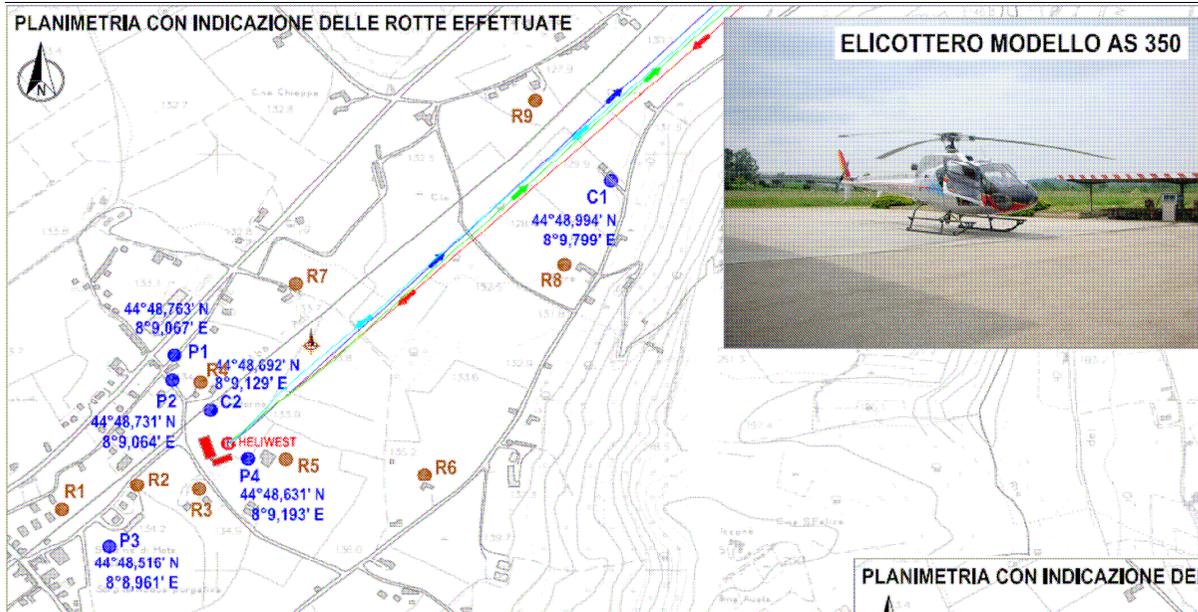


# **STUDIO DI IMPATTO DA RUMORE**

***relativo all'atterraggio ed al decollo  
degli elicotteri nell'area del Comune di  
Costigliole d'Asti (Italia)***



## TIPOLOGIA DI ELECOTTERI ANALIZZATI

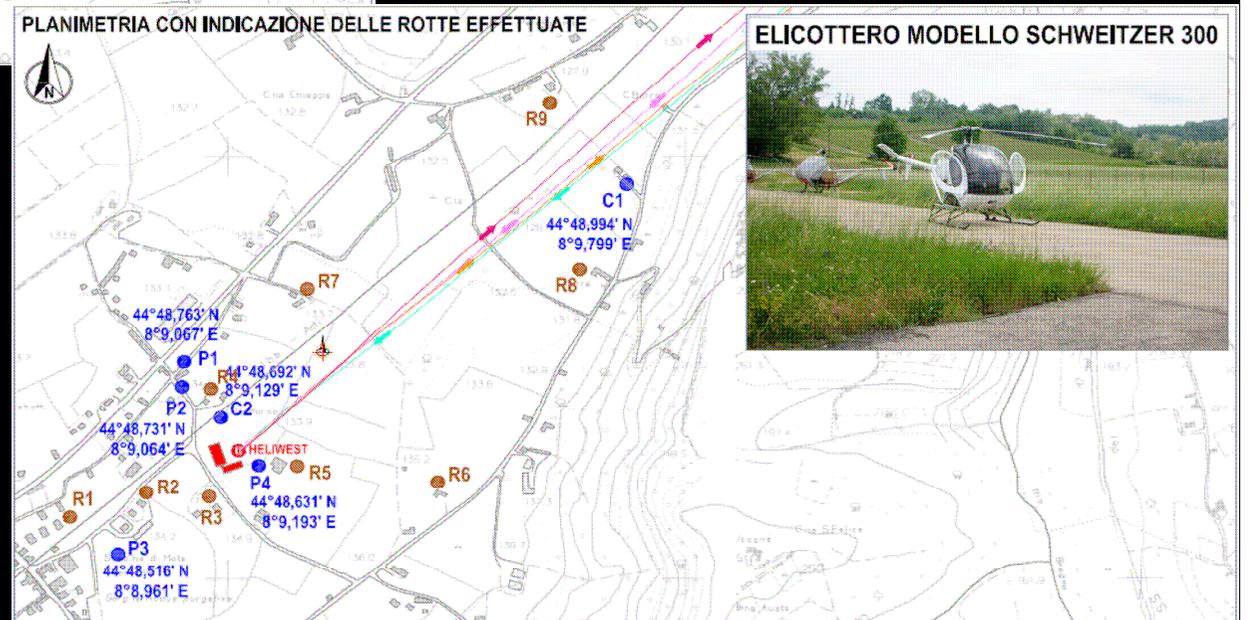


PLANIMETRIA CON INDICAZIONE DELLE ROTTE EFFETTUATE

Elicottero modello AS 350

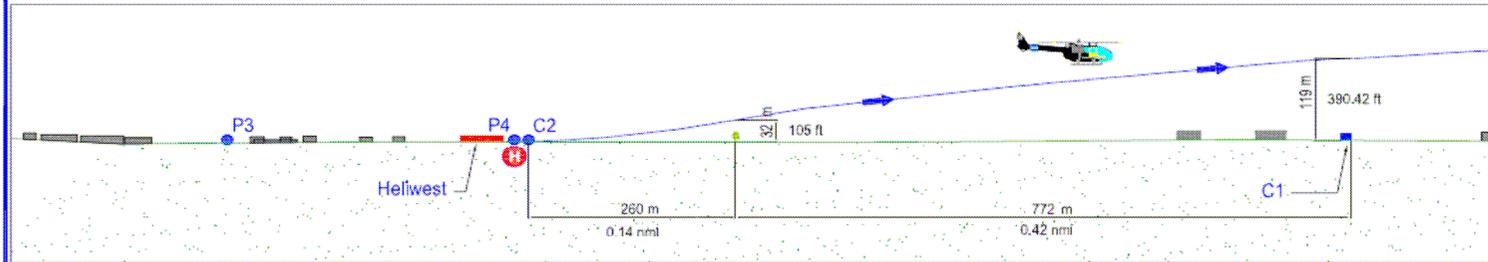
PLANIMETRIA CON INDICAZIONE DELLE ROTTE EFFETTUATE

Elicottero modello Schweizer 300

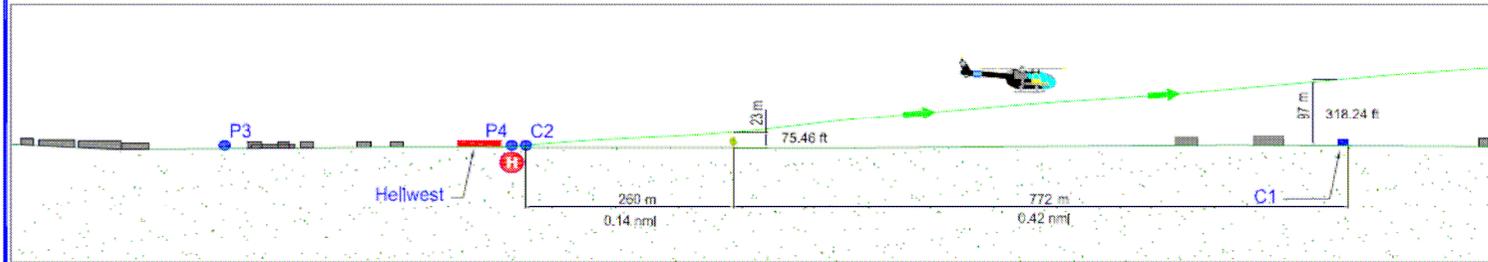


## TIPOLOGIA DI ELECOTTERI ANALIZZATI

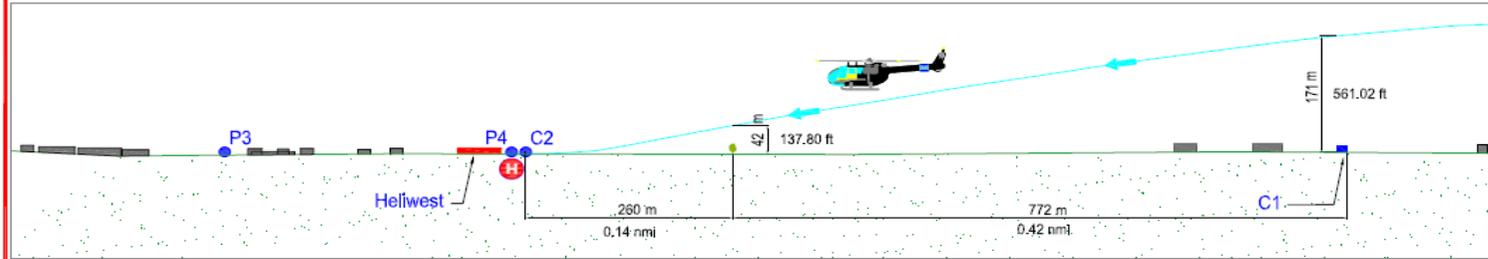
Procedura A rateo di salita 697 ft/nmi



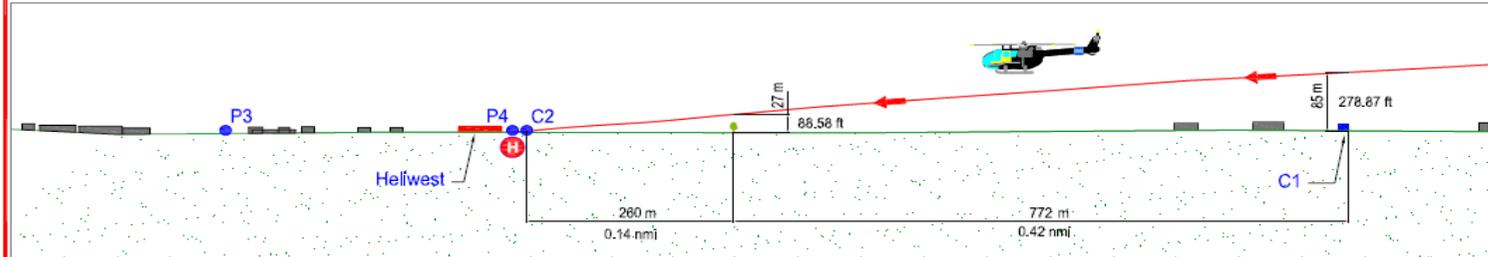
Procedura B rateo di salita 568 ft/nmi



Procedura A rateo di discesa 1002 ft/nmi



Procedura B rateo di discesa 498 ft/nmi



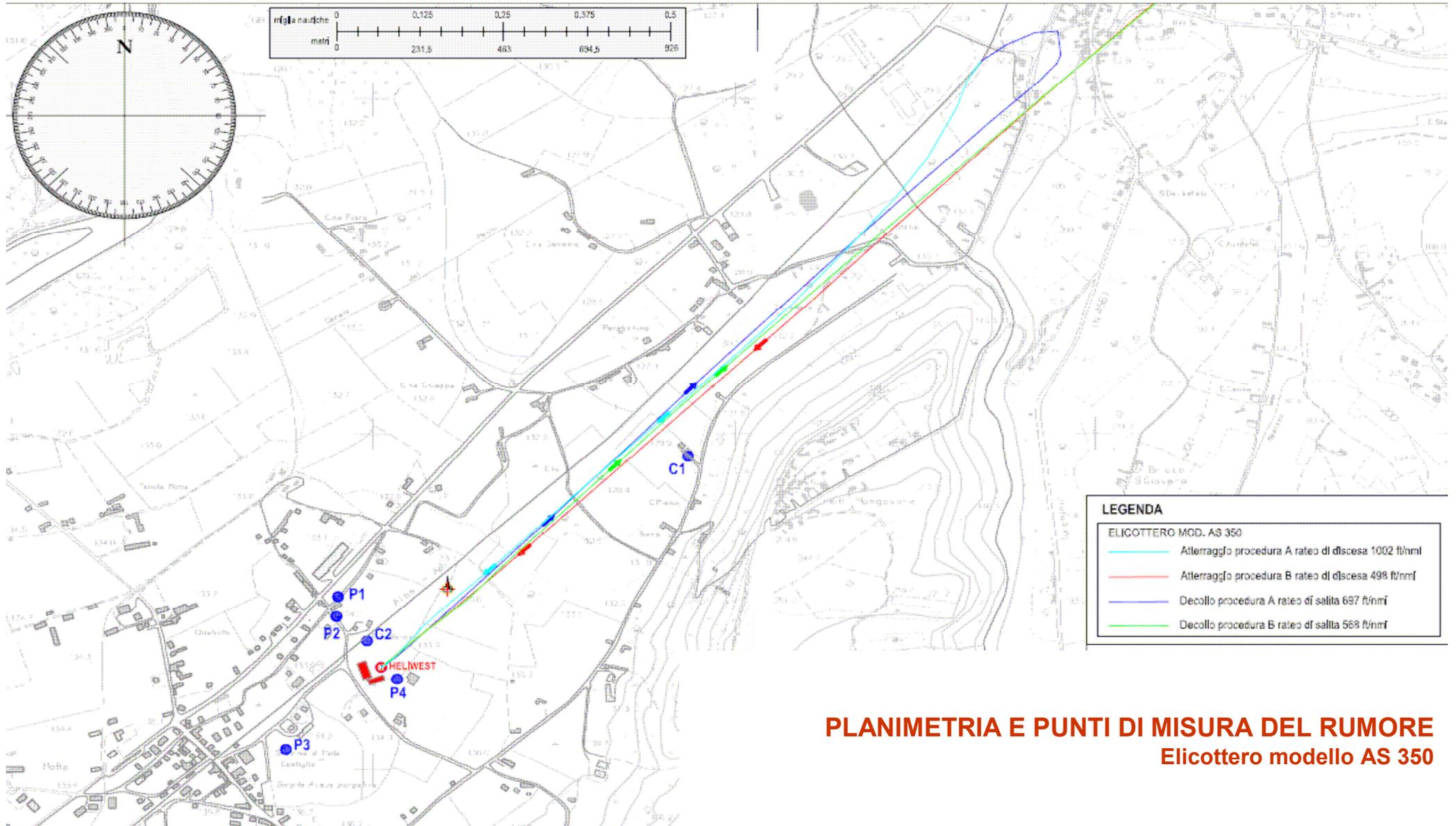
**PROFILO DI ATTERRAGGIO**  
Elicottero modello AS 350



**PROFILO DI DECOLLO**  
Elicottero modello Schweizer 300



## TIPOLOGIA DI ELEOTTERI ANALIZZATI

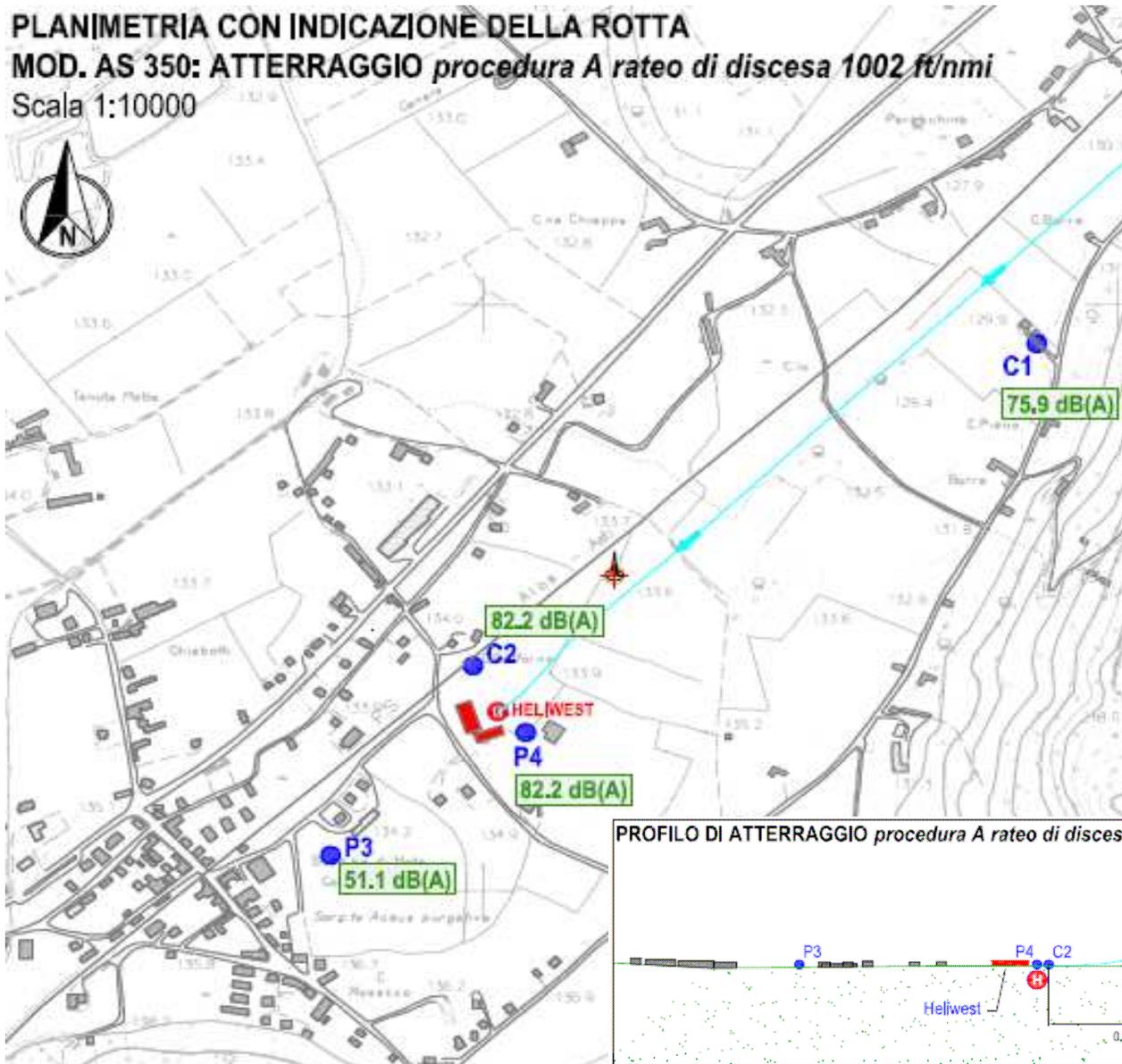


**PLANIMETRIA E PUNTI DI MISURA DEL RUMORE**  
Elicottero modello AS 350

## Procedura A rateo di discesa 1002 ft/mni\_ Elicottero modello AS 350

PLANIMETRIA CON INDICAZIONE DELLA ROTTA  
MOD. AS 350: ATTERRAGGIO procedura A rateo di discesa 1002 ft/mni

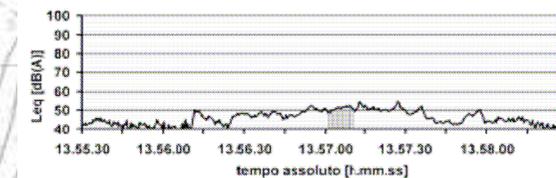
Scala 1:10000



### LIVELLI EQUIVALENTI CALCOLATI NEGLI Istanti di MASSIMA RUMOROSITA'

Tracciato storico del livello di rumore

P3 - Presso stazione RFI Costigliole (LD824)



Livelli calcolati nell'intervallo indicato sul tracciato

Leq	51.1 dB(A)
SEL	61.3 dB(A)
Leq, min	48.9 dB(A)
Leq, Max	52.4 dB(A)
Durata	10.5 s

P4 - Recinzione Helwest (LD2900)



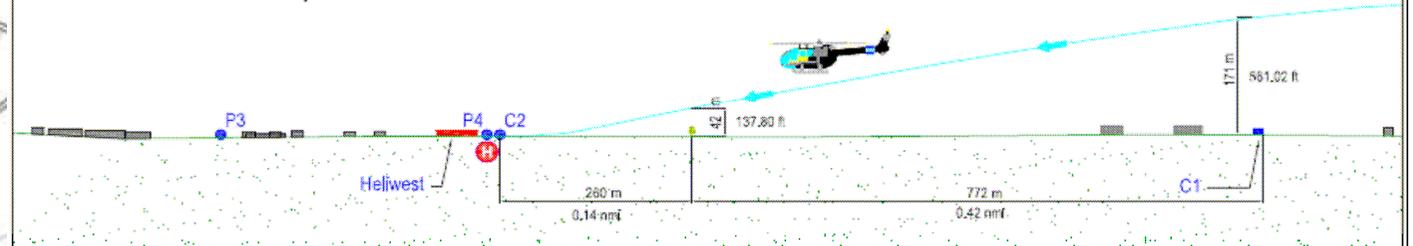
Leq	82.2 dB(A)
SEL	94.2 dB(A)
Leq, min	76.1 dB(A)
Leq, Max	86.4 dB(A)
Durata	16.0 s

C1 - Via Borra n°12 Isola d'Asti (LD820)



Leq	75.9 dB(A)
SEL	87.8 dB(A)
Leq, min	68.4 dB(A)
Leq, Max	78.6 dB(A)
Durata	15.5 s

PROFilo di ATTERRAGGIO procedura A rateo di discesa 1002 ft/mni

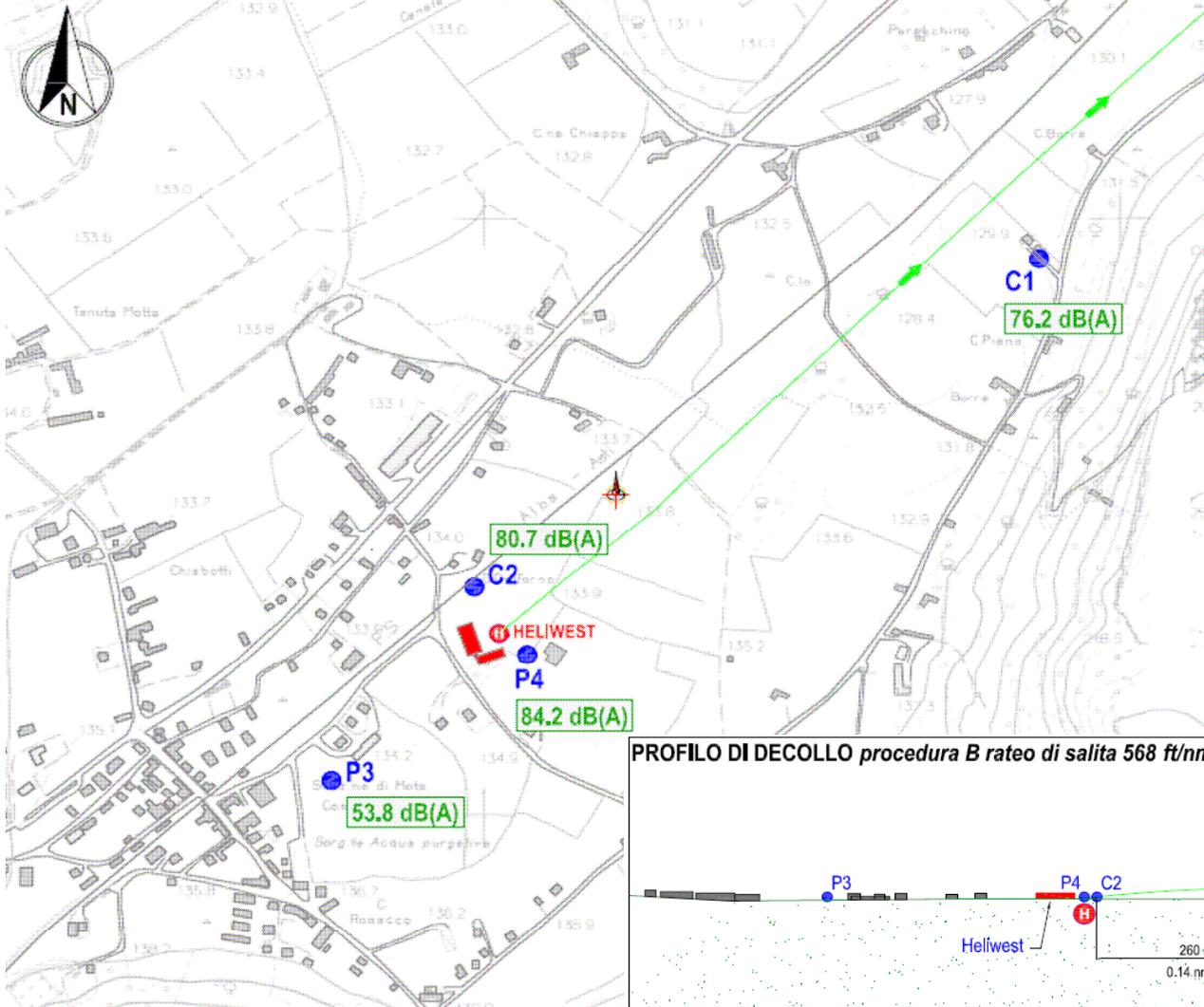


## Procedura B rateo di salita 568 ft/mni\_ Elicottero modello AS 350

### PLANIMETRIA CON INDICAZIONE DELLA ROTTA

MOD. AS 350: DECOLLO procedura B rateo di salita 568 ft/mni

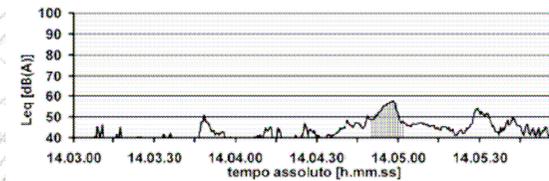
scala 1:10000



### LIVELLI EQUIVALENTI CALCOLATI NEGLI Istanti di MASSIMA RUMOROSITA'

#### Tracciato storico del livello di rumore

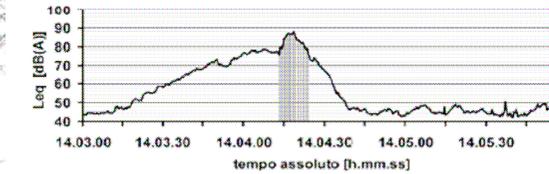
P3 - Presso stazione RFI Costigliole (LD824)



Livelli calcolati nell'intervallo indicato sul tracciato

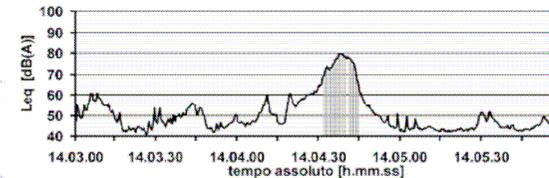
Leq	53.8 dB(A)
SEL	64.8 dB(A)
Leq, min	47.3 dB(A)
Leq, Max	57.6 dB(A)
Durata	12.5 s

P4 - Recinzione Heliwest (LD2900)



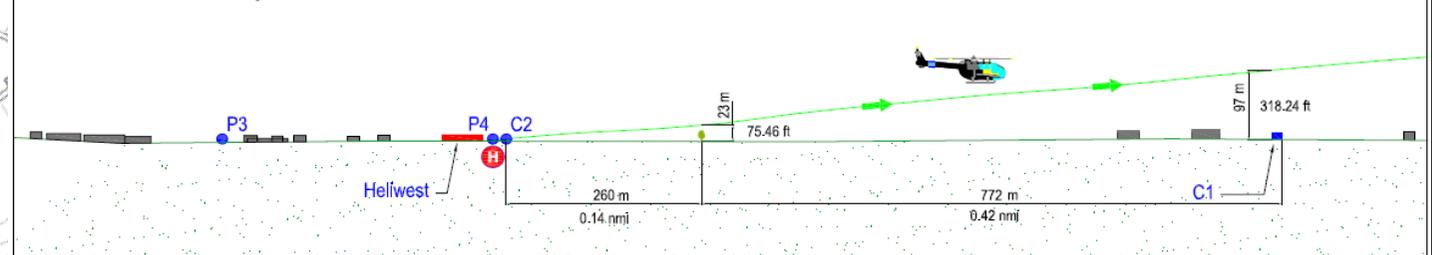
Leq	84.2 dB(A)
SEL	94.6 dB(A)
Leq, min	76.1 dB(A)
Leq, Max	88.0 dB(A)
Durata	11.0 s

C1 - Via Borra n°12 Isola d'Asti (LD820)

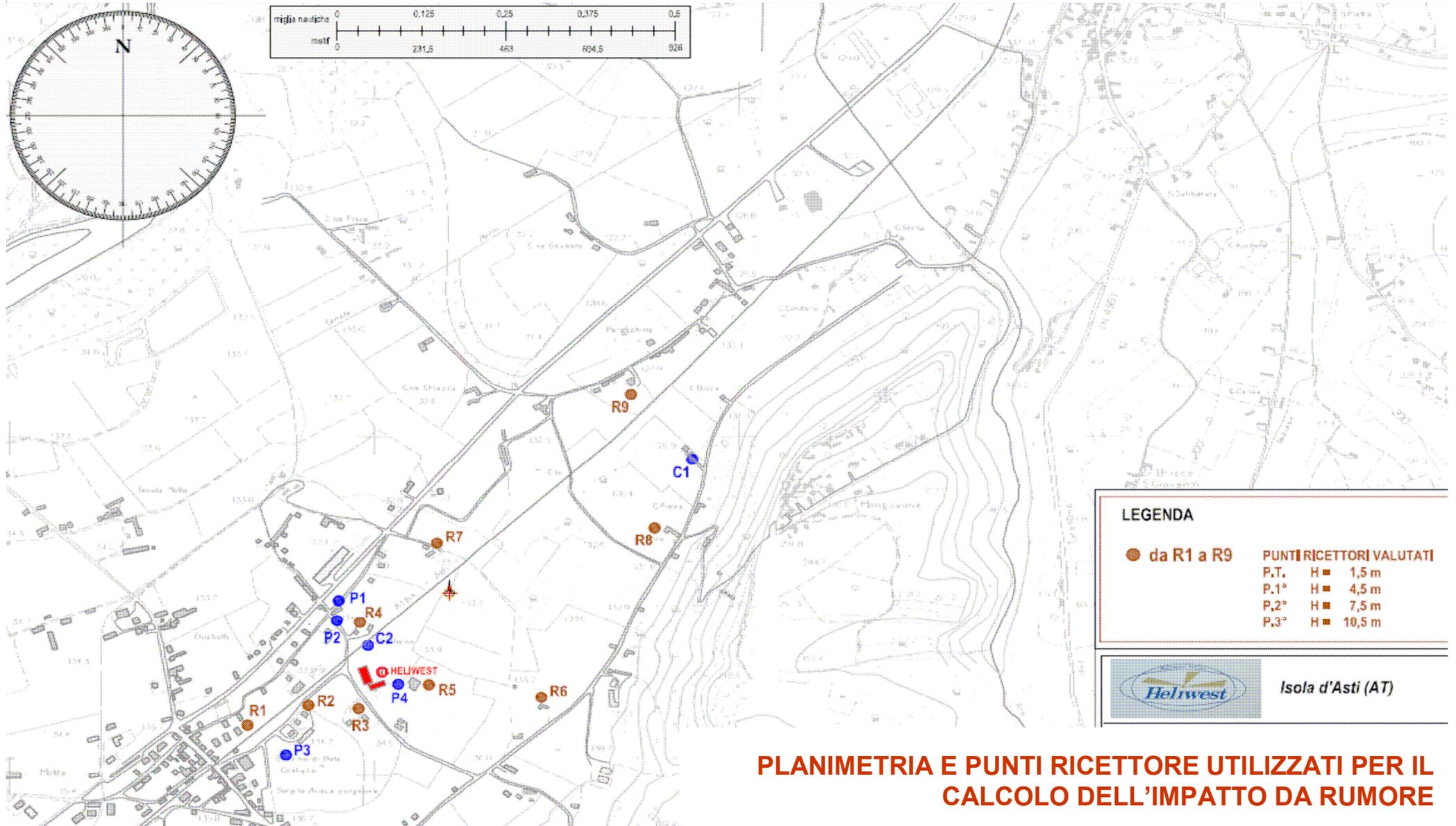


Leq	76.2 dB(A)
SEL	87.3 dB(A)
Leq, min	67.7 dB(A)
Leq, Max	79.7 dB(A)
Durata	13.0 s

### PROFILO DI DECOLLO procedura B rateo di salita 568 ft/mni



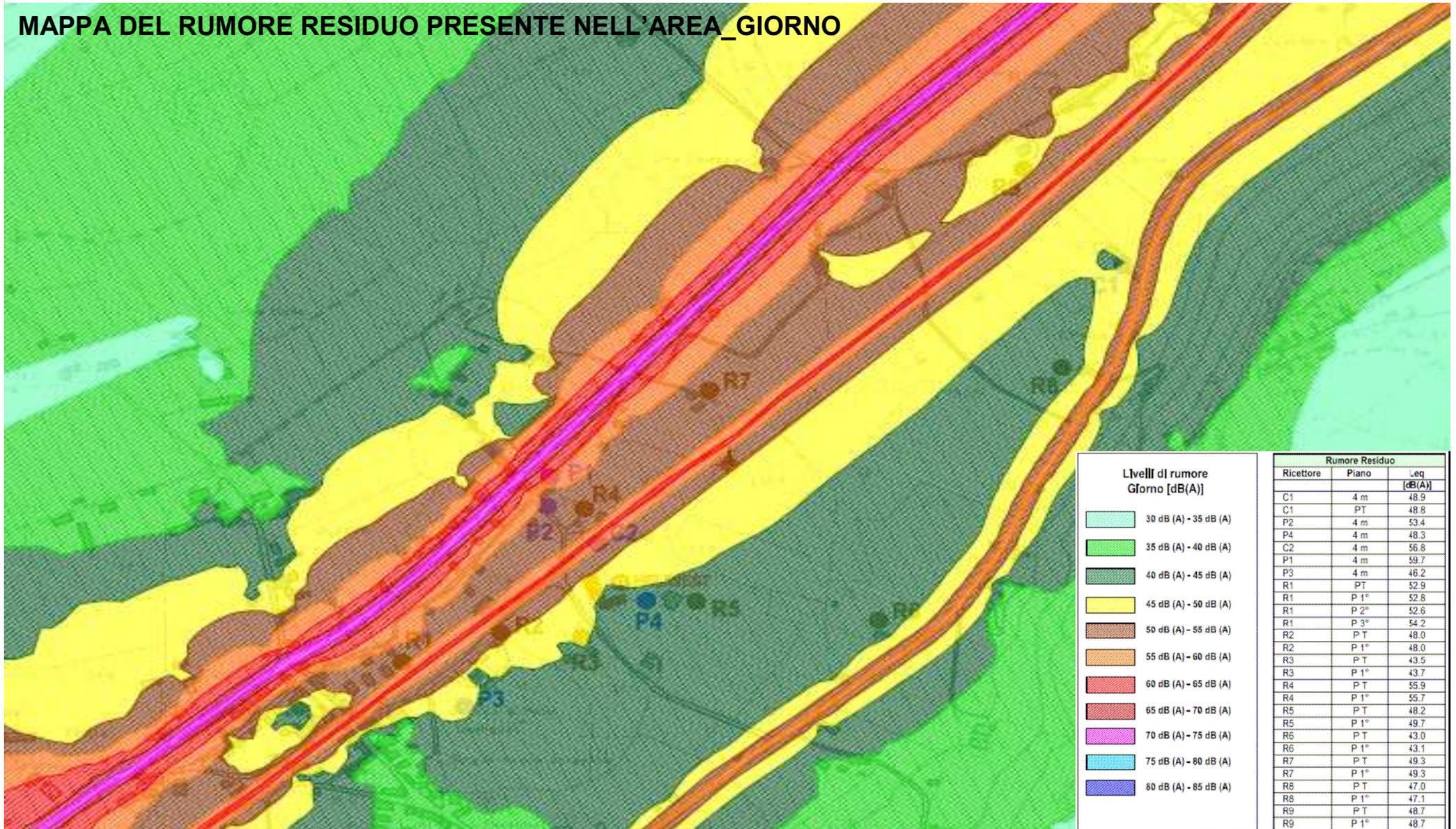
## PLANIMETRIA E PUNTI RICETTORI DEL RUMORE



PLANIMETRIA E PUNTI RICETTORE UTILIZZATI PER IL CALCOLO DELL'IMPATTO DA RUMORE

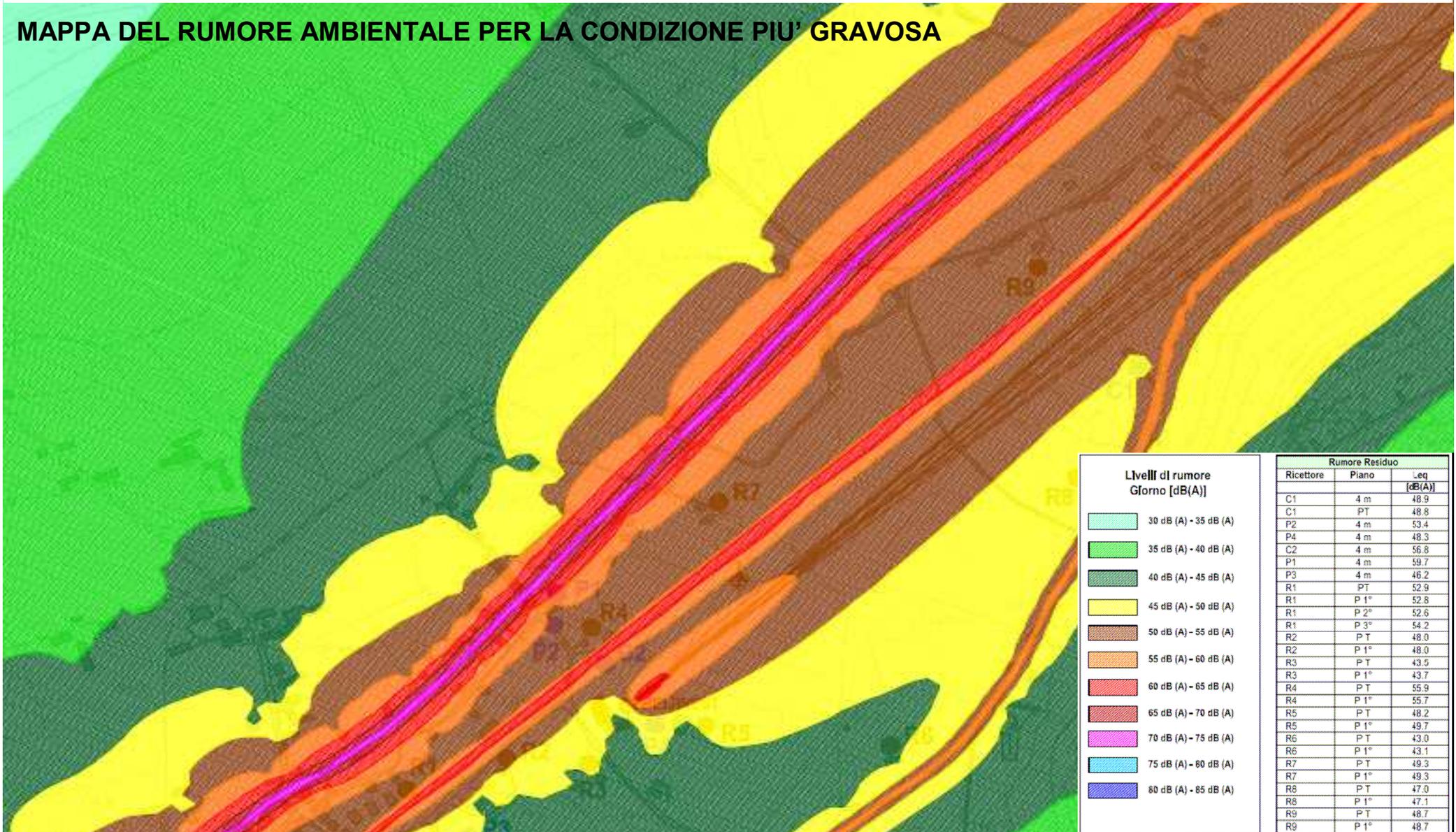
## MAPPA DEL RUMORE RESIDUO

### MAPPA DEL RUMORE RESIDUO PRESENTE NELL'AREA\_GIORNO



MAPPA DEL RUMORE AMBIENTALE

MAPPA DEL RUMORE AMBIENTALE PER LA CONDIZIONE PIU' GRAVOSA



CONFRONTO FRA PROCEDURA NORMALE E PROCEDURA ANTIRUMORE

PROCEDURE NORMALI

Punto	Ambientale [dB(A)]	Residuo [dB(A)]	Differenza [dB]	Punto	Ambientale [dB(A)]	Residuo [dB(A)]	Differenza [dB]
C1	49.6	45.8	3.8	R3_PT	43.5	43.3	0.2
C1_PT	49.1	45.7	3.4	R3_P1	43.6	43.4	0.2
P2	53.4	53.2	0.1	R4_PT	55.8	55.6	0.3
P4	47.9	43.8	4.0	R4_P1	55.7	55.3	0.3
C2	56.8	56.5	0.3	R5_PT	47.9	43.6	4.1
P1	59.7	59.7	0.0	R5_P1	49.3	44.2	5.1
P3	46.2	46.1	0.0	R6_PT	42.2	40.1	2.1
R1_PT	52.9	52.9	0.0	R6_P1	42.3	40.2	2.1
R1_P1	52.8	52.8	0.0	R7_PT	48.5	46.2	2.3
R1_P2	52.6	52.6	0.0	R7_P1	48.6	46.2	2.4
R1_P3	54.2	54.2	0.0	R8_PT	46.8	42.2	4.6
R2_PT	48.0	48.0	0.0	R8_P1	46.9	42.3	4.6
R2_P1	48.0	47.9	0.0	R9_PT	49.0	46.0	3.0
				R9_P1	49.0	46.0	2.9

PROCEDURE ANTIRUMORE

Punto	Ambientale [dB(A)]	Residuo [dB(A)]	Differenza [dB]	Punto	Ambientale [dB(A)]	Residuo [dB(A)]	Differenza [dB]
C1	48.9	48.4	0.5	R3_PT	43.5	43.5	0.1
C1_PT	48.8	48.3	0.5	R3_P1	43.7	43.6	0.1
P2	53.4	53.4	0.0	R4_PT	55.9	55.6	0.1
P4	48.3	47.7	0.6	R4_P1	55.7	55.6	0.1
C2	56.8	56.6	0.1	R5_PT	48.2	47.6	0.6
P1	59.7	59.7	0.0	R5_P1	49.7	49.0	0.7
P3	46.2	46.2	0.0	R6_PT	43.0	42.5	0.5
R1_PT	52.9	52.9	0.0	R6_P1	43.1	42.6	0.5
R1_P1	52.8	52.6	0.0	R7_PT	49.3	48.8	0.5
R1_P2	52.6	52.6	0.0	R7_P1	49.3	48.9	0.5
R1_P3	54.2	54.2	0.0	R8_PT	47.0	46.4	0.6
R2_PT	48.0	48.0	0.0	R8_P1	47.1	46.4	0.6
R2_P1	48.0	48.0	0.0	R9_PT	46.7	46.3	0.4
				R9_P1	46.7	46.3	0.4

