

SPECIFICATION-OF-INTENT

ISSUED FOR
DEVELOPMENT APPROVAL
COMPRISING OF
PROVISIONAL DEVELOPMENT PLAN CONSENT
PROVISIONAL BUILDING RULES CONSENT

***MISCION PTY LTD**
STRUCTURAL DESIGN

Maitland, South Australia

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*also T/A Roy Harrison & Associates

DRAWING INDEX & DOCUMENT STATUS		
DRAWING NUMBER	TITLE	REV
1982/G01	GENERAL NOTES (1)	A
1982/S01	FRAMING PLAN	A
1982/S02	DETAILS	A
1982/SD01	COLLAR-TIED TRUSS	A
1982/SD02	SUPPORT FRAME	A

Example No - 1982

February 2007

for

Proposed Canopy
CLARENCE PARK

EXAMPLE

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GENERAL

- The builder shall ensure that the process of construction is supervised by an appropriately qualified person.
- The Building Code of Australia (BCA) is adopted as the primary reference specification for objective, function and performance.
- The South Australian Housing Code (SAHC) is adopted as a specification of acceptable product and process unless noted otherwise.
- The project specific specification-of-intent comprises of the documents listed on the cover sheet.
- This project specification takes precedence over the BCA and the SAHC unless the BCA imposes higher levels of performance.
- The scope of the SAHC is extended to the BCA class of the current building project subject to:
 - The SAHC shall not be used for the sizing of Structural members
- All materials and workmanship shall be in accordance with the latest editions of the relevant Australian codes unless noted otherwise (uno).
- The structural drawings shall be read in conjunction with these Construction Notes and associated drawings, and with such other written instructions as may be issued by the Engineer, during the course of construction.
- All dimensions in millimetres(mm) unless noted otherwise.
- The Contractor shall verify setting out dimensions shown on the drawings by measurement on site.
- The structure has been designed to meet the requirements of the Code or Standard relevant to the facility in its in-service condition. During construction and prior to hand-over the Contractor shall, at all time, ensure that the structure is protected from over-stressing and instability due to any causes whatsoever.
- Details of component parts of each structure are typical only. Where items are not detailed the contractor or fabricator shall use similar methods to those shown on the drawings.
- The contractor shall provide all cleats and holes for fixing to steel, timber and other components as required by the engineering and architectural drawings whether or not shown.
- All beams shall be fabricated and installed with natural camber up.
- The quality characteristics of all materials and components used shall be verifiable against this specification upon request.

BASIS OF DESIGN

- Structure Importance Level : 2 (Normal)
- Design wind Class : N1 (AS4055)
- Design live loading : Roof = 0.25 kPa
- A maximum allowable bearing pressure of 100kPa has been assumed.
- Footings shall be placed centrally under walls and columns uno.
- All variations from the design specification to be referred to the design engineer for approval before proceeding.

STRUCTURAL CONCRETE

- Concrete quality shall be as tabulated, and verifiable

Concrete Element	Exposure Class'n	Class/Grade	Slump mm	Aggregate Size mm	Cement Type
Footing Piers & Pads	A2	N20	80	20	GP

STRUCTURAL STEELWORK

- All shop and field welds shall be classification General-Purpose (GP) uno.
- Continuous fillet weld (CFW) shall be as specified on details.
- Butt welds shall be complete penetration(CPBW) type.
- Bolt designation: 4.6/S refer to commercial bolts grade 4.6, tightened using a standard wrench to a snug-tight condition.
- All bolts shall be 4.6/S uno.
- Bolts in slotted holes shall be "finger tight" and supplied with lock nuts.
- Seal weld a 3mm plate to the ends of all hollow sections uno.
- All damage to protective coatings as a result of transport, welding or other building operations shall be repaired in accordance with relevant codes as approved.
- Welds to cold-formed sections shall be continuous fillet M.I.G. welds of a size equal to the thinnest section of the material joined, wire brushed and coated with zinc silicate paint.
- Surface treatment and coating:

Element	Surface Treatment	Treatment or Coating
All steel fitments including Hold Down Bolts, Nuts & Washers, Cast-in steel items, external steelwork walkways & Hand-railing	Chemical Treatment	Hot Dip Galvanising
All other steelwork	Grit blast to near white metal finish	Inorganic Zinc Silicate with average thickness 85 microns

STRUCTURAL TIMBER

- Items not explicitly described are to be to the requirements of AS1720 and AS1684.2 and the TDA construction guide for Carports, Verandahs & Pergolas.
- Vertical Nail lamination to increase breadth of members to AS1684.2 clause 2.3
- Posts and Rafters shall not be spliced.
- Roof Battens shall be continuous spanned, and spliced to AS1684.2 clause 7.2.20
- Ridge boards spliced in accordance with AS1684.2 clause 7.2.12.2
- Fascia beams spliced at post supports.
- Unless noted otherwise all bolts to be provided with washers under nut and bolt head.
- Washers to bolts to comply with AS1720.1:1997 Table 4.12 unless noted otherwise. (M12 = ø55 washer, M10 = ø45 washers.)
- Spacing of fasteners, end distances and edge distances to comply with AS1720.1
- End distances given in AS1720 for nails and screws are taken to be required irrespective of load direction. End distances for bolts selected according to load direction.
- Preservative Treatment
 - Posts in ground and framing less than 150mm above the ground shall be treated to Hazard level H5 (AS1604.1)
 - Framing greater than 150mm above the ground shall be treated to Hazard Level H3 (AS1604.1)

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U.N.O : unless noted otherwise.
NB: code clauses refer to AS1684.2:1999

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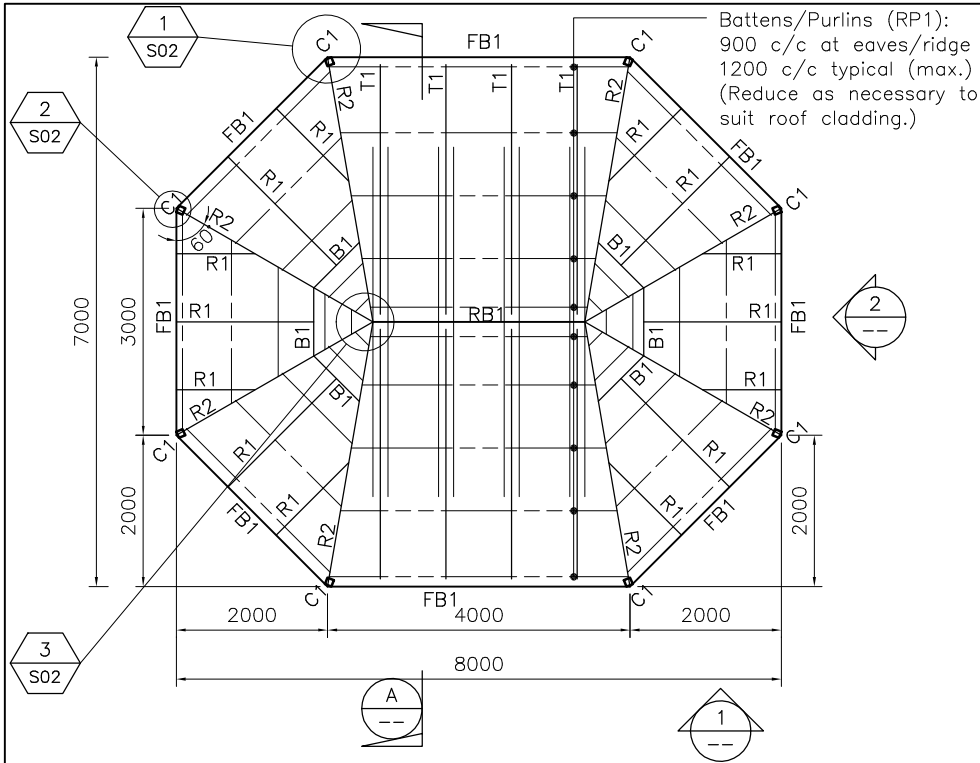
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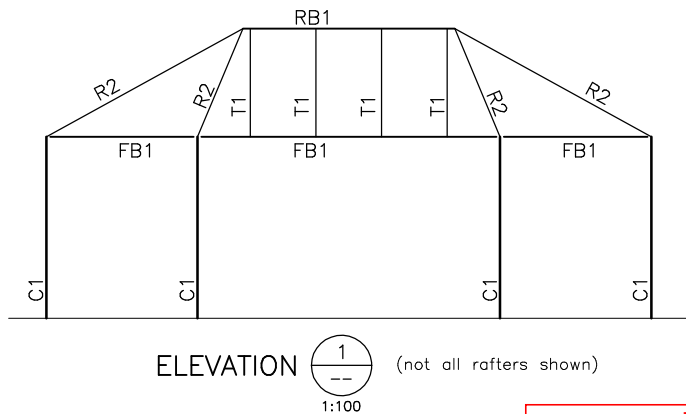
PROPOSED CANOPY
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CLARENCE PARK
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GENERAL NOTES(1)

DRAWN		SCH	
DESIGNED		SCH	
CHECKED			
SCALE		as shown DO NOT SCALE	
SIZE	DRAWING NUMBER	REVISION	
A4	1982/G01	A	

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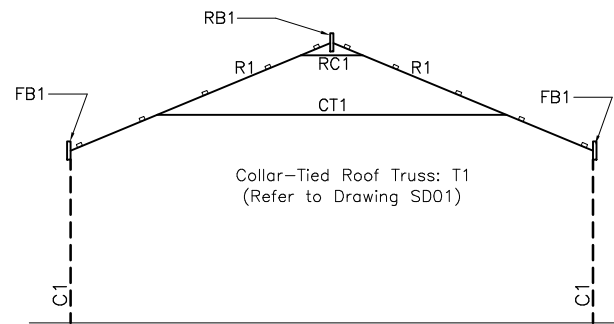
FRAMING PLAN
1:100



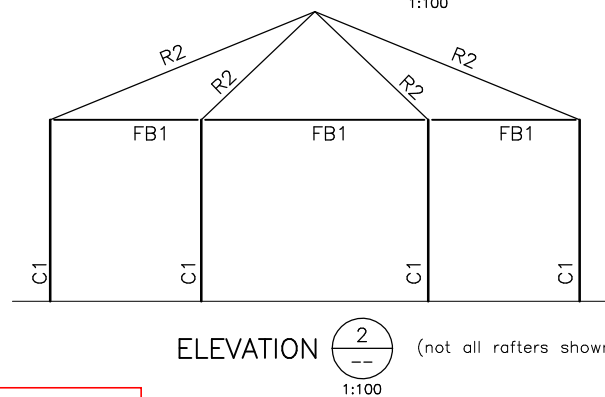
ELEVATION $\frac{1}{1:100}$ (not all rafters shown)

SCHEDULE OF MATERIALS			
MEMBER	MARK	SIZE	DWG
COLUMNS	C1	90x90x2.0 SHS Duragal C450	--
FASCIAS	FB1	190 x 45 F7	--
RIDGE BEAM	RB1	190 x 45 F7	--
BEAM	B1	190 x 45 F7	--
RAFTERS	R1	140 x 45 F7	--
	R2	190 x 45 F7	--
COLLAR-TIE	CT1	2/120 x 45 F7	--
RIDGE-COLLAR	RC1	70 x 45 F7	--
BATTENS	RP1	45 x 70 MGP10	--
TRUSSES	T1	REFER SECTION 'A'	--

Battens/Purlins (RP1):
900 c/c at eaves/ridge
1200 c/c typical (max.)
(Reduce as necessary to
suit roof cladding.)



SECTION $\frac{A}{1:100}$



ELEVATION $\frac{2}{1:100}$ (not all rafters shown)

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⊗ TIE-DOWNS

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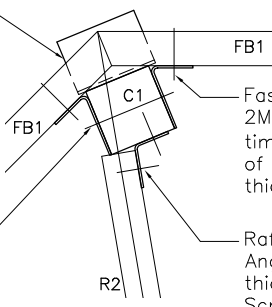
FRAMING PLAN

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SCALE	as shown	DO NOT SCALE
SIZE	DRAWING NUMBER	REVISION
A4	1982/S01	A

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Other Connections:
B1 to Rafters : 1 Angle Bracket + 5 No. 12
Hex Head Type 17 Screws, to each leg.

Bearing Support Bracket:
Fabricated from 100mm
length of Duragal 75x75x4
CA. Fillet weld all around
to steel post to seal.
(3CFW)

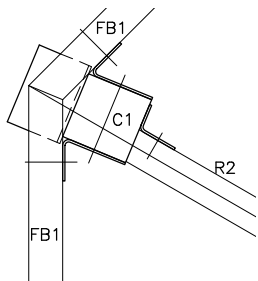


Fascia beam to post Connection:
2M10 bolts + Ø45 washers to face of
timber and "standard" washers to face
of steel. Bracket fabricated from 3mm
thick steel.

Angle Brackets to Post:
2 M10 through bolts +
washers, picking up
brackets on each side of
post.

Rafter to Post Connection.
Angle bracket fabricated from 1mm
thick steel. 5 No.12 Hex head Type 17
Screws 30mm Long to fasten bracket
to rafter. 5 No. 12 hex head Type
ASD self drilling screws 20mm long to
fasten bracket to steel post.

DETAIL 1
S01



DETAIL 2
S01

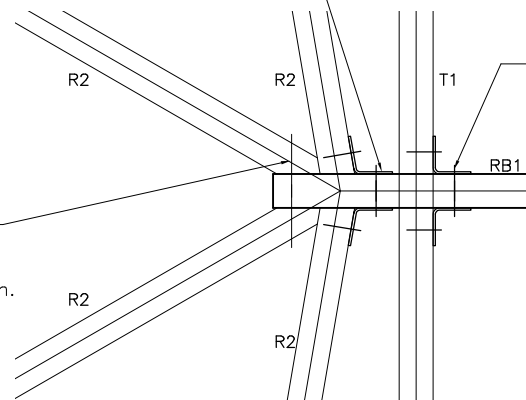
(Refer Detail (1) for
fastener sizes)

Rafter to Ridge Beam Connection.
5 No.12 Hex head Type 17 Screws
75mm Long through rafter, minimum
of 30mm penetration into Ridge beam.

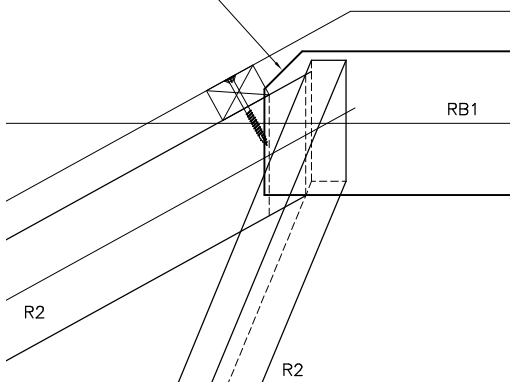
Nominal 50mm chamfer
to end of ridge beam to
clear roof cladding.

DETAIL 3
S01

Rafter to Ridge Beam Connection.
Angle bracket fabricated from 1mm
thick steel. 5 No.12 Hex head Type 17
Screws 30mm Long to fasten bracket
to rafter. 5 No. 12 hex head Type 17
screws 30mm long to fasten bracket
to Ridge Beam. (typical)



DETAIL 4
S01

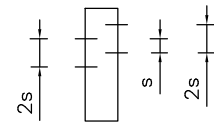


VIEW 4
S01

(Pictorial Orthographic View,
showing main members only
intersecting at ridge board)

SPECIFICATION-OF-INTENT

NB: For all connections
Fasteners from both
sides are to have
minimum spacings from
each other.



s = minimum fastener
spacing.

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DETAILS

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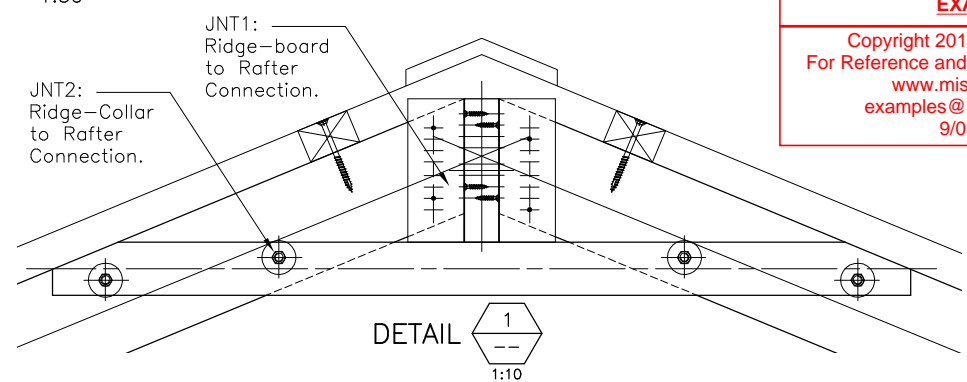
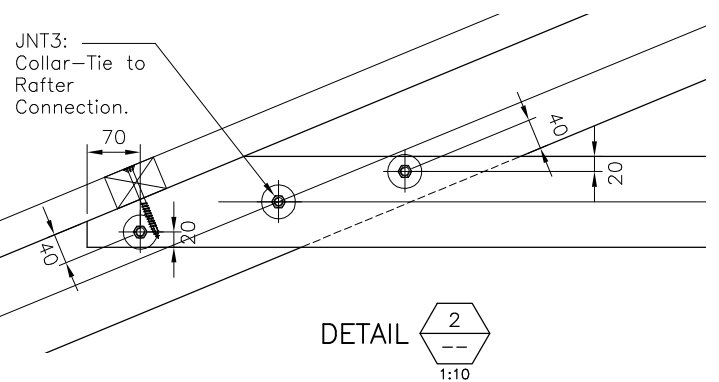
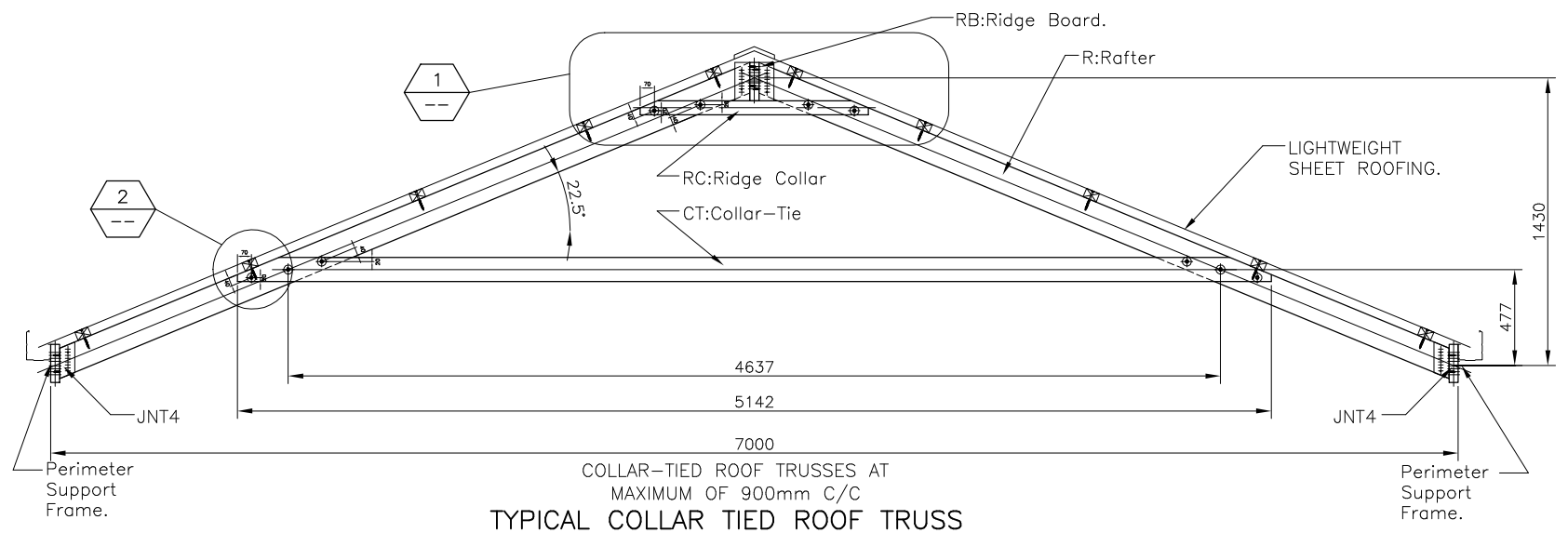
SCALE as shown DO NOT SCALE

SIZE A4	DRAWING NUMBER 1982/S02	REVISION A
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Connection details are indicative only, typically showing bolted and screwed connections. Refer to schedule for required fasteners and fittings.

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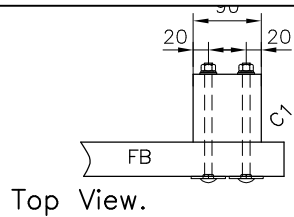
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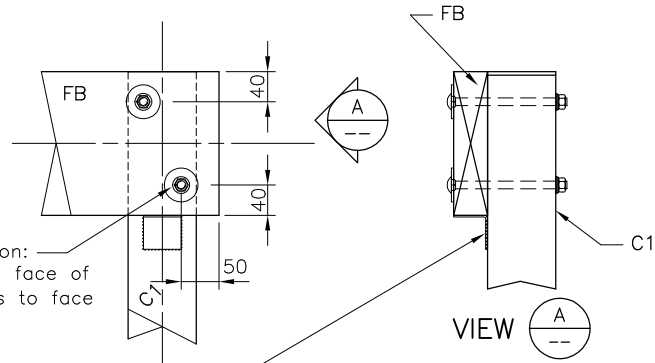
COLLAR-TIED TRUSS (T1)

DRAWN	SCH	DO NOT SCALE
DESIGNED	SCH	
CHECKED		
SCALE	as shown	DO NOT SCALE
SIZE	DRAWING NUMBER	REVISION
A4	1982/SD01	A

MEMBER SCHEDULE					CONNECTION SCHEDULE							
ITEM ID.	MARK	MEMBER	DESCRIPTION/DIMENSION	MATERIAL (grade)	Reference	ITEM ID.	MARK	DESCRIPTION	FITMENT	FASTENER	COMMENTS	DRG
---	R	RAFTER	140 x 45	F7	---	1	JNT1	At Ridge	---	4/ø2.8 Nails	2 to each face	---
---	CT	COLLAR-TIE	2/120 x 45 battened	F7	---	2	---	---	---	---	---	---
---	RC	RIDGE-COLLAR	70 x 45	F7	---	3	JNT4	At Fascia	---	6/ø2.8 Nails	3 to each face	---
---	---	---	---	---	---	4	---	---	---	---	---	---
---	---	---	---	---	---	5	JNT3	to rafter	---	3/M10 bolts	ø22.5 Washers	---
---	---	---	---	---	---	6	---	---	---	---	---	---
---	---	---	---	---	---	7	JNT2	to rafter	---	2/M10 bolts	ø45 Washers	---
---	---	---	---	---	---	8	---	---	---	---	---	---
---	---	---	---	---	---	9	---	---	---	---	---	---
---	---	---	---	---	---	10	---	---	---	---	---	---
---	---	---	---	---	---	11	---	---	---	---	---	---
---	---	---	---	---	---	12	---	---	---	---	---	---

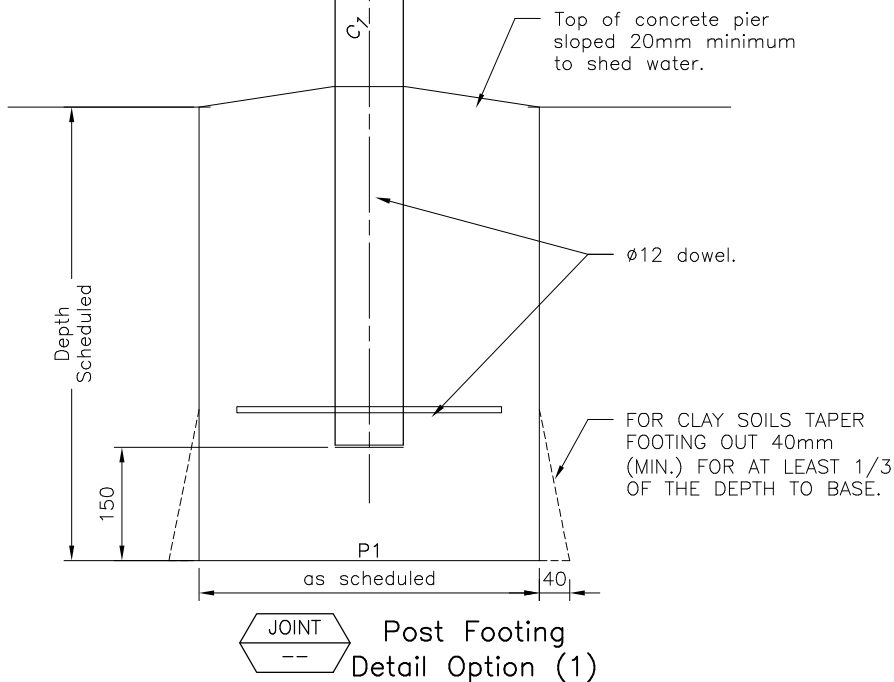


Top View.



Fascia beam to post Connection:
2M10 bolts + $\phi 45$ washers to face of timber and "standard" washers to face of steel.

Bearing Support Bracket:
Fabricated from 50mm length of Duragal 45x45x2.5 CA. Fillet weld all around to steel post to seal.(3CFW)



Top of concrete pier sloped 20mm minimum to shed water.

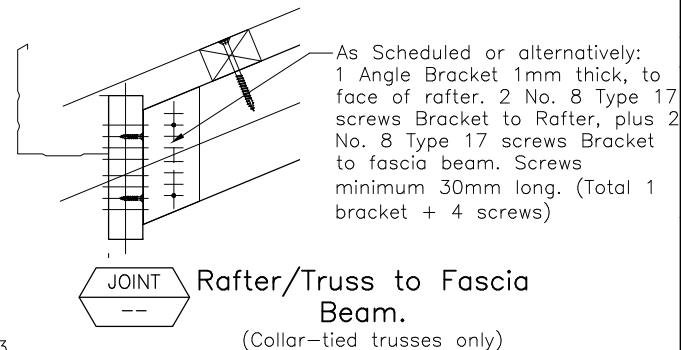
$\phi 12$ dowel.

FOR CLAY SOILS TAPER FOOTING OUT 40mm (MIN.) FOR AT LEAST 1/3 OF THE DEPTH TO BASE.

JOINT
--
Post Footing Detail Option (1)

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JOINT
--
Rafter/Truss to Fascia Beam.
(Collar-tied trusses only)

NOTES	
Depth of Piers to be NOT less than scheduled BUT must be founded below any fill NOT less than 300mm into firm natural ground.	

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SUPPORT FRAME

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CHECKED		
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