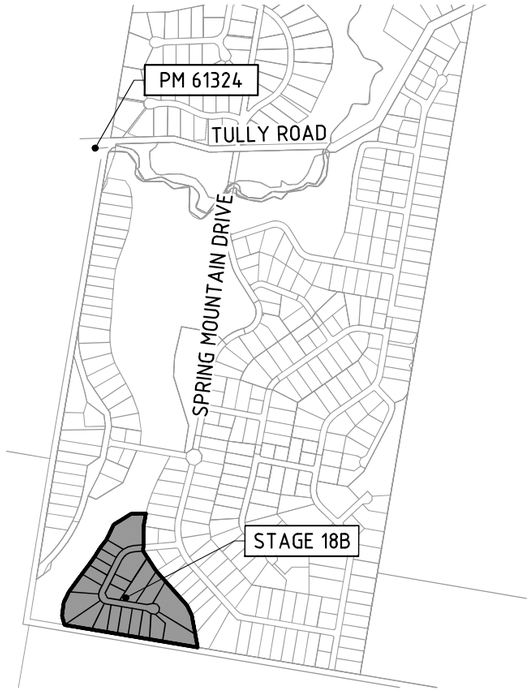
APPLICATION No.
DEV RL/44/2008/F

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B



LOCALITY PLAN
SCALE NTS

PLAN
SCALE 1:2000

DRAWING INDEX

DRAWING NO.	DRAWING TITLE
18-201-01	GENERAL - LOCALITY PLAN, DRAWING INDEX AND NOTES
18-201-02	GENERAL - SETOUT PLAN
18-201-03	GENERAL - LAYOUT PLAN - SHEET 1
18-201-04	GENERAL - LAYOUT PLAN - SHEET 2
18-201-05	GENERAL - LAYOUT PLAN - SHEET 3
18-201-06	EARTHWORKS - CONTOUR PLAN - SHEET 1
18-201-07	EARTHWORKS - CONTOUR PLAN - SHEET 2
18-201-08	EARTHWORKS - CONTOUR PLAN - SHEET 3
18-201-09	EARTHWORKS - BUSHFIRE ACCESS TRAIL - TYPICAL SECTIONS
18-201-10	ROADWORKS - LONGITUDINAL SECTION - DAWSON CLOSE
18-201-11	ROADWORKS - CROSS SECTIONS - DAWSON CLOSE - SHEET 1
18-201-12	ROADWORKS - CROSS SECTIONS - DAWSON CLOSE - SHEET 2
18-201-13	ROADWORKS - CROSS SECTIONS - DAWSON CLOSE - SHEET 3
18-201-14	ROADWORKS - INTERSECTION DETAILS
18-201-15	STORMWATER - CATCHMENT PLAN
18-201-16	STORMWATER - CALCULATION TABLE
18-201-17	STORMWATER - LONGITUDINAL SECTIONS AND GULLY DETAIL
18-201-18	STORMWATER - CULVERT DETAIL
~~18-201-19~~	~~EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - CONSTRUCTION PHASE - SHEET 1~~
~~18-201-20~~	~~EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - CONSTRUCTION PHASE - SHEET 2~~
~~18-201-21~~	~~EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - CONSTRUCTION PHASE - SHEET 3~~
18-201-22	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - POST CONSTRUCTION PHASE - SHEET 1
18-201-23	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - POST CONSTRUCTION PHASE - SHEET 2
18-201-24	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - POST CONSTRUCTION PHASE - SHEET 3
18-201-25	EROSION AND SEDIMENT CONTROL - NOTES
18-201-26	EROSION AND SEDIMENT CONTROL - DETAILS
18-201-27	WATER RETICULATION - LAYOUT PLAN - SHEET 1
18-201-28	WATER RETICULATION - LAYOUT PLAN - SHEET 2
18-201-29	WATER RETICULATION - LIVE CONNECTION DETAILS AND NOTES
~~18-201-30~~	~~SAFETY IN DESIGN~~
18-201-31	TARP EXTENTS - SHEET 1
18-201-32	TARP EXTENTS - SHEET 2
18-201-33	TARP EXTENTS - SHEET 3
18-201-34	EASEMENT PLAN

GENERAL NOTES

1. ALL WORK SHALL BE JOINED NEATLY TO EXISTING CONSTRUCTION.
2. WHERE REFERENCE IS MADE ON THESE DRAWINGS TO A KERB LINE, IT SHALL BE TAKEN TO MEAN THE KERB INVERT LINE.
3. LEVELS FOR KERB AND CHANNEL CONSTRUCTION ARE SHOWN AT LIP OF CHANNEL UNLESS SHOWN OTHERWISE.
4. KERB AND CHANNEL AND SPOON DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA STANDARD DWG NO SEQ RS-80. SPOON DRAINS ACROSS ROAD INTERSECTIONS SHALL BE IN ACCORDANCE WITH INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA STD DWG NO SEQ RS-80. THE CONCRETE SHALL BE CLASS N32 AND THE DEPTH INCREASED BY 50mm TO 175mm AT INVERT. FLUSH KERB TO BE INCREASED IN DEPTH BY 50mm TO 280mm.
5. IF MACHINE MADE KERB AND CHANNEL IS USED, EXTRA FINES AND 20mm SLUMP IS REQUIRED.
6. ALL DRAINAGE CENTRE LINES ARE 2m FROM INVERT OF KERB UNLESS OTHERWISE SHOWN.
7. GULLY CONNECTIONS AND STORMWATER PIPES SHALL BE 375mm DIAMETER CLASS '2' R.C. PIPES UNLESS SHOWN OTHERWISE.
8. THE CONTRACTOR SHALL INITIALLY EXCAVATE THE PAVEMENT BOX TO 280mm BELOW THE FINISHED PAVEMENT LEVEL SHOWN ON THE DRAWINGS. HE SHALL THEN NOTIFY THE ENGINEER WHO WILL FIX THE PAVEMENT THICKNESS TO BE CONSTRUCTED FOLLOWING THE RESULTS OF SUB-GRADE TESTING.
9. NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE ENGINEER AND SIMILARLY THE FINISHED SURFACE CONTOURS MAY BE ADJUSTED BY WRITTEN DIRECTION OF THE ENGINEER DURING CONSTRUCTION.
10. THE MINIMUM CLEARANCE BETWEEN OUTER WALLS OF PIPES IN MANHOLES SHALL BE 150mm.
11. SUBSURFACE DRAIN CLEANING POINTS SHALL BE INSTALLED IN ACCORDANCE WITH IPWEAQ STD DWG NO SEQ RS-142.
12. CONSTRUCTION LOAD CONTROL ON THE INSTALLATION OF REINFORCED CONCRETE STORMWATER PIPE WORK SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE RECOMMENDATIONS DEFINED IN THE CONCRETE PIPE ASSOCIATIONS OF AUSTRALASIA'S "THE INSTALLATIONS OF STEEL REINFORCED CONCRETE PIPES - MINIMUM PIPE COVER REQUIRED FOR VARIOUS COMPACTORS".
13. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL ERECT A 2 STRAND WIRE FENCE INCLUDING SAFETY BARRIER MESH TO THE PERIMETER OF VEGETATION TO BE RETAINED AND/OR EXCLUSION ZONES.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES/DIAL BEFORE YOU DIG PRIOR TO COMMENCING WORKS.
15. THE CONTRACTOR SHALL NOTE THE PRESENCE OF EXISTING SERVICES ASSOCIATED WITH THE WORKS. SPECIAL CARE MUST BE TAKEN BY THE CONTRACTOR IN THE VICINITY OF ALL SERVICES.

ROOFWATER

1. THE ENDS OF 150mm ROOFWATER CONNECTIONS FROM LOT DIRECTLY TO GULLY PIT SHALL BE CAPPED AND LOCATED WITH NOT LESS THAN 300mm AND NOT MORE THAN 450mm COVER UNLESS OTHERWISE APPROVED.
2. PROVIDE 1 x KERB ADAPTORS FOR ALL LOTS GRADING TO KERB AND CHANNEL AS PER LAYOUT PLAN. ALL KERB ADAPTORS SHALL BE CAST INTO KERB AND CHANNEL.
3. ROOFWATER KERB ADAPTORS SHALL BE LOCATED IN THE KERB AND CHANNEL FOR EACH ALLOTMENT THAT DRAINS PREDOMINANTLY TO THE ROAD FRONTAGE. KERB ADAPTORS SHALL BE LOCATED 0.6 METERS OFF THE SIDE BOUNDARY POSITION OR IF THE ALLOTMENT DRAINS PREDOMINANTLY TO ONE SIDE BOUNDARY THEN LOCATE BOTH KERB ADAPTORS 0.3 METERS AND APART 0.5 METERS OFF THE LOWER BOUNDARY LINE.

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust.
RPEQ 17544
2021.05.06 12:52:24
+10'00'

Signed..... RPEQ No.....17544..... Dated.....06.05.2021.....

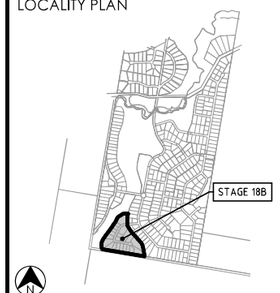
DATUM A.H.D.
P.M. No 61324
E 491712.179
N 6931003.529
RL 69.322

SCALE
20 10 0 20 40 60 80 100 120 140 160 180 200m
1 : 2,000 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	DRAWING 34 ADDED	20/08/20	DES
C	REVISED LOTS	23/09/20	DES
D	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS
E	AS CONSTRUCTED FINAL	06/05/21	LMS

Client
PEET

Project
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B
OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
GENERAL
LOCALITY PLAN,
DRAWING INDEX AND NOTES

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	01 of 33

	Drawing No	Revision
A1	18-201-01	E

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SETOUT PLAN
SCALE 1:1000

CONTROL LINE DETAILS - DAWSON CLOSE

PT	CHAINAGE	EASTING	NORTHING	BEARING	RADIUS	TANGENT	DEF ANGLE	ARC-LEN
IP1	0.000	491986.296	6929712.643	253d34'49"	-	-	-	-
TC	11.430	491975.332	6929709.412	253d34'49"	-	-	-	-
IP2	12.848	491973.967	6929709.010	-	14.100	1.423	11d31'27"	2.836
CT	14.266	491972.550	6929708.889	265d06'17"	-	-	-	-
TC	149.103	491838.205	6929697.382	265d06'17"	-	-	-	-
IP3	179.792	491804.648	6929694.508	-	60.000	33.679	58d36'46"	61.379
CT	210.482	491789.625	6929664.365	206d29'31"	-	-	-	-
TC	332.188	491735.336	6929555.439	206d29'31"	-	-	-	-
IP4	350.854	491723.291	6929531.272	-	20.000	27.002	106d56'48"	37.331
CT	369.519	491749.919	6929526.794	99d32'42"	-	-	-	-
TC	502.160	491880.724	6929504.799	99d32'42"	-	-	-	-
IP5	508.987	491887.730	6929503.621	-	20.000	7.104	39d06'42"	13.653
CT	515.813	491892.422	6929498.287	138d39'25"	-	-	-	-
IP6	526.950	491899.779	6929489.926	138d39'25"	-	-	-	-

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust.
RPEQ 17544
2021.05.06 12:52:38
+10'00'

Signed..... RPEQ No. 17544 ..... Dated. 06.05.2021 .....

LEGEND

CONSTRUCTION BOUNDARY

PROPOSED ROAD CENTRELINE

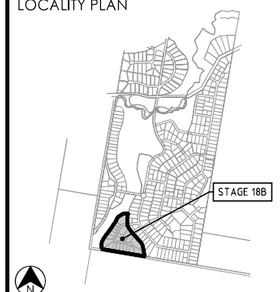
SCALE 10 5 0 10 20 30 40 50 60 70 80 90 100m

1 : 1000 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED LOTS / EASEMENT	23/09/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

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Drawing Title
GENERAL
SETOUT
PLAN

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	02 of 33

Drawing No	Revision
18-201-02	C

A1

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LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- Q100 FLOOD POST CONSTRUCTION EXTENTS
- 300mm FREEBOARD EXTENTS
- STORMWATER DRAINAGE
- TARP BOUNDARY
- EXISTING STORMWATER DRAINAGE
- WATER MAIN
- FINISHED SURFACE CONTOURS
- LIDAR CONTOURS
- DTM SURVEY CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- EASEMENT
- KERB ADAPTOR LOCATION
- SUBSURFACE DRAIN CLEANING POINT
- 150Ø uPVC ROOFWATER CONNECTION TO GULLY PIT/MH
- 14C — STORMWATER MANHOLE TEXT
- G147 — STORMWATER GULLY TEXT
- PROPOSED DRIVEWAY LOCATION
- ROCK SCOUR PROTECTION WITH WITH IMPERMABLE LINER BENEATH

NOTE
ALL BATTERS TO BE 1(V) : 4(H) MAXIMUM.

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust. RPEQ 17544 2021.05.06 12:52:53 +10'00'

Signed..... RPEQ No. 17544 ..... Dated 06.05.2021

10m WIDE BUSHFIRE LINK TRAIL

10m WIDE BUSHFIRE ACCESS TRACK

STAGE 18B

CT210,482

DAWSON CLOSE

REFER KN DWG 18-201-04

REFER KN DWG 18-201-18 FOR HEADWALL AND SCOUR PROTECTION DETAILS

REMOVE TEMPORARY HEADWALL AND EXTEND CONSTRUCTION TO "180UT"

TC149.103

95.028

180UT

210UT

G121

G120

G119

G118

PMT

EX

Emt

Emt BMP

1846 1847 1849 1850 1851 1852 1853 1854 1855 1860 1867 1869 1870 1871

160 180 200 220 240 260 280 300 320 120 140 100

NOTE:
CH100 TO CH120 TEMPORARY BULK EARTHWORKS COMPLETED AS PART OF 18A CONSTRUCTION. BATTERS IN LOT COMPLETE TO FINAL LEVEL. REFER TO 18-201-11 TO SHOW CONSTRUCTION EXTENTS WITHIN ROAD RESERVE.

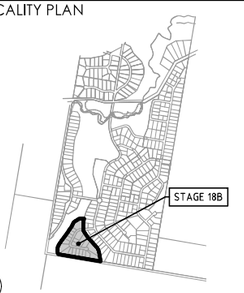
LAYOUT PLAN
SCALE 1:500

SCALE 10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	REVISED LOTS / EASEMENT	23/09/20	DES
D	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
GENERAL
LAYOUT PLAN
SHEET 1

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	03 of 33

A1	Drawing No	Revision
	18-201-03	D

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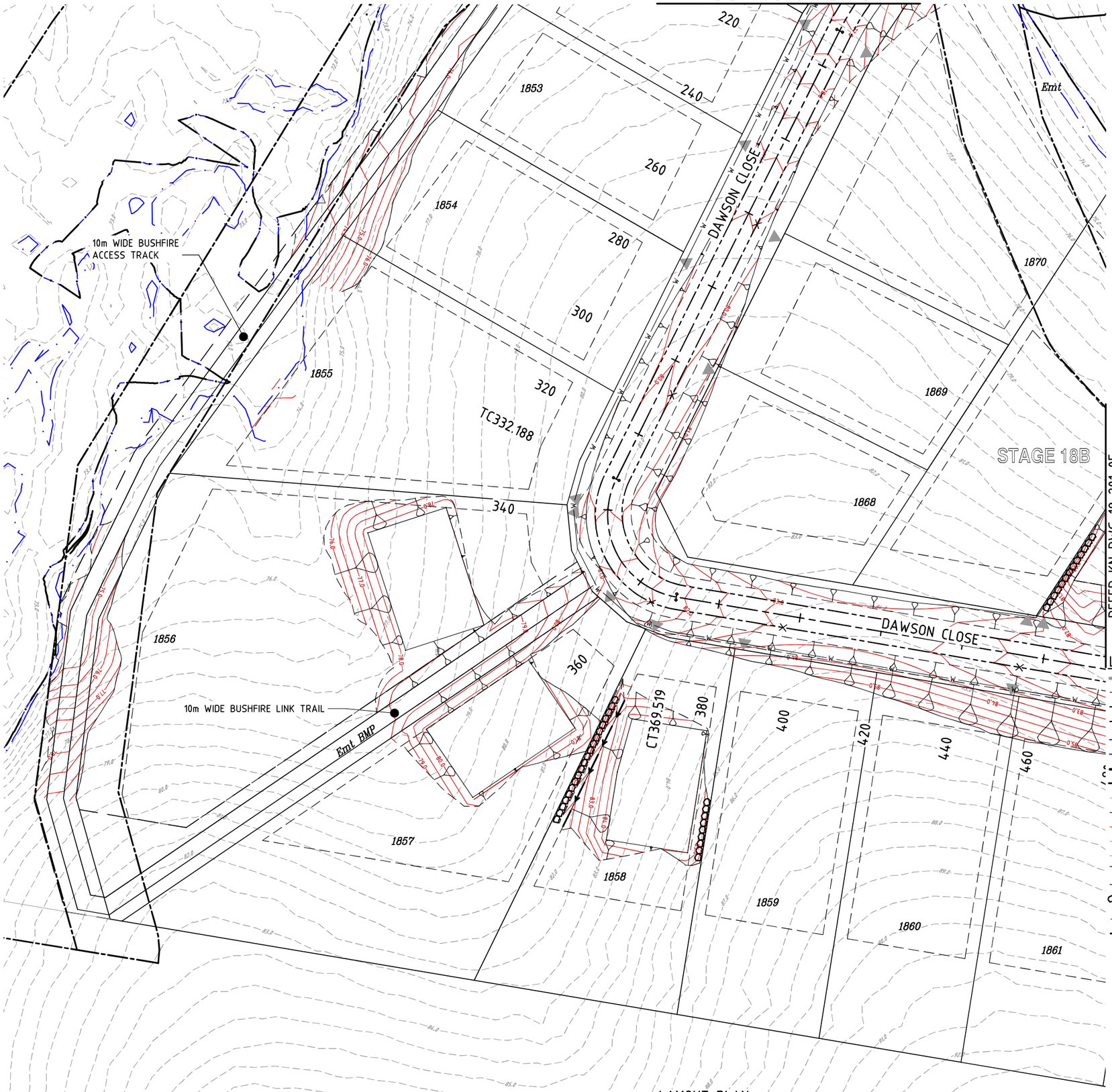
REFER KN DWG 18-201-03



LAYOUT PLAN
SCALE 1:500

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No...17544..... Dated..06.05.2021.....

Mark Andrew Shaw BEng (Civil) MIEAust RPEQ 17544 2021.05.06 12:32:04 +10'00'

NOTE
ALL BATTERS TO BE 1(V) : 4(H) MAXIMUM.

LEGEND

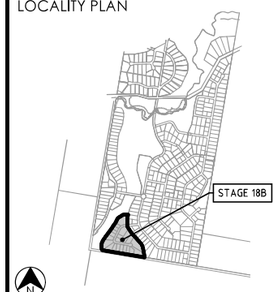
- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- Q100 FLOOD POST CONSTRUCTION EXTENTS
- 300mm FREEBOARD EXTENTS
- STORMWATER DRAINAGE
- TARP BOUNDARY
- EXISTING STORMWATER DRAINAGE
- WATER MAIN
- FINISHED SURFACE CONTOURS
- LIDAR CONTOURS
- DTM SURVEY CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- ROCK BOULDER RETAINING WALL
- EASEMENT
- SWALE
- KERB ADAPTOR LOCATION
- SUBSURFACE DRAIN CLEANING POINT
- 150Ø uPVC ROOFWATER CONNECTION TO GULLY PIT/MH
- 14C STORMWATER MANHOLE TEXT
- G147 STORMWATER GULLY TEXT
- PROPOSED DRIVEWAY LOCATION

SCALE
10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	REVISED LOTS / EASEMENT	23/09/20	DES
D	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
GENERAL
LAYOUT PLAN
SHEET 2

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	04 of 33

A1	Drawing No	Revision
	18-201-04	D

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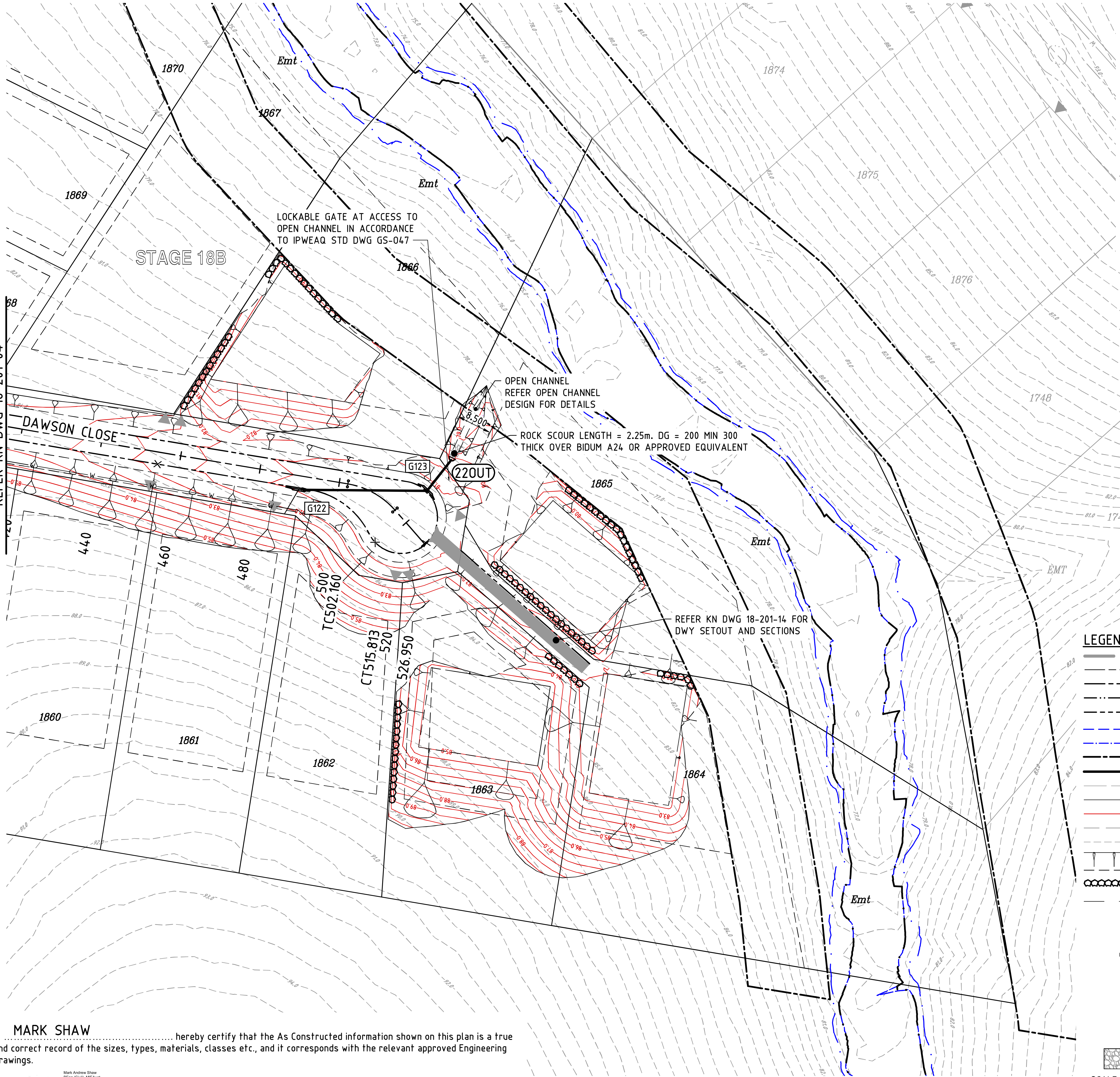


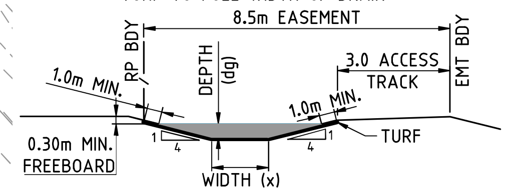
LAYOUT PLAN
SCALE 1:500

OPEN CHANNEL DESIGN

Q100 FLOW Qcap = 0.793 m3/s
Qreqd = 0.760 m3/s

DEPTH= 0.19m (0.49m TOTAL)
n = 0.045 (GRASS)
s = 9.5%
A=0.43m2 WP=3.07 V=1.85 m/s

NOTE:
TURF TO FULL WIDTH OF DRAIN



OPEN CHANNEL PROFILE
TYPICAL SECTION
SCALE: NTS

NOTE
ALL BATTERS TO BE 1(V) : 4(H) MAXIMUM.

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- KERB AND CHANNEL (TYPE B1)
- Q100 FLOOD POST CONSTRUCTION EXTENTS
- 300mm FREEBOARD EXTENTS
- TARP BOUNDARY
- STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE
- WATER MAIN
- FINISHED SURFACE CONTOURS
- LIDAR CONTOURS
- DTM SURVEY CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- ROCK BOULDER RETAINING WALL
- EASEMENT
- KERB ADAPTOR LOCATION
- SUBSURFACE DRAIN CLEANING POINT
- 150Ø uPVC ROOFWATER CONNECTION TO GULLY PIT/MH
- (14C) STORMWATER MANHOLE TEXT
- [G147] STORMWATER GULLY TEXT
- PROPOSED DRIVEWAY LOCATION
- ROCK SCOUR PROTECTION WITH WITH IMPERMABLE LINER BENEATH

SCALE 10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:53:16 +10'00'

Signed........ RPEQ No. 17544 Dated 06.05.2021

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Ascon\18-201-03-05-GE-LAYOUT.dwg Plotted by: DS on 6/05/2021 12:42:10 PM

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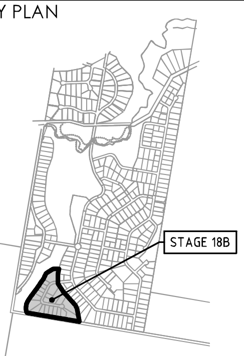
NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client
PEET

Project
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B
OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
GENERAL
LAYOUT PLAN
SHEET 3

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	05 of 33

	Drawing No	Revision
A1	18-201-05	C

NOTE

DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFOMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:53:29 +10'00'

Signed..... RPEQ No. 17544 Dated 06.05.2021

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- KERB AND CHANNEL (TYPE B1)
- TARP BOUNDARY
- 37.0 FINISHED SURFACE CONTOURS
- 36.0 NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
- 36.0 NATURAL SURFACE CONTOURS (LIDAR SOURCED)
- ROCK BOULDER RETAINING WALL REFER DETAIL ON DWG 18-201-07
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- EXTENT OF CUT
- EXTENT OF FILL

NOTE

ALL BATTERS TO BE 1(V) : 4(H) MAXIMUM.

AREA 0 TO +210 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO +410 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO +110 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO -750 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO +160 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA +310 TO +460 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

10m WIDE BUSHFIRE LINK TRAIL

10m WIDE BUSHFIRE ACCESS TRACK

STAGE 18B

DAWSON CLOSE

Emt BMP

Emt

PMT

EX

1849 1850 1851 1852 1853 1854 1855 1867 1869 1870 1871

160 180 200 220 240 260 280 300 320 120 140 100 95.028

A 09

C 09

REFER KN DWG 18-201-07

LAYOUT PLAN

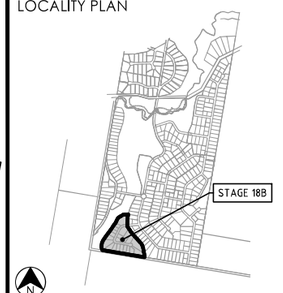
SCALE 1:500

SCALE 10 5 0 10 20 30 40 50m

1 : 500 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	REVISED LOTS / EASEMENT	23/09/20	DES
D	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS
E	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
EARTHWORKS
CONTOUR PLAN
SHEET 1

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	06 of 33

A1	Drawing No	Revision
	18-201-06	E

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Arcon\18-201-06-09-EW-CONTOUR.dwg Plotted by DS on 6/05/2021 12:02:19 PM

REFER KN DWG 18-201-06

REFER KN DWG 18-201-08

NOTE

DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFOMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- KERB AND CHANNEL (TYPE B1)
- TARP BOUNDARY
- 37.0 FINISHED SURFACE CONTOURS
- 36.0 NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
- 36.0 NATURAL SURFACE CONTOURS (LIDAR SOURCED)
- ROCK BOULDER RETAINING WALL REFER DETAIL
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- SWALE
- EXTENT OF CUT
- EXTENT OF FILL

NOTE

ALL BATTERS TO BE 1(V) : 4(H) MAXIMUM.

STAGE 18B

DAWSON CLOSE

10m WIDE BUSHFIRE ACCESS TRACK

10m WIDE BUSHFIRE LINK TRAIL

Emt BMP

REFER INSET A

AREA -100 TO -400 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO +175 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

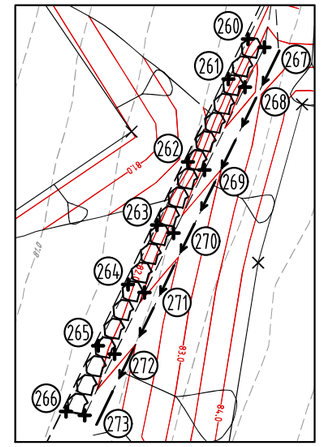
AREA +25 TO +725 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO -200 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

AREA 0 TO +160 OUT OF VERTICAL TOLERANCE (LIDAR SURVEY AREA)

1853 1854 1855 1856 1857 1858 1860 1861 1868 1869 1870 Emt

220 240 260 280 300 320 340 360 380 400 420 440 460

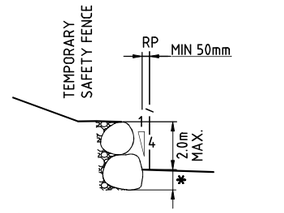


INSET A

SCALE 1:250

INSET A - SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
260	491734.749	6929502.500	82.193
261	491733.158	6929499.244	82.122
262	491729.862	6929492.500	81.998
263	491727.341	6929487.341	81.887
264	491724.976	6929482.500	81.747
265	491722.532	6929477.500	81.693
266	491719.917	6929472.148	81.590
267	491736.097	6929501.841	83.350
268	491734.506	6929498.585	83.735
269	491731.210	6929491.841	83.261
270	491728.689	6929486.683	82.899
271	491726.323	6929481.841	82.558
272	491723.880	6929476.841	82.207
273	491721.436	6929471.841	81.856



* TOE OF ROCK BOULDER WALL TO BE FOUNDED 300mm MINIMUM BELOW PREFERRED BENCH LEVEL FOR EACH ALLOTMENT

TYPICAL ROCK BOULDER RETAINING WALL DETAIL

PERFORMANCE REQUIREMENTS FOR RETAINING WALLS

THE CONTRACTOR IS TO PROVIDE CERTIFICATION, FROM AN APPROVED STRUCTURAL/GEOTECHNICAL ENGINEER FOLLOWING COMPLETION OF THE RETAINING WALL CONSTRUCTION, THAT THE WALLS ARE STRUCTURALLY ADEQUATE FOR ALL RELEVANT LOADING CONDITIONS (INCLUDING LCC REQUIREMENTS & MIN 10 kPA SURCHARGE LOADING).

AS A MINIMUM THE FOLLOWING CONSTRUCTION STANDARD IS REQUIRED:
- AS1726, AS4678 AND AS1170;
- 10 kPa SURCHARGE LOADING;
- MINIMUM 300mm EMBEDDMENT OF FIRST COURSE BOULDER (WHERE APPLICABLE);
- IMPERVIOUS BACKFILL TO EMBEDDMENT TRENCH;
- PROVIDE GEOFABRIC LAYER TO REAR OF BOULDERS (WHERE APPLICABLE) AND FREE DRAINING BACKFILL BEHIND;
- A MINIMUM 100mm DIAMETER SLOTTED PVC DRAINAGE PIPE FULL LENGTH OF WALL, INSTALLED ABOVE IMPERVIOUS BACKFILL WITH CONNECTION TO DRAINAGE OUTLET;
- SELECT AND PLACE BOULDERS IN A MANNER TO ENSURE THAT THEY ARE SECURELY INTERLOCKED (WHERE APPLICABLE).

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:53:41 +10'00'

Signed..... RPEQ No...17544..... Dated...06.05.2021.....

LAYOUT PLAN

SCALE 1:500

SCALE 5 0 5 10 15 20 25m

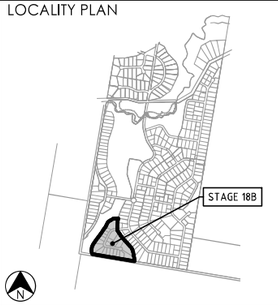
1 : 250 (A1 UNREDUCED)

SCALE 10 5 0 10 20 30 40 50m

1 : 500 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

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D	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS
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Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
EARTHWORKS
CONTOUR PLAN
SHEET 2

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	07 of 33

	Drawing No	Revision
A1	18-201-07	E

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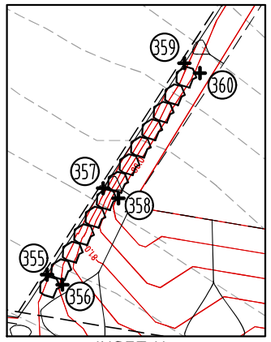
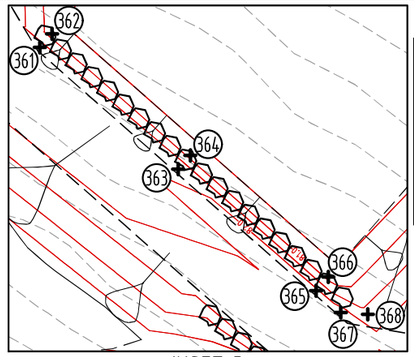


INSET H
SCALE 1:250

INSET H - SETOUT TABLE

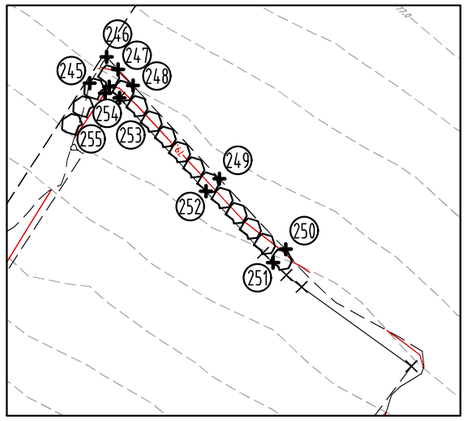
PT No.	EASTING	NORTHING	LEVEL
355	491839.742	6929525.258	82.601
356	491840.999	6929524.441	81.900
357	491844.311	6929532.293	81.868
358	491845.568	6929531.476	79.800
359	491850.940	6929542.500	80.707
360	491852.198	6929541.683	79.730



INSET G
SCALE 1:250

INSET G - SETOUT TABLE

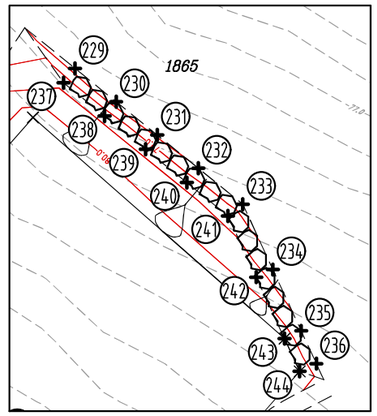
PT No.	EASTING	NORTHING	LEVEL
361	491916.771	6929483.653	81.767
362	491917.777	6929484.766	80.795
363	491928.047	6929473.731	81.955
364	491929.038	6929474.857	80.797
365	491939.293	6929463.834	82.142
366	491940.298	6929464.947	80.799
367	491941.314	6929462.055	82.176
368	491943.521	6929461.896	81.660



INSET B
SCALE 1:250

INSET B - SETOUT TABLE

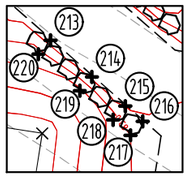
PT No.	EASTING	NORTHING	LEVEL
245	491862.500	6929560.298	78.626
246	491863.885	6929562.430	78.397
247	491864.823	6929561.417	78.437
248	491866.035	6929560.108	78.488
249	491873.084	6929552.500	78.586
250	491878.497	6929546.757	78.925
251	491877.463	6929545.671	79.300
252	491871.983	6929551.481	79.300
253	491864.935	6929559.089	79.300
254	491864.094	6929559.997	79.000
255	491863.758	6929559.481	79.003



INSET C
SCALE 1:250

INSET C - SETOUT TABLE

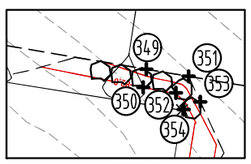
PT No.	EASTING	NORTHING	LEVEL
229	491935.193	6929504.668	78.231
230	491938.544	6929501.955	78.198
231	491941.895	6929499.242	78.377
232	491945.247	6929496.529	78.537
233	491948.870	6929493.596	78.703
234	491951.326	6929488.275	79.227
235	491953.636	6929483.270	79.613
236	491954.869	6929480.600	79.751
237	491934.249	6929503.502	79.358
238	491937.600	6929500.789	79.358
239	491940.952	6929498.076	79.358
240	491944.303	6929495.363	79.358
241	491947.655	6929492.650	79.358
242	491949.964	6929487.646	79.742
243	491952.274	6929482.642	80.300
244	491953.507	6929479.971	80.300



INSET D
SCALE 1:250

INSET D - SETOUT TABLE

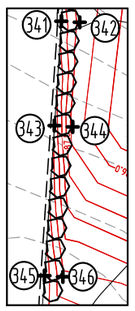
PT No.	EASTING	NORTHING	LEVEL
213	491931.748	6929461.947	82.290
214	491935.123	6929458.977	82.346
215	491937.837	6929456.589	82.489
216	491939.263	6929455.334	82.624
217	491938.272	6929454.208	83.000
218	491936.846	6929455.463	83.350
219	491934.132	6929457.851	83.650
220	491930.758	6929460.820	83.220



INSET E
SCALE 1:250

INSET E - SETOUT TABLE

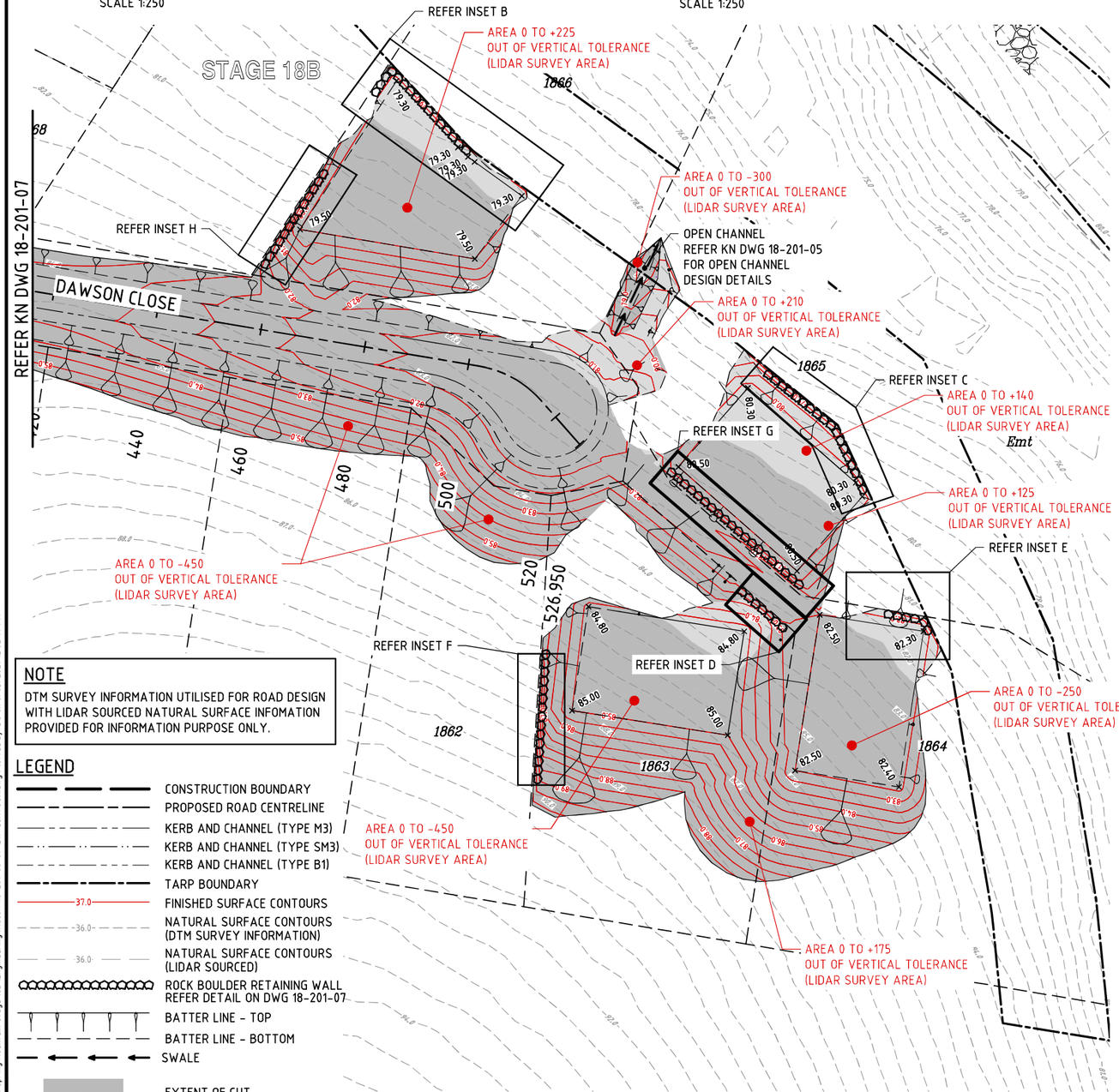
PT No.	EASTING	NORTHING	LEVEL
349	491962.262	6929457.738	81.216
350	491962.013	6929456.259	82.000
351	491965.703	6929457.160	81.030
352	491964.674	6929455.812	81.978
353	491966.663	6929455.085	81.135
354	491965.301	6929454.456	82.300



INSET F
SCALE 1:250

INSET F - SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
341	491892.500	6929448.243	87.324
342	491893.997	6929448.144	86.330
343	491891.936	6929439.731	88.353
344	491893.432	6929439.632	86.222
345	491891.125	6929427.500	89.829
346	491892.622	6929427.401	88.600



EARTHWORKS CONTOUR PLAN
SCALE 1:500

NOTE

DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFOMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- KERB AND CHANNEL (TYPE B1)
- TARP BOUNDARY
- FINISHED SURFACE CONTOURS
- NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
- NATURAL SURFACE CONTOURS (LIDAR SOURCED)
- ROCK BOULDER RETAINING WALL REFER DETAIL ON DWG 18-201-07
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- SWALE
- EXTENT OF CUT
- EXTENT OF FILL

NOTE

ALL BATTERS TO BE 1(V) : 4(H) MAXIMUM.

MARK SHAW

I, ... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

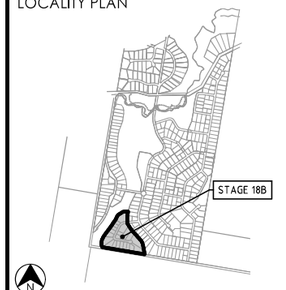
Signed..... RPEQ No....17544..... Dated....06.05.2021.....

SCALE 5 0 5 10 15 20 25m
1 : 250 (A1 UNREDUCED)

SCALE 10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS
D	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
EARTHWORKS
CONTOUR PLAN
SHEET 3

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	08 of 33

A1	Drawing No	Revision
	18-201-08	D

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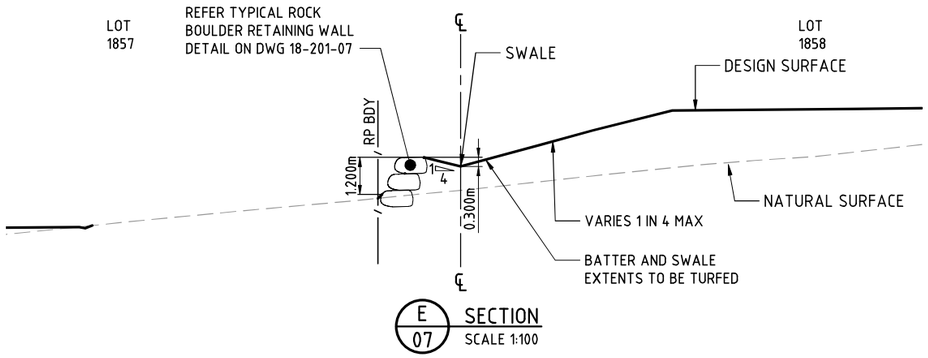
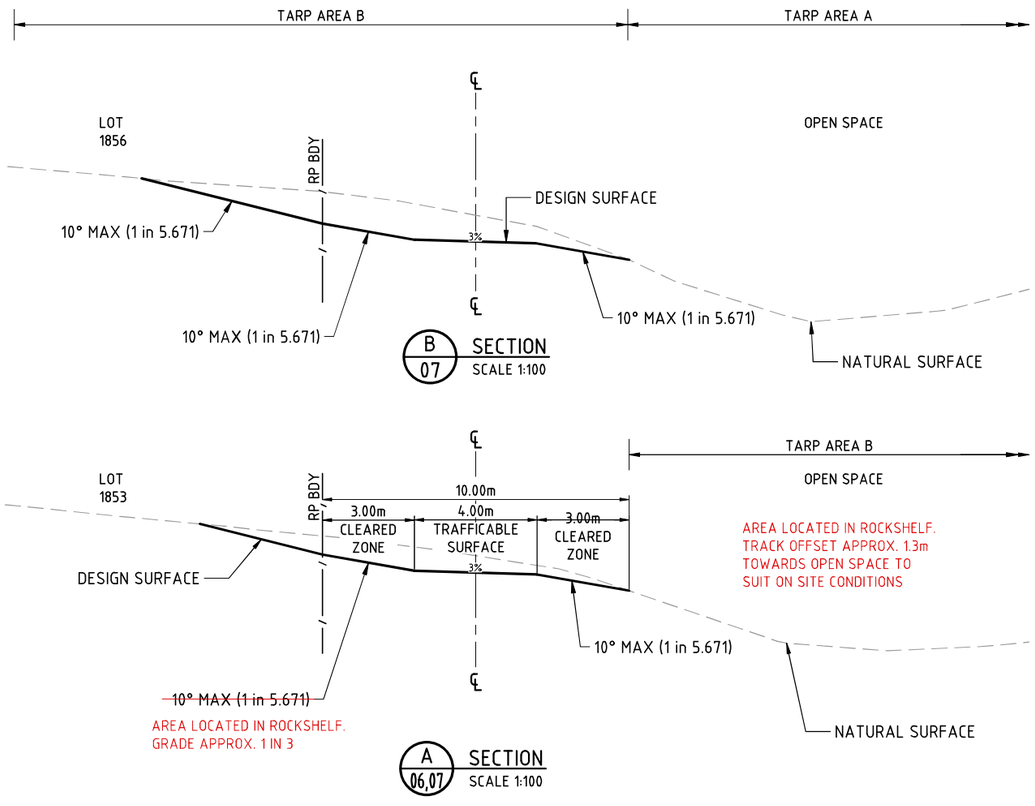


E / 07 SECTION
SCALE 1:100

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

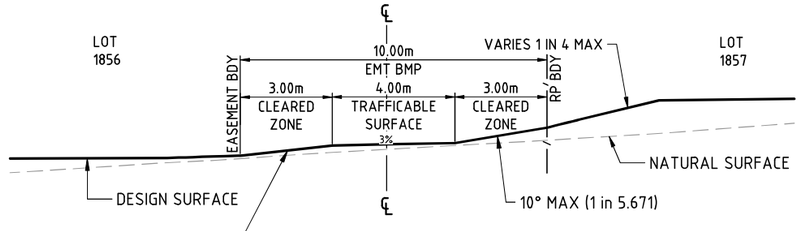
Mark Andrew Shaw
BEng (Civil), MIEAust, RPEQ 17544
2021.05.06 12:55:40 +10'00'

Signed..... RPEQ No...17544..... Dated...06.05.2021.....

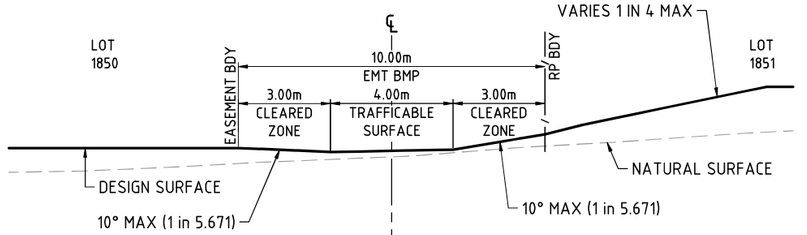


B / 07 SECTION
SCALE 1:100

A / 06,07 SECTION
SCALE 1:100



D / 07 SECTION
SCALE 1:100

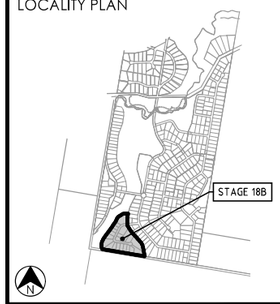


C / 06 SECTION
SCALE 1:100

SCALE
1 0.5 0 1 2 3 4 5 6 7 8 9 10m
1 : 100 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

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B	NOTE ADDED	20/08/20	DES
C	REVISED SECTIONS	23/09/20	DES
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Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
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Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
EARTHWORKS
BUSHFIRE ACCESS TRAIL
TYPICAL SECTIONS

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	09 of 33

Drawing No	Revision
18-201-09	E

A1

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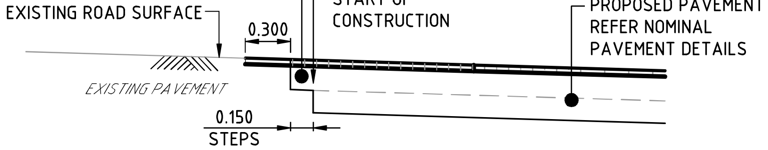


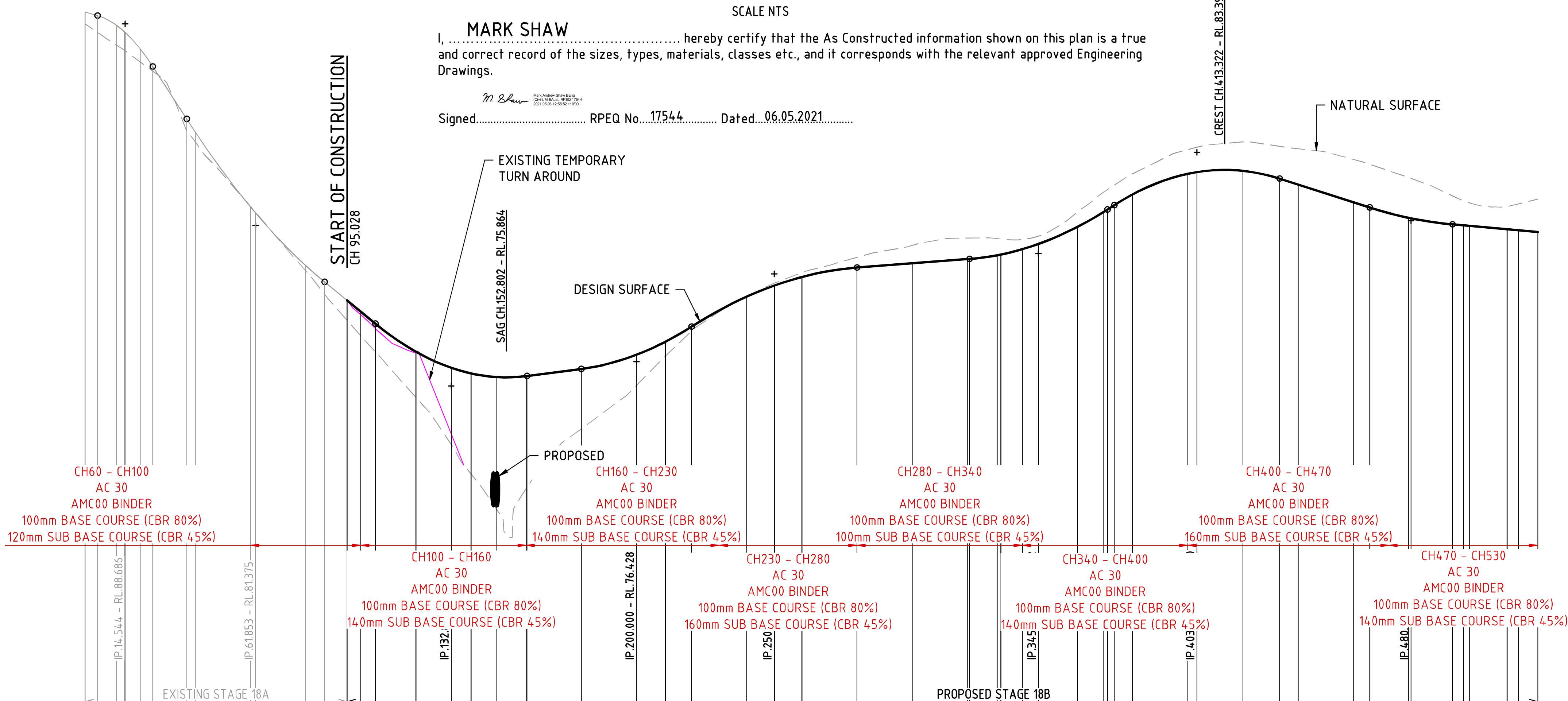
TYPICAL KEY IN DETAIL TO EXISTING PAVEMENT

SCALE NTS

NOMINAL PAVEMENT DETAILS
ACCESS ROAD
30mm ASPHALTIC CONCRETE
7mm PRIMER SEAL AMC 6 BINDER
100mm BASE COURSE (TYPE 2.1, CBR 80)
100mm SUB-BASE COURSE (TYPE 2.3, CBR 45)
SUBGRADE REPLACEMENT AS REQUIRED (TYPE 2.5, CBR 15)
DESIGN ESA = 1.0x10 ^{5}

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed M. Shaw (Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:55:52 +10'00') RPEQ No. 17544 Dated 06.05.2021



STAGE: EXISTING STAGE 18A | PROPOSED STAGE 18B

VERTICAL GEOMETRY GRADE / LENGTH (m)	-3.000% / 14.544	-15.455% / 47.309	-8.200% / 70.975	1.300% / 67.172	6.371% / 50.000	0.770% / 95.839	6.400% / 57.483	-3.200% / 77.661	-0.900% / 45.967

VERTICAL CURVE LENGTH (m) / RADIUS (m)	VC.20 R.160.581	VC.50 R.689.203	VC.55 R.578.947	VC.40 R.788.870	VC.60 R.1071.360	VC.50 R.888.139	VC.60 R.625.008	VC.30 R.1304.377

DATUM R.L.60.000

VOLUMES

CUT	0	7	2	5	0	0	0	0	0	0	0	3	21	58	152	244	140	22	162	271	339	472	650	671	403	0
FILL	16	38	34	17	175	504	1214	1920	1369	660	202	19	1	0	0	0	0	2	0	0	0	0	0	0	0	0

PEGGED CHAINAGE	DESIGN SURFACE	As constructed (red)	CUT/FILL DEPTH	NATURAL SURFACE	LIP OF KERB LHS	LIP OF KERB RHS
0.000	89.123		0.433	88.689	EXISTING INTERSECTION	EXISTING INTERSECTION
4.544	88.986		0.611	88.376		
11.430	88.632		0.728	87.904		
14.266	88.400		0.669	87.731		
14.544	88.375		0.664	87.711		
20.000	87.779		0.471	87.308	87.697	
24.544	87.141		0.169	86.972	87.059	87.059
36.853	85.239		0.420	84.818	85.157	85.157
40.000	84.759		0.351	84.408	84.678	84.678
60.000	82.050		-0.014	82.064	81.968	81.968
61.853	81.828		-0.020	81.848	81.747	81.747
80.000	79.921		0.187	79.734	79.839	79.839
86.853	79.325		0.441	78.884	79.243	79.243
95.028	~~78.655~~	78.637	0.722	77.932	78.573	78.573
100.000	~~78.247~~	78.212	0.876	77.370	78.165	78.165
105.328	~~77.810~~	77.796	1.023	76.787	77.728	77.728
120.000	76.793		1.658	75.134	76.711	76.711
132.828	~~76.208~~	76.215	2.777	73.431	76.127	76.127
140.000	76.005		3.647	72.358	75.923	75.923
149.103	~~75.875~~	75.882	4.776	71.100	75.793	75.793
160.000	~~75.908~~	75.928	4.087	71.821	75.826	75.826
160.328	~~75.912~~	75.931	4.041	71.871	75.831	75.831
180.000	~~76.168~~	76.190	2.174	73.994	76.086	76.086
200.000	~~76.682~~	76.709	1.114	75.568	76.600	76.600
210.482	~~77.153~~	77.180	0.521	76.633	77.072	77.072
220.000	~~77.702~~	77.722	0.164	77.538	77.620	77.620
240.000	78.790		-0.022	78.812	78.708	78.708
250.000	~~79.193~~	79.174	-0.084	79.278	79.112	79.112
260.000	79.504		-0.152	79.656	79.422	79.422
280.000	79.845		-0.373	80.218	79.763	79.763
300.000	79.999		-0.654	80.653	79.917	79.917
320.000	~~80.153~~	80.163	-0.764	80.917	80.071	80.071
320.839	~~80.159~~	80.172	-0.759	80.918	80.077	80.077
330.814	80.292		-0.608	80.900	80.210	80.210
332.188	80.319		-0.566	80.886	REFER INTERSECTION PLANS KN DWG 18-201-14	80.237
340.000	~~80.513~~	80.525	-0.345	80.859		80.431
345.839	~~80.703~~	80.711	-0.281	80.984		80.622
360.000	~~81.324~~	81.334	-0.542	81.866		81.242
369.519	~~81.868~~	81.886	-0.718	82.587		81.786
370.839	~~81.952~~	81.967	-0.721	82.673		81.870
370.870	~~81.954~~	81.969	-0.721	82.675	81.872	81.872
373.322	~~82.111~~	82.117	-0.724	82.834	82.029	82.029
380.000	~~82.502~~	82.492	-0.745	83.247	82.420	82.420
400.000	~~83.249~~	83.235	-0.876	84.124	83.167	83.167
403.322	83.311		-0.901	84.211	83.228	83.228
420.000	83.355		-1.052	84.407	83.273	83.273
433.322	83.071		-1.174	84.245	82.989	82.989
440.000	~~82.857~~	82.863	-1.302	84.159	82.775	82.775
460.000	82.217		-1.554	83.771	82.135	82.135
465.983	~~82.025~~	82.009	-1.566	83.591	81.943	81.943
480.000	~~81.652~~	81.661	-1.466	83.118	81.570	81.570
480.983	~~81.632~~	81.642	-1.450	83.082	81.550	81.550
495.983	81.410		-1.039	82.450	REFER INTERSECTION PLANS KN DWG 18-201-14	REFER INTERSECTION PLANS KN DWG 18-201-14
500.000	~~81.374~~	81.367	-0.903	82.277		
502.160	81.355		-0.842	82.197		
515.813	~~81.232~~	81.295	-0.829	82.061		
520.000	~~81.194~~	81.258	-0.963	82.157		
526.950	81.132		-1.201	82.333		

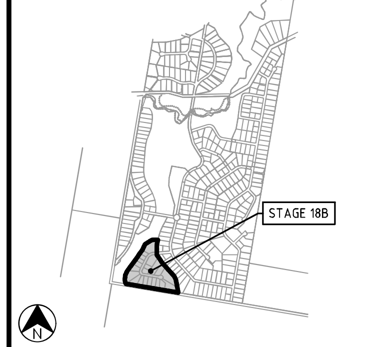
Horiz Curve Data: R.14.1 2.836 | R.-60 61.379 | R.-20 37.331 | R.20 13.653

LONGITUDINAL SECTION - DAWSON CLOSE

SCALE - 1:1000 (H)
1:100 (V)

SCALE A 1:1000 (Horiz.) 10 5 0 10 20 30 40 50 60 70 80 90 100m
B 1:100 (Vert.) 1 0.5 0 1 2 3 4 5 6 7 8 9 10m
(A1 UNREDUCED)

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED LONGSECTION	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client
PEET

Project
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B
OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
ROADWORKS
LONGITUDINAL SECTION
DAWSON CLOSE

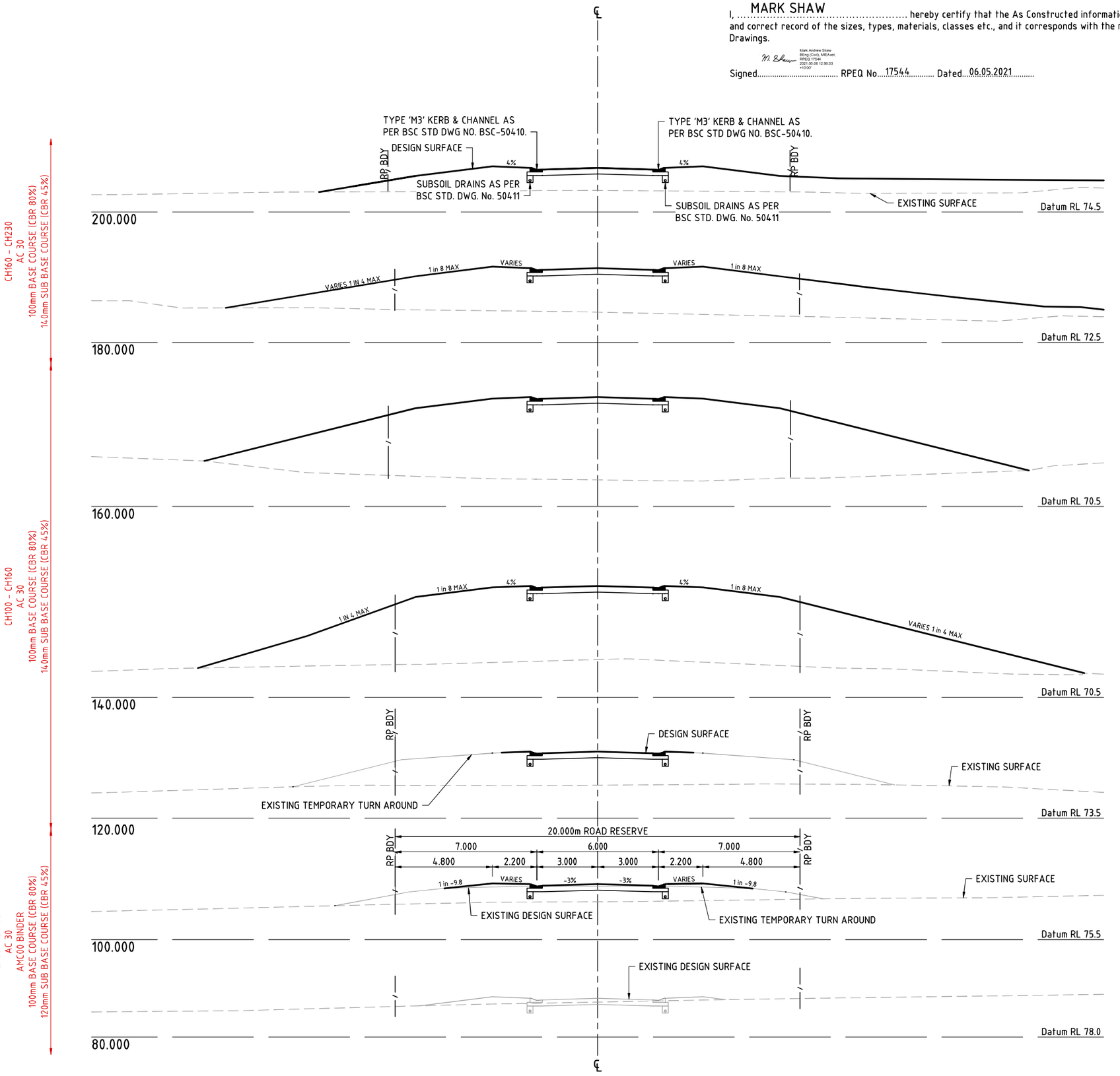
Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale: AS SHOWN | Sheet: 10 of 33
A1 | Drawing No: 18-201-10 | Revision: C

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust,
RPEQ 17544
2021.05.06 12:56:03
+10'00'

Signed..... RPEQ No.17544..... Dated.06.05.2021.....



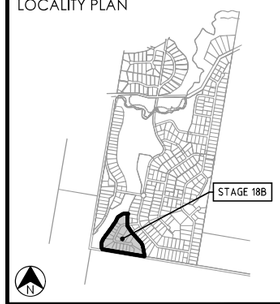
CROSS SECTIONS - DAWSON CLOSE
SCALE 1:100

SCALE 1 0.5 0 1 2 3 4 5 6 7 8 9 10m
1 : 100 (A1 UNREDUCED)

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Ascon\18-201-10-13-RD-LONG-CROSS.dwg Plotted by: DS on 6/05/2021 12:03:02 PM

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED CROSS SECTIONS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
ROADWORKS
CROSS SECTIONS
DAWSON CLOSE - SHEET 1

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

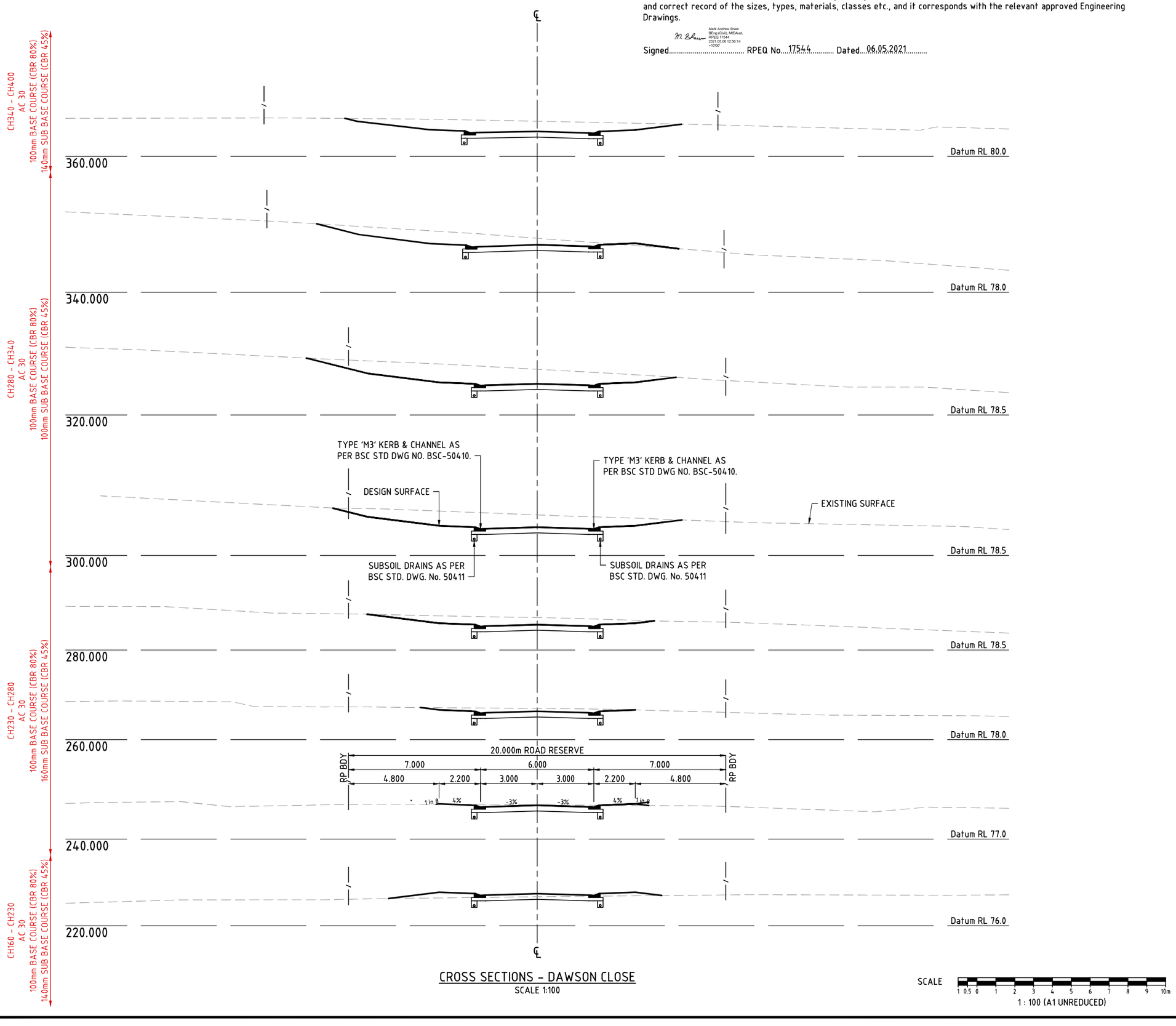
Scale	Sheet
AS SHOWN	11 of 33

A1	Drawing No	Revision
	18-201-11	C

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:56:14 +10'00'

Signed..... RPEQ No.17544 Dated.06.05.2021



CROSS SECTIONS - DAWSON CLOSE

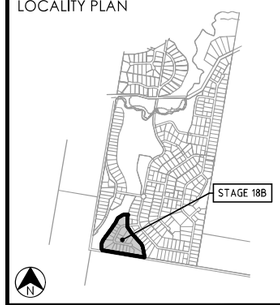
SCALE 1:100

SCALE 1 0.5 0 1 2 3 4 5 6 7 8 9 10m

1 : 100 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED CROSS SECTIONS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

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Drawing Title
ROADWORKS
CROSS SECTIONS
DAWSON CLOSE - SHEET 2

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	12 of 33

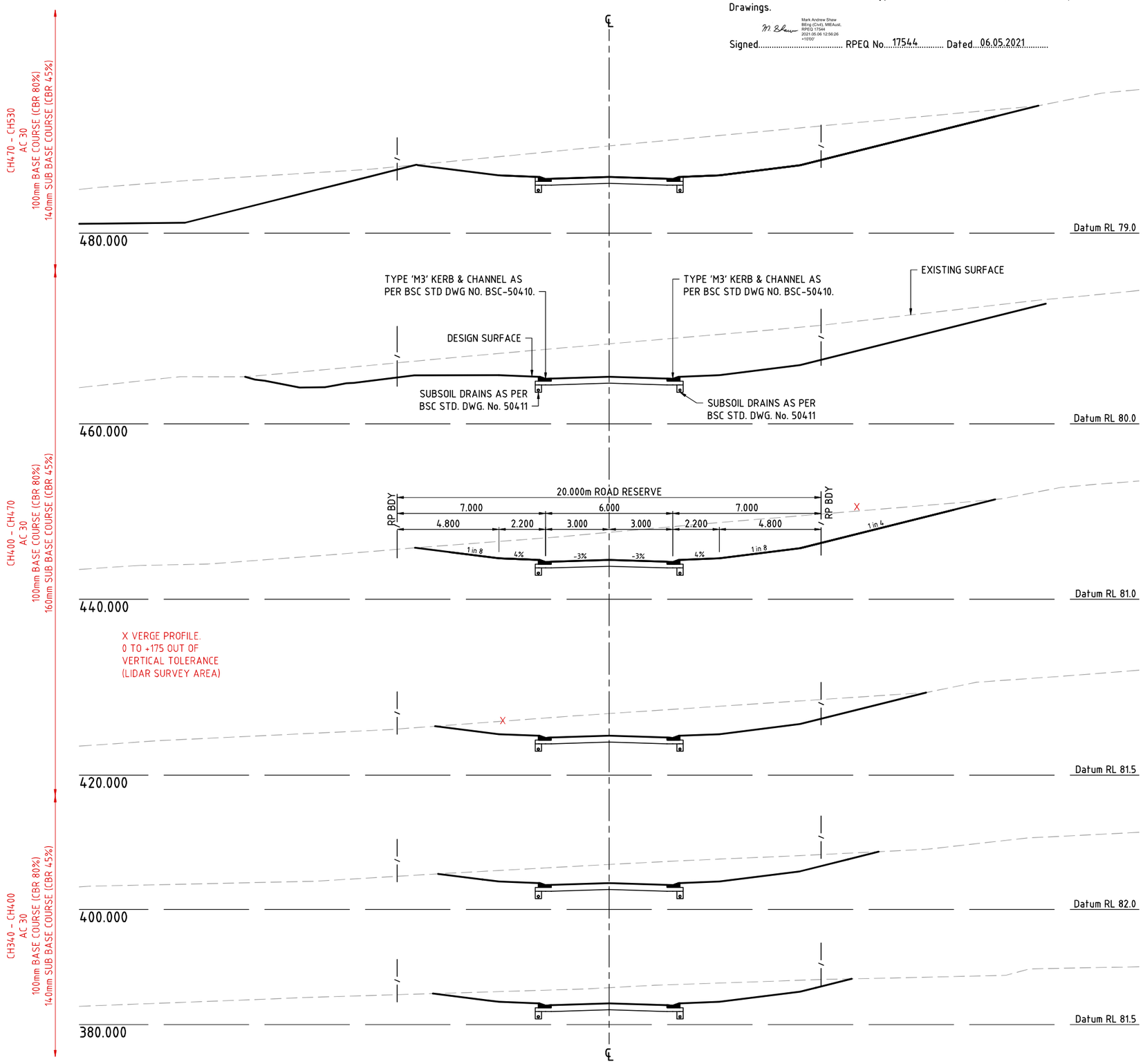
A1	Drawing No	Revision
	18-201-12	C

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Ascon\18-201-10-13-RD-LONG-CROSS.dwg Plotted by DS on 6/05/2021 12:03:03 PM

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust.
RPEQ 17544
2021.05.06 12:56:26 +10'00'

Signed..... RPEQ No. 17544 Dated 06.05.2021

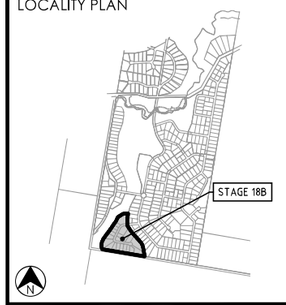


CROSS SECTIONS - DAWSON CLOSE
SCALE 1:100

SCALE 1 0.5 0 1 2 3 4 5 6 7 8 9 10m
1 : 100 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED CROSS SECTIONS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
ROADWORKS
CROSS SECTIONS
DAWSON CLOSE - SHEET 3

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	13 of 33

	Drawing No	Revision
A1	18-201-13	C

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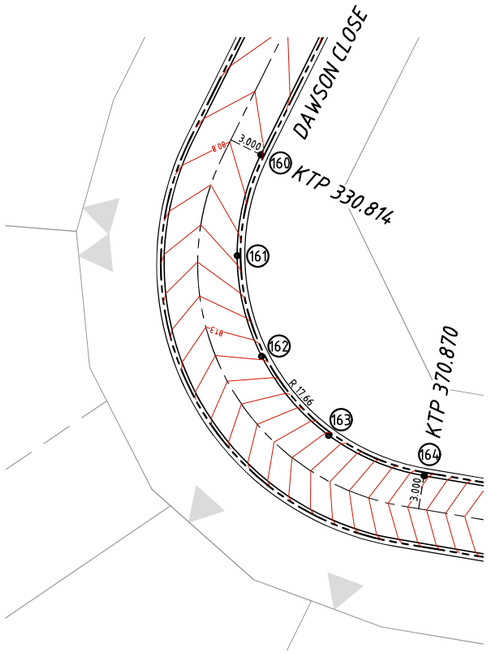
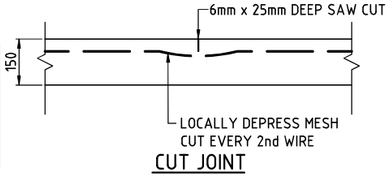


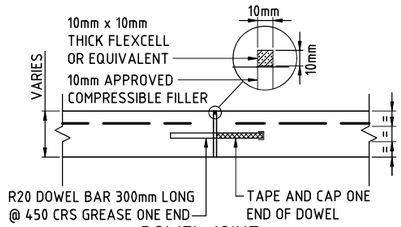
KERB WIDENING DETAIL - DAWSON CLOSE
SCALE 1:250

SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
160	491738.381	6929555.429	80.210
161	491736.463	6929547.202	80.431
162	491738.451	6929538.990	80.817
163	491743.921	6929532.552	81.302
164	491751.703	6929529.263	81.872



CUT JOINT
DENOTED 'CJ' ON PLAN
SCALE 1:10



DOWEL JOINT
DENOTED 'DJ' ON PLAN
SCALE 1:10

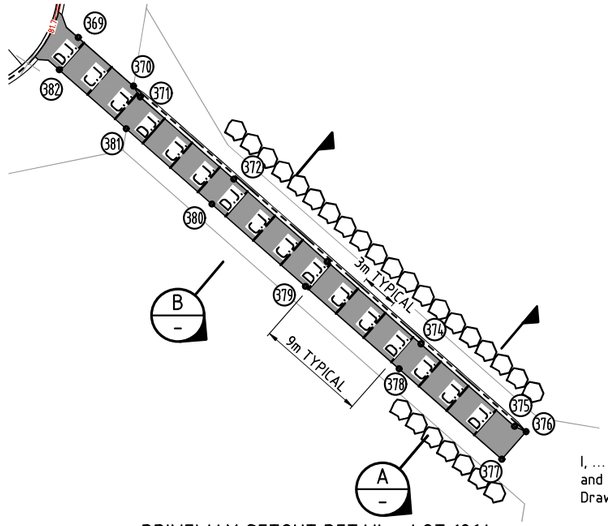
LEGEND

- ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE B1)
- SW — STORMWATER DRAINAGE
- 36.0 — FINISHED SURFACE CONTOURS
- 3.000 — OFFSET TO KERB FACE
- D.J. — DOWEL JOINT (D.J.)
- C.J. — CUT JOINT (C.J.)

GENERAL NOTES

1. SETOUT TABLES ARE GIVEN AT KERB LIP LEVELS.
2. KERB LIP LEVELS ARE GIVEN AT QUARTER POINTS, TP'S AND EQUAL PARTS U.N.O.
3. KERB RADII AND OFFSETS ARE GIVEN AT HORIZONTAL SETOUT POINT SHOWN ON KERB SETOUT DETAILS BELOW
4. EXTRA DETAIL FOR SETTING OUT IS AVAILABLE ON CAD FILE

DRIVEWAY AND CROSSOVER 'TYPE 3'
N40 CONCRETE (f'cf=4.0MPa)
125mm THICK SL72 FABRIC
40 COVER OVER 50mm SAND BEDDING
AS PER BSC STD DWG 50413



DRIVEWAY SETOUT DETAIL - LOT 1864
SCALE 1:250

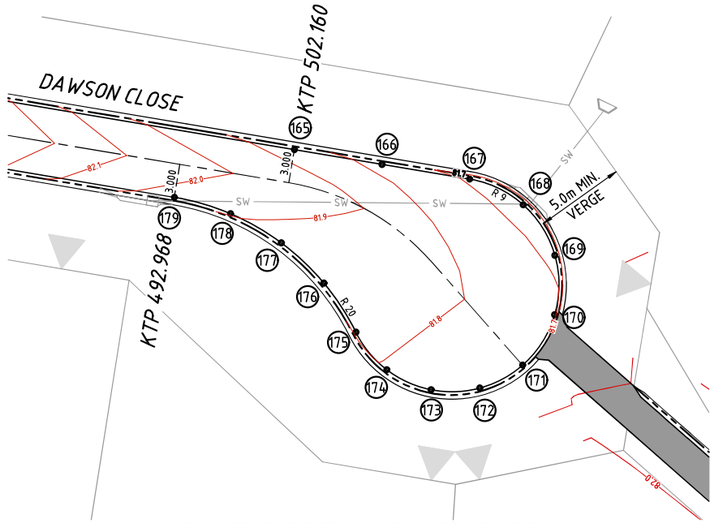
DRIVEWAY - SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
369	491904.355	6929492.182	81.273
370	491908.850	6929488.227	81.513
371	491909.402	6929487.341	81.552
372	491917.033	6929480.625	81.736
373	491924.665	6929473.910	81.863
374	491932.296	6929467.194	81.990
375	491939.927	6929460.478	82.117
376	491940.876	6929460.043	82.130
377	491938.894	6929457.791	82.220
378	491930.512	6929465.167	82.071
379	491922.881	6929471.883	81.944
380	491915.250	6929478.598	81.817
381	491908.264	6929484.745	81.661
382	491902.808	6929489.547	81.282

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust.
RPEQ 17544
2021.05.06 12:56:37 +10'00'

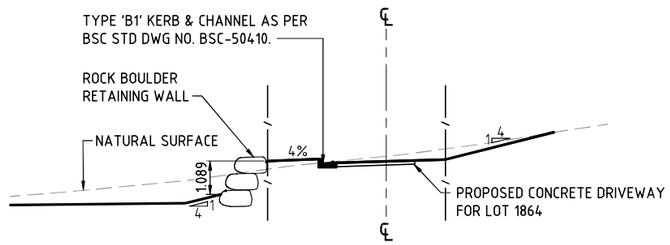
Signed..... RPEQ No.17544..... Dated.06.05.2021.....



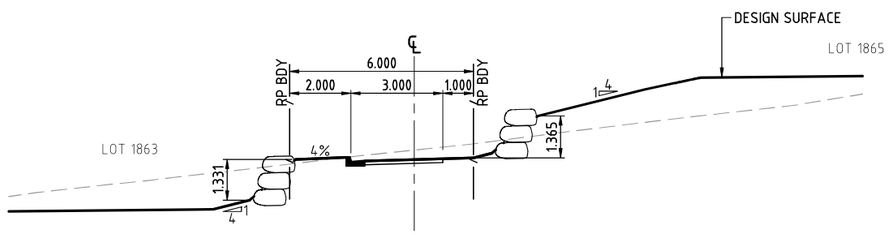
CUL-DE-SAC DETAIL - DAWSON CLOSE
SCALE 1:250

SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
165	491881.176	6929507.491	81.252
166	491888.318	6929506.290	81.168
167	491895.460	6929505.089	81.087
168	491899.834	6929502.986	81.066
169	491902.408	6929498.872	81.083
170	491902.388	6929494.019	81.107
171	491899.779	6929489.926	81.132
172	491896.286	6929488.052	81.151
173	491892.323	6929487.915	81.171
174	491888.709	6929489.546	81.191
175	491886.189	6929492.606	81.212
176	491883.581	6929496.606	81.236
177	491880.110	6929499.885	81.264
178	491875.968	6929502.260	81.305
179	491871.385	6929503.601	81.357

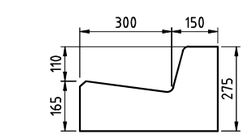


B — SECTION
SCALE 1:100

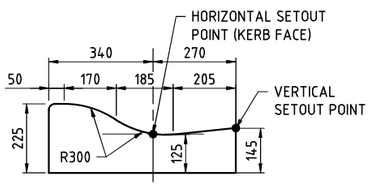


A — SECTION
SCALE 1:100

DRIVEWAY CROSS SECTION
SCALE 1:100



KERB SETOUT DETAIL
KERB AND CHANNEL - TYPE B1
SCALE 1:10



KERB SETOUT DETAIL
KERB AND CHANNEL - TYPE M3
SCALE 1:10

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1 : 10 (A1 UNREDUCED)

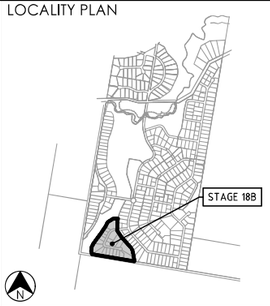
SCALE 1 0.5 0 1 2 3 4 5 6 7 8 9 10m
1 : 100 (A1 UNREDUCED)

SCALE 5 0 5 10 15 20 25m
1 : 250 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED TABLES/DETAILS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client
PEET

Project
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B
OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
ROADWORKS
INTERSECTION DETAILS

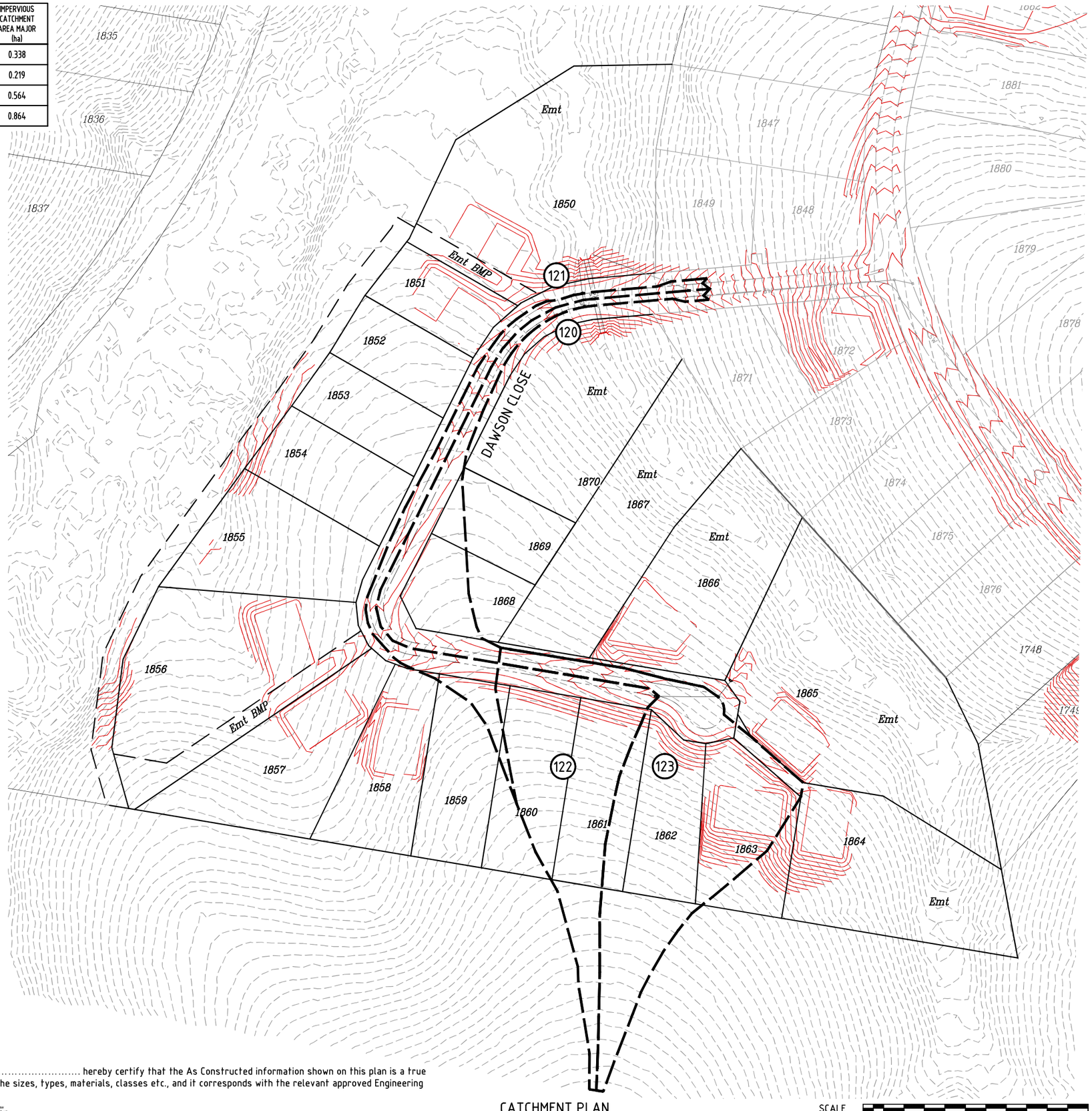
Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	14 of 33

	Drawing No	Revision
A1	18-201-14	C

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Accom\18-201-14-RD-DETAILS.dwg Plotted by: DS on 6/05/2021 12:03:10 PM

CATCHMENT NAME	CATCHMENT AREA (ha)	RUNOFF COEFF MINOR	RUNOFF COEFF MAJOR	IMPERVIOUS CATCHMENT AREA MINOR (ha)	IMPERVIOUS CATCHMENT AREA MAJOR (ha)
120	0.384	0.62	0.88	0.238	0.338
121	0.249	0.62	0.88	0.154	0.219
122	0.641	0.62	0.88	0.397	0.564
123	0.982	0.62	0.88	0.609	0.864



LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED CATCHMENT BOUNDARY
- (001) CATCHMENT NUMBER
- KERB AND CHANNEL
- SW PROPOSED STORMWATER DRAINAGE
- 36.0 FINISHED SURFACE CONTOURS
- 36.0 DTM SURVEY CONTOURS
- 36.0 LIDAR CONTOURS

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust,
RPEQ 17544
2021.05.06 12:56:50
+10'00'

Signed..... RPEQ No....17544..... Dated...06.05.2021.....

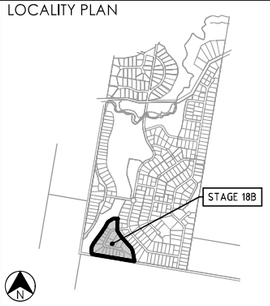
CATCHMENT PLAN
SCALE 1:1000

SCALE
10 5 0 10 20 30 40 50 60 70 80 90 100m
1 : 1000 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED LOTS / EASEMENT	23/09/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
STORMWATER
CATCHMENT PLAN

Drawn	Designed	Checked	Date
LMS	BK	GG	JUN 20

Scale	Sheet
AS SHOWN	15 of 33

Drawing No	Revision
A1	18-201-15	C

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Ascon\18-201-15-SW-CATCHMENT.dwg Plotted by: DS on 6/05/2021 12:03:18 PM

LOCATION					TIME			SUB-CATCHMENT RUNOFF						INLET DESIGN								DRAIN DESIGN													HEADLOSSES										PART FULL		DESIGN LEVELS							
						tc	I	C10	C	A	C×A	ΣCA	Q					Qg	Qb		tc	I	ΣCA	Qt	Qm	Qs	Qp	L	S		V	T			V2/2g	Ku	hu	Kl	hl	Kw	hw	Sf	hf		Vp							
DESIGN ARI	STRUCTURE No.	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	LAND USE	SLOPE OF CATCHMENT	SUB-CATCHMENT TIME OF CONC.	RAINFALL INTENSITY	10yr RUNOFF CO-EFFICIENT	CO-EFFICIENT OR RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUM OF (C x A)	SUB-CATCHMENT DISCHARGE	FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET	MINOR FLOW ROAD CAPACITY	INLET TYPE	FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE No.	CRITICAL TIME OF CONC.	RAINFALL INTENSITY	TOTAL (C x A)	MAJOR TOTAL FLOW	MAJOR SURFACE FLOW CAPACITY	MAJOR SURFACE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE / BOX DIMENSIONS (CLASS)	FLOW VELOCITY FULL (PIPE GRADE VELOCITY)	TIME OF FLOW IN REACH	STRUCTURE CHART No.	STRUCTURE RATIOS FOR 'K' VALUE CALCULATIONS	VELOCITY HEAD	U/S HEADLOSS COEFFICIENT	U/S PIPE STRUCT. HEADLOSS	LAT. HEADLOSS CO-EFFICIENT	LAT. PIPE STRUCT. HEADLOSS	W.S.E CO-EFFICIENT	CHANGE IN W.S.E	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L x Sf)	DEPTH	VELOCITY	OBVERT LEVELS	DRAIN SECTION H.G.L	UPSTREAM H.G.L	LAT. H.G.L	W.S.E.	SURFACE OR K&C INVERT LEVEL	STRUCTURE No.
yrs					%	min	mm/h			ha	ha	ha	l/s	l/s	%	l/s		l/s	l/s		min	mm/h	ha	l/s	l/s	l/s	l/s	m	%		m/s	min			m		m				m	%	m	m	m/s	m	m	m	m	m	m	
2 100	G101	G101 to G102	101			15.00 15.00	95 192		0.62 0.88	0.425 0.425	0.264 0.374	0.264 0.374	70 199	70 FLOW WIDTH 1.500 m DOWNSTREAM 0.474 m	3.00	24.7	2	61 (UNLOCKED | 9 0)	G103	15.00 15.00	95 192	0.264 0.374	199	1579	139 (Pipe flow= Grate flow)	61	51.418	1.95	375(20	5(0.47 1y) (2.21)	0.86			0.015 0.015	5.90 5.90	0.091 0.091			5.90 5.90	0.091 0.091	0.12 0.12	0.062 0.062	0.127 (0.118 1y)	1.84 (1.76 1y)	89.154 88.152	89.154 88.090	89.245		89.245	90.194	G101
2 100	G102	G102 to 18A	101;102			5.00 5.00	147 295		0.75 1.00	0.090 0.090	0.068 0.090	0.068 0.090	28 74	28 FLOW WIDTH 1.246 m	1.00	14.2	2	28 (UNLOCKED | 0 0)	G118	15.86 15.86	93 188	0.332 0.644	242	911	165 (Pipe flow= Sum upstr atten flows)	77	9.346	0.60	375(28	7(0.59 1y) (1.23)	0.16		Part full downstream pipe Upstream HGL 88.090 below outlet pipe obv 88.132 Set Kp to 16	0.025 0.025	1.60 1.60	0.131 0.131			1.60 1.60	0.131 0.131	0.19 0.19	0.018 0.018	0.202 (0.183 1y)	1.27 (1.22 1y)	88.132 88.076	87.959 87.903	88.090		88.090	89.169	G102
2 100	G103	G103 to 18A	103			15.00 15.00	95 192		0.62 0.88	0.457 0.457	0.283 0.402	0.283 0.402	75 214	83 FLOW WIDTH 2.108 m DOWNSTREAM 0.883m	1.00	14.2	2	69 (UNLOCKED | 15 0)	G104A	15.00 15.00	95 192	0.283 0.402	214	911	146 (Pipe flow= Grate flow)	69	9.204	2.00	375(28	6(0.58 1y) (2.24)	0.15			0.020 0.020	7.90 7.90	0.155 0.155			7.90 7.90	0.155 0.155	0.15 0.15	0.014 0.014	0.135 (0.121 1y)	1.92 (1.81 1y)	88.160 87.976	88.160 87.736	88.315		88.315	89.125	G103
2 100	18A	18A to G118	18A -Maj;101;102;103			16.02 16.02	92 187				0.615 0.866						16				16.02 16.02	92 187	0.615 0.866	450	1579	307 (Pipe flow= Sum upstr atten flows)	143	91.837	10.63	375(28	29(1.07 1y) (5.17)	1.19			0.085 0.085	1.30 1.30	0.110 0.110			1.30 1.30	0.110 0.110	0.66 0.66	0.610 0.610	0.128 (0.116 1y)	4.30 (4.08 1y)	87.456 77.691	87.456 77.737	87.566		87.566	89.113	18A
														(Sum Imp Area Maj 1.394 Sum Flow Maj 0.724 Overland Flow Maj 0.581)																																										
														(Overland flow diverted = 0.000; Equiv Area = Diverted Flow x 360/18/mm/h = 0.528 ha)																																										
2 100	G119	G119 to G118	119			5.00 5.00	147 295		0.75 1.00	0.054 0.054	0.041 0.054	0.041 0.054	17 44	17 FLOW WIDTH 0.470 m	8.20	40.8	2	17 (UNLOCKED | 0 0)	G121	5.00 5.00	147 295	0.041 0.054	44	2488	28 (Pipe flow= Grate flow)	17	6.639	3.69	375(20	5(0.12 1y) (3.05)	0.11		Part full downstream pipe Upstream HGL 77.781 below outlet pipe obv 77.937 Set Kp to 7.9	0.001 0.001	7.90 7.90	0.043 0.043			7.90 7.90	0.043 0.043	0.01 0.01	0.001 0.001	0.057 (0.050 1y)	1.59 (1.46 1y)	77.937 77.691	77.738 77.737	77.781		77.781	78.781	G119
2 100	G118	G118 to 18OUT	18A -Maj;101;102;103;119;118			5.00 5.00	147 295		0.75 1.00	0.058 0.058	0.044 0.058	0.044 0.058	18 48	18 FLOW WIDTH 0.497 m	8.20	40.8	2	18 (UNLOCKED | 0 0)	G120	17.21 17.21	89 181	0.700 0.978	492	2488	333 (Pipe flow= Sum upstr atten flows)	159	59.271	10.84	375(29	4(1.19 1y) (5.22)	0.69		Qg 0.011 Qa 0.159 Do 375 Routine 2.24 Join Pipes: 18A and G119 Vel1 1.251 Vel2 0.092 Eq Dia 4.01 Angle 14.8 Flow 0.148	0.106 0.106	0.62 0.62	0.066 0.066		CHART 34 Angle 32 Case3 S/Do 2.5 Du/Do 1.07 Qg/Qa 0.07 K 0.51 S/Do 1.17 corr 0.11 Ku 0.62 Kw 0.62	0.62 0.62	0.066 0.066	0.83 0.83	0.489 0.489	0.135 (0.122 1y)	4.46 (4.23 1y)	77.671 71.245	77.671 71.005	77.737		77.737	78.781	G118
2 100	G120	G120 to G121	120			15.00 15.00	95 192		0.62 0.88	0.384 0.384	0.238 0.338	0.238 0.338	63 180	63 FLOW WIDTH 0.708 m	0.00	19.2	185	0.08 (UNLOCKED	63 0)	0 0	G121	15.00 15.00	95 192	0.238 0.338	180	0	117 (Pipe flow= Sum upstream flows)	63	6.597	4.00	375(2)	0.57(0.44 1y) (3.17)	0.11			0.017 0.017	7.90 7.90	0.131 0.131			7.90 7.90	0.131 0.131	0.13 0.13	0.008 0.008	0.108 (0.094 1y)	2.40 (2.23 1y)	74.745 74.481	74.745 74.214	74.876		74.876	75.782	G120
2 100	G121	G121 to 21OUT	120;121			15.00 15.00	95 192		0.62 0.88	0.249 0.249	0.154 0.219	0.154 0.219	41 117	41 FLOW WIDTH 0.394 m	0.00	19.2	185	0.08 (UNLOCKED	41 0)	0 0		15.11 15.11	95 192	0.392 0.557	297	0	194 (Pipe flow= Sum upstream flows)	103	16.833	14.33	375(2)	0.94(0.73 1y) (6.00)	0.28		Qg 0.041 Qa 0.103 Do 375 Flow G120 made eqv grate flow CHRT 32: Vo2/2gDo 0.12 H/Do 0.00 Kq side flow 7.53 end flow 5.82 K vals above for stepped pipes as grate flow	0.045 0.045	7.53 7.53	0.339 0.339			7.53 7.53	0.339 0.339	0.35 0.35	0.059 0.059	0.100 (0.088 1y)	4.37 (4.06 1y)	73.657 71.245	73.657 70.970	73.996		73.996	75.782	G121
2 100	G122	G122 to G123	122			15.00 15.00	95 192		0.62 0.88	0.616 0.616	0.382 0.542	0.382 0.542	101 289	101 FLOW WIDTH 2.165 m DOWNSTREAM 1.039m	1.30	16.2	2	78 (UNLOCKED | 23 0)	G123	15.00 15.00	95 192	0.382 0.542	289	991	211 (Pipe flow= Grate flow)	78	30.745	1.41	375(28	7(0.60 1y) (1.89)	0.51			0.026 0.026	5.90 5.90	0.152 0.152			5.90 5.90	0.152 0.152	0.20 0.20	0.061 0.061	0.160 (0.145 1y)	1.75 (1.67 1y)	80.525 80.090	80.525 80.403	80.676		80.676	81.377	G122
2 100	G123	G123 to 22OUT	122;123			15.00 15.00	95 192		0.62 0.88	0.572 0.572	0.355 0.503	0.355 0.503	94 268	116 FLOW WIDTH 1.561 m	0.00	19.2	185	0.08 (UNLOCKED	116 0)	0 0		15.51 15.51	94 190	0.737 1.045	552	0	357 (Pipe flow= Sum upstream flows)	194	9.754	2.00	375(29	7(1.37 1y) (2.24)	0.09		Qg 0.116 Qa 0.194 Do 375 CHART 37 Angle 53 Case2 S/Do 2.5 Du/Do 1.00 Qg/Qa 0.60 K 1.78 S/Do 1.89 corr 0.33 Ku 2.11 Kw 2.11	0.158 0.158	2.11 2.11	0.333 0.333			2.11 2.11	0.333 0.333	1.23 1.23	0.120 0.120	0.250 (0.212 1y)	2.48 (2.35 1y)	80.070 79.875	80.070 79.750	80.403		80.403	81.066	G123

CALCULATIONS TABLE

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust
RPEQ 17544
2021.05.06 12:57:01 +10'00'

Signed..... RPEQ No....17544..... Dated....06.05.2021.....

DO NOT SCALE THIS DRAWING
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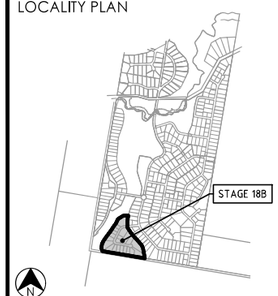
LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED CALCS SHEET	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

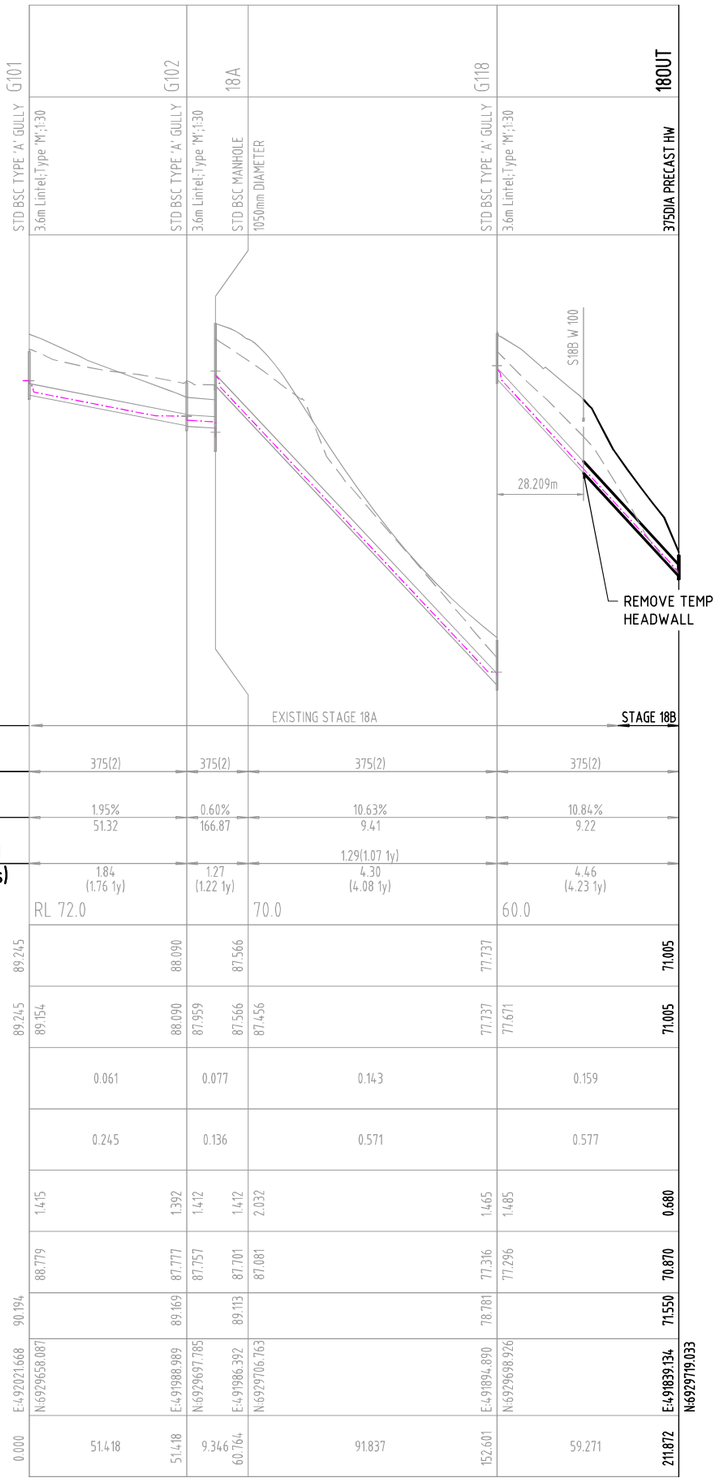
Drawing Title
STORMWATER
CALCULATION TABLE

Drawn	Designed	Checked	Date
LMS	BK	GG	JUN 20

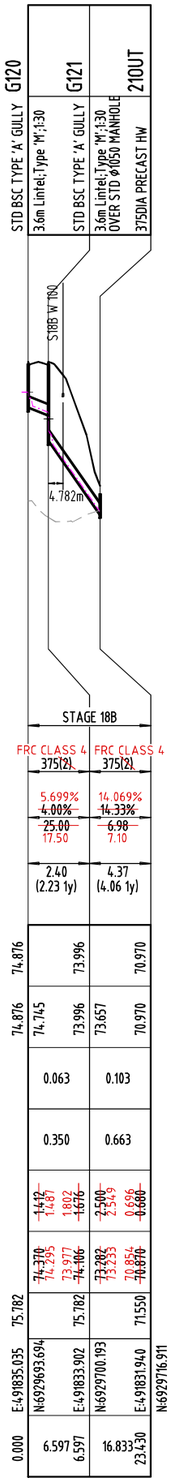
Scale	Sheet
AS SHOWN	16 of 33

	Drawing No	Revision
A1	18-201-16	C

STRUCTURE NAME	G101		G102	18A		G118	18OUT
STRUCTURE DESCRIPTION	STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M';1:30		STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M';1:30	STD BSC MANHOLE 1050mm DIAMETER		STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M';1:30	375DIA PRECAST HW
STAGE	EXISTING STAGE 18A						STAGE 18B
PIPE SIZEmm (Class)	375(2)		375(2)	375(2)			375(2)
PIPE GRADE %	1.95%		0.60%	10.63%			10.84%
PIPE SLOPE 1 in X	51.32		166.87	9.41			9.22
FULL PIPE FLOW VELOCITY (m/s)				1.29(1.07 1y)			
PART FULL FLOW VELOCITY (m/s)	1.84 (1.76 1y)		1.27 (1.22 1y)	4.30 (4.08 1y)			4.46 (4.23 1y)
DATUM	RL 72.0			70.0			60.0
WATER LEVEL IN STRUCTURE	89.245	88.090		87.566		77.737	71.005
HYDRAULIC GRADE LEVEL	89.245	89.154	88.090	87.959	87.566	87.456	77.737	77.671	71.005
PIPE FLOW (Cumecs)		0.061		0.077		0.143		0.159	
PIPE CAPACITY AT GRADE (Cumecs)		0.245		0.136		0.571		0.577	
DEPTH TO INVERT	1.415		1.392	1.412	1.412	2.032	1.465	1.485	0.680
INVERT LEVEL OF DRAIN	88.779		87.777	87.757	87.701	87.081	77.316	77.296	70.870
DESIGN SURFACE LEVEL	90.194		89.169		89.113		78.781		71.550
SETOUT CO-ORDINATE	E:4792021.668 N:6929658.087		E:4791988.989 N:6929697.785	E:4791986.392 N:6929706.763			E:4791894.890 N:6929698.926		E:4791839.134 N:6929719.033
RUNNING CHAINAGE	0.000	51.418	51.418	9.346 60.764		91.837	152.601	59.271	211.872



STAGE	G120	G121	21OUT
	STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M';1:30	STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M';1:30 OVER STD ø1050 MANHOLE	375DIA PRECAST HW
	STAGE 18B		
PIPE SIZEmm (Class)	FRC CLASS 4 375(2)	FRC CLASS 4 375(2)	
PIPE GRADE %	5.699% ~~4.00%~~	14.069% ~~14.33%~~	
PIPE SLOPE 1 in X	~~25.00~~ 17.50	~~6.98~~ 7.10	
FULL PIPE FLOW VELOCITY (m/s)			
PART FULL FLOW VELOCITY (m/s)	2.40 (2.23 1y)	4.37 (4.06 1y)	
DATUM			
WATER LEVEL IN STRUCTURE	74.876	73.996	70.970
HYDRAULIC GRADE LEVEL	74.876	74.745	73.996	73.657	70.970
PIPE FLOW (Cumecs)		0.063	0.103	
PIPE CAPACITY AT GRADE (Cumecs)		0.350	0.663	
DEPTH TO INVERT	~~1.412~~ 1.487	~~1.802~~ 1.676	~~2.500~~ 2.543	~~0.696~~ 0.680	
INVERT LEVEL OF DRAIN	74.370 ~~74.295~~	73.977 ~~74.166~~	~~73.282~~ 73.233	~~71.854~~ 71.870	
DESIGN SURFACE LEVEL	75.782	75.782		71.550
SETOUT CO-ORDINATE	E:4791835.035 N:6929693.694	E:4791833.902 N:6929700.193	E:4791831.940 N:6929716.911
RUNNING CHAINAGE	0.000	6.597	6.597	16.833	23.430



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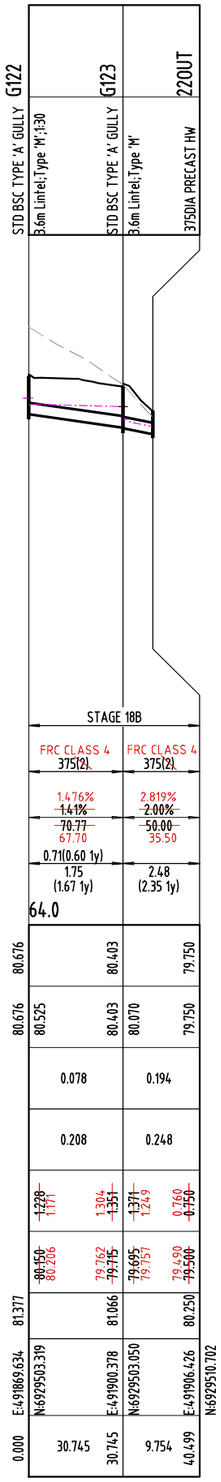
STAGE	G122	G123	22OUT
	STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M';1:30	STD BSC TYPE 'A' GULLY 3.6m Lintel;Type 'M'	375DIA PRECAST HW
	STAGE 18B		
PIPE SIZEmm (Class)	FRC CLASS 4 375(2)	FRC CLASS 4 375(2)	
PIPE GRADE %	1.476% ~~1.41%~~	2.819% ~~2.00%~~	
PIPE SLOPE 1 in X	~~70.77~~ 67.70	~~50.00~~ 35.50	
FULL PIPE FLOW VELOCITY (m/s)	0.71(0.60 1y)		
PART FULL FLOW VELOCITY (m/s)	1.75 (1.67 1y)	2.48 (2.35 1y)	
DATUM	64.0		
WATER LEVEL IN STRUCTURE	80.676	80.403	79.750
HYDRAULIC GRADE LEVEL	80.676	80.525	80.403	80.070	79.750
PIPE FLOW (Cumecs)		0.078	0.194	
PIPE CAPACITY AT GRADE (Cumecs)		0.208	0.248	
DEPTH TO INVERT	~~1.228~~ 1.171	~~1.304~~ 1.351	~~1.371~~ 1.249	~~0.760~~ 0.750	
INVERT LEVEL OF DRAIN	~~80.150~~ 80.206	79.762 ~~79.715~~	~~79.695~~ 79.751	~~79.490~~ 79.500	
DESIGN SURFACE LEVEL	81.377	81.066	80.250
SETOUT CO-ORDINATE	E:4791869.634 N:6929503.319	E:4791900.378 N:6929503.050	E:4791906.426 N:6929510.702
RUNNING CHAINAGE	0.000	30.745	30.745	9.754	40.499



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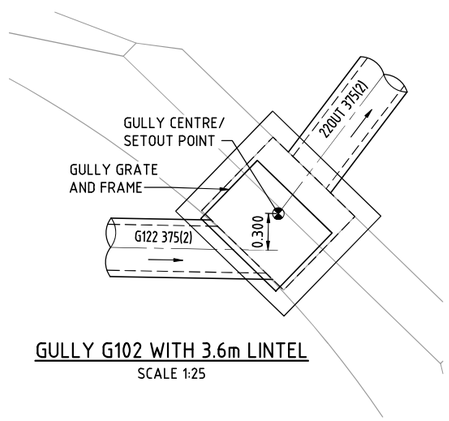

GULLY G102 WITH 3.6m LINTEL
SCALE 1:25

LINE

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:57:14 +10'00'

Signed..... RPEQ No. 17544 ..... Dated. 06.05.2021 .....

SCALE A 1:1000 (Horiz.) 10 5 0 10 20 30 40 50 60 70 80 90 100m

B 1:100 (Vert.) 1 0.5 0 1 2 3 4 5 6 7 8 9 10m

(A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
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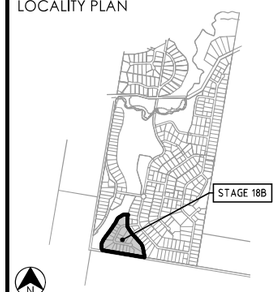
LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED LONG SECTION	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

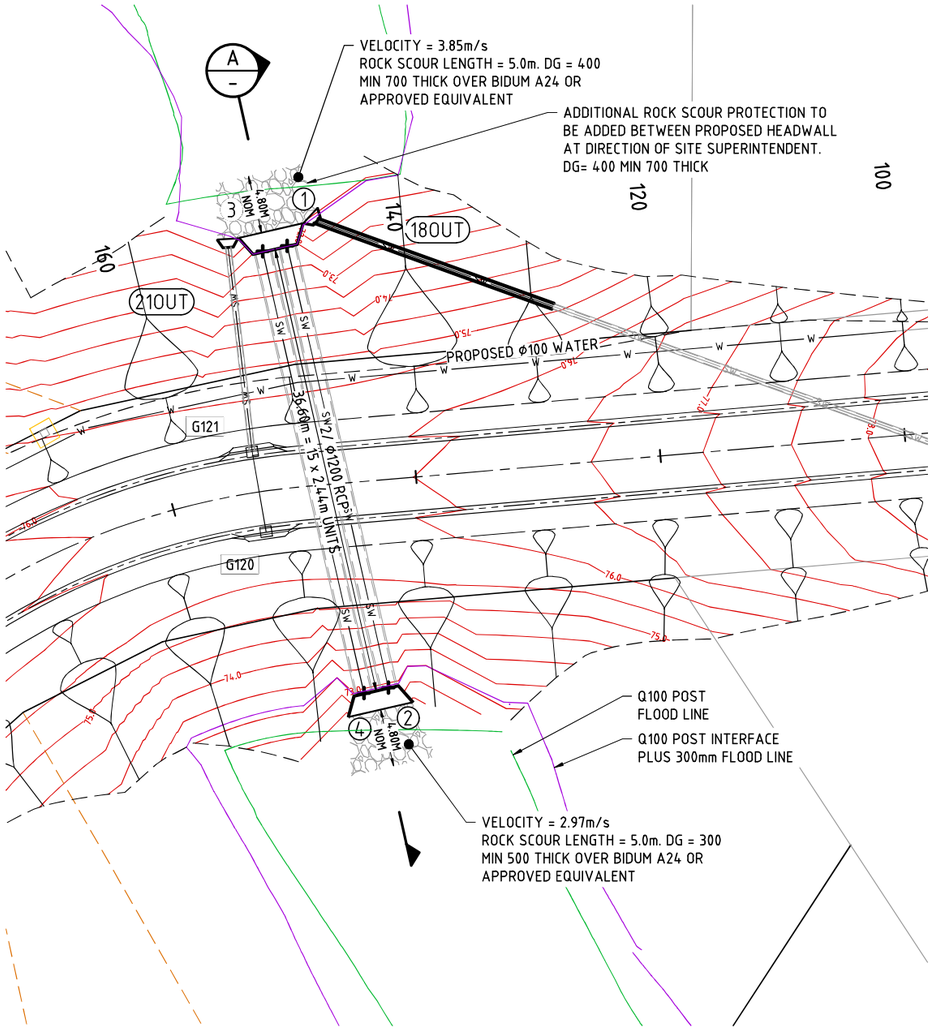
Approved

Drawing Title

STORMWATER LONGITUDINAL SECTIONS AND GULLY DETAIL

Drawn	Designed	Checked	Date
LMS	BK	GG	JUN 20
Scale: AS SHOWN			Sheet: 17 of 33
A1	Drawing No: 18-201-17		Revision: C

M:\2018\18201 Spring Mountain Stage 18B\Engineering\Ascon\18-201-17-SW-LONGS.dwg Plotted by: DS on 6/05/2021 12:03:28 PM



CULVERT LAYOUT PLAN
SCALE 1:250

LEGEND

- ROAD CENTRELINE
- BARRIER KERB AND CHANNEL (TYPE B1)
- SEMI - MOUNTABLE KERB (TYPE SM5 - MODIFIED)
- S — SEWERAGE
- W — WATER
- TW — TRUNK WATER
- 2A — STORMWATER MANHOLE NUMBER
- G001 — STORMWATER GULLY PIT NUMBER
- SAFETY FENCE
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- ROCK SCOUR PROTECTION WITH WITH IMPERMABLE LINER BENEATH

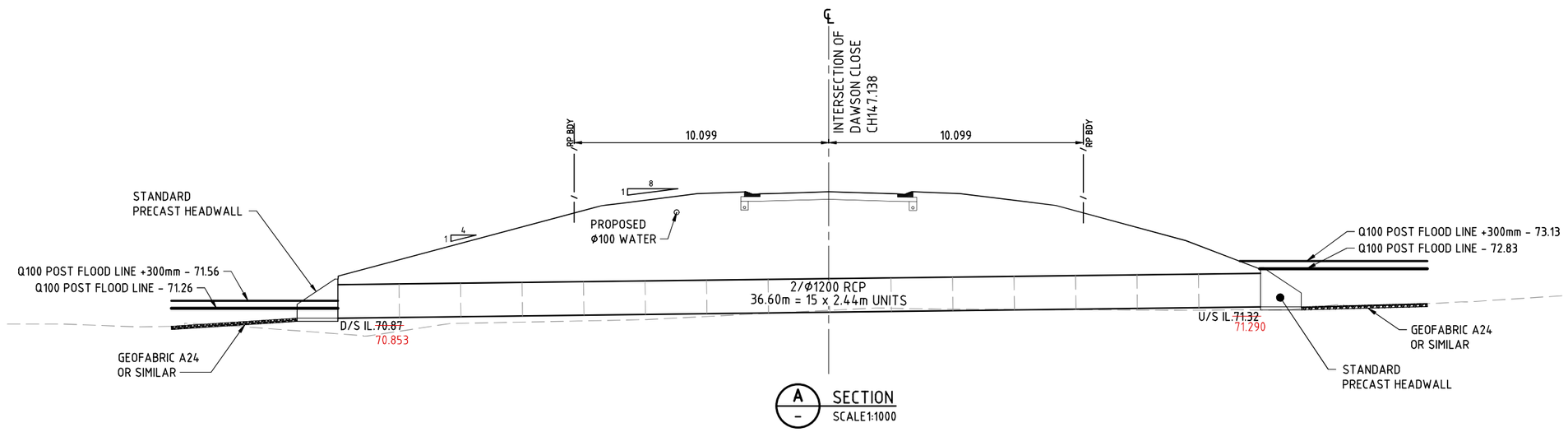
POINT	DESCRIPTION	EASTING	NORTHING	LEVEL
1	CTR OF D/S PIPE	491836.755	6929717.008	70.870
2	CTR OF U/S PIPE	491845.009	6929680.992	71.320
3	CTR OF D/S PIPE	491834.757	6929716.550	70.870
4	CTR OF U/S PIPE	491843.011	6929680.535	71.320

NOTE

1. THIS DWG IS TO BE READ IN CONJUNCTION WITH DMR STD DWG 1303 and 1312 to 1320
2. DIMENSIONS OF CULVERT CELLS TO BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION
3. FINAL SETOUT OF CULVERT SCOUR PROTECTION TO BE AS DIRECTED ON SITE BY SUPERINTENDENTS REP.

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No....17544..... Dated...06.05.2021.....



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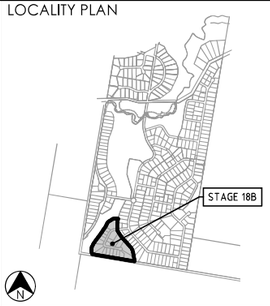
NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED CULVERT DETAILS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
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Drawing Title
STORMWATER
CULVERT DETAIL

Drawn	Designed	Checked	Date
LMS	BK	GG	JUN 20

Scale	Sheet
AS SHOWN	18 of 33

	Drawing No	Revision
A1	18-201-18	C

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LEGEND

- CONSTRUCTION BOUNDARY
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- SW — PROPOSED STORMWATER DRAINAGE
- 36.0 — FINISHED SURFACE CONTOURS
- Q100 FLOOD POST CONSTRUCTION EXTENTS
- 300mm FREEBOARD EXTENTS
- 36.0 — DTM SURVEY CONTOURS
- 36.0 — LIDAR CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- GULLY BAGS
- SEDIMENT AND DIVERSION FENCE (TEMP)

NOTE

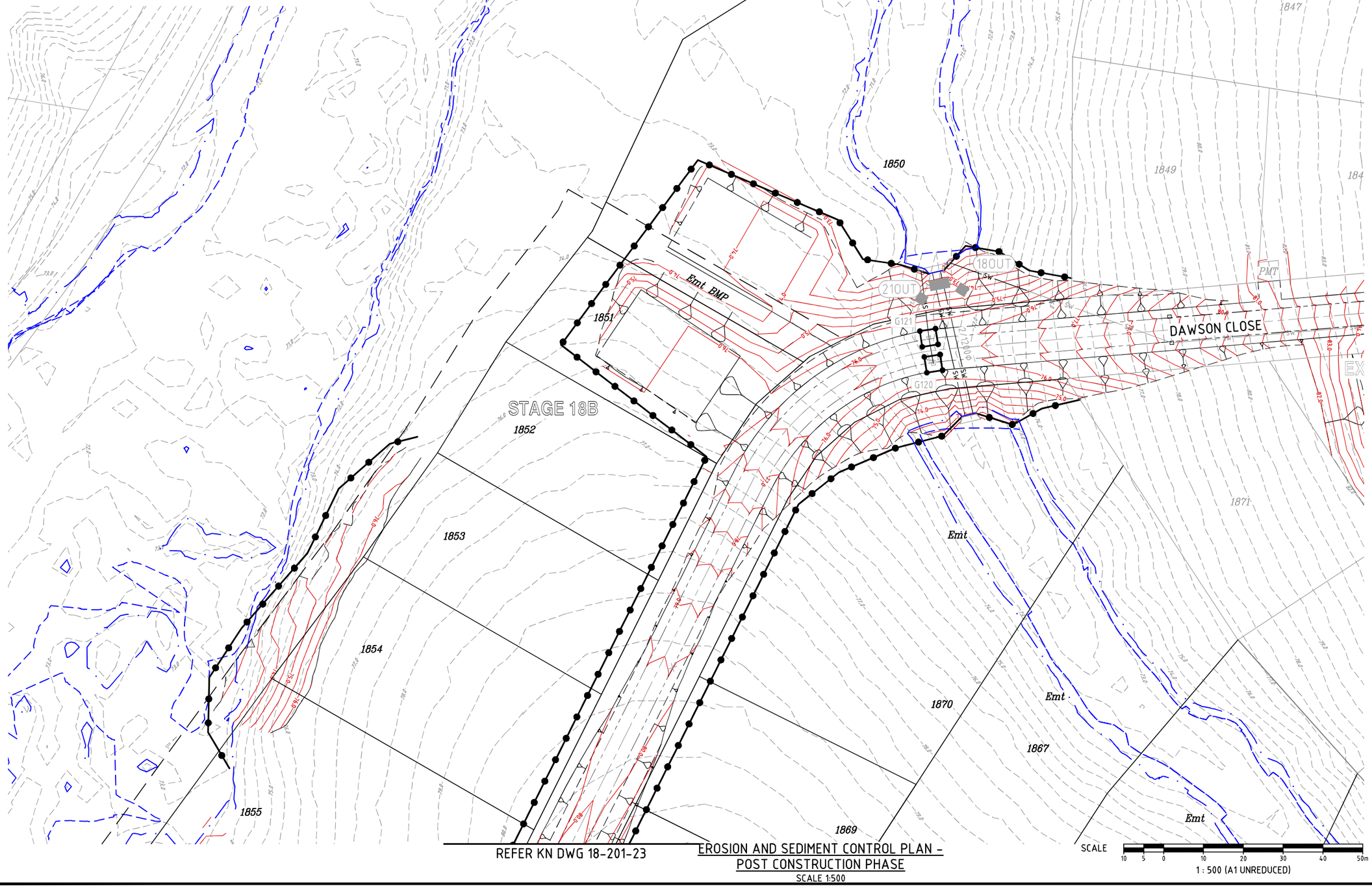
EROSION AND SEDIMENT CONTROL REQUIREMENTS TO BE CERTIFIED ON SITE BY A RECOGNISED SPECIALIST IN THE SOIL AND EROSION AND SEDIMENT CONTROL - CPESC.

MARK SHAW

I, ... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust,
RPEQ 17544
2021.05.06 12:57:35
+10'00'

Signed..... RPEQ No. 17544 ..... Dated. 06.05.2021 .....



REFER KN DWG 18-201-23

EROSION AND SEDIMENT CONTROL PLAN - POST CONSTRUCTION PHASE
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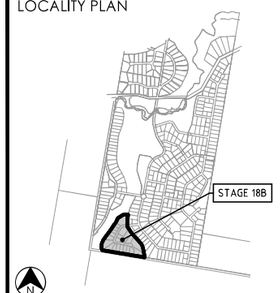
NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	NOTE ADDED	20/08/20	DES
C	REVISED LOTS / EASEMENT	23/09/20	DES
D	AS CONSTRUCTED FINAL	06/05/21	LMS

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ACREAGE ESTATE
STAGE 18B

OW/106/2020

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Drawing Title
EROSION AND SEDIMENT CONTROL LAYOUT PLAN
POST CONSTRUCTION PHASE - SHEET 1

Drawn	Designed	Checked	Date
LMS	TE	GG	JUN 20

Scale	Sheet
AS SHOWN	22 of 33

	Drawing No	Revision
A1	18-201-22	D

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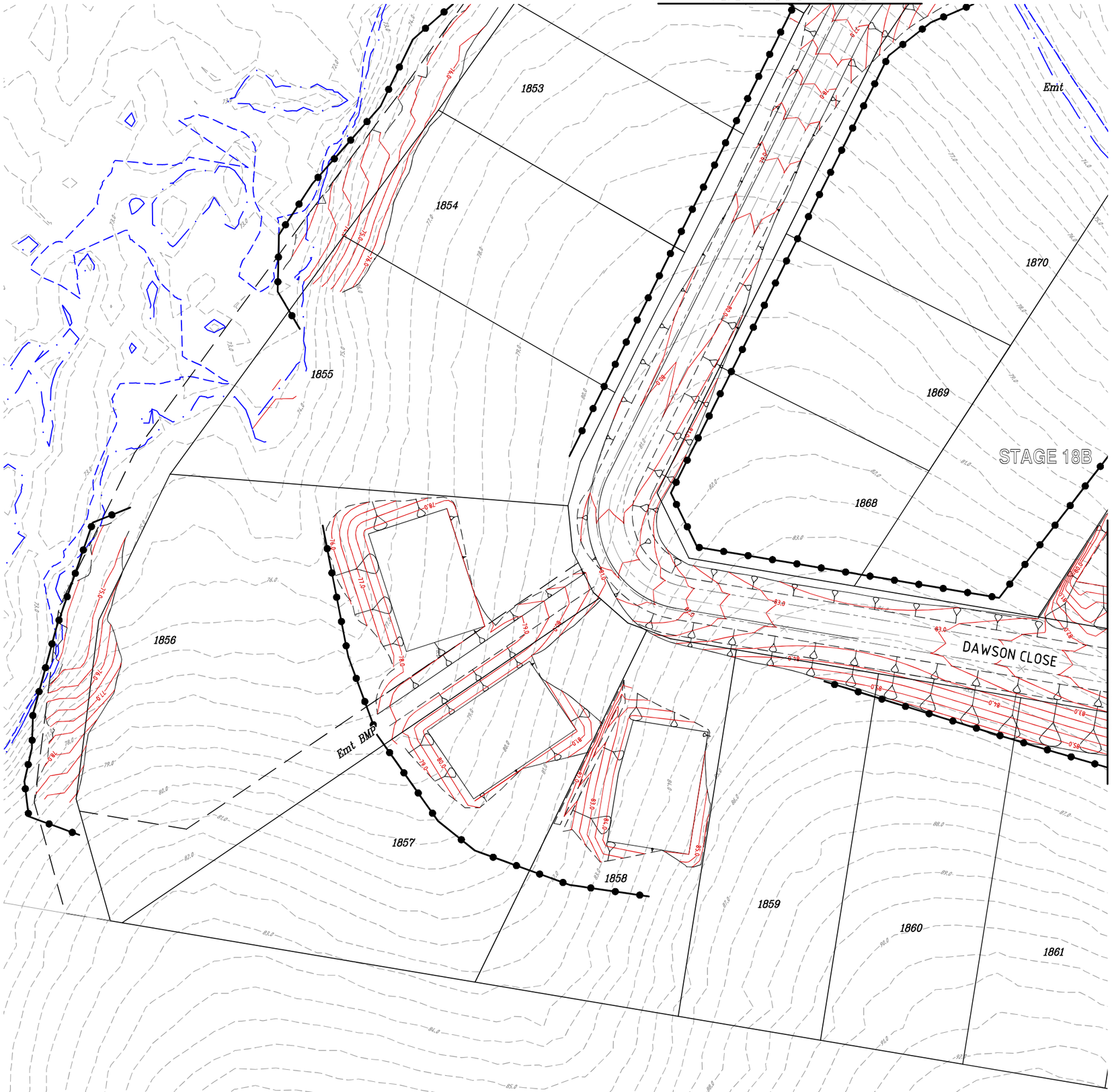

EROSION AND SEDIMENT CONTROL PLAN - POST CONSTRUCTION PHASE
SCALE 1:500

NOTE
EROSION AND SEDIMENT CONTROL REQUIREMENTS TO BE CERTIFIED ON SITE BY A RECOGNISED SPECIALIST IN THE SOIL AND EROSION AND SEDIMENT CONTROL - CPESC.

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SCALE
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1 : 500 (A1 UNREDUCED)

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Signed ..... RPEQ No. 17544 ..... Dated 06.05.2021

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:57:48 +10'00'

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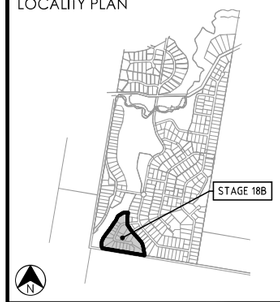
NORTH

LOCALITY PLAN



REVISIONS

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D	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

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Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

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Drawing Title
EROSION AND SEDIMENT CONTROL LAYOUT PLAN
POST CONSTRUCTION PHASE - SHEET 2

Drawn	Designed	Checked	Date
LMS	TE	GG	JUN 20

Scale	Sheet
AS SHOWN	23 of 33

	Drawing No	Revision
A1	18-201-23	D

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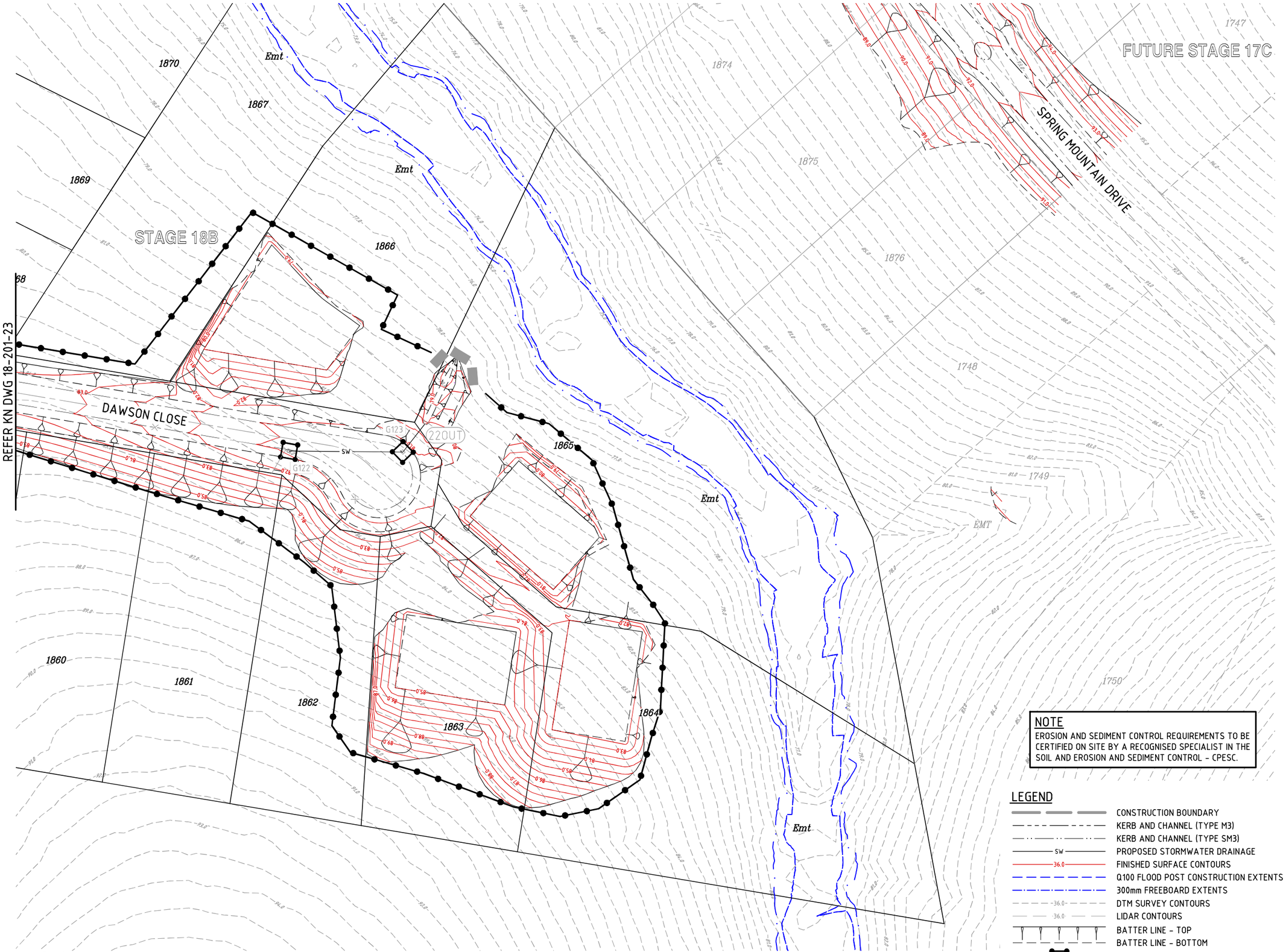

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Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:57:59 +10'00'

Signed..... RPEQ No. 17544 ..... Dated. 06.05.2021 .....

EROSION AND SEDIMENT CONTROL PLAN - POST CONSTRUCTION PHASE

SCALE 1:500

NOTE

EROSION AND SEDIMENT CONTROL REQUIREMENTS TO BE CERTIFIED ON SITE BY A RECOGNISED SPECIALIST IN THE SOIL AND EROSION AND SEDIMENT CONTROL - CPESC.

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SCALE 10 5 0 10 20 30 40 50m

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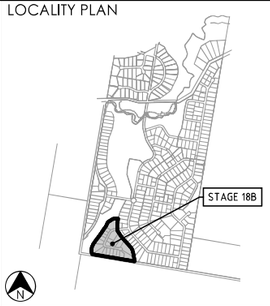
LOCALITY PLAN



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Client

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Drawing Title
EROSION AND SEDIMENT CONTROL LAYOUT PLAN
POST CONSTRUCTION PHASE - SHEET 3

Drawn	Designed	Checked	Date
LMS	TE	GG	JUN 20

Scale	Sheet
AS SHOWN	24 of 33

	Drawing No	Revision
A1	18-201-24	C

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EROSION AND SEDIMENT CONTROL PROGRAM

1. THIS PROGRAM AND ASSOCIATED PLANS SHOULD BE READ IN CONJUNCTION WITH THE SITE MANAGEMENT SPECIFICATION INCORPORATED IN THE CONTRACT DOCUMENTS. THE PROVISIONS OF THE SPECIFICATION ARE TO BE STRICTLY ADHERED TO.
2. THE BASIC OBJECTIVES OF THE EROSION AND SEDIMENT CONTROL ARE:
   - I. IDENTIFY CRITICAL AREAS AND PROVIDE APPROPRIATE ATTENTION TO THOSE AREAS.
   - II. PLAN SITE LAYOUTS SO THAT ACCESS TO ALL REQUIRED DRAINAGE EROSION AND SEDIMENT CONTROL MEASURE IS MAINTAINED.
   - III. LIMIT EXPOSURE TIME BY PROGRAMMING TO MINIMISE THE AREA OF LAND EXPOSED TO POTENTIALLY ADVERSE WEATHER CONDITIONS AT ANY ONE TIME. I.E. PROGRESSIVELY CLEAR AND REVEGETATE.
   - IV. PROVIDE CONTROL MEASURES INCLUDING TEMPORARY AND PERMANENT DRAINAGE, EROSION AND SEDIMENT CONTROLS.
3. THE EROSION AND SEDIMENT CONTROL SHALL COMPLY WITH BEST PRACTICE FOR EROSION AND SEDIMENT CONTROL, THE POLLUTION CONTROL MANUAL FOR URBAN STORMWATER MANAGEMENT, THE QUEENSLAND URBAN DRAINAGE MANUAL, AND THE SOIL EROSION AND SEDIMENT CONTROL - ENGINEERING GUIDELINES FOR QUEENSLAND (CURRENT EDITIONS).
4. CONSTRUCTION SEQUENCE THE CONSTRUCTION SEQUENCE WILL GENERALLY BE:
   - I. OBTAIN ALL NECESSARY PERMITS AND APPROVALS BEFORE SITE ESTABLISHMENTS.
   - II. HOLD A PRE-CONSTRUCTION CONFERENCE.
   - III. STABILISE ALL CONSTRUCTION ACCESS ROUTES AND ENTRY/EXIT POINTS.
   - IV. ESTABLISH SEDIMENT CONTROL STRUCTURES AND TEMPORARY DRAINAGE CONTROL MEASURES AS NECESSARY.
   - V. CARRY OUT BULK EARTHWORKS.
   - VI. MAINTAIN AND REPAIR DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES.
   - VII. REMOVE SEDIMENT CONTROL MEASURES WHEN THE SITE IS STABILISED. I.E. >70% GROUND COVER
   - VIII. THE CONTRACTOR SHALL PREPARE A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO SUIT HIS/HER CONSTRUCTION METHODOLOGY, AND SUBMIT THIS PLAN FOR APPROVAL TO THE SUPERINTENDENT. IT SHOULD BE NOTED THAT ANY SIGNIFICANT VARIATION TO THIS PLAN MAY REQUIRE RESUBMISSION TO COUNCIL FOR APPROVAL. THE CLIENT SHALL NOT BE RESPONSIBLE FOR ANY SUCH ASSOCIATED DELAY.
5. ALL ESC DEVICES ARE TO BE INSPECTED WEEKLY, PRIOR TO EXPECTED AND AFTER RAINFALL ANY DAMAGE IS TO BE REPAIRED AS REQUIRED TO MAINTAIN THEIR EFFICACY.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL (ESC) MEASURE TO BE MAINTAINED AND FULLY OPERATIONAL DURING THE MAINTENANCE PERIOD AND ARE TO BE REMOVED AFTER THE SATISFACTORY COMPLETION OF AN OFF-MAINTENANCE INSPECTION BY COUNCIL AND PRIOR TO FORMAL ACCEPTANCE "OFF MAINTENANCE" BY COUNCIL.
7. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR IS TO PROVIDE A DETAILED PROGRAM TO THE SUPERINTENDENT SHOWING THE TIMING FOR ALL WORKS ASSOCIATED WITH THE PROJECT, NOMINATING, IN PARTICULAR, THE PROGRAM FOR INSTALLATION OF SOIL AND EROSION CONTROL SYSTEMS.
8. EARTHWORKS SHALL BE CARRIED OUT IN SUCH A MANNER THAT THE SITE IS MAINTAINED IN A WELL DRAINED CONDITION, AREAS OF LOOSE SOIL ARE MINIMISED AND CONCENTRATIONS OF STORMWATER ARE MINIMISED. BULK EARTHWORKS WILL BE CARRIED OUT OVER THE ENTIRE SITE IN ONE STAGE.
9. A SHAKE DOWN AS DETAILED ON THE PLAN COMPRISING FREE DRAINAGE GRAVEL SHALL BE LOCATED ADJACENT TO THE POINT OF ACCESS WHERE VEHICLES CAN BE WASHED DOWN PRIOR TO EXIT TO THE STREET SYSTEM IF REQUIRED. THE WASH DOWN AREA SHALL BE KEPT FREE OF MUD.
10. FOR DETAILS OF ENTRY/EXIT SEDIMENT PAD REFER TO BEST PRACTICE EROSION & SEDIMENT CONTROL BOOK 1, PAGE 2.48, FIGURE 2.6.
11. SUPPLEMENTARY EROSION AND SEDIMENT CONTROL DEVICES MAY BE REQUIRED AT THE DISCRETION OF THE SUPERINTENDENT.
12. SEDIMENTATION FENCES TO BE PLACED AS SHOWN. FOR DETAILS OF SEDIMENT FENCE REFER BEST PRACTICE EROSION & SEDIMENT CONTROL BOOK 1, PAGE 2.50, FIGURE 2.8.
13. WHERE SEDIMENT FENCES ARE SHOWN TO BE CONSTRUCTED IN AREAS OF SIGNIFICANT EARTHWORKS, ERECTION OF THE FENCE MAY BE DEFERRED UNTIL COMPLETION OF THE BULK EARTHWORKS, SUBJECT TO ABSENCE OF RAIN.

TREES

1. ENSURE COMPLIANCE WITH THE REQUIREMENTS OF AS4970 - TREES ON CONSTRUCTION SITES. THIS MAY REQUIRE CONSULTATION AND GUIDANCE FROM A CLASS V CERTIFIED ARBORIST AS TREES OUTSIDE THE IMMEDIATE WORK AREA MAY BE AFFECTED.

EROSION AND SEDIMENT CONTROL NOTES

1. NO DISTURBED AREA IS TO REMAIN DENUDED LONGER THAN 60 DAYS.
2. ALL EROSION AND SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING AND GRUBBING OR ANY OTHER EARTHWORKS OR TRENCHING.
3. ALL STORMWATER, SEWER LINE AND SERVICES TRENCHES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 15 DAYS AFTER BACKFILL, NO MORE THAN 150 METRES ARE TO BE OPEN AT ANY ONE TIME.
4. ALL TEMPORARY EARTH BANKS, DIVERSIONS AND SEDIMENT DAM EMBANKMENTS ARE TO BE MACHINE-COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER WITHIN 10 DAYS AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED.
5. ALL FILL EMBANKMENTS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END OF EACH DAYS OPERATION.
6. ALL CUT AND FILL BATTERS ARE TO BE SEEDED AND MULCHED WITHIN 10 DAYS OF COMPLETION OF GRADING.
7. ADDITIONAL SILT AND EROSION CONTROLS MAY BE REQUIRED AS ORDERED ON SITE BY THE SUPERVISING ENGINEER.
8. ALL CONTROLS ARE TO BE INSPECTED AFTER EACH STORM EVENT AND MAINTAINED AS REQUIRED. CONTROLS ARE TO BE MAINTAINED UNTIL THE DISTURBED AREAS ARE PERMANENTLY STABILIZED OR UNTIL NO LONGER REQUIRED.

PHASE 1 - CLEARING AND BULK EARTHWORKS

CONSTRUCT AND MAINTAIN SILT FENCES, STRAW BALE TRAPS, ALLOTMENT DRAINAGE BANKS, CATCH DRAINS AND HYDROMULCHING WHICH CONTROL SEDIMENT AND EROSION DURING CLEARING AND BULK EARTHWORKS.

PHASE 2 - TRENCH EXCAVATION

CONSTRUCT AND MAINTAIN SILT FENCES, STRAW BALE TRAPS, ALLOTMENT DRAINAGE BANKS AND CATCH DRAINS WHICH CONTROL SEDIMENTATION AND EROSION DURING TRENCHING WORK.

PHASE 3 - PAVEMENT CONSTRUCTION

CONSTRUCT AND MAINTAIN SILT FENCES, STRAW BALE TRAPS, ALLOTMENT DRAINAGE BANKS, GULLY INLET PROTECTION, AND PIPE INLET/OUTLET PROTECTION WHICH CONTROL SEDIMENTATION AND EROSION DURING PAVEMENT CONSTRUCTION. SAND BAGGING TO BE PLACED ACROSS PAVEMENT TO CONTROL RUNOFF IN PAVEMENT BOXING AS DIRECTED ON SITE.

PHASE 4 - MAINTENANCE PERIOD

CONSTRUCT AND MAINTAIN CONTROLS AND VEGETATIVE TREATMENTS WHICH CONTROL SEDIMENTATION AND EROSION PRIOR TO THE ESTABLISHMENT OF GRASS COVER.
PROVIDE 600mm WIDE GRASS FILTER STRIPS BEHIND KERB AND CHANNEL.

NOTE: TURF TREATMENT IN CERTAIN AREAS BY LANDSCAPER. REFER TO LANDSCAPE DRAWING.

NOTE

ALL VEHICLES EXITING FROM THE SITE ARE TO BE CLEANED AND TREATED TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ONTO PUBLIC ROADS.
IF MATERIAL IS ACCIDENTLY DEPOSITED ONTO PUBLIC ROADS IT SHALL BE REMOVED WITHOUT DELAY. IF THE SHAKEDOWN DEVICE PROVES TO BE INEFFECTIVE THE CONTRACTOR IS TO USE OTHERS MEANS TO PREVENT MATERIAL BEING DEPOSITED ONTO PUBLIC ROADS.

TOPSOIL

1. STRIP AND STOCKPILE AVAILABLE TOPSOIL (ASSUMED AVERAGE DEPTH 150mm) FROM ALL DISTURBED AREAS PRIOR TO BULK EARTHWORKS. GRADE EVENLY BETWEEN ALLOTMENT FINISHED SURFACE LEVELS AND ENSURE LOTS ARE FREE DRAINING.
2. MINIMUM SLOPE ACROSS ALLOTMENTS TO BE 1%.
3. ALL FOOTPATHS, BATTERS, AND EARTHWORKS AFFECTED ALLOTMENTS ARE TO BE TOPSOILED TO A MINIMUM DEPTH OF 150mm (LIGHTLY COMPACTED) AND TURFED WHERE SPECIFIED.

SEDIMENT FENCES

1. SEDIMENT FENCES TO BE PLACED AS SHOWN. SEDIMENT FENCED TO BE REPAIRED AND EXCESSIVE SEDIMENT DEPOSITS SHALL BE REMOVED ONCE CAPACITY FALLS BELOW 75%.
2. FOR DETAILS OF SEDIMENT FENCE REFER BEST PRACTICE EROSION & SEDIMENT CONTROL BOOK 1, PAGE 2.50, FIGURE 2.8.
3. SEDIMENT FENCES TO BE REPAIRED AS REQUIRED AND EXCESSIVE SEDIMENT DEPOSITS SHOULD BE REMOVED.
4. INSTALL KERB INLETS WITH GRAVEL RANGING FROM 50mm TO 75mm IN SIZE SHALL BE INSTALLED AT ALL COMPLETED INLETS. REFER IPWEAQ STANDARD DRAWING D-0041. THESE SHALL BE MAINTAINED IN A CLEAN CONDITION. IN THE EVENT OF HEAVY RAIN THEY SHALL BE REMOVED TO MINIMISE THE POTENTIAL FOR FLOODING.
5. CHECKS OF SILT CONTROL DEVICES ARE TO BE MADE WEEKLY, OR AFTER ANY SIGNIFICANT STORM EVENT TO ENSURE INTEGRITY AND PERFORMANCE.

TURFING

1. PROVIDE TURFING TO ENTIRE WIDTH OF ALL SWALES, FOOTPATHS AND 1 IN 4 CUT AND FILL BATTERS.
2. FOOTPATH BATTERS ARE TO BE STABILISED WITH TOPSOIL (AND TURFED) AS SOON AS PRACTICAL AFTER THE BATTERS HAVE BEEN COMPLETED.

DURING CONSTRUCTION SEQUENCE:

1. TOPSOIL STOCKPILES SHALL BE LESS THAN 1m DEEP AND UNCOMPACTED. A SEDIMENTATION FENCE SHALL BE CONSTRUCTED ON THE D/S SIDE, OR THE STOCKPILE STABILISED WITH VEGETATION, MULCH, OR A SOIL STABILISER.
2. SEDIMENTATION FENCES TO BE PLACED AS SHOWN.
3. REGULARLY INSPECT BANKS AND REPAIR ANY SLUMPS, WHEEL TRACK DAMAGE OR LOSS OF FREEBOARD.
4. REMOVE SEDIMENT TO AVOID PONDING FROM CATCH DRAINS.
5. REMOVE EXCESSIVE SEDIMENT FROM UPSTREAM OF CHECK DAM.
6. ROAD RESERVE TO BE USED AS HAUL ROAD.
7. A CATCH DRAIN OR DIVERSION BANK IS TO BE PROVIDED ON THE TOP SIDE OF ALL CUTS, WITH DISCHARGE EITHER TO UNDISTURBED GRASS LANDS OR TO THE CROSS ROAD DRAINAGE.
8. SUPPLEMENTARY EROSION AND SEDIMENT CONTROL DEVISED MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
9. WATER QUALITY SAMPLES MUST BE TAKEN AND ANALYSED PRIOR TO THE RELEASE OF ANY WATER FROM THE SEDIMENT POND. WATER QUALITY MUST SATISFY THE FOLLOWING CRITERIA: TSS<50MG/L PH BETWEEN 6.5 AND 8.5.
10. ALL WATER QUALITY DATA INCLUDING DATES OF RAINFALL, TESTING AND WATER RELEASE MUST BE MAINTAINED IN AN ON-SITE REGISTER. THIS REGISTER IS TO BE MAINTAINED FOR THE DURATION OF THE APPROVED WORKS AND BE AVAILABLE ON SITE FOR INSPECTION BY COUNCIL OFFICERS ON REQUEST.
11. EXPOSED AREAS ON LOTS ARE TO BE SEEDED AND MULCHED (E.G. HYDROMULCHED). MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 2.5T/HA. ALTERNATIVELY THEY SHALL BE DRILL-SEEDED AND IRRIGATED SO AS TO ENSURE >70% GROUND COVER WITHIN 14 DAYS FROM NOVEMBER TO APRIL, OR 30 DAYS FROM MAY TO OCTOBER.

FOLLOWING CONSTRUCTION:

1. SEDIMENTATION FENCES TO BE MAINTAINED UNTIL TURFING IS COMPLETED.
2. SEDIMENT BASINS TO BE CHECKED AFTER EVERY SIGNIFICANT STORM AND DESILTED ONCE THE SETTLEMENT LIMIT HAS BEEN REACHED.

STABILISATION:

1. THE AMOUNT OF AREA EXPOSED AT ANY ONE TIME TO BE MINIMISED BY STAGING THE WORKS WHEREVER POSSIBLE AND AIMING TO ACHIEVE FINISHED LEVEL IN EACH AREA AS QUICKLY AS POSSIBLE BEFORE OPENING NEW AREAS.
2. TOPSOIL TO BE STRIPPED AND STOCKPILED SEPARATELY TO SUB-SOILS.
3. STOCKPILES TO BE PROVIDED WITH SURFACE COVER USING A CHEMICAL SURFACE STABILISER SUCH AS VITAL CHEMICALS VITAL-BON MATT STONEWALL.
4. IF WORKS ARE DELAYED OR PUT ON HOLD THEN TEMPORARY EROSION CONTROL COVERING TO BE PROVIDED USING VITAL CHEMICALS VITAL-BON MATT P47-VR1 OR EQUIVALENT.
5. ONCE AREAS REACH FINISHED LEVEL:
   - a. TOPSOIL TO BE SPREAD TO CAP/BURY THE DISPERSIVE SUBSOILS.
   - b. TOPSOIL TO BE DRILL-SEEDED WITH A MIXTURE OF ANNUAL AND PERENIAL GRASS SPECIES (REFER TABLE) AND FERTILISER WITH CROP-KING 88 (0.3t/Ha).
   - c. TEMPORARY SOIL COVER TO BE APPLIED CONSISTING OF VITAL CHEMICALS VITAL-BON MATT P47-VR1 OR EQUIVALENT.
   - d. WATERING UNDERTAKEN AS NECESSARY UNTIL STABLE GRASS SURFACE COVER IS ESTABLISHED.

SEED MIXES

	SUMMER BLEND (APPLICATIONS NOVEMBER - DECEMBER)	MID SEASON BLEND (APPLICATIONS MARCH/APRIL & SEPTEMBER/OCTOBER)	WINTER BLEND (APPLICATIONS MAY AUGUST)
UNHULLED GREEN COUCH (CYNODON DACTYLON) OR BLUE COACH (DIGITARIA DIDACYLA)	25%	25%	25%
HULLED GREEN COUCH (CYNODON DACTYLON) OR BLUE COACH (DIGITARIA DIDACYLA)	25%	25%	25%
JAPANESE MILLET	30%	15%	N/A
RYE GRASS	N/A	15%	30%
CARPET GRASS (AXONOPUS AFFINIS)	20%	20%	20%

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Mark Andrew Shaw BEng (Civil), MIEAust. RPEQ 17544 2021.05.06 12:58:10 +10'00'

Signed..... RPEQ No...17544..... Dated...06.05.2021.....

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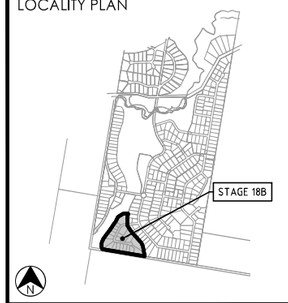
LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
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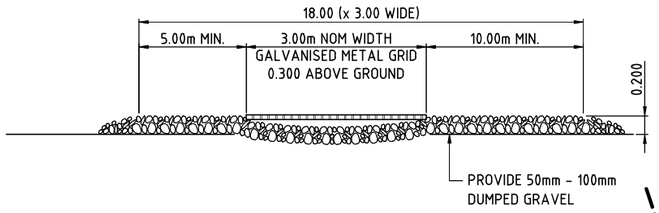
Drawing Title
EROSION AND SEDIMENT CONTROL NOTES

Drawn	Designed	Checked	Date
LMS	TE	GG	JUN 20

Scale: AS SHOWN
Sheet: 25 of 33

A1 | Drawing No: 18-201-25 | Revision: B



SITE ACCESS POINT SHAKEDOWN FACILITY
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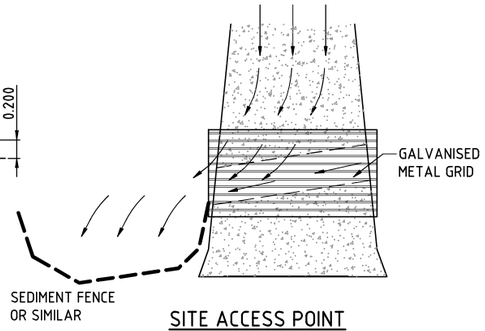

SITE ACCESS POINT ENTRY/EXIT PAD
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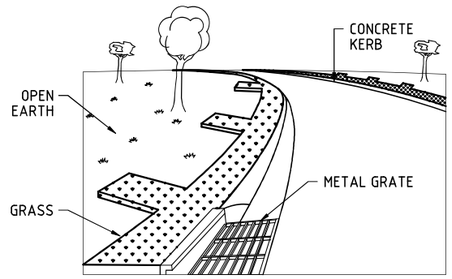

TURF STRIP DETAIL
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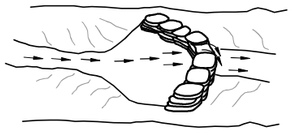

SANDBAG CHECK DAM
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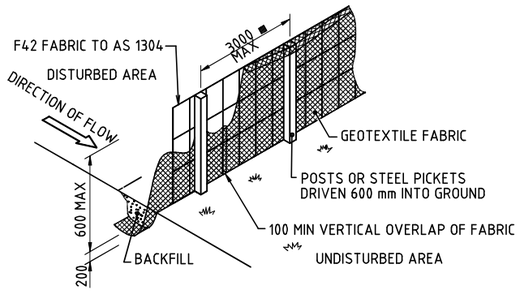

SEDIMENT FENCE
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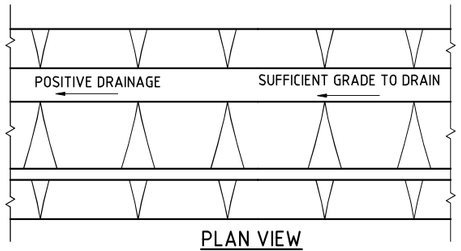
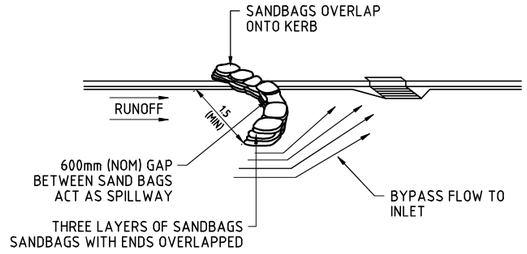


PLAN VIEW
N.T.S.



ON GRADE GULLY INLET
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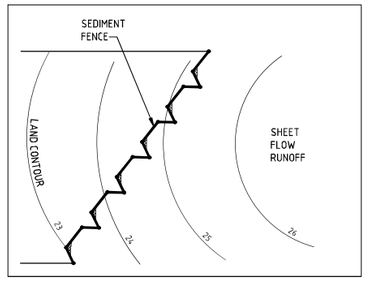

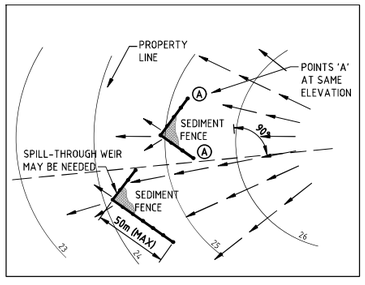

SILT FENCE DETAILS
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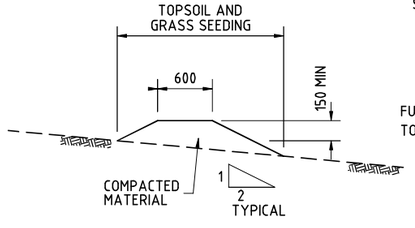

DIVERSION DRAINAGE BANK
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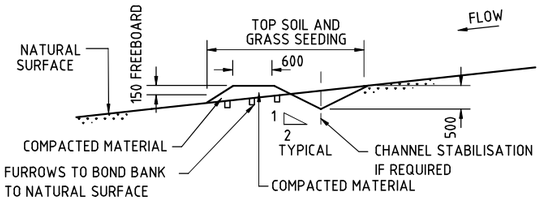
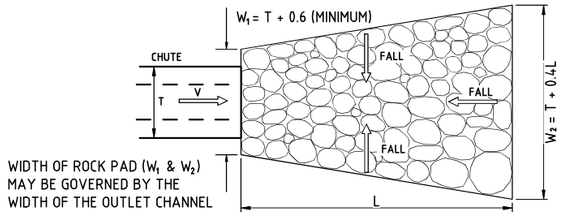
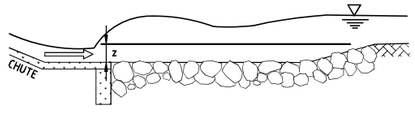


PLACE FILTER FABRIC ACROSS DRAIN AT 30m MAXIMUM INTERVALS AND AT OUTLET OF DRAIN, OR AS REQUIRED TO CONTROL SEDIMENT MOVEMENT ALONG DRAIN.

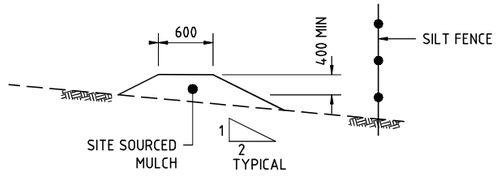
CATCHMENT DRAIN
N.T.S.



TYPICAL LAYOUT OF A ROCK PAD OUTLET STRUCTURE FOR A DRAINAGE CHUTE
N.T.S.



TYPICAL PROFILE OF A ROCK PAD OUTLET STRUCTURE FOR A DRAINAGE CHUTE
N.T.S.



MULCH BUND
N.T.S.

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw
BEng (Civil), MIEAust,
RPEQ 17544
2021.05.06 12:58:22
+10'00'

Signed..... RPEQ No....17544..... Dated...06.05.2021.....

DO NOT SCALE THIS DRAWING
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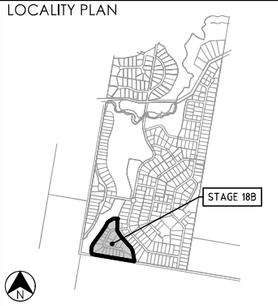
LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
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Drawing Title
EROSION AND SEDIMENT CONTROL DETAILS

Drawn	Designed	Checked	Date
LMS	TE	GG	JUN 20

Scale	Sheet
AS SHOWN	26 of 33

Drawing No	Revision
18-201-26	B

A1

NOTE

- ALL LIVE CONNECTIONS TO EXISTING MAINS TO BE UNDERTAKEN BY LOGAN WATER AT DEVELOPERS COST
- WATER SERVICE CONDUITS MUST MAINTAIN MINIMUM CLEARANCES AS PER TABLE 5.5 OF THE SEQ D&C CODE

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ϕ100 WATER MAIN
- PROPOSED DN63 PE WATER MAIN
- PROPOSED CONDUIT
- EXISTING WATER MAIN
- STORMWATER DRAINAGE
- WATER SERVICE LOCATION
- FIRE HYDRANT
- TEMPORARY FIRE HYDRANT
- VALVE
- CONNECTION REQUIRED BY LOGAN WATER
- ELECTRICAL PILLAR (BY OTHERS)

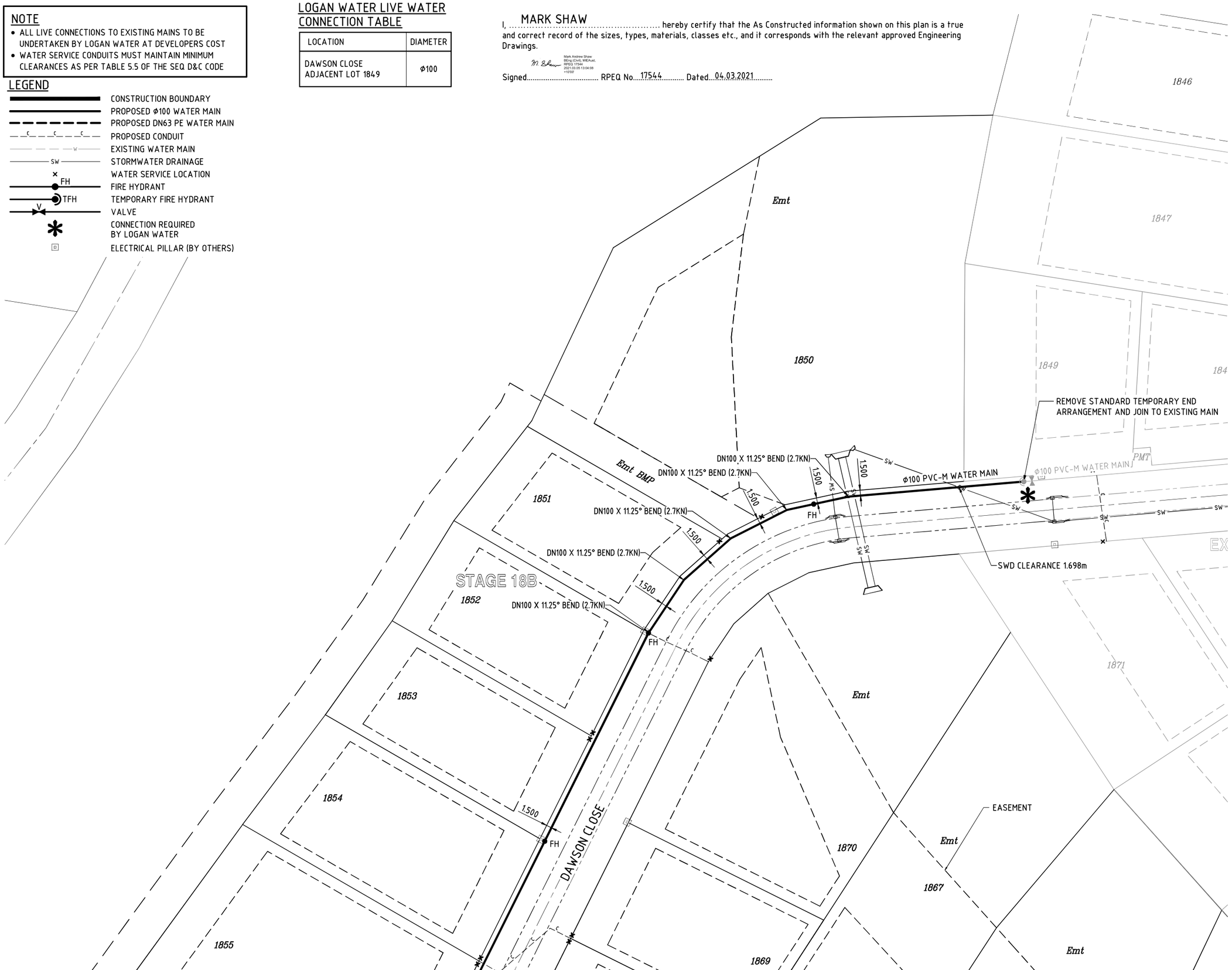
LOGAN WATER LIVE WATER CONNECTION TABLE

LOCATION	DIAMETER
DAWSON CLOSE ADJACENT LOT 1849	ϕ100

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.03.05 13:04:08 +10'00'

Signed..... RPEQ No.17544 Dated..04.03.2021



WATER RETICULATION LAYOUT PLAN

SCALE 1:500

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NORTH

LOCALITY PLAN

REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED LOTS / EASEMENT	23/09/20	DES
C	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS

Client

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SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

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Drawing Title
WATER RETICULATION LAYOUT PLAN SHEET 1

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	27 of 33

A1	Drawing No 18-201-27	Revision C

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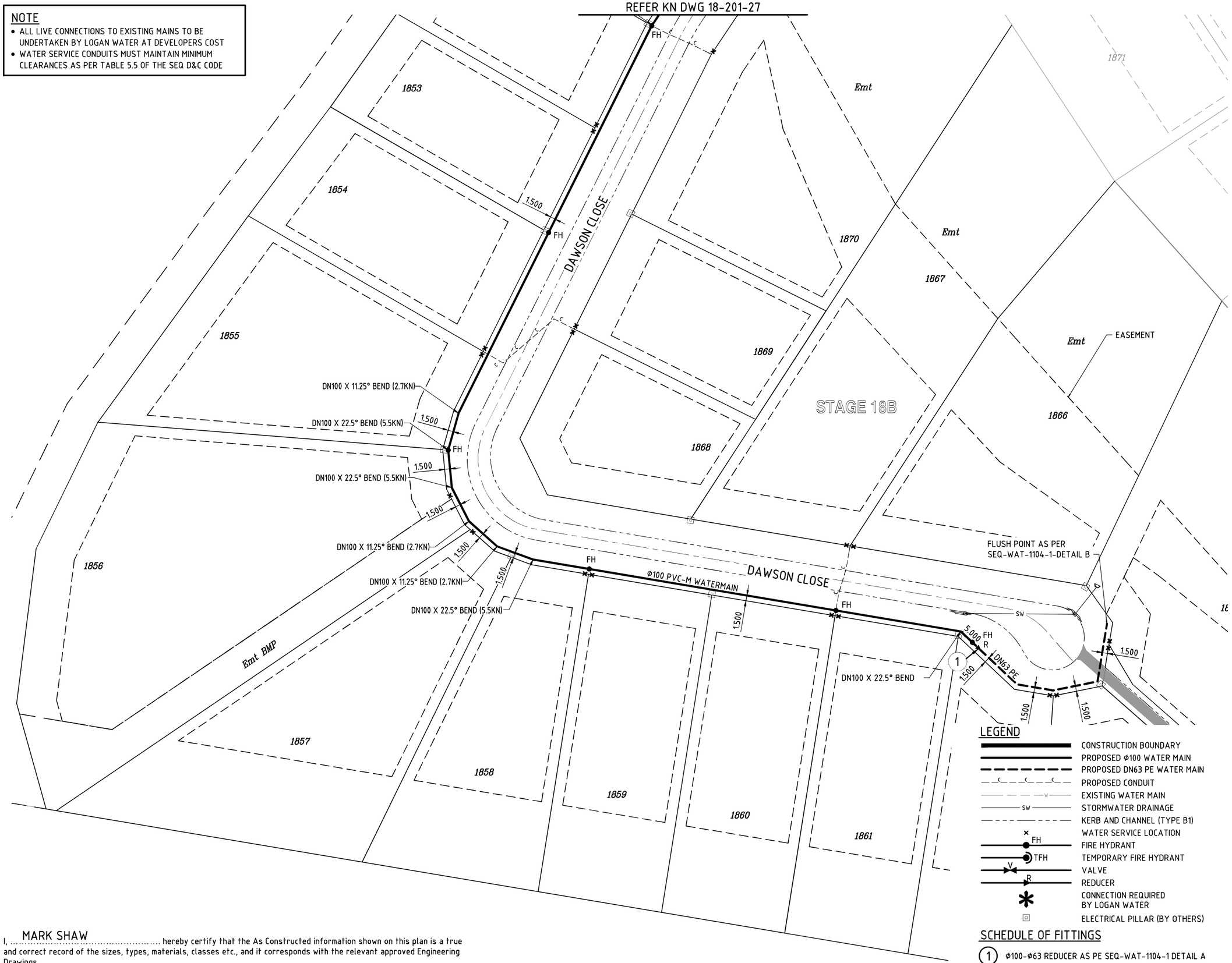
NOTE

- ALL LIVE CONNECTIONS TO EXISTING MAINS TO BE UNDERTAKEN BY LOGAN WATER AT DEVELOPERS COST
- WATER SERVICE CONDUITS MUST MAINTAIN MINIMUM CLEARANCES AS PER TABLE 5.5 OF THE SEQ D&C CODE



LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED Ø100 WATER MAIN
- PROPOSED DN63 PE WATER MAIN
- PROPOSED CONDUIT
- EXISTING WATER MAIN
- STORMWATER DRAINAGE
- KERB AND CHANNEL (TYPE B1)
- WATER SERVICE LOCATION
- FIRE HYDRANT
- TEMPORARY FIRE HYDRANT
- VALVE
- REDUCER
- CONNECTION REQUIRED BY LOGAN WATER
- ELECTRICAL PILLAR (BY OTHERS)

SCHEDULE OF FITTINGS

(1) Ø100-Ø63 REDUCER AS PE SEQ-WAT-1104-1 DETAIL A

SCALE 10 5 0 10 20 30 40 50m

1 : 500 (A1 UNREDUCED)

I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Mark Andrew Shaw BEng(Civil), MIEAust. RPEQ 17544 2021.03.05 13:04:18 +10'00'

Signed..... RPEQ No. 17544 Dated 04.03.2021

WATER RETICULATION LAYOUT PLAN

SCALE 1:500

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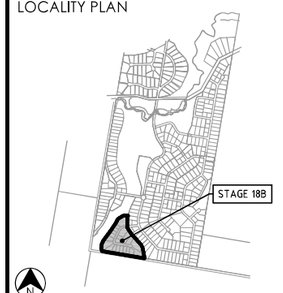
NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED LOTS / EASEMENT	23/09/20	DES
C	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

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ABN 35 112 53 611
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Spring Hill Q 4000
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Drawing Title
WATER RETICULATION LAYOUT PLAN SHEET 2

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	28 of 33

A1	Drawing No	Revision
	18-201-28	C

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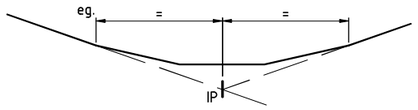
GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SEQ WS&S CODE SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
4. CLEARANCE OVER MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN STANDARD DRAWING No. SEQ-WAT-1200-2.
5. MINIMUM EMBEDMENT SHALL BE TYPE C IN ACCORDANCE WITH STANDARD DRAWING No. SEQ-WAT-1201-1.
6. THRUST BLOCKS SHALL BE IN ACCORDANCE WITH AND PRESSURE TESTED TO 1200kPa AS PER STANDARD DRAWING No. SEQ-WAT-1205-1 AND SEQ-WAT-1206-1.
7. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWING No. SEQ-WAT-1110-1.
8. A WATER METER IS TO BE INSTALLED AT THE RESIDENT'S COST, BY LOGAN WATER.
9. ALL MATERIALS USED IN THE WORKS SHALL BE AS FOLLOWS:

   - ALL DUCTILE IRON FITTINGS SHALL BE MANUFACTURED TO AS/NZS 2280 WITH SOCKET ENDS (UNLESS NOTED) AND DESIGNED FOR USE WITH PVC OR DI PIPES AS APPLICABLE. ALL DI PIPES SHALL BE CEMENT LINED TO AS/NZS 2280.
   - DICL USED IN ROAD CROSSINGS WILL BE PN35 AS PER WATER AUTHORITY STANDARDS.
   - PRESSURE PIPES USED FOR WATER SUPPLY SHALL BE RRJ PIPES AND SHALL BE EITHER PVC CLASS PN16 (UNLESS NOTED OTHERWISE) MINIMUM AND MANUFACTURED TO (UPVC AS/NZS 1477), (PVC-M AS/NZS 4765) (PVC-O AS/NZS 4441) OR DICL PN 20, 35 OR FLANGED CLASS TO AS/NZS 2280).
   - DUCTILE IRON SLUICE AND SCOUR VALVES SHALL BE PN16 RESILIENT SEATED WITH DOUBLE "O" RING STEM SEALS MANUFACTURED TO AS 2638.
   - ALL VALVES, FITTINGS AND PIPE FITTINGS TO BE COATED INTERNALLY AND EXTERNALLY WITH FACTORY APPLIED THERMAL POLYMERIC CORROSION PROTECTION TO AS 4158.
   - ALL NUTS, BOLTS AND WASHERS, SHALL BE STAINLESS STEEL GRADE 316 CLASS 50, WITH AN ANTI-SEIZE APPLIED DURING ASSEMBLY.
   - ALL DUCTILE IRON FLANGES ARE TO COMPLY WITH AS/NZS 2280 AND SHALL BE RAISED FACE TO AS 4087.
10. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS (WHERE APPLICABLE).
11. MARKERS SHALL BE INSTALLED FOR ALL SERVICE CROSSINGS, HYDRANTS AND VALVES IN ACCORDANCE WITH STANDARD DRAWING Nos. SEQ-WAT-1110-1, AND SEQ-WAT-1110-2.
12. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS R.P.E.Q. REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
13. WATER MAIN SHALL BE LAID AT 1.425m ALIGNMENT FROM PROPERTY BOUNDARY UNLESS NOTES OTHERWISE.
14. WHERE PERMANENT HYDRANTS ARE NOT INSTALLED AT END OF MAINS OF EACH STAGE, A TEMPORARY HYDRANT WILL BE INSTALLED INSTEAD.
15. NO WORK SHALL BE BACKFILLED UNTIL PERMISSION IS GRANTED BY THE SUPERINTENDENT OR LOGAN WATER.
16. NOT ALL SERVICES HAVE NECESSARILY BEEN SHOWN. THE LOCATION OF SERVICES ON THESE PLANS ARE APPROXIMATE ONLY. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OR COMPLETENESS OF THIS INFORMATION NO WORK IS TO BE UNDERTAKEN WITHOUT CONSULTING THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF THE WORK. DEPTH OF SERVICES AT POSSIBLE CONFLICT POINTS ARE TO BE CONFIRMED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ABOVE GROUND SERVICES AS SHOWN ON THE DRGS HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND SERVICES HAVE BEEN PLOTTED FROM THE RELEVANT AUTHORITY'S RECORDS.
17. ALL EXISTING FEATURES (eg. DRIVEWAYS, GARDENS, PATHS etc.) ARE TO BE REINSTATED WHERE DISTURBED BY THE WORKS. ALLOW FOR SUPPORT OF POWER POLES/STAYS, FENCES etc. ADJACENT TO TRENCHES.
18. WHERE BEND FITTINGS ARE NOT SHOWN, MAKE CHANGES IN DIRECTION USING PIPE JOINT DEFLECTIONS. MAKE EQUAL NUMBER AND SIZE OF PIPE DEFLECTIONS EACH SIDE OF CHAINAGE SHOWN (MAX. DEFLECTION 3° PER JOINT). IL SHOWN ON LONG SECTIONS IS AT INTERSECTIONS POINT (IP). JOINT DEFLECTIONS MAY ALSO BE REQUIRED AT FITTINGS TO MEET ALIGNMENT AND LEVELS AS SPECIFIED.



VEGETATION PROTECTION (WHERE APPLICABLE)

A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
C. TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL (WHERE APPLICABLE)

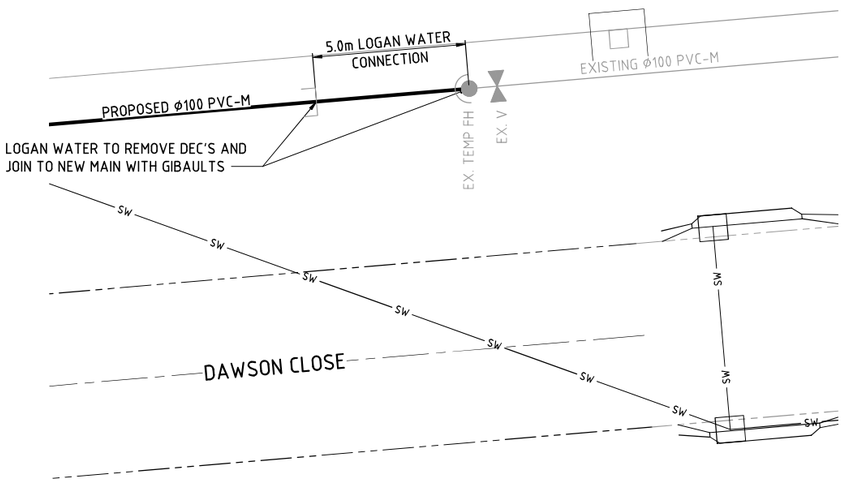
A. TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.
B. CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROL AROUND STOCKPILES.

CREEK CROSSINGS (WHERE APPLICABLE)

A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
B. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
C. NO SOIL SHOULD BE STOCKPILED WITHIN 5m OF CREEK.

REHABILITATION (WHERE APPLICABLE)

A. PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
B. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.



LIVE CONNECTION DETAIL
SPRING MOUNTAIN DRIVE ADJACENT LOT 1849

SCALE 1:100

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Mark Andrew Shaw
BEng (Civil), MIEAust, RPEQ 17544
2021.03.05 13:04:28 +10'00'

Signed..... RPEQ No. 17544 ..... Dated. 04.03.2021 .....

SCALE 1 0.5 0 1 2 3 4 5 6 7 8 9 10m
1 : 100 (A1 UNREDUCED)

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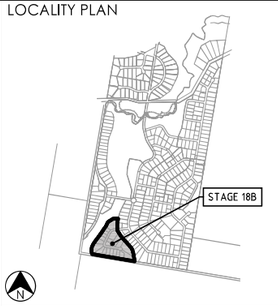
NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	AS CONSTRUCTED WATER AND EWKS	04/03/21	LMS

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kn group
ABN 35 112 53 611
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Spring Hill Q 4000
07 3017 1900
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Drawing Title
WATER RETICULATION
LIVE CONNECTION DETAILS
AND NOTES

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	29 of 33

A1	Drawing No	Revision
	18-201-29	B

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NOTE

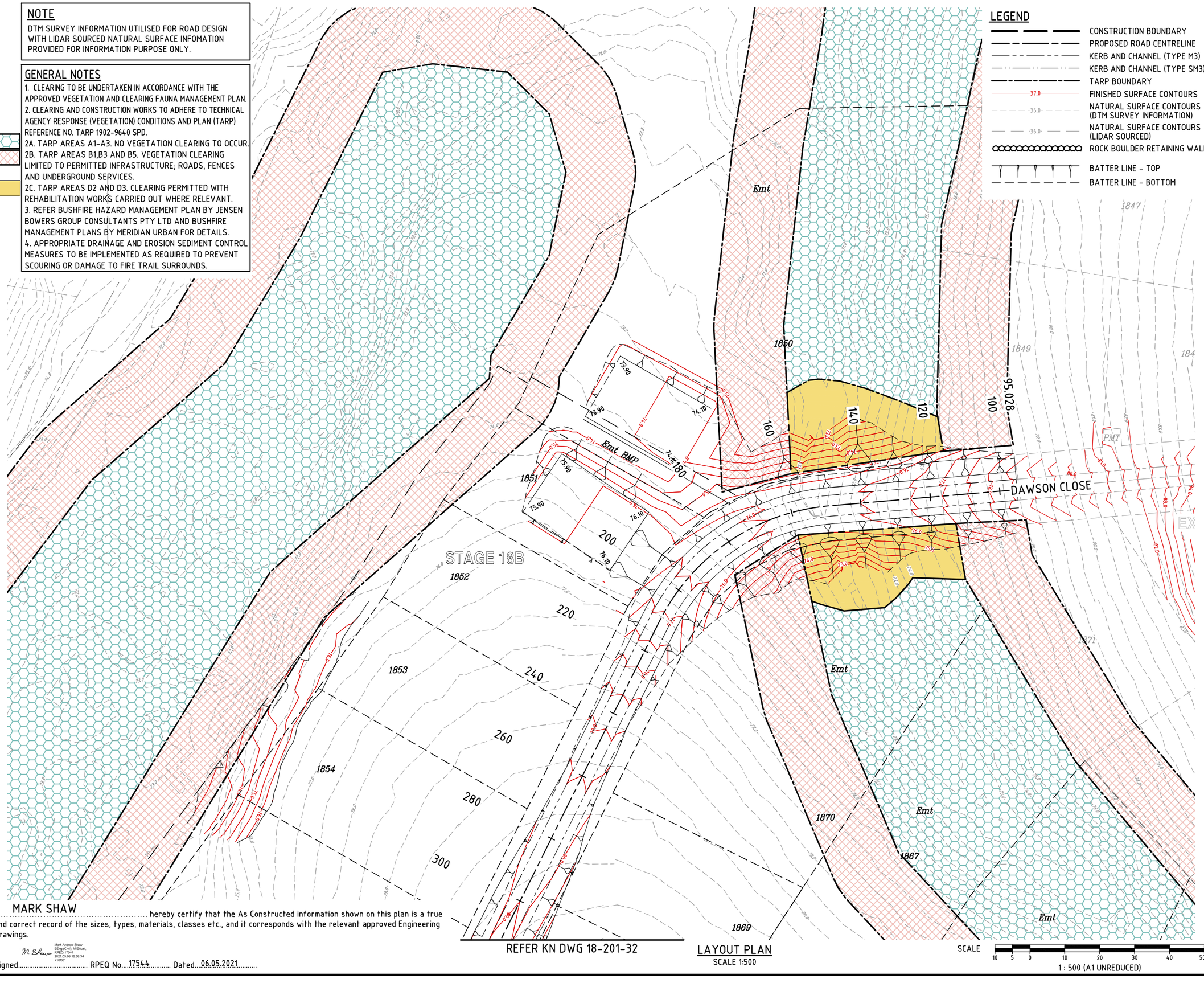
DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFOMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

GENERAL NOTES

1. CLEARING TO BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED VEGETATION AND CLEARING FAUNA MANAGEMENT PLAN.
2. CLEARING AND CONSTRUCTION WORKS TO ADHERE TO TECHNICAL AGENCY RESPONSE (VEGETATION) CONDITIONS AND PLAN (TARP) REFERENCE NO. TARP 1902-9640 SPD.
2A. TARP AREAS A1-A3. NO VEGETATION CLEARING TO OCCUR.
2B. TARP AREAS B1,B3 AND B5. VEGETATION CLEARING LIMITED TO PERMITTED INFRASTRUCTURE; ROADS, FENCES AND UNDERGROUND SERVICES.
2C. TARP AREAS D2 AND D3. CLEARING PERMITTED WITH REHABILITATION WORKS CARRIED OUT WHERE RELEVANT.
3. REFER BUSHFIRE HAZARD MANAGEMENT PLAN BY JENSEN BOWERS GROUP CONSULTANTS PTY LTD AND BUSHFIRE MANAGEMENT PLANS BY MERIDIAN URBAN FOR DETAILS.
4. APPROPRIATE DRAINAGE AND EROSION SEDIMENT CONTROL MEASURES TO BE IMPLEMENTED AS REQUIRED TO PREVENT SCOURING OR DAMAGE TO FIRE TRAIL SURROUNDS.

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- TARP BOUNDARY
- FINISHED SURFACE CONTOURS
- NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
- NATURAL SURFACE CONTOURS (LIDAR SOURCED)
- ROCK BOULDER RETAINING WALL
- BATTER LINE - TOP
- BATTER LINE - BOTTOM



REFER KN DWG 18-201-32

LAYOUT PLAN
SCALE 1:500

SCALE
10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

I, MARK SHAW ..... hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

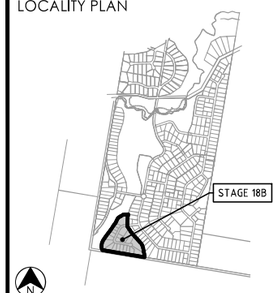
Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:58:34 +10'00'

Signed..... RPEQ No...17544..... Dated...06.05.2021.....

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	REVISED LOTS / EASEMENT	23/09/20	DES
D	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
TARP EXTENTS
SHEET 1

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	31 of 33

A1	Drawing No	Revision
	18-201-31	D

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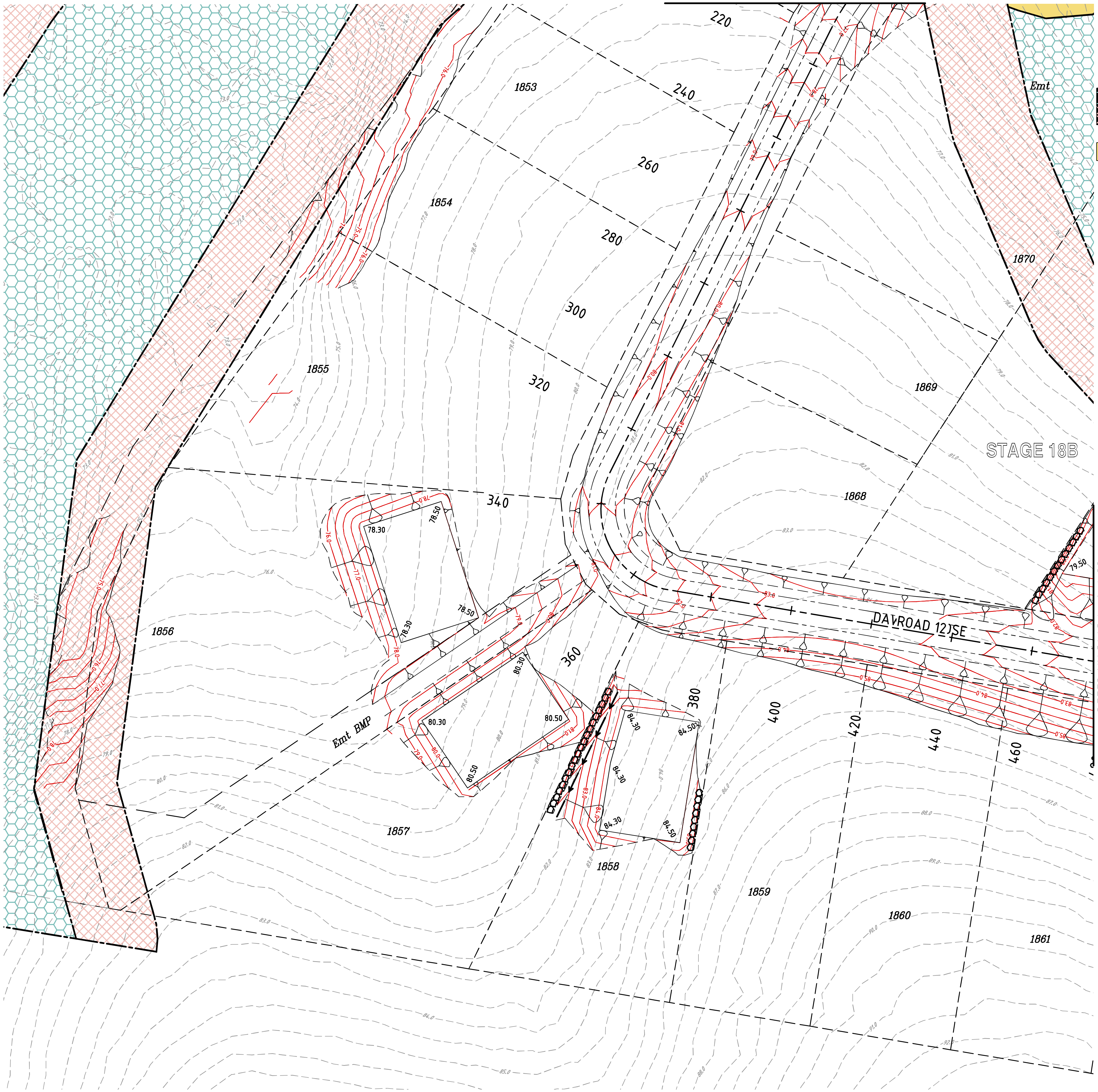
REFER KN DWG 18-201-31



LAYOUT PLAN
SCALE 1:500

GENERAL NOTES

1. CLEARING TO BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED VEGETATION AND CLEARING FAUNA MANAGEMENT PLAN.
2. CLEARING AND CONSTRUCTION WORKS TO ADHERE TO TECHNICAL AGENCY RESPONSE (VEGETATION) CONDITIONS AND PLAN (TARP) REFERENCE NO. TARP 1902-9640 SPD.
2A. TARP AREAS A1-A3. NO VEGETATION CLEARING TO OCCUR.
2B. TARP AREAS B1,B3 AND B5. VEGETATION CLEARING LIMITED TO PERMITTED INFRASTRUCTURE; ROADS, FENCES AND UNDERGROUND SERVICES.
2C. TARP AREAS D2 AND D3. CLEARING PERMITTED WITH REHABILITATION WORKS CARRIED OUT WHERE RELEVANT.
3. REFER BUSHFIRE HAZARD MANAGEMENT PLAN BY JENSEN BOWERS GROUP CONSULTANTS PTY LTD AND BUSHFIRE MANAGEMENT PLANS BY MERIDIAN URBAN FOR DETAILS.
4. APPROPRIATE DRAINAGE AND EROSION SEDIMENT CONTROL MEASURES TO BE IMPLEMENTED AS REQUIRED TO PREVENT SCOURING OR DAMAGE TO FIRE TRAIL SURROUNDS.

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Signed........ RPEQ No. 17544 Dated 06.05.2021

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- TARP BOUNDARY
- 37.0 FINISHED SURFACE CONTOURS
- 36.0 NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
- 36.0 NATURAL SURFACE CONTOURS (LIDAR SOURCED)
- ROCK BOULDER RETAINING WALL
- BATTER LINE - TOP
- BATTER LINE - BOTTOM

SCALE 10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
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NORTH

LOCALITY PLAN
STAGE 18B

REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	REVISED LOTS / EASEMENT	23/09/20	DES
D	AS CONSTRUCTED FINAL	06/05/21	LMS

Client
PEET

Project
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

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Drawing Title
TARP EXTENTS
SHEET 2

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale: AS SHOWN
Sheet: 32 of 33
A1 — Drawing No: 18-201-32 — Revision: D

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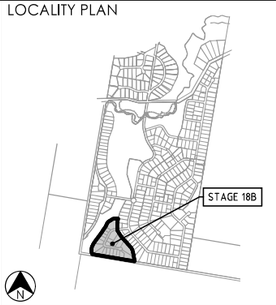
NORTH

LOCALITY PLAN



GENERAL NOTES

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4. APPROPRIATE DRAINAGE AND EROSION SEDIMENT CONTROL MEASURES TO BE IMPLEMENTED AS REQUIRED TO PREVENT SCOURING OR DAMAGE TO FIRE TRAIL SURROUNDS.

NOTE

DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFOMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- TARP BOUNDARY
- FINISHED SURFACE CONTOURS
- NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
- NATURAL SURFACE CONTOURS (LIDAR SOURCED)
- ROCK BOULDER RETAINING WALL
- BATTER LINE - TOP
- BATTER LINE - BOTTOM

SCALE 10 5 0 10 20 30 40 50m
1 : 500 (A1 UNREDUCED)

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Mark Andrew Shaw BEng (Civil), MIEAust. RPEQ 17544 2021.05.06 12:58:57 +10'00'

Signed..... RPEQ No. 17544 ..... Dated 06.05.2021 .....

EARTHWORKS CONTOUR PLAN

SCALE 1:500

REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	11/06/20	DES
B	REVISED EARTHWORKS	20/08/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 18B

OW/106/2020

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
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Drawing Title
TARP EXTENTS
SHEET 3

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	33 of 33

Drawing No	Revision
A1 18-201-33	C

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Mark Andrew Shaw BEng (Civil), MIEAust, RPEQ 17544 2021.05.06 12:59:09 +10'00'

Signed..... RPEQ No. 17544 Dated 06.05.2021

LAYOUT PLAN
SCALE 1:1000

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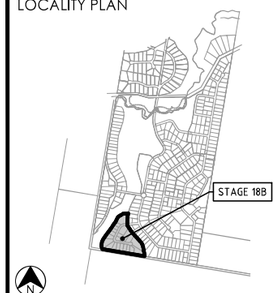
NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	20/08/20	DES
B	REVISED LOTS / EASEMENT	23/09/20	DES
C	AS CONSTRUCTED FINAL	06/05/21	LMS

Client

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Drawing Title
EASEMENT PLAN

Drawn	Designed	Checked	Date
LMS	JB	GG	JUN 20

Scale	Sheet
AS SHOWN	34 of 33

	Drawing No	Revision
A1	18-201-34	C

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