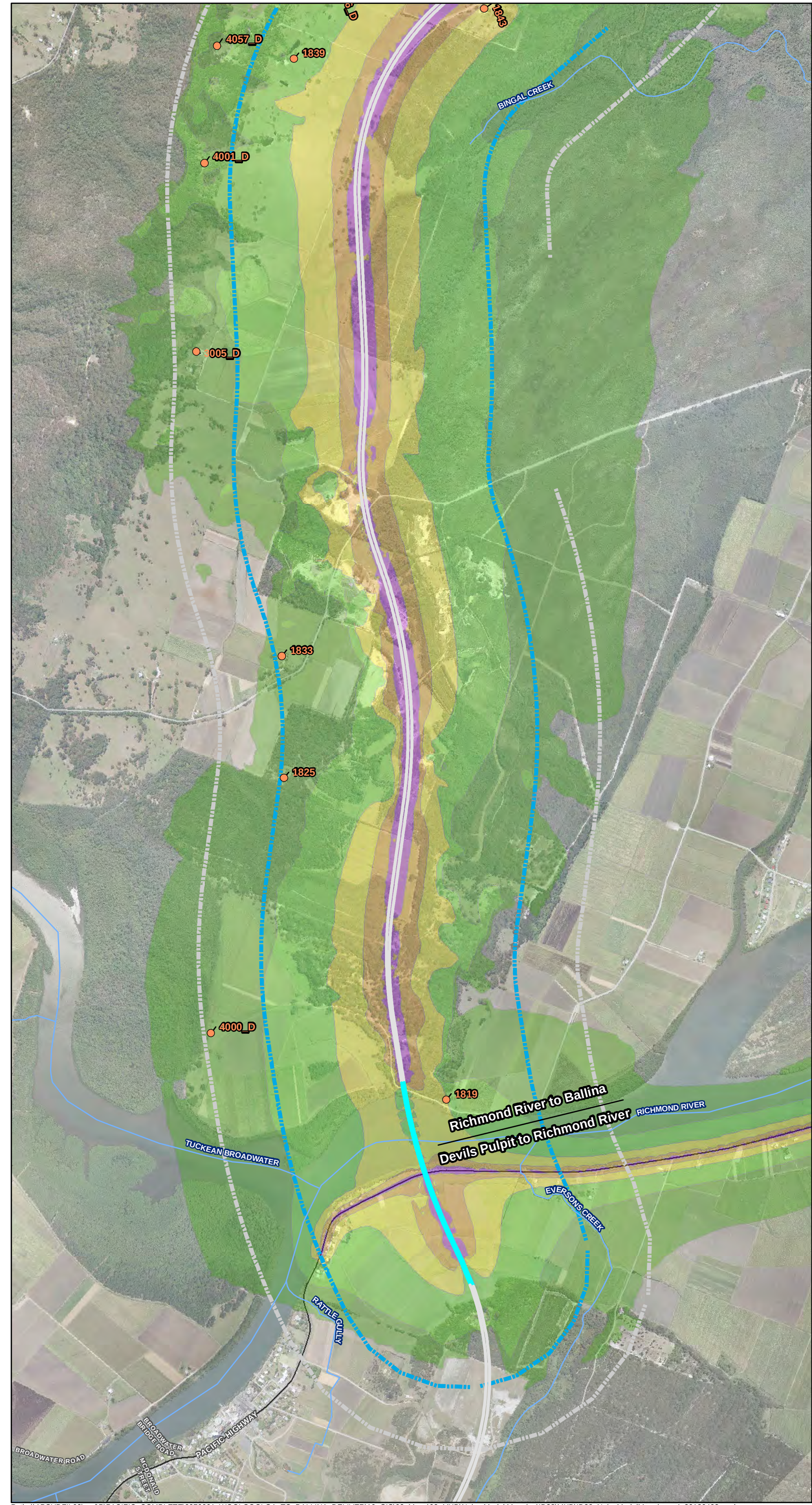


Appendix E-4 Noise contour maps Richmond River to Pimlico





Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
Richmond River to Ballina

**Opening Year 2019
Build Day**

Map: ID38

Page: 1 of 3

●

Receivers eligible for consideration of additional mitigation

●

Receivers not eligible for consideration of additional mitigation

Additional Low Noise Pavement

EIS Low Noise Pavement

Flexible Pavement

Chip seal Pavement

DGA Pavement

Concrete Pavement

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

090180360540720900

Metres

Print Date:

3/04/2018

Author:

ORFANOSM

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Opening Year 2019 Build Day

Map: ID38

Page: 2 of 3

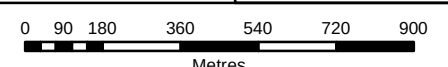
-  Receivers eligible for consideration of additional mitigation
-  Receivers not eligible for consideration of additional mitigation
-  Additional Low Noise Pavement
-  EIS Low Noise Pavement
-  Flexible Pavement
-  Chip seal Pavement
-  DGA Pavement
-  Concrete Pavement
-  600m Buffer
-  900m Buffer

Day Noise Level Leq,15hr dBA

- | |
|-------|
| 45-49 |
| 50-54 |
| 55-59 |
| 60-64 |
| 65+ |



1:17,500
at A3



Print Date:	3/04/2018
Author:	ORFANOSM

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Opening Year 2019 Build Day

Map: ID38

Page: 3 of 3

- Receivers eligible for consideration of additional mitigation
- Receivers not eligible for consideration of additional mitigation

— Additional Low Noise Pavement

— EIS Low Noise Pavement

Flexible Pavement

Chip seal Pavement

— DGA Pavement

Concrete Pavement

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-4

50-54

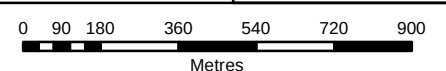
55-59

60-64

65+



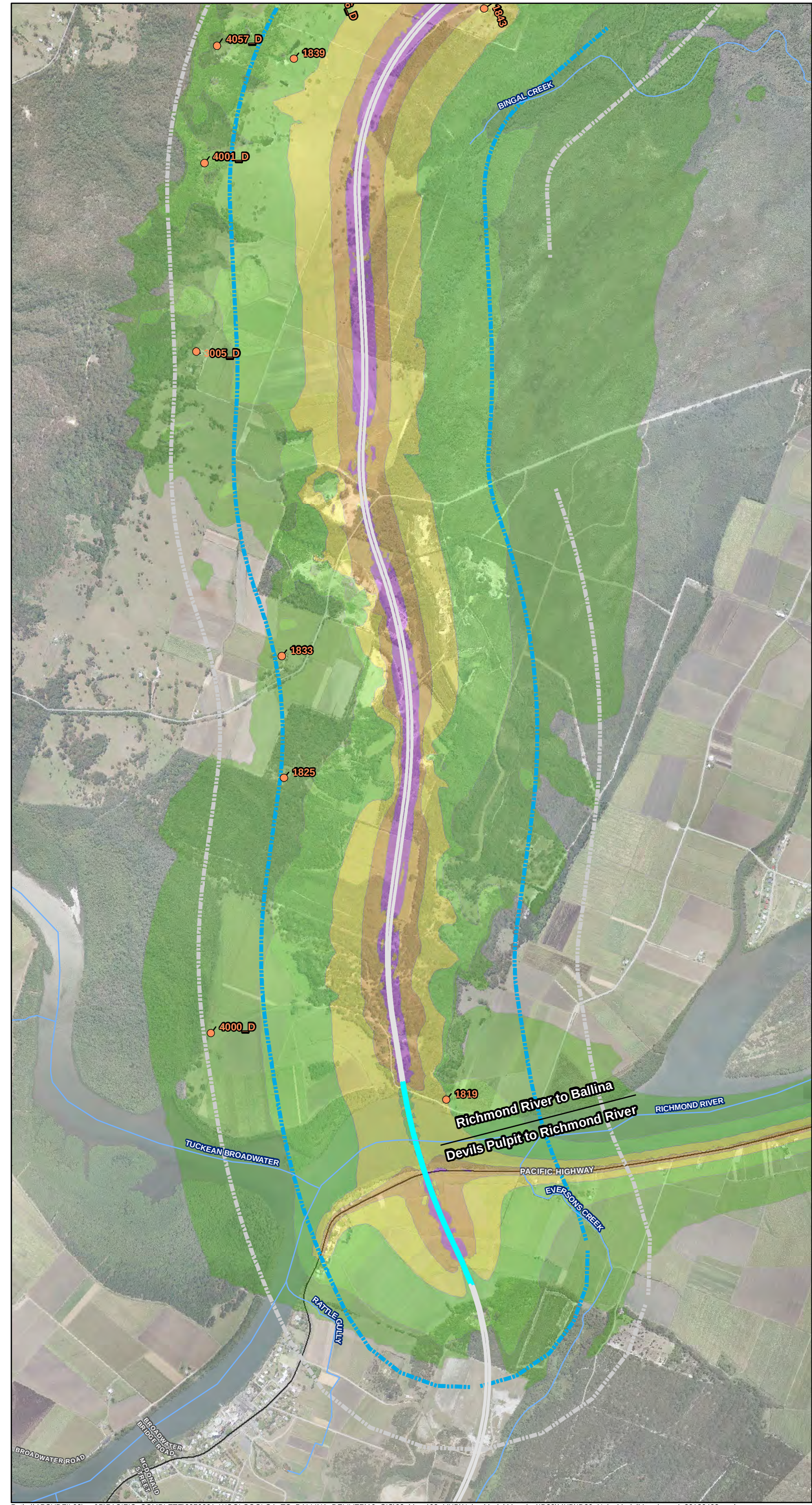
1:17,500
at A3



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Author:	ORFANOSM
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Transport
Roads & Maritime Services

PACIFIC HIGHWAY UPGRADE

Woolgoolga to Ballina

Richmond River to Ballina

Opening Year 2019 Build Night

Map: ID39

Map 1 of 3

●

Receivers eligible for consideration of additional mitigation

●

Receivers not eligible for consideration of additional mitigation

Additional Low Noise Pavement

EIS Low Noise Pavement

Flexible Pavement

Chip seal Pavement

DGA Pavement

Concrete Pavement

600m Buffer

900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

090180360540720900

Metres

Print Date:

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Author:

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Opening Year 2019 Build Night

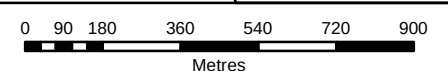
Map: ID39

Map 2 of 3

- Night Noise Level Leq,9hr dBA**
- | |
|-------|
| 45-49 |
| 50-54 |
| 55-59 |
| 60-64 |
| 65+ |



1:17,500
at A3



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PACIFIC HIGHWAY
UPGRADE
Woolgoolga to Ballina
Richmond River to Ballina

Opening Year 2019
Build Night
Map: ID39

Map 3 of 3

● Receivers eligible for consideration of additional mitigation

● Receivers not eligible for consideration of additional mitigation

— Additional Low Noise Pavement

— EIS Low Noise Pavement

— Flexible Pavement

— Chip seal Pavement

— DGA Pavement

— Concrete Pavement

— 600m Buffer

— 900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

0 90 180 360 540 720 900

Metres

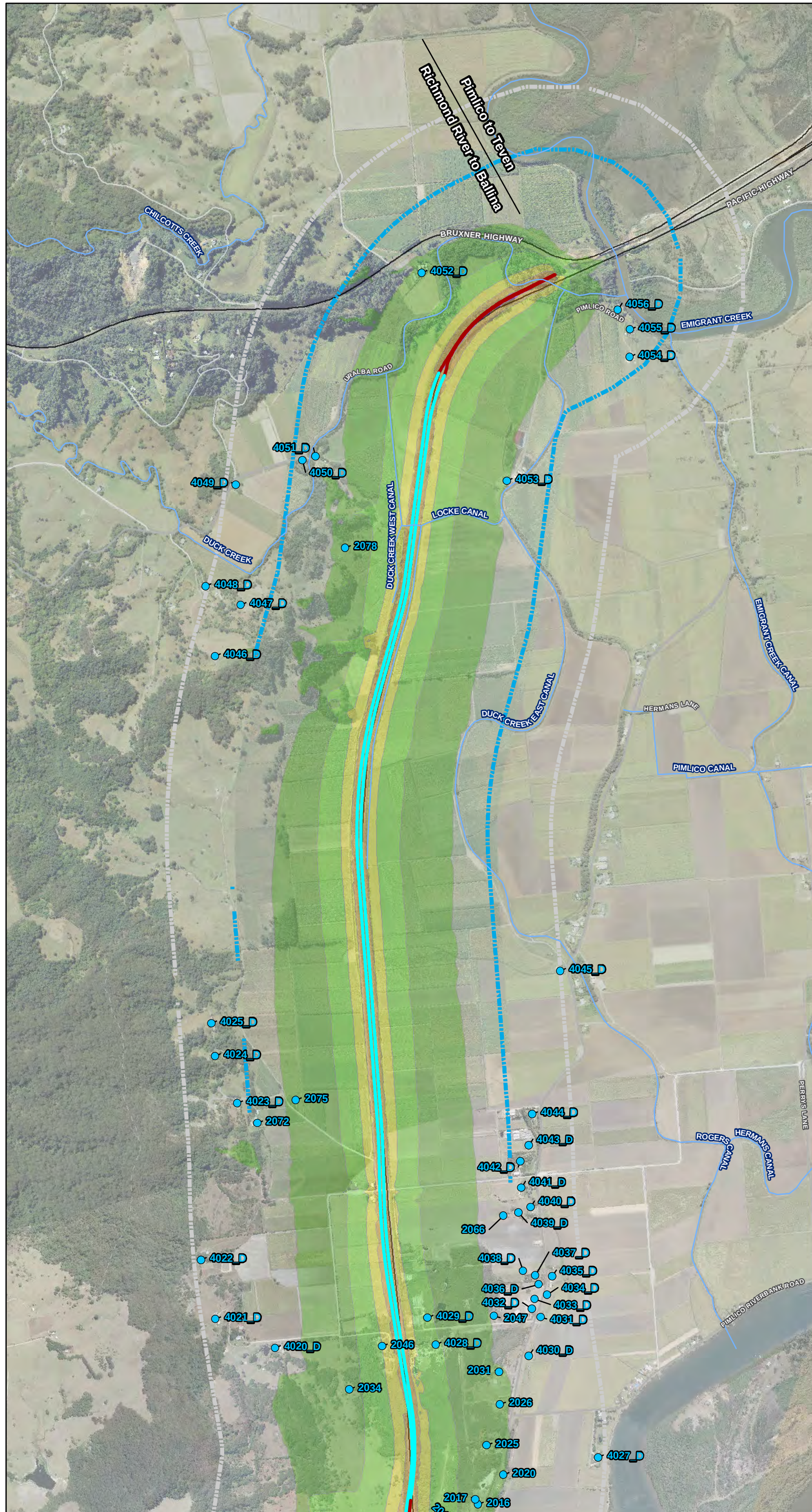
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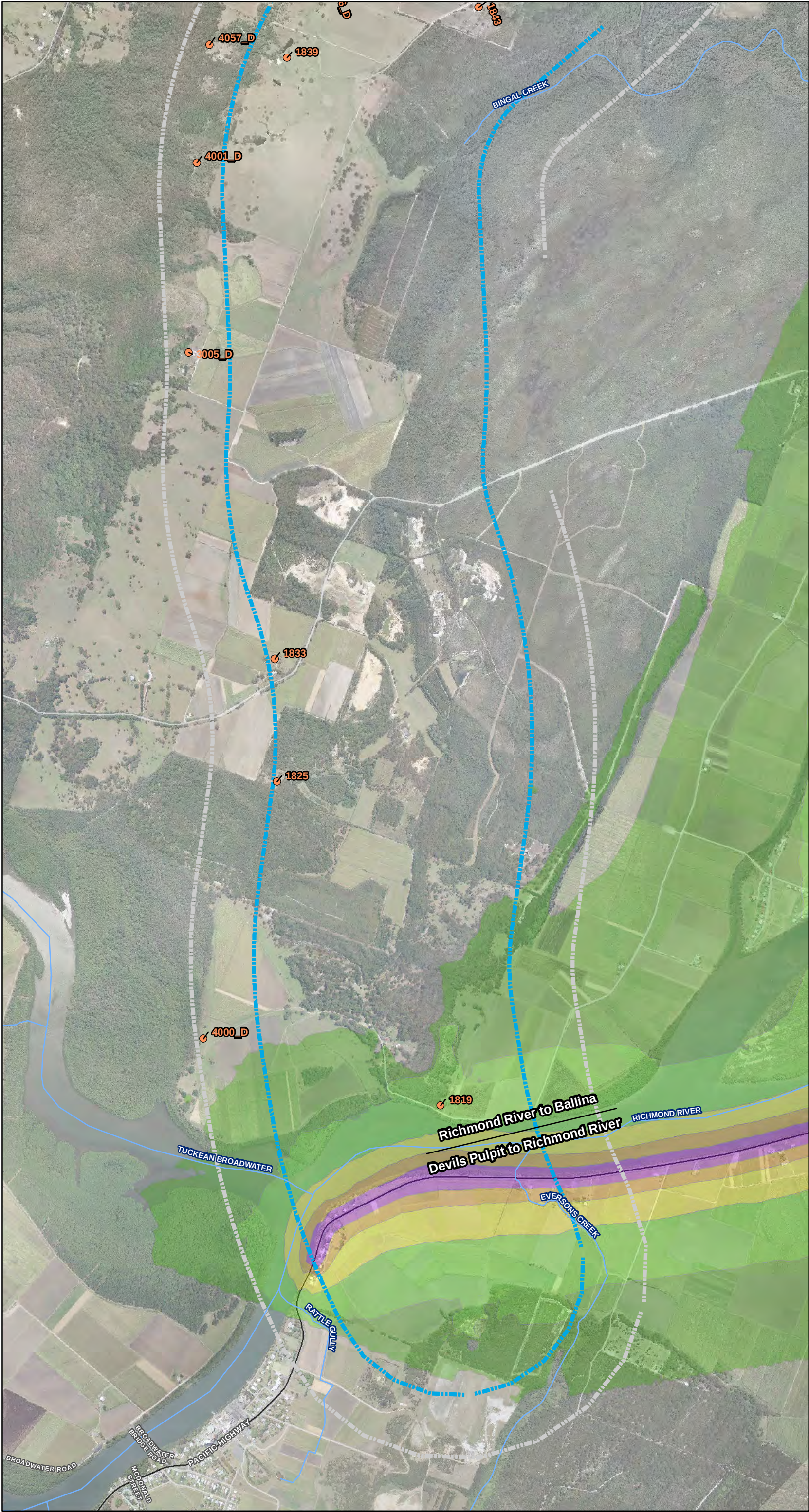
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Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
Richmond River to Ballina

Opening Year 2019
No Build Day

Map: ID40

Map 1 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

090180360540720900

Metres

Print Date:

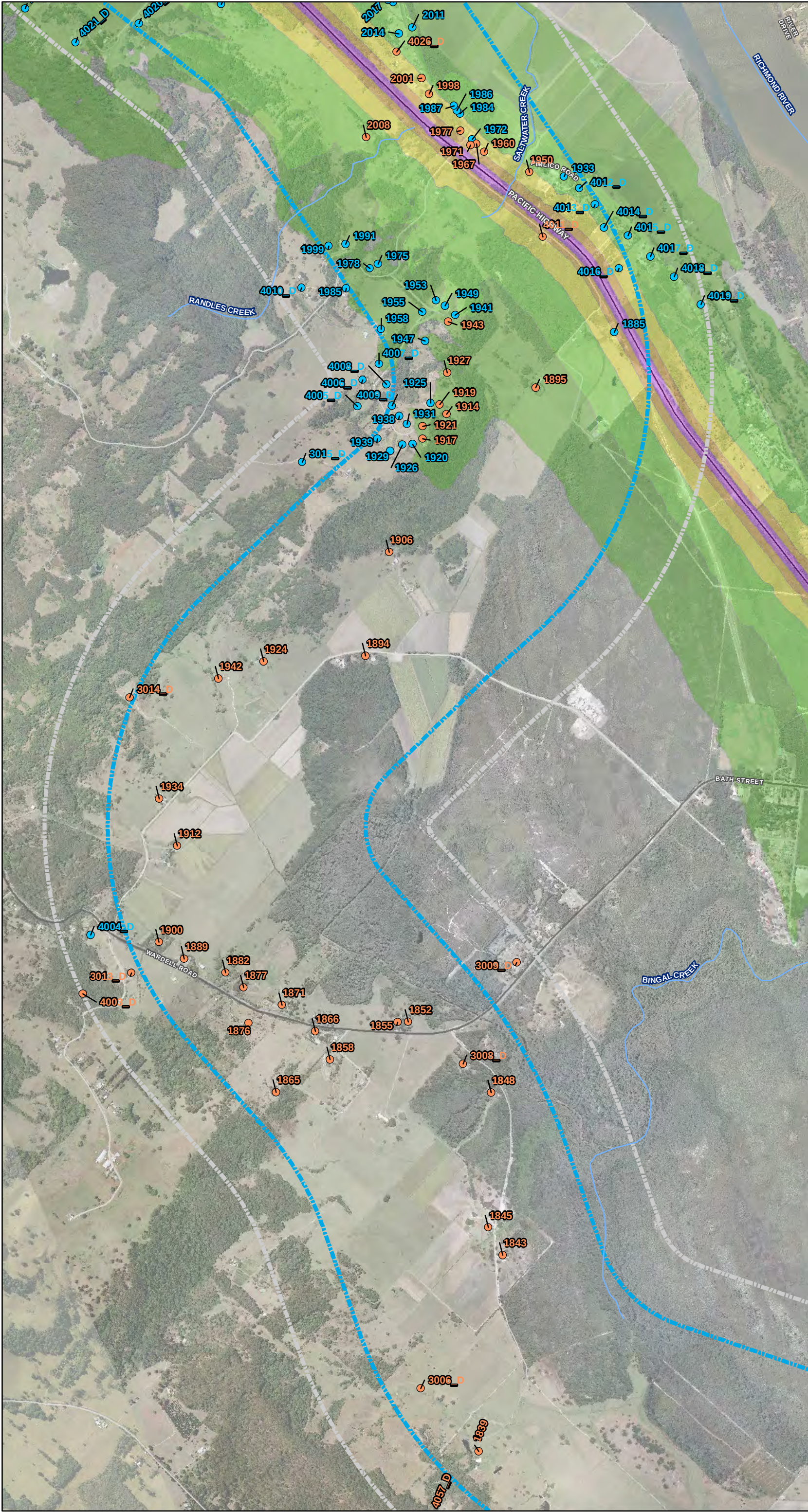
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Transport
Roads & Maritime Services

PACIFIC HIGHWAY UPGRADE

Woolgoolga to Ballina

Richmond River to Ballina

Opening Year 2019 No Build Day

Map: ID40

Map 2 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

0 90 180 360 540 720 900

Metres

Print Date:

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Author:

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**Opening Year 2019
No Build Day**

Map: ID40

Map 3 of 3

- Receivers eligible for consideration of additional mitigation
- Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

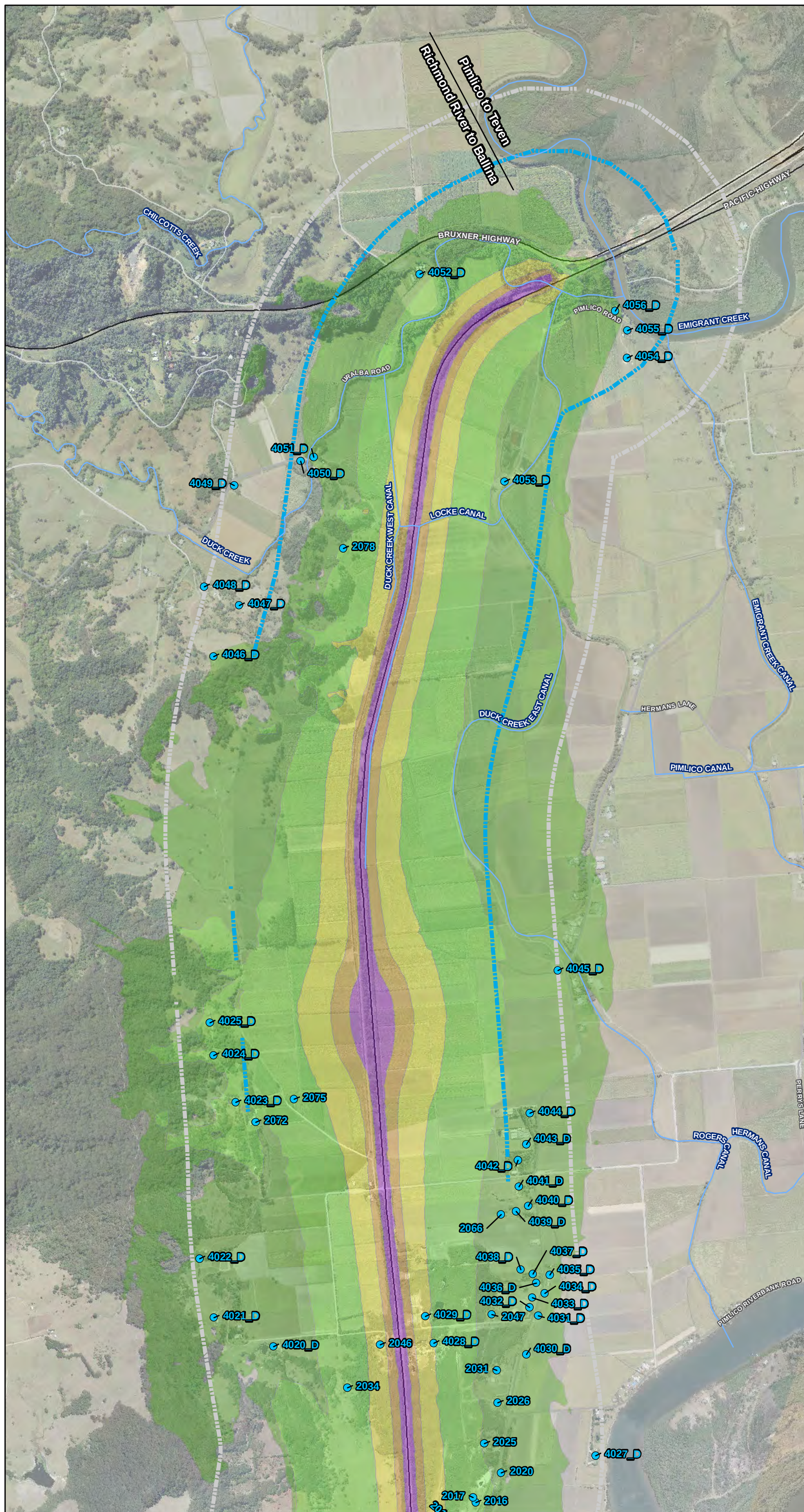
45-4

50-54

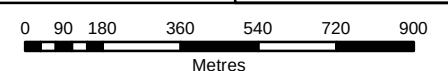
55-59

60-64

65+



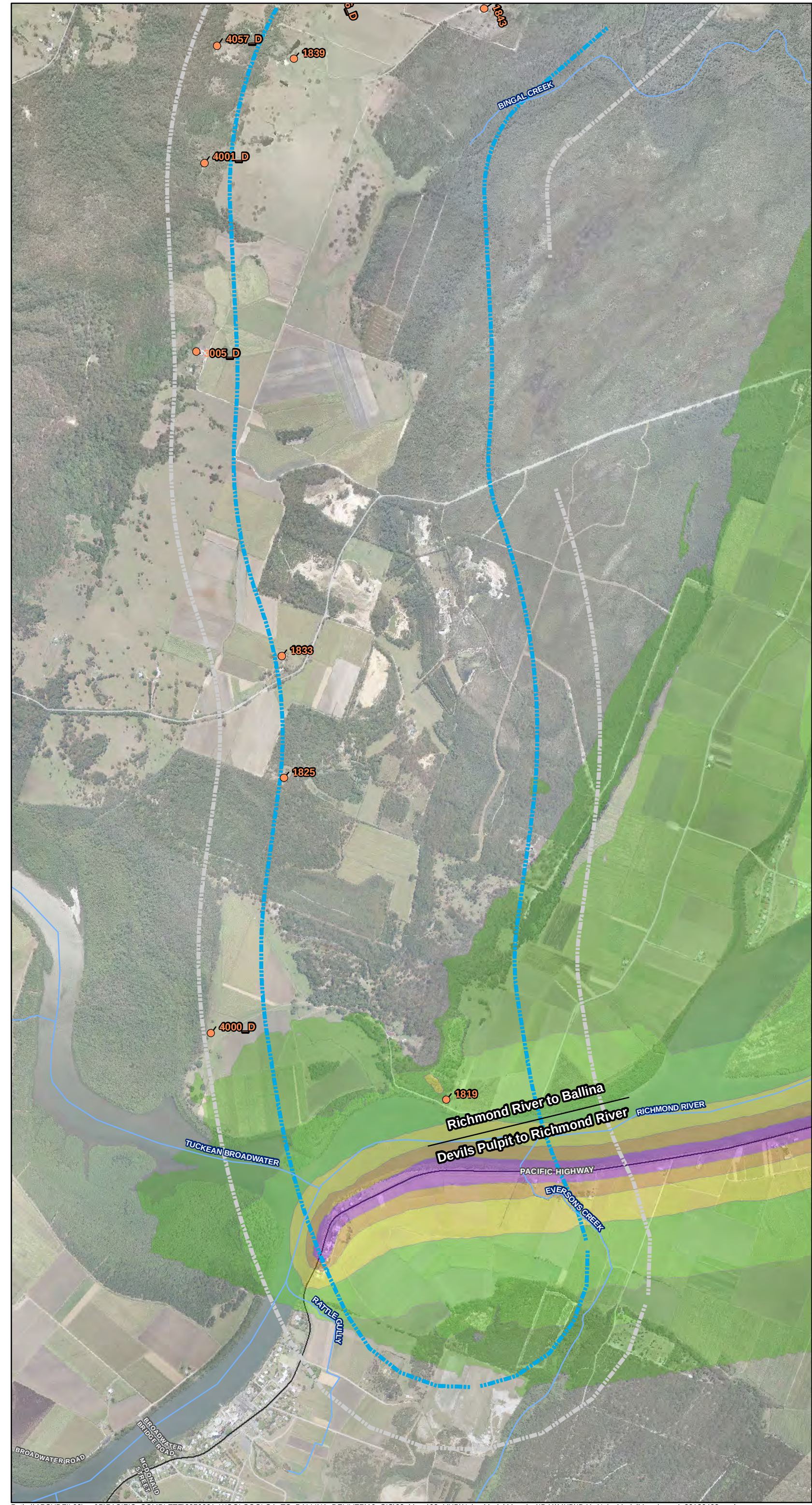
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at A3



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Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
*Richmond River
to Ballina*

Opening Year 2019
No Build Night

Map: ID41

Map 1 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+



CASINO
WOODBURN
MACLEAN
GRAFTON
BALLINA
EVANS HEAD
YAMBA
WOOLGOOLGA



1:17,500
at A3

0 90 180 360 540 720 900

Metres

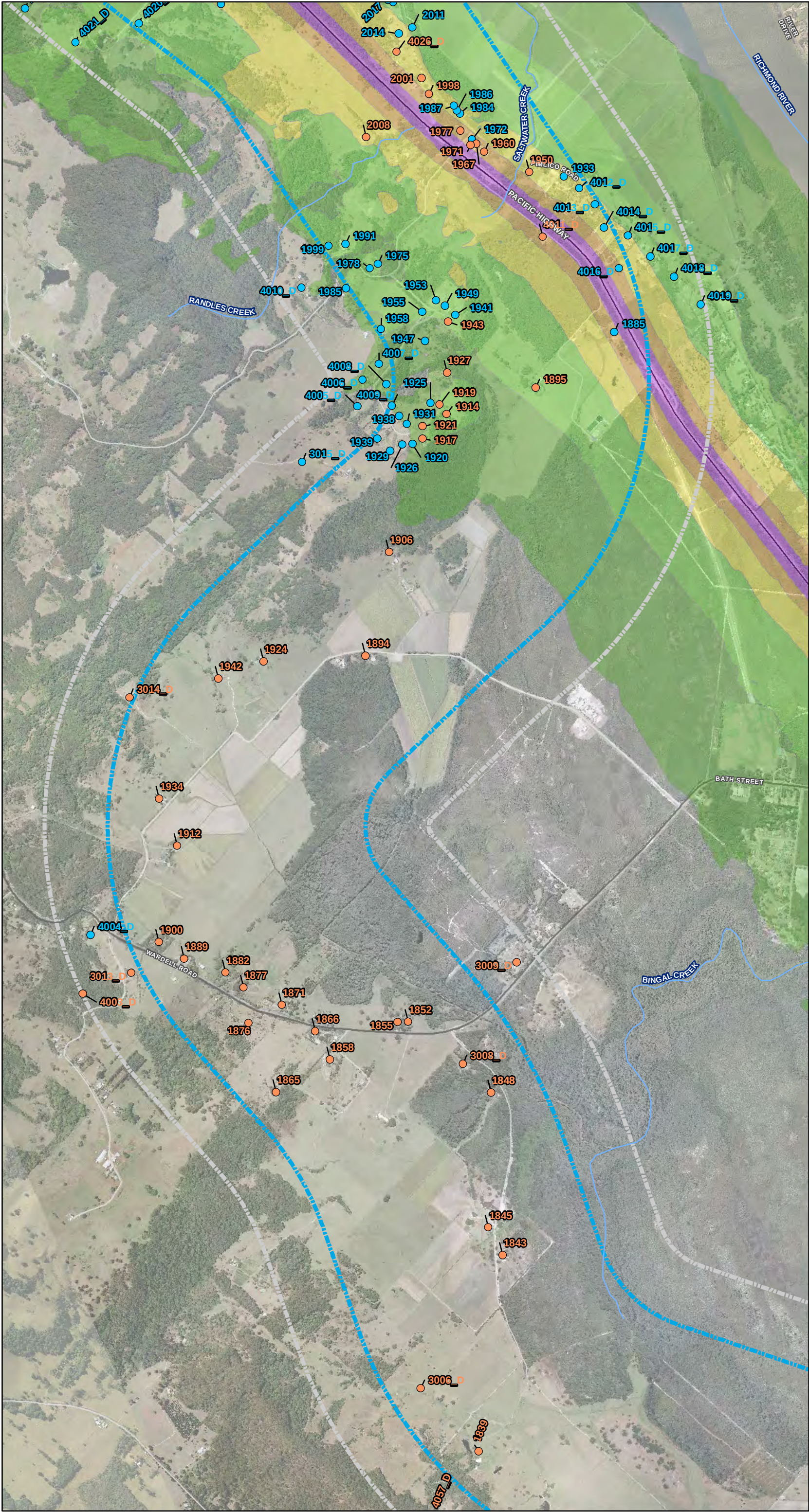
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Transport
Roads & Maritime Services

PACIFIC HIGHWAY UPGRADE

Woolgoolga to Ballina

*Richmond River
to Ballina*

Opening Year 2019 No Build Night

Map: ID41

Map 2 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

090180360540720900

Metres

Print Date:

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Author:

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PACIFIC HIGHWAY UPGRADE Woolgoolga to Ballina

Richmond River to Ballina

Opening Year 2019
No Build Night

Map: ID41

Map 3 of 3

- Receivers eligible for consideration of additional mitigation
- Receivers not eligible for consideration of additional mitigation

600m Buffer
900m Buffer

Night Noise Level Leq,9hr dBA

45-49
50-54
55-59
60-64
65+

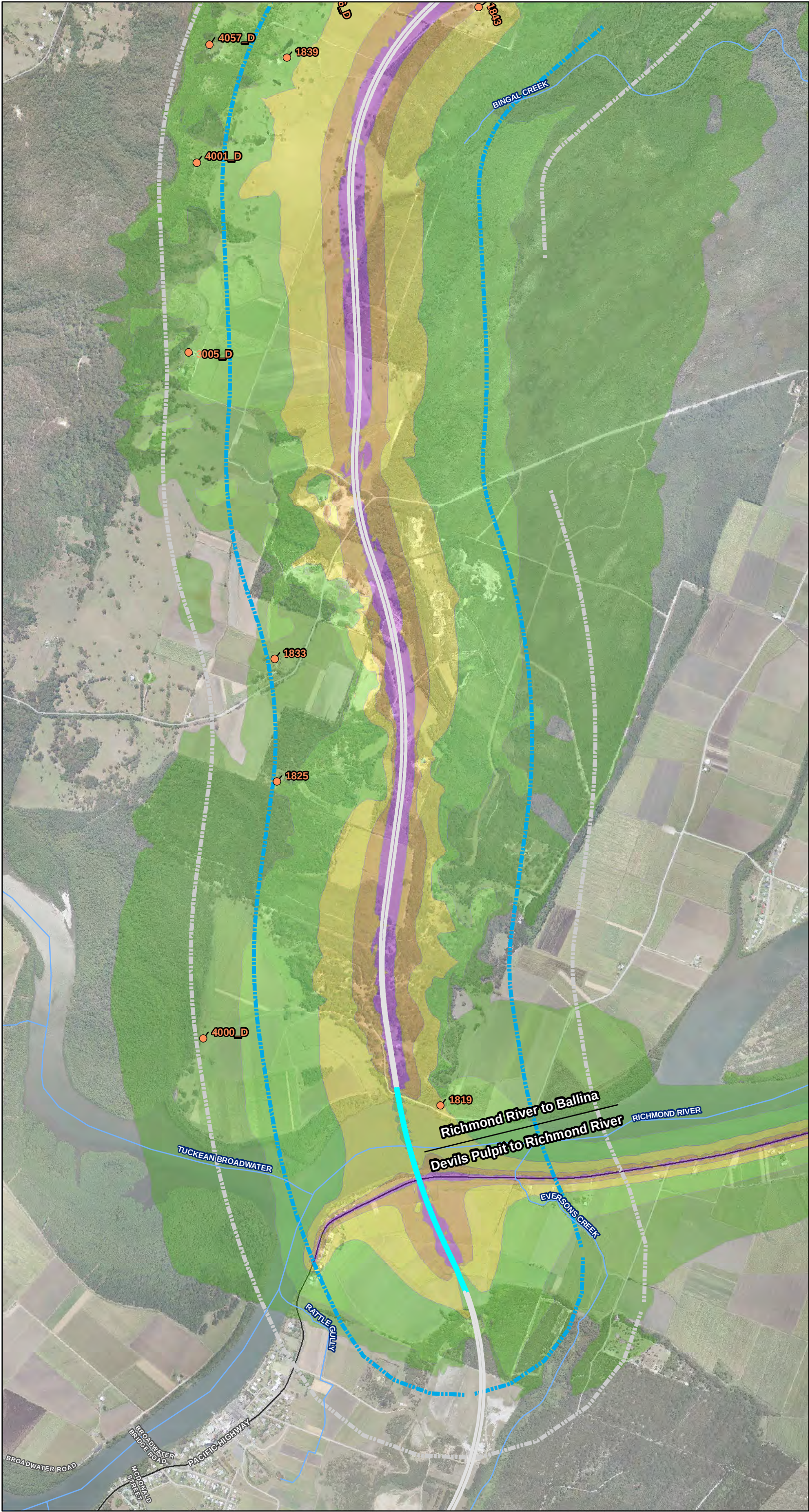


1:17,500
at A3

0 90 180 360 540 720 900
Metres

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Author: ORFANOSM

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Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
Richmond River to Ballina

Design Year 2029
Build Day

Map: ID42

Map 1 of 3

●

Receivers eligible for consideration of additional mitigation

●

Receivers not eligible for consideration of additional mitigation

Additional Low Noise Pavement

EIS Low Noise Pavement

Flexible Pavement

Chip seal Pavement

DGA Pavement

Concrete Pavement

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

090180360540720900

Metres

Print Date:

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Author:

ORFANOSM

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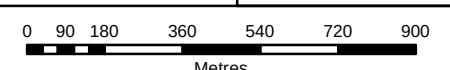
Design Year 2029
Build Day

Map 2 of 3

- Day Noise Level Leq,15hr dBA**
- | |
|-------|
| 45-49 |
| 50-54 |
| 55-59 |
| 60-64 |
| 65+ |



1:17,500
at A3



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PACIFIC HIGHWAY
UPGRADE
Woolgoolga to Ballina
Richmond River to Ballina

Design Year 2029
Build Day
Map: ID42

Map 3 of 3

● Receivers eligible for consideration of additional mitigation

● Receivers not eligible for consideration of additional mitigation

— Additional Low Noise Pavement

— EIS Low Noise Pavement

— Flexible Pavement

— Chip seal Pavement

— DGA Pavement

— Concrete Pavement

— 600m Buffer

— 900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

0 90 180 360 540 720 900

Metres

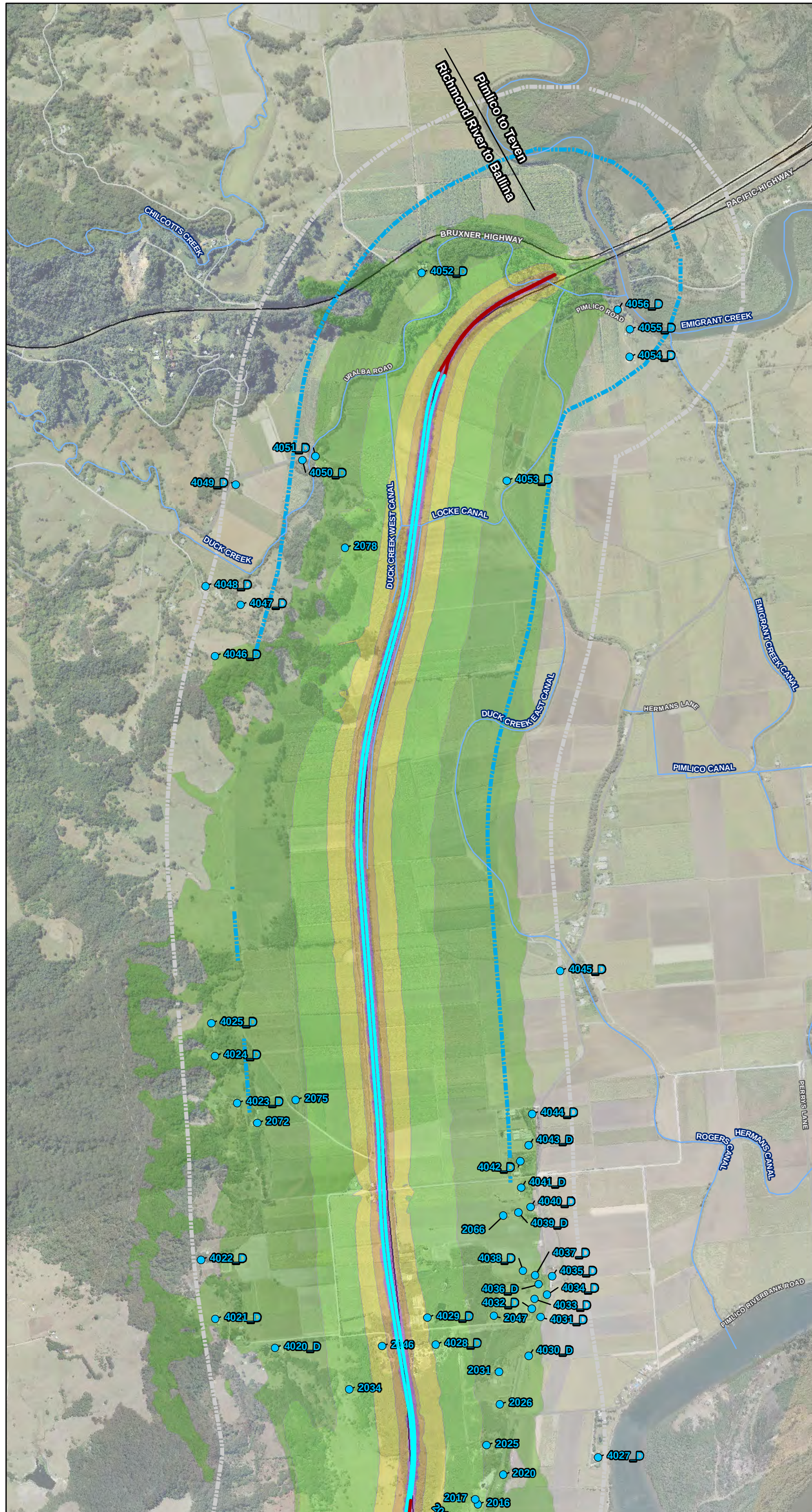
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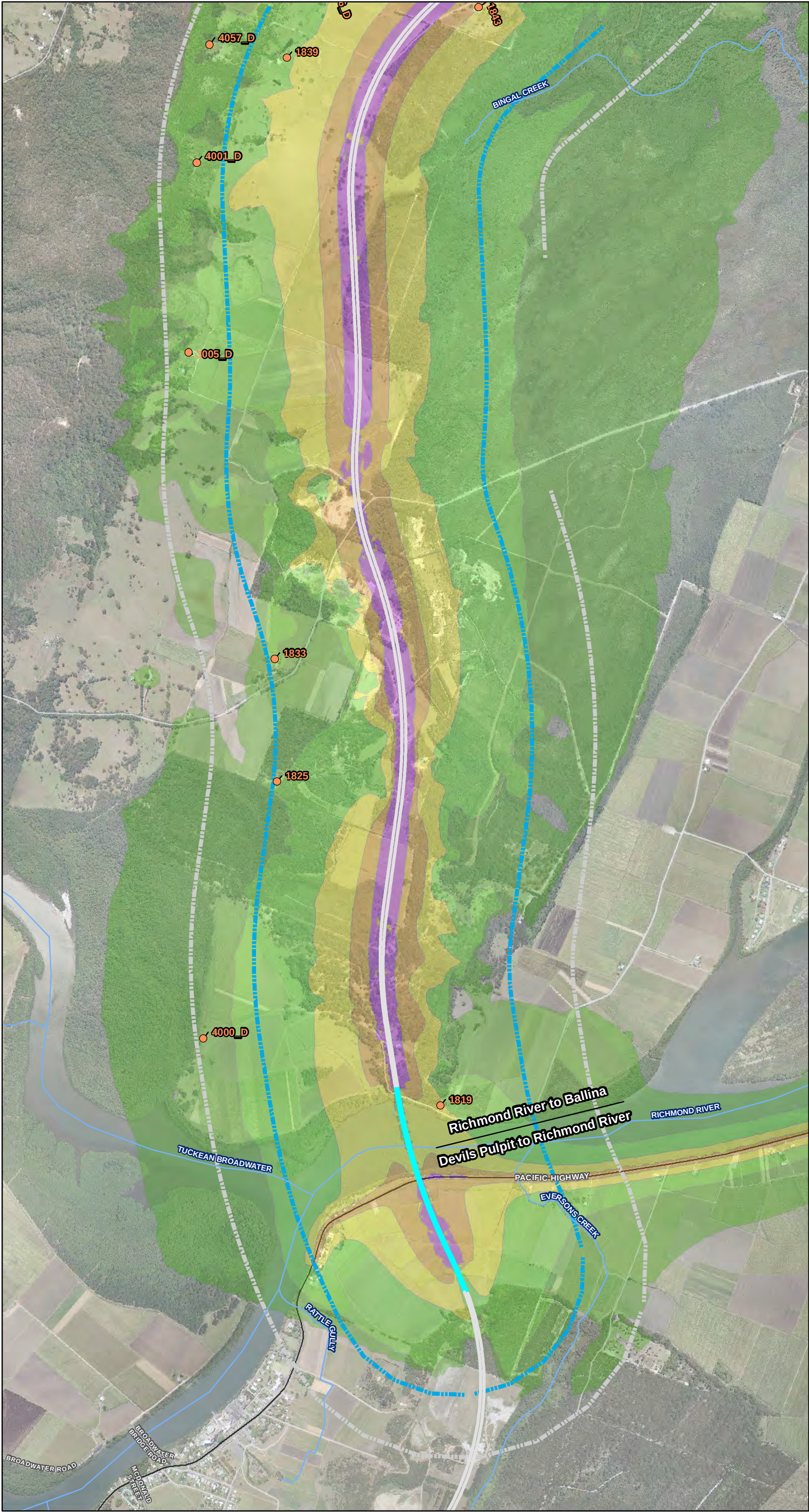
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Author:

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Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
Richmond River to Ballina

Design Year 2029
Build Night

Map: ID43

Map 1 of 3

●

Receivers eligible for consideration of additional mitigation

●

Receivers not eligible for consideration of additional mitigation

Additional Low Noise Pavement

EIS Low Noise Pavement

Flexible Pavement

Chip seal Pavement

DGA Pavement

Concrete Pavement

600m Buffer

900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+

CASINO

WOODBURN

MACLEAN

GRAFTON

WOOLGOOLGA

BALLINA

EVANS HEAD

YAMBA

1:17,500

at A3

0

90

180

360

540

720

900

Metres

Print Date:

3/04/2018

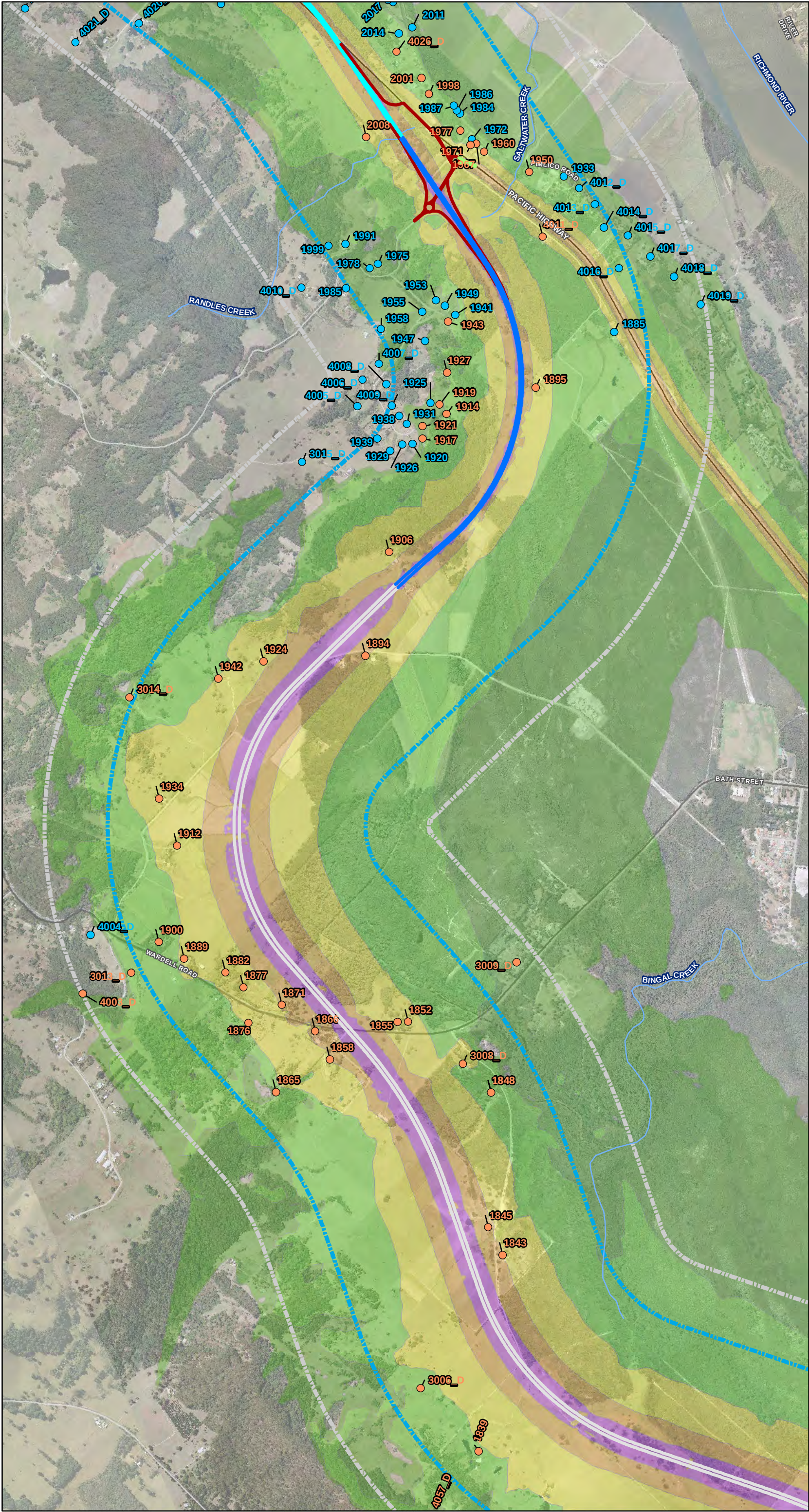
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Transport
Roads & Maritime Services

PACIFIC HIGHWAY UPGRADE

Woolgoolga to Ballina

Richmond River to Ballina

Design Year 2029 Build Night

Map: ID43

Map 2 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

Additional Low Noise Pavement

EIS Low Noise Pavement

Flexible Pavement

Chip seal Pavement

DGA Pavement

Concrete Pavement

600m Buffer

900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

0

90

180

360

540

720

900

Metres

Print Date:

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PACIFIC HIGHWAY
UPGRADE
Woolgoolga to Ballina
Richmond River to Ballina

Design Year 2029
Build Night
Map: ID43

Map 3 of 3

● Receivers eligible for consideration of additional mitigation

● Receivers not eligible for consideration of additional mitigation

— Additional Low Noise Pavement

— EIS Low Noise Pavement

— Flexible Pavement

— Chip seal Pavement

— DGA Pavement

— Concrete Pavement

— 600m Buffer

— 900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

0 90 180 360 540 720 900

Metres

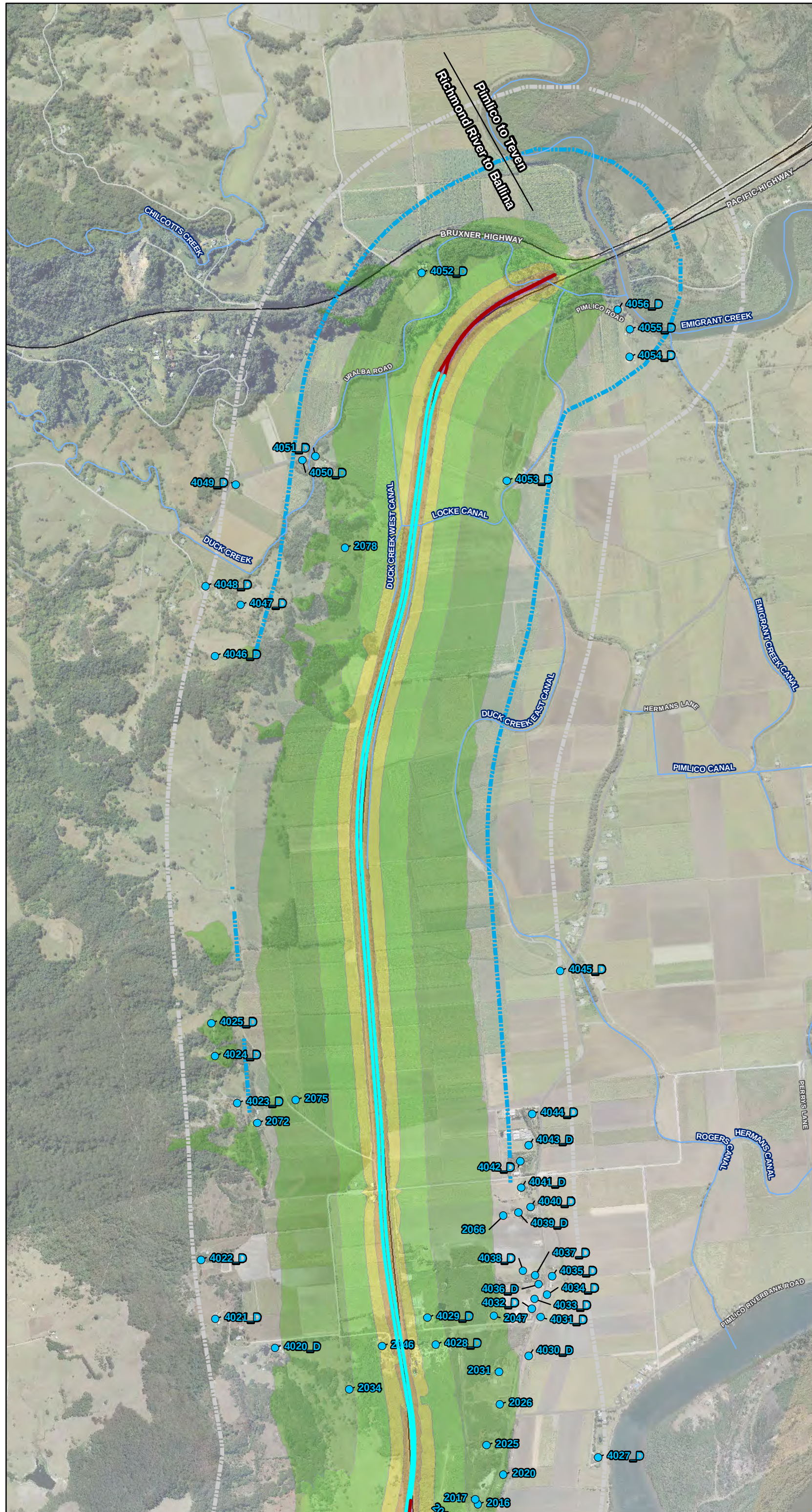
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Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
*Richmond River
to Ballina*

Design Year 2029
No Build Day

Map: ID44

Map 1 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+

CASINO

WOODBURN

MACLEAN

GRAFTON

WOOLGOOLGA

BALLINA

EVANS HEAD

YAMBA

18

17,500

at A3

0

90

180

360

540

720

900

Metres

Print Date:

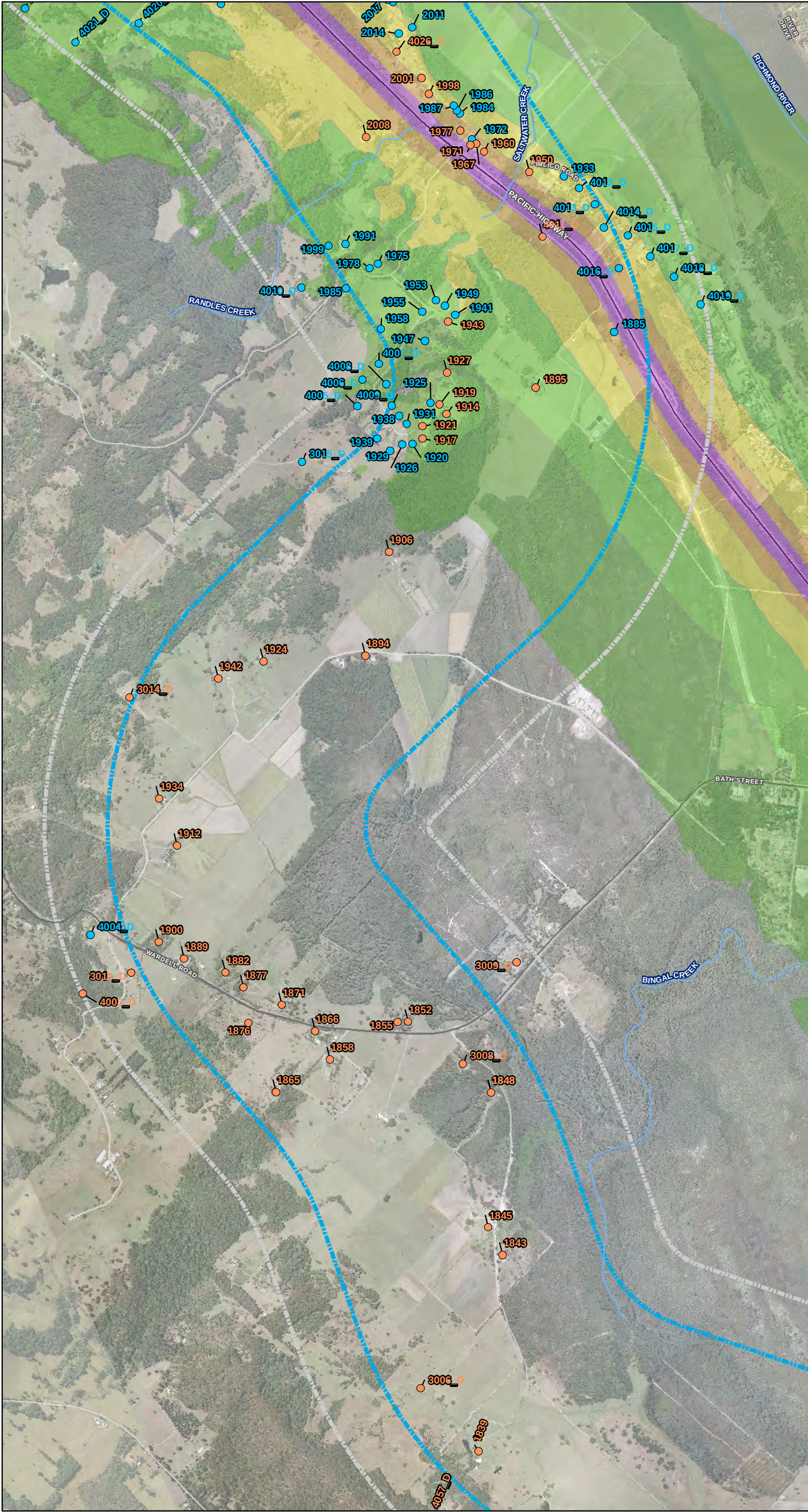
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Transport
Roads & Maritime Services

PACIFIC HIGHWAY UPGRADE

Woolgoolga to Ballina

Richmond River to Ballina

Design Year 2029 No Build Day

Map: ID44

Map 2 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-49

50-54

55-59

60-64

65+





1:17,500
at A3

090180360540720900

Metres

Print Date:

4/04/2018

Author:

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Design Year 2029
No Build Day

Map: ID44

Map 3 of 3

- Receivers eligible for consideration of additional mitigation
- Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Day Noise Level Leq,15hr dBA

45-4

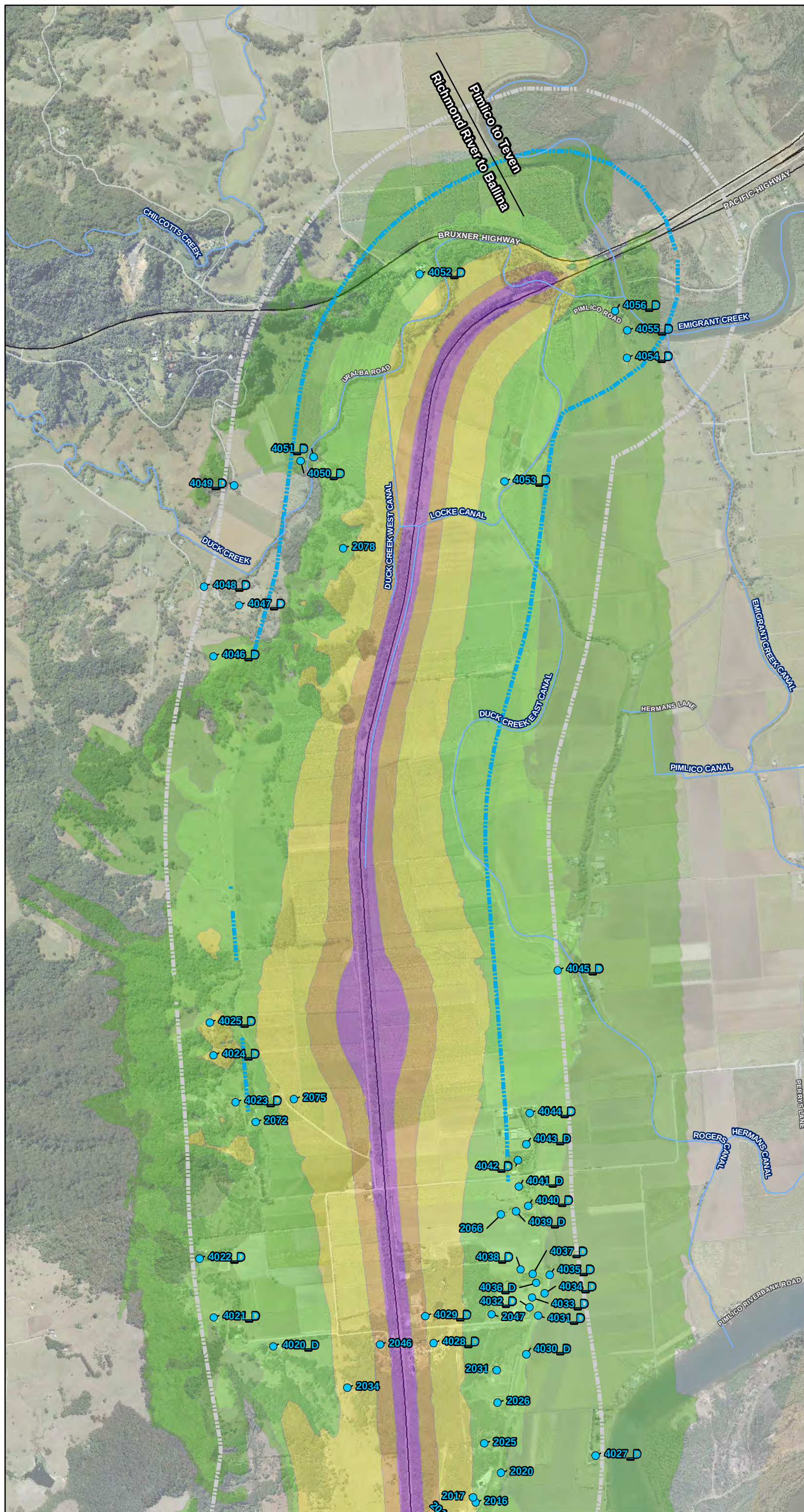
50-54

55-59

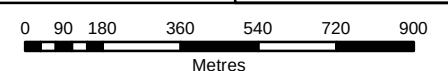
60-64

65+

100



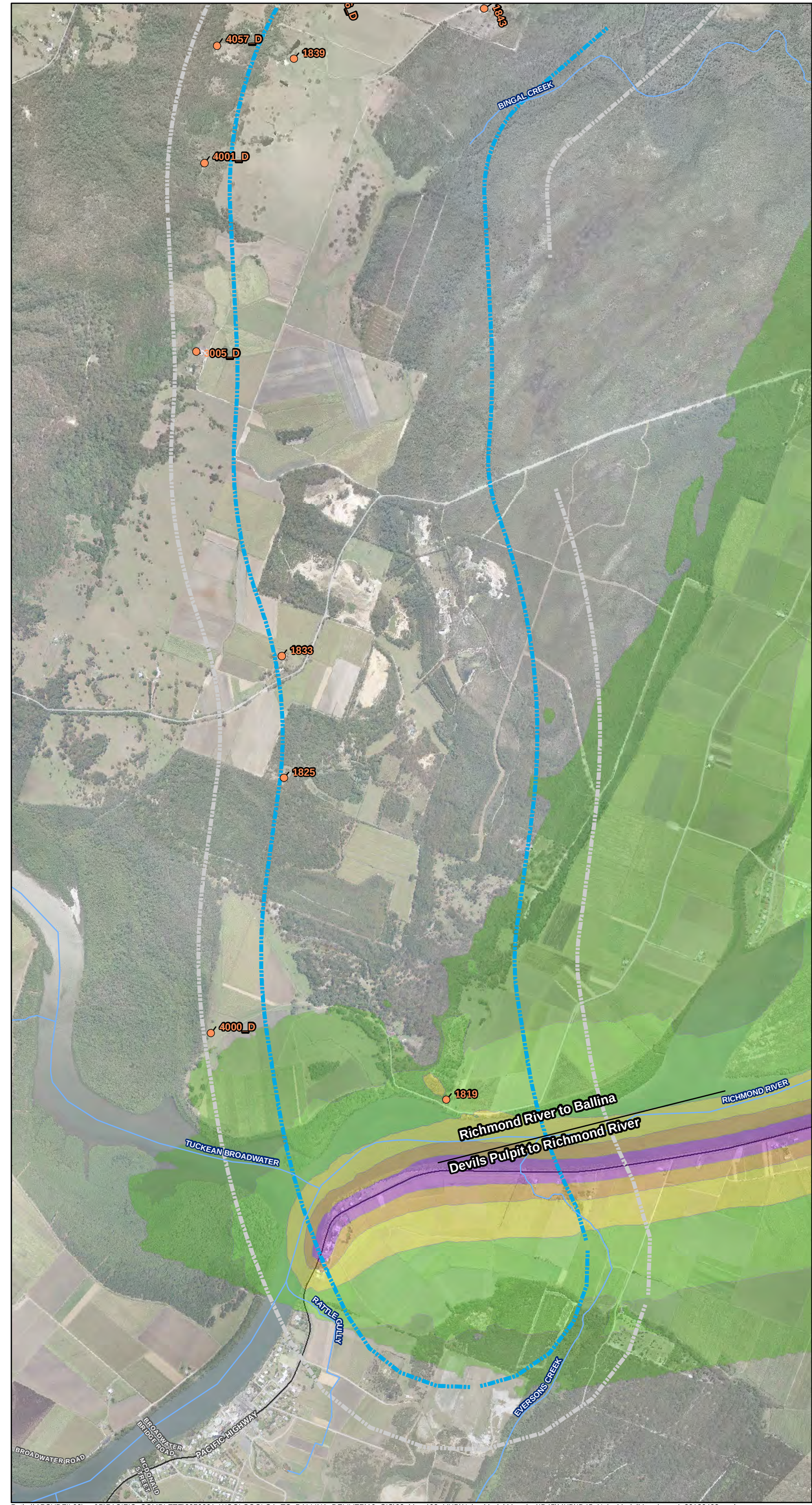
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Transport
Roads & Maritime Services

**PACIFIC HIGHWAY
UPGRADE**
Woolgoolga to Ballina
Richmond River to Ballina

Design Year 2029
No Build Night

Map: ID45

Map 1 of 3

Receivers eligible for consideration of additional mitigation

Receivers not eligible for consideration of additional mitigation

600m Buffer

900m Buffer

Night Noise Level Leq,9hr dBA

45-49

50-54

55-59

60-64

65+

CASINO

WOODBURN

MACLEAN

GRAFTON

WOOLGOOLGA

BALLINA

EVANS HEAD

YAMBA

Richmond River to Ballina

Devils Pulpit to Richmond River

0

90

180

360

540

720

900

Metres

Print Date:

4/04/2018

Author:

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**Design Year 2029
No Build Night**

Map: ID45

Map 2 of 3

- Receivers eligible for consideration of additional mitigation
- Receivers not eligible for consideration of additional mitigation

600m Buffer

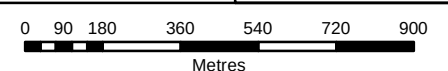
900m Buffer

Night Noise Level Leq,9hr dBA

- | |
|-------|
| 45-49 |
| 50-54 |
| 55-59 |
| 60-64 |
| 65+ |



1:17,500
at A3



Print Date:	4/04/2018
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Author:	ORFANOSM
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**Design Year 2029
No Build Night**

Map: ID45

Map 3 of 3

- Receivers eligible for consideration of additional mitigation
- Receivers not eligible for consideration of additional mitigation

600m Buffer

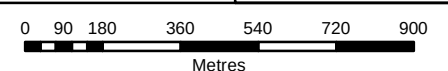
900m Buffer

Night Noise Level Leq,9hr dBA

- | | |
|---|-------|
|  | 45-49 |
|  | 50-54 |
|  | 55-59 |
|  | 60-64 |
|  | 65+ |



1:17,500
at A3



Print Date:	4/04/2018
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Author:	ORFANOSM
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