

Newell and Mitchell Highways Intersection Upgrade

Review of Environmental Factors

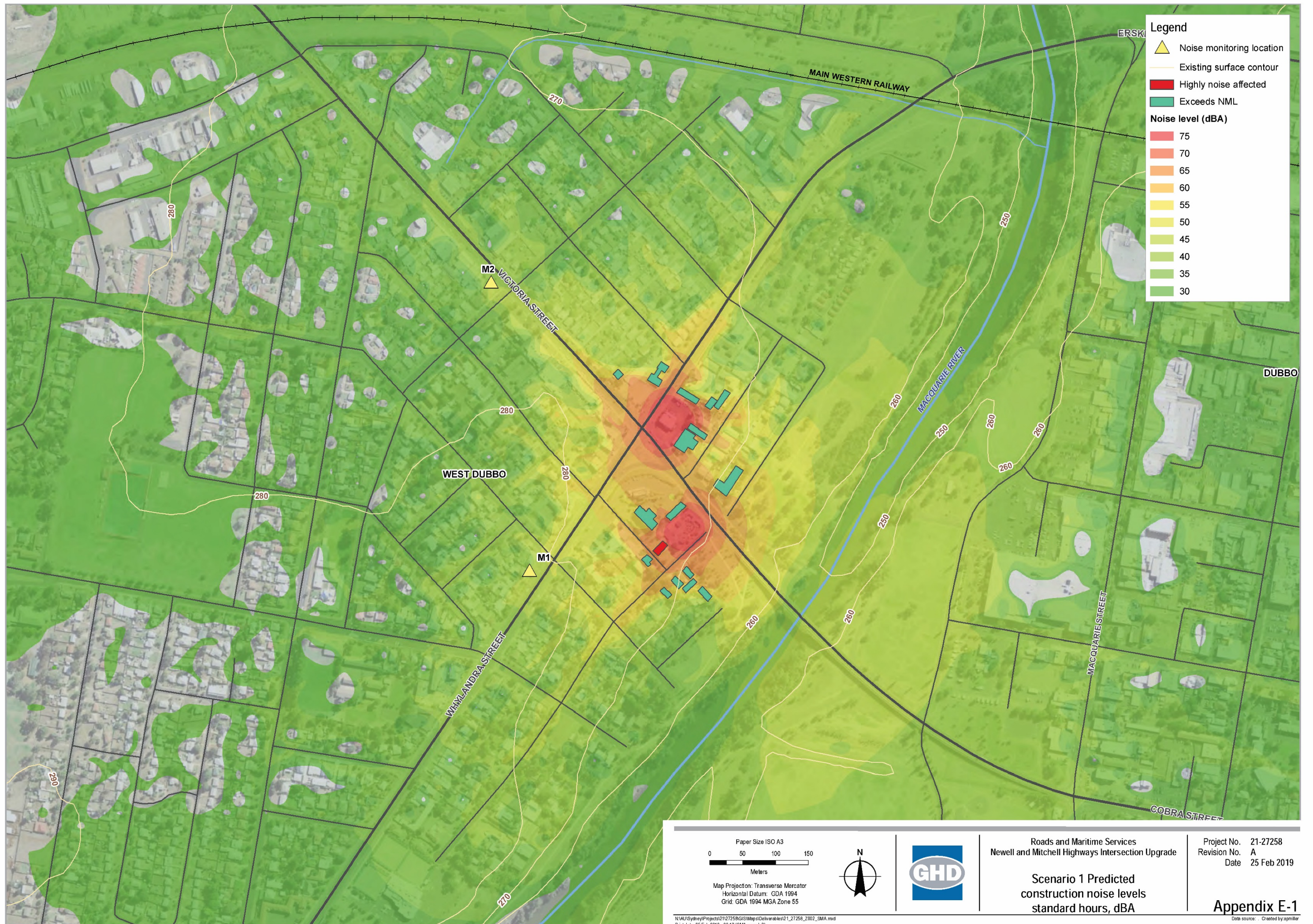
Appendix D - Part 2

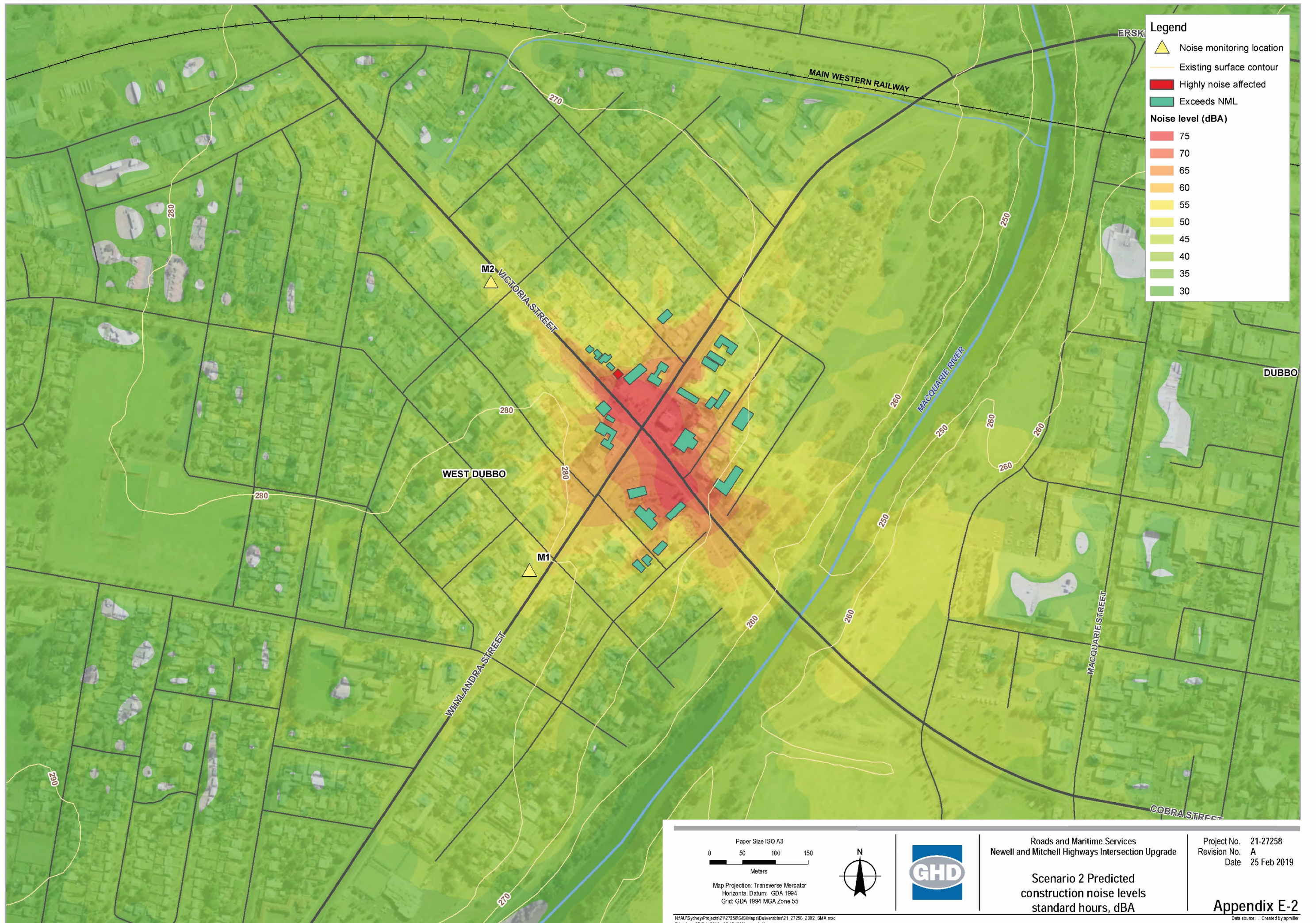
Roads and Maritime Services | April 2019

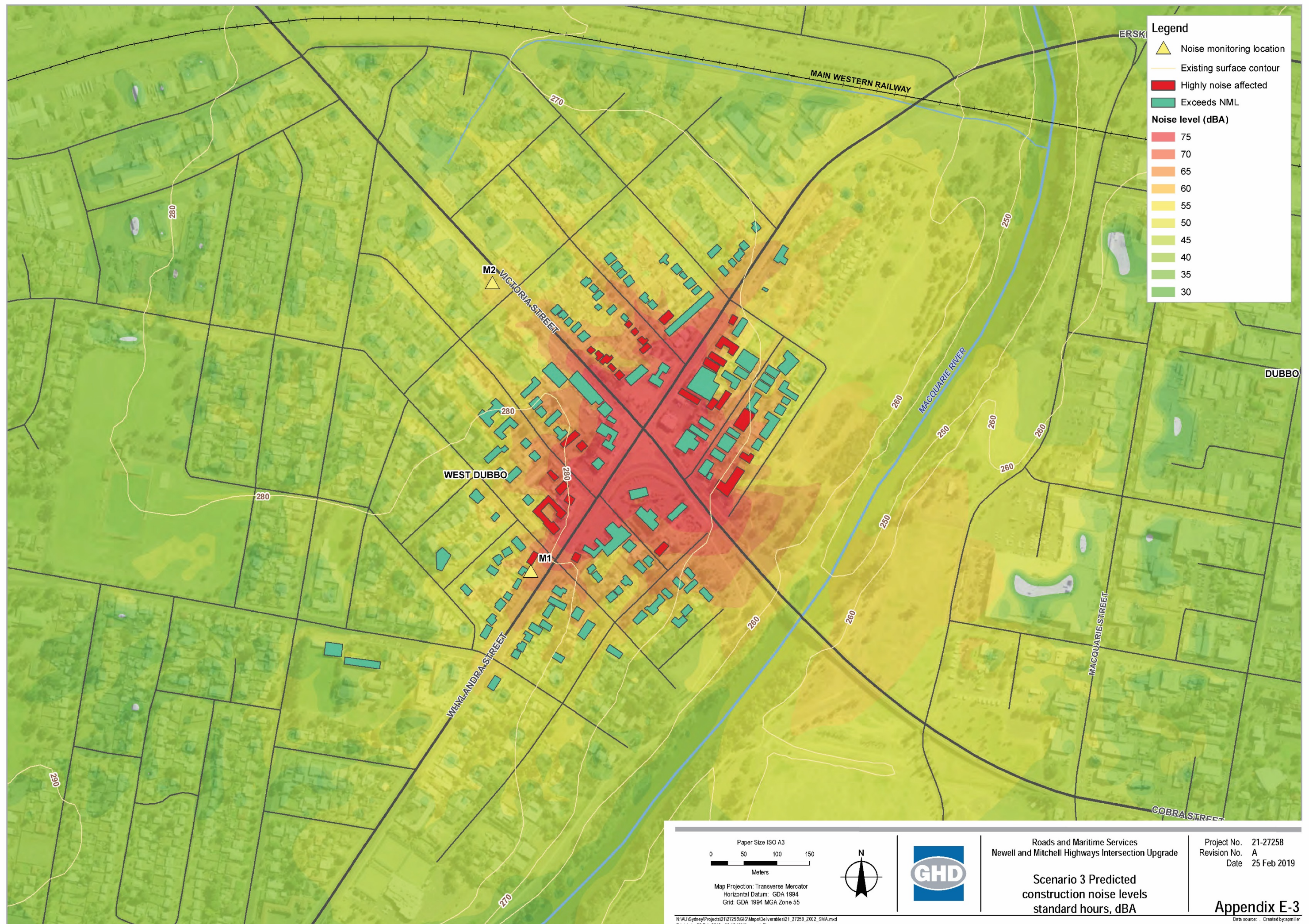
Prepared by GHD Pty Ltd and Roads and Maritime Services

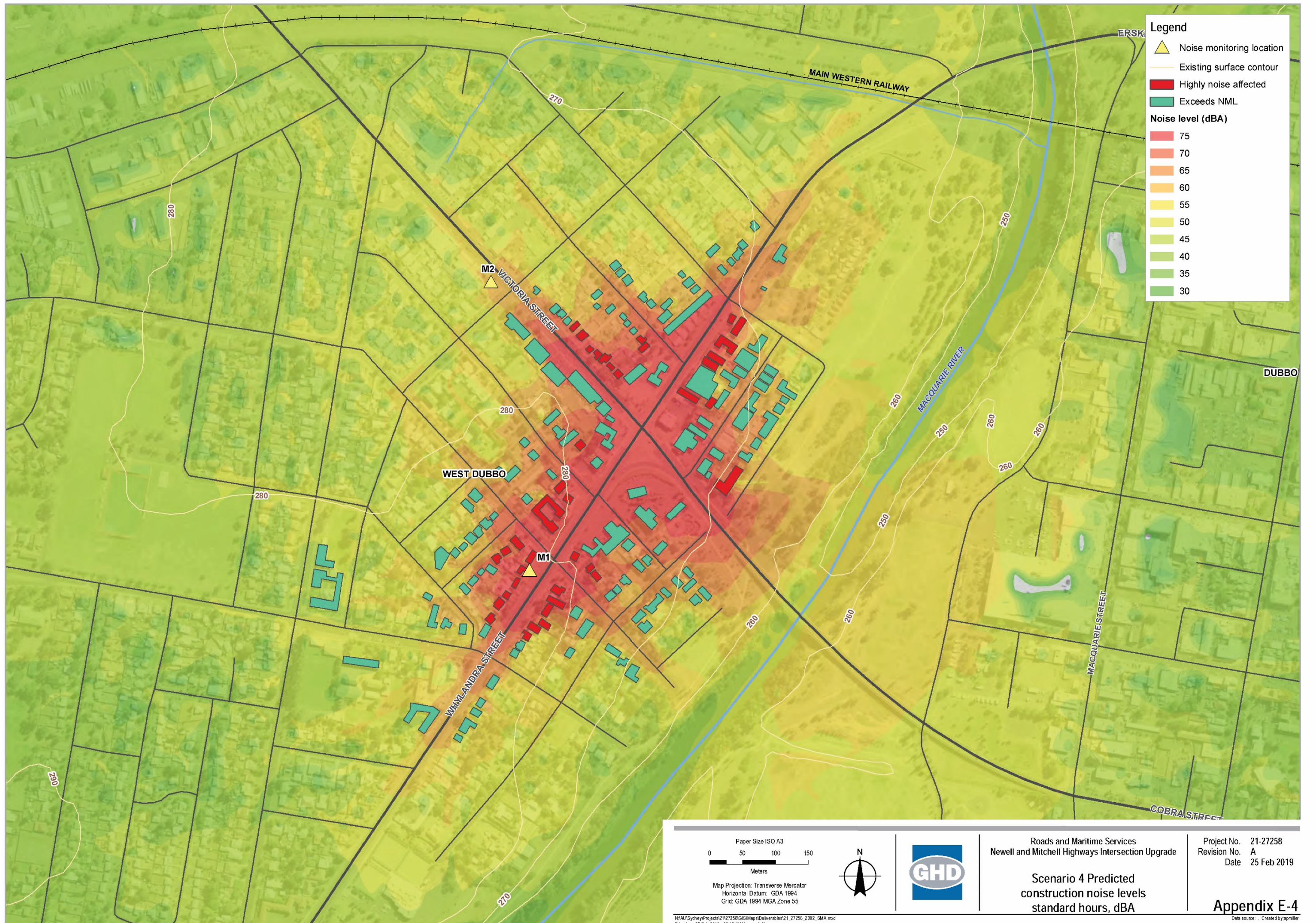
Copyright: The concepts and information contained in this document are the property of NSW Roads and Maritime Services. Use or copying of this document in whole or in part without the written permission of NSW Roads and Maritime Services constitutes an infringement of copyright.

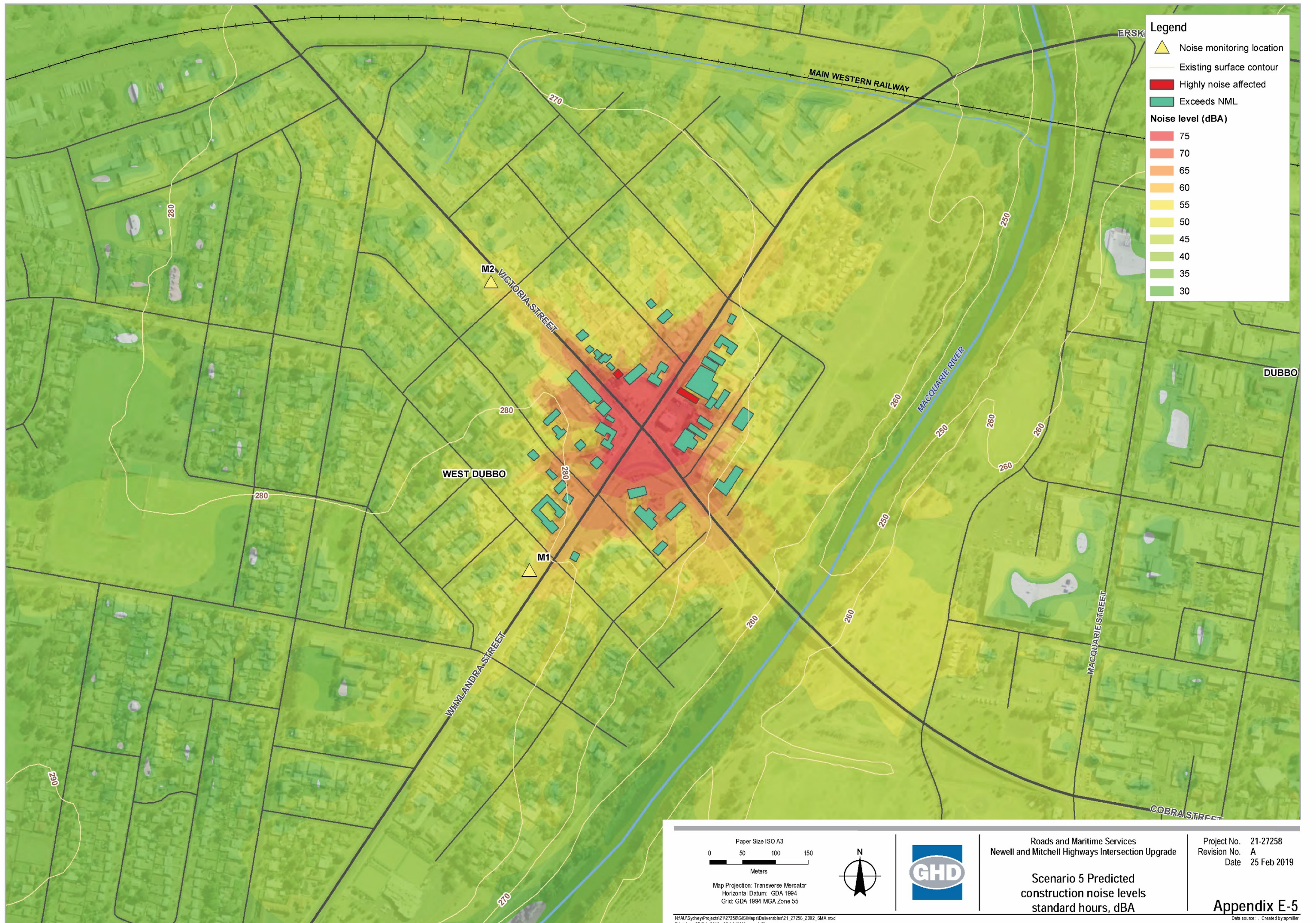
Appendix E – Predicted construction noise contours

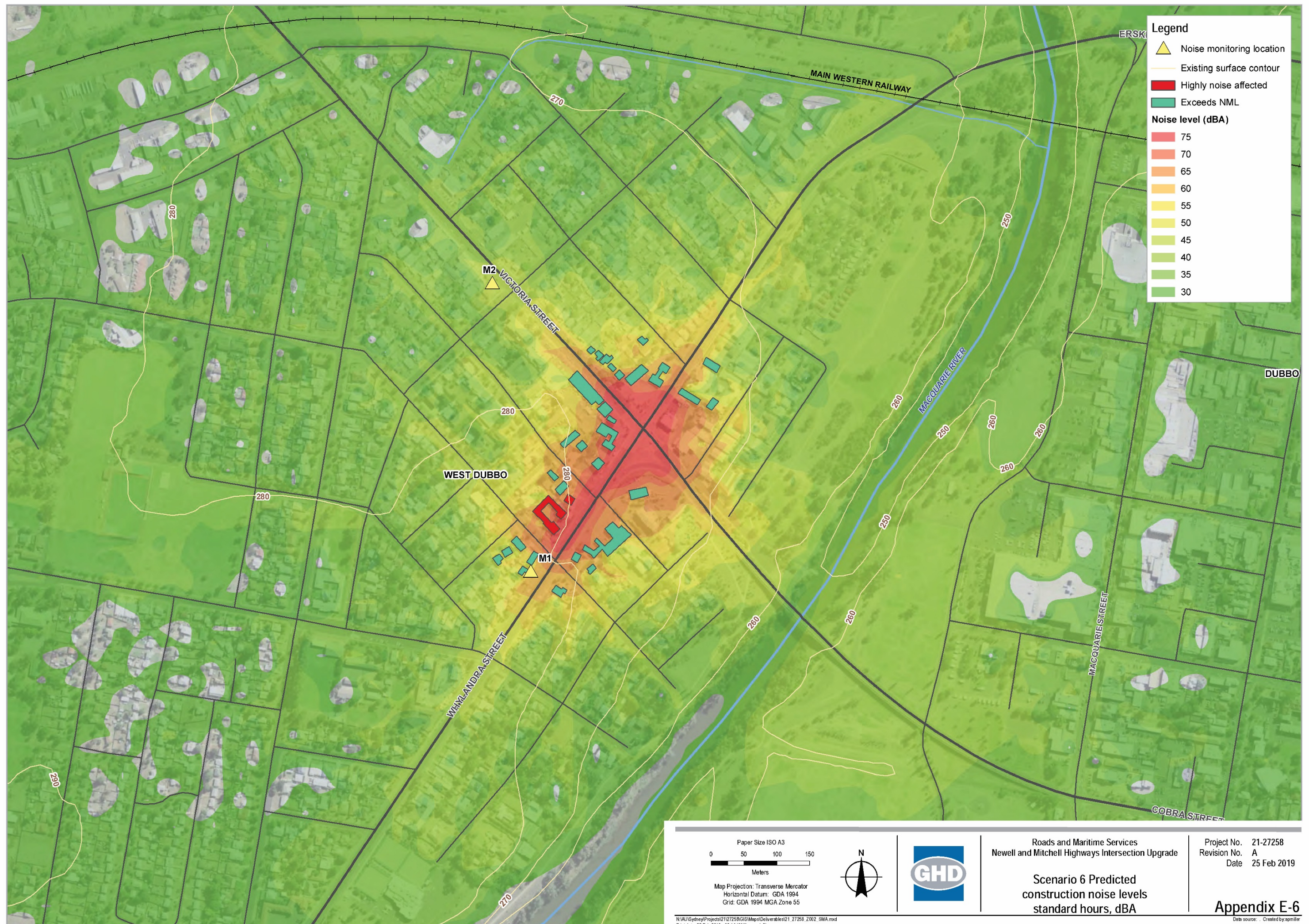


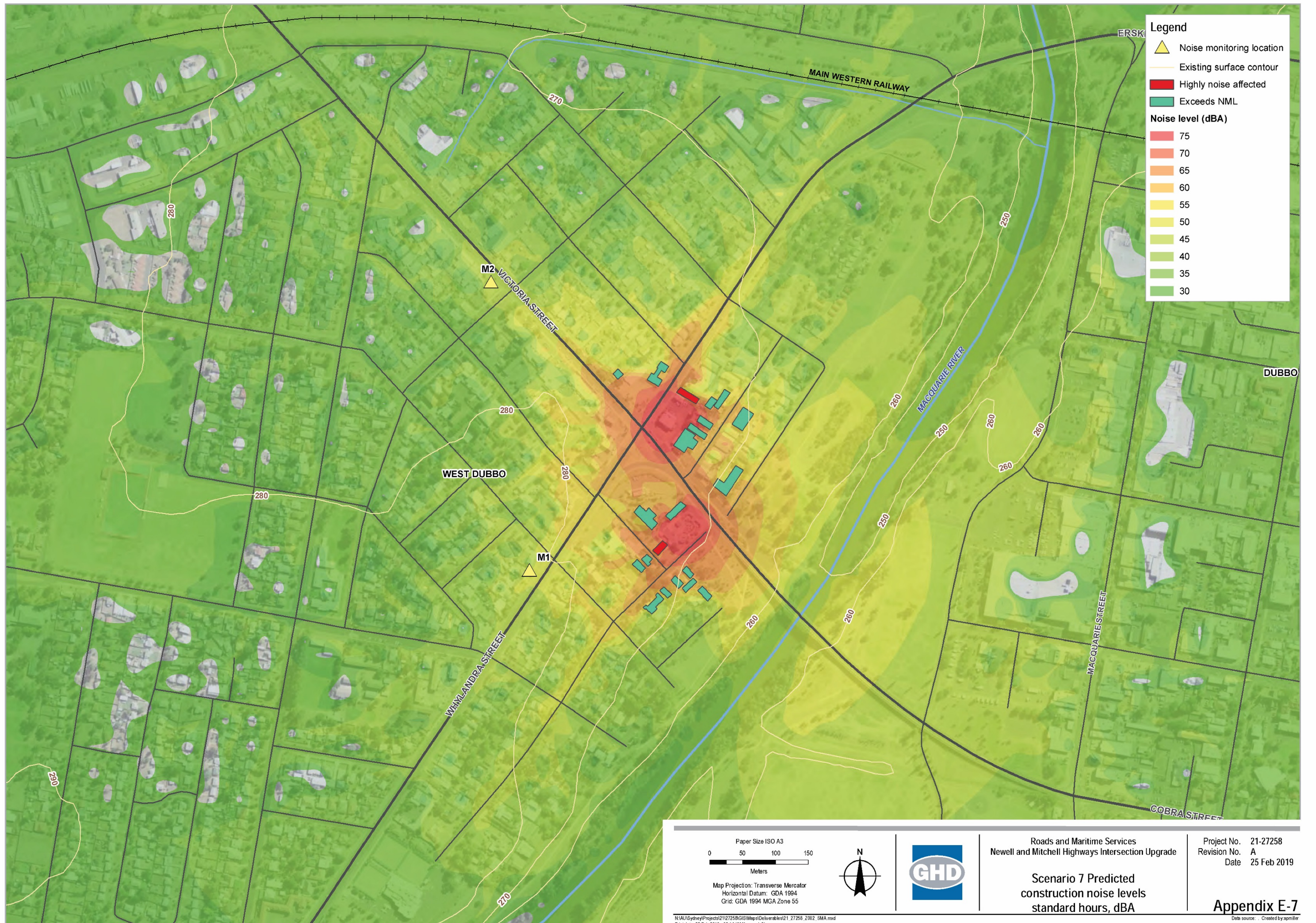


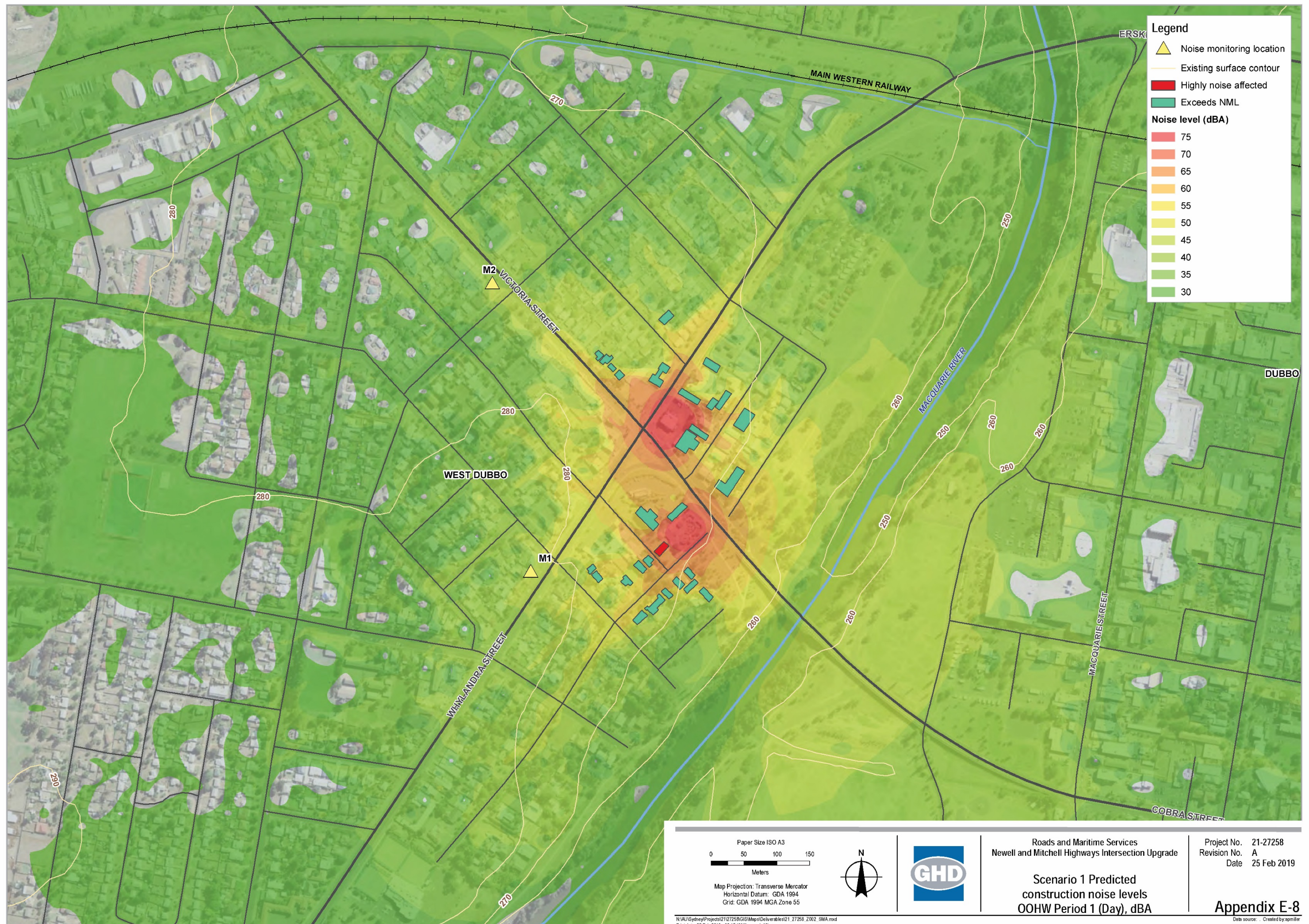


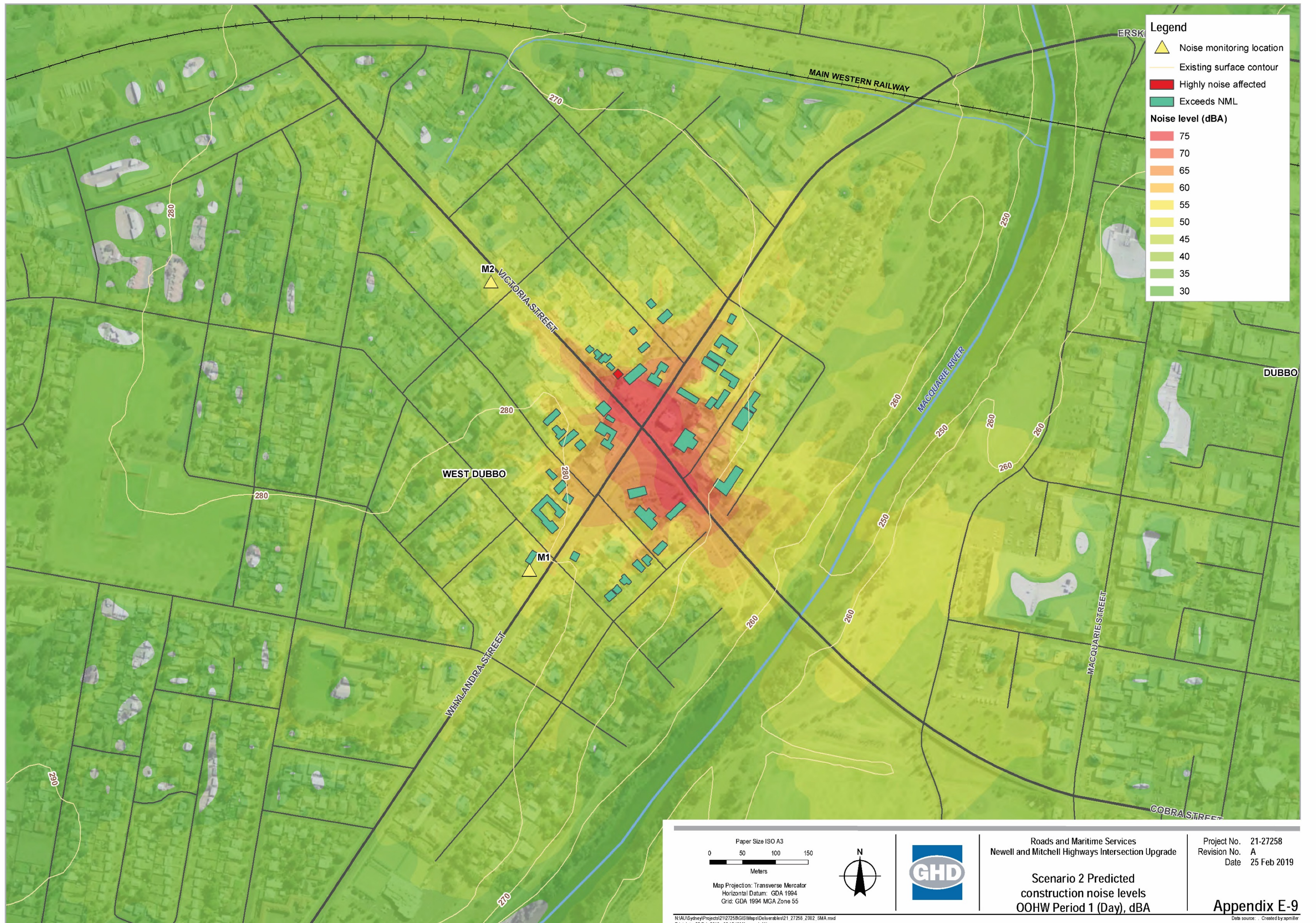


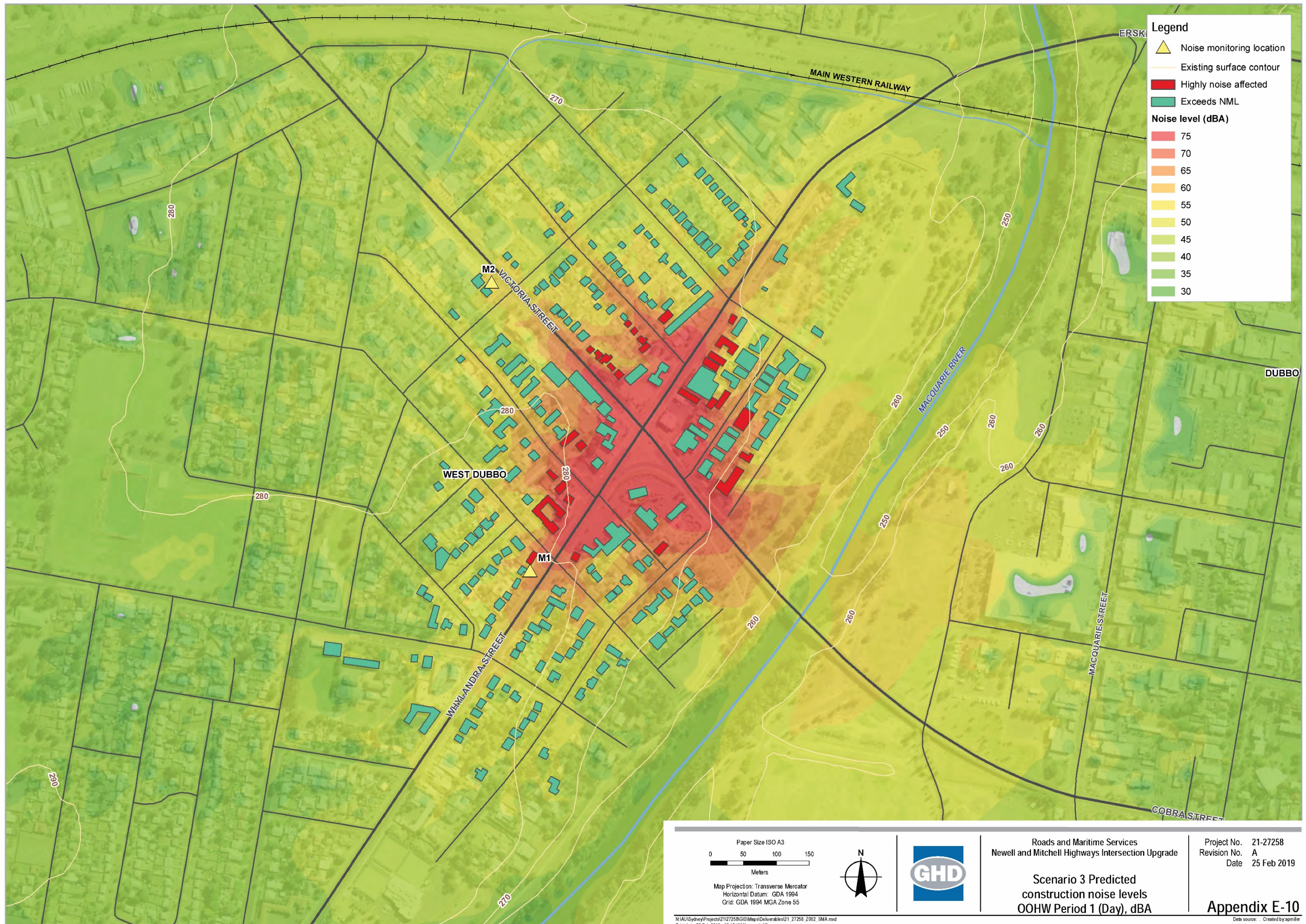


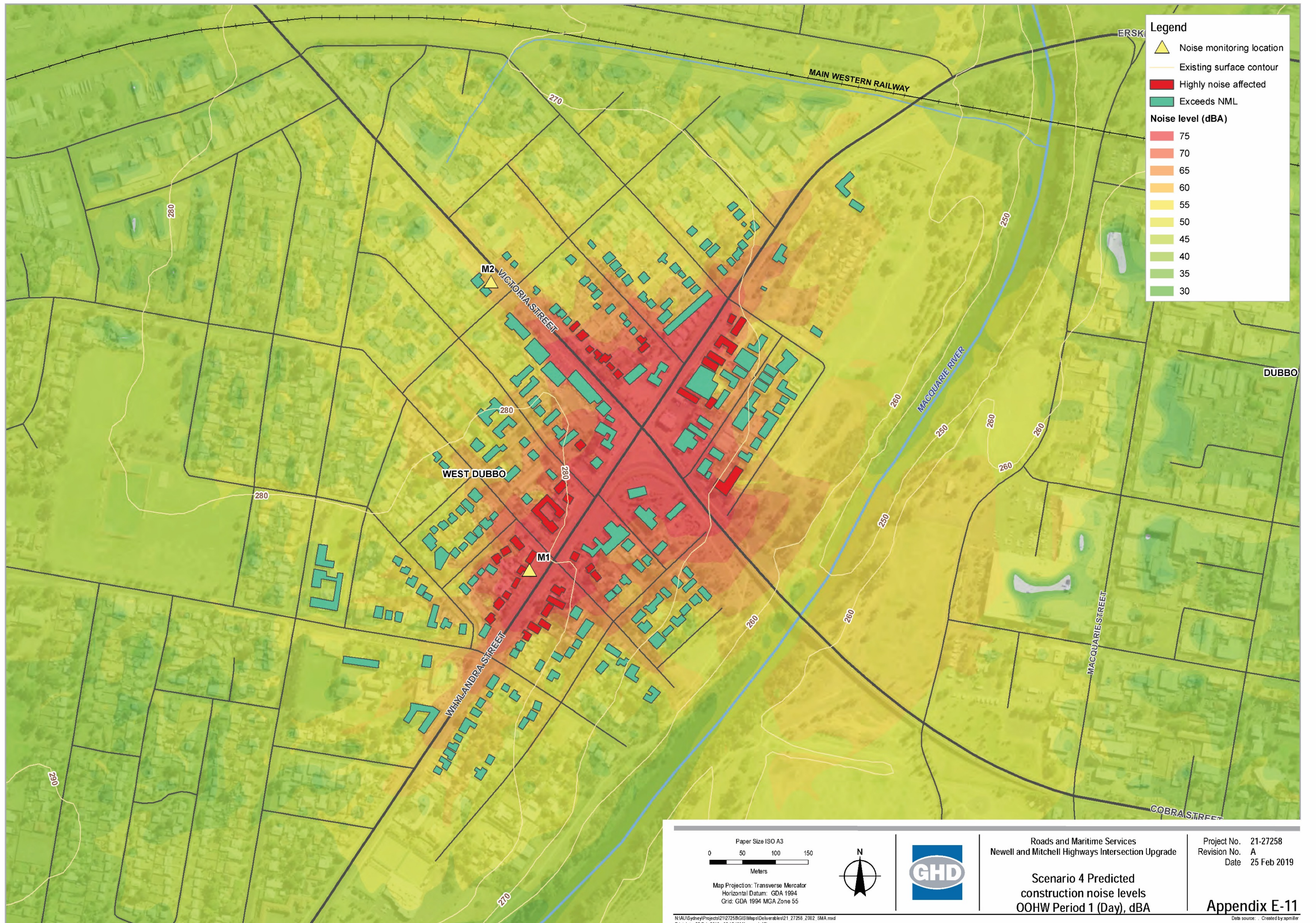


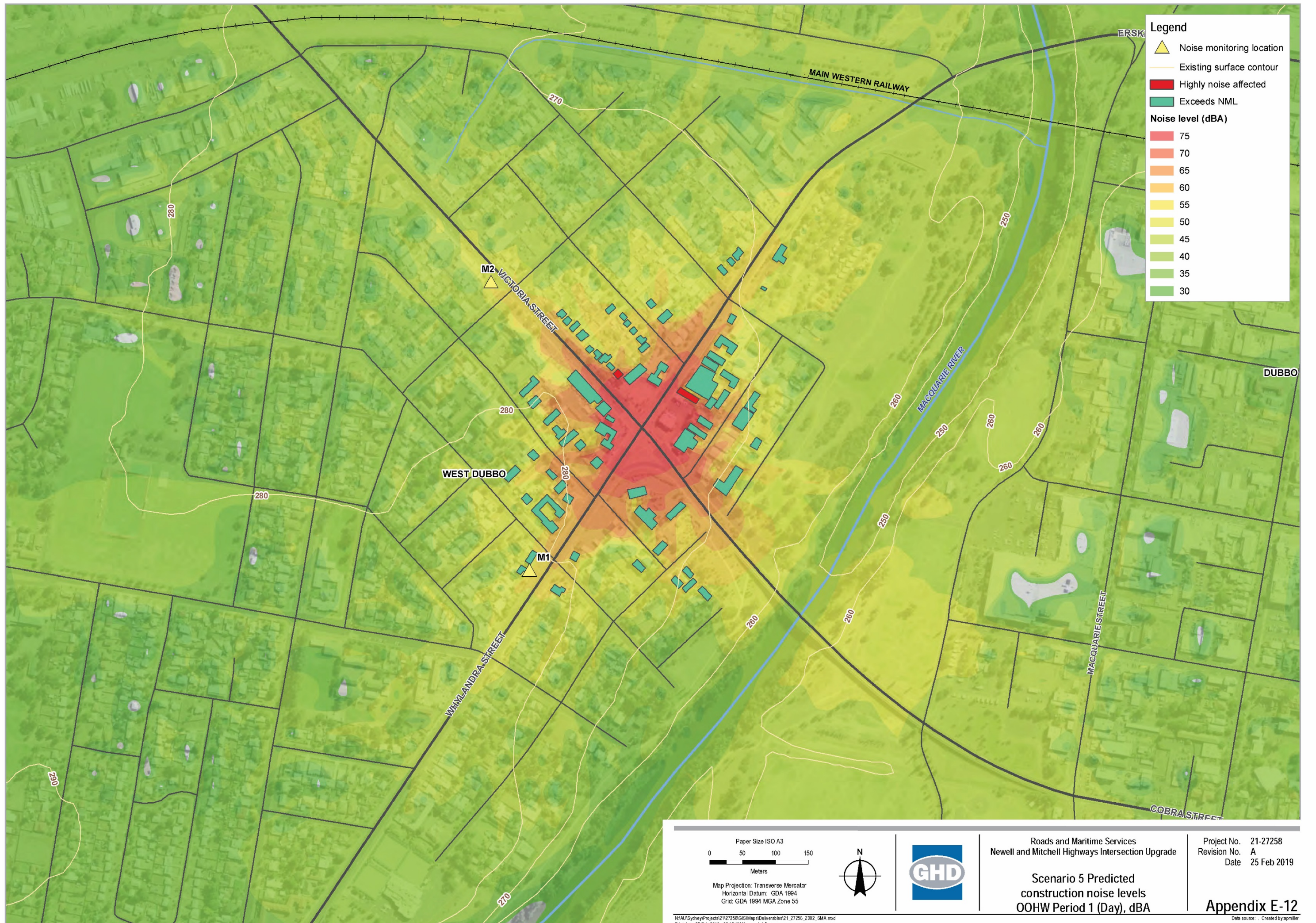


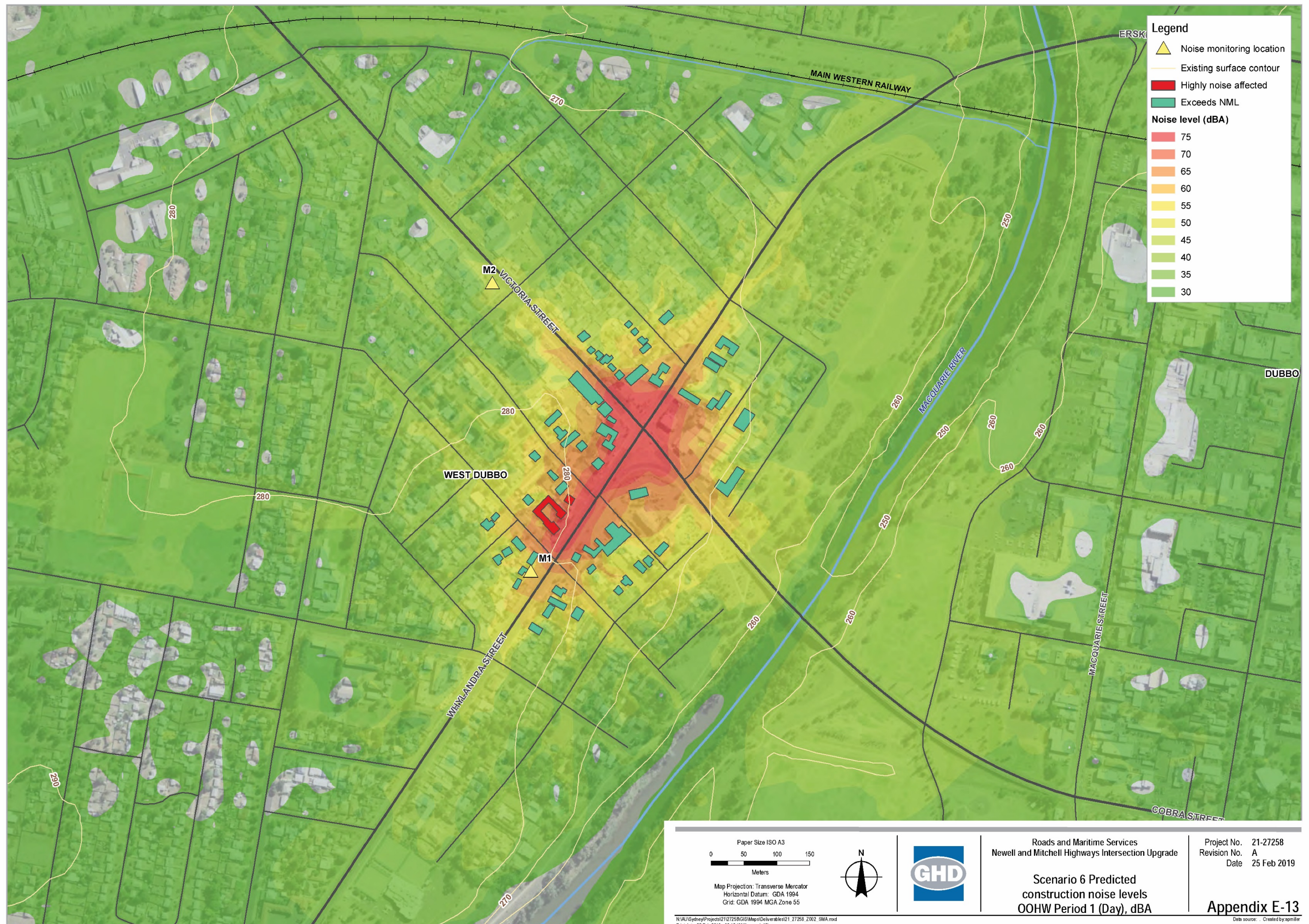


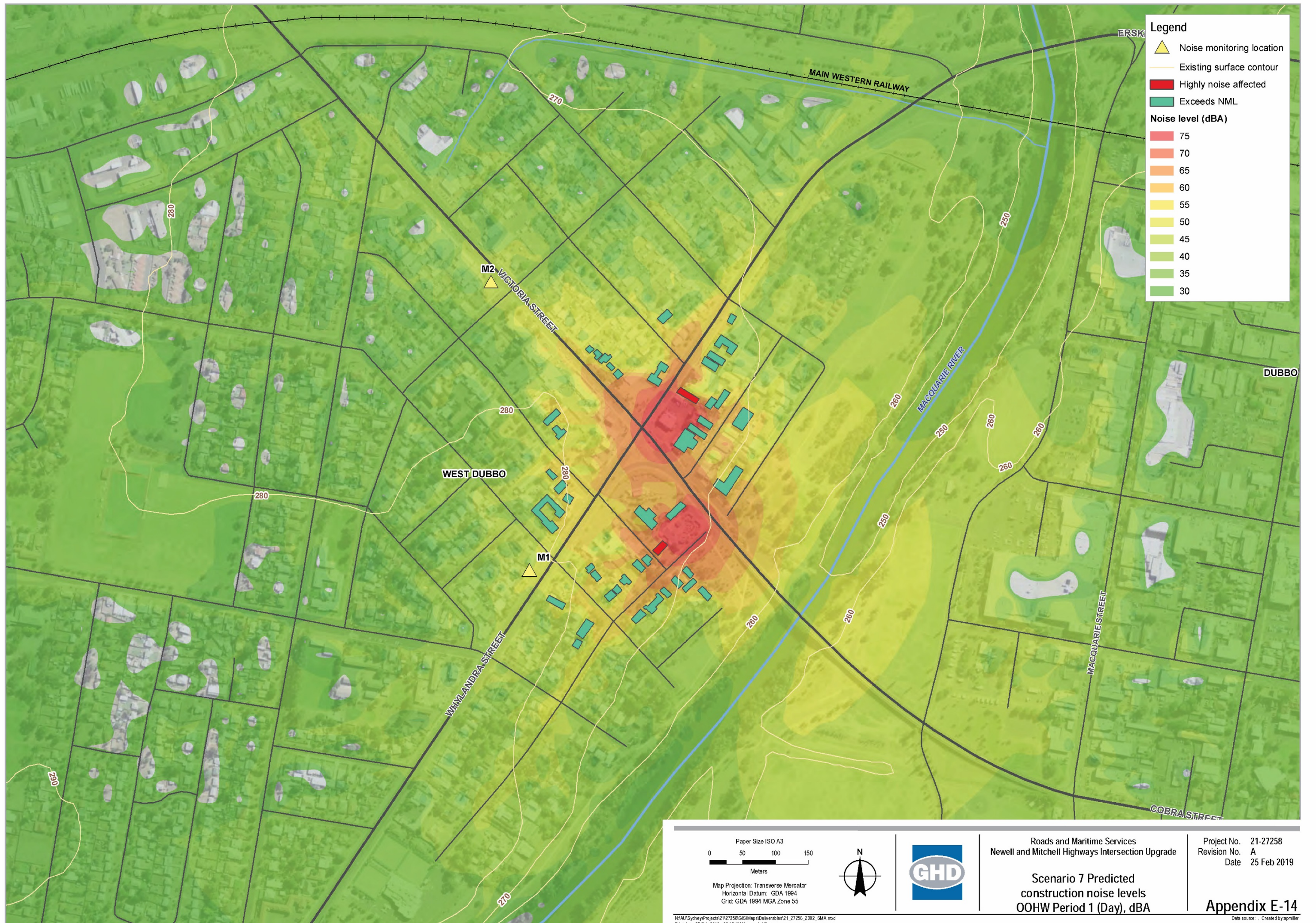


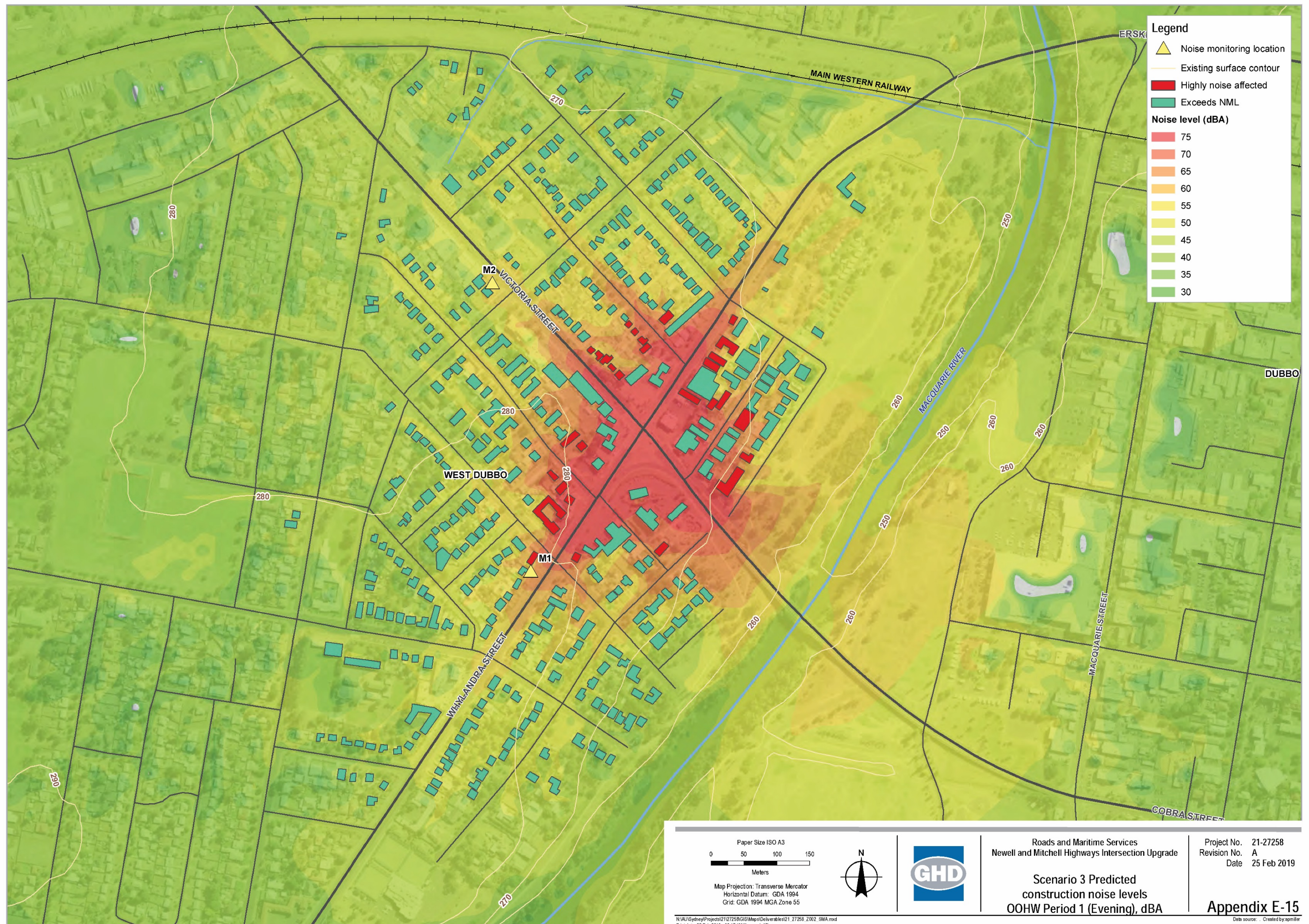


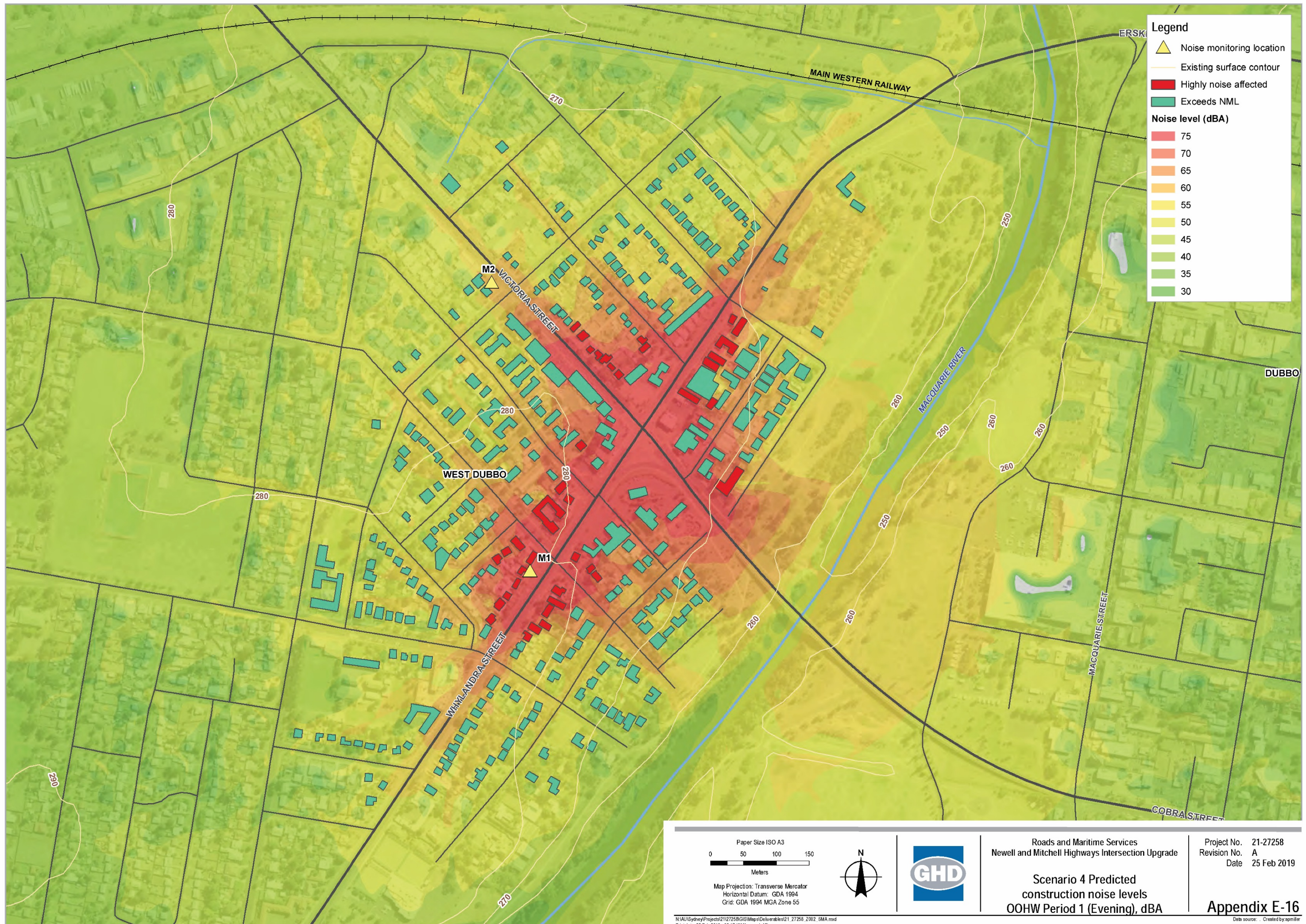


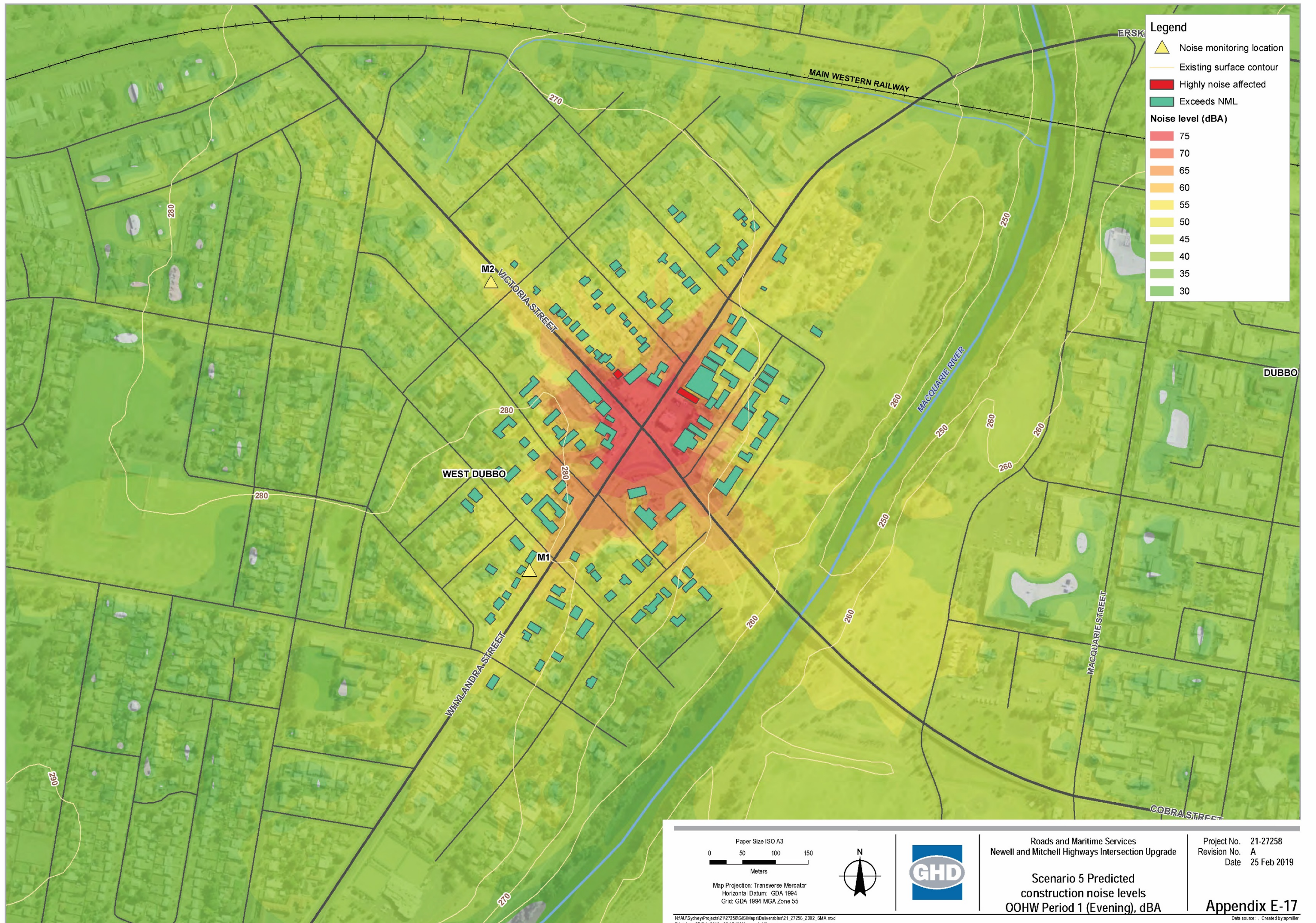


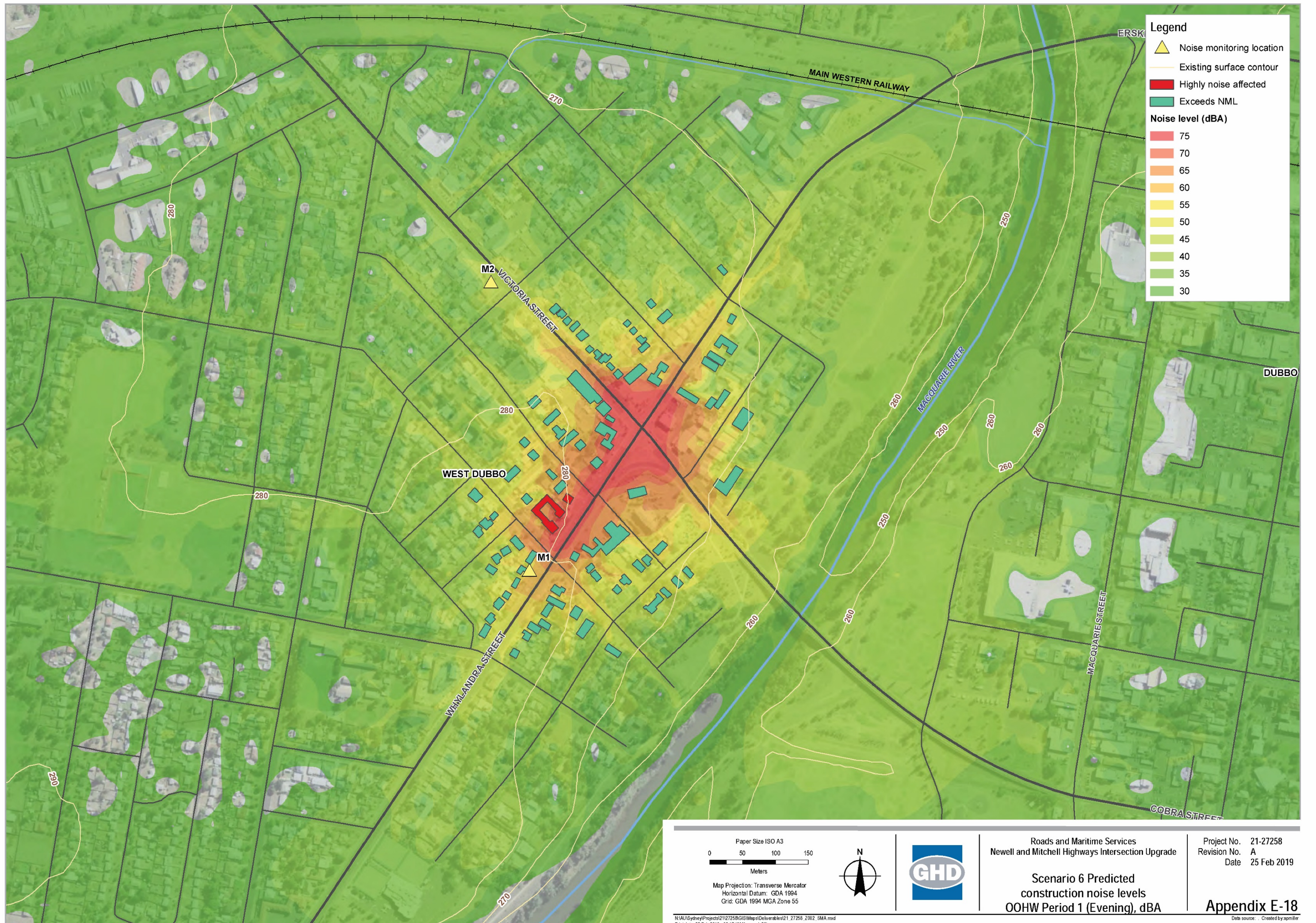


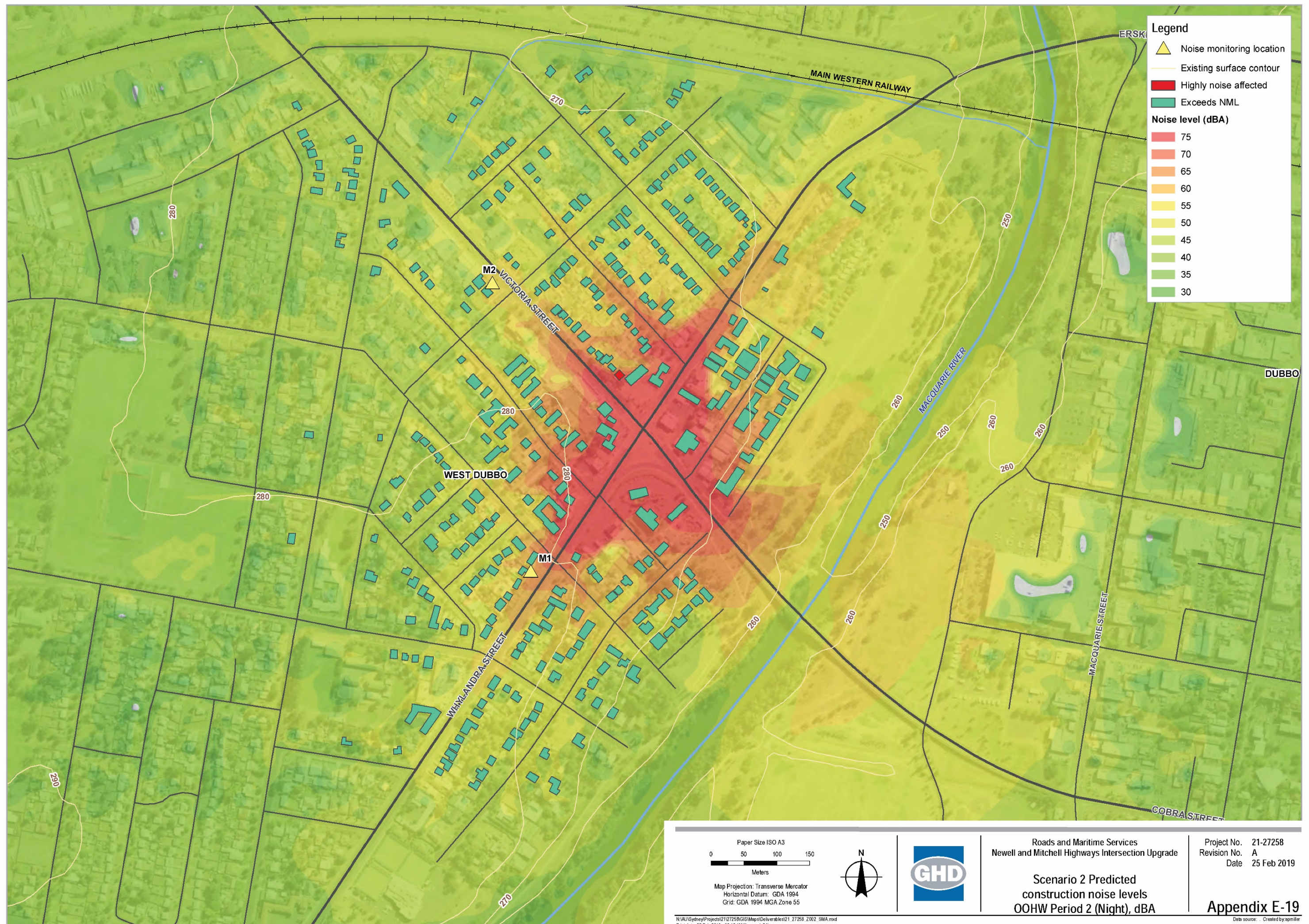


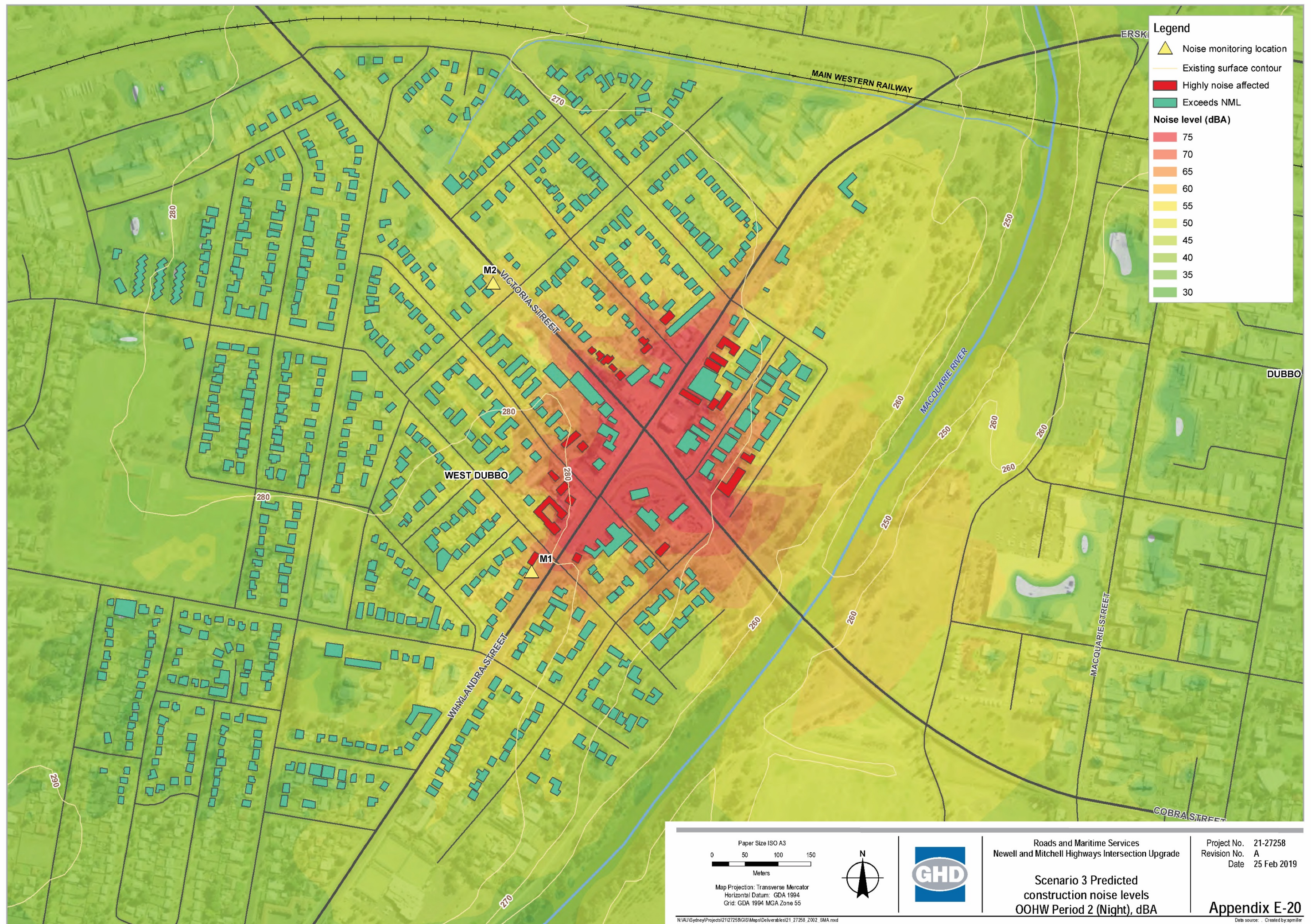


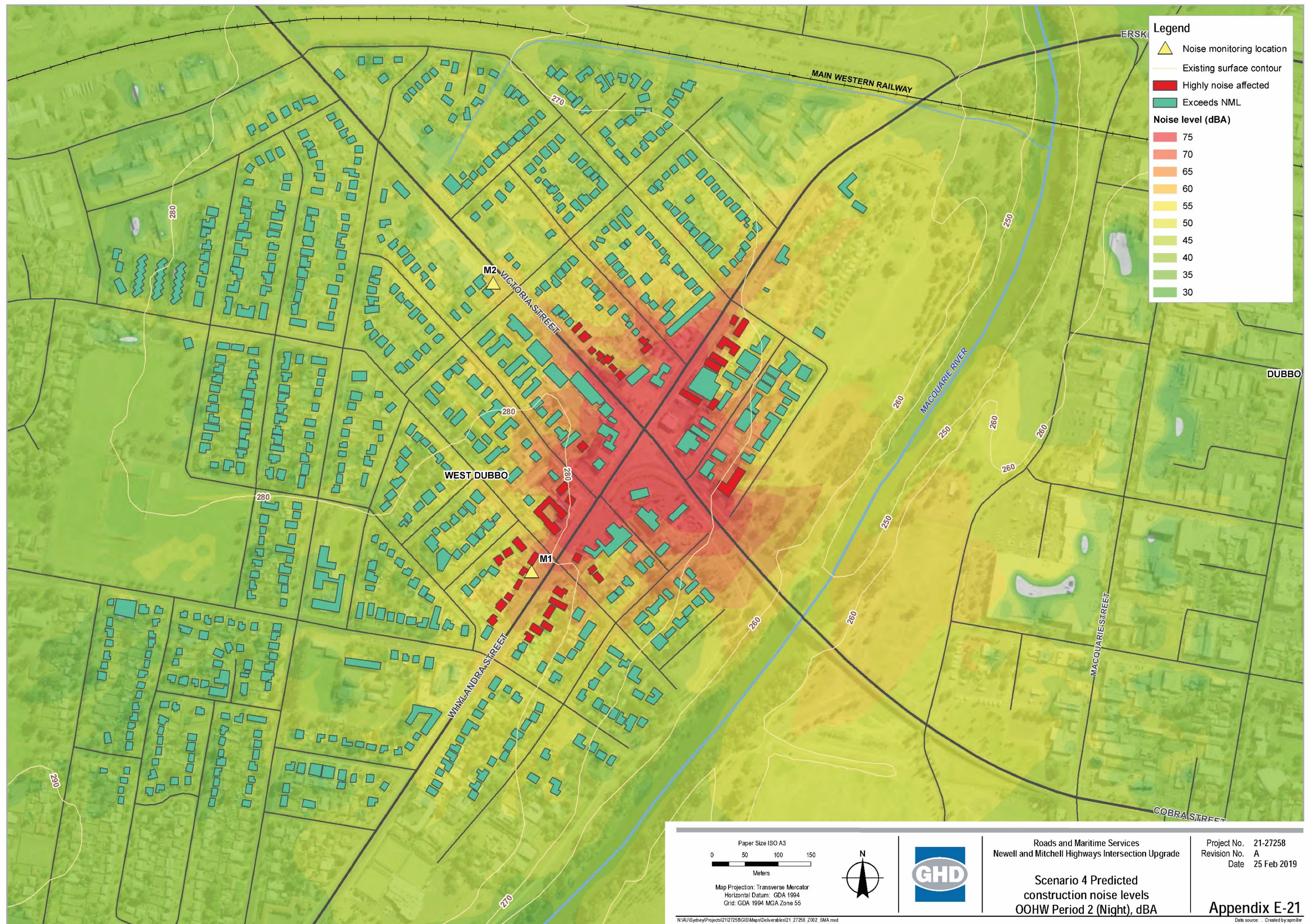












Legend

- Noise monitoring location
- Existing surface contour
- Highly noise affected
- Exceeds NML

Noise level (dBA)

75
70
65
60
55
50
45
40
35
30

Paper Size ISO A3

0 50 100 150

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Roads and Maritime Services
Newell and Mitchell Highways Intersection Upgrade

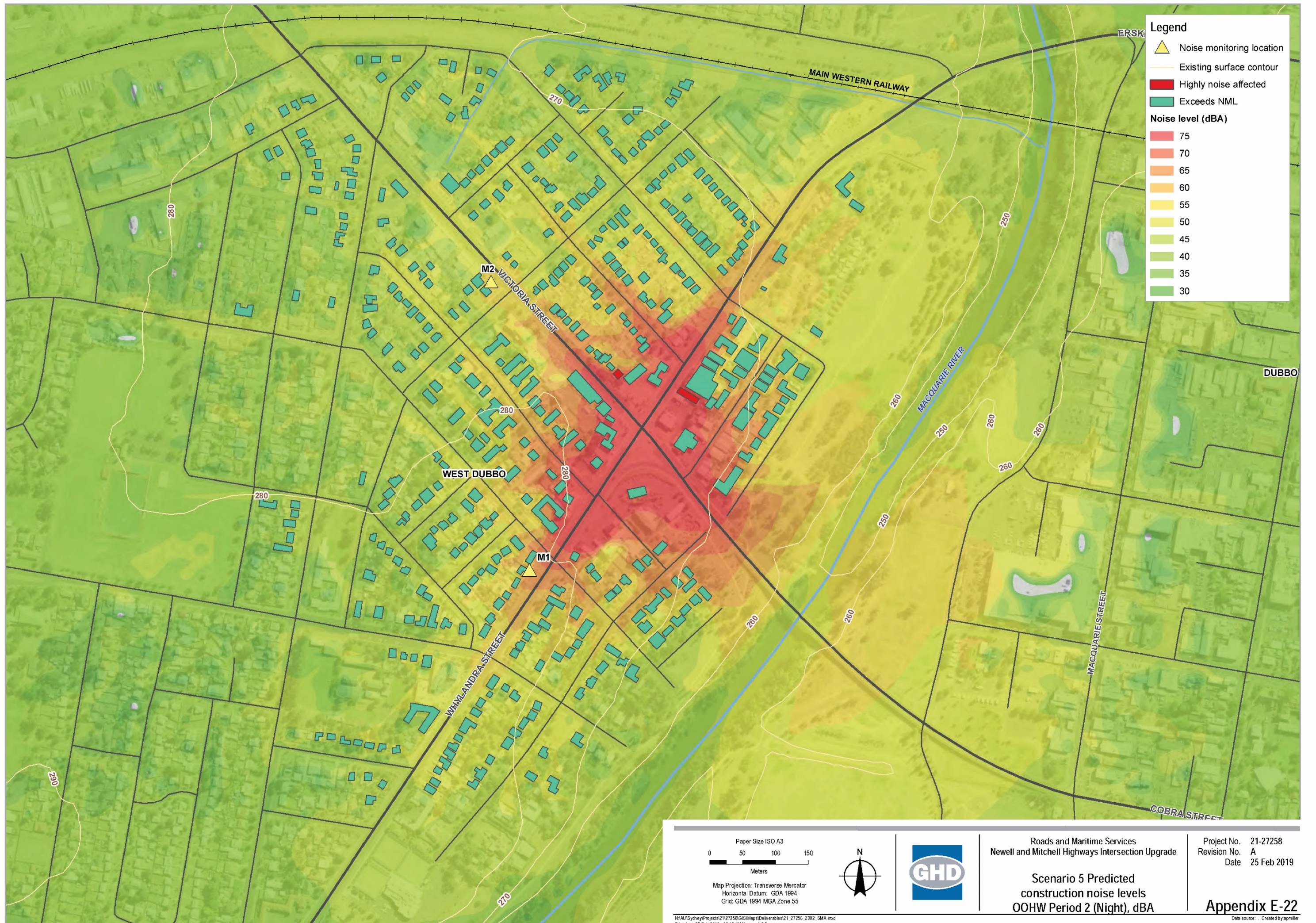
**Scenario 4 Predicted
construction noise levels
OOHW Period 2 (Night), dBA**

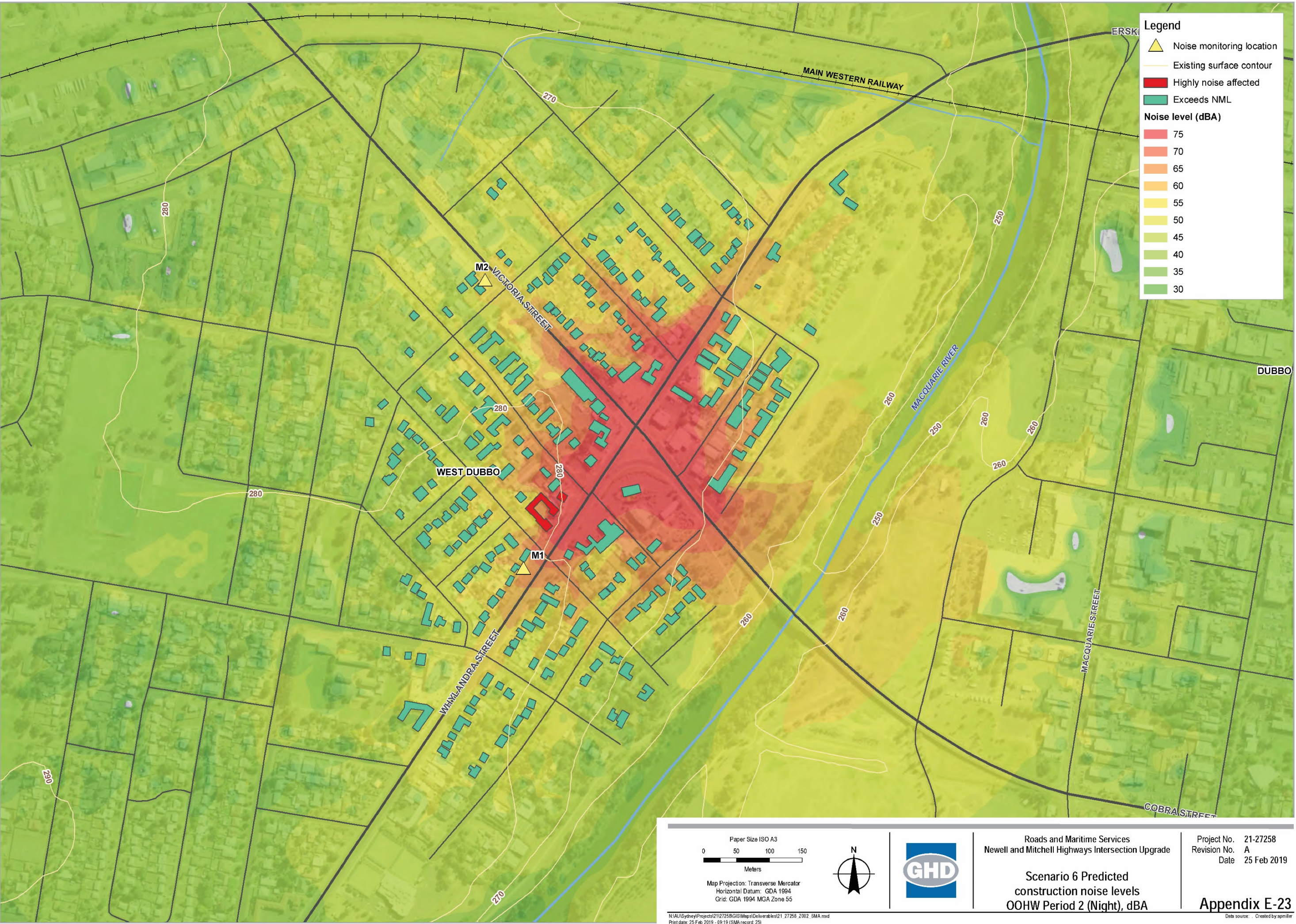
Project No. 21-27258
Revision No. A
Date 25 Feb 2019

Appendix E-21

Data source: Created by apmiller

N:\AUSydney\Projects\2107258\GIS\Map\Deliverables\21_27258_2002_SMA.mxd
Print date: 25 Feb 2019 - 09:18 (SMA record: 23)





Paper Size ISO A3

0 50 100 150

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Roads and Maritime Services
Newell and Mitchell Highways Intersection Upgrade

**Scenario 6 Predicted
construction noise levels
OOHW Period 2 (Night), dBA**

Project No. 21-27258
Revision No. A
Date 25 Feb 2019

Appendix E-23

Data source: . Created by: apmiller

Appendix F – Maximum noise level assessment

Location M1

L _{Aeq} (1 hour)	11 pm	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am
Tuesday-24-Jul-18	-	-	-	-	-	-	-	-	-
Wednesday-25-Jul-18	61	57	57	60	62	65	67	70	69
Thursday-26-Jul-18	60	60	59	59	62	64	67	69	69
Friday-27-Jul-18	61	58	60	58	61	64	65	68	68
Saturday-28-Jul-18	62	59	58	61	59	63	65	69	69
Sunday-29-Jul-18	62	63	62	59	56	60	61	68	-
Monday-30-Jul-18	62	59	53	58	58	64	67	67	68
Tuesday-31-Jul-18	61	59	60	60	63	63	67	68	67
Wednesday-1-Aug-18	60	58	59	61	61	63	67	67	68
Thursday-2-Aug-18	-	-	-	-	-	-	-	-	-

L _{Amax} (1 hour)	11 pm	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am
Tuesday-24-Jul-18	-	-	-	-	-	-	-	-	-
Wednesday-25-Jul-18	82	82	80	80	82	84	82	99	84
Thursday-26-Jul-18	82	82	82	82	85	81	82	88	92
Friday-27-Jul-18	83	80	83	80	83	82	83	83	82
Saturday-28-Jul-18	87	79	80	82	81	83	82	93	84
Sunday-29-Jul-18	82	89	81	82	80	83	80	87	
Monday-30-Jul-18	90	84	79	82	79	82	82	80	87
Tuesday-31-Jul-18	84	84	81	80	85	80	81	82	84
Wednesday-1-Aug-18	80	79	81	83	81	83	81	83	90
Thursday-2-Aug-18	-	-	-	-	-	-	-	-	-

Hourly difference $L_{Amax}(1 \text{ hour}) - L_{Aeq}(1 \text{ hour})$	11 pm	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am
Tuesday-24-Jul-18	-	-	-	-	-	-	-	-	-
Wednesday-25-Jul-18	20	25	22	20	20	19	15	29	15
Thursday-26-Jul-18	22	22	23	23	22	17	15	19	23
Friday-27-Jul-18	22	22	23	22	21	18	18	15	14
Saturday-28-Jul-18	25	20	22	21	21	20	18	24	15
Sunday-29-Jul-18	19	26	18	22	24	22	19	19	-
Monday-30-Jul-18	28	25	25	24	21	18	15	13	19
Tuesday-31-Jul-18	22	24	21	20	22	17	14	14	17
Wednesday-1-Aug-18	20	21	22	22	20	20	14	16	22
Thursday-2-Aug-18	-	-	-	-	-	-	-	-	-

Location M2

$L_{Aeq}(1 \text{ hour})$	11 pm	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am
Tuesday-24-Jul-18	-	-	-	-	-	-	-	-	-
Wednesday-25-Jul-18	53	56	57	54	57	63	66	66	65
Thursday-26-Jul-18	57	52	57	58	59	63	66	66	66
Friday-27-Jul-18	57	55	56	56	61	63	65	67	67
Saturday-28-Jul-18	57	57	56	57	56	62	62	67	67
Sunday-29-Jul-18	59	56	55	51	54	57	59	66	-
Monday-30-Jul-18	53	50	52	53	56	63	65	67	66
Tuesday-31-Jul-18	57	56	50	55	59	63	65	65	64
Wednesday-1-Aug-18	59	53	58	53	57	63	65	67	66
Thursday-2-Aug-18	-	-	-	-	-	-	-	-	-

L _{Amax} (1 hour)	11 pm	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am
Tuesday-24-Jul-18	-	-	-	-	-	-	-	-	-
Wednesday-25-Jul-18	75	82	83	79	85	80	83	89	82
Thursday-26-Jul-18	80	78	87	82	87	82	84	84	83
Friday-27-Jul-18	82	80	80	81	84	79	83	85	89
Saturday-28-Jul-18	79	80	78	83	81	83	81	86	82
Sunday-29-Jul-18	78	75	76	74	75	77	78	83	
Monday-30-Jul-18	75	76	80	74	79	77	79	83	84
Tuesday-31-Jul-18	81	81	75	79	82	79	82	84	82
Wednesday-1-Aug-18	86	75	87	75	82	91	84	87	85
Thursday-2-Aug-18	-	-	-	-	-	-	-	-	-

Hourly difference L _{Amax} (1 hour) – L _{Aeq} (1 hour)	11 pm	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am
Tuesday-24-Jul-18	-	-	-	-	-	-	-	-	-
Wednesday-25-Jul-18	22	26	27	25	28	17	17	23	17
Thursday-26-Jul-18	24	27	30	24	28	18	18	18	17
Friday-27-Jul-18	24	25	24	25	23	16	18	18	22
Saturday-28-Jul-18	22	23	22	26	25	21	19	19	15
Sunday-29-Jul-18	19	19	22	22	21	20	20	17	-
Monday-30-Jul-18	21	26	29	21	23	15	14	16	18
Tuesday-31-Jul-18	23	25	25	24	24	16	17	19	18
Wednesday-1-Aug-18	27	22	29	23	25	28	19	20	19
Thursday-2-Aug-18	-	-	-	-	-	-	-	-	-



rms.nsw.gov.au/



13 22 13



Customer feedback
Roads and Maritime
Locked Bag 928,
North Sydney NSW 2059

April 2019
RMS 19.1273
ISBN: 978-1-925891-50-8