

Figure K-24 Contour plot of annual mean NO_x concentrations (ventilation outlets only, 2023-DS)

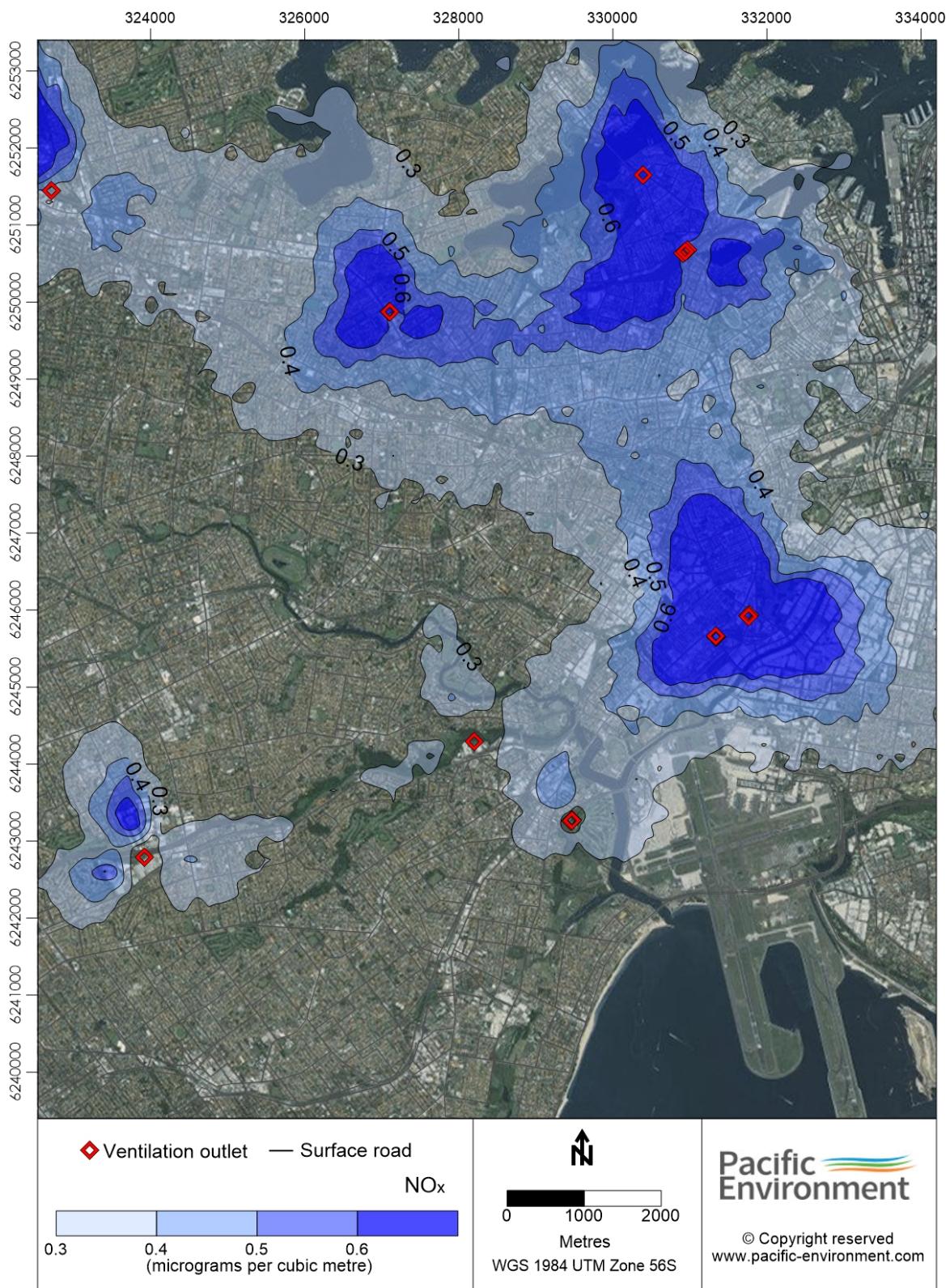


Figure K-25 Contour plot of annual mean NO_x concentrations (ventilation outlets only, 2023-DSC)

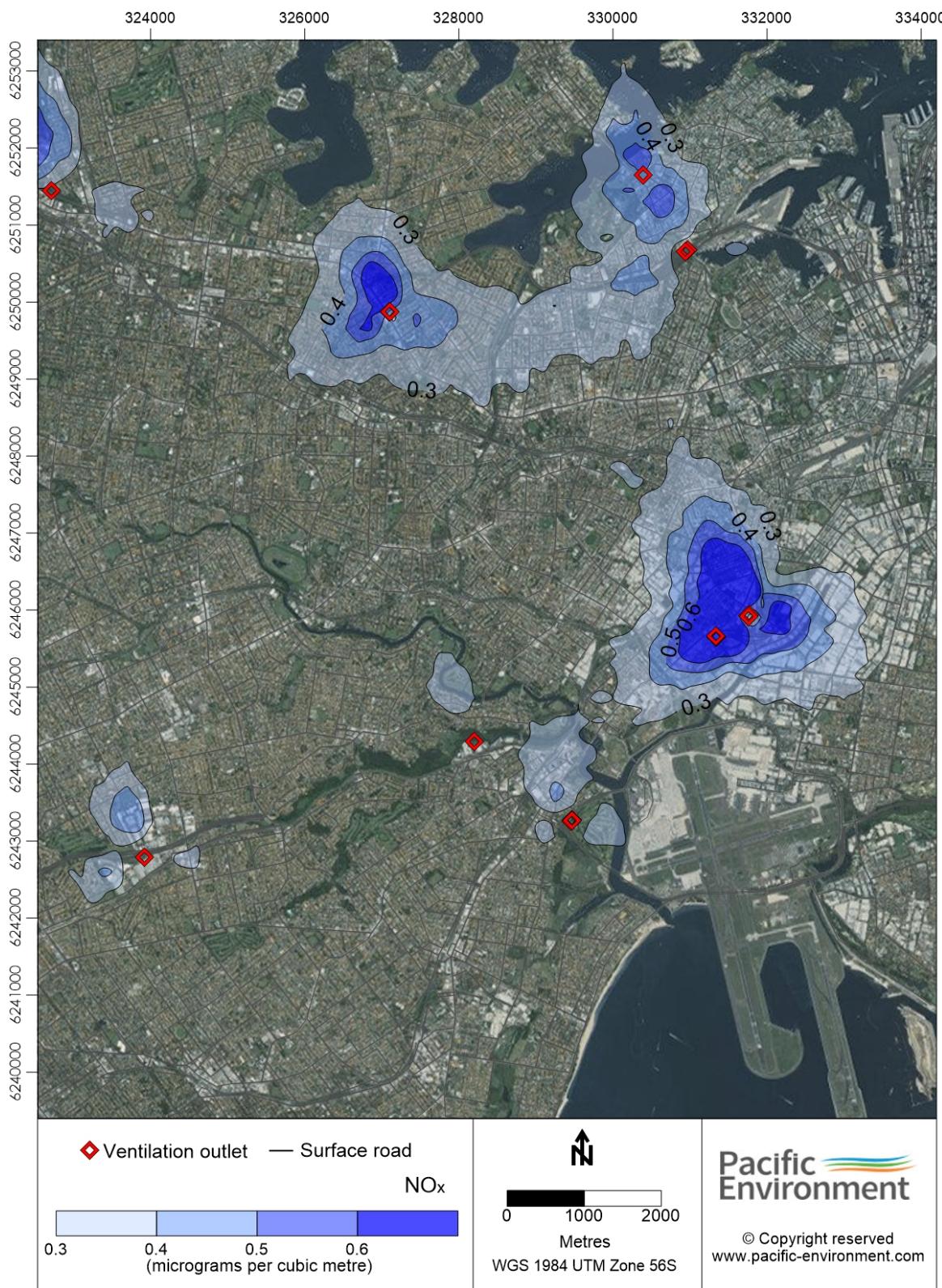


Figure K-26 Contour plot of annual mean NO_x concentrations (ventilation outlets only, 2033-DS)

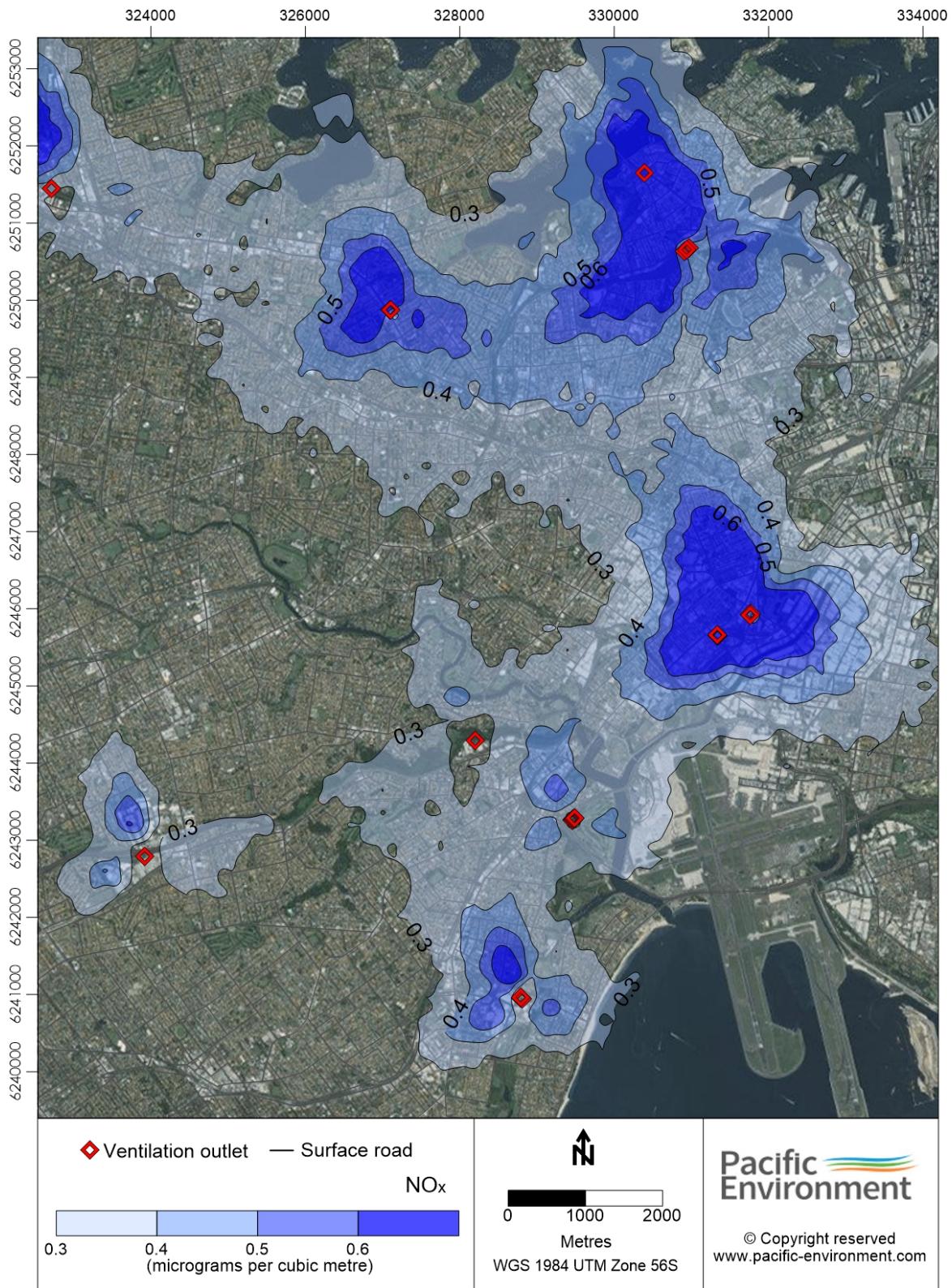


Figure K-27 Contour plot of annual mean NO_x concentrations (ventilation outlets only, 2033-DSC)

K.4 Nitrogen dioxide (maximum 1-hour mean)

Table K-22 Maximum 1-hour mean NO₂ concentration at community receptors

Receptor	Maximum 1-hour mean NO ₂ concentration (µg/m ³)							Change relative to Do Minimum (µg/m ³)				Change relative to Do Minimum (%)			
	2015-BY	2023-DM	2023-DS	2023-DSC	2033-DM	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC
CR01	-	200.4	199.1	198.9	196.5	197.4	196.8	-1.3	-1.5	1.0	0.4	-0.6%	-0.8%	0.5%	0.2%
CR02	-	204.0	205.2	205.2	200.3	197.8	199.2	1.2	1.2	-2.5	-1.2	0.6%	0.6%	-1.3%	-0.6%
CR03	-	213.7	212.4	208.8	205.7	203.3	197.8	-1.3	-5.0	-2.4	-7.8	-0.6%	-2.3%	-1.2%	-3.8%
CR04	-	202.8	205.5	222.6	205.5	197.9	205.0	2.7	19.8	-7.6	-0.5	1.3%	9.7%	-3.7%	-0.3%
CR05	-	203.9	205.0	202.2	202.3	199.5	200.5	1.0	-1.7	-2.8	-1.7	0.5%	-0.8%	-1.4%	-0.9%
CR06	-	198.2	209.7	203.4	197.0	198.0	198.1	11.5	5.2	1.0	1.1	5.8%	2.6%	0.5%	0.6%
CR07	-	213.3	204.3	208.0	206.2	197.4	200.0	-9.0	-5.4	-8.8	-6.2	-4.2%	-2.5%	-4.3%	-3.0%
CR08	-	207.3	209.4	201.8	199.8	199.6	198.9	2.1	-5.5	-0.2	-0.9	1.0%	-2.6%	-0.1%	-0.4%
CR09	-	209.9	200.7	201.9	196.5	199.2	198.7	-9.2	-8.0	2.7	2.3	-4.4%	-3.8%	1.4%	1.2%
CR10	-	235.5	222.7	218.1	213.0	217.1	215.8	-12.7	-17.3	4.1	2.7	-5.4%	-7.4%	1.9%	1.3%
CR11	-	197.7	196.6	198.5	200.6	197.6	197.7	-1.1	0.8	-3.0	-2.9	-0.6%	0.4%	-1.5%	-1.5%
CR12	-	206.9	214.0	209.1	200.2	206.4	207.2	7.2	2.2	6.3	7.0	3.5%	1.1%	3.1%	3.5%
CR13	-	197.9	198.6	202.5	200.8	197.9	196.5	0.7	4.6	-2.9	-4.3	0.4%	2.3%	-1.4%	-2.2%
CR14	-	201.5	201.0	197.0	198.5	201.8	198.0	-0.5	-4.5	3.3	-0.5	-0.3%	-2.3%	1.7%	-0.3%
CR15	-	204.0	202.4	202.7	199.0	201.2	198.5	-1.6	-1.3	2.2	-0.5	-0.8%	-0.6%	1.1%	-0.2%
CR16	-	200.8	200.3	199.3	200.2	197.4	197.4	-0.5	-1.5	-2.8	-2.8	-0.2%	-0.8%	-1.4%	-1.4%
CR17	-	196.5	199.2	197.1	200.4	201.1	196.8	2.7	0.6	0.7	-3.6	1.4%	0.3%	0.4%	-1.8%
CR18	-	198.3	203.0	200.1	196.9	198.9	196.5	4.6	1.8	2.0	-0.4	2.3%	0.9%	1.0%	-0.2%
CR19	-	196.5	196.5	197.4	197.5	197.0	196.7	0.0	0.9	-0.4	-0.8	0.0%	0.5%	-0.2%	-0.4%
CR20	-	197.3	204.4	199.4	197.7	198.6	199.3	7.1	2.1	0.9	1.5	3.6%	1.1%	0.4%	0.8%
CR21	-	205.3	198.6	205.3	196.5	197.8	200.1	-6.7	0.0	1.4	3.6	-3.3%	0.0%	0.7%	1.8%
CR22	-	200.1	200.8	199.6	200.4	199.8	199.3	0.7	-0.5	-0.6	-1.1	0.4%	-0.3%	-0.3%	-0.5%
CR23	-	215.1	210.2	199.1	205.7	201.3	199.1	-5.0	-16.1	-4.4	-6.6	-2.3%	-7.5%	-2.1%	-3.2%
CR24	-	204.1	199.7	205.9	200.2	200.3	199.9	-4.4	1.7	0.1	-0.3	-2.2%	0.9%	0.0%	-0.2%
CR25	-	203.2	196.9	196.5	200.8	196.9	199.1	-6.3	-6.8	-3.9	-1.7	-3.1%	-3.3%	-1.9%	-0.9%
CR26	-	202.4	197.9	210.7	197.4	197.4	196.5	-4.5	8.3	0.0	-0.9	-2.2%	4.1%	0.0%	-0.5%
CR27	-	197.6	201.0	197.6	198.8	198.2	197.4	3.4	0.0	-0.6	-1.3	1.7%	0.0%	-0.3%	-0.7%
CR28	-	199.4	201.1	196.5	196.5	198.5	197.9	1.7	-2.9	2.1	1.4	0.8%	-1.5%	1.1%	0.7%
CR29	-	204.7	207.1	201.7	199.4	197.3	201.6	2.4	-3.0	-2.0	2.2	1.2%	-1.5%	-1.0%	1.1%
CR30	-	206.5	208.0	200.7	201.5	201.5	202.0	1.5	-5.8	0.0	0.5	0.7%	-2.8%	0.0%	0.2%
CR31	-	205.2	201.3	199.4	198.6	200.9	197.0	-3.9	-5.8	2.4	-1.5	-1.9%	-2.8%	1.2%	-0.8%
CR32	-	199.0	199.0	198.2	197.4	196.5	200.0	0.0	-0.9	-1.0	2.6	0.0%	-0.4%	-0.5%	1.3%
CR33	-	198.4	202.2	211.1	197.9	197.5	198.2	3.8	12.7	-0.4	0.2	1.9%	6.4%	-0.2%	0.1%
CR34	-	199.5	200.6	202.6	197.8	201.3	198.4	1.0	3.0	3.4	0.6	0.5%	1.5%	1.7%	0.3%
CR35	-	201.5	204.5	196.5	196.9	196.5	196.8	2.9	-5.1	-0.4	0.0	1.5%	-2.5%	-0.2%	0.0%
CR36	-	199.7	196.5	201.5	198.5	196.5	200.6	-3.2	1.8	-2.0	2.1	-1.6%	0.9%	-1.0%	1.1%
CR37	-	201.2	201.1	203.4	202.0	198.6	206.7	-0.1	2.2	-3.5	4.7	0.0%	1.1%	-1.7%	2.3%
CR38	-	213.4	214.1	207.4	200.2	210.0	207.0	0.6	-6.1	9.8	6.8	0.3%	-2.9%	4.9%	3.4%
CR39	-	203.9	203.9	200.0	199.0	207.5	200.1	0.0	-3.8	8.5	1.0	0.0%	-1.9%	4.3%	0.5%
CR40	-	204.3	202.4	203.4	201.6	201.4	208.3	-2.0	-0.9	-0.2	6.6	-1.0%	-0.4%	-0.1%	3.3%

Table K-23 Maximum 1-hour mean NO₂ concentration at community receptors, ranked by concentration

Rank	Ranking by concentration (µg/m ³)						
	2015-BY	2023-DM	2023 DS	2023-DSC	2033-DM	2033-DS	2033-DSC
1	-	235.5	222.7	222.6	213.0	217.1	215.8
2		215.1	214.1	218.1	206.2	210.0	208.3
3		213.7	214.0	211.1	205.7	207.5	207.2
4		213.4	212.4	210.7	205.7	206.4	207.0
5		213.3	210.2	209.1	205.5	203.3	206.7
6		209.9	209.7	208.8	202.3	201.8	205.0
7		207.3	209.4	208.0	202.0	201.5	202.0
8		206.9	208.0	207.4	201.6	201.4	201.6
9		206.5	207.1	205.9	201.5	201.3	200.6
10		205.3	205.5	205.3	200.8	201.3	200.5

Table K-24 Maximum 1-hour mean NO₂ concentration at community receptors, ranked by increase and by decrease in concentration

Rank	Ranking by increase in concentration relative to Do Minimum (µg/m ³)				Ranking by decrease in concentration relative to Do Minimum (µg/m ³)				
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC	
1	11.5	19.8	9.8	7.0	-12.7	-17.3	-8.8	-7.8	
2		7.2	12.7	8.5		-9.2	-16.1	-7.6	-6.6
3		7.1	8.3	6.3		-9.0	-8.0	-4.4	-6.2
4		4.6	5.2	4.1		-6.7	-6.8	-3.9	-4.3
5		3.8	4.6	3.4		-6.3	-6.1	-3.5	-3.6
6		3.4	3.0	3.3		-5.0	-5.8	-3.0	-2.9
7		2.9	2.2	2.7		-4.5	-5.8	-2.9	-2.8
8		2.7	2.2	2.4		-4.4	-5.5	-2.8	-1.7
9		2.7	2.1	2.2		-3.9	-5.4	-2.8	-1.7
10		2.4	1.8	2.1		-3.2	-5.1	-2.5	-1.5

Table K-25 Maximum 1-hour mean NO₂ concentration at community receptors, ranked by percentage increase and by decrease in concentration

Rank	Ranking by % increase in concentration relative to Do Minimum				Ranking by % decrease in concentration relative to Do Minimum				
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC	
1	5.8%	9.7%	4.9%	3.5%	-5.4%	-7.5%	-4.3%	-3.8%	
2		3.6%	6.4%	4.3%		-4.4%	-7.4%	-3.7%	-3.2%
3		3.5%	4.1%	3.1%		-4.2%	-3.8%	-2.1%	-3.0%
4		2.3%	2.6%	1.9%		-3.3%	-3.3%	-1.9%	-2.2%
5		1.9%	2.3%	1.7%		-3.1%	-2.9%	-1.7%	-1.8%
6		1.7%	1.5%	1.7%		-2.3%	-2.8%	-1.5%	-1.5%
7		1.5%	1.1%	1.4%		-2.2%	-2.8%	-1.4%	-1.4%
8		1.4%	1.1%	1.2%		-2.2%	-2.6%	-1.4%	-0.9%
9		1.3%	1.1%	1.1%		-1.9%	-2.5%	-1.4%	-0.9%
10		1.2%	0.9%	1.1%		-1.6%	-2.5%	-1.3%	-0.8%

Table K-26 Maximum 1-hour mean NO₂ concentration at RWR receptors, ranked by concentration

Rank	Ranking by concentration (µg/m ³)						
	2015-BY	2023-DM	2023 DS	2023-DSC	2033-DM	2033-DS	2033-DSC
1	-	486.8	516.2	476.9	387.2	436.2	482.7
2		456.2	513.0	435.4	382.4	430.1	415.4
3		453.7	494.4	427.7	378.4	417.9	388.8
4		451.2	488.3	427.0	370.2	411.6	382.7
5		429.1	484.4	416.9	365.2	411.4	381.6
6		429.0	483.2	412.7	363.2	407.7	380.2
7		428.4	475.7	411.8	360.5	403.3	373.2
8		428.1	467.9	411.4	360.1	395.5	355.8
9		426.1	460.2	406.5	350.7	382.3	354.4
10		423.5	459.3	406.0	348.1	380.6	352.8

Table K-27 Maximum 1-hour mean NO₂ concentration at RWR receptors, ranked by increase and by decrease in concentration

Rank	Ranking by increase in concentration relative to Do Minimum (µg/m ³)				Ranking by decrease in concentration relative to Do Minimum (µg/m ³)				
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC	
1	179.7	212.7	187.2	233.7	-130.9	-150.9	-140.6	-124.7	
2		175.5	164.7	154.3		-124.4	-137.2	-118.5	-120.7
3		168.5	144.6	140.2		-121.9	-134.3	-97.8	-99.7
4		166.0	138.4	137.9		-117.4	-130.2	-95.1	-95.5
5		151.2	131.0	131.3		-115.8	-130.1	-92.4	-92.0
6		141.6	129.5	127.0		-114.5	-114.6	-91.6	-87.1
7		138.3	127.1	125.9		-113.9	-113.1	-89.9	-84.7
8		136.2	126.1	122.1		-109.1	-111.0	-87.3	-83.7
9		134.2	122.9	118.6		-107.0	-110.6	-85.9	-83.3
10		123.8	118.1	115.6		-105.6	-110.4	-84.5	-79.6

Table K-28 Maximum 1-hour mean NO₂ concentration at RWR receptors, ranked by percentage increase and by decrease in concentration

Rank	Ranking by % increase in concentration relative to Do Minimum				Ranking by % decrease in concentration relative to Do Minimum				
	2023-DS	2023-DSC	2033-DS	2033-DSC	2023-DS	2023-DSC	2033-DS	2033-DSC	
1	68.4%	80.5%	75.1%	93.8%	-37.4%	-35.4%	-36.8%	-36.0%	
2		68.0%	71.3%	60.5%		-32.5%	-33.5%	-35.3%	-32.6%
3		62.0%	62.9%	60.0%		-32.4%	-33.4%	-30.1%	-30.7%
4		57.4%	62.3%	53.7%		-30.7%	-33.3%	-29.6%	-27.5%
5		55.5%	59.6%	53.5%		-30.2%	-33.2%	-28.4%	-27.5%
6		52.6%	57.7%	52.7%		-30.1%	-33.0%	-27.7%	-27.1%
7		51.7%	57.1%	49.7%		-29.7%	-31.3%	-27.4%	-26.8%
8		51.5%	55.6%	49.5%		-29.5%	-31.0%	-27.3%	-26.1%
9		49.8%	52.9%	47.5%		-29.0%	-30.9%	-27.3%	-26.0%
10		47.8%	49.7%	47.2%		-28.9%	-30.8%	-26.2%	-26.0%

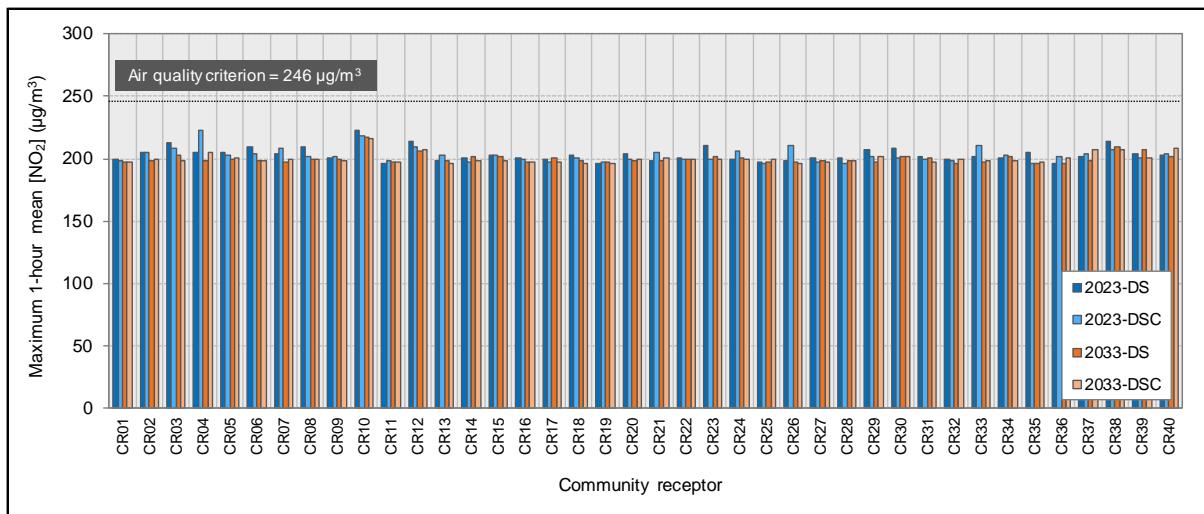


Figure K-28 Maximum 1-hour mean NO_2 concentration at community receptors (with-project and cumulative scenarios)

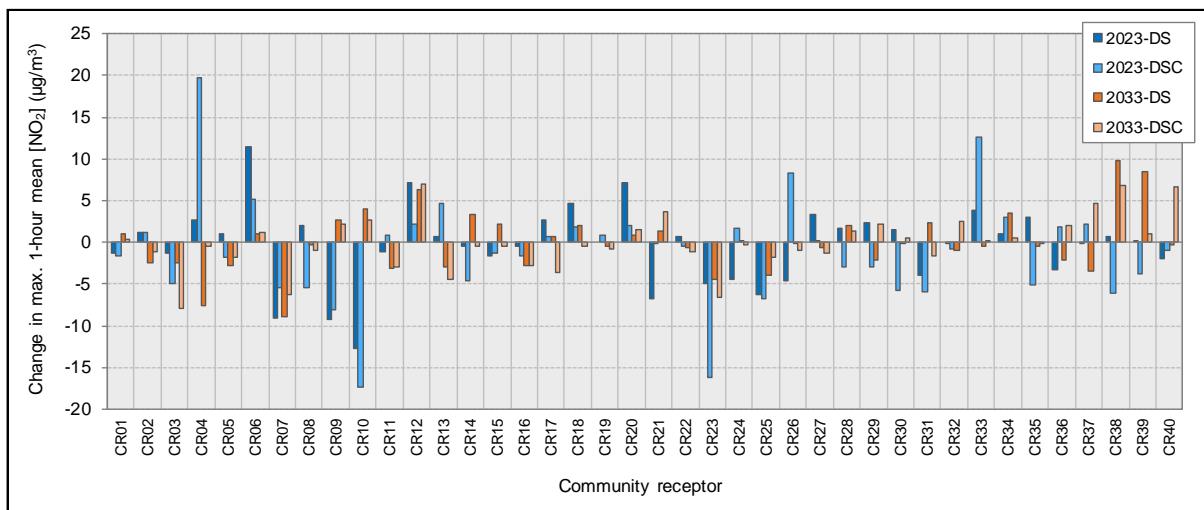


Figure K-29 Change in maximum 1-hour mean NO_2 concentration at community receptors (with-project and cumulative scenarios, relative to Do Minimum scenarios)

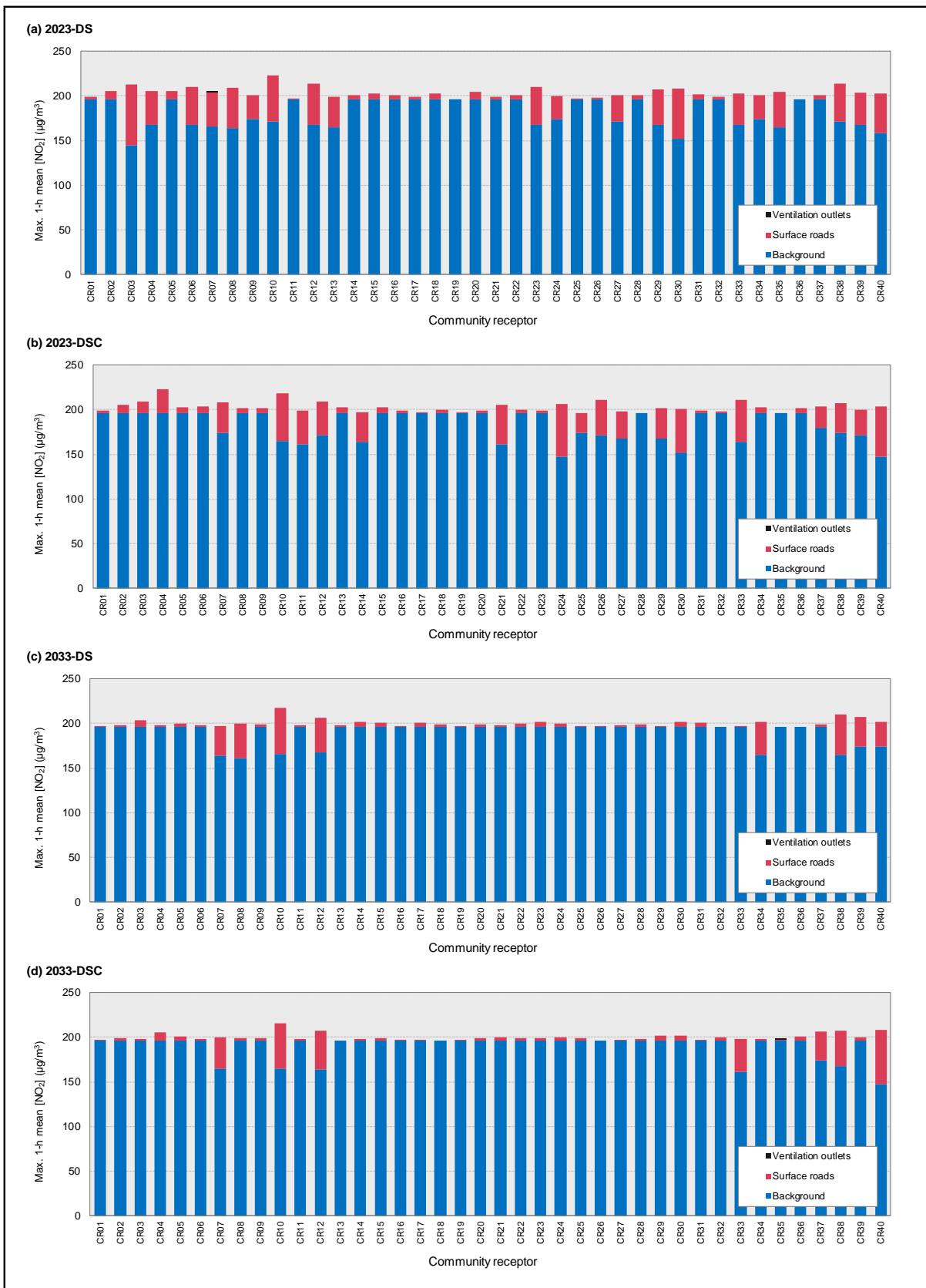


Figure K-30 Source contributions to maximum 1-hour mean NO_2 concentration at community receptors (with-project and cumulative scenarios)

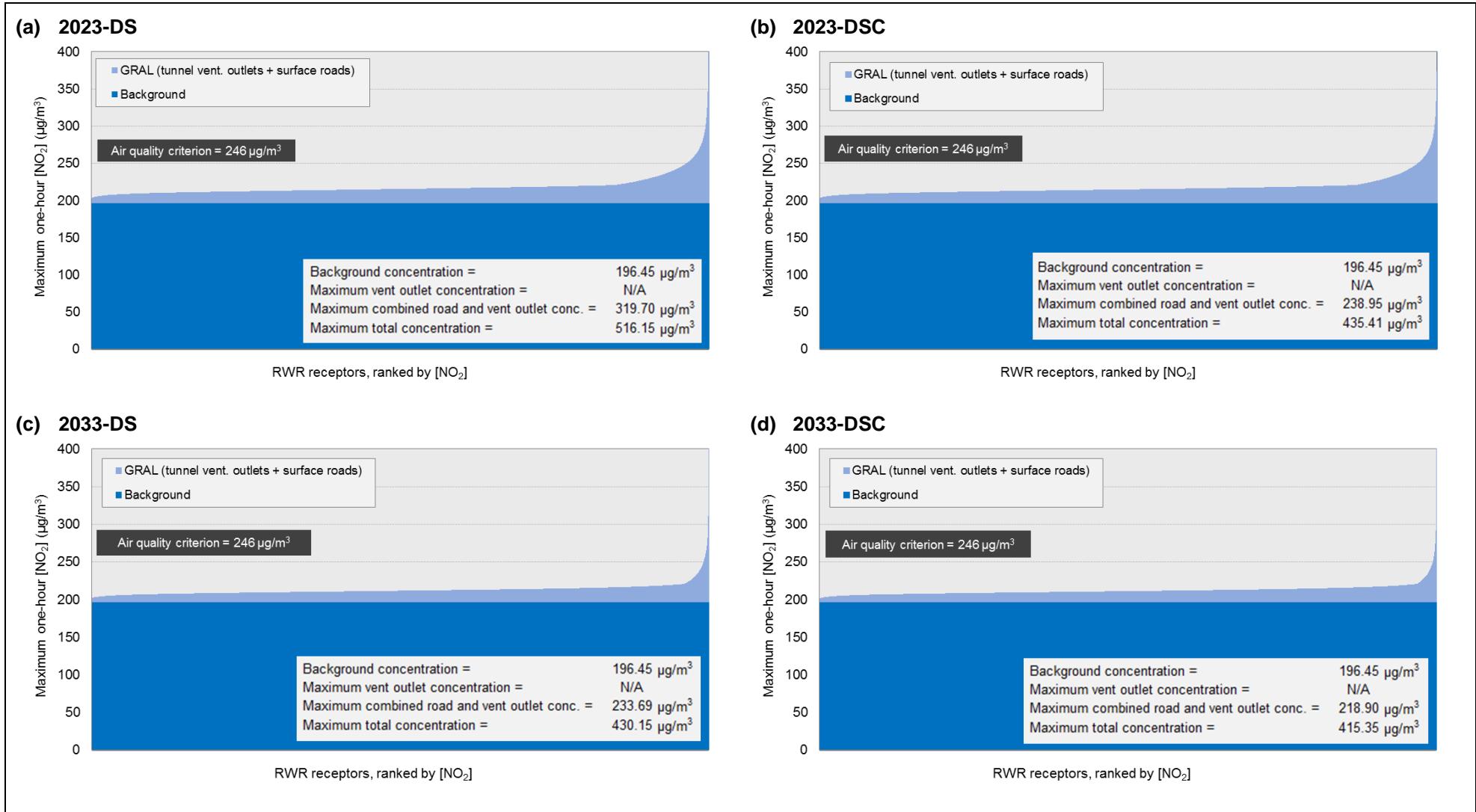


Figure K-31 Source contributions to maximum 1-hour mean NO_2 concentration at RWR receptors (with-project and cumulative scenarios)

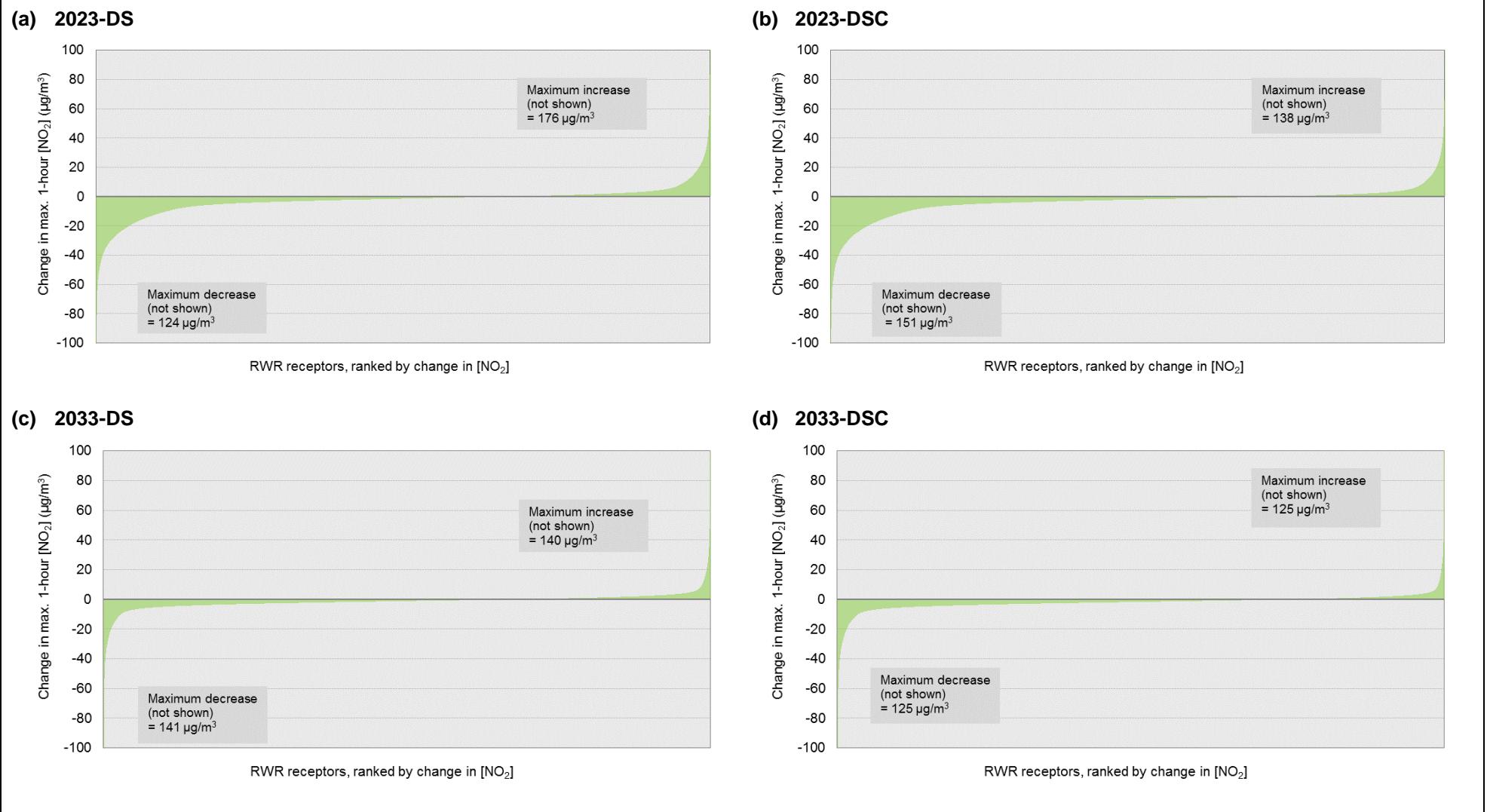


Figure K-32 Change in maximum 1-hour mean NO_2 concentration at RWR receptors (with-project and cumulative scenarios, relative to Do Minimum scenarios)

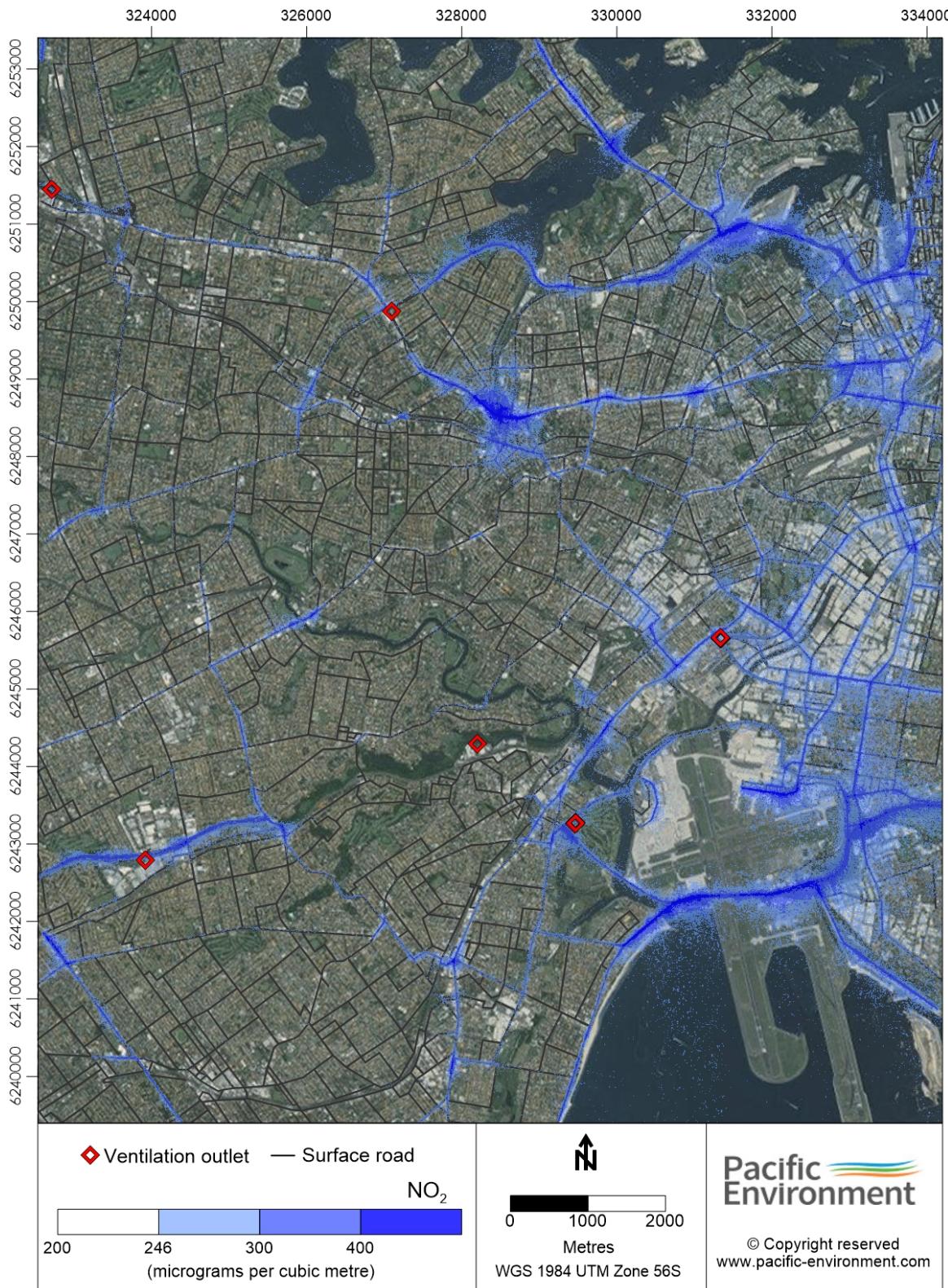


Figure K-33 Contour plot of maximum 1-hour mean NO_2 concentration in the 2023 Do Minimum scenario (all sources, 2023-DM)

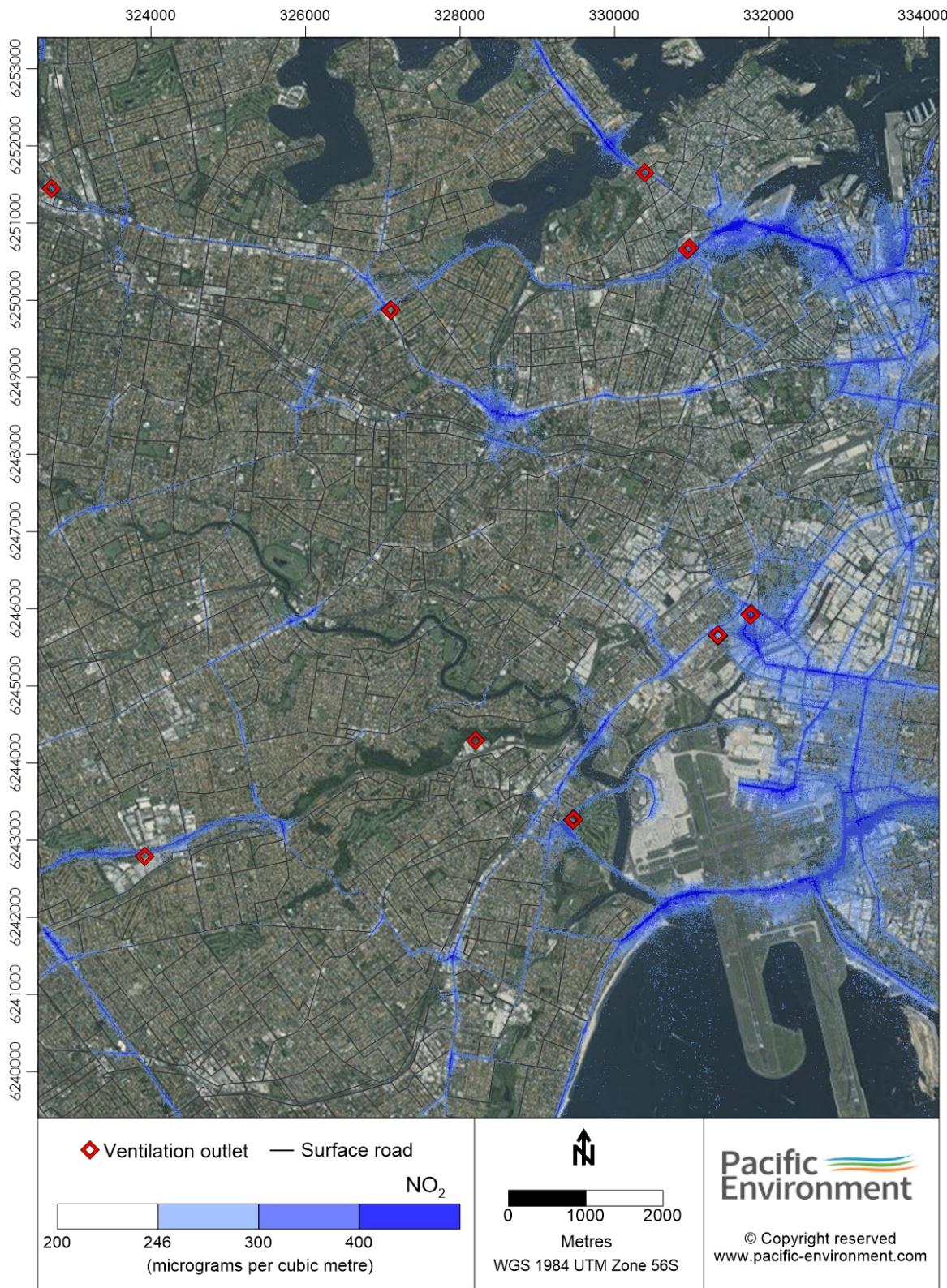


Figure K-34 Contour plot of maximum 1-hour mean NO_2 concentration in the 2023 Do Something scenario (all sources, 2023-DS)

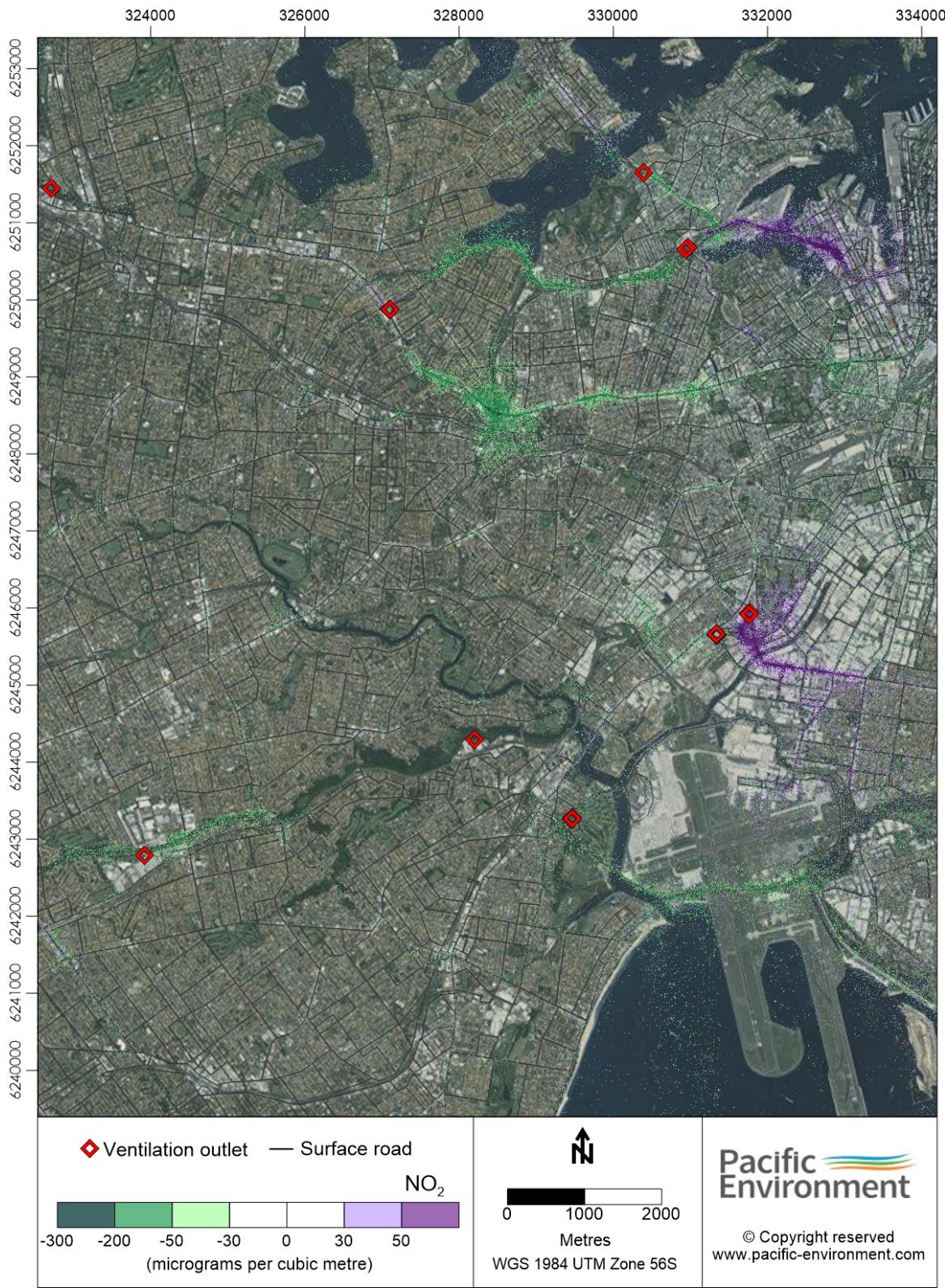


Figure K-35 Contour plot of change in maximum 1-hour mean NO_2 concentration in the 2023 Do Something scenario (all sources, 2023-DS minus 2023-DM)

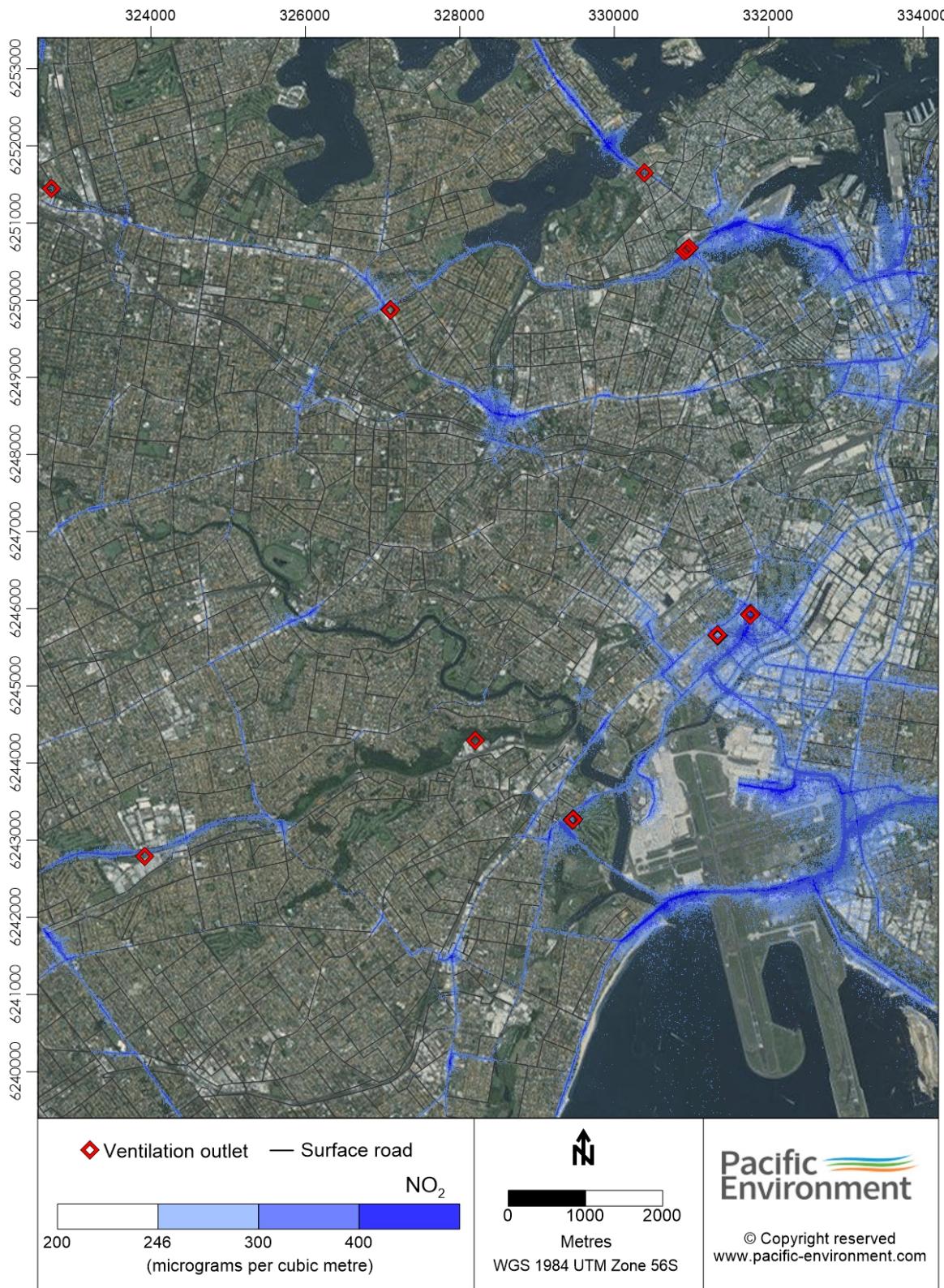


Figure K-36 Contour plot of maximum 1-hour mean NO₂ concentration in the 2023 cumulative scenario (all sources, 2023-DSC)

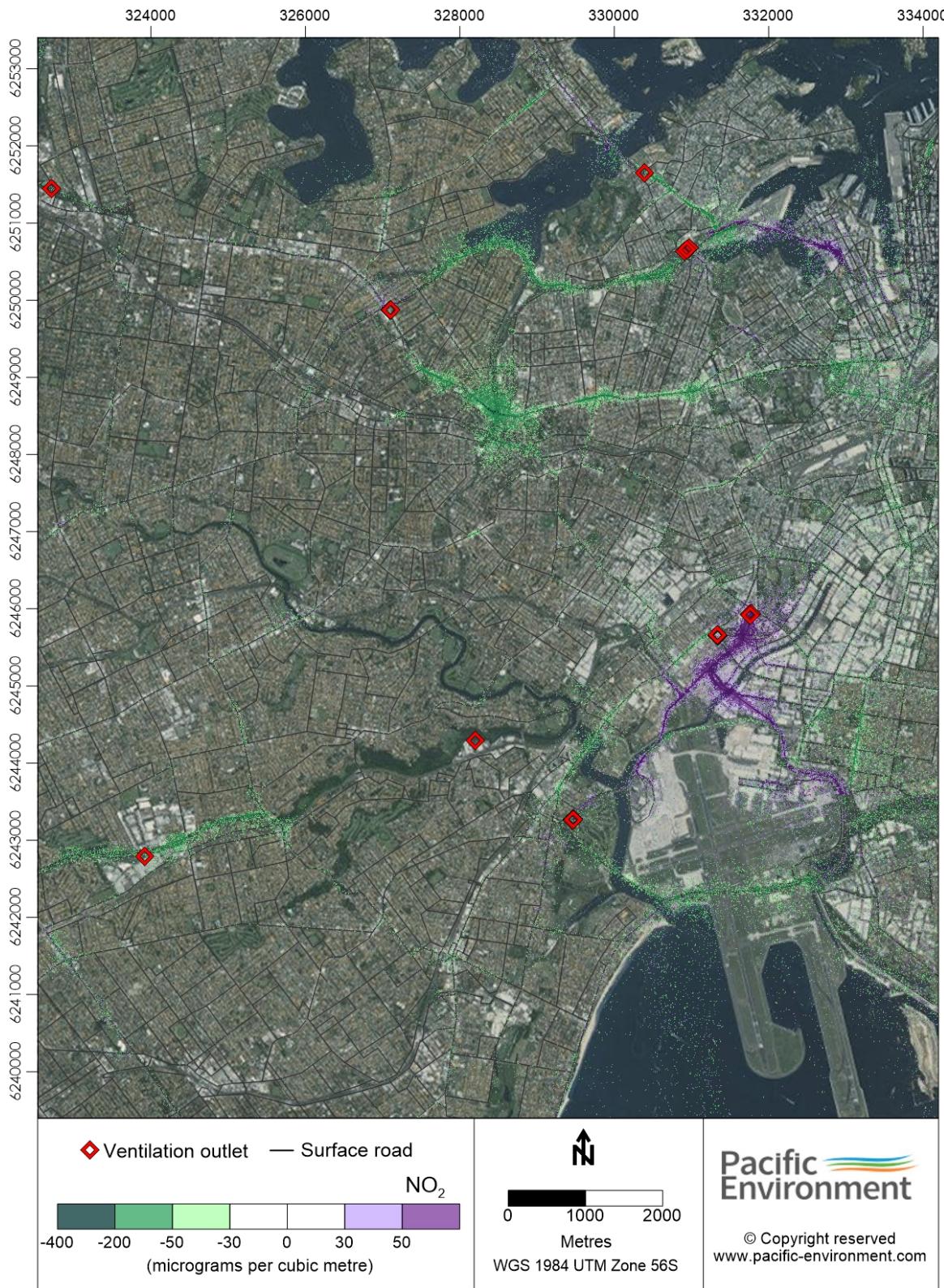


Figure K-37 Contour plot of change in maximum 1-hour mean NO_2 concentration in the 2023 cumulative scenario (all sources, 2023-DSC minus 2023-DM)

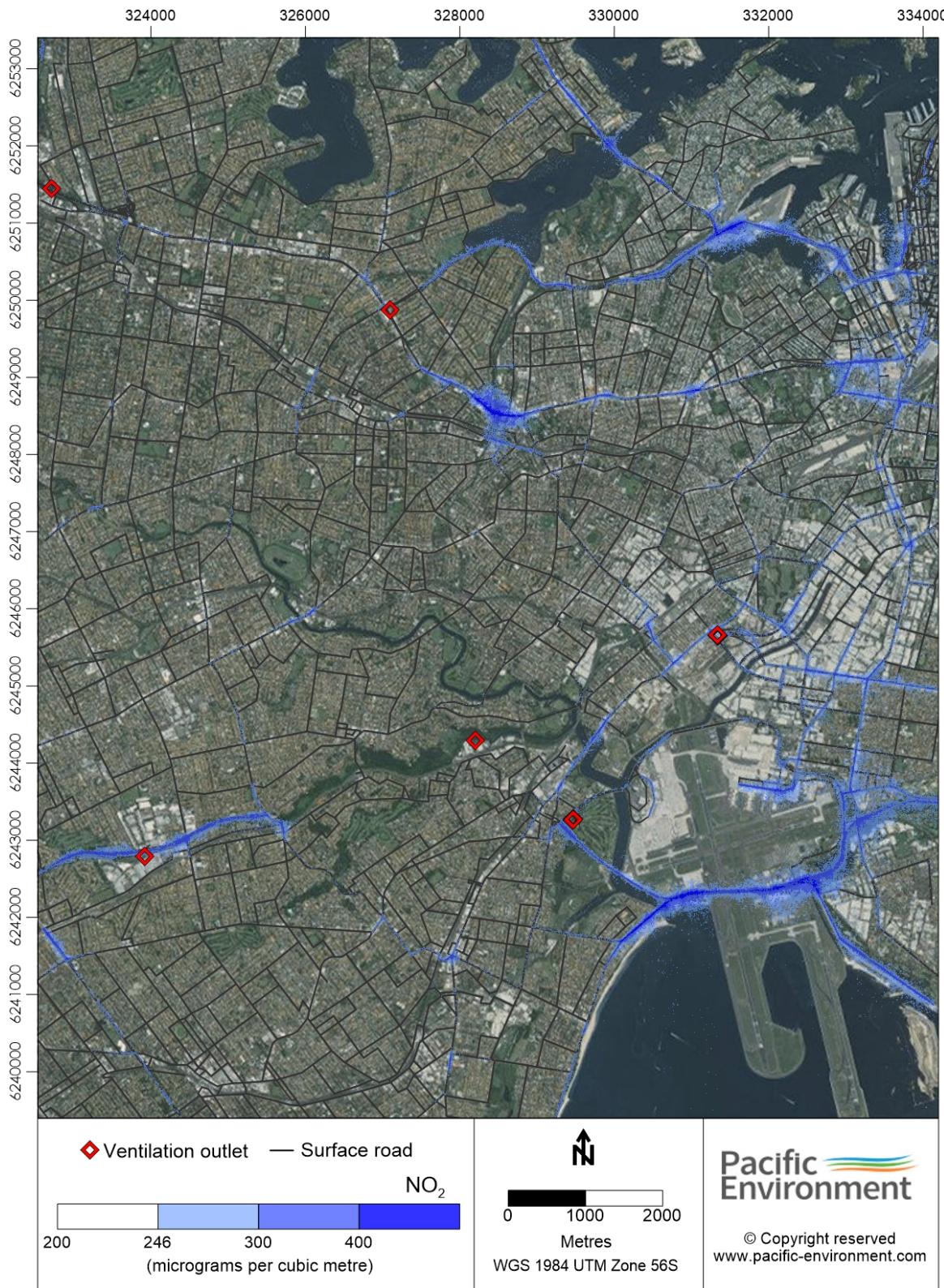


Figure K-38 Contour plot of maximum 1-hour mean NO_2 concentration in the 2033 Do Minimum scenario (all sources, 2033-DM)