LAYOUT PLAN

Q50 STORMWATER LEVELS

Road Name	Chainage	Description	Q50 Level
Glendower Street	60.732	Pit 1/50	6.127
	92.616	Pit 4/6	6.451
	143.359	Pit 1/51	6.890
	211.833	Pit 7/6	7.488
Hillock Crescent	2042.229	Pit 1/35 & 1/36	6.596
Holbourne Street	19.651	Pit 1/25 & 1/26	6.586
Baird Court	46.900	Pit 8/6	8.385
	89.254	Pit 10/6 & 1/52	9.217
	122.260	Pit 11/6 & 1/53	10.005

LEGEND

2/1	- Pit No. 2/Drainline No. 1
12.000e	- Surface levels.
12.000*	- Surface levels.
→	- Stormwater flow arrow.
— — — —	- RP boundary.
— T — T —	- Top of batter.
— ⊥ — ⊥ —	- Toe of batter.
— — — —	- Stormwater drain line.
- - - - -	- Subsoil drainage.
— — — —	- Stormwater drain line.
- - - - -	- Subsoil drainage.

NOTES:

1. All Q50 flows within roads remain within the road reserve boundaries.

AS CONSTRUCTED

I Laurence John Nolan of ROWLANDS SURVEYS Pty. Ltd. hereby certify that this drawing accurately describes and records the nature and the location of the works depicted hereon as they have been constructed for the purposes of the development.

Laurence John Nolan
Director/Registered Surveyor
Date 7/9/11

Original Plan Received
Size A3

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

N

APPROVED AS CONSTRUCTED

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale
0 5 10 15 20m

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'*' - Indicates as constructed information.

All work is carried out in accordance with LOCAL AUTHORITY standard details.

REFER TO DRAWING SUNJ0001/07 FOR ROAD TYPICAL SECTIONS.

Issue	Description	Date
D	AMENDED TO AS CONSTRUCTED.	07/09/2011
C	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL	24/03/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P3	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR INFORMATION ONLY.	30/07/2010

NORTHERN CONSULTING engineers
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Phone: 07 4725 5550 Fax: 07 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Drawn JHS
Date 30/07/2010
Checked
Approved
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In Association With
SUNLAND GROUP LIMITED

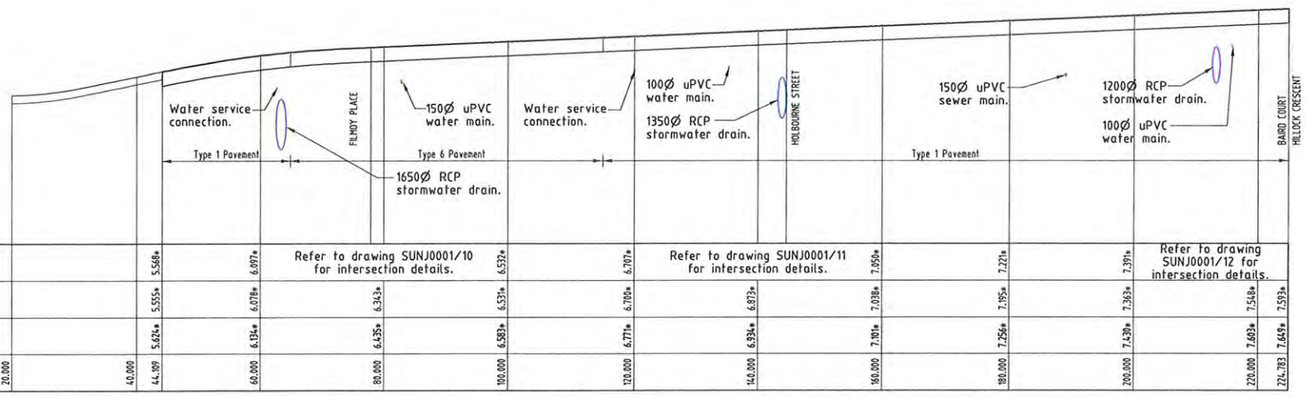
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

LAYOUT PLAN, ROADWORKS & STORMWATER

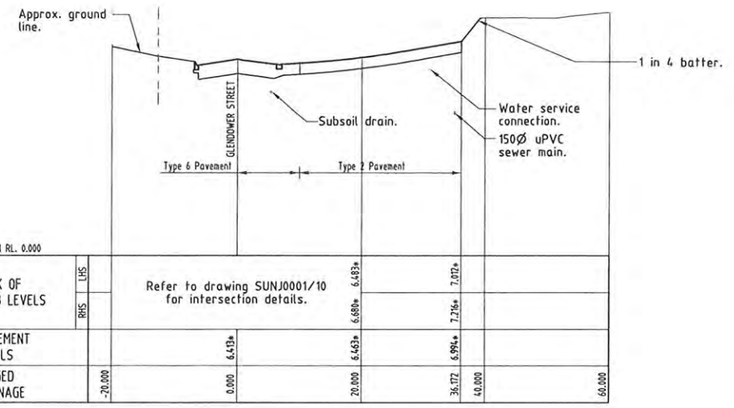
Drawing Number SUNJ0001/03
Issue D

PAVEMENT TABLE

PAVEMENT TYPE	PAVEMENT DESCRIPTION
TYPE 1	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 235mm 2.5 lower sub-base gravel.
TYPE 2	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 130mm 2.5 lower sub-base gravel.
TYPE 6	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 200mm 2.3 lower sub-base gravel with 3% cement.



GLENDOWER STREET
(Regulatory Speed Zone 50 km/h)



FILMOY PLACE

LONGITUDINAL SECTIONS

Scale 'A' - Horizontal
Scale 'B' - Vertical

AS CONSTRUCTED

I Laurence John Nolan of ROWLANDS SURVEYS Pty. Ltd. hereby certify that this drawing accurately describes and records the nature and the location of the works depicted hereon as they have been constructed for the purposes of the development.

Date 7/3/11

Laurence John Nolan
Director/Registered Surveyor

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION
Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

APPROVED
AS CONSTRUCTED

'*' - Indicates as constructed information.

All work is carried out in accordance with LOCAL AUTHORITY standard details.

REFER TO DRAWING SUNJ0001/07 FOR ROAD TYPICAL SECTIONS.

Issue	Description	Date
C	AMENDED TO AS CONSTRUCTED.	07/09/2011
B	MODIFICATION TO RETAINING WALLS AND SERVICES	23/6/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL	06/08/2010

In Association with:-
ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 5 10 15 20m
Scale 'B' 0 1 2 3 4m

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NORTHERN CONSULTING engineers
Civil & Structural Engineers
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Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

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Date 06/08/2010
Checked DE
Approved

In Association With
SUNLAND GROUP LIMITED

STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

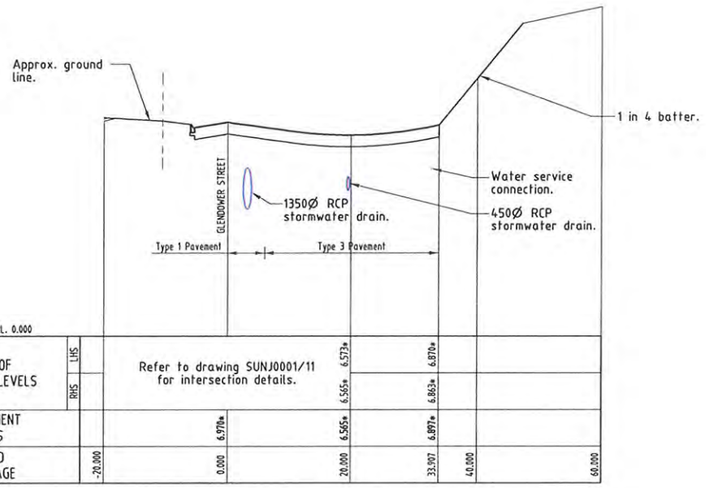
ROAD LONGITUDINAL SECTIONS

Drawing Number SUNJ0001/04

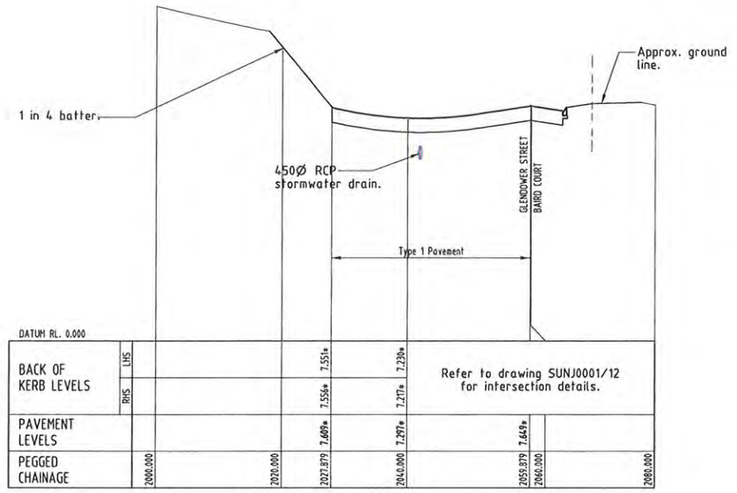
Issue C

PAVEMENT TABLE

PAVEMENT TYPE	PAVEMENT DESCRIPTION
TYPE 1	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 235mm 2.5 lower sub-base gravel.
TYPE 3	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 150mm 2.5 lower sub-base gravel.



HOLBOURNE STREET
(Regulatory Speed Zone 50 km/h)



HILLOCK CRESCENT
(Regulatory Speed Zone 50 km/h)

LONGITUDINAL SECTIONS

Scale 'A' - Horizontal
Scale 'B' - Vertical

AS CONSTRUCTED

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Laurence John Nolan
Director/Registered Surveyor

Date 7/9/11

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

APPROVED AS CONSTRUCTED

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 5 10 15 20m
Scale 'B' 0 1 2 3 4m

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'*' - Indicates as constructed information.

All work is carried out in accordance with LOCAL AUTHORITY standard details.

REFER TO DRAWING SUNJ0001/07 FOR ROAD TYPICAL SECTIONS.

Issue	Description	Date
B	AMENDED TO AS CONSTRUCTED.	07/09/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

NORTHERN CONSULTING engineers

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50 Punari Street, Currajong 4812
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Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Drawn	JHS
Date	06/08/2010
Checked	LR
Approved	
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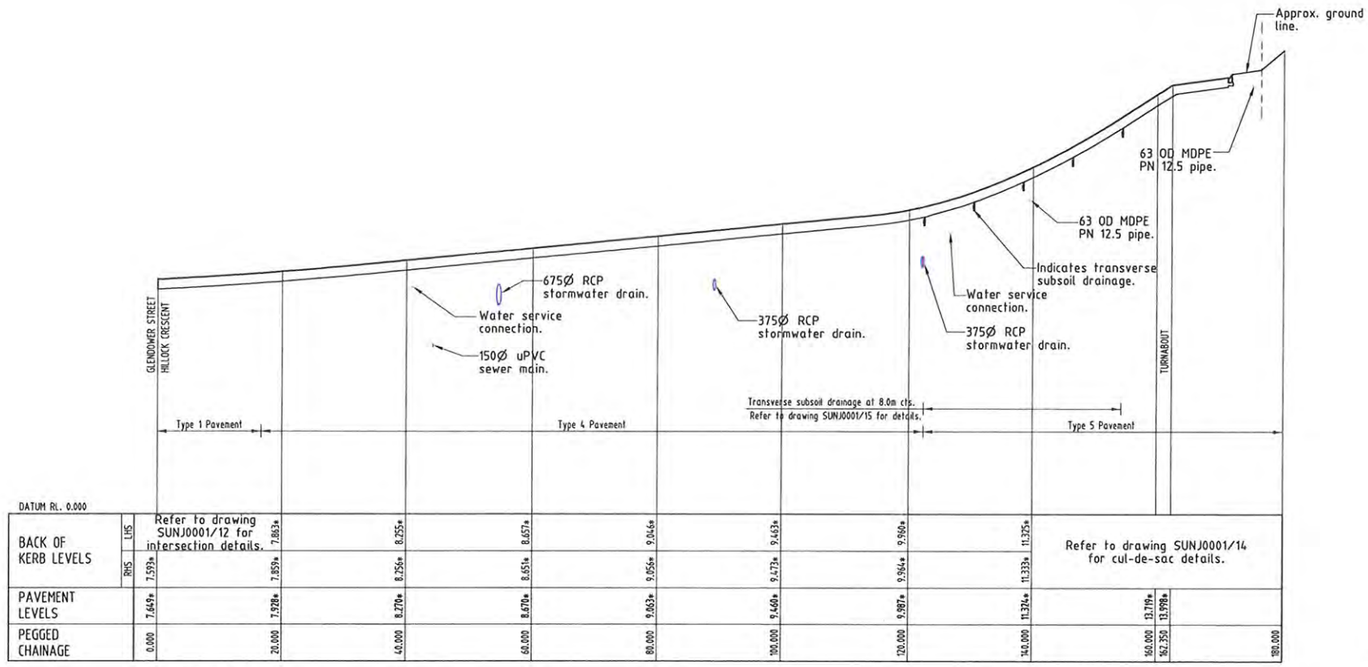
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

ROAD LONGITUDINAL SECTIONS

Drawing Number: SUNJ0001/05
Issue: B

PAVEMENT TABLE

PAVEMENT TYPE	PAVEMENT DESCRIPTION
TYPE 1	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 235mm 2.5 lower sub-base gravel.
TYPE 4	25mm asphalt wearing course. 100mm 2.1 base gravel. 100mm 2.3 sub-base gravel. 100mm 2.5 lower sub-base gravel.
TYPE 5	70mm A.C. (30mm A.C. 10 wearing course. (Class 320 bitumen) (40mm A.C. 14 binder course. (Class 320 bitumen) 100mm Type 2.1 base. (1.5% CTB swept & primed) 155mm Type 2.3 sub-base.



BAIRD COURT
(Regulatory Speed Zone 50 km/h)

LONGITUDINAL SECTION
Scale 'A' - Horizontal
Scale 'B' - Vertical

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Laurence John Nolan
Director/Registered Surveyor
Date 7/9/11

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

APPROVED AS CONSTRUCTED

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All work is carried out in accordance with LOCAL AUTHORITY standard details.

REFER TO DRAWING SUNJ0001/07 FOR ROAD TYPICAL SECTIONS.

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 5 10 15 20m
Scale 'B' 0 1 2 3 4m

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Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Issue	Description	Date
C	AMENDED TO AS CONSTRUCTED.	07/09/2011
B	PAVEMENT TYPE 5 CONTINUED THROUGH TURNABOUT.	24/03/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

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Date 06/08/2010
Checked
Approved

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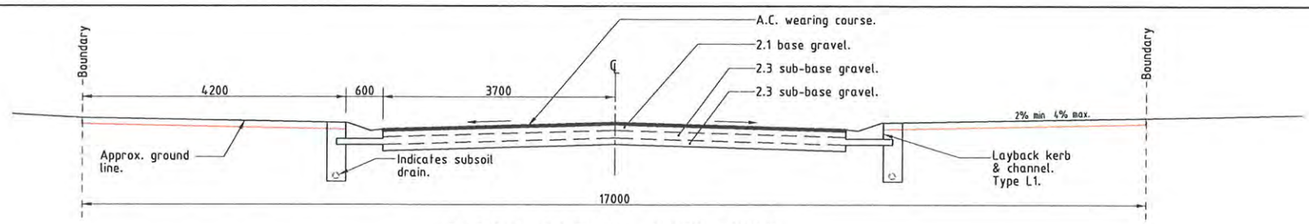
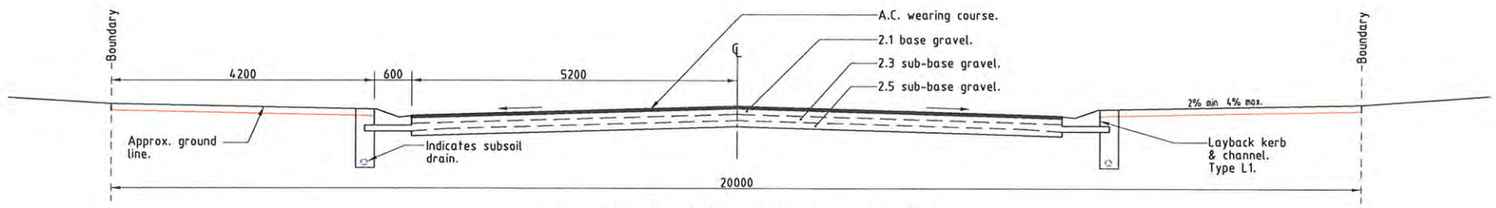
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

ROAD LONGITUDINAL SECTIONS

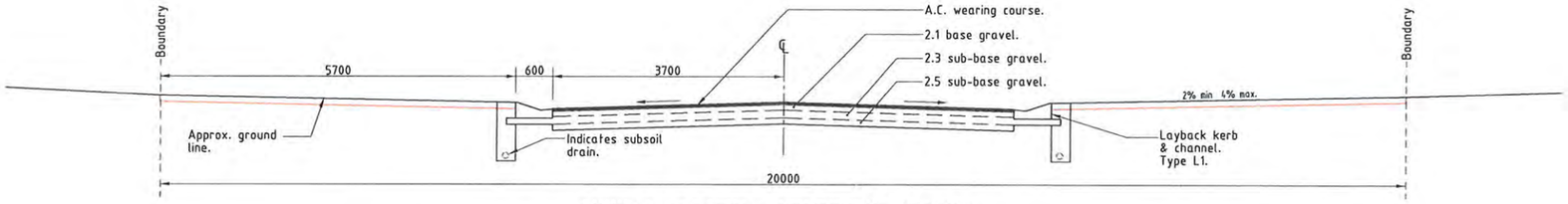
Drawing Number SUNJ0001/06
Issue C



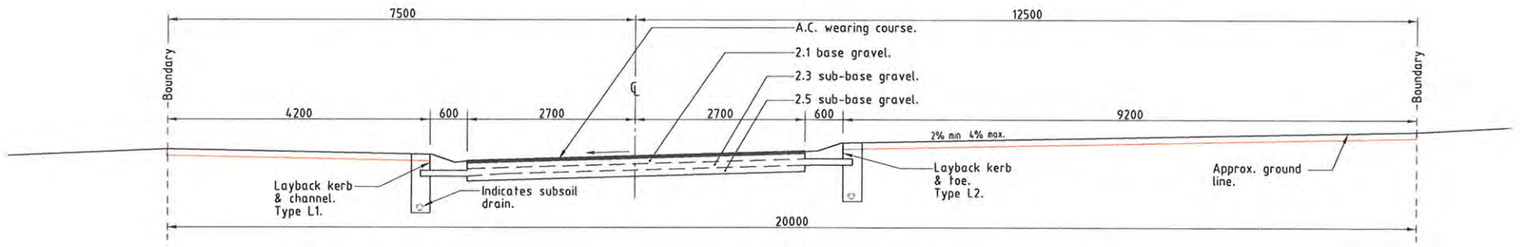
TYPICAL SECTION - BAIRD COURT



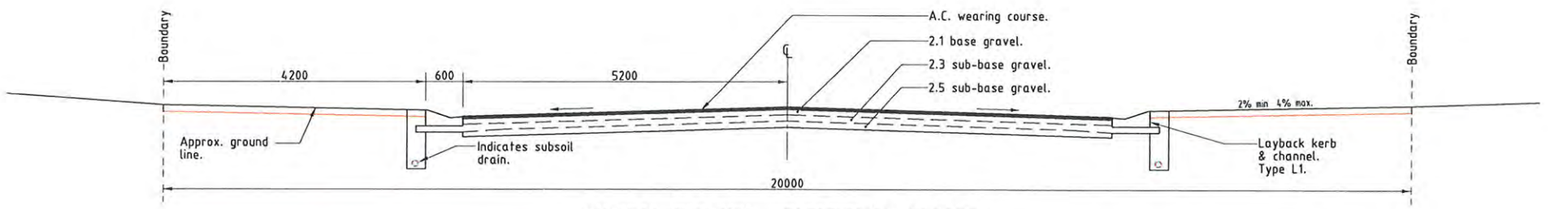
TYPICAL SECTION - HILLOCK CRESCENT



TYPICAL SECTION - HOLBOURNE STREET



TYPICAL SECTION - FILMOY PLACE



TYPICAL SECTION - GLENDOWER STREET

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

APPROVED AS CONSTRUCTED

All work is carried out in accordance with LOCAL AUTHORITY standard details.

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale
0 500 1000 1500 2000

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NORTHERN CONSULTING engineers

Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: 07 4725 5550 Fax: 07 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

AS CONSTRUCTED

Northern Consulting Engineers hereby certify that the works detailed on this drawing have been constructed to the dimensions and levels detailed.

Derek Robert Conley Sav ..... Date 7-9-2011

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

Issue	Description	Date
B	AMENDED TO AS CONSTRUCTED.	07/09/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P3	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR INFORMATION ONLY.	30/07/2010

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Date 30/07/2010
Checked LC
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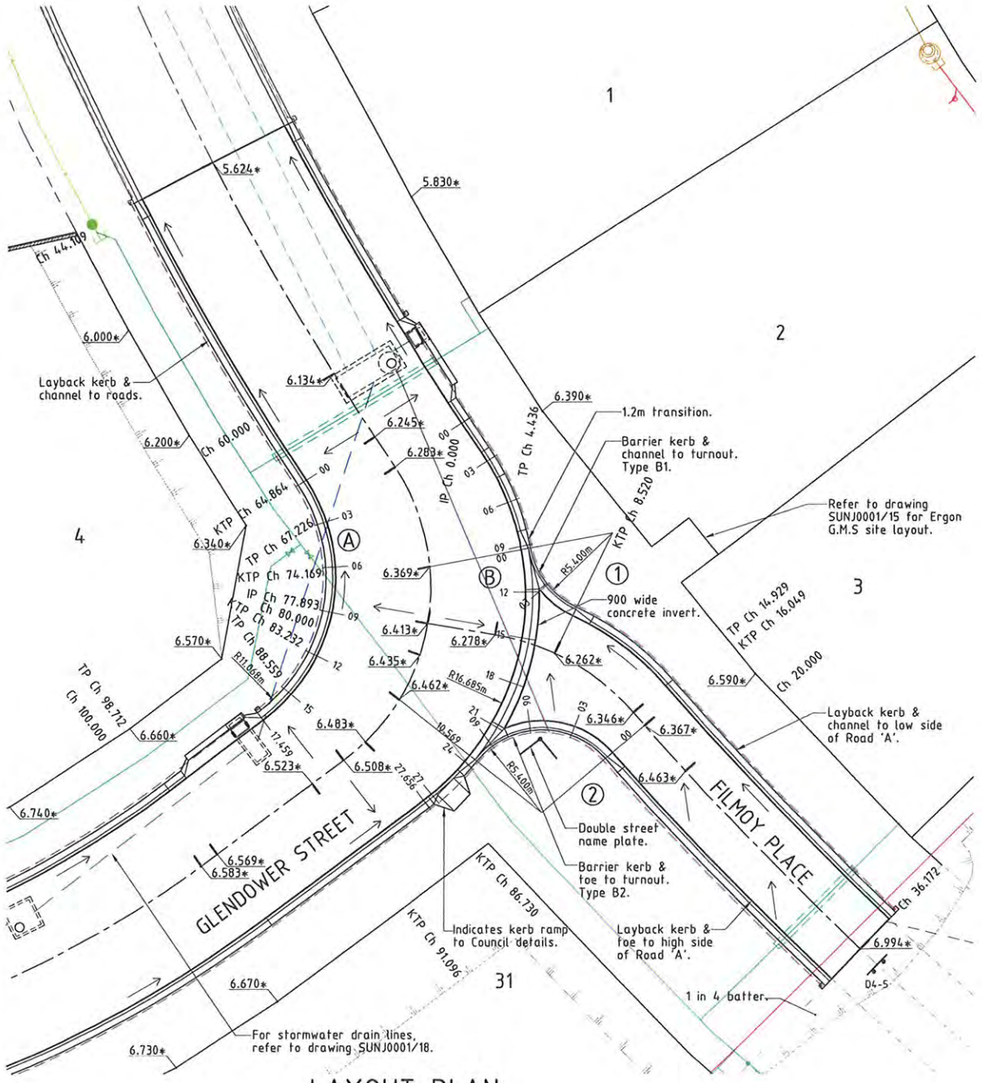
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

ROAD TYPICAL SECTIONS

Drawing Number SUNJ0001/07

Issue B



LAYOUT PLAN
Scale 'A'

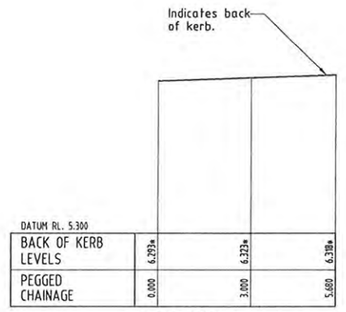
No.	CORNER EDGE A	CORNER EDGE B
CHGE.	KERB TOP LEVEL	KERB TOP LEVEL
00	6.187*	6.218*
03	6.232*	6.254*
06	6.282*	6.262*
09	6.331*	6.292*
12	6.377*	6.167*
15	6.423*	6.189*
17.459	6.473*	
18		6.226*
21		6.250*
24		6.404*
27		6.402*
27.656		6.406*

LEGEND

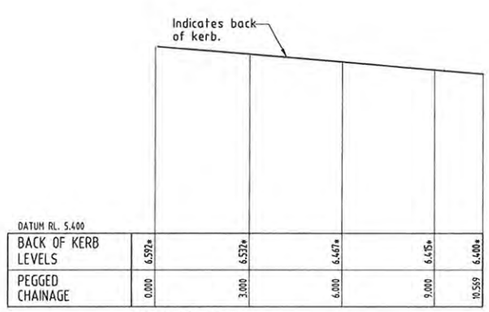
- 12.000* - Surface level.
- - Direction of fall.
- - Top of batter.
- - Stormwater drain line.
- - Subsoil drainage.
- - Sewer main.
- - Water main.
- - Stormwater drain line.
- - Subsoil drainage.
- - Sewer main.
- - Sewer manhole.
- - Water main.

SIGNAGE:-

CODE	EXAMPLE	DESCRIPTION
D4-5		Obstruction Marker



TURNOUT 1
Scale 'B' - Horizontal
Scale 'C' - Vertical



TURNOUT 2
Scale 'B' - Horizontal
Scale 'C' - Vertical

N

AS CONSTRUCTED

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Laurence John Nolan
Director/Registered Surveyor

Date 7/9/11

APPROVED
AS CONSTRUCTED

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

'*' - Indicates as constructed information.

All work is carried out in accordance with LOCAL AUTHORITY standard details.

Issue	Description	Date
D	AMENDED TO AS CONSTRUCTED.	07/09/2011
C	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

In Association with:-
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22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 2 4 6 8m
Scale 'B' 0 1 2 3 4m
Scale 'C' 0 0.2 0.4 0.6 0.8m

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50 Punari Street, Currajong 4812
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Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

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Date	06/08/2010
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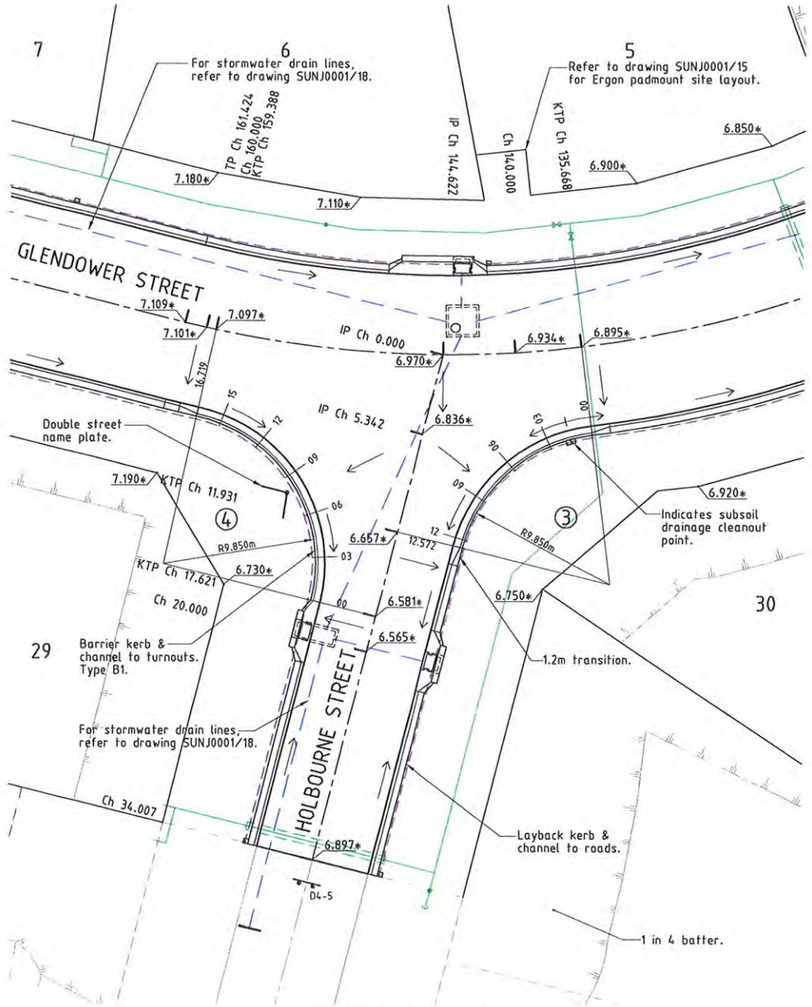
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

INTERSECTION & CORNER WIDENING DETAILS

Drawing Number: SUNJ0001/10
Issue: D



LAYOUT PLAN
Scale 'A'

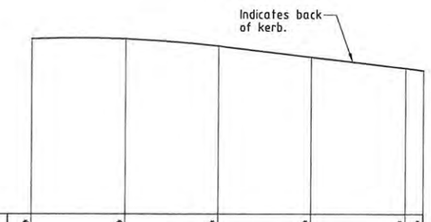
N

SIGNAGE:-

CODE	EXAMPLE	DESCRIPTION
D4-5		Obstruction Marker

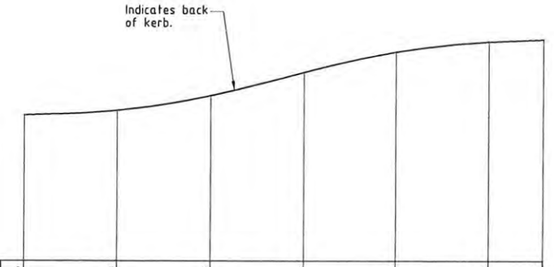
LEGEND

- 12.000* – Surface level.
- → – Direction of fall.
- Top of batter.
- Toe of batter.
- Stormwater drain line.
- Subsoil drainage.
- Water main.



DATUM RL. 5.700							
BACK OF KERB LEVELS	6.847*	6.843*	6.796*	6.734*	6.657*	6.648*	
PEGGED CHAINAGE	0.000	3.000	6.000	9.000	12.000	12.572	

TURNOUT 3
Scale 'B' - Horizontal
Scale 'C' - Vertical



DATUM RL. 5.600							
BACK OF KERB LEVELS	6.568*	6.596*	6.686*	6.824*	6.955*	7.013*	7.037*
PEGGED CHAINAGE	0.000	3.000	6.000	9.000	12.000	15.000	16.719

TURNOUT 4
Scale 'B' - Horizontal
Scale 'C' - Vertical

AS CONSTRUCTED

I Laurence John Nolan of ROWLANDS SURVEYS Pty. Ltd. hereby certify that this drawing accurately describes and records the nature and the location of the works depicted hereon as they have been constructed for the purposes of the development.

Laurence John Nolan
Director/Registered Surveyor
Date: 7/9/11

APPROVED
AS CONSTRUCTED

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 2 4 6 8m
Scale 'B' 0 1 2 3 4m
Scale 'C' 0 0.2 0.4 0.6 0.8m

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'*' - Indicates as constructed information.

All work is carried out in accordance with LOCAL AUTHORITY standard details.

NORTHERN CONSULTING engineers

Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: 07 4725 5550 Fax: 07 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Issue	Description	Date
D	AMENDED TO AS CONSTRUCTED.	07/09/2011
C	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

Drawn	JHS
Date	06/08/2010
Checked	
Approved	
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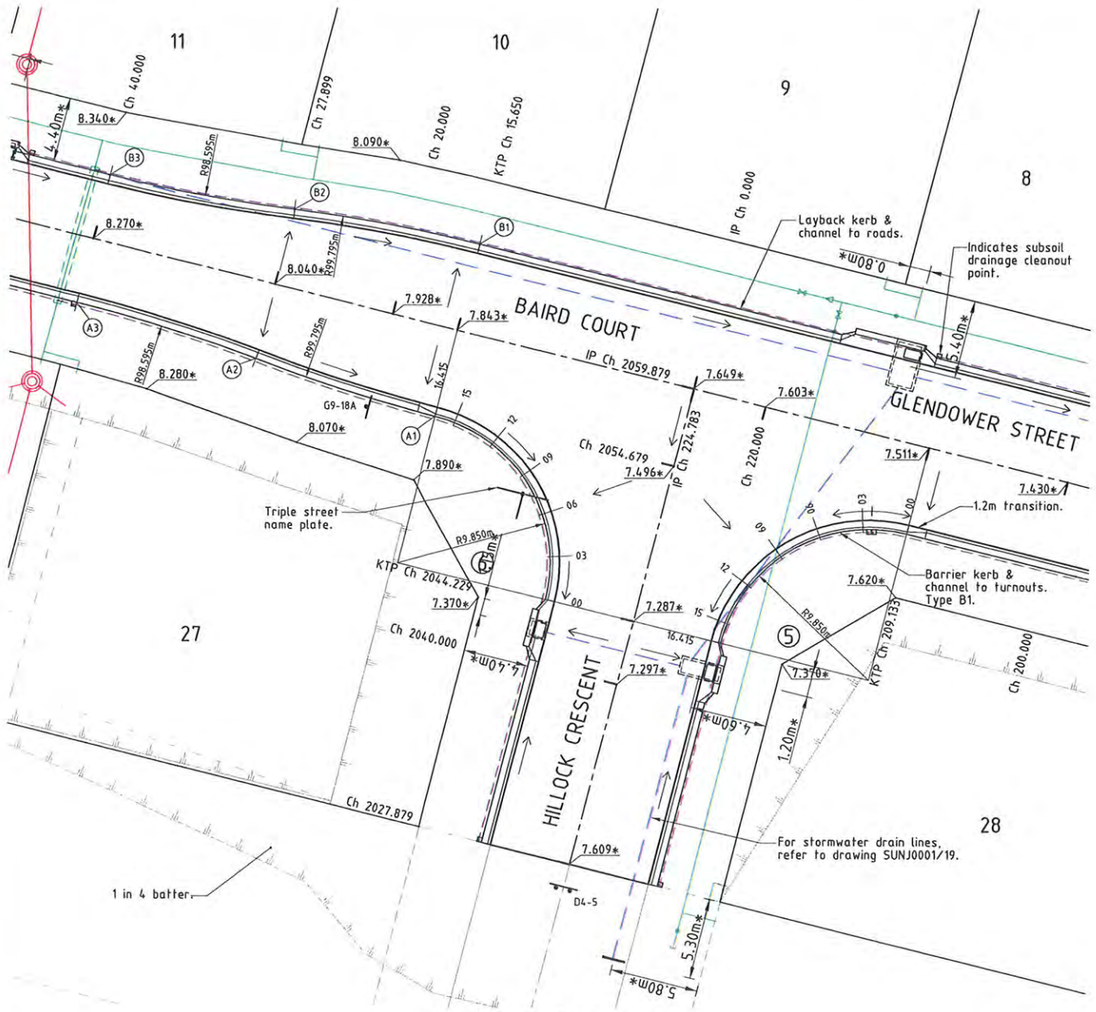
In Association With
SUNLAND GROUP LIMITED

STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

INTERSECTION DETAILS

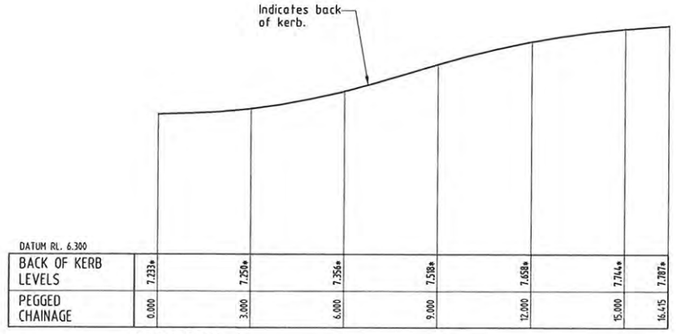
Drawing Number: SUNJ0001/11
Issue: D



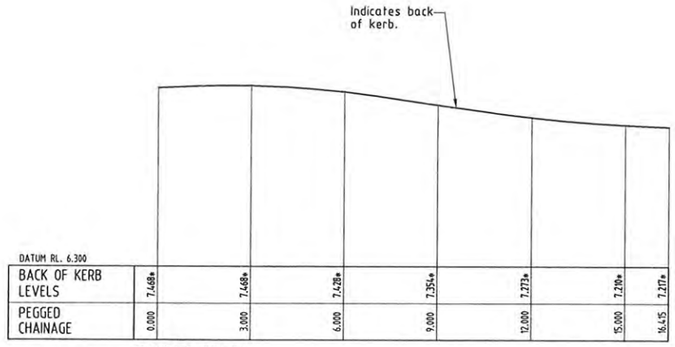
LAYOUT PLAN
Scale 'A'

SETOUT TABLE

Point N°	Chainage	Offset Distance	RL (back of K&C)
A1	15.650	5.800 (L)	7.787*
A2	27.899	5.050 (L)	8.008*
A3	40.000	4.300 (L)	8.255*
B1	15.650	5.800 (R)	7.785*
B2	27.899	5.050 (R)	8.006*
B3	40.000	4.300 (R)	8.256*



TURNOUT 6
Scale 'B' - Horizontal
Scale 'C' - Vertical



TURNOUT 5
Scale 'B' - Horizontal
Scale 'C' - Vertical

LEGEND

- 12.000* - Surface level.
- → - Direction of fall.
- Top of batter.
- Toe of batter.
- Stormwater drain line.
- Subsoil drainage.
- Sewer main.
- Sewer manhole.
- Water main.

SIGNAGE:-

CODE	EXAMPLE	DESCRIPTION
D4-5		Obstruction Marker
G9-18A	NO THROUGH ROAD	No Through Road

AS CONSTRUCTED

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Laurence John Nolan
Director/Registered Surveyor
Date 7/9/11

APPROVED AS CONSTRUCTED

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION
Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-
ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 2 4 6 8m
Scale 'B' 0 1 2 3 4m
Scale 'C' 0 0.2 0.4 0.6 0.8m

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Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Issue	Description	Date
D	AMENDED TO AS CONSTRUCTED.	07/09/2011
C	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

Drawn JHS
Date 06/08/2010
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Approved
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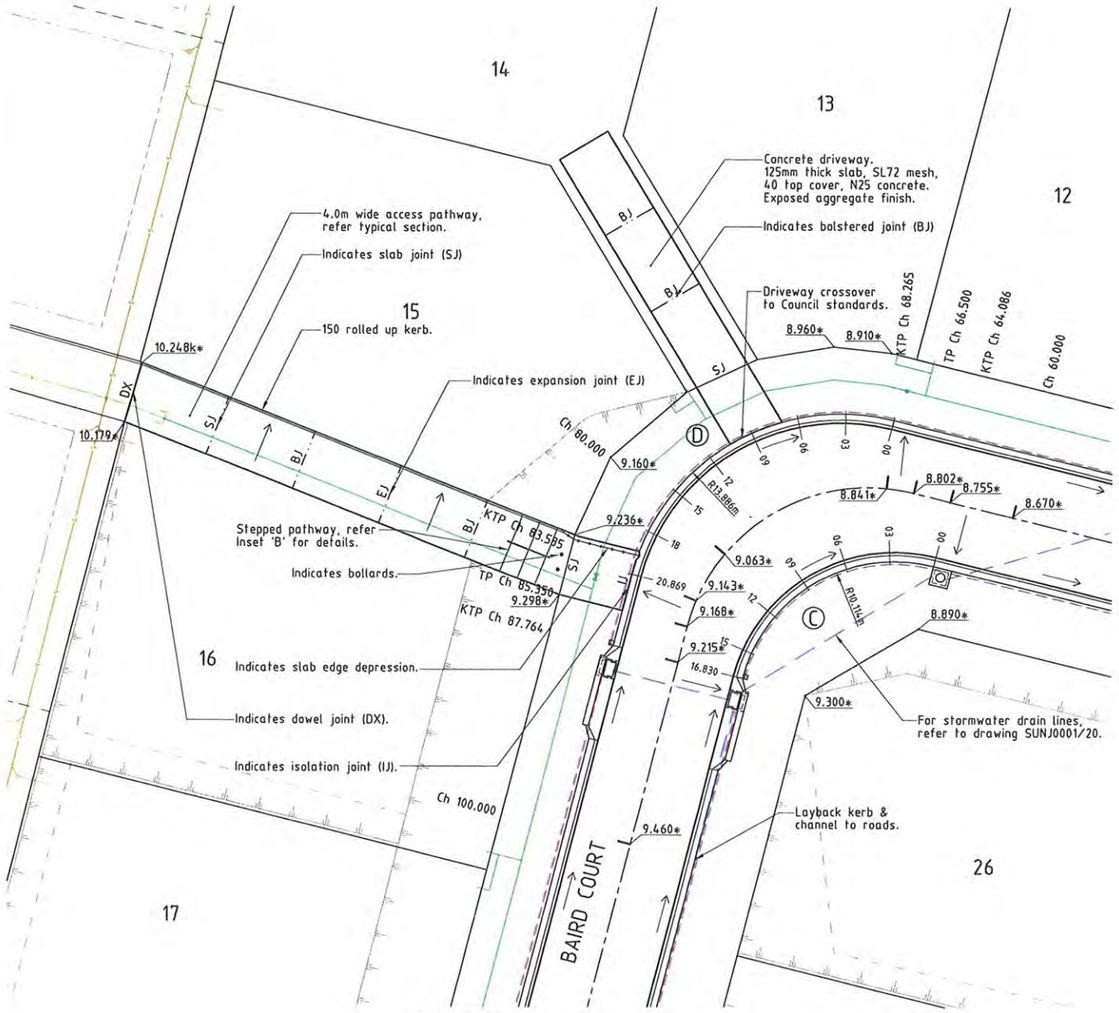
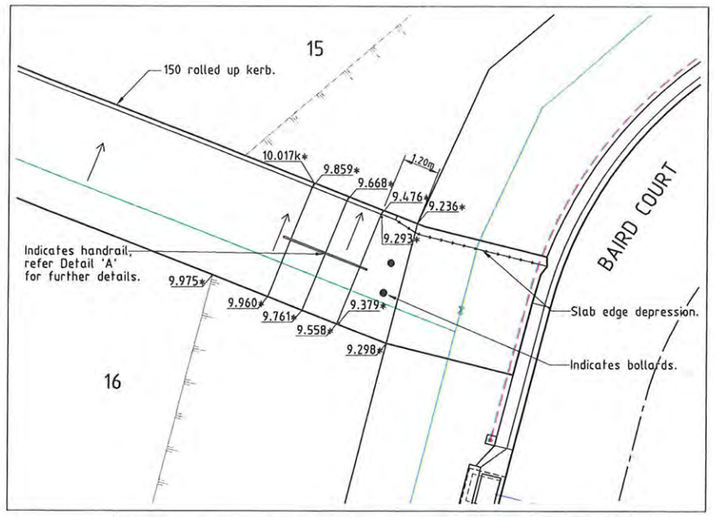
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

INTERSECTION DETAILS

Drawing Number SUNJ0001/12
Issue D



LAYOUT PLAN
Scale 'A'

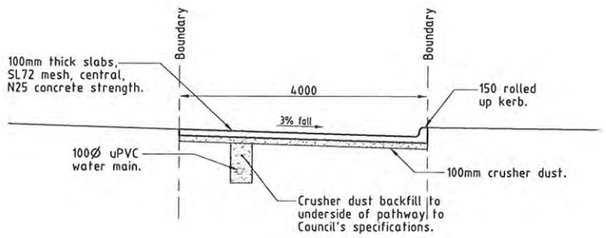


INSET 'B'
Scale 'B'

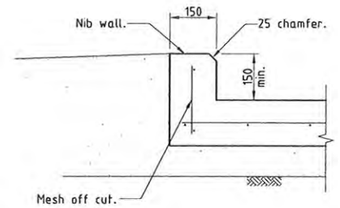
LEGEND

- 12.000* — Surface level.
- → — Direction of fall.
- Change of grade.
- Stormwater drain line.
- Subsoil drainage.
- Water main.
- Sewer main.
- Water main.

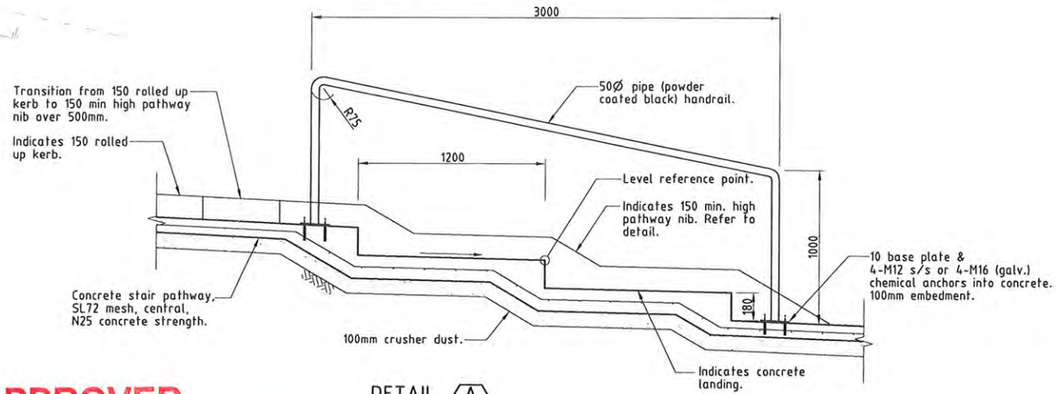
No.	CORNER EDGE C	CORNER EDGE D
CHGE.	KERB TOP LEVEL	KERB TOP LEVEL
00	8.748*	8.811*
03	8.819*	8.860*
06	8.911*	8.904*
09	8.993*	8.950*
12	9.081*	8.993*
15	9.162*	9.041*
16.830	9.209*	
18		9.082*
20.869		9.128*



TYPICAL SECTION - ACCESS PATHWAY
Scale 'C'



PATHWAY NIB
Scale 'E'



DETAIL A
Scale 'D'

N

AS CONSTRUCTED

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Laurence John Nolan
Director/Registered Surveyor
Date 7/9/11

APPROVED AS CONSTRUCTED

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TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

Issue	Description	Date
E	AMENDED TO AS CONSTRUCTED.	07/09/2011
D	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
C	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
B	CONCRETE DRIVEWAY FINISH AMENDED.	22/11/2010
A	ISSUED FOR CONSTRUCTION	27/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATION WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 2 4 6 8m
Scale 'B' 0 1 2 3 4m
Scale 'C' 0 500 1000 1500 2000
Scale 'D' 0 200 400 600 800
Scale 'E' 0 100 200 300 400

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50 Punari Street, Currajong 4812
Phone: 07 4725 5550 Fax: 07 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

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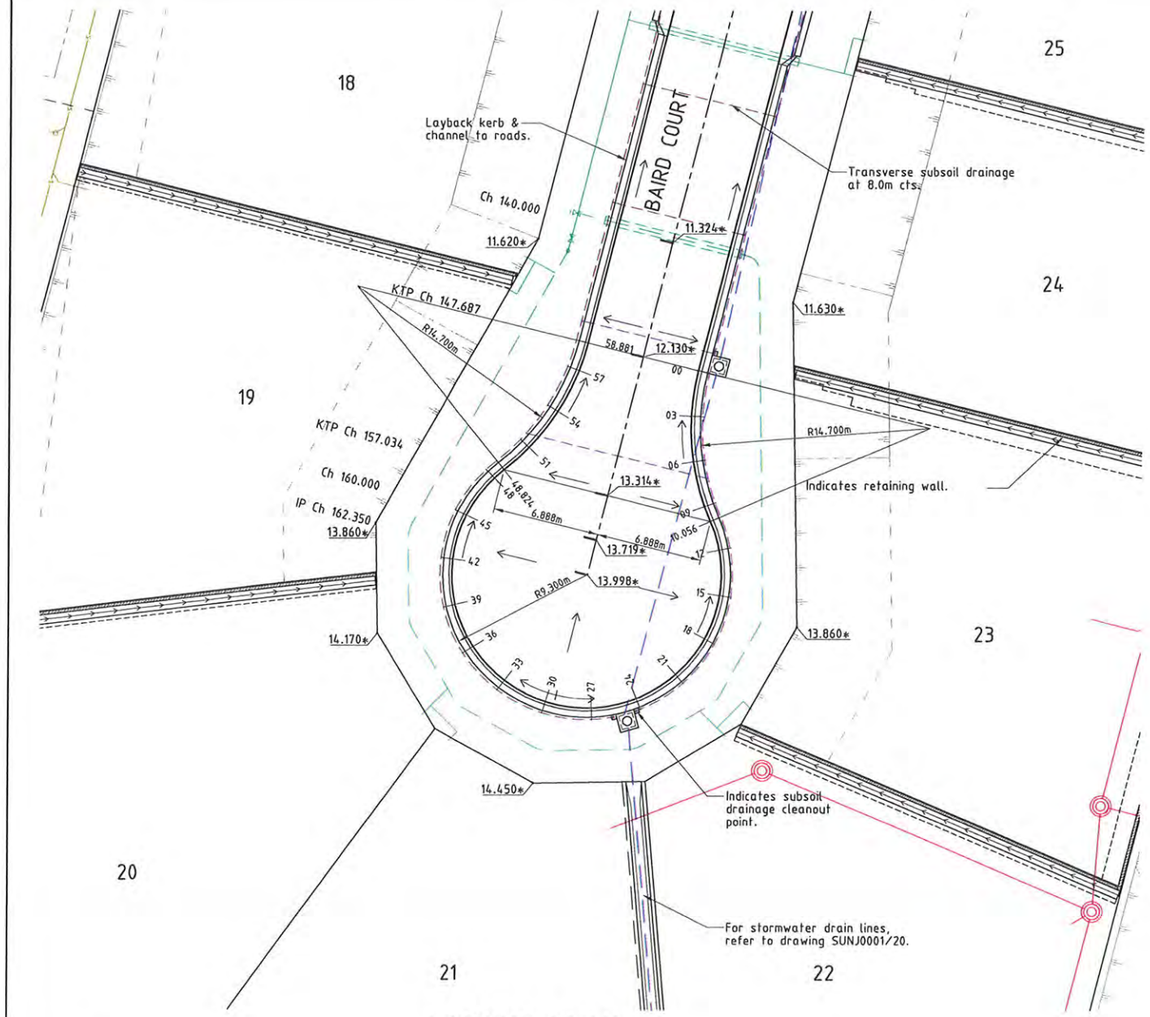
Drawn JHS
Date 06/08/2010
Checked
Approved

In Association With
SUNLAND GROUP LIMITED

STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

CORNER WIDENING, DRIVEWAY & ACCESS PATHWAY DETAILS

Drawing Number SUNJ0001/13
Issue E

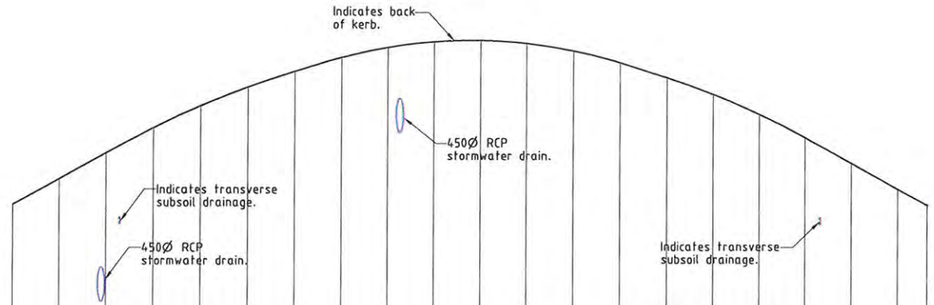


LAYOUT PLAN
Scale 'A'

N

LEGEND

- 12.000* – Surface level.
- → – Direction of fall.
- Top of batter.
- Change of grade.
- Stormwater drain line.
- Subsoil drainage.
- Sewer main.
- Sewer manhole.
- Water main.
- Poly water main.
- Sewer main.



DATUM RL. 10.300																							
BACK OF KERB LEVELS	12.132*	12.438*	12.803*	13.149*	13.441*	13.678*	13.882*	14.063*	14.196*	14.266*	14.269*	14.223*	14.131*	13.992*	13.808*	13.584*	13.325*	13.079*	12.781*	12.356*	12.144*
PEGGED CHAINAGE	0.000	3.000	6.000	9.000	12.000	15.000	18.000	21.000	24.000	27.000	30.000	33.000	36.000	39.000	42.000	45.000	48.000	51.000	54.000	57.000	58.881

BAIRD COURT - TURNABOUT
Scale 'A' - Horizontal
Scale 'B' - Vertical

AS CONSTRUCTED

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Laurence John Nolan
Director/Registered Surveyor
Date 7/9/11

APPROVED AS CONSTRUCTED

TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION
Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

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Issue	Description	Date
D	AMENDED TO AS CONSTRUCTED.	07/09/2011
C	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
A	ISSUED FOR CONSTRUCTION	21/10/2010
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATION WORKS APPROVAL.	17/08/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR CLIENT APPROVAL.	06/08/2010

In Association with:-
ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 'A' 0 2 4 6 8m
Scale 'B' 0 0.4 0.8 1.2 1.6m

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Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

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Date	06/08/2010
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STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

TURNABOUT DETAILS

Drawing Number: SUNJ0001/14
Issue: D

LAYOUT PLAN

LEGEND

GENERAL:-

- Top of batter.
- Toe of batter.
- Stormwater drain line.
- Sewer main.
- Sewer manhole.
- Water main.

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TOWN PLANNING

SUNLAND GROUP

REAL PROPERTY DESCRIPTION

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Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

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Issue	Description	Date
E	AMENDED TO AS CONSTRUCTED.	07/09/2011
D	MODIFICATION TO RETAINING WALLS AND SERVICES.	23/06/2011
C	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR CONSTRUCTION.	30/03/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
A	ISSUED FOR CONSTRUCTION	22/10/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATION WORKS APPROVAL.	17/08/2010

In Association with:-

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GARBUTT. 4814
Ph. (07)47755077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 0 2 4 6 8m

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Date 17/08/2010
Checked
Approved

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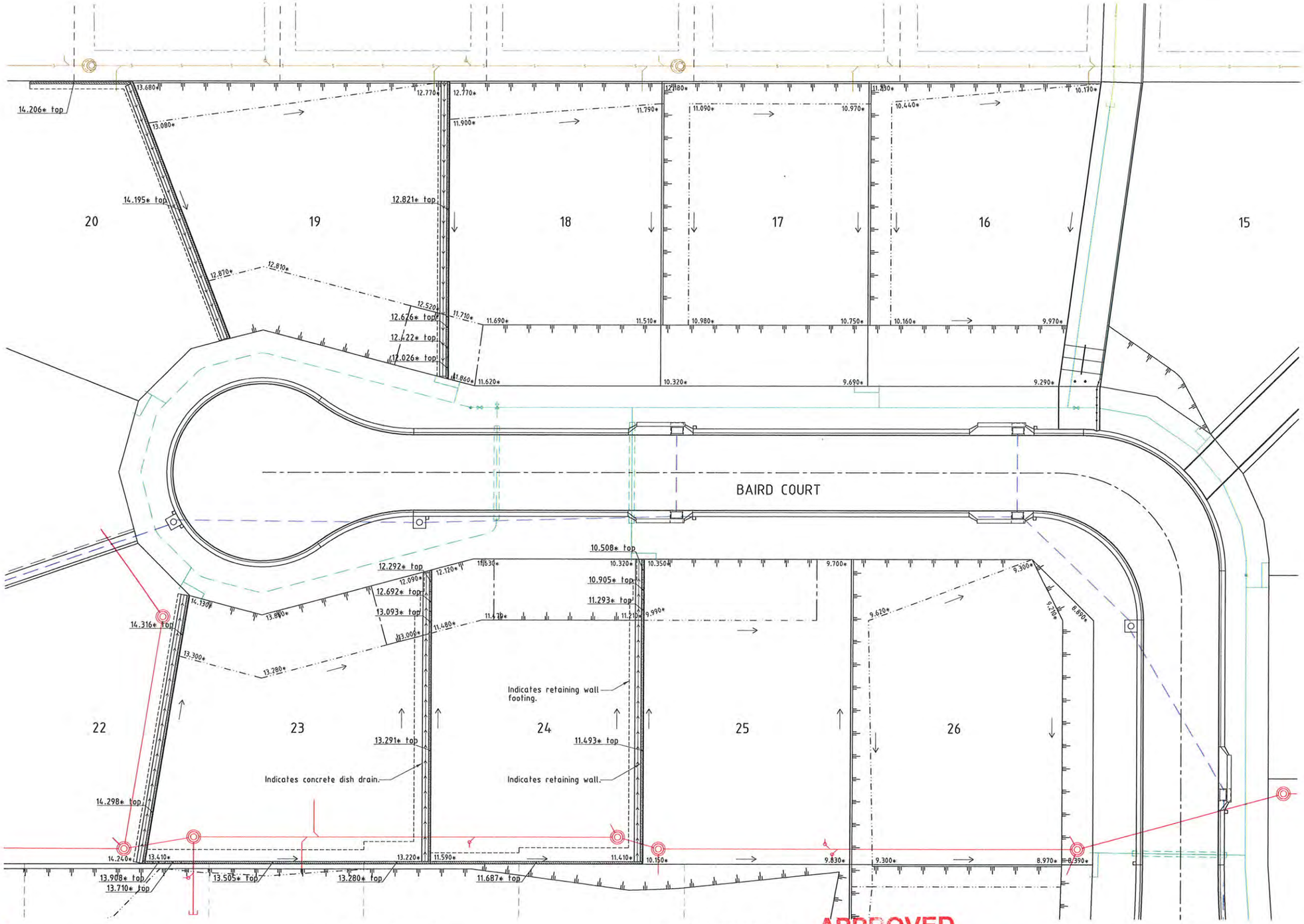
STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

ALLOTMENT BENCHING LAYOUT PLAN LOTS 25 TO 29

Drawing Number SUNJ0001/PD01
Issue E



SUNLAND GROUP

REAL PROPERTY DESCRIPTION

Lot 902 on SP 218628, Lot 901 on SP 226447 & Lot 4 on RP 743005
Parish of BOHLE
County of ELPHINSTONE
Glendower Street - Bushland Beach

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Laurence John Nolan
Director/Registered Surveyor
Date 7/9/11

LAYOUT PLAN

APPROVED AS CONSTRUCTED

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TOWNSVILLE CITY COUNCIL
REC'D - 8 SEP 2011
TOWN PLANNING

Issue	Description	Date
E	AMENDED TO AS CONSTRUCTED.	07/09/2011
D	MODIFICATION TO RETAINING WALLS AND SERVICES	23/06/2011
C	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR CONSTRUCTION.	30/03/2011
B	SERVICES & LOT LAYOUT DESIGN AMENDED - ISSUED FOR APPROVAL.	24/03/2011
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR INFORMATION.	11/03/2011
A	ISSUED FOR CONSTRUCTION	27/10/2010
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATION WORKS APPROVAL.	17/08/2010

In Association with:-

ROWLANDS SURVEYS PTY LTD
22 GORDEN STREET
GARBUTT. 4814
Ph. (07)47765077

LEVEL DATUM A.H.D.
Horizontal Datum GDA' 94 Zone 55
Refer P.M. 174438 RL. 4.820
Bolt & washer in kerb.
Cnr HILLOCK CR. & GLENDOWER ST.

Scale 0 2 4 6 8m

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ACN 100 817 356

Drawn JHS
Date 17/08/2010
Checked
Approved

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STAGE 1, 31 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
GLENDOWER STREET
BUSHLAND BEACH

ALLOTMENT BENCHING
LAYOUT PLAN
LOTS 18 TO 16

Drawing Number SUNJ0001/PD02
Issue E