

SITE CLASSIFICATION REPORT
CERTIFICATE 2599430

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 114 NORFOLK DR SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098934
DATE OF ASSESSMENT 10/5/23

SITE RECORD

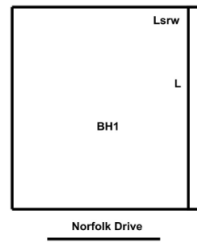


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

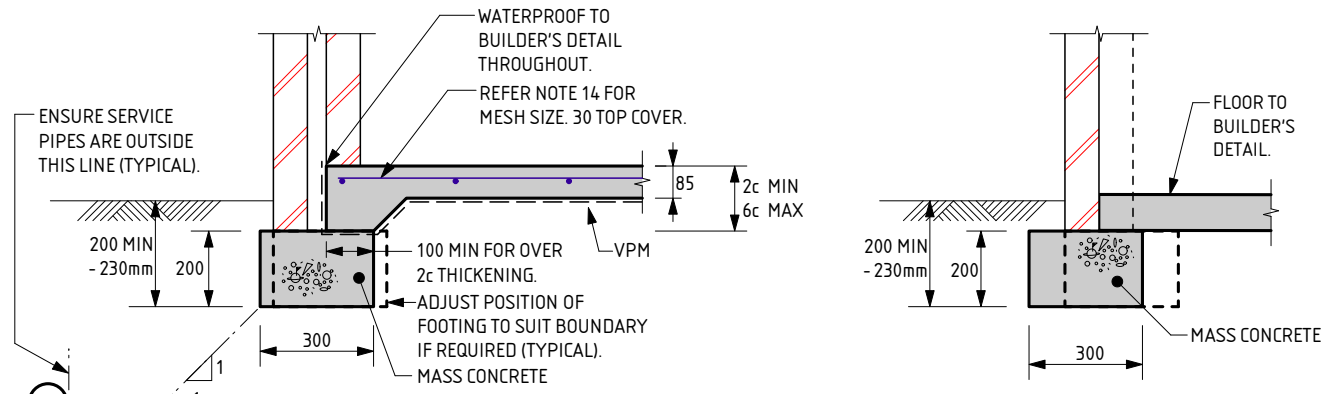
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

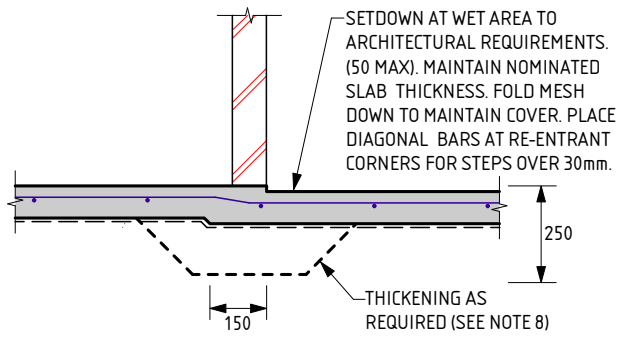
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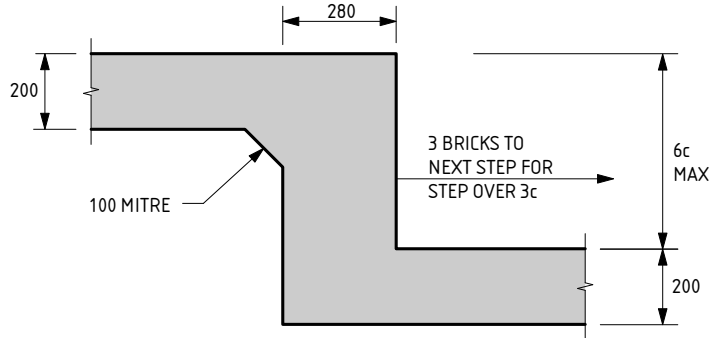
EXTERNAL WALLS

GARAGE WALL

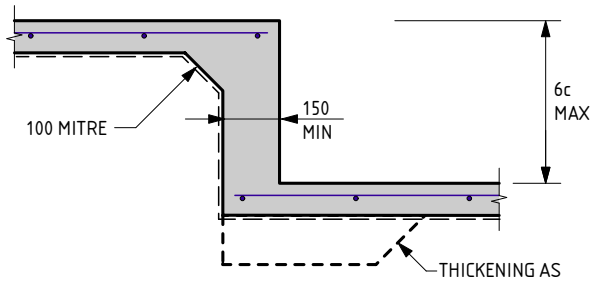
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



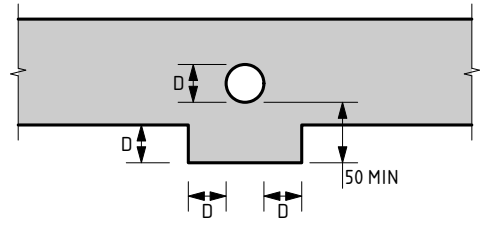
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
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PROJECT : LOT 114 NORFOLK DR SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 114 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599431

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 115 NORFOLK DR SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098935
DATE OF ASSESSMENT 10/5/23

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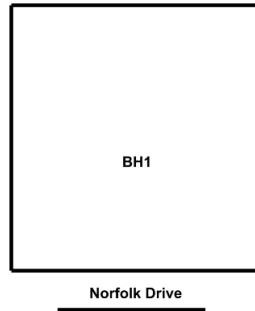


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

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NOTE 2 Bushfire - Prone Area

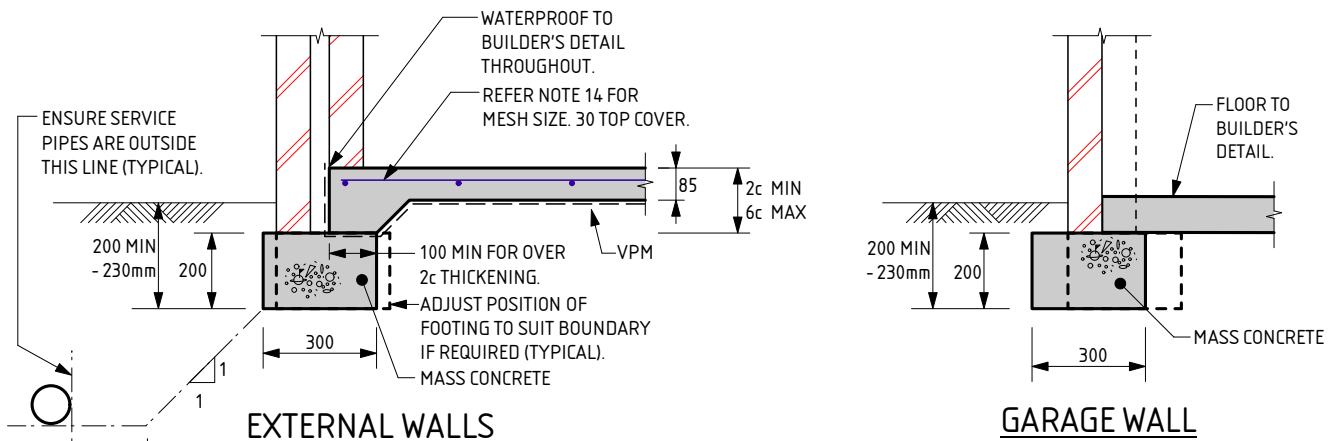
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ADDITIONAL NOTES / REQUIREMENTS

Site Condition

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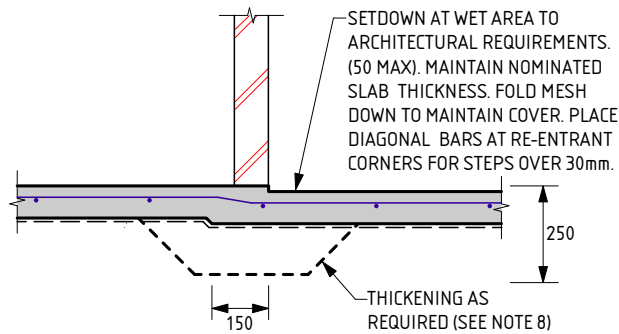
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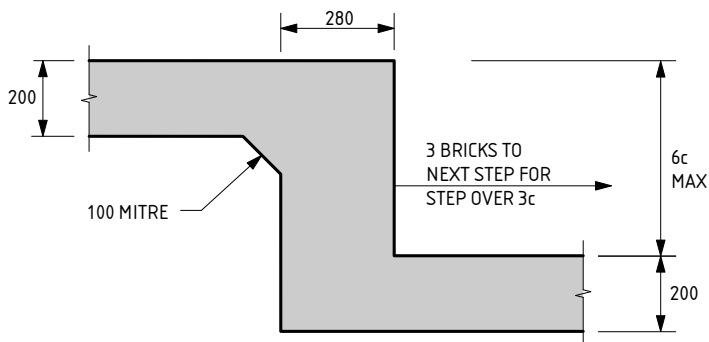
EXTERNAL WALLS

GARAGE WALL

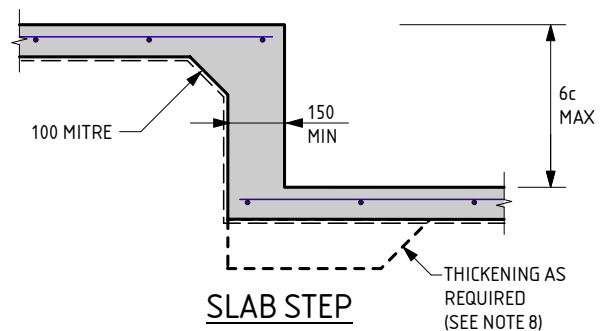
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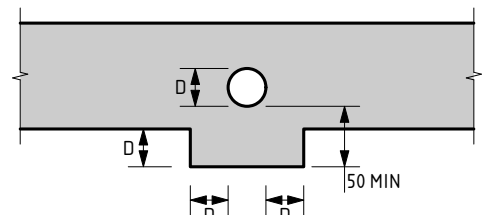
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
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THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

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 CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
 DATE: 11/5/23
 APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

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4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
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1 ERINDALE ROAD, BALCATTA W.A. 6021

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PROJECT :
LOT 115 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599432

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 116 NORFOLK DR SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098938
DATE OF ASSESSMENT 10/5/23

SITE RECORD

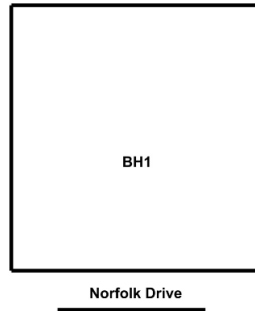


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

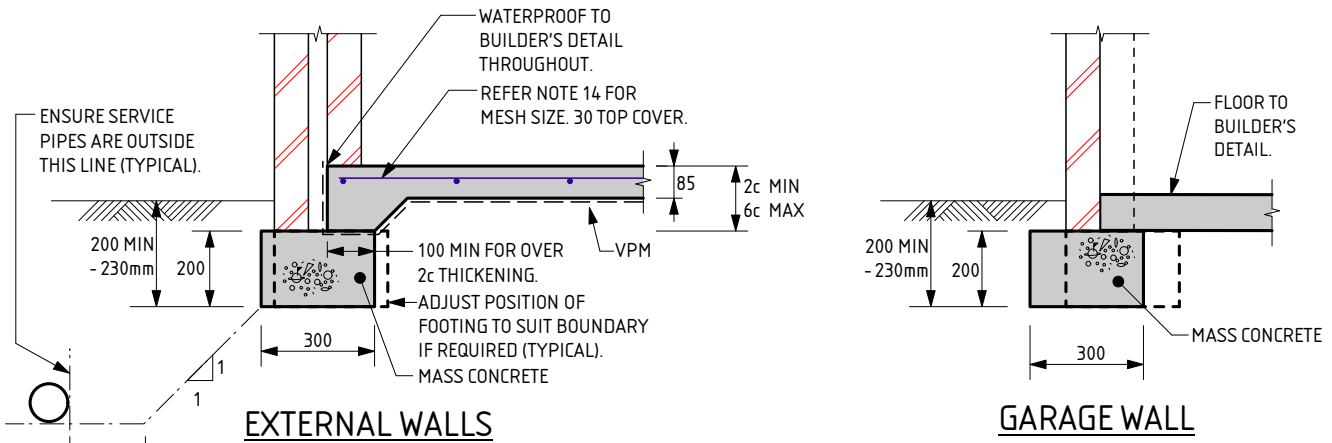
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

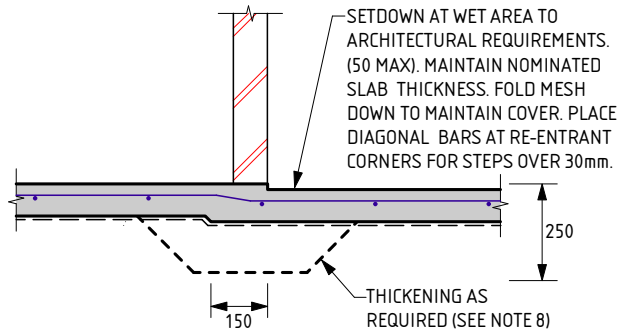
-- END OF REPORT --



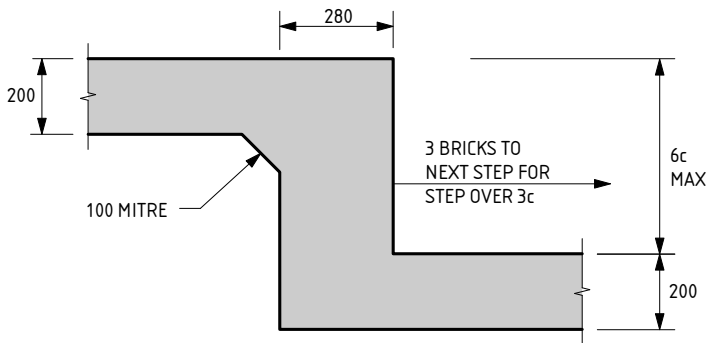
EXTERNAL WALLS

GARAGE WALL

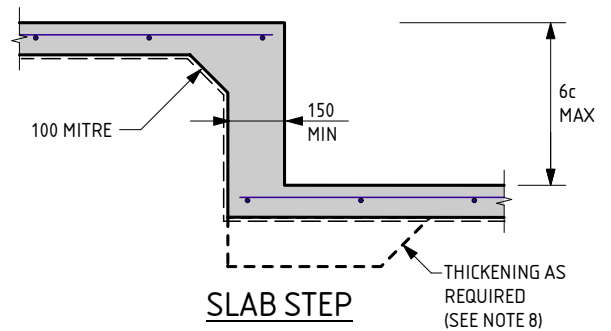
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



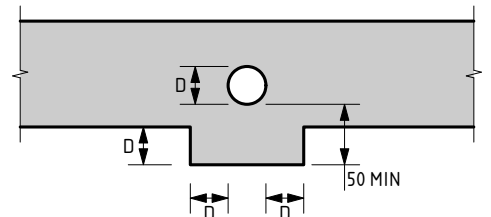
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
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 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
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 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

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EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599411

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 117 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098924
DATE OF ASSESSMENT 10/5/23

SITE RECORD

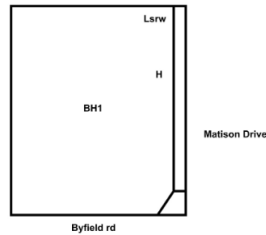


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference:<http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

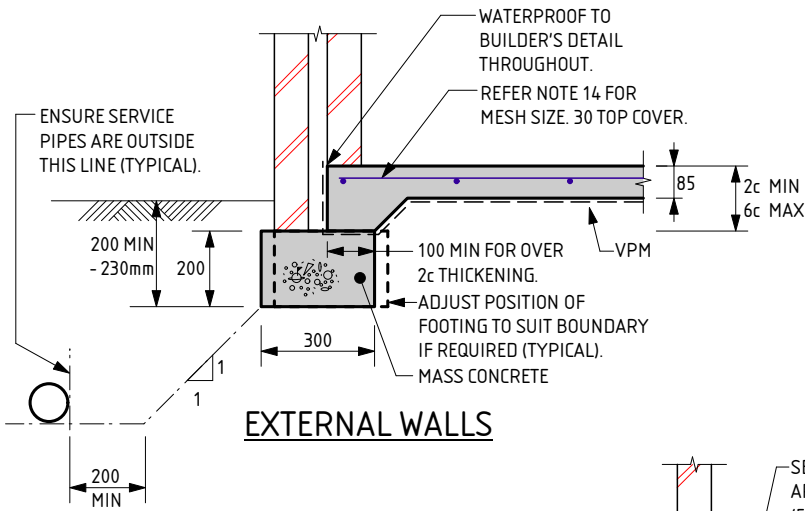
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

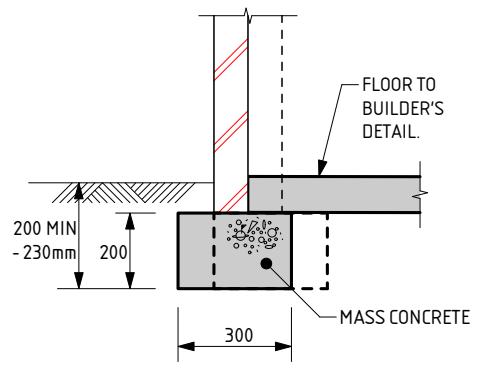
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

-- END OF REPORT --

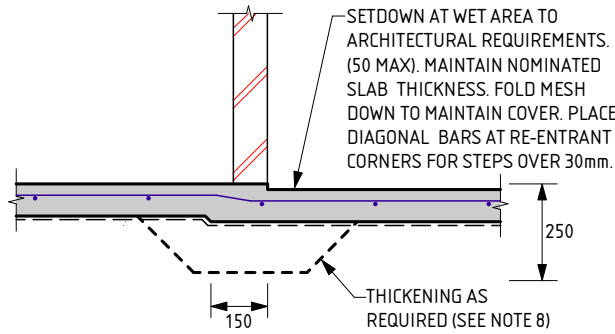


EXTERNAL WALLS

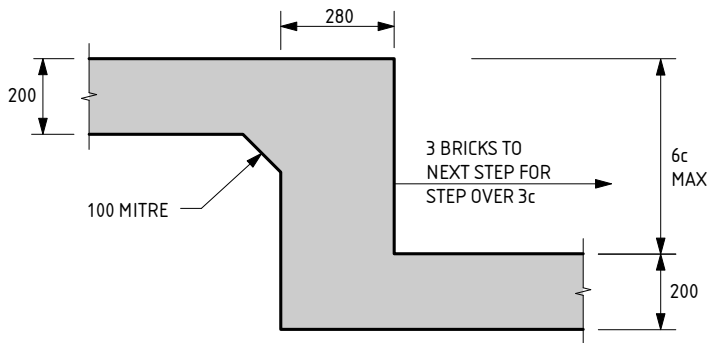


GARAGE WALL

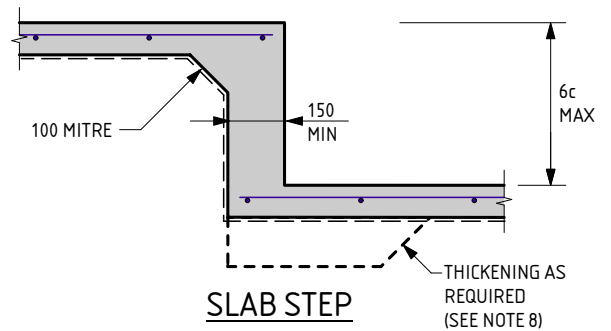
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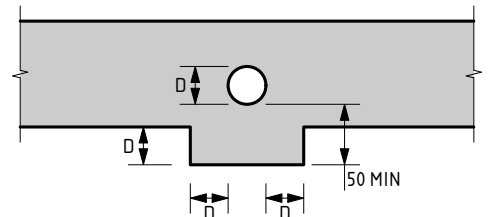
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
 1 ERINDALE ROAD, BALCATTA W.A. 6021
 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT: LOT 117 BYFIELD RD SOUTHERN RIVER
 CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
 DATE: 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
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1 ERINDALE ROAD, BALEATTA W.A. 6021

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PROJECT :
LOT 117 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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SCALE 1:20

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CERTIFICATE 2599410

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JOB ADDRESS LOT 118 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098923
DATE OF ASSESSMENT 10/5/23

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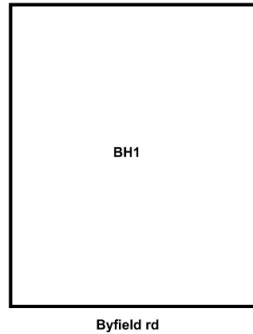


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
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BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
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-TERRAIN CATEGORY	2	
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SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



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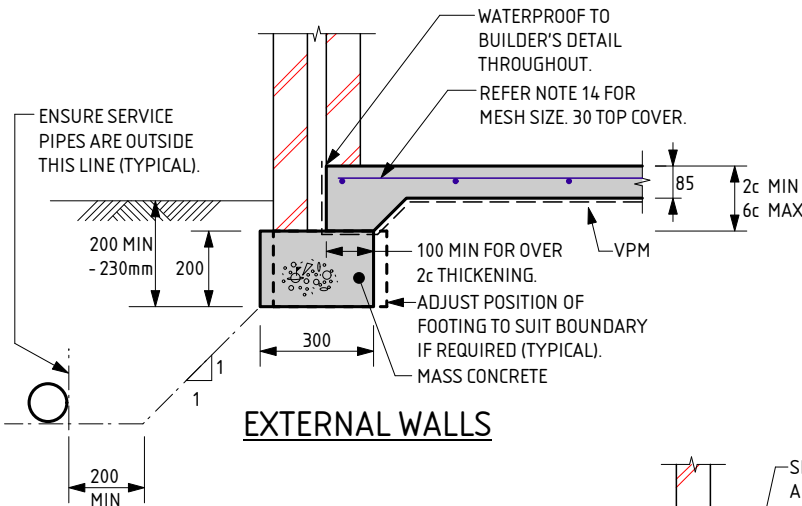
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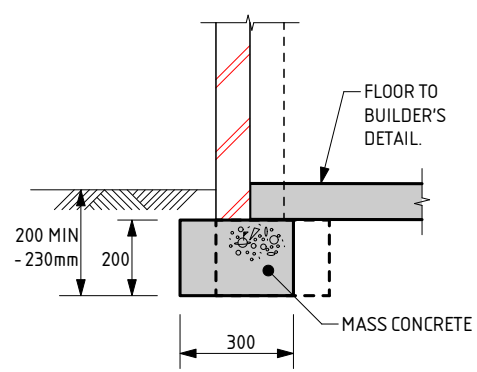
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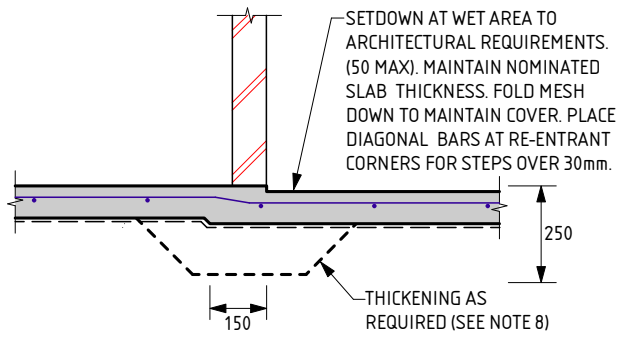


EXTERNAL WALLS

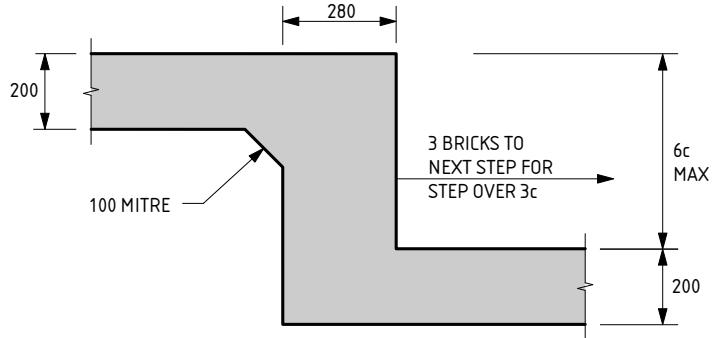


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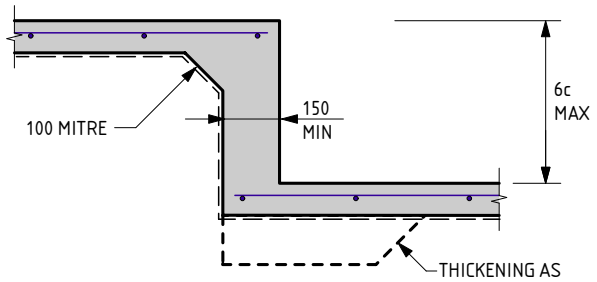
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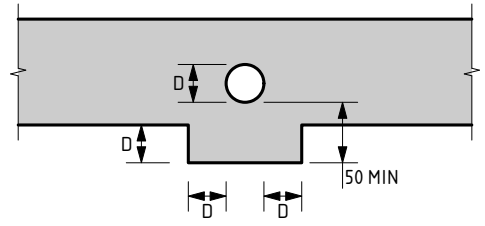
WET AREA STEP



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SLAB STEP



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D10 FOOTING NOTES:

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PROJECT : LOT 118 BYFIELD RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALEATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 118 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599409

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 119 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098921
DATE OF ASSESSMENT 10/5/23

SITE RECORD

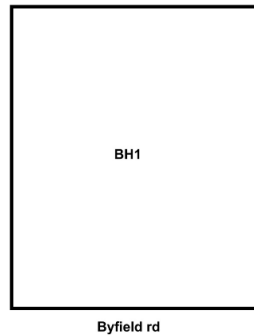


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference:<http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

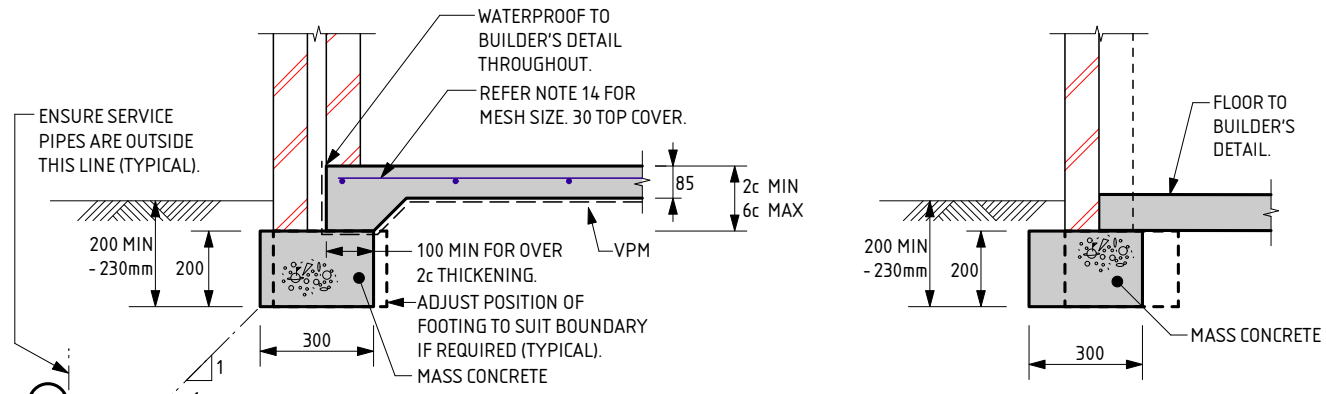
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

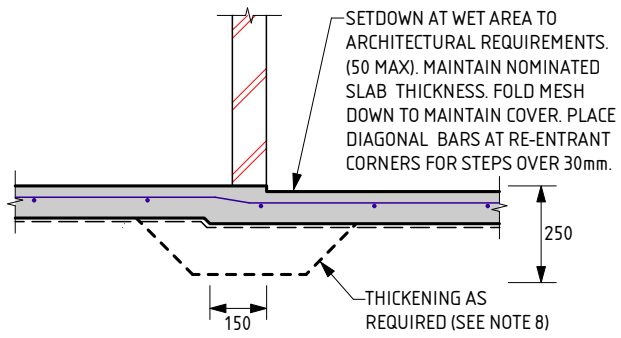
-- END OF REPORT --



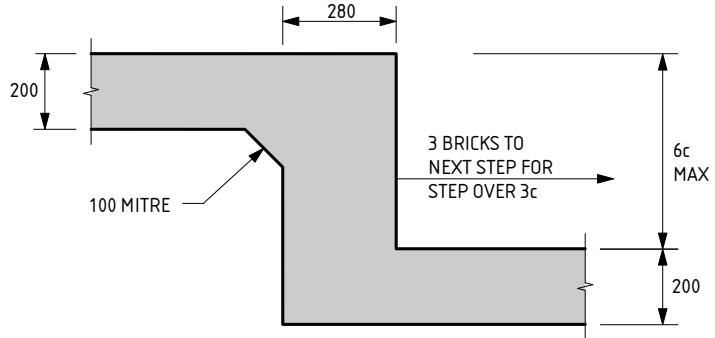
EXTERNAL WALLS

GARAGE WALL

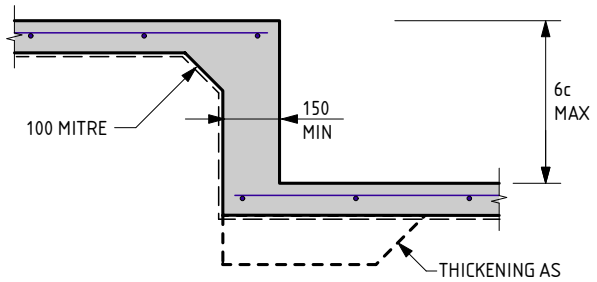
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



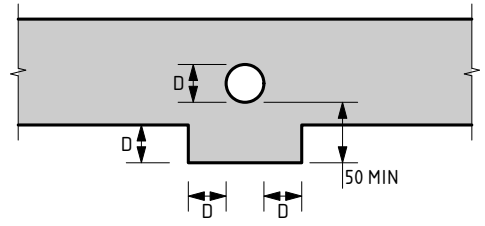
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

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- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
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IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

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23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALCATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 119 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' text.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599408

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 120 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098920
DATE OF ASSESSMENT 10/5/23

SITE RECORD

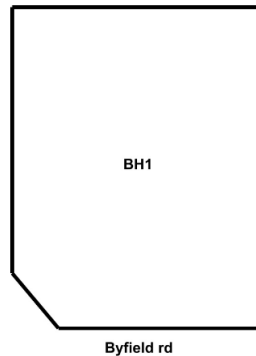


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

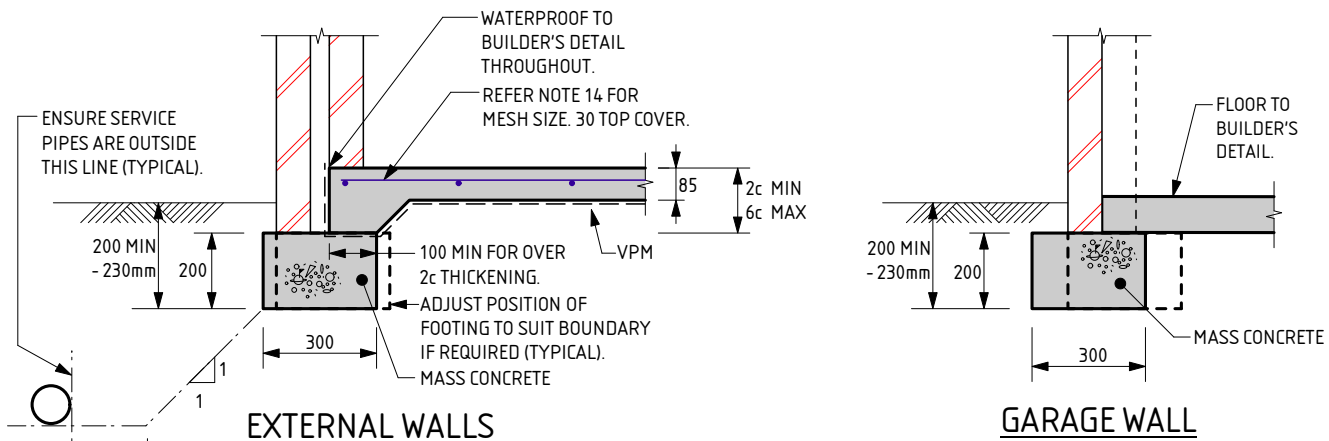
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

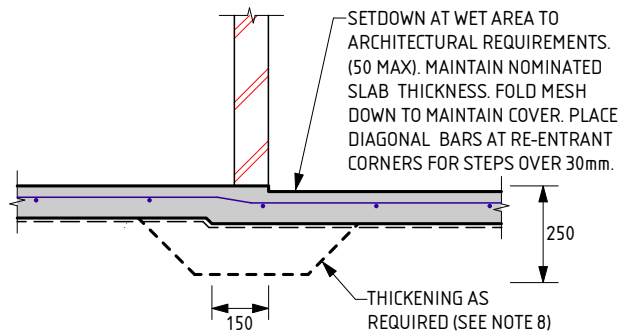
-- END OF REPORT --



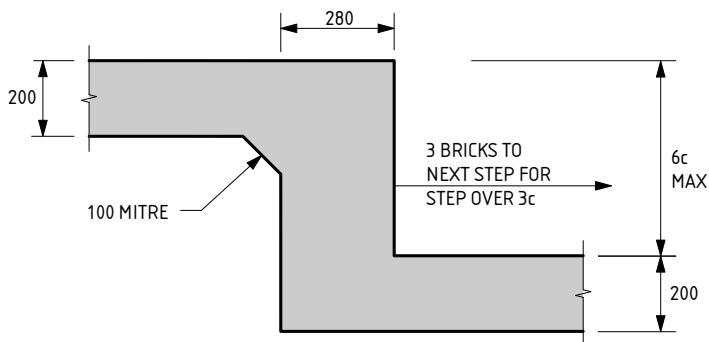
EXTERNAL WALLS

GARAGE WALL

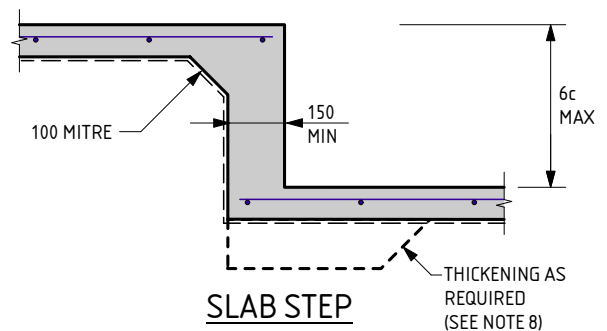
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



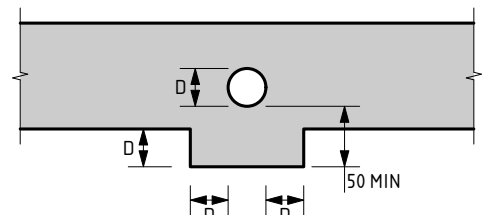
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
 1 ERINDALE ROAD, BALEGATTA W.A. 6021
 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT: LOT 120 BYFIELD RD SOUTHERN RIVER
 CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
 DATE: 11/5/23
 APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALEATTA W.A. 6021

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PROJECT :
LOT 120 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' text.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599407

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 121 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098919
DATE OF ASSESSMENT 10/5/23

SITE RECORD

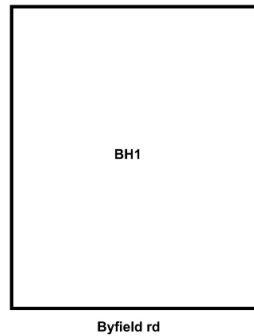


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

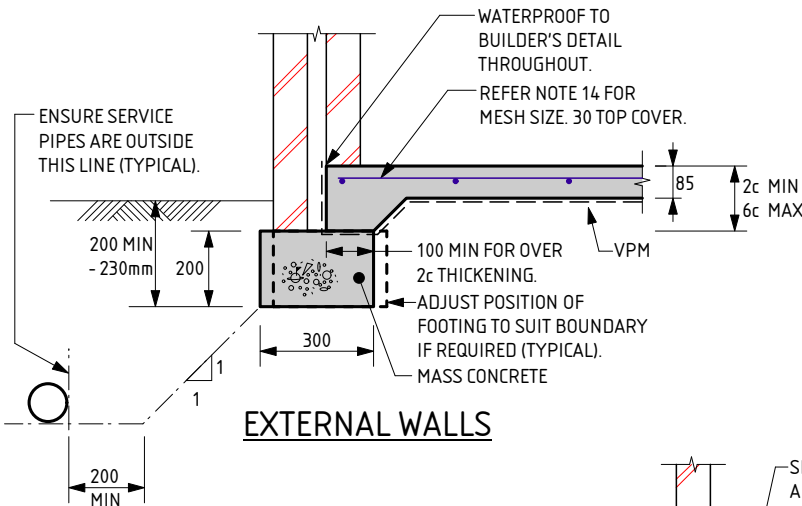
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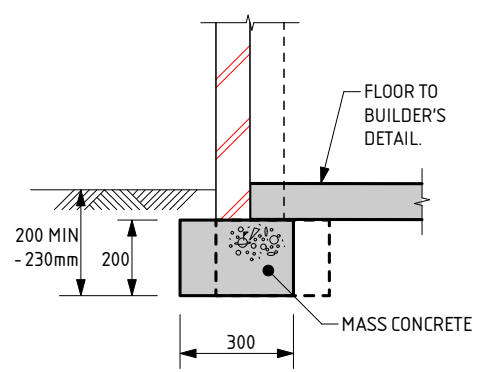
External Reference

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-- END OF REPORT --

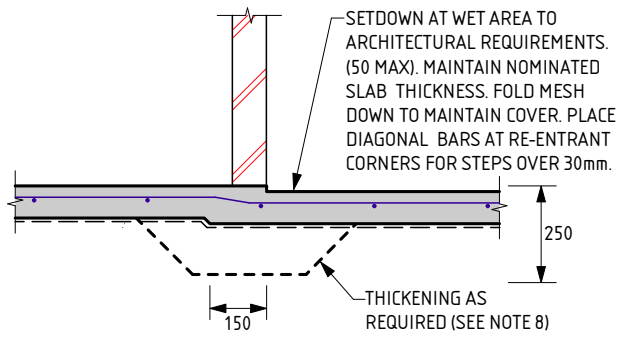


EXTERNAL WALLS

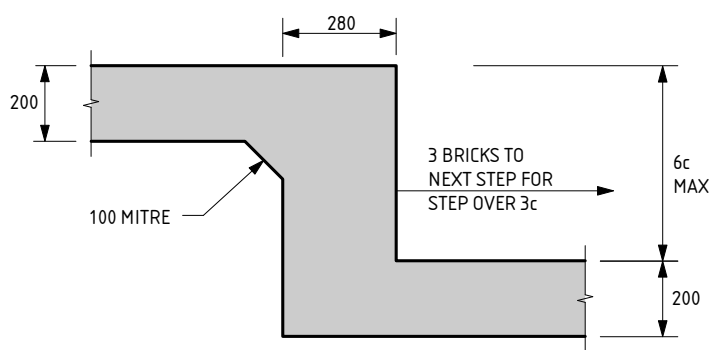


GARAGE WALL

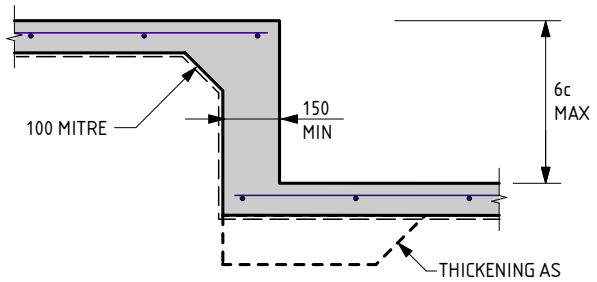
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 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



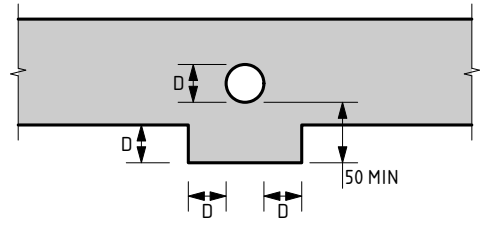
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT : LOT 121 BYFIELD RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 121 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599406

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 122 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098917
DATE OF ASSESSMENT 10/5/23

SITE RECORD



SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

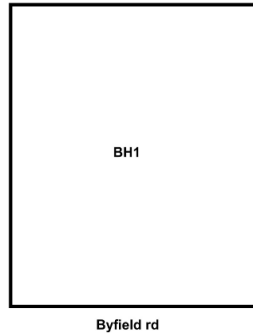
WA | QLD | NSW | VIC

1 Erindale Road, Balcatta, Western Australia 6021 | PO Box 792, Balcatta, Western Australia 6914
 Phone (+618) 9205 4500 | Fax (+618) 9205 4501 | Email wageotechsite@structerre.com.au | Web www.structerre.com.au
 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Structerre Consulting Engineers

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

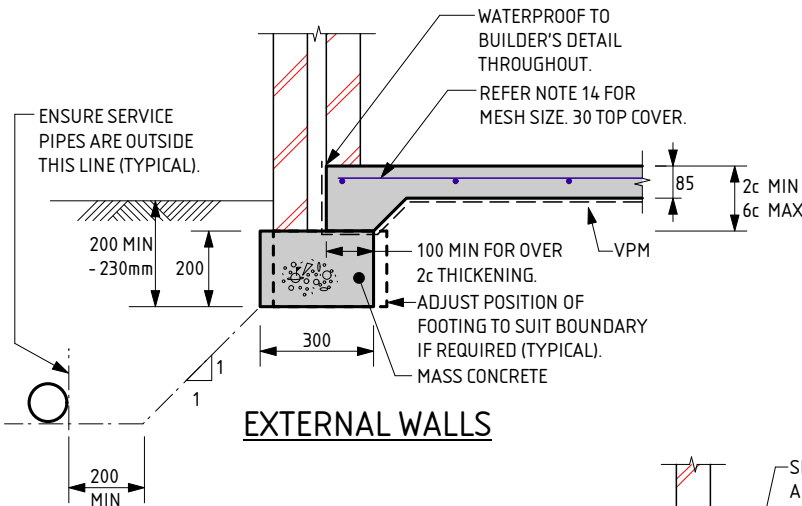
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

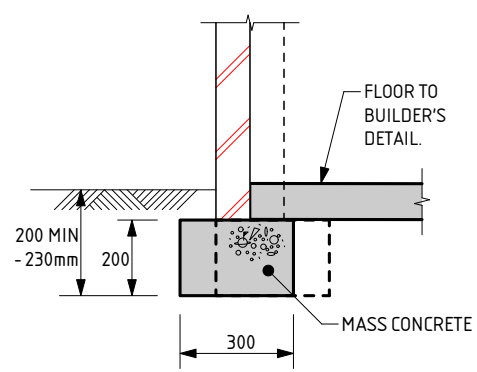
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --

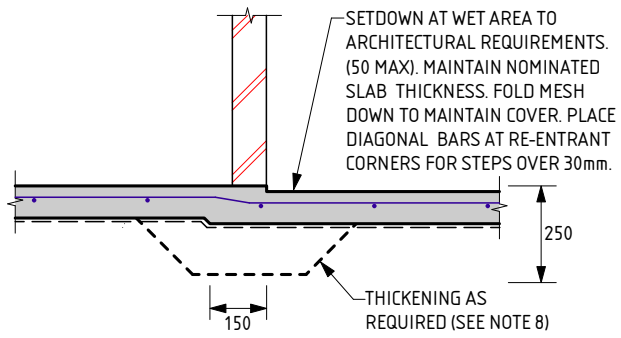


EXTERNAL WALLS

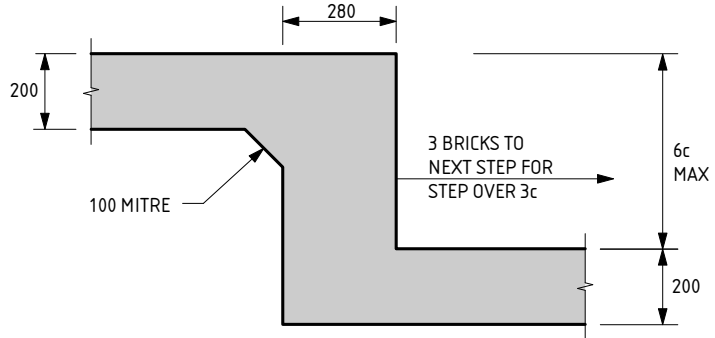


GARAGE WALL

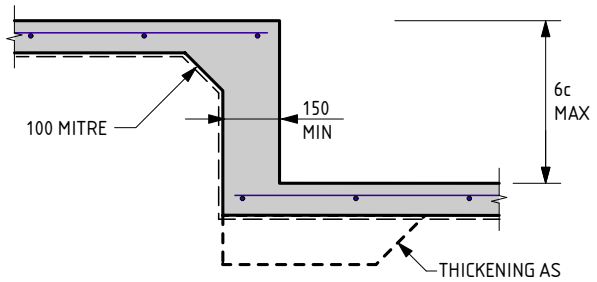
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



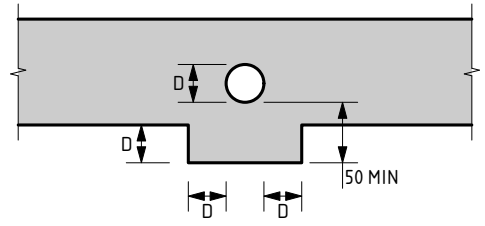
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
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21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALEATTA W.A. 6021

TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 122 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 122 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599412

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 123 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098915
DATE OF ASSESSMENT 10/5/23

SITE RECORD

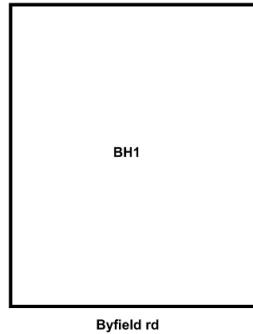


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference:<http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

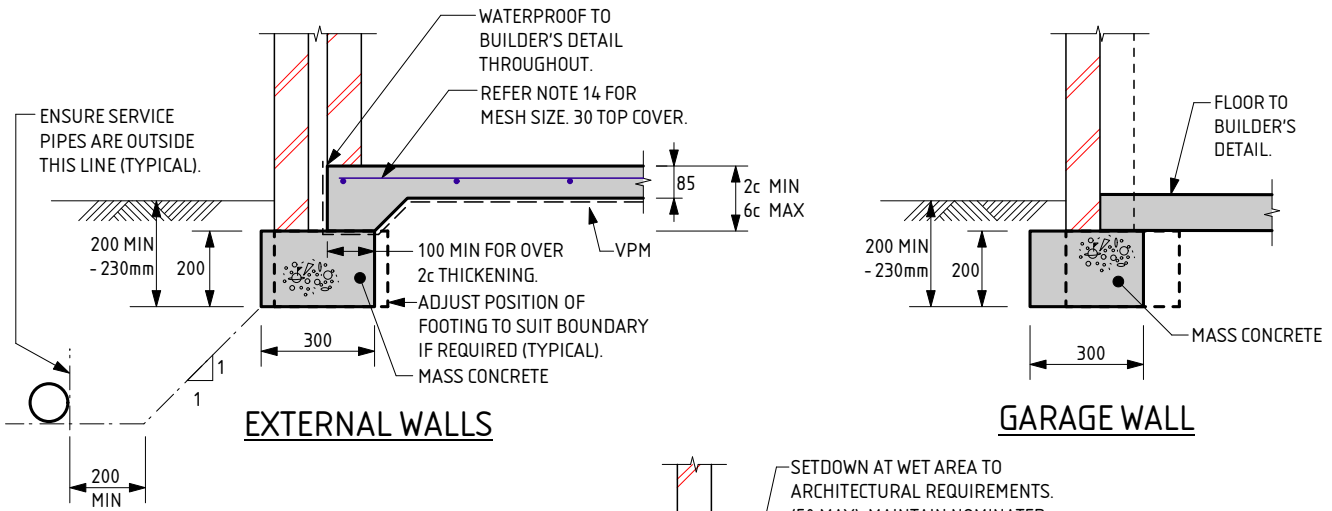
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

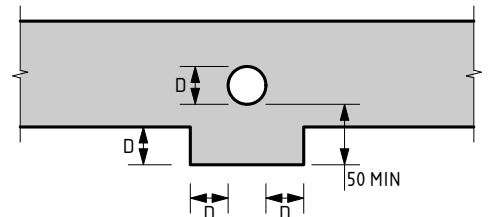
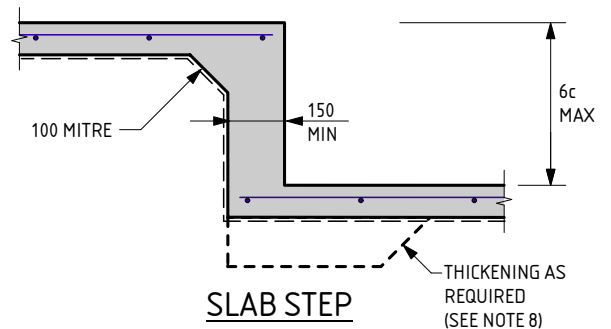
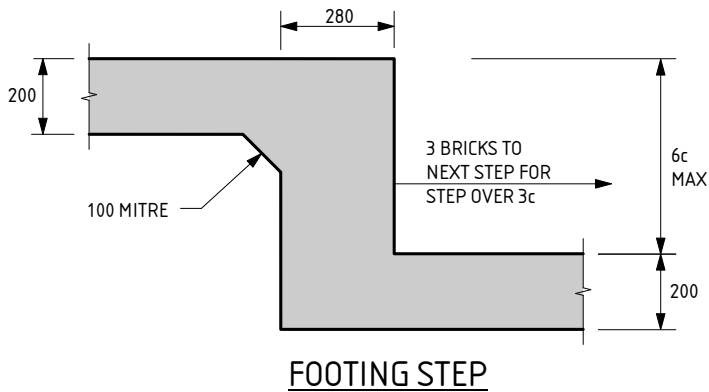
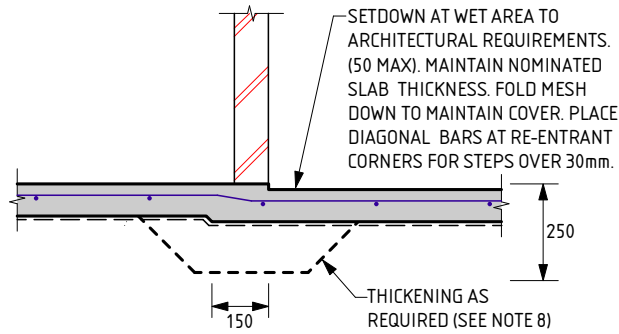
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --



NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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PROJECT: LOT 123 BYFIELD RD SOUTHERN RIVER
 CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
 DATE: 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 123 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599433

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 204 NORFOLK DR SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098939
DATE OF ASSESSMENT 10/5/23

SITE RECORD

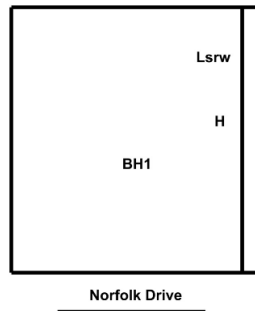


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

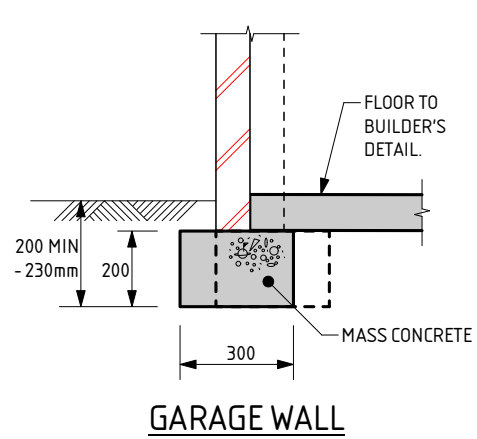
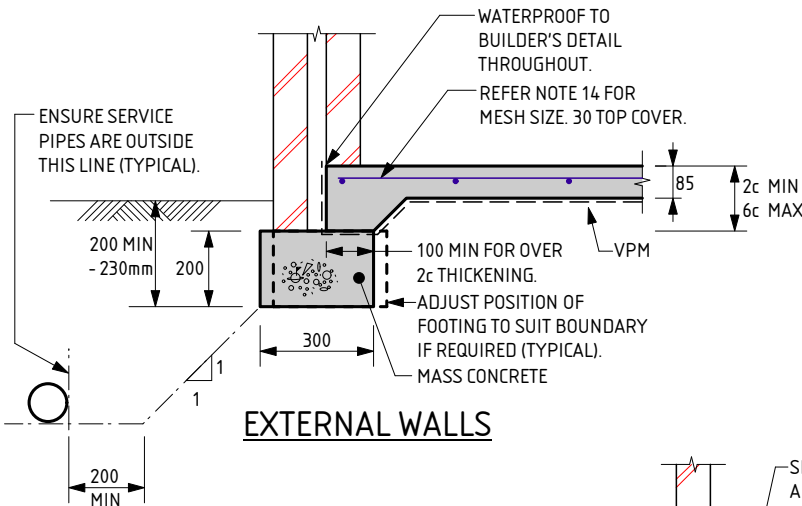
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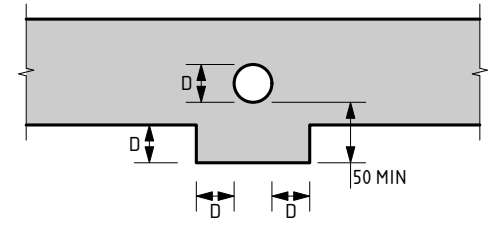
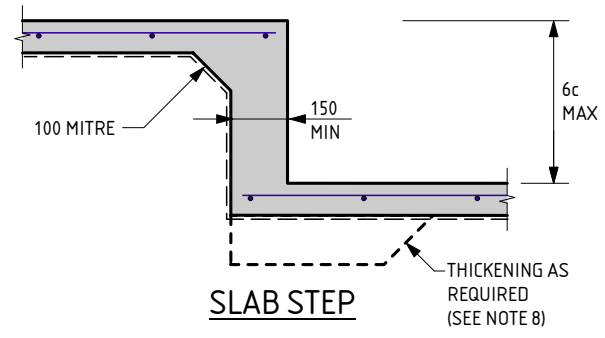
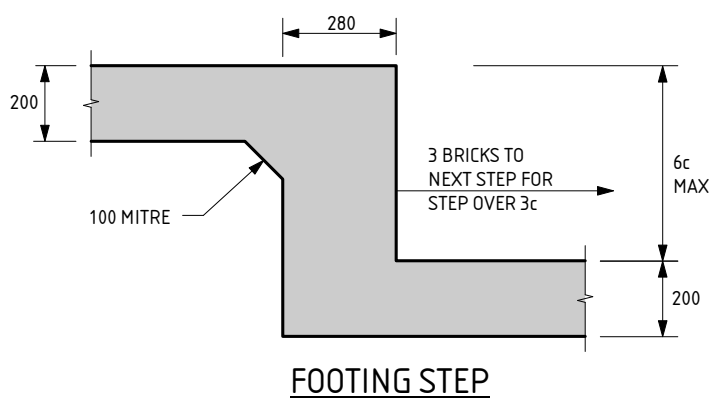
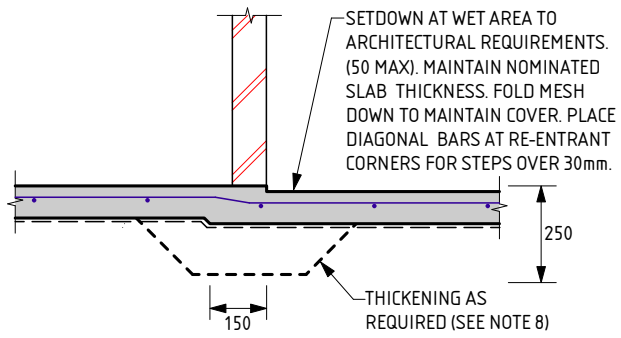
External Reference

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-- END OF REPORT --



NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
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 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT : LOT 204 NORFOLK DR SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 204 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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PROJECT :
LOT 204 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599434

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 205 NORFOLK DR SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098940
DATE OF ASSESSMENT 10/5/23

SITE RECORD

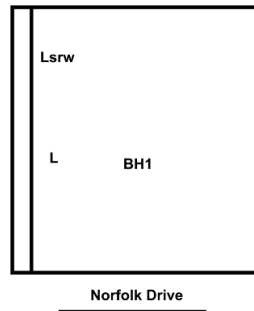


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

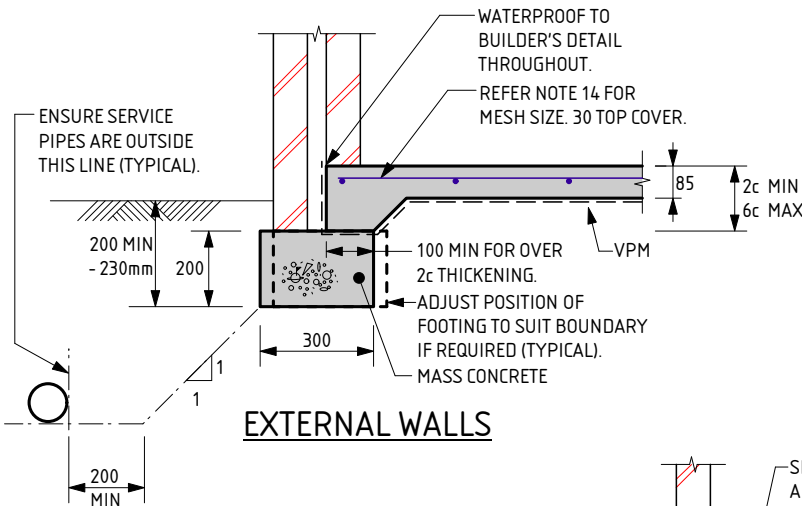
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

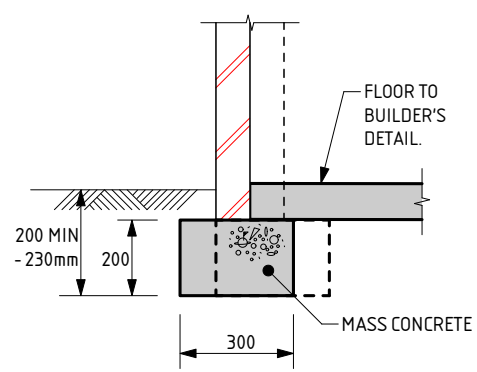
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --

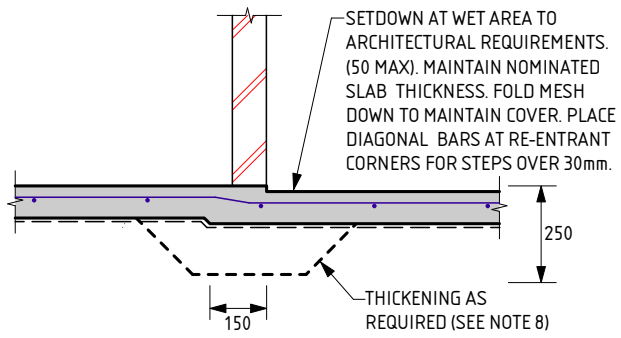


EXTERNAL WALLS

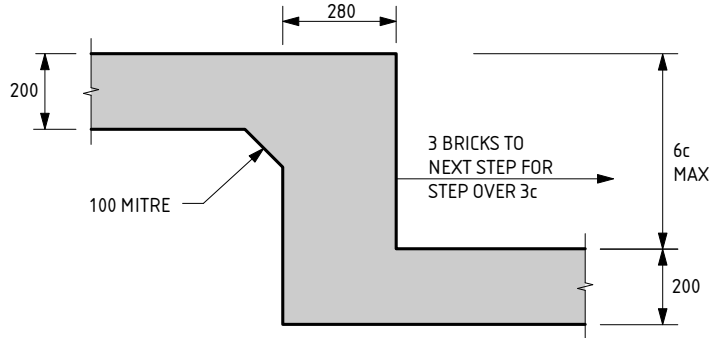


GARAGE WALL

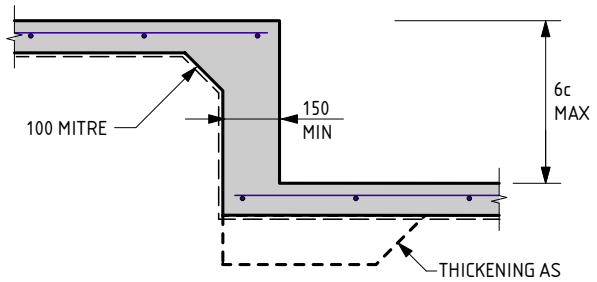
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



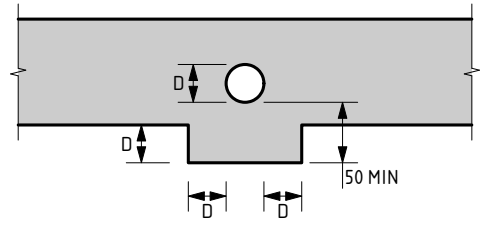
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
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THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

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 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALEATTA W.A. 6021

TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 205 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 205 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599436

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 206 NORFOLK DR SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098942
DATE OF ASSESSMENT 10/5/23

SITE RECORD

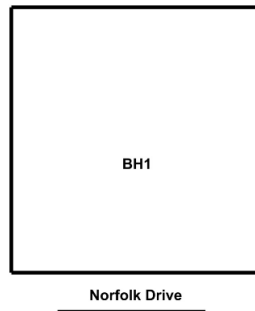


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

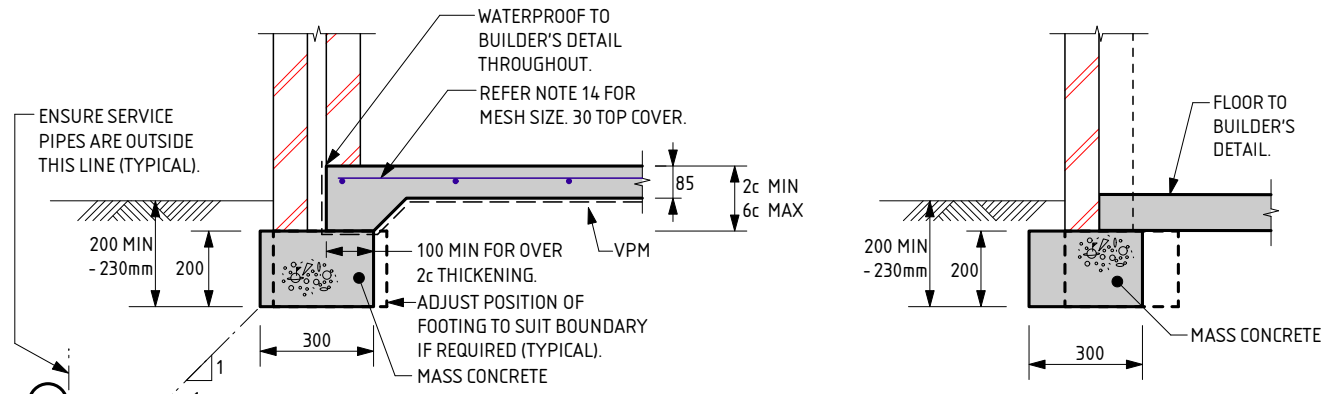
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

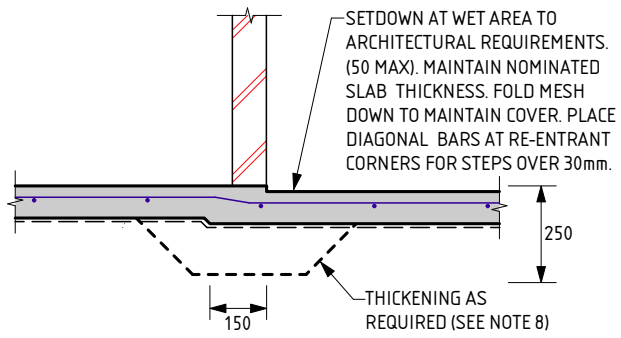
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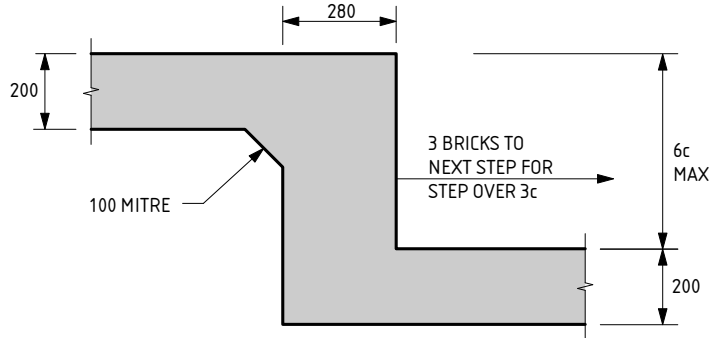
EXTERNAL WALLS

GARAGE WALL

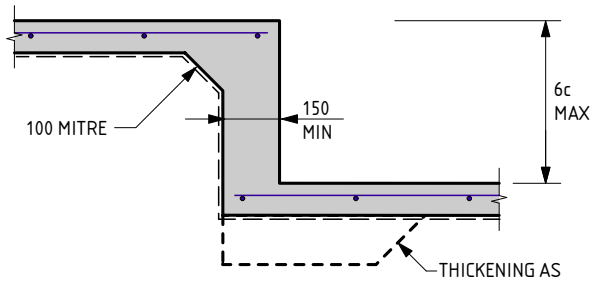
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 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



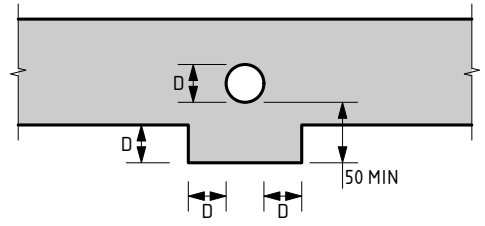
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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PROJECT : LOT 206 NORFOLK DR SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE 1:20	APPROVED
DATE 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 206 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 206 NORFOLK DR SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599413

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 207 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098925
DATE OF ASSESSMENT 10/5/23

SITE RECORD

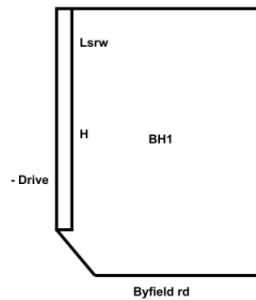


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

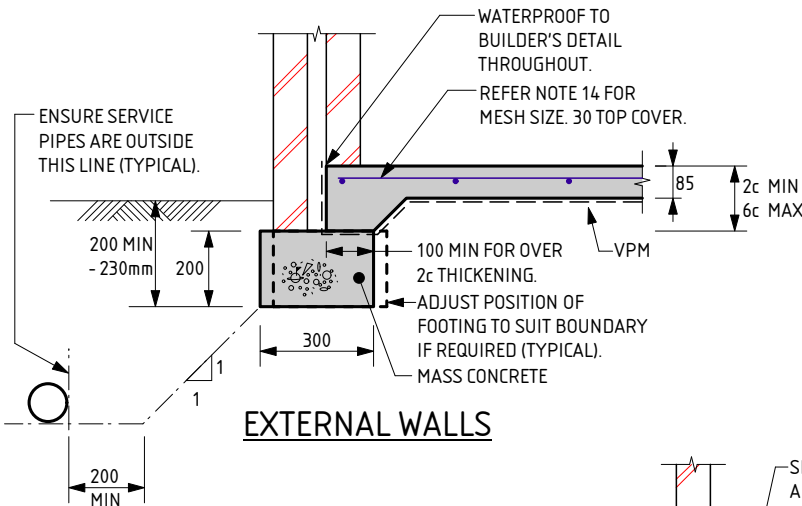
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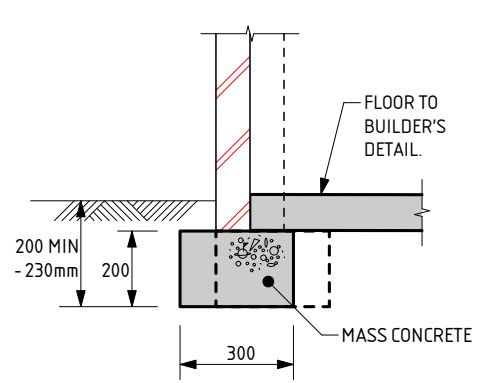
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-- END OF REPORT --

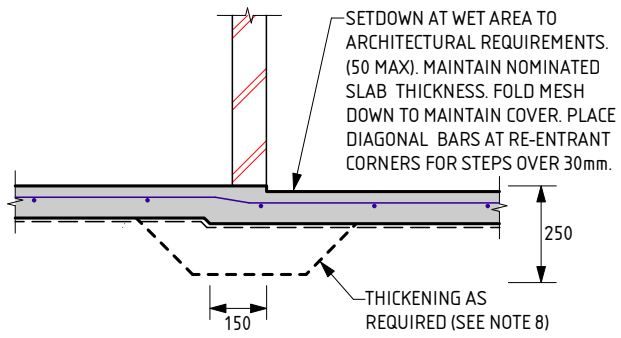


EXTERNAL WALLS

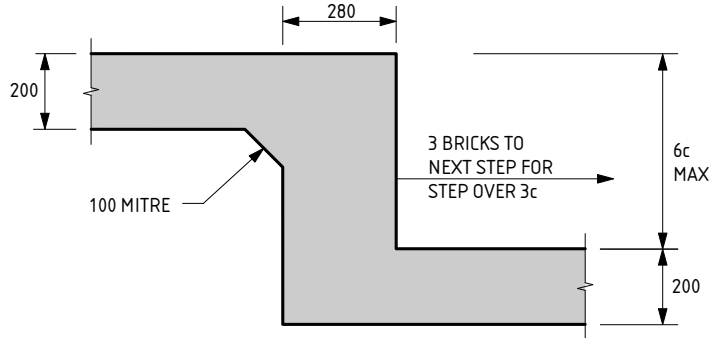


GARAGE WALL

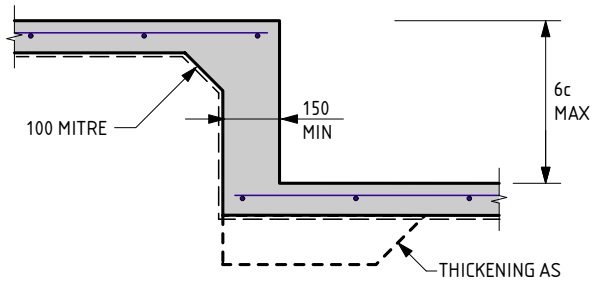
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 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



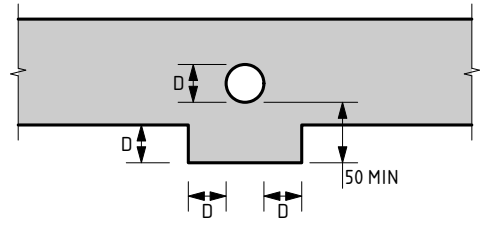
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
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 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT : LOT 207 BYFIELD RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 207 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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LOT 207 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599416

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 208 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098926
DATE OF ASSESSMENT 10/5/23

SITE RECORD

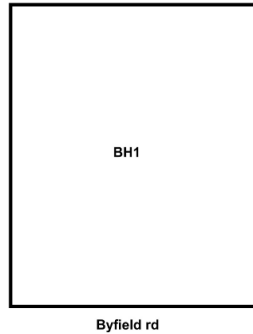


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

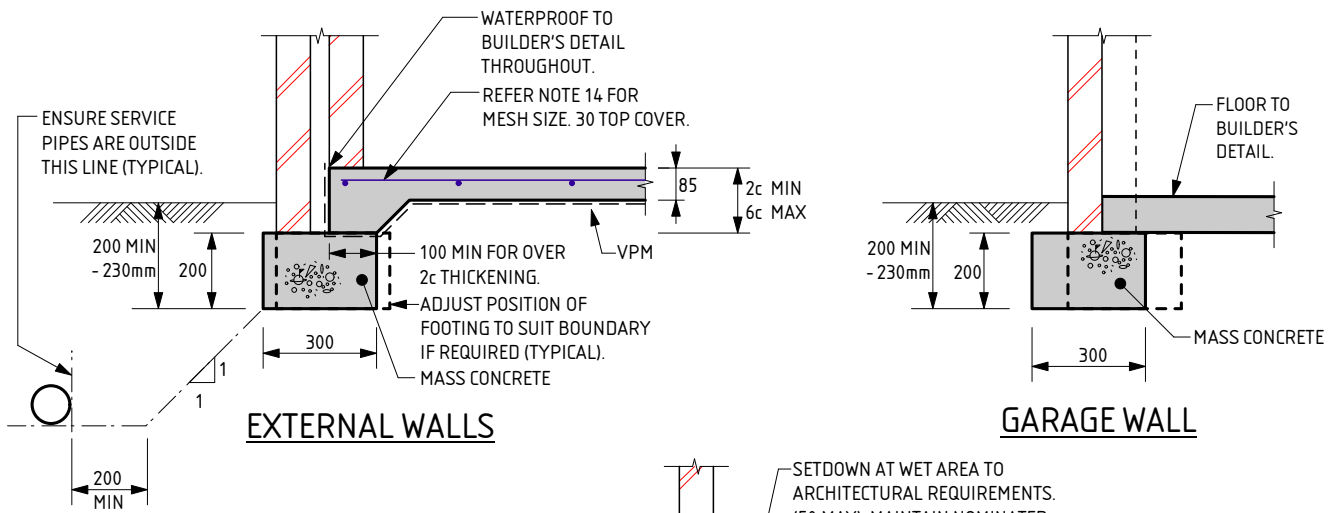
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

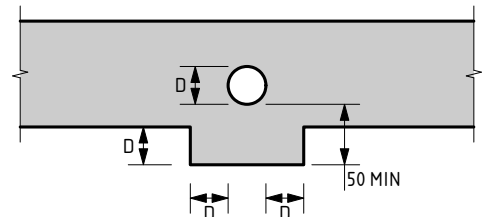
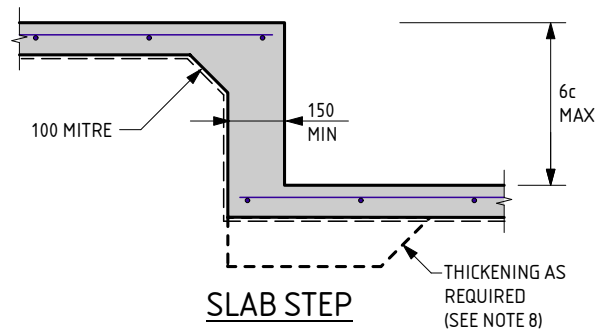
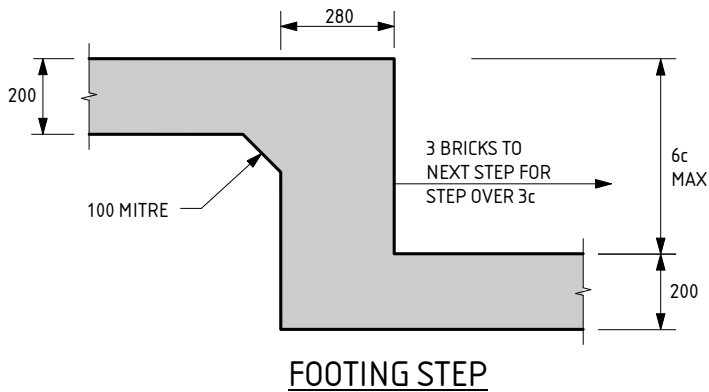
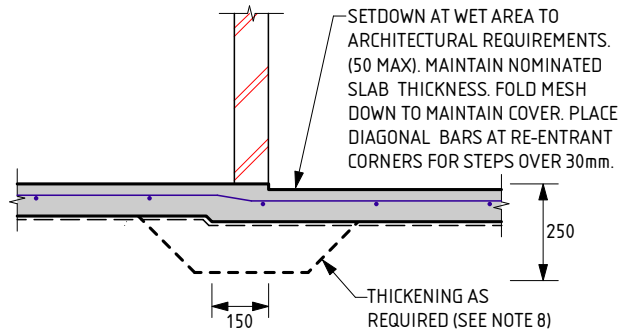
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --



NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



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- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
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 DATE LAST MODIFIED - 13/02/23

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APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

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16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALEATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 208 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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PROJECT :
LOT 208 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599418

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 209 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098927
DATE OF ASSESSMENT 10/5/23

SITE RECORD

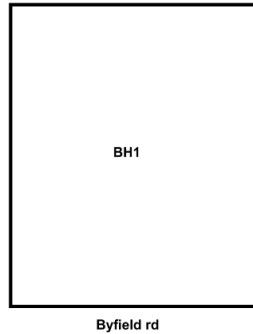


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

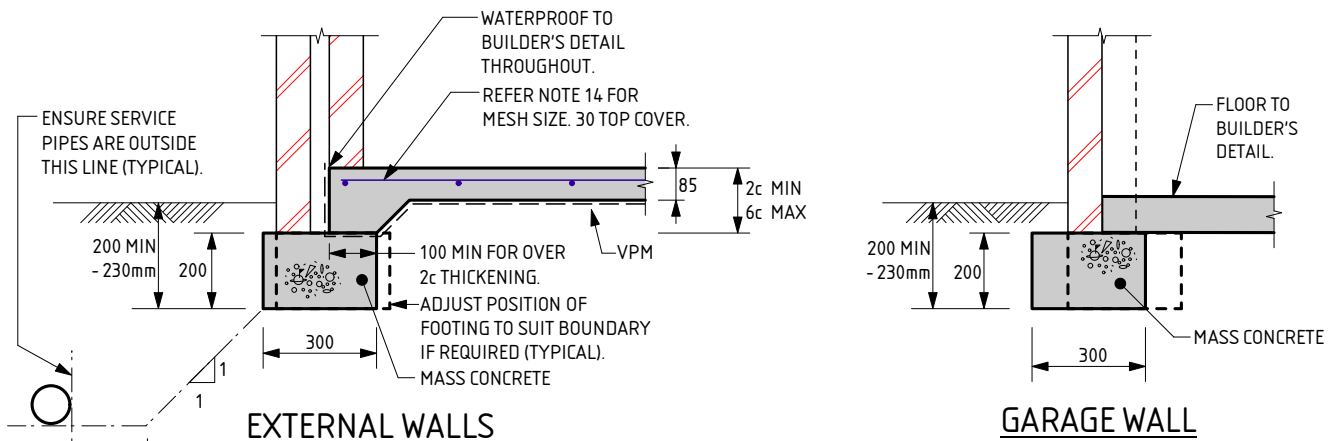
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

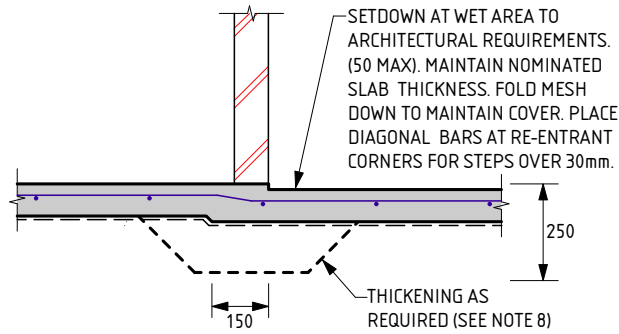
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

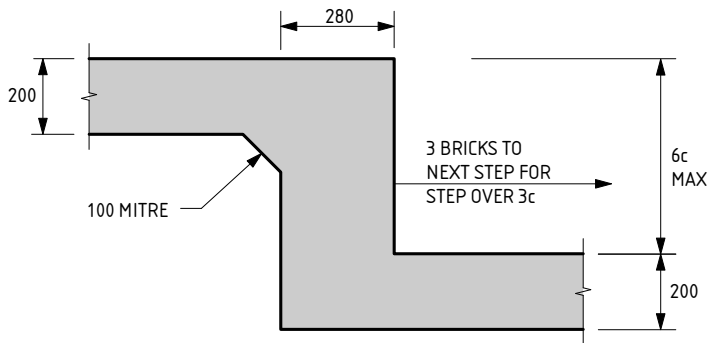
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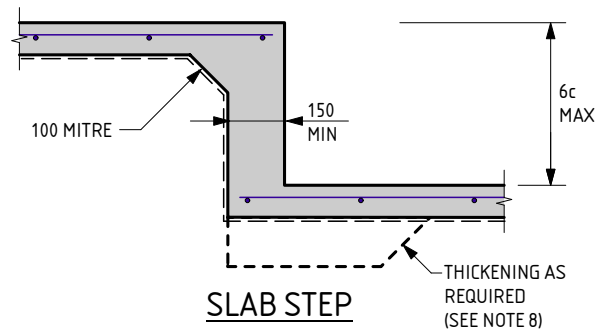
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



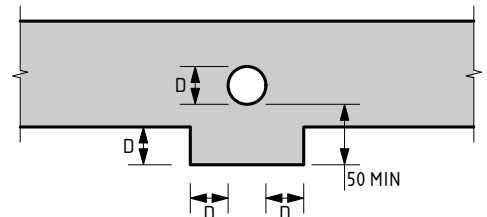
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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PROJECT : LOT 209 BYFIELD RD SOUTHERN RIVER
 CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20
 DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 209 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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APPROVED

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SITE CLASSIFICATION REPORT
CERTIFICATE 2599415

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 210 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098928
DATE OF ASSESSMENT 10/5/23

SITE RECORD

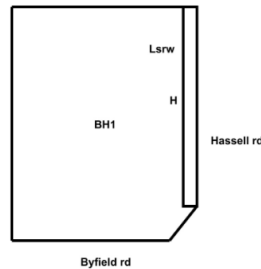


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference:<http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

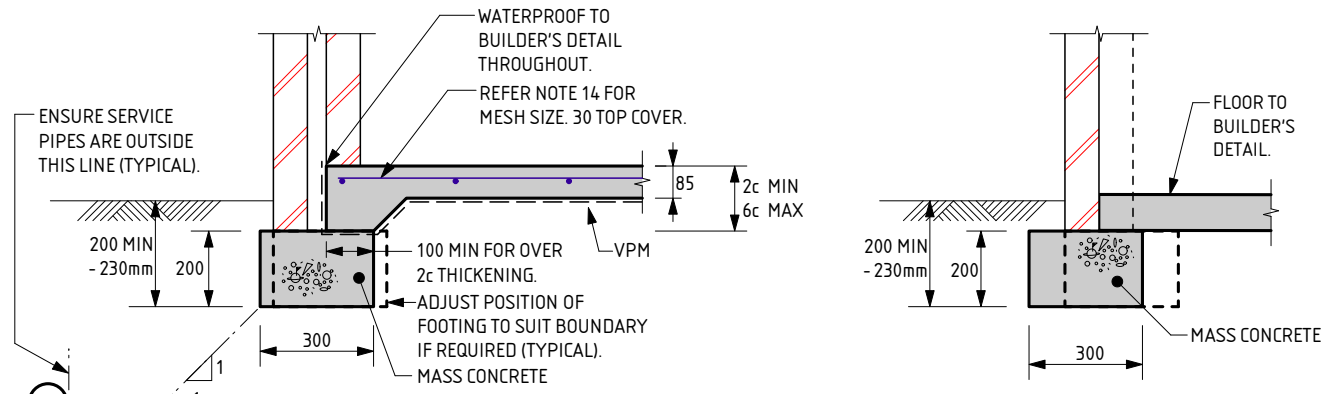
Stormwater Design

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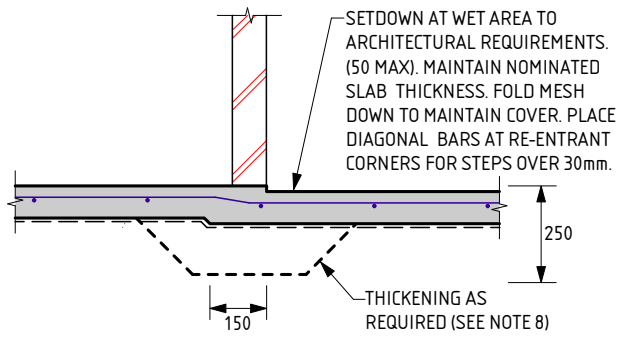
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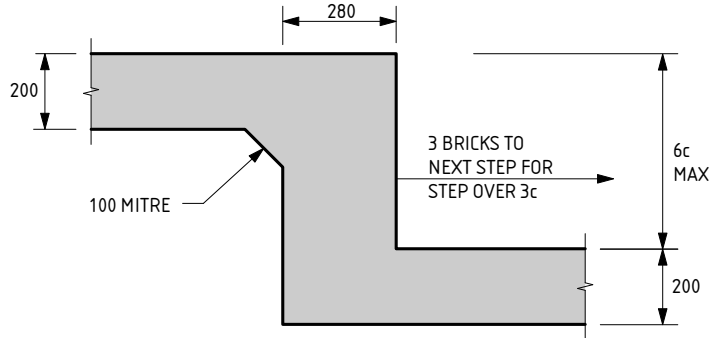
EXTERNAL WALLS

GARAGE WALL

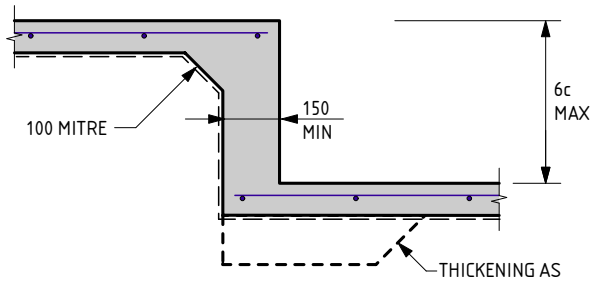
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



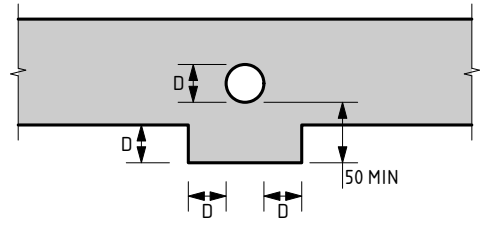
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
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 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT : LOT 210 BYFIELD RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE 1:20	APPROVED
DATE 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
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 - c. A COASTAL CORROSION CLASSIFICATION,
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 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 210 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599422

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 211 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098943
DATE OF ASSESSMENT 10/5/23

SITE RECORD



SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

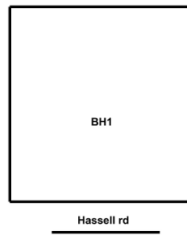
WA | QLD | NSW | VIC

1 Erindale Road, Balcatta, Western Australia 6021 | PO Box 792, Balcatta, Western Australia 6914
 Phone (+618) 9205 4500 | Fax (+618) 9205 4501 | Email wageotechsite@strucsterre.com.au | Web www.strucsterre.com.au
 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Strucsterre Consulting Engineers

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

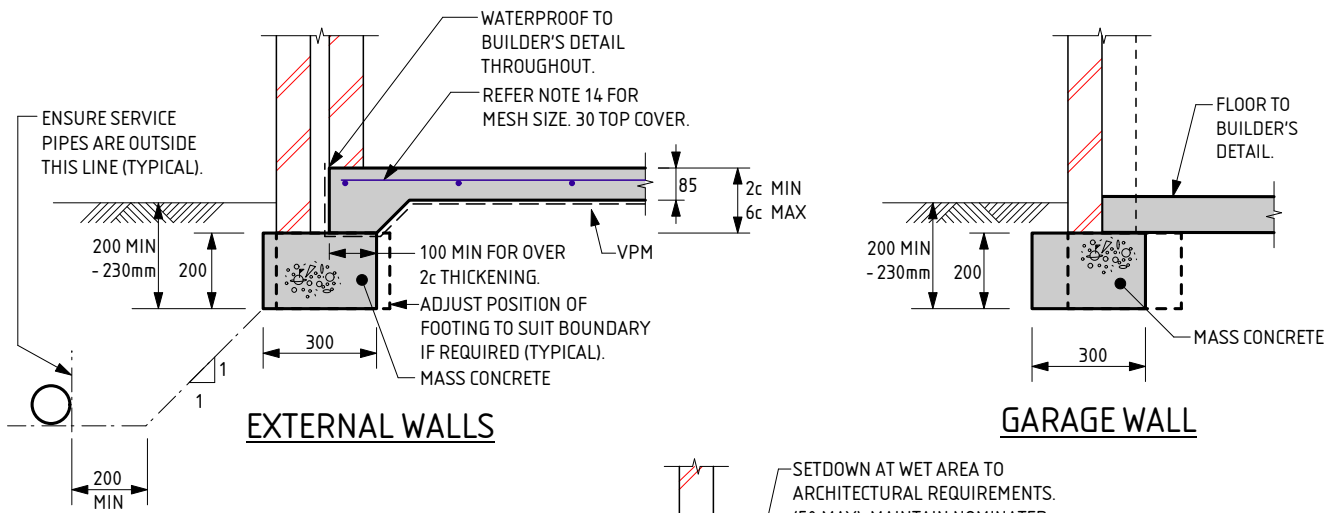
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

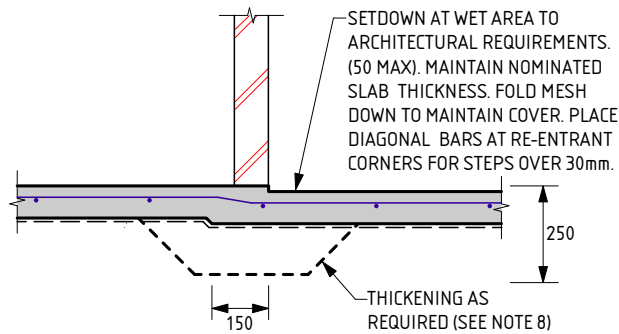
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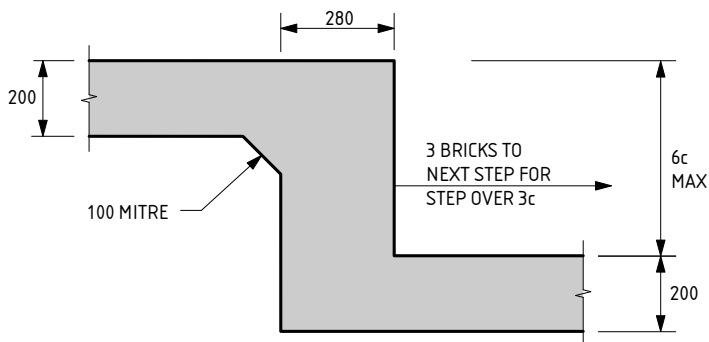
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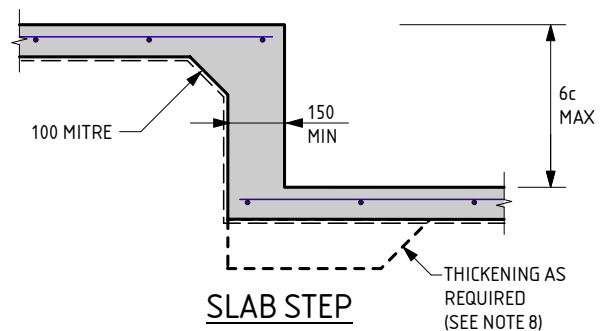
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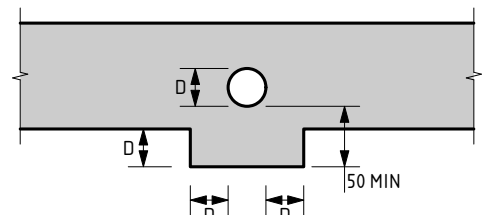
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11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
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PROJECT :
LOT 211 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 211 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599423

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 212 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098944
DATE OF ASSESSMENT 10/5/23

SITE RECORD



SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

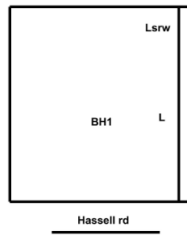
WA | QLD | NSW | VIC

1 Erindale Road, Balcatta, Western Australia 6021 | PO Box 792, Balcatta, Western Australia 6914
 Phone (+618) 9205 4500 | Fax (+618) 9205 4501 | Email wageotechsite@structerre.com.au | Web www.structerre.com.au
 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Structerre Consulting Engineers

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

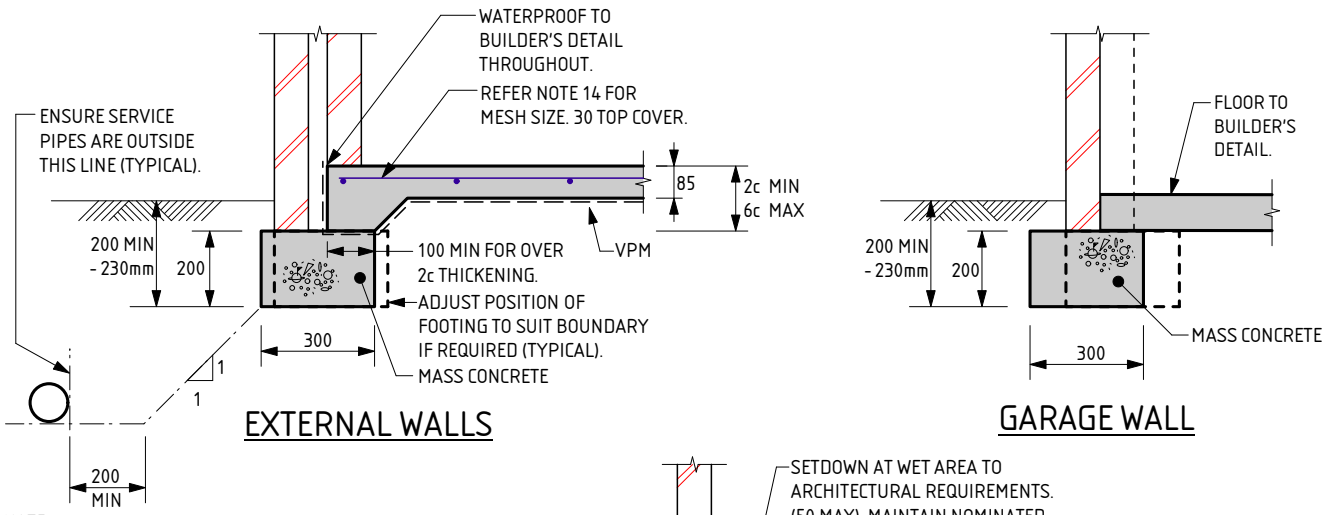
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

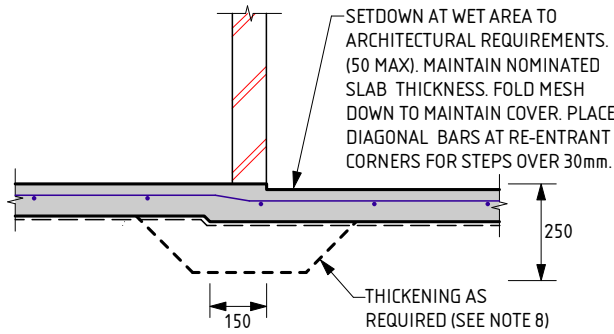
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

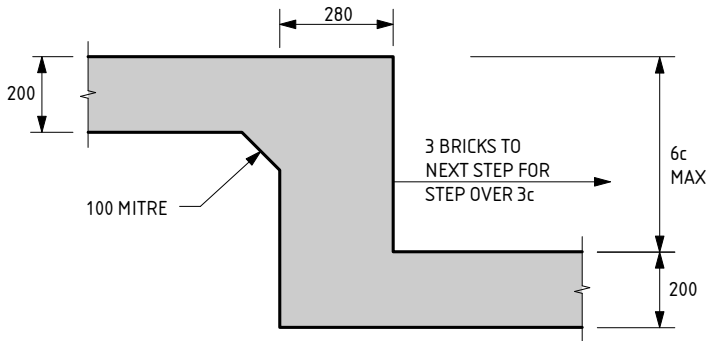
-- END OF REPORT --



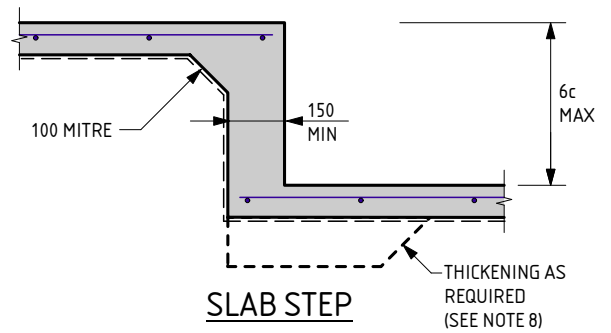
NOTE:
WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
- AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
- AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
- THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



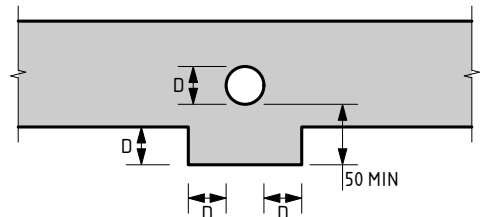
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
USE SL53 MESH FOR SLAB SPAN UP TO 22m.
USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
USE SL62 MESH FOR SLAB SPAN UP TO 28m.
USE SL72 MESH FOR SLAB SPAN UP TO 32m.
30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
DATE LAST MODIFIED - 13/02/23

D10



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PROJECT: LOT 212 HASSELL RD SOUTHERN RIVER
CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
DATE: 11/5/23

APPROVED



EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 212 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 212 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

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SITE CLASSIFICATION REPORT
CERTIFICATE 2599424

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 213 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098947
DATE OF ASSESSMENT 10/5/23

SITE RECORD

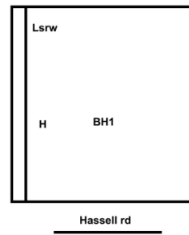


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

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NOTE 2 Bushfire - Prone Area

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ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

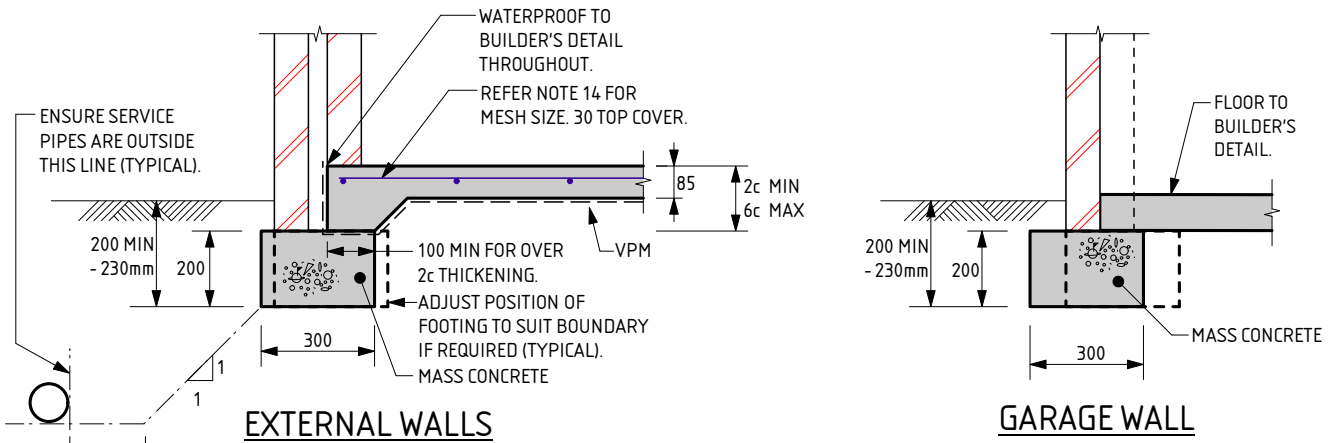
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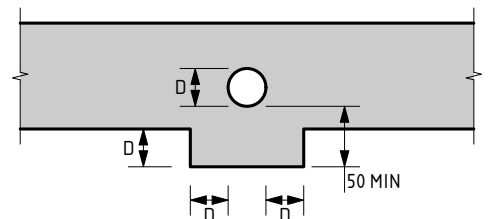
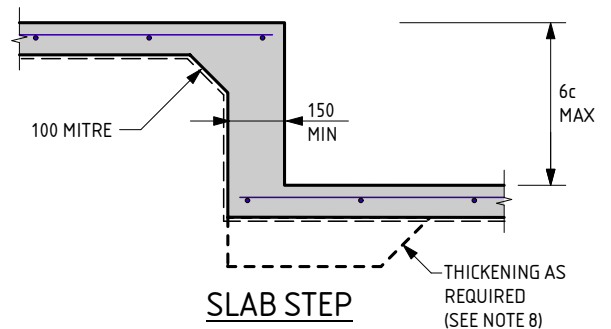
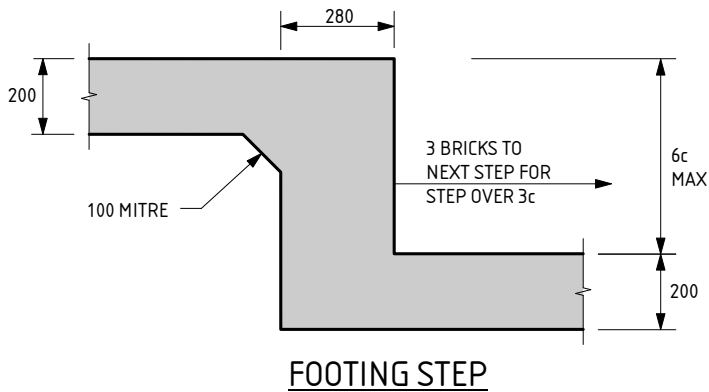
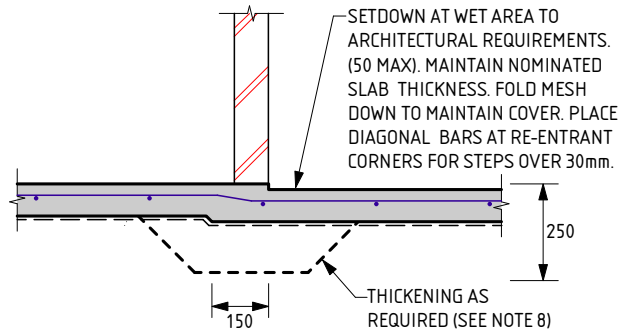
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --



NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
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 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
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- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
 1 ERINDALE ROAD, BALCATTA W.A. 6021
 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT: LOT 213 HASSELL RD SOUTHERN RIVER
 CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
 DATE: 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
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 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
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 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 213 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599425

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 214 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098948
DATE OF ASSESSMENT 10/5/23

SITE RECORD

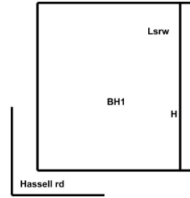


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



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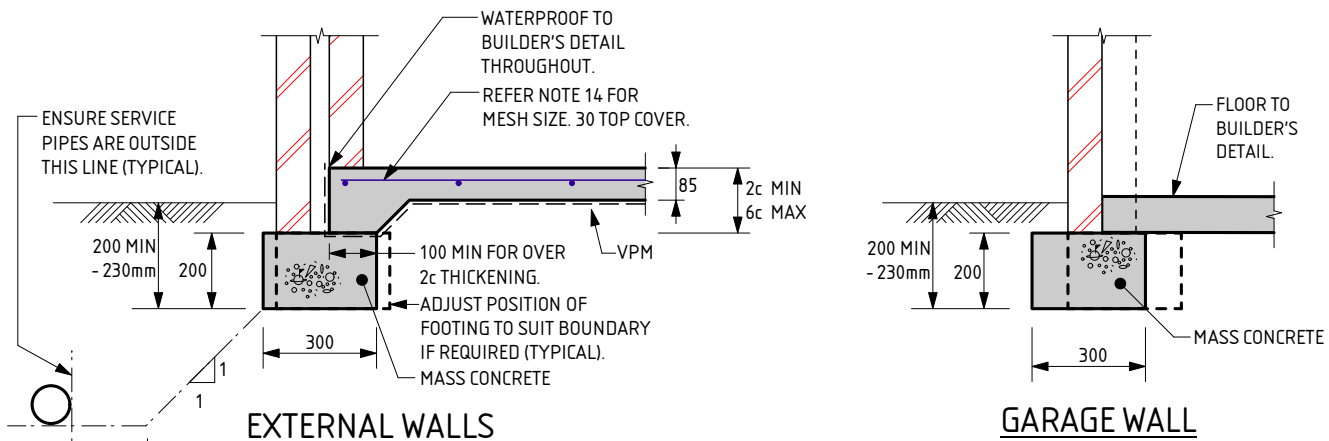
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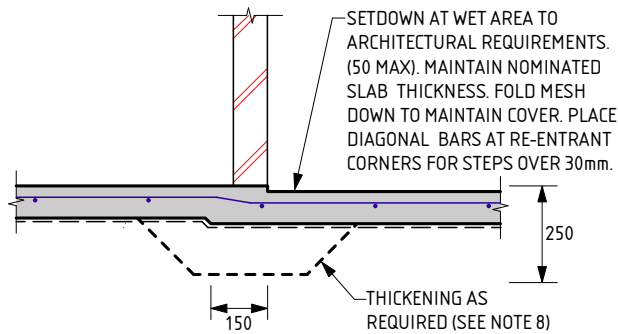
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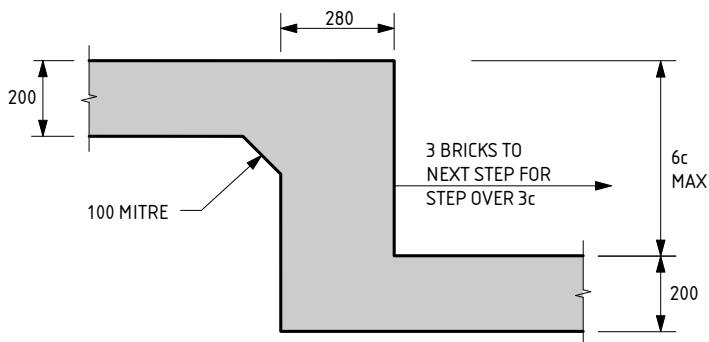
EXTERNAL WALLS

GARAGE WALL

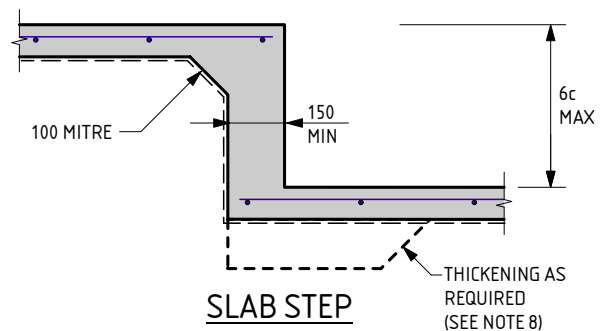
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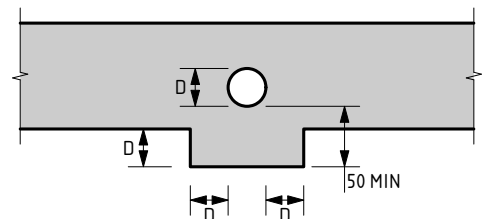
WET AREA STEP



FOOTING STEP



SLAB STEP



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7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALEATTA W.A. 6021

TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 214 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 214 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599427

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 215 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098949
DATE OF ASSESSMENT 10/5/23

SITE RECORD

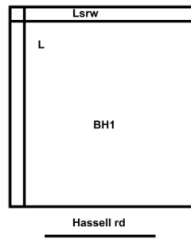


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

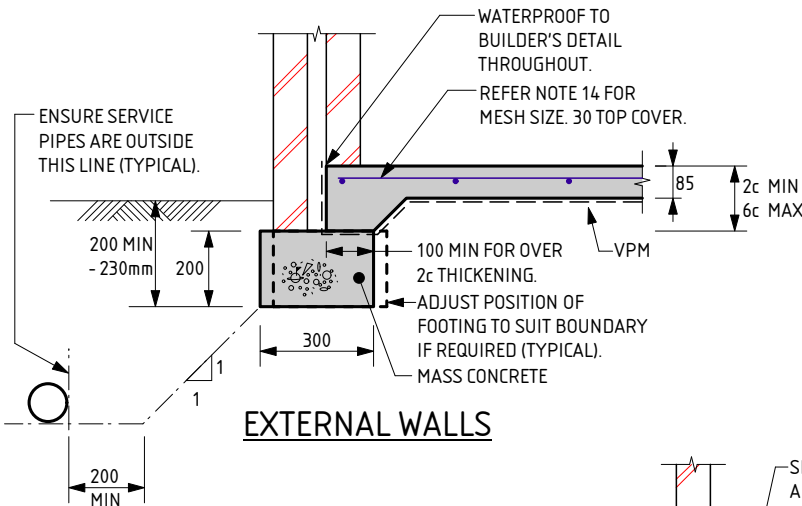
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

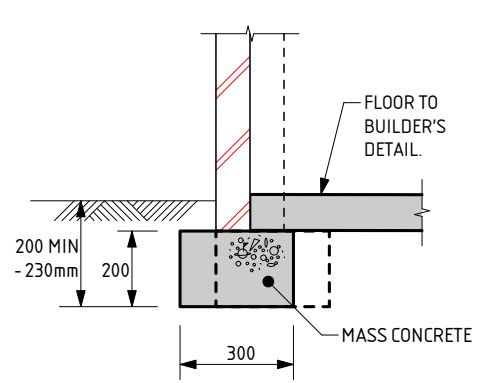
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --

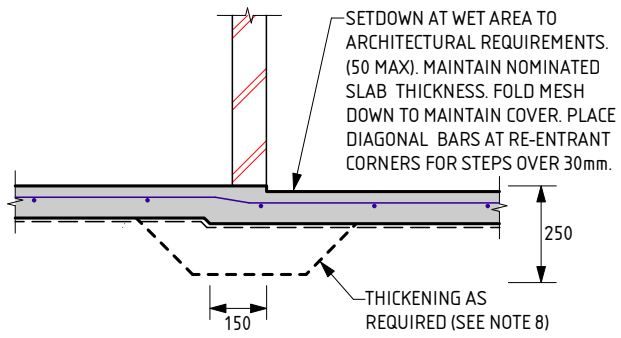


EXTERNAL WALLS

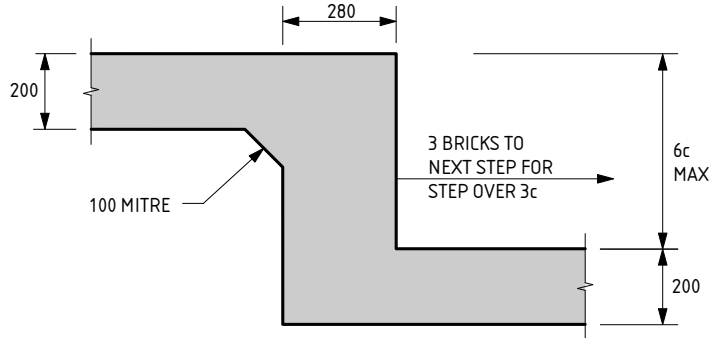


GARAGE WALL

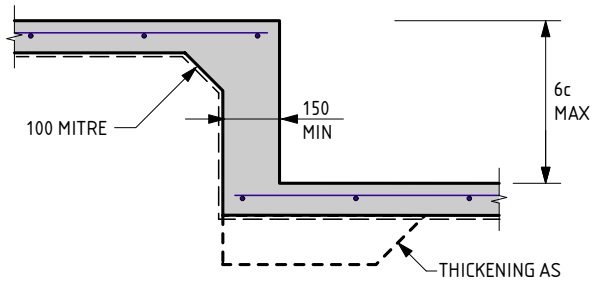
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



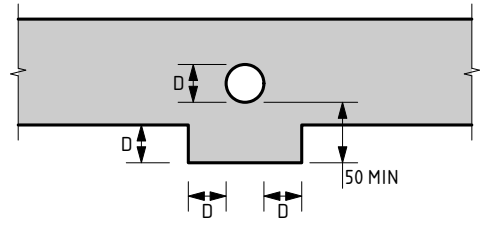
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTERRE ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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PROJECT : LOT 215 HASSELL RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

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 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
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 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 215 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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PROJECT :
LOT 215 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599426

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 216 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098951
DATE OF ASSESSMENT 10/5/23

SITE RECORD

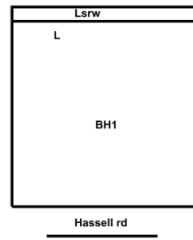


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	Partial Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

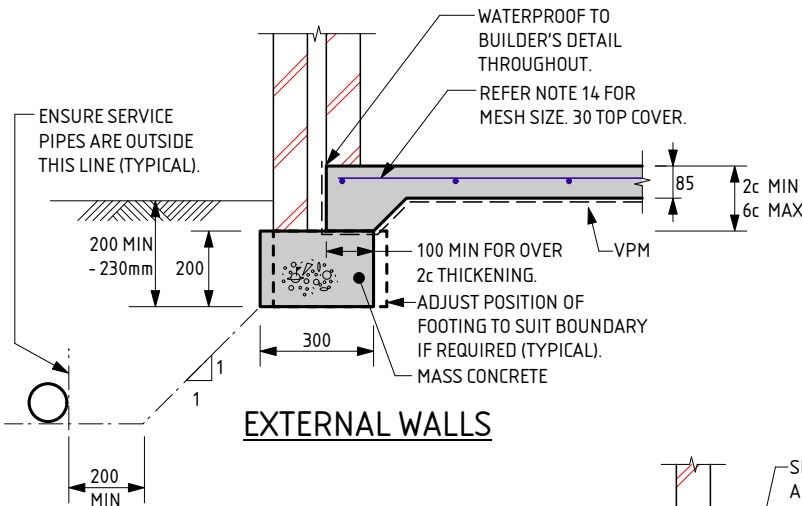
Stormwater Design

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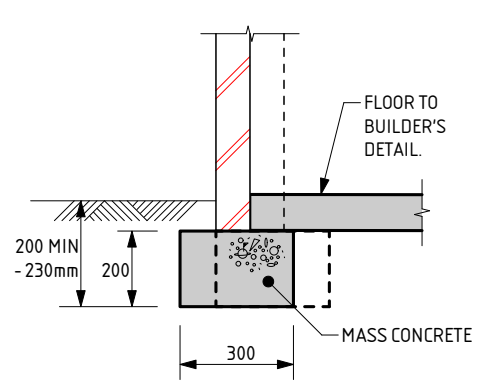
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --

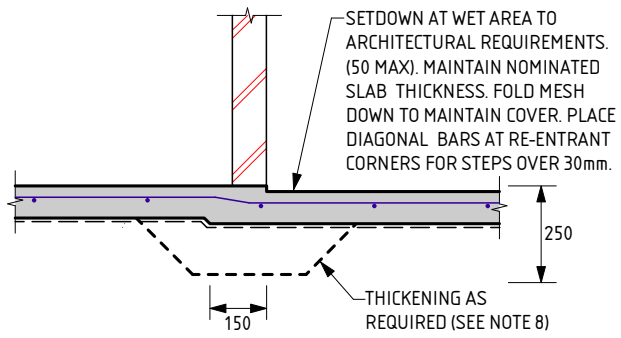


EXTERNAL WALLS

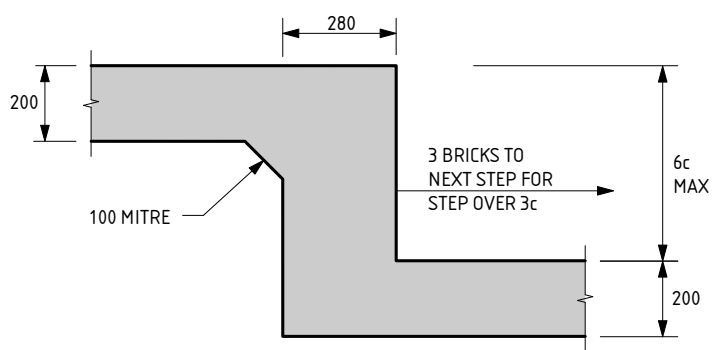


GARAGE WALL

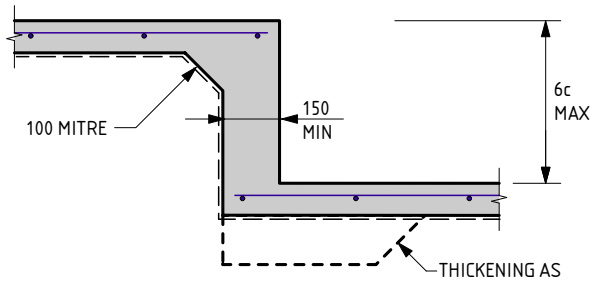
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 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



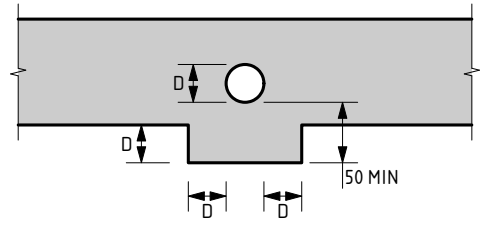
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
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 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
 1 ERINDALE ROAD, BALCATTA W.A. 6021
 TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT : LOT 216 HASSELL RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE : 1:20	APPROVED
DATE : 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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1 ERINDALE ROAD, BALEATTA W.A. 6021

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PROJECT :
LOT 216 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599428

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 217 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098952
DATE OF ASSESSMENT 10/5/23

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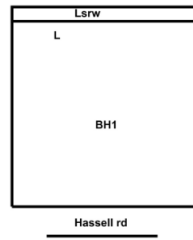


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
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CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
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-TERRAIN CATEGORY	2	
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SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

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Site Condition

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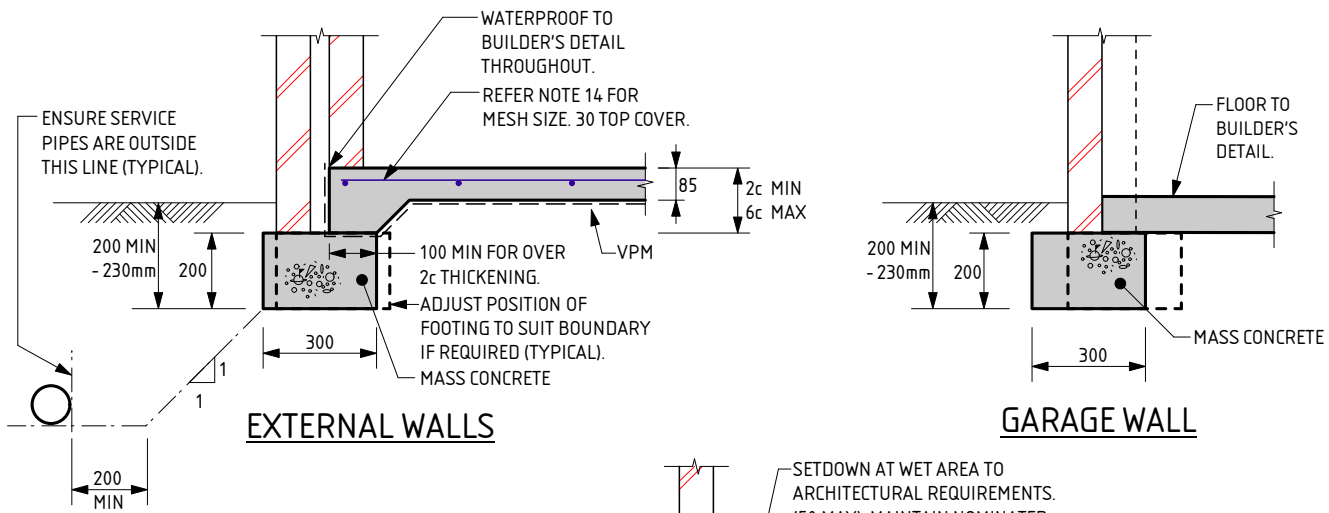
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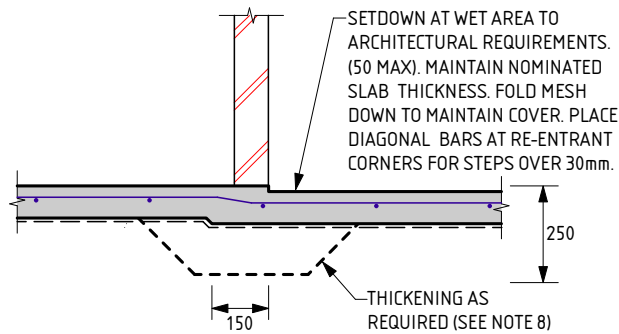
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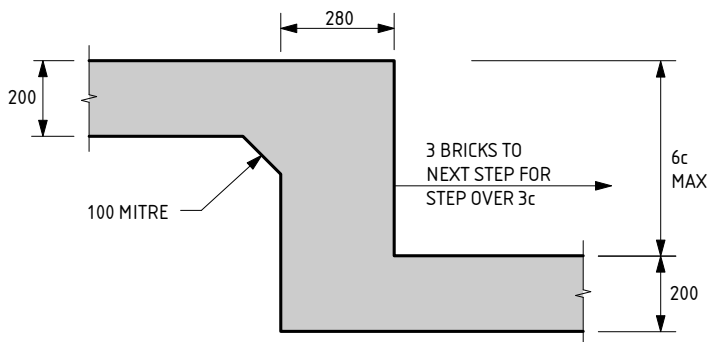
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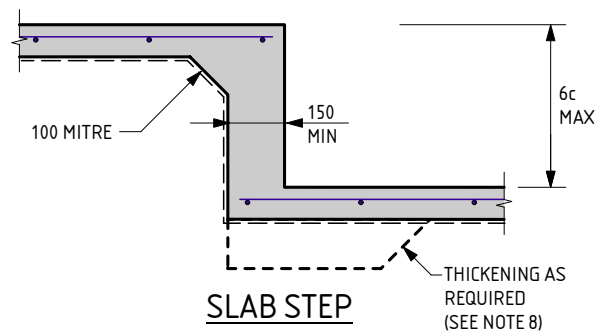
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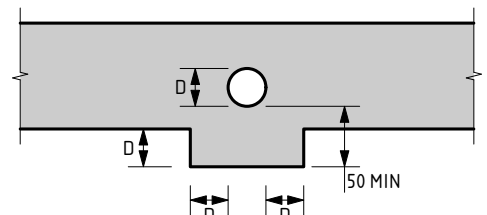
WET AREA STEP



FOOTING STEP



SLAB STEP



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- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

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THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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 CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20
 DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALCATT WA 6021

TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 217 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599429

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 218 HASSELL RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098953
DATE OF ASSESSMENT 10/5/23

SITE RECORD

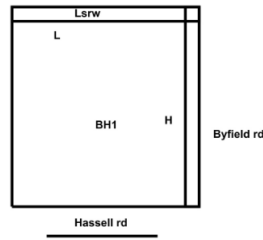


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

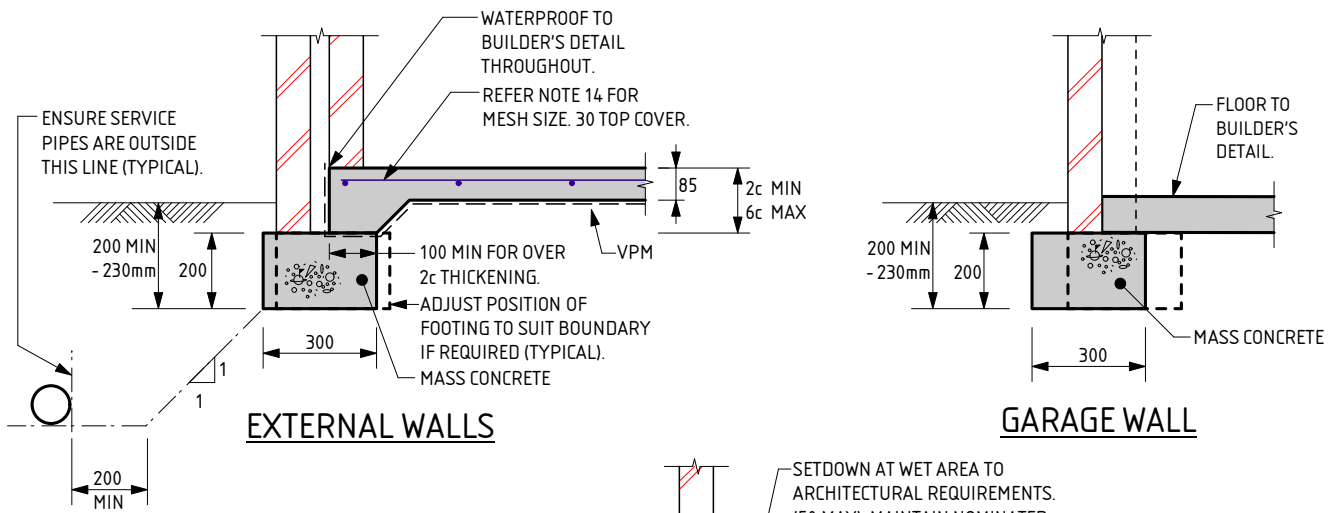
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

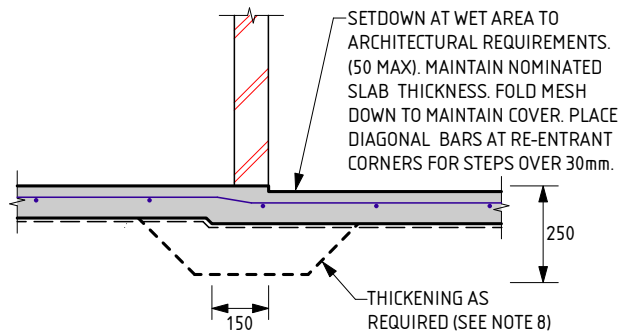
-- END OF REPORT --



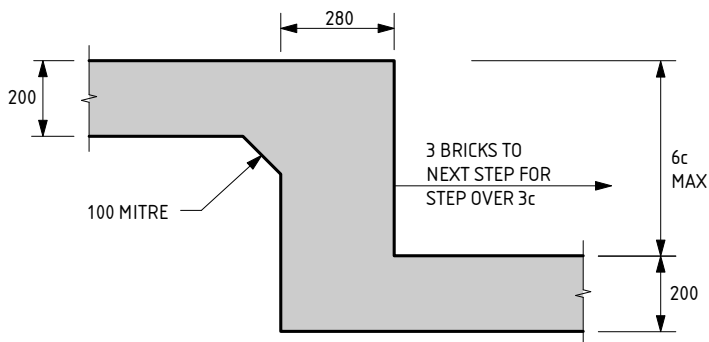
EXTERNAL WALLS

GARAGE WALL

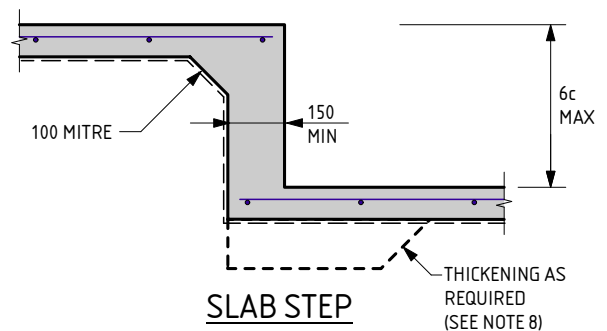
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



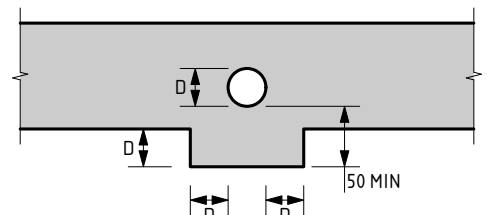
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

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3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
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 - c. A COASTAL CORROSION CLASSIFICATION,
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 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
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7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
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SAND PAD

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14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

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 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

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19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
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STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

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SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
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TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 218 HASSELL RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599414

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 219 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098929
DATE OF ASSESSMENT 10/5/23

SITE RECORD

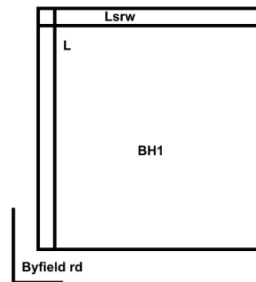


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

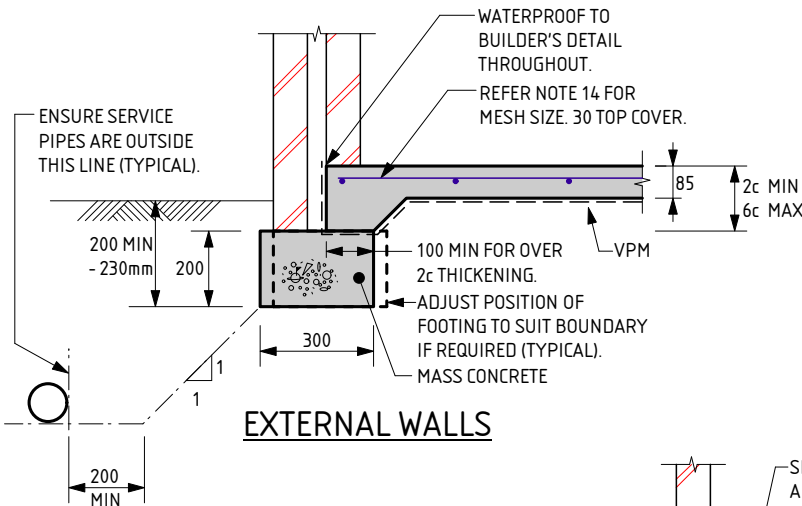
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

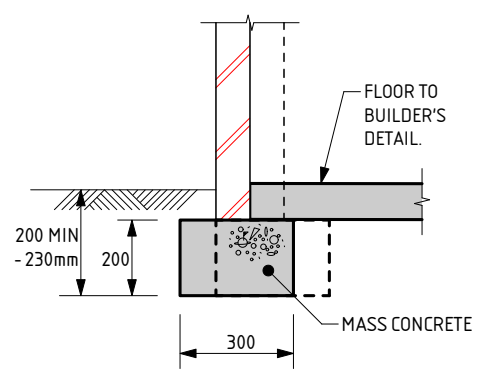
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --

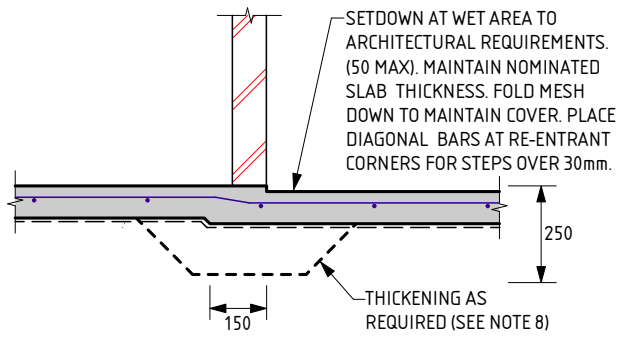


EXTERNAL WALLS

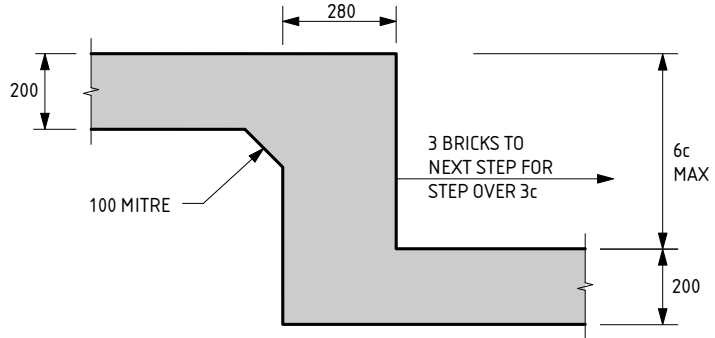


GARAGE WALL

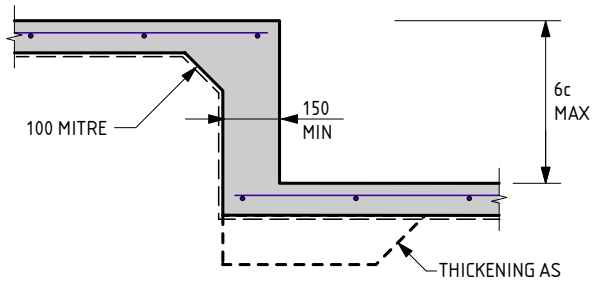
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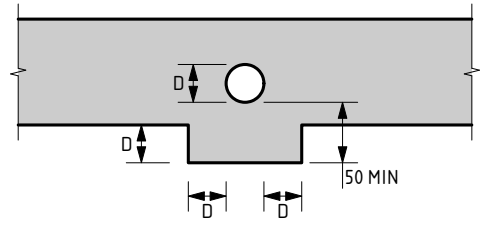
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

1. REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
2. SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
3. A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
4. IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
5. ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
6. EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
7. PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
8. PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
9. CONCRETE TO CONFORM WITH AS 3600.
10. BLENDED CEMENT TO CONFORM WITH AS 3972.
11. ALL CONCRETE TO BE N20/20/100.
12. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
13. IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

14. IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
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 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
15. CURE SLAB AS DETERMINED BY ENGINEER.
16. MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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PROJECT : LOT 219 BYFIELD RD SOUTHERN RIVER	
CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY	
SCALE 1:20	APPROVED
DATE 11/5/23	

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 219 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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SITE CLASSIFICATION REPORT
CERTIFICATE 2599417

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 220 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098930
DATE OF ASSESSMENT 10/5/23

SITE RECORD



SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

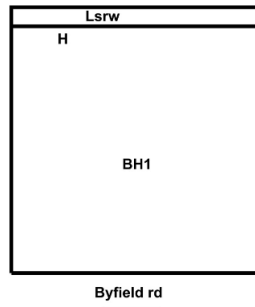
WA | QLD | NSW | VIC

1 Erindale Road, Balcatta, Western Australia 6021 | PO Box 792, Balcatta, Western Australia 6914
 Phone (+618) 9205 4500 | Fax (+618) 9205 4501 | Email wageotechsite@strucsterre.com.au | Web www.strucsterre.com.au
 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Strucsterre Consulting Engineers

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

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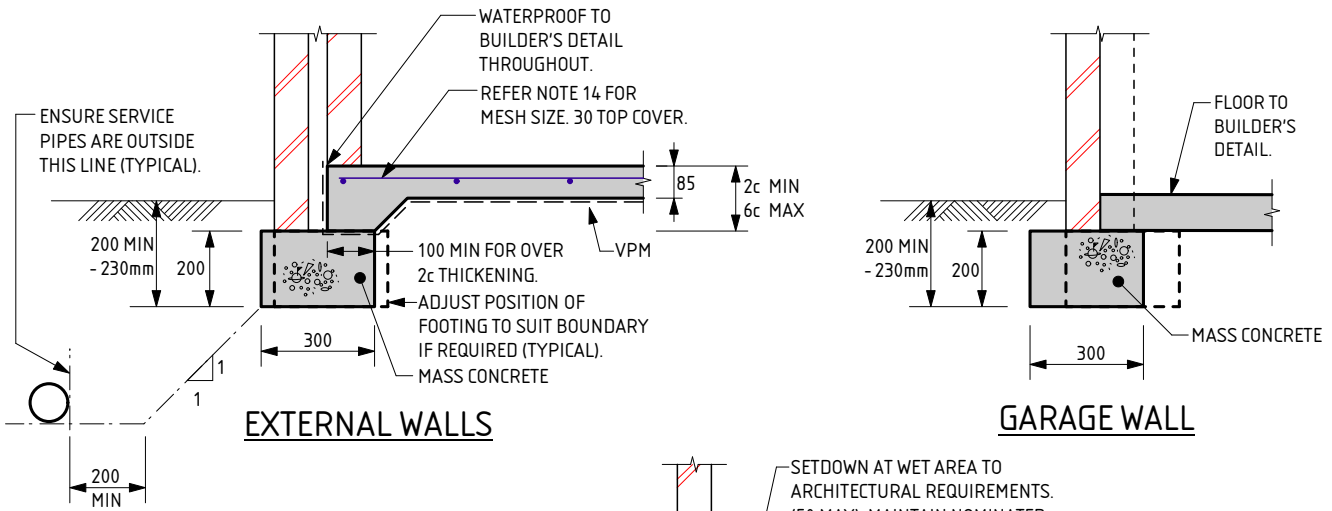
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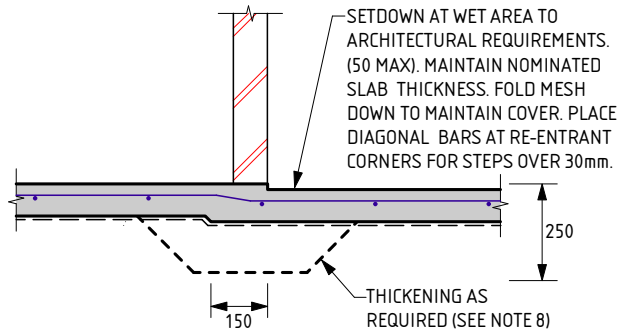
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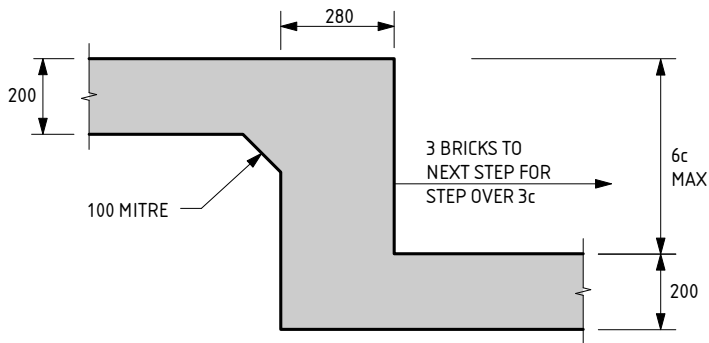
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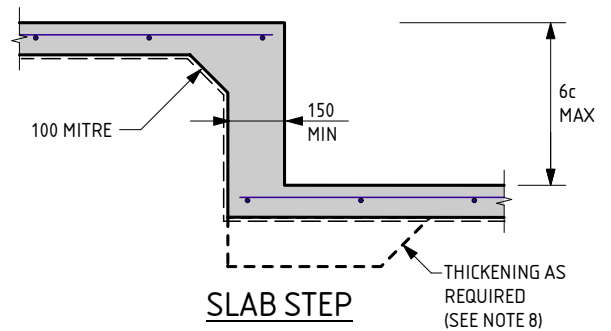
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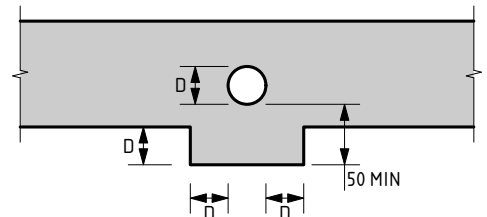
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17. THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
18. A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
19. LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
20. THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS

1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



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PROJECT : LOT 220 BYFIELD RD SOUTHERN RIVER
 CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20
 DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 220 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599419

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 221 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098931
DATE OF ASSESSMENT 10/5/23

SITE RECORD

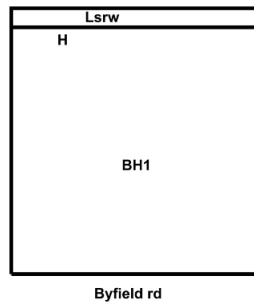


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

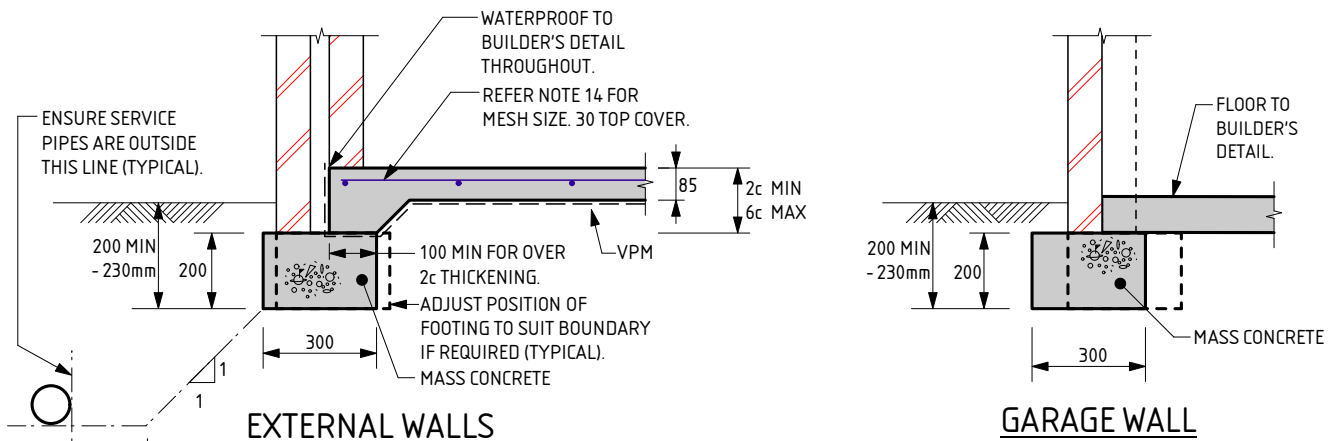
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

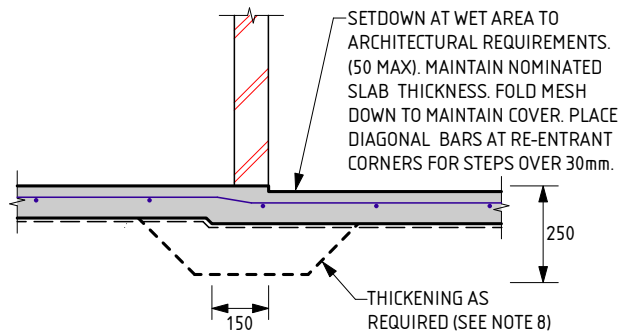
-- END OF REPORT --



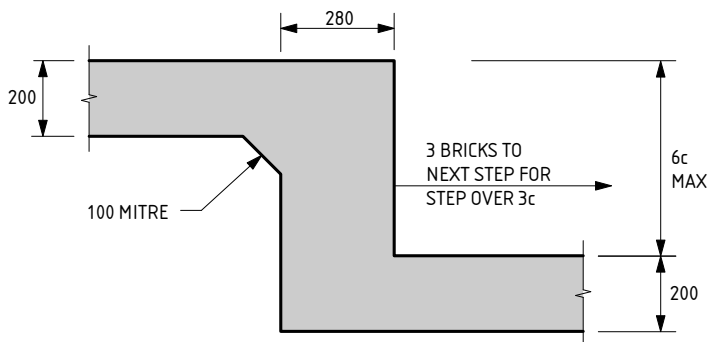
EXTERNAL WALLS

GARAGE WALL

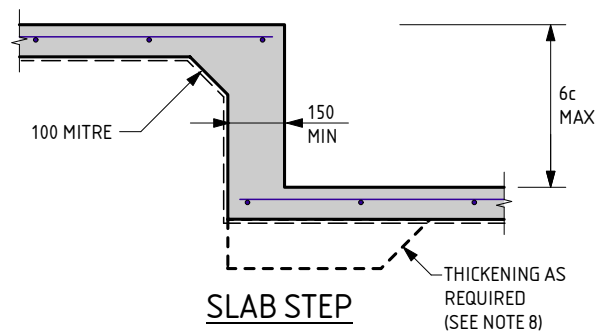
NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



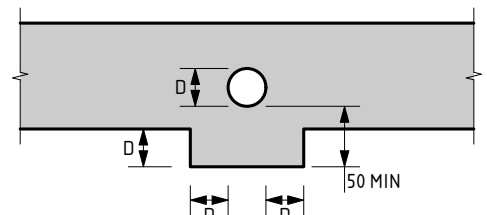
WET AREA STEP



FOOTING STEP



SLAB STEP



SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
 - MAXIMUM PENETRATION SIZE TO BE Ø150.

D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

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 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

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 APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

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4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
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 - c. A COASTAL CORROSION CLASSIFICATION,
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 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
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SAND PAD

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12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
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14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
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 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
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STORMWATER DRAINAGE

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DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALCATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 221 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599421

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 222 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098932
DATE OF ASSESSMENT 10/5/23

SITE RECORD

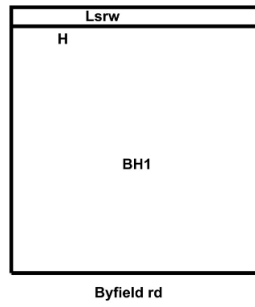


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

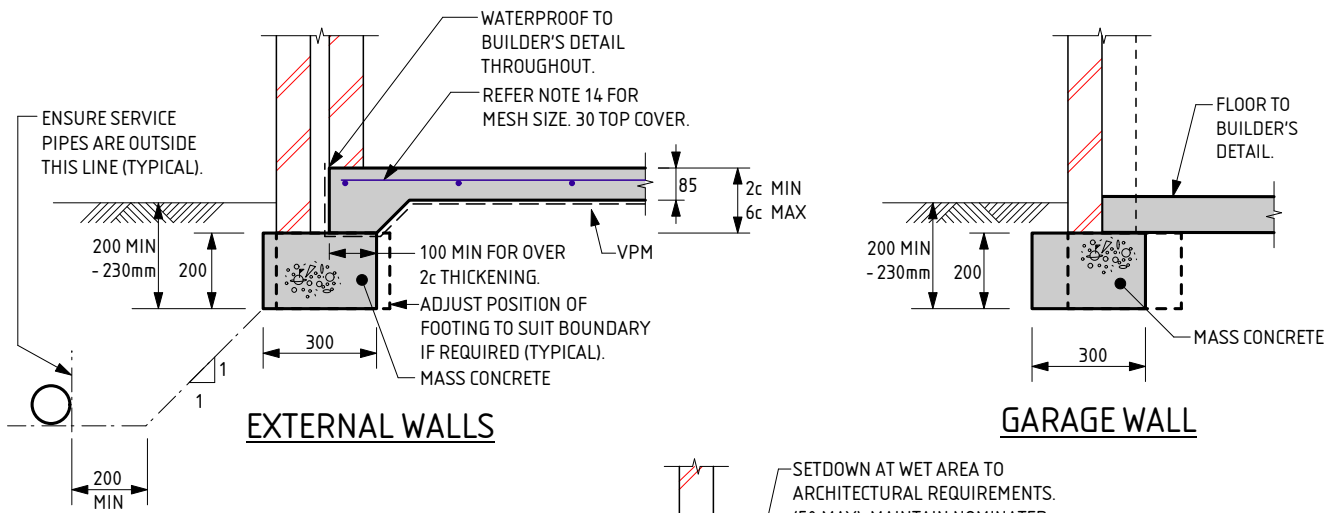
Stormwater Design

Site conditions suggest that stormwater disposal maybe problematic, therefore it is recommended that Structerre is engaged to conduct a stormwater design or review. If the site has direct council connection, please disregard this notation.

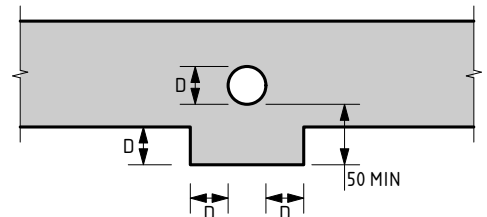
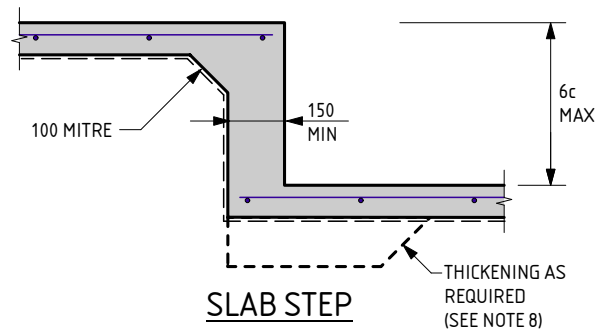
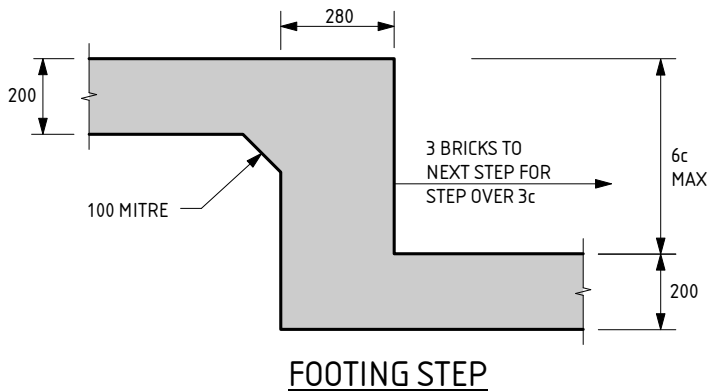
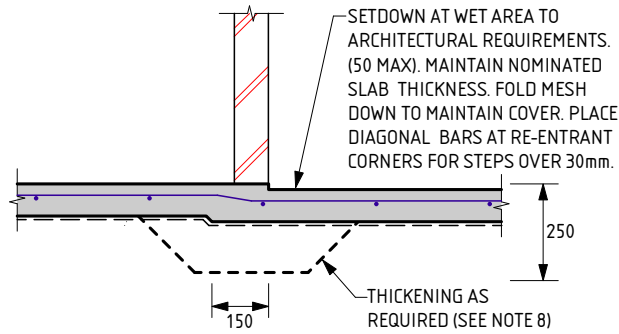
External Reference

The Site Classification is in accordance with Galt Geotechnics Report Number J1501153 008 L Rev0 dated 25 January 2022. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report. An additional geotechnical investigation may result in a reduced footing detail, please contact this office for further recommendations.

-- END OF REPORT --



NOTE:
 WHERE TERMI MESH IS USED THE DEPTH OF EMBEDMENT IS TO BE:
 - AT DOORS AND FULL HEIGHT WINDOWS WITH PAVING OUTSIDE = 200mm
 - AT FULL HEIGHT WINDOWS AND OTHER LOCATIONS WHERE SOIL OUTSIDE = 230mm
 - THESE DEPTHS SATISFY TERMI MESH REQUIREMENTS



D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER.
- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- CONCRETE TO CONFORM WITH AS 3600.
- BLENDED CEMENT TO CONFORM WITH AS 3972.
- ALL CONCRETE TO BE N20/20/100.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 3:1 USE THE FOLLOWING:
 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

D10



Zemia Pty. Ltd. (ABN: 71 349 772 837) ATF The Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers
 1 ERINDALE ROAD, BALCATTA W.A. 6021

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PROJECT: LOT 222 BYFIELD RD SOUTHERN RIVER
 CLIENT: POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE: 1:20
 DATE: 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
LOT 222 BYFIELD RD SOUTHERN RIVER

CLIENT : POLKAMP PTY LTD C/- PARCEL PROPERTY

SCALE 1:20

DATE 11/5/23

APPROVED

EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :
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SCALE 1:20

DATE 11/5/23

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2599420

CLIENT POLKAMP PTY LTD C/- PARCEL PROPERTY
JOB ADDRESS LOT 223 BYFIELD RD SOUTHERN RIVER
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1098933
DATE OF ASSESSMENT 10/5/23

SITE RECORD



SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	D10	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Yes	<i>(see NOTE 2.)</i>
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N2	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	2	
-TOPOGRAPHIC	T0	
-SHIELDING	No Shielding	

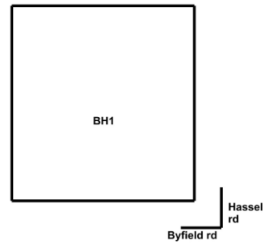
WA | QLD | NSW | VIC

1 Erindale Road, Balcatta, Western Australia 6021 | PO Box 792, Balcatta, Western Australia 6914
 Phone (+618) 9205 4500 | Fax (+618) 9205 4501 | Email wageotechsite@structerre.com.au | Web www.structerre.com.au
 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Structerre Consulting Engineers

SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand - brown; 1800 end of hole.

APPROXIMATE BOREHOLE LOCATIONS



NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

NOTE 2 Bushfire - Prone Area

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ADDITIONAL NOTES / REQUIREMENTS

Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

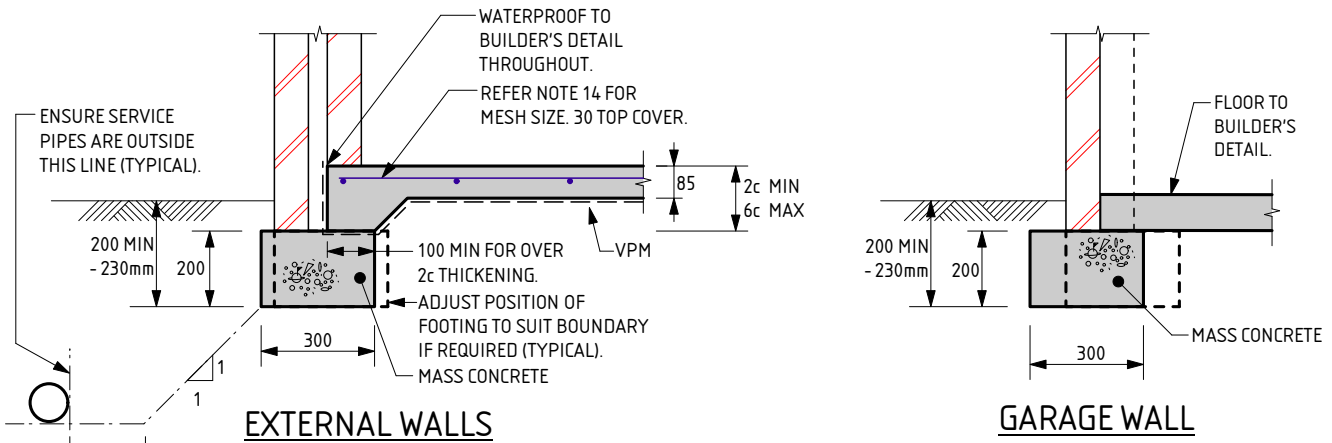
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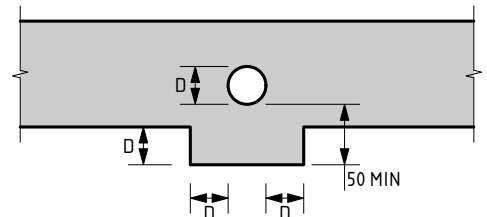
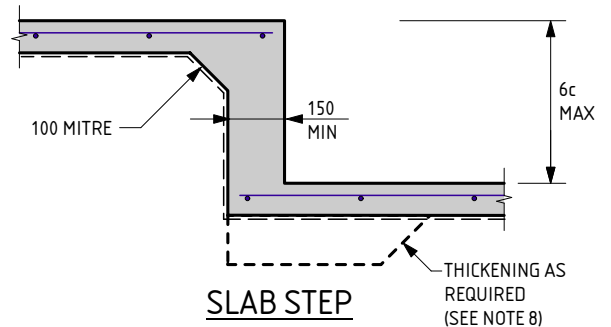
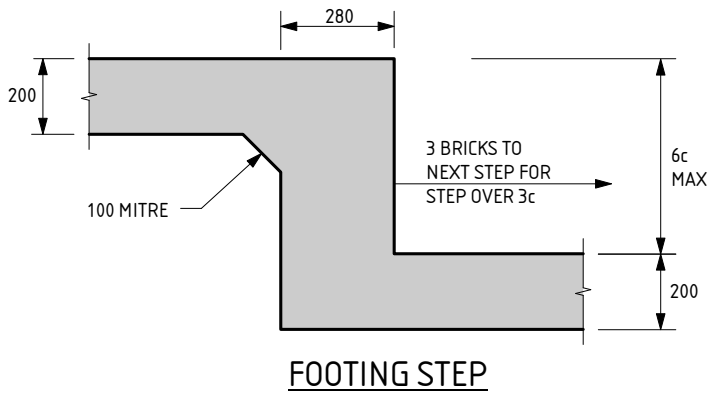
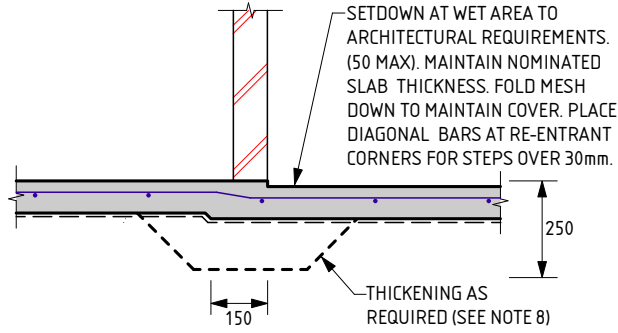
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-- END OF REPORT --



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D10 FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
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- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
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 USE SL53 MESH FOR SLAB SPAN UP TO 22m.
 USE SL52/SL63 MESH FOR SLAB SPAN UP TO 26m.
 USE SL62 MESH FOR SLAB SPAN UP TO 28m.
 USE SL72 MESH FOR SLAB SPAN UP TO 32m.
 30 TOP COVER TO REINFORCEMENT.
- CURE SLAB AS DETERMINED BY ENGINEER.
- MAXIMUM HEIGHT OF CAVITY WALL TO BE 2750mm ABOVE FLOOR LEVEL.
- THIS DESIGN IS IN ACCORDANCE WITH AS2870 SECTIONS 4.4 AND 4.6, AND THE EXPECTED PERFORMANCE IS AS PER CLAUSE 1.3 OF AS2870.
- A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- THE SLAB DESIGN IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES.

QUALITY CONTROL PROGRAM REQUIREMENTS
 1. SLAB DEPTH IS TO BE CONFIRMED BY STRUCTURER ON SITE.

SERVICE PIPE DIAGRAM

- MINIMUM HORIZONTAL DISTANCE BETWEEN 2 PENETRATIONS TO BE 2 x DIAMETER OF THE LARGER PIPE.
- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON CLASS A STABLE SITES.
 DATE LAST MODIFIED - 13/02/23

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EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
 - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
 - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
 - c. A COASTAL CORROSION CLASSIFICATION,
 - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
 - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
 - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
 - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
 - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
 - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
 - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
 - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF ≤ 0.11 . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF > 0.11 , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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