Douglas Partners
Geotechnics / Environment / Groundwater

Integrated Practical Solutions

Report on
Desktop Groundwater Assessment

Proposed Industrial Development
100 South Creek Road, Cromer

Prepared for
EG Funds Management Pty Ltd

Project 86951.00
November 2020

Douglas Partners
Geotechnics / Environment / Groundwater

Document History

Document details

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Status	Electronic	Paper	Issued to
Revision 0	1	-	Will Clark, EG Funds Management Pty Ltd
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Revision 3	1	-	Grant Flannigan, EG Funds Management Pty Ltd

The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

	Signature	Date
Author		5 November 2020
Reviewer		5 November 2020

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FS 604853

Douglas Partners Pty Ltd
ABN 75 053 980 117
www.douglaspartners.com.au
96 Hermitage Road
West Ryde NSW 2114
PO Box 472
West Ryde NSW 1685
Phone (02) 9809 0666
Fax (02) 9809 4095

Douglas Partners
Geotechnics / Environment / Groundwater

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Report on Desktop Groundwater Assessment
Proposed Industrial Development
100 South Creek Road, Cromer

1. Introduction

This report presents the results of a revised desktop groundwater assessment undertaken by Douglas Partners Pty Ltd (DP) for a proposed industrial development at 100 South Creek Road, Cromer. The original assessment was commissioned by Will Clark of EG Funds Management Pty Ltd (EGFM) in an email dated 3 October 2019 and was undertaken in accordance with DP's proposal SYD191040.P.001.Rev0 dated 2 October 2019. This revised assessment was commissioned by Grant Flannigan of EGFM in an email dated 18 September 2020 and was undertaken in accordance with DP's proposal SYD201026 dated 14 September 2020. It is understood that the revised assessment is required for a Section 4.55 application by EGFM to Northern Beaches Council to modify the Council-approved development.

The scope of work included:

- Outlining the anticipated groundwater conditions at the site;
- Preliminary comments on groundwater management with reference to the applicable legislation; and
- Recommendations for intrusive geotechnical investigation

The desktop study did not involve any direct subsurface exploration or sampling and it draws upon information available in the public domain and an understanding of the subsurface conditions at the site based on a previous investigation performed by DP at the site and other investigations undertaken in the vicinity of the site.

This report must be read in conjunction with the notes *'About this Report'* located in Appendix A and other explanatory notes, and the report should be kept in its entirety without separation of individual pages or sections.

2. Proposed Development

The "Section 4.55 Application" Issue 4 of architectural drawings for the proposed development by SBA Architects Pty Ltd (dated 12 October 2020), included in Appendix B for reference, show a new light-industrial development over the western half of the broader property, referred to as 100 South Creek Road, Cromer. The new development involves 11 warehouse units with associated mezzanine offices distributed over two main buildings (Buildings 1 and 2), located on the western side of a riparian area and creek channel/culvert. The buildings are divided by a central driveway with parking on either side for the warehouses.

A part-basement carpark is indicated beneath the northern half of Building 1 and the central parts of the central driveway and Building 2, with a Finished Floor Level (FFL) at RL 14.200 m, relative to the Australian Height Datum (AHD). Beneath the southern ends of central driveway and both Buildings 1 and 2, over the southern half of the development site, "Self-Storage Units" are shown with a FFL of RL 13.850 m AHD. Based on contour plan information it would appear that the formation of the storage units will generally involve excavation depths in the order of 0.5 – 0.7 m below present ground surface levels. For the proposed part-basement carpark, it would appear that the excavation depths will increase from 0.3 m along its southern perimeter, to between 1.5 m and 2.8 m from east to west along its northern perimeter.

An existing heritage-listed building will be retained along the Inman Street frontage, together with its rear courtyard (also heritage-listed).

3. Sources of Information

Information on the likely subsurface conditions at the site and the surrounding area was sourced from the following:

- Geological maps published by Geological Survey New South Wales. The relevant map is the Sydney sheet 9130 (Edition 1, 1983) at a scale of 1:100 000;
- NSW government database of registered groundwater bores; and
- Previous geotechnical investigations undertaken by DP at and near the site. In particular, DP carried out a geotechnical investigation of the broader site in 1998 for Roche Products, the pharmaceutical and healthcare company.

4. Geology and Hydrogeology

Reference to the Sydney 1:100 000 Series Geological Map Sheet (9130) indicates that the site is on or near a geological boundary. The upper portion of the site, over the northern half of the broader site, is shown to be underlain by Narrabeen Group rocks of Triassic age (comprising interbedded laminite, shale, quartz and sandstone) and the southern portion is underlain by alluvial stream deposits of Quaternary age (comprising silty to peaty quartz sand, silt and clay). An excerpt from the geological map is given in Figure 1.

Borehole and cone penetration test (CPT) investigations carried out at the site suggest that the geological boundary between areas underlain by bedrock and alluvium is located further to the north than shown on the geological map (and Figure 1), with relatively deep soils encountered over most of the proposed development footprint.

The location of Water NSW-registered groundwater wells is also shown in Figure 1. For the four registered wells located on the site (drilled in 2010), no measurement of the standing water level is recorded. All boreholes (i.e. wells) were drilled to a depth of 7.5 m.

Figure 1. Excerpt from geological map sheet 9130 for Sydney.

5. Site Description

The development site is bounded by commercial properties and a day-care centre to the north and further to the north, Orlando Road, Inman Road to west and South Creek Road to the south.

DP visited the site on 10 October 2019 to undertake a site walkover inspection. At the time of the visit, there were multiple commercial buildings and associated hardstand car parking across the site. A grassed area with a tennis court was located in the north-western part of the site. Numerous medium to large trees were located across the site. The northern end of the site (extending from Orlando Road to the carpark adjacent to Gate 1) has an approximate slope of 20 to 30 degrees. A relatively flat topography was observed from approximately the middle of the site all the way to South Creek Road.

A creek running from north to south was observed along the eastern boundary of the development site. At the northern end of the creek, a steep, high-strength sandstone rock face was also observed. The creek is not visible over the southern half of the site where it has been directed into a culvert that extends beneath the property. Minor creek flows were observed at the time of the inspection.

6. Anticipated Subsurface Conditions

6.1 Subsurface Soil and Rock Profile

Based on the previous DP investigation (1998) undertaken at the site, the subsurface conditions are expected to comprise the following general sequence, described in increasing depth order.

- FILL – silty clay, clayey sand, sand and some building rubble to variable depths of between 0.3 m and about 2 m;
- ALLUVIUM – of interlayered silty sand/sandy silt, organic clay, sand, silty clay and clay down to depths of 10 m to 15 m in the southern part of the site. The alluvium is typically stiff to hard cohesive soils or medium dense sand, but some layers of very soft clay and very loose to loose sand were also indicated.
- SANDSTONE/SHALE/SILTSTONE - Extremely to highly weathered, extremely low and very low strength rock, grading to a low and medium strength, moderately weathered sandstone with depth. The boreholes at the northern end of the proposed building footprint indicate rock depths vary between 2 m and 6 m depth, greatest towards the eastern side of the proposed building footprint.

No boreholes or CPTs were located over the south-western quadrant of the broader property and, as such, the above description is primarily based on the profile encountered in the central area, adjacent to the creek and culvert. It is possible that the depth of the rock reduces towards the west and towards South Creek Road.

6.2 Groundwater

The previous DP investigation at the site (i.e. borehole drilling and CPTs) encountered groundwater between RL 10.4 m and RL 20.3 m AHD for the broader site. It is inferred that the groundwater aquifer is fed by overland and subsurface flows from the elevated (higher ground) areas above, both on and surrounding the site.

Over the lower (southern) part of the site where excavations for the carpark and storage units are proposed, groundwater was typically encountered at depths of between 2.5 m and 4.5 m (i.e. between RL 10 m and RL 14 m AHD), from north to south. It is expected that following periods of prolonged rainfall, groundwater levels within the alluvial soil profile could rise significantly.

Groundwater levels can vary seasonally, due to climatic effects, following periods of rainfall and due to local factors, such as permeability of the soil, changes to drainage conditions and nearby underground services. Localised areas of perched water may also be present at shallow depths in some areas across the site, particularly in the vicinity of surface depressions or poorly drained areas.

7. Discussion

7.1 General

The referenced architectural drawings indicate the FFLs for the part-basement of the proposed development will step down to the south from RL 14.200 m AHD for the car park to RL 13.850 m AHD for the self-storage units. It is noted that this area is closest to the former creek channel and existing culvert, with the deepest soil profile (about 15 m) and a groundwater level that falls from RL 14.4 m at the northern end to RL 10.4m at the southern end of the footprint (from 2.5 m to 4.2 m depth) based on the field work in 1998.

While it is unlikely that excavation for the proposed self-storage units will encounter the groundwater table, some seepage from perched ephemeral water could impact the construction phase. The floor level of the proposed basement car park over the northern half of the development site, however, is shown at RL 14.200 m AHD. This is marginally lower than the groundwater levels recorded at the northern end of this part of the site for the investigations conducted (by DP) in 1998. So, it is possible that construction of the car park could occur without groundwater inflows due to seasonal and climatic variation, but it is likely that the design would need to accommodate water levels rising above RL 14.2 m for the permanent structure. Long-term (contemporary) groundwater level monitoring is recommended in this area of the site, as discussed in the following sections.

7.2 Applicable Legislation for Consideration of Dewatering

The construction of the part-basement car parking and self-storage units that form part of the proposed development constitute an “aquifer interference activity” within the definition of the NSW Water Management Act 2000. As a consequence, application for an aquifer interference approval will generally need to be made to Water NSW, who handle the licensing and assessment of aquifer interference activities in accordance with the “Aquifer Interference Policy “(AIP) of the NSW Department of Primary Industries (Office of Water) dated September 2012. Water NSW will not approve dewatering (if required), unless they are satisfied that adequate arrangements are in force to ensure that no more than minimal harm will be done to the aquifer or its dependent ecosystems as a consequence of it being “interfered with” in the course of the activities to which the approval relates.

The taking of water from the groundwater source may be required for dewatering purposes during construction for the deeper cuts along the northern perimeter of the proposed carpark. In order to discharge construction water if it is encountered, a submission will need to be made to Water NSW for a Construction Dewatering License. A Dewatering Management Plan (DMP) will need to accompany the submission. Depending on the ecosystem and Council requirements, an environmental impact assessment may be required to accompany the License application submission. Approval will also be needed for construction water to be discharged into the stormwater system. Some Councils have advised that they are no longer issuing licenses for disposal to the stormwater system, but that such approval now also needs to be obtained from Water NSW. Treatment may be needed to achieve water quality requirements (e.g. clarity and possibly treatment for PH and metals).

An access licence would be required to take water from the groundwater source during construction, if groundwater is encountered. A separate Water Access Licence would also be necessary for permanent drained basements where the water would be taken from the groundwater source over the long-term.

7.3 Part-Basement Construction Options

It is considered that a 'tanked' basement may be required for the northern end of the car park, where deeper cuts may intersect the groundwater table. A tanked basement is one which is theoretically watertight, via the construction of a perimeter 'cut-off' wall (interlocking piles or diaphragm wall) around the basement with an integrated waterproof base slab and appropriate waterproof seals and linings or membranes. Even with good workmanship, however, some seepage is not uncommon and such seepage would need to be directed to drainage pits or similar. A Water Access Licence is unlikely to be required for the permanent case on this basis.

Alternatively, a drained basement could theoretically be adopted provided that 'cut-off' walls are installed around the northern perimeter of the part-basement to substantially reduce seepage inflows into the carpark under the differential 'head' (pressure) acting outside the basement. It is considered, however, that Water NSW is unlikely to approve a drained basement on the basis of the regulatory framework in play and the potential for 'inflows' of groundwater over the life of the car park structure. The accumulated water would need to be discharged into the stormwater system (under a license) and prior treatment of the groundwater may also be necessary so as not to cause pollution. Also, a long-term Water Access License would generally be required from Water NSW, which would require the acquisition of 'shares' sufficient to cover the expected annual 'take' of water from the aquifer.

Aside from regulations, it is noted that a drained basement will also generally require permanent drainage below the basement floor slab to direct any seepage to the stormwater drainage system. It is likely that iron oxides will precipitate from any such seepage, possibly leading to a build-up of an iron-oxide sludge that can lead to blockages of drainage lines and 'seizing' of the moving elements of pumps. Allowance should be made in the design of permanent drainage systems for removal of this sludge, long-term maintenance requirements, general cleaning and flushing of the drainage systems.

7.4 Further Investigation

The assessment of the type of basement (i.e. drained or tanked) should be made following an intrusive ground investigation of the site with a focus on groundwater monitoring. Given the likelihood that some form of perimeter 'cut-off' wall will be required for the part-basement car park, it will also be important to ascertain the depth to and nature of the bedrock. For the size and nature of the proposed development and expected subsurface conditions, the following ground and groundwater investigation is suggested:

- Drilling of 8 boreholes to depths of 15 – 20 m around the perimeter of the proposed basement excavation, including along the western side of the site (i.e. at Building 1) where no previous investigations (by DP in 1998) were undertaken;
- Installation of three or four groundwater monitoring wells in the drilled boreholes for monitoring, testing and sampling purposes;
- Installation of data loggers in all wells and monitoring for at least six, and preferably twelve, months;
- In situ permeability testing in all of the wells using either the falling or rising-head test method, as appropriate, to provide an indication of the seepage inflows to the basement excavation; and
- Chemical laboratory analysis of groundwater samples to assess likely treatment requirements and options for groundwater disposal.

For the rising head method, the groundwater table level in each well is first measured then groundwater is pumped out of each well so as to temporarily lower the water level in each well, whereupon its depth in each well is again measured to commence the test. The depth to the lowered water level in each well is then measured at regular time intervals as it rises back to the initial groundwater table levels. For the falling head test method, the groundwater table level in each well is first measured then water is poured into each well so as to temporarily increase the water level in each well, whereupon its depth in each well is again measured to commence the test. The depth to the water level in each well is then measured at regular time intervals as it falls back toward the initial groundwater levels.

Given the presence of the fill noted in some of the previous (1998) boreholes and considering the previous land-use of the site, the site should be investigated for contamination in respect of the proposed land-use for the site and also to classify the spoil to the derived from the excavation (for disposal purposes), in accordance with current EPA guidelines.

8. Limitations

Douglas Partners (DP) has prepared this revised report for this project at 100 South Creek Road, Cromer, in accordance with DP's proposal SYD201026 dated 14 September 2020 and acceptance received from Grant Flannigan of EG Funds Management Pty Ltd (EGFM) dated 18 September 2020. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of EGFM for this project only and for the purposes as described in the report. It should not be used by or be relied upon for other projects or purposes on the same or another site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site and nearby sites only at specific sampling and/or testing locations, and then only to the depths investigated and at the time the works were carried out (i.e. pre-2000). Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

The assessment of atypical safety hazards arising from this advice is restricted to the geotechnical and groundwater components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

This report must be read in conjunction with all of the attached notes and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

The scope of work for this report did not include the assessment of surface or sub-surface materials or groundwater for contaminants, within or adjacent to the site. Should evidence of filling of unknown origin be noted in the report, and in particular the presence of building demolition materials, it should be recognised that there may be some risk that such filling may contain contaminants and hazardous building materials.

Douglas Partners Pty Ltd

Appendix A

About This Report

About this Report

Douglas Partners

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix B

Section 4.55 Application Architectural Drawings by SBA

EG - PROPOSED INDUSTRIAL BUILDING

100 SOUTH CREEK ROAD, CROMER, NSW 2099

ISSUE FOR SECTION 4.55 APPLICATION

DRAWING LIST S4.55	
Sheet Number	Sheet Name
S4.55-000	COVERPAGE
S4.55-202	GROUND FLOOR PLAN
S4.55-203	BASEMENT PLAN
S4.55-302	ELEVATIONS 2
S4.55-305	SECTIONS
S4.55-306	SECTIONS 2

SECTION 4.55 **PRELIMINARY**

SBA ARCHITECTS
Commercial Industrial Residential Retail Interior Design
Phone: 02 9929 9988 Web: www.sbaarch.com.au

#	DESCRIPTION	DATE
4	ISSUE FOR S4.55 SUBMISSION	12/10/2020
3	ISSUE FOR S4.55 SUBMISSION	08/10/2020
2	ISSUE FOR S4.55 SUBMISSION	25/09/2020
1	ISSUE FOR S4.55 SUBMISSION	17/09/2020

CLIENT EG

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

NORTH

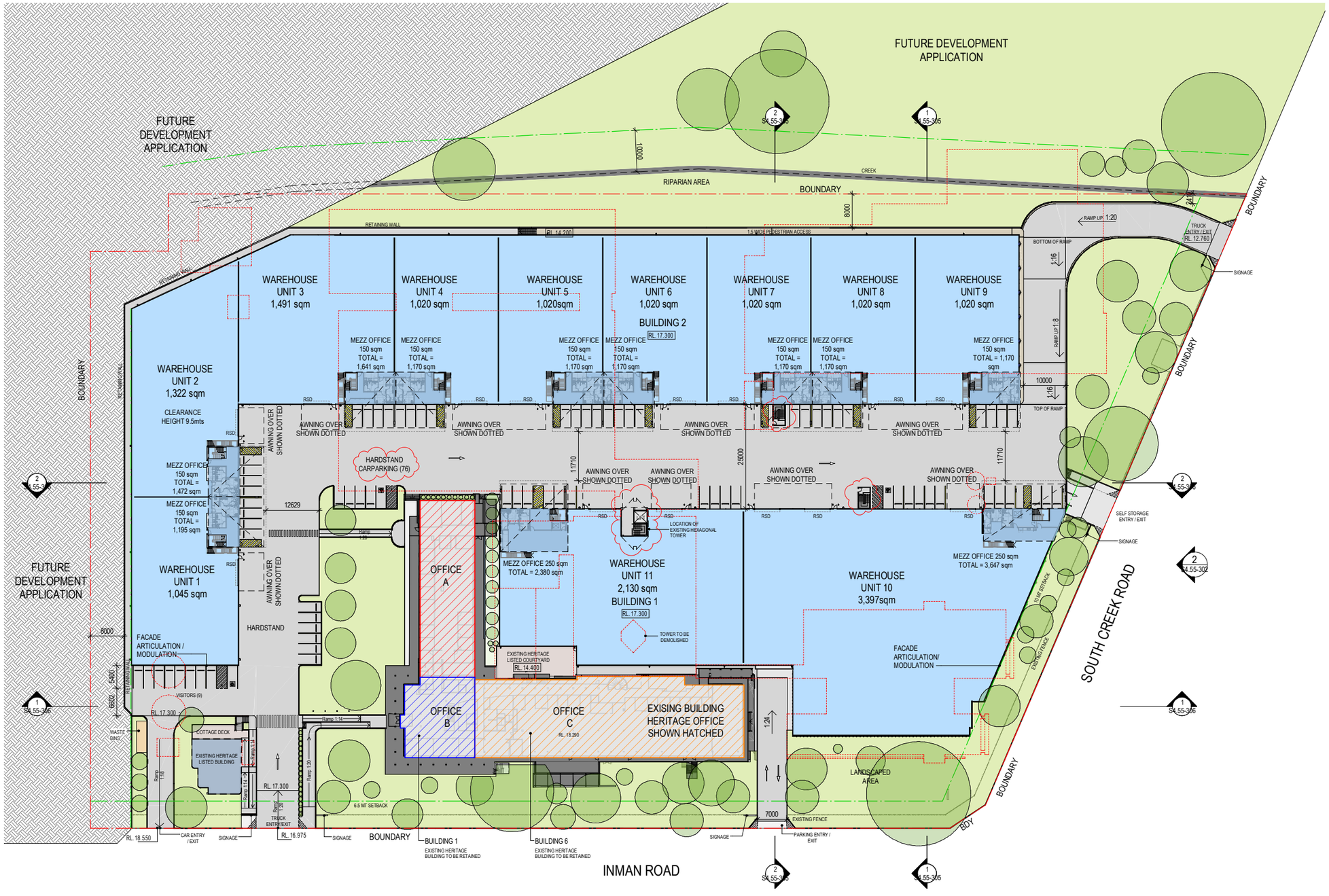
TITLE COVERPAGE

DATE	SCALE	PROJECT NO.	DWG NO.	REVISION
12/10/2020	As indicated @ A1	19110	S4.55-000	4

EG

DEMOLITION LEGEND:

WALL TO BE DEMOLISH



1 GROUND LEVEL 1 : 500

AREA SCHEDULE

SITE AREA		37,031 sq.m
UNIT 1	WAREHOUSE	1,045 sq.m
	MEZZ 1	150 sq.m
UNIT 2	WAREHOUSE	1,322 sq.m
	MEZZ 2	150 sq.m
UNIT 3	WAREHOUSE	1,491 sq.m
	MEZZ 3	150 sq.m
UNIT 4	WAREHOUSE	1,020 sq.m
	MEZZ 4	150 sq.m
UNIT 5	WAREHOUSE	1,020 sq.m
	MEZZ 5	150 sq.m
UNIT 6	WAREHOUSE	1,020 sq.m
	MEZZ 6	150 sq.m
UNIT 7	WAREHOUSE	1,020 sq.m
	MEZZ 7	150 sq.m
UNIT 8	WAREHOUSE	1,020 sq.m
	MEZZ 8	150 sq.m
UNIT 9	WAREHOUSE	1,020 sq.m
	MEZZ 9	150 sq.m
UNIT 10	WAREHOUSE	3,397 sq.m
	MEZZ 10	250 sq.m
UNIT 11	WAREHOUSE	2,130 sq.m
	MEZZ 11	250 sq.m
TOTAL WH. AREA		15,501 sq.m
TOTAL MZZ. OFFICE AREA		1,850 sq.m
HERITAGE OFFICE		
OFFICE UNIT A		570 sq.m
GF - OFFICE UNIT B		309 sq.m
LV1 - OFFICE UNIT B		401 sq.m
LV-1 - OFFICE UNIT C		775 sq.m
GF - OFFICE UNIT C		1,124 sq.m
TOTAL HERITAGE OFFICE AREA		3,179 sq.m
EXISTING COTTAGE		124 sq.m
SELF STORAGE FACILITY		7,000 sq.m
HARDSTAND		5,621 sq.m
TOTAL GFA (excludes basement carpark)		27,654 sq.m
CARPARKING		279 cars
SITE COVERAGE		66%

SECTION 4.55 **PRELIMINARY**

SBA ARCHITECTS
Commercial Industrial Residential Retail Interior Design
Phone: 02 9929 9988 Web: www.sbaarch.com.au

#	DESCRIPTION	DATE
1	ISSUE FOR S4.55 SUBMISSION	12/10/2020

CLIENT EG

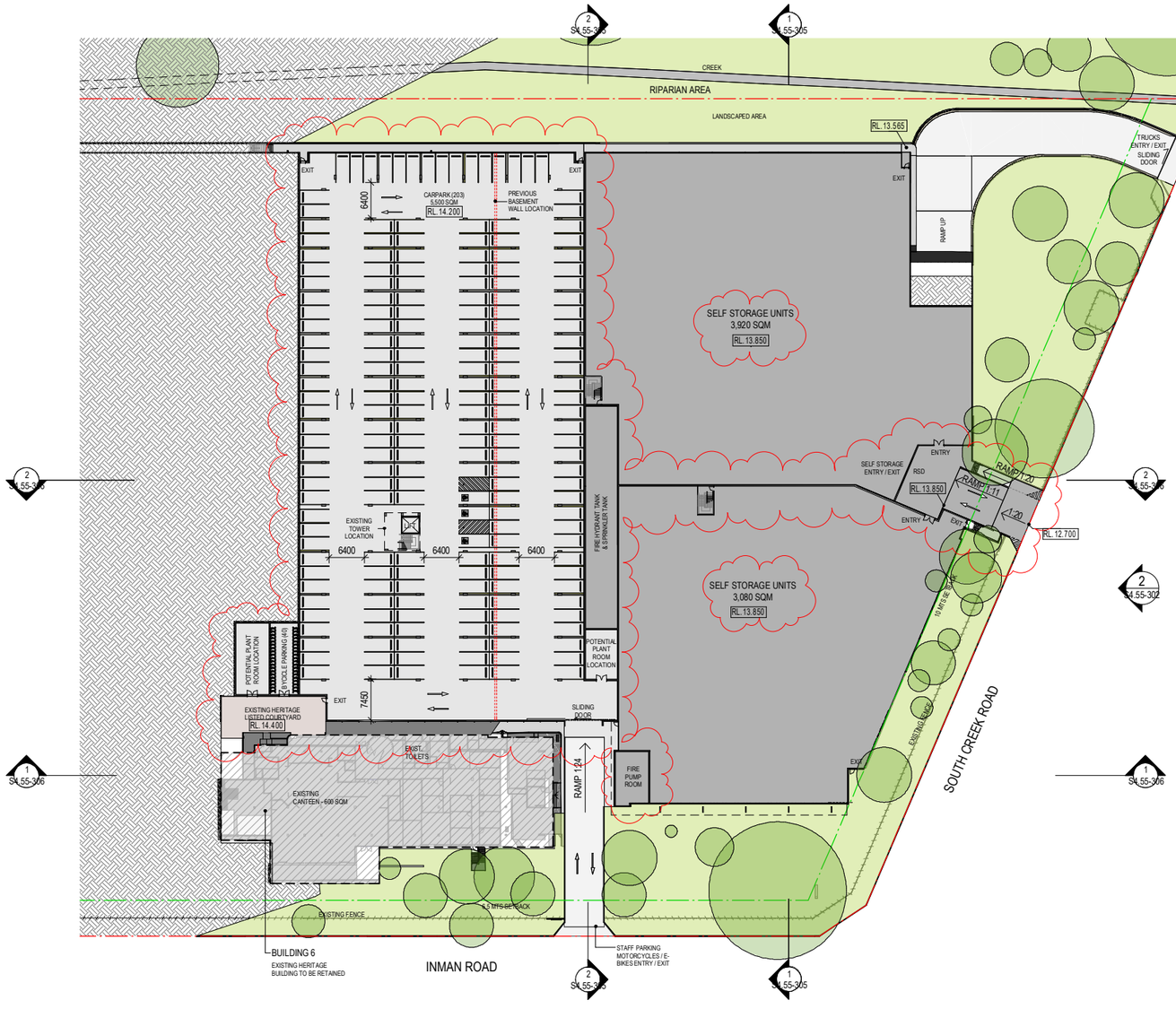
NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

NORTH

TITLE GROUND FLOOR PLAN

DATE	SCALE	PROJECT NO.	DWG NO.	REVISION
12/10/2020	As indicated @ A1	19110	S4.55-202	1



1 SELF STORAGE LEVEL 1 : 500

SUMMARY OF S4.55 MODIFICATIONS:

-SELF STORAGE UNITS LEVEL RAISED 2.85m (NEW RL: 13.85)
-ACCESS RAMP FROM STH CREEK RD ADJUSTED TO SUIT NEW LEVEL
-SELF STORAGE UNITS AREA INCREASED FROM 3,902 TO 7,000 SQM
-PARKING SPACES PROVIDED ON BASEMENT INCREASED FROM 159 TO 203
-PARKING SPACES PROVIDED ON GROUND FLOOR INCREASED FROM 72 TO 76
-NEW 40 BICYCLES SPACES PROVIDED
-NEW PLANT ROOM PROVIDED
-INCREASED CARPARK AREA AND LAYOUT RECONFIGURATION TO ACCOMMODATE THE ABOVE
-EXISTING TOWER LOCATION AND HERITAGE COURTYARD NOW SHOWN IN PLANS
-LIFT AND STAIRS RELOCATED INTO EXISTING TOWER

SECTION 4.55 **PRELIMINARY**

SBA ARCHITECTS
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#	DESCRIPTION	DATE
4	ISSUE FOR S4.55 SUBMISSION	12/10/2020
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2	ISSUE FOR S4.55 SUBMISSION	25/09/2020
1	ISSUE FOR S4.55 SUBMISSION	17/09/2020

CLIENT EG

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

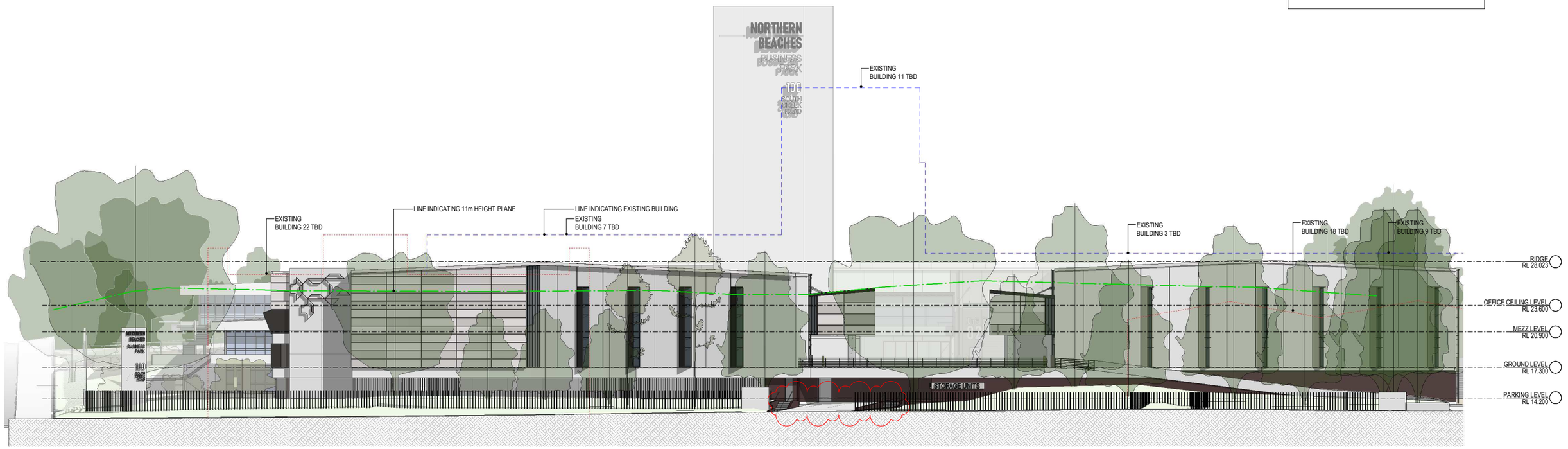
NORTH

TITLE BASEMENT PLAN

DATE	SCALE	PROJECT NO.	DWG NO.	REVISION
12/10/2020	1 : 500 @ A1	19110	S4.55-203	4

LEGEND:

- EXISTING BULDING TO BE DEMOLISH ENVELOPE LINE
- EXISTING BUILDING TO BE DEMOLISH BEYOND ENVELOPE LINE
- 11 LINE INDICATING 11m HEIGHT PLANE



2 SOUTH CREEK RD ELEVATION 1 : 200

SECTION 4.55 **PRELIMINARY**

SBA ARCHITECTS
Commercial Industrial Residential Retail Interior Design
Phone: 02 9929 9988 Web: www.sbaarch.com.au

#	DESCRIPTION	DATE
4	ISSUE FOR S4.55 SUBMISSION	13/10/2020
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2	ISSUE FOR S4.55 SUBMISSION	25/09/2020
1	ISSUE FOR S4.55 SUBMISSION	17/09/2020

CLIENT EG

NORTHERN BEACHES BUSINESS PARK

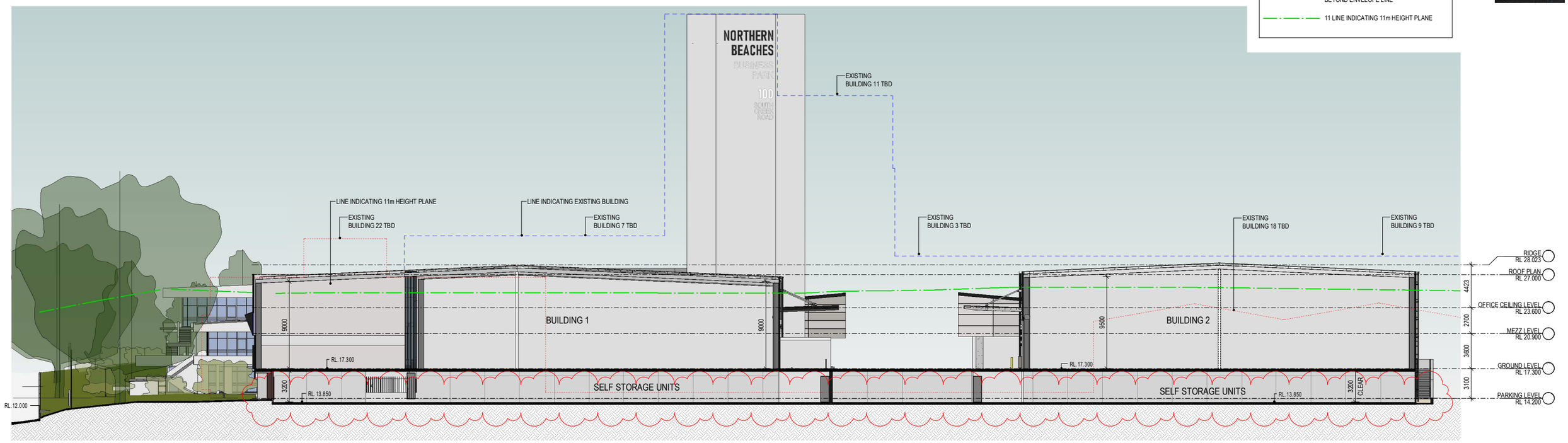
100 SOUTH CREEK ROAD. CROMER

TITLE ELEVATIONS 2

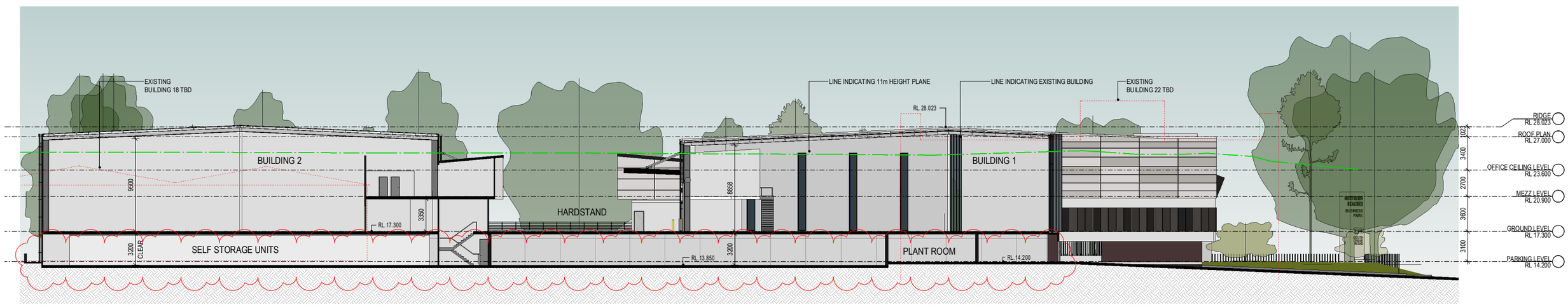
DATE	SCALE	PROJECT NO.	DWG NO.	REVISION
12/10/2020	1 : 200 @ A1	19110	S4.55-302	4

LEGEND:

- EXISTING BULDING TO BE DEMOLISH ENVELOPE LINE
- EXISTING BUILDING TO BE DEMOLISH BEYOND ENVELOPE LINE
- 11 LINE INDICATING 11m HEIGHT PLANE



1 Section A 1 : 200



2 Section B 1 : 200

SECTION 4.55 **PRELIMINARY**

SBA ARCHITECTS
Commercial Industrial Residential Retail Interior Design
Phone: 02 9929 9988 Web: www.sbaarch.com.au

#	DESCRIPTION	DATE
4	ISSUE FOR S4.55 SUBMISSION	12/10/2020
3	ISSUE FOR S4.55 SUBMISSION	08/10/2020
2	ISSUE FOR S4.55 SUBMISSION	25/09/2020
1	ISSUE FOR S4.55 SUBMISSION	17/09/2020

CLIENT EG

NORTHERN BEACHES BUSINESS PARK

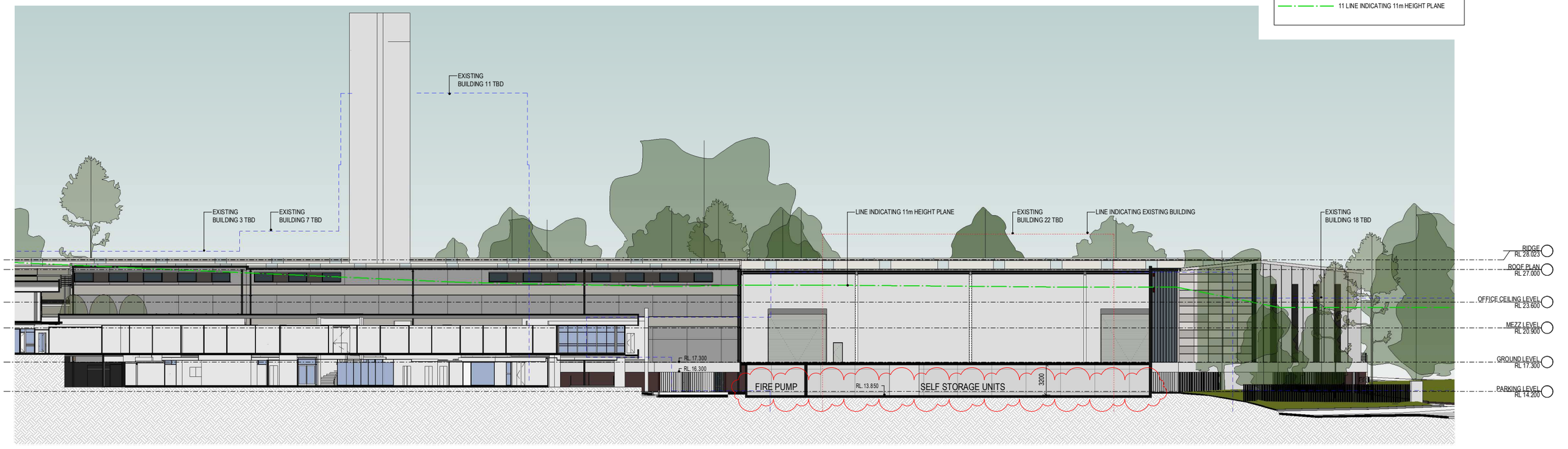
100 SOUTH CREEK ROAD. CROMER

TITLE SECTIONS

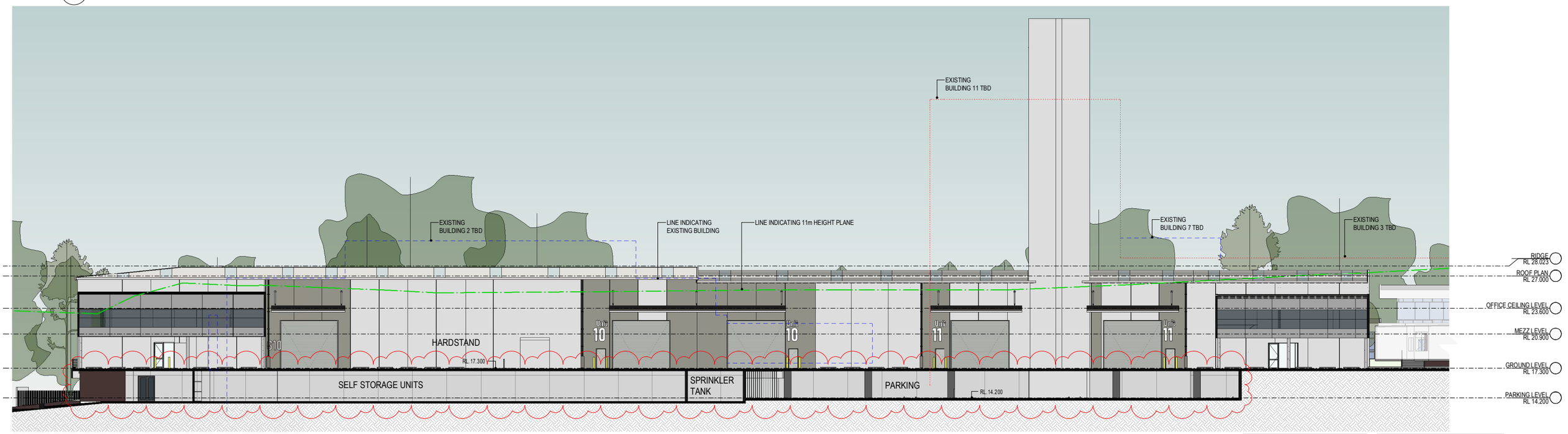
DATE	SCALE	PROJECT NO.	DWG NO.	REVISION
12/10/2020	1 : 200 @ A1	19110	S4.55-305	4

LEGEND:

- EXISTING BULDING TO BE DEMOLISH ENVELOPE LINE
- EXISTING BUILDING TO BE DEMOLISH BEYOND ENVELOPE LINE
- 11 LINE INDICATING 11m HEIGHT PLANE



1 Section C 1 : 200



2 Section D 1 : 200

SECTION 4.55 **PRELIMINARY**

SBA ARCHITECTS
Commercial Industrial Residential Retail Interior Design
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#	DESCRIPTION	DATE
4	ISSUE FOR S4.55 SUBMISSION	12/10/2020
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1	ISSUE FOR S4.55 SUBMISSION	17/09/2020

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NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

TITLE SECTIONS 2

DATE	SCALE	PROJECT NO.	DWG NO.	REVISION
12/10/2020	1 : 200 @ A1	19110	S4.55-306	4