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IF THIS MEASUREMENT DOES NOT MATCH WITH THE SHEET, THE SHEET SIZE SHALL BE USED FOR REFERENCE.

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434

CLIENT
DOUGLAS SHIRE COUNCIL

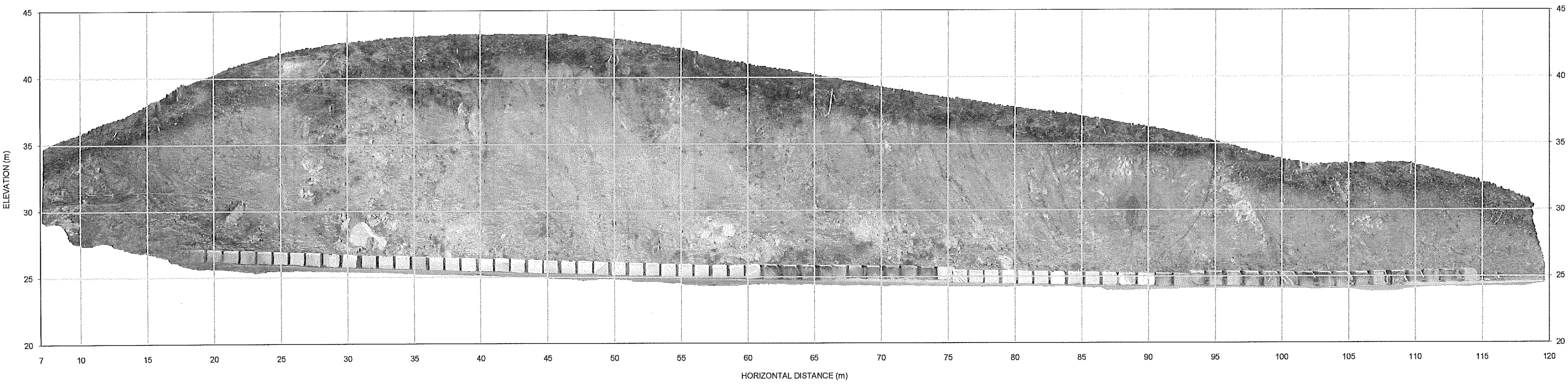
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PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
PORT DOUGLAS

TITLE
SITE LOCALITY PLAN

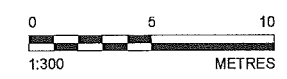
PROJECT NO. 1899263 CONTROL 018 REV. 1 2 of 17 FIGURE D002

F:\projects\2019\1899263_01_ELEVATION\1899263_01_ELEVATION.dwg | Plot Date: 2019-07-12 10:46:58 AM | Printed By: gpc | Date: 2019-07-12 10:46:58 AM



MURPHY ST EAST OF OWEN ST - ELEVATION
 SCALE 1:300 m

ISSUED FOR
TENDER



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1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434

CLIENT
 DOUGLAS SHIRE COUNCIL

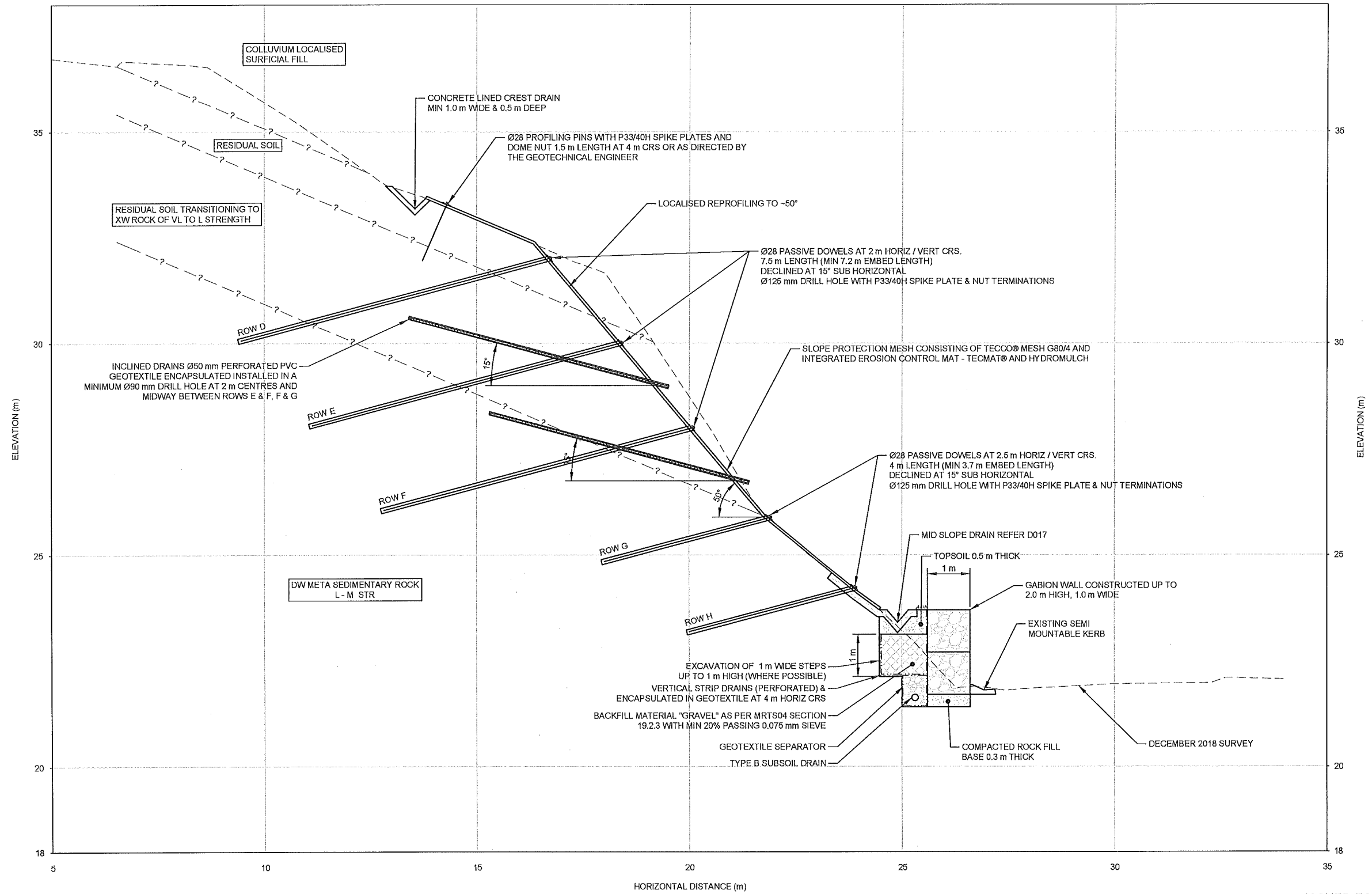
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PROJECT
 TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
 PORT DOUGLAS

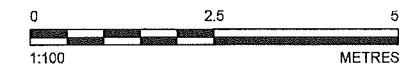
TITLE
MURPHY ST EAST OF OWEN ST - ELEVATION

PROJECT NO. 1899263	CONTROL 018	REV. 1	15 of 17	FIGURE D015
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN ON THE SHEET, THE SHEET SIZE HAS BEEN ADJUSTED FOR SCALE.



ISSUED FOR
TENDER



CLIENT
DOUGLAS SHIRE COUNCIL

PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
PORT DOUGLAS

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TITLE
MURPHY STREET EAST OF OWEN STREET - TYPICAL
SECTION CH 90

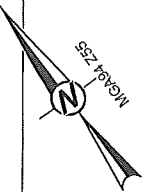
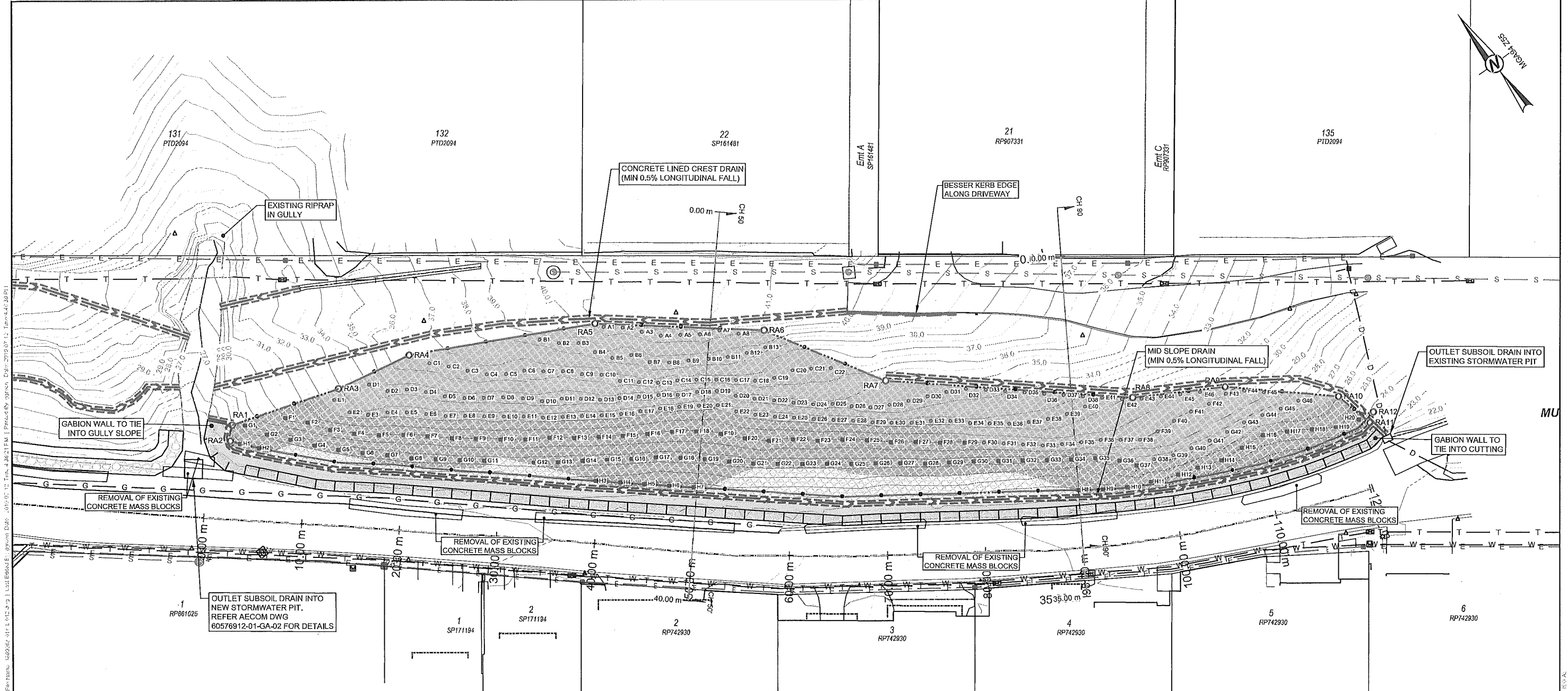
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0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	R.I. GS RPEQ 21434
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED



PROJECT NO.	CONTROL	REV.	14 of 17	FIGURE
1899263	018	1		D014

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25 mm IF THIS DRAWING IS USED FOR ANY OTHER PROJECT, THE USER ACCEPTS ALL LIABILITY FOR ANY DAMAGE OR LOSS OF PROFITS.



LEGEND

- GABION WALL (2m HIGH)
- ENGINEERED BACKFILL, TOPSOIL AND LANDSCAPE TREATMENT
- PASSIVE DOWELS (MIN. 7.2 m EMBEDMENT LENGTH) AND INTEGRATED SLOPE PROTECTION MESH CONSISTING OF TECCO® MESH G80/4 TECMAT® AND HYDROMULCH
- PASSIVE DOWELS (MIN. 3.7 m EMBEDMENT LENGTH) AND INTEGRATED SLOPE PROTECTION MESH CONSISTING OF TECCO® MESH G80/4 TECMAT® AND HYDROMULCH
- SLOPE PROTECTION MESH CONSISTING OF TECCO® MESH G80/4 - TECMAT® AND HYDROMULCH
- CONCRETE LINED CREST DRAIN
- 4 m LONG Ø28 PASSIVE DOWELS AT 2.5 m HORIZ / VERT CRS (MIN 3.7 m EMBED LENGTH) SLOPE
- 7.5 m LONG Ø28 PASSIVE DOWELS AT 2.0 m HORIZ / VERT CRS (MIN 7.2 m EMBED LENGTH)
- Ø28 mm PROFILING PINS 1.5 m LENGTH AT 4 m CRS
- Ø14 mm PERIMETER ROPE
- Ø28 mm PERIMETER ROPE ANCHORS 3.0 m LENGTH (MIN 2.7 m EMBED LENGTH)

SCHEDULE OF PASSIVE DOWELS (EAST OF OWEN)

Row	Gewi Thread Bar Diameter D (mm)	Ultimate Tensile Strength (kN)	Drill Hole Diameter (mm)/ Drill Angle (Deg.)	Minimum Dowel Embedment Length (m)	Estimated Number of Dowels
A	28	339	125/15	7.2	8
B	28	339	125/15	7.2	13
C	28	339	125/15	7.2	22
D	28	339	125/15	7.2	38
E	28	339	125/15	7.2	46
F-1	28	339	125/15	7.2	16
F-2	28	339	125/15	3.7	29
G-1	28	339	125/15	7.2	9
G-2	28	339	125/15	3.7	37
H	28	339	125/15	3.7	20



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REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434

CLIENT
DOUGLAS SHIRE COUNCIL

CONSULTANT



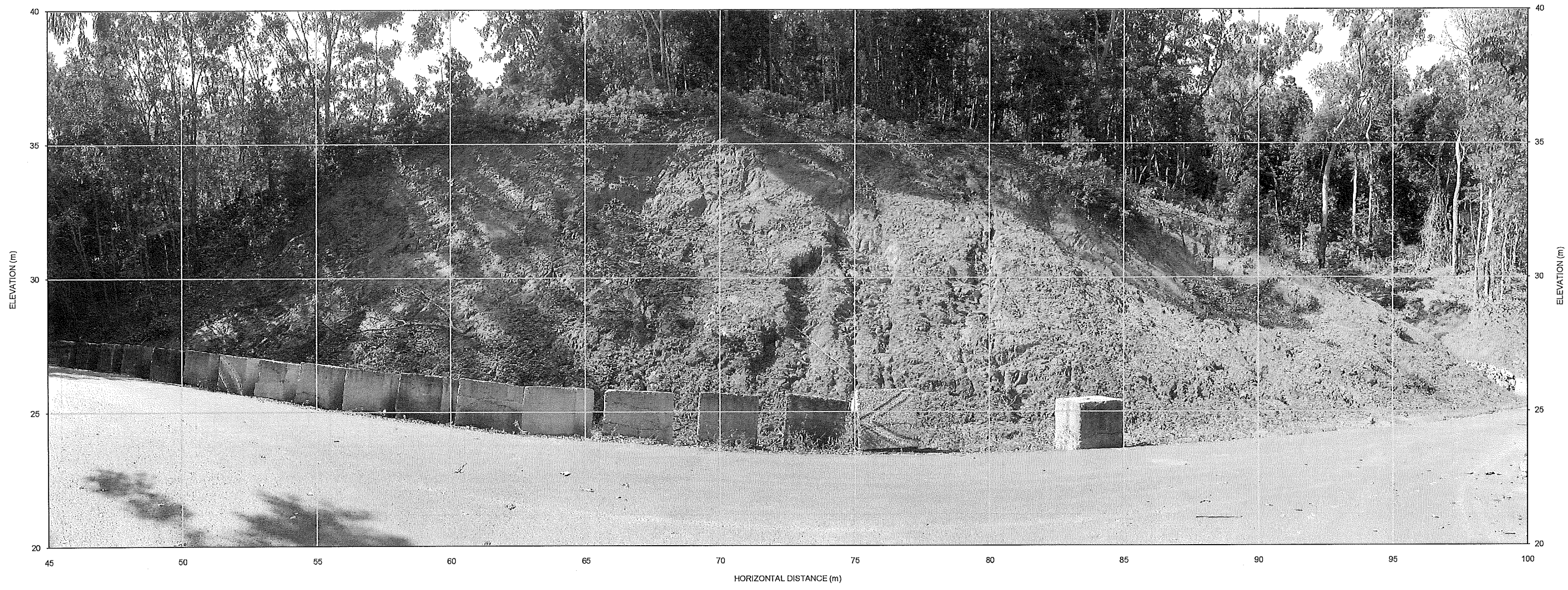
CAIRNS OFFICE
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PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
PORT DOUGLAS

TITLE
MURPHY STREET EAST OF OWEN STREET - SITE PLAN

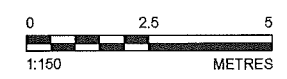
PROJECT NO.	CONTROL	REV.	12 of 17	FIGURE
1899263	018	1		D012

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MURPHY STREET – OWEN STREET - ELEVATION
 SCALE 1:150 m

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TENDER



REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434

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DOUGLAS SHIRE COUNCIL

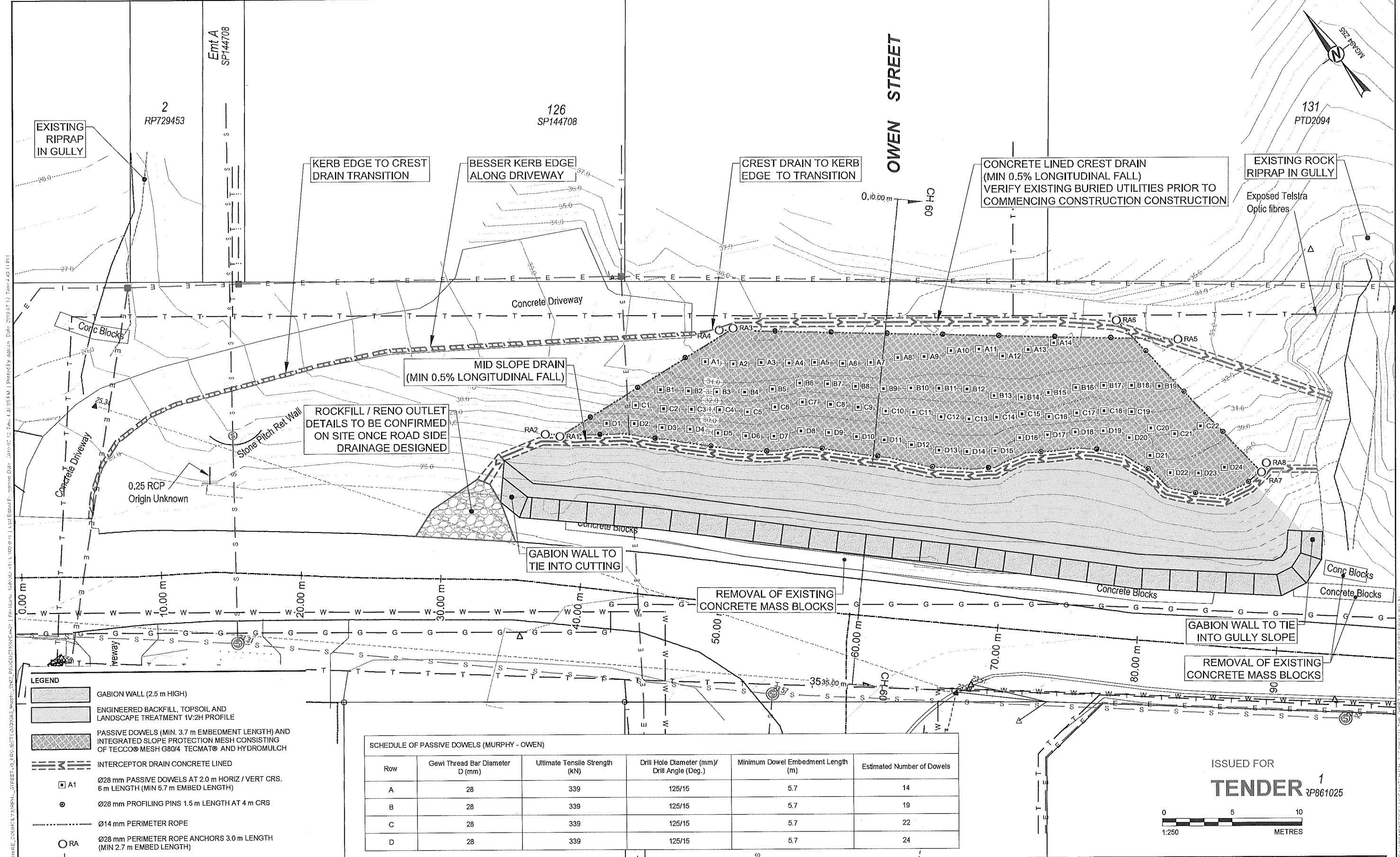
PROJECT
**TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
 PORT DOUGLAS**

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TITLE
MURPHY STREET – OWEN STREET - ELEVATION

PROJECT NO.	CONTROL	REV.	11 of 17	FIGURE
1899263	018	1		D011

IF THIS MEASUREMENT DOES NOT MATCH WITH A SIGNIFICANT DIFFERENCE, THE SHEET SIZE HAS BEEN USED AS REFERENCE.



1. 2019-07-12 ISSUED FOR TENDER JJP GPG WB GS RPEQ 21434
 0. 2019-07-05 ISSUED FOR TENDER JJP GPG WB RJ GS RPEQ 21434
 REV. YYYY-MM-DD DESCRIPTION DESIGNED PREPARED REVIEWED APPROVED

CLIENT
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PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
PORT DOUGLAS

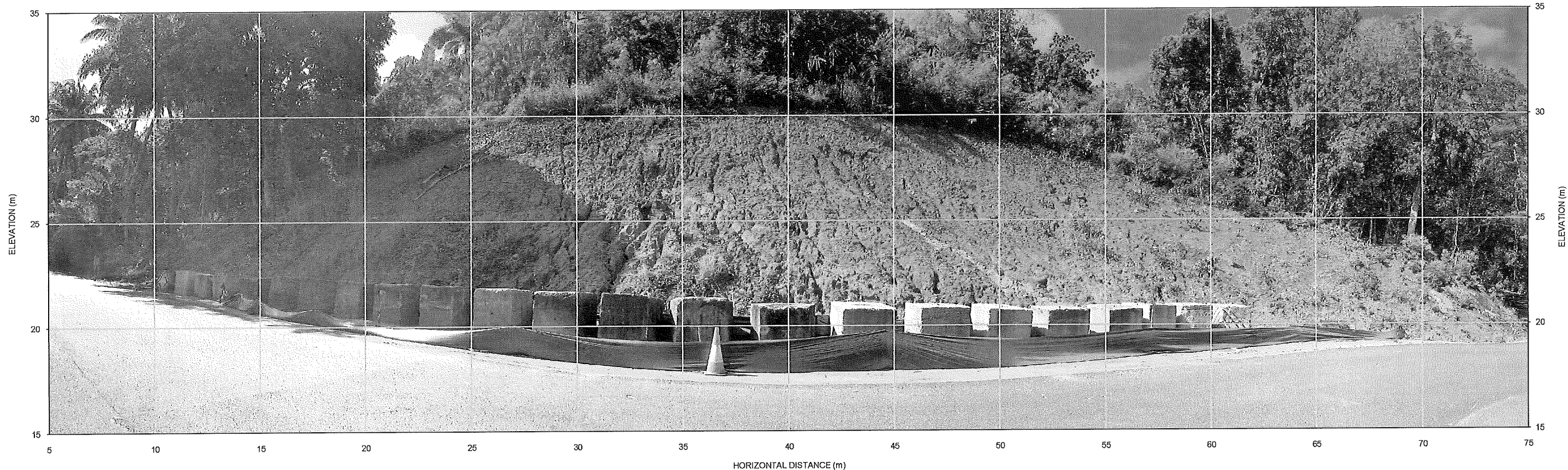
TITLE
MURPHY STREET - OWEN STREET INTERSECTION - SITE PLAN

PROJECT NO. 1899263 CONTROL 018 REV. 1 9 of 17 FIGURE D009

ISSUED FOR
TENDER 1
RP861025

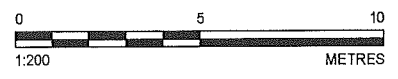


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MURPHY ST – GRANT ST INTERSECTION - ELEVATION
SCALE 1:200 m

ISSUED FOR
TENDER



REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434

CLIENT
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PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
PORT DOUGLAS

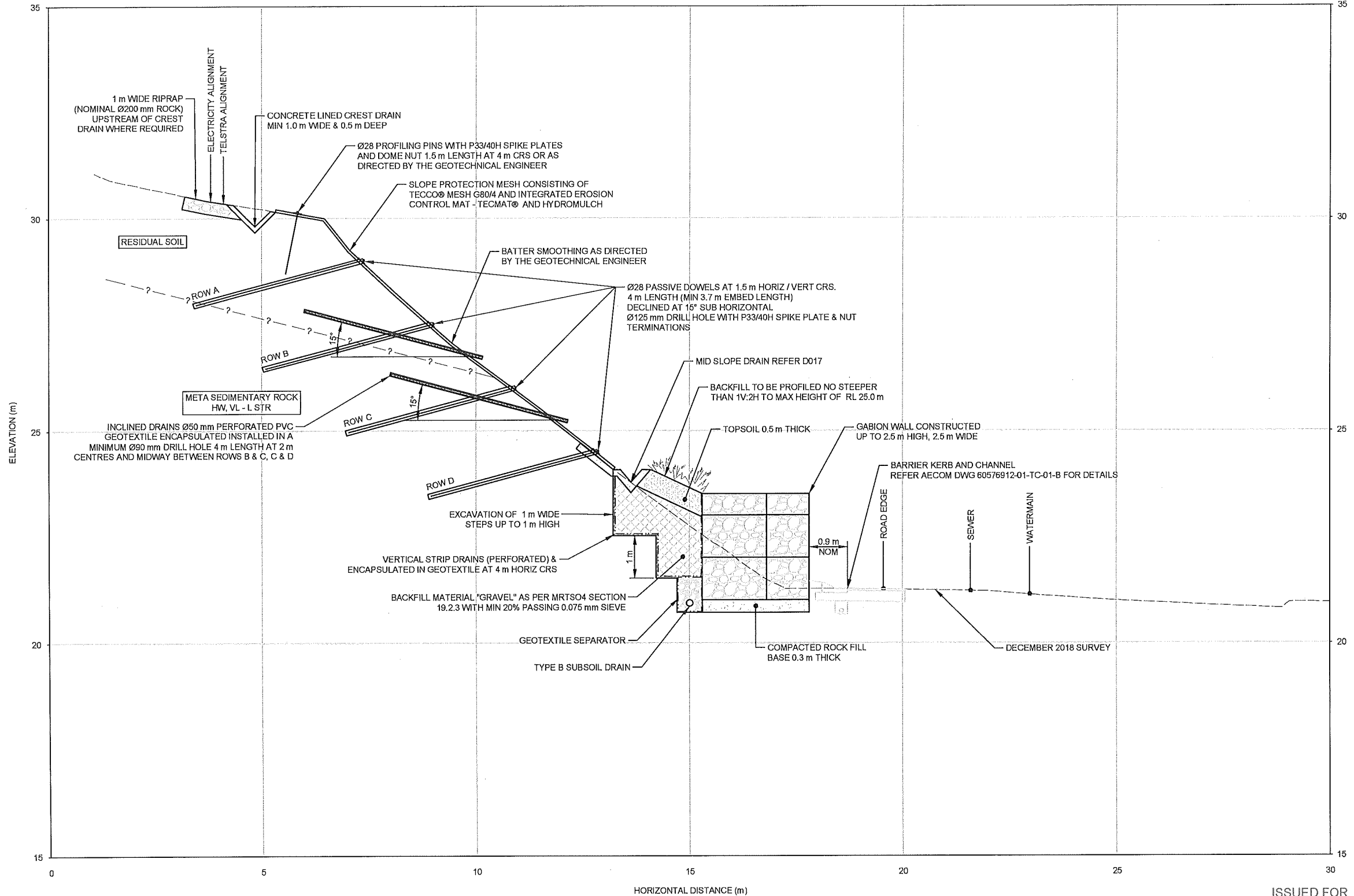
TITLE
MURPHY ST – GRANT ST INTERSECTION - ELEVATION

PROJECT NO. 1899263 CONTROL 018 REV. 1 8 of 17 FIGURE D008

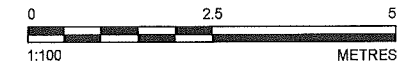
20 mm IF THIS MEASUREMENT DOES NOT MATCH WITH THE SHEET SCALE PLEASE REFER TO THE PROJECT DRAWINGS

CH 40

CH 40'



ISSUED FOR
TENDER



CLIENT
DOUGLAS SHIRE COUNCIL

PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET,
PORT DOUGLAS

CONSULTANT

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TITLE
**MURPHY STREET – GRANT STREET INTERSECTION -
TYPICAL SECTION CH 40**

1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434



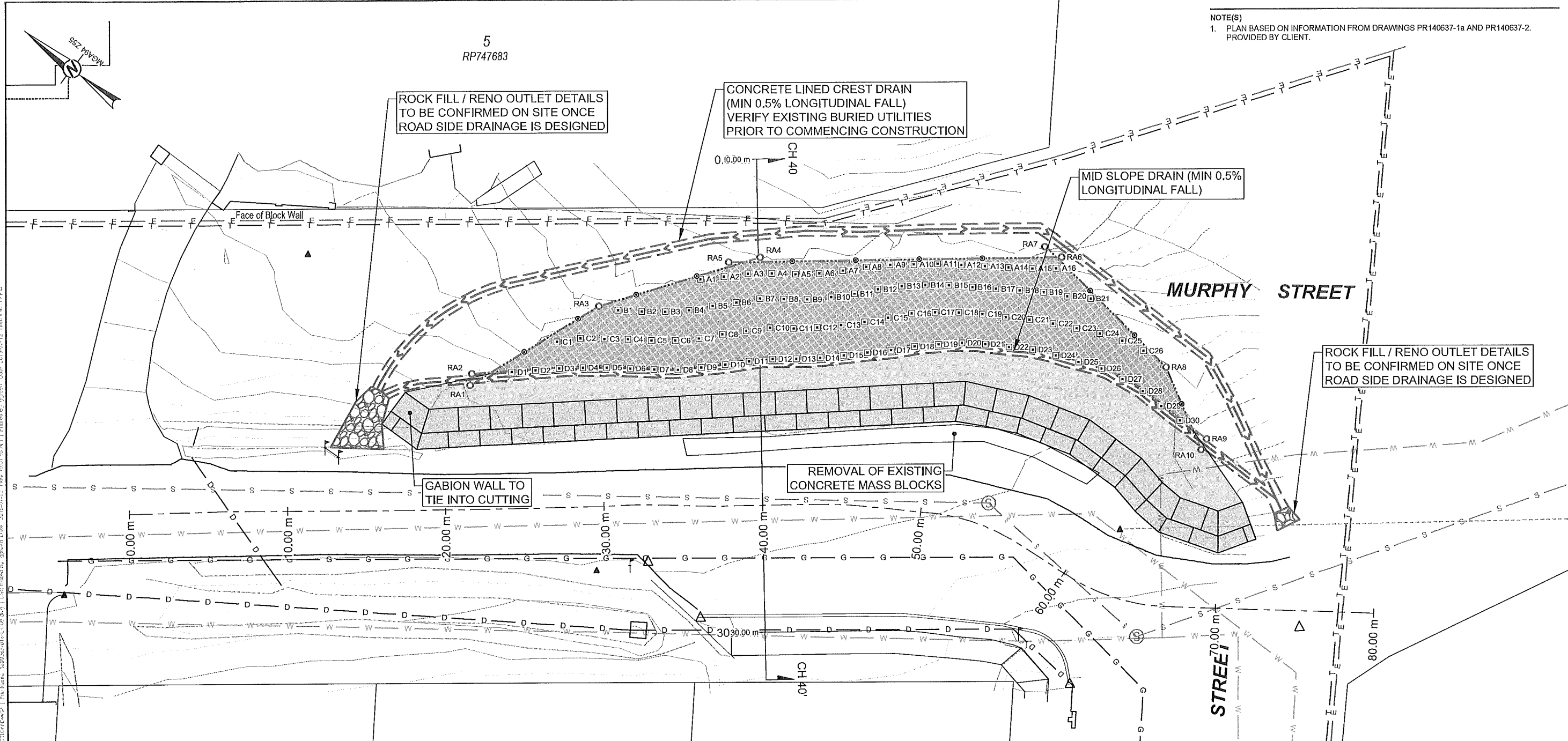
PROJECT NO. 1899263	CONTROL 018	REV. 1	7 of 17	FIGURE D007
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IF THIS MEASUREMENT DOES NOT MATCH WITH THE SURVEY, THE SHEET SIZE HAS BEEN ADJUSTED FOR PRINTING.

5
RP747683

NOTE(S)
1. PLAN BASED ON INFORMATION FROM DRAWINGS PR140637-1a AND PR140637-2. PROVIDED BY CLIENT.



GABION WALL TO TIE INTO CUTTING

CONCRETE LINED CREST DRAIN (MIN 0.5% LONGITUDINAL FALL) VERIFY EXISTING BURIED UTILITIES PRIOR TO COMMENCING CONSTRUCTION

MID SLOPE DRAIN (MIN 0.5% LONGITUDINAL FALL)

ROCK FILL / RENO OUTLET DETAILS TO BE CONFIRMED ON SITE ONCE ROAD SIDE DRAINAGE IS DESIGNED

REMOVAL OF EXISTING CONCRETE MASS BLOCKS

- LEGEND**
- GABION WALL (2.5 m HIGH)
 - ENGINEERED BACKFILL, TOPSOIL AND LANDSCAPE TREATMENT 1V:2H PROFILE
 - PASSIVE DOWELS (MIN. 3.7 m EMBEDMENT LENGTH) AND INTEGRATED SLOPE PROTECTION MESH CONSISTING OF TECCO® MESH G80/4 TECCAT® AND HYDROMULCH
 - PROPOSED CONCRETE LINED INTERCEPTOR DRAIN
 - A1 Ø28 mm PASSIVE DOWELS AT 1.5 m HORIZ / VERT CRS. 4 m LENGTH (MIN 3.7 m EMBED LENGTH)
 - Ø28 mm PROFILING PINS 1.5 m LENGTH AT 4 m CRS
 - Ø14 mm PERIMETER ROPE
 - RA Ø28 mm PERIMETER ROPE ANCHORS 3.0 m LENGTH (MIN 2.7 m EMBED LENGTH)

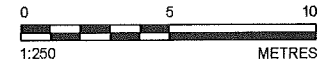
SCHEDULE OF PASSIVE DOWELS (MURPHY - GRANT)

Row	Gewi Thread Bar Diameter D (mm)	Ultimate Tensile Strength (kN)	Drill Hole Diameter (mm)/ Drill Angle (Deg.)	Minimum Dowel Embedment Length (m)	Estimated Number of Dowels
A	28	339	125/15	3.7	16
B	28	339	125/15	3.7	21
C	28	339	125/15	3.7	26
D	28	339	125/15	3.7	30

113
PTD2091

1
SP215434

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TENDER



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DOUGLAS SHIRE COUNCIL

PROJECT
TREATMENT OF SLOPE INSTABILITIES ON MURPHY STREET, PORT DOUGLAS

CONSULTANT

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TITLE
MURPHY STREET - GRANT STREET INTERSECTION - SITE PLAN



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1	2019-07-12	ISSUED FOR TENDER	JJP	GPG	WB	GS RPEQ 21434
0	2019-07-05	ISSUED FOR TENDER	JJP	GPG	WB	RJ GS RPEQ 21434

PROJECT NO. 1899263 CONTROL 018 REV. 1 of 17 FIGURE D006