Zał. 4 Analiza akustyczna

1. Pora dnia – wariant 1

Program LEQ Professional v. 6-2019 dla Windows

****

Dane do obliczeń :

****

Współczynnik gruntu (całego obszaru analizy)-global G = 0.000

Temperatura otoczenia 10[°C]

Źródła punktowe

Nr	X[m]	Y[m]	z[m]	Pma	Symbol
1	451.7	224.0	9.0	89.1	Biuro
2	529.5	265.6	6.0	76.2	Portier
3	373.2	105.5	16.0	88.0	B+S_1
4	279.1	182.4	16.0	88.0	B+S_2
5	267.4	190.6	16.0	88.0	B+S_3
6	155.2	281.7	16.0	88.0	B+S_4
7	295.0	330.3	16.0	88.0	B+S_5
8	347.8	289.4	16.0	88.0	B+S_6
9	462.2	203.7	3.0	60.0	12.1
10	458.8	199.4	3.0	60.0	12.1
11	429.1	160.8	3.0	64.0	7
12	425.5	155.9	3.0	76.0	7
13	421.2	150.7	3.0	77.0	7
14	329.0	225.4	16.0	87.0	15
15	337.3	218.2	16.0	87.0	15
16	346.3	211.7	16.0	87.0	15

17 355.7 203.8 16.0 87.0 15

18 364.0 196.9 16.0 87.0 15

19 373.0 190.8 16.0 87.0 15

20 381.6 183.2 16.0 87.0 15

21 390.2 176.4 16.0 87.0 15

22 398.9 169.6 16.0 87.0 15

23 407.2 162.7 16.0 87.0 15

24 379.8 208.1 16.0 65.0 12.2

25 383.0 212.8 16.0 65.0 12.2

26 349.2 254.9 16.0 80.0 4

27 397.4 216.7 16.0 80.0 4

28 346.3 249.1 16.0 63.0 2

29 393.8 211.7 16.0 63.0 2

30 351.7 245.9 16.0 86.0 2.1

31 398.9 207.4 16.0 86.0 2.1

32 350.6 193.0 16.0 77.0 13

33 395.3 157.3 16.0 77.0 13

34 214.9 313.6 16.0 85.0 14

35 199.1 294.8 16.0 85.0 14

36 240.5 292.3 16.0 85.0 14

37 225.4 274.3 16.0 85.0 14

38 267.8 271.4 16.0 85.0 14

39 252.7 252.4 16.0 85.0 14

40 294.5 250.6 16.0 85.0 14

41 279.4 231.1 16.0 85.0 14

42 177.1 321.8 3.0 75.0 7

43 173.5 317.5 3.0 75.0 7

44 168.8 311.4 3.0 75.0 7

45 172.7 311.7 16.0 65.0 30

46 175.4 309.4 16.0 65.0 30

47 172.4 308.6 16.0 65.0 30

48 175.0 314.3 16.0 70.0 28

49 178.3 314.1 16.0 70.0 28

50 182.3 317.7 16.0 76.0 29

51 181.1 320.3 16.0 75.0 27

52 177.9 318.3 16.0 75.0 27.1

53 529.8 244.2 0.5 69.6 R-1

54 523.0 249.5 0.5 69.6 R-1

55 511.5 252.6 0.5 72.6 R-2

56 494.4 253.4 0.5 72.6 R-2

57 477.4 254.2 0.5 72.6 R-2

58 460.4 255.0 0.5 72.6 R-2

59 444.5 260.5 0.5 70.7 R-3

60 431.2 270.9 0.5 70.7 R-3

61 417.8 281.3 0.5 70.7 R-3

62 404.5 291.6 0.5 70.7 R-3

63 391.2 302.0 0.5 70.7 R-3

64 377.8 312.4 0.5 70.7 R-3

65 364.5 322.8 0.5 70.7 R-3

66 351.1 333.1 0.5 70.7 R-3

67 337.8 343.5 0.5 70.7 R-3

68 324.4 353.9 0.5 70.7 R-3

69 309.2 357.9 0.5 72.3 R-4

70 293.3 356.1 0.5 72.3 R-4

71 277.4 354.4 0.5 72.3 R-4

72 261.5 352.7 0.5 72.3 R-4

73 245.6 350.9 0.5 72.3 R-4

74 229.6 349.2 0.5 72.3 R-4

75 213.7 347.5 0.5 72.3 R-4

76 197.8 345.8 0.5 72.3 R-4

77 181.9 344.0 0.5 72.3 R-4

78 166.0 342.3 0.5 72.3 R-4

79	154.7	336.9	0.5	71.0	R-5
80	147.2	327.8	0.5	71.0	R-5
81	139.7	318.7	0.5	71.0	R-5
82	132.2	309.6	0.5	71.0	R-5
83	124.7	300.5	0.5	71.0	R-5
84	121.6	290.0	0.5	70.6	R-6
85	122.4	279.4	0.5	70.6	R-6
86	123.1	268.8	0.5	70.6	R-6
87	123.8	258.1	0.5	70.6	R-6
88	128.2	249.3	0.5	70.4	R-7
89	136.2	242.9	0.5	70.4	R-7
90	144.3	236.5	0.5	70.4	R-7
91	152.3	230.1	0.5	70.4	R-7
92	160.4	223.7	0.5	70.4	R-7
93	168.4	217.3	0.5	70.4	R-7
94	176.5	210.9	0.5	70.4	R-7
95	184.5	204.5	0.5	70.4	R-7
96	192.6	198.1	0.5	70.4	R-7
97	200.6	191.7	0.5	70.4	R-7
98	208.7	185.3	0.5	70.4	R-7
99	216.7	178.9	0.5	70.4	R-7
100	224.8	172.5	0.5	70.4	R-7
101	232.8	166.1	0.5	70.4	R-7
102	240.8	159.7	0.5	70.4	R-7
103	248.9	153.3	0.5	70.4	R-7
104	256.9	146.9	0.5	70.4	R-7
105	265.0	140.5	0.5	70.4	R-7
106	273.0	134.1	0.5	70.4	R-7
107	281.1	127.7	0.5	70.4	R-7
108	289.1	121.3	0.5	70.4	R-7
109	297.2	114.9	0.5	70.4	R-7

110 305.2 108.5 0.5 70.4 R-7

111 313.3 102.1 0.5 70.4 R-7

112 321.3 95.7 0.5 70.4 R-7

113 329.4 89.3 0.5 70.4 R-7

114 337.4 82.9 0.5 70.4 R-7

115 347.5 80.6 0.5 71.3 R-8

116 360.2 81.8 0.5 71.3 R-8

117 372.9 82.9 0.5 71.3 R-8

118 382.7 87.9 0.5 70.4 R-9

119 389.1 96.1 0.5 70.4 R-9

120 395.5 104.3 0.5 70.4 R-9

121 401.8 112.5 0.5 70.4 R-9

122 408.2 120.7 0.5 70.4 R-9

123 414.6 128.9 0.5 70.4 R-9

124 421.0 137.1 0.5 70.4 R-9

125 427.4 145.3 0.5 70.4 R-9

126 433.8 153.5 0.5 70.4 R-9

127 440.1 161.7 0.5 70.4 R-9

128 446.5 169.9 0.5 70.4 R-9

129 452.9 178.1 0.5 70.4 R-9

130 459.3 186.3 0.5 70.4 R-9

131 465.7 194.5 0.5 70.4 R-9

132 472.0 202.7 0.5 70.4 R-9

133 478.4 210.9 0.5 70.4 R-9

134 480.8 220.5 0.5 70.2 R-10

135 478.6 230.2 0.5 70.2 R-10

136 476.3 239.9 0.5 70.2 R-10

137 474.1 249.6 0.5 70.2 R-10

138 433.3 268.8 0.5 64.8 S+H1

139 342.1 339.5 0.5 74.9 S+H2

140 236.8 349.4 0.5 74.4 S+H3

141 137.3 315.5 0.5 73.4 S+H4

142 175.0 211.8 0.5 73.4 S+H5

143 301.4 112.6 0.5 72.7 S+H6

144 414.4 127.7 0.5 72.7 S+H7

145 454.4 178.9 0.5 72.7 S+H8

146 337.3 241.6 16.0 81.0 Mal1

147 358.2 268.6 16.0 81.0 Mal2

148 424.5 154.7 3.0 76.0 7

149 456.2 196.0 3.0 60.0 12.1

150 413.8 148.0 16.0 65.0 12.3

151 411.6 145.2 16.0 65.0 12.3

152 410.2 143.0 16.0 65.0 12.3

153 416.9 144.8 3.0 60.0 12.1

154 414.9 142.2 3.0 60.0 12.1

155 170.8 195.1 5.5 70.0 P2

156 168.6 192.5 5.5 70.0 P3

157 437.0 145.2 1.0 63.0 31

158 140.1 225.1 1.0 63.0 31

==========

Źródła typu hala produkcyjna :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] h0[m] h[m]

==========

1 357.0 290.8 311.1 233.7 418.4 146.7 463.2 205.4 0.0 15.0

2 171.7 199.3 164.4 190.2 171.1 185.2 178.1 194.3 0.0 4.5

==========

POZIOMY HAŁASU i IZOLACYJNOŚĆ PRZEGRÓD

Nr źródła A 63 125 250 500 1000 2000 4000 8000 wsp.odb.

==========

1 sc.1 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.2 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.3 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.4 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

dach L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R d 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

==========

Nr źródła A 63 125 250 500 1000 2000 4000 8000 wsp.odb.

==========

2 sc.1 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.2 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.3 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.4 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

dach L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R d 28.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

==========

Ekrany akustyczne :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] h0[m] h[m]

==========

1 453.5 229.9 445.5 220.6 463.3 205.3 471.3 214.6 0.0 8.0

2 530.3 271.8 523.9 264.2 537.0 253.0 543.5 260.6 0.0 5.0

3 311.1 233.4 265.4 176.8 373.0 90.0 418.6 146.6 0.0 15.0

4 356.5 290.6 294.6 340.2 203.3 226.2 265.2 176.7 0.0 15.0

5 287.2 331.1 203.0 226.3 193.3 234.2 277.4 339.0 0.0 15.0

6 269.8 329.5 193.2 234.2 184.4 241.2 261.0 336.6 0.0 15.0

7 253.5 327.2 184.4 241.4 175.8 248.3 244.9 334.0 0.0 15.0

8 237.1 324.1 175.7 248.3 166.6 255.6 228.0 331.5 0.0 15.0

9 220.8 321.8 166.7 255.4 157.7 262.8 211.8 329.2 0.0 15.0

10 203.8 319.5 157.6 262.8 148.4 269.9 194.8 326.8 0.0 15.0

11 186.6 316.6 148.4 269.9 140.0 276.4 178.4 323.3 0.0 15.0

12 109.5 273.9 110.0 274.3 113.7 266.6 113.0 266.2 0.0 4.0

13 113.0 266.2 117.8 250.6 118.6 250.8 113.8 266.4 0.0 4.0

14 117.9 250.5 118.4 234.6 119.0 234.5 118.7 250.7 0.0 4.0

15 116.8 190.7 117.8 190.7 117.8 186.2 116.8 186.2 0.0 4.0

16 116.9 185.4 144.8 175.3 145.0 175.8 117.1 186.0 0.0 4.0

17 328.2 64.4 371.2 61.0 371.3 61.7 328.3 65.0 0.0 4.0

18 105.0 348.1 92.7 328.7 102.5 322.5 114.8 341.8 0.0 3.0

19 93.2 310.3 96.6 298.0 107.7 301.0 104.3 313.4 0.0 3.0

20 96.6 298.0 103.7 285.0 110.9 288.6 107.7 301.0 0.0 3.0

21 103.7 285.0 109.6 273.9 116.4 278.6 111.0 288.6 0.0 3.0

22 118.5 234.5 117.7 204.3 130.1 204.4 130.6 233.8 0.0 3.0

23 144.8 175.4 157.1 170.6 159.6 177.1 147.3 181.8 0.0 2.0

24 159.6 177.1 157.1 170.6 169.9 166.1 175.7 180.2 0.0 3.0

25 175.7 180.2 169.9 166.0 202.8 153.5 208.2 167.7 0.0 4.0

26 208.3 167.7 202.8 153.4 207.4 151.8 212.1 164.1 0.0 3.8

27 212.1 164.1 207.3 151.8 215.7 148.8 220.1 160.5 0.0 3.5

28 220.1 160.5 215.7 148.7 233.2 142.2 235.6 148.0 0.0 3.0

29 235.6 147.9 233.2 142.2 245.0 136.6 244.5 142.0 0.0 2.5

30 239.6 139.1 236.2 135.5 241.0 131.2 244.9 136.6 0.0 2.5

31 236.3 135.5 232.0 130.2 241.8 121.8 241.1 131.2 0.0 3.0

32 231.9 130.2 224.6 122.6 235.2 114.8 241.7 121.8 0.0 3.5

33 224.6 122.6 222.6 119.5 234.9 110.2 235.2 114.8 0.0 3.8

34 222.6 119.4 212.2 101.8 227.0 95.8 234.8 110.2 0.0 4.0

35 212.2 101.6 206.5 71.8 228.4 72.8 227.0 95.8 0.0 4.0

36 227.5 89.8 269.6 84.3 269.5 69.4 228.5 72.9 0.0 4.0

37 269.6 84.3 269.5 69.3 282.1 67.9 282.4 75.5 0.0 3.0

38 282.5 75.5 282.1 67.9 292.7 67.4 293.1 74.6 0.0 2.0

39 293.3 74.6 298.2 79.5 297.7 67.1 292.7 67.4 0.0 2.8

40 328.2 64.5 297.7 67.2 298.2 79.3 329.2 76.2 0.0 3.5

41 171.7 199.3 164.6 190.2 171.1 185.2 178.1 194.3 0.0 4.5

42 140.2 276.4 149.2 287.8 149.7 287.5 140.5 276.3 15.0 17.0

43 140.4 276.6 140.1 276.2 150.9 267.9 151.4 268.4 15.0 17.0

44 251.8 188.8 251.2 187.6 278.8 166.0 279.4 166.8 15.0 17.0

==========

WSPÓŁCZYNNIKI ODBICIA DLA ŚCIAN

Nr ściana 1 ściana 2 ściana 3 ściana 4 dach

==========

1 1.0000 1.0000 1.0000 1.0000 1.0000

2 1.0000 1.0000 1.0000 1.0000 1.0000

3 1.0000 1.0000 1.0000 1.0000 1.0000

4 1.0000 1.0000 1.0000 1.0000 1.0000

5 1.0000 1.0000 1.0000 1.0000 1.0000

6 1.0000 1.0000 1.0000 1.0000 1.0000

7 1.0000 1.0000 1.0000 1.0000 1.0000

8 1.0000 1.0000 1.0000 1.0000 1.0000

9 1.0000 1.0000 1.0000 1.0000 1.0000

10 1.0000 1.0000 1.0000 1.0000 1.0000

11 1.0000 1.0000 1.0000 1.0000 1.0000

12 1.0000 1.0000 1.0000 1.0000 1.0000

13 1.0000 1.0000 1.0000 1.0000 1.0000

14 1.0000 1.0000 1.0000 1.0000 1.0000

15 1.0000 1.0000 1.0000 1.0000 1.0000

16 1.0000 1.0000 1.0000 1.0000 1.0000

17	1.0000	1.0000	1.0000	1.0000	1.0000
18	1.0000	1.0000	1.0000	1.0000	1.0000
19	1.0000	1.0000	1.0000	1.0000	1.0000
20	1.0000	1.0000	1.0000	1.0000	1.0000
21	1.0000	1.0000	1.0000	1.0000	1.0000
22	1.0000	1.0000	1.0000	1.0000	1.0000
23	1.0000	1.0000	1.0000	1.0000	1.0000
24	1.0000	1.0000	1.0000	1.0000	1.0000
25	1.0000	1.0000	1.0000	1.0000	1.0000
26	1.0000	1.0000	1.0000	1.0000	1.0000
27	1.0000	1.0000	1.0000	1.0000	1.0000
28	1.0000	1.0000	1.0000	1.0000	1.0000
29	1.0000	1.0000	1.0000	1.0000	1.0000
30	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	1.0000	1.0000
33	1.0000	1.0000	1.0000	1.0000	1.0000
34	1.0000	1.0000	1.0000	1.0000	1.0000
35	1.0000	1.0000	1.0000	1.0000	1.0000
36	1.0000	1.0000	1.0000	1.0000	1.0000
37	1.0000	1.0000	1.0000	1.0000	1.0000
38	1.0000	1.0000	1.0000	1.0000	1.0000
39	1.0000	1.0000	1.0000	1.0000	1.0000
40	1.0000	1.0000	1.0000	1.0000	1.0000
41	1.0000	1.0000	1.0000	1.0000	1.0000
42	1.0000	1.0000	1.0000	1.0000	1.0000
43	1.0000	1.0000	1.0000	1.0000	1.0000
44	1.0000	1.0000	1.0000	1.0000	1.0000

==========

Punkty obserwacji

Nr	Symbol	X[m]	Y[m]	z[m]
1	P1	95.5	268.1	1.5
2	P2	95.5	268.1	4.5
3	P3	106.1	268.7	4.0
4	P4	107.0	236.4	1.5
5	P5	104.3	238.0	4.5
6	P6	97.1	220.7	1.5
7	P7	97.1	220.7	4.5
8	P8	113.1	225.8	4.0
9	P9	98.4	165.7	1.5
10	P10	98.4	165.7	4.5
11	P11	109.3	164.7	4.0
12	P12	132.0	173.4	1.5
13	P13	132.0	173.4	4.5
14	P14	133.9	177.8	4.0
15	P15	98.4	133.0	1.5
16	P16	98.4	133.0	4.5
17	P17	106.7	140.4	4.0
18	P18	124.6	114.5	1.5
19	P19	124.6	114.5	4.5
20	P20	135.8	150.0	4.0
21	P21	155.4	70.3	1.5
22	P22	155.4	70.3	4.5
23	P23	159.5	78.3	4.0
24	P24	215.5	71.0	1.5
25	P25	215.5	71.0	4.5
26	P26	215.5	71.0	4.0
27	P27	203.0	31.3	1.5
28	P28	203.0	31.3	4.5
29	P29	204.0	52.4	4.0

30 P30 616.0 196.7 1.5

31 P31 616.0 196.7 4.5

32 P32 606.3 195.4 4.0

Obszary o innym niż globalny współczynniku gruntu G :

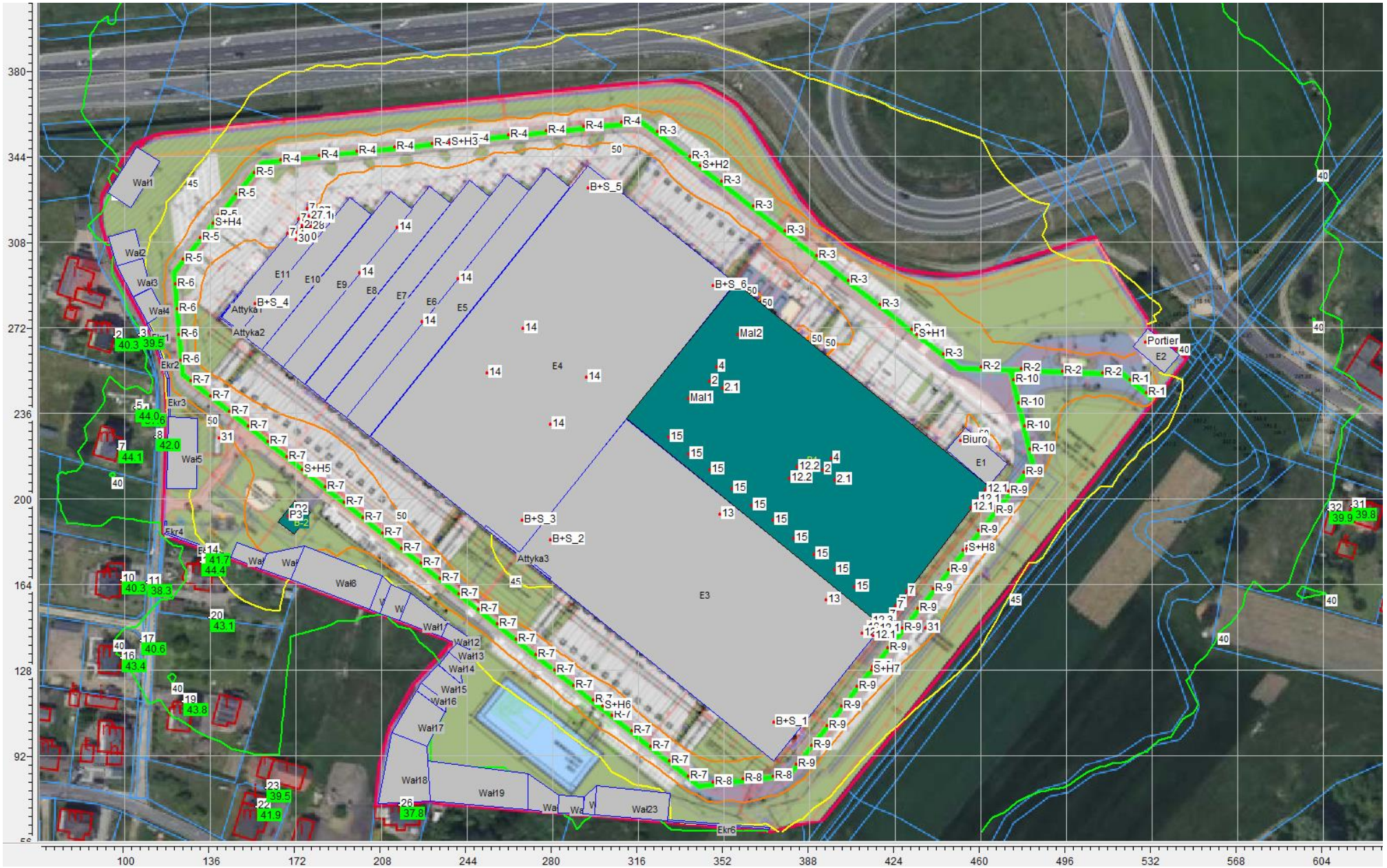
WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr	X1[m]	Y1[m]	X2[m]	Y2[m]	X3[m]	Y3[m]	X4[m]	Y4[m]	wsp.G
1	250.1	190.1	234.4	171.5	268.0	144.0	282.7	162.2	1.000
2	151.8	221.4	242.1	147.5	238.2	140.2	121.8	183.4	1.000
3	147.6	225.8	128.8	200.6	118.4	202.8	119.4	249.6	1.000
4	129.2	283.0	148.0	268.0	133.6	250.0	128.0	253.6	1.000
5	121.0	248.2	117.6	296.6	90.6	315.4	97.0	296.0	1.000
6	90.6	315.4	117.8	296.8	161.6	353.6	111.2	350.8	1.000
7	241.6	144.6	206.8	72.2	330.2	64.6	339.8	77.8	1.000
8	238.1	138.2	221.4	122.2	210.9	102.6	206.1	71.6	1.000
9	555.7	270.6	393.4	63.4	544.3	13.2	617.8	233.2	1.000
10	510.4	245.5	367.0	60.7	393.4	62.0	528.9	237.2	1.000

Program LEQ Professional w.6(2019)
Wydruk wyników obliczeń
Projekt :

Nr pkt.	X [m]	Y [m]	z [m]	Leq [dB(A)]
1	95.5	268.1	1.5	37.2
2	95.5	268.1	4.5	40.3
3	106.1	268.7	4.0	39.5
4	107.0	236.4	1.5	37.6
5	104.3	238.0	4.5	44.0
6	97.1	220.7	1.5	37.3
7	97.1	220.7	4.5	44.1
8	113.1	225.8	4.0	42.0
9	98.4	165.7	1.5	37.7
10	98.4	165.7	4.5	40.3
11	109.3	164.7	4.0	38.3
12	132.0	173.4	1.5	36.5
13	132.0	173.4	4.5	44.4
14	133.9	177.8	4.0	41.7
15	98.4	133.0	1.5	39.9
16	98.4	133.0	4.5	43.4
17	106.7	140.4	4.0	40.6
18	124.6	114.5	1.5	37.5
19	124.6	114.5	4.5	43.8
20	135.8	150.0	4.0	43.1
21	155.4	70.3	1.5	37.1
22	155.4	70.3	4.5	41.9
23	159.5	78.3	4.0	39.5
24	215.5	71.0	1.5	27.7
25	215.5	71.0	4.5	39.1
26	215.5	71.0	4.0	37.8
27	203.0	31.3	1.5	36.5
28	203.0	31.3	4.5	38.2
29	204.0	52.4	4.0	37.7
30	616.0	196.7	1.5	37.5
31	616.0	196.7	4.5	39.8
32	606.3	195.4	4.0	39.9

Rysunek 1Plan sytuacyjny – pora dnia (wariant 1)



Rysunek 2 Izofony w porze dnia (wariant 1)

2. Pora dnia – wariant 2

Program LEQ Professional v. 6-2019 dla Windows

****

Dane do obliczeń :

****

Współczynnik gruntu (całego obszaru analizy)-global G = 0.000

Temperatura otoczenia 10[°C]

Źródła punktowe

Nr	X[m]	Y[m]	z[m]	Pma	Symbol
1	451.7	224.0	9.0	89.1	Biuro
2	529.5	265.6	6.0	76.2	Portier
3	373.2	105.5	16.0	83.7	B+S_1
4	279.1	182.4	16.0	83.7	B+S_2
5	267.4	190.6	16.0	83.7	B+S_3
6	155.2	281.7	16.0	83.7	B+S_4
7	295.0	330.3	16.0	83.7	B+S_5
8	347.8	289.4	16.0	83.7	B+S_6
9	462.2	203.7	3.0	60.0	12.1
10	458.8	199.4	3.0	60.0	12.1
11	429.1	160.8	3.0	64.0	7
12	425.5	155.9	3.0	76.0	7
13	421.2	150.7	3.0	77.0	7
14	329.0	225.4	16.0	87.0	15
15	337.3	218.2	16.0	87.0	15
16	346.3	211.7	16.0	87.0	15
17	355.7	203.8	16.0	87.0	15

18 364.0 196.9 16.0 87.0 15

19 373.0 190.8 16.0 87.0 15

20 381.6 183.2 16.0 87.0 15

21 390.2 176.4 16.0 87.0 15

22 398.9 169.6 16.0 87.0 15

23 407.2 162.7 16.0 87.0 15

24 379.8 208.1 16.0 65.0 12.2

25 383.0 212.8 16.0 65.0 12.2

26 349.2 254.9 16.0 80.0 4

27 397.4 216.7 16.0 80.0 4

28 346.3 249.1 16.0 63.0 2

29 393.8 211.7 16.0 63.0 2

30 351.7 245.9 16.0 86.0 2.1

31 398.9 207.4 16.0 86.0 2.1

32 350.6 193.0 16.0 77.0 13

33 395.3 157.3 16.0 77.0 13

34 214.9 313.6 16.0 85.0 14

35 199.1 294.8 16.0 85.0 14

36 240.5 292.3 16.0 85.0 14

37 225.4 274.3 16.0 85.0 14

38 267.8 271.4 16.0 85.0 14

39 252.7 252.4 16.0 85.0 14

40 294.5 250.6 16.0 85.0 14

41 279.4 231.1 16.0 85.0 14

42 177.1 321.8 3.0 75.0 7

43 173.5 317.5 3.0 75.0 7

44 168.8 311.4 3.0 75.0 7

45 172.7 311.7 16.0 65.0 30

46 175.4 309.4 16.0 65.0 30

47 172.4 308.6 16.0 65.0 30

48 175.0 314.3 16.0 70.0 28

49 178.3 314.1 16.0 70.0 28

50 182.3 317.7 16.0 76.0 29

51 181.1 320.3 16.0 75.0 27

52 177.9 318.3 16.0 75.0 27.1

53 529.8 244.2 0.5 70.5 R-1

54 523.0 249.5 0.5 70.5 R-1

55 511.5 252.6 0.5 73.5 R-2

56 494.4 253.4 0.5 73.5 R-2

57 477.4 254.2 0.5 73.5 R-2

58 460.4 255.0 0.5 73.5 R-2

59 444.5 260.5 0.5 73.4 R-3

60 431.2 270.9 0.5 73.4 R-3

61 417.8 281.3 0.5 73.4 R-3

62 404.5 291.6 0.5 73.4 R-3

63 391.2 302.0 0.5 73.4 R-3

64 377.8 312.4 0.5 73.4 R-3

65 364.5 322.8 0.5 73.4 R-3

66 351.1 333.1 0.5 73.4 R-3

67 337.8 343.5 0.5 73.4 R-3

68 324.4 353.9 0.5 73.4 R-3

69 309.2 357.9 0.5 73.2 R-4

70 293.3 356.1 0.5 73.2 R-4

71 277.4 354.4 0.5 73.2 R-4

72 261.5 352.7 0.5 73.2 R-4

73 245.6 350.9 0.5 73.2 R-4

74 229.6 349.2 0.5 73.2 R-4

75 213.7 347.5 0.5 73.2 R-4

76 197.8 345.8 0.5 73.2 R-4

77 181.9 344.0 0.5 73.2 R-4

78 166.0 342.3 0.5 73.2 R-4

79 154.7 336.9 0.5 71.9 R-5

80 147.2 327.8 0.5 71.9 R-5

81 139.7 318.7 0.5 71.9 R-5

82 132.2 309.6 0.5 71.9 R-5

83 124.7 300.5 0.5 71.9 R-5

84 121.6 290.0 0.5 71.4 R-6

85 122.4 279.4 0.5 71.4 R-6

86 123.1 268.8 0.5 71.4 R-6

87 123.8 258.1 0.5 71.4 R-6

88 128.2 249.3 0.5 71.3 R-7

89 136.2 242.9 0.5 71.3 R-7

90 144.3 236.5 0.5 71.3 R-7

91 152.3 230.1 0.5 71.3 R-7

92 160.4 223.7 0.5 71.3 R-7

93 168.4 217.3 0.5 71.3 R-7

94 176.5 210.9 0.5 71.3 R-7

95 184.5 204.5 0.5 71.3 R-7

96 192.6 198.1 0.5 71.3 R-7

97 200.6 191.7 0.5 71.3 R-7

98 208.7 185.3 0.5 71.3 R-7

99 216.7 178.9 0.5 71.3 R-7

100 224.8 172.5 0.5 71.3 R-7

101 232.8 166.1 0.5 71.3 R-7

102 240.8 159.7 0.5 71.3 R-7

103 248.9 153.3 0.5 71.3 R-7

104 256.9 146.9 0.5 71.3 R-7

105 265.0 140.5 0.5 71.3 R-7

106 273.0 134.1 0.5 71.3 R-7

107 281.1 127.7 0.5 71.3 R-7

108 289.1 121.3 0.5 71.3 R-7

109 297.2 114.9 0.5 71.3 R-7

110 305.2 108.5 0.5 71.3 R-7

111 313.3 102.1 0.5 71.3 R-7

112 321.3 95.7 0.5 71.3 R-7

113 329.4 89.3 0.5 71.3 R-7

114 337.4 82.9 0.5 71.3 R-7

115 347.5 80.6 0.5 72.2 R-8

116 360.2 81.8 0.5 72.2 R-8

117 372.9 82.9 0.5 72.2 R-8

118 382.7 87.9 0.5 71.3 R-9

119 389.1 96.1 0.5 71.3 R-9

120 395.5 104.3 0.5 71.3 R-9

121 401.8 112.5 0.5 71.3 R-9

122 408.2 120.7 0.5 71.3 R-9

123 414.6 128.9 0.5 71.3 R-9

124 421.0 137.1 0.5 71.3 R-9

125 427.4 145.3 0.5 71.3 R-9

126 433.8 153.5 0.5 71.3 R-9

127 440.1 161.7 0.5 71.3 R-9

128 446.5 169.9 0.5 71.3 R-9

129 452.9 178.1 0.5 71.3 R-9

130 459.3 186.3 0.5 71.3 R-9

131 465.7 194.5 0.5 71.3 R-9

132 472.0 202.7 0.5 71.3 R-9

133 478.4 210.9 0.5 71.3 R-9

134 480.8 220.5 0.5 71.1 R-10

135 478.6 230.2 0.5 71.1 R-10

136 476.3 239.9 0.5 71.1 R-10

137 474.1 249.6 0.5 71.1 R-10

138 433.3 268.8 0.5 66.2 S+H1

139 342.1 339.5 0.5 73.6 S+H2

140 236.8 349.4 0.5 72.6 S+H3

141 137.3 315.5 0.5 73.1 S+H4

142 175.0 211.8 0.5 74.6 S+H5

143 301.4 112.6 0.5 70.7 S+H6

144 414.4 127.7 0.5 68.5 S+H7

145 454.4 178.9 0.5 66.7 S+H8

146 337.3 241.6 16.0 81.0 Mal1

147 358.2 268.6 16.0 81.0 Mal2

148 424.5 154.7 3.0 76.0 7

149 456.2 196.0 3.0 60.0 12.1

150 413.8 148.0 16.0 65.0 12.3

151 411.6 145.2 16.0 65.0 12.3

152 410.2 143.0 16.0 65.0 12.3

153 416.9 144.8 3.0 60.0 12.1

154 414.9 142.2 3.0 60.0 12.1

155 170.8 195.1 5.5 70.0 P2

156 168.6 192.5 5.5 70.0 P3

157 437.0 145.2 1.0 63.0 31

158 140.1 225.1 1.0 63.0 31

==========

Źródła typu hala produkcyjna :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] h0[m] h[m]

==========

1 357.0 290.8 311.1 233.7 418.4 146.7 463.2 205.4 0.0 15.0

2 171.7 199.3 164.4 190.2 171.1 185.2 178.1 194.3 0.0 4.5

==========

POZIOMY HAŁASU i IZOLACYJNOść PRZEGRóD

Nr źródła A 63 125 250 500 1000 2000 4000 8000 wsp.odb.

==========

1 sc.1 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.2 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.3 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.4 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

dach L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R d 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

==========

Nr źródła A 63 125 250 500 1000 2000 4000 8000 wsp.odb.

==========

2 sc.1 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.2 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.3 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.4 L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 46.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

dach L wew 105.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R d 28.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

==========

Ekrany akustyczne :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] h0[m] h[m]

==========

1 453.5 229.9 445.5 220.6 463.3 205.3 471.3 214.6 0.0 8.0

2 530.3 271.8 523.9 264.2 537.0 253.0 543.5 260.6 0.0 5.0

3 311.1 233.4 265.4 176.8 373.0 90.0 418.6 146.6 0.0 15.0

4 356.5 290.6 294.6 340.2 203.3 226.2 265.2 176.7 0.0 15.0

5 287.2 331.1 203.0 226.3 193.3 234.2 277.4 339.0 0.0 15.0

6 269.8 329.5 193.2 234.2 184.4 241.2 261.0 336.6 0.0 15.0

7 253.5 327.2 184.4 241.4 175.8 248.3 244.9 334.0 0.0 15.0

8 237.1 324.1 175.7 248.3 166.6 255.6 228.0 331.5 0.0 15.0

9 220.8 321.8 166.7 255.4 157.7 262.8 211.8 329.2 0.0 15.0

10 203.8 319.5 157.6 262.8 148.4 269.9 194.8 326.8 0.0 15.0

11 186.6 316.6 148.4 269.9 140.0 276.4 178.4 323.3 0.0 15.0

12 109.5 273.9 110.0 274.3 113.7 266.6 113.0 266.2 0.0 4.0

13 113.0 266.2 117.8 250.6 118.6 250.8 113.8 266.4 0.0 4.0

14 117.9 250.5 118.4 234.6 119.0 234.5 118.7 250.7 0.0 4.0

15 116.8 190.7 117.8 190.7 117.8 186.2 116.8 186.2 0.0 4.0

16 116.9 185.4 144.8 175.3 145.0 175.8 117.1 186.0 0.0 4.0

17 328.2 64.4 371.2 61.0 371.3 61.7 328.3 65.0 0.0 4.0

18 105.0 348.1 92.7 328.7 102.5 322.5 114.8 341.8 0.0 3.0

19 93.2 310.3 96.6 298.0 107.7 301.0 104.3 313.4 0.0 3.0

20 96.6 298.0 103.7 285.0 110.9 288.6 107.7 301.0 0.0 3.0

21 103.7 285.0 109.6 273.9 116.4 278.6 111.0 288.6 0.0 3.0

22 118.5 234.5 117.7 204.3 130.1 204.4 130.6 233.8 0.0 3.0

23 144.8 175.4 157.1 170.6 159.6 177.1 147.3 181.8 0.0 2.0

24 159.6 177.1 157.1 170.6 169.9 166.1 175.7 180.2 0.0 3.0

25 175.7 180.2 169.9 166.0 202.8 153.5 208.2 167.7 0.0 4.0

26 208.3 167.7 202.8 153.4 207.4 151.8 212.1 164.1 0.0 3.8

27 212.1 164.1 207.3 151.8 215.7 148.8 220.1 160.5 0.0 3.5

28 220.1 160.5 215.7 148.7 233.2 142.2 235.6 148.0 0.0 3.0

29 235.6 147.9 233.2 142.2 245.0 136.6 244.5 142.0 0.0 2.5

30 239.6 139.1 236.2 135.5 241.0 131.2 244.9 136.6 0.0 2.5

31 236.3 135.5 232.0 130.2 241.8 121.8 241.1 131.2 0.0 3.0

32 231.9 130.2 224.6 122.6 235.2 114.8 241.7 121.8 0.0 3.5

33 224.6 122.6 222.6 119.5 234.9 110.2 235.2 114.8 0.0 3.8

34 222.6 119.4 212.2 101.8 227.0 95.8 234.8 110.2 0.0 4.0

35 212.2 101.6 206.5 71.8 228.4 72.8 227.0 95.8 0.0 4.0

36 227.5 89.8 269.6 84.3 269.5 69.4 228.5 72.9 0.0 4.0

37 269.6 84.3 269.5 69.3 282.1 67.9 282.4 75.5 0.0 3.0

38 282.5 75.5 282.1 67.9 292.7 67.4 293.1 74.6 0.0 2.0

39 293.3 74.6 298.2 79.5 297.7 67.1 292.7 67.4 0.0 2.8

40 328.2 64.5 297.7 67.2 298.2 79.3 329.2 76.2 0.0 3.5

==========

WSPÓŁCZYNNIKI ODBICIA DLA ŚCIAN

Nr	ściana 1	ściana 2	ściana 3	ściana 4	dach
1	1.0000	1.0000	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000	1.0000	1.0000
3	1.0000	1.0000	1.0000	1.0000	1.0000
4	1.0000	1.0000	1.0000	1.0000	1.0000
5	1.0000	1.0000	1.0000	1.0000	1.0000
6	1.0000	1.0000	1.0000	1.0000	1.0000
7	1.0000	1.0000	1.0000	1.0000	1.0000
8	1.0000	1.0000	1.0000	1.0000	1.0000
9	1.0000	1.0000	1.0000	1.0000	1.0000
10	1.0000	1.0000	1.0000	1.0000	1.0000
11	1.0000	1.0000	1.0000	1.0000	1.0000
12	1.0000	1.0000	1.0000	1.0000	1.0000
13	1.0000	1.0000	1.0000	1.0000	1.0000
14	1.0000	1.0000	1.0000	1.0000	1.0000
15	1.0000	1.0000	1.0000	1.0000	1.0000
16	1.0000	1.0000	1.0000	1.0000	1.0000
17	1.0000	1.0000	1.0000	1.0000	1.0000
18	1.0000	1.0000	1.0000	1.0000	1.0000
19	1.0000	1.0000	1.0000	1.0000	1.0000
20	1.0000	1.0000	1.0000	1.0000	1.0000

21	1.0000	1.0000	1.0000	1.0000	1.0000
22	1.0000	1.0000	1.0000	1.0000	1.0000
23	1.0000	1.0000	1.0000	1.0000	1.0000
24	1.0000	1.0000	1.0000	1.0000	1.0000
25	1.0000	1.0000	1.0000	1.0000	1.0000
26	1.0000	1.0000	1.0000	1.0000	1.0000
27	1.0000	1.0000	1.0000	1.0000	1.0000
28	1.0000	1.0000	1.0000	1.0000	1.0000
29	1.0000	1.0000	1.0000	1.0000	1.0000
30	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	1.0000	1.0000
33	1.0000	1.0000	1.0000	1.0000	1.0000
34	1.0000	1.0000	1.0000	1.0000	1.0000
35	1.0000	1.0000	1.0000	1.0000	1.0000
36	1.0000	1.0000	1.0000	1.0000	1.0000
37	1.0000	1.0000	1.0000	1.0000	1.0000
38	1.0000	1.0000	1.0000	1.0000	1.0000
39	1.0000	1.0000	1.0000	1.0000	1.0000
40	1.0000	1.0000	1.0000	1.0000	1.0000

==========

Punkty obserwacji

Nr	Symbol	X[m]	Y[m]	z[m]
1	P1	95.5	268.1	1.5
2	P2	95.5	268.1	4.5
3	P3	106.1	268.7	4.0
4	P4	107.0	236.4	1.5
5	P5	104.3	238.0	4.5
6	P6	97.1	220.7	1.5

7	P7	97.1	220.7	4.5
8	P8	113.1	225.8	4.0
9	P9	98.4	165.7	1.5
10	P10	98.4	165.7	4.5
11	P11	109.3	164.7	4.0
12	P12	132.0	173.4	1.5
13	P13	132.0	173.4	4.5
14	P14	133.9	177.8	4.0
15	P15	98.4	133.0	1.5
16	P16	98.4	133.0	4.5
17	P17	106.7	140.4	4.0
18	P18	124.6	114.5	1.5
19	P19	124.6	114.5	4.5
20	P20	135.8	150.0	4.0
21	P21	155.4	70.3	1.5
22	P22	155.4	70.3	4.5
23	P23	159.5	78.3	4.0
24	P24	215.5	71.0	1.5
25	P25	215.5	71.0	4.5
26	P26	215.5	71.0	4.0
27	P27	203.0	31.3	1.5
28	P28	203.0	31.3	4.5
29	P29	204.0	52.4	4.0
30	P30	616.0	196.7	1.5
31	P31	616.0	196.7	4.5
32	P32	606.3	195.4	4.0

Obszary o innym niż globalny współczynniku gruntu G :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

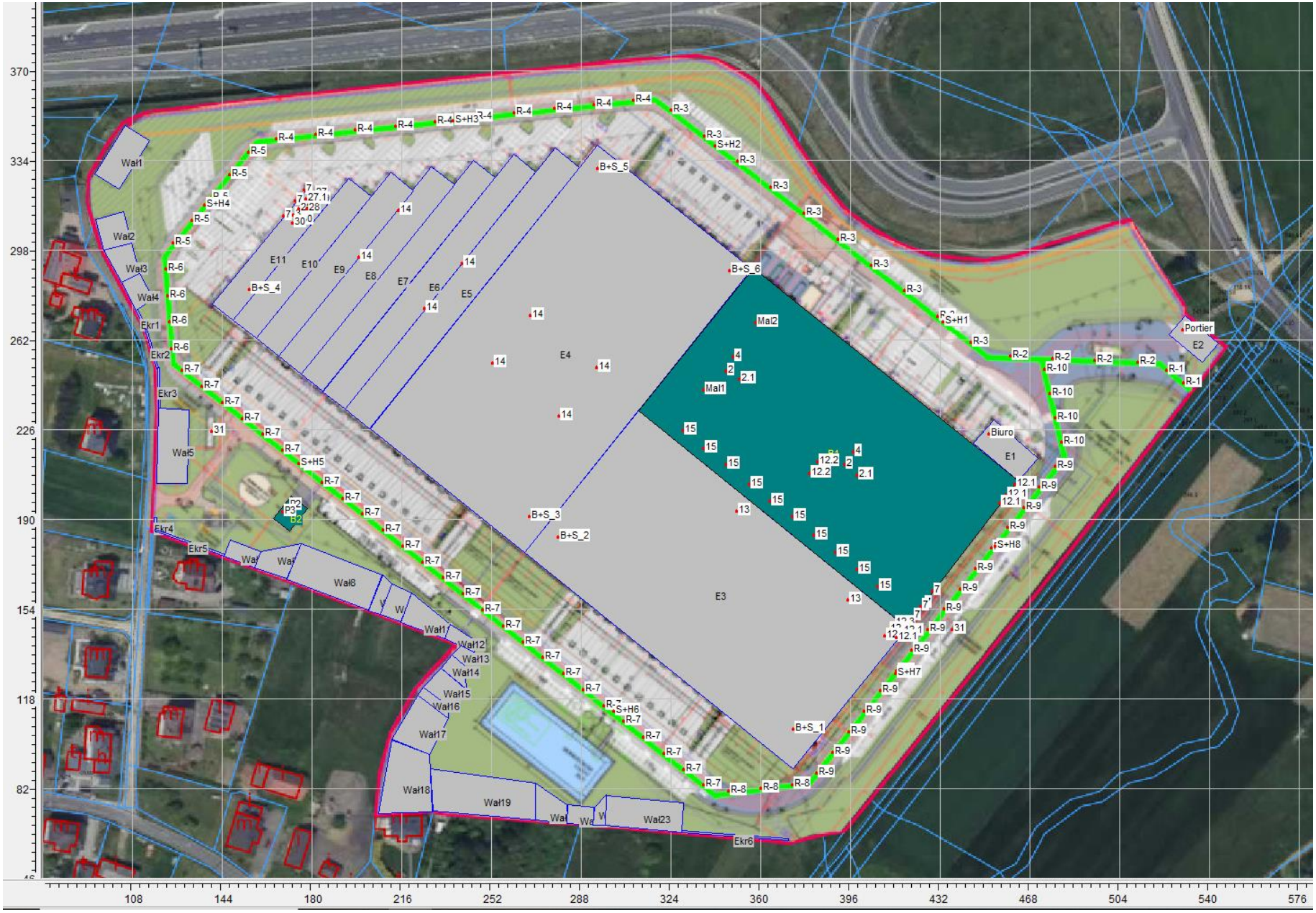
Nr	X1[m]	Y1[m]	X2[m]	Y2[m]	X3[m]	Y3[m]	X4[m]	Y4[m]	wsp.G

==========

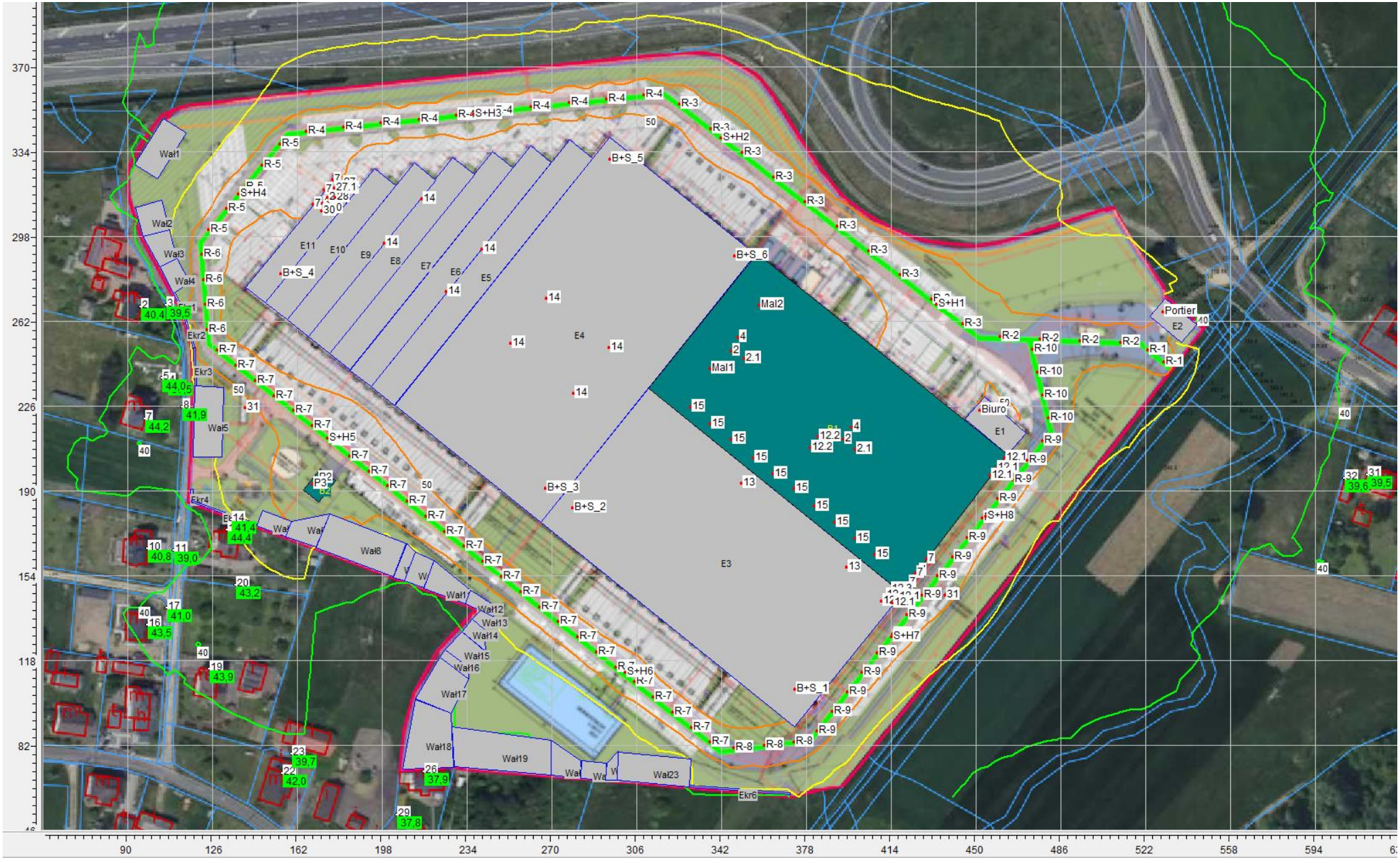
1	250.1	190.1	234.4	171.5	268.0	144.0	282.7	162.2	1.000
2	151.8	221.4	242.1	147.5	238.2	140.2	121.8	183.4	1.000
3	147.6	225.8	128.8	200.6	118.4	202.8	119.4	249.6	1.000
4	129.2	283.0	148.0	268.0	133.6	250.0	128.0	253.6	1.000
5	121.0	248.2	117.6	296.6	90.6	315.4	97.0	296.0	1.000
6	90.6	315.4	117.8	296.8	161.6	353.6	111.2	350.8	1.000
7	241.6	144.6	206.8	72.2	330.2	64.6	339.8	77.8	1.000
8	238.1	138.2	221.4	122.2	210.9	102.6	206.1	71.6	1.000
9	555.7	270.6	393.4	63.4	544.3	13.2	617.8	233.2	1.000
10	510.4	245.5	367.0	60.7	393.4	62.0	528.9	237.2	1.000

Program LEQ Professional w.6(2019)
Wydruk wyników obliczeń
Projekt :

Nr pkt.	X [m]	Y [m]	z [m]	Leq [dB(A)]
1	95,5	268,1	1,5	36,9
2	95,5	268,1	4,5	40,4
3	106,1	268,7	4,0	39,5
4	107,0	236,4	1,5	37,5
5	104,3	238,0	4,5	44,0
6	97,1	220,7	1,5	37,4
7	97,1	220,7	4,5	44,2
8	113,1	225,8	4,0	42,0
9	98,4	165,7	1,5	38,4
10	98,4	165,7	4,5	40,8
11	109,3	164,7	4,0	39,0
12	132,0	173,4	1,5	36,8
13	132,0	173,4	4,5	44,4
14	133,9	177,8	4,0	41,4
15	98,4	133,0	1,5	40,3
16	98,4	133,0	4,5	43,5
17	106,7	140,4	4,0	41,0
18	124,6	114,5	1,5	37,8
19	124,6	114,5	4,5	43,9
20	135,8	150,0	4,0	43,2
21	155,4	70,3	1,5	37,4
22	155,4	70,3	4,5	42,0
23	159,5	78,3	4,0	39,7
24	215,5	71,0	1,5	26,4
25	215,5	71,0	4,5	39,3
26	215,5	71,0	4,0	37,9
27	203,0	31,3	1,5	36,3
28	203,0	31,3	4,5	38,3
29	204,0	52,4	4,0	37,8
30	616,0	196,7	1,5	37,1
31	616,0	196,7	4,5	39,5
32	606,3	195,4	4,0	39,6



Rysunek 3 Plan sytuacyjny – pora dnia (wariant 2)



Rysunek 4 Izofony w porze dnia (wariant 2)

3. Pora nocy – wariant 1

Program LEQ Professional v. 6-2019 dla Windows

****

Dane do obliczeń :

****

Współczynnik gruntu (całego obszaru analizy)-global G = 0.000

Temperatura otoczenia 10[°C]

Źródła punktowe

Nr	X[m]	Y[m]	z[m]	Pma	Symbol
1	451.7	224.0	9.0	89.1	Biuro
2	529.5	265.6	6.0	76.2	Portier
3	373.2	105.5	16.0	88.0	B+S_1
4	279.1	182.4	16.0	88.0	B+S_2
5	267.4	190.6	16.0	88.0	B+S_3
6	155.2	281.7	16.0	88.0	B+S_4
7	295.0	330.3	16.0	88.0	B+S_5
8	347.8	289.4	16.0	88.0	B+S_6
9	462.2	203.7	3.0	60.0	12.1
10	458.8	199.4	3.0	60.0	12.1
11	429.1	160.8	3.0	64.0	7
12	425.5	155.9	3.0	76.0	7
13	421.2	150.7	3.0	77.0	7
14	329.0	225.4	16.0	87.0	15
15	337.3	218.2	16.0	87.0	15

16 346.3 211.7 16.0 87.0 15

17 355.7 203.8 16.0 87.0 15

18 364.0 196.9 16.0 87.0 15

19 373.0 190.8 16.0 87.0 15

20 381.6 183.2 16.0 87.0 15

21 390.2 176.4 16.0 87.0 15

22 398.9 169.6 16.0 87.0 15

23 407.2 162.7 16.0 87.0 15

24 379.8 208.1 16.0 65.0 12.2

25 383.0 212.8 16.0 65.0 12.2

26 349.2 254.9 16.0 80.0 4

27 397.4 216.7 16.0 80.0 4

28 346.3 249.1 16.0 63.0 2

29 393.8 211.7 16.0 63.0 2

30 351.7 245.9 16.0 86.0 2.1

31 398.9 207.4 16.0 86.0 2.1

32 350.6 193.0 16.0 77.0 13

33 395.3 157.3 16.0 77.0 13

34 214.9 313.6 16.0 85.0 14

35 199.1 294.8 16.0 85.0 14

36 240.5 292.3 16.0 85.0 14

37 225.4 274.3 16.0 85.0 14

38 267.8 271.4 16.0 85.0 14

39 252.7 252.4 16.0 85.0 14

40 294.5 250.6 16.0 85.0 14

41 279.4 231.1 16.0 85.0 14

42 177.1 321.8 3.0 75.0 7

43 173.5 317.5 3.0 75.0 7

44 168.8 311.4 3.0 75.0 7

45 172.7 311.7 16.0 65.0 30

46 175.4 309.4 16.0 65.0 30

47 172.4 308.6 16.0 65.0 30

48 175.0 314.3 16.0 70.0 28

49 178.3 314.1 16.0 70.0 28

50 182.3 317.7 16.0 76.0 29

51 181.1 320.3 16.0 75.0 27

52 177.9 318.3 16.0 75.0 27.1

53 529.8 244.2 0.5 69.6 R-1

54 523.0 249.5 0.5 69.6 R-1

55 511.5 252.6 0.5 72.6 R-2

56 494.4 253.4 0.5 72.6 R-2

57 477.4 254.2 0.5 72.6 R-2

58 460.4 255.0 0.5 72.6 R-2

59 444.5 260.5 0.5 70.7 R-3

60 431.2 270.9 0.5 70.7 R-3

61 417.8 281.3 0.5 70.7 R-3

62 404.5 291.6 0.5 70.7 R-3

63 391.2 302.0 0.5 70.7 R-3

64 377.8 312.4 0.5 70.7 R-3

65 364.5 322.8 0.5 70.7 R-3

66 351.1 333.1 0.5 70.7 R-3

67 337.8 343.5 0.5 70.7 R-3

68 324.4 353.9 0.5 70.7 R-3

69 309.2 357.9 0.5 72.3 R-4

70 293.3 356.1 0.5 72.3 R-4

71 277.4 354.4 0.5 72.3 R-4

72 261.5 352.7 0.5 72.3 R-4

73 245.6 350.9 0.5 72.3 R-4

74 229.6 349.2 0.5 72.3 R-4

75 213.7 347.5 0.5 72.3 R-4

76 197.8 345.8 0.5 72.3 R-4

77 181.9 344.0 0.5 72.3 R-4

78	166.0	342.3	0.5	72.3	R-4
79	154.7	336.9	0.5	71.0	R-5
80	147.2	327.8	0.5	71.0	R-5
81	139.7	318.7	0.5	71.0	R-5
82	132.2	309.6	0.5	71.0	R-5
83	124.7	300.5	0.5	71.0	R-5
84	121.6	290.0	0.5	70.6	R-6
85	122.4	279.4	0.5	70.6	R-6
86	123.1	268.8	0.5	70.6	R-6
87	123.8	258.1	0.5	70.6	R-6
88	128.2	249.3	0.5	70.4	R-7
89	136.2	242.9	0.5	70.4	R-7
90	144.3	236.5	0.5	70.4	R-7
91	152.3	230.1	0.5	70.4	R-7
92	160.4	223.7	0.5	70.4	R-7
93	168.4	217.3	0.5	70.4	R-7
94	176.5	210.9	0.5	70.4	R-7
95	184.5	204.5	0.5	70.4	R-7
96	192.6	198.1	0.5	70.4	R-7
97	200.6	191.7	0.5	70.4	R-7
98	208.7	185.3	0.5	70.4	R-7
99	216.7	178.9	0.5	70.4	R-7
100	224.8	172.5	0.5	70.4	R-7
101	232.8	166.1	0.5	70.4	R-7
102	240.8	159.7	0.5	70.4	R-7
103	248.9	153.3	0.5	70.4	R-7
104	256.9	146.9	0.5	70.4	R-7
105	265.0	140.5	0.5	70.4	R-7
106	273.0	134.1	0.5	70.4	R-7
107	281.1	127.7	0.5	70.4	R-7
108	289.1	121.3	0.5	70.4	R-7

109 297.2 114.9 0.5 70.4 R-7

110 305.2 108.5 0.5 70.4 R-7

111 313.3 102.1 0.5 70.4 R-7

112 321.3 95.7 0.5 70.4 R-7

113 329.4 89.3 0.5 70.4 R-7

114 337.4 82.9 0.5 70.4 R-7

115 347.5 80.6 0.5 71.3 R-8

116 360.2 81.8 0.5 71.3 R-8

117 372.9 82.9 0.5 71.3 R-8

118 382.7 87.9 0.5 70.4 R-9

119 389.1 96.1 0.5 70.4 R-9

120 395.5 104.3 0.5 70.4 R-9

121 401.8 112.5 0.5 70.4 R-9

122 408.2 120.7 0.5 70.4 R-9

123 414.6 128.9 0.5 70.4 R-9

124 421.0 137.1 0.5 70.4 R-9

125 427.4 145.3 0.5 70.4 R-9

126 433.8 153.5 0.5 70.4 R-9

127 440.1 161.7 0.5 70.4 R-9

128 446.5 169.9 0.5 70.4 R-9

129 452.9 178.1 0.5 70.4 R-9

130 459.3 186.3 0.5 70.4 R-9

131 465.7 194.5 0.5 70.4 R-9

132 472.0 202.7 0.5 70.4 R-9

133 478.4 210.9 0.5 70.4 R-9

134 480.8 220.5 0.5 70.2 R-10

135 478.6 230.2 0.5 70.2 R-10

136 476.3 239.9 0.5 70.2 R-10

137 474.1 249.6 0.5 70.2 R-10

138 433.3 268.8 0.5 64.8 S+H1

139 342.1 339.5 0.5 74.9 S+H2

140 236.8 349.4 0.5 74.4 S+H3

141 137.3 315.5 0.5 73.4 S+H4

142 175.0 211.8 0.5 73.4 S+H5

143 301.4 112.6 0.5 72.7 S+H6

144 414.4 127.7 0.5 72.7 S+H7

145 454.4 178.9 0.5 72.7 S+H8

146 337.3 241.6 16.0 81.0 Mal1

147 358.2 268.6 16.0 81.0 Mal2

148 424.5 154.7 3.0 76.0 7

149 456.2 196.0 3.0 60.0 12.1

150 413.8 148.0 16.0 65.0 12.3

151 411.6 145.2 16.0 65.0 12.3

152 410.2 143.0 16.0 65.0 12.3

153 416.9 144.8 3.0 60.0 12.1

154 414.9 142.2 3.0 60.0 12.1

==========

Źródła typu hala produkcyjna :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] h0[m] h[m]

==========

1 357.0 290.8 311.1 233.7 418.4 146.7 463.2 205.4 0.0 15.0

==========

POZIOMY HAŁASU i IZOLACYJNOść PRZEGRóD

Nr źródła A 63 125 250 500 1000 2000 4000 8000 wsp.odb.

==========

1 sc.1 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.2 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.3 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.4 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

dach L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R d 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

==========

Ekrany akustyczne :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr	X1[m]	Y1[m]	X2[m]	Y2[m]	X3[m]	Y3[m]	X4[m]	Y4[m]	h0[m]	h[m]
1	453.5	229.9	445.5	220.6	463.3	205.3	471.3	214.6	0.0	8.0
2	530.3	271.8	523.9	264.2	537.0	253.0	543.5	260.6	0.0	5.0
3	311.1	233.4	265.4	176.8	373.0	90.0	418.6	146.6	0.0	15.0
4	356.5	290.6	294.6	340.2	203.3	226.2	265.2	176.7	0.0	15.0
5	287.2	331.1	203.0	226.3	193.3	234.2	277.4	339.0	0.0	15.0
6	269.8	329.5	193.2	234.2	184.4	241.2	261.0	336.6	0.0	15.0
7	253.5	327.2	184.4	241.4	175.8	248.3	244.9	334.0	0.0	15.0
8	237.1	324.1	175.7	248.3	166.6	255.6	228.0	331.5	0.0	15.0
9	220.8	321.8	166.7	255.4	157.7	262.8	211.8	329.2	0.0	15.0
10	203.8	319.5	157.6	262.8	148.4	269.9	194.8	326.8	0.0	15.0
11	186.6	316.6	148.4	269.9	140.0	276.4	178.4	323.3	0.0	15.0
12	109.5	273.9	110.0	274.3	113.7	266.6	113.0	266.2	0.0	4.0
13	113.0	266.2	117.8	250.6	118.6	250.8	113.8	266.4	0.0	4.0
14	117.9	250.5	118.4	234.6	119.0	234.5	118.7	250.7	0.0	4.0
15	116.8	190.7	117.8	190.7	117.8	186.2	116.8	186.2	0.0	4.0
16	116.9	185.4	144.8	175.3	145.0	175.8	117.1	186.0	0.0	4.0
17	328.2	64.4	371.2	61.0	371.3	61.7	328.3	65.0	0.0	4.0
18	105.0	348.1	92.7	328.7	102.5	322.5	114.8	341.8	0.0	3.0
19	93.2	310.3	96.6	298.0	107.7	301.0	104.3	313.4	0.0	3.0

20 96.6 298.0 103.7 285.0 110.9 288.6 107.7 301.0 0.0 3.0

21 103.7 285.0 109.6 273.9 116.4 278.6 111.0 288.6 0.0 3.0

22 118.5 234.5 117.7 204.3 130.1 204.4 130.6 233.8 0.0 3.0

23 144.8 175.4 157.1 170.6 159.6 177.1 147.3 181.8 0.0 2.0

24 159.6 177.1 157.1 170.6 169.9 166.1 175.7 180.2 0.0 3.0

25 175.7 180.2 169.9 166.0 202.8 153.5 208.2 167.7 0.0 4.0

26 208.3 167.7 202.8 153.4 207.4 151.8 212.1 164.1 0.0 3.8

27 212.1 164.1 207.3 151.8 215.7 148.8 220.1 160.5 0.0 3.5

28 220.1 160.5 215.7 148.7 233.2 142.2 235.6 148.0 0.0 3.0

29 235.6 147.9 233.2 142.2 245.0 136.6 244.5 142.0 0.0 2.5

30 239.6 139.1 236.2 135.5 241.0 131.2 244.9 136.6 0.0 2.5

31 236.3 135.5 232.0 130.2 241.8 121.8 241.1 131.2 0.0 3.0

32 231.9 130.2 224.6 122.6 235.2 114.8 241.7 121.8 0.0 3.5

33 224.6 122.6 222.6 119.5 234.9 110.2 235.2 114.8 0.0 3.8

34 222.6 119.4 212.2 101.8 227.0 95.8 234.8 110.2 0.0 4.0

35 212.2 101.6 206.5 71.8 228.4 72.8 227.0 95.8 0.0 4.0

36 227.5 89.8 269.6 84.3 269.5 69.4 228.5 72.9 0.0 4.0

37 269.6 84.3 269.5 69.3 282.1 67.9 282.4 75.5 0.0 3.0

38 282.5 75.5 282.1 67.9 292.7 67.4 293.1 74.6 0.0 2.0

39 293.3 74.6 298.2 79.5 297.7 67.1 292.7 67.4 0.0 2.8

40 328.2 64.5 297.7 67.2 298.2 79.3 329.2 76.2 0.0 3.5

41 171.7 199.3 164.6 190.2 171.1 185.2 178.1 194.3 0.0 4.5

42 140.2 276.4 149.2 287.8 149.7 287.5 140.5 276.3 15.0 17.0

43 140.4 276.6 140.1 276.2 150.9 267.9 151.4 268.4 15.0 17.0

44 251.8 188.8 251.2 187.6 278.8 166.0 279.4 166.8 15.0 17.0

==========

WSPÓŁCZYNNIKI ODBICIA DLA ŚCIAN

Nr ściana 1 ściana 2 ściana 3 ściana 4 dach

==========

1 1.0000 1.0000 1.0000 1.0000 1.0000

2	1.0000	1.0000	1.0000	1.0000	1.0000
3	1.0000	1.0000	1.0000	1.0000	1.0000
4	1.0000	1.0000	1.0000	1.0000	1.0000
5	1.0000	1.0000	1.0000	1.0000	1.0000
6	1.0000	1.0000	1.0000	1.0000	1.0000
7	1.0000	1.0000	1.0000	1.0000	1.0000
8	1.0000	1.0000	1.0000	1.0000	1.0000
9	1.0000	1.0000	1.0000	1.0000	1.0000
10	1.0000	1.0000	1.0000	1.0000	1.0000
11	1.0000	1.0000	1.0000	1.0000	1.0000
12	1.0000	1.0000	1.0000	1.0000	1.0000
13	1.0000	1.0000	1.0000	1.0000	1.0000
14	1.0000	1.0000	1.0000	1.0000	1.0000
15	1.0000	1.0000	1.0000	1.0000	1.0000
16	1.0000	1.0000	1.0000	1.0000	1.0000
17	1.0000	1.0000	1.0000	1.0000	1.0000
18	1.0000	1.0000	1.0000	1.0000	1.0000
19	1.0000	1.0000	1.0000	1.0000	1.0000
20	1.0000	1.0000	1.0000	1.0000	1.0000
21	1.0000	1.0000	1.0000	1.0000	1.0000
22	1.0000	1.0000	1.0000	1.0000	1.0000
23	1.0000	1.0000	1.0000	1.0000	1.0000
24	1.0000	1.0000	1.0000	1.0000	1.0000
25	1.0000	1.0000	1.0000	1.0000	1.0000
26	1.0000	1.0000	1.0000	1.0000	1.0000
27	1.0000	1.0000	1.0000	1.0000	1.0000
28	1.0000	1.0000	1.0000	1.0000	1.0000
29	1.0000	1.0000	1.0000	1.0000	1.0000
30	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	1.0000	1.0000

33	1.0000	1.0000	1.0000	1.0000	1.0000
34	1.0000	1.0000	1.0000	1.0000	1.0000
35	1.0000	1.0000	1.0000	1.0000	1.0000
36	1.0000	1.0000	1.0000	1.0000	1.0000
37	1.0000	1.0000	1.0000	1.0000	1.0000
38	1.0000	1.0000	1.0000	1.0000	1.0000
39	1.0000	1.0000	1.0000	1.0000	1.0000
40	1.0000	1.0000	1.0000	1.0000	1.0000
41	1.0000	1.0000	1.0000	1.0000	1.0000
42	1.0000	1.0000	1.0000	1.0000	1.0000
43	1.0000	1.0000	1.0000	1.0000	1.0000
44	1.0000	1.0000	1.0000	1.0000	1.0000

==========

Punkty obserwacji

Nr	Symbol	X[m]	Y[m]	z[m]
1	P1	95.5	268.1	1.5
2	P2	95.5	268.1	4.5
3	P3	106.1	268.7	4.0
4	P4	107.0	236.4	1.5
5	P5	104.3	238.0	4.5
6	P6	97.1	220.7	1.5
7	P7	97.1	220.7	4.5
8	P8	113.1	225.8	4.0
9	P9	98.4	165.7	1.5
10	P10	98.4	165.7	4.5
11	P11	109.3	164.7	4.0
12	P12	132.0	173.4	1.5
13	P13	132.0	173.4	4.5
14	P14	133.9	177.8	4.0

15 P15 98.4 133.0 1.5

16 P16 98.4 133.0 4.5

17 P17 106.7 140.4 4.0

18 P18 124.6 114.5 1.5

19 P19 124.6 114.5 4.5

20 P20 135.8 150.0 4.0

21 P21 155.4 70.3 1.5

22 P22 155.4 70.3 4.5

23 P23 159.5 78.3 4.0

24 P24 215.5 71.0 1.5

25 P25 215.5 71.0 4.5

26 P26 215.5 71.0 4.0

27 P27 203.0 31.3 1.5

28 P28 203.0 31.3 4.5

29 P29 204.0 52.4 4.0

30 P30 616.0 196.7 1.5

31 P31 616.0 196.7 4.5

32 P32 606.3 195.4 4.0

Obszary o innym niż globalny współczynniku gruntu G :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] wsp.G

==========

1 250.1 190.1 234.4 171.5 268.0 144.0 282.7 162.2 1.000

2 151.8 221.4 242.1 147.5 238.2 140.2 121.8 183.4 1.000

3 147.6 225.8 128.8 200.6 118.4 202.8 119.4 249.6 1.000

4 129.2 283.0 148.0 268.0 133.6 250.0 128.0 253.6 1.000

5 121.0 248.2 117.6 296.6 90.6 315.4 97.0 296.0 1.000

6 90.6 315.4 117.8 296.8 161.6 353.6 111.2 350.8 1.000

7 241.6 144.6 206.8 72.2 330.2 64.6 339.8 77.8 1.000

8 238.1 138.2 221.4 122.2 210.9 102.6 206.1 71.6 1.000

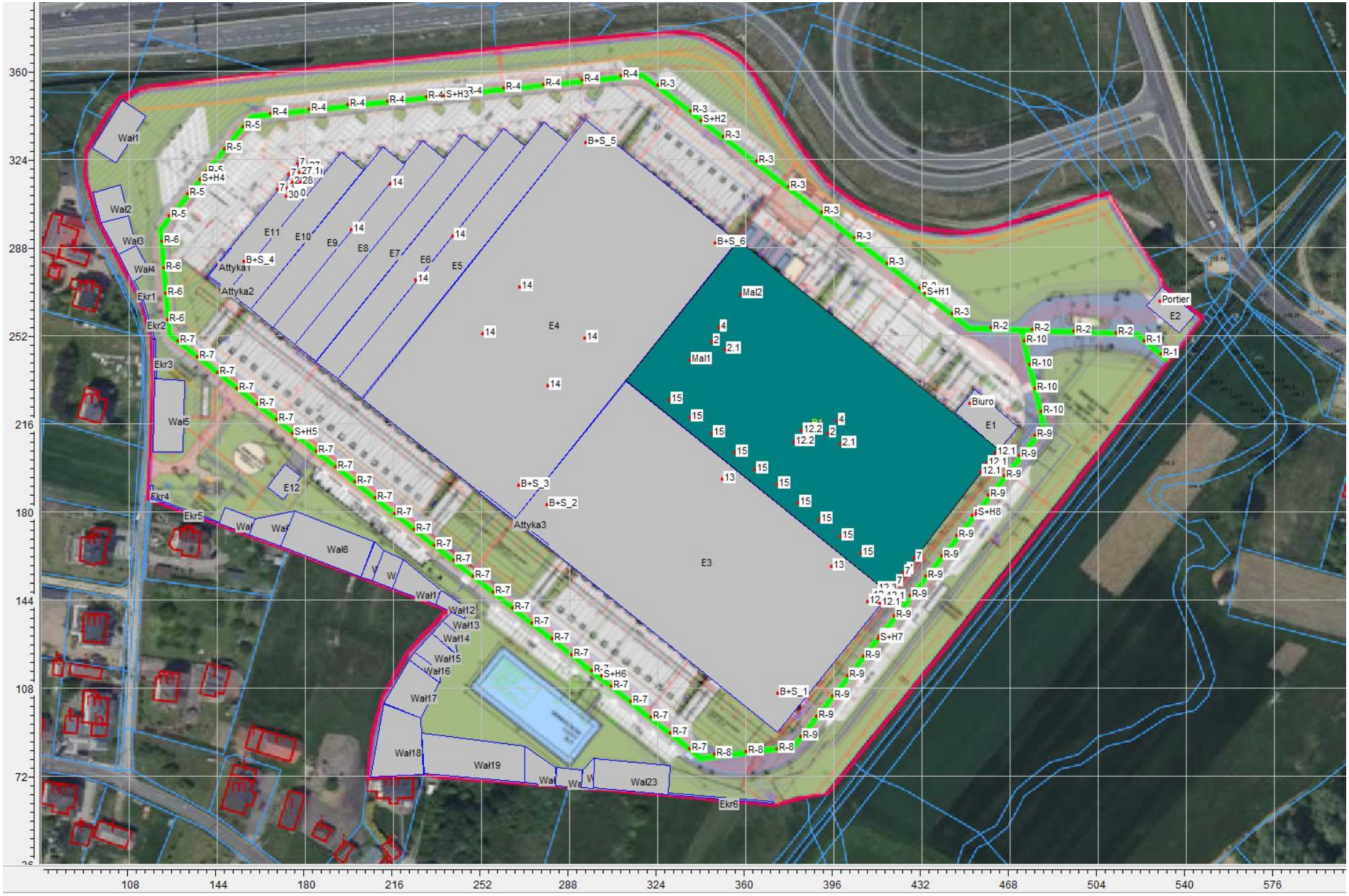
9 555.7 270.6 393.4 63.4 544.3 13.2 617.8 233.2 1.000

10 510.4 245.5 367.0 60.7 393.4 62.0 528.9 237.2 1.000

==========

Program LEQ Professional w.6(2019)
Wydruk wyników obliczeń
Projekt :

Nr pkt.	X [m]	Y [m]	z [m]	Leq [dB(A)]
1	95.5	268.1	1.5	35.8
2	95.5	268.1	4.5	38.5
3	106.1	268.7	4.0	38.3
4	107.0	236.4	1.5	36.5
5	104.3	238.0	4.5	38.3
6	97.1	220.7	1.5	35.3
7	97.1	220.7	4.5	37.4
8	113.1	225.8	4.0	38.2
9	98.4	165.7	1.5	36.1
10	98.4	165.7	4.5	36.5
11	109.3	164.7	4.0	35.9
12	132.0	173.4	1.5	34.0
13	132.0	173.4	4.5	37.9
14	133.9	177.8	4.0	38.5
15	98.4	133.0	1.5	35.1
16	98.4	133.0	4.5	36.0
17	106.7	140.4	4.0	36.0
18	124.6	114.5	1.5	35.3
19	124.6	114.5	4.5	36.5
20	135.8	150.0	4.0	37.0
21	155.4	70.3	1.5	35.6
22	155.4	70.3	4.5	36.7
23	159.5	78.3	4.0	36.7
24	215.5	71.0	1.5	27.4
25	215.5	71.0	4.5	37.4
26	215.5	71.0	4.0	37.1
27	203.0	31.3	1.5	36.0
28	203.0	31.3	4.5	36.9
29	204.0	52.4	4.0	37.0
30	616.0	196.7	1.5	37.3
31	616.0	196.7	4.5	39.4
32	606.3	195.4	4.0	39.6



Rysunek 5 Pan sytuacyjny – pora nocy (wariant 1)

Rysunek 6 Izofony w porze nocy (wariant 1)

4. Pora nocy – wariant 2

Program LEQ Professional v. 6-2019 dla Windows

****

Dane do obliczeń :

****

Współczynnik gruntu (całego obszaru analizy)-global G = 0.000

Temperatura otoczenia 10[°C]

Źródła punktowe

Nr	X[m]	Y[m]	z[m]	Pma	Symbol
1	451.7	224.0	9.0	89.1	Biuro
2	529.5	265.6	6.0	76.2	Portier
3	373.2	105.5	16.0	83.7	B+S_1
4	279.1	182.4	16.0	83.7	B+S_2
5	267.4	190.6	16.0	83.7	B+S_3
6	155.2	281.7	16.0	83.7	B+S_4
7	295.0	330.3	16.0	83.7	B+S_5
8	347.8	289.4	16.0	83.7	B+S_6
9	462.2	203.7	3.0	60.0	12.1
10	458.8	199.4	3.0	60.0	12.1
11	429.1	160.8	3.0	64.0	7
12	425.5	155.9	3.0	76.0	7
13	421.2	150.7	3.0	77.0	7
14	329.0	225.4	16.0	87.0	15
15	337.3	218.2	16.0	87.0	15
16	346.3	211.7	16.0	87.0	15
17	355.7	203.8	16.0	87.0	15

18 364.0 196.9 16.0 87.0 15

19 373.0 190.8 16.0 87.0 15

20 381.6 183.2 16.0 87.0 15

21 390.2 176.4 16.0 87.0 15

22 398.9 169.6 16.0 87.0 15

23 407.2 162.7 16.0 87.0 15

24 379.8 208.1 16.0 65.0 12.2

25 383.0 212.8 16.0 65.0 12.2

26 349.2 254.9 16.0 80.0 4

27 397.4 216.7 16.0 80.0 4

28 346.3 249.1 16.0 63.0 2

29 393.8 211.7 16.0 63.0 2

30 351.7 245.9 16.0 86.0 2.1

31 398.9 207.4 16.0 86.0 2.1

32 350.6 193.0 16.0 77.0 13

33 395.3 157.3 16.0 77.0 13

34 214.9 313.6 16.0 85.0 14

35 199.1 294.8 16.0 85.0 14

36 240.5 292.3 16.0 85.0 14

37 225.4 274.3 16.0 85.0 14

38 267.8 271.4 16.0 85.0 14

39 252.7 252.4 16.0 85.0 14

40 294.5 250.6 16.0 85.0 14

41 279.4 231.1 16.0 85.0 14

42 177.1 321.8 3.0 75.0 7

43 173.5 317.5 3.0 75.0 7

44 168.8 311.4 3.0 75.0 7

45 172.7 311.7 16.0 65.0 30

46 175.4 309.4 16.0 65.0 30

47 172.4 308.6 16.0 65.0 30

48 175.0 314.3 16.0 70.0 28

49 178.3 314.1 16.0 70.0 28

50 182.3 317.7 16.0 76.0 29

51 181.1 320.3 16.0 75.0 27

52 177.9 318.3 16.0 75.0 27.1

53 529.8 244.2 0.5 69.6 R-1

54 523.0 249.5 0.5 69.6 R-1

55 511.5 252.6 0.5 72.6 R-2

56 494.4 253.4 0.5 72.6 R-2

57 477.4 254.2 0.5 72.6 R-2

58 460.4 255.0 0.5 72.6 R-2

59 444.5 260.5 0.5 70.7 R-3

60 431.2 270.9 0.5 70.7 R-3

61 417.8 281.3 0.5 70.7 R-3

62 404.5 291.6 0.5 70.7 R-3

63 391.2 302.0 0.5 70.7 R-3

64 377.8 312.4 0.5 70.7 R-3

65 364.5 322.8 0.5 70.7 R-3

66 351.1 333.1 0.5 70.7 R-3

67 337.8 343.5 0.5 70.7 R-3

68 324.4 353.9 0.5 70.7 R-3

69 309.2 357.9 0.5 72.3 R-4

70 293.3 356.1 0.5 72.3 R-4

71 277.4 354.4 0.5 72.3 R-4

72 261.5 352.7 0.5 72.3 R-4

73 245.6 350.9 0.5 72.3 R-4

74 229.6 349.2 0.5 72.3 R-4

75 213.7 347.5 0.5 72.3 R-4

76 197.8 345.8 0.5 72.3 R-4

77 181.9 344.0 0.5 72.3 R-4

78 166.0 342.3 0.5 72.3 R-4

79 154.7 336.9 0.5 71.0 R-5

80	147.2	327.8	0.5	71.0	R-5
81	139.7	318.7	0.5	71.0	R-5
82	132.2	309.6	0.5	71.0	R-5
83	124.7	300.5	0.5	71.0	R-5
84	121.6	290.0	0.5	70.6	R-6
85	122.4	279.4	0.5	70.6	R-6
86	123.1	268.8	0.5	70.6	R-6
87	123.8	258.1	0.5	70.6	R-6
88	128.2	249.3	0.5	70.4	R-7
89	136.2	242.9	0.5	70.4	R-7
90	144.3	236.5	0.5	70.4	R-7
91	152.3	230.1	0.5	70.4	R-7
92	160.4	223.7	0.5	70.4	R-7
93	168.4	217.3	0.5	70.4	R-7
94	176.5	210.9	0.5	70.4	R-7
95	184.5	204.5	0.5	70.4	R-7
96	192.6	198.1	0.5	70.4	R-7
97	200.6	191.7	0.5	70.4	R-7
98	208.7	185.3	0.5	70.4	R-7
99	216.7	178.9	0.5	70.4	R-7
100	224.8	172.5	0.5	70.4	R-7
101	232.8	166.1	0.5	70.4	R-7
102	240.8	159.7	0.5	70.4	R-7
103	248.9	153.3	0.5	70.4	R-7
104	256.9	146.9	0.5	70.4	R-7
105	265.0	140.5	0.5	70.4	R-7
106	273.0	134.1	0.5	70.4	R-7
107	281.1	127.7	0.5	70.4	R-7
108	289.1	121.3	0.5	70.4	R-7
109	297.2	114.9	0.5	70.4	R-7
110	305.2	108.5	0.5	70.4	R-7

111 313.3 102.1 0.5 70.4 R-7

112 321.3 95.7 0.5 70.4 R-7

113 329.4 89.3 0.5 70.4 R-7

114 337.4 82.9 0.5 70.4 R-7

115 347.5 80.6 0.5 71.3 R-8

116 360.2 81.8 0.5 71.3 R-8

117 372.9 82.9 0.5 71.3 R-8

118 382.7 87.9 0.5 70.4 R-9

119 389.1 96.1 0.5 70.4 R-9

120 395.5 104.3 0.5 70.4 R-9

121 401.8 112.5 0.5 70.4 R-9

122 408.2 120.7 0.5 70.4 R-9

123 414.6 128.9 0.5 70.4 R-9

124 421.0 137.1 0.5 70.4 R-9

125 427.4 145.3 0.5 70.4 R-9

126 433.8 153.5 0.5 70.4 R-9

127 440.1 161.7 0.5 70.4 R-9

128 446.5 169.9 0.5 70.4 R-9

129 452.9 178.1 0.5 70.4 R-9

130 459.3 186.3 0.5 70.4 R-9

131 465.7 194.5 0.5 70.4 R-9

132 472.0 202.7 0.5 70.4 R-9

133 478.4 210.9 0.5 70.4 R-9

134 480.8 220.5 0.5 70.2 R-10

135 478.6 230.2 0.5 70.2 R-10

136 476.3 239.9 0.5 70.2 R-10

137 474.1 249.6 0.5 70.2 R-10

138 433.3 268.8 0.5 64.8 S+H1

139 342.1 339.5 0.5 74.9 S+H2

140 236.8 349.4 0.5 74.4 S+H3

141 137.3 315.5 0.5 73.4 S+H4

142 175.0 211.8 0.5 73.4 S+H5

143 301.4 112.6 0.5 72.7 S+H6

144 414.4 127.7 0.5 72.7 S+H7

145 454.4 178.9 0.5 72.7 S+H8

146 337.3 241.6 16.0 81.0 Mal1

147 358.2 268.6 16.0 81.0 Mal2

148 424.5 154.7 3.0 76.0 7

149 456.2 196.0 3.0 60.0 12.1

150 413.8 148.0 16.0 65.0 12.3

151 411.6 145.2 16.0 65.0 12.3

152 410.2 143.0 16.0 65.0 12.3

153 416.9 144.8 3.0 60.0 12.1

154 414.9 142.2 3.0 60.0 12.1

==========

Źródła typu hala produkcyjna :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr X1[m] Y1[m] X2[m] Y2[m] X3[m] Y3[m] X4[m] Y4[m] h0[m] h[m]

==========

1 357.0 290.8 311.1 233.7 418.4 146.7 463.2 205.4 0.0 15.0

==========

POZIOMY HAŁASU i IZOLACYJNOść PRZEGRóD

Nr źródła A 63 125 250 500 1000 2000 4000 8000 wsp.odb.

==========

1 sc.1 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.2 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.3 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

sc.4 L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R sc 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

dach L wew 80.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0000

R d 30.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

==========

Ekrany akustyczne :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

Nr	X1[m]	Y1[m]	X2[m]	Y2[m]	X3[m]	Y3[m]	X4[m]	Y4[m]	h0[m]	h[m]
1	453.5	229.9	445.5	220.6	463.3	205.3	471.3	214.6	0.0	8.0
2	530.3	271.8	523.9	264.2	537.0	253.0	543.5	260.6	0.0	5.0
3	311.1	233.4	265.4	176.8	373.0	90.0	418.6	146.6	0.0	15.0
4	356.5	290.6	294.6	340.2	203.3	226.2	265.2	176.7	0.0	15.0
5	287.2	331.1	203.0	226.3	193.3	234.2	277.4	339.0	0.0	15.0
6	269.8	329.5	193.2	234.2	184.4	241.2	261.0	336.6	0.0	15.0
7	253.5	327.2	184.4	241.4	175.8	248.3	244.9	334.0	0.0	15.0
8	237.1	324.1	175.7	248.3	166.6	255.6	228.0	331.5	0.0	15.0
9	220.8	321.8	166.7	255.4	157.7	262.8	211.8	329.2	0.0	15.0
10	203.8	319.5	157.6	262.8	148.4	269.9	194.8	326.8	0.0	15.0
11	186.6	316.6	148.4	269.9	140.0	276.4	178.4	323.3	0.0	15.0
12	109.5	273.9	110.0	274.3	113.7	266.6	113.0	266.2	0.0	4.0
13	113.0	266.2	117.8	250.6	118.6	250.8	113.8	266.4	0.0	4.0
14	117.9	250.5	118.4	234.6	119.0	234.5	118.7	250.7	0.0	4.0
15	116.8	190.7	117.8	190.7	117.8	186.2	116.8	186.2	0.0	4.0
16	116.9	185.4	144.8	175.3	145.0	175.8	117.1	186.0	0.0	4.0
17	328.2	64.4	371.2	61.0	371.3	61.7	328.3	65.0	0.0	4.0
18	105.0	348.1	92.7	328.7	102.5	322.5	114.8	341.8	0.0	3.0
19	93.2	310.3	96.6	298.0	107.7	301.0	104.3	313.4	0.0	3.0
20	96.6	298.0	103.7	285.0	110.9	288.6	107.7	301.0	0.0	3.0
21	103.7	285.0	109.6	273.9	116.4	278.6	111.0	288.6	0.0	3.0

22 118.5 234.5 117.7 204.3 130.1 204.4 130.6 233.8 0.0 3.0

23 144.8 175.4 157.1 170.6 159.6 177.1 147.3 181.8 0.0 2.0

24 159.6 177.1 157.1 170.6 169.9 166.1 175.7 180.2 0.0 3.0

25 175.7 180.2 169.9 166.0 202.8 153.5 208.2 167.7 0.0 4.0

26 208.3 167.7 202.8 153.4 207.4 151.8 212.1 164.1 0.0 3.8

27 212.1 164.1 207.3 151.8 215.7 148.8 220.1 160.5 0.0 3.5

28 220.1 160.5 215.7 148.7 233.2 142.2 235.6 148.0 0.0 3.0

29 235.6 147.9 233.2 142.2 245.0 136.6 244.5 142.0 0.0 2.5

30 239.6 139.1 236.2 135.5 241.0 131.2 244.9 136.6 0.0 2.5

31 236.3 135.5 232.0 130.2 241.8 121.8 241.1 131.2 0.0 3.0

32 231.9 130.2 224.6 122.6 235.2 114.8 241.7 121.8 0.0 3.5

33 224.6 122.6 222.6 119.5 234.9 110.2 235.2 114.8 0.0 3.8

34 222.6 119.4 212.2 101.8 227.0 95.8 234.8 110.2 0.0 4.0

35 212.2 101.6 206.5 71.8 228.4 72.8 227.0 95.8 0.0 4.0

36 227.5 89.8 269.6 84.3 269.5 69.4 228.5 72.9 0.0 4.0

37 269.6 84.3 269.5 69.3 282.1 67.9 282.4 75.5 0.0 3.0

38 282.5 75.5 282.1 67.9 292.7 67.4 293.1 74.6 0.0 2.0

39 293.3 74.6 298.2 79.5 297.7 67.1 292.7 67.4 0.0 2.8

40 328.2 64.5 297.7 67.2 298.2 79.3 329.2 76.2 0.0 3.5

41 171.7 199.3 164.6 190.2 171.1 185.2 178.1 194.3 0.0 4.5

==========

WSPÓŁCZYNNIKI ODBICIA DLA ŚCIAN

Nr ściana 1 ściana 2 ściana 3 ściana 4 dach

==========

1 1.0000 1.0000 1.0000 1.0000 1.0000

2 1.0000 1.0000 1.0000 1.0000 1.0000

3 1.0000 1.0000 1.0000 1.0000 1.0000

4 1.0000 1.0000 1.0000 1.0000 1.0000

5 1.0000 1.0000 1.0000 1.0000 1.0000

6 1.0000 1.0000 1.0000 1.0000 1.0000

7	1.0000	1.0000	1.0000	1.0000	1.0000
8	1.0000	1.0000	1.0000	1.0000	1.0000
9	1.0000	1.0000	1.0000	1.0000	1.0000
10	1.0000	1.0000	1.0000	1.0000	1.0000
11	1.0000	1.0000	1.0000	1.0000	1.0000
12	1.0000	1.0000	1.0000	1.0000	1.0000
13	1.0000	1.0000	1.0000	1.0000	1.0000
14	1.0000	1.0000	1.0000	1.0000	1.0000
15	1.0000	1.0000	1.0000	1.0000	1.0000
16	1.0000	1.0000	1.0000	1.0000	1.0000
17	1.0000	1.0000	1.0000	1.0000	1.0000
18	1.0000	1.0000	1.0000	1.0000	1.0000
19	1.0000	1.0000	1.0000	1.0000	1.0000
20	1.0000	1.0000	1.0000	1.0000	1.0000
21	1.0000	1.0000	1.0000	1.0000	1.0000
22	1.0000	1.0000	1.0000	1.0000	1.0000
23	1.0000	1.0000	1.0000	1.0000	1.0000
24	1.0000	1.0000	1.0000	1.0000	1.0000
25	1.0000	1.0000	1.0000	1.0000	1.0000
26	1.0000	1.0000	1.0000	1.0000	1.0000
27	1.0000	1.0000	1.0000	1.0000	1.0000
28	1.0000	1.0000	1.0000	1.0000	1.0000
29	1.0000	1.0000	1.0000	1.0000	1.0000
30	1.0000	1.0000	1.0000	1.0000	1.0000
31	1.0000	1.0000	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000	1.0000	1.0000
33	1.0000	1.0000	1.0000	1.0000	1.0000
34	1.0000	1.0000	1.0000	1.0000	1.0000
35	1.0000	1.0000	1.0000	1.0000	1.0000
36	1.0000	1.0000	1.0000	1.0000	1.0000
37	1.0000	1.0000	1.0000	1.0000	1.0000

38	1.0000	1.0000	1.0000	1.0000	1.0000
39	1.0000	1.0000	1.0000	1.0000	1.0000
40	1.0000	1.0000	1.0000	1.0000	1.0000
41	1.0000	1.0000	1.0000	1.0000	1.0000

==========

Punkty obserwacji

Nr	Symbol	X[m]	Y[m]	z[m]
1	P1	95.5	268.1	1.5
2	P2	95.5	268.1	4.5
3	P3	106.1	268.7	4.0
4	P4	107.0	236.4	1.5
5	P5	104.3	238.0	4.5
6	P6	97.1	220.7	1.5
7	P7	97.1	220.7	4.5
8	P8	113.1	225.8	4.0
9	P9	98.4	165.7	1.5
10	P10	98.4	165.7	4.5
11	P11	109.3	164.7	4.0
12	P12	132.0	173.4	1.5
13	P13	132.0	173.4	4.5
14	P14	133.9	177.8	4.0
15	P15	98.4	133.0	1.5
16	P16	98.4	133.0	4.5
17	P17	106.7	140.4	4.0
18	P18	124.6	114.5	1.5
19	P19	124.6	114.5	4.5
20	P20	135.8	150.0	4.0
21	P21	155.4	70.3	1.5
22	P22	155.4	70.3	4.5

23	P23	159.5	78.3	4.0
24	P24	215.5	71.0	1.5
25	P25	215.5	71.0	4.5
26	P26	215.5	71.0	4.0
27	P27	203.0	31.3	1.5
28	P28	203.0	31.3	4.5
29	P29	204.0	52.4	4.0
30	P30	616.0	196.7	1.5
31	P31	616.0	196.7	4.5
32	P32	606.3	195.4	4.0

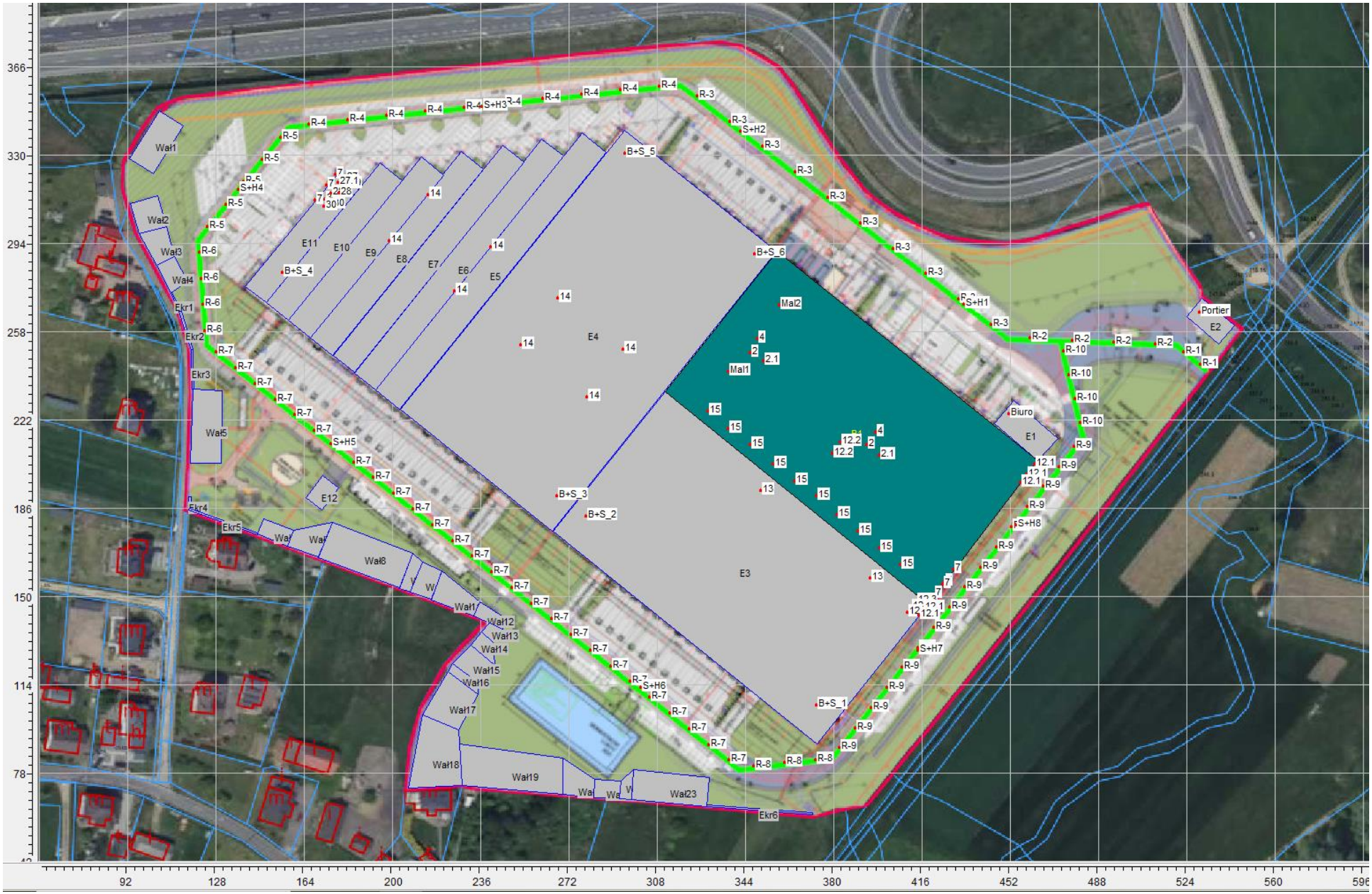
Obszary o innym niż globalny współczynniku gruntu G :

WSPÓŁRZĘDNE WIERZCHOŁKÓW :

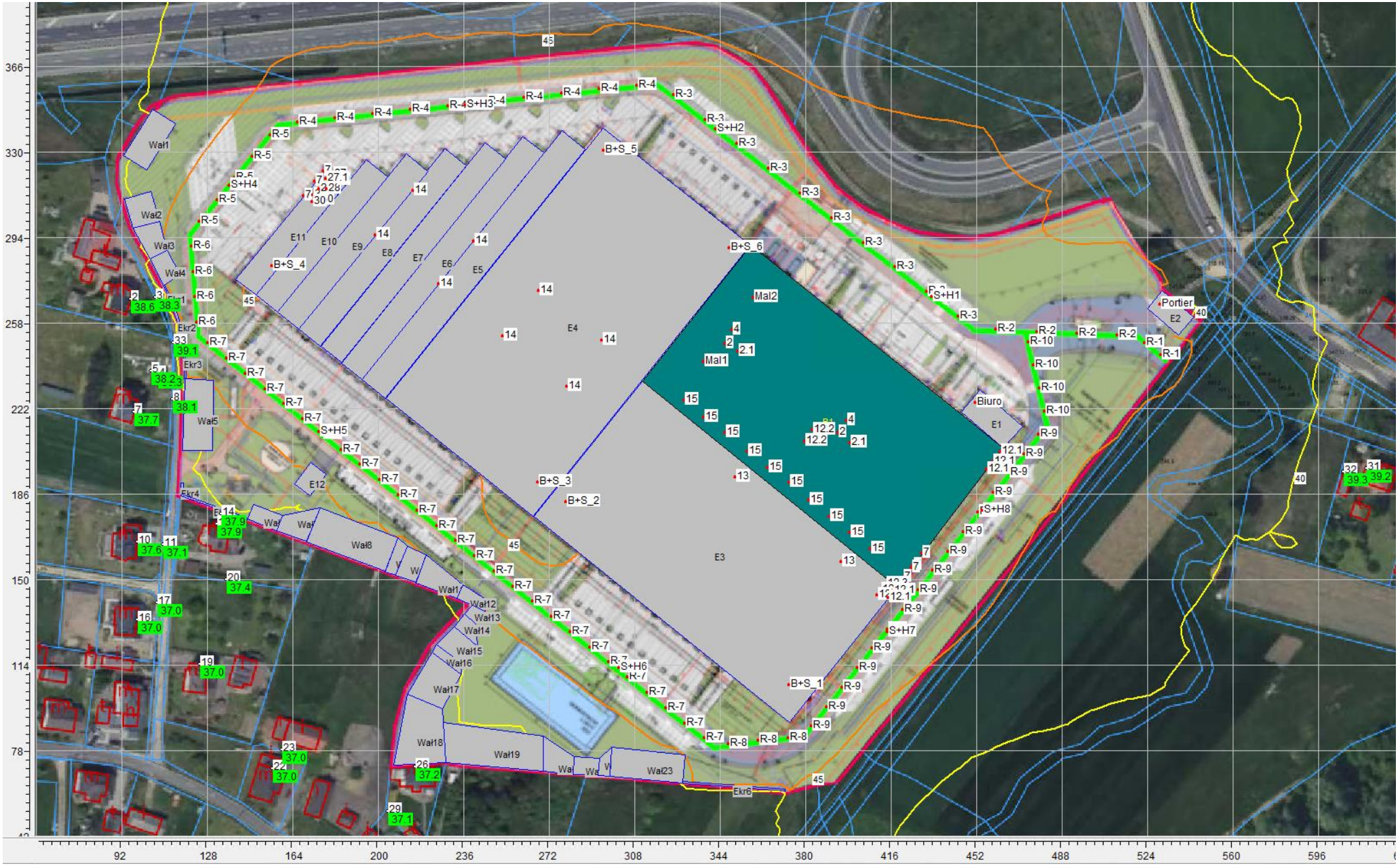
Nr	X1[m]	Y1[m]	X2[m]	Y2[m]	X3[m]	Y3[m]	X4[m]	Y4[m]	wsp.G
1	250.1	190.1	234.4	171.5	268.0	144.0	282.7	162.2	1.000
2	151.8	221.4	242.1	147.5	238.2	140.2	121.8	183.4	1.000
3	147.6	225.8	128.8	200.6	118.4	202.8	119.4	249.6	1.000
4	129.2	283.0	148.0	268.0	133.6	250.0	128.0	253.6	1.000
5	121.0	248.2	117.6	296.6	90.6	315.4	97.0	296.0	1.000
6	90.6	315.4	117.8	296.8	161.6	353.6	111.2	350.8	1.000
7	241.6	144.6	206.8	72.2	330.2	64.6	339.8	77.8	1.000
8	238.1	138.2	221.4	122.2	210.9	102.6	206.1	71.6	1.000
9	555.7	270.6	393.4	63.4	544.3	13.2	617.8	233.2	1.000
10	510.4	245.5	367.0	60.7	393.4	62.0	528.9	237.2	1.000

Program LEQ Professional w.6(2019)
Wydruk wyników obliczeń
Projekt :

Nr pkt.	X [m]	Y [m]	z [m]	Leq [dB(A)]
1	95.5	268.1	1.5	35.4
2	95.5	268.1	4.5	38.6
3	106.1	268.7	4.0	38.3
4	107.0	236.4	1.5	36.3
5	104.3	238.0	4.5	38.2
6	97.1	220.7	1.5	35.5
7	97.1	220.7	4.5	37.7
8	113.1	225.8	4.0	38.1
9	98.4	165.7	1.5	37.0
10	98.4	165.7	4.5	37.6
11	109.3	164.7	4.0	37.1
12	132.0	173.4	1.5	34.6
13	132.0	173.4	4.5	37.9
14	133.9	177.8	4.0	37.9
15	98.4	133.0	1.5	36.1
16	98.4	133.0	4.5	37.0
17	106.7	140.4	4.0	37.0
18	124.6	114.5	1.5	35.8
19	124.6	114.5	4.5	37.0
20	135.8	150.0	4.0	37.4
21	155.4	70.3	1.5	35.9
22	155.4	70.3	4.5	37.0
23	159.5	78.3	4.0	37.0
24	215.5	71.0	1.5	25.9
25	215.5	71.0	4.5	37.6
26	215.5	71.0	4.0	37.2
27	203.0	31.3	1.5	35.7
28	203.0	31.3	4.5	37.0
29	204.0	52.4	4.0	37.1
30	616.0	196.7	1.5	36.9
31	616.0	196.7	4.5	39.2
32	606.3	195.4	4.0	39.3



Rysunek 7 Plan sytuacyjny – pora nocy (wariant 2)



Rysunek 8 Izofony w porze nocy (wariant 2)