



Presidenza del Consiglio dei Ministri

Dipartimento di Protezione Civile

Struttura di Missione - D.P.C.M. 15 Giugno 2007 O.P.C.M. 19 Marzo 2008



REGIONE AUTONOMA DELLA SARDEGNA

Assessorato dei Lavori Pubblici

UFFICIO DEL COMMISSARIO DELEGATO
Dott. Guido BERTOLASO

STRUTTURA DI MISSIONE
Dott. Ing. Raniero FABRIZI

REVISIONI

N°	data	redatto	contr.	approv.	Motivo della revisione
0	08/08/08	Cardinali	Marchettini	Policicchio	Emissione
1					
2					
3					

PROG. N° B279.A.001

DIS. N°

DATA 21/11/2008

SCALA ---

**NUOVA STRADA TIPO B (4 CORSIE)
SASSARI - OLBIA**
(SVINCOLO S.S. 131 BIVIO PLOAGHE - S.S. 597 - S.S. 199)

PROGETTO PRELIMINARE
STUDIO D'IMPATTO AMBIENTALE

TITOLO :

**Vol. 9 Quadro Riferimento Ambientale
Rumore e vibrazioni
Appendice 5: tabulati di calcolo Mithra**

ALLEGATO
N°

IL PROGETTISTA

A.T.I.:



C. LOTTI & ASSOCIATI
SOCIETA' DI INGEGNERIA S.p.A. - ROMA

STUDIO ASSOCIATO
Ing. F. COCCO / Ing. P.A. TROMBINO

**REGIONE AUTONOMA DELLA SARDEGNA
ASSESSORATO AI LAVORI PUBBLICI - SERVIZIO VIABILITÀ**

**PROGETTO PRELIMINARE DELLA NUOVA STRADA
TIPO B (4 CORSIE) SASSARI – OLBIA
(SVINCOLO S.S. 131 BIVIO PLOAGHE – S.S. 597 – S.S. 199)**

**STUDIO D'IMPATTO AMBIENTALE
AI SENSI DEL D. LGS. 152/06 COSÌ COME MODIFICATO IN BASE AL D.LGS 4/2008**

VOL. 9

QUADRO DI RIFERIMENTO AMBIENTALE

RUMORE E VIBRAZIONI

Appendice 5: Tabulati di calcolo Mithra

N° PROGETTO: B279.A.001			N° ALLEGATO:		
0	08/08/2008	EMISSIONE	CARDINALI	MARCHETTINI	POLICICCHIO
1					
2					
3					
4					
<i>revisione</i>	<i>data</i>	<i>descrizione</i>	<i>redatto</i>	<i>controllato</i>	<i>approvato</i>

Tabulati con i risultati del modello di simulazione Mithra

Scenario post operam:

- TRONCO 1

- Km 1-2 diurno
- Km 1-2 notturno
- Km 3-4 diurno
- Km 3-4 notturno
- Km 8-10 diurno
- Km 8-10 notturno
- Km 12-13 diurno
- Km 12-13 notturno
- Km 14-15 diurno
- Km 14-15 notturno
- Km 19-20 diurno
- Km 19-20 notturno
- Cantiere Km 24 diurno
- Cantiere Km 24 notturno

- TRONCO 2

- Km 0-3 diurno
- Km 0-3 notturno
- *Km 0-3 notturno con mitigazione*
- Km 8-11 diurno
- Km 8-11 notturno
- *Km 8-11 notturno con mitigazione*
- Km 12,5-15 diurno
- Km 12,5-15 notturno
- *Km 12,5-15 notturno con mitigazione*
- Km 16,5-19 diurno
- Km 16,5-19 notturno
- *Km 16,5-19 notturno con mitigazione*
- Cantiere km 16,3 diurno
- Cantiere km 16,3 notturno

- TRONCO 3

- Km 0,5-2,5 diurno
- Km 0,5-2,5 notturno
- *Km 0,5-2,5 notturno con mitigazione*
- Km 6-8 diurno
- Km 6-8 notturno
- *Km 6-8 notturno con mitigazione*
- Km 9-14,5 diurno
- Km 9-14,5 notturno
- *Km 9-14,5 notturno con mitigazione*
- Km 14,5-17 diurno
- Km 14,5-17 notturno
- Km 19-21 diurno
- Km 19-21 notturno
- Cantiere Km 15,3 diurno
- Cantiere Km 15,3 notturno

TRONCO 1 KM 1-2 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 15-JUL-2008

Position : from (1477834.8m, 4498567.0m) to (1478867.0m, 4499195.5m)

Calculation parameters : mode CSTB.92, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	54.0
2	Ground floor (1.8 m)	53.7
3	Ground floor (1.8 m)	52.5
4	Ground floor (1.8 m)	53.9
5	Ground floor (1.8 m)	58.7
6	Ground floor (1.8 m)	58.9
7	Ground floor (1.8 m)	55.2
8	Ground floor (1.8 m)	65.1
9	Ground floor (1.8 m)	57.9
	First floor (4.2 m)	60.1
10	Ground floor (1.8 m)	60.3
11	Ground floor (1.8 m)	52.9
12	Ground floor (1.8 m)	55.6
13	Ground floor (1.8 m)	53.6
	First floor (3.5 m)	54.6
14	Ground floor (1.8 m)	51.8
15	Ground floor (1.8 m)	52.8

TRONCO 1 KM 1-2 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 15-JUL-2008

Position : from (1477840.6m, 4498568.0m) to (1478865.8m, 4499193.0m)

Calculation parameters : mode CSTB.92, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	45.9
2	Ground floor (1.8 m)	45.6
3	Ground floor (1.8 m)	44.4
4	Ground floor (1.8 m)	45.8
5	Ground floor (1.8 m)	50.6
6	Ground floor (1.8 m)	50.8
7	Ground floor (1.8 m)	47.0
8	Ground floor (1.8 m)	57.0
9	Ground floor (1.8 m)	49.8
	First floor (4.2 m)	52.0

10	Ground floor (1.8 m)	52.2
11	Ground floor (1.8 m)	44.8
12	Ground floor (1.8 m)	47.5
13	Ground floor (1.8 m)	45.5
	First floor (3.5 m)	46.5
14	Ground floor (1.8 m)	43.7
15	Ground floor (1.8 m)	44.7

TRONCO 1 KM 3-4 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 29-JUL-2008

Position : from (1479775.8m, 4498451.5m) to (1480913.0m, 4499072.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	49.6
2	Ground floor (1.8 m)	61.1
	First floor (3.9 m)	61.5
3	Ground floor (1.8 m)	58.4
4	Ground floor (1.8 m)	59.9
5	Ground floor (1.8 m)	62.5
6	Ground floor (1.8 m)	60.2
	First floor (3.8 m)	60.5
7	Ground floor (1.8 m)	63.9
8	Ground floor (1.8 m)	64.9
	First floor (3.5 m)	66.0
9	Ground floor (1.8 m)	65.3
10	Ground floor (1.8 m)	60.0
11	Ground floor (1.8 m)	61.4
12	Ground floor (1.8 m)	57.5
13	Ground floor (1.8 m)	55.3
	First floor (3.7 m)	55.8
14	Ground floor (1.8 m)	50.9
15	Ground floor (1.8 m)	50.8
	First floor (4.1 m)	51.9

TRONCO 1 KM 3-4 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 29-JUL-2008

Position : from (1479781.8m, 4498459.0m) to (1480907.0m, 4499067.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
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1	Ground floor (1.8 m)	41.5
2	Ground floor (1.8 m)	53.0
	First floor (3.9 m)	53.4
3	Ground floor (1.8 m)	50.3
4	Ground floor (1.8 m)	51.8
5	Ground floor (1.8 m)	54.4
6	Ground floor (1.8 m)	52.1
	First floor (3.8 m)	52.4
7	Ground floor (1.8 m)	55.8
8	Ground floor (1.8 m)	56.8
	First floor (3.5 m)	57.9
9	Ground floor (1.8 m)	57.2
10	Ground floor (1.8 m)	51.9
11	Ground floor (1.8 m)	53.2
12	Ground floor (1.8 m)	49.3
13	Ground floor (1.8 m)	47.2
	First floor (3.7 m)	47.7
14	Ground floor (1.8 m)	42.8
15	Ground floor (1.8 m)	42.7
	First floor (4.1 m)	43.8

TRONCO 1 KM 8-10 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 15-JUL-2008

Position : from (1484586.1m, 4497851.0m) to (1486814.6m, 4498529.5m)

Calculation parameters : mode CSTB.92, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	54.9
2	Ground floor (1.8 m)	54.5
	First floor (3.7 m)	57.1
3	Ground floor (1.8 m)	54.3
	First floor (3.7 m)	57.1
4	Ground floor (1.8 m)	60.3
	First floor (3.8 m)	62.2
	Second floor (6.2 m)	63.0
5	Ground floor (1.8 m)	67.9
6	Ground floor (1.8 m)	48.9
	First floor (3.4 m)	49.7
7	Ground floor (1.8 m)	48.5
8	Ground floor (1.8 m)	55.9
	First floor (3.7 m)	58.8
9	Ground floor (1.8 m)	58.1
10	Ground floor (1.8 m)	57.9
	First floor (4.5 m)	58.4
11	Ground floor (1.8 m)	60.1
	First floor (4.0 m)	61.1

12	Ground floor (1.8 m)	50.4
13	Ground floor (1.8 m)	46.5
	First floor (3.7 m)	49.0
	Second floor (5.9 m)	52.1
	3th floor (8.1 m)	54.5
14	Ground floor (1.8 m)	52.2
15	Ground floor (1.8 m)	51.1
	First floor (4.0 m)	52.2
	Second floor (6.4 m)	52.9
16	Ground floor (1.8 m)	56.1
	First floor (3.6 m)	57.7
17	Ground floor (1.8 m)	60.0
18	Ground floor (1.8 m)	60.1
19	Ground floor (1.8 m)	62.9
	First floor (3.9 m)	64.7
20	Ground floor (1.8 m)	59.5
	First floor (4.6 m)	61.7
21	Ground floor (1.8 m)	54.2
	First floor (3.6 m)	54.9
22	Ground floor (1.8 m)	55.1
	First floor (3.9 m)	57.0
	Second floor (6.3 m)	59.3
23	Ground floor (1.8 m)	48.9
24	Ground floor (1.8 m)	46.3

TRONCO 1 KM 8-10 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 15-JUL-2008

Position : from (1484579.1m, 4497846.0m) to (1486819.3m, 4498541.0m)

Calculation parameters : mode CSTB.92, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	46.6
2	Ground floor (1.8 m)	46.3
	First floor (3.7 m)	48.9
3	Ground floor (1.8 m)	46.1
	First floor (3.7 m)	48.9
4	Ground floor (1.8 m)	52.1
	First floor (3.8 m)	54.0
	Second floor (6.2 m)	54.8
5	Ground floor (1.8 m)	59.7
6	Ground floor (1.8 m)	40.7
	First floor (3.4 m)	41.6
7	Ground floor (1.8 m)	40.4
8	Ground floor (1.8 m)	47.8
	First floor (3.7 m)	50.7
9	Ground floor (1.8 m)	50.0

10	Ground floor (1.8 m)	49.7
	First floor (4.5 m)	50.2
11	Ground floor (1.8 m)	51.9
	First floor (4.0 m)	52.9
12	Ground floor (1.8 m)	42.2
13	Ground floor (1.8 m)	38.3
	First floor (3.7 m)	40.8
	Second floor (5.9 m)	43.8
	3th floor (8.1 m)	46.3
14	Ground floor (1.8 m)	44.0
15	Ground floor (1.8 m)	42.9
	First floor (4.0 m)	44.0
	Second floor (6.4 m)	44.7
16	Ground floor (1.8 m)	48.0
	First floor (3.6 m)	49.6
17	Ground floor (1.8 m)	52.0
18	Ground floor (1.8 m)	52.0
19	Ground floor (1.8 m)	54.8
	First floor (3.9 m)	56.6
20	Ground floor (1.8 m)	51.4
	First floor (4.6 m)	53.6
21	Ground floor (1.8 m)	46.1
	First floor (3.6 m)	46.8
22	Ground floor (1.8 m)	47.0
	First floor (3.9 m)	48.9
	Second floor (6.3 m)	51.2
23	Ground floor (1.8 m)	40.8
24	Ground floor (1.8 m)	38.2

TRONCO 1 KM 12-13 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 3-JAN-1980

Position : from (1488552.8m, 4497827.5m) to (1489761.4m, 4498566.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	58.3
2	Ground floor (1.8 m)	56.1
	First floor (3.8 m)	57.6
3	Ground floor (1.8 m)	59.7
4	Ground floor (1.8 m)	58.4
	First floor (3.8 m)	59.0
	Second floor (6.0 m)	59.3
5	Ground floor (1.8 m)	58.1
6	Ground floor (1.8 m)	57.4
7	Ground floor (1.8 m)	55.9
	First floor (3.9 m)	56.4

8	Ground floor (1.8 m)	55.9
9	Ground floor (1.8 m)	54.6
10	Ground floor (1.8 m)	50.4
	First floor (4.2 m)	50.9
	Second floor (6.8 m)	51.0

TRONCO 1 KM 12-13 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 3-JAN-1980

Position : from (1488557.9m, 4497832.5m) to (1489756.3m, 4498561.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	50.2
2	Ground floor (1.8 m)	48.0
	First floor (3.8 m)	49.5
3	Ground floor (1.8 m)	51.6
4	Ground floor (1.8 m)	50.3
	First floor (3.8 m)	50.9
	Second floor (6.0 m)	51.2
5	Ground floor (1.8 m)	50.0
6	Ground floor (1.8 m)	49.3
7	Ground floor (1.8 m)	47.8
	First floor (3.9 m)	48.3
8	Ground floor (1.8 m)	47.8
9	Ground floor (1.8 m)	46.5
10	Ground floor (1.8 m)	42.3
	First floor (4.2 m)	42.8
	Second floor (6.8 m)	42.9

TRONCO 1 KM 14-15 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 3-JAN-1980

Position : from (1490558.5m, 4498012.0m) to (1491731.4m, 4498542.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	63.2
2	Ground floor (1.8 m)	54.3
3	Ground floor (1.8 m)	63.8
4	Ground floor (1.8 m)	59.3
	First floor (3.7 m)	62.0
	Second floor (5.8 m)	62.8

5	Ground floor (1.8 m)	60.5
	First floor (3.6 m)	61.4
6	Ground floor (1.8 m)	61.1
7	Ground floor (1.8 m)	61.6
8	Ground floor (1.8 m)	54.6
	First floor (3.6 m)	55.0
9	Ground floor (1.8 m)	56.0
10	Ground floor (1.8 m)	61.8
11	Ground floor (1.8 m)	61.1
12	Ground floor (1.8 m)	58.8
13	Ground floor (1.8 m)	61.5
14	Ground floor (1.8 m)	61.0
15	Ground floor (1.8 m)	59.8
16	Ground floor (1.8 m)	59.2
	First floor (3.9 m)	59.6
17	Ground floor (1.8 m)	59.6
18	Ground floor (1.8 m)	58.4
19	Ground floor (1.8 m)	57.6
20	Ground floor (1.8 m)	59.1
21	Ground floor (1.8 m)	59.0
	First floor (4.3 m)	60.5

TRONCO 1 KM 14-15 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 3-JAN-1980

Position : from (1490551.0m, 4498009.5m) to (1491735.1m, 4498553.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	55.1
2	Ground floor (1.8 m)	46.2
3	Ground floor (1.8 m)	55.7
4	Ground floor (1.8 m)	51.2
	First floor (3.7 m)	53.9
	Second floor (5.8 m)	54.7
5	Ground floor (1.8 m)	52.4
	First floor (3.6 m)	53.3
6	Ground floor (1.8 m)	53.0
7	Ground floor (1.8 m)	53.5
8	Ground floor (1.8 m)	46.5
	First floor (3.6 m)	46.9
9	Ground floor (1.8 m)	47.9
10	Ground floor (1.8 m)	53.7
11	Ground floor (1.8 m)	53.0
12	Ground floor (1.8 m)	50.7
13	Ground floor (1.8 m)	53.4
14	Ground floor (1.8 m)	52.9

15	Ground floor (1.8 m)	51.7
16	Ground floor (1.8 m)	51.2
	First floor (3.9 m)	51.5
17	Ground floor (1.8 m)	51.5
18	Ground floor (1.8 m)	50.3
19	Ground floor (1.8 m)	49.5
20	Ground floor (1.8 m)	51.0
21	Ground floor (1.8 m)	50.9
	First floor (4.3 m)	52.4

TRONCO 1 KM 19-20 DIURNO POST OPERAM

CALCUL N° 4

Comment : calculation n°4 (Receiver)

Creation date : 29-JUL-2008

Position : from (1494921.6m, 4499219.0m) to (1496336.8m, 4500197.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	63.4
3	Ground floor (1.8 m)	56.6
4	Ground floor (1.8 m)	55.3
5	Ground floor (1.8 m)	48.0
6	Ground floor (1.8 m)	62.4

TRONCO 1 KM 19-20 NOTTURNO POST OPERAM

CALCUL N° 5

Comment : calculation n°5 (Receiver)

Creation date : 29-JUL-2008

Position : from (1495040.5m, 4499228.0m) to (1496344.1m, 4500182.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	55.3
3	Ground floor (1.8 m)	48.5
4	Ground floor (1.8 m)	47.2
5	Ground floor (1.8 m)	39.9
6	Ground floor (1.8 m)	54.2

TRONCO 1 KM 22-25 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 1-MAR-1999

Position : from (1497341.6m, 4501181.0m) to (1500398.3m, 4503112.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq
 Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	56.8
	First floor (3.8 m)	59.4
	Second floor (6.2 m)	59.5
2	Ground floor (1.8 m)	58.6
3	Ground floor (1.8 m)	60.6
	First floor (4.0 m)	61.1
	Ground floor (1.8 m)	56.9
5	Ground floor (1.8 m)	64.2
	First floor (3.7 m)	65.7
	Second floor (5.8 m)	65.8
	Ground floor (1.8 m)	61.4
	First floor (3.7 m)	62.0
	Second floor (5.8 m)	62.4
7	Ground floor (1.8 m)	58.1
8	Ground floor (1.8 m)	60.5
	First floor (3.9 m)	60.4
9	Ground floor (1.8 m)	56.2
	First floor (3.7 m)	57.0
10	Ground floor (1.8 m)	57.2
	First floor (3.6 m)	57.6
	Second floor (5.7 m)	57.4
11	Ground floor (1.8 m)	61.3
12	Ground floor (1.8 m)	58.6
13	Ground floor (1.8 m)	54.1
14	Ground floor (1.8 m)	59.4
	First floor (3.7 m)	60.1
15	Ground floor (1.8 m)	55.5
	First floor (3.6 m)	56.7
16	Ground floor (1.8 m)	56.4
17	Ground floor (1.8 m)	58.1
18	Ground floor (1.8 m)	60.1
19	Ground floor (1.8 m)	61.3
20	Ground floor (1.8 m)	60.5

TRONCO 1 KM 22-25 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 1-MAR-1999

Position : from (1497358.4m, 4501194.0m) to (1500388.3m, 4503099.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	48.7
	First floor (3.8 m)	51.3

	Second floor (6.2 m)	51.4
2	Ground floor (1.8 m)	50.5
3	Ground floor (1.8 m)	52.5
	First floor (4.0 m)	53.0
4	Ground floor (1.8 m)	48.8
5	Ground floor (1.8 m)	56.1
	First floor (3.7 m)	57.6
	Second floor (5.8 m)	57.7
6	Ground floor (1.8 m)	53.3
	First floor (3.7 m)	53.9
	Second floor (5.8 m)	54.3
7	Ground floor (1.8 m)	50.0
8	Ground floor (1.8 m)	52.4
	First floor (3.9 m)	52.3
9	Ground floor (1.8 m)	48.1
	First floor (3.7 m)	49.0
10	Ground floor (1.8 m)	49.1
	First floor (3.6 m)	49.5
	Second floor (5.7 m)	49.3
11	Ground floor (1.8 m)	53.2
12	Ground floor (1.8 m)	50.5
13	Ground floor (1.8 m)	46.0
14	Ground floor (1.8 m)	51.3
	First floor (3.7 m)	52.0
15	Ground floor (1.8 m)	47.4
	First floor (3.6 m)	48.6
16	Ground floor (1.8 m)	48.3
17	Ground floor (1.8 m)	50.0
18	Ground floor (1.8 m)	52.0
19	Ground floor (1.8 m)	53.2
20	Ground floor (1.8 m)	52.4

TRONCO 1 CANTIERE AL KM 24 CORSO D'OPERA DIURNO

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 6-AUG-2008

Position : from (1498922.5m, 4502223.5m) to (1500308.5m, 4503082.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	57.3
	First floor (3.6 m)	57.8
	Second floor (5.7 m)	57.8
2	Ground floor (1.8 m)	52.8
3	Ground floor (1.8 m)	53.6
	First floor (3.7 m)	54.2
4	Ground floor (1.8 m)	48.7
5	Ground floor (1.8 m)	48.4

	First floor (3.6 m)	49.5
6	Ground floor (1.8 m)	46.7
	First floor (4.2 m)	50.0
7	Ground floor (1.8 m)	49.7
8	Ground floor (1.8 m)	50.9
9	Ground floor (1.8 m)	53.5
10	Ground floor (1.8 m)	54.1
11	Ground floor (1.8 m)	57.6
12	Ground floor (1.8 m)	54.2

TRONCO 1 CANTIERE AL KM 24 CORSO D'OPERA NOTTURNO

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 6-AUG-2008

Position : from (1498979.3m, 4502185.0m) to (1500242.5m, 4503098.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	51.5
	First floor (3.6 m)	51.9
	Second floor (5.7 m)	51.8
2	Ground floor (1.8 m)	43.7
3	Ground floor (1.8 m)	43.3
	First floor (3.7 m)	41.5
4	Ground floor (1.8 m)	44.4
5	Ground floor (1.8 m)	40.6
	First floor (3.6 m)	40.7
6	Ground floor (1.8 m)	42.8
	First floor (4.2 m)	43.1
7	Ground floor (1.8 m)	42.3
8	Ground floor (1.8 m)	42.3
9	Ground floor (1.8 m)	42.5
10	Ground floor (1.8 m)	39.0
11	Ground floor (1.8 m)	55.6
12	Ground floor (1.8 m)	53.6

TRONCO 2 KM 0-3 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 22-JUL-2008

Position : from (1506295.4m, 4507806.5m) to (1509389.9m, 4510138.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	59.4

2	Ground floor (1.8 m)	68.8
3	Ground floor (1.8 m)	67.0
4	Ground floor (1.8 m)	51.3
5	Ground floor (1.8 m)	51.2
	First floor (3.4 m)	53.1
6	Ground floor (1.8 m)	61.8
7	Ground floor (1.8 m)	64.5
8	Ground floor (1.8 m)	64.1
9	Ground floor (1.8 m)	63.5
10	Ground floor (1.8 m)	64.1
11	Ground floor (1.8 m)	58.0
12	Ground floor (1.8 m)	55.6
	First floor (3.7 m)	56.8
13	Ground floor (1.8 m)	58.4
14	Ground floor (1.8 m)	58.0
15	Ground floor (1.8 m)	58.9
16	Ground floor (1.8 m)	55.7
17	Ground floor (1.8 m)	57.4
	First floor (3.5 m)	58.5
18	Ground floor (1.8 m)	63.1
19	Ground floor (1.8 m)	52.4
20	Ground floor (1.8 m)	63.0
	First floor (3.8 m)	64.6
21	Ground floor (1.8 m)	60.6
	First floor (4.0 m)	60.8
22	Ground floor (1.8 m)	62.6
	First floor (3.7 m)	62.6
23	Ground floor (1.8 m)	56.2
24	Ground floor (1.8 m)	60.5
25	Ground floor (1.8 m)	58.3
26	Ground floor (1.8 m)	58.4
27	Ground floor (1.8 m)	57.7
	First floor (4.0 m)	57.6
28	Ground floor (1.8 m)	58.8
29	Ground floor (1.8 m)	57.1
	First floor (3.7 m)	57.4
30	Ground floor (1.8 m)	54.3
31	Ground floor (1.8 m)	61.5
32	Ground floor (1.8 m)	54.5
33	Ground floor (1.8 m)	50.5
34	Ground floor (1.8 m)	56.5
	First floor (3.4 m)	57.7
35	Ground floor (1.8 m)	53.6
36	Ground floor (1.8 m)	47.6
37	Ground floor (1.8 m)	54.3
	First floor (3.6 m)	55.1
38	Ground floor (1.8 m)	63.2
39	Ground floor (1.8 m)	61.7
	First floor (3.4 m)	62.6
40	Ground floor (1.8 m)	59.0
41	Ground floor (1.8 m)	54.3

42 Ground floor (1.8 m) 61.4

TRONCO 2 KM 0-3 NOTTURNO POST OPERAM**CALCUL N° 2**

Comment : calculation n°2 (Receiver)

Creation date : 22-JUL-2008

Position : from (1506303.3m, 4507818.0m) to (1509382.1m, 4510134.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	51.3
2	Ground floor (1.8 m)	60.7
3	Ground floor (1.8 m)	58.9
4	Ground floor (1.8 m)	43.2
5	Ground floor (1.8 m)	43.1
	First floor (3.4 m)	45.0
6	Ground floor (1.8 m)	53.7
7	Ground floor (1.8 m)	56.4
8	Ground floor (1.8 m)	56.0
9	Ground floor (1.8 m)	55.4
10	Ground floor (1.8 m)	56.0
11	Ground floor (1.8 m)	49.9
12	Ground floor (1.8 m)	47.5
	First floor (3.7 m)	48.7
13	Ground floor (1.8 m)	50.3
14	Ground floor (1.8 m)	49.9
15	Ground floor (1.8 m)	50.8
16	Ground floor (1.8 m)	47.6
17	Ground floor (1.8 m)	49.3
	First floor (3.5 m)	50.4
18	Ground floor (1.8 m)	55.0
19	Ground floor (1.8 m)	44.3
20	Ground floor (1.8 m)	54.9
	First floor (3.8 m)	56.5
21	Ground floor (1.8 m)	52.5
	First floor (4.0 m)	52.7
22	Ground floor (1.8 m)	54.5
	First floor (3.7 m)	54.5
23	Ground floor (1.8 m)	48.1
24	Ground floor (1.8 m)	52.4
25	Ground floor (1.8 m)	50.1
26	Ground floor (1.8 m)	50.3
27	Ground floor (1.8 m)	49.5
	First floor (4.0 m)	49.5
28	Ground floor (1.8 m)	50.7
29	Ground floor (1.8 m)	48.9
	First floor (3.7 m)	49.2
30	Ground floor (1.8 m)	46.2

31	Ground floor (1.8 m)	53.4
32	Ground floor (1.8 m)	46.4
33	Ground floor (1.8 m)	42.4
34	Ground floor (1.8 m)	48.4
	First floor (3.4 m)	49.6
35	Ground floor (1.8 m)	45.5
36	Ground floor (1.8 m)	39.5
37	Ground floor (1.8 m)	46.2
	First floor (3.6 m)	47.0
38	Ground floor (1.8 m)	55.1
39	Ground floor (1.8 m)	53.6
	First floor (3.4 m)	54.5
40	Ground floor (1.8 m)	50.9
41	Ground floor (1.8 m)	46.2
42	Ground floor (1.8 m)	53.3

TRONCO 2 KM 0-3 NOTTURNO POST OPERAM CON MITIGAZIONE

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 29-JUL-2008

Position : from (1506910.4m, 4508098.5m) to (1507723.9m, 4508771.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	51.2
2	Ground floor (1.8 m)	56.5
3	Ground floor (1.8 m)	55.5
4	Ground floor (1.8 m)	42.9
5	Ground floor (1.8 m)	42.5
	First floor (3.4 m)	44.4
6	Ground floor (1.8 m)	52.8
7	Ground floor (1.8 m)	56.2
8	Ground floor (1.8 m)	55.8
9	Ground floor (1.8 m)	55.3
10	Ground floor (1.8 m)	55.9
11	Ground floor (1.8 m)	49.5
12	Ground floor (1.8 m)	47.2
	First floor (3.7 m)	48.4
13	Ground floor (1.8 m)	50.3
14	Ground floor (1.8 m)	49.9
15	Ground floor (1.8 m)	50.7
28	Ground floor (1.8 m)	50.7
29	Ground floor (1.8 m)	48.9
	First floor (3.7 m)	49.2
30	Ground floor (1.8 m)	46.2
31	Ground floor (1.8 m)	53.4
32	Ground floor (1.8 m)	46.4
33	Ground floor (1.8 m)	42.5

TRONCO 2 KM 8-11 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 22-JUL-2008

Position : from (1512495.4m, 4512581.5m) to (1515545.9m, 4514604.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	47.4
2	Ground floor (1.8 m)	39.9
3	Ground floor (1.8 m)	49.4
	First floor (4.3 m)	51.2
4	Ground floor (1.8 m)	42.4
	First floor (3.8 m)	46.7
5	Ground floor (1.8 m)	45.8
	First floor (3.4 m)	46.1
6	Ground floor (1.8 m)	46.3
7	Ground floor (1.8 m)	51.9
8	Ground floor (1.8 m)	57.7
9	Ground floor (1.8 m)	60.0
10	Ground floor (1.8 m)	66.5
11	Ground floor (1.8 m)	62.9
12	Ground floor (1.8 m)	58.3
13	Ground floor (1.8 m)	58.3
14	Ground floor (1.8 m)	57.3
15	Ground floor (1.8 m)	62.7
16	Ground floor (1.8 m)	64.2
17	Ground floor (1.8 m)	58.4
18	Ground floor (1.8 m)	57.1
19	Ground floor (1.8 m)	56.1
20	Ground floor (1.8 m)	57.9
21	Ground floor (1.8 m)	54.3
22	Ground floor (1.8 m)	55.0
23	Ground floor (1.8 m)	61.9
24	Ground floor (1.8 m)	57.1
	First floor (3.7 m)	58.4
25	Ground floor (1.8 m)	60.5
26	Ground floor (1.8 m)	50.6
27	Ground floor (1.8 m)	52.0
	First floor (4.5 m)	52.5
28	Ground floor (1.8 m)	49.1
29	Ground floor (1.8 m)	60.8
30	Ground floor (1.8 m)	57.7
31	Ground floor (1.8 m)	51.6
32	Ground floor (1.8 m)	58.3
33	Ground floor (1.8 m)	60.5
	First floor (4.5 m)	60.9

34	Ground floor (1.8 m)	60.6
	First floor (4.6 m)	61.6
35	Ground floor (1.8 m)	61.2
	First floor (4.0 m)	61.6
36	Ground floor (1.8 m)	59.7
37	Ground floor (1.8 m)	51.7
38	Ground floor (1.8 m)	52.3
39	Ground floor (1.8 m)	52.4
40	Ground floor (1.8 m)	52.8
	First floor (3.4 m)	53.9
41	Ground floor (1.8 m)	55.2
42	Ground floor (1.8 m)	56.4
43	Ground floor (1.8 m)	56.2
44	Ground floor (1.8 m)	55.8
	First floor (3.7 m)	56.7
	Second floor (5.9 m)	56.7
45	Ground floor (1.8 m)	56.3
46	Ground floor (1.8 m)	59.5
	First floor (3.5 m)	59.6
47	Ground floor (1.8 m)	60.0
48	Ground floor (1.8 m)	56.0
	First floor (3.8 m)	56.7
	Second floor (6.1 m)	57.1
49	Ground floor (1.8 m)	68.7
50	Ground floor (1.8 m)	65.6
51	Ground floor (1.8 m)	58.9
52	Ground floor (1.8 m)	60.9
53	Ground floor (1.8 m)	57.8

TRONCO 2 KM 8-11 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 22-JUL-2008

Position : from (1512508.8m, 4512568.0m) to (1515519.0m, 4514597.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	39.4
2	Ground floor (1.8 m)	31.8
3	Ground floor (1.8 m)	41.3
	First floor (4.3 m)	43.1
4	Ground floor (1.8 m)	34.3
	First floor (3.8 m)	38.6
5	Ground floor (1.8 m)	37.7
	First floor (3.4 m)	38.0
6	Ground floor (1.8 m)	38.2
7	Ground floor (1.8 m)	43.8
8	Ground floor (1.8 m)	49.6

9	Ground floor (1.8 m)	51.9
10	Ground floor (1.8 m)	58.3
11	Ground floor (1.8 m)	54.7
12	Ground floor (1.8 m)	50.2
13	Ground floor (1.8 m)	50.1
14	Ground floor (1.8 m)	49.2
15	Ground floor (1.8 m)	54.6
16	Ground floor (1.8 m)	56.2
17	Ground floor (1.8 m)	50.3
18	Ground floor (1.8 m)	49.0
19	Ground floor (1.8 m)	48.0
20	Ground floor (1.8 m)	49.9
21	Ground floor (1.8 m)	46.2
22	Ground floor (1.8 m)	46.9
23	Ground floor (1.8 m)	53.8
24	Ground floor (1.8 m)	49.0
	First floor (3.7 m)	50.3
25	Ground floor (1.8 m)	52.4
26	Ground floor (1.8 m)	42.4
27	Ground floor (1.8 m)	43.9
	First floor (4.5 m)	44.4
28	Ground floor (1.8 m)	41.0
29	Ground floor (1.8 m)	52.7
30	Ground floor (1.8 m)	49.5
31	Ground floor (1.8 m)	43.4
32	Ground floor (1.8 m)	50.1
33	Ground floor (1.8 m)	52.3
	First floor (4.5 m)	52.7
34	Ground floor (1.8 m)	52.4
	First floor (4.6 m)	53.4
35	Ground floor (1.8 m)	53.0
	First floor (4.0 m)	53.4
36	Ground floor (1.8 m)	51.6
37	Ground floor (1.8 m)	43.6
38	Ground floor (1.8 m)	44.2
39	Ground floor (1.8 m)	44.3
40	Ground floor (1.8 m)	44.7
	First floor (3.4 m)	45.8
41	Ground floor (1.8 m)	47.1
42	Ground floor (1.8 m)	48.3
43	Ground floor (1.8 m)	48.1
44	Ground floor (1.8 m)	47.7
	First floor (3.7 m)	48.6
	Second floor (5.9 m)	48.6
45	Ground floor (1.8 m)	48.2
46	Ground floor (1.8 m)	51.4
	First floor (3.5 m)	51.5
47	Ground floor (1.8 m)	51.9
48	Ground floor (1.8 m)	47.9
	First floor (3.8 m)	48.6
	Second floor (6.1 m)	49.0

49	Ground floor (1.8 m)	60.6
50	Ground floor (1.8 m)	57.5
51	Ground floor (1.8 m)	50.8
52	Ground floor (1.8 m)	52.8
53	Ground floor (1.8 m)	49.7

TRONCO 2 KM 8-11 NOTTURNO POST OPERAM CON MITIGAZIONE

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 29-JUL-2008

Position : from (1514682.4m, 4513697.0m) to (1515095.6m, 4514056.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
16	Ground floor (1.8 m)	56.2
17	Ground floor (1.8 m)	50.3
48	Ground floor (1.8 m)	47.7
	First floor (3.8 m)	48.3
	Second floor (6.1 m)	48.7
49	Ground floor (1.8 m)	55.4
50	Ground floor (1.8 m)	54.3
51	Ground floor (1.8 m)	50.6

TRONCO 2 KM 12,5-15 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 29-JUL-2008

Position : from (1516649.1m, 4514050.5m) to (1519457.0m, 4514778.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	53.3
2	Ground floor (1.8 m)	53.1
	First floor (3.7 m)	53.7
3	Ground floor (1.8 m)	59.5
4	Ground floor (1.8 m)	63.1
5	Ground floor (1.8 m)	66.7
6	Ground floor (1.8 m)	65.6
7	Ground floor (1.8 m)	63.3
8	Ground floor (1.8 m)	68.8
	First floor (3.7 m)	69.1
9	Ground floor (1.8 m)	62.5
	First floor (3.7 m)	64.7
	Second floor (5.8 m)	66.0
10	Ground floor (1.8 m)	63.9

	First floor (3.9 m)	64.5
11	Ground floor (1.8 m)	58.5
12	Ground floor (1.8 m)	57.0
13	Ground floor (1.8 m)	59.9
14	Ground floor (1.8 m)	61.8
15	Ground floor (1.8 m)	58.5
16	Ground floor (1.8 m)	57.3
17	Ground floor (1.8 m)	60.0
18	Ground floor (1.8 m)	57.5
	First floor (4.1 m)	58.7
19	Ground floor (1.8 m)	61.5
	First floor (3.4 m)	62.2
20	Ground floor (1.8 m)	61.6
	First floor (3.4 m)	62.5
21	Ground floor (1.8 m)	61.7
22	Ground floor (1.8 m)	62.0
	First floor (4.1 m)	65.9
23	Ground floor (1.8 m)	44.2
	First floor (3.4 m)	44.9

TRONCO 2 KM 12,5-15 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 29-JUL-2008

Position : from (1516646.1m, 4514065.5m) to (1519472.0m, 4514796.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	45.2
2	Ground floor (1.8 m)	45.0
	First floor (3.7 m)	45.6
3	Ground floor (1.8 m)	51.4
4	Ground floor (1.8 m)	55.0
5	Ground floor (1.8 m)	58.6
6	Ground floor (1.8 m)	57.5
7	Ground floor (1.8 m)	55.2
8	Ground floor (1.8 m)	60.7
	First floor (3.7 m)	61.0
9	Ground floor (1.8 m)	54.4
	First floor (3.7 m)	56.6
	Second floor (5.8 m)	57.9
10	Ground floor (1.8 m)	55.8
	First floor (3.9 m)	56.4
11	Ground floor (1.8 m)	50.4
12	Ground floor (1.8 m)	48.8
13	Ground floor (1.8 m)	51.8
14	Ground floor (1.8 m)	53.7
15	Ground floor (1.8 m)	50.4

16	Ground floor (1.8 m)	49.2
17	Ground floor (1.8 m)	51.9
18	Ground floor (1.8 m)	49.4
	First floor (4.1 m)	50.6
19	Ground floor (1.8 m)	53.4
	First floor (3.4 m)	54.1
20	Ground floor (1.8 m)	53.5
	First floor (3.4 m)	54.4
21	Ground floor (1.8 m)	53.6
22	Ground floor (1.8 m)	53.9
	First floor (4.1 m)	57.8
23	Ground floor (1.8 m)	36.0
	First floor (3.4 m)	36.7

TRONCO 2 KM 12,5-15 NOTTURNO POST OPERAM CON MITIGAZIONE

CALCUL N° 3

Comment : calculation n°3 (Receiver)

Creation date : 29-JUL-2008

Position : from (1517014.8m, 4514224.5m) to (1517335.4m, 4514482.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
8	Ground floor (1.8 m)	55.1
	First floor (3.7 m)	58.2
9	Ground floor (1.8 m)	52.0
	First floor (3.7 m)	54.5
	Second floor (5.8 m)	56.6
10	Ground floor (1.8 m)	52.5
	First floor (3.9 m)	53.3

TRONCO 2 KM 16,5-19 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 22-JUL-2008

Position : from (1520278.3m, 4514250.0m) to (1522878.4m, 4516244.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	68.2
2	Ground floor (1.8 m)	58.4
3	Ground floor (1.8 m)	56.0
4	Ground floor (1.8 m)	55.2
5	Ground floor (1.8 m)	57.1
6	Ground floor (1.8 m)	58.8
	First floor (3.4 m)	59.3

7	Ground floor (1.8 m)	59.8
8	Ground floor (1.8 m)	59.2
9	Ground floor (1.8 m)	58.8
10	Ground floor (1.8 m)	49.3
11	Ground floor (1.8 m)	64.3
	First floor (3.4 m)	64.7
12	Ground floor (1.8 m)	62.3

TRONCO 2 KM 16,5-19 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 22-JUL-2008

Position : from (1520285.1m, 4514257.0m) to (1522868.1m, 4516237.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	60.1
2	Ground floor (1.8 m)	50.3
3	Ground floor (1.8 m)	47.9
4	Ground floor (1.8 m)	47.1
5	Ground floor (1.8 m)	49.0
6	Ground floor (1.8 m)	50.7
	First floor (3.4 m)	51.2
7	Ground floor (1.8 m)	51.8
8	Ground floor (1.8 m)	51.1
9	Ground floor (1.8 m)	50.8
10	Ground floor (1.8 m)	41.2
11	Ground floor (1.8 m)	56.2
	First floor (3.4 m)	56.6
12	Ground floor (1.8 m)	54.2

TRONCO 2 KM 16,5-19 NOTTURNO POST OPERAM CON MITIGAZIONE

CALCUL N° 3

Comment : calculation n°3 (Receiver)

Creation date : 29-JUL-2008

Position : from (1520826.3m, 4514553.0m) to (1521323.1m, 4514886.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	56.5

TRONCO 2 CANTIERE AL KM 16,3 CORSO D'OPERA DIURNO

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 6-AUG-2008

Position : from (1519641.3m, 4513976.0m) to (1520917.5m, 4514653.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	64.3
	First floor (3.5 m)	63.1
2	Ground floor (1.8 m)	59.5
	First floor (4.1 m)	59.6
	Second floor (6.8 m)	59.1
3	Ground floor (1.8 m)	55.9
4	Ground floor (1.8 m)	51.2

TRONCO 2 CANTIERE AL KM 16,3 CORSO D'OPERA NOTTURNO

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 6-AUG-2008

Position : from (1519644.0m, 4513978.5m) to (1520886.3m, 4514653.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	41.9
	First floor (3.5 m)	42.6
2	Ground floor (1.8 m)	42.5
	First floor (4.1 m)	43.5
	Second floor (6.8 m)	42.8
3	Ground floor (1.8 m)	55.1
4	Ground floor (1.8 m)	50.7

TRONCO 3 KM 0,5-2,5 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 23-JUL-2008

Position : from (1522749.4m, 4516175.0m) to (1524955.3m, 4517608.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	63.3
2	Ground floor (1.8 m)	65.9
3	Ground floor (1.8 m)	56.9
	First floor (3.7 m)	57.5
4	Ground floor (1.8 m)	59.3
	First floor (3.7 m)	59.8

5	Ground floor (1.8 m)	56.8
	First floor (4.3 m)	58.0
6	Ground floor (1.8 m)	59.1
7	Ground floor (1.8 m)	58.7
8	Ground floor (1.8 m)	68.2
9	Ground floor (1.8 m)	59.4
10	Ground floor (1.8 m)	62.9
11	Ground floor (1.8 m)	56.4
	First floor (3.7 m)	56.4
12	Ground floor (1.8 m)	56.6
	First floor (3.8 m)	56.6
13	Ground floor (1.8 m)	55.2
	First floor (3.6 m)	57.8
	Second floor (5.8 m)	59.8
14	Ground floor (1.8 m)	59.3
15	Ground floor (1.8 m)	53.5
	First floor (3.4 m)	53.6
16	Ground floor (1.8 m)	58.3
17	Ground floor (1.8 m)	58.5
18	Ground floor (1.8 m)	55.3
19	Ground floor (1.8 m)	51.8

TRONCO 3 KM 0,5-2,5 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 23-JUL-2008

Position : from (1522814.3m, 4516190.5m) to (1524942.3m, 4517619.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	55.2
2	Ground floor (1.8 m)	57.8
3	Ground floor (1.8 m)	48.8
	First floor (3.7 m)	49.4
4	Ground floor (1.8 m)	51.2
	First floor (3.7 m)	51.7
5	Ground floor (1.8 m)	48.7
	First floor (4.3 m)	49.9
6	Ground floor (1.8 m)	51.0
7	Ground floor (1.8 m)	50.6
8	Ground floor (1.8 m)	60.1
9	Ground floor (1.8 m)	51.3
10	Ground floor (1.8 m)	54.8
11	Ground floor (1.8 m)	48.2
	First floor (3.7 m)	48.2
12	Ground floor (1.8 m)	48.5
	First floor (3.8 m)	48.5
13	Ground floor (1.8 m)	47.0
	First floor (3.6 m)	49.6

	Second floor (5.8 m)	51.6
14	Ground floor (1.8 m)	51.2
15	Ground floor (1.8 m)	45.4
	First floor (3.4 m)	45.5
16	Ground floor (1.8 m)	50.3
17	Ground floor (1.8 m)	50.4
18	Ground floor (1.8 m)	47.2
19	Ground floor (1.8 m)	43.7

TRONCO 3 KM 0,5-2,5 NOTTURNO POST OPERAM CON MITIGAZIONI

CALCUL N° 4

Comment : calculation n°4 (Receiver)

Creation date : 29-JUL-2008

Position : from (1523936.8m, 4517088.5m) to (1524290.5m, 4517288.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
8	Ground floor (1.8 m)	56.4

TRONCO 3 KM 6-8 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 29-AUG-2008

Position : from (1527149.9m, 4519264.0m) to (1529364.0m, 4520482.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	57.2
	First floor (4.3 m)	60.7
2	Ground floor (1.8 m)	56.8
	First floor (3.5 m)	57.5
3	Ground floor (1.8 m)	53.1
	First floor (3.4 m)	54.8
4	Ground floor (1.8 m)	55.6
	First floor (4.4 m)	57.4
5	Ground floor (1.8 m)	54.9
6	Ground floor (1.8 m)	54.8
	First floor (4.1 m)	57.9
7	Ground floor (1.8 m)	59.7
	First floor (4.6 m)	62.0
8	Ground floor (1.8 m)	66.1
	First floor (3.5 m)	66.3
9	Ground floor (1.8 m)	65.4
10	Ground floor (1.8 m)	69.4
11	Ground floor (1.8 m)	60.1
12	Ground floor (1.8 m)	59.8
13	Ground floor (1.8 m)	66.3

14	Ground floor (1.8 m)	60.5
15	Ground floor (1.8 m)	60.3
16	Ground floor (1.8 m)	62.8
	First floor (3.8 m)	62.8
17	Ground floor (1.8 m)	56.5
18	Ground floor (1.8 m)	55.7
19	Ground floor (1.8 m)	55.4
20	Ground floor (1.8 m)	55.2
21	Ground floor (1.8 m)	55.4
	First floor (3.5 m)	55.7
22	Ground floor (1.8 m)	53.1
23	Ground floor (1.8 m)	53.2
24	Ground floor (1.8 m)	51.0
25	Ground floor (1.8 m)	52.7
	First floor (3.8 m)	52.6

TRONCO 3 KM 6-8 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 29-AUG-2008

Position : from (1527182.6m, 4519261.5m) to (1529359.4m, 4520463.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	49.2
	First floor (4.3 m)	52.6
2	Ground floor (1.8 m)	48.7
	First floor (3.5 m)	49.4
3	Ground floor (1.8 m)	45.0
	First floor (3.4 m)	46.7
4	Ground floor (1.8 m)	47.5
	First floor (4.4 m)	49.3
5	Ground floor (1.8 m)	46.7
6	Ground floor (1.8 m)	46.7
	First floor (4.1 m)	49.8
7	Ground floor (1.8 m)	51.6
	First floor (4.6 m)	53.9
8	Ground floor (1.8 m)	58.0
	First floor (3.5 m)	58.2
9	Ground floor (1.8 m)	57.1
10	Ground floor (1.8 m)	61.1
11	Ground floor (1.8 m)	51.8
12	Ground floor (1.8 m)	51.6
13	Ground floor (1.8 m)	58.0
14	Ground floor (1.8 m)	52.3
15	Ground floor (1.8 m)	52.0
16	Ground floor (1.8 m)	54.6
	First floor (3.8 m)	54.6
17	Ground floor (1.8 m)	48.3

18	Ground floor (1.8 m)	47.5
19	Ground floor (1.8 m)	47.2
20	Ground floor (1.8 m)	47.0
21	Ground floor (1.8 m)	47.2
	First floor (3.5 m)	47.5
22	Ground floor (1.8 m)	44.9
23	Ground floor (1.8 m)	45.0
24	Ground floor (1.8 m)	42.8
25	Ground floor (1.8 m)	44.6
	First floor (3.8 m)	44.5

TRONCO 3 KM 6-8 NOTTURNO POST OPERAM CON MITIGAZIONE

CALCUL N° 3

Comment : calculation n°3 (Receiver)

Creation date : 29-AUG-2008

Position : from (1527946.3m, 4519848.5m) to (1528297.3m, 4520115.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
9	Ground floor (1.8 m)	56.8
10	Ground floor (1.8 m)	53.1
11	Ground floor (1.8 m)	51.1
12	Ground floor (1.8 m)	51.2
13	Ground floor (1.8 m)	57.9

TRONCO 3 KM 9-14,5 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 28-JUL-2008

Position : from (1530040.3m, 4519971.0m) to (1535565.5m, 4522074.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	61.9
	First floor (3.6 m)	63.6
	Second floor (5.7 m)	64.3
2	Ground floor (1.8 m)	69.7
3	Ground floor (1.8 m)	61.0
4	Ground floor (1.8 m)	54.6
5	Ground floor (1.8 m)	57.5
6	Ground floor (1.8 m)	52.9
	First floor (4.1 m)	55.3
7	Ground floor (1.8 m)	54.7
	First floor (3.9 m)	57.2
	Second floor (6.3 m)	58.2
8	Ground floor (1.8 m)	62.1

	First floor (4.5 m)	65.3
9	Ground floor (1.8 m)	62.2
	First floor (3.8 m)	64.5
10	Ground floor (1.8 m)	61.3
11	Ground floor (1.8 m)	60.3
12	Ground floor (1.8 m)	59.1
13	Ground floor (1.8 m)	56.5
14	Ground floor (1.8 m)	55.6
	First floor (3.8 m)	55.6
15	Ground floor (1.8 m)	57.9
16	Ground floor (1.8 m)	59.0
17	Ground floor (1.8 m)	66.1
18	Ground floor (1.8 m)	58.5
	First floor (3.6 m)	59.5
19	Ground floor (1.8 m)	54.2
	First floor (3.8 m)	56.0
20	Ground floor (1.8 m)	53.9
	First floor (3.6 m)	56.2
	Second floor (5.7 m)	56.9
21	Ground floor (1.8 m)	54.6
	First floor (3.9 m)	56.0
22	Ground floor (1.8 m)	58.4
	First floor (4.4 m)	61.1
23	Ground floor (1.8 m)	58.4
	First floor (3.8 m)	60.8
	Second floor (6.1 m)	61.8
	3th floor (8.5 m)	63.1
24	Ground floor (1.8 m)	62.5
	First floor (3.9 m)	64.1
25	Ground floor (1.8 m)	63.3
	First floor (4.6 m)	64.2
26	Ground floor (1.8 m)	52.8
	First floor (3.9 m)	54.7
	Second floor (6.3 m)	55.5
27	Ground floor (1.8 m)	60.4
28	Ground floor (1.8 m)	68.9
	First floor (3.6 m)	68.8
29	Ground floor (1.8 m)	54.3
30	Ground floor (1.8 m)	53.8
31	Ground floor (1.8 m)	54.1
32	Ground floor (1.8 m)	62.9
	First floor (3.9 m)	65.0
33	Ground floor (1.8 m)	56.1
	First floor (3.9 m)	59.0
34	Ground floor (1.8 m)	66.9
	First floor (3.7 m)	67.7
	Second floor (6.0 m)	67.7
35	Ground floor (1.8 m)	55.8
36	Ground floor (1.8 m)	53.2
	First floor (3.4 m)	54.2
37	Ground floor (1.8 m)	56.8

38	Ground floor (1.8 m)	57.6
39	Ground floor (1.8 m)	56.4
40	Ground floor (1.8 m)	58.3
41	Ground floor (1.8 m)	56.5
	First floor (4.0 m)	57.2
42	Ground floor (1.8 m)	59.2
	First floor (3.7 m)	59.4
43	Ground floor (1.8 m)	62.5
	First floor (3.4 m)	64.1
44	Ground floor (1.8 m)	65.4
	First floor (3.6 m)	67.6
45	Ground floor (1.8 m)	57.6
	First floor (3.5 m)	58.2
46	Ground floor (1.8 m)	58.0
	First floor (3.9 m)	58.9
47	Ground floor (1.8 m)	67.1
	First floor (3.7 m)	67.3
48	Ground floor (1.8 m)	59.8
49	Ground floor (1.8 m)	59.2
50	Ground floor (1.8 m)	64.1
	First floor (3.4 m)	64.4
51	Ground floor (1.8 m)	57.4
52	Ground floor (1.8 m)	68.3
	First floor (3.5 m)	68.4
53	Ground floor (1.8 m)	59.3
	First floor (4.0 m)	61.6
54	Ground floor (1.8 m)	56.0
55	Ground floor (1.8 m)	57.4
56	Ground floor (1.8 m)	57.4
57	Ground floor (1.8 m)	57.9
58	Ground floor (1.8 m)	56.8
59	Ground floor (1.8 m)	57.3
60	Ground floor (1.8 m)	67.8
61	Ground floor (1.8 m)	70.6
	First floor (3.6 m)	70.5
62	Ground floor (1.8 m)	65.3
63	Ground floor (1.8 m)	55.8
64	Ground floor (1.8 m)	65.3
65	Ground floor (1.8 m)	61.0
66	Ground floor (1.8 m)	58.4
67	Ground floor (1.8 m)	54.7
	First floor (3.9 m)	55.8
68	Ground floor (1.8 m)	56.4
	First floor (3.5 m)	57.2
69	Ground floor (1.8 m)	58.3
70	Ground floor (1.8 m)	54.8
71	Ground floor (1.8 m)	63.4
72	Ground floor (1.8 m)	63.1
73	Ground floor (1.8 m)	61.9
74	Ground floor (1.8 m)	66.0
75	Ground floor (1.8 m)	63.6

76	Ground floor (1.8 m)	58.6
77	Ground floor (1.8 m)	56.9
	First floor (3.5 m)	56.9
78	Ground floor (1.8 m)	69.7
	First floor (3.9 m)	69.7
	Second floor (6.3 m)	69.3
79	Ground floor (1.8 m)	62.9
	First floor (4.2 m)	63.4
80	Ground floor (1.8 m)	60.1
	First floor (3.4 m)	60.1
81	Ground floor (1.8 m)	61.2
	First floor (4.0 m)	61.5
82	Ground floor (1.8 m)	56.8
83	Ground floor (1.8 m)	56.9
	First floor (4.0 m)	57.5
84	Ground floor (1.8 m)	60.6
	First floor (3.6 m)	62.3
	Second floor (5.7 m)	63.1
85	Ground floor (1.8 m)	57.3
	First floor (3.5 m)	57.3
86	Ground floor (1.8 m)	62.4
87	Ground floor (1.8 m)	57.8
	First floor (3.5 m)	58.3
88	Ground floor (1.8 m)	58.0
89	Ground floor (1.8 m)	61.1
	First floor (3.7 m)	61.5
	Second floor (5.9 m)	61.7
90	Ground floor (1.8 m)	56.4
	First floor (4.3 m)	56.8
91	Ground floor (1.8 m)	56.3
92	Ground floor (1.8 m)	58.3
93	Ground floor (1.8 m)	55.4
94	Ground floor (1.8 m)	52.9
95	Ground floor (1.8 m)	64.7
96	Ground floor (1.8 m)	52.9
97	Ground floor (1.8 m)	51.6
	First floor (3.7 m)	54.8
	Second floor (5.9 m)	57.4
98	Ground floor (1.8 m)	52.1
99	Ground floor (1.8 m)	56.9
	First floor (3.7 m)	59.9
100	Ground floor (1.8 m)	50.8
101	Ground floor (1.8 m)	52.7

TRONCO 3 KM 9-14,5 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 28-JUL-2008

Position : from (1530063.5m, 4519988.5m) to (1535553.9m, 4522103.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq
 Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	53.8
	First floor (3.6 m)	55.4
	Second floor (5.7 m)	56.1
2	Ground floor (1.8 m)	61.6
3	Ground floor (1.8 m)	52.9
4	Ground floor (1.8 m)	46.5
5	Ground floor (1.8 m)	49.4
6	Ground floor (1.8 m)	44.8
	First floor (4.1 m)	47.3
7	Ground floor (1.8 m)	46.6
	First floor (3.9 m)	49.1
	Second floor (6.3 m)	50.1
8	Ground floor (1.8 m)	54.0
	First floor (4.5 m)	57.2
9	Ground floor (1.8 m)	54.1
	First floor (3.8 m)	56.4
10	Ground floor (1.8 m)	53.2
11	Ground floor (1.8 m)	52.1
12	Ground floor (1.8 m)	51.0
13	Ground floor (1.8 m)	48.4
14	Ground floor (1.8 m)	47.4
	First floor (3.8 m)	47.5
15	Ground floor (1.8 m)	49.8
16	Ground floor (1.8 m)	50.9
17	Ground floor (1.8 m)	58.0
18	Ground floor (1.8 m)	50.3
	First floor (3.6 m)	51.4
19	Ground floor (1.8 m)	46.1
	First floor (3.8 m)	47.8
20	Ground floor (1.8 m)	45.8
	First floor (3.6 m)	48.1
	Second floor (5.7 m)	48.8
21	Ground floor (1.8 m)	46.5
	First floor (3.9 m)	47.8
22	Ground floor (1.8 m)	50.3
	First floor (4.4 m)	53.0
23	Ground floor (1.8 m)	50.3
	First floor (3.8 m)	52.7
	Second floor (6.1 m)	53.6
24	3th floor (8.5 m)	55.0
	Ground floor (1.8 m)	54.4
25	First floor (3.9 m)	56.0
	Ground floor (1.8 m)	55.2
26	First floor (4.6 m)	56.1
	Ground floor (1.8 m)	44.7
	First floor (3.9 m)	46.6
	Second floor (6.3 m)	47.4

27	Ground floor (1.8 m)	52.3
28	Ground floor (1.8 m)	60.8
	First floor (3.6 m)	60.7
29	Ground floor (1.8 m)	46.2
30	Ground floor (1.8 m)	45.7
31	Ground floor (1.8 m)	46.0
32	Ground floor (1.8 m)	54.8
	First floor (3.9 m)	56.9
33	Ground floor (1.8 m)	48.0
	First floor (3.9 m)	50.9
34	Ground floor (1.8 m)	58.8
	First floor (3.7 m)	59.6
	Second floor (6.0 m)	59.6
35	Ground floor (1.8 m)	47.7
36	Ground floor (1.8 m)	45.1
	First floor (3.4 m)	46.1
37	Ground floor (1.8 m)	48.7
38	Ground floor (1.8 m)	49.5
39	Ground floor (1.8 m)	48.3
40	Ground floor (1.8 m)	50.2
41	Ground floor (1.8 m)	48.4
	First floor (4.0 m)	49.2
42	Ground floor (1.8 m)	51.1
	First floor (3.7 m)	51.3
43	Ground floor (1.8 m)	54.4
	First floor (3.4 m)	56.0
44	Ground floor (1.8 m)	57.3
	First floor (3.6 m)	59.5
45	Ground floor (1.8 m)	49.5
	First floor (3.5 m)	50.1
46	Ground floor (1.8 m)	49.9
	First floor (3.9 m)	50.8
47	Ground floor (1.8 m)	59.0
	First floor (3.7 m)	59.2
48	Ground floor (1.8 m)	51.7
49	Ground floor (1.8 m)	51.2
50	Ground floor (1.8 m)	56.0
	First floor (3.4 m)	56.4
51	Ground floor (1.8 m)	49.3
52	Ground floor (1.8 m)	60.2
	First floor (3.5 m)	60.3
53	Ground floor (1.8 m)	51.2
	First floor (4.0 m)	53.5
54	Ground floor (1.8 m)	47.9
55	Ground floor (1.8 m)	49.3
56	Ground floor (1.8 m)	49.4
57	Ground floor (1.8 m)	49.8
58	Ground floor (1.8 m)	48.7
59	Ground floor (1.8 m)	49.1
60	Ground floor (1.8 m)	59.6
61	Ground floor (1.8 m)	62.5

	First floor (3.6 m)	62.4
62	Ground floor (1.8 m)	57.1
63	Ground floor (1.8 m)	47.6
64	Ground floor (1.8 m)	57.2
65	Ground floor (1.8 m)	52.9
66	Ground floor (1.8 m)	50.3
67	Ground floor (1.8 m)	46.5
	First floor (3.9 m)	47.7
68	Ground floor (1.8 m)	48.3
	First floor (3.5 m)	49.0
69	Ground floor (1.8 m)	50.2
70	Ground floor (1.8 m)	46.7
71	Ground floor (1.8 m)	55.3
72	Ground floor (1.8 m)	55.0
73	Ground floor (1.8 m)	53.8
74	Ground floor (1.8 m)	57.9
75	Ground floor (1.8 m)	55.5
76	Ground floor (1.8 m)	50.5
77	Ground floor (1.8 m)	48.8
	First floor (3.5 m)	48.8
78	Ground floor (1.8 m)	61.6
	First floor (3.9 m)	61.6
	Second floor (6.3 m)	61.2
79	Ground floor (1.8 m)	54.8
	First floor (4.2 m)	55.3
80	Ground floor (1.8 m)	52.0
	First floor (3.4 m)	52.0
81	Ground floor (1.8 m)	53.1
	First floor (4.0 m)	53.4
82	Ground floor (1.8 m)	48.7
83	Ground floor (1.8 m)	48.8
	First floor (4.0 m)	49.4
84	Ground floor (1.8 m)	52.5
	First floor (3.6 m)	54.2
	Second floor (5.7 m)	55.0
85	Ground floor (1.8 m)	49.2
	First floor (3.5 m)	49.2
86	Ground floor (1.8 m)	54.3
87	Ground floor (1.8 m)	49.7
	First floor (3.5 m)	50.3
88	Ground floor (1.8 m)	49.9
89	Ground floor (1.8 m)	53.1
	First floor (3.7 m)	53.4
	Second floor (5.9 m)	53.6
90	Ground floor (1.8 m)	48.3
	First floor (4.3 m)	48.7
91	Ground floor (1.8 m)	48.2
92	Ground floor (1.8 m)	50.2
93	Ground floor (1.8 m)	47.2
94	Ground floor (1.8 m)	44.7
95	Ground floor (1.8 m)	56.5

96	Ground floor (1.8 m)	44.8
97	Ground floor (1.8 m)	43.5
	First floor (3.7 m)	46.7
	Second floor (5.9 m)	49.3
98	Ground floor (1.8 m)	44.0
99	Ground floor (1.8 m)	48.8
	First floor (3.7 m)	51.8
100	Ground floor (1.8 m)	42.7
101	Ground floor (1.8 m)	44.6

TRONCO 3 KM 9-14,5 NOTTURNO POST OPERAM CON MITIGAZIONE

CALCUL N° 4

Comment : calculation n°4 (Receiver)

Creation date : 29-JUL-2008

Position : from (1532776.0m, 4520711.5m) to (1533160.0m, 4521032.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
5	Ground floor (1.8 m)	49.4
6	Ground floor (1.8 m)	45.0
	First floor (4.1 m)	47.4
7	Ground floor (1.8 m)	46.7
	First floor (3.9 m)	49.2
	Second floor (6.3 m)	50.3
8	Ground floor (1.8 m)	54.3
	First floor (4.5 m)	57.4
9	Ground floor (1.8 m)	54.2
	First floor (3.8 m)	56.6
10	Ground floor (1.8 m)	53.2
78	Ground floor (1.8 m)	54.9
	First floor (3.9 m)	58.6
	Second floor (6.3 m)	59.9

CALCUL N° 5

Comment : calculation n°5 (Receiver)

Creation date : 29-JUL-2008

Position : from (1534510.8m, 4521434.0m) to (1534967.6m, 4521738.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
52	Ground floor (1.8 m)	58.5
	First floor (3.5 m)	59.7
53	Ground floor (1.8 m)	51.1
	First floor (4.0 m)	53.4

CALCUL N° 6

Comment : calculation n°6 (Receiver)
 Creation date : 29-JUL-2008

Position : from (1530799.9m, 4520390.0m) to (1531084.3m, 4520596.5m)
 Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq
 Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
61	Ground floor (1.8 m)	56.6
	First floor (3.6 m)	59.9
62	Ground floor (1.8 m)	52.1

CALCUL N° 7

Comment : calculation n°7 (Receiver)
 Creation date : 30-JUL-2008

Position : from (1533409.5m, 4520934.5m) to (1534053.1m, 4521385.5m)
 Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq
 Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
16	Ground floor (1.8 m)	50.9
17	Ground floor (1.8 m)	57.9
18	Ground floor (1.8 m)	50.3
	First floor (3.6 m)	51.4
19	Ground floor (1.8 m)	46.0
	First floor (3.8 m)	47.8
20	Ground floor (1.8 m)	45.8
	First floor (3.6 m)	48.1
	Second floor (5.7 m)	48.8
21	Ground floor (1.8 m)	46.5
	First floor (3.9 m)	47.8
22	Ground floor (1.8 m)	50.3
	First floor (4.4 m)	52.9
23	Ground floor (1.8 m)	50.0
	First floor (3.8 m)	52.3
	Second floor (6.1 m)	53.4
24	3th floor (8.5 m)	54.7
	Ground floor (1.8 m)	54.0
25	First floor (3.9 m)	55.7
	Ground floor (1.8 m)	54.1
26	First floor (4.6 m)	55.3
	Ground floor (1.8 m)	44.5
27	First floor (3.9 m)	46.4
	Second floor (6.3 m)	46.9
	Ground floor (1.8 m)	51.1
28	Ground floor (1.8 m)	58.8
	First floor (3.6 m)	59.7
29	Ground floor (1.8 m)	46.1
30	Ground floor (1.8 m)	45.6
31	Ground floor (1.8 m)	45.9

32	Ground floor (1.8 m)	52.6
	First floor (3.9 m)	54.5
33	Ground floor (1.8 m)	47.8
	First floor (3.9 m)	50.7
34	Ground floor (1.8 m)	57.9
	First floor (3.7 m)	58.8
	Second floor (6.0 m)	58.8
35	Ground floor (1.8 m)	47.5
36	Ground floor (1.8 m)	45.0
	First floor (3.4 m)	46.0
37	Ground floor (1.8 m)	48.6
38	Ground floor (1.8 m)	49.4
39	Ground floor (1.8 m)	48.2
40	Ground floor (1.8 m)	49.9
41	Ground floor (1.8 m)	48.0
	First floor (4.0 m)	48.9
42	Ground floor (1.8 m)	50.9
	First floor (3.7 m)	51.1
84	Ground floor (1.8 m)	52.7
	First floor (3.6 m)	54.3
	Second floor (5.7 m)	55.3
92	Ground floor (1.8 m)	50.2
93	Ground floor (1.8 m)	47.3
94	Ground floor (1.8 m)	44.7
95	Ground floor (1.8 m)	56.5
96	Ground floor (1.8 m)	44.2
97	Ground floor (1.8 m)	43.2
	First floor (3.7 m)	46.1
	Second floor (5.9 m)	47.7
98	Ground floor (1.8 m)	43.8
99	Ground floor (1.8 m)	47.8
	First floor (3.7 m)	50.2
100	Ground floor (1.8 m)	42.3
101	Ground floor (1.8 m)	44.6

CALCUL N° 8

Comment : calculation n°8 (Receiver)

Creation date : 30-JUL-2008

Position : from (1533870.8m, 4521075.0m) to (1534527.5m, 4521635.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
43	Ground floor (1.8 m)	54.2
	First floor (3.4 m)	55.8
44	Ground floor (1.8 m)	52.7
	First floor (3.6 m)	54.3
45	Ground floor (1.8 m)	48.3
	First floor (3.5 m)	48.9
46	Ground floor (1.8 m)	48.7

	First floor (3.9 m)	49.6
47	Ground floor (1.8 m)	54.9
	First floor (3.7 m)	54.7
48	Ground floor (1.8 m)	50.6
49	Ground floor (1.8 m)	50.2
50	Ground floor (1.8 m)	56.0
	First floor (3.4 m)	56.3
51	Ground floor (1.8 m)	49.1
86	Ground floor (1.8 m)	54.6

TRONCO 3 KM 14,5-17,5 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 29-JUL-2008

Position : from (1535205.3m, 4521712.5m) to (1538109.8m, 4523687.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	57.7
2	Ground floor (1.8 m)	55.9
	First floor (3.9 m)	56.3
	Second floor (6.3 m)	56.3
3	Ground floor (1.8 m)	62.4
	First floor (3.7 m)	63.5
4	Ground floor (1.8 m)	53.8
5	Ground floor (1.8 m)	53.5
	First floor (3.4 m)	55.5
6	Ground floor (1.8 m)	53.3
	First floor (3.5 m)	55.3
7	Ground floor (1.8 m)	65.4
	First floor (4.0 m)	65.1
8	Ground floor (1.8 m)	59.0
9	Ground floor (1.8 m)	59.8
10	Ground floor (1.8 m)	56.8
	First floor (4.5 m)	58.0
11	Ground floor (1.8 m)	56.4
	First floor (4.4 m)	57.4
12	Ground floor (1.8 m)	56.0
	First floor (3.7 m)	56.1
13	Ground floor (1.8 m)	55.0
	First floor (4.0 m)	55.4
14	Ground floor (1.8 m)	55.3
	First floor (3.5 m)	55.3
15	Ground floor (1.8 m)	53.9
16	Ground floor (1.8 m)	53.9
	First floor (3.4 m)	54.4
17	Ground floor (1.8 m)	50.5
	First floor (3.5 m)	51.7
18	Ground floor (1.8 m)	49.2

19	Ground floor (1.8 m)	51.0
	First floor (4.0 m)	53.2
20	Ground floor (1.8 m)	49.6
	First floor (4.2 m)	52.0
21	Ground floor (1.8 m)	49.5
	First floor (3.9 m)	51.9
22	Ground floor (1.8 m)	51.9
	First floor (4.4 m)	54.5
23	Ground floor (1.8 m)	51.7
24	Ground floor (1.8 m)	53.4
25	Ground floor (1.8 m)	51.8
	First floor (3.6 m)	52.6
26	Ground floor (1.8 m)	54.0
27	Ground floor (1.8 m)	59.3
	First floor (3.9 m)	60.4
28	Ground floor (1.8 m)	54.2
29	Ground floor (1.8 m)	48.2
30	Ground floor (1.8 m)	52.9
	First floor (3.8 m)	53.7
31	Ground floor (1.8 m)	54.1
	First floor (3.4 m)	53.8
32	Ground floor (1.8 m)	57.3
	First floor (4.0 m)	60.6
33	Ground floor (1.8 m)	56.9
34	Ground floor (1.8 m)	60.3
35	Ground floor (1.8 m)	60.7
	First floor (4.1 m)	62.2
36	Ground floor (1.8 m)	62.3
37	Ground floor (1.8 m)	64.4
38	Ground floor (1.8 m)	56.9
39	Ground floor (1.8 m)	62.6
40	Ground floor (1.8 m)	59.0
	First floor (3.5 m)	59.2
41	Ground floor (1.8 m)	56.5
42	Ground floor (1.8 m)	58.1
43	Ground floor (1.8 m)	58.6
44	Ground floor (1.8 m)	60.0
45	Ground floor (1.8 m)	60.3
46	Ground floor (1.8 m)	60.8
	First floor (4.1 m)	62.0
47	Ground floor (1.8 m)	60.1
	First floor (3.9 m)	60.5
	Second floor (6.4 m)	60.7
48	Ground floor (1.8 m)	57.2
49	Ground floor (1.8 m)	63.3
50	Ground floor (1.8 m)	59.9
51	Ground floor (1.8 m)	64.4
52	Ground floor (1.8 m)	57.5
	First floor (3.6 m)	57.8
53	Ground floor (1.8 m)	55.5
54	Ground floor (1.8 m)	60.4

55	Ground floor (1.8 m)	59.9
	First floor (4.2 m)	60.4
56	Ground floor (1.8 m)	57.0

TRONCO 3 KM 14,5-17,5 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 29-JUL-2008

Position : from (1535208.6m, 4521712.5m) to (1538123.4m, 4523684.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	49.6
2	Ground floor (1.8 m)	47.8
	First floor (3.9 m)	48.2
	Second floor (6.3 m)	48.2
3	Ground floor (1.8 m)	54.3
	First floor (3.7 m)	55.5
4	Ground floor (1.8 m)	45.7
5	Ground floor (1.8 m)	45.4
	First floor (3.4 m)	47.4
6	Ground floor (1.8 m)	45.2
	First floor (3.5 m)	47.2
7	Ground floor (1.8 m)	57.3
	First floor (4.0 m)	57.0
8	Ground floor (1.8 m)	51.0
9	Ground floor (1.8 m)	51.7
10	Ground floor (1.8 m)	48.7
	First floor (4.5 m)	50.0
11	Ground floor (1.8 m)	48.3
	First floor (4.4 m)	49.3
12	Ground floor (1.8 m)	48.0
	First floor (3.7 m)	48.1
13	Ground floor (1.8 m)	46.9
	First floor (4.0 m)	47.3
14	Ground floor (1.8 m)	47.2
	First floor (3.5 m)	47.2
15	Ground floor (1.8 m)	45.8
16	Ground floor (1.8 m)	45.8
	First floor (3.4 m)	46.3
17	Ground floor (1.8 m)	42.4
	First floor (3.5 m)	43.6
18	Ground floor (1.8 m)	41.1
19	Ground floor (1.8 m)	42.9
	First floor (4.0 m)	45.1
20	Ground floor (1.8 m)	41.5
	First floor (4.2 m)	43.9
21	Ground floor (1.8 m)	41.4

	First floor (3.9 m)	43.8
22	Ground floor (1.8 m)	43.8
	First floor (4.4 m)	46.4
23	Ground floor (1.8 m)	43.6
24	Ground floor (1.8 m)	45.3
25	Ground floor (1.8 m)	43.8
	First floor (3.6 m)	44.5
26	Ground floor (1.8 m)	45.9
27	Ground floor (1.8 m)	51.2
	First floor (3.9 m)	52.3
28	Ground floor (1.8 m)	46.1
29	Ground floor (1.8 m)	40.1
30	Ground floor (1.8 m)	44.8
	First floor (3.8 m)	45.6
31	Ground floor (1.8 m)	46.0
	First floor (3.4 m)	45.7
32	Ground floor (1.8 m)	49.2
	First floor (4.0 m)	52.5
33	Ground floor (1.8 m)	48.8
34	Ground floor (1.8 m)	52.2
35	Ground floor (1.8 m)	52.6
	First floor (4.1 m)	54.1
36	Ground floor (1.8 m)	54.3
37	Ground floor (1.8 m)	56.3
38	Ground floor (1.8 m)	48.8
39	Ground floor (1.8 m)	54.5
40	Ground floor (1.8 m)	50.9
	First floor (3.5 m)	51.1
41	Ground floor (1.8 m)	48.4
42	Ground floor (1.8 m)	50.0
43	Ground floor (1.8 m)	50.5
44	Ground floor (1.8 m)	51.9
45	Ground floor (1.8 m)	52.3
46	Ground floor (1.8 m)	52.7
	First floor (4.1 m)	54.0
47	Ground floor (1.8 m)	52.0
	First floor (3.9 m)	52.4
	Second floor (6.4 m)	52.6
48	Ground floor (1.8 m)	49.1
49	Ground floor (1.8 m)	55.2
50	Ground floor (1.8 m)	51.8
51	Ground floor (1.8 m)	56.3
52	Ground floor (1.8 m)	49.4
	First floor (3.6 m)	49.7
53	Ground floor (1.8 m)	47.4
54	Ground floor (1.8 m)	52.3
55	Ground floor (1.8 m)	51.8
	First floor (4.2 m)	52.3
56	Ground floor (1.8 m)	48.9

TRONCO 3 KM 19-21 DIURNO POST OPERAM

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 28-JUL-2008

Position : from (1538523.1m, 4524654.0m) to (1540280.0m, 4526455.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	59.6
2	Ground floor (1.8 m)	65.4
3	Ground floor (1.8 m)	57.5
	First floor (4.2 m)	58.0
4	Ground floor (1.8 m)	57.4
5	Ground floor (1.8 m)	57.1
6	Ground floor (1.8 m)	59.3
	First floor (3.6 m)	60.1
7	Ground floor (1.8 m)	59.0
8	Ground floor (1.8 m)	64.4
9	Ground floor (1.8 m)	60.7
	First floor (3.9 m)	61.2
10	Ground floor (1.8 m)	60.8
11	Ground floor (1.8 m)	60.4
12	Ground floor (1.8 m)	59.1
	First floor (3.7 m)	59.9
13	Ground floor (1.8 m)	54.8
14	Ground floor (1.8 m)	55.9
15	Ground floor (1.8 m)	55.6
	First floor (3.7 m)	56.9
16	Ground floor (1.8 m)	56.6
17	Ground floor (1.8 m)	57.4
18	Ground floor (1.8 m)	57.4
	First floor (3.4 m)	58.0
19	Ground floor (1.8 m)	59.0
20	Ground floor (1.8 m)	53.5
	First floor (3.8 m)	55.0
21	Ground floor (1.8 m)	55.6
22	Ground floor (1.8 m)	57.9
	First floor (3.4 m)	58.2
23	Ground floor (1.8 m)	58.9
24	Ground floor (1.8 m)	58.1
25	Ground floor (1.8 m)	59.6
26	Ground floor (1.8 m)	54.4
27	Ground floor (1.8 m)	56.0
28	Ground floor (1.8 m)	57.4

TRONCO 3 KM 19-21 NOTTURNO POST OPERAM

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 28-JUL-2008

Position : from (1538538.0m, 4524660.0m) to (1540268.1m, 4526446.5m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	51.5
2	Ground floor (1.8 m)	57.3
3	Ground floor (1.8 m)	49.4
	First floor (4.2 m)	49.9
4	Ground floor (1.8 m)	49.3
5	Ground floor (1.8 m)	49.1
6	Ground floor (1.8 m)	51.2
	First floor (3.6 m)	52.0
7	Ground floor (1.8 m)	50.9
8	Ground floor (1.8 m)	56.3
9	Ground floor (1.8 m)	52.6
	First floor (3.9 m)	53.1
10	Ground floor (1.8 m)	52.7
11	Ground floor (1.8 m)	52.4
12	Ground floor (1.8 m)	51.0
	First floor (3.7 m)	51.8
13	Ground floor (1.8 m)	46.7
14	Ground floor (1.8 m)	47.8
15	Ground floor (1.8 m)	47.5
	First floor (3.7 m)	48.8
16	Ground floor (1.8 m)	48.5
17	Ground floor (1.8 m)	49.3
18	Ground floor (1.8 m)	49.3
	First floor (3.4 m)	49.9
19	Ground floor (1.8 m)	50.9
20	Ground floor (1.8 m)	45.5
	First floor (3.8 m)	46.9
21	Ground floor (1.8 m)	47.5
22	Ground floor (1.8 m)	49.9
	First floor (3.4 m)	50.2
23	Ground floor (1.8 m)	50.8
24	Ground floor (1.8 m)	50.0
25	Ground floor (1.8 m)	51.5
26	Ground floor (1.8 m)	46.3
27	Ground floor (1.8 m)	47.9
28	Ground floor (1.8 m)	49.3

TRONCO 3 CANTIERE AL KM 15,3 CORSO D'OPERA DIURNO

CALCUL N° 2

Comment : calculation n°2 (Receiver)

Creation date : 6-AUG-2008

Position : from (1535245.3m, 4521884.0m) to (1536857.6m, 4523062.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	46.8
2	Ground floor (1.8 m)	50.2
3	Ground floor (1.8 m)	51.8
	First floor (3.4 m)	54.5
4	Ground floor (1.8 m)	51.7
	First floor (3.5 m)	54.0
5	Ground floor (1.8 m)	59.2
	First floor (3.5 m)	59.2
6	Ground floor (1.8 m)	53.5
	First floor (3.4 m)	55.0
7	Ground floor (1.8 m)	57.8
8	Ground floor (1.8 m)	57.0
	First floor (4.0 m)	57.8
9	Ground floor (1.8 m)	50.6
	First floor (3.9 m)	55.2
10	Ground floor (1.8 m)	51.4
	First floor (3.9 m)	52.8
11	Ground floor (1.8 m)	41.6
	First floor (3.5 m)	47.8
12	Ground floor (1.8 m)	40.6
	First floor (4.2 m)	43.5
13	Ground floor (1.8 m)	50.4
	First floor (4.4 m)	56.2
14	Ground floor (1.8 m)	52.9
15	Ground floor (1.8 m)	50.1
16	Ground floor (1.8 m)	49.7
17	Ground floor (1.8 m)	48.1
	First floor (3.8 m)	48.7
18	Ground floor (1.8 m)	50.2
	First floor (3.4 m)	49.9
19	Ground floor (1.8 m)	45.7
20	Ground floor (1.8 m)	45.4
21	Ground floor (1.8 m)	48.4
22	Ground floor (1.8 m)	54.7
	First floor (3.9 m)	55.3
23	Ground floor (1.8 m)	61.9
	First floor (4.4 m)	62.4
24	Ground floor (1.8 m)	62.3
	First floor (4.5 m)	62.6
25	Ground floor (1.8 m)	58.5
26	Ground floor (1.8 m)	59.8
27	Ground floor (1.8 m)	58.3
	First floor (3.9 m)	60.3
28	Ground floor (1.8 m)	57.1
	First floor (3.8 m)	57.3
29	Ground floor (1.8 m)	56.9
	First floor (3.7 m)	56.9
30	Ground floor (1.8 m)	46.2

	First floor (3.9 m)	46.3
	Second floor (6.3 m)	46.4
31	Ground floor (1.8 m)	46.5
	First floor (3.9 m)	47.2

TRONCO 3 CANTIERE AL KM 15,3 CORSO D'OPERA NOTTURNO

CALCUL N° 1

Comment : calculation n°1 (Receiver)

Creation date : 6-AUG-2008

Position : from (1535223.5m, 4521877.5m) to (1536857.6m, 4523075.0m)

Calculation parameters : mode NMPB.96, 100 rays, 5 reflections, 2000.00 m, Leq

Type of ground : 600.0 (sigma)

Receiver	Information	Lp dB(A)
1	Ground floor (1.8 m)	44.9
2	Ground floor (1.8 m)	47.8
3	Ground floor (1.8 m)	49.3
	First floor (3.4 m)	53.0
4	Ground floor (1.8 m)	49.4
	First floor (3.5 m)	52.7
5	Ground floor (1.8 m)	58.3
	First floor (3.5 m)	58.3
6	Ground floor (1.8 m)	52.8
	First floor (3.4 m)	54.3
7	Ground floor (1.8 m)	55.7
8	Ground floor (1.8 m)	54.1
	First floor (4.0 m)	54.5
9	Ground floor (1.8 m)	49.5
	First floor (3.9 m)	54.6
10	Ground floor (1.8 m)	50.4
	First floor (3.9 m)	52.0
11	Ground floor (1.8 m)	38.2
	First floor (3.5 m)	46.5
12	Ground floor (1.8 m)	33.5
	First floor (4.2 m)	39.2
13	Ground floor (1.8 m)	44.3
	First floor (4.4 m)	54.4
14	Ground floor (1.8 m)	50.8
15	Ground floor (1.8 m)	40.1
16	Ground floor (1.8 m)	37.5
17	Ground floor (1.8 m)	28.1
	First floor (3.8 m)	30.6
18	Ground floor (1.8 m)	33.7
	First floor (3.4 m)	35.2
19	Ground floor (1.8 m)	31.0
20	Ground floor (1.8 m)	37.0
21	Ground floor (1.8 m)	41.7
22	Ground floor (1.8 m)	42.1
	First floor (3.9 m)	44.8

23	Ground floor (1.8 m)	60.8
	First floor (4.4 m)	61.1
24	Ground floor (1.8 m)	62.0
	First floor (4.5 m)	62.3
25	Ground floor (1.8 m)	58.0
26	Ground floor (1.8 m)	59.8
27	Ground floor (1.8 m)	58.2
	First floor (3.9 m)	60.2
28	Ground floor (1.8 m)	57.0
	First floor (3.8 m)	57.1
29	Ground floor (1.8 m)	56.2
	First floor (3.7 m)	56.3
30	Ground floor (1.8 m)	44.0
	First floor (3.9 m)	43.9
	Second floor (6.3 m)	43.8
31	Ground floor (1.8 m)	42.6
	First floor (3.9 m)	43.9