



Douglas Partners

Geotechnics | Environment | Groundwater

Report on
Desktop Groundwater Assessment

Proposed Industrial Development
100 South Creek Road, Cromer

Prepared for
EG Funds Management Pty Ltd

Project 86951.00
October 2019

Integrated Practical Solutions



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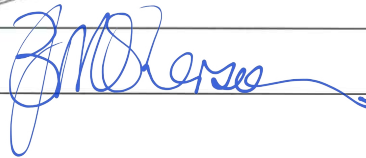
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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

	Signature	Date
Author		25/10/2019
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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 desktop groundwater assessment undertaken by Douglas Partners Pty Ltd (DP) for a proposed industrial development at 100 South Creek Road, Cromer. The investigation was commissioned by Will Clark of EG Funds Management Pty Ltd in an email dated 3 October 2019 and was undertaken in accordance with DP's proposal SYD191040.P.001.Rev0 dated 2 October 2019.

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 "Pre-Development Application" series of architectural drawings for the proposed development by SBA Architects Rev 09 (dated 18 October 2019), 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). The buildings are divided by a central driveway with parking on either side for the warehouses.

Beneath Warehouse Unit 10, at the southern end of Building 1, and the central driveway, a basement carpark is indicated with a floor level (FFL) at RL 14.2 m. Beneath Building 2, over the eastern half of the development site, "Self Storage Units" are shown, with a lower floor level (FFL) at RL 11.0 m. It appears that the storage units extend beneath Warehouse Units 7-9, at the southern end of Building 2. Based on contour plan information it would appear that the formation of the storage units will involve excavation depths in the order of 5 m below present ground surface levels.

An existing heritage listed building will be retained along the Inman Street frontage.

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 the site and near the subject site. In particular DP carried out 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.



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

Borehole and core penetration testing (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 building footprint.

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

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. 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 west part of the site. Numerous medium to large size 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 field work.

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 cone penetration tests) encountered groundwater at an RL of between 10.4 m and 20.3 m 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 the basement excavation is proposed, groundwater was typically encountered at depths of between 2.5 m and 4.5 m below the surface (at approximately RL 10 m to RL 14 m). 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 architectural drawings indicate the floor level for the lowest basement of the proposed development (i.e. for the self-storage units) will be at RL 11.0 m. 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 highest water level approximately 2.5 m.

Excavation of the proposed self-storage units (basement) will encounter groundwater inflows, which will need to be removed and discharged off site. The floor level of the proposed basement car park over the western half of the development site, at the southern end, is shown at RL 14.2 m. This is marginally higher than the groundwater levels recorded over 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 but it is likely that the design would need to accommodate water levels rising to above RL 14.2 m for the permanent structure. Long-term 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 basement car parking and lower basement level (for 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 the dewatering, 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 is expected to be required for dewatering purposes during construction. In order to discharge construction water, 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).

So, an access licence to take water from the groundwater source during construction will therefore be required. An access licence would also be necessary for permanent drained basements where the water would be taken from the groundwater source over a long-term period.

7.3 Basement Construction Options

It is considered likely that a ‘tanked’ basement will be required for at best the lower (self-storage units) basement. 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 drainage basement could theoretically be adopted provided that ‘cut-off’ walls are installed around the perimeter of the basement to substantially reduce seepage inflows into the basement under the differential ‘head’ (pressure) acting outside the basement. It is considered, however, unlikely to be approved by Water NSW on the basis of the regulatory framework in play and the potential for ‘inflows’ of groundwater over the life of the 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 water uptake.

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. This 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 Recommendations for Intrusive 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 the groundwater monitoring. Given the likelihood that some form of the perimeter 'cut-off' wall will be required for the basement it will 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 proposed:

- Drilling 8 boreholes to depths of 15-20 m around the perimeter of the proposed basement excavation and along the western side of the site (i.e. at Building 1), where no previous investigations (by DP in 1998) were located;
- Installation of three or four groundwater monitoring wells in the drilled boreholes for monitoring, testing and sampling purposes;
- Installation 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 pumped out of each well so as to temporarily lower the groundwater level in each well, whereupon its depth in each well is again measured to commence the test. The groundwater depth 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 groundwater level in each well, whereupon its depth in each well is again measured to commence the test. The groundwater depth 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 (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, in accordance with current EPA guidelines.

8. Limitations

Douglas Partners (DP) has prepared this report for this project at 100 South Creek Road, Cromer in accordance with DP's proposal SYD191040.P.001.Rev0 dated 2 October 2019 and acceptance received from Will Clark (EG Funds Management Pty Ltd) dated 3 October 2019. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of EG Funds Management Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other 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.

This report must be read in conjunction with all of the attached 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 for 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.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the groundwater components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

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

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

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

Drawings – Pre DA Architectural Drawings by SBA

4-10 INMAN ROAD, CROMER, NSW 2099

PRE - DEVELOPMENT APPLICATION

DRAWING LIST		
Sheet Number	Sheet Name	Current Revision
DA000	COVERPAGE	9
DA101	IMAGE 01	9
DA101-B	IMAGE 01 - NOTES	9
DA101-C	IMAGE 01 - EXTERNAL FINISHES	9
DA102	IMAGE 02	9
DA103	IMAGE 03	9
DA103-B	IMAGE 03 - NOTES	9
DA104	IMAGE 04	9
DA105	IMAGE 05	9
DA106	IMAGE 06	9
DA107	IMAGE 07	9
DA201	SITE PLAN	9
DA202	GROUND FLOOR PLAN	9
DA203	BASEMENT PLAN	9
DA301	ELEVATIONS	9
DA302	ELEVATIONS 2	9
DA305	SECTIONS	9
DA306	SECTIONS 2	9



PRELIMINARY



RETRENTION AND CONSERVATION OF POST WWII COTTAGE AND LANDSCAPE. POTENTIAL FOR ADAPTIVE RE-USE INCLUDING CAFE / KIOSK

IN-SITU RETENTION, CONSERVATION AND ADAPTIVE RE-USE OF THE FORMER ROCHE MAIN OFFICE BUILDINGS

EXISTING HEXAGONAL TOWER ELEMENT. POTENTIAL FOR ADAPTIVE RE-USE AT BASE OF TOWER, I.e. WAREHOUSE OFFICES, SUBJECT TO FURTHER INVESTIGATION.

POTENTIAL INTERPRETATIVE FACADE TREATMENT + ARTWORK, SUBJECT TO FURTHER INVESTIGATION.



POSSIBLE LOCATION FOR PERMANENT CULTURAL HERITAGE INTERPRETATIVE DISPLAY AND ARTWORK

RETENTION, CONSERVATION AND SYMPATHETIC EMBELLISHMENT OF EXISTING LANDSCAPE SETTING ALONG INMAN ROAD FRONTAGE

RETENTION, CONSERVATION AND SYMPATHETIC EMBELLISHMENT OF EXISTING LANDSCAPE SETTING ALONG SOUTH CREEK ROAD FRONTAGE

PRELIMINARY

SBA
ARCHITECTS

9	UPDATED SET FOR CONSULTANTS DRAFT	18/10/2019
8	MARKETING PLAN ISSUED FOR INFORMATION	11/10/2019
7	FOR CLIENT REVIEW	09/09/2019
6	AMENDMENTS FOR PRE DA MEETING	06/08/2019
5	LEVELS DROPPED	01/08/2019

CLIENT

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

IMAGE 01 - NOTES

DATE 18/10/2019 SCALE @ A1

JOB NO. 19110 DWG NO. DA101-B REVISION P9



Indicative External Finishes Legends

- 1

Precast Concrete Panel. Natural Finish
- 2

Precast Concrete Panel. Paint Finish 01
- 3

Brick Wall to Match Heritage Building Brick Walls
- 4

Concrete Beam. Paint Finish to Match Heritage Building Beams
- 5

Solid Aluminium Cladding in Light Grey Tone, Three Different Greys
- 6

Solid Aluminium Cladding in Dark Grey Tone, Three Different Greys
- 7

Metal Louvre / Screen. Powdercoated Black Finish on Carpark
- 8

Palisade / Diplomat Fencing. Powdercoated Finish
- 9

Powdercoated Aluminium Windows Frames with Tone Glazing and Powdercoated Metal Solar Control
- 10

Powdercoated Aluminium Windows Frames with Tone Glazing
- 11

Danpalon Traslucent Sheet With Vertical Louvre
- 12

Profiled Metal Roofing in Selected Colorbond Colours

PRELIMINARY



PRELIMINARY

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NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER

TITLE
IMAGE 02

DATE
18/10/2019

SCALE
@ A1

JOB NO.
19110

DWG NO.
DA102

REVISION
P9





IN-SITU RETENTION, CONSERVATION AND ADAPTIVE RE-USE OF THE FORMER ROCHE MAIN OFFICE BUILDINGS - BUILDING 2

EXISTING HEXAGONAL TOWER ELEMENT. POTENTIAL FOR ADAPTIVE RE-USE AT BASE OF TOWER, I.e. WAREHOUSE OFFICES, SUBJECT TO FURTHER INVESTIGATION

IN-SITU RETENTION, CONSERVATION AND ADAPTIVE RE-USE OF THE FORMER ROCHE MAIN OFFICE BUILDINGS - BUILDING 1

RETENTION AND CONSERVATION OF POST WWII COTTAGE AND LANDSCAPE. POTENTIAL FOR ADAPTIVE RE-USE INCLUDING CAFE / KIOSK

POSSIBLE LOCATION FOR PERMANENT CULTURAL HERITAGE INTERPRETATIVE DISPLAY AND ARTWORK

RETENTION, CONSERVATION AND SYMPATHETIC EMBELLISHMENT OF EXISTING LANDSCAPE SETTING ALONG INMAN ROAD FRONTAGE

PRELIMINARY

EXISTING BUILDING OUTLINE SHOWN
DOTTED IN RED. IT IS APROX. 4m IN
FRONT OF THE PROPOSED BUILDING



PRELIMINARY

SBA
ARCHITECTS

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NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

TITLE
IMAGE 04

DATE
18/10/2019

SCALE
@ A1

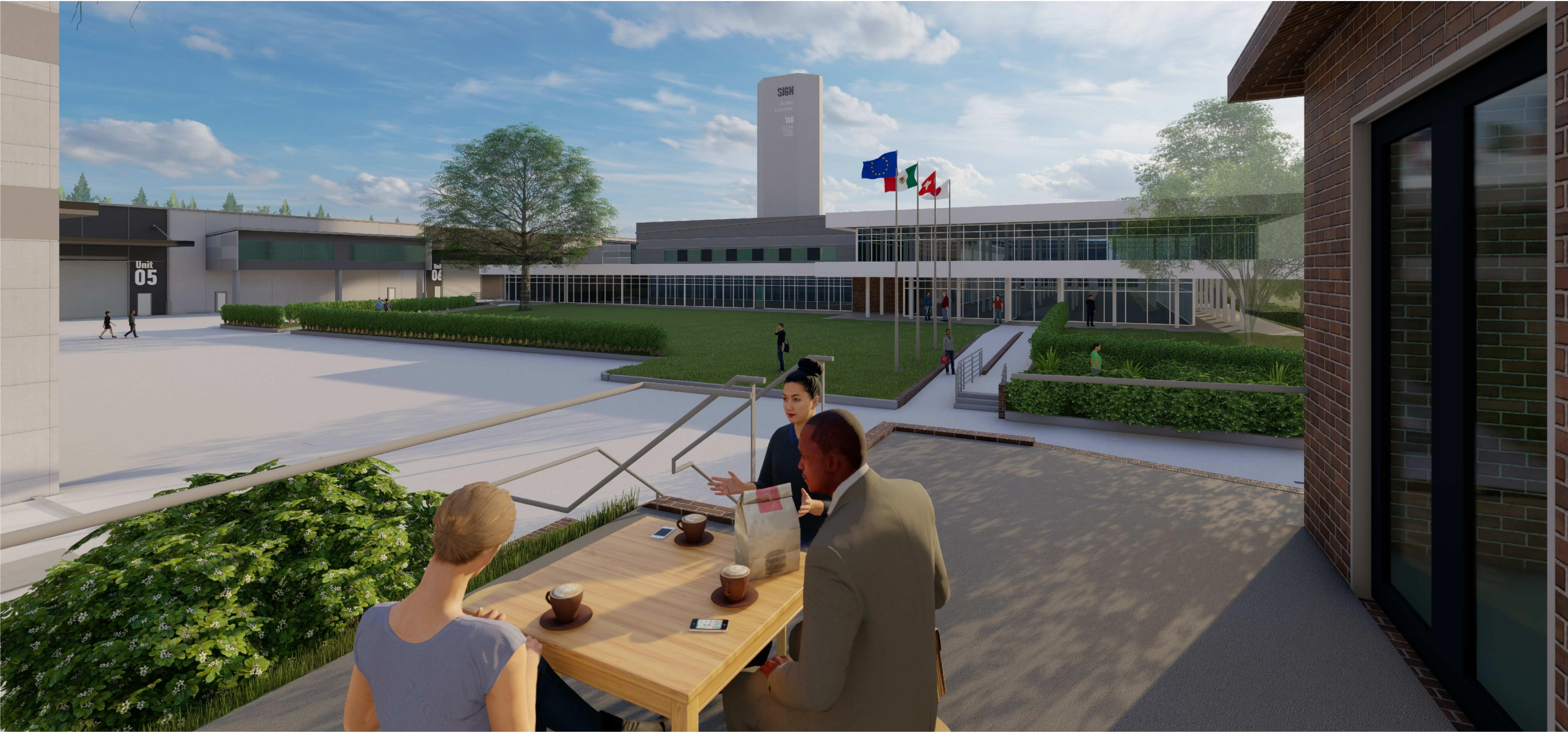
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DWG NO.
DA104

REVISION
P9



PRELIMINARY



PRELIMINARY

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NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

IMAGE 06

DATE 18/10/2019 SCALE @ A1

JOB NO. 19110 DWG NO. DA106

REVISION P9



PRELIMINARY

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NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER

IMAGE 07

DATE 18/10/2019 SCALE @ A1

JOB NO. 19110 DWG NO. DA107

REVISION P9

NOTE:

- AREA BETWEEN 0
AND 1 mt ABOVE
11 MTS HEIGHT
- AREA BETWEEN 1
AND 2 mts ABOVE
11 MTS HEIGHT
- AREA BETWEEN 2
AND 3 mts ABOVE
11 MTS HEIGHT



1

SITE PLAN

1:1000

PRELIMINARY

0m 20m 40m 60m 80m 100m

VISUAL SCALE 1:1000 @ A1

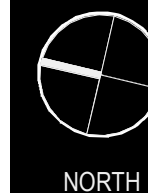
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NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER



SITE PLAN

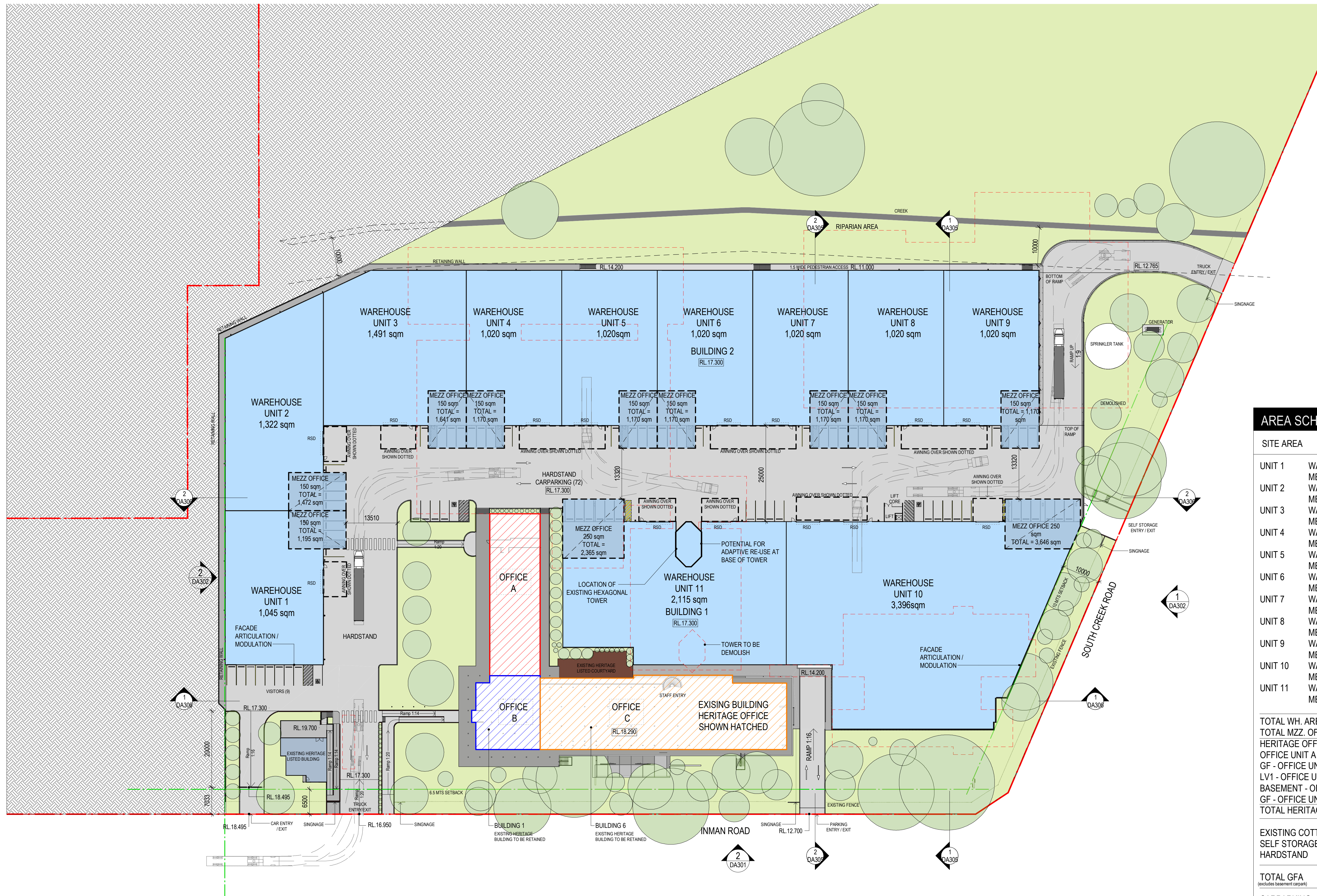
DATE 18/10/2019 SCALE As indicated @ A1

JOB NO. 19110 DWG NO. DA201

REVISION P9



DEMOLITION LEGEND:
--- WALL TO BE DEMOLISH



AREA SCHEDULE

SITE AREA		44,488 sq.m (TBC)
UNIT 1	WAREHOUSE	1,045 sq.m
UNIT 2	MEZZ 1	150 sq.m
	WAREHOUSE	1,322 sq.m
UNIT 3	MEZZ 2	150 sq.m
	WAREHOUSE	1,491 sq.m
UNIT 4	MEZZ 3	150 sq.m
	WAREHOUSE	1,020 sq.m
UNIT 5	MEZZ 4	150 sq.m
	WAREHOUSE	1,020 sq.m
UNIT 6	MEZZ 5	150 sq.m
	WAREHOUSE	1,020 sq.m
UNIT 7	MEZZ 6	150 sq.m
	WAREHOUSE	1,020 sq.m
UNIT 8	MEZZ 7	150 sq.m
	WAREHOUSE	1,020 sq.m
UNIT 9	MEZZ 8	150 sq.m
	WAREHOUSE	1,020 sq.m
UNIT 10	MEZZ 9	150 sq.m
	WAREHOUSE	3,396 sq.m
UNIT 11	MEZZ 10	250 sq.m
	WAREHOUSE	2,115 sq.m
	MEZZ 11	250 sq.m
TOTAL WH. AREA		15,489 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
BASEMENT - 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		3,902 sq.m
HARDSTAND		5,637 sq.m
TOTAL GFA (excludes basement carpark)		24,544 sq.m
CARPARKING		231 cars
SITE COVERAGE		55%

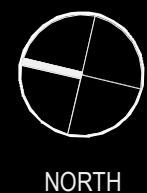
PRELIMINARY

NORTEN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD. CROMER

0m 10m 20m 30m 40m 50m

VISUAL SCALE 1:500 @ A1



GROUND FLOOR PLAN

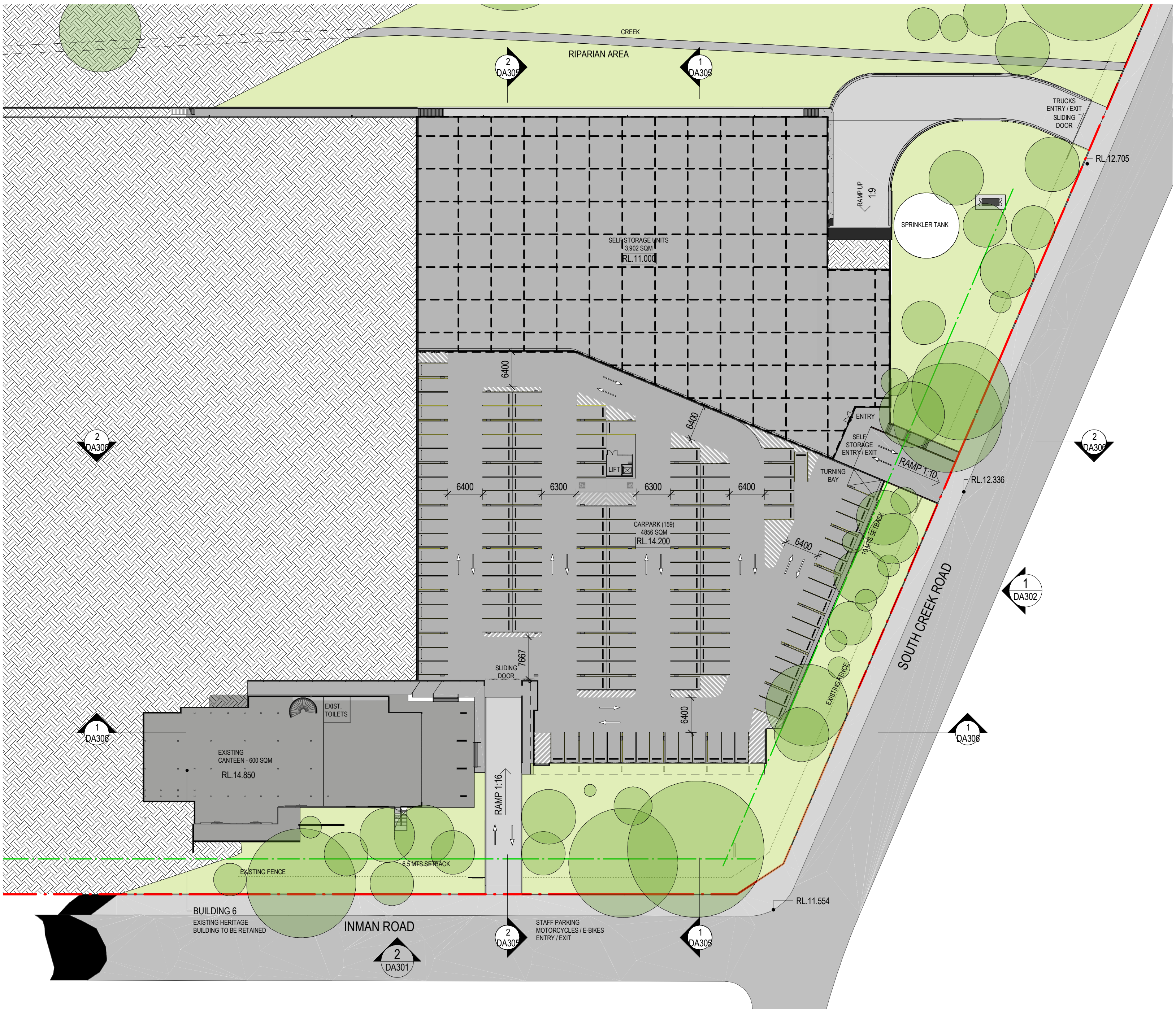
DATE 18/10/2019 SCALE As indicated @ A1

JOB NO. 19110 DWG NO. DA202

REVISION P9



9	UPDATED SET FOR CONSULTANTS DRAFT	18/10/2019
8	MARKETING PLAN ISSUED FOR INFORMATION	11/10/2019
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6	AMENDMENTS FOR PRE DA MEETING	06/08/2019
5	LEVELS DROPPED	01/08/2019



1 SELF STORAGE LEVEL 1 : 500

PRELIMINARY



VISUAL SCALE 1:500 @ A1

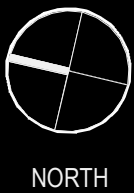
SBA
ARCHITECTS

9	UPDATED SET FOR CONSULTANTS DRAFT	18/10/2019
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CLIENT

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER



TITLE
BASEMENT PLAN

DATE
18/10/2019

SCALE
1 : 500 @ A1

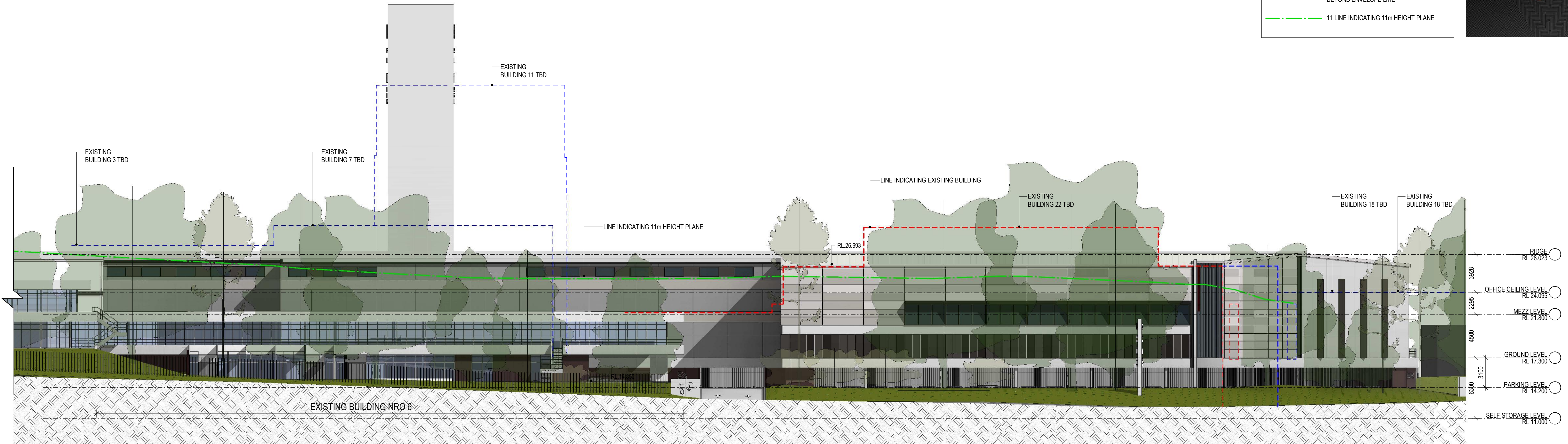
JOB NO.
19110

DWG NO.
DA203

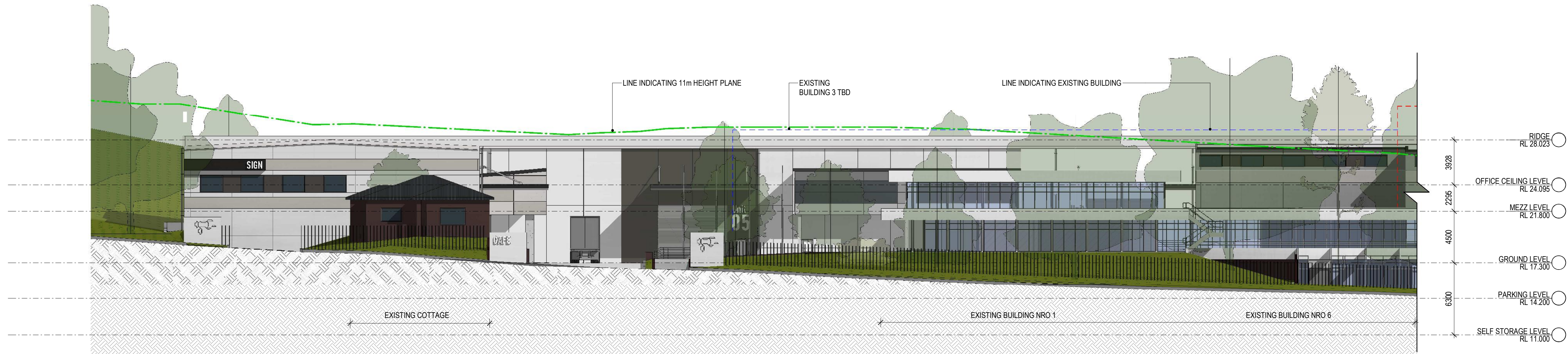
REVISION
P9

LEGEND:

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

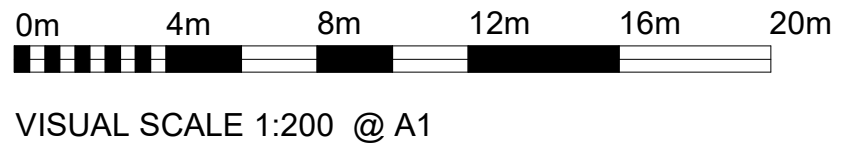


1 INMAN RD ELEVATION SOUTHERN CORNER 1 : 200



2 INMAN RD ELEVATION NORTHERN CORNER 1 : 200

PRELIMINARY



SBA
ARCHITECTS

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CLIENT

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER

TITLE
ELEVATIONS

DATE
18/10/2019

SCALE
1 : 200 @ A1

JOB NO.
19110

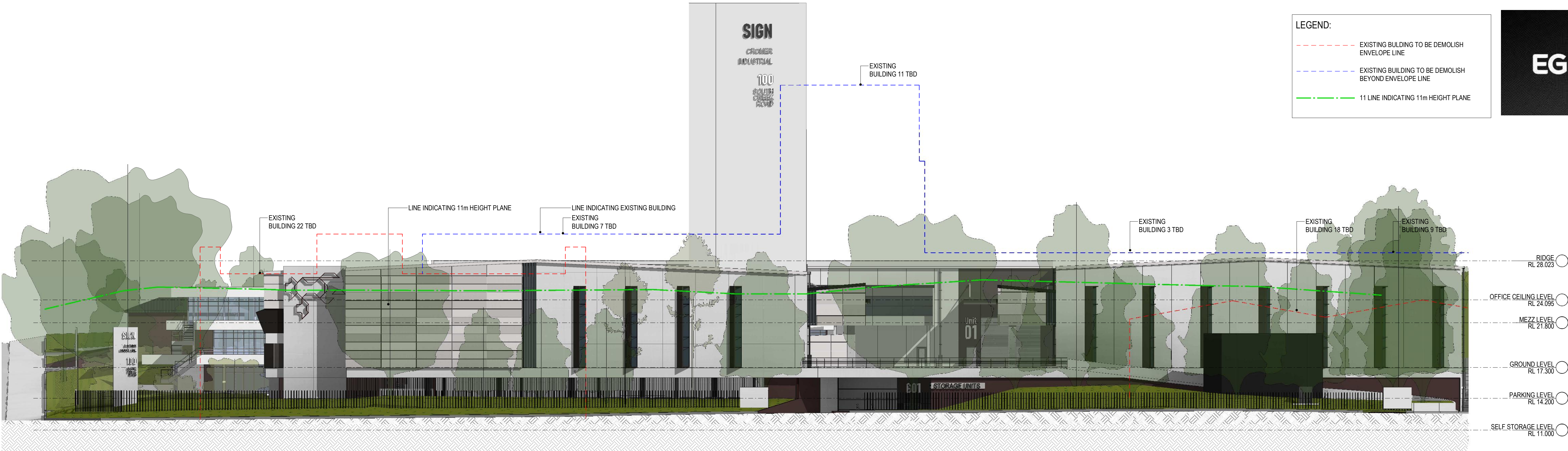
DWG NO.
DA301

REVISION
P9

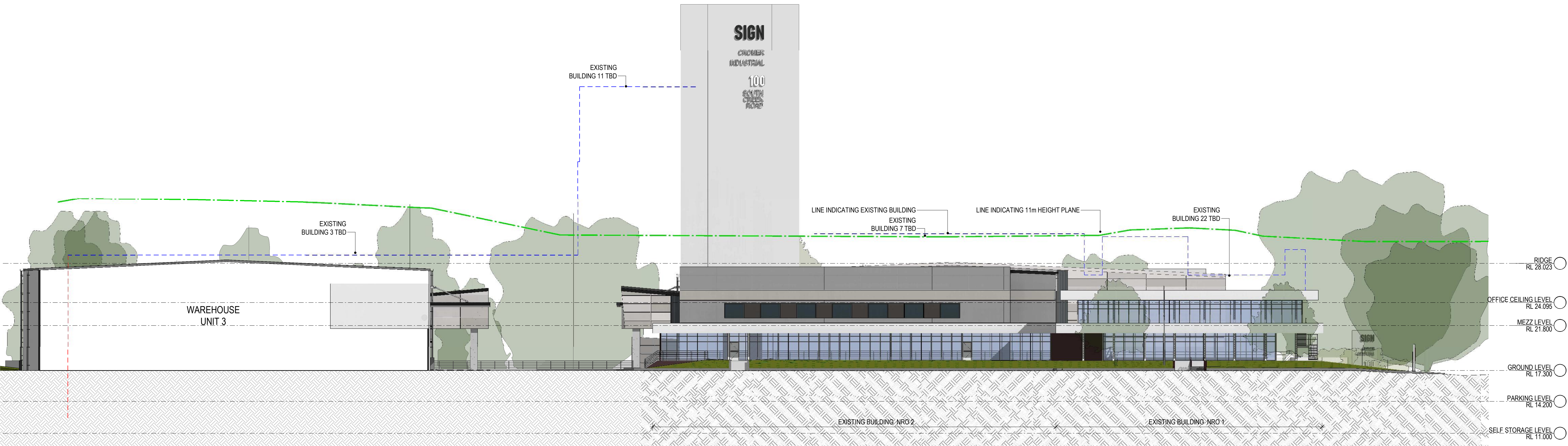


LEGEND:

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

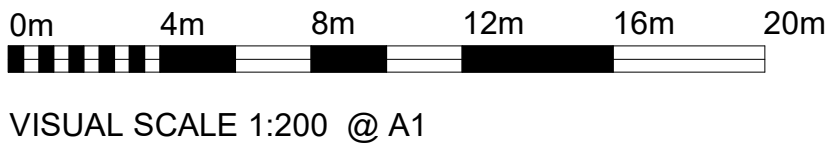


1 SOUTH CREEK RD ELEVATION 1 : 200



2 NORTH ELEVATION 1 : 200

PRELIMINARY



	9	UPDATED SET FOR CONSULTANTS DRAFT	18/10/2019
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	4		

CLIENT

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER

ELEVATIONS 2

DATE 18/10/2019 SCALE 1 : 200 @ A1

JOB NO. 19110 DWG NO. DA302

REVISION P9

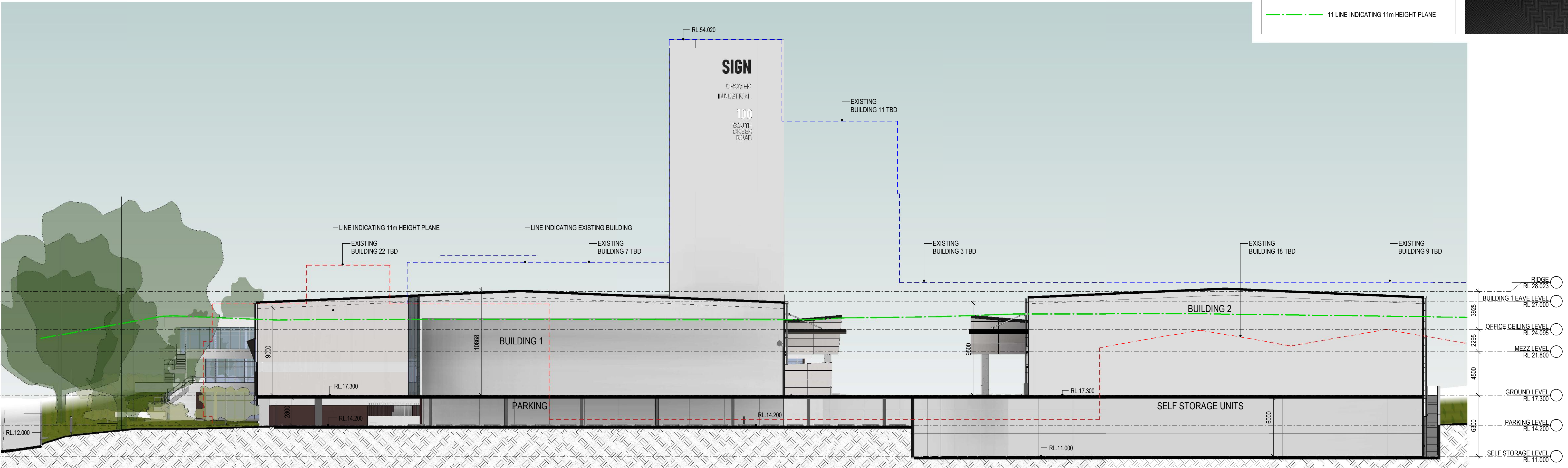


LEGEND:

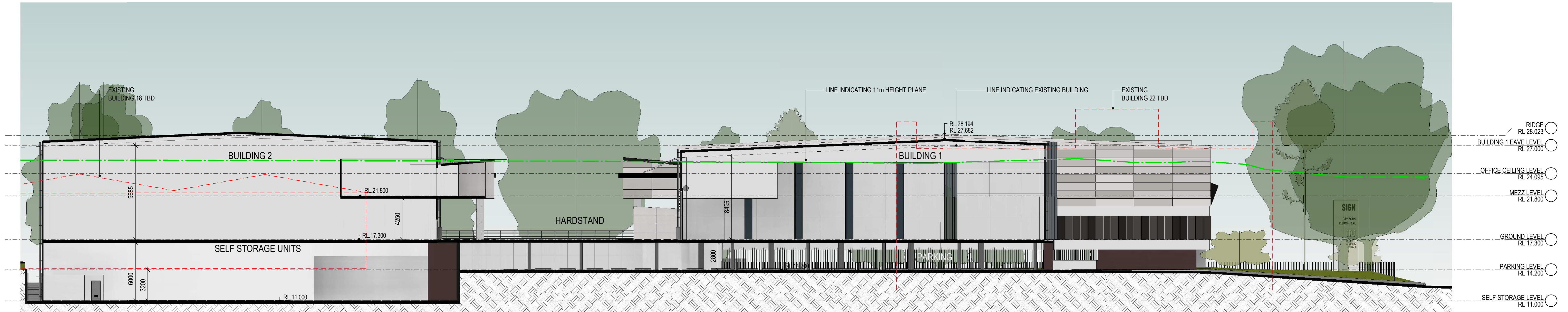
EXISTING BUILDING TO BE DEMOLISH ENVELOPE LINE

EXISTING BUILDING TO BE DEMOLISH BEYOND ENVELOPE LINE

11 LINE INDICATING 11m HEIGHT PLANE

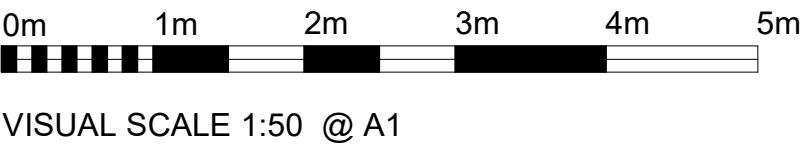


1 Section A 1:200



2 Section B 1:200

PRELIMINARY



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CLIENT

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER



SECTIONS

DATE 18/10/2019 SCALE 1:200 @ A1

JOB NO. 19110 DWG NO. DA305

REVISION P9



1 Section C

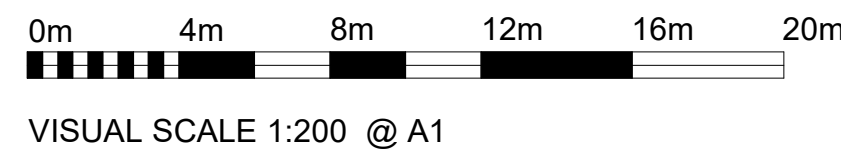
1 : 200



2 Section D

1 : 200

PRELIMINARY



SBA
ARCHITECTS

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CLIENT

NORTHERN BEACHES BUSINESS PARK

100 SOUTH CREEK ROAD, CROMER

SECTIONS 2

DATE 18/10/2019 SCALE 1 : 200 @ A1

JOB NO. 19110 DWG NO. DA306

REVISION P9