

Job No 2005/307

Wednesday, 19 December 2007

Pittwater Council,
PO Box 882,
Mona Vale, NSW 1660

Attention General Manager

**RE Construction Certificate No 05/307/01
6-14 Macpherson Street, Warriewood**

Please find attached a copy of Construction Certificate 05/307/01 and required attachments issued by Steve Watson & Partners for the above mentioned development in accordance with Section 109C(1)(b) and 81A(2) of the Environmental Planning and Assessment Act 1979

Please find attached a cheque in the amount of \$30 payable for the registration of the Construction Certificate

Can you please forward SWP a receipt for the acknowledgment of the lodgement cheque

If you have any queries please do not hesitate to contact me on (02) 9283 6555

Regards,



Paul Curjak
Steve Watson & Partners

Rec 231483

\$30

28/12/07



STEVE WATSON & PARTNERS

CONSTRUCTION CERTIFICATE

LEVEL 5 432 KENT STREET SYDNEY NSW 2000
TEL +61 2 9283 6555 | FAX +61 2 9283 8500
sydney@swpartners.com.au
www.swpartners.com.au
ABN 48 102 366 576

Construction Certificate No. 05/307/01

I, Steve Watson, certify that work completed in accordance with documentation accompanying the application for this certificate (with such modifications verified by me as may be shown on that documentation) will comply with the requirements of this Regulation as are referred to in section 81A (5) of the Environmental Planning and Assessment Act 1979

Applicant

Name **Anglican Retirement Villages, Diocese of Sydney**
Address **PO Box 284**
Suburb **Castle Hill** State **NSW** Postcode **1765**

Location of the Property

Address **6-14 Macpherson Street**
Suburb **Warriewood** State **NSW** Postcode **2102**
Real Property Description **Lot B DP400488, Lot 22 DP5464, Lot B DP358765, Lot B DP345528, PT Lot 1 DP208149, PT Lot 3 DP579309, PT Lot 3 DP942319, PT Lot 4 DP579309**

Building description

Construction of independent living units, basement car parking and associated site works Stage one buildings A, B and C, structural profiles only

Building Code of Australia Classification

Class 2

Date of Receipt

Date Received **17th December 2007**

Determination

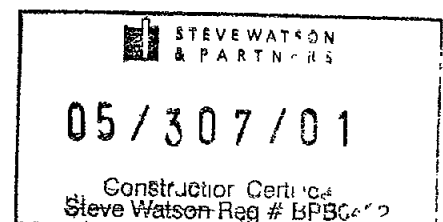
Approved
Date of Determination **20th December 2007**

Development Consent

Development Consent Number **0102/05 & S96 modifications** Council **Warriewood**
Date of Determination **6th April 2006 & 24th October 2007, 22nd December 2006, 8th January 2007 & 24th October 2007**

Attachments

- 1 Plans and specifications endorsed by this certificate
- 2 Fire safety schedule



Steve Watson

Accreditation Body **BPB**

Accreditation no **BPB0432**

Date of Endorsement **Thursday, 20 December 2007**

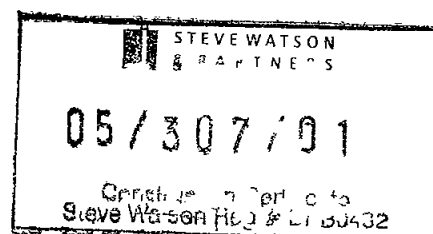
Design documentation approved for Construction Certificate 05/307/01 for 6-14 Macpherson Street, Warriewood

Drawing No	Drawing Title	Revision	Date	Drawn by
0439/G/CCA G01	Site Plan Ground	A	03 12 07	Boffa Robertson Group
0439/TF/CCA A02	The Ferneres Basement Plan	A	03 12 07	Boffa Robertson Group
0439/TF/CCA A03	The Ferneres Ground Floor Plan	A	03 12 07	Boffa Robertson Group
0439/TF/CCA A04	The Ferneres First Floor Plan	A	03 12 07	Boffa Robertson Group
0439/TF/CCA A09	The Ferneres Elevations	A	03 12 07	Boffa Robertson Group
0439/TF/CCA A10	The Ferneres Sections	A	03 12 07	Boffa Robertson Group
0439/LL/CCA A03	Lakelands Basement Plan	A	03 12 07	Boffa Robertson Group
0439/LL/CCA A04	Lakelands Ground Floor Plan	A	03 12 07	Boffa Robertson Group
0439/LL/CCA A05	Lakelands First & Second Floor Plan	A	03 12 07	Boffa Robertson Group
0439/LL/CCA A12	Lakelands Elevations	A	03 12 07	Boffa Robertson Group
0439/LL/CCA A13	Lakelands Sections	A	03 12 07	Boffa Robertson Group

Landscape design documentation supporting Construction Certificate 05/307/01 for 6-14 Macpherson Street, Warriewood Drawings range from LF01 to LD03

Structural design documentation supporting Construction Certificate 05/307/01 for 6-14 Macpherson Street, Warriewood Drawings range from 07S585-LLS01 to 07S585-LLS40 and 07S585-TFS01 to 07S585-TFS31

Civil design documentation supporting Construction Certificate 05/307/01 for 6-14 Macpherson Street, Warriewood Drawings range from 21-13577-C101 to 21-13577-C238





STEVE WATSON
& PARTNERS

15 ELIZABETH COURT LEVEL 5, DUNCAN COURT
TEL +61 2 237 0551 FAX + 61 2 237 0550
5/100 WYNDHAM STREET
WYNDHAM STREET
APT 42 2022

APPLICATION FOR CONSTRUCTION CERTIFICATE

PART 1 Application and Site Details

Applicant

It is important that we are able to contact you if we need more information.

Please give us as much detail as possible

Mr Mrs Miss Ms Other

Surname (or Company) ANGLICAN RETIREMENT VILLAGES DIOCESE OF SYDNEY

Given names (or ABN) 39 922 848 563

Address C/O MICHAEL LOCKWOOD - PROJECT MANAGER PO BOX 284
CASTLE HILL State NSW Post Code 1765

Phone (02) 9421 5333 Fax (02) 9421 2217

Mobile 0409 372 664 E-mail michael_lockwood@arv.org.au

Please ensure you sign the declaration in Part 3 of this application

Owner's Consent

Every owner of the land must sign this form

If the owner is a company an authorised director must sign the form

Where the works are being carried out in a strata titled building the consent of the Body Corporate must be provided

Surname (or Company) ANGLICAN RETIREMENT VILLAGES DIOCESE OF SYDNEY

Given names (or ABN) 39 922 848 563

Address PO BOX 284 CASTLE HILL
State NSW Post Code 1765

Phone (02) 9421 5333 Fax (02) 9421 2217

Mobile _____ E-mail michael_lockwood@arv.org.au

As owner of the land to which this application relates I consent to this application I also consent for SWP staff to enter the land to carry out inspections relating to this application

Signature(s) MICHAEL LOCKWOOD - PROJECT MANAGER Date 10 / 12 / 2007

Without the owner's consent we will not accept the application. This is a very strict requirement for all applications. If you are signing on the owner's behalf as the owner's legal representative you must state the nature of your legal authority and attach documentary evidence (eg Power of attorney, executor trustee company director etc.

Location of the Property

Address 6-14 MACPHERSON ST WARRIEWOOD NSW
Post Code 2102

Real Property Description LOT B DP400488 LOT 22 DP5464 LOT B DP358765

(eg Lot/DP/Section, etc) LOT B DP 345528 PT LOT 1 DP208149 PT LOT 3 DP579309

PT LOT 3 DP942319 PT LOT 1 DP579309

The real property description is mandatory these details are shown on your rate notices property deeds etc



PART 2 Work Description

Description of Work <i>Please describe briefly everything that you want approved</i>	Building Work CONSTRUCTION OF INDEPENDENT LIVING UNITS BASEMENT CARPARKING AND ASSOCIATED SITE WORKS NOTE THIS C C TO COVER STRUCTURAL PROFILES ONLY
Estimated Cost of Work (inclusive of GST)	\$ 15,000 000 00
Development Consent	Development Consent No <u>0102/05</u> Date of Determination <u>24 / 10 / 07</u> SECTION 96 MODIFICATION ORIGINAL CONSENT GRANTED 06/04/2006
Building Code of Australia Classification	BCA Classification <u>2</u>
Principal Contractors Details <i>Required for all projects</i>	Name <u>SOUTHERN CROSS CONSTRUCTIONS</u> Address <u>135-153 NEW SOUTH HEAD ROAD EDGECLIFF NSW 2027</u> Contact Number <u>9363 1111</u>

PART 3 Declaration

ALL THE DETAILS SOUGHT IN THE CHECKLIST IN PART 5 MUST BE PROVIDED

THE COMPLETED CHECKLIST MUST BE SUBMITTED WITH THIS APPLICATION. FAILURE TO PROVIDE THE REQUIRED DOCUMENTATION OF AN ACCEPTABLE STANDARD WILL RESULT IN YOUR APPLICATION BEING RETURNED

Declaration

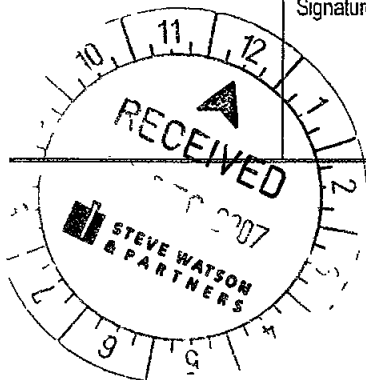
If the applicant is a company or strata title body corporate a director or authorised delegate must sign this declaration

I apply for approval to carry out the development or works described in this application. I declare that all the information in the application and checklist is to the best of my knowledge true and correct

I also understand that if the information is incomplete the application may be delayed or rejected or more information may be requested. I acknowledge that if the information provided is misleading any approval granted may be void

Signature  Date 10 / 12 / 2007

MICHAEL LOCKWOOD - PROJECT MANAGER



PART 4 Schedule to Application for a Construction Certificate

Please complete this schedule. The information will be sent to the Australian Bureau of Statistics

All new buildings

Please complete the following

- Number of storeys (including underground floors)
- Gross floor area of new building (m²)
- Gross site area (m²)

Residential buildings only

Please complete the following details on residential structures

- Number of dwellings to be constructed
- Number of pre-existing dwellings on site
- Number of dwellings to be demolished
- Will the new dwelling(s) be attached to other new buildings?
- Will the new building(s) be attached to existing buildings?
- Does the site contain a dual occupancy?
(NB dual occupancy = two dwellings on the same site)

Yes No

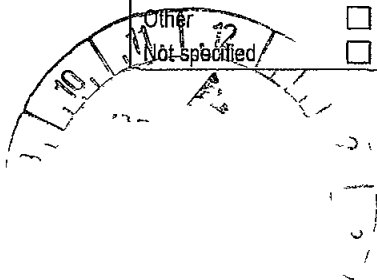
Yes No

Yes No

Materials – residential buildings

Please indicate the materials to be used in the construction of the new building(s)

Walls	Code	Roof	Code	Floor	Code	Frame	Code
Brick (double)	<input type="checkbox"/> 11	Tiles	<input type="checkbox"/> 10	Concrete or slate	<input type="checkbox"/> 20	Timber	<input type="checkbox"/> 40
Brick (veneer)	<input type="checkbox"/> 12	Concrete or slate	<input type="checkbox"/> 20	Timber	<input type="checkbox"/> 40	Steel	<input type="checkbox"/> 60
Concrete or stone	<input type="checkbox"/> 20	Fibre cement	<input type="checkbox"/> 30	Other	<input type="checkbox"/> 80	Aluminium	<input type="checkbox"/> 70
Fibre cement	<input type="checkbox"/> 30	Steel	<input type="checkbox"/> 60	Not specified	<input type="checkbox"/> 90	Other	<input type="checkbox"/> 80
Timber	<input type="checkbox"/> 40	Aluminium	<input type="checkbox"/> 70			Not specified	<input type="checkbox"/> 90
Curtain glass	<input type="checkbox"/> 50	Other	<input type="checkbox"/> 80				
Steel	<input type="checkbox"/> 60	Not specified	<input type="checkbox"/> 90				
Aluminium	<input type="checkbox"/> 70						
Other	<input type="checkbox"/> 80						
Not specified	<input type="checkbox"/> 90						



PART 5 Checklist

Where relevant have you provided/completed the following

	Yes	Not Relevant
• 4 copies of plans elevations and sections	<input type="checkbox"/>	<input type="checkbox"/>
• 4 copies of specifications	<input type="checkbox"/>	<input type="checkbox"/>
• List of any existing and proposed fire safety measures (Refer to the Fire Safety Schedule)	<input type="checkbox"/>	<input type="checkbox"/>
• Evidence of Home Building Act requirements satisfied	<input type="checkbox"/>	<input type="checkbox"/>
• Evidence that Long Service Levy has been paid	<input type="checkbox"/>	<input type="checkbox"/>
• Schedule to application for a construction certificate is completed	<input type="checkbox"/>	
• Owners consent	<input type="checkbox"/>	
• Applicants signature	<input type="checkbox"/>	

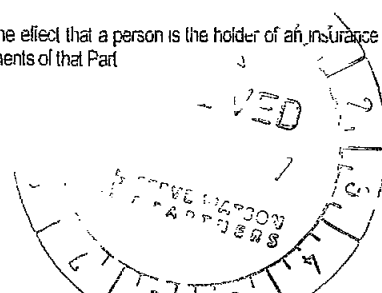
PART 6 Notes for Completing Application for a Construction Certificate

The following information must accompany applications for a Construction Certificate for Building Work

- 1 The ABS schedule is required to be completed for the purposes of providing information to the Australian Bureau of Statistics
- 2 Copies of compliance certificates relied upon
- 3 Four (4) copies of all plans and specifications must be submitted with your application. Plans for the building must be drawn to a suitable scale and consist of a general plan and a block plan. The general plan of the building is to
 - a) Show a plan of each floor section.
 - b) Show a plan of each elevation
 - c) Show the levels of the lowest floor and of any yard or unbuild on area belonging to that floor and the levels of the adjacent ground
 - d) Indicate the height design construction and provisions for fire safety and fire resistance
- 4 Where proposed building work involves any alteration or addition to or rebuilding of an existing building the plan is to be coloured or otherwise marked to distinguish the proposed work to be approved
- 5 Where the proposed building work involves a modification to previously approved plans and specifications the general plans must be coloured or marked up to adequately distinguish the modifications
- 6 The specification is
 - a) To describe the construction and materials of which the building is to be built and the method of drainage sewerage and water supply
 - b) State whether the materials proposed to be used are new or second hand and give particulars of any second hand materials used
- 7 Where the application involves an alternative solution to meet the Performance Requirements of the BCA, the application must also be accompanied by
 - a) Details of the Performance Requirements that the alternative solution is intended to meet and Details of the assessment methods used to establish compliance with those Performance Requirements
- 8 Evidence of any accredited component process or design sought to be relied upon
- 9 Except in the case of any application for or in the respect of a class 1a or class 10 building
 - a) A list of any fire safety measures that are proposed to be implemented in the building or on the land on which the building is situated
 - b) If the application relates to a proposal to carry out any alteration or rebuilding of or addition to an existing building a separate list of such of those measures as are currently implemented in the building or on the land on which the building is situated

The list must describe the extent capability and basis of design of each of the measures concerned
- 10 The Development Consent conditions together with stamped approved DA drawings are to be provided for our assessment of the development and record purposes
- 11 Under section 109F(1)(b) of the *Environmental Planning and Assessment Act 1979* a Construction Certificate cannot be issued until any long service levy payable under section 34 of the *Building and Construction Industry Long Service Payments Act 1986* (or where such a levy is payable by instalments the first instalment of the levy) has been paid. The local council may be authorised to accept payment.
- 12 In the case of an application for a Construction Certificate for residential building work (within the meaning of the Home Building Act 1989) attach the following
 - a) In the case of work performed by a licensee under that Act
 - i) A statement detailing the licensee's name and contract licence number and
 - ii) documentary evidence that the licensee has complied with the applicable requirements of that Act or
 - b) in the case of work done by any other person
 - i) a statement detailing the persons name and owner builder permit number or
 - ii) a declaration signed by the owner of the land to the effect that the reasonable market cost of the labour and materials involved in the work is less than the amount prescribed for the purposes of the definition of owner builder work in section 29 of that Act. (If the building work is less than \$12,000 provide a statement that states the proposed work is less than \$12,000)

A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 to the effect that a person is the holder of an insurance contract issued for the purposes of that Part is sufficient evidence that the person has complied with the requirements of that Part



FIRE SAFETY SCHEDULE



STEVE WATSON
& PARTNERS

6-14 Macpherson Street, Warneewood

CC No 05/307/01

Existing Fire Safety Schedule

Nil

Proposed Fire Safety Schedule

Measure	Standard of Performance
Access panels, doors and hoppers to fire resisting shafts	BCA2007 Clause C3 13 and tested prototypes (AS 1530 4 – 2005)
Automatic Fail Safe Devices	Scheduled devices release upon trip of smoke detection, fire detection and sprinkler activation in accordance with BCA2006 Clause D2 21
Automatic Fire Detection and Alarm System (<i>smoke detection system</i>)	BCA2007 Specification E2 2a and AS 1670 1 – 2004
Automatic Fire Detection and Alarm System (<i>smoke alarm system</i>)	BCA2007 Specification E2 2a and AS 3786 – 1993
Automatic fire suppression systems (<i>Sprinklers – car park level only</i>)	BCA2007 Specification E1 5 and AS 2118 1 – 1999
Emergency Lighting	BCA2007 Clause E4 2, E4 4 and AS/NZS 2293 1 – 1998
Exit Signs	BCA2007 Clause E4 5, NSW E4 6, E4 7, E4 8 and AS/NZS 2293 1 – 2005
Fire Dampers	BCA2007 Clause C3 15 and AS/NZS 1668 1 – 1998 (AS 1682 1-1990 and AS 1682 2-1990)
Fire Doors	BCA2007 Specification C3 4 and AS/NZS 1905 1 – 2005
Fire Hydrants Systems	BCA2007 Clause E1 3 and AS 2419 1 – 2005
Fire seals protecting opening in fire resisting components of the building	BCA2007 Clause C3 15, Specification C3 15 and AS 1530 4 – 2005 and AS 4072 1 – 2005 and installed in accordance with the tested prototype
Hose Reel System	BCA2007 Clause E1 4 and AS 2441 – 2005
Lightweight Construction	BCA2007 Specifications C1 8, Clause A2 3 and AS 1530 4-2005
Portable Fire Extinguishers	BCA2007 Clause E1 6 and AS 2444 – 2001
Smoke detectors and heat detectors (<i>detectors for the automatic closing operation of horizontal exits</i>)	BCA2007 Clause C3 7 and AS 1670 1 – 2004
Smoke detectors and heat detectors (<i>detectors for the automatic closing operation of smoke doors</i>)	BCA2007 Specification C3 4 and AS 1670 1 – 2004
Warning and Operational signs	BCA2007 Clauses D1 17, D2 23, E1 4 and E3 3



**Pittwater
Council**

ABN 61 340 837 671 Telephone (02) 9970 1111 Facsimile (02) 9970 7150
Postal Address P O Box 882 Mona Vale NSW 1660 DX 9016 Mona Vale

pittwater@pittwater.nsw.gov.au e mail pittwater_council@pittwater.nsw.gov.au

Business Hours
8 00am to 6 00pm Monday to Thursday
8 00am to 5 00pm Friday

DA No N0102/05

15 January 2007

Anglican Retirement Village
C/ Connell Wagner
PO Box 538
Neutral Bay
NSW 2089

Dear Sir/Madam

Deferred Commencement Consent for Demolition of existing structures and construction of a SEPP Seniors Living development including 260 self contained dwellings in nine (9) separate buildings, 119 bed Residential Aged Care Facility, ancillary facilities including administration offices, chapel/hall, community centre, cafe and store, health/fitness centre, child care centre, construction of associated roadwork, carparking and support facilities

At

Lot B DP 400488, Lot A DP 400488, Lot 22 DP 5464, Lot B DP 358765, Lot A DP 358765, Pt Lot B DP 345528, Pt Lot 1 DP 208149, Pt Lot 3 DP 579309, Pt Lot 3 DP 942319 and Pt Lot 4 DP 579309
6, 8, 10, 12 and 14 MACPHERSON STREET, WARRIEWOOD and 53C, 53B, 53 and 61 WARRIEWOOD RD, WARRIEWOOD NSW 2102

Please be advised that pursuant to Regulation 95(5) of the Environmental Planning and Assessment Regulation 2000, Council considers the details provided in accordance with deferred commencement Conditions 1 2 3 and 4 contained in Part 1 of the conditions of Development Consent are satisfactory. The following documentation therefore forms part of the consent documentation:

- Warriewood Retirement Village Water Management Report (Version 4), Prepared by GHD, Dated December 2006
- GHD Addenda letter to Pittwater Council dated 5 January 2007 (ref 21/13577/74773) RE Response to Queries from Cardno Lawson Treloar dated 4 January 2007
- Level 3 Odour Assessment, Warriewood STP Prepared by Pacific Air & Environment Dated 20 September 2006
- Developer Contribution Agreement – Warriewood Sewage Treatment Plant, Prepared by Clayton Utz (ref Legal/102784045 4) Dated 9 January 2007

In this regard the Consent becomes operative from the date of this letter subject to the conditions listed in Part 2 of the Consent

Yours faithfully


Lindsay Dyce
MANAGER - PLANNING AND ASSESSMENT

Mona Vale Customer Service Centre Village Park 1 Park Street Mona Vale
Avalon Customer Service Centre 59A Old Barrenjoey Road Avalon
Sport Services Units 11 12 13 & 16/5 Vukob Place Warriewood



11th December 2007

Richard Abbott
Morgan & Moore
Level 4, 140 Arthur Street
Morth Sydney NSW 2060

Dear Richard,

RE WARRIEWOOD BROOK STAGE 1 - ACCESSIBILITY ISSUES

Please find issues report with regards to the Warriewood Brook Stage 1, building A (The Ferneries) and building B&C (The Lakeland's) development located at 8 Macpherson Street Warriewood

The following recommendations are made in accordance with SEPP Seniors Living and consent condition 7 which refer to full compliance with BCA and AS1428 1. Where possible the following report has also made advisory recommendations in accordance with the DDA Premises Standards

The recommendations have been made with regards to the drawing numbers G/AG01 A02 to A05, A09, A10, LL/A03 to A07 A12 and A13

General (Both Buildings)

- (i) If fully glazed, ensure the lift lobby entry sliding door capable of being mistaken for doorway, is clearly marked with a minimum 30% continuous contrasting line on the face of each door. The line, 50mm to 75mm in width shall be placed between 900mm – 1100mm above the FFL
- (ii) The use of any intercom or night door release shall be placed between 900mm – 1250mm FFL. The communications device shall be no less than 500mm from any internal/external corner, compliant with AS1428 1
- (iii) Ensure the door matt is finished level with the surrounding flooring, compliant with AS1428 1
- (iv) The lift car to comply with AS1735 12
- (v) Ensure the slip resistance of flooring system used is traversable by wheelchair or walking frame in accordance with HB197 1999
- (vi) Should carpet be the preferred choice of flooring, ensure the pile height is no greater than 6mm, compliant with AS1428 1
- (vii) Lakeside door DBCG-15 to have 470mm latch side clearance
- (viii) Ensure common terrace area of Lakeside are wheelchair accessible (1.8 max gradient ramp based on difference in threshold being no more than 56mm at doorway)

Accessible Toilets - Lakelands

- (i) There is an accessible WC located within the ground floor meeting room. The WC has an internal dimension 2400mm x 1900mm which satisfy compliance with AS1428.1. Ensure the fixtures are designed and installed as follows
- Relocate the pan so that it has a distance of 450mm from the centreline of toilet to the side wall
 - Ensure there is an 800mm +/- 10mm clearance between the front face of the toilet pan to the rear wall
 - Handrail provision on wall of the toilet at a height of 800mm
 - The height of the basin should be 800mm (max) with lever action taps and insulation of water pipes
 - The mirror shall start 100mm above the wash basin
 - Toilet roll holder to be placed at a height of 600 mm on the wall adjacent the front edge of the toilet pan. The toilet roll holder shall be simple in design
 - Provision of soap dispenser, hand drier or paper towel dispenser at a dispensing height, between 900mm - 1100mm. Ensure these fixtures are within arms reach when directly in front of the wash basin
 - Door operation to be lightweight, with large D shaped handles
 - Floor surface to be non-slip design
 - International signage for the disabled to be located beside the latch side of the door at a height not greater than 1200-1600mm
 - Clothes hook to be installed at a height of 1200mm on the back of the door
 - Ensure there is a fixed shelf conveniently placed within the accessible WC. The shelf shall be positioned between 900mm – 1100mm above the finish floor level
 - Provide a toilet door that can be removed in an emergency situation

Unit Design within Lakeside & Ferneries

The following recommendations refer to all unit types (1 1, 1 2, 2 1, 2 1A, 2 1B, 2 6A 3 2 3 3, 3 4 3 5, 3 13, 3 14, 3 15), due to their similar layouts and design

Doors

- (i) Ensure all doors have a “D shaped lever action” handle with return to assist people with dexterity impairment
- (ii) The handle shall be placed between 900mm – 1100mm above the FFL

Living Areas

- (iii) The living room shall make provision of a telephone adjacent to a general power outlet
- (iv) The living room and dining room are to have wiring to allow a potential illumination level of at least 300 lux

Kitchen

- (v) The cook top shall have front or side controls

Main Bedroom

- (vi) Provide 2 double power outlets on the wall where the bed head is likely to be
- (vii) Provide at least 1 double power outlet opposite the wall where the bed head is likely to be
- (viii) Provide a telephone outlet and a general power outlet either side adjacent the bed head (closest to the door)
- (ix) The bedroom shall have wiring to allow a potential illumination level of at least 300 lux

Bathroom

- (x) Ensure the ensuite bathroom is designed as follows the area is to comply with AS1428 1
 - The pan is to be fixed 450mm from the side wall, compliant with AS1428 1 (currently 600mm)
 - The basin to be fitted with capstan taps or lever action handles
 - The shower to be fitted with capstan taps or lever action handles
 - Ensure design of the shower screen shall be such that it can be easily removed when needed
 - The shower walls shall be reinforced to accommodate the future needs of a folding shower seat and grabrails
 - The walls surrounding the pan shall be reinforced to accommodate the future need for grab rails around the toilet pan compliant with AS1428 1
 - The provisions of a wall cabinet that is illuminated, compliant with AS4299
 - The bathroom shall make provision for a mirror
 - A double power outlet shall be fitted besides the mirror

Laundry

- (xi) The laundry shall make provision of the use of clothes dryer (free standing preferred)

- (xii) The laundry shall make provisions of a minimum 1300mm circulation space in front of all laundry appliances

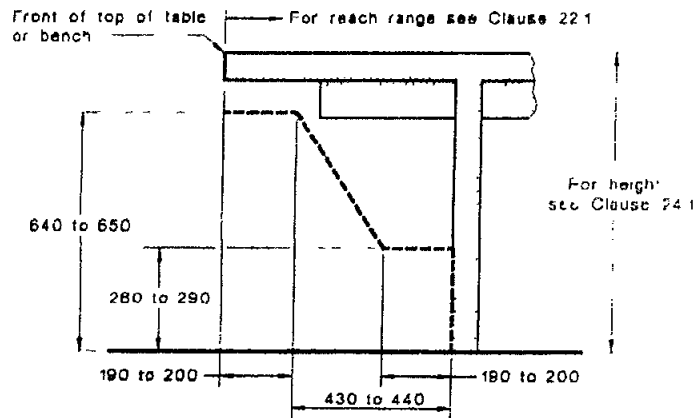
Miscellaneous

- (xiii) All light switches shall be between 900mm to 1100mm above the FFL
- (xiv) General power outlets shall be at least 600mm above the FFL
- (xv) Provide a means of wheelchair access onto all unit type terrace areas (1.8 max gradient ramp can be used, based on difference in threshold being no more than 56mm at doorway)
- (xvi) All units shall make provision of a linen cupboard. The cupboard shall be minimum 600mm in width with adjustable shelving

DDA Issues

The following comments relate to the Draft DDA Premises Standards with regards to the principles of equality, independence and dignity. Although the following issues are not mandatory, these recommendations will mitigate any possible DDA complaints.

- (i) Lakeside accessible toilet to be accessed from corridor rather than meeting room
- (ii) Consideration shall be given with the provisions of 850mm clear widths to all fire doors (currently 800mm). This will allow some level of fire safety protection for a person in a wheelchair (best practice)
- (iii) Ensure all passenger lift cars have a minimum 1400mm x 1700mm internal dimension, compliant with AS1428.2
- (iv) The seating near all lift lobbies shall have a firm back and side arm rests to assist the elderly
- (v) The ground floor accessible WC within the Lakeland building shall have a 2700mm x 1900mm internal dimension compliant with AS1428.2. These internal dimensions will assist people with larger wheelchairs (i.e. scooters)
- (vi) The ground floor kitchen found within the Lakeland building shall be designed as follows
- Ensure the taps are no greater than 300mm away from the front edge of the bench
 - Provide a power point 300mm from the front of the bench
 - If applicable, ensure the operative part of the hot water boiler unit is no greater than 1100mm above the FFL. The unit shall also be no more than 300mm away from the front edge of the kitchen bench
 - Ensure the area underneath the sink is designed to allow easy access for a person in a wheelchair. The sink shall provide toe (290mm) and knee (650mm) clearances when required in the future (see diagram below)



LEGEND
----- Outer limit of any obstructions beneath table/bench or counter at wheelchair seating spaces

NOTE For width of seating spaces see Clause 24.1.3

Yours faithfully,

David Goding
Morris-Goding Accessibility Consulting

ESTIMATED RECEIPTS

OFFICIAL RECEIPT

15/05/2007 Receipt No 015770

To Anglican retirement savings

111 McPherson Street
Perth WA 6002

Applic	Reference	Amount
CL Re	SUEF-594 1 - n0102/05	\$33,277.51
GL Re	SWCF-594 1 - n0102/05	\$705,493.58
GL Re	SWCL-594 1 - n0102/05	\$105,159.57
CL Pe	SWCW-594 1 - n0102/05	\$744,192.29
CL Re	SWLS-594 1 - n0102/05	\$145,602.67
GL Re	SWPC-594 1 - n0102/05	\$564,371.90
GL Re	SWFM-594 1 - n0102/05	\$233,409.15
EL Re	SWFF-594 1 - n0102/05	\$1,509,570.50
EL Re	SUTT-594 1 - n0102/05	\$475,703.20

Total \$4,516,996.25

Amounts Tendered

Cash	\$0.00
Cheque	\$4,516,996.25
Debit Card	\$0.00
Money Order	\$0.00
Agency Rec	\$0.00
Total	\$4,516,996.25
Outstanding	\$0.00
Change	\$0.00
Nett	\$4,516,996.25

Printed 15/05/2007 1 77 42

Cashier M'Calli

Section 94 Contribution Breakdown (Warriewood Valley)

NOTE - PLEASE ENSURE THAT PAYMENT IS SUBMITTED TO CASHIER WITH THIS FORM

DA Consent No NO102/05 (For Receipt Description)

Consent Date _____

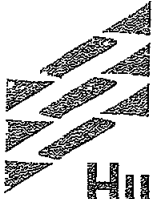
DA Consent Description SEPP SENIORS LIVING DEVELOPMENT

Property Address 6-14 MACPHERSON STREET, WARRIEWOOD (For Receipt Description)

S94 Subset	Contribution Amount	Cashier Code	Account No	Responsible Business Unit
Traffic and Transport	\$ 475,703.22	SWTT	91310C1210000	Urban Infrastructure
Creeklane corridor (works)	\$ 744,182.29	SWCW	91317C1210000	Urban Infrastructure
Creeklane corridor (land)	\$ 105,169.97	SWCL	91303C1210000	Urban Infrastructure
Community Facilities	\$ 705,499.58	SWCF	91316C1210000	Community & Library Services
Public Recreation	\$ 1,509,579.60	SWPR	91312C1210000	Reserves & Recreation
Pedestrian Cycleway	\$ 664,371.90	SWPC	91311C1210000	Reserves & Recreation
Bushfire	\$ 33,277.91	SWBF	91314C1210000	Natural Resources
Library Services	\$ 145,802.63	SWLS	91315C1210000	Community & Library Services
Ponderosa Parade	\$	SWVP	91250C1210000	Urban Infrastructure
Plan Management	\$ 233,409.15	SWPM	91318C2210000	
Total Payment	<u>\$ 4,616,996.25</u>			

To be completed by Cashier	
Date Paid	15 5 07
Receipt Number	215330

NOTE TO CASHIER - PLEASE SEND COMPLETED FORM AND A COPY OF THE RECEIPT TO PROJECT LEADER WARRIEWOOD INFRASTRUCTURE



HughesTrueman

HUGHES TRUEMAN PTY LTD
AS TRUSTEE FOR HTL REINHOLD TRUST

ABN 53 831 529 091
QUALITY CERTIFIED AS 9001

www.hughestrueman.com.au

Level 2 60 Pacific Highway

PO Box 151
St Leonards NSW 1590
Australia

T 02 9439 2633
F 02 9438 4505

stleonards@hughestrueman.com.au

18th December 2007

Andrew Rys
Senior Building Regulation Consultant
Steve Watson & Partners Pty L'd
Level 5, 432 Kent Street, Sydney NSW 2000
Ph (02) 9283 6555
Fax (02) 9283 8500

Dear Sir

**RE CURRENT STATUS OF STRUCTURAL DRAWINGS
8 MACPHERSON STREET WARRIEWOOD – STAGE 1 WARRIEWOOD BROOK**

The structural engineering components of this project as shown on the current structural drawings marked as issued for pricing were designed by a practising structural engineer in accordance with the relevant Australian Standards, Building Code of Australia and accepted engineering practice and principles. It should be noted that the current structural drawings are concept drawings only and are not to be used for construction.

In carrying out the design we exercised the degree of skill, care and diligence normally exercised by Consulting Engineers in similar circumstances.

Yours sincerely

HUGHES TRUEMAN
JOHN WILLIAMS
Director





**WARRIEWOOD VALLEY
ANGELICAN RETIREMENT VILLAGE**

Prepared for Anglican Retirement Villages

**Narrabeen Creek Riparian Restoration
VEGETATION MANAGEMENT PLAN**

20 October 2005

05072

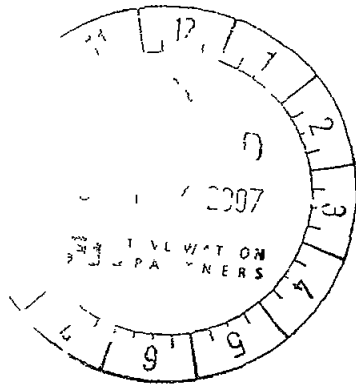
QA-2-5/05/05

Pittendrich Shinkfield Bruce Pty Ltd
2-14 Mountain Street Ultimo NSW 2007

CLIENTS PEOPLE PERFORMANCE

Anglican Retirement Villages

Warriewood Retirement Village Water Management Report



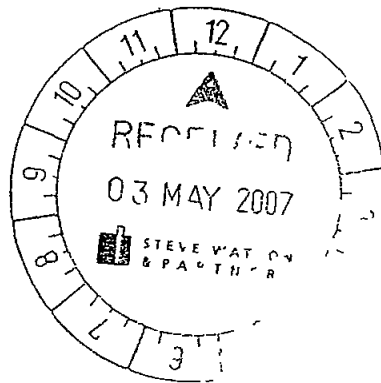
FULL COPY OF REPORT
SENT WITH ORIGINAL
CC 05/307/01

December 2006

Event Project Management

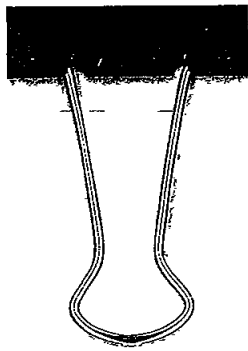
Warriewood Retirement Village
6-14 Macpherson Street
Warriewood

Acid Sulphate Soils Management Plan



**FULL COPY OF REPORT
SENT WITH ORIGINAL
CL 05/307/01**

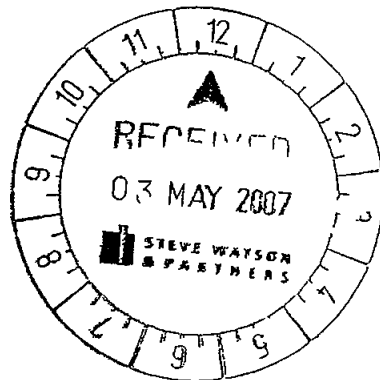
September 2005



Anglican Retirement Villages

8-14 Macpherson Street,
Warriewood, NSW

"Upfront" Asbestos Validation Report



FULL COPY OF REPORT
SENT WITH ORIGINAL
CC 05/307/01

March 2006



CLIENTS PEOPLE PERFORMANCE

13 December 2007

Morgan Moore Associates
Level 5 140 Arthur Street
North Sydney NSW 2060

Our ref 21/13577/137019
Your ref

Attn Richard Abbott
Mr

Dear Richard

**Warriewood Anglican Retirement Villages
Road & Drainage Design Works**

This letter certifies that the design and plans for road and drainage works has been carried out in accordance with and complies with Conditions C20 & C21 of DA No 102/05

Yours faithfully
GHD Pty Ltd

Alan Liddle
Principal Professional Engineer
02 9239 7283



Case Number 108073

5 September 2007

Anglican Retirement Villages
c/ Bowdens Group Australia

NOTICE OF REQUIREMENTS
for
SECTION 73 SUBDIVIDER/DEVELOPER COMPLIANCE CERTIFICATE
(Sydney Water Act 1994, Part 6, Division 9)

Developer	Anglican Retirement Villages
Your reference	71777/Mach6
Development	6 to 14 MacPherson Street Warriewood
Development Description	Demolition of existing structures and construction of a SEPP Seniors Living development including 260 self contained dwellings in nine (9) separate buildings, 119 bed Residential Aged Care Facility, ancillary facilities including administration offices, chapel/hall, community centre, cafe and centre, health and fitness, child centre
Council Consent No	NO102/05 by Pittwater Council of 6 April 2006 (modified 22/12/2006 & 08/01/2007)
Your application date	17 July 2007

Dear Applicant

Sydney Water has assessed your application for a Section 73 Compliance Certificate (the Certificate) for the development shown above. Before your Water Servicing Coordinator (Coordinator) can issue the Certificate to you, you must meet all the requirements set out in the following document called *What You Must Do To Get A Section 73 Certificate*.

You have until 5 September 2008 to meet those requirements and receive the Certificate. If you have not received the Certificate by then you will have to reapply (and pay another application fee) and Sydney Water will issue you with a new notice. We may have extra requirements and charges may change in that notice.

The Coordinator will be your point of contact with Sydney Water. They can answer most questions you might have on our developer process and developer charges.

You can also find out about this process by visiting www.sydneywater.com.au > Building Developing and Plumbing > Developing Your Land

What You Must Do To Get A Section 73 Certificate

Summary

This is a summary of Sydney Water's requirements. The detailed list begins on the next page.

You must do all of the following things

1 Pay a total of \$1,259,972 in charges

Please note

- You have to pay these charges directly to Sydney Water and you must have an invoice. Your Coordinator can arrange the invoice,
- **Payment is by cash or bank cheque only** and you can pay at a Sydney Water Customer Service Centre or by post with your invoice, and
- You must tell your Coordinator when you have made that payment

2 Complete any special requirements from Section 2

Other things you need to do

At the end of this Notice are some other things that you need to do. They are NOT a requirement to be met before the Certificate can issue but may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

DETAILED REQUIREMENTS**1 Developer Charges**

Development Servicing Plan (DSP)	Basis of Calculation	Charge (\$) for Applicable period (05/09/07 30/06/08)	Charge (\$) for Applicable period (01/07/08-04/09/08) (CPI adjusted)
Warringah Water DSP Area <i>See Note Below</i>	Residential Development Density > 180 dwellings per ha band 260 dwellings @ \$494 = \$128 440 <i>plus #Other Developer Charge Flow Your WSC has provided a projected water usage figure of 29 kl/s</i> 29 kl/d @ \$2 032 per ET = \$56 999 <i>less Credit of \$10,160 for previous use (5 x residential dwellings)</i>	\$ 175 279	\$TBA
Warrlewood Sewer DSP Area <i>See Note Below</i>	Residential Development Density > 180 dwellings per ha band 260 dwellings @ \$2 961 = \$769 86 <i>plus Other Developer Charge Flow Discharge rate of 79% provided by your WSC</i> \$6,437 per ET = \$ 314,833 <i>less Credit of \$0 for previous payment/ use (No previous connection to sewer or sewer availability charges paid)</i>	\$1 084 693	\$TBA
Reticulation Recovery	See Note below	\$NIL See Note below	\$TBA See Note below
DEVELOPER CHARGES TOTAL <i>[OFFICE USE – Invoice Charges total – Developer \$1,259 972]</i>		\$1,259,972	\$TBA

The projected water usage of 29 kl/s covers the Residential Care (21 kl/d) and Administration Offices, Child Care, Chapel/Hall, Community Centre, Cafe/Store and Health/Fitness Centre (8 kl/d)

Note

- If payment is made after 1 July 2008 then the charges in column 3 will first need to be adjusted by the CPI figure. This will be done when you get the invoice from your Coordinator and you will need to pay the adjusted amount. (The CPI figure is based on the weighted average of the capital cities CPI for the 12 months to the end of the previous March.)

Payment of charges

- **You must pay your DSP charge before you will be given permission to connect your development to Sydney Water's water/sewer systems**
- You have to pay these charges directly to Sydney Water and you must have an invoice. Your Coordinator can arrange the invoice. **Payment is by cash or bank cheque only and you can pay at a Sydney Water Customer Service Centre or by post with your invoice.** You must tell your Coordinator when you have made that payment.

Also

- **DSP charges** are a contribution towards the cost of systems (e.g. pipelines and treatment plants) which serve your development. Sydney Water has no power to change these costs because they are decided by IPART. If you want more information visit the IPART website www.IPART.nsw.gov.au. If there is a dispute, the cost of arbitration will be shared equally by you and Sydney Water (see *IPART Act 1992, Section 31*).
- The DSP charges (for Other Developer Charge) in the table are based on your development needing an average day water demand of 29 kℓ.
If the development generates a greater demand, you may have to pay more in charges. If you are going to sell the development, you have to explain the situation to prospective buyers as part of the requirements of Vendor Disclosure.
- **Reticulation Recovery Charges** recover part of the cost of works that have been paid for by Sydney Water or other developers and that benefit your development. This charge is calculated before your points of connection have been determined. If your completed designs show that your development will be connected to other man/s, the Reticulation Recovery charge may be changed and/or you may need to construct other works.

2 Special Requirements

- **Provision of sewer facilities**

The provision of sewer facilities to this development is dependent upon the satisfactory completion of works known as the Narrabeen Creek Sewer Carrier. This proposed 300mm diameter sewer will be laid along the southern bank of Narrabeen Creek, which is the north-eastern boundary of the proposed development. A connection point will be made available inside the property boundary. The estimated completion of these works is 2009.

- **Complete conditions of the Developer Contribution Agreement Warriewood Sewage Treatment Plant**

Your organisation signed a Commercial Agreement with Sydney Water to pay its share of contributions towards odour mitigation works to be carried out at our Warriewood STP. The conditions and works in this Agreement and Notice letter will need to be satisfactorily completed before the Section 73 Certificate can issue.

OTHER THINGS YOU NEED TO DO

Shown below are other things you need to do that are NOT a requirement for the Certificate. They may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

(1) Stamping and approval of your building plans

Please note that your building plans must be stamped and approved. This can be done at either a

- Quick Check agency (for an agency list visit www.sydneywater.com.au > Building Developing and Plumbing > Quick Check or call 13 20 92) or
- Sydney Water Customer Service Centre

This is not a requirement for the Certificate but the approval is needed because construction/building works may impact on existing Sydney Water assets (e.g. water and sewer mains). **In any case, these works MUST NOT commence until Sydney Water has granted approval.**

Your Coordinator can tell you about the approval process including

- Possible requirements,
- Costs, and
- Timeframes

Note You must obtain our written approval before you do any work on Sydney Water's systems. Sydney Water will take action to have work stopped on the site if you do not have that approval. We will apply Section 44 of the *Sydney Water Act 1994*.

(2) Water and sewer information

(a) Water

Your development must have a frontage to a water main that is the right size and can be used for connection.

Sydney Water has assessed your application and found that

- The existing 200mm DICL water main in MacPherson Street (opposite side of road) will serve your development and must have its own connection to that water main.

Large Water Service Connection

The size of your development means that you will need a connection larger than the standard domestic 20 mm size.

To get approval for your connection, you will need to lodge an application with a Quick Check Agent or at a Sydney Water Customer Centre. You, or your hydraulic consultant, may need to supply the following

- A plan of the hydraulic layout,

- A list of all the fixtures/fittings within the property.
- A copy of the fireflow pressure inquiry issued by Sydney Water,
- A pump application form (if a pump is required),
- All pump details (if a pump is required)

You will have to pay an application fee

Sydney Water does not consider whether a water main is adequate for fire fighting purposes for your development. We cannot guarantee that this water supply will meet your Council's fire fighting requirements. The Council and your hydraulic consultant can help.

Private Water Services Connection and Metering

To provide domestic water to the total development you will need to connect to the Sydney Water main. This connection must comply with the *National Plumbing and Drainage Code AS 3500* and *NSW Code of Practice for Plumbing and Drainage*. You may have to include isolation valves on either side of the connection(s) to the Sydney Water main.

For example, a single meter on

- each vertical block of residential units** whether subdivided or unsubdivided (e.g. if your development has tower buildings, you must provide a meter for each building off one or more connections to the main),
- each mixed development use type** whether subdivided or unsubdivided (e.g. if your mixed development has both a residential and a commercial area, you must provide a meter for each area usually off one connection to the main. Note that if there is more than one commercial area, you must provide a separate meter for each commercial area off that connection), and
- each non-residential Strata, Stratum or Torrens (within a Community) Title** subdivided lot with a demand for water. You will need a separate private water service for each lot.

Note

Where a number of non-residential units are not subdivided, separate services and metering to each unit is not required as Sydney Water will look to the owner for payment of all rates and charges. For example, a shopping centre where all shops remain in one ownership.

To meet the preceding guidelines, either

- a single connection to the Sydney Water main may be branched, or
- if you would rather separate connections for each use type/area, you can apply to us for that.

A vertical building may be plumbed with a common riser, with either

- a ring main on each floor with tee off-takes at each unit, or
- individual metered services to each unit that will allow housing of individually tagged meters in the one location.

The location of the meter servicing a residential vertical building generally must be in the commercial area after all commercial off-takes.

Sydney Water will supply enough meters to meet the above guidelines but we will not provide any check meters. All meters **must** be placed in an accessible area that should be either

- no more than one metre inside the property boundary, or
- in a location acceptable to Sydney Water e.g. in the commercial area after all commercial off takes

(b) Sewer

Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

Sydney Water has assessed your application and found that

- The provision of sewer facilities to this development is dependent upon the satisfactory completion of works known as the Narrabeen Creek Carrier. This proposed 300mm diameter sewer will be laid along the southern bank of Narrabeen Creek which is the north-eastern boundary of the proposed development. A connection point will be made available inside the property boundary. The estimated completion of these works is 2009.

(3) Soffit Requirements

Please be aware that floor levels must meet Sydney Water's soffit requirements for property connection and drainage.

(4) Asset adjustments

After Sydney Water issues this Notice, we may find that the water main/sewer main/stormwater located in the footway/your property needs to be adjusted/deviated. If this happens, you will need to complete this work at your cost and to Sydney Water standards **before we can issue the Certificate**. (This is also talked about in the section in this Notice about building plan stamping.)

You must engage your current or another authorised Coordinator to make another application for approval (and pay an application fee) and manage the design and construction of the works. Coordinators will give you a quote or information about costs for services/works, including Sydney Water costs.

For a list of authorised Coordinators, either visit www.sydneywater.com.au > Building Developing and Plumbing > Developing Your Land or call 13 20 92.

You will need to sign a Major Works Agreement before you can construct the works. Sydney Water will need to see the completed designs for the work before construction and we will require you to lodge a security. The security will be refunded once the work is completed.

(5) Trade Waste Information

Should this development generate trade wastewater, this notice of requirements does not guarantee the applicant that Sydney Water will accept the trade wastewater to its sewerage system. For further information please visit the Sydney Water website at, <http://www.sydneywater.com.au/OurSystemsAndOperations/Tradewaste/>

or contact a Trade Waste Customer Service Representative on (02) 9622 2244

Prospective Purchasers should be made aware of the above situation under the requirements of vendor disclosure

(6) Backflow Prevention Information

In accordance with Sydney Water's Backflow Prevention Policy, you may be required to install a backflow prevention containment device immediately downstream of each water meter service the property. The device must be installed as a condition of continued use of the water supply. Failure to install and maintain the device may result in disconnection of the water service. A copy of Sydney Water's Backflow Prevention Policy is available on the Sydney Water Website at, <http://www.sydneywater.com.au/BuildingDevelopingandPlumbing/BackflowPrevention>

(7) Other fees and requirements

The requirements in this Notice relate to your Certificate application only. Sydney Water may be involved with other aspects of your development and there may be other fees or requirements. These include:

- plumbing and drainage inspection costs,
- the installation of backflow prevention devices,
- trade waste requirements,
- large water connections and
- council fire fighting requirements (It will help you to know what the fire fighting requirements are for your development as soon as possible. Your hydraulic consultant can help you here.)

END OF NOTICE

Waste Management Plan

Demolition, Construction and Use of Premises

Completing this table will assist you in identifying the type of waste that will be generated and in advising Council how you intend to re-use recycling or dispose of the waste

If space is insufficient in the table please provide attachments

Outline of Proposal

Site Address 6 - 14 MACPHERSON STREET, WARRIEWOOD

Applicant's Name and Address Morgan Moore & Associate, on behalf of Arghon Retirement Villages
Level 5, 140 Arthur Street North Sydney NSW 2060

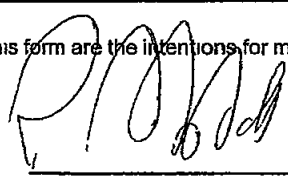
Phone No 9957-3048 Fax No 9957-6188

Building and other structures currently on the site N/A, Cleared site

Brief description of proposal

Construction of 64 Independent Living Units (ILU's) and associated landscaping & civil works

The details provided on this form are the intentions for managing waste relating to this project

Signature of Applicant: 

Date

13/12/07

Waste Management Plan

SECTION ONE DEMOLITION STAGE

Materials On-Site	Quantity (m ³)	Re-use and Recycling			Destination	
		On-Site Storage (m ³)	On-Site Reuse (m ³)	Off-Site Recycling (m ³)	On-Site Storage (m ³)	Off-Site Disposal (m ³)
Excavation material	7'000 m ³	-	-	-	-	Southern Cross Smt → Envirogard
Green waste	3'000 m ³	-	-	-	-	" " → "
Bricks	-	-	-	-	-	-
Concrete	-	-	-	-	-	-
Timber (please specify)	-	-	-	-	-	-
Plaster board	-	-	-	-	-	-
Metals (please specify)	-	-	-	-	-	-
Other (please specify)	-	-	-	-	-	-

Waste Management Plan

SECTION TWO CONSTRUCTION STAGE

Materials On-Site	Destination	
	Re-use and Recycling	Disposal
Excavation material	Backfill Material	Southern Cross Const → Enviroguard
Green waste		
Bricks		Southern Cross Const → Brick Pit
Concrete		
Timber (please specify)		Southern Cross Const → SITA
Plaster board		Southern Cross Const → SITA
Metals (please specify)		
Other (please specify)		

Waste Management Plan

SECTION THREE USE OF PREMISES

Type of Waste to be Generated	Expected Volume per week	Proposed on-site storage and treatment facilities	Destination
<p>Please specify the volume of waste to be generated at the site.</p>	<p>1000 litres</p>	<p>On-site storage area with storage bins and a separate area for organic waste composting.</p>	<p>Existing disposal facility</p>
General household rubbish	40 m ³		General Waste & Recycling bins E.G. JJ Richards disposed



13th December 2007

MORGAN AND MOORE ASSOCIATES
Lvl 5 140 Arthur Street
North Sydney
NSW 2060

Attention *Richard Abbott*

Dear *Richard*

JOB TITLE Stage 1 – Warriewood Brook
OUR REF JOB NO 05-149s

CERTIFICATE OF COMPLIANCE – LANDSCAPE DOCUMENTATION

SUBJECT PREMISES STAGE 1 WARRIEWOOD BROOK RETIREMENT VILLAGE 8 MCPHERSON STREET WARRIEWOOD
CONSENT DA NUMBER No 102/05

We hereby certify that the above design and documentation is in accordance with accepted Landscape Architectural practice and relevant conditions of Development Consent. In particular condition C1 pertaining to the landscape plans being prepared in accordance with the landscape master plan and liaison with council.

We are an appropriately qualified company in this area and as such certify that the design and performance of the design systems comply with the above and which are detailed on the following drawings:

LM01	B1	Landscape Cover Sheet
LF01	B1	Landscape Finishes
LF02	B1	Landscape Finishes
LF03	B1	Landscape Finishes
LF04	B1	Landscape Finishes
LP01	B1	Landscape Planting
LP02	B1	Landscape Planting
LP03	B1	Landscape Planting
LP04	B1	Landscape Planting
LP05	B1	Landscape Planting
LD01	B1	Details
LD02	B1	Details
LD03	B1	Details

taylor brammer landscape architects

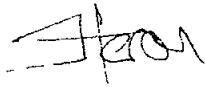
Sydney
218 Oxford Street Woollahra NSW 2025 Australia
t +61 2 9387 8855 f +61 2 9387 8155
e sydney@taylorbrammer.com.au

South Coast
26 Moore Street PO Box 64 Austinmer NSW 2515 Australia
t +612 4267 5088 f +612 4267 4826
e southcoast@taylorbrammer.com.au

The firm possesses Professional Indemnity Insurance to the value of \$ 5 000 000 as required

Full Name of Designer Taylor Brammer Landscape Architects Pty Ltd
Address of Designer 218 Oxford Street Woollahra NSW 2025
Business Telephone 02 9387 8855 Facsimile No 02 9387 8155

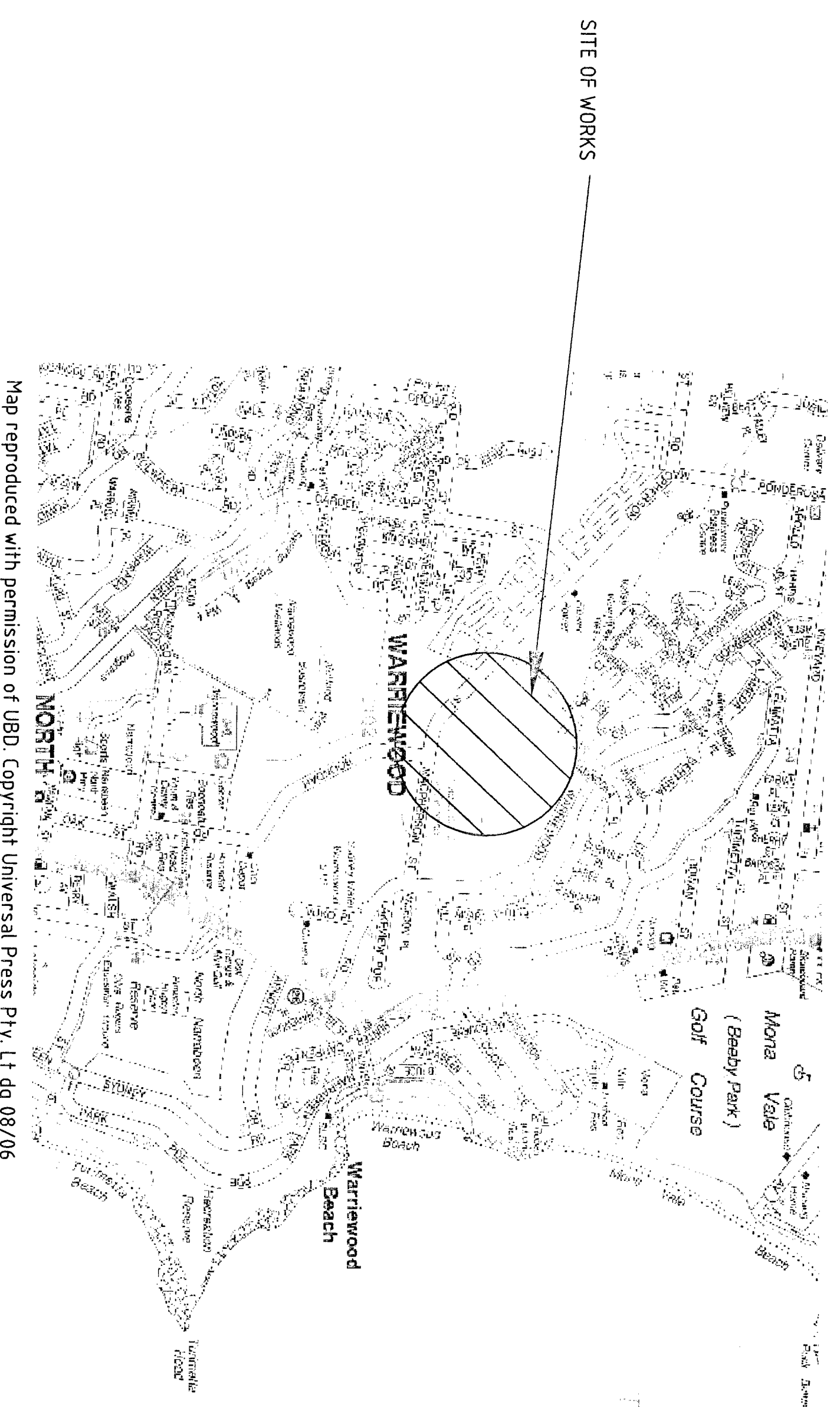
Yours faithfully

A handwritten signature in black ink, appearing to read 'J Heron', written over a horizontal line.

James Heron BLArch (Hons1) DipHort
Landscape Architect

ANGLICAN RETIREMENT VILLAGES WARRIEWOOD BROOK STAGE 1

GHD PROJECT No. 21-13577



DRAWING LIST STAGE 1 CIVIL WORKS

DWG No.	DRAWING TITLE
21-13577-C101	COVER SHEET, TITLE, LOCALITY PLAN
21-13577-C102	OVERALL SITE PLAN SHOWING STAGING
21-13577-C103	ROAD 1 & 4 DETAIL PLANS
21-13577-C104	ROAD 2 & 3 DETAIL PLANS
21-13577-C105	ROAD LONGITUDINAL SECTIONS
21-13577-C106	ROAD TYPICAL SECTIONS & DETAILS
21-13577-C107	ROAD 1 GROSS SECTIONS SHEET 1 OF 2
21-13577-C108	ROAD 2 GROSS SECTIONS SHEET 1 OF 2
21-13577-C109	ROAD 2 GROSS SECTIONS SHEET 2 OF 2
21-13577-C110	KERB RETURN DETAILS
21-13577-C111	ROAD DETAILS
21-13577-C112	STORMWATER DRAINAGE PLAN
21-13577-C113	STORMWATER LONG SECTIONS STAGE 1, SHEET 1
21-13577-C114	STORMWATER LONG SECTIONS STAGE 1, SHEET 2
21-13577-C115	STORMWATER DRAINAGE SWALE DETAILS
21-13577-C116	STORMWATER DRAINAGE PIT SCHEDULE
21-13577-C117	STORMWATER DRAINAGE DETAILS
21-13577-C118	SITE REGRADE PLAN SHEET 1 OF 2
21-13577-C119	SITE REGRADE PLAN SHEET 2 OF 2
21-13577-C120	SEDIMENT & EROSION CONTROL PLAN
21-13577-C121	SEDIMENT & EROSION CONTROL PLAN
21-13577-C122	BULK EARTHWORKS

DRAWING LIST REFERENCE DRAWINGS CIVIL WORKS

DWG No.	DRAWING TITLE
21-13577-C190	MACPHERSON ST, PLAN & LONG SECTION
21-13577-C191	MACPHERSON ST, PLAN & LONG SECTION
21-13577-C192	BRANDS LANE, PLAN & LONG SECTION
21-13577-C193	MACPHERSON ST GROSS SECTIONS SHEET 1 OF 5
21-13577-C194	MACPHERSON ST GROSS SECTIONS SHEET 2 OF 5
21-13577-C195	MACPHERSON ST GROSS SECTIONS SHEET 3 OF 5
21-13577-C196	MACPHERSON ST GROSS SECTIONS SHEET 4 OF 5
21-13577-C197	MACPHERSON ST GROSS SECTIONS SHEET 5 OF 5
21-13577-C198	BRANDS LANE GROSS SECTIONS SHEET 1 OF 1
21-13577-C199	TYPICAL SECTIONS & DETAILS
21-13577-C200	KERB AND PRAM CROSSING DETAILS
21-13577-C201	SETOUT PLAN & DETAILS
21-13577-C202	MACPHERSON ST/BRANDS LANE ROUNDABOUT
21-13577-C203	MACPHERSON ST/SITE ENTRY ROUNDABOUT
21-13577-C204	MACPHERSON ST PEDESTRIAN REFUGE DETAILS
21-13577-C205	MACPHERSON ST BUS BAY DETAILS
21-13577-C206	BRANDS LANE/ SITE ENTRY ROUNDABOUT
21-13577-C207	SERVICES LAYOUT
21-13577-C208	SIGNAGE & LINEMARKING PLAN
21-13577-C209	STORMWATER LONG SECTION LINE 50, SHEET 1
21-13577-C210	STORMWATER LONG SECTION LINE 50, SHEET 2
21-13577-C211	STORMWATER DRAINAGE DETAILS

No.	Revision	Name	Issued	By	Checked	Approved	Date	No.	Revision	Name	Issued	By	Checked	Approved	Date
A		ISSUED FOR TENDER	LSM	NDP	NDP		1/12/07								

TENDER

10-Bland Street, Sydney NSW 2009, Australia
T 61 2 9239 7100 F 61 2 9239 7100
E sydney@ghd.com.au W www.ghd.com.au

ANGELICAN RETIREMENT VILLAGES
WARRIEWOOD BROOK STAGE 1
COVER SHEET, TITLE, LOCALITY PLAN

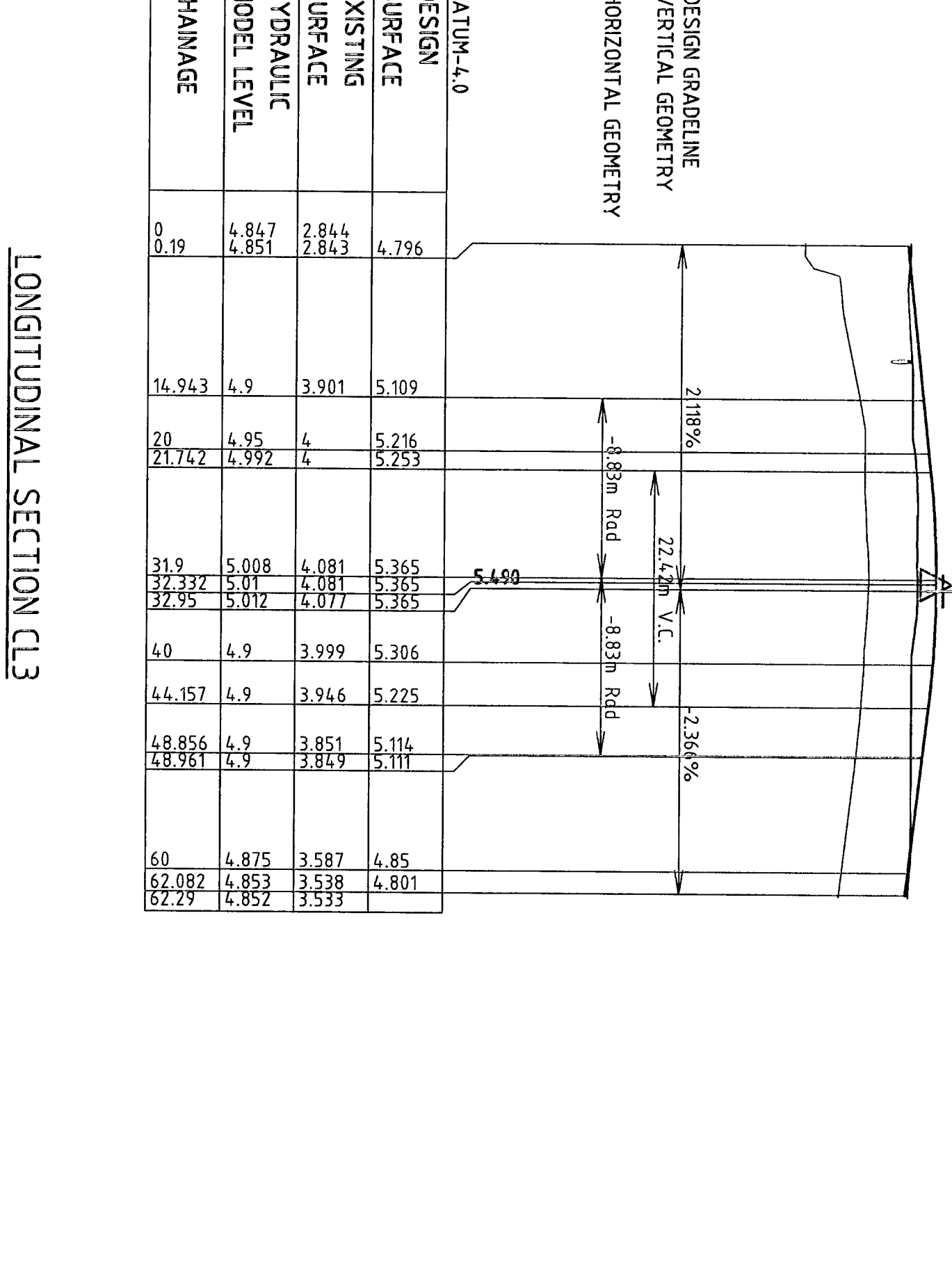
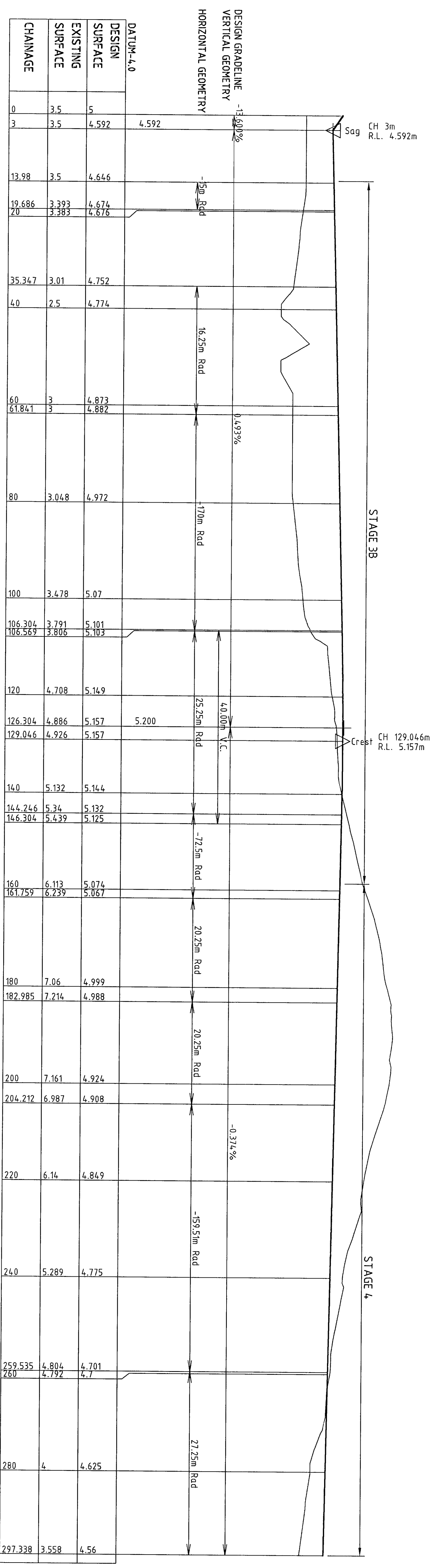
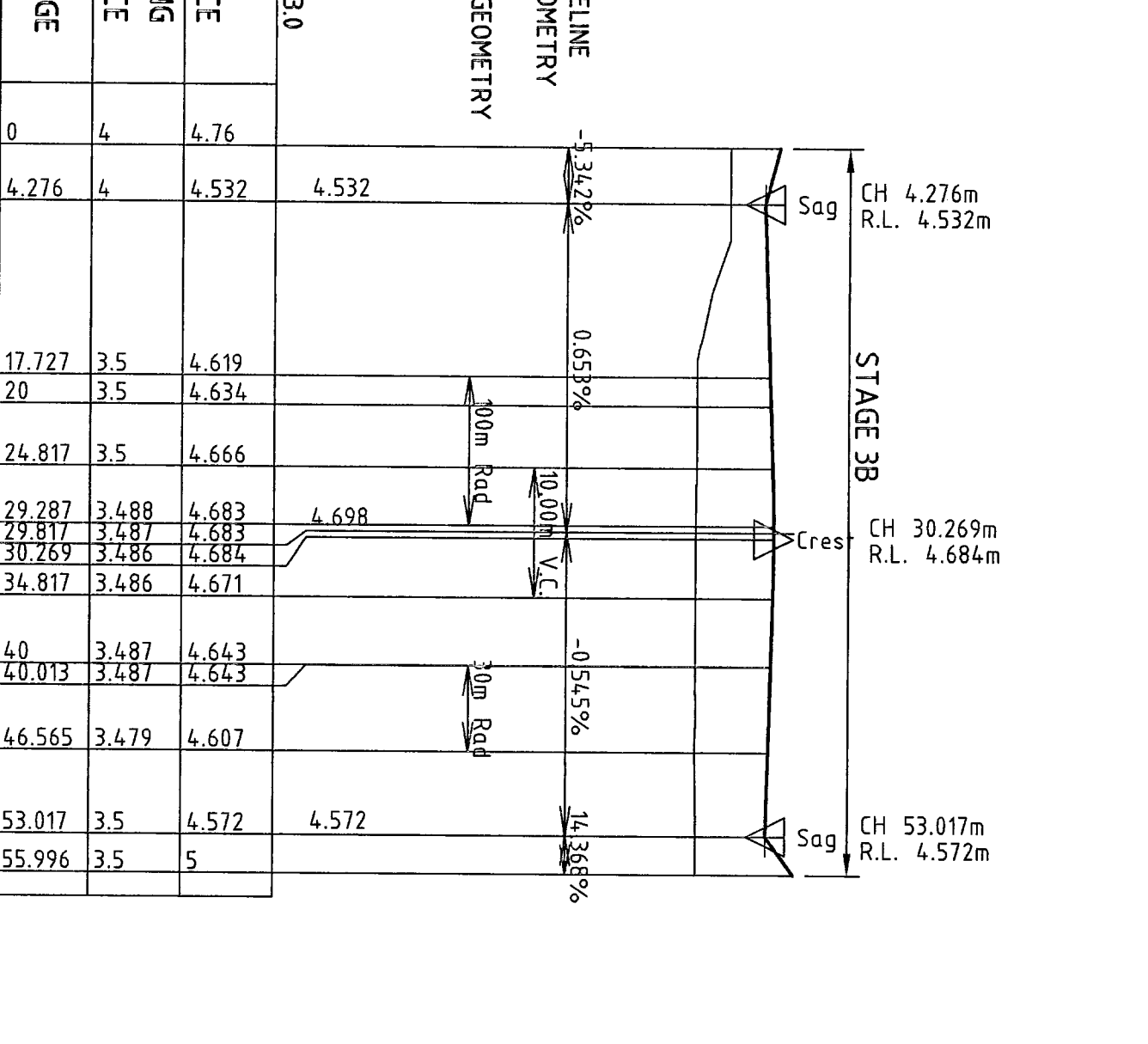
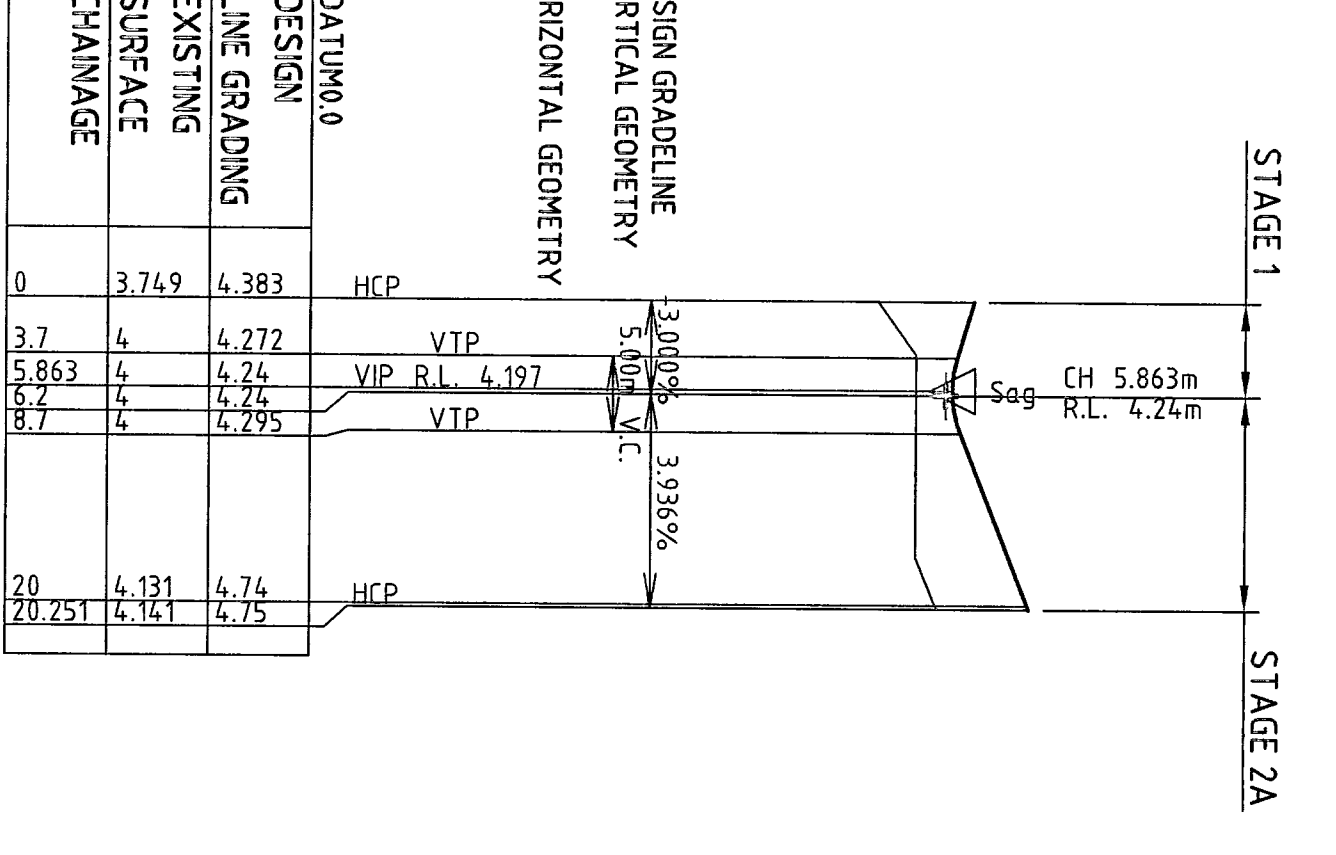
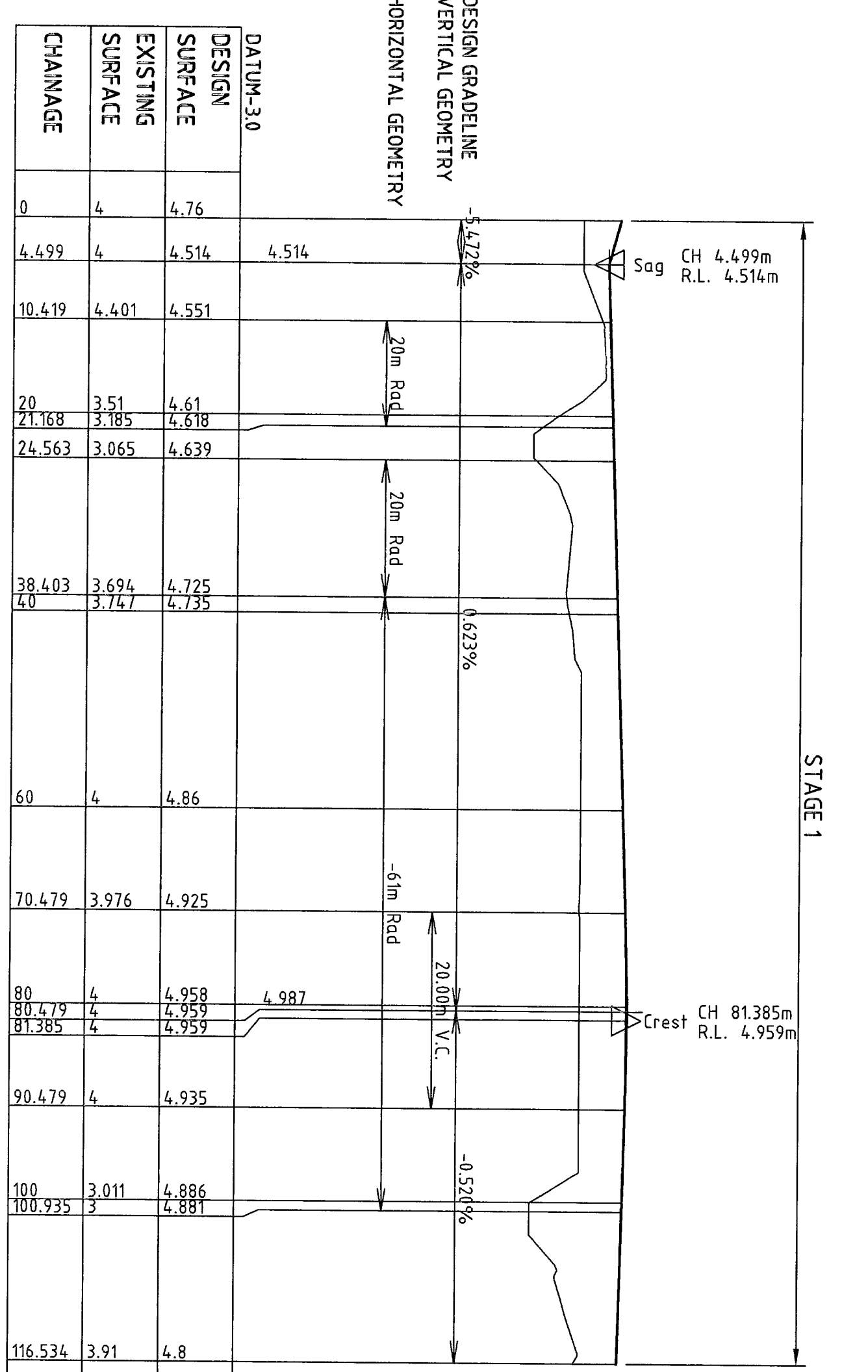
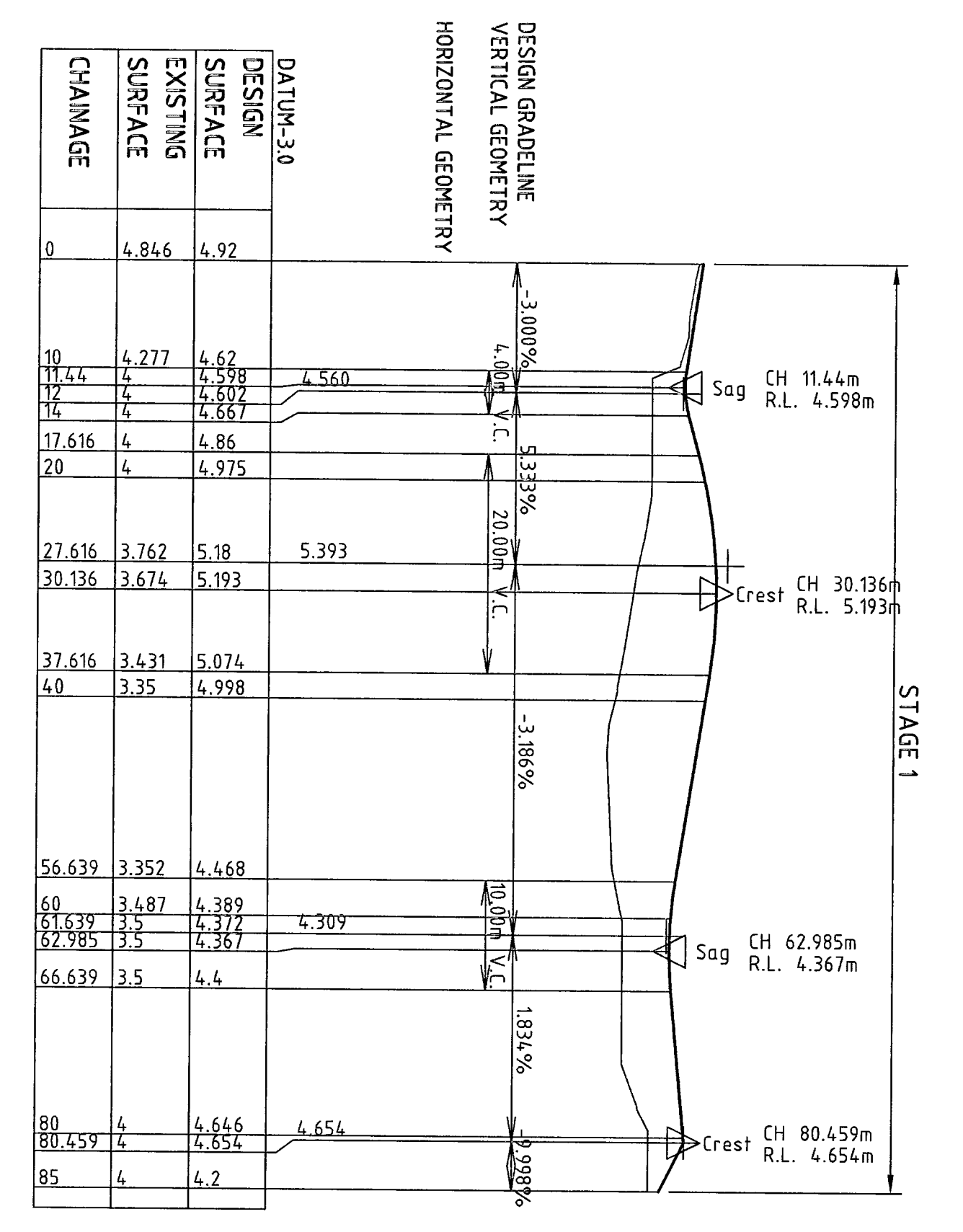
Client: ANGELICAN RETIREMENT VILLAGES
Project: WARRIEWOOD BROOK STAGE 1
Title: COVER SHEET, TITLE, LOCALITY PLAN
Drawing No: 21-13577-C101
Rev: A

DO NOT SCALE

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Design: LSM
Checked: NDP
Approved: NDP

Client: ANGELICAN RETIREMENT VILLAGES
Project: WARRIEWOOD BROOK STAGE 1
Title: COVER SHEET, TITLE, LOCALITY PLAN
Drawing No: 21-13577-C101
Rev: A



ROAD 1 CENTRELINE SETOUT		ROAD 2 CENTRELINE SETOUT	
CHANGING	STATION	CHANGING	STATION
0.000	34.975.446	0.000	34.982.118
10.000	34.975.446	10.000	34.982.118
20.000	34.975.446	20.000	34.982.118
30.000	34.975.446	30.000	34.982.118
40.000	34.975.446	40.000	34.982.118
50.000	34.975.446	50.000	34.982.118
60.000	34.975.446	60.000	34.982.118
70.000	34.975.446	70.000	34.982.118
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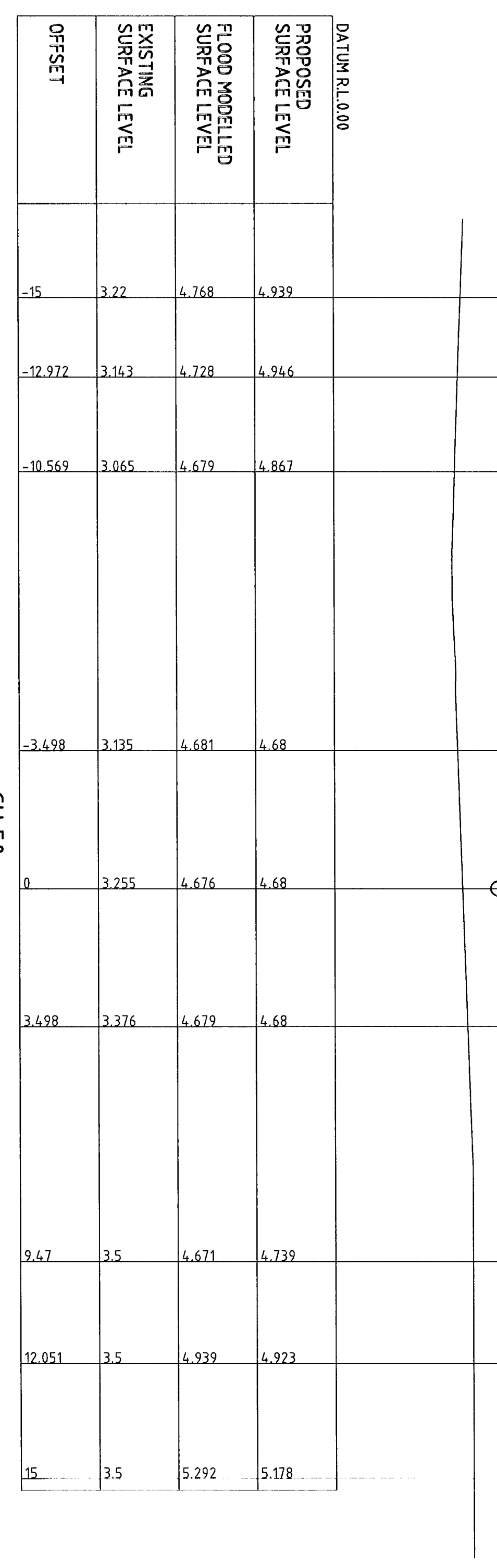
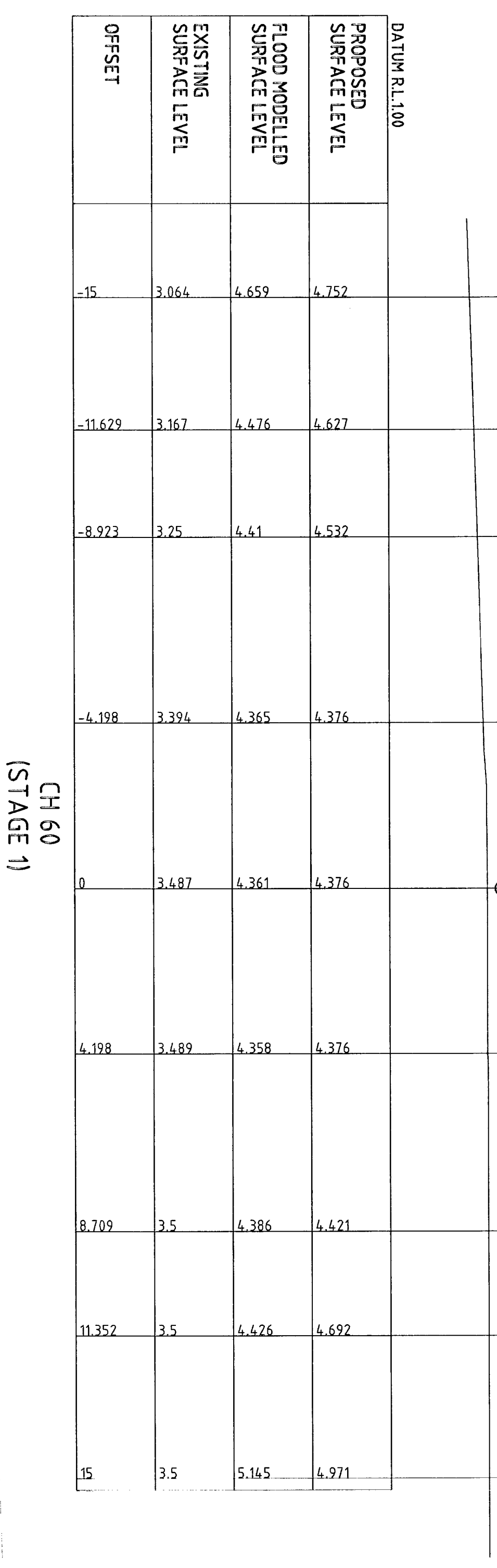
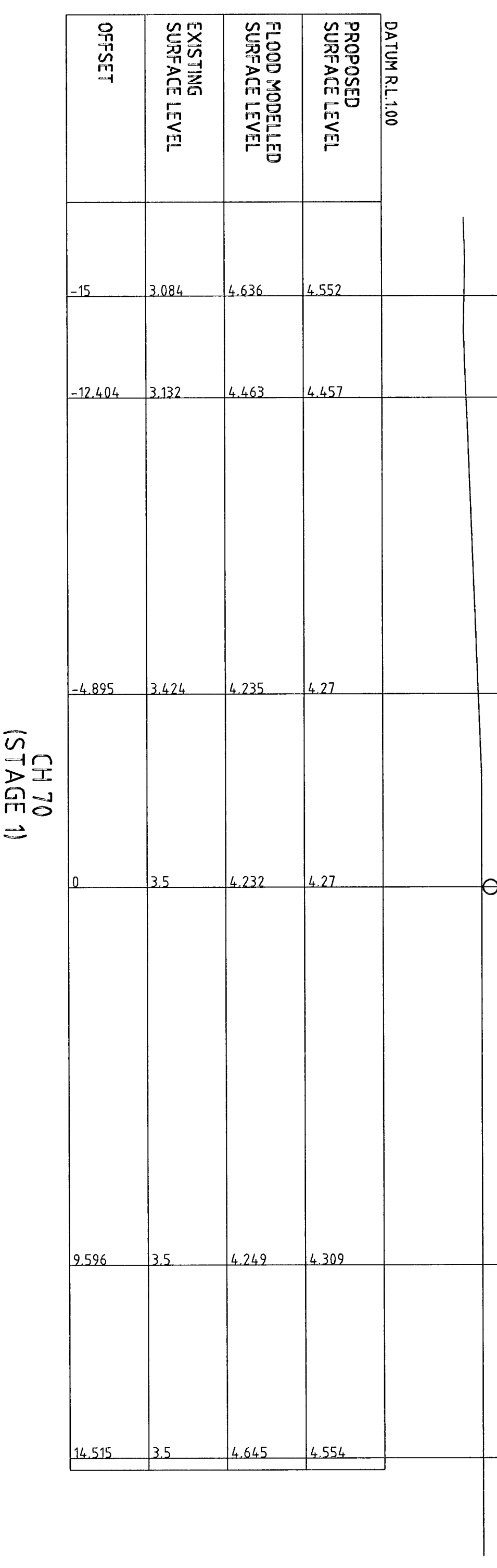
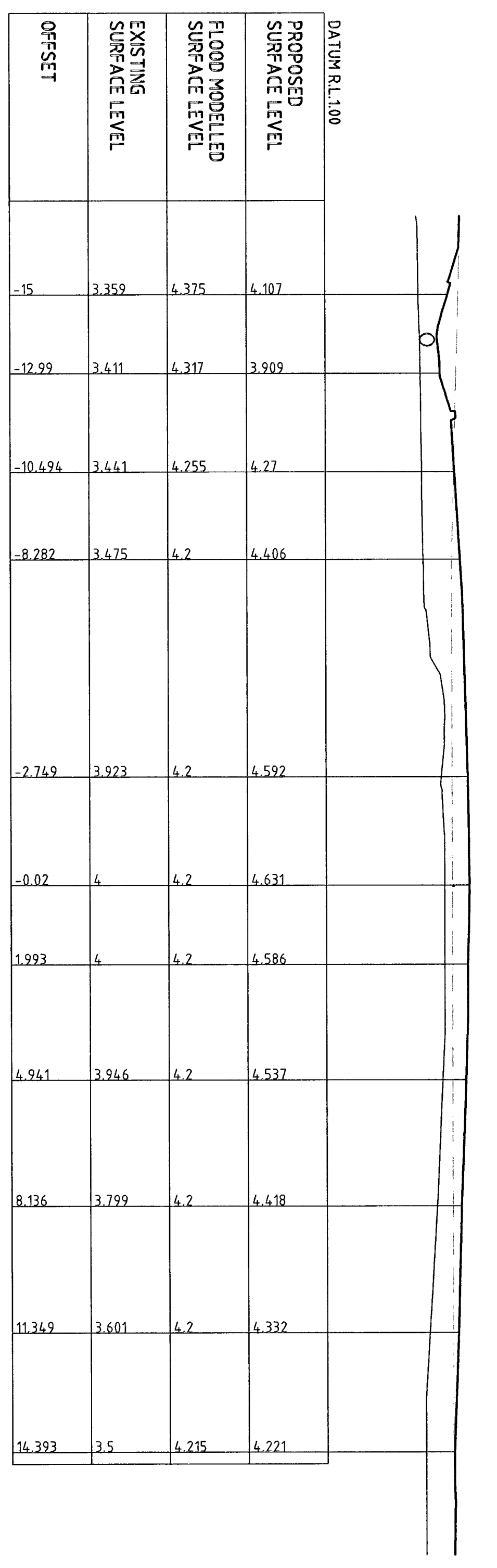
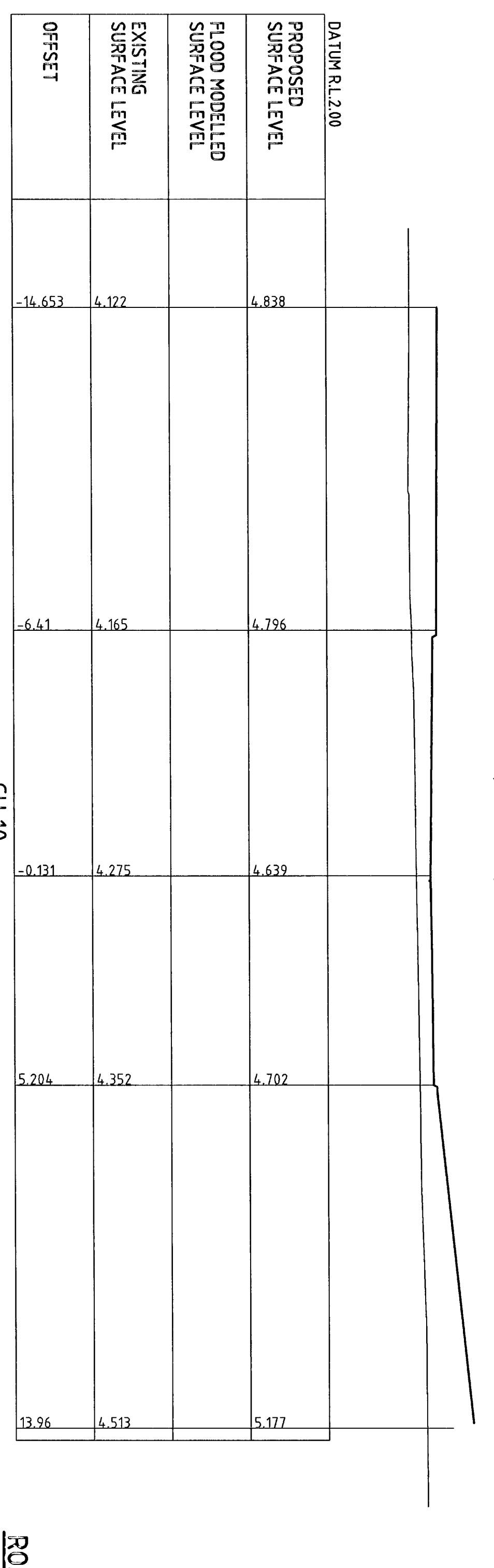
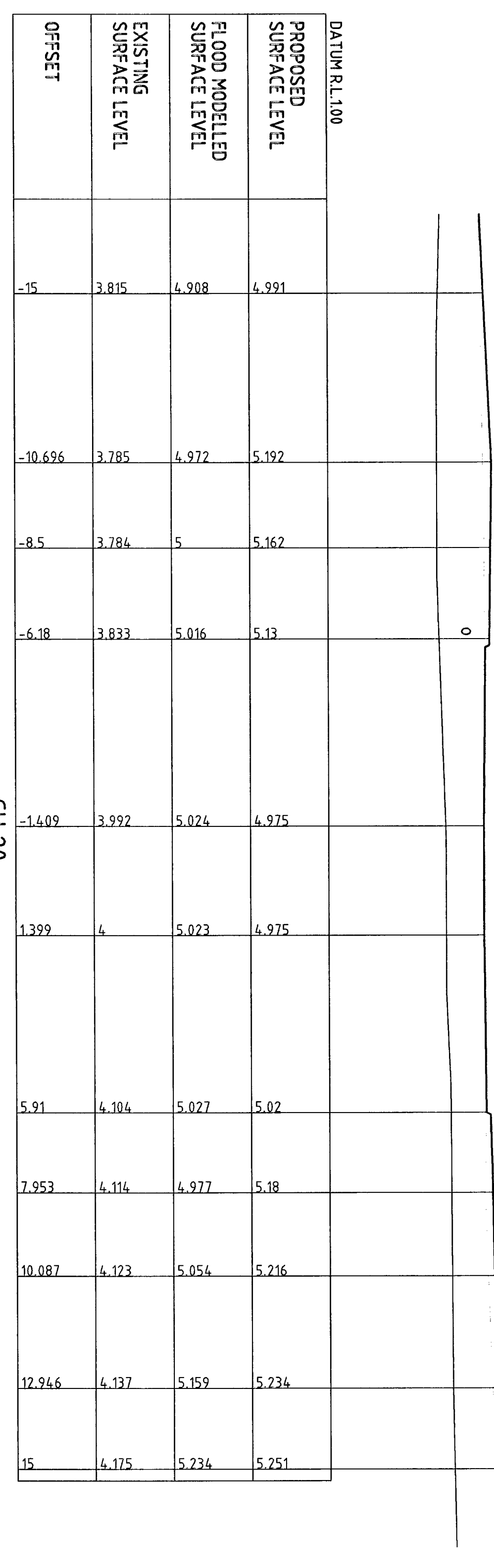
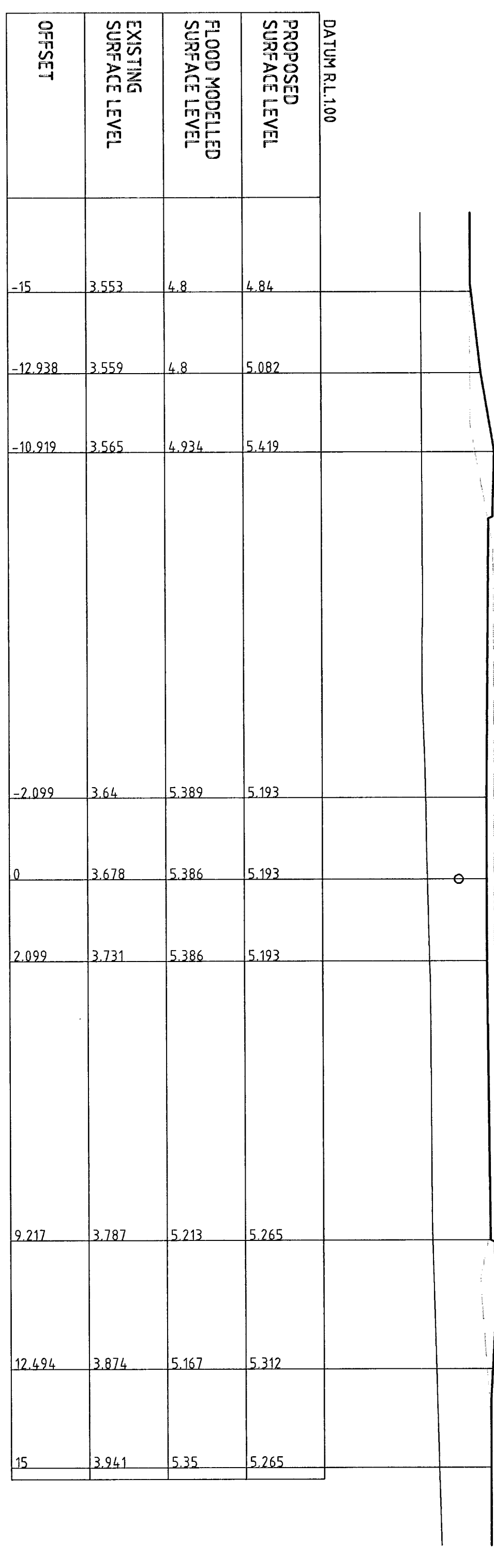
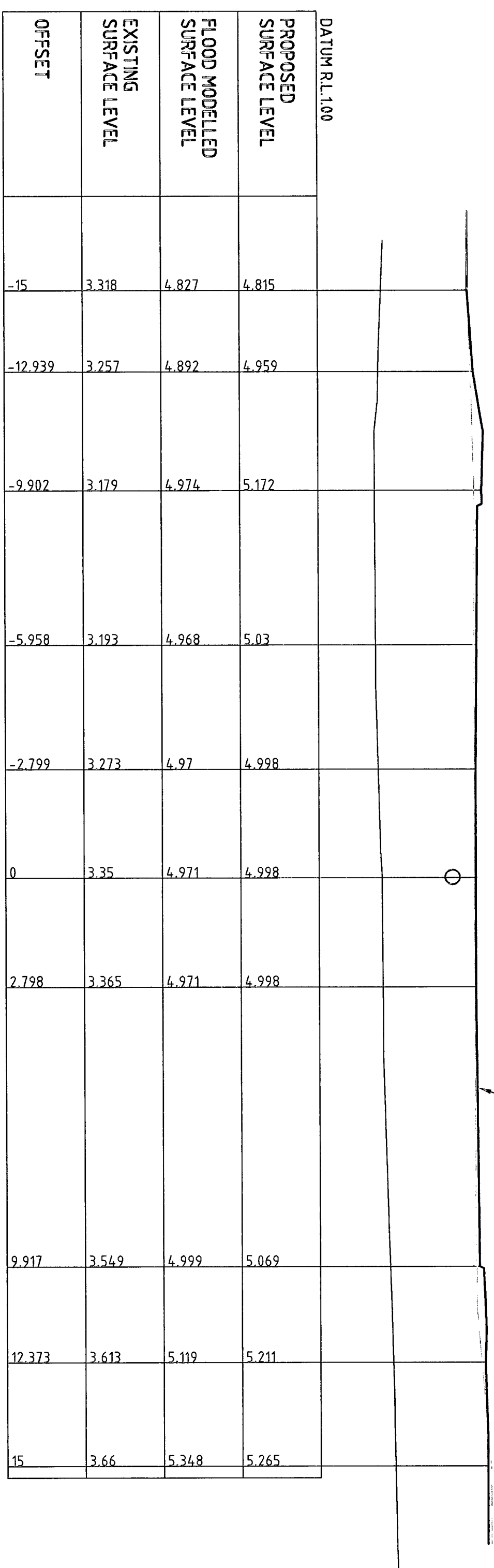
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10.000	34.982.118	10.000	34.201.206
20.000	34.982.118	20.000	34.201.206
30.000	34.982.118	30.000	34.201.206
40.000	34.982.118	40.000	34.201.206
50.000	34.982.118	50.000	34.201.206
60.000	34.982.118	60.000	34.201.206
70.000	34.982.118	70.000	34.201.206
80.000	34.982.118	80.000	34.201.206
82.205	34.982.118	82.205	34.201.206

ROAD 6 CENTRELINE SETOUT	
CHANGING	STATION
0.000	34.201.206
10.000	34.201.206
20.000	34.201.206
30.000	34.201.206
40.000	34.201.206
50.000	34.201.206
60.000	34.201.206
70.000	34.201.206
80.000	34.201.206
82.205	34.201.206

NOTE:
 1. MARKING CONTRACTOR TO BE AWARE OF
 EXTENT OF STAGING AND WORKS INCLUDED
 WITHIN STAGE REFER TO 21-19377-0202 FOR
 OVERALL STAGING PLAN.



SEE LANDSCAPE PLANS
FOR DETAILS



LEGEND
 PROPOSED DESIGN SURFACE
 FLOOD LEVEL
 EXISTING SURFACE
 PROPOSED DRAINAGE



TENDER

ANGELIAN RETIREMENT VILLAGES
STAGE 1: MARRIMWOOD BROOK
CIVIL WORKS
ROAD 1 CROSS SECTIONS
21-13577-C108
 Rev: A

No.	Revisions	Date	By	Checked	Approved	Date
A	ISSUED FOR TENDER		LSM	AL	RP	7/20/27

Client: **ANGELIAN RETIREMENT VILLAGES**
 Project: **STAGE 1: MARRIMWOOD BROOK**
 Drawing No: **21-13577-C108**

Scale: AS SHOWN

Approved: **REBERG** 20/11/07

Drawn: **LSM**

Checked: **AL**

Disigned: **LSM**

Project No: **31**

Client: **ANGELIAN RETIREMENT VILLAGES**

Project: **STAGE 1: MARRIMWOOD BROOK**

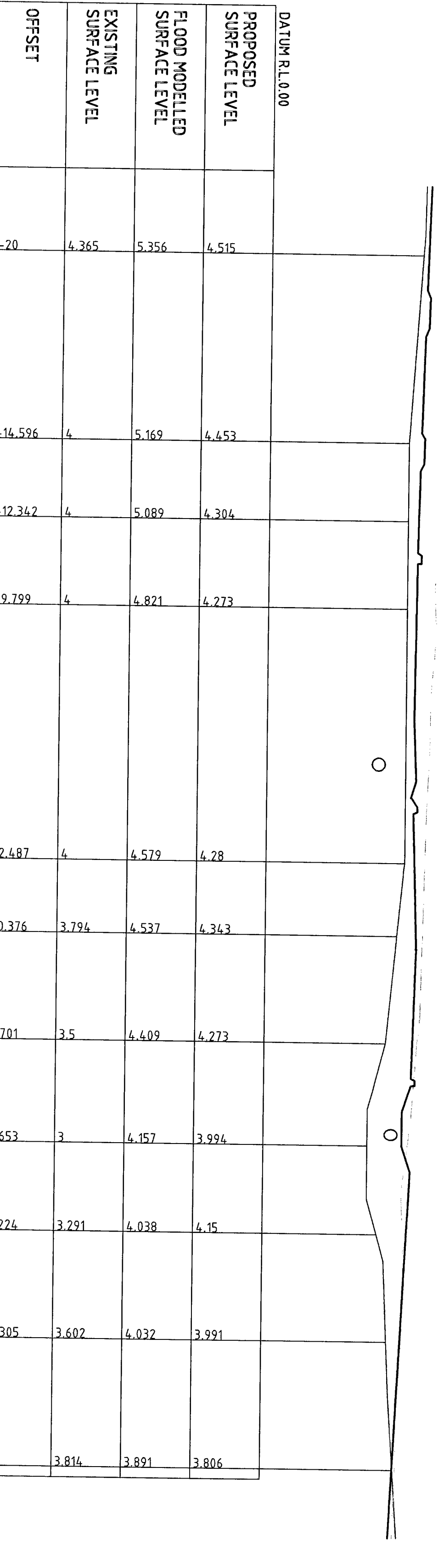
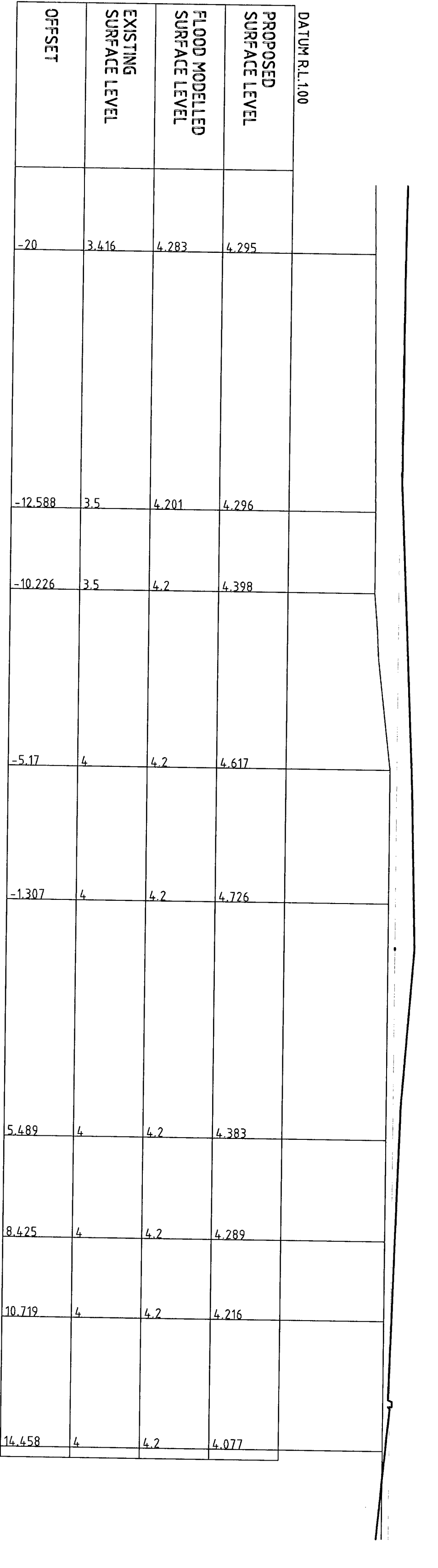
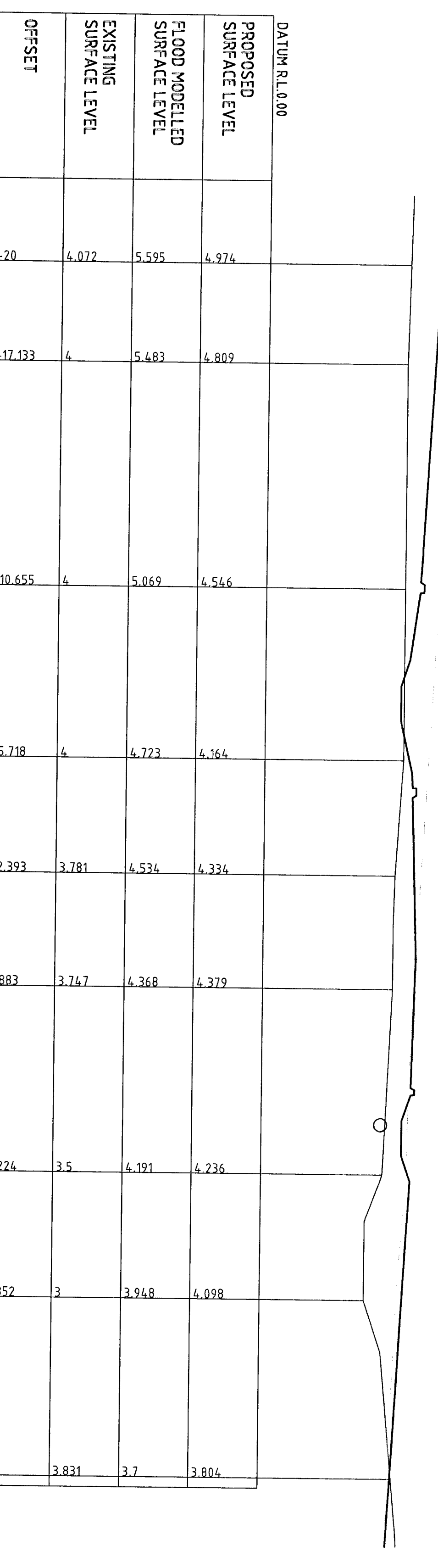
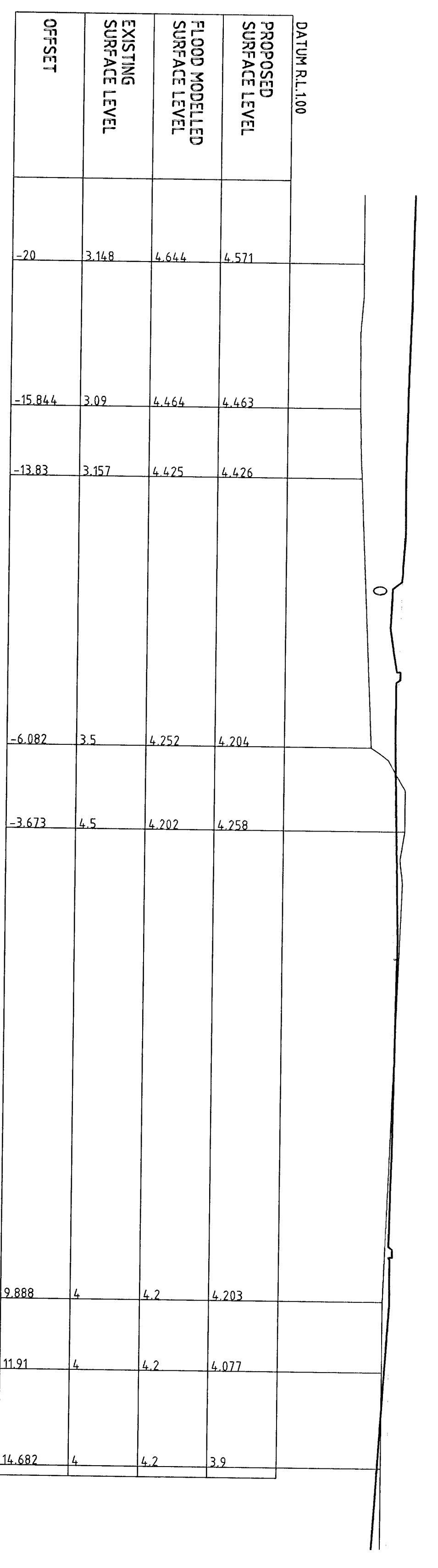
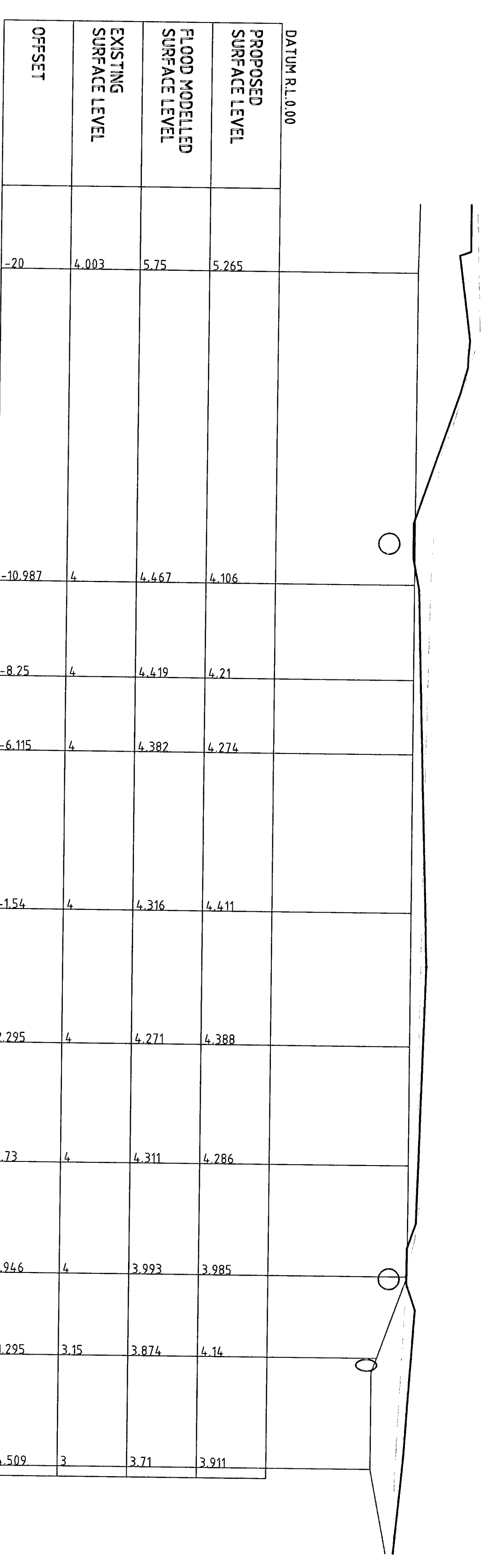
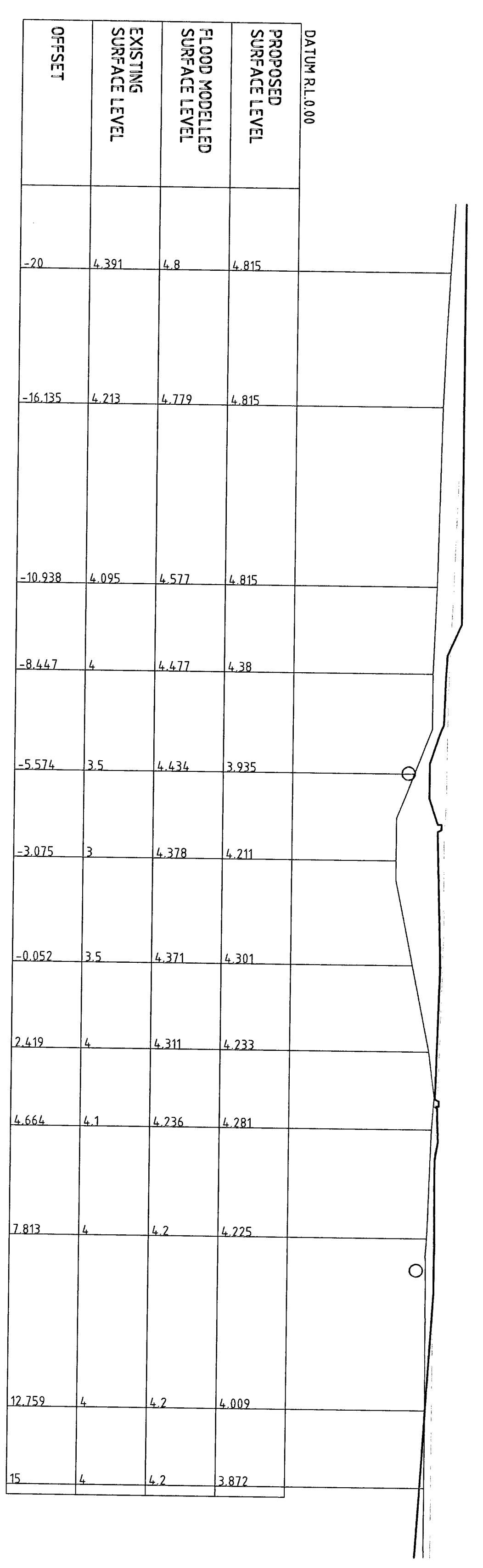
Drawing No: **21-13577-C108**

Rev: **A**

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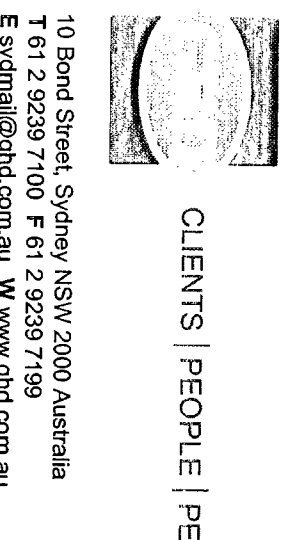
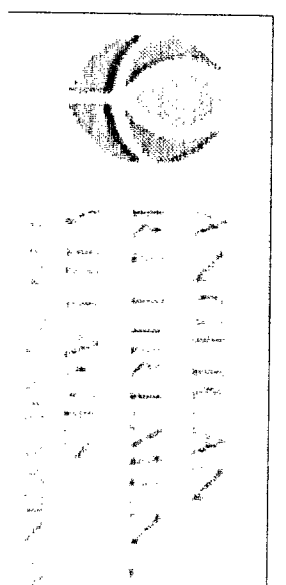
LEGEND
 PROPOSED DESIGN SURFACE
 FLOOD LEVEL
 EXISTING SURFACE
 PROPOSED DRAINAGE



ROAD 2
 HORIZONTAL SCALE - 1:100
 VERTICAL SCALE - 1:100



A ISSUED FOR TENDER		LSM		NO		NO		NO		NO		NO		NO	
Revision	Note	Checked	Approved	Date	Revision	Note	Checked	Approved	Date	Revision	Note	Checked	Approved	Date	Revision

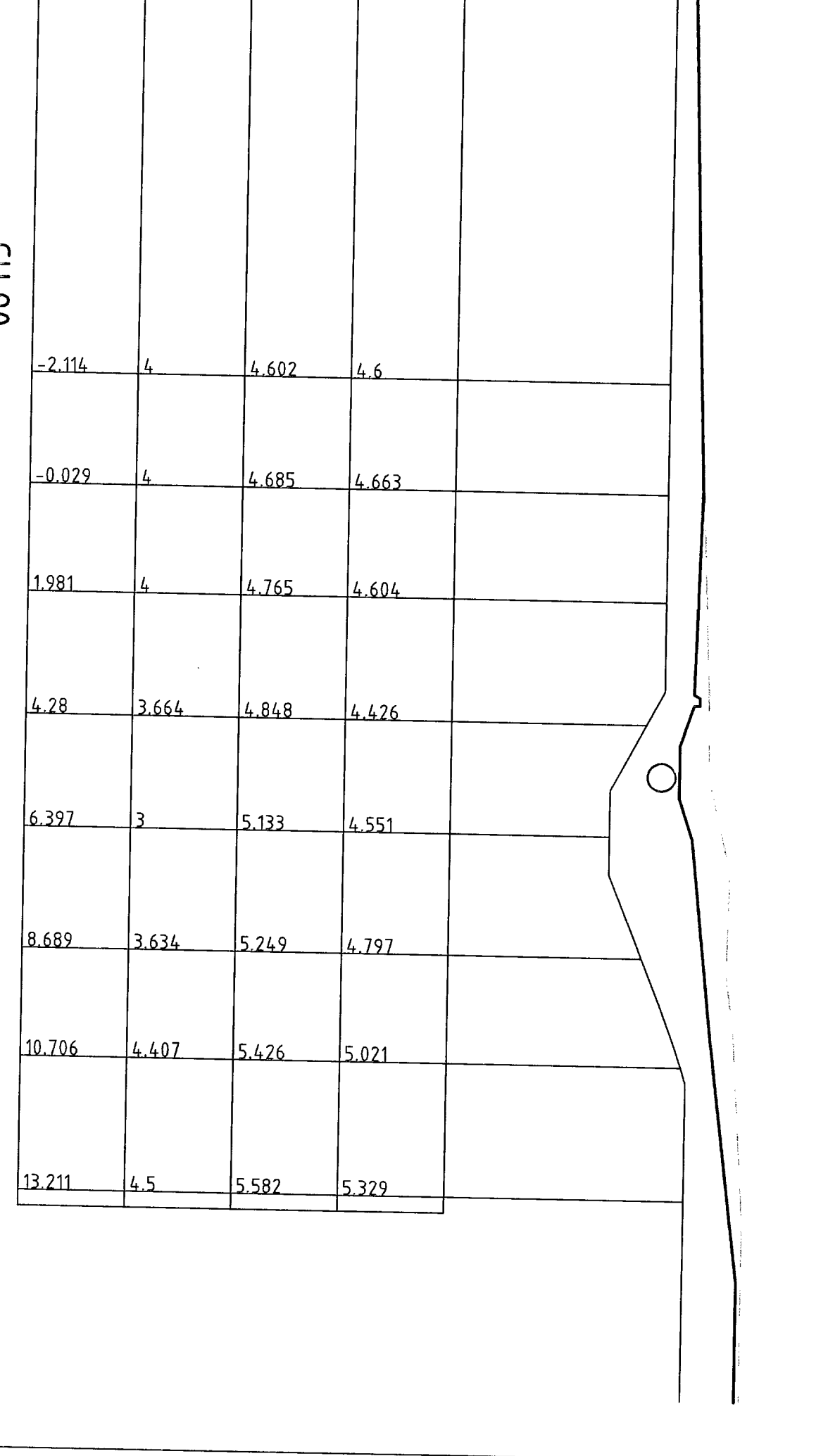
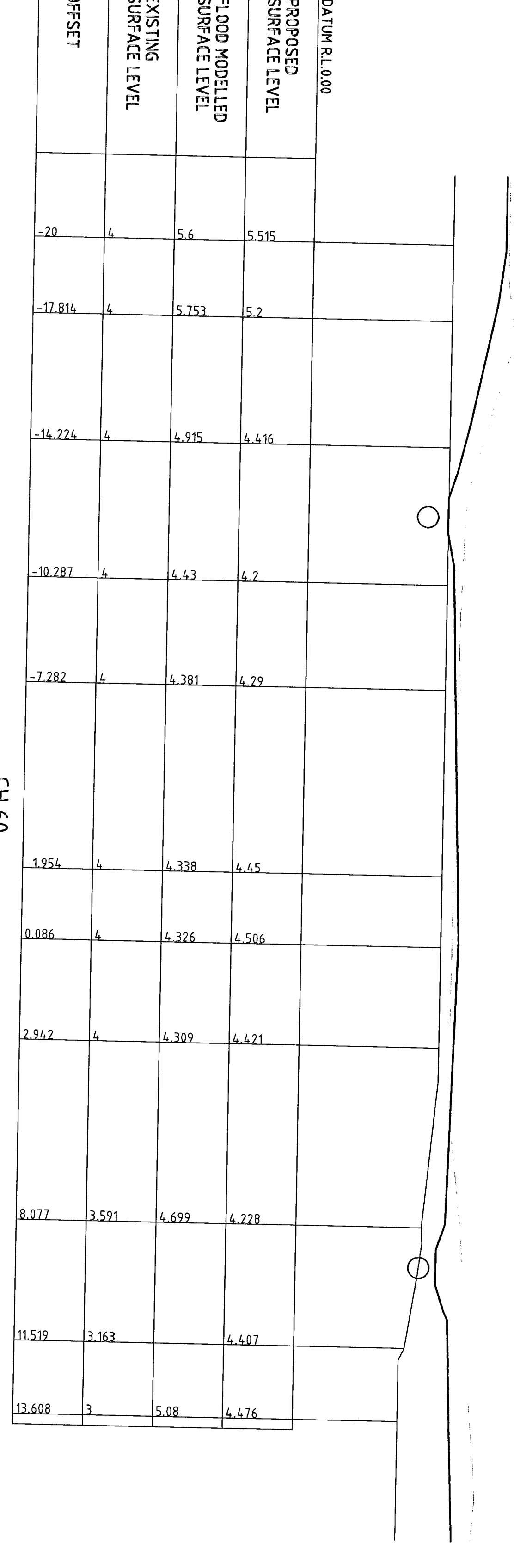
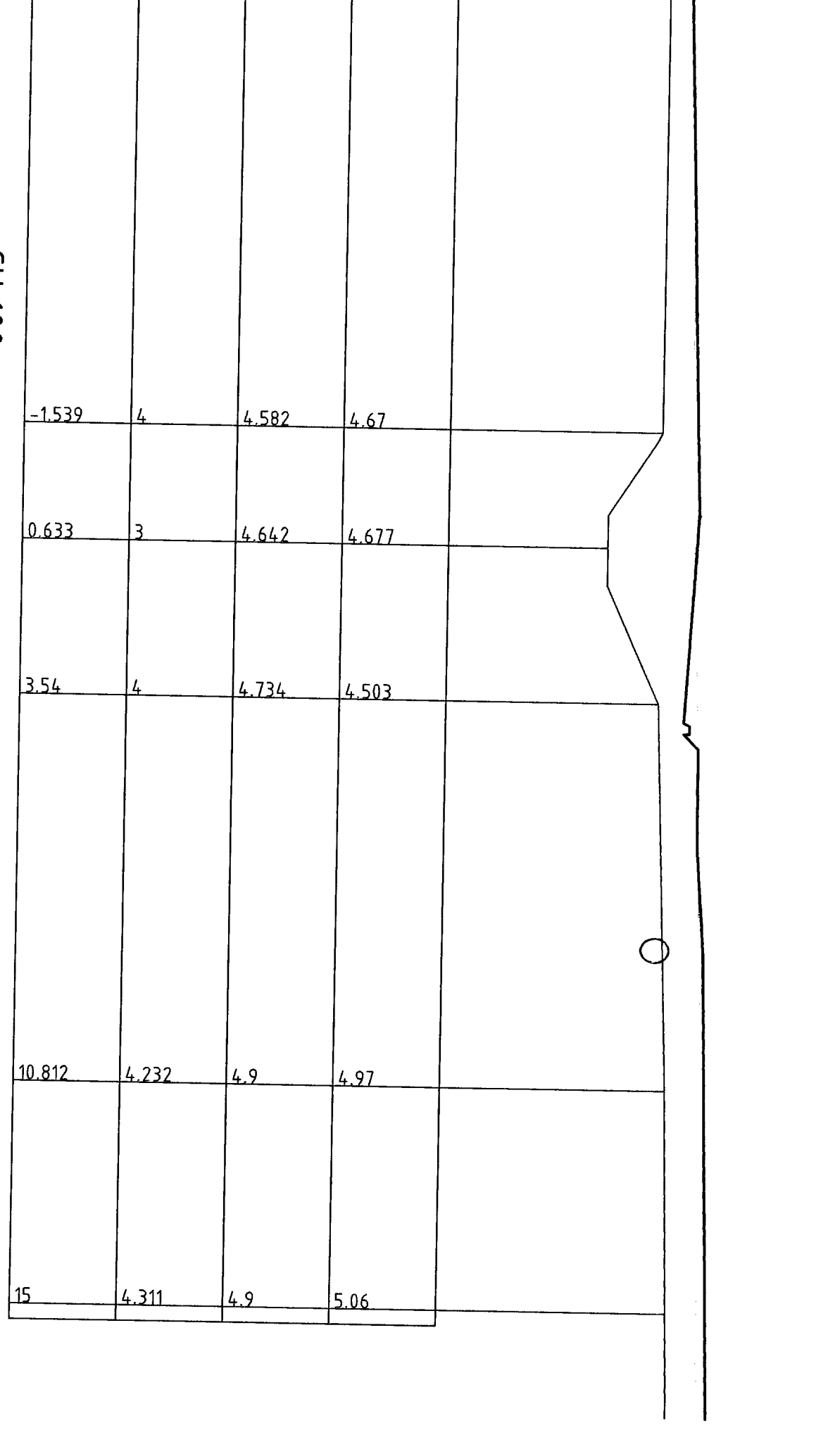
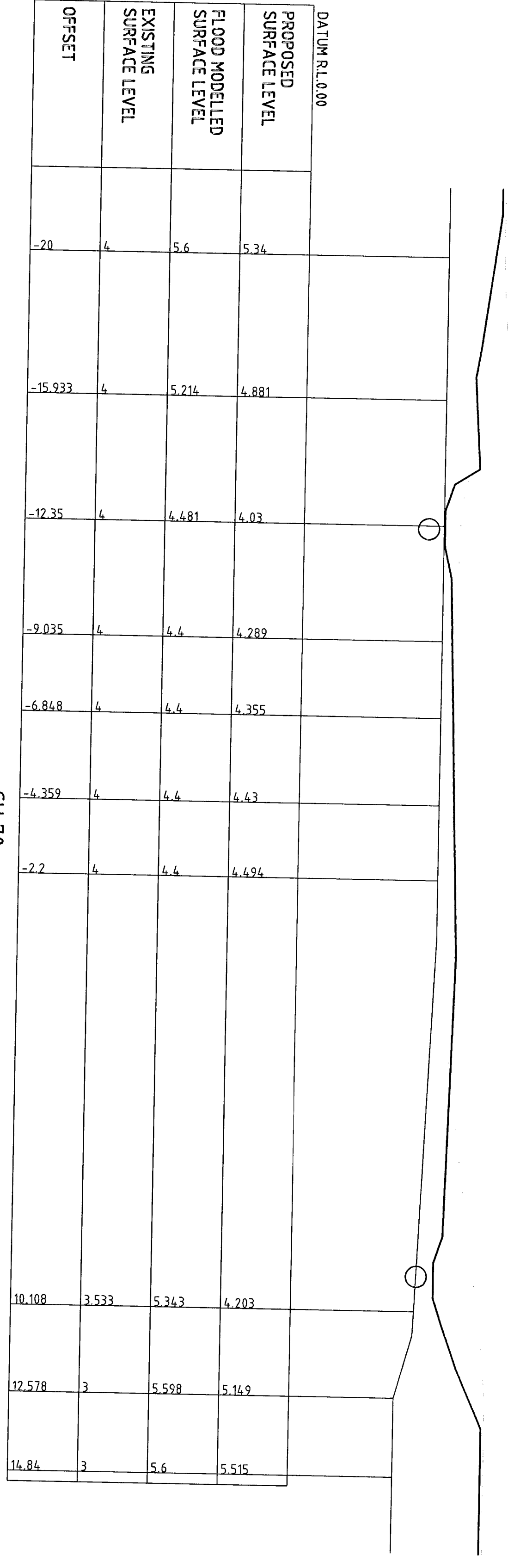
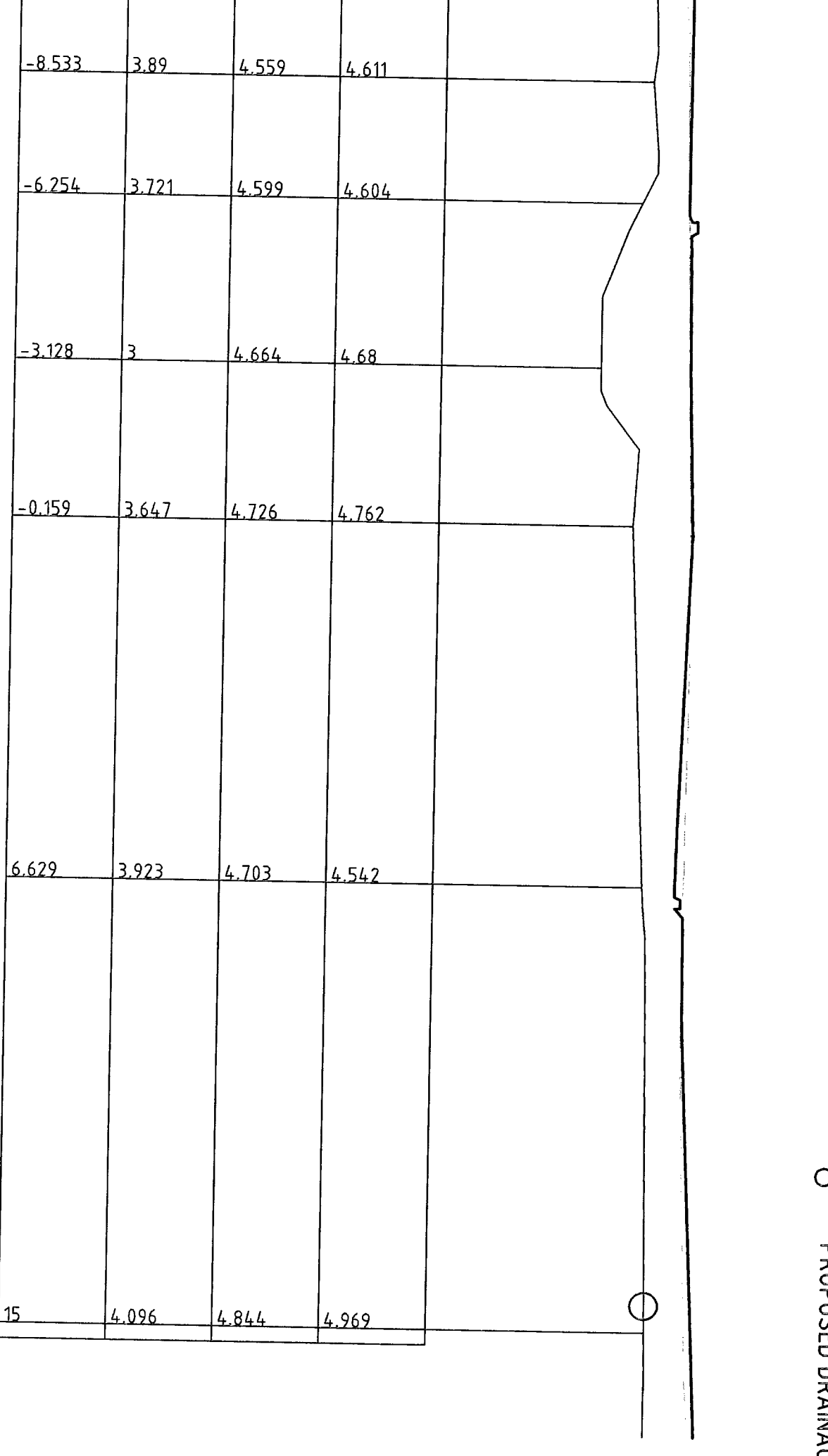
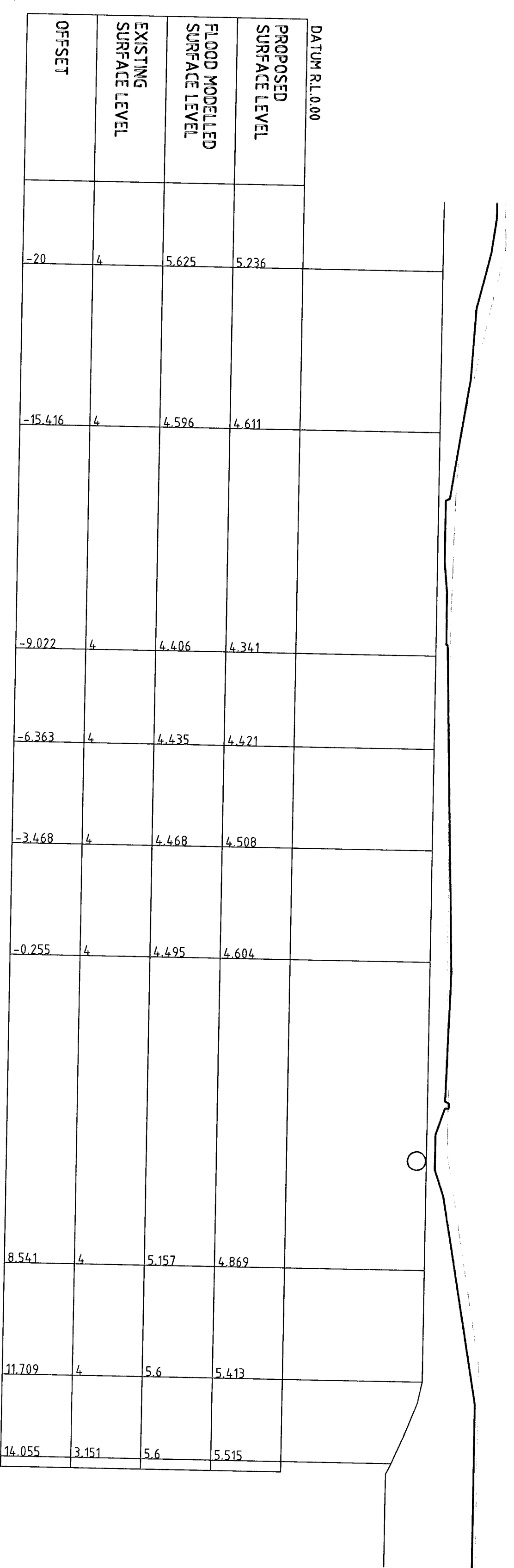


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Drawn	Checked	Designed	Client
AS SHOWN	AS SHOWN	AS SHOWN	AMERICAN RETIREMENT VILLAGES

Client: **AMERICAN RETIREMENT VILLAGES**
 Project: **WARRENWOOD BROOK**
 Title: **ROAD 2 CROSS SECTIONS SHEET 1 OF 2**
 Drawing No: **21-1377-C109**
 Rev: **A**

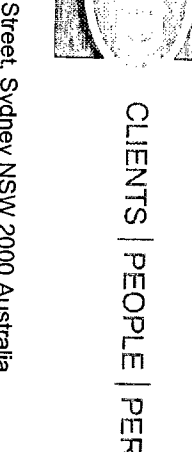
LEGEND
 PROPOSED DESIGN SURFACE
 FLOOD LEVEL
 EXISTING SURFACE
 PROPOSED DRAINAGE



ROAD 2
 HORIZONTAL SCALE - 1:100
 VERTICAL SCALE - 1:100

0 1 2 3 4 5m
 SCALE BAR AT ORIGINAL SIZE

TENDER



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Client: **ANGLOICAN RETIREMENT VILLAGES**
 Project: **WARRIEWOOD BROOK CIVIL WORKS**
 Title: **ROAD 2 CROSS SECTIONS SHEET 2 OF 2**

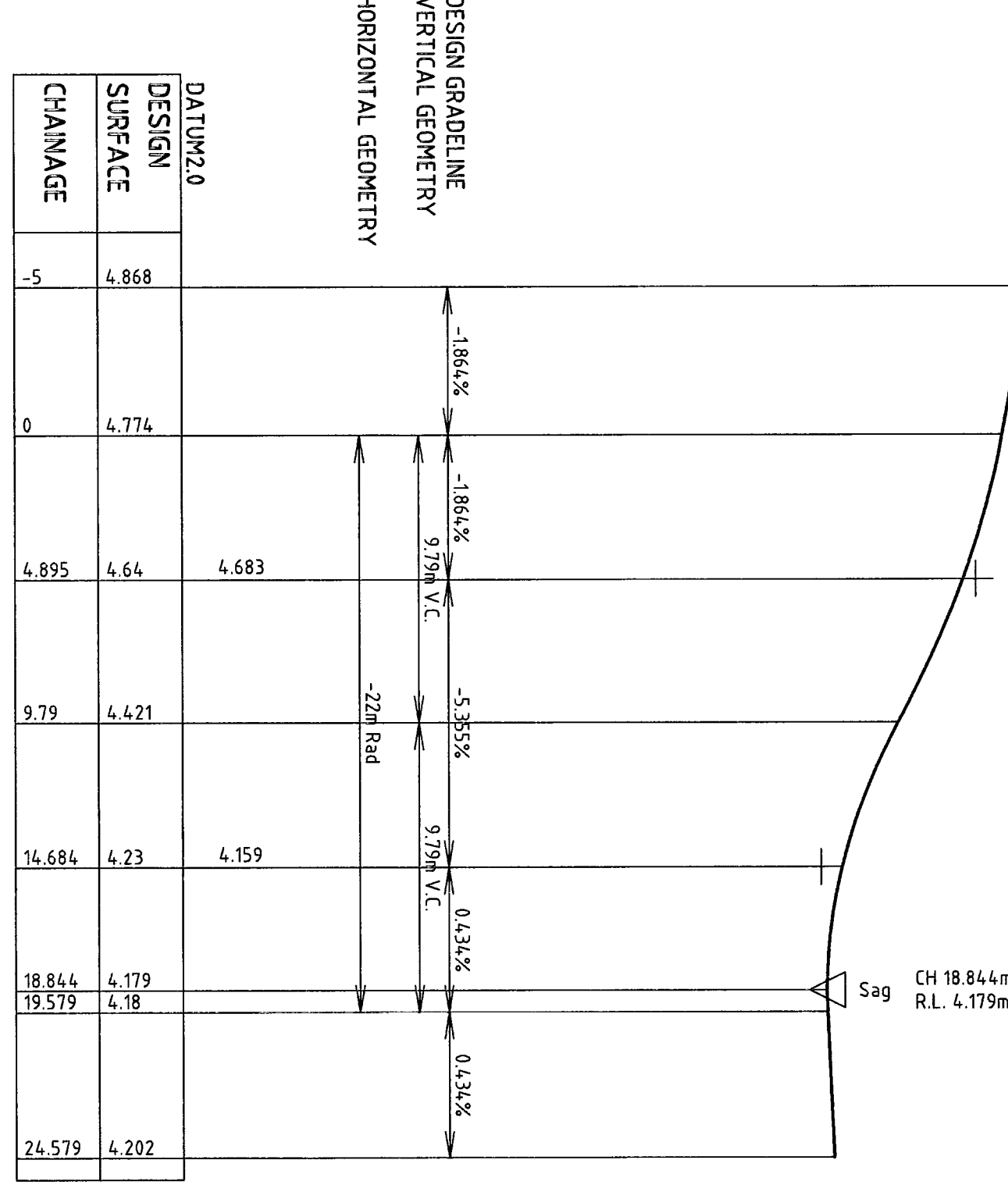
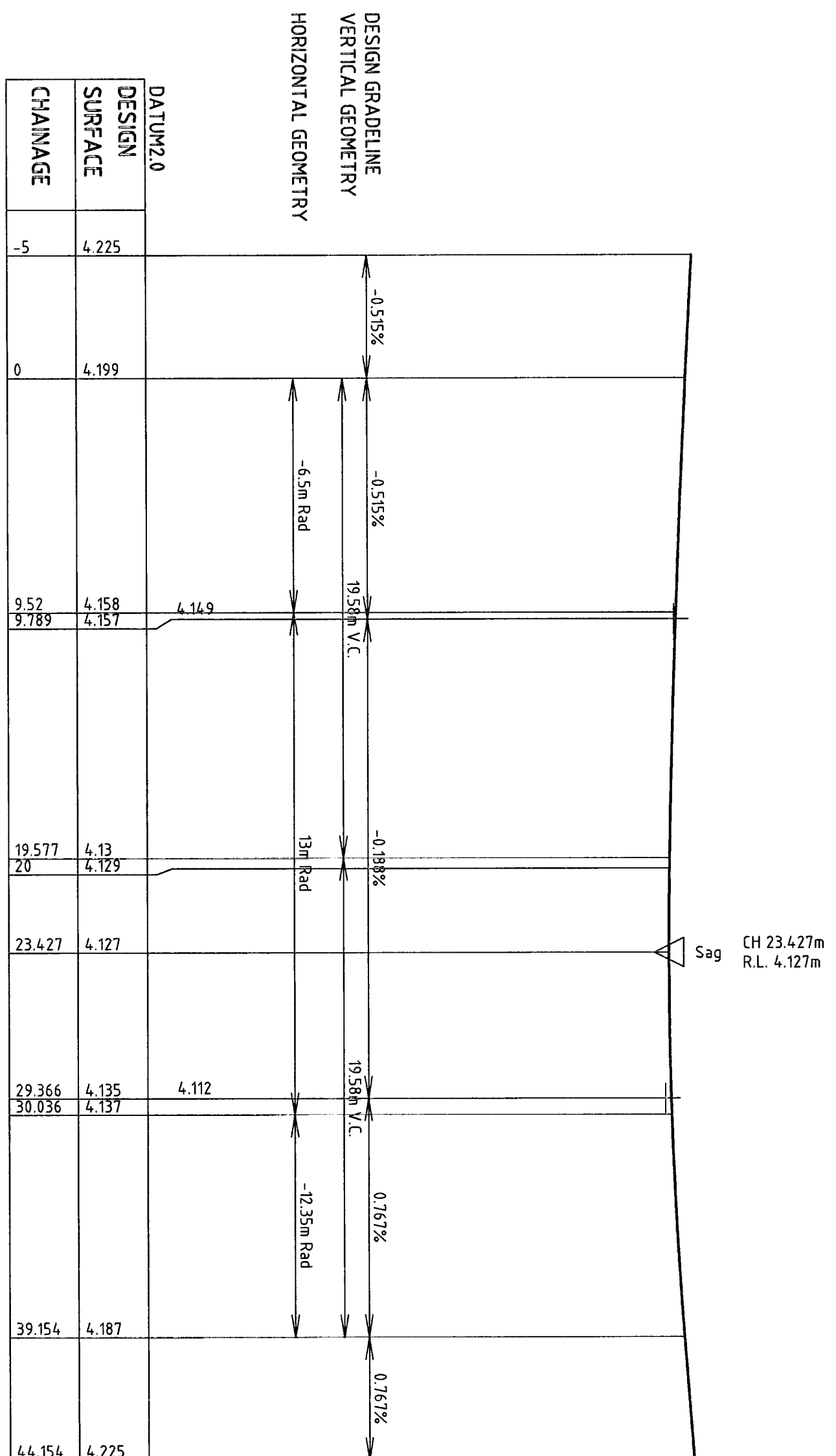
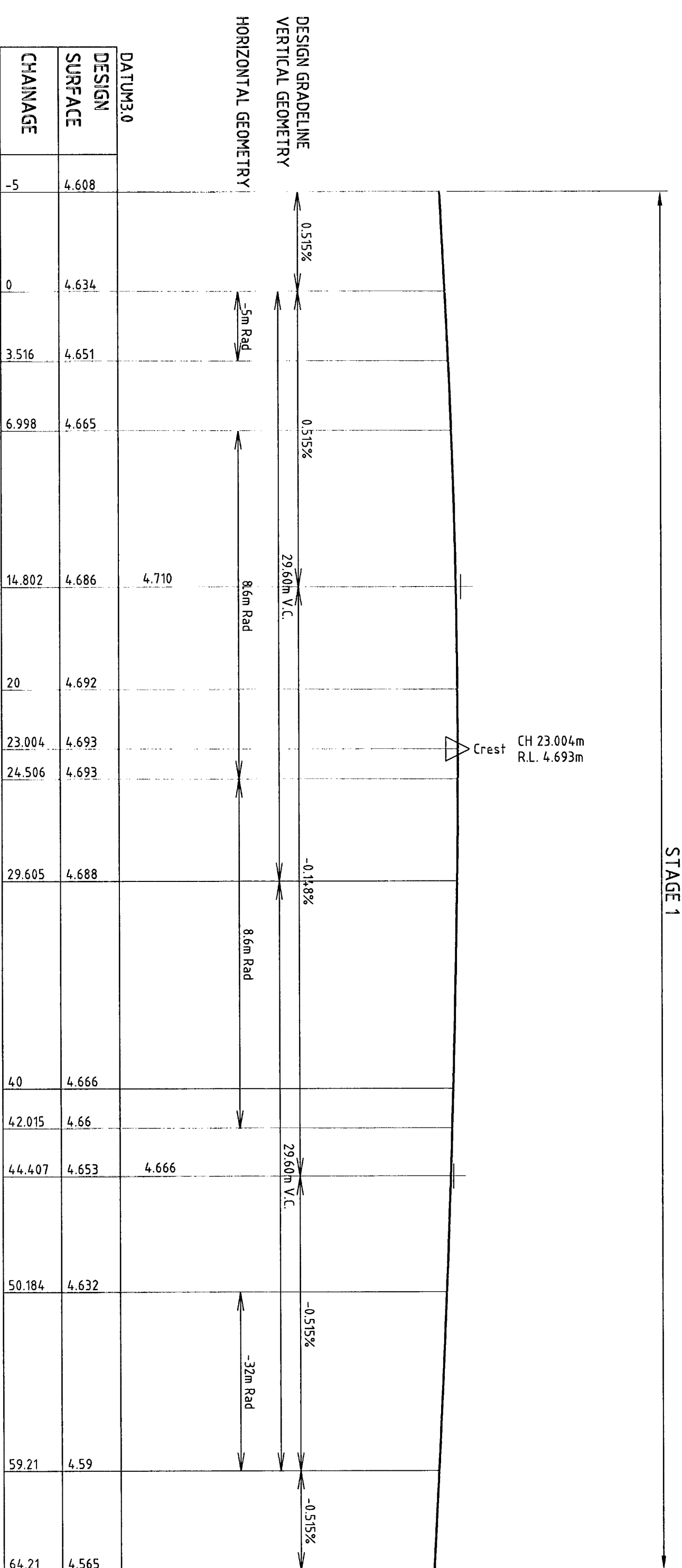
Drawing No: **21-13577-C110**
 Rev: **A**

Rev: **A**

A ISSUED FOR TENDER

No.	Revision	Date	By	Check	Approved	Date
1	ISSUED FOR TENDER	21/11/2027				

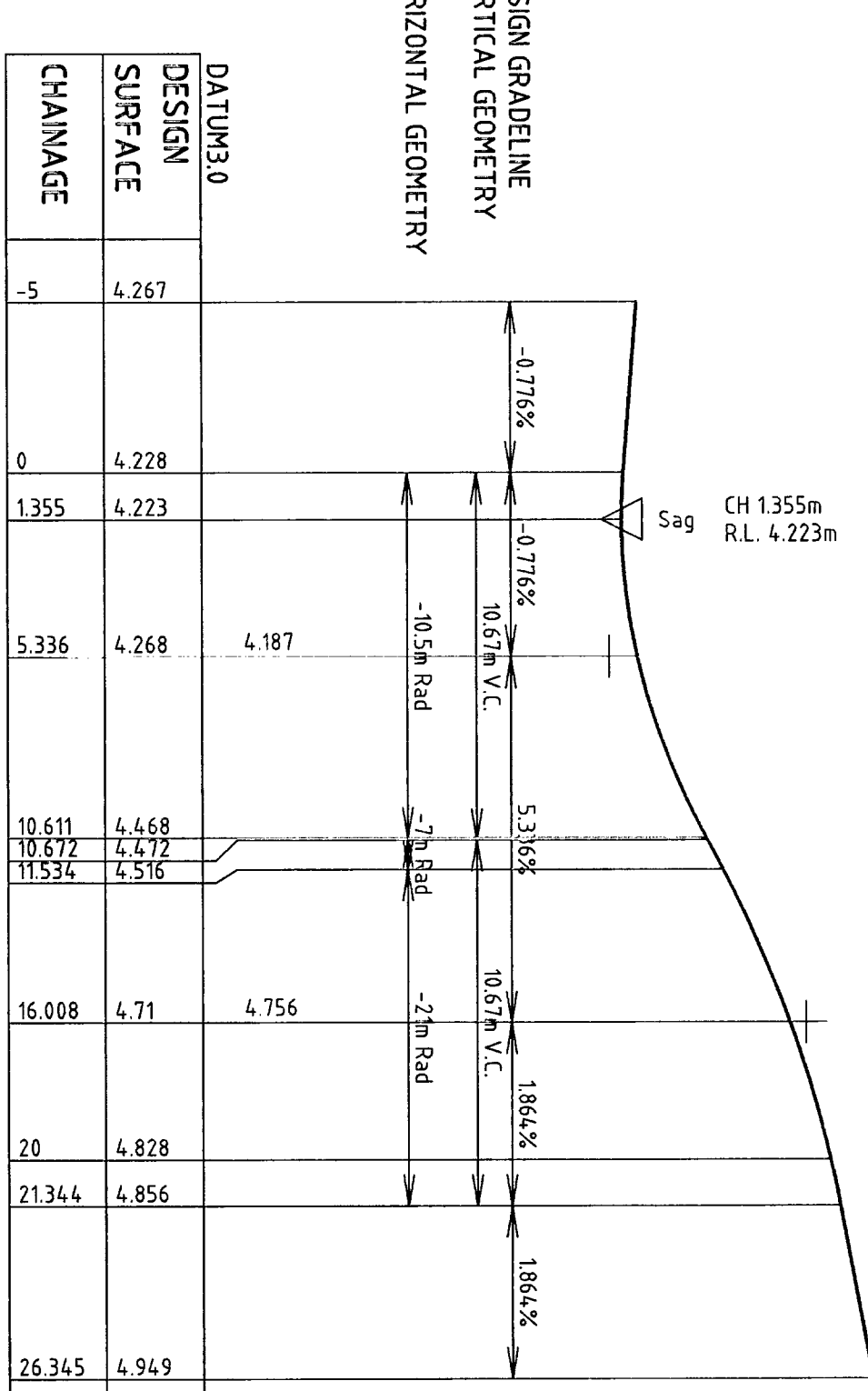
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 Tel: 02 9230 7100 Fax: 02 9230 7199
 Email: info@warriewoodcivil.com.au

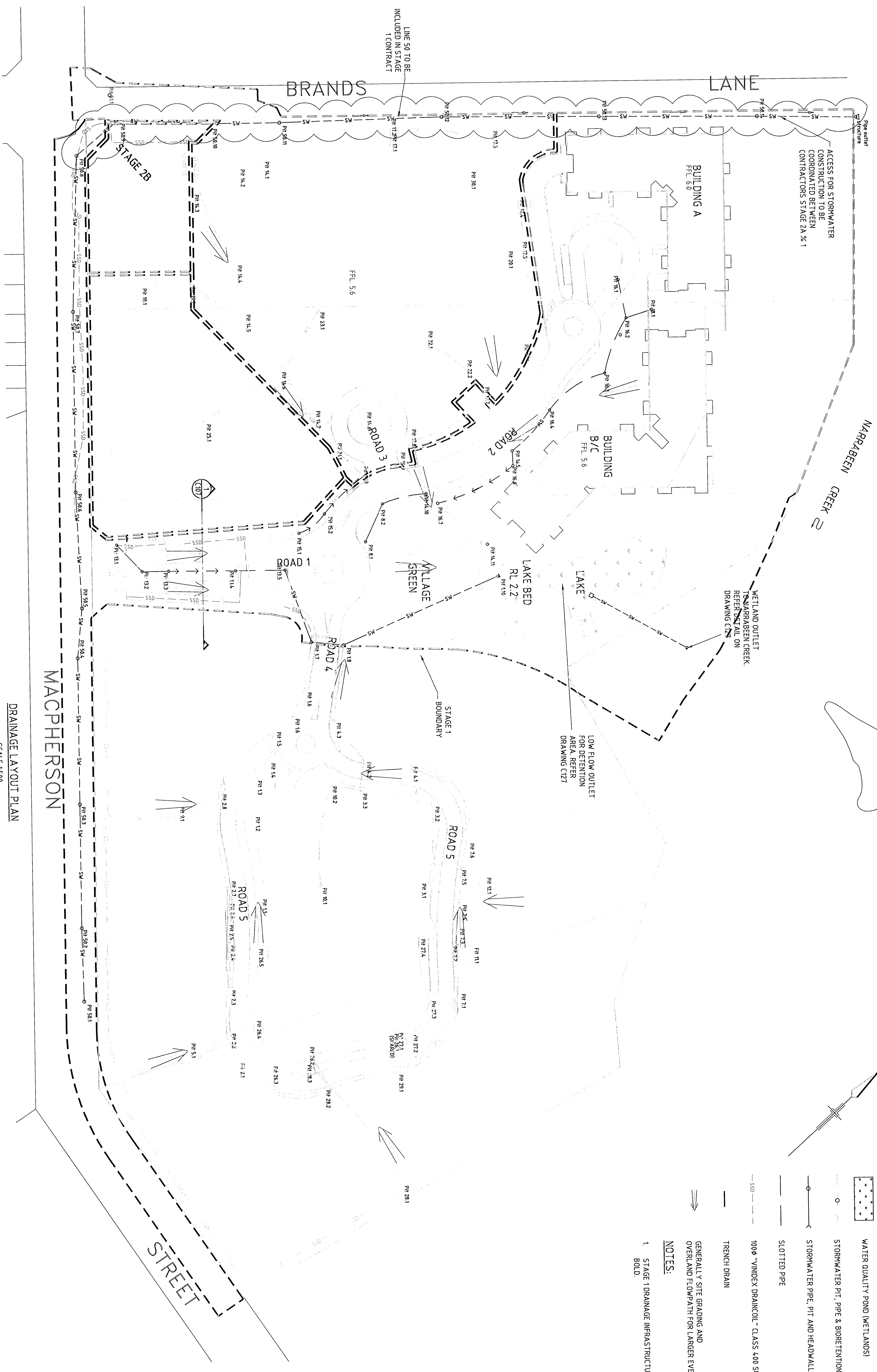


LONGITUDINAL SECTION KR1 (STAGE 1)
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:20

LONGITUDINAL SECTION KR2
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:20

LONGITUDINAL SECTION KR10
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:20





LEGEND

- WATER QUALITY POND (WETLANDS)
- STORMWATER PIT, PIPE & BIOTENTION SWALE
- STORMWATER PIPE, PIT AND HEADWALL
- SLOTTED PIPE
- 100Ø "VINDEX DRAINCOIL" CLASS 400 SUBSOIL DRAIN
- TRENCH DRAIN
- GENERALLY SITE GRADING AND OVERLAND FLOWPATH FOR LARGER EVENTS

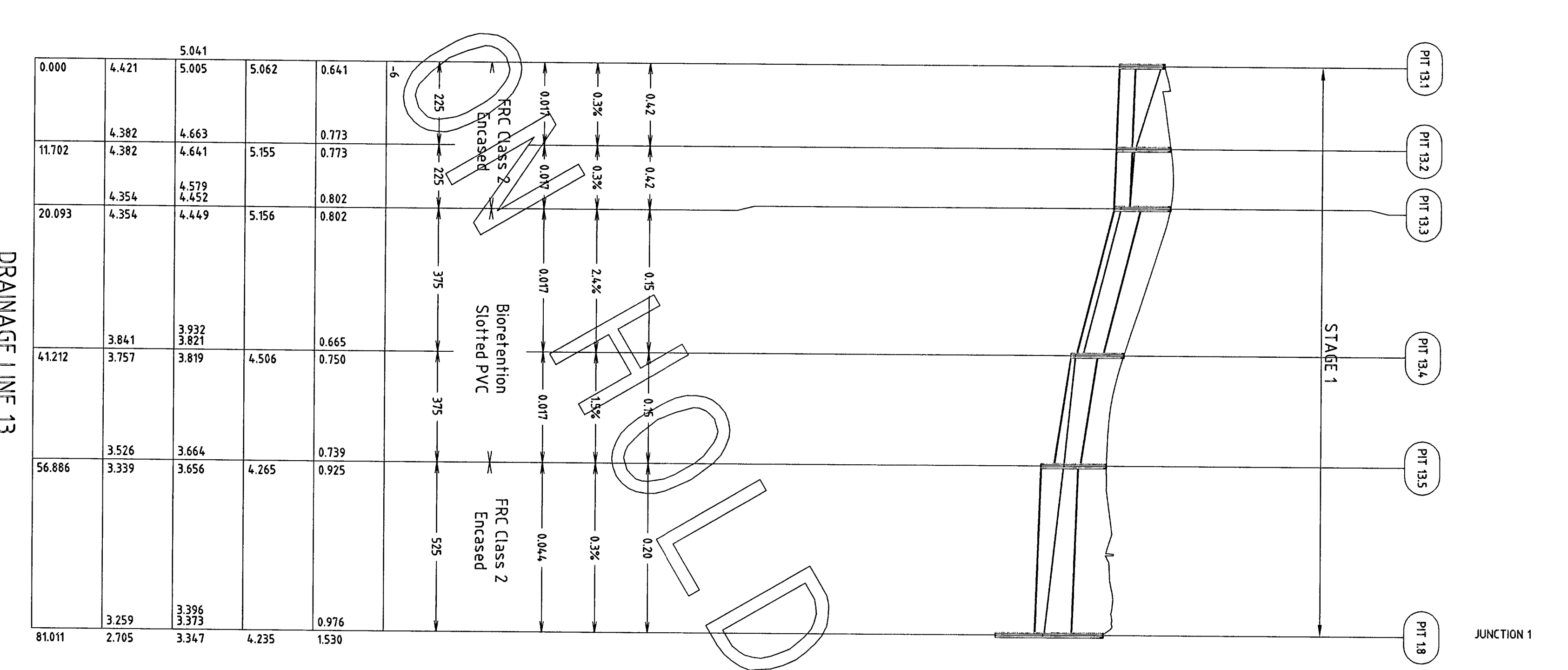
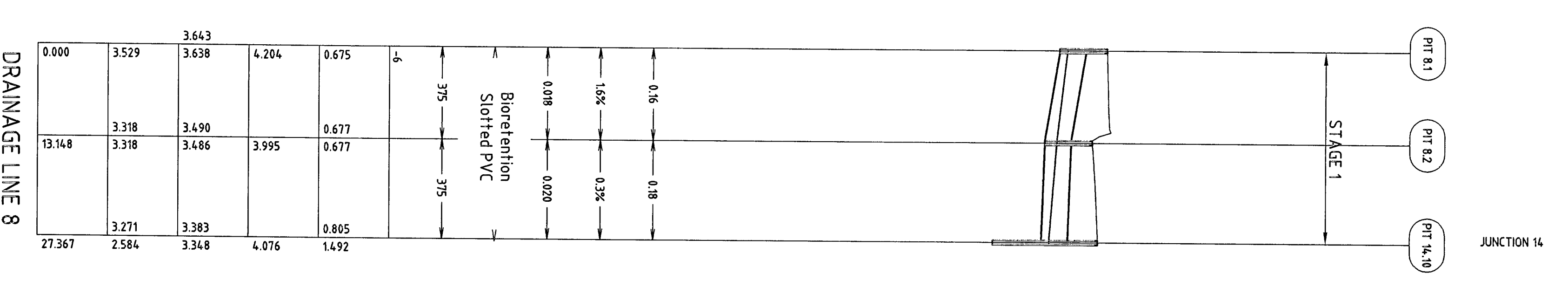
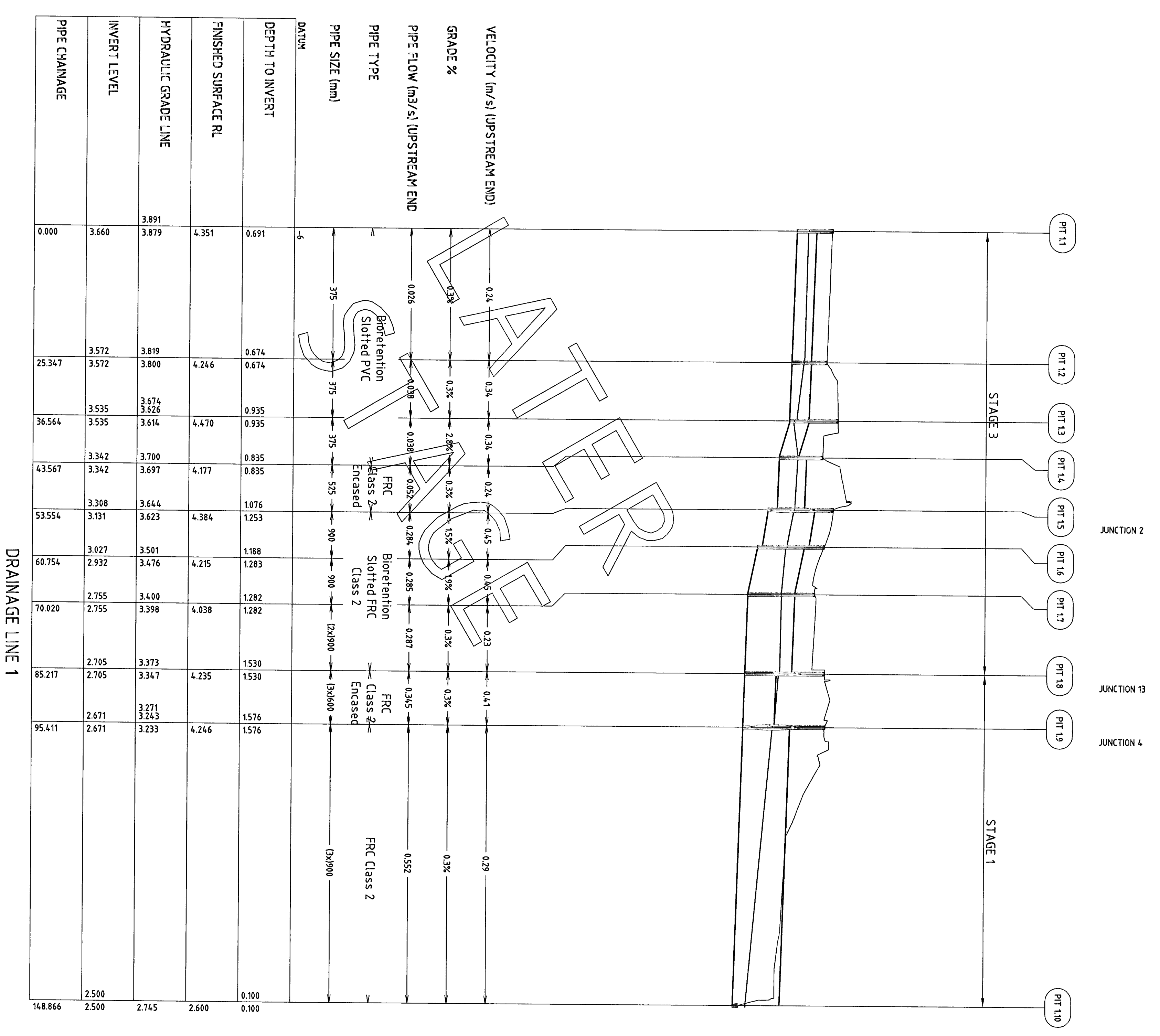
NOTES:

1. STAGE 1 DRAINAGE INFRASTRUCTURE SHOWN IN BOLD.

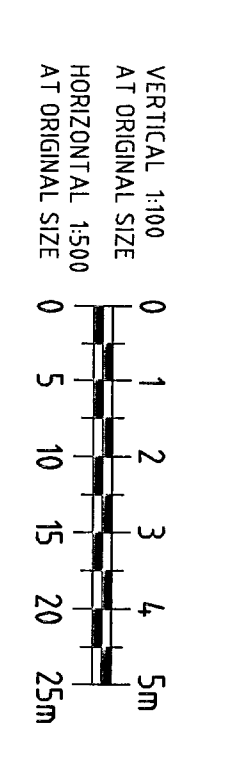
DRAINAGE LAYOUT PLAN
SCALE 1:500

				DO NOT SCALE <small>This document may only be used for the purposes for which it was prepared and for no other purpose.</small>	
ANGELICAN RETIREMENT VILLAGES WARRIWOOD BROOK STAGE 1 CIVIL WORKS STORMWATER DRAINAGE PLAN		Designer: LSM Checker: AL	Designer: AL Checker: AL	Scale: AS SHOWN	Client: ANGELICAN RETIREMENT VILLAGES Project: WARRIWOOD BROOK STAGE 1 Drawing No: 21-13577-C115
No. Issued: 1 Date: 07 December 2007 No. Revisions: 0		No. Checked: 1 Date: 07 December 2007		No. Approved: 1 Date: 07 December 2007	

No. Issued: 1
 Date: 07 December 2007
 No. Revisions: 0
 No. Checked: 1
 Date: 07 December 2007
 No. Approved: 1
 Date: 07 December 2007



LEGEND
 FRC - FIBRE REINFORCED CEMENT SLOTTED PIPE
 PVC - POLYVINYL CHLORIDE SLOTTED PIPE
 FRC CA - FIBRE REINFORCED CEMENT CLASS 4 UNSLOTTED PIPE



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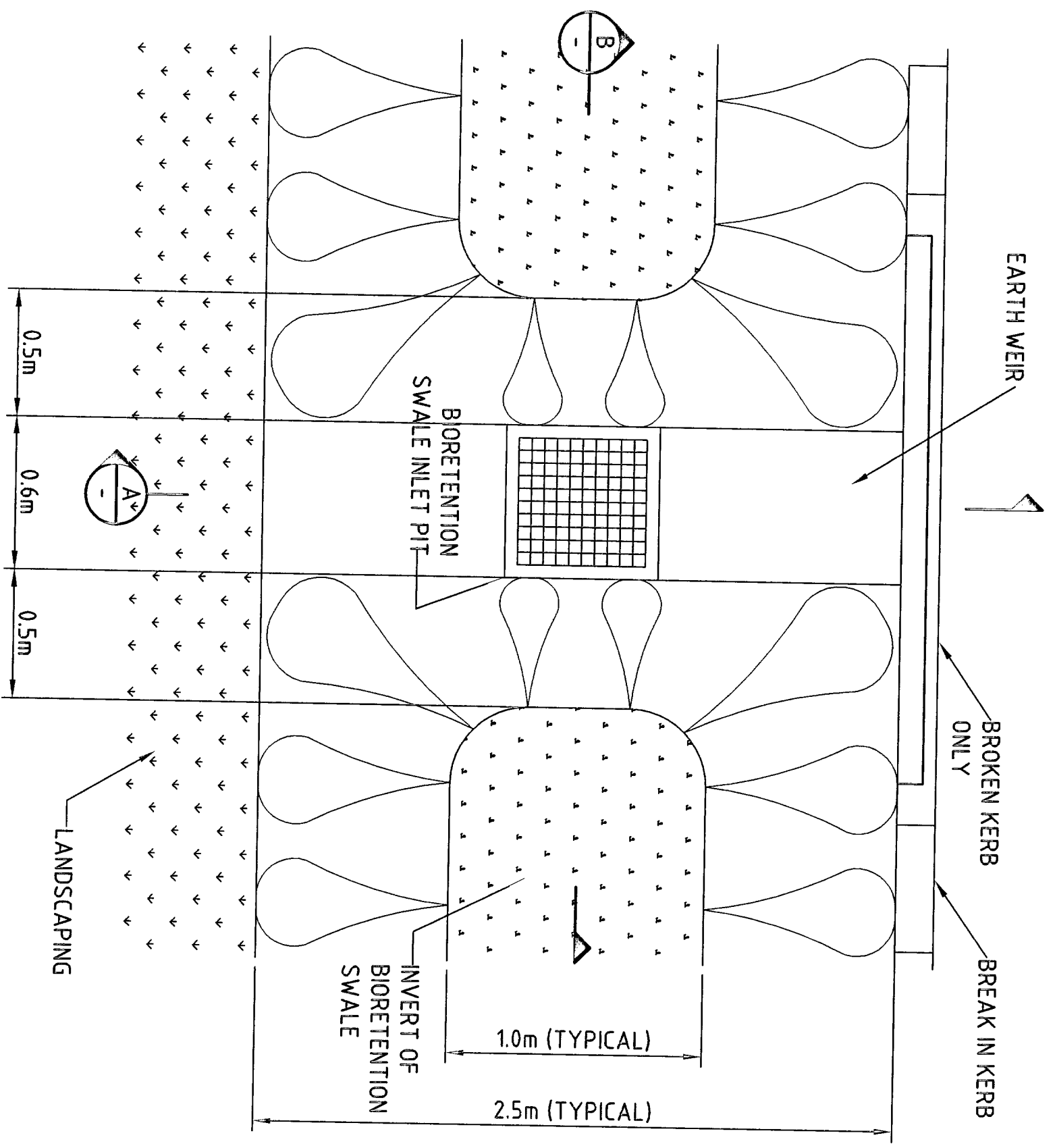
Drawn: LSM	Designed: MD	Client: ANGLO-AMERICAN RETIREMENT VILLAGES
Checked: AL	Approved: RB BERG	Project: WARRIEWOOD BROOK
Date: 20/11/07	Scale: AS SHOWN	Civil Works

Original Size: A1
 Drawing No: 21-13577-C117
 Rev: A

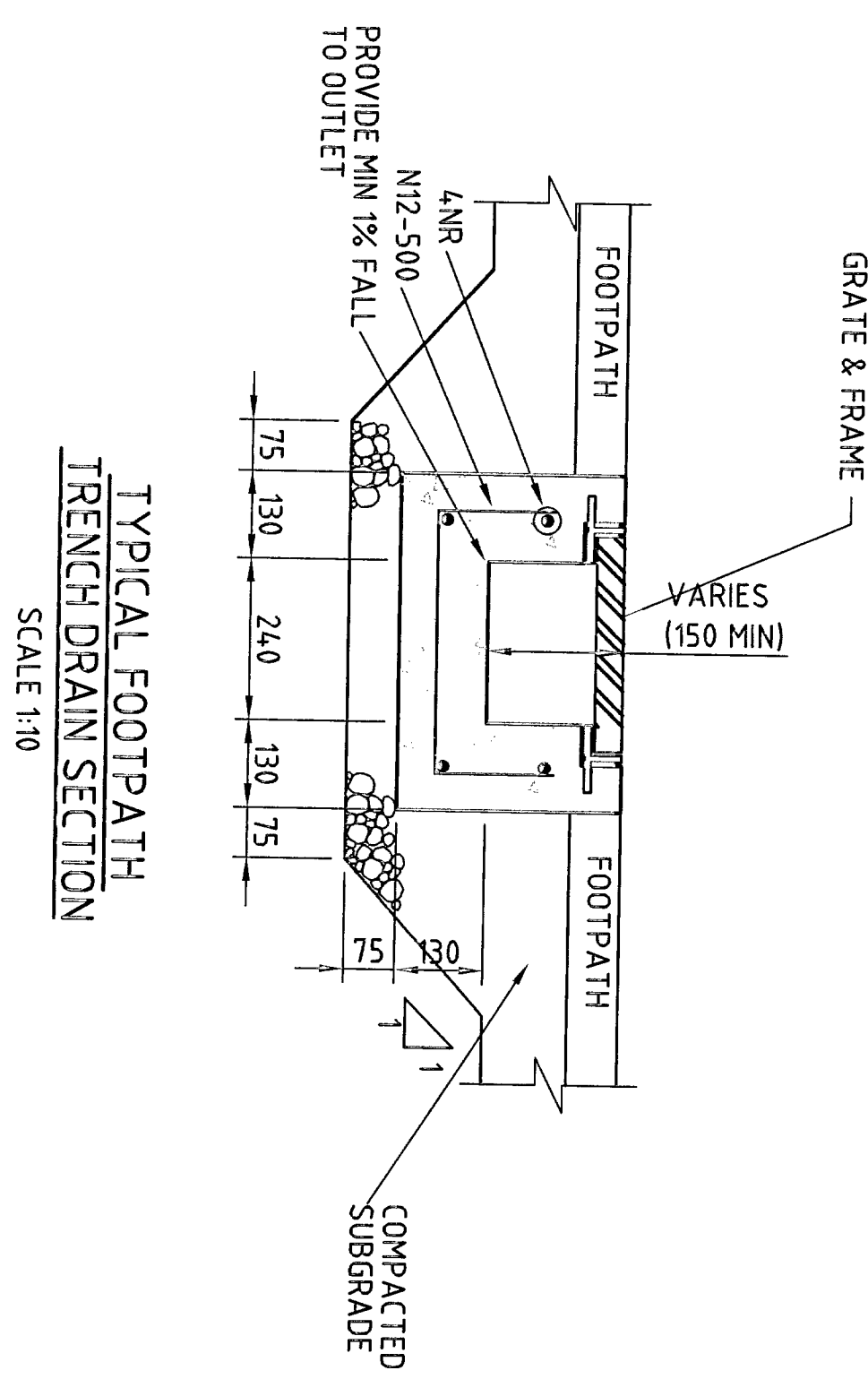
TENDER

Project Name: STORMWATER LONG SECTIONS - STAGE 1, SHEET 1

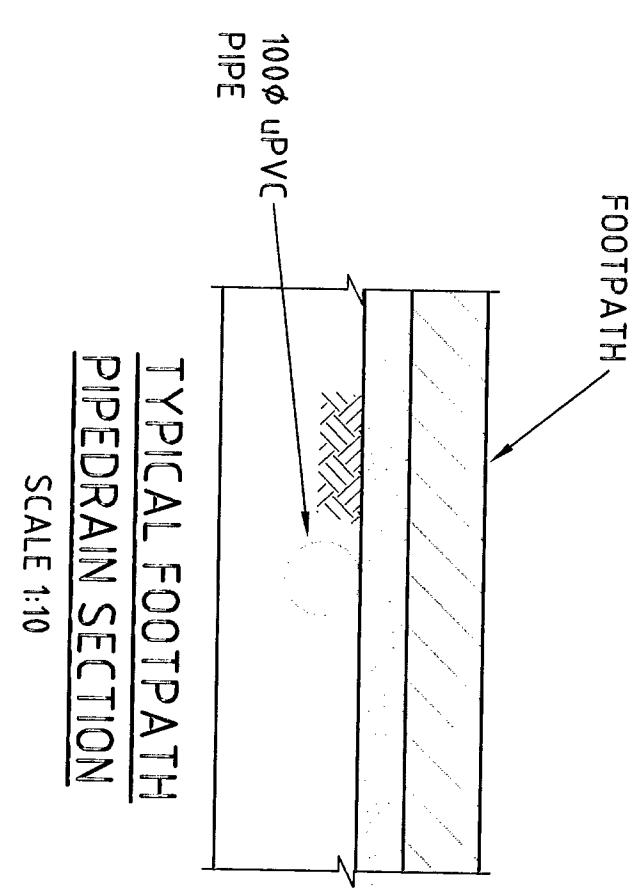
Issue Date: 07 December 2007 - 05:00 AM
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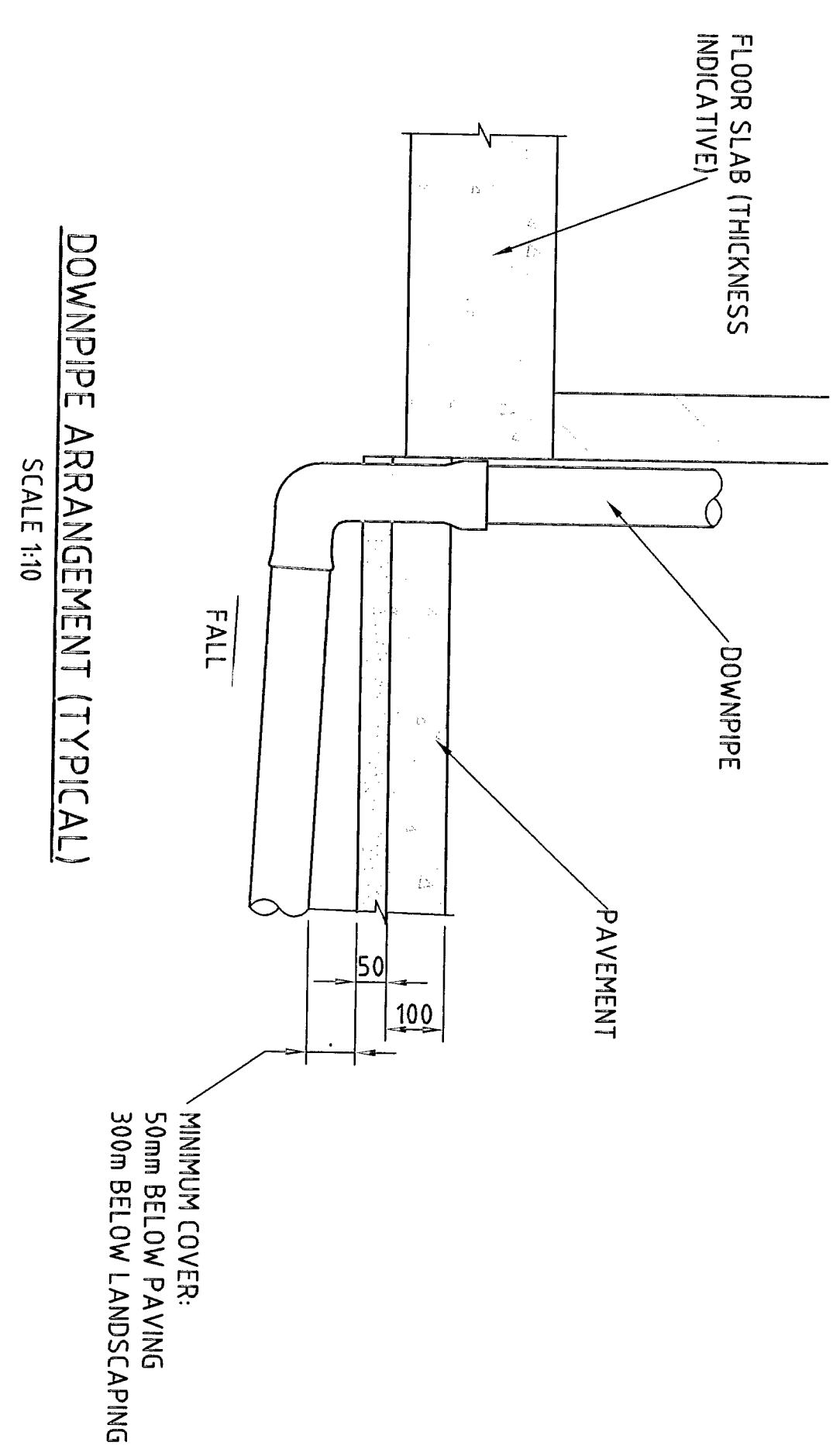
BIOPRETENTION SWALE PIT ARRANGEMENT
SCALE 1:20



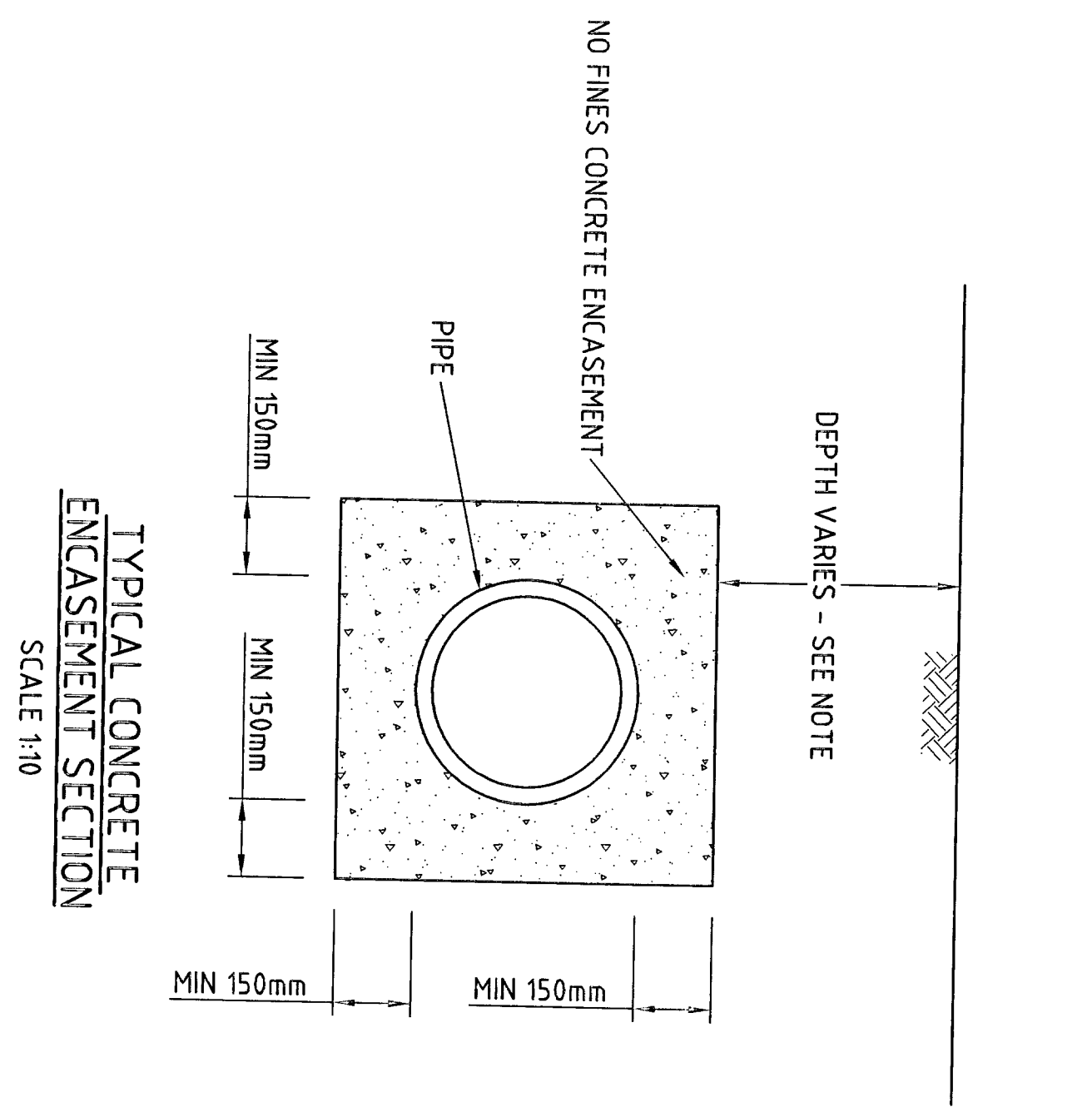
TYPICAL FOOTPATH TRENCH DRAIN SECTION
SCALE 1:10



TYPICAL FOOTPATH PIPE DRAIN SECTION
SCALE 1:10

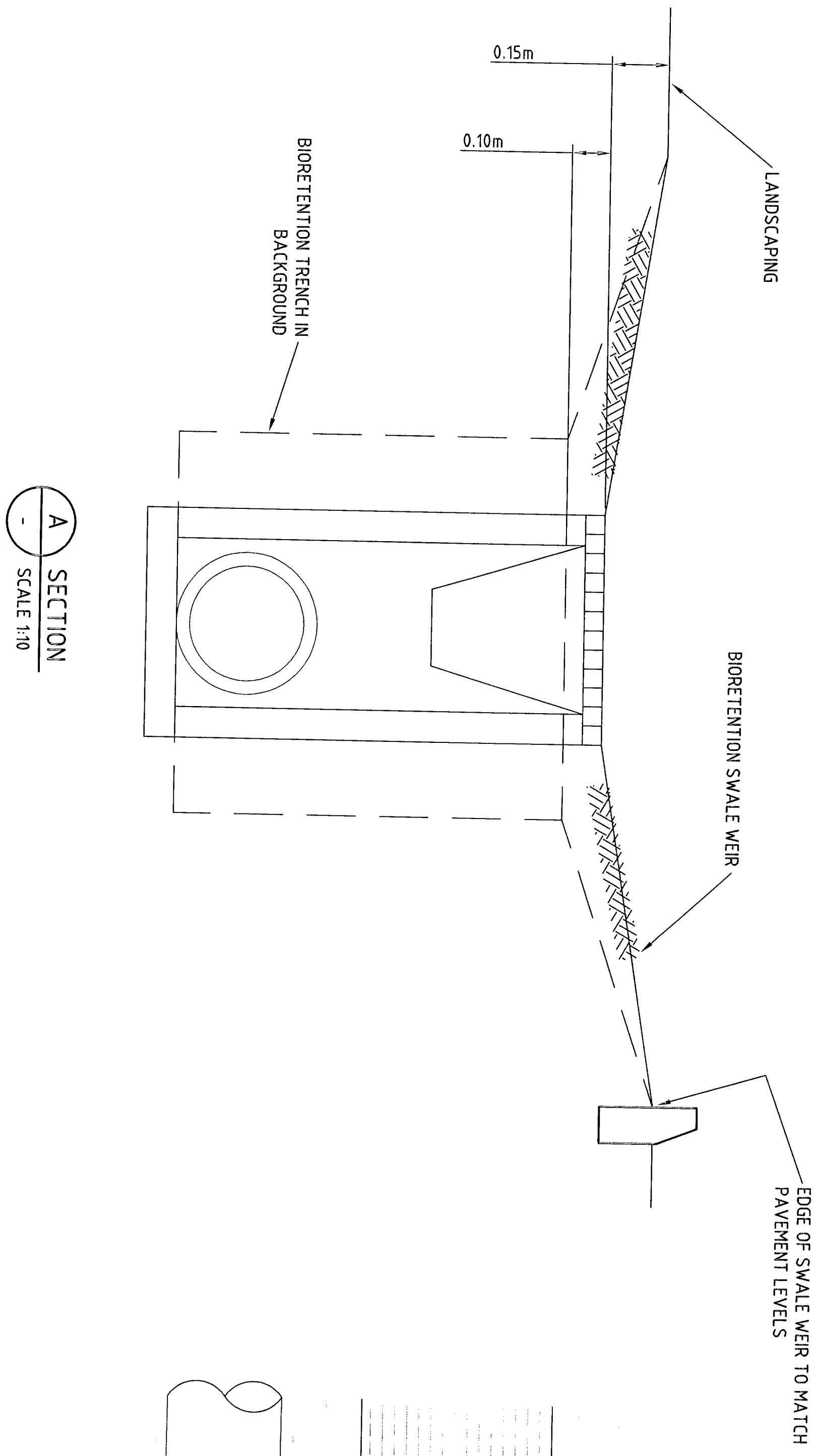


DOWNPIPE ARRANGEMENT (TYPICAL)
SCALE 1:10

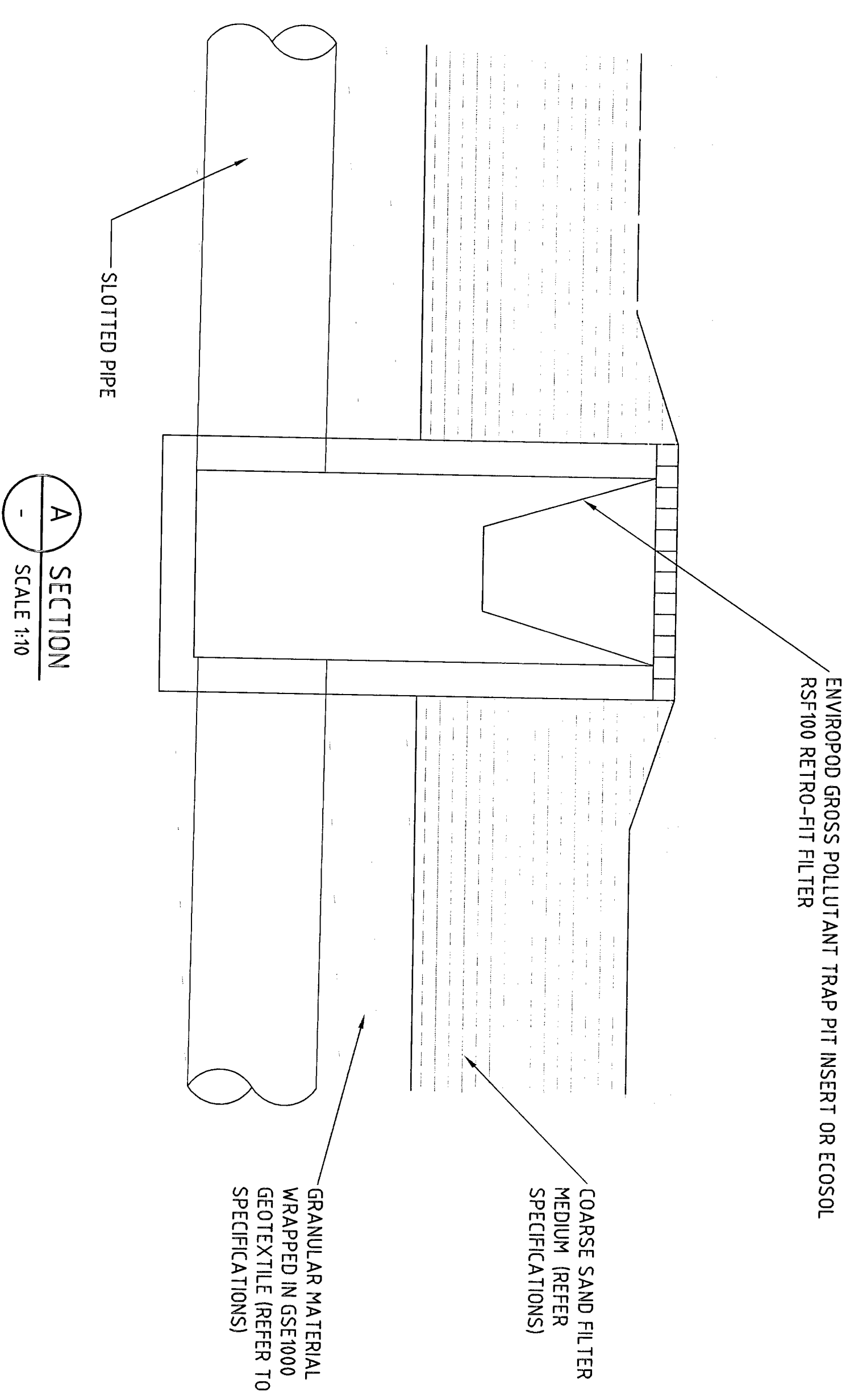


TYPICAL CONCRETE ENCASEMENT SECTION
SCALE 1:10

NOTE:
CONCRETE ENCASEMENT GENERALLY BENEATH:
1. PAVEMENTS WHERE COVER ≤ 600mm
2. LANDSCAPING WHERE COVER ≤ 300mm

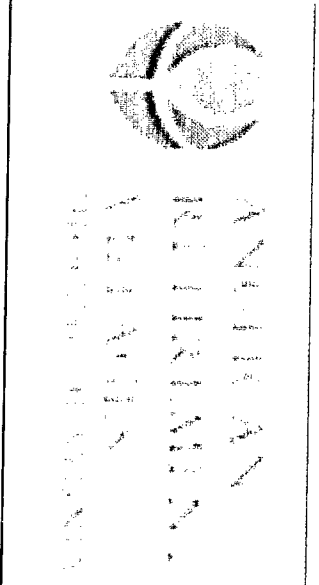


A SECTION
SCALE 1:10



A SECTION
SCALE 1:10

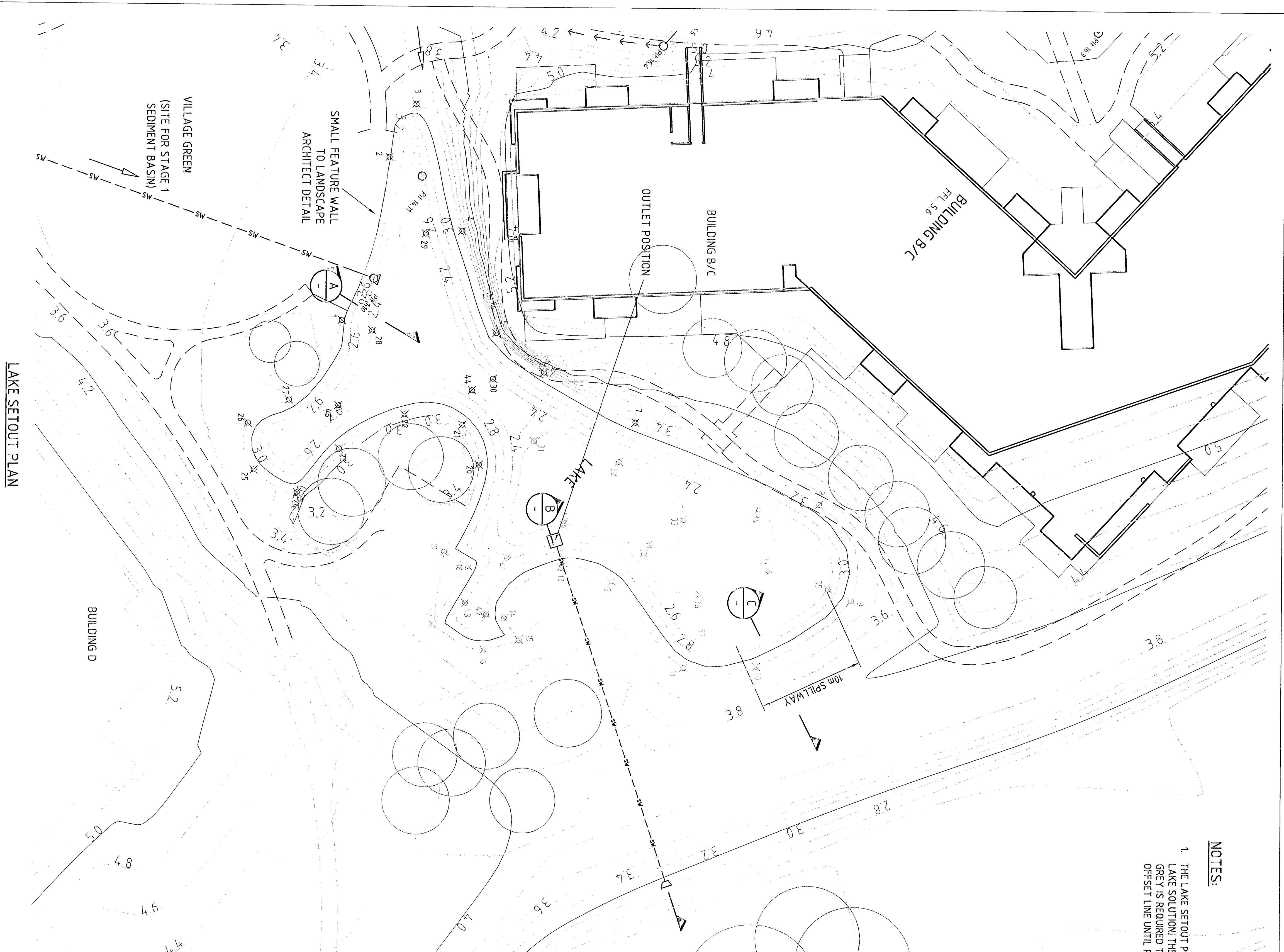
A ISSUED FOR TENDER				TENDER			
No	Revised	Drawn	Checked	Design	Scale	Project	Sheet
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PROJECT: 07/2006/001 - 2007 - 02/13/06 CLIENT: ANGLO-AN RETIREMENT VILLAGES PROJECT: WARRIEWOOD BROOK STAGE 1 TITLE: CIVIL WORKS DRAWING: STORMWATER DRAINAGE SWALE DETAILS				DRAWING NO: 21-13577-C124 REV: A			



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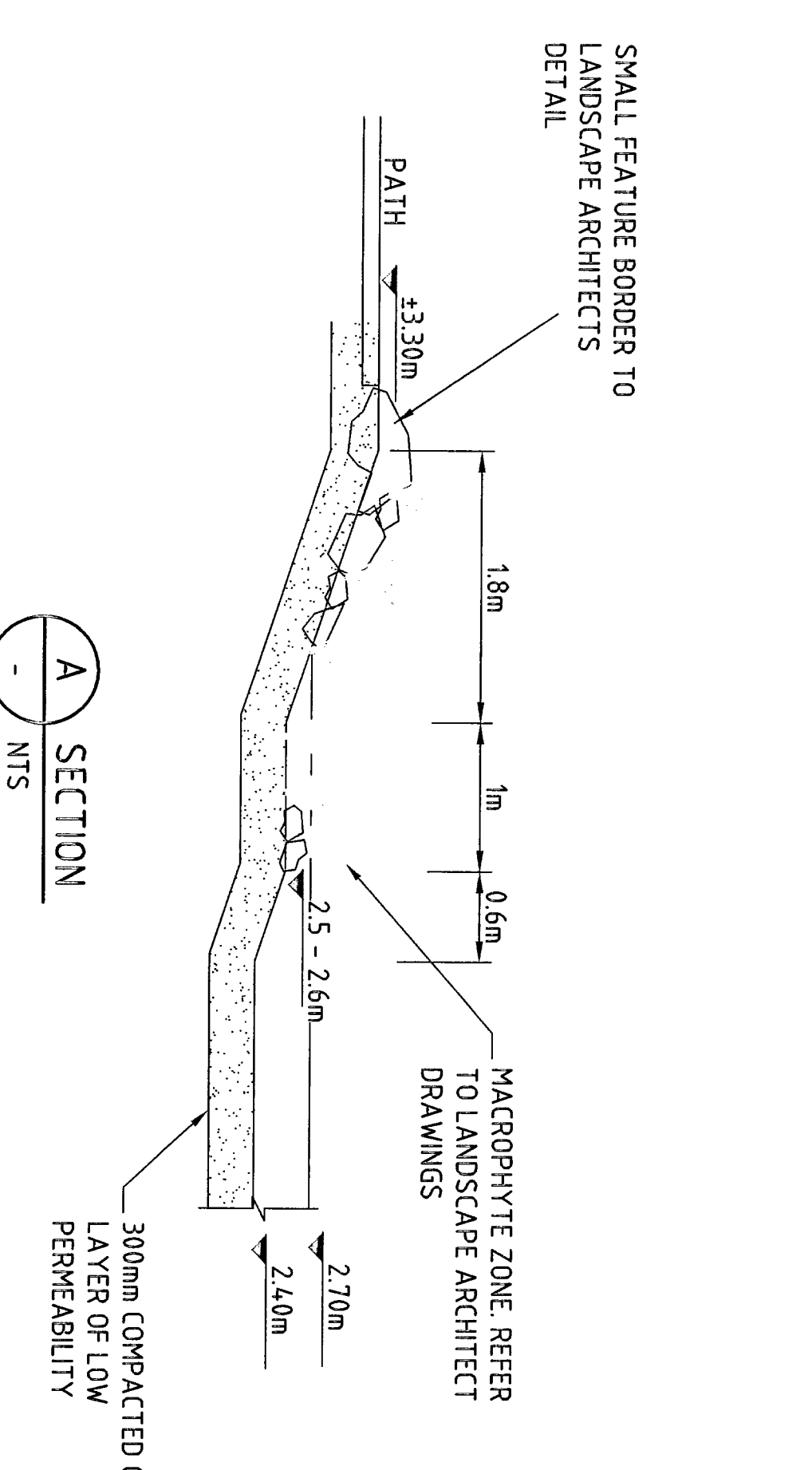
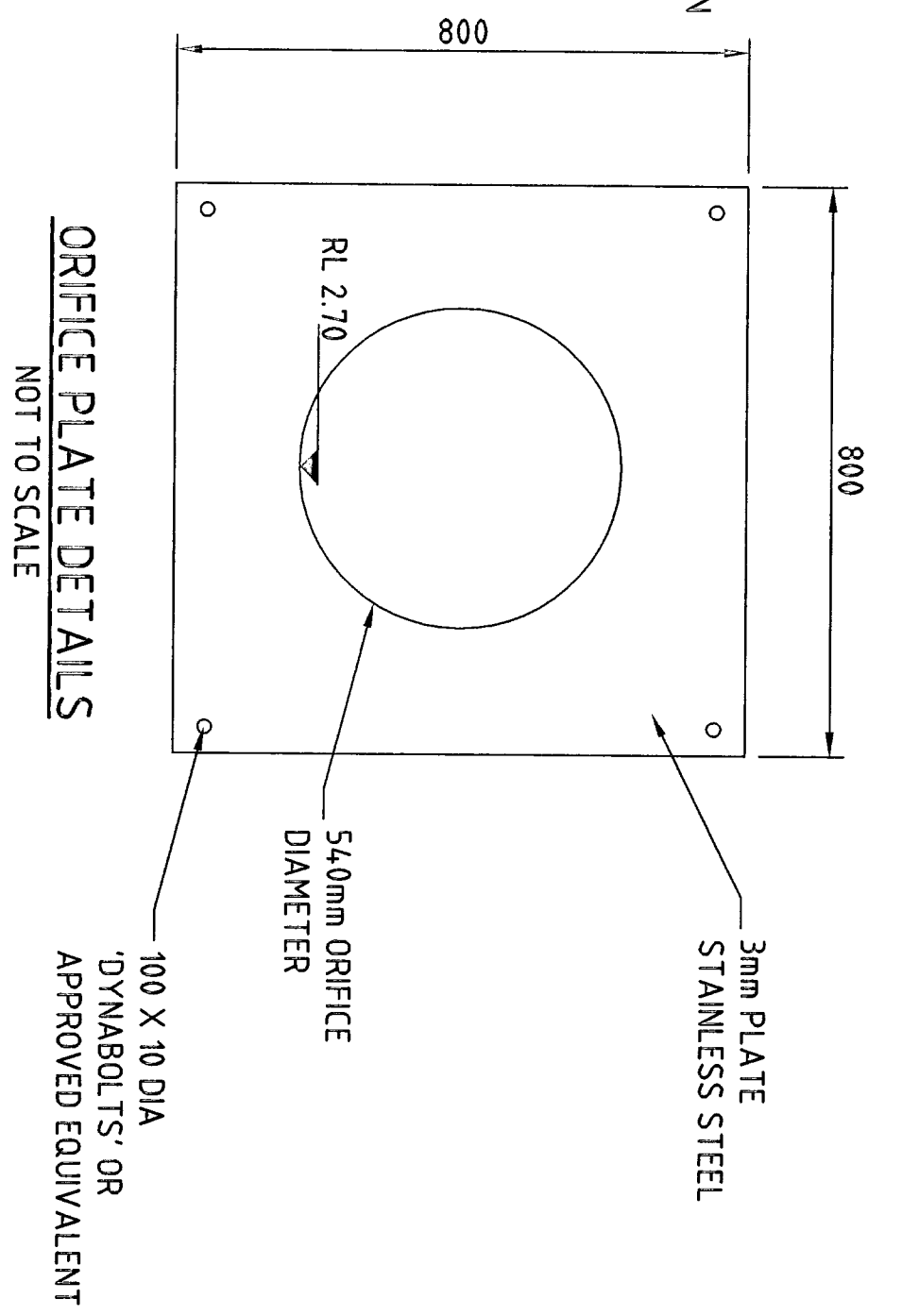
ANGLO-AN RETIREMENT VILLAGES
 WARRIEWOOD BROOK STAGE 1
 CIVIL WORKS
 STORMWATER DRAINAGE SWALE DETAILS
 Drawing No: 21-13577-C124
 Rev: A



LAKE SETOUT PLAN
SCALE 1:200

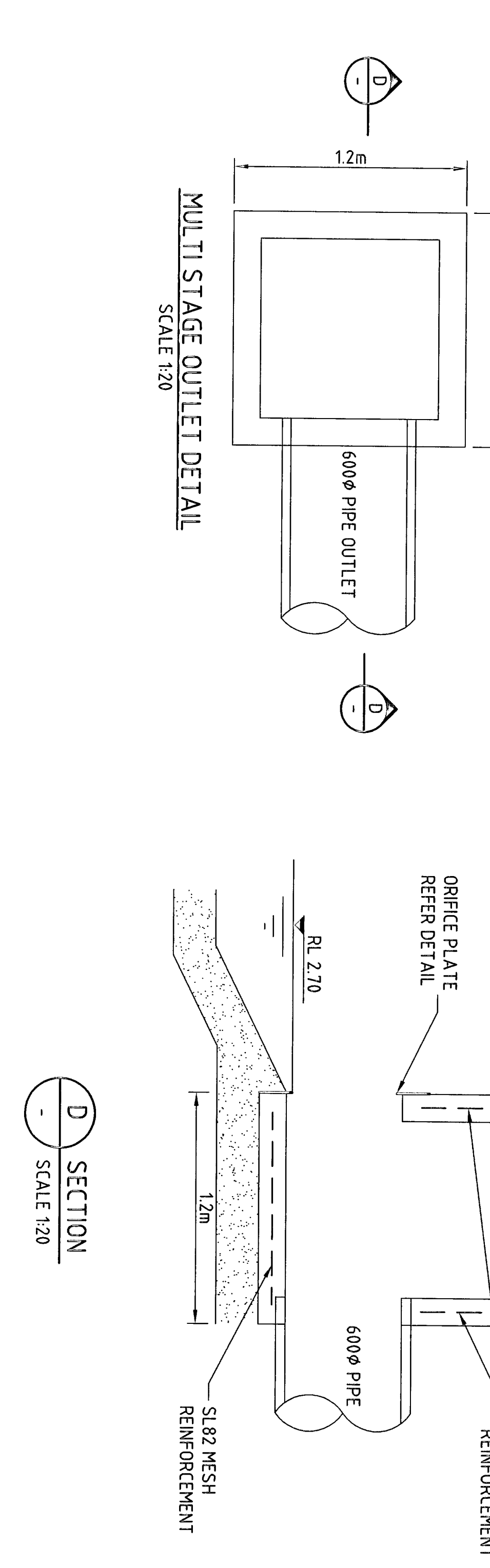
NOTES:

1. THE LAKE SETOUT PLAN SHOWS THE ULTIMATE LAKE SOLUTION. THE STAGE 1 BUND WALL SHOWN IN GREY IS REQUIRED TO BE OUTSIDE THE 40m CREEK OFFSET LINE UNTIL PART 3A PERMIT IS OBTAINED.



LAKE SETOUT

POINT	EASTING	NORTHING	HEIGHT
1	342022.456	627110.542	3.200
2	342008.668	627111.976	3.200
3	342003.616	627117.501	3.200
4	342015.696	627118.198	3.200
5	342025.303	627185.213	3.200
6	342028.988	627189.774	3.200
7	342033.720	627198.497	3.200
8	342041.316	627215.991	3.200
9	342050.517	627219.071	3.200
10	342056.800	627220.176	3.200
11	342058.920	627223.270	3.200
12	342061.040	627199.328	3.200
13	342062.160	627199.328	3.200
14	342062.352	627188.137	3.200
15	342055.438	627188.137	3.200
16	342055.387	627188.274	3.200
17	342053.057	627119.345	3.200
18	342044.396	627182.665	3.200
19	342046.066	627180.399	3.200
20	342037.782	627183.640	3.200
21	342034.039	627182.052	3.200
22	342033.099	627118.554	3.200
23	342028.440	627110.373	3.200
24	342028.440	627110.373	3.200
25	342028.452	627110.270	3.200
26	342028.465	627185.702	3.200
27	342031.799	627185.584	3.200
28	342025.195	627113.442	2.400
29	342015.965	627118.471	2.400
30	342029.621	627188.979	2.400
31	342035.545	627188.870	2.400
32	342037.419	627198.965	2.200
33	342042.844	627203.176	2.200
34	342041.991	627202.281	2.400
35	342041.356	627202.880	2.800
36	342041.356	627202.880	2.800
37	342058.491	627120.051	2.400
38	34208.955	627120.655	2.400
39	34208.955	627199.466	2.200
40	34208.337	627199.695	2.200
41	34204.595	627198.370	2.800
42	342052.024	627188.423	2.800
43	342050.946	627182.439	2.800
44	342050.737	627182.929	2.400
45	342032.275	627110.212	2.400



TENDER

A. ISSUED FOR TENDER		LSM	ND	RB	17/20/27	No.	Revision	Name	Status	Checked	Approved	Date
<p>No. Revisions: None. *Indicates separation on original issue of drawing in later revision of drawing.</p> <p>Client: AVGILCAN RETIREMENT VILLAGES</p> <p>Project: WARREWOOD BROOK - STAGE 1</p> <p>Discipline: CIVIL WORKS</p> <p>Drawing No: 21-13577-C127</p> <p>Rev: A</p>												
<p>DO NOT SCALE</p> <p>Client: AVGILCAN RETIREMENT VILLAGES</p> <p>Project: WARREWOOD BROOK - STAGE 1</p> <p>Discipline: CIVIL WORKS</p> <p>Drawing No: 21-13577-C127</p> <p>Rev: A</p>												

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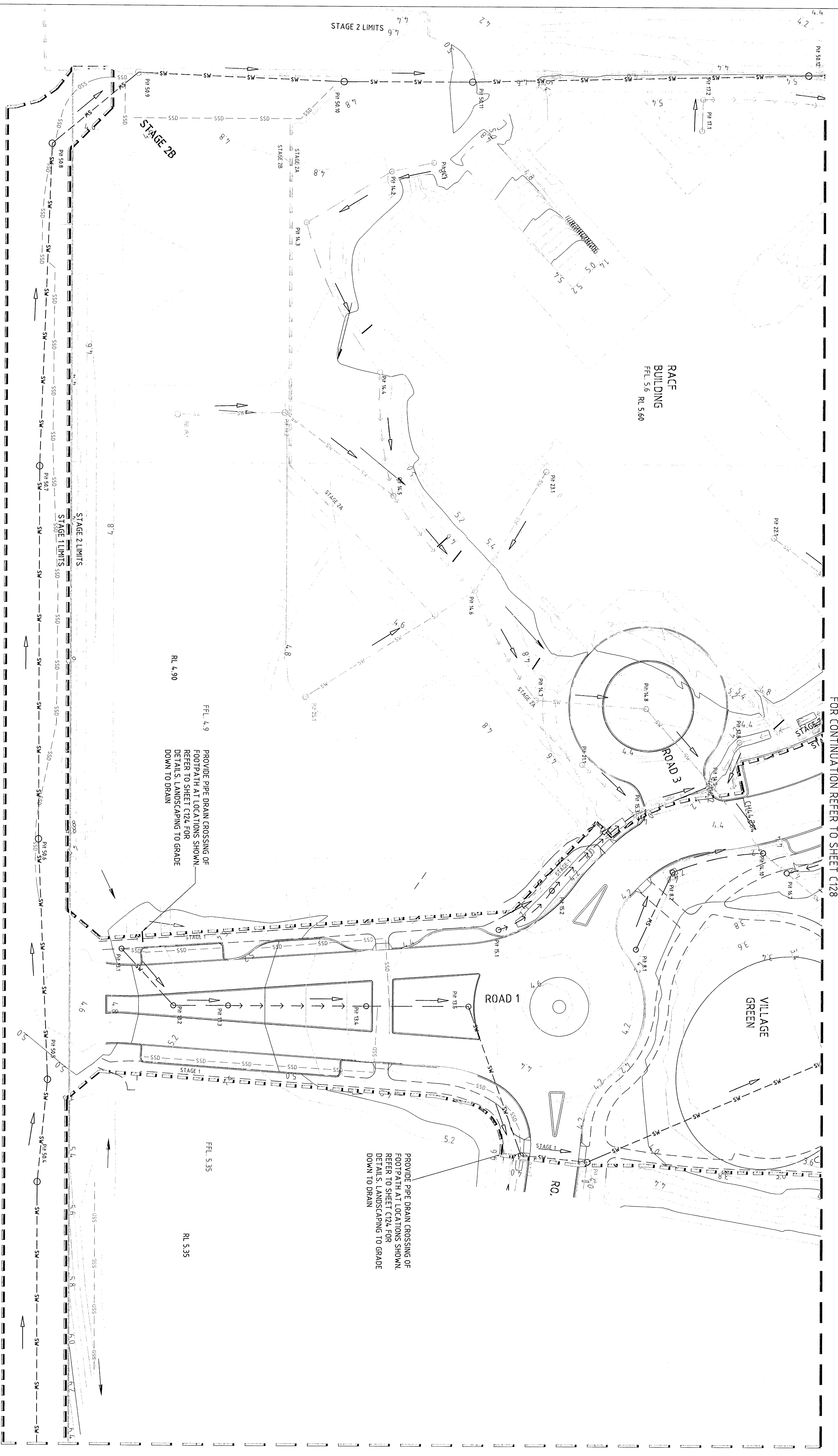
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Drawn	LSM	Designed	LSM
Checked	ND	Approved	RB
Date	28/11/07	Scale	AS SHOWN

Project: **WARREWOOD BROOK - STAGE 1**

Discipline: **CIVIL WORKS**

Drawing No: **21-13577-C127**



FOR CONTINUATION REFER TO SHEET C128

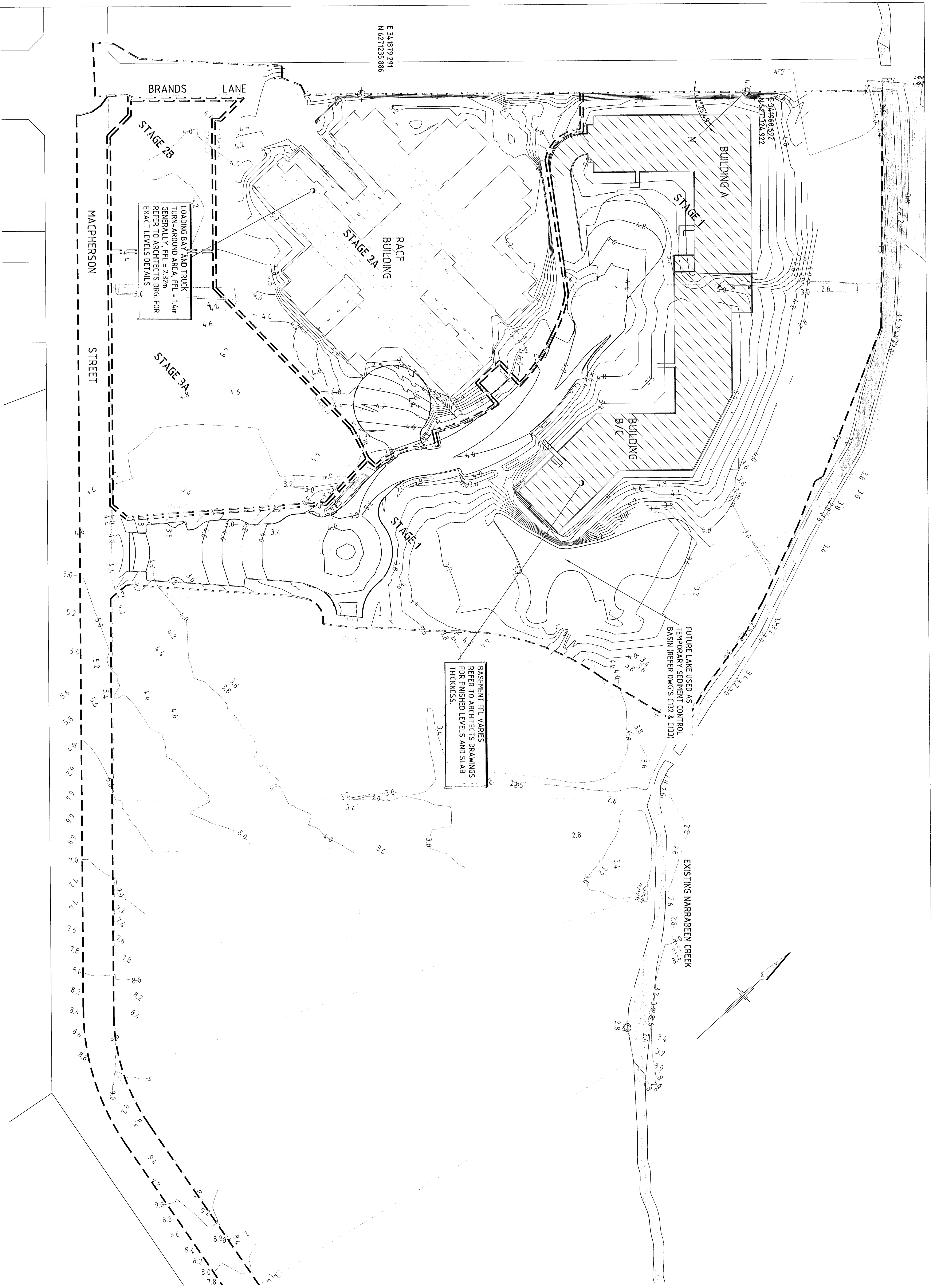
LEGEND
 DESIGN CONTOUR
 LANDSCAPE "MOUNDS"

SITE REGRADING PLAN
 SCALE 1:250

0 2.5 5 7.5 10 12.5m
 SCALE 1:250 AT ORIGINAL SIZE

TENDER

ISSUED FOR TENDER No. Revision Name: Indicates sequence on original issue of drawing or last revision of drawing. Drawn: Checked: Approved: Date: No. Revision Name: Indicates sequence on original issue of drawing or last revision of drawing. Drawn: Checked: Approved: Date:				CLIENTS PEOPLE PERFORMANCE 10 Bond Street, Sydney, NSW 2000, Australia T 61 2 8239 7100 F 61 2 8239 7199 E enquiries@ard.com.au W www.ard.com.au		DO NOT SCALE GHD Pty Ltd This document may only be used for the purposes for which it was prepared or for other similar purposes.		Drawn: LSM Checked: AL Approved: REB/RS Date: 29/11/17 Scale: AS SHOWN		Client: ANGLICAN RETIREMENT VILLAGES WARRIEWOOD BROOK STAGE 1 Project: CIVIL WORKS Title: SITE REGRADING PLAN SHEET 2 OF 2 Drawing No: 21-13577-C129 Rev: A	
---	--	--	--	--	--	--	--	--	--	--	--



LEGEND	
BUILDING NAME	D
BULK EARTHWORKS LEVEL	18
SETOUT POINT	✕
STAGE 1 ROAD WORKS (-4.50mm)	[Hatched pattern]
BASEMENT EXCAVATION	[Diagonal lines]
MAJOR EXISTING CONTOUR	3.4
MINOR EXISTING CONTOUR	3.4
MAJOR LANDSCAPE CONTOUR	3.4
MINOR LANDSCAPE CONTOUR	3.4
MAJOR ROAD BOX-OUT CONTOUR	3.4
MINOR ROAD BOX-OUT CONTOUR	3.4

NOTES:

1. CONTOURS SHOWN ON THIS DRAWING ARE TO BULK EARTHWORKS LEVELS.
 - LANDSCAPE CONTOURS ARE FINISHED SURFACE LEVEL -250mm.
 - ROAD LEVEL CONTOURS ARE FINISHED PAVEMENT LEVEL -450mm.
 - SUBGRADE CONTOURS SHALL BE EXCAVATED TO THE ROCK SURFACE BEING GRADED SO AS TO DRAIN AWAY.
2. SUBGRADE IS TO BE PROOF ROLLED IN THE PRESENCE OF A GEOTECHNICAL ENGINEER.
3. INTERFACE BETWEEN STAGE 1 BOUNDARY AND OTHER STAGES IS TO BE BATTERED SO AS TO ENSURE THAT STORMWATER DRAINAGE IS MAINTAINED.
4. CONTRACTOR TO REFER TO STRUCTURAL DRAWINGS TO DETERMINE EXACT BASEMENT EXCAVATED PROFILE & LOCATIONS OF GROUND BEAMS, PILES ETC.
5. CONTRACTOR IS TO REFER TO GEOTECHNICAL REPORTS.

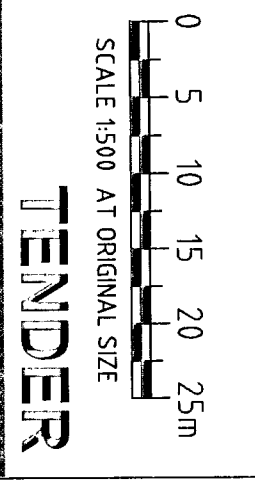
LOADING BAY AND TRUCK TURN-AROUND AREA. FFL = 14m GENERALLY. FFL = 232m REFER TO ARCHITECT'S DRG FOR EXACT LEVELS DETAILS

BASEMENT FILL VARIES REFER TO ARCHITECT'S DRAWINGS FOR FINISHED LEVELS AND SLAB THICKNESS.

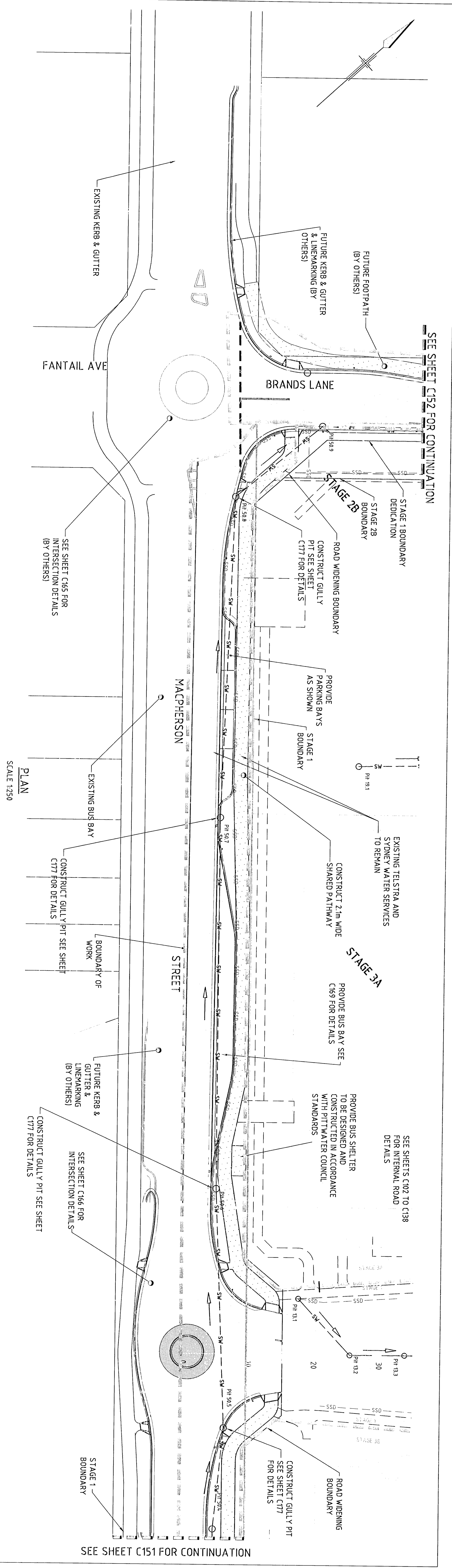
FUTURE LAKE USED AS TEMPORARY SEDIMENT CONTROL BASIN (REFER DWGS C132 & C133)

EXISTING MARRABREEN CREEK

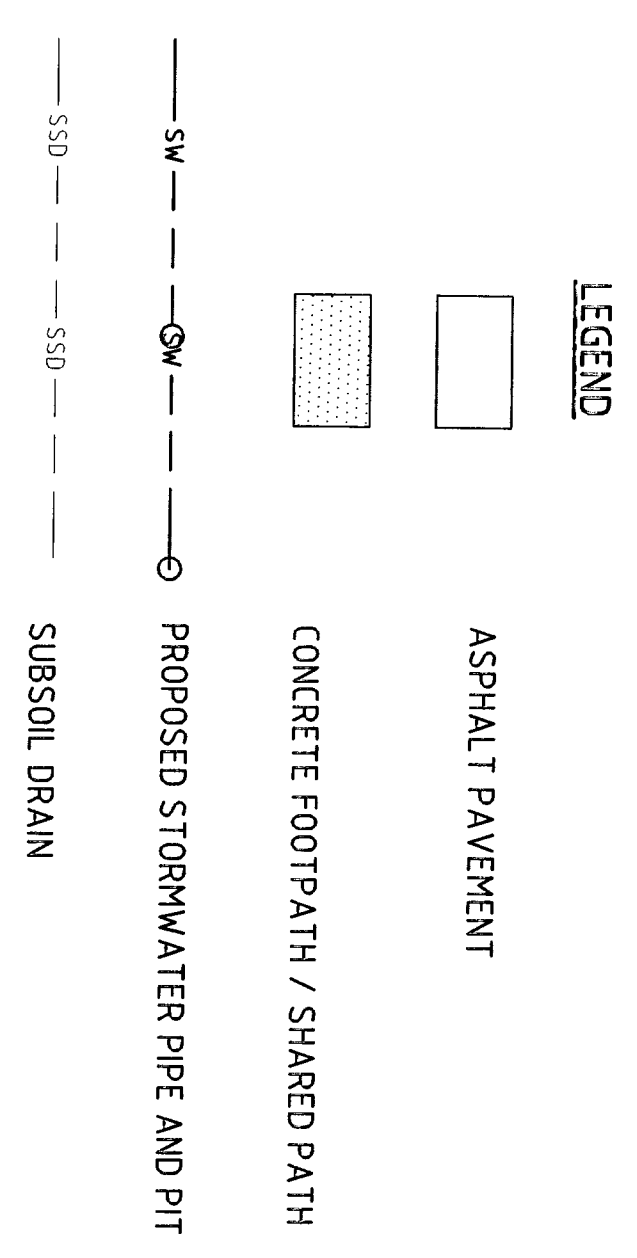
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Drawing No: 21-13577-C13A Scale: AS SHOWN	Client: ANGLIAN RETIREMENT VILLAGES Project: WARRIEWOOD BROOK Title: CIVIL WORKS Discipline: BULK EARTHWORKS
Designer: PVL Checker: NP	Client Ref: 31
Date: 26/11/2017 Approved: RABROR	Rev: A
No. Issued for Tender: 1 Reason: None	No. Revisions: 0 Reason: None



No.	Revision	Date	By	Check	Approved	Date
A	ISSUED FOR TENDER		LSM	ND	SB	27/07/17

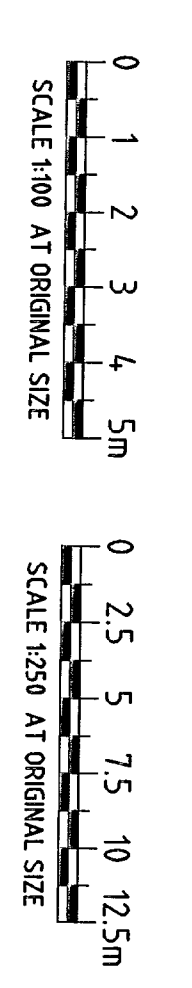


NOTE:
 1. WORKS NOTED "BY COUNCIL" RELATE TO THOSE ITEMS COVERED BY SECTION 9.2. PAVEMENTS BY A.A.V. PAVEMENTS BY ELECTRICAL SERVICES AND ELECTRICAL DRAWINGS.



STATION	DESIGN SURFACE		EXISTING SURFACE		CHANGAGE
	DESIGN SURFACE	EXISTING SURFACE	DESIGN SURFACE	EXISTING SURFACE	
20	5.255	5.255	5.255	5.255	
22.5	5.18	5.024	5.18	5.024	
30	5.068	5.067	5.068	5.067	
32.5	5.035	5.028	5.035	5.028	
40	4.942	4.933	4.942	4.933	
42.5	4.921	4.909	4.921	4.909	
50	4.867	4.841	4.867	4.841	
60	4.765	4.749	4.765	4.749	
70	4.663	4.658	4.663	4.658	
80	4.54	4.557	4.54	4.557	
90	4.437	4.476	4.437	4.476	
100	4.347	4.385	4.347	4.385	
108	4.279	4.312	4.279	4.312	
110	4.268	4.255	4.268	4.255	
120	4.209	4.236	4.209	4.236	
128	4.177	4.221	4.177	4.221	
128.872	4.177	4.221	4.177	4.221	
130	4.184	4.222	4.184	4.222	
140	4.226	4.254	4.226	4.254	
148	4.277	4.312	4.277	4.312	
150	4.294	4.33	4.294	4.33	
160	4.387	4.421	4.387	4.421	
170	4.548	4.511	4.548	4.511	
180	4.573	4.602	4.573	4.602	
190	4.699	4.693	4.699	4.693	
200	4.804	4.784	4.804	4.784	
203.874	4.831	4.819	4.831	4.819	
210	4.885	4.882	4.885	4.882	
213.874	4.918	4.93	4.918	4.93	
213.874	4.918	4.93	4.918	4.93	
220	5.002	5.017	5.002	5.017	
223.874	5.056	5.08	5.056	5.08	
230	5.112	5.183	5.112	5.183	
240	5.22	5.353	5.22	5.353	

LONGITUDINAL SECTION - MACPHERSON ST
 SCALE - HOR: 1:250
 VERT: 1:100

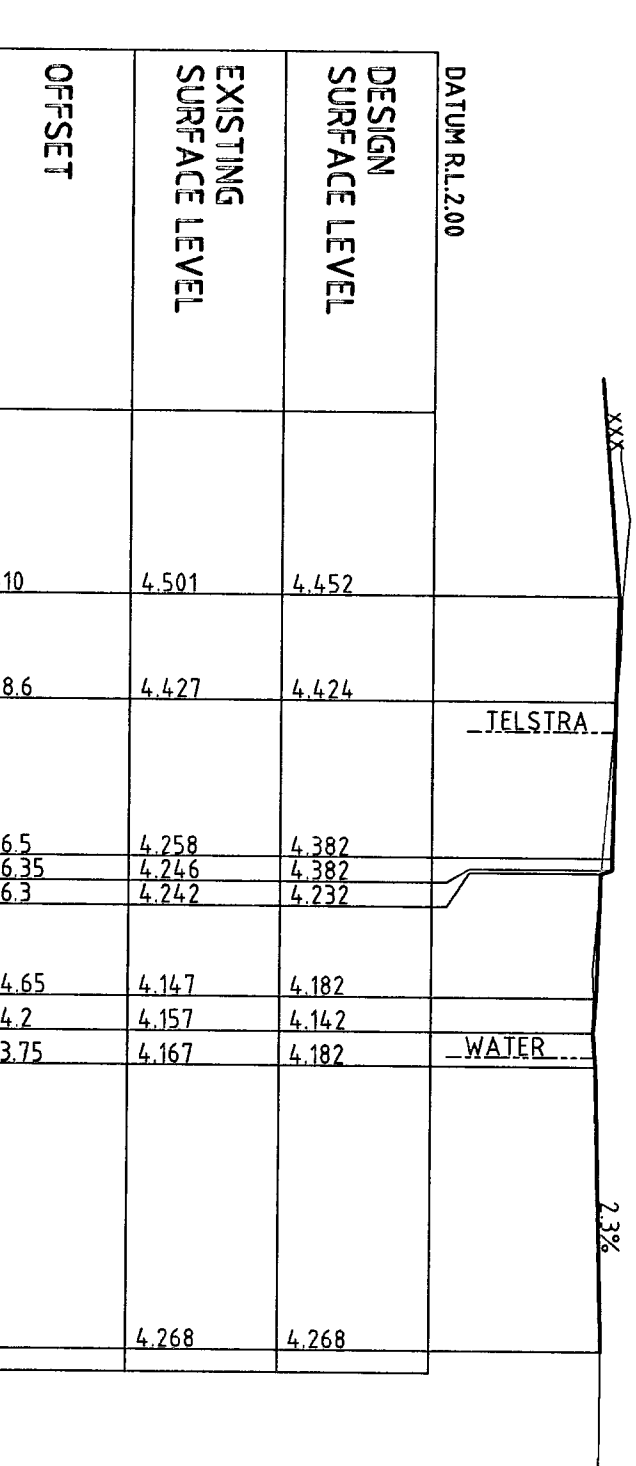
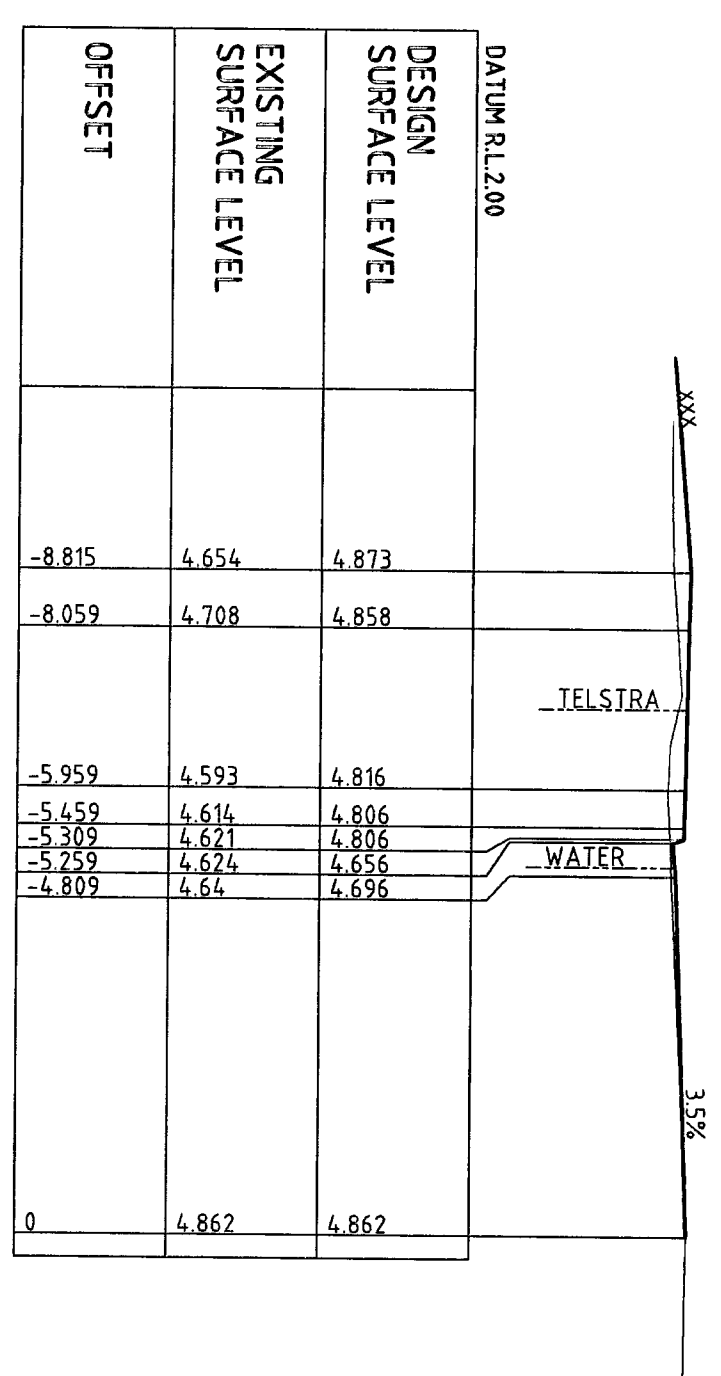


TENDER

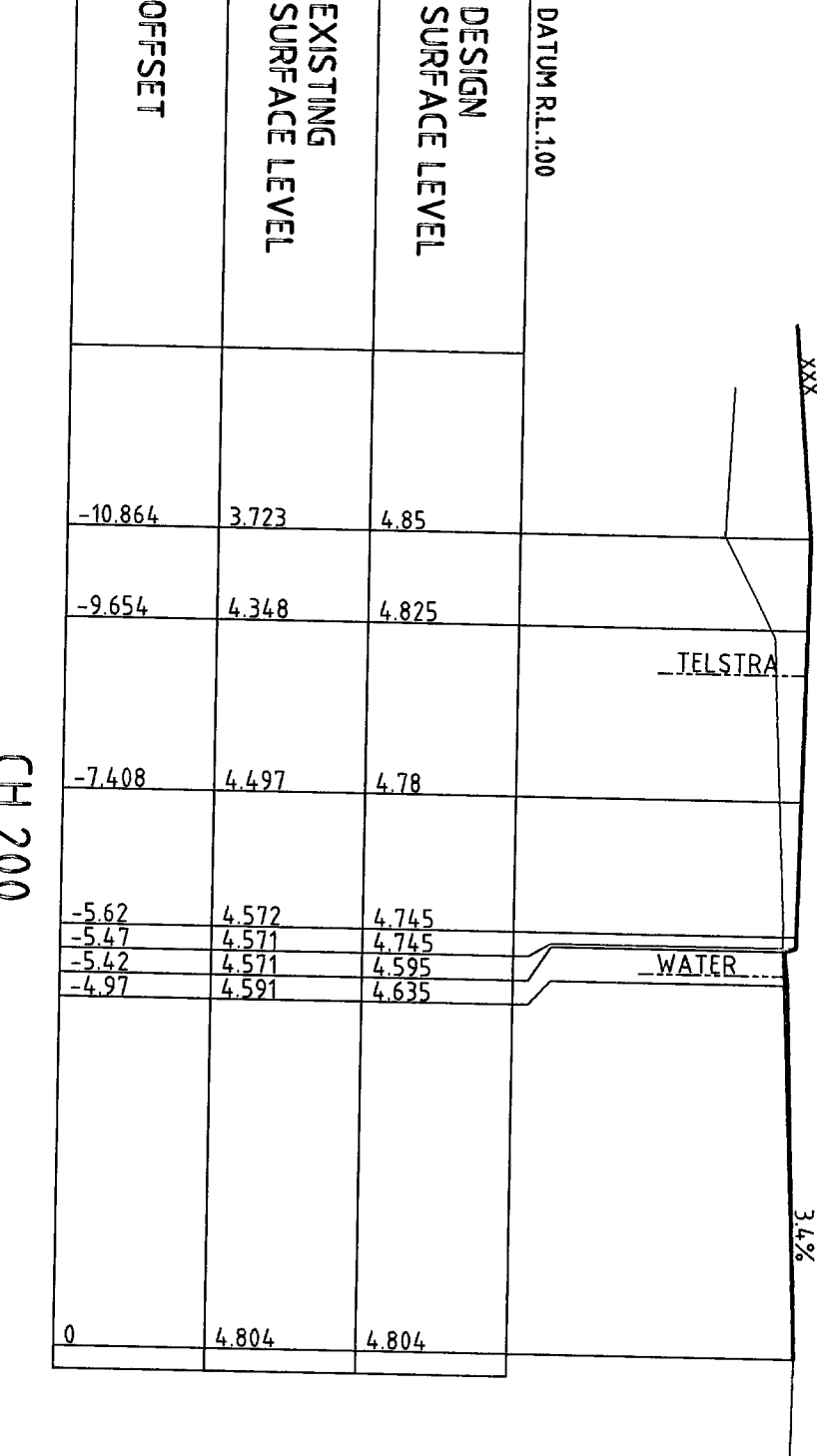
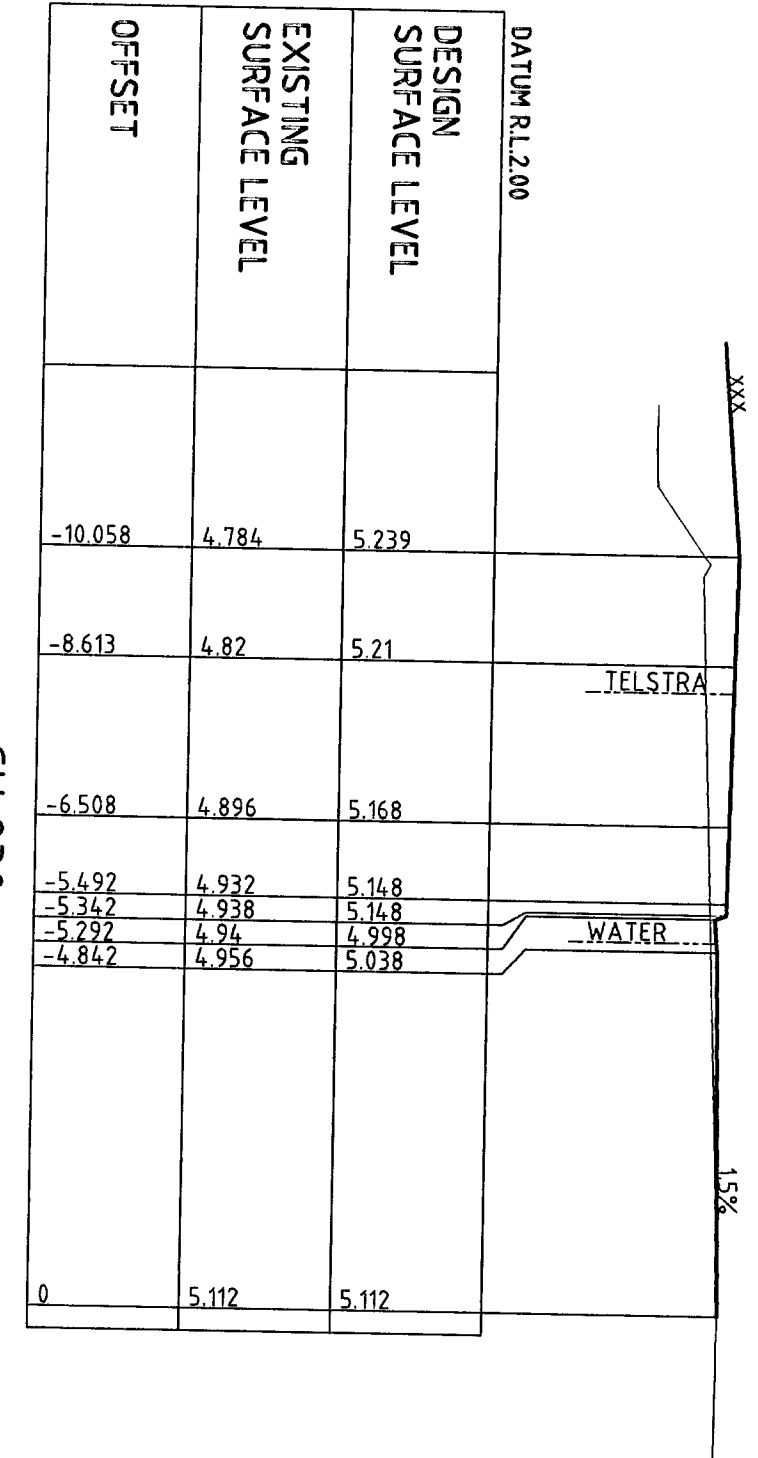
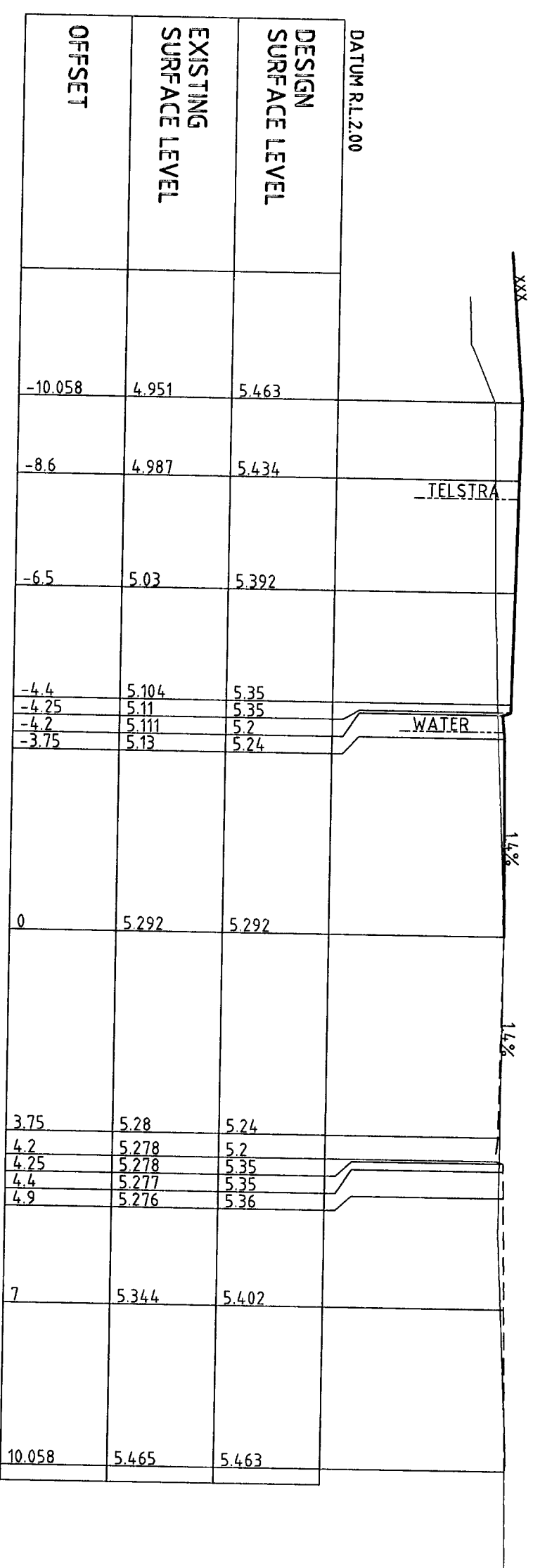
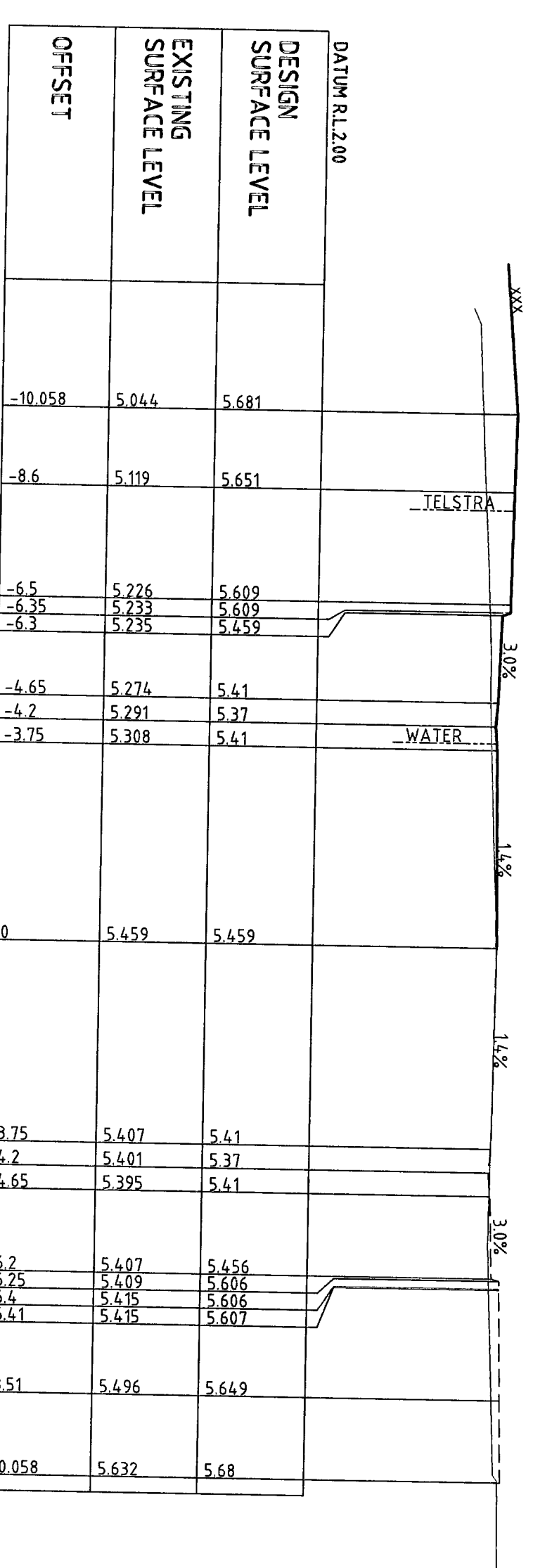
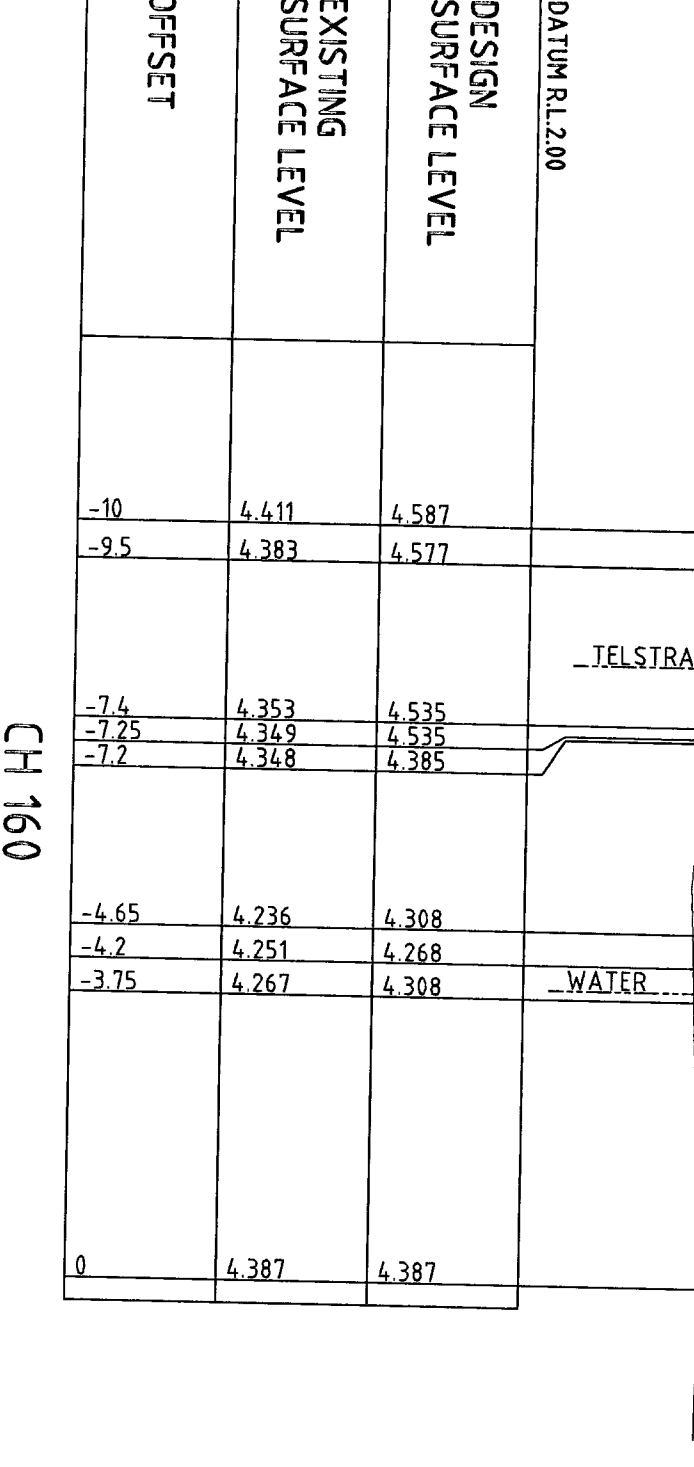
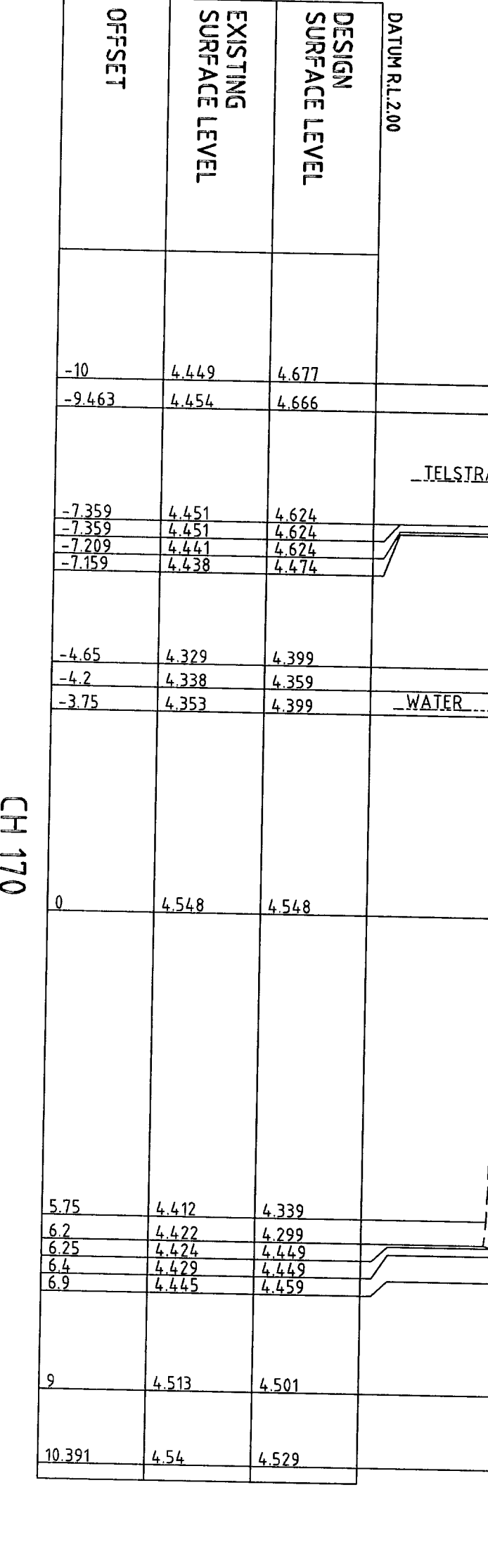
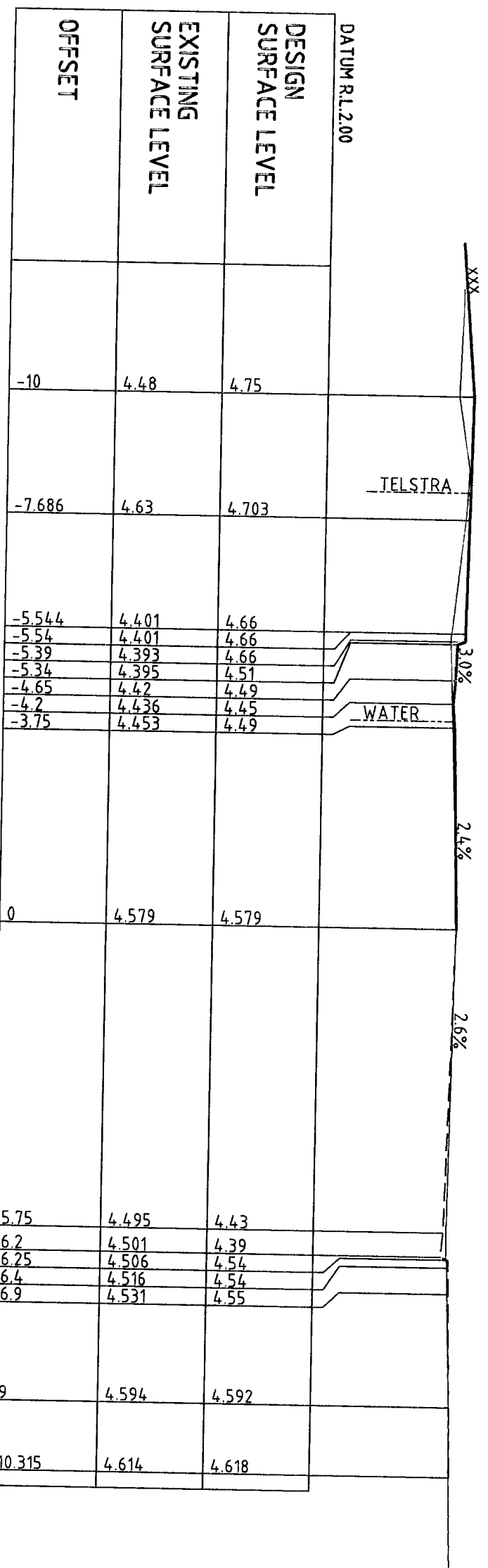
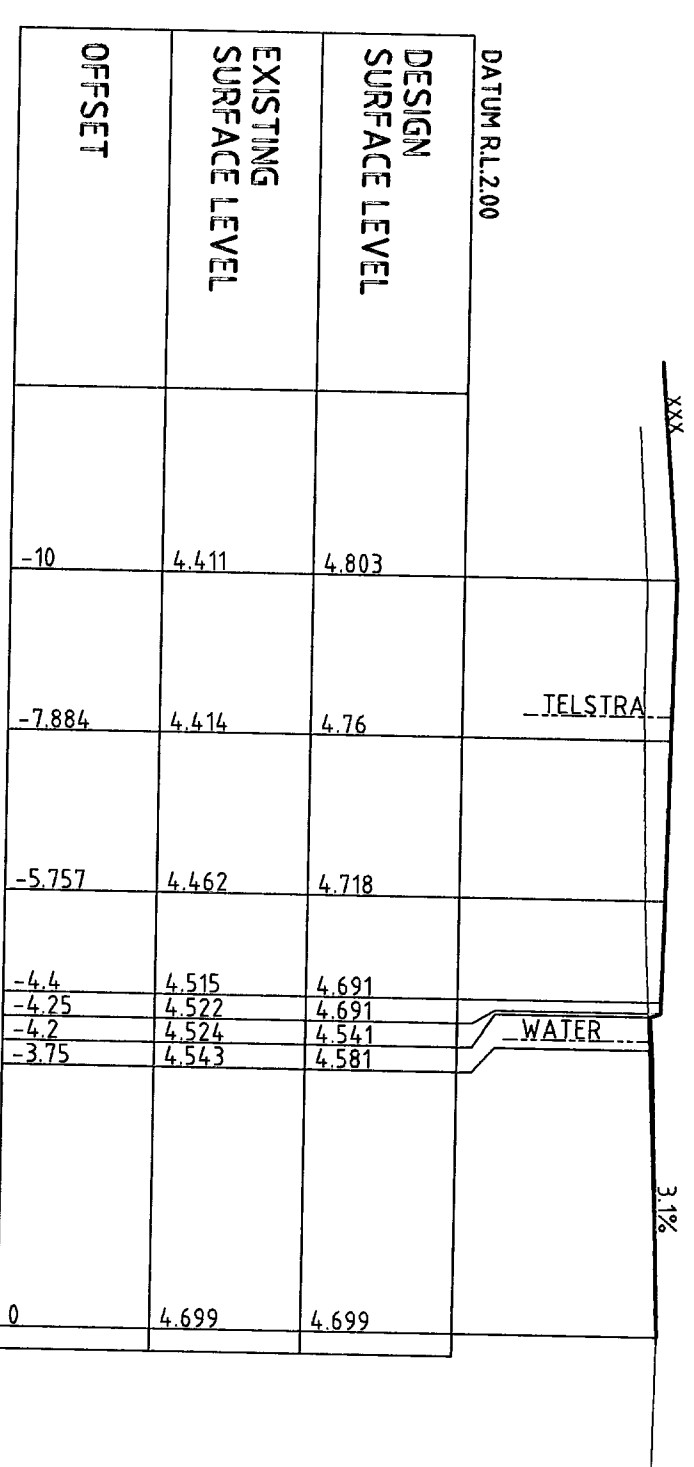
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10 Bond Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydney@angelicann.com.au W www.angelicann.com.au		Project: WARRIEWOOD BROOK Title: MACPHERSON ST, PLAN & LONG SECTION Drawing No: 21-13577-C150 Rev: A	

No	Revision	Date	By	Check	Scale
A	ISSUED FOR TENDER	17/12/27	ND	ND	AS SHOWN

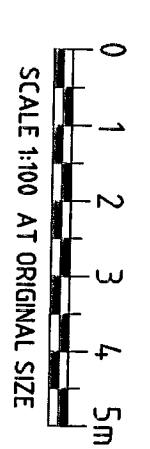
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SITE WORKS REGRADING
PLANS C128-C131



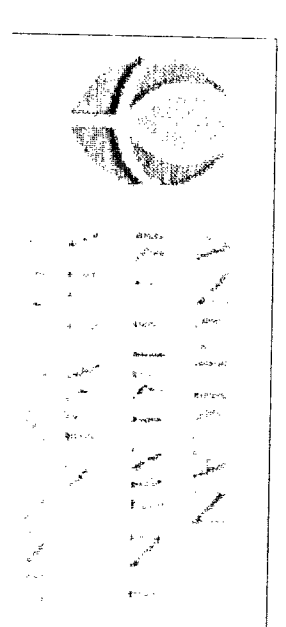
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SITE WORKS REGADING
PLANS C128-C131



MACPHERSON ST CROSS SECTIONS
SCALE - HOR 1:100
VERT 1:100



Rev	Description	Drawn	Checked	Date
E	ISSUED FOR PRE-TENDER	TR	AML	06/03/07
D	90% STAGE 1 REVIEW	KRW	AML	15/08/07
C	GENERAL REVISION	KRW	AL	06/07/07
B	FOR TENDER	LSM	AL	23/02/07
A	FOR FINAL COORDINATION	LSM	AL	
F	ISSUED FOR TENDER	TR	AML	17/07/07



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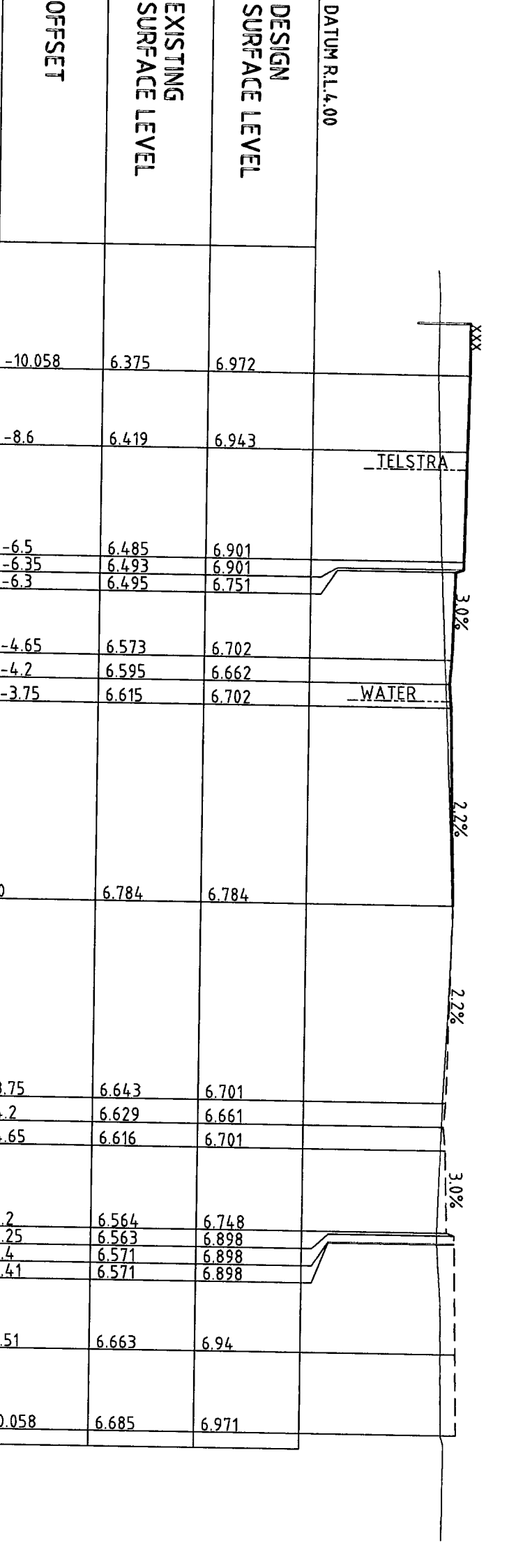
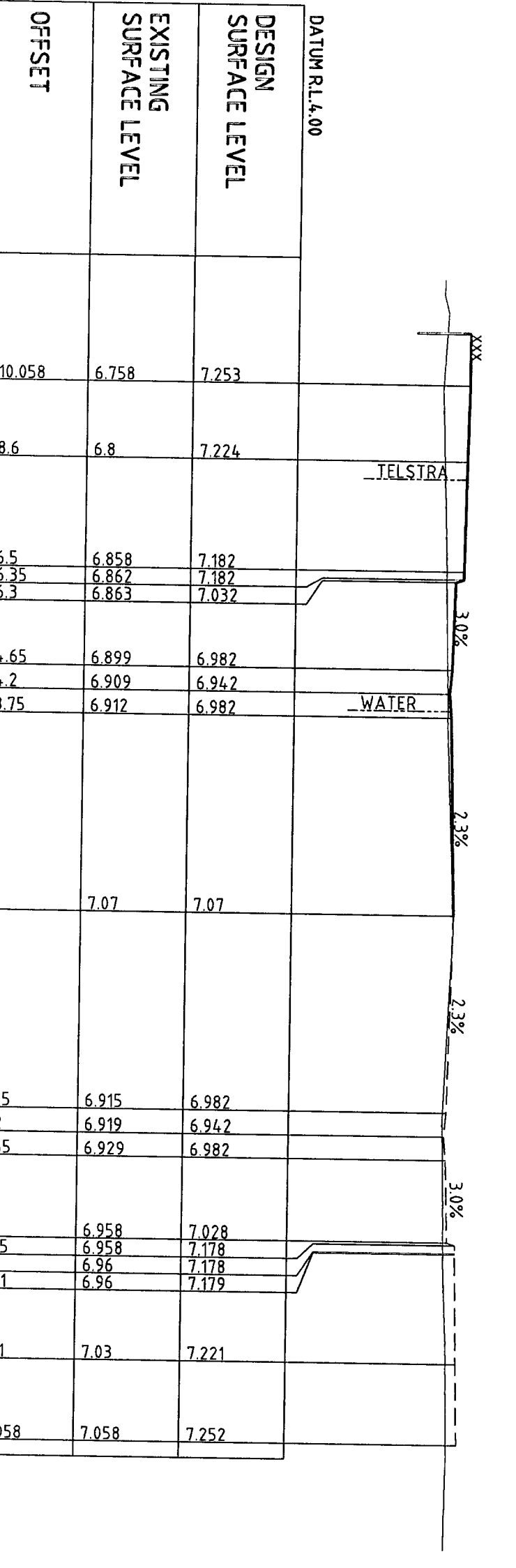
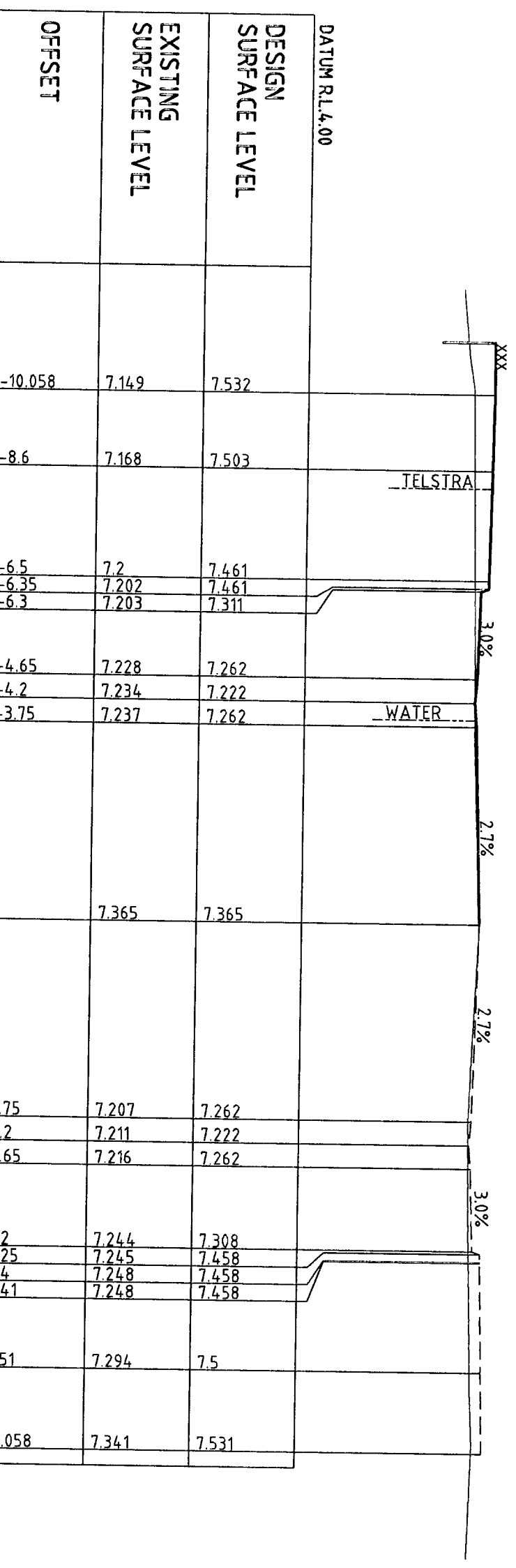
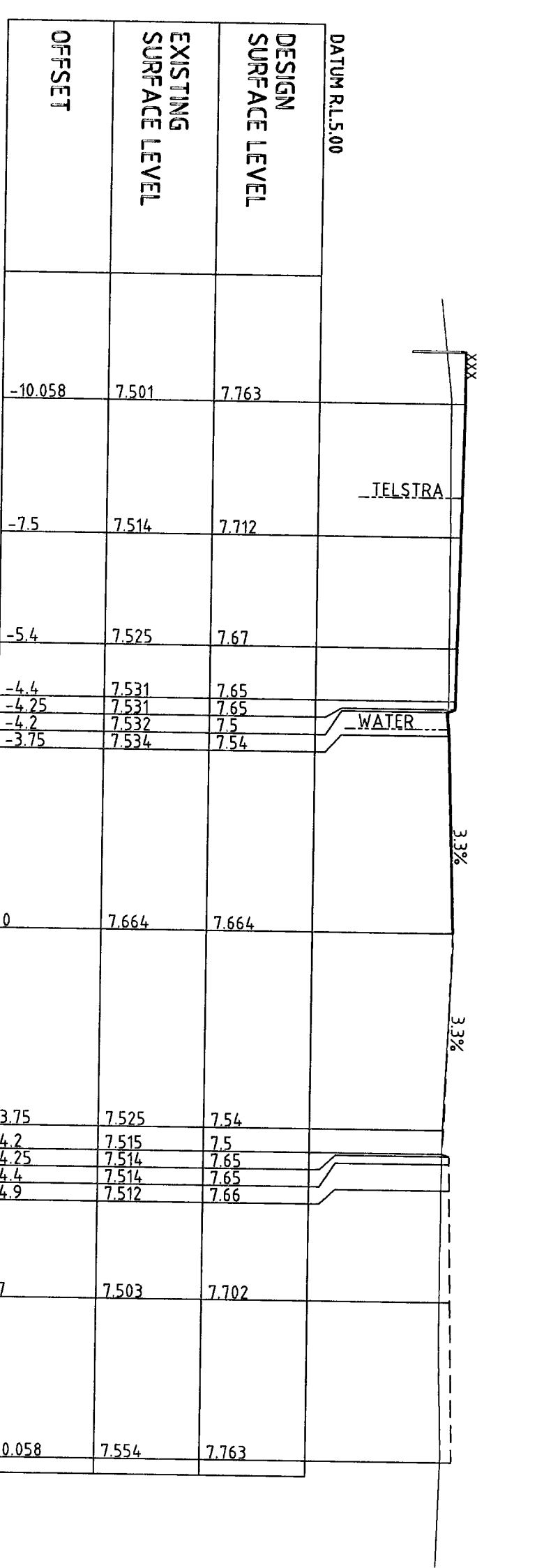
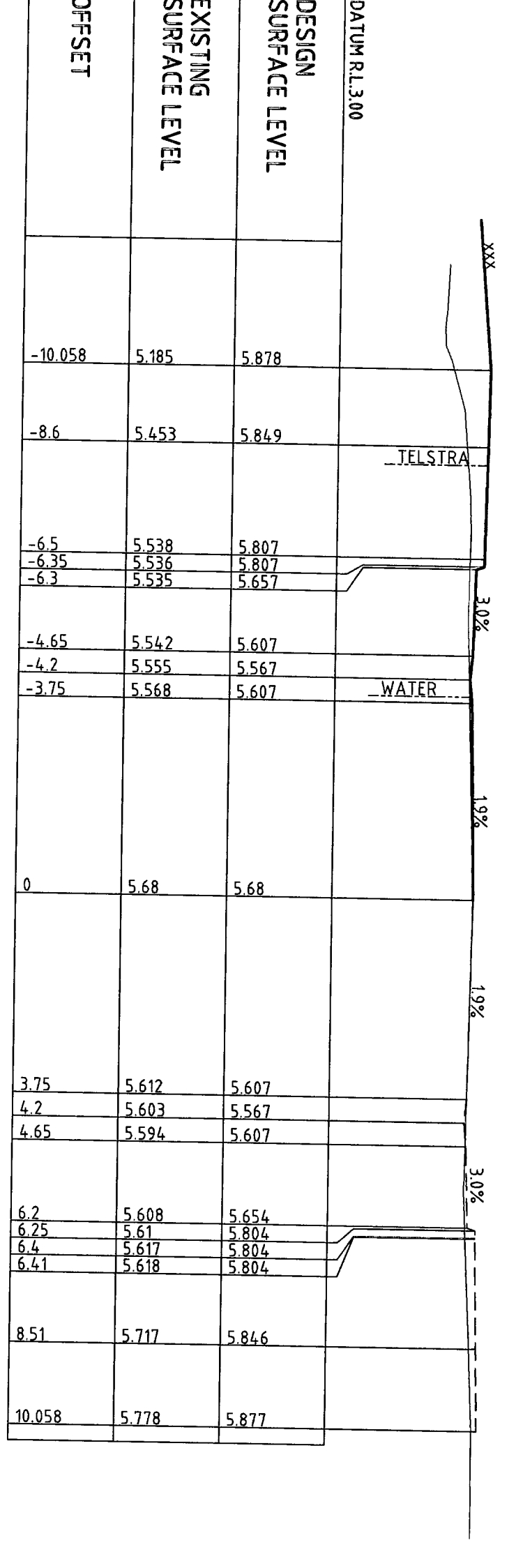
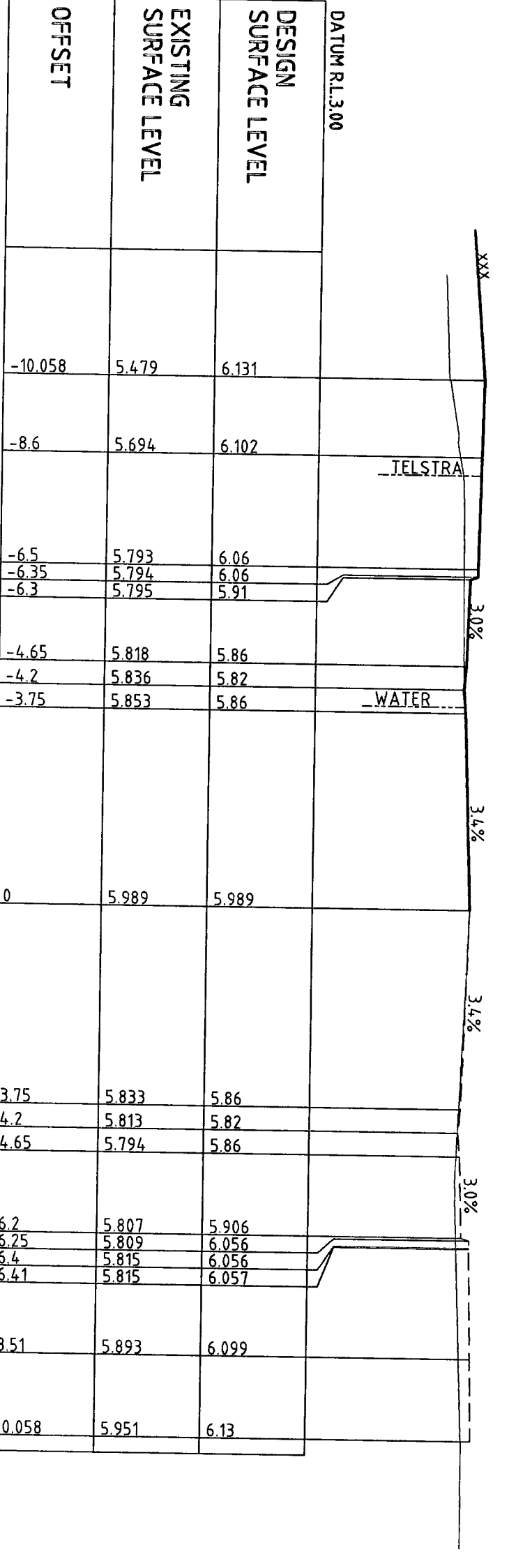
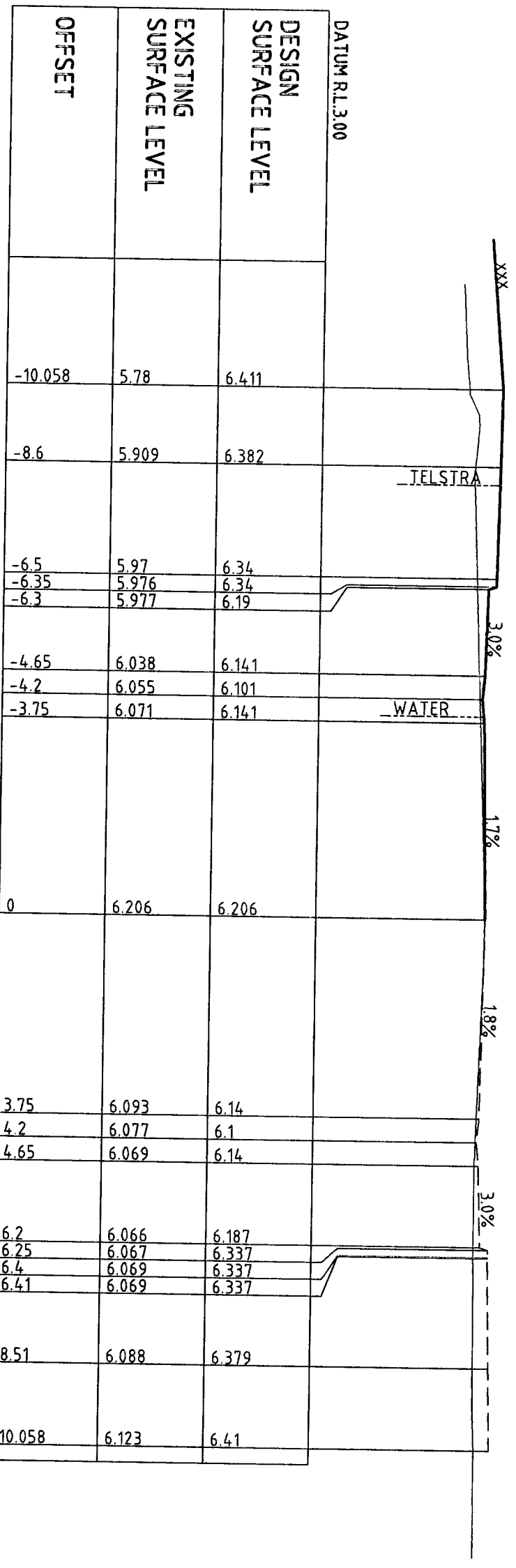
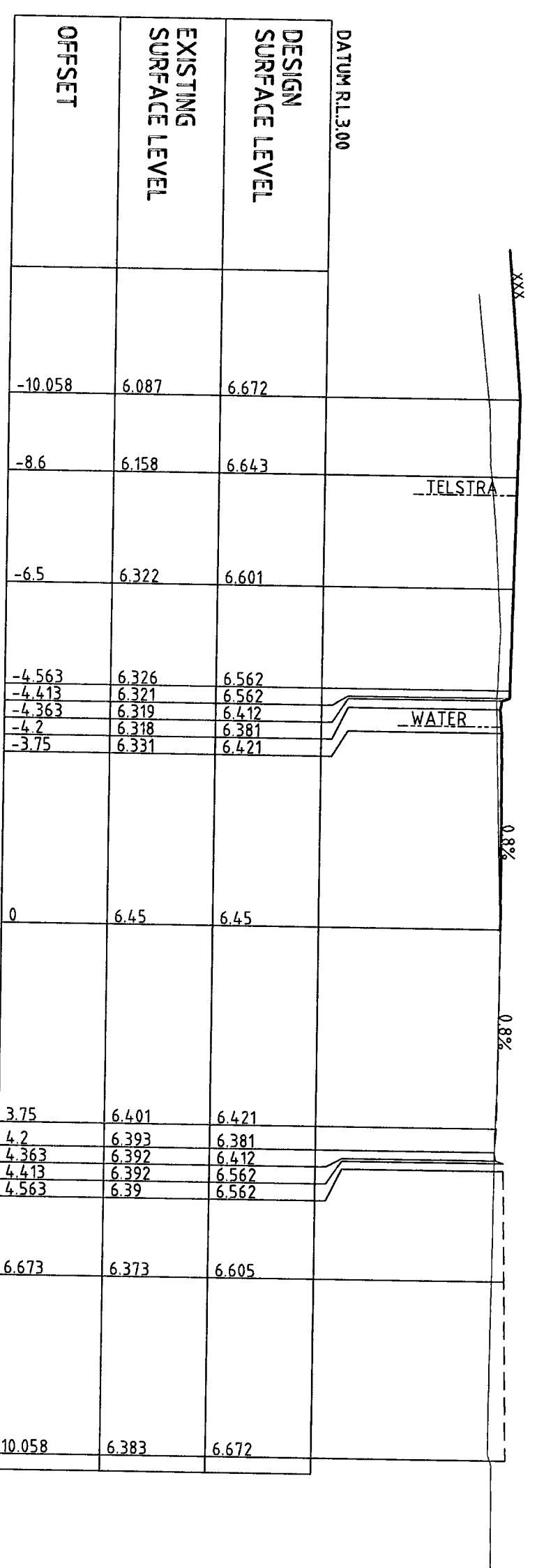
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DO NOT SCALE
Drawing No: 21-13577-C15A

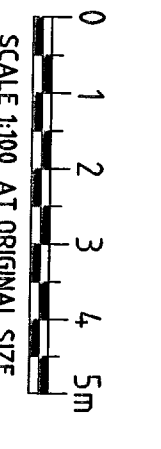
ANGICAN RETIREMENT VILLAGES
WARRENWOOD BROOK
MACPHERSON ST CROSS SECTIONS SHEET 2 OF 5
Drawing No: 21-13577-C15A

TENDER
REV: F

*** DENOTES GRADING TO
SITE WORKS REGRADING
PLANS CP8-C131

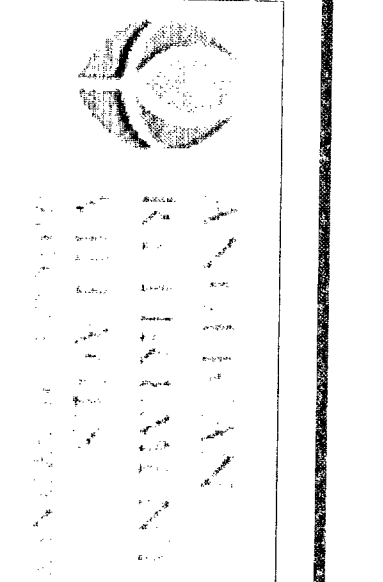


MACPHERSON ST CROSS SECTIONS
SCALE - HOR 1:100
VERT 1:100



Revision	Date	By	Check	Approved
E	10/08/07	TR	AMC	AMC
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C	10/08/07	TR	AMC	AMC
B	10/08/07	TR	AMC	AMC
A	10/08/07	TR	AMC	AMC

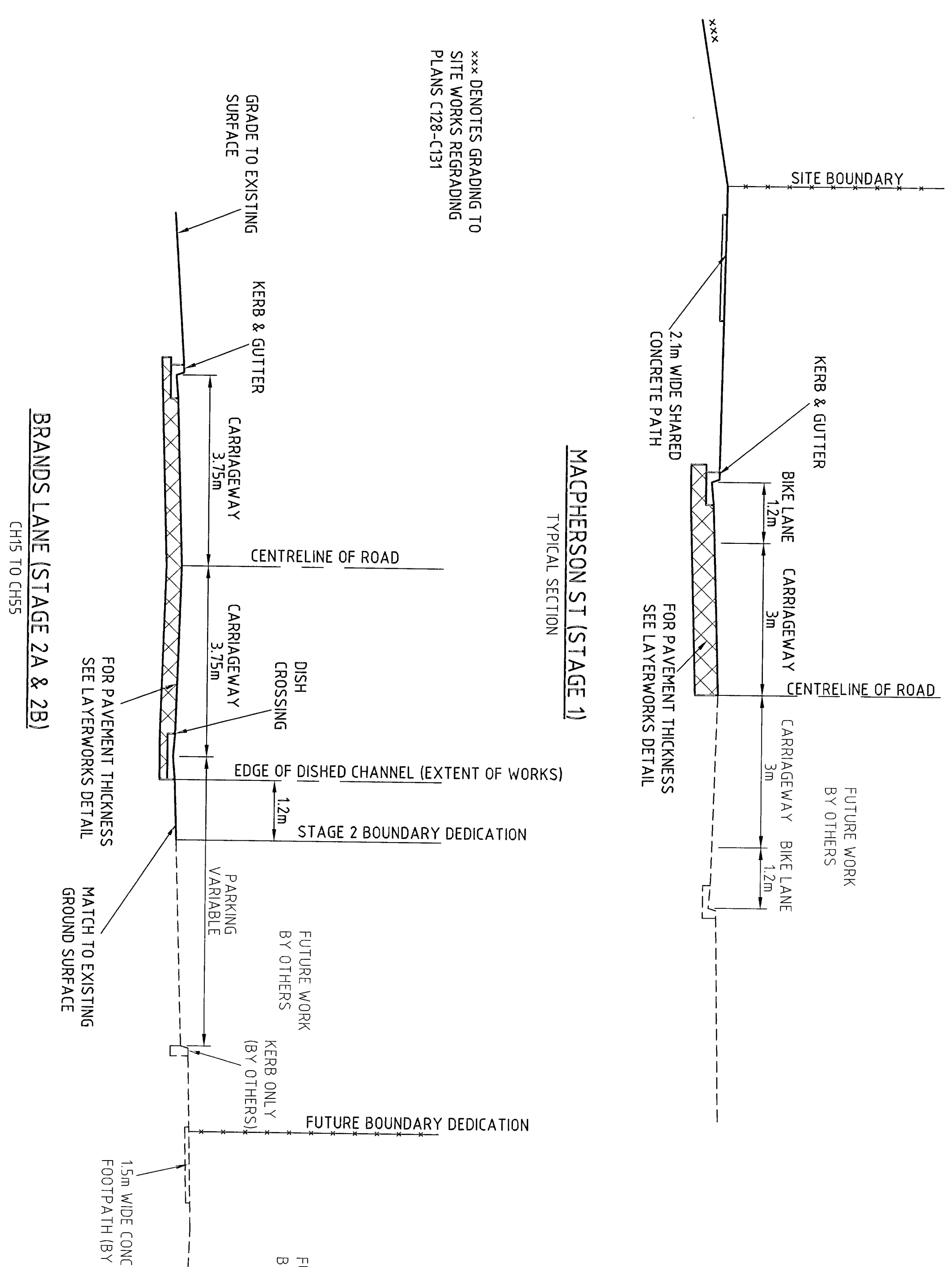
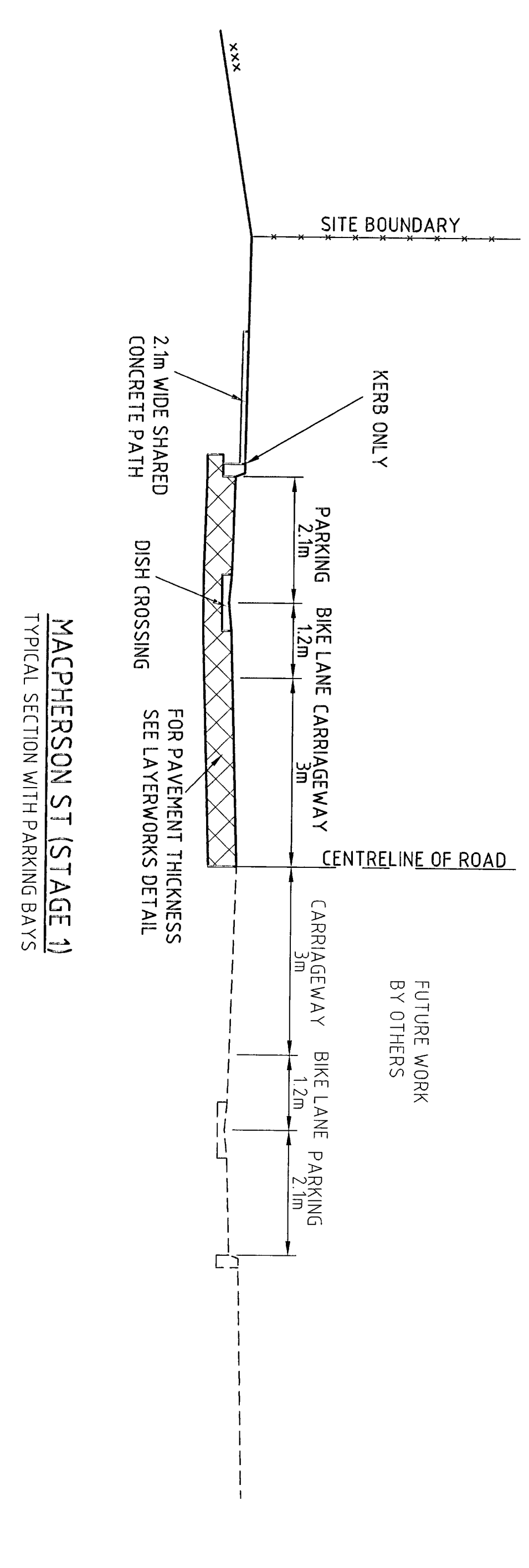
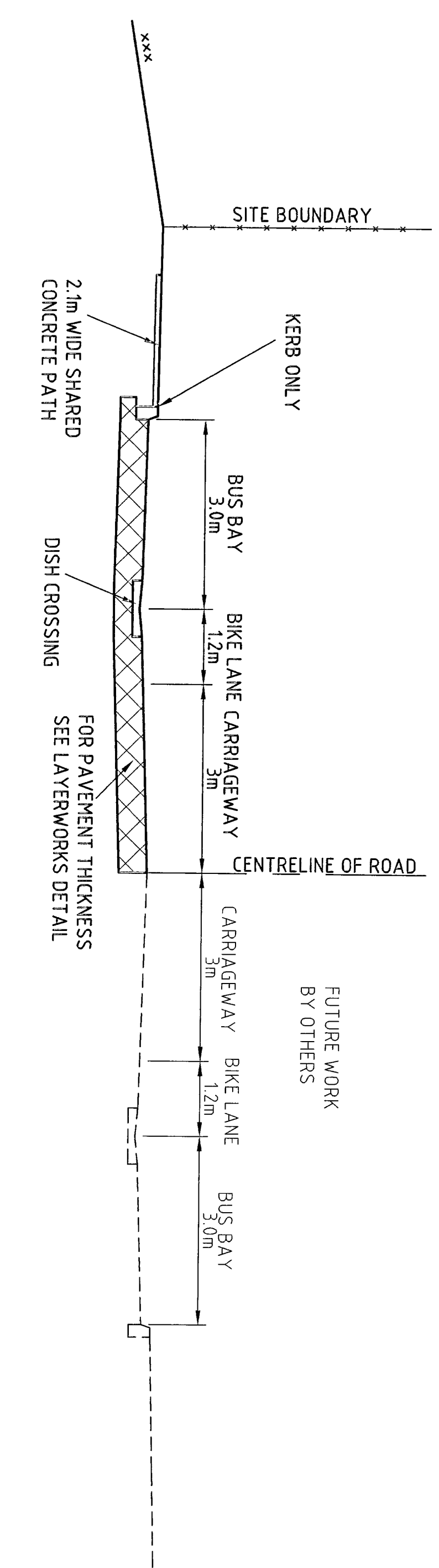
Revision	Date	By	Check	Approved
F	17/10/07	TR	AMC	AMC



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Tel: 08 9437 7700 | Fax: 08 9437 7701
E: info@anglicanretirement.com.au
W: www.anglicanretirement.com.au

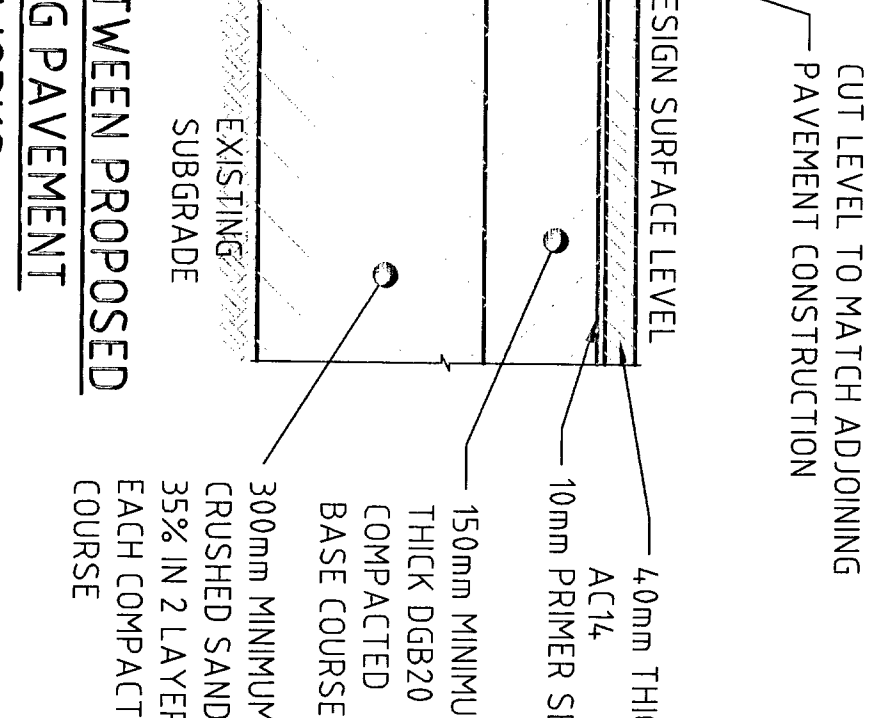
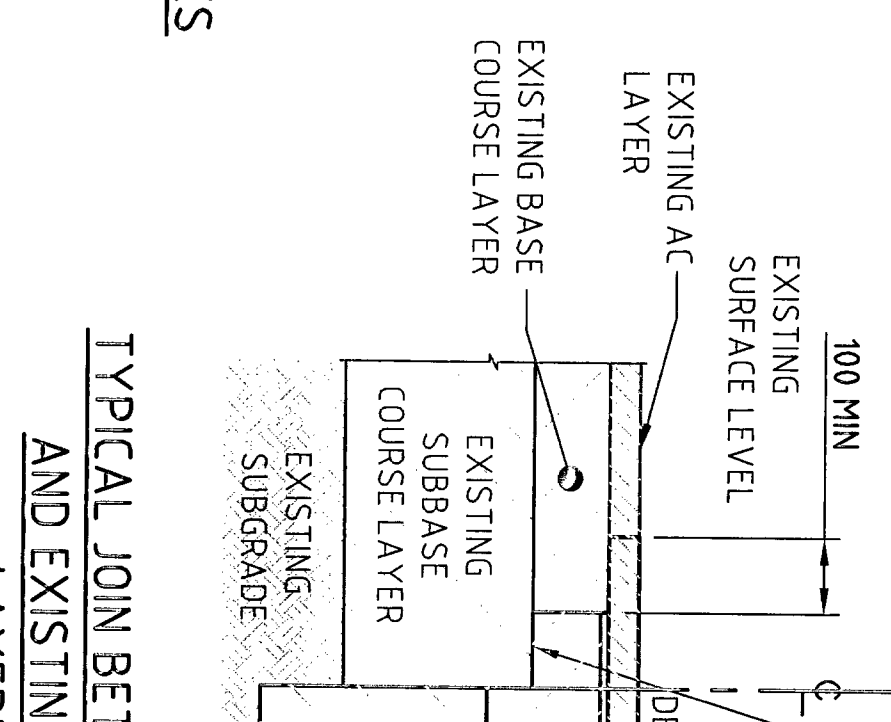
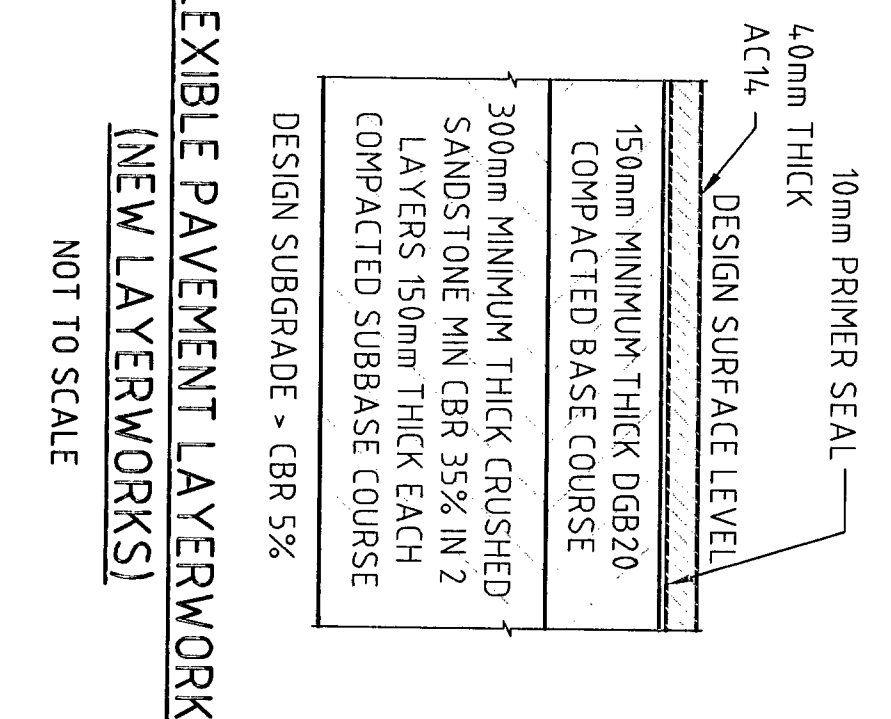
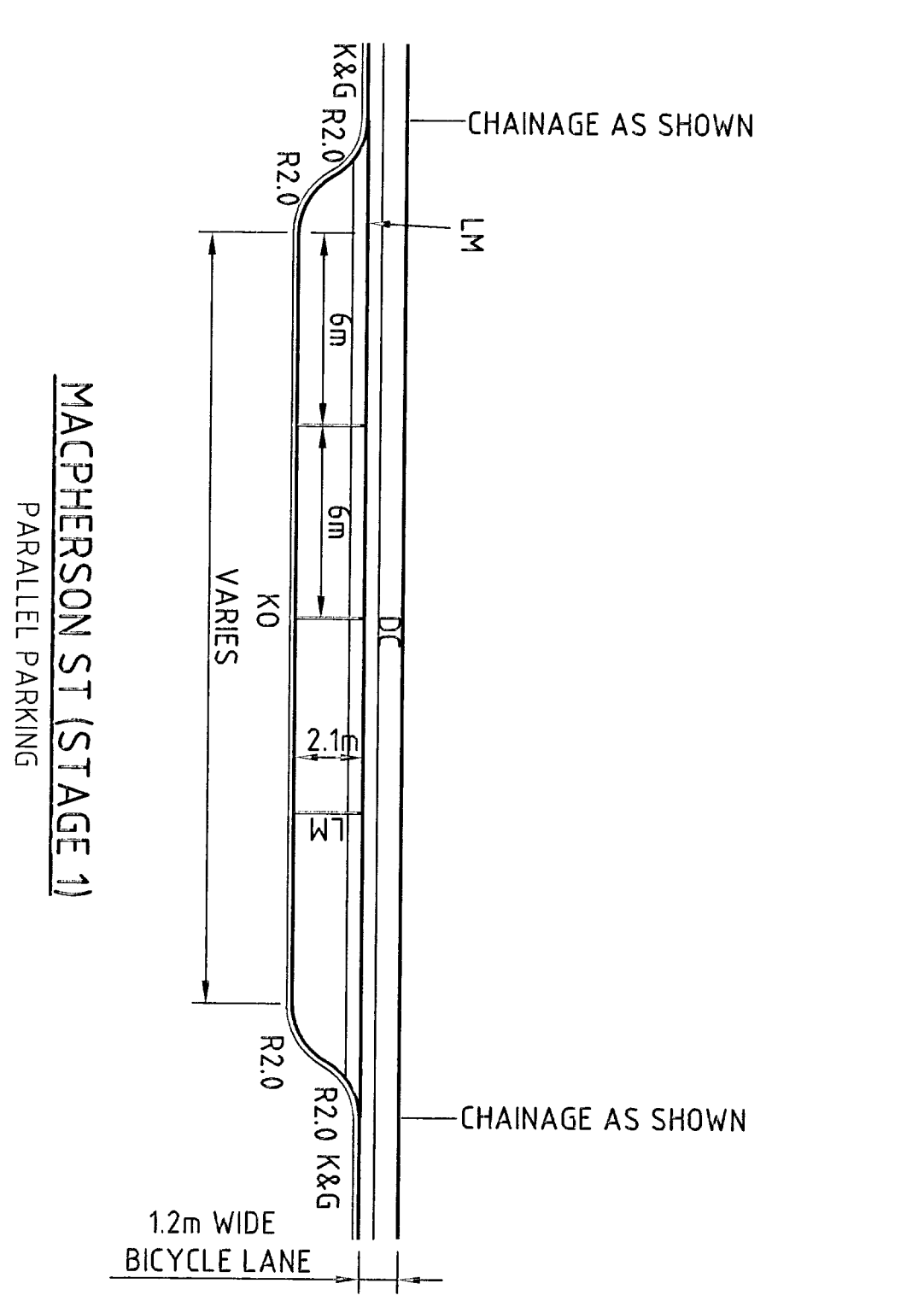
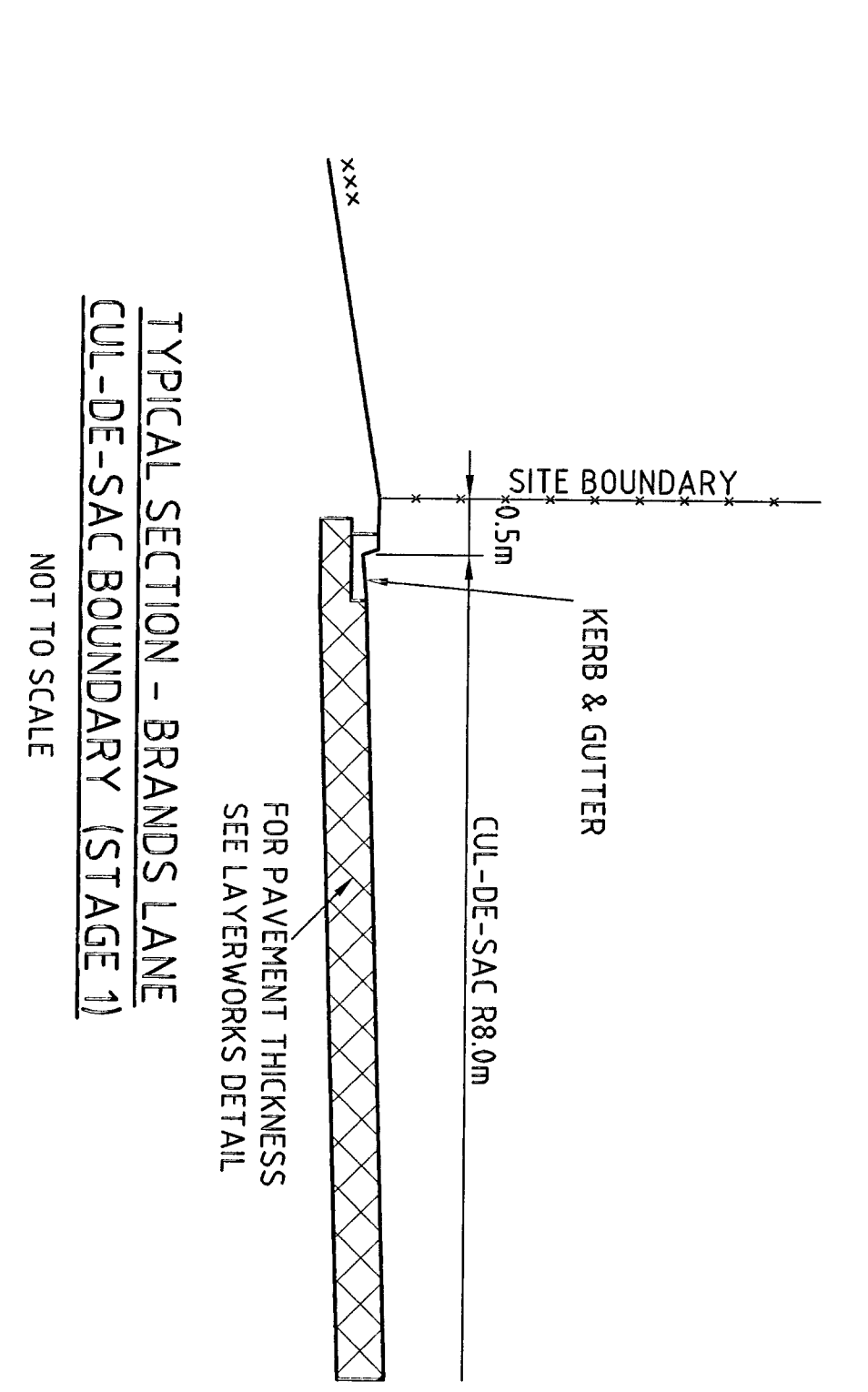
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Client: ANGLICAN RETIREMENT VILLAGES
Project: WARRENWOOD BROOK
Title: CIVIL WORKS
Drawing No: 21-13577-C155
Rev: F



- GENERAL NOTES**
1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CIVIL WORKS SPECIFICATION. WHEN DISCREPANCIES ARISE THE CONTRACTOR SHALL ADVISE THE SUPERINTENDENT IMMEDIATELY FOR CLARIFICATION.
 2. PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING SERVICES AND STRUCTURES WHETHER OR NOT SHOWN ON THE DRAWINGS. ANY DAMAGE TO EXISTING SERVICES AND STRUCTURES SHALL BE RECTIFIED AT THE CONTRACTOR'S EXPENSE. 10mm COMPRESSIBLE FILLER MATERIAL SHALL BE PLACED AROUND EXPOSED SERVICES AND STRUCTURES. ALL SERVICE COVERS SHALL BE ADJUSTED TO SUIT FINISHED SURFACE LEVELS.
 3. THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
 4. TO MINIMISE DISRUPTION THE CONTRACTOR SHALL STAGE THE WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
 5. ALL NEW WORKS SHALL BE SMOOTHLY TRANSITIONED INTO EXISTING WORKS.
 6. DIMENSIONS OF ANY DETAIL SHALL NOT BE SCALED. DIMENSIONS, IF IN DOUBT, SHALL BE VERIFIED BY THE SUPERINTENDENT.
 7. ALL SURVEY DATA AND CONTROL DATA SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 8. THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC MANAGEMENT MEASURES WHICH ARE TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION.
 9. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING THE FINAL ASPHALTIC CONCRETE SEAL LAYER.
 10. ALL WORK ON SYDNEY WATER INFRASTRUCTURE TO BE CARRIED OUT IN ACCORDANCE WITH THE DESIGN DRAWINGS AND SYDNEY WATER STANDARDS BY SYDNEY WATER ACCREDITED CONTRACTORS.
 11. THE CONTRACTOR SHALL CHECK LOCATION SIZE AND INVERT LEVEL OF ALL STORMWATER PIPES/PITS AND SEWER PIPES MANHOLES ETC. PRIOR TO ANY WORK. DISCREPANCIES WITH THE DESIGN DRAWING.

12. THE CONTRACTOR SHALL CHECK LOCATION SIZE AND INVERT LEVEL OF ALL STORMWATER PIPES/PITS AND SEWER PIPES MANHOLES ETC. PRIOR TO ANY WORK. DISCREPANCIES WITH THE DESIGN DRAWING.

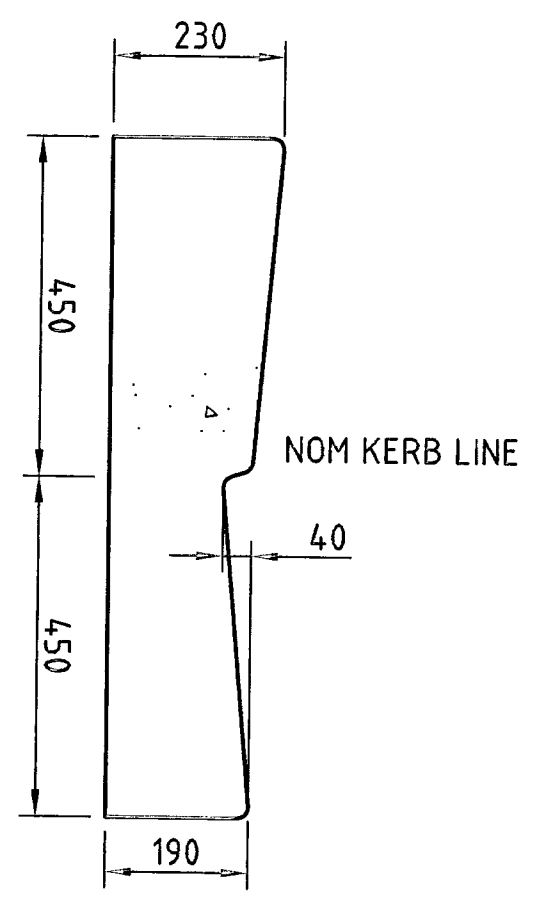


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	LSM	NO	NO	17/12/07	

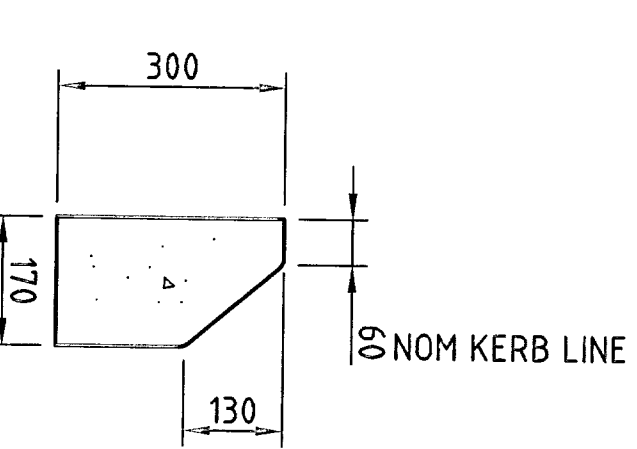
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ANGULGAN RETIREMENT VILLAGES	WARRENWOOD BROOK CIVIL WORKS - OFFSITE ROADS TYPICAL SECTIONS & DETAILS	21-13577-C101	A

Client's People	Performance
ANGULGAN RETIREMENT VILLAGES	10 Bond Street, Sydney NSW 2000 Australia E: sydney@angulgan.com.au W: www.angulgan.com.au

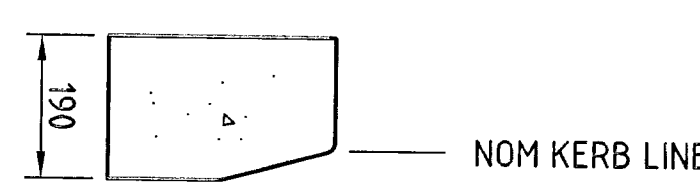
DO NOT SCALE	Drawn	LSM	Checked	LSM	Designed	LSM
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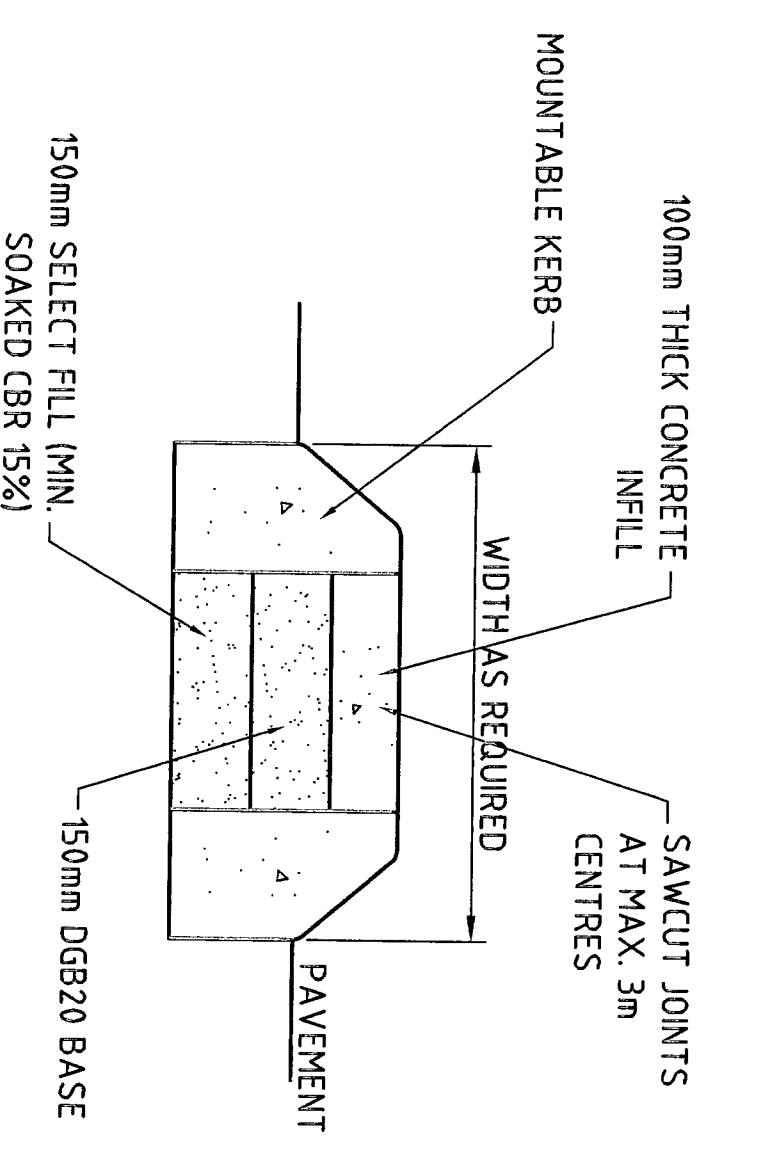
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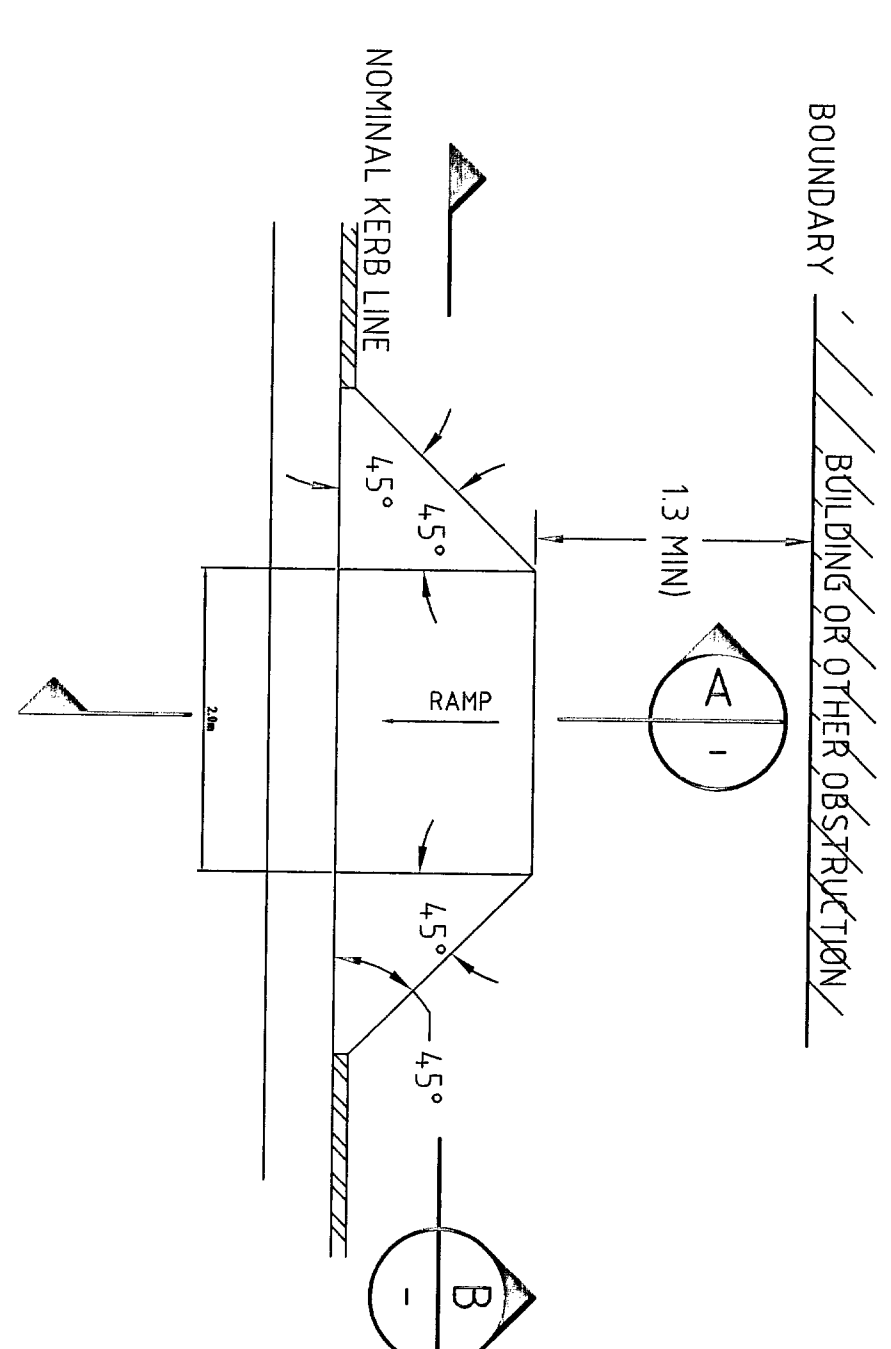
MOUNTABLE KERB (M.K.)
SCALE 1:10



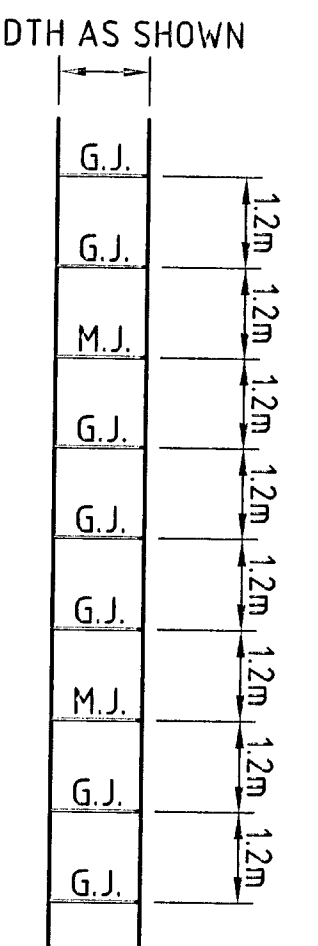
TYPE "S" KERB (K.O.)
FOR DIMENSIONS NOT SHOWN REFER K, & G



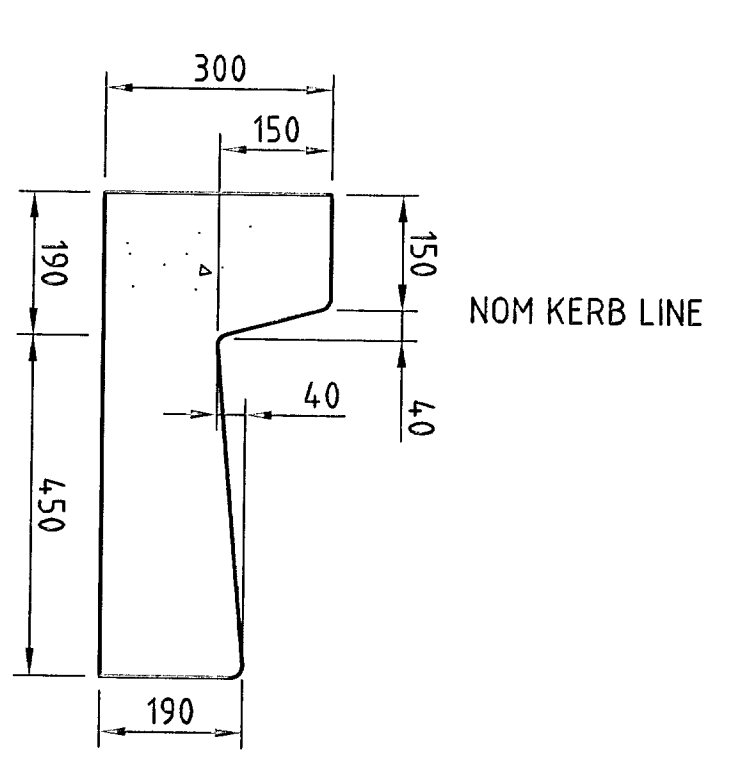
MEDIAN ISLAND DETAIL
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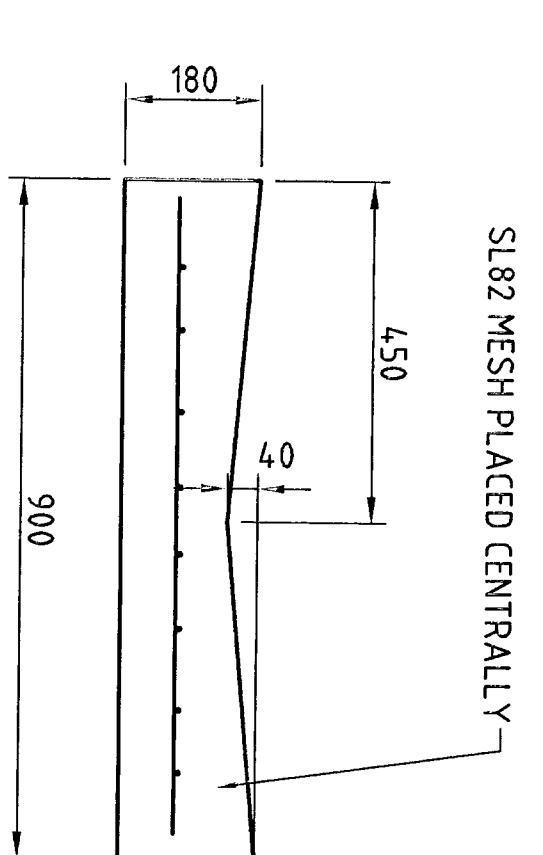
EXTERNAL PRAM RAMP DETAIL
SCALE 1:50



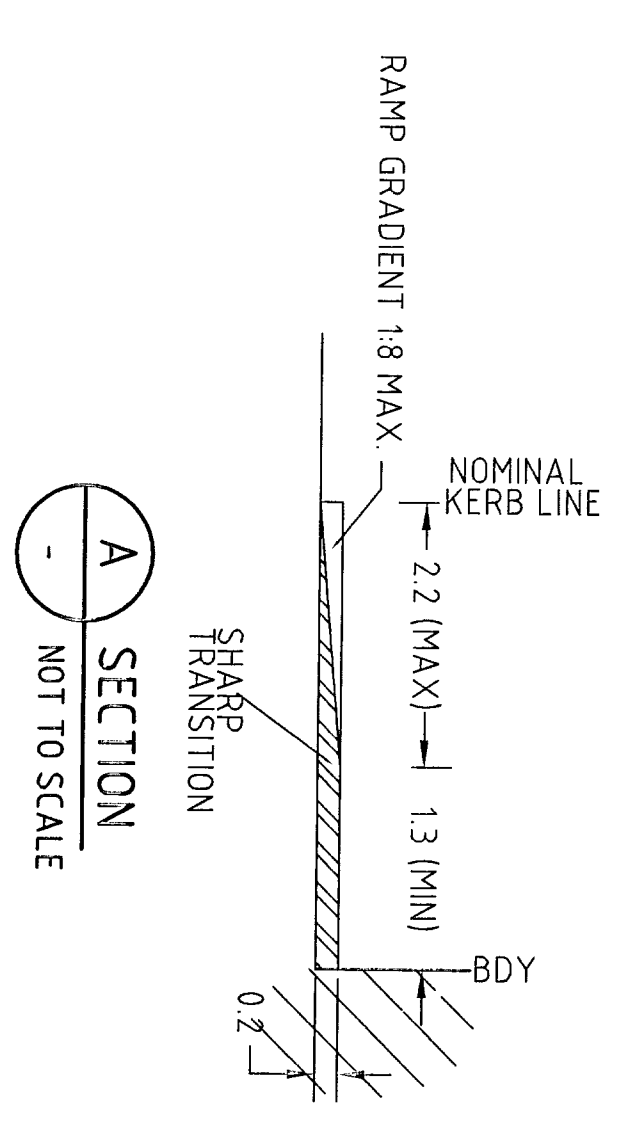
FOOTPATH DETAIL
SCALE 1:100



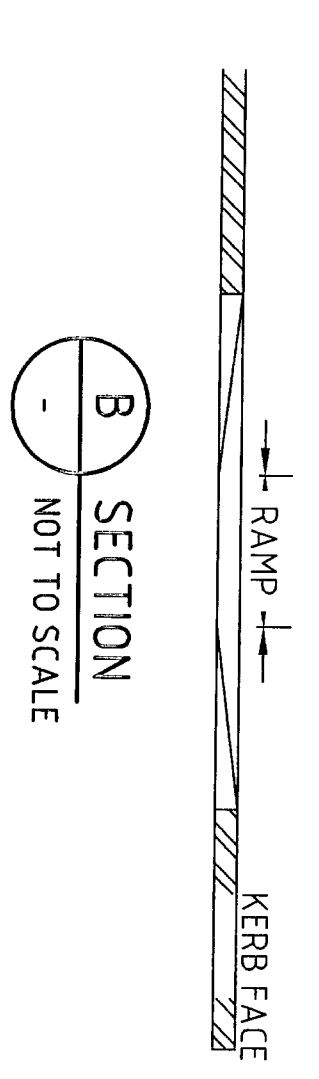
STANDARD KERB & GUTTER (K&G)
SCALE 1:10



DISH CROSSING (D.C.)
SCALE 1:10

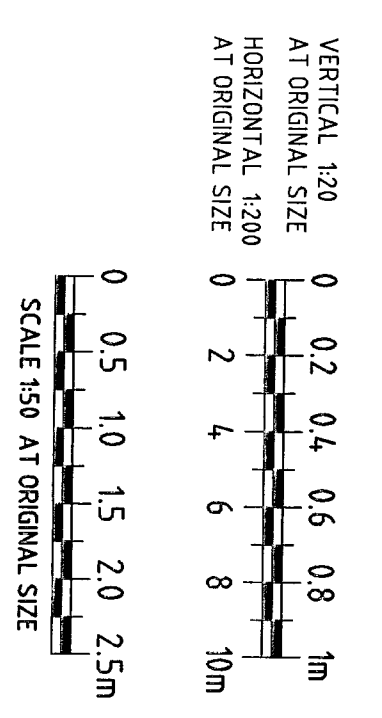


SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE

- NOTES:**
1. THE RAMP AND SLOPING SIDES SHOULD BE SLIP RESISTANT AND COLOURED 'PUMPKIN'.
 2. A TACTILE INDICATOR, AS SPECIFIED IN AS1428.4, SHOULD BE INTEGRATED AND EXTENDED FOR 200mm AWAY FROM THE TRANSITION AT THE TOP AND BOTTOM OF THE RAMP. THIS SHOULD TAKE THE FORM OF ROUGH BROOMING OR SIMILAR TEXTURE WHICH WILL AID ORIENTATION FOR PEOPLE WITH VISUAL IMPAIRMENT.
 3. WHERE TRANSVERSE PEDESTRIAN TRAFFIC IS ANTICIPATED, THE SIDES OF KERB RAMPS SHALL BE GRADED PLANE SURFACES UNLESS A SUITABLE BARRIER WITH A MINIMUM HEIGHT OF 900mm IS PROVIDED.
- FOOTPATH NOTES (EXTERNAL ONLY)**
4. PEDESTRIAN FOOTPATH TO BE CONSTRUCTED IN ACCORDANCE TO THE SPECIFICATION.
 5. MASTIC JOINTS AT 4.8m SPACING CONSISTING OF 10mm THICK APPROVED JOINTING MATERIAL. JOINTS TO RUN FULL DEPTH OF CONCRETE.
 6. GROOVE JOINTS AT 1200mm SPACING 15mm DEEP.
 7. FINISH TO BE 4mm THICK, F7c 20MPa AT 28 DAYS OVER 40mm THICK BEDDING SAND.
 8. SUBGRADE TO BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATION.
 9. NO JOINTS TO BE PLACED WITH AN EDGE WITHOUT LOCAL MESH REINFORCEMENT.
 10. 22x CROSSFALL TO PAVEMENT.



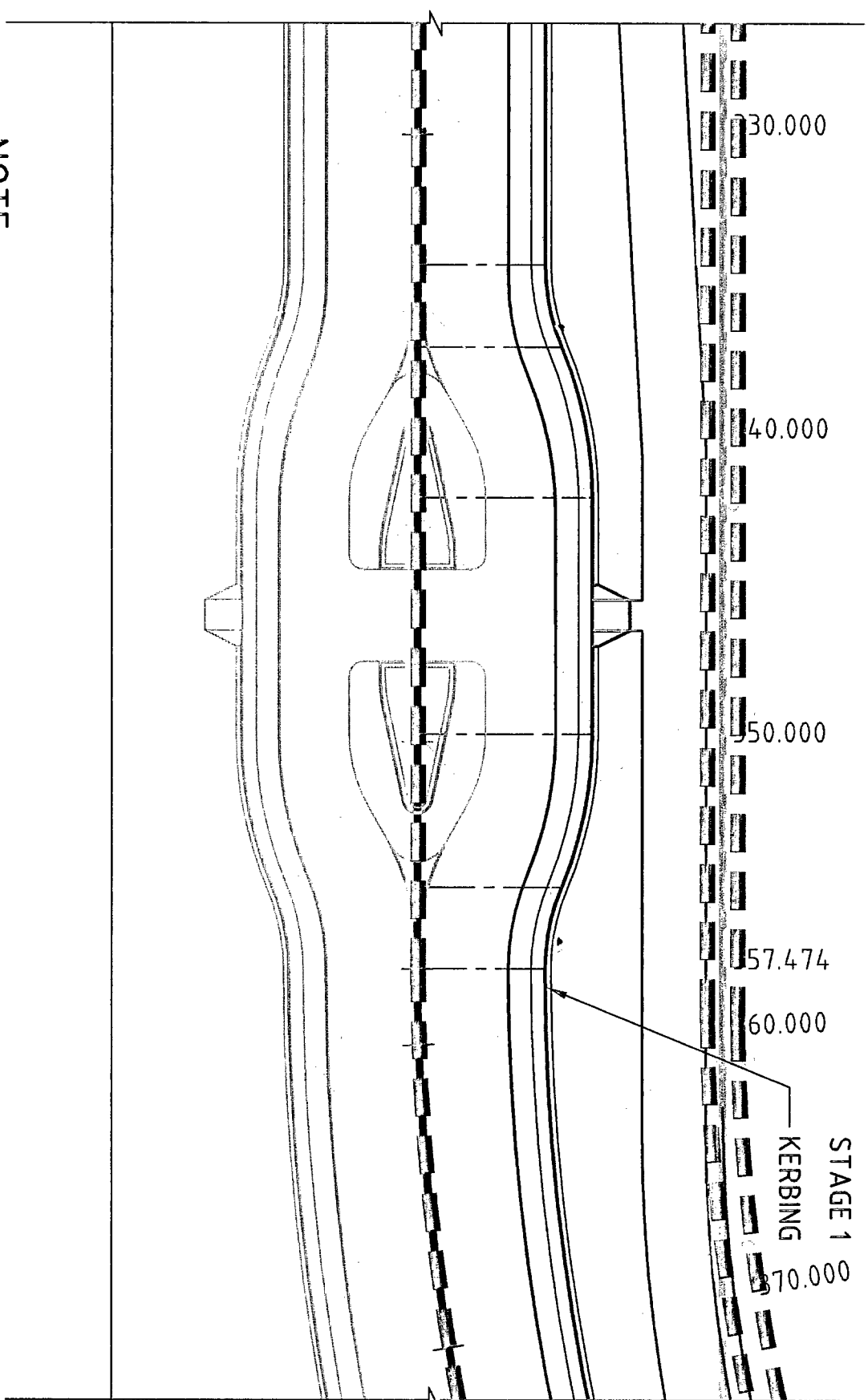
TENDER

E	STAGE 2: 90% REVIEW	KRW	ND	31/07/07																
D	STAGE 2: 90% REVIEW	KRW	ND	06/07/07																
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B	FOR TENDER	LSM	AL	23/02/07	G	ISSUED FOR PRE-TENDER	TR	AML	AML	04/08/07										
A	FOR FINAL COORDINATION	LSM	AL		F	90% STAGE 1 REVIEW	KRW	ND	ND	15/08/07										

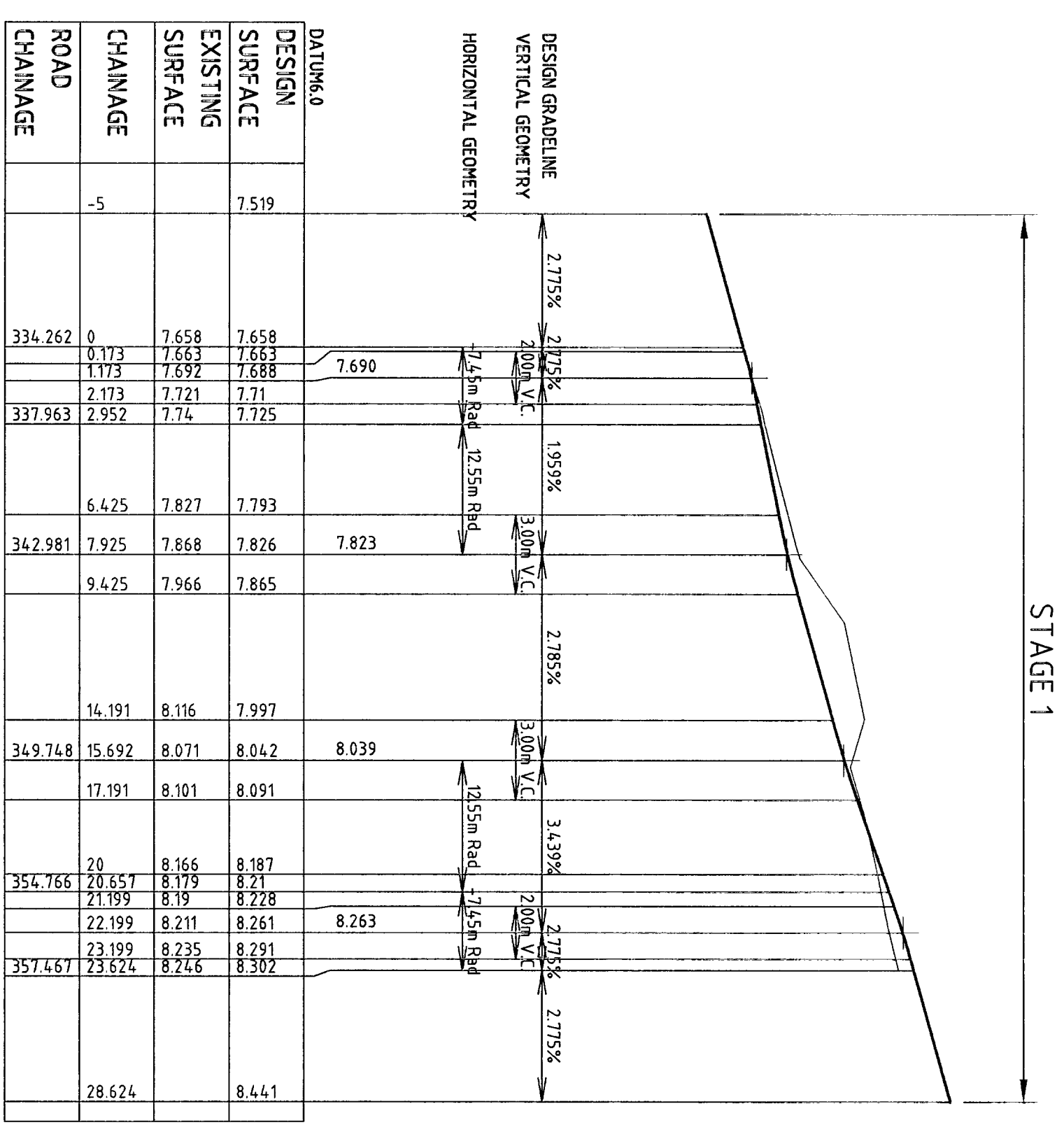
No. Revision: Name: - Indicates signature on original issue of drawing or last revision of drawing. Date: Checked/Approved: Date: Drawn: Checked/Approved: Date:

Client: ANGLICAN RETIREMENT VILLAGES
WARREWOOD BROOK
CIVIL WORKS
MACPHERSON ST PEDESTRIAN REFUGE DETAILS

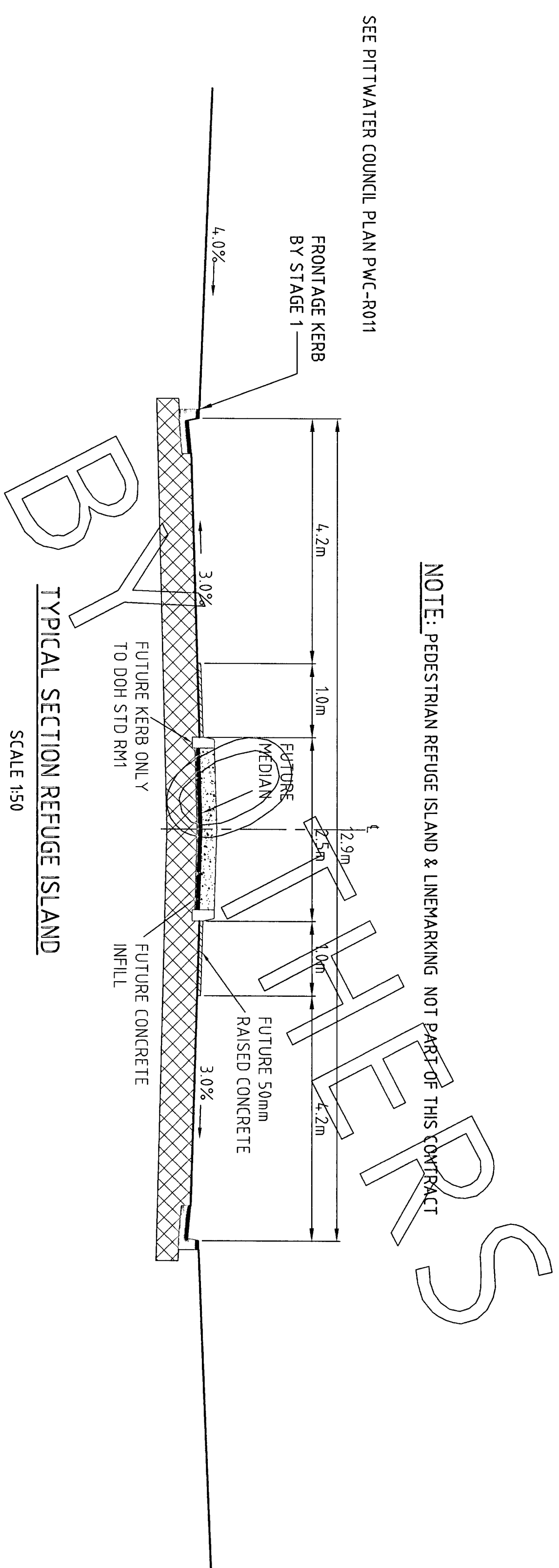
Drawing No: 21-13577-C162
Rev: H



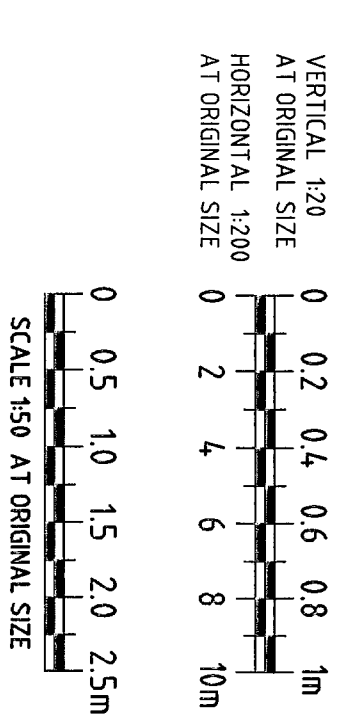
NOTE: PEDESTRIAN REFUGE ISLAND & LINE-MARKING NOT PART OF THIS CONTRACT
REFUGE ISLAND
SCALE 1:200



PEDESTRIAN REFUGE
KERB LONG SECTION
SCALE - HOR 1:200
VERT 1:20

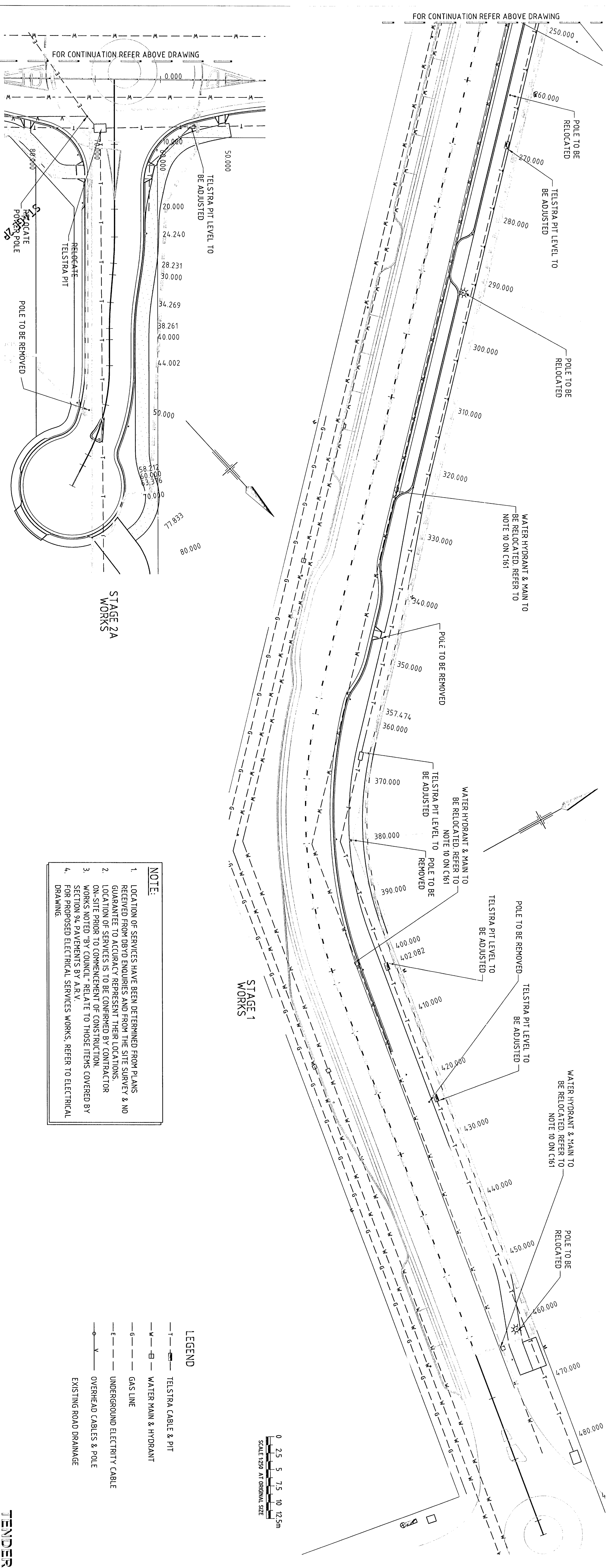
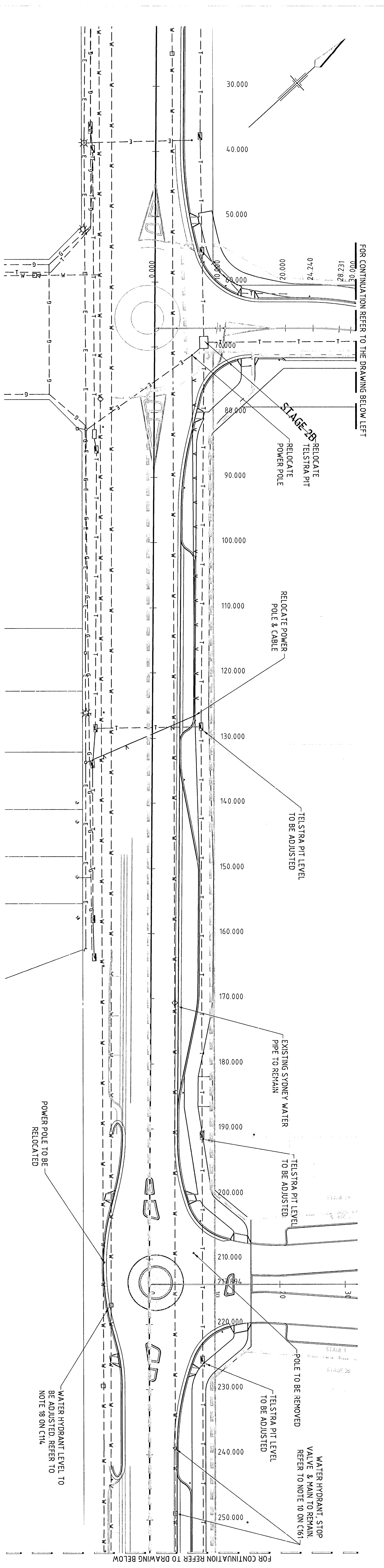


SEE PITTWATER COUNCIL PLAN PWIC-R011
TYPICAL SECTION REFUGE ISLAND
SCALE 1:50



No.	Revision	Date	By	Check	Approved	Date
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D	STAGE 2 90% REVIEW	03/07/07	KRW	AL		
C	ISSUED FOR COUNCIL APPROVAL	23/07/07	LSM	AL		
B	FOR TENDER	23/07/07	LSM	AL		
A	FOR FINAL COORDINATION	23/07/07	LSM	AL		
F	90% STAGE 1 REVIEW					
G	ISSUED FOR PRE-TENDER					
H	ISSUED FOR TENDER					
I	FOR TENDER					
J	FOR TENDER					
K	FOR TENDER					
L	FOR TENDER					
M	FOR TENDER					
N	FOR TENDER					
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R	FOR TENDER					
S	FOR TENDER					
T	FOR TENDER					
U	FOR TENDER					
V	FOR TENDER					
W	FOR TENDER					
X	FOR TENDER					
Y	FOR TENDER					
Z	FOR TENDER					

ANGELICAN RETIREMENT VILLAGES
WARWICKWOOD BROOK
CIVIL WORKS OFFSITE ROADS
MACPHERSON ST PEDESTRIAN REFUGE DETAILS
Drawing No. 21-13577-C168
Rev. H



NOTE:

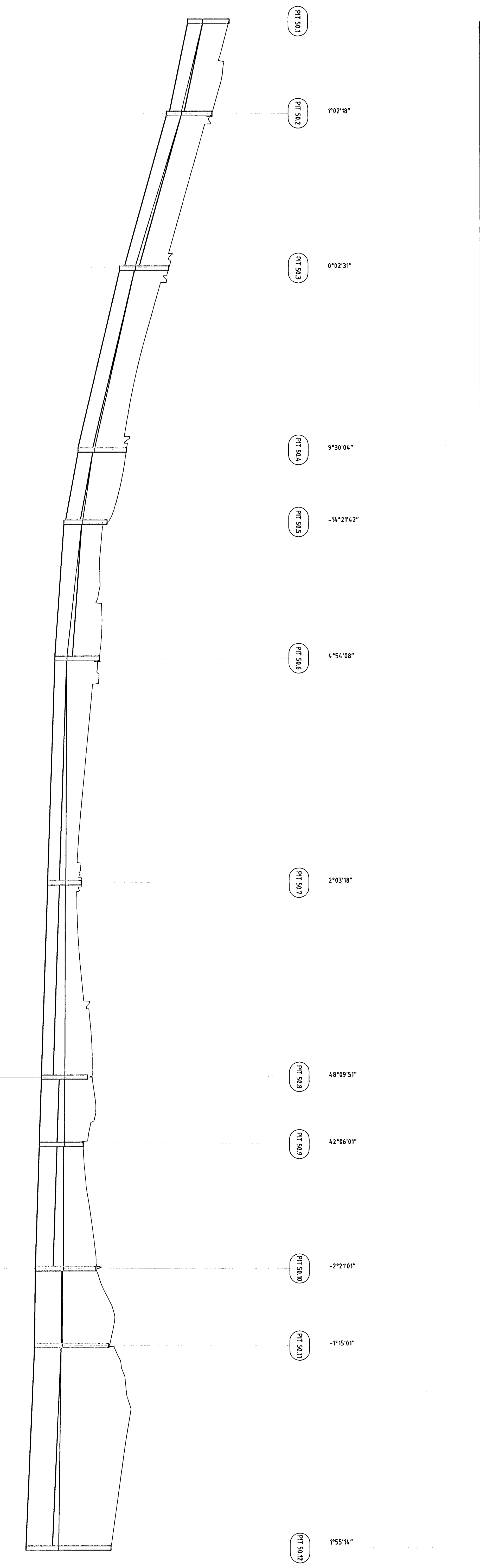
1. LOCATION OF SERVICES HAVE BEEN DETERMINED FROM PLANS RECEIVED FROM DPO/ ENQUIRIES AND FROM THE SITE SURVEY & NO GUARANTEE TO ACCURACY REPRESENTS THEIR LOCATIONS.
2. LOCATION OF SERVICES IS TO BE COVERED BY CONTRACTOR.
3. WORKS NOTED BY CONTRACTOR RELATE TO THOSE ITEMS COVERED BY SECTION 4. PAYMENTS BY A.B.V.
4. FOR PROPOSED ELECTRICAL SERVICES WORKS, REFER TO ELECTRICAL DRAWING.

LEGEND

- - - TELSTRA CABLE & PIT
- - - WATER MAIN & HYDRANT
- - - GAS LINE
- - - UNDERGROUND ELECTRICITY CABLE
- - - OVERHEAD CABLES & POLE
- - - EXISTING ROAD DRAINAGE

0 2.5 5 7.5 10 12.5m
SCALE 1:250 AT ORIGINAL SIZE

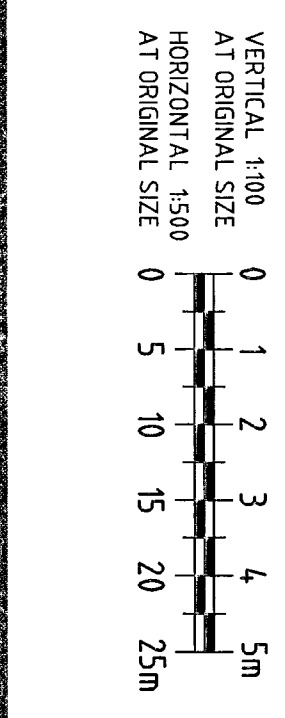
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No		Revision		Name		Title		Date		No		Revision		Name		Title		Date		Date	
<p>1. Indicates signature on original issue of drawing or later revision of drawing</p> <p>2. Indicates signature on original issue of drawing or later revision of drawing</p> <p>3. Indicates signature on original issue of drawing or later revision of drawing</p> <p>4. Indicates signature on original issue of drawing or later revision of drawing</p>																					
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<p>CLIENTS PEOPLE PERFORMANCE</p> <p>DO NOT SCALE</p> <p>Client: ANGLICAN RETIREMENT VILLAGES</p> <p>Project: WARRIMOOD BROOK CIVIL WORKS</p> <p>Title: OFF SITE EXISTING SERVICES LAYOUT</p> <p>Drawing No: 21-13577-C171</p> <p>Rev: A</p>																					



CONTINUED ON SHEET C176

VELOCITY (m/s) (UPSTREAM END)	GRADE %	PIPE FLOW (m³/s) (UPSTREAM END)	PIPE TYPE	PIPE SIZE (mm)	DATUM	DEPTH TO INVERT	FINISHED SURFACE RL	HYDRAULIC GRADE LINE	INVERT LEVEL	PIPE CHANGE
0.23	2.0%	0.025	FRC Class 2	375	-5	1052	8.007	7.336	6.959	
0.33	2.7%	0.037	FRC Class 2	375		1077	7.510	6.708	6.410	
0.50	2.3%	0.055	FRC Class 2	375		1126	6.499	5.619	5.345	
0.69	1.7%	0.076	FRC Class 2	375		1225	5.382	4.581	4.157	
0.52	0.7%	0.083	FRC Class 2	450		1049	4.866	4.274	3.840	
0.30	0.3%	0.107	Box Culverts	1200x300		1130	4.689	3.868	3.559	
0.42	0.3%	0.152	Box Culverts	1200x300		1055	4.224	3.481	3.369	
0.39	0.3%	0.157	Box Culverts	900x450		1176	4.381	3.802	3.204	
0.45	0.3%	0.181	Box Culverts	900x450		1119	4.266	3.783	3.147	
0.52	0.1%	0.186	RCP RRI Class 2	675		1537	4.519	3.755	3.042	
0.54	0.4%	0.193	RCP RRI Class 2	675		1690	4.907	3.722	3.017	
						1690	4.907	3.692	3.017	
						1897	4.952	3.624	2.791	

LEGEND
 FRC - FIBRE REINFORCED CONCRETE CLASS 2 UNSLOTTED PIPE
 RIBC - REINFORCED CONCRETE BOX CULVERTS
 NOTE:
 1. REFER TO PLAN DRAWING 21-13577-C175, 150, 151, & 152 FOR PIT LOCATIONS.



ANGELICAN RETIREMENT VILLAGES
WARREWOOD BROOK
CIVIL WORKS OFF SITE ROADS
STORMWATER LONG SECTION LINE 50 SHEET 1

Client: ANGELICAN RETIREMENT VILLAGES
 Project: WARREWOOD BROOK
 Drawing No: 21-13577-C175
 Rev: A

ANGELICAN RETIREMENT VILLAGES
 CIVIL ENGINEERING
 10 Bond Street, Sydney NSW 2000 Australia
 T 61 2 9229 7100 F 61 2 9229 7100
 E 61@angelicann.com.au W www.angelicann.com.au

DO NOT SCALE

DATE: 07 December 2007 15:01 A4
 CAD FILE NO: 03415720XDRW\ANGELICAN\21-13577-C175.dwg
 No: Revision: Name: Indicates signature on original issue of drawing or final revision of drawing
 Issued For Tender: LSM NO NO 7/12/07
 Checked/Approved: Date: No: Revision: Name: Indicates signature on original issue of drawing or final revision of drawing
 Checked/Approved: Date

VELOCITY (m/s) (UPSTREAM END)	GRADE %	PIPE FLOW (m ³ /s) (UPSTREAM END)	PIPE TYPE	PIPE SIZE (mm)	DATUM	DEPTH TO INVERT	FINISHED SURFACE RL	HYDRAULIC GRADE LINE	INVERT LEVEL	PIPE CHAINAGE
0.53	0.3%	0.191	RCP RRJ Class 2	675	6	2.161	2.161	2.242	2.459	387.484
0.53	0.3%	0.189	RCP RRJ Class 2	675	6	2.161	2.161	2.242	2.459	387.484
0.52	0.2%	0.186	RCP RRJ Class 2	675	6	2.161	2.161	2.242	2.459	387.484
0.19	5.2%	0.021	FRC Class 2	375	6	2.161	2.161	2.242	2.459	387.484

CONTINUED FROM SHEET C175

FOR PIPE OUTLET STRUCTURE DETAILS REFER TO DETAIL A

VELOCITY (m/s)	GRADE %	PIPE FLOW (m ³ /s)	PIPE TYPE	PIPE SIZE (mm)	DATUM	DEPTH TO INVERT	FINISHED SURFACE RL	HYDRAULIC GRADE LINE	INVERT LEVEL	PIPE CHAINAGE
0.19	5.2%	0.021	FRC Class 2	375	6	2.161	2.161	2.242	2.459	387.484

LEGEND
 FRC C2 - FIBRE REINFORCED CEMENT CLASS 2 UNSLOTTED PIPE
 RCB-C - REINFORCED CONCRETE BOX CULVERTS

NOTE:
 1. REFER TO PLAN DRAWING 21-13577-C15, 150, 151, & 152 FOR PIT LOCATIONS.

NOTES:

- THIS WORKS PLAN REFERS SPECIFICALLY TO THE CONSTRUCTION OF STORMWATER DRAINAGE PIPEWORK/CULVERTS TO BE LAID BELOW GROUND THROUGH THE 40m EXCLUSION ZONE BETWEEN THE NARRABEEN RIVER AND THE PROPOSED ARV CONSTRUCTION SITE.
- DURING STAGE 1 THERE ARE TWO STORMWATER OUTFALLS TO BE CONSTRUCTED ACROSS THE RIPARIAN EXCLUSION ZONE. IN ADDITION PART OF THE DETENTION/ORNAMENTAL POND WILL EXTEND APPROXIMATELY 16m INTO THE 40m RIPARIAN EXCLUSION ZONE.
- BRANDS LANE: THE EXISTING STORMWATER DRAINAGE EASEMENT THROUGH THE SITE IS TO BE REDIRECTED AROUND THE SITE AND WILL RUN ALONG BRANDS LANE INSIDE THE ARV BOUNDARY, DISCHARGING INTO THE NARRABEEN RIVER OPPOSITE BRANDS LANE.
- PROPOSED DETENTION POND: THERE IS A SEDIMENT BASIN AND DETENTION POND TO BE CONSTRUCTED ON THE ARV SITE INITIALLY. DURING CONSTRUCTION THE POND SHALL FUNCTION AS A SEDIMENT BASIN. AFTER COMPLETION OF STAGE ONE THE POND WOULD BE RESHARED TO TAKE ON MORE OF A DETENTION ROLE AND SHALL BECOME A WATER FEATURE. THIS POND WILL DISCHARGE VIA A 600mm DIAMETER PIPELINE INTO THE NEARBY NARRABEEN RIVER.
- DETECTION/SEDIMENT POND: DURING THE BULK EARTHWORKS CONTRACT A SEDIMENT POND SHALL BE CONSTRUCTED AT THE DETENTION POND LOCATION, BUT WILL NOT EXTEND INTO THE 40m EXCLUSION ZONE. WATER IN THE SEDIMENT POND SHALL BE MONITORED BY THE CONTRACTOR AND SHALL EITHER BE FANKERED OFF SITE FOR TREATMENT OR TREATED IN-SITU AND PUMPED INTO THE EXISTING DRAINAGE CHANNEL RUNNING THROUGH THE SITE.
- AT A FUTURE STAGE PORTIONS OF BUILDINGS A, B, C AND D WILL EXTEND INTO THE 40m RIPARIAN ZONE BY APPROXIMATELY 15m.
- UNNECESSARY DISTURBANCE OF SOIL/VEGETATION WITHIN THE RIPARIAN ZONE SHALL BE MINIMISED. CONTRACTOR TO REFER TO THE ACID SULPHATE SOILS MANAGEMENT PLAN (ASSMP), CONTAMINATION MANAGEMENT PLAN (CMP), ENVIRONMENTAL MANAGEMENT PLAN (EMP), SOIL AND WATER MANAGEMENT PLAN (SWMP) AND VEGETATION MANAGEMENT PLAN (VMP), ALL INCLUDED WITH THE CONTRACT DOCUMENTATION.
- CONTRACTOR TO ENSURE THAT ALL MATERIAL NECESSARY FOR THE SUCCESSFUL COMPLETION OF THE WORK IS ON SITE AND THAT A METHOD STATEMENT HAS BEEN APPROVED BY THE SUPERINTENDENT PRIOR TO COMMENCING WORK WITHIN THE RIPARIAN ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR MONITORING THE WORKS DURING CONSTRUCTION AND AFTER COMPLETION. CONTRACTOR TO PROVIDE A LIST OF EMERGENCY CONTACTS FOR EROSION CONTROL, 'DOs AND DON'T'S':
- DO ACCOMMODATE OTHER PLANS (REFER ITEM 4, ABOVE).
- DO MINIMISE DISTURBANCE.
- DON'T CONSTRUCT UNPLANNED CROSSINGS, WORK PADS OR ACCESS TRACKS.
- DO ENSURE THAT ROCK USED FOR SCOUR PROTECTION IS CAREFULLY PLACED TO 'LOCK' TOGETHER AND FORM A ROUGH SURFACE. IT IS LAID OVER A BED OF COARSE GRAVEL/COBBLES MIXED WITH SOIL, OVER GEOTEXTILE, AND ALL Voids ARE FILLED WITH SOIL (NO AIR SPACES) AND PLANTED OUT WITH SEDGES AND BUSHES TO FORM A TIGHTLY ROOT-BOUND MATRIX WITH CAPILLARY CONNECTION TO THE SUBSTRATE.
- DON'T USE CONCRETE, SPRAY CONCRETE, CONCRETE FILLED MATRESSES, WIRE MESH STRUCTURES OR CONCRETE GROUTING IN ROCK Voids FOR EROSION CONTROL.
- DO CONSULT THE PERSON WHO EMERGING THE VMP TO ARRANGE ANY TRANSPARENTING OF VEGETATION (TO SPEED UP STABILISATION) OR STOCKPILING OF LITTER LAYER/TOPSOIL TO FACILITATE SITE REHABILITATION.
- DO STABILISE DISTURBED SURFACES AS SOON AS POSSIBLE USING MATERIALS SUCH AS: JUTE/COJOUT FIBRE MATTING, MULCH, STERILE COVER COPS, BINDING SPRAYS ETC.
- DO ENSURE THAT ANY EROSION CONTROL MATTING IS BIODEGRADABLE (OR ASITE WETTING ENTANGLES MULCH) AND IS SNAKED BY FLOOD DEBRIS, RESULTING IN SURFACE STRIPPING AND BLOCKAGES DOWNSTREAM.
- DO MAINTAIN A TOY SITE, AND AT THE END OF EACH DAY REMOVE ALL DEBRIS, STOCKPILES, ETC FROM ANY AREA LIKELY TO BE AFFECTED BY FLASH FLOODING.
- THE STATUS OF THE WORKS AREA WITHIN THE RIPARIAN EXCLUSION ZONE SHALL BE CLOSELY MONITORED AND ANY MAINTENANCE WORK SHALL BE LISTED WITHIN THE VMP REPORTS.
- THE CONTRACTOR SHALL MAINTAIN A REGULAR (WEEKLY) PHOTOGRAPHIC RECORD OF THE WORKS WITHIN THE RIPARIAN ZONE FROM COMMENCEMENT TO COMPLETION OF WORK.

NOTE:
 1. ALL WORKS TO BE IN ACCORDANCE WITH CEMP AND WORKS PLAN.

DETAIL A: CREEK OUTLET
 SCALE 1:20

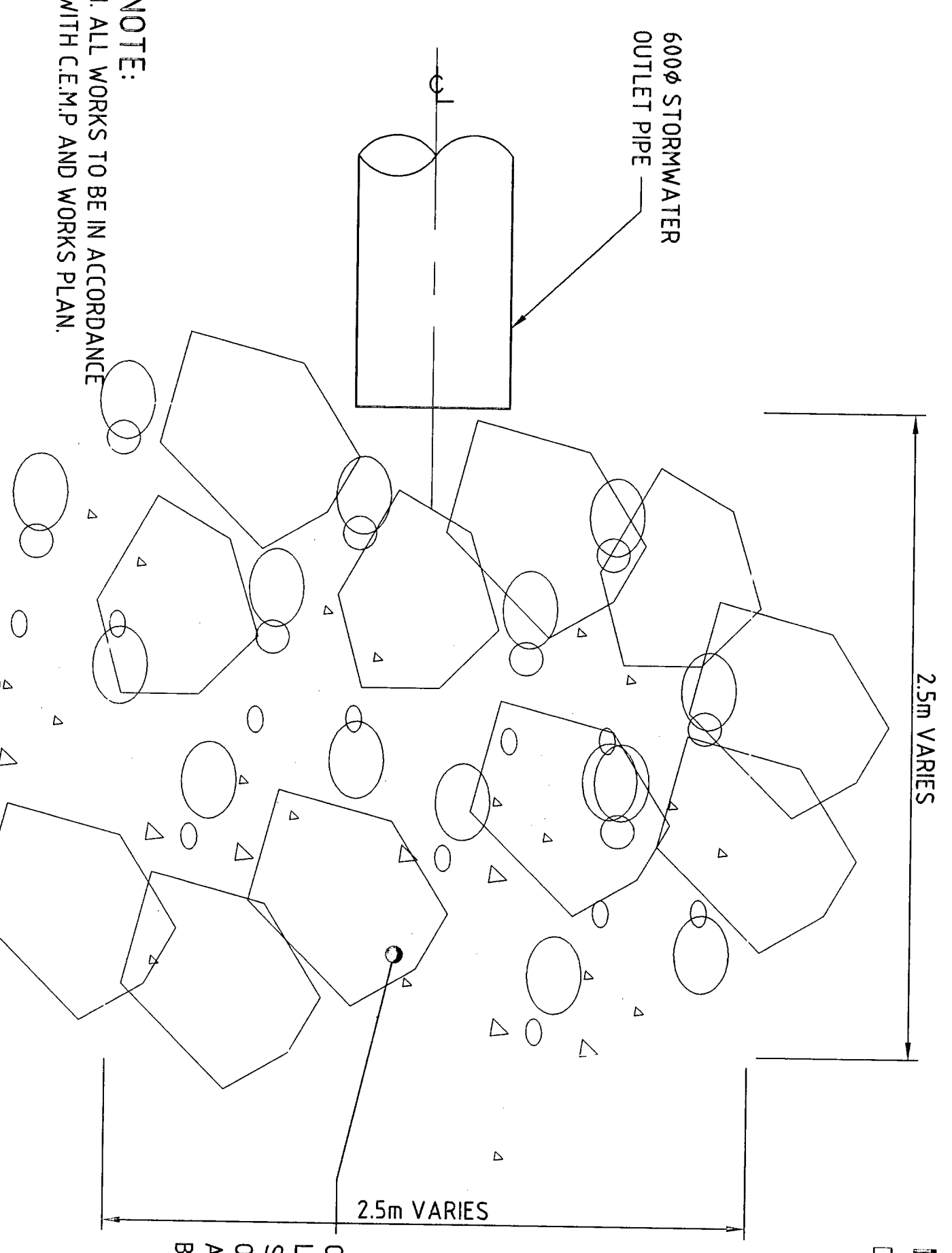
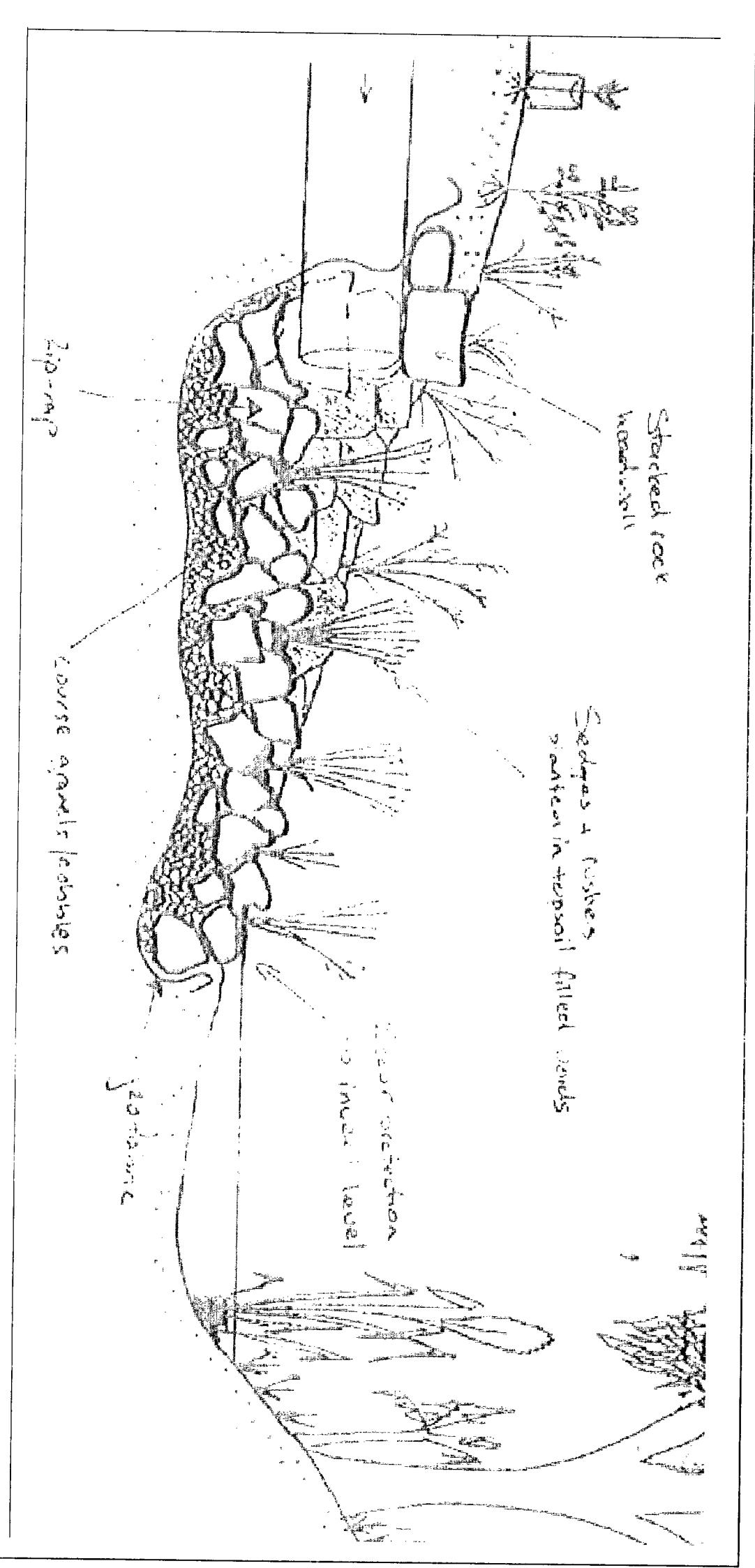
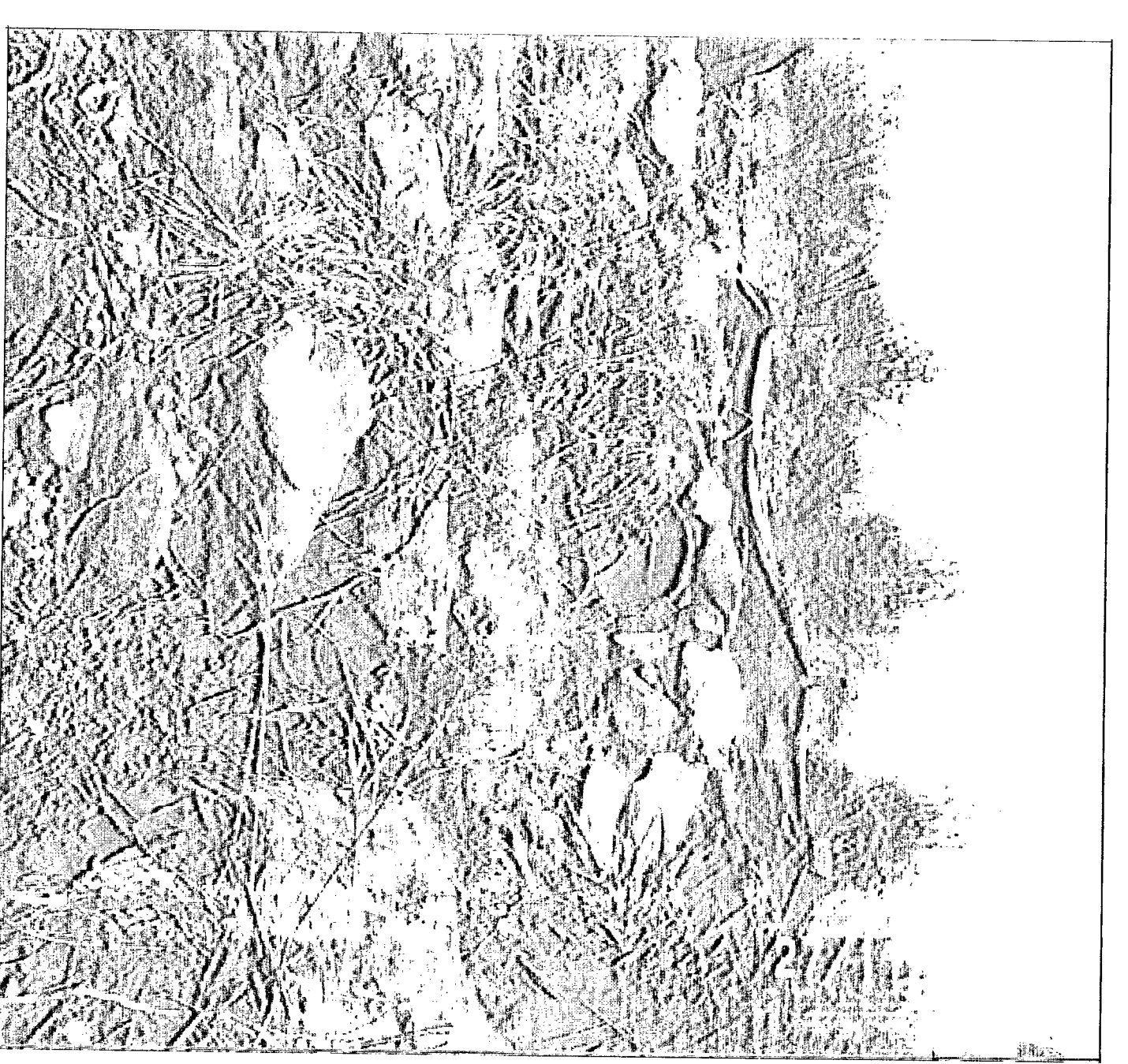
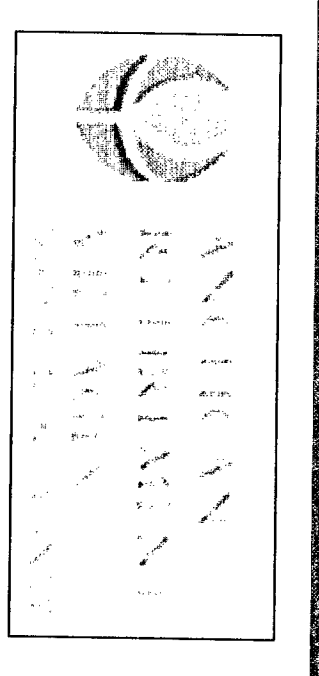


Photo of a rip-trap outlet structure with vegetation growing in the cracks between the rocks. Courtesy of DNR, Stormwater Outlet Structures to Streams (For pipes, culverts, drains and ditches) - 13-2016-1



A sketch of long section through a typical outlet structure. The result should be almost unnoticeable, appearing as fully vegetated gentle undulations through the riparian zone. Courtesy of DNR, Stormwater Outlet Structures to Streams (For pipes, culverts, drains and ditches) - Version 1)

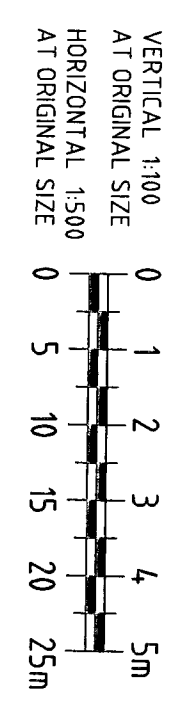


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DO NOT SCALE

Checked by:	Checked by:	Checked by:
Design	Design	Design
Check	Check	Check
Approved	Approved	Approved
10/03/07	10/03/07	10/03/07

Client: **ANGLIAN RETIREMENT VILLAGES**
 Project: **WARREWOOD BROOK**
 Title: **CIVIL WORKS OFF-SITE ROADS**
 Drawing No: **21-13577-C176**
 Rev: **A**



No.	Revision	Date	By	Check	Approved	Date
A	ISSUED FOR TENDER		LSM	ND	ND	7/12/07

No.	Revision	Date	By	Check	Approved	Date

No.	Revision	Date	By	Check	Approved	Date

No.	Revision	Date	By	Check	Approved	Date

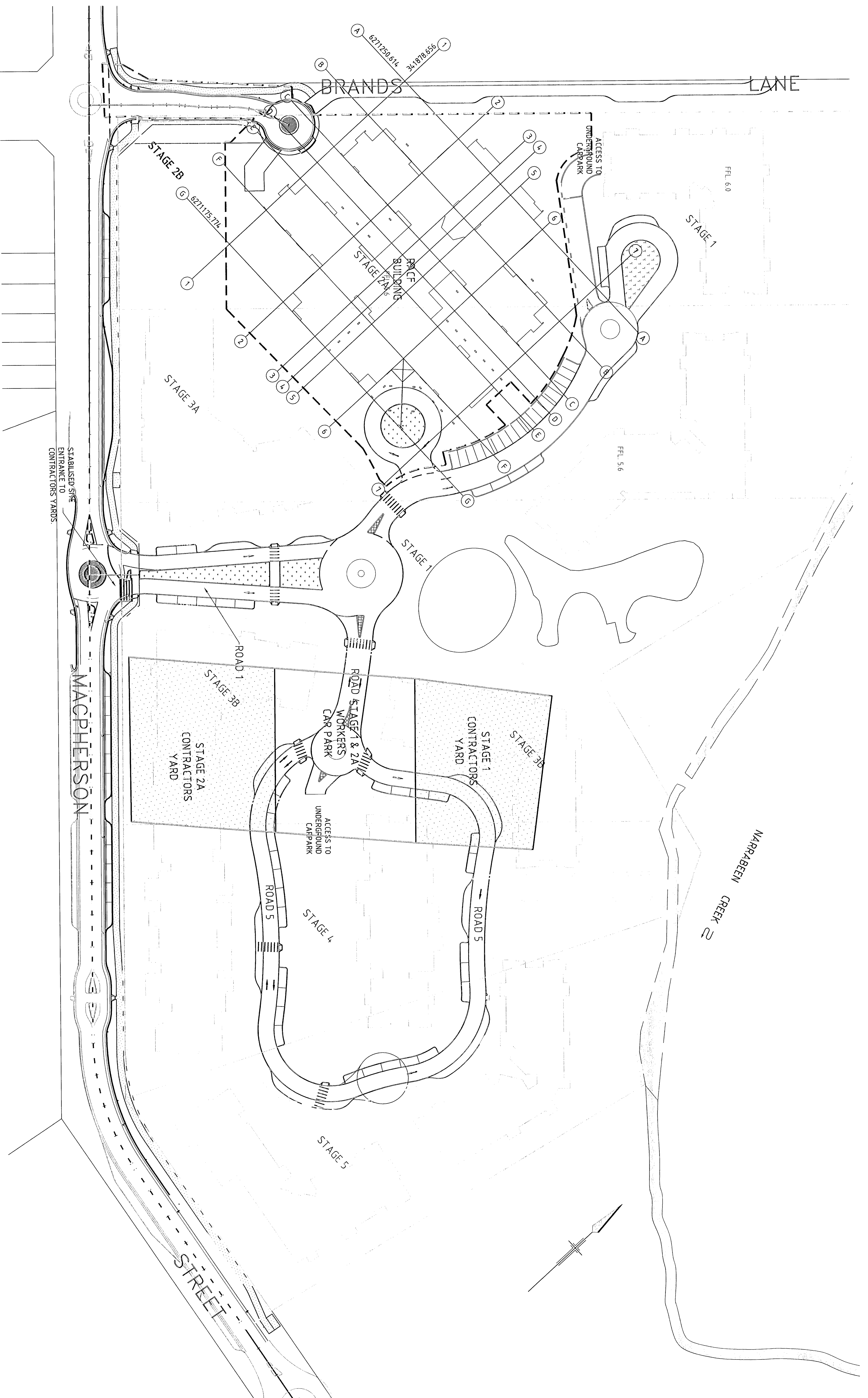
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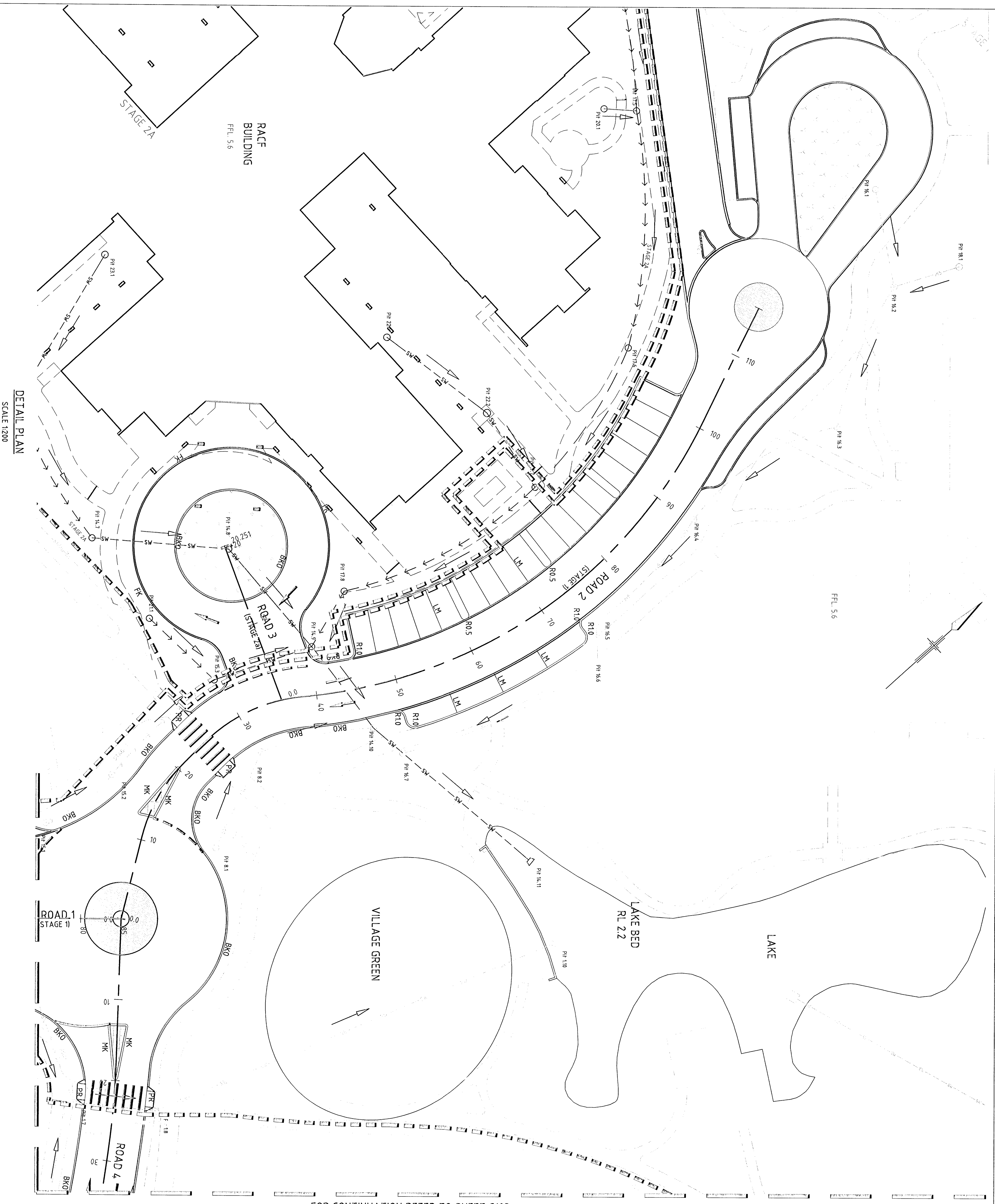


OVERALL SITE PLAN
SCALE 1:500

<p>REVISIONS</p> <p>No. Reason Date Drawn Checked Approved Date</p>								
C	ISSUED FOR TENDER	TR	AMC	AMC	1/12/27			
B	PRE-TENDER AMENDMENTS	TR	AMC	TR	2/11/27			
A	ISSUED FOR TENDER	LSM	NP	NP	10/8/27			

<p>CLIENTS PEOPLE PERFORMANCE</p> <p>19 Bond Street, Sydney NSW 2009 Australia E: systems@pda.com.au W: www.pda.com.au</p>		<p>DO NOT SCALE</p> <p>Condition of Use: This drawing is for the use of the client only and is not to be used for any other purpose without the written consent of the client. It is not to be used for any other purpose without the written consent of the client.</p>		<p>Drawn: LSM Checked: NP</p>		<p>Client: ANGLICAN RETIREMENT VILLAGES Project: WARRIEWOOD BROOK - STAGE 2A Title: OVERALL SITE PLAN SHOWING STAGING</p>	
<p>DATE: 10/08/27</p>		<p>Scale: AS SHOWN</p>		<p>Design: NP</p>		<p>Drawing No: 21-13577-C202</p>	
<p>Scale: AS SHOWN</p>		<p>Scale: AS SHOWN</p>		<p>Scale: AS SHOWN</p>		<p>Rev: 3</p>	

TENDER



FOR CONTINUATION REFER TO SHEET C103

LEGEND

- MEDIAN CONCRETE ISLAND
- SWALE ISLAND
- ASPHALT PAVEMENT
- PAVERS
- CONCRETE ROUNDABOUT
- SLOTTED STORMWATER PIPE AND SWALE
- STORMWATER PIPE AND PIT
- SLOTTED PIPE
- SUBSOIL DRAIN
- FOOTPATHS
- SPOT LEVEL, SETOUT POINT NUMBER, RADIUS
- PRISM RAMP, BROKEN KERB ONLY, KERB ONLY, FLUSH KERB, MOUNTABLE KERB, DISH CROSSING, KERB & GUTTER, LINE MARKING
- FINISHED GROUND SURFACE CONTOUR

DO NOT SCALE

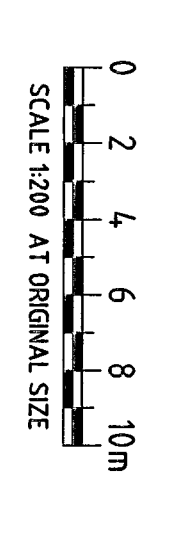
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Drawn	LSM	Designed	LSM
Checked	NP	Checked	NP
Approved	R.BENIG	Approved	R.BENIG
Date	20/11/07	Date	20/11/07
Scale	AS SHOWN	Scale	AS SHOWN

Client: **ANGELICAN RETIREMENT VILLAGES**
Project: **WARWICKWOOD BROOK - STAGE 2A**
Type: **CIVIL WORKS**
Drawing No: **21-13577-C204**

Rev: **A**

- NOTES:**
1. REFER TO DRG 21-13577-C202 FOR OVERALL SITE LAYOUT
 2. FOR EXACT STAGING INTERFACES OF STORMWATER REFER TO DRAWING 21-13577-C215



No	Revision	Date	By	Checked	Approved
A	ISSUED FOR TENDER	17/02/07	NP	NP	LSM

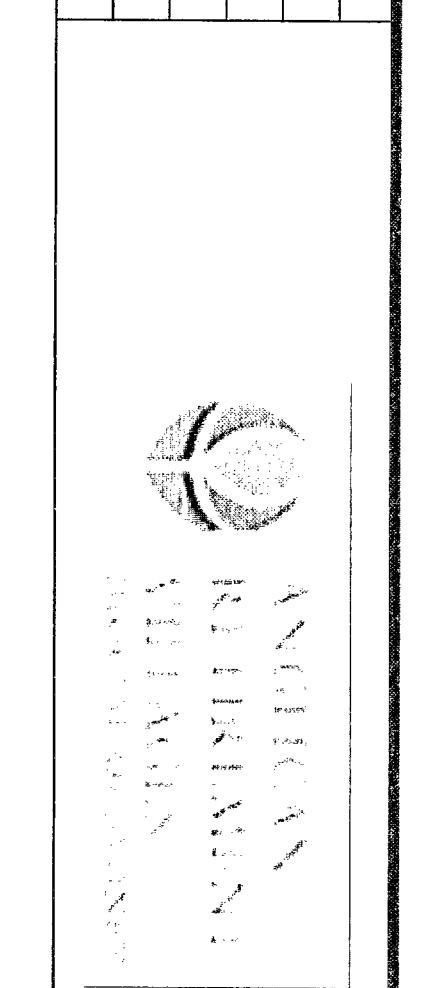
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Checked	NP	Checked	NP
Approved	R.BENIG	Approved	R.BENIG
Date	20/11/07	Date	20/11/07
Scale	AS SHOWN	Scale	AS SHOWN

Client	ANGELICAN RETIREMENT VILLAGES
Project	WARWICKWOOD BROOK - STAGE 2A
Type	CIVIL WORKS
Drawing No	21-13577-C204

Project Name: Warwickwood Brook - Stage 2A
 Project No: 21-13577-C204
 Drawing No: 21-13577-C204
 Date: 17/02/07
 Scale: 1:200

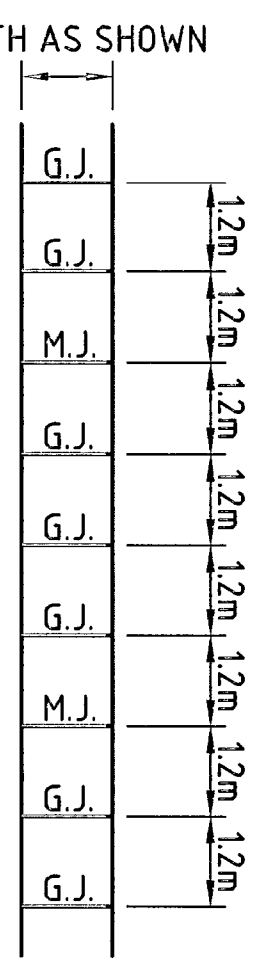
Author: LSM
 Designer: NP
 Checker: NP
 Approver: R.BENIG



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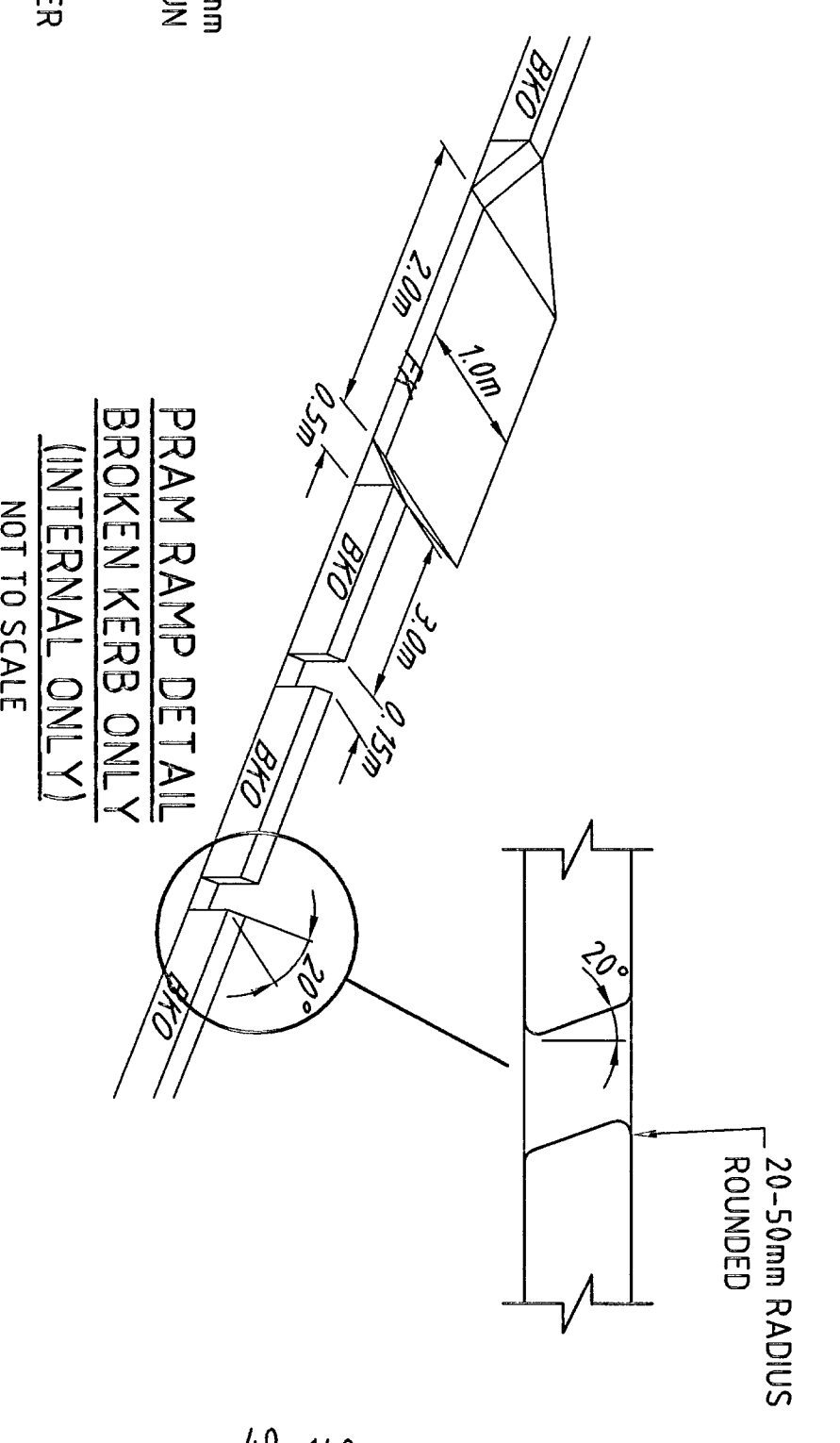
ANGELICAN RETIREMENT VILLAGES
 WARWICKWOOD BROOK - STAGE 2A
 CIVIL WORKS
 ROAD 2 & 3, DETAIL PLANS

ANGELICAN RETIREMENT VILLAGES
 WARWICKWOOD BROOK - STAGE 2A
 CIVIL WORKS
 ROAD 2 & 3, DETAIL PLANS

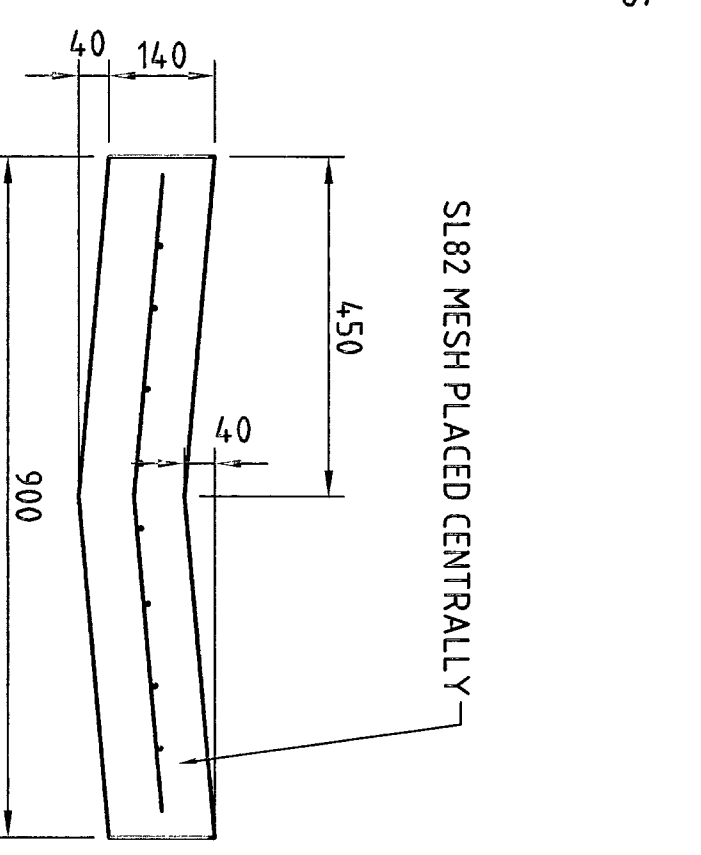


FOOTPATH DETAIL
SCALE 1:100

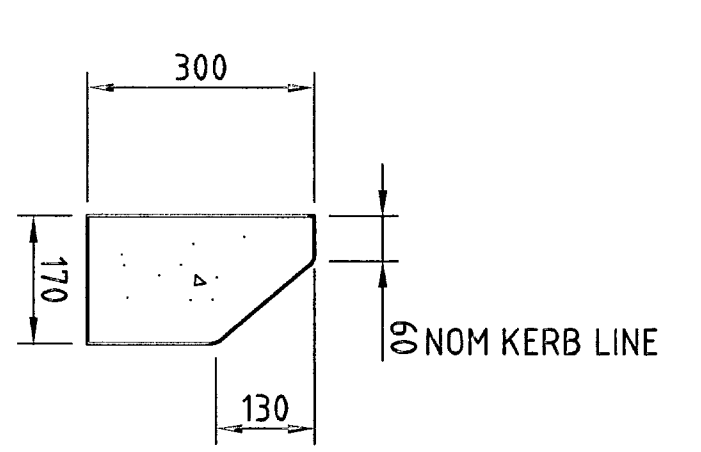
- FOOTPATH NOTES (INTERNAL ONLY)**
1. PROPOSED FOOTPATH TO BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF 100mm THICK APPROVED JOINING MATERIAL. JOINTS TO RUN FULL DEPTH OF CONCRETE.
 2. GROOVE JOINTS AT 1200mm SPACING 15mm DEEP
 3. CONCRETE 15mm THICK, F_{ck} 20MPa AT 28 DAYS OVER 25mm THICK BEDDING SAND.
 4. SUB-GRADE TO BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATION.
 5. NO JOINTS TO FORM ANGLES 45° WITH AN EDGE WITHOUT LOCAL MESH REINFORCEMENT.
 6. 22# GROSSBARS TO LANDSCAPE ARCHITECT'S DETAIL.
 7. SURFACE FINISHED TO LANDSCAPE ARCHITECT'S DETAIL.



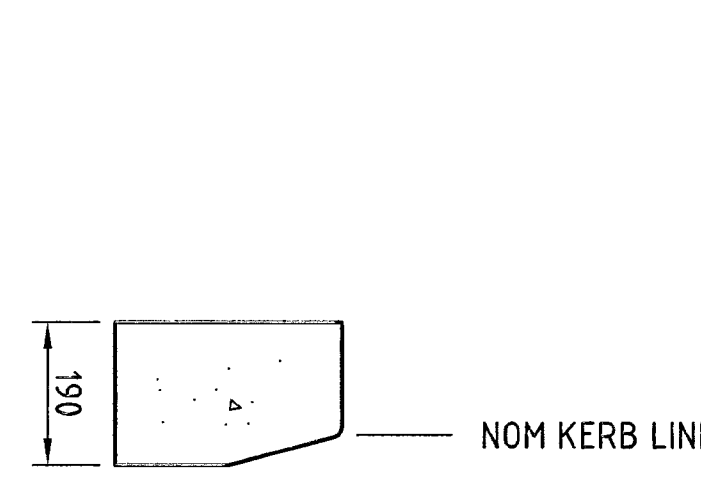
PRAM RAMP DETAIL
BROKEN KERB ONLY
INTERNAL ONLY
NOT TO SCALE



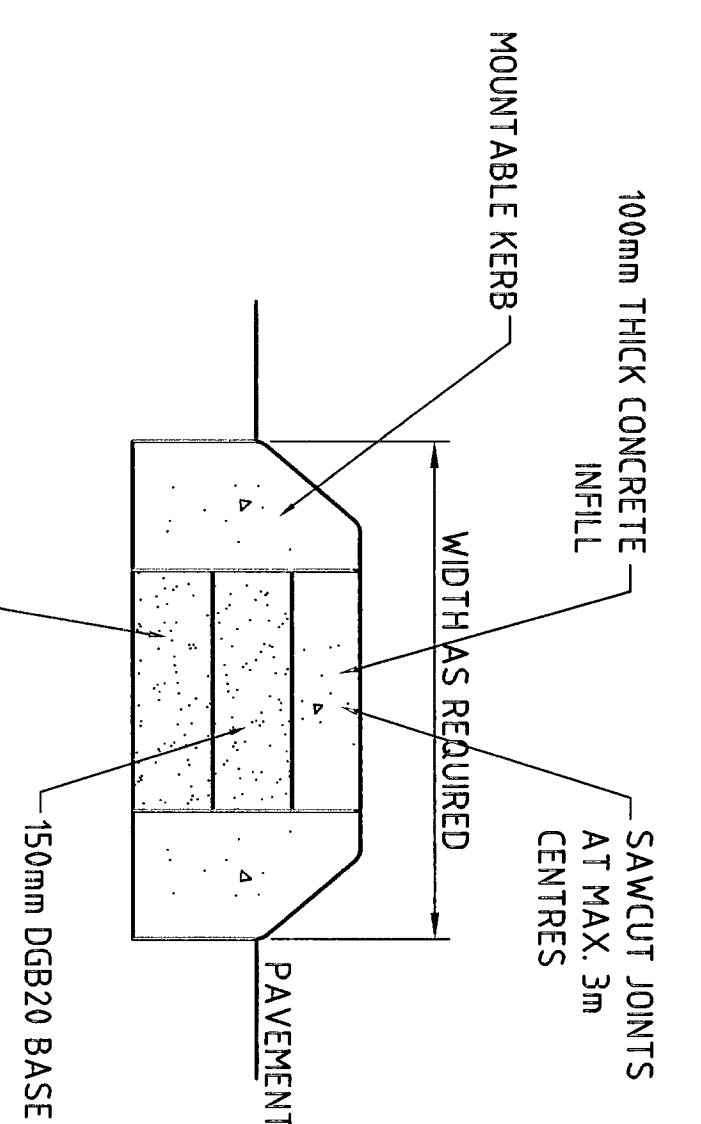
SLABZ MESH PLACED CENTRALLY
DISH (CROSSING D.C.)
SCALE 1:100



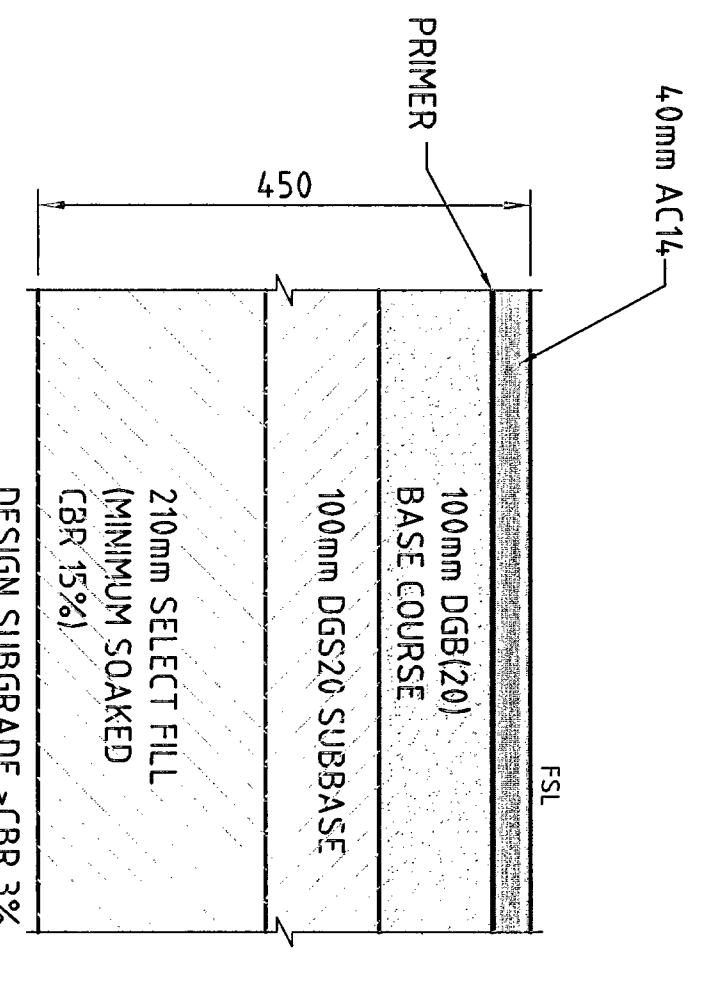
20-50mm RADIUS
ROUNDED
NOM KERB LINE
MOUNTABLE KERB (M.K.)
SCALE 1:30



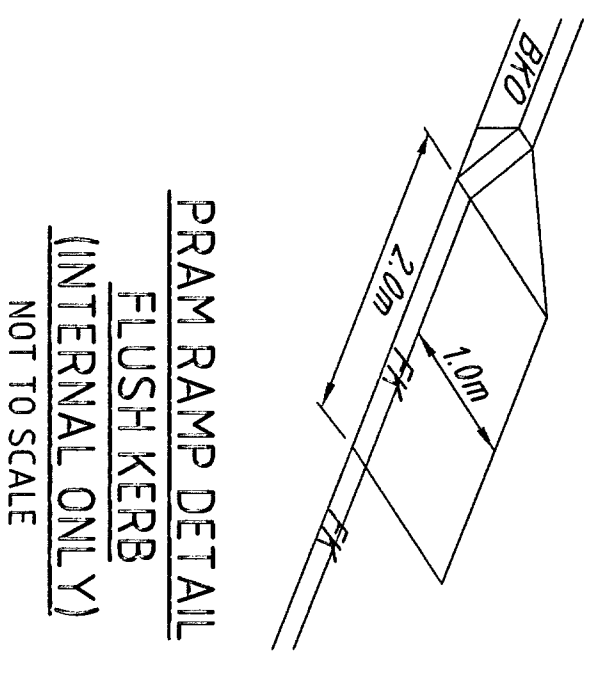
5 RAD (TYP)
FLUSH KERB (F.K.)
SCALE 1:30



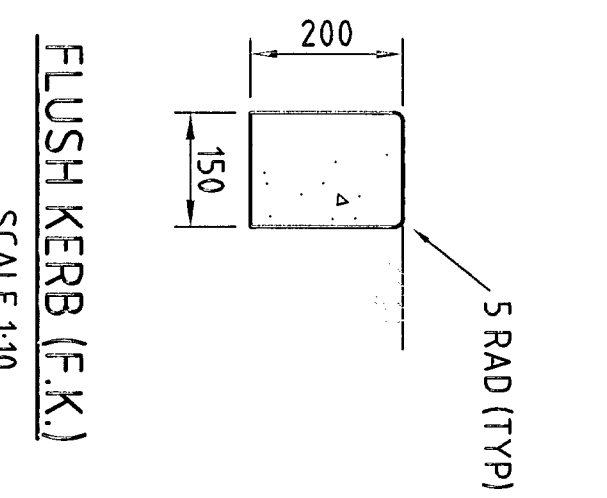
100mm THICK CONCRETE INFILL AT MAX. 3m CENTRES
SAWCUT JOINTS
MOUNTABLE KERB
WIDTH AS REQUIRED
PAVEMENT
150mm D09/20 BASE
150mm SELECT FILL (MIN. SOAKED CBR 15%)
MEDIAN ISLAND DETAIL
SCALE 1:10



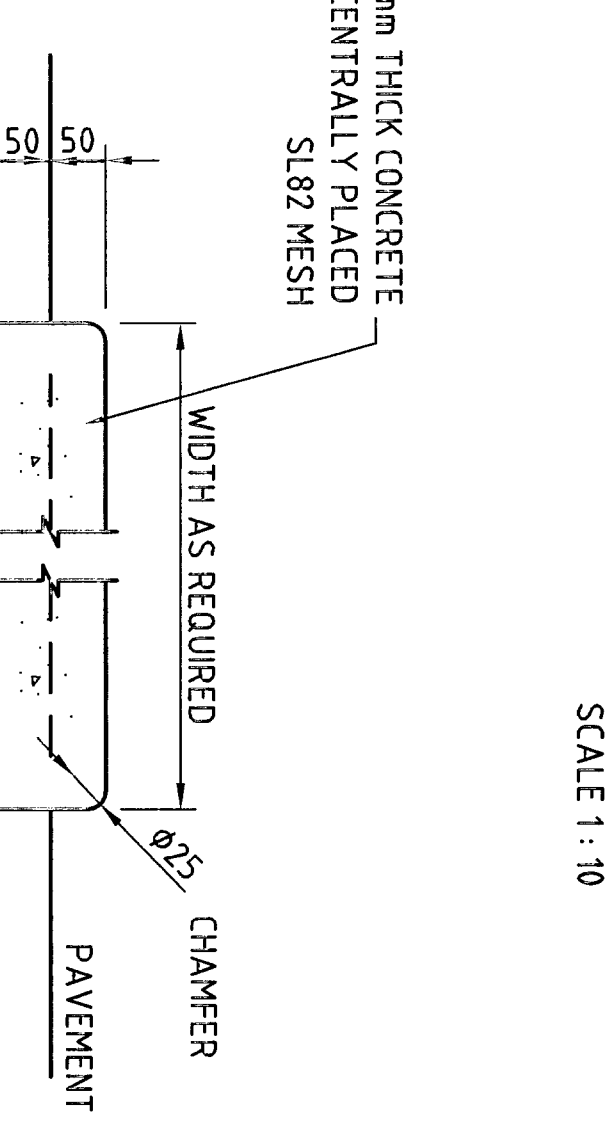
40mm ACT
PRIMER
FLEXIBLE PAVEMENT LAYERWORKS (INTERNAL ROADS ONLY)
DETAIL
NOT TO SCALE



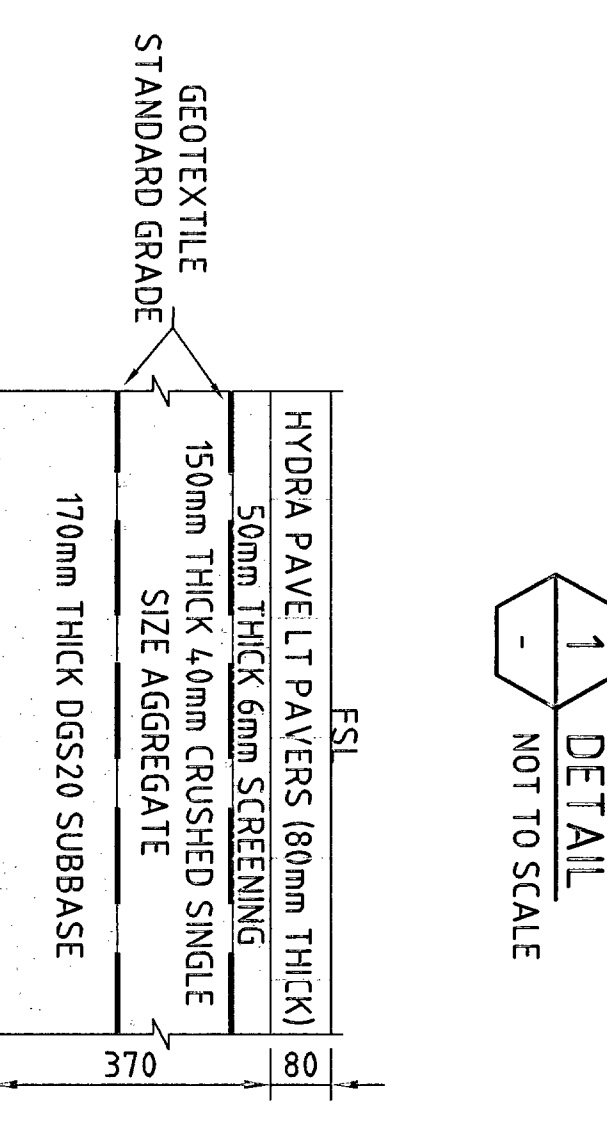
PRAM RAMP DETAIL
FLUSH KERB
INTERNAL ONLY
NOT TO SCALE



STANDARD KERB & GUTTER (K&G)
SCALE 1:30



100mm THICK CONCRETE WITH CENTRALLY PLACED SLABZ MESH
WIDTH AS REQUIRED
CHAMFER
PAVEMENT
LAYERWORKS TO DETAIL 1
CENTRAL ROUNDABOUT DETAIL
NOT TO SCALE



PAVERS PAVEMENT LAYERWORKS
DETAIL
NOT TO SCALE

GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CIVIL WORKS SPECIFICATION. WHEN DISCREPANCIES ARISE THE CONTRACTOR SHALL ADVISE THE SUPERINTENDENT IMMEDIATELY FOR CLARIFICATION.
2. PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING SERVICES AND STRUCTURES WHETHER OR NOT SHOWN ON THE DRAWINGS. ANY DAMAGE TO EXISTING SERVICES AND STRUCTURES SHALL BE RECTIFIED AT THE CONTRACTOR'S EXPENSE. 100mm COMPRESSIBLE FILLER MATERIAL SHALL BE PLACED AROUND EXPOSED SERVICES AND STRUCTURES. ALL SERVICE COVERS SHALL BE ADJUSTED TO SUIT FINISHED SURFACE LEVELS.
3. THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
4. TO MINIMISE DISRUPTION THE CONTRACTOR SHALL STAGE THE WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
5. ALL NEW WORKS SHALL BE SMOOTHLY TRANSITIONED INTO EXISTING WORKS.
6. DIMENSIONS OF ANY DETAIL SHALL NOT BE SCALED DIMENSIONS. IF IN DOUBT SHALL BE VERIFIED BY THE SUPERINTENDENT.
7. ALL SURVEY DATA AND CONTROL DATA SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC MANAGEMENT MEASURES WHICH ARE TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION.
9. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING THE FINAL ASPHALTIC CONCRETE SEAL LAYER.
10. THE CONTRACTOR SHALL CHECK LOCATION SIZE AND INVERT LEVEL OF ALL STORMWATER PIPES/PIES AND SEWER PIPES MANHOLES ETC PRIOR TO ANY WORK. COMMENCING AND SHALL NOTIFY THE SUPERINTENDENT IF THERE ARE ANY DISCREPANCIES WITH THE DESIGN DRAWING.

TENDER

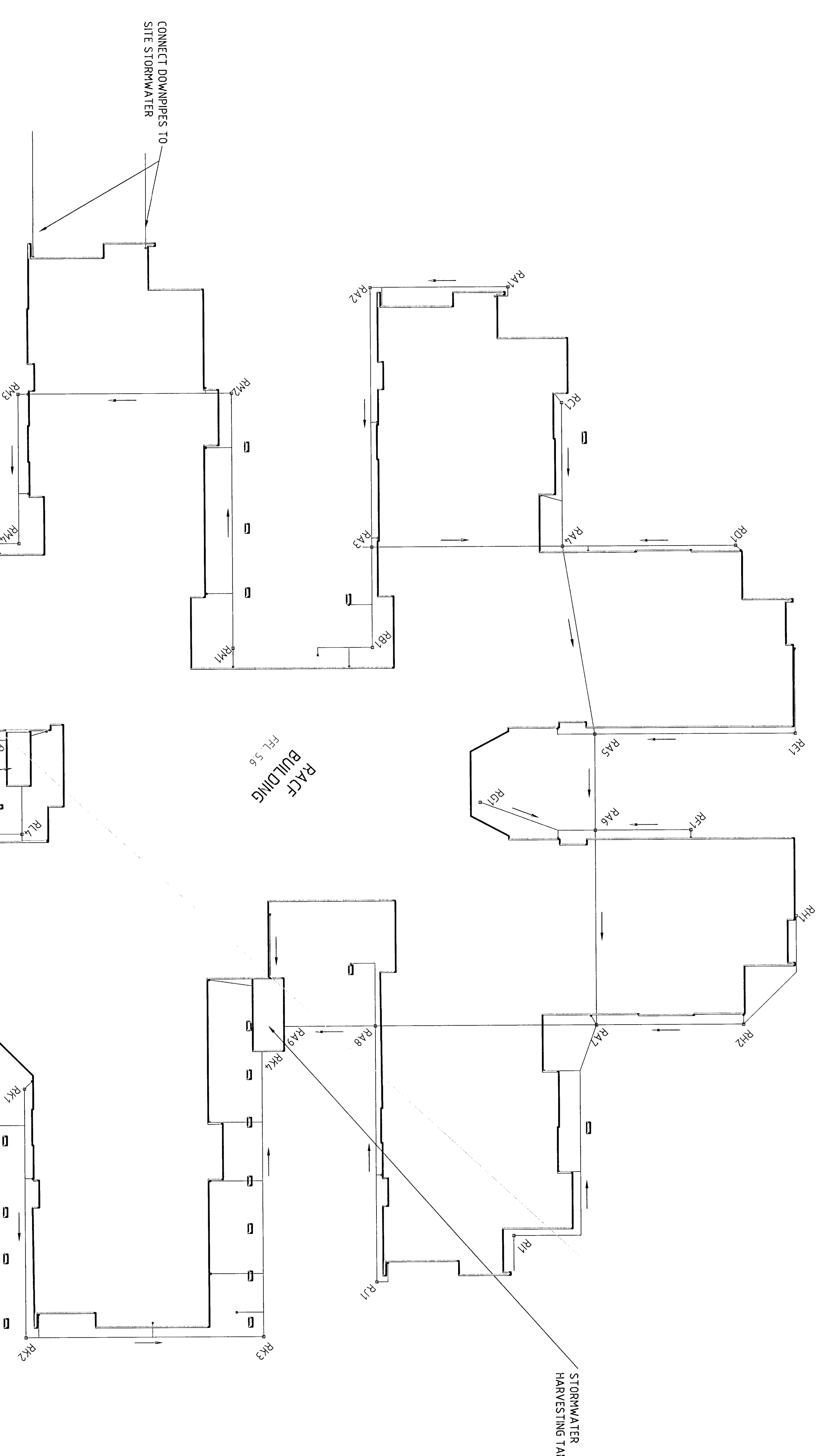
No	Revision	Name	Indicates suspension or original issue of drawing or withdrawal of drawing	Drawn	Checked	Approved	Date
A	ISSUED FOR TENDER	FVL		AMC	7/12/2017		

Client	Project	Drawing No.	Rev.
ANGELICAN RETIREMENT VILLAGES	WARRIEWOOD BROOK STAGE 2A	21-13577-C21A	A

Client	Project	Drawing No.	Rev.
ANGELICAN RETIREMENT VILLAGES	WARRIEWOOD BROOK STAGE 2A	21-13577-C21A	A

Client	Project	Drawing No.	Rev.
ANGELICAN RETIREMENT VILLAGES	WARRIEWOOD BROOK STAGE 2A	21-13577-C21A	A

Client	Project	Drawing No.	Rev.
ANGELICAN RETIREMENT VILLAGES	WARRIEWOOD BROOK STAGE 2A	21-13577-C21A	A



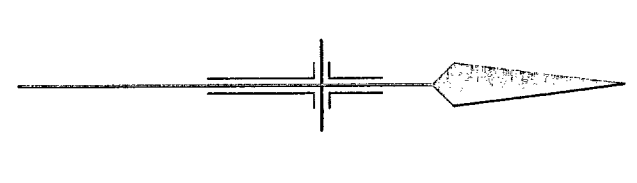
ROOFWATER DRAINAGE PLAN
SCALE 1:200

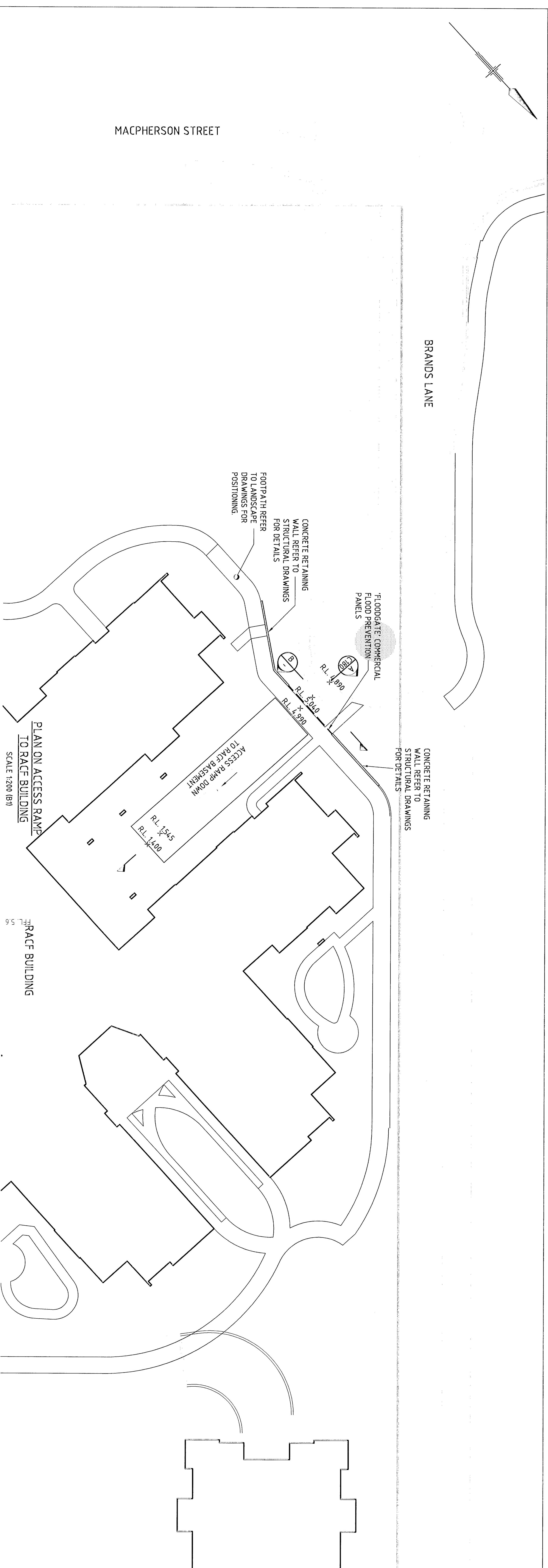
ROOFWATER HYDRAULIC DATA

From	To	100 Year Return Period Rainfall Intensity (mm/hr)	Pipe Length (m)	Pipe diameter (mm)	Number of pipes	US Invert Level (m AHD)	DS Invert Level (m AHD)	Slope
R1A1	R1A2	100	11.5	100	1	5.38	5.24	1.0%
R1A2	R1A3	150	21.6	150	1	5.24	5.07	1.0%
R1A3	R1A4	150	10.8	150	1	5.07	4.85	1.0%
R1A4	R1A5	225	19.8	225	1	4.85	4.69	1.0%
R1A5	R1A6	225	19.8	225	1	4.69	4.44	1.0%
R1A6	R1A7	550	18.4	300	1	4.44	4.25	1.0%
R1A7	R1A8	300	7.8	300	1	4.25	4.18	1.0%
R1A8	R1A9	150	8.3	150	1	5.10	5.02	1.0%
R1A9	R1A10	150	11.9	150	1	5.20	4.85	2.9%
R1A10	R1A11	100	14.4	100	1	5.20	4.85	2.4%
R1A11	R1A12	100	18.7	100	1	5.20	5.17	0.2%
R1A12	R1A13	150	7.9	150	1	5.20	4.60	3.9%
R1A13	R1A14	100	10.0	100	1	5.25	5.15	1.0%
R1A14	R1A15	150	10.9	150	1	5.30	5.00	2.8%
R1A15	R1A16	150	12.2	150	1	5.00	4.44	4.9%
R1A16	R1A17	150	23.3	150	1	5.30	4.44	3.1%
R1A17	R1A18	150	21.3	150	1	5.30	4.25	4.9%
R1A18	R1A19	150	20.7	150	1	3.14	2.94	1.0%
R1A19	R1A20	150	19.8	150	1	2.94	2.74	1.0%
R1A20	R1A21	225	23.8	225	1	2.74	2.50	1.0%
R1A21	R1A22	150	12.7	150	1	2.90	2.77	1.0%
R1A22	R1A23	150	11.3	150	1	2.77	2.68	1.0%
R1A23	R1A24	225	15.8	225	1	2.60	2.50	1.9%
R1A24	R1A25	150	21.2	150	1	5.38	5.26	0.5%
R1A25	R1A26	150	17.8	150	1	5.28	5.09	1.0%
R1A26	R1A27	150	17.2	150	1	4.84	4.40	2.0%
R1A27	R1A28	225	11.3	225	1	4.40	4.20	2.0%
R1A28	R1A29	225	14.3	225	1	4.20	3.98	2.0%

LEGEND
 ——— GROUND FLOOR BUILDING OUTLINE
 - - - - - BASEMENT BUILDING OUTLINE
 RG2 PVC PIPE WITH INSPECTION RISER

ANGLO-AMERICAN RETIREMENT VILLAGES WARRIEWOOD BROOK STAGE 2A CIVIL WORKS ROOFWATER DRAINAGE LAYOUT PLAN	
Client: ANGLO-AMERICAN RETIREMENT VILLAGES Project: WARRIEWOOD BROOK STAGE 2A Title: CIVIL WORKS Drawing No: 21-13577-0236	Client: GHD Pty Ltd Designer: AS SHOWN Scale: AS SHOWN Drawing Date: 28/11/07
Designer: LSM Checked: NP Approved: RBERG	Designer: LSM Checked: NP Approved: RBERG
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No. Revision: 07 December, 2007, 10:15 AM Drawn: LSM Checked: Approved: RBERG Date: 28/11/07	No. Revision: 07 December, 2007, 10:15 AM Drawn: LSM Checked: Approved: RBERG Date: 28/11/07





- NOTES:
- FOR RETAINING WALL DETAILS REFER TO STRUCTURAL DRAWINGS FOR MATERIAL TYPE AND CONSTRUCTION DETAILS.
 - FOR FOOTPATH POSITIONING REFER TO LANDSCAPE ARCHITECT'S DRAWINGS.

RACE BASEMENT ACCESS RAMP
TOP OF RAMP ELEVATION
SCALE 1:20 (B1)

NO	REVISION	DATE	BY	CHECKED	APPROVED	DATE
A	ISSUED FOR TENDER	17/10/27	KWV	AML	AML	17/10/27

NO	REVISION	DATE	BY	CHECKED	APPROVED	DATE
1	ISSUED FOR TENDER	17/10/27	KWV	AML	AML	17/10/27

0 2 4 6 8 10m
SCALE 1:200 AT ORIGINAL SIZE

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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10 Bond Street, Sydney NSW 2000 Australia
P 61 2 9239 7100 F 61 2 9239 7199
E info@pjc.com.au W www.pjc.com.au

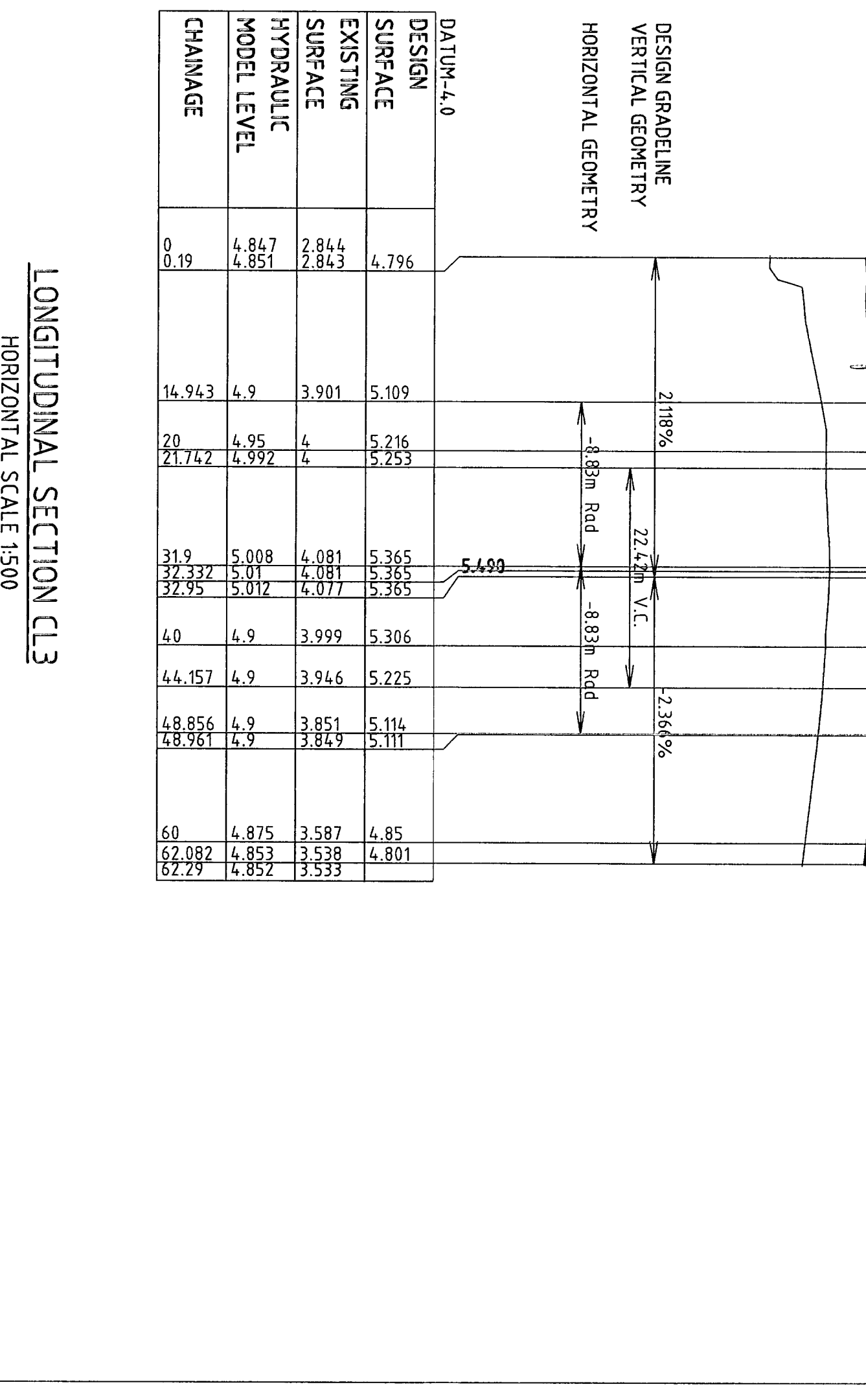
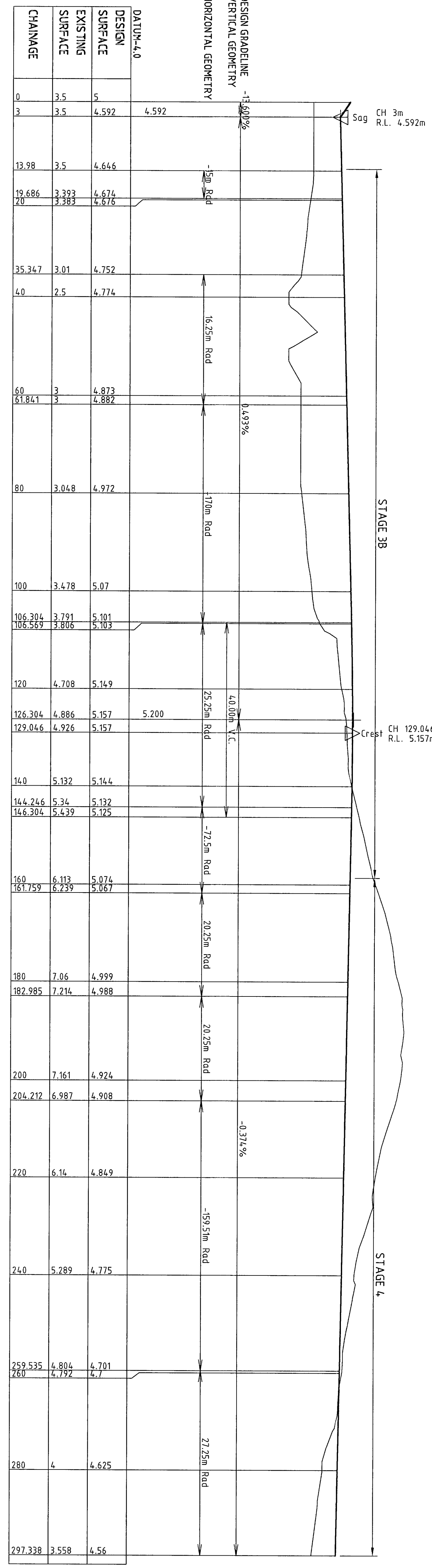
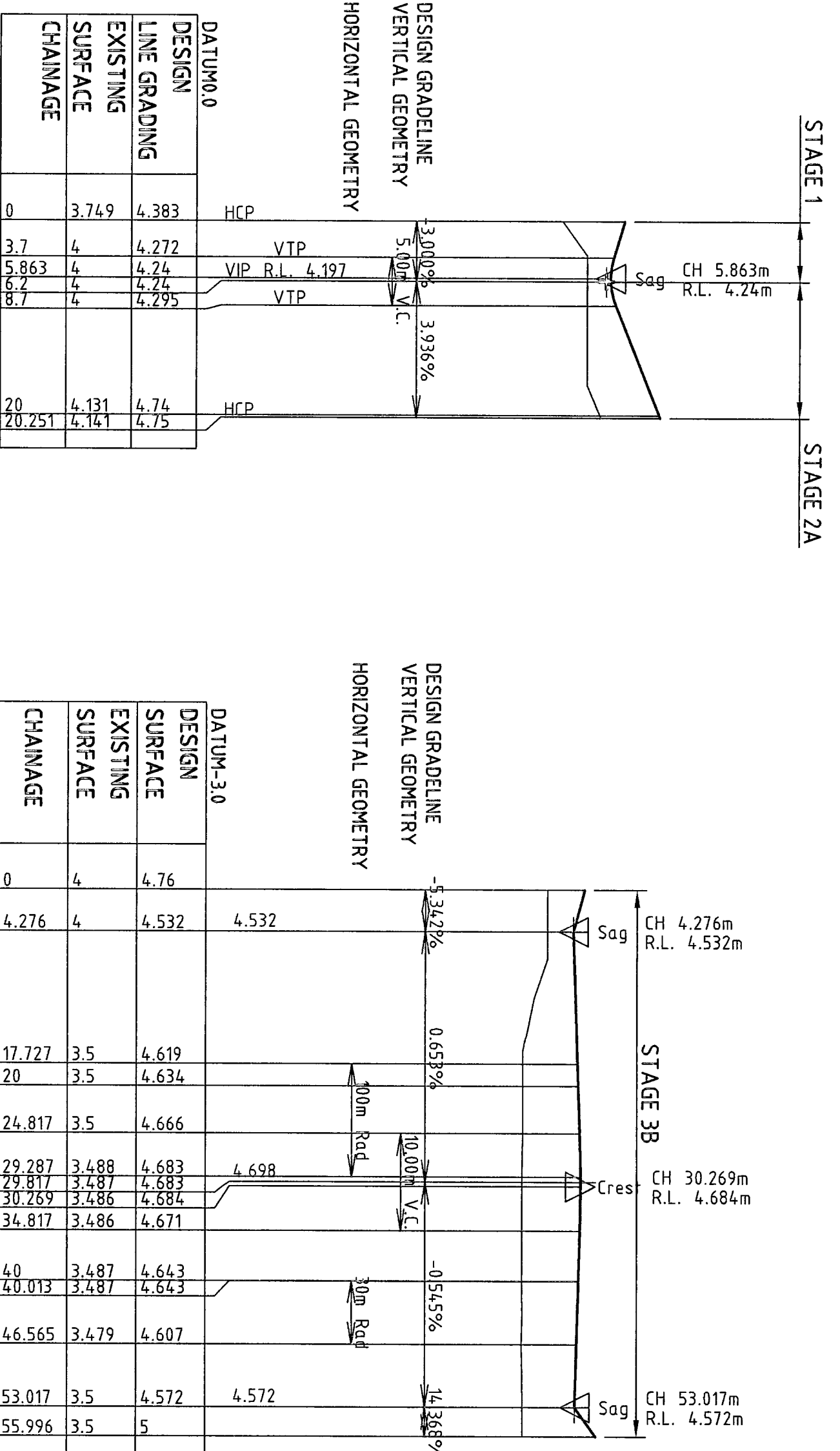
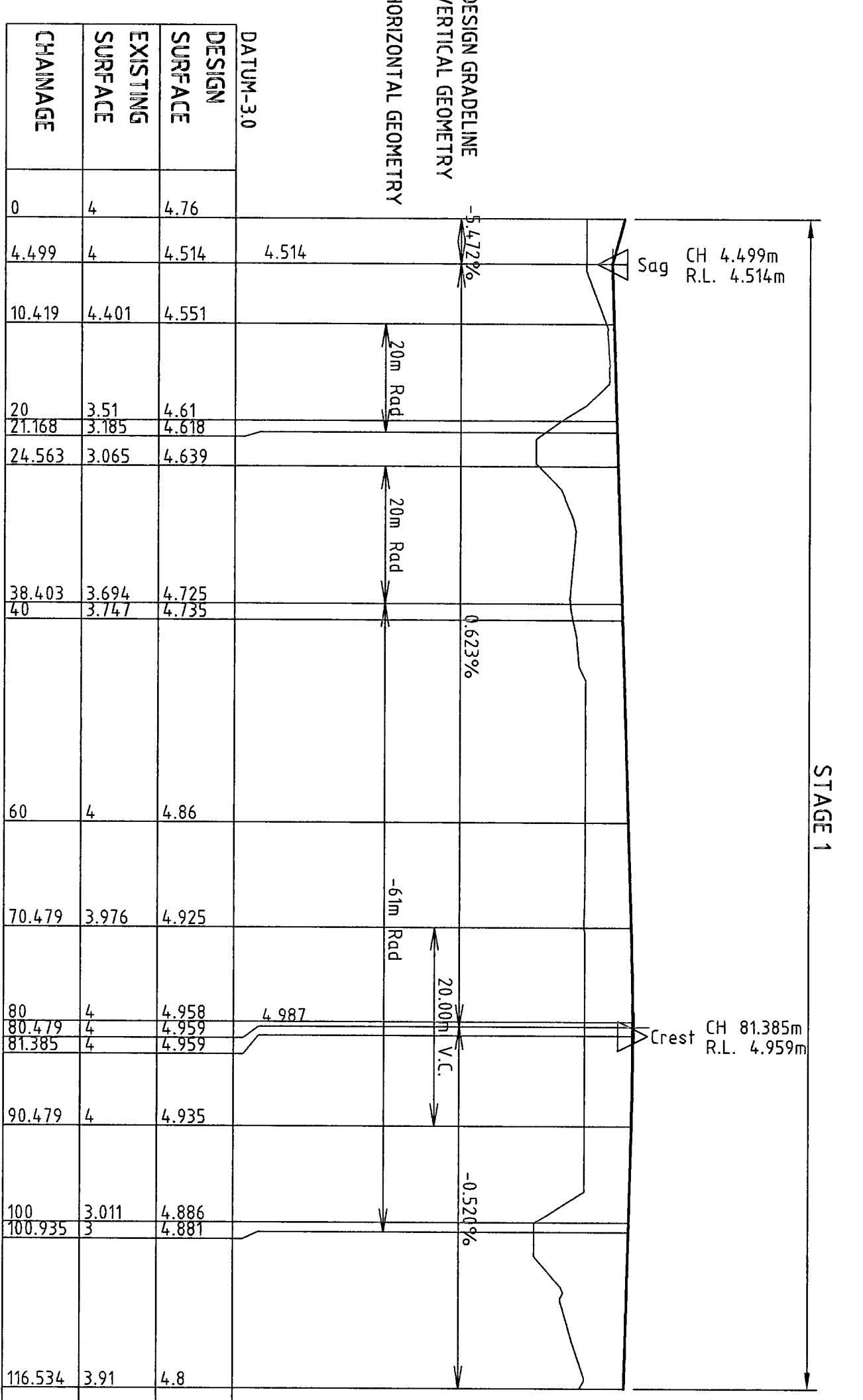
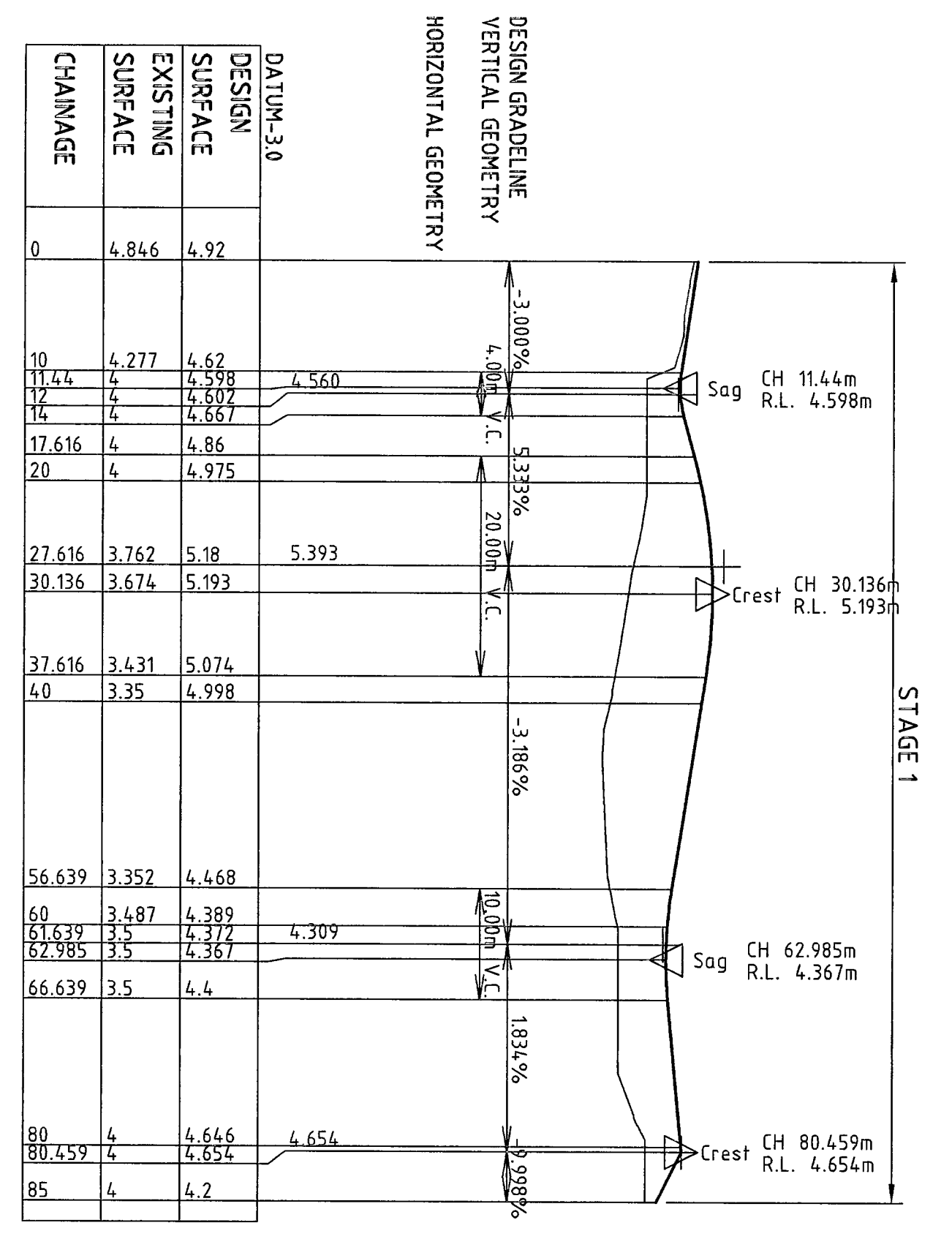
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Drawn	KWV	Designed	AL
Checked	AL	Project	AL
Approved	AML	Date	10.07
Scale	AS SHOWN	This drawing must not be used for construction purposes.	

Client: ANGLICAN RETIREMENT VILLAGES
Project: WARRENWOOD BROOK
Type: CIVIL WORKS - STAGE 2A
Original Size: BRANDS LANE ACCESS RAMP ELEVATION
Drawing No: 21-13577-C238
Rev: A

TENDER



ROAD 1 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	341924.769	6271073.167
10.000	341931.516	6271080.548
20.000	341938.263	6271087.929
30.000	341945.010	6271095.310
40.000	341951.757	6271102.691
50.000	341958.504	6271110.072
60.000	341965.251	6271117.453
70.000	341972.000	6271124.834
80.000	341978.744	6271132.215
85.000	341982.118	6271135.905

ROAD 2 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	341982.118	6271135.905
10.000	341976.611	6271144.252
20.000	341976.380	6271144.692
30.000	341973.347	6271144.919
40.000	341973.086	6271153.537
50.000	341972.825	6271158.102
60.000	341972.564	6271158.693
70.000	341972.303	6271162.275
80.000	341972.042	6271165.858
85.000	341971.781	6271172.439

ROAD 4 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	341982.118	6271135.905
10.000	341982.889	6271128.936
20.000	341996.442	6271121.948
30.000	342003.088	6271115.034
40.000	342009.734	6271108.120
50.000	342016.380	6271101.206
60.000	342023.026	6271094.292
70.000	342029.672	6271087.378
80.000	342036.318	6271076.464
85.000	342042.964	6271063.550

ROAD 5 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	342012.206	6271092.807
10.000	342020.122	6271095.849
20.000	342030.275	6271099.938
30.000	342035.503	6271099.975
40.000	342043.651	6271093.738
50.000	342051.799	6271087.491
60.000	342059.947	6271076.244
70.000	342068.095	6271063.997
80.000	342076.243	6271051.750
85.000	342084.391	6271045.503

ROAD 6 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	342076.181	6271082.433
10.000	342071.514	6271078.707
20.000	342066.848	6271074.981
30.000	342062.182	6271071.255
40.000	342057.516	6271067.529
50.000	342052.850	6271063.803
60.000	342048.184	6271059.077
70.000	342043.518	6271055.351
80.000	342038.852	6271051.625
85.000	342034.186	6271051.891

ROAD 3 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	342076.181	6271082.433
10.000	342071.514	6271078.707
20.000	342066.848	6271074.981
30.000	342062.182	6271071.255
40.000	342057.516	6271067.529
50.000	342052.850	6271063.803
60.000	342048.184	6271059.077
70.000	342043.518	6271055.351
80.000	342038.852	6271051.625
85.000	342034.186	6271051.891

ROAD 4 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	342076.181	6271082.433
10.000	342071.514	6271078.707
20.000	342066.848	6271074.981
30.000	342062.182	6271071.255
40.000	342057.516	6271067.529
50.000	342052.850	6271063.803
60.000	342048.184	6271059.077
70.000	342043.518	6271055.351
80.000	342038.852	6271051.625
85.000	342034.186	6271051.891

ROAD 5 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	342076.181	6271082.433
10.000	342071.514	6271078.707
20.000	342066.848	6271074.981
30.000	342062.182	6271071.255
40.000	342057.516	6271067.529
50.000	342052.850	6271063.803
60.000	342048.184	6271059.077
70.000	342043.518	6271055.351
80.000	342038.852	6271051.625
85.000	342034.186	6271051.891

ROAD 6 CENTRELINE SETOUT

CHAINAGE	EASTING	NORTHING
0.000	342076.181	6271082.433
10.000	342071.514	6271078.707
20.000	342066.848	6271074.981
30.000	342062.182	6271071.255
40.000	342057.516	6271067.529
50.000	342052.850	6271063.803
60.000	342048.184	6271059.077
70.000	342043.518	6271055.351
80.000	342038.852	6271051.625
85.000	342034.186	6271051.891

NOTE:
 T-WARNING CONTRACTOR TO BE AWARE OF
 EXTENT OF STAGING AND WORKS INCLUDED
 WITHIN STAGE REFER TO 21-13577-C202 20R
 OVERALL STAGING PLAN.



TENDER

ANGELICAN RETIREMENT VILLAGES
WARRIEWOOD BROOK STAGE 1
CIVIL WORKS
ROAD LONGITUDINAL SECTIONS

Project: **ANGELICAN RETIREMENT VILLAGES**
 Drawing No: **21-13577-C106**

Scale: **A3 SHOWN**

Client: **ANGELICAN RETIREMENT VILLAGES**
 Designer: **ANGELICAN RETIREMENT VILLAGES**

Contractor: **ANGELICAN RETIREMENT VILLAGES**

Approved: **ANGELICAN RETIREMENT VILLAGES**
 Date: **20/11/07**

Scale: **A3 SHOWN**

Rev: **A**

ISSUED FOR TENDER

No. Revision: None. *Indicates revisions to original issue of drawing in full measure of change.

Drawn: LSN, Checked: Approved, Date: 20/11/07, Title: ROAD LONGITUDINAL SECTIONS

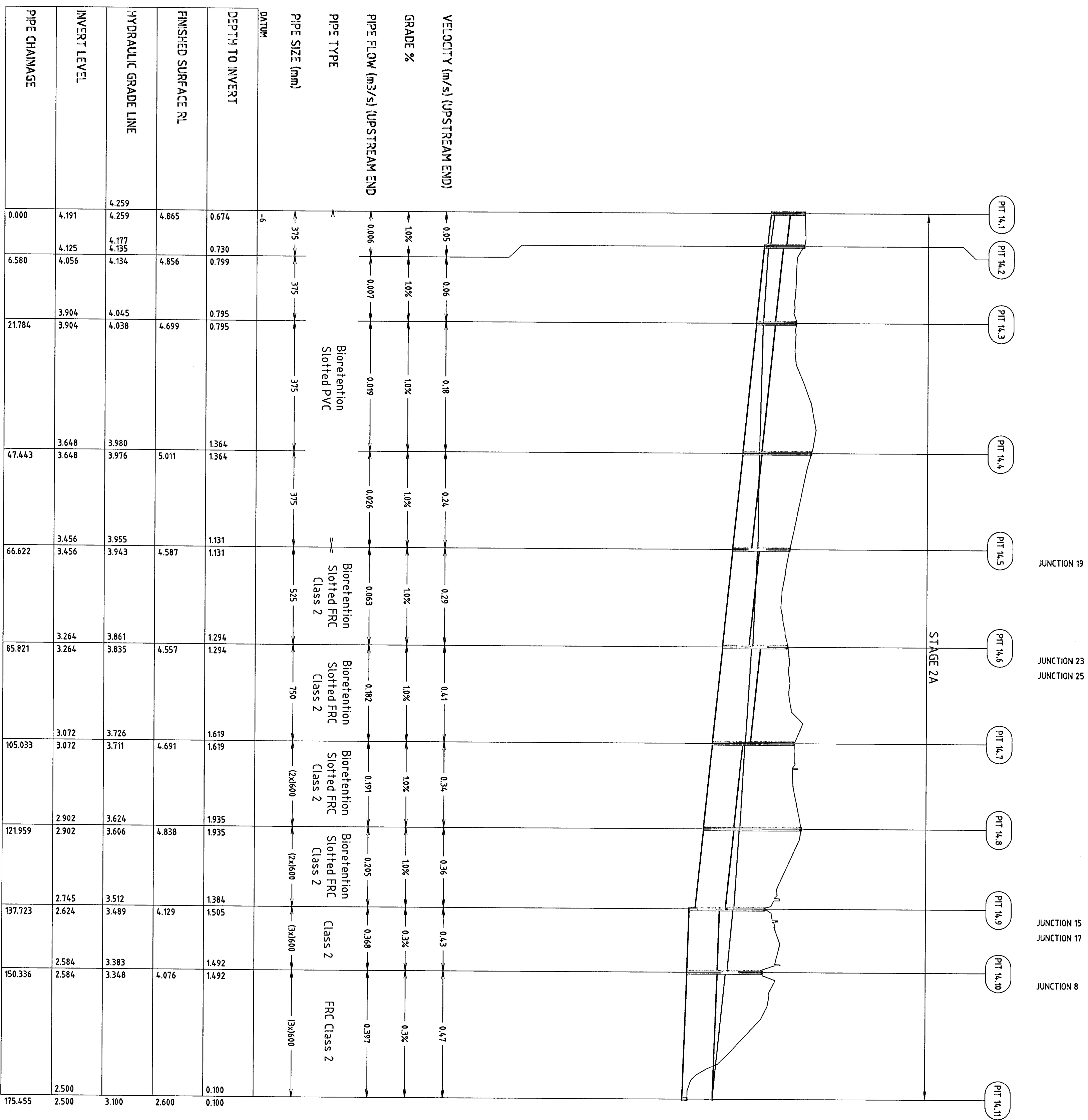
Scale: A3 SHOWN

ANGELICAN RETIREMENT VILLAGES

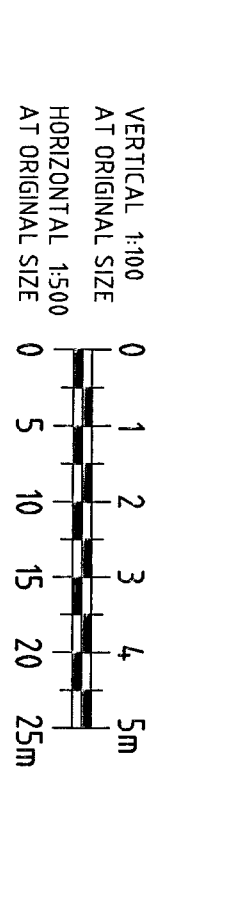
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 E: marketing@angelican.com.au, W: www.angelican.com.au

ANGELICAN RETIREMENT VILLAGES

ANGELICAN RETIREMENT VILLAGES



LEGEND
 FRC - FIBRE REINFORCED CEMENT SLOTTED PIPE
 PVC - POLYVINYL CHLORIDE SLOTTED PIPE
 FRC C1 - FIBRE REINFORCED CEMENT CLASS 4 UNSLOTTED PIPE



No.	Revised	Notes	Issued	By	Checked	Approved	Date
A	ISSUED FOR TENDER		LSM	NO	NO	7/1/2017	

Project: ANGLICAN RETIREMENT VILLAGES
 WARRIEWOOD BROOK
 CIVIL WORKS
 STORMWATER LONG SECTION - STAGE 2a, SHEET 1
 Drawing No. 21-13577-C119
 Rev: A

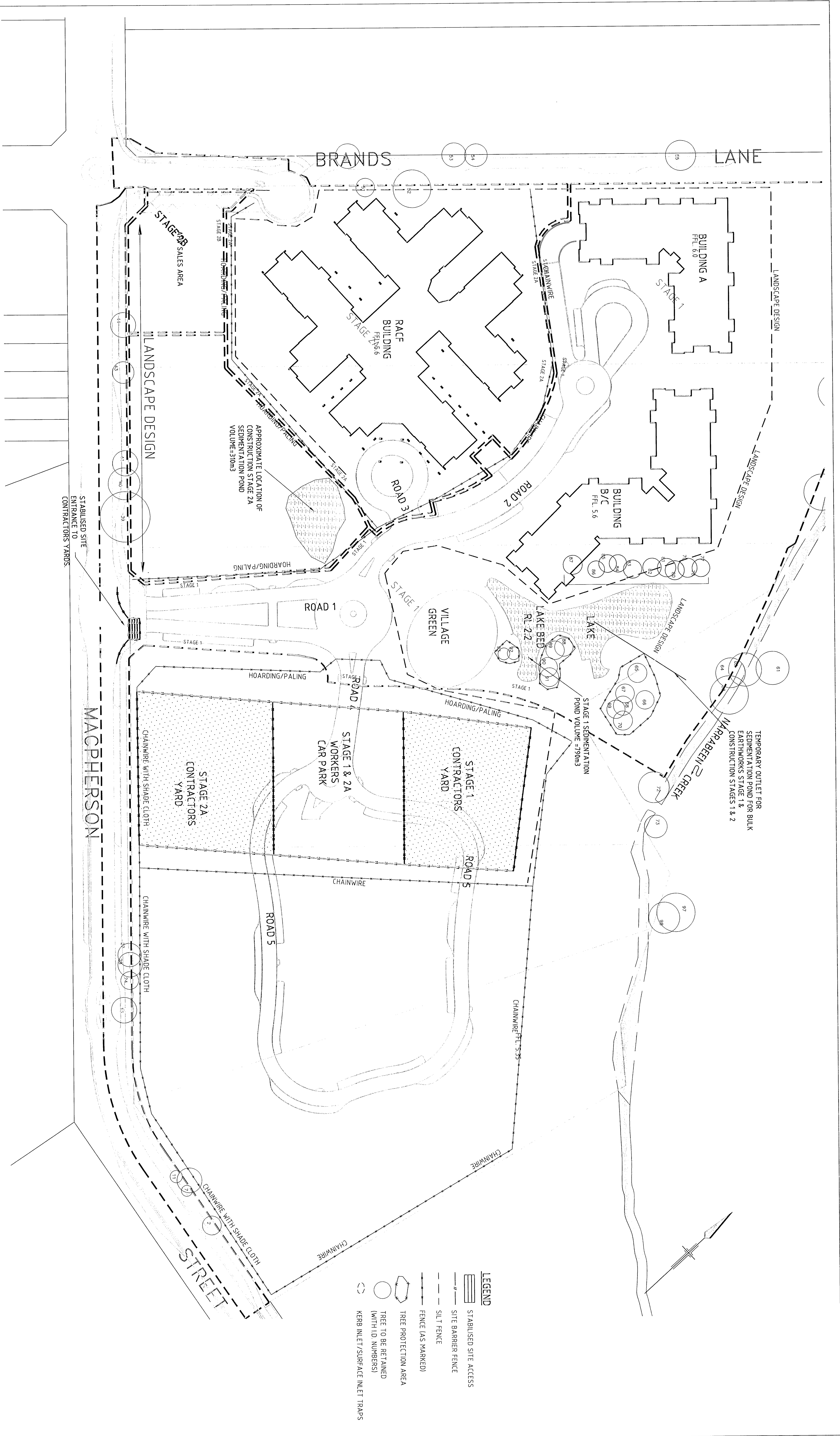
PIT SCHEDULE

PIT SCHEDULE	PIT Name	TYPE	EASTING	NORTHING	INLET DIA	OUTLET DIA	PIT FIN RL	DEPTH	Remarks
Pit 1.1	Bioretention Sag	EASTING	342021.729	6271051.083	375	3.572	3.66	4.261	0.694 P.T.T. Durham 450 x 450
Pit 1.2	Bioretention Sag	EASTING	342014.58	6271095.986	375	3.535	4.47	0.935 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.3	Bioretention Sag	EASTING	342017.88	6271080.576	375	3.342	4.177	0.835 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.4	Bioretention Sag	EASTING	342006.982	6271088.535	525	3.308	3.131	1.233 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.5	Bioretention Sag	EASTING	342007.903	6271095.772	900	3.027	4.215	1.283 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.6	Bioretention Sag	EASTING	342004.341	6271104.318	900	2.755	4.038	1.282 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.7	Bioretention Sag	EASTING	342004.341	6271104.318	900	2.755	4.038	1.282 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.8	Bioretention Sag	EASTING	341994.979	6271116.288	600	2.705	4.235	1.53 P.T.T. Durham 900 x 900	L.D. Gated
Pit 1.9	Headwall	EASTING	342002.214	6271173.559	900	2.671	4.246	1.576 P.T.T. 2 x Durham 900 x 900	L.D. Solid
Pit 1.10	Headwall	EASTING	342002.214	6271173.559	900	2.5	2.6	0.1	
Pit 13.1	Bioretention Sag	EASTING	341930.576	6271092.194	225	4.421	5.082	0.641 P.T.T. Durham 450 x 450	L.D. Gated
Pit 13.2	Bioretention Sag	EASTING	341942.278	6271092.284	225	4.382	5.185	0.773 P.T.T. Durham 450 x 450	L.D. Gated
Pit 13.3	Bioretention Sag	EASTING	341947.904	6271098.51	225	4.354	5.156	0.802 P.T.T. Durham 450 x 450	L.D. Gated
Pit 13.4	Bioretention Sag	EASTING	341952.17	6271114.082	375	3.841	3.757	4.506	0.75 P.T.T. Durham 900 x 900
Pit 13.5	Bioretention Sag	EASTING	341972.745	6271125.651	375	3.526	3.339	4.285	0.925 P.T.T. Durham 900 x 900
Pit 1.8	Bioretention Sag	EASTING	341984.979	6271116.288	525	3.259	4.235	1.53 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.1	Bioretention Sag	EASTING	341873.641	6271208.481	375	4.191	4.885	0.674 P.T.T. Durham 600 x 600	L.D. Gated
Pit 14.2	Bioretention Sag	EASTING	341870.31	6271202.806	375	4.125	4.056	0.799 P.T.T. Durham 600 x 600	L.D. Gated
Pit 14.3	Bioretention Sag	EASTING	341867.285	6271187.907	375	3.904	4.689	0.795 P.T.T. Durham 600 x 600	L.D. Gated
Pit 14.4	Bioretention Sag	EASTING	341881.782	6271180.882	375	3.648	5.011	1.364 P.T.T. Durham 600 x 600	L.D. Gated
Pit 14.5	Bioretention Sag	EASTING	341907.205	6271169.648	375	3.456	4.587	1.131 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.6	Bioretention Sag	EASTING	341926.316	6271169.152	525	3.284	4.557	1.284 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.7	Bioretention Sag	EASTING	341944.946	6271164.809	750	3.072	4.631	1.619 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.8	Bioretention Sag	EASTING	341957.283	6271176.42	600	2.902	4.838	1.935 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.9	Bioretention Sag	EASTING	341973.019	6271175.935	600	2.745	4.129	1.505 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.10	Bioretention Sag	EASTING	341985.583	6271174.83	600	2.584	4.076	1.482 P.T.T. Durham 900 x 900	L.D. Gated
Pit 14.11	Headwall	EASTING	342010.491	6271178.085	600	2.5	2.6	0.1	
Pit 18.1	Junction	EASTING	341991.94	6271286.606	450	4.785	5.65	0.864	
Pit 18.2	Junction	EASTING	341988.387	6271286.994	450	4.412	5.247	1.137 P.T.T. Durham 900 x 900	L.D. Gated
Pit 16.1	Bioretention Sag	EASTING	341977.949	6271285.358	375	4.509	5.312	0.803 P.T.T. Durham 450 x 450	L.D. Gated
Pit 16.2	Bioretention Sag	EASTING	341988.387	6271258.994	375	4.11	5.247	1.137 P.T.T. Durham 600 x 600	L.D. Gated
Pit 16.3	Bioretention Sag	EASTING	341996.421	6271242.141	600	3.829	4.956	1.127 P.T.T. Durham 900 x 900	L.D. Gated
Pit 16.4	Bioretention Sag	EASTING	341993.078	6271221.386	600	3.263	4.305	1.051 P.T.T. Durham 900 x 900	L.D. Gated
Pit 16.5	Bioretention Sag	EASTING	341994.378	6271203.932	750	3.173	4.221	1.061 P.T.T. Durham 900 x 900	L.D. Gated
Pit 16.6	Bioretention Sag	EASTING	341997.883	6271200.908	750	3.006	4.084	1.078 P.T.T. Durham 900 x 900	L.D. Gated
Pit 16.7	Junction	EASTING	341990.287	6271175.445	750	2.917	4.213	1.297 P.T.T. Durham 900 x 900	L.D. Gated
Pit 15.1	Bioretention Sag	EASTING	341967.16	6271138.929	375	3.45	4.413	0.963 P.T.T. Durham 450 x 450	L.D. Gated
Pit 15.2	Bioretention Sag	EASTING	341968.19	6271147.025	375	3.125	4.09	0.965 P.T.T. Durham 450 x 450	L.D. Gated
Pit 15.3	Bioretention Sag	EASTING	341988.039	6271164.225	375	2.952	4.044	1.092 P.T.T. Durham 450 x 450	L.D. Gated
Pit 14.9	Bioretention Sag	EASTING	341973.019	6271175.935	375	2.825	4.129	1.505 P.T.T. Durham 900 x 900	L.D. Gated
Pit 17.1	Bioretention Sag	EASTING	341887.574	6271242.131	375	4.543	5.512	0.969 P.T.T. Durham 600 x 600	L.D. Gated
Pit 17.2	Bioretention Sag	EASTING	341884.107	6271245.511	375	4.495	5.562	1.068 P.T.T. Durham 600 x 600	L.D. Gated
Pit 17.3	Bioretention Sag	EASTING	341919.084	6271268.877	375	4.164	5.644	1.48 P.T.T. Durham 600 x 600	L.D. Gated
Pit 17.4	Bioretention Sag	EASTING	341937.888	6271259.206	375	3.963	5.643	1.68 P.T.T. Durham 600 x 600	L.D. Gated
Pit 17.5	Bioretention Sag	EASTING	341951.007	6271250.051	375	3.801	5.609	1.808 P.T.T. Durham 600 x 600	L.D. Gated
Pit 17.6	Bioretention Sag	EASTING	341972.004	6271229.616	375	3.671	4.565	0.894 P.T.T. Durham 600 x 600	L.D. Gated
Pit 17.7	Bioretention Sag	EASTING	341976.979	6271209.579	375	3.496	4.288	1.02 P.T.T. Durham 900 x 900	L.D. Gated
Pit 17.8	Bioretention Sag	EASTING	341970.532	6271183.508	600	2.824	3.944	1.021 P.T.T. Durham 900 x 900	L.D. Gated

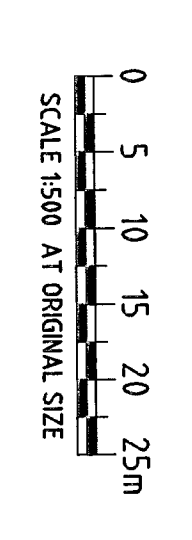
SEE SHEET C177 FOR EXTERNAL ROAD STORMWATER DETAILS

TENDER

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Drawing No: 21-13577-C126	Drawing No: 21-13577-C126

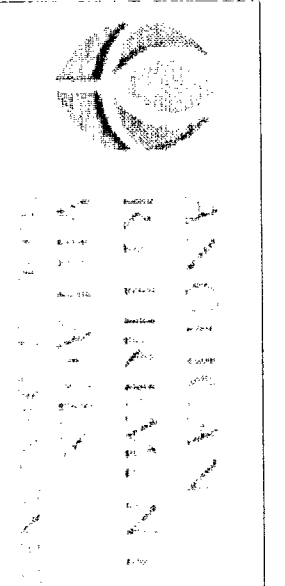


SEDIMENT & EROSION CONTROL PLAN
SCALE 1:500

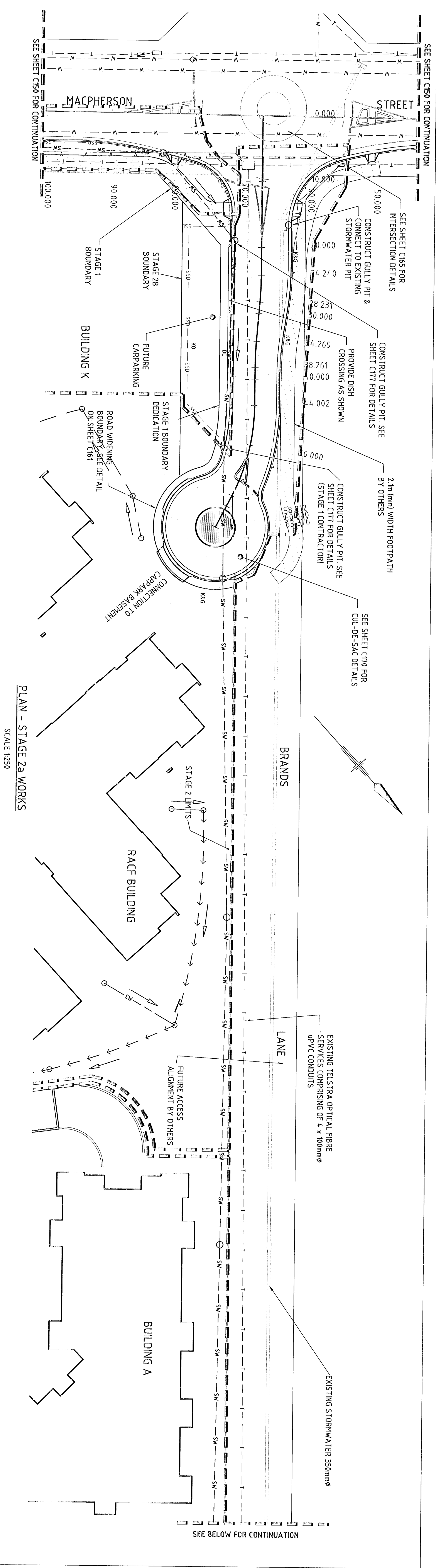


TENDER

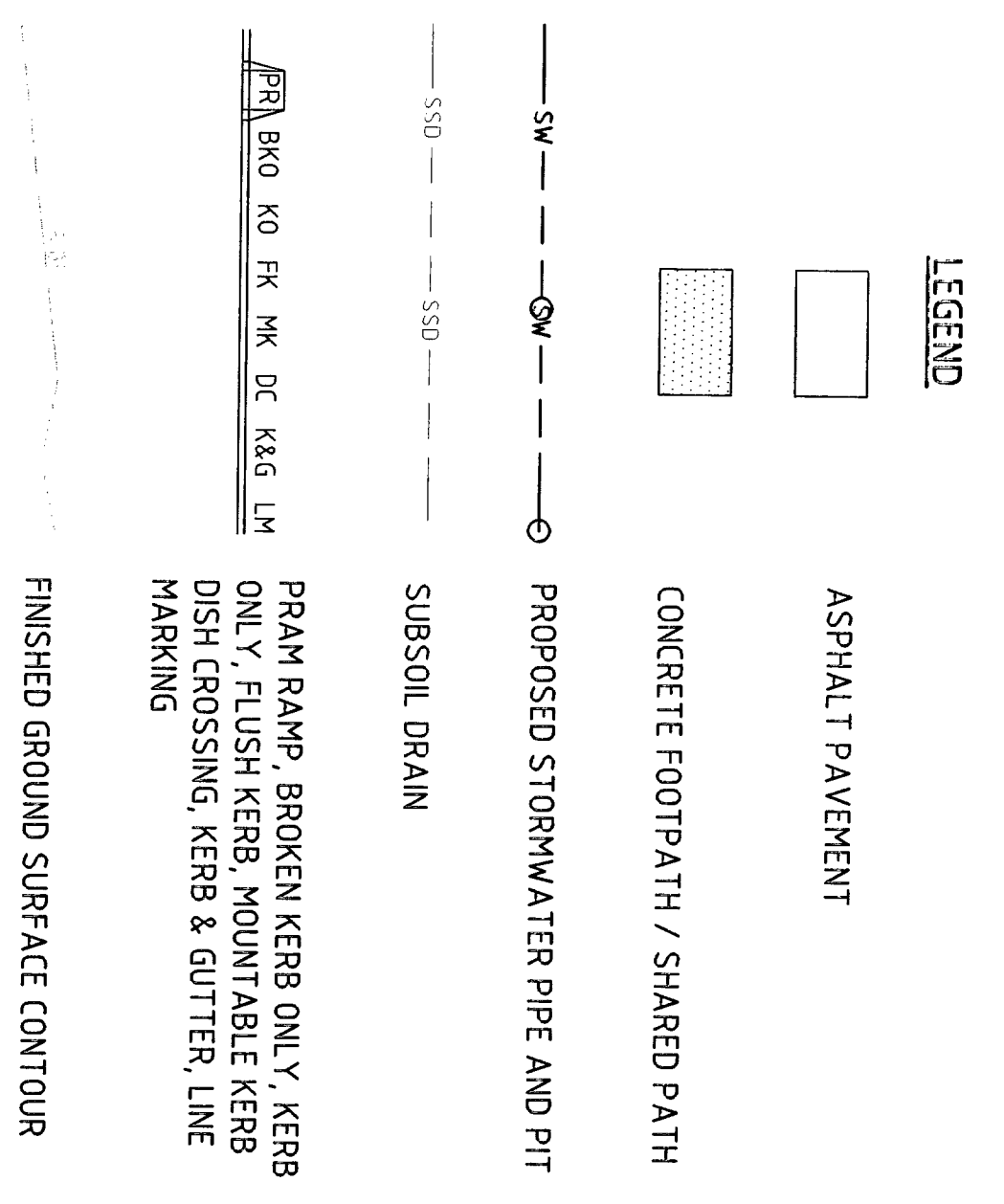
ISSUED FOR TENDER No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.		DO NOT SCALE This document may only be used for the purposes stated on the drawing. It is not to be used for any other purpose.		Client: ANGLIAN RETIREMENT VILLAGES WARRIEWOOD BROOK - STAGE 1 Project: CIVIL WORKS SEDIMENT & EROSION CONTROL PLAN Drawing No.: 21-13577-C-132 Rev: A	
No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.	No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.	No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.	No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.	No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.	No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing. Drawn: LSM ND RB7 21/10/27 Checked: Approved: Date: No. Revision: None - Indicates signature on original issue of drawing or the revision of drawing.



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PLAN - STAGE 2a WORKS
SCALE 1:250



PRAM RAMP BROKEN KERB ONLY KERB ONLY FLUSH KERB MOUNTABLE KERB DISH CROSSING, KERB & GUTTER, LINE MARKING

FINISHED GROUND SURFACE CONTOUR

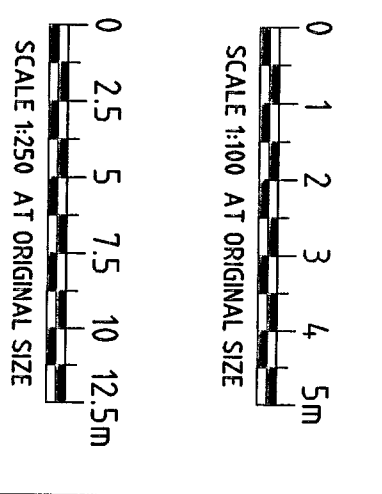
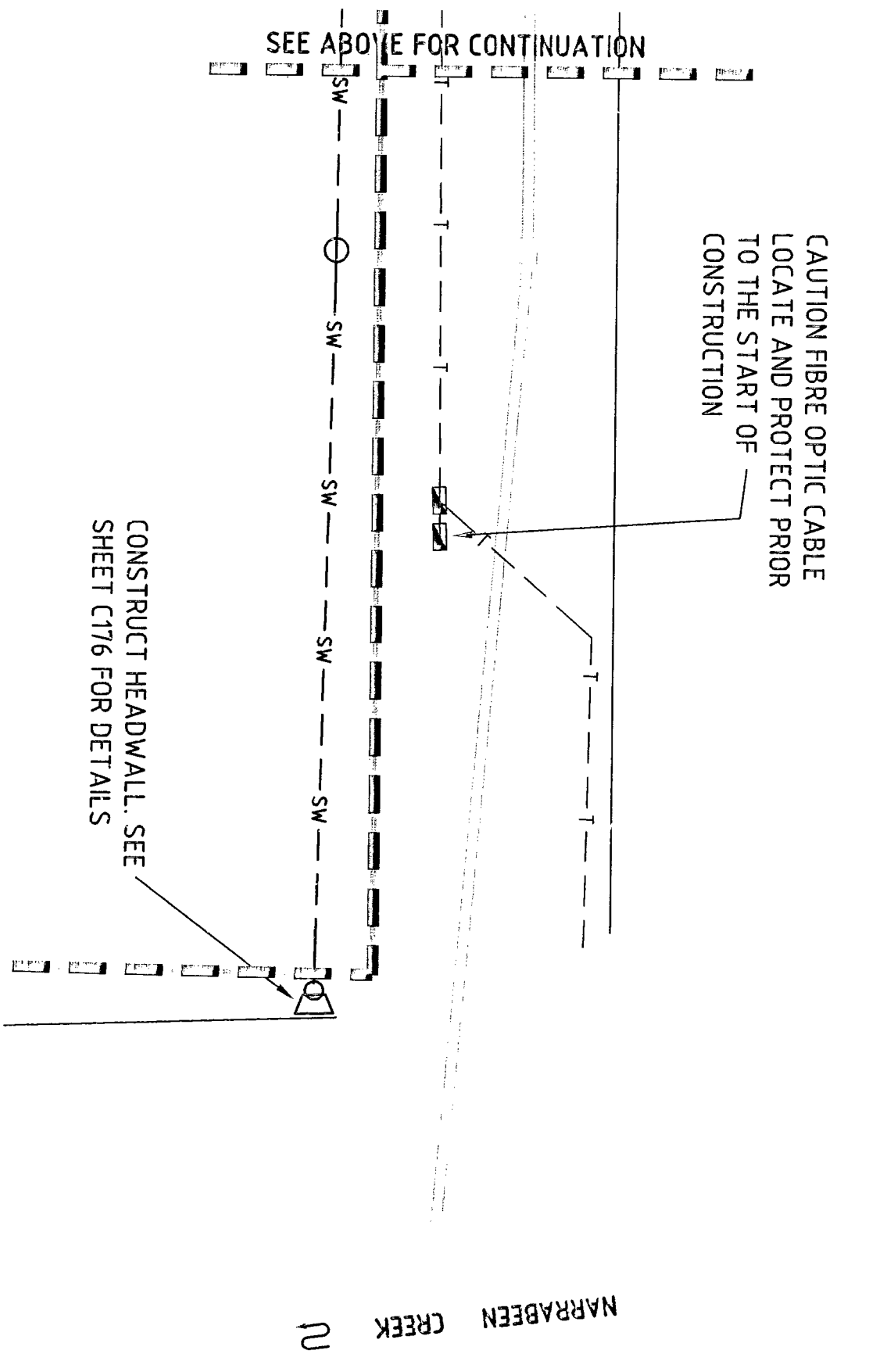
DESIGN GRADIENT VERTICAL GEOMETRY
HORIZONTAL GEOMETRY

STATION	CH	PC	PT	LC	CH	PC	PT	LC
0								
10								
12								
17								
18.546								
20								
22								
24.24								
28.231								
30								
34.249								
38.281								
40								
44.002								
50								
52								
55								
58								
60								
63.93								

LONGITUDINAL SECTION - BRANDS LANE
SCALE - HOR 1:250
VERT 1:100

NOTE:

- WORKS NOTED BY COUNCIL - RELATE TO THOSE ITEMS COVERED BY SECTION 94, PAVEMENTS BY A.R.V.
- FOR PROPOSED ELECTRICAL SERVICES WORKS, REFER TO DRG XC7070463 - SHEETS 1 TO 4.
- PRELIMINARY EXISTING TELSTRA OPTIC FIBRE SERVICE LAYED IN BRANDS LANE, COMPRISING 4 x 400mm APPLICABLE TO THIS DRAWING. THE EXACT LOCATION AND DEPTH OF THIS SERVICE IS RESPONSIBLE TO CONFIRM THE EXACT LOCATION AND DEPTH OF THIS (AND OTHER) SERVICES WITH THE RELEVANT SERVICE PROVIDER.

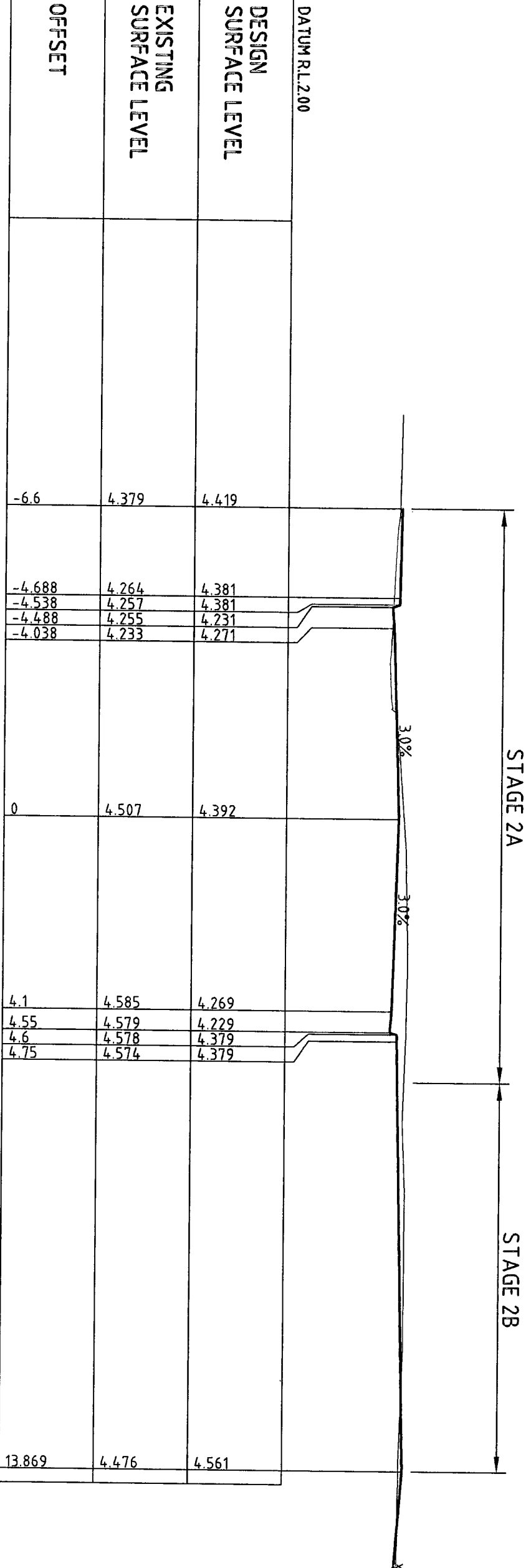
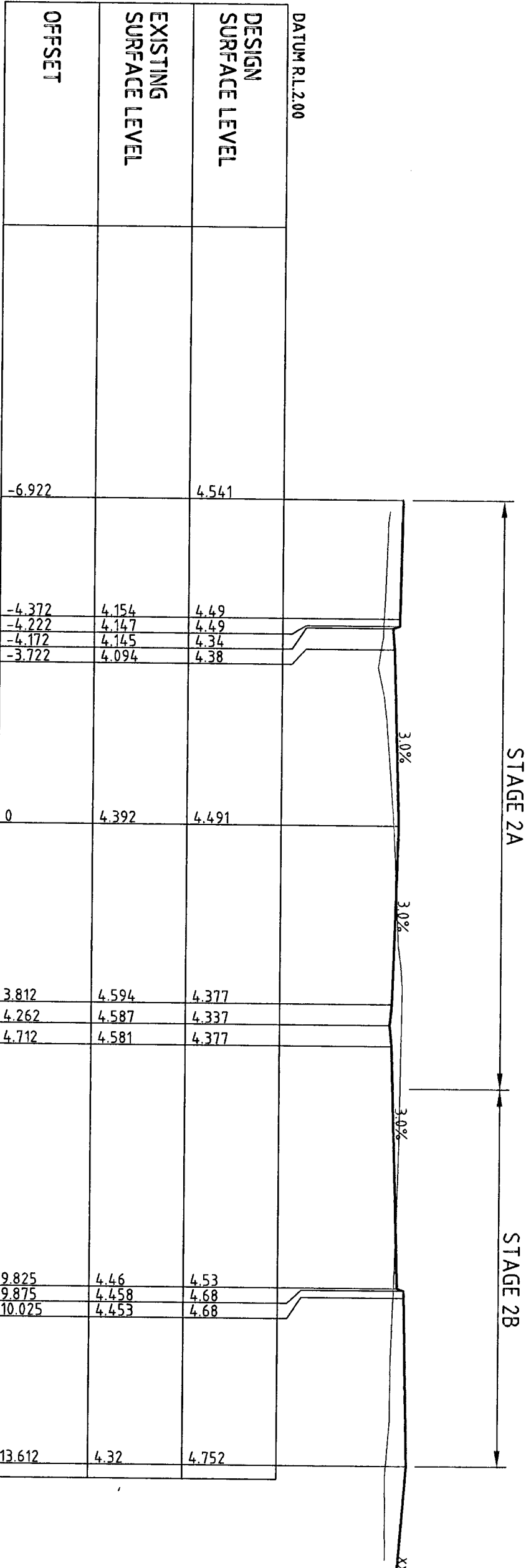
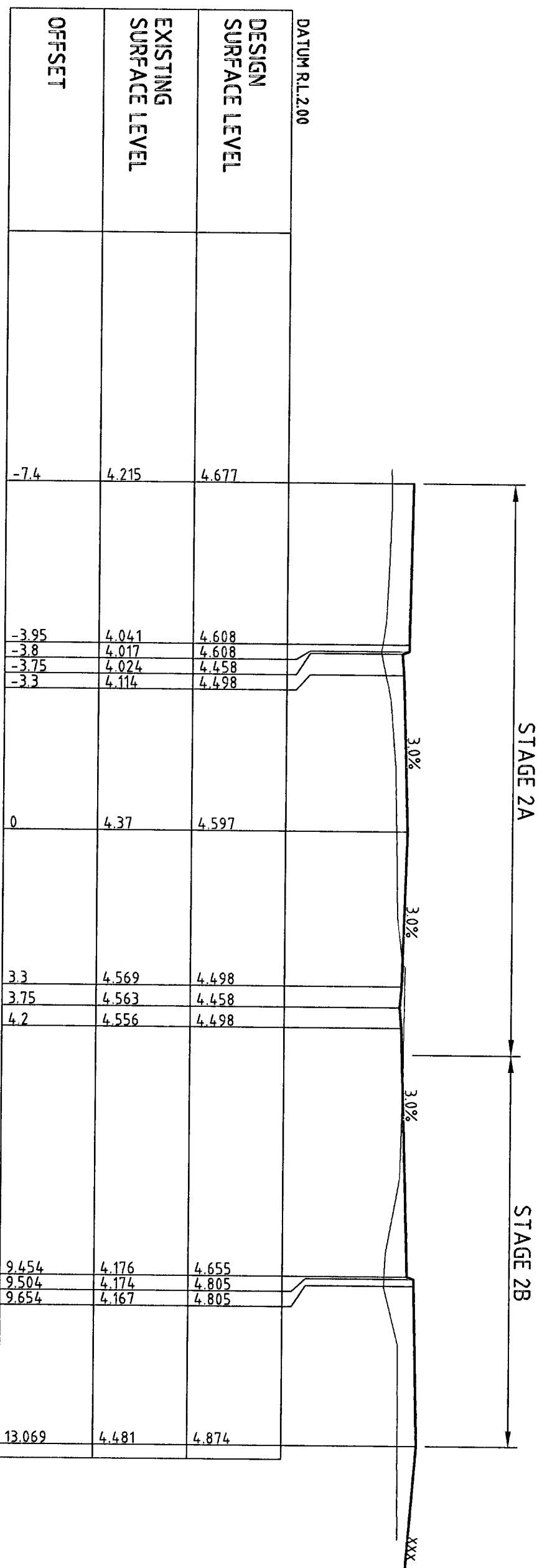
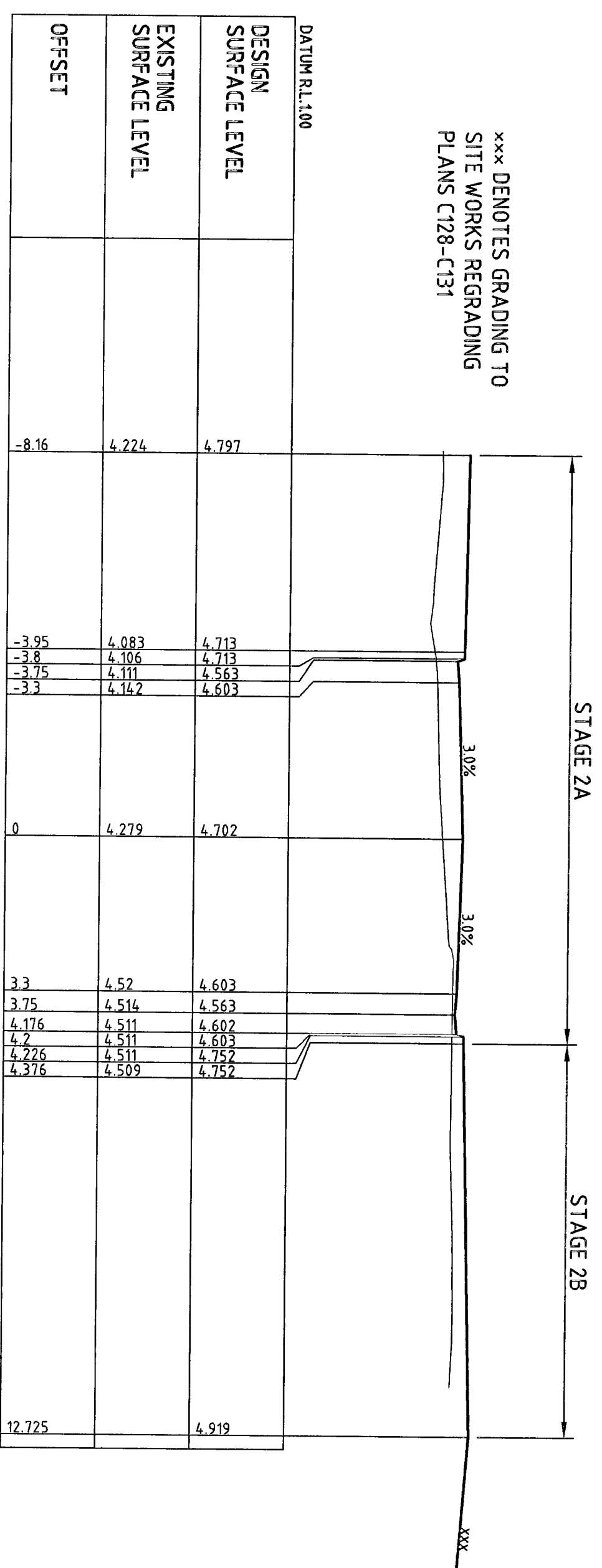


<p>ISSUED FOR TENDER</p> <p>No. Revision: None / Indicates updates on original issue of drawing or late revision of drawing. Date: 10/10/07</p> <p>Drawn: [Name] / Checked: [Name] / Approved: [Name]</p>		<p>Client: ANGELICAN RETIREMENT VILLAGES</p> <p>Project: MARRIWOOD BROOK</p> <p>Title: CIVIL WORKS</p> <p>Brand: BRANDS LANE, PLAN & LONG SECTION</p> <p>Drawing No: 21-13577-C152</p> <p>Rev: A</p>	
<p>Conditions of Use: This document may only be used for the purpose for which it was prepared and is not to be used for any other purpose.</p>		<p>Scale: AS SHOWN</p>	
<p>Design: [Name] / Date: [Date]</p>		<p>Project: [Name] / Title: [Title]</p>	

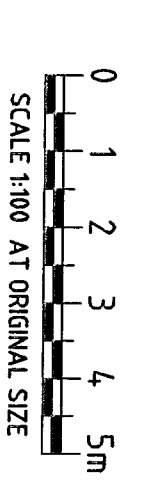
TENDER

ANGELICAN RETIREMENT VILLAGES
MARRIWOOD BROOK
CIVIL WORKS
BRANDS LANE, PLAN & LONG SECTION
Drawing No: 21-13577-C152
Rev: A

*** DEVOTES GRADING TO
SITE WORKS REGRADING
PLANS C128-C131



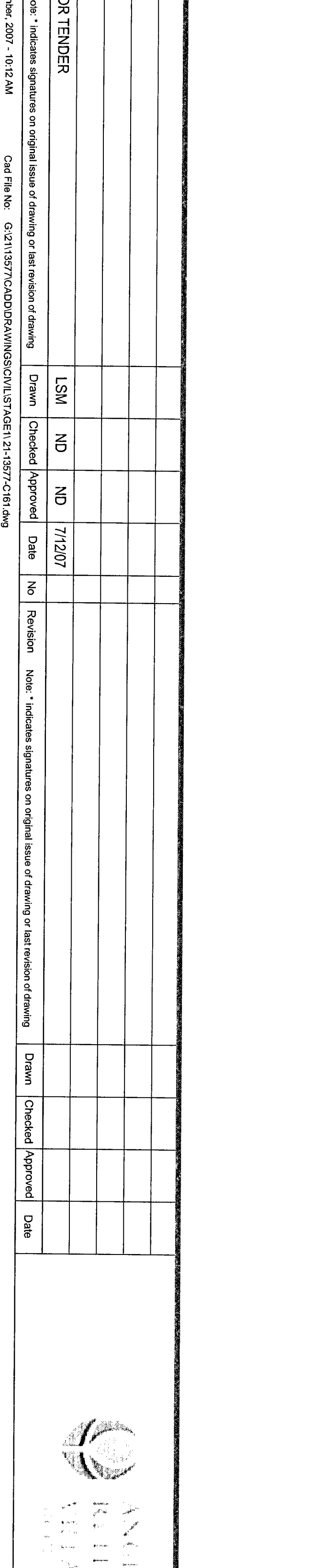
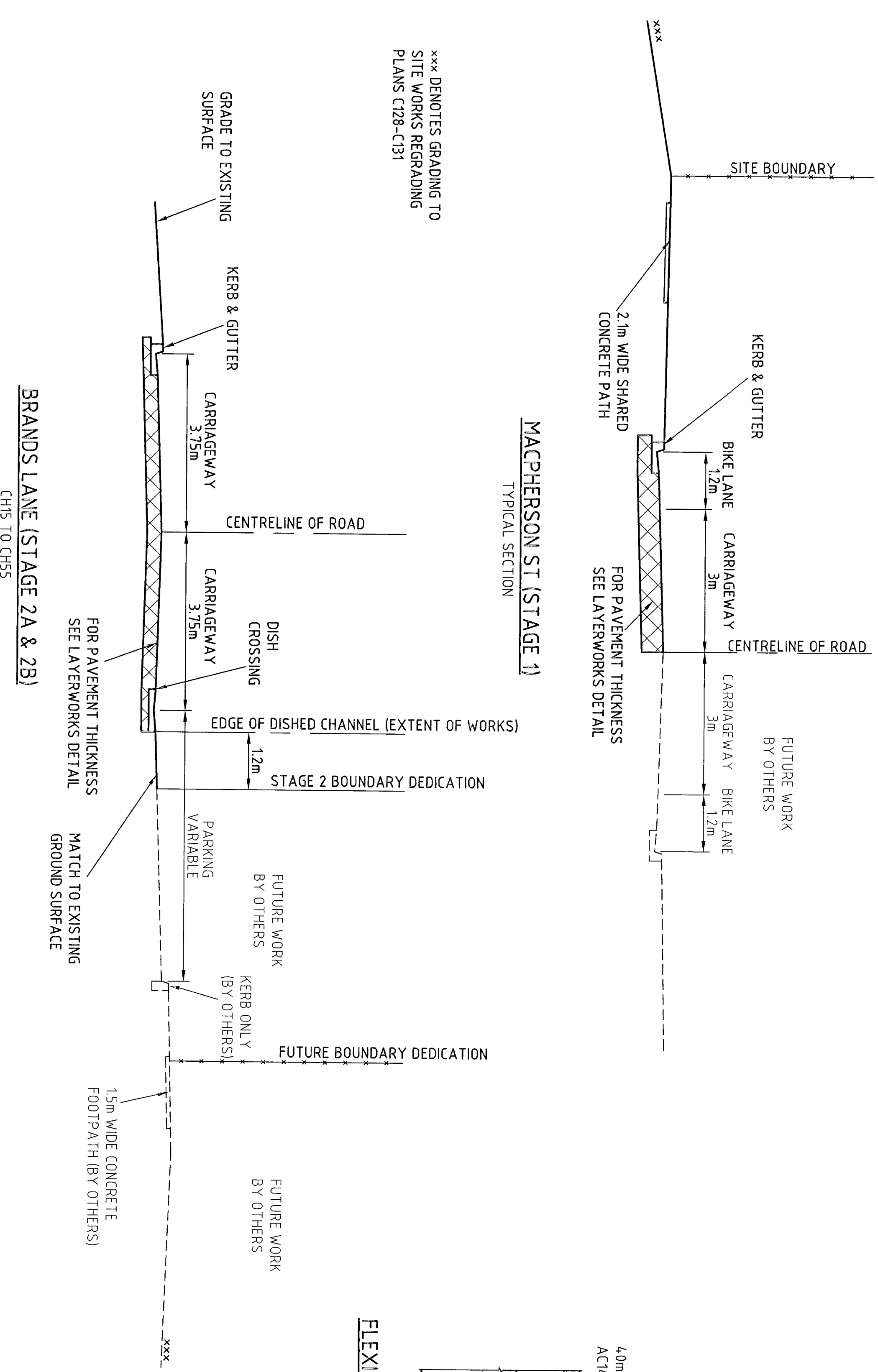
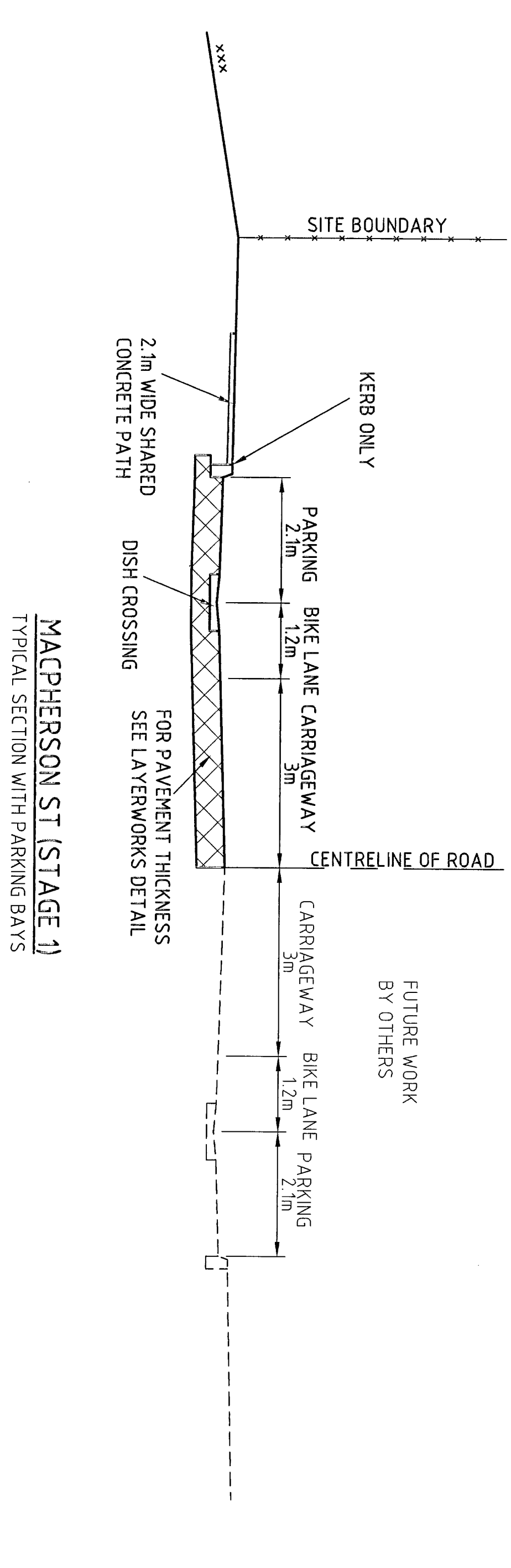
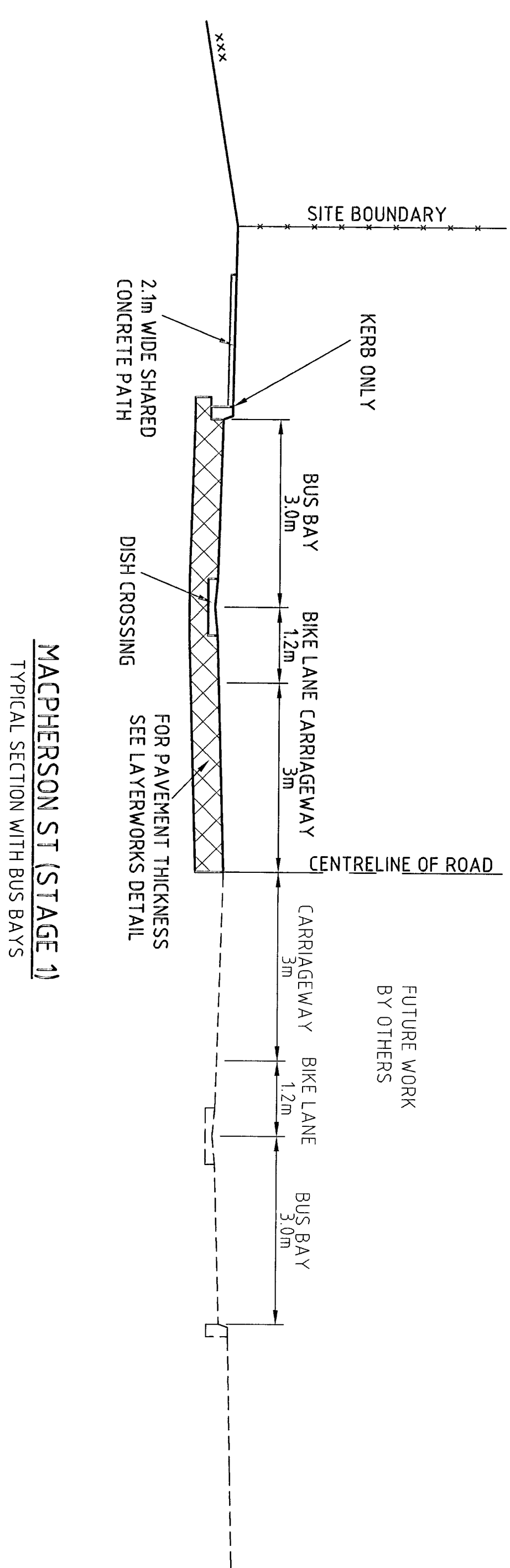
BRANDS LANE CROSS SECTIONS
SCALE - HOR 1:100
VERT 1:100



TENDER

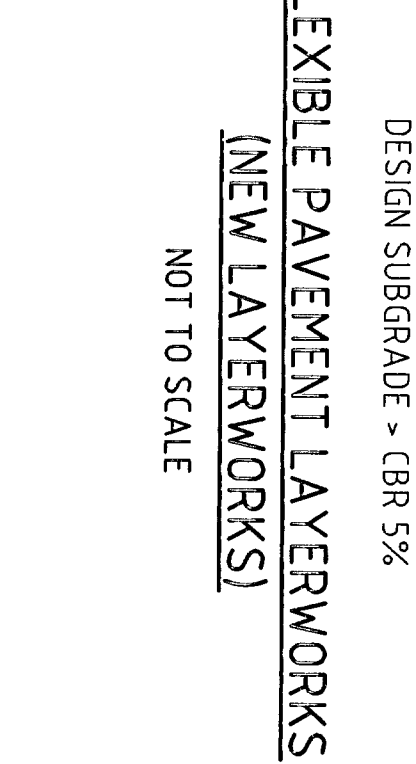
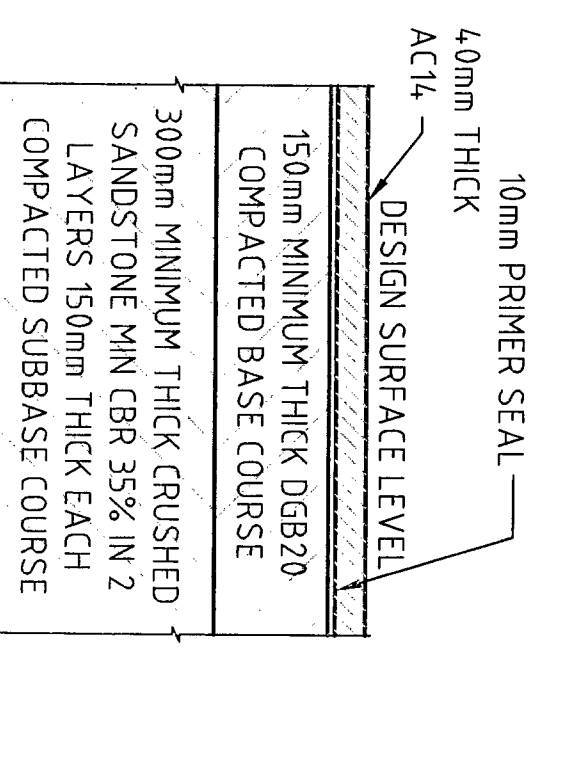
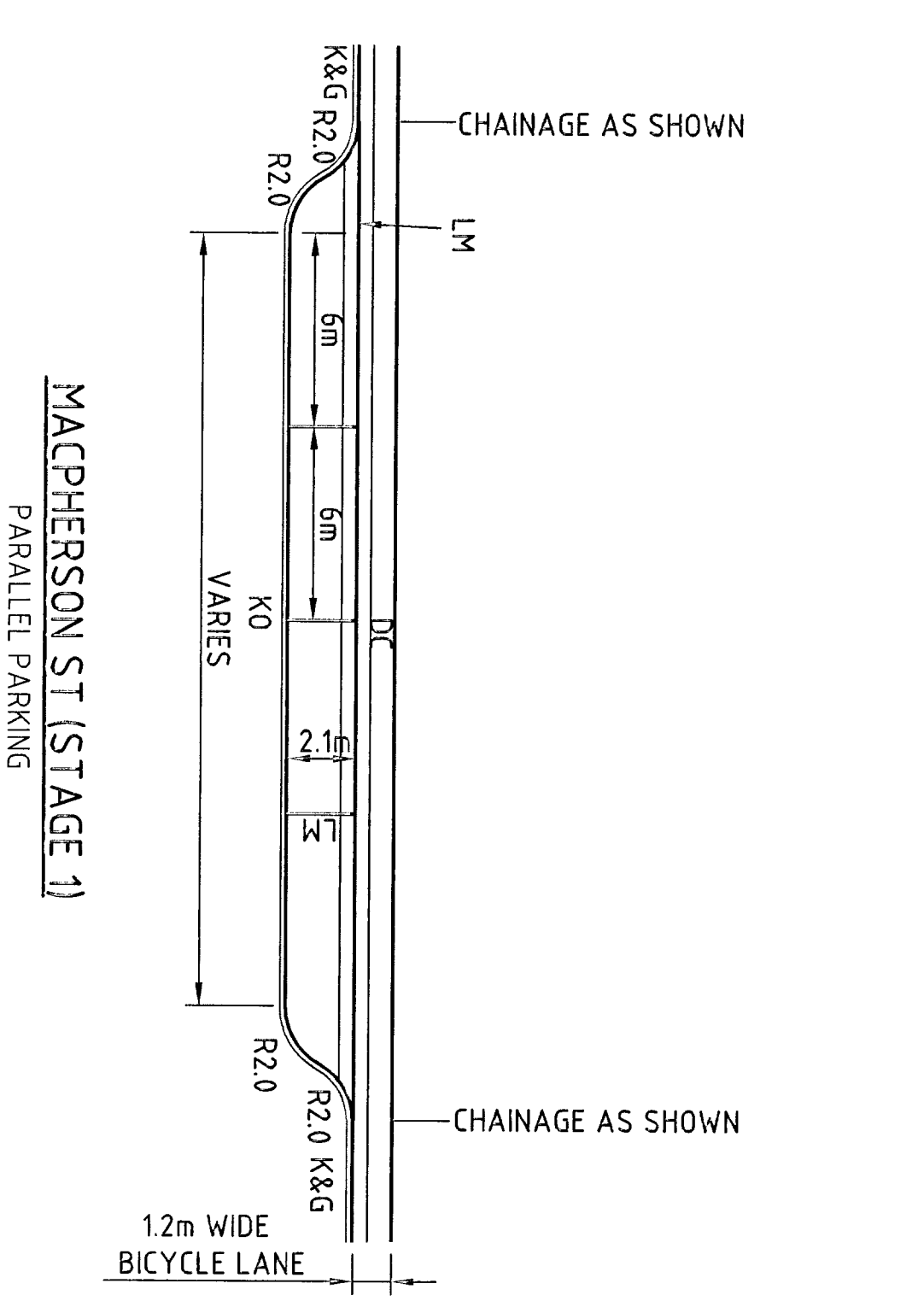
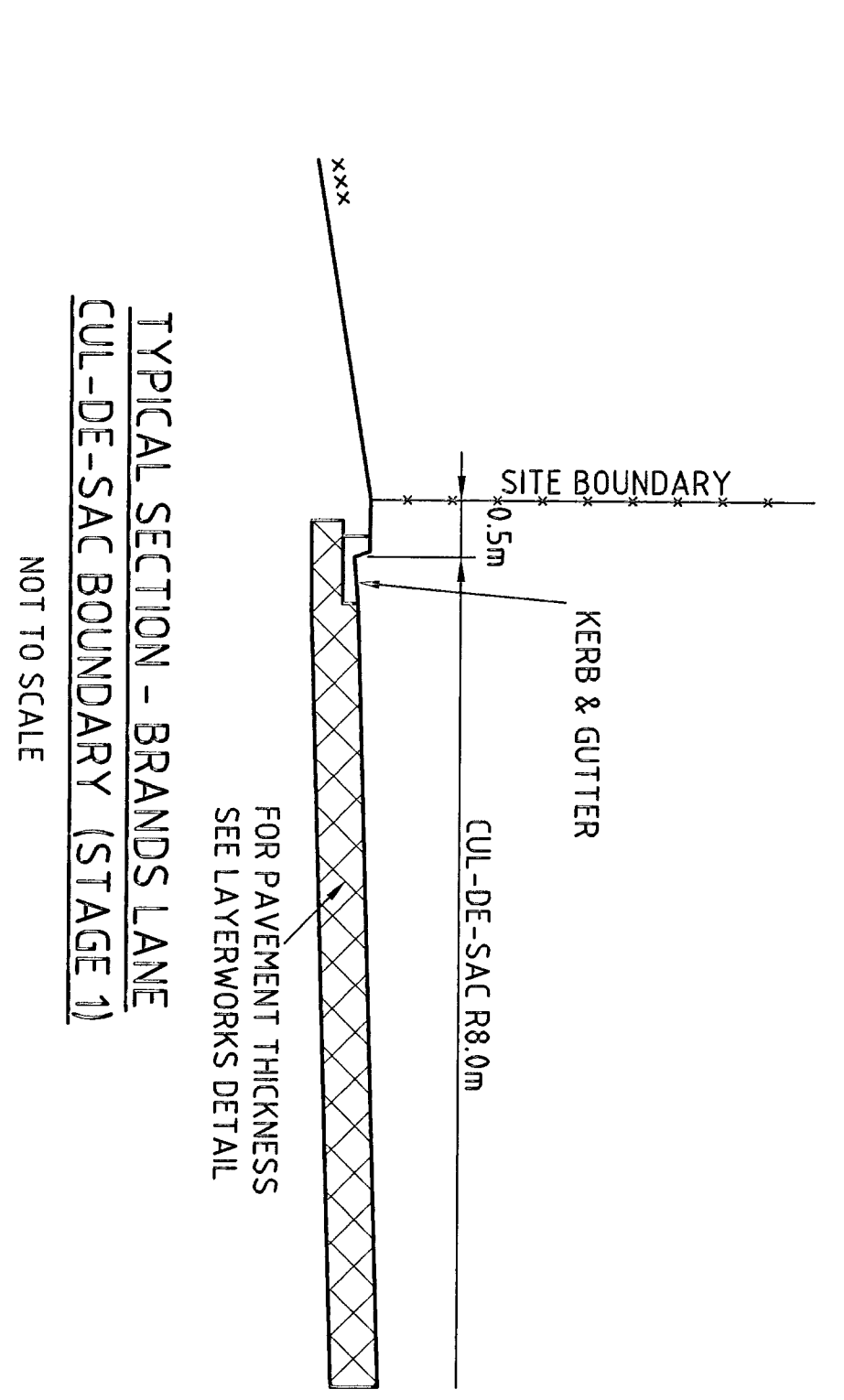
NOTES:
1. STAGE 2B INVOLVES THE FUTURE CONSTRUCTION OF BUILDING K AND IS NOT PART OF THE STAGE 1 OR 2A WORKS

ISSUED FOR TENDER		LSM	NDP	AMC	7/2/07	Rev	1
Scale	Issue	Checked	Approved	Date	Rev	Revision	Note
1:100	As Issued	LSM	NDP	7/2/07	1		
<p>DO NOT SCALE</p> <p>GHD Pty Ltd This document may only be used for the purposes for which it was prepared and for no other purpose.</p> <p>Client: AVGILCAN RETIREMENT VILLAGES Project: WARREWOOD BROOK - STAGE 2A Table: CIVIL WORKS - OFFSITE ROADS Drawing No: 21-13577-C158</p> <p>Scale: AS SHOWN</p> <p>Design No: 51</p> <p>Rev: A</p>							



GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CIVIL WORKS SPECIFICATION. WHEN DISCREPANCIES ARISE, THE CONTRACTOR SHALL ADVISE THE SUPERINTENDENT IMMEDIATELY FOR CLARIFICATION.
2. PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING SERVICES AND STRUCTURES WHETHER OR NOT SHOWN ON THE DRAWINGS. ANY DAMAGE TO EXISTING SERVICES AND STRUCTURES SHALL BE RECTIFIED AT THE CONTRACTOR'S EXPENSE. 10mm COMPRESSIBLE FILLER MATERIAL SHALL BE PLACED AROUND EXPOSED SERVICES AND STRUCTURES. ALL SERVICE COVERS SHALL BE ADJUSTED TO SUIT FINISHED SURFACE LEVELS.
3. THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
4. TO MINIMISE DISRUPTION THE CONTRACTOR SHALL STAGE THE WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
5. ALL NEW WORKS SHALL BE SMOOTHLY TRANSTIONED INTO EXISTING WORKS.
6. DIMENSIONS OF ANY DETAIL SHALL NOT BE SCALED. DIMENSIONS, IF IN DOUBT, SHALL BE VERIFIED BY THE SUPERINTENDENT.
7. ALL SURVEY DATA AND CONTROL DATA SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC MANAGEMENT MEASURES WHICH ARE TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION.
9. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING THE FINAL ASPHALTIC CONCRETE SEAL LAYER.
10. ALL WORK ON SYDNEY WATER INFRASTRUCTURE TO BE CARRIED OUT IN ACCORDANCE WITH THE DESIGN DRAWINGS AND SYDNEY WATER STANDARDS BY SYDNEY WATER ACCREDITED CONTRACTORS.
11. THE CONTRACTOR SHALL CHECK LOCATION SIZE AND INVERT LEVEL OF ALL STORMWATER PIPES/PITS AND SEWER PIPES MANHOLES ETC PRIOR TO ANY WORK COMMENCING AND SHALL NOTIFY THE SUPERINTENDENT IF THERE ARE ANY DISCREPANCIES WITH THE DESIGN DRAWING.



ISSUES FOR TENDER

No	Revision	Notes	Author	Checked	Approved	Date
A	LSM	ND	ND	17/07/07		

DO NOT SCALE

Drawn	LSM	Checked	ND	Approved	R. REBERG	Date	10/07
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ANGELICAN RETIREMENT VILLAGES

WARREWOOD BROOK

CIVIL WORKS - OFFSITE ROADS

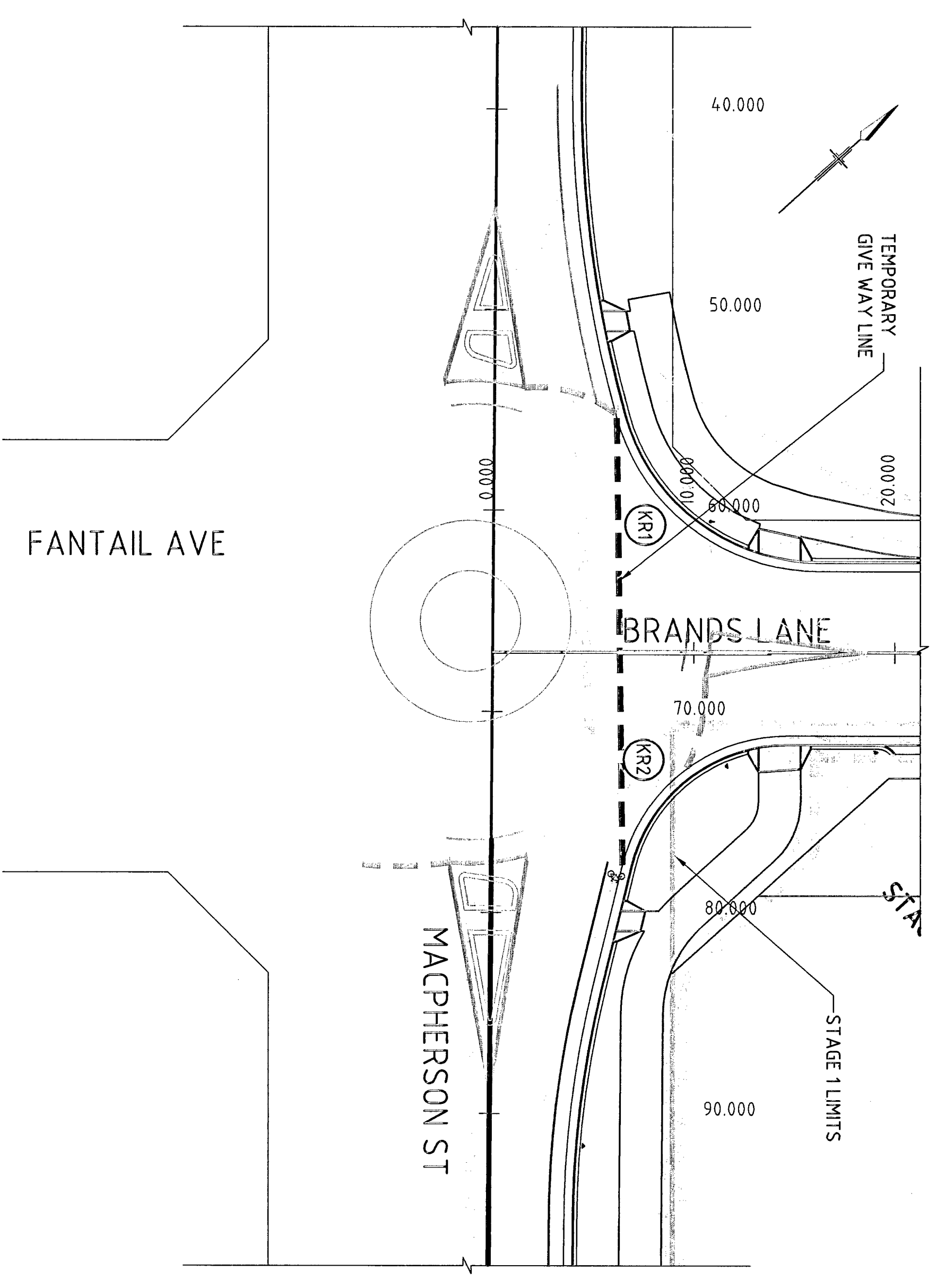
TYPICAL SECTIONS & DETAILS

Project: 21-13577-C-161

Drawing No: 21-13577-C-161

Rev: A





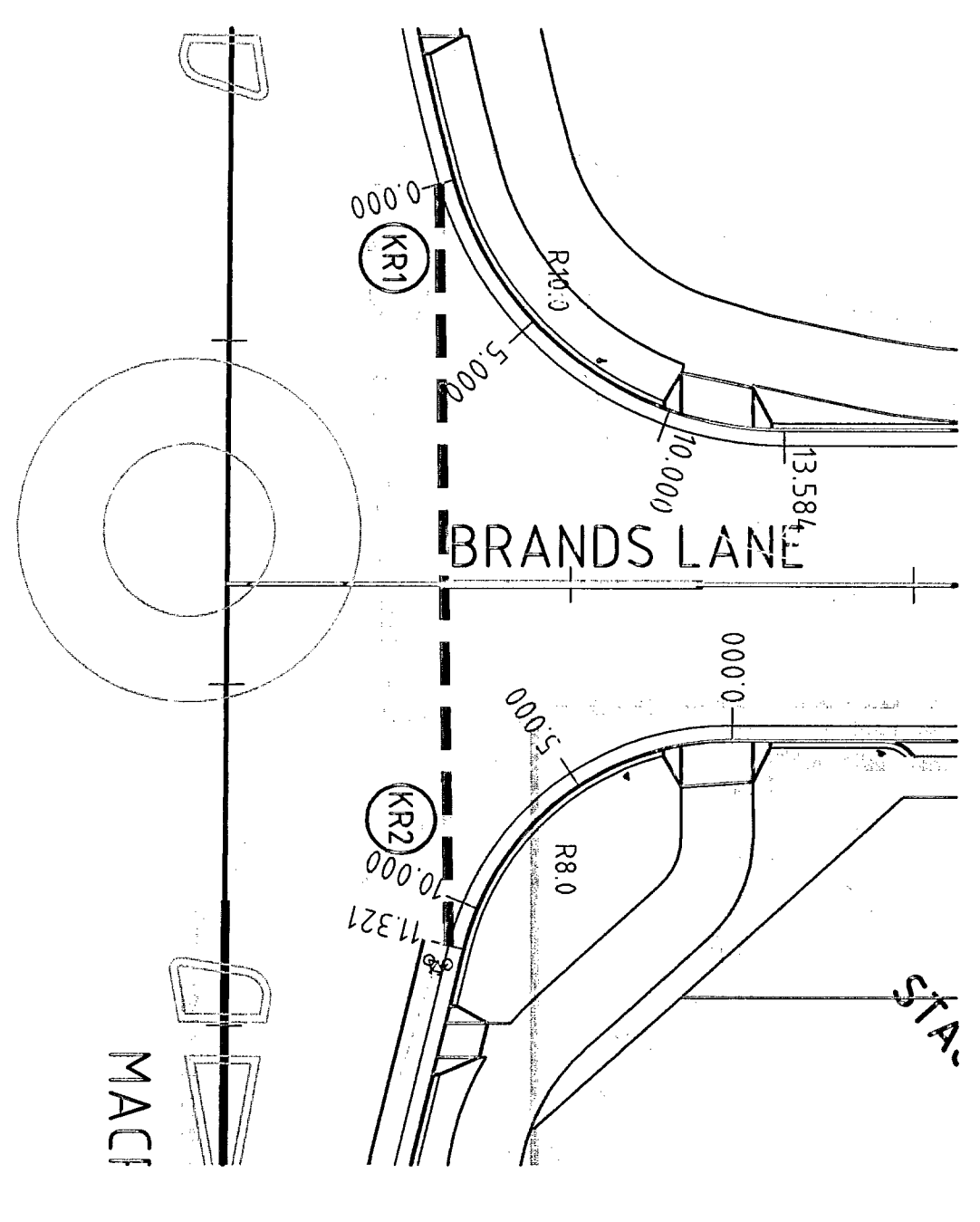
PLAN
SCALE 1:200

DATA	LP	EXISTING SURFACE	CHANGE
0	4.595	4.54	0
3.396	4.522	4.551	3.396
6.792	4.449	4.439	6.792
10.188	4.41	4.378	10.188
13.584	4.317	4.276	13.584
16.980	4.24		16.980

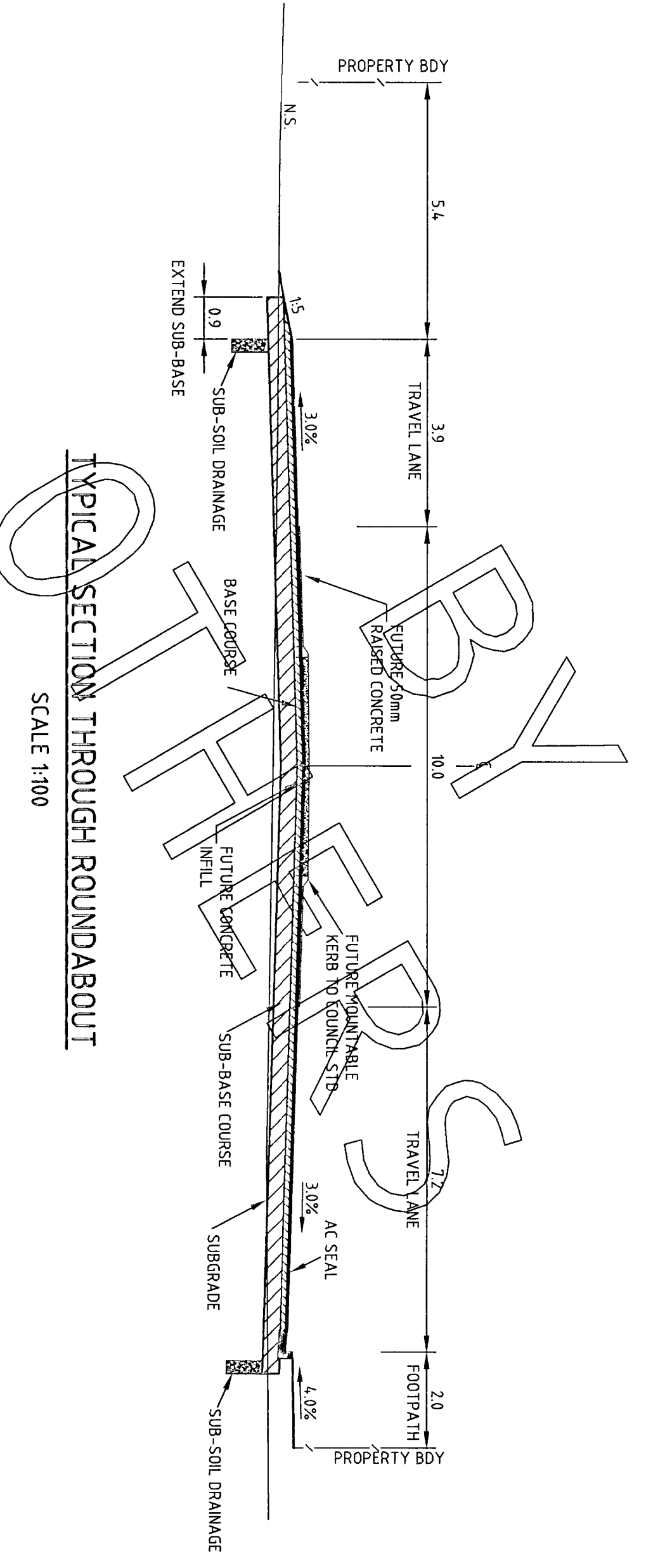
KERR RETURN 1
[STAGE 2A]
SCALE - HOR 1:200
VERT 1:20

DATA	LP	EXISTING SURFACE	CHANGE
4.288	4.325	4.321	4.288
4.37	4.402	4.419	4.37
4.393	4.393		4.393
4.348			4.348

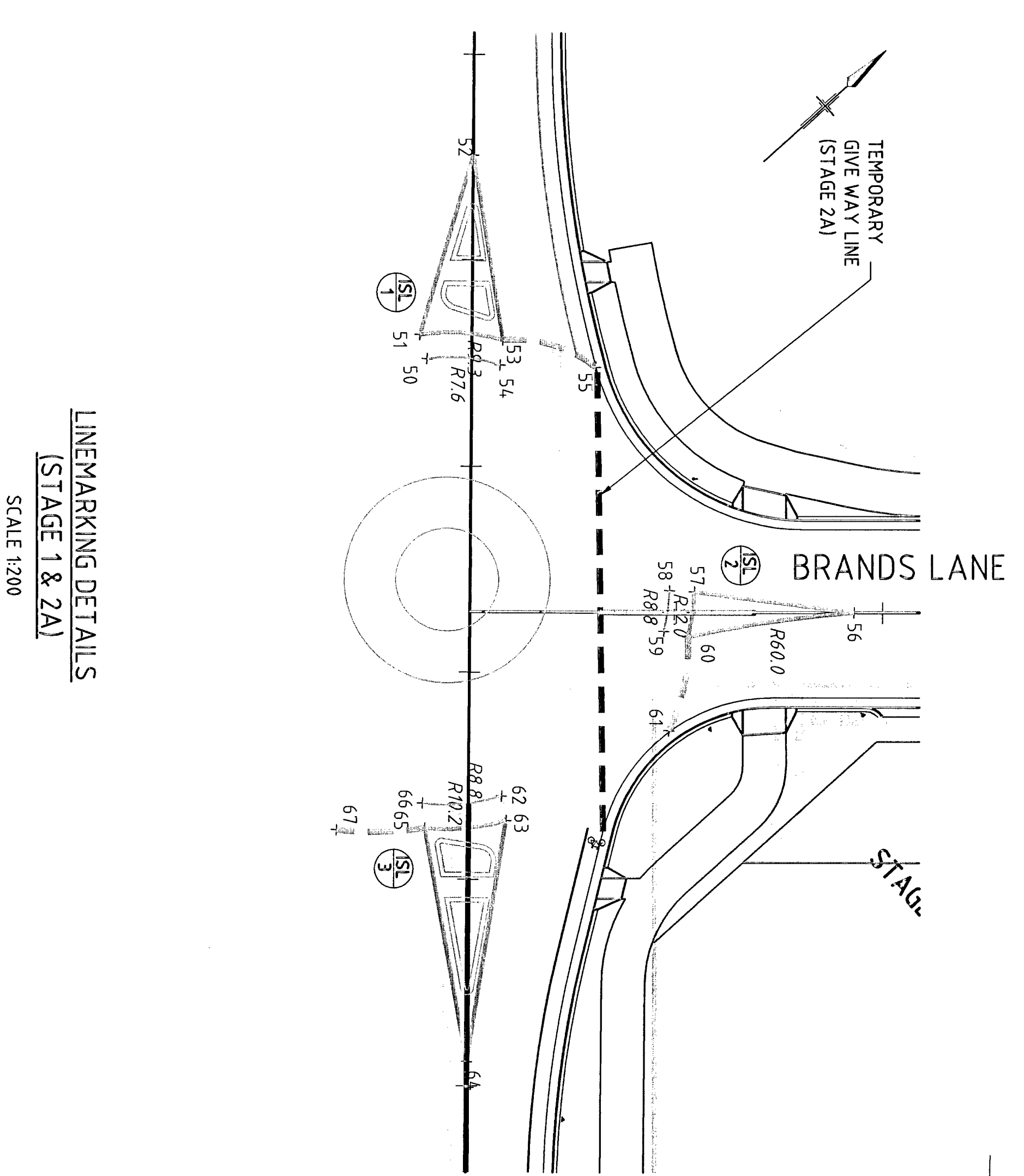
KERR RETURN 2
[STAGE 1]
SCALE - HOR 1:200
VERT 1:20



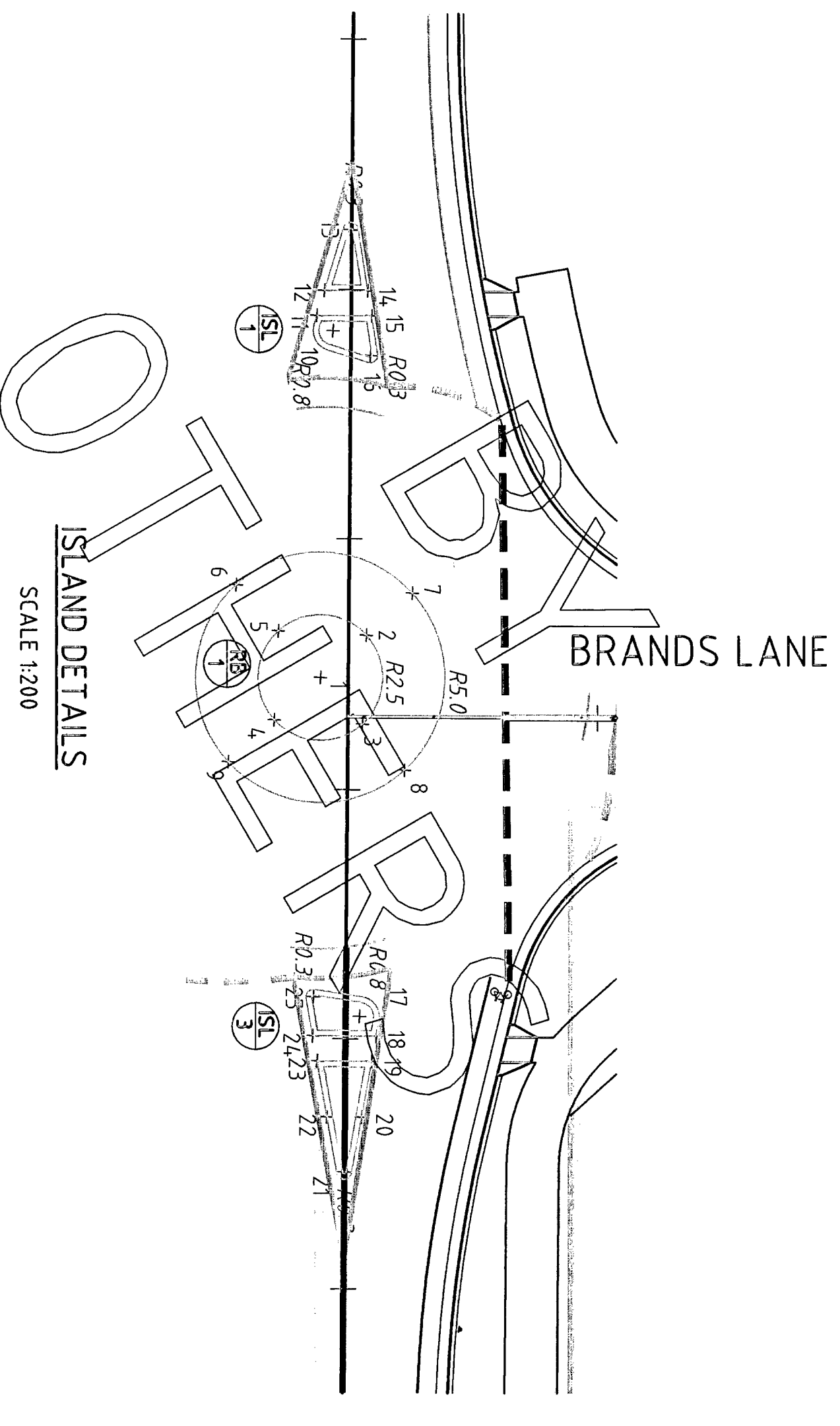
KERR RETURN PLAN
SCALE 1:200



TYPICAL SECTION THROUGH ROUNDABOUT
SCALE 1:100



LINEMARKING DETAILS
[STAGE 1 & 2A]
SCALE 1:200



ISLAND DETAILS
SCALE 1:200

NOTE

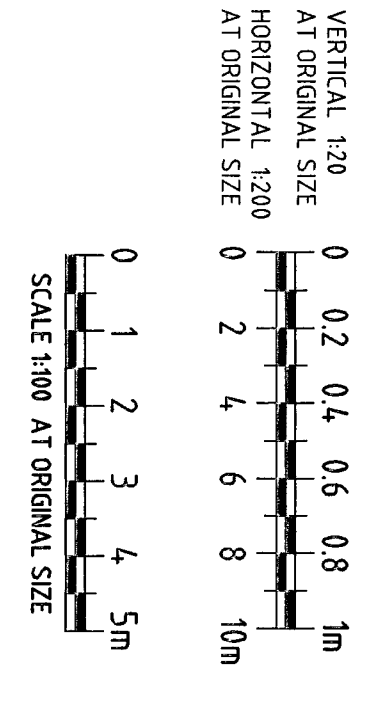
1. STAGE 1 WORKS INCLUDES CONSTRUCTION OF KR2 AND GIVE WAY LINE MARKING WITHIN BRANDS LANE.
2. STAGE 2A WORKS INCLUDES CONSTRUCTION OF KR1 AND ISL2 ALONG WITH BRANDS LANE (REF DRG C163).
3. CONSTRUCTION OF THE BRANDS LANE ROUNDABOUT AND ISLANDS 1 & 3 TO BE COMPLETED BY THE END OF 2024.
4. FOOTPATH ALONG KR1 TO BE CONSTRUCTED IN STAGE 2A BUT REQUIRES RELOCATION OF PRIVATE BOUNDARY AND MAY REQUIRE A TEMPORARY PATH IN A SUITABLE INTERIM LOCATION AGAINST KR1.

ISLAND SETOUT

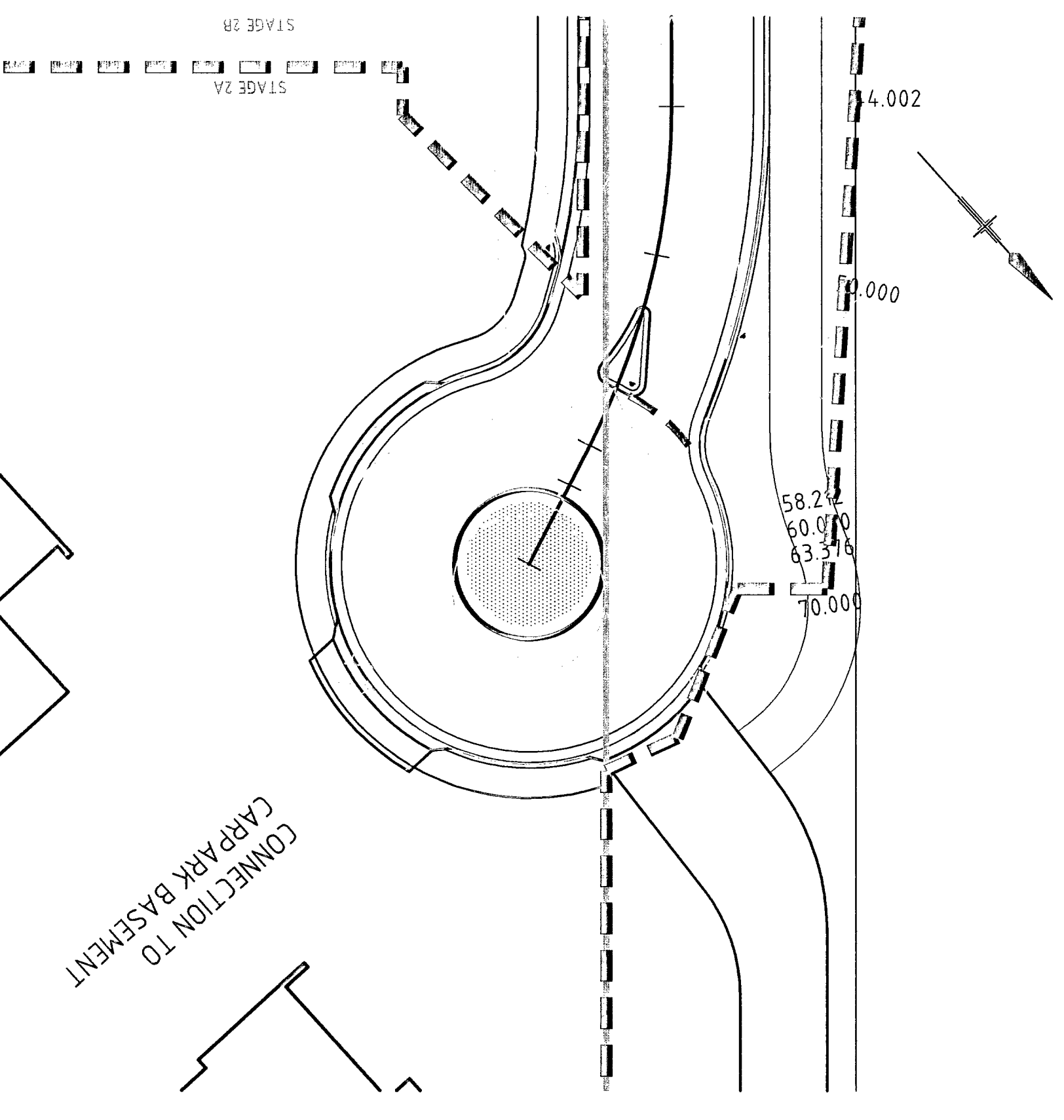
POINT EASTING	NORTHING
1 34,815,256	62,717,327
2 34,815,256	62,717,577
3 34,817,156	62,717,277
4 34,815,256	62,717,877
5 34,817,156	62,717,277
6 34,815,256	62,717,577
7 34,817,156	62,717,277
8 34,815,256	62,717,577
9 34,817,156	62,717,277
10 34,815,256	62,717,577
11 34,817,156	62,717,277
12 34,815,256	62,717,577
13 34,817,156	62,717,277
14 34,815,256	62,717,577
15 34,817,156	62,717,277
16 34,815,256	62,717,577
17 34,817,156	62,717,277
18 34,815,256	62,717,577
19 34,817,156	62,717,277
20 34,815,256	62,717,577
21 34,817,156	62,717,277
22 34,815,256	62,717,577
23 34,817,156	62,717,277
24 34,815,256	62,717,577
25 34,817,156	62,717,277

LINEMARKING SETOUT

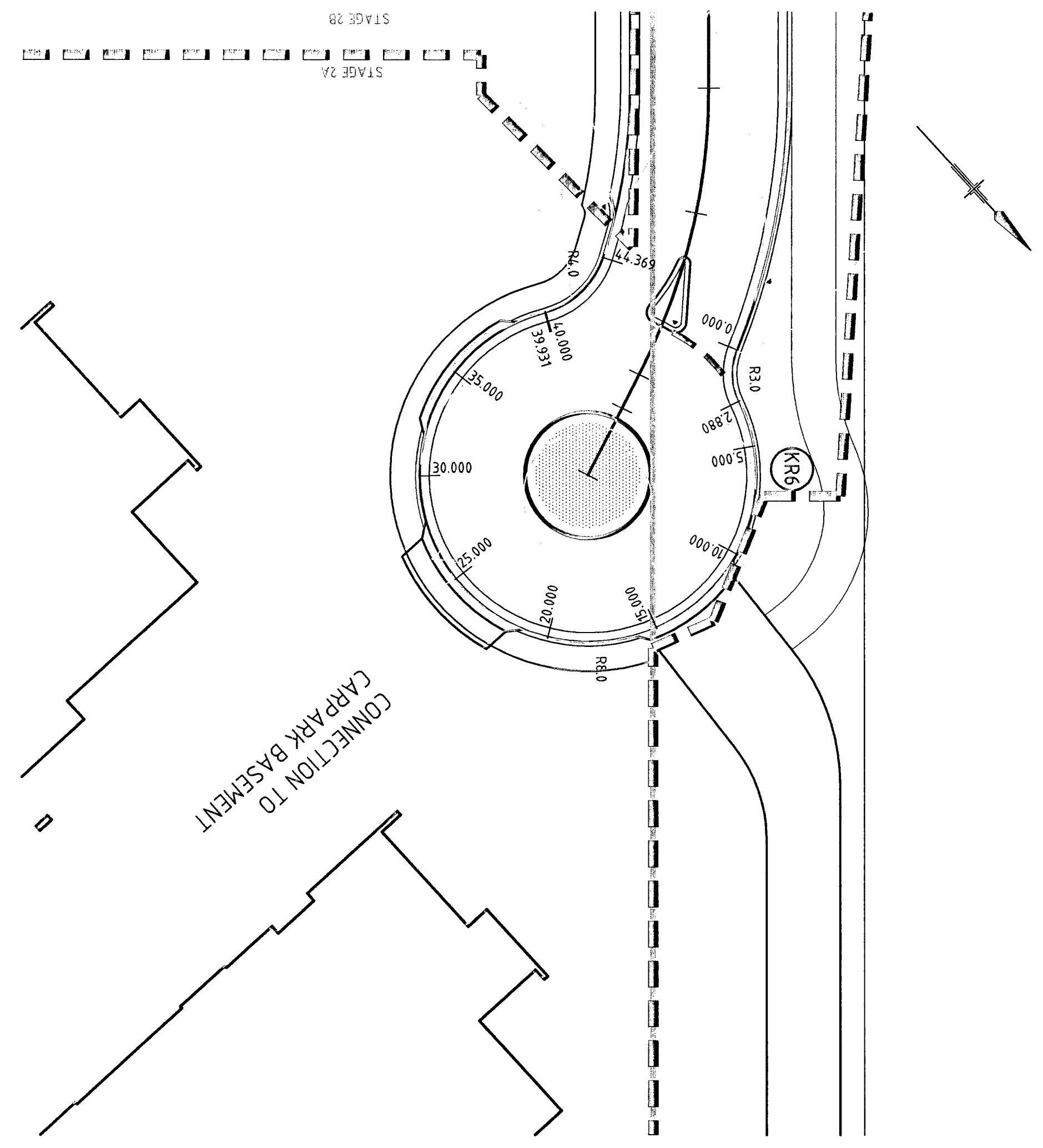
POINT EASTING	NORTHING
1 34,808,681	62,717,920
2 34,808,681	62,718,170
3 34,810,581	62,717,670
4 34,808,681	62,718,170
5 34,810,581	62,717,670
6 34,808,681	62,718,170
7 34,810,581	62,717,670
8 34,808,681	62,718,170
9 34,810,581	62,717,670
10 34,808,681	62,718,170
11 34,810,581	62,717,670
12 34,808,681	62,718,170
13 34,810,581	62,717,670
14 34,808,681	62,718,170
15 34,810,581	62,717,670
16 34,808,681	62,718,170
17 34,810,581	62,717,670
18 34,808,681	62,718,170
19 34,810,581	62,717,670
20 34,808,681	62,718,170
21 34,810,581	62,717,670
22 34,808,681	62,718,170
23 34,810,581	62,717,670
24 34,808,681	62,718,170
25 34,810,581	62,717,670



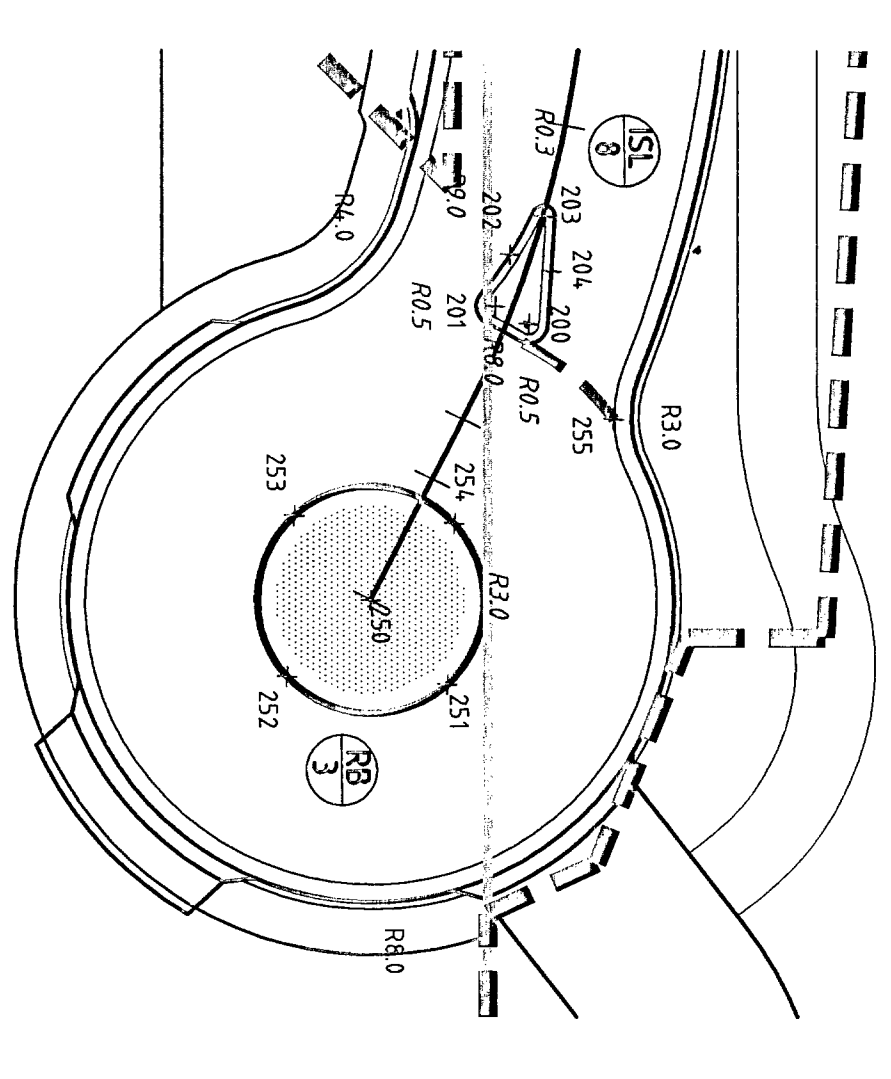
A ISSUED FOR TENDER		LSM	ND	ND	7/1/2027	Drawn	Checked	Approved	Date	No	Revision	Note
<p>10 Brad Street, Sydney NSW 2000, Australia Tel: 02 9550 6000 Fax: 02 9550 6001 Email: info@ghd.com.au Website: www.ghd.com.au</p>												
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<p>GHQ Pty Ltd 10 Brad Street, Sydney NSW 2000, Australia Tel: 02 9550 6000 Fax: 02 9550 6001 Email: info@ghd.com.au Website: www.ghd.com.au</p>												
<p>Project: AMERICAN RETIREMENT VILLAGES Warriewood Brook CIVIL WORKS - OFFSITE ROADS MACPHERSON STRANDE LA ROUNDABOUT</p>												
<p>Drawing No: 21-1357-C165</p>												
<p>Rev: A</p>												



BRANDS LANE / SITE ENTRY CUL-DE-SAC
PLAN (STAGE 2A)
SCALE 1:200



BRANDS LANE / SITE ENTRY CUL-DE-SAC
KERB RETURN PLAN (STAGE 2A)
SCALE 1:200



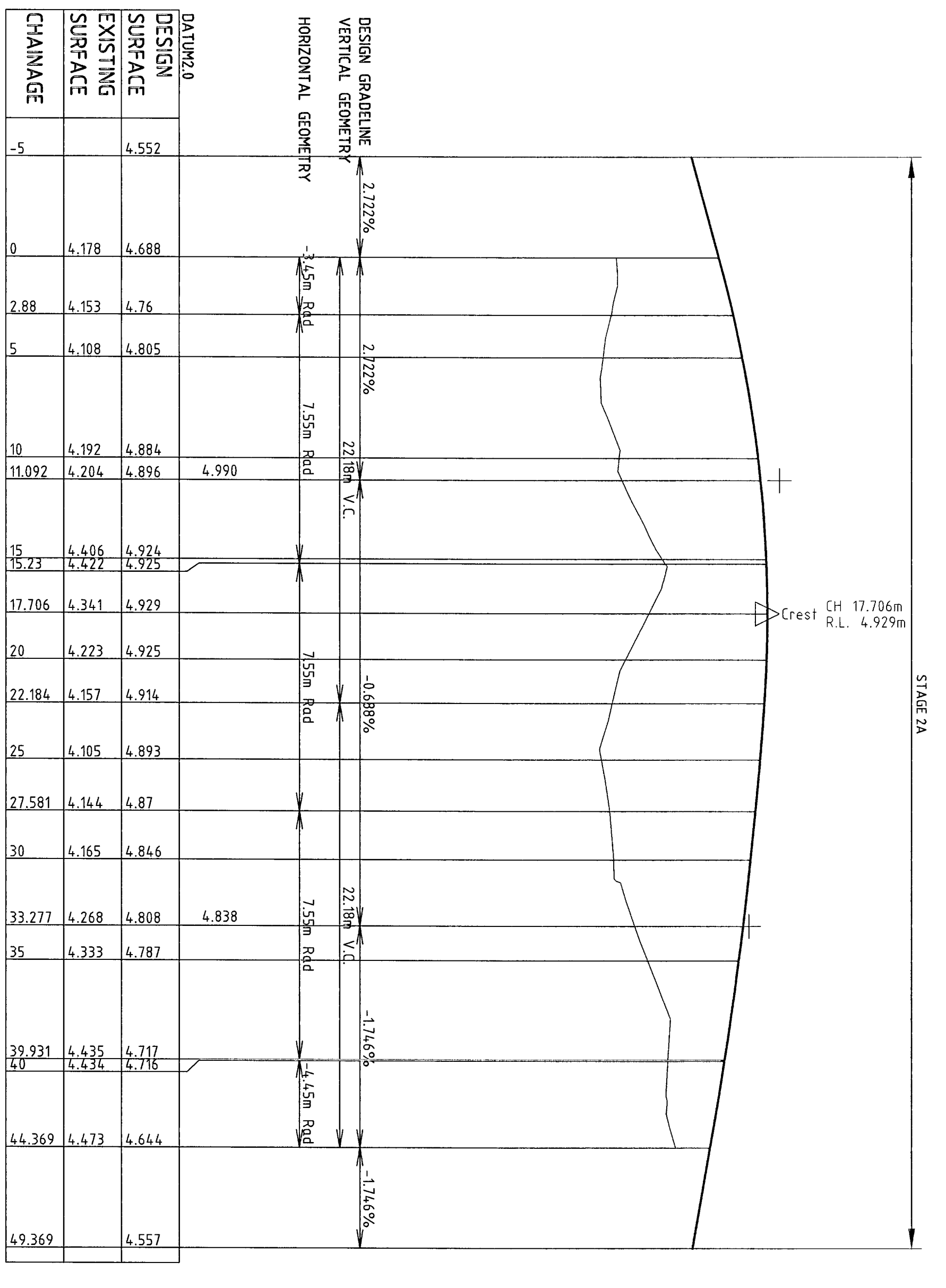
ISLAND & LINEMARKING PLAN (STAGE 2A)
SCALE 1:200

ISLAND SETOUT

POINT EASTING	NORTHING
249	34,985,471
250	34,985,469
251	34,985,464
252	34,985,399
253	34,985,124
254	34,985,152
255	34,985,153

LINEMARKING SETOUT

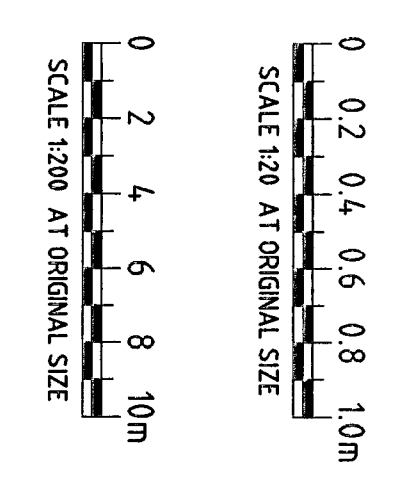
POINT EASTING	NORTHING
250	34,986,124
251	34,986,124
252	34,986,124
253	34,986,124
254	34,986,124
255	34,986,124



KERB RETURN 6
SCALE - HOR 1:200
VERT 1:20

KERB RETURN 6 SETOUT

CHANGAGE	EASTING	NORTHING
0.000	34,985,071	62,712,689
2.880	34,985,879	62,712,823
5.000	34,987,753	62,712,874
10.000	34,986,159	62,722,180
15.000	34,986,499	62,722,185
20.000	34,970,406	62,728,887
25.000	34,971,653	62,712,139
30.000	34,989,719	62,729,627
35.000	34,985,420	62,720,258
40.000	34,980,372	62,720,833
44.369	34,986,377	62,720,192

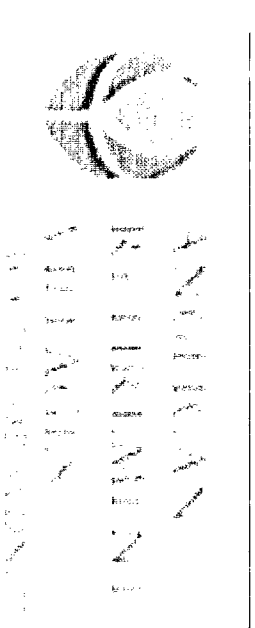


TENDER

No.	Revision	Description	Author	Checked	Approved	Date
A	ISSUED FOR TENDER					

Client	Project	Sheet No.	Drawing No.	Rev.
ANGICAN RETIREMENT VILLAGES	WARREWOOD BROOK STAGE 2A	21	1357-C170	A

Scale	Author	Checked	Approved	Date
AS BOUND				

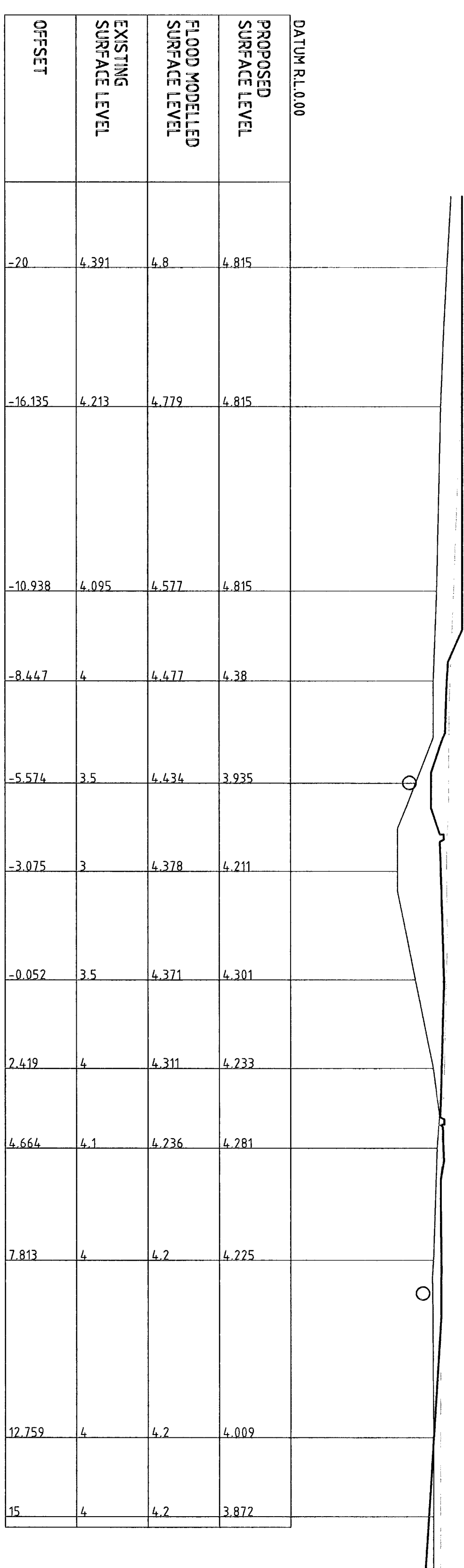


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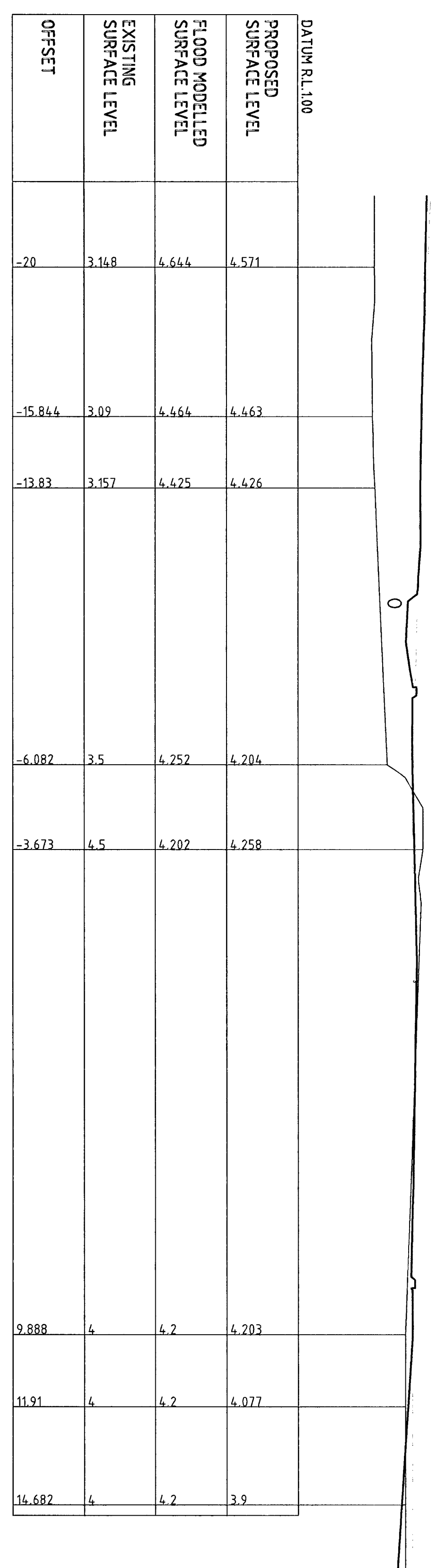
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ANGICAN RETIREMENT VILLAGES
WARREWOOD BROOK STAGE 2A
CIVIL WORKS OFF SITE ROADS
BRANDS LANE / SITE ENTRY ROUNDABOUT

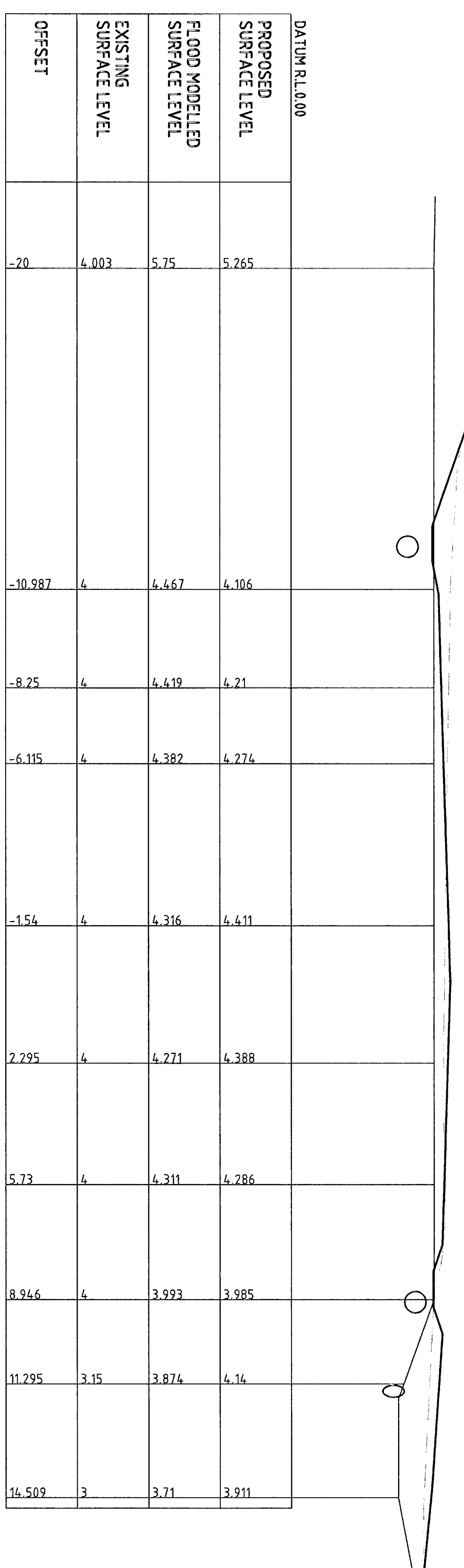
LEGEND
 PROPOSED DESIGN SURFACE
 FLOOD LEVEL
 EXISTING SURFACE
 PROPOSED DRAINAGE



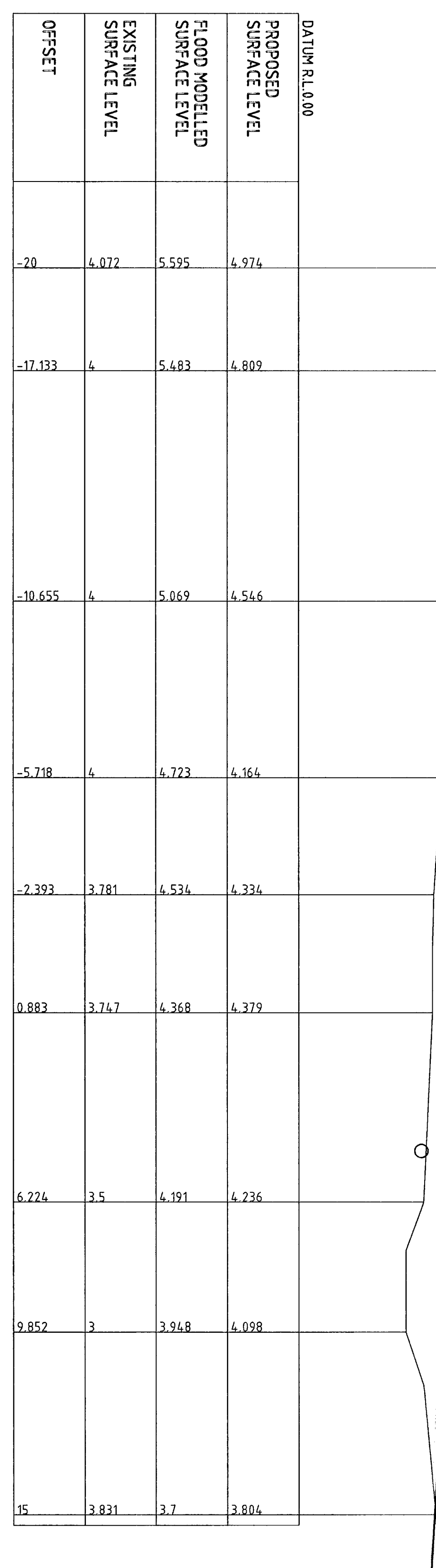
CH 20 (STAGE 1)



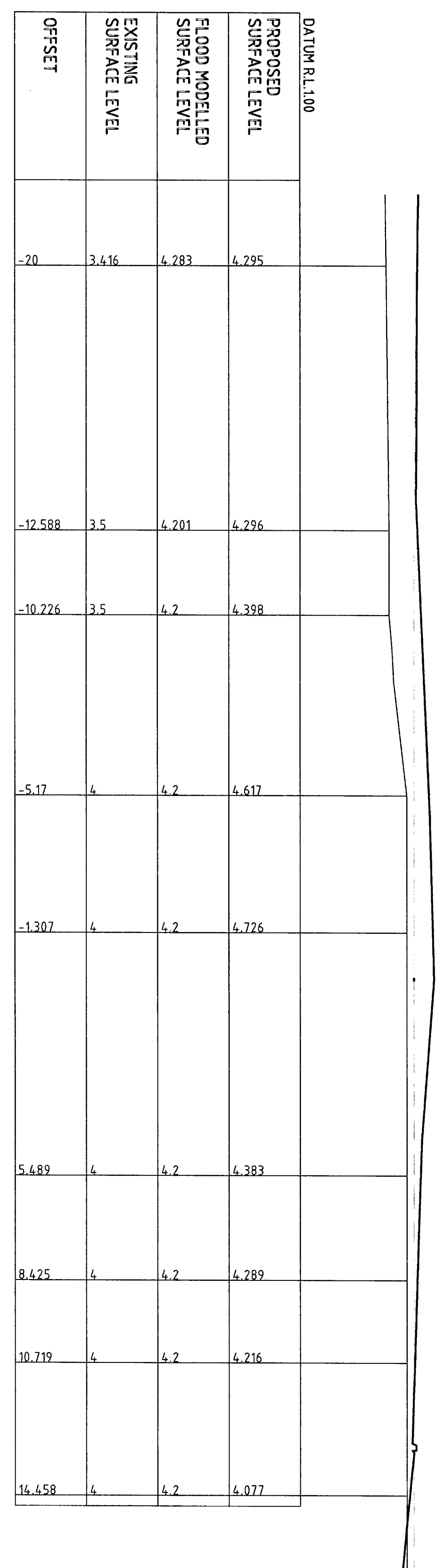
CH 10 (STAGE 1)



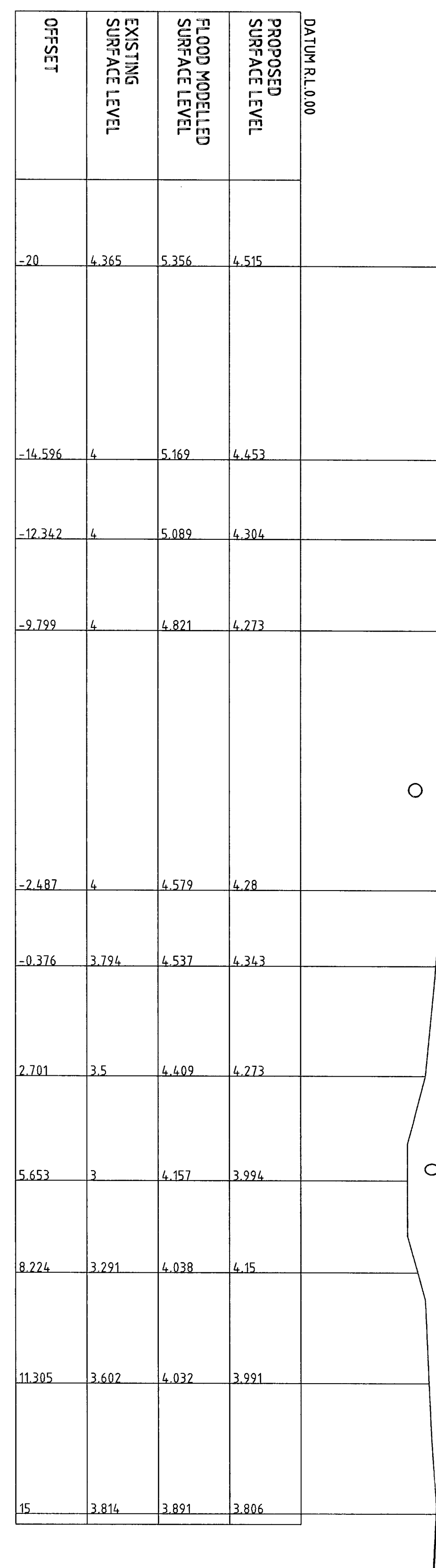
CH 50 (STAGE 1)



CH 40 (STAGE 1)

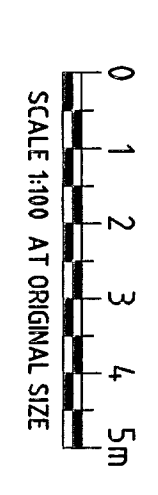


CH 0 (STAGE 1)



CH 30 (STAGE 1)

ROAD 2
 HORIZONTAL SCALE - 1:100
 VERTICAL SCALE - 1:100



TENDER

A ISSUED FOR TENDER		LSM	NO	NO	7/2027	DATE	NO	NO	DATE	NO	NO	DATE
NO	REVISION	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

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 www.ard.com.au

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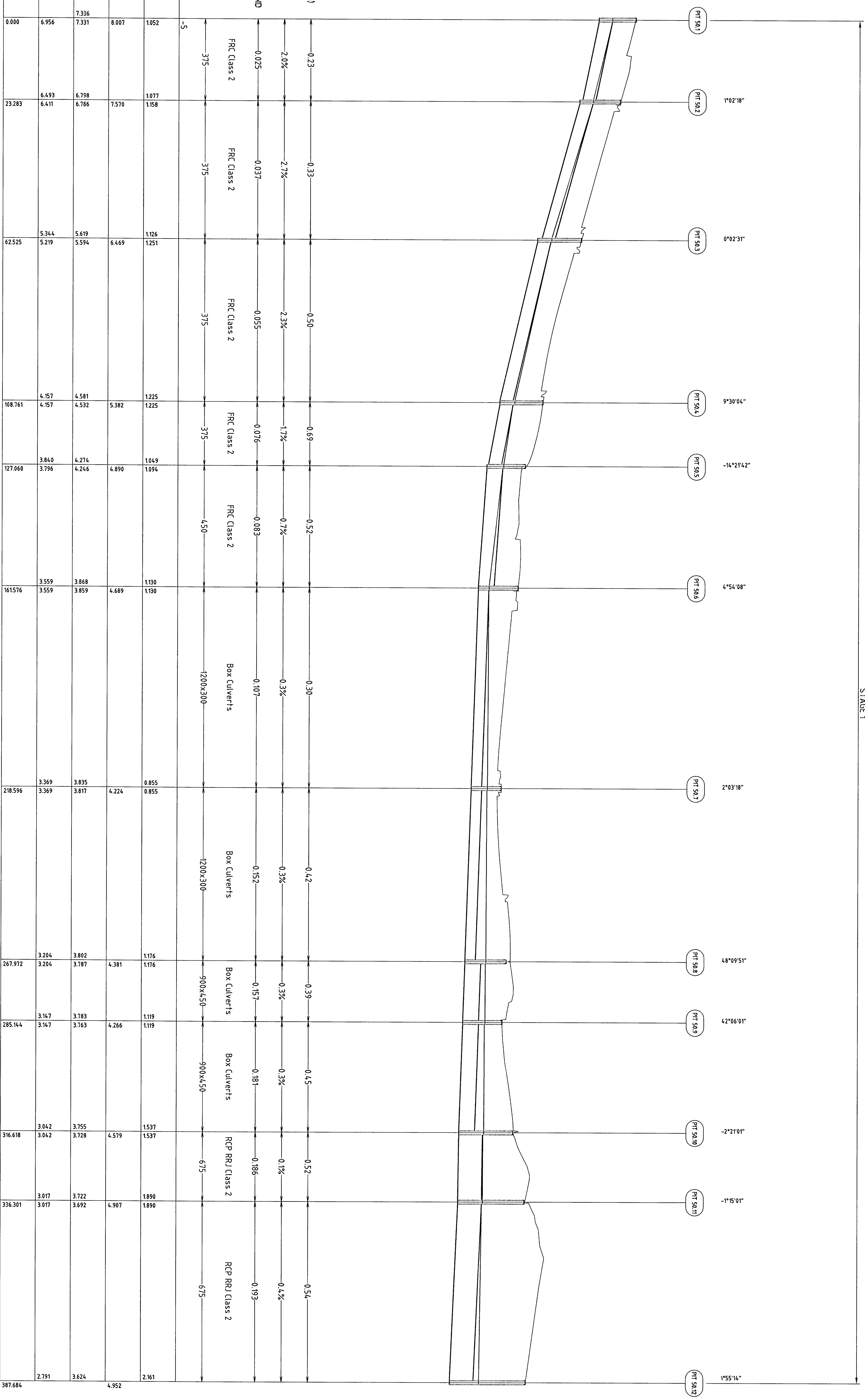
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Drawn: LSM
 Checked: RALZ
 Date: 10/07/2027
 Scale: AS SHOWN

Client: AMERICAN RETIREMENT VILLAGES
 Project: WARRIEWOOD BROOK
 Title: CIVIL WORKS
 ROAD 2 CROSS SECTIONS SHEET 1 OF 2
 Drawing No: 21-13577-C109
 Rev: A

STAGE 1

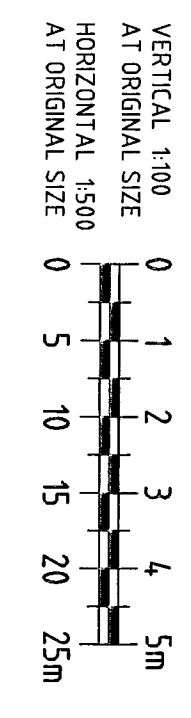


CONTINUED ON SHEET C176

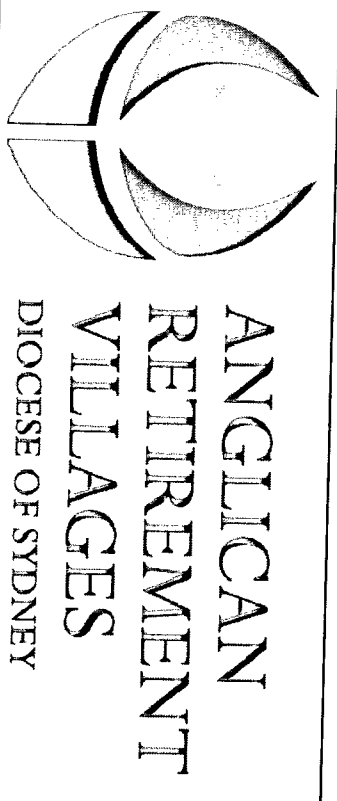
PIPE CHAINAGE	INVERT LEVEL	HYDRAULIC GRADE LINE	FINISHED SURFACE RL	DEPTH TO INVERT	PIPE SIZE (mm)	PIPE TYPE	PIPE FLOW (m³/s) (UPSTREAM END)	GRADE %	VELOCITY (m/s) (UPSTREAM END)
0.000	6.956	7.336	8.007	1.051	375	FRC Class 2	0.025	2.0%	0.23
23283	6.453	6.798	7.570	1.077	375	FRC Class 2	0.037	2.7%	0.33
42525	5.344	5.619	6.469	1.126	375	FRC Class 2	0.055	2.3%	0.50
108.714	4.157	4.581	5.382	1.225	375	FRC Class 2	0.076	1.7%	0.69
127.000	3.840	4.274	4.890	1.049	375	FRC Class 2	0.083	0.7%	0.52
161516	3.559	3.868	4.469	1.130	450	FRC Class 2	0.107	0.3%	0.30
181516	2.369	2.805	4.224	0.855	1200x300	Box Culverts	0.152	0.3%	0.42
267.972	3.202	3.787	4.381	1.176	900x450	Box Culverts	0.157	0.3%	0.39
285.744	3.147	3.783	4.266	1.119	900x450	Box Culverts	0.181	0.3%	0.45
316.618	3.042	3.755	4.529	1.537	675	RCP RRU Class 2	0.186	0.1%	0.52
336.300	3.017	3.722	4.907	1.890	675	RCP RRU Class 2	0.193	0.4%	0.54
387.887	2.791	2.922	4.952	2.161					

LEGEND
 FRC 2 - FIBRE REINFORCED CEMENT CLASS 2 UNSLOTTED PIPE
 RBE - REINFORCED CONCRETE BOX CULVERTS

NOTE:
 1. REFER TO PLAN DRAWING 21-13577-C15, 150, 151, & 152 FOR P1T LOCATIONS.



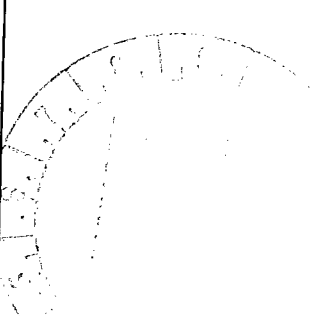
<p>AMERICAN INSTITUTIONS CIVIL ENGINEERS</p>	<p>CLIENTS PEOPLE PERFORMANCE</p>	<p>DO NOT SCALE</p>	<p>Client ANGLICAN RETIREMENT VILLAGES</p>
<p>10 Bond Street, Sydney NSW 2000 Australia T 61 2 8237 7000 F 61 2 8237 7788 E info@americaninstitutions.com.au W www.pip.com.au</p>	<p>Drawn: LSM Checked: Approved: Date: 10/07/2017 Scale: AS SHOWN</p>	<p>Design: LSM Checked: Approved: R. BERG Date: 10/07/2017 Scale: AS SHOWN</p>	<p>Project WARRIMOOD BROOK CIVIL WORKS OFF SITE ROADS STORMWATER LONG SECTION LINE 50 SHEET 1</p>
<p>ISSUED FOR TENDER</p>	<p>LSM NO. 71207</p>	<p>NO. 71207</p>	<p>Original Scale: B1 Drawing No: 21-13577-C15 Rev: A</p>

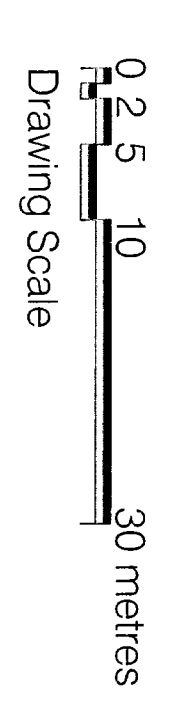


ANGLICAN
RETIREMENT
VILLAGES
DIOCESE OF SYDNEY

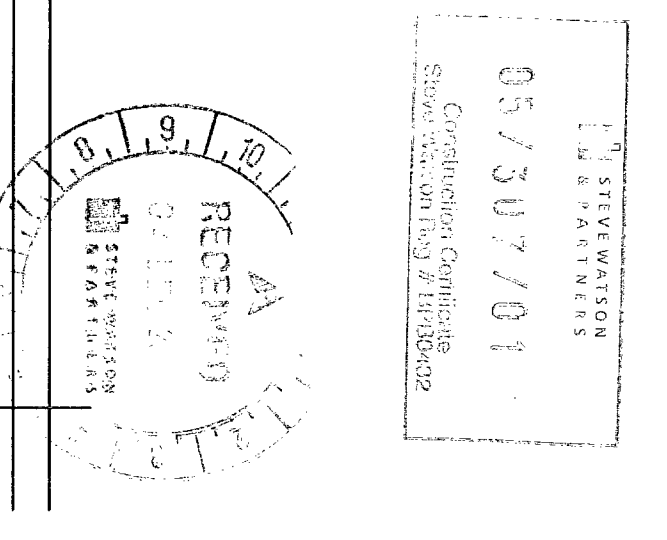
A PROPOSAL FOR
WARREIWOOD BROOK RETIREMENT VILLAGE & RESIDENTIAL AGED CARE FACILITY
AT 8 MACPHERSON STREET, WARREIWOOD

Stage 1 - Construction Certificate - Part Issue, 03 Dec 2007





- Legend:**
- G = Garbage enclosure
 - L = Letterbox Location
 - V = Visitor Parking
 - S = Sub Station
 - W = Waiting Shield
 - C = Concrete Path
 - T = Tile on concrete base
 - P = Pavers on concrete base
 - PP = Permeable paving
 - A = Asphalt paving
 - +RL 5.800 = Reduced Level to AHD
- Proposed Building Footprints

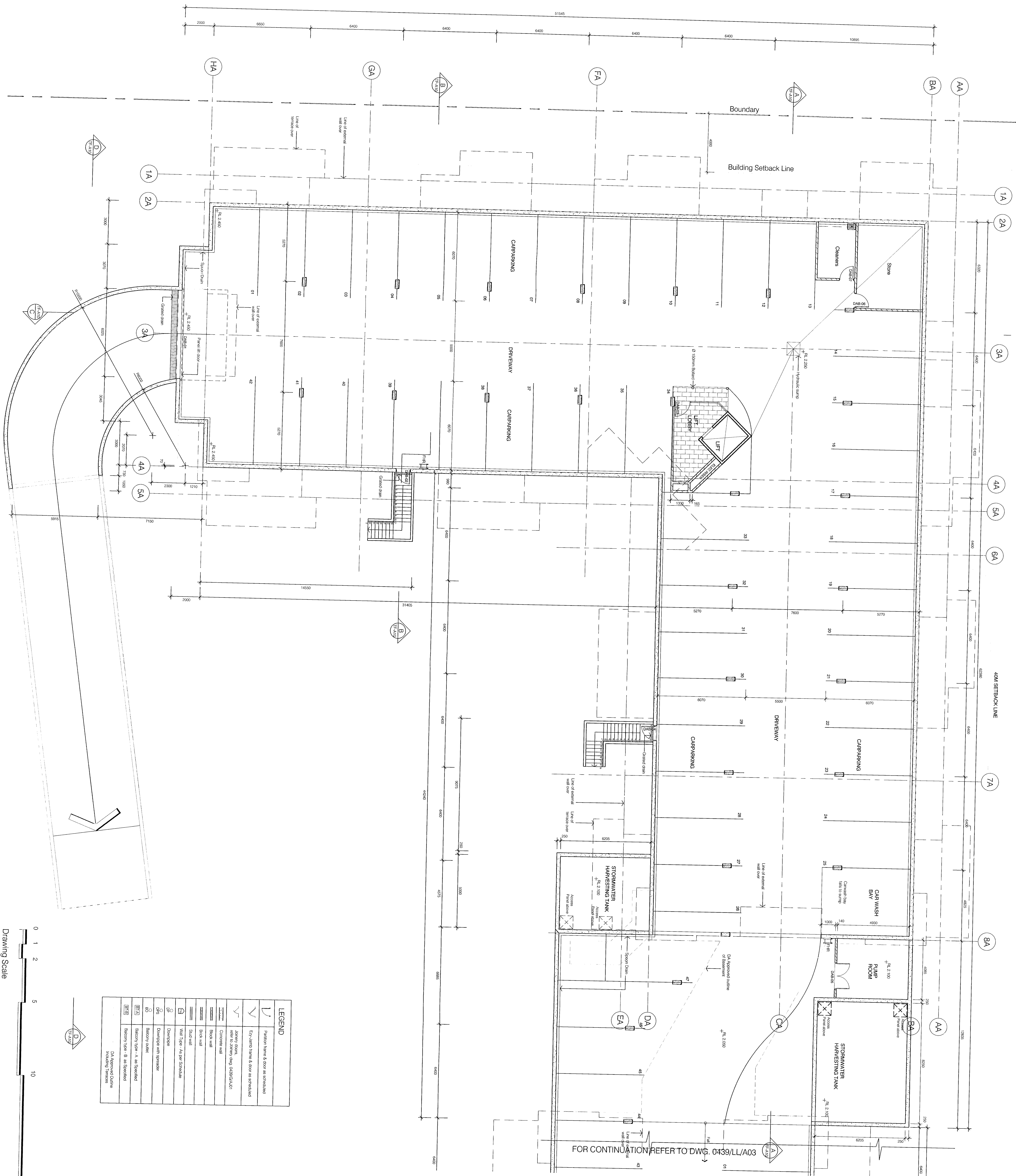


DATE	DESCRIPTION
20/08/2024	ISSUED FOR PERMITTING
15/08/2024	REVISED PERMITTING
10/08/2024	ISSUED FOR PERMITTING
05/08/2024	ISSUED FOR PERMITTING

Boffa Robertson Group
 Architecture, Interiors and Urban Design
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 Tel: (03) 9488 1000
 Fax: (03) 9488 1001
 Email: info@boffarobertson.com.au
 www.boffarobertson.com.au

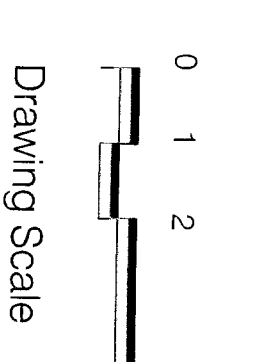
MAHREWOOD BROOK
 100/102 Macpherson Street, Hawthorn VIC 3122

SITE PLAN (GROUND)



FOR CONTINUATION REFER TO DWG. 0439/LL/A03

LEGEND	
U	Partition figure & door as indicated
✓	Excluded figure & door as indicated
✓	Window door, window door, window door, window door
✓	Concrete wall
✓	Block wall
✓	Steel wall
✓	Wall Type - As per Schedule
✓	Chimney
✓	Chimney with Staircase
✓	Factory roof - A as Standard
✓	Factory roof - B as Standard
✓	Roof Type - A as Standard
✓	Roof Type - B as Standard

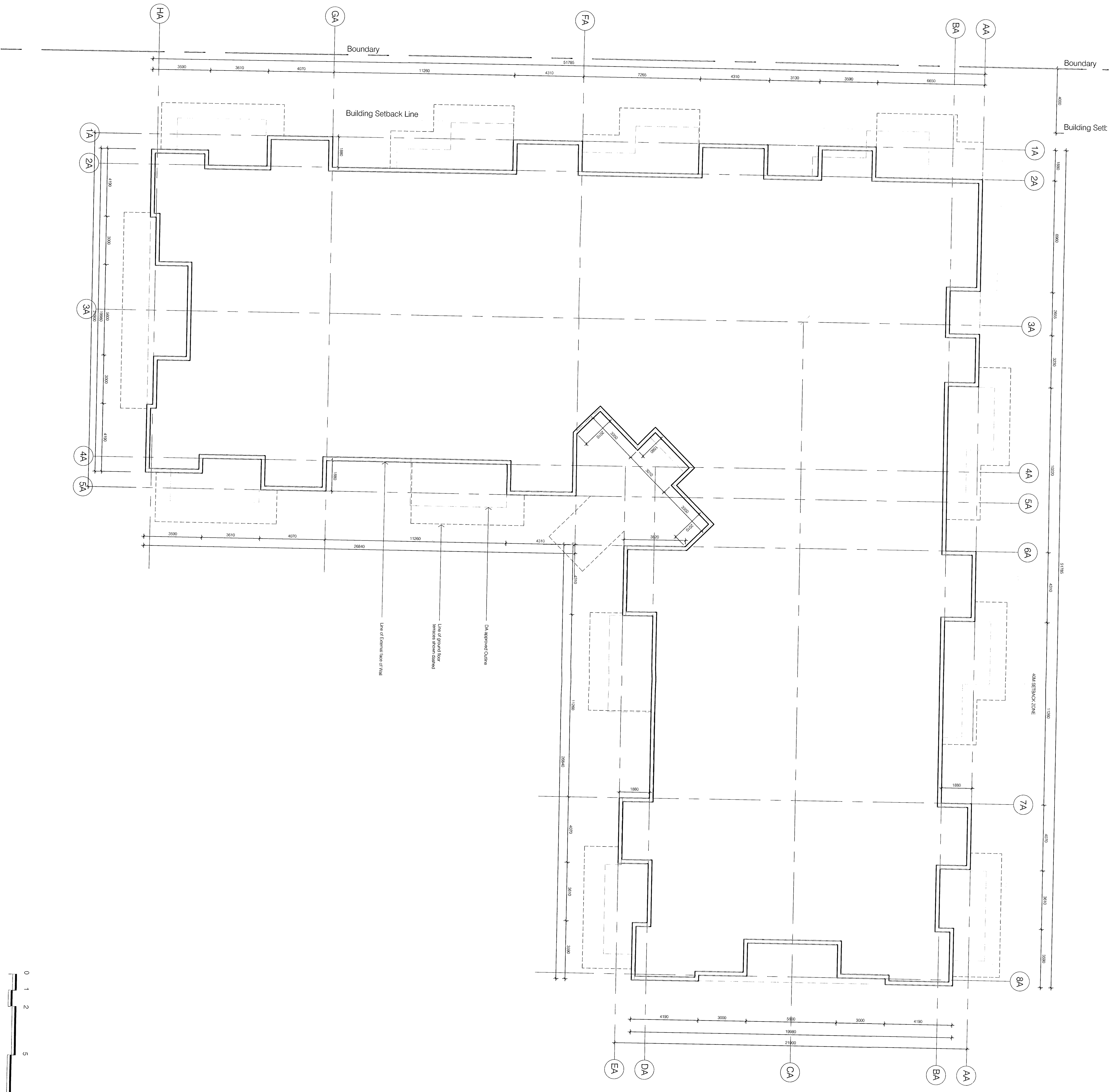


20 METERS

05/307/01
 11/11/2010
 11/11/2010

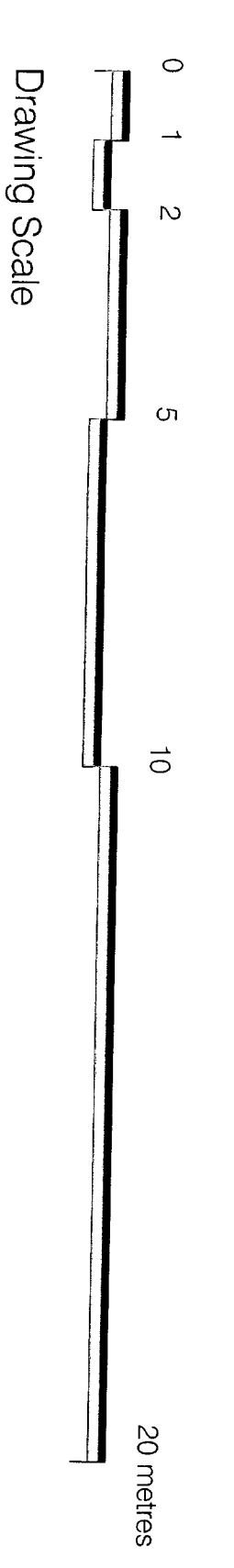
Boffa Robertson Group
 Architects, Planners and Urban Design
 2nd Floor, 111 St. James Street
 Sydney, NSW 2000
 Tel: (02) 9232 2000
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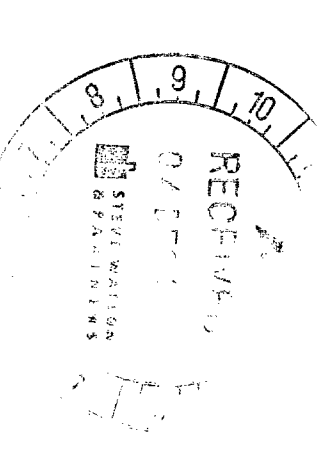


LEGEND:

- DA approved Outline
- - - - - Proposed Outline
- - - - - Proposed Outline of Terrace
- Line of External Face of Column Wall



03/387/01
 City of Wellington
 Resource Management
 Environment and Planning
 Planning Unit



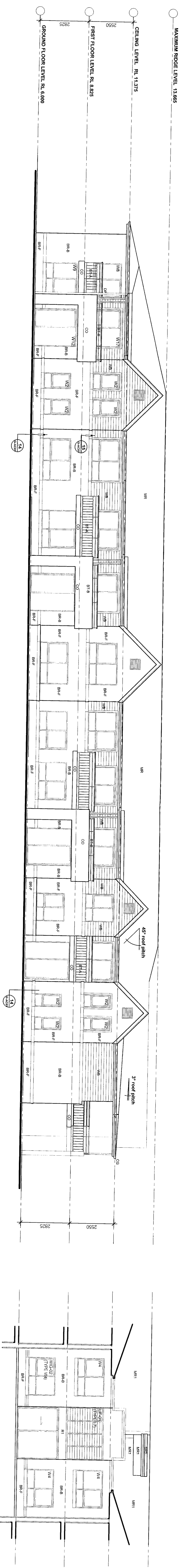
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SCALE	1:100	DRAWING	04/01/10
DESIGNER	3	CHECKED	CC/09

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Client: WAIHIWHERO
Project Name: WAIHIWHERO
Project Address: WAIHIWHERO
Project Description: WAIHIWHERO
Project Status: WAIHIWHERO
Project Reference: WAIHIWHERO

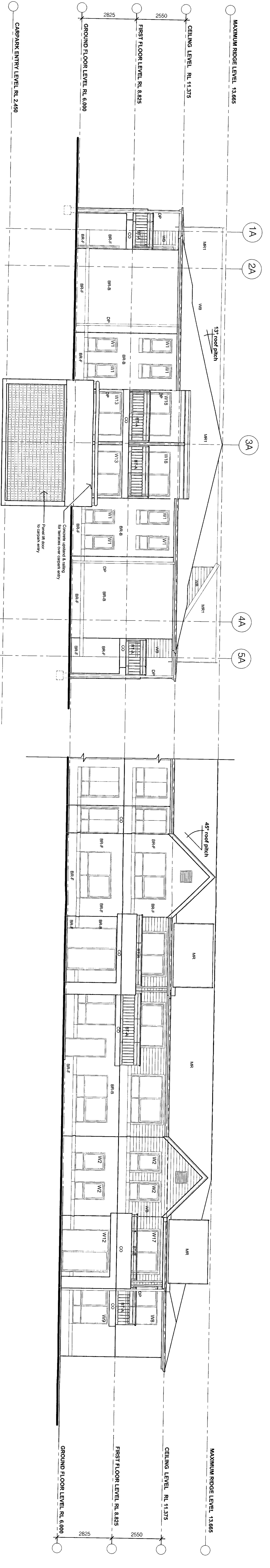
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Project Name: WAIHIWHERO
Project Address: WAIHIWHERO
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Project: WAIHIWHERO
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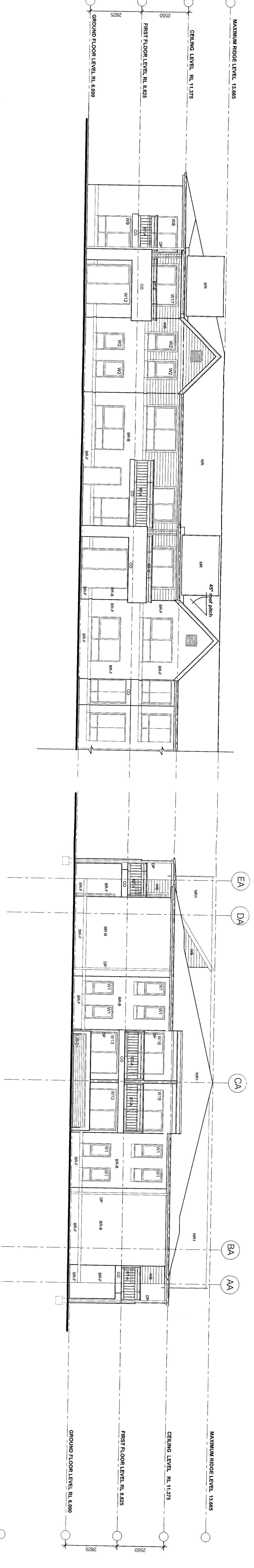
Boffa Robertson Group
 Architects, Planners and Urban Designers
 100-102 Lambton Quay
 Wellington, New Zealand
 Phone: +64 (0) 414 3700
 Fax: +64 (0) 414 3701
 Email: info@boffa.com



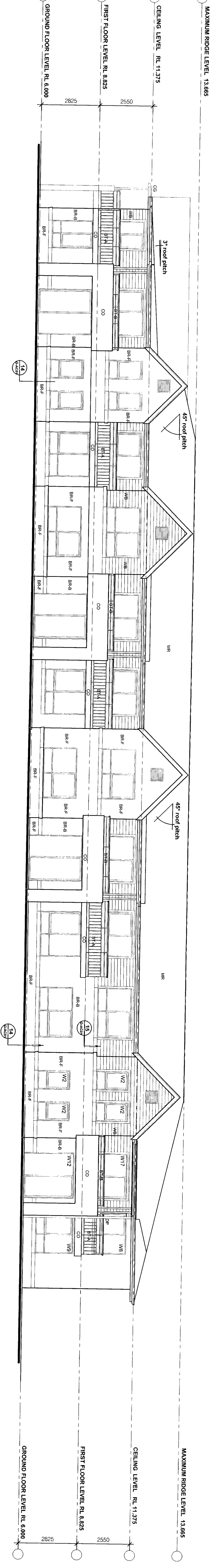
NORTH ELEVATION
SCALE 1:100



SOUTH END ELEVATION
SCALE 1:100



EAST END ELEVATION
SCALE 1:100



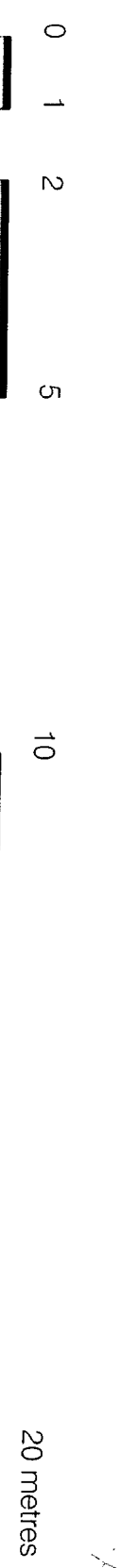
WEST ELEVATION
SCALE 1:100

EAST CORNER ENTRY ELEVATION
SCALE 1:100

LEGEND	
BRF	Brickwork face
BRB	Brickwork banded and finished finish
CD	Coloured Glass in specified
CJ	Claret paint
CO	Claret from Corvair (see part 100)
CP	Corvair/Corvair
FC	Fibre Cement Sheetings
GL	Glazing
HTA	Hardware and Balustrade - Type A
HTB	Hardware and Balustrade - Type B
HTC	Hardware and Balustrade - Type C
HTD	Hardware and Balustrade - Type D
HTE	Hardware and Balustrade - Type E
HTF	Hardware and Balustrade - Type F
HTG	Hardware and Balustrade - Type G
HTH	Hardware and Balustrade - Type H
HTI	Hardware and Balustrade - Type I
HTJ	Hardware and Balustrade - Type J
HTK	Hardware and Balustrade - Type K
HTL	Hardware and Balustrade - Type L
HTM	Hardware and Balustrade - Type M
HTN	Hardware and Balustrade - Type N
HTO	Hardware and Balustrade - Type O
HTP	Hardware and Balustrade - Type P
HTQ	Hardware and Balustrade - Type Q
HTR	Hardware and Balustrade - Type R
HTS	Hardware and Balustrade - Type S
HTT	Hardware and Balustrade - Type T
HTU	Hardware and Balustrade - Type U
HTV	Hardware and Balustrade - Type V
HTW	Hardware and Balustrade - Type W
HTX	Hardware and Balustrade - Type X
HTY	Hardware and Balustrade - Type Y
HTZ	Hardware and Balustrade - Type Z

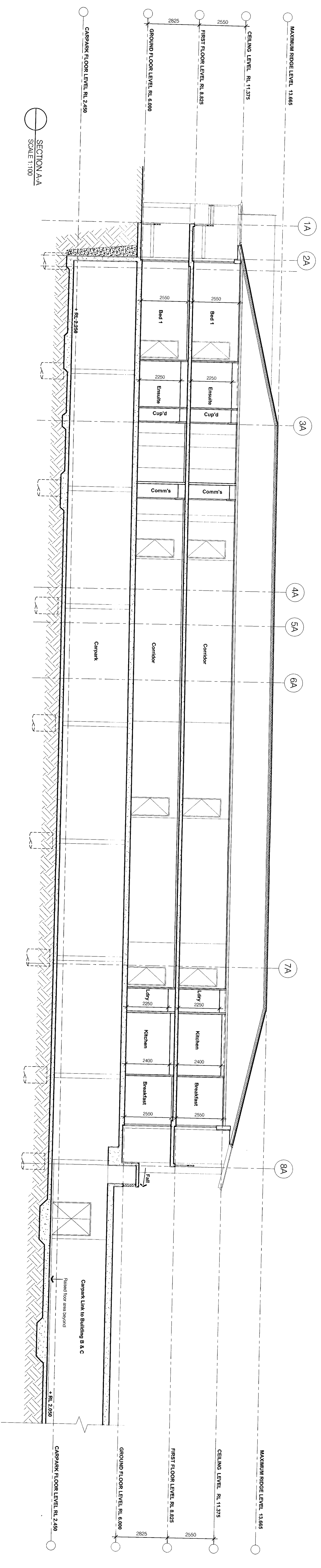
15/30/2021
SIGNED: [Signature]
DATE: 15/30/2021

THE FERRIERES ELEVATIONS	
Project	WARRIEWOOD BROOK
Location	34/36-38 WARRIWOOD STREET, WARRIWOOD
Client	BOFFA ROBERTSON GROUP
Architect	BOFFA ROBERTSON GROUP
Scale	1:100
Date	15/30/2021
Drawn by	[Name]
Checked by	[Name]
Approved by	[Name]

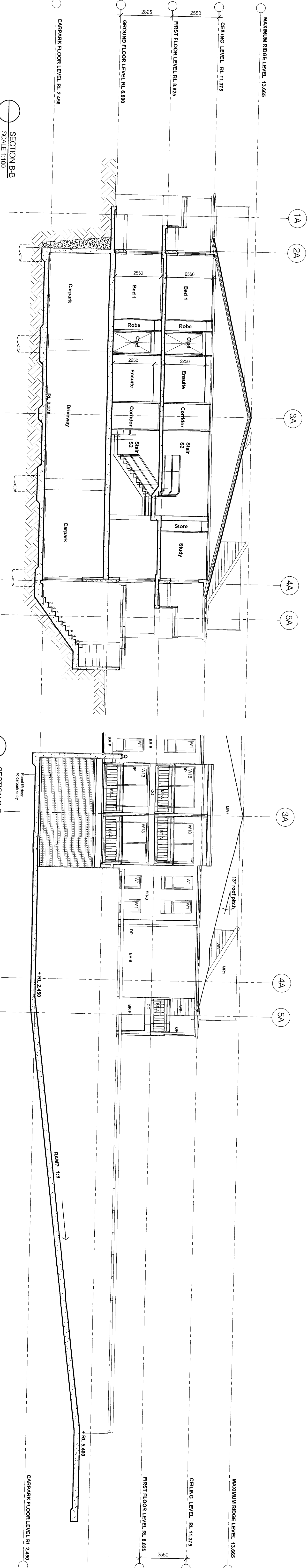


BOFFA ROBERTSON GROUP
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Tel: 02 9439 7171
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www.boffarobertson.com.au

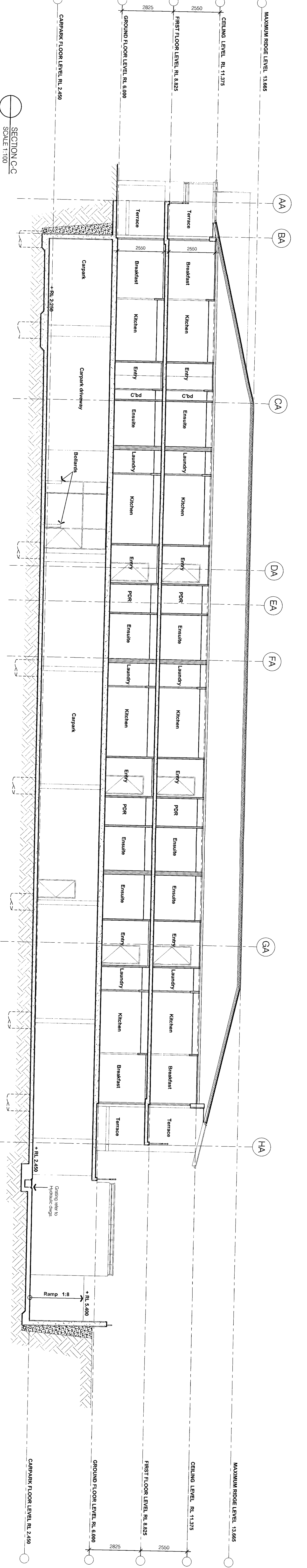
BOFFA ROBERTSON GROUP
15/30/2021
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Drawing No: 0439/TF/
CC-009



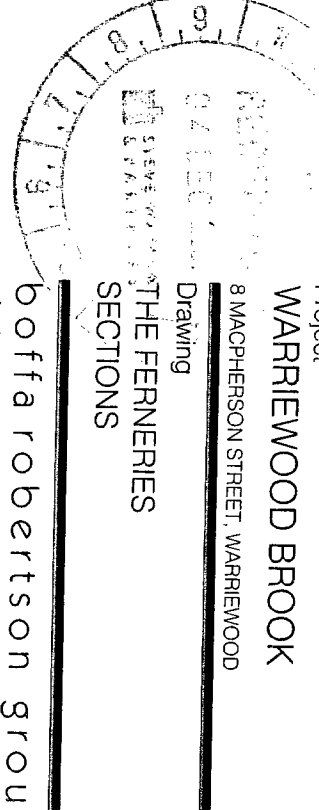
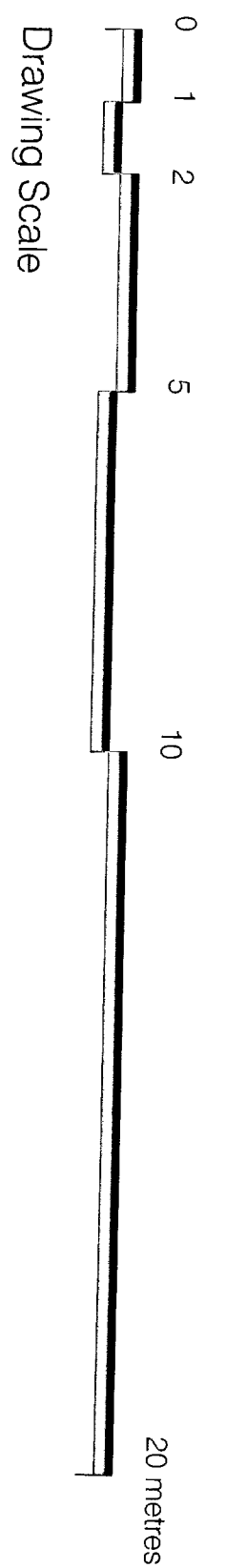
SECTION A-A
SCALE: 1/160



SECTION B-B
SCALE: 1/160

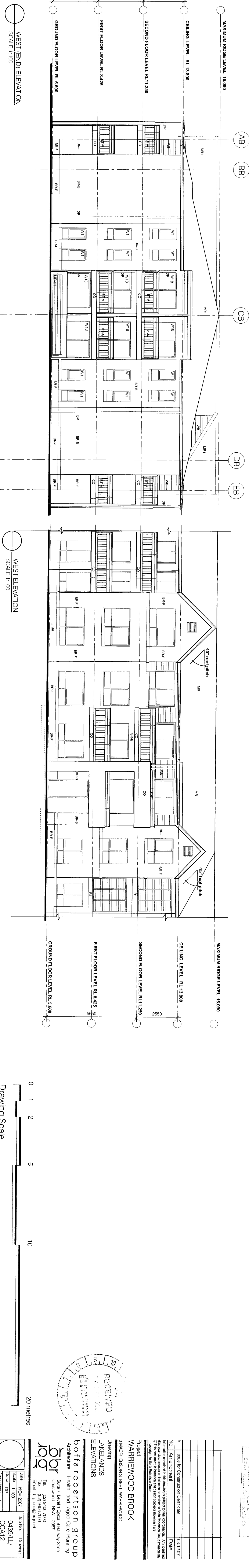
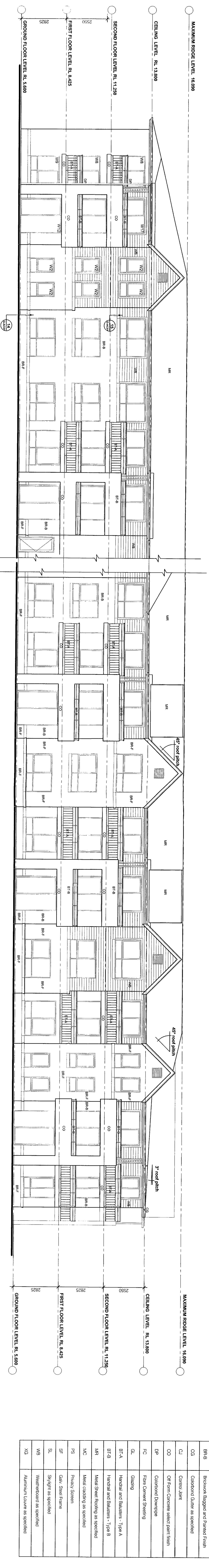
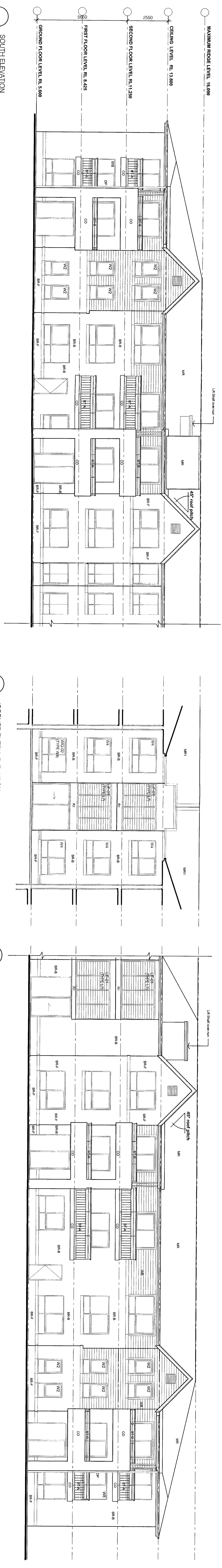
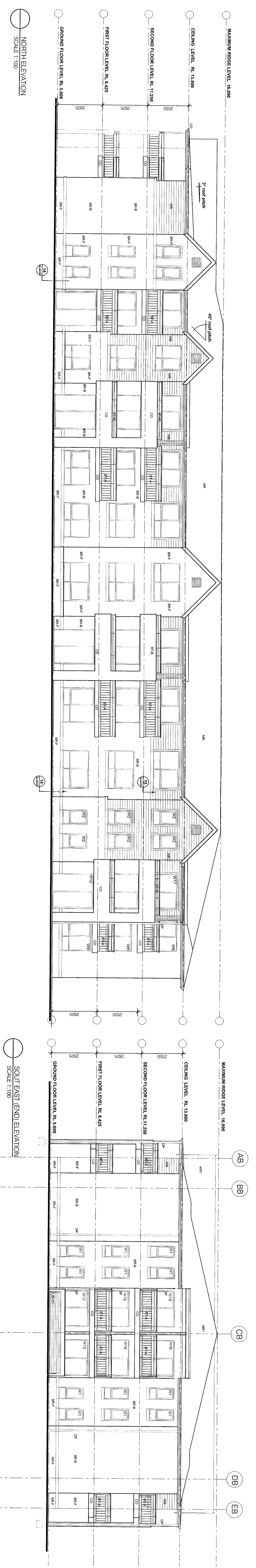


SECTION C-C
SCALE: 1/160



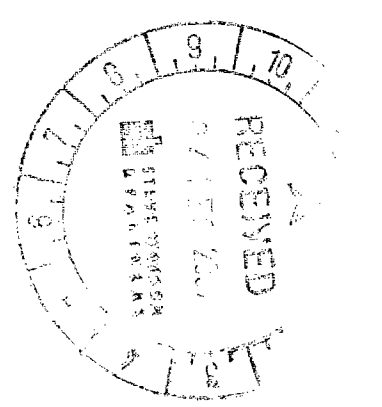
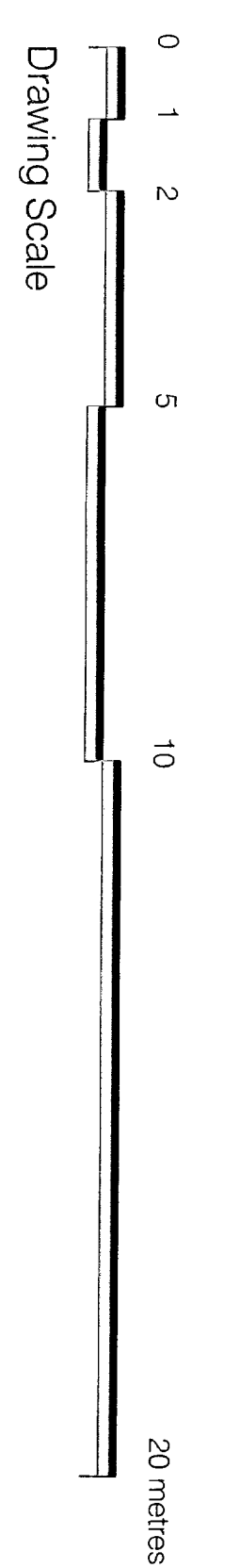
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Client	WARREWOOD BROOK
Architect	BOFFA ROBETSON GROUP
Scale	1/160
Date	2023
Sheet No.	03/307/01
Scale	1/160
Author	BOFFA ROBETSON GROUP
Checked	BOFFA ROBETSON GROUP
Drawn	BOFFA ROBETSON GROUP
Discipline	Architecture
Project No.	WARREWOOD BROOK
Sheet No.	03/307/01
Scale	1/160
Date	2023
Author	BOFFA ROBETSON GROUP
Checked	BOFFA ROBETSON GROUP
Drawn	BOFFA ROBETSON GROUP
Discipline	Architecture

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 www.boffa-robetson.com.au



LEGEND

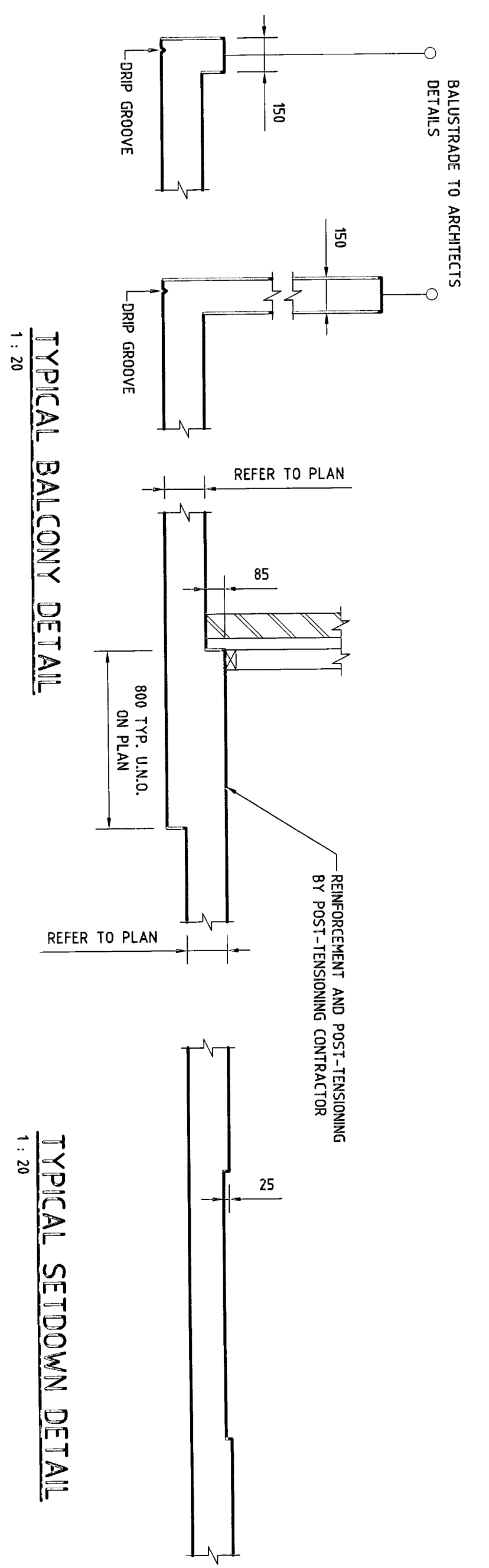
BRF	Brickwork Face
BRB	Brickwork Battered and Battered Finish
CB	Cast-in-place Concrete
CC	Cast-in-place Concrete (as specified)
CD	Cast-in-place Concrete (as specified)
CO	Cast-in-place Concrete (as specified)
CP	Cast-in-place Concrete (as specified)
CS	Cast-in-place Concrete (as specified)
CT	Cast-in-place Concrete (as specified)
CU	Cast-in-place Concrete (as specified)
CV	Cast-in-place Concrete (as specified)
CW	Cast-in-place Concrete (as specified)
CX	Cast-in-place Concrete (as specified)
CY	Cast-in-place Concrete (as specified)
CZ	Cast-in-place Concrete (as specified)
DA	Cast-in-place Concrete (as specified)
DB	Cast-in-place Concrete (as specified)
DC	Cast-in-place Concrete (as specified)
DD	Cast-in-place Concrete (as specified)
DE	Cast-in-place Concrete (as specified)
DF	Cast-in-place Concrete (as specified)
DG	Cast-in-place Concrete (as specified)
DH	Cast-in-place Concrete (as specified)
DI	Cast-in-place Concrete (as specified)
DJ	Cast-in-place Concrete (as specified)
DK	Cast-in-place Concrete (as specified)
DL	Cast-in-place Concrete (as specified)
DM	Cast-in-place Concrete (as specified)
DN	Cast-in-place Concrete (as specified)
DO	Cast-in-place Concrete (as specified)
DP	Cast-in-place Concrete (as specified)
DQ	Cast-in-place Concrete (as specified)
DR	Cast-in-place Concrete (as specified)
DS	Cast-in-place Concrete (as specified)
DT	Cast-in-place Concrete (as specified)
DU	Cast-in-place Concrete (as specified)
DV	Cast-in-place Concrete (as specified)
DW	Cast-in-place Concrete (as specified)
DX	Cast-in-place Concrete (as specified)
DY	Cast-in-place Concrete (as specified)
DZ	Cast-in-place Concrete (as specified)
EA	Cast-in-place Concrete (as specified)
EB	Cast-in-place Concrete (as specified)
EC	Cast-in-place Concrete (as specified)
ED	Cast-in-place Concrete (as specified)
EE	Cast-in-place Concrete (as specified)
EF	Cast-in-place Concrete (as specified)
EG	Cast-in-place Concrete (as specified)
EH	Cast-in-place Concrete (as specified)
EI	Cast-in-place Concrete (as specified)
EJ	Cast-in-place Concrete (as specified)
EK	Cast-in-place Concrete (as specified)
EL	Cast-in-place Concrete (as specified)
EM	Cast-in-place Concrete (as specified)
EN	Cast-in-place Concrete (as specified)
EO	Cast-in-place Concrete (as specified)
EP	Cast-in-place Concrete (as specified)
EQ	Cast-in-place Concrete (as specified)
ER	Cast-in-place Concrete (as specified)
ES	Cast-in-place Concrete (as specified)
ET	Cast-in-place Concrete (as specified)
EU	Cast-in-place Concrete (as specified)
EV	Cast-in-place Concrete (as specified)
EW	Cast-in-place Concrete (as specified)
EX	Cast-in-place Concrete (as specified)
EY	Cast-in-place Concrete (as specified)
EZ	Cast-in-place Concrete (as specified)



boffa robertson group
 ARCHITECTURE, INTERIOR DESIGN AND URBAN PLANNING
 1000 WEST END AVENUE, SUITE 200
 VANCOUVER, BC V6E 2R7
 TEL: 604 681 2300
 FAX: 604 681 2301
 WWW.BOFFAROBERTSON.COM

MARRIWOOD BROOK
 LAKELANDS
 ELEVATIONS

DATE: 02/20/2014
 DRAWN BY: A
 CHECKED BY: A
 PROJECT NO: 04381/L
 CLIENT: CCA#2



TYPICAL SHELF ANGLE DETAIL
 1:20
 NOTE: HEIGHT OF EXTERNAL MANSUARY NOT TO EXCEED 1 FLOOR BETWEEN VERTICAL SUPPORTS. SHELF ANGLE SHOULD BE SAVED FOR ALL FLOORS. MANSUARY TO SAVED FOR ALL FLOORS.

100mm 200mm 300mm

Revision	Author	Check	Date	Description
A	SSSE FOR PRELIM	Amendment or reason for issue	27/11/21	HOW
	Issue date	Designed & Drawn by	Checked by	Issue authorized
		ALL	X	SSW

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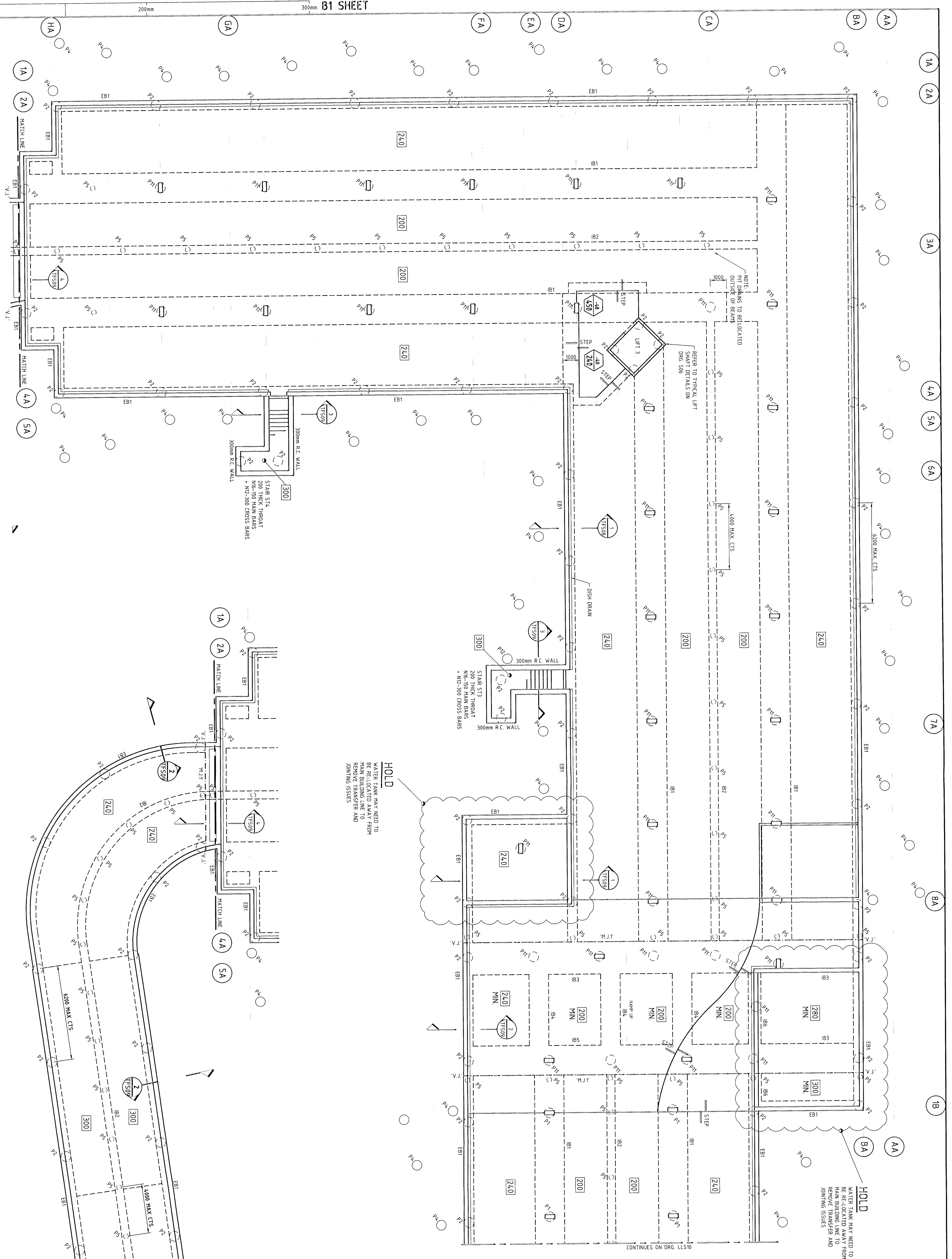
North

HALCROW TRANSPORT
 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Project: WAREWOOD BROOK & MARPESON STREET
Client: ANGLICAN RETIREMENT VILLAGES
Architect: BOFFA ROBERTSON

Project Title: THE FERRIS & LAKELANDS
Phase: FIRST FLOOR & SECOND FLOOR
Typical Slab Details
Scale: 1:20
Drawing No.: 07SS85-TS31
Sheet: A
Of: 1

NOT FOR CONSTRUCTION



BASEMENT FLOOR PLAN
 1:100
 ALL R.C. WALLS TO BE 250mm THICK UNLESS NOTED OTHERWISE ON PLAN.
 N.I.T. — NOTES GOVERNMENT 'JOINT' REFER TO BASEMENT DETAILS SHEET
 N.I.T. — NOTES VERTICAL JOINT IN WALL REFER TO BASEMENT DETAILS SHEET
 V.7 — NOTES VERTICAL JOINT IN WALL REFER TO BASEMENT DETAILS SHEET
 DRAWING FROM 'TYP'
NOTES:
 THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE NOTES ON DWGS. TFS00-TFS03
 1. ALL DIMENSIONS FROM BASEMENT FLOOR SLAB TO TOP OF GROUND FLOOR SLAB ARE TYPE 'A' UNLESS NOTED OTHERWISE ON DWG. TFS01
 2. REFER TO DWG. TFS02 FOR LIFT WALL DETAILS AND SECTIONS
 3. REFER TO DWG. TFS03 FOR TYPICAL DETAILS AND SECTIONS
 4. REFER TO ARCHITECT'S FOR DIMS. FOR R.L.'S, HIGHS AND ANY DIMENSIONS OF REINFORCING STEEL AND SECTION NOT INDICATED ON THIS DWG OR ANY
 5. REFER TO ARCHITECT'S FOR DIMS. FOR R.L.'S, HIGHS AND ANY DIMENSIONS OF REINFORCING STEEL, BEAMS AND RETAINING WALLS ARE TO BE FULLY WATERPROOFED
 6. ALL BASEMENT SLABS, BEAMS AND RETAINING WALLS ARE TO BE FULLY WATERPROOFED
 7. REFER TO TYPICAL DETAILS AND SECTIONS FOR MOISTURE WATERPROOFING DETAILS
 8. REFER TO TYPICAL DETAILS AND SECTIONS FOR MOISTURE WATERPROOFING DETAILS
 9. SPECIAL REQUIREMENTS OF THE SPECIAL WATERPROOFING SYSTEM IS TO BE PROVIDED FOR PILING PURPOSES ONLY AND ARE SUBJECT TO CHANGE TO MEET SPECIAL REQUIREMENTS OF THE SPECIAL WATERPROOFING SYSTEM IS TO BE PROVIDED FOR PILING PURPOSES ONLY AND ARE SUBJECT TO CHANGE TO MEET SPECIAL REQUIREMENTS OF THE SPECIAL WATERPROOFING SYSTEM IS TO BE PROVIDED FOR PILING PURPOSES ONLY AND ARE SUBJECT TO CHANGE TO MEET SPECIAL REQUIREMENTS OF THE SPECIAL WATERPROOFING CONTRACTOR.
 CONTRACTOR.

PILE DESIGN LOADS

PILE	WORKING LOAD (kN)	ULTIMATE WORKING HEIGHT P (kN)	WORKING HEIGHT P (kN)
P1	200	600	N/A
P2	500	600	N/A
P3	500	N/A	N/A
P4	1000	N/A	N/A
P5	250	700	N/A
P6	800	N/A	70
P7	1600	N/A	N/A
P8	800	1100	N/A
P9	500	400	N/A
P10	250	600	N/A
P11	500	1050	N/A
P12	50	N/A	N/A

NOTE: DISTRICT PILE DESIGN BY PILING CONTRACTOR.
 REFER TO DWG. TFS03 FOR DESIGN NOTES AND REQUIREMENTS
 * PILE TO BE DESIGNED FOR HIGH WIND IN ADDITION TO NORMAL RESULTEING FROM MINIMUM DESIGN WIND SPEED.

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Revision	Issue	Date	Drawn by	Checked by	Scale
A	ISSUE FOR PERMIT	07/12/23	JSM	AH	1:100
B	FOR INFORMATION	07/12/23	JSM	AH	1:100

Amendment or reason for issue

Scale: 1:100

Project Name: **ANGELICAN RETIREMENT VILLAGES**

Client: **ANGELICAN RETIREMENT VILLAGES**

Project No: **07585-TS10**

Sheet: **01** of **01**

Project No: **07585-TS10**

Sheet: **01** of **01**

Revision: **B**

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Drawn by: JSM
 Checked by: AH
 Scale: 1:100

Project Name: **ANGELICAN RETIREMENT VILLAGES**
 Client: **ANGELICAN RETIREMENT VILLAGES**
 Project No: **07585-TS10**

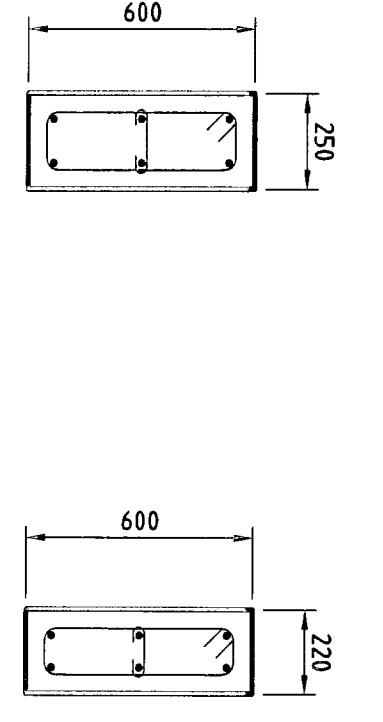
Location: **WARRENWOOD BROOK, 8 MACPHERSON STREET, WARRENWOOD**

Architect: **THE FERRERIES, BASEMENT FLOOR PLAN**

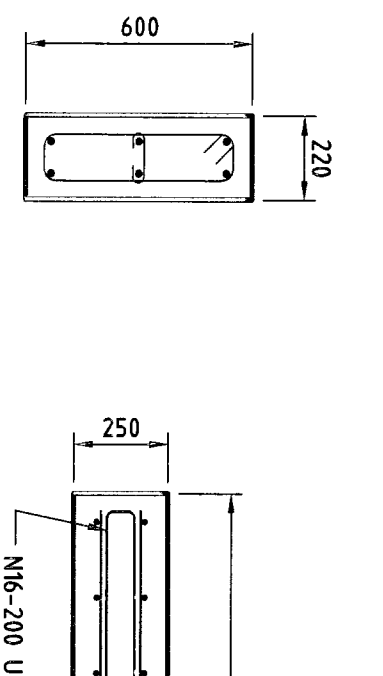
Scale: **1:100**

Sheet: **01** of **01**

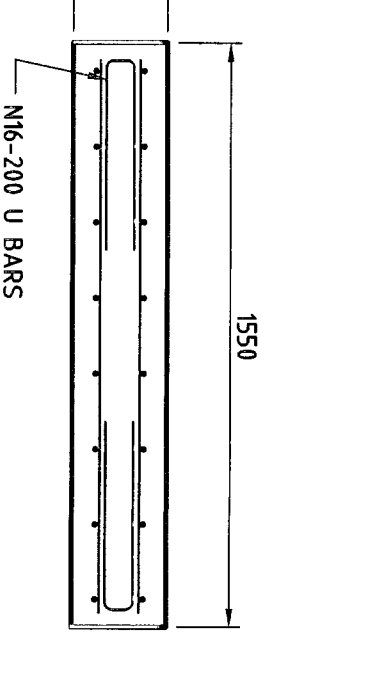
Revision: **B**



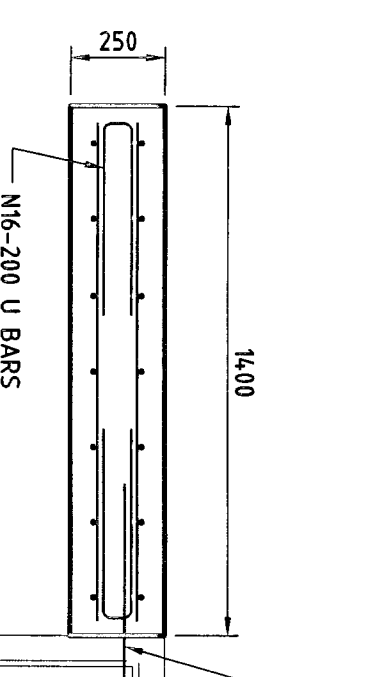
TYPE 'A' COLUMN
SCALE 1:20



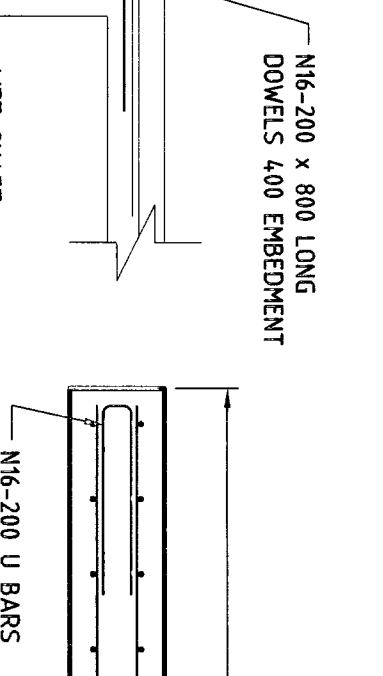
TYPE 'B' COLUMN
SCALE 1:20



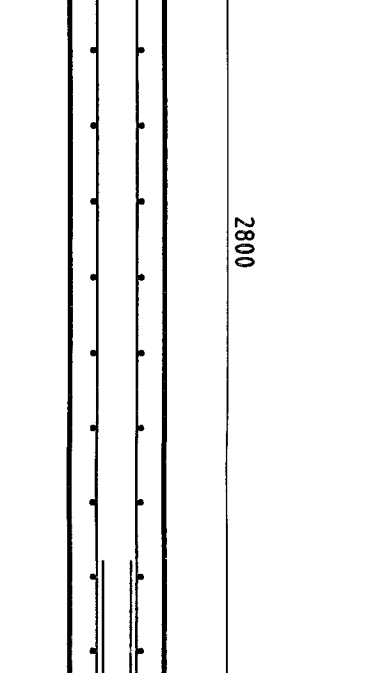
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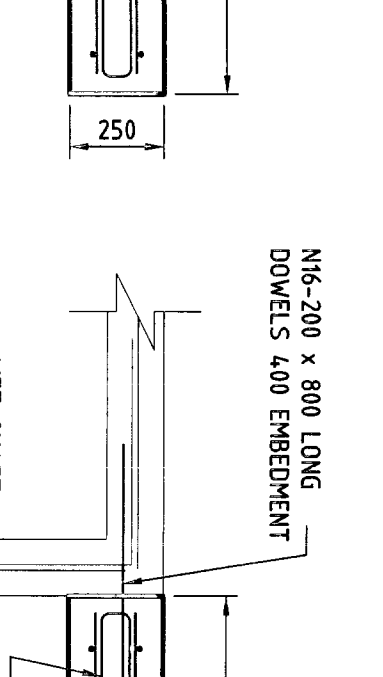
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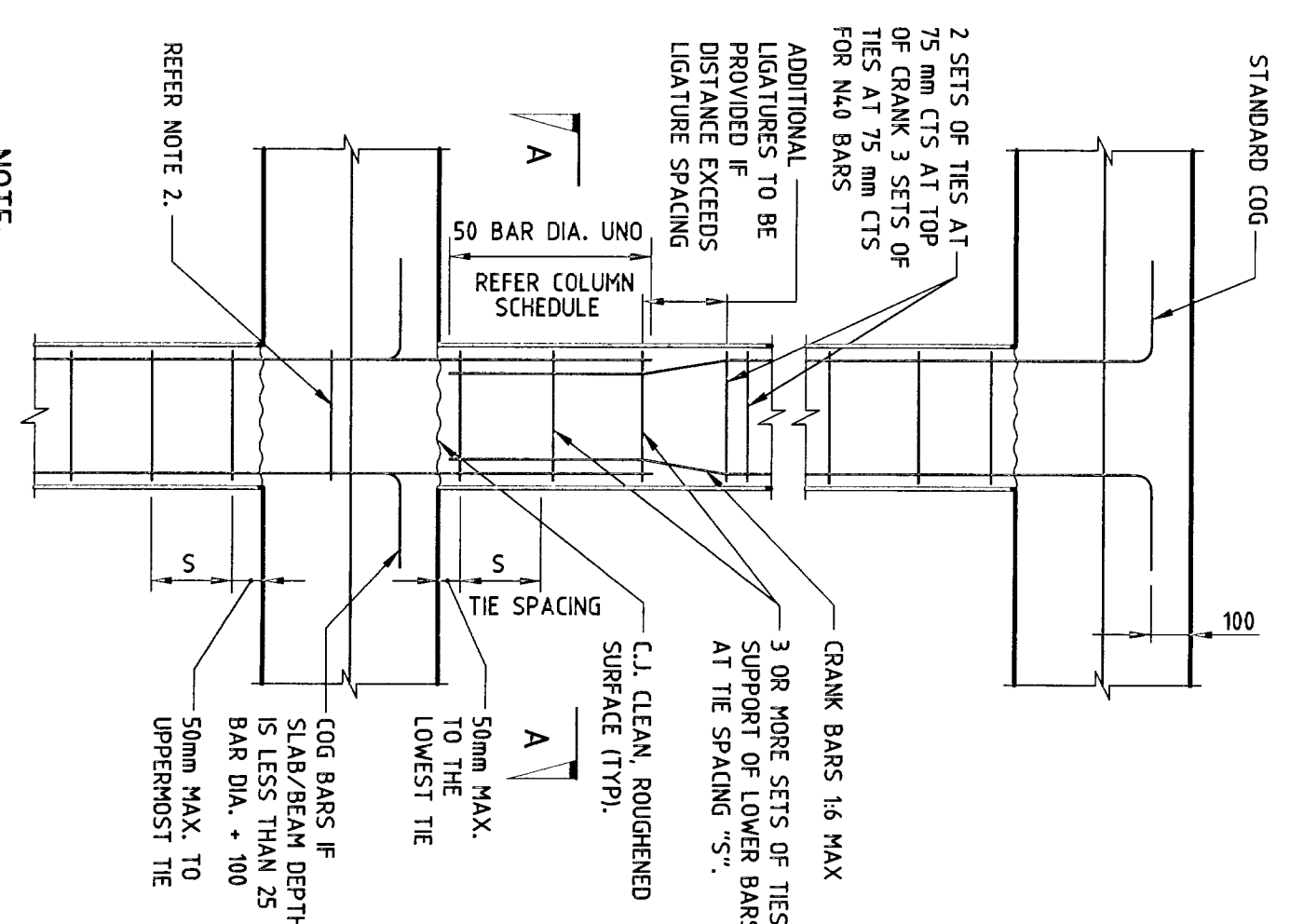
TYPE 'E' COLUMN
SCALE 1:20



TYPE 'F' COLUMN
SCALE 1:20



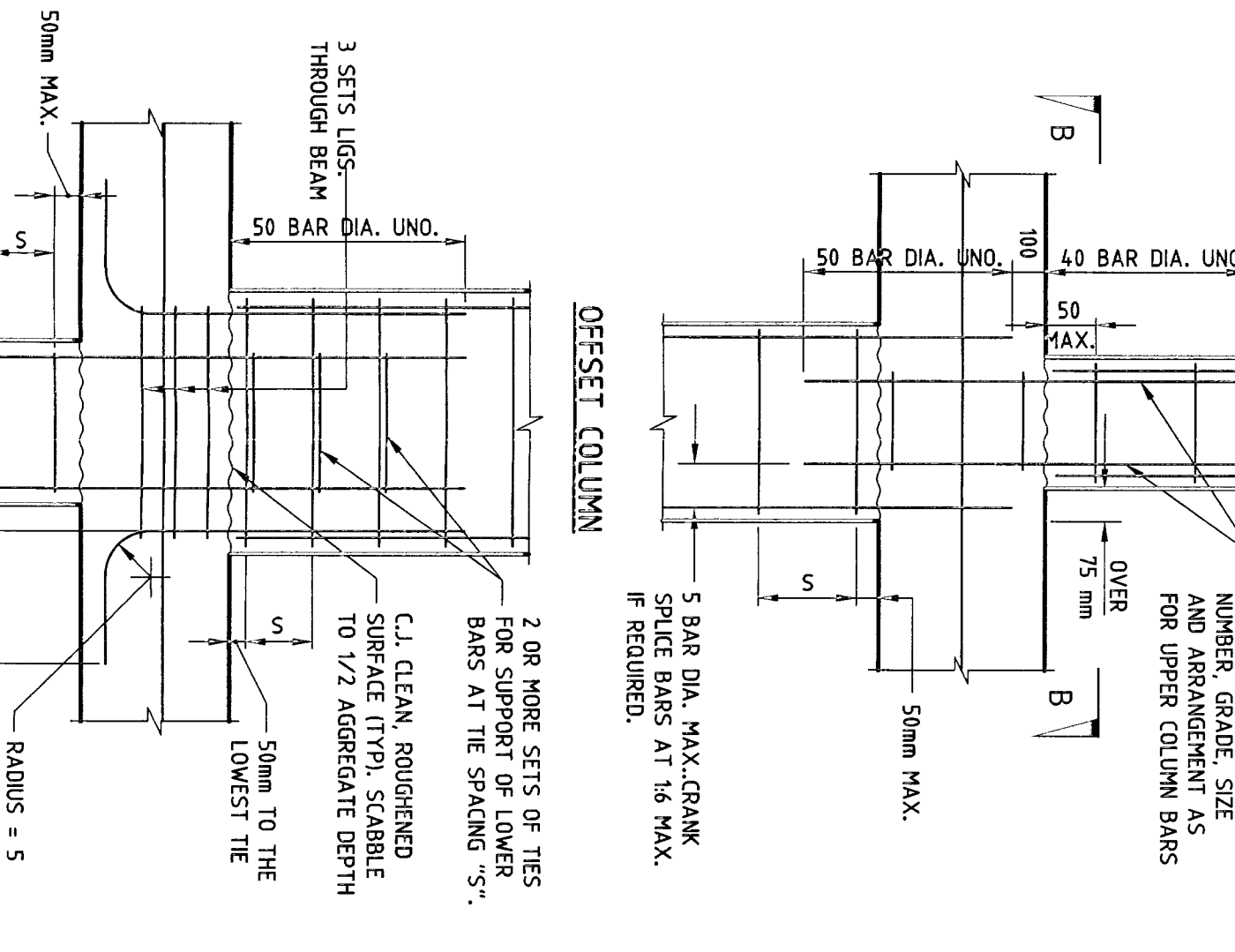
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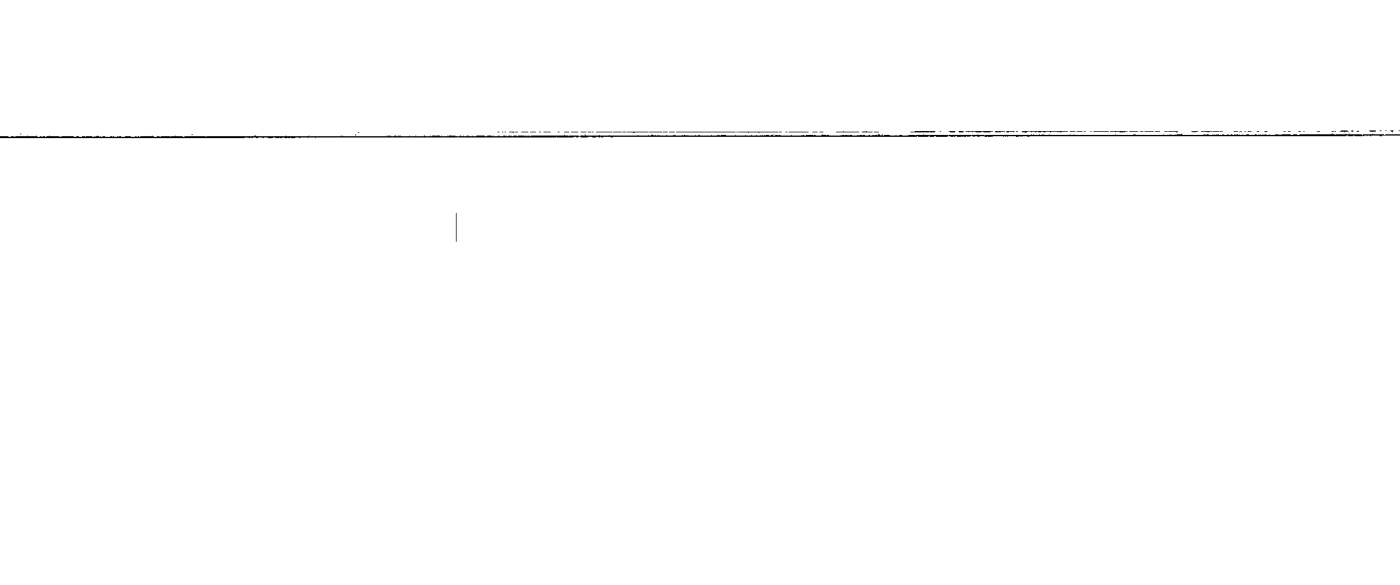
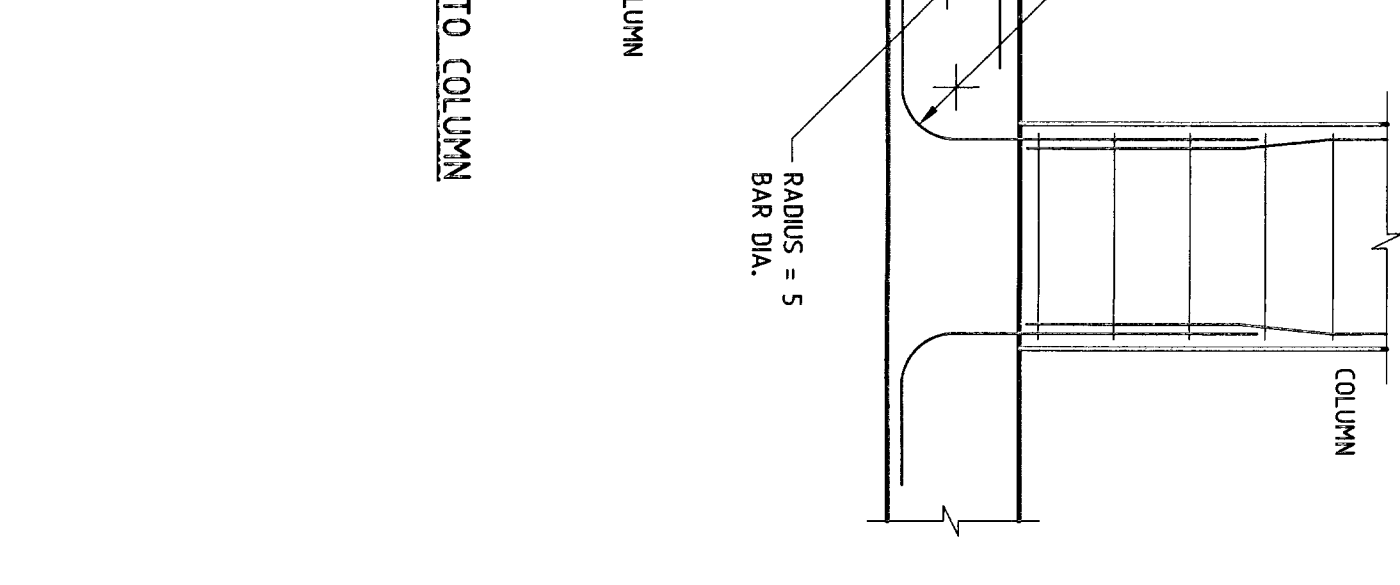
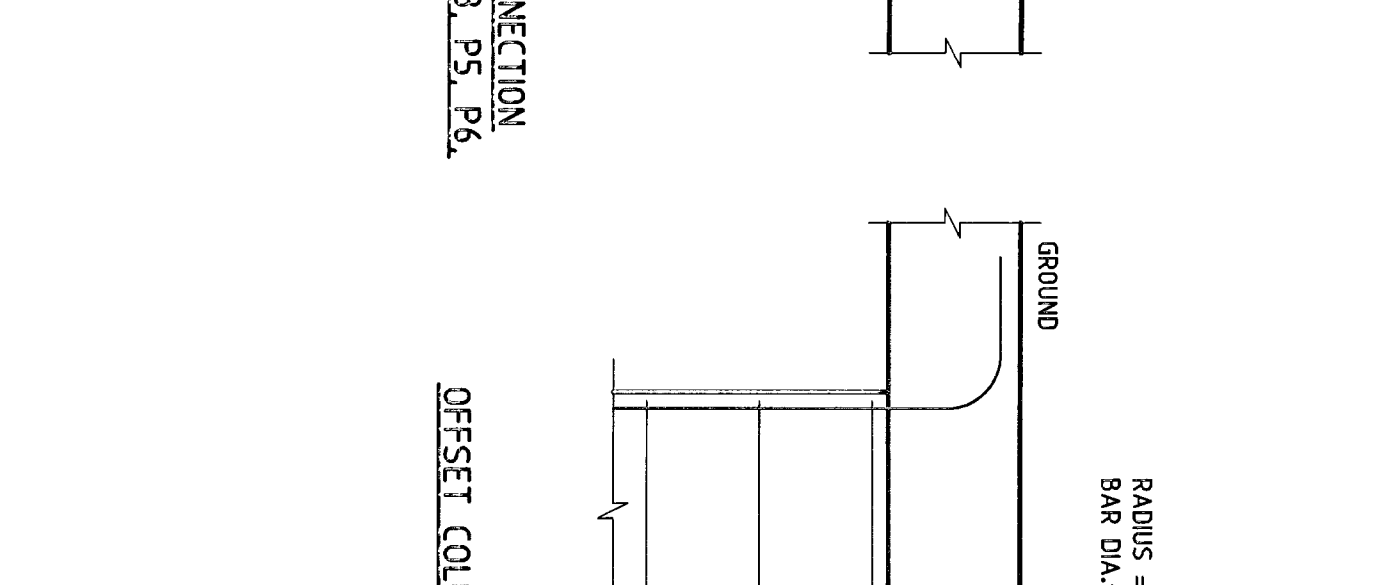
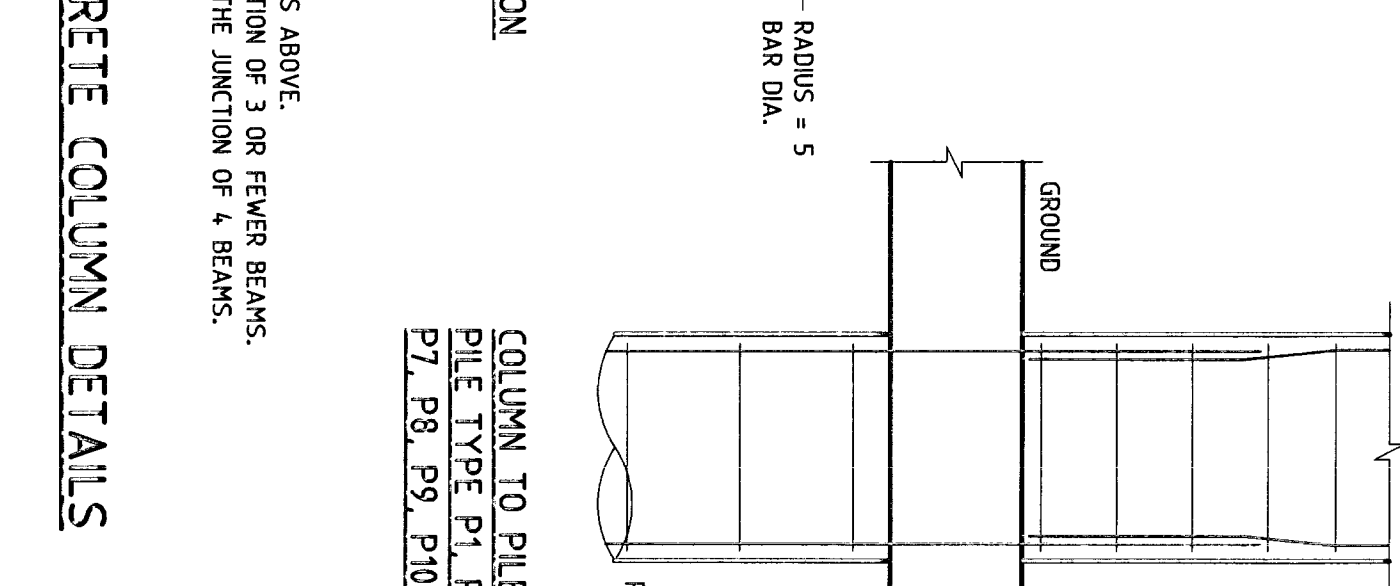
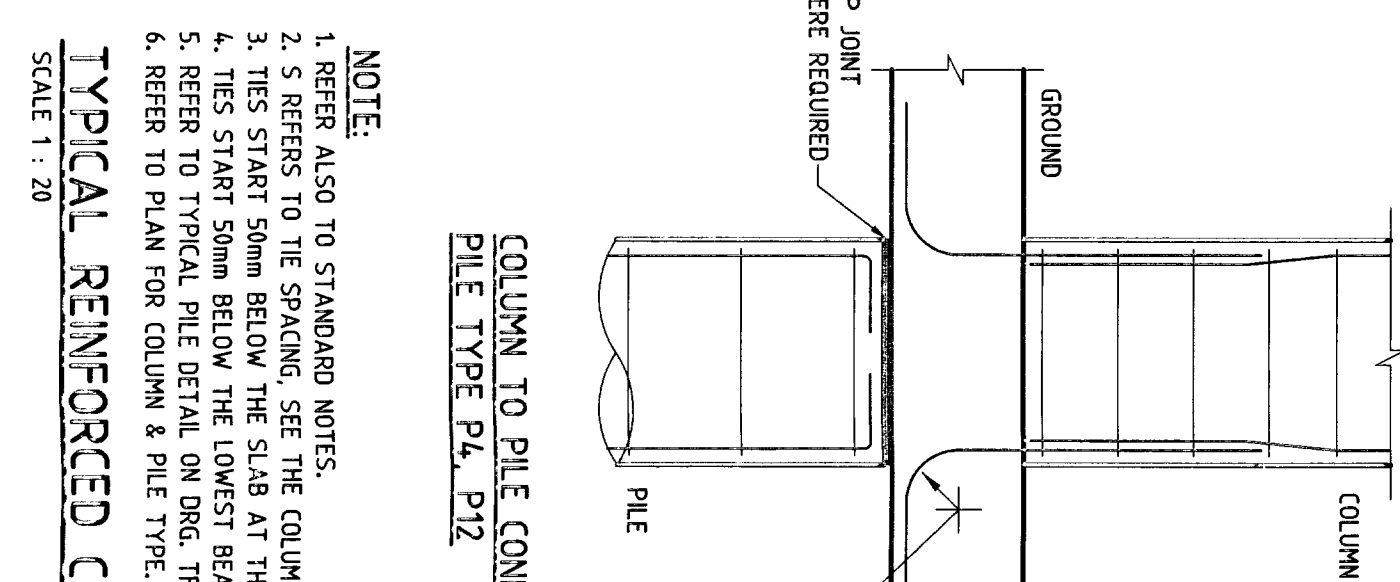
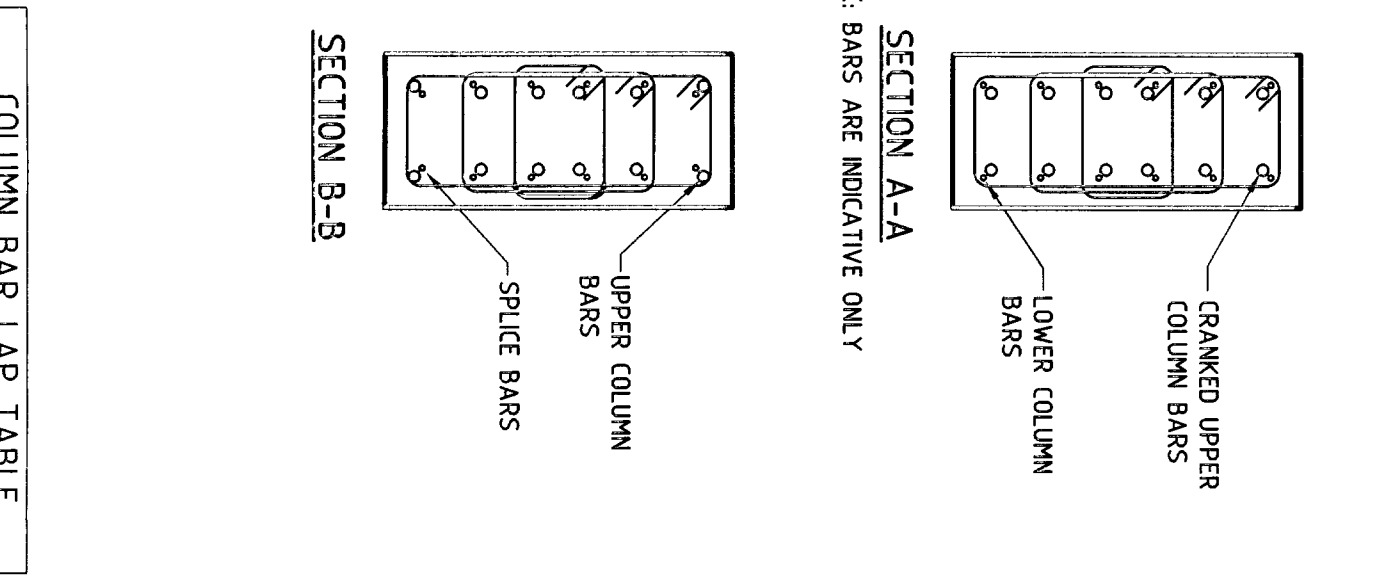
RC COLUMN DETAILS - STANDARD DETAIL
SCALE 1:20

NOTE:

- REFER COLUMN SCHEDULE FOR THE SPACING.
- WHERE BEAMS OR SLABS DO NOT FRAME FROM FOUR DIRECTIONS INTO A COLUMN, SPACING TIES WITHIN BEAM DEPTH.
- WHERE DIFFERENT DIAMETER BARS ARE SPICED, USE SPICE LENGTH FOR SMALLER BAR.



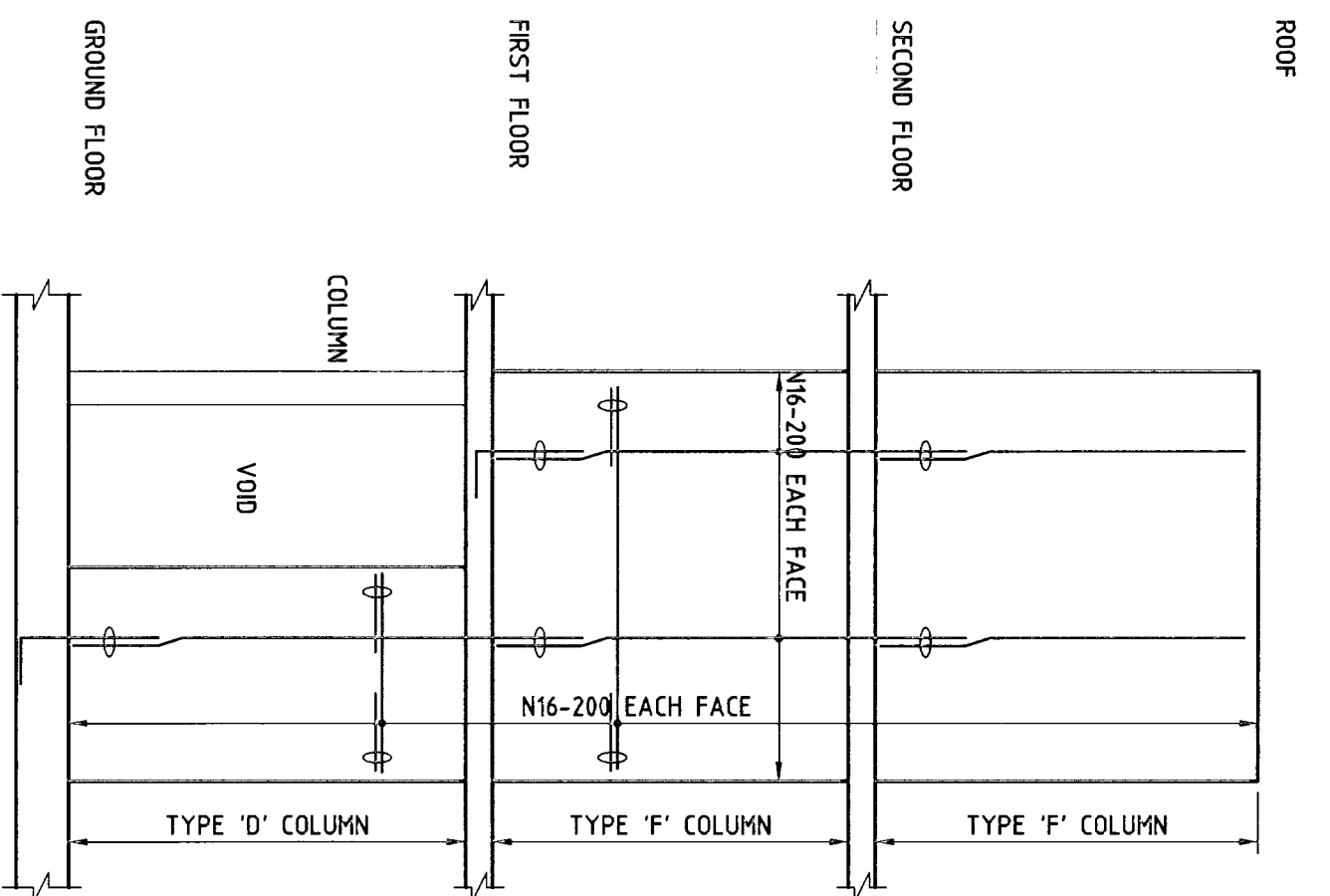
LARGER COLUMN OVER BEAM
SCALE 1:20



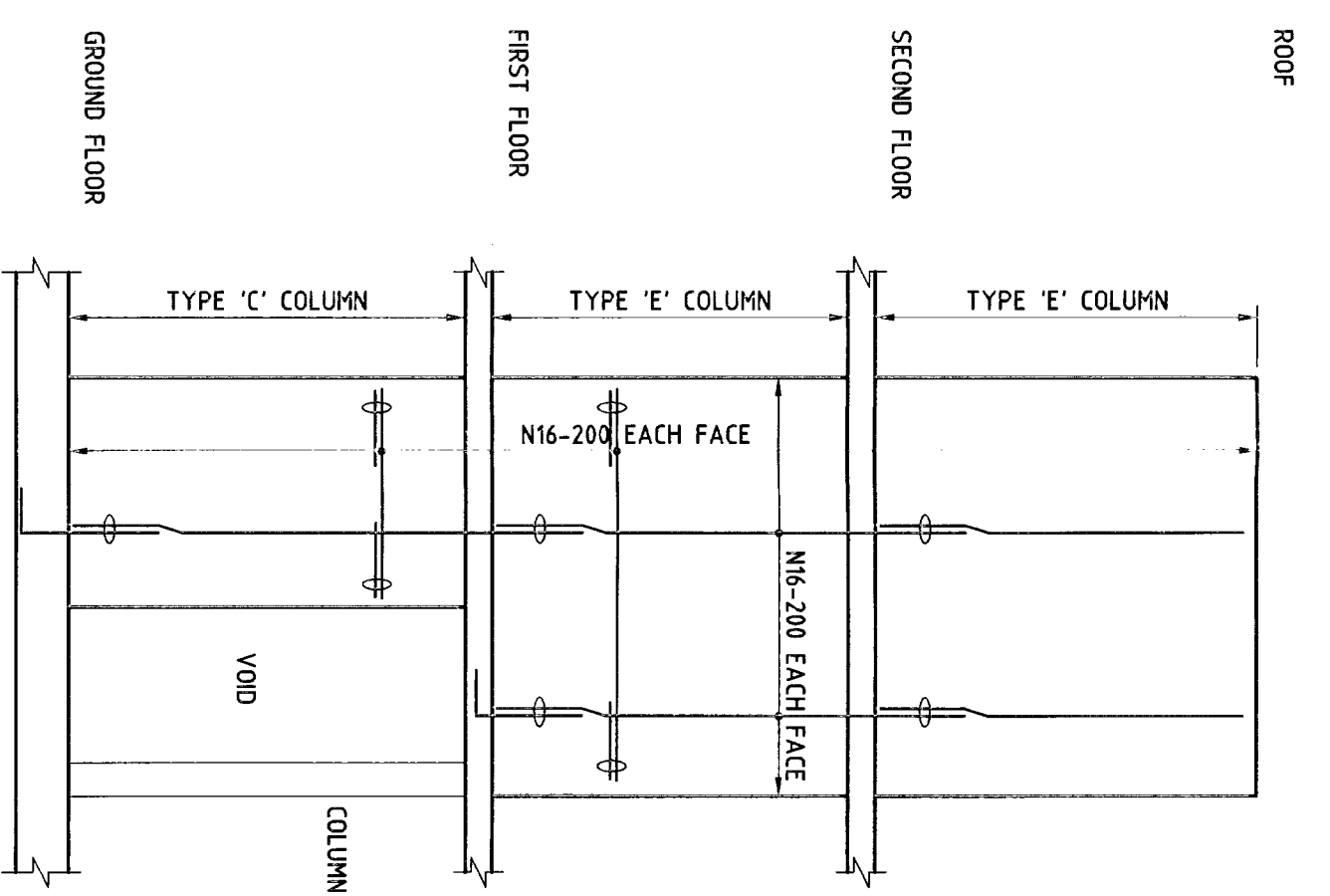
NOTE:

- REFER ALSO TO STANDARD NOTES.
- 5 REFERS TO THE SPACING. SEE THE COLUMN TYPES ABOVE.
- TIES START 50mm BELOW THE SLAB AT THE JUNCTION OF 3 OR FEWER BARS.
- TIES START 50mm BELOW THE SLAB AT THE JUNCTION OF 4 BARS.
- REFER TO TYPE 'A' COLUMN FOR PILE TYPE.
- REFER TO PLAN FOR COLUMN & PILE TYPE.

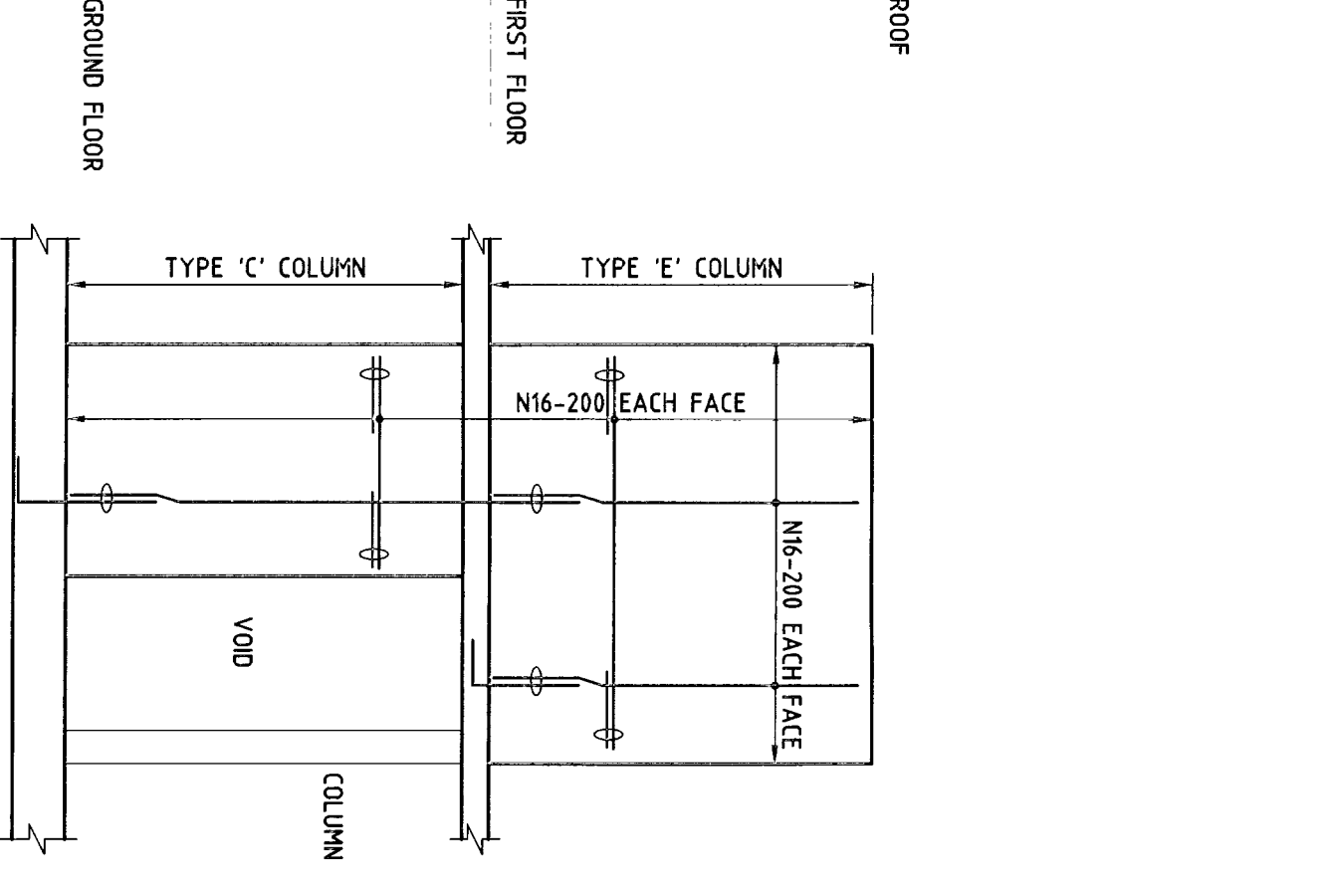
TYPICAL REINFORCED CONCRETE COLUMN DETAILS
SCALE 1:20



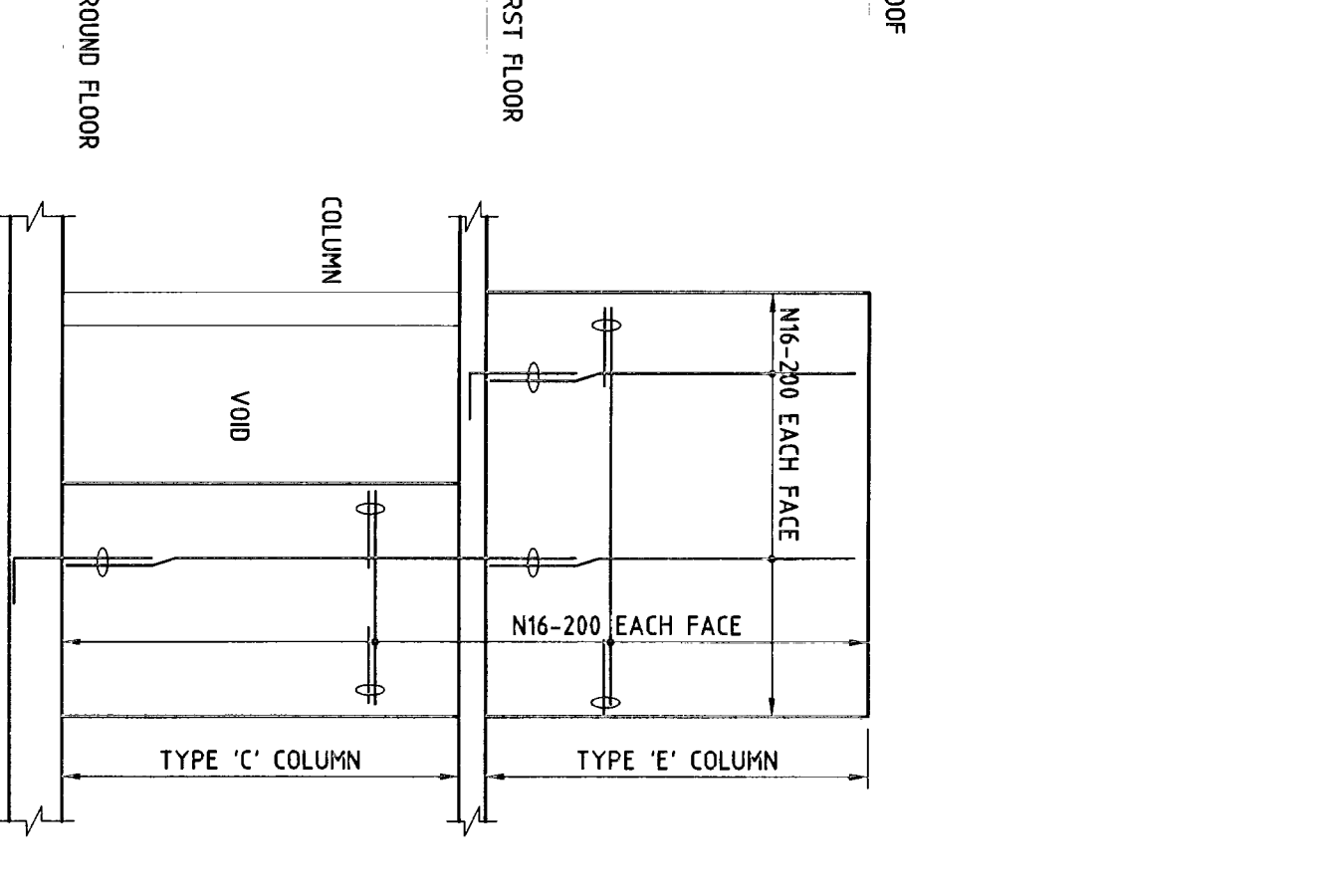
COLUMN AT STAIR ST3
LAKELANDS
SCALE 1:50



COLUMN AT STAIR ST4
LAKELANDS
SCALE 1:50



COLUMN AT STAIR ST5
THE FERRIERES
SCALE 1:50



COLUMN AT STAIR ST6
THE FERRIERES
SCALE 1:50

COLUMN BAR LAP TABLE

BAR Ø	LAP LENGTH
N12	600mm
N16	800mm
N20	1000mm
N25	1200mm

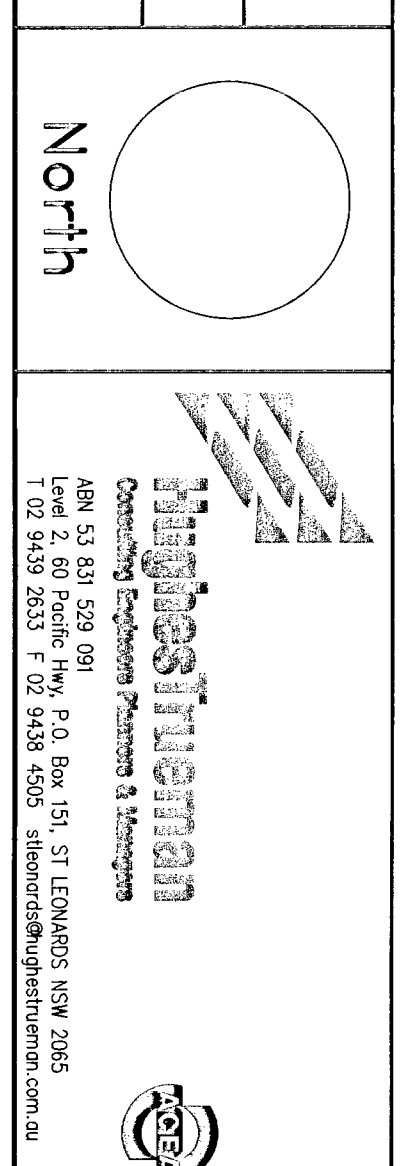
Revision	Description	Amendment or reason for issue	Issue date	Checked by	Designed & exp. by	Verified by	Issue authorised
B	RCB FOR REVISION		02/12/27	NSD	NSD	X	NSD
A	RCB FOR REVISION		02/12/27	NSD	NSD	X	NSD

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WARREWOOD BROOK
8 MACPHERSON STREET
WARREWOOD

ANGELICAN RETIREMENT VILLAGES

BOFFA ROBERTSON

THE FERRIERES & LAKELANDS
COLUMN SCHEDULE & DETAILS

Scale: 1:20

Drawing No: 075585-TFS07

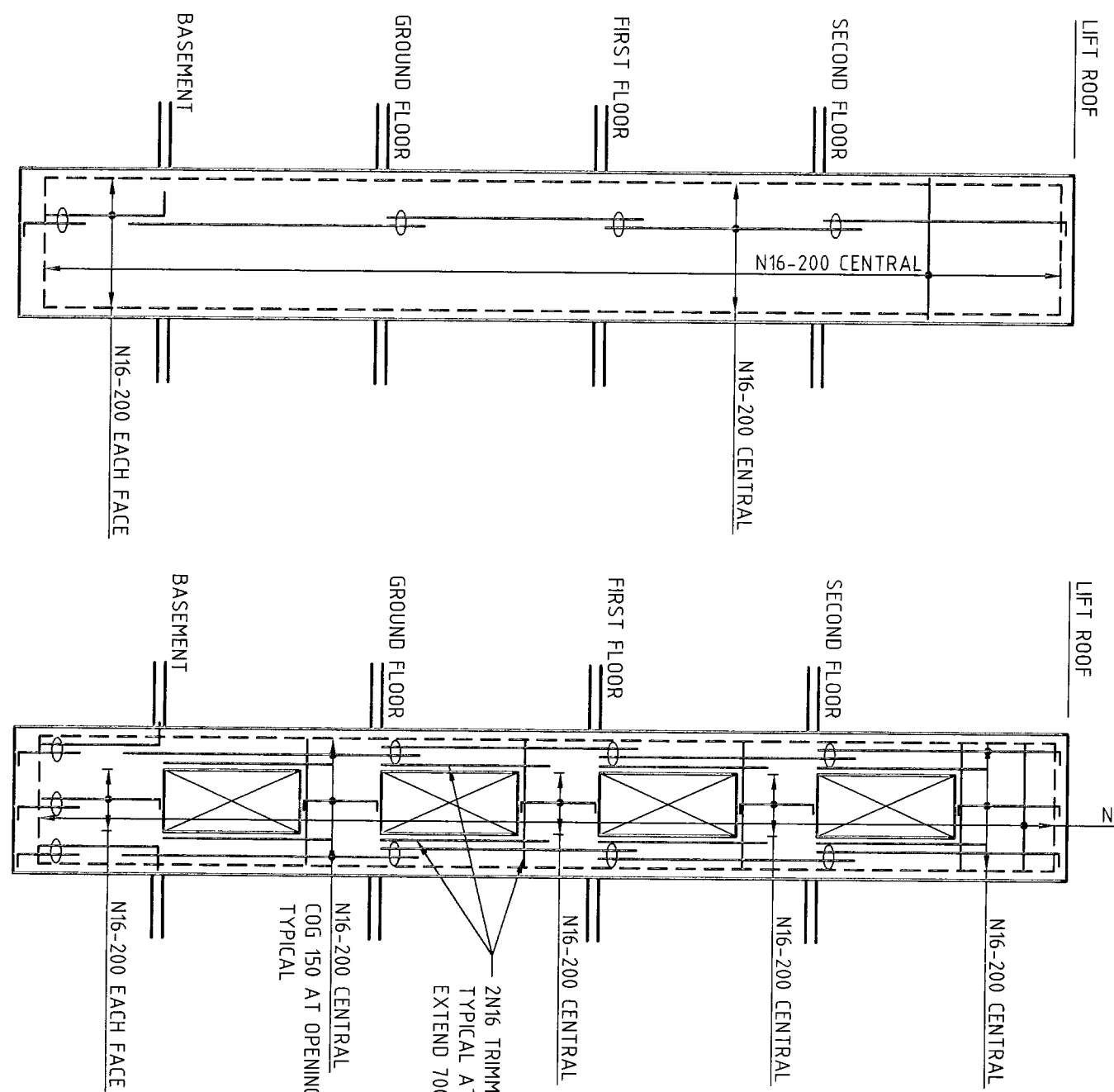
Sheet 8 of 8

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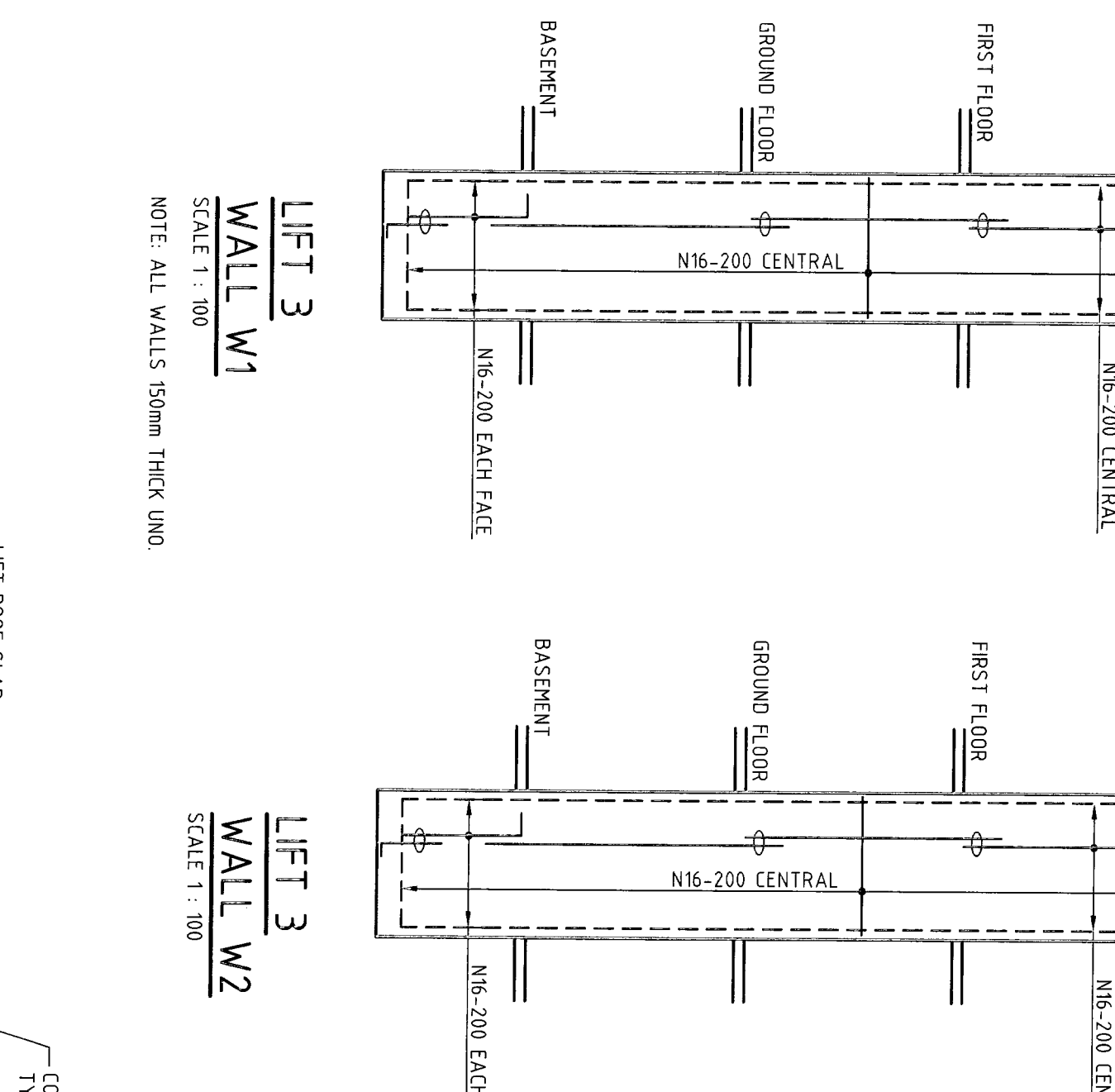
LAP SCHEDULE

BAR DIAMETER	LAP
N12	400
N16	400

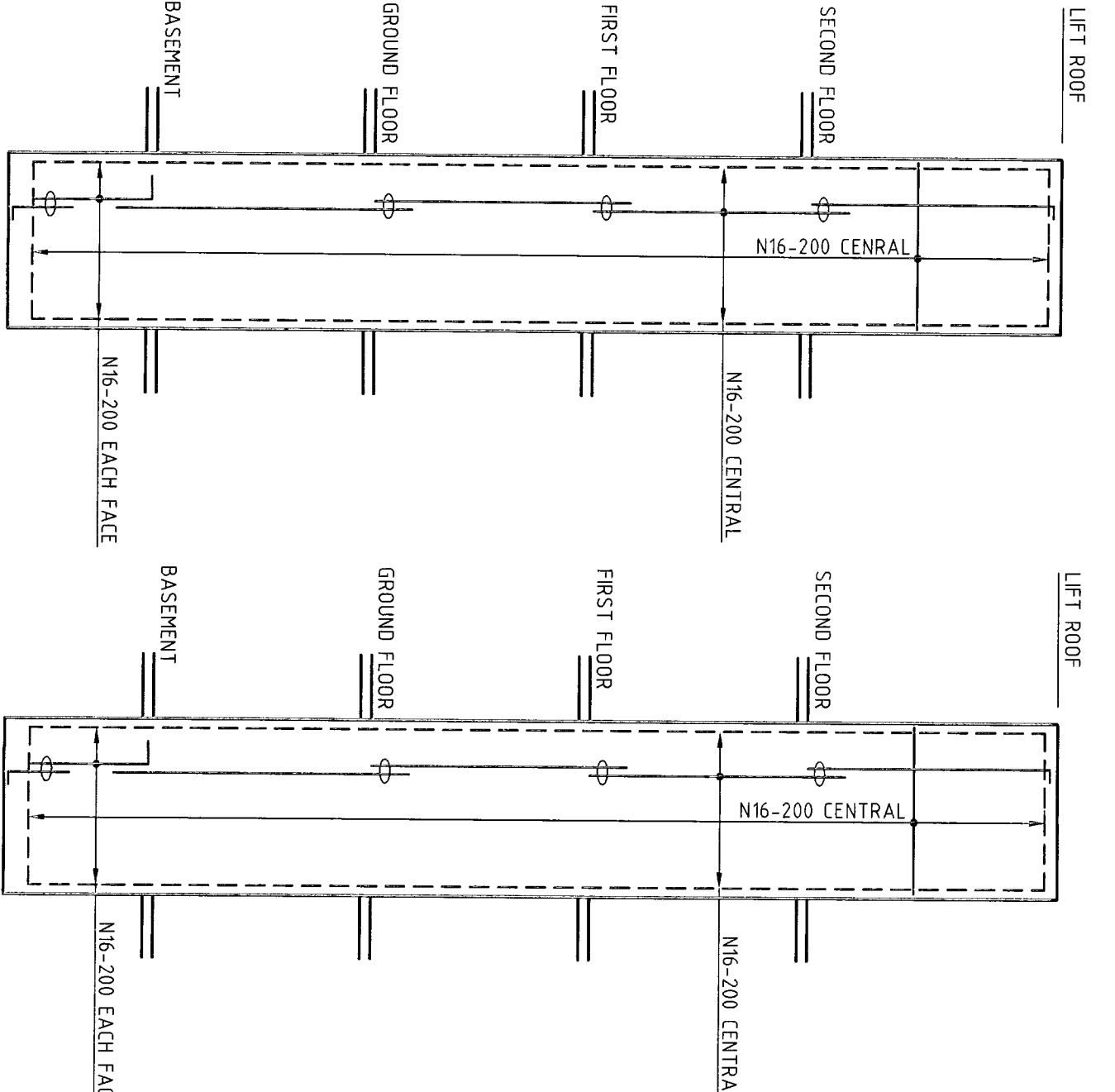
LEFT SHAFT 1 WALL PLAN
SCALE 1:100



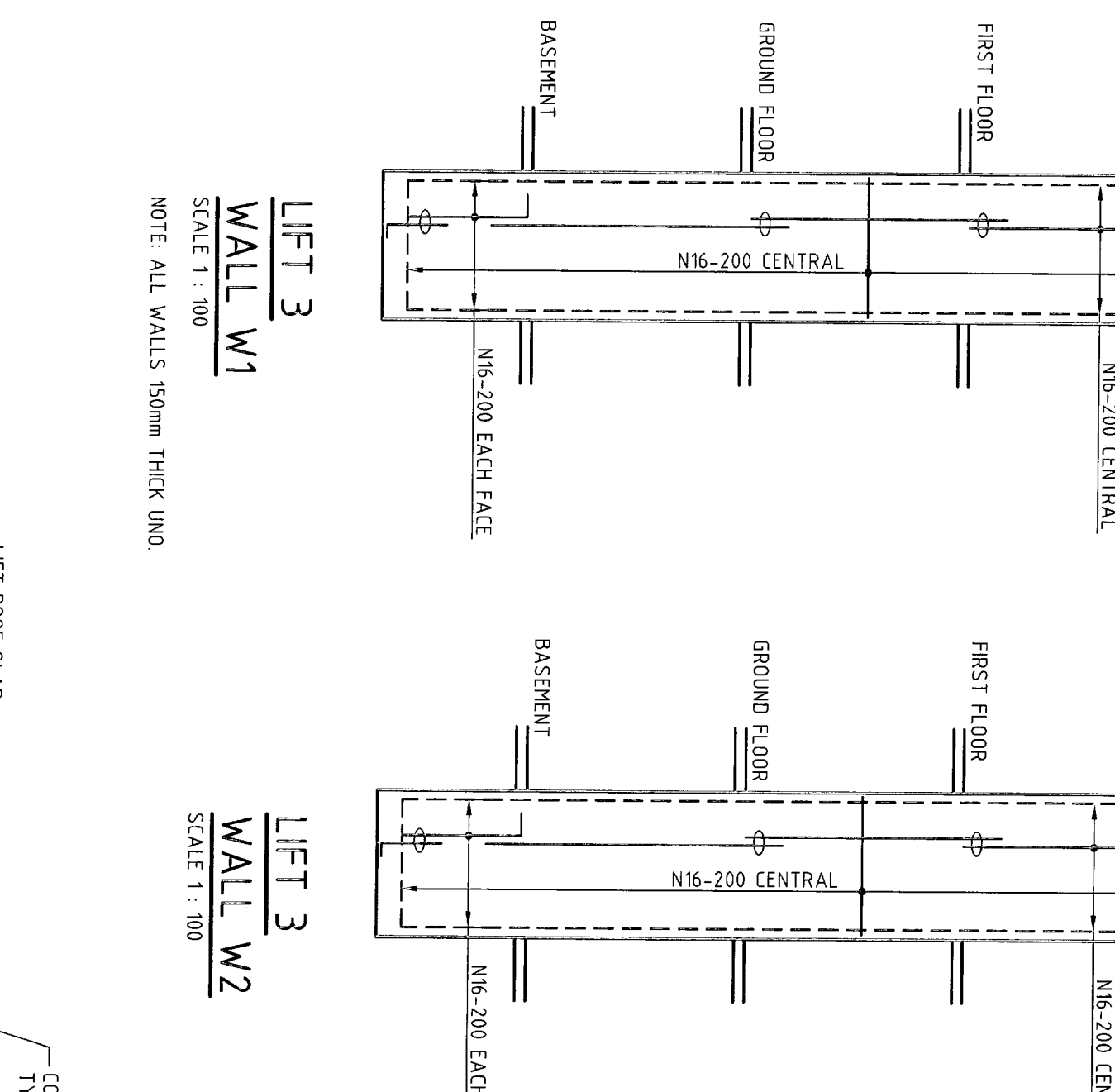
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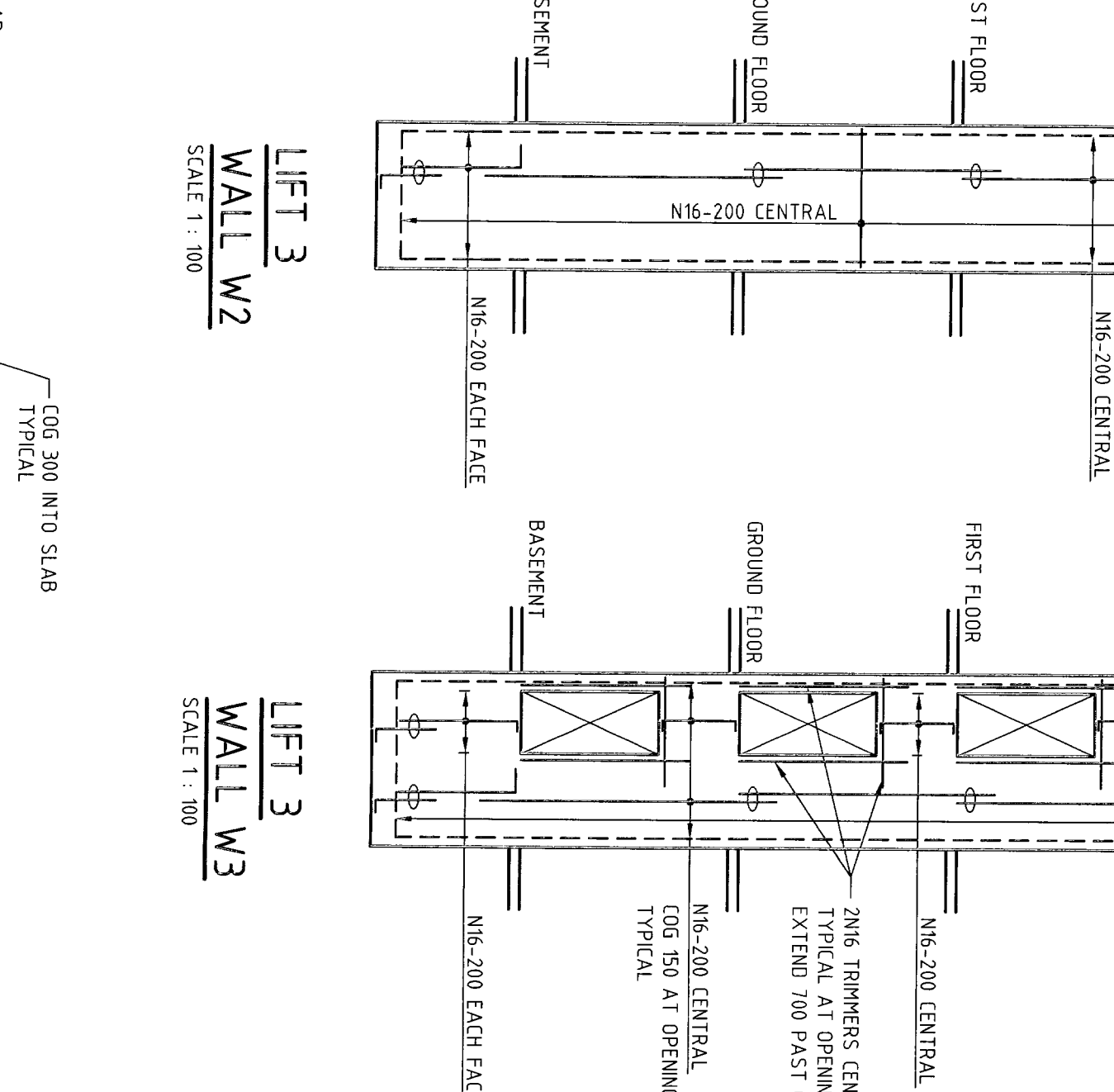
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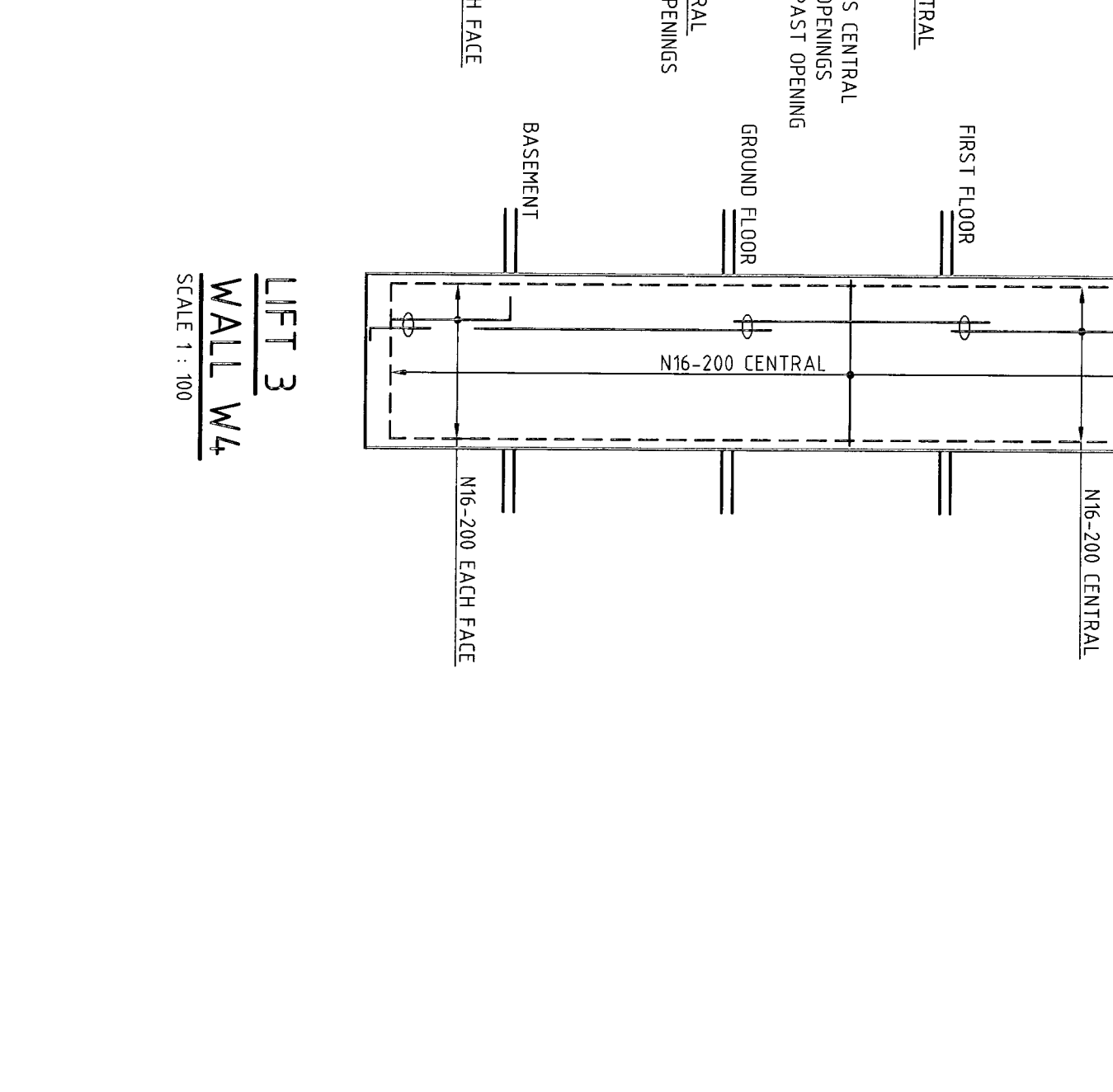
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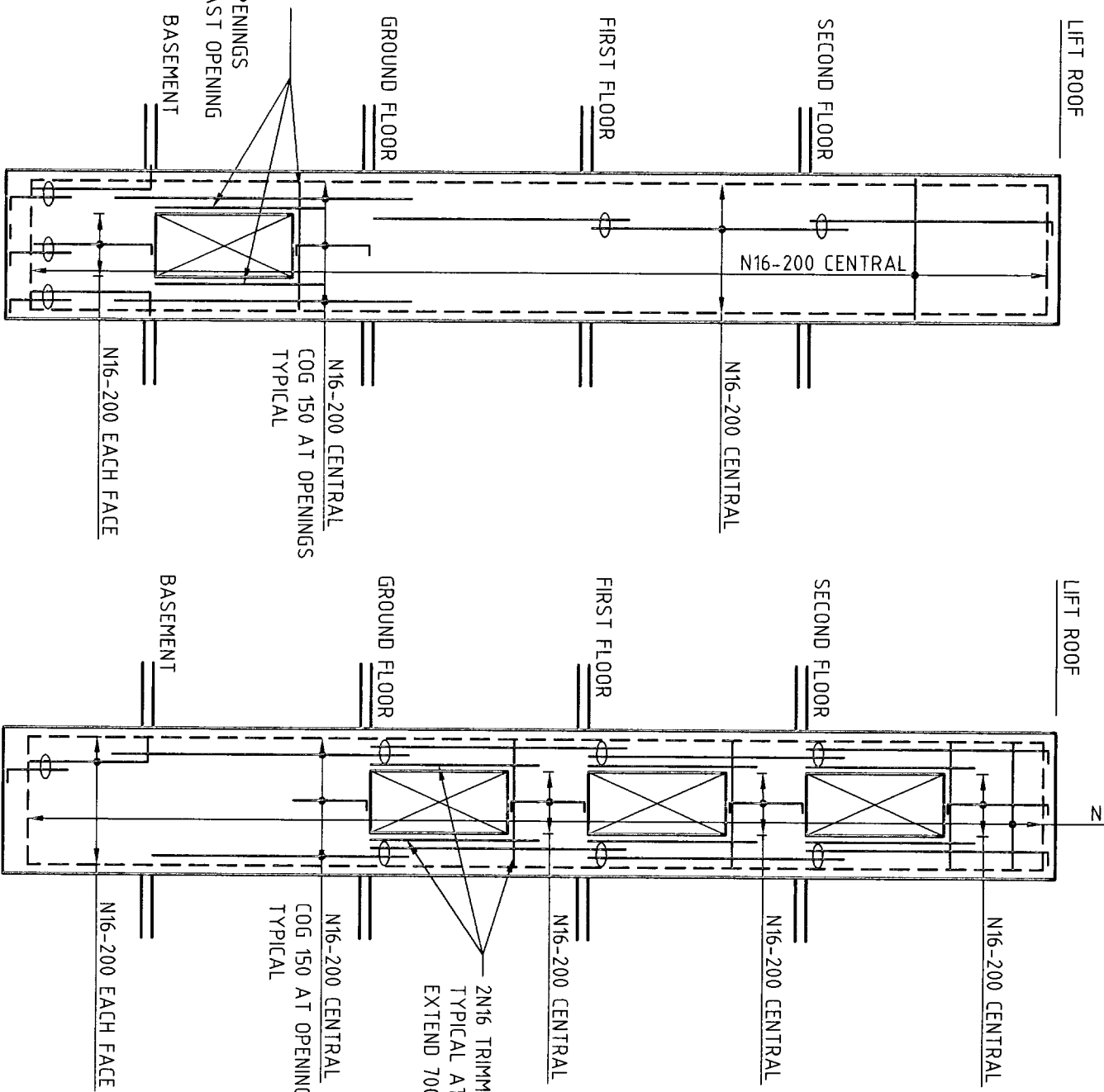
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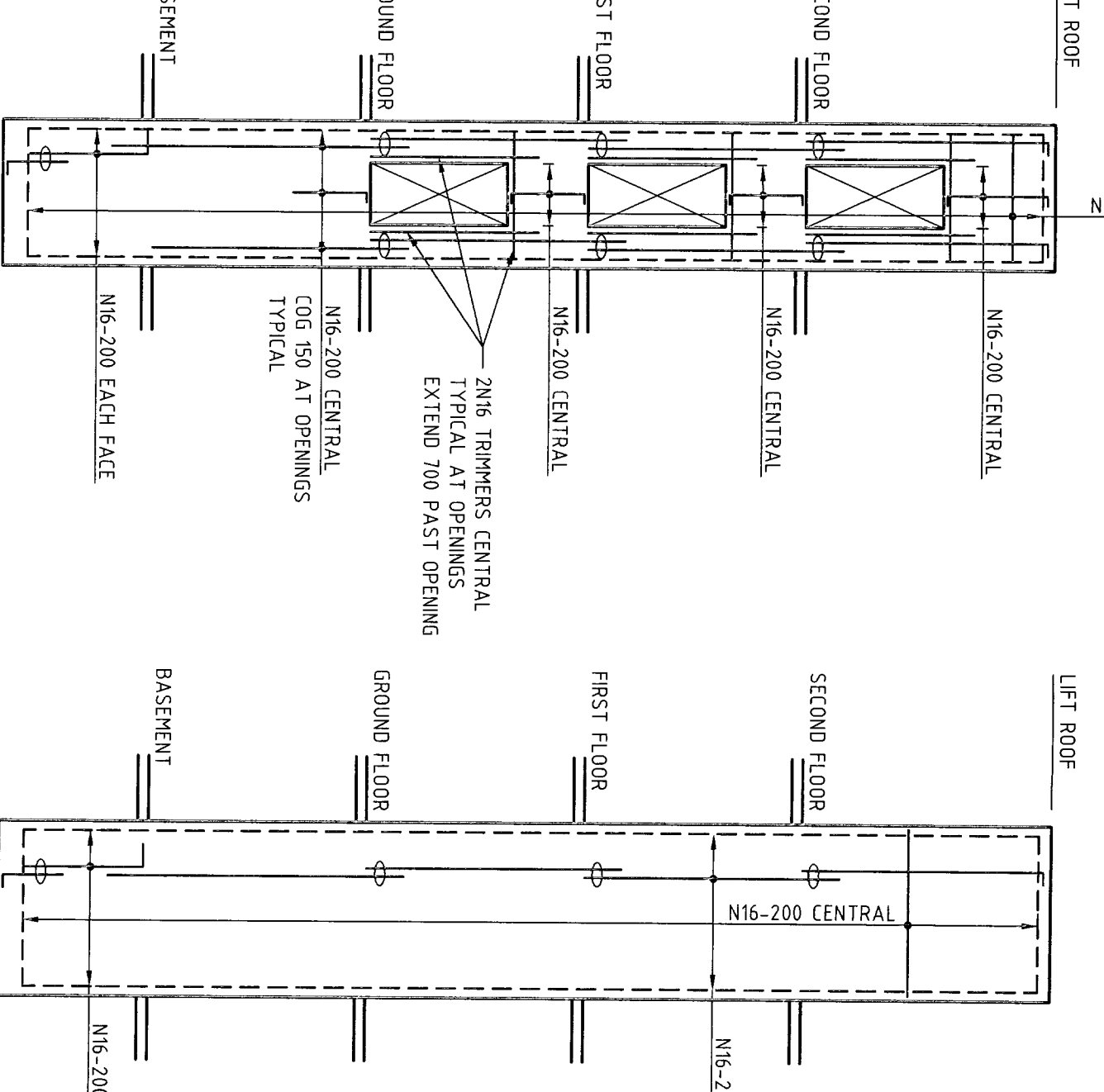
LEFT SHAFT 3 WALL W3
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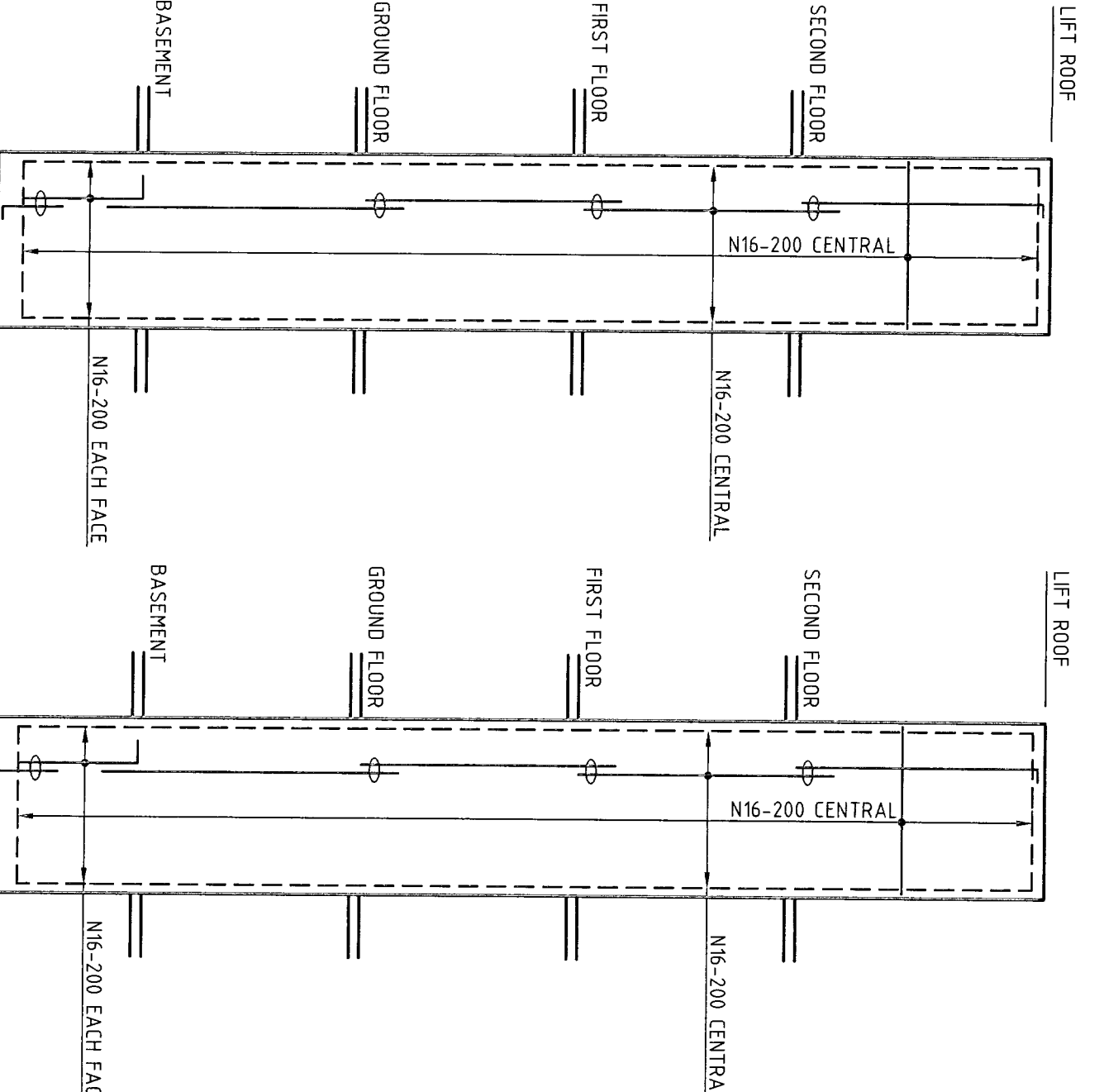
LEFT SHAFT 2 WALL PLAN
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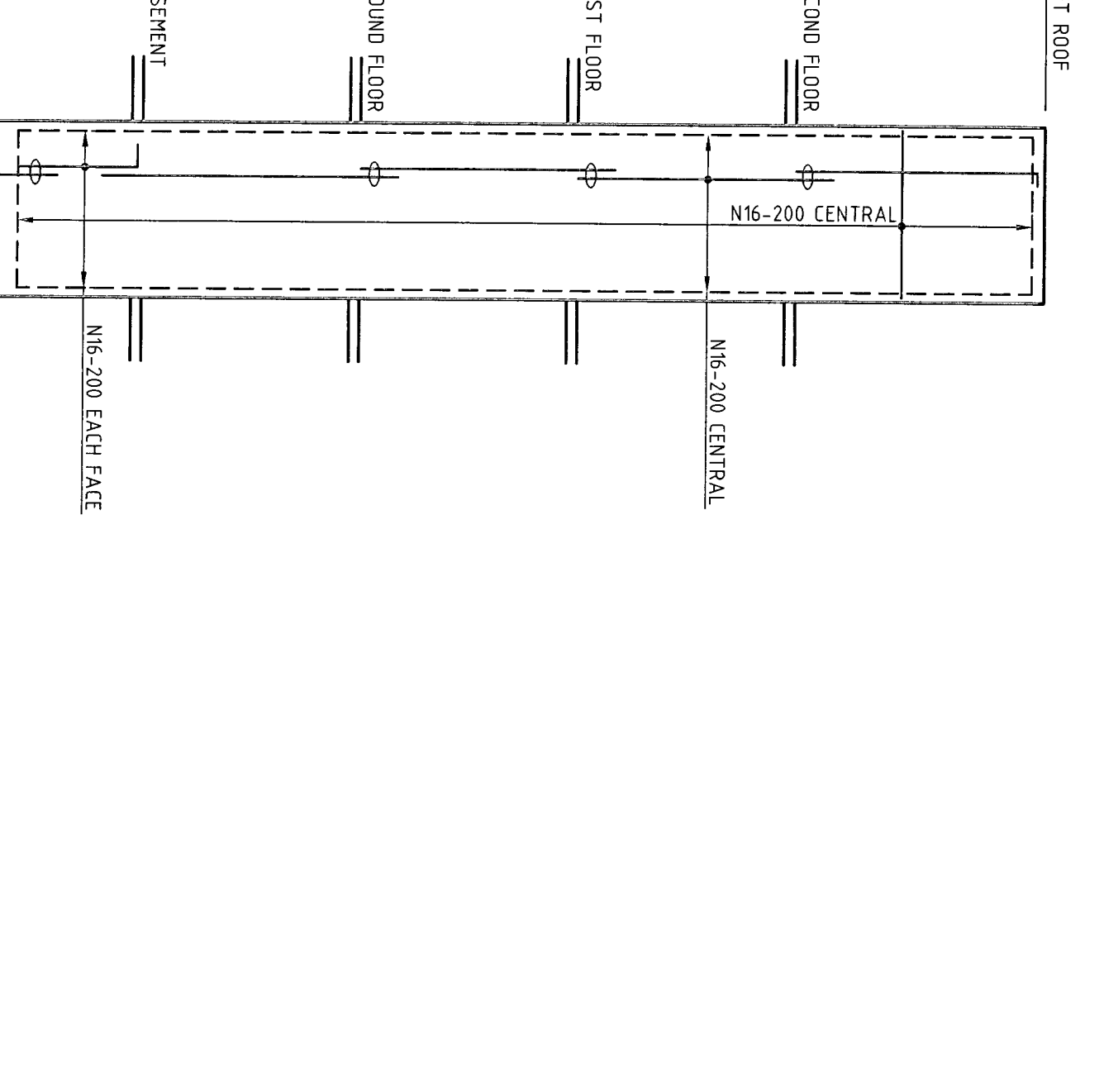
LEFT SHAFT 2 WALL W2
SCALE 1:100



LEFT SHAFT 2 WALL W3
SCALE 1:100



LEFT SHAFT 2 WALL W4
SCALE 1:100



LEFT 2 WALL W1
SCALE 1:100



LEFT 2 WALL W2
SCALE 1:100



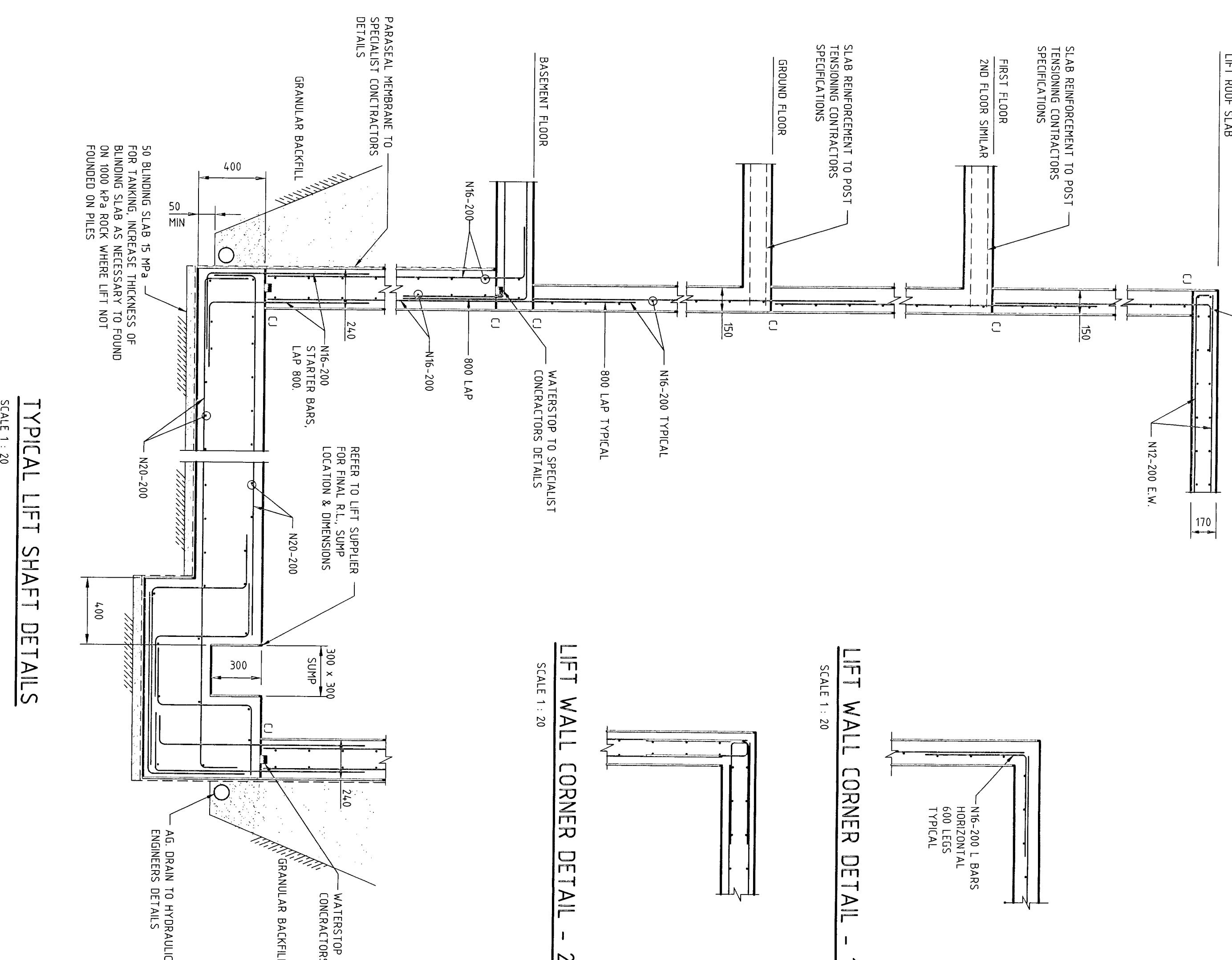
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SCALE 1:100



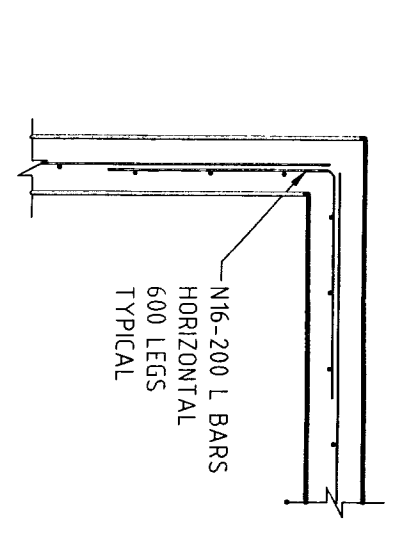
LEFT 2 WALL W4
SCALE 1:100



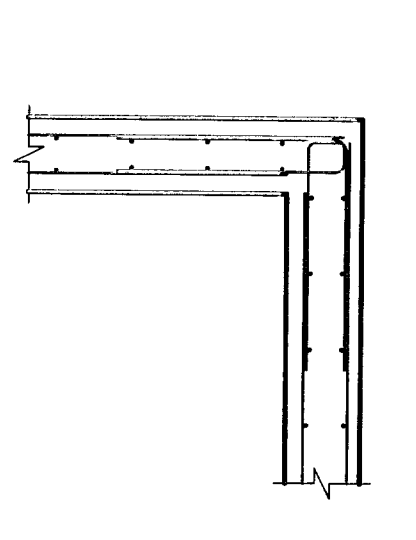
TYPICAL LIFT SHAFT DETAILS
SCALE 1:20



LIFT WALL CORNER DETAIL - 1
SCALE 1:20



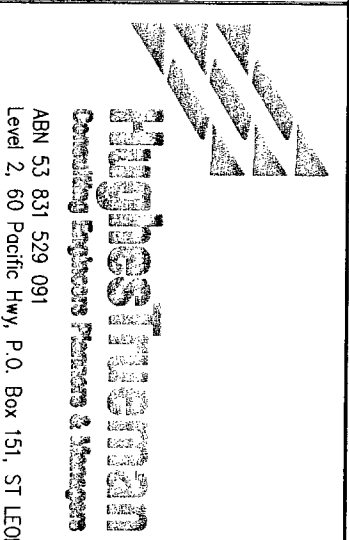
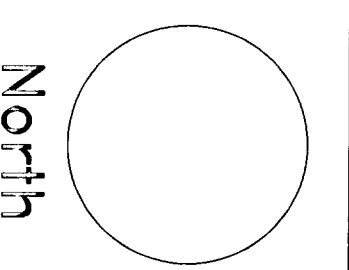
LIFT WALL CORNER DETAIL - 2
SCALE 1:20



NOT FOR CONSTRUCTION

Revision	1	Issue	07/12/21	Drawn by	AW	Checked by	AW	Scale	1:100
2	Issue for printing	07/12/21	AW	AW	AW	AW	AW	1:100	
3	Issue for printing	07/12/21	AW	AW	AW	AW	AW	1:100	
4	Issue for printing	07/12/21	AW	AW	AW	AW	AW	1:100	

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Project
WARRWOOD BROOK
8 HARRISON STREET
WARRWOOD

Client
ANGELICAN RETIREMENT VILLAGES
BOYLA ROBERTSON

Drawing Title
THE FERRISERS - LAKELANDS
TYPICAL DETAILS SHEET 2
LIFT DETAILS

Scale
1:20

Sheet
9 of 9

TEMPORARY ANCHORS

- 1A. ALL TEMPORARY ANCHORS TO BE USE OR EQUIVALENT WITH MINIMUM SECTION 1A. ANCHORS SHALL BE INSTALLED IN RETAINING WALL SECTION 1A. ANCHORS SHALL BE INSTALLED IN RETAINING WALL SECTION 1A. ANCHORS SHALL BE INSTALLED IN RETAINING WALL SECTION 1A.
- 1B. A MINIMUM OF ONE ANCHOR AT TOP & BOTTOM TO BE PROVIDED AT THE CENTER OF EACH 3000 LONG WALL LENGTH.
- 1C. BUILDER TO ENSURE THAT:
 - A. APPROVAL IS OBTAINED PRIOR TO INSTALLATION OF ANCHORS.
 - B. ANY ANTI-BURST REINFORCEMENT REQUIRED IS INCORPORATED IN THE WALL.
 - C. NO DAMAGE IS CAUSED TO EXISTING BUSINESS AND/OR ROADWAY AND ROADWAYS DURING THE INSTALLATION OF THE TEMPORARY WORKS AND APPROVAL IS OBTAINED PRIOR TO INSTALLATION OF ANCHORS.
- 1D. RETAINING ANCHORS AFTER TOP SLAB AND BASEMENT SLAB HAVE BEEN FORMED AND CURED.

TEMPORARY WORKS

DESIGN AND INSTALLATION OF ALL TEMPORARY WORKS AND PROCEDURES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND ROADWAYS DURING THE INSTALLATION OF THE TEMPORARY WORKS AND PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND ROADWAYS DURING THE INSTALLATION OF THE TEMPORARY WORKS AND PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND ROADWAYS DURING THE INSTALLATION OF THE TEMPORARY WORKS AND PROCEDURES.

EPOXY ADHESIVES AND GROUTS

EPXY ADHESIVES OR GROUTS ARE INDICATED ON THE DRAWINGS UNLESS SPECIFIED OTHERWISE. THE CONTRACTOR IS TO USE A PROPRIETARY PRODUCT SUPPLIED BY EITHER RAKET, H.L.T. ERMEL, SICA, HERTZ OR PARABAY. THE CONTRACTOR SHALL CONSULT WITH THE SUPPLIER AND REFER TO THEIR SPECIFICATIONS TO DETERMINE SUSTAINABILITY AND METHOD OF PREPARATION AND INSTALLATION. GROUTS AND GROUTS SHALL BE LOW SHRINK WITH A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 60MPa AND SHALL BE SUITABLE FOR THE ENVIRONMENT IN WHICH THEY WILL BE USED AND BE COMPATIBLE WITH THE SUBSTRATE TO WHICH THEY WILL BE APPLIED.

BORED PIERS DESIGN, INSTALLATION AND CERTIFICATION NOTES

1. BORED PIERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS 3600 AND ANY APPLICABLE SPECIAL REQUIREMENTS OUTLINED ON THE STRUCTURAL DRAWINGS.
 2. BORED PIERS SHALL BE DESIGNED BY THE CONTRACTOR IN TERMS OF:
 - PIER DIAMETER
 - SOCKET LENGTH
 - CONCRETE STRENGTH
 3. ALL EXISTING MATERIAL SHALL BE INSPECTED, APPROVED & CERTIFIED AT THE CONTRACTOR'S EXPENSE BY A GEOTECHNICAL ENGINEER APPROVED BY HIGHER TRIBUNAL.
 4. ALL BORED PIERS SHALL BE FORMED IN SAME FOUNDATION MATERIAL.
 5. TOLERANCE ON INSTALLATION OF BORED PIERS SHALL BE IN ACCORDANCE WITH AS 3600.
 6. PLACING OF CONCRETE IN BORED PIERS SHALL BE IN ACCORDANCE WITH SPECIFICATION.
- THE CONTRACTOR SHALL SUBMIT DETAILED CALCULATIONS SHOWING THE DESIGN CAPACITY OF BORED PIERS & METHOD OF ASSIGNING AT THE DESIGN CAPACITY FOR REVIEW BY HIGHER TRIBUNAL PRIOR TO COMMENCING ON SITE. PIER DESIGN TO BE CERTIFIED BY REFER ENGINEER SHOWN BY THE CONTRACTOR.
- CONCRETE COVER TO ALL REINFORCEMENT IS TO BE 75mm.
- A CENTER-LINE OF ALL PIERS TO CONCRE WITH CENTER-LINE OF COLUMNS UNLESS DETAIL OTHERWISE. DESIGN LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH WORKING LOADS FOR THE LOAD COMBINATION G + Q ARE SPECIFIED ON THE STRUCTURAL DRAWINGS.
- NOTES: 1. TOP OF ALL PIERS TO BE AT BULK EARTHWORKS LEVEL, NOMINATED BY CIVIL ENGINEERS UNLESS NOTED OTHERWISE ON PLANS.
- a. ALL COLUMNS WHERE SERVICE PIERS RUN DOWN COLUMNS, TOP OF BE CONSIDERED TO BE AT BULK EARTHWORKS LEVEL. LOCATIONS YET TO BE CONFIRMED.
 - b. ALL PIERS WHERE SERVICE PIERS TYPE PERI, PERI & PERI PERI, TOP OF PIERS TO BE 300mm BELOW BULK EARTHWORKS LEVEL.
 2. AT SERVICE ANCHORS FOR ROOMS & UNDERGROUND TANKS ROUNDED LEVEL FOR ROOM/PLANS.
 3. MINIMUM LENGTH OF BORED PIER UNDER COLUMN = 1000mm.

REFERENCE DRAWINGS:

- TFE01 COVER SHEET AND GENERAL NOTES (SHEET 1)
- TFE02 GENERAL NOTES (SHEET 2)
- TFE03 GENERAL NOTES (SHEET 3)
- TFE05 TYPICAL STAIRS ELEVATIONS AND DETAILS
- TFE06 TYPICAL LIFT DETAILS
- TFE07 COLUMN SCHEDULE AND DETAILS
- TFE08 TYPICAL DETAILS BASEMENT & LINKS (SHEET 1)
- TFE09 TYPICAL DETAILS BASEMENT & LINKS (SHEET 2)

THE FERRERIES

- TFE10 BASEMENT FLOOR PLAN
- TFE20 GROUND FLOOR PLAN
- TFE21 GROUND FLOOR SLAB TYPICAL DETAILS SHEET 1
- TFE30 FIRST FLOOR PLAN
- TFE31 FIRST AND SECOND FLOOR SLAB DETAILS

LAKELANDS

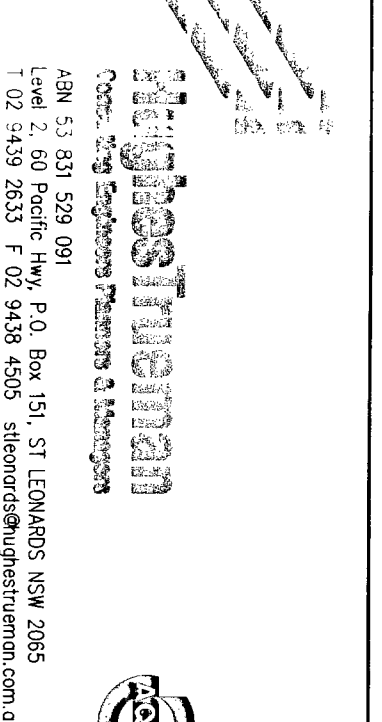
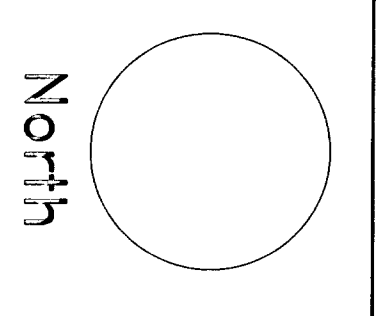
- LLS10 BASEMENT FLOOR PLAN
- LLS05 GARBAGE ROOMS TYPICAL DETAILS
- LLS6 EXTERNAL WORKS CANOPY DETAILS
- LLS20 GROUND FLOOR PLAN
- LLS30 FIRST FLOOR PLAN
- LLS31 FIRST AND SECOND FLOOR SLAB DETAILS
- LLS40 SECOND FLOOR PLAN

NOT FOR CONSTRUCTION

100mm	200mm	300mm
100mm	200mm	300mm

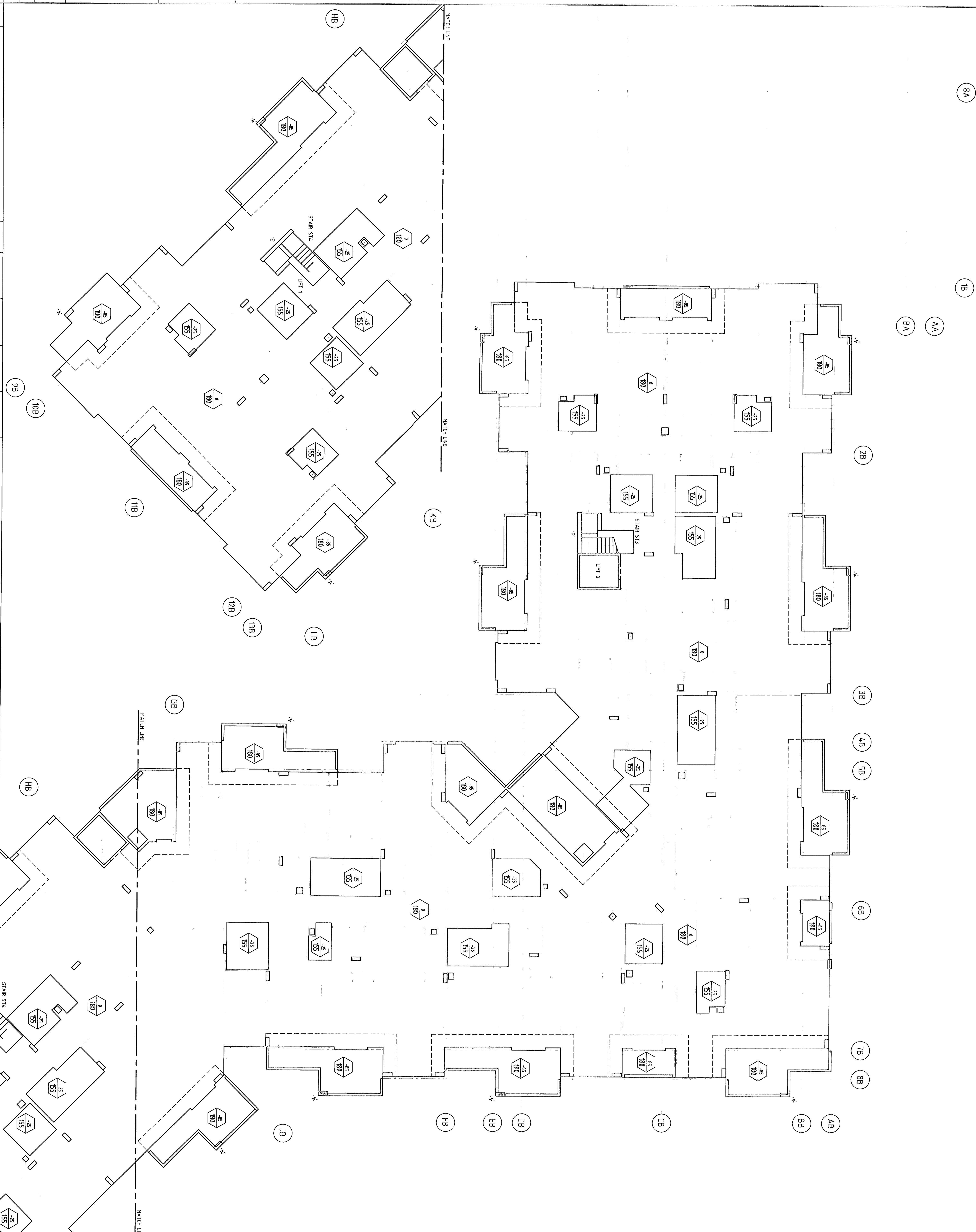
100mm	200mm	300mm
100mm	200mm	300mm

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Project
WARRIEWOOD BROOK
8 MACPHERSON STREET
WARRIEWOOD
ANGELICAN RETIREMENT VILLAGES
BOFFA ROBERTSON

Drawing No. 075585-TFE03
Sheet 01
Revision B



SECOND FLOOR PLAN

1 : 80

- NOTES:**
1. REFER TO DWG. THESE FROM LIFT WALL DETAILS AND SECTIONS
 2. REFER TO DWG. THESE FROM STAIR DETAILS AND SECTIONS
 3. REFER TO DWG. THESE FROM CORNER DETAILS AND SECTIONS
 4. DIMENSIONS OF REBAR'S STROPPING AND SETDOWNS NOT INDICATED ON THIS PLAN AND ASSOCIATED SECTIONS
- NOTE THIS SLAB HAS NOT BEEN DESIGNED TO TRANSFER ALL ROOF LOADS ARE TO BE TRANSFERRED TO CONCRETE COLUMNS

NOT FOR CONSTRUCTION

Revision	Description	Date	Drawn By	Checked By	Issue No.
0	ISSUE FOR PERMIT	07/12/21	MM	MM	1
1	FOR PERMIT	MM	MM	MM	1
2	AMENDMENT OF PERMIT FOR ISSUE	MM	MM	MM	1

Project	WARRIMOOD BROOK 8 MARCHERSON STREET WARRIMOOD
Client	AMERICAN RETIREMENT VILLAGES
Architect	BOFFA ROBERTSON
Scale	1:100
Drawing No.	075585-11540
Sheet	5
Revision	0

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