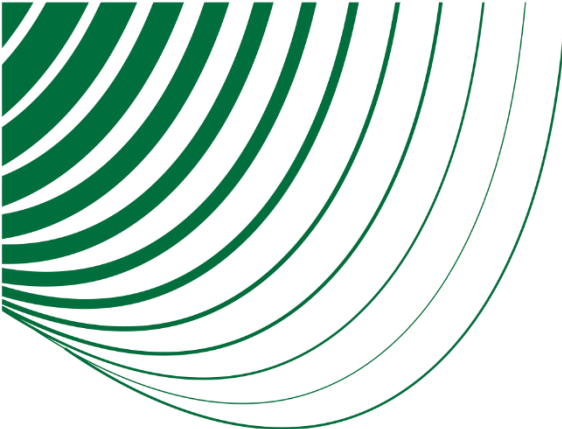




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-

ACOUSTIC STUDY

**Construction and Operation of SMR ETE –
Construction Noise**

Acoustic Study for EIA

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1. Assignment:

The Customer for the acoustic study requires an assessment of whether noise during the construction of the New Nuclear Power Plant at the Temelín site (New NPP ETE), construction-site traffic noise, and noise from construction-related traffic on public roads will exceed, in protected outdoor areas of buildings, the public-health noise limits pursuant to Government Regulation No. 272/2011 Coll., on the protection of health against the adverse effects of noise and vibration, as amended.

The subject of the Project is the construction of the New SMR Power Plant at the Temelín site (SMR ETE).

The acoustic study has been prepared for the stage of documentation on the Project's environmental impacts (EIA).

The subject of the acoustic study is:

- verification of whether noise from the operation of related construction-site traffic on public roads exceeds, in protected outdoor areas of buildings and in protected outdoor areas, the public-health noise limits for daytime and night-time pursuant to Government Regulation No. 272/2011 Coll., on the protection of health against the adverse effects of noise and vibration, as amended,
- verification of whether construction noise during the construction of the Project exceeds, in protected outdoor areas of buildings, the public-health noise limits for daytime and night-time pursuant to Government Regulation No. 272/2011 Coll., on the protection of health against the adverse effects of noise and vibration, as amended.

2. Source Documents:

- [1] Act No. 258/2000 Coll., on the protection of public health and on the amendment of certain related acts, as amended.
- [2] Government Regulation No. 272/2011 Coll., on the protection of health against the adverse effects of noise and vibration, as amended.
- [3] ČSN ISO 9613-1 Acoustics – Attenuation of sound during propagation outdoors. Part 1: Calculation of the absorption of sound by the atmosphere.
- [4] ČSN ISO 9613-2 Acoustics – Attenuation of sound during propagation outdoors. Part 2: General method of calculation.
- [5] ČSN ISO 1996-1 Acoustics – Description, measurement and assessment of environmental noise – Part 1: Basic quantities and assessment procedures.
- [6] ČSN ISO 1996-2 Acoustics – Description, measurement and assessment of environmental noise. Part 2: Determination of sound pressure levels.
- [7] Drawing documentation with technical description.
- [8] Noise measurement outside the nearest surrounding residential development, Z230163-01, Greif-akustika, s.r.o., 01/2024.
- [9] Traffic volumes on the monitored roads from the Road and Motorway Directorate of the Czech Republic, results of the 2020 national traffic census.
- [10] DOPRAVOPROJEKT Ostrava, a.s. – Traffic Study for the Construction and Operation of SMR ETE (in combination with the operation of ETE1,2 and the construction and operation of New NPP ETE)
- [11] EIA Acoustic Study, SMR at the ETE site, Z250153-01-R01, Greif-akustika, s.r.o., 06/2025.
- [12] EIA Acoustic Study, SMR at the ETE site, Z250153-02, Greif-akustika, s.r.o., 06/2025.
- [13] Technical Assistance – Preparation of the Indicative Bulk Earthworks Design for SMR ETE, 25-05835-20-001, ÚJV Řež, a.s., 03/2026



- [14] EIA Acoustic Study, New NPP at the ETE site – EIA Supporting Studies – Construction Noise, Z080664-05-R02, Greif-akustika, s.r.o., 08/2009



3. Public-Health Limits for Outdoor Noise:

Public-health noise limits are laid down pursuant to [2], Section 12, “Public-health noise limits in protected outdoor areas of buildings and in protected outdoor areas”.

3.1 Noise from traffic on roads permitted before 1 January, 2001:

For noise from traffic on roads that were sited and permitted by a decision or measure pursuant to another legal regulation before 1 January, 2001, the public-health limits for protected outdoor areas of other buildings and other protected outdoor areas are set out in the following table.

Table 1 – Public-health limit for noise from traffic on roads sited and permitted before 1 January, 2001

Protected outdoor areas of other buildings and other protected outdoor areas	$L_{Aeq,T}$ [dB]
Daytime	68
Night-time – protected outdoor areas	68
Night-time – protected outdoor areas of buildings	58

Traffic on public roads related to the construction of the Project is assessed in Section 5.

3.2 Construction Noise:

Table 2 – Public-health limit for construction noise

Protected outdoor area of other buildings	$L_{Aeq,s}$ [dB]
Daytime from 06:00am to 07:00am and from 09:00pm to 10:00pm	60
Daytime from 07:00am to 09:00pm	65
Night-time	45
Additional correction of -12 dB shall be added for a high-impulse noise. In the case of noise with tonal components, an additional correction of -5 dB is applied.	

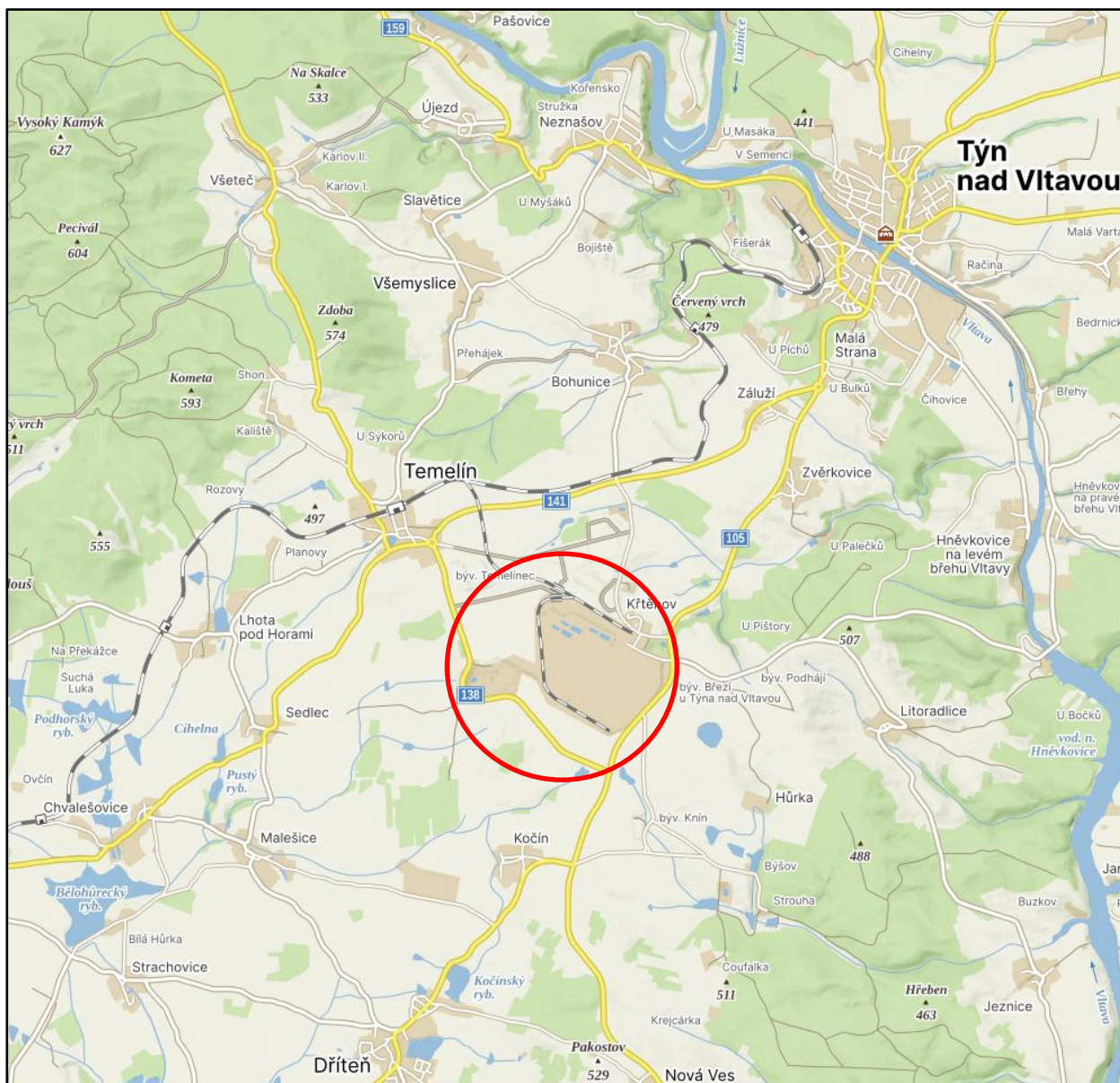
Construction noise, including construction-site traffic on non-public roads related to the construction of the Project, is assessed in Section 6.

4. Situation:

4.1 Site legend:

The existing Temelín Nuclear Power Plant (ETE1,2) is located in the South Bohemian Region near the municipality of Temelín. Other surrounding municipalities are also located near the power plant, namely Litoradlice, Kočín, Malešice, Zvěrkovice, and Sedlec. A larger residential agglomeration is located at a distance of approximately 5 km, in the town of Týn nad Vltavou.

Figure 1 – Overall situation of the assessed area



The subject of the **Project** is the construction of the New SMR Power Plant at the Temelín site, including related building structures and operational units (technological equipment).

4.2 Description of the Project:

In the SMR ETE Project, the dominant structure is the reactor building, or containment building. The height will depend on the technology selected; however, a height of more than 60 m is not being considered.

Other structures significant in terms of height:

- turbine generator hall – assumed up to 45 m (in all cases, the TG hall is lower than the containment building),
- forced-draught cooling towers – assumed height 14.5 m,
- transformer – assumed height 5 m; a U-shaped concrete barrier, 8 m high, will be installed in the direction of the village of Kočín,
- other auxiliary structures – assumed height from 10 to 20 m.

5. Construction noise – related traffic:

The baseline data on the quantities of transported materials, technologies, and persons during construction, which will consequently result in an increase in traffic intensity in the surrounding area, were specified by the investor. The input traffic-engineering source documents are taken from source document [10].

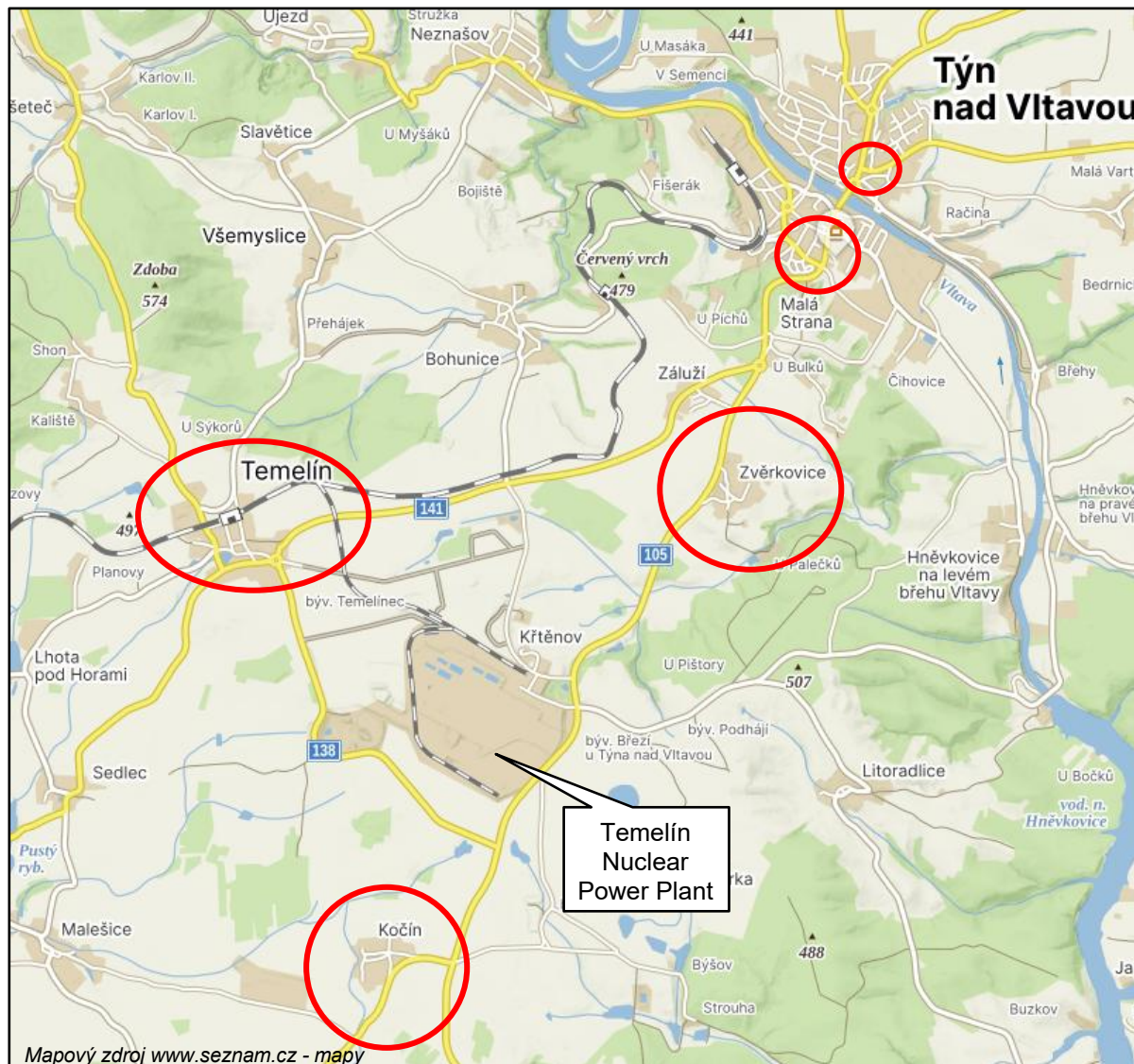
5.1 Nearest Protected Outdoor Areas of Buildings:

The nearest residential development in the vicinity of the Temelín Nuclear Power Plant and the new SMR ETE Project, along the transport routes associated with the construction of the Project, is located in the municipalities of Kočín, Temelín, Týn nad Vltavou, and Zvěrkovice. These municipalities are distributed in all cardinal directions around the power plant.

List of municipalities in which a more detailed mapping of road traffic noise is carried out, i.e., locations with protected outdoor areas and protected outdoor areas of buildings:

- Kočín
- Temelín
- Týn nad Vltavou
- Zvěrkovice

Figure 2 – Overall situation of the assessed area, indicating the monitored municipalities and roads



The roads monitored for the purposes of the acoustic calculations are roads 105, 138, and 141, the Sedlec – Temelín road, the Temelín – Albrechtice nad Vltavou road, the Temelín – Záluží road, the Dříteň – Kočín road, Road 105 – Tým nad Vltavou, and Road 147 – Tým nad Vltavou – Bečice.

This chapter shows in more detail the control calculation points in the four monitored municipalities: Kočín, see Figure 3; Temelín, see Figure 4; Zvěrkovice, see Figure 5; and Tým nad Vltavou (2 calculation areas), see Figure 6 and Figure 7.

Figure 3 – Detailed view of the control point in the municipality of Kočín in relation to the monitored road network

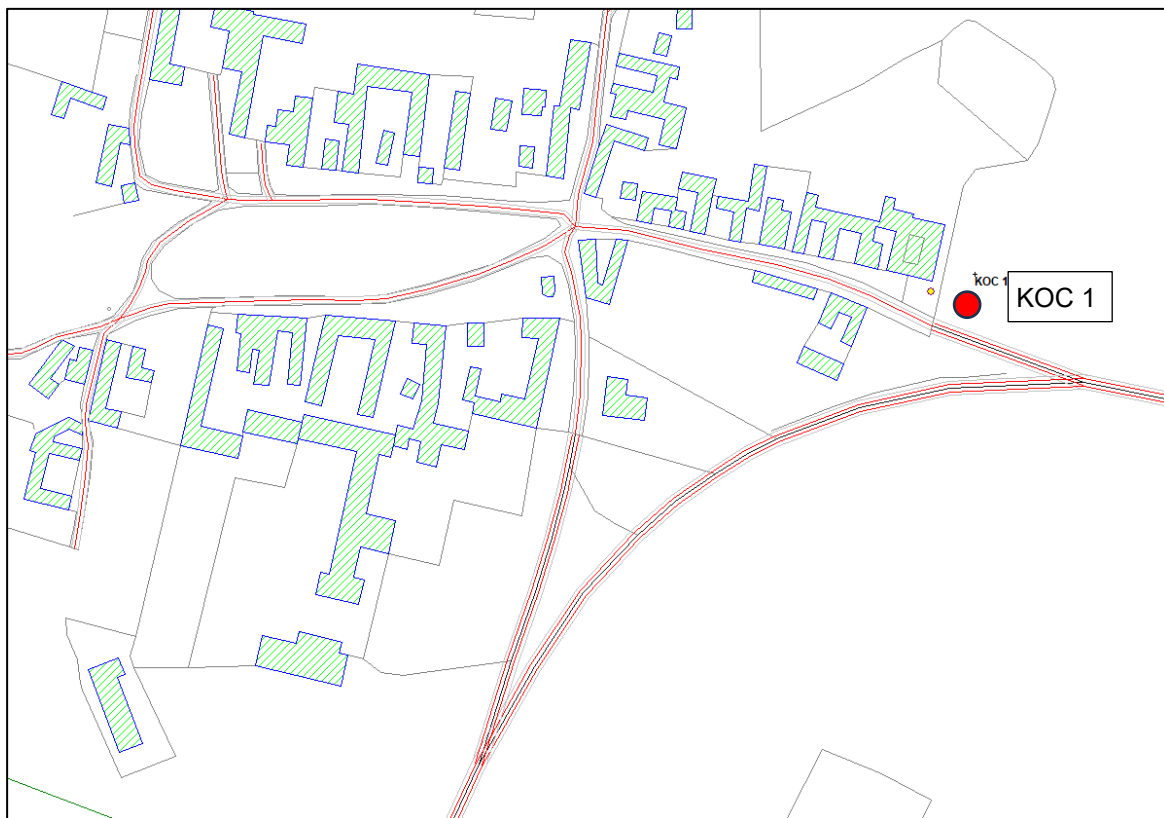


Figure 4 – Detailed view of the control points in the municipality of Temelín in relation to the monitored road network

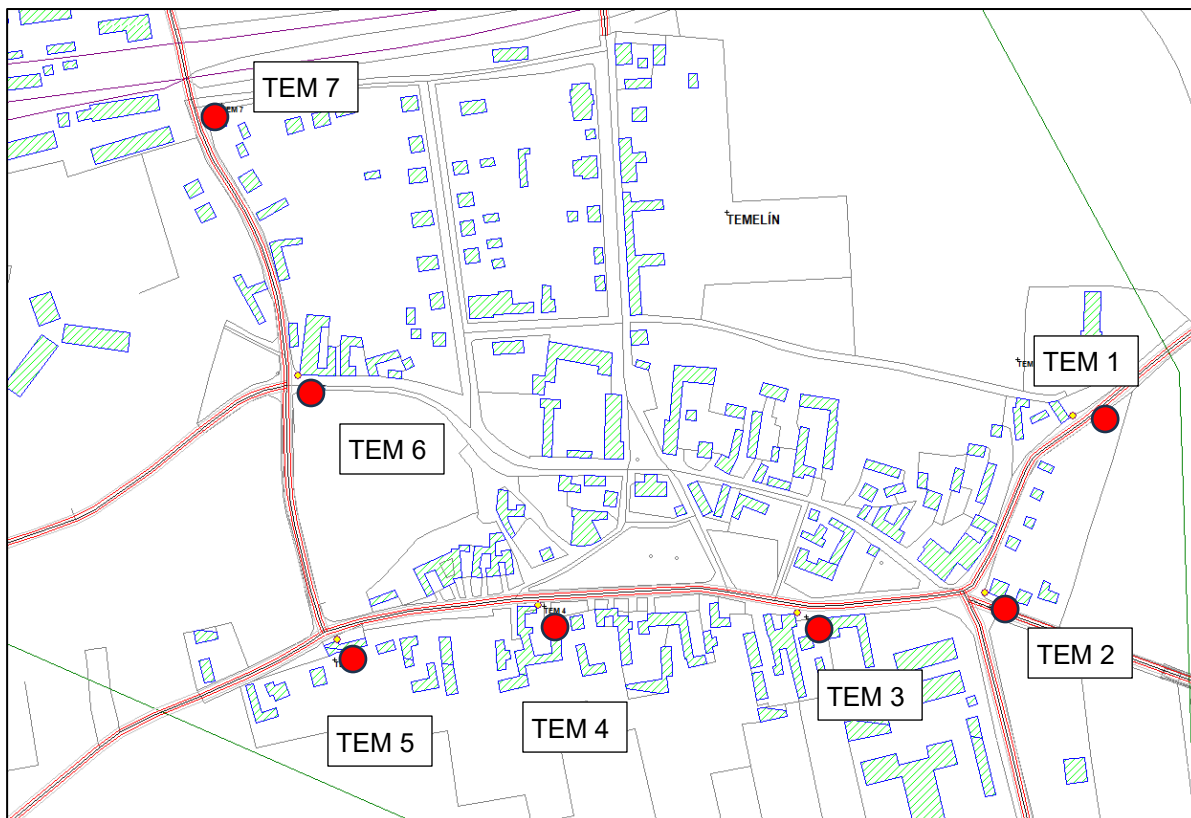


Figure 5 – Detailed view of the control points in the municipality of Zvěrkovice in relation to the monitored road network

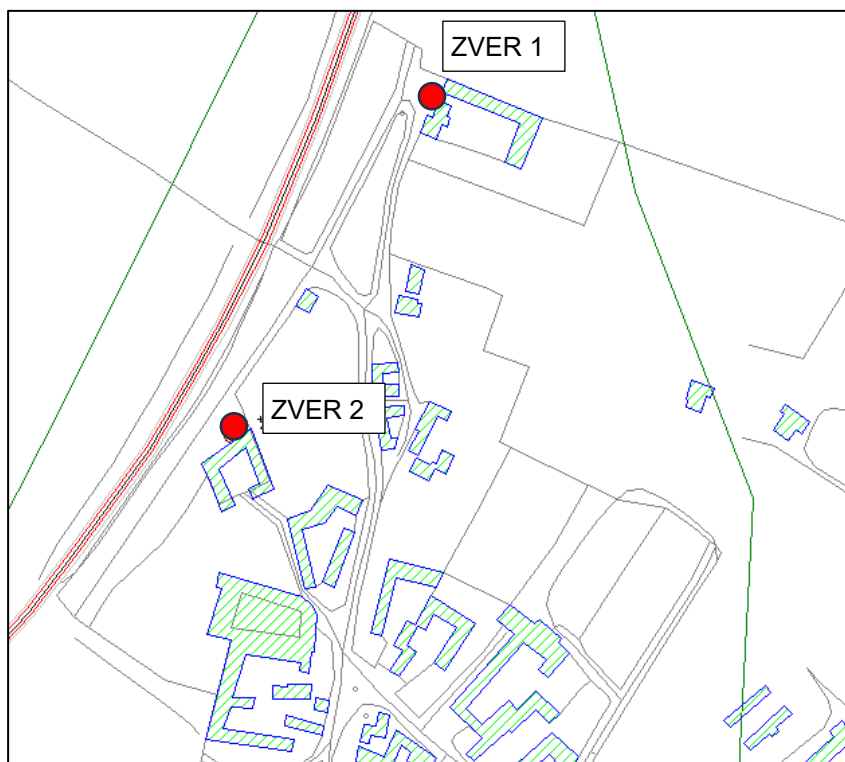


Figure 6 – Detailed view of the control points in the municipality of Týn nad Vltavou – Area 2, in relation to the monitored road network

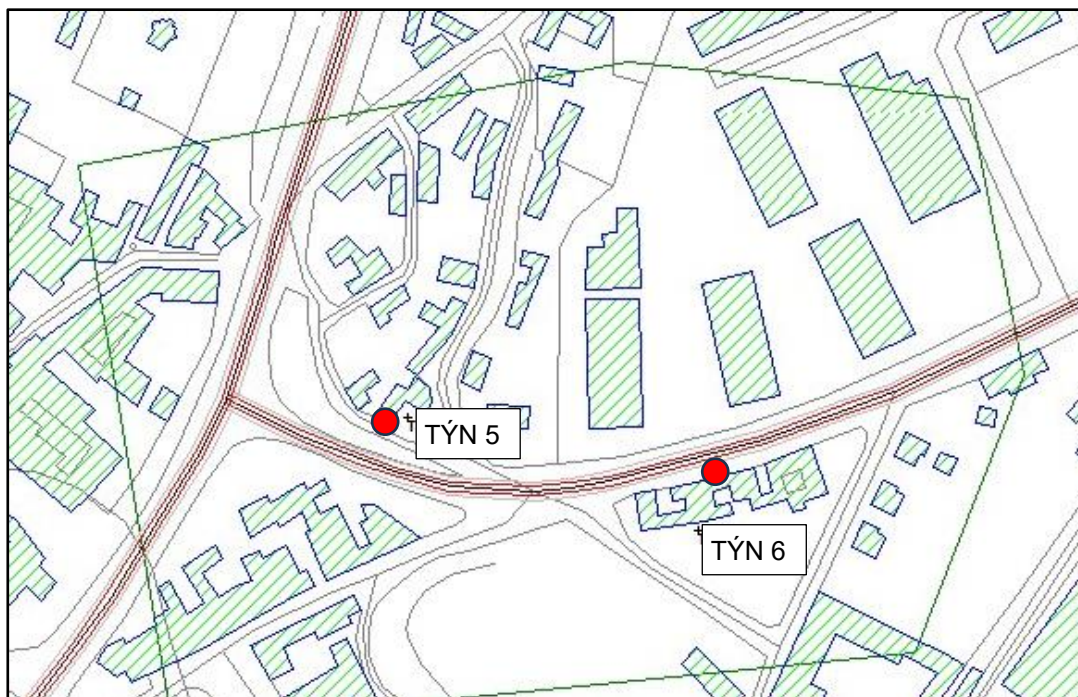
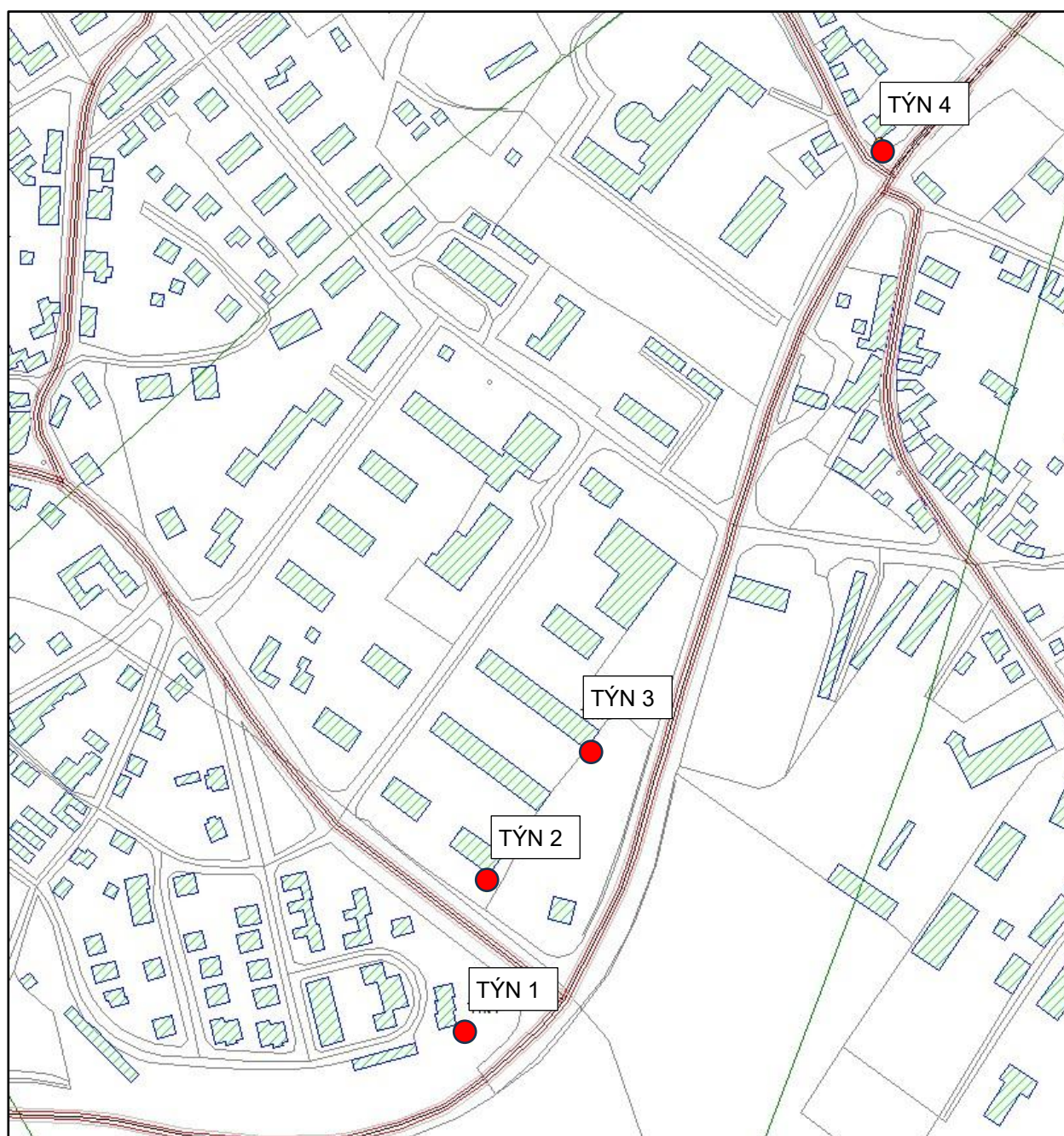


Figure 7 – Detailed view of the control points in the municipality of Týn nad Vltavou – Area 1, in relation to the monitored road network



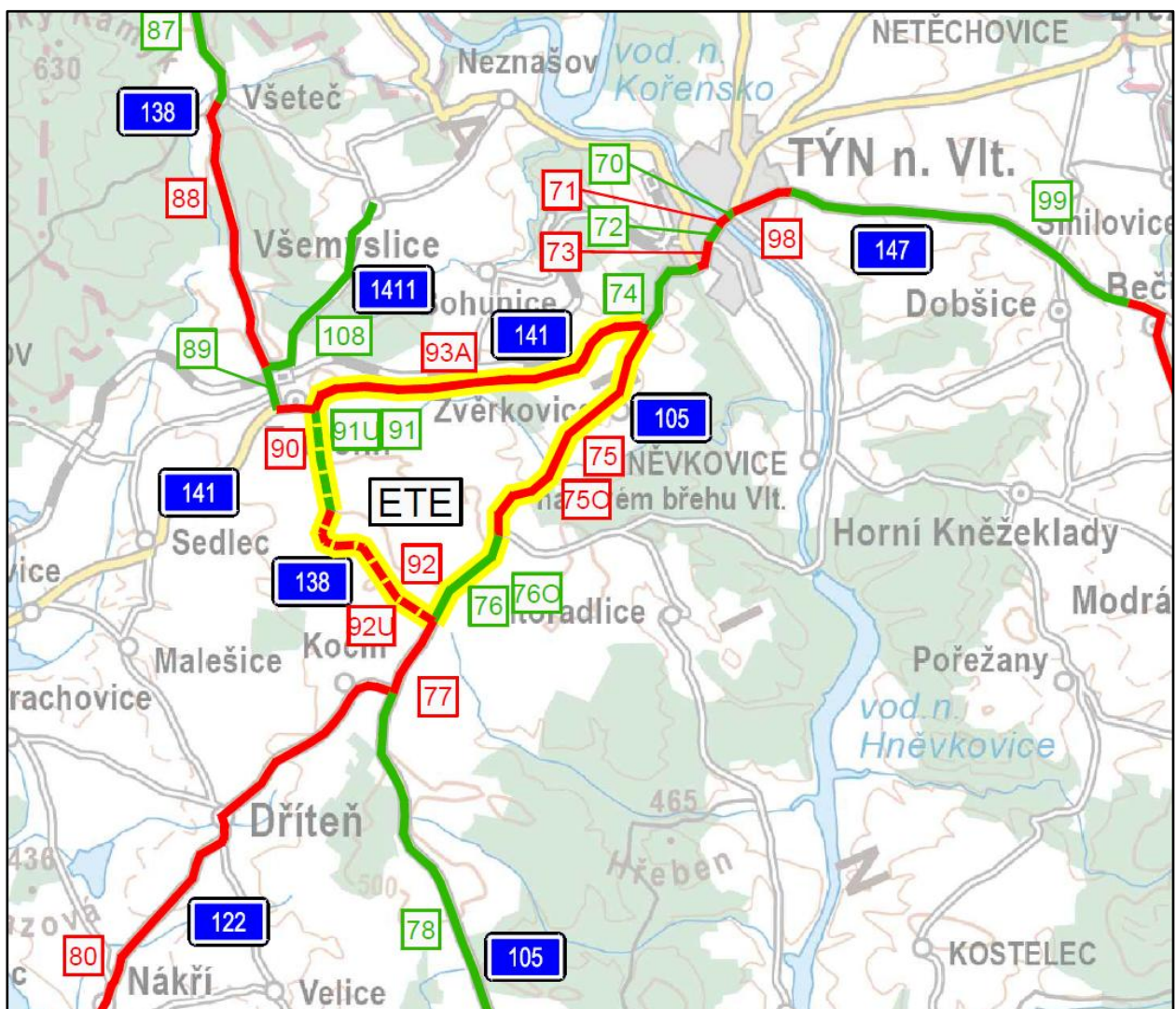
5.2 Description of traffic, traffic volumes:

The traffic-engineering source documents [10] define the scope of the required mapping of noise from traffic related to the construction of SMR ETE. For the complete assessment of the contribution of noise from traffic associated with the construction of the Project, a total of two time horizons (STC1 and STC2) of traffic operation on the above-mentioned roads are modelled (calculated), which will be evaluated in the four municipalities of Kočín, Temelín, Týn nad Vltavou, and Zvěrkovice.

- **STC1** – SMR ETE construction traffic
traffic volumes on the existing roads, including traffic related to the construction of the SMR ETE Project, year 2034
- **STC2** – SMR ETE construction traffic + initial phase of New NPP ETE construction traffic,
traffic volumes on the existing roads, including traffic related to the construction of the SMR ETE Project in concurrence with the initial phase of construction of New NPP ETE, year 2034

The volumes of road traffic on the individual roads monitored for the traffic loading of the road network in the vicinity of ETE are set out in more detail in Figure 8, Table 3 and Table 4.

Figure 8 – Illustration of the monitored road network in the ETE area, indicating the traffic count sections





5.2.1 SMR ETE construction traffic (STC1):

Assessment of noise from traffic related to the construction of the SMR ETE Project.

In the traffic-engineering source documents [10], this is the time horizon set out in Annex 9 for the year 2034 – operation of ETE1,2 + construction phase of SMR ETE.

Table 3 – Traffic volumes on selected road sections for the year 2034 – operation of ETE1,2 + construction phase of SMR ETE

Road number	Situation section number	Count section number	DAY (06.00am – 10.00pm)			NIGHT (10.00pm – 6.00am)		
			Cars	Trucks	Truck combinations	Cars	Trucks	Truck combinations
105	70	2-1216	11,044	763	387	732	52	28
105	71	2-1223	12,933	807	318	842	55	22
105	72	2-0631	11,725	873	340	781	60	24
105	73	2-0636	9,440	730	363	633	50	26
105	74	2-0640	7,821	651	367	536	43	27
105	75O	2-0656	6,250	1,021	449	438	70	34
105	76O	2-0657	6,712	964	448	461	67	34
105	77	2-0650	5,929	441	264	413	31	21
105	78	2-0660	7,093	615	412	520	44	36
122	80	2-2050	1,646	190	89	125	13	9
138	87	2-4209	589	80	91	45	5	4
138	88	2-4200	589	80	91	45	5	4
138	89	2-4200	589	82	97	45	5	4
138	90	2-4687	1,452	254	267	127	17	21
138	91U	2-4680	43	18	50	0	0	0
138	92U	2-4680	557	89	142	0	0	0
141	93A	2-2020	2,284	383	231	198	29	22
147	98	2-2381	1,546	211	249	127	14	15

5.2.2 SMR ETE construction traffic + initial phase of New NPP ETE construction traffic (STC2):

Assessment of noise from traffic related to the construction of the SMR ETE Project in concurrence with the initial phase of construction of New NPP ETE.

In the traffic-engineering source documents [10], this is the time horizon set out in Annex 12 for the year 2034 – initial phase of construction of New NPP ETE + operation of ETE1,2 + construction phase of SMR ETE.

Table 4 – Traffic volumes on selected road sections for the year 2034 – initial phase of construction of New NPP ETE + operation of ETE1,2 + construction phase of SMR ETE

Road number	Situation section number	Count section number	DAY (06.00am – 10.00pm)			NIGHT (10.00pm – 6.00am)		
			Cars	Trucks	Truck combinations	Cars	Trucks	Truck combinations
105	70	2-1216	11,750	862	524	732	52	28
105	71	2-1223	13,639	906	455	842	55	22
105	72	2-0631	12,431	972	477	781	60	24
105	73	2-0636	10,146	829	500	633	50	26
105	74	2-0640	8,527	750	504	536	43	27
105	75O	2-0656	6,956	1121	586	438	70	34
105	76O	2-0657	7,418	1,063	585	461	67	34
105	77	2-0650	6,141	473	337	413	31	21
105	78	2-0660	7,305	644	476	520	44	36
122	80	2-2050	1,646	190	98	125	13	9
138	87	2-4209	660	104	155	45	5	4
138	88	2-4200	660	104	155	45	5	4
138	89	2-4200	660	104	170	45	5	4
138	90	2-4687	1,522	281	341	127	17	21
138	91U	2-4680	113	45	124	0	0	0
138	92U	2-4680	1,475	221	352	0	0	0
141	93A	2-2020	2,284	383	231	198	29	22
147	98	2-2381	1,546	256	385	127	14	15

5.3 Calculation:

Noise modelling was carried out using the SoundPLAN calculation software. The above situations and the dominant road traffic noise sources were defined.

Noise from operation on public roads was assessed for daytime and night-time in the four monitored municipalities directly associated with the roads linked to transport routes during the construction of SMR ETE.

Road traffic volume values for the two calculation scenarios **STC1** and **STC2**, described in more detail in the preceding section, were entered into the calculation models. The calculations also include speed data for the relevant road sections.

The calculations are always carried out separately for daytime and night-time. The calculation results are presented in the individual Annexes, which show noise maps at levels of 3 m and 6 m above ground level in the four monitored municipalities of Kočín, Temelín, Týn nad Vltavou, and Zvěrkovice. These noise maps have been prepared for two modelled situations, namely **STC1** for the year 2034 – operation of



ETE1,2 + construction phase of SMR ETE, and **STC2** for the year 2034 – initial phase of construction of New NPP ETE + operation of ETE1,2 + construction phase of SMR ETE. At the same time, all results are processed in tabular form at the calculation points representing protected outdoor areas of buildings located closest to the roads passing through the municipalities of Kočín, Temelín, Týn nad Vltavou, and Zvěrkovice.

All monitored roads in the assessed site are roads sited and permitted before 1 January, 2001. Pursuant to Government Regulation [2], the public-health limit in protected outdoor areas of buildings for traffic noise on these roads is $L_{Aeq,16h} = 68$ dB during daytime and $L_{Aeq,8h} = 58$ dB during night-time.

Table 5 – Results of calculations of traffic noise on the monitored roads for the two time horizons STC1 and STC2 involving the construction of SMR ETE

Control point	Floor	STC1		STC2		Public-health limit	
		Daytime	Night-time	Daytime	Night-time	Daytime	Night-time
		$L_{Aeq,16h}$ [dB]	$L_{Aeq,8h}$ [dB]	$L_{Aeq,16h}$ [dB]	$L_{Aeq,8h}$ [dB]	$L_{Aeq,16h}$ [dB]	$L_{Aeq,8h}$ [dB]
KOC 1	1st	53.5	45.8	53.7	45.8	68	58
	2nd	54.2	46.5	54.4	46.5	68	58
TEM 1	1st	64.8	56.9	64.8	56.9	68	58
	2nd	65.2	57.3	65.2	57.3	68	58
TEM 2	1st	61.0	52.9	61.2	52.9	68	58
	2nd	63.8	55.7	64.2	55.7	68	58
TEM 3	1st	64.3	56.2	65.0	56.2	68	58
	2nd	65.0	56.9	65.6	56.9	68	58
TEM 4	1st	65.1	57.0	65.8	57.0	68	58
	2nd	65.5	57.4	66.1	57.4	68	58
TEM 5	1st	64.0	55.8	64.6	55.8	68	58
	2nd	65.4	57.1	66.0	57.1	68	58
TEM 6	1st	57.6	47.8	59.3	47.8	68	58
	2nd	59.0	49.2	60.7	49.2	68	58
TEM 7	1st	60.6	50.8	62.3	50.8	68	58
	2nd	62.0	52.1	63.6	52.1	68	58
TYN 1	1st	62.4	53.8	63.1	53.8	68	58
	2nd	64.1	55.5	64.8	55.5	68	58
TYN 2	1st	57.0	48.4	57.7	48.4	68	58
	2nd	57.9	49.2	58.6	49.2	68	58
	3rd	58.6	50.0	59.3	50.0	68	58
	4th	59.4	50.7	60.1	50.7	68	58
	5th	60.0	51.4	60.7	51.4	68	58
	6th	60.7	52.0	61.4	52.0	68	58
TYN 3	1st	59.0	50.2	59.7	50.2	68	58
	2nd	60.0	51.3	60.7	51.3	68	58
	3rd	61.1	52.3	61.8	52.3	68	58
	4th	62.1	53.3	62.7	53.3	68	58
	5th	62.5	53.8	63.2	53.8	68	58
	6th	62.7	54.0	63.4	54.0	68	58
TYN 4	1st	63.0	54.3	63.6	54.3	68	58
	2nd	65.9	57.3	66.5	57.3	68	58
TYN 5	1st	58.9	50.7	59.9	50.7	68	58

Control point	Floor	STC1		STC2		Public-health limit	
		Daytime	Night-time	Daytime	Night-time	Daytime	Night-time
		$L_{Aeq,16h}$ [dB]	$L_{Aeq,8h}$ [dB]	$L_{Aeq,16h}$ [dB]	$L_{Aeq,8h}$ [dB]	$L_{Aeq,16h}$ [dB]	$L_{Aeq,8h}$ [dB]
	2nd	63.9	55.6	64.9	55.6	68	58
TYN 6	1st	64.1	55.6	65.2	55.6	68	58
	2nd	65.2	56.8	66.4	56.8	68	58
ZVER 1	1st	60.7	52.5	61.3	52.5	68	58
	2nd	61.6	53.4	62.2	53.4	68	58
ZVER 2	1st	64.5	56.3	65.1	56.3	68	58
	2nd	65.8	57.6	66.4	57.6	68	58

Explanations:

$L_{Aeq,16h}$ – equivalent sound pressure level during daytime over 16 hours

$L_{Aeq,8h}$ – equivalent sound pressure level during night-time over 8 hours

For noise from traffic on roads that were sited and permitted by a decision or measure pursuant to another legal regulation before 1 January, 2001, the public-health limits for protected outdoor areas of other buildings and other protected outdoor areas are:

The public-health limit for DAY is $L_{Aeq,16h} = 68$ dB.

The public-health limit for NIGHT is $L_{Aeq,8h} = 58$ dB.

KOC – Kočín

TEM – Temelín

TYN – Týn nad Vltavou

ZVER – Zvěrkovice

5.4 SoundPLAN Calculation Software:

The calculation software models the specified noise situation pursuant to the ČSN ISO 9613 standard, Acoustics – Attenuation of sound during propagation outdoors. This standard specifies an engineering method for calculating the attenuation of sound during propagation outdoors, with the aim of predicting environmental noise levels at a certain distance from individual sources. The method predicts the equivalent A-weighted sound pressure level under meteorological conditions favourable to propagation from sources of known sound emission.

The sound attenuation calculations are described by algorithms for octave bands (with centre frequencies from 63 Hz to 8 kHz) generated by a point source or a set of point sources. The sources may be moving or stationary.

The calculation algorithms include mathematical expressions taking into account the following physical phenomena:

- Geometrical divergence
- Atmospheric absorption
- Ground effect
- Reflections from various surfaces
- Screening by obstacles

Standards used for the calculation – SoundPLAN 7.4 – Standards:

- road traffic noise – RLS-19
- Industry – ISO 9613-2:1996

5.5 Conclusion – Construction Noise – Related Traffic on Public Roads:

It is clear from the calculated results at the individual control points that, in all affected municipalities, at all calculation points and for both assessed time horizons **STC1** and **STC2**, the public-health limits pursuant to Government Regulation No. 272/2011 Coll., on the protection of health against the adverse effects of noise and vibration, as amended, are **met**.

A comparison of road traffic volumes on the monitored road network, see Chapter 5.2, shows that on most roads there is an increase in the number of passenger cars and trucks directly related to construction activity during the construction of SMR ETE.

This increase is also reflected in the calculated sound pressure levels, see Table 5. Nevertheless, despite this slight increase, which during daytime in the municipality of Temelín is up to 2.9 dB (year 2032 without SMR versus STC1) and up to 3.3 dB (year 2032 without SMR versus STC2), the relevant public-health limits continue to be met and the limit values are not exceeded at any location. During night-time, there is an increase in noise from traffic related to the construction of SMR ETE in the municipalities of Temelín, up to 2.9 dB (year 2032 without SMR versus both STC1 and STC2), and Zvěrkovice, up to 1.9 dB (year 2032 without SMR versus both STC1 and STC2). This increase is due primarily to the closure of Road II/138.

In connection with traffic induced by the construction of SMR, it is not necessary to propose acoustic measures on the existing public roads.

6. Construction Noise – Noise Sources on the Construction Site:

6.1 Nearest Protected Outdoor Areas of Buildings:

Pursuant to [1], a protected outdoor area of buildings means the area up to a distance of 2 m in front of the part of their external envelope that is relevant in terms of the penetration of noise from outside into the protected indoor space of apartment buildings, family houses, buildings for preschool and school education, buildings for healthcare and social purposes, as well as functionally similar buildings. The area relevant in terms of noise penetration is the area in front of the infill of an opening in the external envelope of the building that provides direct natural ventilation, behind which the protected indoor space of the building is located, if this protected space cannot be directly ventilated otherwise.

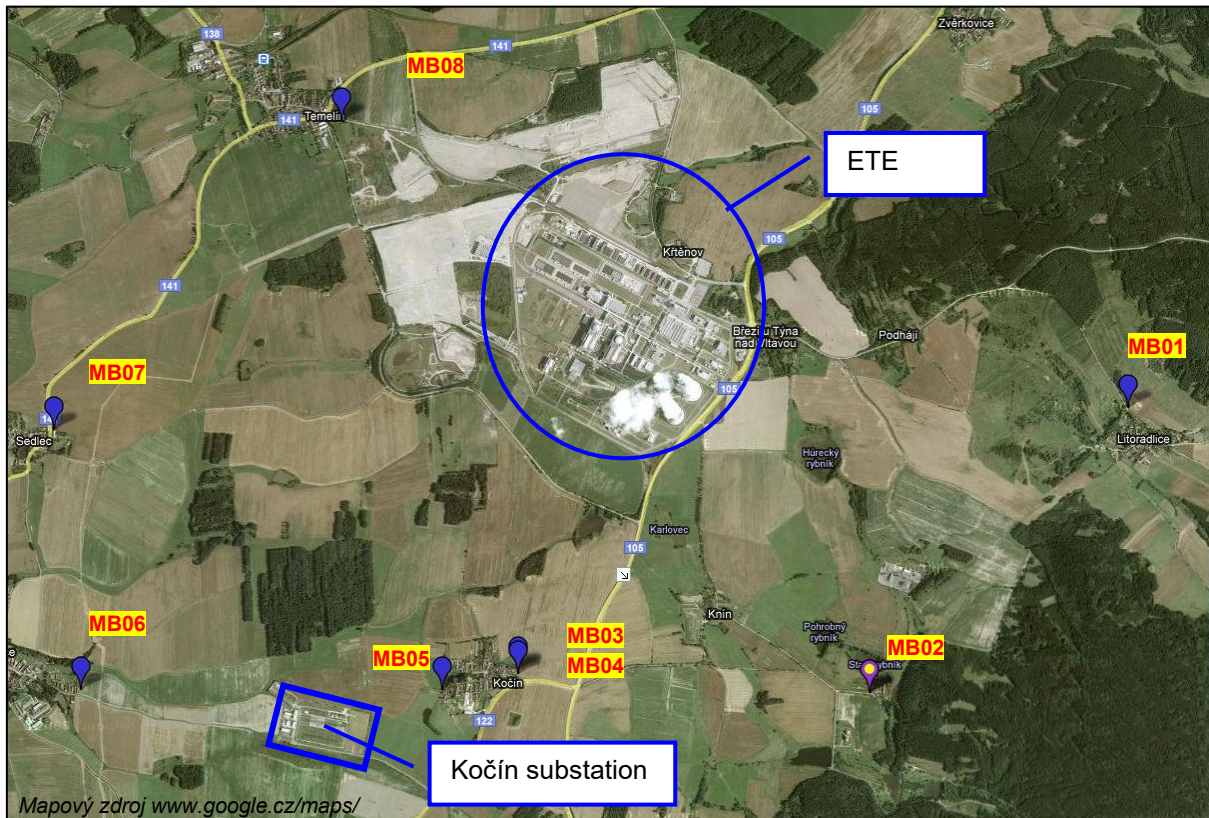
The nearest residential development in the vicinity of the future Project (SMR ETE) and the Kočín substation is located in the municipalities of Litoradlice, the former municipality of Knín, Kočín, Malešice, Sedlec, and Temelín, which are distributed in all cardinal directions around the power plant. The above-listed municipalities are also the locations where the effect of noise from the existing operation of the Temelín Nuclear Power Plant and the Kočín substation, including their service operations, was monitored.

Table 6 – Overview of calculation points representing the nearest protected outdoor areas of buildings

Measurement and calculation points	Description	Height of the calculation point above the terrain
MB01	Edge of the municipality of Litoradlice	3 and 6 m
MB02	Near the former farmstead beyond the former municipality of Knín	3 and 6 m
MB03	North-eastern edge of the municipality of Kočín	3 and 6 m
MB04	North-eastern edge of the municipality of Kočín	3 and 6 m
MB05	South-western edge of the municipality of Kočín	3 and 6 m
MB06	Edge of the municipality of Malešice	3 and 6 m
MB07	Edge of the municipality of Sedlec	3 and 6 m
MB08	Edge of the municipality of Temelín	3 and 6 m

For the purposes of this acoustic study, protected outdoor areas (plot boundaries) are also considered as protected outdoor areas of buildings. Everything is then assessed according to the stricter criterion, i.e., as protected outdoor areas of buildings.

Figure9 – Indicative diagram showing the location of calculation points



6.2 Construction Noise Calculation Procedure:

The method for calculating construction noise exposure in outdoor areas consists of four main parts:

- In the first part, the construction site area is defined and divided into individual monitored sectors. The number of sectors depends on the size of the construction site, the location of the protected points in relation to the construction site, the type of construction technology used, the possibilities for passive noise protection, etc. The division of the construction site is based on the conditions of the given area and ties in with previous construction work on the site. Among other things, existing stockpile areas and construction site facilities areas are used.
- In the second part, the construction process is divided into individual phases, since the average daily noise exposure changes during construction depending on the machinery and equipment deployed. It is different at the start of construction (earthworks) and different during completion works – installation of technology. The working hours (i.e., the start and end of work on a normal working day) are also determined at this stage.
- The third part of the calculation specifies the equipment used and the activities carried out, taking into account their noise and operating time on the monitored day and in the construction site sector. The noise exposure on the construction site in the given sector is determined on the basis of these data. The calculation treats the construction machinery and activities carried out in the given sector as stationary sources, which are moved across the area of the given sector according to the progress of the construction works.

- In the fourth part, the noise exposure in the given construction site sector is recalculated using the SoundPLAN software, taking into account the distance to the control points representing the nearest protected outdoor areas of buildings. The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas.

The result of the calculation is the increments in construction noise exposure from the individual construction sectors at the control points.

6.3 Construction Site

The construction of the New SMR Power Plant at the Temelín site will require an extensive land take, both for the construction area and for operational areas used as construction site facilities. The areas are divided into the construction area, construction site facilities areas, and reserve areas.

The following table lists all areas currently considered for the construction of SMR ETE.

Table 7 – Areas for the construction of SMR ETE

Area type	Area – designation	Area [ha]
Construction area	SMR	29.5
Construction site facilities areas	C	14.0
	H	25.5
	G	9.5
	I	5.5
	J	19.0
Reserve areas	B1	7.8
	B2	15.0
	B3	4.0
	E1	17.5
	E2	36.0
	F1	18.5
	D	12.6

Note: The use of reserve areas is not considered in the EIA documentation; in terms of noise impact, the analysed construction areas and construction site facilities areas are potentially the least favourable.

6.3.1 Construction area:

The construction area (SMR) is located south of the existing Temelín Nuclear Power Plant. Its eastern boundary is lined by Class II Road No. 105 and, on the southern side, by Class II Road No. 138.

All works related to the construction of SMR ETE will be carried out in this area. Before construction itself begins, the topsoil will be stripped and bulk earthworks will be carried out in order to level the terrain to a working surface. After the completion of preparatory works, excavation works for the SMR structure, foundation works, structural works on the buildings, etc. will begin in the area, continuing up to the completion of construction and the start of testing.

The area will be divided into areas for the construction of structures, as well as areas for material storage and pre-assembly of equipment before its incorporation into the structures. A network of construction site roads will also be created for the movement of construction machinery and pedestrians. An assembly hall (Site Factory) will also be built here. Construction cranes will also be positioned within the construction area.

6.3.2 Construction site facilities areas:

Area C

Area C is located north of the existing Temelín Nuclear Power Plant. Its southern boundary is defined by the rail siding yard, which is considered for use in ensuring the supply of materials to the construction site, particularly bulk materials. On both the eastern and western sides, the area is defined by a local-purpose road connecting Temelín NPP with Class II Road No. 141.

In Area C, preparatory works will be carried out in the first phase, consisting of levelling the area. The area will serve for the transshipment and short-term storage of materials. For these purposes, a transshipment facility will be built there, consisting of temporary building structures, paved areas for the storage and handling of materials, and a truck car park.

Area H

Area H is located south of the SMR ETE construction area. Class II Road No. 138 runs between the two areas. The eastern boundary of the area is lined by Class II Road No. 105. An existing access to Area H from Road II/138 is located near the junction with Road II/105. On the western side, the area adjoins the Dvorčice fishpond.

The ETE – České Budějovice hot-water pipeline passes through the area from north to south, dividing it into two parts (eastern and western).

The area will serve primarily for operational and storage purposes. The operations occurring within the area can be divided into the following groups, for which examples of operations that may occur in the area are listed:

- Administration
 - Contractor's offices
 - Gatehouse
 - Canteen
 - Locker rooms
- Workshops
- Warehouses
 - Outdoor storage areas
 - Covered storage areas
 - Temperature-controlled storage areas
- Other utility areas
 - Collection yard
 - Recycling line
 - Parking areas
 - Stockpiles of topsoil, subsoil, and soils from excavation works

For the purposes of the construction site facilities, only the northern and western parts of Area H are considered for use.

Area G

Area G is located east of the SMR construction area. Its western boundary is formed by Class II Road No. 105.

In Area G, topsoil will be stripped and bulk earthworks carried out in the first phase of preparatory works. A high-capacity car park will subsequently be located there. This will be a central car park for construction workers and other persons involved. Administrative facilities will also be built there, serving as a training facility for workers.

Area I

Area I is located south of the SMR ETE construction area. Class II Road No. 138 runs between the two areas. The area adjoins the Dvorčice fishpond.

Area I will serve the needs of the investor. It is assumed that administrative facilities for the investor's staff will be built there. A "Security Plaza" will also be located there, providing customs, physical, and dimensional inspection of imported technology and materials.

Area I will be affected by the protection zone of the power evacuation route from Temelín NPP. A car park is therefore considered within the protection zone. It is not possible to locate tall elements of the construction site facilities there.

Area J

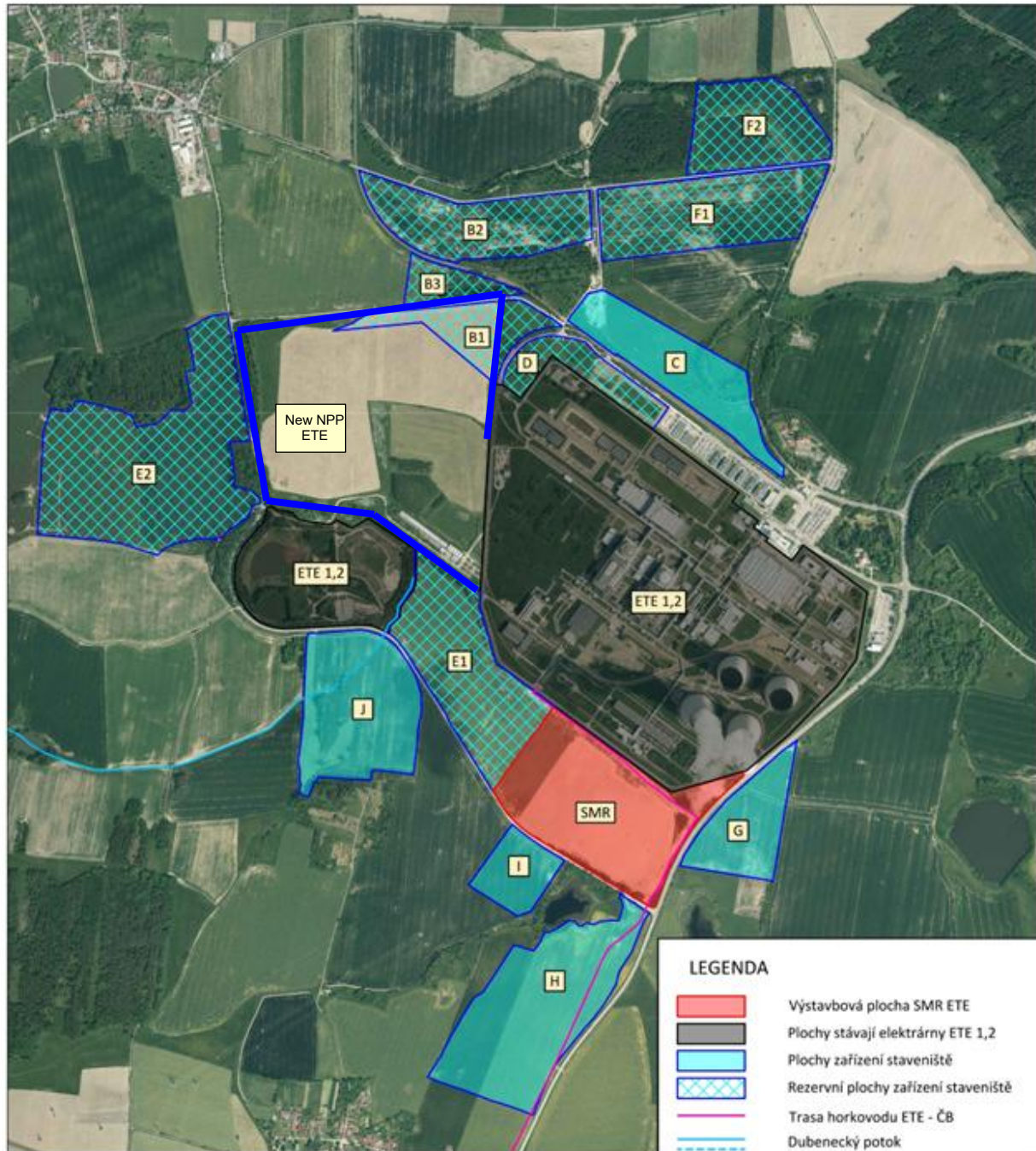
Area J is located south of the existing Temelínec landfill. Class II Road No. 138 runs between the two areas.

The construction of the main construction site facilities is considered in Area J, where operations related to construction will be located. The operations can be divided into 4 groups. For each group, examples of operations that may occur within the area are listed:

- Administration
 - Offices (contractor, investor)
 - Gatehouse
 - Canteen
 - Locker rooms
- Workshops
 - Rebar shop
 - Pipefitting workshop
 - Electrical workshop
 - Prefabrication workshop
 - HVAC workshop
- Warehouses
 - Outdoor storage areas
 - Covered storage areas
 - Temperature-controlled storage areas
- Other utility areas
 - Parking areas
 - Concrete batching plant
 - Area for charging electric vehicles and machinery

The following Figure 10 graphically illustrates the locations of the individual areas. The construction site – the location for construction of the Project – is indicated in the following figure by the SMR area.

Figure 10 – Division of areas indicating the construction site location (SMR) and the construction site facilities areas (C, G, H, I, and J)



LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

ETE1,2 existing Temelín Nuclear Power Plant site,
New NPP ETE New Nuclear Power Plant at the Temelín site – expansion of the existing operation of Temelín Nuclear Power Plant by two new units.
SMR ETE New SMR Power Plant at the Temelín site – main construction site,



C	transshipment and short-term storage of materials, material transshipment facility, truck car park.
H	operational construction site facilities – administration, workshops, warehouses, utility areas, stockpiles of topsoil, subsoil, and soils, material transshipment facility, recycling line, collection yard,
G	high-capacity car park for construction workers, administration, training facility.
I	investor's administration, Security Plaza – customs, physical and dimensional inspection of imported technology and materials
J	operational construction site facilities (administration, workshops, warehouses, utility areas, concrete production)

6.4 Description of the Works to Be Carried Out and Division of Construction into Individual Phases:

Construction activities can be divided into several major parts, namely preparatory works, construction site facilities, and the actual construction of SMR.

6.4.1 Preparatory works:

Preparatory works consist of preparing the area before the start of the actual construction works. They will include stripping of topsoil and subsoil in the allocated areas (SMR, C, H, G, I and J). At the same time, bulk earthworks will be carried out in the above-mentioned areas.

When topsoil stripping is completed, at least temporary roads (e.g., concrete panels) will be built in the areas to allow the transport of soils between the construction site facilities areas.

- Topsoil stripping in the construction area and construction site facilities areas
- Excavation works in the construction area and construction site facilities areas

6.4.2 Construction of construction site facilities:

Social and office buildings are assumed to be implemented using container assemblies, which will be erected on strip and spread foundations in the areas designated for construction site facilities.

6.4.3 Construction of SMR ETE:

Construction activities related to the construction of SMR ETE will be carried out in the SMR area.

- Excavation works
 - Excavations (MTB)
 - Excavations (other structures)
- Foundation works + substructure (MTB)
 - Transport and installation of reinforcements
 - Transport of materials for concrete production
 - Concreting
- Foundation works + substructure (other structures)
 - Transport and installation of reinforcements
 - Transport of materials for concrete production
 - Concreting
- Construction (MTB)
 - Transport and installation of reinforcements
 - Transport of materials for concrete production
 - Concreting
 - Pre-assembly and erection of steel structures
 - Transport and installation of prefabricated elements (modules)

- Transport and installation of heavy prefabricated elements (modules)
- Construction (other structures)
 - Transport and installation of reinforcements
 - Transport of materials for concrete production
 - Concreting
 - Pre-assembly and erection of steel structures
- Installation works (MTB)
 - Transport and installation of oversized technological components
 - Installation of technological modules and mechanical equipment
- Installation works (other structures)
 - Installation of technological equipment
- Other works
 - On-site roads and paved areas

6.5 Construction Schedule, Selection of Time Horizons for Construction Noise Calculations:

For a complete assessment of construction noise associated with the construction of the Project, a total of two time horizons (STC1 and STC2) are addressed.

- **STC1** – Construction of SMR ETE **without concurrence with the initial phase of construction of New NPP ETE**, year 2034
- **STC2** – Construction of SMR ETE **in concurrence with the initial phase of construction of New NPP ETE**, year 2034

The construction of SMR ETE will be carried out using the same construction machinery for the 2034 time horizons, both with and without concurrence with the initial phase of construction of New NPP ETE.

The calculation will be made for **STC1**. For **STC2**, the calculated values in protected outdoor areas of buildings from the valid EIA [14] (initial phase of construction of New NPP ETE) will be used for the cumulation of noise sources on the construction sites.

Given the current state of project preparation, the time limits of the individual construction phases are not explicitly stated. For the purposes of construction noise calculations in the acoustic study, the time horizons listed below (7 in total) have been selected, based on the assumed progress of the construction works and the individual phases of construction of the Project.

- Time horizon 1 – Site preparation, topsoil stripping
- Time horizon 2 – Excavation works in the construction area and construction site facilities areas (bulk earthworks)
- Time horizon 3 – Construction site facilities
- Time horizon 4 – Construction of SMR ETE – Excavations (MTB)
- Time horizon 5 – Construction of SMR ETE – Foundation works and substructure
- Time horizon 6 – Construction of SMR ETE – Construction (MTB), construction of other structures
- Time horizon 7 – Construction of SMR ETE – Installation works (MTB), other works



6.5.1 Preparatory works (time horizons 1 and 2):

- Time horizon 1 – Topsoil stripping in the construction area and construction site facilities areas:

Table 8 – Construction phase schedule – topsoil stripping

Fáze výstavby - Skryvka ornice	Doba trvání	2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Plocha SMR																									
Skryvka ornice	17																								
Nakládání ornice	15																								
Odvoz na deponii	15																								
Plocha C																									
Skryvka ornice	14																								
Nakládání ornice	15																								
Odvoz na deponii	15																								
Plocha H																									
Skryvka ornice	15																								
Nakládání ornice	15																								
Odvoz na deponii	15																								
Plocha G																									
Skryvka ornice	11																								
Nakládání ornice	12																								
Odvoz na deponii	12																								
Plocha I																									
Skryvka ornice	7																								
Nakládání ornice	13																								
Odvoz na deponii	13																								
Plocha J																									
Skryvka ornice	10																								
Nakládání ornice	17																								
Odvoz na deponii	17																								

Fáze výstavby-Skryvka ornice	Construction phase – Topsoil stripping
Doba trvání	Duration
Plocha SMR	SMR area
Skryvka ornice	Topsoil stripping
Nakládání ornice	Loading of topsoil
Odvoz na deponii	Landfill disposal
Plocha C	Area C
Plocha H	Area H
Plocha G	Area G
Plocha I	Area I
Plocha J	Area J

Note: The table is taken from [13]. The duration is in days.

The colour scale in the schedule has been selected for clarity.

Based on the above schedule for topsoil stripping, a time horizon has been selected in which the following construction activities will be carried out concurrently:

Table 9 – List of individual construction activities in the construction site facilities areas for calculation time horizon 1

Preparatory works – topsoil stripping in the construction site facilities areas		
Area type	Area – designation	Construction activity
Construction site facilities areas	C	Topsoil stripping
		Loading of topsoil
		Landfill disposal
	J	Topsoil stripping
		Loading of topsoil



		Landfill disposal
	I	Topsoil stripping

- Time horizon 2 – Excavation works in the construction area and construction site facilities areas (bulk earthworks)

Table 10 – Construction phase schedule – Bulk earthworks

Fáze výstavby - HTÚ	Doba trvání	2030												2031											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Plocha SMR																									
Odtěžení a naložení zeminy	32																								
Přesun v rámci plochy	32																								
Odvoz na deponii nevyužitě zeminy	32																								
Plocha C																									
Odtěžení a naložení zeminy	24																								
Přesun v rámci plochy	24																								
Odvoz na deponii nevyužitě zeminy	24																								
Plocha H																									
Odtěžení a naložení zeminy	57																								
Přesun v rámci plochy	57																								
Odvoz na deponii nevyužitě zeminy	57																								
Plocha G																									
Odtěžení a naložení zeminy	42																								
Přesun v rámci plochy	42																								
Odvoz na deponii nevyužitě zeminy	42																								
Plocha I																									
Odtěžení a naložení zeminy	39																								
Přesun v rámci plochy	39																								
Odvoz na deponii nevyužitě zeminy	39																								
Plocha J																									
Odtěžení a naložení zeminy	20																								
Přesun v rámci plochy	20																								
Odvoz na deponii nevyužitě zeminy	20																								

Fáze výstavby - HTÚ	Construction phase – Bulk earthworks
Doba trvání	Duration
Plocha SMR	SMR area
Odtěžení a naložení zeminy	Soil excavation and loading
Přesun v rámci plochy	Movement within the area
Odvoz na deponii nevyužitě zeminy	Transport of unused soil to stockpile
Plocha C	Area C
Plocha H	Area H
Plocha G	Area G
Plocha I	Area I
Plocha J	Area J

Note: The table is taken from [13]. The duration is in days.

The colour scale in the schedule has been selected for clarity.

Based on the above schedule for bulk earthworks, a time horizon has been selected in which the following construction activities will be carried out concurrently:

Table 11 – List of individual construction activities in construction areas and construction site facilities areas for calculation time horizon 2

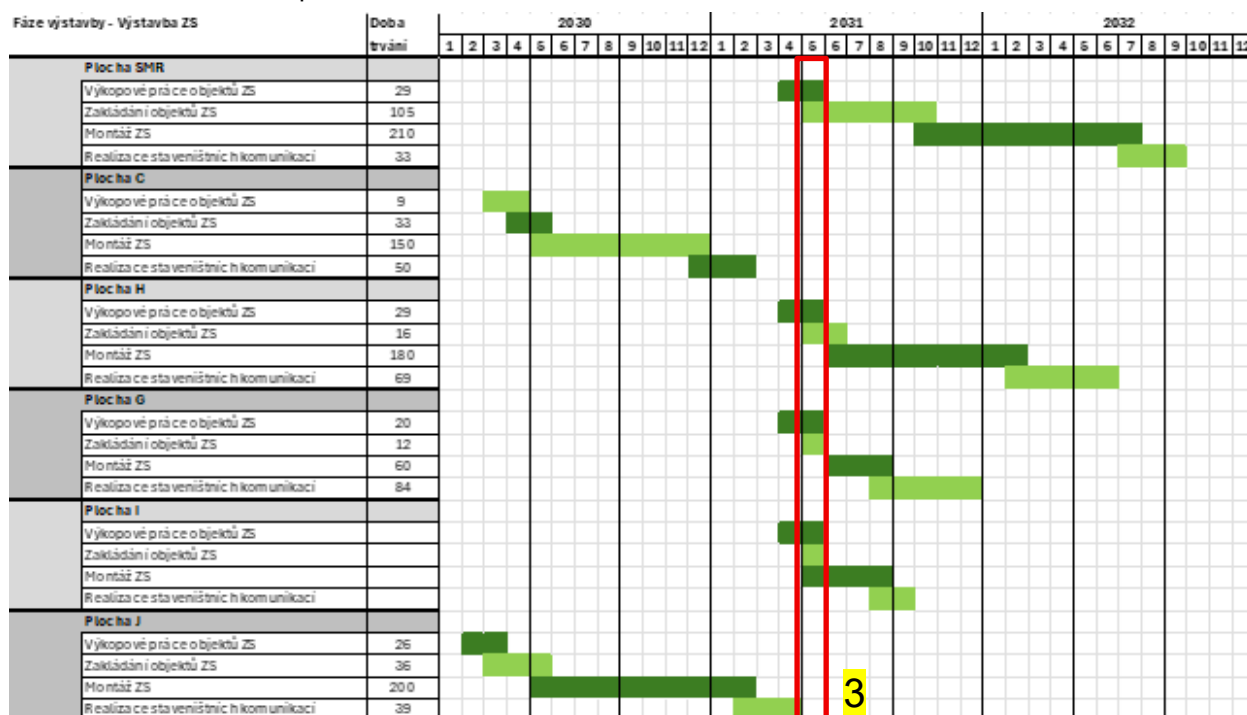
Preparatory works – Bulk earthworks in the construction area and construction site facilities areas		
Area type	Area – designation	Construction activity
Construction area	SMR	Soil excavation and loading
		Movement within the area



Construction site facilities areas	C	Landfill disposal
		Soil excavation and loading
		Movement within the area
	H	Landfill disposal
		Soil excavation and loading
		Movement within the area
	G	Landfill disposal
		Soil excavation and loading
		Movement within the area
	I	Landfill disposal
		Soil excavation and loading
		Movement within the area
	J	Landfill disposal
		Soil excavation and loading
		Movement within the area

6.5.2 Construction of construction site facilities (time horizon 3):

Table 12 – Construction phase schedule – Construction of construction site facilities



Fáze výstavby - Výstavba ZS	Construction phase – Construction of construction site facilities
Doba trvání	Duration
Plocha SMR	SMR area
Výkopové práce objektů ZS	Excavation works for construction site facilities structures
Zakládání objektů ZS	Foundation works for construction site facilities structures
Montáž ZS	Assembly of construction site facilities
Realizace stavebního komunikací	Construction of construction site roads
Plocha C	Area C
Plocha H	Area H
Plocha G	Area G
Plocha I	Area I
Plocha J	Area J

Note: The table is taken from [13]. The duration is in days.
The colour scale in the schedule has been selected for clarity.



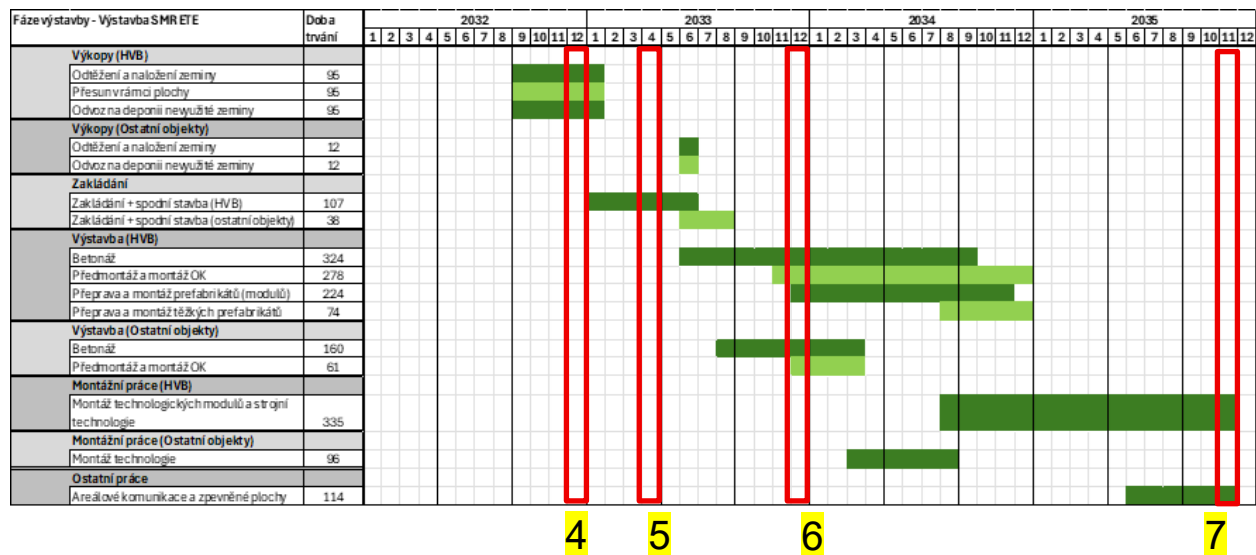
Based on the above schedule for the construction of construction site facilities, a time horizon has been selected in which the following construction activities will be carried out concurrently:

Table 13 – List of individual construction activities in construction areas and construction site facilities areas for calculation time horizon 3

Construction of construction site facilities: on the construction area and construction site facilities areas		
Area type	Area – designation	Construction activity
Construction area	SMR	Excavation works for construction site facilities structures
		Foundation works for construction site facilities structures
Construction site facilities areas	H	Excavation works for construction site facilities structures
		Foundation works for construction site facilities structures
	G	Excavation works for construction site facilities structures
		Foundation works for construction site facilities structures
	I	Excavation works for construction site facilities structures
		Foundation works for construction site facilities structures
		Assembly of construction site facilities

6.5.3 Construction of SMR ETE (time horizons 4 to 7):

Table 14 – Construction phase schedule – Construction of SMR ETE



Fáze výstavby-Výstavba SMR ETE	Construction phase - Construction of SMR ETE
Doba trvání	Duration
Výkopy (HVB)	Excavations (MTB)
Odtěžení a naložení zeminy	Soil excavation and loading
Přesun v rámci plochy	Movement within the area
Odvoz na deponii nevyužitě zeminy	Transport of unused soil to stockpile
Výkopy (Ostatní objekty)	Excavations (other structures)
Zakládání	Foundation
Zakládání + spodní stavba (HVB)	Foundation works + substructure (MTB)



Zakládání + spodní stavba (ostatní objekty)	Foundation works + substructure (other structures)
Výstavba (HVB)	Construction (MTB)
Betonáž	Concreting
Předmontáž a montáž OK	Pre-assembly and erection of steel structures
Přeprava a montáž prefabrikátů (modulů)	Transport and installation of prefabricated elements (modules)
Přeprava a montáž těžkých prefabrikátů	Transport and installation of heavy prefabricated elements
Výstavba (Ostatní objekty)	Construction (other structures)
Montážní práce (HVB)	Installation works (MTB)
Montáž technologických modulů a strojní technologie	Installation of technological modules and mechanical equipment
Montážní práce (Ostatní objekty)	Installation works (other structures)
Montáž technologie	Technology installation
Ostatní práce	Other works
Areálové komunikace a zpevněné plochy	On-site roads and paved areas

Note: The table is taken from [13].

The duration is in days.

The colour scale in the schedule has been selected for clarity.

Based on the above schedule for the construction of SMR ETE, four time horizons have been selected in which the following construction activities will be carried out concurrently:

Table 15 – List of individual construction activities in the construction areas and construction site facilities areas for calculation time horizons 4–7

Construction of SMR ETE		
Time horizon	Construction phase	Construction activity
4	Excavations (MTB)	Soil excavation and loading
		Movement within the area
		Disposal of unused soil to landfill
5	Foundations (MTB)	Foundation of the substructure
6	Construction (MTB)	Concreting
		Pre-assembly and erection of steel structures
		Transport and installation of prefabricated elements (modules)
	Construction of other structures	Concreting
		Pre-assembly and erection of steel structures
7	Installation works (MTB)	Installation of technological modules and mechanical equipment
	Other works	On-site roads and paved areas

6.6 Working Hours:

Construction activity on the construction site will be carried out during daytime. A 12-hour shift is considered. Taking into account work breaks, the net working time will be 11 hours. For noise from traffic related to construction, the calculation is carried out for both daytime and night-time. This is set out in a separate chapter 5 of this acoustic study.



6.7 Equipment Used, Construction Machinery, Calculation Assumptions:

The source documents provided by the Customer for the acoustic study and the project documentation are used to define a normal working day on the construction site and to determine the construction noise level. Construction works will be carried out using standard technologies. More detailed data will be available after the tendering procedure for construction contractors has been completed.

Construction and installation works will be carried out during a seven-day working week from 7:00am to 9:00pm.

The following list presents the assumed construction machinery on the construction site during the monitored phases of construction of the Project. The table specifies the acoustic power of the equipment entered into the calculation and the number of construction machines operating simultaneously on the construction site throughout the working hours.

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13] for each selected construction time horizon.

The transport of construction materials by trucks and truck mixers between the individual construction site facilities areas, including the construction area, is entered as a linear noise source on the construction site roads according to the traffic volumes taken from source document [13].

6.7.1 Time horizon 1 – site preparation, topsoil stripping:

In the construction areas and construction site facilities areas, the topsoil will first be stripped and transported to the designated soil stockpile. The works will be carried out using high-performance earthmoving equipment. For the purposes of this document, the following machinery is considered:

Table 16 – List of construction equipment used on the construction site – 1st stage, site preparation, topsoil stripping

Construction phase Construction time horizon		Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
1	Construction site preparation, topsoil stripping	C	Dozer	111	1
			Excavator and loader	109	1
		J	Dozer	111	2
			Excavator and loader	109	2
		I	Dozer	111	1

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

Piles of topsoil pushed up by dozers will be transported to the soil stockpiles in Area H. The distance between the area and the stockpile has been estimated for each area from which topsoil will be transported. The topsoil will be loaded by loading excavators with a large-capacity bucket onto trucks, which will transport it to the soil stockpile in Area H.

Table 17 – Construction-related transport to Area H – 1st stage, site preparation, topsoil stripping

Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
C	Truck	90	8	4.75	266
J	Truck	90	10	2.0	176

6.7.2 Time horizon 2 – Excavation works in the construction area and construction site facilities areas (bulk earthworks):

The excavation works consist of carrying out bulk earthworks. These will involve extensive earthworks consisting of excavations and fills in order to level the selected areas to a working surface.

The works will be carried out using modern high-performance earthmoving equipment. For the purposes of this document, the following machinery is considered:

Table 18 – List of construction equipment used on the construction site – Excavation works in the construction area and construction site facilities areas (bulk earthworks)

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
2 Construction site preparation, bulk earthworks	SMR	Truck	90	14
		Excavator and loader	109	2
		Excavator	107	5
	C	Excavator and loader	109	1
		Excavator	107	1
	H	Excavator and loader	109	1
		Excavator	107	5
		Truck	90	4
	G	Excavator and loader	109	1
		Excavator	107	3
	I	Excavator and loader	109	1
		Excavator	107	2
	J	Excavator and loader	109	1
		Excavator	107	2
		Truck	90	6

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

The excavation works will be carried out using high-performance excavators fitted with buckets of appropriate capacity. At this stage, the excavated soil within the affected area will be used for fills. In Area J, there are significant soil deficits for the implementation of the bulk earthworks. Trucks will continuously transport soil from Areas C, H, G, and I to Area J in order to achieve the required levels.

Table 19 – Transport related to soil removal to Area J – Excavation works in the construction area and construction site facilities areas (bulk earthworks)

Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
C	Truck	90	6	3.2	214.5
H	Truck	90	19	1.5	120.0
G	Truck	90	11	2.0	182.0
I	Truck	90	6	1.1	117.3

During the excavations, it is assumed that approximately 10% of the total volume of excavated soil will be produced as soil unsuitable for the construction of fills. These soils will be transported to Area H, where, for the purposes of this study, the recycling line is assumed to be located. In the recycling line, this material will then be sorted, with maximum effort made to reuse the excavated material.



The separated material that will not be further used for construction will not be stockpiled in the construction site facilities areas, i.e., it will have to be removed from the site. The amount of material that will have to be removed will be minimal and can be neglected.

Table 20 – Construction-related transport to Area H – Excavation works in the construction area and construction site facilities areas (bulk earthworks)

Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR1	Truck	90	4	0.75	72
SMR2	Truck	90	4	0.75	72
C	Truck	90	6	4.25	256
G	Truck	90	4	0.65	67.6
I	Truck	90	4	0.45	49.5
J	Truck	90	4	0.55	55

6.7.3 Time horizon 3 – Construction site facilities:

Social and office buildings are assumed to be implemented using container assemblies, which will be erected on strip and spread foundations. Mobile cranes with a lifting capacity of approximately 20 t are considered for their assembly.

The construction of utility networks and basic technical infrastructure structures will be carried out using standard equipment. Specifically, this will involve excavators, trucks and standard mobile cranes.

Storage and handling areas and paved roads will also be constructed. These works will require the use of dozers, excavators, vibratory rollers, road construction equipment, and mobile cranes.

For contractors' specialised construction and technological operations, the use of construction machinery can only be estimated in general terms.

In this construction phase, the start of operation of the concrete batching plant located in Area J is assumed.

Table 21 – List of construction equipment used on the construction site – Construction site facilities

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
3 Construction of construction site facilities	SMR	Trucks	90	2
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	1
		Excavator	107	1
		Excavator and loader	109	1
	H	Trucks	90	4
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	1
		Excavator	107	1
		Excavator and loader	109	1
	G	Trucks	90	2
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	1
		Excavator	107	2



Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
	I	Excavator and loader	109	1
		Trucks	90	4
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	2
		Excavator	107	1
		Excavator and loader	109	1

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

Soil from excavation works will be transported to the stockpile in Area H.

Table 22 – Construction-related transport to Area H – Excavation works for construction site facilities structures in the construction area and construction site facilities areas

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR	Truck	90	3	0.75	74.8
G	Truck	90	5	0.65	89.1
I	Truck	90	2	0.45	79.2

The following table estimates the vehicle mileage for transporting materials for concrete production from Area C to Area J.

Table 23 – Construction-related transport from Area C to Area J – Transport of materials for concrete production in the construction area and construction site facilities areas

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR	Truck	90	2	3.2	325
H	Truck	90	2	3.2	325
G	Truck	90	2	3.2	325
I	Truck	90	2	3.2	325

Concrete will be produced in the concrete batching plant in Area J.

Table 24 – Construction-related transport from Area J to the construction site area – Transport of concrete from the concrete batching plant to the construction area and construction site facilities areas

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR	Truck mixers*	115	2	1	95.7
H	Truck mixers*	115	2	1.5	115.5
G	Truck mixers*	115	2	2	135.3
I	Truck mixers*	115	2	1.1	69.3

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

6.7.4 Time horizon 4 – Construction of SMR ETE – Excavations (MTB):

Construction activities related to the construction of SMR ETE will be carried out in the SMR area.

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

Table 25 – List of construction equipment used on the construction site – Construction of SMR ETE – Excavations (MTB)

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
4	Construction of SMR ETE - Excavations (MTB)	Trucks	90	9
		Excavator	107	3

Soil from excavations from the pit for the MTB will be used within the construction site area to complete the bulk earthworks. For this construction phase, no operation of construction-site traffic outside the SMR area, nor operation of the recycling line or the concrete batching plant, is considered.

6.7.5 Time horizon 5 – Construction of SMR ETE – Foundation works and substructure:

Construction activities related to the construction of SMR ETE will be carried out in the SMR area.

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

Table 26 – List of construction equipment used on the construction site – Construction of SMR ETE – Foundation works and substructure

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
5	Construction of SMR ETE - Foundation works and substructure (MTB)	Truck mixers	115*	6
		Concrete pump	107	3
		Stationary/gantry cranes	95	7
		Excavator and loader	109	1

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

Table 27 – Construction-related transport for SMR – Transport and installation of reinforcements, transport of materials for concrete production, transport of concrete from the concrete batching plant to the construction area

Area	Process	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
transport from C to J	transport and installation of reinforcements	Truck	90	8	3.2	280.5
	transport of materials for concrete production	Truck	90	5	3.2	325
transport from J to SMR	concrete transportation	Truck mixers	115*	6	1	108.9

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.



6.7.6 Time horizon 6 – Construction of SMR ETE – Construction (MTB), construction of other structures:

Construction activities related to the construction of SMR ETE will be carried out in the SMR area.

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

Table 28 – List of construction equipment used on the construction site – Construction of SMR ETE – Construction (MTB), construction of other structures

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
6 Construction of SMR ETE - Construction (MTB), other structures	SMR	Trucks	90	6
		Truck mixers	115*	8
		Concrete pump	107	4
		Stationary/gantry cranes	95	20
		Truck crane, 27 t	95	1
		Excavator and loader	109	3
		Tractor with low loader	105	4

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

All materials for the production of concrete and prefabricated modules will be supplied from Area C to Area J. Reinforcements will also be supplied and assembled there. Concrete will be transported from Area J, and prefabricated modules will be transported to the SMR construction area. Materials or structures for which transport by rail siding is not assumed will be delivered to and stored in Area J.

Table 29 – Construction-related transport for SMR – Transport and installation of reinforcements, transport of materials for concrete production, transport of concrete from the concrete batching plant to the construction area

Area	Process	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
transport from C to J	transport and installation of reinforcements	Truck	90	10	3.2	280.5
	transport of materials for concrete production	Truck	90	7	3.2	325
	transport of materials for the production of prefabricated elements	Truck	90	4	3.2	325
transport from J to SMR	concrete transportation	Truck mixers	115*	8	1	108.9

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.



6.7.7 Time horizon 7 – Construction of SMR ETE – Installation works (MTB), other works:

Construction activities related to the construction of SMR ETE will be carried out in the SMR area.

The deployment of machinery assumes 12-hour shifts. Taking into account work breaks, the net working time will be 11 hours.

Table 30 – List of construction equipment used on the construction site – Construction of SMR ETE – Installation works (MTB), other works

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
7 Construction of SMR ETE - Installation works (MTB), other works	SMR	Oversized cargo kit	105	1
		Mobile crane for superlifts	102	1
		Tractor with low loader	105	2
		Stationary/gantry cranes	95	2
		Vibrating roller	110	1
		Finisher	110	2
		Trucks	90	8

6.8 Recycling of construction waste:

For the purposes of the assessment, the recycling line is considered to be located in Area H.

The line will be used to separate construction waste and unusable soil arising mainly during bulk earthworks and excavation works, with the aim of maximising the reuse of materials within the construction. In the first phase, mainly unusable soil from bulk earthworks excavations and construction pits will be transported to the line; in subsequent phases, construction waste generated during the implementation of structures will be processed there. The operation will also include areas for material being processed and separated material.

Table 31 – Basic technical parameters of the recycling line

Parameter	Value
Line capacity	600 tons/day*
Electricity consumption	260 kW
Water demand	13–18 m ³ /h
Assumed footprint dimensions	70 × 19 m

The stated line capacity assumes 8-hour working hours.

Operation of the line is considered to be variable over time. The highest operating intensity is expected during the period when soil and stone will be processed, in an estimated quantity of 133,150 m³, with operation of approximately 8 hours per day, a total annual deployment of approximately 222 hours, and operation throughout the working week. During the actual construction period, the processing of construction waste in the amount of approximately 6,060 t, or conservatively up to approximately 8,180 t after inclusion of a 35% reserve, is also considered; in this phase, the line is to be operated only as needed, approximately once a week, typically for approximately 2 hours per day.

Figure 11 – Assumed use of Area H with the recycling line located there



In terms of noise sources, the recycling line consists of the following machines:

Table 32 – List of construction equipment used on the construction site

Construction phase Construction time horizon		Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
2,3,5,6,7	Site preparation, bulk earthworks through to completion of construction of SMR ETE	H	Crusher on its own crawler	109	1
			Screener	109	1
			Loader	109	1

The machines of the recycling line in Area H are included in the calculation concurrently in time horizons 2, 3, 5, 6, 7.

6.9 Concrete Batching Plant:

The concrete batching plant is proposed in Area J, which constitutes the main production and logistics centre of the construction site facilities. Area J is situated south of the SMR ETE construction area and is intended to concentrate technological and logistics activities related to the implementation of the construction, including concrete production, prefabrication, reinforcement processing, and material storage.

The proposed concrete batching plant is considered as a multi-line facility with a total maximum production capacity of approximately 450 m³/h, consisting of three production units. The footprint dimensions of the concrete batching plant itself are stated in the source documents as approximately 120 × 40 m. The operation of the concrete batching plant depends on the current construction phase, with the highest operating intensity expected during the implementation of the main building structures. For the purposes of the acoustic study, operation of the concrete batching plant is considered from time horizon 3 – construction of construction site facilities.

The operation of the concrete batching plant is considered predominantly during daytime, within one extended shift, i.e., a maximum of approximately 12 hours per day.

In addition to the production technology itself, the concrete batching plant also includes associated storage, handling and transport sections. Based on the usual technical design of concrete batching plants of similar capacity, it can be assumed that it includes, in particular, cement silos for binder storage, aggregate bins, mixing equipment, weighing and dosing systems, conveyors, hoppers and intermediate mix storage bins, areas for the operation of truck mixers, and related handling and storage areas. Indicatively, cement silos with a capacity in the order of 100–300 t, with a diameter of approximately 3–5 m and a height of approximately 16–19 m, and multi-compartment aggregate bins, typically divided into 4 compartments of approximately 20–30 m³ each, can be considered. These values represent an expert estimate based on the usual technical design of similar facilities; the specific dimensions of the individual parts of the concrete batching plant are not specified in the source documentation.

The operation of the concrete batching plant also includes related logistics, in particular the delivery of aggregate, cement, and other raw materials, their storage, dosing, and production of the concrete mix, including dispatch of ready-mixed concrete to the construction site by truck mixers.

In terms of noise load, the concrete batching plant represents a significant stationary noise source. Noise is mainly generated by the operation of mixing equipment, conveyors, dosing systems, and other auxiliary technological equipment. The movement of truck mixers is entered as a line noise source on the construction site according to the specific construction stages.

Note: The detailed technical design of the concrete batching plant, including the exact dimensions of the individual technological parts, is not specified in the source documentation. The stated indicative dimensions of the technological parts are based on the typical parameters of concrete batching plants of similar capacity. The input acoustic data have been taken from the archive of Greif-akustika, s.r.o.

Table 33 – Basic technical parameters of the concrete batching plant located in Area J

Parameter	Value
Number of production units	3
Concrete production capacity	450 m ³ /h*
Assumed built-up area	4,800 m ²
Water demand	81 m ³ /h
Assumed footprint dimensions	120 × 40 m

The stated line capacity assumes 12-hour working hours.

The concrete batching plant machinery in Area J is included in the calculation concurrently in time horizons **3, 5, 6, 7**.

In terms of noise sources, the concrete batching plant consists of the following machines:

Table 34 – List of construction equipment used on the construction site – concrete batching plant

Construction phase Construction time horizon	Area	Noise sources	Acoustic power L_{WA} [dB]	Number in one production unit [pcs]	Total number [pcs]
3,5,6,7	Construction site facilities through to completion of construction of SMR ETE	J	Loading of aggregate onto conveyor	1	3
			Conveyor	2	6
			Aeration of cement silos	8	24
			Aggregate bin noise source – compressor below silo	2	6
			Concrete mix bin noise source – aeration on silo	4	12
			Concrete mix bin noise source – compressor below silo	4	12
			Loading of concrete mix	2	6
			Total sound pressure level $L_{Aeq} = 87.5$ dB approximately 10 m from the nearest noise sources of the concrete batching plant*		

*Value taken from the Rolls-Royce source document, actual noise measurement at a similar concrete batching plant.

The following figure represents only one production unit. A total of three production units are included in the calculation.

Figure 12 – Entered noise sources of the concrete batching plant corresponding to Table 34, with the control point located approximately 10 m from the nearest noise source (yellow point) in the central part of the concrete batching plant, extract from the SoundPLAN calculation software

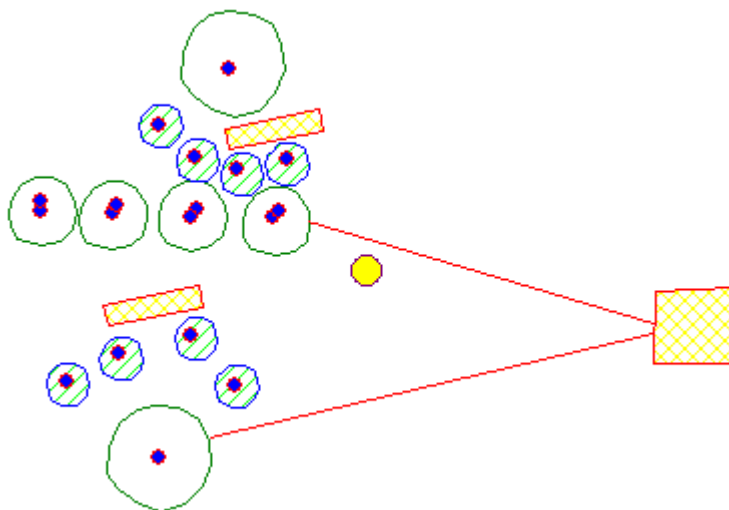




Figure 13 – Assumed use of Area J with the concrete batching plant located there



6.10 Results of Construction Noise Calculations during the Construction of SMR ETE (STC1):

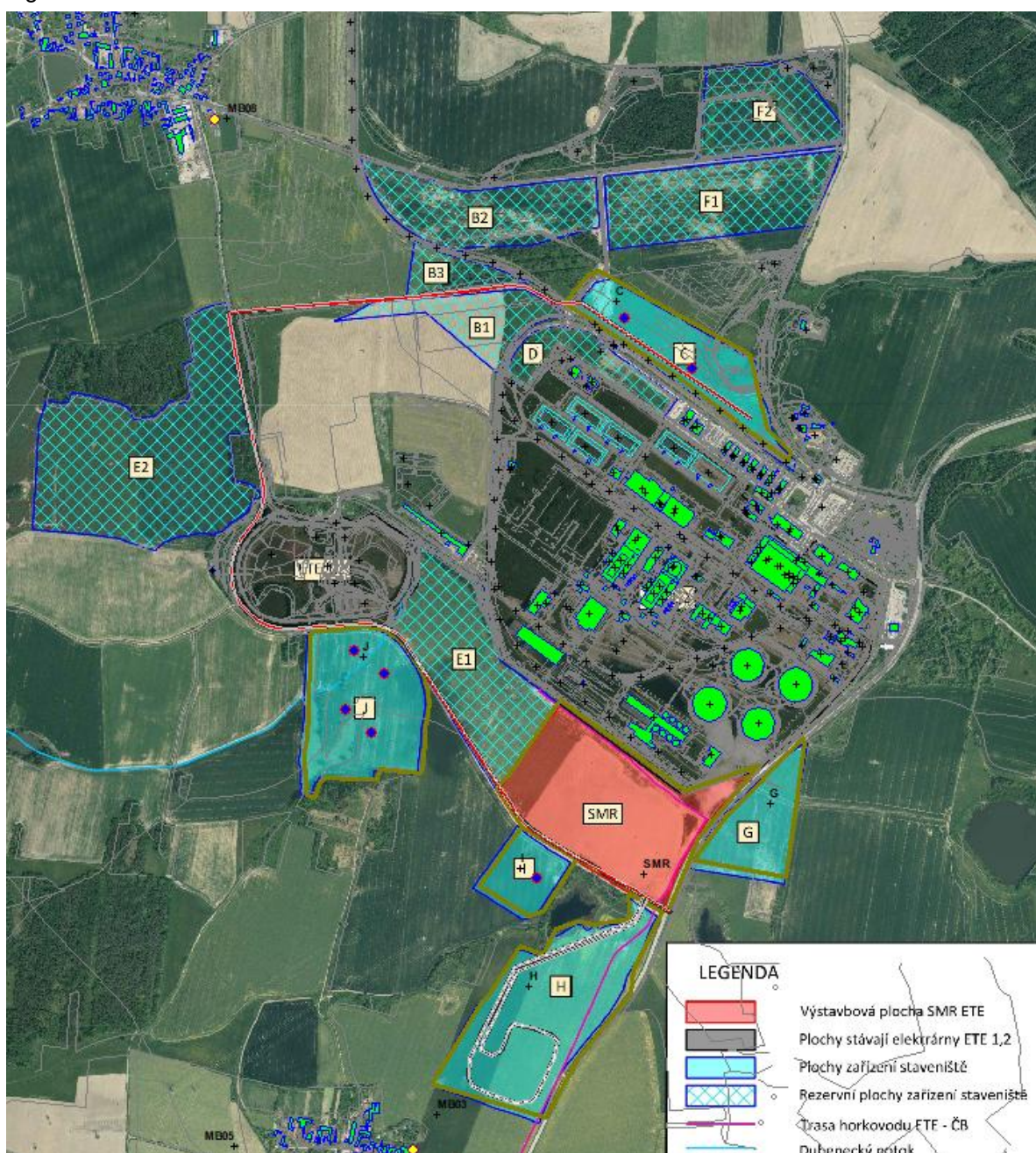
The results of calculations modelling the noise situation at the assessed site for the individual construction phases are presented for heights of 3 m and 6 m above ground level in tabular form in the following chapters of the acoustic study.

The calculated values at the 3 m level are lower than those at the 6 m level above ground.

The calculation results are also shown graphically in Annexes 41 to 47. The attached noise maps are calculated only at a height of 6 m above ground level. At this calculation height, the resulting values are higher.

6.10.1 Time horizon 1 – Preparatory works, topsoil stripping:

Figure 14 – Noise sources on the construction site in time horizon 1





LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.

Table 35 – List of construction equipment used on the construction site

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
1 Construction site preparation, topsoil stripping	C	Dozer	111	1
		Excavator and loader	109	1
	J	Dozer	111	2
		Excavator and loader	109	2
	I	Dozer	111	1

Table 36 – Construction-related transport to Area H – 1st stage, site preparation, topsoil stripping

Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
C	Truck	90	8	4.75	266
J	Truck	90	10	2.0	176

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 41 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.

Table 37 – Calculation results at the control points for the monitored time horizon 1

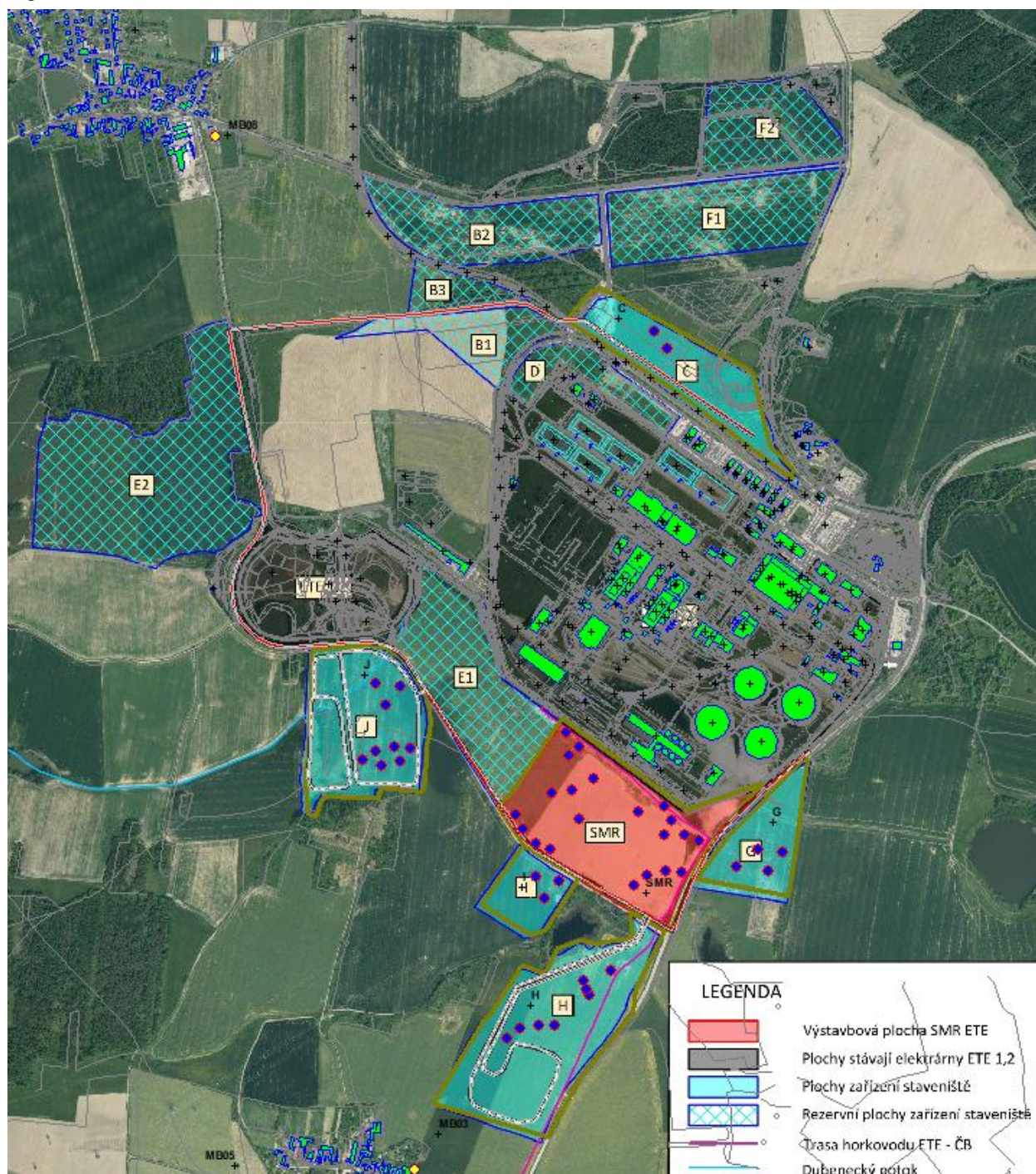
Calculation point	Structure	Height	L _{Aeq,T} [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	21.4	65
		6 m	22.1	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	30.4	65
		6 m	30.5	
MB03	North-eastern edge of the municipality of Kočín	3 m	46.6	65
		6 m	46.8	
MB04	North-eastern edge of the municipality of Kočín	3 m	46.7	65
		6 m	46.2	
MB05	South-western edge of the municipality of Kočín	3 m	39.4	65
		6 m	39.6	
MB06	Edge of the municipality of Malešice	3 m	27.3	65
		6 m	27.6	

MB07	Edge of the municipality of Sedlec	3 m	26.8	65
		6 m	27.2	
MB08	Edge of the municipality of Temelín	3 m	36.1	65
		6 m	36.2	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.10.2 Time horizon 2 – Preparatory works, bulk earthworks:

Figure 15 – Noise sources on the construction site in time horizon 2





LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.

Table 38 – List of construction equipment used on the construction site

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
2	SMR	Truck	90	14
		Excavator and loader	109	2
		Excavator	107	5
	C	Excavator and loader	109	1
		Excavator	107	1
	H	Excavator and loader	109	1
		Excavator	107	5
		Truck	90	4
	G	Excavator and loader	109	1
		Excavator	107	3
	I	Excavator and loader	109	1
		Excavator	107	2
	J	Excavator and loader	109	1
		Excavator	107	2
		Truck	90	6

Table 39 – List of construction equipment used on the construction site – recycling line

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
2,3,5,6,7	H	Crusher on its own crawler	109	1
		Screener	109	1
		Loader	109	1

Table 40 – Construction-related transport to Area J – Excavation works in the construction area and construction site facilities areas (bulk earthworks)

Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
C	Truck	90	6	3.2	214.5
H	Truck	90	19	1.5	120.0
G	Truck	90	11	2.0	182.0
I	Truck	90	6	1.1	117.3

Table 41 – Construction-related transport to Area H – Excavation works in the construction area and construction site facilities areas (bulk earthworks)

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR1	Truck	90	4	0.75	72
SMR2	Truck	90	4	0.75	72
C	Truck	90	6	4.25	256
G	Truck	90	4	0.65	67.6
I	Truck	90	4	0.45	49.5
J	Truck	90	4	0.55	55

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 42 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.

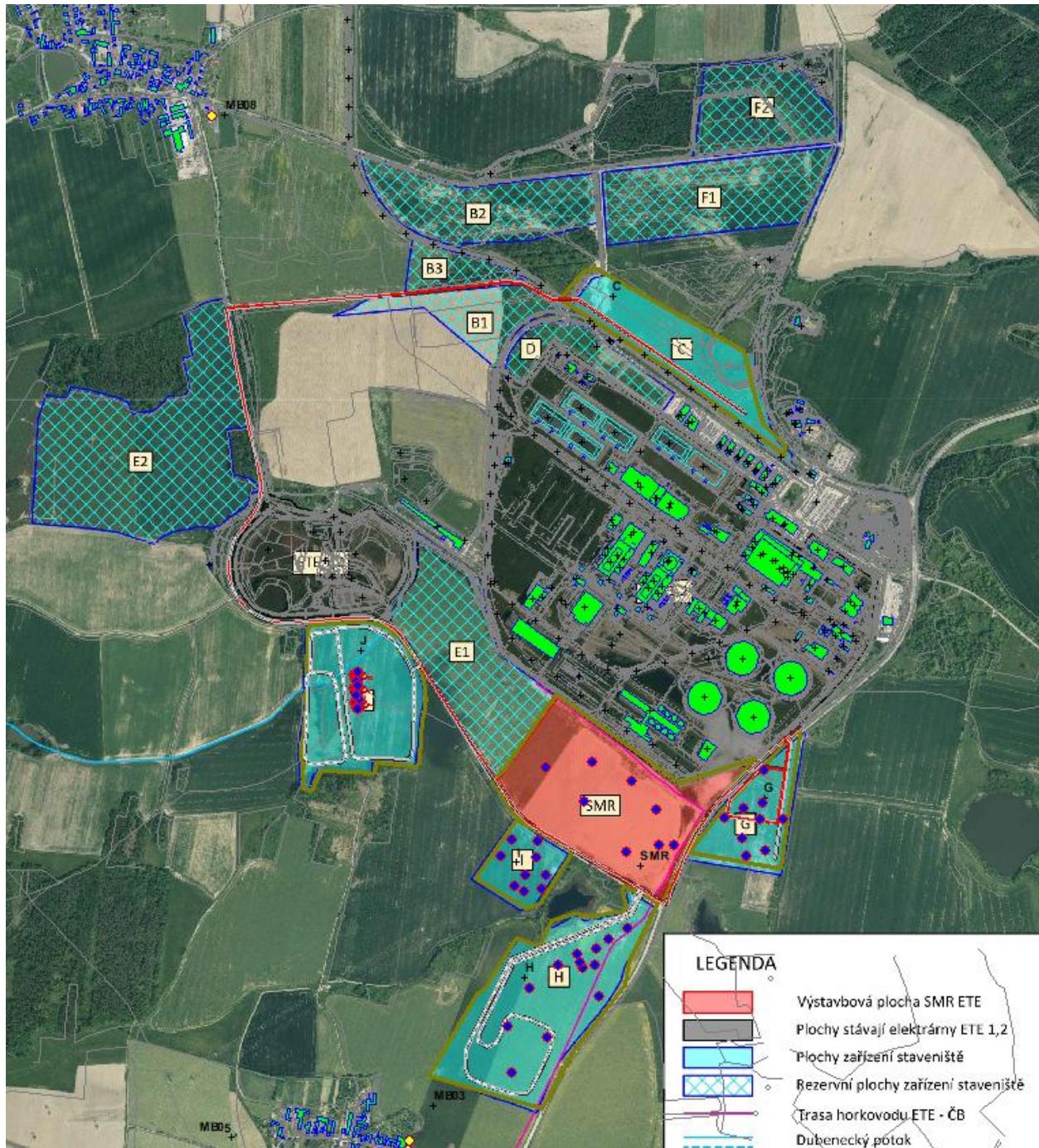
Table 42 – Calculation results at the control points for the monitored time horizon 2

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	26.7	65
		6 m	27.3	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	35.7	65
		6 m	35.9	
MB03	North-eastern edge of the municipality of Kočín	3 m	49.2	65
		6 m	49.4	
MB04	North-eastern edge of the municipality of Kočín	3 m	49.4	65
		6 m	48.8	
MB05	South-western edge of the municipality of Kočín	3 m	42.7	65
		6 m	42.9	
MB06	Edge of the municipality of Malešice	3 m	29.4	65
		6 m	29.7	
MB07	Edge of the municipality of Sedlec	3 m	30.1	65
		6 m	30.4	
MB08	Edge of the municipality of Temelín	3 m	38.6	65
		6 m	38.7	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.10.3 Time horizon 3 – Construction site facilities:

Figure 16 – Noise sources on the construction site in time horizon 3



LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.



Table 43 – List of construction equipment used on the construction site – Construction site facilities

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
3 Construction of construction site facilities	SMR	Trucks	90	2
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	1
		Excavator	107	1
		Excavator and loader	109	1
	H	Trucks	90	4
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	1
		Excavator	107	1
		Excavator and loader	109	1
	G	Trucks	90	2
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	1
		Excavator	107	2
		Excavator and loader	109	1
	I	Trucks	90	4
		Truck mixers	115*	2
		Concrete pump	107	1
		Truck crane, 27 t	95	2
		Excavator	107	1
		Excavator and loader	109	1

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

Table 44 – List of construction equipment used on the construction site – concrete batching plant

Construction phase Construction time horizon	Area	Noise sources	Acoustic power L_{WA} [dB]	Number in one production unit [pcs]	Total number [pcs]
3,5,6,7 Construction site facilities through to completion of construction of SMR ETE	J	Loading of aggregate onto conveyor	77	1	3
		Conveyor	90	2	6
		Aeration of cement silos	85	8	24
		Aggregate bin noise source – compressor below silo	88	2	6
		Concrete mix bin noise source – aeration on silo	85	4	12
		Concrete mix bin noise source – compressor below silo	88	4	12
		Loading of concrete mix	110	2	6
		Total sound pressure level $L_{Aeq} = 87.5$ dB approximately 10 m from the nearest noise sources of the concrete batching plant*			



Table 45 – List of construction equipment used on the construction site – recycling line

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
2,3,5,6,7	H	Crusher on its own crawler	109	1
		Screener	109	1
		Loader	109	1

Table 46 – Construction-related transport to Area H – Excavation works for construction site facilities structures in the construction area and construction site facilities areas

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR	Truck	90	3	0.75	74.8
G	Truck	90	5	0.65	89.1
I	Truck	90	2	0.45	79.2

Table 47 – Construction-related transport from Area C to Area J – Transport of materials for concrete production in the construction area and construction site facilities areas

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR	Truck	90	2	3.2	325
H	Truck	90	2	3.2	325
G	Truck	90	2	3.2	325
I	Truck	90	2	3.2	325

Table 48 – Construction-related transport from Area J to the construction site area – Transport of concrete from the concrete batching plant to the construction area and construction site facilities areas

Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
SMR	Truck mixers*	115	2	1	95.7
H	Truck mixers*	115	2	1.5	115.5
G	Truck mixers*	115	2	2	135.3
I	Truck mixers*	115	2	1.1	69.3

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 43 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.



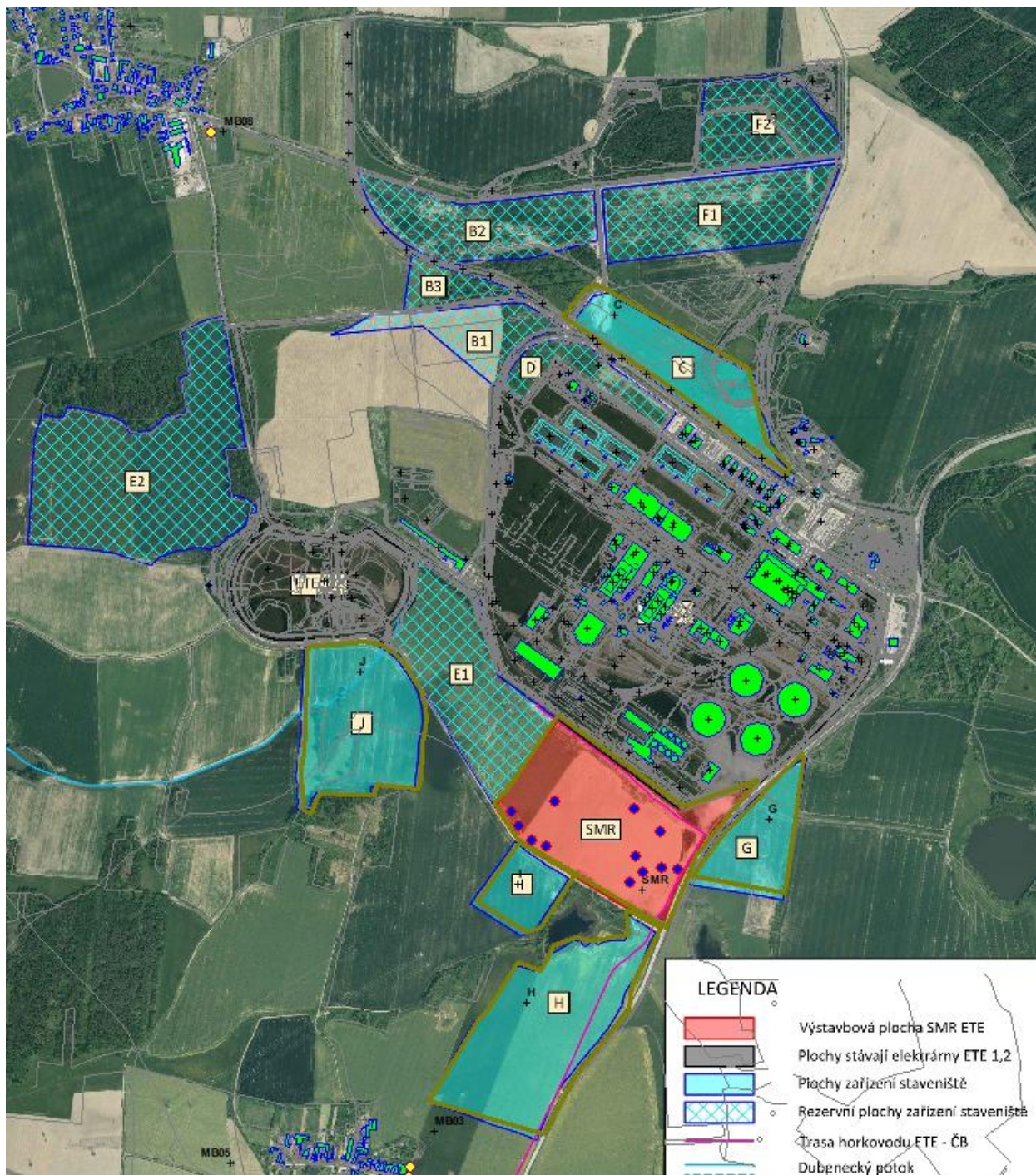
Table 49 – Calculation results at the control points for the monitored time horizon 3

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	34.3	65
		6 m	35.3	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	38.7	65
		6 m	39.0	
MB03	North-eastern edge of the municipality of Kočín	3 m	49.2	65
		6 m	50.7	
MB04	North-eastern edge of the municipality of Kočín	3 m	51.1	65
		6 m	50.2	
MB05	South-western edge of the municipality of Kočín	3 m	42.1	65
		6 m	42.6	
MB06	Edge of the municipality of Malešice	3 m	41.8	65
		6 m	42.3	
MB07	Edge of the municipality of Sedlec	3 m	38.2	65
		6 m	38.7	
MB08	Edge of the municipality of Temelín	3 m	40.0	65
		6 m	40.3	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.10.4 Time horizon 4 – Construction of SMR ETE – Excavations:

Figure 17 – Noise sources on the construction site in time horizon 4



LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.

Table 50 – List of construction equipment used on the construction site – Construction of SMR ETE – Excavations (MTB)

Construction phase Construction time horizon		Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
4	Construction of SMR ETE	SMR	Trucks	90	9
	- Excavations (MTB)		Excavator	107	3

Soil from excavations from the pit for the MTB will be used within the construction site area to complete the bulk earthworks. For this construction phase, no operation of construction-site traffic outside the SMR area, nor operation of the recycling line or the concrete batching plant, is considered.

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 44 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.

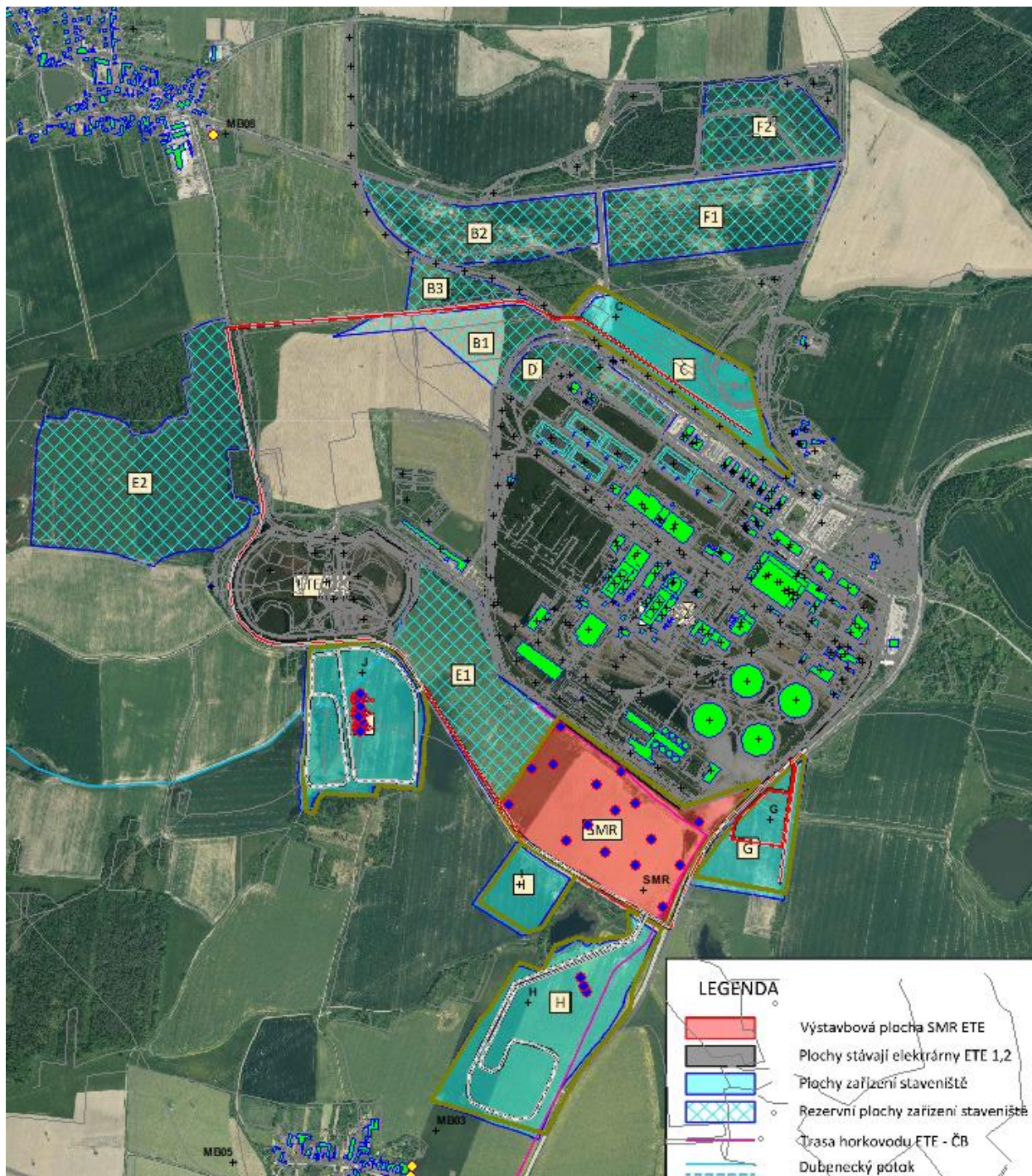
Table 51 – Calculation results at the control points for the monitored time horizon 4

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	16.4	65
		6 m	17.2	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	23.3	65
		6 m	23.7	
MB03	North-eastern edge of the municipality of Kočín	3 m	28.9	65
		6 m	29.5	
MB04	North-eastern edge of the municipality of Kočín	3 m	30.1	65
		6 m	29.3	
MB05	South-western edge of the municipality of Kočín	3 m	25.4	65
		6 m	25.9	
MB06	Edge of the municipality of Malešice	3 m	16.6	65
		6 m	17.2	
MB07	Edge of the municipality of Sedlec	3 m	15.0	65
		6 m	15.8	
MB08	Edge of the municipality of Temelín	3 m	19.0	65
		6 m	19.6	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.10.5 Time horizon 5 – Construction of SMR ETE – Foundation works and substructure:

Figure 18 – Noise sources on the construction site in time horizon 5



LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.

Table 52 – List of construction equipment used on the construction site

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
5 - Construction of SMR ETE Foundation works and substructure (MTB)	SMR	Truck mixers	115*	6
		Concrete pump	107	3
		Stationary/gantry cranes	95	7
		Excavator and loader	109	1

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

Table 53 – List of construction equipment used on the construction site – recycling line

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs
2,3,5,6,7 Site preparation, bulk earthworks through to completion of construction of SMR ETE	H	Crusher on its own crawler	109	1
		Screener	109	1
		Loader	109	1

Table 54 – List of construction equipment used on the construction site – concrete batching plant

Construction phase Construction time horizon	Area	Noise sources	Acoustic power L_{WA} [dB]	Number in one production unit [pcs]	Total number [pcs]
3,5,6,7 Construction site facilities through to completion of construction of SMR ETE	J	Loading of aggregate onto conveyor	77	1	3
		Conveyor	90	2	6
		Aeration of cement silos	85	8	24
		Aggregate bin noise source – compressor below silo	88	2	6
		Concrete mix bin noise source – aeration on silo	85	4	12
		Concrete mix bin noise source – compressor below silo	88	4	12
		Loading of concrete mix	110	2	6
		Total sound pressure level $L_{Aeq} = 87.5$ dB approximately 10 m from the nearest noise sources of the concrete batching plant*			

Table 55 – Construction-related transport for SMR – Transport and installation of reinforcements, transport of materials for concrete production, transport of concrete from the concrete batching plant to the construction area

Area	Process	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
transport from C to J	transport and installation of reinforcements	Truck	90	8	3.2	280.5
	transport of materials for concrete production	Truck	90	5	3.2	325
transport from J to SMR	concrete transportation	Truck mixers	115*	6	1	108.9

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 45 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.

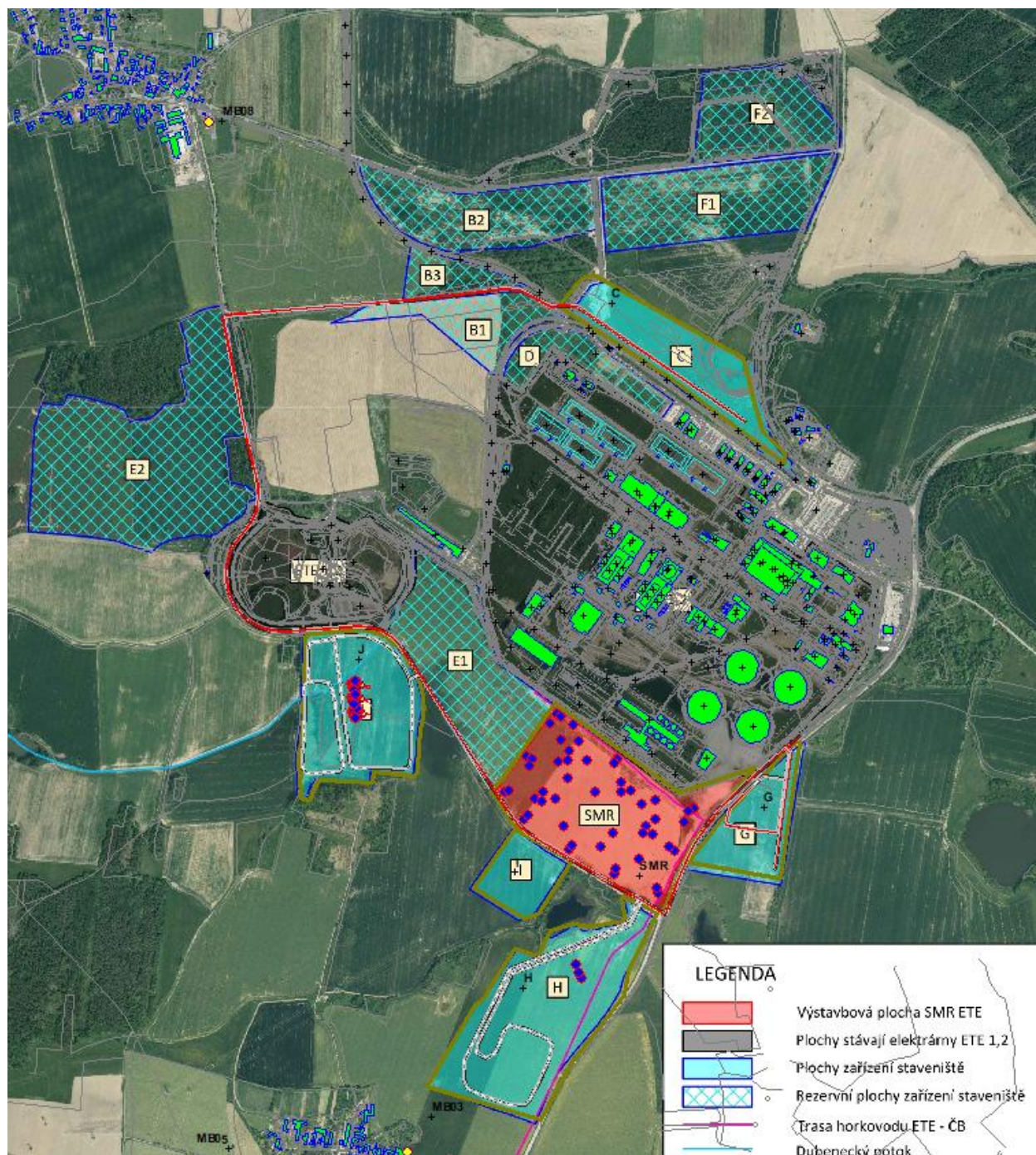
Table 56 – Calculation results at the control points for the monitored time horizon 5

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	33.6	65
		6 m	34.7	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	36.5	65
		6 m	36.9	
MB03	North-eastern edge of the municipality of Kočín	3 m	43.0	65
		6 m	43.6	
MB04	North-eastern edge of the municipality of Kočín	3 m	43.7	65
		6 m	43.2	
MB05	South-western edge of the municipality of Kočín	3 m	38.9	65
		6 m	39.4	
MB06	Edge of the municipality of Malešice	3 m	41.5	65
		6 m	42.0	
MB07	Edge of the municipality of Sedlec	3 m	38.1	65
		6 m	38.6	
MB08	Edge of the municipality of Temelín	3 m	40.4	65
		6 m	40.6	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.10.6 Time horizon 6 – Construction of SMR ETE – Construction (MTB):

Figure 19 – Noise sources on the construction site in time horizon 6



LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – Česká Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.



Table 57 – List of construction equipment used on the construction site

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
6 Construction of SMR ETE - Construction (MTB), other structures	SMR	Trucks	90	6
		Truck mixers	115*	8
		Concrete pump	107	4
		Stationary/gantry cranes	95	20
		Truck crane, 27 t	95	1
		Excavator and loader	109	3
		Tractor with low loader	105	4

For truck mixers, a conservatively increased sound power level (L_{WA} = 115 dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

Table 58 – List of construction equipment used on the construction site – recycling line

Construction phase Construction time horizon	Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
2,3,5,6,7 Site preparation, bulk earthworks through to completion of construction of SMR ETE	H	Crusher on its own crawler	109	1
		Screener	109	1
		Loader	109	1

Table 59 – List of construction equipment used on the construction site – concrete batching plant

Construction phase Construction time horizon	Area	Noise sources	Acoustic power L _{WA} [dB]	Number in one production unit [pcs]	Total number [pcs]
3,5,6,7 Construction site facilities through to completion of construction of SMR ETE	J	Loading of aggregate onto conveyor	77	1	3
		Conveyor	90	2	6
		Aeration of cement silos	85	8	24
		Aggregate bin noise source – compressor below silo	88	2	6
		Concrete mix bin noise source – aeration on silo	85	4	12
		Concrete mix bin noise source – compressor below silo	88	4	12
		Loading of concrete mix	110	2	6
		Total sound pressure level L _{Aeq} = 87.5 dB approximately 10 m from the nearest noise sources of the concrete batching plant*			

Table 60 – Construction-related transport for SMR – Transport and installation of reinforcements, transport of materials for concrete production, transport of concrete from the concrete batching plant to the construction area

Area	Process	Construction machinery	Acoustic power L_{WA} [dB]	Number of pcs	Transport distance [km]	Distance travelled per shift [km]
transport from C to J	transport and installation of reinforcements	Truck	90	10	3.2	280.5
	transport of materials for concrete production	Truck	90	7	3.2	325
	transport of materials for the production of prefabricated elements	Truck	90	4	3.2	325
transport from J to SMR	concrete transportation	Truck mixers	115*	8	1	108.9

For truck mixers, a conservatively increased sound power level ($L_{WA} = 115$ dB) was considered in order to take into account the worst-case scenario in terms of the type of mixer actually used in the future.

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 46 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.

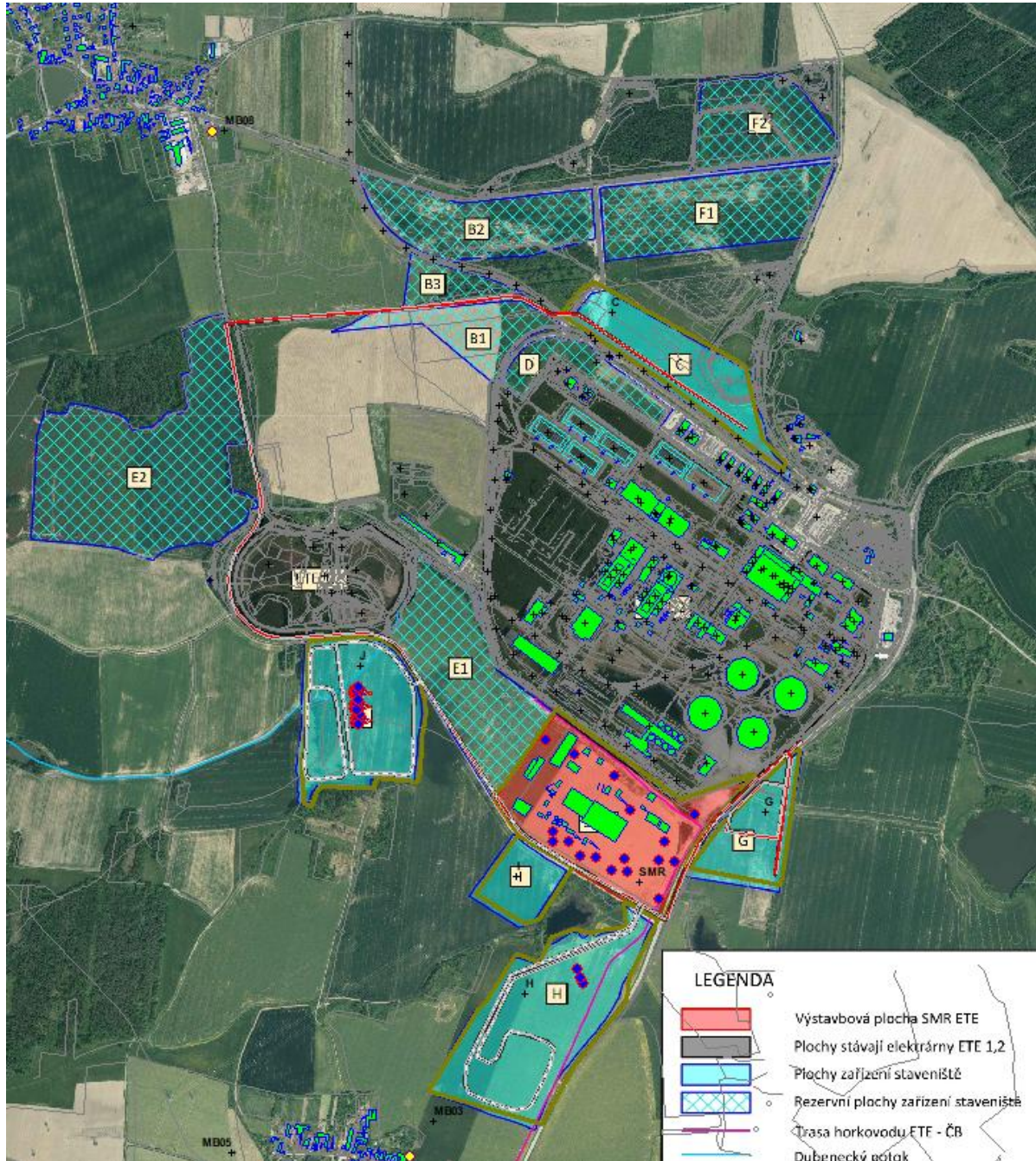
Table 61 – Calculation results at the control points for the monitored time horizon 6

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	34.1	65
		6 m	35.2	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	37.0	65
		6 m	37.4	
MB03	North-eastern edge of the municipality of Kočín	3 m	45.0	65
		6 m	45.7	
MB04	North-eastern edge of the municipality of Kočín	3 m	45.4	65
		6 m	45.1	
MB05	South-western edge of the municipality of Kočín	3 m	40.2	65
		6 m	40.7	
MB06	Edge of the municipality of Malešice	3 m	41.6	65
		6 m	42.1	
MB07	Edge of the municipality of Sedlec	3 m	38.4	65
		6 m	38.9	
MB08	Edge of the municipality of Temelín	3 m	42.5	65
		6 m	42.6	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.10.7 Time horizon 7 – Construction of SMR ETE – Installation works (MTB), other works:

Figure 20 – Noise sources on the construction site in time horizon 7



LEGENDA	LEGEND
Výstavbová plocha SMR ETE	SMR ETE construction area
Plochy stávající elektrárny ETE 1,2	Areas of the existing ETE1,2 power plant
Plochy zařízení staveniště	Construction site facilities areas
Rezervní plochy zařízení staveniště	Reserve construction site facilities areas
Trasa horkovodu ETE - ČB	ETE – České Budějovice hot-water pipeline route
Dubenecký potok	Dubenecký stream

Note: Building structures are marked in green. The purple points represent the stationary sources entered into the calculation software.

Table 62 – List of construction equipment used on the construction site

Construction phase Construction time horizon		Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
7	Construction of SMR ETE - Installation works (MTB), other works	SMR	Oversized cargo kit	105	1
			Mobile crane for superlifts	102	1
			Tractor with low loader	105	2
			Stationary/gantry cranes	95	2
			Vibrating roller	110	1
			Finisher	110	2
			Trucks	90	8

Vehicle operation on construction site roads is entered as set out in Table 62 above.

Table 63 – List of construction equipment used on the construction site – recycling line

Construction phase Construction time horizon		Area	Construction machinery	Acoustic power L _{WA} [dB]	Number of pcs
2,3,5,6,7	Site preparation, bulk earthworks through to completion of construction of SMR ETE	H	Crusher on its own crawler	109	1
			Screener	109	1
			Loader	109	1

Table 64 – List of construction equipment used on the construction site – concrete batching plant

Construction phase Construction time horizon		Area	Noise sources	Acoustic power L_{WA} [dB]	Number in one production unit [pcs]	Total number [pcs]
3,5,6,7	Construction site facilities through to completion of construction of SMR ETE	J	Loading of aggregate onto conveyor	77	1	3
			Conveyor	90	2	6
			Aeration of cement silos	85	8	24
			Aggregate bin noise source – compressor below silo	88	2	6
			Concrete mix bin noise source – aeration on silo	85	4	12
			Concrete mix bin noise source – compressor below silo	88	4	12
			Loading of concrete mix	110	2	6
			Total sound pressure level L_{Aeq} = 87.5 dB approximately 10 m from the nearest noise sources of the concrete batching plant*			

The noise sources on the construction site (construction machinery) are entered as point sources, given their distance from the protected areas. The number of construction machines in the individual construction site areas is taken from source document [13].

Annex 47 contains the calculation map at a height level of 6 m, showing the propagation of noise from the operation of noise sources on the construction site for the monitored time horizon.

The following table presents the calculated noise levels at the individual control points from the operation of noise sources on the construction site.

Table 65 – Calculation results at the control points for the monitored time horizon 7

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	32.9	65
		6 m	34.0	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	34.6	65
		6 m	35.1	
MB03	North-eastern edge of the municipality of Kočín	3 m	43.0	65
		6 m	43.3	
MB04	North-eastern edge of the municipality of Kočín	3 m	42.4	65
		6 m	41.9	
MB05	South-western edge of the municipality of Kočín	3 m	34.6	65
		6 m	35.3	
MB06	Edge of the municipality of Malešice	3 m	41.3	65
		6 m	41.8	
MB07	Edge of the municipality of Sedlec	3 m	37.6	65
		6 m	38.2	
MB08	Edge of the municipality of Temelín	3 m	37.3	65
		6 m	37.8	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.

6.11 Results of Construction Noise Calculations during the Construction of SMR + New NPP ETE (Initial Phase) STC2:

For the cumulation of the construction of SMR ETE and New NPP ETE, the least favourable scenario in terms of acoustic impact is selected.

It is assumed that, during the construction of the SMR ETE structures, bulk earthworks will be carried out at the New NPP ETE construction site.

From source document [14], the following time horizon was selected for the construction of New NPP ETE: Excavation works at main construction site – alternative of units above 1,000 MW + construction site facilities – (4):

Table 66 – Calculation results at the control points for the monitored construction phase (Table 15, see [14])

Control points	STC excavation works at main construction site + construction site facilities (above 1,000 MW)
	$L_{Aeq,T}$ [dB]
MB01 – Litoradlice	32.1
MB02 – Knín	36.0
MB03 – Kočín NE	42.8
MB04 – Kočín NE	42.6
MB05 – Kočín SW	39.2
MB06 – Malešice	34.1
MB07 – Sedlec	35.9
MB08 – Temelín	49.4

Table 67 – Calculation results at the control points for the monitored time horizon 6 (Construction of SMR ETE)

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB]	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	34.1	65
		6 m	35.2	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	37.0	65
		6 m	37.3	
MB03	North-eastern edge of the municipality of Kočín	3 m	45.0	65
		6 m	45.6	
MB04	North-eastern edge of the municipality of Kočín	3 m	45.4	65
		6 m	45.0	
MB05	South-western edge of the municipality of Kočín	3 m	40.2	65
		6 m	40.6	
MB06	Edge of the municipality of Malešice	3 m	41.6	65
		6 m	42.1	
MB07	Edge of the municipality of Sedlec	3 m	38.4	65
		6 m	38.9	
MB08	Edge of the municipality of Temelín	3 m	42.5	65
		6 m	42.6	

Table 68 – Cumulation of stationary sources for STC2 – initial phase of construction of New NPP ETE + construction phase of SMR ETE (time horizon 6).

Calculation point	Structure	Height	$L_{Aeq,T}$ [dB] SMR ETE	$L_{Aeq,T}$ [dB] New NPP ETE	$L_{Aeq,T}$ [dB] SMR+New NPP ETE	Public-health limit
MB01	Edge of the municipality of Litoradlice	3 m	34.1	32.1	36.2	65
		6 m	35.2	32.1	36.9	
MB02	Near the former farmstead beyond the former municipality of Knín	3 m	37.0	36.0	39.5	65
		6 m	37.3	36.0	39.7	
MB03	North-eastern edge of the municipality of Kočín	3 m	45.0	42.8	47.0	65
		6 m	45.6	42.8	47.4	
MB04	North-eastern edge of the municipality of Kočín	3 m	45.4	42.6	47.2	65
		6 m	45.0	42.6	47.0	
MB05	South-western edge of the municipality of Kočín	3 m	40.2	39.2	42.7	65
		6 m	40.6	39.2	43.0	
MB06	Edge of the municipality of Malešice	3 m	41.6	34.1	42.3	65
		6 m	42.1	34.1	42.7	
MB07	Edge of the municipality of Sedlec	3 m	38.4	35.9	40.3	65
		6 m	38.9	35.9	40.7	
MB08	Edge of the municipality of Temelín	3 m	42.5	49.4	50.2	65
		6 m	42.6	49.4	50.2	

The public-health limit for construction noise $L_{Aeq,T} = 65$ dB is met at the control points representing the nearest protected outdoor areas of buildings.



6.12 Conclusion – Construction Noise – Noise Sources on the Construction Site:

At all monitored control points representing protected outdoor areas of buildings, the public-health limits for construction noise are **met**; therefore, this part of the acoustic study does not propose any noise mitigation measures to reduce noise from noise sources on the construction site during the construction of SMR ETE.

The public-health limits in protected outdoor areas of buildings for construction noise are also met for the scenario involving cumulation with the initial phase of construction of New NPP ETE.

7. External annexes:

List of attached noise maps for road traffic operation, traffic loading STC1 for the year 2034 – operation of ETE1,2 + construction phase of SMR ETE:

Kočín:

Annex No. 1 – noise map at a height of 3 m above ground level, year 2034, STC1 – daytime

Annex No. 2 – noise map at a height of 3 m above ground level, year 2034, STC1 – night-time

Annex No. 3 – noise map at a height of 6 m above ground level, year 2034, STC1 – daytime

Annex No. 4 – noise map at a height of 6 m above ground level, year 2034, STC1 – night-time

Temelín:

Annex No. 5 – noise map at a height of 3 m above ground level, year 2034, STC1 – daytime

Annex No. 6 – noise map at a height of 3 m above ground level, year 2034, STC1 – night-time

Annex No. 7 – noise map at a height of 6 m above ground level, year 2034, STC1 – daytime

Annex No. 8 – noise map at a height of 6 m above ground level, year 2034, STC1 – night-time

Týn nad Vltavou 1:

Annex No. 9 – noise map at a height of 3 m above ground level, year 2034, STC1 – daytime

Annex No. 10 – noise map at a height of 3 m above ground level, year 2034, STC1 – night-time

Annex No. 11 – noise map at a height of 6 m above ground level, year 2034, STC1 – daytime

Annex No. 12 – noise map at a height of 6 m above ground level, year 2034, STC1 – night-time

Týn nad Vltavou 2:

Annex No. 13 – noise map at a height of 3 m above ground level, year 2034, STC1 – daytime

Annex No. 14 – noise map at a height of 3 m above ground level, year 2034, STC1 – night-time

Annex No. 15 – noise map at a height of 6 m above ground level, year 2034, STC1 – daytime

Annex No. 16 – noise map at a height of 6 m above ground level, year 2034, STC1 – night-time

Zvěrkovice:

Annex No. 17 – noise map at a height of 3 m above ground level, year 2034, STC1 – daytime

Annex No. 18 – noise map at a height of 3 m above ground level, year 2034, STC1 – night-time

Annex No. 19 – noise map at a height of 6 m above ground level, year 2034, STC1 – daytime

Annex No. 20 – noise map at a height of 6 m above ground level, year 2034, STC1 – night-time

List of attached noise maps for road traffic operation, traffic loading STC2 for the year 2034 – initial phase of construction of New NPP ETE + operation of ETE1,2 + construction phase of SMR ETE:

Kočín:

- Annex No. 21 – noise map at a height of 3 m above ground level, year 2034, STC2 – daytime
- Annex No. 22 – noise map at a height of 3 m above ground level, year 2034, STC2 – night-time
- Annex No. 23 – noise map at a height of 6 m above ground level, year 2034, STC2 – daytime
- Annex No. 24 – noise map at a height of 6 m above ground level, year 2034, STC2 – night-time

Temelín:

- Annex No. 25 – noise map at a height of 3 m above ground level, year 2034, STC2 – daytime
- Annex No. 26 – noise map at a height of 3 m above ground level, year 2034, STC2 – night-time
- Annex No. 27 – noise map at a height of 6 m above ground level, year 2034, STC2 – daytime
- Annex No. 28 – noise map at a height of 6 m above ground level, year 2034, STC2 – night-time

Týn nad Vltavou 1:

- Annex No. 29 – noise map at a height of 3 m above ground level, year 2034, STC2 – daytime
- Annex No. 30 – noise map at a height of 3 m above ground level, year 2034, STC2 – night-time
- Annex No. 31 – noise map at a height of 6 m above ground level, year 2034, STC2 – daytime
- Annex No. 32 – noise map at a height of 6 m above ground level, year 2034, STC2 – night-time

Týn nad Vltavou 2:

- Annex No. 33 – noise map at a height of 3 m above ground level, year 2034, STC2 – daytime
- Annex No. 34 – noise map at a height of 3 m above ground level, year 2034, STC2 – night-time
- Annex No. 35 – noise map at a height of 6 m above ground level, year 2034, STC2 – daytime
- Annex No. 36 – noise map at a height of 6 m above ground level, year 2034, STC2 – night-time

Zvěrkovice:

- Annex No. 37 – noise map at a height of 3 m above ground level, year 2034, STC2 – daytime
- Annex No. 38 – noise map at a height of 3 m above ground level, year 2034, STC2 – night-time
- Annex No. 39 – noise map at a height of 6 m above ground level, year 2034, STC2 – daytime
- Annex No. 40 – noise map at a height of 6 m above ground level, year 2034, STC2 – night-time

List of attached noise maps for construction noise on the construction site – noise from stationary sources for the individual time horizons:

- Annex No. 41 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 1
- Annex No. 42 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 2
- Annex No. 43 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 3
- Annex No. 44 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 4
- Annex No. 45 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 5
- Annex No. 46 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 6
- Annex No. 47 – noise map at a height of 6 m above ground level, year 2034 – construction time horizon 7



8. Abbreviations:

ČR	Czech Republic
ČSN	Czech Technical Standard
DIN	Deutsche Industrie-Norm
DP	partial performance
EIA	Environmental Impact Assessment
ETE	Temelín Power Plant
HTÚ	bulk earthworks
MTB	Main Technological Building
ISO	International Organization for Standardization
KB	control point
New NPP ETE	New Nuclear Power Plant at the Temelín site (Units 3,4)
RLS	Richtlinien für den lärmschutz an strassen (Guidelines for Noise Protection on Roads)
ŘSD ČR	Road and Motorway Directorate of the Czech Republic
SMR	small modular reactor
SMR ETE	New SMR Power Plant at the Temelín site
STC1	construction activity during the construction of SMR ETE
STC2	construction activity during the construction of SMR ETE + initial phase of New NPP ETE construction traffic