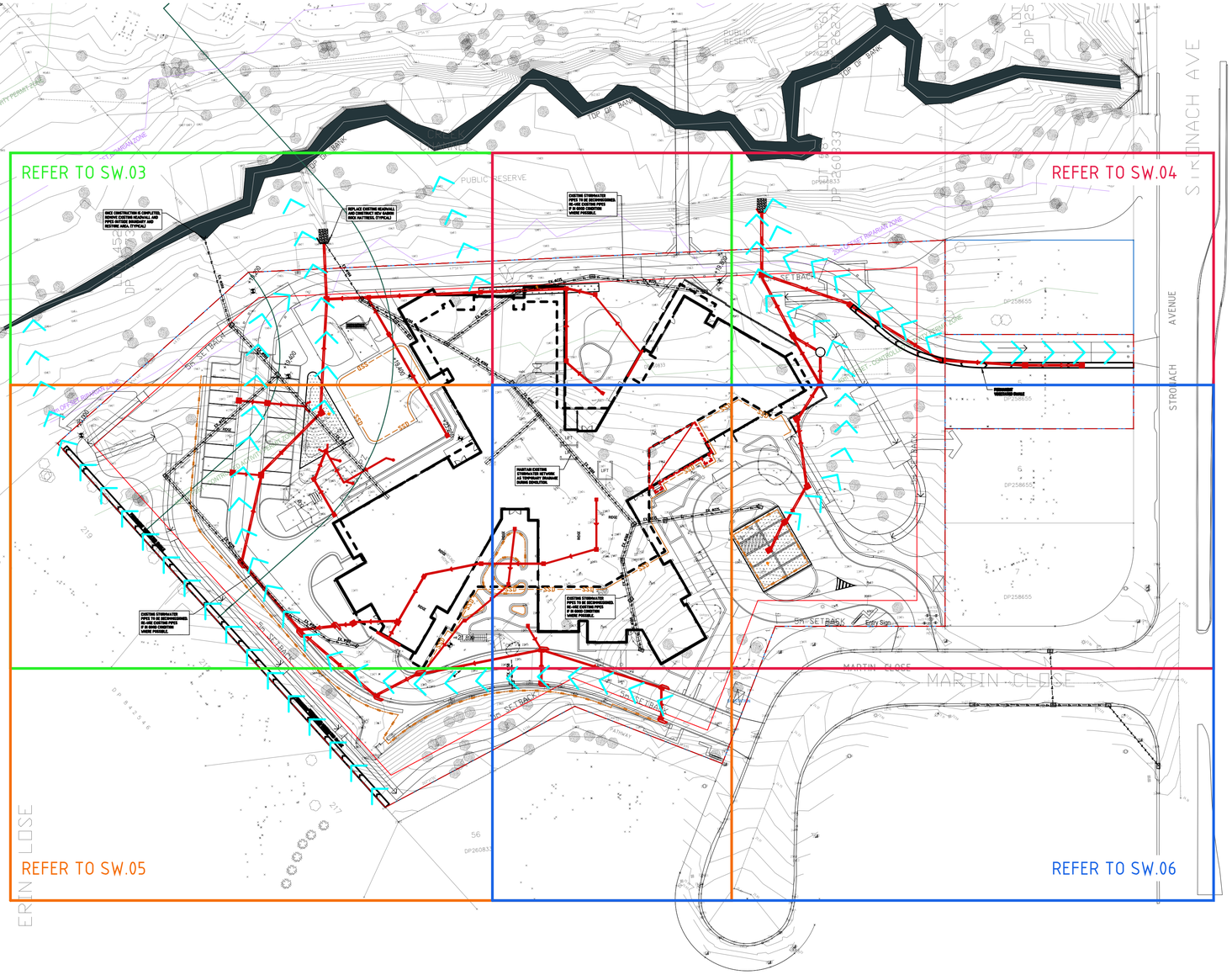


OVERALL SITE PLAN
SCALE 1:500

< < DENOTES OVERLAND FLOW PATH

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
C	OVERLAND FLOW PATH ADDED	PG	18/06/20
B	ISSUE FOR DA	PG	12/06/20
A	PRE-DA DOCUMENTATION	-	26/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER architecture
Telephone : (02) 9698 9822
Address : Level 2, 140 Myrtle St, Chippendale NSW 2008

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue,
East Maitland, NSW 2323

TITLE
OVERALL SITE PLAN

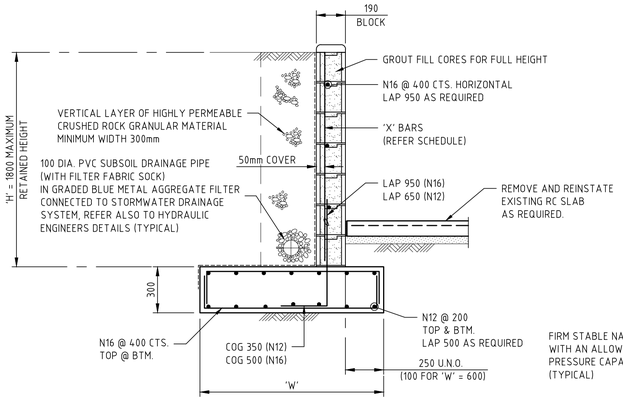
SCALES	DATE
as noted @ A1	APR, 2020

DRAWN	DESIGN	VERIFIED	APPROVED
CKE	CA / PG	CA	PG

ISSUE	PROJECT No.	DRAWING No.
C	191030	SW.02

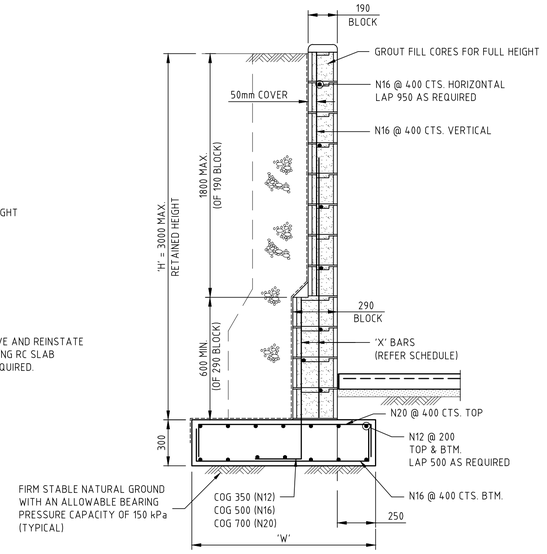
BLOCK RETAINING WALL 'RW1' SCHEDULE

WALL TYPE	WALL HEIGHT 'H'	FOOTING WIDTH 'W'	REINFORCEMENT 'X' BARS
'B'	2400 - 3000	2200	N20@200 CTS.
	1800 - 2400	1800	N20@400 CTS.
'A'	1400 - 1800	1200	N16@400 CTS.
	1000 - 1400	1000	N16@400 CTS.
	750 - 1000	800	N12@400 CTS.
	UP TO 750	600	N12@400 CTS.



R.C. BLOCK RETAINING WALL TYPE 'A' - 'RW1'

SCALE 1:20



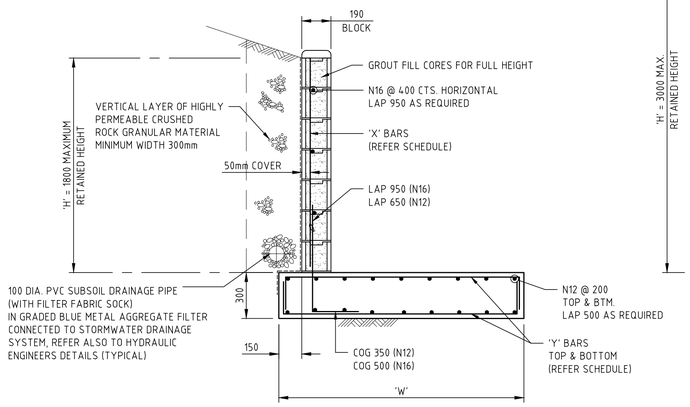
R.C. BLOCK RETAINING WALL TYPE 'B' - 'RW1'

SCALE 1:20

DETAILS AS SHOWN ON TYPE 'A' U.N.O.

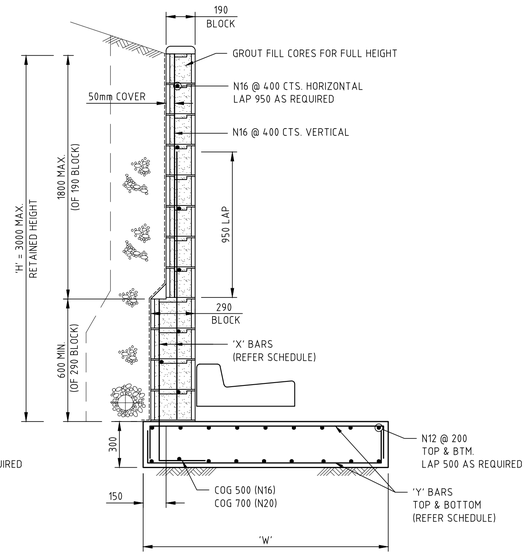
BLOCK RETAINING WALL 'RW2' SCHEDULE

WALL TYPE	WALL HEIGHT 'H'	FOOTING WIDTH 'W'	REINFORCEMENT 'X' BARS	REINFORCEMENT 'Y' BARS
'B'	2400 - 3000	2600	N20 @ 200 CTS.	N20 @ 400 CTS.
	1800 - 2400	2000	N16 @ 400 CTS.	N16 @ 400 CTS.
'A'	1000 - 1800	1600	N16 @ 400 CTS.	N16 @ 400 CTS.
	UP TO 1000	1000	N12 @ 400 CTS.	N16 @ 400 CTS.



R.C. BLOCK RETAINING WALL TYPE 'A' - 'RW2'

SCALE 1:20



R.C. BLOCK RETAINING WALL TYPE 'B' - 'RW2'

SCALE 1:20

DETAILS AS SHOWN ON TYPE 'A' U.N.O.

BLOCK RETAINING WALL VERTICAL CONTROL JOINT

SCALE 1:20
REFER TO ARCHITECTS DRAWINGS FOR LOCATIONS
PROVIDE AT MAXIMUM 8000mm CTS.
5000mm FROM CORNERS U.N.O.

BLOCK RETAINING WALL CORNER DETAIL

SCALE 1:20

TYPICAL RETAINING WALL STRIP FOOTING STEP DETAIL

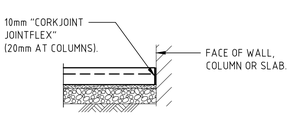
SCALE 1:20
USE AS REQUIRED TO SUIT GROUND CONDITIONS

TYPICAL RETAINING WALL FOOTING CONTROL JOINT FCJ DETAIL

SCALE 1:20

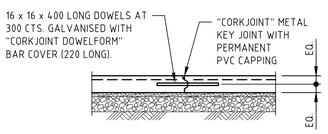
TYPICAL SECTION THROUGH RAMP

SCALE 1:20



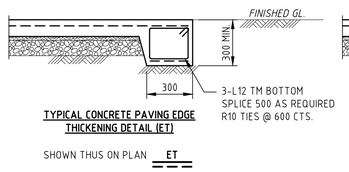
ISOLATION JOINT DETAIL

SHOWN THUS ON PLAN **IJ**



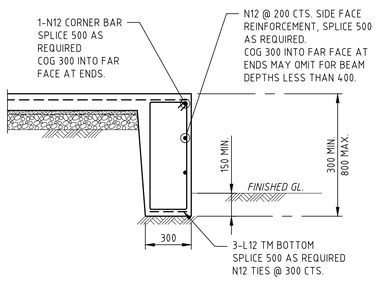
DOWELLED KEY JOINT DETAIL

SHOWN THUS ON PLAN **DKJ**



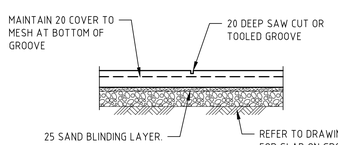
TYPICAL CONCRETE PAVING EDGE THICKENING DETAIL (ET)

SHOWN THUS ON PLAN **ET**



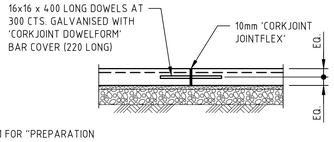
TYPICAL CONCRETE PAVING EDGE THICKENING DETAIL (ET1)

SHOWN THUS ON PLAN **ET1**



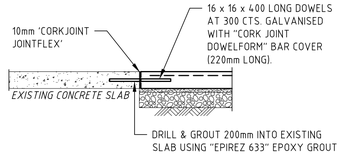
SAWN/TOOLED JOINT DETAIL

SHOWN THUS ON PLAN **SJ**



EXPANSION JOINT DETAIL

SHOWN THUS ON PLAN **EJ**



TYPICAL JUNCTION WITH EXISTING PAVEMENT

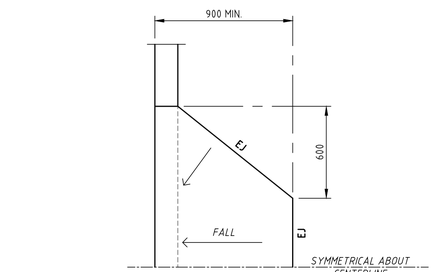
SHOWN THUS ON PLAN **EJX**

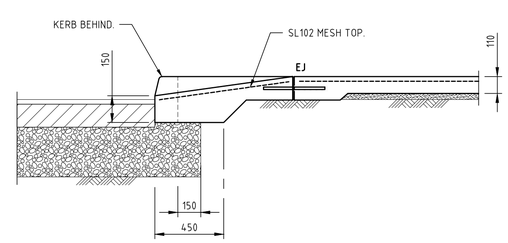
TYPICAL EXTERNAL CONCRETE FOOTPATH PAVEMENT JOINT DETAILS

SCALE 1:20
100mm THICK PAVING SLABS WITH SL92 MESH TOP THROUGHOUT U.N.O.

SAW CUTTING TABLE

DAILY MAXIMUM TEMP. (°C)	LATEST TIME FOR SAWING (HOURS)
< 10	48
10 - 20	36
20 - 30	24
> 30	12





TYPICAL PEDESTRIAN ACCESS RAMP (PRAM RAMP) DETAILS

SCALE 1:20

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
B	ISSUE FOR DA	PG	12/06/20
A	PRE-DA DOCUMENTATION	-	26/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER architecture
Telephone : (02) 9698 9822
Address : Level 2, 140 Myrtle St, Chippendale NSW 2008

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email : office@birzulisassociates.com
www.birzulisassociates.com

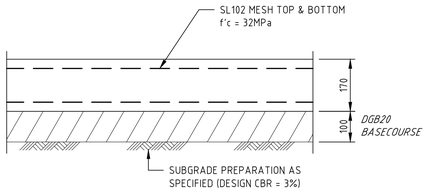
PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue,
East Maitland, NSW 2323

TITLE
CIVIL WORKS DETAILS
SHEET 01

SCALES	DATE
as noted @ A1	APR, 2020

DRAWN	DESIGN	VERIFIED	APPROVED
CKE	CA / PG	CA	PG

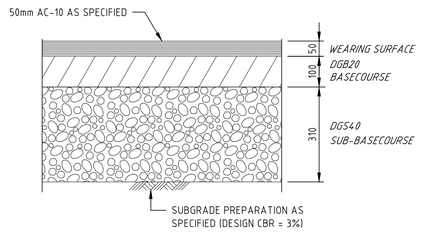
ISSUE	PROJECT No.	DRAWING No.
B	191030	SW.12



TYPICAL CONCRETE DRIVEWAY PAVEMENT SECTION

SCALE 1:10

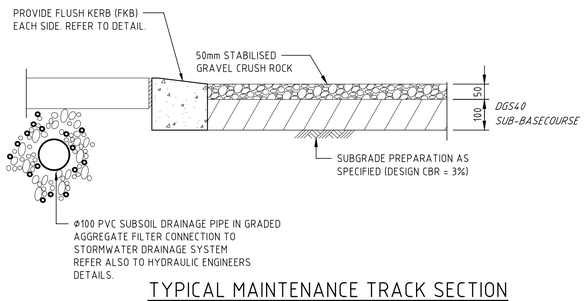
DESIGN TRAFFIC LOADING = $2x10^5$ ESA



TYPICAL FLEXIBLE PAVEMENT SECTION

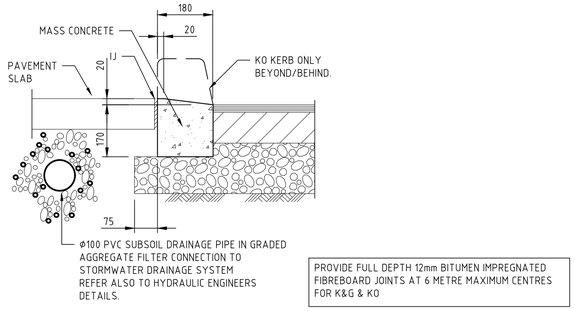
SCALE 1:10

DESIGN TRAFFIC LOADING = $6x10^4$ ESA



TYPICAL MAINTENANCE TRACK SECTION

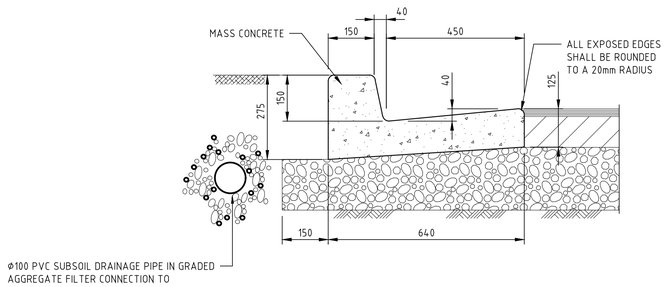
SCALE 1:10



PROVIDE FULL DEPTH 12mm BITUMEN IMPREGNATED FIBREBOARD JOINTS AT 6 METRE MAXIMUM CENTRES FOR K&G & K0

TYPICAL FKB FLUSH KERB DETAIL

SCALE 1:10

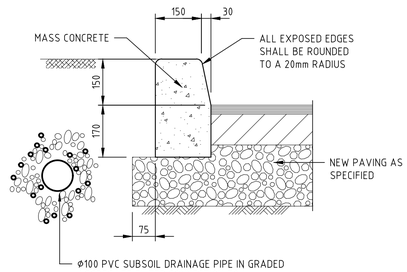


TYPICAL 'KG' KERB & GUTTER DETAIL

SCALE 1:10

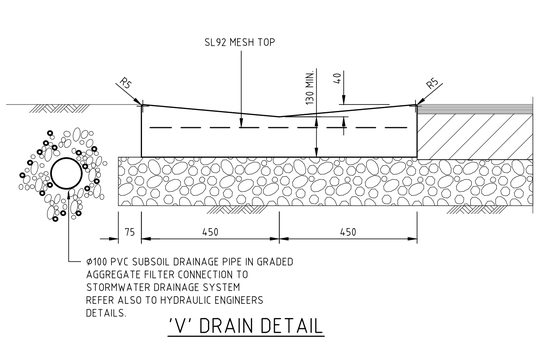
DENOTED 'KG' ON PLAN

PROVIDE FULL DEPTH 12mm BITUMEN IMPREGNATED FIBREBOARD JOINTS AT 6 METER MAXIMUM CENTERS



TYPICAL 'KO' KERB ONLY DETAIL

SCALE 1:10



'V' DRAIN DETAIL

SCALE 1:10

PROVIDE FULL DEPTH 12mm BITUMEN IMPREGNATED FIBREBOARD JOINTS AT 6 METRE MAXIMUM CENTRES U.N.O.

SPECIFICATION FOR CONSTRUCTION OF ROAD PAVEMENT

1. All work to be in accordance with the Specification.

SUBGRADE

2. Clear the area to be occupied by the pavement and its adjuncts. Break up and remove foundations, slabs, paving etc. found on the surface or within 300mm of the basecourse. Remove all topsoil and organic matter and grub out all roots and stumps. Remove all rubble remaining from excavations.

3. The subgrade material (natural ground below excavations) shall be thoroughly compacted by proof rolling with a minimum of 8 passes of a 10 tonne dead weight static smooth drum roller. This proof rolling shall be inspected by the geotechnical engineering consultant, to determine the extent of replacement of any unsuitable material encountered. The cost of all such work shall be deemed to be included in the Contractors tender.

4. Any soft, yielding, organic or other unsuitable material in the subgrade shall be removed for a depth of at least 300mm and holes so formed shall be filled with approved filling compacted in 150mm layers as specified below.

5. Bring all filling on to the site unless it can be provided from spoil recovered from the site. Filling shall be sound clean stable material, free of perishable material or any other material that will not form stable fill. The fill material shall be capable of consolidation so that it is firm and unyielding throughout its depth.

6. Place filling in layers not exceeding 200mm thick when measured loose. Bring filling to optimum moisture content (+/- 2%) by watering and compact each layer thoroughly and uniformly with a vibrating roller.

7. Consolidate each layer of filling to obtain a uniform density of not less than 100% of the standard maximum dry density of the material as determined by AS1289.5.1.1.

SUBBASE

8. The sub-basecourse layer shall consist of 310mm finished compacted thickness of crushed rock in accordance with RTA QA Specification 3051 and RTA QA Specification R71. The material used for this course shall be a Class 2 DGS 40 in accordance with the aforementioned standards.

   Design Original Subgrade CBR = 3.0%
   Design Traffic Loading = 6 x 10^4 ESA

BASE

9. The basecourse layer shall consist of 100mm finished compacted thickness of crushed rock in accordance with RTA QA Specification 3051 and RTA QA Specification R71. The material used for this course shall be Class 1 DGB 20 in accordance with the aforementioned standards.

WEARING SURFACE

10. The wearing surface course shall be provided with an initial two coat hot bitumen seal.

11. The wearing surface course shall be a 50mm compacted thickness of 25mm asphaltic concrete laid on the two coat seal in accordance with RTA QA Specification R116.

TESTING

12. The Contractor shall allow for testing at the rate of one test per 100 square metres of surface area for each of the following finished surfaces, with a minimum of three tests for each compacted layer.
    - Subgrade
    - Sub-basecourse
    - Basecourse

13. The Contractor shall allow for testing at the rate of one test per 30 cubic metres for the filling, with a minimum of three tests for each compacted layer.

14. The location of all tests shall be to the approval of the Superintendent.

15. The Contractor shall obtain from a registered N.A.T.A. testing authority documented test evidence proving that the compaction figures as required for the materials specified herein have been obtained. The cost of such work shall be deemed to be included in the Contractor's Tender.
    Test results for each stage (i.e. subgrade, subbase, basecourse and fill where applicable) to be submitted to the Superintendent prior to proceeding to the next stage of the works.

GENERAL

1. These civil drawings shall be read in conjunction with all architectural and other consultant's drawings and specifications and with such other written instructions as may be issued during the course of the contract. Any discrepancy shall be referred to the Superintendent before proceeding with the work.

2. All materials and workmanship shall be in accordance with the relevant current Standards Australia Codes and with the Building Code of Australia.

3. All dimensions shown on these civil drawings shall be verified by the Contractor on site. These structural drawings shall not be scaled for dimensions.

4. The method of construction and the maintenance of safety during construction is the responsibility of the Contractor. If any structural element presents difficulty in respect of constructability or safety, the matter shall be referred to the Structural Engineer for resolution before proceeding with the work.

5. During construction the structure shall be maintained in a stable condition and no part shall be overstressed. The design, installation and maintenance of all temporary propping, bracing and shoring shall be provided by the Contractor to keep the works and excavations stable at all times. The cost of all such work shall be deemed to be included in the Contractor's tender.

PREPARATION FOR SLAB ON GROUND

1. Clear the area to be occupied by the pavement and its adjuncts. Break up and remove slabs, foundations, paving, etc. found on the surface or within 300mm of the basecourse. Remove all topsoil and organic matter and grub out all roots and stumps. Remove all rubble remaining from excavations.

2. The subgrade material (natural ground below the excavations) shall be thoroughly compacted by proof rolling with a minimum of 8 passes of a 10 tonne dead weight roller. This proof rolling shall be inspected by an approved geotechnical engineering consultant, engaged by the contractor, to determine the extent of replacement of any unsuitable material. The cost of these inspections shall be deemed to be included in the contractors tender.

3. Any soft, yielding, organic or other unsuitable material in the subgrade shall be removed for a depth of at least 300mm and holes so formed shall be filled with approved filling compacted in 150mm layers as specified below.

4. Bring all filling on to the site unless it can be provided from spoil recovered from the site. Filling shall be sound clean stable material free of perishable material or any other material that will not form stable fill. The fill material shall be capable of consolidation so that it is firm and unyielding throughout its depth.

5. Place filling in layers not exceeding 200mm thick when measured loose. Bring filling to optimum moisture content (+/- 2%) by watering and compact each layer thoroughly and uniformly with a vibrating roller where practicable. Hand tamp in areas not accessible to a vibrating roller.

6. For the backfilling of localised excavations lightweight compaction equipment is to be used and filling placed in layers not exceeding 100mm thick when measured loose.

7. Consolidate each layer of filling to obtain a uniform density strictly between 98% and 102% of the standard maximum dry density of the material as determined by AS2159.5.1.1.

8. The basecourse layer (directly below the slab) shall consist of 100mm finished compacted thickness of crushed rock blinded with 25mm of sand.

9. The basecourse material shall be clean, tough, durable and free of any weathered or disintegrated stone, clay, organic matter or any other deleterious materials.

10. The crushed rock shall be compacted with approved equipment to obtain a uniform density of not less than 100% of the standard maximum dry density of material as determined by AS1289.5.1.1.

11. Finish the basecourse to the following tolerances:
    Variation from design level - 5mm
    Variation from 3000mm straight edge - 5mm

12. All earthworks shall be carried out under Level 1 control as defined in AS3798.

13. The Contractor shall allow for testing at the rate of one test per 200 square metres of surface area for each of the following finished surfaces, with a minimum of three tests for each compacted layer:

    - Subgrade
    - Basecourse (at surface of crushed rock)

14. The Contractor shall allow for testing at the rate of one test per 30 cubic metres for the filling, with a minimum of three tests for each compacted layer.

15. The location of all tests shall be to the approval of the Superintendent.

16. The Contractor shall obtain approval from a registered N.A.T.A. testing authority documented test evidence proving that the compaction figures as required for the materials specified herein have been obtained. The cost of such work shall be deemed to be included in the Contractor's Tender.

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
C	ISSUE FOR DA	PG	12/06/20
B	FLUSH KERB DETAIL ADDED	PG	02/06/20
A	PRE-DA DOCUMENTATION	-	26/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER
architecture
Telephone : (02) 9698 9822
Address : Level 2, 140 Myrtle St, Chippendale NSW 2008

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email : office@birzulisassociates.com
www.birzulisassociates.com

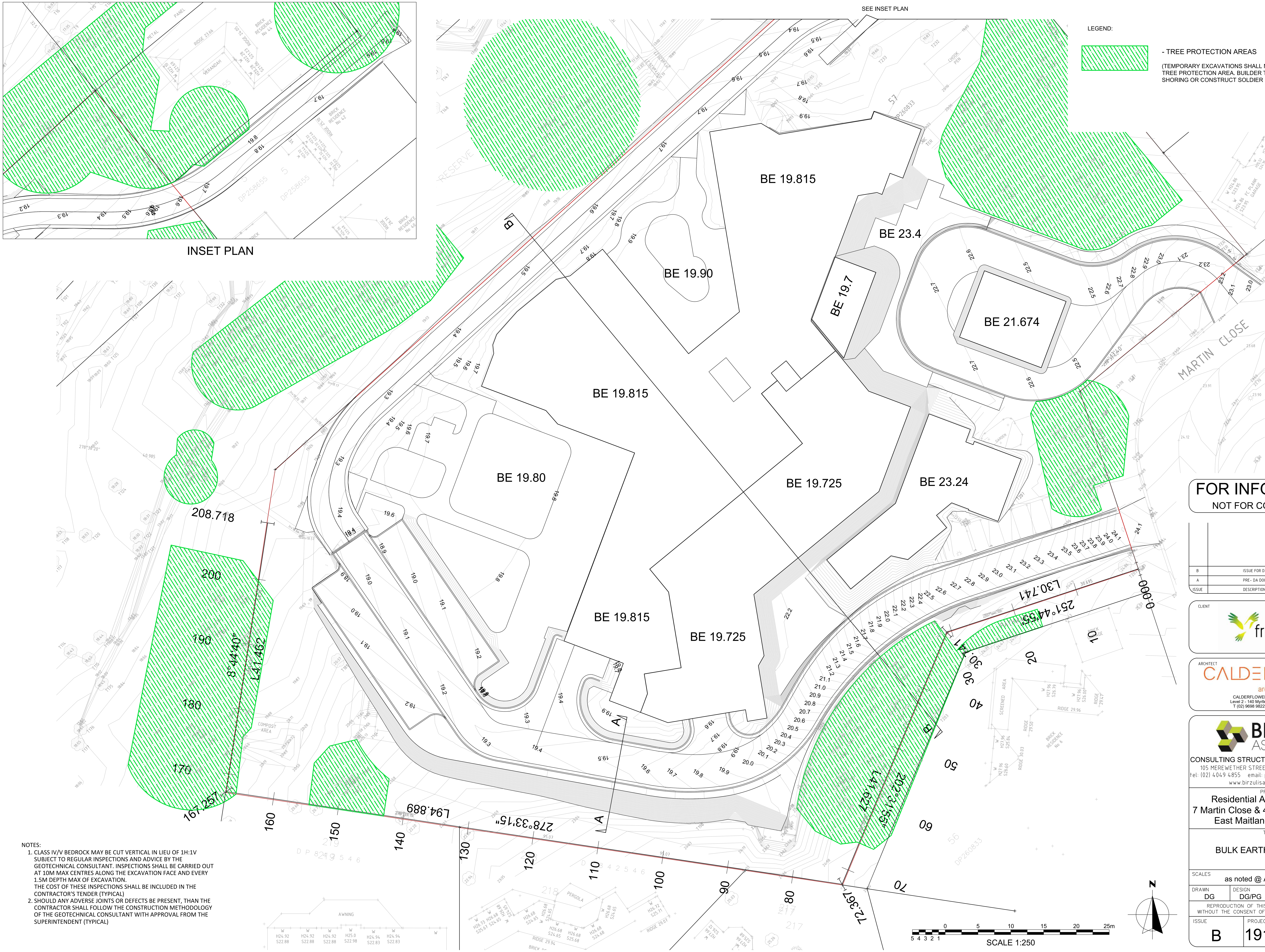
PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue,
East Maitland, NSW 2323

TITLE
CIVIL WORKS DETAILS
SHEET 02

SCALES	DATE
as noted @ A1	APR, 2020

DRAWN	DESIGN	VERIFIED	APPROVED
CKE	CA / PG	CA	PG

ISSUE	PROJECT No.	DRAWING No.
C	191030	SW.13



LEGEND:

- TREE PROTECTION AREAS

(TEMPORARY EXCAVATIONS SHALL NOT ENCROACH INTO TREE PROTECTION AREA. BUILDER TO PROVIDE TEMPORARY SHORING OR CONSTRUCT SOLDIER PILE WALL)

NOTES:

1. CLASS IV/V BEDROCK MAY BE CUT VERTICAL IN LIEU OF 1H:1V SUBJECT TO REGULAR INSPECTIONS AND ADVICE BY THE GEOTECHNICAL CONSULTANT. INSPECTIONS SHALL BE CARRIED OUT AT 10M MAX CENTRES ALONG THE EXCAVATION FACE AND EVERY 1.5M DEPTH MAX OF EXCAVATION. THE COST OF THESE INSPECTIONS SHALL BE INCLUDED IN THE CONTRACTOR'S TENDER (TYPICAL)
2. SHOULD ANY ADVERSE JOINTS OR DEFECTS BE PRESENT, THAN THE CONTRACTOR SHALL FOLLOW THE CONSTRUCTION METHODOLOGY OF THE GEOTECHNICAL CONSULTANT WITH APPROVAL FROM THE SUPERINTENDENT (TYPICAL)

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
B	ISSUE FOR DA	PG	12/06/20
A	PRE- DA DOCUMENTATION	PG	25/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER architecture
CALDERFLOWER ARCHITECTS PTY LTD
Level 2 - 140 Myrtle St Chippendale NSW 2008
T (02) 9698 9822 www.calderflower.com.au

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email: pgrogan@birzulisassociates.com
www.birzulisassociates.com

PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue, East Maitland, NSW 2323

TITLE
BULK EARTHWORKS PLAN

SCALES	DATE
as noted @ A1	MAY, 2020

DRAWN	DESIGN	VERIFIED	APPROVED
DG	DG/PG	CA	PG

ISSUE	PROJECT No.	DRAWING No.
B	191030	C.01

CUT AND FILL DEPTH RANGE				
Lower_value		Upper_value		Colour
-30.0	to	-5.8	m	
-5.8	to	-5.6	m	
-5.6	to	-5.4	m	
-5.4	to	-5.2	m	
-5.2	to	-5.0	m	
-5.0	to	-4.8	m	
-4.8	to	-4.6	m	
-4.6	to	-4.4	m	
-4.4	to	-4.2	m	
-4.2	to	-4.0	m	
-4.0	to	-3.8	m	
-3.8	to	-3.6	m	
-3.6	to	-3.4	m	
-3.4	to	-3.2	m	
-3.2	to	-3.0	m	
-3.0	to	-2.8	m	
-2.8	to	-2.6	m	
-2.6	to	-2.4	m	
-2.4	to	-2.2	m	
-2.2	to	-2.0	m	
-2.0	to	-1.8	m	
-1.8	to	-1.6	m	
-1.6	to	-1.4	m	
-1.4	to	-1.2	m	
-1.2	to	-1.0	m	
-1.0	to	-0.8	m	
-0.8	to	-0.6	m	
-0.6	to	-0.4	m	
-0.4	to	-0.2	m	
-0.2	to	0.0	m	

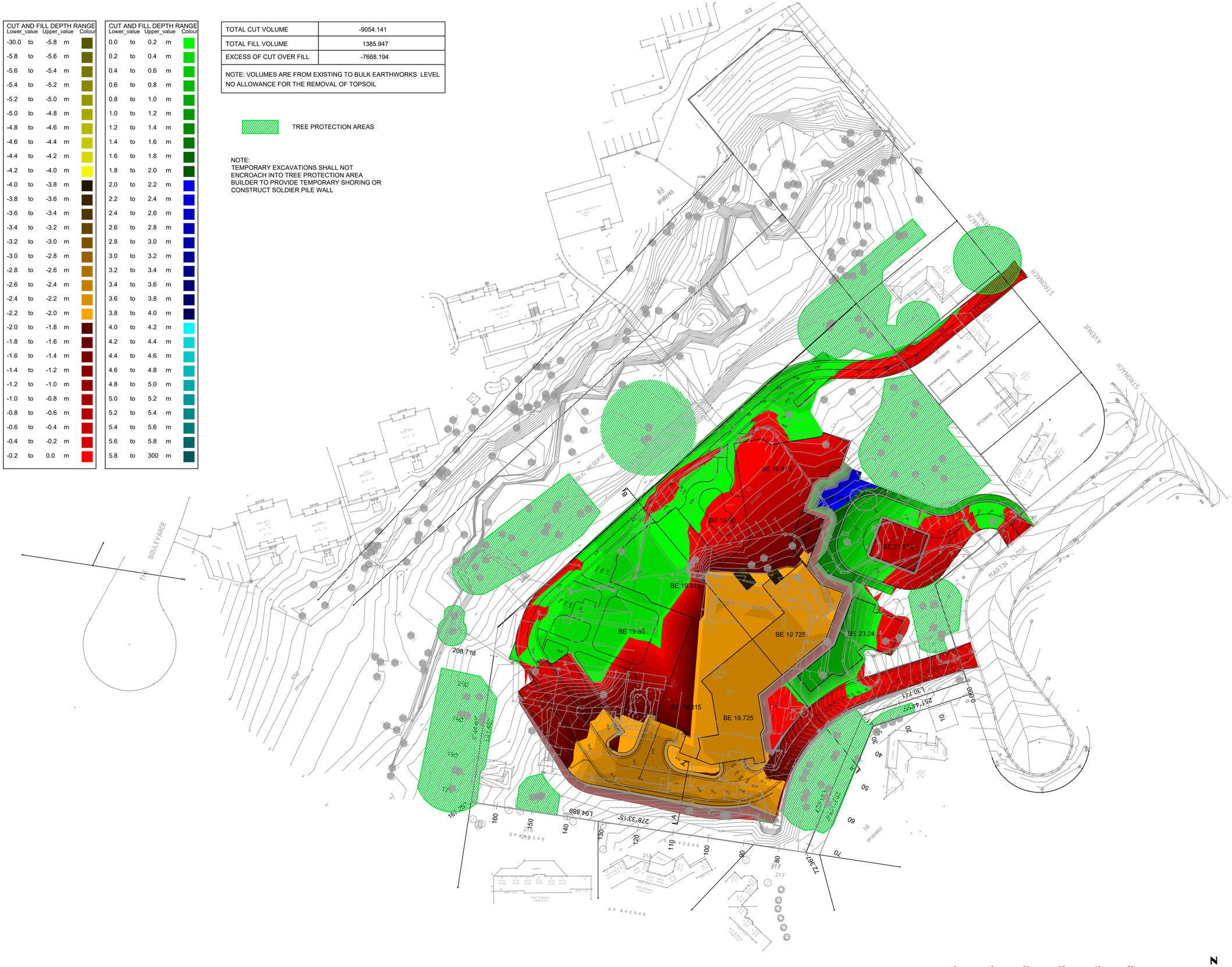
CUT AND FILL DEPTH RANGE				
Lower_value		Upper_value		Colour
0.0	to	0.2	m	
0.2	to	0.4	m	
0.4	to	0.6	m	
0.6	to	0.8	m	
0.8	to	1.0	m	
1.0	to	1.2	m	
1.2	to	1.4	m	
1.4	to	1.6	m	
1.6	to	1.8	m	
1.8	to	2.0	m	
2.0	to	2.2	m	
2.2	to	2.4	m	
2.4	to	2.6	m	
2.6	to	2.8	m	
2.8	to	3.0	m	
3.0	to	3.2	m	
3.2	to	3.4	m	
3.4	to	3.6	m	
3.6	to	3.8	m	
3.8	to	4.0	m	
4.0	to	4.2	m	
4.2	to	4.4	m	
4.4	to	4.6	m	
4.6	to	4.8	m	
4.8	to	5.0	m	
5.0	to	5.2	m	
5.2	to	5.4	m	
5.4	to	5.6	m	
5.6	to	5.8	m	
5.8	to	300	m	

TOTAL CUT VOLUME	-9054.141
TOTAL FILL VOLUME	1385.947
EXCESS OF CUT OVER FILL	-7668.194

NOTE: VOLUMES ARE FROM EXISTING TO BULK EARTHWORKS LEVEL
NO ALLOWANCE FOR THE REMOVAL OF TOPSOIL

TREE PROTECTION AREAS

NOTE:
TEMPORARY EXCAVATIONS SHALL NOT ENCROACH INTO TREE PROTECTION AREA
BUILDER TO PROVIDE TEMPORARY SHORING OR CONSTRUCT SOLDIER PILE WALL



FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
B	ISSUE FOR DA	PG	12/06/20
A	PRE- DA DOCUMENTATION	PG	25/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER
architecture
CALDERFLOWER ARCHITECTS PTY LTD
Level 2 - 140 Myrtle St Chippendale NSW 2008
T (02) 9698 9822 www.calderflower.com.au

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email: pgrogan@birzulisassociates.com
www.birzulisassociates.com

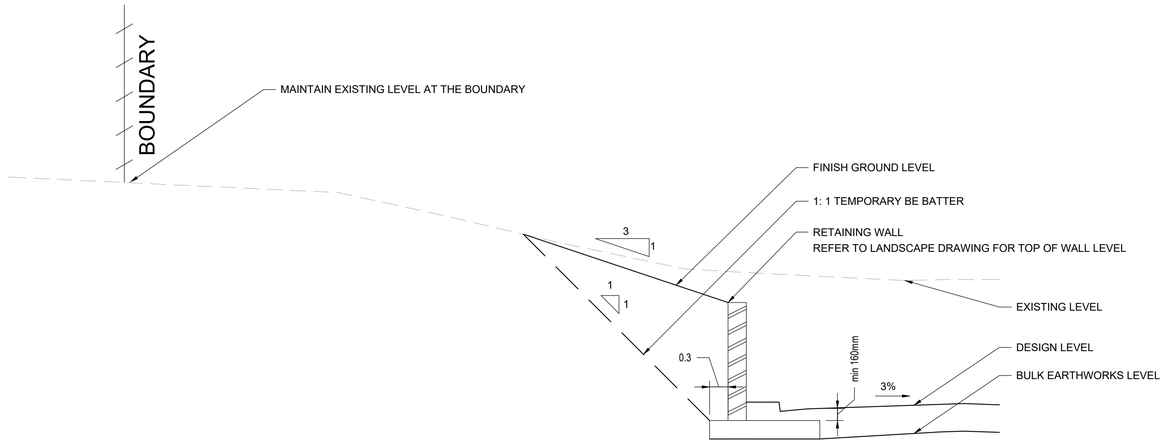
PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue,
East Maitland, NSW 2323

TITLE
BULK EARTHWORKS
CUT AND FILL PLAN

SCALES	DATE
as noted @ A1	MAY, 2020

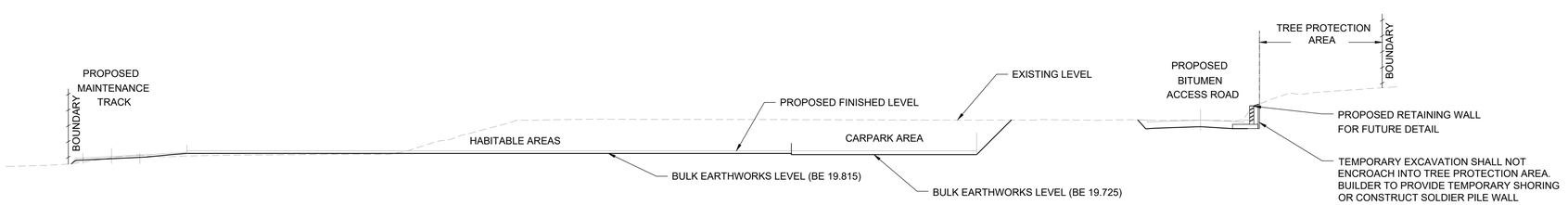
DRAWN	DESIGN	VERIFIED	APPROVED
DG	DG/PG	-	-

ISSUE	PROJECT No.	DRAWING No.
B	191030	C.02



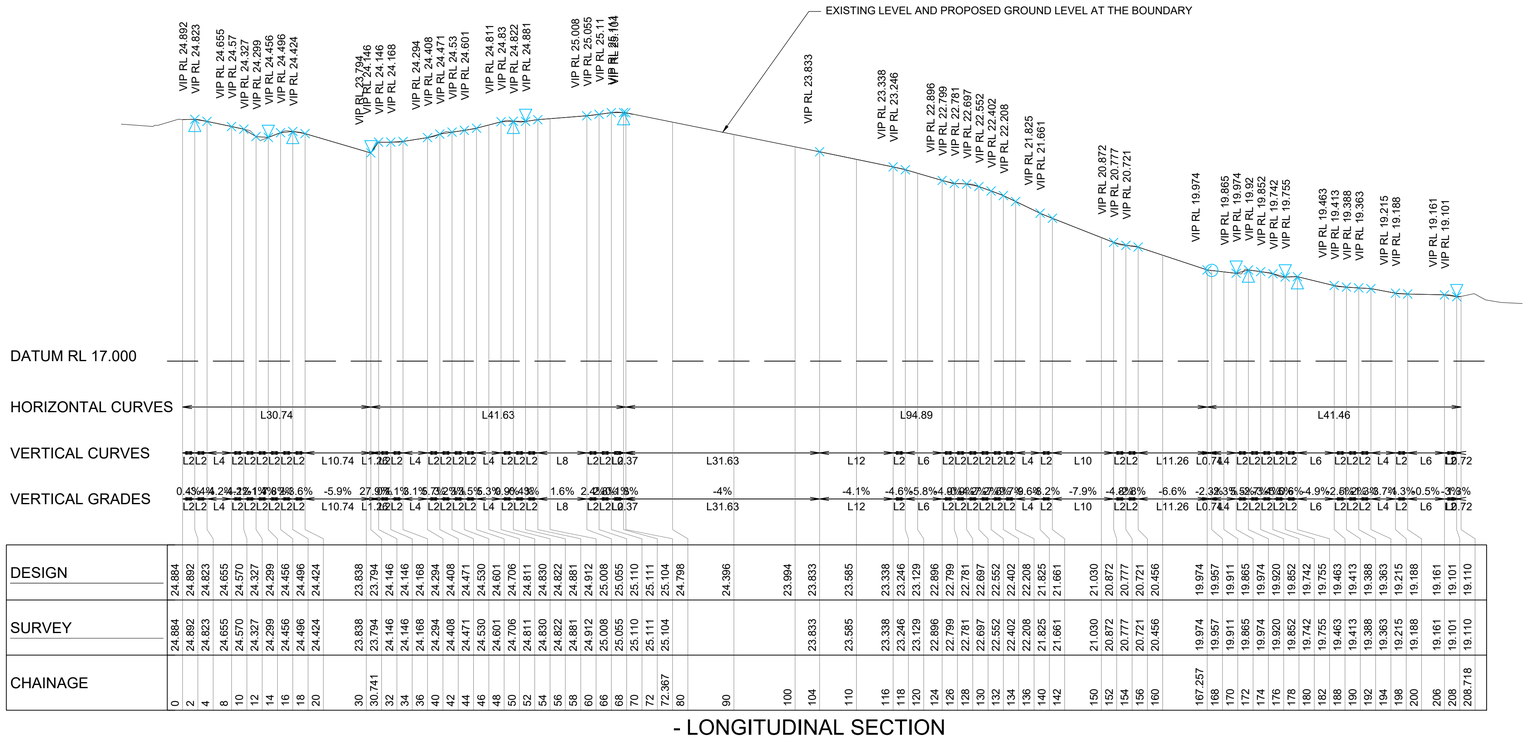
SECTION THRU A-A

SCALE 1:50

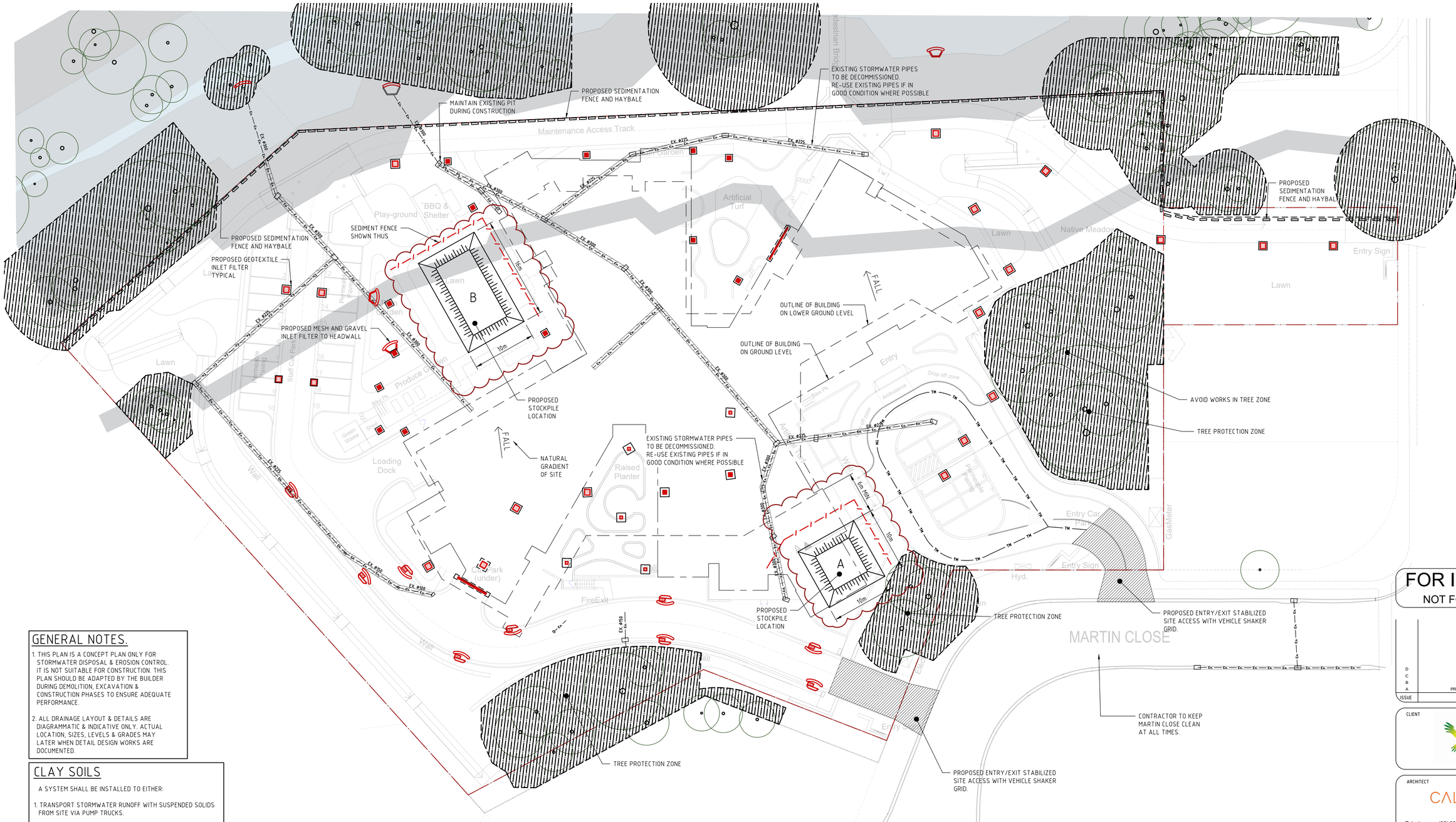


SECTION THRU B-B

SCALE 1:200



| | | |



GENERAL NOTES.

1. THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.

2. ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY LATER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

CLAY SOILS

A SYSTEM SHALL BE INSTALLED TO EITHER:

1. TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.

2. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY THE LOCAL COUNCIL.

EROSION & SEDIMENTATION CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.

2. EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.

3. NO PARKING OR STOCKPILING OF MATERIAL IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.

4. GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.

5. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

SOIL EROSION AND SEDIMENT CONTROL PLAN

SCALE 1:300

LEGEND/KEY PLAN

- TREE PROTECTION ZONE
- MESH AND GRAVEL INLET FILTER
- SEDIMENTATION FENCE AND HAYBALE
- GEOTEXTILE FABRIC

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
D	STOCKPILES ADDED	PG	03/09/20
C	ISSUE FOR DA	PG	12/06/20
B	DRAWING REVISED	PG	02/06/20
A	PRE-DA DOCUMENTATION	-	26/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER architecture
Telephone : (02) 9698 9822
Address : Level 2, 140 Myrtle St, Chippendale NSW 2008

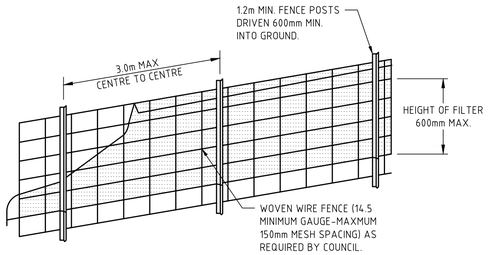
BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue,
East Maitland, NSW 2323

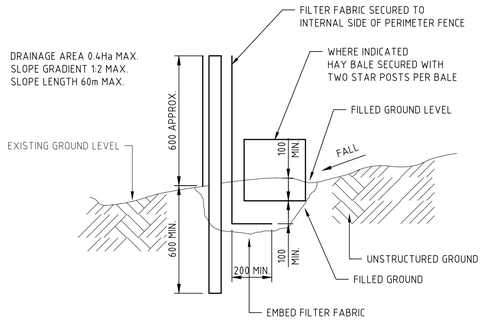
TITLE
SOIL EROSION AND SEDIMENT CONTROL PLAN

SCALES		DATE
as noted @ A1		APR' 2020
DRAWN	DESIGN	VERIFIED	APPROVED
JM	CA / PG	CA	PG

ISSUE	PROJECT No.	DRAWING No.
D	191030	SW.10



DIAGRAMMATIC VIEW



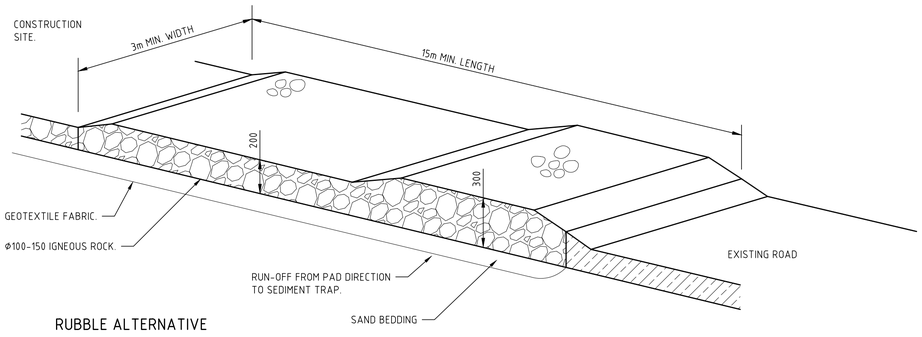
TYPICAL SECTION

SEDIMENT FENCE AND HAYBALE BARRIER DETAIL

NOT TO SCALE

SEDIMENT FENCE 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 1.2m LONG STAR PICKETS INTO GROUND @ 3m 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.



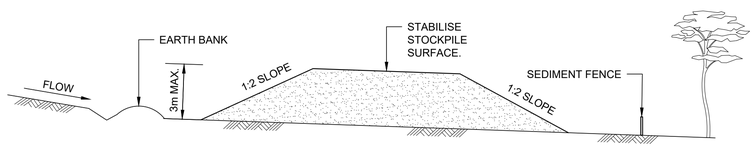
RUBBLE ALTERNATIVE

TEMPORARY CONSTRUCTION EXIT

NOT TO SCALE

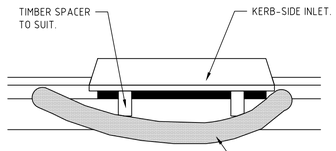
STOCKPILE CONSTRUCTION NOTES:

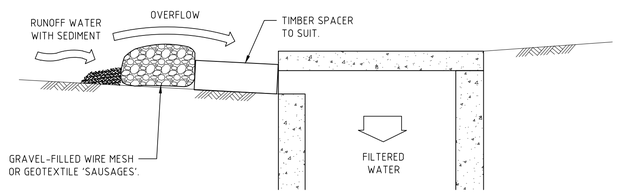
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 3 METRES IN HEIGHT.
4. WHERE THEY ARE TO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



STOCKPILES DETAIL

NOT TO SCALE



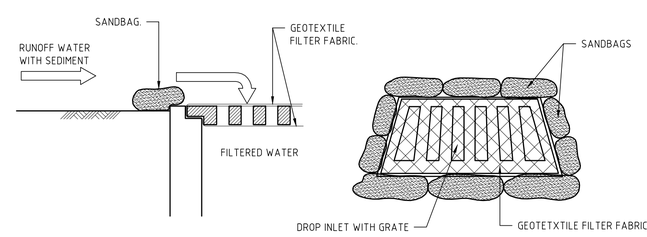


MESH AND GRAVEL INLET FILTER

SCALE 1:20

NOTES:

1. 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.
2. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH A 400mm WIDE.
3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
5. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY CAN FIRMLY ABUT EACH OTHER AND SEDIMENT/LADEN WATERS CANNOT PASS BETWEEN.



GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP

NOT TO SCALE

NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.
2. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANK AS SHOWN IN THE DRAWING.
3. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
C	STOCKPILE DETAILS ADDED	PG	03/09/20
B	ISSUE FOR DA	PG	12/06/20
A	PRE-DA DOCUMENTATION	-	26/05/20

CLIENT
fresh hope care

ARCHITECT
CALDERFLOWER
architecture
Telephone : (02) 9698 9822
Address : Level 2, 140 Myrtle St, Chippendale NSW 2008

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
105 MEREWETHER STREET, MEREWETHER NSW 2291
tel: (02) 4049 4855 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT
Residential Aged Care Facility
7 Martin Close & 42 Stronach Avenue,
East Maitland, NSW 2323

TITLE
SOIL EROSION AND SEDIMENT CONTROL DETAILS

SCALES			DATE
as noted @ A1			APR' 2020
DRAWN	DESIGN	VERIFIED	APPROVED
JM	CA / PG	CA	PG

ISSUE	PROJECT No.	DRAWING No.
C	191030	SW.11