GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1 – To be submitted with Development Application

Development Application for _____
Name of Applicant

Address of site 120 McCarrs Creek Road, Church Point

The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk ***Declaration made by geotechnical engineer or engineering geologist or coastal engineer (where applicable) as part of a geotechnical report***

I, Ben White *on behalf of* **White Geotechnical Group** Pty Ltd
(Insert Name) (Trading or Company Name)

on this the 2/10/24 certify that I am a geotechnical engineer or engineering geologist or coastal engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009 and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least $10million.

I:
Please mark appropriate box

☒ have prepared the detailed Geotechnical Report referenced below in accordance with the Australia Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009

☒ am willing to technically verify that the detailed Geotechnical Report referenced below has been prepared in accordance with the Australian Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009

☐ have examined the site and the proposed development in detail and have carried out a risk assessment in accordance with Section 6.0 of the Geotechnical Risk Management Policy for Pittwater - 2009. I confirm that the results of the risk assessment for the proposed development are in compliance with the Geotechnical Risk Management Policy for Pittwater - 2009 and further detailed geotechnical reporting is not required for the subject site.

☐ have examined the site and the proposed development/alteration in detail and I am of the opinion that the Development Application only involves Minor Development/Alteration that does not require a Geotechnical Report or Risk Assessment and hence my Report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements.

☐ have examined the site and the proposed development/alteration is separate from and is not affected by a Geotechnical Hazard and does not require a Geotechnical Report or Risk Assessment and hence my Report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements.

☐ have provided the coastal process and coastal forces analysis for inclusion in the Geotechnical Report

Geotechnical Report Details:

Report Title: Geotechnical Report **120 McCarrs Creek Road, Church Point**
Report Date: 2/10/24

Author: BEN WHITE

Author's Company/Organisation: **WHITE GEOTECHNICAL GROUP PTY LTD**

Documentation which relate to or are relied upon in report preparation:

Australian Geomechanics Society Landslide Risk Management March 2007.

White Geotechnical Group company archives.

I am aware that the above Geotechnical Report, prepared for the abovementioned site is to be submitted in support of a Development Application for this site and will be relied on by Pittwater Council as the basis for ensuring that the Geotechnical Risk Management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature _____

Name Ben White

Chartered Professional Status MScGEOL AIG., RPGeo

Membership No. 10306

Company **White Geotechnical Group Pty Ltd**

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1(a) - Checklist of Requirements for Geotechnical Risk Management Report for Development Application

Development Application for _____
Name of Applicant

Address of site 120 McCarrs Creek Road, Church Point

The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk Management Geotechnical Report. This checklist is to accompany the Geotechnical Report and its certification (Form No. 1).

Geotechnical Report Details:

Report Title: Geotechnical Report **120 McCarrs Creek Road, Church Point**

Report Date: 2/10/24

Author: BEN WHITE

Author's Company/Organisation: WHITE GEOTECHNICAL GROUP PTY LTD

Please mark appropriate box

- ☒ Comprehensive site mapping conducted **18/7/24** (date)
- ☒ Mapping details presented on contoured site plan with geomorphic mapping to a minimum scale of 1:200 (as appropriate)
- ☒ Subsurface investigation required
  - ☐ No Justification _____
  - ☒ Yes Date conducted **18/7/24**
- ☒ Geotechnical model developed and reported as an inferred subsurface type-section
- ☒ Geotechnical hazards identified
  - ☒ Above the site
  - ☒ On the site
  - ☐ Below the site
  - ☐ Beside the site
- ☒ Geotechnical hazards described and reported
- ☒ Risk assessment conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009
  - ☒ Consequence analysis
  - ☒ Frequency analysis
- ☒ Risk calculation
- ☒ Risk assessment for property conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009
- ☒ Risk assessment for loss of life conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009
- ☒ Assessed risks have been compared to "Acceptable Risk Management" criteria as defined in the Geotechnical Risk Management Policy for Pittwater - 2009
- ☒ Opinion has been provided that the design can achieve the "Acceptable Risk Management" criteria provided that the specified conditions are achieved.
- ☒ Design Life Adopted:
  - ☒ 100 years
  - ☐ Other _____ specify
- ☒ Geotechnical Conditions to be applied to all four phases as described in the Geotechnical Risk Management Policy for Pittwater - 2009 have been specified
- ☒ Additional action to remove risk where reasonable and practical have been identified and included in the report.
- ☐ Risk assessment within Bushfire Asset Protection Zone.

I am aware that Pittwater Council will rely on the Geotechnical Report, to which this checklist applies, as the basis for ensuring that the geotechnical risk management aspects of the proposal have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated, and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature _____

Name Ben White

Chartered Professional Status MScGEOL AIG., RPGeo

Membership No. 222757

Company **White Geotechnical Group Pty Ltd**

GEOTECHNICAL INVESTIGATION:

House Extension and New Garage at **120 McCarrs Creek Road, Church Point**

1. Proposed Development

1.1 Partially demolish the existing decking, extend level 1 of the house on the downhill side and construct a deck on the W side of the ground floor.

1.2 Construct a new garage and extend the inclined lift on the uphill side of the existing garage.

1.3 Other minor internal and external additions and alterations.

1.4 Details of the proposed development are shown on 11 drawings prepared by Studio Etic, project number 105, drawings numbered CD D05, CD E01 to CD E03, CD F01 to F03, revision A. CD D04, revision C. CD D02, revision I. CD D03, revision J. CD D01, revision K. All dated 20.09.24.

2. Site Description

2.1 The site was inspected on the 18th July, 2024.

2.2 This waterfront residential property is on the low side of the road and has a NE aspect. It is located on the steeply graded lower reaches of a hillslope. The natural slope falls across the property at an average angle of ~21°. The slope above the property continues at similar steep angles.

2.3 At the road frontage, a shared concrete ROW (Right of Carriageway) runs down and across the slope (Photo 1) to a driveway (Photo 2) and garage on the uphill side of the subject property. The steep slope above and below the cut for the ROW has a covering of dense vegetation and is currently considered to be stable (Photo 1). A cut for the driveway on the subject property is supported by a stable low rendered masonry retaining wall that approximates the W common boundary (Photo 2). Below

the driveway, a cut for the neighbouring house has been taken through Low to Medium Strength Sandstone bedrock. The garage (Photo 3) is supported on brick and concrete block walls. No significant signs of movement were observed in the supporting walls.

A band of Medium Strength Sandstone outcrops and steps ~4m vertically down the property below the garage (Photo 4). The outcrop exhibits jointing up to 80mm wide and was slightly undercut in places. Any significantly large jointed or undercut portions are sufficiently thick relative to the overhang length and display no horizontal cracking when viewed from above or below. Additionally, the wooden posts for the stairs are sufficiently set back from the undercut portions of the rock. As such, we consider this outcrop stable.

A timber log retaining wall (Photo 5) reaching ~1.5m high approximates the uphill common boundary and supports a fill for a level lawn on the uphill neighbouring property. The wall was measured to be tilting downslope up to ~15° and some of the upper log sleepers had failed. See **Section 12** for advice regarding this retaining wall. A cut on the uphill side of the house is supported by a stable mortared sandstone block retaining wall reaching up to ~1.7m high (Photo 6). To maintain ongoing stability, these walls require occasional maintenance which may involve re-mortaring/restacking. The part three-story brick and timber clad house (Photo 7) is supported on brick walls. No significant signs of movement were observed in the visible supporting walls. A series of low timber log retaining walls terrace the slope below the house (Photo 8) and support fill for garden bedding. Some of the retaining walls were measured to be tilting downslope up to ~10°. Additionally, the timber walkway (Photo 9) tilts up to ~4° (from horizontal) in some locations. See **Section 12** for advice regarding the retaining walls and timber walkway. Detached joint blocks are scattered on the steep slope in this location and were observed to be sufficiently embedded in stable positions (Photo 10). The slope below the walkway is retained by

a stable stacked boulder retaining wall (Photo 11). Rounded rocks have been laid at the waterfront to manage erosion (Photo 12).

3. Geology

The Sydney 1:100 000 Geological Sheet indicates the site is underlain by Alluvial Stream and Estuarine Sediment (Qha), although the Narrabeen Group Rocks is shown close to the uphill property boundary and at a residential scale the map is not always accurate. Ground testing and observations on site indicate that the proposed works are underlain by geology which is consistent with the Narrabeen Group Rocks which are described as interbedded laminite, shale, and quartz to lithic quartz sandstone.

4. Subsurface Investigation

One hand Auger Hole (AH) was put down to identify the soil materials. Eight Dynamic Cone Penetrometer (DCP) tests were put down to determine the relative density of the overlying soil and the depth to weathered rock. The locations of the tests are shown on the site plan attached. It should be noted that a level of caution should be applied when interpreting DCP test results. The test will not pass through hard buried objects so in some instances it can be difficult to determine whether refusal has occurred on an obstruction in the profile or on the natural rock surface. This is expected to have occurred for DCP tests 4, 5, and 7 which are likely to have hit refusal on detached sandstone joint blocks scattered throughout the soil profile. But due to the possibility that the actual ground conditions vary from our interpretation there should be allowances in the excavation and foundation budget to account for this. We refer to the appended “Important Information about Your Report” to further clarify. The results are as follows:

GROUND TEST RESULTS ON THE NEXT PAGE

AUGER HOLE 1 – AH1 (Photo 13)

Depth (m)	Material Encountered
0.0 to 0.2	**CLAYEY TOPSOIL**, brown, stiff, dry, fine to medium grained.
0.2 to 0.5	**SANDY CLAY COLLUVIUM**, mottled maroon, brown, and yellow, very stiff, damp, fine to medium grained, organic material (roots) present.
0.5 to 0.8	**SANDY CLAY COLLUVIUM**, mottled yellow and grey, very stiff, damp, fine to medium grained, soil lenses throughout the mottling, organic material (roots) present.

End of test @ 0.8m in Sandy Clay Colluvium. No water table encountered.

DCP TEST RESULTS – Dynamic Cone Penetrometer

Equipment: 9kg hammer, 510mm drop, conical tip. Standard: AS1289.6.3.2 - 1997

Depth(m) Blows/0.3m	DCP 1	DCP 2	DCP 3	DCP 4	DCP 5	DCP 6	DCP 7	DCP 8
0.0 to 0.3	Rock Exposed at Surface	Rock Exposed at Surface	11	25	3	2	1F	2
0.3 to 0.6			20	22	6	2	2	7
0.6 to 0.9			17	#	4	6	4	8
0.9 to 1.2			20		7	4	13	13
1.2 to 1.5			50		6	3	#	13
1.5 to 1.8			#		7	4		8
1.8 to 2.1					#	6		19
2.1 to 2.4						9		#
2.4 to 2.7						14		
2.7 to 3.0						19		
3.0 to 3.3						20		
3.3 to 3.6						35		
3.6 to 3.9						#		
			End of Test @ 1.5m	Refusal @ 0.5m	Refusal @ 1.7m	End of Test @ 3.6m	Refusal @ 1.2m	Refusal on Rock @ 2.0m

#refusal/end of test. F=DCP fell after being struck showing little resistance through all or part of the interval.

DCP Notes:

DCP1 – Low to Medium Strength Sandstone exposed at surface.
DCP2 – Medium Strength Sandstone exposed at surface.
DCP3 – End of test @ 1.5m, DCP still very slowly going down, maroon sand and brown sandy clay on dry tip.
DCP4 – Refusal @ 0.5m, DCP bouncing, white, orange, and maroon impact dust maroon and orange clay on dry tip.
DCP5 – Refusal @ 1.7m, DCP bouncing, brown sandy clay on dry tip and in collar above tip.
DCP6 – End of test @ 3.6m, DCP still very slowly going down, brown sandy clay on damp tip and in collar above tip, clay smeared up DCP rod.
DCP7 – Refusal @ 1.2m, DCP bouncing, brown clay and maroon sand on damp tip.
DCP8 – Refusal on Rock @ 2.0m, DCP thudding on rock surface, brown and maroon clay on wet tip.

5. Geological Observations/Interpretation

The natural slope materials are colluvial at the near surface and residual at depth. In the test locations, the ground materials consist of a clayey topsoil over sandy clay colluvium. Younger alluvial sediment is likely to be encountered at the lower boundary. Filling has been placed behind retaining walls for landscaping. The clays merge into the weathered zone of the underlying shale at depths of between 1.2m to 3.3m below the current surface, noting tests 5 and 6 were taken behind a retaining wall supporting at least 1.0m of fill. This variation in the depth to weathered rock is due to the presence of filling and a variable weathering profile. The weathered zone is interpreted as Extremely Low to Very Low Strength Shale. Underneath the driveway and garage, a band of sandstone can be seen outcropping through the otherwise shale-dominated profile. From our previous experience in the Narrabeen Group, it is likely any sandstone bands will be limited in thickness and extent. See Type Section attached for a diagrammatical representation of the expected ground materials.

6. Groundwater

Normal ground water seepage is expected to move over the denser and less permeable clay and weathered rock layers, as well as the buried surface of the sandstone. The water table

was not encountered during the testing but is expected to sit just above the waterline. As such, it is expected to be metres below the base of the proposed works.

7. Surface Water

No evidence of surface flows were observed on the property during the inspection. It is expected that normal sheet wash will move onto the site from above the property during heavy down pours. This will move down the slope at a relatively high velocity due to the steep slope.

Should the owners be aware, or if at a later time, become aware that overland flows enter the property during prolonged heavy rainfall, our office is to be contacted so appropriate drainage advice can be provided to intercept the flows. It is a condition of the risk assessment in **Section 8** that this be done.

8. Geotechnical Hazards and Risk Analysis

No geotechnical hazards were observed below or beside the property. The steeply graded slope that falls across the property and continues above is a potential hazard (**Hazard One**). The tilting retaining walls and walkway are a potential hazard (**Hazard Two**).

RISK ANALYSIS SUMMARY ON THE NEXT PAGE

Risk Analysis Summary

HAZARDS	Hazard One	Hazard Two
TYPE	The steep slope that falls across the property and continues above failing and impacting on the proposed works.	Further movement of the log retaining walls and timber walkway (Photos 5,8, and 9) that that will eventually result in failure.
LIKELIHOOD	'Unlikely' (10^{-4})	'Possible' (10^{-3})
CONSEQUENCES TO PROPERTY	'Medium' (15%)	'Minor' (10%)
RISK TO PROPERTY	'Low' (2×10^{-5})	'Moderate' (5×10^{-5})
RISK TO LIFE	9.1×10^{-7}/annum	5.3×10^{-6}/annum
COMMENTS	This level of risk is 'ACCEPTABLE', provided the recommendations in **Section 7 & 12** are followed.	This level of risk to property is 'UNACCEPTABLE'. To move the risk to 'TOLERABLE' levels, the recommendations in **Section 12** are to be followed.

(See Aust. Geomech. Jnl. Mar 2007 Vol. 42 No 1, for full explanation of terms)

9. Suitability of the Proposed Development for the Site

The proposed development is suitable for the site. No geotechnical hazards will be created by the completion of the proposed development provided it is carried out in accordance with the requirements of this report and good engineering and building practice.

10. Stormwater

There is fall to the waterfront below. All stormwater or drainage runoff from the proposed works is to be piped to the waterfront through any tanks that may be required by the regulating authorities.

11. Excavations

Apart from those for footings and possible minor levelling, no excavations are required.

12. Site Maintenance/Remedial Works

The ~1.5m high timber log retaining wall which approximates the uphill common boundary was measured to be tilting downslope at a maximum angle of ~15° (Photo 5) and some of the sleepers had failed. Similarly, the low timber log retaining walls, as well as the timber walkway (Photos 8 & 9) were tilting downslope. As such, a plan is to be formulated with the uphill neighbouring residents, and the dilapidated potion of the ~1.5m timber retaining wall is to be rebuilt or remediated as part of the proposed works so that it meets current engineering standards. The low timber log retaining walls and walkway are to be monitored by the owners on an on an annual basis, or after heavy and prolonged rainfall events, whichever occurs first. A photographic record of these inspections is to be kept. Should further movement occur these structures are also to be remediated so they meet current engineering standards. We can carry out these inspections upon request.

Where slopes approach or exceed 20°, such as on this site, it is prudent for the owners to occasionally inspect the slope (say annually or after heavy rainfall events, whichever occurs first). Should any of the following be observed: movement or cracking in retaining walls, cracking in any structures, cracking or movement in the slope surface, tilting or movement in established trees, leaking pipes, or newly observed flowing water, or changes in the erosional process or drainage regime, then a geotechnical consultant should be engaged to assess the slope. We can carry out these inspections upon request. The risk assessment in **Section 8** is subject to this site maintenance being carried out.

13. Foundations

Due to the grade of the slope, any new footings for the house and decking can be supported on piers taken to and embedded ~0.6m into to Extremely Low to Very Low Strength Rock where necessary. This ground material is expected at depths of between ~1.2m to 3.3m below the current surface in the area of the proposed works. As such, the required depths of the piered foundations are expected to be between ~2.1m to 4.2m below the current surface measured from the downhill side of the pier hole.

The foundations supporting the existing house are currently unknown. Ideally, footings should be founded on the same footing material across the old and new portions of the structure. Where the footing material does change across the structure, construction joints or similar are to be installed to prevent differential settlement, where the structure cannot tolerate such movement in accordance with a 'Class M' site.

Piers socketed at least ~0.1m into Low to Medium Strength Sandstone are suitable footings for the proposed garage and inclined lift as measured from the downhill side of the pier hole. This ground material is expected to be encountered at shallow depths across the footprint of the garage, as it is exposed at the cut for the E neighbouring house.

A maximum allowable bearing pressure of 600kPa can be assumed for footings on Extremely Low to Very Low Strength Rock or better.

As the bearing capacity of clay and shale reduces when it is wet, we recommend the footings be dug, inspected, and poured in quick succession (ideally the same day if possible). If the footings get wet, they will have to be drained and the soft layer of wet clay or shale on the footing surface will have to be removed before concrete is poured.

If a rapid turnaround from footing excavation to the concrete pour is not possible, a sealing layer of concrete may be added to the footing surface after it has been cleaned and inspected by the geotechnical consultant.

NOTE: If the contractor is unsure of the footing material required, it is more cost-effective to get the geotechnical consultant on site at the start of the footing excavation to advise on footing depth and material. This mostly prevents unnecessary over-excavation in clay-like shaly-rock but can be valuable in all types of geology.

14. Geotechnical Review

The structural plans are to be checked and certified by the geotechnical engineer as being in accordance with the geotechnical recommendations. On completion, a Form 2B will be issued. This form is required for the Construction Certificate to proceed.

15. Inspections

The client and builder are to familiarise themselves with the following required inspections as well as council geotechnical policy. We cannot provide certification for the Occupation Certificate or the owner if the following inspections have not been carried out during the construction process.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.

Nathan Gardner B.Sc. (Geol. & Geophys. & Env. Stud.)
AIG., RPGeo Geotechnical & Engineering.
No. 10307
Engineering Geologist & Environmental Scientist.

Reviewed By:

Ben White M.Sc. Geol.,
AIG., RPGeo Geotechnical & Engineering.
No. 10306
Engineering Geologist.

REGISTERED PROFESSIONAL GEOSCIENTIST
AUSTRALIAN INSTITUTE OF GEOSCIENTISTS
BENJAMIN WHITE
RPGeo No:
10306

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

Photo 9

Photo 10

Photo 11

Photo 12

Photo 13 – Ah1 – downhole is left to right

Important Information about Your Report

It should be noted that Geotechnical Reports are documents that build a picture of the subsurface conditions from the observation of surface features and testing carried out at specific points on the site. The spacing and location of the test points can be limited by the location of existing structures on the site or by budget and time constraints of the client. Additionally, the test themselves, although chosen for their suitability for the particular project, have their own limiting factors. The testing gives accurate information at the location of the test, within the confines of the test's capability. A geological interpretation or model is developed by joining these test points using all available data and drawing on previous experience of the geotechnical consultant. Even the most experienced practitioners cannot determine every possible feature or change that may lie below the earth. All of the subsurface features can only be known when they are revealed by excavation. As such, a Geotechnical report can be considered an interpretive document. It is based on factual data but also on opinion and judgement that comes with a level of uncertainty. This information is provided to help explain the nature and limitations of your report.

With this in mind, the following points are to be noted:

- If upon the commencement of the works the subsurface ground or ground water conditions prove different from those described in this report, it is advisable to contact White Geotechnical Group immediately, as problems relating to the ground works phase of construction are far easier and less costly to overcome if they are addressed early.

- If this report is used by other professionals during the design or construction process, any questions should be directed to White Geotechnical Group as only we understand the full methodology behind the report's conclusions.

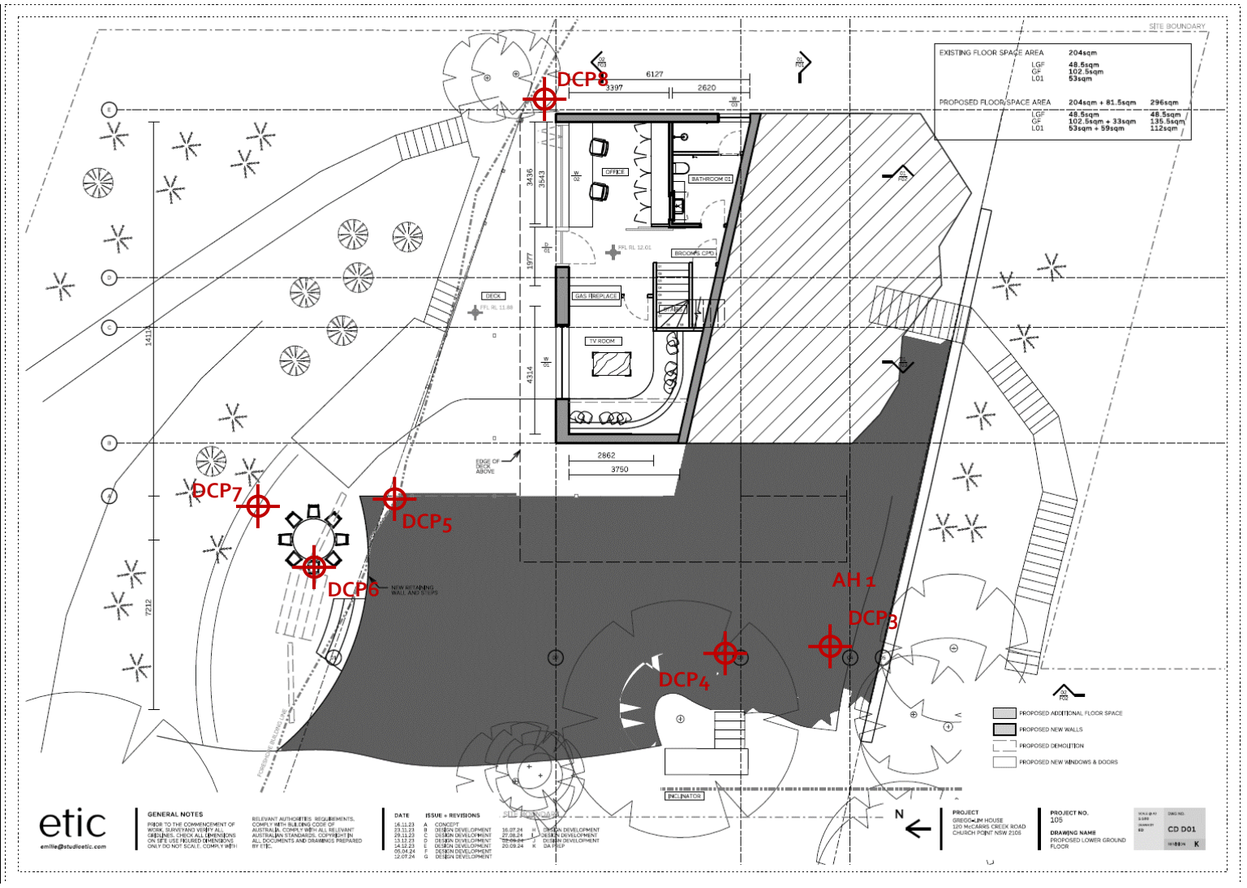
- The report addresses issues relating to your specific design and site. If the proposed project design changes, aspects of the report may no longer apply. Contact White Geotechnical if this occurs.

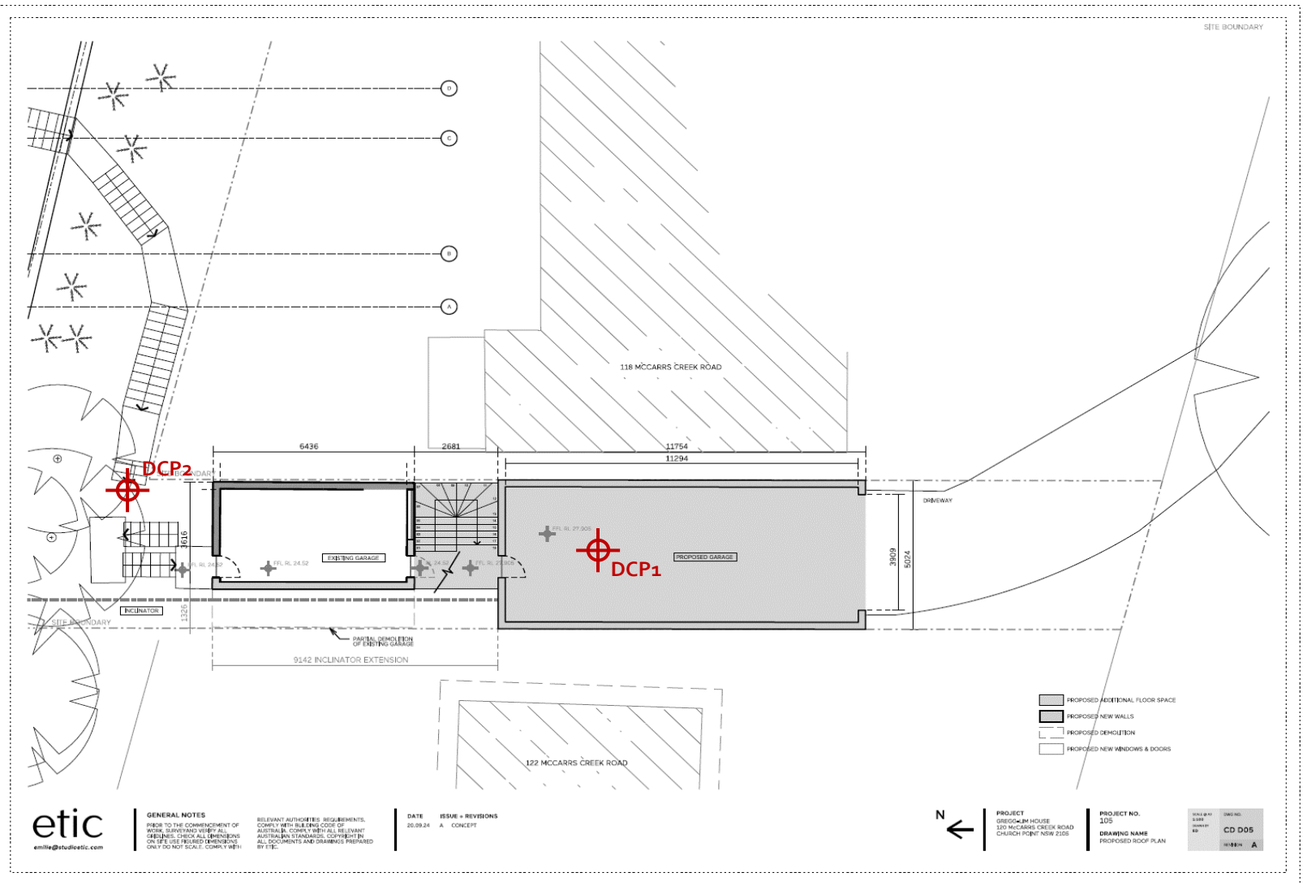
- This report should not be applied to any other project other than that outlined in section 1.0.

- This report is to be read in full and should not have sections removed or included in other documents as this can result in misinterpretation of the data by others.

- It is common for the design and construction process to be adapted as it progresses (sometimes to suit the previous experience of the contractors involved). If alternative design and construction processes are required to those described in this report, contact White Geotechnical Group. We are familiar with a variety of techniques to reduce risk and can advise if your proposed methods are suitable for the site conditions.

SITE PLAN – showing test locations

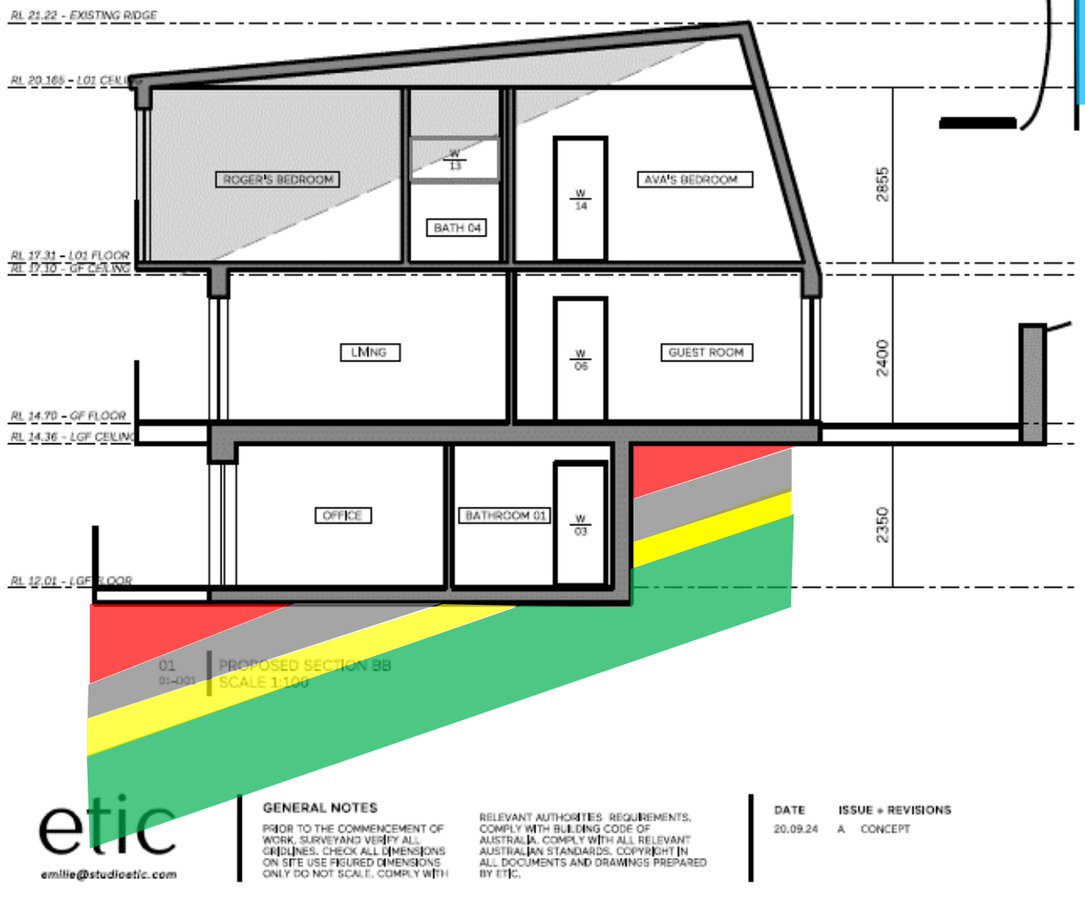




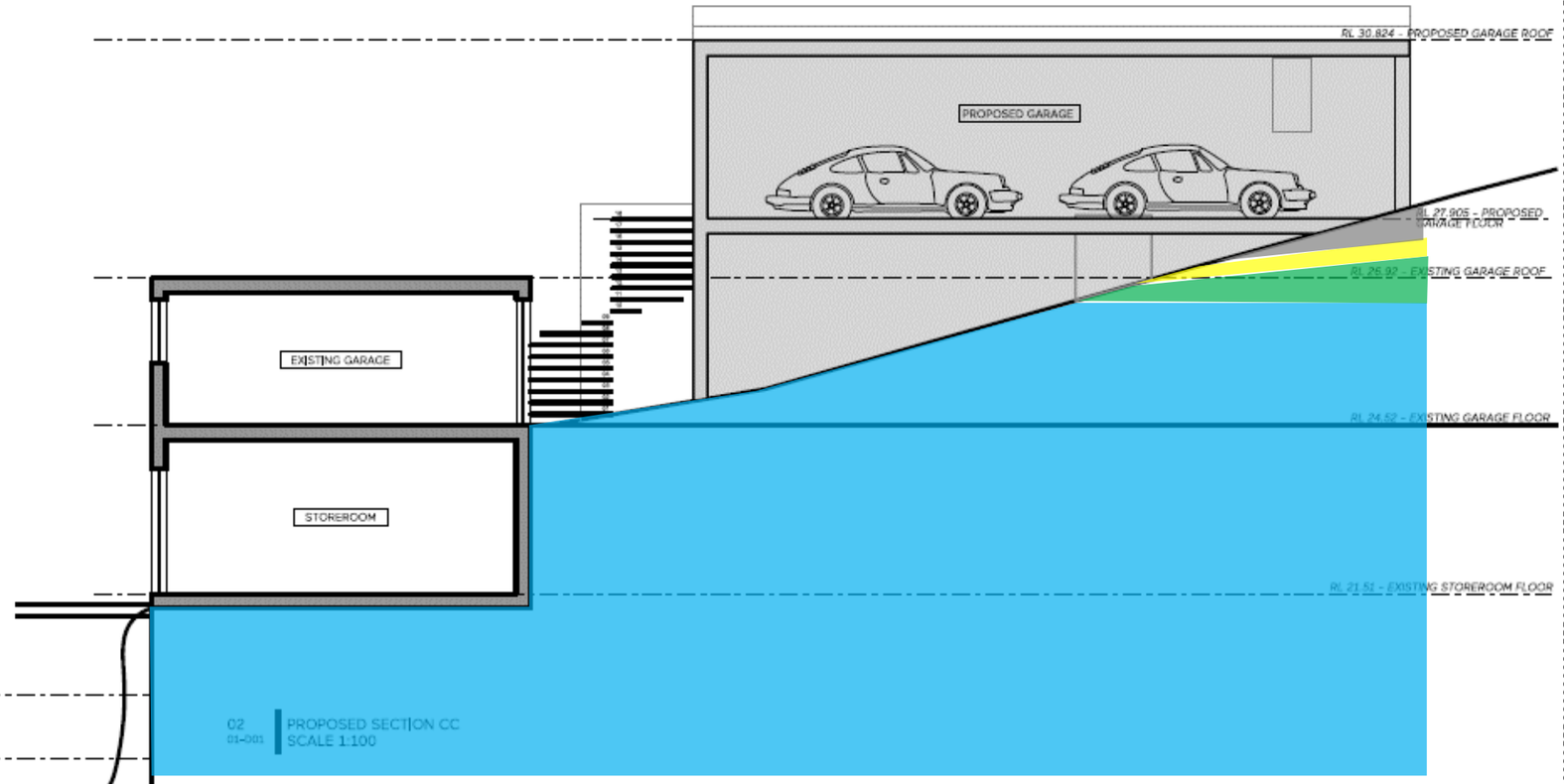
TYPE SECTION – Diagrammatical Interpretation of expected Ground Materials

Expected Ground Materials

- Fill
- Topsoil
- Clay
- Extremely Low to Very Low Strength Rock
- Low to Medium Strength Sandstone



01 01-001 PROPOSED SECTION BB
SCALE 1:100



02 01-001 PROPOSED SECTION CC
SCALE 1:100

- PROPOSED ADDITIONAL FLOOR SPACE
- PROPOSED NEW WALLS
- PROPOSED DEMOLITION
- PROPOSED NEW WINDOWS & DOORS

etic
emilie@studioetic.com

GENERAL NOTES

PRIOR TO THE COMMENCEMENT OF WORK, SURVEYAND VERIFY ALL GRIDLINES. CHECK ALL DIMENSIONS ON SITE USE FIGURED DIMENSIONS ONLY DO NOT SCALE. COMPLY WITH RELEVANT AUTHORITIES REQUIREMENTS. COMPLY WITH BUILDING CODE OF AUSTRALIA. COMPLY WITH ALL RELEVANT AUSTRALIAN STANDARDS. COPYRIGHT IN ALL DOCUMENTS AND DRAWINGS PREPARED BY ETIC.

DATE	ISSUE + REVISIONS	
20.09.24	A	CONCEPT

N

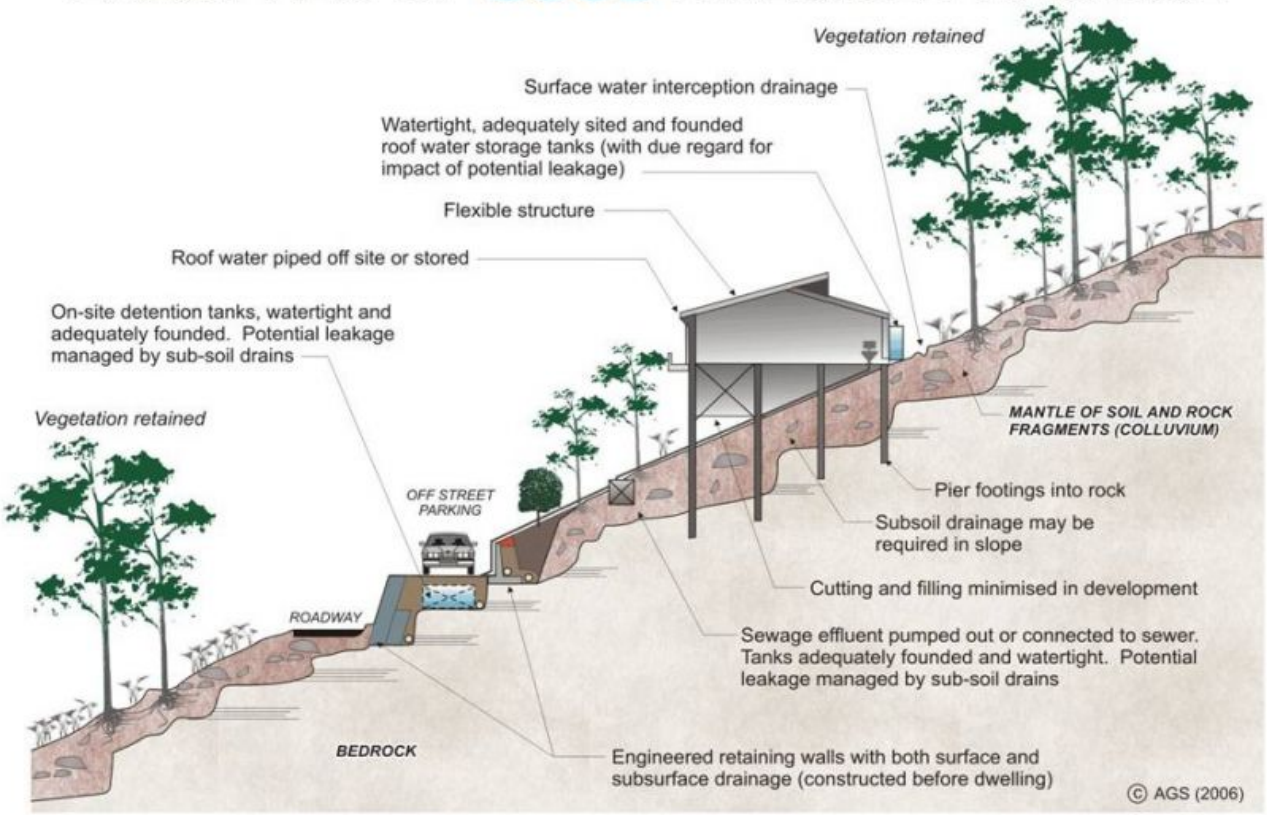
PROJECT
GREGG+LIM HOUSE
120 McCARRS CREEK ROAD
CHURCH POINT NSW 2105

PROJECT NO.
105

DRAWING NAME
.
PROPOSED SECTION BB

SCALE @ A1 1:100
DRAWN BY ED
DWG NO. CD F02
REVISION A

EXAMPLES OF **GOOD** HILLSIDE PRACTICE



EXAMPLES OF **POOR** HILLSIDE PRACTICE