Annex 5: Characterization of the critical areas and of the noise measures foreseen: Province of Savona

Parameter	Data
Name of the critical area/special building	**Ospedale, Sassello**
Road	SP334
Traffic flow data	
Lightweight vehicles day (06-20)	419
Lightweight vehicles evening (20-22)	245
Lightweight vehicles night (22-6)	92
Heavyweight vehicles day (06-20)	14
Heavyweight vehicles evening (20-22)	4
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	1
N° beds and staff	82
Greatest value of noise limits exceeds [dB]	18,0
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	93
N° people exposed to noise level over the limit in the notturno period	82
IP value	**5516**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	242.800 € (Standard) 330.500 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**ITCG "F. Patetta"**
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	730
Lightweight vehicles evening (20-22)	427
Lightweight vehicles night (22-6)	161
Heavyweight vehicles day (06-20)	16
Heavyweight vehicles evening (20-22)	5
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	1
N° students, teachers and technical/administrative staff members	472
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	2.4
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	472
N° people exposed to noise level over the limit in the notturno period	-
IP value	**3398**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*Low Noise asphalt or Noise Barrier*
Cost (rounded to the nearest hundred)	5.300 € (Low Noise asphalt) 45.000 € (Noise Barrier)

Parameter	Data
Name of the critical area/special building	**San Giovanni**
Road	SP334
Traffic flow data	
Lightweight vehicles day (06-20)	419
Lightweight vehicles evening (20-22)	245
Lightweight vehicles night (22-6)	92
Heavyweight vehicles day (06-20)	14
Heavyweight vehicles evening (20-22)	4
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	40
Population inside critical buildings	253
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	17,3
Mean value of noise limits exceeds [dB]	10,6
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	253
N° people exposed to noise level over the limit in the notturno period	253
IP value	**2915**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	898.800 € (Standard) 1.134.900 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**Complesso scolastico di Millesimo**
Road	SP28 bis
Traffic flow data	
Lightweight vehicles day (06-20)	370
Lightweight vehicles evening (20-22)	217
Lightweight vehicles night (22-6)	82
Heavyweight vehicles day (06-20)	19
Heavyweight vehicles evening (20-22)	6
Heavyweight vehicles night (22-06)	3
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	1
N° students, teachers and technical/administrative staff members	388
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	2.3
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	388
N° people exposed to noise level over the limit in the notturno period	-
IP value	**2677**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*Low Noise asphalt or High noise insulating window*
Cost (rounded to the nearest hundred)	5.300 € (Low Noise asphalt) 16.100 € (Standard window) 21.900 € (Ventilating window)

Parameter	Data
Name of the critical area/special building	**Burré**
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	633
Lightweight vehicles evening (20-22)	371
Lightweight vehicles night (22-6)	140
Heavyweight vehicles day (06-20)	24
Heavyweight vehicles evening (20-22)	8
Heavyweight vehicles night (22-06)	3
Critical area/special building data	
N° residential critical buildings	50
Population inside critical buildings	212
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	17,2
Mean value of noise limits exceeds [dB]	8,1
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	208
N° people exposed to noise level over the limit in the notturno period	212
IP value	**1777**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	943.800 € (Standard) 1.287.000 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**Comunità Alloggio ANFFAS, Santa Giustina**
Road	SP334
Traffic flow data	
Lightweight vehicles day (06-20)	419
Lightweight vehicles evening (20-22)	245
Lightweight vehicles night (22-6)	92
Heavyweight vehicles day (06-20)	14
Heavyweight vehicles evening (20-22)	4
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	1
N° beds and staff	25
Greatest value of noise limits exceeds [dB]	17,4
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	25
N° people exposed to noise level over the limit in the notturno period	20
IP value	**1740**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	19.300 € (Standard) 26.300 € (Ventilating)

Parameter	Data		
Name of the critical area/special building	**Millesimo-Martinetto**		
Road	SP28bis		
Traffic flow data			
Lightweight vehicles day (06-20)	403 (ovest)	40 (centro)*	370 (est)
Lightweight vehicles evening (20-22)	236	24	217
Lightweight vehicles night (22-6)	89	9	82
Heavyweight vehicles day (06-20)	17	2	19
Heavyweight vehicles evening (20-22)	6	1	6
Heavyweight vehicles night (22-06)	2	0	3
Critical area/special building data			
N° residential critical buildings	44		
Population inside critical buildings	261		
N° schools	-		
N° students, teachers and technical/administrative staff members	-		
N° hospitals or nursing homes	-		
N° beds and staff	-		
Greatest value of noise limits exceeds [dB]	10,5		
Mean value of noise limits exceeds [dB]	6,0		
Data about population exposure to noise			
N° people exposed to noise level over the limit in the diurno period	211		
N° people exposed to noise level over the limit in the notturno period	261		
IP value	**1532,2**		
Noise measures carried out			
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*		
Cost (rounded to the nearest hundred)	1.250.500 € (Standard) 1.705.300 € (Ventilating)		

* All'interno del centro abitato il flusso veicolare è scarso grazie alla presenza di un percorso alternativo

Parameter	Data
Name of the critical area/special building	Carcare
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	633
Lightweight vehicles evening (20-22)	371
Lightweight vehicles night (22-6)	140
Heavyweight vehicles day (06-20)	24
Heavyweight vehicles evening (20-22)	8
Heavyweight vehicles night (22-06)	3
Critical area/special building data	
N° residential critical buildings	52
Population inside critical buildings	290
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	10.8
Mean value of noise limits exceeds [dB]	3.8
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	207
N° people exposed to noise level over the limit in the notturno period	290
IP value	**1408**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	959.900 € (Standard) 1.309.900€ (Ventilating)

Parameter	Data
Name of the critical area/special building	**Scuola dell'infanzia, Roccavignale**
Road	SP28 bis
Traffic flow data	
Lightweight vehicles day (06-20)	403
Lightweight vehicles evening (20-22)	236
Lightweight vehicles night (22-6)	89
Heavyweight vehicles day (06-20)	17
Heavyweight vehicles evening (20-22)	6
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	1
N° students, teachers and technical/administrative staff members	29
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	15.4
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	29
N° people exposed to noise level over the limit in the notturno period	-
IP value	**1340**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	24.700 € (Standard) 33.600 € (Ventilating)

Parameter	Data
Name of the critical area/special building	Savona Nord
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	633
Lightweight vehicles evening (20-22)	371
Lightweight vehicles night (22-6)	140
Heavyweight vehicles day (06-20)	24
Heavyweight vehicles evening (20-22)	8
Heavyweight vehicles night (22-06)	3
Critical area/special building data	
N° residential critical buildings	35
Population inside critical buildings	156
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	17,0
Mean value of noise limits exceeds [dB]	7,3
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	146
N° people exposed to noise level over the limit in the notturno period	156
IP value	**1308**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	750.700 € (Standard) 1.023.800 € (Ventilating)

Parameter	Data
Name of the critical area/special building	Santa Giustina
Road	SP334
Traffic flow data	
Lightweight vehicles day (06-20)	419
Lightweight vehicles evening (20-22)	245
Lightweight vehicles night (22-6)	92
Heavyweight vehicles day (06-20)	14
Heavyweight vehicles evening (20-22)	4
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	57
Population inside critical buildings	118
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	1
N° beds and staff	25
Greatest value of noise limits exceeds [dB]	16.1
Mean value of noise limits exceeds [dB]	9.7
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	118
N° people exposed to noise level over the limit in the notturno period	118
IP value	**1232**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	832.300 € (Standard) 1.134.900 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**Vispa**
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	633
Lightweight vehicles evening (20-22)	371
Lightweight vehicles night (22-6)	140
Heavyweight vehicles day (06-20)	24
Heavyweight vehicles evening (20-22)	8
Heavyweight vehicles night (22-06)	3
Critical area/special building data	
N° residential critical buildings	39
Population inside critical buildings	195
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	10,7
Mean value of noise limits exceeds [dB]	6,0
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	137
N° people exposed to noise level over the limit in the notturno period	195
IP value	**1181**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	716.430 € (Standard) 976.950 € (Ventilating)

Parameter	Data
Name of the critical area/special building	San Massimo
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	730
Lightweight vehicles evening (20-22)	427
Lightweight vehicles night (22-6)	161
Heavyweight vehicles day (06-20)	16
Heavyweight vehicles evening (20-22)	5
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	35
Population inside critical buildings	197
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	15,7
Mean value of noise limits exceeds [dB]	5,9
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	163
N° people exposed to noise level over the limit in the notturno period	197
IP value	**1137**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	515.900 € (Standard) 703.500 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**Scuola dell'infanzia, Cairo Montenotte - Rocchetta**
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	730
Lightweight vehicles evening (20-22)	427
Lightweight vehicles night (22-6)	161
Heavyweight vehicles day (06-20)	16
Heavyweight vehicles evening (20-22)	5
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	1
N° students, teachers and technical/administrative staff members	86
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	4,0
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	86
N° people exposed to noise level over the limit in the notturno period	-
IP value	**1032**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*Low Noise Asphalt and Reduction of vehicles speed (more advisable) or High noise insulation window*
Cost (rounded to the nearest hundred)	17.300 € (Low noise asphalt and Reduction of vehicles speed) 21.400 € (Standard window) 29.000 € (Ventilating window)

Parameter	Data
Name of the critical area/special building	Cairo Montenotte
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	730
Lightweight vehicles evening (20-22)	427
Lightweight vehicles night (22-6)	161
Heavyweight vehicles day (06-20)	16
Heavyweight vehicles evening (20-22)	5
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	34
Population inside critical buildings	291
N° schools	1
N° students, teachers and technical/administrative staff members	86
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	7,4
Mean value of noise limits exceeds [dB]	3,2
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	132
N° people exposed to noise level over the limit in the notturno period	291
IP value	**951**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	751.000 € (Standard) 1.024.000 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**Sassello**
Road	SP334
Traffic flow data	
Lightweight vehicles day (06-20)	419
Lightweight vehicles evening (20-22)	245
Lightweight vehicles night (22-6)	92
Heavyweight vehicles day (06-20)	14
Heavyweight vehicles evening (20-22)	4
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	37
Population inside critical buildings	114
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	1
N° beds and staff	82
Greatest value of noise limits exceeds [dB]	11,1
Mean value of noise limits exceeds [dB]	7,7
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	114
N° people exposed to noise level over the limit in the notturno period	114
IP value	**902**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	892.320 € (Standard) 1.216.800 € (Ventilating)

Parameter	Data
Name of the critical area/special building	Rovieto Superiore
Road	SP334
Traffic flow data	
Lightweight vehicles day (06-20)	419
Lightweight vehicles evening (20-22)	245
Lightweight vehicles night (22-6)	92
Heavyweight vehicles day (06-20)	14
Heavyweight vehicles evening (20-22)	4
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	22
Population inside critical buildings	84
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	14,6
Mean value of noise limits exceeds [dB]	7,4
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	84
N° people exposed to noise level over the limit in the notturno period	84
IP value	**818**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	341.100 € (Standard) 465.100 € (Ventilating)

Parameter	Data
Name of the critical area/special building	Rocchetta Cairo
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	730
Lightweight vehicles evening (20-22)	427
Lightweight vehicles night (22-6)	161
Heavyweight vehicles day (06-20)	16
Heavyweight vehicles evening (20-22)	5
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	75
Population inside critical buildings	158
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	8,9
Mean value of noise limits exceeds [dB]	4,2
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	97
N° people exposed to noise level over the limit in the notturno period	158
IP value	**664**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	1.151.900 € (Standard) 1.570.700 € (Ventilating)

Parameter	Data
Name of the critical area/special building	Roccavignale
Road	SP28bis
Traffic flow data	
Lightweight vehicles day (06-20)	403
Lightweight vehicles evening (20-22)	236
Lightweight vehicles night (22-6)	89
Heavyweight vehicles day (06-20)	17
Heavyweight vehicles evening (20-22)	6
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	50
Population inside critical buildings	107
N° schools	1
N° students, teachers and technical/administrative staff members	29
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	11,2
Mean value of noise limits exceeds [dB]	5,0
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	82
N° people exposed to noise level over the limit in the notturno period	107
IP value	**573,3**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	795.800 € (Standard) 1.085.200 € (Ventilating)

Parameter	Data
Name of the critical area/special building	**IPSIA "L. da Vinci"**
Road	SP29
Traffic flow data	
Lightweight vehicles day (06-20)	730
Lightweight vehicles evening (20-22)	427
Lightweight vehicles night (22-6)	161
Heavyweight vehicles day (06-20)	16
Heavyweight vehicles evening (20-22)	5
Heavyweight vehicles night (22-06)	2
Critical area/special building data	
N° residential critical buildings	-
Population inside critical buildings	-
N° schools	1
N° students, teachers and technical/administrative staff members	172
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	1,1
Mean value of noise limits exceeds [dB]	-
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	172
N° people exposed to noise level over the limit in the notturno period	-
IP value	**577**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*Low Noise Asphalt or Reduction of vehicles speed reduction*
Cost (rounded to the nearest hundred)	5.300 € (Low noise asphalt) 12.000 € (Reduction of vehicle speed)

Parameter	Data
Name of the critical area/special building	Case Lidora
Road	SP28bis
Traffic flow data	
Lightweight vehicles day (06-20)	370
Lightweight vehicles evening (20-22)	217
Lightweight vehicles night (22-6)	82
Heavyweight vehicles day (06-20)	19
Heavyweight vehicles evening (20-22)	6
Heavyweight vehicles night (22-06)	3
Critical area/special building data	
N° residential critical buildings	39
Population inside critical buildings	102
N° schools	-
N° students, teachers and technical/administrative staff members	-
N° hospitals or nursing homes	-
N° beds and staff	-
Greatest value of noise limits exceeds [dB]	9,7
Mean value of noise limits exceeds [dB]	4,5
Data about population exposure to noise	
N° people exposed to noise level over the limit in the diurno period	72
N° people exposed to noise level over the limit in the notturno period	102
IP value	**471**
Noise measures carried out	
Noise measures foreseen by the Noise Action Plan	*High noise insulating window*
Cost (rounded to the nearest hundred)	488.000€ (Standard) 665.400 € (Ventilating)