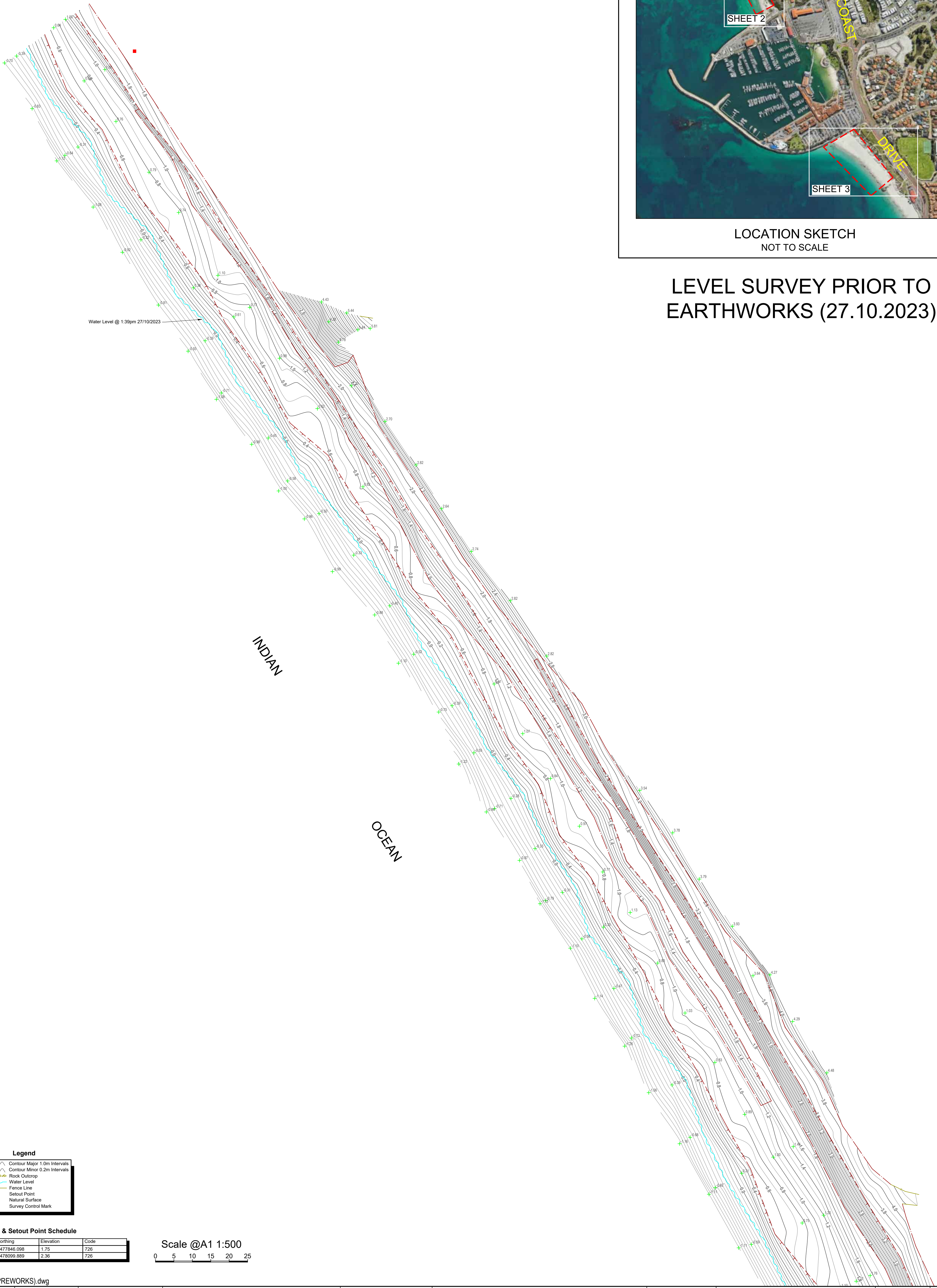


Appendix E Bypassing Surveys



LOCATION SKETCH
NOT TO SCALE

LEVEL SURVEY PRIOR TO
EARTHWORKS (27.10.2023)

Legend

	Contour Major 1.0m Intervals
	Contour Minor 0.2m Intervals
	Rock Outcrop
	Water Level
	Fence Line
	Setout Point
	Natural Surface
	Survey Control Mark

Control & Setout Point Schedule

Point	Easting	Northing	Elevation	Code
9001	381121.863	6477846.098	1.75	726
9002	380848.943	6478099.889	2.36	726

Scale @A1 1:500



18147-F13-1.0 (OCT2023-PREWORKS).dwg

VER.	DATE	BY	AMENDMENTS	FILE SOURCE
1.0	30.10.2023	MDR	Issued for Information	18147-12.0-27102023-MGA94-UPRE SURVEY

Notes:
1. Heights established from SSM HAM164 via GPS connection.



44 Hardey Road, Belmont WA 6104
Ph: 9450 7188
email: admin@jbasurveys.com.au
web: www.jbasurveys.com.au

CLIENT:

m p rogers & associates pl
creating better roads and ports

JOB NO: 21038

TITLE: PRE-WORKS SURVEY

PROJECT:

HILLARYS SAND BYPASS SURVEYS
WEST COAST DRIVE
HILLARYS WA 6025
OCTOBER 2023

SURVEYOR: JT

DATE OF SURVEY: 27.10.2023

DRAWN BY: MDR

APPROVED BY: NRW

DATUM

VERT: AHD

HORIZ: MGA94 Z50

SCALE: 1:500

DWG NO: 18147-F13

SHEET NO: 1 OF 3

VER: 1.0





LOCATION SKETCH
NOT TO SCALE

LEVEL SURVEY PRIOR TO
EARTHWORKS (27.10.2023)

Legend

	Contour Major 1.0m Intervals
	Contour Minor 0.2m Intervals
	Rock Outcrop
	Water Level
	Fence Line
	Setout Point
	Natural Surface
	Survey Control Mark

Control & Setout Point Schedule

Point	Easting	Northing	Elevation	Code
9001	381121.863	6477846.098	1.75	726
9002	380848.943	6478099.889	2.36	726

Scale @A1 1:500



18147-F13-1.0 (OCT2023-PREWORKS).dwg

VER.	DATE	BY	AMENDMENTS	FILE SOURCE
1.0	30.10.2023	MDR	Issued for Information	18147-12.0-27102022-MGA94-UPRE SURVEY

Notes:
1. Heights established from SSM HAM164 via GPS connection.

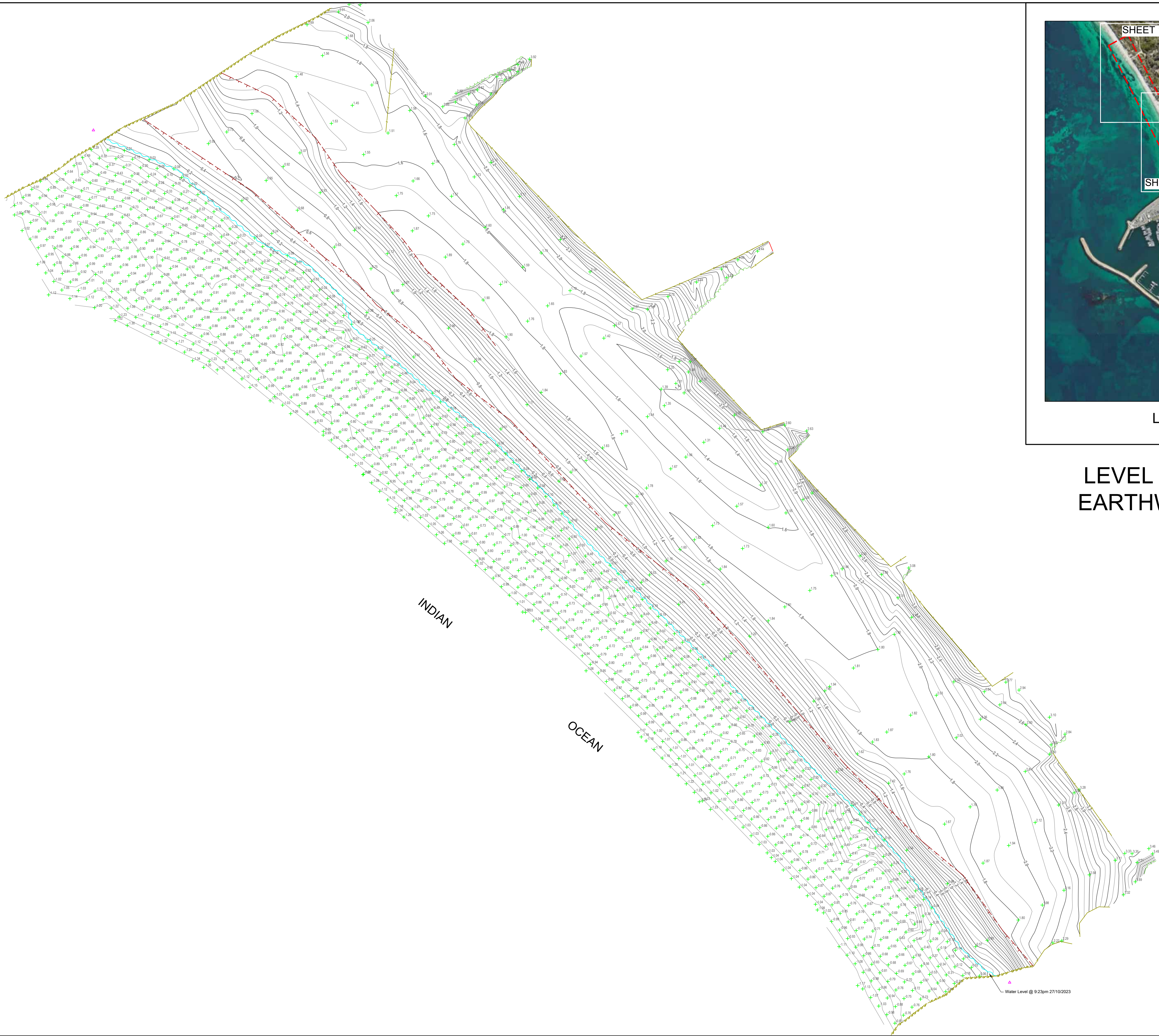


44 Hardey Road, Belmont WA 6104
Ph: 9450 7188
email: admin@jbasurveys.com.au
web: www.jbasurveys.com.au

CLIENT:

m p rogers & associates pl

JOB NO: 21038		TITLE: PRE-WORKS SURVEY		DATUM			
PROJECT:		HILLARYS SAND BYPASS SURVEYS WEST COAST DRIVE HILLARYS WA 6025 OCTOBER 2023		VERT. AHD HORIZ. MGA94 Z50			
				SCALE: 1:500			
				DWG NO: 18147-F13			VER: 1.0
SURVEYOR: JT		DATE OF SURVEY: 27.10.2023	DRAWN BY: MDR	APPROVED BY: NRW		SHEET NO: 2 OF 3	A1



LEVEL SURVEY PRIOR TO
EARTHWORKS (27.10.2023)

Legend				
29.0	Contour Major 1.0m Intervals			
29.0	Contour Minor 0.2m Intervals			
	Rock Outcrop			
	Water Level			
	Fence Line			
	Setout Point			
	Natural Surface			
	Survey Control Mark			

Control & Setout Point Schedule

Point	Easting	Northing	Elevation	Code
9001	381121.863	6477846.098	1.75	726
9002	380848.943	6478099.889	2.36	726

Scale @A1 1:600

0 6 12 18 24 30

18147-F13-1.0_(OCT2023-PREWORKS).dwg

VER.	DATE	BY	AMENDMENTS	FILE SOURCE
1.0	30.10.2023	MDB	Issued for Information	18147-12.27102022-MGA94-(PRE SURVEY)

Notes:
1. Heights established from SSM HAM164 via GPS connection.



44 Hardey Road, Belmont WA 6104
Ph: 9450 7188
email: admin@jbasurveys.com.au
web: www.jbasurveys.com.au

CLIENT:

m p rogers & associates pl

creating better coasts and ports

JOB NO: 21038

TITLE: PRE-WORKS SURVEY

PROJECT:

HILLARYS SAND BYPASS SURVEYS
WEST COAST DRIVE
HILLARYS WA 6025
OCTOBER 2023

SURVEYOR: JT

DATE OF SURVEY: 27.10.2023

DRAWN BY: MDB

APPROVED BY: NRW

DATUM

VERT: AHD
HORIZ: MGA94 Z50

SCALE: 1:600

DWG NO: 18147-F13

SHEET NO: 3 OF 3

VER: 1.0

A1

This figure is a topographic map of a coastal area, oriented vertically. The map displays elevation contours in meters, with values ranging from -1.00 to 3.50. The contours are color-coded according to the 'Elevations Table' provided. The map shows a coastal area with a road labeled 'COAST DRIVE' and a beach area. A location sketch in the top right corner shows the map's position relative to a larger area, with 'SHEET 2' and 'SHEET 3' indicated. A scale bar at the bottom left indicates a scale of 1:500, with a maximum length of 25 meters. A note on the right side of the map states: 'Red Contours illustrate quantity of fill calculated in Post Earthworks'.

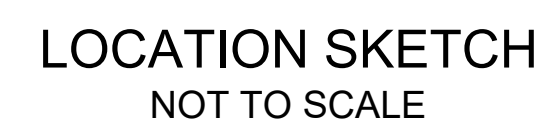
Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	-1.000	-0.500	Red
2	-0.500	0.000	Yellow
3	0.000	0.500	Light Green
4	0.500	1.000	Green
5	1.000	1.500	Dark Green
6	1.500	2.000	Dark Green
7	2.000	2.500	Dark Green
8	2.500	3.000	Dark Green
9	3.000	3.500	Dark Green

Scale @A1 1:500

0 5 10 15 20 25

Red Contours illustrate quantity of fill calculated in Post Earthworks



Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-1.000	-0.500	
2	-0.500	0.000	
3	0.000	0.500	
4	0.500	1.000	
5	1.000	1.500	
6	1.500	2.000	
7	2.000	2.500	
8	2.500	3.000	
9	3.000	3.500	

Red Contours illustrate
— quantity of fill calculated in
Post Earthworks

Legend

	Contour Major 1.0m Intervals
	Volume Contour
	Building
	Steps
	Bottom of Bank
	Top of Bank
	Water Level
	Fence Line
	Setout Point
	Natural Surface
	Survey Control Mark

Control & Setout Point Schedule			
	Easting	Northing	Elevation
	381089.647	6478031.033	6.78
	381121.863	6477846.098	1.75
	380848.043	6470060.880	2.36

Scale @A1 1:500

[illegible]

Notes:
1. Heights established from VRS via GPS connection.
2. Setout Points Derived from Client DWG : D1822-01-01



CLIENT-

m p rogers & associates pl

JOB NO: 18147		TITLE: POST-WORKS SURVEY		DATUM VERT: AHD HORIZ: MGA94 Z50 SCALE: 1:500 DWG NO: 18147-F14 SHEET NO: 1 OF 3		N  VER: 1.0 A1	
PROJECT: HILLARYS SAND BYPASS SURVEY NOVEMBER 2023 WEST COAST DRIVE HILLARYS, WA, 6025							
SUDVEYED BY: IAAR		DATE OF SURVEY: 22 11 2023		DRAWN BY: GM		APPROVED BY: NIM	

LEVEL SURVEY POST EARTHWORKS
(23.11.2023)



LOCATION SKETCH
NOT TO SCALE

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-1.000	-0.500	Red
2	-0.500	0.000	Yellow
3	0.000	0.500	Light Green
4	0.500	1.000	Light Green
5	1.000	1.500	Light Green
6	1.500	2.000	Light Green
7	2.000	2.500	Light Green
8	2.500	3.000	Light Green
9	3.000	3.500	Light Green

Volume of Material Placed
Since 27.10.2023 to
23.11.2023 = 11554m³

Red Contours illustrate
quantity of fill calculated in
Post Earthworks

Stockpile 1200m²

Legend			
28.0	Contour Major 1.0m Intervals		
	Volume Contour		
	Building		
	Steps		
	Bottom of Bank		
	Top of Bank		
	Water Level		
	Fence Line		
	Setout Point		
	Natural Surface		
	Survey Control Mark		

Control & Setout Point Schedule			
Point	Easting	Northing	Elevation
9000	381089.647	6478031.033	8.76
9001	381121.863	6477846.098	1.75
9002	380848.943	6479099.889	2.36

Scale @A1 1:500
0 5 10 15 20 25

18147-F14-1.0 (OCT2023-POSTWORKS).dwg

VER.	DATE	BY	AMENDMENTS	FILE SOURCE
1.0	29.11.2023	SW	Issued for Information	18147-13.0-23112023-MGA94-POST SURVEY

Notes:
1. Heights established from VRS via GPS connection.
2. Setout Points Derived from Client DWG : D1822-01-01

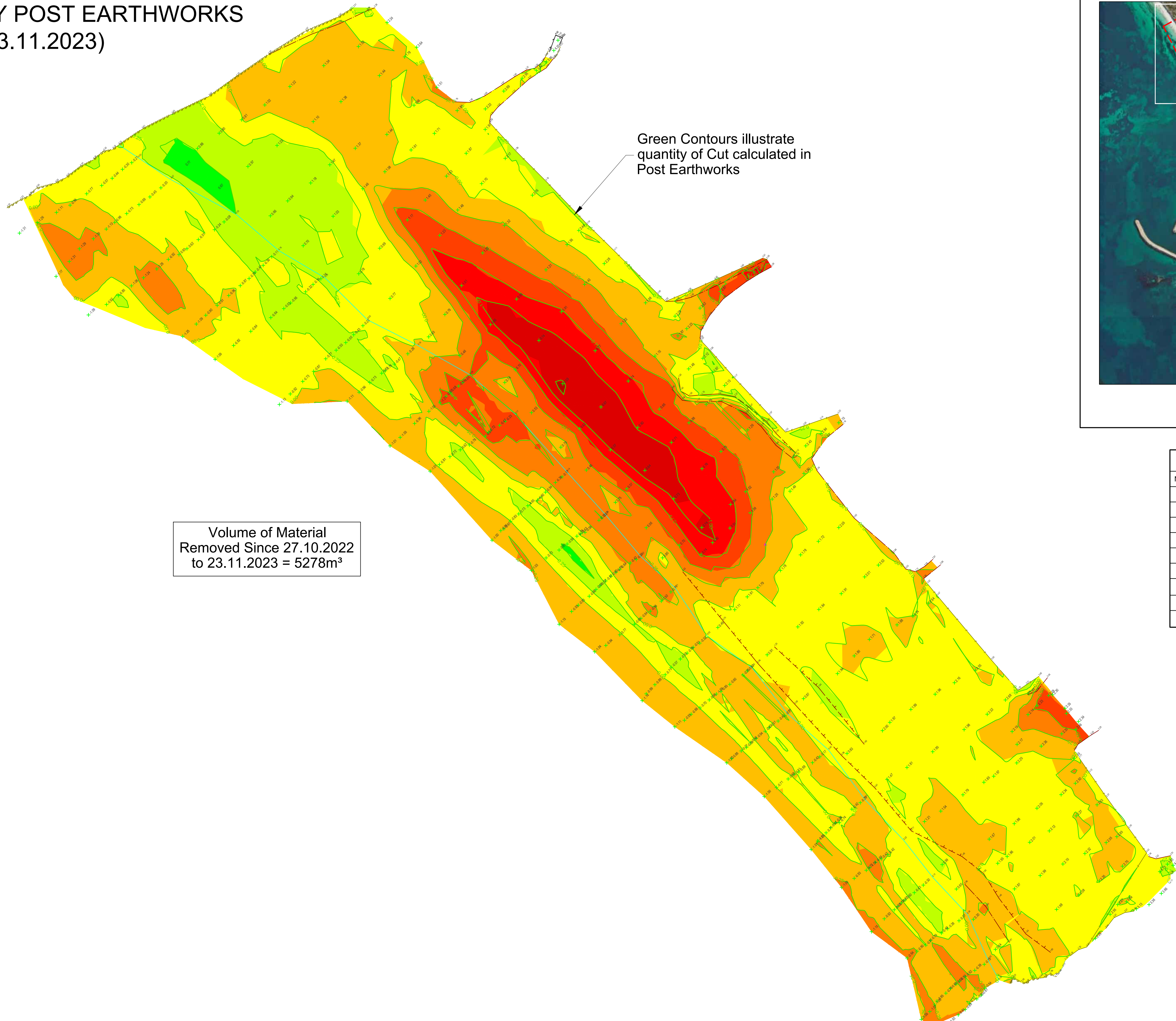


CLIENT:

m p rogers & associates pl

JOB NO: 18147	TITLE: POST-WORKS SURVEY	DATUM	
PROJECT:	HILLARYS SAND BYPASS SURVEY NOVEMBER 2023 WEST COAST DRIVE HILLARYS, WA, 6025	VERT: AHD HORIZ: MGA94 Z50 SCALE: 1:500	
SURVEYOR: JMB	DATE OF SURVEY: 23.11.2023	DWG NO: 18147-F14	
DATE OF SURVEY: 23.11.2023	DRAWN BY: SW	APPROVED BY: NRW	
SHEET NO: 2 OF 3		VER: 1.0	A1

LEVEL SURVEY POST EARTHWORKS
(23.11.2023)



LOCATION SKETCH
NOT TO SCALE

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-1.500	-1.250	Red
2	-1.250	-1.000	Red
3	-1.000	-0.750	Red
4	-0.750	-0.500	Orange
5	-0.500	-0.250	Orange
6	-0.250	0.000	Yellow
7	0.000	0.250	Yellow
8	0.250	0.500	Light Green
9	0.500	0.750	Green

Legend			
	Contour Major 1.0m Intervals		Volume Contour
	Building		Steps
	Bottom of Bank		Top of Bank
	Water Level		Fence Line
	Setout Point		Natural Surface
	Survey Control Mark		

Control & Setout Point Schedule			
Point	Easting	Northing	Elevation
9000	381060.647	6478031.033	6.75
9001	381121.863	6477846.098	1.75
9002	380848.943	6479099.889	2.36

Scale @A1 1:600
0 6 12 18 24 30

18147-F14-1.0_(OCT2023-POSTWORKS).dwg					Notes: 1. Heights established from VRS via GPS connection. 2. Setout Points Derived from Client DWG : D1822-01-01	 44 Hardey Road, Belmont WA 6104 Ph: 9450 7188 email: admin@jbasurveys.com.au web: www.jbasurveys.com.au	CLIENT: creating better coasts and ports	JOB NO: 18147	TITLE: POST-WORKS SURVEY	DATUM		VER: 1.0
VER: 1.0	DATE: 29.11.2023	BY: SW	AMENDMENTS: Issued for Information	FILE SOURCE: 18147-13.0-23112023-MGA94-(POST SURVEY)				PROJECT: HILLARYS SAND BYPASS SURVEYS NOVEMBER 2023 WEST COAST DRIVE HILLARYS, WA, 6025		VERT: AHD HORIZ: MGA94 Z50 SCALE: 1:600		
								DWG NO: 18147-F14				
								SHEET NO: 3 OF 3				
								SURVEYOR: JMB	DATE OF SURVEY: 23.11.2023	DRAWN BY: SW	APPROVED BY: NRW	A1