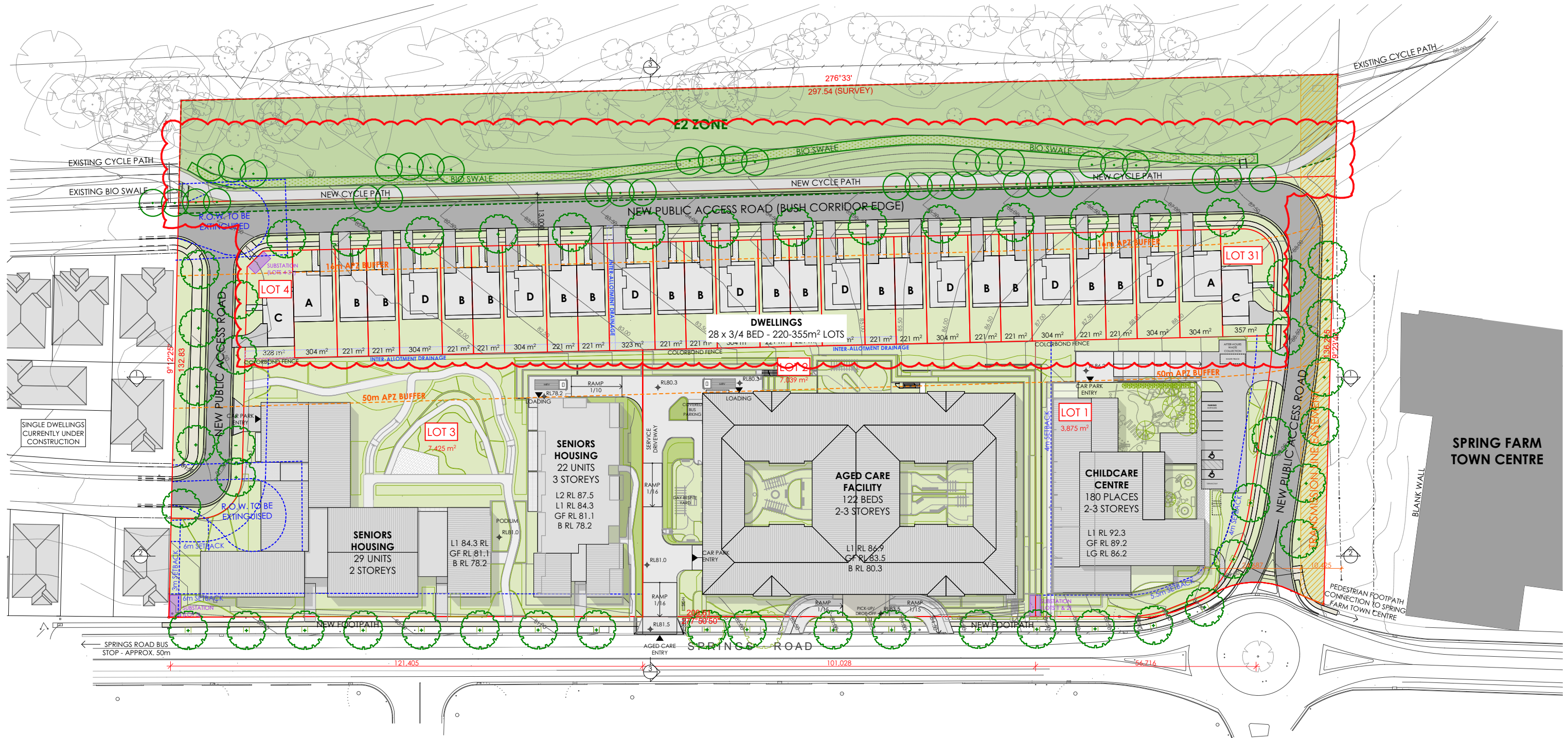


<div><div>Australia New Zealand</div><div><div>REALSERVE</div><div>Start confident.</div></div><div><div>Building Measurement Specialist Consulting Land Surveyors 3D Laser Scanning</div><div>ph. 02 9629 9377 www.realserve.com.au</div></div></div>	Plan prepared for: BHI Architects	Surveyor: DAVID SAXON McCULLOCH Date of Survey: 16/07/2019 Surveyor's Ref: 71789	PLAN OF PROPOSED SUBDIVISION OF LOT 2 IN DP 1175936 131 SPRINGS ROAD, SPRING FARM	LGA: CAMDEN Locality: SPRING FARM Subdivision No: - Lengths are in metres, Reduction Ratio 1:700	Registered	
--	--------------------------------------	--	---	---	------------	--



NOTE:

1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.

NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RPI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE	G	18/06/2020	FOR RPI ISSUE 3
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RPI ISSUE			

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



B H I ARCHITECTS PTY LTD
SYDNEY
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ROSEBERY NSW 2018
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4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:				STATUS:	
SITE PLAN				DA	
DRAWN	CHKD	DATE		SCALE@A3:	
BT	MH	18/06/2020		1:1000	
PROJECT NO.	DRAWING NO.	REVISION			
8723	A.1001	G			

STAGE 1: CHILDCARE CENTRE & AGED CARE FACILITY

CHILDCARE CENTRE - LOT 1
180 PLACES

TOTAL GFA: 1,430m²
LOT AREA: 3,875m²

PARKING
REQUIRED PARKING: 45 SPACES
PROVIDED PARKING: 45 SPACES

AGED CARE FACILITY - LOT 2
122 BEDS

TOTAL GFA: 6,697m²
LOT AREA: 7,039m²

PARKING
REQUIRED PARKING: 42 SPACES
PROVIDED PARKING: 42 SPACES

STAGE 2: SENIORS HOUSING

SENIORS HOUSING - LOT 3
51 UNITS

TOTAL GFA: APPROX. 4,906m²
LOT AREA: 7,425m²

PARKING
REQUIRED PARKING: 51 SPACES
PROVIDED PARKING: 51 SPACES

INDICATIVE ONLY:
SUBJECT TO DETAILED DA

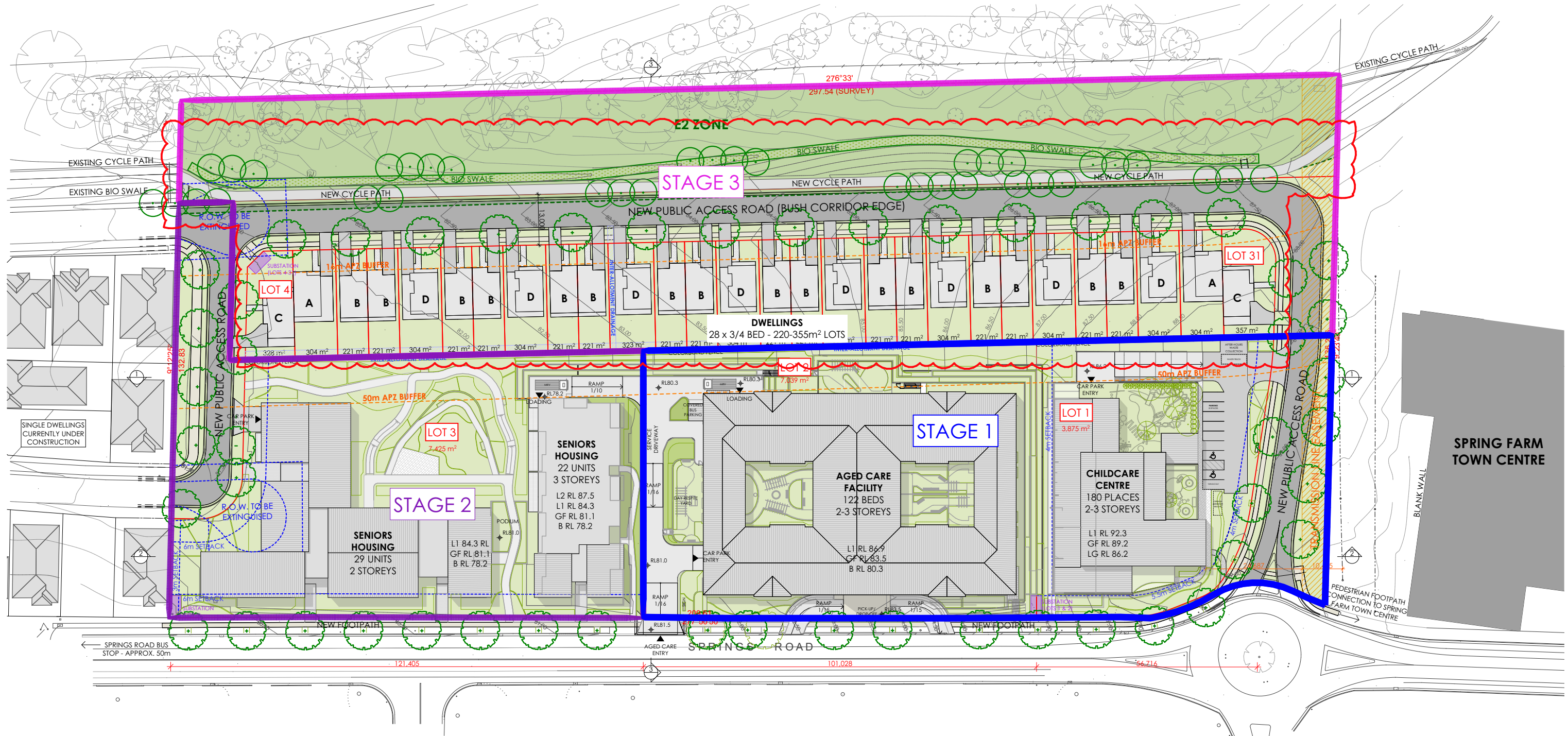
STAGE 3: SEMI-DETACHED DWELLINGS

SEMI-DETACHED DWELLINGS - LOTS 4-31
28 DWELLINGS

TOTAL GFA: APPROX 3,830m²
LOT AREA: 7,279m² TOTAL AREA OF RESIDENTIAL LOTS

PARKING
REQUIRED PARKING: 56 SPACES
PROVIDED PARKING: 56 SPACES

INDICATIVE ONLY:
SUBJECT TO DETAILED DA

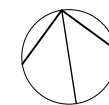


NOTE:

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2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.
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C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RPI ISSUE			

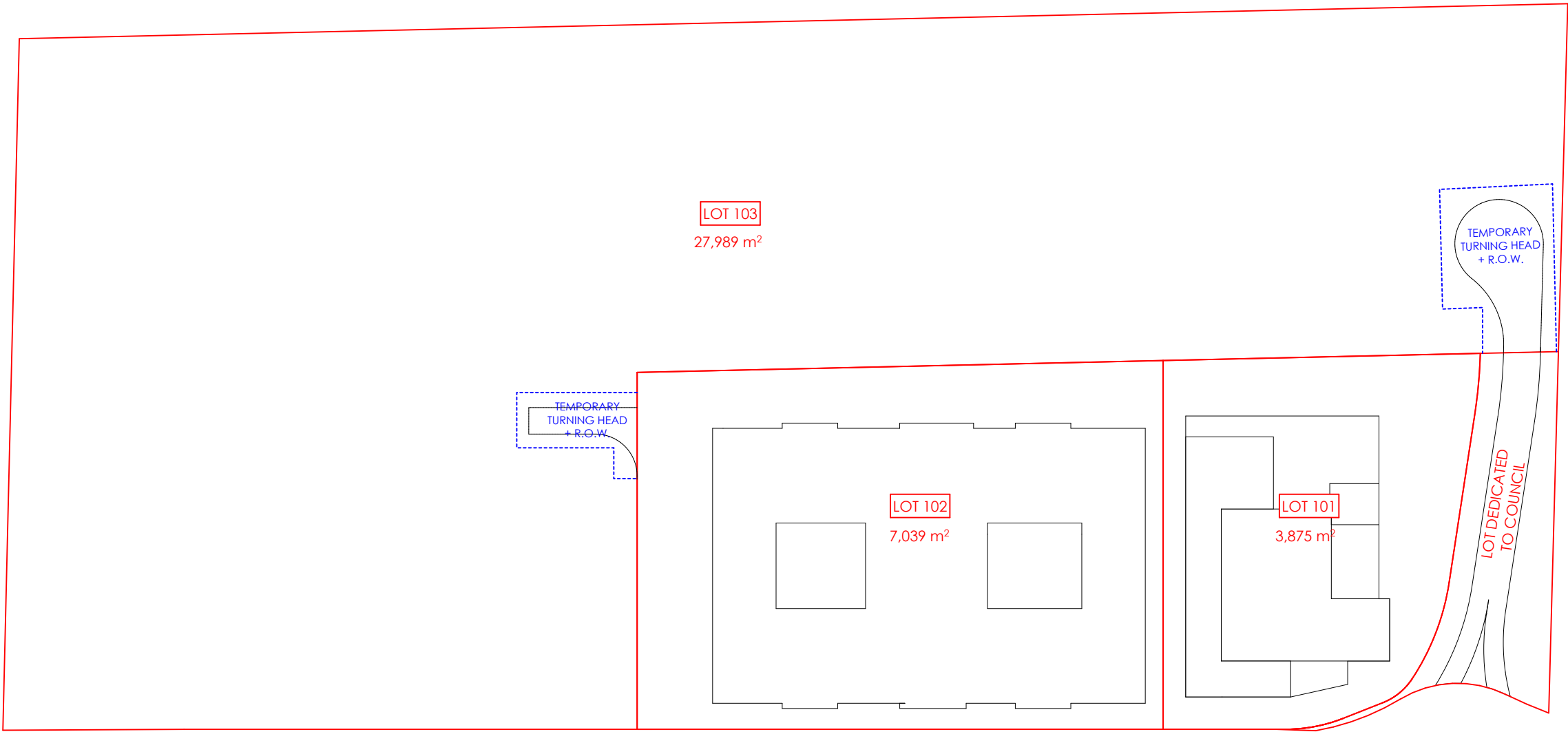
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



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DRAWING TITLE:	STAGING PLAN	STATUS:	DA
DRAWN:	BT	CHKD:	MH
DATE:	18/06/2020	SCALE@A3:	1:1000
PROJECT NO.:	8723	DRAWING NO.:	A.1002
REVISION:	G		



NOTE:		
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.		
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NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS
B	30/05/2019	FOR CONSULTANT ISSUE
C	28/06/2019	FOR CONSULTANT ISSUE
D	19/07/2019	FOR DEVELOPMENT APPLICATION

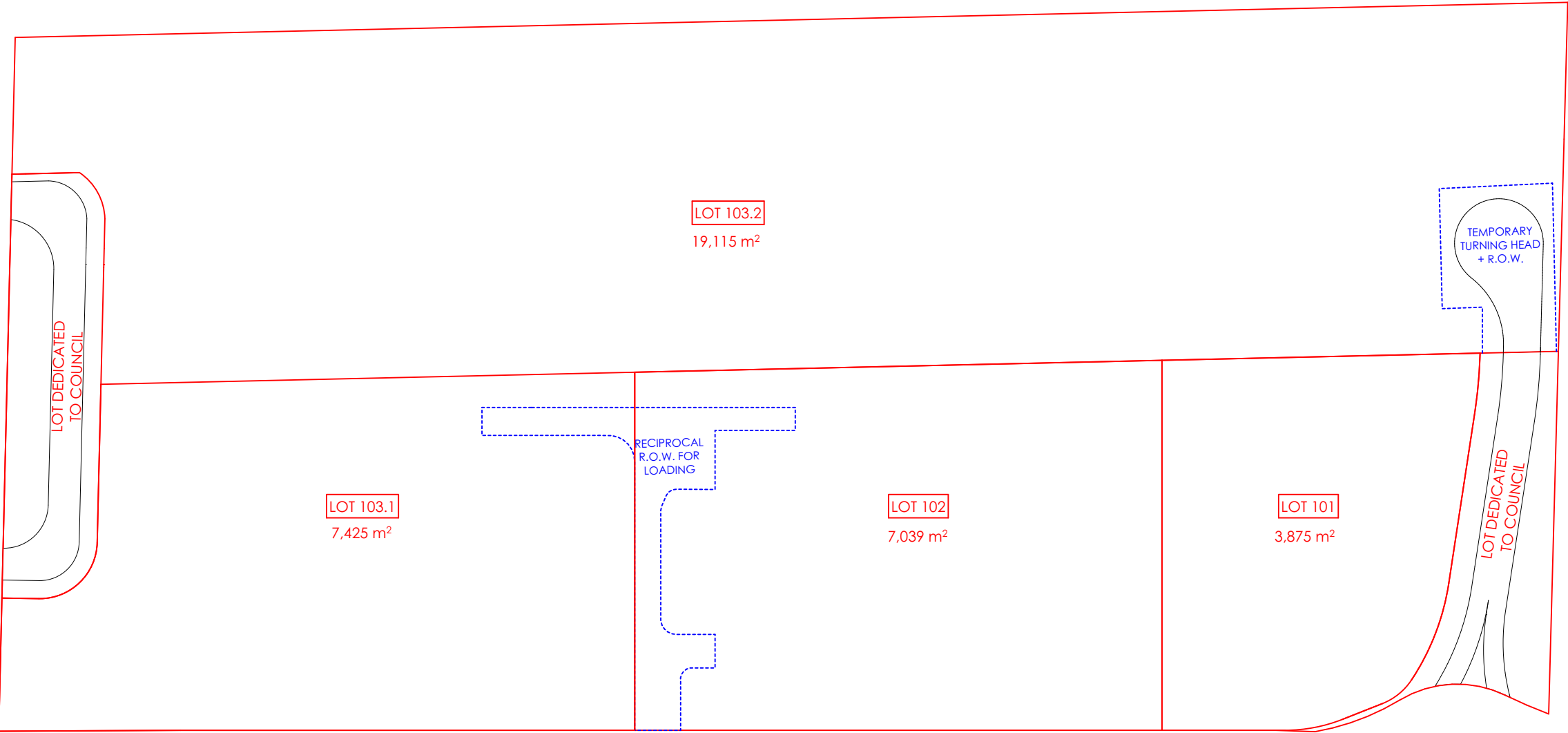
PROJECT	SPRING FARM SENIORS
SITE:	131 SPRINGS ROAD, SPRING FARM NSW
CLIENT:	MORAN HEALTH



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DRAWING TITLE:	STATUS:
STAGING & SUBDIV. PLAN 1	DA
DRAWN	CHKD
BT	MH
DATE	19/07/2019
SCALE@A3:	1:1000
PROJECT NO.	DRAWING NO.
8723	A.1003
REVISION	D



NOTE:		
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B	30/05/2019	FOR CONSULTANT ISSUE
C	28/06/2019	FOR CONSULTANT ISSUE
D	19/07/2019	FOR DEVELOPMENT APPLICATION

PROJECT
SPRING FARM SENIORS

SITE:
131 SPRINGS ROAD,
SPRING FARM NSW

CLIENT:
MORAN HEALTH



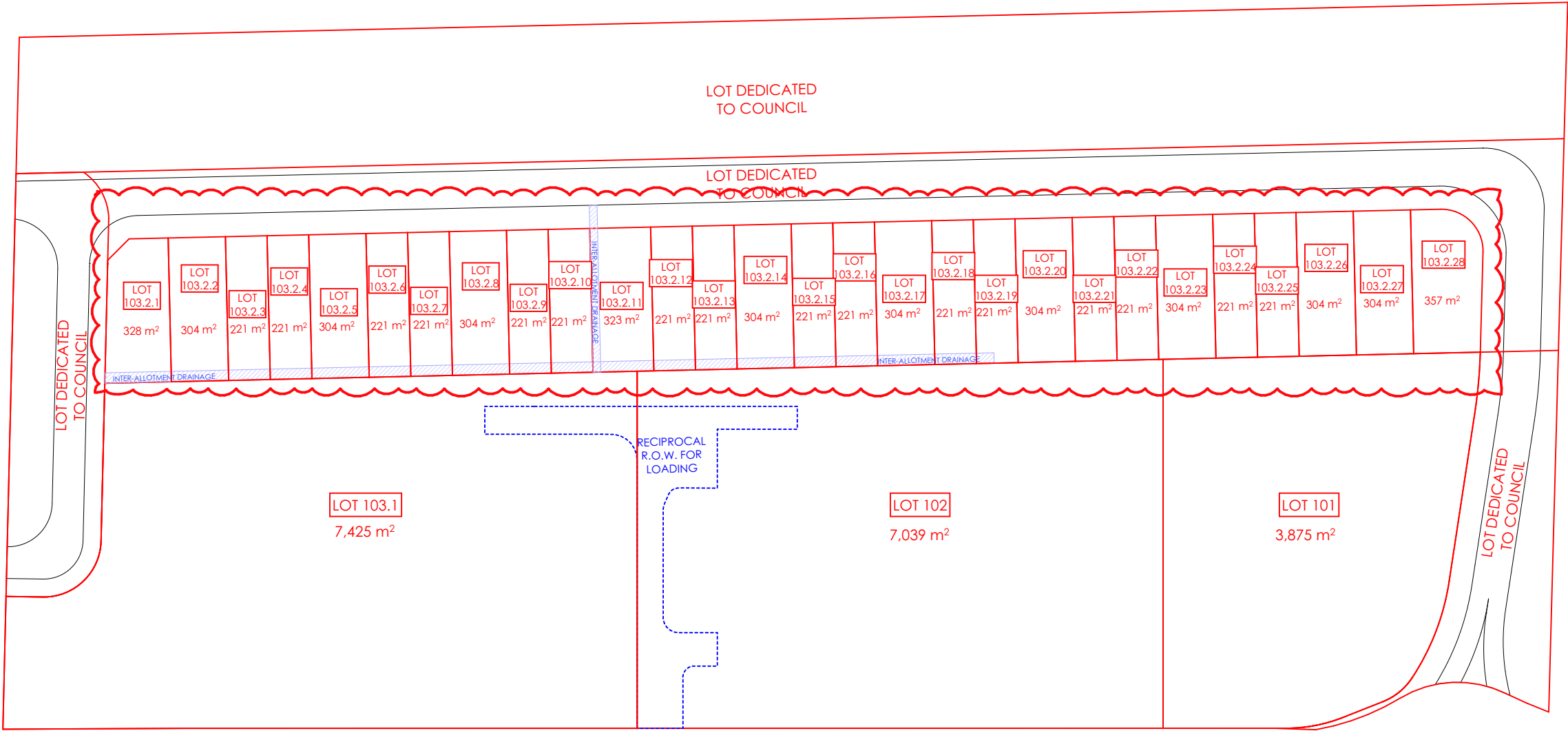
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ROSEBERY NSW 2018
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DRAWING TITLE:			STATUS:
STAGING & SUBDIV. PLAN 2			DA
DRAWN	CHKD	DATE	SCALE@A3:
BT	MH	19/07/2019	1:1000
PROJECT NO.	DRAWING NO.	REVISION	
8723	A.1004	D	



NOTE:					
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C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

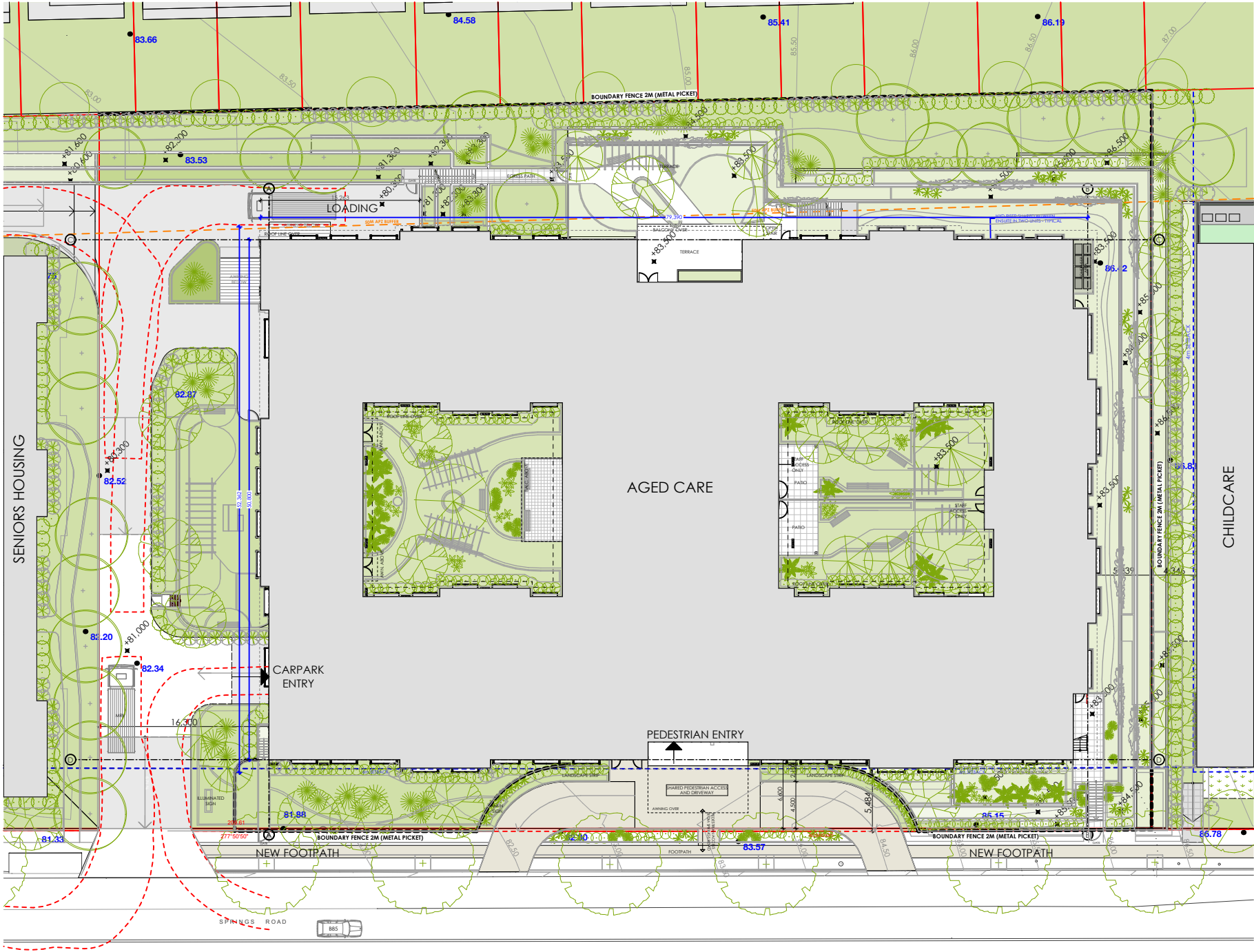
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



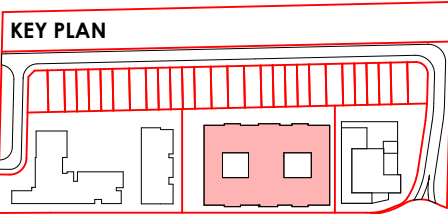
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DRAWING TITLE:				STATUS:	
STAGING & SUBDIV. PLAN 3				DA	
DRAWN	CHKD	DATE	SCALE@A3:		
BT	MH	18/06/2020	1:1000		
PROJECT NO.		DRAWING NO.		REVISION	
8723		A.1005		G	



KEY	
	80.00 EXISTING SPOT LEVELS
	80,000 PROPOSED CONTOURS
	x80,000 PROPOSED SPOT LEVELS



NOTE:			NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.			A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.			B	30/05/2019	FOR CONSULTANT ISSUE			
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4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.			D	19/07/2019	FOR DEVELOPMENT APPLICATION			
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.			E	03/12/2019	FOR RFI ISSUE			
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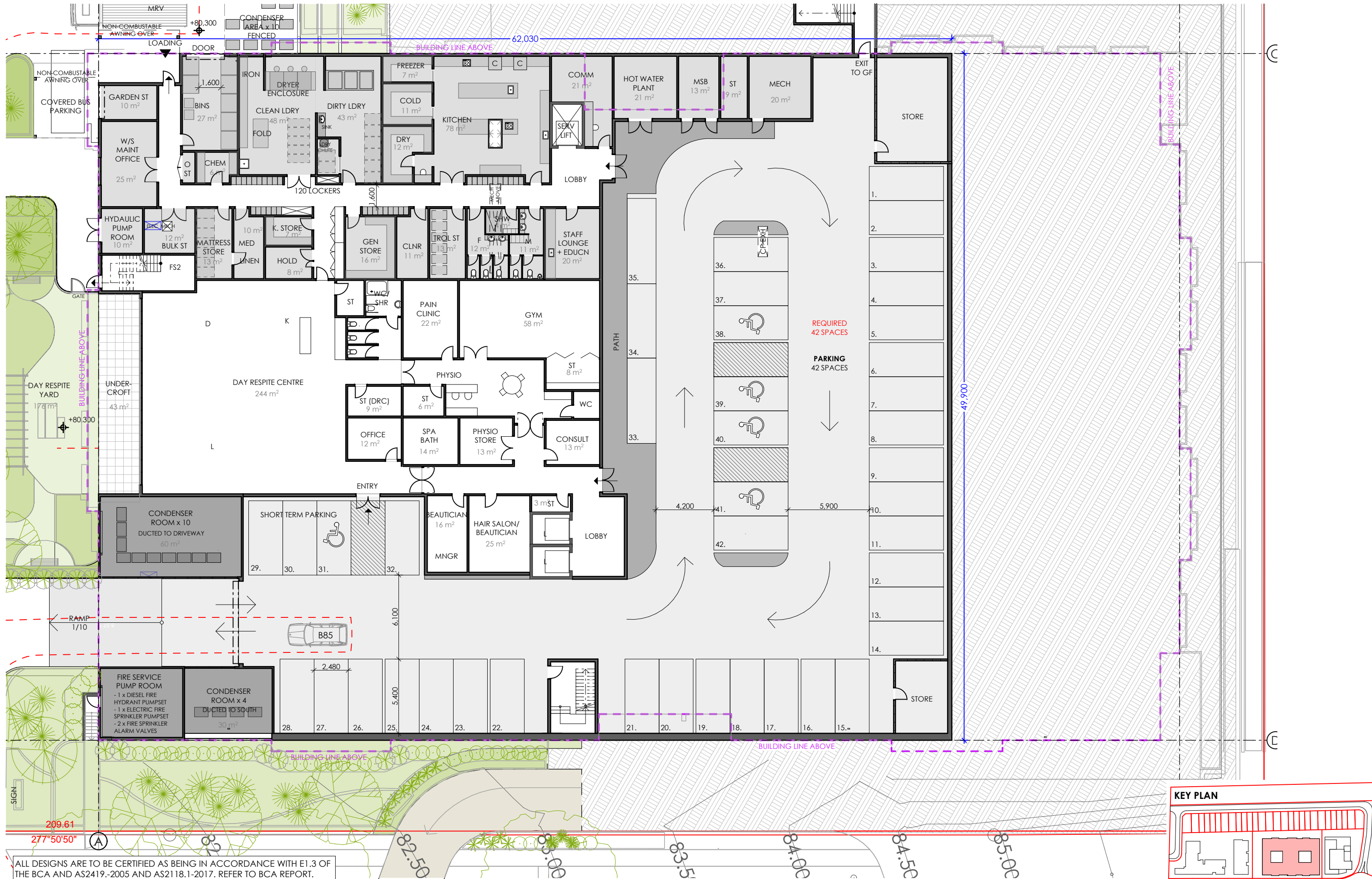
PROJECT
SPRING FARM SENIORS
SITE:
**131 SPRINGS ROAD,
SPRING FARM NSW**
CLIENT:
MORAN HEALTH



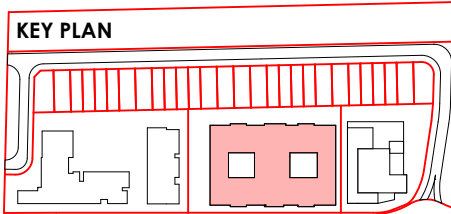
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KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:			STATUS:	
AGED CARE - SITE PLAN			DA	
DRAWN	CHKD	DATE	SCALE@A3:	
BT	MH	3/12/2019	1:500	
PROJECT NO.		DRAWING NO.	REVISION	
8723		A.2002	F	



ALL DESIGNS ARE TO BE CERTIFIED AS BEING IN ACCORDANCE WITH E1.3 OF THE BCA AND AS2419.-2005 AND AS2118.1-2017. REFER TO BCA REPORT.



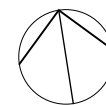
NOTE:			PROJECT			DRAWING TITLE:			STATUS:		
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.			SPRING FARM SENIORS			AGED CARE - BASEMENT			DA		
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.			SITE:			DRAWN			DATE		
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.			131 SPRINGS ROAD,			BT			17/04/2020		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.			SPRING FARM NSW			CHKD			SCALE@A3:		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.			CLIENT:			BT			1:250		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.			MORAN HEALTH			MH			REVISION		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.						PROJECT NO.			8723		
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						DRAWING NO.			A.2003		
						REVISION			F		



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NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
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PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



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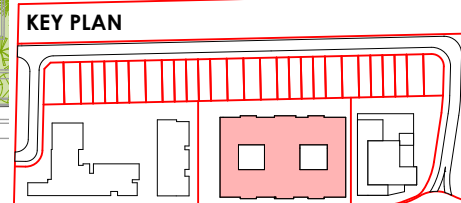


DRAWING TITLE:
AGED CARE - GROUND
DRAWN: BT
CHKD: MH
DATE: 17/04/2020
PROJECT NO.: 8723
DRAWING NO.: A.2004

STATUS:
DA
SCALE@A3:
1:250
REVISION:
F



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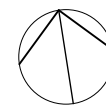


NOTE:

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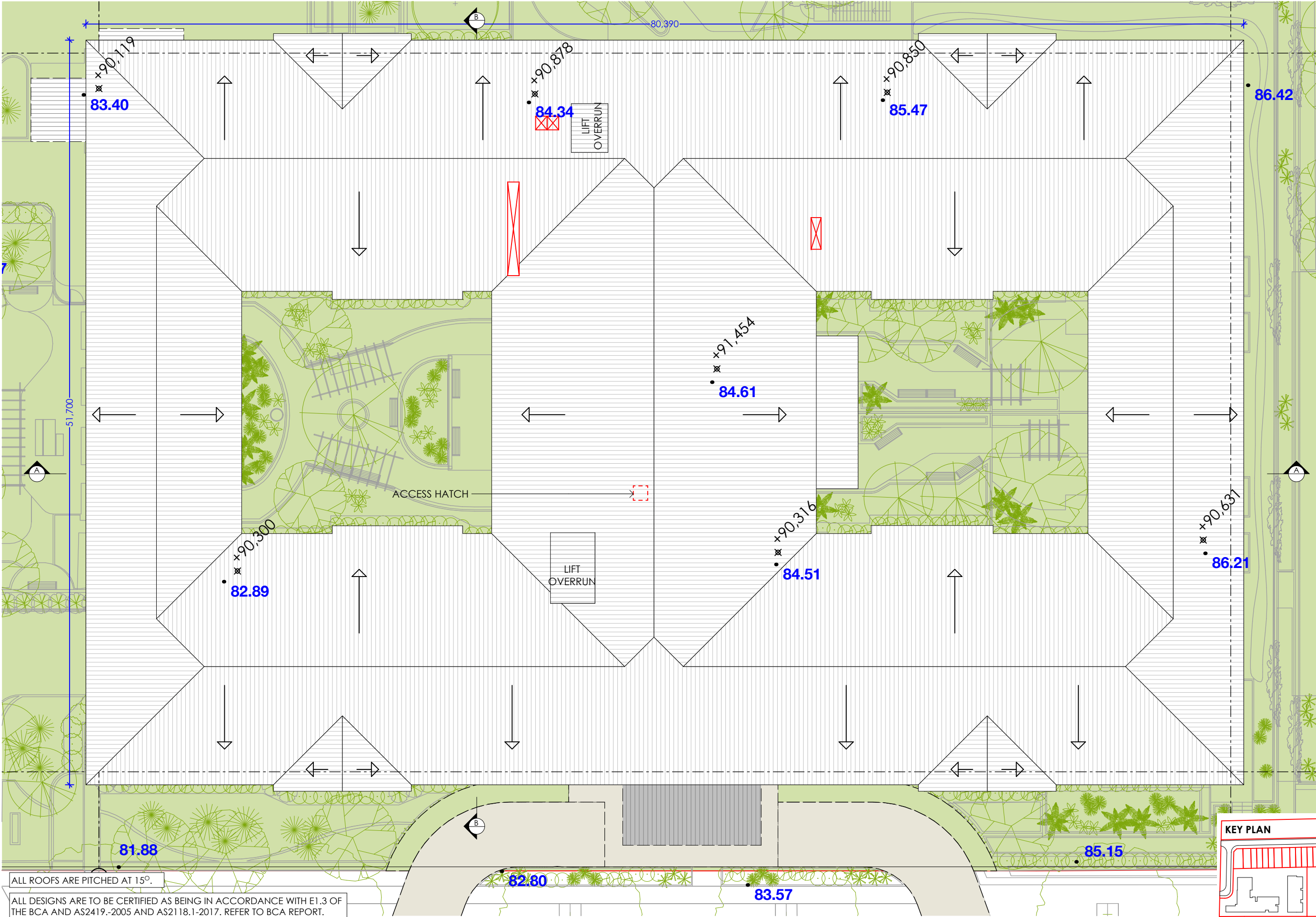
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



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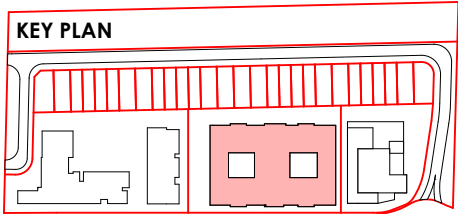


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DRAWN BT	CHKD MH	DATE 17/04/2020	SCALE@A3: 1:250
PROJECT NO. 8723		DRAWING NO. A.2005	REVISION F



ALL ROOFS ARE PITCHED AT 15°.

ALL DESIGNS ARE TO BE CERTIFIED AS BEING IN ACCORDANCE WITH E1.3 OF THE BCA AND AS2419.-2005 AND AS2118.1-2017. REFER TO BCA REPORT.



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NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS
B	30/05/2019	FOR CONSULTANT ISSUE
C	28/06/2019	FOR CONSULTANT ISSUE
D	19/07/2019	FOR DEVELOPMENT APPLICATION
E	03/12/2019	FOR RFI ISSUE

NO.	DATE	AMENDMENT
F	17/04/2020	FOR RFI ISSUE 2

KEY

80.00 EXISTING SPOT LEVELS

PROPOSED SPOT LEVELS

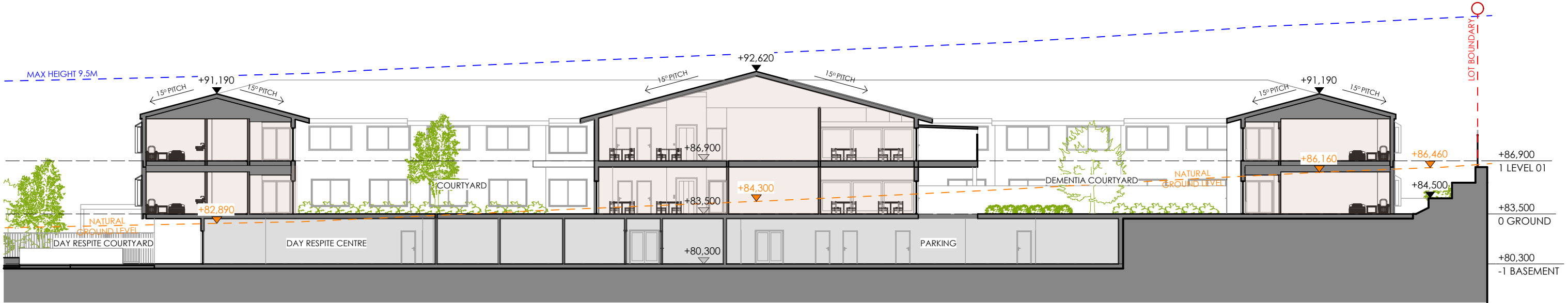
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



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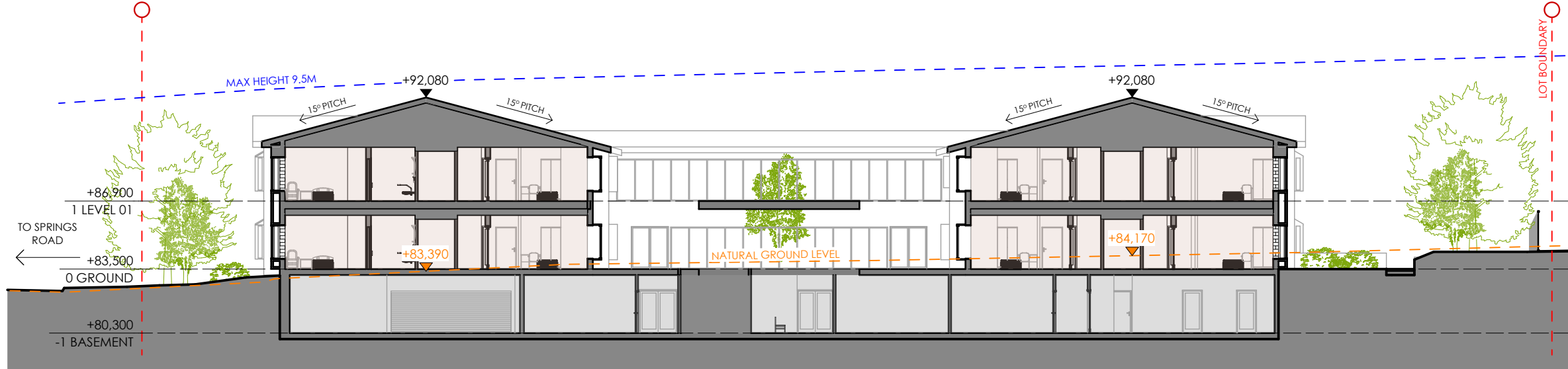
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DRAWN BT	CHKD MH	DATE 17/04/2020
PROJECT NO. 8723	DRAWING NO. A.2006	SCALE@A3: 1:250
		REVISION F



1

SECTION A-A

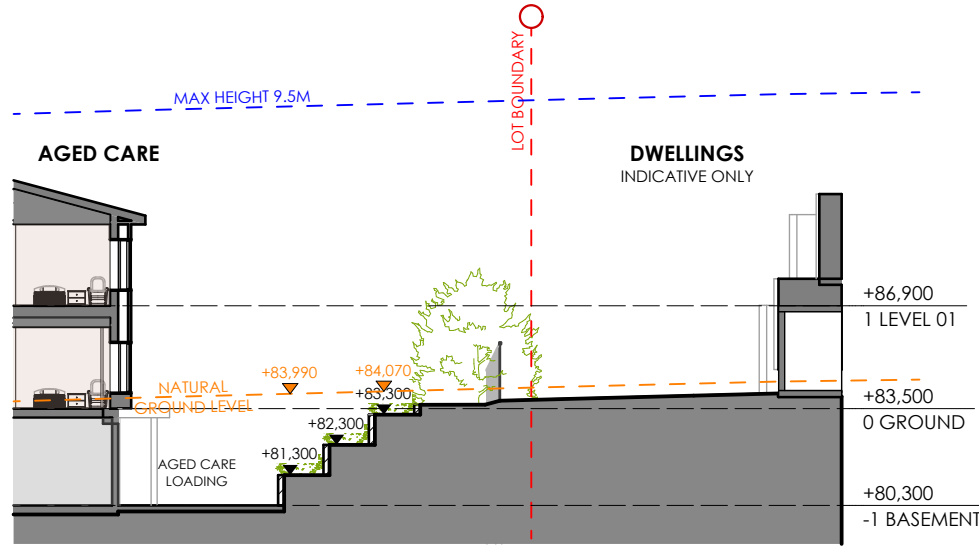
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2

SECTION B-B

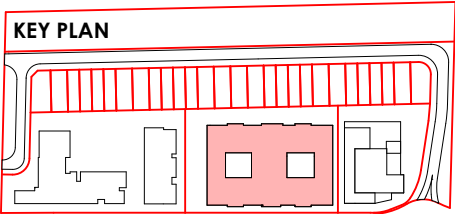
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3

RACF AND DWELLINGS INTERFACE SECTION

1:250



NOTE:					
1.	TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.		NO.	DATE	AMENDMENT
2.	PROVIDE CERTIFIED TERNITE BARRIER SYSTEM TO AS 3640.		F	17/04/2020	FOR RFI ISSUE 2
3.	SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.				
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PROJECT	SPRING FARM SENIORS
SITE:	131 SPRINGS ROAD, SPRING FARM NSW
CLIENT:	MORAN HEALTH

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KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125

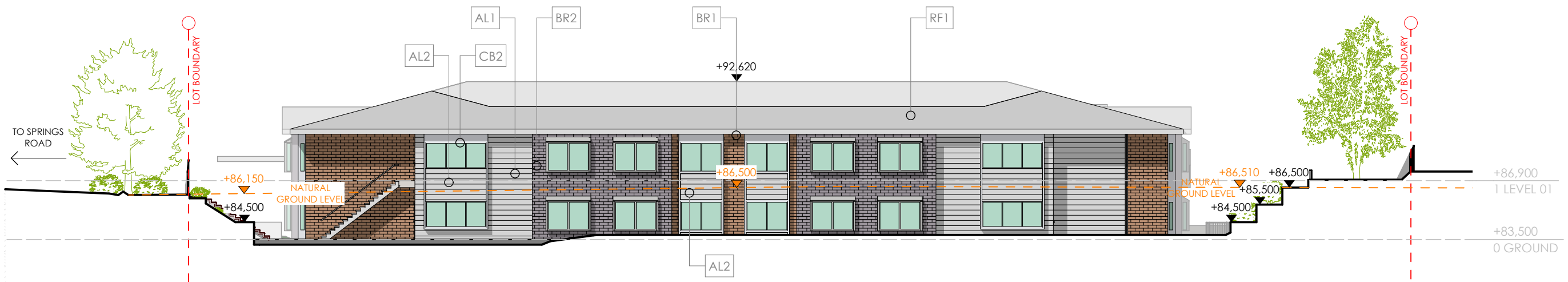


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DRAWN:	BT	CHKD:	MH
DATE:	17/04/2020	SCALE@A3:	1:250
PROJECT NO.:	8723	DRAWING NO.:	A.2007
REVISION:	F		



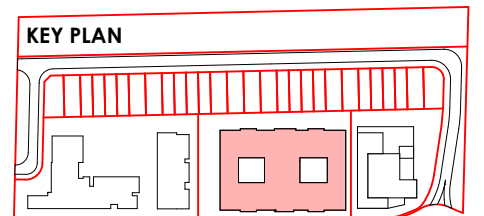
1 SOUTH ELEVATION (FRONT)

1:250



2 EAST ELEVATION (SIDE)

1:250



NOTE:

1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.
5. DO NOT SCALE THE DRAWINGS. USE FIGURED DIMENSIONS.
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.

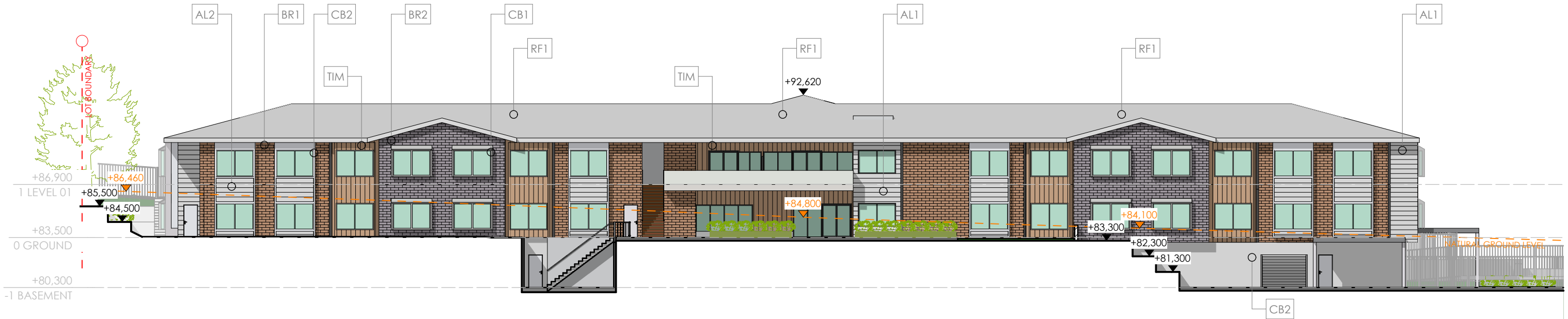
NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:	STATUS:
AGED CARE - ELEVATIONS 1	DA
DRAWN: BT	CHKD: MH
DATE: 17/04/2020	SCALE@A3: 1:250
PROJECT NO.: 8723	DRAWING NO.: A.2008
REVISION: F	



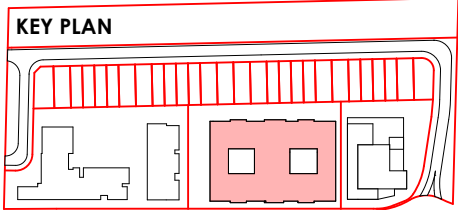
NORTH ELEVATION (BACK)

1:250



WEST ELEVATION (SIDE)

1:250



NOTE:					
1.	TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.				
2.	PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.				
3.	SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.				
4.	ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.				
5.	DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.				
6.	CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.				
7.	DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.				
8.	THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.				
NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125

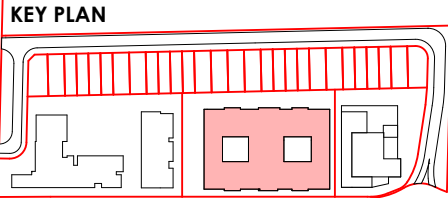


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AGED CARE - ELEVATIONS 2				DA	
DRAWN	CHKD	DATE	SCALE@A3:		
BT	MH	17/04/2020	1:250		
PROJECT NO.		DRAWING NO.	REVISION		
8723		A.2009	F		

EXTERNAL FINISHES SCHEDULE

REF	MATERIAL	LOCATION	COLOUR	IMAGE
AL1	FIBRE CEMENT SCYON CLADDING IN 'CB SHALE GREY' OR SIMILAR	SELECTED EXTERNAL WALLS		
BR1	BRICK FINISH IN AUSTRALBRICK METROPOLIS IN SHADE 'TOPAZ' OR SIMILAR	SELECTED EXTERNAL WALLS		
TIM	ALUMINIUM CLADDING WALL IN TIMBER LOOK OR SIMILAR	SELECTED EXTERNAL WALLS		
BR2	BRICK FINISH IN AUSTRALBRICK URBAN ONE IN SHADE 'CHIFFON' OR SIMILAR	SELECTED EXTERNAL WALLS		
CB1	PAINTED FINISH IN COLOUR BOND 'BASALT' OR SIMILAR	SELECTED EXTERNAL WINDOW FRAMES		
CB2	PAINTED FINISH IN OFF WHITE OR SIMILAR	SELECTED EXTERNAL WINDOW FRAMES		
AL2	FIBRE CEMENT SCYON CLADDING IN OFF WHITE OR SIMILAR	SELECTED EXTERNAL WINDOW FINISH		

REF	MATERIAL	LOCATION	COLOUR	IMAGE
TB	ALUMINIUM BATTENS IN TIMBER LOOK OR SIMILAR	ALL EXTERNAL BATTENS		
RF1	ALUMINIUM ROOF SHEETING IN COLOURBOND 'SHALE GREY' OR SIMILAR	SELECTED ROOFS		



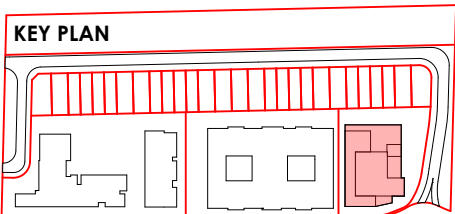
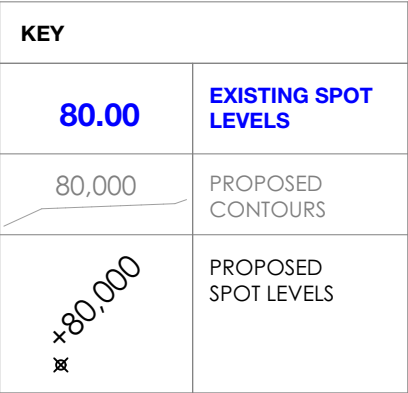
NOTE:					
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	NO.	DATE	AMENDMENT	NO.	DATE
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	B	30/05/2019	FOR CONSULTANT ISSUE		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	C	28/06/2019	FOR CONSULTANT ISSUE		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.	D	19/07/2019	FOR DEVELOPMENT APPLICATION		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.	E	03/12/2019	FOR RFI ISSUE		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.					
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.					

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125

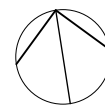


DRAWING TITLE:			STATUS:	
AGED CARE - EXT. FINISHES			DA	
DRAWN	CHKD	DATE	SCALE@A3:	
BT	MH	17/04/2020		
PROJECT NO.	DRAWING NO.	REVISION		
8723	A.2017	F		



NOTE:	NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
1. THREE FRAMING AND WIND BRACING TO COMPLY WITH AS1546 AND TO NSW TIER 1 FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
2. PROVIDED CERTIFIED TERMITE BARRIER SYSTEM TO AS 3660.	B	30/05/2019	FOR CONSULTANT ISSUE	G	18/06/2020	FOR RFI ISSUE 3
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	C	28/06/2019	FOR CONSULTANT ISSUE			
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	D	19/07/2019	FOR DEVELOPMENT APPLICATION			
5. DO NOT SCALE THE DRAWINGS. USE FIGURED DIMENSIONS.	E	03/12/2019	FOR RFI ISSUE			
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.						
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.						
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

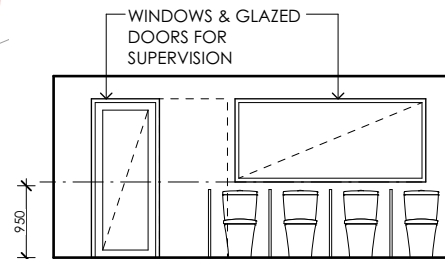


B H I ARCHITECTS PTY LTD
SYDNEY
 3.10/77 DUNNING AVE
 ROSEBERY NSW 2018
 02 9313 7800

KIAMA
 4/125 TERRALONG STREET
 KIAMA NSW 2533
 02 4232 2125

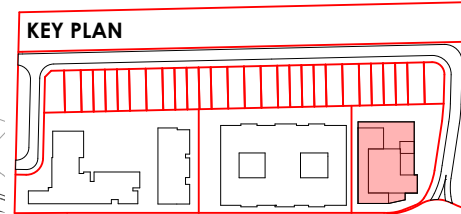


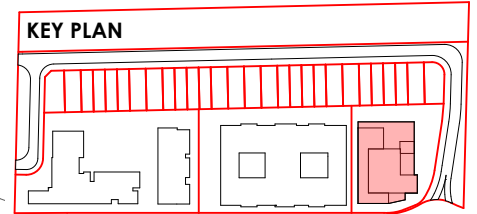
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CHILDCARE - LOWER GROUND		DA	
DRAWN	CHKD	DATE	SCALE@A3:
BT	MH	18/06/2020	1:300
PROJECT NO.		REVISION	
8723		A.2018 G	



TYP WC ELEVATION 1:100

KEY	
80.00	EXISTING SPOT LEVELS
80,000	PROPOSED CONTOURS
+80,000	PROPOSED SPOT LEVELS





NOTE:	NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3660.	B	30/05/2019	FOR CONSULTANT ISSUE			
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	C	28/06/2019	FOR CONSULTANT ISSUE			
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	D	19/07/2019	FOR DEVELOPMENT APPLICATION			
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.	E	03/12/2019	FOR RFI ISSUE			
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.						
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						

PROJECT

SPRING FARM SENIORS

SITE:

11 SPRINGS ROAD,

SPRING FARM NSW

CLIENT:

MORAN HEALTH

B H I ARCHITECTS PTY LTD

SYDNEY

31/07/7 DUNNING AVE

ROSEBERY NSW 2018

02 9313 7800

KIAMA

4/125 TERRALLONG STREET

KIAMA NSW 2533

02 4232 2125

DRAWING TITLE:

CHILD CARE - LEVEL 01

DRAWN

CHKD

DATE

BT

MH

17/04/2020

PROJECT NO.

8723

DRAWING NO.

A.2020

STATUS:

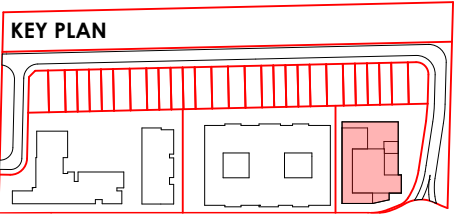
DA

SCALE/A3:

1:300

REVISION

F



NOTE:					
1.	TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.		NO.	DATE	AMENDMENT
2.	PROVIDE CERTIFIED TERRACE BARREL SYSTEM TO AS 3640.		F	17/04/2020	FOR RFI ISSUE 2
3.	SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.				
4.	ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.				
5.	DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.				
6.	CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.				
7.	DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.				
8.	THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.				
NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS			
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

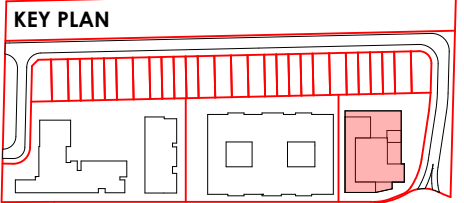
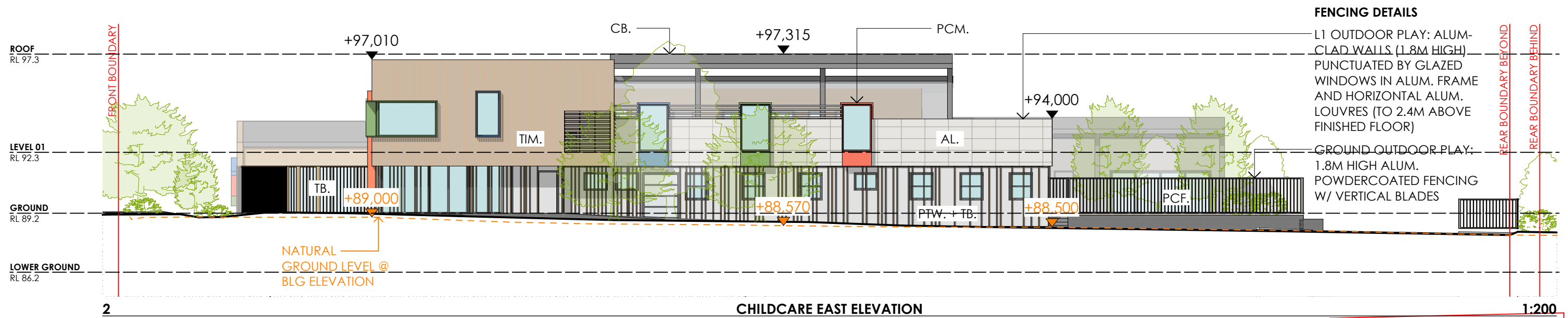
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



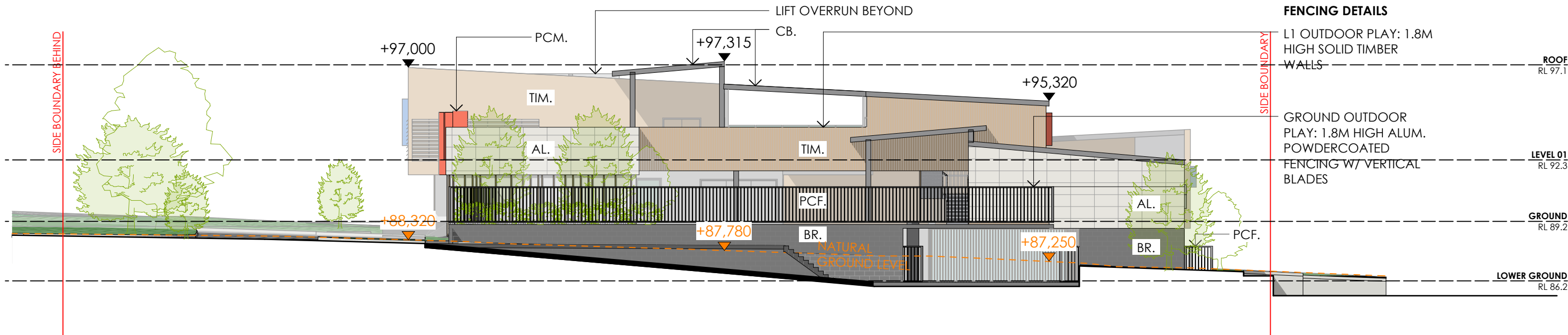
B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:				STATUS:	
CHILD CARE - ROOF				DA	
DRAWN	CHKD	DATE	SCALE@A3:		
BT	MH	17/04/2020	1:300		
PROJECT NO.		DRAWING NO.	REVISION		
8723		A.2021	F		



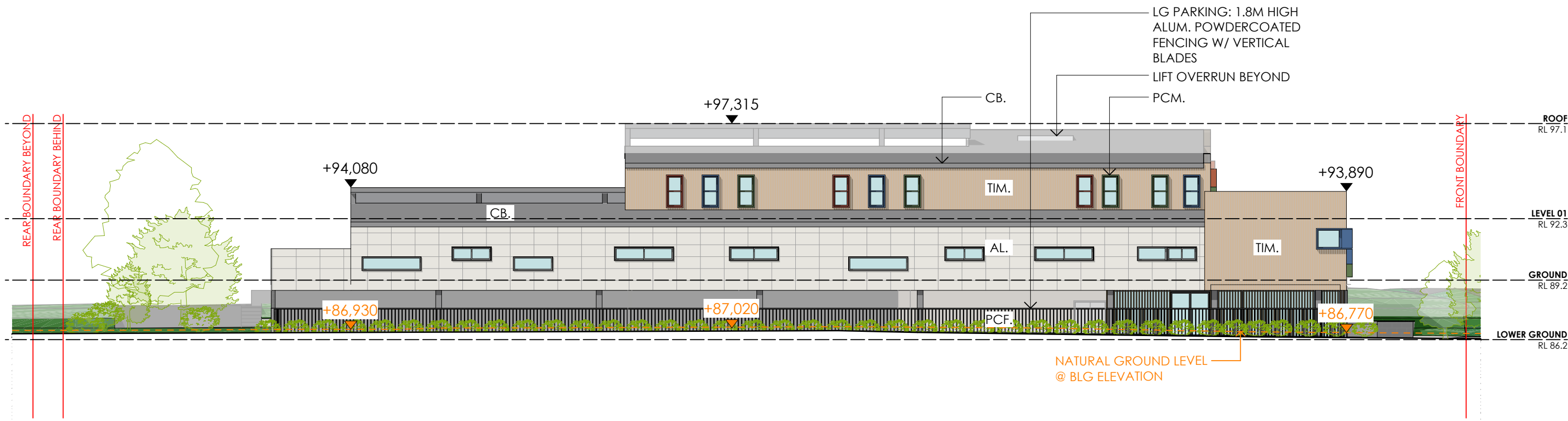
NOTE:			PROJECT			B H I ARCHITECTS PTY LTD		
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.			SPRING FARM SENIORS			SYDNEY		
2. PROVIDE CERTIFIED TENSILE BARRED SYSTEM TO AS 3602.			SITE:			3.10/777 DUNNING AVE		
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.			131 SPRINGS ROAD,			ROSEBERY NSW 2018		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.			SPRING FARM NSW			02 9313 7800		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.			CLIENT:			KIAMA		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.			MORAN HEALTH			4/125 TERRALONG STREET		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.						KIAMA NSW 2533		
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						02 4232 2125		
NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT			
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2			
B	30/05/2019	FOR CONSULTANT ISSUE						
C	28/06/2019	FOR CONSULTANT ISSUE						
D	19/07/2019	FOR DEVELOPMENT APPLICATION						
E	03/12/2019	FOR RFI ISSUE				DRAWING TITLE:		
						CHILD CARE - ELEVATIONS		
						STATUS: DA		
						DRAWN: BT		
						CHKD: MH		
						DATE: 17/04/2020		
						SCALE@A3: 1:200		
						PROJECT NO.: 8723		
						DRAWING NO.: A.2022		
						REVISION: F		



3

CHILDCARE NORTH ELEVATION (REAR)

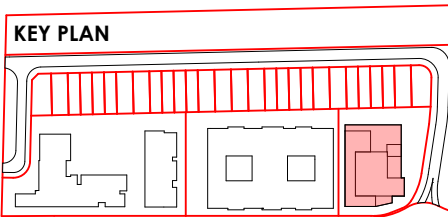
1:200



4

CHILDCARE WEST ELEVATION

1:200



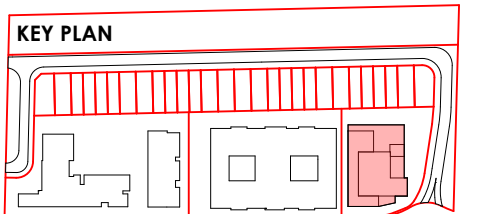
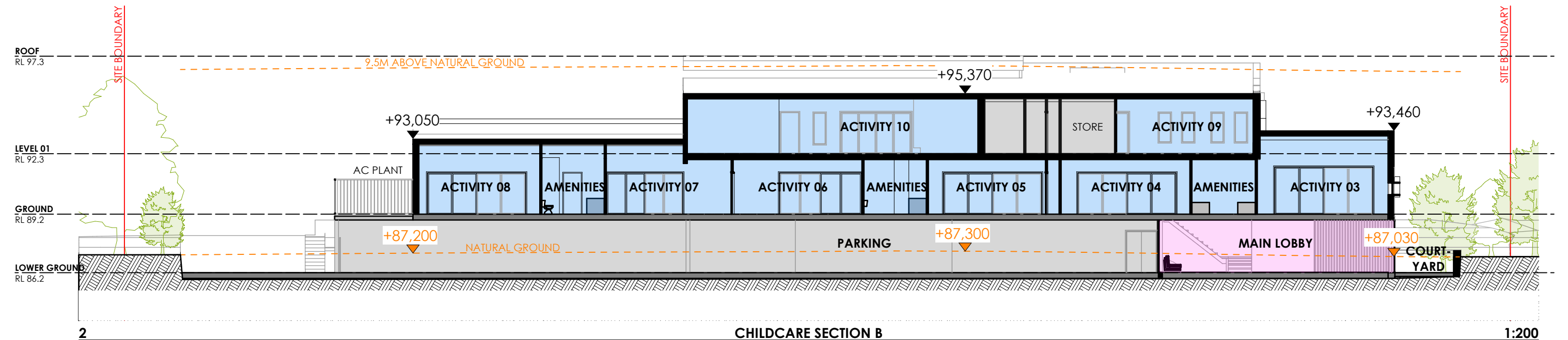
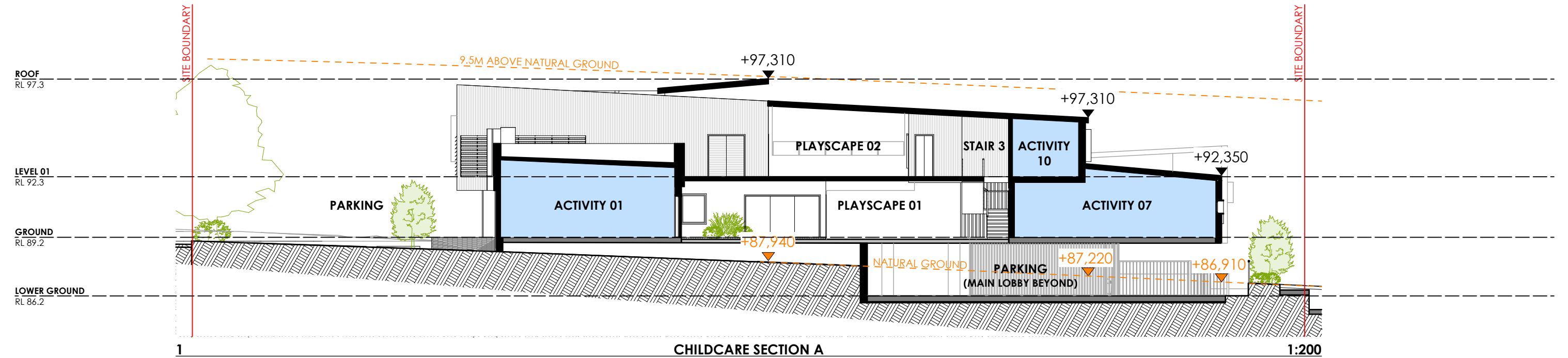
NOTE:					
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	NO.	DATE	AMENDMENT	NO.	DATE
2. PROVIDE CERTIFIED TENSILE BARRED SYSTEM TO AS 3602.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	B	30/05/2019	FOR CONSULTANT ISSUE		FOR RFI ISSUE 2
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	C	28/06/2019	FOR CONSULTANT ISSUE		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.	D	19/07/2019	FOR DEVELOPMENT APPLICATION		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.	E	03/12/2019	FOR RFI ISSUE		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.					
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.					

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:			STATUS:		
CHILDCARE - ELEVATIONS			DA		
DRAWN	CHKD	DATE	SCALE@A3:		
BT	MH	17/04/2020	1:200		
PROJECT NO.		DRAWING NO.	REVISION		
8723		A.2023	F		

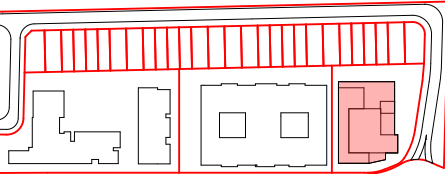


NOTE: 1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY. 2. PROVIDE CERTIFIED TERRACE BARBER SYSTEM TO AS 3640. 3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY. 4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT. 5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS. 6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM. 7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. 8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						PROJECT SPRING FARM SENIORS SITE: 131 SPRINGS ROAD, SPRING FARM NSW CLIENT: MORAN HEALTH						B H I ARCHITECTS PTY LTD SYDNEY 3/19/77 DUNNING AVE ROSEBERY NSW 2018 02 9313 7800 KIAMA 4/1/25 TERRALONG STREET KIAMA NSW 2533 02 4232 2125						DRAWING TITLE: CHILD CARE - SECTIONS DRAWN: BT CHKD: MH DATE: 17/04/2020 PROJECT NO.: 8723 DRAWING NO.: A.2024						STATUS: DA SCALE@A3: 1:200 REVISION F					
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EXTERNAL FINISHES SCHEDULE

REF	MATERIAL	LOCATION	COLOUR		IMAGE
AL	ALUCOBOND WHITE OR SIMILAR	SELECTED EXTERNAL WALLS			
TIM	ALUMINIUM CLADDING WALL IN TIMBER LOOK OR SIMILAR	SELECTED EXTERNAL WALLS			
PCM	POWDERCOAT FINISH IN MULTI-COLOUR OR SIMILAR	SELECTED EXTERNAL WINDOW FRAMES			
PTW	PAINTED FINISH IN OFF WHITE OR SIMILAR	SELECTED EXTERNAL WINDOW FRAMES			
TB	ALUMINIUM BATTENS IN TIMBER LOOK OR SIMILAR	ALL EXTERNAL BATTENS			
CB	ALUMINIUM ROOF SHEETING IN COLOURBOND 'SHALE GREY' OR SIMILAR	SELECTED ROOFS			
PCF	POWDER COAT FINISH IN COLOURBOND 'IRONSTONE' OR SIMILAR	FENCING			
BR	BRICK FINISH IN AUSTRALBRICK URBAN ONE IN SHADE 'CHIFFON' OR SIMILAR	SELECTED EXTERNAL WALLS			

KEY PLAN



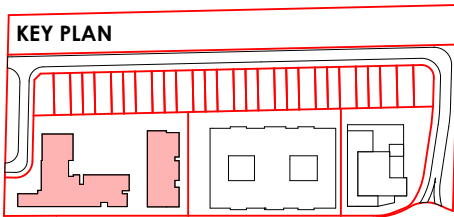
NOTE:	NO.	DATE	AMENDMENT
<div>1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY. 2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640. 3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY. 4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT. 5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS. 6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM. 7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. 8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.</div>	A	07/02/2019	PRE-DA REVISIONS
	B	30/05/2019	FOR CONSULTANT ISSUE
	C	28/06/2019	FOR CONSULTANT ISSUE
	D	19/07/2019	FOR DEVELOPMENT APPLICATION

PROJECT	SPRING FARM SENIORS
SITE:	131 SPRINGS ROAD, SPRING FARM NSW
CLIENT:	MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY 3/19/77 DUNNING AVE ROSEBERY NSW 2018 02 9313 7800
KIAMA 4/1/25 TERRALONG STREET KIAMA NSW 2533 02 4232 2125



DRAWING TITLE:	STATUS:
CHILDCARE - EXT. FINISHES	DA
DRAWN: BT	CHKD: MH
DATE: 19/07/2019	SCALE@A3:
PROJECT NO.: 8723	REVISION: D
DRAWING NO.: A.2028	

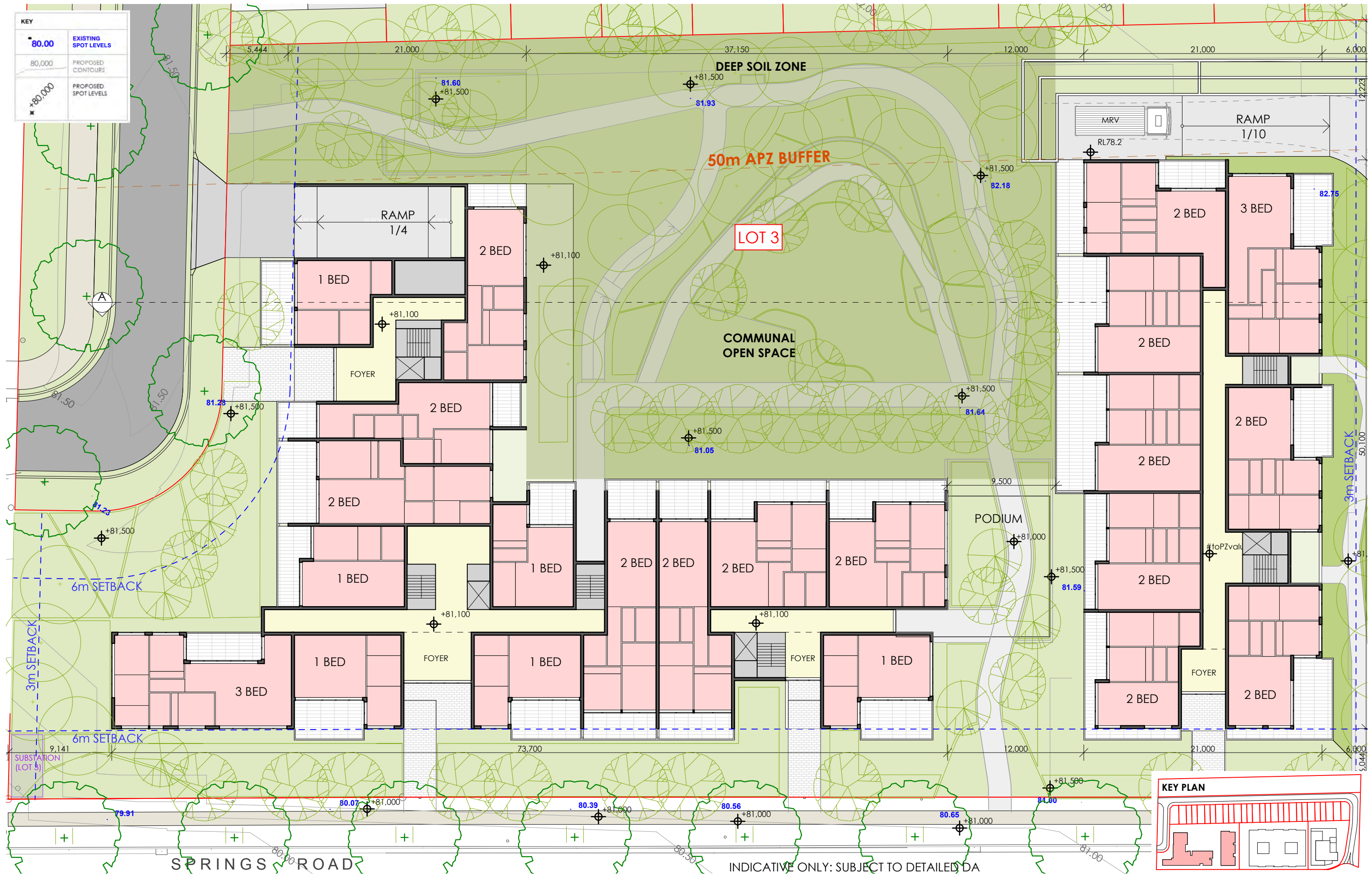


NOTE:	NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
1. TIMBER FRAMING AND NAIL BRACING TO COMPLY WITH AS1684 AND TO NSW HEM FRAMING MANUAL, AMENDED TO SUIT WEST TERRAN CATEGORY 1.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
2. PROVIDE CERTIFIED TENITE BARRIER SYSTEM AS TO S460.	B	30/05/2019	FOR CONSULTANT ISSUE			
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WEST TERRAN CATEGORY 1.	C	28/06/2019	FOR CONSULTANT ISSUE			
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	D	19/07/2019	FOR DEVELOPMENT APPLICATION			
5. DO NOT SCALE THE DRAWINGS. USE FIGURED DIMENSIONS.	E	03/12/2019	FOR RFI ISSUE			
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.						
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.						
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						

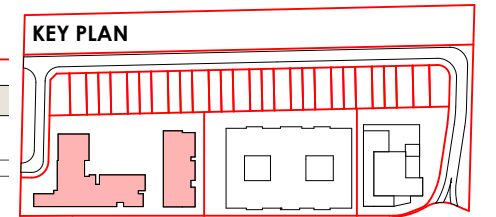
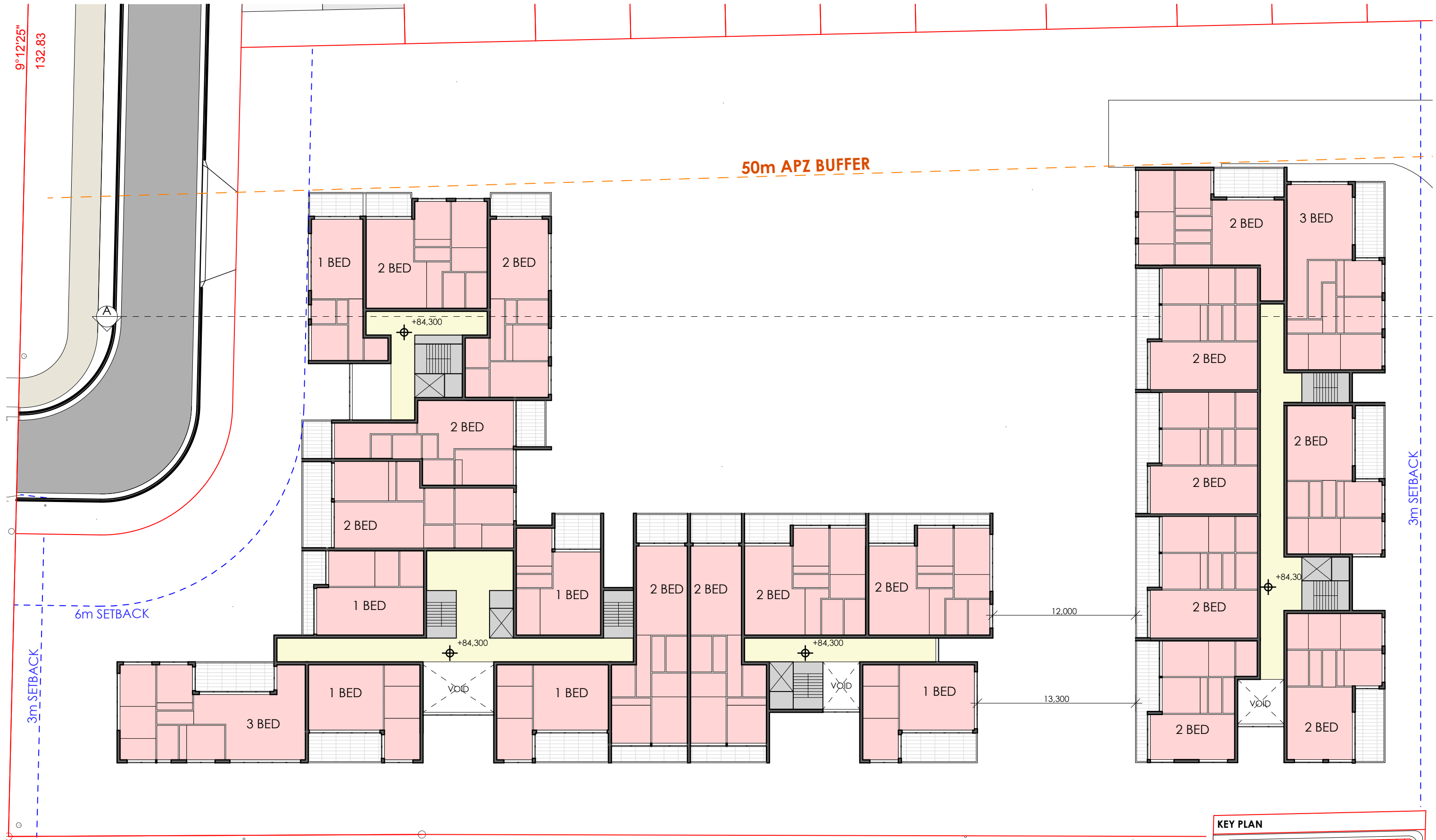


BHI ARCHITECT

DRAWING TITLE:		STATUS:	
SENIORS - BASEMENT		DA	
DRAWN	CHKD	DATE	SCALE@A3:
BT	MH	17/04/2020	1:300, 1:5000
PROJECT NO.		REVISION	
8723		F	
A.2030			



NOTE:			PROJECT			B H I ARCHITECTS PTY LTD			DRAWING TITLE:			STATUS:		
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL, AMENDED TO SUIT WIND TERRAIN CATEGORY.			SPRING FARM SENIORS			SYDNEY			SENIORS - GROUND FLOOR			DA		
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.			SITE:			3/19/77 DUNNING AVE			DRAWN			SCALE@A3:		
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.			131 SPRINGS ROAD,			ROSEBERY NSW 2018			BT			1:300, 1:5000		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.			SPRING FARM NSW			02 9313 7800			CHKD			DATE		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.			CLIENT:			KIAMA			MH			17/04/2020		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.			MORAN HEALTH			4/125 TERRALONG STREET			PROJECT NO.			DRAWING NO.		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.						KIAMA NSW 2533			8723			A.2031		
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.						02 4232 2125			REVISION			F		



NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

INDICATIVE ONLY: SUBJECT TO DETAILED DA

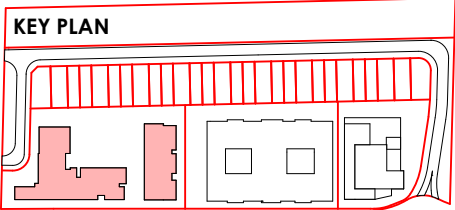
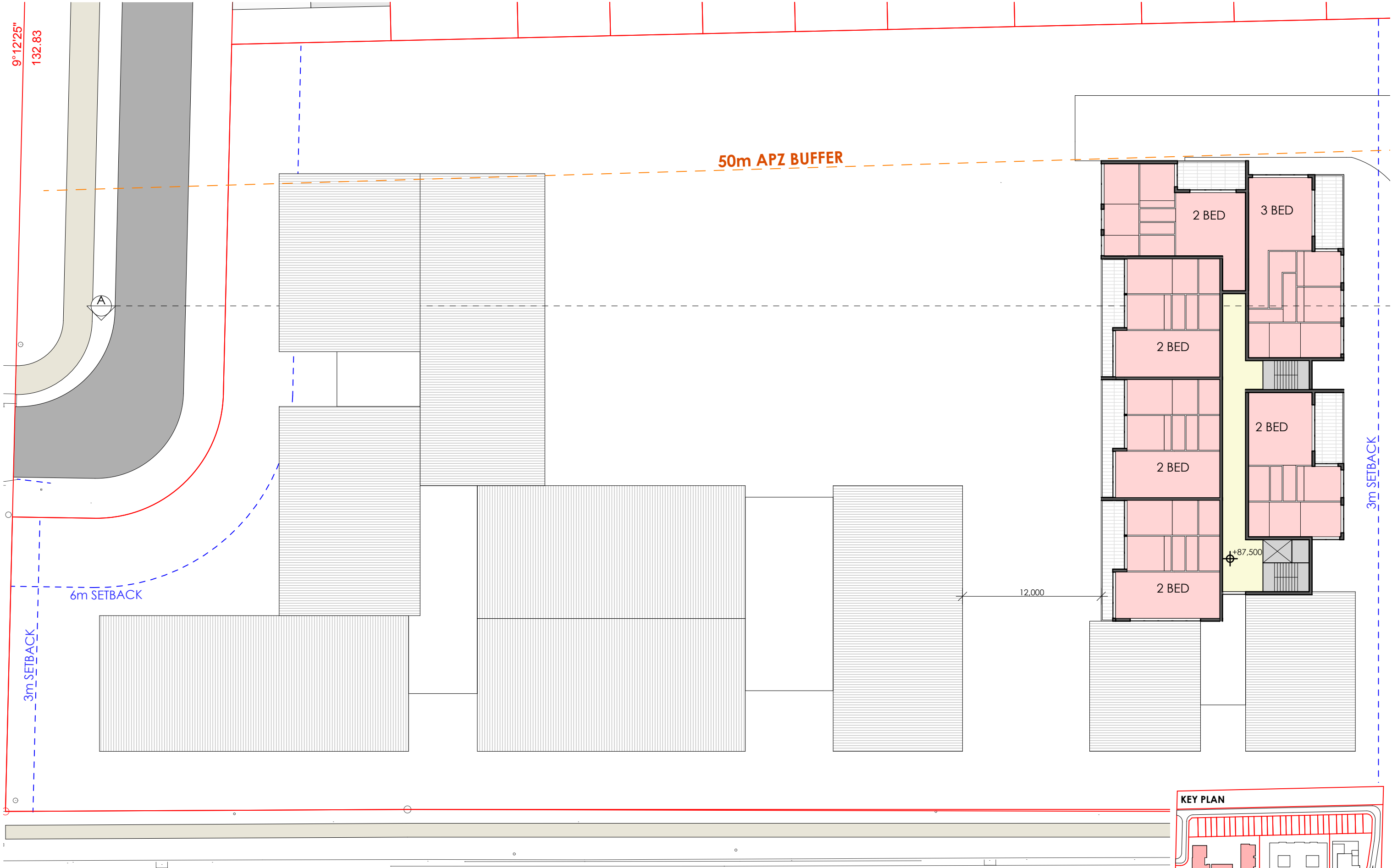
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:				STATUS:	
SENIORS - FIRST FLOOR				DA	
DRAWN	CHKD	DATE	SCALE@A3:		
BT	MH	17/04/2020	1:300, 1:5000		
PROJECT NO.		DRAWING NO.	REVISION		
8723		A.2032	F		



INDICATIVE ONLY: SUBJECT TO DETAILED DA

NOTE:					
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	NO.	DATE	AMENDMENT	NO.	DATE
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	B	30/05/2019	FOR CONSULTANT ISSUE		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	C	28/06/2019	FOR CONSULTANT ISSUE		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.	D	19/07/2019	FOR DEVELOPMENT APPLICATION		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.	E	03/12/2019	FOR RFI ISSUE		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.					
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.					

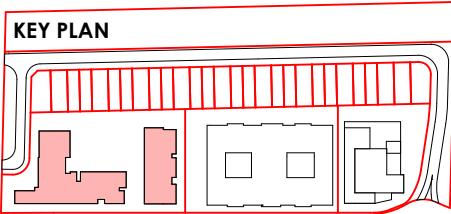
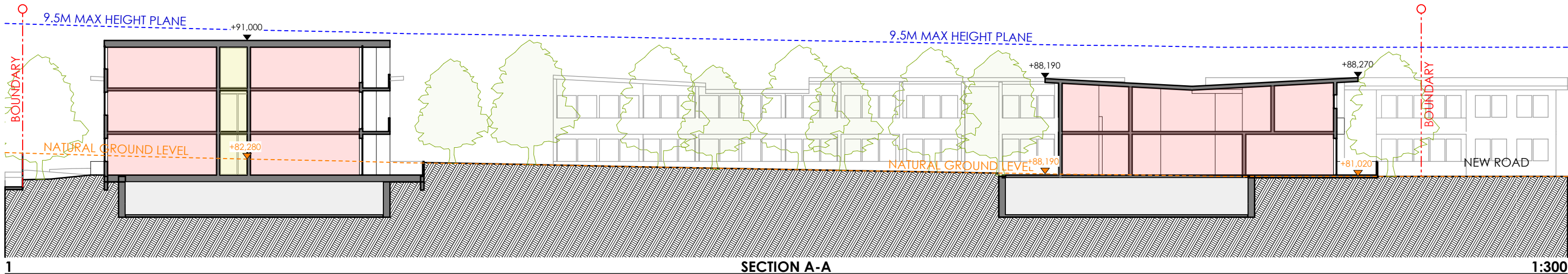
PROJECT
SPRING FARM SENIORS
SITE:
**131 SPRINGS ROAD,
SPRING FARM NSW**
CLIENT:
MORAN HEALTH



B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:			STATUS:
SENIORS - SECOND FLOOR			DA
DRAWN	CHKD	DATE	SCALE@A3:
BT	MH	17/04/2020	1:300, 1:5000
PROJECT NO.	DRAWING NO.		REVISION
8723	A.2033		F



INDICATIVE ONLY: SUBJECT TO DETAILED DA

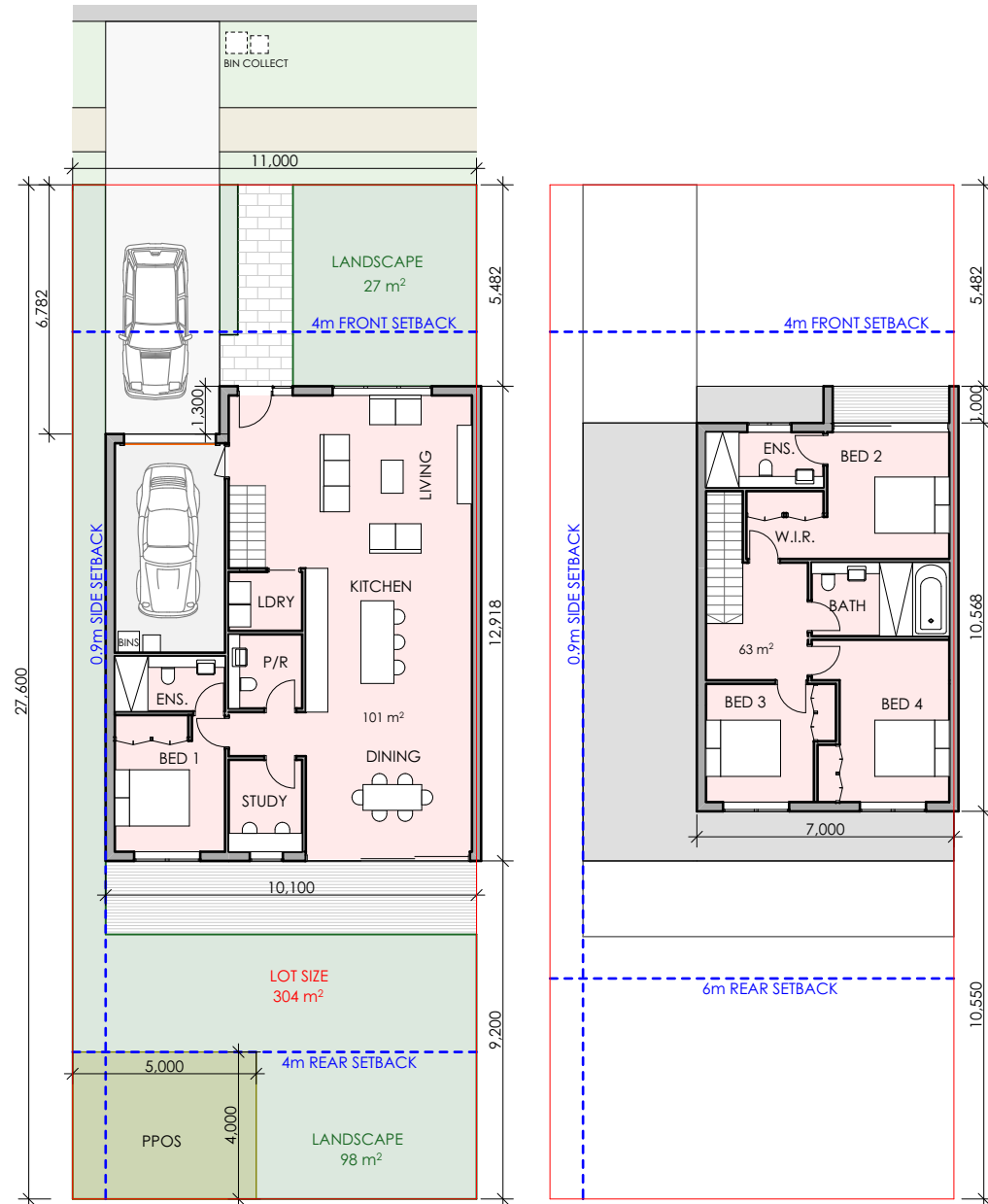
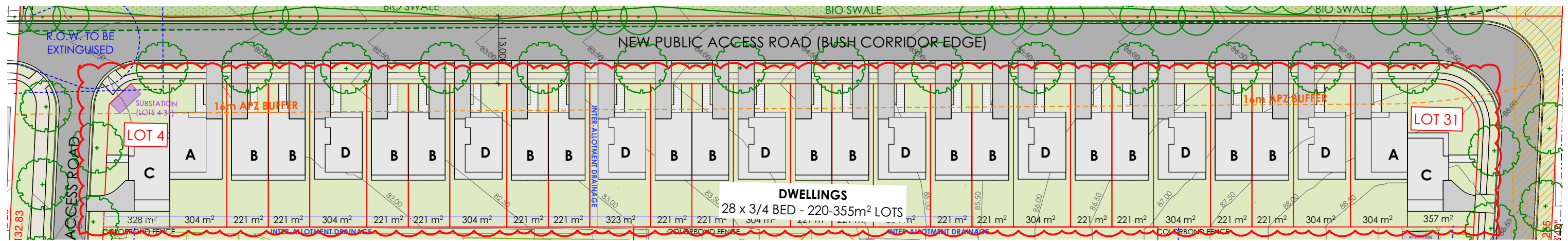
NOTE:					
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	NO.	DATE	AMENDMENT	NO.	DATE
2. PROVIDE CERTIFIED TERRACE BARBER SYSTEM TO AS 3640.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	B	30/05/2019	FOR CONSULTANT ISSUE		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	C	28/06/2019	FOR CONSULTANT ISSUE		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.	D	19/07/2019	FOR DEVELOPMENT APPLICATION		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.	E	03/12/2019	FOR RFI ISSUE		
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8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.					

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

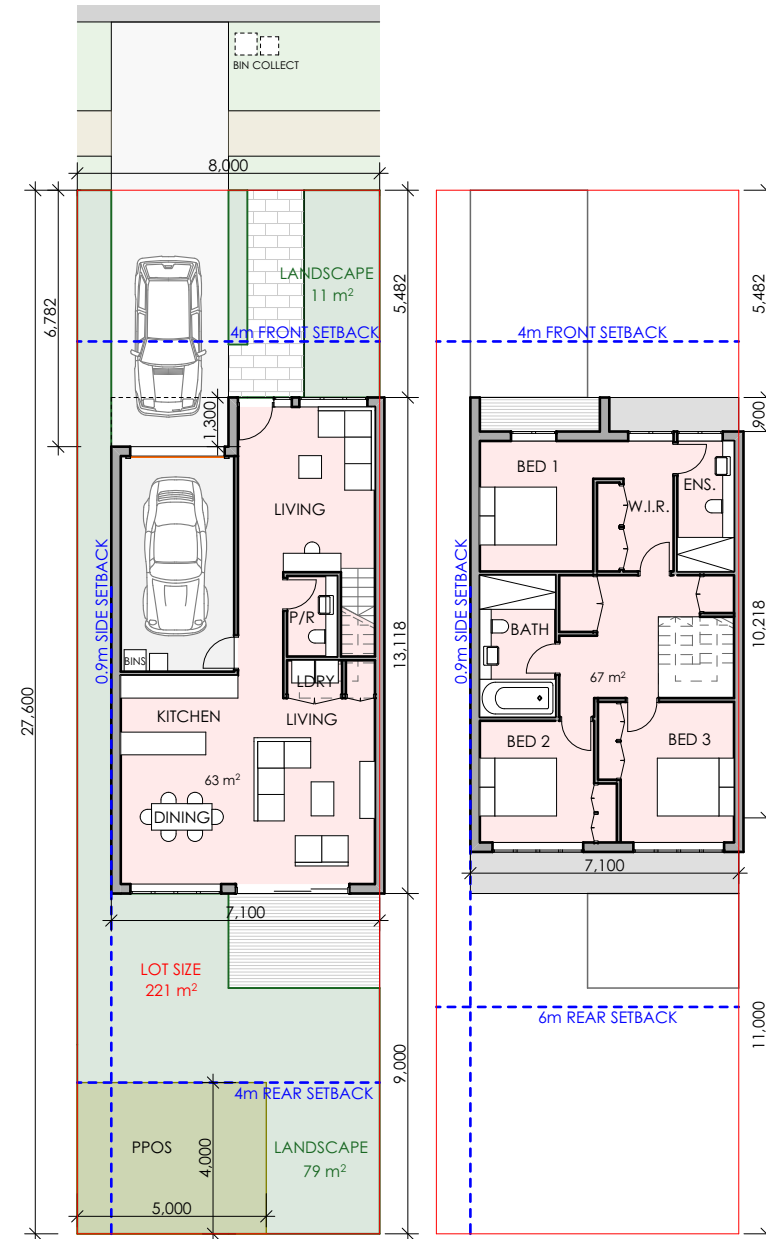
B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:			STATUS:	
SENIORS - SECTION			DA	
DRAWN:	CHKD:	DATE:	SCALE@A3:	
BT	MH	17/04/2020	1:300, 1:5000	
PROJECT NO.:	DRAWING NO.:	REVISION		
8723	A.2034	F		



DWELLING TYPE A x 2
4 BEDS -164m² GFA



DWELLING TYPE B x 16
3 BEDS -128m² GFA



NOTE: ALL LAYOUTS ARE INDICATIVE ONLY, AND WILL BE DIFFERENTIATED DURING THE INDIVIDUAL DESIGN OF EACH DWELLING TO AVOID REPLICA DWELLINGS.

INDICATIVE ONLY: SUBJECT TO DETAILED DA

NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RPI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE	G	18/06/2020	FOR RPI ISSUE 3
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RPI ISSUE			

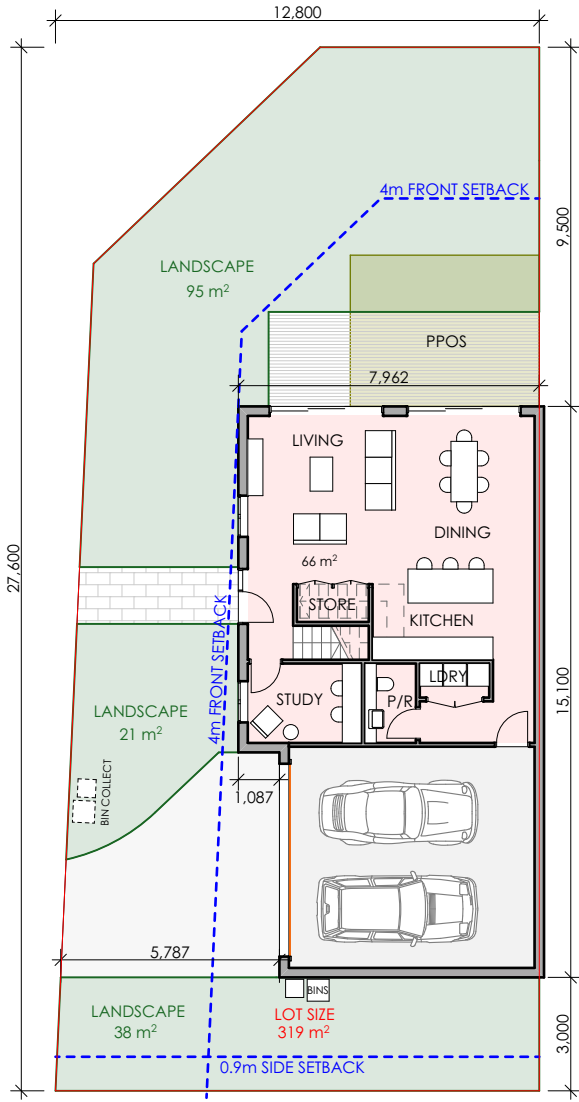
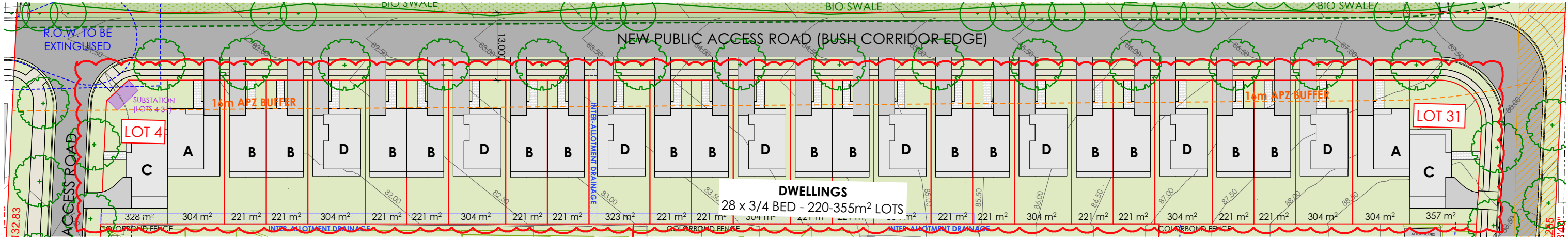
PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH



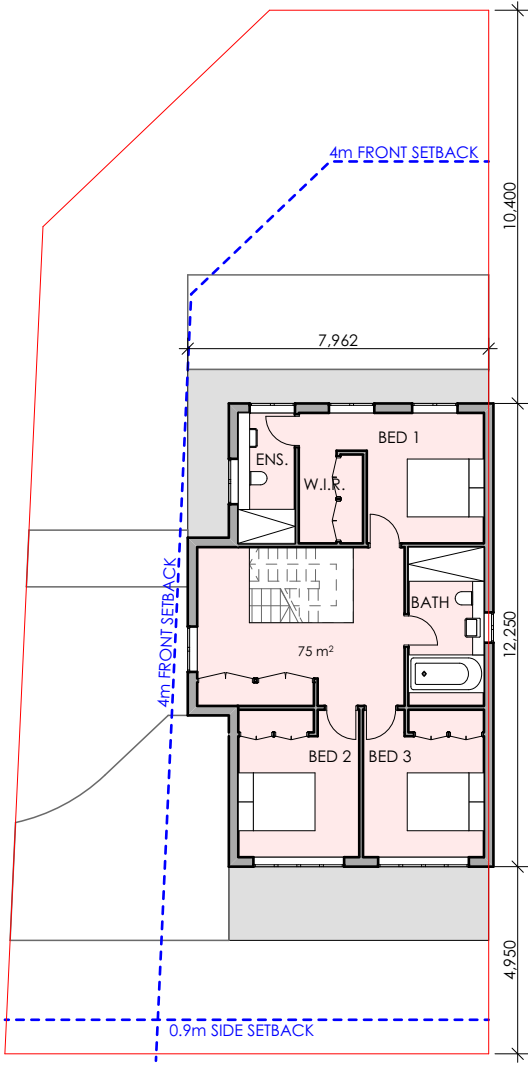
B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



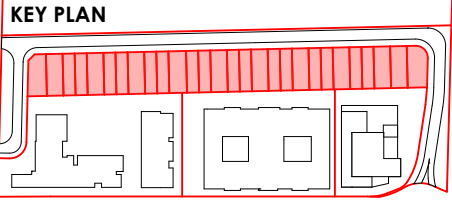
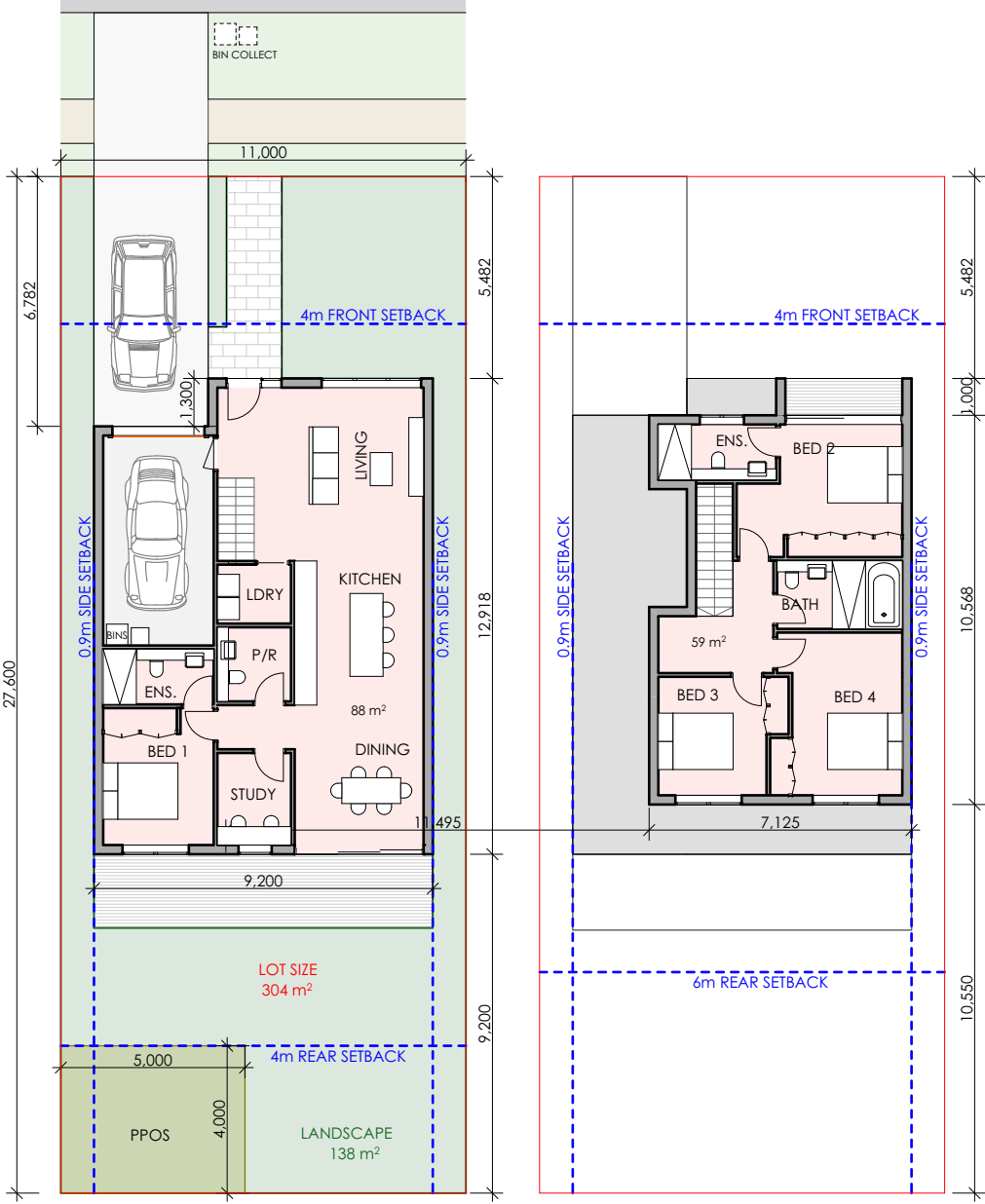
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DWELLINGS - TYPICAL PLANS	DA
DRAWN: BT	CHKD: MH
DATE: 18/06/2020	SCALE@A3: 1:200, 1:5000
PROJECT NO.: 8723	DRAWING NO.: A.2037
REVISION: G	



DWELLING TYPE C x 2
3 BEDS -141m² GFA



DWELLING TYPE D x 8
4 BEDS -147m² GFA



NOTE: ALL LAYOUTS ARE INDICATIVE ONLY, AND WILL BE DIFFERENTIATED DURING THE INDIVIDUAL DESIGN OF EACH DWELLING TO AVOID REPLICA DWELLINGS.

INDICATIVE ONLY: SUBJECT TO DETAILED DA

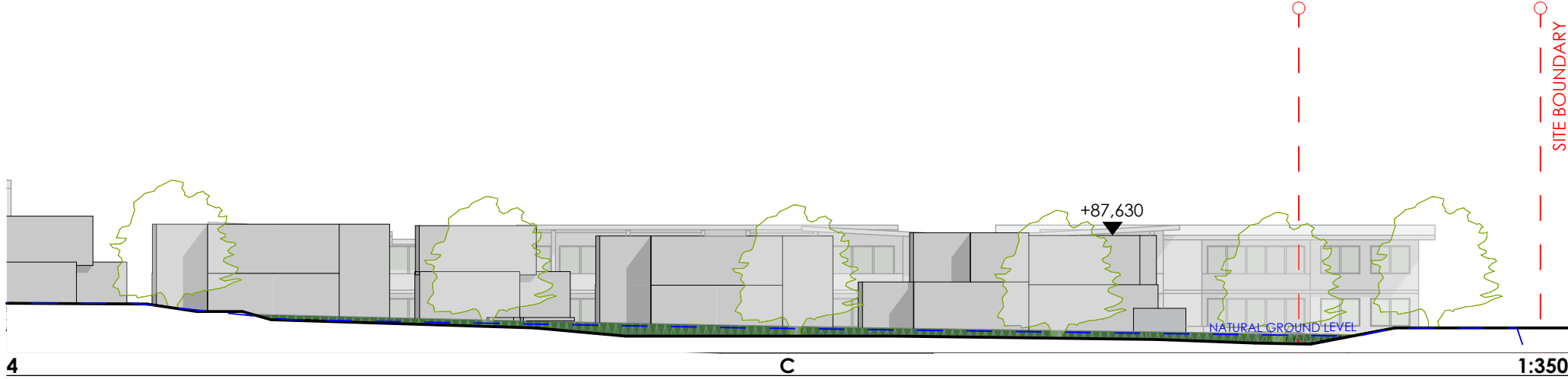
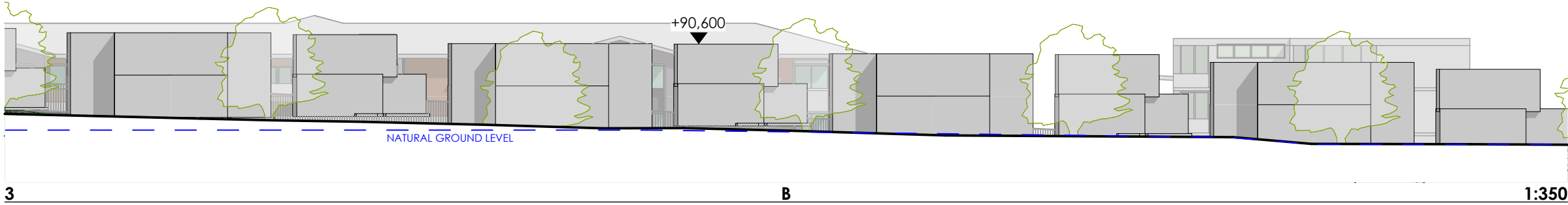
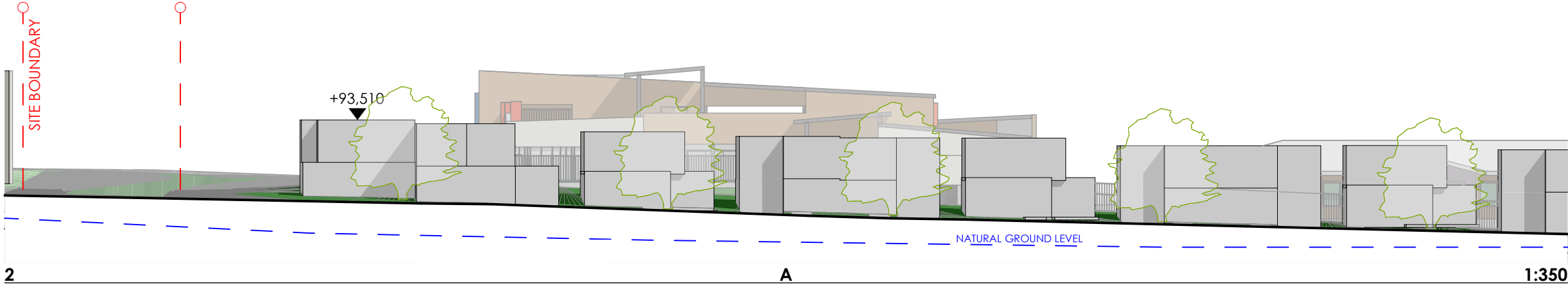
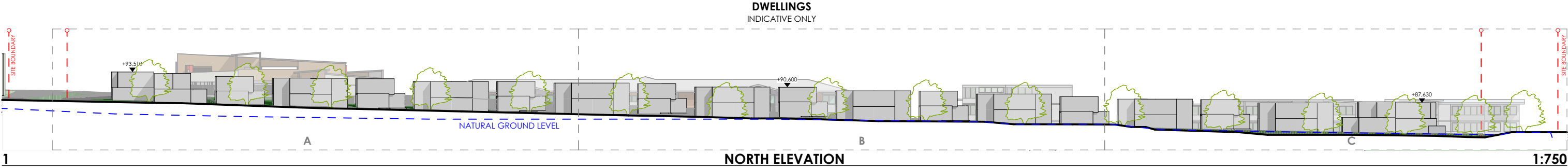
NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
1.	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RPI ISSUE 2
2.	30/05/2019	FOR CONSULTANT ISSUE	G	18/06/2020	FOR RPI ISSUE 3
3.	28/06/2019	FOR CONSULTANT ISSUE			
4.	19/07/2019	FOR DEVELOPMENT APPLICATION			
5.	03/12/2019	FOR RPI ISSUE			

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125

DRAWING TITLE:
DWELLINGS - TYPICAL PLANS
DRAWN: BT
CHKD: MH
DATE: 18/06/2020
PROJECT NO.: 8723
DRAWING NO.: A.2050
REVISION: G

STATUS:
DA
SCALE@A3:
REVISION: G



NOTE:

1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.
2. PROVIDE CERTIFIED TERRACE BARBER SYSTEM TO AS 3640.
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTISING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.

NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

PROJECT
SPRING FARM SENIORS

SITE:
131 SPRINGS ROAD,
SPRING FARM NSW

CLIENT:
MORAN HEALTH

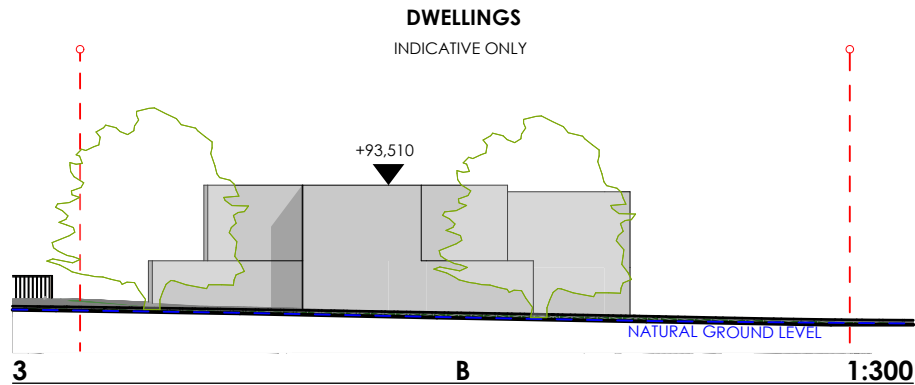
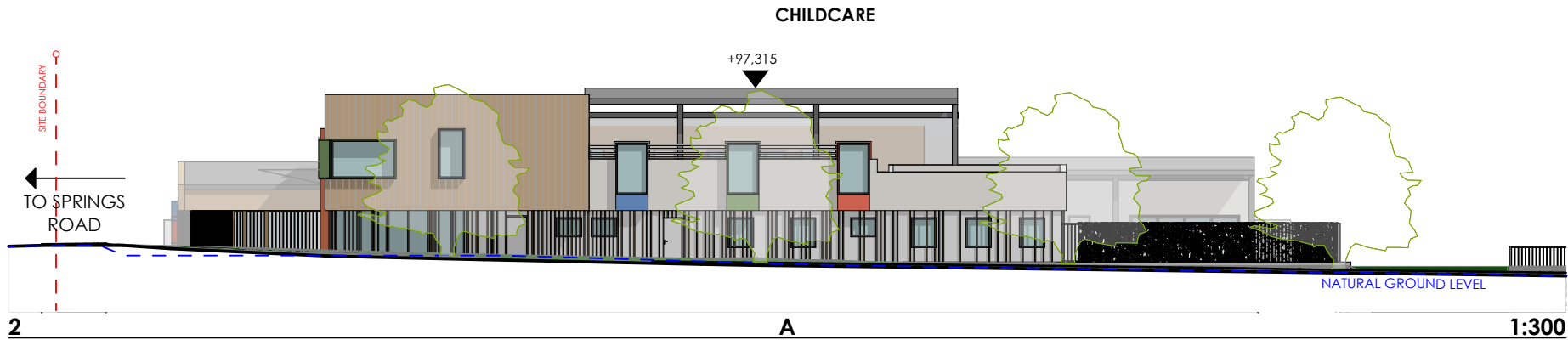
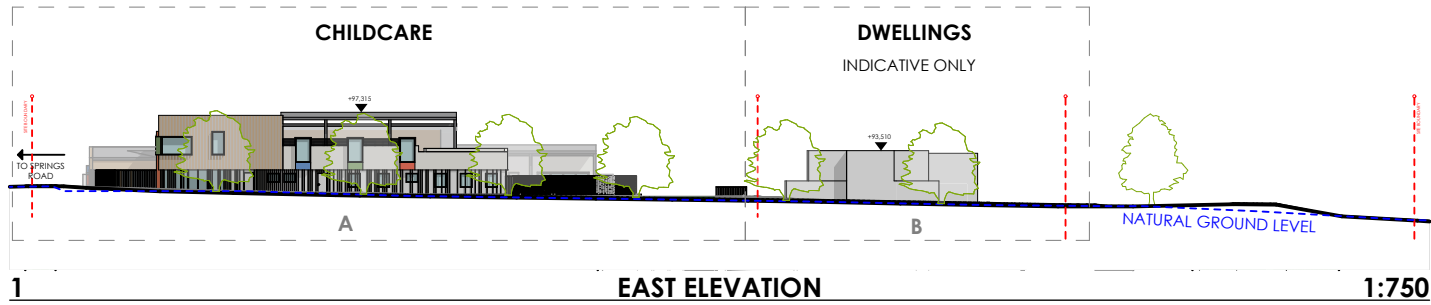
B H I ARCHITECTS PTY LTD

SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800

KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE: NORTH ELEVATION (REAR)			STATUS: DA	
DRAWN BT	CHKD MH	DATE 17/04/2020	SCALE@A3: 1:750, 1:350	
PROJECT NO. 8723	DRAWING NO. A.3002	REVISION F		

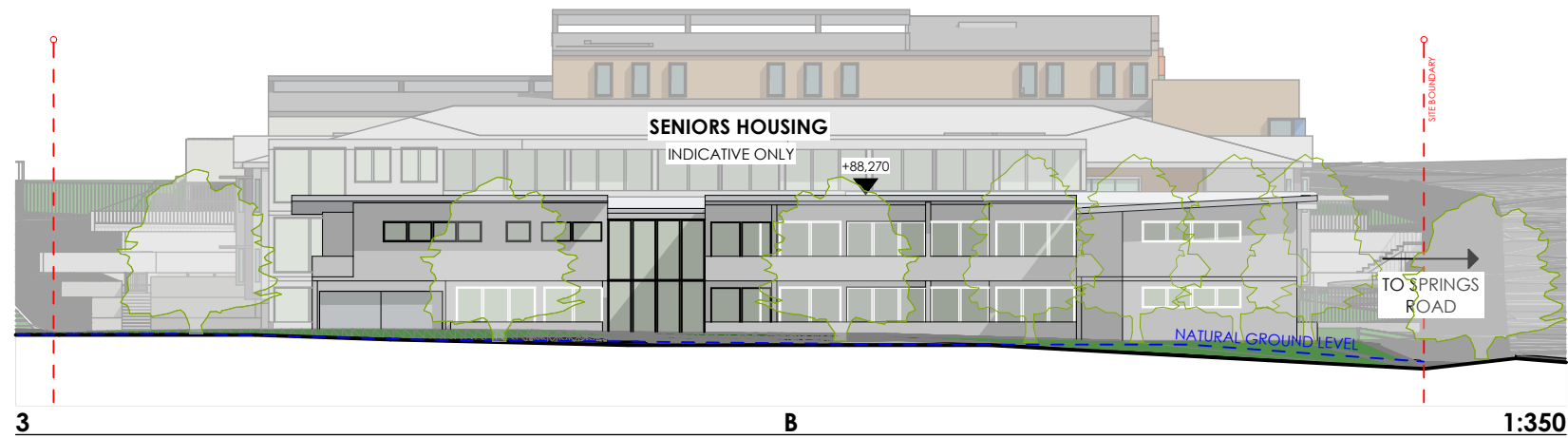
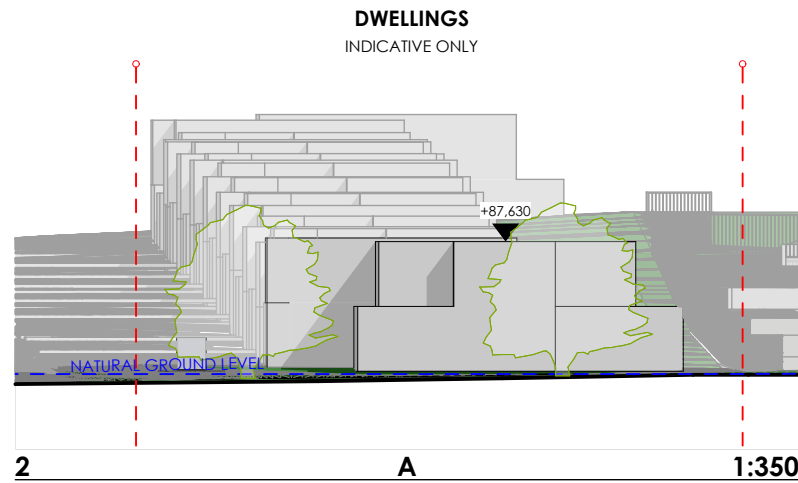
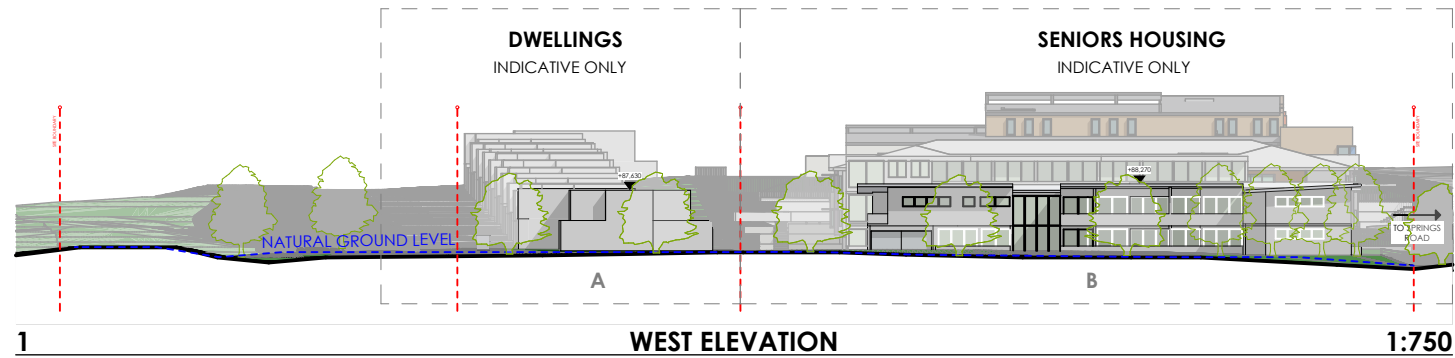


NOTE:					
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	NO.	DATE	AMENDMENT	NO.	DATE
2. PROVIDE CERTIFIED TERRACE BARBER SYSTEM TO AS 3640.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.	B	30/05/2019	FOR CONSULTANT ISSUE		
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.	C	28/06/2019	FOR CONSULTANT ISSUE		
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.	D	19/07/2019	FOR DEVELOPMENT APPLICATION		
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.	E	03/12/2019	FOR RFI ISSUE		
7. DRAWINGS TO BE CHECKED AND CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.					
8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.					

PROJECT	SPRING FARM SENIORS
SITE:	131 SPRINGS ROAD, SPRING FARM NSW
CLIENT:	MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125

DRAWING TITLE:	STATUS:
EAST ELEVATION (SIDE)	DA
DRAWN	CHKD
BT	MH
DATE	17/04/2020
SCALE@A3:	1:750, 1:300
PROJECT NO.	DRAWING NO.
8723	A.3003
REVISION	F



NOTE:

1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.
2. PROVIDE CERTIFIED TERRACE BARBER SYSTEM TO AS 3640.
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.
5. DO NOT SCALE THE DRAWING. USE FIGURED DIMENSIONS.
6. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATING ANY ITEM.
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8. THESE DRAWINGS ARE SUBJECT TO COPYRIGHT.

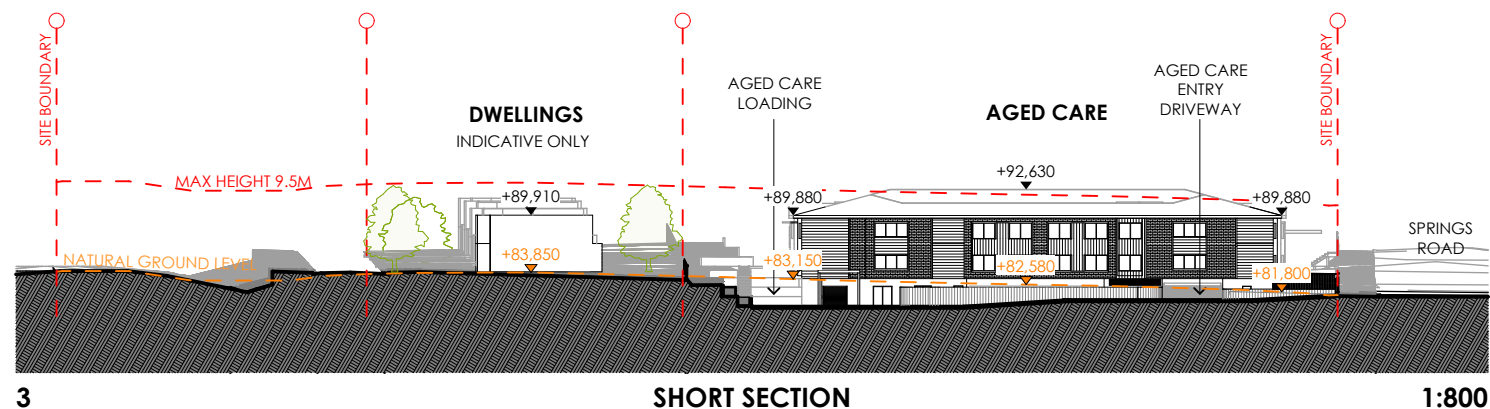
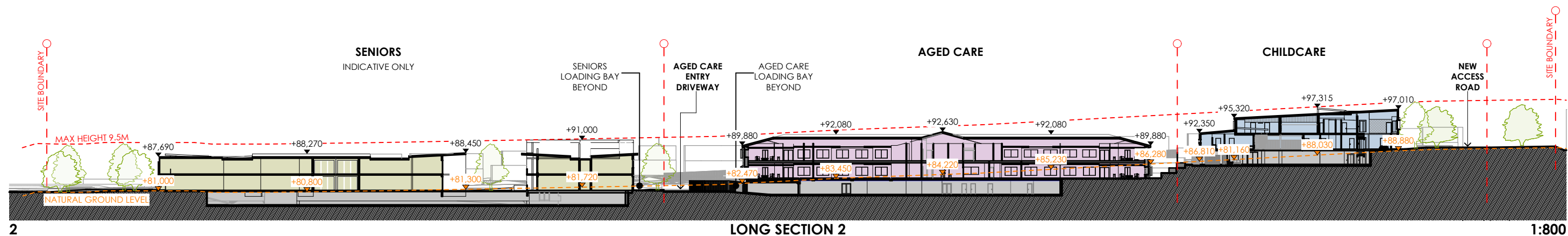
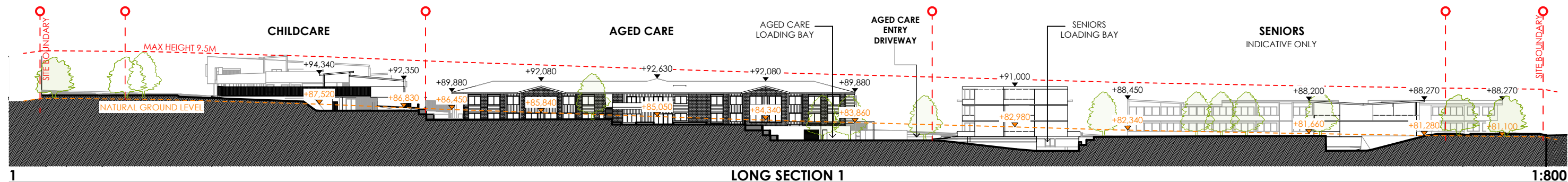
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A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

PROJECT
SPRING FARM SENIORS
SITE:
131 SPRINGS ROAD,
SPRING FARM NSW
CLIENT:
MORAN HEALTH

B H I ARCHITECTS PTY LTD
SYDNEY
3/19/77 DUNNING AVE
ROSEBERY NSW 2018
02 9313 7800
KIAMA
4/1/25 TERRALONG STREET
KIAMA NSW 2533
02 4232 2125



DRAWING TITLE:	STATUS:
WEST ELEVATION (SIDE)	DA
DRAWN: BT	CHKD: MH
DATE: 17/04/2020	SCALE@A3: 1:750, 1:350
PROJECT NO.: 8723	DRAWING NO.: A.3004
REVISION: F	



NOTE:

1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.
3. SELECTED WINDOWS AND DOORS TO SUIT DESIGNATED WIND TERRAIN CATEGORY.
4. ALL SITE CONDITIONS INCLUDING LEVELS TO BE CONFIRMED, AND ANY DISCREPANCIES TO BE REFERRED TO ARCHITECT PRIOR TO COMMENCEMENT.
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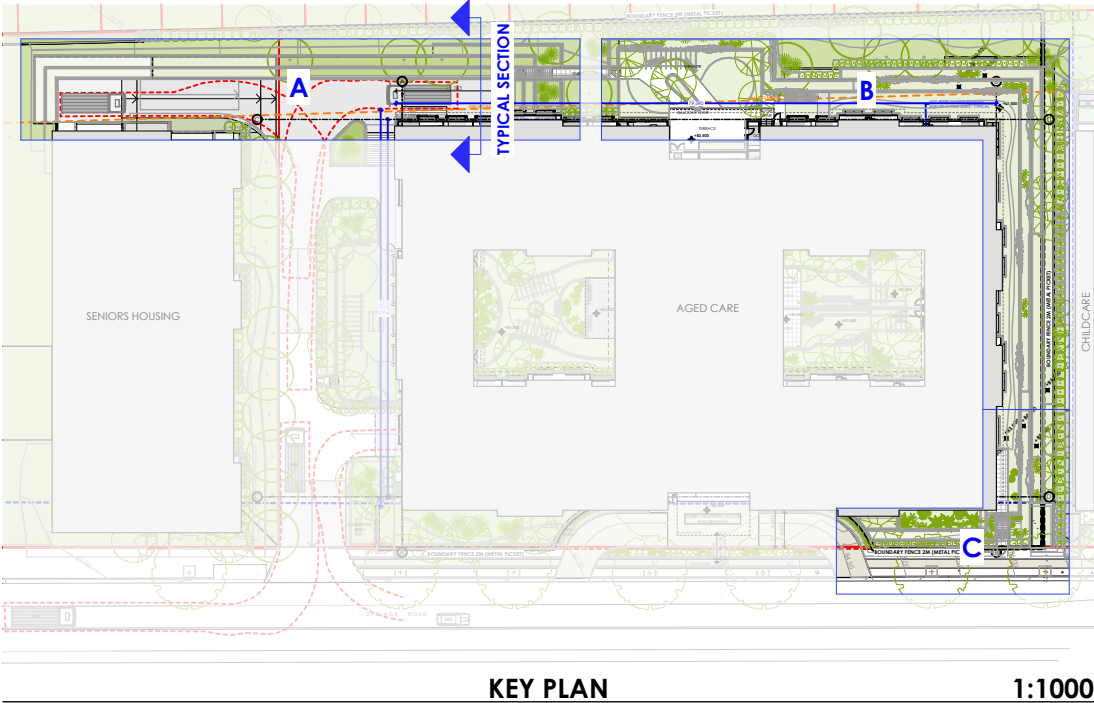
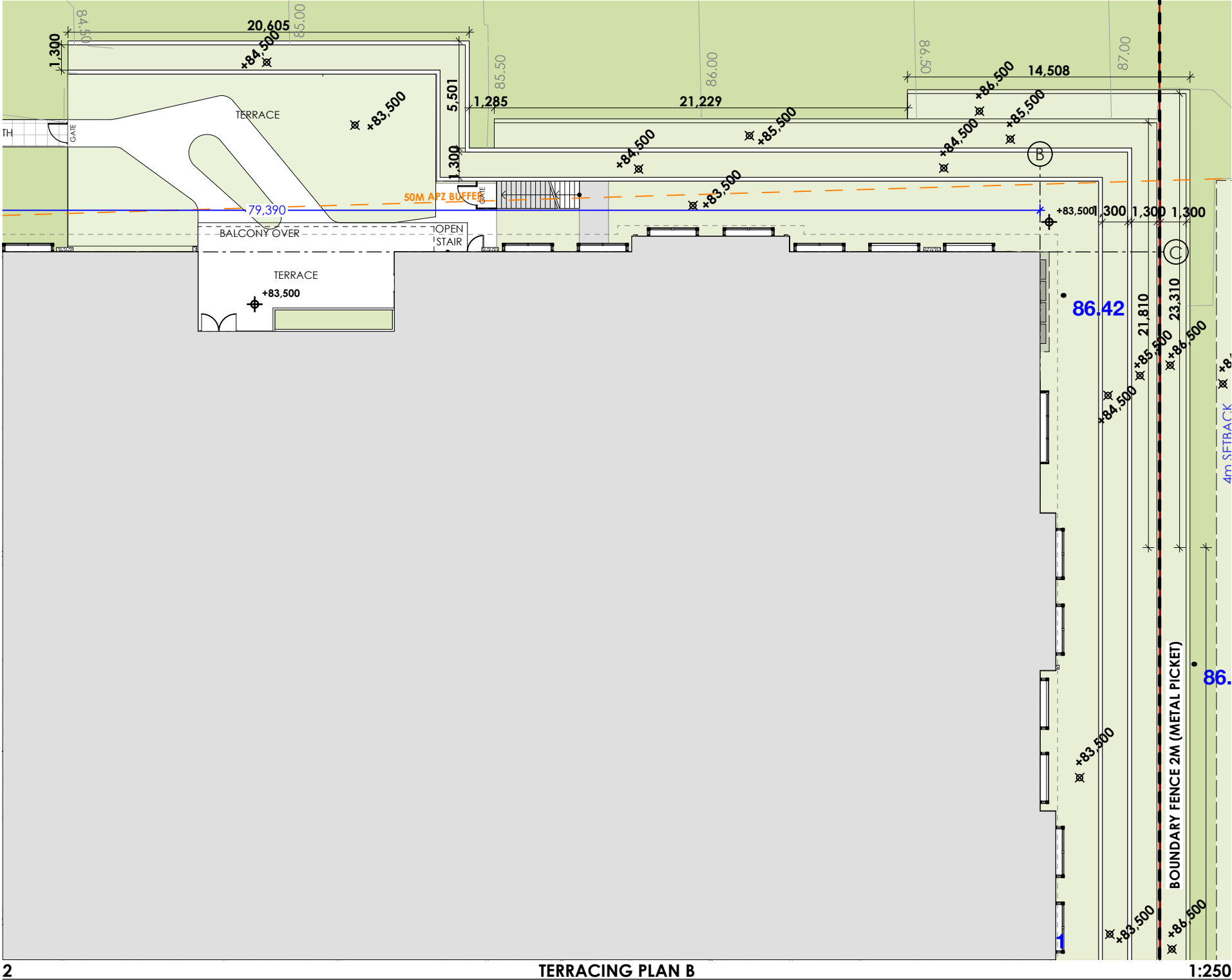
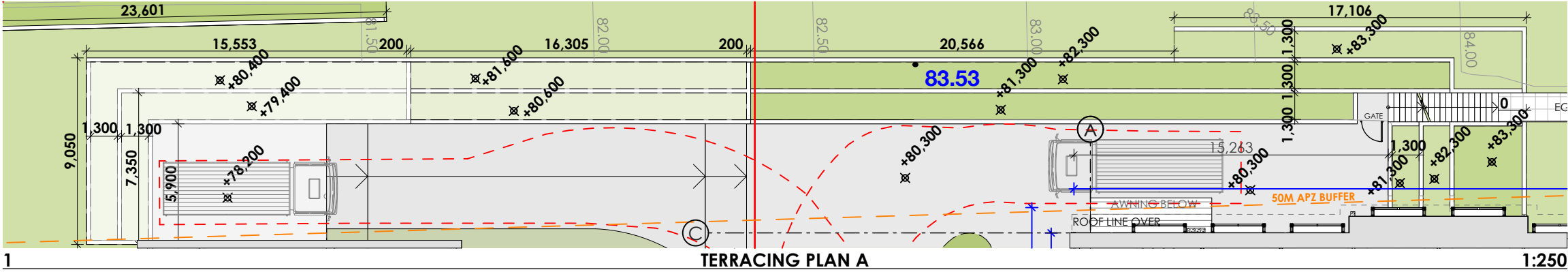
NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
B	30/05/2019	FOR CONSULTANT ISSUE			
C	28/06/2019	FOR CONSULTANT ISSUE			
D	19/07/2019	FOR DEVELOPMENT APPLICATION			
E	03/12/2019	FOR RFI ISSUE			

PROJECT
SPRING FARM SENIORS
SITE:
**131 SPRINGS ROAD,
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3			28/06/2019			FOR CONSULTANT ISSUE		
4			19/07/2019			FOR DEVELOPMENT APPLICATION		
5			03/12/2019			FOR RFI ISSUE		

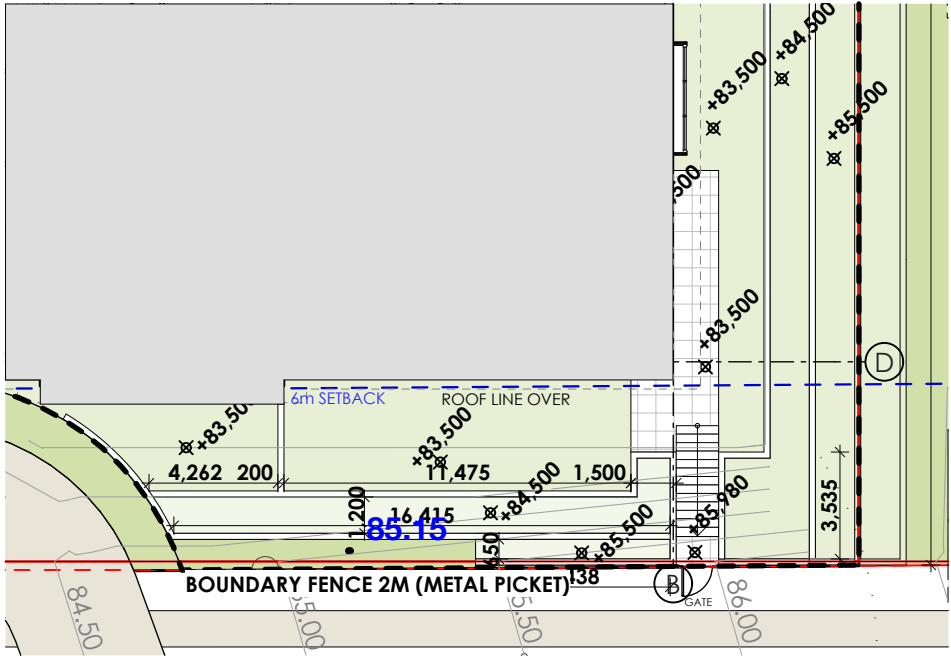
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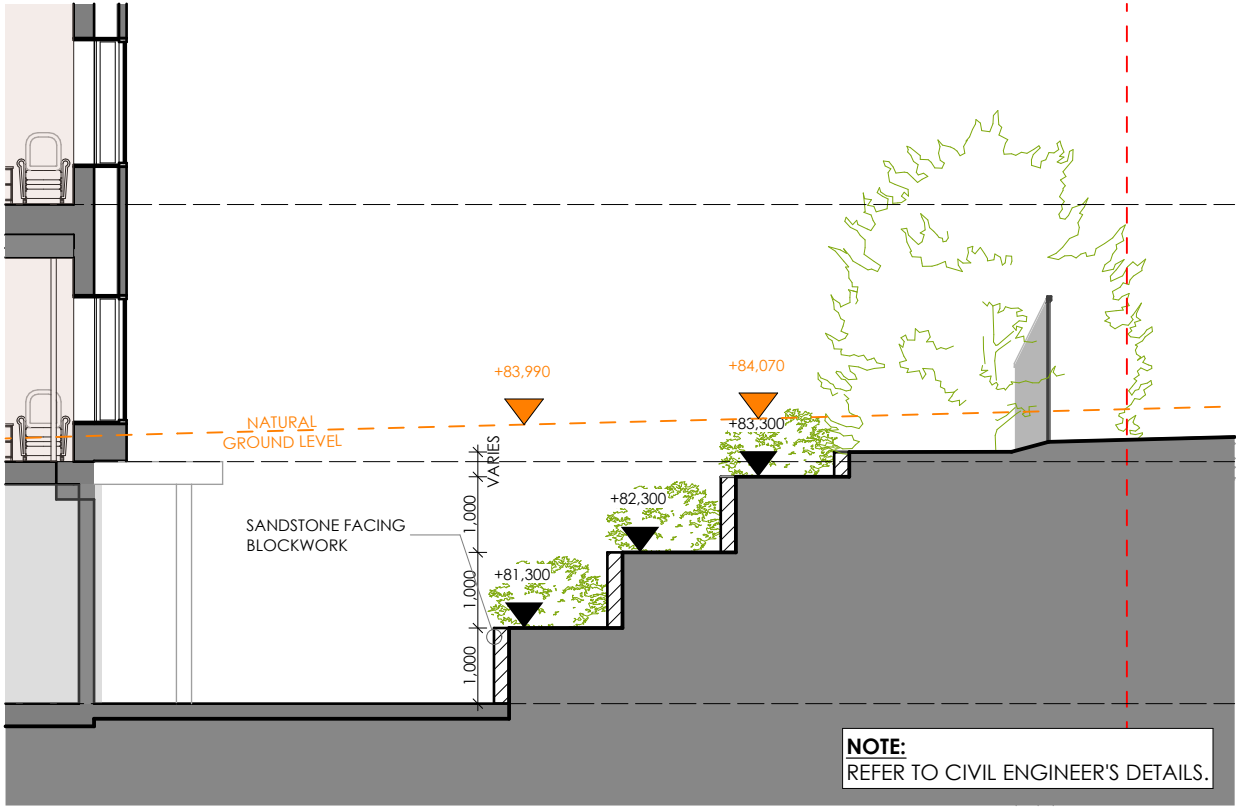
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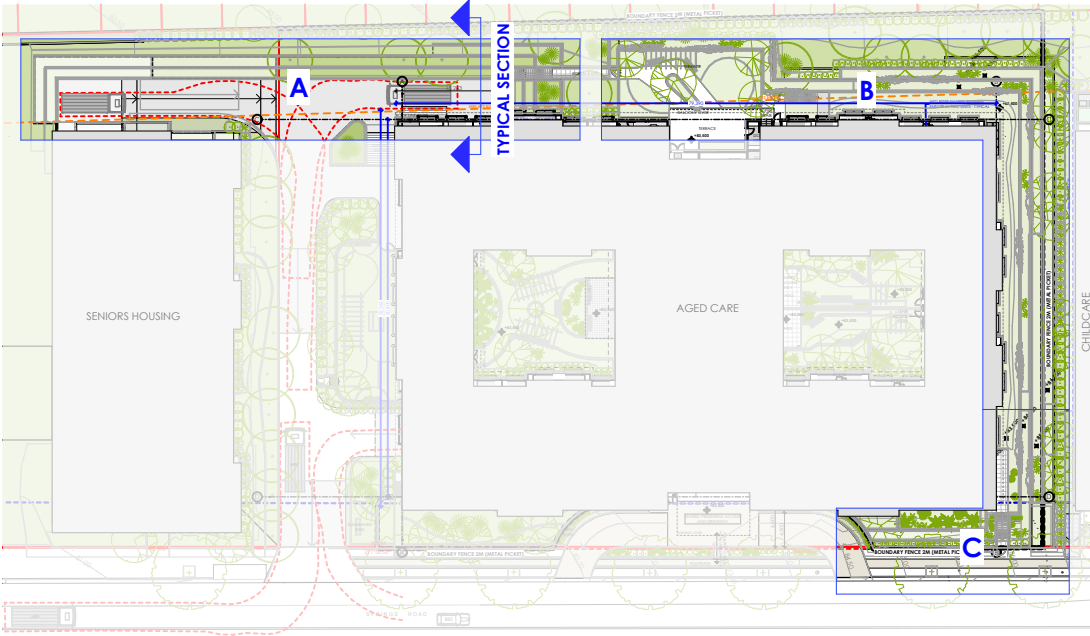
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1 TERRACING PLAN C 1:250



2 TYPICAL RETAINING WALL SECTION 1:100



KEY PLAN 1:1000

NOTE: ALL DIMENSIONS AND LEVELS ARE PRELIMINARY AND SUBJECT TO DETAILED CIVIL DESIGN.

NO.	DATE	AMENDMENT	NO.	DATE	AMENDMENT
A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020	FOR RFI ISSUE 2
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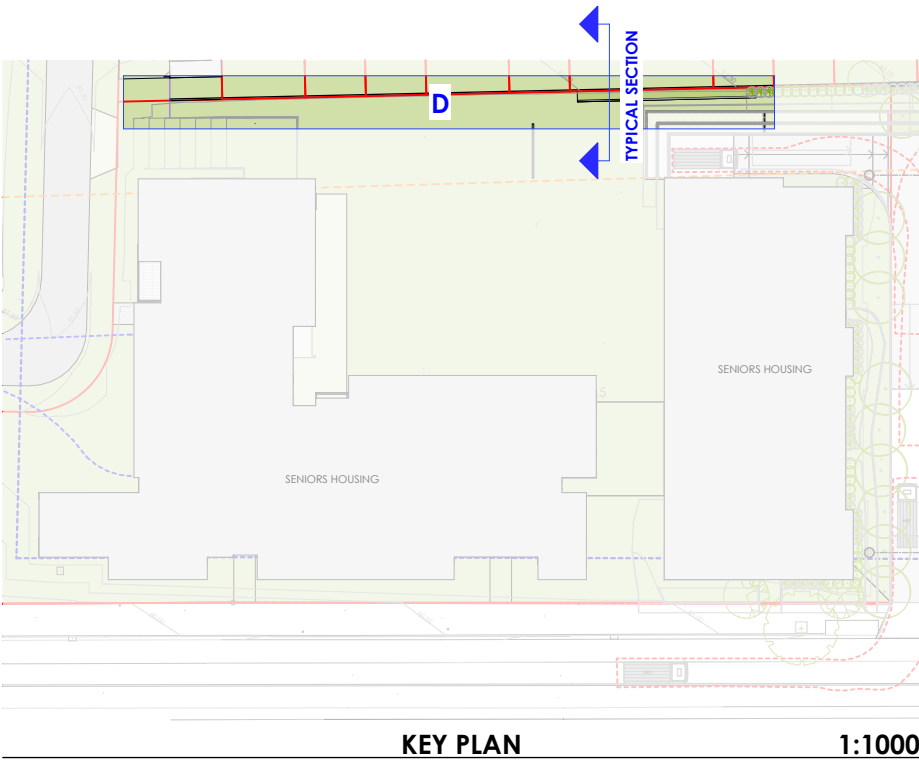
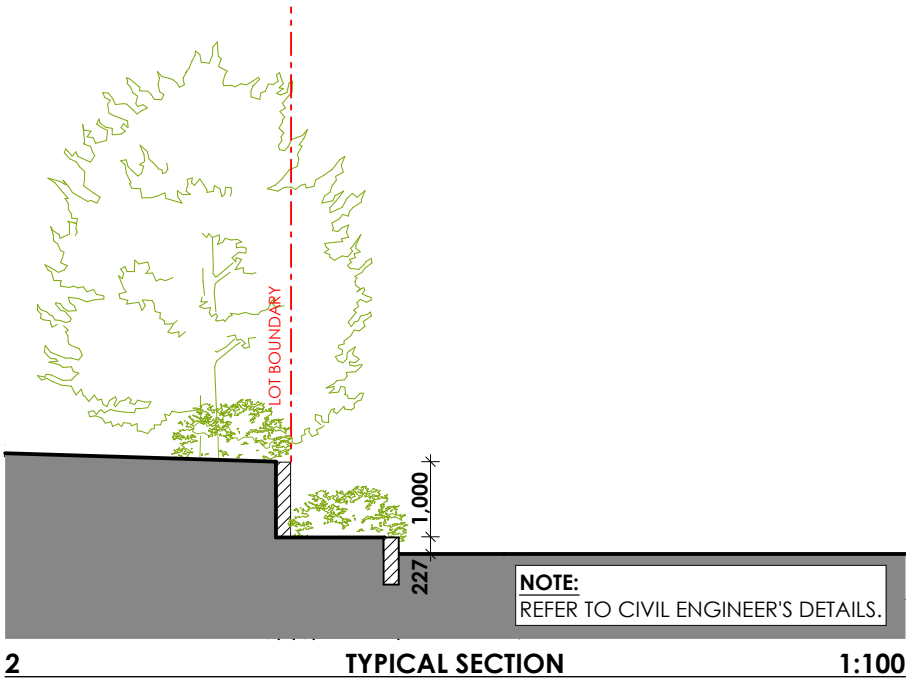
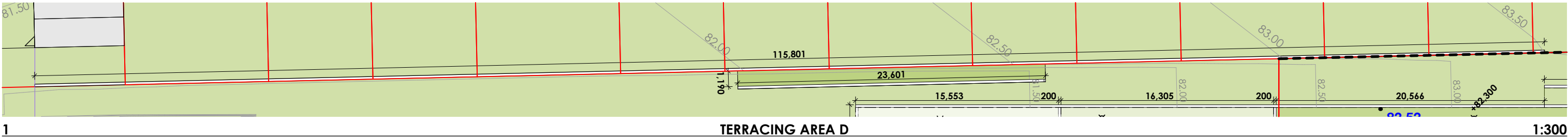
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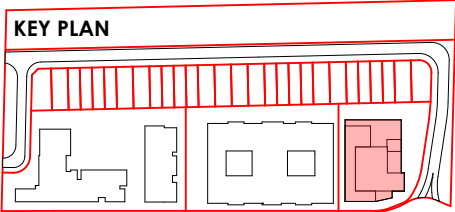
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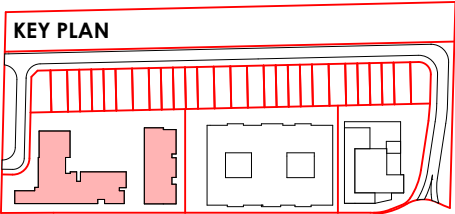
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DRAWN:	CHKD:	DATE:	SCALE@A3:
BT	MH	19/07/2019	
PROJECT NO.		DRAWING NO.	REVISION
8723		A.2026	D



SPRINGS ROAD VIEW - FROM SOUTH WEST



SPRINGS ROAD VIEW - FROM SOUTH EAST



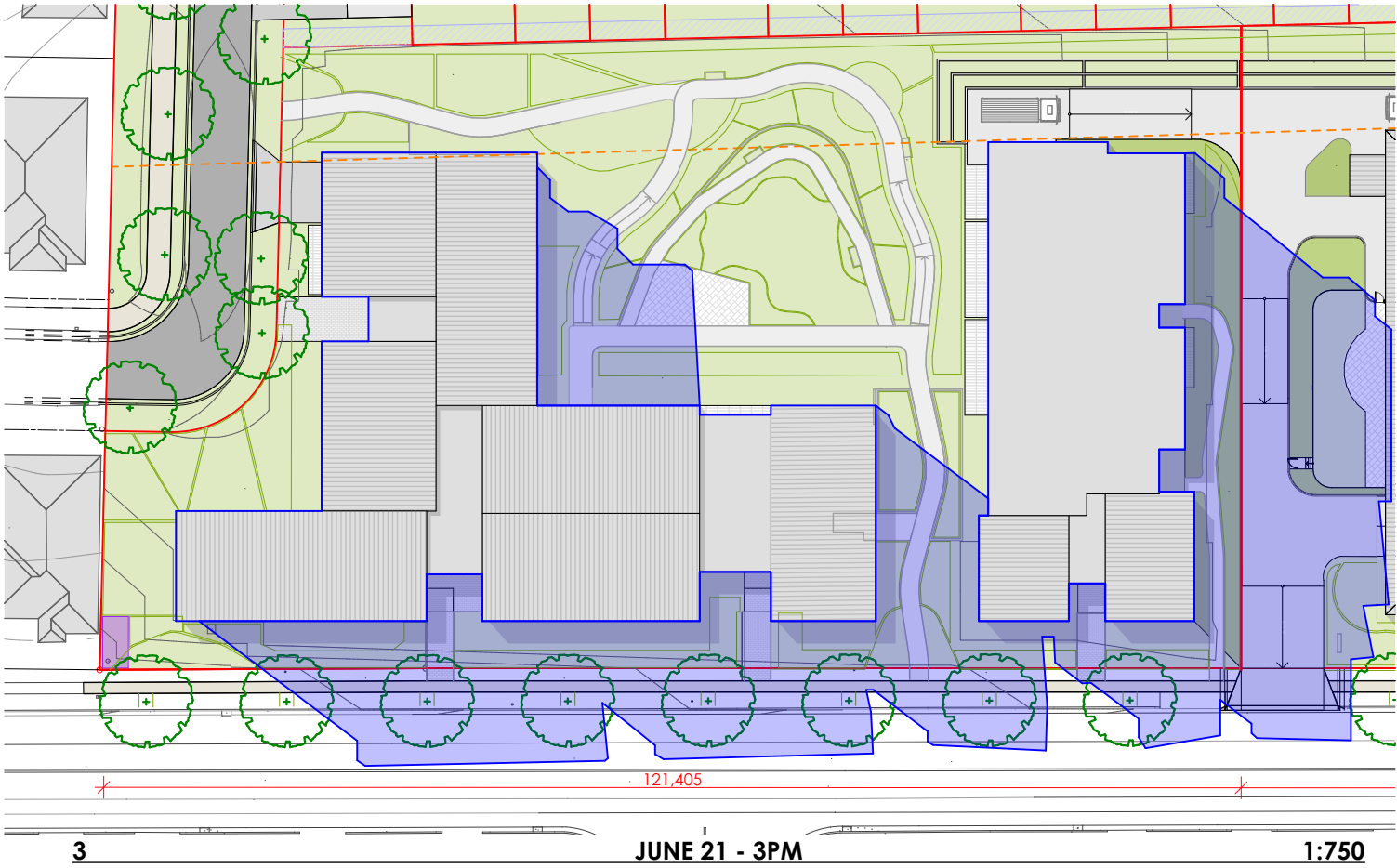
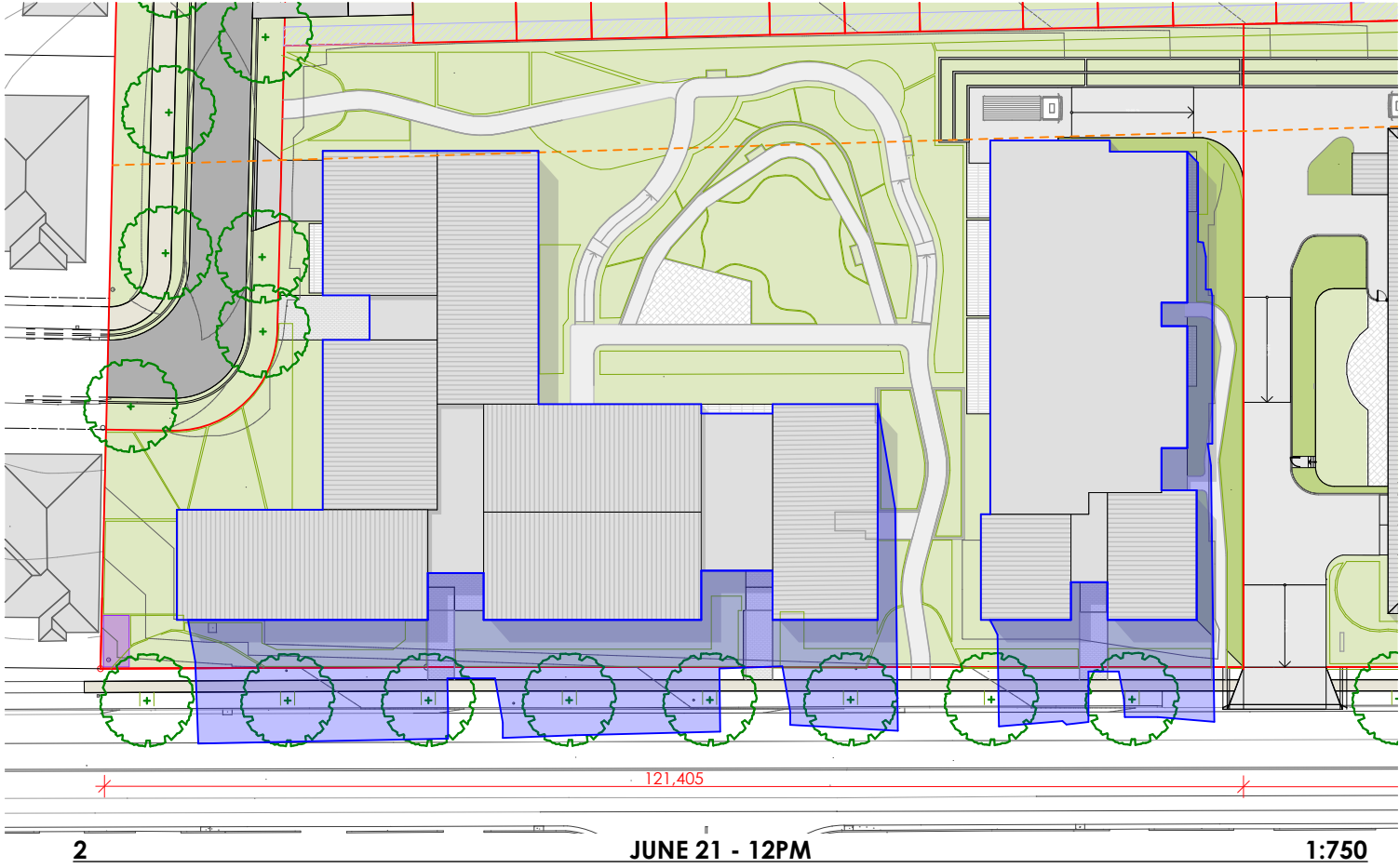
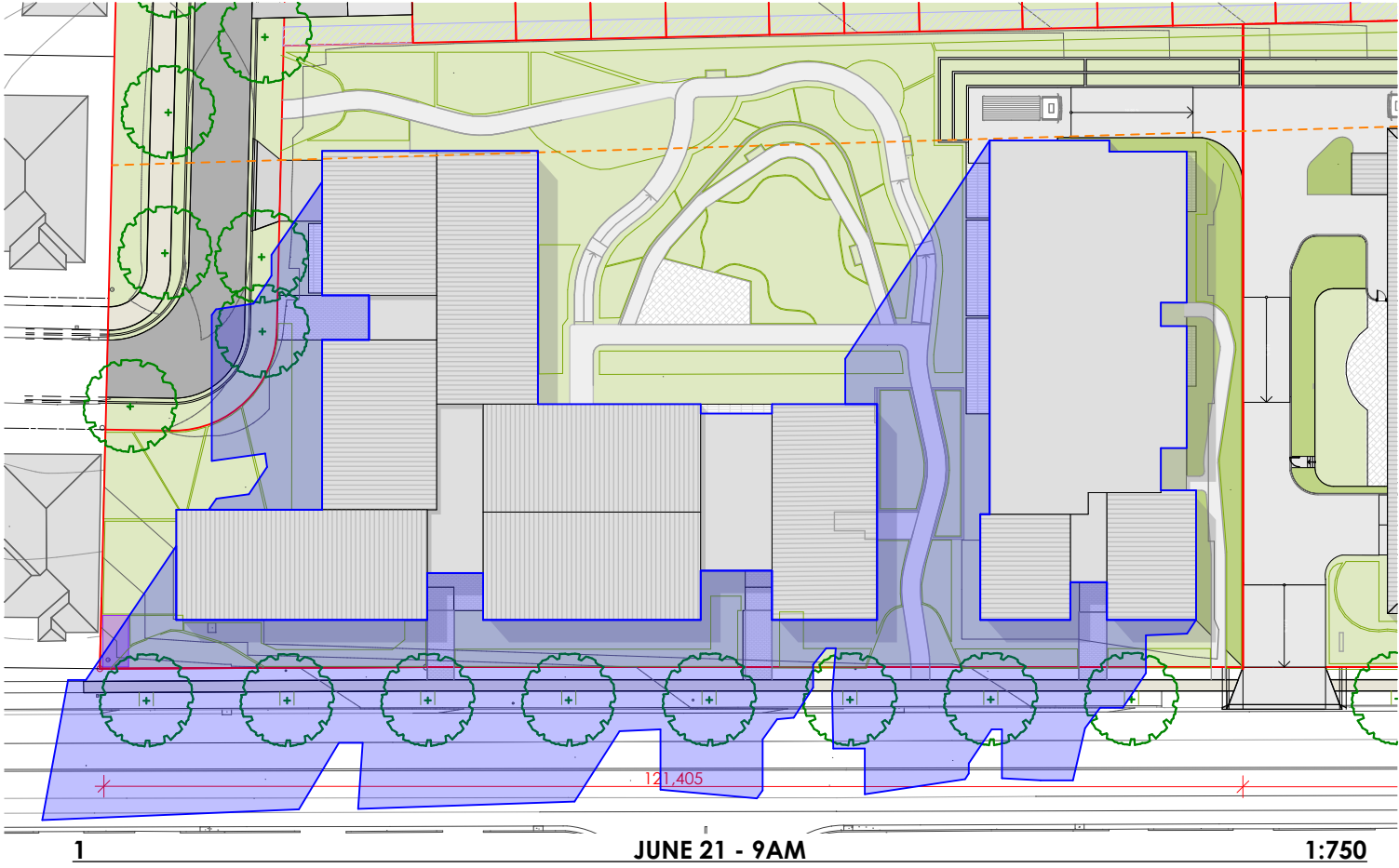
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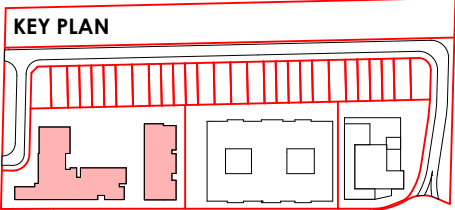
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SENIORS - 3D VIEWS	DA
DRAWN: BT	CHKD: MH
DATE: 03/12/2019	SCALE@A3:
PROJECT NO. 8723	DRAWING NO. A.2039
REVISION: E	



OVERSHADOWING DIAGRAMS

ADDITIONAL SHADOW IMPACT



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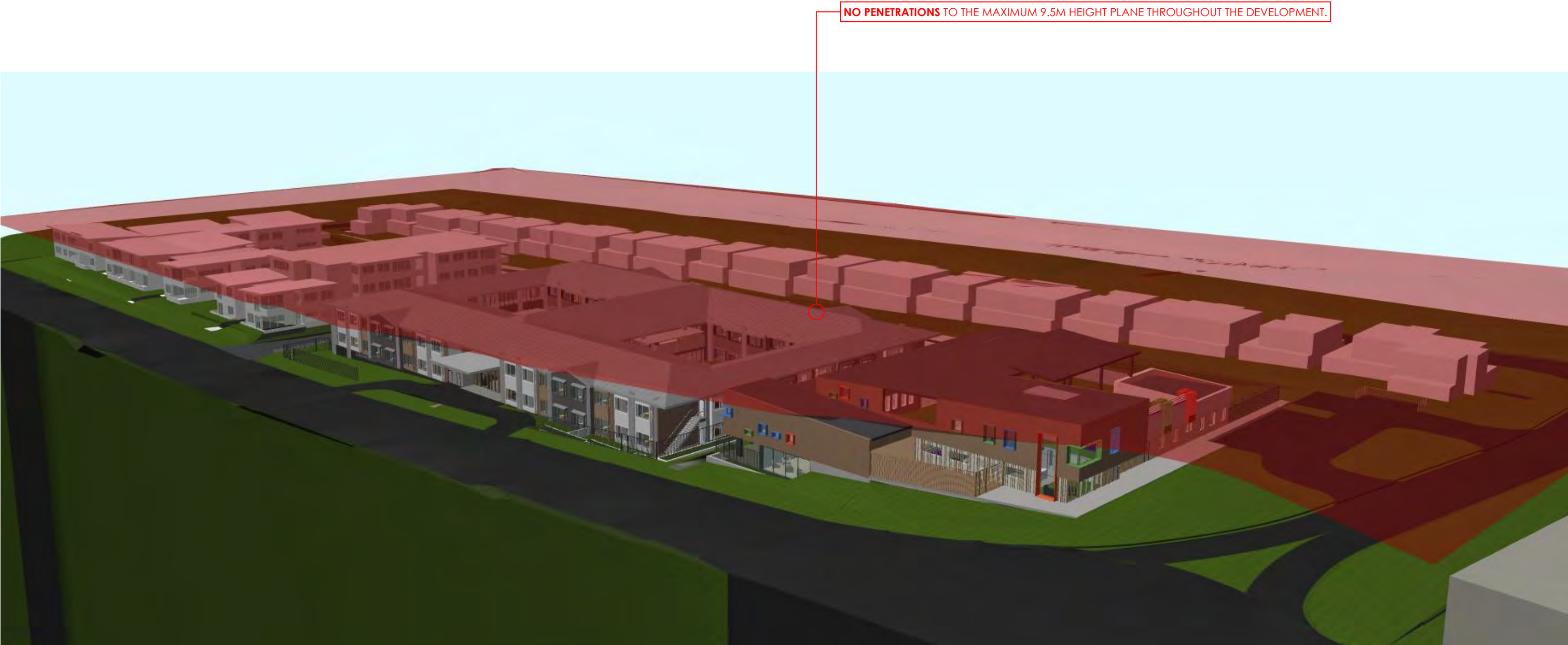
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DRAWN	CHKD	DATE	SCALE@A3:
BT	MH	17/04/2020	
PROJECT NO.	DRAWING NO.	REVISION	
8723	A.2046	F	



NO PENETRATIONS TO THE MAXIMUM 9.5M HEIGHT PLANE THROUGHOUT THE DEVELOPMENT.

1 OVERALL HEIGHT DIAGRAM VIEW

NOTE:					
1. TIMBER FRAMING AND WIND BRACING TO COMPLY WITH AS1684 AND TO NSW TIMBER FRAMING MANUAL AMENDED TO SUIT WIND TERRAIN CATEGORY.	NO.	DATE	AMENDMENT	NO.	DATE
2. PROVIDE CERTIFIED TERRACE BARRIER SYSTEM TO AS 3640.	A	07/02/2019	PRE-DA REVISIONS	F	17/04/2020
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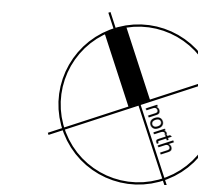
PROJECT	SPRING FARM SENIORS
SITE:	131 SPRINGS ROAD, SPRING FARM NSW
CLIENT:	MORAN HEALTH

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PROJECT NO.	DRAWING NO.	REVISION	
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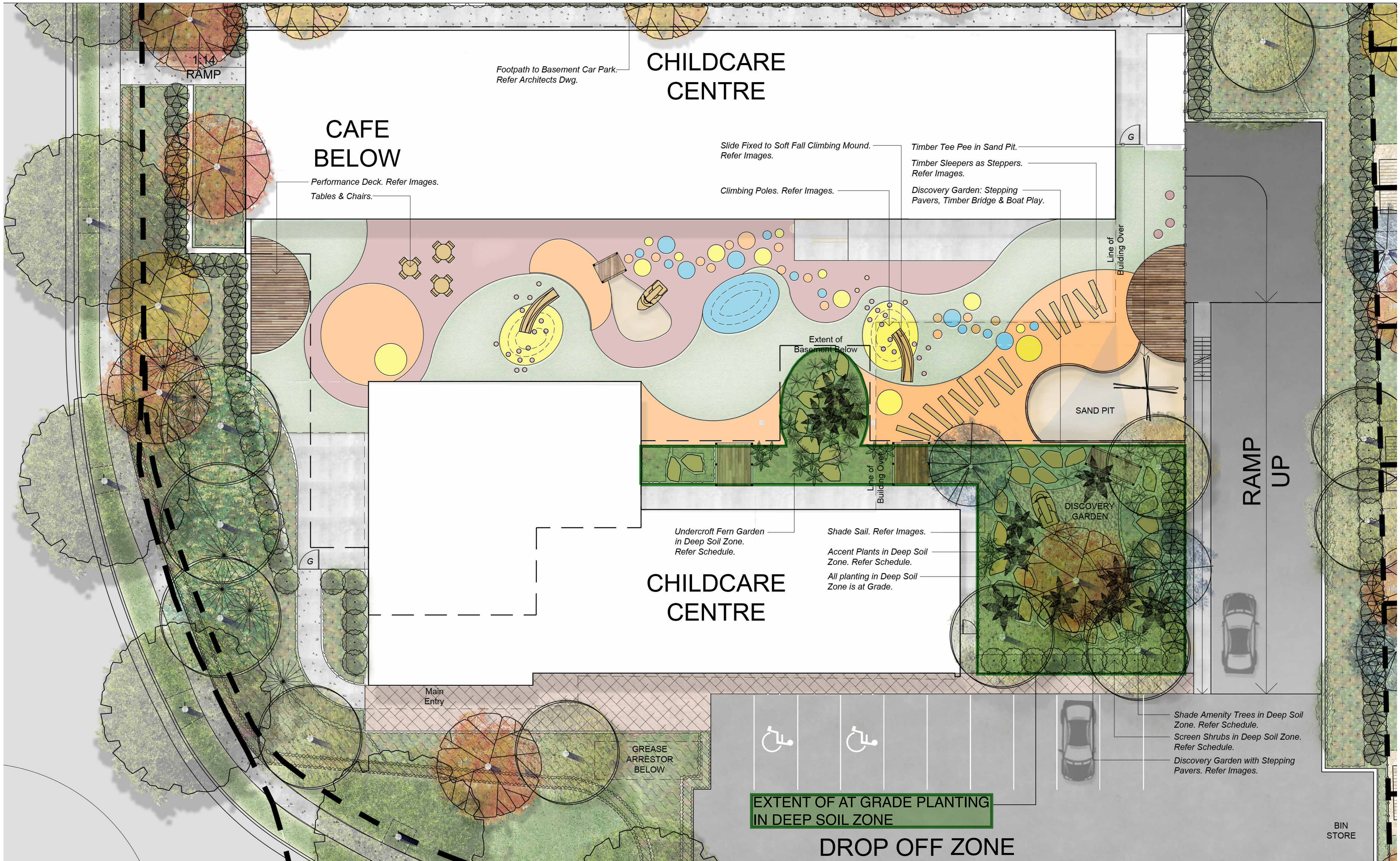




Image	Key	Botanical Name	Common Name	Mature Height (m.)	Mature Spread (m.)	Pot Size	Comments
Street Trees							
01	Ere	<i>Elaeocarpus reticulatus</i>	Blue Berry Ash	8	4	75L	Stakes and ties
	Lco	<i>Lophostemon confertus</i>	Brush Box	8	6	75L	Stakes and ties
	TLu	<i>Tristaniopsis 'Luscious'</i>	Luscious Water Gum	8	5	75L	Stakes and ties
Shade Amenity Trees							
02	Asm	<i>Acmena smithii</i>	Lilly Pilly	10	5	45L	Stakes and ties
	Bac	<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	15	5	75L	Stakes and ties
	Can	<i>Cupaniopsis anacardioides</i>	Tuckeroo	7	5	45L	Stakes and ties
	Gfe	<i>Glochidion ferdinandi</i>	Cheese Tree	8	6	45L	Stakes and ties
	Sau	<i>Syzygium australe</i>	Scrub Cherry	8	4	25L	Stakes and ties
	WSw	<i>Waterhousia 'Sweeper'</i>	Weeping Lilly Pilly	10	7	75L	Stakes and ties
Small Feature Trees							
03	Bin	<i>Banksia integrifolia</i>	Coast Banksia	12	4	45L	Stakes and ties
	Bce	<i>Buckinghamia celsissima</i>	Ivory Curl Flower	6	3	45L	Stakes and ties
	Cgu	<i>Ceratopetalum gummiferum</i>	NSW Christmas Bush	6	1.5	45L	Stakes and ties
	Ere	<i>Elaeocarpus reticulatus</i>	Blueberry Ash	6	4	45L	Stakes and ties
	Hfl	<i>Hymenosporum flavum</i>	Native Frangipani	6	4	45L	Stakes and ties
04	SPi	<i>Syzigium australe 'Pinnacle'</i>	Pinnacle Narrow Lilly Pilly	6	1.5	45L	Stakes and ties
05	TAI	<i>Tibouchina 'Alstonville'</i>	Tibouchina/Lisiandra	6	3	45L	Stakes and ties
Screening Shrubs > 1.5m							
06	BIR	<i>Breyenia cernua 'Ironstone Range'</i>	Coffee Bush	2	1.5	300mm	
	GHG	<i>Grevillea 'Honey Gem'</i>	Spider Flower Grevillea	4	3	300mm	
	MFF	<i>Metrosideros collina 'Fiji Fire'</i>	Fiji Fire NZ Christmas Bush	1.5	1.5	300mm	
	PRR	<i>Photinia x fraseri 'Red Robin'</i>	Red Robin Photinia	3	2	300mm	
	RCW	<i>Raphiolepis indica 'Cosmic White'</i>	Cosmic White Indian Hawthorn	1.7	1.5	300mm	
Shrubs < 1.5m							
07	CBJ	<i>Callistemon 'Better John'</i>	Better John Bottlebrush	1.2	0.9	200mm	
	GCV	<i>Grevillea 'Crimson Villa'</i>	Crimson Villa	0.7	0.7	200mm	
	Hpe	<i>Helichrysum petiolare</i>	Licorice Plant	0.5	1	200mm	
	RAB	<i>Raphiolepis indica 'Apple Blossom'</i>	Apple Blossom Hawthorn	1	1	200mm	
	Wfe	<i>Westringia 'fruiticosa</i>	Coastal Rosemary	1.2	1.2	200mm	
Mass Planted Groundcovers							
09	ALR	<i>Alternanthera dentata 'Little Ruby'</i>	Littly Ruby	0.5	0.5	140mm	
	ARV	<i>Anigozanthus 'Ruby Velvet'</i>	Ruby Velvet Kangaroo Paw	0.4	0.3	140mm	
	Cne	<i>Convolvulus cneorum</i>	Silver Bush	0.5	1	140mm	
10	DLJ	<i>Dianella caerulea 'Little Jess'</i>	Little Jess Flax Lily	0.4	0.4	140mm	
	Lls	<i>Liriope muscari 'Isabella'</i>	Isabella Fine Leaf Liriope	0.4	0.5	140mm	
	PKi	<i>Poa labillardieri 'Kingsdale'</i>	Blue Tussock Grass	0.45	0.45	140mm	
Low Border Planting							
11	CFC	<i>Carex albula 'Frosted Curls'</i>	New Zealand Hair Sedge	0.6	0.6	140mm	
		<i>Chrysocephalum apiculatum 'Desert Flame'</i>	Yellow Buttons	0.5	0.3	140mm	
	LWi	<i>Lomandra confertifolia 'Wingarra'</i>	Lomandra Wingarra	0.4	0.6	140mm	
12	Vhe	<i>Viola hederacea</i>	Native Violet	0.1	0.3	140mm	
Cascading Planting							
13	CCI	<i>Casuarina glauca 'Cousin It'</i>	Cousin It	0.3	1	140mm	
	HMe	<i>Hardenbergia violacea 'Meema'</i>	Meema Snake Vine	0.5	2	140mm	
	RBL	<i>Rosmarinus officinalis 'Blue Lagoon'</i>	Blue Lagoon Rosemary	0.3	1	140mm	
Shade Tolerant Planting							
14	Aca	<i>Alpinia caerulea</i>	Native Ginger	1.5	0.5	140mm	
	Aci	<i>Arthropodium cirratum</i>	NZ Rock Lily	0.8	0.8	140mm	
	Bnu	<i>Blechnum nudum</i>	Fishbone Water Fern	0.7	0.5	140mm	
	Cmi	<i>Clivea miniata</i>	Clivea Lily	0.4	0.5	140mm	
	Mco	<i>Macrozamia communis</i>	Burrawang	1	1.5	140mm	
	PXa	<i>Philodendron 'Xanadu'</i>	Xanadu Dwarf Philodendron	0.8	0.8	140mm	
Climbers							
16	Can	<i>Cissus antarctica</i>	Kangaroo Vine	6		140mm	
	Pja	<i>Pandorea jasminoides</i>	Bower of Beauty	5		140mm	
	Pve	<i>Pyrostegia venusta</i>	Orange Trumpet Vine	10		140mm	
Riparian Planting							
	Cap	<i>Carex appressa</i>	Tall Sedge	.8	.6	140mm	
	DLR	<i>Dianella revoluta Little Rev</i>	Blue Flax-lily	.4	.4	140mm	
	Fno	<i>Ficinia nodosa</i>	Knobby Club Rush	1	.8	140mm	
	Jef	<i>Juncus effusus</i>	Common Rush	1	1	140mm	
	LTa	<i>Lomandra longifolia Tanika</i>	Lomandra Tanika	.6	.65	140mm	



DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:

1. Erosion Hazard and Sediment Basins

Site Name:		Spring Farm - 131 Springs Road				
Site Location:		Spring Farm				
Precinct/Stage:		Stage 1				
Other Details:		N/A				

Soil analysis (enter sediment type if known, or laboratory particle size data)					
Sediment Type (C, F or D) if known:	D				From Appendix C (if known)
% sand (fraction 0.02 to 2.00 mm)					Enter the percentage of each soil fraction. E.g. enter 10 for 10%
% silt (fraction 0.002 to 0.02 mm)					
% clay (fraction finer than 0.002 mm)					
Dispersion percentage					E.g. enter 10 for dispersion of 10%
% of whole soil dispersible					See Section 6.3.3(e) Auto-calculated
Soil Texture Group	D				Automatic calculation from above

Rainfall data					
Design rainfall depth (no of days)	5				See Section 6.3.4 and, particularly, Table 6.3 on pages 6-24 and 6-25.
Design rainfall depth (percentile)	75				
x-day, y-percentile rainfall event (mm)	20.2				
Rainfall R-factor (if known)					Only need to enter one or the other here
IFD: 2-year, 6-hour storm (if known)	9.5				

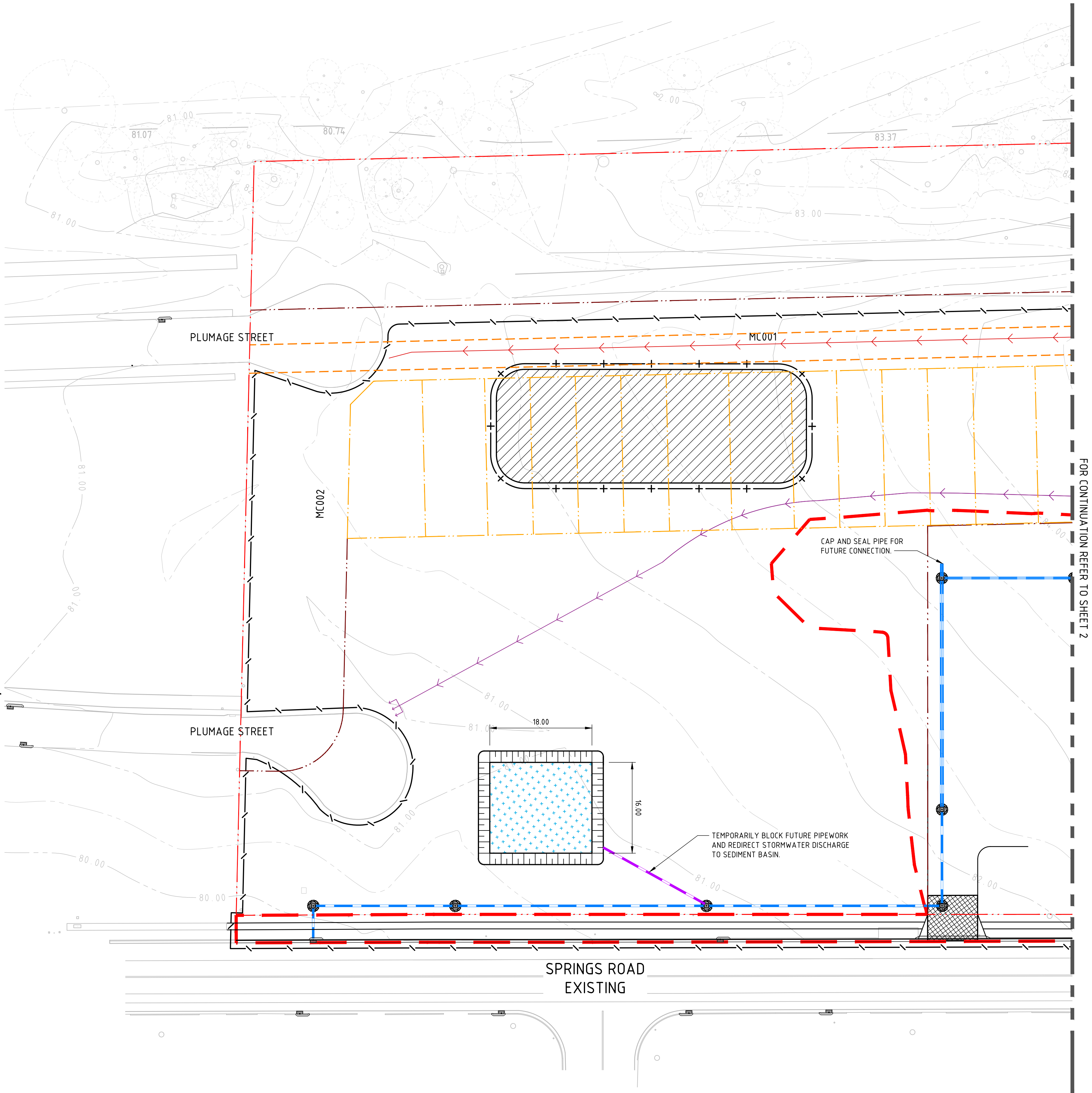
RUSLE Factors					
Rainfall erosivity (R-factor)	2020				Auto-filled from above
Soil erodibility (K-factor)	0.038				
Slope length (m)	7.5				
Slope gradient (%)	33.33				RUSLE LS factor calculated for a high rill/interill ratio.
Length/gradient (LS-factor)	1.94				
Erosion control practice (P-factor)	1.3	1.3	1.3	1.3	1.3
Ground cover (C-factor)	1	1	1	1	1

Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)					
Storage (soil) zone design (no of months)	2	2	2	2	Minimum is generally 2 months
Cv (Volumetric runoff coefficient)	0.69				See Table F2, page F-4 in Appendix F

Calculations and Type D/F Sediment Basin Volumes					
Soil loss (t/ha/yr)	194				
Soil Loss Class	2				See Table 4.2, page 4-13
Soil loss (m ³ /ha/yr)	149				Conversion to cubic metres
Sediment basin storage (soil) volume (m ³)	37				See Sections 6.3.4(i) for calculations
Sediment basin settling (water) volume (m ³)	208				See Sections 6.3.4(i) for calculations
Sediment basin total volume (m ³)	245				

NB for sizing of Type C (coarse) sediment basins, see Worksheet 3 (if required).

SEDIMENT BASIN - CALCULATION SPREADSHEET



LEGEND	
	PROPOSED BOUNDARY LINE
	INTERNAL LOT BOUNDARY LINE
	FUTURE LOT BOUNDARY LINE
	DISTURBED AREA = 1.493ha
	EXISTING CONTOURS
	SEDIMENT FENCE
	SECURITY FENCE
	WIRE MESH AND GRAVEL SEDIMENT FILTER
	SANDBAG SEDIMENT FILTER
	DROP INLET SEDIMENT TRAP
	STABILISED SITE ACCESS
	STOCKPILE
	DIVERSION DRAIN & LEVEL SPREADER IN ACCORDANCE WITH THE 'BLUE BOOK'
	PROPOSED PIPEWORK

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT

moran
FAMILY

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SCALE 1:400@A1

0 4 8 12 16 20m

NORTHROP
Sydney

Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**CONCEPT SEDIMENT AND SOIL
EROSION CONTRL PLAN - SHEET 01**

JOB NUMBER

181741

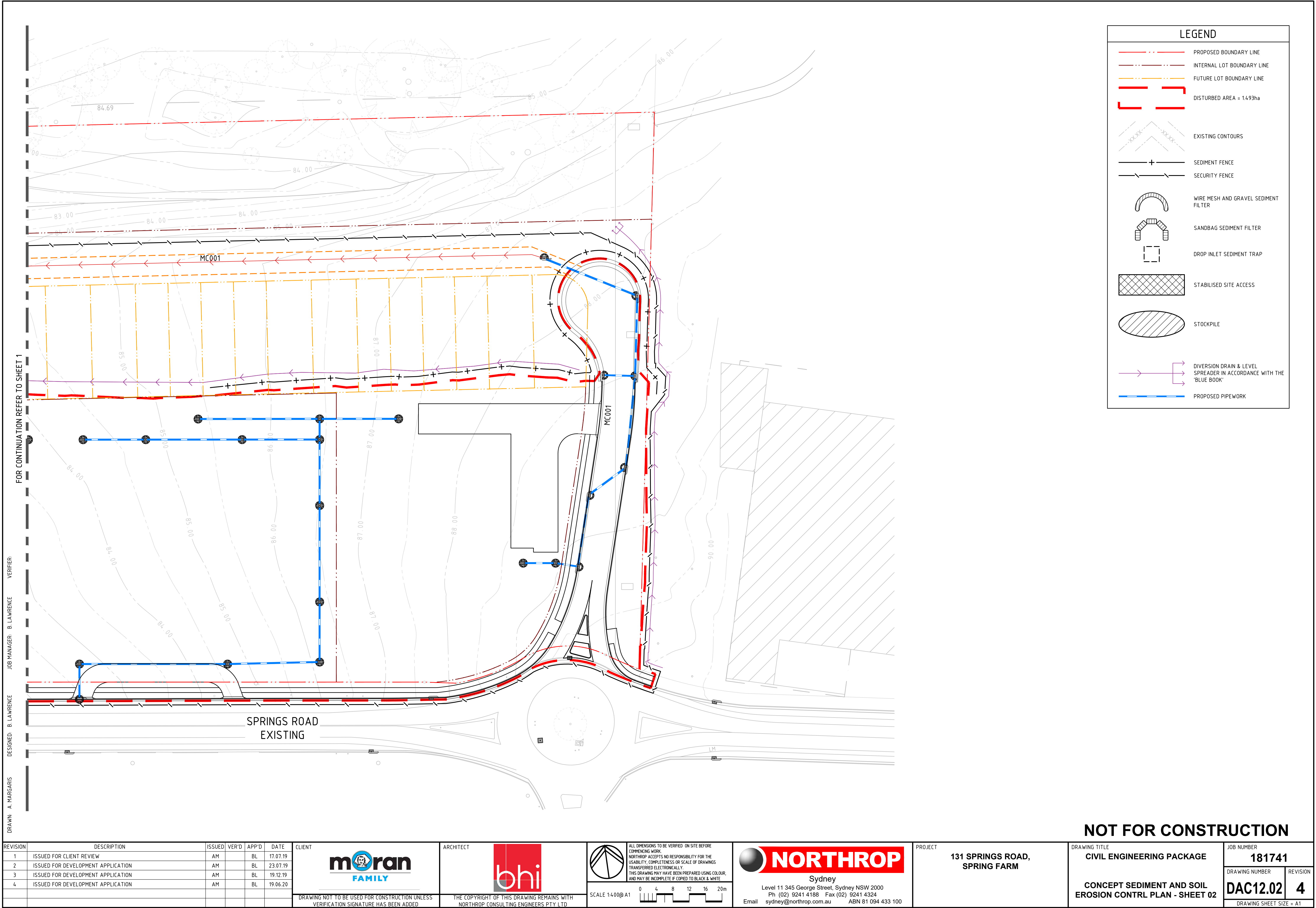
DRAWING NUMBER

DAC12.01

REVISION

4

DRAWING SHEET SIZE = A1



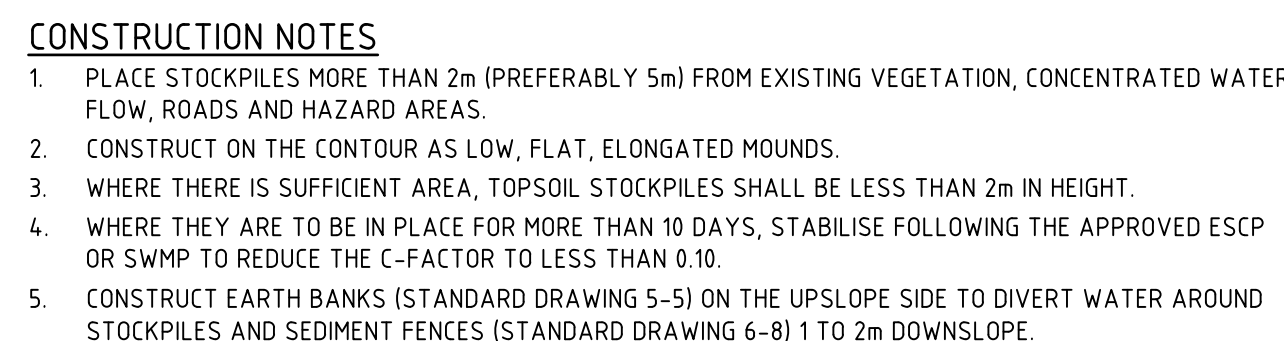
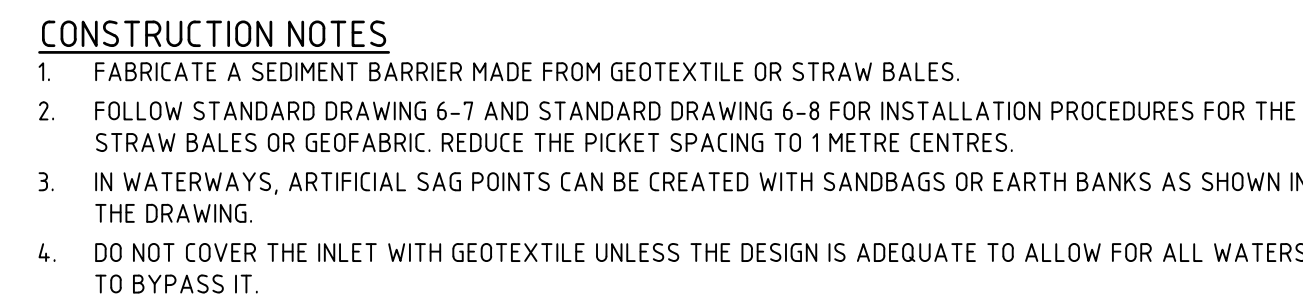


Diagram illustrating the construction of a drop inlet with grate. The diagram shows a cross-section of the inlet structure. Key components labeled include:

- TAR PICKETS
- 1 METRE MAX. (indicating the maximum width of the grate area)
- DROP INLET WITH GRATE
- WIRE OR STEEL MESH (14 GAUGE x 150mm OPENINGS) WHERE GEOTEXTILE IS NOT SELF-SUPPORTING
- WOVEN GEOTEXTILE



ELEVATION

1.2m STAR PICKET
DRIVEN 600mm INTO
GROUND

ANGLE FIRST STAKE
TOWARDS PREVIOUS
BALE.

PLAN

20m MAX. (UNLESS
STATED OTHERWISE
ON SWMP/ESCP)

FLOW

STRAW BALES TIGHTLY
ABUTTING TOGETHER.

SECTION

NYLON OR WIRE BINDING.

15m TO 2m

DISTURBED AREA

2:1 SLOPE

BALES EMBEDDED
100mm INTO GROUND

A
-

1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 12 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

The image contains two technical drawings of a spillway structure, labeled 'PLAN VIEW' and 'SECTION'.

PLAN VIEW: This top-down diagram shows the spillway's footprint. It includes an 'INFLOW' arrow on the left, a 'LENGTH' dimension line, a 'WIDTH' dimension line, and a note 'LENGTH/WIDTH RATIO 3:1 MIN.'. The structure features an 'EMERGENCY SPILLWAY' at the top, a 'SEDIMENT STORAGE ZONE' in the middle, and an 'EARTH EMBANKMENT' on the right. A north arrow is located on the right side.

SECTION: This side-view diagram shows the spillway's cross-section. It includes an 'INFLOW' arrow, a 'SEDIMENT SETTLING ZONE' at the bottom left, a 'SEDIMENT STORAGE ZONE' below the spillway, and a 'WATER DEPTH 1500mm MIN.' dimension. The spillway itself has a crest with a 1:2 slope on the left and a 3:1 slope on the right. A 'CUT-OFF TRENCH 600mm MIN. DEPTH BACKFILLED WITH IMPERMEABLE CLAY COMPACTED' is shown at the base of the embankment. A north arrow is also present.

1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
2. CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.
4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE.
6. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
7. CONSTRUCT THE EMERGENCY SPILLWAY.
8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

The drawing consists of two parts: a plan view and a section detail.

Plan View: Shows a perspective view of the fence line. It is divided into a "DISTURBED AREA" (indicated by a dotted pattern) and an "UNDISTURBED AREA" (indicated by a cross-hatched pattern). The fence is composed of "15m STAR PICKETS AT MAX 2.5m CENTRES". An arrow indicates the "DIRECTION OF FLOW". A dimension line shows a "20m MAX" length for a section, with the note "(UNLESS STATED OTHERWISE ON SWMP/ESCP)". A small detail shows a "1.5m MIN" spacing between pickets.

Section Detail: A cross-sectional view of the fence. It shows a "SELF-SUPPORTING GEOTEXTILE" wall. The picket is "ON SOIL, 150mmx100mm TRENCH WITH COMPACTED BACKFILL AND ON ROCK, SET INTO SURFACE CONCRETE". Dimensions include "600 to 600" for the picket height and "600 MIN" for the trench depth. An arrow indicates the "DIRECTION OF FLOW".

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

The diagram illustrates a Kerb-Side Inlet (KSI) system. At the top, a cross-section shows a road surface with a kerb. A 'KERB-SIDE INLET' is shown as a rectangular opening in the road. Below the road surface, a 'TIMBER SPACER TO SUIT' is positioned. A 'GRAVEL-FILLED WIRE MESH OR GEOTEXTILE 'SAUSAGE'' is shown as a curved, U-shaped structure that fits between the road surface and the timber spacer. This structure is designed to capture sediment from runoff water entering the inlet. The sediment is shown as a dark, textured mass within the 'sausage'. The filtered water then flows through the 'sausage' and into a drainage pipe. The diagram is labeled with 'RUNOFF WATER WITH SEDIMENT', 'OVERFLOW', 'TIMBER SPACER TO SUIT', 'GRAVEL-FILLED WIRE MESH OR GEOTEXTILE 'SAUSAGE'', 'SEDIMENT', and 'FILTERED WATER'.

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN

Diagram illustrating a drainage ditch cross-section. The ditch is 150mm deep. The gradient of the ditch is 1% to 5%. The direction of flow is indicated. The ditch can be constructed with or without a channel. All batter grades are 2(H):1(V) MAX. The ditch is 2 metres wide at the base. The ditch is 300mm high on the embankment.

1. BUILD WITH GRADIENTS BETWEEN 1 AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

PROJECT	131 SPRINGS ROAD, SPRING FARM
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DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**SEDIMENT AND SOIL
EROSION CONTROL DETAILS**

JOB NUMBER		181741	
DRAWING NUMBER		REVISION	
DAC12.11		4	
DRAWING SHEET SIZE = A1			

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
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PROJECT

DRAWING TITLE

JOB NUMBER

DRAWING NUMBER	REVISION
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DAC12.11	4
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DRAWING SHEET SIZE - A1

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Date : 15.02.2018 11:24 AM

DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:

LEGEND			
DEPTH OF CUT		DEPTH OF FILL	
<div></div>	BELOW - 15.0m	<div></div>	0.0m TO 0.25m
<div></div>	- 15.0m TO - 10.0m	<div></div>	0.25m TO 0.5m
<div></div>	- 10.0m TO - 5.0m	<div></div>	0.5m TO 1.0m
<div></div>	- 5.0m TO - 2.0m	<div></div>	1.0m TO 2.0m
<div></div>	- 2.0m TO - 1.0m	<div></div>	2.0m TO 5.0m
<div></div>	- 1.0m TO - 0.5m	<div></div>	5.0m TO 10.0m
<div></div>	- 0.5m TO - 0.25m	<div></div>	10.0m TO 15.0m
<div></div>	- 0.25m TO - 0.0m	<div></div>	ABOVE 15.0m
		<div></div>	PROPOSED BOUNDARY LINE
		<div></div>	INTERNAL LOT BOUNDARY LINE
		<div></div>	FUTURE LOT BOUNDARY LINE
		<div></div>	BULK CONTOURS
		<div></div>	EXISTING CONTOURS
		<div></div>	E2 ZONE

- GENERAL NOTES:
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
 - CAD FILES / DTM FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).
 - NO ALLOWANCE HAS BEEN MADE FOR BULKING FACTORS. NOTE ALL VOLUMES DEPICTED ARE SOLID VOLUMES ONLY AND MAY NOT REFLECT DETAILED EARTHWORKS.
 - NO ALLOWANCE HAS BEEN MADE FOR DETAILED EARTHWORKS:
ie DETAILED EXCAVATION, FOOTINGS, RETAINING WALLS AND THE LIKE.
 - THE CONTRACTOR SHALL USE FINAL SURFACE LEVELS AND TYPICAL PAVEMENT DETAILS FOR ACTUAL EARTHWORKS LEVELS.
 - APPROXIMATE VOLUME DIFFERENCES BETWEEN SUBGRADE LEVEL AND EXISTING SURFACE LEVEL;
6.1. CUT -37,970 cu.m
6.2. FILL 2,510 cu.m
6.3. BALANCE -35,460 (EXPORT) cu.m
 - THE FOLLOWING ALLOWANCES HAVE BEEN MADE:
7.1 500mm ROAD PAVEMENTS
7.2 200mm NON-ROAD PAVEMENT
7.3 NO ALLOWANCE FOR STRIPPING HAS BEEN MADE
 - TEMPORARY 1:3 SLOPES FOR EXCAVATIONS HAVE BEEN ADOPTED (UNO). CONTRACTOR TO CONFIRM ADEQUACY WITH GEOTECHNICAL ENGINEER.



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CLIENT

moran
FAMILY

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0 5 10 15 20 25m

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Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**BULK EARTHWORKS CUT
AND FILL PLAN**

JOB NUMBER

181741

DRAWING NUMBER

DAC13.01

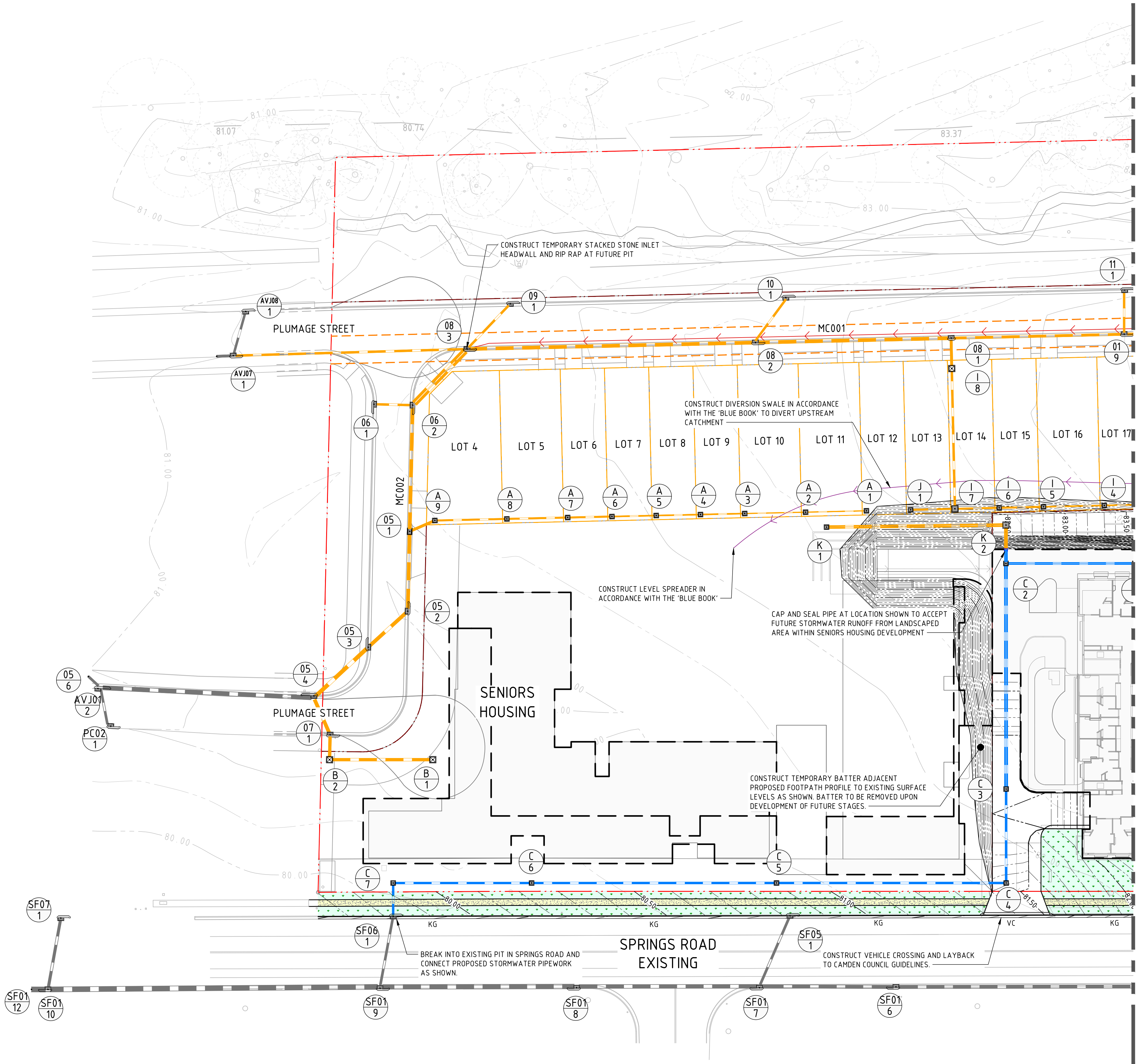
REVISION

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Date: 15.02.2018 11:24 AM

DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:



LEGEND	
	PROPOSED BOUNDARY LINE
	INTERNAL LOT BOUNDARY LINE
	FUTURE LOT BOUNDARY LINE
	EASEMENT LINE
	PROPOSED KERB
	SAWCUT AND PAVEMENT INFILL
	KERB AND GUTTER
	ROLL KERB GUTTER
	VEHICULAR CROSSING
	KERB RAMP
	CONTOURS
	EXISTING CONTOURS
	STORMWATER PIPE
	EXISTING STORMWATER PIPE
	FUTURE STORMWATER PIPE
	NEW DRAINAGE STRUCTURE
	EXISTING DRAINAGE STRUCTURE
	LIMIT OF WORKS

LEGEND	
	FLEXIBLE PAVEMENT
	PEDESTRIAN FOOTPATH
	TURF AND/OR SELECTED STREET TREES (COUNCIL APPROVED) AT APPROPRIATE SPACINGS ONLY

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CLIENT

moran
FAMILY

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SCALE 1:400@A1

0 4 8 12 16 20m

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Sydney
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Ph (02) 9241 4188 Fax (02) 9241 4324
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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**SITeworks AND STORMWATER
MANAGEMENT PLAN - SHEET 01**

JOB NUMBER

181741

DRAWING NUMBER

DAC14.01

REVISION

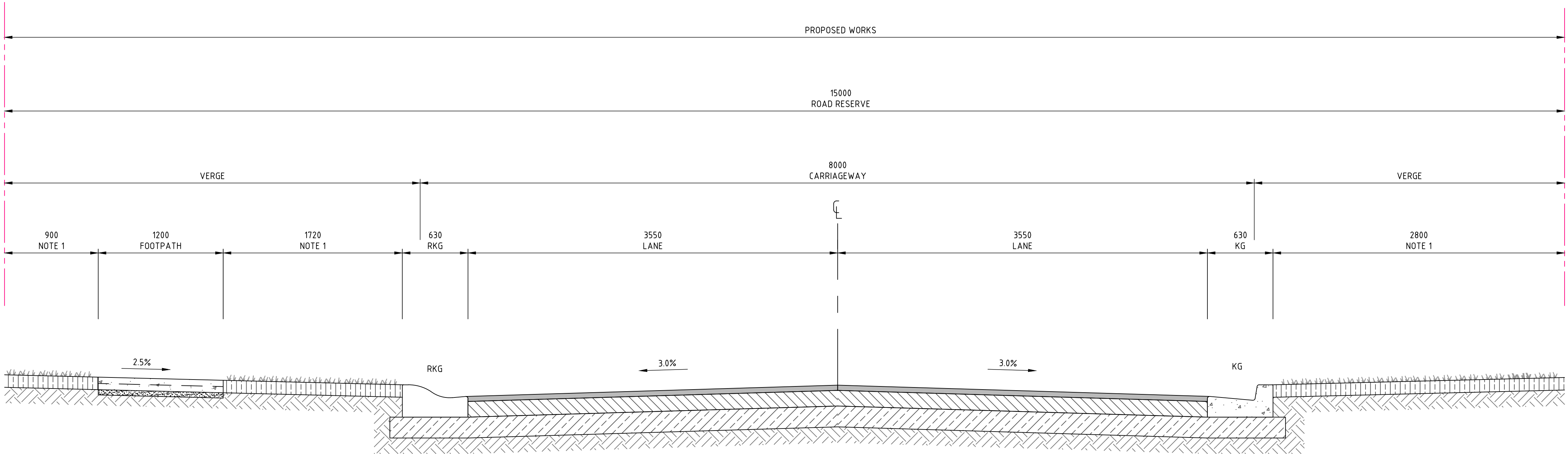
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NOTES

1. TURF AND/OR SELECTED STREET TREES (COUNCIL APPROVED)
AT APPROPRIATE SPACINGS ONLY



NEW PUBLIC ACCESS ROAD
SECTION A
C14.02

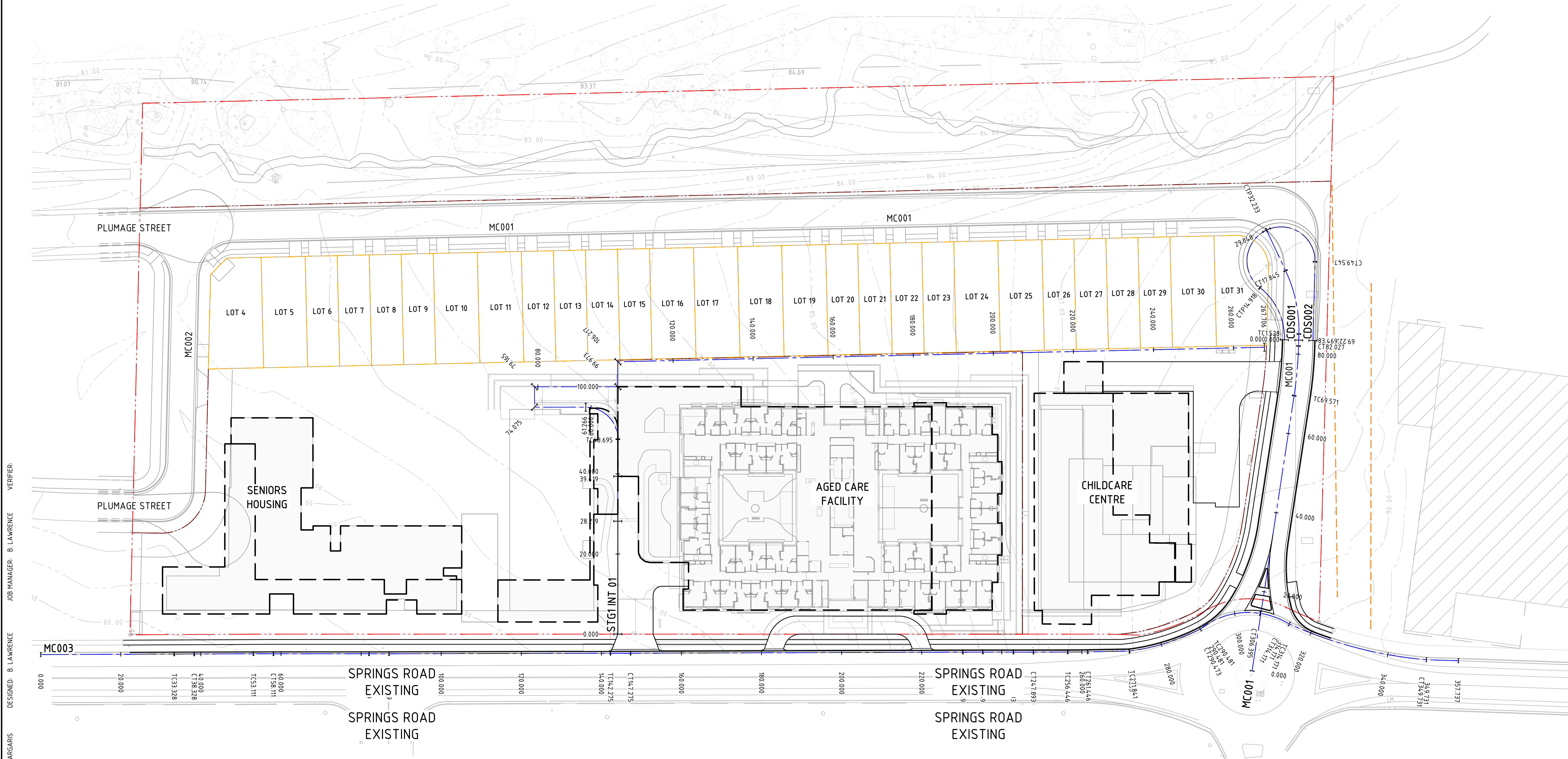
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											REVISION
											DAC14.11
											1
											DRAWING SHEET SIZE = A1

DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:

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JOB MANAGER: B. LAWRENCE
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LEGEND

PROPOSED BOUNDARY LINE

INTERNAL LOT BOUNDARY LINE

FUTURE LOT BOUNDARY LINE

EASEMENT LINE

MC01

CONTROL LINE

CH0.000

CHAINAGE

TC0.000

TANGENT POINT

LIMIT OF WORKS

LIMIT OF WORKS

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moran

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10

15

20

25m

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Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

131 SPRINGS ROAD,
SPRING FARM

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

ALIGNMENT CONTROL PLAN

JOB NUMBER

181741

DRAWING NUMBER

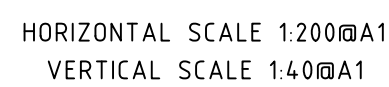
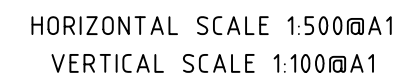
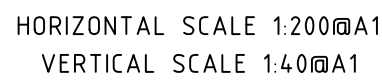
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REVISION

4

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JOB NUMBER		181741	
DRAWING NUMBER		REVISION	
DAC16.01		4	
DRAWING SHEET SIZE = A1			

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Drawn: A. Margaris Designed: B. Lawrence Job Manager: B. Lawrence Verifier:

Revision	Description	Issued	Ver'd	App'd	Date
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
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Sydney

Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

131 SPRINGS ROAD,
SPRING FARM

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

LONGITUDINAL SECTIONS -
SHEET 02

JOB NUMBER

181741

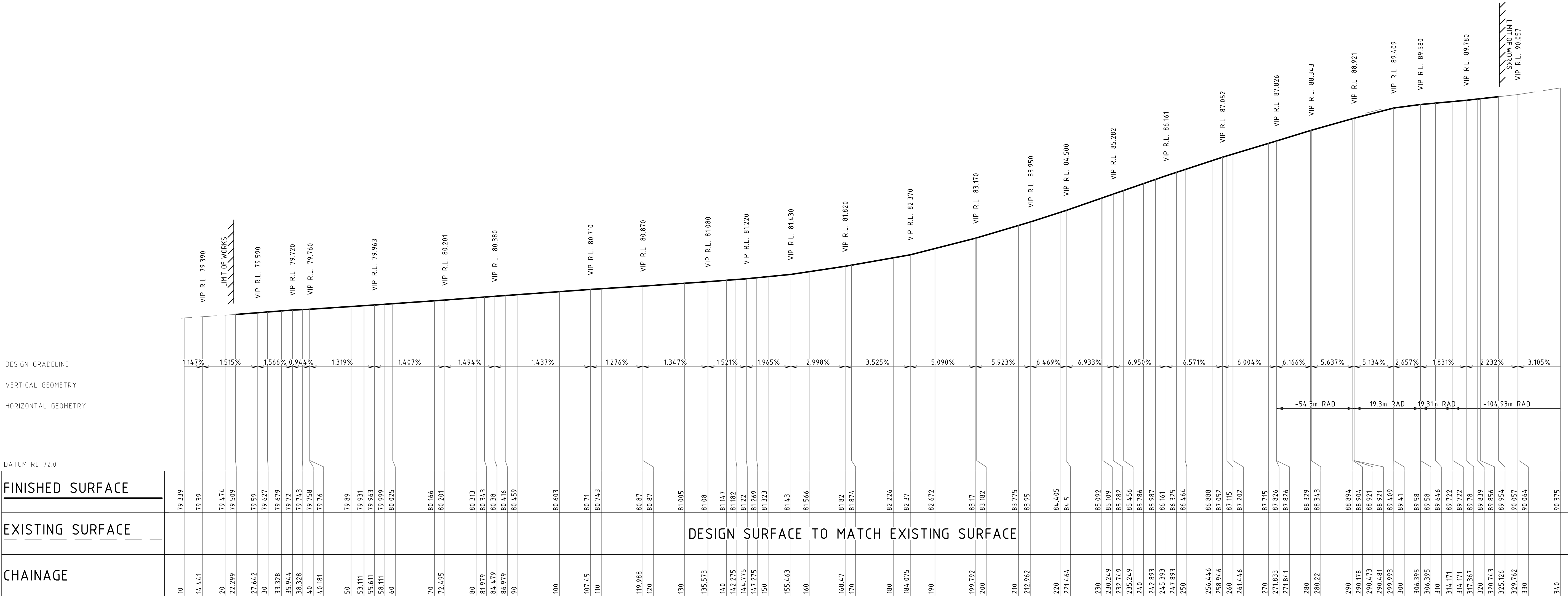
DRAWING NUMBER

DAC16.02

REVISION

4


DRAWING SHEET SIZE = A1



DATUM RL 88.0

[illegible]

DATUM RL 88.0

= 62271775.549 Z = 89.125																			
DATUM RL 88.0																			
FINISHED SURFACE		89.205	89.187	89.163	89.129	89.129	88.979	89.019	89.125			89.149	88.965	89.019	88.979	89.129	89.129	89.251	89.008
EXISTING SURFACE		88.889	88.910	88.921	88.929	88.930	88.930	88.932	88.949			88.965	88.968	88.968	88.968	88.968	88.968	89.000	89.008
OFFSET		-8.000	-7.100	-5.900	-4.180	-4.030	-4.000	-3.550	0.000			4.000	4.030	4.180				10.286	11.256

DATUM RL 88.0

X = 290322.515 Y = 6227765.962 Z = 89.275 DATUM RL 88.0									
FINISHED SURFACE	89.355	89.337	89.313	89.279	89.279	89.279	89.275	89.169	89.220
EXISTING SURFACE	88.976	89.007	89.026	89.046	89.048	89.053	89.093	89.133	89.220
OFFSET	-8.000	-7.700	-5.900	-4.180	-4.030	-3.550	0.000	3.550	12.363

DATUM RL 88.0

[illegible]

DATUM RL 88.0

X = 290320.516 Y = 6227759.223 Z = 89.381 DATUM RL 88.0			
FINISHED SURFACE		89.381	89.381
EXISTING SURFACE		89.194	89.194
OFFSET		0.000	0.000

CROSS SECTION ALONG MC001

DATUM RL 87.0

[illegible]

DATUM RL 87.0

		L 7.0		L 7.6		-3%		-1.36%		L 7.0	
FINISHED SURFACE		88 755	88 737	88 713	88 679	88 679	88 675	88 627	88 587	88 737	88 646
EXISTING SURFACE		88 470	88 432	88 498	88 552	88 529	88 579	88 622	88 625	88 626	88 646
OFFSET		-8 000	-7 100	-5 900	-4 180	-4 000	0 000	3 550	4 000	4 180	7 022

DATUM RL 88.0

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CHAINAGE 70.000


REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT

moran
FAMILY

DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS
VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT

The logo for bhi (Building & Infrastructure) features the lowercase letters 'bhi' in white on a red square background. The 'b' is stylized with a grey vertical bar on its left side.

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 **NORTHROP**

Sydney

Level 11 345 George Street, Sydney NSW 2000

Ph (02) 9241 4188 Fax (02) 9241 4324

Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT	131 SPRINGS ROAD, SPRING FARM
---------	--

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

**CROSS SECTIONS - MC001 -
SHEET 01**

JOB NUMBER		181741	
DRAWING NUMBER		REVISION	
DAC16.11		4	
DRAWING SHEET SIZE = A1			

NOT FOR CONSTRUCTION


Plotted By : ALEX MARGARIS
Found : t:\2018 jobs\181741 - 131 springs rd spring farm\drawings\1-northrop\C-CIVIL\2-CAD\2-CAD FILES\1-DA\STAGE 1\181744_DAC\16.11.dwg

Date : 15.02.2018 11:24 AM

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20



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Sydney

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Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

131 SPRINGS ROAD,
SPRING FARM

DRAWING TITLE

CIVIL ENGINEERING PACKAGE
MASTER PLAN

CROSS SECTIONS - MC003 -
SHEET 02

JOB NUMBER

181741

DRAWING NUMBER

DAC16.12

REVISION

4

DRAWING SHEET SIZE = A1

Centreline Data
X = 290061.601
Y = 6227766.309
Z = 79.890

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 50.000

Centreline Data
X = 290051.691
Y = 6227767.647
Z = 79.758

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 40.000

Centreline Data
X = 290041.780
Y = 6227768.976
Z = 79.627

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 30.000

Centreline Data
X = 290034.146
Y = 6227769.993
Z = 79.509

DATUM RL 78.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 22.299

Centreline Data
X = 290034.145
Y = 6227769.993
Z = 79.509

DATUM RL 78.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 22.298

Centreline Data
X = 290111.140
Y = 6227759.534
Z = 80.603

DATUM RL 80.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 100.000

Centreline Data
X = 290101.231
Y = 6227760.878
Z = 80.459

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 90.000

Centreline Data
X = 290091.323
Y = 6227762.231
Z = 80.313

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 80.000

Centreline Data
X = 290081.416
Y = 6227763.595
Z = 80.166

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 70.000

Centreline Data
X = 290071.510
Y = 6227764.960
Z = 80.025

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 60.000

CROSS SECTION ALONG MC003

Centreline Data
X = 290160.687
Y = 6227752.822
Z = 81.323

DATUM RL 80.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 150.000

Centreline Data
X = 290150.777
Y = 6227754.160
Z = 81.147

DATUM RL 80.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 140.000

Centreline Data
X = 290140.868
Y = 6227755.503
Z = 81.005

DATUM RL 80.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 130.000

Centreline Data
X = 290130.959
Y = 6227756.847
Z = 80.870

DATUM RL 80.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 120.000

Centreline Data
X = 290121.049
Y = 6227758.191
Z = 80.743

DATUM RL 80.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 110.000

Centreline Data
X = 290210.241
Y = 6227746.159
Z = 83.182

DATUM RL 82.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 200.000

Centreline Data
X = 290200.331
Y = 6227747.491
Z = 82.672

DATUM RL 82.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 190.000

Centreline Data
X = 290190.420
Y = 6227748.824
Z = 82.226

DATUM RL 81.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 180.000

Centreline Data
X = 290180.509
Y = 6227750.157
Z = 81.874

DATUM RL 81.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 170.000

Centreline Data
X = 290170.598
Y = 6227751.489
Z = 81.566

DATUM RL 81.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 160.000

NOT FOR CONSTRUCTION

Found: c:\008\jobs\181741 - 131 springs rd spring farm\c-drawings\c-northrop\C-CWIL-2-CAD-2-CAD FILES\1-DJUSTAGE 1181744_DAC16.11.dwg Plotted By: ALEX MARGARIS Date: 15.02.2018 11:24 AM

Drawn: A. MARGARIS Designed: B. LAWRENCE Job Manager: B. LAWRENCE Verifier:

Centreline Data
X = 290259.788
Y = 6227739.443
Z = 86.464

DATUM RL 85.0	
FINISHED SURFACE	86.651
EXISTING SURFACE	86.574
OFFSET	-4.491

CHAINAGE 250.000

Centreline Data
X = 290249.881
Y = 6227740.802
Z = 85.786

DATUM RL 84.0	
FINISHED SURFACE	85.974
EXISTING SURFACE	85.974
OFFSET	-4.497

CHAINAGE 240.000

Centreline Data
X = 290239.974
Y = 6227742.161
Z = 85.092

DATUM RL 84.0	
FINISHED SURFACE	85.279
EXISTING SURFACE	85.267
OFFSET	-4.503

CHAINAGE 230.000

Centreline Data
X = 290230.063
Y = 6227743.493
Z = 84.405

DATUM RL 83.0	
FINISHED SURFACE	84.593
EXISTING SURFACE	84.637
OFFSET	-4.535

CHAINAGE 220.000

Centreline Data
X = 290220.152
Y = 6227744.826
Z = 83.775

DATUM RL 83.0	
FINISHED SURFACE	83.963
EXISTING SURFACE	83.940
OFFSET	-4.568

CHAINAGE 210.000

Centreline Data
X = 290327.607
Y = 6227734.634
Z = 89.856

DATUM RL 89.0	
FINISHED SURFACE	90.022
EXISTING SURFACE	89.951
OFFSET	-3.450

CHAINAGE 320.743

Centreline Data
X = 290299.472
Y = 6227739.630
Z = 88.904

DATUM RL 88.0	
FINISHED SURFACE	89.090
EXISTING SURFACE	88.902
OFFSET	-4.450

CHAINAGE 290.178

Centreline Data
X = 290289.591
Y = 6227737.258
Z = 88.329

DATUM RL 87.0	
FINISHED SURFACE	88.516
EXISTING SURFACE	88.442
OFFSET	-4.450

CHAINAGE 280.000

Centreline Data
X = 290279.629
Y = 6227736.930
Z = 87.715

DATUM RL 87.0	
FINISHED SURFACE	87.899
EXISTING SURFACE	87.825
OFFSET	-4.293

CHAINAGE 270.000

Centreline Data
X = 290269.700
Y = 6227738.115
Z = 87.115

DATUM RL 86.0	
FINISHED SURFACE	87.302
EXISTING SURFACE	87.217
OFFSET	-4.454

CHAINAGE 260.000




Centreline Data
X = 290331.498
Y = 6227732.619
Z = 89.954

DATUM RL 89.0	
FINISHED SURFACE	90.075
EXISTING SURFACE	90.075
OFFSET	-3.631

CHAINAGE 325.126

CROSS SECTION ALONG MC003

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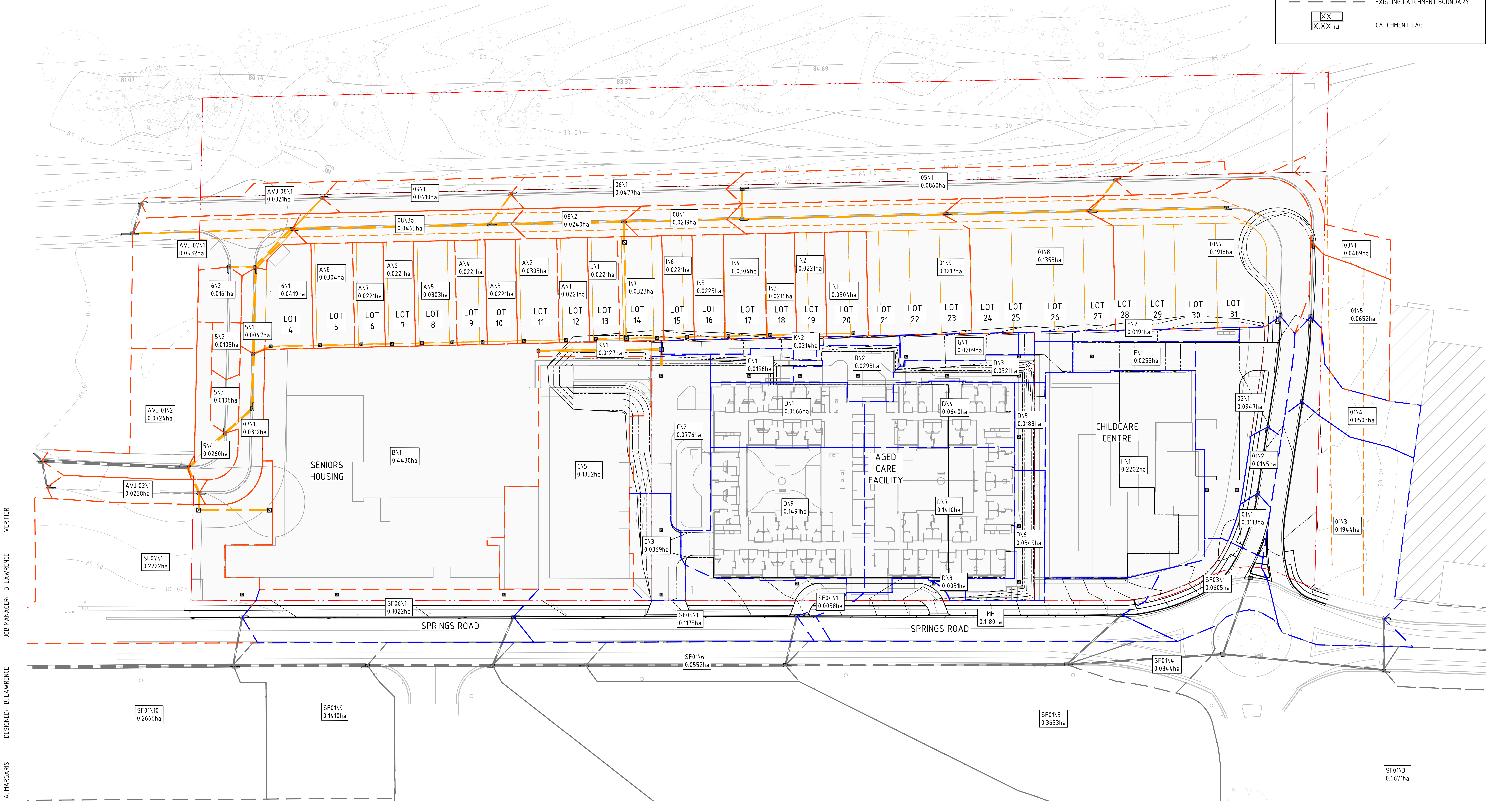
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3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19						
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20						
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Date: 15.02.2018 11:24 AM

DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

SITE CATCHMENT PLAN

JOB NUMBER

181741

DRAWING NUMBER

DAC19.11

REVISION

4

DRAWING SHEET SIZE = A1

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Site Name:	Spring Farm - 131 Springs Road
Site Location:	Spring Farm
Precinct/Stage:	Masterplan
Other Details:	N/A

Site area	Sub-catchment or Name of Structure						Notes
	1						
Total catchment area (ha)	3.675						
Disturbed catchment area (ha)	3.675						

Settlement Type (C, F or D) if known:	D				From Appendix C (if known)
% sand (fraction 0.02 to 2.00 mm)					
% silt (fraction 0.002 to 0.02 mm)					Enter the percentage of each soil fraction. E.g. enter 10 for 10%
% clay (fraction finer than 0.002 mm)					
Dispersion percentage					E.g. enter 10 for dispersion of 10%
% of whole soil dispersible					See Section 6.3.3(e). Auto-calculated
Soil Texture Group	D				Automatic calculation from above e

Design rainfall depth (no of days)	5					See Section 6.3.4 and, particularly, Table 6.3 on pages 6-24 and 6-25.
Design rainfall depth (percentile)	75					
x-day, y-percentile rainfall event (mm)	20.2					
Rainfall R-factor (if known)						Only need to enter one or the other here
IFD: 2-year, 6-hour storm (if known)	9.5					

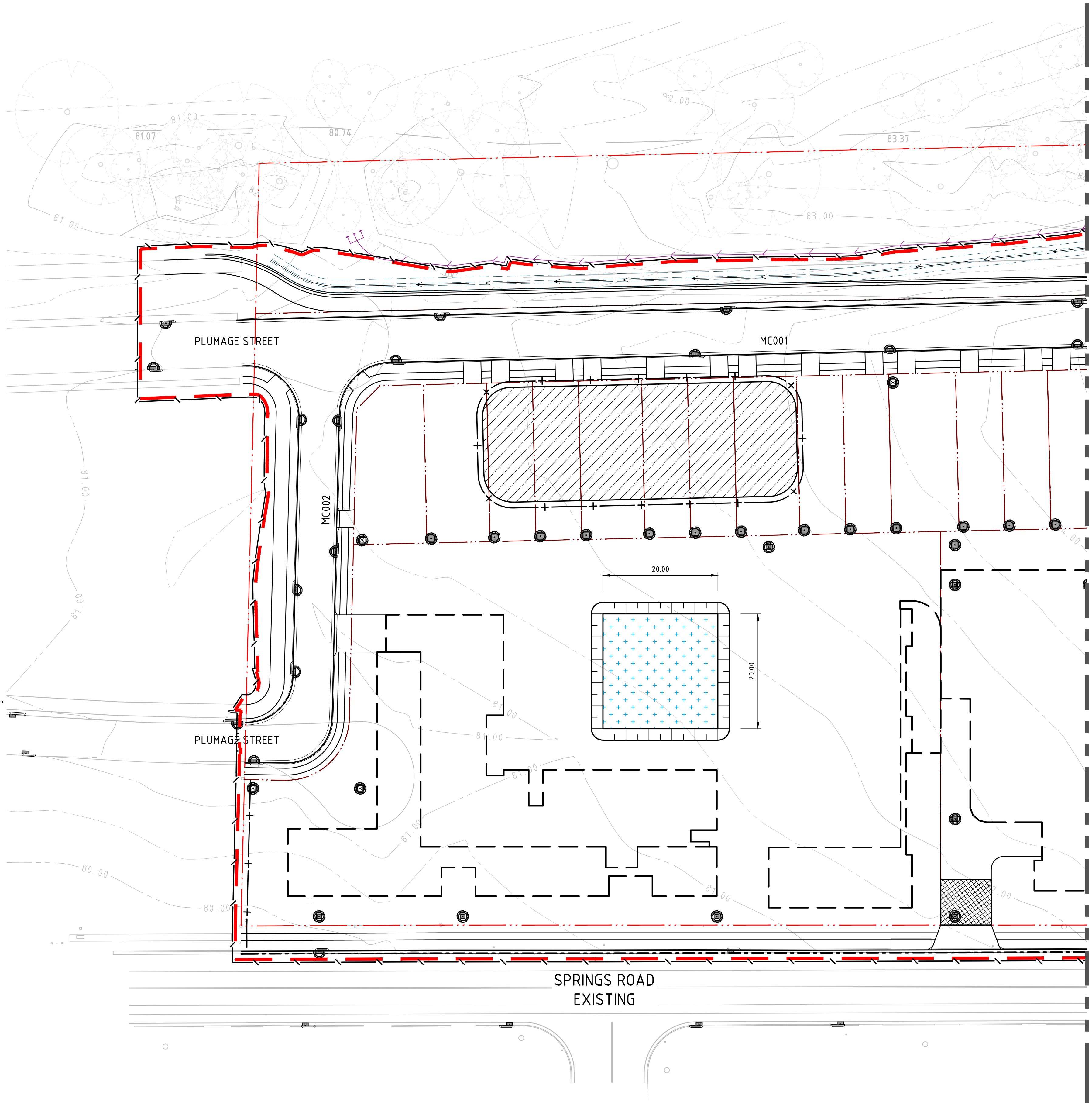
Rainfall erosivity (R-factor)	2020								Auto-filled from above
Soil erodibility (K factor)	0.038								
Slope length (m)	8.5								
Slope gradient (%)	25								
Length/gradients (LS-factor)	1.65								
Erosion control practice (P-factor)	1.3	1.3	1.3	1.3	1.3	1.3	1.3		RUSLE LS factor calculated for a high ml/intertill ratio.
Ground cover (C-factor)	1	1	1	1	1	1	1		

Storage (soil) zone design (no of months)	2	2	2	2	2	2	Minimum is generally 2 months
Cv (Volumetric runoff coefficient)	0.69						See Table F2, page F-4 in Appendix F

Soil loss (t/ha/yr)	165			
Soil Loss Class	2			See Table 4.2, page 4-13
Soil loss (m ³ /ha/yr)	127			Conversion to cubic metres
Sediment basin storage (soil) volume (m ³)	78			See Sections 6.3.4(i) for calculations
Sediment basin settling (water) volume (m ³)	512			See Sections 6.3.4(i) for calculations
Sediment basin total volume (m ³)	590			

NB for sizing of Type C (coarse) sediment basins, see Worksheet 3 (if required)

SEDIMENT BASIN - CALCULATION SPREADSHEET



	PROPOSED BOUNDARY LINE
	INTERNAL LOT BOUNDARY LINE
	DISTURBED AREA = 3.68ha
	EXISTING CONTOURS
	SEDIMENT FENCE
	SECURITY FENCE
	WIRE MESH AND GRAVEL SEDIMENT FILTER
	SANDBAG SEDIMENT FILTER
	DROP INLET SEDIMENT TRAP
	STABILISED ACCESS POINT TO COUNCIL SPECIFICATION (DRAWING NO. SD31 - CAMDEN COUNCIL ENGINEERING STANDARD DRAWINGS)
	STOCKPILE
	SEDIMENT BASIN
	DIVERSION DRAIN & LEVEL SPREADER IN ACCORDANCE WITH THE 'BLUE BOOK'

FOR CONTINUATION REFER TO SHEET 2

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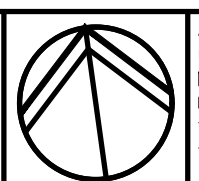


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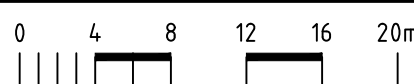


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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

**CONCEPT SEDIMENT AND SOIL
EROSION CONTROL PLAN - SHEET 01**

JOB NUMBER

181741

DRAWING NUMBER

REVISION

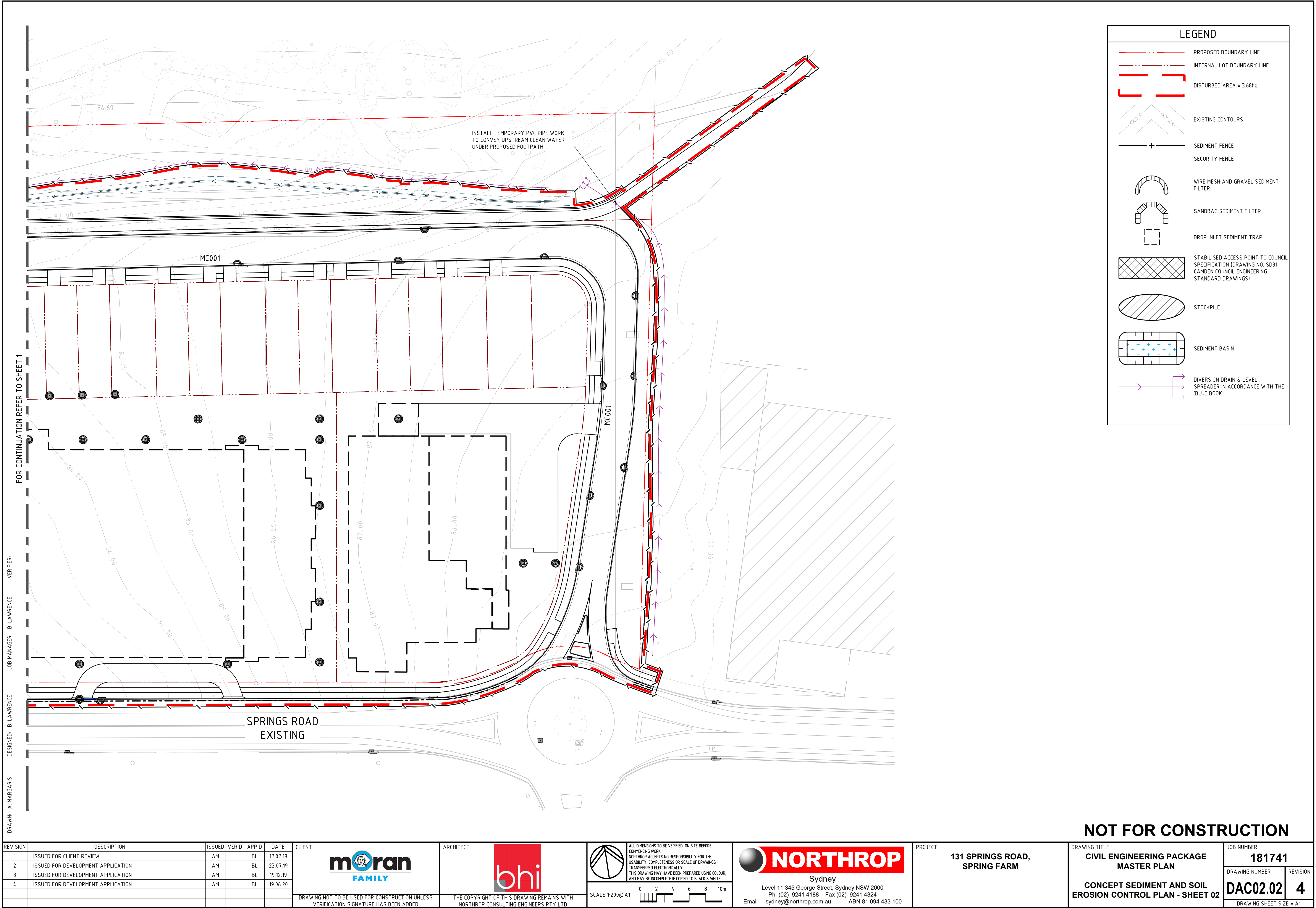
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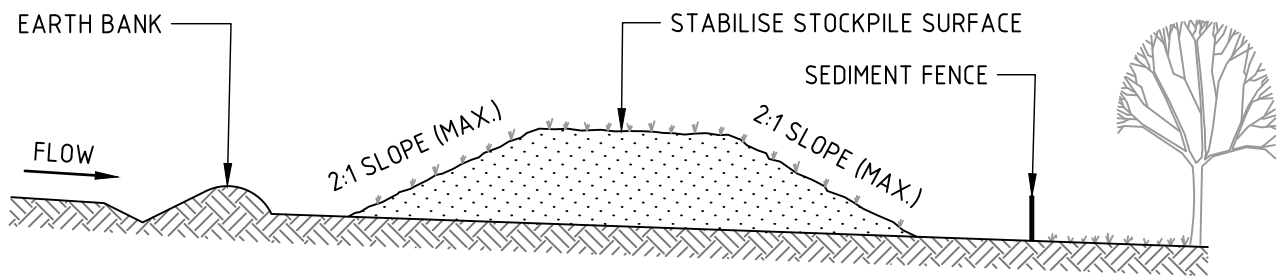
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Plotted By : ALEX MARGARIS
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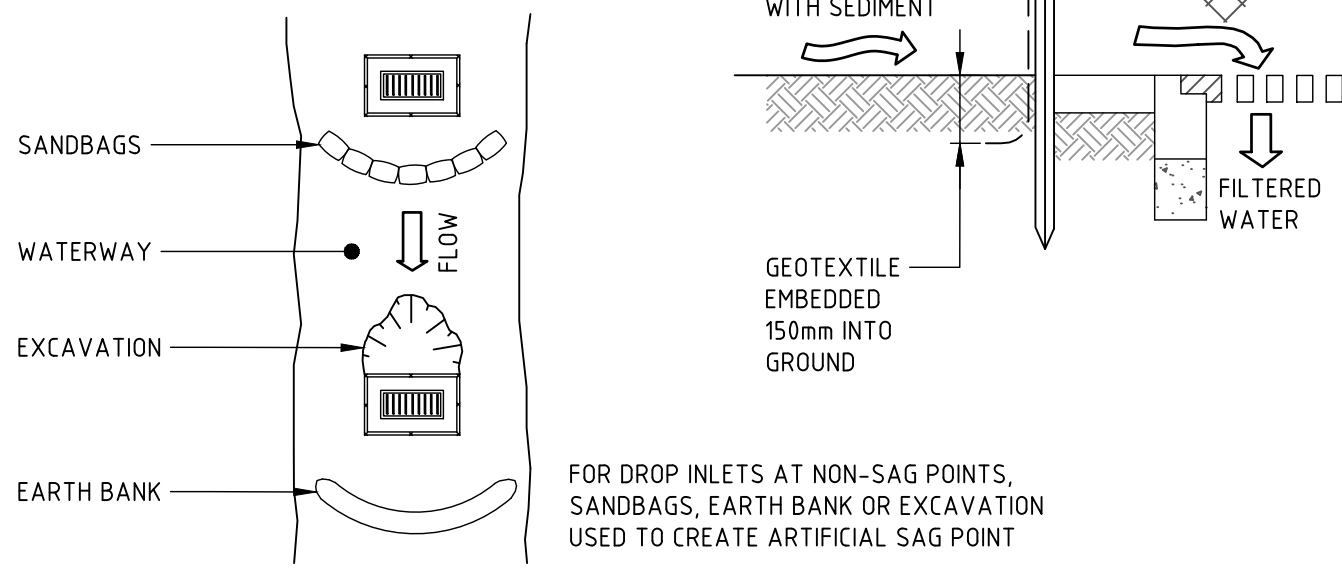
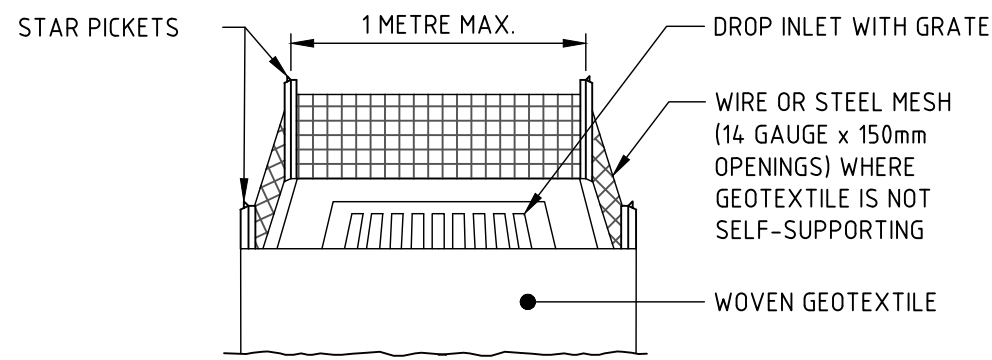
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CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

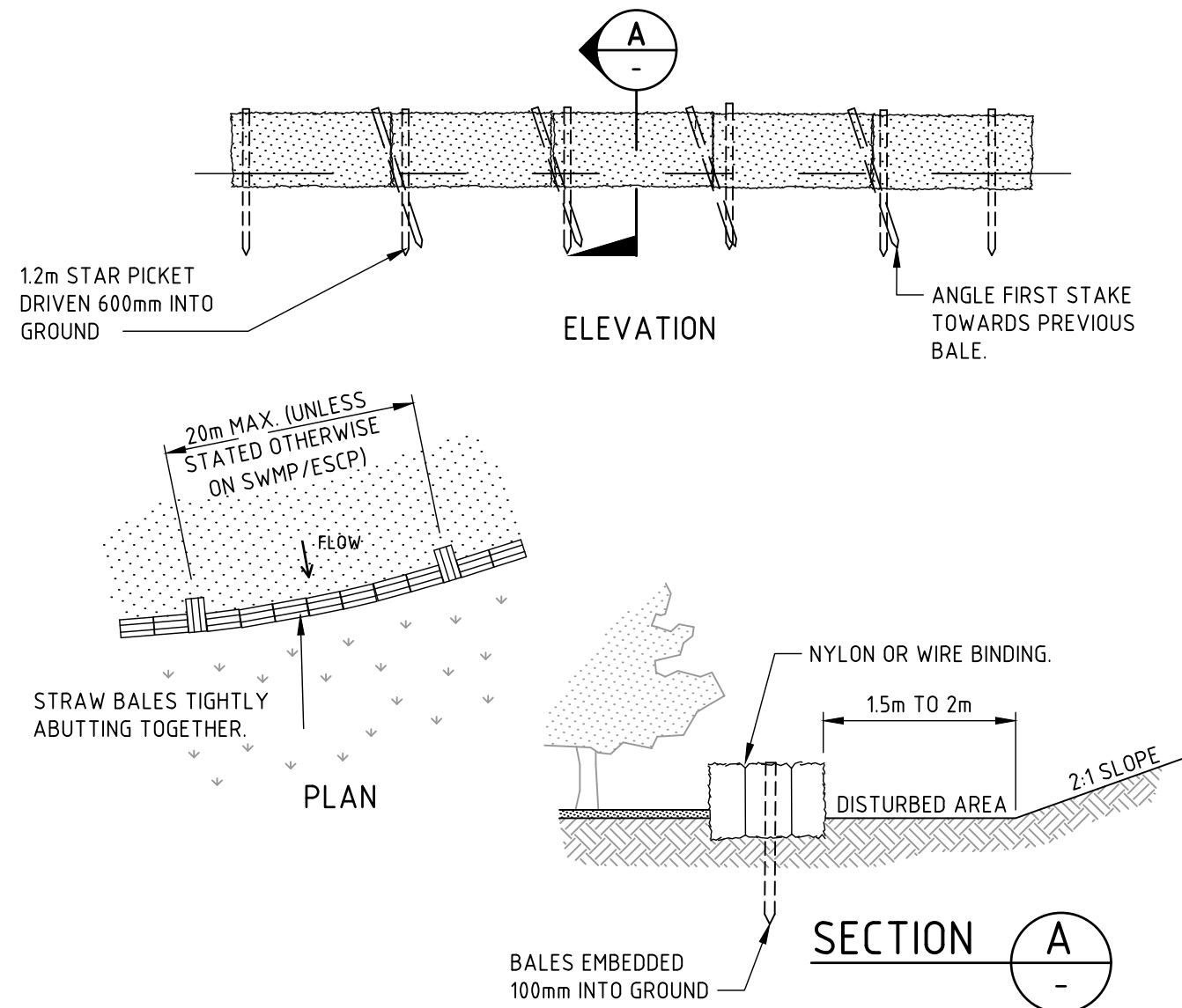
STOCKPILES (SD 4-1)



CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

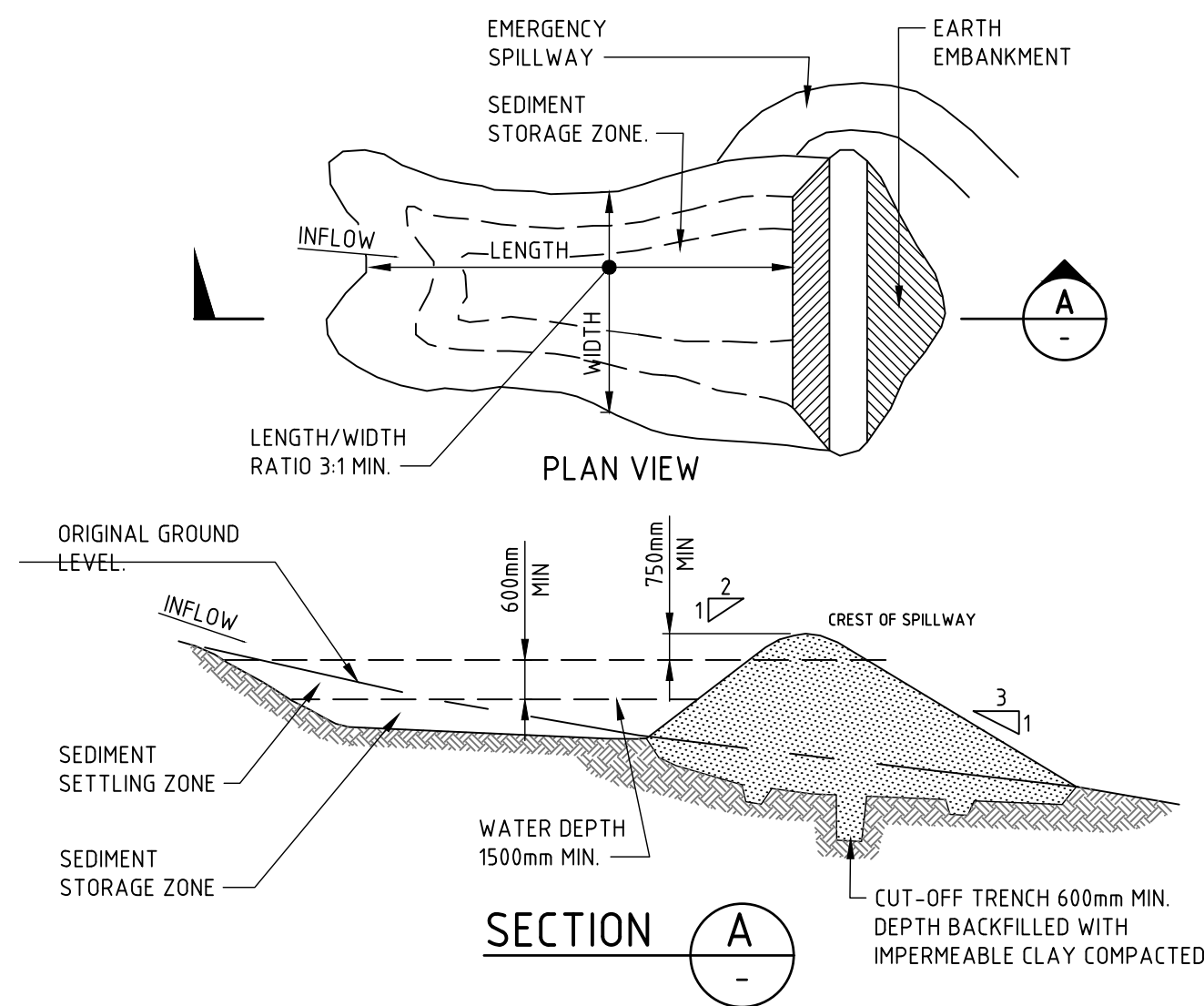
GEOTEXTILE INLET FILTER (SD 6-12)



CONSTRUCTION NOTES

1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

STRAW BALE FILTER (SD 6-7)

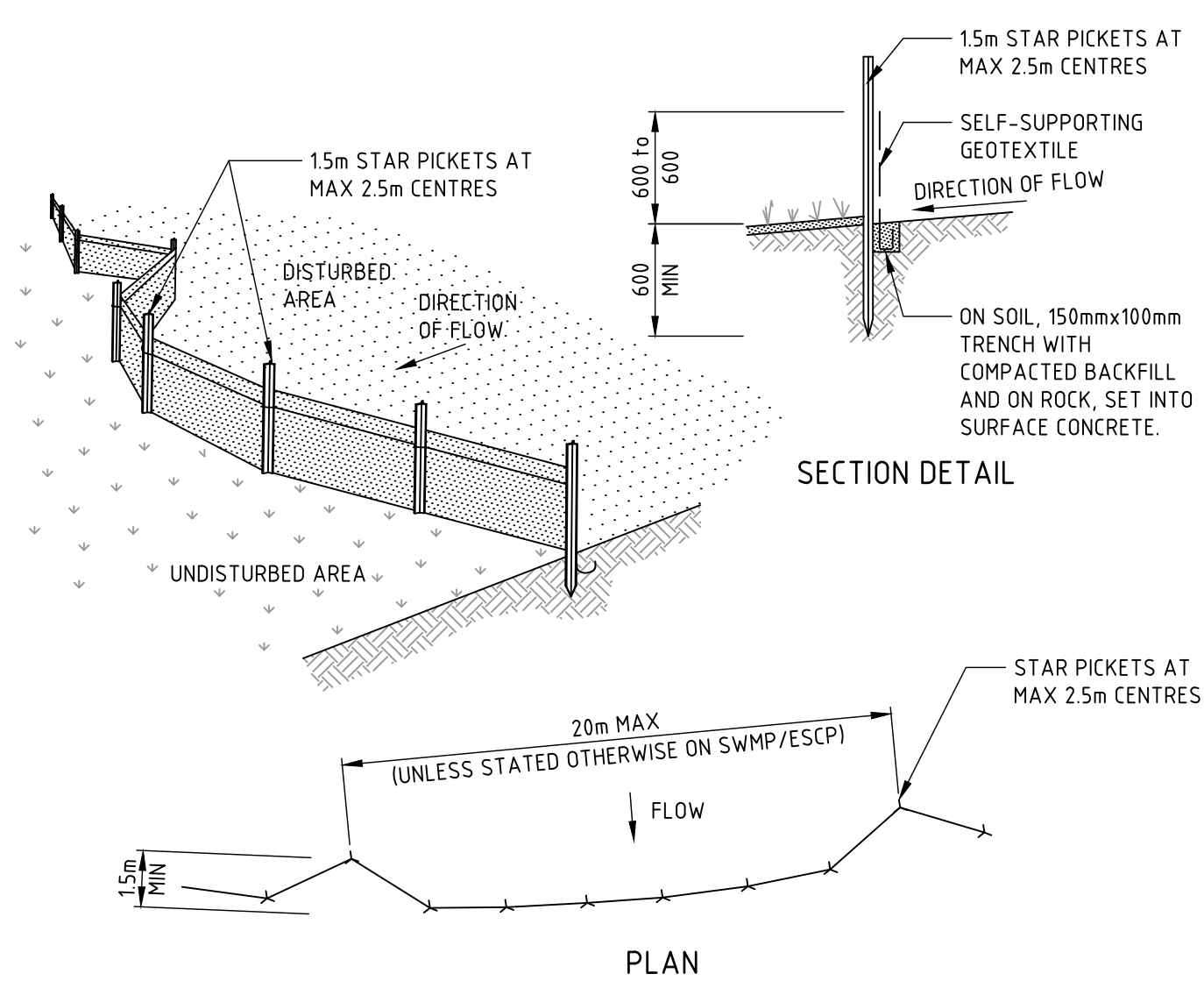


CONSTRUCTION NOTES

1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
2. CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTRELIN OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.
4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE.
6. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
7. CONSTRUCT THE EMERGENCY SPILLWAY.
8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)

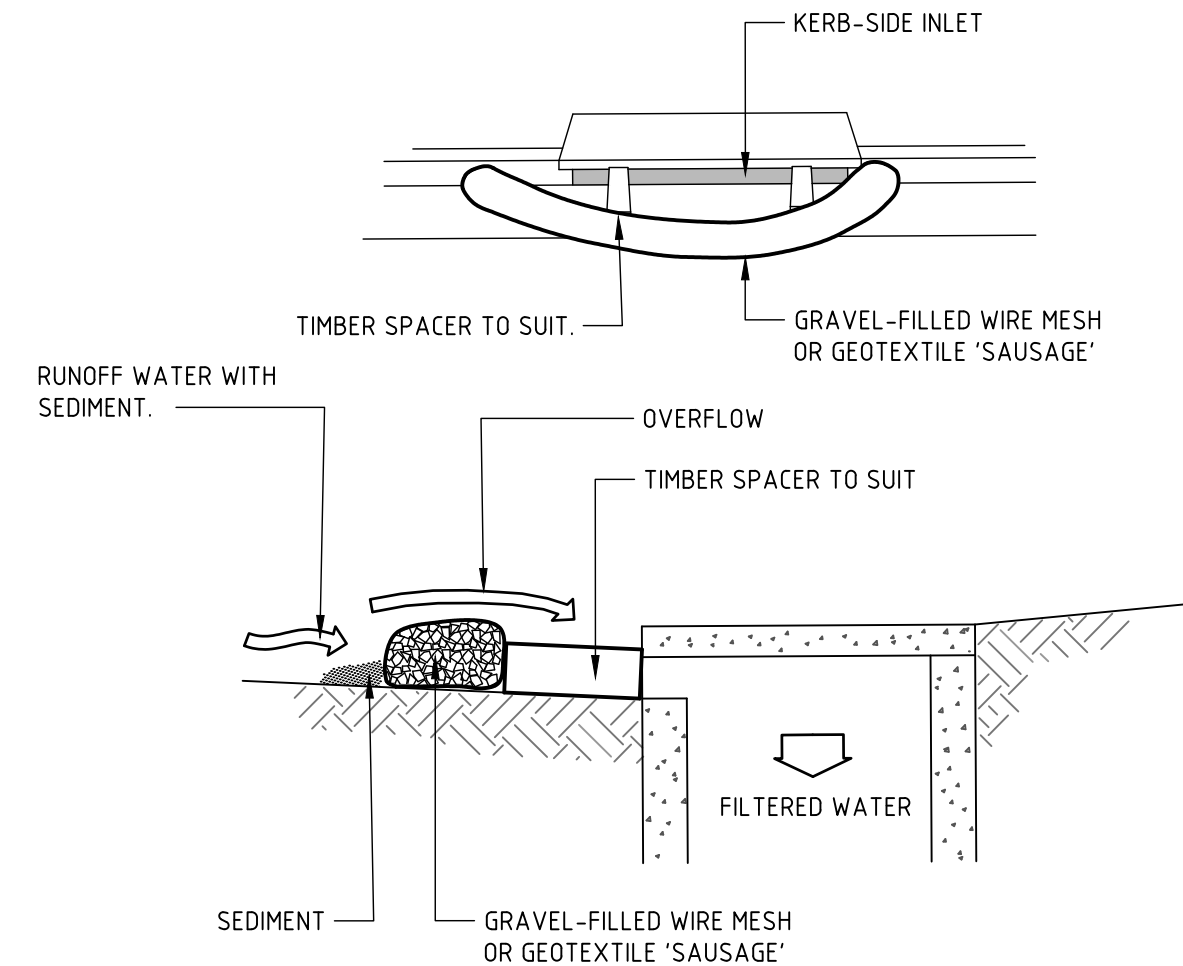
EARTH BASIN - WET (SD 6-4)



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE (SD 6-8)

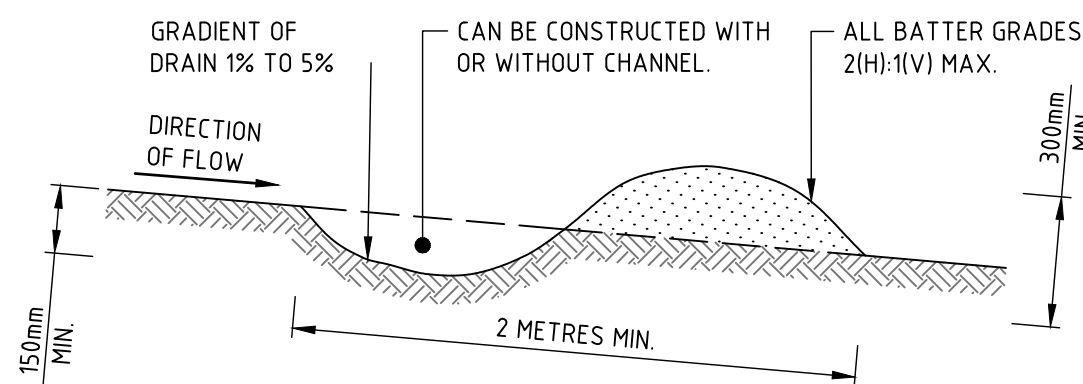


NOTE: THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN APPROVED SWMP/ESCP.

CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH AND GRAVEL INLET FILTER (SD 6-11)



NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAXIMUM UPSLOPE LENGTH IS 80 METRES.

EARTH BANK - LOW FLOW (SD 5-5)

CONSTRUCTION NOTES

1. BUILD WITH GRADIENTS BETWEEN 1 AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPE.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

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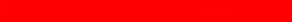


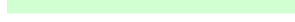

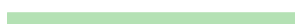












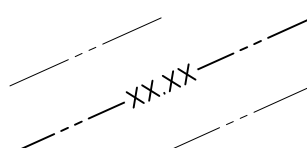


PROJECT	131 SPRINGS ROAD, SPRING FARM
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DRAWING TITLE	CIVIL ENGINEERING PACKAGE MASTER PLAN
	SEDIMENT AND SOIL EROSION CONTROL DETAILS

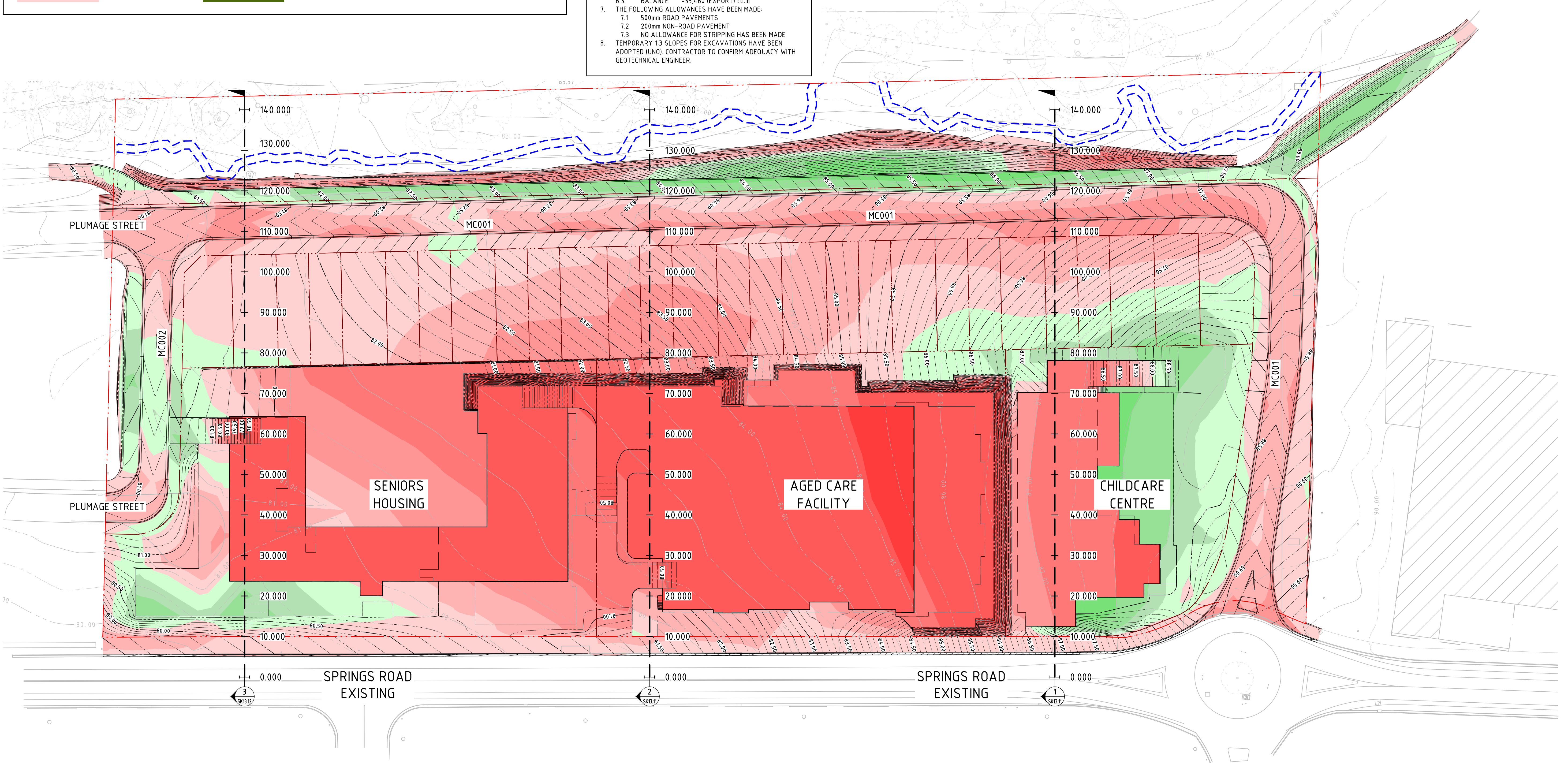
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DRAWING NUMBER	DAC02.11
REVISION	3
DRAWING SHEET SIZE	A1

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DRAWING NUMBER	DAC02.11
REVISION	3
DRAWING SHEET SIZE	A1

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DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:

LEGEND				
DEPTH OF CUT		DEPTH OF FILL		
	BELOW	- 15.0m		0.0m TO 0.25m
	- 15.0m TO	- 10.0m		0.25m TO 0.5m
	- 10.0m TO	- 5.0m		0.5m TO 1.0m
	- 5.0m TO	- 2.0m		1.0m TO 2.0m
	- 2.0m TO	- 1.0m		2.0m TO 5.0m
	- 1.0m TO	- 0.5m		5.0m TO 10.0m
	- 0.5m TO	- 0.25m		10.0m TO 15.0m
	- 0.25m TO	- 0.0m		ABOVE 15.0m
				PROPOSED BOUNDARY LINE
				INTERNAL LOT BOUNDARY LINE
				BULK CONTOURS
				EXISTING CONTOURS
				E2 ZONE

- GENERAL NOTES:
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
 - CAD FILES / DTM FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).
 - NO ALLOWANCE HAS BEEN MADE FOR BULKING FACTORS. NOTE ALL VOLUMES DEPICTED ARE SOLID VOLUMES ONLY AND MAY NOT REFLECT DETAILED EARTHWORKS.
 - NO ALLOWANCE HAS BEEN MADE FOR DETAILED EARTHWORKS; ie DETAILED EXCAVATION, FOOTINGS, RETAINING WALLS AND THE LIKE.
 - THE CONTRACTOR SHALL USE FINAL SURFACE LEVELS AND TYPICAL PAVEMENT DETAILS FOR ACTUAL EARTHWORKS LEVELS.
 - APPROXIMATE VOLUME DIFFERENCES BETWEEN SUBGRADE LEVEL AND EXISTING SURFACE LEVEL;
6.1. CUT -37,970 cu.m
6.2. FILL 2,510 cu.m
6.3. BALANCE -35,460 (EXPORT) cu.m
 - THE FOLLOWING ALLOWANCES HAVE BEEN MADE:
7.1 500mm ROAD PAVEMENTS
7.2 200mm NON-ROAD PAVEMENT
7.3 NO ALLOWANCE FOR STRIPPING HAS BEEN MADE
8. TEMPORARY 1:3 SLOPES FOR EXCAVATIONS HAVE BEEN ADOPTED (UNO). CONTRACTOR TO CONFIRM ADEQUACY WITH GEOTECHNICAL ENGINEER.



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	09.04.20
5	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT

moran
FAMILY

ARCHITECT

bhi

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ARCHITECT

bhi

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SCALE 1:500@A1

0 5 10 15 20 25m

NORTHROP
Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

**BULK EARTHWORKS CUT
AND FILL PLAN**

JOB NUMBER

181741

DRAWING NUMBER

DAC03.01

REVISION

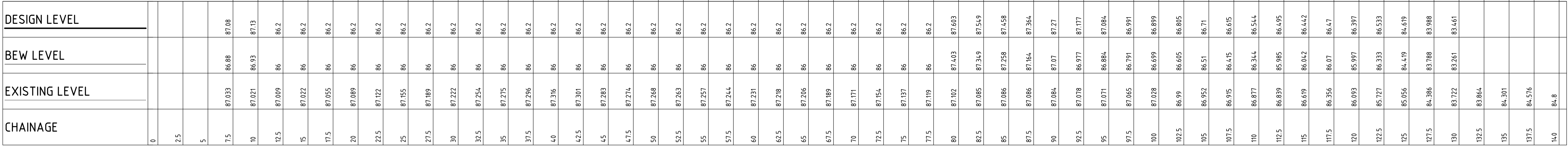
5

DRAWING SHEET SIZE = A1

Drawn: 15.02.2018 11:24 AM
Printed By: ALEX MARGARIS
Found: C:\0018\jobs\181741 - 131 Springs rd spring farm\drawings\civil\2-CAD\2-CAD FILES\3-D\MASTER PLAN\181741_DAC03.01.dwg

DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:

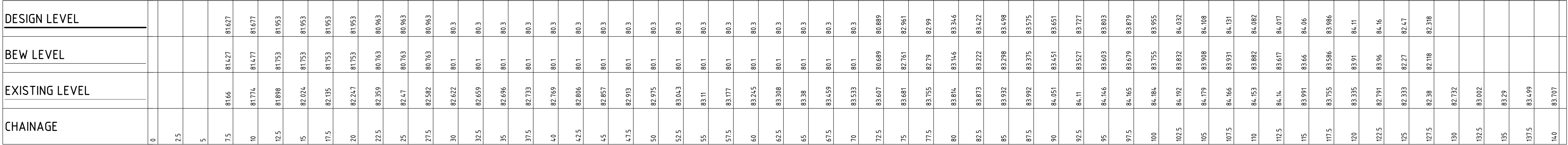
DATUM R.L. 77



LONGITUDINAL SECTION CENTRELINE - SITE SECTION 1

SCALE 1:200 (H)
SCALE 1:100 (V)

DATUM R.L. 77




LONGITUDINAL SECTION CENTRELINE - SITE SECTION 2

SCALE 1:200 (H)
SCALE 1:100 (V)

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	09.04.20
5	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

	CLIENT
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ARCHITECT	
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PROJECT	131 SPRINGS ROAD, SPRING FARM
---------	----------------------------------

DRAWING TITLE	CIVIL ENGINEERING PACKAGE MASTER PLAN
BULK EARTHWORKS CUT AND FILL SECTIONS - SHEET 01	

JOB NUMBER	181741
DRAWING NUMBER	DAC03.11
REVISION	5
DRAWING SHEET SIZE = A1	

NOT FOR CONSTRUCTION

DRAWN: A. MARGARIS DESIGNED: B. LAWRENCE JOB MANAGER: B. LAWRENCE VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	09.04.20
5	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT



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PROJECT

131 SPRINGS ROAD,
SPRING FARM

DRAWING TITLE

CIVIL ENGINEERING PACKAGE
MASTER PLAN

BULK EARTHWORKS CUT AND
FILL SECTIONS - SHEET 02

JOB NUMBER

181741

DRAWING NUMBER

DAC03.12

REVISION

5

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION

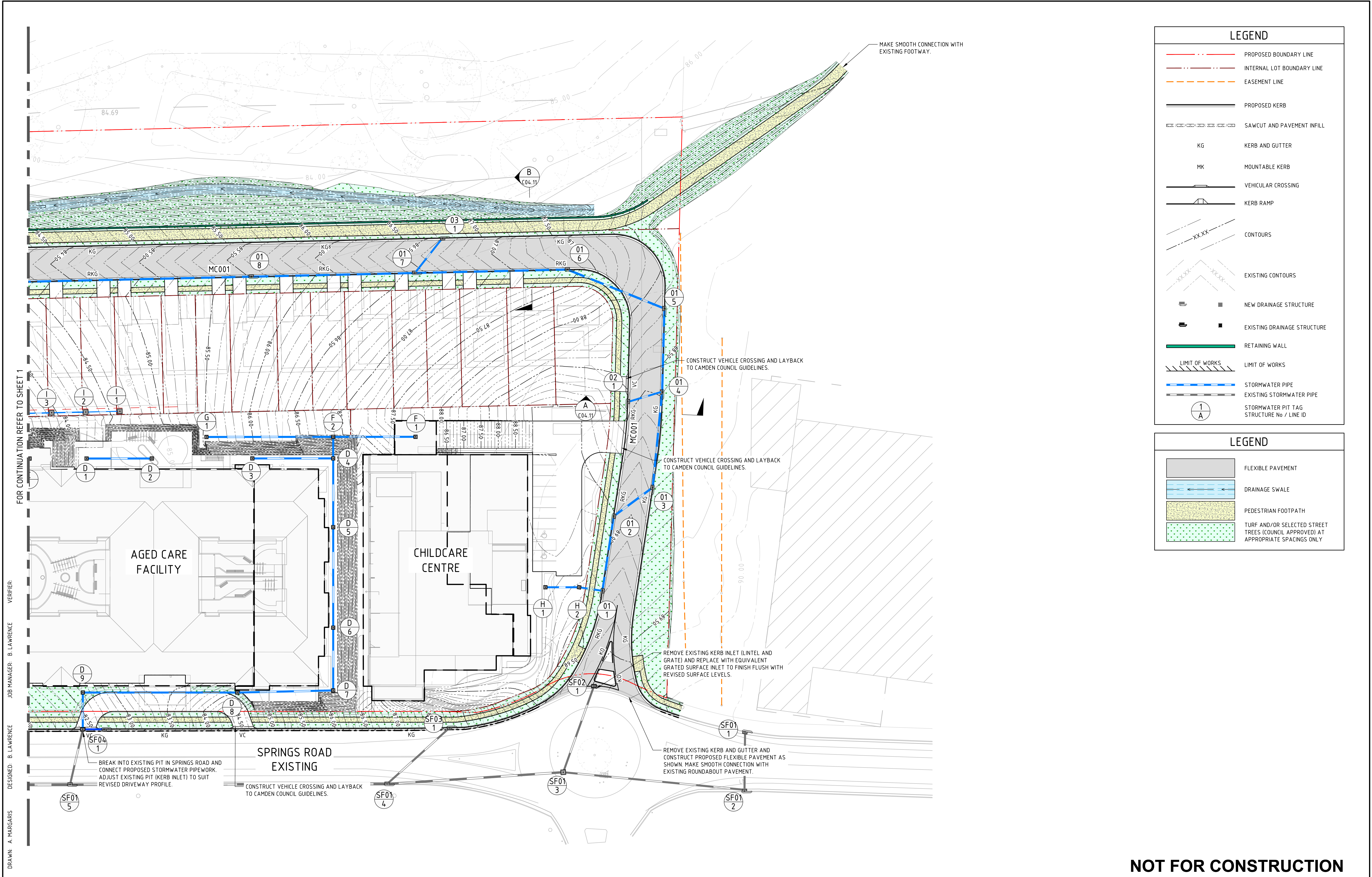
DATUM R.L. 77

DESIGN LEVEL	
BEW LEVEL	
EXISTING LEVEL	
CHAINAGE	
0	
2.5	
5	
7.5	80.141 79.933 80.133
10	80.187 79.983 80.183
12.5	80.232 80.315 80.515
15	80.277 80.64.7 80.84.7
17.5	80.323 80.774 80.974
20	80.368 80.899 81.099
22.5	80.444 80.9 81.1
25	80.622 78 78.2
27.5	80.799 78 78.2
30	80.976 78 78.2
32.5	81.154 78 78.2
35	81.331 78 78.2
37.5	81.293 78 78.2
40	81.181 78 78.2
42.5	81.07 78 78.2
45	80.958 78 78.2
47.5	80.846 78 78.2
50	80.887 78 78.2
52.5	80.958 78 78.2
55	81.03 78 78.2
57.5	81.102 78 78.2
60	81.174 78.818 79.018
62.5	81.246 78.818 79.018
65	81.318 81.19 81.39
67.5	81.403 81.195 81.395
70	81.488 81.2 81.4
72.5	81.562 81.206 81.406
75	81.609 81.211 81.411
77.5	81.656 81.724 81.924
80	81.701 81.721 81.921
82.5	81.747 81.718 81.918
85	81.792 81.715 81.915
87.5	81.838 81.713 81.913
90	81.874 81.71 81.91
92.5	81.874 81.708 81.908
95	81.875 81.705 81.905
97.5	81.875 81.702 81.902
100	81.876 81.7 81.9
102.5	81.876 81.698 81.898
105	81.889 81.681 81.881
107.5	81.908 81.632 81.832
110	81.926 81.353 81.753
112.5	81.944 81.411 81.811
115	81.909 81.336 81.736
117.5	81.609 81.648 81.848
120	81.31 81.698 81.898
122.5	81.067 80.694 80.894
125	80.984
127.5	81.015
130	81.114
132.5	81.163
135	81.33
137.5	81.534
140	81.715

LONGITUDINAL SECTION CENTRELINE - SITE SECTION 3

SCALE 1:200 (H)
SCALE 1:100 (V)

Printed By : ALEX MARGARIS Found : C:\2016\jobs\181741 - 131 springs rd spring farm\c-drawings\c-northrop\Civil\2-CAD\2-CAD FILES\0-DAMMASTER\PLAN181741_DAC03.12.dwg Date : 15.02.2018 11:24 AM



LEGEND

PROPOSED BOUNDARY LINE

INTERNAL LOT BOUNDARY LINE

EASEMENT LINE

PROPOSED KERB

SAWCUT AND PAVEMENT INFILL

KG

KERB AND GUTTER

MK

MOUNTABLE KERB

VEHICULAR CROSSING

KERB RAMP

CONTOURS

EXISTING CONTOURS

NEW DRAINAGE STRUCTURE

EXISTING DRAINAGE STRUCTURE

RETAINING WALL

LIMIT OF WORKS

STORMWATER PIPE

EXISTING STORMWATER PIPE

STORMWATER PIT TAG STRUCTURE No / LINE ID

LEGEND

FLEXIBLE PAVEMENT

DRAINAGE SWALE

PEDESTRIAN FOOTPATH

TURF AND/OR SELECTED STREET TREES (COUNCIL APPROVED) AT APPROPRIATE SPACINGS ONLY

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	PROJECT	DRAWING TITLE	JOB NUMBER
1	ISSUED FOR CLIENT REVIEW	AM	BL	17.07.19				131 SPRINGS ROAD, SPRING FARM	CIVIL ENGINEERING PACKAGE MASTER PLAN	181741
2	ISSUED FOR DEVELOPMENT APPLICATION	AM	BL	23.07.19						
3	AMENDED AS PER CLIENT COMMENTS	AM	BL	26.07.19						
4	ISSUED FOR DEVELOPMENT APPLICATION	AM	BL	19.12.19						
5	ISSUED FOR DEVELOPMENT APPLICATION	AM	BL	09.04.20						
6	ISSUED FOR DEVELOPMENT APPLICATION	AM	BL	19.06.20						

moran
FAMILY

bhi

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SCALE 1:400@A1

0

4

8

12

16

20m

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PROJECT

DRAWING TITLE

JOB NUMBER

DRAWING NUMBER

REVISION

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION

131 SPRINGS ROAD, SPRING FARM

CIVIL ENGINEERING PACKAGE MASTER PLAN

SITeworks AND STORMWATER MANAGEMENT PLAN - SHEET 02

181741

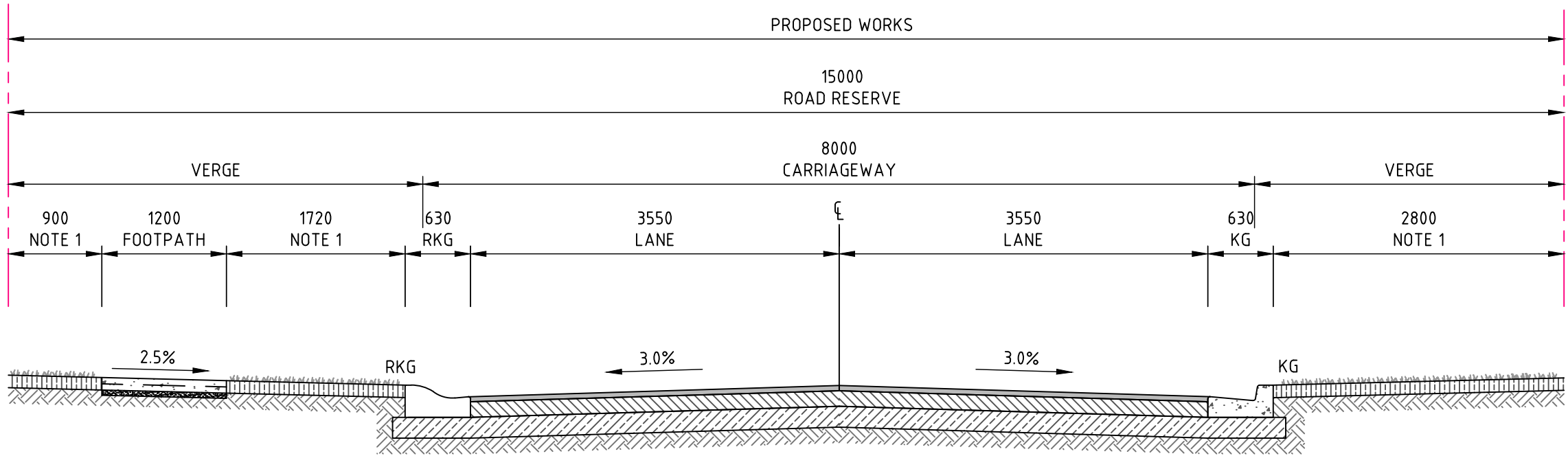
DAC04.02

6

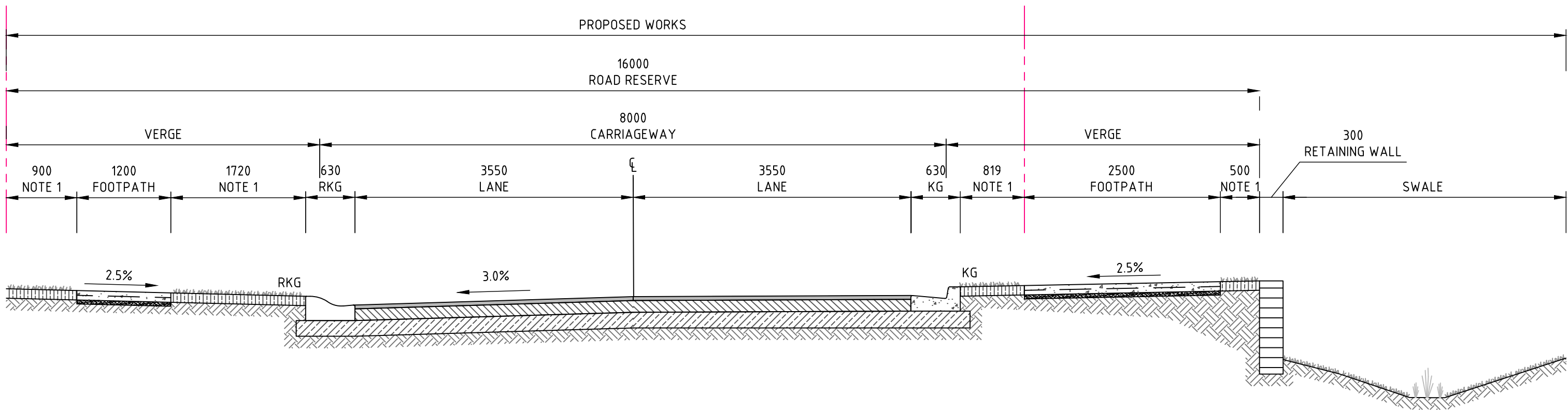
Found: 13/06/18 Job: 181741 - 131 Springs rd spring farm drawings to northrop
Plotted By: ALEX MARGARIS
Date: 15.02.2018 11:24 AM

DRAWN: A. MARGARIS
DESIGNED: B. LAWRENCE
JOB MANAGER: B. LAWRENCE
VERIFIER:

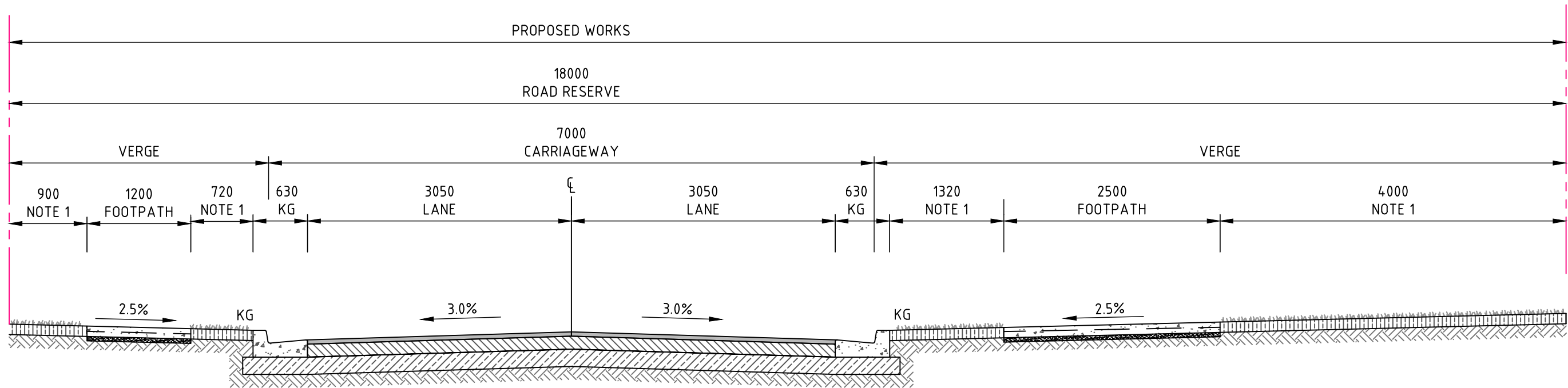
NOTES	
1.	TURF AND/OR SELECTED STREET TREES (COUNCIL APPROVED) AT APPROPRIATE SPACINGS ONLY



NEW PUBLIC ACCESS ROAD
SECTION A
C04.02



NEW PUBLIC ACCESS ROAD
SECTION B
C04.02



NEW PUBLIC ACCESS ROAD
SECTION C
C04.01

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT

moran
FAMILY

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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE


**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

TYPICAL ROAD SECTIONS

JOB NUMBER 181741	
DRAWING NUMBER DAC04.11	REVISION 4
DRAWING SHEET SIZE = A1	

DRAWN: A. MARGARIS DESIGNED: B. LAWRENCE JOB MANAGER: B. LAWRENCE VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20




moran
FAMILY



bhi

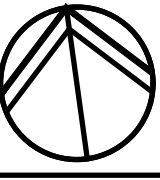
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VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT



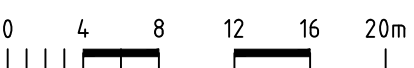
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SCALE 1:400@A1



0 4 8 12 16 20m



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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

**ALIGNMENT CONTROL
PLAN - SHEET 01**

JOB NUMBER

181741

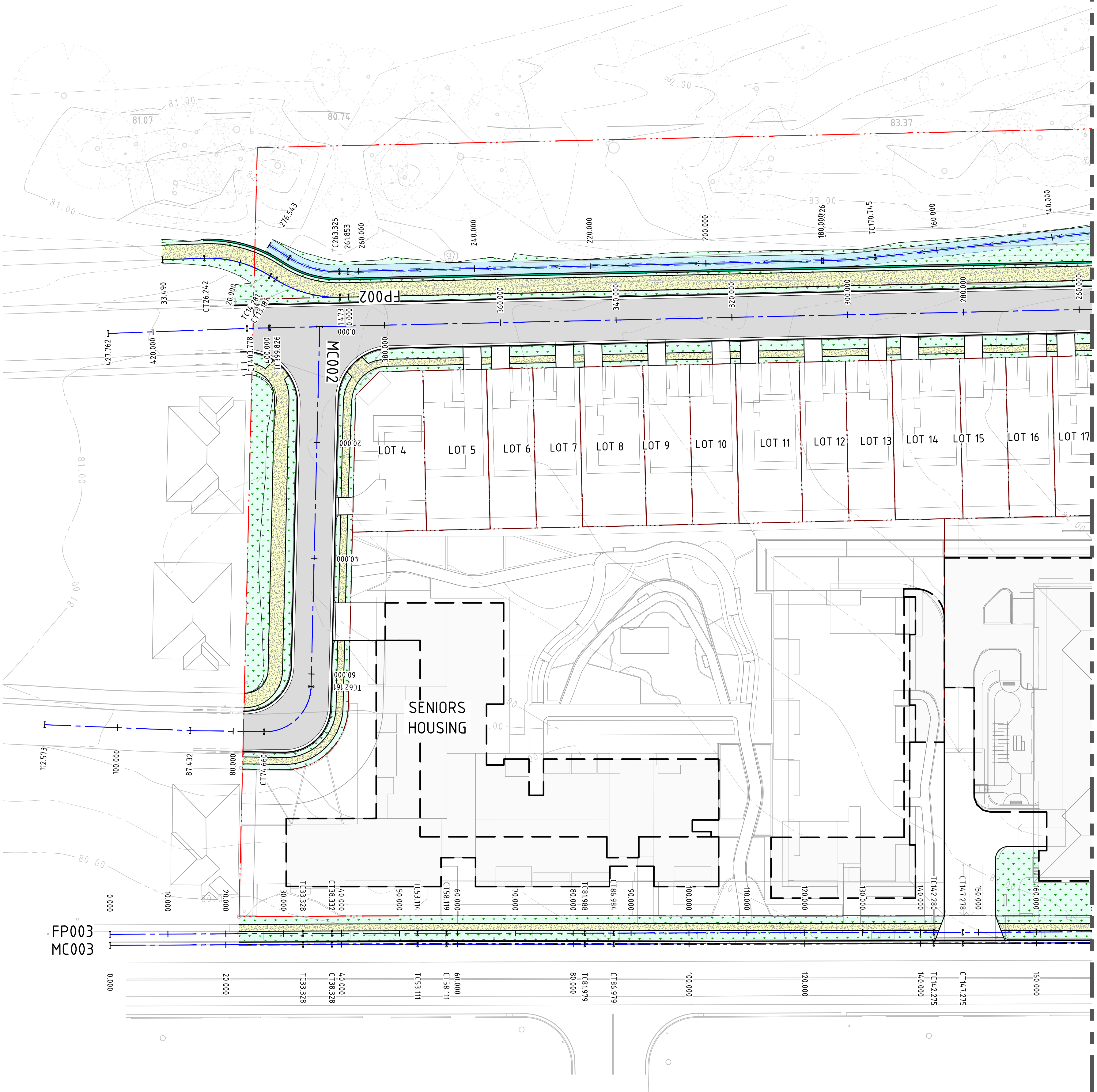
DRAWING NUMBER

DAC04.21


REVISION


4


DRAWING SHEET SIZE = A1





LEGEND


 PROPOSED BOUNDARY LINE


 INTERNAL LOT BOUNDARY LINE

 EASEMENT LINE

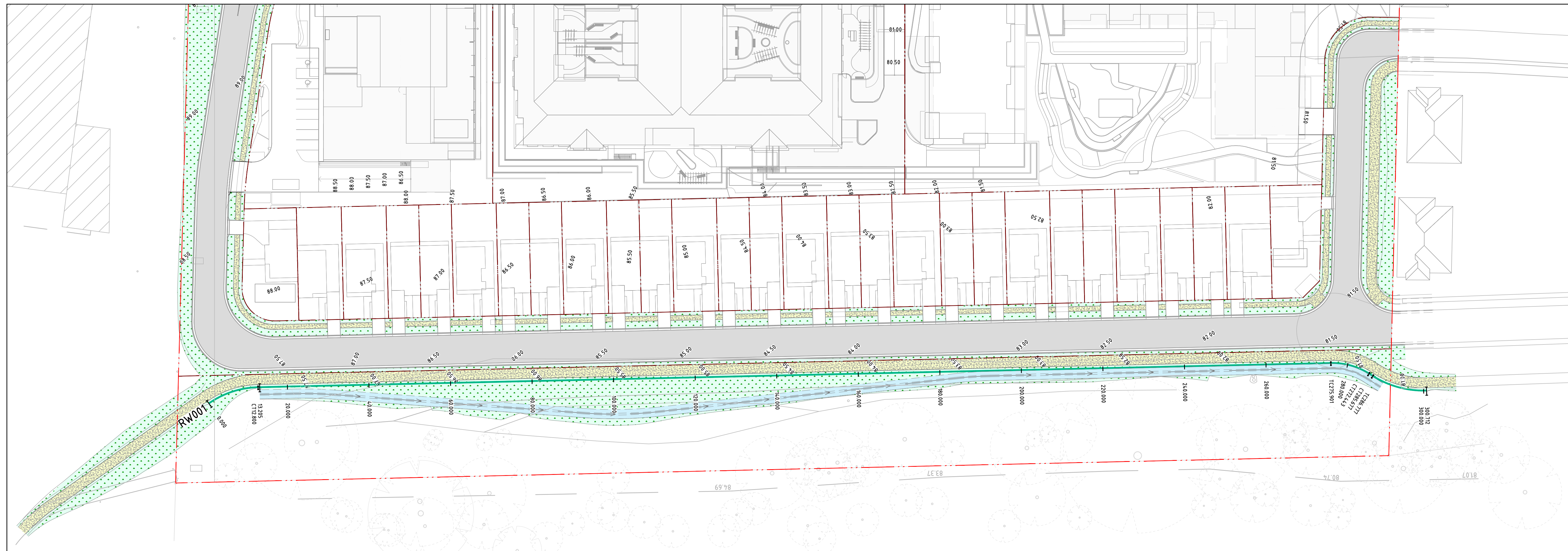
 MC01 CONTROL LINE

 CH0.000 CHAINAGE

 TC0.000 TANGENT POINT






 LIMIT OF WORKS

NOT FOR CONSTRUCTION



DATUM RL53				
CHAINAGE	RETAINING WALL BOTTOM FSL	RETAINING WALL TOP FSL	HEIGHT (FSL-FSL)	EXISTING SURFACE
0.00	88.11	88.13	0.02	87.362
5.00	87.79	87.99	0.21	87.424
10.00	87.45	87.85	0.40	87.378
15.00	87.19	87.72	0.53	87.226
20.00	86.87	87.61	0.74	87.07
25.00	86.60	87.50	0.90	86.919
30.00	86.32	87.37	1.05	86.732
35.00	86.00	87.22	1.22	86.494
40.00	85.68	87.07	1.39	86.256
45.00	85.35	86.92	1.57	85.995
50.00	85.02	86.78	1.75	85.596
55.00	84.72	86.66	1.94	85.256
60.00	84.60	86.53	1.93	84.945
65.00	84.67	86.41	1.75	84.676
70.00	84.76	86.29	1.53	84.535
75.00	84.86	86.17	1.32	84.402
80.00	84.95	86.05	1.10	84.315
85.00	85.05	85.93	0.88	84.227
90.00	85.14	85.81	0.67	84.123
95.00	85.23	85.69	0.46	84.022
100.00	85.27	85.57	0.30	83.963
105.00	85.23	85.45	0.21	83.901
110.00	85.13	85.33	0.19	83.826
115.00	85.00	85.21	0.21	83.752
120.00	84.84	85.08	0.25	83.651
125.00	84.63	84.96	0.34	83.541
130.00	84.39	84.84	0.46	83.389
135.00	84.14	84.72	0.58	83.236
140.00	83.90	84.60	0.70	83.109
145.00	83.66	84.48	0.82	83.001
150.00	83.42	84.36	0.94	82.898
155.00	83.18	84.24	1.06	82.797
160.00	82.95	84.12	1.17	82.735
165.00	82.73	84.00	1.27	82.706
170.00	82.51	83.88	1.37	82.667
175.00	82.29	83.76	1.47	82.555
180.00	82.07	83.63	1.56	82.444
185.00	81.86	83.51	1.66	82.37
190.00	81.69	83.39	1.70	82.305
195.00	81.58	83.27	1.69	82.24
200.00	81.51	83.15	1.64	82.174
205.00	81.46	83.03	1.57	82.098
210.00	81.42	82.91	1.49	82.012
215.00	81.37	82.79	1.42	81.909
220.00	81.33	82.67	1.34	81.784
225.00	81.28	82.55	1.27	81.661
230.00	81.23	82.43	1.20	81.539
235.00	81.19	82.32	1.13	81.42
240.00	81.14	82.22	1.08	81.303
245.00	81.09	82.12	1.03	81.259
250.00	81.05	82.03	0.99	81.474
255.00	81.00	81.95	0.95	81.255
260.00	80.97	81.88	0.91	81.31
265.00	80.94	81.81	0.87	81.529
270.00	80.92	81.74	0.82	81.243
275.00	80.89	81.66	0.77	81.315
280.00	80.87	81.59	0.72	81.401
285.00	80.84	81.43	0.59	81.098
290.00	80.81	81.22	0.41	80.811
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300.71	80.59			80.752

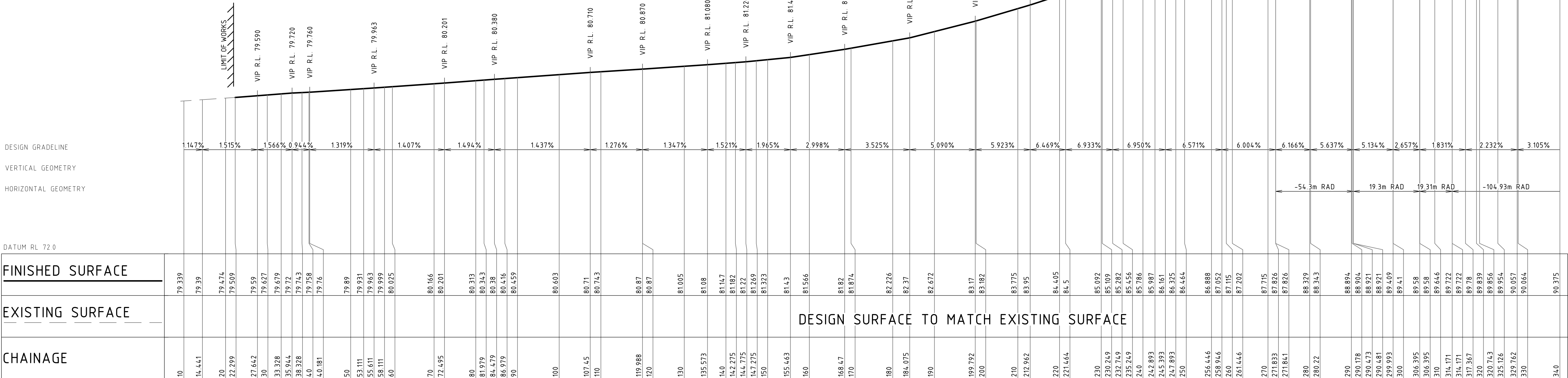
NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT		PROJECT	DRAWING TITLE	JOB NUMBER	
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19	 	 Sydney Level 11 345 George Street, Sydney NSW 2000 Ph (02) 9241 4188 Fax (02) 9241 4324 Email sydney@northrop.com.au ABN 81 094 433 100	 131 SPRINGS ROAD, SPRING FARM	CIVIL ENGINEERING PACKAGE MASTER PLAN RETAINING WALL ALIGNMENT CONTROL PLAN AND SECTION	181741		
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19							
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19							
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20							
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DATUM RL 72.0

DESIGN GRADELINE
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY

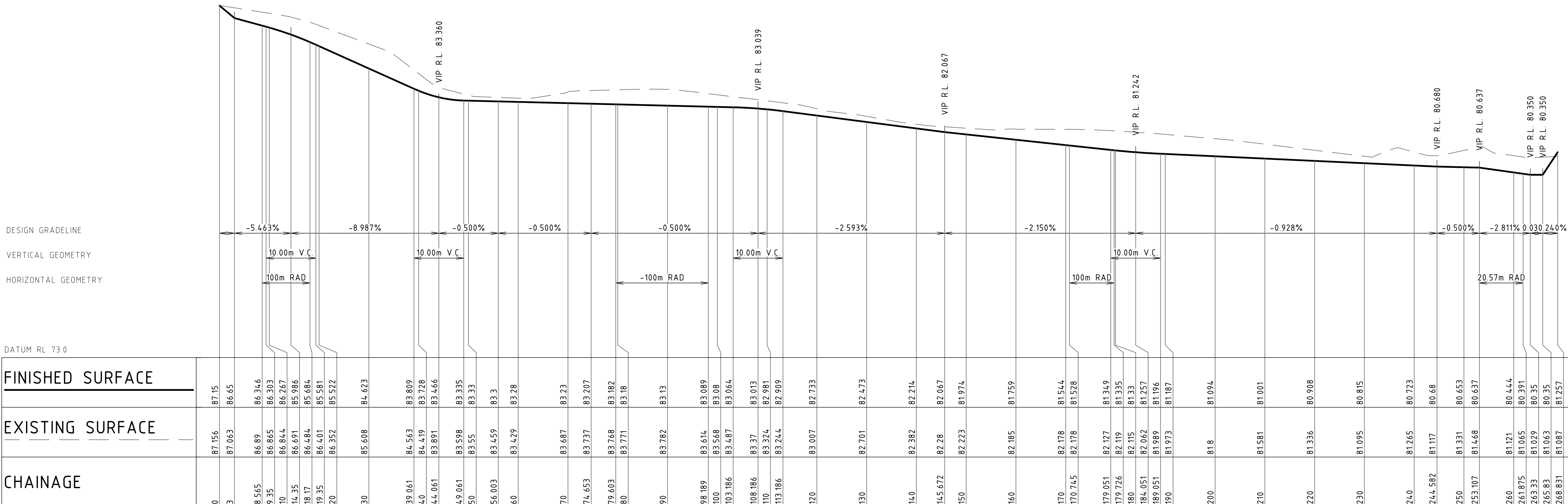
CHAINAGE	EXISTING SURFACE	FINISHED SURFACE
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14.441		79.39
20		79.474
22.299		79.509
27.642		79.59
30		79.627
33.328		79.679
35.944		79.72
38.328		79.743
40		79.758
40.181		79.76
50		79.89
53.111		79.931
55.611		79.963
58.111		79.999
60		80.025
70		80.166
72.495		80.201
80		80.313
81.979		80.343
84.479		80.36
86.979		80.416
90		80.459
100		80.603
107.45		80.71
110		80.743
119.988		80.87
120		80.87
130		81.005
135.573		81.08
140		81.147
142.275		81.182
144.775		81.22
147.275		81.269
150		81.323
155.463		81.43
160		81.566
168.47		81.82
170		81.874
180		82.226
184.075		82.37
190		82.672
199.792		83.17
200		83.182
210		83.775
212.962		83.95
220		84.405
221.664		84.5
230		85.092
230.249		85.109
232.749		85.282
235.249		85.456
240		85.786
242.893		85.987
245.393		86.161
247.893		86.325
250		86.464
256.446		86.888
258.946		87.052
260		87.115
261.446		87.202
270		87.715
271.933		87.826
271.941		87.826
280		88.329
280.22		88.343
290		88.894
290.178		88.904
290.473		88.921
290.481		88.921
299.993		89.409
300		89.41
306.395		89.58
306.395		89.58
310		89.646
314.171		89.722
314.171		89.722
317.367		89.78
320		89.839
320.743		89.856
325.126		89.954
329.762		90.057
330		90.064
340		90.375



DATUM RL 73.0

DESIGN GRADELINE
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY

CHAINAGE	EXISTING SURFACE	FINISHED SURFACE
0	87.156	87.15
3	87.063	86.65
8.565	86.89	86.346
9.35	86.865	86.303
10	86.844	86.267
14.35	86.691	85.986
18.17	86.484	85.684
19.35	86.401	85.581
20	86.352	85.522
30	85.608	84.623
39.061	84.563	83.809
40	84.419	83.728
44.061	83.891	83.466
49.061	83.598	83.335
50	83.55	83.33
56.003	83.459	83.3
60	83.429	83.28
70	83.687	83.23
74.653	83.737	83.207
79.603	83.768	83.182
80	83.771	83.18
90	83.782	83.13
98.89	83.614	83.089
100	83.568	83.08
103.186	83.487	83.064
108.186	83.37	83.013
110	83.374	82.981
113.186	83.244	82.909
120	83.007	82.733
130	82.701	82.473
140	82.382	82.214
145.672	82.28	82.067
150	82.223	81.974
160	82.185	81.759
170	82.178	81.544
170.745	82.178	81.528
179.051	82.127	81.349
179.726	82.119	81.335
180	82.115	81.33
184.051	82.062	81.257
189.051	81.989	81.196
190	81.973	81.187
200	81.8	81.094
210	81.581	81.001
220	81.336	80.908
230	81.095	80.815
240	81.265	80.723
244.582	81.117	80.68
250	81.331	80.653
253.107	81.468	80.637
260	81.121	80.444
261.875	81.065	80.391
263.33	81.079	80.35
265.83	81.063	80.35
268.831	81.087	81.257



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19	
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19	
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20	



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ARCHITECT	CLIENT
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LONGITUDINAL SECTION ALONG MC003

HORIZONTAL SCALE 1:500@A1
VERTICAL SCALE 1:100@A1

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Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE
**CIVIL ENGINEERING PACKAGE
MASTER PLAN**
**LONGITUDINAL SECTIONS -
SHEET 02**

JOB NUMBER
181741
DRAWING NUMBER
DAC06.02
REVISION
3
DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20



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PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

CIVIL ENGINEERING PACKAGE MASTER PLAN

**LONGITUDINAL SECTIONS -
SHEET 03**

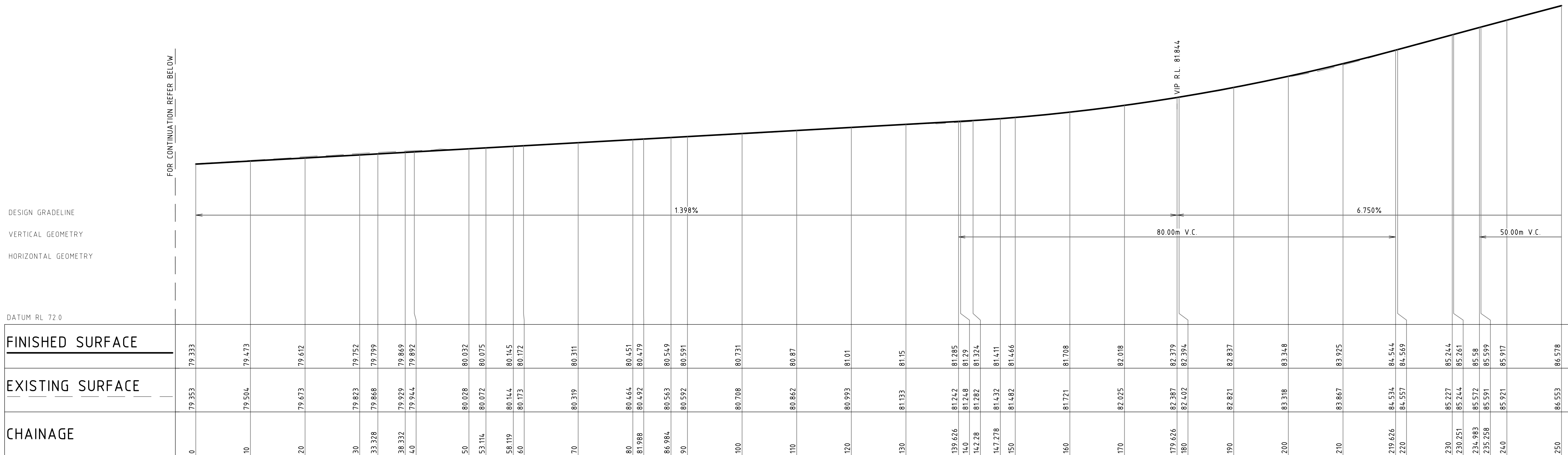
JOB NUMBER

181741

DRAWING NUMBER

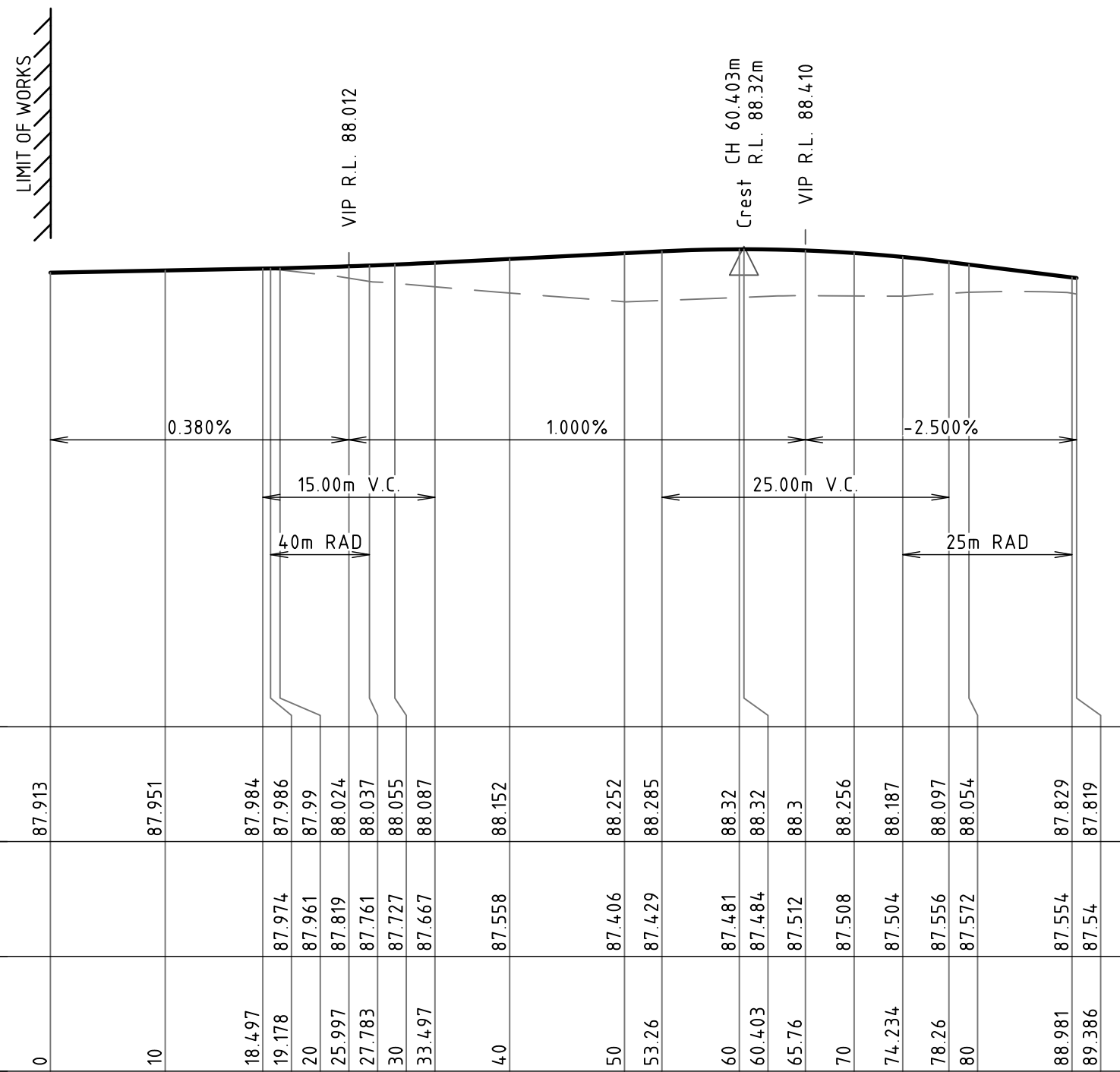
REVISION

DRAWING SHEET SIZE = A1



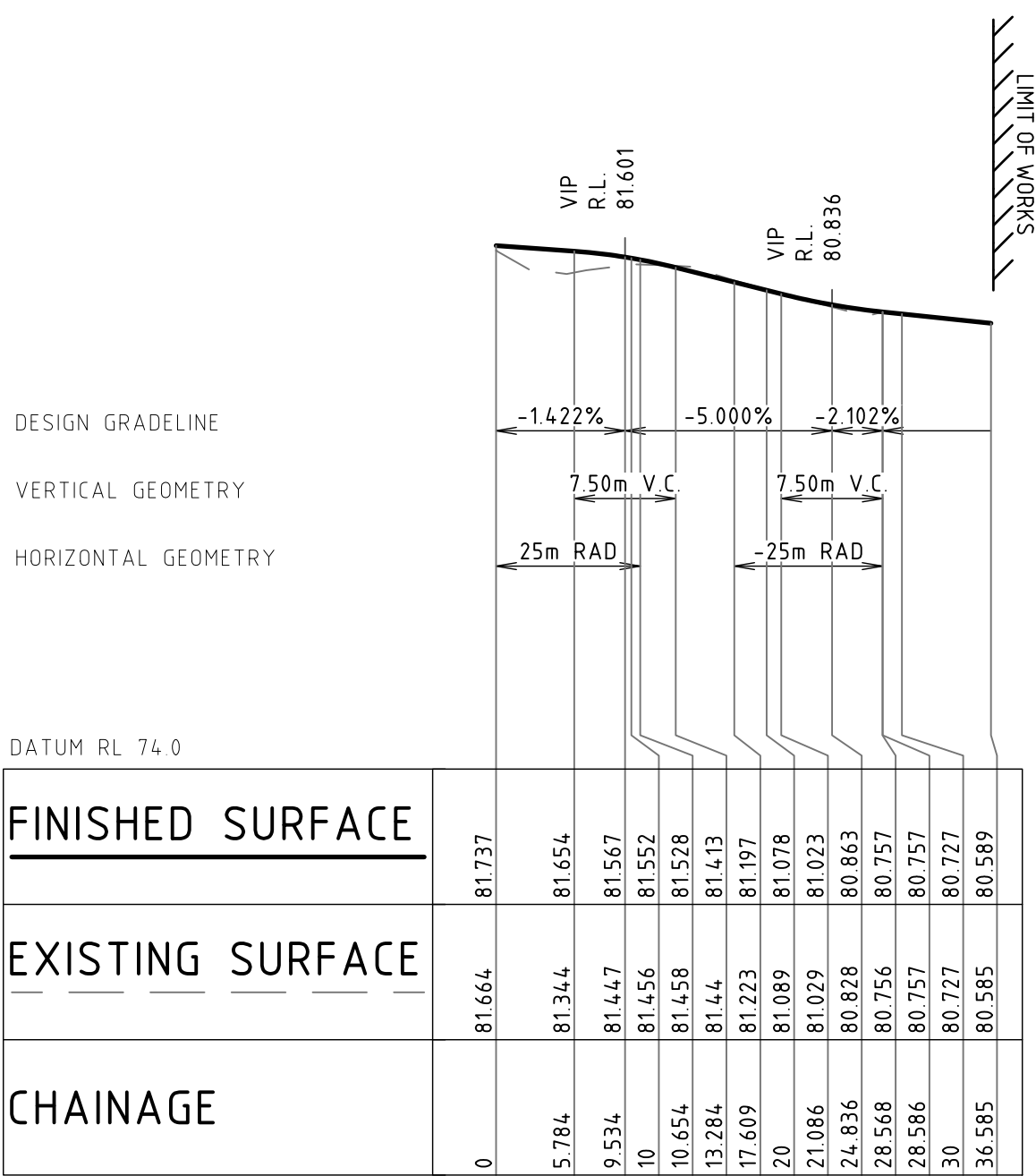
LONGITUDINAL SECTION ALONG FP003

HORIZONTAL SCALE 1:400@A1
VERTICAL SCALE 1:100@A1



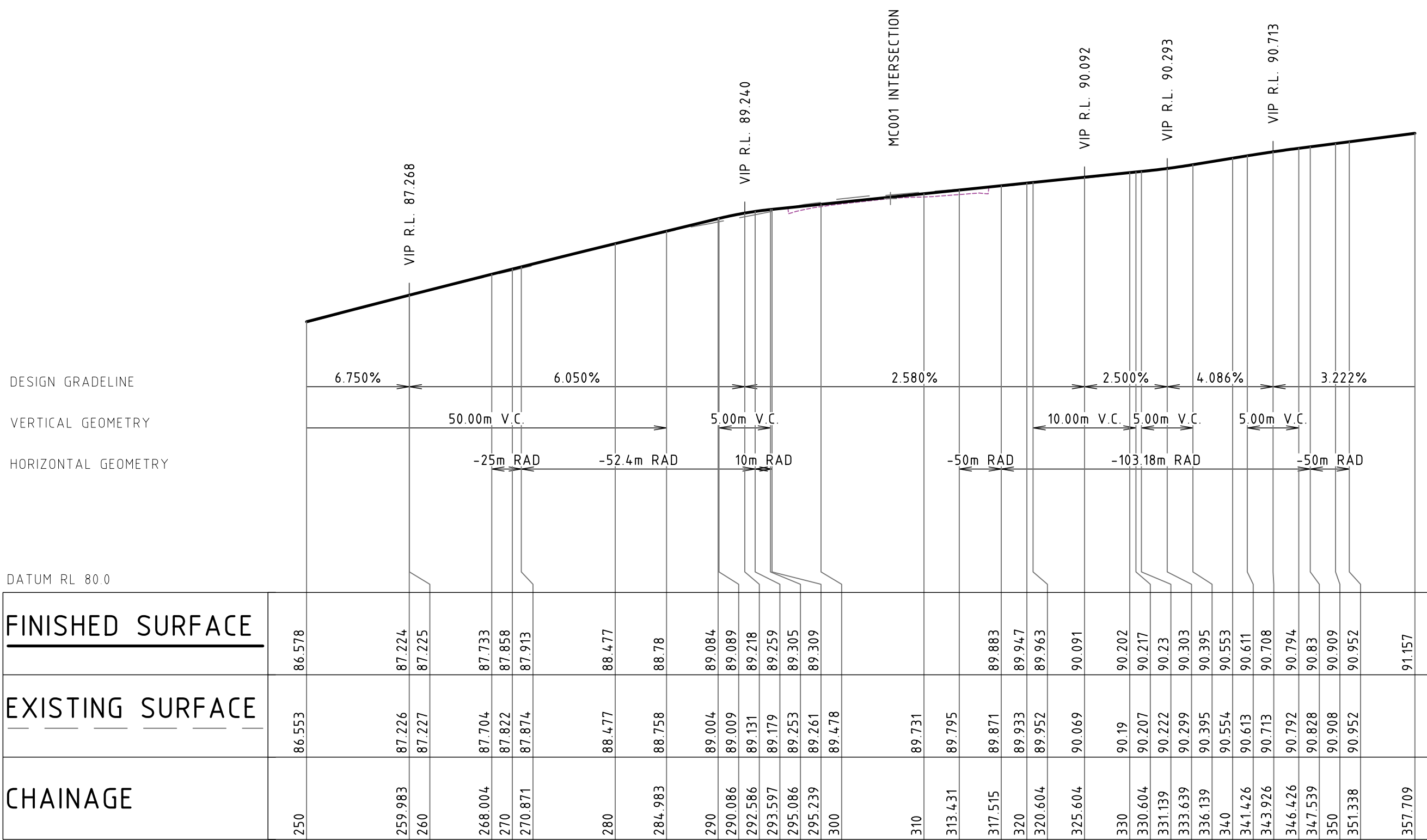
LONGITUDINAL SECTION ALONG FP001

HORIZONTAL SCALE 1:500@A1
VERTICAL SCALE 1:100@A1



LONGITUDINAL SECTION ALONG FP002

HORIZONTAL SCALE 1:500@A1
VERTICAL SCALE 1:100@A1



LONGITUDINAL SECTION ALONG FP003

HORIZONTAL SCALE 1:400@A1
VERTICAL SCALE 1:100@A1

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CIVIL ENGINEERING PACKAGE MASTER PLAN

**LONGITUDINAL SECTIONS -
SHEET 03**

JOB NUMBER

181741

DRAWING NUMBER

REVISION

DRAWING SHEET SIZE = A1

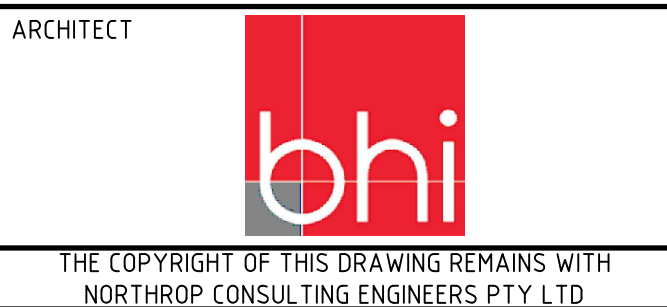
Found : t:2018 jobs\181741 - 131 springs rd spring farm\id-drawings\id-northrop\C-CIVIL2-CAD2\CAD FILES\1-DA\MASTERPLAN\181741_DAC06.01.dwg
Plotted By : ALEX MARGARIS

	-8 000	88 794	89 015	2%
	-7 100	88 815	88 997	2%
	-5 900	88 844	88 973	
	-4 180	88 862	88 939	
	-4 030	88 862	88 939	
	-4 000	88 863	88 789	
	-3 550	88 885	88 829	
	0 000	88 901	88 935	
	3 550	88 918	88 829	
	4 000	88 920	88 789	
	4 030	88 921	88 939	
	4 180	88 921	88 939	
	9 034	88 924	89 036	
	9 480	88 924	88 974	

[illegible][illegible][illegible]

DATUM RL 88.0					
FINISHED SURFACE		89.369		89.262 89.272 89.372 89.372	89.537 89.388
EXISTING SURFACE		89.194		89.247 89.254 89.254 89.257	89.380 89.388
OFFSET		0.000		3.550 4.000 4.030 4.180	12.418 13.013

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20



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DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

**CROSS SECTIONS - MC001 -
SHEET 01**

JOB NUMBER		181741	
DRAWING NUMBER		REVISION	
DAC06.11		3	
DRAWING SHEET SIZE = A1			


REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT

moran
FAMILY

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ARCHITECT

The logo for bhi (Northrop Consulting Engineers) features the lowercase letters 'bhi' in white, set against a red square background. A thin white vertical line runs through the center of the square, and a thin white horizontal line runs through the middle of the letters.

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PROJECT

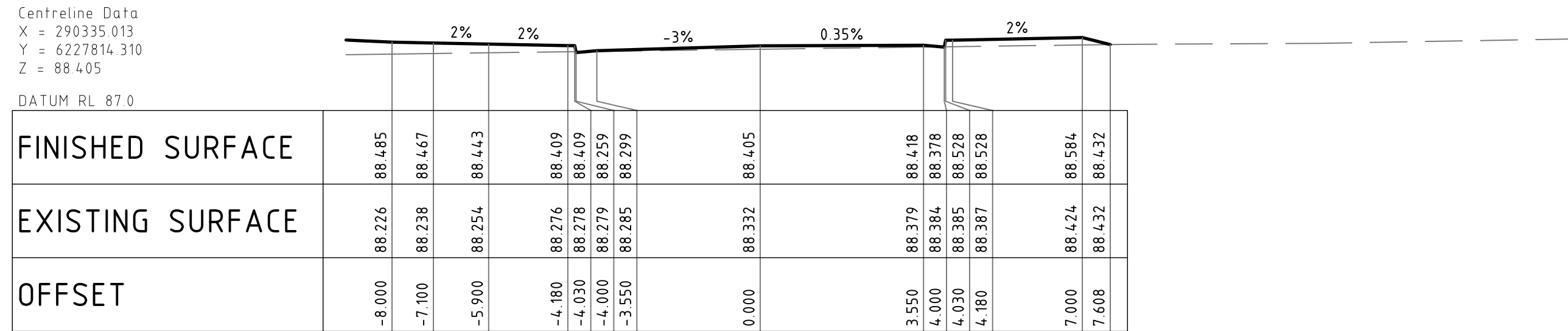
**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

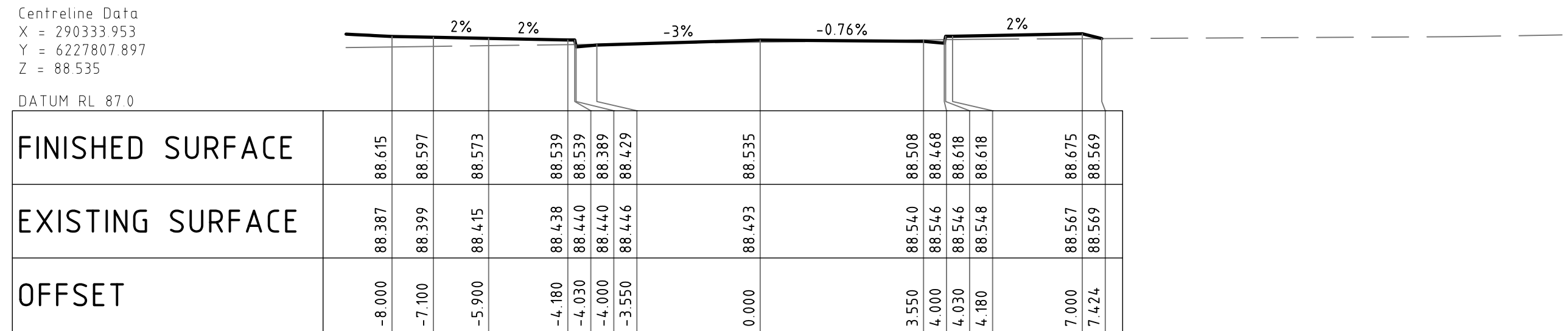
**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

**CROSS SECTIONS - MC001 -
SHEET 02**

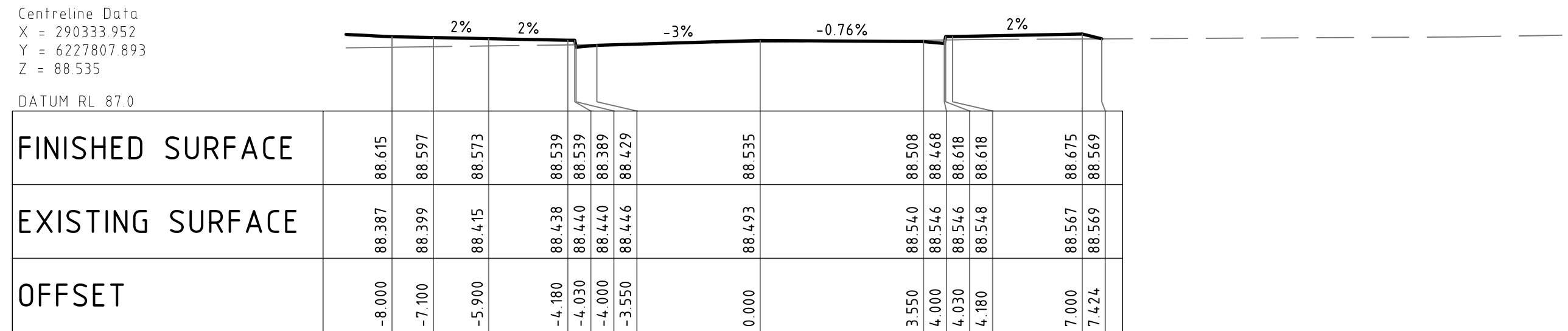
JOB NUMBER	
181741	
DRAWING NUMBER	REVISION
DAC06.12	3
DRAWING SHEET SIZE = A1	



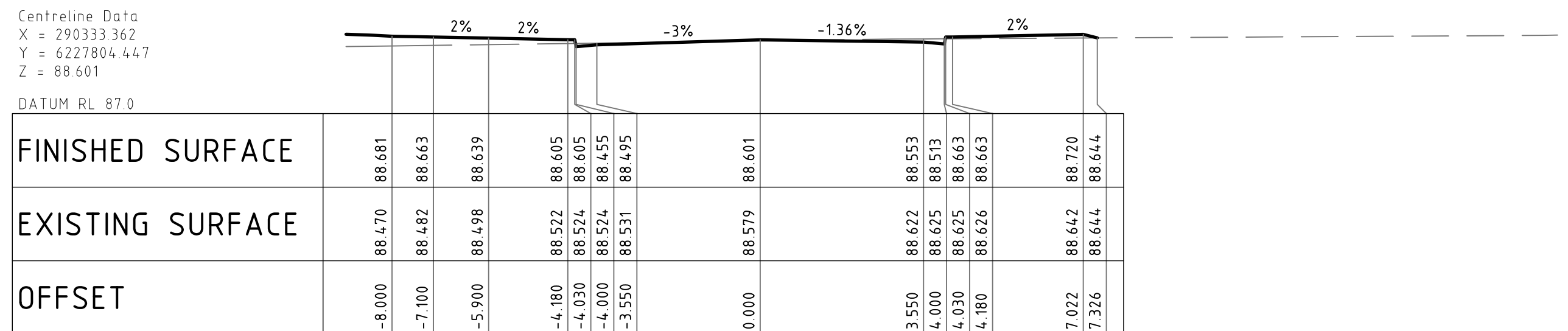
CHAINAGE 90.000



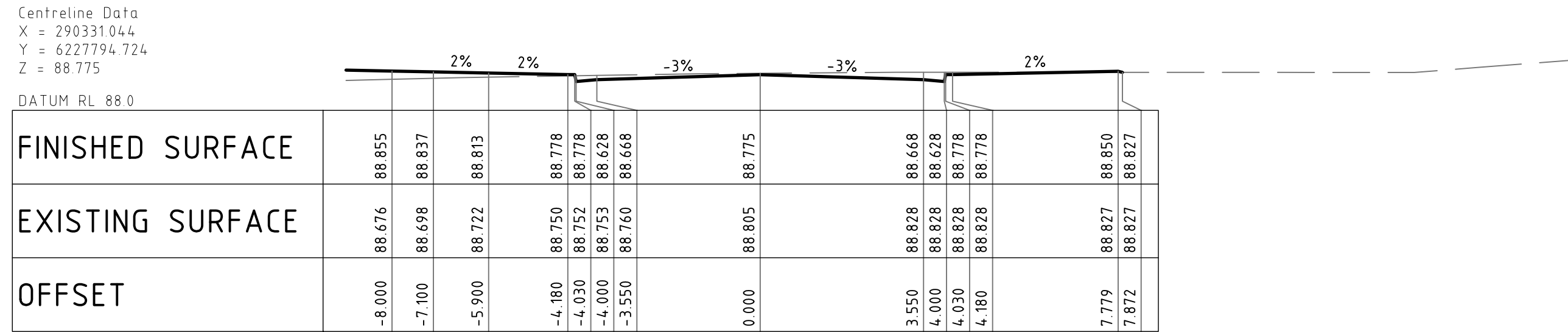
CHAINAGE 83.500



CHAINAGE 83.496

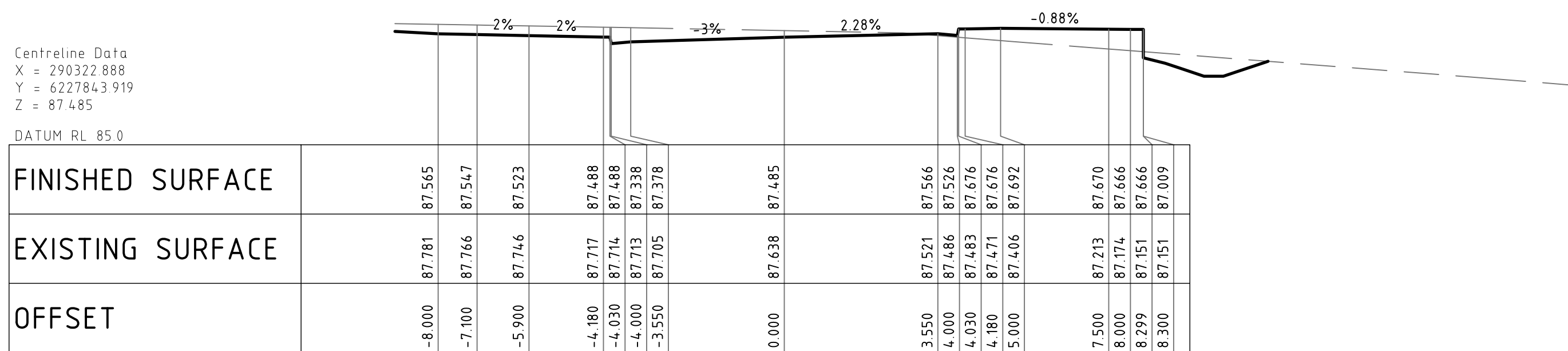


CHAINAGE 80.000

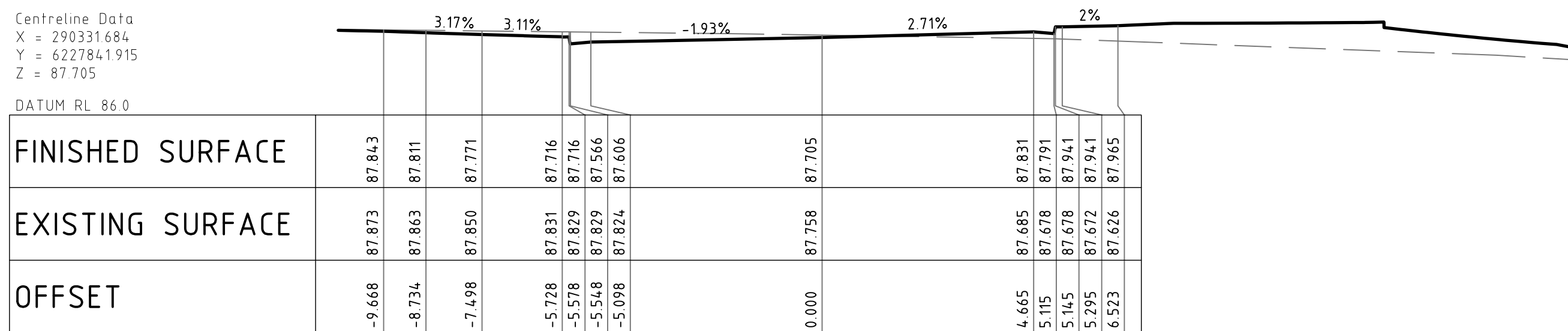


CHAINAGE 70.000

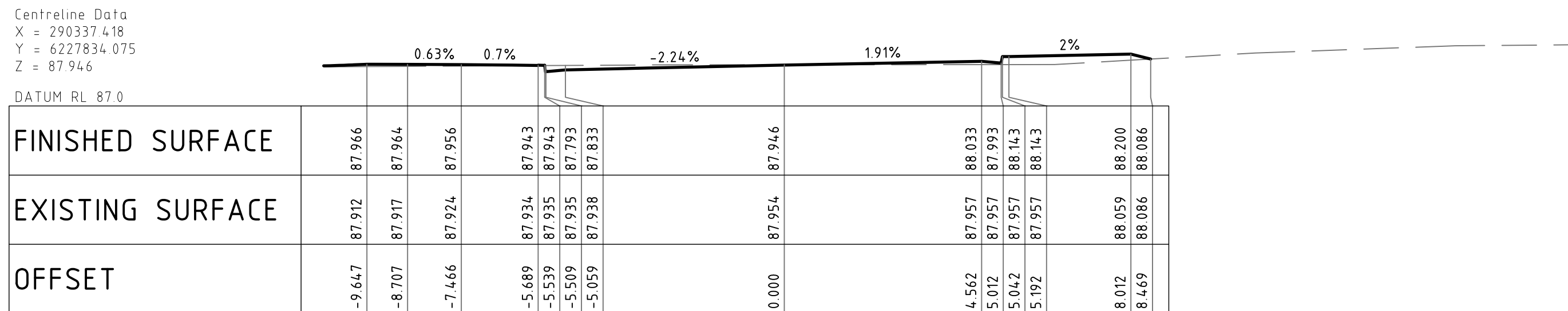
CROSS SECTION ALONG MC001



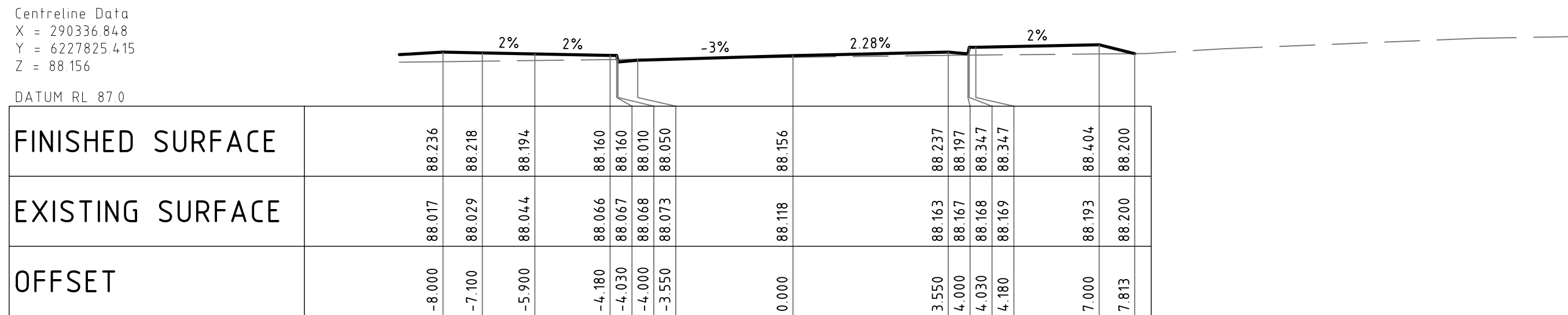
CHAINAGE 129.103



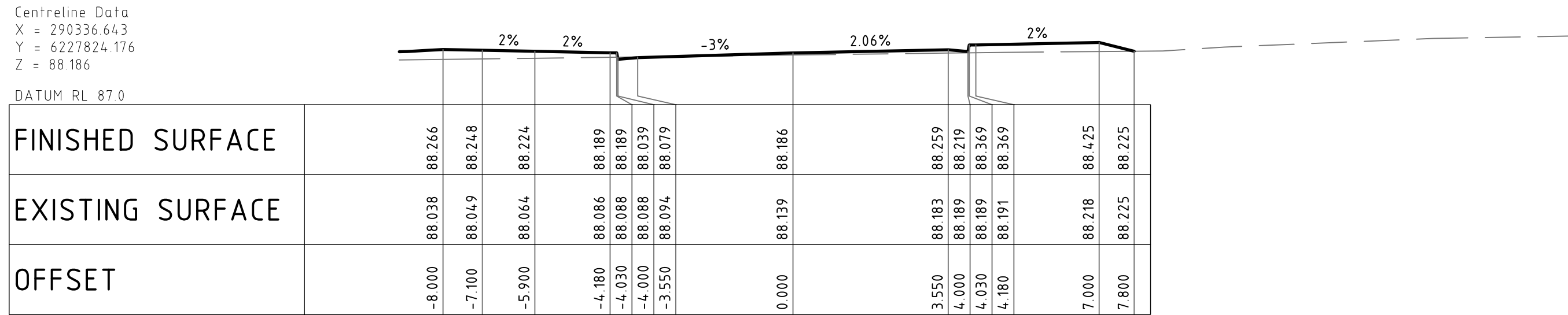
CHAINAGE 120.000



CHAINAGE 110.000



CHAINAGE 101.256



CHAINAGE 100.000

NOT FOR CONSTRUCTION

[illegible]

-8.116	81.180	81.400	
-8.000	81.680	81.451	
-7.100	81.170	81.433	
-5.900	81.125	81.409	
-4.180	81.361	81.375	
-4.030	81.329	81.375	
-4.000	81.322	81.225	
-3.550	81.244	81.265	
-0.675	81.343	81.351	
0.000	81.327	81.331	
3.550	81.233	81.224	
4.000	81.247	81.184	
4.030	81.245	81.334	
4.180	81.238	81.334	
5.000	81.197	81.351	
7.702	81.061	80.450	

[illegible]

	-3.550	81.436	81.431
	0.000	81.437	81.537
	-3.550	81.439	81.431
	4.000	81.439	81.391
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[illegible]

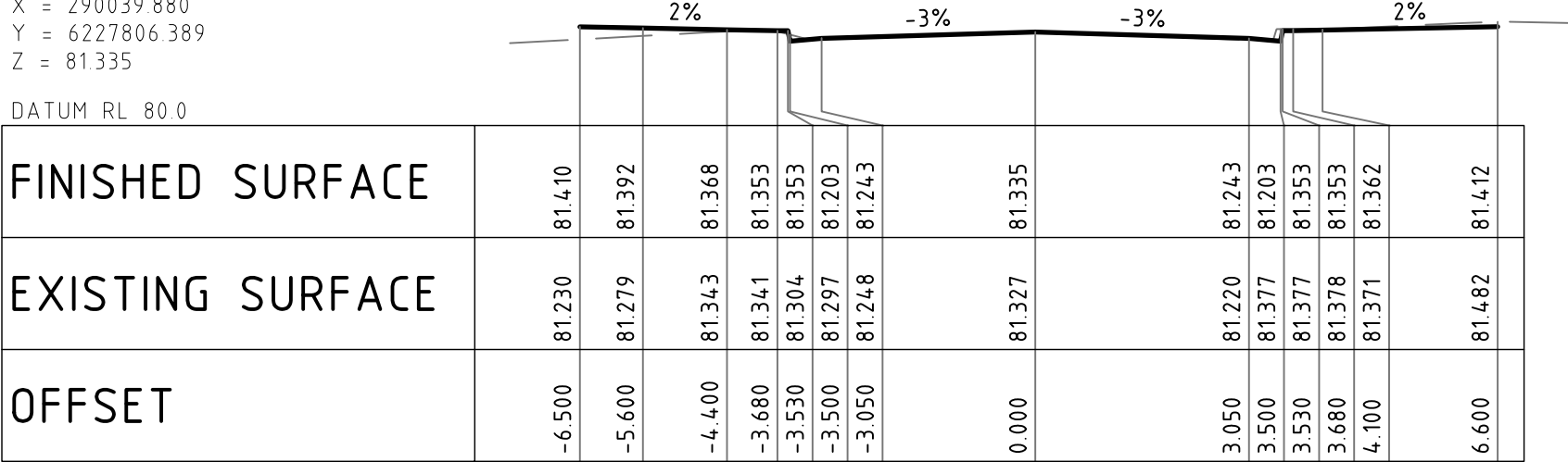
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EXISTING SURFACE		81.312		81.217	81.356	81.316	81.316	81.316	81.332	
OFFSET	0.000		9.550	0.000	0.030	0.180	0.500			6.646

Plotted By: ALEX MARGARIS
Date: 15.02.2018 11:24 AM
Found: 1:2018 [plot181741 - 131 springs of spring firmid-drawingsid-northropiC-CIVIL3D-CAD2-CAD FLES1: DAMASTERPLAN181741_DAC08.11.dwg]

DRAWN: A. MARGARIS DESIGNED: B. LAWRENCE JOB MANAGER: B. LAWRENCE VERIFIER:

Centreline Data
X = 290039.880
Y = 6227806.389
Z = 81.335



DATUM RL 80.0



CHAINAGE 78.252

CROSS SECTION ALONG MC002

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT		PROJECT	DRAWING TITLE	JOB NUMBER	
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19			<div>ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE</div>	131 SPRINGS ROAD, SPRING FARM	CIVIL ENGINEERING PACKAGE MASTER PLAN	181741	
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19						DRAWING NUMBER	REVISION
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20						DAC06.18	3
						DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD			CROSS SECTIONS - MC002 - SHEET 02	DRAWING SHEET SIZE = A1	

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Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

DATUM RL 85.0

A diagram showing a cross-section of a roof. It consists of three rectangular sections, each labeled with a '2%' slope. These sections are followed by a vertical drop-off, represented by a line that goes down and then back up slightly to form a small parapet or edge.

CHAINAGE 250.000

DATUM RL 84.0

CHAINAGE 240.000

DATUM RL 84.0

A cross-section diagram of a roof structure. The roof is divided into three sections, each labeled with a 2% slope. The first section is a gable end, the second is a main roof section, and the third is a smaller section. The roof is supported by a series of vertical lines representing structural elements. The diagram is drawn on a grid.

CHAINAGE 230.000

DATUM RL 83.0

A diagram showing a cross-section of a roof profile. The roof is divided into three sections, each labeled with a 2% slope. The first section is a low-pitched slope, the second is a flat section, and the third is a steeper slope. The diagram illustrates the drainage path for water on the roof.

CHAINAGE 220.000

DATUM RL 83.0

CHAINAGE 210.000

DATUM RL 89.0

A cross-section diagram of a roof edge. A horizontal line represents the roof surface, with a vertical line in the center. On both sides of the center line, the roof slopes downward at a 2% angle, indicated by a '2%' label and a short line segment perpendicular to the slope. The roof ends in a vertical drop-off on the right side.

CHAINAGE 320.743

DATUM RL 88.0

2% 2% 2%

CHAINAGE 290.178

DATUM RL 87.0

CHAINAGE 280.000

DATUM RL 87.0

Year	Percentage of Population Aged 65 and Over
1950	10%
1960	11%
1970	12%
1980	13%
1990	14%
2000	18%
2010	19%
2020	20%
2030	21%
2040	21.5%
2050	22%

CHAINAGE 270.000

DATUM RL 86.0

Number of Children	Percentage of Families
0	2%
1	2%
2	2%
3	10%
4	10%
5	10%
6	10%

CHAINAGE 260.000

CROSS SECTION ALONG MC003

DATUM RL 89.0

CHAINAGE 325.126


REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

CLIENT

moran
FAMILY

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ARCHITECT



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Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

**CROSS SECTIONS - MC003 -
SHEET 02**

JOB NUMBER		181741	
DRAWING NUMBER		REVISION	
DAC06.20		3	
DRAWING SHEET SIZE = A1			

Date : 15.02.2018 11:24 AM

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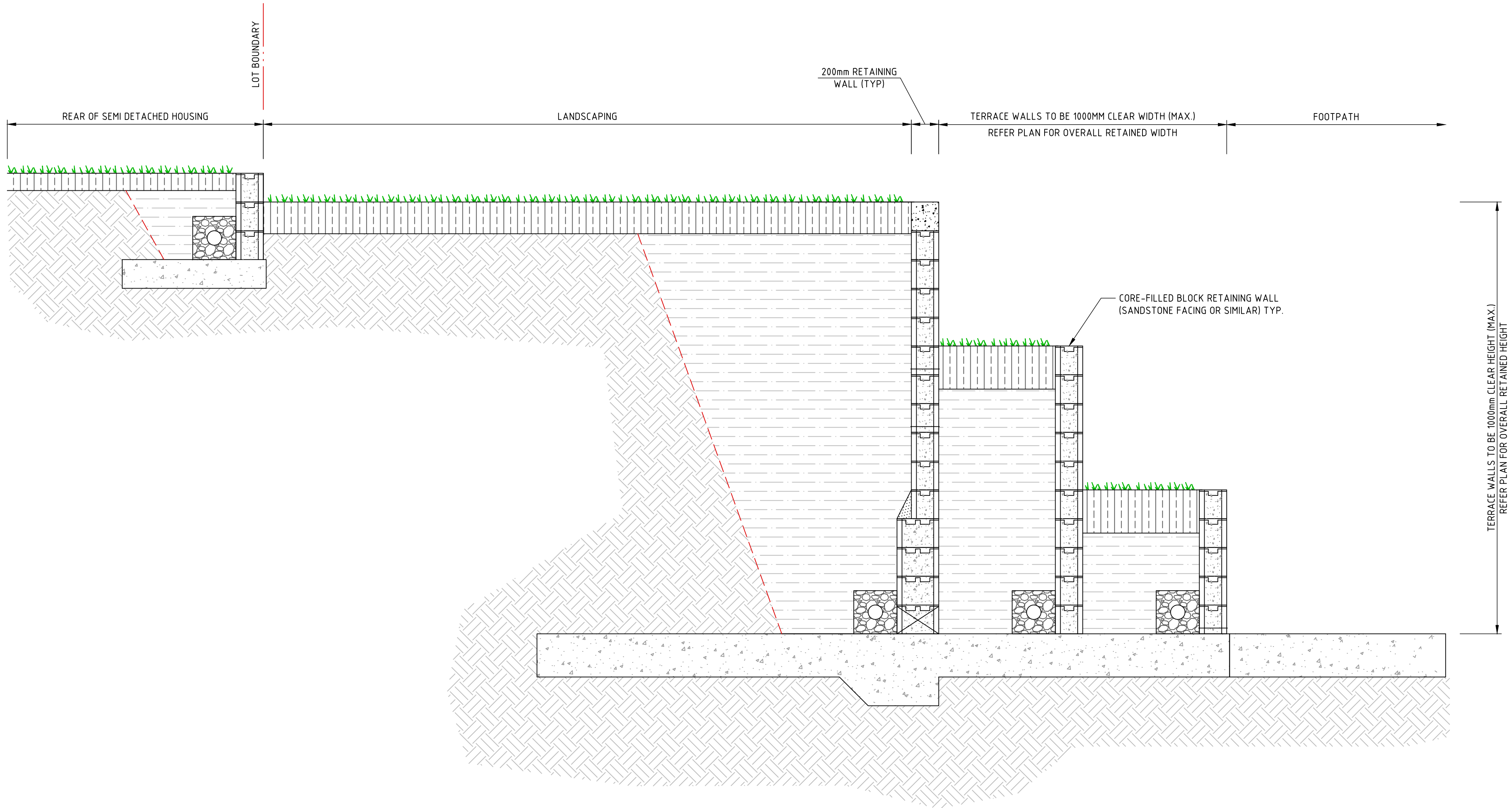
**CROSS SECTIONS - MC003 -
SHEET 02**

JOB NUMBER
181741

DRAWING NUMBER

DRAWING SHEET SIZE = A1

DRAWN: A. MARGARIS DESIGNED: B. LAWRENCE JOB MANAGER: B. LAWRENCE VERIFIER:



TYPICAL TERRACE GARDEN RETAINING WALL DETAIL

SECTION **D**
C04.01

FURTHER DETAIL TO BE PROVIDED AT CONSTRUCTION CERTIFICATE STAGE

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19
2	AMENDED AS PER CLIENT COMMENTS	AM		BL	26.07.19
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20

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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

**131 SPRINGS ROAD,
SPRING FARM**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE
MASTER PLAN**

DETAILS - SHEET 01

JOB NUMBER

181741

DRAWING NUMBER

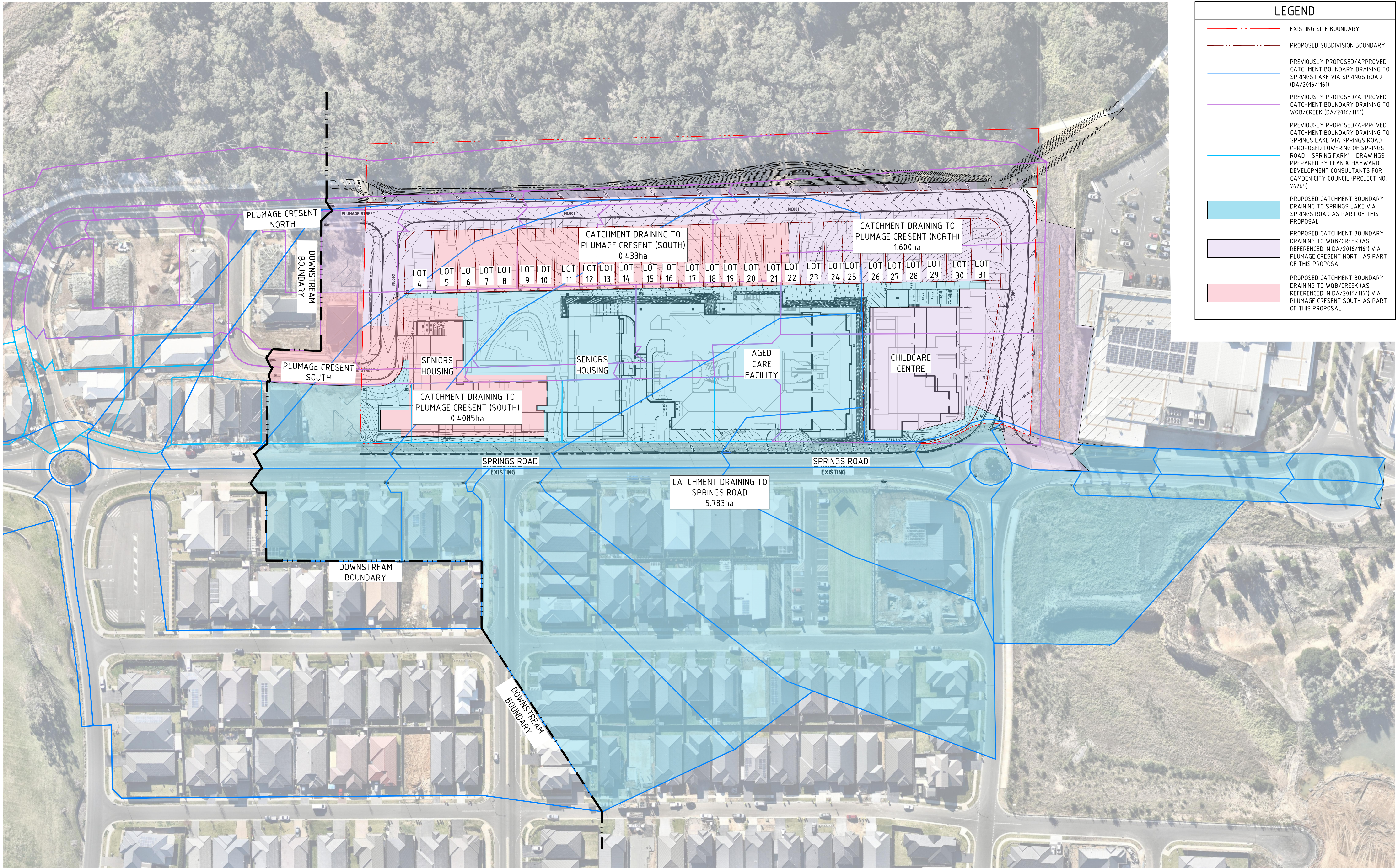
DAC09.01

REVISION

4

DRAWING SHEET SIZE = A1

DRAWN: A. MARGARIS DESIGNED: B. LAWRENCE JOB MANAGER: B. LAWRENCE VERIFIER:



LEGEND	
	EXISTING SITE BOUNDARY
	PROPOSED SUBDIVISION BOUNDARY
	PREVIOUSLY PROPOSED/APPROVED CATCHMENT BOUNDARY DRAINING TO SPRINGS LAKE VIA SPRINGS ROAD (DA/2016/1161)
	PREVIOUSLY PROPOSED/APPROVED CATCHMENT BOUNDARY DRAINING TO WQB/CREEK (DA/2016/1161)
	PREVIOUSLY PROPOSED/APPROVED CATCHMENT BOUNDARY DRAINING TO SPRINGS LAKE VIA SPRINGS ROAD ('PROPOSED LOWERING OF SPRINGS ROAD - SPRING FARM' - DRAWINGS PREPARED BY LEAN & HAYWARD DEVELOPMENT CONSULTANTS FOR CAMDEN CITY COUNCIL (PROJECT NO. 76265))
	PROPOSED CATCHMENT BOUNDARY DRAINING TO SPRINGS LAKE VIA SPRINGS ROAD AS PART OF THIS PROPOSAL
	PROPOSED CATCHMENT BOUNDARY DRAINING TO WQB/CREEK (AS REFERENCED IN DA/2016/1161) VIA PLUMAGE CRESSENT NORTH AS PART OF THIS PROPOSAL
	PROPOSED CATCHMENT BOUNDARY DRAINING TO WQB/CREEK (AS REFERENCED IN DA/2016/1161) VIA PLUMAGE CRESSENT SOUTH AS PART OF THIS PROPOSAL

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
1	ISSUED FOR CLIENT REVIEW	AM		BL	17.07.19	
2	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	23.07.19	
3	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.12.19	
4	ISSUED FOR DEVELOPMENT APPLICATION	AM		BL	19.06.20	

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Sydney

Level 11 345 George Street, Sydney NSW 2000

Ph (02) 9241 4188 Fax (02) 9241 4324

Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

131 SPRINGS ROAD,
SPRING FARM

DRAWING TITLE

CIVIL ENGINEERING PACKAGE
MASTER PLAN

REGIONAL CATCHMENT PLAN

JOB NUMBER

181741

DRAWING NUMBER

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REVISION

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