Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 152 Doley Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81161
Inspection Date:	26-09-2023
Report Reference No:	rpt_78479
Date Certified:	28-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**A100**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N2** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**NS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

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Soil Profile

BH1:	0-1800mm	Sand with trace of silt
	1800-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1800mm	Sand with trace of silt
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

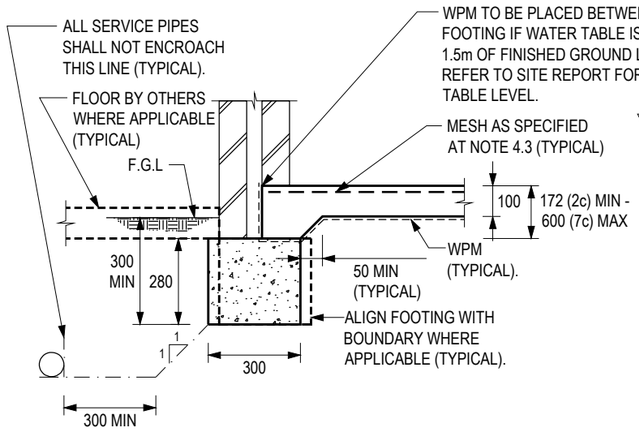
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

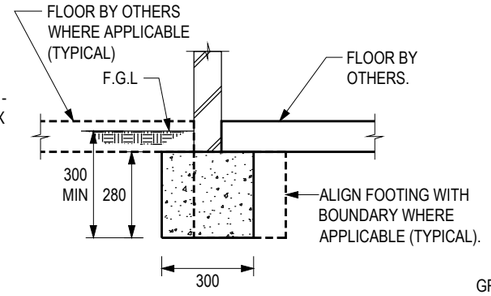
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	11	20+

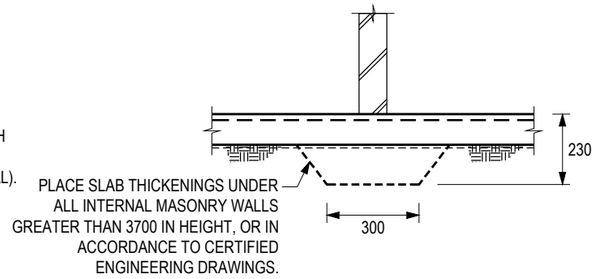
Michael Anthony Young
Michael Young BE MIE (276533)



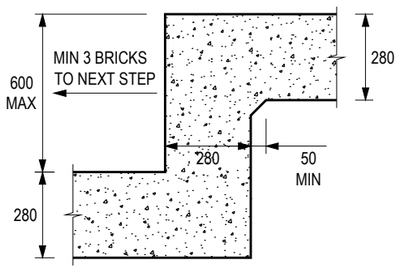
EXTERNAL WALL 1:20



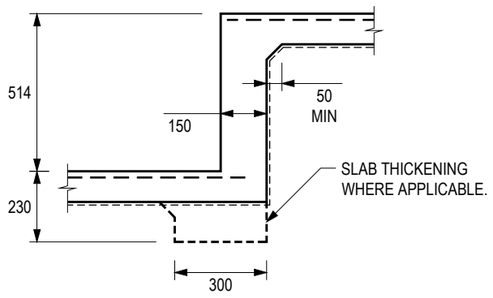
GARAGE WALL 1:20



SLAB THICKENING 1:20



FOOTING STEP 1:20



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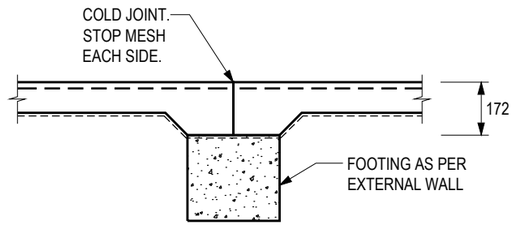

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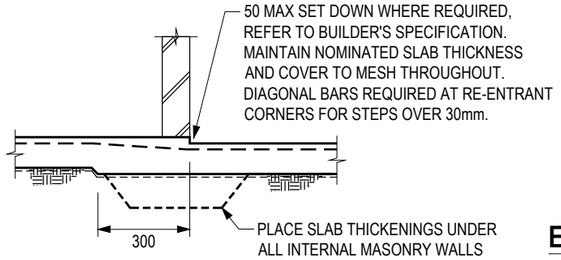
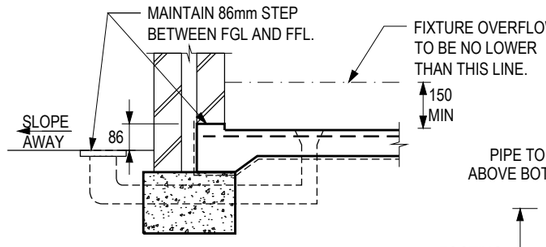


STANDARD SLAB RECESS 1:20



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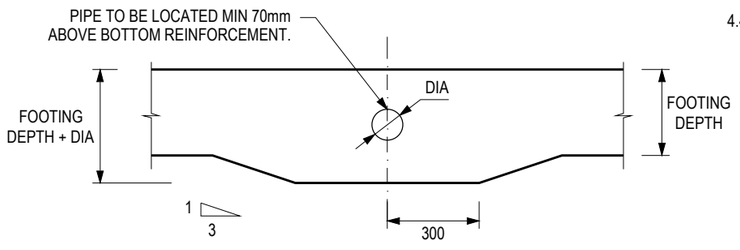

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

2.2 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.
2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
SL DENOTES D500L DEFORMED SQUARE MESH.
N DENOTES D500N DEFORMED BARS.
TM DENOTES D500L DEFORMED BAR TRENCH MESH.
4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
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ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	28-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 152 Doley Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81161 Tsk:200097

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 153 DOLEY ROAD Byford 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81162
Inspection Date:	26-09-2023
Report Reference No:	rpt_78506
Date Certified:	28-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**A100**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N2** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**NS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

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	1800-2000mm	Clayey Sand with silt
	2000-2500mm (71% passing 0.425mm, Linear Shrinkage - 6.5% , Plasticity Index - 19%)	Sandy Clay with silt and trace of gravel
BH2:	0-1800mm	Sand with trace of silt
	1800-2000mm	Clayey Sand with silt
	2000-2500mm	Sandy Clay with silt and trace of gravel

Borehole / PSP location Plan

Legend:
PSP = Perth Sand Penetrometer
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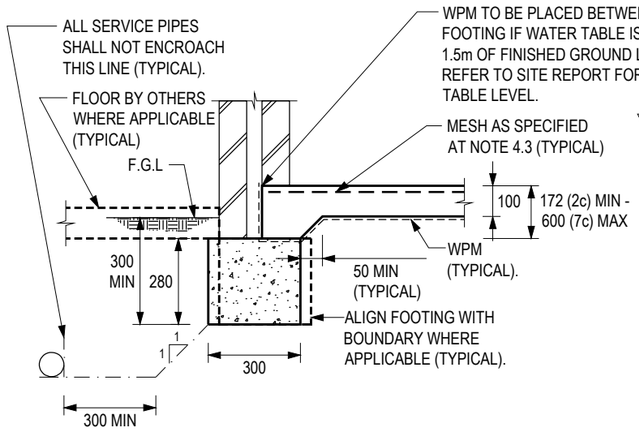

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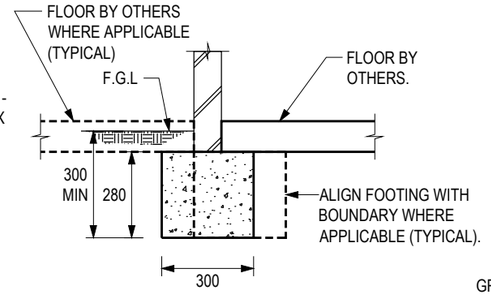

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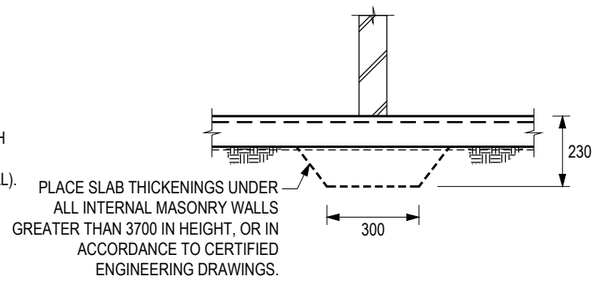

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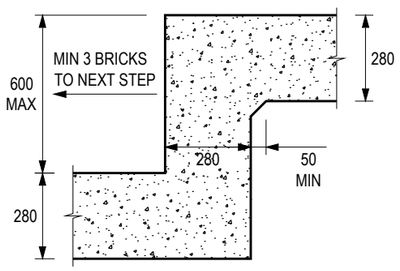

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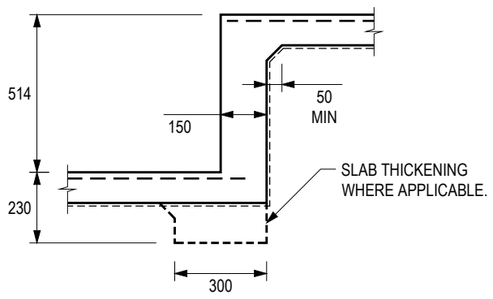

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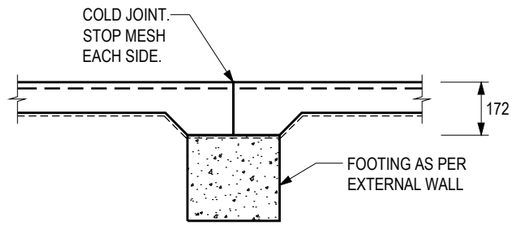

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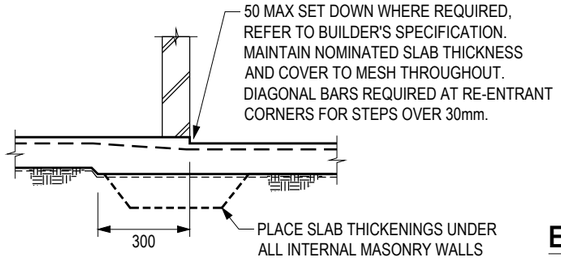

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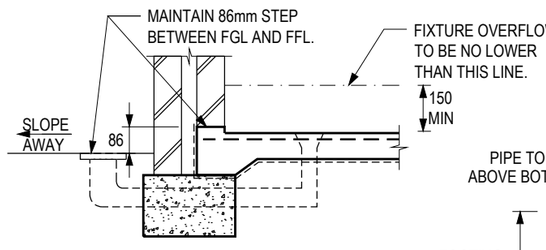

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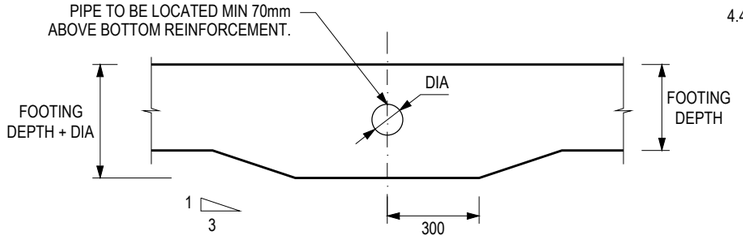

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		JOB REF.	pln_81162 Tsk:200098

DB-A100

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Report References

Client Ref No:	
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Inspection Date:	26-09-2023
Report Reference No:	rpt_78480
Date Certified:	26-09-2023

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PSP1	SET	9	20+

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PROMPT
ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

Laboratory Test Summary

Project Details:

Client: Parcel Property
Project No.: PLN_81163
Address: Lot 154 Doley Road
BYFORD

Sample Details:

Borehole: BH1
Depth (mm): 2000 - 2500mm
Description: Sandy Clay with silt and trace of gravel

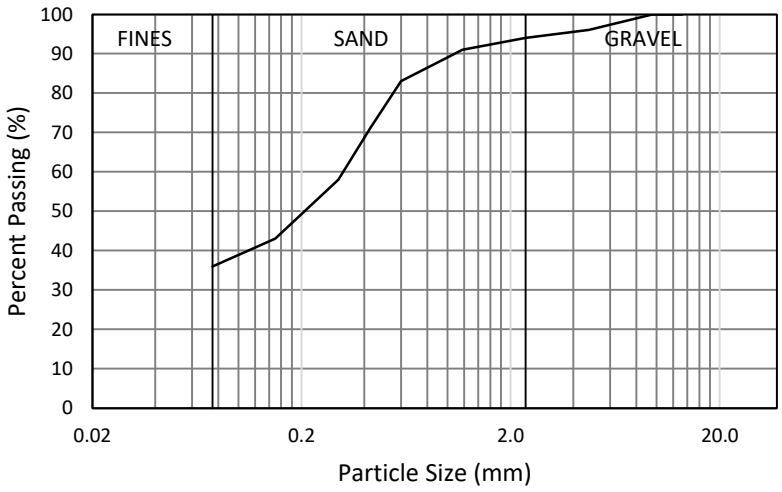
Sample Preparation: AS1289.1.1
Drying Method: Oven (AS1289.0)
Lab: Materials Consultants

Atterberg Limits - AS1289.3.2.1, AS1289.3.1.2, AS1289.3.3.1, AS1289.3.4.1

Plastic Limit	w_P =	17.0 %
Liquid Limit	w_L =	36.0 %
Plasticity Index	I_P =	19.0 %
Linear Shrinkage	LS =	6.5 %

Particle Size Distribution - AS1289.3.6.1

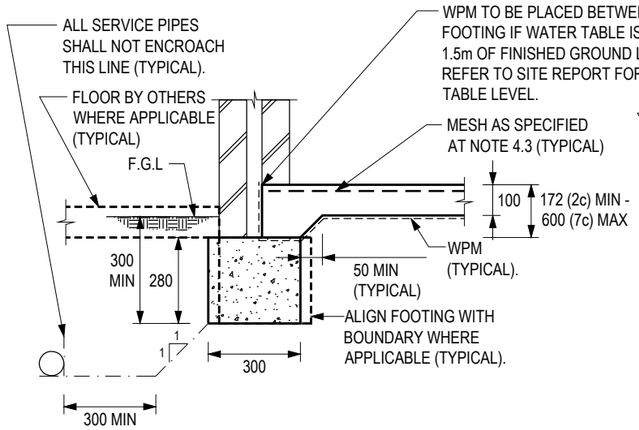
Seive	Percent Passing (%)
19.0 mm	
13.2 mm	100
9.5 mm	100
4.75 mm	96
2.36 mm	94
1.18 mm	91
0.6 mm	83
0.425 mm	71
0.3 mm	58
0.15 mm	43
0.075 mm	36



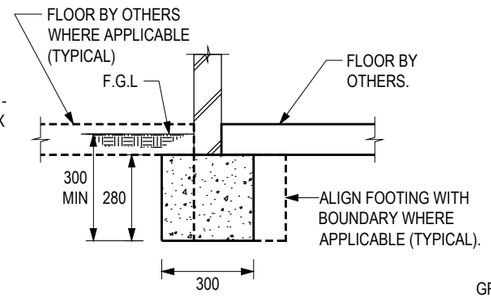
PROMPT ENGINEERING
MICHAEL YOUNG BE MIE (276533)
PLN_81163,26-09-2023

Signed: _____

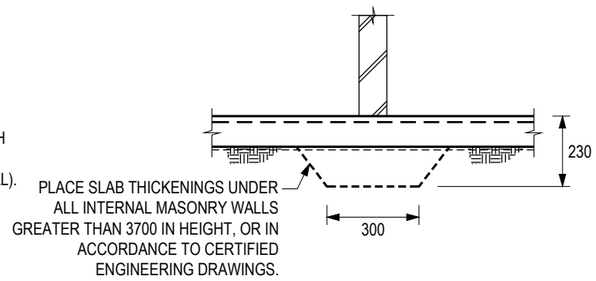
Date: 23 September 2023



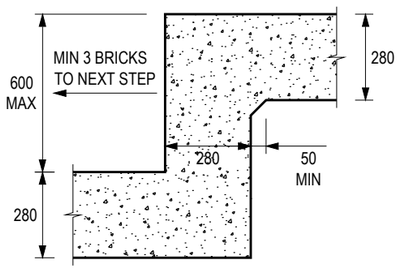
EXTERNAL WALL 1:20



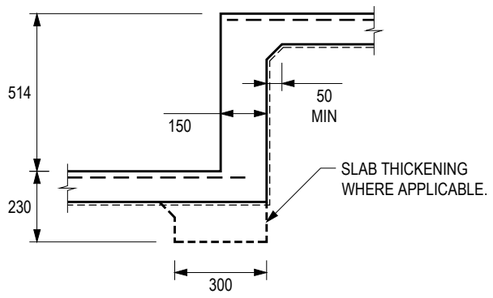
GARAGE WALL 1:20



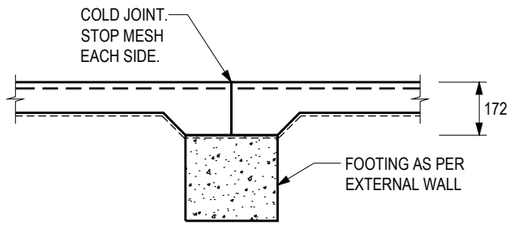
SLAB THICKENING 1:20



FOOTING STEP 1:20

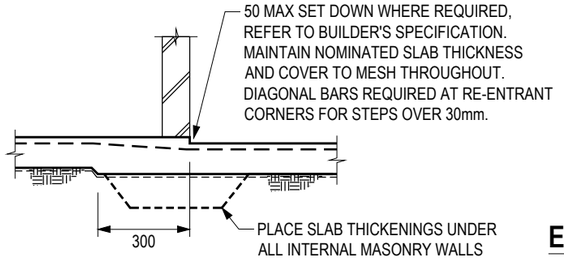


SLAB STEP 1:20

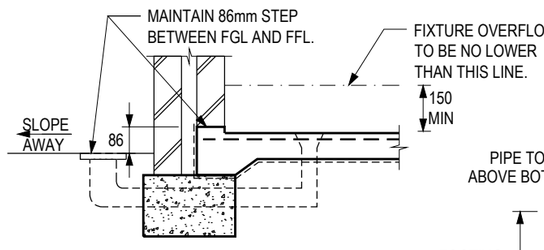


CONSTRUCTION JOINT 1:20

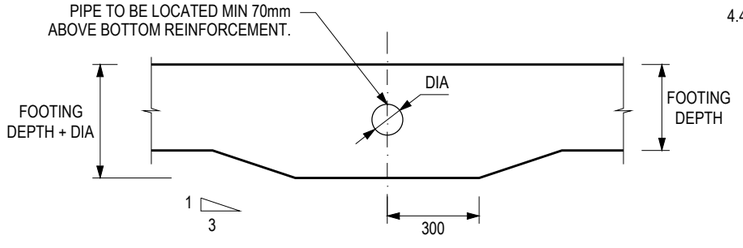
- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.



STANDARD SLAB RECESS 1:20



EXTERNAL WALL AT WET AREAS 1:20



PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

2.2 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.
2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
SL DENOTES D500L DEFORMED SQUARE MESH.
N DENOTES D500N DEFORMED BARS.
TM DENOTES D500L DEFORMED BAR TRENCH MESH.
4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
SL72 MESH	32m MAX

ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 154 DOLEY ROAD Byford WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81163 Tsk:200099

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 155 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81168
Inspection Date:	21-09-2023
Report Reference No:	rpt_78483
Date Certified:	28-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N2** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**NS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1000mm	Sand with trace of silt
	1000-1500mm	Sand with trace of silt and gravel
	1500-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1000mm	Sand with trace of silt
	1000-1500mm	Sand with trace of silt and gravel
	1500-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

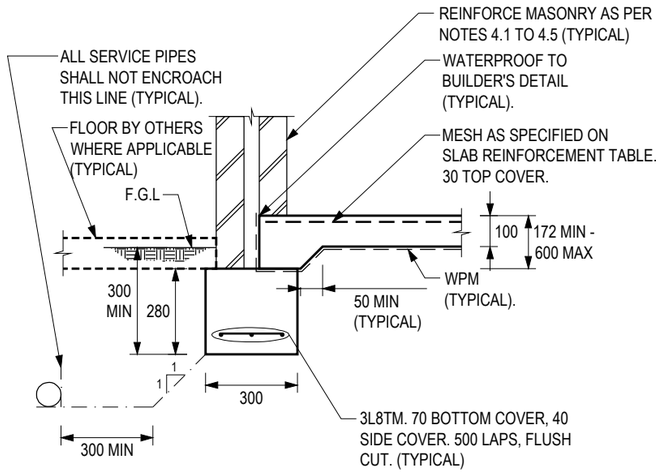
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

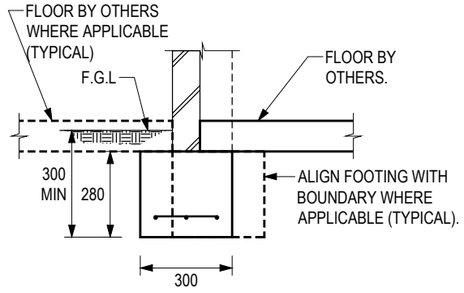
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

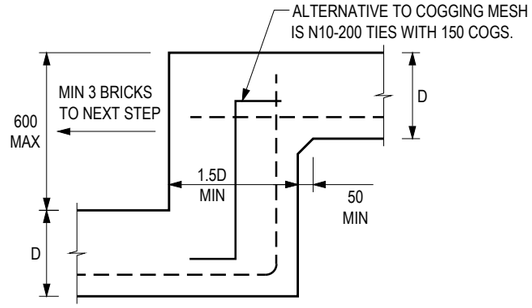
Michael Anthony Young
Michael Young BE MIE (276533)



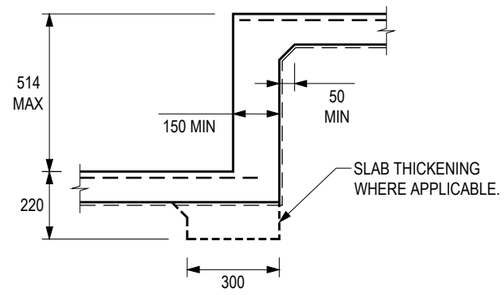
EXTERNAL WALL 1:20



GARAGE WALL 1:20

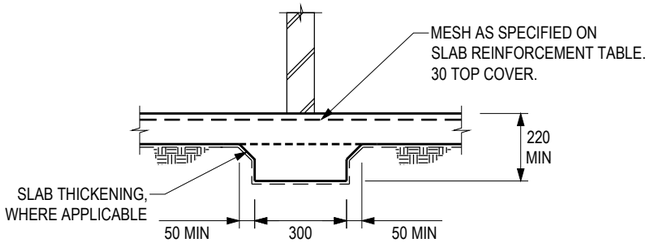


FOOTING STEP 1:20



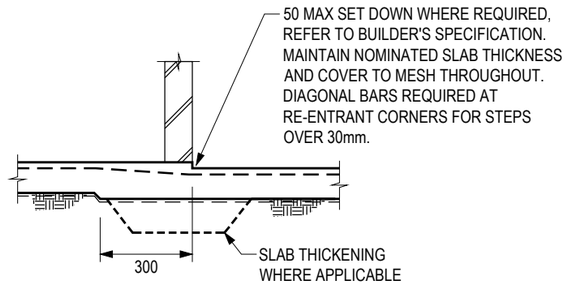
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

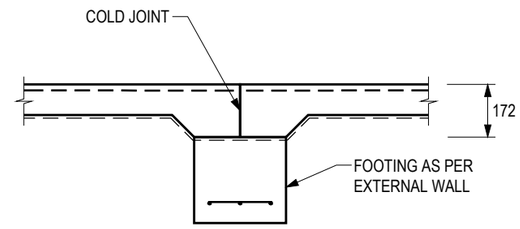


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	28-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 155 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81168 Tsk:200104

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

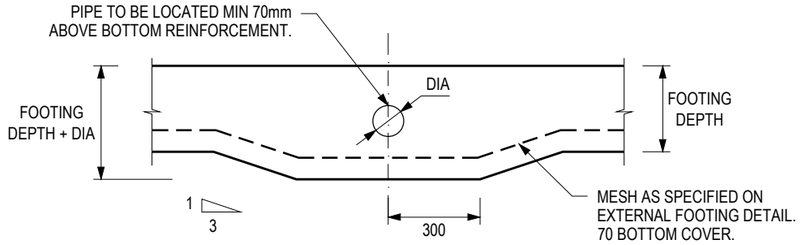
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

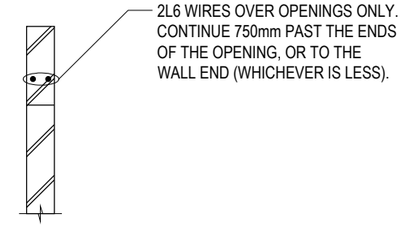
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

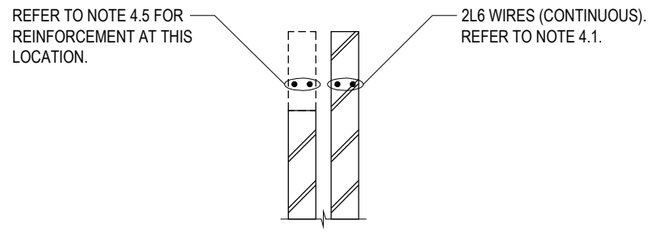


PLUMBING CAST INTO FOOTING 1:20

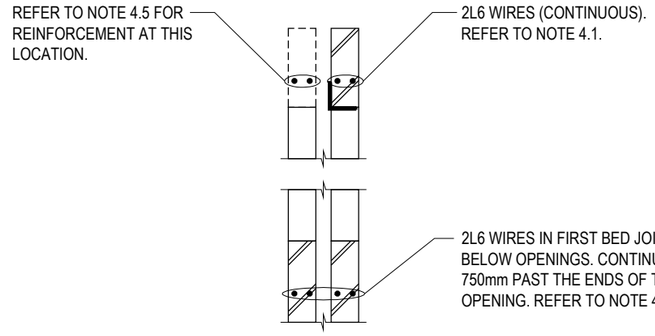


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	28-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 155 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81168 Tsk:200104

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 156 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81169
Inspection Date:	21-09-2023
Report Reference No:	rpt_78485
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1000mm	Sand with trace of silt
	1000-1500mm	Sand with trace of silt and gravel
	1500-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1000mm	Sand with trace of silt
	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

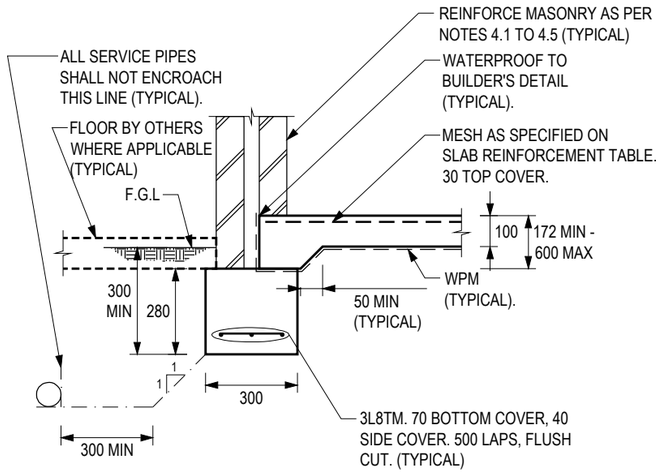
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

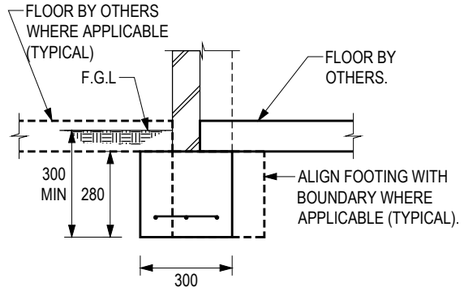
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

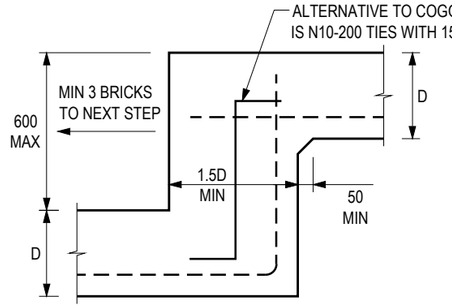
Michael Anthony Young
Michael Young BE MIE (276533)



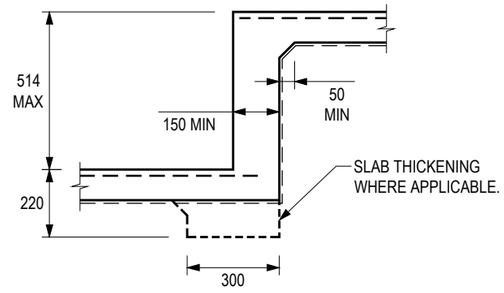
EXTERNAL WALL 1:20



GARAGE WALL 1:20



FOOTING STEP 1:20



SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
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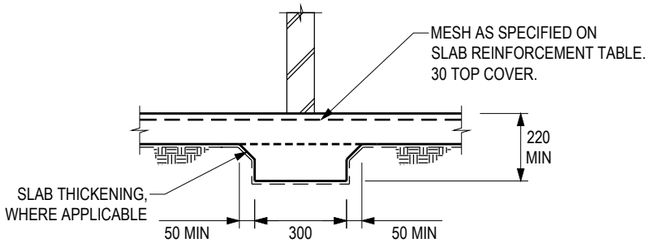

SLAB THICKENING 1:20

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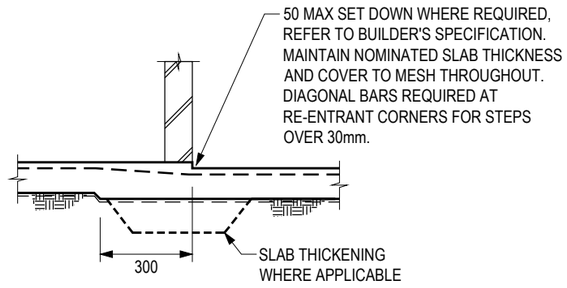
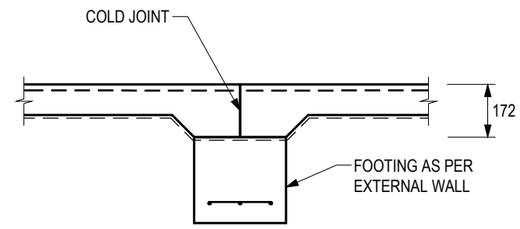


STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 156 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81169 Tsk:200105

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

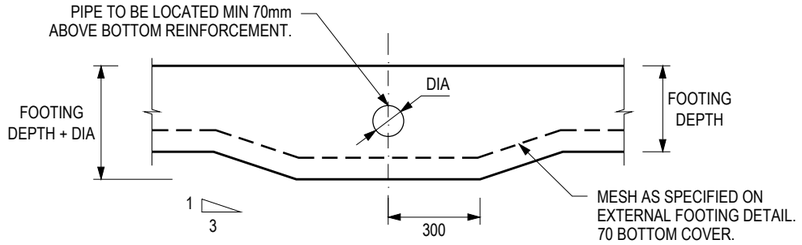
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

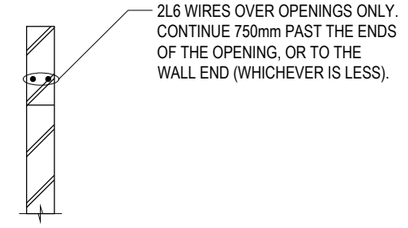
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.



PLUMBING CAST INTO FOOTING 1:20



TYPICAL INTERNAL WALL SECTION

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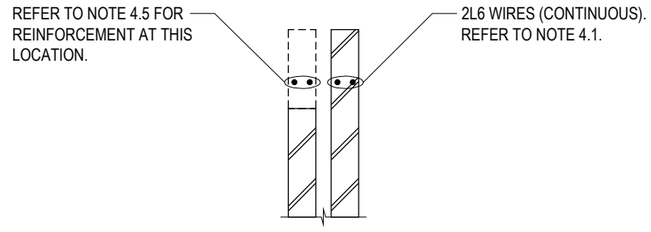

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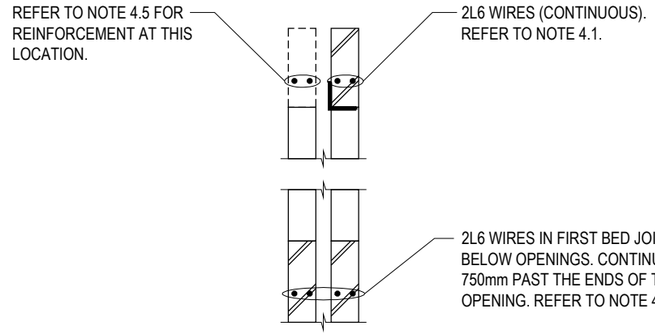

TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

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CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
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PROJECT	Lot 156 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81169 Tsk:200105

DB NOTES

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Address:	**Lot 157 Durling Road BYFORD 6122 WA**

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Report Reference No:	rpt_78508
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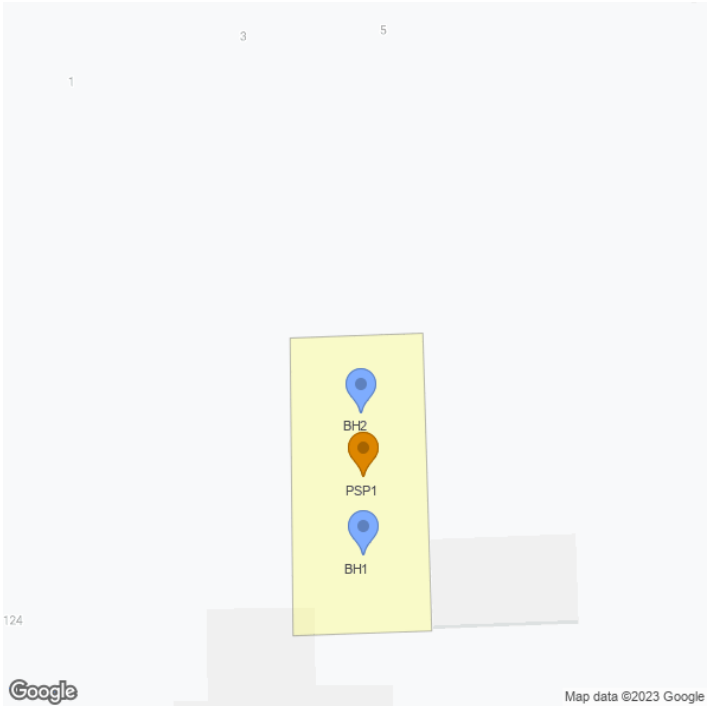

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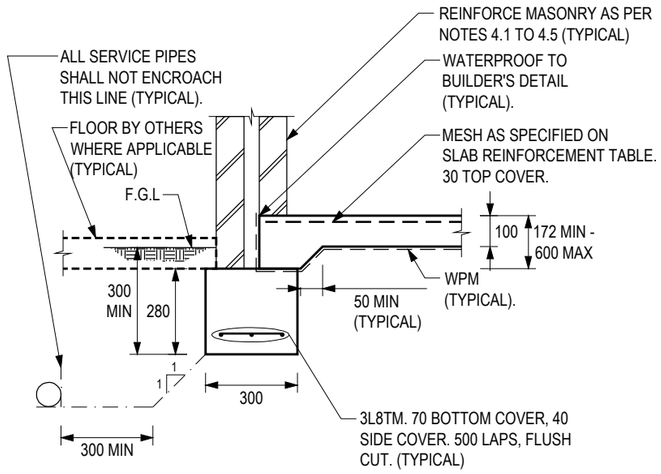

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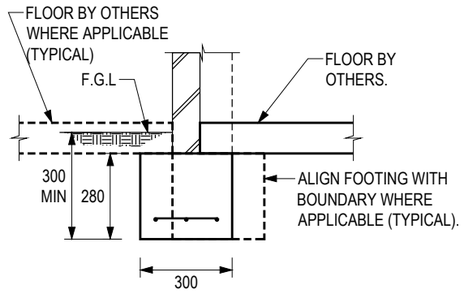

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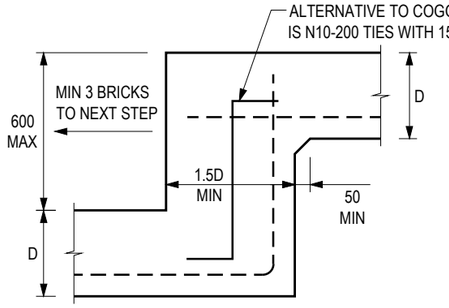
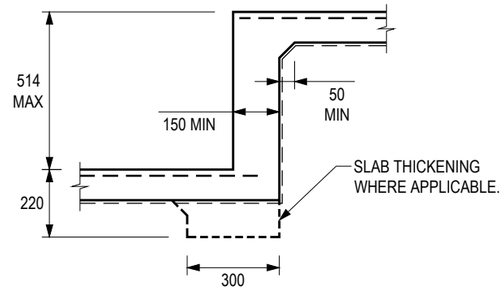


FOOTING STEP 1:20



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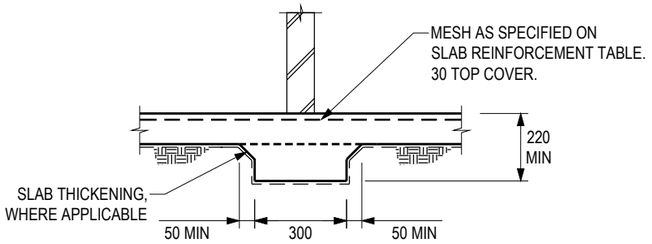

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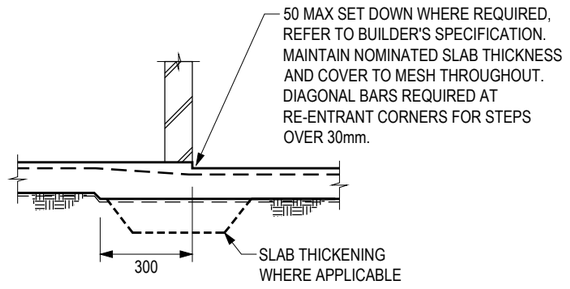

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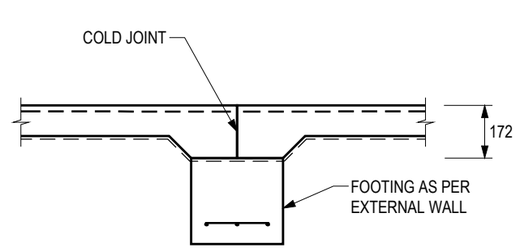

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1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

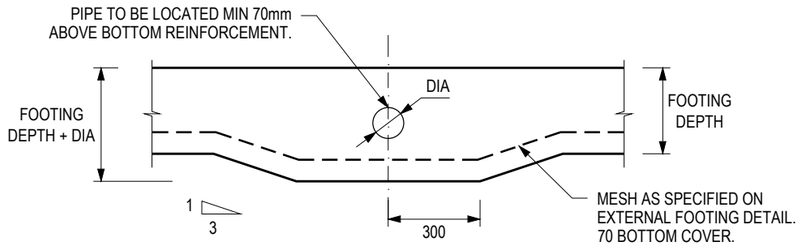
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

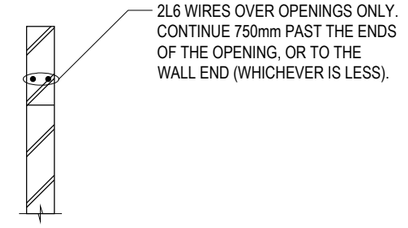
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

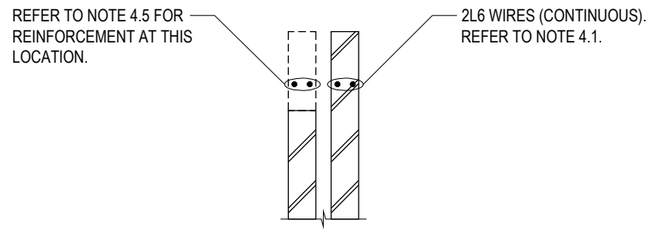


PLUMBING CAST INTO FOOTING 1:20

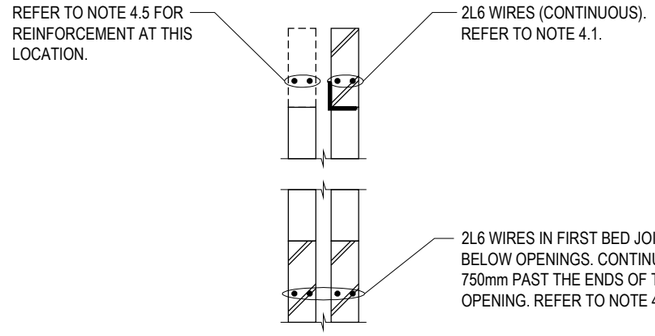


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 157 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81170 Tsk:200107

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 158 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81171
Inspection Date:	21-09-2023
Report Reference No:	rpt_78507
Date Certified:	28-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-900mm	Sand with trace of silt
	900-1500mm	Sand with trace of silt and gravel
	1500-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-900mm	Sand with trace of silt
	900-1500mm	Sand with trace of silt and gravel
	1500-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

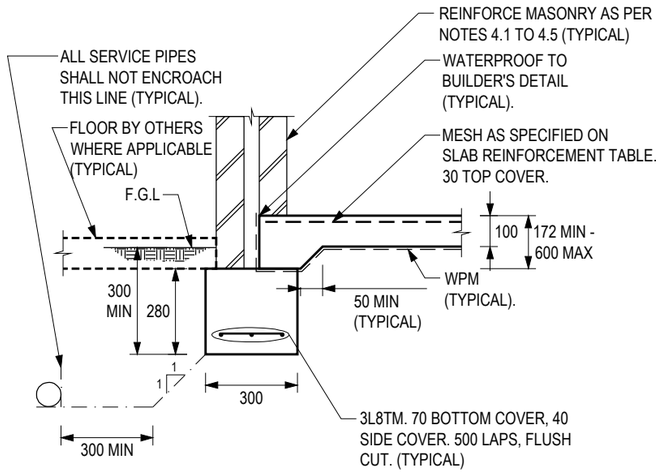
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

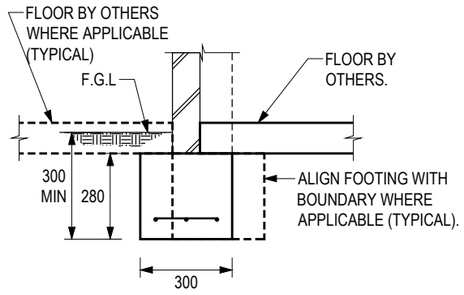
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	11	20+

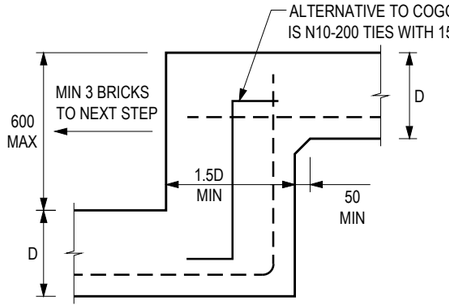
Michael Anthony Young
Michael Young BE MIE (276533)



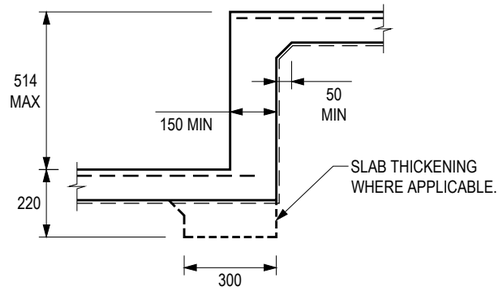
EXTERNAL WALL 1:20



GARAGE WALL 1:20

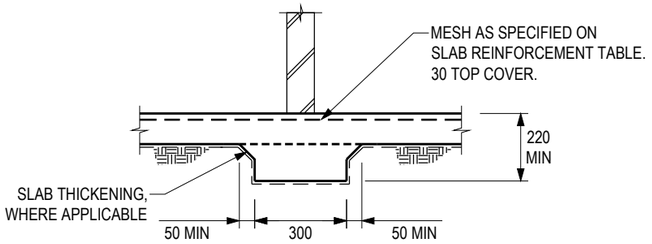


FOOTING STEP 1:20



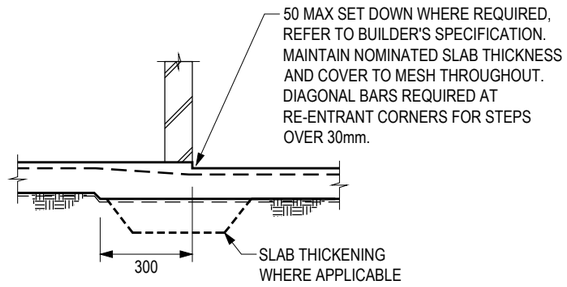
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

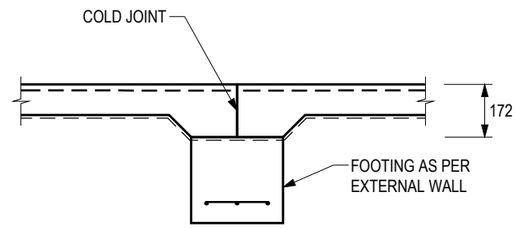


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	28-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 158 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81171 Tsk:200108

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

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1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

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2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

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2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

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2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

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4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

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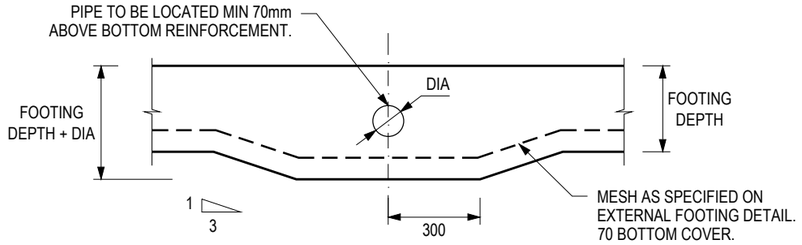
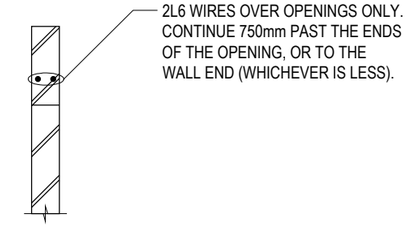
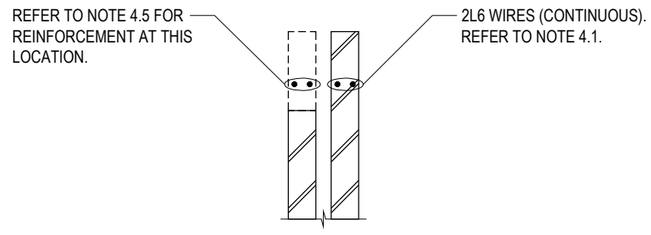


PLUMBING CAST INTO FOOTING 1:20

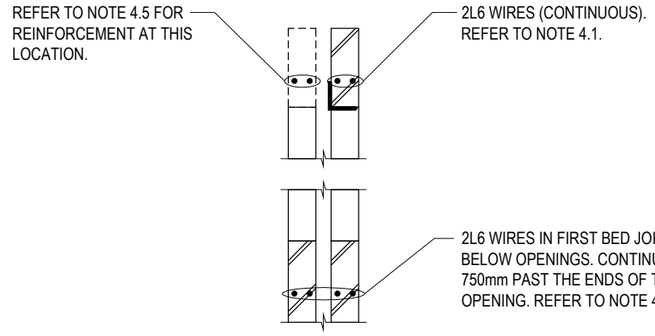


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	28-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 158 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81171 Tsk:200108

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 159 Maitland Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81188
Inspection Date:	26-09-2023
Report Reference No:	rpt_78490
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**A100**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

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- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1800mm	Sand with trace of silt
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BH2:	0-1800mm	Sand with trace of silt
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

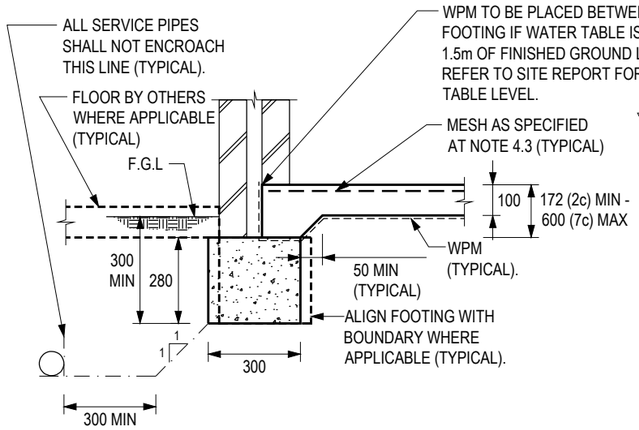
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

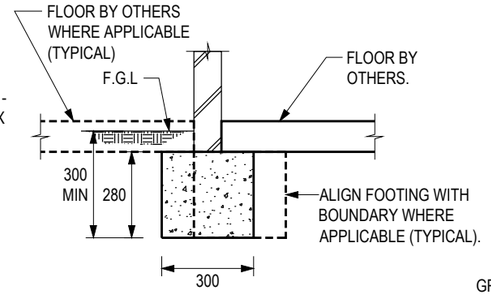
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

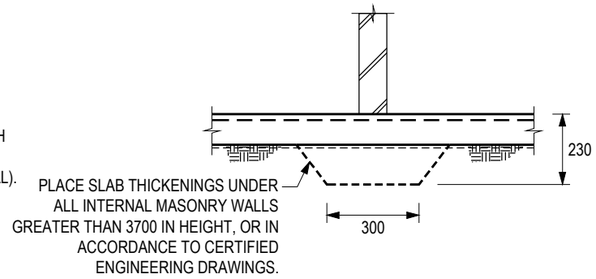
Michael Anthony Young
Michael Young BE MIE (276533)



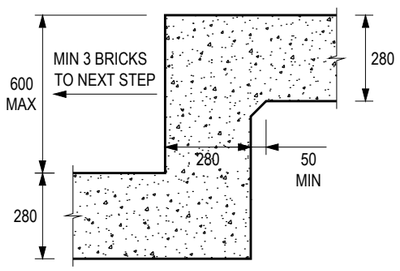
EXTERNAL WALL 1:20



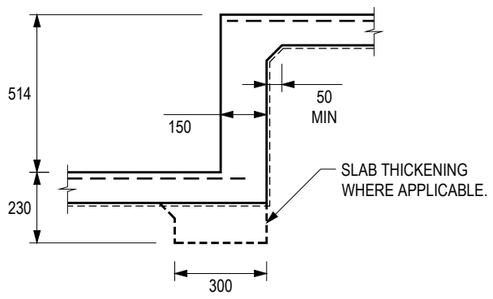
GARAGE WALL 1:20



SLAB THICKENING 1:20



FOOTING STEP 1:20



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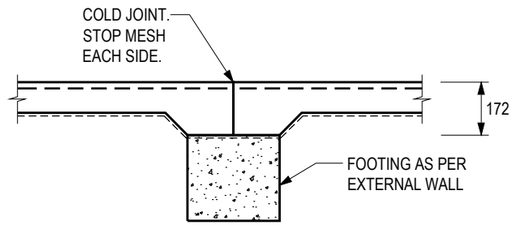

CONSTRUCTION JOINT 1:20

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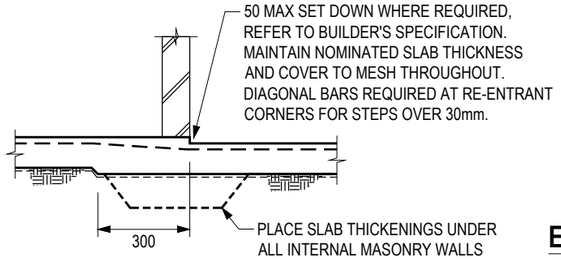
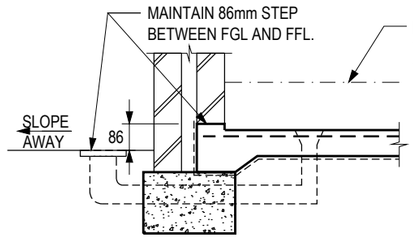


STANDARD SLAB RECESS 1:20



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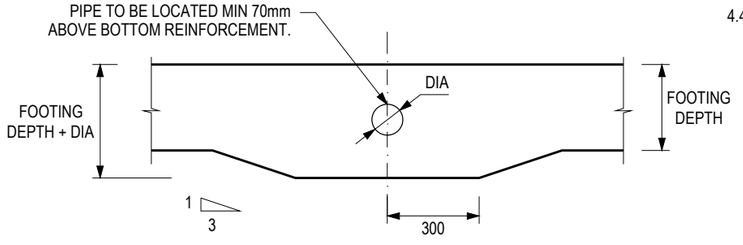

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

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1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
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2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
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3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
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3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
- **SL** DENOTES D500L DEFORMED SQUARE MESH.
- **N** DENOTES D500N DEFORMED BARS.
- **TM** DENOTES D500L DEFORMED BAR TRENCH MESH.

4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
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ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 159 Maitland Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81188 Tsk:200133

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 160 Maitland Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81189
Inspection Date:	26-09-2023
Report Reference No:	rpt_78504
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**A100**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

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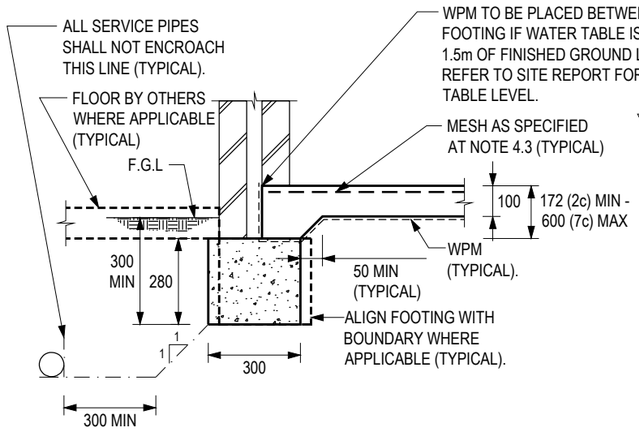

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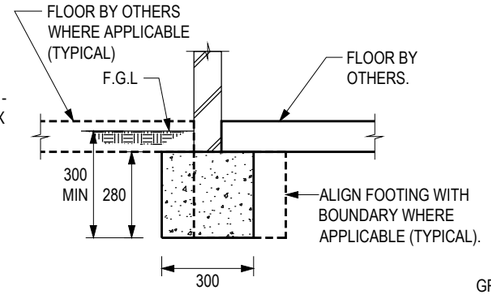

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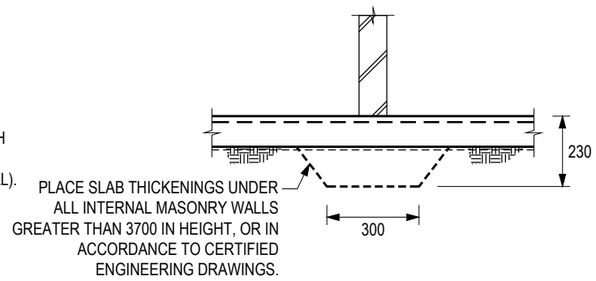

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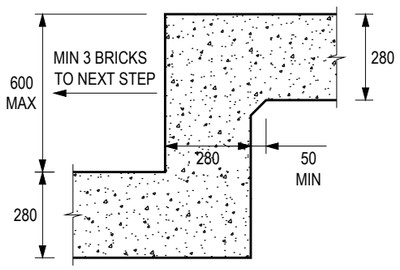
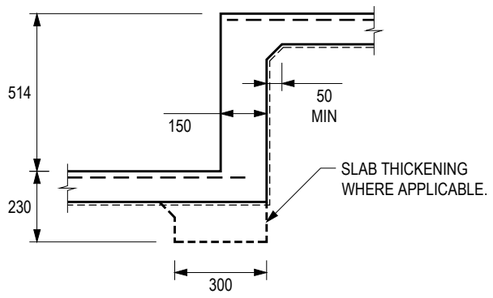


FOOTING STEP 1:20



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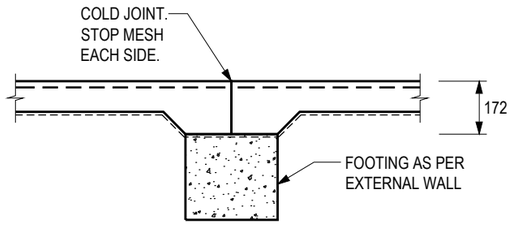

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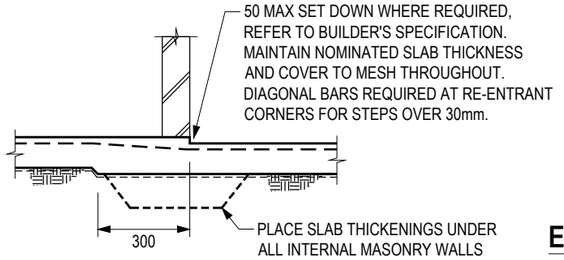
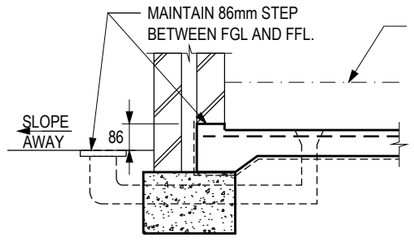


STANDARD SLAB RECESS 1:20



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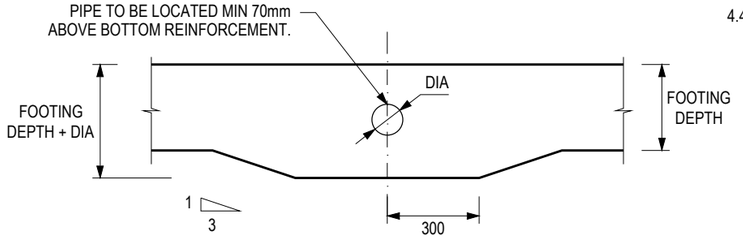

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Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 160 Maitland Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81189 Tsk:200134

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 161 Maitland Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81190
Inspection Date:	26-09-2023
Report Reference No:	rpt_78502
Date Certified:	26-09-2023

Site Description

Recommendation

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Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
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Legend:
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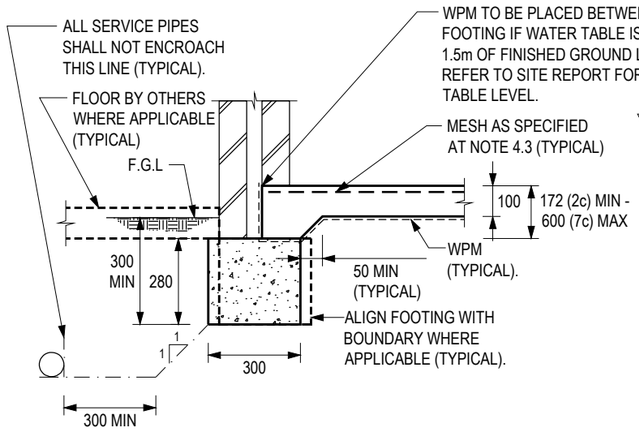

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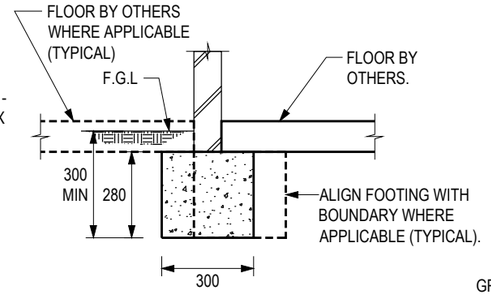

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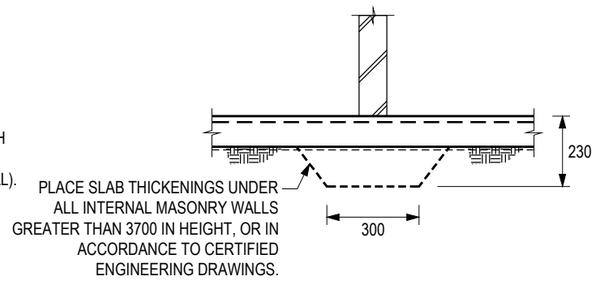
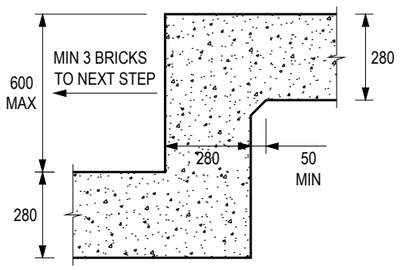
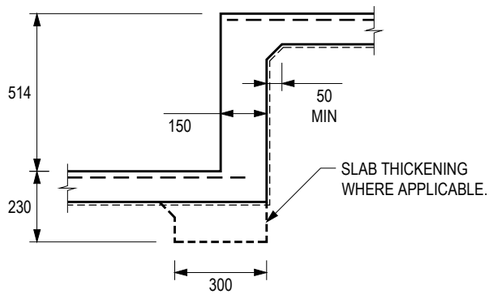


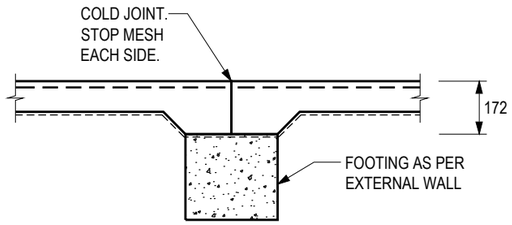
SLAB THICKENING 1:20



FOOTING STEP 1:20

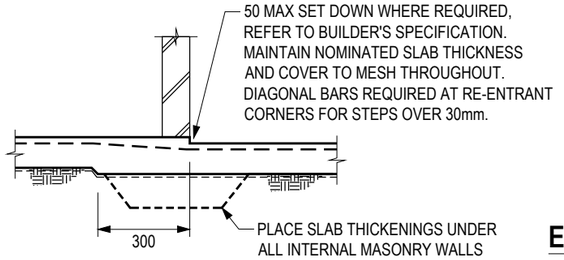


SLAB STEP 1:20

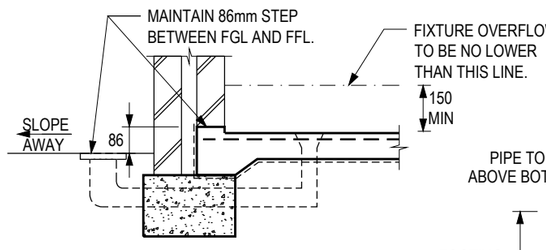


CONSTRUCTION JOINT 1:20

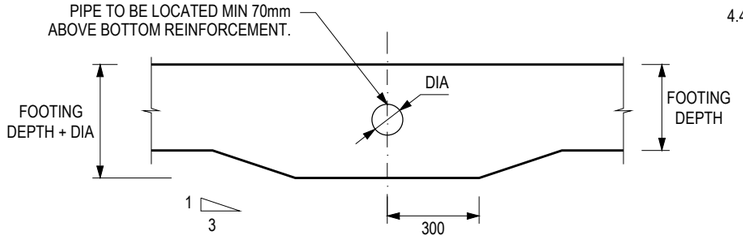
- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.



STANDARD SLAB RECESS 1:20



EXTERNAL WALL AT WET AREAS 1:20



PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

2.2 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.
2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
SL DENOTES D500L DEFORMED SQUARE MESH.
N DENOTES D500N DEFORMED BARS.
TM DENOTES D500L DEFORMED BAR TRENCH MESH.
4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
SL72 MESH	32m MAX

ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 161 Maitland Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81190 Tsk:200135

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 163 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81191
Inspection Date:	22-09-2023
Report Reference No:	rpt_78430
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1400mm	Sand with trace of silt
	1400-2500mm (63% passing 0.425mm, Linear Shrinkage - 8.5% , Plasticity Index - 25%	Clayey SAND with silt and trace of gravel
BH2:	0-1400mm	Sand with trace of silt
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

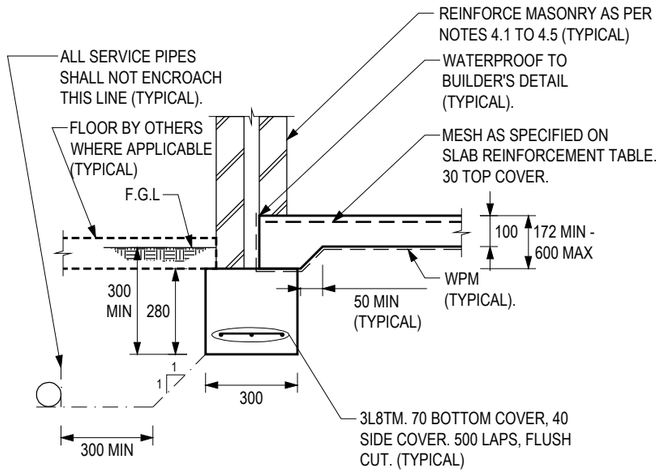
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

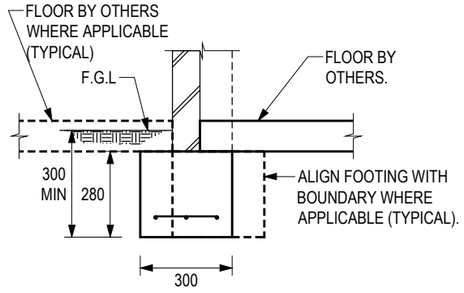
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

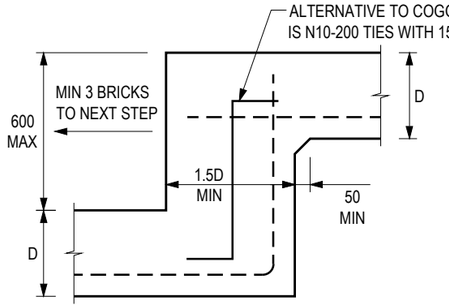
Michael Anthony Young
Michael Young BE MIE (276533)



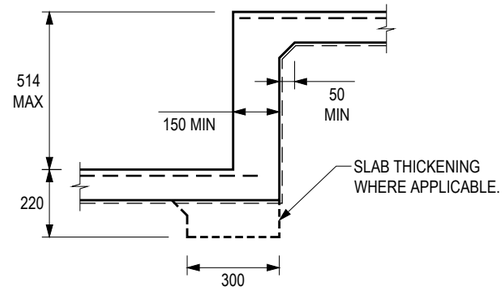
EXTERNAL WALL 1:20



GARAGE WALL 1:20

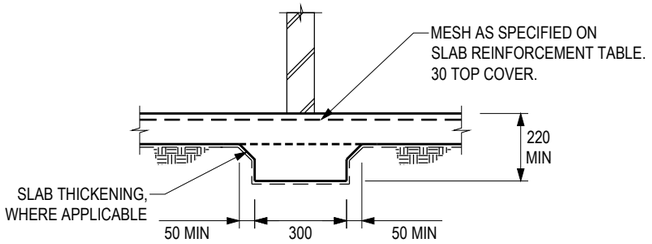


FOOTING STEP 1:20



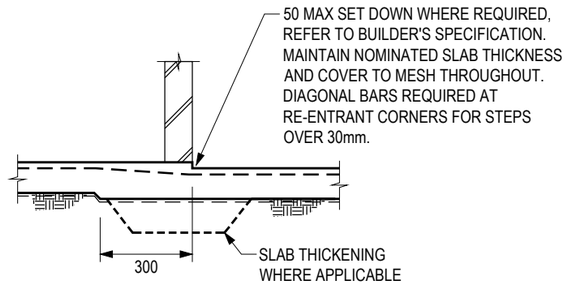
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

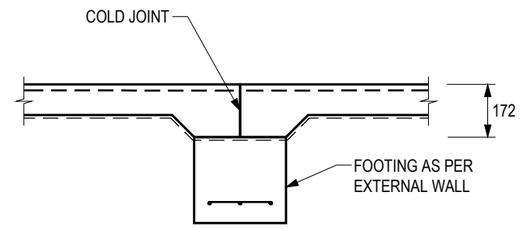


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 163 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81191 Tsk:200136

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

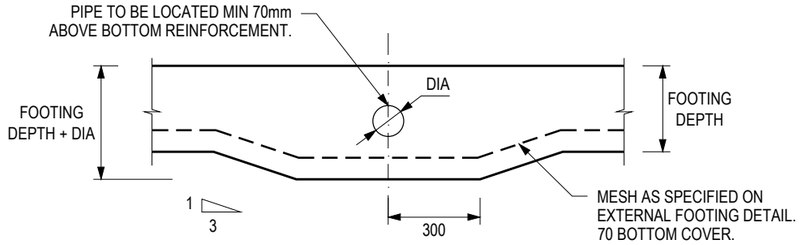
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

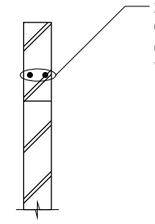
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

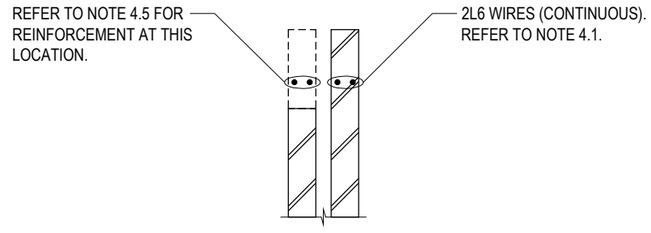


PLUMBING CAST INTO FOOTING 1:20

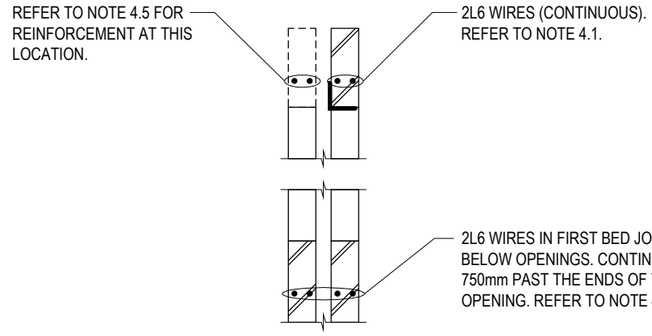


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 163 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81191 Tsk:200136

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 164 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81192
Inspection Date:	22-09-2023
Report Reference No:	rpt_78433
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1400mm	Sand with trace of silt
	1400-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1400mm	Sand with trace of silt
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

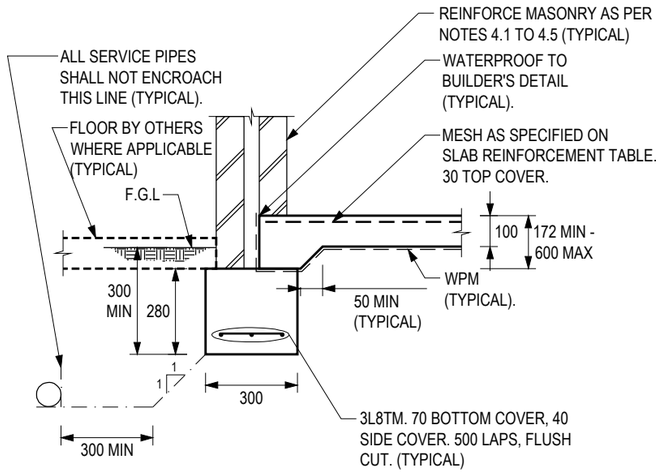
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

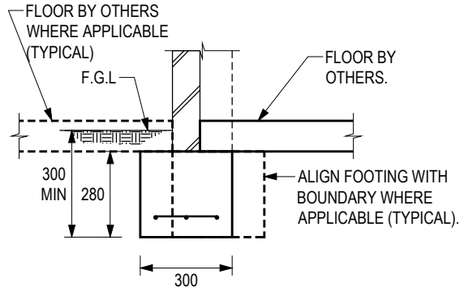
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

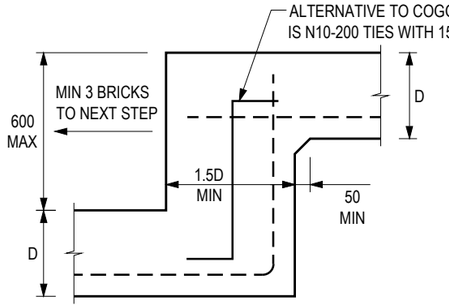
Michael Anthony Young
Michael Young BE MIE (276533)



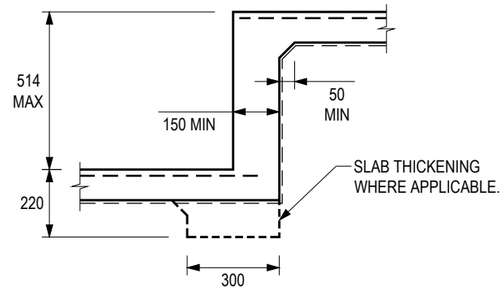
EXTERNAL WALL 1:20



GARAGE WALL 1:20



FOOTING STEP 1:20



SLAB STEP 1:20

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MESH SIZE	SLAB SPAN
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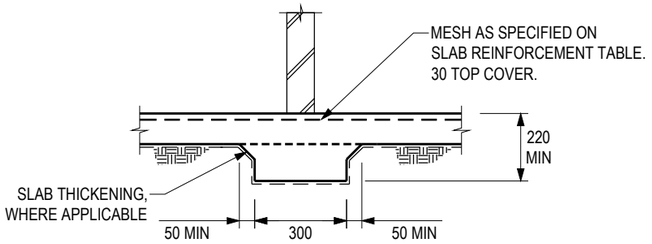
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	



SLAB THICKENING 1:20

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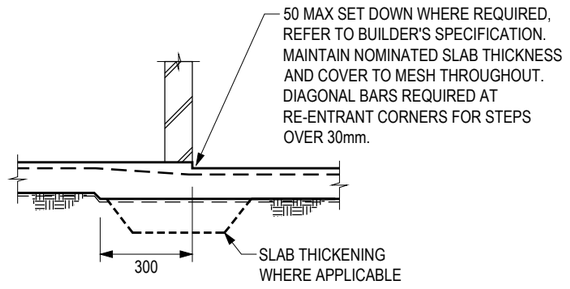

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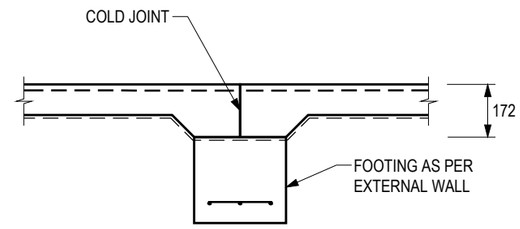


CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 164 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81192 Tsk:200137

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

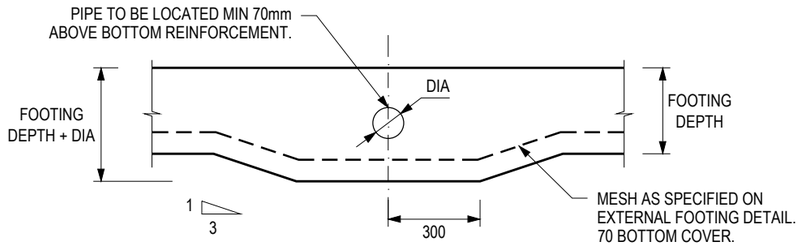
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

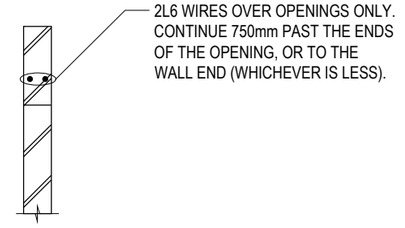
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

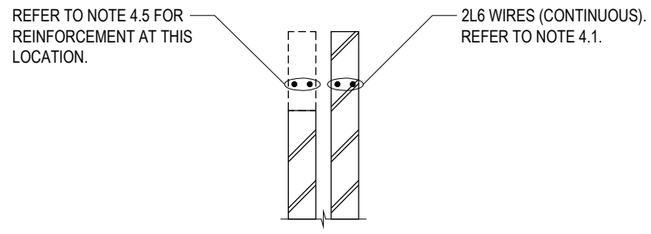


PLUMBING CAST INTO FOOTING 1:20

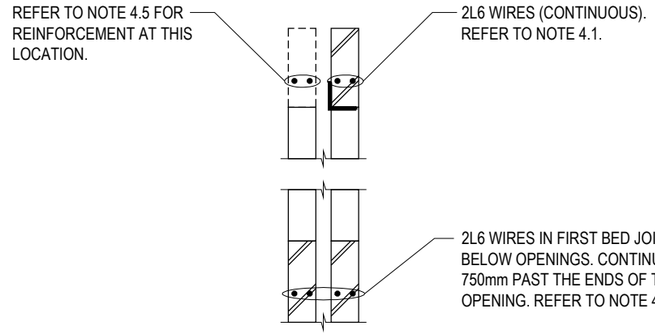


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 164 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81192 Tsk:200137

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 165 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81193
Inspection Date:	22-09-2023
Report Reference No:	rpt_78435
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

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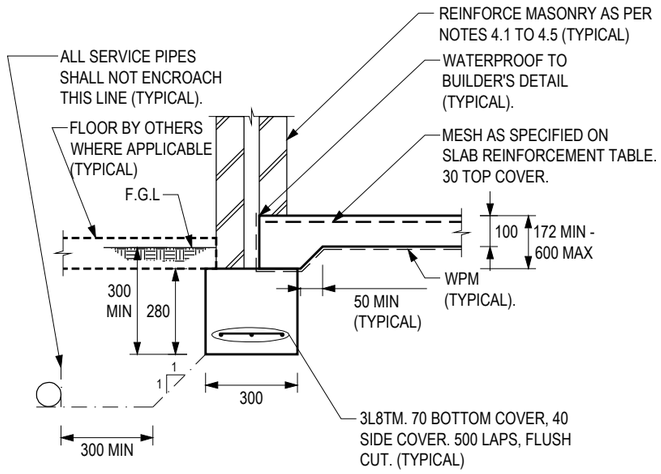

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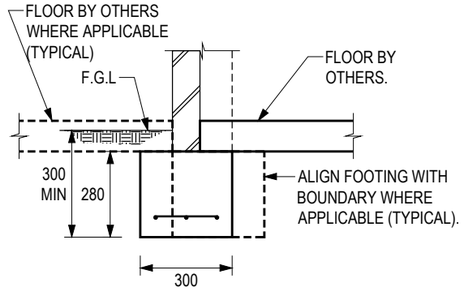

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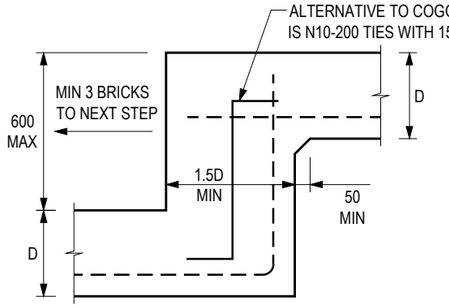

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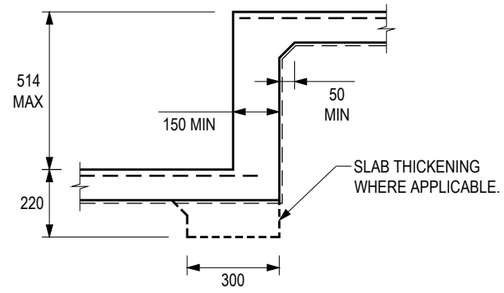

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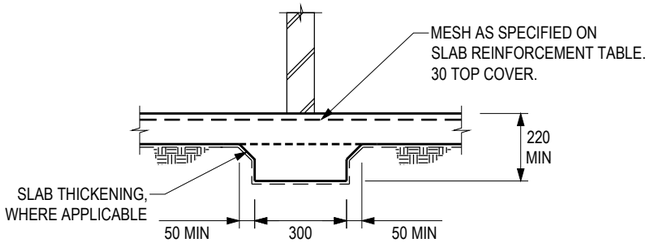

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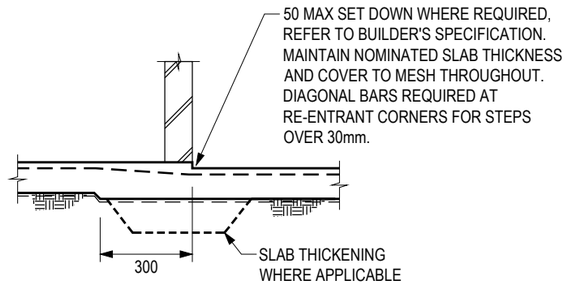

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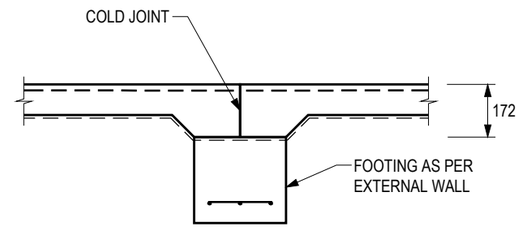

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PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 165 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
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3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

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5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

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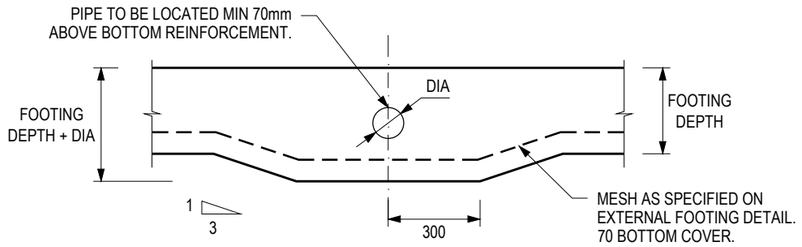
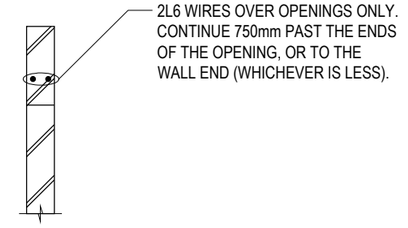
5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

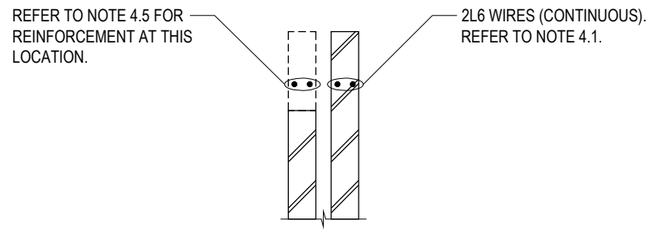


PLUMBING CAST INTO FOOTING 1:20

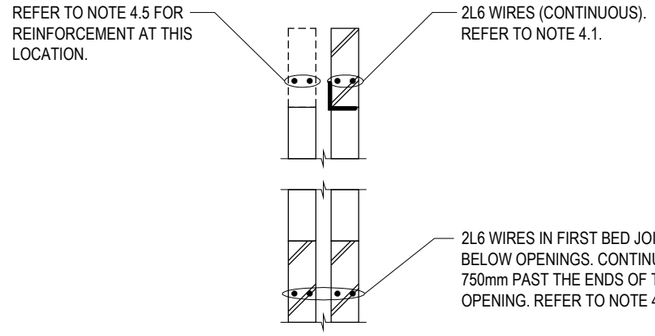


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
PROJECT	Lot 165 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	2 of 2
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81193 Tsk:200139

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 166 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81194
Inspection Date:	22-09-2023
Report Reference No:	rpt_78431
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1400mm	Sand with trace of silt
	1400-1600mm	Clayey Sand with silt and gravel
	1600-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1400mm	Sand with trace of silt
	1400-1600mm	Clayey Sand with silt and gravel
	1600-2500mm (63% passing 0.425mm, Linear Shrinkage - 9% , Plasticity Index - 32%	Clayey SAND with silt and trace of gravel

---

Borehole / PSP location Plan

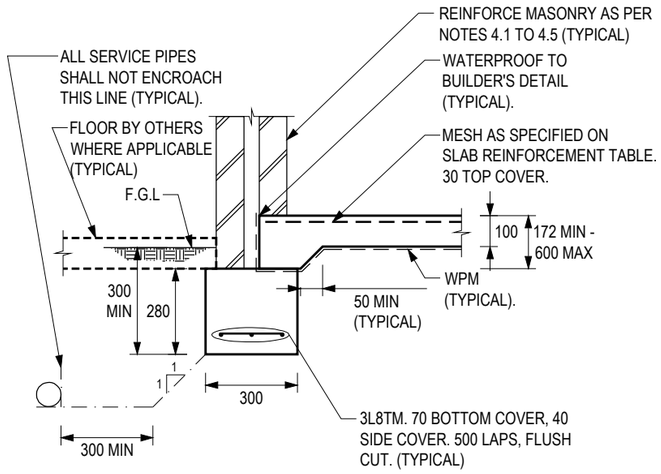
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

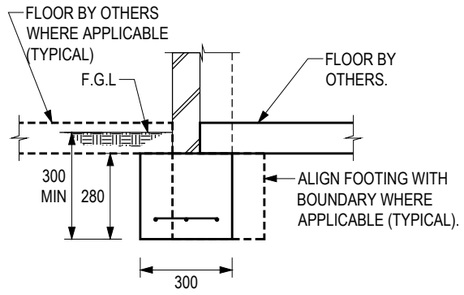
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

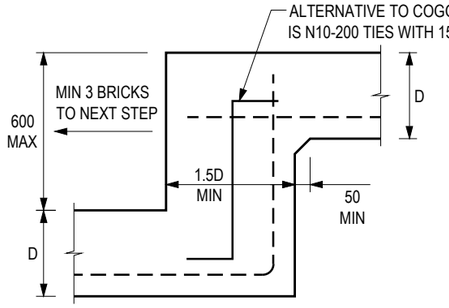
Michael Anthony Young
Michael Young BE MIE (276533)



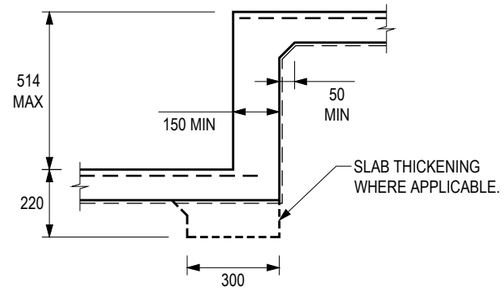
EXTERNAL WALL 1:20



GARAGE WALL 1:20

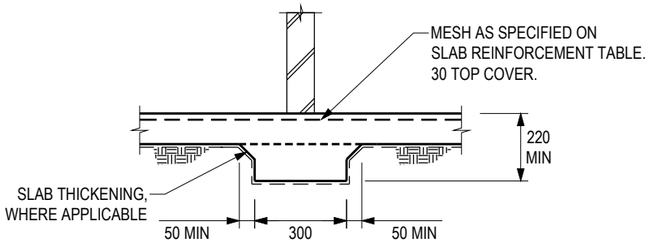


FOOTING STEP 1:20



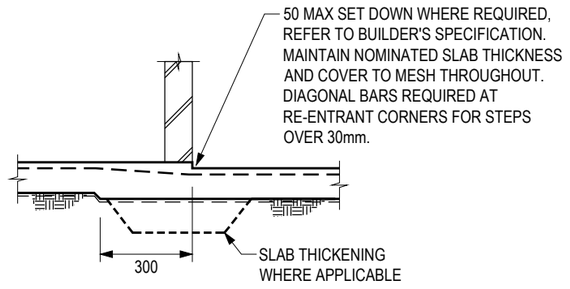
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

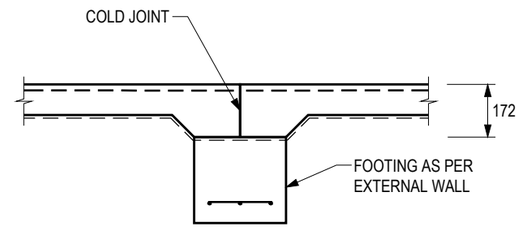


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 166 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81194 Tsk:200140

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

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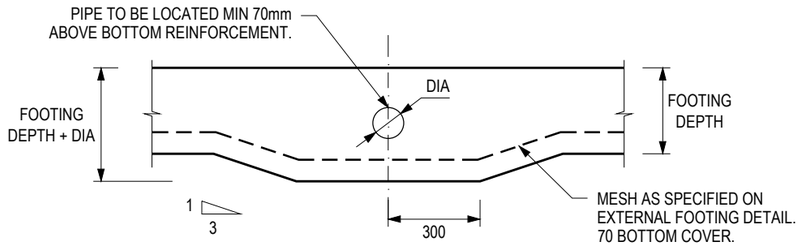
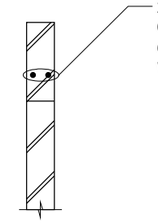


PLUMBING CAST INTO FOOTING 1:20



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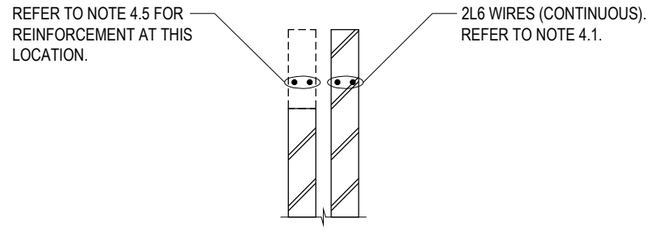

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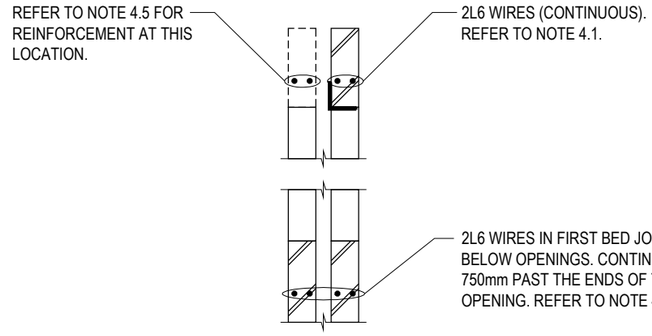

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- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
PROJECT	Lot 166 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	2 of 2
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81194 Tsk:200140

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 167 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81195
Inspection Date:	22-09-2023
Report Reference No:	rpt_78436
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
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Topography	**T0**
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Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
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BH = Bore Hole location

Additional information and Notes

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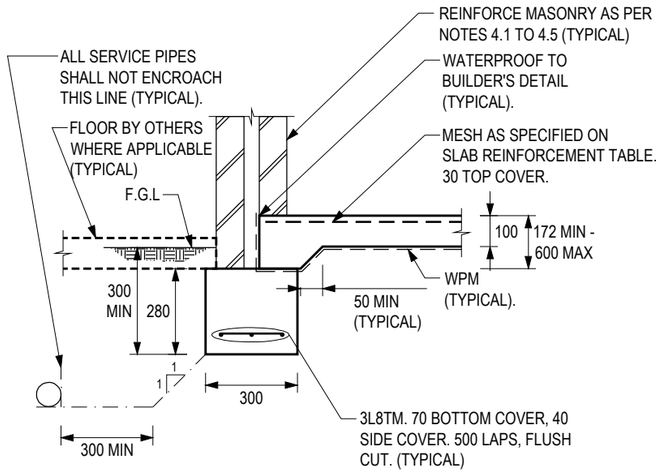
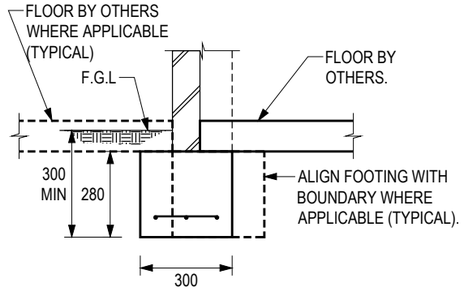
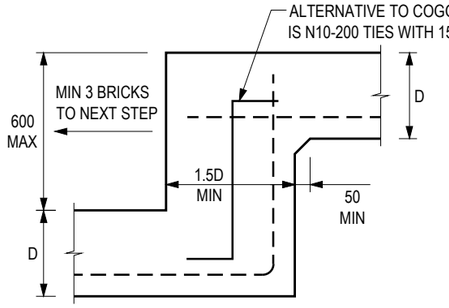
Michael Anthony Young
Michael Young BE MIE (276533)



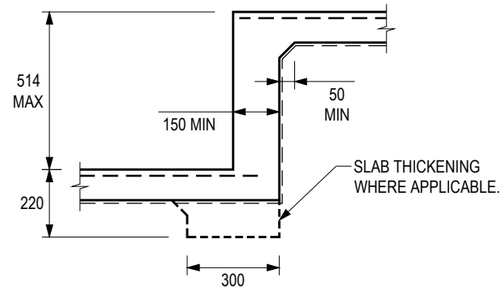
EXTERNAL WALL 1:20



GARAGE WALL 1:20

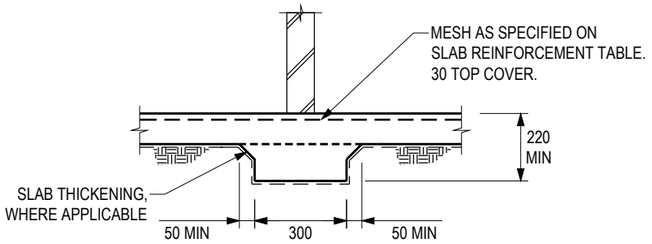


FOOTING STEP 1:20



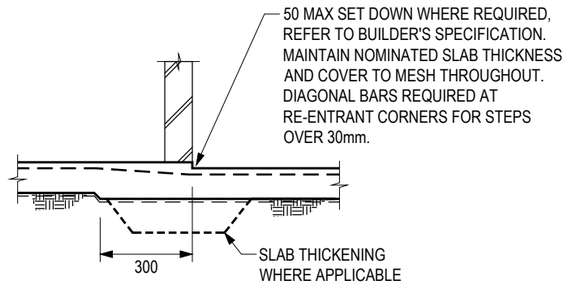
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

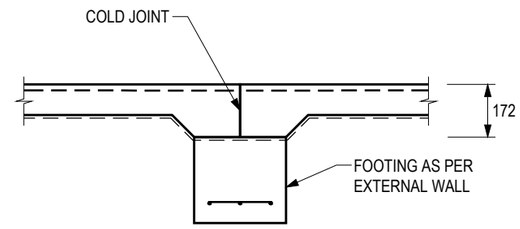


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 167 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81195 Tsk:200141

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

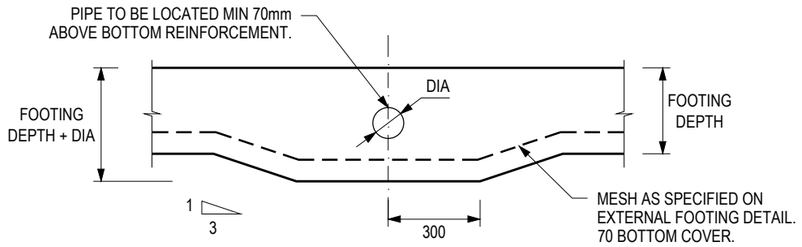
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

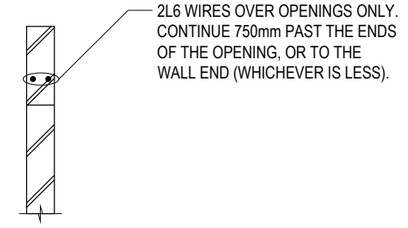
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

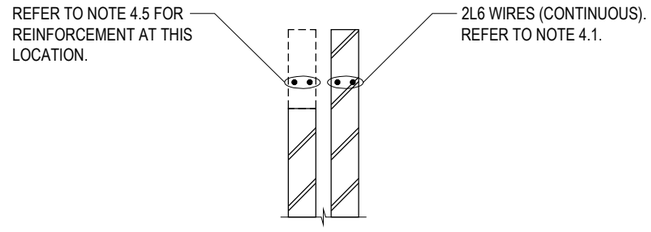


PLUMBING CAST INTO FOOTING 1:20

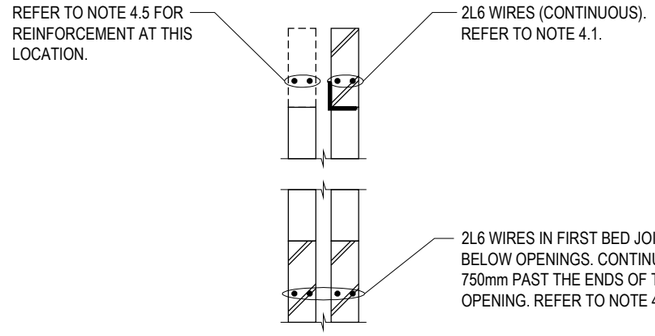


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
PROJECT	Lot 167 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	2 of 2
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81195 Tsk:200141

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 168 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81196
Inspection Date:	26-09-2023
Report Reference No:	rpt_78503
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

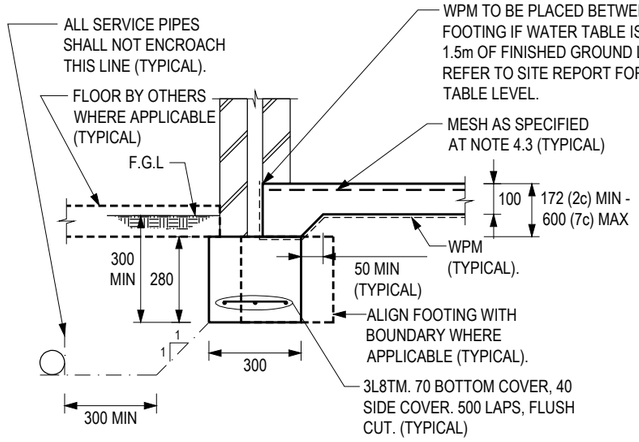
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

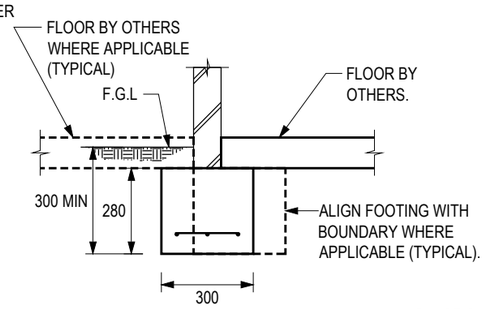
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	13	20+

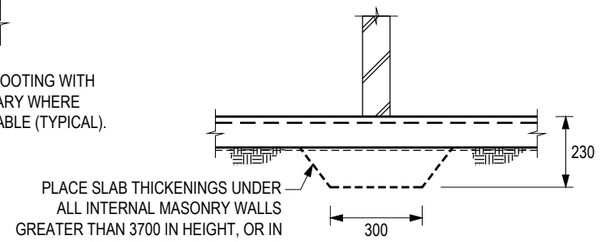
Michael Anthony Young
Michael Young BE MIE (276533)



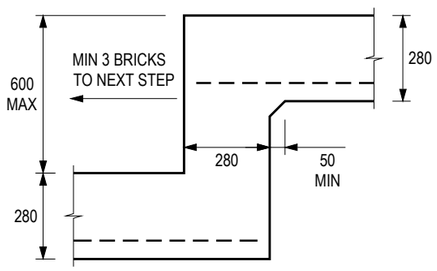
EXTERNAL WALL 1:20



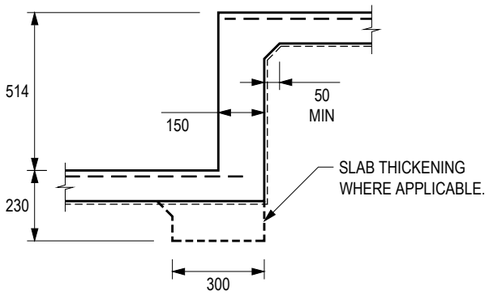
GARAGE WALL 1:20



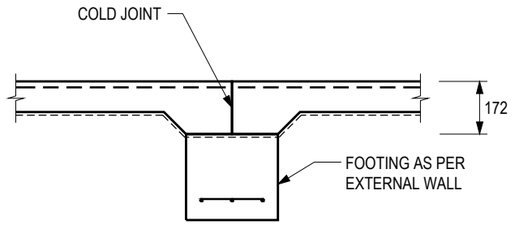
SLAB THICKENING 1:20



FOOTING STEP 1:20

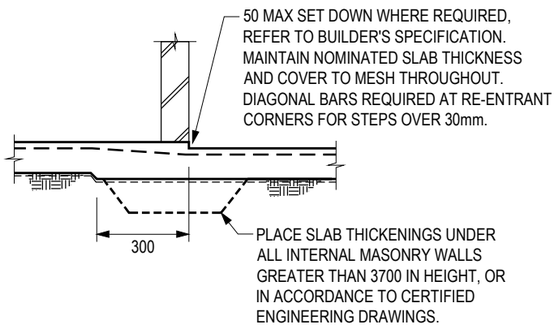


SLAB STEP 1:20

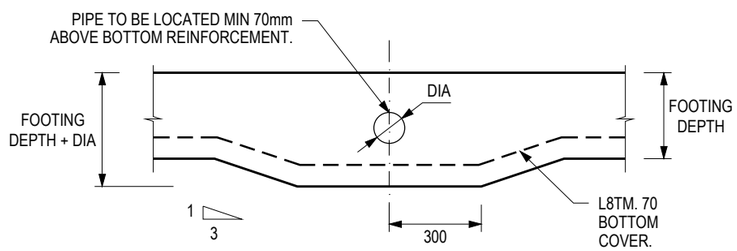


CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.



STANDARD SLAB RECESS 1:20



PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

2.2 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.
2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
- **SL** DENOTES D500L DEFORMED SQUARE MESH.
- **N** DENOTES D500N DEFORMED BARS.
- **TM** DENOTES D500L DEFORMED BAR TRENCH MESH.

4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
SL72 MESH	32m MAX

ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 168 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81196 Tsk:200142

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 169 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81197
Inspection Date:	26-09-2023
Report Reference No:	rpt_78501
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

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- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm (69% passing 0.425mm, Linear Shrinkage - 6.5% , Plasticity Index - 20%)	Clayey SAND with silt and trace of gravel
BH2:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

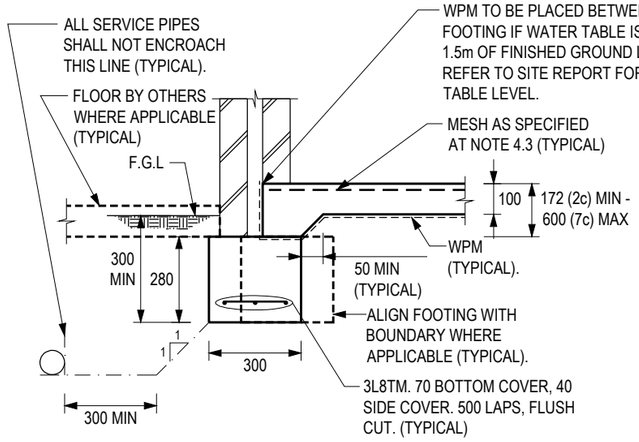
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

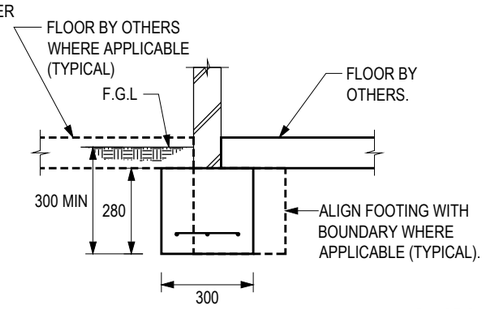
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	14	20+

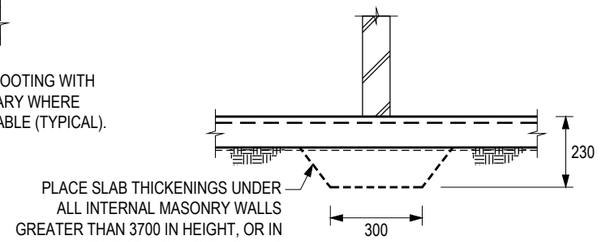
Michael Anthony Young
Michael Young BE MIE (276533)



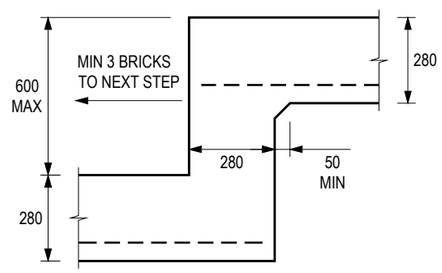
EXTERNAL WALL 1:20



GARAGE WALL 1:20



SLAB THICKENING 1:20



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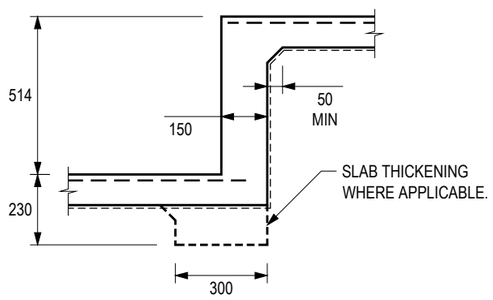

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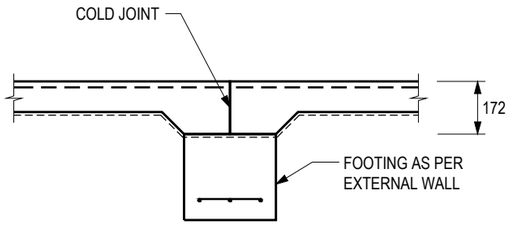

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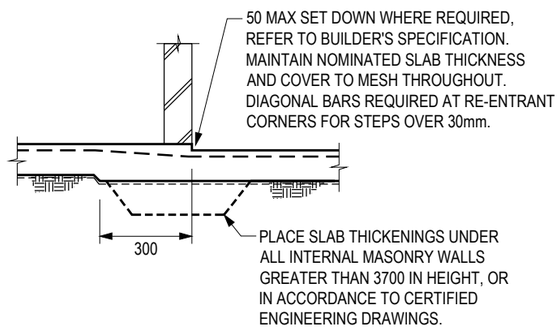

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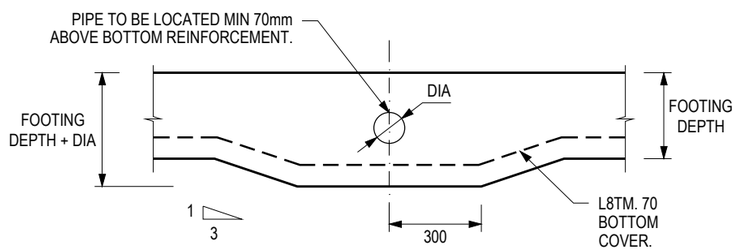

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

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1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
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3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
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SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
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ENSURE 30 TOP COVER TO MESH.
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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 169 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81197 Tsk:200143

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 170 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81198
Inspection Date:	26-09-2023
Report Reference No:	rpt_78500
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

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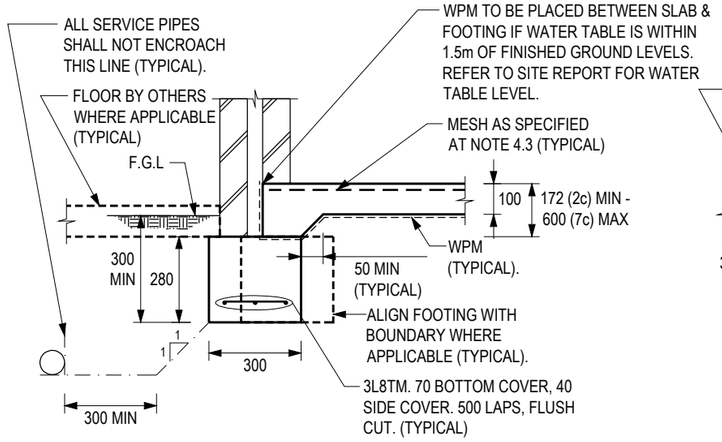
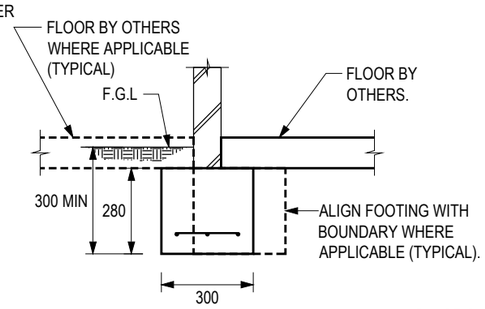


EXTERNAL WALL 1:20



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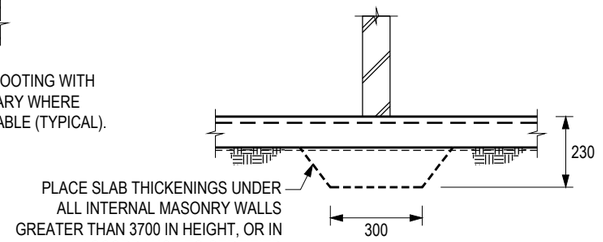

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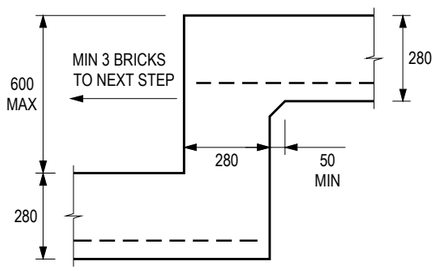

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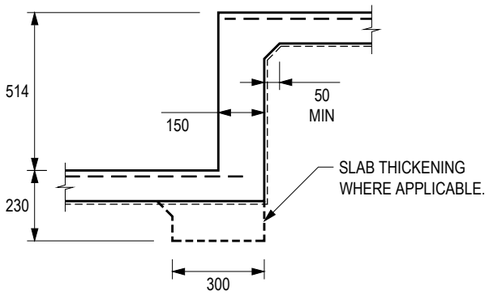

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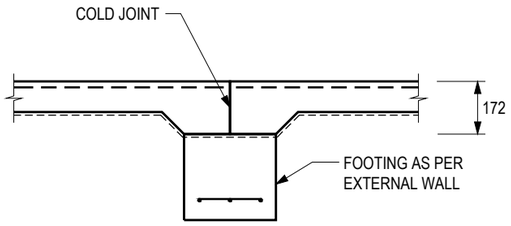

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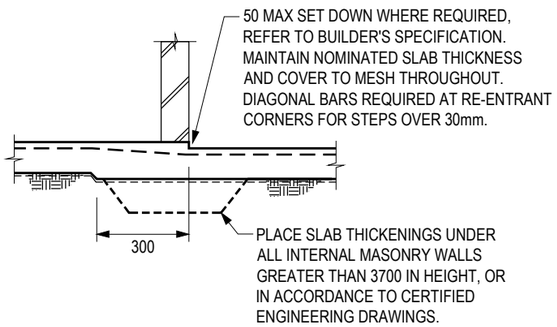

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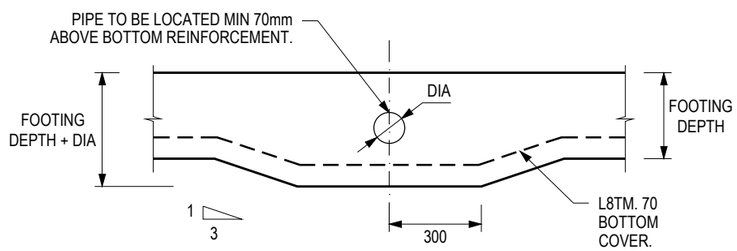

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PROMPT ENGINEERING
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PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 170 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81198 Tsk:200144

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 171 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81199
Inspection Date:	26-09-2023
Report Reference No:	rpt_78499
Date Certified:	26-09-2023

Site Description

Recommendation

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Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
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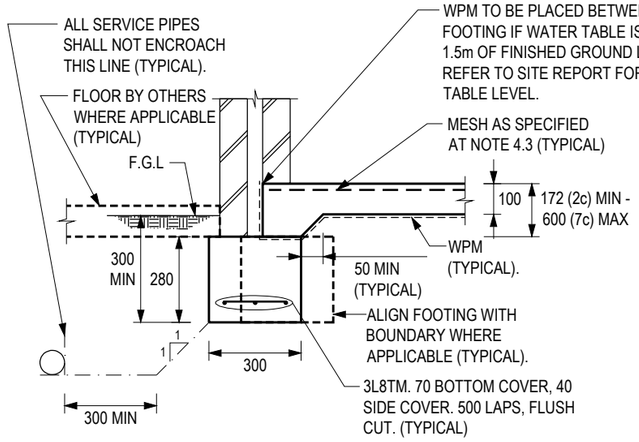

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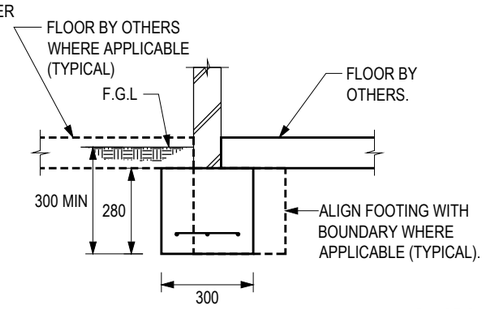

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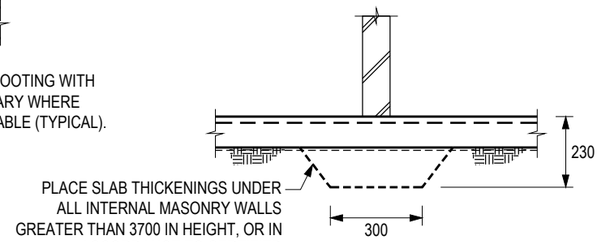

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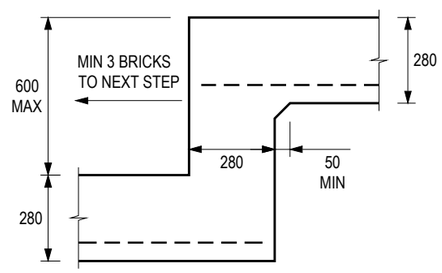

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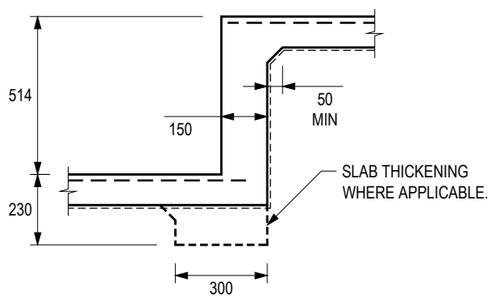

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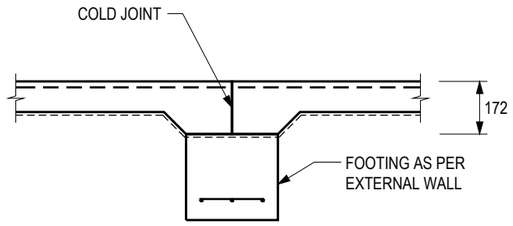

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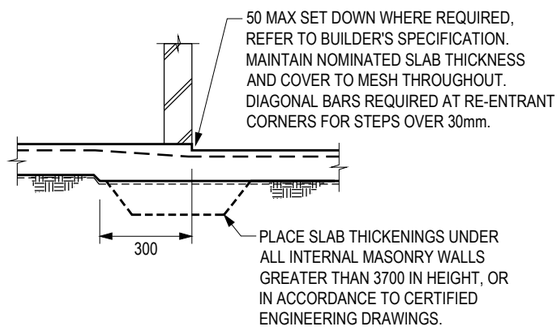

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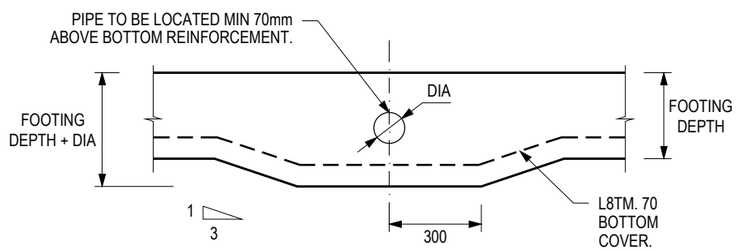

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

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4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 171 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81199 Tsk:200145

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 172 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81200
Inspection Date:	26-09-2023
Report Reference No:	rpt_78497
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

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- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
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Soil Profile

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	1600-1800mm	Clayey Sand with silt
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Borehole / PSP location Plan

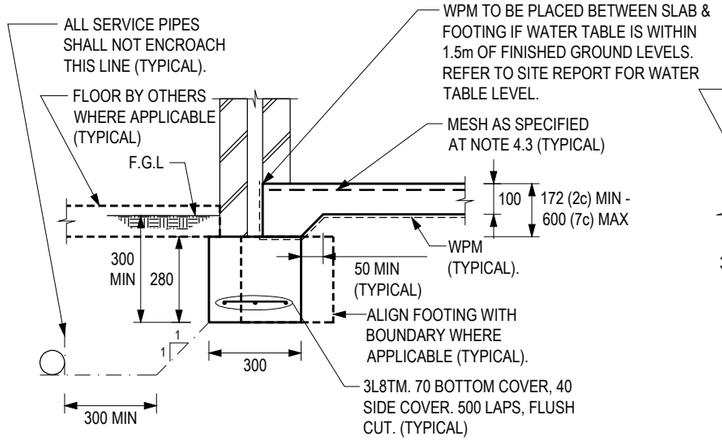
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	10	20+

Michael Anthony Young
Michael Young BE MIE (276533)



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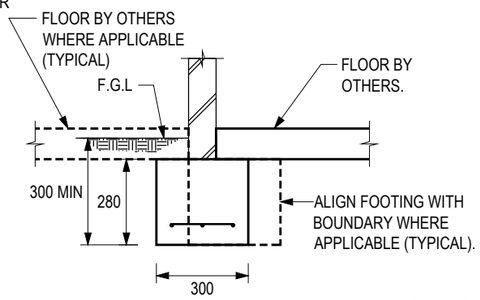

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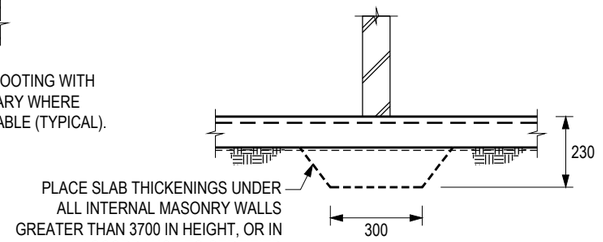

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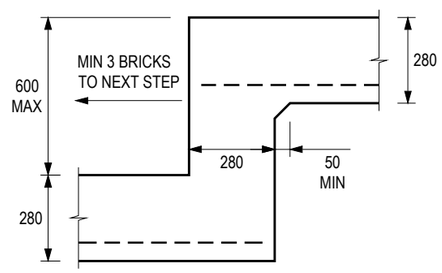

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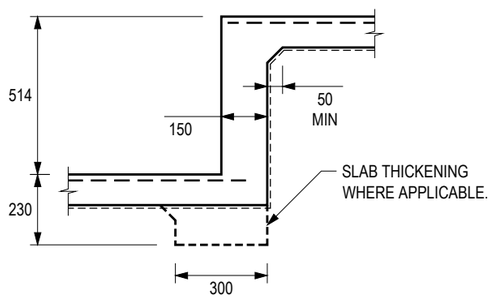

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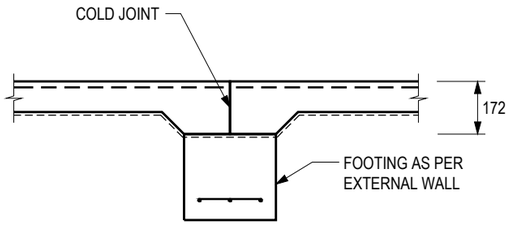

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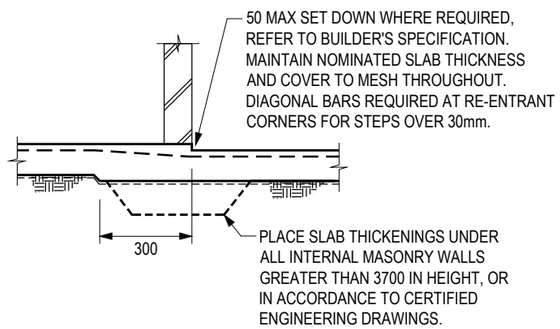

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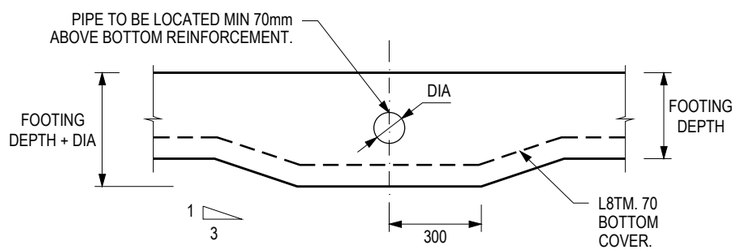

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CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 172 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81200 Tsk:200147

DB-A100 TM

Site Classification and Footing Detail Report

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Owner:	Delfina Properties Pty Ltd
Address:	**Lot 173 Farncomb Street BYFORD 6122 WA**

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Client Ref No:	
Project No:	pln_81201
Inspection Date:	26-09-2023
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Date Certified:	26-09-2023

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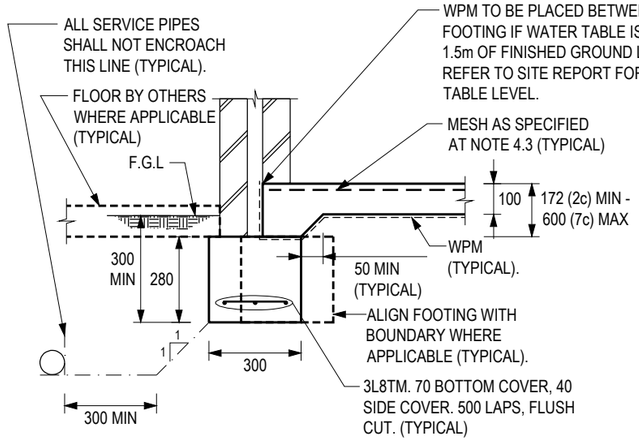

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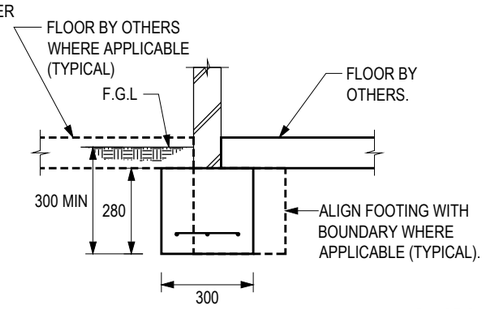

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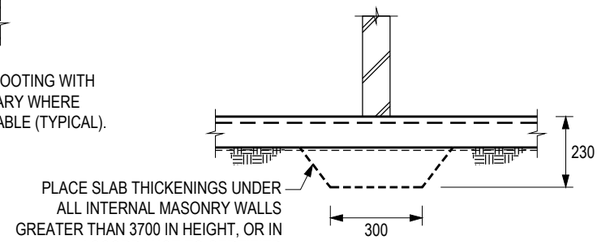

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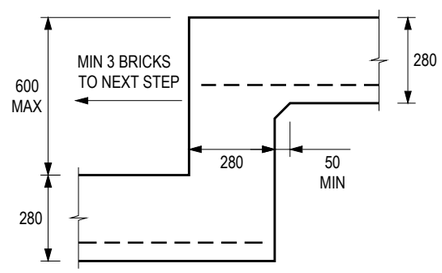

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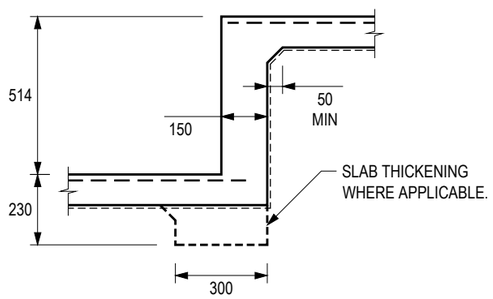

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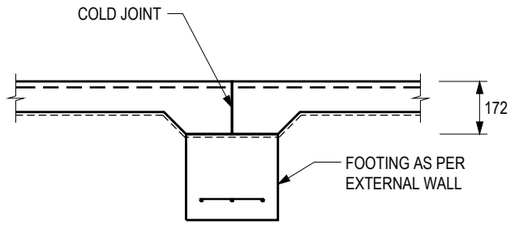

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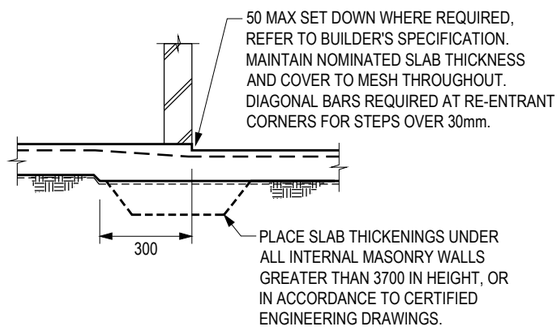

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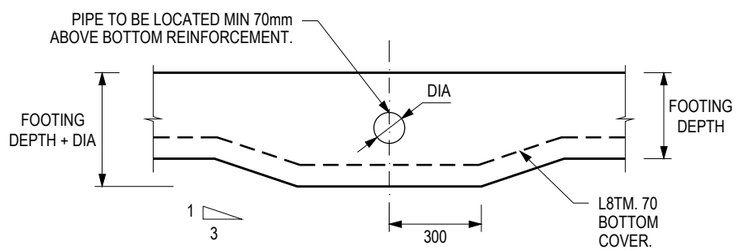

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- **N** DENOTES D500N DEFORMED BARS.
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4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
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ENSURE 30 TOP COVER TO MESH.
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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 173 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81201 Tsk:200148

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 174 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81203
Inspection Date:	26-09-2023
Report Reference No:	rpt_78494
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

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BH2:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

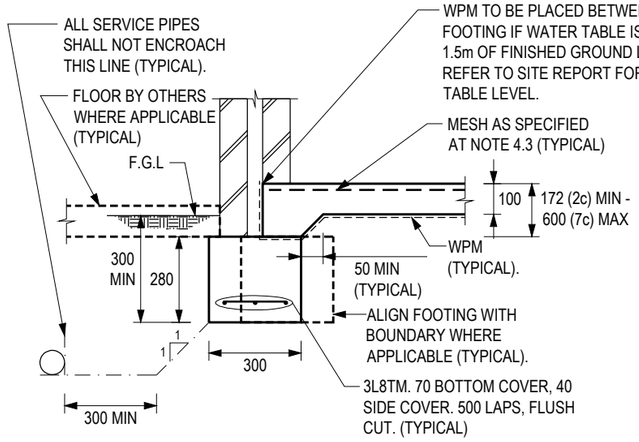
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

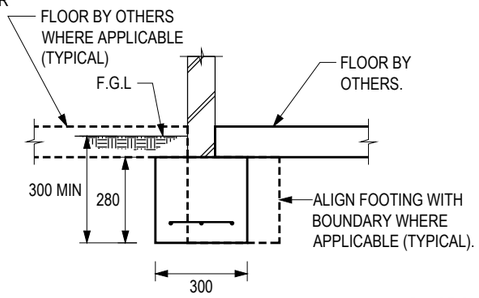
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	14	20+

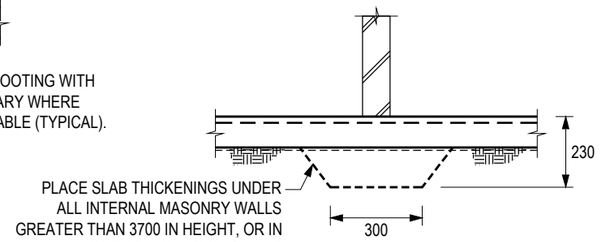
Michael Anthony Young
Michael Young BE MIE (276533)



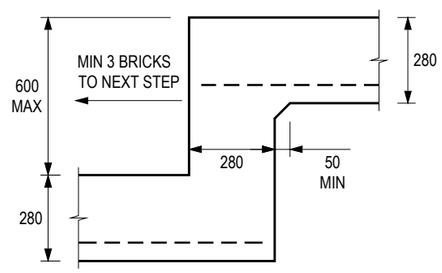
EXTERNAL WALL 1:20



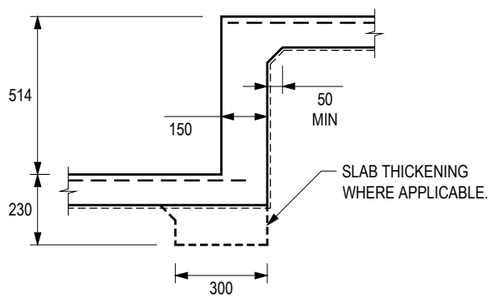
GARAGE WALL 1:20



SLAB THICKENING 1:20



FOOTING STEP 1:20



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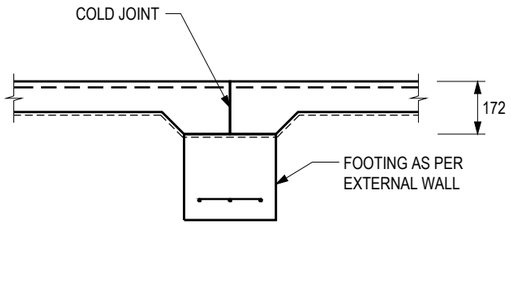

CONSTRUCTION JOINT 1:20

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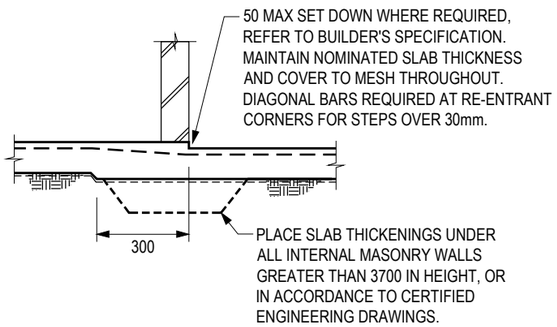

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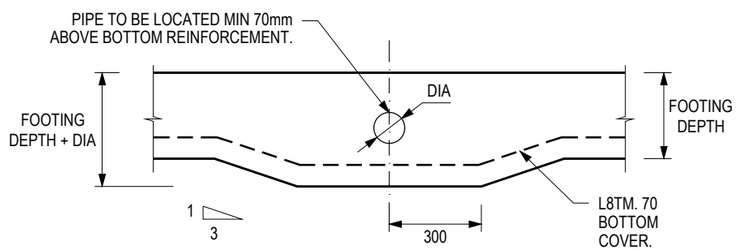

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

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2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 174 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81203 Tsk:200150

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 175 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81204
Inspection Date:	22-09-2023
Report Reference No:	rpt_78460
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

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Borehole / PSP location Plan

Legend:
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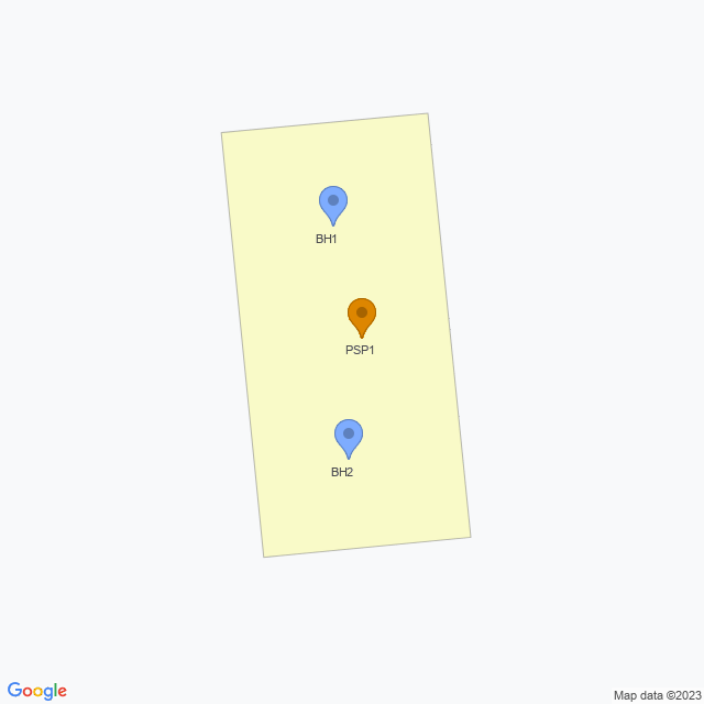
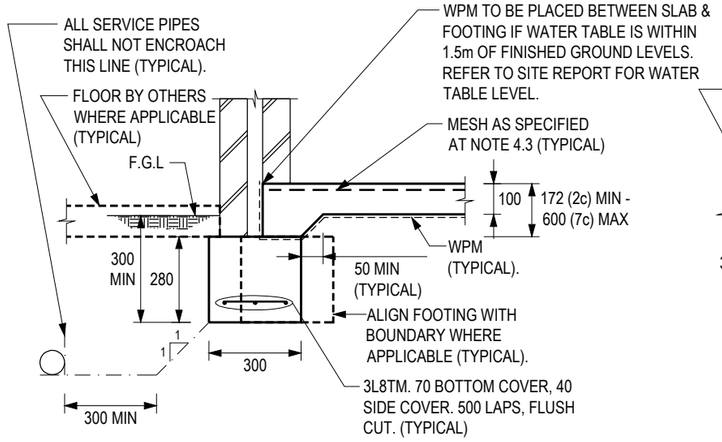


Additional information and Notes

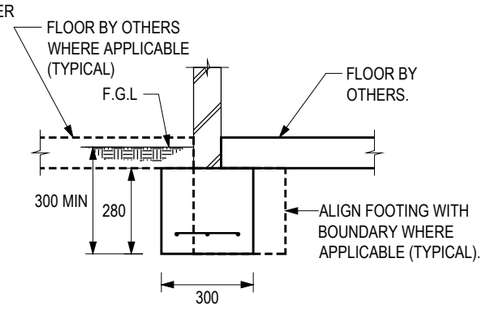
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

Michael Anthony Young
Michael Young BE MIE (276533)



EXTERNAL WALL 1:20



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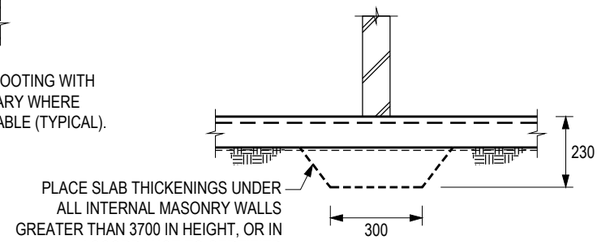
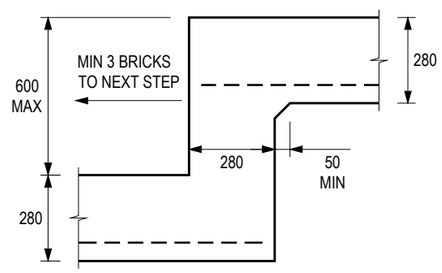


SLAB THICKENING 1:20



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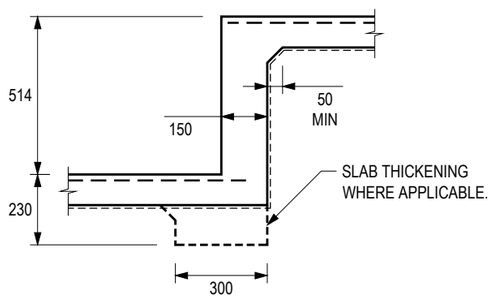

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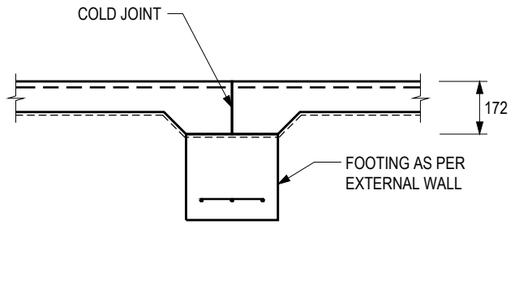

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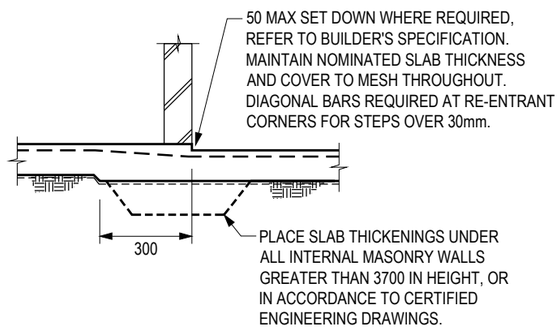

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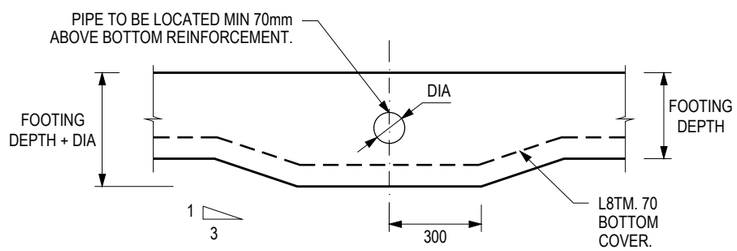

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Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 175 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81204 Tsk:200151

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 176 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81205
Inspection Date:	26-09-2023
Report Reference No:	rpt_78493
Date Certified:	28-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
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- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm (61% passing 0.425mm, Linear Shrinkage - 8% , Plasticity Index - 19%)	Clayey SAND with silt and trace of gravel
BH2:	0-1600mm	Sand with trace of silt
	1600-1800mm	Clayey Sand with silt
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

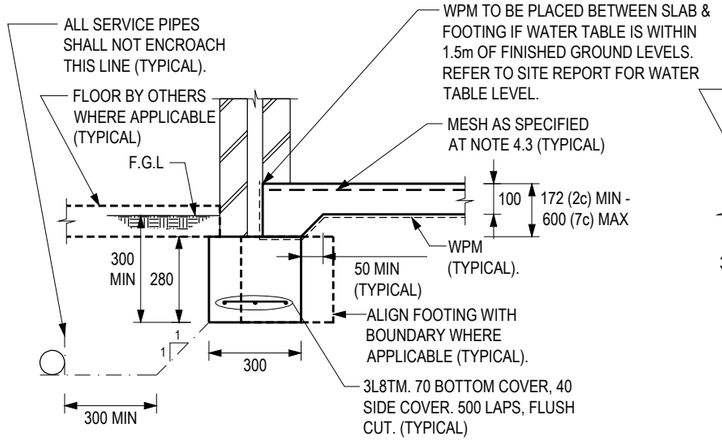
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

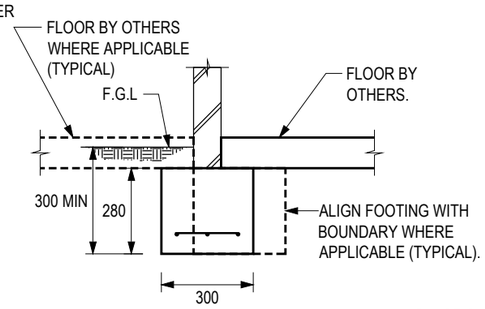
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	13	20+

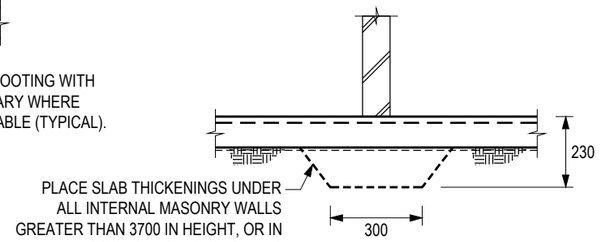
Michael Anthony Young
Michael Young BE MIE (276533)



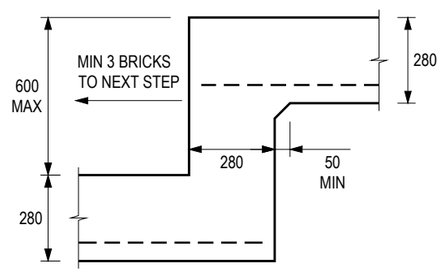
EXTERNAL WALL 1:20



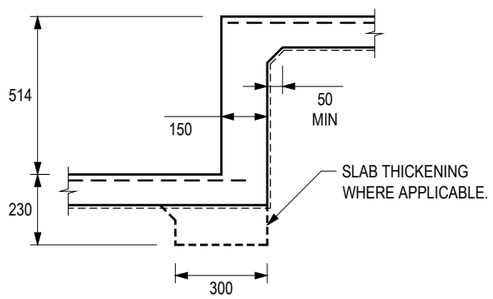
GARAGE WALL 1:20



SLAB THICKENING 1:20



FOOTING STEP 1:20



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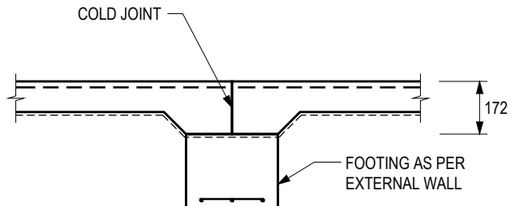

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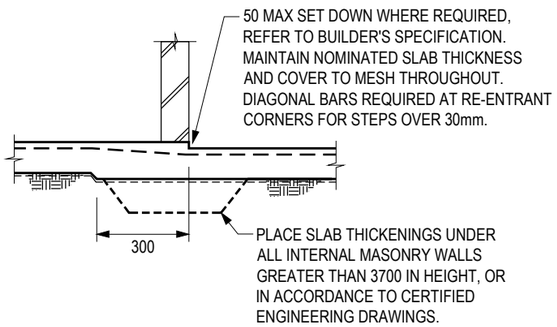

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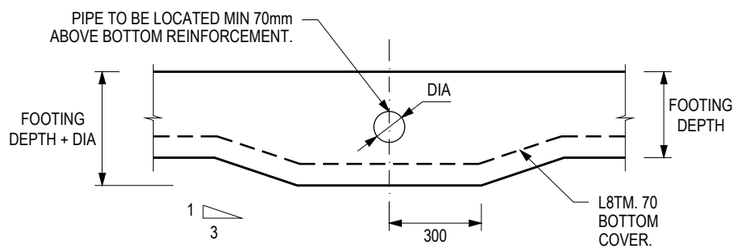

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

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1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
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2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

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3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
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3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
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4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
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- **N** DENOTES D500N DEFORMED BARS.
- **TM** DENOTES D500L DEFORMED BAR TRENCH MESH.

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4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
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ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	28-09-2023
PROJECT	Lot 176 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81205 Tsk:200152

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 177 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81206
Inspection Date:	22-09-2023
Report Reference No:	rpt_78459
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
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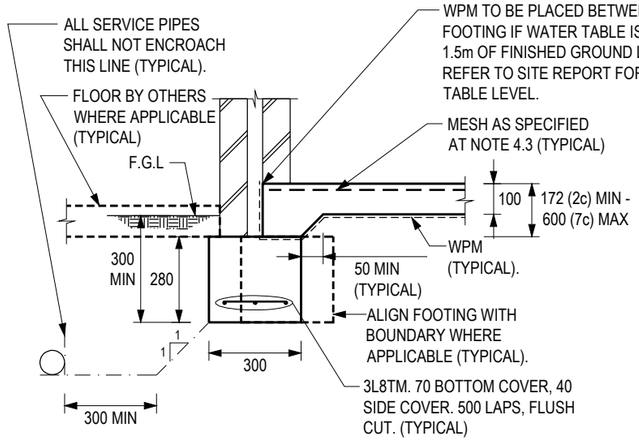

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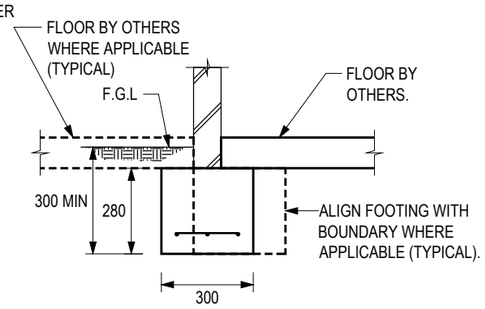

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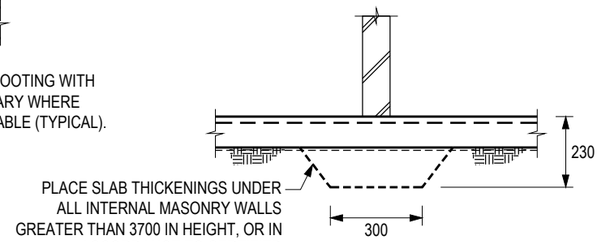

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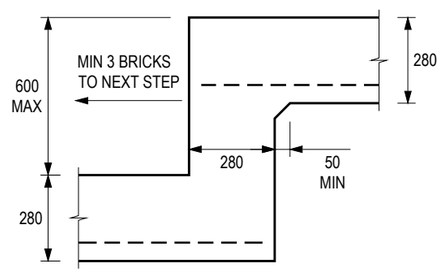

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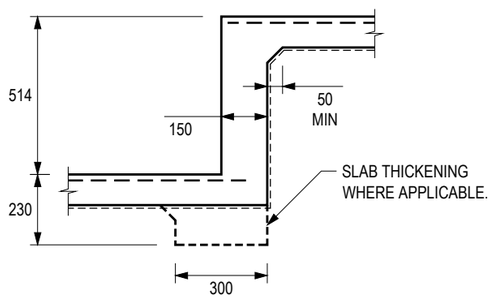

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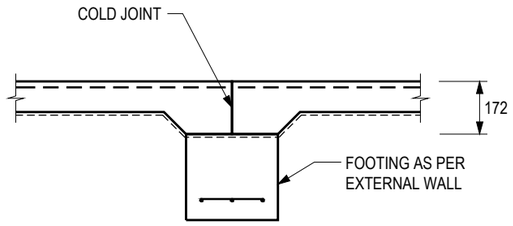

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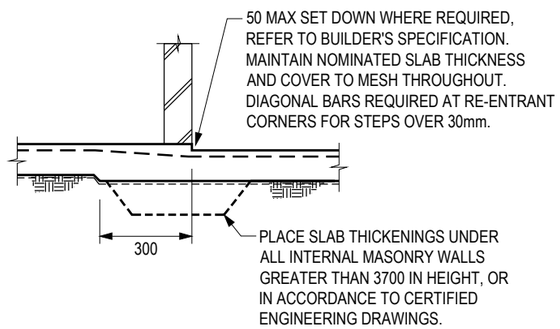

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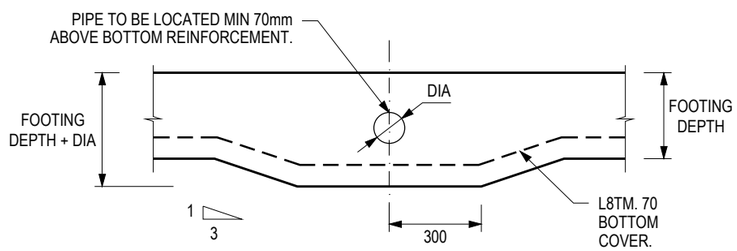

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PROMPT ENGINEERING
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PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 177 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81206 Tsk:200153

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 178 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81208
Inspection Date:	22-09-2023
Report Reference No:	rpt_78457
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
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Sand pad requirements:	**No structural sand pad required.**
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Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
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Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

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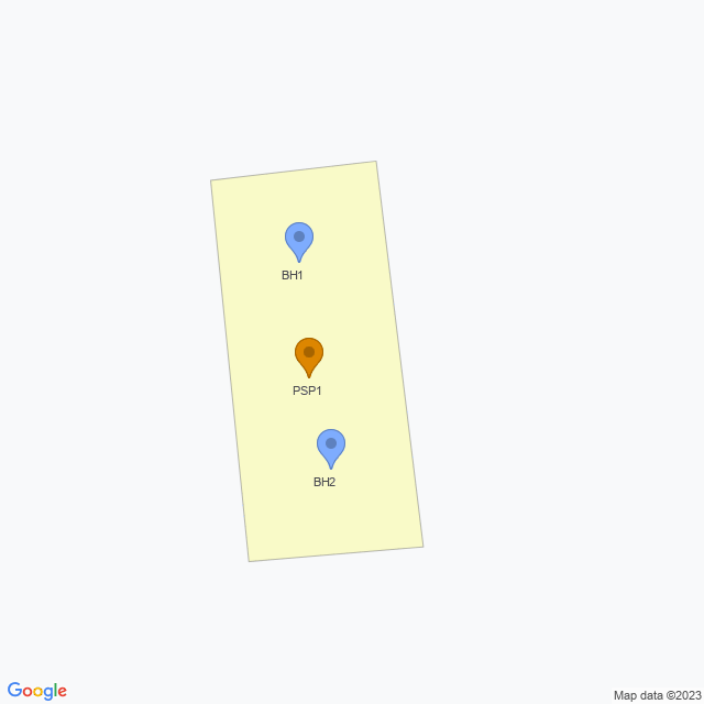

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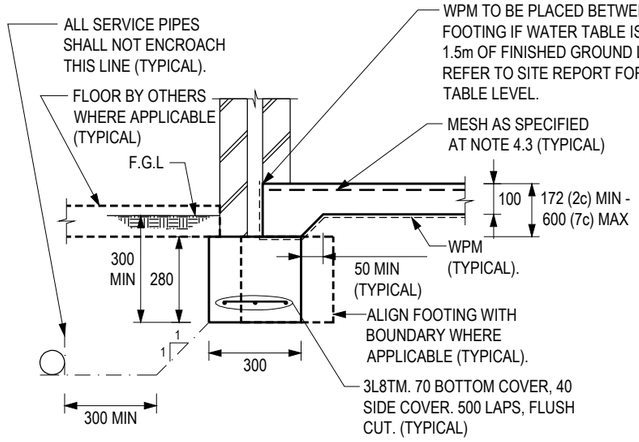

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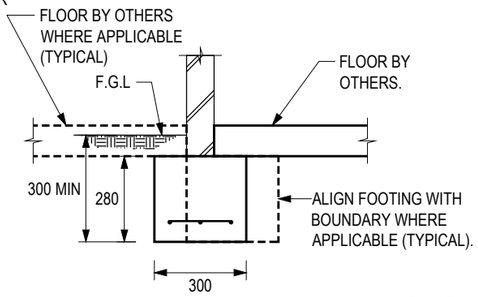

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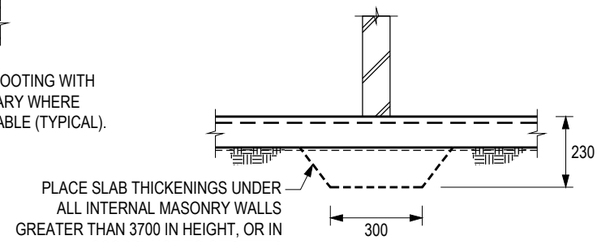

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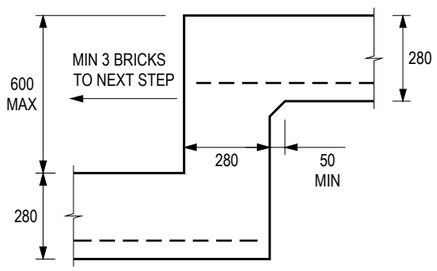

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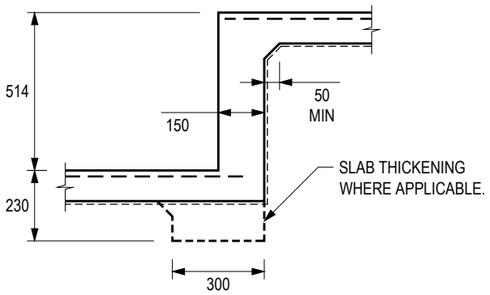
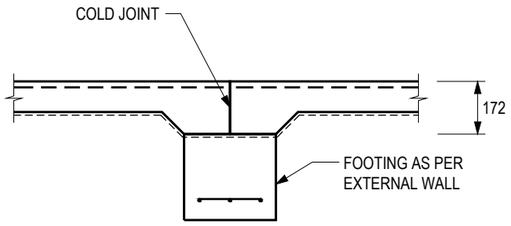


SLAB STEP 1:20



CONSTRUCTION JOINT 1:20

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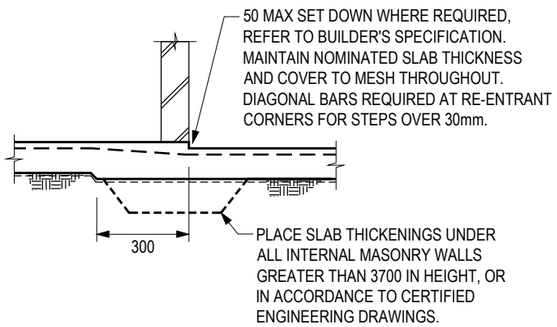

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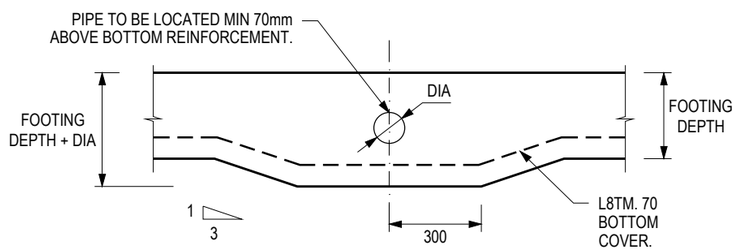

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

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1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
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1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
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2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

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3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
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3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

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4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 178 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81208 Tsk:200155

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 179 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81209
Inspection Date:	26-09-2023
Report Reference No:	rpt_78491
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1400mm	Sand with trace of silt
	1400-1600mm	Sand with trace of silt and gravel
	1600-2500mm (61% passing 0.425mm, Linear Shrinkage - 6.5% , Plasticity Index - 19%)	Clayey SAND with silt and trace of gravel
BH2:	0-1400mm	Sand with trace of silt
	1400-1600mm	Sand with trace of silt and gravel
	1600-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

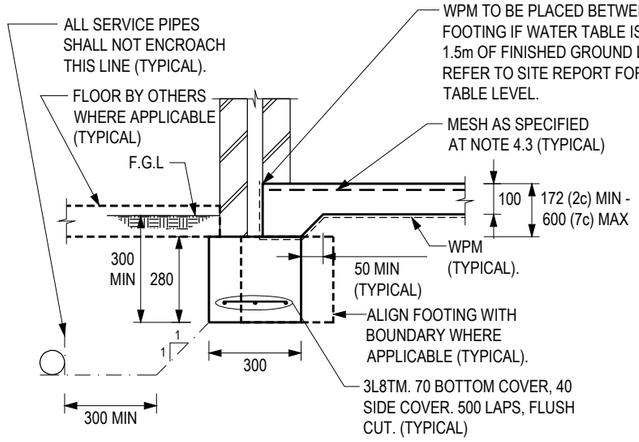
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

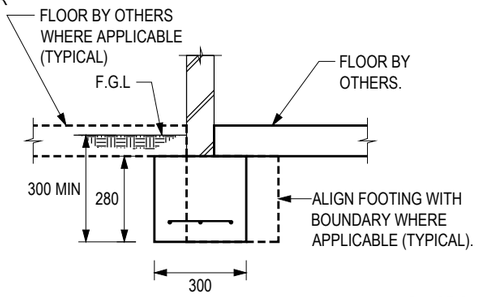
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

Michael Anthony Young
Michael Young BE MIE (276533)



EXTERNAL WALL 1:20



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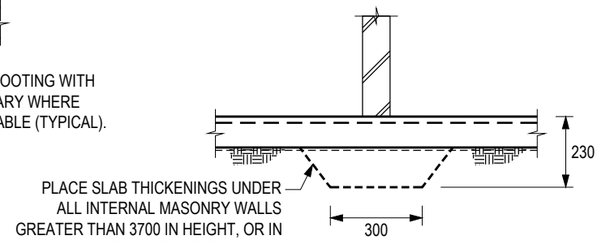
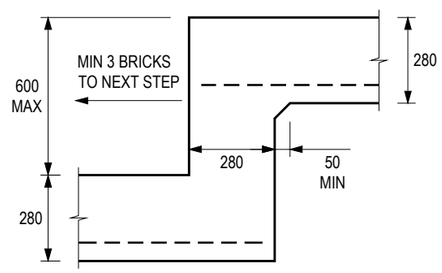


SLAB THICKENING 1:20



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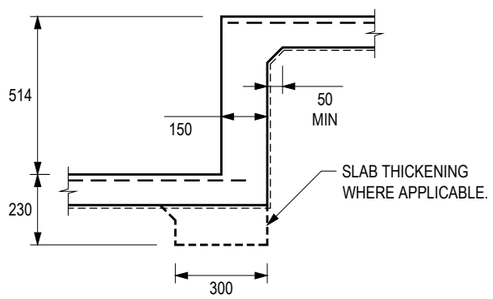

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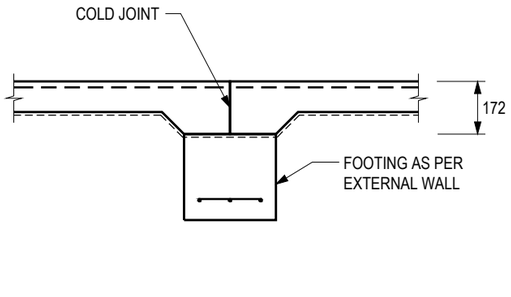

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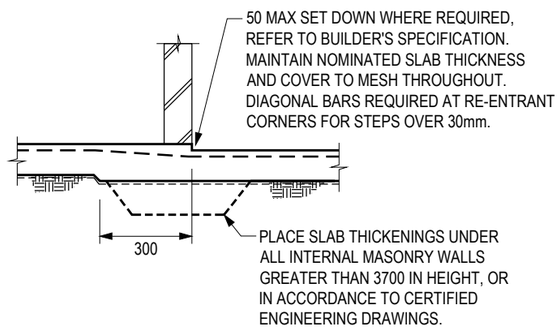

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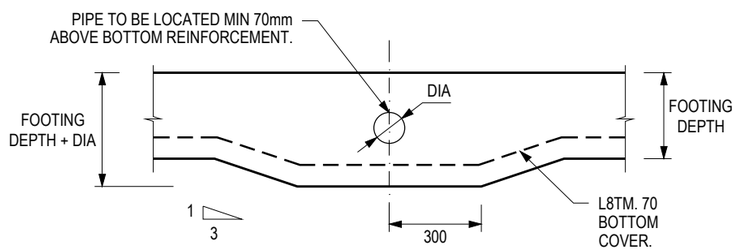

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CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 179 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81209 Tsk:200156

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 180 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81210
Inspection Date:	22-09-2023
Report Reference No:	rpt_78456
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
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Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

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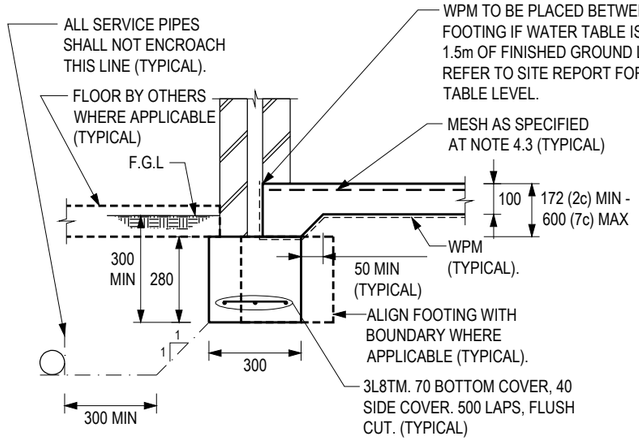

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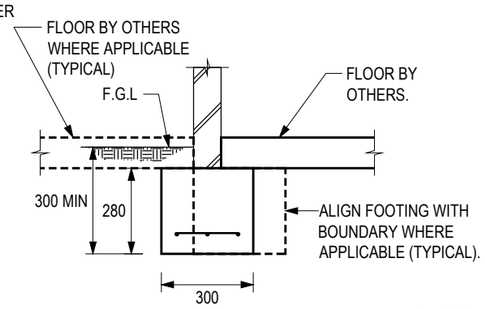

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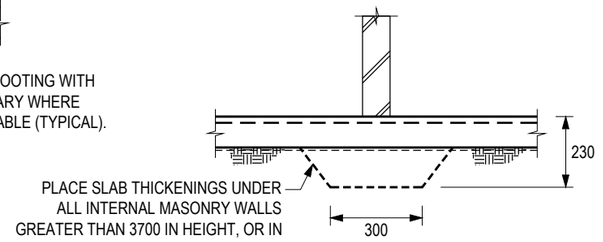

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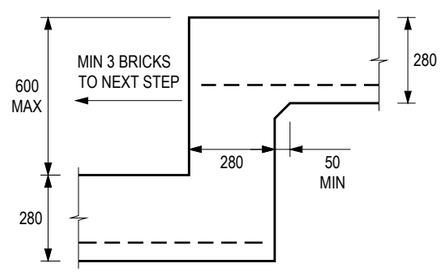

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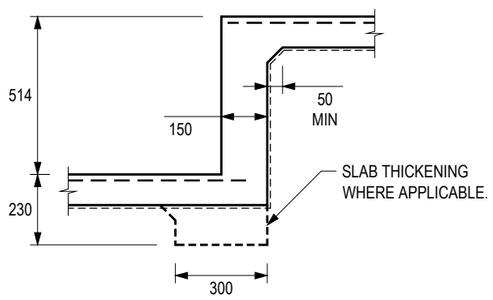

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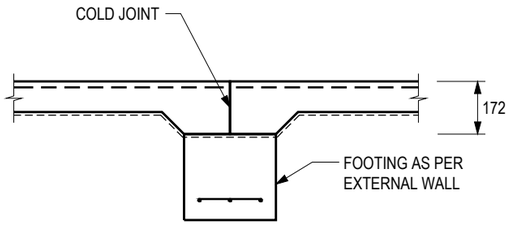

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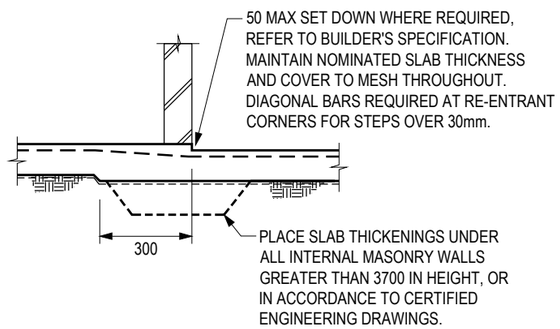

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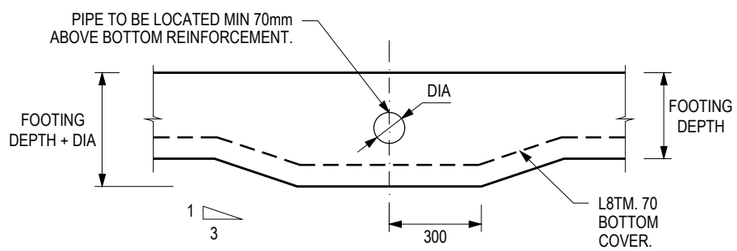

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3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
- **SL** DENOTES D500L DEFORMED SQUARE MESH.
- **N** DENOTES D500N DEFORMED BARS.
- **TM** DENOTES D500L DEFORMED BAR TRENCH MESH.

4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
SL72 MESH	32m MAX

ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 180 Farncomb Street BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81210 Tsk:200157

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 181 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81211
Inspection Date:	22-09-2023
Report Reference No:	rpt_78452
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**A100**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1500mm	Sand with trace of silt
	1500-1800mm	Sand with trace of silt and gravel
	1800-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1500mm	Sand with trace of silt
	1500-1800mm	Sand with trace of silt and gravel
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

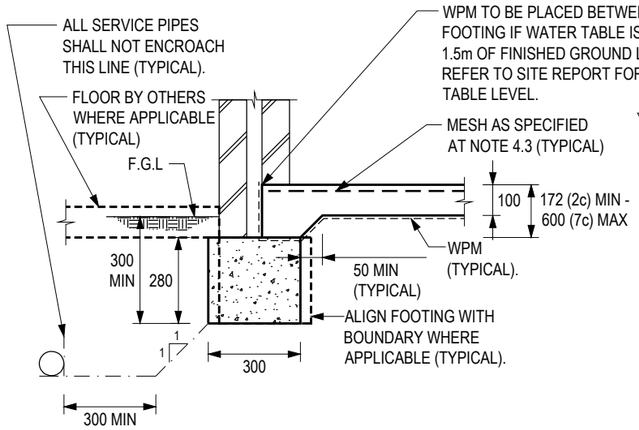
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

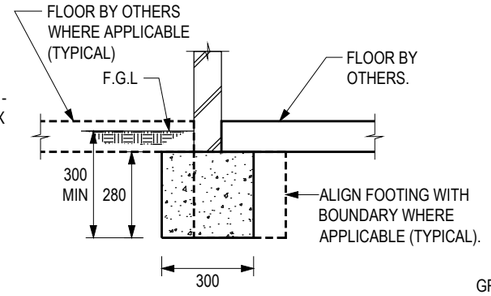
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	13	20+

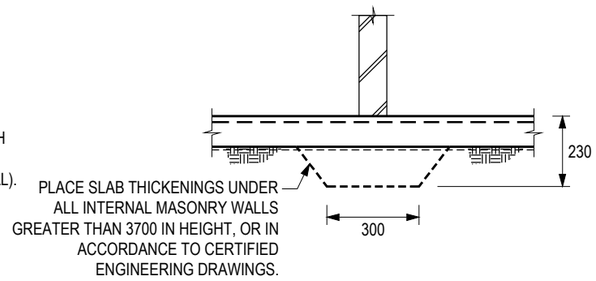
Michael Anthony Young
Michael Young BE MIE (276533)



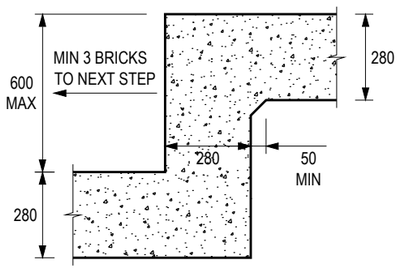
EXTERNAL WALL 1:20



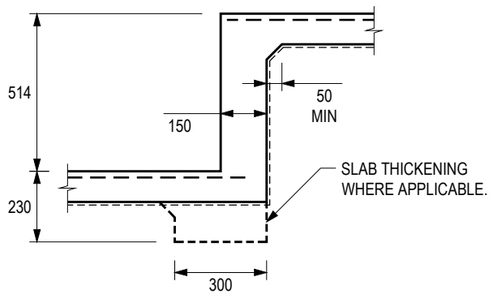
GARAGE WALL 1:20



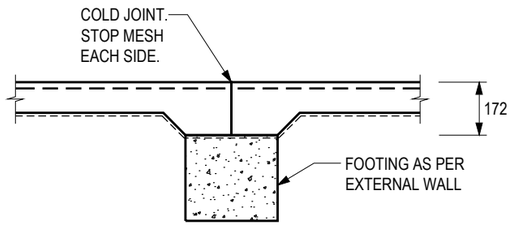
SLAB THICKENING 1:20



FOOTING STEP 1:20

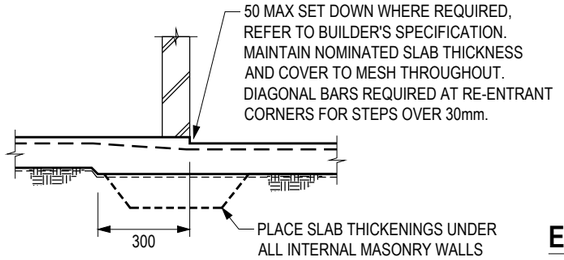


SLAB STEP 1:20

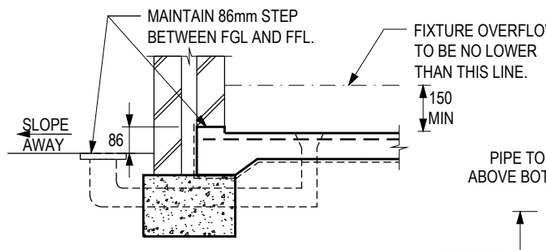


CONSTRUCTION JOINT 1:20

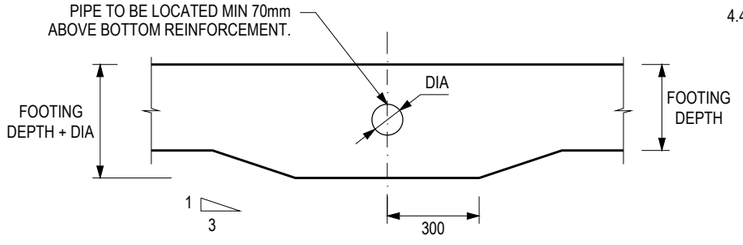
- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.



STANDARD SLAB RECESS 1:20



EXTERNAL WALL AT WET AREAS 1:20



PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

2.2 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.
2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 181 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81211 Tsk:200158

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 182 Farncomb Street BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81212
Inspection Date:	26-09-2023
Report Reference No:	rpt_78487
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**A100**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

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Soil Profile

BH1:	0-1500mm	Sand with trace of silt
	1500-1800mm	Sand with trace of silt and gravel
	1800-2500mm (56% passing 0.425mm, Linear Shrinkage - 8.5% , Plasticity Index - 23%)	Clayey SAND with silt and trace of gravel
BH2:	0-1500mm	Sand with trace of silt
	1500-1800mm	Sand with trace of silt and gravel
	1800-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

Legend:
PSP = Perth Sand Penetrometer
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Additional information and Notes

PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	11	20+

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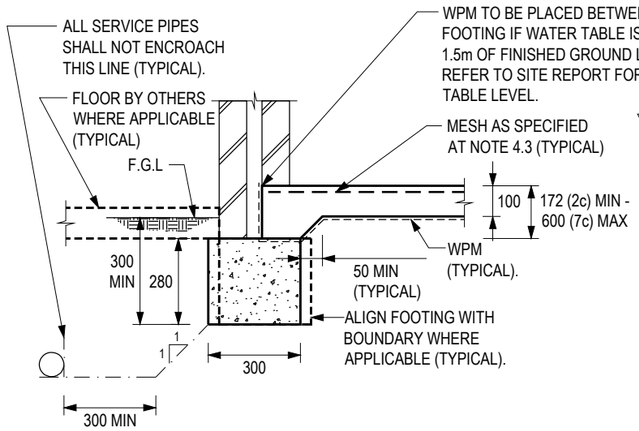
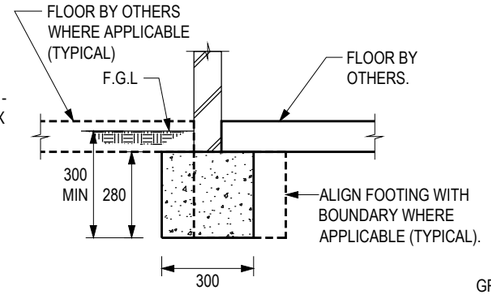
Michael Young BE MIE (276533)



EXTERNAL WALL 1:20



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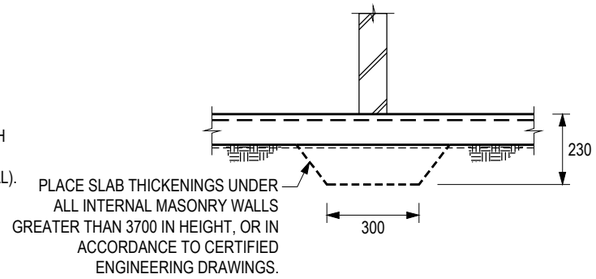

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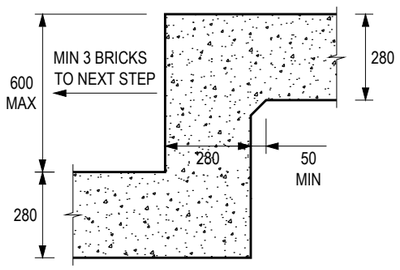
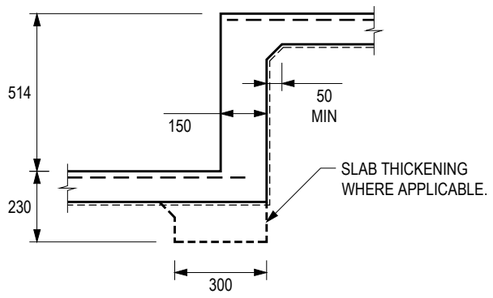


FOOTING STEP 1:20



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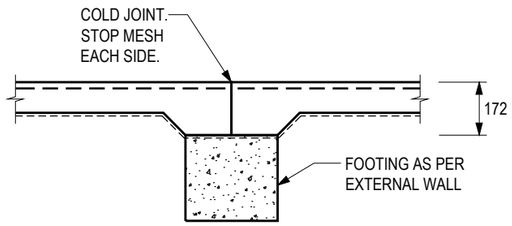

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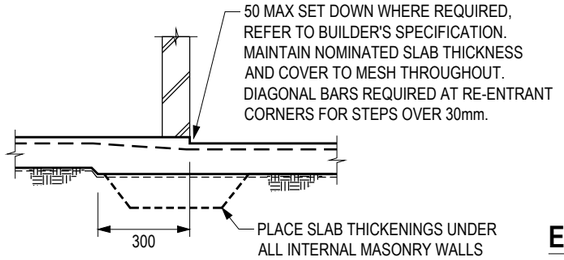
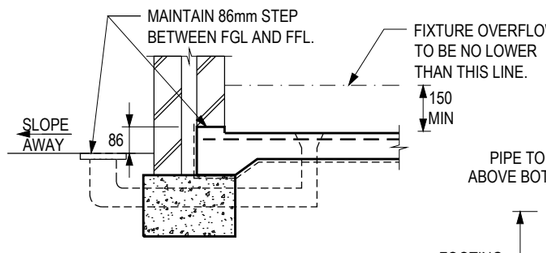


STANDARD SLAB RECESS 1:20



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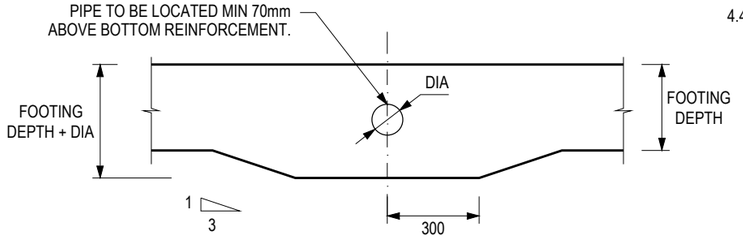

PLUMBING CAST INTO FOOTING 1:20

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PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 182 Farncomb Street BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81212 Tsk:200159

DB-A100

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 183 Maitland Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81164
Inspection Date:	21-09-2023
Report Reference No:	rpt_78423
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

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- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1200mm	Sand with trace of silt
	1200-1600mm	Sand with trace of silt and gravel
	1600-2500mm (60% passing 0.425mm, Linear Shrinkage - 6% , Plasticity Index - 18%	Clayey SAND with silt and trace of gravel
BH2:	0-1200mm	Sand with trace of silt
	1200-1600mm	Sand with trace of silt and gravel
	1600-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

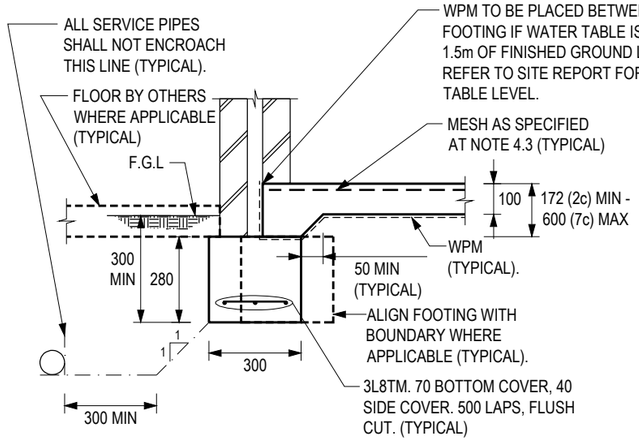
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

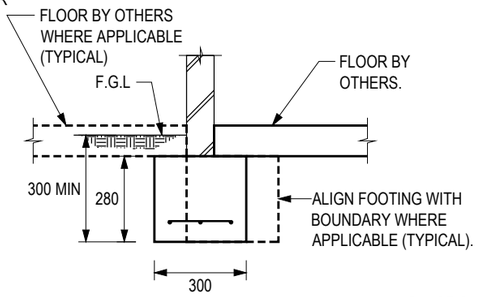
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

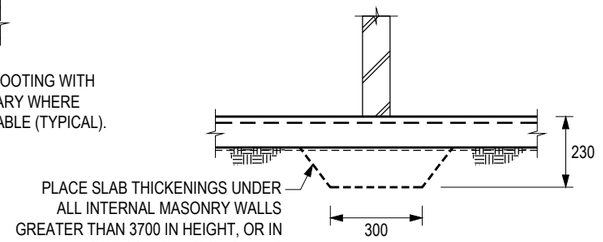
Michael Anthony Young
Michael Young BE MIE (276533)



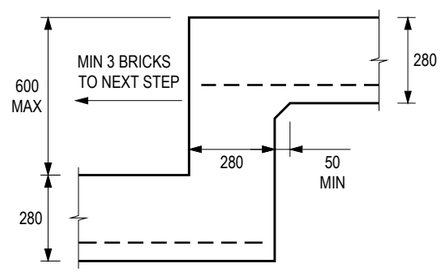
EXTERNAL WALL 1:20



GARAGE WALL 1:20



SLAB THICKENING 1:20



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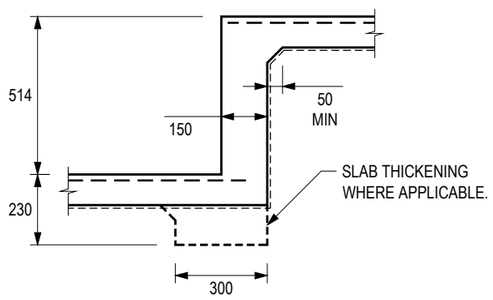

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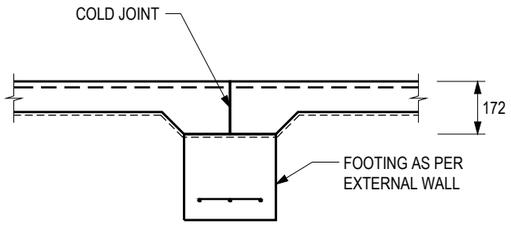

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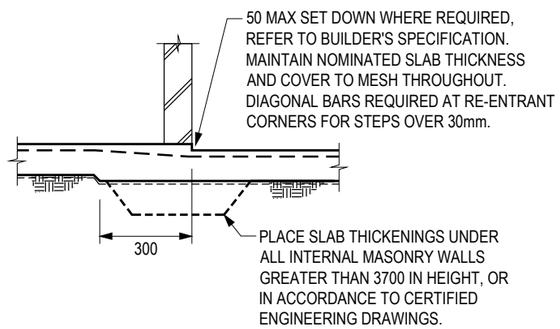

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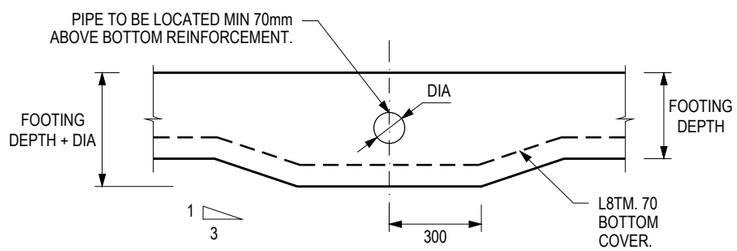

PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

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1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
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1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

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2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
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2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

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3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
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3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
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3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
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- **N** DENOTES D500N DEFORMED BARS.
- **TM** DENOTES D500L DEFORMED BAR TRENCH MESH.

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SL53 MESH	FOR SLAB SPANS UP TO 12m
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ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
PROJECT	Lot 183 Maitland Road BYFORD WA for Parcel Property()	SHEET No.	1 of 1
		A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81164 Tsk:200100

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 184 MAITLAND ROAD Byford 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81165
Inspection Date:	22-09-2023
Report Reference No:	rpt_78439
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**A** (in accordance with AS2870)
Footing Detail	**DB-A100 TM**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

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Borehole / PSP location Plan

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PSP Results

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PSP1	SET	14	20+

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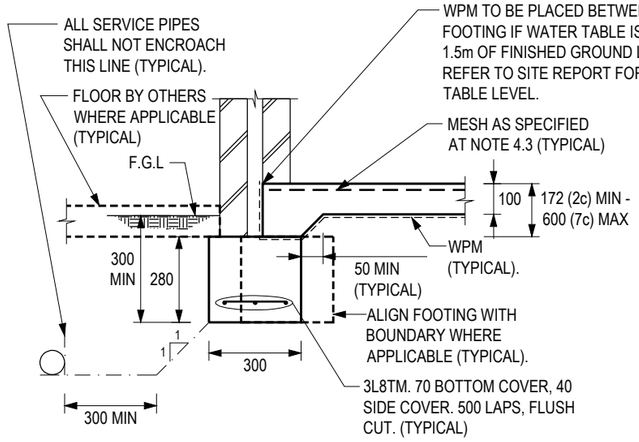

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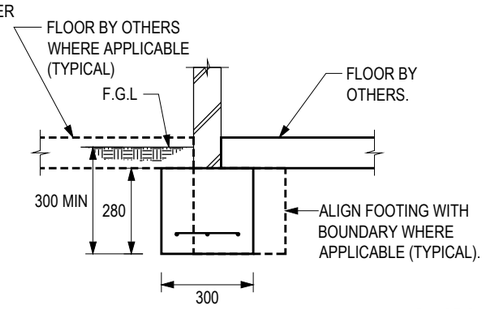

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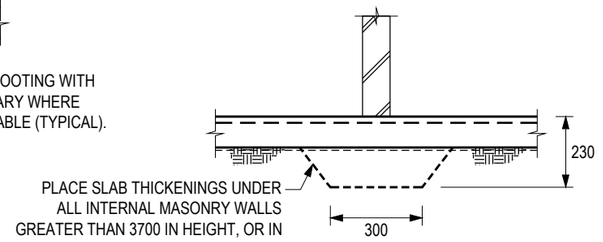

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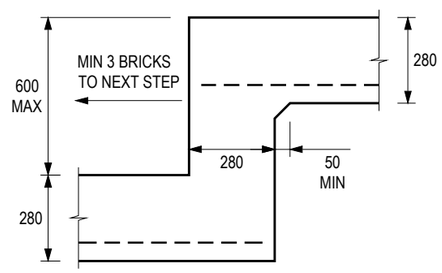

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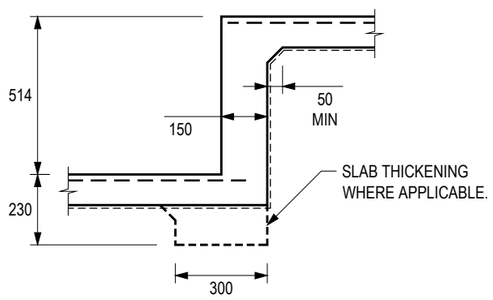

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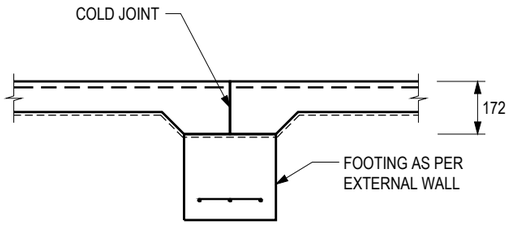

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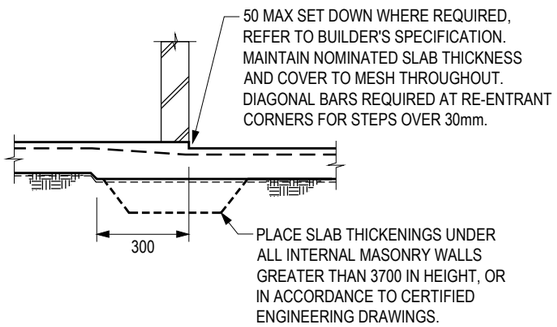

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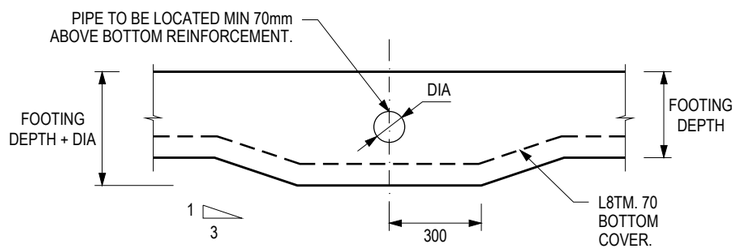

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CIVIL | STRUCTURAL | GEOTECHNICAL

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		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 184 MAITLAND ROAD Byford WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81165 Tsk:200101

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 185 Maitland Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81166
Inspection Date:	22-09-2023
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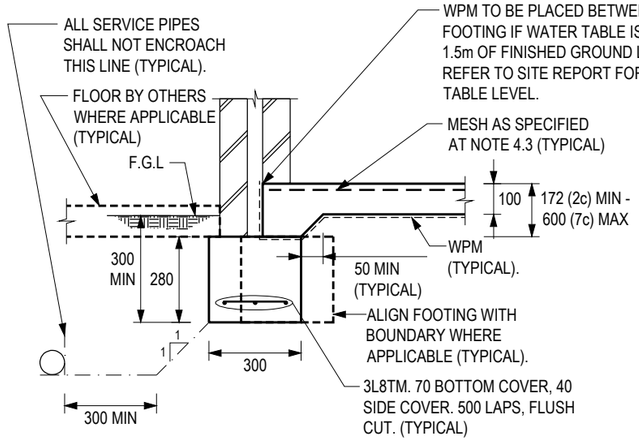

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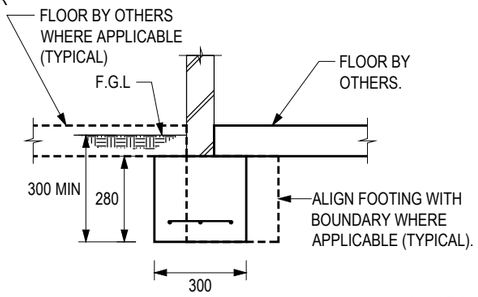

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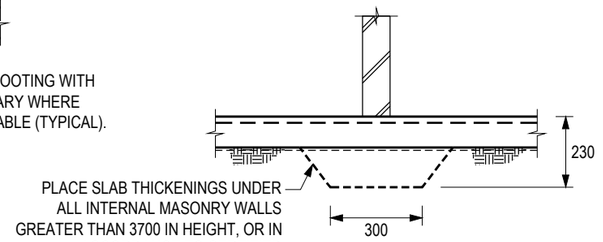
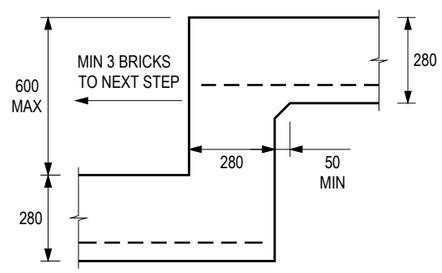
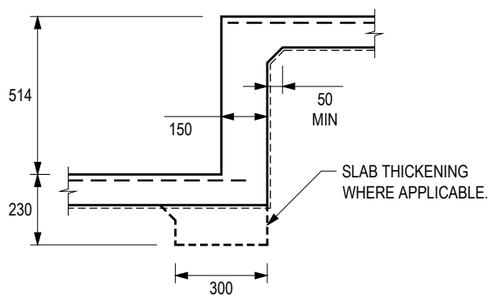


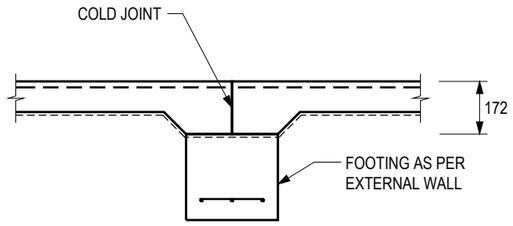
SLAB THICKENING 1:20



FOOTING STEP 1:20

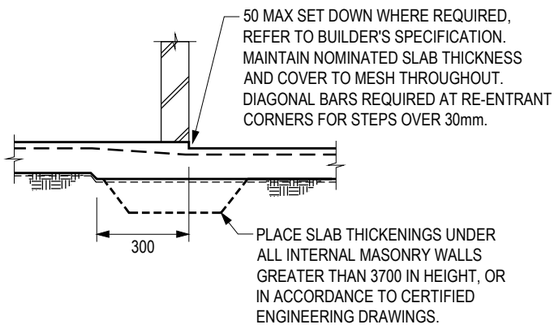


SLAB STEP 1:20

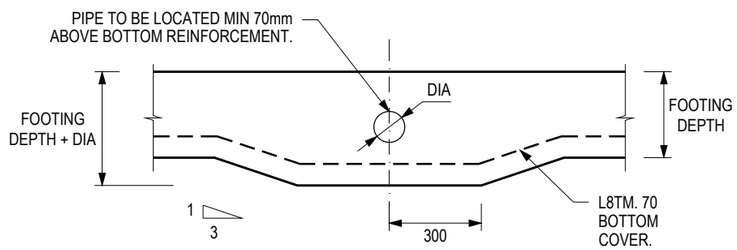


CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.



STANDARD SLAB RECESS 1:20



PLUMBING CAST INTO FOOTING 1:20

A CLASS SITE NOTES:

1 GENERAL

1.1 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.
1.2 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS CONSTRUCTED ON CLASS "A" (SANDY) SITES ONLY.
1.3 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN.
1.4 FOOTING DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.
1.5 DRAIN ROOF & SURFACE WATER AWAY FROM FOOTINGS.
1.6 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).
1.7 ALL TIMBERWORK TO BE TO AS1684. ALL STEEL WALL FRAMES TO BE TO NASH STANDARD.

2. EARTHWORKS AND SITE PREPARATION

2.1 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

2.2 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.
2.3 ALL FILLING SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 5 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3).
2.4 REFER BACK TO PROMPT ENGINEERING SHOULD REACTIVE MATERIALS BE ENCOUNTERED DURING SITE PREPARATION.

3 CONCRETE & MASONRY

3.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.
3.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.
3.3 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.
3.4 ALL CONCRETE TO BE N20/20/100 U.N.O.
3.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.
3.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.
3.7 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

4 REINFORCEMENT

4.1 ALL REINFORCEMENT TO BE IN ACCORDANCE WITH AS/NZS 4671
- **SL** DENOTES D500L DEFORMED SQUARE MESH.
- **N** DENOTES D500N DEFORMED BARS.
- **TM** DENOTES D500L DEFORMED BAR TRENCH MESH.

4.2 MESH TO BE LAPPED AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS FOLLOWS:

SL53 MESH	FOR SLAB SPANS UP TO 12m
SL52/SL63 MESH	26m MAX
SL62 MESH	28m MAX
SL72 MESH	32m MAX

ENSURE 30 TOP COVER TO MESH.
REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE SLAB EXCEED 3:1 AT ANY POINT.
4.4 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (11/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 1
PROJECT	Lot 185 Maitland Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81166 Tsk:200102

DB-A100 TM

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 186 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81172
Inspection Date:	22-09-2023
Report Reference No:	rpt_78450
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**FS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1000mm	Sand with trace of silt
	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-1000mm	Sand with trace of silt
	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

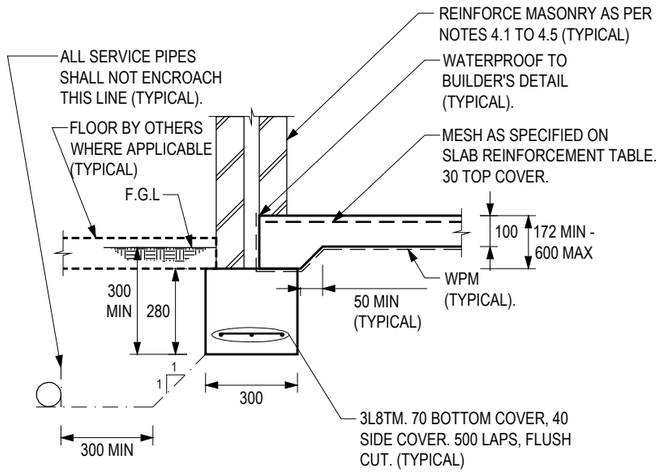
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

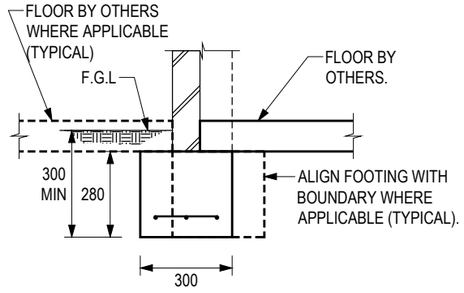
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	10	20+

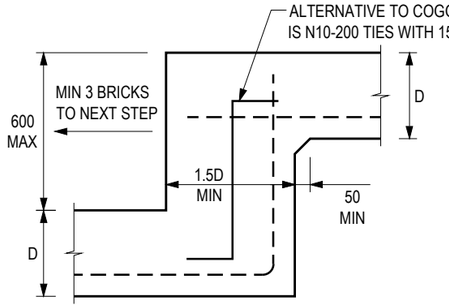
Michael Anthony Young
Michael Young BE MIE (276533)



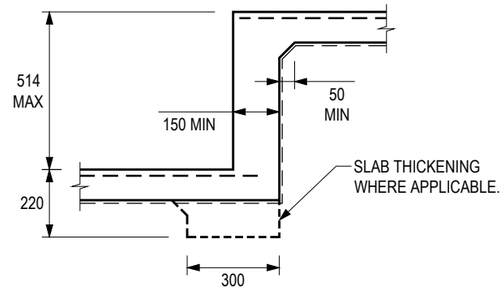
EXTERNAL WALL 1:20



GARAGE WALL 1:20

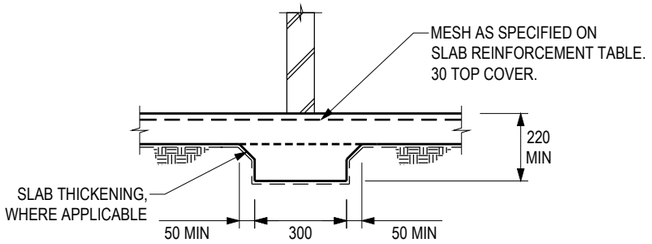


FOOTING STEP 1:20



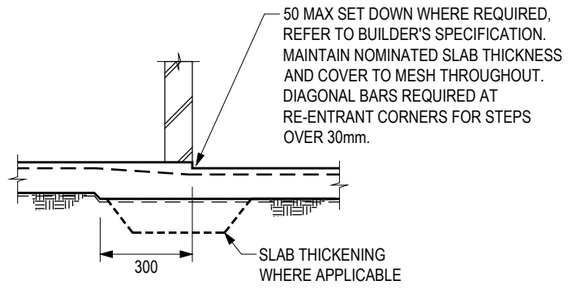
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

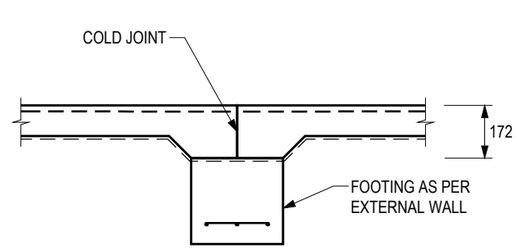


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 186 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81172 Tsk:200109

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

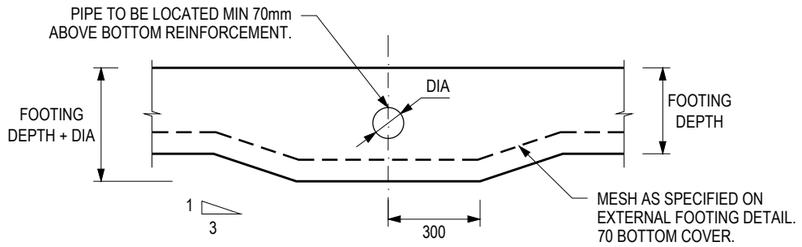
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

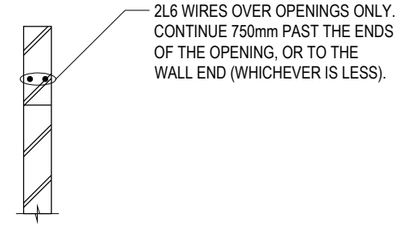
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

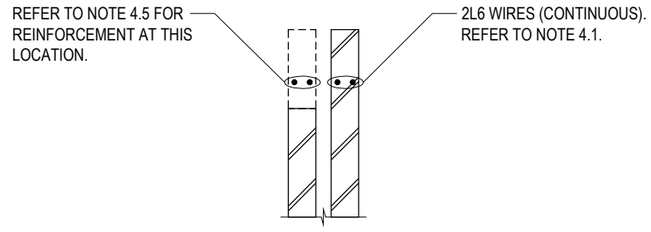


PLUMBING CAST INTO FOOTING 1:20

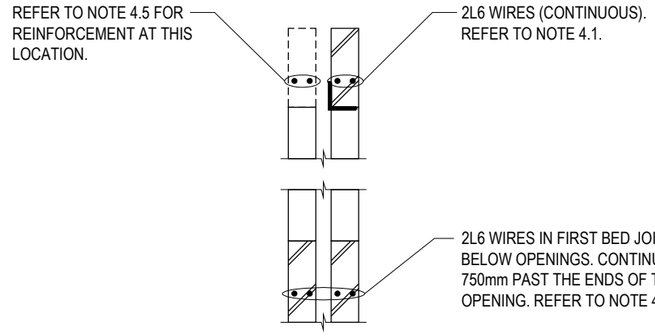


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 186 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81172 Tsk:200109

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 187 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81173
Inspection Date:	26-09-2023
Report Reference No:	rpt_78473
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

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- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-1000mm	Sand with trace of silt
	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm (61% passing 0.425mm, Linear Shrinkage - 7.5% , Plasticity Index - 20%)	Clayey SAND with silt and trace of gravel
BH2:	0-1100mm	Sand with trace of silt
	1100-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

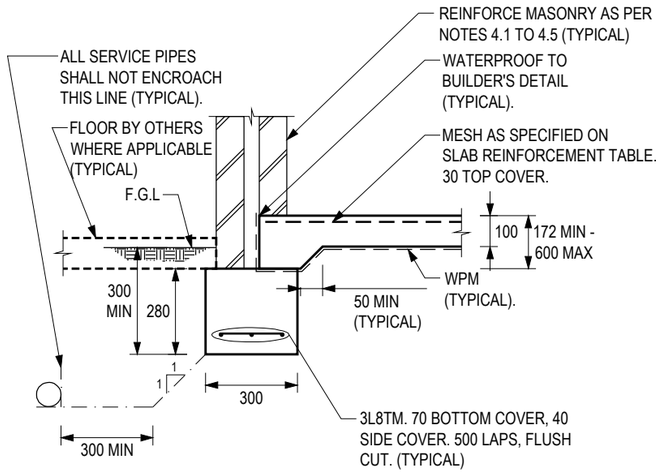
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

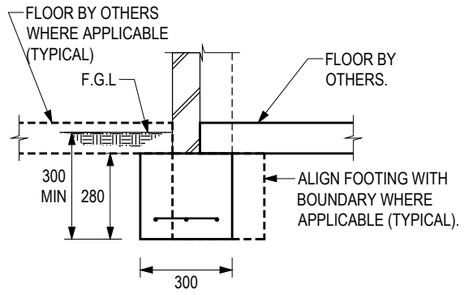
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	10	20+

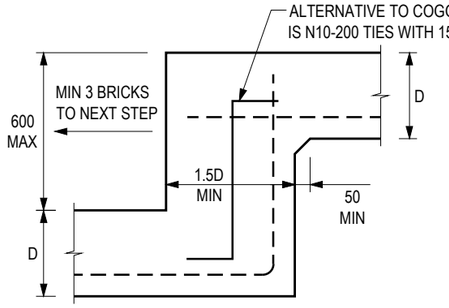
Michael Anthony Young
Michael Young BE MIE (276533)



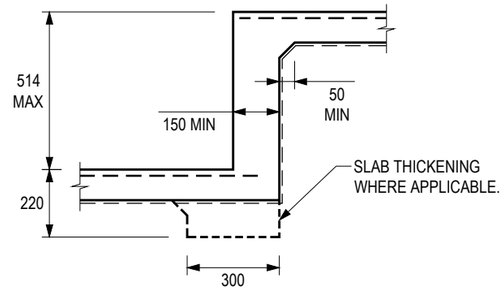
EXTERNAL WALL 1:20



GARAGE WALL 1:20

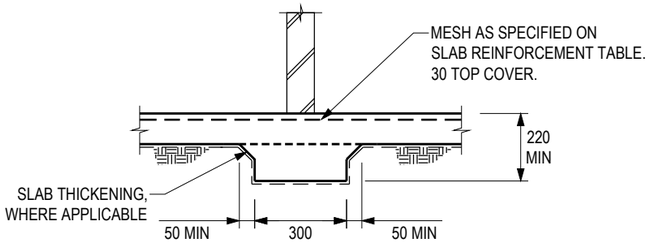


FOOTING STEP 1:20



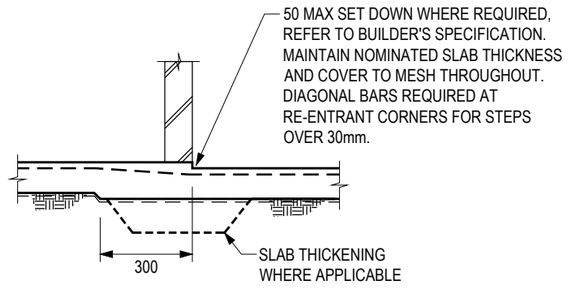
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	



SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



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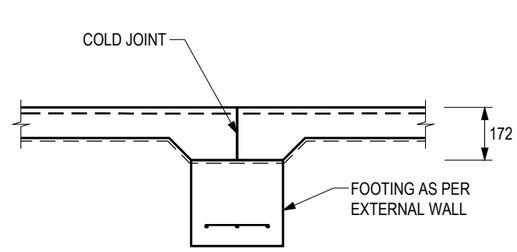


CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 187 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81173 Tsk:200110

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

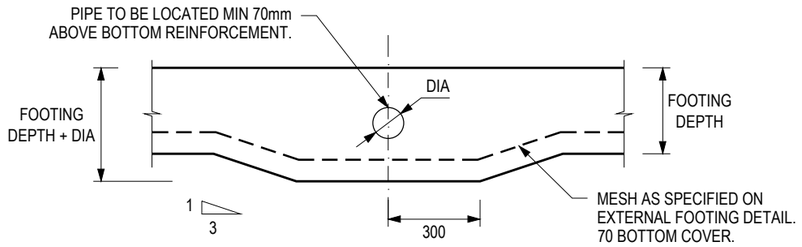
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

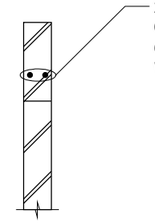
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

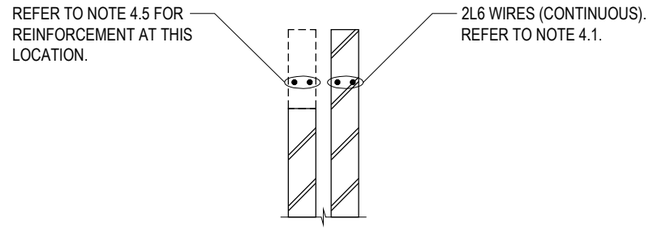


PLUMBING CAST INTO FOOTING 1:20

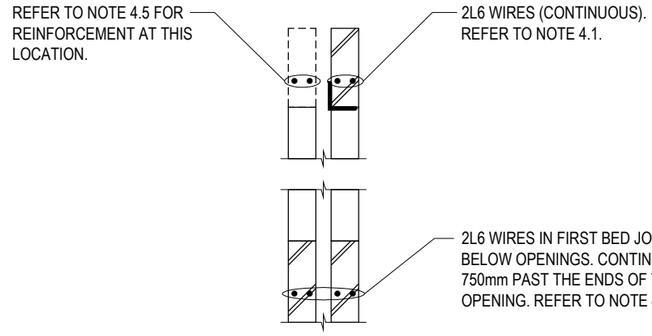


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 187 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81173 Tsk:200110

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 188 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81174
Inspection Date:	22-09-2023
Report Reference No:	rpt_78449
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

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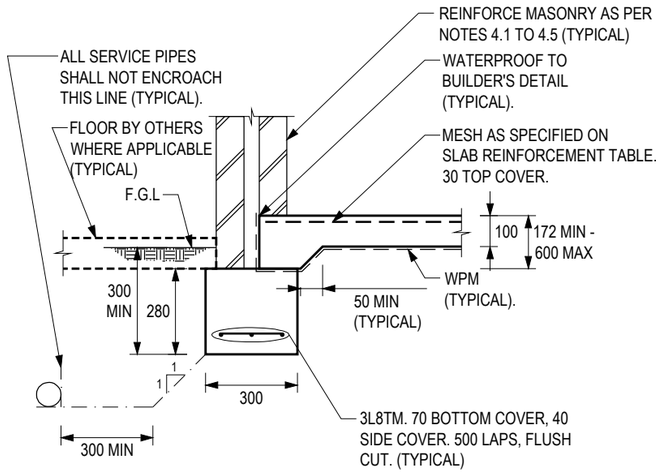

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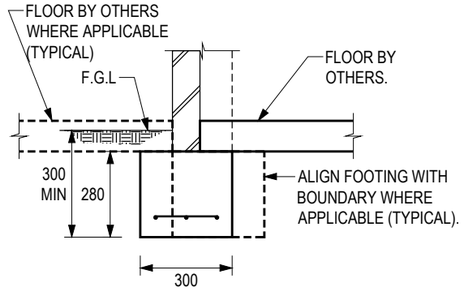

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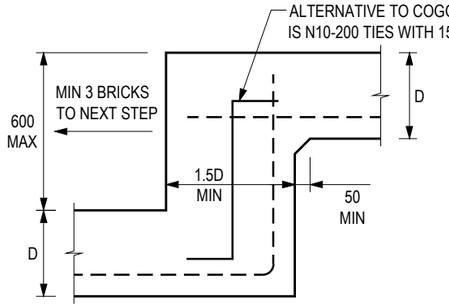

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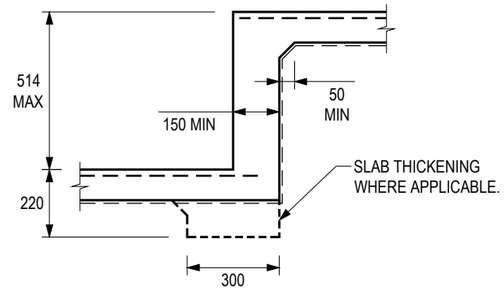

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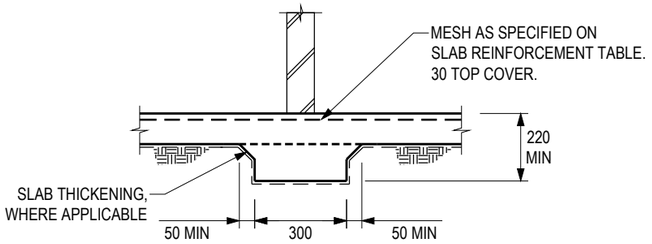

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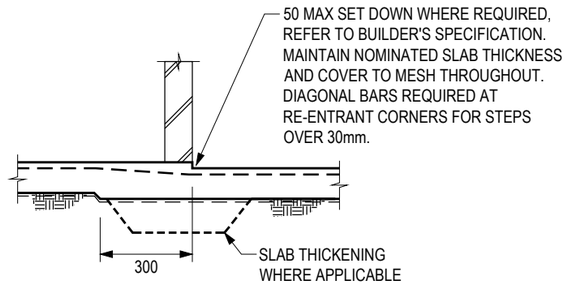

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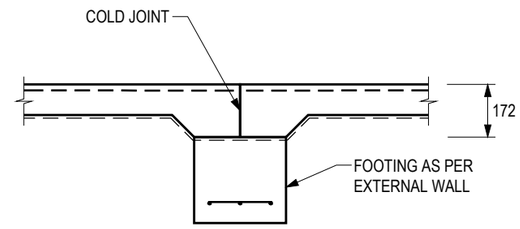

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TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
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3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

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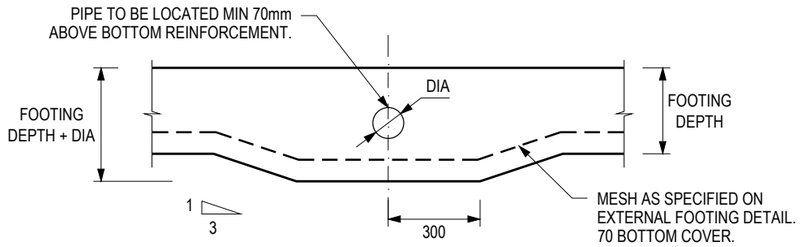
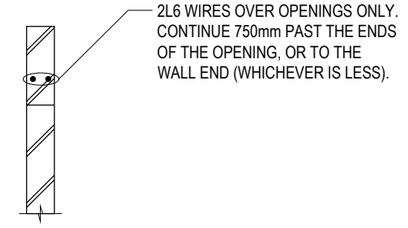
5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

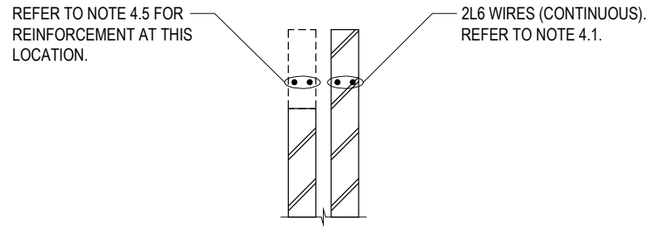


PLUMBING CAST INTO FOOTING 1:20

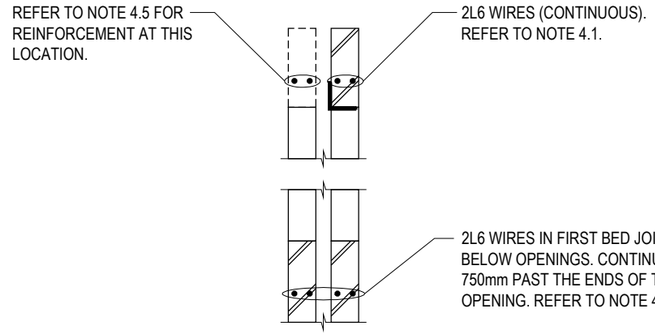


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 188 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81174 Tsk:200111

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 189 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81175
Inspection Date:	22-09-2023
Report Reference No:	rpt_78448
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-900mm	Sand with trace of silt
	900-1200mm	Sand with trace of silt and gravel
	1200-1400mm	Sand with silt and trace of clay
	1400-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-900mm	Sand with trace of silt
	900-1200mm	Sand with trace of silt and gravel
	1200-1400mm	Sand with silt and trace of clay
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

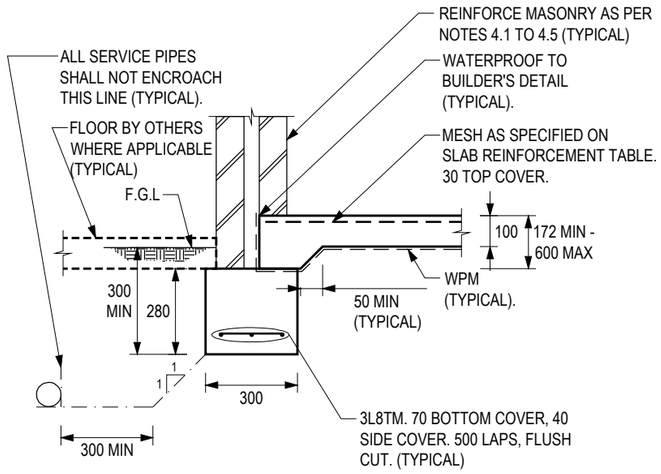
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

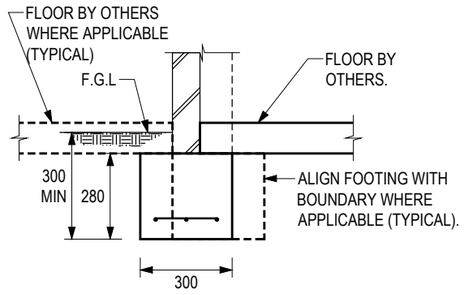
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	10	20+

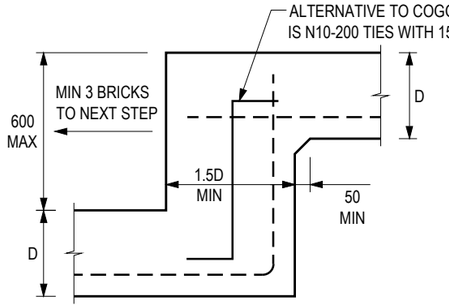
Michael Anthony Young
Michael Young BE MIE (276533)



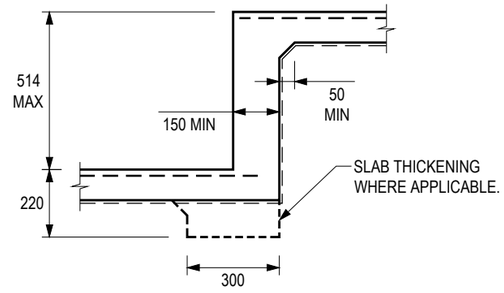
EXTERNAL WALL 1:20



GARAGE WALL 1:20

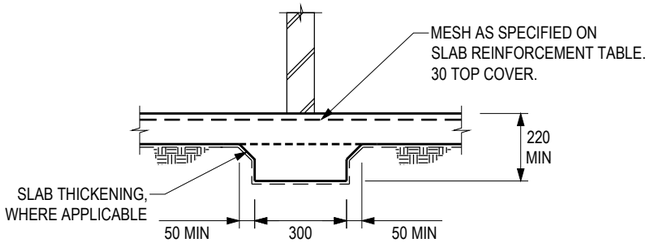


FOOTING STEP 1:20



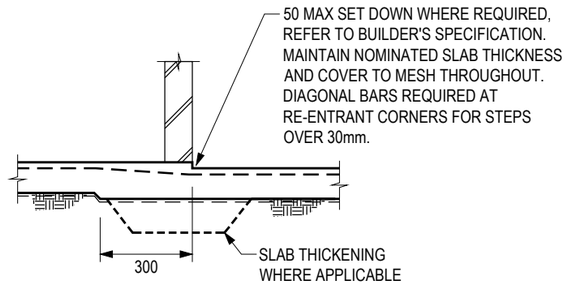
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

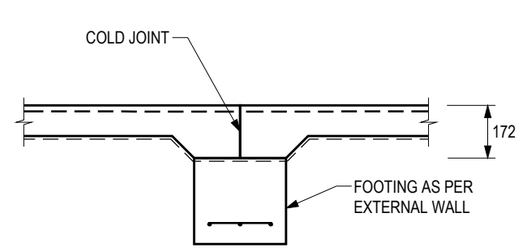


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 189 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81175 Tsk:200112

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

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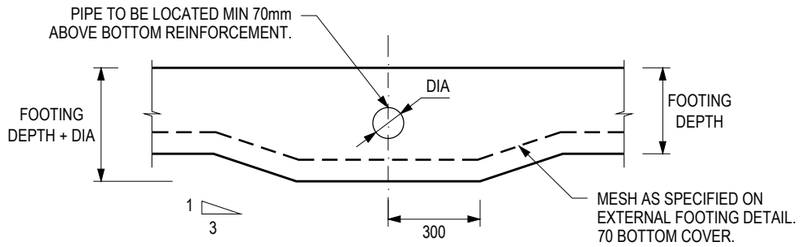
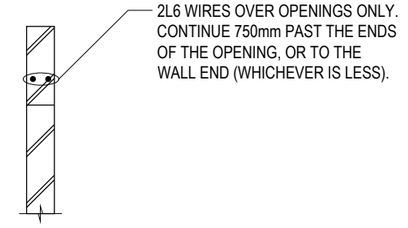


PLUMBING CAST INTO FOOTING 1:20



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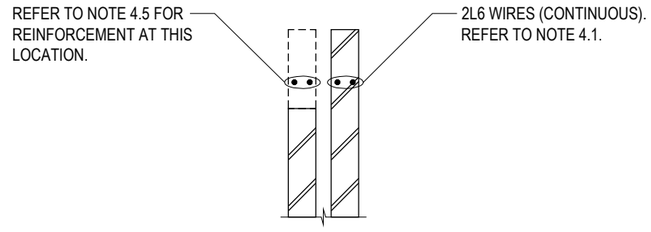

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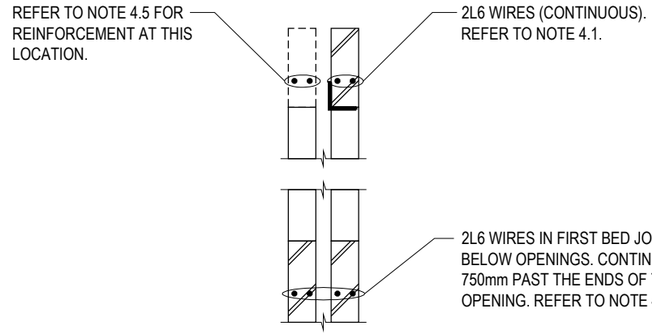

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PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
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		SHEET No.	2 of 2
PROJECT	Lot 189 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81175 Tsk:200112

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 190 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81177
Inspection Date:	26-09-2023
Report Reference No:	rpt_78505
Date Certified:	26-09-2023

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Recommendation

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	1400-2500mm (68% passing 0.425mm, Linear Shrinkage - 7.5% , Plasticity Index - 25%)	Clayey SAND with silt and trace of gravel
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	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel

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BH = Bore Hole location

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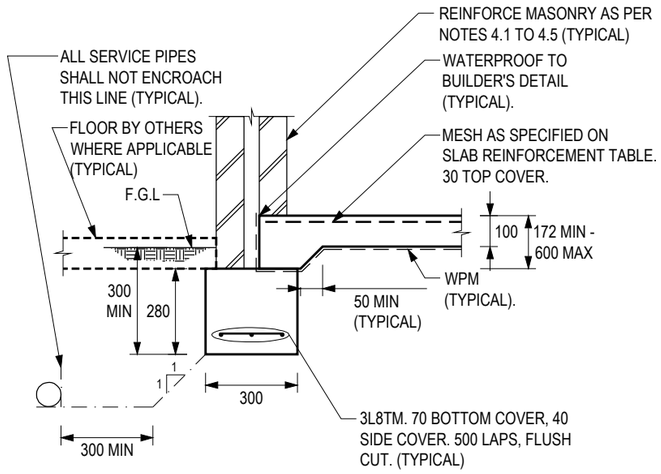
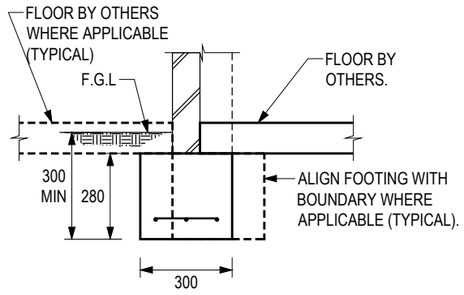
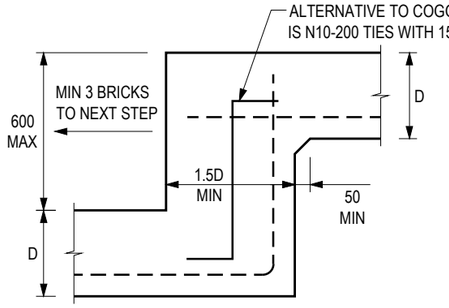
Michael Anthony Young
Michael Young BE MIE (276533)



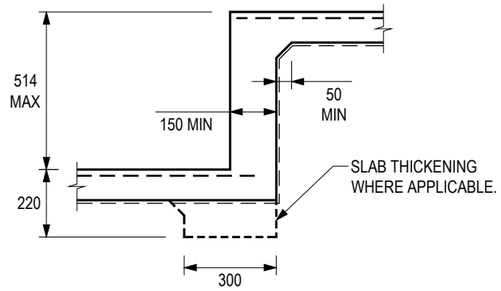
EXTERNAL WALL 1:20



GARAGE WALL 1:20

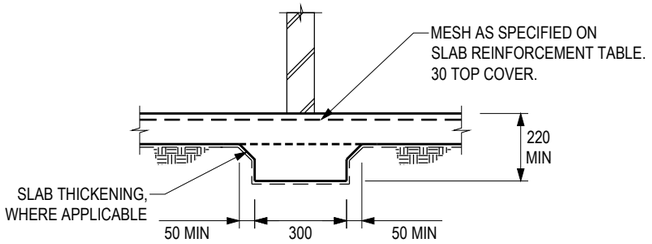


FOOTING STEP 1:20



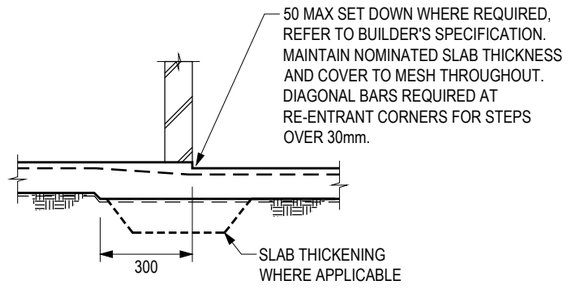
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

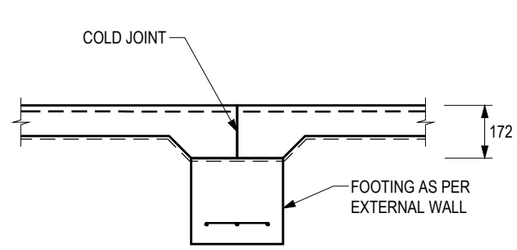


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 190 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81177 Tsk:200114

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

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3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

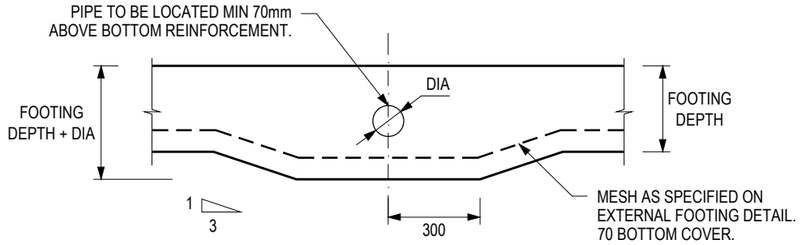
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

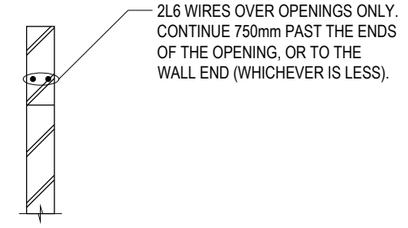
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

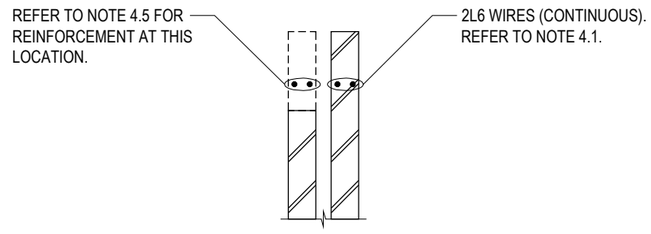


PLUMBING CAST INTO FOOTING 1:20

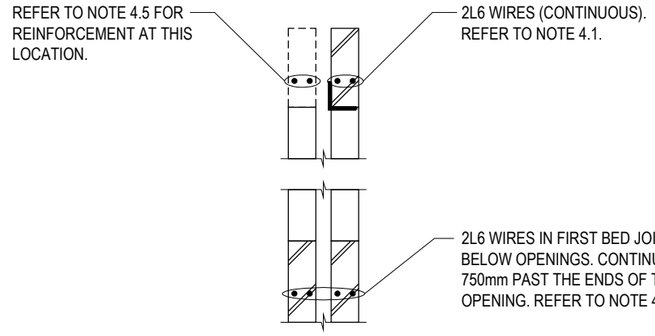


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 190 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81177 Tsk:200114

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 191 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81178
Inspection Date:	22-09-2023
Report Reference No:	rpt_78447
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

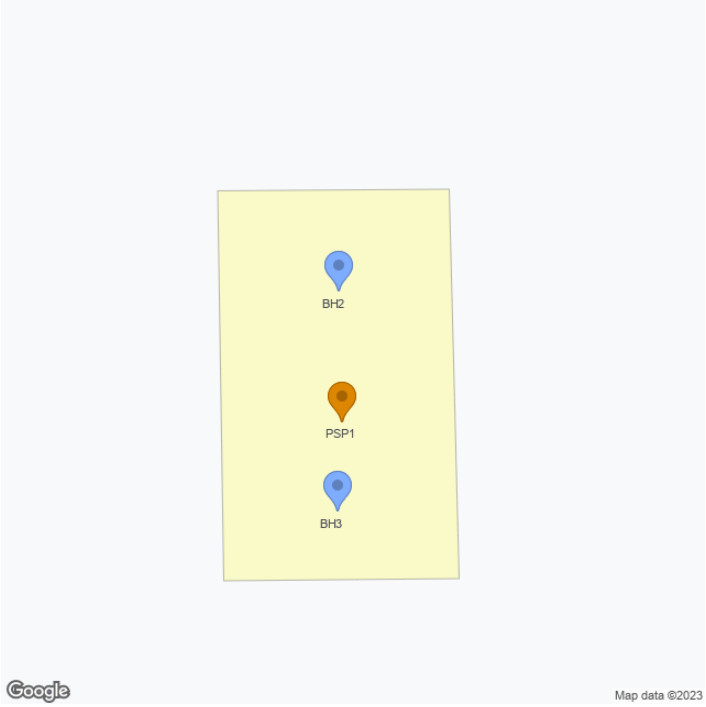
- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH2:	0-1000mm	Sand with trace of silt
	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel
BH3:	0-1000mm	Sand with trace of silt
	1000-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

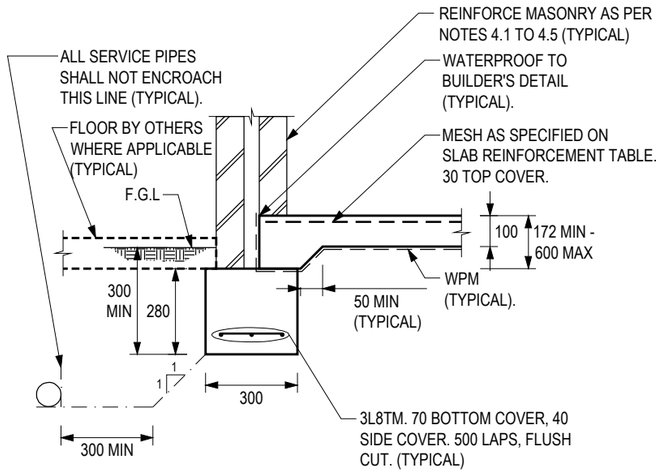


Additional information and Notes

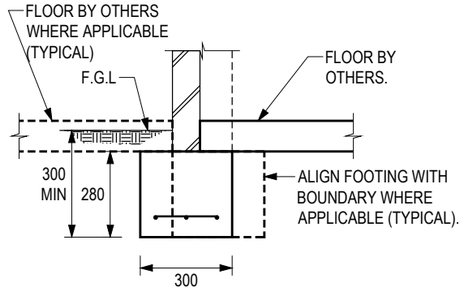
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

Michael Anthony Young
Michael Young BE MIE (276533)



EXTERNAL WALL 1:20



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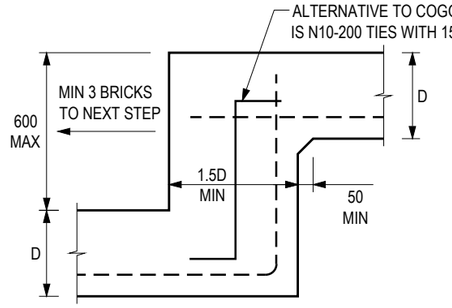

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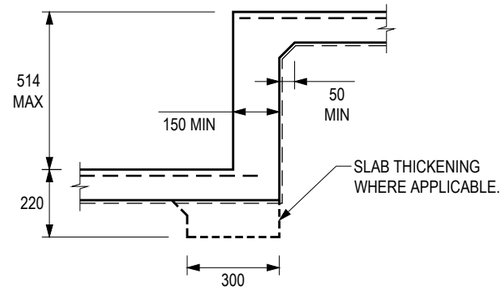

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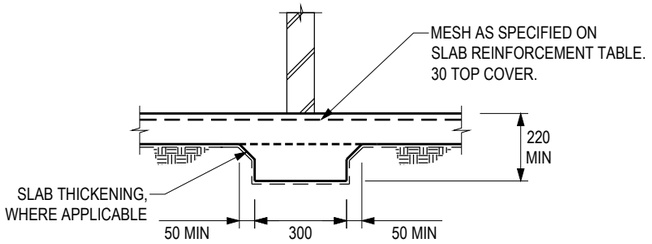

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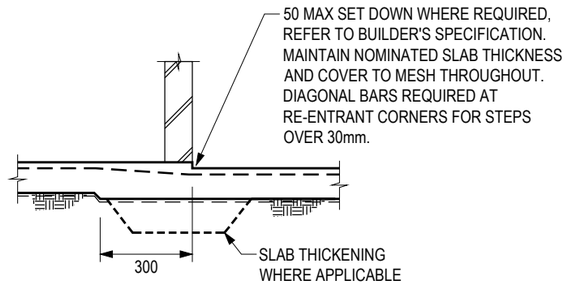

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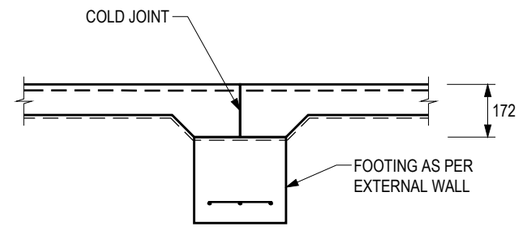

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4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

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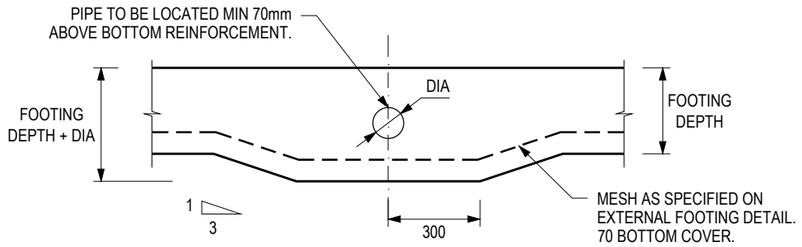
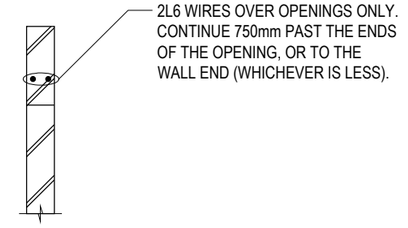
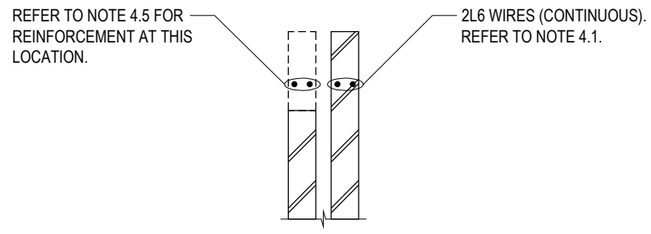


PLUMBING CAST INTO FOOTING 1:20



TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



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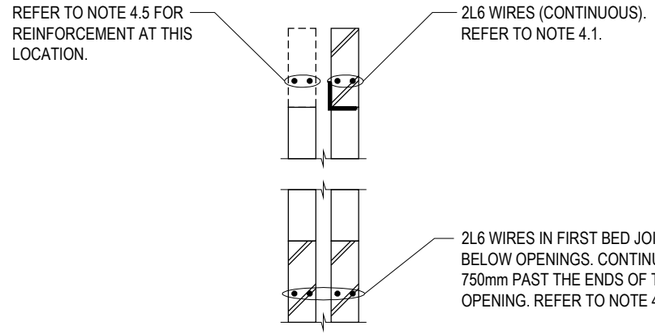

TYPICAL EXTERNAL WALL SECTION AT OPENINGS

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PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 191 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81178 Tsk:200115

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 192 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81179
Inspection Date:	22-09-2023
Report Reference No:	rpt_78445
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

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- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
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Borehole / PSP location Plan

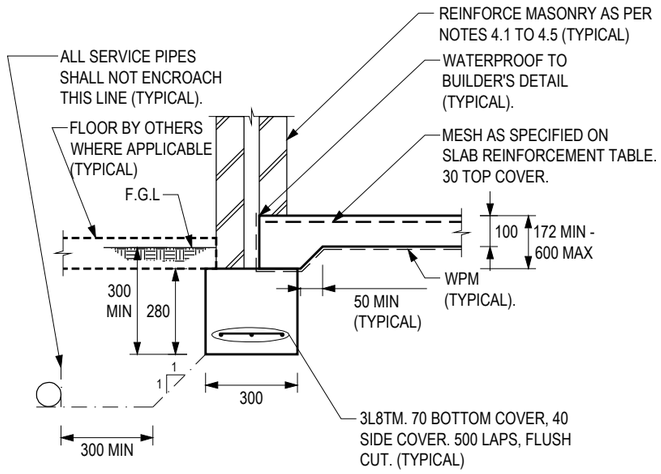
Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

Additional information and Notes

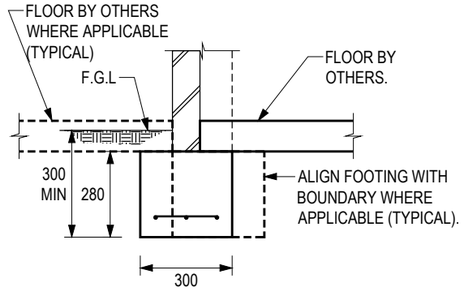
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	12	20+

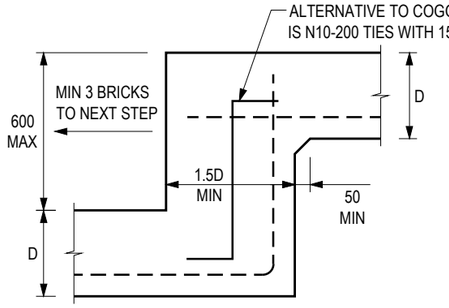
Michael Anthony Young
Michael Young BE MIE (276533)



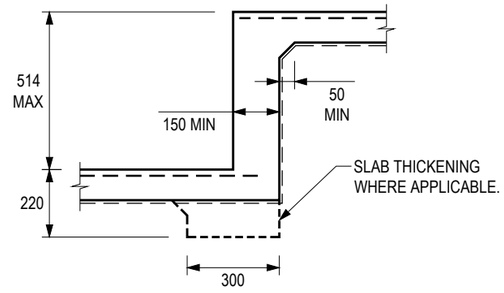
EXTERNAL WALL 1:20



GARAGE WALL 1:20



FOOTING STEP 1:20



SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
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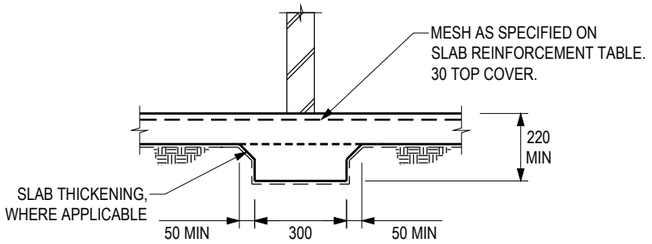
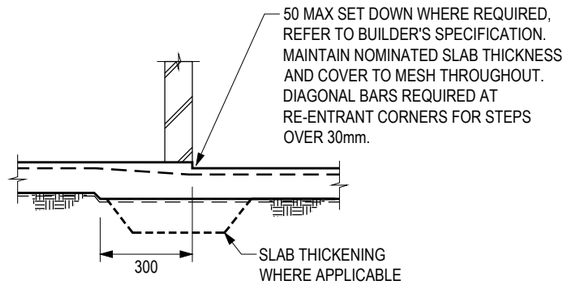
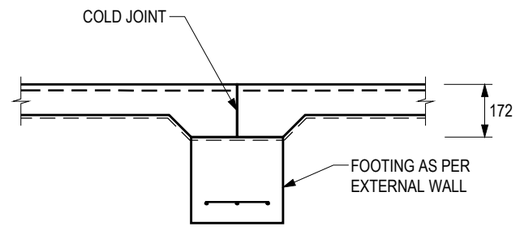


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 192 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81179 Tsk:200116

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

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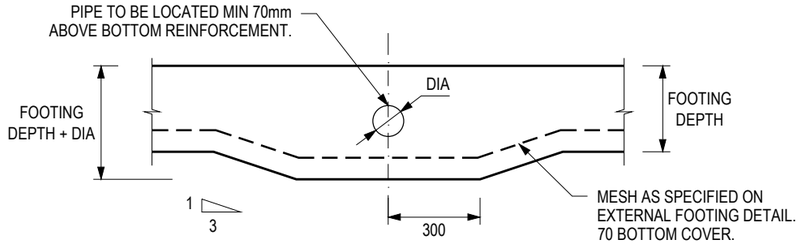

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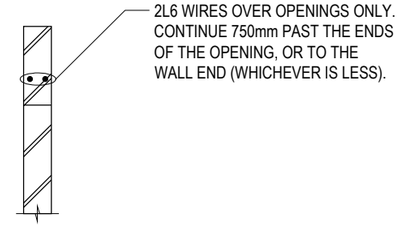

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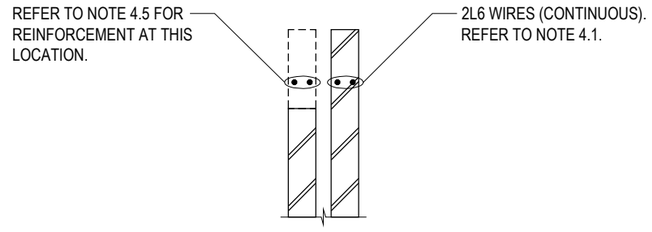

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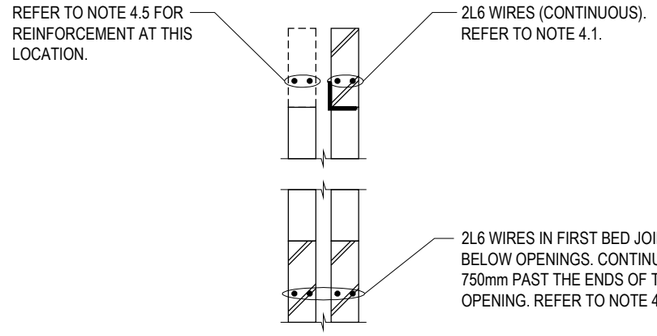

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CIVIL | STRUCTURAL | GEOTECHNICAL

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Owner:	Delfina Properties Pty Ltd
Address:	**Lot 193 Durling Road BYFORD 6122 WA**

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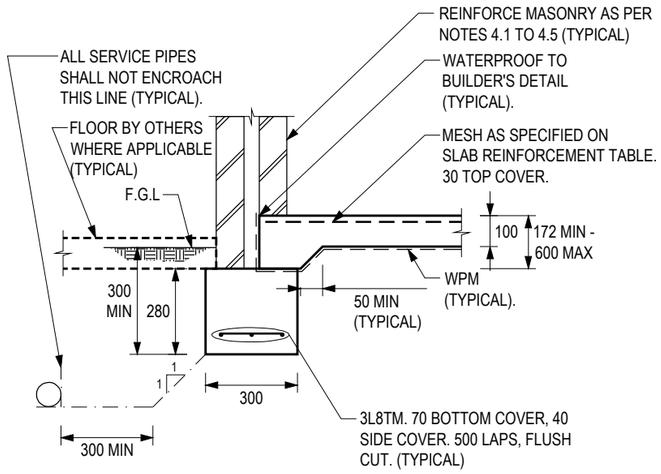

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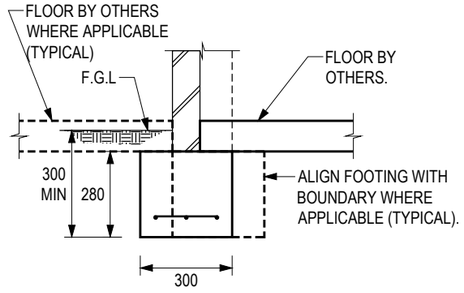

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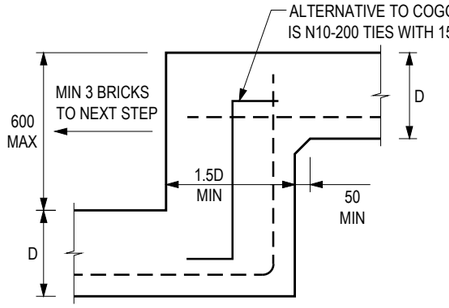

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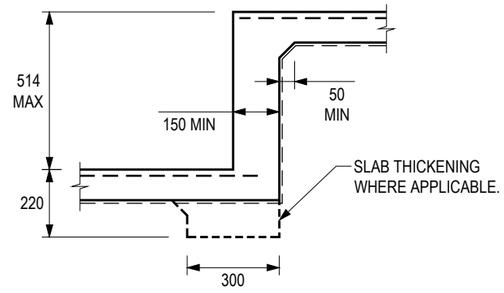

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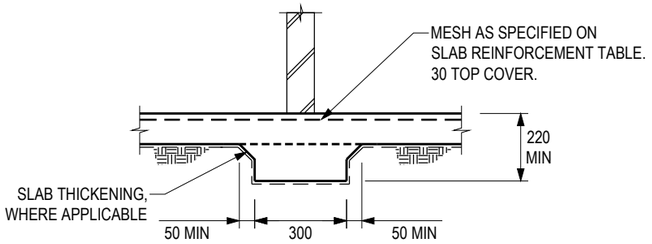
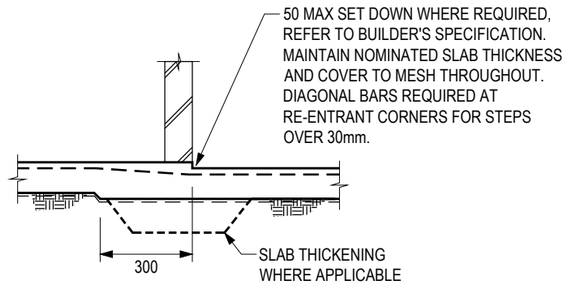
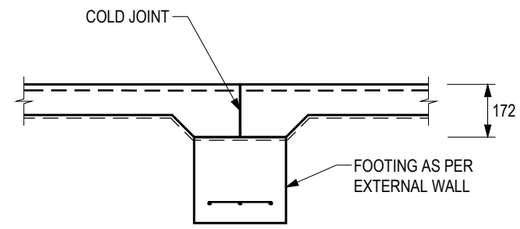


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 193 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81180 Tsk:200117

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

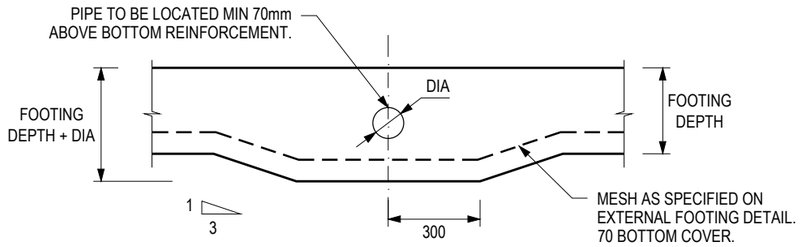
5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

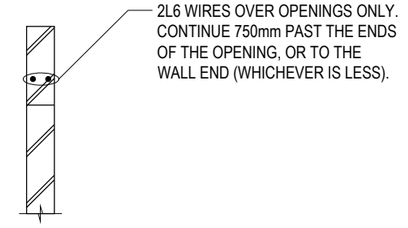
5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

5.7 THE OWNER IS TO BE ADVISED THAT TREES AND GARDEN BEDS CAN AFFECT FOUNDATION PERFORMANCE. TREES ARE TO GENERALLY BE KEPT MIN 1.5x THE MAXIMUM HEIGHT OF THE TREE AWAY FROM THE RESIDENCE. SEEK EXPERT ADVICE PRIOR TO PLANTING OR REMOVING TREES WHICH FALL WITHIN THIS ZONE.

5.8 ALL REFERENCED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF CONSTRUCTION.

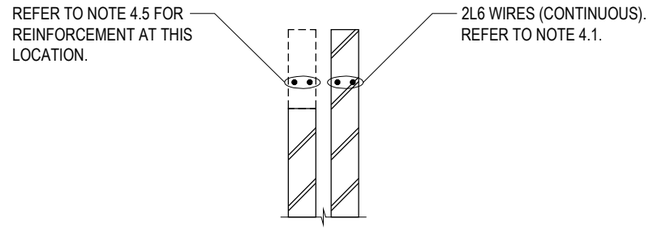


PLUMBING CAST INTO FOOTING 1:20

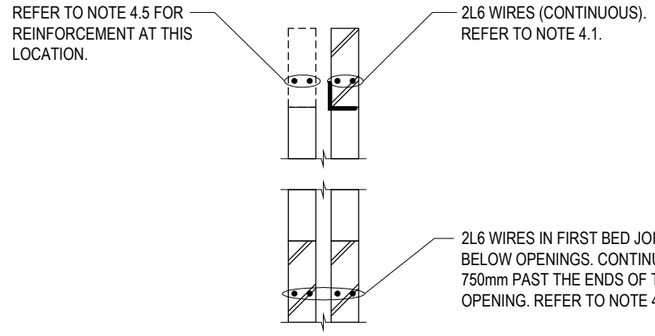


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 193 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81180 Tsk:200117

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 194 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81181
Inspection Date:	22-09-2023
Report Reference No:	rpt_78427
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

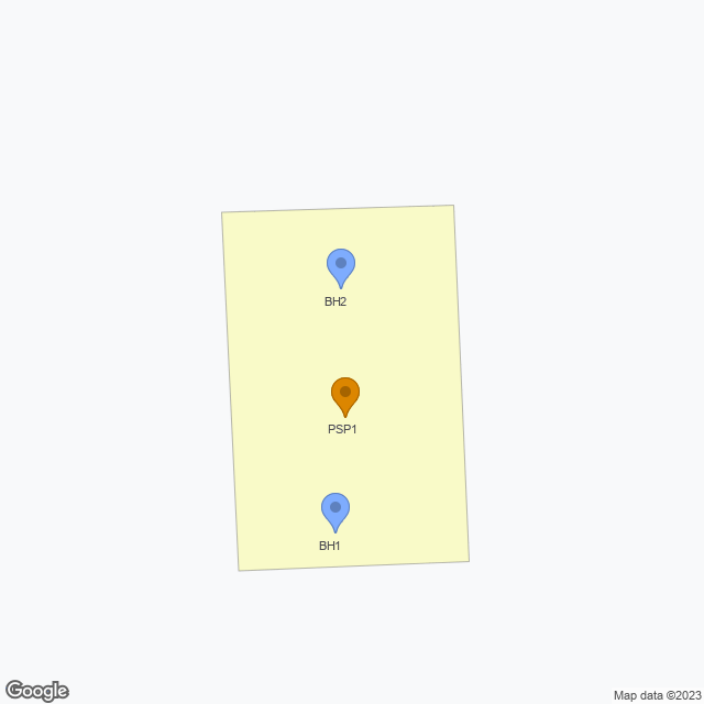
- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-900mm	Sand with trace of silt
	900-1300mm	Sand with trace of silt and gravel
	1300-2500mm (68% passing 0.425mm, Linear Shrinkage - 6% , Plasticity Index - 25%	Clayey SAND with silt and trace of gravel
BH2:	0-1000mm	Sand with trace of silt
	1000-1300mm	Sand with trace of silt and gravel
	1300-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

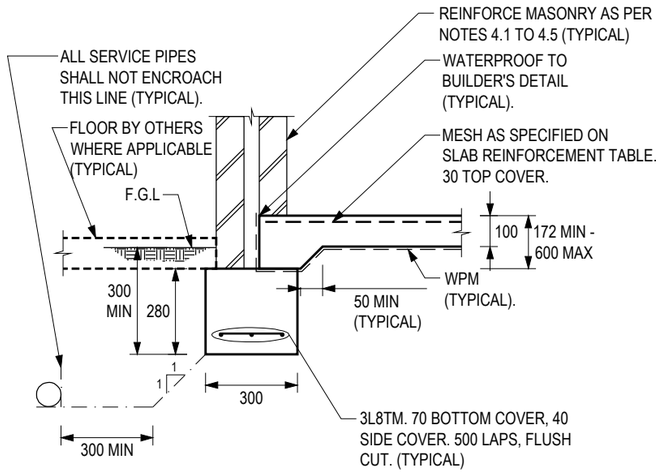


Additional information and Notes

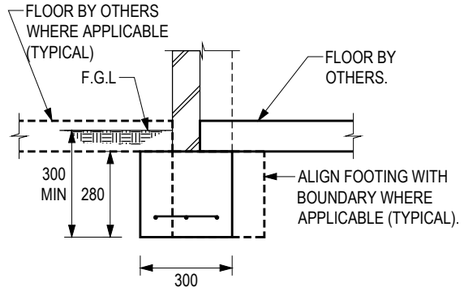
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	13	20+

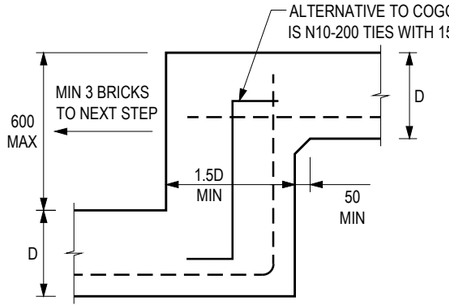
Michael Anthony Young
Michael Young BE MIE (276533)



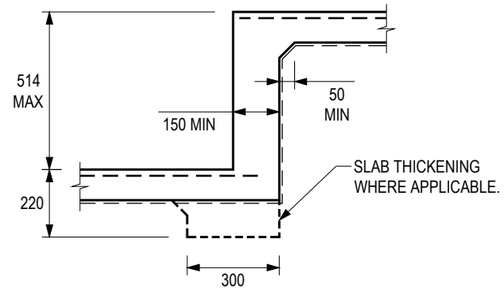
EXTERNAL WALL 1:20



GARAGE WALL 1:20

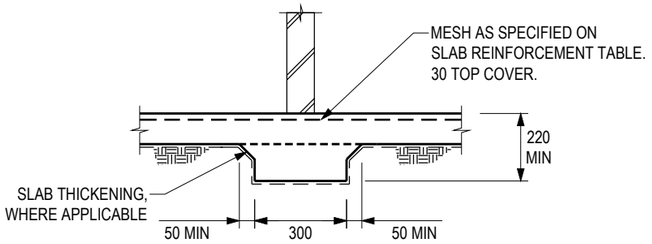


FOOTING STEP 1:20



SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	



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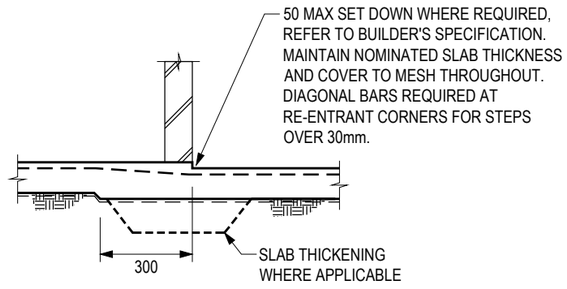

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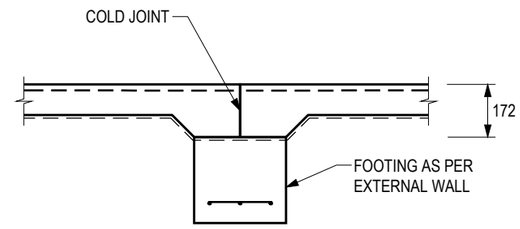

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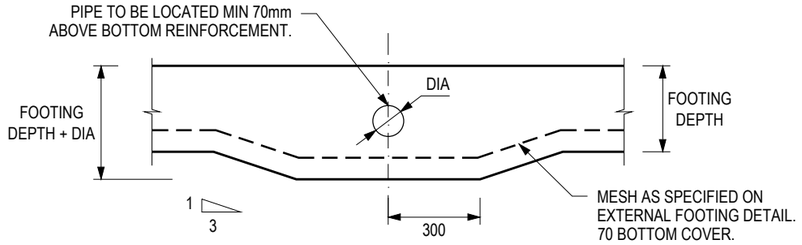
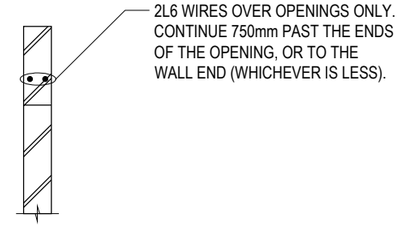
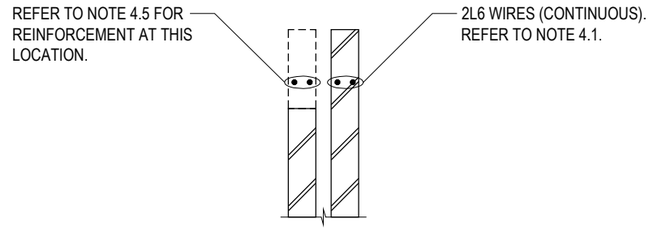


PLUMBING CAST INTO FOOTING 1:20

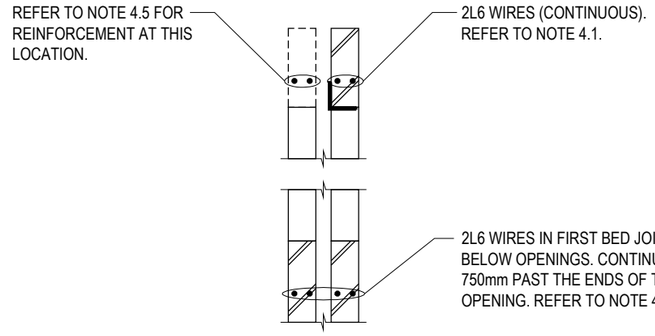


TYPICAL INTERNAL WALL SECTION

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.



TYPICAL EXTERNAL WALL SECTION



TYPICAL EXTERNAL WALL SECTION AT OPENINGS

- ENSURE MINIMUM OF ONE BED JOINT IS PLACED OVER ALL OPENINGS.

PROMPT ENGINEERING

Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	4 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	2 of 2
PROJECT	Lot 194 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81181 Tsk:200118

DB NOTES

Site Classification and Footing Detail Report

Site Details

Client:	**Parcel Property**
Owner:	Delfina Properties Pty Ltd
Address:	**Lot 195 Durling Road BYFORD 6122 WA**

Report References

Client Ref No:	
Project No:	pln_81182
Inspection Date:	22-09-2023
Report Reference No:	rpt_78474
Date Certified:	26-09-2023

Site Description

Recommendation

Site Classification	**S** (in accordance with AS2870)
Footing Detail	**DB-S6**
Sand pad requirements:	**No structural sand pad required.**
Wind Classification:	**N1** (single and double storey to AS4055)
Terrain Category	**TC2.5**
Shielding	**PS**
Topography	**T0**
Corrosion classification:	**R1 (in accordance with AS3700)**
Bush Fire Prone Area:	**YES**
Designation	Bush Fire Prone Area (additional planning and building requirements may apply to development on this site)
Designation Date	11/12/21 (since 08/12/15)
Local Government Authority	SERPENTINE-JARRAHDALE
Comments	This site has been in a designated bush fire prone area for longer than four months. Additional planning and building requirements may apply to development on this site.

Comments

Remove all vegetation and topsoil from the building area.

Backfill with clean compacted sand to achieve at least 6 PSP blows per 300mm penetration.

The footing detail recommended requires maintenance of the site in order to ensure on going satisfactory structural performance. The owner is to be provided with a copy of 'Foundation Maintenance and Footing Performance: A Homeowner's Guide' (Ref. BTF 18), dated 2003, published by CSIRO.

We have reviewed the Geotechnical Report: , prepared by Galt Geotechnics reference J1501201 027 R Rev1 dated 7 July 2022 . We certify that we have considered the above geotechnical document in conjunction with our own findings and are satisfied that the structural details provided are suitable.

Notes

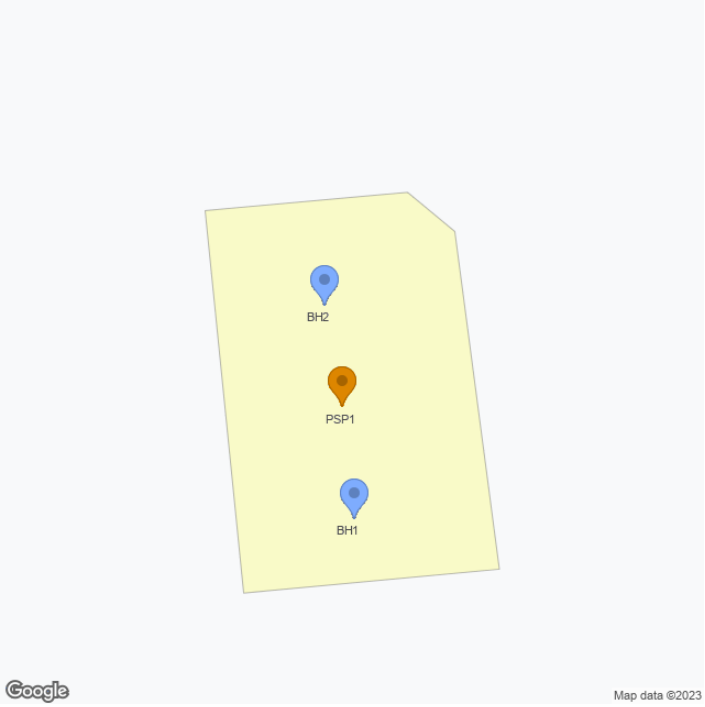
- This office is to be contacted should the site conditions encountered differ from those noted in this report.
- The site classification is provided subject to site preparation being in accordance with the provisions of AS3798 "Guidelines on earthworks for commercial and residential developments".
- The recommentations are based on performance as defined in AS2870. Minor foundation movement is to be expected. This can result in cracking up to a level 2 damage criteria. This is non structural cracking.
- **This site has been nominated as in a bushfire prone area as nominated on https://maps.slip.wa.gov.au/landgate/bushfireprone which is current at the time of the report being written. Please refer to local authority and land developer to determine if a BAL assessment is required.**
- All referenced standards to be the current version at the time of construction.

Soil Profile

BH1:	0-900mm	Sand with trace of silt
	900-1300mm	Sand with trace of silt and gravel
	1300-2500mm	Clayey SAND with silt and trace of gravel
BH2:	0-900mm	Sand with trace of silt
	900-1400mm	Sand with trace of silt and gravel
	1400-2500mm	Clayey SAND with silt and trace of gravel

Borehole / PSP location Plan

Legend:
PSP = Perth Sand Penetrometer
BH = Bore Hole location

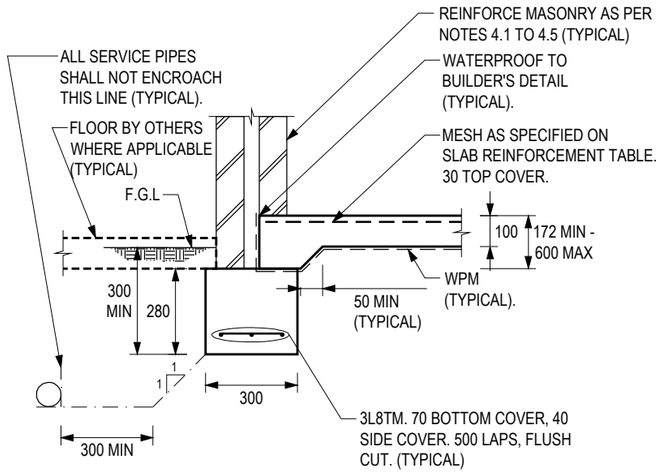


Additional information and Notes

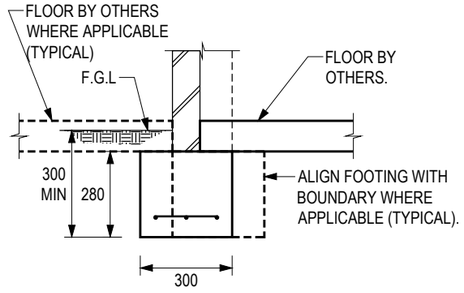
PSP Results

Location	0-150mm	150-450mm	450-750mm
PSP1	SET	11	20+

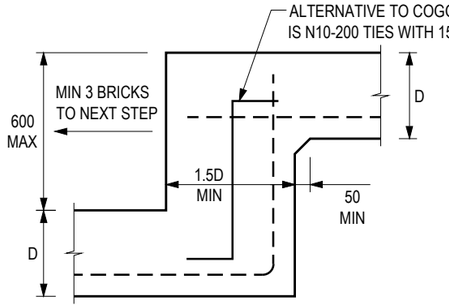
Michael Anthony Young
Michael Young BE MIE (276533)



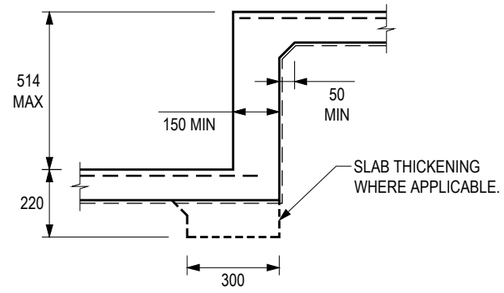
EXTERNAL WALL 1:20



GARAGE WALL 1:20

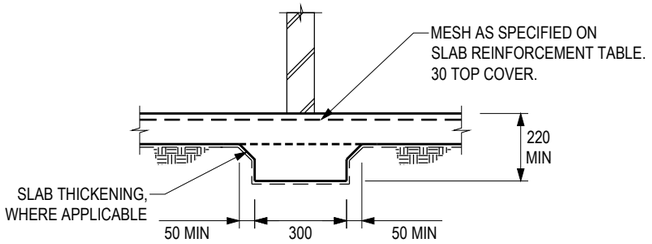


FOOTING STEP 1:20



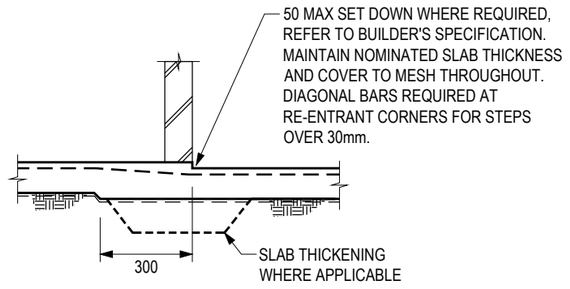
SLAB STEP 1:20

SLAB REINFORCEMENT TABLE	
MESH SIZE	SLAB SPAN
SL52/SL63	< 24m
SL62	24m - 30m
SL72	30m - 35m
REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS GREATER THAN 35m.	

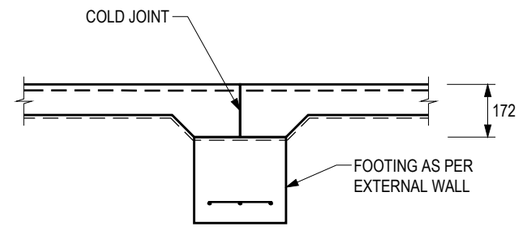


SLAB THICKENING 1:20

- PLACE SLAB THICKENING UNDER ALL INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT, WHERE GREATER THAN 1000 FROM INTERNAL BEAM.



STANDARD SLAB RECESS 1:20



CONSTRUCTION JOINT 1:20

- TO BE PLACED ONLY WHERE INDICATED ON THE CERTIFIED ENGINEER'S MARK UP.

THIS FOOTING DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ON CLASS S (AS2870) SITES WITH GROUND SURFACE MOVEMENT OF ≤ 6 mm.

NOTE:
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED REACTIVE SITE NOTES.

PROMPT ENGINEERING
Michael Young BE MIE (276533)

PROMPT ENGINEERING
CIVIL | STRUCTURAL | GEOTECHNICAL

TITLE	GROUND SLAB & FOOTING DETAILS	REVISION	3 (05/10/2018)
		DATE	26-09-2023
		SHEET No.	1 of 2
PROJECT	Lot 195 Durling Road BYFORD WA for Parcel Property()	A3 SCALE	AS NOTED ON DRAWINGS
		JOB REF.	pln_81182 Tsk:200119

DB-S6

REACTIVE SITE NOTES:

1 EARTHWORKS AND SITE PREPARATION

1.1 SAND PAD DEPTH AS PER SITE ASSESSMENT REPORT.

1.2 EARTHWORKS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- i REMOVAL OF TOPSOIL, ORGANIC AND TREE ROOT ZONE MATERIALS FROM THE BUILDING PAD AREA.
- ii REMOVAL OF ALL UNCONTROLLED FILL AND ALL DELETERIOUS FILL (GRAVELS, CLAY, SILT, RUBBISH, LIMESTONE RUBBLE, BUILDING RUBBLE ETC.) FROM THE BUILDING AREA.
- iii SAND FILL EXCAVATED FROM THE SITE MAY BE USED AS RECYCLED ENGINEERED FILL PROVIDED IT IS SCREENED WITH ALL UNSUITABLE MATERIALS REMOVED.

1.3 COMPACT THE BASE SURFACE TO ACHIEVE MINIMUM 3 BLOWS PER 150mm PENETRATION USING A DYNAMIC CONE PENETROMETER (DCP) FOR CLAY/SILT MATERIALS, OR MINIMUM 6 BLOWS PER 300mm PENETRATION WITH A PERTH SAND PENETROMETER (PSP) FOR SAND MATERIALS. THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.4 SAND FILL IS TO BE FREE DRAINING WITH NOT MORE THAN 5% PASSING A 75µm SIEVE, OR TO BE APPROVED BY PROMPT ENGINEERING.

1.5 SAND SHALL BE PLACED IN NOT MORE THAN 300mm LOOSE LAYERS AND COMPACTED TO ACHIEVE AT LEAST 6 BLOWS OVER 150 - 450mm, 6 BLOWS OVER 450 - 750mm, AND 7 BLOWS OVER 750 - 1050mm WITH A PERTH SAND PENETROMETER (AS1289.6.3.3). THIS EQUATES TO MINIMUM 100kPa SOIL BEARING CAPACITY.

1.6 PREPARE THE SITE SUCH THAT SURFACE AND ROOF STORM WATER CANNOT DRAIN UNDER OR POND ADJACENT TO THE PROPOSED RESIDENCE. SOAKWELLS SHALL NOT BE PLACED CLOSER THAN 5m AWAY FROM THE FOUNDATION AREA UNLESS SPECIFICALLY AUTHORISED BY PROMPT ENGINEERING.

1.7 REFER BACK TO PROMPT ENGINEERING SHOULD AGGRESSIVE MATERIALS (AS PER AS2870) BE ENCOUNTERED DURING SITE PREPARATIONS.

2 CONCRETE

2.1 ALL CONCRETE TO BE IN ACCORDANCE WITH AS3600.

2.2 ALL CEMENT TO BE IN ACCORDANCE WITH AS3972.

2.3 ALL CONCRETE TO BE N20/20/100.

2.4 FOOTINGS ARE TO BE PLACED DIRECTLY INTO COMPLETED SAND PAD.

2.5 SLAB TO BE CURED BY KEEPING MOIST FOR 3 DAYS, OR EQUIVALENT METHOD.

2.6 ENSURE SPECIFIED CONCRETE DEPTH IS MAINTAINED AT LOCATIONS WHERE ANY PIPES PASS THROUGH FOOTING OR SLAB. PLUMBER IS TO ENSURE THAT APPROPRIATE FIXINGS BE USED ON ALL PIPES ALLOWING FOR THE SHRINK/SWELL NATURE OF THE FOUNDATION SOIL.

2.7 CARE IS TO BE TAKEN TO ENSURE EXCAVATIONS FOR ALL UNDERGROUND SERVICES DO NOT UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, REFER BACK TO PROMPT ENGINEERING FOR ADVICE. EXCAVATIONS WITHIN A 1:1 LINE FROM THE TOP OF ADJACENT FOOTINGS ARE TO BE COMPACTED, WHEN BACKFILLED, TO ORIGINAL LEVELS OF COMPACTION.

2.8 FOOTING LOCATION MAY BE ADJUSTED TO SUIT THE BOUNDARY.

2.9 NOT SUITABLE FOR POLISHED CONCRETE (OR SIMILAR) FINISHES. REFER BACK TO PROMPT ENGINEERING SHOULD THESE FINISHES OCCUR ON THIS PROJECT.

2.10 PLACE SLAB THICKENINGS UNDER INTERNAL MASONRY WALLS GREATER THAN 3700 IN HEIGHT. REFER TO SLAB THICKENING DETAIL.

2.11 CONCRETE TO BE COMPACTED WHEN PLACED.

3 REINFORCEMENT

3.1 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS/NZS 4671.

3.2 MESH TO LAP AT LEAST 2 PARALLEL WIRES PLUS 25mm AT ALL LAP LOCATIONS. ALTERNATIVELY, INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3.3 MAXIMUM REINFORCED SLAB SPAN TO BE AS SHOWN ON EXTERNAL WALL DETAIL. ENSURE 30 TOP COVER. REFER BACK TO PROMPT ENGINEERING FOR SLAB SPANS >35m.

3.4 REFER BACK TO PROMPT ENGINEERING SHOULD THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB EXCEED 3:1 AT ANY POINT.

3.5 TO AID IN CRACK CONTROL, PROVIDE 2N12-200 x 2000 LONG OR 2N16-200 x 1500 LONG DIAGONAL BARS AT RE-ENTRANT CORNERS WITH RETURNS EXCEEDING 1000 AND PROVIDE 1N16 x 1000 AT RE-ENTRANT CORNERS WITH RETURNS LESS THAN 1000, BUT EXCEEDING 500.

3.6 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH CLAUSE 3.4.4.4 "CORROSION PROTECTION" OF THE NCC.

4 MASONRY

4.1 PLACE 2L6 WIRES IN TOP BED JOINT OF EACH LEAF CONTINUOUSLY THROUGHOUT ALL EXTERNAL BRICKWORK (NOT REQUIRED FOR INTERNAL BRICKWORK). MAXI BRICKS ARE PERMITTED OVER THE OPENINGS TO SUIT COURSING.

4.2 PLACE 2L6 WIRES IN BED JOINT BELOW WINDOW SILLS TO BOTH BRICK LEAVES. CONTINUE 750 PAST OPENING SIDES OR TO EXTERNAL WALL CORNER.

4.3 LAP WIRES 500 AT SPLICES, 20mm SIDE COVER TO ALL WIRES. LAPS AROUND CORNERS AND COGS TO INTERNAL WALLS ARE NOT REQUIRED.

4.4 ALL WIRES TO EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS4680.

4.5 REINFORCE BRICKWORK OVER OPENINGS TO EXTERNAL LEAF AS PER NOTES 4.1 & 4.3.

4.6 ALL PERPENDS TO BE FULLY MORTARED.

4.7 ALL MASONRY TO BE IN ACCORDANCE WITH AS3700.

5 GENERAL & MAINTENANCE

5.1 THIS DETAIL IS SUITABLE FOR SINGLE STOREY BUILDINGS ONLY.

5.2 FOOTING DESIGN WITHIN PARAMETERS OF AS2870 AND CAN BE CONSIDERED A PERFORMANCE BASED DESIGN. IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE ENCOUNTERED FOUNDATION CONDITIONS AND WILL ADEQUATELY CONTROL ANY CRACKING OF CONCRETE OR BRICKWORK, SUBJECT TO ALL RECOMMENDATIONS BEING ADHERED TO AND SATISFIED.

5.3 DESIGN IS SUITABLE TO BE CONSIDERED A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

5.4 MAXIMUM CAVITY WALL HEIGHT TO BE 3086mm (36c).

5.5 THE OWNER IS TO BE REFERRED TO CSIRO BUILDING TECHNOLOGY FILE 18.

5.6 THE OWNER IS TO BE INSTRUCTED ON THE REQUIREMENTS OF KEEPING ALL ROOF AND SITE DRAINS IN GOOD OPERATING CONDITION.

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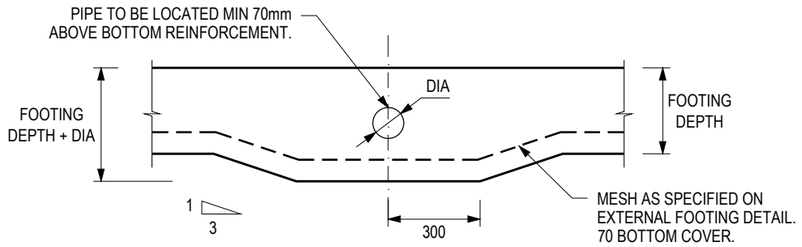
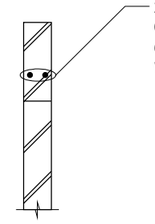


PLUMBING CAST INTO FOOTING 1:20



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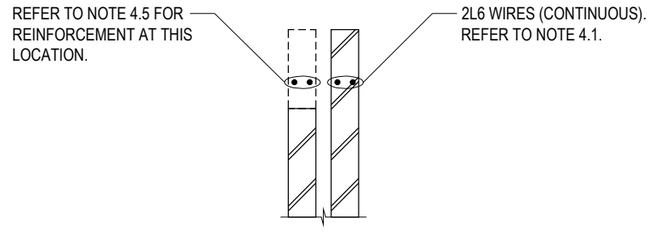

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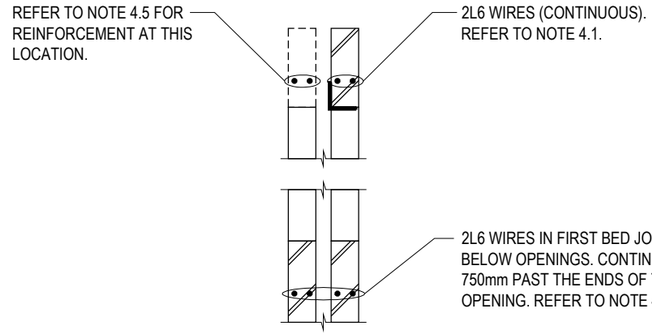

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