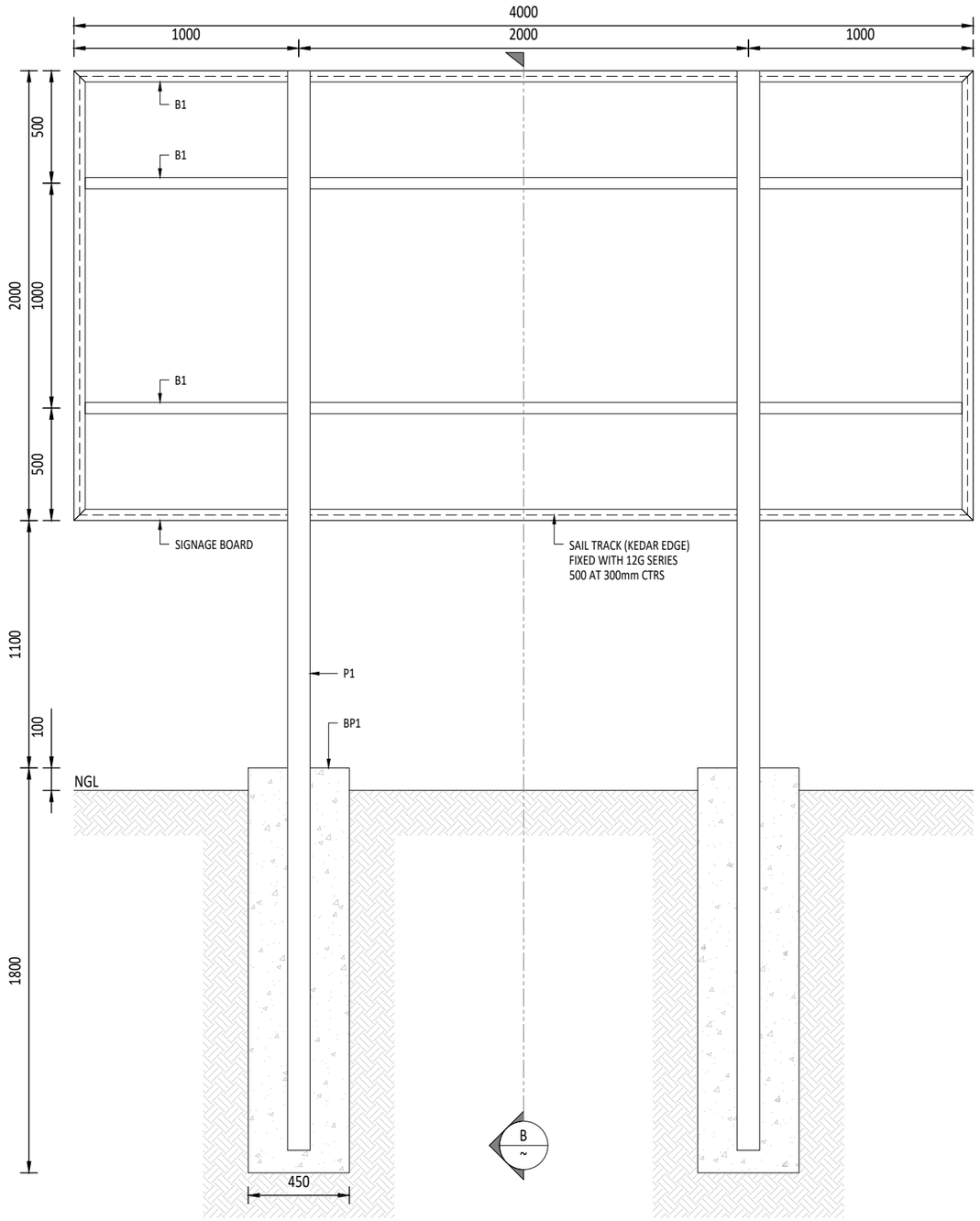
DATE: 08/05/2026

DRAWING: S90

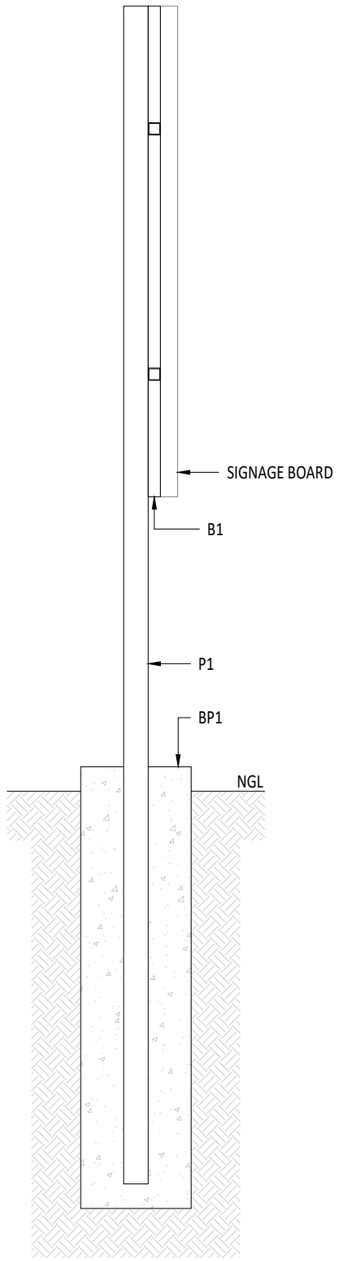
MEMBER SCHEDULE	
P1	100 X 100 X 4 STEEL SHS
B1	50 X 50 X 3 STEEL SHS
BP1	450 Ø X 1800mm DEEP BORED PIER

NOTE:

1. **ALL DIMENSIONS** SHALL BE CONFIRMED ON SITE.



SIGNAGE FRAME ELEVATION
SCALE 1:25



SECTION B
SCALE 1:25

COPYRIGHT RESERVED IN ALL DRAWINGS AND THE WORK EXECUTED FROM THEM . THE CONTRACTOR SHALL VERIFY **All DIMENSIONS** ON JOB AND BE RESPONSIBLE FOR REPORTING ANY **DISCREPANCIES** TO THE CONSULTANTS BEFORE COMMENCING WORKS.

STAGE:

FOR CONSTRUCTION

AMMENDMENTS:

NO.	DESCRIPTION	DATE	DRAWN BY	DESIGN BY	APPROVED BY
1	FOR CONSTRUCTION	08/05/2026	VV	LA	SF

ARDENT CONSULTING ENGINEERS
PO BOX 31, CAMP HILL, QLD, 4152

CLIENT: JASON HENNAH

PAPER SIZE : A3

PROJECT: 37 & 55 KILLARA CRES, KALKADOON QLD 4825

JOB REF. # : 260436

DATE: 08/05/2026

DRAWING: S91

Form 15 Compliance certificate for building design or specification

Queensland Government

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2. Description of aspect/s certified Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.	Billboard Sign -Associated frames & fixings -Footings
3. Basis of certification Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications were relied upon.	Building Code of Australia (BCA)/NCC 2022 AS 1170.0:2002 – General principles AS 1170.1:2002 – Permanent, imposed and other actions AS 1170.2:2021– Wind Loads AS 1664.1:1997 – Aluminum Structures AS 4100:2020 – Steel Structures AS 1111.1 & .2: 2015 – Fixing Bolts AS 3566.1 & .2:2002 – Fixing Screws AS 3600:2018 - Concrete Structures AS 2870:2011 – Residential Slabs and Footings

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LOCAL GOVERNMENT USE ONLY

Date received		**Reference number/s**	260436

Appendix – explanatory information

IMPORTANT NOTE: it is an offence for a competent person to give a building certifier a document, including this form, that the person knows or reasonably suspects, is false or misleading.

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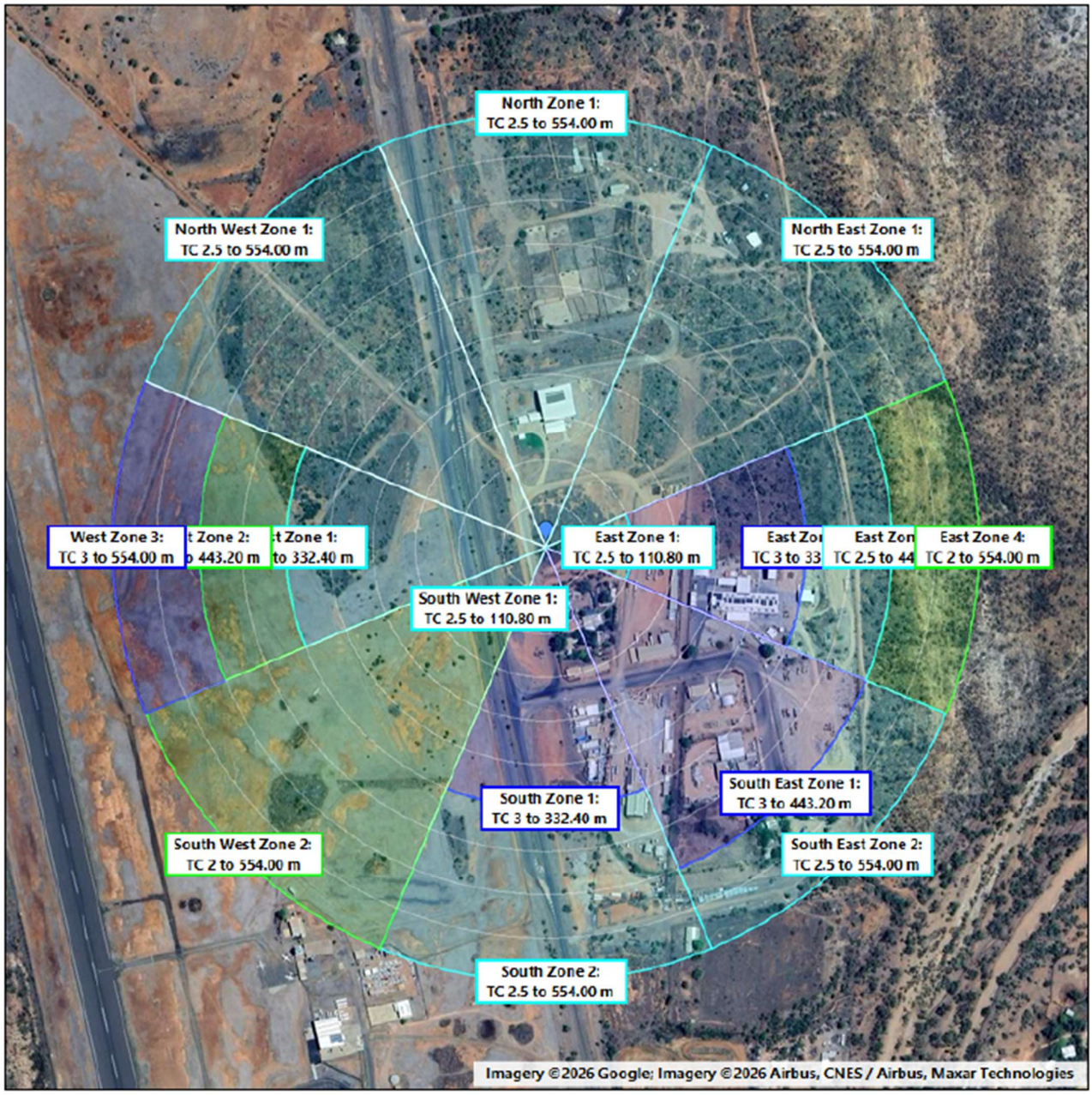
STRUCTURAL ENGINEERING REPORT

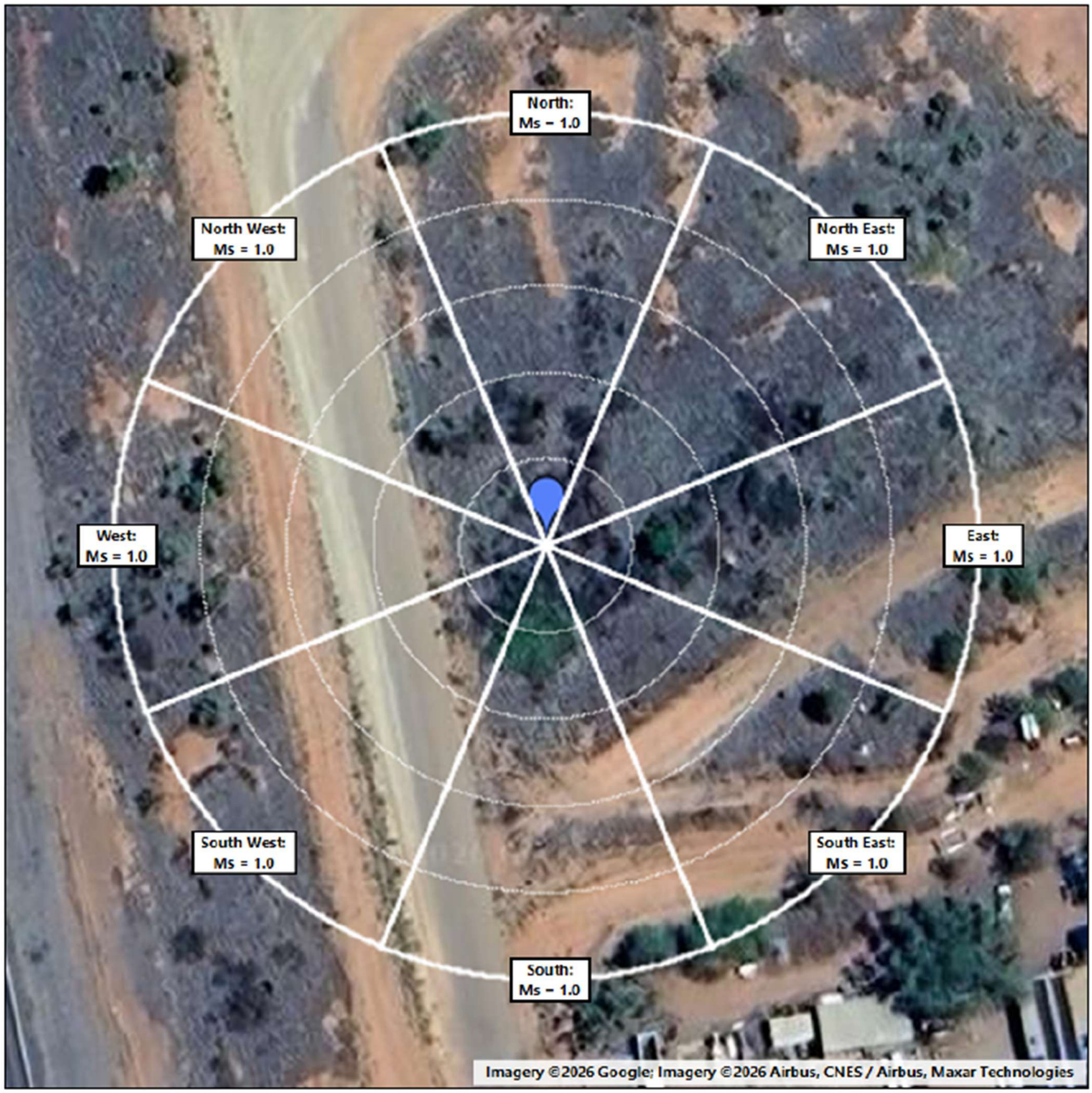
36, 37 & 55 Killara Cres, Kalkadoon QLD 4825

ARDENT CONSULTING ENGINEERS

08th May 2026 Ref:260436 V1

Wind Loads – 36 Killara Cres

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North West:
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East:
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South West:
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South East:
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Imagery ©2026 Google; Imagery ©2026 Airbus, CNES / Airbus, Maxar Technologies

North:
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North West:
Mt = 1.0
North East:
Mt = 1.0251 – 1.0221
West:
Mt = 1.0
East:
Mt = 1.0
Kalkadoon
South West:
Mt = 1.0
South East:
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South:
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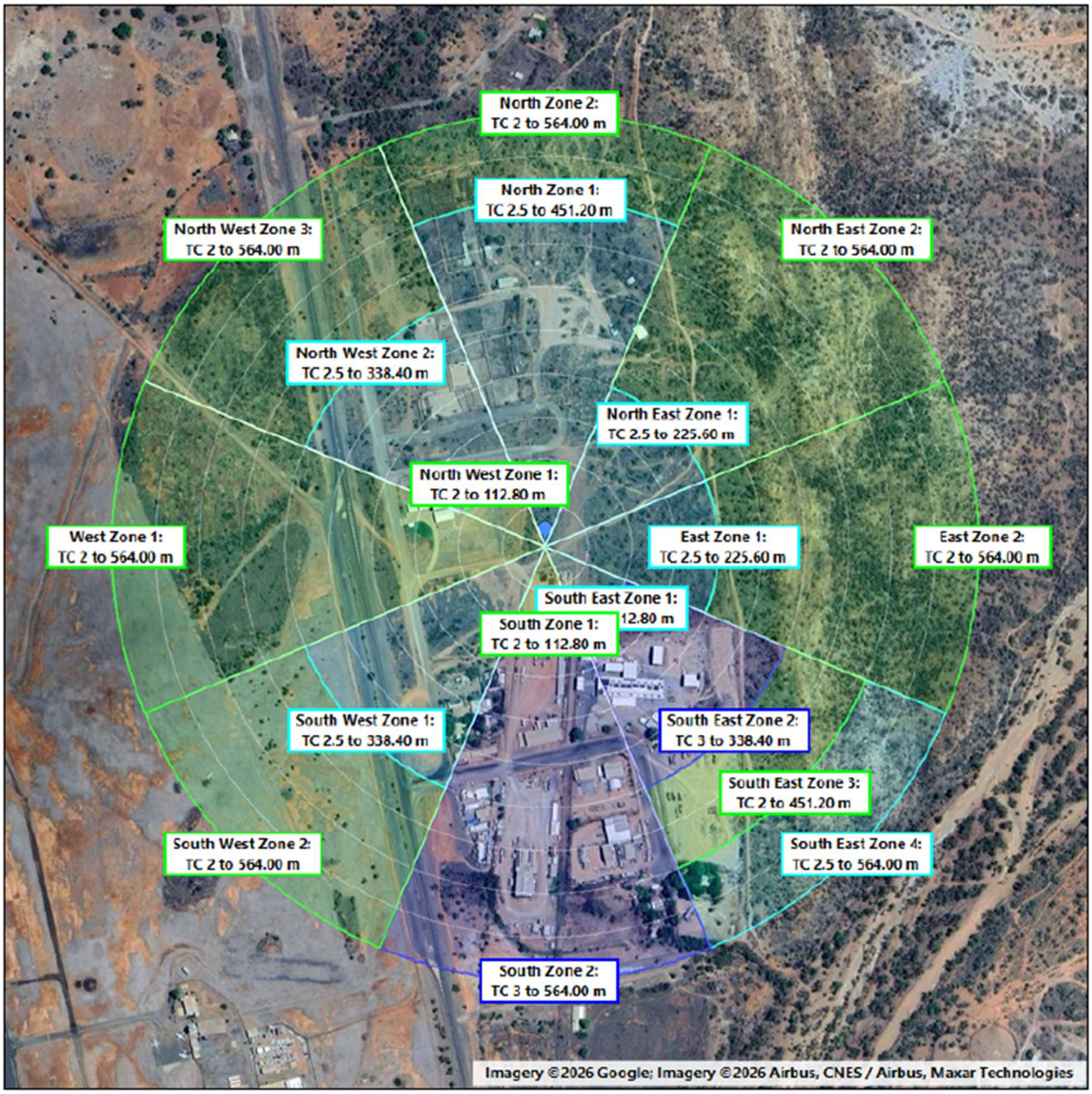
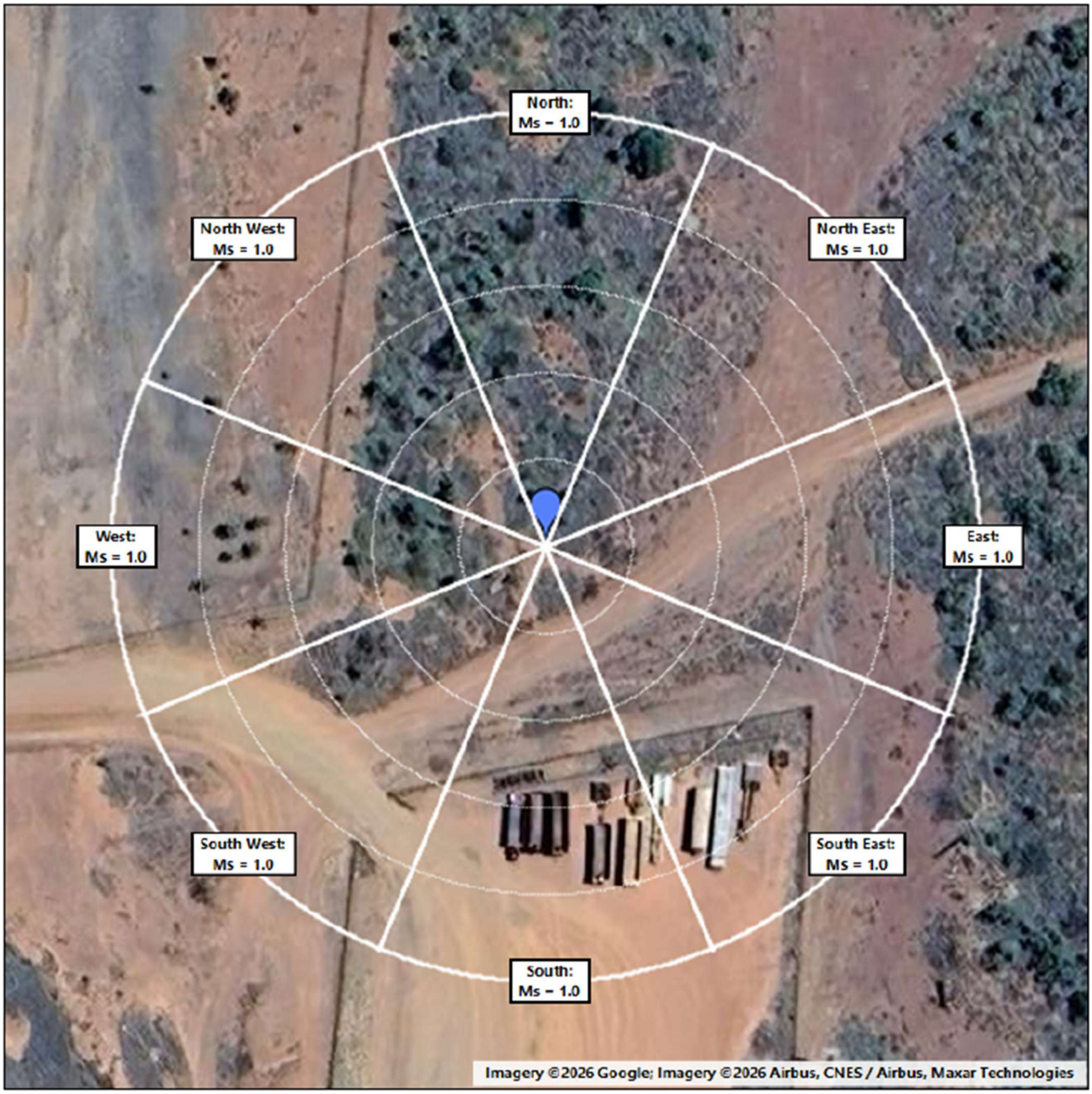
Imagery ©2026 Google; Map data ©2026

Wind Loads – 37/55 Killara Cres




North:
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Imagery ©2026 Google; Imagery ©2026 Airbus, CNES / Airbus, Maxar Technologies

North:
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North West:
Mt = 1.0
North East:
Mt = 1.0
West:
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East:
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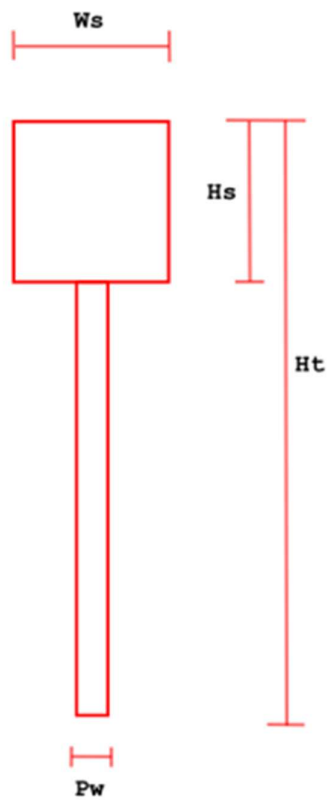
Kalkadoon
South West:
Mt = 1.0
South East:
Mt = 1.0
South:
Mt = 1.0
Imagery ©2026 Google; Map data ©2026

Member Design – 36 Killara Cres

Free Standing Sign Design (Assumed to be Conservative)

Basic ULS Wind Pressure	0.96	
Basic SLS Wind Pressure	0.71	



Overall Dimensions

Total Height of the Structure (Ht)	2.70	m
Average Sign Head Height (Hs)	1.50	m
Average Sign Width (Ws)	2.00	m
Average Height to center of sign load	1.95	

Sign Wind Pressure

Cpn	1.35	From RHS
Justification	Free standing	(Assumed to be conservative)
ULS Sign	1.30	kPa
SLS Sign	0.96	kPa

Pole Wind Load

Pole Width (Pw)	0.02	m
Cfig	1.54	From RHS
# Poles	2	
Height of Pole	1.20	m
ULS Pole	1.48	kPa
SLS Pole	1.09	kPa

Deflection Variables

M*	7.61	knm
V*	3.93	kn
V* (ws)	2.91	kn
e	1.94	m
M*pole	3.81	
V*pole	1.96	

Member Shape	SHS			
Member Size	100x100x3	**SHS**	100x50x3	**RHS**
Ixx	1770000	mm^4	-	mm^4
Sxx	41200	mm^3	-	mm^3
Fy	350	N/mm^2	350	N/mm^2
Phi Mub/ Phi Msx	12.98	**OK**	-	**OK**
E	200000	N/mm^2	200000	N/mm^2

Deflection using point load at centroid			**Deflection using cantilever UDL**	
Deflection	16.0		18.03	mm
Span/x	168.6	**OK**	149.8	**OK**

Strength FOS	3.41	**OK**
Service FOS	3.37	**OK**

Simple with Overhang UDL

Dead Load & Windload

Specify Loads		
G		kPa
Wu	1.3	kPa
Ws	1.0	kPa
Geometry		
TRIB	1.0	m
SPAN	2.0	m

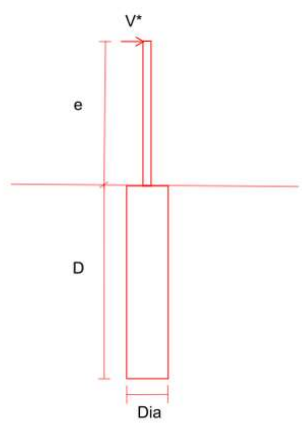
Summary Combination Loads		
Wu - G	1.30	(kn/m)
Ws	0.96	(kn/m)
Summary Design Actions		
M(negative)	0.325	
M(positive)	0.041	
V*	0.3	

Calculate Effective Length		
Cont' Laterally Restrained	Yes	
kl	1.00	
kt	1.00	
kr	1.00	
le	1.00	
a(m)	1.0	
M*x a(m)	0.3	
Member Size		
Member	50x50x3	
Phi Mb	2.2	**OK**
Ixx	224109	
E	200000	
Deflection		
Deflection	2.6	
Span/x	759.3	**OK**

Broms Non-Cohesive

Short Pile

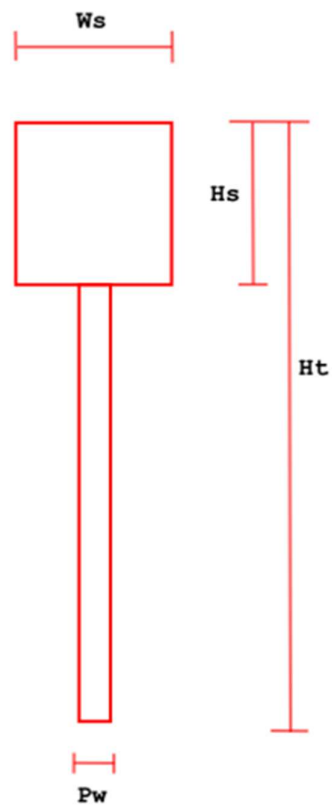
V*	1.96	kN
Eccentricity e	1944	mm
M*	3.81	kNm
Unit Weight	18	kn/m3
Pier Diameter (Dia)	450	mm
Length of pier (D)	1300	mm
Kp	2	
Phi	0.8	
PhiMt	11.20	kNm
FOS	2.93896063	



Member Design – 37/55 Killara Cres

Free Standing Sign Design (Assumed to be Conservative)

Basic ULS Wind Pressure	0.92	
Basic SLS Wind Pressure	0.68	



Overall Dimensions

Total Height of the Structure (Ht)	3.20	m
Average Sign Head Height (Hs)	2.00	m
Average Sign Width (Ws)	4.00	m
Average Height to center of sign load	2.20	

Sign Wind Pressure

Cpn	1.35	
Justification	Free standing	(Assumed to be conservative)
ULS Sign	**1.24**	kPa
SLS Sign	**0.92**	kPa

Pole Wind Load

Pole Width (Pw)	0.10	m
Cfig	1.54	
# Poles	2	
Height of Pole	1.20	m
ULS Pole	**1.41**	kPa
SLS Pole	**1.05**	kPa

Deflection Variables

M*	**21.97**	knm
V*	**10.11**	kn
V* (ws)	**7.49**	kn
e	**2.17**	m
M*pole	**10.99**	
V*pole	**5.06**	

Member Shape	SHS			
Member Size	100x100x4	**SHS**	100x50x3	**RHS**
Ixx	2230000	mm^4	-	mm^4
Sxx	52600	mm^3	-	mm^3
Fy	350	N/mm^2	350	N/mm^2
Phi Mub/ Phi Msx	16.57	**OK**	-	**OK**
E	200000	N/mm^2	200000	N/mm^2

Deflection using point load at centroid			**Deflection using cantilever UDL**	
Deflection	**50.1**		54.08	mm
Span/x	63.9	**OK**	**59.2**	**OK**

Strength FOS	1.51	**OK**
Service FOS	1.28	**OK**

Simple with Overhang UDL

Dead Load & Windload

Specify Loads		
G		kPa
Wu	1.2	kPa
Ws	0.9	kPa
Geometry		
TRIB	1.0	m
SPAN	4.0	m

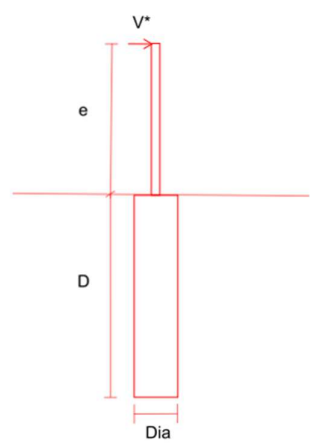
Summary Combination Loads		
Wu - G	1.24	(kn/m)
Ws	0.92	(kn/m)
Summary Design Actions		
M(negative)	0.000	
M(positive)	0.620	
V*	1.2	

Calculate Effective Length		
Cont' Laterally Restrained	Yes	
kl	1.00	
kt	1.00	
kr	1.00	
le	1.00	
a(m)	1.0	
M*x a(m)	0.6	
Member Size		
Member	50x50x3	
Phi Mb	2.2	**OK**
Ixx	224109	
E	200000	
Deflection		
Deflection	55.0	
Span/x	72.7	**OK**

Broms Non-Cohesive

Short Pile

V*	5.06	kN
Eccentricity e	2171.93676	mm
M*	10.99	kNm
Unit Weight	18	kn/m3
Pier Diameter (Dia)	450	mm
Length of pier (D)	1800	mm
Kp	2	
Phi	0.8	
PhiMt	31.84	kNm
FOS	2.89683712	



Upon request, Ardent Consulting Engineers undertook the design and certification of the following signage.

If you have any questions regarding this matter please contact info@ardentengineers.com.au or call 1300 509 927.

Kind regards,

Scott Fell

B. Eng (Hons), RPEQ, PRE0001778