Development of Kwu Tung North New Development Area Remaining Phase – Design and Construction

Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement

EP-467/2013/A

Traffic Noise Mitigation Plan (Version B)

March 2025

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Attention: Mr. Kingman CHAN / Ms. Lighting Chan

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Agreement No. CE 81/2023 (EP)
Independent Environmental Checker for Environmental Monitoring and Audit Works in Construction Phase for the Remaining Phase Development of Kwu Tung North and Fanling North New Development Area – Investigation

Environmental Permit No. EP-467/2013/A (Condition 2.6):
Traffic Noise Mitigation Plan (Version B)

24 March 2025

BY EMAIL

Dear Sir,

Reference is made to the AECOM's submission of the Traffic Noise Mitigation Plan in accordance with EP-467/2013/A (EP Condition 2.6) dated 17 March 2025 certified by the ET Leader on 21 March 2025.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore we write to verify the captioned submission in accordance with the requirement stipulated in Condition 1.9 and 2.6 of EP-467/2013/A.

Should you have any queries, please contact the undersigned at 2828 5967.

Yours faithfully,
For and on behalf of the
Mott MacDonald Hong Kong Limited



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Date: 21 March 2025

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By Email

Attn.: Mr. Kingman CHAN / Ms. Lighting CHAN

Dear Mr. Chan / Ms Chan,

Contract No. NDO/05/2024 Environmental Team for EM&A Works for Remaining Phase Development of Kwu Tung North and Fanling North New Development Areas

Contract No. ND/2024/01
Kwu Tung North New Development Area, Remaining Phase:
Site Formation and Infrastructure Works (South)
(Traffic Noise Mitigation Plan (EP-467/2013/A) and (EP-468/2013/A))

Reference is made to the submission of "Traffic Noise Mitigation Plan (Version B) (EP-467/2013/A)" and "Traffic Noise Mitigation Plan (Version A) (EP-468/2013/A)" dated 17 March 2025 for the captioned works contract pursuant to Condition 2.6 of EP-467/2013/A and Condition 2.10 of EP-468/2013/A.

We write to certify that we have no adverse comments on the captioned submission in accordance with Condition 1.9 of EP-467/2013/A and EP-468/2013/A.

Should you require any further information or clarification, please do not hesitate to contact the undersigned on 3664 6788.

Yours sincerely,

Keith Chau
Environmental Team Leader
Aurecon Hong Kong Limited

c.c.

CEDD	(Attn.: Mr. Eric KWAN)	By Email (w/o)
IEC – Mott MacDonald	(Attn.: Mr. Thomas CHAN)	By Email (w/o)

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土木工程拓展署
CEDD Civil Engineering and Development Department
North Development Office

Agreement No. CE 19/2019 (CE)

Development of Kwu Tung North New Development Area, Remaining Phase - Design and Construction

EP-467/2013/A
Traffic Noise Mitigation Plan (Version B)

March 2025

Reviewed: _____ 17 March 2025
Raymond Pau

Approved for Issue: _____ 17 March 2025
Francis Leong

AECOM ASIA COMPANY LIMITED

Disclaimer:

*This report is prepared for **Civil Engineering and Development Department (CEDD)** and is given for its sole benefit in relation to and pursuant to **Agreement No. CE 19/2019 (CE) Development of Kwu Tung North New Development Area, Remaining Phase – Design and Construction** and may not be disclosed to, quoted to or relied upon by any person other than CEDD without our prior written consent. No person (other than **CEDD**) into whose possession a copy of this report comes may rely on this report without our express written consent and **CEDD** may not rely on it for any purpose other than as described above.*

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1 INTRODUCTION

1.1 Background

1.1.1 The North East New Territories (NENT) New Development Areas (NDAs) Planning and Engineering (P&E) Study, after consideration and incorporation of comments from the three-stage public engagement programme, planned to proceed with development in the Kwu Tung North (KTN) and Fanling North (FLN). The NENT NDAs P&E Study is a designated project under Item 1 Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO), and covers a total of thirteen individual designated projects which require environmental permits under Schedule 2 of EIAO.

1.1.2 An EIA Report was prepared to assess the environmental impacts associated with the proposed construction and operational works of the NENT NDAs. The EIA Report (Register No. AEIAR-175/2013) was approved by the Director of Environmental Protection (DEP) on 18 October 2013 with approval conditions stipulated in the Director's letter (Reference: (45) in EP2/N7/S3/57 Pt.3). There are twelve Environmental Permits (EPs) and one Further Environmental Permit (FEP) issued by DEP on 21 November 2013 and 3 January 2014 to cover all the identified designated projects in NENT NDAs.

1.1.3 The construction and operation of KTN NDA Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement (hereinafter referred to as "the Project"), which is defined as Designated Project 3 (DP3) in the EIA Report, is governed by EP-467/2013. The location of the Project is shown in **Figure 1.1**. Variation of environmental permit (VEP) for the Project was subsequently applied for the proposed changes under Agreement No. CE 13/2014 – Development of Kwu Tung North and Fanling North New Development Areas, Phase 1 – Design and Construction and the latest Environmental Permit (EP No: EP-467/2013/A) was issued by DEP on 27 January 2017.

1.1.4 During the planning and engineering (P&E) reviews under Agreement No. CE 19/2019 – Development of Kwu Tung North New Development Areas, Remaining Phase – Design and Construction and Agreement No. CE 20/2019 – Improvement of Tai Tau Leng Roundabout and Fanling Highway (Kwu Tung Section) – Design and Construction (hereinafter referred to as "the Remaining Phase Exercise"), minor changes in the road alignment of the Project were proposed based on the findings of the P&E reviews (**Appendix 1.1** refers). In addition, for better planning on both road alignment and development of NDA to minimise substantial structures of at-source noise mitigation measures (NMMs) on a practical and reasonable basis, a balanced approach would be adopted to provide NMMs at both at-source and at-receiver end. Taking such initiative, the predicted degree of noise exceedances has been made known to relevant parties (i.e. Housing Department (HD) / Housing Society (HS) / Lands Department (LandsD)) by Civil Engineering and Development Department (CEDD), and these parties agreed to adopt the commonly used at-receiver end NMMs (e.g. acoustic windows and acoustic balconies) subject to the detailed design of respective sites. The latest proposal of at-source road traffic noise mitigation measures under the P&E reviews is presented in **Appendix 1.2**.

1.1.5 Pursuant to EP Condition 2.6, the Permit Holder, CEDD, shall no later than one month before the commencement of construction of the Project, submit four hard copies and two electronic copies of the Traffic Noise Mitigation Plan (the Plan) to the DEP for approval. If there is any change proposed to the traffic noise mitigation measures in the approved Plan, the Permit Holder shall, no later than one month before the implementation of any such change, submit to the Director for approval four hard copies and two electronic copies of an update to the Plan (the Updated Plan). The Plan or any Updated Plan shall demonstrate that the traffic noise performance requirements set out in the EIA Report (Register No.: AEIAR-175/2013) will not be exceeded with the mitigation measures in place.

1.1.6 A Plan which considered the proposed changes in road alignment (**Appendix 1.1** refers) and intensifications under the Remaining Phase Exercise, was submitted and approved by DEP in September 2022 (hereinafter referred to as "the TNMP (Version A) (September 2022)"). Under further review of the Remaining Phase Exercise, there are minor updates on the proposed at-source NMMs within KTN NDA. AECOM Asia Co Ltd was commissioned by the CEDD to update the Plan for submission to DEP for approval.

1.2 Objective of this Traffic Noise Mitigation Plan

1.2.1 This Updated Plan (Version B) has been prepared to demonstrate that the traffic noise performance requirements set out in the EIA Report (Register No.: AEIAR-175/2013) for the Project will not be exceeded with the NMMs in place.

2 REVIEW ON TRAFFIC NOISE MITIGATION MEASURES

2.1 Introduction

2.1.1 As mentioned in **Section 1.1.6**, there are minor updates on the proposed at-source road traffic noise mitigation measures within KTN NDA (**Appendix 1.2** refers) under further review of the Remaining Phase Exercise. This section presents the road traffic noise impact assessment findings within the 300m study area of the Project and the performance of the at-source NMMs.

2.2 Environmental Legislation, Standards and Criteria

2.2.1 The criteria for assessing road traffic noise are given in the *Technical Memorandum on Environmental Impact Assessment Process* (EIAO-TM). The road traffic noise criterion is 70dB(A) for all domestic premises, temporary housing accommodation, hostels, convalescent homes and homes for the aged; and 65dB(A) for educational institutions, places of public worship and courts of law. For hospitals and medical clinics, a more stringent criterion of 55dB(A) is stipulated. It should be noted that all these criteria only apply to Noise Sensitive Receivers (NSRs) that rely on opened windows for ventilation.

2.3 Representative Noise Sensitive Receivers

2.3.1 The representative NSRs and most of the noise assessment points (NAPs) generally follow those as adopted in the TNMP (Version A) (September 2022), while some NAPs at the planned development sites have been updated based on the best available information on blocking layout plans.

2.3.2 The provision of social welfare facilities and kindergartens would increase due to additional population in KTN NDA and the associated increased demand. Their locations have also been updated according to the latest planning arrangement. Except for the proposed Residential Care Home for the Elderly (RCHE) and kindergartens at Sites A1-2, A2-2a and A2-2b, the exact locations of other proposed social welfare facilities with residential premises and kindergartens within 300m study area of the Project were not yet confirmed during the time of preparation of this Plan. Therefore, following the same assessment approach as adopted in the EIA Report, a sensitivity test on the potential road traffic noise impact was conducted at the proposed social welfare facilities and kindergartens. It should be noted that, during the design of the social welfare facilities with residential premises and kindergartens, noise sensitive uses should be properly located to avoid exceedance as far as practicable. The locations of the NAPs for the proposed RCHEs and kindergartens at Sites A1-2, A2-2a and A2-2b were updated according to the design layouts provided by HS and HD in January 2022 and June 2022, respectively.

2.3.3 Details of the representative NSRs for residential use, educational use, social welfare facilities with residential premises and kindergartens are presented in **Table 2.1**, with the locations of the NAPs shown in **Figures 2.1 – 2.3**.

Table 2.1 Details of Representative Noise Sensitive Receivers

NSR	NAP (1)	Revised / New NAPs (2)	Land Use (3)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (4)	Remarks
Existing						
A3-7	R2141	-	R	3	70	-
C1-4	R2001, R2102 to R2103	-	R	3	70	-
D1-6	-	E0002 to E0006	R	1 - 2	70	New NSR identified during design changes
D1-9	R2041 to R2043, R2046 to R2047, N2046 to N2047	-	R	3	70	-
KTN-1	R1001 to R1005	-	W, E, R	1 - 3	65 / 70	-
KTN-2	R1021 to R1034	-	E, R	1 - 4	65 / 70	-
KTN-4	R1041 to R1043	-	R	2 - 3	70	-
KTN-P2	R1541 to R1546	-	-	-	-	There will be new residential development at the area where the APs are located and

NSR	NAP (1)	Revised / New NAPs (2)	Land Use (3)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (4)	Remarks
						therefore R1541 - R1546 are removed
KTN-9	R1085 to R1090	-	R	3	70	-
KTN-12	R1121	-	R	2	70	-
KTN-48	R1281 to R1282, R1284 to R1290	-	R	4	70	-
KTN-49	R1301	-	R	2	70	-
KTN-50	R1681 to R1682	-	R	2	70	-
CPR	-	E0007 to E0012	R	1 - 2	70	Existing NSRs close to Castle Peak Road
Planned						
A1-2	N2500 to N2510 (Residential)	A1-2-1 to A1-2-34 (Residential)	R	32 - 34	70	Best available information from HS
	N6681 to N6683 (Social Welfare)	A1-2-s1 to A1-2-s13 (Social Welfare)	R	2	70	
	N6161 to N6175 (Kindergartens)	A1-2-k1 to A1-2-k7 (Kindergartens)	E	1	65	
A1-4a	R2521 to R2522, N2542, N2545 (Residential)	A1-4a-1 to A1-4a-17 (Residential)	R	27	70	Best available information from CEDD
	R6261 to R6267, R6271, N6269 to N6270, N6315 to N6318 (Kindergartens)	-	-	-	-	
A1-9a	R2606 to R2610 (Residential)	A1-9a-1 to A1-9a-7 (Residential)	R	18	70	Updated APs based on updated design
A1-9b	R2601 to R2605, R2611, N2612 (Residential)	A1-9b-1 to A1-9b-9 (Residential)	R	18	70	Updated APs based on updated design
A2-2a	N2621 to N2627 (Residential)	A2-2a-1 to A2-2a-33 (Residential)	R	38 - 40	70	Best available information from HD
	-	A2-2a-s1 to A2-2a-s6 (Social Welfare)	R	1 - 2	70	
	N6220 to N6238 (Kindergartens)	A2-2a-k1 to A2-2a-k5 (Kindergartens)	E	1	65	
A2-2b	N2628 to N2640 (Residential)	A2-2b-1 to A2-2b-22 (Residential)	R	38	70	Best available information from HD
	-	A2-2b-s1 to A2-2b-s8 (Social Welfare)	R	1	70	
	N6201 to N6213 (Kindergartens)	A2-2b-k1 to A2-2b-k11 (Kindergartens)	E	1	65	
	N6613 to N6614 (Social Welfare)	A2-7-s1 to A2-7-s20 (Social Welfare)	R	2 - 6	70	
	N6113 to N6132 (Kindergartens)	A2-7-k1 to A2-7-k20 (Kindergartens)	E	2 - 5	65	
A2-9a	R2701 to R2702 (Residential)	A2-9a-1 to A2-9a-3 (Residential)	R	20	70	Updated APs based on updated design
A2-9b	R2703 to R2707 (Residential)	A2-9b-1 to A2-9b-7 (Residential)	R	20	70	Updated APs based on updated design
A2-11	R3222 to R3223 (Schools)	A2-11-1 to A2-11-3 (Schools)	E	8	65	Updated APs based on updated design
A2-12	R3241 (Schools)	A2-12-1 to A2-12-3 (Schools)	E	8	65	Updated APs based on updated design
A2-13	R3264 to R3265 (Schools)	A2-13-1 to A2-13-3 (Schools)	E	8	65	Updated APs based on updated design
A3-1	R3282 (Schools)	A3-1-1 to A3-1-2 (Schools)	E	8	65	Updated APs based on updated design
A3-2	N3301 to N3302 (Schools)	A3-2-1 to A3-2-2 (Schools)	E	8	65	Updated APs based on updated design
A3-3a	N2721, N2726a-b,	A3-3a-1,	R	41	70	Updated APs based on

NSR	NAP (1)	Revised / New NAPs (2)	Land Use (3)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (4)	Remarks
	N2727a-b, N2728, N2730, N2731a-b (Residential)	A3-3a-2a to A3-3a-2b, A3-3a-3a to A3-3a-3b, A3-3a-4a to A3-3a-4b, A3-3a-5 to A3-3a-6 (Residential)				updated design
	N6001 to N6004 (Social Welfare)	A3-3a-s1 to A3-3a-s24 (Social Welfare)	R	2 - 6	70	
	N6001 to N6019, N6040 to N6052 (Kindergartens)	A3-3a-k1 to A3-3a-k24 (Kindergartens)	E	2 - 5	65	
A3-6	R2741 to R2747 (Residential)	A3-6-1 to A3-6-8 (Residential)	R	22	70	Updated APs based on updated design
B1-1	N3001 to N3003 (Schools)	-	-	-	-	APs removed based on updated design
B3-5a	-	B3-5a-1 to B3-5a-15 (Residential)	R	19	70	New NSRs based on updated design
B3-8	-	B3-8-1 to B3-8-6 (Residential)	R	16	70	New NSRs based on updated design
D1-5	R3481 (Residential)	-	R	3	70	-
D1-7a	N2788 to N2792 (Residential)	D1-7a-1 to D1-7a-5 (Residential)	R	24	70	Updated APs based on updated design
D1-7b	N2787, N2793 (Residential)	D1-7b-1 to D1-7b-4 (Residential)	R	26	70	Updated APs based on updated design
D1-7c	N2784 to N2786, N2794 (Residential)	D1-7c-1 to D1-7c-7 (Residential)	R	20	70	Updated APs based on updated design
D1-7d	R2781 to R2783 (Residential)	D1-7d-1 to D1-7d-4 (Residential)	R	24	70	Updated APs based on updated design
D1-11a	R2821 to R2824, N2834 to N2835 (Residential)	D1-11a-1 to D1-11a-6 (Residential)	R	18	70	Updated APs based on updated design
D1-11b	R2825 to R2828, N2833 (Residential)	D1-11b-1 to D1-11b-6 (Residential)	R	20	70	Updated APs based on updated design
D1-11c	R2828 to R2830, N2831 to N2832 (Residential)	D1-11c-1 to D1-11c-5 (Residential)	R	20	70	Updated APs based on updated design
E1-2	R2862 to R2863 (Schools)	E1-2-1 to E1-2-3 (Schools)	E	8	65	Updated APs based on updated design
E1-3	R3701 to R3704 (Residential)	E1-3-1 to E1-3-7 (Residential)	R	28	70	Best available information from ArchSD
E1-4	R3721 (Schools)	E1-4-1 (Schools)	E	8	65	Updated APs based on updated design
C1-3	R2021 to R2024 (Residential)	C1-3-1 to C1-3-18 (Residential)	R	3 - 14	70	Revised APs based on latest building layout adopted under the approved application for rezoning (case no.: No. Y/KTN/2). The main building of Enchi Lodge is a Grade 3 Historical Building and forms a part of the R site. It would be refurbished to clubhouse which is not considered as NSR. Thus, R2021 was removed.
KTS14	-	KTS14_1 to KTS14_2 (Residential)	CDA	17 - 19	70	New APs based on OZP Planned Developments at Kwu Tung South
KTS15	-	KTS15_1 to KTS15_4 (Residential)	CDA	16	70	New APs based on OZP Planned Developments at Kwu Tung South
SHK	-	SHK_1 to SHK_17	CDA	17 - 21	70	New APs based on OZP

NSR	NAP (1)	Revised / New NAPs (2)	Land Use (3)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (4)	Remarks
		(Residential)				Planned Developments at Kwu Tung South

Notes:
(1) Reference was made from Planning and Engineering Review for According Additional Population in KTN and FLN NDAs and for Remaining Package of NDAs – Report on Environmental Review (July 2017) ("P&ER ERR") and the TNMP (Version A) (September 2022).
(2) The revised / new NAPs at representative NSRs, where applicable, were identified for road traffic noise impact assessment according to the best available information during the time of preparation of this Updated Plan.
(3) R – Residential; E – Educational; CDA – Comprehensive Development Area; W – Place of Public Worship.
(4) Relevant environmental standards / criteria: EIAO-TM Annex 5 noise standards for road traffic noise.

2.4 Traffic Noise Impact Assessment Methodology

2.4.1 Same road traffic noise assessment methodology as presented in Section 4.6.2.1 of the EIA Report was adopted in this road traffic noise impact assessment.

2.4.2 The commencement year of the Project is expected to be 2031. According to the "*Hong Kong Population Projections 2020-2069*" which was published by Census and Statistics Department, the population in Hong Kong will reach its peak in 2041 and drop continuously thereafter. It is expected that the traffic forecast, which is related to the population, would also drop continuously after 2041. Hence, the year with maximum traffic flow within a 15-year period upon commencement of operation of the road works is anticipated to be 2041. Traffic forecast for 2041 was therefore adopted in the assessment and endorsed by Transport Department (TD) from the view of transport planning on 31 October 2024. Traffic forecast adopted and the endorsement from TD are presented in **Appendix 2.1**.

2.4.3 As mentioned in **Section 2.4.2**, the population in Hong Kong will reach the peak in 2041 and will drop continuously after. Under the scenario of without the NENT NDA Project, it is anticipated that there will be no significant population growth and changes in associated traffic flow would be induced in Kwu Tung North after 2041, and hence, the predicted road traffic noise impact from the existing roads to existing NSRs would be same in 2041 and 2044. Thus, the predicted overall noise levels in 2044 without the project scenario in the EIA Report still remain valid.

2.5 Traffic Noise Impact Assessment

2.5.1 A computer plot of the road scheme and a plan showing the location of existing roads, new roads and other roads, are presented in **Appendix 2.2**.

2.5.2 Based on the latest road alignment and the mitigation proposal (**Appendix 1.2** refers), the noise levels of the representative NSRs within the 300m study area under the mitigated scenario were predicted and are summarised in **Table 2.2**, with the detailed road traffic noise levels presented in **Appendix 2.3**. The predicted noise levels at the representative NSRs within the 300m study area under the unmitigated scenario remain the same as the assessment results in the Environmental Reviews under the Remaining Phase Exercise.

Table 2.2 Predicted Road Traffic Noise Levels under the Mitigated Scenario in Year 2041 (at Residential Premises and Schools)

NSR	NAP	Land Use (1)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (2)	Predicted Noise Levels, L10 (1hour) dB(A)	Exceedance [Y/N]	At Receiver-end NMMs Required (3) [Y/N]
Existing (4)							
A3-7	R2141	R	3	70	61	N	N
C1-4	R2001, R2102 to R2103	R	3	70	59 - 64	N	N
D1-6	E0002 to E0006	R	1 - 2	70	63 - 70	N	N
D1-9	R2041 to R2043, R2046 to R2047, N2046 to N2047	R	3	70	59 - 70	N	N
KTN-1	R1001 to R1005	W, E, R	1 - 3	65 / 70	58 - 64	N	N

NSR	NAP	Land Use (1)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (2)	Predicted Noise Levels, L10 (1hour) dB(A)	Exceedance [Y/N]	At Receiver-end NMMs Required (3) [Y/N]
KTN-2	R1021 to R1034	E, R	1 - 4	65 / 70	59 - 66	N	N
KTN-4	R1041 to R1043	R	2 - 3	70	60 - 65	N	N
KTN-9	R1085 to R1090	R	3	70	56 - 70	N	N
KTN-12	R1121	R	2	70	70	N	N
KTN-48	R1281 to R1282, R1284 to R1290	R	4	70	57 - 70	N	N
KTN-49	R1301	R	2	70	63	N	N
KTN-50	R1681 to R1682	R	2	70	68 - 70	N	N
CPR	E0007 to E0012	R	1 - 2	70	59 - 70	N	N
Planned							
A2-11	A2-11-1 to A2-11-3	E	8	65	59 - 65	N	N
A2-12	A2-12-1 to A2-12-3	E	8	65	60 - 62	N	N
A2-13	A2-13-1 to A2-13-3	E	8	65	61 - 65	N	N
A3-1	A3-1-1 to A3-1-2	E	8	65	55 - 65	N	N
A3-2	A3-2-1 to A3-2-2	E	8	65	61 - 65	N	N
E1-2	E1-2-1 to E1-2-3	E	8	65	55 - 65	N	N
E1-4	E1-4-1	E	8	65	65	N	N
A1-2	A1-2-1 to A1-2-34	R	32 - 34	70	56 - 72	**Y**	**Y** (5)
A1-4a	A1-4a-1 to A1-4a-17	R	27	70	58 - 69	N	N
A1-9a	A1-9a-1 to A1-9a-7	R	18	70	62 - 73	**Y**	**Y** (3)
A1-9b	A1-9b-1 to A1-9b-9	R	18	70	63 - 73	**Y**	**Y** (3)
A2-2a	A2-2a-1 to A2-2a-33	R	38 - 40	70	57 - 72	**Y**	**Y** (6)
A2-2b	A2-2b-1 to A2-2b-22	R	38	70	61 - 74	**Y**	**Y** (6)
A2-9a	A2-9a-1 to A2-9a-3	R	20	70	59 - 63	N	N
A2-9b	A2-9b-1 to A2-9b-7	R	20	70	61 - 72	**Y**	**Y** (3)
A3-3a	A3-3a-1, A3-3a-2a to A3-3a-2b, A3-3a-3a to A3-3a-3b, A3-3a-4a to A3-3a-4b, A3-3a-5 to A3-3a-6	R	41	70	52 - 69	N	N
A3-6	A3-6-1 to A3-6-8	R	22	70	63 - 74	**Y**	**Y** (3)
B3-5a	B3-5a-1 to B3-5a-15	R	19	70	67 - 74	**Y**	**Y** (3)
B3-8	B3-8-1 to B3-8-6	R	16	70	60 - 74	**Y**	**Y** (3)
D1-5	R3481	R	3	70	67	N	N
D1-7a	D1-7a-1 to D1-7a-5	R	24	70	53 - 73	**Y**	**Y** (3)
D1-7b	D1-7b-1 to D1-7b-4	R	26	70	63 - 73	**Y**	**Y** (3)
D1-7c	D1-7c-1 to D1-7c-7	R	20	70	65 - 73	**Y**	**Y** (3)
D1-7d	D1-7d-1 to D1-7d-4	R	24	70	66 - 72	**Y**	**Y** (3)
D1-11a	D1-11a-1 to D1-11a-6	R	18	70	63 - 73	**Y**	**Y** (3)
D1-11b	D1-11b-1 to D1-11b-6	R	20	70	63 - 70	N	N
D1-11c	D1-11c-1 to D1-11c-5	R	20	70	58 - 70	N	N
E1-3	E1-3-1 to E1-3-7	R	28	70	61 - 69	N	N
C1-3	C1-3-1 to C1-3-18	R	3 - 14	70	62 - 80	**Y**	**Y** (7)
KTS14	KTS14_1 to KTS14_2	CDA	17 - 19	70	56 - 75	**Y**	**Y** (8)
KTS15	KTS15_1 to KTS15_4	CDA	16	70	65 - 72	**Y**	**Y** (9)
SHK	SHK_1 to SHK_17	CDA	17 - 21	70	58 - 77	**Y**	**Y** (10)

Notes:

(1) R – Residential; E – Educational; CDA – Comprehensive Development Area; W – Place of Public Worship.

(2) Relevant environmental standards / criteria: EIAO-TM Annex 5 noise standards for road traffic noise.

(3) As detailed in **Section 1.1.4**, HD, HS and LandsD agreed to adopt the common at-receiver end NMMs (e.g. acoustic windows and acoustic balconies) subject to the detailed design of respective sites.

(4) For existing NSRs outside and within the non-development area of NDA, direct mitigation measures are required when "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)".

(5) As advised by HS, acoustic windows or acoustic balconies will be adopted at the specific floors of facades of NAPs A1-2-18 to A1-2-19, A1-2-21 to A1-2-27 of the housing site at KTN Site A1-2 to mitigate the residual noise impacts for compliance with the noise standard. With the implementation of acoustic windows or similar NMMs, the road traffic noise levels at these NSRs would comply with noise limit of 70 dB(A). HS will conduct Traffic Noise Impact Assessment (TNIA) to review the road traffic noise impact on their development and, where necessary, propose at-receiver end NMMs to mitigate the residual exceedances at a later stage.

(6) As advised by HD, at-receiver end NMMs, not limited to acoustic windows and acoustic balconies, will be adopted at the façades where NAPs A2-2a-3 to A2-2a-5, A2-2a-13 to A2-2a-15, A2-2a-25 to A2-2a-27, A2-2a-30 to A2-2a-32; as well as A2-2b-2 to A2-2b-4, A2-2b-8 to A2-2b-10 and A2-2b-13 to A2-2b-22 are located at the housing sites at KTN Sites A2-2a and A2-2b to mitigate the residual noise impacts for meeting the noise standard. With the implementation of acoustic windows or similar NMMs, the road traffic noise levels at NSRs would comply with noise limit of 70 dB(A). HD will conduct TNIA to review the road traffic noise impact to their development and, where necessary, propose at-receiver end NMMs to mitigate the residual exceedances at a later stage.

(7) The latest model results indicated that there are exceedances predicted at the NAPs of C1-3 after consideration of the at-receiver end NMMs as proposed in C1-3's TNIA (dated November 2020), which was prepared for supporting the planning application (Application No.: Y/KTN/2). Given that both the latest layout of Kwu Tung Interchange (KTI) (i.e. slip roads) and the traffic data with further intensification in KTN NDA were not adopted in the C1-3's TNIA, revision of TNIA with the adoption of latest road layout (i.e. KTI) and traffic data in KTN, as well as the enhancement of at-receiver end NMMs proposal by the private development, should be considered necessary for achieving the balanced approach in providing both at-source and at-receiver end NMMs for compliance of the stipulated noise criteria.

(8) According to the information available on the website of Town Planning Board, at-receiver end NMMs (e.g. vertical architectural fin, fixed glazing with maintenance window, acoustic window (baffle type) and acoustic balcony door (baffle type) will be adopted, and thus, the proposed development would not be subject to unacceptable road traffic noise.

(9) According to the information available on the website of Town Planning Board, at-receiver end NMMs (i.e. acoustic window (baffle type)) will be adopted at the façade of NAP KTS15_4 in the CDA site at Kwu Tung South, and thus, the proposed development would not be subject to adverse road traffic noise impact.

(10) The latest model results indicated that there are exceedances predicted at the NAPs of SHK after consideration of the at-receiver end NMMs as proposed in SHK's TNIA (dated March 2022) which was prepared for supporting the planning application (Application No.: A/NE-KTS/506). However, according to the approval condition (e) under the planning application of SHK, an updated TNIA had been submitted to EPD based on the latest layout of KTI (i.e. slip roads) for demonstration of noise compliance. Thus, noise compliance at SHK would be anticipated.

2.5.3 Same as the findings of the TNMP (Version A) (September 2022), with the proposed at-source NMMs as illustrated in **Appendix 1.2**, the predicted noise levels at some NSRs of the planned residential developments still exceed the noise limit of 70 dB(A). In order to reduce substantial structures of at-source NMMs, a balanced approach would be adopted to provide NMMs at both at-source and at-receiver end (**Section 1.1.4** refers).

2.5.4 Adoption of at-receiver end NMMs is a common mitigation approach and had been widely adopted as effective practices to reduce road traffic noise impact on the existing residential developments. According to information provided by EPD[1], Innovative Noise Mitigation Measures (INMMs), i.e. acoustic windows and enhanced acoustic balconies, have been adopted in over 150 developments. These INMMs could provide a high degree of noise reduction and allow natural ventilation at the same time. It is anticipated that INMMs will not affect the development parameters. Different types of INMMs and their relative noise reduction are listed in **Table 2.3**.

Table 2.3 Relative Noise Reduction of Innovative Noise Mitigation Measures

Innovative Noise Mitigation Measures	Relative Noise Reduction in dB(A) (1) (2)
Acoustic Windows (Baffle Type)	> 6.0
Enhanced Acoustic Balcony (Baffle Type)	> 8.0

Notes:
(1) Reference was made to ProPECC PN 5/23 "Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise Impact".
(2) For planned public housing developments, the developers should refer to the guidelines and procedural documents from Housing Authority.

2.5.5 As discussed in **Section 1.1.4**, the predicted degree of noise exceedances in this Plan has been made known to relevant parties (i.e. HD / HS / LandsD) by CEDD via circulation of the Environmental Review Report under Agreement No. CE19/2019, and they agreed to adopt the above-mentioned INMMs subject to the detailed designs of respective housing sites. For public housing sites in KTN NDA, HD and HS will conduct Environmental Assessment Studies (EAS) including detailed Noise Impact Assessment (NIA) at a later stage and, where necessary, propose at-receiver end NMMs to mitigate the residual exceedances to meet the noise standard. While for private housing sites, LandsD will set out requirements of conducting EAS/NIA on land leases and/or sale conditions to review the road traffic noise impacts and the provision of at-receiver end NMMs to mitigate residual noise impacts. Owing to the high relative noise reduction of the INMMs, the predicted noise exceedances could be mitigated.

[1] https://www.epd.gov.hk/epd/Innovative/greeny/eng/innovation.html

2.5.6 As discussed in **Section 2.3.2**, during the time of preparing this Updated Plan, the exact locations and design layouts for the proposed social welfare facilities with residential care and kindergartens within 300m study area of the Project are not yet confirmed, except for the proposed RCHE and kindergartens at Sites A1-2, A2-2a and A2-2b. Hence, a sensitivity test on the possible locations of other proposed social welfare facilities with residential care and kindergartens was conducted with the findings presented in **Table 2.4** and **Table 2.5**. The predicted road traffic noise levels at some of the NAPs would exceed the relevant noise criteria, and thus, non-sensitive use at that particular façade or acoustic insulation should be adopted. In addition, during the detailed design of the proposed social welfare facilities with residential premises and kindergartens, noise sensitive uses should be properly located to avoid exceedance as far as practicable. Such design constraints have been made known by CEDD to relevant parties (i.e. HD / HS / ArchSD). **Figure 2.4** and **Figure 2.5** show the façades of potential locations for the proposed social welfare facilities with residential premises and kindergartens within the 300m study area of the Project, respectively, which can rely on open windows for ventilation without exceeding the road traffic noise criteria.

Table 2.4 Road Traffic Noise Sensitivity Analysis for Potential Locations of Social Welfare Facilities under the Mitigated Scenario in Year 2041

NSR	NAP	Land Use (1)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (2)	Predicted Noise Levels, L10 (1hour) dB(A)	Exceedance [Y/N] (3)
A1-2	A1-2-s1 to A1-2-s13	R	2	70	<40 - 70	N
A2-2a	A2-2a-s1 to A2-2a-s6	R	1 - 2	70	63 - 66	N
A2-2b	A2-2b-s1 to A2-2b-s8	R	1	70	61 - 69	N
A2-7	A2-7-s1 to A2-7-s20	R	2 - 6	70	<40 - 74	Y (3)
A3-3a	A3-3a-s1 to A3-3a-s24	R	2 - 6	70	44 - 75	Y (3)

Notes:
(1) R – Residential.
(2) Relevant environmental standards / criteria: EIAO-TM Annex 5 noise standards for road traffic noise.
(3) Non-sensitive use at the particular façade on particular numbers of floors that was predicted with noise exceedance or acoustic insulation should be adopted during the detailed design stage. **Figure 2.4** shows the façades of potential locations for the proposed social welfare facilities with residential premises within 300m study area of the Project which can rely on opened windows for ventilation without exceeding the road traffic noise criteria. With the implementation of proper design, there would be no exceedance anticipated at these NSRs.

Table 2.5 Road Traffic Noise Sensitivity Analysis for Potential Locations of Kindergartens under the Mitigated Scenario in Year 2041

NSR	NAP	Land Use (1)	No. of Floor	Noise Criteria, L10 (1hour) dB(A) (2)	Predicted Noise Levels, L10 (1hour) dB(A)	Exceedance [Y/N] (3)
A1-2	A1-2-k1 to A1-2-k7	E	1	65	56 - 58	N
A2-2a	A2-2a-k1 to A2-2a-k5	E	1	65	<40 - 63	N
A2-2b	A2-2b-k1 to A2-2b-k11	E	1	65	46 - 65	N
A2-7	A2-7-k1 to A2-7-k20	E	2 - 5	65	<40 - 74	Y (3)
A3-3a	A3-3a-k1 to A3-3a-k24	E	2 - 5	65	44 - 75	Y (3)

Notes:
(1) E – Educational.
(2) Relevant environmental standards / criteria: EIAO-TM Annex 5 noise standards for road traffic noise.
(3) Non-sensitive use at the particular façade on particular numbers of floors that was predicted with noise exceedance or acoustic insulation should be adopted during the detailed design stage. **Figure 2.5** shows the façades of potential locations for the proposed kindergartens which can rely on opened windows for ventilation without exceeding the road traffic noise criteria. With the implementation of proper design, there would be no exceedance anticipated at these NSRs.

2.5.7 To study the noise performance of the Project, road traffic noise levels at the NSRs (i.e. residential premises, educational institutions and places of public worship) within 300m study area of the Project which have direct line of sight to the Project have been reviewed. The numbers of dwellings, classrooms, places of public worship that would be benefited from and protected by the provision of recommended at-source NMMs have been estimated and are presented in **Table 2.6**, with details of calculation presented in **Appendix 2.4**.

Table 2.6 Summary of Protected and Benefitted Noise Sensitive Receivers

NSR	Total No. of NSRs within the 300m Study Area of the Project	Unmitigated Scenario		Mitigated Scenario	
		No. of Exposed NSRs (1)	No. of Exposed NSRs	No. of Protected NSRs (2)	No. of Benefitted NSRs (3)
Existing					
Dwellings	788	144	0	144	180
Classrooms	78	78	0	78	78
Planned					
Dwellings	11643	5343	2609	2734	8961
Classrooms	576	423	0	423	528

Notes:
(1) Exposed NSRs – NSRs predicted with road traffic noise level greater than relevant noise criteria.
(2) Protected NSRs – Exposed NSRs predicted with an overall road traffic noise level not greater than relevant noise criteria with the noise mitigation measures in place.
(3) Benefited NSRs – Exposed NSRs predicted with a noise reduction of 1.0 dB(A) or greater in overall noise level with the at-source NMMs in place.

2.5.8 With the provision of at-source (e.g. low noise road surfacing and noise barrier) and at-receiver end (e.g. acoustic windows and acoustic balconies) NMMs, no exceedance is predicted at the existing and planned dwellings within 300m of the Project. The NMMs required and the building layout assumed in this Plan will not affect the development potential of those concerned sites for the planned residential premises.

2.5.9 The eligibility of the affected premises for indirect technical remedies (ITR) was reviewed according to the three criteria (i.e. “With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)"). Since none of the existing NSRs (**Table 2.2** refers) has met all three criteria, no ITR is required.

2.6 Evaluation of Residual Impact

2.6.1 During the operational phase, the road traffic noise impact arising from the Project can be mitigated by implementing the proposed at-source NMMs (**Appendix 2.5** refers), as well as at-receiver end NMMs to be designed and implemented by developers of residential development, and thus, no residual road traffic noise impacts at the NSRs are anticipated.

2.7 Implementation Programme of Mitigation Measures

2.7.1 A summary of the proposed road traffic noise mitigation measures for the Project, together with the implementation programme, are presented in **Appendix 2.5**. The proposed at-source NMMs listed in **Appendix 2.5** will be constructed by CEDD and maintained by Highway Department.

2.7.2 If there is any change proposed to the road traffic noise mitigation measures in the approved Plan, the Permit Holder shall, no later than one month before the implementation of any such change, submit to the DEP for approval of an Updated Plan.

3 CONCLUSION

3.1.1 The road traffic noise mitigation measures for the Project were prepared based on the latest road networks design and best available information of the development layouts. With both the proposed at-source and at-receiver end NMMs in place, the road traffic noise impacts will still meet the traffic noise performance requirements set out in the EIA Report (Register No.: AEIAR-175/2013).

3.1.2 All of the at-source NMMs recommended in this Updated Plan will be fully implemented and properly maintained throughout the operation of the Project. If there is any change proposed to the road traffic noise mitigation measures in the approved Plan, the Permit Holder shall, no later than one month before the implementation of any such change, submit to the DEP for approval of an Updated Plan.

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FIGURES

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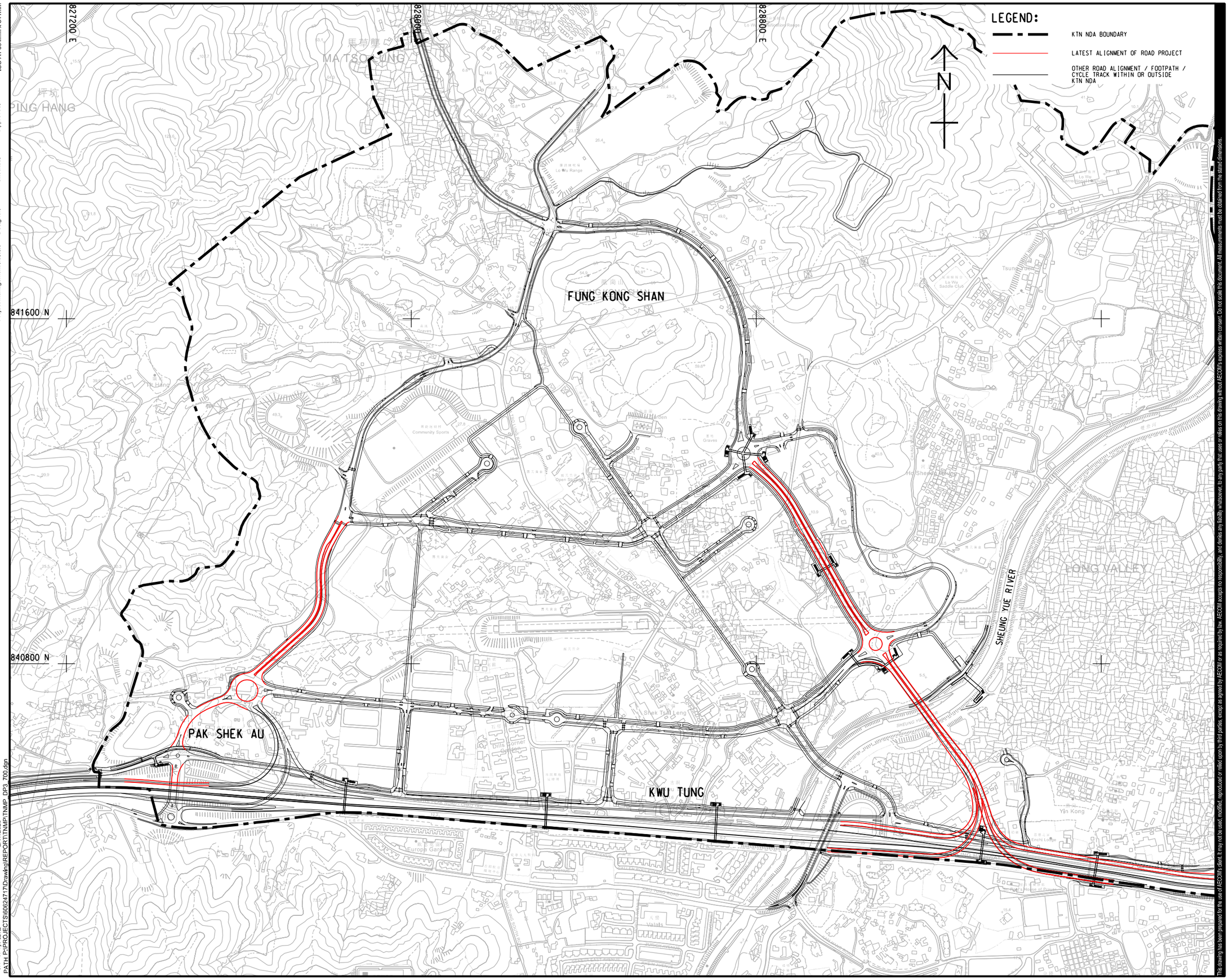
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Approved:

Checked:

Designer:

Project Management Initials:



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PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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Civil Engineering and Development Department

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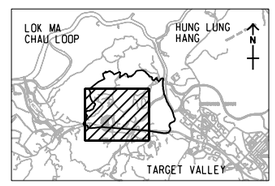
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STATUS
狀況

SCALE 比例
A1 1 : 8000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN A1 1 : 100000
索引圖



PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATION OF THE PROJECT (DP3)

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 1.1

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

827200 E

828800 E

830400 E

841600 N

840000 N

LO WU

SHEUNG SHUI

FAN KAM ROAD

MTRC-EAST RAIL

60624717/TNMP/DP3/FIGURE 2.1.1

60624717/TNMP/DP3/FIGURE 2.1.2

60624717/TNMP/DP3/FIGURE 2.1.3

N

LEGEND:

- KTN NDA BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT
- 300m STUDY AREA
- OTHER ROAD ALIGNMENT / FOOTPATH / CYCLE TRACK WITHIN OR OUTSIDE KTN NDA

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SCALE 比例
A1 1 : 8000

DIMENSION UNIT 尺寸單位
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KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (RESIDENTIAL PREMISES AND SCHOOLS) - KEY PLAN

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.1

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2/20/2025

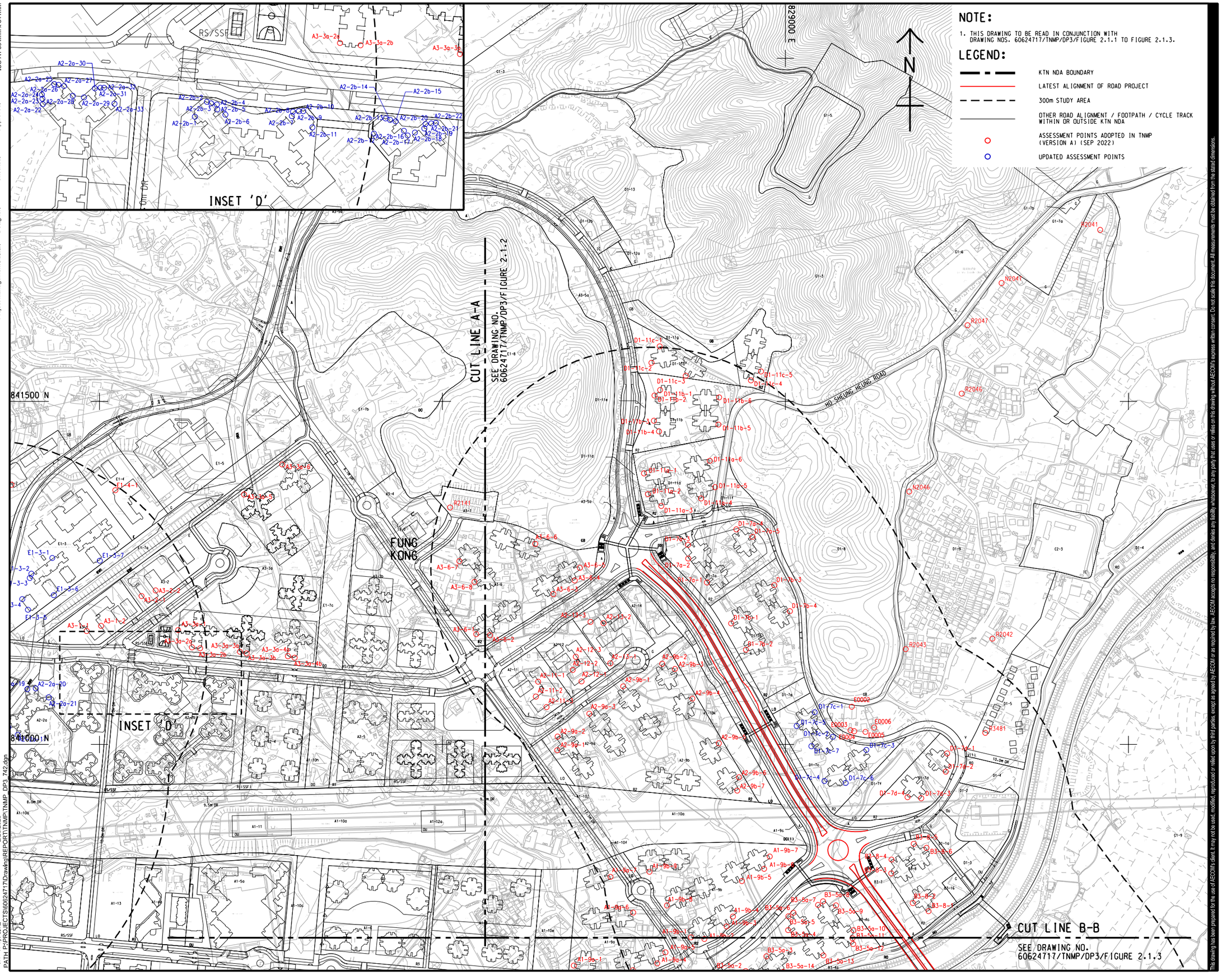
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SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
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PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (RESIDENTIAL PREMISES AND SCHOOLS)

SHEET 1 OF 3

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.1.1

ISO A1 594mm x 841mm

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Project Management Initials:

INSET 'A'

INSET 'B'

INSET 'C'

PAK SHEK AU

FANLING HIGHWAY

CUT LINE A-A

SEE DRAWING NO. 60624717/TNMP/DP3/FIGURE 2.1.3

RS/SSF

N

828000 E

828500 E

840500 N

R1301

R1681

R1682

R1121

R1085

R1086

R1087

R1088

NOTES:

1. FOR NOTES AND LEGEND PLEASE REFER TO DRAWING NO. 60624717/TNMP/DP3/FIGURE 2.1.1.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/FIGURE 2.1.1 TO FIGURE 2.1.3.

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PROJECT
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DEVELOPMENT OF KWU TUNG NORTH NEW DEVELOPMENT AREA, REMAINING PHASE - DESIGN & CONSTRUCTION

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SCALE 比例: A1 1 : 2500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號: 60624717

CONTRACT NO. 合約編號: CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (RESIDENTIAL PREMISES AND SCHOOLS)

SHEET 2 OF 3

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.1.2

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

NOTES:

1. FOR NOTES AND LEGEND PLEASE REFER TO DRAWING NO. 60624717/TNMP/DP3/FIGURE 2.1.1.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/FIGURE 2.1.1 TO FIGURE 2.1.3.

N

829600 E

829800 E

841200 N

840000 N

TONG KOK

FANLING HIGHWAY

KAM HANG ROAD

CUT LINE B-B

SEE DRAWING NO.
60624717/TNMP/DP3/FIGURE 2.1.1

CUT LINE A-A

SEE DRAWING NO.
60624717/TNMP/DP3/FIGURE 2.1.2

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AECOM

PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

CLIENT
業主

CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT
土木顧問公司

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS
階段

SCALE 比例
A1 1 : 3000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (RESIDENTIAL PREMISES AND SCHOOLS)

SHEET 3 OF 3

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.1.3

ISO A1 594mm x 841mm

Project Management Initials: Designer: Checked: Approved:

827200 E

828800 E

830400 E

841600 N

840000 N

LO WU

SHEUNG SHUI

60624717/TNMP/DP3/
FIGURE 2.2.1

MTRC EAST RAIL

FANLING HIGHWAY

FAN KAM ROAD

LEGEND:

- KTN NDA BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT
- 300m STUDY AREA
- OTHER ROAD ALIGNMENT / FOOTPATH / CYCLE TRACK WITHIN OR OUTSIDE KTN NDA

N

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AECOM

PROJECT
項目

DEVELOPMENT OF
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NEW DEVELOPMENT AREA,
REMAINING PHASE -
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修訂

I/R 修訂	DATE 日期	DESCRIPTION 修改摘要	CHK. 核核

STATUS
階段

SCALE 比例
A1 1 : 8000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (SOCIAL WELFARE FACILITIES) - KEY PLAN

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.2

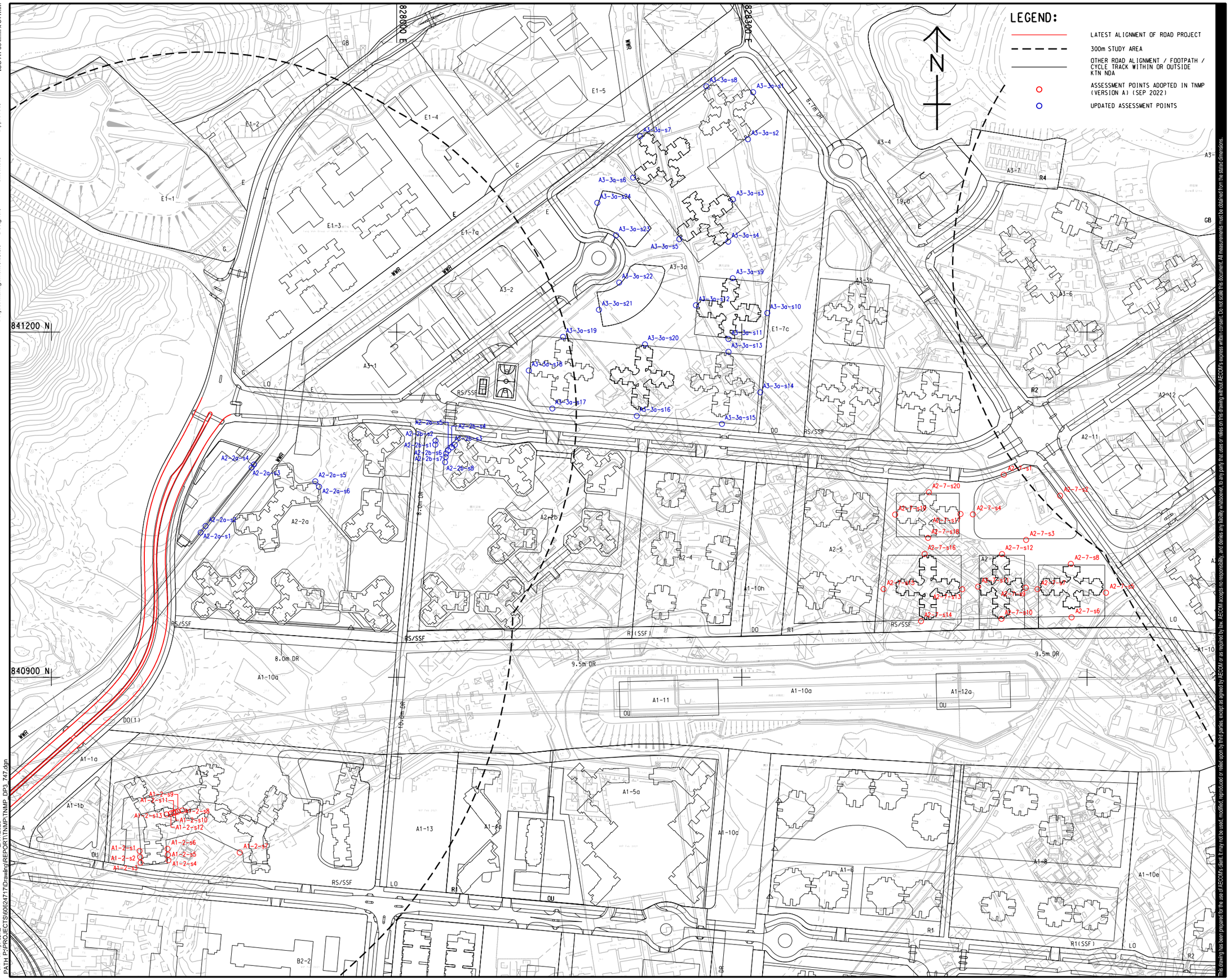
ISO A1 594mm x 841mm

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Checked:

Designer:

Project Management Initials:



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PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

CLIENT
業主

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS
階段

SCALE 比例
A1 1 : 1500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (SOCIAL WELFARE FACILITIES)

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.2.1

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ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

827200 E

828800 E

830400 E

841600 N

840000 N

LO WU

SHEUNG SHUI

KWU TUNG

FAN KAM ROAD

MTRC EAST RAIL

60624717/TNMP/DP3/
FIGURE 2.3.1

LEGEND:

- KTN NDA BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT
- 300m STUDY AREA
- OTHER ROAD ALIGNMENT / FOOTPATH / CYCLE TRACK WITHIN OR OUTSIDE KTN NDA

N

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PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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I/R 修訂	DATE 日期	DESCRIPTION 修改摘要	CHK. 核核

STATUS
階段

SCALE 比例
A1 1 : 8000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (KINDERGARTENS) - KEY PLAN

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.3

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2/20/2025
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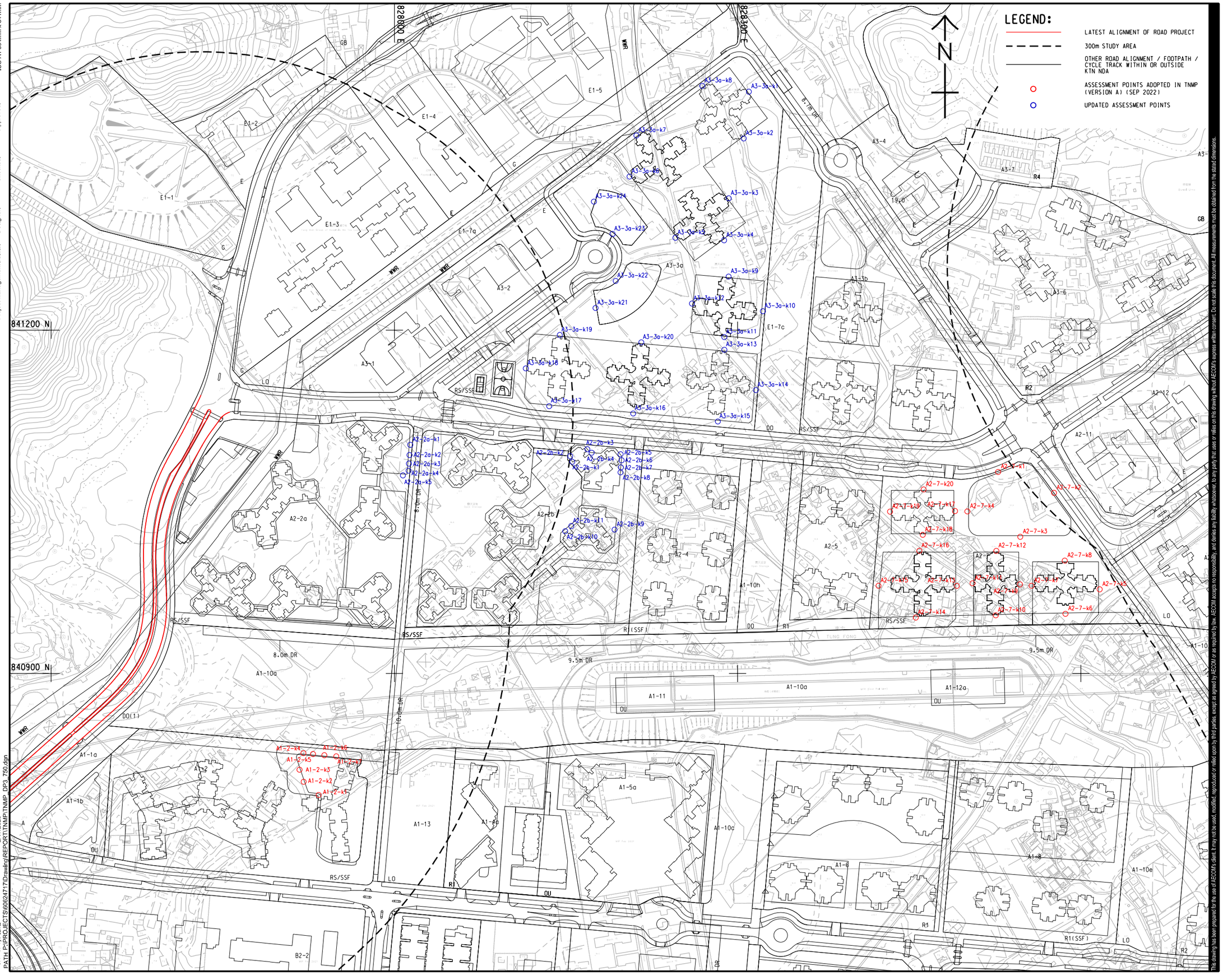
ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:



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STATUS
階段

SCALE 比例
A1 1 : 1500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (KINDERGARTENS)

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.3.1

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

LEGEND:

- KTN NDA BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT
- 300m STUDY AREA
- OTHER ROAD ALIGNMENT / FOOTPATH / CYCLE TRACK WITHIN OR OUTSIDE KTN NDA
- FACADE WITH PREDICTED ROAD TRAFFIC NOISE LEVELS EXCEED RESPECTIVE CRITERION
- FACADE WITH PREDICTED ROAD TRAFFIC NOISE LEVELS WITHIN RESPECTIVE CRITERION
- (N) NON-DOMESTIC PURPOSE-BUILT BUILDING
- (P) PODIUM

828000 E

828500 E

829000 E

841500 N

841000 N

840500 N

FUNG KONG SHAN

Kwu Tung

Sheung Shui

Pak Shek Au

Lo Wai

Fanling

CASTLE PEAK ROAD – CHAU TAU

RICI AVENUE

Europa Garden

Dills Corner Garden

Open Space

Community Hall

Graves

Works area

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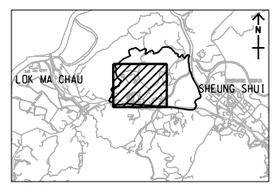
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核對

STATUS
階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 100000



PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

LOCATIONS OF NOISE EXCEEDANCES PREDICTED AT THE PROPOSED SOCIAL WELFARE FACILITIES

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/FIGURE 2.4

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

LEGEND:

- KTN NDA BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT
- 300m STUDY AREA
- OTHER ROAD ALIGNMENT / FOOTPATH / CYCLE TRACK WITHIN OR OUTSIDE KTN NDA
- FACADE WITH PREDICTED ROAD TRAFFIC NOISE LEVELS EXCEED RESPECTIVE CRITERION
- FACADE WITH PREDICTED ROAD TRAFFIC NOISE LEVELS WITHIN RESPECTIVE CRITERION
- (N) NON-DOMESTIC PURPOSE-BUILT BUILDING
- (P) PODIUM

828000 E | 828500 E | 829000 E

841500 N | 841000 N | 840500 N

FUNG KONG SHAN

Pak Shek Au | Kwu Tung | Sheung Shui | Lok Ma Chau | Fung Kong Shan

CASTLE PEAK ROAD – CHAU TAU

Europa Garden

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PROJECT 項目

DEVELOPMENT OF KWU TUNG NORTH NEW DEVELOPMENT AREA, REMAINING PHASE - DESIGN & CONSTRUCTION

CLIENT 業主

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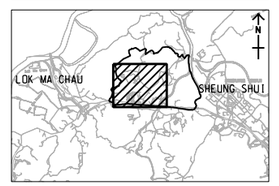
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STATUS 階段

SCALE 比例 A1 1 : 2500

DIMENSION UNIT 尺寸單位 METRES

KEY PLAN location plan A1 1 : 100000



PROJECT NO. 項目編號 60624717

CONTRACT NO. 合約編號 CE 19/2019 (CE)

SHEET TITLE 圖紙名稱

LOCATIONS OF NOISE EXCEEDANCES PREDICTED AT THE PROPOSED KINDERGARTENS

SHEET NUMBER 圖紙編號

60624717/TNMP/DP3/FIGURE 2.5

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APPENDICES

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Appendix 1.1
Design Changes Proposed under the P&E Reviews of CE19/2019 & CE20/2019

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ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

828000 E

829000 E

60624717/TNMP/DP3/APPENDIX 1.1.1

PING HANG

842000 N

841000 N

840000 N

FUNG KONG SHAN

KWU TUNG

LONG VALLEY

SHEUNG YUE RIVER

N

LEGEND:

KTN NDA BOUNDARY

LATEST ROAD ALIGNMENT UNDER CE19/2019 (CE) & CE20/2019 (HY)

ROAD ALIGNMENT ASSESSED UNDER AGREEMENT NO. CE 13/2014 (CE)

OTHER ROAD ALIGNMENT / FOOTPATH / CYCLE TRACK WITHIN OR OUTSIDE KTN NDA

60624717/TNMP/DP3/APPENDIX 1.1.2

60624717/TNMP/DP3/APPENDIX 1.1.3

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PROJECT
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DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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STATUS
階段

SCALE 比例
A1 1 : 5000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

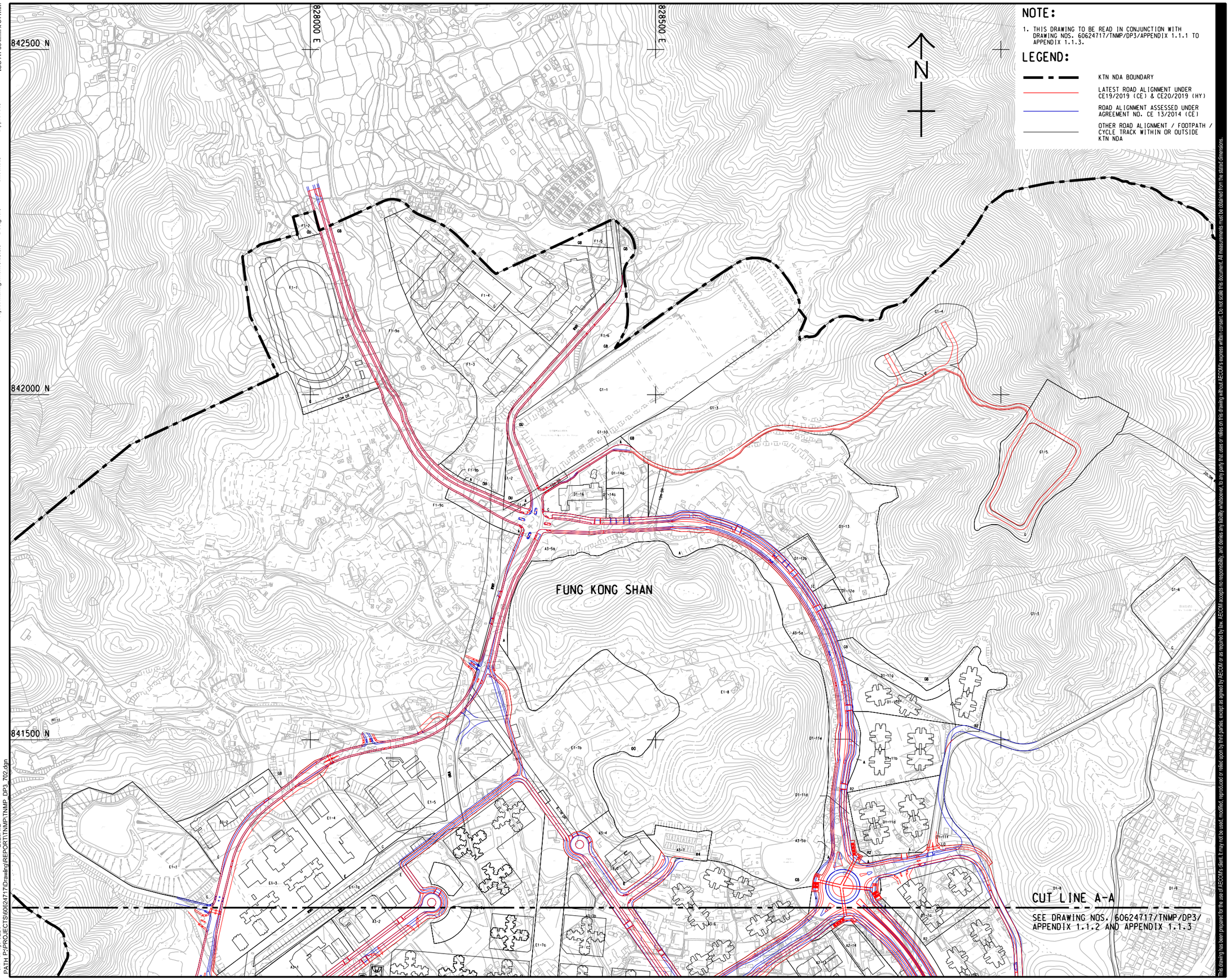
DESIGN CHANGES PROPOSED
UNDER THE P&E REVIEWS OF
CE19/2019 & CE20/2019
(KEY PLAN)

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 1.1

ISO A1 594mm x 841mm

Project Management Initials: Designer: Checked: Approved:



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PROJECT 項目

DEVELOPMENT OF
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NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

CLIENT 業主

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STATUS 狀況

SCALE 比例 A1 1 : 2500

DIMENSION UNIT 尺寸單位 METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號 60624717

CONTRACT NO. 合約編號 CE 19/2019 (CE)

SHEET TITLE 圖紙名稱

DESIGN CHANGES PROPOSED UNDER THE P&E REVIEWS OF CE19/2019 & CE20/2019

SHEET 1 OF 3

SHEET NUMBER 圖紙編號

60624717/TNMP/DP3/APPENDIX 1.1.1

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60624717/TNMP/DP3/APPENDIX 1.1.1.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/APPENDIX 1.1.1 TO APPENDIX 1.1.3.

827500 E

828000 E

828500 E

N

CUT LINE A-A

SEE DRAWING NO. 60624717/ TNMP/DP3/APPENDIX 1.1.1

841000 N

840500 N

840000 N

FANLING HIGHWAY

KWU TUNG ROAD

CUT LINE B-B

SEE DRAWING NO. 60624717/ TNMP/DP3/APPENDIX 1.1.3

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DEVELOPMENT OF KWU TUNG NORTH NEW DEVELOPMENT AREA, REMAINING PHASE - DESIGN & CONSTRUCTION

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STATUS
階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

DESIGN CHANGES PROPOSED UNDER THE P&E REVIEWS OF CE19/2019 & CE20/2019

SHEET 2 OF 3

SHEET NUMBER
圖紙號碼

60624717/TNMP/DP3/APPENDIX 1.1.2

Plot File by: LIANJ2
PATH: P:\PROJECTS\60624717\Drawing\REPORT\TNMP\TNMP_DP3_703.dgn
6/27/2024

ISO A1 594mm x 841mm

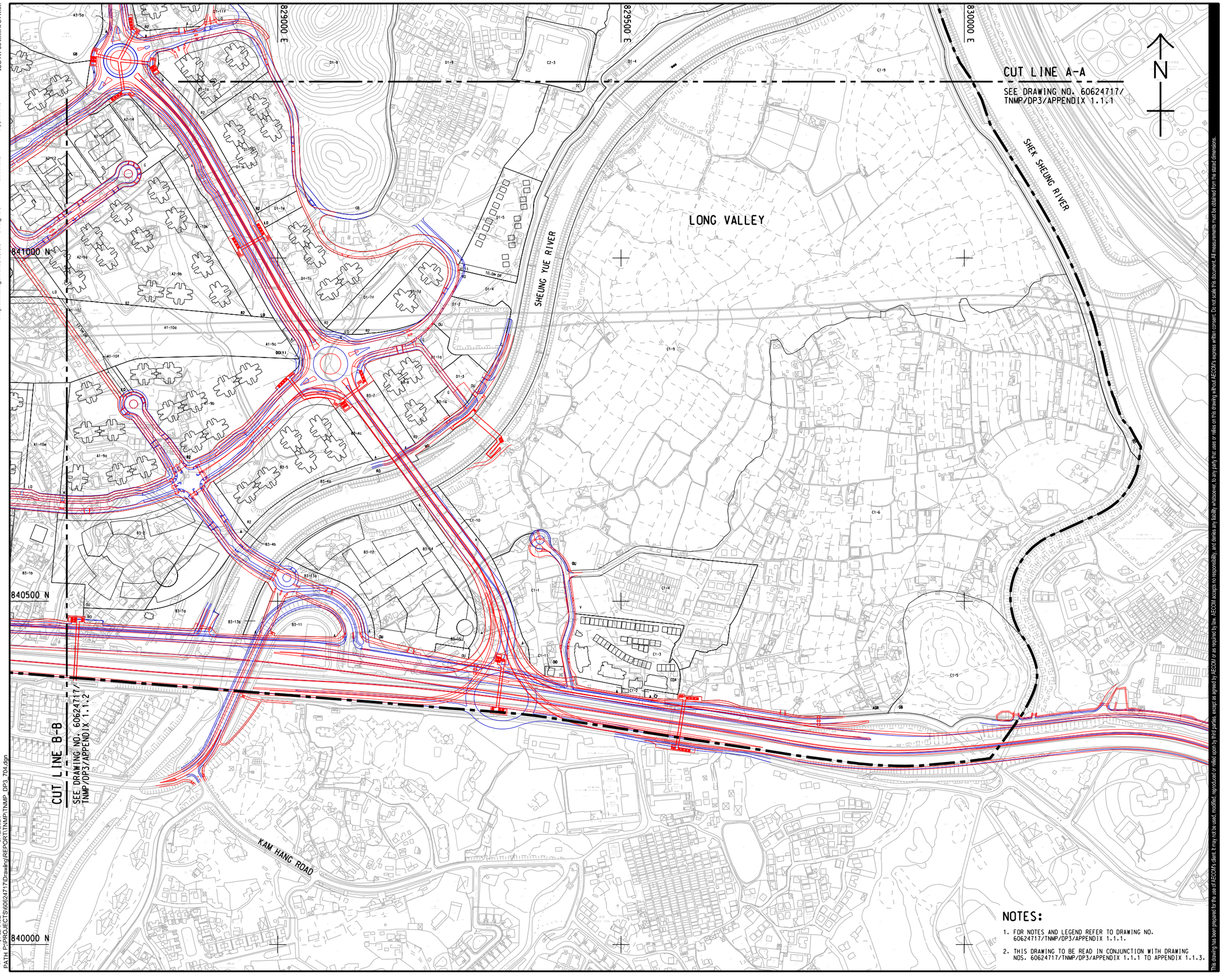
Approved:

Checked:

Designer:

Project Management Initials:

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Plot Date: 9/12/2024
Plot File by: LIANJ2
PATH: P:\PROJECTS\60624717\Drawing\REPORT\TNMP\TNMP_DP3_704.dgn



NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60624717/TNMP/DP3/APPENDIX 1.1.1.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/APPENDIX 1.1.1 TO APPENDIX 1.1.3.

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AECOM

PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

CLIENT
業主

CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT
土木顧問公司

AECOM Asia Company Ltd.
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SUB-CONSULTANTS
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ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 修改說明	CHK. 核核

STATUS
階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

DESIGN CHANGES PROPOSED UNDER THE P&E REVIEWS OF CE19/2019 & CE20/2019

SHEET 3 OF 3

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 1.1.3

Appendix 1.2
Updated Traffic Noise Mitigation Measures Proposal

[BLANK]

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

827200 E

828800 E

830400 E

841600 N

840000 N

LEGEND:

KTN NDA BOUNDARY

N

LO WU

SHEUNG SHUI

60624717/TNMP/DP3/APPENDIX 1.2.2

60624717/TNMP/DP3/APPENDIX 1.2.1

60624717/TNMP/DP3/APPENDIX 1.2.3

MTRC EAST RAIL

FAN KAM ROAD

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PROJECT
項目

DEVELOPMENT OF
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NEW DEVELOPMENT AREA,
REMAINING PHASE -
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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS
階段

SCALE 比例	DIMENSION UNIT 尺寸單位
A1 1 : 8000	METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號	CONTRACT NO. 合約編號
60624717	CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

UPDATED TRAFFIC NOISE
MITIGATION MEASURES
PROPOSAL - KEY PLAN

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 1.2

V:\BAK\US95-BAK\CSWP\plotdrv\Create Plt filenew\CSWP-75(color).plt
2025/12/
Plot File by: TaoY
PATH: P:\PROJECTS\60624717\Drawing\REPORT\TNMP\TNMP_DP3_760.dgn

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/APPENDIX 1.2.1 TO APPENDIX 1.2.3.
2. IN VIEW OF THE SIGHTLINE CONSTRAINT OF THE ASSOCIATED ROADS, KTN-NB09 & KTN-NB10 AND KTN-NB15 & KTN-NB16 COULD NOT BE CONNECTED.

LEGEND:

- KTN NDA BOUNDARY
- PROPOSED 0.5m STRUCTURE
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- OPENING SIDE
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- PROPOSED LOW NOISE ROAD SURFACING
- LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
- INDICATIVE LOCATIONS OF FACADES THAT WOULD BE PROVIDED WITH AT RECEIVER END MITIGATION MEASURES (WITHIN KTN NDA)

THE EXACT LOCATIONS OF FACADES THAT REQUIRE AT-RECEIVER END MITIGATION MEASURES ARE SUBJECT TO THE DETAILED TNIA TO BE CONDUCTED BY RELAVANT PARTIES AT LATER STAGE

827500 E

820000 E

841000 N

840500 N

N

MA TSO LUNG

PAK SHEK AU

CUT LINE B-B
SEE DRAWING NO.
60624717/TNMP/DP3/APPENDIX 1.2.2

CUT LINE A-A
SEE DRAWING NO.
60624717/TNMP/DP3/APPENDIX 1.2.3

KTN-NB02
KTN-NB06
KTN-NB05
KTN-NB04
KTN-LN01
KTN-LN02
KTN-LN03
KTN-NB55
KTN-LN07
KTN-LN09
KTN-LN10
KTN-NB27
KTN-SE01
KTN-NB18
KTN-NB20
KTN-NB19
KTN-NB25
KTN-NB21
KTN-NB22
KTN-NB26
KTN-FE01
KTN-NB29
KTN-NB24
KTN-NB23

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PROJECT 項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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STATUS 階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE 圖紙名稱
UPDATED TRAFFIC NOISE MITIGATION MEASURES PROPOSAL

SHEET 1 OF 3

SHEET NUMBER 圖紙編號
60624717/TNMP/DP3/APPENDIX 1.2.1

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2/6/2025
Plot File by: Yiling,Qi
PATH: I:\PROJECTS\60624717\Drawing\REPORT\TNMP\TNMP_DP3_761.dgn

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 606247117/TNMP/DP3/APPENDIX 1.2.1.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 606247117/TNMP/DP3/APPENDIX 1.2.1 TO APPENDIX 1.2.3.

MA TSO LUNG

MA TSO LUNG SAN TSUEN

828000 E

828500 E

829000 E

842000 N

841500 N

N

MA TSO LUNG ROAD

HO SHEUNG HEUNG ROAD

FUNG KONG

KTN-NB01

KTN-NB02

KTN-NB04

KTN-NB05

KTN-NB06

KTN-NB08

KTN-NB09

KTN-NB10

KTN-NB55

KTN-LN01

KTN-LN02

KTN-LN03

KTN-LN05

KTN-LN06

CUT LINE B-B

SEE DRAWING NOS.
60624717/TNMP/DP3/APPENDIX 1.2.1 AND 1.2.3

V:\BAK\US95-BAK\CSWP\pl otdrv\Create Pl ftilenew\CSWP-75(color).pltt
Plot File by: Yang,Qi
PATH: P:\PROJECTS\60624717\Drawing\REPORT\TNMP\TNMP_DP3_762.dgn
2/6/2025

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PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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STATUS
階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

UPDATED TRAFFIC NOISE
MITIGATION MEASURES
PROPOSAL

SHEET 2 OF 3

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 1.2.2

ISO A1 594mm x 841mm

Approved:

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Designer:

Project Management Initials:

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60624717/TNMP/DP3/APPENDIX 1.2.1.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/APPENDIX 1.2.1 TO APPENDIX 1.2.3.

N

CUT LINE B-B

SEE DRAWING NO.
60624717/TNMP/DP3/APPENDIX 1.2.2

CUT LINE A-A

SEE DRAWING NO.
60624717/TNMP/DP3/APPENDIX 1.2.1

828500 E

829000 E

829500 E

841000 N

840500 N

KTN-LN05
KTN-NB09
KTN-NB08
KTN-NB10
KTN-LN03
KTN-LN06
KTN-LN04
KTN-NB54
KTN-NB13
TONG KOK
KTN-NB15
KTN-NB17
KTN-LN12
KTN-LN11
KTN-NB16
KTN-LN13
KTN-LN11
KTN-NB30
KTN-NB32
KTN-NB40
KTN-NB41
KTN-NB43
KTN-NB42
FANLING HIGHWAY
KTN-NB31
KTN-NB33
KTN-NB35
KTN-NB34
KTN-NB36
KTN-NB39
KTN-NB37
KTN-NB46
KTN-NB38
KTN-NB45
KTN-LN14
KTN-NB44
KTN-NB47
KTN-NB48
KTN-NB49
KWU TUNG
KWU TUNG ROAD

AECOM

PROJECT
項目

DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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STATUS
階段

SCALE 比例
A1 1 : 2500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

UPDATED TRAFFIC NOISE
MITIGATION MEASURES
PROPOSAL

SHEET 3 OF 3

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 1.2.3

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Plot File by: Yiling,Qi
PATH: P:\PROJECTS\60624717\Drawing\REPORT\TNMP\TNMP_DP3_763.dgn
2/8/2025

Appendix 2.1
Details of Road Traffic Forecast in Year 2041

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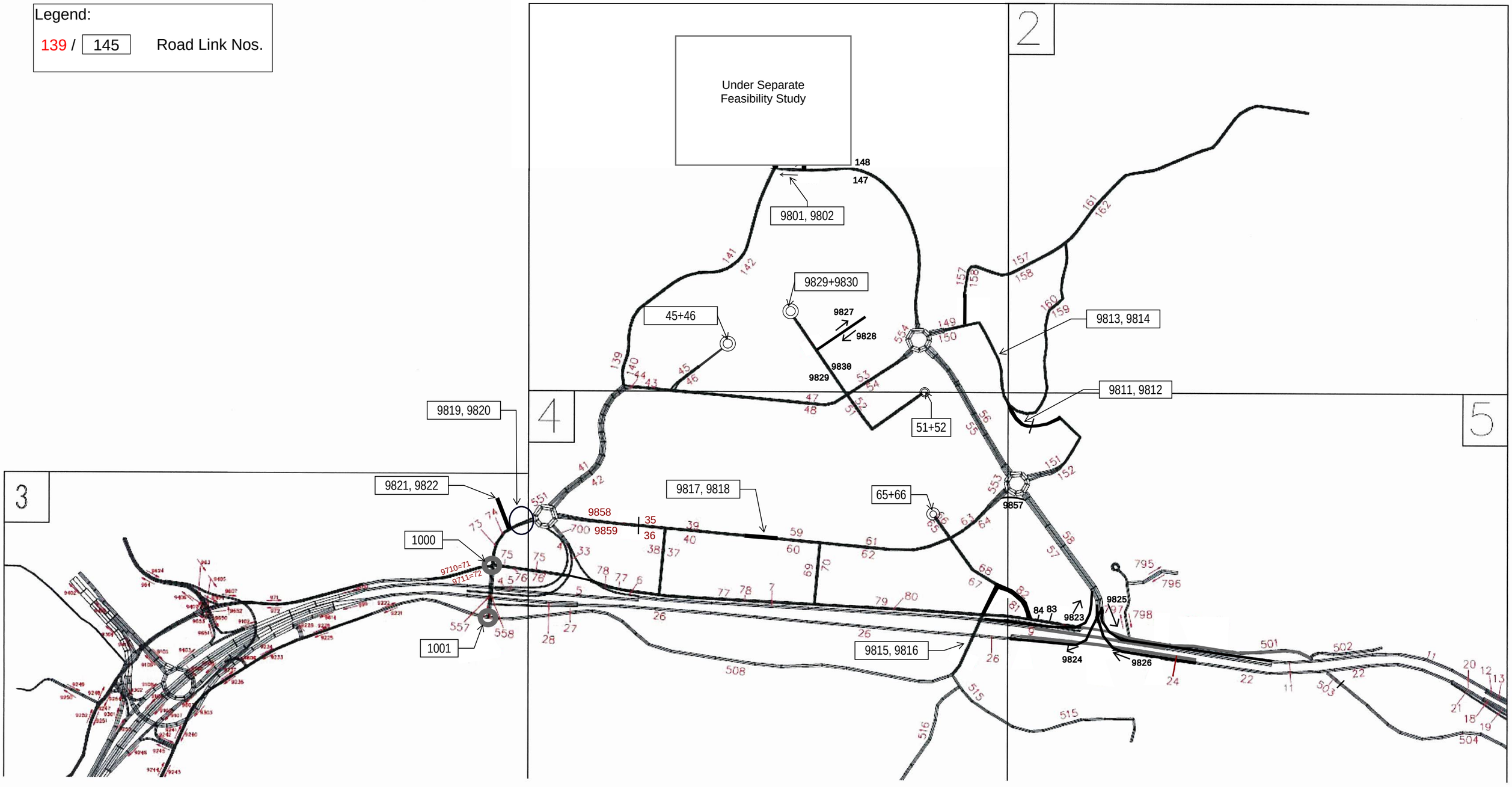

Legend:
139 / 145 Road Link Nos.
Under Separate Feasibility Study
2
3
4
5
148
147
9801, 9802
9829+9830
9827
9828
9830
9829
45+46
9813, 9814
9811, 9812
51+52
9819, 9820
9821, 9822
9817, 9818
65+66
9858
9859
9857
1000
1001
9710=71
9711=72
9815, 9816
9824
9825
9826
9823

Figure 1

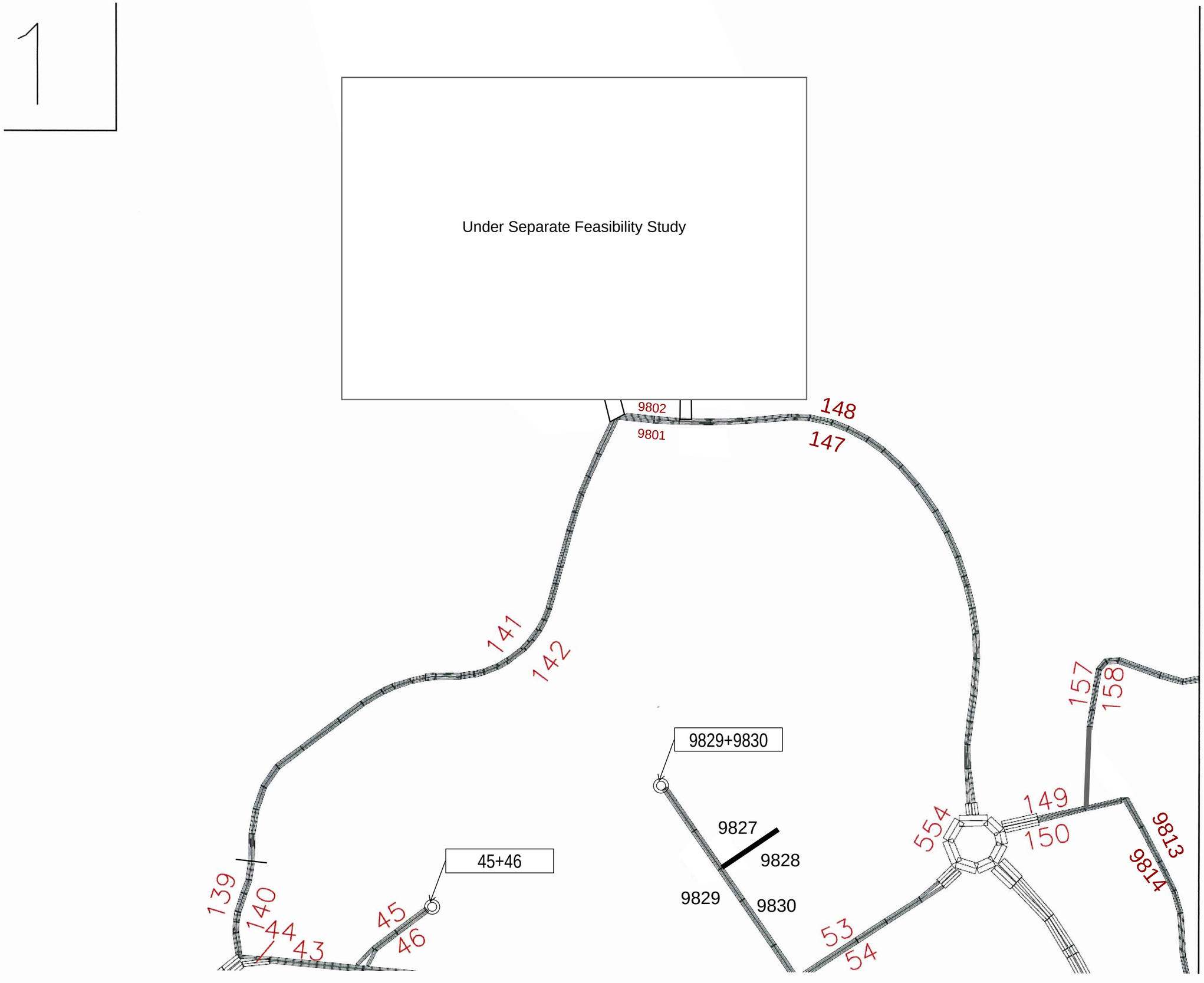

Under Separate Feasibility Study
9802
9801
148
147
141
142
139
140
144
43
45
46
45+46
9829+9830
9827
9828
9829
9830
554
149
150
157
158
9813
9814
53
54

Figure 2

2

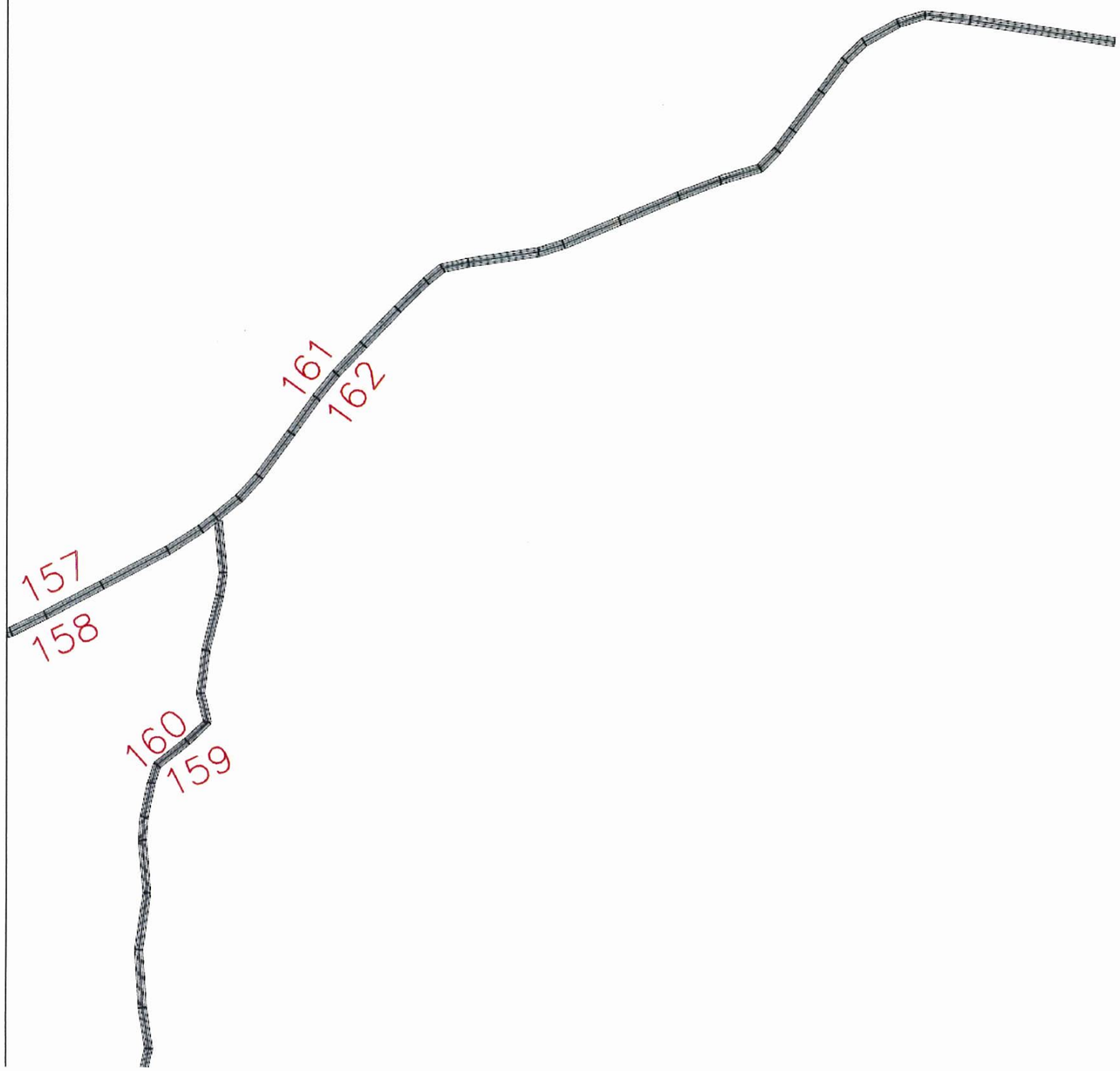


Figure 3

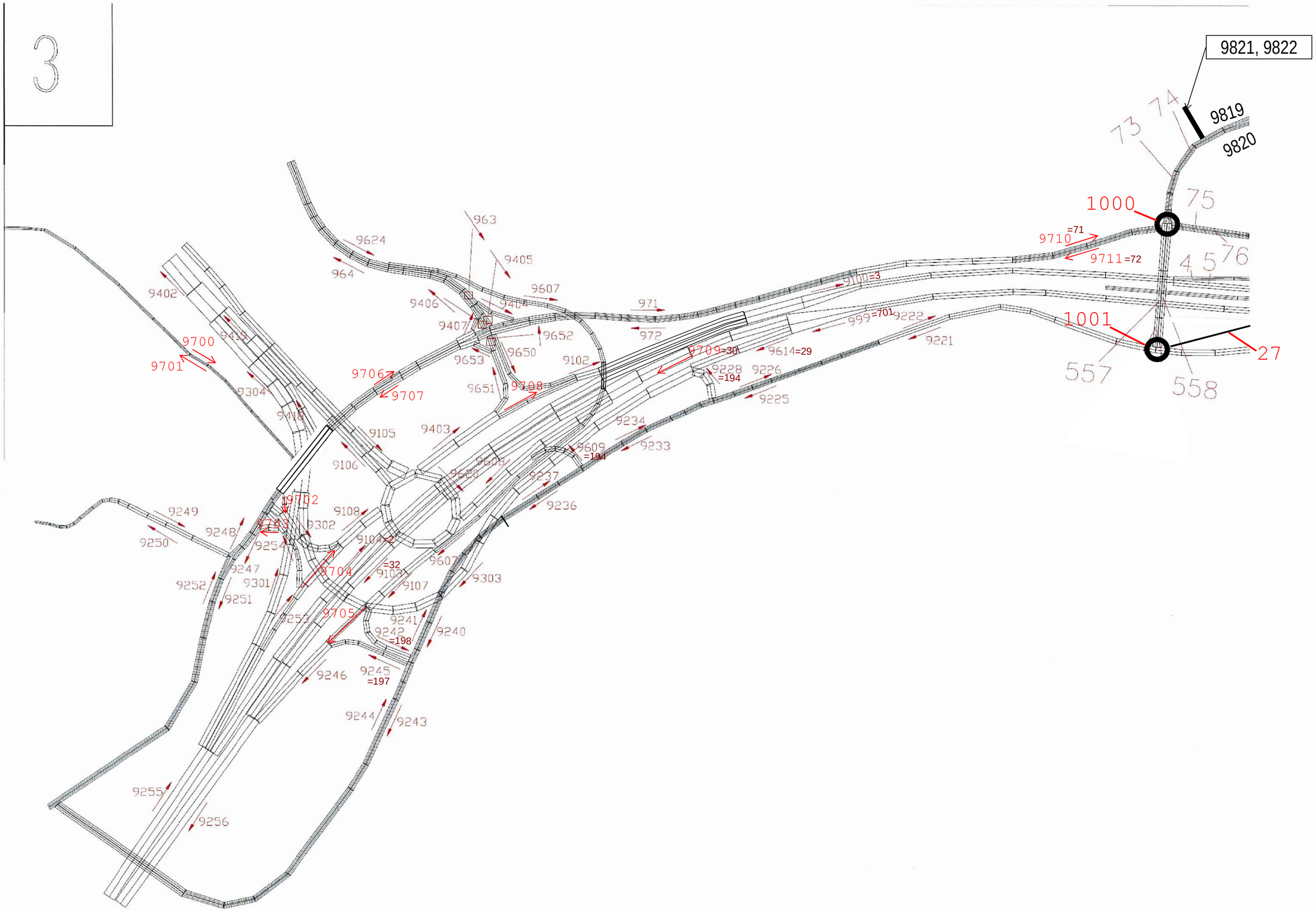

3
9821, 9822
9819
9820
73
74
75
76
1000
1001
9710
=71
9711=72
4
5
27
557
558
963
9624
964
9405
9607
9406
9404
9407
971
9652
9653
9650
9102
9706
9707
9651
9708
9700
9701
9304
9105
9403
9106
9609
=194
9608
9620
9237
9234
9233
9236
9700=3
999=701
9222
9221
9709=30
9614=29
9228
=194
9226
9225
9702
9249
9248
9703
9302
9108
9250
9254
9104=2
=32
9103
9107
9247
9704
9607
9303
9252
9301
9251
9253
9705
9241
9240
9242
=198
9246
9245
=197
9244
9243
9255
9256

Figure 4

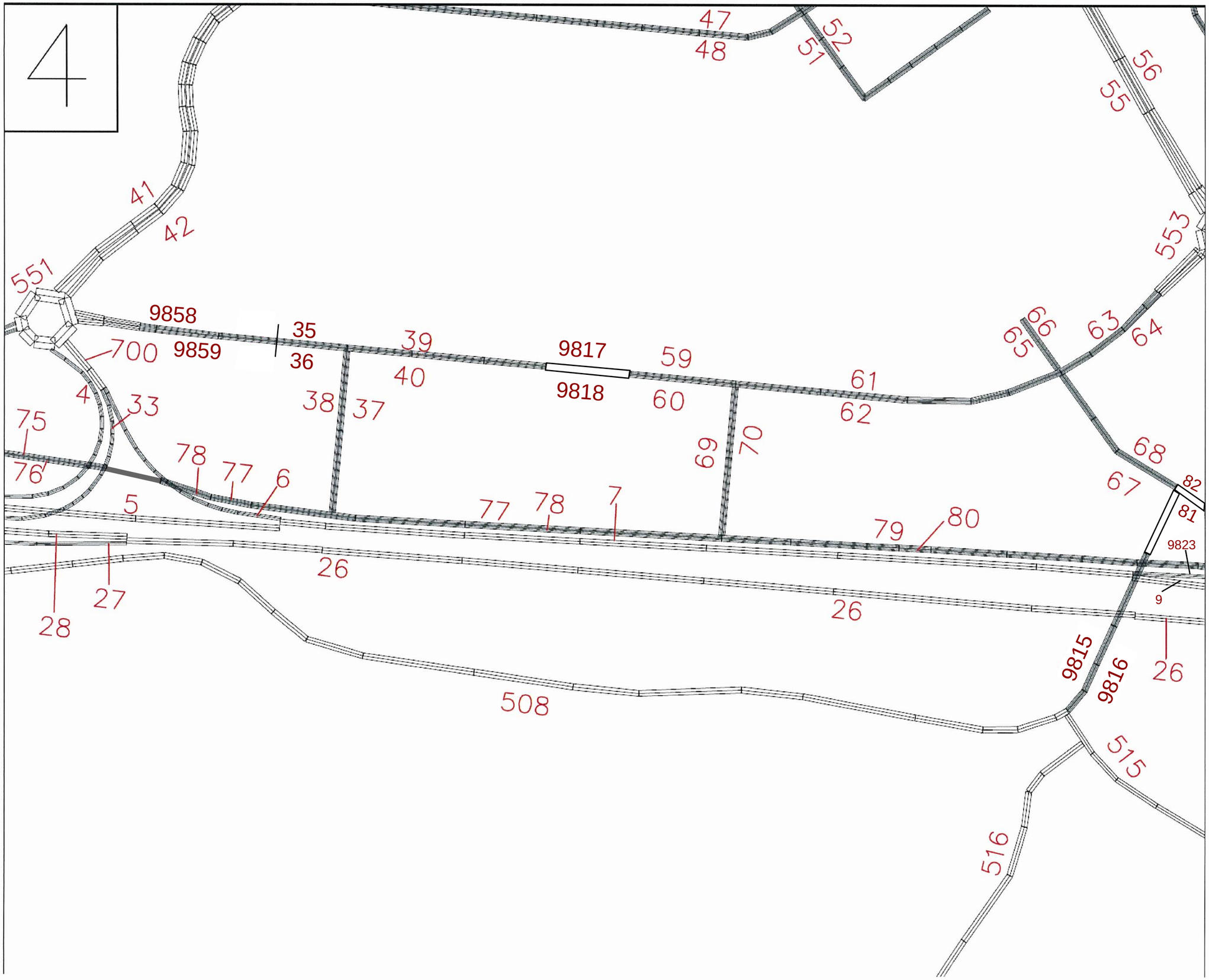

4
47
48
51
52
55
56
41
42
551
553
9858
9859
35
36
39
40
9817
9818
59
60
61
62
63
64
65
66
700
4
33
38
37
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9823
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508
9815
9816
515
516

Figure 5

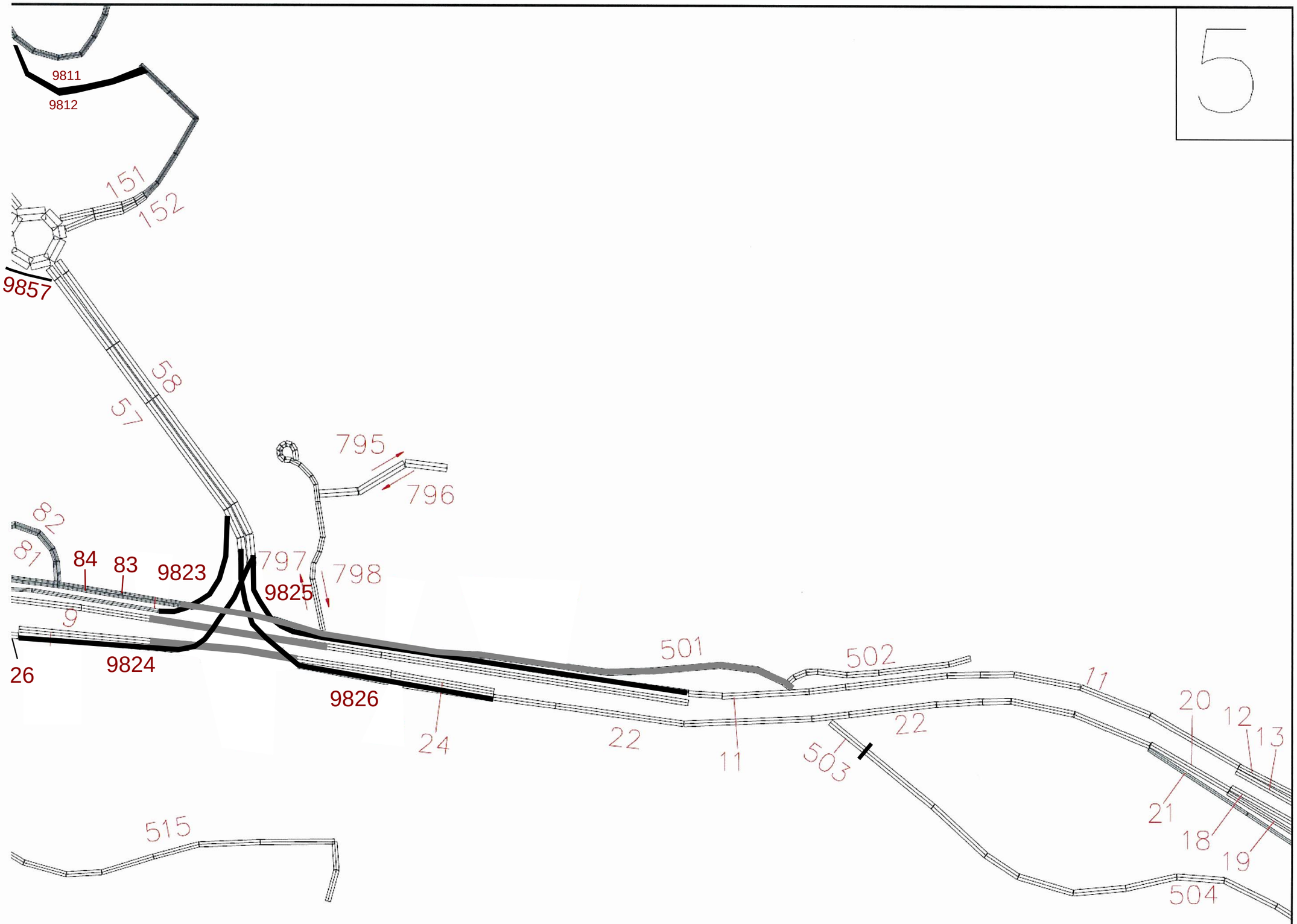

9811
9812
151
152
9857
58
57
795
796
82
87
84
83
9823
797
798
9825
9
26
9824
9826
501
502
24
22
11
503
22
11
20
12
13
21
18
19
504
515

Figure 6

2041 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	HV%	Total Vehicle	HV%	Speed Limit
	AM	AM	PM	PM	km/hr
4	1191	19.1%	1099	14.6%	50
5	3201	41.0%	4401	24.1%	100
6	601	22.8%	660	20.8%	50
7	3802	38.1%	5059	23.7%	100
9	3721	38.5%	4932	24.0%	100
11	5422	33.7%	6393	22.2%	100
12	1542	36.0%	1684	29.3%	50
13	3881	32.8%	4712	19.7%	100
14	1144	30.7%	891	26.6%	50
15	5023	32.3%	5599	20.8%	100
16	5398	27.0%	5503	24.1%	100
17	791	34.2%	775	28.1%	50
18	4609	25.8%	4731	23.5%	100
19	634	32.0%	623	29.3%	50
20	5243	26.5%	5353	24.1%	100
21	1170	40.7%	1311	33.0%	50
22	6411	29.1%	6660	25.9%	100
24	4451	32.1%	4595	30.4%	100
26	4733	31.2%	4735	30.1%	100
27	688	28.9%	616	31.8%	50
28	4046	31.6%	4121	29.8%	100
33	1060	19.5%	803	25.7%	50
35	133	47.0%	236	29.5%	50
36	202	36.3%	188	38.4%	50
37	80	9.8%	20	17.5%	50
38	59	11.0%	22	16.2%	50
39	177	40.7%	237	29.9%	50
40	259	32.1%	190	38.3%	50
41	915	18.3%	632	21.7%	50
42	991	20.9%	658	27.7%	50
43	488	25.4%	446	19.6%	50
44	537	22.8%	408	27.4%	50
45	271	23.4%	270	16.7%	50
46	331	20.4%	225	22.6%	50
47	783	25.7%	557	27.5%	50
48	596	31.8%	705	22.2%	50
49	145	22.2%	183	9.7%	50
50	236	14.2%	135	17.8%	50
51	44	14.2%	40	17.8%	50
52	46	22.2%	32	12.2%	50
53	924	22.5%	594	28.4%	50
54	648	31.2%	782	20.7%	50
55	1361	26.2%	1245	20.6%	50
56	1259	26.3%	1141	20.6%	50
57	2043	22.3%	2198	15.7%	50
58	1985	22.4%	1605	16.6%	50
59	256	46.2%	190	55.7%	50

2041 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	HV%	Total Vehicle	HV%	Speed Limit
	AM	AM	PM	PM	km/hr
60	198	55.5%	229	45.6%	50
61	303	36.6%	334	31.2%	50
62	429	31.1%	403	31.2%	50
63	766	25.8%	563	27.3%	50
64	814	26.7%	1070	20.1%	50
65	123	21.4%	178	12.9%	50
66	273	19.0%	108	19.2%	50
67	115	25.6%	44	29.8%	50
68	261	22.0%	310	20.5%	50
69	243	35.4%	394	21.0%	50
70	415	26.6%	384	30.0%	50
73	709	22.3%	871	22.9%	50
74	384	22.2%	462	16.4%	50
75	538	25.3%	500	19.3%	50
76	580	21.1%	543	25.3%	50
77	295	24.9%	306	16.5%	50
78	385	20.2%	312	25.1%	50
79	262	38.0%	259	34.4%	50
80	172	43.8%	224	32.7%	50
81	280	31.8%	325	28.7%	50
82	502	27.3%	537	24.8%	50
83	755	31.0%	805	27.8%	50
84	444	37.4%	543	29.9%	50
95	1883	39.2%	1755	36.2%	50
96	1097	39.2%	831	42.6%	50
111	1863	34.8%	1750	32.0%	50
112	587	39.0%	431	46.5%	50
113	1757	40.1%	1742	36.3%	50
114	1014	43.5%	1127	35.4%	50
115	976	43.1%	1114	42.0%	50
133	1153	44.7%	1076	42.0%	50
134	1097	44.3%	1161	41.7%	50
135	1134	44.9%	1060	42.4%	50
136	1097	44.3%	1161	41.7%	50
139	440	14.5%	198	25.6%	50
140	468	22.8%	262	27.4%	50
141	348	12.5%	178	25.2%	50
142	406	29.2%	239	27.2%	50
145	355	16.6%	120	32.4%	50
146	85	57.2%	242	17.4%	50
147	760	23.1%	394	30.8%	50
148	280	46.9%	535	16.8%	50
149	130	41.3%	113	39.7%	50
150	154	39.1%	86	51.3%	50
151	172	27.3%	179	20.2%	50
152	263	30.7%	195	21.1%	50
157	55	25.0%	46	24.0%	50

2041 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	HV%	Total Vehicle	HV%	Speed Limit
	AM	AM	PM	PM	km/hr
158	62	28.3%	62	22.7%	50
159	38	76.4%	66	10.6%	50
160	43	24.4%	49	14.7%	50
161	98	24.7%	95	19.2%	50
162	96	47.9%	128	16.5%	50
183	629	18.5%	520	20.7%	50
184	381	20.1%	209	20.3%	50
313	280	35.7%	258	39.1%	50
314	191	50.8%	162	56.8%	50
369	452	57.0%	498	43.5%	50
370	646	42.9%	705	31.1%	50
371	998	33.0%	946	24.2%	50
372	1227	22.3%	910	30.6%	50
377	402	31.2%	478	41.5%	50
378	506	35.2%	651	27.3%	50
379	1550	34.7%	1491	24.0%	50
380	1608	31.1%	1329	30.4%	50
389	573	26.5%	540	43.0%	50
390	223	35.2%	412	27.5%	50
501	1199	33.4%	1348	28.7%	50
502	159	27.8%	146	22.3%	50
503	1279	32.6%	1412	28.5%	50
504	1484	29.9%	1590	26.6%	50
508	784	23.4%	649	25.9%	50
515	110	28.2%	74	32.0%	50
516*	27	24.1%	21	20.3%	50
551	1621	21.4%	1468	21.1%	50
552	2014	22.4%	1901	16.1%	50
553	2052	24.9%	2003	18.9%	50
554	1332	28.2%	1210	23.0%	50
556	2501	34.5%	2354	30.3%	50
557	629	18.5%	520	20.7%	50
558	381	20.1%	209	20.3%	50
603	472	28.0%	342	23.5%	50
604	530	59.2%	657	36.1%	50
605	687	29.6%	594	20.9%	50
606	568	21.7%	533	20.9%	50
607	172	24.8%	328	22.0%	50
611	1315	34.6%	962	36.1%	50
612	879	41.9%	572	43.6%	50
613	532	19.6%	480	25.5%	50
619	152	44.3%	172	42.3%	50
700	1661	20.7%	1463	23.5%	50
795	32	42.7%	31	23.4%	50
796	31	30.8%	47	28.2%	50
797	32	42.7%	31	23.4%	50
798	31	30.8%	47	28.2%	50

2041 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	HV%	Total Vehicle	HV%	Speed Limit
	AM	AM	PM	PM	km/hr
801	1983	27.0%	1619	27.3%	50
802	2910	31.1%	2856	25.7%	50
803	698	28.6%	607	30.0%	50
804	349	28.6%	303	30.0%	50
805	349	28.6%	303	30.0%	50
806	174	28.6%	152	30.0%	50
807	174	28.6%	152	30.0%	50
808	1013	27.8%	792	30.8%	50
809	629	27.7%	582	24.6%	50
810	535	33.5%	539	25.0%	50
811	203	23.7%	190	19.1%	50
812	101	23.7%	95	19.1%	50
813	203	23.7%	190	19.1%	50
814	229	23.0%	210	20.1%	50
815	136	19.0%	194	16.0%	50
816	393	35.4%	391	24.3%	50
963	148	61.5%	458	16.8%	50
964	1076	20.7%	595	31.3%	50
971	107	64.4%	142	42.3%	50
972	72	30.4%	87	48.6%	50
999	5106	29.1%	4923	29.1%	100
1000	732	22.7%	698	22.8%	50
1001	830	24.9%	605	29.3%	50
9100	4391	35.1%	5499	22.2%	100
9102	105	51.9%	343	11.3%	50
9103	3821	32.6%	3954	29.9%	100
9104	3886	35.0%	3954	24.7%	100
9105	276	7.4%	976	3.6%	50
9106	12	28.1%	13	25.7%	50
9107	1097	29.3%	1181	32.9%	50
9108	232	40.9%	616	45.1%	50
9221	574	21.8%	199	36.4%	50
9222	77	27.8%	97	41.3%	50
9225	574	21.8%	199	36.4%	50
9226	77	27.8%	97	41.3%	50
9228	20	19.7%	13	25.7%	50
9233	574	21.8%	199	36.4%	50
9234	77	27.8%	97	41.3%	50
9236	159	71.4%	98	43.7%	50
9237	288	41.0%	266	51.4%	50
9240	266	62.4%	146	39.5%	50
9241	300	44.7%	353	47.2%	50
9242	319	44.7%	337	45.1%	50
9243	359	47.3%	355	49.0%	50
9244	314	50.0%	326	58.5%	50
9245	240	67.4%	101	58.9%	50
9246	1019	33.4%	944	31.4%	50

2041 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	HV%	Total Vehicle	HV%	Speed Limit
	AM	AM	PM	PM	km/hr
9247	188	62.2%	215	53.3%	50
9248	329	46.7%	351	47.3%	50
9249	84	45.3%	84	41.2%	50
9250	122	40.3%	167	45.1%	50
9251	171	62.2%	83	66.7%	50
9252	350	44.1%	302	48.8%	50
9253	508	36.9%	401	56.3%	50
9254	372	41.9%	217	58.2%	50
9255	4543	34.3%	4439	27.1%	100
9256	4839	32.8%	4899	30.2%	100
9301	152	8.2%	88	6.6%	50
9302	95	66.3%	433	41.4%	50
9303	397	7.1%	244	4.5%	50
9304	546	6.9%	329	4.2%	50
9402	563	6.9%	331	4.2%	50
9403	1156	20.5%	1819	22.1%	50
9404	12	28.1%	70	7.4%	50
9405	142	62.1%	388	18.5%	50
9406	707	13.5%	532	25.6%	50
9407	369	34.5%	63	79.3%	50
9418	17	22.6%	13	25.7%	50
9419	563	6.9%	331	4.2%	50
9607	223	53.2%	419	30.7%	50
9608	1529	21.4%	994	35.5%	50
9609	619	18.1%	256	42.3%	50
9614	380	7.2%	237	4.5%	50
9620	132	24.1%	326	21.4%	50
9624	371	56.5%	876	23.4%	50
9650	105	51.9%	343	11.3%	50
9651	754	14.8%	614	31.8%	50
9652	654	13.0%	462	23.2%	50
9653	100	26.8%	153	57.8%	50
9700	51	40.7%	47	37.6%	50
9701	72	43.2%	71	55.5%	50
9702	40	78.0%	156	46.0%	50
9703	50	51.0%	69	34.0%	50
9704	136	23.0%	183	53.9%	50
9705	778	23.0%	843	28.1%	50
9706	529	43.0%	175	76.7%	50
9707	147	74.4%	280	56.4%	50
9708	402	31.1%	1205	17.2%	50
9709	4731	30.9%	4692	30.4%	100
9710	107	64.4%	142	42.3%	50
9711	72	30.4%	87	48.5%	50
9801	142	54.7%	290	23.3%	50
9802	760	23.1%	394	30.8%	50
9804	137	38.9%	244	9.2%	50

2041 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	HV%	Total Vehicle	HV%	Speed Limit
	AM	AM	PM	PM	km/hr
9805	540	19.8%	312	30.3%	50
9806	251	37.7%	148	39.1%	50
9807	29	15.7%	25	23.0%	50
9808	12	28.1%	13	25.7%	50
9809	454	19.5%	228	33.0%	50
9810	353	38.6%	372	20.9%	50
9811	94	32.2%	101	25.9%	50
9812	125	43.7%	139	21.9%	50
9813	51	38.8%	52	36.5%	50
9814	91	28.6%	74	31.7%	50
9815	422	26.0%	315	29.9%	50
9816	320	33.0%	337	23.1%	50
9817	98	91.0%	99	90.4%	50
9818	98	91.0%	99	90.4%	50
9819	709	22.3%	871	22.9%	50
9820	384	22.2%	462	16.4%	50
9821	12	28.1%	13	25.7%	50
9822	12	28.1%	13	25.7%	50
9823	81	21.5%	127	11.9%	50
9824	282	17.7%	141	20.3%	50
9825	1703	23.2%	1464	16.2%	50
9826	1962	22.3%	2071	15.9%	50
9827	12	28.1%	13	25.7%	50
9828	12	28.1%	13	25.7%	50
9829	145	22.2%	183	9.7%	50
9830	236	14.2%	135	17.8%	50
9857 (A1)	691	20.4%	868	14.3%	50
9860 (A2)	408	26.6%	330	20.2%	50
9858 (A3)	281	28.0%	381	16.7%	50
9859 (A4)	350	23.1%	308	25.3%	50

* Results from traffic model show that only 5% of the traffic flow at Kam Hang Road (road link ID: 516) contributed to the development of KTN NDA.

By Fax
3922 9797

運輸署
Transport Department

本署檔案 Our Ref. : (P2LGJ) in TD TP/171/70/12-5
來函檔號 Your Ref. : RPCM:BCKY:HMKH:mlpm:60624717/20.1-2022008395L
電 話 Tel. : 3842 6026
圖文傳真 Fax : 2802 2673
電 郵 Email : holam@td.gov.hk

AECOM Asia Co. Ltd.
12/F Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, Hong Kong
(Attn: Raymond Pau)

28 June 2022

Dear Mr. Pau,

Agreement No. CE 19/2019 (CE)
Development of Kwu Tung North New Development Area, Remaining Phase – Design and Construction

Technical Note 6 on Methodology on Traffic Forecast for Noise Impact Assessment (Issue 1)

Your letter dated 15 June 2022 refers. Our comment from transport planning perspective are as follows:

(i) Please be reminded that the projected traffic data shall be updated in case of changes to the current assumed speed limit and transport model in TIA study.

Yours faithfully,

(Michael H Lam)
for Commissioner for Transport

Internal
SE5/TP, E12/TP

Chan, Iverson

From: Hong Chi TSANG <hongchitsang@td.gov.hk>
Sent: Monday, October 7, 2024 4:07 PM
To: Chan, Iverson
Cc: Y WONG; Ho Man CHU
Subject: Re: CE19/2019 (CE) - Traffic and Transport Impact Assessment Review Report (Final) (Ref. G3C-06)

Follow Up Flag: Follow up
Flag Status: Flagged

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This message came from outside your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Report Suspicious

Dear Iverson,

Please note that this division has no further comment on captioned submission in transport planning viewpoint. Thank you.

Regards,
Hong Chi TSANG
PC1/TP, TPD, TD
Tel: 3842 6031

From: "Chan, Iverson" <iverson.chan@aecom.com>
To: "homanchu@td.gov.hk" <homanchu@td.gov.hk>, Doris HY WONG <doris_wong@td.gov.hk>, Hong Chi TSANG <hongchitsang@td.gov.hk>, "gavinchoy@td.gov.hk" <gavinchoy@td.gov.hk>, "chikongleung@td.gov.hk" <chikongleung@td.gov.hk>
Cc: "wktai@cedd.gov.hk" <wktai@cedd.gov.hk>, "rickywklam@cedd.gov.hk" <rickywklam@cedd.gov.hk>, "cktse1@cedd.gov.hk" <cktse1@cedd.gov.hk>, "Pau, Chun Man Raymond" <raymond.pau@aecom.com>, "Yung, Chun Kit Benny" <benny.yung@aecom.com>, "Ho, Wing Ying Wendy" <Wendy.Ho@aecom.com>
Date: 24/09/2024 06:39 pm
Subject: CE19/2019 (CE) - Traffic and Transport Impact Assessment Review Report (Final) (Ref. G3C-06)

Dear Sir/Madam,

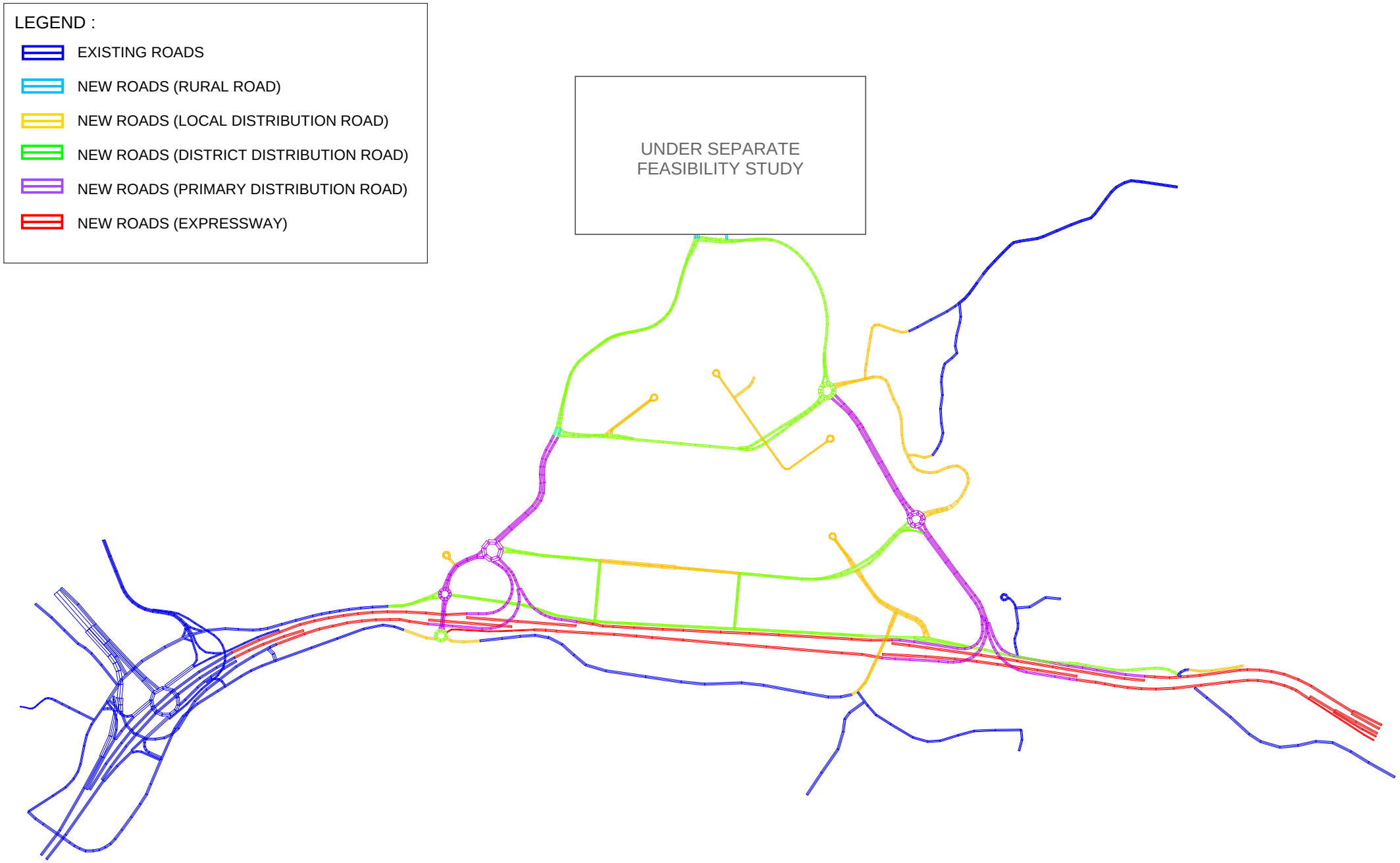
Agreement No. CE19/2019 (CE)
Development of Kwu Tung North New Development Area, Remaining Phase – Design and Construction

Please find our letter ref. RPCM:BCKY:WHWY: mplm:60624717/20.1-2024013905L dated 13 August July 2024 enclosing the Traffic and Transport Impact Assessment Review Report (Final) (Ref. G3C-06) in below link for the captioned contract for your review and comment.

Appendix 2.2
Computer Plot of Road Scheme

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UNDER SEPARATE
FEASIBILITY STUDY


LEGEND :
EXISTING ROADS
NEW ROADS (RURAL ROAD)
NEW ROADS (LOCAL DISTRIBUTION ROAD)
NEW ROADS (DISTRICT DISTRIBUTION ROAD)
NEW ROADS (PRIMARY DISTRIBUTION ROAD)
NEW ROADS (EXPRESSWAY)
UNDER SEPARATE
FEASIBILITY STUDY

Appendix 2.3
Details of Road Traffic Noise Impacts on NSRs (Mitigated Scenario) in Year 2041

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Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
R1001	1	11.6	St. Paul's House of Prayer	75.7	32.9	0	60.2	50.2	35.6	61.1	63.9	63.9	65	N	-11.8	N	31.0	Y	N	N
R1002	1	11.6	St. Paul's House of Prayer	73.3	49.5	0	53.4	45	0	54.7	57.4	58.0	65	N	-15.3	N	8.5	Y	N	N
R1003	1	11.6	St. Paul's House of Prayer	73.3	48.9	0	57.8	48.3	37.1	62.8	64.1	64.2	65	N	-9.1	N	15.3	Y	N	N
R1004	1	12.7	De La Salle S. Sch NT	76.9	25.7	0	56.3	48.6	32.4	59.5	61.4	61.4	65	N	-15.5	N	35.7	Y	N	N
R1004	2	16.7	De La Salle S. Sch NT	77.8	27.6	0	57.9	49.5	33.8	60.4	62.5	62.5	65	N	-15.3	N	34.9	Y	N	N
R1004	3	20.7	De La Salle S. Sch NT	78.8	29.7	0	60	50.4	35.5	61.4	64	64.0	65	N	-14.8	N	34.3	Y	N	N
R1005	1	18.1	Ascot Park	67.6	60.7	0	54.8	30.1	15.1	49.3	55.9	62.0	70	N	-5.6	N	1.3	Y	N	N
R1005	2	21.1	Ascot Park	67.6	60.7	0	55.4	30.4	15.1	49.4	56.4	62.1	70	N	-5.5	N	1.4	Y	N	N
R1005	3	24.1	Ascot Park	67.6	60.7	0	55.6	30.7	15.2	49.5	56.6	62.2	70	N	-5.4	N	1.5	Y	N	N
R1021	1	10.9	KT Village Ho Tung Sch	83.8	39.9	0	56.4	46.5	17.9	58	60.5	60.5	65	N	-23.3	N	20.6	Y	N	N
R1022	1	10.9	KT Village Ho Tung Sch	77.6	51.5	0	53.8	44.9	20.2	55.2	57.8	58.7	65	N	-18.9	N	7.2	Y	N	N
R1023	1	10.9	KT Village Ho Tung Sch	79.7	49.5	0	53.9	45.8	19.9	56.5	58.7	59.2	65	N	-20.5	N	9.7	Y	N	N
R1024	1	8.1	Kam Tsin Village	78.6	54.7	0	54.5	48	20.6	60.7	61.8	62.6	70	N	-16.0	N	7.9	Y	N	N
R1024	2	11.1	Kam Tsin Village	78.6	54.7	0	55.5	48.6	21.5	61	62.2	62.9	70	N	-15.7	N	8.2	Y	N	N
R1024	3	14.1	Kam Tsin Village	78.6	54.7	0	56.6	49.2	22.5	61.3	62.8	63.4	70	N	-15.2	N	8.7	Y	N	N
R1024	4	17.1	Kam Tsin Village	78.7	54.7	0	57.9	49.8	23.6	61.6	63.4	63.9	70	N	-14.8	N	9.2	Y	N	N
R1025	1	13.9	Kam Tsin Village	73.1	54.2	0	54.4	46.5	34.2	59.2	60.6	61.5	70	N	-11.6	N	7.3	Y	N	N
R1025	2	16.9	Kam Tsin Village	73.3	54.3	0	55.2	46.9	35.3	59.3	60.9	61.8	70	N	-11.5	N	7.5	Y	N	N
R1025	3	19.9	Kam Tsin Village	73.6	54.2	0	56	47.2	36.6	59.4	61.2	62.0	70	N	-11.6	N	7.8	Y	N	N
R1025	4	22.9	Kam Tsin Village	74.1	54.2	0	56.9	47.6	38	59.6	61.7	62.4	70	N	-11.7	N	8.2	Y	N	N
R1026	1	13.9	Kam Tsin Village	68.1	57.4	0	53.3	43.7	34.1	56.7	58.5	61.0	70	N	-7.1	N	3.6	Y	N	N
R1026	2	16.9	Kam Tsin Village	68.3	57.4	0	54.5	44.1	35.2	56.8	59	61.3	70	N	-7.0	N	3.9	Y	N	N
R1026	3	19.9	Kam Tsin Village	68.5	57.4	0	55.5	44.4	36.5	56.9	59.4	61.5	70	N	-7.0	N	4.1	Y	N	N
R1026	4	22.9	Kam Tsin Village	68.9	57.4	0	56.5	44.8	37.8	57	59.9	61.8	70	N	-7.1	N	4.4	Y	N	N
R1027	1	11.9	KT Village Ho Tung Kindgt.	77.3	23	0	55.5	48.2	22.2	60	61.5	61.5	65	N	-15.8	N	38.5	Y	N	N
R1028	1	8	Kam Tsin Village	80.9	58.6	0	51.1	48.4	25.5	63	63.4	64.6	70	N	-16.3	N	6.0	Y	N	N
R1028	2	11	Kam Tsin Village	80.9	58.6	0	52.6	49.2	26.4	63.6	64.1	65.2	70	N	-15.7	N	6.6	Y	N	N
R1028	3	14	Kam Tsin Village	80.9	58.6	0	54.8	50.1	27.4	64.3	64.9	65.8	70	N	-15.1	N	7.2	Y	N	N
R1029	1	9.2	Kam Tsin Village	77.6	59.1	0	51.3	47.2	25.4	59.7	60.5	62.9	70	N	-14.7	N	3.8	Y	N	N
R1029	2	12.2	Kam Tsin Village	77.6	59.1	0	52.6	47.8	26	60.1	61.1	63.2	70	N	-14.4	N	4.1	Y	N	N
R1029	3	15.2	Kam Tsin Village	77.6	59	0	54	48.3	26.5	60.6	61.6	63.5	70	N	-14.1	N	4.5	Y	N	N
R1030	1	10.2	Kam Tsin Village	77.5	58.9	0	52.7	47.8	24.3	61.4	62.1	63.8	70	N	-13.7	N	4.9	Y	N	N
R1030	2	13.2	Kam Tsin Village	77.5	58.9	0	53.8	48.3	25.1	61.6	62.4	64.0	70	N	-13.5	N	5.1	Y	N	N
R1030	3	16.2	Kam Tsin Village	77.5	58.9	0	55.2	48.9	25.8	61.9	62.9	64.4	70	N	-13.1	N	5.5	Y	N	N
R1031	1	10.1	KT Village Ho Tung Sch Extension	79.1	48.8	0	54.6	45.2	18.3	55.1	58.1	58.6	65	N	-20.5	N	9.8	Y	N	N
R1031	2	13.4	KT Village Ho Tung Sch Extension	79.2	49.3	0	56.3	46.9	20.1	56.8	59.8	60.2	65	N	-19.0	N	10.9	Y	N	N
R1032	1	10.1	KT Village Ho Tung Sch Extension	83.8	29.1	0	56.9	47.9	21.3	58.5	61	61.0	65	N	-22.8	N	31.9	Y	N	N
R1032	2	13.4	KT Village Ho Tung Sch Extension	83.8	30.4	0	58.7	49.6	23.5	60.1	62.7	62.7	65	N	-21.1	N	32.3	Y	N	N
R1033	1	9.9	KT Village Ho Tung Sch Extension	84.2	41.4	0	56.9	48.6	20.6	62.4	63.6	63.7	65	N	-20.5	N	22.3	Y	N	N
R1033	2	13.2	KT Village Ho Tung Sch Extension	84.2	46.5	0	58.9	50.6	23.3	63.8	65.2	65.2	65	N	-19.0	N	18.7	Y	N	N
R1034	1	10.1	KT Village Ho Tung Sch Extension	80.9	41.5	0	50.8	47.1	19.6	59.4	60.2	60.2	65	N	-20.7	N	18.7	Y	N	N
R1034	2	13.4	KT Village Ho Tung Sch Extension	80.9	47	0	53.3	48.5	22	61	61.9	62.0	65	N	-18.9	N	15.0	Y	N	N
R1041	1	17.1	Casas Domingo	68.3	59.8	0	23.6	15.5	58.4	61.6	63.3	64.9	70	N	-3.4	N	5.1	Y	N	N
R1041	2	20.4	Casas Domingo	68.4	59.8	0	23.6	15.5	58.5	61.9	63.5	65.0	70	N	-3.4	N	5.2	Y	N	N
R1042	1	17.1	Casas Domingo	65.6	60.9	0	0	23.3	47.8	0	47.8	61.1	70	N	-4.5	N	0.2	N	N	N
R1042	2	20.4	Casas Domingo	65.5	60.9	0	0	23.7	47.8	0	47.8	61.1	70	N	-4.4	N	0.2	N	N	N
R1043	1	15.3	Casas Domingo	65.1	58.8	0	9.9	0	52.1	0	52.1	59.7	70	N	-5.4	N	0.9	Y	N	N
R1043	2	18.6	Casas Domingo	65	58.7	0	9.9	0	52.1	0	52.1	59.6	70	N	-5.4	N	0.9	N	N	N
R1043	3	21.9	Casas Domingo	65	58.6	0	9.9	0	52.1	0	52.1	59.5	70	N	-5.5	N	0.9	N	N	N
R1085	1	12.8	Valais	58.4	53.5	0	20.3	38.9	27.3	54.5	54.6	57.1	70	N	-1.3	N	3.6	Y	N	N
R1085	2	16.8	Valais	61	54.4	0	24	43.1	30.7	58.4	58.5	60.0	70	N	-1.0	N	5.6	Y	N	N
R1085	3	20.8	Valais	67.4	55.3	0	33	51.7	39.8	66.2	66.4	66.7	70	N	-0.7	N	11.4	Y	N	N
R1086	1	12.8	Valais	59.5	31.8	0	17.9	43.7	28.7	58.4	58.5	58.5	70	N	-1.0	N	26.7	Y	N	N
R1086	2	16.8	Valais	63.3	32.8	0	21	47.4	31.2	62.3	62.4	62.4	70	N	-0.9	N	29.6	Y	N	N
R1086	3	20.8	Valais	68.7	33.6	0	26	52.1	37.5	68.2	68.3	68.3	70	N	-0.4	N	34.7	Y	N	N
R1087	1	12.8	Valais	56.9	49.5	0	12.2	41.8	25.3	56.5	56.7	57.4	70	N	0.5	N	7.9	Y	N	N
R1087	2	16.8	Valais	59.9	51	0	16.3	45	29.7	59.9	60	60.6	70	N	0.7	N	9.6	Y	N	N
R1087	3	20.8	Valais	64.7	53.1	0	25	48.9	36.5	64.9	65	65.3	70	N	0.6	N	12.2	Y	N	N
R1088	1	12.8	Valais	56.2	44.3	0	0	40.9	24.8	55.5	55.7	56.0	70	N	-0.2	N	11.7	Y	N	N
R1088	2	16.8	Valais	60	47.6	0	0	44.7	25.3	59.5	59.7	59.9	70	N	-0.1	N	12.3	Y	N	N
R1088	3	20.8	Valais	66	52	0	0	49.7	25.6	66	66.1	66.3	70	N	0.3	N	14.3	Y	N	N
R1089	1	12.8	Valais	57.4	12.8	0	25.8	40.4	56.8	56.3	59.6	59.6	70	N	2.2	Y	46.8	Y	N	N
R1089	2	16.8	Valais	60.9	13	0	30.3	44	57.1	60.1	62	62.0	70	N	1.1	Y	49.0	Y	N	N
R1089	3	20.8	Valais	69.5	13.1	0	39.8	50	58	69.1	69.5	69.5	70	N	0.0	N	56.4	Y	N	N
R1090	1	12.8	Valais	64.5	58.9	0	36.8	40.8	62	55.7	62.9	64.4	70	N	-0.1	N	5.5	Y	N	N
R1090	2	16.8	Valais	67	59.6	0	40	44	62.5	59	64.2	65.4	70	N	-1.6	N	5.8	Y	N	N
R1090	3	20.8	Valais	69.6	59.9	0	43.6	47.6	63.1	63.7	66.5	67.3	70	N	-2.3	N	7.4	Y	N	N
R1121	1	21.5	Luen Shen Area	75.7	67.6	0	61.4	53	46.7	63.3	65.8	69.8	70	N	-5.9	N	2.2	Y	N	N
R1121	2	24.5	Luen Shen Area	76.2	67.6	0	63.1	54.5	46.6	64.6	67.2	70.4	70	N	-5.8	N	2.8	Y	N	N
R1281	1	19.8	Golf Parkview	81.9	36.9	0	31.4	44.9	37	60.1	60.3	60.3	70	N	-21.6	N	23.4	Y	N	N
R1281	2	22.8	Golf Parkview	81.9	39	0	34.7	47.7	38.2	61.8	62	62.0	70	N	-19.9	N	23.0	Y	N	N
R1281	3	25.8	Golf Parkview	81.8	41	0	37.8	50.6	39.2	63.5	63.8	63.8	70	N	-18.0	N	22.8	Y	N	N
R1281	4	28.8	Golf Parkview	81.7	42.8	0	41.6	54.4	40.3	65.6	66	66.0	70	N	-15.7	N	23.2	Y	N	N
R1282	1	19.8	Golf Parkview	82.3	63.4	0	38.8	45	37.4	65.3	65.3	67.5	70	N	-14.8	N	4.1	Y	N	N
R1282	2	22.8	Golf Parkview	82.2	63.2	0	42.1	47.8	38.7	66.1	66.2	68.0	70	N	-14.2	N	4.8	Y	N	N
R1282	3	25.8	Golf Parkview	82.1	63.1	0	45.2	50.7	40	67.6	67.7	69.0	70	N	-13.1	N	5.9	Y	N	N
R1282	4	28.8	Golf Parkview	82	62.9	0	48.7	54.4	41.4	69.3	69.4	70.3	70	N	-11.7	N	7.4	Y	N	N
R1284	1	19.8	Golf Parkview	82.2	55.3	0	0	41.9	35.3	57.2	57.4	59.5	70	N	-22.7	N	4.2	Y	N	N
R1284	2	22.8	Golf Parkview	82.1	55.3	0	0	44.4	35.9	58.8	59	60.5	70	N	-21.6	N	5.2	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
R1284	3	25.8	Golf Parkview	81.9	55.3	0	0	47.4	36.3	60.6	60.8	61.9	70	N	-20.0	N	6.6	Y	N	N
R1284	4	28.8	Golf Parkview	81.7	55.3	0	0	51	36.9	62.6	62.9	63.6	70	N	-18.1	N	8.3	Y	N	N
R1285	1	19.8	Golf Parkview	83.5	52.1	0	0	42.2	35.7	59.5	59.6	60.3	70	N	-23.2	N	8.2	Y	N	N
R1285	2	22.8	Golf Parkview	83.2	52.2	0	0	44.7	36.3	61.6	61.7	62.2	70	N	-21.0	N	10.0	Y	N	N
R1285	3	25.8	Golf Parkview	82.9	52.3	0	0	48.4	36.8	64.2	64.4	64.6	70	N	-18.3	N	12.3	Y	N	N
R1285	4	28.8	Golf Parkview	83.4	52.3	0	0	51.6	37.3	66.6	66.7	66.9	70	N	-16.5	N	14.6	Y	N	N
R1286	1	19.8	Golf Parkview	79.2	64	0	0	0	0	65.2	65.2	67.7	70	N	-11.5	N	3.7	Y	N	N
R1286	2	22.8	Golf Parkview	79.1	64.1	0	0	0	0	66.3	66.3	68.3	70	N	-10.8	N	4.2	Y	N	N
R1286	3	25.8	Golf Parkview	79	64.1	0	0	0	0	67.4	67.4	69.1	70	N	-9.9	N	5.0	Y	N	N
R1286	4	28.8	Golf Parkview	78.9	64.1	0	0	0	0	68.8	68.8	70.1	70	N	-8.8	N	6.0	Y	N	N
R1287	1	10.4	Fanling Highway A100	83.7	42.5	0	0	28	23.5	63.6	63.6	63.6	70	N	-20.1	N	21.1	Y	N	N
R1287	2	13.4	Fanling Highway A100	83.7	44.5	0	0	29	23.8	67.3	67.3	67.4	70	N	-16.3	N	22.9	Y	N	N
R1287	3	16.4	Fanling Highway A100	83.6	46.1	0	0	29.9	24.3	68.9	68.9	69.0	70	N	-14.6	N	22.9	Y	N	N
R1287	4	19.4	Fanling Highway A100	83.4	47.8	0	0	31	24.6	70.3	70.3	70.4	70	N	-13.0	N	22.6	Y	N	N
R1288	1	11.8	Fanling Highway A100	74.6	29.3	0	0	26.2	29.2	57	57	57.0	70	N	-17.6	N	27.7	Y	N	N
R1288	2	14.8	Fanling Highway A100	76.1	30	0	0	27.2	29.8	58.1	58.1	58.1	70	N	-18.0	N	28.1	Y	N	N
R1288	3	17.8	Fanling Highway A100	78.1	30.9	0	0	28.9	30.4	59.2	59.2	59.2	70	N	-18.9	N	28.3	Y	N	N
R1288	4	20.8	Fanling Highway A100	79.3	31.9	0	0	31	30.9	60.1	60.1	60.1	70	N	-19.2	N	28.2	Y	N	N
R1289	1	11.2	Fanling Highway A100	79.7	15.3	0	0	0	27.3	65.7	65.7	65.7	70	N	-14.0	N	50.4	Y	N	N
R1289	2	14.2	Fanling Highway A100	80.2	17.9	0	0	0	27.8	66.2	66.2	66.2	70	N	-14.0	N	48.3	Y	N	N
R1289	3	17.2	Fanling Highway A100	80.5	20.3	0	0	0	28.2	66.9	66.9	66.9	70	N	-13.6	N	46.6	Y	N	N
R1289	4	20.2	Fanling Highway A100	80.7	23.6	0	0	0	28.5	67.4	67.4	67.4	70	N	-13.3	N	43.8	Y	N	N
R1290	1	10.4	Fanling Highway A100	80.4	15.2	0	0	0	23.7	68.7	68.7	68.7	70	N	-11.7	N	53.5	Y	N	N
R1290	2	13.4	Fanling Highway A100	80.6	17	0	0	0	23.9	69	69	69.0	70	N	-11.6	N	52.0	Y	N	N
R1290	3	16.4	Fanling Highway A100	80.7	19.1	0	0	0	24.3	69.6	69.6	69.6	70	N	-11.1	N	50.5	Y	N	N
R1290	4	19.4	Fanling Highway A100	80.7	21.7	0	0	0	24.6	70	70	70.0	70	N	-10.7	N	48.3	Y	N	N
R1301	1	10.2	Pak Shek Au	71	54.2	0	51.8	54	43.3	60.7	62	62.7	70	N	-8.3	N	8.5	Y	N	N
R1301	2	13.2	Pak Shek Au	71.1	54.5	0	52.2	54.4	45.7	61.4	62.7	63.3	70	N	-7.8	N	8.8	Y	N	N
R1681	1	12.9	Luen Shen Area	78	64.8	0	35.7	40	0	65.7	65.7	68.3	70	N	-9.7	N	3.5	Y	N	N
R1681	2	16.9	Luen Shen Area	78	65	0	40.4	42.2	0	66.9	66.9	69.1	70	N	-8.9	N	4.1	Y	N	N
R1682	1	14.5	Luen Shen Area	75.7	66.5	0	36.2	38	46.5	67.4	67.4	70.0	70	N	-5.7	N	3.5	Y	N	N
R1682	2	18.5	Luen Shen Area	75.8	67.2	0	36.4	39.4	46.5	67.5	67.6	70.4	70	N	-5.4	N	3.2	Y	N	N
R2001	1	11.9	Yin Kong	33.9	62.6	0	50.9	29.6	44.1	55.7	57.2	63.7	70	N	29.8	Y	1.1	Y	N	N
R2001	2	14.9	Yin Kong	33.8	62.5	0	51.3	30.1	44.1	55.9	57.4	63.6	70	N	29.8	Y	1.1	Y	N	N
R2001	3	17.9	Yin Kong	33.8	62.3	0	51.7	30.5	44.1	56.1	57.6	63.6	70	N	29.8	Y	1.3	Y	N	N
R2041	1	6.7	Ho Sheung Heung	34.7	64.5	0	0	0	0	0	0	64.5	70	N	29.8	Y	0.0	N	N	N
R2041	2	9.7	Ho Sheung Heung	34.7	64.5	0	0	0	0	0	0	64.5	70	N	29.8	Y	0.0	N	N	N
R2041	3	12.7	Ho Sheung Heung	34.7	64.5	0	0	0	0	0	0	64.5	70	N	29.8	Y	0.0	N	N	N
R2042	1	6.7	Ho Sheung Heung	45	49	52.2	20	46.1	58.8	0	59.9	60.2	70	N	15.2	Y	11.2	Y	N	N
R2042	2	9.7	Ho Sheung Heung	45.8	49.6	52.2	20	46.1	58.9	0	59.9	60.3	70	N	14.5	Y	10.7	Y	N	N
R2042	3	12.7	Ho Sheung Heung	46.5	50.3	52.2	20	46.1	58.9	0	60	60.4	70	N	13.9	Y	10.1	Y	N	N
R2043	1	6.7	Ho Sheung Heung	61.8	56.7	53.4	52.3	24.1	57.2	0	59.6	61.4	70	N	-0.4	N	4.7	Y	N	N
R2043	2	9.7	Ho Sheung Heung	61.9	65.8	53.4	52.4	24.1	57.4	0	59.8	66.7	70	N	4.8	Y	0.9	Y	N	N
R2043	3	12.7	Ho Sheung Heung	61.5	68	53.4	52.5	24.2	57.6	0	59.9	68.6	70	N	7.1	Y	0.6	N	N	N
R2046	1	6.7	Ho Sheung Heung	58.5	59.3	0	0	25.6	29.3	0	30.8	59.3	70	N	0.8	N	0.0	N	N	N
R2046	2	9.7	Ho Sheung Heung	58.9	60	0	0	27.7	30.6	0	32.4	60.0	70	N	1.1	Y	0.0	N	N	N
R2046	3	12.7	Ho Sheung Heung	59.2	61.2	0	0	30	31.9	0	34	61.2	70	N	2.0	Y	0.0	N	N	N
R2047	1	6.7	Ho Sheung Heung	49.8	69.5	0	0	28.8	47.5	0	47.5	69.6	70	N	19.8	Y	0.1	N	N	N
R2047	2	9.7	Ho Sheung Heung	49.8	70	0	0	29.5	47.5	0	47.6	70.0	70	N	20.2	Y	0.0	N	N	N
R2047	3	12.7	Ho Sheung Heung	49.8	70.2	0	0	30.2	47.5	0	47.6	70.2	70	N	20.4	Y	0.0	N	N	N
N2046	1	11.7	Ho Sheung Heung	52.6	66.7	0	0	24.3	35.6	0	35.9	66.8	70	N	14.2	Y	0.1	N	N	N
N2046	2	14.4	Ho Sheung Heung	52.5	68.7	0	0	25	36.3	0	36.6	68.7	70	N	16.2	Y	0.0	N	N	N
N2046	3	17.1	Ho Sheung Heung	52.3	68.5	0	0	25.9	37	0	37.4	68.5	70	N	16.2	Y	0.0	N	N	N
N2047	1	13.7	Ho Sheung Heung	62.1	67.9	0	0	29.4	45.3	0	45.4	67.9	70	N	5.8	Y	0.0	N	N	N
N2047	2	16.4	Ho Sheung Heung	61.8	67.9	0	0	29.9	45.3	0	45.4	67.9	70	N	6.1	Y	0.0	N	N	N
N2047	3	19.1	Ho Sheung Heung	61.3	67.8	0	0	30.5	45.3	0	45.4	67.8	70	N	6.5	Y	0.0	N	N	N
R2102	1	7.9	C1-4	73.8	50.2	0	55	46.1	41.7	54.8	58.3	58.9	70	N	-14.9	N	8.7	Y	N	N
R2102	2	10.6	C1-4	74.4	50.3	0	56	47.6	41.7	55.9	59.4	59.9	70	N	-14.5	N	9.6	Y	N	N
R2102	3	13.3	C1-4	74.9	50.4	0	57.2	49.5	41.7	57.1	60.6	61.0	70	N	-13.9	N	10.6	Y	N	N
R2103	1	7.9	C1-4	76	39.4	0	57	52	39.5	58.1	61.2	61.2	70	N	-14.8	N	21.8	Y	N	N
R2103	2	10.6	C1-4	76.5	40	0	58.3	52.9	40	59.1	62.3	62.3	70	N	-14.2	N	22.3	Y	N	N
R2103	3	13.3	C1-4	76.9	40.6	0	59.6	54.1	41.1	60.5	63.6	63.6	70	N	-13.3	N	23.0	Y	N	N
R2141	1	22.2	Fung Kong Garden	51	0	19.6	0	54.1	59.7	0	60.7	60.7	70	N	9.7	Y	60.7	Y	N	N
R2141	2	25.2	Fung Kong Garden	51	0	20.1	0	54.1	59.7	0	60.7	60.7	70	N	9.7	Y	60.7	Y	N	N
R2141	3	28.2	Fung Kong Garden	51	0	20.7	0	54.1	59.6	0	60.7	60.7	70	N	9.7	Y	60.7	Y	N	N
R3481	1	8.7	D1-5	-	42.1	28.6	55.8	42.4	66.8	0	67.2	67.2	70	N	-	-	25.1	Y	N	N
R3481	2	12.7	D1-5	-	42.7	28.6	56.2	42.4	66.7	0	67.1	67.1	70	N	-	-	24.4	Y	N	N
R3481	3	16.7	D1-5	-	43.7	28.6	56.6	42.4	66.6	0	67	67.0	70	N	-	-	23.3	Y	N	N
E0002	1	8.5	D1-6	61.9	40.6	0	58.7	15.1	60.1	0	62.4	62.5	70	N	0.6	N	21.9	Y	N	N
E0002	2	10.8	D1-6	62	51	0	59.3	15.1	64.1	0	65.3	65.5	70	N	3.5	Y	14.5	Y	N	N
E0003	1	9.2	D1-6	50	3.8	32.8	41.3	28.7	70.2	0	70.3	70.3	70	N	20.3	Y	66.5	Y	N	N
E0004	1	9.2	D1-6	49	17.8	32.8	40.2	28	65.4	0	65.4	65.4	70	N	16.4	Y	47.6	Y	N	N
E0005	1	9.2	D1-6	47.2	23.1	32.8	39.5	27.7	65.7	0	65.7	65.7	70	N	18.5	Y	42.6	Y	N	N
E0005	2	12.2	D1-6	47.2	33.8	32.8	39.9	27.7	69.4	0	69.4	69.4	70	N	22.2	Y	35.6	Y	N	N
E0006	1	9.2	D1-6	44.2	4.8	32.4	46.5	31.5	68.8	0	68.9	68.9	70	N	24.7	Y	64.1	Y	N	N
E0007	1	10.5	Squatter Houses along Castle Peak Road - Kwu Tung	79.7	40.1	0	62.9	60.9	6.7	64.5	67.8	67.8	70	N	-11.9	N	27.7	Y	N	N
E0008	1	9.6	Squatter Houses along Castle Peak Road - Kwu Tung	79.5	40.9	0	61.4	65	25.9	62.9	68.1	68.1	70	N	-11.4	N	27.2	Y	N	N
E0008	2	12.6	Squatter Houses along Castle Peak Road - Kwu Tung	80.2	42.9	0	63.7	65.2	28.8	65.7	69.7	69.7	70	N	-10.5	N	26.8	Y	N	N
E0009	1	9.2	Squatter Houses along Castle Peak Road - Kwu Tung	78.8	38.8	0	60.2	66.7	27.6	60.3	68.3	68.3	70	N	-10.5	N	29.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]					New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)				
E0010	1	9.1	Squatter Houses along Castle Peak Road - Kwu Tung	79	38.4	0	58.8	60.5	26.7	60	64.6	64.6	70	N	-14.4	N	26.2	Y	N	N
E0011	1	8.1	Squatter Houses along Castle Peak Road - Kwu Tung	78.6	35.3	0	52.3	51.6	24.7	57.2	59.2	59.2	70	N	-19.4	N	23.9	Y	N	N
E0012	1	8.1	Squatter Houses along Castle Peak Road - Kwu Tung	77.1	43	0	59.5	64.4	48.6	62.8	67.5	67.5	70	N	-9.6	N	24.5	Y	N	N
A2-11-1	1	12.2	A2-11	-	0	0	0	63.1	57.7	0	64.2	64.2	65	N	-	-	64.2	Y	N	N
A2-11-1	2	15.2	A2-11	-	0	0	0	63	57.7	0	64.1	64.1	65	N	-	-	64.1	Y	N	N
A2-11-1	3	18.2	A2-11	-	0	0	0	62.9	57.6	0	64.1	64.1	65	N	-	-	64.1	Y	N	N
A2-11-1	4	21.2	A2-11	-	0	0	0	62.9	57.6	0	64	64.0	65	N	-	-	64.0	Y	N	N
A2-11-1	5	24.2	A2-11	-	0	0	0	62.8	57.5	0	63.9	63.9	65	N	-	-	63.9	Y	N	N
A2-11-1	6	27.2	A2-11	-	0	0	0	62.7	57.5	0	63.8	63.8	65	N	-	-	63.8	Y	N	N
A2-11-1	7	30.2	A2-11	-	0	0	0	62.5	57.4	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
A2-11-1	8	33.2	A2-11	-	0	0	0	62.5	57.3	0	63.6	63.6	65	N	-	-	63.6	Y	N	N
A2-11-2	1	12.2	A2-11	-	0	0	0	63.7	58.8	0	64.9	64.9	65	N	-	-	64.9	Y	N	N
A2-11-2	2	15.2	A2-11	-	0	0	0	63.7	58.7	0	64.9	64.9	65	N	-	-	64.9	Y	N	N
A2-11-2	3	18.2	A2-11	-	0	0	0	63.7	58.7	0	64.9	64.9	65	N	-	-	64.9	Y	N	N
A2-11-2	4	21.2	A2-11	-	0	0	0	63.7	58.6	0	64.8	64.8	65	N	-	-	64.8	Y	N	N
A2-11-2	5	24.2	A2-11	-	0	0	0	63.6	58.5	0	64.8	64.8	65	N	-	-	64.8	Y	N	N
A2-11-2	6	27.2	A2-11	-	0	0	0	63.6	58.4	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
A2-11-2	7	30.2	A2-11	-	0	0	0	63.6	58.3	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
A2-11-2	8	33.2	A2-11	-	0	0	0	63.5	58.2	0	64.6	64.6	65	N	-	-	64.6	Y	N	N
A2-11-3	1	12.2	A2-11	-	2.5	15.2	51.2	19.7	59.8	0	60.3	60.3	65	N	-	-	57.8	Y	N	N
A2-11-3	2	15.2	A2-11	-	2.5	15.2	51.2	19.8	59.7	0	60.3	60.3	65	N	-	-	57.8	Y	N	N
A2-11-3	3	18.2	A2-11	-	2.5	15.2	51.2	19.8	59.6	0	60.2	60.2	65	N	-	-	57.7	Y	N	N
A2-11-3	4	21.2	A2-11	-	2.5	15.2	51.2	19.8	59.5	0	60.1	60.1	65	N	-	-	57.6	Y	N	N
A2-11-3	5	24.2	A2-11	-	2.5	15.2	51.2	19.8	59.2	0	59.9	59.9	65	N	-	-	57.4	Y	N	N
A2-11-3	6	27.2	A2-11	-	2.5	15.2	51.2	19.8	59.1	0	59.8	59.8	65	N	-	-	57.3	Y	N	N
A2-11-3	7	30.2	A2-11	-	2	15.2	51.2	19.8	58.9	0	59.6	59.6	65	N	-	-	57.6	Y	N	N
A2-11-3	8	33.2	A2-11	-	2.1	15.2	51.2	19.8	58.6	0	59.3	59.3	65	N	-	-	57.2	Y	N	N
A2-12-1	1	12.2	A2-12	-	0	15.7	54.9	18.7	59.7	0	61	61.0	65	N	-	-	61.0	Y	N	N
A2-12-1	2	15.2	A2-12	-	0	15.7	54.9	18.7	59.6	0	60.9	60.9	65	N	-	-	60.9	Y	N	N
A2-12-1	3	18.2	A2-12	-	0	15.7	54.9	18.7	59.5	0	60.8	60.8	65	N	-	-	60.8	Y	N	N
A2-12-1	4	21.2	A2-12	-	0	15.7	54.9	18.7	59.4	0	60.7	60.7	65	N	-	-	60.7	Y	N	N
A2-12-1	5	24.2	A2-12	-	0	15.7	54.9	18.7	59.3	0	60.6	60.6	65	N	-	-	60.6	Y	N	N
A2-12-1	6	27.2	A2-12	-	0	15.7	54.9	18.7	59.2	0	60.5	60.5	65	N	-	-	60.5	Y	N	N
A2-12-1	7	30.2	A2-12	-	0	15.7	54.9	18.7	58.9	0	60.3	60.3	65	N	-	-	60.3	Y	N	N
A2-12-1	8	33.2	A2-12	-	0	15.7	54.9	18.7	58.6	0	60.1	60.1	65	N	-	-	60.1	Y	N	N
A2-12-2	1	12.2	A2-12	-	0	0	0	58.9	51.9	0	59.7	59.7	65	N	-	-	59.7	Y	N	N
A2-12-2	2	15.2	A2-12	-	0	0	0	58.9	51.9	0	59.7	59.7	65	N	-	-	59.7	Y	N	N
A2-12-2	3	18.2	A2-12	-	0	0	0	58.9	51.9	0	59.7	59.7	65	N	-	-	59.7	Y	N	N
A2-12-2	4	21.2	A2-12	-	0	0	0	59	51.9	0	59.7	59.7	65	N	-	-	59.7	Y	N	N
A2-12-2	5	24.2	A2-12	-	0	0	0	59	51.9	0	59.8	59.8	65	N	-	-	59.8	Y	N	N
A2-12-2	6	27.2	A2-12	-	0	0	0	59	51.9	0	59.8	59.8	65	N	-	-	59.8	Y	N	N
A2-12-2	7	30.2	A2-12	-	0	0	0	59.1	51.8	0	59.9	59.9	65	N	-	-	59.9	Y	N	N
A2-12-2	8	33.2	A2-12	-	0	0	0	59.2	51.8	0	59.9	59.9	65	N	-	-	59.9	Y	N	N
A2-12-3	1	12.2	A2-12	-	0	0	0	61	51.8	0	61.5	61.5	65	N	-	-	61.5	Y	N	N
A2-12-3	2	15.2	A2-12	-	0	0	0	61	51.8	0	61.5	61.5	65	N	-	-	61.5	Y	N	N
A2-12-3	3	18.2	A2-12	-	0	0	0	61	51.8	0	61.5	61.5	65	N	-	-	61.5	Y	N	N
A2-12-3	4	21.2	A2-12	-	0	0	0	61	51.9	0	61.5	61.5	65	N	-	-	61.5	Y	N	N
A2-12-3	5	24.2	A2-12	-	0	0	0	61	52	0	61.5	61.5	65	N	-	-	61.5	Y	N	N
A2-12-3	6	27.2	A2-12	-	0	0	0	61.1	52.3	0	61.6	61.6	65	N	-	-	61.6	Y	N	N
A2-12-3	7	30.2	A2-12	-	0	0	0	61	52.3	0	61.6	61.6	65	N	-	-	61.6	Y	N	N
A2-12-3	8	33.2	A2-12	-	0	0	0	61.1	52.4	0	61.6	61.6	65	N	-	-	61.6	Y	N	N
A2-13-1	1	12.2	A2-13	-	0	18.5	58.7	17.7	60.7	0	62.8	62.8	65	N	-	-	62.8	Y	N	N
A2-13-1	2	15.2	A2-13	-	0	18.5	58.7	17.7	60.6	0	62.7	62.7	65	N	-	-	62.7	Y	N	N
A2-13-1	3	18.2	A2-13	-	0	18.5	58.7	17.7	60.5	0	62.7	62.7	65	N	-	-	62.7	Y	N	N
A2-13-1	4	21.2	A2-13	-	0	18.5	58.7	17.7	60.4	0	62.6	62.6	65	N	-	-	62.6	Y	N	N
A2-13-1	5	24.2	A2-13	-	0	18.5	58.7	17.7	60.1	0	62.5	62.5	65	N	-	-	62.5	Y	N	N
A2-13-1	6	27.2	A2-13	-	0	18.5	58.7	17.7	59.9	0	62.4	62.4	65	N	-	-	62.4	Y	N	N
A2-13-1	7	30.2	A2-13	-	0	18.5	58.7	17.7	59.7	0	62.2	62.2	65	N	-	-	62.2	Y	N	N
A2-13-1	8	33.2	A2-13	-	0	18.5	58.7	17.7	59.5	0	62.1	62.1	65	N	-	-	62.1	Y	N	N
A2-13-2	1	12.2	A2-13	-	21.8	6.8	61.7	58.5	53.8	0	63.8	63.8	65	N	-	-	42.0	Y	N	N
A2-13-2	2	15.2	A2-13	-	23.5	6.9	61.7	58.6	53.8	0	63.9	63.9	65	N	-	-	40.4	Y	N	N
A2-13-2	3	18.2	A2-13	-	26	7	61.7	58.7	53.8	0	63.9	63.9	65	N	-	-	37.9	Y	N	N
A2-13-2	4	21.2	A2-13	-	30.2	7	61.7	58.9	53.9	0	63.9	64.0	65	N	-	-	33.8	Y	N	N
A2-13-2	5	24.2	A2-13	-	32.4	7.1	61.7	59.2	54	0	64.1	64.1	65	N	-	-	31.7	Y	N	N
A2-13-2	6	27.2	A2-13	-	32.6	7.1	61.7	60	54.2	0	64.4	64.4	65	N	-	-	31.8	Y	N	N
A2-13-2	7	30.2	A2-13	-	32.8	7.2	61.7	60.8	54.6	0	64.7	64.7	65	N	-	-	31.9	Y	N	N
A2-13-2	8	33.2	A2-13	-	32.9	7.2	61.7	61.4	55	0	65	65.0	65	N	-	-	32.1	Y	N	N
A2-13-3	1	12.2	A2-13	-	28.1	6.7	55.9	58.5	53.3	0	61.1	61.1	65	N	-	-	33.0	Y	N	N
A2-13-3	2	15.2	A2-13	-	29.6	6.7	55.9	58.7	53.4	0	61.3	61.3	65	N	-	-	31.7	Y	N	N
A2-13-3	3	18.2	A2-13	-	31	6.8	55.9	58.9	53.4	0	61.4	61.4	65	N	-	-	30.4	Y	N	N
A2-13-3	4	21.2	A2-13	-	31.7	6.9	55.9	59.2	53.5	0	61.6	61.6	65	N	-	-	29.9	Y	N	N
A2-13-3	5	24.2	A2-13	-	32.2	6.9	55.9	60.1	53.9	0	62.2	62.2	65	N	-	-	30.0	Y	N	N
A2-13-3	6	27.2	A2-13	-	32.5	7	55.9	61.6	54.5	0	63.3	63.3	65	N	-	-	30.8	Y	N	N
A2-13-3	7	30.2	A2-13	-	32.7	7	55.8	63.2	55	0	64.4	64.4	65	N	-	-	31.7	Y	N	N
A2-13-3	8	33.2	A2-13	-	32.9	7.1	55.8	64.3	55.3	0	65.4	65.4	65	N	-	-	32.5	Y	N	N
A3-1-1	1	23.7	A3-1	-	0	0	59.4	62.8	0	0	64.5	64.5	65	N	-	-	64.5	Y	N	N
A3-1-1	2	26.7	A3-1	-	0	0	59.4	62.9	0	0	64.5	64.5	65	N	-	-	64.5	Y	N	N
A3-1-1	3	29.7	A3-1	-	0	0	59.4	62.9	0	0	64.5	64.5	65	N	-	-	64.5	Y	N	N
A3-1-1	4	32.7	A3-1	-	0	0	59.4	62.9	0	0	64.5	64.5	65	N	-	-	64.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-1-1	5	35.7	A3-1	-	0	0	59.4	62.9	0	0	64.5	64.5	65	N	-	-	64.5	Y	N	N
A3-1-1	6	38.7	A3-1	-	0	0	59.4	62.9	0	0	64.5	64.5	65	N	-	-	64.5	Y	N	N
A3-1-1	7	41.7	A3-1	-	0	0	59.4	63	0	0	64.6	64.6	65	N	-	-	64.6	Y	N	N
A3-1-1	8	44.7	A3-1	-	0	0	59.4	63.2	0	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
A3-1-2	1	23.7	A3-1	-	0	0	0	42.6	54.9	0	55.2	55.2	65	N	-	-	55.2	Y	N	N
A3-1-2	2	26.7	A3-1	-	0	0	0	44.7	55	0	55.4	55.4	65	N	-	-	55.4	Y	N	N
A3-1-2	3	29.7	A3-1	-	0	0	0	47.3	55	0	55.7	55.7	65	N	-	-	55.7	Y	N	N
A3-1-2	4	32.7	A3-1	-	0	0	0	50.6	55	0	56.3	56.3	65	N	-	-	56.3	Y	N	N
A3-1-2	5	35.7	A3-1	-	0	0	0	54.9	55	0	58	58.0	65	N	-	-	58.0	Y	N	N
A3-1-2	6	38.7	A3-1	-	0	0	0	60.8	55.1	0	61.9	61.9	65	N	-	-	61.9	Y	N	N
A3-1-2	7	41.7	A3-1	-	0	0	0	64	55.2	0	64.5	64.5	65	N	-	-	64.5	Y	N	N
A3-1-2	8	44.7	A3-1	-	0	0	0	65	55.4	0	65.4	65.4	65	N	-	-	65.4	Y	N	N
A3-2-1	1	23.2	A3-2	-	0	0	31.8	58.4	56.3	0	60.5	60.5	65	N	-	-	60.5	Y	N	N
A3-2-1	2	26.2	A3-2	-	0	0	32.7	58.5	56.2	0	60.5	60.5	65	N	-	-	60.5	Y	N	N
A3-2-1	3	29.2	A3-2	-	0	0	33.8	58.7	56.3	0	60.7	60.7	65	N	-	-	60.7	Y	N	N
A3-2-1	4	32.2	A3-2	-	0	0	35	59.2	56.3	0	61	61.0	65	N	-	-	61.0	Y	N	N
A3-2-1	5	35.2	A3-2	-	0	0	36.2	60.6	56.3	0	62	62.0	65	N	-	-	62.0	Y	N	N
A3-2-1	6	38.2	A3-2	-	0	0	37.6	62.9	56.2	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
A3-2-1	7	41.2	A3-2	-	0	0	39	63.9	56.3	0	64.6	64.6	65	N	-	-	64.6	Y	N	N
A3-2-1	8	44.2	A3-2	-	0	0	40.5	64.2	56.5	0	64.9	64.9	65	N	-	-	64.9	Y	N	N
A3-2-2	1	23.2	A3-2	-	0	0	0	31.2	63.7	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
A3-2-2	2	26.2	A3-2	-	0	0	0	31.2	63.7	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
A3-2-2	3	29.2	A3-2	-	0	0	0	31.2	63.6	0	63.6	63.6	65	N	-	-	63.6	Y	N	N
A3-2-2	4	32.2	A3-2	-	0	0	0	30.9	63.5	0	63.5	63.5	65	N	-	-	63.5	Y	N	N
A3-2-2	5	35.2	A3-2	-	0	0	0	31.1	63.4	0	63.4	63.4	65	N	-	-	63.4	Y	N	N
A3-2-2	6	38.2	A3-2	-	0	0	0	31.2	63.2	0	63.2	63.2	65	N	-	-	63.2	Y	N	N
A3-2-2	7	41.2	A3-2	-	0	0	0	31.2	63.1	0	63.1	63.1	65	N	-	-	63.1	Y	N	N
A3-2-2	8	44.2	A3-2	-	0	0	0	31.2	63	0	63	63.0	65	N	-	-	63.0	Y	N	N
E1-2-1	1	29.2	E1-2	-	0	0	0	59.7	18.5	0	59.7	59.7	65	N	-	-	59.7	Y	N	N
E1-2-1	2	32.2	E1-2	-	0	0	0	59.8	18.7	0	59.8	59.8	65	N	-	-	59.8	Y	N	N
E1-2-1	3	35.2	E1-2	-	0	0	0	59.8	19	0	59.8	59.8	65	N	-	-	59.8	Y	N	N
E1-2-1	4	38.2	E1-2	-	0	0	0	59.8	19.5	0	59.8	59.8	65	N	-	-	59.8	Y	N	N
E1-2-1	5	41.2	E1-2	-	0	0	0	59.9	20.2	0	59.9	59.9	65	N	-	-	59.9	Y	N	N
E1-2-1	6	44.2	E1-2	-	0	0	0	60.2	21.4	0	60.2	60.2	65	N	-	-	60.2	Y	N	N
E1-2-1	7	47.2	E1-2	-	0	0	0	60.9	23.4	0	60.9	60.9	65	N	-	-	60.9	Y	N	N
E1-2-1	8	50.2	E1-2	-	0	0	0	61.7	27.3	0	61.7	61.7	65	N	-	-	61.7	Y	N	N
E1-2-2	1	29.2	E1-2	-	0	0	0	55	25.9	0	55	55.0	65	N	-	-	55.0	Y	N	N
E1-2-2	2	32.2	E1-2	-	0	0	0	55.6	26.7	0	55.6	55.6	65	N	-	-	55.6	Y	N	N
E1-2-2	3	35.2	E1-2	-	0	0	0	56.8	27.5	0	56.8	56.8	65	N	-	-	56.8	Y	N	N
E1-2-2	4	38.2	E1-2	-	0	0	0	58.6	28.5	0	58.6	58.6	65	N	-	-	58.6	Y	N	N
E1-2-2	5	41.2	E1-2	-	0	0	0	60.2	29.7	0	60.2	60.2	65	N	-	-	60.2	Y	N	N
E1-2-2	6	44.2	E1-2	-	0	0	0	61.7	31.5	0	61.7	61.7	65	N	-	-	61.7	Y	N	N
E1-2-2	7	47.2	E1-2	-	0	0	0	63.3	34	0	63.3	63.3	65	N	-	-	63.3	Y	N	N
E1-2-2	8	50.2	E1-2	-	0	0	0	64.8	36.8	0	64.8	64.8	65	N	-	-	64.8	Y	N	N
E1-2-3	1	29.2	E1-2	-	0	0	59	62	9.1	0	63.8	63.8	65	N	-	-	63.8	Y	N	N
E1-2-3	2	32.2	E1-2	-	0	0	59	62	9.3	0	63.8	63.8	65	N	-	-	63.8	Y	N	N
E1-2-3	3	35.2	E1-2	-	0	0	59	62	9.4	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
E1-2-3	4	38.2	E1-2	-	0	0	59	61.9	9.6	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
E1-2-3	5	41.2	E1-2	-	0	0	59	61.8	9.7	0	63.7	63.7	65	N	-	-	63.7	Y	N	N
E1-2-3	6	44.2	E1-2	-	0	0	59	61.8	9.7	0	63.6	63.6	65	N	-	-	63.6	Y	N	N
E1-2-3	7	47.2	E1-2	-	0	0	59	61.7	9.9	0	63.5	63.5	65	N	-	-	63.5	Y	N	N
E1-2-3	8	50.2	E1-2	-	0	0	58.9	61.5	10	0	63.4	63.4	65	N	-	-	63.4	Y	N	N
E1-4-1	1	29.2	E1-4	-	0	18.9	0	64.8	0	0	64.8	64.8	65	N	-	-	64.8	Y	N	N
E1-4-1	2	32.2	E1-4	-	0	20	0	64.8	0	0	64.8	64.8	65	N	-	-	64.8	Y	N	N
E1-4-1	3	35.2	E1-4	-	0	21.2	0	64.8	0	0	64.8	64.8	65	N	-	-	64.8	Y	N	N
E1-4-1	4	38.2	E1-4	-	0	22.6	0	64.7	0	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
E1-4-1	5	41.2	E1-4	-	0	24.2	0	64.7	0	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
E1-4-1	6	44.2	E1-4	-	0	26	0	64.7	0	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
E1-4-1	7	47.2	E1-4	-	0	28.1	0	64.7	0	0	64.7	64.7	65	N	-	-	64.7	Y	N	N
E1-4-1	8	50.2	E1-4	-	0	30.5	0	64.6	0	0	64.6	64.6	65	N	-	-	64.6	Y	N	N
A1-2-1	1	32.5	A1-2	-	21.6	0	59.5	47.7	6.7	33.2	59.8	59.8	70	N	-	-	38.2	Y	N	N
A1-2-1	2	35.5	A1-2	-	21.6	0	64	53.4	8.1	34.3	64.4	64.4	70	N	-	-	42.8	Y	N	N
A1-2-1	3	38.5	A1-2	-	22.4	0	64.9	55.3	9.8	35.9	65.4	65.4	70	N	-	-	43.0	Y	N	N
A1-2-1	4	41.5	A1-2	-	24.1	0	65.4	56	11.8	37.8	65.9	65.9	70	N	-	-	41.8	Y	N	N
A1-2-1	5	44.5	A1-2	-	26.4	0	65.7	56.6	13.9	40	66.2	66.2	70	N	-	-	39.8	Y	N	N
A1-2-1	6	47.5	A1-2	-	29.4	0	65.9	56.9	16.4	42.6	66.4	66.4	70	N	-	-	37.0	Y	N	N
A1-2-1	7	50.5	A1-2	-	33.5	0	66	57.2	18.9	45.3	66.5	66.5	70	N	-	-	33.0	Y	N	N
A1-2-1	8	53.5	A1-2	-	38.3	0	66	57.5	21.1	47.4	66.7	66.7	70	N	-	-	28.4	Y	N	N
A1-2-1	9	56.5	A1-2	-	43.8	0	66.1	57.6	23.7	49.5	66.7	66.7	70	N	-	-	22.9	Y	N	N
A1-2-1	10	59.5	A1-2	-	47.6	0	66.1	57.6	27.1	51.9	66.8	66.9	70	N	-	-	19.3	Y	N	N
A1-2-1	11	62.5	A1-2	-	48.9	0	66.2	57.8	30.3	53.4	66.9	67.0	70	N	-	-	18.1	Y	N	N
A1-2-1	12	65.5	A1-2	-	49.3	0	66.3	57.8	32.4	54.2	67.1	67.1	70	N	-	-	17.8	Y	N	N
A1-2-1	13	68.5	A1-2	-	49.6	0	66.6	57.9	33.1	54.8	67.4	67.4	70	N	-	-	17.8	Y	N	N
A1-2-1	14	71.5	A1-2	-	49.8	0	67.2	58	33.3	55.3	67.9	68.0	70	N	-	-	18.2	Y	N	N
A1-2-1	15	74.5	A1-2	-	50	0	67.8	58	33.5	55.8	68.5	68.5	70	N	-	-	18.5	Y	N	N
A1-2-1	16	77.5	A1-2	-	50.1	0	68.3	58.1	33.6	56.2	68.9	69.0	70	N	-	-	18.9	Y	N	N
A1-2-1	17	80.5	A1-2	-	50.3	0	68.6	58.2	33.7	56.6	69.2	69.3	70	N	-	-	19.0	Y	N	N
A1-2-1	18	83.5	A1-2	-	50.3	0	68.8	58.4	33.8	56.9	69.4	69.5	70	N	-	-	19.2	Y	N	N
A1-2-1	19	86.5	A1-2	-	50.5	0	68.9	58.5	33.8	57.2	69.6	69.6	70	N	-	-	19.1	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-1	20	89.5	A1-2	-	50.7	0	69	58.7	33.9	57.4	69.6	69.7	70	N	-	-	19.0	Y	N	N
A1-2-1	21	92.5	A1-2	-	50.8	0	69	58.8	33.9	57.6	69.7	69.8	70	N	-	-	19.0	Y	N	N
A1-2-1	22	95.5	A1-2	-	51	0	69	59	33.9	57.8	69.7	69.8	70	N	-	-	18.8	Y	N	N
A1-2-1	23	98.5	A1-2	-	51	0	69	59.1	33.9	58.1	69.7	69.8	70	N	-	-	18.8	Y	N	N
A1-2-1	24	101.5	A1-2	-	51.1	0	68.9	59.2	34	58.2	69.7	69.8	70	N	-	-	18.7	Y	N	N
A1-2-1	25	104.5	A1-2	-	51.1	0	68.9	59.3	34.1	58.4	69.7	69.7	70	N	-	-	18.6	Y	N	N
A1-2-1	26	107.5	A1-2	-	51.1	0	68.8	59.3	34	58.6	69.7	69.7	70	N	-	-	18.6	Y	N	N
A1-2-1	27	110.5	A1-2	-	51.1	0	68.8	59.4	34.1	58.7	69.6	69.7	70	N	-	-	18.6	Y	N	N
A1-2-1	28	113.5	A1-2	-	51.1	0	68.8	59.5	34.1	58.8	69.6	69.7	70	N	-	-	18.6	Y	N	N
A1-2-1	29	116.5	A1-2	-	51.2	0	68.7	59.7	34.1	59	69.6	69.7	70	N	-	-	18.5	Y	N	N
A1-2-1	30	119.5	A1-2	-	51.2	0	68.6	59.7	34.1	59.1	69.6	69.6	70	N	-	-	18.4	Y	N	N
A1-2-1	31	122.5	A1-2	-	51.1	0	68.6	59.9	34.1	59.2	69.6	69.6	70	N	-	-	18.5	Y	N	N
A1-2-1	32	125.5	A1-2	-	51.1	0	68.5	60	34.2	59.3	69.5	69.6	70	N	-	-	18.5	Y	N	N
A1-2-1	33	128.5	A1-2	-	51.1	0	68.5	60.2	34.2	59.5	69.5	69.6	70	N	-	-	18.5	Y	N	N
A1-2-1	34	131.5	A1-2	-	51	0	68.4	60.3	34.2	59.6	69.5	69.6	70	N	-	-	18.6	Y	N	N
A1-2-2	1	32.5	A1-2	-	21.4	0	56.9	48.1	6.8	34.3	57.4	57.4	70	N	-	-	36.0	Y	N	N
A1-2-2	2	35.5	A1-2	-	21.5	0	62.1	53.5	8.4	35.5	62.7	62.7	70	N	-	-	41.2	Y	N	N
A1-2-2	3	38.5	A1-2	-	22.4	0	63.3	55.1	10	37.2	63.9	63.9	70	N	-	-	41.5	Y	N	N
A1-2-2	4	41.5	A1-2	-	24.1	0	63.8	56	11.9	39.1	64.5	64.5	70	N	-	-	40.4	Y	N	N
A1-2-2	5	44.5	A1-2	-	26.4	0	64.2	56.7	14	41.3	64.9	64.9	70	N	-	-	38.5	Y	N	N
A1-2-2	6	47.5	A1-2	-	29.5	0	64.4	57	16.4	43.8	65.1	65.1	70	N	-	-	35.6	Y	N	N
A1-2-2	7	50.5	A1-2	-	33.6	0	64.5	57.4	18.7	46.5	65.4	65.4	70	N	-	-	31.8	Y	N	N
A1-2-2	8	53.5	A1-2	-	38.2	0	64.6	57.7	20.8	48.4	65.5	65.5	70	N	-	-	27.3	Y	N	N
A1-2-2	9	56.5	A1-2	-	43.7	0	64.7	57.8	23.2	50.5	65.6	65.6	70	N	-	-	21.9	Y	N	N
A1-2-2	10	59.5	A1-2	-	47.8	0	64.7	57.8	26.2	52.8	65.8	65.8	70	N	-	-	18.0	Y	N	N
A1-2-2	11	62.5	A1-2	-	48.9	0	64.8	57.9	29.9	54.5	66	66.0	70	N	-	-	17.1	Y	N	N
A1-2-2	12	65.5	A1-2	-	49.4	0	65	57.9	32.1	55.3	66.2	66.3	70	N	-	-	16.9	Y	N	N
A1-2-2	13	68.5	A1-2	-	49.6	0	65.3	58	33	55.9	66.4	66.5	70	N	-	-	16.9	Y	N	N
A1-2-2	14	71.5	A1-2	-	49.8	0	65.9	58.1	33.4	56.3	67	67.0	70	N	-	-	17.2	Y	N	N
A1-2-2	15	74.5	A1-2	-	50	0	66.7	58.2	33.4	56.8	67.6	67.7	70	N	-	-	17.7	Y	N	N
A1-2-2	16	77.5	A1-2	-	50.1	0	67.3	58.2	33.6	57.2	68.2	68.3	70	N	-	-	18.2	Y	N	N
A1-2-2	17	80.5	A1-2	-	50.3	0	67.9	58.4	33.6	57.6	68.7	68.7	70	N	-	-	18.4	Y	N	N
A1-2-2	18	83.5	A1-2	-	50.4	0	68.2	58.5	33.8	57.9	69	69.0	70	N	-	-	18.6	Y	N	N
A1-2-2	19	86.5	A1-2	-	50.6	0	68.3	58.6	33.8	58.1	69.1	69.2	70	N	-	-	18.6	Y	N	N
A1-2-2	20	89.5	A1-2	-	50.7	0	68.5	58.8	33.9	58.3	69.3	69.3	70	N	-	-	18.6	Y	N	N
A1-2-2	21	92.5	A1-2	-	50.7	0	68.5	59	33.9	58.6	69.4	69.4	70	N	-	-	18.7	Y	N	N
A1-2-2	22	95.5	A1-2	-	50.8	0	68.5	59.1	34	58.8	69.4	69.4	70	N	-	-	18.6	Y	N	N
A1-2-2	23	98.5	A1-2	-	50.8	0	68.5	59.2	33.9	59	69.4	69.5	70	N	-	-	18.7	Y	N	N
A1-2-2	24	101.5	A1-2	-	50.9	0	68.5	59.3	34	59.2	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-2	25	104.5	A1-2	-	50.9	0	68.4	59.4	34	59.4	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-2	26	107.5	A1-2	-	50.9	0	68.4	59.5	34.1	59.6	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-2	27	110.5	A1-2	-	50.9	0	68.4	59.6	34.1	59.7	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-2	28	113.5	A1-2	-	50.9	0	68.3	59.7	34.1	59.9	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-2	29	116.5	A1-2	-	50.9	0	68.3	59.8	34.1	60	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-2	30	119.5	A1-2	-	50.9	0	68.2	59.9	34.1	60.1	69.4	69.4	70	N	-	-	18.5	Y	N	N
A1-2-2	31	122.5	A1-2	-	50.9	0	68.2	60	34.1	60.3	69.4	69.4	70	N	-	-	18.5	Y	N	N
A1-2-2	32	125.5	A1-2	-	50.9	0	68.1	60.2	34.2	60.3	69.4	69.4	70	N	-	-	18.5	Y	N	N
A1-2-2	33	128.5	A1-2	-	50.9	0	68.1	60.3	34.2	60.5	69.4	69.4	70	N	-	-	18.5	Y	N	N
A1-2-2	34	131.5	A1-2	-	50.9	0	68	60.5	34.2	60.6	69.4	69.4	70	N	-	-	18.5	Y	N	N
A1-2-3	1	32.5	A1-2	-	20.8	0	55.8	49.5	7.1	34.5	56.7	56.7	70	N	-	-	35.9	Y	N	N
A1-2-3	2	35.5	A1-2	-	20.8	0	61.1	53.9	8.5	35.8	61.9	61.9	70	N	-	-	41.1	Y	N	N
A1-2-3	3	38.5	A1-2	-	22.1	0	62.6	55.1	10.2	37.4	63.3	63.3	70	N	-	-	41.2	Y	N	N
A1-2-3	4	41.5	A1-2	-	23.9	0	63.2	56.2	12	39.3	64	64.0	70	N	-	-	40.1	Y	N	N
A1-2-3	5	44.5	A1-2	-	26.2	0	63.6	56.8	14.2	41.4	64.4	64.4	70	N	-	-	38.2	Y	N	N
A1-2-3	6	47.5	A1-2	-	29.2	0	63.8	57.3	16.5	44	64.7	64.7	70	N	-	-	35.5	Y	N	N
A1-2-3	7	50.5	A1-2	-	33.2	0	64	57.7	18.5	46.5	64.9	64.9	70	N	-	-	31.7	Y	N	N
A1-2-3	8	53.5	A1-2	-	37.8	0	64.1	57.9	20.5	48.5	65.1	65.1	70	N	-	-	27.3	Y	N	N
A1-2-3	9	56.5	A1-2	-	43.4	0	64.2	57.9	22.8	50.6	65.2	65.3	70	N	-	-	21.9	Y	N	N
A1-2-3	10	59.5	A1-2	-	47.3	0	64.2	58	25.4	52.8	65.4	65.5	70	N	-	-	18.2	Y	N	N
A1-2-3	11	62.5	A1-2	-	48.1	0	64.4	58.1	28.8	54.7	65.7	65.7	70	N	-	-	17.6	Y	N	N
A1-2-3	12	65.5	A1-2	-	48.5	0	64.6	58.2	31.6	55.5	65.9	65.9	70	N	-	-	17.4	Y	N	N
A1-2-3	13	68.5	A1-2	-	48.9	0	64.9	58.2	32.8	55.9	66.2	66.2	70	N	-	-	17.3	Y	N	N
A1-2-3	14	71.5	A1-2	-	49.1	0	65.4	58.2	33.2	56.4	66.6	66.7	70	N	-	-	17.6	Y	N	N
A1-2-3	15	74.5	A1-2	-	49.3	0	66.1	58.4	33.4	56.9	67.2	67.3	70	N	-	-	18.0	Y	N	N
A1-2-3	16	77.5	A1-2	-	49.5	0	66.8	58.5	33.5	57.3	67.8	67.9	70	N	-	-	18.4	Y	N	N
A1-2-3	17	80.5	A1-2	-	49.7	0	67.4	58.6	33.6	57.7	68.3	68.4	70	N	-	-	18.7	Y	N	N
A1-2-3	18	83.5	A1-2	-	49.8	0	67.9	58.7	33.7	58	68.8	68.8	70	N	-	-	19.0	Y	N	N
A1-2-3	19	86.5	A1-2	-	50	0	68.1	58.9	33.8	58.2	69	69.1	70	N	-	-	19.1	Y	N	N
A1-2-3	20	89.5	A1-2	-	50.1	0	68.3	59.1	33.9	58.5	69.2	69.2	70	N	-	-	19.1	Y	N	N
A1-2-3	21	92.5	A1-2	-	50.2	0	68.3	59.2	33.9	58.6	69.2	69.3	70	N	-	-	19.1	Y	N	N
A1-2-3	22	95.5	A1-2	-	50.3	0	68.4	59.4	33.9	58.9	69.3	69.3	70	N	-	-	19.0	Y	N	N
A1-2-3	23	98.5	A1-2	-	50.4	0	68.4	59.4	34	59.1	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	24	101.5	A1-2	-	50.4	0	68.4	59.5	33.9	59.2	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	25	104.5	A1-2	-	50.5	0	68.4	59.6	34	59.4	69.4	69.4	70	N	-	-	18.9	Y	N	N
A1-2-3	26	107.5	A1-2	-	50.4	0	68.3	59.7	34	59.6	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	27	110.5	A1-2	-	50.4	0	68.3	59.8	34.1	59.8	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	28	113.5	A1-2	-	50.4	0	68.2	59.9	34.1	60	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	29	116.5	A1-2	-	50.5	0	68.2	60	34.1	60.1	69.4	69.4	70	N	-	-	18.9	Y	N	N
A1-2-3	30	119.5	A1-2	-	50.5	0	68.1	60.1	34.1	60.1	69.3	69.4	70	N	-	-	18.9	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-3	31	122.5	A1-2	-	50.4	0	68.1	60.2	34.1	60.3	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	32	125.5	A1-2	-	50.4	0	68.1	60.4	34.1	60.4	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-3	33	128.5	A1-2	-	50.3	0	68	60.5	34.1	60.5	69.3	69.4	70	N	-	-	19.1	Y	N	N
A1-2-3	34	131.5	A1-2	-	50.4	0	67.9	60.6	34.2	60.7	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-4	1	32.5	A1-2	-	20.9	0	55.1	51.1	6.5	34.6	56.6	56.6	70	N	-	-	35.7	Y	N	N
A1-2-4	2	35.5	A1-2	-	20.9	0	60.5	54.4	7.9	35.9	61.4	61.4	70	N	-	-	40.5	Y	N	N
A1-2-4	3	38.5	A1-2	-	22.2	0	62.2	55.3	9.6	37.5	63	63.0	70	N	-	-	40.8	Y	N	N
A1-2-4	4	41.5	A1-2	-	24	0	62.9	56.4	11.5	39.3	63.8	63.8	70	N	-	-	39.8	Y	N	N
A1-2-4	5	44.5	A1-2	-	26.3	0	63.2	57.1	13.5	41.5	64.2	64.2	70	N	-	-	37.9	Y	N	N
A1-2-4	6	47.5	A1-2	-	29.3	0	63.5	57.4	15.8	44	64.5	64.5	70	N	-	-	35.2	Y	N	N
A1-2-4	7	50.5	A1-2	-	33.3	0	63.6	57.8	17.7	46.5	64.7	64.7	70	N	-	-	31.4	Y	N	N
A1-2-4	8	53.5	A1-2	-	37.7	0	63.8	58	19.6	48.5	64.9	64.9	70	N	-	-	27.2	Y	N	N
A1-2-4	9	56.5	A1-2	-	43.2	0	63.8	58.1	21.7	50.7	65	65.1	70	N	-	-	21.9	Y	N	N
A1-2-4	10	59.5	A1-2	-	47.4	0	64	58.1	24.3	52.9	65.2	65.3	70	N	-	-	17.9	Y	N	N
A1-2-4	11	62.5	A1-2	-	48.2	0	64.1	58.2	27.5	54.8	65.5	65.6	70	N	-	-	17.4	Y	N	N
A1-2-4	12	65.5	A1-2	-	48.6	0	64.3	58.3	30.4	55.6	65.7	65.8	70	N	-	-	17.2	Y	N	N
A1-2-4	13	68.5	A1-2	-	49	0	64.6	58.4	32.1	56	66	66.1	70	N	-	-	17.1	Y	N	N
A1-2-4	14	71.5	A1-2	-	49.2	0	65.1	58.4	32.7	56.5	66.4	66.5	70	N	-	-	17.3	Y	N	N
A1-2-4	15	74.5	A1-2	-	49.3	0	65.7	58.5	32.9	56.9	67	67.0	70	N	-	-	17.7	Y	N	N
A1-2-4	16	77.5	A1-2	-	49.5	0	66.5	58.6	33	57.3	67.6	67.6	70	N	-	-	18.1	Y	N	N
A1-2-4	17	80.5	A1-2	-	49.6	0	67.1	58.8	33.1	57.7	68.1	68.2	70	N	-	-	18.6	Y	N	N
A1-2-4	18	83.5	A1-2	-	49.8	0	67.6	58.9	33.1	58	68.5	68.6	70	N	-	-	18.8	Y	N	N
A1-2-4	19	86.5	A1-2	-	49.9	0	67.9	59.1	33.2	58.2	68.9	68.9	70	N	-	-	19.0	Y	N	N
A1-2-4	20	89.5	A1-2	-	50.1	0	68.1	59.3	33.3	58.5	69	69.1	70	N	-	-	19.0	Y	N	N
A1-2-4	21	92.5	A1-2	-	50.2	0	68.2	59.4	33.3	58.7	69.2	69.2	70	N	-	-	19.0	Y	N	N
A1-2-4	22	95.5	A1-2	-	50.3	0	68.2	59.5	33.4	58.9	69.2	69.3	70	N	-	-	19.0	Y	N	N
A1-2-4	23	98.5	A1-2	-	50.4	0	68.3	59.6	33.4	59.1	69.3	69.3	70	N	-	-	18.9	Y	N	N
A1-2-4	24	101.5	A1-2	-	50.3	0	68.3	59.7	33.4	59.3	69.3	69.3	70	N	-	-	19.0	Y	N	N
A1-2-4	25	104.5	A1-2	-	50.4	0	68.2	59.8	33.4	59.5	69.3	69.3	70	N	-	-	18.9	Y	N	N
A1-2-4	26	107.5	A1-2	-	50.4	0	68.2	59.9	33.4	59.6	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-4	27	110.5	A1-2	-	50.5	0	68.2	59.9	33.5	59.8	69.3	69.4	70	N	-	-	18.9	Y	N	N
A1-2-4	28	113.5	A1-2	-	50.4	0	68.1	60.1	33.5	60	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-4	29	116.5	A1-2	-	50.4	0	68.1	60.1	33.5	60.1	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-4	30	119.5	A1-2	-	50.5	0	68.1	60.2	33.5	60.2	69.3	69.4	70	N	-	-	18.9	Y	N	N
A1-2-4	31	122.5	A1-2	-	50.5	0	68	60.4	33.5	60.3	69.3	69.3	70	N	-	-	18.8	Y	N	N
A1-2-4	32	125.5	A1-2	-	50.4	0	68	60.6	33.5	60.4	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-4	33	128.5	A1-2	-	50.4	0	67.9	60.7	33.5	60.6	69.3	69.3	70	N	-	-	18.9	Y	N	N
A1-2-4	34	131.5	A1-2	-	50.4	0	67.9	60.8	33.5	60.7	69.3	69.3	70	N	-	-	18.9	Y	N	N
A1-2-5	1	32.5	A1-2	-	16.8	0	54.6	54.3	6.6	34.7	57.5	57.5	70	N	-	-	40.7	Y	N	N
A1-2-5	2	35.5	A1-2	-	17.1	0	59.7	54.7	8.1	36	60.9	60.9	70	N	-	-	43.8	Y	N	N
A1-2-5	3	38.5	A1-2	-	18	0	61.8	55.5	9.7	37.6	62.7	62.7	70	N	-	-	44.7	Y	N	N
A1-2-5	4	41.5	A1-2	-	19.6	0	62.5	56.6	11.5	39.5	63.5	63.5	70	N	-	-	43.9	Y	N	N
A1-2-5	5	44.5	A1-2	-	21.9	0	62.9	57.2	13.6	41.6	64	64.0	70	N	-	-	42.1	Y	N	N
A1-2-5	6	47.5	A1-2	-	24.7	0	63.2	57.6	15.7	44.1	64.3	64.3	70	N	-	-	39.6	Y	N	N
A1-2-5	7	50.5	A1-2	-	28.2	0	63.4	58	17.5	46.6	64.5	64.5	70	N	-	-	36.3	Y	N	N
A1-2-5	8	53.5	A1-2	-	31.3	0	63.5	58.2	19.3	48.6	64.7	64.7	70	N	-	-	33.4	Y	N	N
A1-2-5	9	56.5	A1-2	-	35.4	0	63.6	58.2	21.3	50.8	64.9	64.9	70	N	-	-	29.5	Y	N	N
A1-2-5	10	59.5	A1-2	-	39.8	0	63.7	58.2	23.7	53.2	65.1	65.1	70	N	-	-	25.3	Y	N	N
A1-2-5	11	62.5	A1-2	-	41.8	0	63.9	58.3	26.8	55	65.3	65.4	70	N	-	-	23.6	Y	N	N
A1-2-5	12	65.5	A1-2	-	42.7	0	64	58.5	29.7	55.6	65.6	65.6	70	N	-	-	22.9	Y	N	N
A1-2-5	13	68.5	A1-2	-	43.3	0	64.3	58.5	31.7	56.1	65.8	65.8	70	N	-	-	22.5	Y	N	N
A1-2-5	14	71.5	A1-2	-	43.8	0	64.7	58.6	32.6	56.6	66.2	66.2	70	N	-	-	22.4	Y	N	N
A1-2-5	15	74.5	A1-2	-	44.2	0	65.3	58.7	32.9	57.1	66.7	66.7	70	N	-	-	22.5	Y	N	N
A1-2-5	16	77.5	A1-2	-	44.7	0	66	58.8	33.1	57.4	67.2	67.2	70	N	-	-	22.5	Y	N	N
A1-2-5	17	80.5	A1-2	-	45	0	66.7	58.9	33.1	57.8	67.8	67.8	70	N	-	-	22.8	Y	N	N
A1-2-5	18	83.5	A1-2	-	45.4	0	67.2	59	33.1	58	68.2	68.3	70	N	-	-	22.9	Y	N	N
A1-2-5	19	86.5	A1-2	-	45.7	0	67.6	59.2	33.2	58.3	68.6	68.6	70	N	-	-	22.9	Y	N	N
A1-2-5	20	89.5	A1-2	-	46	0	67.9	59.4	33.2	58.5	68.9	68.9	70	N	-	-	22.9	Y	N	N
A1-2-5	21	92.5	A1-2	-	46.1	0	68	59.6	33.3	58.7	69	69.0	70	N	-	-	22.9	Y	N	N
A1-2-5	22	95.5	A1-2	-	46.2	0	68	59.7	33.3	59	69.1	69.1	70	N	-	-	22.9	Y	N	N
A1-2-5	23	98.5	A1-2	-	46.3	0	68.1	59.8	33.4	59.2	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-5	24	101.5	A1-2	-	46.3	0	68.1	59.9	33.4	59.3	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-5	25	104.5	A1-2	-	46.4	0	68.1	59.9	33.4	59.5	69.2	69.2	70	N	-	-	22.8	Y	N	N
A1-2-5	26	107.5	A1-2	-	46.4	0	68.1	60	33.4	59.7	69.2	69.3	70	N	-	-	22.9	Y	N	N
A1-2-5	27	110.5	A1-2	-	46.3	0	68.1	60.1	33.4	59.9	69.3	69.3	70	N	-	-	23.0	Y	N	N
A1-2-5	28	113.5	A1-2	-	46.3	0	68	60.2	33.4	60	69.3	69.3	70	N	-	-	23.0	Y	N	N
A1-2-5	29	116.5	A1-2	-	46.3	0	68	60.3	33.5	60.1	69.3	69.3	70	N	-	-	23.0	Y	N	N
A1-2-5	30	119.5	A1-2	-	46.3	0	68	60.4	33.5	60.2	69.3	69.3	70	N	-	-	23.0	Y	N	N
A1-2-5	31	122.5	A1-2	-	46.2	0	67.9	60.6	33.5	60.4	69.2	69.3	70	N	-	-	23.1	Y	N	N
A1-2-5	32	125.5	A1-2	-	46.1	0	67.9	60.7	33.4	60.5	69.3	69.3	70	N	-	-	23.2	Y	N	N
A1-2-5	33	128.5	A1-2	-	46.2	0	67.8	60.8	33.5	60.6	69.3	69.3	70	N	-	-	23.1	Y	N	N
A1-2-5	34	131.5	A1-2	-	46.1	0	67.8	60.9	33.5	60.8	69.3	69.3	70	N	-	-	23.2	Y	N	N
A1-2-6	1	32.5	A1-2	-	18.6	0	54.1	54.6	6.8	34.8	57.4	57.4	70	N	-	-	38.8	Y	N	N
A1-2-6	2	35.5	A1-2	-	18.8	0	58.9	54.9	8.3	36.1	60.4	60.4	70	N	-	-	41.6	Y	N	N
A1-2-6	3	38.5	A1-2	-	19.5	0	61.4	55.7	9.9	37.8	62.4	62.4	70	N	-	-	42.9	Y	N	N
A1-2-6	4	41.5	A1-2	-	20.7	0	62.2	56.7	11.6	39.6	63.3	63.3	70	N	-	-	42.6	Y	N	N
A1-2-6	5	44.5	A1-2	-	22.6	0	62.6	57.4	13.6	41.7	63.8	63.8	70	N	-	-	41.2	Y	N	N
A1-2-6	6	47.5	A1-2	-	25.2	0	62.9	57.8	15.7	44.1	64.1	64.1	70	N	-	-	38.9	Y	N	N
A1-2-6	7	50.5	A1-2	-	28.4	0	63.1	58.1	17.4	46.6	64.3	64.3	70	N	-	-	35.9	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-6	8	53.5	A1-2	-	31.4	0	63.2	58.3	19.1	48.7	64.5	64.5	70	N	-	-	33.1	Y	N	N
A1-2-6	9	56.5	A1-2	-	35.6	0	63.3	58.4	21	50.9	64.7	64.7	70	N	-	-	29.1	Y	N	N
A1-2-6	10	59.5	A1-2	-	40	0	63.4	58.5	23.4	53.5	65	65.0	70	N	-	-	25.0	Y	N	N
A1-2-6	11	62.5	A1-2	-	42	0	63.6	58.5	26.2	55.1	65.2	65.2	70	N	-	-	23.2	Y	N	N
A1-2-6	12	65.5	A1-2	-	42.8	0	63.8	58.6	29.2	55.7	65.4	65.5	70	N	-	-	22.7	Y	N	N
A1-2-6	13	68.5	A1-2	-	43.4	0	64.1	58.7	31.4	56.2	65.7	65.7	70	N	-	-	22.3	Y	N	N
A1-2-6	14	71.5	A1-2	-	43.9	0	64.5	58.8	32.4	56.7	66.1	66.1	70	N	-	-	22.2	Y	N	N
A1-2-6	15	74.5	A1-2	-	44.4	0	65	58.9	32.8	57.1	66.5	66.5	70	N	-	-	22.1	Y	N	N
A1-2-6	16	77.5	A1-2	-	44.7	0	65.6	59	33	57.5	67	67.0	70	N	-	-	22.3	Y	N	N
A1-2-6	17	80.5	A1-2	-	45.1	0	66.3	59.1	33.1	57.8	67.5	67.6	70	N	-	-	22.5	Y	N	N
A1-2-6	18	83.5	A1-2	-	45.4	0	66.9	59.3	33.1	58.1	68	68.1	70	N	-	-	22.7	Y	N	N
A1-2-6	19	86.5	A1-2	-	45.8	0	67.2	59.5	33.2	58.4	68.4	68.4	70	N	-	-	22.6	Y	N	N
A1-2-6	20	89.5	A1-2	-	46	0	67.6	59.7	33.2	58.6	68.7	68.7	70	N	-	-	22.7	Y	N	N
A1-2-6	21	92.5	A1-2	-	46.2	0	67.8	59.8	33.3	58.8	68.9	68.9	70	N	-	-	22.7	Y	N	N
A1-2-6	22	95.5	A1-2	-	46.2	0	67.9	59.9	33.3	59	69	69.0	70	N	-	-	22.8	Y	N	N
A1-2-6	23	98.5	A1-2	-	46.4	0	67.9	60	33.4	59.2	69	69.1	70	N	-	-	22.7	Y	N	N
A1-2-6	24	101.5	A1-2	-	46.3	0	68	60.1	33.4	59.4	69.1	69.1	70	N	-	-	22.8	Y	N	N
A1-2-6	25	104.5	A1-2	-	46.3	0	68	60.1	33.4	59.6	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-6	26	107.5	A1-2	-	46.4	0	68	60.2	33.4	59.8	69.2	69.2	70	N	-	-	22.8	Y	N	N
A1-2-6	27	110.5	A1-2	-	46.3	0	68	60.3	33.4	59.9	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-6	28	113.5	A1-2	-	46.3	0	67.9	60.4	33.4	60	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-6	29	116.5	A1-2	-	46.3	0	67.9	60.5	33.4	60.1	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-6	30	119.5	A1-2	-	46.3	0	67.9	60.6	33.5	60.3	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-6	31	122.5	A1-2	-	46.3	0	67.8	60.8	33.5	60.4	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-6	32	125.5	A1-2	-	46.2	0	67.8	60.9	33.4	60.5	69.2	69.2	70	N	-	-	23.0	Y	N	N
A1-2-6	33	128.5	A1-2	-	46.2	0	67.7	61	33.5	60.7	69.2	69.2	70	N	-	-	23.0	Y	N	N
A1-2-6	34	131.5	A1-2	-	46.3	0	67.7	61.1	33.5	60.9	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-7	1	32.5	A1-2	-	16.9	0	53.7	55.1	6.3	45.1	57.7	57.7	70	N	-	-	40.8	Y	N	N
A1-2-7	2	35.5	A1-2	-	17.3	0	58.2	55.3	7.7	46	60.1	60.1	70	N	-	-	42.8	Y	N	N
A1-2-7	3	38.5	A1-2	-	18.2	0	61	55.8	9.3	46.7	62.3	62.3	70	N	-	-	44.1	Y	N	N
A1-2-7	4	41.5	A1-2	-	19.9	0	62	56.7	11.1	47.5	63.2	63.2	70	N	-	-	43.3	Y	N	N
A1-2-7	5	44.5	A1-2	-	22.1	0	62.4	57.7	12.9	48.3	63.8	63.8	70	N	-	-	41.7	Y	N	N
A1-2-7	6	47.5	A1-2	-	24.9	0	62.7	58.2	14.9	49.4	64.2	64.2	70	N	-	-	39.3	Y	N	N
A1-2-7	7	50.5	A1-2	-	28.2	0	62.9	58.4	16.4	50.7	64.4	64.4	70	N	-	-	36.2	Y	N	N
A1-2-7	8	53.5	A1-2	-	31.5	0	63.1	58.6	18	52.1	64.7	64.7	70	N	-	-	33.2	Y	N	N
A1-2-7	9	56.5	A1-2	-	35.9	0	63.2	58.7	19.7	53.7	64.9	64.9	70	N	-	-	29.0	Y	N	N
A1-2-7	10	59.5	A1-2	-	40.5	0	63.3	58.8	21.8	55.6	65.2	65.2	70	N	-	-	24.7	Y	N	N
A1-2-7	11	62.5	A1-2	-	42.3	0	63.5	58.9	24.3	56.8	65.4	65.4	70	N	-	-	23.1	Y	N	N
A1-2-7	12	65.5	A1-2	-	43.1	0	63.6	59	27.5	57.3	65.6	65.6	70	N	-	-	22.5	Y	N	N
A1-2-7	13	68.5	A1-2	-	43.7	0	63.9	59.1	30	57.8	65.9	65.9	70	N	-	-	22.2	Y	N	N
A1-2-7	14	71.5	A1-2	-	44.1	0	64.4	59.2	31.6	58.2	66.3	66.3	70	N	-	-	22.2	Y	N	N
A1-2-7	15	74.5	A1-2	-	44.6	0	64.8	59.3	32.3	58.6	66.7	66.7	70	N	-	-	22.1	Y	N	N
A1-2-7	16	77.5	A1-2	-	44.9	0	65.3	59.5	32.6	58.9	67	67.0	70	N	-	-	22.1	Y	N	N
A1-2-7	17	80.5	A1-2	-	45.3	0	65.8	59.6	32.7	59.2	67.5	67.5	70	N	-	-	22.2	Y	N	N
A1-2-7	18	83.5	A1-2	-	45.7	0	66.4	59.8	32.7	59.5	67.9	67.9	70	N	-	-	22.2	Y	N	N
A1-2-7	19	86.5	A1-2	-	45.9	0	66.8	59.9	32.6	59.8	68.3	68.3	70	N	-	-	22.4	Y	N	N
A1-2-7	20	89.5	A1-2	-	46.1	0	67.1	60.1	32.7	60	68.5	68.6	70	N	-	-	22.5	Y	N	N
A1-2-7	21	92.5	A1-2	-	46.2	0	67.4	60.2	32.7	60.3	68.8	68.8	70	N	-	-	22.6	Y	N	N
A1-2-7	22	95.5	A1-2	-	46.2	0	67.6	60.3	32.8	60.5	69	69.0	70	N	-	-	22.8	Y	N	N
A1-2-7	23	98.5	A1-2	-	46.3	0	67.7	60.4	32.8	60.7	69.1	69.1	70	N	-	-	22.8	Y	N	N
A1-2-7	24	101.5	A1-2	-	46.3	0	67.7	60.4	32.9	60.9	69.2	69.2	70	N	-	-	22.9	Y	N	N
A1-2-7	25	104.5	A1-2	-	46.3	0	67.8	60.5	32.9	61.1	69.3	69.3	70	N	-	-	23.0	Y	N	N
A1-2-7	26	107.5	A1-2	-	46.3	0	67.9	60.6	32.9	61.4	69.4	69.4	70	N	-	-	23.1	Y	N	N
A1-2-7	27	110.5	A1-2	-	46.3	0	67.8	60.7	32.9	61.7	69.4	69.4	70	N	-	-	23.1	Y	N	N
A1-2-7	28	113.5	A1-2	-	46.3	0	67.8	60.9	32.9	61.9	69.5	69.5	70	N	-	-	23.2	Y	N	N
A1-2-7	29	116.5	A1-2	-	46.2	0	67.8	60.9	32.9	61.9	69.4	69.5	70	N	-	-	23.3	Y	N	N
A1-2-7	30	119.5	A1-2	-	46.1	0	67.8	61	32.9	62	69.4	69.5	70	N	-	-	23.4	Y	N	N
A1-2-7	31	122.5	A1-2	-	46.1	0	67.7	61.1	32.9	62.2	69.5	69.5	70	N	-	-	23.4	Y	N	N
A1-2-7	32	125.5	A1-2	-	46.1	0	67.7	61.2	32.9	62.3	69.5	69.5	70	N	-	-	23.4	Y	N	N
A1-2-7	33	128.5	A1-2	-	46	0	67.6	61.3	32.8	62.5	69.5	69.5	70	N	-	-	23.5	Y	N	N
A1-2-7	34	131.5	A1-2	-	46	0	67.6	61.3	32.8	62.7	69.5	69.5	70	N	-	-	23.5	Y	N	N
A1-2-8	1	32.5	A1-2	-	21.7	0	53.7	55.4	6.4	45.4	57.9	57.9	70	N	-	-	36.2	Y	N	N
A1-2-8	2	35.5	A1-2	-	21.6	0	58	55.6	7.8	46.1	60.1	60.1	70	N	-	-	38.5	Y	N	N
A1-2-8	3	38.5	A1-2	-	22.5	0	61.1	56	9.4	46.9	62.4	62.4	70	N	-	-	39.9	Y	N	N
A1-2-8	4	41.5	A1-2	-	24.2	0	62.1	56.8	11.1	47.6	63.4	63.4	70	N	-	-	39.2	Y	N	N
A1-2-8	5	44.5	A1-2	-	26.6	0	62.6	57.9	13	48.5	64	64.0	70	N	-	-	37.4	Y	N	N
A1-2-8	6	47.5	A1-2	-	29.5	0	62.9	58.5	14.9	49.6	64.4	64.4	70	N	-	-	34.9	Y	N	N
A1-2-8	7	50.5	A1-2	-	33.5	0	63.1	58.7	16.3	50.8	64.6	64.6	70	N	-	-	31.1	Y	N	N
A1-2-8	8	53.5	A1-2	-	37.6	0	63.2	58.8	17.9	52.2	64.8	64.8	70	N	-	-	27.2	Y	N	N
A1-2-8	9	56.5	A1-2	-	42.9	0	63.3	58.9	19.6	53.8	65	65.0	70	N	-	-	22.1	Y	N	N
A1-2-8	10	59.5	A1-2	-	48.6	0	63.5	59	21.5	55.7	65.3	65.4	70	N	-	-	16.8	Y	N	N
A1-2-8	11	62.5	A1-2	-	49.7	0	63.6	59.1	23.9	56.8	65.6	65.7	70	N	-	-	16.0	Y	N	N
A1-2-8	12	65.5	A1-2	-	50.1	0	63.8	59.3	26.9	57.3	65.8	65.9	70	N	-	-	15.8	Y	N	N
A1-2-8	13	68.5	A1-2	-	50.3	0	64.1	59.4	29.7	57.8	66.1	66.2	70	N	-	-	15.9	Y	N	N
A1-2-8	14	71.5	A1-2	-	50.4	0	64.5	59.5	31.5	58.2	66.4	66.5	70	N	-	-	16.1	Y	N	N
A1-2-8	15	74.5	A1-2	-	50.6	0	64.9	59.6	32.2	58.6	66.8	66.9	70	N	-	-	16.3	Y	N	N
A1-2-8	16	77.5	A1-2	-	50.8	0	65.3	59.8	32.5	59	67.1	67.2	70	N	-	-	16.4	Y	N	N
A1-2-8	17	80.5	A1-2	-	50.9	0	65.7	59.9	32.6	59.3	67.4	67.5	70	N	-	-	16.6	Y	N	N
A1-2-8	18	83.5	A1-2	-	51	0	66.2	60.1	32.7	59.6	67.8	67.9	70	N	-	-	16.9	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-8	19	86.5	A1-2	-	51.1	0	66.6	60.2	32.7	59.8	68.2	68.3	70	N	-	-	17.2	Y	N	N
A1-2-8	20	89.5	A1-2	-	51.2	0	66.9	60.4	32.7	60	68.5	68.5	70	N	-	-	17.3	Y	N	N
A1-2-8	21	92.5	A1-2	-	51.2	0	67.2	60.5	32.7	60.2	68.7	68.8	70	N	-	-	17.6	Y	N	N
A1-2-8	22	95.5	A1-2	-	51.2	0	67.4	60.6	32.8	60.5	68.9	69.0	70	N	-	-	17.8	Y	N	N
A1-2-8	23	98.5	A1-2	-	51.2	0	67.6	60.6	32.8	60.7	69.1	69.1	70	N	-	-	17.9	Y	N	N
A1-2-8	24	101.5	A1-2	-	51.2	0	67.7	60.7	32.9	60.9	69.2	69.3	70	N	-	-	18.1	Y	N	N
A1-2-8	25	104.5	A1-2	-	51.2	0	67.8	60.8	32.9	61.2	69.3	69.3	70	N	-	-	18.1	Y	N	N
A1-2-8	26	107.5	A1-2	-	51.2	0	67.8	60.8	32.9	61.5	69.4	69.4	70	N	-	-	18.2	Y	N	N
A1-2-8	27	110.5	A1-2	-	51.2	0	67.8	60.9	32.8	61.7	69.4	69.5	70	N	-	-	18.3	Y	N	N
A1-2-8	28	113.5	A1-2	-	51.2	0	67.8	61	32.9	61.8	69.4	69.5	70	N	-	-	18.3	Y	N	N
A1-2-8	29	116.5	A1-2	-	51.1	0	67.8	61.1	32.9	61.9	69.4	69.5	70	N	-	-	18.4	Y	N	N
A1-2-8	30	119.5	A1-2	-	51.1	0	67.7	61.2	32.9	62	69.4	69.5	70	N	-	-	18.4	Y	N	N
A1-2-8	31	122.5	A1-2	-	51.1	0	67.7	61.2	32.9	62.2	69.5	69.5	70	N	-	-	18.4	Y	N	N
A1-2-8	32	125.5	A1-2	-	51	0	67.6	61.3	32.9	62.3	69.5	69.5	70	N	-	-	18.5	Y	N	N
A1-2-8	33	128.5	A1-2	-	51	0	67.6	61.4	32.9	62.6	69.5	69.6	70	N	-	-	18.6	Y	N	N
A1-2-8	34	131.5	A1-2	-	51	0	67.6	61.4	32.8	62.7	69.5	69.6	70	N	-	-	18.6	Y	N	N
A1-2-9	1	32.5	A1-2	-	21	0	53.5	55.7	6.5	45.5	58	58.0	70	N	-	-	37.0	Y	N	N
A1-2-9	2	35.5	A1-2	-	21.2	0	57.5	55.8	8	46.3	60	60.0	70	N	-	-	38.8	Y	N	N
A1-2-9	3	38.5	A1-2	-	22.1	0	60.7	56.2	9.6	47	62.1	62.1	70	N	-	-	40.0	Y	N	N
A1-2-9	4	41.5	A1-2	-	23.9	0	61.7	57	11.3	47.8	63.1	63.1	70	N	-	-	39.2	Y	N	N
A1-2-9	5	44.5	A1-2	-	26.2	0	62.2	58.1	13	48.7	63.8	63.8	70	N	-	-	37.6	Y	N	N
A1-2-9	6	47.5	A1-2	-	29.2	0	62.5	58.6	14.8	49.7	64.2	64.2	70	N	-	-	35.0	Y	N	N
A1-2-9	7	50.5	A1-2	-	33	0	62.8	58.9	16.2	50.9	64.5	64.5	70	N	-	-	31.5	Y	N	N
A1-2-9	8	53.5	A1-2	-	37.3	0	63	59	17.8	52.2	64.7	64.7	70	N	-	-	27.4	Y	N	N
A1-2-9	9	56.5	A1-2	-	43	0	63.1	59	19.3	53.9	64.9	64.9	70	N	-	-	21.9	Y	N	N
A1-2-9	10	59.5	A1-2	-	48.6	0	63.3	59.2	21.3	55.7	65.2	65.3	70	N	-	-	16.7	Y	N	N
A1-2-9	11	62.5	A1-2	-	49.1	0	63.4	59.3	23.5	56.8	65.5	65.6	70	N	-	-	16.5	Y	N	N
A1-2-9	12	65.5	A1-2	-	49.4	0	63.6	59.4	26.5	57.3	65.7	65.8	70	N	-	-	16.4	Y	N	N
A1-2-9	13	68.5	A1-2	-	49.6	0	63.9	59.5	29.3	57.8	65.9	66.0	70	N	-	-	16.4	Y	N	N
A1-2-9	14	71.5	A1-2	-	49.9	0	64.3	59.7	31.3	58.2	66.3	66.4	70	N	-	-	16.5	Y	N	N
A1-2-9	15	74.5	A1-2	-	49.9	0	64.7	59.8	32.1	58.6	66.6	66.7	70	N	-	-	16.8	Y	N	N
A1-2-9	16	77.5	A1-2	-	50.1	0	65	60	32.5	58.9	67	67.0	70	N	-	-	16.9	Y	N	N
A1-2-9	17	80.5	A1-2	-	50.2	0	65.4	60	32.6	59.2	67.3	67.3	70	N	-	-	17.1	Y	N	N
A1-2-9	18	83.5	A1-2	-	50.3	0	65.8	60.2	32.6	59.5	67.6	67.7	70	N	-	-	17.4	Y	N	N
A1-2-9	19	86.5	A1-2	-	50.5	0	66.1	60.4	32.7	59.8	67.9	68.0	70	N	-	-	17.5	Y	N	N
A1-2-9	20	89.5	A1-2	-	50.5	0	66.6	60.5	32.6	60	68.2	68.3	70	N	-	-	17.8	Y	N	N
A1-2-9	21	92.5	A1-2	-	50.5	0	66.8	60.6	32.7	60.3	68.5	68.5	70	N	-	-	18.0	Y	N	N
A1-2-9	22	95.5	A1-2	-	50.6	0	67	60.6	32.7	60.5	68.6	68.7	70	N	-	-	18.1	Y	N	N
A1-2-9	23	98.5	A1-2	-	50.6	0	67.3	60.7	32.8	60.7	68.9	68.9	70	N	-	-	18.3	Y	N	N
A1-2-9	24	101.5	A1-2	-	50.5	0	67.4	60.8	32.8	60.9	69	69.1	70	N	-	-	18.6	Y	N	N
A1-2-9	25	104.5	A1-2	-	50.6	0	67.5	60.8	32.8	61.1	69.1	69.2	70	N	-	-	18.6	Y	N	N
A1-2-9	26	107.5	A1-2	-	50.6	0	67.6	60.9	32.9	61.4	69.2	69.3	70	N	-	-	18.7	Y	N	N
A1-2-9	27	110.5	A1-2	-	50.6	0	67.6	61	32.8	61.7	69.3	69.3	70	N	-	-	18.7	Y	N	N
A1-2-9	28	113.5	A1-2	-	50.5	0	67.6	61	32.8	61.8	69.3	69.4	70	N	-	-	18.9	Y	N	N
A1-2-9	29	116.5	A1-2	-	50.5	0	67.6	61.1	32.8	61.8	69.3	69.4	70	N	-	-	18.9	Y	N	N
A1-2-9	30	119.5	A1-2	-	50.5	0	67.5	61.2	32.8	61.9	69.3	69.4	70	N	-	-	18.9	Y	N	N
A1-2-9	31	122.5	A1-2	-	50.4	0	67.5	61.3	32.8	62.1	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-9	32	125.5	A1-2	-	50.4	0	67.5	61.3	32.8	62.3	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-9	33	128.5	A1-2	-	50.4	0	67.4	61.4	32.8	62.5	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-9	34	131.5	A1-2	-	50.4	0	67.4	61.4	32.8	62.7	69.4	69.5	70	N	-	-	19.1	Y	N	N
A1-2-10	1	32.5	A1-2	-	20.9	0	53.4	55.3	6.7	45.6	57.7	57.7	70	N	-	-	36.8	Y	N	N
A1-2-10	2	35.5	A1-2	-	21.2	0	57.3	56	8	46.4	59.9	59.9	70	N	-	-	38.7	Y	N	N
A1-2-10	3	38.5	A1-2	-	22.2	0	60.4	56.4	9.6	47	62	62.0	70	N	-	-	39.8	Y	N	N
A1-2-10	4	41.5	A1-2	-	24	0	61.5	57.1	11.3	47.8	63	63.0	70	N	-	-	39.0	Y	N	N
A1-2-10	5	44.5	A1-2	-	26.4	0	62.1	58.2	13.1	48.6	63.7	63.7	70	N	-	-	37.3	Y	N	N
A1-2-10	6	47.5	A1-2	-	29.4	0	62.4	58.9	14.7	49.7	64.1	64.1	70	N	-	-	34.7	Y	N	N
A1-2-10	7	50.5	A1-2	-	33.1	0	62.6	59.1	16.2	50.9	64.4	64.4	70	N	-	-	31.3	Y	N	N
A1-2-10	8	53.5	A1-2	-	37.4	0	62.8	59.2	17.7	52.3	64.6	64.6	70	N	-	-	27.2	Y	N	N
A1-2-10	9	56.5	A1-2	-	43.4	0	63	59.2	19.4	53.9	64.9	64.9	70	N	-	-	21.5	Y	N	N
A1-2-10	10	59.5	A1-2	-	48.6	0	63.1	59.4	21.2	55.8	65.2	65.3	70	N	-	-	16.7	Y	N	N
A1-2-10	11	62.5	A1-2	-	49.2	0	63.3	59.5	23.5	56.8	65.5	65.6	70	N	-	-	16.4	Y	N	N
A1-2-10	12	65.5	A1-2	-	49.5	0	63.5	59.7	26.4	57.3	65.7	65.8	70	N	-	-	16.3	Y	N	N
A1-2-10	13	68.5	A1-2	-	49.7	0	63.8	59.8	29.2	57.8	66	66.1	70	N	-	-	16.4	Y	N	N
A1-2-10	14	71.5	A1-2	-	49.7	0	64.2	59.9	31.4	58.3	66.3	66.4	70	N	-	-	16.7	Y	N	N
A1-2-10	15	74.5	A1-2	-	50	0	64.6	60	32.1	58.6	66.6	66.7	70	N	-	-	16.7	Y	N	N
A1-2-10	16	77.5	A1-2	-	50.1	0	64.9	60.2	32.4	59	66.9	67.0	70	N	-	-	16.9	Y	N	N
A1-2-10	17	80.5	A1-2	-	50.3	0	65.2	60.3	32.5	59.2	67.2	67.3	70	N	-	-	17.0	Y	N	N
A1-2-10	18	83.5	A1-2	-	50.4	0	65.5	60.4	32.6	59.6	67.5	67.6	70	N	-	-	17.2	Y	N	N
A1-2-10	19	86.5	A1-2	-	50.4	0	65.9	60.6	32.7	59.8	67.8	67.8	70	N	-	-	17.4	Y	N	N
A1-2-10	20	89.5	A1-2	-	50.5	0	66.2	60.7	32.6	60	68.1	68.1	70	N	-	-	17.6	Y	N	N
A1-2-10	21	92.5	A1-2	-	50.6	0	66.6	60.8	32.7	60.2	68.3	68.4	70	N	-	-	17.8	Y	N	N
A1-2-10	22	95.5	A1-2	-	50.5	0	66.8	60.9	32.7	60.5	68.5	68.6	70	N	-	-	18.1	Y	N	N
A1-2-10	23	98.5	A1-2	-	50.6	0	67	60.9	32.7	60.7	68.7	68.8	70	N	-	-	18.2	Y	N	N
A1-2-10	24	101.5	A1-2	-	50.6	0	67.3	60.9	32.8	60.9	68.9	69.0	70	N	-	-	18.4	Y	N	N
A1-2-10	25	104.5	A1-2	-	50.6	0	67.4	61	32.8	61.2	69	69.1	70	N	-	-	18.5	Y	N	N
A1-2-10	26	107.5	A1-2	-	50.5	0	67.4	61	32.8	61.4	69.1	69.2	70	N	-	-	18.7	Y	N	N
A1-2-10	27	110.5	A1-2	-	50.6	0	67.4	61.2	32.8	61.7	69.2	69.3	70	N	-	-	18.7	Y	N	N
A1-2-10	28	113.5	A1-2	-	50.6	0	67.5	61.2	32.8	61.7	69.2	69.3	70	N	-	-	18.7	Y	N	N
A1-2-10	29	116.5	A1-2	-	50.6	0	67.5	61.2	32.8	61.8	69.3	69.3	70	N	-	-	18.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-10	30	119.5	A1-2	-	50.5	0	67.4	61.3	32.8	62	69.3	69.3	70	N	-	-	18.8	Y	N	N
A1-2-10	31	122.5	A1-2	-	50.5	0	67.4	61.4	32.8	62.1	69.3	69.3	70	N	-	-	18.8	Y	N	N
A1-2-10	32	125.5	A1-2	-	50.5	0	67.4	61.4	32.8	62.3	69.3	69.4	70	N	-	-	18.9	Y	N	N
A1-2-10	33	128.5	A1-2	-	50.4	0	67.3	61.4	32.8	62.6	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-10	34	131.5	A1-2	-	50.4	0	67.3	61.4	32.7	62.8	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-11	1	32.5	A1-2	-	21	0	53.3	55	6.7	45.8	57.5	57.5	70	N	-	-	36.5	Y	N	N
A1-2-11	2	35.5	A1-2	-	21.3	0	57.2	56.3	8.1	46.5	59.9	59.9	70	N	-	-	38.6	Y	N	N
A1-2-11	3	38.5	A1-2	-	22.3	0	60.2	56.6	9.6	47.2	61.9	61.9	70	N	-	-	39.6	Y	N	N
A1-2-11	4	41.5	A1-2	-	24.2	0	61.4	57.3	11.3	48	62.9	62.9	70	N	-	-	38.7	Y	N	N
A1-2-11	5	44.5	A1-2	-	26.5	0	61.9	58.3	13.1	48.9	63.6	63.6	70	N	-	-	37.1	Y	N	N
A1-2-11	6	47.5	A1-2	-	29.5	0	62.3	59	14.8	49.9	64.1	64.1	70	N	-	-	34.6	Y	N	N
A1-2-11	7	50.5	A1-2	-	33.3	0	62.5	59.2	16.1	51	64.4	64.4	70	N	-	-	31.1	Y	N	N
A1-2-11	8	53.5	A1-2	-	37.6	0	62.7	59.4	17.7	52.3	64.6	64.6	70	N	-	-	27.0	Y	N	N
A1-2-11	9	56.5	A1-2	-	43.9	0	62.9	59.5	19.5	54	64.9	64.9	70	N	-	-	21.0	Y	N	N
A1-2-11	10	59.5	A1-2	-	48.8	0	63	59.6	21.4	55.9	65.2	65.3	70	N	-	-	16.5	Y	N	N
A1-2-11	11	62.5	A1-2	-	49.2	0	63.2	59.7	23.8	56.9	65.5	65.6	70	N	-	-	16.4	Y	N	N
A1-2-11	12	65.5	A1-2	-	49.4	0	63.4	59.9	26.6	57.3	65.7	65.8	70	N	-	-	16.4	Y	N	N
A1-2-11	13	68.5	A1-2	-	49.7	0	63.7	60	29.5	57.8	66	66.1	70	N	-	-	16.4	Y	N	N
A1-2-11	14	71.5	A1-2	-	49.8	0	64.2	60	31.5	58.2	66.3	66.4	70	N	-	-	16.6	Y	N	N
A1-2-11	15	74.5	A1-2	-	50	0	64.5	60.2	32.2	58.7	66.6	66.7	70	N	-	-	16.7	Y	N	N
A1-2-11	16	77.5	A1-2	-	50	0	64.8	60.4	32.5	59	66.9	67.0	70	N	-	-	17.0	Y	N	N
A1-2-11	17	80.5	A1-2	-	50.2	0	65.1	60.5	32.6	59.3	67.2	67.3	70	N	-	-	17.1	Y	N	N
A1-2-11	18	83.5	A1-2	-	50.4	0	65.3	60.7	32.6	59.5	67.4	67.5	70	N	-	-	17.1	Y	N	N
A1-2-11	19	86.5	A1-2	-	50.4	0	65.6	60.8	32.7	59.8	67.7	67.7	70	N	-	-	17.3	Y	N	N
A1-2-11	20	89.5	A1-2	-	50.5	0	66	60.9	32.7	60	67.9	68.0	70	N	-	-	17.5	Y	N	N
A1-2-11	21	92.5	A1-2	-	50.6	0	66.3	60.9	32.6	60.3	68.2	68.3	70	N	-	-	17.7	Y	N	N
A1-2-11	22	95.5	A1-2	-	50.6	0	66.6	61	32.7	60.5	68.4	68.5	70	N	-	-	17.9	Y	N	N
A1-2-11	23	98.5	A1-2	-	50.6	0	66.8	61	32.7	60.7	68.6	68.7	70	N	-	-	18.1	Y	N	N
A1-2-11	24	101.5	A1-2	-	50.5	0	67	61.1	32.8	60.9	68.8	68.8	70	N	-	-	18.3	Y	N	N
A1-2-11	25	104.5	A1-2	-	50.5	0	67.2	61.1	32.8	61.2	68.9	69.0	70	N	-	-	18.5	Y	N	N
A1-2-11	26	107.5	A1-2	-	50.6	0	67.3	61.2	32.8	61.5	69.1	69.1	70	N	-	-	18.5	Y	N	N
A1-2-11	27	110.5	A1-2	-	50.6	0	67.3	61.3	32.9	61.7	69.1	69.2	70	N	-	-	18.6	Y	N	N
A1-2-11	28	113.5	A1-2	-	50.5	0	67.3	61.3	32.8	61.7	69.2	69.2	70	N	-	-	18.7	Y	N	N
A1-2-11	29	116.5	A1-2	-	50.5	0	67.3	61.3	32.8	61.8	69.2	69.2	70	N	-	-	18.7	Y	N	N
A1-2-11	30	119.5	A1-2	-	50.5	0	67.3	61.4	32.8	62	69.2	69.3	70	N	-	-	18.8	Y	N	N
A1-2-11	31	122.5	A1-2	-	50.5	0	67.3	61.4	32.8	62.2	69.2	69.3	70	N	-	-	18.8	Y	N	N
A1-2-11	32	125.5	A1-2	-	50.4	0	67.2	61.5	32.8	62.4	69.3	69.3	70	N	-	-	18.9	Y	N	N
A1-2-11	33	128.5	A1-2	-	50.4	0	67.2	61.5	32.8	62.6	69.3	69.3	70	N	-	-	18.9	Y	N	N
A1-2-11	34	131.5	A1-2	-	50.4	0	67.2	61.5	32.7	62.8	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-12	1	32.5	A1-2	-	20.9	0	53.2	51.9	6.3	46.1	56	56.0	70	N	-	-	35.1	Y	N	N
A1-2-12	2	35.5	A1-2	-	21.2	0	56.9	56.1	7.7	46.7	59.8	59.8	70	N	-	-	38.6	Y	N	N
A1-2-12	3	38.5	A1-2	-	22.4	0	60	56.7	9.1	47.5	61.8	61.8	70	N	-	-	39.4	Y	N	N
A1-2-12	4	41.5	A1-2	-	24.3	0	61.2	57.4	10.8	48.2	62.9	62.9	70	N	-	-	38.6	Y	N	N
A1-2-12	5	44.5	A1-2	-	26.6	0	61.8	58.3	12.5	49.1	63.5	63.5	70	N	-	-	36.9	Y	N	N
A1-2-12	6	47.5	A1-2	-	29.6	0	62.1	59	14	50.1	64	64.0	70	N	-	-	34.4	Y	N	N
A1-2-12	7	50.5	A1-2	-	33.3	0	62.4	59.2	15.4	51.2	64.3	64.3	70	N	-	-	31.0	Y	N	N
A1-2-12	8	53.5	A1-2	-	37.7	0	62.6	59.4	17	52.5	64.6	64.6	70	N	-	-	26.9	Y	N	N
A1-2-12	9	56.5	A1-2	-	44.4	0	62.7	59.5	18.7	54.1	64.8	64.8	70	N	-	-	20.4	Y	N	N
A1-2-12	10	59.5	A1-2	-	48.7	0	62.9	59.6	20.6	56	65.1	65.2	70	N	-	-	16.5	Y	N	N
A1-2-12	11	62.5	A1-2	-	49.2	0	63.1	59.8	22.9	56.9	65.4	65.5	70	N	-	-	16.3	Y	N	N
A1-2-12	12	65.5	A1-2	-	49.5	0	63.3	59.9	25.9	57.3	65.6	65.7	70	N	-	-	16.2	Y	N	N
A1-2-12	13	68.5	A1-2	-	49.5	0	63.6	60	28.6	57.8	65.9	66.0	70	N	-	-	16.5	Y	N	N
A1-2-12	14	71.5	A1-2	-	49.8	0	63.9	60.2	30.4	58.3	66.2	66.3	70	N	-	-	16.5	Y	N	N
A1-2-12	15	74.5	A1-2	-	50	0	64.3	60.4	31.1	58.6	66.5	66.6	70	N	-	-	16.6	Y	N	N
A1-2-12	16	77.5	A1-2	-	50.1	0	64.6	60.6	31.4	58.9	66.8	66.9	70	N	-	-	16.8	Y	N	N
A1-2-12	17	80.5	A1-2	-	50.2	0	64.8	60.6	31.5	59.3	67	67.1	70	N	-	-	16.9	Y	N	N
A1-2-12	18	83.5	A1-2	-	50.3	0	65	60.8	31.6	59.5	67.2	67.3	70	N	-	-	17.0	Y	N	N
A1-2-12	19	86.5	A1-2	-	50.4	0	65.3	60.9	31.6	59.8	67.4	67.5	70	N	-	-	17.1	Y	N	N
A1-2-12	20	89.5	A1-2	-	50.5	0	65.6	60.9	31.7	60	67.7	67.8	70	N	-	-	17.3	Y	N	N
A1-2-12	21	92.5	A1-2	-	50.6	0	65.9	61	31.6	60.2	67.9	68.0	70	N	-	-	17.4	Y	N	N
A1-2-12	22	95.5	A1-2	-	50.6	0	66.3	61	31.7	60.4	68.2	68.3	70	N	-	-	17.7	Y	N	N
A1-2-12	23	98.5	A1-2	-	50.5	0	66.5	61.1	31.7	60.6	68.4	68.5	70	N	-	-	18.0	Y	N	N
A1-2-12	24	101.5	A1-2	-	50.6	0	66.7	61.1	31.7	60.9	68.6	68.6	70	N	-	-	18.0	Y	N	N
A1-2-12	25	104.5	A1-2	-	50.6	0	66.8	61.2	31.7	61.2	68.7	68.8	70	N	-	-	18.2	Y	N	N
A1-2-12	26	107.5	A1-2	-	50.5	0	67	61.2	31.8	61.4	68.8	68.9	70	N	-	-	18.4	Y	N	N
A1-2-12	27	110.5	A1-2	-	50.6	0	67	61.3	31.8	61.6	68.9	69.0	70	N	-	-	18.4	Y	N	N
A1-2-12	28	113.5	A1-2	-	50.6	0	67.1	61.3	31.7	61.7	69	69.0	70	N	-	-	18.4	Y	N	N
A1-2-12	29	116.5	A1-2	-	50.6	0	67.1	61.3	31.8	61.8	69	69.1	70	N	-	-	18.5	Y	N	N
A1-2-12	30	119.5	A1-2	-	50.5	0	67.1	61.4	31.8	62	69.1	69.1	70	N	-	-	18.6	Y	N	N
A1-2-12	31	122.5	A1-2	-	50.5	0	67	61.4	31.8	62.1	69.1	69.1	70	N	-	-	18.6	Y	N	N
A1-2-12	32	125.5	A1-2	-	50.5	0	67	61.4	31.8	62.3	69.1	69.2	70	N	-	-	18.7	Y	N	N
A1-2-12	33	128.5	A1-2	-	50.5	0	67	61.4	31.8	62.5	69.2	69.2	70	N	-	-	18.7	Y	N	N
A1-2-12	34	131.5	A1-2	-	50.4	0	67	61.4	31.8	62.8	69.2	69.3	70	N	-	-	18.9	Y	N	N
A1-2-13	1	32.5	A1-2	-	28	0	54	53.6	6.5	50.1	57.6	57.6	70	N	-	-	29.6	Y	N	N
A1-2-13	2	35.5	A1-2	-	29.6	0	57.9	57.8	7.8	50.9	61.3	61.3	70	N	-	-	31.7	Y	N	N
A1-2-13	3	38.5	A1-2	-	31.9	0	60.9	58.6	9.3	51.8	63.2	63.2	70	N	-	-	31.3	Y	N	N
A1-2-13	4	41.5	A1-2	-	34.6	0	62	59.6	10.9	52.7	64.3	64.3	70	N	-	-	29.7	Y	N	N
A1-2-13	5	44.5	A1-2	-	36.5	0	62.5	60.2	12.7	53.7	64.8	64.8	70	N	-	-	28.3	Y	N	N
A1-2-13	6	47.5	A1-2	-	37.8	0	62.8	60.6	14.5	54.8	65.2	65.2	70	N	-	-	27.4	Y	N	N
A1-2-13	7	50.5	A1-2	-	39.1	0	63	60.9	16.1	55.8	65.6	65.6	70	N	-	-	26.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-13	8	53.5	A1-2	-	41.3	0	63.2	61.1	17.9	56.7	65.8	65.9	70	N	-	-	24.6	Y	N	N
A1-2-13	9	56.5	A1-2	-	47.3	0	63.3	61.2	20	57.4	66	66.1	70	N	-	-	18.8	Y	N	N
A1-2-13	10	59.5	A1-2	-	48.9	0	63.5	61.3	22.5	58	66.3	66.3	70	N	-	-	17.4	Y	N	N
A1-2-13	11	62.5	A1-2	-	49.1	0	63.7	61.5	26	58.6	66.5	66.6	70	N	-	-	17.5	Y	N	N
A1-2-13	12	65.5	A1-2	-	49.5	0	64	61.6	29.2	59.2	66.8	66.9	70	N	-	-	17.4	Y	N	N
A1-2-13	13	68.5	A1-2	-	49.6	0	64.2	61.8	30.7	59.7	67.1	67.1	70	N	-	-	17.5	Y	N	N
A1-2-13	14	71.5	A1-2	-	49.8	0	64.5	61.8	31.2	60.2	67.3	67.4	70	N	-	-	17.6	Y	N	N
A1-2-13	15	74.5	A1-2	-	50	0	64.8	62	31.4	60.6	67.6	67.7	70	N	-	-	17.7	Y	N	N
A1-2-13	16	77.5	A1-2	-	50.2	0	65	62	31.5	60.9	67.8	67.8	70	N	-	-	17.6	Y	N	N
A1-2-13	17	80.5	A1-2	-	50.4	0	65.1	62	31.6	61.1	67.9	68.0	70	N	-	-	17.6	Y	N	N
A1-2-13	18	83.5	A1-2	-	50.4	0	65.3	62	31.6	61.3	68	68.1	70	N	-	-	17.7	Y	N	N
A1-2-13	19	86.5	A1-2	-	50.4	0	65.4	62.1	31.7	61.6	68.1	68.2	70	N	-	-	17.8	Y	N	N
A1-2-13	20	89.5	A1-2	-	50.5	0	65.6	62	31.7	61.8	68.3	68.4	70	N	-	-	17.9	Y	N	N
A1-2-13	21	92.5	A1-2	-	50.5	0	65.7	62	31.7	62.1	68.4	68.5	70	N	-	-	18.0	Y	N	N
A1-2-13	22	95.5	A1-2	-	50.6	0	65.9	62	31.7	62.4	68.6	68.7	70	N	-	-	18.1	Y	N	N
A1-2-13	23	98.5	A1-2	-	50.6	0	66.1	61.9	31.8	62.7	68.8	68.8	70	N	-	-	18.2	Y	N	N
A1-2-13	24	101.5	A1-2	-	50.5	0	66.3	61.9	31.8	63	68.9	69.0	70	N	-	-	18.5	Y	N	N
A1-2-13	25	104.5	A1-2	-	50.6	0	66.5	61.9	31.8	63.2	69.1	69.1	70	N	-	-	18.5	Y	N	N
A1-2-13	26	107.5	A1-2	-	50.6	0	66.6	61.9	31.9	63.4	69.2	69.2	70	N	-	-	18.6	Y	N	N
A1-2-13	27	110.5	A1-2	-	50.6	0	66.7	61.8	31.9	63.6	69.3	69.3	70	N	-	-	18.7	Y	N	N
A1-2-13	28	113.5	A1-2	-	50.5	0	66.8	61.8	31.8	63.7	69.4	69.4	70	N	-	-	18.9	Y	N	N
A1-2-13	29	116.5	A1-2	-	50.6	0	66.9	61.8	31.8	63.9	69.5	69.6	70	N	-	-	19.0	Y	N	N
A1-2-13	30	119.5	A1-2	-	50.6	0	67	61.8	31.9	64.2	69.6	69.7	70	N	-	-	19.1	Y	N	N
A1-2-13	31	122.5	A1-2	-	50.6	0	67	61.8	31.9	64.4	69.7	69.7	70	N	-	-	19.1	Y	N	N
A1-2-13	32	125.5	A1-2	-	50.5	0	67	61.8	31.9	64.6	69.8	69.8	70	N	-	-	19.3	Y	N	N
A1-2-13	33	128.5	A1-2	-	50.5	0	67	61.7	31.9	65	69.9	69.9	70	N	-	-	19.4	Y	N	N
A1-2-13	34	131.5	A1-2	-	50.5	0	67	61.7	31.8	65.3	69.9	70.0	70	N	-	-	19.5	Y	N	N
A1-2-14	1	32.5	A1-2	-	35.2	0	54.3	54	6.4	50.1	57.9	58.0	70	N	-	-	22.8	Y	N	N
A1-2-14	2	35.5	A1-2	-	36.8	0	58.5	58.2	7.8	50.9	61.7	61.8	70	N	-	-	25.0	Y	N	N
A1-2-14	3	38.5	A1-2	-	38.7	0	61.5	59.2	9.3	51.8	63.8	63.8	70	N	-	-	25.1	Y	N	N
A1-2-14	4	41.5	A1-2	-	41	0	62.4	60.1	10.9	52.7	64.7	64.7	70	N	-	-	23.7	Y	N	N
A1-2-14	5	44.5	A1-2	-	43.6	0	62.8	60.6	12.7	53.7	65.2	65.2	70	N	-	-	21.6	Y	N	N
A1-2-14	6	47.5	A1-2	-	45.9	0	63.1	61	14.6	54.8	65.6	65.6	70	N	-	-	19.7	Y	N	N
A1-2-14	7	50.5	A1-2	-	47.6	0	63.4	61.4	16.2	55.8	66	66.0	70	N	-	-	18.4	Y	N	N
A1-2-14	8	53.5	A1-2	-	48.3	0	63.5	61.6	18.2	56.7	66.2	66.3	70	N	-	-	18.0	Y	N	N
A1-2-14	9	56.5	A1-2	-	48.7	0	63.7	61.7	20.4	57.4	66.4	66.5	70	N	-	-	17.8	Y	N	N
A1-2-14	10	59.5	A1-2	-	49	0	63.8	61.8	23.3	57.9	66.6	66.6	70	N	-	-	17.6	Y	N	N
A1-2-14	11	62.5	A1-2	-	49.2	0	64	62	26.9	58.5	66.8	66.9	70	N	-	-	17.7	Y	N	N
A1-2-14	12	65.5	A1-2	-	49.4	0	64.3	62.1	30	59	67.1	67.1	70	N	-	-	17.7	Y	N	N
A1-2-14	13	68.5	A1-2	-	49.6	0	64.5	62.2	31.1	59.5	67.3	67.4	70	N	-	-	17.8	Y	N	N
A1-2-14	14	71.5	A1-2	-	49.8	0	64.7	62.3	31.3	60.1	67.5	67.6	70	N	-	-	17.8	Y	N	N
A1-2-14	15	74.5	A1-2	-	50.1	0	65	62.3	31.5	60.4	67.7	67.8	70	N	-	-	17.7	Y	N	N
A1-2-14	16	77.5	A1-2	-	50.2	0	65.2	62.3	31.5	60.8	67.9	68.0	70	N	-	-	17.8	Y	N	N
A1-2-14	17	80.5	A1-2	-	50.3	0	65.3	62.3	31.6	61	68	68.1	70	N	-	-	17.8	Y	N	N
A1-2-14	18	83.5	A1-2	-	50.4	0	65.4	62.3	31.7	61.2	68.1	68.2	70	N	-	-	17.8	Y	N	N
A1-2-14	19	86.5	A1-2	-	50.5	0	65.5	62.3	31.7	61.4	68.2	68.3	70	N	-	-	17.8	Y	N	N
A1-2-14	20	89.5	A1-2	-	50.5	0	65.6	62.2	31.7	61.7	68.3	68.4	70	N	-	-	17.9	Y	N	N
A1-2-14	21	92.5	A1-2	-	50.6	0	65.8	62.2	31.8	62	68.5	68.5	70	N	-	-	17.9	Y	N	N
A1-2-14	22	95.5	A1-2	-	50.5	0	65.9	62.2	31.8	62.3	68.6	68.7	70	N	-	-	18.2	Y	N	N
A1-2-14	23	98.5	A1-2	-	50.6	0	66.1	62.1	31.8	62.5	68.7	68.8	70	N	-	-	18.2	Y	N	N
A1-2-14	24	101.5	A1-2	-	50.6	0	66.3	62	31.8	62.8	68.9	69.0	70	N	-	-	18.4	Y	N	N
A1-2-14	25	104.5	A1-2	-	50.6	0	66.4	62	31.8	63.1	69	69.1	70	N	-	-	18.5	Y	N	N
A1-2-14	26	107.5	A1-2	-	50.6	0	66.5	62	31.8	63.3	69.1	69.2	70	N	-	-	18.6	Y	N	N
A1-2-14	27	110.5	A1-2	-	50.6	0	66.6	61.9	31.9	63.5	69.2	69.3	70	N	-	-	18.7	Y	N	N
A1-2-14	28	113.5	A1-2	-	50.6	0	66.7	61.9	31.9	63.7	69.3	69.4	70	N	-	-	18.8	Y	N	N
A1-2-14	29	116.5	A1-2	-	50.6	0	66.9	61.9	31.8	63.8	69.5	69.5	70	N	-	-	18.9	Y	N	N
A1-2-14	30	119.5	A1-2	-	50.6	0	66.9	61.9	31.8	64.1	69.6	69.6	70	N	-	-	19.0	Y	N	N
A1-2-14	31	122.5	A1-2	-	50.5	0	67	61.9	31.8	64.3	69.7	69.7	70	N	-	-	19.2	Y	N	N
A1-2-14	32	125.5	A1-2	-	50.6	0	67	61.8	31.9	64.7	69.8	69.8	70	N	-	-	19.2	Y	N	N
A1-2-14	33	128.5	A1-2	-	50.6	0	67	61.8	31.9	65.2	69.9	70.0	70	N	-	-	19.4	Y	N	N
A1-2-14	34	131.5	A1-2	-	50.5	0	67	61.7	31.9	65.6	70.1	70.1	70	N	-	-	19.6	Y	N	N
A1-2-15	1	32.5	A1-2	-	34.9	0	54.8	56.6	7.3	50.1	59.4	59.4	70	N	-	-	24.5	Y	N	N
A1-2-15	2	35.5	A1-2	-	36.8	0	59.1	59.1	8.7	50.9	62.5	62.5	70	N	-	-	25.7	Y	N	N
A1-2-15	3	38.5	A1-2	-	38.6	0	62	59.9	10.3	51.8	64.4	64.4	70	N	-	-	25.8	Y	N	N
A1-2-15	4	41.5	A1-2	-	41	0	62.9	60.8	11.9	52.7	65.3	65.3	70	N	-	-	24.3	Y	N	N
A1-2-15	5	44.5	A1-2	-	44.2	0	63.3	61.3	13.7	53.8	65.7	65.8	70	N	-	-	21.6	Y	N	N
A1-2-15	6	47.5	A1-2	-	46.2	0	63.6	61.7	15.5	54.8	66.1	66.2	70	N	-	-	20.0	Y	N	N
A1-2-15	7	50.5	A1-2	-	47.6	0	63.8	62.1	17.4	55.9	66.4	66.5	70	N	-	-	18.9	Y	N	N
A1-2-15	8	53.5	A1-2	-	48.2	0	64	62.2	19.3	56.8	66.6	66.7	70	N	-	-	18.5	Y	N	N
A1-2-15	9	56.5	A1-2	-	48.5	0	64.1	62.3	21.8	57.4	66.8	66.9	70	N	-	-	18.4	Y	N	N
A1-2-15	10	59.5	A1-2	-	48.7	0	64.2	62.5	25.1	58	67	67.1	70	N	-	-	18.4	Y	N	N
A1-2-15	11	62.5	A1-2	-	49	0	64.4	62.6	28.8	58.6	67.2	67.3	70	N	-	-	18.3	Y	N	N
A1-2-15	12	65.5	A1-2	-	49.2	0	64.6	62.7	31	59.2	67.5	67.5	70	N	-	-	18.3	Y	N	N
A1-2-15	13	68.5	A1-2	-	49.5	0	64.8	62.8	31.7	59.6	67.6	67.7	70	N	-	-	18.2	Y	N	N
A1-2-15	14	71.5	A1-2	-	49.8	0	65	62.8	32	60.1	67.8	67.9	70	N	-	-	18.1	Y	N	N
A1-2-15	15	74.5	A1-2	-	50	0	65.2	62.8	32.1	60.5	68	68.1	70	N	-	-	18.1	Y	N	N
A1-2-15	16	77.5	A1-2	-	50	0	65.3	62.7	32.2	60.8	68.1	68.2	70	N	-	-	18.2	Y	N	N
A1-2-15	17	80.5	A1-2	-	50.2	0	65.4	62.7	32.2	61	68.2	68.3	70	N	-	-	18.1	Y	N	N
A1-2-15	18	83.5	A1-2	-	50.3	0	65.5	62.7	32.3	61.3	68.3	68.4	70	N	-	-	18.1	Y	N	N
A1-2-15	19	86.5	A1-2	-	50.4	0	65.6	62.6	32.3	61.5	68.4	68.4	70	N	-	-	18.0	Y	N	N
A1-2-15	20	89.5	A1-2	-	50.4	0	65.7	62.6	32.3	61.8	68.5	68.5	70	N	-	-	18.1	Y	N	N
A1-2-15	21	92.5	A1-2	-	50.4	0	65.8	62.5	32.4	62.1	68.6	68.6	70	N	-	-	18.2	Y	N	N
A1-2-15	22	95.5	A1-2	-	50.4	0	66	62.4	32.4	62.4	68.7	68.8	70	N	-	-	18.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-15	23	98.5	A1-2	-	50.5	0	66.1	62.3	32.5	62.6	68.8	68.9	70	N	-	-	18.4	Y	N	N
A1-2-15	24	101.5	A1-2	-	50.5	0	66.3	62.3	32.5	62.9	69	69.0	70	N	-	-	18.5	Y	N	N
A1-2-15	25	104.5	A1-2	-	50.4	0	66.4	62.2	32.5	63.2	69.1	69.2	70	N	-	-	18.8	Y	N	N
A1-2-15	26	107.5	A1-2	-	50.5	0	66.5	62.2	32.5	63.3	69.2	69.3	70	N	-	-	18.8	Y	N	N
A1-2-15	27	110.5	A1-2	-	50.4	0	66.7	62.2	32.6	63.5	69.3	69.4	70	N	-	-	19.0	Y	N	N
A1-2-15	28	113.5	A1-2	-	50.4	0	66.8	62.1	32.6	63.8	69.4	69.5	70	N	-	-	19.1	Y	N	N
A1-2-15	29	116.5	A1-2	-	50.5	0	66.9	62.1	32.6	64	69.6	69.6	70	N	-	-	19.1	Y	N	N
A1-2-15	30	119.5	A1-2	-	50.4	0	67	62	32.7	64.2	69.7	69.7	70	N	-	-	19.3	Y	N	N
A1-2-15	31	122.5	A1-2	-	50.4	0	67.1	62	32.6	64.5	69.8	69.8	70	N	-	-	19.4	Y	N	N
A1-2-15	32	125.5	A1-2	-	50.4	0	67.1	62	32.6	64.9	69.9	69.9	70	N	-	-	19.5	Y	N	N
A1-2-15	33	128.5	A1-2	-	50.3	0	67.1	61.9	32.6	65.4	70.1	70.1	70	N	-	-	19.8	Y	N	N
A1-2-15	34	131.5	A1-2	-	50.3	0	67.1	61.9	32.6	65.9	70.2	70.3	70	N	-	-	20.0	Y	N	N
A1-2-16	1	32.5	A1-2	-	35	0	55.4	57.2	22.1	50.1	59.9	59.9	70	N	-	-	24.9	Y	N	N
A1-2-16	2	35.5	A1-2	-	37	0	60	59.8	26.7	50.9	63.2	63.2	70	N	-	-	26.2	Y	N	N
A1-2-16	3	38.5	A1-2	-	39.2	0	62.7	60.7	27.7	51.8	65.1	65.1	70	N	-	-	25.9	Y	N	N
A1-2-16	4	41.5	A1-2	-	41.7	0	63.6	61.4	28	52.8	65.8	65.9	70	N	-	-	24.2	Y	N	N
A1-2-16	5	44.5	A1-2	-	44.3	0	63.9	61.9	28.2	53.8	66.3	66.3	70	N	-	-	22.0	Y	N	N
A1-2-16	6	47.5	A1-2	-	46.6	0	64.1	62.3	28.4	55	66.6	66.7	70	N	-	-	20.1	Y	N	N
A1-2-16	7	50.5	A1-2	-	47.7	0	64.3	62.5	28.5	56	66.9	66.9	70	N	-	-	19.2	Y	N	N
A1-2-16	8	53.5	A1-2	-	48.2	0	64.4	62.7	28.7	56.9	67.1	67.1	70	N	-	-	18.9	Y	N	N
A1-2-16	9	56.5	A1-2	-	48.5	0	64.6	62.8	29.1	57.6	67.3	67.3	70	N	-	-	18.8	Y	N	N
A1-2-16	10	59.5	A1-2	-	48.7	0	64.7	63	29.9	58.1	67.5	67.5	70	N	-	-	18.8	Y	N	N
A1-2-16	11	62.5	A1-2	-	49	0	64.8	63.1	31	58.7	67.6	67.7	70	N	-	-	18.7	Y	N	N
A1-2-16	12	65.5	A1-2	-	49.2	0	64.9	63.1	31.6	59.3	67.8	67.8	70	N	-	-	18.6	Y	N	N
A1-2-16	13	68.5	A1-2	-	49.3	0	65	63.1	31.8	59.8	67.9	68.0	70	N	-	-	18.7	Y	N	N
A1-2-16	14	71.5	A1-2	-	49.6	0	65.1	63.1	32	60.2	68	68.1	70	N	-	-	18.5	Y	N	N
A1-2-16	15	74.5	A1-2	-	49.7	0	65.3	63.1	32.1	60.6	68.2	68.2	70	N	-	-	18.5	Y	N	N
A1-2-16	16	77.5	A1-2	-	49.8	0	65.4	62.9	32.1	60.9	68.2	68.3	70	N	-	-	18.5	Y	N	N
A1-2-16	17	80.5	A1-2	-	50	0	65.5	62.9	32.2	61.1	68.3	68.4	70	N	-	-	18.4	Y	N	N
A1-2-16	18	83.5	A1-2	-	50	0	65.6	62.8	32.3	61.3	68.4	68.4	70	N	-	-	18.4	Y	N	N
A1-2-16	19	86.5	A1-2	-	50	0	65.7	62.7	32.4	61.5	68.4	68.5	70	N	-	-	18.5	Y	N	N
A1-2-16	20	89.5	A1-2	-	50.1	0	65.7	62.7	32.3	61.8	68.5	68.6	70	N	-	-	18.5	Y	N	N
A1-2-16	21	92.5	A1-2	-	50.1	0	65.8	62.6	32.4	62.1	68.6	68.7	70	N	-	-	18.6	Y	N	N
A1-2-16	22	95.5	A1-2	-	50.2	0	65.9	62.5	32.4	62.4	68.7	68.8	70	N	-	-	18.6	Y	N	N
A1-2-16	23	98.5	A1-2	-	50.2	0	66	62.4	32.5	62.7	68.8	68.9	70	N	-	-	18.7	Y	N	N
A1-2-16	24	101.5	A1-2	-	50.2	0	66.2	62.3	32.5	63	69	69.0	70	N	-	-	18.8	Y	N	N
A1-2-16	25	104.5	A1-2	-	50.2	0	66.4	62.3	32.5	63.2	69.1	69.2	70	N	-	-	19.0	Y	N	N
A1-2-16	26	107.5	A1-2	-	50.2	0	66.5	62.2	32.6	63.3	69.2	69.3	70	N	-	-	19.1	Y	N	N
A1-2-16	27	110.5	A1-2	-	50.2	0	66.6	62.2	32.6	63.5	69.3	69.4	70	N	-	-	19.2	Y	N	N
A1-2-16	28	113.5	A1-2	-	50.1	0	66.7	62.2	32.6	63.8	69.4	69.5	70	N	-	-	19.4	Y	N	N
A1-2-16	29	116.5	A1-2	-	50.2	0	66.8	62.1	32.6	64	69.5	69.6	70	N	-	-	19.4	Y	N	N
A1-2-16	30	119.5	A1-2	-	50.2	0	66.9	62.1	32.6	64.3	69.7	69.7	70	N	-	-	19.5	Y	N	N
A1-2-16	31	122.5	A1-2	-	50.2	0	67	62	32.6	64.6	69.8	69.8	70	N	-	-	19.6	Y	N	N
A1-2-16	32	125.5	A1-2	-	50.1	0	67.1	61.9	32.7	65.1	69.9	70.0	70	N	-	-	19.9	Y	N	N
A1-2-16	33	128.5	A1-2	-	50.2	0	67.1	61.9	32.6	65.6	70.1	70.2	70	N	-	-	20.0	Y	N	N
A1-2-16	34	131.5	A1-2	-	50.2	0	67.1	61.8	32.6	66.1	70.3	70.4	70	N	-	-	20.2	Y	N	N
A1-2-17	1	32.5	A1-2	-	35	0	56.4	58	25	50	60.7	60.7	70	N	-	-	25.7	Y	N	N
A1-2-17	2	35.5	A1-2	-	37	0	61.1	60.4	28.9	50.8	64	64.0	70	N	-	-	27.0	Y	N	N
A1-2-17	3	38.5	A1-2	-	39.4	0	63.5	61.3	29.8	51.7	65.7	65.7	70	N	-	-	26.3	Y	N	N
A1-2-17	4	41.5	A1-2	-	42.5	0	64.2	62	30.1	52.7	66.4	66.4	70	N	-	-	23.9	Y	N	N
A1-2-17	5	44.5	A1-2	-	45.3	0	64.5	62.3	30.4	53.8	66.8	66.8	70	N	-	-	21.5	Y	N	N
A1-2-17	6	47.5	A1-2	-	47	0	64.7	62.7	30.6	55	67.1	67.1	70	N	-	-	20.1	Y	N	N
A1-2-17	7	50.5	A1-2	-	47.8	0	64.8	63	30.8	56	67.4	67.4	70	N	-	-	19.6	Y	N	N
A1-2-17	8	53.5	A1-2	-	48.2	0	64.9	63.2	30.9	56.9	67.6	67.6	70	N	-	-	19.4	Y	N	N
A1-2-17	9	56.5	A1-2	-	48.5	0	65	63.4	31.2	57.6	67.7	67.8	70	N	-	-	19.3	Y	N	N
A1-2-17	10	59.5	A1-2	-	48.7	0	65.1	63.5	31.3	58.1	67.9	67.9	70	N	-	-	19.2	Y	N	N
A1-2-17	11	62.5	A1-2	-	48.9	0	65.2	63.5	31.6	58.7	68	68.0	70	N	-	-	19.1	Y	N	N
A1-2-17	12	65.5	A1-2	-	49.1	0	65.2	63.4	31.8	59.3	68	68.1	70	N	-	-	19.0	Y	N	N
A1-2-17	13	68.5	A1-2	-	49.4	0	65.3	63.3	32	59.8	68.1	68.2	70	N	-	-	18.8	Y	N	N
A1-2-17	14	71.5	A1-2	-	49.6	0	65.4	63.3	32	60.2	68.2	68.3	70	N	-	-	18.7	Y	N	N
A1-2-17	15	74.5	A1-2	-	49.8	0	65.5	63.2	32	60.6	68.3	68.4	70	N	-	-	18.6	Y	N	N
A1-2-17	16	77.5	A1-2	-	49.8	0	65.5	63.1	32.1	60.8	68.3	68.4	70	N	-	-	18.6	Y	N	N
A1-2-17	17	80.5	A1-2	-	49.9	0	65.6	63	32.2	61.1	68.4	68.5	70	N	-	-	18.6	Y	N	N
A1-2-17	18	83.5	A1-2	-	50	0	65.7	62.9	32.3	61.3	68.4	68.5	70	N	-	-	18.5	Y	N	N
A1-2-17	19	86.5	A1-2	-	50.1	0	65.7	62.8	32.4	61.6	68.5	68.6	70	N	-	-	18.5	Y	N	N
A1-2-17	20	89.5	A1-2	-	50.1	0	65.8	62.8	32.4	61.9	68.6	68.6	70	N	-	-	18.5	Y	N	N
A1-2-17	21	92.5	A1-2	-	50.1	0	65.8	62.7	32.5	62.1	68.6	68.7	70	N	-	-	18.6	Y	N	N
A1-2-17	22	95.5	A1-2	-	50.1	0	65.9	62.6	32.4	62.4	68.7	68.8	70	N	-	-	18.7	Y	N	N
A1-2-17	23	98.5	A1-2	-	50.2	0	66.1	62.5	32.4	62.7	68.8	68.9	70	N	-	-	18.7	Y	N	N
A1-2-17	24	101.5	A1-2	-	50.2	0	66.2	62.4	32.5	62.9	68.9	69.0	70	N	-	-	18.8	Y	N	N
A1-2-17	25	104.5	A1-2	-	50.3	0	66.4	62.3	32.5	63.1	69.1	69.1	70	N	-	-	18.8	Y	N	N
A1-2-17	26	107.5	A1-2	-	50.2	0	66.5	62.2	32.5	63.3	69.2	69.2	70	N	-	-	19.0	Y	N	N
A1-2-17	27	110.5	A1-2	-	50.2	0	66.6	62.2	32.6	63.5	69.3	69.3	70	N	-	-	19.1	Y	N	N
A1-2-17	28	113.5	A1-2	-	50.2	0	66.7	62.1	32.6	63.8	69.4	69.4	70	N	-	-	19.2	Y	N	N
A1-2-17	29	116.5	A1-2	-	50.2	0	66.8	62.1	32.6	64	69.5	69.5	70	N	-	-	19.3	Y	N	N
A1-2-17	30	119.5	A1-2	-	50.1	0	66.9	62	32.6	64.3	69.6	69.7	70	N	-	-	19.6	Y	N	N
A1-2-17	31	122.5	A1-2	-	50.2	0	67	62	32.6	64.7	69.8	69.8	70	N	-	-	19.6	Y	N	N
A1-2-17	32	125.5	A1-2	-	50.2	0	67	61.9	32.7	65.3	70	70.0	70	N	-	-	19.8	Y	N	N
A1-2-17	33	128.5	A1-2	-	50.2	0	67.1	61.9	32.7	65.8	70.2	70.2	70	N	-	-	20.0	Y	N	N
A1-2-17	34	131.5	A1-2	-	50.1	0	67.1	61.8	32.6	66.3	70.4	70.4	70	N	-	-	20.3	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-18	1	32.5	A1-2	-	35.2	0	57.6	59.2	25.7	49.8	61.8	61.8	70	N	-	-	26.6	Y	N	N
A1-2-18	2	35.5	A1-2	-	37.2	0	61.7	61.3	29.4	50.6	64.7	64.7	70	N	-	-	27.5	Y	N	N
A1-2-18	3	38.5	A1-2	-	39.7	0	63.8	62.2	30.2	51.6	66.3	66.3	70	N	-	-	26.6	Y	N	N
A1-2-18	4	41.5	A1-2	-	43.4	0	64.5	62.7	30.5	52.6	66.9	66.9	70	N	-	-	23.5	Y	N	N
A1-2-18	5	44.5	A1-2	-	46.3	0	64.8	63	30.8	53.7	67.2	67.3	70	N	-	-	21.0	Y	N	N
A1-2-18	6	47.5	A1-2	-	47.3	0	65	63.4	31	54.9	67.5	67.6	70	N	-	-	20.3	Y	N	N
A1-2-18	7	50.5	A1-2	-	47.8	0	65.1	63.7	31.1	56	67.8	67.8	70	N	-	-	20.0	Y	N	N
A1-2-18	8	53.5	A1-2	-	48.1	0	65.2	63.8	31.3	56.9	67.9	68.0	70	N	-	-	19.9	Y	N	N
A1-2-18	9	56.5	A1-2	-	48.5	0	65.3	63.9	31.4	57.6	68.1	68.1	70	N	-	-	19.6	Y	N	N
A1-2-18	10	59.5	A1-2	-	48.7	0	65.4	63.9	31.6	58.2	68.2	68.2	70	N	-	-	19.5	Y	N	N
A1-2-18	11	62.5	A1-2	-	48.9	0	65.5	63.8	31.7	58.7	68.2	68.3	70	N	-	-	19.4	Y	N	N
A1-2-18	12	65.5	A1-2	-	49.1	0	65.5	63.6	31.8	59.3	68.3	68.3	70	N	-	-	19.2	Y	N	N
A1-2-18	13	68.5	A1-2	-	49.4	0	65.6	63.5	32	59.8	68.3	68.4	70	N	-	-	19.0	Y	N	N
A1-2-18	14	71.5	A1-2	-	49.5	0	65.6	63.4	32.1	60.2	68.4	68.4	70	N	-	-	18.9	Y	N	N
A1-2-18	15	74.5	A1-2	-	49.7	0	65.7	63.3	32.1	60.5	68.4	68.5	70	N	-	-	18.8	Y	N	N
A1-2-18	16	77.5	A1-2	-	49.9	0	65.8	63.1	32.2	60.8	68.5	68.5	70	N	-	-	18.6	Y	N	N
A1-2-18	17	80.5	A1-2	-	50	0	65.8	63.1	32.3	61	68.5	68.6	70	N	-	-	18.6	Y	N	N
A1-2-18	18	83.5	A1-2	-	50	0	65.9	62.9	32.3	61.2	68.6	68.6	70	N	-	-	18.6	Y	N	N
A1-2-18	19	86.5	A1-2	-	50.1	0	65.9	62.8	32.4	61.5	68.6	68.6	70	N	-	-	18.5	Y	N	N
A1-2-18	20	89.5	A1-2	-	50.1	0	65.9	62.7	32.4	61.8	68.6	68.7	70	N	-	-	18.6	Y	N	N
A1-2-18	21	92.5	A1-2	-	50.1	0	66	62.6	32.4	62	68.7	68.7	70	N	-	-	18.6	Y	N	N
A1-2-18	22	95.5	A1-2	-	50.2	0	66	62.5	32.5	62.4	68.8	68.8	70	N	-	-	18.6	Y	N	N
A1-2-18	23	98.5	A1-2	-	50.1	0	66.1	62.4	32.5	62.6	68.8	68.9	70	N	-	-	18.8	Y	N	N
A1-2-18	24	101.5	A1-2	-	50.2	0	66.2	62.3	32.5	62.9	68.9	69.0	70	N	-	-	18.8	Y	N	N
A1-2-18	25	104.5	A1-2	-	50.2	0	66.3	62.2	32.5	63.1	69	69.1	70	N	-	-	18.9	Y	N	N
A1-2-18	26	107.5	A1-2	-	50.2	0	66.5	62.1	32.5	63.2	69.1	69.2	70	N	-	-	19.0	Y	N	N
A1-2-18	27	110.5	A1-2	-	50.3	0	66.5	62.1	32.6	63.4	69.2	69.3	70	N	-	-	19.0	Y	N	N
A1-2-18	28	113.5	A1-2	-	50.2	0	66.6	62	32.6	63.7	69.3	69.4	70	N	-	-	19.2	Y	N	N
A1-2-18	29	116.5	A1-2	-	50.2	0	66.8	62	32.7	64	69.4	69.5	70	N	-	-	19.3	Y	N	N
A1-2-18	30	119.5	A1-2	-	50.2	0	66.8	61.9	32.7	64.3	69.6	69.6	70	N	-	-	19.4	Y	N	N
A1-2-18	31	122.5	A1-2	-	50.3	0	66.9	61.8	32.6	64.9	69.8	69.8	70	N	-	-	19.5	Y	N	N
A1-2-18	32	125.5	A1-2	-	50.2	0	67	61.7	32.6	65.5	70	70.1	70	N	-	-	19.9	Y	N	N
A1-2-18	33	128.5	A1-2	-	50.2	0	67.1	61.7	32.6	66	70.2	70.3	70	N	-	-	20.1	Y	N	N
A1-2-18	34	131.5	A1-2	-	50.2	0	67.2	61.6	32.6	66.5	70.4	70.5	70	Y	-	-	20.3	Y	N	Y
A1-2-19	1	32.5	A1-2	-	35.5	0	58.1	60.5	25.6	49.6	62.7	62.7	70	N	-	-	27.2	Y	N	N
A1-2-19	2	35.5	A1-2	-	37.5	0	62	62	29.3	50.6	65.2	65.2	70	N	-	-	27.7	Y	N	N
A1-2-19	3	38.5	A1-2	-	40.1	0	64.1	62.7	30.1	51.5	66.6	66.6	70	N	-	-	26.5	Y	N	N
A1-2-19	4	41.5	A1-2	-	43.8	0	64.7	63.2	30.4	52.6	67.2	67.2	70	N	-	-	23.4	Y	N	N
A1-2-19	5	44.5	A1-2	-	46.4	0	65	63.4	30.7	53.7	67.5	67.5	70	N	-	-	21.1	Y	N	N
A1-2-19	6	47.5	A1-2	-	47.3	0	65.2	63.9	31	55	67.8	67.8	70	N	-	-	20.5	Y	N	N
A1-2-19	7	50.5	A1-2	-	47.8	0	65.3	64.1	31.2	56	68	68.1	70	N	-	-	20.3	Y	N	N
A1-2-19	8	53.5	A1-2	-	48.1	0	65.4	64.1	31.4	56.9	68.2	68.2	70	N	-	-	20.1	Y	N	N
A1-2-19	9	56.5	A1-2	-	48.4	0	65.5	64.1	31.5	57.6	68.3	68.3	70	N	-	-	19.9	Y	N	N
A1-2-19	10	59.5	A1-2	-	48.7	0	65.6	64	31.6	58.1	68.3	68.4	70	N	-	-	19.7	Y	N	N
A1-2-19	11	62.5	A1-2	-	48.9	0	65.6	63.8	31.7	58.7	68.3	68.4	70	N	-	-	19.5	Y	N	N
A1-2-19	12	65.5	A1-2	-	49.2	0	65.7	63.6	31.9	59.3	68.4	68.4	70	N	-	-	19.2	Y	N	N
A1-2-19	13	68.5	A1-2	-	49.4	0	65.8	63.5	32	59.8	68.4	68.5	70	N	-	-	19.1	Y	N	N
A1-2-19	14	71.5	A1-2	-	49.7	0	65.8	63.4	32	60.2	68.5	68.5	70	N	-	-	18.8	Y	N	N
A1-2-19	15	74.5	A1-2	-	49.7	0	65.9	63.2	32.1	60.5	68.5	68.6	70	N	-	-	18.9	Y	N	N
A1-2-19	16	77.5	A1-2	-	49.8	0	65.9	63.1	32.2	60.7	68.5	68.6	70	N	-	-	18.8	Y	N	N
A1-2-19	17	80.5	A1-2	-	49.9	0	66	63	32.3	61	68.6	68.6	70	N	-	-	18.7	Y	N	N
A1-2-19	18	83.5	A1-2	-	50	0	66	62.9	32.4	61.2	68.6	68.7	70	N	-	-	18.7	Y	N	N
A1-2-19	19	86.5	A1-2	-	50.1	0	66	62.8	32.5	61.5	68.6	68.7	70	N	-	-	18.6	Y	N	N
A1-2-19	20	89.5	A1-2	-	50.1	0	66	62.6	32.4	61.8	68.7	68.7	70	N	-	-	18.6	Y	N	N
A1-2-19	21	92.5	A1-2	-	50.2	0	66.1	62.5	32.4	62	68.7	68.8	70	N	-	-	18.6	Y	N	N
A1-2-19	22	95.5	A1-2	-	50.2	0	66.1	62.4	32.5	62.3	68.8	68.8	70	N	-	-	18.6	Y	N	N
A1-2-19	23	98.5	A1-2	-	50.2	0	66.2	62.3	32.5	62.6	68.8	68.9	70	N	-	-	18.7	Y	N	N
A1-2-19	24	101.5	A1-2	-	50.3	0	66.2	62.2	32.5	62.8	68.9	69.0	70	N	-	-	18.7	Y	N	N
A1-2-19	25	104.5	A1-2	-	50.3	0	66.3	62.1	32.6	63	69	69.0	70	N	-	-	18.7	Y	N	N
A1-2-19	26	107.5	A1-2	-	50.4	0	66.4	62	32.5	63.2	69.1	69.1	70	N	-	-	18.7	Y	N	N
A1-2-19	27	110.5	A1-2	-	50.5	0	66.6	62	32.6	63.5	69.2	69.3	70	N	-	-	18.8	Y	N	N
A1-2-19	28	113.5	A1-2	-	50.6	0	66.6	61.9	32.7	63.7	69.3	69.4	70	N	-	-	18.8	Y	N	N
A1-2-19	29	116.5	A1-2	-	50.9	0	66.7	61.8	32.7	63.9	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-19	30	119.5	A1-2	-	51.3	0	66.8	61.8	32.7	64.3	69.6	69.6	70	N	-	-	18.3	Y	N	N
A1-2-19	31	122.5	A1-2	-	52.1	0	66.9	61.7	32.7	64.9	69.8	69.9	70	N	-	-	17.8	Y	N	N
A1-2-19	32	125.5	A1-2	-	52.9	0	67.1	61.6	32.6	65.4	70	70.1	70	N	-	-	17.2	Y	N	N
A1-2-19	33	128.5	A1-2	-	53.3	0	67.2	61.5	32.6	65.9	70.2	70.3	70	N	-	-	17.0	Y	N	N
A1-2-19	34	131.5	A1-2	-	53.4	0	67.2	61.5	32.6	66.4	70.4	70.5	70	Y	-	-	17.1	Y	N	Y
A1-2-20	1	32.5	A1-2	-	35.5	0	58.7	61.3	25.5	49.4	63.4	63.4	70	N	-	-	27.9	Y	N	N
A1-2-20	2	35.5	A1-2	-	37.5	0	62.4	62.2	29.3	50.4	65.4	65.4	70	N	-	-	27.9	Y	N	N
A1-2-20	3	38.5	A1-2	-	40.1	0	64.3	62.8	30	51.3	66.7	66.8	70	N	-	-	26.7	Y	N	N
A1-2-20	4	41.5	A1-2	-	43.8	0	64.9	63.3	30.4	52.4	67.3	67.3	70	N	-	-	23.5	Y	N	N
A1-2-20	5	44.5	A1-2	-	46.4	0	65.1	63.8	30.7	53.6	67.7	67.7	70	N	-	-	21.3	Y	N	N
A1-2-20	6	47.5	A1-2	-	47.3	0	65.3	64	30.9	54.9	67.9	68.0	70	N	-	-	20.7	Y	N	N
A1-2-20	7	50.5	A1-2	-	47.7	0	65.4	64.2	31.2	56	68.1	68.2	70	N	-	-	20.5	Y	N	N
A1-2-20	8	53.5	A1-2	-	48.1	0	65.5	64	31.3	56.9	68.2	68.2	70	N	-	-	20.1	Y	N	N
A1-2-20	9	56.5	A1-2	-	48.5	0	65.6	63.9	31.5	57.5	68.2	68.3	70	N	-	-	19.8	Y	N	N
A1-2-20	10	59.5	A1-2	-	48.7	0	65.7	63.7	31.6	58.1	68.2	68.3	70	N	-	-	19.6	Y	N	N
A1-2-20	11	62.5	A1-2	-	49	0	65.8	63.5	31.8	58.7	68.3	68.4	70	N	-	-	19.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-20	12	65.5	A1-2	-	49.1	0	65.8	63.3	31.9	59.2	68.3	68.4	70	N	-	-	19.3	Y	N	N
A1-2-20	13	68.5	A1-2	-	49.4	0	65.9	63.2	32.1	59.8	68.4	68.4	70	N	-	-	19.0	Y	N	N
A1-2-20	14	71.5	A1-2	-	49.6	0	65.9	63	32.1	60.1	68.4	68.5	70	N	-	-	18.9	Y	N	N
A1-2-20	15	74.5	A1-2	-	49.7	0	66	62.9	32.1	60.4	68.4	68.5	70	N	-	-	18.8	Y	N	N
A1-2-20	16	77.5	A1-2	-	49.8	0	66	62.8	32.2	60.7	68.5	68.5	70	N	-	-	18.7	Y	N	N
A1-2-20	17	80.5	A1-2	-	50	0	66	62.7	32.2	60.9	68.5	68.5	70	N	-	-	18.5	Y	N	N
A1-2-20	18	83.5	A1-2	-	50	0	66	62.5	32.4	61.2	68.5	68.6	70	N	-	-	18.6	Y	N	N
A1-2-20	19	86.5	A1-2	-	50	0	66	62.4	32.4	61.4	68.5	68.6	70	N	-	-	18.6	Y	N	N
A1-2-20	20	89.5	A1-2	-	50.1	0	66	62.3	32.5	61.7	68.6	68.6	70	N	-	-	18.5	Y	N	N
A1-2-20	21	92.5	A1-2	-	50.2	0	66.1	62.2	32.5	62	68.6	68.7	70	N	-	-	18.5	Y	N	N
A1-2-20	22	95.5	A1-2	-	50.2	0	66.1	62	32.5	62.3	68.7	68.7	70	N	-	-	18.5	Y	N	N
A1-2-20	23	98.5	A1-2	-	50.2	0	66.1	61.9	32.5	62.6	68.7	68.8	70	N	-	-	18.6	Y	N	N
A1-2-20	24	101.5	A1-2	-	50.2	0	66.2	61.8	32.5	62.7	68.8	68.8	70	N	-	-	18.6	Y	N	N
A1-2-20	25	104.5	A1-2	-	50.3	0	66.2	61.8	32.6	62.9	68.8	68.9	70	N	-	-	18.6	Y	N	N
A1-2-20	26	107.5	A1-2	-	50.3	0	66.3	61.7	32.6	63.1	68.9	69.0	70	N	-	-	18.7	Y	N	N
A1-2-20	27	110.5	A1-2	-	50.3	0	66.4	61.6	32.6	63.3	69	69.1	70	N	-	-	18.8	Y	N	N
A1-2-20	28	113.5	A1-2	-	50.4	0	66.5	61.6	32.6	63.6	69.1	69.2	70	N	-	-	18.8	Y	N	N
A1-2-20	29	116.5	A1-2	-	50.6	0	66.6	61.5	32.6	63.9	69.3	69.3	70	N	-	-	18.7	Y	N	N
A1-2-20	30	119.5	A1-2	-	50.8	0	66.7	61.4	32.6	64.4	69.5	69.5	70	N	-	-	18.7	Y	N	N
A1-2-20	31	122.5	A1-2	-	51.2	0	66.8	61.3	32.7	64.9	69.7	69.7	70	N	-	-	18.5	Y	N	N
A1-2-20	32	125.5	A1-2	-	51.7	0	67	61.3	32.7	65.2	69.8	69.9	70	N	-	-	18.2	Y	N	N
A1-2-20	33	128.5	A1-2	-	51.8	0	67.1	61.2	32.6	65.5	70	70.0	70	N	-	-	18.2	Y	N	N
A1-2-20	34	131.5	A1-2	-	51.8	0	67.1	61.2	32.6	65.8	70.1	70.2	70	N	-	-	18.4	Y	N	N
A1-2-21	1	32.5	A1-2	-	36.3	0	63.3	70.4	45.7	49.5	71.2	71.2	70	Y	-	-	34.9	Y	Y	Y
A1-2-21	2	35.5	A1-2	-	38.2	0	64.5	70.2	45.4	50.4	71.2	71.2	70	Y	-	-	33.0	Y	Y	Y
A1-2-21	3	38.5	A1-2	-	40.7	0	65.5	69.9	45.1	51.3	71.3	71.3	70	Y	-	-	30.6	Y	Y	Y
A1-2-21	4	41.5	A1-2	-	43.8	0	65.7	69.5	44.8	52.4	71.1	71.1	70	Y	-	-	27.3	Y	Y	Y
A1-2-21	5	44.5	A1-2	-	46.6	0	65.8	69.1	44.5	53.6	70.9	70.9	70	Y	-	-	24.3	Y	Y	Y
A1-2-21	6	47.5	A1-2	-	47.3	0	65.9	68.7	44.2	54.9	70.7	70.7	70	Y	-	-	23.4	Y	Y	Y
A1-2-21	7	50.5	A1-2	-	47.7	0	65.9	68.3	43.9	56	70.5	70.5	70	Y	-	-	22.8	Y	Y	Y
A1-2-21	8	53.5	A1-2	-	48	0	65.9	68	43.7	56.8	70.3	70.3	70	N	-	-	22.3	Y	N	N
A1-2-21	9	56.5	A1-2	-	48.4	0	66	67.7	43.4	57.4	70.2	70.2	70	N	-	-	21.8	Y	N	N
A1-2-21	10	59.5	A1-2	-	48.8	0	66	67.4	43.1	58.1	70.1	70.1	70	N	-	-	21.3	Y	N	N
A1-2-21	11	62.5	A1-2	-	49	0	66	67.1	43	58.7	70	70.0	70	N	-	-	21.0	Y	N	N
A1-2-21	12	65.5	A1-2	-	49.3	0	66	66.9	42.7	59.2	69.9	69.9	70	N	-	-	20.6	Y	N	N
A1-2-21	13	68.5	A1-2	-	49.4	0	66	66.7	42.5	59.6	69.8	69.8	70	N	-	-	20.4	Y	N	N
A1-2-21	14	71.5	A1-2	-	49.6	0	66	66.5	42.3	59.9	69.7	69.8	70	N	-	-	20.2	Y	N	N
A1-2-21	15	74.5	A1-2	-	49.8	0	66	66.3	42.1	60.2	69.7	69.7	70	N	-	-	19.9	Y	N	N
A1-2-21	16	77.5	A1-2	-	49.8	0	66	66.1	41.9	60.5	69.6	69.7	70	N	-	-	19.9	Y	N	N
A1-2-21	17	80.5	A1-2	-	49.9	0	65.9	65.9	41.8	60.7	69.6	69.6	70	N	-	-	19.7	Y	N	N
A1-2-21	18	83.5	A1-2	-	50	0	65.9	65.7	41.6	61.1	69.5	69.6	70	N	-	-	19.6	Y	N	N
A1-2-21	19	86.5	A1-2	-	50.1	0	65.9	65.6	41.5	61.3	69.5	69.5	70	N	-	-	19.4	Y	N	N
A1-2-21	20	89.5	A1-2	-	50.2	0	65.9	65.4	41.5	61.6	69.4	69.5	70	N	-	-	19.3	Y	N	N
A1-2-21	21	92.5	A1-2	-	50.3	0	65.8	65.3	41.4	61.8	69.4	69.5	70	N	-	-	19.2	Y	N	N
A1-2-21	22	95.5	A1-2	-	50.3	0	65.8	65.1	41.3	62.1	69.4	69.5	70	N	-	-	19.2	Y	N	N
A1-2-21	23	98.5	A1-2	-	50.4	0	65.8	64.9	41.4	62.4	69.4	69.4	70	N	-	-	19.0	Y	N	N
A1-2-21	24	101.5	A1-2	-	50.5	0	65.8	64.9	41.5	62.6	69.4	69.4	70	N	-	-	18.9	Y	N	N
A1-2-21	25	104.5	A1-2	-	50.6	0	65.8	64.7	42	62.9	69.4	69.4	70	N	-	-	18.8	Y	N	N
A1-2-21	26	107.5	A1-2	-	50.9	0	65.8	64.6	43	63.2	69.4	69.5	70	N	-	-	18.6	Y	N	N
A1-2-21	27	110.5	A1-2	-	51.1	0	65.9	64.4	45.1	63.6	69.5	69.6	70	N	-	-	18.5	Y	N	N
A1-2-21	28	113.5	A1-2	-	51.7	0	66	64.4	46.4	64.1	69.7	69.7	70	N	-	-	18.0	Y	N	N
A1-2-21	29	116.5	A1-2	-	53	0	66.1	64.2	47	64.9	69.9	70.0	70	N	-	-	17.0	Y	N	N
A1-2-21	30	119.5	A1-2	-	54.2	0	66.2	64.1	47.4	65.8	70.3	70.4	70	N	-	-	16.2	Y	N	N
A1-2-21	31	122.5	A1-2	-	54.9	0	66.3	64.1	47.7	66.6	70.6	70.7	70	Y	-	-	15.8	Y	Y	Y
A1-2-21	32	125.5	A1-2	-	55.4	0	66.5	64	47.8	67.3	70.9	71.0	70	Y	-	-	15.6	Y	Y	Y
A1-2-21	33	128.5	A1-2	-	55.7	0	66.5	64	47.8	67.9	71.2	71.3	70	Y	-	-	15.6	Y	Y	Y
A1-2-21	34	131.5	A1-2	-	55.9	0	66.6	64	47.7	68.3	71.4	71.5	70	Y	-	-	15.6	Y	Y	Y
A1-2-22	1	32.5	A1-2	-	36.3	0	63.4	70.6	45.8	49.3	71.4	71.4	70	Y	-	-	35.1	Y	Y	Y
A1-2-22	2	35.5	A1-2	-	38.2	0	64.3	70.2	45.5	50.2	71.2	71.2	70	Y	-	-	33.0	Y	Y	Y
A1-2-22	3	38.5	A1-2	-	40.7	0	65.2	69.8	45.1	51.1	71.2	71.2	70	Y	-	-	30.5	Y	Y	Y
A1-2-22	4	41.5	A1-2	-	43.7	0	65.5	69.4	44.9	52.2	71	71.0	70	Y	-	-	27.3	Y	Y	Y
A1-2-22	5	44.5	A1-2	-	46.4	0	65.6	69	44.6	53.4	70.7	70.8	70	Y	-	-	24.4	Y	Y	Y
A1-2-22	6	47.5	A1-2	-	47.2	0	65.7	68.6	44.2	54.7	70.5	70.6	70	Y	-	-	23.4	Y	Y	Y
A1-2-22	7	50.5	A1-2	-	47.7	0	65.7	68.3	43.9	55.8	70.4	70.4	70	N	-	-	22.7	Y	N	N
A1-2-22	8	53.5	A1-2	-	48	0	65.7	68	43.7	56.6	70.2	70.2	70	N	-	-	22.2	Y	N	N
A1-2-22	9	56.5	A1-2	-	48.4	0	65.8	67.7	43.4	57.2	70.1	70.1	70	N	-	-	21.7	Y	N	N
A1-2-22	10	59.5	A1-2	-	48.8	0	65.8	67.4	43.1	57.8	69.9	70.0	70	N	-	-	21.2	Y	N	N
A1-2-22	11	62.5	A1-2	-	49	0	65.8	67.1	42.9	58.4	69.8	69.9	70	N	-	-	20.9	Y	N	N
A1-2-22	12	65.5	A1-2	-	49.3	0	65.8	66.9	42.7	58.9	69.7	69.8	70	N	-	-	20.5	Y	N	N
A1-2-22	13	68.5	A1-2	-	49.4	0	65.8	66.6	42.5	59.3	69.6	69.7	70	N	-	-	20.3	Y	N	N
A1-2-22	14	71.5	A1-2	-	49.5	0	65.8	66.4	42.3	59.7	69.6	69.6	70	N	-	-	20.1	Y	N	N
A1-2-22	15	74.5	A1-2	-	49.6	0	65.8	66.2	42.1	60	69.5	69.6	70	N	-	-	20.0	Y	N	N
A1-2-22	16	77.5	A1-2	-	49.8	0	65.7	66	41.9	60.3	69.4	69.5	70	N	-	-	19.7	Y	N	N
A1-2-22	17	80.5	A1-2	-	49.9	0	65.7	65.8	41.8	60.5	69.4	69.4	70	N	-	-	19.5	Y	N	N
A1-2-22	18	83.5	A1-2	-	50	0	65.7	65.7	41.6	60.8	69.3	69.4	70	N	-	-	19.4	Y	N	N
A1-2-22	19	86.5	A1-2	-	50.1	0	65.6	65.5	41.5	61	69.3	69.3	70	N	-	-	19.2	Y	N	N
A1-2-22	20	89.5	A1-2	-	50.1	0	65.6	65.3	41.4	61.3	69.3	69.3	70	N	-	-	19.2	Y	N	N
A1-2-22	21	92.5	A1-2	-	50.2	0	65.6	65.2	41.3	61.6	69.2	69.3	70	N	-	-	19.1	Y	N	N
A1-2-22	22	95.5	A1-2	-	50.3	0	65.5	65	41.2	61.9	69.2	69.3	70	N	-	-	19.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-22	23	98.5	A1-2	-	50.4	0	65.5	64.9	41.3	62.1	69.2	69.2	70	N	-	-	18.8	Y	N	N
A1-2-22	24	101.5	A1-2	-	50.5	0	65.5	64.8	41.4	62.3	69.2	69.2	70	N	-	-	18.7	Y	N	N
A1-2-22	25	104.5	A1-2	-	50.7	0	65.5	64.6	41.8	62.6	69.2	69.2	70	N	-	-	18.5	Y	N	N
A1-2-22	26	107.5	A1-2	-	50.9	0	65.5	64.5	42.5	63	69.2	69.3	70	N	-	-	18.4	Y	N	N
A1-2-22	27	110.5	A1-2	-	51.3	0	65.5	64.3	44.3	63.4	69.3	69.3	70	N	-	-	18.0	Y	N	N
A1-2-22	28	113.5	A1-2	-	52.1	0	65.6	64.3	45.7	63.9	69.4	69.5	70	N	-	-	17.4	Y	N	N
A1-2-22	29	116.5	A1-2	-	53.2	0	65.7	64.1	46.5	64.7	69.7	69.8	70	N	-	-	16.6	Y	N	N
A1-2-22	30	119.5	A1-2	-	54.5	0	65.8	64	47.1	65.6	70	70.1	70	N	-	-	15.6	Y	N	N
A1-2-22	31	122.5	A1-2	-	55.1	0	65.9	64	47.5	66.5	70.4	70.5	70	Y	-	-	15.4	Y	N	Y
A1-2-22	32	125.5	A1-2	-	55.5	0	66	64	47.7	67.3	70.7	70.9	70	Y	-	-	15.4	Y	Y	Y
A1-2-22	33	128.5	A1-2	-	55.7	0	66	63.9	47.8	67.9	71	71.2	70	Y	-	-	15.5	Y	Y	Y
A1-2-22	34	131.5	A1-2	-	55.8	0	66	64	47.8	68.3	71.2	71.4	70	Y	-	-	15.6	Y	Y	Y
A1-2-23	1	32.5	A1-2	-	36.3	0	63.1	70.5	48.2	49.1	71.3	71.3	70	Y	-	-	35.0	Y	Y	Y
A1-2-23	2	35.5	A1-2	-	38.1	0	64	70.1	47.8	49.9	71.1	71.1	70	Y	-	-	33.0	Y	Y	Y
A1-2-23	3	38.5	A1-2	-	40.6	0	65	69.8	47.5	50.9	71.1	71.1	70	Y	-	-	30.5	Y	Y	Y
A1-2-23	4	41.5	A1-2	-	43.7	0	65.4	69.4	47.2	52	70.9	70.9	70	Y	-	-	27.2	Y	Y	Y
A1-2-23	5	44.5	A1-2	-	46.3	0	65.5	69	46.7	53.1	70.7	70.7	70	Y	-	-	24.4	Y	Y	Y
A1-2-23	6	47.5	A1-2	-	47.2	0	65.5	68.6	46.4	54.5	70.5	70.5	70	Y	-	-	23.3	Y	Y	Y
A1-2-23	7	50.5	A1-2	-	47.6	0	65.6	68.3	46.1	55.6	70.3	70.3	70	N	-	-	22.7	Y	N	N
A1-2-23	8	53.5	A1-2	-	48	0	65.6	67.9	45.8	56.3	70.1	70.1	70	N	-	-	22.1	Y	N	N
A1-2-23	9	56.5	A1-2	-	48.4	0	65.6	67.6	45.5	57	70	70.0	70	N	-	-	21.6	Y	N	N
A1-2-23	10	59.5	A1-2	-	48.8	0	65.6	67.3	45.2	57.5	69.8	69.9	70	N	-	-	21.1	Y	N	N
A1-2-23	11	62.5	A1-2	-	49	0	65.6	67	45	58.1	69.7	69.8	70	N	-	-	20.8	Y	N	N
A1-2-23	12	65.5	A1-2	-	49.2	0	65.6	66.8	44.7	58.5	69.6	69.7	70	N	-	-	20.5	Y	N	N
A1-2-23	13	68.5	A1-2	-	49.3	0	65.6	66.6	44.6	58.9	69.5	69.6	70	N	-	-	20.3	Y	N	N
A1-2-23	14	71.5	A1-2	-	49.5	0	65.6	66.4	44.3	59.3	69.5	69.5	70	N	-	-	20.0	Y	N	N
A1-2-23	15	74.5	A1-2	-	49.6	0	65.6	66.1	44.1	59.6	69.4	69.4	70	N	-	-	19.8	Y	N	N
A1-2-23	16	77.5	A1-2	-	49.8	0	65.6	66	43.9	59.9	69.3	69.4	70	N	-	-	19.6	Y	N	N
A1-2-23	17	80.5	A1-2	-	49.9	0	65.5	65.8	43.7	60.2	69.3	69.3	70	N	-	-	19.4	Y	N	N
A1-2-23	18	83.5	A1-2	-	49.9	0	65.5	65.6	43.6	60.4	69.2	69.3	70	N	-	-	19.4	Y	N	N
A1-2-23	19	86.5	A1-2	-	50	0	65.5	65.5	43.4	60.7	69.2	69.2	70	N	-	-	19.2	Y	N	N
A1-2-23	20	89.5	A1-2	-	50.1	0	65.4	65.3	43.3	61	69.1	69.2	70	N	-	-	19.1	Y	N	N
A1-2-23	21	92.5	A1-2	-	50.2	0	65.4	65.2	43.2	61.3	69.1	69.2	70	N	-	-	19.0	Y	N	N
A1-2-23	22	95.5	A1-2	-	50.3	0	65.4	65	43.1	61.6	69.1	69.1	70	N	-	-	18.8	Y	N	N
A1-2-23	23	98.5	A1-2	-	50.4	0	65.3	64.8	43	61.8	69	69.1	70	N	-	-	18.7	Y	N	N
A1-2-23	24	101.5	A1-2	-	50.5	0	65.3	64.7	43	62	69	69.1	70	N	-	-	18.6	Y	N	N
A1-2-23	25	104.5	A1-2	-	50.6	0	65.3	64.6	43.1	62.3	69	69.1	70	N	-	-	18.5	Y	N	N
A1-2-23	26	107.5	A1-2	-	50.9	0	65.2	64.5	43.5	62.7	69	69.1	70	N	-	-	18.2	Y	N	N
A1-2-23	27	110.5	A1-2	-	51.3	0	65.3	64.3	44.6	63.1	69.1	69.2	70	N	-	-	17.9	Y	N	N
A1-2-23	28	113.5	A1-2	-	52.2	0	65.3	64.2	45.8	63.6	69.2	69.3	70	N	-	-	17.1	Y	N	N
A1-2-23	29	116.5	A1-2	-	53.4	0	65.4	64	46.6	64.4	69.4	69.5	70	N	-	-	16.1	Y	N	N
A1-2-23	30	119.5	A1-2	-	54.5	0	65.5	64	47.3	65.4	69.8	69.9	70	N	-	-	15.4	Y	N	N
A1-2-23	31	122.5	A1-2	-	55.1	0	65.6	63.9	47.8	66.3	70.2	70.3	70	N	-	-	15.2	Y	N	N
A1-2-23	32	125.5	A1-2	-	55.5	0	65.6	63.9	48	67.2	70.6	70.7	70	Y	-	-	15.2	Y	Y	Y
A1-2-23	33	128.5	A1-2	-	55.7	0	65.7	63.8	48	67.8	70.9	71.0	70	Y	-	-	15.3	Y	Y	Y
A1-2-23	34	131.5	A1-2	-	55.8	0	65.7	63.9	48.1	68.2	71.1	71.2	70	Y	-	-	15.4	Y	Y	Y
A1-2-24	1	32.5	A1-2	-	37.1	0	63.1	70.5	48.3	48.9	71.3	71.3	70	Y	-	-	34.2	Y	Y	Y
A1-2-24	2	35.5	A1-2	-	38.7	0	63.8	70.1	47.8	49.7	71.1	71.1	70	Y	-	-	32.4	Y	Y	Y
A1-2-24	3	38.5	A1-2	-	40.9	0	64.8	69.7	47.5	50.6	71	71.0	70	Y	-	-	30.1	Y	Y	Y
A1-2-24	4	41.5	A1-2	-	43.9	0	65.2	69.4	47.1	51.5	70.8	70.8	70	Y	-	-	26.9	Y	Y	Y
A1-2-24	5	44.5	A1-2	-	46.5	0	65.3	69	46.8	52.6	70.6	70.6	70	Y	-	-	24.1	Y	Y	Y
A1-2-24	6	47.5	A1-2	-	47.2	0	65.3	68.6	46.4	53.8	70.4	70.4	70	N	-	-	23.2	Y	N	N
A1-2-24	7	50.5	A1-2	-	47.8	0	65.4	68.3	46.1	54.9	70.2	70.2	70	N	-	-	22.4	Y	N	N
A1-2-24	8	53.5	A1-2	-	48.2	0	65.4	67.9	45.8	55.6	70	70.0	70	N	-	-	21.8	Y	N	N
A1-2-24	9	56.5	A1-2	-	48.5	0	65.4	67.6	45.5	56.2	69.9	69.9	70	N	-	-	21.4	Y	N	N
A1-2-24	10	59.5	A1-2	-	48.9	0	65.4	67.3	45.2	56.7	69.7	69.7	70	N	-	-	20.8	Y	N	N
A1-2-24	11	62.5	A1-2	-	49.2	0	65.4	67	45	57.2	69.6	69.6	70	N	-	-	20.4	Y	N	N
A1-2-24	12	65.5	A1-2	-	49.4	0	65.4	66.8	44.7	57.7	69.5	69.5	70	N	-	-	20.1	Y	N	N
A1-2-24	13	68.5	A1-2	-	49.6	0	65.4	66.6	44.6	58.1	69.4	69.4	70	N	-	-	19.8	Y	N	N
A1-2-24	14	71.5	A1-2	-	49.7	0	65.4	66.4	44.3	58.5	69.3	69.4	70	N	-	-	19.7	Y	N	N
A1-2-24	15	74.5	A1-2	-	49.9	0	65.4	66.1	44.1	58.8	69.2	69.3	70	N	-	-	19.4	Y	N	N
A1-2-24	16	77.5	A1-2	-	50.1	0	65.4	66	43.9	59.1	69.2	69.2	70	N	-	-	19.1	Y	N	N
A1-2-24	17	80.5	A1-2	-	50.2	0	65.3	65.8	43.7	59.4	69.1	69.1	70	N	-	-	18.9	Y	N	N
A1-2-24	18	83.5	A1-2	-	50.2	0	65.3	65.6	43.5	59.7	69	69.1	70	N	-	-	18.9	Y	N	N
A1-2-24	19	86.5	A1-2	-	50.3	0	65.3	65.4	43.4	60	69	69.0	70	N	-	-	18.7	Y	N	N
A1-2-24	20	89.5	A1-2	-	50.4	0	65.3	65.3	43.3	60.3	68.9	69.0	70	N	-	-	18.6	Y	N	N
A1-2-24	21	92.5	A1-2	-	50.5	0	65.2	65.2	43.2	60.6	68.9	69.0	70	N	-	-	18.5	Y	N	N
A1-2-24	22	95.5	A1-2	-	50.6	0	65.2	65	43	60.9	68.9	68.9	70	N	-	-	18.3	Y	N	N
A1-2-24	23	98.5	A1-2	-	50.6	0	65.2	64.8	43	61.2	68.8	68.9	70	N	-	-	18.3	Y	N	N
A1-2-24	24	101.5	A1-2	-	50.8	0	65.1	64.7	43	61.4	68.8	68.9	70	N	-	-	18.1	Y	N	N
A1-2-24	25	104.5	A1-2	-	50.9	0	65.1	64.5	43	61.8	68.8	68.9	70	N	-	-	18.0	Y	N	N
A1-2-24	26	107.5	A1-2	-	51.2	0	65.1	64.4	43.3	62.2	68.8	68.9	70	N	-	-	17.7	Y	N	N
A1-2-24	27	110.5	A1-2	-	51.6	0	65.1	64.3	44	62.6	68.9	69.0	70	N	-	-	17.4	Y	N	N
A1-2-24	28	113.5	A1-2	-	52.4	0	65.1	64.2	45.1	63.2	69	69.1	70	N	-	-	16.7	Y	N	N
A1-2-24	29	116.5	A1-2	-	53.4	0	65.2	64	46	64.1	69.3	69.4	70	N	-	-	16.0	Y	N	N
A1-2-24	30	119.5	A1-2	-	54.5	0	65.3	63.9	47.1	65.1	69.6	69.8	70	N	-	-	15.3	Y	N	N
A1-2-24	31	122.5	A1-2	-	55.2	0	65.4	63.9	47.7	66.1	70	70.2	70	N	-	-	15.0	Y	N	N
A1-2-24	32	125.5	A1-2	-	55.5	0	65.5	63.8	48	67	70.4	70.6	70	Y	-	-	15.1	Y	N	Y
A1-2-24	33	128.5	A1-2	-	55.6	0	65.5	63.8	48	67.7	70.8	70.9	70	Y	-	-	15.3	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-24	34	131.5	A1-2	-	55.8	0	65.5	63.9	48	68.1	71	71.1	70	Y	-	-	15.3	Y	Y	Y
A1-2-25	1	32.5	A1-2	-	38.1	0	62.5	70.3	48.5	49.4	71	71.0	70	Y	-	-	32.9	Y	Y	Y
A1-2-25	2	35.5	A1-2	-	39.4	0	62.9	69.9	48.2	50.1	70.8	70.8	70	Y	-	-	31.4	Y	Y	Y
A1-2-25	3	38.5	A1-2	-	41.3	0	63.4	69.5	47.8	50.8	70.5	70.6	70	Y	-	-	29.3	Y	Y	Y
A1-2-25	4	41.5	A1-2	-	44.1	0	63.7	69.2	47.5	51.7	70.3	70.3	70	N	-	-	26.2	Y	N	N
A1-2-25	5	44.5	A1-2	-	46.4	0	63.8	68.8	47.1	52.6	70.1	70.1	70	N	-	-	23.7	Y	N	N
A1-2-25	6	47.5	A1-2	-	47.3	0	63.9	68.5	46.8	53.7	69.9	69.9	70	N	-	-	22.6	Y	N	N
A1-2-25	7	50.5	A1-2	-	47.7	0	64	68.1	46.4	54.7	69.7	69.7	70	N	-	-	22.0	Y	N	N
A1-2-25	8	53.5	A1-2	-	48.2	0	64	67.8	46.1	55.4	69.5	69.6	70	N	-	-	21.4	Y	N	N
A1-2-25	9	56.5	A1-2	-	48.6	0	64.1	67.5	45.9	55.9	69.4	69.4	70	N	-	-	20.8	Y	N	N
A1-2-25	10	59.5	A1-2	-	49	0	64.2	67.2	45.6	56.4	69.2	69.3	70	N	-	-	20.3	Y	N	N
A1-2-25	11	62.5	A1-2	-	49.3	0	64.2	66.9	45.3	56.9	69.1	69.1	70	N	-	-	19.8	Y	N	N
A1-2-25	12	65.5	A1-2	-	49.4	0	64.2	66.7	45.1	57.4	68.9	69.0	70	N	-	-	19.6	Y	N	N
A1-2-25	13	68.5	A1-2	-	49.6	0	64.2	66.5	44.9	57.8	68.9	68.9	70	N	-	-	19.3	Y	N	N
A1-2-25	14	71.5	A1-2	-	49.8	0	64.2	66.2	44.7	58.2	68.8	68.8	70	N	-	-	19.0	Y	N	N
A1-2-25	15	74.5	A1-2	-	50	0	64.2	66.1	44.5	58.5	68.7	68.8	70	N	-	-	18.8	Y	N	N
A1-2-25	16	77.5	A1-2	-	50.2	0	64.2	65.9	44.3	58.8	68.6	68.7	70	N	-	-	18.5	Y	N	N
A1-2-25	17	80.5	A1-2	-	50.3	0	64.2	65.7	44.1	59.1	68.6	68.6	70	N	-	-	18.3	Y	N	N
A1-2-25	18	83.5	A1-2	-	50.5	0	64.2	65.5	43.9	59.4	68.5	68.6	70	N	-	-	18.1	Y	N	N
A1-2-25	19	86.5	A1-2	-	50.6	0	64.1	65.4	43.7	59.7	68.4	68.5	70	N	-	-	17.9	Y	N	N
A1-2-25	20	89.5	A1-2	-	50.8	0	64.1	65.2	43.6	60	68.4	68.5	70	N	-	-	17.7	Y	N	N
A1-2-25	21	92.5	A1-2	-	50.9	0	64.1	65	43.5	60.3	68.3	68.4	70	N	-	-	17.5	Y	N	N
A1-2-25	22	95.5	A1-2	-	51.1	0	64	64.9	43.3	60.6	68.3	68.4	70	N	-	-	17.3	Y	N	N
A1-2-25	23	98.5	A1-2	-	51.2	0	64	64.7	43.3	60.8	68.3	68.4	70	N	-	-	17.2	Y	N	N
A1-2-25	24	101.5	A1-2	-	51.4	0	64	64.6	43.2	61.1	68.3	68.3	70	N	-	-	16.9	Y	N	N
A1-2-25	25	104.5	A1-2	-	51.6	0	64	64.5	43.1	61.5	68.3	68.4	70	N	-	-	16.8	Y	N	N
A1-2-25	26	107.5	A1-2	-	51.7	0	64	64.3	43.2	61.8	68.3	68.4	70	N	-	-	16.7	Y	N	N
A1-2-25	27	110.5	A1-2	-	51.9	0	64	64.2	43.5	62.2	68.3	68.4	70	N	-	-	16.5	Y	N	N
A1-2-25	28	113.5	A1-2	-	52.3	0	64.1	64.1	44	62.8	68.5	68.6	70	N	-	-	16.3	Y	N	N
A1-2-25	29	116.5	A1-2	-	53.1	0	64.1	63.9	45.1	63.7	68.7	68.8	70	N	-	-	15.7	Y	N	N
A1-2-25	30	119.5	A1-2	-	54	0	64.3	63.9	46.8	64.8	69.1	69.2	70	N	-	-	15.2	Y	N	N
A1-2-25	31	122.5	A1-2	-	54.6	0	64.4	63.8	47.7	65.8	69.5	69.7	70	N	-	-	15.1	Y	N	N
A1-2-25	32	125.5	A1-2	-	55	0	64.6	63.8	48	66.6	70	70.1	70	N	-	-	15.1	Y	N	N
A1-2-25	33	128.5	A1-2	-	55.2	0	64.6	63.7	48.1	67.3	70.3	70.4	70	N	-	-	15.2	Y	N	N
A1-2-25	34	131.5	A1-2	-	55.4	0	64.6	63.8	48.1	67.8	70.6	70.7	70	Y	-	-	15.3	Y	Y	Y
A1-2-26	1	32.5	A1-2	-	38.3	0	62	70	50	49.7	70.7	70.7	70	Y	-	-	32.4	Y	Y	Y
A1-2-26	2	35.5	A1-2	-	39.6	0	62.4	69.6	49.7	50.3	70.5	70.5	70	Y	-	-	30.9	Y	Y	Y
A1-2-26	3	38.5	A1-2	-	41.4	0	62.6	69.3	49.4	51	70.2	70.2	70	N	-	-	28.8	Y	N	N
A1-2-26	4	41.5	A1-2	-	44.1	0	62.9	68.9	49.1	51.8	70	70.0	70	N	-	-	25.9	Y	N	N
A1-2-26	5	44.5	A1-2	-	46.4	0	63	68.6	48.7	52.7	69.7	69.8	70	N	-	-	23.4	Y	N	N
A1-2-26	6	47.5	A1-2	-	47.2	0	63.1	68.3	48.4	53.7	69.6	69.6	70	N	-	-	22.4	Y	N	N
A1-2-26	7	50.5	A1-2	-	47.7	0	63.2	67.9	48.1	54.7	69.3	69.4	70	N	-	-	21.7	Y	N	N
A1-2-26	8	53.5	A1-2	-	48.1	0	63.3	67.6	47.8	55.4	69.2	69.2	70	N	-	-	21.1	Y	N	N
A1-2-26	9	56.5	A1-2	-	48.6	0	63.3	67.3	47.5	55.9	69	69.0	70	N	-	-	20.4	Y	N	N
A1-2-26	10	59.5	A1-2	-	49	0	63.4	67	47.2	56.4	68.9	68.9	70	N	-	-	19.9	Y	N	N
A1-2-26	11	62.5	A1-2	-	49.2	0	63.4	66.8	47	56.8	68.8	68.8	70	N	-	-	19.6	Y	N	N
A1-2-26	12	65.5	A1-2	-	49.4	0	63.5	66.5	46.7	57.3	68.6	68.7	70	N	-	-	19.3	Y	N	N
A1-2-26	13	68.5	A1-2	-	49.6	0	63.4	66.3	46.5	57.7	68.5	68.6	70	N	-	-	19.0	Y	N	N
A1-2-26	14	71.5	A1-2	-	49.7	0	63.5	66.1	46.3	58.1	68.5	68.5	70	N	-	-	18.8	Y	N	N
A1-2-26	15	74.5	A1-2	-	50	0	63.5	65.9	46.1	58.5	68.4	68.4	70	N	-	-	18.4	Y	N	N
A1-2-26	16	77.5	A1-2	-	50.2	0	63.5	65.7	45.9	58.7	68.3	68.4	70	N	-	-	18.2	Y	N	N
A1-2-26	17	80.5	A1-2	-	50.3	0	63.5	65.6	45.7	59	68.2	68.3	70	N	-	-	18.0	Y	N	N
A1-2-26	18	83.5	A1-2	-	50.5	0	63.5	65.4	45.5	59.3	68.2	68.3	70	N	-	-	17.8	Y	N	N
A1-2-26	19	86.5	A1-2	-	50.6	0	63.4	65.2	45.3	59.6	68.1	68.2	70	N	-	-	17.6	Y	N	N
A1-2-26	20	89.5	A1-2	-	50.8	0	63.4	65.1	45.2	59.9	68.1	68.2	70	N	-	-	17.4	Y	N	N
A1-2-26	21	92.5	A1-2	-	50.9	0	63.4	64.9	45.1	60.2	68	68.1	70	N	-	-	17.2	Y	N	N
A1-2-26	22	95.5	A1-2	-	51.1	0	63.4	64.8	44.9	60.5	68	68.1	70	N	-	-	17.0	Y	N	N
A1-2-26	23	98.5	A1-2	-	51.2	0	63.3	64.6	44.8	60.7	68	68.1	70	N	-	-	16.9	Y	N	N
A1-2-26	24	101.5	A1-2	-	51.4	0	63.3	64.4	44.7	61	67.9	68.0	70	N	-	-	16.6	Y	N	N
A1-2-26	25	104.5	A1-2	-	51.5	0	63.3	64.3	44.6	61.4	68	68.1	70	N	-	-	16.6	Y	N	N
A1-2-26	26	107.5	A1-2	-	51.6	0	63.3	64.1	44.7	61.7	67.9	68.0	70	N	-	-	16.4	Y	N	N
A1-2-26	27	110.5	A1-2	-	51.9	0	63.3	64.1	44.8	62.1	68	68.1	70	N	-	-	16.2	Y	N	N
A1-2-26	28	113.5	A1-2	-	52.2	0	63.3	64	45.1	62.7	68.2	68.3	70	N	-	-	16.1	Y	N	N
A1-2-26	29	116.5	A1-2	-	52.8	0	63.5	63.8	46	63.5	68.4	68.5	70	N	-	-	15.7	Y	N	N
A1-2-26	30	119.5	A1-2	-	53.6	0	63.6	63.7	47.5	64.6	68.8	68.9	70	N	-	-	15.3	Y	N	N
A1-2-26	31	122.5	A1-2	-	54.2	0	63.8	63.7	48.1	65.5	69.2	69.4	70	N	-	-	15.2	Y	N	N
A1-2-26	32	125.5	A1-2	-	54.7	0	64	63.5	48.4	66.4	69.6	69.8	70	N	-	-	15.1	Y	N	N
A1-2-26	33	128.5	A1-2	-	54.9	0	64	63.5	48.5	67.2	70	70.2	70	N	-	-	15.3	Y	N	N
A1-2-26	34	131.5	A1-2	-	55.1	0	64	63.6	48.4	67.6	70.3	70.4	70	N	-	-	15.3	Y	N	N
A1-2-27	1	32.5	A1-2	-	38.3	0	61.7	69.8	50.2	49.9	70.5	70.5	70	Y	-	-	32.2	Y	Y	Y
A1-2-27	2	35.5	A1-2	-	39.5	0	62.2	69.6	49.8	50.5	70.4	70.4	70	N	-	-	30.9	Y	N	N
A1-2-27	3	38.5	A1-2	-	41.4	0	62.4	69.2	49.5	51.1	70.1	70.1	70	N	-	-	28.7	Y	N	N
A1-2-27	4	41.5	A1-2	-	44.1	0	62.7	68.8	49.2	51.9	69.9	69.9	70	N	-	-	25.8	Y	N	N
A1-2-27	5	44.5	A1-2	-	46.4	0	62.8	68.5	48.9	52.7	69.7	69.7	70	N	-	-	23.3	Y	N	N
A1-2-27	6	47.5	A1-2	-	47.2	0	62.9	68.1	48.5	53.7	69.4	69.5	70	N	-	-	22.3	Y	N	N
A1-2-27	7	50.5	A1-2	-	47.7	0	63	67.8	48.2	54.6	69.3	69.3	70	N	-	-	21.6	Y	N	N
A1-2-27	8	53.5	A1-2	-	48.1	0	63.1	67.6	48	55.4	69.1	69.1	70	N	-	-	21.0	Y	N	N
A1-2-27	9	56.5	A1-2	-	48.6	0	63.2	67.3	47.7	55.9	68.9	69.0	70	N	-	-	20.4	Y	N	N
A1-2-27	10	59.5	A1-2	-	49	0	63.2	67	47.4	56.3	68.8	68.8	70	N	-	-	19.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-27	11	62.5	A1-2	-	49.2	0	63.2	66.7	47.2	56.8	68.6	68.7	70	N	-	-	19.5	Y	N	N
A1-2-27	12	65.5	A1-2	-	49.4	0	63.2	66.5	46.9	57.2	68.5	68.6	70	N	-	-	19.2	Y	N	N
A1-2-27	13	68.5	A1-2	-	49.5	0	63.3	66.3	46.7	57.6	68.4	68.5	70	N	-	-	19.0	Y	N	N
A1-2-27	14	71.5	A1-2	-	49.7	0	63.3	66.1	46.5	58	68.4	68.4	70	N	-	-	18.7	Y	N	N
A1-2-27	15	74.5	A1-2	-	49.9	0	63.2	65.9	46.3	58.4	68.3	68.3	70	N	-	-	18.4	Y	N	N
A1-2-27	16	77.5	A1-2	-	50.1	0	63.3	65.7	46.1	58.6	68.2	68.3	70	N	-	-	18.2	Y	N	N
A1-2-27	17	80.5	A1-2	-	50.3	0	63.2	65.6	45.9	58.9	68.1	68.2	70	N	-	-	17.9	Y	N	N
A1-2-27	18	83.5	A1-2	-	50.4	0	63.2	65.4	45.7	59.2	68.1	68.2	70	N	-	-	17.8	Y	N	N
A1-2-27	19	86.5	A1-2	-	50.6	0	63.2	65.2	45.5	59.5	68	68.1	70	N	-	-	17.5	Y	N	N
A1-2-27	20	89.5	A1-2	-	50.7	0	63.2	65	45.4	59.8	68	68.0	70	N	-	-	17.3	Y	N	N
A1-2-27	21	92.5	A1-2	-	50.8	0	63.2	64.9	45.2	60.1	67.9	68.0	70	N	-	-	17.2	Y	N	N
A1-2-27	22	95.5	A1-2	-	50.9	0	63.2	64.7	45.1	60.4	67.9	68.0	70	N	-	-	17.1	Y	N	N
A1-2-27	23	98.5	A1-2	-	51.1	0	63.2	64.6	45	60.6	67.9	68.0	70	N	-	-	16.9	Y	N	N
A1-2-27	24	101.5	A1-2	-	51.3	0	63.1	64.4	44.9	60.9	67.8	67.9	70	N	-	-	16.6	Y	N	N
A1-2-27	25	104.5	A1-2	-	51.3	0	63.1	64.3	44.8	61.2	67.9	68.0	70	N	-	-	16.7	Y	N	N
A1-2-27	26	107.5	A1-2	-	51.5	0	63.1	64.1	44.8	61.5	67.9	68.0	70	N	-	-	16.5	Y	N	N
A1-2-27	27	110.5	A1-2	-	51.8	0	63.1	64	44.9	61.9	67.9	68.0	70	N	-	-	16.2	Y	N	N
A1-2-27	28	113.5	A1-2	-	52.1	0	63.2	63.9	45.3	62.5	68.1	68.2	70	N	-	-	16.1	Y	N	N
A1-2-27	29	116.5	A1-2	-	52.7	0	63.3	63.8	46.2	63.4	68.3	68.4	70	N	-	-	15.7	Y	N	N
A1-2-27	30	119.5	A1-2	-	53.5	0	63.5	63.7	47.5	64.4	68.7	68.8	70	N	-	-	15.3	Y	N	N
A1-2-27	31	122.5	A1-2	-	54	0	63.6	63.6	48.2	65.4	69.1	69.3	70	N	-	-	15.3	Y	N	N
A1-2-27	32	125.5	A1-2	-	54.4	0	63.8	63.5	48.4	66.3	69.5	69.7	70	N	-	-	15.3	Y	N	N
A1-2-27	33	128.5	A1-2	-	54.7	0	63.9	63.5	48.5	67	69.9	70.0	70	N	-	-	15.3	Y	N	N
A1-2-27	34	131.5	A1-2	-	54.9	0	63.9	63.5	48.5	67.5	70.2	70.3	70	N	-	-	15.4	Y	N	N
A1-2-28	1	32.5	A1-2	-	38.2	0	58	69.2	50.3	50.1	69.6	69.6	70	N	-	-	31.4	Y	N	N
A1-2-28	2	35.5	A1-2	-	39.5	0	58.7	69.1	50	50.6	69.6	69.6	70	N	-	-	30.1	Y	N	N
A1-2-28	3	38.5	A1-2	-	41.3	0	59.3	68.8	49.7	51.3	69.3	69.3	70	N	-	-	28.0	Y	N	N
A1-2-28	4	41.5	A1-2	-	44.1	0	59.7	68.4	49.3	52	69.1	69.1	70	N	-	-	25.0	Y	N	N
A1-2-28	5	44.5	A1-2	-	46.3	0	60.1	68.1	49	52.8	68.9	68.9	70	N	-	-	22.6	Y	N	N
A1-2-28	6	47.5	A1-2	-	47.2	0	60.3	67.7	48.7	53.8	68.6	68.7	70	N	-	-	21.5	Y	N	N
A1-2-28	7	50.5	A1-2	-	47.7	0	60.5	67.4	48.4	54.6	68.5	68.5	70	N	-	-	20.8	Y	N	N
A1-2-28	8	53.5	A1-2	-	48.1	0	60.6	67.1	48.2	55.3	68.3	68.3	70	N	-	-	20.2	Y	N	N
A1-2-28	9	56.5	A1-2	-	48.5	0	60.8	66.9	47.9	55.9	68.1	68.2	70	N	-	-	19.7	Y	N	N
A1-2-28	10	59.5	A1-2	-	48.9	0	60.9	66.6	47.6	56.3	68	68.1	70	N	-	-	19.2	Y	N	N
A1-2-28	11	62.5	A1-2	-	49.1	0	61.1	66.4	47.4	56.8	67.9	68.0	70	N	-	-	18.9	Y	N	N
A1-2-28	12	65.5	A1-2	-	49.3	0	61.1	66.1	47.1	57.2	67.7	67.8	70	N	-	-	18.5	Y	N	N
A1-2-28	13	68.5	A1-2	-	49.5	0	61.2	65.9	46.9	57.6	67.7	67.8	70	N	-	-	18.3	Y	N	N
A1-2-28	14	71.5	A1-2	-	49.7	0	61.3	65.8	46.6	58	67.6	67.7	70	N	-	-	18.0	Y	N	N
A1-2-28	15	74.5	A1-2	-	49.9	0	61.3	65.5	46.4	58.3	67.5	67.6	70	N	-	-	17.7	Y	N	N
A1-2-28	16	77.5	A1-2	-	50	0	61.3	65.3	46.2	58.6	67.4	67.5	70	N	-	-	17.5	Y	N	N
A1-2-28	17	80.5	A1-2	-	50.2	0	61.3	65.2	46	58.9	67.4	67.5	70	N	-	-	17.3	Y	N	N
A1-2-28	18	83.5	A1-2	-	50.3	0	61.4	65	45.9	59.2	67.3	67.4	70	N	-	-	17.1	Y	N	N
A1-2-28	19	86.5	A1-2	-	50.4	0	61.4	64.9	45.7	59.4	67.3	67.4	70	N	-	-	17.0	Y	N	N
A1-2-28	20	89.5	A1-2	-	50.6	0	61.4	64.7	45.5	59.7	67.3	67.4	70	N	-	-	16.8	Y	N	N
A1-2-28	21	92.5	A1-2	-	50.7	0	61.4	64.6	45.3	60.1	67.2	67.3	70	N	-	-	16.6	Y	N	N
A1-2-28	22	95.5	A1-2	-	50.8	0	61.4	64.4	45.2	60.4	67.2	67.3	70	N	-	-	16.5	Y	N	N
A1-2-28	23	98.5	A1-2	-	51	0	61.4	64.3	45.1	60.6	67.2	67.3	70	N	-	-	16.3	Y	N	N
A1-2-28	24	101.5	A1-2	-	51.1	0	61.4	64.1	45	60.9	67.2	67.3	70	N	-	-	16.2	Y	N	N
A1-2-28	25	104.5	A1-2	-	51.2	0	61.4	64	44.9	61.2	67.2	67.3	70	N	-	-	16.1	Y	N	N
A1-2-28	26	107.5	A1-2	-	51.3	0	61.4	63.8	44.9	61.5	67.2	67.3	70	N	-	-	16.0	Y	N	N
A1-2-28	27	110.5	A1-2	-	51.6	0	61.5	63.7	44.9	61.9	67.3	67.4	70	N	-	-	15.8	Y	N	N
A1-2-28	28	113.5	A1-2	-	51.9	0	61.5	63.6	45.3	62.4	67.4	67.5	70	N	-	-	15.6	Y	N	N
A1-2-28	29	116.5	A1-2	-	52.4	0	61.7	63.5	46.1	63.2	67.7	67.8	70	N	-	-	15.4	Y	N	N
A1-2-28	30	119.5	A1-2	-	53.2	0	61.9	63.4	47.5	64.2	68.1	68.2	70	N	-	-	15.0	Y	N	N
A1-2-28	31	122.5	A1-2	-	53.7	0	62.2	63.3	48.2	65.2	68.6	68.7	70	N	-	-	15.0	Y	N	N
A1-2-28	32	125.5	A1-2	-	54.1	0	62.4	63.2	48.4	66.1	69	69.2	70	N	-	-	15.1	Y	N	N
A1-2-28	33	128.5	A1-2	-	54.5	0	62.5	63.2	48.5	66.9	69.5	69.6	70	N	-	-	15.1	Y	N	N
A1-2-28	34	131.5	A1-2	-	54.7	0	62.6	63.2	48.4	67.4	69.8	69.9	70	N	-	-	15.2	Y	N	N
A1-2-29	1	32.5	A1-2	-	27.4	0	58.4	67	16	40.9	67.6	67.6	70	N	-	-	40.2	Y	N	N
A1-2-29	2	35.5	A1-2	-	27.4	0	58.6	66.7	16	40.9	67.3	67.3	70	N	-	-	39.9	Y	N	N
A1-2-29	3	38.5	A1-2	-	27.6	0	58.9	66.5	16	40.9	67.2	67.2	70	N	-	-	39.6	Y	N	N
A1-2-29	4	41.5	A1-2	-	27.7	0	59	66.2	16	40.9	67	67.0	70	N	-	-	39.3	Y	N	N
A1-2-29	5	44.5	A1-2	-	28	0	59.2	65.9	16	40.9	66.8	66.8	70	N	-	-	38.8	Y	N	N
A1-2-29	6	47.5	A1-2	-	28.3	0	59.3	65.6	15.9	40.9	66.5	66.5	70	N	-	-	38.2	Y	N	N
A1-2-29	7	50.5	A1-2	-	28.9	0	59.4	65.3	15.9	40.8	66.3	66.3	70	N	-	-	37.4	Y	N	N
A1-2-29	8	53.5	A1-2	-	30	0	59.5	65	15.9	40.8	66.1	66.1	70	N	-	-	36.1	Y	N	N
A1-2-29	9	56.5	A1-2	-	31.5	0	59.6	64.7	15.9	40.8	65.9	65.9	70	N	-	-	34.4	Y	N	N
A1-2-29	10	59.5	A1-2	-	33.1	0	59.6	64.5	15.9	40.8	65.8	65.8	70	N	-	-	32.7	Y	N	N
A1-2-29	11	62.5	A1-2	-	33.7	0	59.7	64.3	15.9	40.8	65.6	65.6	70	N	-	-	31.9	Y	N	N
A1-2-29	12	65.5	A1-2	-	34	0	59.7	64.1	15.5	40.8	65.4	65.4	70	N	-	-	31.4	Y	N	N
A1-2-29	13	68.5	A1-2	-	34.1	0	59.7	63.9	16.4	40.7	65.3	65.3	70	N	-	-	31.2	Y	N	N
A1-2-29	14	71.5	A1-2	-	34.3	0	59.7	63.6	17.3	40.9	65.1	65.1	70	N	-	-	30.8	Y	N	N
A1-2-29	15	74.5	A1-2	-	34.4	0	59.7	63.4	18	41.1	64.9	65.0	70	N	-	-	30.6	Y	N	N
A1-2-29	16	77.5	A1-2	-	34.5	0	59.7	63.2	18.7	41.6	64.8	64.8	70	N	-	-	30.3	Y	N	N
A1-2-29	17	80.5	A1-2	-	34.7	0	59.7	63	19.5	42.1	64.7	64.7	70	N	-	-	30.0	Y	N	N
A1-2-29	18	83.5	A1-2	-	35	0	59.7	62.8	20.4	42.7	64.5	64.6	70	N	-	-	29.6	Y	N	N
A1-2-29	19	86.5	A1-2	-	35.3	0	59.7	62.7	21.1	43.3	64.5	64.5	70	N	-	-	29.2	Y	N	N
A1-2-29	20	89.5	A1-2	-	35.8	0	59.7	62.5	22	44.1	64.3	64.4	70	N	-	-	28.6	Y	N	N
A1-2-29	21	92.5	A1-2	-	36.4	0	59.7	62.3	23	44.8	64.2	64.2	70	N	-	-	27.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project												
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-29	22	95.5	A1-2	-	37.3	0	59.7	62.2	24.1	45.6	64.2	64.2	70	N	-	-	26.9	Y	N	N
A1-2-29	23	98.5	A1-2	-	38.5	0	59.7	62	25.1	46.6	64.1	64.1	70	N	-	-	25.6	Y	N	N
A1-2-29	24	101.5	A1-2	-	40.4	0	59.6	61.8	26.1	47.5	64	64.0	70	N	-	-	23.6	Y	N	N
A1-2-29	25	104.5	A1-2	-	43.2	0	59.6	61.7	27.2	48.6	63.9	63.9	70	N	-	-	20.7	Y	N	N
A1-2-29	26	107.5	A1-2	-	47.1	0	59.6	61.6	28.3	49.8	63.9	64.0	70	N	-	-	16.9	Y	N	N
A1-2-29	27	110.5	A1-2	-	48.6	0	59.6	61.4	29.4	51.1	63.8	64.0	70	N	-	-	15.4	Y	N	N
A1-2-29	28	113.5	A1-2	-	49.1	0	59.6	61.3	30.7	52.7	63.9	64.0	70	N	-	-	14.9	Y	N	N
A1-2-29	29	116.5	A1-2	-	49.3	0	59.6	61.2	32	54.8	64	64.2	70	N	-	-	14.9	Y	N	N
A1-2-29	30	119.5	A1-2	-	49.5	0	59.7	61	33.5	57	64.3	64.4	70	N	-	-	14.9	Y	N	N
A1-2-29	31	122.5	A1-2	-	49.8	0	59.7	60.9	35.2	58.5	64.6	64.7	70	N	-	-	14.9	Y	N	N
A1-2-29	32	125.5	A1-2	-	49.9	0	59.8	60.8	37	59.5	64.8	65.0	70	N	-	-	15.1	Y	N	N
A1-2-29	33	128.5	A1-2	-	50.2	0	59.9	60.7	39.6	60.3	65.1	65.3	70	N	-	-	15.1	Y	N	N
A1-2-29	34	131.5	A1-2	-	50.4	0	60	60.7	41.7	61.2	65.4	65.6	70	N	-	-	15.2	Y	N	N
A1-2-30	1	32.5	A1-2	-	27.2	0	58.5	67.5	15.9	41	68	68.0	70	N	-	-	40.8	Y	N	N
A1-2-30	2	35.5	A1-2	-	27.2	0	58.8	67.1	15.9	41	67.7	67.7	70	N	-	-	40.5	Y	N	N
A1-2-30	3	38.5	A1-2	-	27.2	0	59	66.8	15.9	41	67.5	67.5	70	N	-	-	40.3	Y	N	N
A1-2-30	4	41.5	A1-2	-	27.2	0	59.2	66.5	15.9	41	67.2	67.2	70	N	-	-	40.0	Y	N	N
A1-2-30	5	44.5	A1-2	-	27.1	0	59.3	66.2	15.9	41	67	67.0	70	N	-	-	39.9	Y	N	N
A1-2-30	6	47.5	A1-2	-	27.1	0	59.5	65.8	15.9	41	66.7	66.7	70	N	-	-	39.6	Y	N	N
A1-2-30	7	50.5	A1-2	-	27.1	0	59.6	65.5	15.9	41	66.5	66.5	70	N	-	-	39.4	Y	N	N
A1-2-30	8	53.5	A1-2	-	27.1	0	59.6	65.2	15.9	40.9	66.3	66.3	70	N	-	-	39.2	Y	N	N
A1-2-30	9	56.5	A1-2	-	27.1	0	59.7	64.9	15.9	40.9	66.1	66.1	70	N	-	-	39.0	Y	N	N
A1-2-30	10	59.5	A1-2	-	27.1	0	59.7	64.7	15.9	40.9	65.9	65.9	70	N	-	-	38.8	Y	N	N
A1-2-30	11	62.5	A1-2	-	27.1	0	59.8	64.4	15.8	40.9	65.7	65.7	70	N	-	-	38.6	Y	N	N
A1-2-30	12	65.5	A1-2	-	27.1	0	59.8	64.2	15.5	40.9	65.6	65.6	70	N	-	-	38.5	Y	N	N
A1-2-30	13	68.5	A1-2	-	27.1	0	59.8	64	16.4	40.8	65.4	65.4	70	N	-	-	38.3	Y	N	N
A1-2-30	14	71.5	A1-2	-	27.3	0	59.8	63.8	17.1	41	65.2	65.2	70	N	-	-	37.9	Y	N	N
A1-2-30	15	74.5	A1-2	-	27.8	0	59.8	63.6	17.9	41.2	65.1	65.1	70	N	-	-	37.3	Y	N	N
A1-2-30	16	77.5	A1-2	-	28.5	0	59.8	63.4	18.6	41.7	65	65.0	70	N	-	-	36.5	Y	N	N
A1-2-30	17	80.5	A1-2	-	29.3	0	59.8	63.2	19.4	42.2	64.8	64.8	70	N	-	-	35.5	Y	N	N
A1-2-30	18	83.5	A1-2	-	30.2	0	59.8	63	20.3	42.8	64.7	64.7	70	N	-	-	34.5	Y	N	N
A1-2-30	19	86.5	A1-2	-	31.2	0	59.8	62.8	21.1	43.4	64.6	64.6	70	N	-	-	33.4	Y	N	N
A1-2-30	20	89.5	A1-2	-	32.4	0	59.7	62.6	22	44.1	64.4	64.4	70	N	-	-	32.0	Y	N	N
A1-2-30	21	92.5	A1-2	-	33.8	0	59.7	62.5	22.9	44.9	64.4	64.4	70	N	-	-	30.6	Y	N	N
A1-2-30	22	95.5	A1-2	-	35.4	0	59.7	62.3	23.9	45.8	64.3	64.3	70	N	-	-	28.9	Y	N	N
A1-2-30	23	98.5	A1-2	-	37.2	0	59.7	62.1	24.9	46.7	64.2	64.2	70	N	-	-	27.0	Y	N	N
A1-2-30	24	101.5	A1-2	-	39.6	0	59.7	62	25.9	47.7	64.1	64.1	70	N	-	-	24.5	Y	N	N
A1-2-30	25	104.5	A1-2	-	43	0	59.7	61.8	27	48.7	64	64.0	70	N	-	-	21.0	Y	N	N
A1-2-30	26	107.5	A1-2	-	47.2	0	59.7	61.7	28.1	49.9	64	64.1	70	N	-	-	16.9	Y	N	N
A1-2-30	27	110.5	A1-2	-	48.6	0	59.7	61.5	29.3	51.2	63.9	64.1	70	N	-	-	15.5	Y	N	N
A1-2-30	28	113.5	A1-2	-	49.1	0	59.7	61.4	30.5	52.9	64	64.1	70	N	-	-	15.0	Y	N	N
A1-2-30	29	116.5	A1-2	-	49.3	0	59.7	61.3	31.8	55	64.1	64.3	70	N	-	-	15.0	Y	N	N
A1-2-30	30	119.5	A1-2	-	49.6	0	59.7	61.2	33.2	57.3	64.5	64.6	70	N	-	-	15.0	Y	N	N
A1-2-30	31	122.5	A1-2	-	49.7	0	59.8	61	34.7	58.7	64.7	64.8	70	N	-	-	15.1	Y	N	N
A1-2-30	32	125.5	A1-2	-	49.9	0	59.9	60.9	36.6	59.6	64.9	65.1	70	N	-	-	15.2	Y	N	N
A1-2-30	33	128.5	A1-2	-	50.2	0	60	60.8	38.8	60.4	65.2	65.3	70	N	-	-	15.1	Y	N	N
A1-2-30	34	131.5	A1-2	-	50.4	0	60.1	60.8	41.1	61.2	65.5	65.6	70	N	-	-	15.2	Y	N	N
A1-2-31	1	32.5	A1-2	-	27.8	0	58.7	68.8	15.9	41.2	69.2	69.2	70	N	-	-	41.4	Y	N	N
A1-2-31	2	35.5	A1-2	-	27.8	0	58.9	68.4	15.9	41.2	68.9	68.9	70	N	-	-	41.1	Y	N	N
A1-2-31	3	38.5	A1-2	-	27.8	0	59.1	68	15.9	41.2	68.6	68.6	70	N	-	-	40.8	Y	N	N
A1-2-31	4	41.5	A1-2	-	27.8	0	59.3	67.7	15.9	41.2	68.3	68.3	70	N	-	-	40.5	Y	N	N
A1-2-31	5	44.5	A1-2	-	27.8	0	59.5	67.3	15.9	41.2	68	68.0	70	N	-	-	40.2	Y	N	N
A1-2-31	6	47.5	A1-2	-	27.8	0	59.6	66.9	15.9	41.2	67.7	67.7	70	N	-	-	39.9	Y	N	N
A1-2-31	7	50.5	A1-2	-	27.8	0	59.8	66.7	15.9	41.2	67.5	67.5	70	N	-	-	39.7	Y	N	N
A1-2-31	8	53.5	A1-2	-	27.8	0	59.8	66.4	15.9	41.2	67.2	67.2	70	N	-	-	39.4	Y	N	N
A1-2-31	9	56.5	A1-2	-	27.8	0	59.9	66.1	15.9	41.2	67	67.0	70	N	-	-	39.2	Y	N	N
A1-2-31	10	59.5	A1-2	-	27.8	0	60	65.8	15.9	41.1	66.8	66.8	70	N	-	-	39.0	Y	N	N
A1-2-31	11	62.5	A1-2	-	27.7	0	60	65.5	15.9	41.1	66.6	66.6	70	N	-	-	38.9	Y	N	N
A1-2-31	12	65.5	A1-2	-	27.7	0	60	65.3	15.8	41.1	66.4	66.4	70	N	-	-	38.7	Y	N	N
A1-2-31	13	68.5	A1-2	-	27.7	0	60	65	16.4	41.1	66.2	66.2	70	N	-	-	38.5	Y	N	N
A1-2-31	14	71.5	A1-2	-	27.9	0	60	64.8	17.1	41.2	66.1	66.1	70	N	-	-	38.2	Y	N	N
A1-2-31	15	74.5	A1-2	-	28.5	0	60	64.6	17.9	41.4	65.9	65.9	70	N	-	-	37.4	Y	N	N
A1-2-31	16	77.5	A1-2	-	29.1	0	60.1	64.3	18.5	41.8	65.7	65.7	70	N	-	-	36.6	Y	N	N
A1-2-31	17	80.5	A1-2	-	29.8	0	60	64.1	19.3	42.4	65.5	65.6	70	N	-	-	35.8	Y	N	N
A1-2-31	18	83.5	A1-2	-	30.7	0	60	63.9	20.1	43	65.4	65.4	70	N	-	-	34.7	Y	N	N
A1-2-31	19	86.5	A1-2	-	31.7	0	60	63.7	21	43.6	65.3	65.3	70	N	-	-	33.6	Y	N	N
A1-2-31	20	89.5	A1-2	-	32.9	0	60	63.6	21.9	44.2	65.2	65.2	70	N	-	-	32.3	Y	N	N
A1-2-31	21	92.5	A1-2	-	34.2	0	60	63.4	22.8	45	65.1	65.1	70	N	-	-	30.9	Y	N	N
A1-2-31	22	95.5	A1-2	-	35.7	0	59.9	63.2	23.8	45.9	64.9	64.9	70	N	-	-	29.2	Y	N	N
A1-2-31	23	98.5	A1-2	-	37.6	0	59.9	63.1	24.8	46.8	64.9	64.9	70	N	-	-	27.3	Y	N	N
A1-2-31	24	101.5	A1-2	-	39.9	0	59.9	62.9	25.8	47.8	64.8	64.8	70	N	-	-	24.9	Y	N	N
A1-2-31	25	104.5	A1-2	-	43.5	0	59.9	62.8	26.8	48.9	64.7	64.7	70	N	-	-	21.2	Y	N	N
A1-2-31	26	107.5	A1-2	-	47.5	0	59.9	62.6	27.9	50.1	64.6	64.7	70	N	-	-	17.2	Y	N	N
A1-2-31	27	110.5	A1-2	-	48.8	0	59.9	62.5	29	51.4	64.6	64.7	70	N	-	-	15.9	Y	N	N
A1-2-31	28	113.5	A1-2	-	49.1	0	59.9	62.3	30.3	53.1	64.6	64.7	70	N	-	-	15.6	Y	N	N
A1-2-31	29	116.5	A1-2	-	49.3	0	59.9	62.2	31.5	55.4	64.7	64.9	70	N	-	-	15.6	Y	N	N
A1-2-31	30	119.5	A1-2	-	49.6	0	59.9	62.1	32.8	57.6	65	65.2	70	N	-	-	15.6	Y	N	N
A1-2-31	31	122.5	A1-2	-	49.8	0	60	61.9	34.4	58.8	65.2	65.3	70	N	-	-	15.5	Y	N	N
A1-2-31	32	125.5	A1-2	-	50	0	60.1	61.9	35.9	59.7	65.4	65.5	70	N	-	-	15.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-31	33	128.5	A1-2	-	50.2	0	60.2	61.8	38.1	60.5	65.7	65.8	70	N	-	-	15.6	Y	N	N
A1-2-31	34	131.5	A1-2	-	50.6	0	60.3	61.7	40.5	61.3	65.9	66.1	70	N	-	-	15.5	Y	N	N
A1-2-32	1	32.5	A1-2	-	23.8	0	24	66.4	55.1	39.4	66.7	66.7	70	N	-	-	42.9	Y	N	N
A1-2-32	2	35.5	A1-2	-	23.8	0	24	66.1	54.8	39.4	66.4	66.4	70	N	-	-	42.6	Y	N	N
A1-2-32	3	38.5	A1-2	-	23.8	0	24	65.8	54.5	39.5	66.1	66.1	70	N	-	-	42.3	Y	N	N
A1-2-32	4	41.5	A1-2	-	23.8	0	24	65.5	54.2	39.6	65.8	65.8	70	N	-	-	42.0	Y	N	N
A1-2-32	5	44.5	A1-2	-	23.8	0	24	65.1	53.8	39.7	65.5	65.5	70	N	-	-	41.7	Y	N	N
A1-2-32	6	47.5	A1-2	-	23.8	0	24	64.8	53.5	39.8	65.2	65.2	70	N	-	-	41.4	Y	N	N
A1-2-32	7	50.5	A1-2	-	23.8	0	23.9	64.5	53.3	39.9	64.9	64.9	70	N	-	-	41.1	Y	N	N
A1-2-32	8	53.5	A1-2	-	23.8	0	23.9	64.2	52.9	40	64.6	64.6	70	N	-	-	40.8	Y	N	N
A1-2-32	9	56.5	A1-2	-	23.7	0	23.9	64	52.7	40.1	64.3	64.3	70	N	-	-	40.6	Y	N	N
A1-2-32	10	59.5	A1-2	-	23.7	0	23.9	63.8	52.4	40.3	64.1	64.1	70	N	-	-	40.4	Y	N	N
A1-2-32	11	62.5	A1-2	-	23.7	0	23.9	63.5	52.2	40.4	63.8	63.8	70	N	-	-	40.1	Y	N	N
A1-2-32	12	65.5	A1-2	-	23.8	0	23.9	63.3	51.9	40.5	63.6	63.6	70	N	-	-	39.8	Y	N	N
A1-2-32	13	68.5	A1-2	-	23.8	0	23.9	63	51.7	40.5	63.3	63.3	70	N	-	-	39.5	Y	N	N
A1-2-32	14	71.5	A1-2	-	24	0	23.7	62.8	51.5	40.6	63.1	63.1	70	N	-	-	39.1	Y	N	N
A1-2-32	15	74.5	A1-2	-	24.2	0	24	62.6	51.3	40.8	62.9	62.9	70	N	-	-	38.7	Y	N	N
A1-2-32	16	77.5	A1-2	-	24.6	0	24.1	62.4	51.1	40.9	62.7	62.7	70	N	-	-	38.1	Y	N	N
A1-2-32	17	80.5	A1-2	-	25.1	0	24.2	62.2	50.9	41.1	62.5	62.5	70	N	-	-	37.4	Y	N	N
A1-2-32	18	83.5	A1-2	-	25.8	0	24.3	62	50.7	41.2	62.3	62.3	70	N	-	-	36.5	Y	N	N
A1-2-32	19	86.5	A1-2	-	26.5	0	24.6	61.8	50.5	41.4	62.2	62.2	70	N	-	-	35.7	Y	N	N
A1-2-32	20	89.5	A1-2	-	27.1	0	24.8	61.6	50.3	41.6	62	62.0	70	N	-	-	34.9	Y	N	N
A1-2-32	21	92.5	A1-2	-	27.9	0	25	61.5	50.2	41.9	61.8	61.8	70	N	-	-	33.9	Y	N	N
A1-2-32	22	95.5	A1-2	-	28.7	0	25.3	61.3	50	42.2	61.7	61.7	70	N	-	-	33.0	Y	N	N
A1-2-32	23	98.5	A1-2	-	29.5	0	25.6	61.2	49.8	42.5	61.5	61.5	70	N	-	-	32.0	Y	N	N
A1-2-32	24	101.5	A1-2	-	30.4	0	25.9	61.1	49.7	42.9	61.4	61.4	70	N	-	-	31.0	Y	N	N
A1-2-32	25	104.5	A1-2	-	31.3	0	26.3	60.9	49.5	43.3	61.3	61.3	70	N	-	-	30.0	Y	N	N
A1-2-32	26	107.5	A1-2	-	32.2	0	26.9	60.8	49.4	43.8	61.2	61.2	70	N	-	-	29.0	Y	N	N
A1-2-32	27	110.5	A1-2	-	33.2	0	27.5	60.7	49.3	44.4	61.1	61.1	70	N	-	-	27.9	Y	N	N
A1-2-32	28	113.5	A1-2	-	34.1	0	28.1	60.6	49.1	45.1	61	61.0	70	N	-	-	26.9	Y	N	N
A1-2-32	29	116.5	A1-2	-	34.9	0	28.9	60.5	49	45.7	60.9	60.9	70	N	-	-	26.0	Y	N	N
A1-2-32	30	119.5	A1-2	-	35.7	0	29.7	60.3	48.9	46.4	60.8	60.8	70	N	-	-	25.1	Y	N	N
A1-2-32	31	122.5	A1-2	-	36.3	0	30.9	60.3	48.7	47.4	60.8	60.8	70	N	-	-	24.5	Y	N	N
A1-2-32	32	125.5	A1-2	-	37	0	32.2	60.2	48.6	48.6	60.8	60.8	70	N	-	-	23.8	Y	N	N
A1-2-32	33	128.5	A1-2	-	37.6	0	33.6	60.1	48.5	49.9	60.8	60.8	70	N	-	-	23.2	Y	N	N
A1-2-32	34	131.5	A1-2	-	38.2	0	35.6	60.1	48.4	50.9	60.8	60.9	70	N	-	-	22.7	Y	N	N
A1-2-33	1	37	A1-2	-	23.8	0	49.6	65.9	14.8	40.4	66	66.0	70	N	-	-	42.2	Y	N	N
A1-2-33	2	40.1	A1-2	-	23.7	0	50	65.6	14.8	40.3	65.7	65.7	70	N	-	-	42.0	Y	N	N
A1-2-33	3	43.2	A1-2	-	23.7	0	50.4	65.4	14.8	40.3	65.6	65.6	70	N	-	-	41.9	Y	N	N
A1-2-33	4	46.3	A1-2	-	23.7	0	50.7	65.2	14.8	40.3	65.4	65.4	70	N	-	-	41.7	Y	N	N
A1-2-33	5	49.4	A1-2	-	23.7	0	51	65	14.8	40.3	65.2	65.2	70	N	-	-	41.5	Y	N	N
A1-2-33	6	52.5	A1-2	-	23.7	0	51.2	64.7	14.8	40.3	64.9	64.9	70	N	-	-	41.2	Y	N	N
A1-2-33	7	55.6	A1-2	-	23.7	0	51.5	64.5	14.8	40.3	64.7	64.8	70	N	-	-	41.1	Y	N	N
A1-2-33	8	58.7	A1-2	-	23.7	0	51.7	64.3	14.8	40.3	64.6	64.6	70	N	-	-	40.9	Y	N	N
A1-2-33	9	61.8	A1-2	-	23.7	0	51.8	64	14.8	40.3	64.3	64.3	70	N	-	-	40.6	Y	N	N
A1-2-33	10	64.9	A1-2	-	23.7	0	51.9	63.8	14.7	40.3	64.1	64.1	70	N	-	-	40.4	Y	N	N
A1-2-33	11	68	A1-2	-	23.6	0	52.1	63.6	14.7	40.3	64	64.0	70	N	-	-	40.4	Y	N	N
A1-2-33	12	71.1	A1-2	-	23.8	0	52.2	63.4	15.2	40.3	63.8	63.8	70	N	-	-	40.0	Y	N	N
A1-2-33	13	74.2	A1-2	-	24.3	0	52.3	63.3	15.8	40.5	63.6	63.6	70	N	-	-	39.3	Y	N	N
A1-2-33	14	77.3	A1-2	-	24.8	0	52.3	63.1	16.4	40.7	63.4	63.4	70	N	-	-	38.6	Y	N	N
A1-2-33	15	80.4	A1-2	-	25.4	0	52.4	62.9	17	41.1	63.3	63.3	70	N	-	-	37.9	Y	N	N
A1-2-33	16	83.5	A1-2	-	26	0	52.5	62.8	17.6	41.5	63.2	63.2	70	N	-	-	37.2	Y	N	N
A1-2-33	17	86.6	A1-2	-	26.7	0	52.5	62.6	18.3	42.1	63	63.0	70	N	-	-	36.3	Y	N	N
A1-2-33	18	89.7	A1-2	-	27.4	0	52.5	62.4	19	42.6	62.9	62.9	70	N	-	-	35.5	Y	N	N
A1-2-33	19	92.8	A1-2	-	28.1	0	52.6	62.3	19.7	43.2	62.8	62.8	70	N	-	-	34.7	Y	N	N
A1-2-33	20	95.9	A1-2	-	29	0	52.7	62.1	20.5	43.9	62.7	62.7	70	N	-	-	33.7	Y	N	N
A1-2-33	21	99	A1-2	-	29.9	0	52.7	62	21.1	44.6	62.5	62.5	70	N	-	-	32.6	Y	N	N
A1-2-33	22	102.1	A1-2	-	30.8	0	52.7	61.9	21.9	45.4	62.5	62.5	70	N	-	-	31.7	Y	N	N
A1-2-33	23	105.2	A1-2	-	31.7	0	52.7	61.8	22.7	46.2	62.4	62.4	70	N	-	-	30.7	Y	N	N
A1-2-33	24	108.3	A1-2	-	32.8	0	52.7	61.7	23.6	47.1	62.3	62.3	70	N	-	-	29.5	Y	N	N
A1-2-33	25	111.4	A1-2	-	33.8	0	52.7	61.6	24.4	48.1	62.3	62.3	70	N	-	-	28.5	Y	N	N
A1-2-33	26	114.5	A1-2	-	35	0	52.8	61.4	25.3	49.1	62.2	62.2	70	N	-	-	27.2	Y	N	N
A1-2-33	27	117.6	A1-2	-	36.3	0	52.8	61.4	26.2	50.2	62.2	62.2	70	N	-	-	25.9	Y	N	N
A1-2-33	28	120.7	A1-2	-	38	0	52.8	61.3	27	51.5	62.3	62.3	70	N	-	-	24.3	Y	N	N
A1-2-33	29	123.8	A1-2	-	40.2	0	52.9	61.3	28	53.1	62.4	62.4	70	N	-	-	22.2	Y	N	N
A1-2-33	30	126.9	A1-2	-	42.5	0	52.9	61.2	29.1	54.9	62.6	62.6	70	N	-	-	20.1	Y	N	N
A1-2-33	31	130	A1-2	-	44.2	0	52.9	61.1	30.1	56.8	62.9	63.0	70	N	-	-	18.8	Y	N	N
A1-2-33	32	133.1	A1-2	-	45.1	0	53	61	31.4	58.3	63.3	63.4	70	N	-	-	18.3	Y	N	N
A1-2-34	1	37	A1-2	-	17	0	23	63.6	61	39.6	65.5	65.5	70	N	-	-	48.5	Y	N	N
A1-2-34	2	40.1	A1-2	-	17	0	22.9	63.4	60.8	39.6	65.3	65.3	70	N	-	-	48.3	Y	N	N
A1-2-34	3	43.2	A1-2	-	17	0	22.9	63.2	60.6	39.6	65.1	65.1	70	N	-	-	48.1	Y	N	N
A1-2-34	4	46.3	A1-2	-	17	0	22.9	63	60.4	39.6	64.9	64.9	70	N	-	-	47.9	Y	N	N
A1-2-34	5	49.4	A1-2	-	16.9	0	22.9	62.7	60.2	39.6	64.7	64.7	70	N	-	-	47.8	Y	N	N
A1-2-34	6	52.5	A1-2	-	16.9	0	22.9	62.5	60	39.6	64.5	64.5	70	N	-	-	47.6	Y	N	N
A1-2-34	7	55.6	A1-2	-	16.9	0	22.9	62.3	59.8	39.6	64.3	64.3	70	N	-	-	47.4	Y	N	N
A1-2-34	8	58.7	A1-2	-	16.9	0	22.9	62.1	59.6	39.6	64.1	64.1	70	N	-	-	47.2	Y	N	N
A1-2-34	9	61.8	A1-2	-	16.9	0	22.9	61.9	59.4	39.6	63.9	63.9	70	N	-	-	47.0	Y	N	N
A1-2-34	10	64.9	A1-2	-	16.9	0	22.9	61.7	59.2	39.6	63.7	63.7	70	N	-	-	46.8	Y	N	N
A1-2-34	11	68	A1-2	-	16.9	0	22.8	61.6	59.1	39.5	63.5	63.5	70	N	-	-	46.6	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-2-34	12	71.1	A1-2	-	17	0	22.8	61.4	58.9	39.6	63.3	63.3	70	N	-	-	46.3	Y	N	N
A1-2-34	13	74.2	A1-2	-	17.1	0	23	61.2	58.7	39.7	63.1	63.1	70	N	-	-	46.0	Y	N	N
A1-2-34	14	77.3	A1-2	-	17.2	0	23.1	61	58.5	39.8	63	63.0	70	N	-	-	45.8	Y	N	N
A1-2-34	15	80.4	A1-2	-	17.2	0	23.2	60.9	58.4	40	62.8	62.8	70	N	-	-	45.6	Y	N	N
A1-2-34	16	83.5	A1-2	-	17	0	23.2	60.7	58.2	40.1	62.7	62.7	70	N	-	-	45.7	Y	N	N
A1-2-34	17	86.6	A1-2	-	17.4	0	23.3	60.5	58	40.3	62.5	62.5	70	N	-	-	45.1	Y	N	N
A1-2-34	18	89.7	A1-2	-	18	0	23.4	60.5	57.9	40.5	62.4	62.4	70	N	-	-	44.4	Y	N	N
A1-2-34	19	92.8	A1-2	-	18.4	0	23.5	60.3	57.7	40.8	62.2	62.2	70	N	-	-	43.8	Y	N	N
A1-2-34	20	95.9	A1-2	-	18.9	0	23.6	60.2	57.6	41.2	62.1	62.1	70	N	-	-	43.2	Y	N	N
A1-2-34	21	99	A1-2	-	19.4	0	23.7	60.1	57.4	41.6	62	62.0	70	N	-	-	42.6	Y	N	N
A1-2-34	22	102.1	A1-2	-	19.9	0	23.8	60	57.3	42	61.9	61.9	70	N	-	-	42.0	Y	N	N
A1-2-34	23	105.2	A1-2	-	20.3	0	24	59.9	57.2	42.5	61.8	61.8	70	N	-	-	41.5	Y	N	N
A1-2-34	24	108.3	A1-2	-	21	0	24.1	59.9	57	43.1	61.7	61.7	70	N	-	-	40.7	Y	N	N
A1-2-34	25	111.4	A1-2	-	21.5	0	24.3	59.8	56.9	43.7	61.6	61.6	70	N	-	-	40.1	Y	N	N
A1-2-34	26	114.5	A1-2	-	22	0	24.5	59.7	56.8	44.3	61.6	61.6	70	N	-	-	39.6	Y	N	N
A1-2-34	27	117.6	A1-2	-	22.6	0	24.9	59.7	56.6	45	61.5	61.5	70	N	-	-	38.9	Y	N	N
A1-2-34	28	120.7	A1-2	-	23.2	0	25.3	59.6	56.5	45.8	61.5	61.5	70	N	-	-	38.3	Y	N	N
A1-2-34	29	123.8	A1-2	-	23.7	0	25.9	59.5	56.5	46.5	61.4	61.4	70	N	-	-	37.7	Y	N	N
A1-2-34	30	126.9	A1-2	-	24.2	0	26.5	59.5	56.3	47.4	61.4	61.4	70	N	-	-	37.2	Y	N	N
A1-2-34	31	130	A1-2	-	24.9	0	27.3	59.5	56.2	48.4	61.4	61.4	70	N	-	-	36.5	Y	N	N
A1-2-34	32	133.1	A1-2	-	25.5	0	28.1	59.5	56.1	49.5	61.4	61.4	70	N	-	-	35.9	Y	N	N
A1-4a-1	1	37.1	A1-4a	-	0	0	51.2	53.3	56.5	26.5	59	59.0	70	N	-	-	59.0	Y	N	N
A1-4a-1	2	40.2	A1-4a	-	0	0	51.3	53.4	56.5	26.5	59	59.0	70	N	-	-	59.0	Y	N	N
A1-4a-1	3	43.3	A1-4a	-	0	0	51.4	53.4	56.4	26.5	59	59.0	70	N	-	-	59.0	Y	N	N
A1-4a-1	4	46.4	A1-4a	-	0	0	51.4	53.4	56.4	26.5	59	59.0	70	N	-	-	59.0	Y	N	N
A1-4a-1	5	49.5	A1-4a	-	0	0	51.4	53.4	56.4	26.4	59	59.0	70	N	-	-	59.0	Y	N	N
A1-4a-1	6	52.6	A1-4a	-	0	0	51.4	53.4	56.3	26.4	58.9	58.9	70	N	-	-	58.9	Y	N	N
A1-4a-1	7	55.7	A1-4a	-	0	0	51.4	53.4	56.3	26.4	58.9	58.9	70	N	-	-	58.9	Y	N	N
A1-4a-1	8	58.8	A1-4a	-	0	0	51.4	53.4	56.2	26.4	58.9	58.9	70	N	-	-	58.9	Y	N	N
A1-4a-1	9	61.9	A1-4a	-	0	0	51.4	53.4	56.2	26.4	58.9	58.9	70	N	-	-	58.9	Y	N	N
A1-4a-1	10	65	A1-4a	-	0	0	51.4	53.3	56.1	26.4	58.8	58.8	70	N	-	-	58.8	Y	N	N
A1-4a-1	11	68.1	A1-4a	-	0	0	51.4	53.3	56.1	26.4	58.8	58.8	70	N	-	-	58.8	Y	N	N
A1-4a-1	12	71.2	A1-4a	-	0	0	51.4	53.2	56	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-1	13	74.3	A1-4a	-	0	0	51.4	53.2	55.9	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-1	14	77.4	A1-4a	-	0	0	51.4	53.1	55.9	26.5	58.6	58.6	70	N	-	-	58.6	Y	N	N
A1-4a-1	15	80.5	A1-4a	-	0	0	51.4	53	55.8	26.5	58.5	58.5	70	N	-	-	58.5	Y	N	N
A1-4a-1	16	83.6	A1-4a	-	0	0	51.4	53	55.8	26.3	58.5	58.5	70	N	-	-	58.5	Y	N	N
A1-4a-1	17	86.7	A1-4a	-	0	0	51.4	52.9	55.7	26.5	58.5	58.5	70	N	-	-	58.5	Y	N	N
A1-4a-1	18	89.8	A1-4a	-	0	0	51.4	52.8	55.6	26.6	58.4	58.4	70	N	-	-	58.4	Y	N	N
A1-4a-1	19	92.9	A1-4a	-	0	0	51.4	52.8	55.5	26.6	58.4	58.4	70	N	-	-	58.4	Y	N	N
A1-4a-1	20	96	A1-4a	-	0	0	51.4	52.7	55.5	26.6	58.3	58.3	70	N	-	-	58.3	Y	N	N
A1-4a-1	21	99.1	A1-4a	-	0	0	51.4	52.6	55.4	26.6	58.3	58.3	70	N	-	-	58.3	Y	N	N
A1-4a-1	22	102.2	A1-4a	-	0	0	51.4	52.6	55.3	26.6	58.2	58.2	70	N	-	-	58.2	Y	N	N
A1-4a-1	23	105.3	A1-4a	-	0	0	51.4	52.5	55.3	26.6	58.1	58.1	70	N	-	-	58.1	Y	N	N
A1-4a-1	24	108.4	A1-4a	-	0	0	51.4	52.4	55.2	26.6	58.1	58.1	70	N	-	-	58.1	Y	N	N
A1-4a-1	25	111.5	A1-4a	-	0	0	51.4	52.4	55.1	26.6	58	58.0	70	N	-	-	58.0	Y	N	N
A1-4a-1	26	114.6	A1-4a	-	0	0	51.4	52.3	55	26.6	58	58.0	70	N	-	-	58.0	Y	N	N
A1-4a-1	27	117.7	A1-4a	-	0	0	51.3	52.3	55	26.4	57.9	57.9	70	N	-	-	57.9	Y	N	N
A1-4a-2	1	37.1	A1-4a	-	0	0	49.5	53.5	56.3	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-2	2	40.2	A1-4a	-	0	0	49.8	53.6	56.3	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-2	3	43.3	A1-4a	-	0	0	49.8	53.5	56.3	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-2	4	46.4	A1-4a	-	0	0	49.8	53.5	56.3	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-2	5	49.5	A1-4a	-	0	0	49.9	53.5	56.2	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-2	6	52.6	A1-4a	-	0	0	49.9	53.5	56.2	26.4	58.7	58.7	70	N	-	-	58.7	Y	N	N
A1-4a-2	7	55.7	A1-4a	-	0	0	49.9	53.6	56.1	26.4	58.6	58.6	70	N	-	-	58.6	Y	N	N
A1-4a-2	8	58.8	A1-4a	-	0	0	49.8	53.5	56.1	26.4	58.6	58.6	70	N	-	-	58.6	Y	N	N
A1-4a-2	9	61.9	A1-4a	-	0	0	49.8	53.5	56	26.4	58.6	58.6	70	N	-	-	58.6	Y	N	N
A1-4a-2	10	65	A1-4a	-	0	0	49.8	53.4	56	26.4	58.6	58.6	70	N	-	-	58.6	Y	N	N
A1-4a-2	11	68.1	A1-4a	-	0	0	49.8	53.4	56	26.4	58.5	58.5	70	N	-	-	58.5	Y	N	N
A1-4a-2	12	71.2	A1-4a	-	0	0	49.9	53.4	56	26.3	58.5	58.5	70	N	-	-	58.5	Y	N	N
A1-4a-2	13	74.3	A1-4a	-	0	0	49.9	53.3	55.9	26.4	58.4	58.4	70	N	-	-	58.4	Y	N	N
A1-4a-2	14	77.4	A1-4a	-	0	0	49.9	53.2	55.8	26.4	58.3	58.3	70	N	-	-	58.3	Y	N	N
A1-4a-2	15	80.5	A1-4a	-	0	0	49.9	53.2	55.8	26.4	58.3	58.3	70	N	-	-	58.3	Y	N	N
A1-4a-2	16	83.6	A1-4a	-	0	0	49.9	53.1	55.7	26.3	58.3	58.3	70	N	-	-	58.3	Y	N	N
A1-4a-2	17	86.7	A1-4a	-	0	0	49.9	53	55.6	26.4	58.2	58.2	70	N	-	-	58.2	Y	N	N
A1-4a-2	18	89.8	A1-4a	-	0	0	49.9	53	55.5	26.5	58.1	58.1	70	N	-	-	58.1	Y	N	N
A1-4a-2	19	92.9	A1-4a	-	0	0	49.9	52.9	55.5	26.4	58.1	58.1	70	N	-	-	58.1	Y	N	N
A1-4a-2	20	96	A1-4a	-	0	0	49.9	52.8	55.4	26.5	58	58.0	70	N	-	-	58.0	Y	N	N
A1-4a-2	21	99.1	A1-4a	-	0	0	49.9	52.8	55.3	26.5	58	58.0	70	N	-	-	58.0	Y	N	N
A1-4a-2	22	102.2	A1-4a	-	0	0	49.9	52.7	55.2	26.5	57.9	57.9	70	N	-	-	57.9	Y	N	N
A1-4a-2	23	105.3	A1-4a	-	0	0	49.8	52.6	55.2	26.5	57.8	57.8	70	N	-	-	57.8	Y	N	N
A1-4a-2	24	108.4	A1-4a	-	0	0	49.8	52.5	55.1	26.5	57.8	57.8	70	N	-	-	57.8	Y	N	N
A1-4a-2	25	111.5	A1-4a	-	0	0	49.8	52.5	55	26.5	57.7	57.7	70	N	-	-	57.7	Y	N	N
A1-4a-2	26	114.6	A1-4a	-	0	0	49.8	52.4	54.9	26.6	57.6	57.6	70	N	-	-	57.6	Y	N	N
A1-4a-2	27	117.7	A1-4a	-	0	0	49.8	52.3	54.9	26.7	57.6	57.6	70	N	-	-	57.6	Y	N	N
A1-4a-3	1	37.1	A1-4a	-	15	0	48.3	53.9	56	27.3	58.5	58.5	70	N	-	-	43.5	Y	N	N
A1-4a-3	2	40.2	A1-4a	-	14.9	0	48.5	53.9	56.1	27.2	58.6	58.6	70	N	-	-	43.7	Y	N	N
A1-4a-3	3	43.3	A1-4a	-	14.9	0	48.5	54	56	27.2	58.6	58.6	70	N	-	-	43.7	Y	N	N
A1-4a-3	4	46.4	A1-4a	-	14.9	0	48.5	53.9	56	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-4a-3	5	49.5	A1-4a	-	14.9	0	48.5	54	56	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N
A1-4a-3	6	52.6	A1-4a	-	14.9	0	48.5	53.9	55.9	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N
A1-4a-3	7	55.7	A1-4a	-	14.9	0	48.5	54	55.9	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N
A1-4a-3	8	58.8	A1-4a	-	14.9	0	48.5	53.9	55.8	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N
A1-4a-3	9	61.9	A1-4a	-	14.9	0	48.6	53.9	55.9	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N
A1-4a-3	10	65	A1-4a	-	14.8	0	48.6	53.9	55.9	27.2	58.5	58.5	70	N	-	-	43.7	Y	N	N
A1-4a-3	11	68.1	A1-4a	-	15	0	48.6	53.9	55.9	27.2	58.5	58.5	70	N	-	-	43.5	Y	N	N
A1-4a-3	12	71.2	A1-4a	-	15	0	48.6	53.9	55.9	27.1	58.5	58.5	70	N	-	-	43.5	Y	N	N
A1-4a-3	13	74.3	A1-4a	-	15.1	0	48.5	54	55.8	27.2	58.5	58.5	70	N	-	-	43.4	Y	N	N
A1-4a-3	14	77.4	A1-4a	-	15.1	0	48.6	54.1	55.7	27	58.5	58.5	70	N	-	-	43.4	Y	N	N
A1-4a-3	15	80.5	A1-4a	-	15.1	0	48.6	54.3	55.7	27.2	58.5	58.5	70	N	-	-	43.4	Y	N	N
A1-4a-3	16	83.6	A1-4a	-	15.1	0	48.6	54.3	55.6	27.2	58.5	58.5	70	N	-	-	43.4	Y	N	N
A1-4a-3	17	86.7	A1-4a	-	14.9	0	48.6	54.4	55.5	27.2	58.5	58.5	70	N	-	-	43.6	Y	N	N
A1-4a-3	18	89.8	A1-4a	-	15.3	0	48.6	54.4	55.4	27.5	58.4	58.4	70	N	-	-	43.1	Y	N	N
A1-4a-3	19	92.9	A1-4a	-	15.7	0	48.6	54.5	55.4	27.7	58.4	58.4	70	N	-	-	42.7	Y	N	N
A1-4a-3	20	96	A1-4a	-	16.1	0	48.6	54.4	55.3	28.1	58.4	58.4	70	N	-	-	42.3	Y	N	N
A1-4a-3	21	99.1	A1-4a	-	16.5	0	48.6	54.4	55.2	28.4	58.3	58.3	70	N	-	-	41.8	Y	N	N
A1-4a-3	22	102.2	A1-4a	-	17	0	48.6	54.4	55.1	28.8	58.3	58.3	70	N	-	-	41.3	Y	N	N
A1-4a-3	23	105.3	A1-4a	-	17.4	0	48.6	54.4	55.1	29.2	58.3	58.3	70	N	-	-	40.9	Y	N	N
A1-4a-3	24	108.4	A1-4a	-	17.8	0	48.5	54.4	55	29.5	58.2	58.2	70	N	-	-	40.4	Y	N	N
A1-4a-3	25	111.5	A1-4a	-	18.2	0	48.5	54.5	54.9	30	58.2	58.2	70	N	-	-	40.0	Y	N	N
A1-4a-3	26	114.6	A1-4a	-	18.7	0	48.5	54.4	54.8	30.5	58.2	58.2	70	N	-	-	39.5	Y	N	N
A1-4a-3	27	117.7	A1-4a	-	19.2	0	48.5	54.4	54.8	31.1	58.1	58.1	70	N	-	-	38.9	Y	N	N
A1-4a-4	1	37.1	A1-4a	-	20.4	0	48.9	57.1	53.7	37	59.2	59.2	70	N	-	-	38.8	Y	N	N
A1-4a-4	2	40.2	A1-4a	-	20.3	0	49.2	57.6	59	37	61.6	61.6	70	N	-	-	41.3	Y	N	N
A1-4a-4	3	43.3	A1-4a	-	20.3	0	49.4	57.5	59	37	61.6	61.6	70	N	-	-	41.3	Y	N	N
A1-4a-4	4	46.4	A1-4a	-	20.3	0	49.6	57.3	58.8	37	61.4	61.4	70	N	-	-	41.1	Y	N	N
A1-4a-4	5	49.5	A1-4a	-	20.3	0	49.7	57.1	58.6	37	61.3	61.3	70	N	-	-	41.0	Y	N	N
A1-4a-4	6	52.6	A1-4a	-	20.3	0	49.9	56.9	58.4	37	61.1	61.1	70	N	-	-	40.8	Y	N	N
A1-4a-4	7	55.7	A1-4a	-	20.3	0	50	56.8	58.3	37	61	61.0	70	N	-	-	40.7	Y	N	N
A1-4a-4	8	58.8	A1-4a	-	20.3	0	50.1	56.6	58.1	37	60.8	60.8	70	N	-	-	40.5	Y	N	N
A1-4a-4	9	61.9	A1-4a	-	20.3	0	50.1	56.4	57.9	37	60.6	60.6	70	N	-	-	40.3	Y	N	N
A1-4a-4	10	65	A1-4a	-	20.3	0	50.2	56.2	57.7	37	60.5	60.5	70	N	-	-	40.2	Y	N	N
A1-4a-4	11	68.1	A1-4a	-	20.1	0	50.2	56.1	57.5	37	60.3	60.3	70	N	-	-	40.2	Y	N	N
A1-4a-4	12	71.2	A1-4a	-	20.4	0	50.3	56	57.4	37	60.2	60.2	70	N	-	-	39.8	Y	N	N
A1-4a-4	13	74.3	A1-4a	-	20.4	0	50.3	55.8	57.2	37.2	60.1	60.1	70	N	-	-	39.7	Y	N	N
A1-4a-4	14	77.4	A1-4a	-	20.4	0	50.4	55.6	57	37.2	59.9	59.9	70	N	-	-	39.5	Y	N	N
A1-4a-4	15	80.5	A1-4a	-	20.5	0	50.4	55.5	56.9	37.6	59.8	59.8	70	N	-	-	39.3	Y	N	N
A1-4a-4	16	83.6	A1-4a	-	20.5	0	50.4	55.3	56.7	37.9	59.7	59.7	70	N	-	-	39.2	Y	N	N
A1-4a-4	17	86.7	A1-4a	-	20.9	0	50.4	55.1	56.6	38.3	59.5	59.5	70	N	-	-	38.6	Y	N	N
A1-4a-4	18	89.8	A1-4a	-	21.4	0	50.5	55	56.4	38.6	59.4	59.4	70	N	-	-	38.0	Y	N	N
A1-4a-4	19	92.9	A1-4a	-	21.9	0	50.5	54.8	56.3	39.1	59.3	59.3	70	N	-	-	37.4	Y	N	N
A1-4a-4	20	96	A1-4a	-	22.4	0	50.5	54.7	56.1	39.7	59.1	59.1	70	N	-	-	36.7	Y	N	N
A1-4a-4	21	99.1	A1-4a	-	22.9	0	50.4	54.6	56	40.3	59.1	59.1	70	N	-	-	36.2	Y	N	N
A1-4a-4	22	102.2	A1-4a	-	23.4	0	50.5	54.5	55.9	41	59	59.0	70	N	-	-	35.6	Y	N	N
A1-4a-4	23	105.3	A1-4a	-	24	0	50.4	54.4	55.7	41.7	58.8	58.8	70	N	-	-	34.8	Y	N	N
A1-4a-4	24	108.4	A1-4a	-	24.6	0	50.5	54.2	55.6	42.5	58.8	58.8	70	N	-	-	34.2	Y	N	N
A1-4a-4	25	111.5	A1-4a	-	25.2	0	50.5	54.1	55.5	43.4	58.7	58.7	70	N	-	-	33.5	Y	N	N
A1-4a-4	26	114.6	A1-4a	-	25.8	0	50.5	54	55.3	44.3	58.6	58.6	70	N	-	-	32.8	Y	N	N
A1-4a-4	27	117.7	A1-4a	-	26.4	0	50.5	53.9	55.2	45.3	58.6	58.6	70	N	-	-	32.2	Y	N	N
A1-4a-5	1	37.1	A1-4a	-	20.5	0	49.4	57.9	61.8	44.2	63.5	63.5	70	N	-	-	43.0	Y	N	N
A1-4a-5	2	40.2	A1-4a	-	20.5	0	49.6	57.9	62.2	45	63.8	63.8	70	N	-	-	43.3	Y	N	N
A1-4a-5	3	43.3	A1-4a	-	20.5	0	49.8	57.7	62	45.9	63.6	63.6	70	N	-	-	43.1	Y	N	N
A1-4a-5	4	46.4	A1-4a	-	20.5	0	50	57.5	61.8	46.8	63.5	63.5	70	N	-	-	43.0	Y	N	N
A1-4a-5	5	49.5	A1-4a	-	20.5	0	50.1	57.3	61.6	47.6	63.3	63.3	70	N	-	-	42.8	Y	N	N
A1-4a-5	6	52.6	A1-4a	-	20.5	0	50.2	57.2	61.4	48.5	63.2	63.2	70	N	-	-	42.7	Y	N	N
A1-4a-5	7	55.7	A1-4a	-	20.5	0	50.4	57	61.2	49.5	63	63.0	70	N	-	-	42.5	Y	N	N
A1-4a-5	8	58.8	A1-4a	-	20.4	0	50.6	56.8	61	50.4	62.9	62.9	70	N	-	-	42.5	Y	N	N
A1-4a-5	9	61.9	A1-4a	-	20.4	0	50.8	56.8	60.8	51.2	62.9	62.9	70	N	-	-	42.5	Y	N	N
A1-4a-5	10	65	A1-4a	-	20.4	0	51.1	56.8	60.6	51.9	62.8	62.8	70	N	-	-	42.4	Y	N	N
A1-4a-5	11	68.1	A1-4a	-	20.3	0	51.2	56.9	60.5	52.3	62.8	62.8	70	N	-	-	42.5	Y	N	N
A1-4a-5	12	71.2	A1-4a	-	20.4	0	51.3	56.8	60.3	52.7	62.7	62.7	70	N	-	-	42.3	Y	N	N
A1-4a-5	13	74.3	A1-4a	-	20.5	0	51.4	56.8	60.1	53.1	62.6	62.6	70	N	-	-	42.1	Y	N	N
A1-4a-5	14	77.4	A1-4a	-	20.5	0	51.5	56.7	59.9	53.4	62.5	62.5	70	N	-	-	42.0	Y	N	N
A1-4a-5	15	80.5	A1-4a	-	20.6	0	51.5	56.7	59.7	53.7	62.5	62.5	70	N	-	-	41.9	Y	N	N
A1-4a-5	16	83.6	A1-4a	-	20.6	0	51.5	56.6	59.6	54	62.4	62.4	70	N	-	-	41.8	Y	N	N
A1-4a-5	17	86.7	A1-4a	-	21	0	51.6	56.6	59.4	54.3	62.4	62.4	70	N	-	-	41.4	Y	N	N
A1-4a-5	18	89.8	A1-4a	-	21.5	0	51.6	56.6	59.2	54.6	62.4	62.4	70	N	-	-	40.9	Y	N	N
A1-4a-5	19	92.9	A1-4a	-	22	0	51.6	56.6	59.1	54.8	62.4	62.4	70	N	-	-	40.4	Y	N	N
A1-4a-5	20	96	A1-4a	-	22.6	0	51.6	56.6	58.9	55.2	62.3	62.3	70	N	-	-	39.7	Y	N	N
A1-4a-5	21	99.1	A1-4a	-	23.1	0	51.6	56.6	58.8	55.5	62.3	62.3	70	N	-	-	39.2	Y	N	N
A1-4a-5	22	102.2	A1-4a	-	23.6	0	51.7	56.5	58.6	55.9	62.3	62.3	70	N	-	-	38.7	Y	N	N
A1-4a-5	23	105.3	A1-4a	-	24.2	0	51.7	56.5	58.5	56.2	62.4	62.4	70	N	-	-	38.2	Y	N	N
A1-4a-5	24	108.4	A1-4a	-	24.7	0	51.7	56.4	58.4	56.5	62.4	62.4	70	N	-	-	37.7	Y	N	N
A1-4a-5	25	111.5	A1-4a	-	25.4	0	51.7	56.4	58.2	56.7	62.3	62.3	70	N	-	-	36.9	Y	N	N
A1-4a-5	26	114.6	A1-4a	-	26	0	51.7	56.4	58.1	57	62.4	62.4	70	N	-	-	36.4	Y	N	N
A1-4a-5	27	117.7	A1-4a	-	26.7	0	51.7	56.3	58	57.3	62.4	62.4	70	N	-	-	35.7	Y	N	N
A1-4a-6	1	37.1	A1-4a	-	20.6	0	51.8	57.5	64.9	44.5	65.8	65.8	70	N	-	-	45.2	Y	N	N
A1-4a-6	2	40.2	A1-4a	-	20.6	0	52	57.2	64.8	45.4	65.8	65.8	70	N	-	-	45.2	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-4a-6	3	43.3	A1-4a	-	20.6	0	52.1	57	65.3	46.3	66.1	66.1	70	N	-	-	45.5	Y	N	N
A1-4a-6	4	46.4	A1-4a	-	20.6	0	52.2	56.7	65.6	47.2	66.4	66.4	70	N	-	-	45.8	Y	N	N
A1-4a-6	5	49.5	A1-4a	-	20.6	0	52.3	56.5	65.7	48.2	66.4	66.4	70	N	-	-	45.8	Y	N	N
A1-4a-6	6	52.6	A1-4a	-	20.6	0	52.4	56.3	65.4	49.2	66.2	66.2	70	N	-	-	45.6	Y	N	N
A1-4a-6	7	55.7	A1-4a	-	20.6	0	52.5	56.1	65.2	50.2	66	66.0	70	N	-	-	45.4	Y	N	N
A1-4a-6	8	58.8	A1-4a	-	20.6	0	52.7	55.9	64.9	51.1	65.8	65.8	70	N	-	-	45.2	Y	N	N
A1-4a-6	9	61.9	A1-4a	-	20.6	0	52.9	55.9	64.7	52	65.6	65.6	70	N	-	-	45.0	Y	N	N
A1-4a-6	10	65	A1-4a	-	20.6	0	53.1	56.1	64.4	52.6	65.5	65.5	70	N	-	-	44.9	Y	N	N
A1-4a-6	11	68.1	A1-4a	-	20.5	0	53.2	56.2	64.2	53	65.4	65.4	70	N	-	-	44.9	Y	N	N
A1-4a-6	12	71.2	A1-4a	-	20.5	0	53.3	56.3	64	53.4	65.3	65.3	70	N	-	-	44.8	Y	N	N
A1-4a-6	13	74.3	A1-4a	-	20.6	0	53.4	56.4	63.7	53.8	65.1	65.1	70	N	-	-	44.5	Y	N	N
A1-4a-6	14	77.4	A1-4a	-	20.7	0	53.4	56.4	63.5	54.2	65	65.0	70	N	-	-	44.3	Y	N	N
A1-4a-6	15	80.5	A1-4a	-	20.6	0	53.5	56.5	63.3	54.4	64.9	64.9	70	N	-	-	44.3	Y	N	N
A1-4a-6	16	83.6	A1-4a	-	20.8	0	53.5	56.6	63.1	54.8	64.8	64.8	70	N	-	-	44.0	Y	N	N
A1-4a-6	17	86.7	A1-4a	-	21.2	0	53.5	56.9	62.9	55	64.8	64.8	70	N	-	-	43.6	Y	N	N
A1-4a-6	18	89.8	A1-4a	-	21.7	0	53.5	57.2	62.8	55.3	64.8	64.8	70	N	-	-	43.1	Y	N	N
A1-4a-6	19	92.9	A1-4a	-	22.3	0	53.5	57.4	62.6	55.7	64.7	64.7	70	N	-	-	42.4	Y	N	N
A1-4a-6	20	96	A1-4a	-	22.8	0	53.6	57.6	62.4	56.1	64.7	64.7	70	N	-	-	41.9	Y	N	N
A1-4a-6	21	99.1	A1-4a	-	23.4	0	53.6	57.7	62.3	56.5	64.7	64.7	70	N	-	-	41.3	Y	N	N
A1-4a-6	22	102.2	A1-4a	-	24	0	53.6	57.9	62.1	56.8	64.7	64.7	70	N	-	-	40.7	Y	N	N
A1-4a-6	23	105.3	A1-4a	-	24.6	0	53.6	58	62	56.9	64.7	64.7	70	N	-	-	40.1	Y	N	N
A1-4a-6	24	108.4	A1-4a	-	25.2	0	53.6	58	61.8	57.3	64.6	64.6	70	N	-	-	39.4	Y	N	N
A1-4a-6	25	111.5	A1-4a	-	25.9	0	53.6	58.1	61.7	57.6	64.7	64.7	70	N	-	-	38.8	Y	N	N
A1-4a-6	26	114.6	A1-4a	-	26.5	0	53.7	58.1	61.6	57.9	64.7	64.7	70	N	-	-	38.2	Y	N	N
A1-4a-6	27	117.7	A1-4a	-	27.2	0	53.7	58.2	61.4	58.3	64.7	64.7	70	N	-	-	37.5	Y	N	N
A1-4a-7	1	37.1	A1-4a	-	20.7	0	51.7	56.8	58.9	44.5	61.6	61.6	70	N	-	-	40.9	Y	N	N
A1-4a-7	2	40.2	A1-4a	-	20.7	0	51.9	56.9	64.2	45.3	65.2	65.2	70	N	-	-	44.5	Y	N	N
A1-4a-7	3	43.3	A1-4a	-	20.7	0	52	56.6	65.7	46.2	66.4	66.4	70	N	-	-	45.7	Y	N	N
A1-4a-7	4	46.4	A1-4a	-	20.7	0	52.1	56.4	66	47.2	66.6	66.6	70	N	-	-	45.9	Y	N	N
A1-4a-7	5	49.5	A1-4a	-	20.6	0	52.2	56.1	65.7	48.1	66.4	66.4	70	N	-	-	45.8	Y	N	N
A1-4a-7	6	52.6	A1-4a	-	20.6	0	52.3	55.9	65.4	49.1	66.2	66.2	70	N	-	-	45.6	Y	N	N
A1-4a-7	7	55.7	A1-4a	-	20.6	0	52.4	55.7	65.1	50.1	65.9	65.9	70	N	-	-	45.3	Y	N	N
A1-4a-7	8	58.8	A1-4a	-	20.6	0	52.6	55.6	64.9	51	65.7	65.7	70	N	-	-	45.1	Y	N	N
A1-4a-7	9	61.9	A1-4a	-	20.6	0	52.8	55.6	64.6	51.7	65.5	65.5	70	N	-	-	44.9	Y	N	N
A1-4a-7	10	65	A1-4a	-	20.6	0	53	55.7	64.4	52.4	65.4	65.4	70	N	-	-	44.8	Y	N	N
A1-4a-7	11	68.1	A1-4a	-	20.6	0	53.2	55.9	64.2	53	65.3	65.3	70	N	-	-	44.7	Y	N	N
A1-4a-7	12	71.2	A1-4a	-	20.5	0	53.3	56	63.9	53.5	65.2	65.2	70	N	-	-	44.7	Y	N	N
A1-4a-7	13	74.3	A1-4a	-	20.6	0	53.3	56.1	63.7	53.9	65.1	65.1	70	N	-	-	44.5	Y	N	N
A1-4a-7	14	77.4	A1-4a	-	20.6	0	53.4	56.2	63.5	54.3	65	65.0	70	N	-	-	44.4	Y	N	N
A1-4a-7	15	80.5	A1-4a	-	20.7	0	53.4	56.3	63.3	54.6	64.9	64.9	70	N	-	-	44.2	Y	N	N
A1-4a-7	16	83.6	A1-4a	-	20.7	0	53.5	56.5	63.1	55	64.8	64.8	70	N	-	-	44.1	Y	N	N
A1-4a-7	17	86.7	A1-4a	-	21.1	0	53.5	56.8	63	55.3	64.8	64.8	70	N	-	-	43.7	Y	N	N
A1-4a-7	18	89.8	A1-4a	-	21.7	0	53.5	57.1	62.8	55.5	64.7	64.7	70	N	-	-	43.0	Y	N	N
A1-4a-7	19	92.9	A1-4a	-	22.2	0	53.5	57.4	62.6	55.8	64.7	64.7	70	N	-	-	42.5	Y	N	N
A1-4a-7	20	96	A1-4a	-	22.8	0	53.5	57.6	62.4	56.2	64.7	64.7	70	N	-	-	41.9	Y	N	N
A1-4a-7	21	99.1	A1-4a	-	23.5	0	53.6	57.7	62.3	56.6	64.7	64.7	70	N	-	-	41.2	Y	N	N
A1-4a-7	22	102.2	A1-4a	-	24	0	53.6	57.9	62.1	56.9	64.7	64.7	70	N	-	-	40.7	Y	N	N
A1-4a-7	23	105.3	A1-4a	-	24.6	0	53.6	57.9	62	57.1	64.7	64.7	70	N	-	-	40.1	Y	N	N
A1-4a-7	24	108.4	A1-4a	-	25.2	0	53.6	58	61.8	57.5	64.7	64.7	70	N	-	-	39.5	Y	N	N
A1-4a-7	25	111.5	A1-4a	-	25.9	0	53.6	58	61.7	57.7	64.7	64.7	70	N	-	-	38.8	Y	N	N
A1-4a-7	26	114.6	A1-4a	-	26.5	0	53.7	58.1	61.5	58	64.7	64.7	70	N	-	-	38.2	Y	N	N
A1-4a-7	27	117.7	A1-4a	-	27.2	0	53.7	58.1	61.4	58.4	64.7	64.7	70	N	-	-	37.5	Y	N	N
A1-4a-8	1	37.1	A1-4a	-	20.6	0	51.7	56.3	59.1	44.6	61.5	61.5	70	N	-	-	40.9	Y	N	N
A1-4a-8	2	40.2	A1-4a	-	20.6	0	51.9	56.7	66.2	45.5	66.8	66.8	70	N	-	-	46.2	Y	N	N
A1-4a-8	3	43.3	A1-4a	-	20.6	0	52	56.4	66.8	46.4	67.3	67.3	70	N	-	-	46.7	Y	N	N
A1-4a-8	4	46.4	A1-4a	-	20.6	0	52.1	56.1	66.5	47.3	67.1	67.1	70	N	-	-	46.5	Y	N	N
A1-4a-8	5	49.5	A1-4a	-	20.6	0	52.2	55.8	66.2	48.3	66.8	66.8	70	N	-	-	46.2	Y	N	N
A1-4a-8	6	52.6	A1-4a	-	20.6	0	52.3	55.6	65.9	49.2	66.5	66.5	70	N	-	-	45.9	Y	N	N
A1-4a-8	7	55.7	A1-4a	-	20.6	0	52.4	55.4	65.7	50.2	66.3	66.3	70	N	-	-	45.7	Y	N	N
A1-4a-8	8	58.8	A1-4a	-	20.6	0	52.5	55.3	65.4	51.1	66.1	66.1	70	N	-	-	45.5	Y	N	N
A1-4a-8	9	61.9	A1-4a	-	20.6	0	52.7	55.3	65.1	51.9	65.9	65.9	70	N	-	-	45.3	Y	N	N
A1-4a-8	10	65	A1-4a	-	20.6	0	53	55.5	64.8	52.6	65.7	65.7	70	N	-	-	45.1	Y	N	N
A1-4a-8	11	68.1	A1-4a	-	20.5	0	53.1	55.7	64.6	53.2	65.6	65.6	70	N	-	-	45.1	Y	N	N
A1-4a-8	12	71.2	A1-4a	-	20.6	0	53.3	55.9	64.3	53.7	65.5	65.5	70	N	-	-	44.9	Y	N	N
A1-4a-8	13	74.3	A1-4a	-	20.6	0	53.3	56	64.1	54.1	65.4	65.4	70	N	-	-	44.8	Y	N	N
A1-4a-8	14	77.4	A1-4a	-	20.7	0	53.4	56	63.9	54.4	65.3	65.3	70	N	-	-	44.6	Y	N	N
A1-4a-8	15	80.5	A1-4a	-	20.6	0	53.4	56.2	63.7	54.7	65.1	65.1	70	N	-	-	44.5	Y	N	N
A1-4a-8	16	83.6	A1-4a	-	20.8	0	53.4	56.4	63.5	55.1	65.1	65.1	70	N	-	-	44.3	Y	N	N
A1-4a-8	17	86.7	A1-4a	-	21.2	0	53.4	56.8	63.3	55.3	65	65.0	70	N	-	-	43.8	Y	N	N
A1-4a-8	18	89.8	A1-4a	-	21.7	0	53.5	57.1	63.1	55.7	65	65.0	70	N	-	-	43.3	Y	N	N
A1-4a-8	19	92.9	A1-4a	-	22.3	0	53.5	57.4	63	56	65	65.0	70	N	-	-	42.7	Y	N	N
A1-4a-8	20	96	A1-4a	-	22.8	0	53.5	57.6	62.8	56.4	65	65.0	70	N	-	-	42.2	Y	N	N
A1-4a-8	21	99.1	A1-4a	-	23.5	0	53.5	57.8	62.6	56.8	64.9	64.9	70	N	-	-	41.4	Y	N	N
A1-4a-8	22	102.2	A1-4a	-	24.1	0	53.6	57.8	62.5	57	64.9	64.9	70	N	-	-	40.8	Y	N	N
A1-4a-8	23	105.3	A1-4a	-	24.7	0	53.6	57.9	62.3	57.3	64.9	64.9	70	N	-	-	40.2	Y	N	N
A1-4a-8	24	108.4	A1-4a	-	25.3	0	53.6	57.9	62.2	57.6	64.9	64.9	70	N	-	-	39.6	Y	N	N
A1-4a-8	25	111.5	A1-4a	-	26	0	53.6	58	62	58	64.9	64.9	70	N	-	-	38.9	Y	N	N
A1-4a-8	26	114.6	A1-4a	-	26.6	0	53.6	58.1	61.9	58.2	64.9	64.9	70	N	-	-	38.3	Y	N	N
A1-4a-8	27	117.7	A1-4a	-	27.3	0	53.7	58.1	61.8	58.6	64.9	64.9	70	N	-	-	37.6	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-4a-9	1	37.1	A1-4a	-	20.6	0	29	47.1	68.9	45.2	68.9	68.9	70	N	-	-	48.3	Y	N	N
A1-4a-9	2	40.2	A1-4a	-	20.6	0	29.7	47.2	68.5	45.9	68.5	68.5	70	N	-	-	47.9	Y	N	N
A1-4a-9	3	43.3	A1-4a	-	20.6	0	30.5	47.2	68.1	46.7	68.2	68.2	70	N	-	-	47.6	Y	N	N
A1-4a-9	4	46.4	A1-4a	-	20.6	0	31.5	47.3	67.7	47.5	67.8	67.8	70	N	-	-	47.2	Y	N	N
A1-4a-9	5	49.5	A1-4a	-	20.6	0	32.7	47.4	67.4	48.4	67.5	67.5	70	N	-	-	46.9	Y	N	N
A1-4a-9	6	52.6	A1-4a	-	20.6	0	34.2	47.6	67	49.2	67.1	67.1	70	N	-	-	46.5	Y	N	N
A1-4a-9	7	55.7	A1-4a	-	20.5	0	35.9	48	66.7	50.1	66.9	66.9	70	N	-	-	46.4	Y	N	N
A1-4a-9	8	58.8	A1-4a	-	20.5	0	37.9	48.6	66.4	51	66.6	66.6	70	N	-	-	46.1	Y	N	N
A1-4a-9	9	61.9	A1-4a	-	20.5	0	40.4	49.7	66.1	51.7	66.4	66.4	70	N	-	-	45.9	Y	N	N
A1-4a-9	10	65	A1-4a	-	20.5	0	42.7	50.9	65.9	52.4	66.2	66.2	70	N	-	-	45.7	Y	N	N
A1-4a-9	11	68.1	A1-4a	-	20.5	0	44.3	51.7	65.6	53.1	66	66.0	70	N	-	-	45.5	Y	N	N
A1-4a-9	12	71.2	A1-4a	-	20.5	0	44.9	52.4	65.4	53.7	65.9	65.9	70	N	-	-	45.4	Y	N	N
A1-4a-9	13	74.3	A1-4a	-	20.6	0	45.3	52.9	65.1	54.2	65.7	65.7	70	N	-	-	45.1	Y	N	N
A1-4a-9	14	77.4	A1-4a	-	20.6	0	45.5	53.3	64.9	54.6	65.6	65.6	70	N	-	-	45.0	Y	N	N
A1-4a-9	15	80.5	A1-4a	-	20.6	0	45.6	53.7	64.7	54.9	65.5	65.5	70	N	-	-	44.9	Y	N	N
A1-4a-9	16	83.6	A1-4a	-	20.8	0	45.7	54.3	64.5	55.3	65.4	65.4	70	N	-	-	44.6	Y	N	N
A1-4a-9	17	86.7	A1-4a	-	21.2	0	45.7	55.1	64.3	55.6	65.3	65.3	70	N	-	-	44.1	Y	N	N
A1-4a-9	18	89.8	A1-4a	-	21.7	0	45.8	55.7	64.1	56	65.3	65.3	70	N	-	-	43.6	Y	N	N
A1-4a-9	19	92.9	A1-4a	-	22.3	0	45.9	56.1	64	56.3	65.3	65.3	70	N	-	-	43.0	Y	N	N
A1-4a-9	20	96	A1-4a	-	22.9	0	46	56.3	63.8	56.8	65.2	65.2	70	N	-	-	42.3	Y	N	N
A1-4a-9	21	99.1	A1-4a	-	23.5	0	46.2	56.6	63.6	57.2	65.2	65.2	70	N	-	-	41.7	Y	N	N
A1-4a-9	22	102.2	A1-4a	-	24.1	0	46.1	56.8	63.5	57.3	65.2	65.2	70	N	-	-	41.1	Y	N	N
A1-4a-9	23	105.3	A1-4a	-	24.8	0	46.2	56.9	63.3	57.5	65.1	65.1	70	N	-	-	40.3	Y	N	N
A1-4a-9	24	108.4	A1-4a	-	25.4	0	46.3	57	63.1	57.8	65.1	65.1	70	N	-	-	39.7	Y	N	N
A1-4a-9	25	111.5	A1-4a	-	26.1	0	46.5	57.1	63	58.2	65.1	65.1	70	N	-	-	39.0	Y	N	N
A1-4a-9	26	114.6	A1-4a	-	26.7	0	46.6	57.2	62.9	58.5	65.1	65.1	70	N	-	-	38.4	Y	N	N
A1-4a-9	27	117.7	A1-4a	-	27.4	0	46.8	57.2	62.7	59	65.1	65.1	70	N	-	-	37.7	Y	N	N
A1-4a-10	1	37.1	A1-4a	-	20.1	0	27.4	37.4	67.9	44.8	68	68.0	70	N	-	-	47.9	Y	N	N
A1-4a-10	2	40.2	A1-4a	-	20	0	28.4	38.1	67.6	45.6	67.6	67.6	70	N	-	-	47.6	Y	N	N
A1-4a-10	3	43.3	A1-4a	-	20	0	29.4	38.9	67.2	46.3	67.3	67.3	70	N	-	-	47.3	Y	N	N
A1-4a-10	4	46.4	A1-4a	-	20	0	30.6	39.7	66.9	47.2	66.9	66.9	70	N	-	-	46.9	Y	N	N
A1-4a-10	5	49.5	A1-4a	-	20	0	31.9	40.6	66.5	48.1	66.6	66.6	70	N	-	-	46.6	Y	N	N
A1-4a-10	6	52.6	A1-4a	-	20	0	33.3	41.6	66.2	49	66.3	66.3	70	N	-	-	46.3	Y	N	N
A1-4a-10	7	55.7	A1-4a	-	20	0	35.3	42.9	66	49.8	66.1	66.1	70	N	-	-	46.1	Y	N	N
A1-4a-10	8	58.8	A1-4a	-	20	0	37.3	44.7	65.7	50.7	65.8	65.8	70	N	-	-	45.8	Y	N	N
A1-4a-10	9	61.9	A1-4a	-	20	0	40	46.9	65.4	51.5	65.6	65.6	70	N	-	-	45.6	Y	N	N
A1-4a-10	10	65	A1-4a	-	20	0	42.4	49.1	65.1	52.2	65.5	65.5	70	N	-	-	45.5	Y	N	N
A1-4a-10	11	68.1	A1-4a	-	19.9	0	44.1	50.4	64.9	52.9	65.3	65.3	70	N	-	-	45.4	Y	N	N
A1-4a-10	12	71.2	A1-4a	-	19.9	0	44.8	51.3	64.6	53.5	65.2	65.2	70	N	-	-	45.3	Y	N	N
A1-4a-10	13	74.3	A1-4a	-	20	0	45.3	51.8	64.4	54	65	65.0	70	N	-	-	45.0	Y	N	N
A1-4a-10	14	77.4	A1-4a	-	20	0	45.4	52.4	64.2	54.4	64.9	64.9	70	N	-	-	44.9	Y	N	N
A1-4a-10	15	80.5	A1-4a	-	20	0	45.5	52.9	64	54.7	64.8	64.8	70	N	-	-	44.8	Y	N	N
A1-4a-10	16	83.6	A1-4a	-	20.1	0	45.6	53.6	63.8	55.1	64.8	64.8	70	N	-	-	44.7	Y	N	N
A1-4a-10	17	86.7	A1-4a	-	20.4	0	45.7	54.4	63.6	55.4	64.7	64.7	70	N	-	-	44.3	Y	N	N
A1-4a-10	18	89.8	A1-4a	-	21	0	45.8	55.1	63.4	55.8	64.7	64.7	70	N	-	-	43.7	Y	N	N
A1-4a-10	19	92.9	A1-4a	-	21.5	0	45.9	55.5	63.3	56.1	64.7	64.7	70	N	-	-	43.2	Y	N	N
A1-4a-10	20	96	A1-4a	-	22.1	0	45.9	55.9	63.1	56.5	64.6	64.6	70	N	-	-	42.5	Y	N	N
A1-4a-10	21	99.1	A1-4a	-	22.6	0	45.9	56.1	62.9	56.9	64.6	64.6	70	N	-	-	42.0	Y	N	N
A1-4a-10	22	102.2	A1-4a	-	23.2	0	46	56.4	62.8	57.1	64.6	64.6	70	N	-	-	41.4	Y	N	N
A1-4a-10	23	105.3	A1-4a	-	23.8	0	46.1	56.5	62.6	57.3	64.6	64.6	70	N	-	-	40.8	Y	N	N
A1-4a-10	24	108.4	A1-4a	-	24.4	0	46.1	56.6	62.5	57.6	64.5	64.5	70	N	-	-	40.1	Y	N	N
A1-4a-10	25	111.5	A1-4a	-	25.1	0	46.2	56.7	62.3	57.9	64.5	64.5	70	N	-	-	39.4	Y	N	N
A1-4a-10	26	114.6	A1-4a	-	25.8	0	46.1	56.8	62.2	58.2	64.5	64.5	70	N	-	-	38.7	Y	N	N
A1-4a-10	27	117.7	A1-4a	-	26.5	0	46.2	56.9	62.1	58.5	64.5	64.5	70	N	-	-	38.0	Y	N	N
A1-4a-11	1	37.1	A1-4a	-	17.1	0	27.2	37.4	67.5	44.6	67.6	67.6	70	N	-	-	50.5	Y	N	N
A1-4a-11	2	40.2	A1-4a	-	17.1	0	28.1	38.1	67.2	45.4	67.2	67.2	70	N	-	-	50.1	Y	N	N
A1-4a-11	3	43.3	A1-4a	-	17.1	0	29.2	38.9	66.9	46.1	66.9	66.9	70	N	-	-	49.8	Y	N	N
A1-4a-11	4	46.4	A1-4a	-	17.1	0	30.3	39.7	66.6	47	66.6	66.6	70	N	-	-	49.5	Y	N	N
A1-4a-11	5	49.5	A1-4a	-	17.1	0	31.6	40.6	66.2	47.8	66.3	66.3	70	N	-	-	49.2	Y	N	N
A1-4a-11	6	52.6	A1-4a	-	17.1	0	33.1	41.7	65.9	48.7	66	66.0	70	N	-	-	48.9	Y	N	N
A1-4a-11	7	55.7	A1-4a	-	17.1	0	34.9	43.1	65.6	49.6	65.8	65.8	70	N	-	-	48.7	Y	N	N
A1-4a-11	8	58.8	A1-4a	-	17.1	0	36.9	45.1	65.4	50.5	65.6	65.6	70	N	-	-	48.5	Y	N	N
A1-4a-11	9	61.9	A1-4a	-	17.1	0	39.3	47.1	65.1	51.2	65.3	65.3	70	N	-	-	48.2	Y	N	N
A1-4a-11	10	65	A1-4a	-	17	0	41.9	49.1	64.9	51.9	65.2	65.2	70	N	-	-	48.2	Y	N	N
A1-4a-11	11	68.1	A1-4a	-	17	0	43.6	50.4	64.6	52.7	65.1	65.1	70	N	-	-	48.1	Y	N	N
A1-4a-11	12	71.2	A1-4a	-	17	0	44.6	51.2	64.4	53.2	64.9	64.9	70	N	-	-	47.9	Y	N	N
A1-4a-11	13	74.3	A1-4a	-	17.1	0	45	51.9	64.2	53.8	64.8	64.8	70	N	-	-	47.7	Y	N	N
A1-4a-11	14	77.4	A1-4a	-	17.1	0	45.3	52.4	64	54.3	64.7	64.7	70	N	-	-	47.6	Y	N	N
A1-4a-11	15	80.5	A1-4a	-	17.1	0	45.5	52.8	63.8	54.6	64.6	64.6	70	N	-	-	47.5	Y	N	N
A1-4a-11	16	83.6	A1-4a	-	17.2	0	45.6	53.5	63.6	55	64.5	64.5	70	N	-	-	47.3	Y	N	N
A1-4a-11	17	86.7	A1-4a	-	17.3	0	45.7	54.1	63.4	55.3	64.5	64.5	70	N	-	-	47.2	Y	N	N
A1-4a-11	18	89.8	A1-4a	-	17.8	0	45.7	54.8	63.2	55.6	64.5	64.5	70	N	-	-	46.7	Y	N	N
A1-4a-11	19	92.9	A1-4a	-	18.3	0	45.8	55.3	63	56	64.5	64.5	70	N	-	-	46.2	Y	N	N
A1-4a-11	20	96	A1-4a	-	18.9	0	45.9	55.7	62.9	56.3	64.5	64.5	70	N	-	-	45.6	Y	N	N
A1-4a-11	21	99.1	A1-4a	-	19.4	0	45.9	56	62.7	56.8	64.5	64.5	70	N	-	-	45.1	Y	N	N
A1-4a-11	22	102.2	A1-4a	-	20	0	46	56.2	62.6	57	64.4	64.4	70	N	-	-	44.4	Y	N	N
A1-4a-11	23	105.3	A1-4a	-	20.5	0	46.1	56.4	62.4	57.2	64.4	64.4	70	N	-	-	43.9	Y	N	N
A1-4a-11	24	108.4	A1-4a	-	21.1	0	46	56.5	62.3	57.5	64.4	64.4	70	N	-	-	43.3	Y	N	N
A1-4a-11	25	111.5	A1-4a	-	21.7	0	46.1	56.6	62.1	57.8	64.4	64.4	70	N	-	-	42.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-4a-11	26	114.6	A1-4a	-	22.3	0	46.1	56.7	62	58	64.4	64.4	70	N	-	-	42.1	Y	N	N
A1-4a-11	27	117.7	A1-4a	-	23	0	46.2	56.8	61.9	58.4	64.4	64.4	70	N	-	-	41.4	Y	N	N
A1-4a-12	1	37.1	A1-4a	-	0	0	26.7	44.1	66.7	44.4	66.8	66.8	70	N	-	-	66.8	Y	N	N
A1-4a-12	2	40.2	A1-4a	-	0	0	27.7	44.3	66.5	45.1	66.5	66.5	70	N	-	-	66.5	Y	N	N
A1-4a-12	3	43.3	A1-4a	-	0	0	28.7	44.5	66.2	45.9	66.2	66.2	70	N	-	-	66.2	Y	N	N
A1-4a-12	4	46.4	A1-4a	-	0	0	30	44.7	65.9	46.7	66	66.0	70	N	-	-	66.0	Y	N	N
A1-4a-12	5	49.5	A1-4a	-	0	0	31.1	45	65.6	47.5	65.7	65.7	70	N	-	-	65.7	Y	N	N
A1-4a-12	6	52.6	A1-4a	-	0	0	32.6	45.3	65.4	48.3	65.5	65.5	70	N	-	-	65.5	Y	N	N
A1-4a-12	7	55.7	A1-4a	-	0	0	34.4	45.9	65.1	49.2	65.2	65.2	70	N	-	-	65.2	Y	N	N
A1-4a-12	8	58.8	A1-4a	-	0	0	36.4	46.8	64.9	50	65.1	65.1	70	N	-	-	65.1	Y	N	N
A1-4a-12	9	61.9	A1-4a	-	0	0	38.6	48	64.6	50.9	64.9	64.9	70	N	-	-	64.9	Y	N	N
A1-4a-12	10	65	A1-4a	-	0	0	41	49.4	64.4	51.7	64.8	64.8	70	N	-	-	64.8	Y	N	N
A1-4a-12	11	68.1	A1-4a	-	0	0	43	50.4	64.1	52.4	64.6	64.6	70	N	-	-	64.6	Y	N	N
A1-4a-12	12	71.2	A1-4a	-	0	0	44.2	51.2	63.9	53	64.5	64.5	70	N	-	-	64.5	Y	N	N
A1-4a-12	13	74.3	A1-4a	-	0	0	44.7	51.7	63.7	53.5	64.4	64.4	70	N	-	-	64.4	Y	N	N
A1-4a-12	14	77.4	A1-4a	-	0	0	44.9	52.2	63.5	54	64.3	64.3	70	N	-	-	64.3	Y	N	N
A1-4a-12	15	80.5	A1-4a	-	0	0	45.1	52.7	63.3	54.4	64.2	64.2	70	N	-	-	64.2	Y	N	N
A1-4a-12	16	83.6	A1-4a	-	0	0	45.3	53.2	63.2	54.7	64.2	64.2	70	N	-	-	64.2	Y	N	N
A1-4a-12	17	86.7	A1-4a	-	0	0	45.4	53.8	63	55.1	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	18	89.8	A1-4a	-	0	0	45.5	54.5	62.8	55.5	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	19	92.9	A1-4a	-	0	0	45.5	55.1	62.6	55.8	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	20	96	A1-4a	-	0	0	45.6	55.4	62.5	56.2	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	21	99.1	A1-4a	-	0	0	45.6	55.8	62.3	56.6	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	22	102.2	A1-4a	-	0	0	45.7	56	62.2	56.7	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	23	105.3	A1-4a	-	0	0	45.7	56.1	62	56.9	64	64.0	70	N	-	-	64.0	Y	N	N
A1-4a-12	24	108.4	A1-4a	-	0	0	45.8	56.3	61.9	57.2	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	25	111.5	A1-4a	-	0	0	45.8	56.4	61.7	57.6	64	64.0	70	N	-	-	64.0	Y	N	N
A1-4a-12	26	114.6	A1-4a	-	0	0	45.9	56.5	61.6	57.9	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-12	27	117.7	A1-4a	-	0	0	45.9	56.7	61.5	58.2	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-13	1	37.1	A1-4a	-	0	0	26.5	47.6	66.2	44.2	66.2	66.2	70	N	-	-	66.2	Y	N	N
A1-4a-13	2	40.2	A1-4a	-	0	0	27.4	47.6	65.9	44.9	66	66.0	70	N	-	-	66.0	Y	N	N
A1-4a-13	3	43.3	A1-4a	-	0	0	28.5	47.7	65.7	45.7	65.8	65.8	70	N	-	-	65.8	Y	N	N
A1-4a-13	4	46.4	A1-4a	-	0	0	29.6	47.8	65.5	46.5	65.6	65.6	70	N	-	-	65.6	Y	N	N
A1-4a-13	5	49.5	A1-4a	-	0	0	30.9	47.8	65.2	47.3	65.4	65.4	70	N	-	-	65.4	Y	N	N
A1-4a-13	6	52.6	A1-4a	-	0	0	32.3	47.9	65	48.1	65.1	65.1	70	N	-	-	65.1	Y	N	N
A1-4a-13	7	55.7	A1-4a	-	0	0	33.9	48.1	64.7	48.9	64.9	64.9	70	N	-	-	64.9	Y	N	N
A1-4a-13	8	58.8	A1-4a	-	0	0	35.8	48.6	64.5	49.7	64.8	64.8	70	N	-	-	64.8	Y	N	N
A1-4a-13	9	61.9	A1-4a	-	0	0	37.7	49.2	64.3	50.5	64.6	64.6	70	N	-	-	64.6	Y	N	N
A1-4a-13	10	65	A1-4a	-	0	0	40.1	49.7	64.1	51.3	64.5	64.5	70	N	-	-	64.5	Y	N	N
A1-4a-13	11	68.1	A1-4a	-	0	0	42.2	50.3	63.9	52	64.3	64.3	70	N	-	-	64.3	Y	N	N
A1-4a-13	12	71.2	A1-4a	-	0	0	43.7	51	63.7	52.6	64.3	64.3	70	N	-	-	64.3	Y	N	N
A1-4a-13	13	74.3	A1-4a	-	0	0	44.3	51.6	63.5	53.3	64.2	64.2	70	N	-	-	64.2	Y	N	N
A1-4a-13	14	77.4	A1-4a	-	0	0	44.8	52	63.3	53.8	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-13	15	80.5	A1-4a	-	0	0	45	52.4	63.1	54.2	64	64.0	70	N	-	-	64.0	Y	N	N
A1-4a-13	16	83.6	A1-4a	-	0	0	45.1	52.8	62.9	54.5	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-13	17	86.7	A1-4a	-	0	0	45.1	53.4	62.7	54.8	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-13	18	89.8	A1-4a	-	0	0	45.2	54.1	62.5	55.1	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-13	19	92.9	A1-4a	-	0	0	45.3	54.7	62.4	55.5	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-13	20	96	A1-4a	-	0	0	45.4	55.1	62.2	55.9	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-13	21	99.1	A1-4a	-	0	0	45.5	55.4	62.1	56.3	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-13	22	102.2	A1-4a	-	0	0	45.5	55.7	61.9	56.6	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-13	23	105.3	A1-4a	-	0	0	45.5	55.9	61.8	56.8	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-13	24	108.4	A1-4a	-	0	0	45.6	56.1	61.7	57	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-13	25	111.5	A1-4a	-	0	0	45.6	56.2	61.5	57.3	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-13	26	114.6	A1-4a	-	0	0	45.7	56.3	61.4	57.6	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-13	27	117.7	A1-4a	-	0	0	45.7	56.4	61.3	57.9	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-14	1	37.1	A1-4a	-	0	0	26.2	48.6	64.7	44.1	64.9	64.9	70	N	-	-	64.9	Y	N	N
A1-4a-14	2	40.2	A1-4a	-	0	0	27.2	48.6	65.2	44.7	65.3	65.3	70	N	-	-	65.3	Y	N	N
A1-4a-14	3	43.3	A1-4a	-	0	0	28.2	48.6	65.1	45.4	65.2	65.2	70	N	-	-	65.2	Y	N	N
A1-4a-14	4	46.4	A1-4a	-	0	0	29.3	48.7	64.9	46.2	65	65.0	70	N	-	-	65.0	Y	N	N
A1-4a-14	5	49.5	A1-4a	-	0	0	30.5	48.8	64.7	46.9	64.8	64.8	70	N	-	-	64.8	Y	N	N
A1-4a-14	6	52.6	A1-4a	-	0	0	31.8	48.7	64.4	47.7	64.6	64.6	70	N	-	-	64.6	Y	N	N
A1-4a-14	7	55.7	A1-4a	-	0	0	33.3	48.8	64.2	48.5	64.5	64.5	70	N	-	-	64.5	Y	N	N
A1-4a-14	8	58.8	A1-4a	-	0	0	35	49	64	49.4	64.3	64.3	70	N	-	-	64.3	Y	N	N
A1-4a-14	9	61.9	A1-4a	-	0	0	36.9	49.1	63.8	50.2	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-14	10	65	A1-4a	-	0	0	39.3	49.4	63.7	50.8	64.1	64.1	70	N	-	-	64.1	Y	N	N
A1-4a-14	11	68.1	A1-4a	-	0	0	41.4	49.8	63.5	51.5	63.9	63.9	70	N	-	-	63.9	Y	N	N
A1-4a-14	12	71.2	A1-4a	-	0	0	42.8	50.4	63.3	52.2	63.8	63.8	70	N	-	-	63.8	Y	N	N
A1-4a-14	13	74.3	A1-4a	-	0	0	43.8	51	63.1	52.8	63.7	63.7	70	N	-	-	63.7	Y	N	N
A1-4a-14	14	77.4	A1-4a	-	0	0	44.3	51.5	62.9	53.3	63.7	63.7	70	N	-	-	63.7	Y	N	N
A1-4a-14	15	80.5	A1-4a	-	0	0	44.7	51.9	62.7	53.8	63.6	63.6	70	N	-	-	63.6	Y	N	N
A1-4a-14	16	83.6	A1-4a	-	0	0	44.9	52.3	62.6	54.2	63.6	63.6	70	N	-	-	63.6	Y	N	N
A1-4a-14	17	86.7	A1-4a	-	0	0	45	52.9	62.4	54.5	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	18	89.8	A1-4a	-	0	0	45	53.4	62.2	54.9	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	19	92.9	A1-4a	-	0	0	45.1	54.1	62.1	55.1	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	20	96	A1-4a	-	0	0	45.2	54.6	61.9	55.5	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	21	99.1	A1-4a	-	0	0	45.2	55	61.8	55.9	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	22	102.2	A1-4a	-	0	0	45.3	55.3	61.6	56.3	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	23	105.3	A1-4a	-	0	0	45.4	55.5	61.5	56.5	63.5	63.5	70	N	-	-	63.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
ID	Floor	Floor Level (mPD)				RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]				C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						dB (A)													
A1-4a-14	24	108.4	A1-4a	-	0	0	45.3	55.8	61.4	56.7	63.6	63.6	70	N	-	-	63.6	Y	N	N
A1-4a-14	25	111.5	A1-4a	-	0	0	45.4	56	61.2	57	63.5	63.5	70	N	-	-	63.5	Y	N	N
A1-4a-14	26	114.6	A1-4a	-	0	0	45.4	56	61.1	57.3	63.6	63.6	70	N	-	-	63.6	Y	N	N
A1-4a-14	27	117.7	A1-4a	-	0	0	45.5	56.2	61	57.5	63.6	63.6	70	N	-	-	63.6	Y	N	N
A1-4a-15	1	37.1	A1-4a	-	11.3	0	26.4	48.2	63.5	44.1	63.7	63.7	70	N	-	-	52.4	Y	N	N
A1-4a-15	2	40.2	A1-4a	-	11.3	0	27.3	48.2	65.1	44.7	65.2	65.2	70	N	-	-	53.9	Y	N	N
A1-4a-15	3	43.3	A1-4a	-	11.3	0	28.3	48.2	65	45.4	65.1	65.1	70	N	-	-	53.8	Y	N	N
A1-4a-15	4	46.4	A1-4a	-	11.3	0	29.3	48.3	64.8	46.1	64.9	64.9	70	N	-	-	53.6	Y	N	N
A1-4a-15	5	49.5	A1-4a	-	11.3	0	30.3	48.3	64.6	46.8	64.8	64.8	70	N	-	-	53.5	Y	N	N
A1-4a-15	6	52.6	A1-4a	-	11.3	0	31.5	48.5	64.4	47.5	64.6	64.6	70	N	-	-	53.3	Y	N	N
A1-4a-15	7	55.7	A1-4a	-	11.3	0	32.9	48.5	64.2	48.3	64.5	64.5	70	N	-	-	53.2	Y	N	N
A1-4a-15	8	58.8	A1-4a	-	11.3	0	34.4	48.7	64	49.1	64.3	64.3	70	N	-	-	53.0	Y	N	N
A1-4a-15	9	61.9	A1-4a	-	11.3	0	36.2	48.8	63.9	49.8	64.2	64.2	70	N	-	-	52.9	Y	N	N
A1-4a-15	10	65	A1-4a	-	11.2	0	38.2	49.1	63.7	50.6	64	64.0	70	N	-	-	52.8	Y	N	N
A1-4a-15	11	68.1	A1-4a	-	11.2	0	40.5	49.4	63.5	51.3	63.9	63.9	70	N	-	-	52.7	Y	N	N
A1-4a-15	12	71.2	A1-4a	-	11.1	0	42.3	50	63.3	51.9	63.8	63.8	70	N	-	-	52.7	Y	N	N
A1-4a-15	13	74.3	A1-4a	-	11.3	0	43.5	50.5	63.1	52.5	63.8	63.8	70	N	-	-	52.5	Y	N	N
A1-4a-15	14	77.4	A1-4a	-	11.3	0	44.1	51	63	53.1	63.7	63.7	70	N	-	-	52.4	Y	N	N
A1-4a-15	15	80.5	A1-4a	-	11.3	0	44.4	51.5	62.8	53.6	63.6	63.6	70	N	-	-	52.3	Y	N	N
A1-4a-15	16	83.6	A1-4a	-	11.4	0	44.8	52	62.6	54	63.6	63.6	70	N	-	-	52.2	Y	N	N
A1-4a-15	17	86.7	A1-4a	-	11.2	0	44.9	52.5	62.5	54.3	63.5	63.5	70	N	-	-	52.3	Y	N	N
A1-4a-15	18	89.8	A1-4a	-	11.6	0	45.1	53.2	62.3	54.6	63.5	63.5	70	N	-	-	51.9	Y	N	N
A1-4a-15	19	92.9	A1-4a	-	12.1	0	45.2	53.7	62.1	55	63.5	63.5	70	N	-	-	51.4	Y	N	N
A1-4a-15	20	96	A1-4a	-	12.5	0	45.2	54.3	62	55.4	63.5	63.5	70	N	-	-	51.0	Y	N	N
A1-4a-15	21	99.1	A1-4a	-	13	0	45.3	54.8	61.8	55.7	63.5	63.5	70	N	-	-	50.5	Y	N	N
A1-4a-15	22	102.2	A1-4a	-	13.5	0	45.3	55.1	61.7	56.2	63.6	63.6	70	N	-	-	50.1	Y	N	N
A1-4a-15	23	105.3	A1-4a	-	14.1	0	45.3	55.4	61.6	56.4	63.6	63.6	70	N	-	-	49.5	Y	N	N
A1-4a-15	24	108.4	A1-4a	-	14.5	0	45.4	55.7	61.4	56.6	63.5	63.5	70	N	-	-	49.0	Y	N	N
A1-4a-15	25	111.5	A1-4a	-	15	0	45.5	55.8	61.3	56.8	63.5	63.5	70	N	-	-	48.5	Y	N	N
A1-4a-15	26	114.6	A1-4a	-	15.7	0	45.5	55.9	61.2	57.1	63.6	63.6	70	N	-	-	47.9	Y	N	N
A1-4a-15	27	117.7	A1-4a	-	16.3	0	45.6	56	61.1	57.4	63.6	63.6	70	N	-	-	47.3	Y	N	N
A1-4a-16	1	37.1	A1-4a	-	17.9	0	26.5	47.7	64.1	44.1	64.2	64.2	70	N	-	-	46.3	Y	N	N
A1-4a-16	2	40.2	A1-4a	-	17.9	0	27.3	47.8	65	44.7	65.1	65.1	70	N	-	-	47.2	Y	N	N
A1-4a-16	3	43.3	A1-4a	-	17.9	0	28.1	47.8	65	45.3	65.1	65.1	70	N	-	-	47.2	Y	N	N
A1-4a-16	4	46.4	A1-4a	-	17.9	0	29	47.9	64.8	46	65	65.0	70	N	-	-	47.1	Y	N	N
A1-4a-16	5	49.5	A1-4a	-	17.9	0	30.1	47.9	64.7	46.7	64.8	64.8	70	N	-	-	46.9	Y	N	N
A1-4a-16	6	52.6	A1-4a	-	17.9	0	31.2	48	64.5	47.4	64.6	64.6	70	N	-	-	46.7	Y	N	N
A1-4a-16	7	55.7	A1-4a	-	17.9	0	32.5	48.1	64.3	48.1	64.5	64.5	70	N	-	-	46.6	Y	N	N
A1-4a-16	8	58.8	A1-4a	-	17.9	0	33.8	48.3	64.1	48.9	64.3	64.3	70	N	-	-	46.4	Y	N	N
A1-4a-16	9	61.9	A1-4a	-	17.9	0	35.5	48.4	63.9	49.6	64.2	64.2	70	N	-	-	46.3	Y	N	N
A1-4a-16	10	65	A1-4a	-	17.8	0	37.3	48.6	63.8	50.3	64.1	64.1	70	N	-	-	46.3	Y	N	N
A1-4a-16	11	68.1	A1-4a	-	17.8	0	39.4	48.8	63.6	51.1	63.9	63.9	70	N	-	-	46.1	Y	N	N
A1-4a-16	12	71.2	A1-4a	-	17.8	0	41.4	49.3	63.4	51.7	63.9	63.9	70	N	-	-	46.1	Y	N	N
A1-4a-16	13	74.3	A1-4a	-	17.9	0	42.9	49.9	63.2	52.4	63.8	63.8	70	N	-	-	45.9	Y	N	N
A1-4a-16	14	77.4	A1-4a	-	17.9	0	43.7	50.5	63	53	63.7	63.7	70	N	-	-	45.8	Y	N	N
A1-4a-16	15	80.5	A1-4a	-	17.9	0	44.3	51.1	62.9	53.5	63.7	63.7	70	N	-	-	45.8	Y	N	N
A1-4a-16	16	83.6	A1-4a	-	17.8	0	44.7	51.6	62.7	53.8	63.6	63.6	70	N	-	-	45.8	Y	N	N
A1-4a-16	17	86.7	A1-4a	-	17.8	0	45	52.2	62.6	54.2	63.6	63.6	70	N	-	-	45.8	Y	N	N
A1-4a-16	18	89.8	A1-4a	-	18.3	0	45.1	52.7	62.4	54.6	63.5	63.5	70	N	-	-	45.2	Y	N	N
A1-4a-16	19	92.9	A1-4a	-	18.8	0	45.1	53.4	62.3	54.9	63.5	63.5	70	N	-	-	44.7	Y	N	N
A1-4a-16	20	96	A1-4a	-	19.3	0	45.3	54.1	62.1	55.3	63.5	63.5	70	N	-	-	44.2	Y	N	N
A1-4a-16	21	99.1	A1-4a	-	19.9	0	45.3	54.6	62	55.6	63.5	63.5	70	N	-	-	43.6	Y	N	N
A1-4a-16	22	102.2	A1-4a	-	20.4	0	45.4	55	61.9	56.1	63.6	63.6	70	N	-	-	43.2	Y	N	N
A1-4a-16	23	105.3	A1-4a	-	20.9	0	45.4	55.3	61.7	56.5	63.6	63.6	70	N	-	-	42.7	Y	N	N
A1-4a-16	24	108.4	A1-4a	-	21.4	0	45.5	55.5	61.6	56.5	63.6	63.6	70	N	-	-	42.2	Y	N	N
A1-4a-16	25	111.5	A1-4a	-	22	0	45.6	55.7	61.5	56.8	63.6	63.6	70	N	-	-	41.6	Y	N	N
A1-4a-16	26	114.6	A1-4a	-	22.6	0	45.6	55.9	61.3	57.1	63.6	63.6	70	N	-	-	41.0	Y	N	N
A1-4a-16	27	117.7	A1-4a	-	23.1	0	45.6	56	61.2	57.4	63.6	63.6	70	N	-	-	40.5	Y	N	N
A1-4a-17	1	37.1	A1-4a	-	19.8	0	26.4	47.2	64.5	44	64.7	64.7	70	N	-	-	44.9	Y	N	N
A1-4a-17	2	40.2	A1-4a	-	19.8	0	27.2	47.2	64.8	44.7	65	65.0	70	N	-	-	45.2	Y	N	N
A1-4a-17	3	43.3	A1-4a	-	19.7	0	28	47.3	64.8	45.2	64.9	64.9	70	N	-	-	45.2	Y	N	N
A1-4a-17	4	46.4	A1-4a	-	19.7	0	28.9	47.4	64.6	45.9	64.8	64.8	70	N	-	-	45.1	Y	N	N
A1-4a-17	5	49.5	A1-4a	-	19.7	0	29.9	47.5	64.4	46.6	64.6	64.6	70	N	-	-	44.9	Y	N	N
A1-4a-17	6	52.6	A1-4a	-	19.7	0	30.9	47.5	64.3	47.2	64.4	64.4	70	N	-	-	44.7	Y	N	N
A1-4a-17	7	55.7	A1-4a	-	19.7	0	32.1	47.6	64.1	48	64.3	64.3	70	N	-	-	44.6	Y	N	N
A1-4a-17	8	58.8	A1-4a	-	19.7	0	33.4	47.8	63.9	48.7	64.1	64.1	70	N	-	-	44.4	Y	N	N
A1-4a-17	9	61.9	A1-4a	-	19.7	0	35	47.9	63.7	49.4	63.9	63.9	70	N	-	-	44.2	Y	N	N
A1-4a-17	10	65	A1-4a	-	19.7	0	36.7	48.1	63.5	50.1	63.8	63.8	70	N	-	-	44.1	Y	N	N
A1-4a-17	11	68.1	A1-4a	-	19.6	0	38.7	48.3	63.3	50.8	63.7	63.7	70	N	-	-	44.1	Y	N	N
A1-4a-17	12	71.2	A1-4a	-	19.6	0	40.5	48.8	63.1	51.5	63.6	63.6	70	N	-	-	44.0	Y	N	N
A1-4a-17	13	74.3	A1-4a	-	19.6	0	42.2	49.3	63	52.2	63.6	63.6	70	N	-	-	44.0	Y	N	N
A1-4a-17	14	77.4	A1-4a	-	19.7	0	43.2	50	62.8	52.8	63.5	63.5	70	N	-	-	43.8	Y	N	N
A1-4a-17	15	80.5	A1-4a	-	19.7	0	44.2	50.6	62.7	53.3	63.4	63.4	70	N	-	-	43.7	Y	N	N
A1-4a-17	16	83.6	A1-4a	-	19.7	0	44.6	51.2	62.5	53.8	63.4	63.4	70	N	-	-	43.7	Y	N	N
A1-4a-17	17	86.7	A1-4a	-	19.9	0	44.9	51.8	62.4	54.2	63.4	63.4	70	N	-	-	43.5	Y	N	N
A1-4a-17	18	89.8	A1-4a	-	20.4	0	45.1	52.6	62.2	54.5	63.3	63.3	70	N	-	-	42.9	Y	N	N
A1-4a-17	19	92.9	A1-4a	-	20.9	0	45.2	53.2	62.1	54.8	63.3	63.3	70	N	-	-	42.4	Y	N	N
A1-4a-17	20	96	A1-4a	-	21.4	0	45.3	53.9	61.9	55.2	63.3	63.3	70	N	-	-	41.9	Y	N	N
A1-4a-17	21	99.1	A1-4a	-	22	0	45.4	54.4	61.8	55.6	63.4	63.4	70	N	-	-	41.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-4a-17	22	102.2	A1-4a	-	22.5	0	45.5	54.9	61.7	55.9	63.4	63.4	70	N	-	-	40.9	Y	N	N
A1-4a-17	23	105.3	A1-4a	-	23.1	0	45.5	55.2	61.5	56.3	63.4	63.4	70	N	-	-	40.3	Y	N	N
A1-4a-17	24	108.4	A1-4a	-	23.7	0	45.6	55.4	61.4	56.5	63.4	63.4	70	N	-	-	39.7	Y	N	N
A1-4a-17	25	111.5	A1-4a	-	24.2	0	45.7	55.6	61.3	56.8	63.5	63.5	70	N	-	-	39.3	Y	N	N
A1-4a-17	26	114.6	A1-4a	-	24.8	0	45.6	55.8	61.1	57.1	63.5	63.5	70	N	-	-	38.7	Y	N	N
A1-4a-17	27	117.7	A1-4a	-	25.4	0	45.7	56	61	57.3	63.5	63.5	70	N	-	-	38.1	Y	N	N
A1-9a-1	1	14.7	A1-9a	-	8.4	0	12.9	69.7	34.2	53.6	69.8	69.8	70	N	-	-	61.4	Y	N	N
A1-9a-1	2	17.9	A1-9a	-	8.4	0	12.9	69.6	34.2	53.8	69.7	69.7	70	N	-	-	61.3	Y	N	N
A1-9a-1	3	21.1	A1-9a	-	8.5	0	12.9	69.5	34.2	54.1	69.6	69.6	70	N	-	-	61.1	Y	N	N
A1-9a-1	4	24.3	A1-9a	-	8.6	0	12.9	69.4	34.5	54.3	69.5	69.5	70	N	-	-	60.9	Y	N	N
A1-9a-1	5	27.5	A1-9a	-	8.7	0	12.9	69.2	34.9	54.6	69.4	69.4	70	N	-	-	60.7	Y	N	N
A1-9a-1	6	30.7	A1-9a	-	9.7	0	12.9	69.1	35.7	54.9	69.3	69.3	70	N	-	-	59.6	Y	N	N
A1-9a-1	7	33.9	A1-9a	-	11.1	0	13	68.9	36.9	55.1	69.1	69.1	70	N	-	-	58.0	Y	N	N
A1-9a-1	8	37.1	A1-9a	-	12.5	0	13	68.8	38.7	55.4	69	69.0	70	N	-	-	56.5	Y	N	N
A1-9a-1	9	40.3	A1-9a	-	14	0	13	68.6	41.4	55.7	68.9	68.9	70	N	-	-	54.9	Y	N	N
A1-9a-1	10	43.5	A1-9a	-	15.6	0	13	68.5	45.1	56	68.7	68.7	70	N	-	-	53.1	Y	N	N
A1-9a-1	11	46.7	A1-9a	-	17.5	0	13	68.3	50	56.3	68.6	68.6	70	N	-	-	51.1	Y	N	N
A1-9a-1	12	49.9	A1-9a	-	19.3	0	13	68.1	52.7	56.5	68.5	68.5	70	N	-	-	49.2	Y	N	N
A1-9a-1	13	53.1	A1-9a	-	21.5	0	13	68	53.1	56.9	68.5	68.5	70	N	-	-	47.0	Y	N	N
A1-9a-1	14	56.3	A1-9a	-	23.8	0	13	67.8	53.1	57.2	68.3	68.3	70	N	-	-	44.5	Y	N	N
A1-9a-1	15	59.5	A1-9a	-	26.4	0	13	67.7	52.9	57.5	68.2	68.2	70	N	-	-	41.8	Y	N	N
A1-9a-1	16	62.7	A1-9a	-	30	0	13	67.5	52.8	57.7	68.1	68.1	70	N	-	-	38.1	Y	N	N
A1-9a-1	17	65.9	A1-9a	-	34.2	0	13	67.3	52.6	58.1	68	68.0	70	N	-	-	33.8	Y	N	N
A1-9a-1	18	69.1	A1-9a	-	36.6	0	13	67.2	52.4	58.4	67.9	67.9	70	N	-	-	31.3	Y	N	N
A1-9a-2	1	14.7	A1-9a	-	11.4	0	22.3	73.3	55	53.7	73.4	73.4	70	Y	-	-	62.0	Y	Y	Y
A1-9a-2	2	17.9	A1-9a	-	11.5	0	22.8	73.1	54.9	53.9	73.2	73.2	70	Y	-	-	61.7	Y	Y	Y
A1-9a-2	3	21.1	A1-9a	-	11.7	0	23.5	72.8	54.8	54.2	73	73.0	70	Y	-	-	61.3	Y	Y	Y
A1-9a-2	4	24.3	A1-9a	-	11.7	0	24.6	72.5	54.6	54.6	72.7	72.7	70	Y	-	-	61.0	Y	Y	Y
A1-9a-2	5	27.5	A1-9a	-	12.3	0	25.8	72.2	54.4	54.8	72.4	72.4	70	Y	-	-	60.1	Y	Y	Y
A1-9a-2	6	30.7	A1-9a	-	13.4	0	27.1	71.9	54.2	55.3	72.1	72.1	70	Y	-	-	58.7	Y	Y	Y
A1-9a-2	7	33.9	A1-9a	-	14.7	0	28.4	71.6	54	55.6	71.8	71.8	70	Y	-	-	57.1	Y	Y	Y
A1-9a-2	8	37.1	A1-9a	-	16.4	0	29.7	71.3	53.8	56	71.5	71.5	70	Y	-	-	55.1	Y	Y	Y
A1-9a-2	9	40.3	A1-9a	-	18	0	31.1	71	53.7	56.4	71.2	71.2	70	Y	-	-	53.2	Y	Y	Y
A1-9a-2	10	43.5	A1-9a	-	19.7	0	32.5	70.7	53.5	57	71	71.0	70	Y	-	-	51.3	Y	Y	Y
A1-9a-2	11	46.7	A1-9a	-	21.6	0	34.1	70.5	53.4	57.5	70.8	70.8	70	Y	-	-	49.2	Y	Y	Y
A1-9a-2	12	49.9	A1-9a	-	23.6	0	36	70.2	53.2	58.2	70.6	70.6	70	Y	-	-	47.0	Y	Y	Y
A1-9a-2	13	53.1	A1-9a	-	26	0	38.6	70	53.1	59	70.4	70.4	70	N	-	-	44.4	Y	N	N
A1-9a-2	14	56.3	A1-9a	-	29	0	41.6	69.8	53	59.9	70.3	70.3	70	N	-	-	41.3	Y	N	N
A1-9a-2	15	59.5	A1-9a	-	32.8	0	43.7	69.6	52.9	61	70.2	70.2	70	N	-	-	37.4	Y	N	N
A1-9a-2	16	62.7	A1-9a	-	37.1	0	45.2	69.4	52.8	62.1	70.2	70.2	70	N	-	-	33.1	Y	N	N
A1-9a-2	17	65.9	A1-9a	-	39.3	0	45.9	69.2	52.9	63.2	70.3	70.3	70	N	-	-	31.0	Y	N	N
A1-9a-2	18	69.1	A1-9a	-	39.9	0	46.3	69.1	53	64	70.3	70.4	70	N	-	-	30.5	Y	N	N
A1-9a-3	1	14.7	A1-9a	-	12.1	0	23.6	70.8	55.9	49	71	71.0	70	Y	-	-	58.9	Y	Y	Y
A1-9a-3	2	17.9	A1-9a	-	12.2	0	24	70.7	55.9	49.4	70.8	70.8	70	Y	-	-	58.6	Y	Y	Y
A1-9a-3	3	21.1	A1-9a	-	12.4	0	24.7	70.5	55.9	49.9	70.7	70.7	70	Y	-	-	58.3	Y	Y	Y
A1-9a-3	4	24.3	A1-9a	-	13.1	0	25.8	70.3	55.9	50.4	70.5	70.5	70	Y	-	-	57.4	Y	Y	Y
A1-9a-3	5	27.5	A1-9a	-	14.1	0	27	70.1	55.8	51	70.3	70.3	70	N	-	-	56.2	Y	N	N
A1-9a-3	6	30.7	A1-9a	-	15.3	0	28.3	69.9	55.8	51.7	70.1	70.1	70	N	-	-	54.8	Y	N	N
A1-9a-3	7	33.9	A1-9a	-	16.8	0	29.7	69.6	55.8	52.4	69.9	69.9	70	N	-	-	53.1	Y	N	N
A1-9a-3	8	37.1	A1-9a	-	18.3	0	31.2	69.4	55.7	53.2	69.6	69.6	70	N	-	-	51.3	Y	N	N
A1-9a-3	9	40.3	A1-9a	-	20.3	0	32.5	69.1	55.7	54	69.5	69.5	70	N	-	-	49.2	Y	N	N
A1-9a-3	10	43.5	A1-9a	-	22.3	0	34	68.9	55.7	54.9	69.3	69.3	70	N	-	-	47.0	Y	N	N
A1-9a-3	11	46.7	A1-9a	-	24.5	0	35.5	68.7	55.7	55.9	69.1	69.1	70	N	-	-	44.6	Y	N	N
A1-9a-3	12	49.9	A1-9a	-	27.3	0	37.3	68.5	55.7	56.9	69	69.0	70	N	-	-	41.7	Y	N	N
A1-9a-3	13	53.1	A1-9a	-	31	0	39.7	68.2	55.8	58.1	68.9	68.9	70	N	-	-	37.9	Y	N	N
A1-9a-3	14	56.3	A1-9a	-	36.4	0	42.8	68.1	56.1	59.5	68.9	68.9	70	N	-	-	32.5	Y	N	N
A1-9a-3	15	59.5	A1-9a	-	39.2	0	45.3	67.9	56.7	61.2	69	69.0	70	N	-	-	29.8	Y	N	N
A1-9a-3	16	62.7	A1-9a	-	39.8	0	46.7	67.8	57.5	62.8	69.3	69.3	70	N	-	-	29.5	Y	N	N
A1-9a-3	17	65.9	A1-9a	-	39.9	0	47.2	67.7	58.1	63.8	69.5	69.5	70	N	-	-	29.6	Y	N	N
A1-9a-3	18	69.1	A1-9a	-	39.9	0	47.5	67.5	58.4	64.5	69.6	69.6	70	N	-	-	29.7	Y	N	N
A1-9a-4	1	14.7	A1-9a	-	10.8	41.9	37.1	70.9	61.7	47.4	71.4	71.4	70	Y	-	-	60.6	Y	Y	Y
A1-9a-4	2	17.9	A1-9a	-	10.8	41.9	37.2	70.7	61.6	47.9	71.3	71.3	70	Y	-	-	60.5	Y	Y	Y
A1-9a-4	3	21.1	A1-9a	-	11.3	41.9	37.3	70.5	61.6	48.5	71.1	71.1	70	Y	-	-	59.8	Y	Y	Y
A1-9a-4	4	24.3	A1-9a	-	12.3	41.9	37.4	70.4	61.5	49.1	70.9	70.9	70	Y	-	-	58.6	Y	Y	Y
A1-9a-4	5	27.5	A1-9a	-	13.4	41.9	37.6	70.2	61.4	49.9	70.7	70.7	70	Y	-	-	57.3	Y	Y	Y
A1-9a-4	6	30.7	A1-9a	-	14.7	41.9	37.8	69.9	61.3	50.6	70.5	70.5	70	Y	-	-	55.8	Y	Y	Y
A1-9a-4	7	33.9	A1-9a	-	16.2	41.9	38	69.7	61.2	51.4	70.3	70.3	70	N	-	-	54.1	Y	N	N
A1-9a-4	8	37.1	A1-9a	-	18	41.9	38.1	69.5	61	52.3	70.1	70.1	70	N	-	-	52.1	Y	N	N
A1-9a-4	9	40.3	A1-9a	-	19.9	41.9	38.4	69.2	60.9	53.3	69.9	69.9	70	N	-	-	50.0	Y	N	N
A1-9a-4	10	43.5	A1-9a	-	22.2	41.8	38.7	69	60.8	54.3	69.8	69.8	70	N	-	-	47.6	Y	N	N
A1-9a-4	11	46.7	A1-9a	-	24.5	41.8	39.1	68.8	60.6	55.4	69.6	69.6	70	N	-	-	45.1	Y	N	N
A1-9a-4	12	49.9	A1-9a	-	27.2	41.8	39.8	68.6	60.6	56.6	69.5	69.5	70	N	-	-	42.3	Y	N	N
A1-9a-4	13	53.1	A1-9a	-	31	41.8	41.1	68.4	60.5	57.8	69.4	69.4	70	N	-	-	38.4	Y	N	N
A1-9a-4	14	56.3	A1-9a	-	36.2	41.8	43.3	68.2	60.6	59.3	69.4	69.4	70	N	-	-	33.2	Y	N	N
A1-9a-4	15	59.5	A1-9a	-	38.8	41.8	44.4	68.1	61	61.1	69.6	69.6	70	N	-	-	30.8	Y	N	N
A1-9a-4	16	62.7	A1-9a	-	39.3	41.9	45.1	67.9	61.4	63	69.8	69.9	70	N	-	-	30.6	Y	N	N
A1-9a-4	17	65.9	A1-9a	-	39.5	41.9	45.6	67.8	61.5	64.2	70	70.0	70	N	-	-	30.5	Y	N	N
A1-9a-4	18	69.1	A1-9a	-	39.5	42	45.9	67.7	61.6	64.8	70.2	70.2	70	N	-	-	30.7	Y	N	N
A1-9a-5	1	14.7	A1-9a	-	12	26.9	48	67.9	67	50.9	70.5	70.5	70	Y	-	-	58.5	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-9a-5	2	17.9	A1-9a	-	12.4	26.9	48	67.8	66.8	51	70.4	70.4	70	N	-	-	58.0	Y	N	N
A1-9a-5	3	21.1	A1-9a	-	13	26.9	48	67.7	66.7	51.1	70.3	70.3	70	N	-	-	57.3	Y	N	N
A1-9a-5	4	24.3	A1-9a	-	13.8	26.9	48	67.6	66.5	51.1	70.2	70.2	70	N	-	-	56.4	Y	N	N
A1-9a-5	5	27.5	A1-9a	-	14.7	26.9	48	67.5	66.3	51.2	70	70.0	70	N	-	-	55.3	Y	N	N
A1-9a-5	6	30.7	A1-9a	-	15.8	26.9	48.1	67.3	66.1	51.4	69.8	69.8	70	N	-	-	54.0	Y	N	N
A1-9a-5	7	33.9	A1-9a	-	17.1	26.8	48.1	67.2	65.8	51.5	69.7	69.7	70	N	-	-	52.6	Y	N	N
A1-9a-5	8	37.1	A1-9a	-	18.6	26.8	48.1	67.1	65.6	51.8	69.5	69.5	70	N	-	-	50.9	Y	N	N
A1-9a-5	9	40.3	A1-9a	-	20.2	26.8	48.1	66.9	65.3	52	69.3	69.3	70	N	-	-	49.1	Y	N	N
A1-9a-5	10	43.5	A1-9a	-	22.1	27.2	48.1	66.7	65.1	52.3	69.1	69.1	70	N	-	-	47.0	Y	N	N
A1-9a-5	11	46.7	A1-9a	-	24.3	27.6	48.1	66.6	64.9	52.7	69	69.0	70	N	-	-	44.7	Y	N	N
A1-9a-5	12	49.9	A1-9a	-	26.8	28.3	48.2	66.4	64.7	53.1	68.8	68.8	70	N	-	-	42.0	Y	N	N
A1-9a-5	13	53.1	A1-9a	-	30.3	28.9	48.3	66.3	64.5	53.7	68.7	68.7	70	N	-	-	38.4	Y	N	N
A1-9a-5	14	56.3	A1-9a	-	34.8	29.6	48.4	66.1	64.3	54.5	68.5	68.5	70	N	-	-	33.7	Y	N	N
A1-9a-5	15	59.5	A1-9a	-	38.1	30.3	48.5	65.9	64.3	56	68.5	68.5	70	N	-	-	30.4	Y	N	N
A1-9a-5	16	62.7	A1-9a	-	38.9	31.2	48.7	65.8	64.2	57.4	68.5	68.5	70	N	-	-	29.6	Y	N	N
A1-9a-5	17	65.9	A1-9a	-	39.2	32.2	48.9	65.7	64.2	58.5	68.5	68.5	70	N	-	-	29.3	Y	N	N
A1-9a-5	18	69.1	A1-9a	-	39.1	33.2	49	65.6	64.1	59.5	68.5	68.5	70	N	-	-	29.4	Y	N	N
A1-9a-6	1	14.7	A1-9a	-	11.2	25.1	50.4	58.3	68.4	28.5	68.9	68.9	70	N	-	-	57.7	Y	N	N
A1-9a-6	2	17.9	A1-9a	-	11.2	25.1	50.4	58.3	68.2	28.6	68.7	68.7	70	N	-	-	57.5	Y	N	N
A1-9a-6	3	21.1	A1-9a	-	11.3	25.1	50.4	58.3	68.1	28.7	68.6	68.6	70	N	-	-	57.3	Y	N	N
A1-9a-6	4	24.3	A1-9a	-	11.3	25.1	50.4	58.3	67.8	28.8	68.4	68.4	70	N	-	-	57.1	Y	N	N
A1-9a-6	5	27.5	A1-9a	-	11.3	25.1	50.4	58.3	67.6	28.9	68.2	68.2	70	N	-	-	56.9	Y	N	N
A1-9a-6	6	30.7	A1-9a	-	11.3	25.1	50.4	58.2	67.3	29	67.9	67.9	70	N	-	-	56.6	Y	N	N
A1-9a-6	7	33.9	A1-9a	-	11.3	25.1	50.4	58.2	67.1	29.2	67.7	67.7	70	N	-	-	56.4	Y	N	N
A1-9a-6	8	37.1	A1-9a	-	11.3	25	50.4	58.2	66.9	29.3	67.5	67.5	70	N	-	-	56.2	Y	N	N
A1-9a-6	9	40.3	A1-9a	-	11.3	25.1	50.3	58.2	66.6	29.4	67.3	67.3	70	N	-	-	56.0	Y	N	N
A1-9a-6	10	43.5	A1-9a	-	11.3	25.3	50.3	58.2	66.4	30	67.1	67.1	70	N	-	-	55.8	Y	N	N
A1-9a-6	11	46.7	A1-9a	-	11.5	25.7	50.3	58.2	66.1	30.6	66.9	66.9	70	N	-	-	55.4	Y	N	N
A1-9a-6	12	49.9	A1-9a	-	12.4	26.4	50.3	58.1	65.9	31.3	66.7	66.7	70	N	-	-	54.3	Y	N	N
A1-9a-6	13	53.1	A1-9a	-	13.4	27	50.3	58.1	65.7	32	66.5	66.5	70	N	-	-	53.1	Y	N	N
A1-9a-6	14	56.3	A1-9a	-	14.7	27.6	50.4	58.1	65.5	32.8	66.3	66.3	70	N	-	-	51.6	Y	N	N
A1-9a-6	15	59.5	A1-9a	-	16.1	28.2	50.4	58	65.3	33.5	66.2	66.2	70	N	-	-	50.1	Y	N	N
A1-9a-6	16	62.7	A1-9a	-	17.8	29	50.4	58	65.1	34.2	66	66.0	70	N	-	-	48.2	Y	N	N
A1-9a-6	17	65.9	A1-9a	-	19.7	29.8	50.5	57.9	64.9	35	65.8	65.8	70	N	-	-	46.1	Y	N	N
A1-9a-6	18	69.1	A1-9a	-	22	30.6	50.5	57.9	64.7	35.7	65.7	65.7	70	N	-	-	43.7	Y	N	N
A1-9a-7	1	14.7	A1-9a	-	10.7	23.4	41.1	54.3	64.1	0	64.6	64.6	70	N	-	-	53.9	Y	N	N
A1-9a-7	2	17.9	A1-9a	-	10.7	23.4	41.1	54.3	63.9	0	64.3	64.3	70	N	-	-	53.6	Y	N	N
A1-9a-7	3	21.1	A1-9a	-	10.8	23.4	41.1	54.3	63.6	0	64.1	64.1	70	N	-	-	53.3	Y	N	N
A1-9a-7	4	24.3	A1-9a	-	10.8	23.4	41.1	54.3	63.4	0	63.9	63.9	70	N	-	-	53.1	Y	N	N
A1-9a-7	5	27.5	A1-9a	-	10.8	23.4	41.1	54.3	63.1	0	63.7	63.7	70	N	-	-	52.9	Y	N	N
A1-9a-7	6	30.7	A1-9a	-	10.8	23.4	41.1	54.3	62.9	0	63.5	63.5	70	N	-	-	52.7	Y	N	N
A1-9a-7	7	33.9	A1-9a	-	10.8	23.3	41	54.2	62.7	0	63.3	63.3	70	N	-	-	52.5	Y	N	N
A1-9a-7	8	37.1	A1-9a	-	10.8	23.3	41	54.2	62.4	0	63.1	63.1	70	N	-	-	52.3	Y	N	N
A1-9a-7	9	40.3	A1-9a	-	10.8	23.3	41	54.2	62.2	0	62.9	62.9	70	N	-	-	52.1	Y	N	N
A1-9a-7	10	43.5	A1-9a	-	10.8	23.3	41.1	54.2	62	0	62.7	62.7	70	N	-	-	51.9	Y	N	N
A1-9a-7	11	46.7	A1-9a	-	10.7	23.3	41.2	54.2	61.8	0	62.6	62.6	70	N	-	-	51.9	Y	N	N
A1-9a-7	12	49.9	A1-9a	-	11.4	23.4	41.3	54.2	61.7	0	62.4	62.4	70	N	-	-	51.0	Y	N	N
A1-9a-7	13	53.1	A1-9a	-	12.4	23.4	41.4	54.2	61.4	0	62.2	62.2	70	N	-	-	49.8	Y	N	N
A1-9a-7	14	56.3	A1-9a	-	13.6	23.4	41.5	54.2	61.3	0	62.1	62.1	70	N	-	-	48.5	Y	N	N
A1-9a-7	15	59.5	A1-9a	-	15	23.5	41.7	54.2	61.1	0	61.9	61.9	70	N	-	-	46.9	Y	N	N
A1-9a-7	16	62.7	A1-9a	-	16.3	23.7	41.9	54.1	60.9	0	61.8	61.8	70	N	-	-	45.5	Y	N	N
A1-9a-7	17	65.9	A1-9a	-	17.6	23.8	42.1	54.1	60.8	0	61.7	61.7	70	N	-	-	44.1	Y	N	N
A1-9a-7	18	69.1	A1-9a	-	19	23.8	42.5	54.1	60.6	0	61.5	61.5	70	N	-	-	42.5	Y	N	N
A1-9b-1	1	15.2	A1-9b	-	9.1	0	43.6	67.4	68.6	59.9	71.4	71.4	70	Y	-	-	62.3	Y	Y	Y
A1-9b-1	2	18.4	A1-9b	-	10	0	43.6	67.3	68.3	59.9	71.2	71.2	70	Y	-	-	61.2	Y	Y	Y
A1-9b-1	3	21.6	A1-9b	-	11.1	0	43.6	67.3	67.9	59.9	71	71.0	70	Y	-	-	59.9	Y	Y	Y
A1-9b-1	4	24.8	A1-9b	-	12.2	0	43.6	67.2	67.6	59.9	70.8	70.8	70	Y	-	-	58.6	Y	Y	Y
A1-9b-1	5	28	A1-9b	-	13.4	0	43.6	67	67.3	59.9	70.6	70.6	70	Y	-	-	57.2	Y	Y	Y
A1-9b-1	6	31.2	A1-9b	-	14.9	0	43.6	66.9	66.9	59.9	70.3	70.3	70	N	-	-	55.4	Y	N	N
A1-9b-1	7	34.4	A1-9b	-	16.3	0	43.6	66.8	66.6	60	70.2	70.2	70	N	-	-	53.9	Y	N	N
A1-9b-1	8	37.6	A1-9b	-	17.9	0	43.6	66.7	66.3	60	70	70.0	70	N	-	-	52.1	Y	N	N
A1-9b-1	9	40.8	A1-9b	-	19.5	0	43.5	66.5	66	60	69.8	69.8	70	N	-	-	50.3	Y	N	N
A1-9b-1	10	44	A1-9b	-	21.2	0	43.5	66.3	65.8	60	69.6	69.6	70	N	-	-	48.4	Y	N	N
A1-9b-1	11	47.2	A1-9b	-	23.1	0	43.5	66.2	65.5	60	69.4	69.4	70	N	-	-	46.3	Y	N	N
A1-9b-1	12	50.4	A1-9b	-	25.3	0	43.5	66.1	65.3	60.1	69.3	69.3	70	N	-	-	44.0	Y	N	N
A1-9b-1	13	53.6	A1-9b	-	28.2	0	43.5	65.9	65.1	60.1	69.1	69.1	70	N	-	-	40.9	Y	N	N
A1-9b-1	14	56.8	A1-9b	-	32.3	0	43.5	65.8	65	60.2	69	69.0	70	N	-	-	36.7	Y	N	N
A1-9b-1	15	60	A1-9b	-	35.9	0	43.5	65.6	64.8	60.3	68.9	68.9	70	N	-	-	33.0	Y	N	N
A1-9b-1	16	63.2	A1-9b	-	37.5	0	43.5	65.5	64.7	60.3	68.8	68.8	70	N	-	-	31.3	Y	N	N
A1-9b-1	17	66.4	A1-9b	-	37.9	0	43.5	65.3	64.6	60.4	68.7	68.7	70	N	-	-	30.8	Y	N	N
A1-9b-1	18	69.6	A1-9b	-	38	0	43.5	65.2	64.4	60.5	68.6	68.6	70	N	-	-	30.6	Y	N	N
A1-9b-2	1	15.2	A1-9b	-	16.5	53.8	50.2	71.9	65.1	60.3	73.1	73.1	70	Y	-	-	56.6	Y	Y	Y
A1-9b-2	2	18.4	A1-9b	-	17.5	53.8	50.3	71.8	65.1	60.3	73	73.0	70	Y	-	-	55.5	Y	Y	Y
A1-9b-2	3	21.6	A1-9b	-	18.6	53.8	50.3	71.7	64.9	60.3	72.8	72.8	70	Y	-	-	54.2	Y	Y	Y
A1-9b-2	4	24.8	A1-9b	-	19.8	53.7	50.3	71.5	64.8	60.4	72.7	72.7	70	Y	-	-	52.9	Y	Y	Y
A1-9b-2	5	28	A1-9b	-	21	53.7	50.4	71.2	64.6	60.4	72.5	72.5	70	Y	-	-	51.5	Y	Y	Y
A1-9b-2	6	31.2	A1-9b	-	22.2	53.7	50.5	71.1	64.5	60.4	72.3	72.3	70	Y	-	-	50.1	Y	Y	Y
A1-9b-2	7	34.4	A1-9b	-	23.6	53.7	50.5	70.8	64.3	60.4	72.1	72.1	70	Y	-	-	48.5	Y	Y	Y
A1-9b-2	8	37.6	A1-9b	-	25.3	53.7	50.6	70.6	64.1	60.5	71.9	71.9	70	Y	-	-	46.6	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-9b-2	9	40.8	A1-9b	-	27	53.7	50.7	70.4	63.9	60.5	71.7	71.7	70	Y	-	-	44.7	Y	Y	Y
A1-9b-2	10	44	A1-9b	-	29.2	53.6	50.9	70.2	63.8	60.5	71.5	71.5	70	Y	-	-	42.3	Y	Y	Y
A1-9b-2	11	47.2	A1-9b	-	32.5	53.6	51	70	63.7	60.5	71.4	71.4	70	Y	-	-	38.9	Y	Y	Y
A1-9b-2	12	50.4	A1-9b	-	35	53.6	51.2	69.8	63.5	60.5	71.2	71.2	70	Y	-	-	36.2	Y	Y	Y
A1-9b-2	13	53.6	A1-9b	-	36.9	53.6	51.5	69.5	63.5	60.6	71.1	71.1	70	Y	-	-	34.2	Y	Y	Y
A1-9b-2	14	56.8	A1-9b	-	37.8	53.6	51.7	69.4	63.4	60.7	70.9	70.9	70	Y	-	-	33.1	Y	Y	Y
A1-9b-2	15	60	A1-9b	-	38.4	53.6	51.9	69.1	63.2	60.7	70.7	70.7	70	Y	-	-	32.3	Y	Y	Y
A1-9b-2	16	63.2	A1-9b	-	38.5	53.5	52.1	69	63.1	60.7	70.6	70.6	70	Y	-	-	32.1	Y	Y	Y
A1-9b-2	17	66.4	A1-9b	-	38.6	53.5	52.3	68.8	63	60.8	70.5	70.5	70	Y	-	-	31.9	Y	Y	Y
A1-9b-2	18	69.6	A1-9b	-	38.6	53.5	52.6	68.6	62.9	60.9	70.4	70.4	70	N	-	-	31.8	Y	N	N
A1-9b-3	1	15.2	A1-9b	-	31	59.6	55.6	72.8	61.1	32.6	73.3	73.3	70	Y	-	-	42.3	Y	Y	Y
A1-9b-3	2	18.4	A1-9b	-	31	59.5	55.7	72.6	61.2	32.7	73.2	73.2	70	Y	-	-	42.2	Y	Y	Y
A1-9b-3	3	21.6	A1-9b	-	31	59.4	55.8	72.4	61.2	32.9	73	73.0	70	Y	-	-	42.0	Y	Y	Y
A1-9b-3	4	24.8	A1-9b	-	31	59.4	56	72.2	61.2	33.1	72.8	72.8	70	Y	-	-	41.8	Y	Y	Y
A1-9b-3	5	28	A1-9b	-	31	59.3	56	71.9	61.1	33.2	72.6	72.6	70	Y	-	-	41.6	Y	Y	Y
A1-9b-3	6	31.2	A1-9b	-	31	59.2	56.1	71.7	61.1	33.3	72.4	72.4	70	Y	-	-	41.4	Y	Y	Y
A1-9b-3	7	34.4	A1-9b	-	31	59.1	56.2	71.4	61.1	33.5	72.2	72.2	70	Y	-	-	41.2	Y	Y	Y
A1-9b-3	8	37.6	A1-9b	-	31.1	59.1	56.4	71.2	61.1	33.7	71.9	71.9	70	Y	-	-	40.8	Y	Y	Y
A1-9b-3	9	40.8	A1-9b	-	31.1	59	56.6	70.9	61	33.8	71.7	71.7	70	Y	-	-	40.6	Y	Y	Y
A1-9b-3	10	44	A1-9b	-	31.2	59	56.8	70.7	61	34	71.5	71.5	70	Y	-	-	40.3	Y	Y	Y
A1-9b-3	11	47.2	A1-9b	-	31.4	58.9	57	70.4	61	34.4	71.3	71.3	70	Y	-	-	39.9	Y	Y	Y
A1-9b-3	12	50.4	A1-9b	-	31.8	58.8	57.2	70.2	60.9	34.9	71.1	71.1	70	Y	-	-	39.3	Y	Y	Y
A1-9b-3	13	53.6	A1-9b	-	32.1	58.8	57.3	70	60.9	35.7	71	71.0	70	Y	-	-	38.9	Y	Y	Y
A1-9b-3	14	56.8	A1-9b	-	32.2	58.7	57.5	69.7	60.9	36.4	70.8	70.8	70	Y	-	-	38.6	Y	Y	Y
A1-9b-3	15	60	A1-9b	-	32.2	58.6	57.6	69.5	60.8	37.2	70.6	70.6	70	Y	-	-	38.4	Y	Y	Y
A1-9b-3	16	63.2	A1-9b	-	32.3	58.6	57.8	69.3	60.8	38	70.5	70.5	70	Y	-	-	38.2	Y	Y	Y
A1-9b-3	17	66.4	A1-9b	-	32.3	58.5	57.9	69.2	60.7	38.8	70.3	70.3	70	N	-	-	38.0	Y	N	N
A1-9b-3	18	69.6	A1-9b	-	32.3	58.5	58	68.9	60.6	39.5	70.1	70.1	70	N	-	-	37.8	Y	N	N
A1-9b-4	1	15.2	A1-9b	-	7.2	61.9	56.4	71.1	56.6	0	71.9	71.9	70	Y	-	-	64.7	Y	Y	Y
A1-9b-4	2	18.4	A1-9b	-	7.9	61.9	56.4	71	56.7	0	71.8	71.8	70	Y	-	-	63.9	Y	Y	Y
A1-9b-4	3	21.6	A1-9b	-	8.6	61.9	56.4	70.8	56.8	0	71.6	71.6	70	Y	-	-	63.0	Y	Y	Y
A1-9b-4	4	24.8	A1-9b	-	9.4	61.9	56.4	70.6	56.9	0	71.5	71.5	70	Y	-	-	62.1	Y	Y	Y
A1-9b-4	5	28	A1-9b	-	10.4	61.9	56.5	70.5	56.9	0	71.3	71.3	70	Y	-	-	60.9	Y	Y	Y
A1-9b-4	6	31.2	A1-9b	-	11.5	61.8	56.5	70.3	56.9	0	71.2	71.2	70	Y	-	-	59.7	Y	Y	Y
A1-9b-4	7	34.4	A1-9b	-	12.7	61.8	56.6	70	57	0	71	71.0	70	Y	-	-	58.3	Y	Y	Y
A1-9b-4	8	37.6	A1-9b	-	14.1	61.8	56.7	69.8	57	0	70.8	70.8	70	Y	-	-	56.7	Y	Y	Y
A1-9b-4	9	40.8	A1-9b	-	15.7	61.7	56.8	69.6	57	0	70.6	70.6	70	Y	-	-	54.9	Y	Y	Y
A1-9b-4	10	44	A1-9b	-	17.7	61.7	56.9	69.4	57	0	70.4	70.4	70	N	-	-	52.7	Y	N	N
A1-9b-4	11	47.2	A1-9b	-	20.4	61.6	57.1	69.1	57	0	70.3	70.3	70	N	-	-	49.9	Y	N	N
A1-9b-4	12	50.4	A1-9b	-	23.1	61.6	57.1	68.9	57	0	70.1	70.1	70	N	-	-	47.0	Y	N	N
A1-9b-4	13	53.6	A1-9b	-	25.1	61.5	57.3	68.7	57	0	70	70.0	70	N	-	-	44.9	Y	N	N
A1-9b-4	14	56.8	A1-9b	-	26	61.4	57.4	68.5	57.1	0	69.8	69.8	70	N	-	-	43.8	Y	N	N
A1-9b-4	15	60	A1-9b	-	26.4	61.4	57.6	68.3	57	0	69.6	69.6	70	N	-	-	43.2	Y	N	N
A1-9b-4	16	63.2	A1-9b	-	26.5	61.4	57.7	68.1	57	0	69.5	69.5	70	N	-	-	43.0	Y	N	N
A1-9b-4	17	66.4	A1-9b	-	26.5	61.3	57.8	67.9	57	0	69.4	69.4	70	N	-	-	42.9	Y	N	N
A1-9b-4	18	69.6	A1-9b	-	26.6	61.3	58	67.7	57	0	69.2	69.2	70	N	-	-	42.6	Y	N	N
A1-9b-5	1	15.2	A1-9b	-	6.3	64.7	60.1	67.8	55.3	0	70.1	70.1	70	N	-	-	63.8	Y	N	N
A1-9b-5	2	18.4	A1-9b	-	6.3	64.6	60.1	67.8	55.2	0	70.1	70.1	70	N	-	-	63.8	Y	N	N
A1-9b-5	3	21.6	A1-9b	-	6.3	64.5	60.1	67.7	55.2	0	70	70.0	70	N	-	-	63.7	Y	N	N
A1-9b-5	4	24.8	A1-9b	-	6.3	64.4	60	67.7	55.2	0	70	70.0	70	N	-	-	63.7	Y	N	N
A1-9b-5	5	28	A1-9b	-	6.3	64.3	60	67.6	55.2	0	69.9	69.9	70	N	-	-	63.6	Y	N	N
A1-9b-5	6	31.2	A1-9b	-	6.3	64.3	60	67.5	55.2	0	69.8	69.8	70	N	-	-	63.5	Y	N	N
A1-9b-5	7	34.4	A1-9b	-	6.3	64.1	60	67.4	55.2	0	69.7	69.7	70	N	-	-	63.4	Y	N	N
A1-9b-5	8	37.6	A1-9b	-	6.1	64	60	67.3	55.2	0	69.7	69.7	70	N	-	-	63.6	Y	N	N
A1-9b-5	9	40.8	A1-9b	-	6.4	63.9	60	67.2	55.1	0	69.6	69.6	70	N	-	-	63.2	Y	N	N
A1-9b-5	10	44	A1-9b	-	6.8	63.9	60	67.1	55.1	0	69.5	69.5	70	N	-	-	62.7	Y	N	N
A1-9b-5	11	47.2	A1-9b	-	7.3	63.8	60	67	55.1	0	69.4	69.4	70	N	-	-	62.1	Y	N	N
A1-9b-5	12	50.4	A1-9b	-	8	63.7	60.1	66.9	55	0	69.3	69.3	70	N	-	-	61.3	Y	N	N
A1-9b-5	13	53.6	A1-9b	-	8.5	63.6	60.1	66.8	55	0	69.2	69.2	70	N	-	-	60.7	Y	N	N
A1-9b-5	14	56.8	A1-9b	-	9.6	63.5	60.1	66.6	55	0	69.1	69.1	70	N	-	-	59.5	Y	N	N
A1-9b-5	15	60	A1-9b	-	10.6	63.4	60.1	66.5	54.9	0	69	69.0	70	N	-	-	58.4	Y	N	N
A1-9b-5	16	63.2	A1-9b	-	11.8	63.3	60.1	66.4	54.9	0	68.9	68.9	70	N	-	-	57.1	Y	N	N
A1-9b-5	17	66.4	A1-9b	-	13	63.2	60.1	66.3	54.9	0	68.8	68.8	70	N	-	-	55.8	Y	N	N
A1-9b-5	18	69.6	A1-9b	-	14.3	63.1	60.1	66.2	54.8	0	68.8	68.8	70	N	-	-	54.5	Y	N	N
A1-9b-6	1	15.2	A1-9b	-	24.8	67.1	66	69.3	56.9	0	72.6	72.6	70	Y	-	-	47.8	Y	Y	Y
A1-9b-6	2	18.4	A1-9b	-	25.7	67	66	69.2	56.8	0	72.5	72.5	70	Y	-	-	46.8	Y	Y	Y
A1-9b-6	3	21.6	A1-9b	-	26.9	66.9	66.1	69.1	56.8	0	72.5	72.5	70	Y	-	-	45.6	Y	Y	Y
A1-9b-6	4	24.8	A1-9b	-	28.3	66.8	66.1	69	56.7	0	72.4	72.4	70	Y	-	-	44.1	Y	Y	Y
A1-9b-6	5	28	A1-9b	-	30.5	66.7	66.2	68.9	56.6	0	72.3	72.3	70	Y	-	-	41.8	Y	Y	Y
A1-9b-6	6	31.2	A1-9b	-	32.9	66.6	66.3	68.8	56.5	0	72.3	72.3	70	Y	-	-	39.4	Y	Y	Y
A1-9b-6	7	34.4	A1-9b	-	34.1	66.5	66.3	68.7	56.5	0	72.2	72.2	70	Y	-	-	38.1	Y	Y	Y
A1-9b-6	8	37.6	A1-9b	-	34.8	66.3	66.2	68.5	56.4	0	72.1	72.1	70	Y	-	-	37.3	Y	Y	Y
A1-9b-6	9	40.8	A1-9b	-	35	66.2	66.2	68.4	56.4	0	72	72.0	70	Y	-	-	37.0	Y	Y	Y
A1-9b-6	10	44	A1-9b	-	35.5	66.1	66.2	68.2	56.3	0	71.9	71.9	70	Y	-	-	36.4	Y	Y	Y
A1-9b-6	11	47.2	A1-9b	-	35.7	66	66.2	68.1	56.2	0	71.8	71.8	70	Y	-	-	36.1	Y	Y	Y
A1-9b-6	12	50.4	A1-9b	-	36.1	65.9	66.1	67.9	56.2	0	71.6	71.6	70	Y	-	-	35.5	Y	Y	Y
A1-9b-6	13	53.6	A1-9b	-	36.5	65.7	66.1	67.8	56.1	0	71.5	71.5	70	Y	-	-	35.0	Y	Y	Y
A1-9b-6	14	56.8	A1-9b	-	36.9	65.7	66	67.6	56.1	0	71.4	71.4	70	Y	-	-	34.5	Y	Y	Y
A1-9b-6	15	60	A1-9b	-	37.2	65.5	66	67.5	56	0	71.3	71.3	70	Y	-	-	34.1	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A1-9b-6	16	63.2	A1-9b	-	37.3	65.4	66	67.4	56	0	71.2	71.2	70	Y	-	-	33.9	Y	Y	Y
A1-9b-6	17	66.4	A1-9b	-	37.5	65.3	65.9	67.2	55.9	0	71.1	71.1	70	Y	-	-	33.6	Y	Y	Y
A1-9b-6	18	69.6	A1-9b	-	37.6	65.2	65.9	67.1	55.9	0	71	71.0	70	Y	-	-	33.4	Y	Y	Y
A1-9b-7	1	15.2	A1-9b	-	26.4	67.3	69.6	67	55	33.2	73	73.0	70	Y	-	-	46.6	Y	Y	Y
A1-9b-7	2	18.4	A1-9b	-	27.6	67.3	69.6	67	55	34.3	73	73.0	70	Y	-	-	45.4	Y	Y	Y
A1-9b-7	3	21.6	A1-9b	-	28.9	67.2	69.6	66.9	55	34.9	72.9	72.9	70	Y	-	-	44.0	Y	Y	Y
A1-9b-7	4	24.8	A1-9b	-	31.2	67.1	69.6	66.8	55.1	35.3	72.9	72.9	70	Y	-	-	41.7	Y	Y	Y
A1-9b-7	5	28	A1-9b	-	33.2	67.1	69.6	66.7	55.2	35.7	72.9	72.9	70	Y	-	-	39.7	Y	Y	Y
A1-9b-7	6	31.2	A1-9b	-	34.5	67	69.6	66.6	55.2	36.1	72.8	72.8	70	Y	-	-	38.3	Y	Y	Y
A1-9b-7	7	34.4	A1-9b	-	35.2	66.9	69.6	66.5	55.1	36.4	72.7	72.7	70	Y	-	-	37.5	Y	Y	Y
A1-9b-7	8	37.6	A1-9b	-	35.7	66.8	69.6	66.4	55	36.8	72.7	72.7	70	Y	-	-	37.0	Y	Y	Y
A1-9b-7	9	40.8	A1-9b	-	36.1	66.7	69.5	66.3	55	37.3	72.6	72.6	70	Y	-	-	36.5	Y	Y	Y
A1-9b-7	10	44	A1-9b	-	36.8	66.6	69.5	66.1	54.9	37.8	72.5	72.5	70	Y	-	-	35.7	Y	Y	Y
A1-9b-7	11	47.2	A1-9b	-	37.2	66.5	69.4	66	54.8	38.3	72.4	72.4	70	Y	-	-	35.2	Y	Y	Y
A1-9b-7	12	50.4	A1-9b	-	37.7	66.4	69.4	65.9	54.8	38.9	72.3	72.3	70	Y	-	-	34.6	Y	Y	Y
A1-9b-7	13	53.6	A1-9b	-	38.1	66.3	69.3	65.7	54.7	39.6	72.2	72.2	70	Y	-	-	34.1	Y	Y	Y
A1-9b-7	14	56.8	A1-9b	-	38.4	66.2	69.2	65.6	54.6	40	72.1	72.1	70	Y	-	-	33.7	Y	Y	Y
A1-9b-7	15	60	A1-9b	-	38.6	66.1	69.2	65.4	54.6	40.7	72.1	72.1	70	Y	-	-	33.5	Y	Y	Y
A1-9b-7	16	63.2	A1-9b	-	38.7	65.9	69.1	65.3	54.5	41.4	72	72.0	70	Y	-	-	33.3	Y	Y	Y
A1-9b-7	17	66.4	A1-9b	-	38.8	65.8	69	65.2	54.5	42	71.9	71.9	70	Y	-	-	33.1	Y	Y	Y
A1-9b-7	18	69.6	A1-9b	-	38.8	65.7	69	65	54.4	42.5	71.8	71.8	70	Y	-	-	33.0	Y	Y	Y
A1-9b-8	1	15.2	A1-9b	-	9.6	0	0	59.6	69.9	0	70.3	70.3	70	N	-	-	60.7	Y	N	N
A1-9b-8	2	18.4	A1-9b	-	10.3	0	0	59.6	69.6	0	70.1	70.1	70	N	-	-	59.8	Y	N	N
A1-9b-8	3	21.6	A1-9b	-	11.3	0	0	59.5	69.3	0	69.8	69.8	70	N	-	-	58.5	Y	N	N
A1-9b-8	4	24.8	A1-9b	-	12.3	0	0	59.5	69	0	69.4	69.4	70	N	-	-	57.1	Y	N	N
A1-9b-8	5	28	A1-9b	-	13.4	0	0	59.5	68.6	0	69.1	69.1	70	N	-	-	55.7	Y	N	N
A1-9b-8	6	31.2	A1-9b	-	14.5	0	0	59.5	68.3	0	68.8	68.8	70	N	-	-	54.3	Y	N	N
A1-9b-8	7	34.4	A1-9b	-	15.6	0	0	59.4	67.9	0	68.5	68.5	70	N	-	-	52.9	Y	N	N
A1-9b-8	8	37.6	A1-9b	-	16.9	0	0	59.4	67.6	0	68.2	68.2	70	N	-	-	51.3	Y	N	N
A1-9b-8	9	40.8	A1-9b	-	18.2	0	0	59.4	67.3	0	67.9	67.9	70	N	-	-	49.7	Y	N	N
A1-9b-8	10	44	A1-9b	-	19.6	0	0	59.3	67	0	67.7	67.7	70	N	-	-	48.1	Y	N	N
A1-9b-8	11	47.2	A1-9b	-	21.1	0	0	59.3	66.7	0	67.5	67.5	70	N	-	-	46.4	Y	N	N
A1-9b-8	12	50.4	A1-9b	-	22.7	0	0	59.2	66.5	0	67.2	67.2	70	N	-	-	44.5	Y	N	N
A1-9b-8	13	53.6	A1-9b	-	24.5	0	0	59.2	66.2	0	67	67.0	70	N	-	-	42.5	Y	N	N
A1-9b-8	14	56.8	A1-9b	-	26.6	0	0	59.1	66	0	66.8	66.8	70	N	-	-	40.2	Y	N	N
A1-9b-8	15	60	A1-9b	-	29.5	0	0	59.1	65.8	0	66.6	66.6	70	N	-	-	37.1	Y	N	N
A1-9b-8	16	63.2	A1-9b	-	32.8	0	0	59	65.6	0	66.5	66.5	70	N	-	-	33.7	Y	N	N
A1-9b-8	17	66.4	A1-9b	-	35.4	0	0	59	65.4	0	66.3	66.3	70	N	-	-	30.9	Y	N	N
A1-9b-8	18	69.6	A1-9b	-	36.3	0	0	58.9	65.2	0	66.2	66.2	70	N	-	-	29.9	Y	N	N
A1-9b-9	1	15.2	A1-9b	-	6.4	23.4	30.8	53.3	67.1	0	67.3	67.3	70	N	-	-	60.9	Y	N	N
A1-9b-9	2	18.4	A1-9b	-	6.4	23.4	30.8	53.2	66.8	0	67	67.0	70	N	-	-	60.6	Y	N	N
A1-9b-9	3	21.6	A1-9b	-	6.4	23.3	30.8	53.2	66.5	0	66.7	66.7	70	N	-	-	60.3	Y	N	N
A1-9b-9	4	24.8	A1-9b	-	6.5	23.3	30.8	53.2	66.2	0	66.4	66.4	70	N	-	-	59.9	Y	N	N
A1-9b-9	5	28	A1-9b	-	6.5	23.3	30.8	53.2	65.9	0	66.1	66.1	70	N	-	-	59.6	Y	N	N
A1-9b-9	6	31.2	A1-9b	-	6.5	23.3	30.8	53.2	65.6	0	65.8	65.8	70	N	-	-	59.3	Y	N	N
A1-9b-9	7	34.4	A1-9b	-	6.5	23.3	30.8	53.2	65.2	0	65.5	65.5	70	N	-	-	59.0	Y	N	N
A1-9b-9	8	37.6	A1-9b	-	6.4	23.2	30.8	53.2	65	0	65.2	65.2	70	N	-	-	58.8	Y	N	N
A1-9b-9	9	40.8	A1-9b	-	7	23.1	30.7	53.2	64.7	0	65	65.0	70	N	-	-	58.0	Y	N	N
A1-9b-9	10	44	A1-9b	-	7.9	23.1	31	53.2	64.4	0	64.7	64.7	70	N	-	-	56.8	Y	N	N
A1-9b-9	11	47.2	A1-9b	-	9	23.1	31.3	53.1	64.1	0	64.5	64.5	70	N	-	-	55.5	Y	N	N
A1-9b-9	12	50.4	A1-9b	-	10.1	23.1	31.8	53.1	63.9	0	64.3	64.3	70	N	-	-	54.2	Y	N	N
A1-9b-9	13	53.6	A1-9b	-	11.4	23.1	32.3	53.1	63.6	0	64	64.0	70	N	-	-	52.6	Y	N	N
A1-9b-9	14	56.8	A1-9b	-	12.7	23.1	32.9	53.1	63.4	0	63.8	63.8	70	N	-	-	51.1	Y	N	N
A1-9b-9	15	60	A1-9b	-	13.9	23.2	33.5	53	63.2	0	63.6	63.6	70	N	-	-	49.7	Y	N	N
A1-9b-9	16	63.2	A1-9b	-	15.4	23.2	34.2	53	63	0	63.4	63.4	70	N	-	-	48.0	Y	N	N
A1-9b-9	17	66.4	A1-9b	-	17	23.4	34.9	53	62.8	0	63.2	63.2	70	N	-	-	46.2	Y	N	N
A1-9b-9	18	69.6	A1-9b	-	18.6	23.5	35.6	53	62.6	0	63.1	63.1	70	N	-	-	44.5	Y	N	N
A2-2a-1	1	40.7	A2-2a	-	30	0	66.2	44.7	23.4	35.3	66.3	66.3	70	N	-	-	36.3	Y	N	N
A2-2a-1	2	43.5	A2-2a	-	31	0	66	44.8	23.4	36	66.1	66.1	70	N	-	-	35.1	Y	N	N
A2-2a-1	3	46.3	A2-2a	-	32.1	0	65.8	44.9	23.4	36.8	65.9	65.9	70	N	-	-	33.8	Y	N	N
A2-2a-1	4	49.1	A2-2a	-	33.4	0	65.6	44.9	23.4	37.6	65.7	65.7	70	N	-	-	32.3	Y	N	N
A2-2a-1	5	51.9	A2-2a	-	34.8	0	65.4	45	23.4	38.5	65.5	65.5	70	N	-	-	30.7	Y	N	N
A2-2a-1	6	54.7	A2-2a	-	36.2	0	65.3	45	23.4	39.4	65.3	65.3	70	N	-	-	29.1	Y	N	N
A2-2a-1	7	57.5	A2-2a	-	38	0	65.1	45.1	23.4	40.4	65.2	65.2	70	N	-	-	27.2	Y	N	N
A2-2a-1	8	60.3	A2-2a	-	39.3	0	64.9	45.2	23.4	41.5	65	65.0	70	N	-	-	25.7	Y	N	N
A2-2a-1	9	63.1	A2-2a	-	40.1	0	64.7	45.3	23.3	42.9	64.8	64.8	70	N	-	-	24.7	Y	N	N
A2-2a-1	10	65.9	A2-2a	-	40.6	0	64.6	45.4	23.3	43.5	64.7	64.7	70	N	-	-	24.1	Y	N	N
A2-2a-1	11	68.7	A2-2a	-	41.1	0	64.4	45.5	23.3	44.4	64.5	64.5	70	N	-	-	23.4	Y	N	N
A2-2a-1	12	71.5	A2-2a	-	41.6	0	64.3	45.5	23.3	45.2	64.4	64.4	70	N	-	-	22.8	Y	N	N
A2-2a-1	13	74.3	A2-2a	-	42.1	0	64.1	45.7	23.3	45.8	64.3	64.3	70	N	-	-	22.2	Y	N	N
A2-2a-1	14	77.1	A2-2a	-	42.6	0	64	45.8	23.3	46.2	64.1	64.2	70	N	-	-	21.6	Y	N	N
A2-2a-1	15	79.9	A2-2a	-	43.1	0	63.9	45.9	23.3	46.6	64	64.0	70	N	-	-	20.9	Y	N	N
A2-2a-1	16	82.7	A2-2a	-	43.4	0	63.7	46	23.3	46.9	63.9	63.9	70	N	-	-	20.5	Y	N	N
A2-2a-1	17	85.5	A2-2a	-	43.7	0	63.6	46.1	23.3	47.3	63.8	63.8	70	N	-	-	20.1	Y	N	N
A2-2a-1	18	88.3	A2-2a	-	44	0	63.5	46.2	23.2	47.5	63.7	63.7	70	N	-	-	19.7	Y	N	N
A2-2a-1	19	91.1	A2-2a	-	44.3	0	63.4	46.3	23.2	47.7	63.6	63.6	70	N	-	-	19.3	Y	N	N
A2-2a-1	20	93.9	A2-2a	-	44.5	0	63.2	46.4	23.2	48	63.5	63.5	70	N	-	-	19.0	Y	N	N
A2-2a-1	21	96.7	A2-2a	-	44.8	0	63.1	46.4	23.2	48.1	63.3	63.4	70	N	-	-	18.6	Y	N	N
A2-2a-1	22	99.5	A2-2a	-	44.9	0	63	46.5	23.2	48.3	63.3	63.3	70	N	-	-	18.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-1	23	102.3	A2-2a	-	45.1	0	62.9	46.6	23.2	48.3	63.1	63.2	70	N	-	-	18.1	Y	N	N
A2-2a-1	24	105.1	A2-2a	-	45.2	0	62.8	46.7	23.2	48.4	63.1	63.1	70	N	-	-	17.9	Y	N	N
A2-2a-1	25	107.9	A2-2a	-	45.4	0	62.7	46.7	23.1	48.5	63	63.1	70	N	-	-	17.7	Y	N	N
A2-2a-1	26	110.7	A2-2a	-	45.4	0	62.6	46.8	23.1	48.6	62.9	63.0	70	N	-	-	17.6	Y	N	N
A2-2a-1	27	113.5	A2-2a	-	45.4	0	62.5	46.8	23.1	48.6	62.8	62.9	70	N	-	-	17.5	Y	N	N
A2-2a-1	28	116.3	A2-2a	-	45.5	0	62.5	46.9	23.1	48.7	62.8	62.9	70	N	-	-	17.4	Y	N	N
A2-2a-1	29	119.1	A2-2a	-	45.6	0	62.4	46.9	23.1	48.7	62.7	62.8	70	N	-	-	17.2	Y	N	N
A2-2a-1	30	121.9	A2-2a	-	45.6	0	62.3	46.9	22.8	48.7	62.6	62.7	70	N	-	-	17.1	Y	N	N
A2-2a-1	31	124.7	A2-2a	-	45.6	0	62.3	47	22.8	48.7	62.6	62.7	70	N	-	-	17.1	Y	N	N
A2-2a-1	32	127.5	A2-2a	-	45.6	0	62.2	47	22.8	48.8	62.5	62.6	70	N	-	-	17.0	Y	N	N
A2-2a-1	33	130.3	A2-2a	-	45.6	0	62.2	46.9	22.8	48.8	62.5	62.6	70	N	-	-	17.0	Y	N	N
A2-2a-1	34	133.1	A2-2a	-	45.6	0	62.1	46.9	23	48.9	62.4	62.5	70	N	-	-	16.9	Y	N	N
A2-2a-1	35	135.9	A2-2a	-	45.6	0	62	47	23	48.9	62.4	62.5	70	N	-	-	16.9	Y	N	N
A2-2a-1	36	138.7	A2-2a	-	45.6	0	62	47	23	48.9	62.3	62.4	70	N	-	-	16.8	Y	N	N
A2-2a-1	37	141.5	A2-2a	-	45.6	0	61.9	47	23.2	48.8	62.3	62.4	70	N	-	-	16.8	Y	N	N
A2-2a-1	38	144.3	A2-2a	-	45.6	0	61.9	46.9	23.2	48.9	62.2	62.3	70	N	-	-	16.7	Y	N	N
A2-2a-1	39	147.1	A2-2a	-	45.6	0	61.8	46.9	23.1	48.9	62.2	62.3	70	N	-	-	16.7	Y	N	N
A2-2a-2	1	40.7	A2-2a	-	30.2	0	64.5	44.7	23.3	35.5	64.5	64.5	70	N	-	-	34.3	Y	N	N
A2-2a-2	2	43.5	A2-2a	-	31.2	0	64.3	44.8	23.3	36.1	64.3	64.3	70	N	-	-	33.1	Y	N	N
A2-2a-2	3	46.3	A2-2a	-	32.3	0	64	44.8	23.3	37	64.1	64.1	70	N	-	-	31.8	Y	N	N
A2-2a-2	4	49.1	A2-2a	-	33.6	0	63.8	44.9	23.3	37.8	63.9	63.9	70	N	-	-	30.3	Y	N	N
A2-2a-2	5	51.9	A2-2a	-	35.1	0	63.6	44.9	23.3	38.7	63.7	63.7	70	N	-	-	28.6	Y	N	N
A2-2a-2	6	54.7	A2-2a	-	36.6	0	63.4	45	23.3	39.7	63.5	63.5	70	N	-	-	26.9	Y	N	N
A2-2a-2	7	57.5	A2-2a	-	38.3	0	63.3	45.1	23.3	40.7	63.3	63.4	70	N	-	-	25.1	Y	N	N
A2-2a-2	8	60.3	A2-2a	-	39.4	0	63.1	45.2	23.3	41.8	63.2	63.2	70	N	-	-	23.8	Y	N	N
A2-2a-2	9	63.1	A2-2a	-	40.2	0	62.9	45.2	23.3	42.9	63	63.1	70	N	-	-	22.9	Y	N	N
A2-2a-2	10	65.9	A2-2a	-	40.7	0	62.8	45.4	23.3	43.6	62.9	62.9	70	N	-	-	22.2	Y	N	N
A2-2a-2	11	68.7	A2-2a	-	41.1	0	62.6	45.5	23.3	44.5	62.7	62.8	70	N	-	-	21.7	Y	N	N
A2-2a-2	12	71.5	A2-2a	-	41.7	0	62.4	45.5	23.2	45.3	62.6	62.6	70	N	-	-	20.9	Y	N	N
A2-2a-2	13	74.3	A2-2a	-	42.2	0	62.3	45.6	23.2	45.7	62.5	62.5	70	N	-	-	20.3	Y	N	N
A2-2a-2	14	77.1	A2-2a	-	42.7	0	62.2	45.8	23.2	46.3	62.4	62.4	70	N	-	-	19.7	Y	N	N
A2-2a-2	15	79.9	A2-2a	-	43.1	0	62.1	45.9	23.2	46.6	62.3	62.3	70	N	-	-	19.2	Y	N	N
A2-2a-2	16	82.7	A2-2a	-	43.4	0	61.9	46	23.2	47	62.2	62.2	70	N	-	-	18.8	Y	N	N
A2-2a-2	17	85.5	A2-2a	-	43.8	0	61.8	46.1	23.2	47.3	62.1	62.1	70	N	-	-	18.3	Y	N	N
A2-2a-2	18	88.3	A2-2a	-	44.1	0	61.7	46.2	23.2	47.5	62	62.0	70	N	-	-	17.9	Y	N	N
A2-2a-2	19	91.1	A2-2a	-	44.3	0	61.6	46.3	23.2	47.8	61.9	62.0	70	N	-	-	17.7	Y	N	N
A2-2a-2	20	93.9	A2-2a	-	44.5	0	61.5	46.4	23.1	48	61.8	61.9	70	N	-	-	17.4	Y	N	N
A2-2a-2	21	96.7	A2-2a	-	44.7	0	61.4	46.4	23.1	48.1	61.7	61.8	70	N	-	-	17.1	Y	N	N
A2-2a-2	22	99.5	A2-2a	-	44.9	0	61.3	46.5	23.1	48.2	61.6	61.7	70	N	-	-	16.8	Y	N	N
A2-2a-2	23	102.3	A2-2a	-	45.1	0	61.2	46.6	23.1	48.3	61.6	61.7	70	N	-	-	16.6	Y	N	N
A2-2a-2	24	105.1	A2-2a	-	45.2	0	61.1	46.7	23.1	48.4	61.5	61.6	70	N	-	-	16.4	Y	N	N
A2-2a-2	25	107.9	A2-2a	-	45.3	0	61.1	46.8	23.1	48.5	61.4	61.5	70	N	-	-	16.2	Y	N	N
A2-2a-2	26	110.7	A2-2a	-	45.4	0	61	46.8	23.1	48.5	61.4	61.5	70	N	-	-	16.1	Y	N	N
A2-2a-2	27	113.5	A2-2a	-	45.4	0	60.9	46.9	23	48.6	61.3	61.4	70	N	-	-	16.0	Y	N	N
A2-2a-2	28	116.3	A2-2a	-	45.5	0	60.9	46.9	23	48.7	61.3	61.4	70	N	-	-	15.9	Y	N	N
A2-2a-2	29	119.1	A2-2a	-	45.6	0	60.8	46.9	23	48.7	61.2	61.4	70	N	-	-	15.8	Y	N	N
A2-2a-2	30	121.9	A2-2a	-	45.6	0	60.8	47	22.8	48.7	61.2	61.3	70	N	-	-	15.7	Y	N	N
A2-2a-2	31	124.7	A2-2a	-	45.6	0	60.7	47	22.7	48.7	61.2	61.3	70	N	-	-	15.7	Y	N	N
A2-2a-2	32	127.5	A2-2a	-	45.6	0	60.7	47	22.7	48.8	61.1	61.3	70	N	-	-	15.7	Y	N	N
A2-2a-2	33	130.3	A2-2a	-	45.6	0	60.7	47	22.7	48.8	61.1	61.2	70	N	-	-	15.6	Y	N	N
A2-2a-2	34	133.1	A2-2a	-	45.7	0	60.6	47	22.9	48.9	61.1	61.2	70	N	-	-	15.5	Y	N	N
A2-2a-2	35	135.9	A2-2a	-	45.6	0	60.6	47	23	48.9	61.1	61.2	70	N	-	-	15.6	Y	N	N
A2-2a-2	36	138.7	A2-2a	-	45.6	0	60.6	47	22.9	48.8	61	61.2	70	N	-	-	15.6	Y	N	N
A2-2a-2	37	141.5	A2-2a	-	45.6	0	60.5	47	23.1	48.8	61	61.1	70	N	-	-	15.5	Y	N	N
A2-2a-2	38	144.3	A2-2a	-	45.6	0	60.5	47	23.1	48.9	61	61.1	70	N	-	-	15.5	Y	N	N
A2-2a-2	39	147.1	A2-2a	-	45.6	0	60.4	46.9	23.1	48.9	60.9	61.0	70	N	-	-	15.4	Y	N	N
A2-2a-3	1	40.7	A2-2a	-	31.7	0	71.1	44.5	0	0	71.1	71.1	70	Y	-	-	39.4	Y	Y	Y
A2-2a-3	2	43.5	A2-2a	-	32.8	0	71	44.8	0	0	71	71.0	70	Y	-	-	38.2	Y	Y	Y
A2-2a-3	3	46.3	A2-2a	-	34	0	70.8	44.9	0	0	70.8	70.8	70	Y	-	-	36.8	Y	Y	Y
A2-2a-3	4	49.1	A2-2a	-	35.9	0	70.6	45	0	0	70.6	70.6	70	Y	-	-	34.7	Y	Y	Y
A2-2a-3	5	51.9	A2-2a	-	36.9	0	70.4	45.1	0	0	70.4	70.4	70	N	-	-	33.5	Y	N	N
A2-2a-3	6	54.7	A2-2a	-	38.3	0	70.2	45.1	0	0	70.2	70.2	70	N	-	-	31.9	Y	N	N
A2-2a-3	7	57.5	A2-2a	-	39.3	0	70	45.2	0	0	70	70.0	70	N	-	-	30.7	Y	N	N
A2-2a-3	8	60.3	A2-2a	-	40	0	69.8	45.2	0	0	69.8	69.8	70	N	-	-	29.8	Y	N	N
A2-2a-3	9	63.1	A2-2a	-	40.6	0	69.6	45.2	0	0	69.6	69.7	70	N	-	-	29.1	Y	N	N
A2-2a-3	10	65.9	A2-2a	-	41.2	0	69.4	45.3	0	0	69.5	69.5	70	N	-	-	28.3	Y	N	N
A2-2a-3	11	68.7	A2-2a	-	41.6	0	69.3	45.3	0	0	69.3	69.3	70	N	-	-	27.7	Y	N	N
A2-2a-3	12	71.5	A2-2a	-	42	0	69.1	45.3	0	0	69.1	69.1	70	N	-	-	27.1	Y	N	N
A2-2a-3	13	74.3	A2-2a	-	42.5	0	68.9	45.3	0	0	68.9	69.0	70	N	-	-	26.5	Y	N	N
A2-2a-3	14	77.1	A2-2a	-	42.9	0	68.8	45.3	0	0	68.8	68.8	70	N	-	-	25.9	Y	N	N
A2-2a-3	15	79.9	A2-2a	-	43.2	0	68.6	45.3	0	0	68.6	68.6	70	N	-	-	25.4	Y	N	N
A2-2a-3	16	82.7	A2-2a	-	43.5	0	68.4	45.3	0	0	68.4	68.5	70	N	-	-	25.0	Y	N	N
A2-2a-3	17	85.5	A2-2a	-	43.8	0	68.3	45.4	0	0	68.3	68.3	70	N	-	-	24.5	Y	N	N
A2-2a-3	18	88.3	A2-2a	-	44	0	68.1	45.4	0	0	68.2	68.2	70	N	-	-	24.2	Y	N	N
A2-2a-3	19	91.1	A2-2a	-	44.3	0	68	45.4	0	0	68	68.0	70	N	-	-	23.7	Y	N	N
A2-2a-3	20	93.9	A2-2a	-	44.5	0	67.9	45.5	0	0	67.9	67.9	70	N	-	-	23.4	Y	N	N
A2-2a-3	21	96.7	A2-2a	-	44.7	0	67.7	45.5	0	0	67.7	67.8	70	N	-	-	23.1	Y	N	N
A2-2a-3	22	99.5	A2-2a	-	44.9	0	67.6	45.5	0	0	67.6	67.6	70	N	-	-	22.7	Y	N	N
A2-2a-3	23	102.3	A2-2a	-	45.1	0	67.5	45.5	0	0	67.5	67.5	70	N	-	-	22.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-3	24	105.1	A2-2a	-	45.2	0	67.4	45.6	0	0	67.4	67.4	70	N	-	-	22.2	Y	N	N
A2-2a-3	25	107.9	A2-2a	-	45.3	0	67.2	45.7	0	0	67.3	67.3	70	N	-	-	22.0	Y	N	N
A2-2a-3	26	110.7	A2-2a	-	45.4	0	67.1	45.8	0	0	67.2	67.2	70	N	-	-	21.8	Y	N	N
A2-2a-3	27	113.5	A2-2a	-	45.5	0	67	45.8	0	0	67.1	67.1	70	N	-	-	21.6	Y	N	N
A2-2a-3	28	116.3	A2-2a	-	45.6	0	66.9	45.9	0	0	67	67.0	70	N	-	-	21.4	Y	N	N
A2-2a-3	29	119.1	A2-2a	-	45.6	0	66.8	45.9	0	0	66.9	66.9	70	N	-	-	21.3	Y	N	N
A2-2a-3	30	121.9	A2-2a	-	45.6	0	66.7	45.9	0	0	66.8	66.8	70	N	-	-	21.2	Y	N	N
A2-2a-3	31	124.7	A2-2a	-	45.6	0	66.6	45.9	0	0	66.7	66.7	70	N	-	-	21.1	Y	N	N
A2-2a-3	32	127.5	A2-2a	-	45.7	0	66.6	46	0	0	66.6	66.6	70	N	-	-	20.9	Y	N	N
A2-2a-3	33	130.3	A2-2a	-	45.7	0	66.5	46	0	0	66.5	66.6	70	N	-	-	20.9	Y	N	N
A2-2a-3	34	133.1	A2-2a	-	45.7	0	66.4	46	0	0	66.4	66.5	70	N	-	-	20.8	Y	N	N
A2-2a-3	35	135.9	A2-2a	-	45.7	0	66.3	46	0	0	66.4	66.4	70	N	-	-	20.7	Y	N	N
A2-2a-3	36	138.7	A2-2a	-	45.7	0	66.2	46	0	0	66.3	66.3	70	N	-	-	20.6	Y	N	N
A2-2a-3	37	141.5	A2-2a	-	45.7	0	66.2	46	0	0	66.2	66.2	70	N	-	-	20.5	Y	N	N
A2-2a-3	38	144.3	A2-2a	-	45.7	0	66.1	46	0	0	66.1	66.2	70	N	-	-	20.5	Y	N	N
A2-2a-3	39	147.1	A2-2a	-	45.7	0	66	45.9	0	0	66.1	66.1	70	N	-	-	20.4	Y	N	N
A2-2a-4	1	40.7	A2-2a	-	31.9	0	71.1	44.5	0	0	71.1	71.1	70	Y	-	-	39.2	Y	Y	Y
A2-2a-4	2	43.5	A2-2a	-	33	0	70.9	44.9	0	0	71	71.0	70	Y	-	-	38.0	Y	Y	Y
A2-2a-4	3	46.3	A2-2a	-	34.4	0	70.8	45	0	0	70.8	70.8	70	Y	-	-	36.4	Y	Y	Y
A2-2a-4	4	49.1	A2-2a	-	35.9	0	70.6	45.1	0	0	70.6	70.6	70	Y	-	-	34.7	Y	Y	Y
A2-2a-4	5	51.9	A2-2a	-	37.3	0	70.4	45.2	0	0	70.4	70.4	70	N	-	-	33.1	Y	N	N
A2-2a-4	6	54.7	A2-2a	-	38.5	0	70.2	45.2	0	0	70.2	70.2	70	N	-	-	31.7	Y	N	N
A2-2a-4	7	57.5	A2-2a	-	39.3	0	70	45.3	0	0	70	70.0	70	N	-	-	30.7	Y	N	N
A2-2a-4	8	60.3	A2-2a	-	40	0	69.8	45.4	0	0	69.9	69.9	70	N	-	-	29.9	Y	N	N
A2-2a-4	9	63.1	A2-2a	-	40.6	0	69.6	45.4	0	0	69.7	69.7	70	N	-	-	29.1	Y	N	N
A2-2a-4	10	65.9	A2-2a	-	41.1	0	69.5	45.5	0	0	69.5	69.5	70	N	-	-	28.4	Y	N	N
A2-2a-4	11	68.7	A2-2a	-	41.6	0	69.3	45.7	0	0	69.3	69.3	70	N	-	-	27.7	Y	N	N
A2-2a-4	12	71.5	A2-2a	-	42.1	0	69.1	45.8	0	0	69.1	69.1	70	N	-	-	27.0	Y	N	N
A2-2a-4	13	74.3	A2-2a	-	42.5	0	69	45.9	0	0	69	69.0	70	N	-	-	26.5	Y	N	N
A2-2a-4	14	77.1	A2-2a	-	42.9	0	68.8	45.9	0	0	68.8	68.8	70	N	-	-	25.9	Y	N	N
A2-2a-4	15	79.9	A2-2a	-	43.2	0	68.6	46	0	0	68.6	68.7	70	N	-	-	25.5	Y	N	N
A2-2a-4	16	82.7	A2-2a	-	43.5	0	68.5	46.1	0	0	68.5	68.5	70	N	-	-	25.0	Y	N	N
A2-2a-4	17	85.5	A2-2a	-	43.8	0	68.3	46.1	0	0	68.3	68.3	70	N	-	-	24.5	Y	N	N
A2-2a-4	18	88.3	A2-2a	-	44	0	68.2	46.1	0	0	68.2	68.2	70	N	-	-	24.2	Y	N	N
A2-2a-4	19	91.1	A2-2a	-	44.3	0	68	46.1	0	0	68	68.1	70	N	-	-	23.8	Y	N	N
A2-2a-4	20	93.9	A2-2a	-	44.5	0	67.9	46.2	0	0	67.9	67.9	70	N	-	-	23.4	Y	N	N
A2-2a-4	21	96.7	A2-2a	-	44.7	0	67.8	46.2	0	0	67.8	67.8	70	N	-	-	23.1	Y	N	N
A2-2a-4	22	99.5	A2-2a	-	44.8	0	67.7	46.3	0	0	67.7	67.7	70	N	-	-	22.9	Y	N	N
A2-2a-4	23	102.3	A2-2a	-	45	0	67.5	46.3	0	0	67.5	67.6	70	N	-	-	22.6	Y	N	N
A2-2a-4	24	105.1	A2-2a	-	45.2	0	67.4	46.3	0	0	67.4	67.5	70	N	-	-	22.3	Y	N	N
A2-2a-4	25	107.9	A2-2a	-	45.3	0	67.3	46.4	0	0	67.3	67.3	70	N	-	-	22.0	Y	N	N
A2-2a-4	26	110.7	A2-2a	-	45.4	0	67.2	46.4	0	0	67.2	67.3	70	N	-	-	21.9	Y	N	N
A2-2a-4	27	113.5	A2-2a	-	45.5	0	67.1	46.5	0	0	67.2	67.2	70	N	-	-	21.7	Y	N	N
A2-2a-4	28	116.3	A2-2a	-	45.5	0	67	46.5	0	0	67	67.1	70	N	-	-	21.6	Y	N	N
A2-2a-4	29	119.1	A2-2a	-	45.5	0	66.9	46.5	0	0	67	67.0	70	N	-	-	21.5	Y	N	N
A2-2a-4	30	121.9	A2-2a	-	45.6	0	66.8	46.6	0	0	66.9	66.9	70	N	-	-	21.3	Y	N	N
A2-2a-4	31	124.7	A2-2a	-	45.6	0	66.8	46.6	0	0	66.8	66.8	70	N	-	-	21.2	Y	N	N
A2-2a-4	32	127.5	A2-2a	-	45.7	0	66.7	46.6	0	0	66.7	66.8	70	N	-	-	21.1	Y	N	N
A2-2a-4	33	130.3	A2-2a	-	45.7	0	66.6	46.6	0	0	66.7	66.7	70	N	-	-	21.0	Y	N	N
A2-2a-4	34	133.1	A2-2a	-	45.6	0	66.6	46.6	0	0	66.6	66.6	70	N	-	-	21.0	Y	N	N
A2-2a-4	35	135.9	A2-2a	-	45.7	0	66.5	46.6	0	0	66.5	66.6	70	N	-	-	20.9	Y	N	N
A2-2a-4	36	138.7	A2-2a	-	45.7	0	66.4	46.6	0	0	66.5	66.5	70	N	-	-	20.8	Y	N	N
A2-2a-4	37	141.5	A2-2a	-	45.7	0	66.4	46.6	0	0	66.4	66.4	70	N	-	-	20.7	Y	N	N
A2-2a-4	38	144.3	A2-2a	-	45.7	0	66.3	46.6	0	0	66.4	66.4	70	N	-	-	20.7	Y	N	N
A2-2a-4	39	147.1	A2-2a	-	45.7	0	66.2	46.6	0	0	66.3	66.3	70	N	-	-	20.6	Y	N	N
A2-2a-5	1	40.7	A2-2a	-	32.2	0	71	44.4	0	0	71	71.0	70	Y	-	-	38.8	Y	Y	Y
A2-2a-5	2	43.5	A2-2a	-	33.5	0	70.9	44.7	0	0	70.9	70.9	70	Y	-	-	37.4	Y	Y	Y
A2-2a-5	3	46.3	A2-2a	-	34.8	0	70.7	44.9	0	0	70.7	70.7	70	Y	-	-	35.9	Y	Y	Y
A2-2a-5	4	49.1	A2-2a	-	36.2	0	70.5	45.1	0	0	70.5	70.5	70	Y	-	-	34.3	Y	Y	Y
A2-2a-5	5	51.9	A2-2a	-	37.6	0	70.4	45.1	0	0	70.4	70.4	70	N	-	-	32.8	Y	N	N
A2-2a-5	6	54.7	A2-2a	-	38.6	0	70.2	45.2	0	0	70.2	70.2	70	N	-	-	31.6	Y	N	N
A2-2a-5	7	57.5	A2-2a	-	39.4	0	70	45.2	0	0	70	70.0	70	N	-	-	30.6	Y	N	N
A2-2a-5	8	60.3	A2-2a	-	40.1	0	69.8	45.4	0	0	69.8	69.8	70	N	-	-	29.7	Y	N	N
A2-2a-5	9	63.1	A2-2a	-	40.7	0	69.6	45.4	0	0	69.6	69.6	70	N	-	-	28.9	Y	N	N
A2-2a-5	10	65.9	A2-2a	-	41.2	0	69.4	45.5	0	0	69.4	69.4	70	N	-	-	28.2	Y	N	N
A2-2a-5	11	68.7	A2-2a	-	41.7	0	69.2	45.7	0	0	69.3	69.3	70	N	-	-	27.6	Y	N	N
A2-2a-5	12	71.5	A2-2a	-	42.1	0	69.1	45.8	0	0	69.1	69.1	70	N	-	-	27.0	Y	N	N
A2-2a-5	13	74.3	A2-2a	-	42.5	0	68.9	45.9	0	0	68.9	68.9	70	N	-	-	26.4	Y	N	N
A2-2a-5	14	77.1	A2-2a	-	42.8	0	68.8	45.9	0	0	68.8	68.8	70	N	-	-	26.0	Y	N	N
A2-2a-5	15	79.9	A2-2a	-	43.2	0	68.6	46	0	0	68.6	68.6	70	N	-	-	25.4	Y	N	N
A2-2a-5	16	82.7	A2-2a	-	43.5	0	68.4	46	0	0	68.5	68.5	70	N	-	-	25.0	Y	N	N
A2-2a-5	17	85.5	A2-2a	-	43.7	0	68.3	46.1	0	0	68.3	68.3	70	N	-	-	24.6	Y	N	N
A2-2a-5	18	88.3	A2-2a	-	44	0	68.2	46.1	0	0	68.2	68.2	70	N	-	-	24.2	Y	N	N
A2-2a-5	19	91.1	A2-2a	-	44.2	0	68	46.1	0	0	68	68.1	70	N	-	-	23.9	Y	N	N
A2-2a-5	20	93.9	A2-2a	-	44.5	0	67.9	46.2	0	0	67.9	67.9	70	N	-	-	23.4	Y	N	N
A2-2a-5	21	96.7	A2-2a	-	44.6	0	67.7	46.2	0	0	67.8	67.8	70	N	-	-	23.2	Y	N	N
A2-2a-5	22	99.5	A2-2a	-	44.9	0	67.6	46.3	0	0	67.7	67.7	70	N	-	-	22.8	Y	N	N
A2-2a-5	23	102.3	A2-2a	-	45	0	67.5	46.2	0	0	67.5	67.6	70	N	-	-	22.6	Y	N	N
A2-2a-5	24	105.1	A2-2a	-	45.1	0	67.4	46.3	0	0	67.4	67.5	70	N	-	-	22.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-5	25	107.9	A2-2a	-	45.3	0	67.3	46.4	0	0	67.3	67.3	70	N	-	-	22.0	Y	N	N
A2-2a-5	26	110.7	A2-2a	-	45.3	0	67.2	46.4	0	0	67.2	67.3	70	N	-	-	22.0	Y	N	N
A2-2a-5	27	113.5	A2-2a	-	45.4	0	67.1	46.5	0	0	67.2	67.2	70	N	-	-	21.8	Y	N	N
A2-2a-5	28	116.3	A2-2a	-	45.5	0	67	46.5	0	0	67	67.1	70	N	-	-	21.6	Y	N	N
A2-2a-5	29	119.1	A2-2a	-	45.5	0	66.9	46.5	0	0	66.9	67.0	70	N	-	-	21.5	Y	N	N
A2-2a-5	30	121.9	A2-2a	-	45.6	0	66.8	46.5	0	0	66.9	66.9	70	N	-	-	21.3	Y	N	N
A2-2a-5	31	124.7	A2-2a	-	45.6	0	66.8	46.6	0	0	66.8	66.8	70	N	-	-	21.2	Y	N	N
A2-2a-5	32	127.5	A2-2a	-	45.6	0	66.7	46.6	0	0	66.7	66.8	70	N	-	-	21.2	Y	N	N
A2-2a-5	33	130.3	A2-2a	-	45.6	0	66.6	46.6	0	0	66.7	66.7	70	N	-	-	21.1	Y	N	N
A2-2a-5	34	133.1	A2-2a	-	45.6	0	66.5	46.6	0	0	66.6	66.6	70	N	-	-	21.0	Y	N	N
A2-2a-5	35	135.9	A2-2a	-	45.7	0	66.5	46.6	0	0	66.5	66.6	70	N	-	-	20.9	Y	N	N
A2-2a-5	36	138.7	A2-2a	-	45.7	0	66.4	46.6	0	0	66.5	66.5	70	N	-	-	20.8	Y	N	N
A2-2a-5	37	141.5	A2-2a	-	45.7	0	66.4	46.6	0	0	66.4	66.4	70	N	-	-	20.7	Y	N	N
A2-2a-5	38	144.3	A2-2a	-	45.7	0	66.3	46.6	0	0	66.3	66.4	70	N	-	-	20.7	Y	N	N
A2-2a-5	39	147.1	A2-2a	-	45.7	0	66.2	46.6	0	0	66.3	66.3	70	N	-	-	20.6	Y	N	N
A2-2a-6	1	40.7	A2-2a	-	0	0	64.7	0	0	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-6	2	43.5	A2-2a	-	0	0	64.6	0	0	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-6	3	46.3	A2-2a	-	0	0	64.5	0	0	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-6	4	49.1	A2-2a	-	0	0	64.3	0	0	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-6	5	51.9	A2-2a	-	0	0	64.2	0	0	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-6	6	54.7	A2-2a	-	0	0	64.1	0	0	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-6	7	57.5	A2-2a	-	0	0	63.9	0	0	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-6	8	60.3	A2-2a	-	0	0	63.8	0	0	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-6	9	63.1	A2-2a	-	0	0	63.6	0	0	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-6	10	65.9	A2-2a	-	0	0	63.5	0	0	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-6	11	68.7	A2-2a	-	0	0	63.3	0	0	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-6	12	71.5	A2-2a	-	0	0	63.1	0	0	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
A2-2a-6	13	74.3	A2-2a	-	0	0	63	0	0	0	63	63.0	70	N	-	-	63.0	Y	N	N
A2-2a-6	14	77.1	A2-2a	-	0	0	62.9	0	0	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
A2-2a-6	15	79.9	A2-2a	-	0	0	62.7	0	0	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
A2-2a-6	16	82.7	A2-2a	-	0	0	62.6	0	0	0	62.6	62.6	70	N	-	-	62.6	Y	N	N
A2-2a-6	17	85.5	A2-2a	-	0	0	62.4	0	0	0	62.4	62.4	70	N	-	-	62.4	Y	N	N
A2-2a-6	18	88.3	A2-2a	-	0	0	62.3	0	0	0	62.3	62.3	70	N	-	-	62.3	Y	N	N
A2-2a-6	19	91.1	A2-2a	-	0	0	62.2	0	0	0	62.2	62.2	70	N	-	-	62.2	Y	N	N
A2-2a-6	20	93.9	A2-2a	-	0	0	62	0	0	0	62	62.0	70	N	-	-	62.0	Y	N	N
A2-2a-6	21	96.7	A2-2a	-	0	0	61.9	0	0	0	61.9	61.9	70	N	-	-	61.9	Y	N	N
A2-2a-6	22	99.5	A2-2a	-	0	0	61.8	0	0	0	61.8	61.8	70	N	-	-	61.8	Y	N	N
A2-2a-6	23	102.3	A2-2a	-	0	0	61.7	0	0	0	61.7	61.7	70	N	-	-	61.7	Y	N	N
A2-2a-6	24	105.1	A2-2a	-	0	0	61.6	0	0	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A2-2a-6	25	107.9	A2-2a	-	0	0	61.5	0	0	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A2-2a-6	26	110.7	A2-2a	-	0	0	61.4	0	0	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A2-2a-6	27	113.5	A2-2a	-	0	0	61.3	0	0	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A2-2a-6	28	116.3	A2-2a	-	0	0	61.3	0	0	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A2-2a-6	29	119.1	A2-2a	-	0	0	61.2	0	0	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A2-2a-6	30	121.9	A2-2a	-	0	0	61.1	0	0	0	61.1	61.1	70	N	-	-	61.1	Y	N	N
A2-2a-6	31	124.7	A2-2a	-	0	0	61	0	0	0	61	61.0	70	N	-	-	61.0	Y	N	N
A2-2a-6	32	127.5	A2-2a	-	0	0	61	0	0	0	61	61.0	70	N	-	-	61.0	Y	N	N
A2-2a-6	33	130.3	A2-2a	-	0	0	60.9	0	0	0	60.9	60.9	70	N	-	-	60.9	Y	N	N
A2-2a-6	34	133.1	A2-2a	-	0	0	60.9	0	0	0	60.9	60.9	70	N	-	-	60.9	Y	N	N
A2-2a-6	35	135.9	A2-2a	-	0	0	60.8	0	0	0	60.8	60.8	70	N	-	-	60.8	Y	N	N
A2-2a-6	36	138.7	A2-2a	-	0	0	60.8	0	0	0	60.8	60.8	70	N	-	-	60.8	Y	N	N
A2-2a-6	37	141.5	A2-2a	-	0	0	60.7	0	0	0	60.7	60.7	70	N	-	-	60.7	Y	N	N
A2-2a-6	38	144.3	A2-2a	-	0	0	60.7	0	0	0	60.7	60.7	70	N	-	-	60.7	Y	N	N
A2-2a-6	39	147.1	A2-2a	-	0	0	60.6	0	0	0	60.6	60.6	70	N	-	-	60.6	Y	N	N
A2-2a-7	1	40.7	A2-2a	-	0	0	67.8	0	0	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-7	2	43.5	A2-2a	-	0	0	67.7	0	0	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-7	3	46.3	A2-2a	-	0	0	67.6	0	0	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-7	4	49.1	A2-2a	-	0	0	67.5	0	0	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-7	5	51.9	A2-2a	-	0	0	67.3	0	0	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-7	6	54.7	A2-2a	-	0	0	67.2	0	0	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-7	7	57.5	A2-2a	-	0	0	67	0	0	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-7	8	60.3	A2-2a	-	0	0	66.9	0	0	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-7	9	63.1	A2-2a	-	0	0	66.7	0	0	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-7	10	65.9	A2-2a	-	0	0	66.6	0	0	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-7	11	68.7	A2-2a	-	0	0	66.5	0	0	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-7	12	71.5	A2-2a	-	0	0	66.3	0	0	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-7	13	74.3	A2-2a	-	0	0	66.1	0	0	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-7	14	77.1	A2-2a	-	0	0	66	0	0	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-7	15	79.9	A2-2a	-	0	0	65.8	0	0	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-7	16	82.7	A2-2a	-	0	0	65.7	0	0	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-7	17	85.5	A2-2a	-	0	0	65.6	0	0	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-7	18	88.3	A2-2a	-	0	0	65.4	0	0	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-7	19	91.1	A2-2a	-	0	0	65.3	0	0	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-7	20	93.9	A2-2a	-	0	0	65.1	0	0	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-7	21	96.7	A2-2a	-	0	0	65	0	0	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-7	22	99.5	A2-2a	-	0	0	64.9	0	0	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-7	23	102.3	A2-2a	-	0	0	64.8	0	0	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-7	24	105.1	A2-2a	-	0	0	64.7	0	0	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-7	25	107.9	A2-2a	-	0	0	64.5	0	0	0	64.5	64.5	70	N	-	-	64.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-7	26	110.7	A2-2a	-	0	0	64.5	0	0	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-7	27	113.5	A2-2a	-	0	0	64.4	0	0	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-7	28	116.3	A2-2a	-	0	0	64.2	0	0	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-7	29	119.1	A2-2a	-	0	0	64.1	0	0	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-7	30	121.9	A2-2a	-	0	0	64	0	0	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-7	31	124.7	A2-2a	-	0	0	63.9	0	0	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-7	32	127.5	A2-2a	-	0	0	63.8	0	0	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-7	33	130.3	A2-2a	-	0	0	63.8	0	0	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-7	34	133.1	A2-2a	-	0	0	63.7	0	0	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-7	35	135.9	A2-2a	-	0	0	63.6	0	0	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-7	36	138.7	A2-2a	-	0	0	63.5	0	0	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-7	37	141.5	A2-2a	-	0	0	63.4	0	0	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2a-7	38	144.3	A2-2a	-	0	0	63.3	0	0	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-7	39	147.1	A2-2a	-	0	0	63.3	0	0	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-8	1	40.7	A2-2a	-	32.2	0	69.7	35	0	0	69.7	69.7	70	N	-	-	37.5	Y	N	N
A2-2a-8	2	43.5	A2-2a	-	33.4	0	69.6	35.5	0	0	69.6	69.6	70	N	-	-	36.2	Y	N	N
A2-2a-8	3	46.3	A2-2a	-	34.9	0	69.5	35.8	0	0	69.5	69.5	70	N	-	-	34.6	Y	N	N
A2-2a-8	4	49.1	A2-2a	-	36.1	0	69.3	36.2	0	0	69.3	69.3	70	N	-	-	33.2	Y	N	N
A2-2a-8	5	51.9	A2-2a	-	37.8	0	69.2	36.5	0	0	69.2	69.2	70	N	-	-	31.4	Y	N	N
A2-2a-8	6	54.7	A2-2a	-	38.7	0	69	36.7	0	0	69	69.0	70	N	-	-	30.3	Y	N	N
A2-2a-8	7	57.5	A2-2a	-	39.4	0	68.9	37	0	0	68.9	68.9	70	N	-	-	29.5	Y	N	N
A2-2a-8	8	60.3	A2-2a	-	40	0	68.7	37.1	0	0	68.7	68.7	70	N	-	-	28.7	Y	N	N
A2-2a-8	9	63.1	A2-2a	-	40.6	0	68.5	37.3	0	0	68.5	68.5	70	N	-	-	27.9	Y	N	N
A2-2a-8	10	65.9	A2-2a	-	41.1	0	68.4	37.5	0	0	68.4	68.4	70	N	-	-	27.3	Y	N	N
A2-2a-8	11	68.7	A2-2a	-	41.5	0	68.2	37.7	0	0	68.2	68.3	70	N	-	-	26.8	Y	N	N
A2-2a-8	12	71.5	A2-2a	-	42	0	68.1	37.8	0	0	68.1	68.1	70	N	-	-	26.1	Y	N	N
A2-2a-8	13	74.3	A2-2a	-	42.4	0	67.9	37.9	0	0	67.9	67.9	70	N	-	-	25.5	Y	N	N
A2-2a-8	14	77.1	A2-2a	-	42.7	0	67.8	38.1	0	0	67.8	67.8	70	N	-	-	25.1	Y	N	N
A2-2a-8	15	79.9	A2-2a	-	43.1	0	67.6	38.2	0	0	67.6	67.6	70	N	-	-	24.5	Y	N	N
A2-2a-8	16	82.7	A2-2a	-	43.4	0	67.5	38.3	0	0	67.5	67.5	70	N	-	-	24.1	Y	N	N
A2-2a-8	17	85.5	A2-2a	-	43.6	0	67.4	38.4	0	0	67.4	67.4	70	N	-	-	23.8	Y	N	N
A2-2a-8	18	88.3	A2-2a	-	43.8	0	67.2	38.6	0	0	67.2	67.2	70	N	-	-	23.4	Y	N	N
A2-2a-8	19	91.1	A2-2a	-	44.1	0	67.1	38.7	0	0	67.1	67.1	70	N	-	-	23.0	Y	N	N
A2-2a-8	20	93.9	A2-2a	-	44.3	0	66.9	38.9	0	0	66.9	67.0	70	N	-	-	22.7	Y	N	N
A2-2a-8	21	96.7	A2-2a	-	44.5	0	66.8	39.1	0	0	66.8	66.9	70	N	-	-	22.4	Y	N	N
A2-2a-8	22	99.5	A2-2a	-	44.7	0	66.7	39.4	0	0	66.7	66.7	70	N	-	-	22.0	Y	N	N
A2-2a-8	23	102.3	A2-2a	-	44.8	0	66.6	39.5	0	0	66.6	66.6	70	N	-	-	21.8	Y	N	N
A2-2a-8	24	105.1	A2-2a	-	45	0	66.5	39.7	0	0	66.5	66.5	70	N	-	-	21.5	Y	N	N
A2-2a-8	25	107.9	A2-2a	-	45.1	0	66.4	40	0	0	66.4	66.4	70	N	-	-	21.3	Y	N	N
A2-2a-8	26	110.7	A2-2a	-	45.2	0	66.3	40.2	0	0	66.3	66.3	70	N	-	-	21.1	Y	N	N
A2-2a-8	27	113.5	A2-2a	-	45.4	0	66.2	40.4	0	0	66.2	66.2	70	N	-	-	20.8	Y	N	N
A2-2a-8	28	116.3	A2-2a	-	45.4	0	66.1	40.7	0	0	66.1	66.1	70	N	-	-	20.7	Y	N	N
A2-2a-8	29	119.1	A2-2a	-	45.4	0	65.9	40.9	0	0	66	66.0	70	N	-	-	20.6	Y	N	N
A2-2a-8	30	121.9	A2-2a	-	45.4	0	65.8	41	0	0	65.9	65.9	70	N	-	-	20.5	Y	N	N
A2-2a-8	31	124.7	A2-2a	-	45.5	0	65.8	41.1	0	0	65.8	65.8	70	N	-	-	20.3	Y	N	N
A2-2a-8	32	127.5	A2-2a	-	45.5	0	65.7	41.2	0	0	65.7	65.7	70	N	-	-	20.2	Y	N	N
A2-2a-8	33	130.3	A2-2a	-	45.6	0	65.6	41.2	0	0	65.6	65.6	70	N	-	-	20.0	Y	N	N
A2-2a-8	34	133.1	A2-2a	-	45.6	0	65.5	41.3	0	0	65.5	65.6	70	N	-	-	20.0	Y	N	N
A2-2a-8	35	135.9	A2-2a	-	45.6	0	65.4	41.3	0	0	65.4	65.5	70	N	-	-	19.9	Y	N	N
A2-2a-8	36	138.7	A2-2a	-	45.6	0	65.3	41.4	0	0	65.3	65.4	70	N	-	-	19.8	Y	N	N
A2-2a-8	37	141.5	A2-2a	-	45.6	0	65.2	41.4	0	0	65.3	65.3	70	N	-	-	19.7	Y	N	N
A2-2a-8	38	144.3	A2-2a	-	45.6	0	65.2	41.4	0	0	65.2	65.2	70	N	-	-	19.6	Y	N	N
A2-2a-8	39	147.1	A2-2a	-	45.6	0	65.1	41.4	0	0	65.1	65.2	70	N	-	-	19.6	Y	N	N
A2-2a-9	1	40.7	A2-2a	-	32.2	0	69.2	34.9	0	0	69.2	69.2	70	N	-	-	37.0	Y	N	N
A2-2a-9	2	43.5	A2-2a	-	33.5	0	69	35.4	0	0	69	69.0	70	N	-	-	35.5	Y	N	N
A2-2a-9	3	46.3	A2-2a	-	34.9	0	68.9	35.8	0	0	68.9	68.9	70	N	-	-	34.0	Y	N	N
A2-2a-9	4	49.1	A2-2a	-	36	0	68.8	36.1	0	0	68.8	68.8	70	N	-	-	32.8	Y	N	N
A2-2a-9	5	51.9	A2-2a	-	37.8	0	68.7	36.4	0	0	68.7	68.7	70	N	-	-	30.9	Y	N	N
A2-2a-9	6	54.7	A2-2a	-	38.6	0	68.5	36.7	0	0	68.5	68.5	70	N	-	-	29.9	Y	N	N
A2-2a-9	7	57.5	A2-2a	-	39.3	0	68.4	36.9	0	0	68.4	68.4	70	N	-	-	29.1	Y	N	N
A2-2a-9	8	60.3	A2-2a	-	40	0	68.3	37.1	0	0	68.3	68.3	70	N	-	-	28.3	Y	N	N
A2-2a-9	9	63.1	A2-2a	-	40.4	0	68.1	37.3	0	0	68.1	68.1	70	N	-	-	27.7	Y	N	N
A2-2a-9	10	65.9	A2-2a	-	41	0	68	37.5	0	0	68	68.0	70	N	-	-	27.0	Y	N	N
A2-2a-9	11	68.7	A2-2a	-	41.5	0	67.8	37.6	0	0	67.8	67.9	70	N	-	-	26.4	Y	N	N
A2-2a-9	12	71.5	A2-2a	-	41.9	0	67.7	37.7	0	0	67.7	67.7	70	N	-	-	25.8	Y	N	N
A2-2a-9	13	74.3	A2-2a	-	42.3	0	67.6	37.9	0	0	67.6	67.6	70	N	-	-	25.3	Y	N	N
A2-2a-9	14	77.1	A2-2a	-	42.7	0	67.4	38	0	0	67.4	67.4	70	N	-	-	24.7	Y	N	N
A2-2a-9	15	79.9	A2-2a	-	43	0	67.3	38.2	0	0	67.3	67.3	70	N	-	-	24.3	Y	N	N
A2-2a-9	16	82.7	A2-2a	-	43.4	0	67.1	38.2	0	0	67.1	67.2	70	N	-	-	23.8	Y	N	N
A2-2a-9	17	85.5	A2-2a	-	43.6	0	67	38.4	0	0	67	67.0	70	N	-	-	23.4	Y	N	N
A2-2a-9	18	88.3	A2-2a	-	43.8	0	66.9	38.5	0	0	66.9	66.9	70	N	-	-	23.1	Y	N	N
A2-2a-9	19	91.1	A2-2a	-	44.1	0	66.7	38.6	0	0	66.7	66.8	70	N	-	-	22.7	Y	N	N
A2-2a-9	20	93.9	A2-2a	-	44.3	0	66.6	38.8	0	0	66.6	66.7	70	N	-	-	22.4	Y	N	N
A2-2a-9	21	96.7	A2-2a	-	44.5	0	66.5	39.1	0	0	66.5	66.5	70	N	-	-	22.0	Y	N	N
A2-2a-9	22	99.5	A2-2a	-	44.6	0	66.4	39.4	0	0	66.4	66.4	70	N	-	-	21.8	Y	N	N
A2-2a-9	23	102.3	A2-2a	-	44.8	0	66.3	39.5	0	0	66.3	66.3	70	N	-	-	21.5	Y	N	N
A2-2a-9	24	105.1	A2-2a	-	45	0	66.1	39.6	0	0	66.1	66.2	70	N	-	-	21.2	Y	N	N
A2-2a-9	25	107.9	A2-2a	-	45.1	0	66	39.8	0	0	66	66.0	70	N	-	-	20.9	Y	N	N
A2-2a-9	26	110.7	A2-2a	-	45.2	0	65.9	40.1	0	0	65.9	66.0	70	N	-	-	20.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-9	27	113.5	A2-2a	-	45.3	0	65.8	40.4	0	0	65.8	65.8	70	N	-	-	20.5	Y	N	N
A2-2a-9	28	116.3	A2-2a	-	45.4	0	65.7	40.6	0	0	65.7	65.7	70	N	-	-	20.3	Y	N	N
A2-2a-9	29	119.1	A2-2a	-	45.4	0	65.6	40.8	0	0	65.6	65.6	70	N	-	-	20.2	Y	N	N
A2-2a-9	30	121.9	A2-2a	-	45.4	0	65.5	40.9	0	0	65.5	65.5	70	N	-	-	20.1	Y	N	N
A2-2a-9	31	124.7	A2-2a	-	45.5	0	65.4	41	0	0	65.4	65.5	70	N	-	-	20.0	Y	N	N
A2-2a-9	32	127.5	A2-2a	-	45.5	0	65.3	41.1	0	0	65.3	65.4	70	N	-	-	19.9	Y	N	N
A2-2a-9	33	130.3	A2-2a	-	45.6	0	65.2	41.2	0	0	65.2	65.3	70	N	-	-	19.7	Y	N	N
A2-2a-9	34	133.1	A2-2a	-	45.6	0	65.1	41.2	0	0	65.1	65.2	70	N	-	-	19.6	Y	N	N
A2-2a-9	35	135.9	A2-2a	-	45.5	0	65	41.3	0	0	65	65.1	70	N	-	-	19.6	Y	N	N
A2-2a-9	36	138.7	A2-2a	-	45.6	0	64.9	41.3	0	0	64.9	65.0	70	N	-	-	19.4	Y	N	N
A2-2a-9	37	141.5	A2-2a	-	45.6	0	64.8	41.3	0	0	64.9	64.9	70	N	-	-	19.3	Y	N	N
A2-2a-9	38	144.3	A2-2a	-	45.6	0	64.7	41.4	0	0	64.8	64.8	70	N	-	-	19.2	Y	N	N
A2-2a-9	39	147.1	A2-2a	-	45.6	0	64.7	41.4	0	0	64.7	64.7	70	N	-	-	19.1	Y	N	N
A2-2a-10	1	40.7	A2-2a	-	33	0	69.9	43.8	0	24.1	69.9	69.9	70	N	-	-	36.9	Y	N	N
A2-2a-10	2	43.5	A2-2a	-	34.2	0	69.8	44.2	0	24.8	69.8	69.8	70	N	-	-	35.6	Y	N	N
A2-2a-10	3	46.3	A2-2a	-	35.6	0	69.6	44.4	0	25.8	69.7	69.7	70	N	-	-	34.1	Y	N	N
A2-2a-10	4	49.1	A2-2a	-	37	0	69.5	44.5	0	25.8	69.5	69.5	70	N	-	-	32.5	Y	N	N
A2-2a-10	5	51.9	A2-2a	-	38.3	0	69.3	44.6	0	26.3	69.4	69.4	70	N	-	-	31.1	Y	N	N
A2-2a-10	6	54.7	A2-2a	-	39	0	69.2	44.7	0	27.1	69.2	69.2	70	N	-	-	30.2	Y	N	N
A2-2a-10	7	57.5	A2-2a	-	39.5	0	69	44.7	0	27.8	69.1	69.1	70	N	-	-	29.6	Y	N	N
A2-2a-10	8	60.3	A2-2a	-	40.1	0	68.9	44.7	0	28.2	68.9	68.9	70	N	-	-	28.8	Y	N	N
A2-2a-10	9	63.1	A2-2a	-	40.7	0	68.7	44.8	0	28.6	68.7	68.7	70	N	-	-	28.0	Y	N	N
A2-2a-10	10	65.9	A2-2a	-	41.1	0	68.6	44.8	0	29	68.6	68.6	70	N	-	-	27.5	Y	N	N
A2-2a-10	11	68.7	A2-2a	-	41.5	0	68.4	44.8	0	29.3	68.4	68.4	70	N	-	-	26.9	Y	N	N
A2-2a-10	12	71.5	A2-2a	-	41.9	0	68.2	44.8	0	29.6	68.3	68.3	70	N	-	-	26.4	Y	N	N
A2-2a-10	13	74.3	A2-2a	-	42.2	0	68.1	44.8	0	29.8	68.1	68.1	70	N	-	-	25.9	Y	N	N
A2-2a-10	14	77.1	A2-2a	-	42.7	0	67.9	44.8	0	29.8	68	68.0	70	N	-	-	25.3	Y	N	N
A2-2a-10	15	79.9	A2-2a	-	43	0	67.8	44.9	0	30	67.8	67.8	70	N	-	-	24.8	Y	N	N
A2-2a-10	16	82.7	A2-2a	-	43.3	0	67.7	44.9	0	30.2	67.7	67.7	70	N	-	-	24.4	Y	N	N
A2-2a-10	17	85.5	A2-2a	-	43.6	0	67.5	44.9	0	30.2	67.5	67.6	70	N	-	-	24.0	Y	N	N
A2-2a-10	18	88.3	A2-2a	-	43.8	0	67.4	44.9	0	30.3	67.4	67.4	70	N	-	-	23.6	Y	N	N
A2-2a-10	19	91.1	A2-2a	-	44	0	67.2	44.9	0	30.5	67.3	67.3	70	N	-	-	23.3	Y	N	N
A2-2a-10	20	93.9	A2-2a	-	44.2	0	67.1	45	0	30.4	67.2	67.2	70	N	-	-	23.0	Y	N	N
A2-2a-10	21	96.7	A2-2a	-	44.4	0	67	45	0	30.5	67	67.0	70	N	-	-	22.6	Y	N	N
A2-2a-10	22	99.5	A2-2a	-	44.5	0	66.9	45.1	0	30.6	66.9	66.9	70	N	-	-	22.4	Y	N	N
A2-2a-10	23	102.3	A2-2a	-	44.7	0	66.8	45.1	0	30.7	66.8	66.8	70	N	-	-	22.1	Y	N	N
A2-2a-10	24	105.1	A2-2a	-	44.9	0	66.6	45.1	0	30.6	66.7	66.7	70	N	-	-	21.8	Y	N	N
A2-2a-10	25	107.9	A2-2a	-	44.9	0	66.5	45.2	0	30.8	66.5	66.6	70	N	-	-	21.7	Y	N	N
A2-2a-10	26	110.7	A2-2a	-	45.1	0	66.4	45.2	0	30.8	66.4	66.5	70	N	-	-	21.4	Y	N	N
A2-2a-10	27	113.5	A2-2a	-	45.2	0	66.3	45.3	0	30.9	66.3	66.3	70	N	-	-	21.1	Y	N	N
A2-2a-10	28	116.3	A2-2a	-	45.3	0	66.2	45.4	0	30.9	66.2	66.2	70	N	-	-	20.9	Y	N	N
A2-2a-10	29	119.1	A2-2a	-	45.3	0	66.1	45.4	0	30.9	66.1	66.2	70	N	-	-	20.9	Y	N	N
A2-2a-10	30	121.9	A2-2a	-	45.3	0	66	45.5	0	31	66	66.0	70	N	-	-	20.7	Y	N	N
A2-2a-10	31	124.7	A2-2a	-	45.3	0	65.9	45.5	0	31.1	65.9	65.9	70	N	-	-	20.6	Y	N	N
A2-2a-10	32	127.5	A2-2a	-	45.4	0	65.8	45.5	0	31.2	65.8	65.9	70	N	-	-	20.5	Y	N	N
A2-2a-10	33	130.3	A2-2a	-	45.4	0	65.7	45.6	0	31.3	65.7	65.8	70	N	-	-	20.4	Y	N	N
A2-2a-10	34	133.1	A2-2a	-	45.4	0	65.6	45.6	0	31.5	65.6	65.7	70	N	-	-	20.3	Y	N	N
A2-2a-10	35	135.9	A2-2a	-	45.5	0	65.5	45.6	0	31.7	65.6	65.6	70	N	-	-	20.1	Y	N	N
A2-2a-10	36	138.7	A2-2a	-	45.4	0	65.4	45.6	0	31.6	65.5	65.5	70	N	-	-	20.1	Y	N	N
A2-2a-10	37	141.5	A2-2a	-	45.4	0	65.3	45.6	0	31.6	65.4	65.4	70	N	-	-	20.0	Y	N	N
A2-2a-10	38	144.3	A2-2a	-	45.4	0	65.2	45.6	0	31.7	65.3	65.3	70	N	-	-	19.9	Y	N	N
A2-2a-10	39	147.1	A2-2a	-	45.5	0	65.1	45.6	0	31.7	65.2	65.2	70	N	-	-	19.7	Y	N	N
A2-2a-11	1	40.7	A2-2a	-	33.4	0	70.1	43.9	0	24.1	70.2	70.2	70	N	-	-	36.8	Y	N	N
A2-2a-11	2	43.5	A2-2a	-	35	0	70	44.2	0	24.7	70	70.0	70	N	-	-	35.0	Y	N	N
A2-2a-11	3	46.3	A2-2a	-	36	0	69.9	44.5	0	25.7	69.9	69.9	70	N	-	-	33.9	Y	N	N
A2-2a-11	4	49.1	A2-2a	-	37.5	0	69.7	44.7	0	25.8	69.7	69.7	70	N	-	-	32.2	Y	N	N
A2-2a-11	5	51.9	A2-2a	-	38.6	0	69.5	44.8	0	26.2	69.6	69.6	70	N	-	-	31.0	Y	N	N
A2-2a-11	6	54.7	A2-2a	-	39.2	0	69.4	44.8	0	26.9	69.4	69.4	70	N	-	-	30.2	Y	N	N
A2-2a-11	7	57.5	A2-2a	-	39.6	0	69.2	44.9	0	27.6	69.2	69.3	70	N	-	-	29.7	Y	N	N
A2-2a-11	8	60.3	A2-2a	-	40.2	0	69.1	45	0	28.2	69.1	69.1	70	N	-	-	28.9	Y	N	N
A2-2a-11	9	63.1	A2-2a	-	40.8	0	68.9	45.1	0	28.6	68.9	68.9	70	N	-	-	28.1	Y	N	N
A2-2a-11	10	65.9	A2-2a	-	41.2	0	68.7	45.1	0	29	68.8	68.8	70	N	-	-	27.6	Y	N	N
A2-2a-11	11	68.7	A2-2a	-	41.6	0	68.6	45.2	0	29.2	68.6	68.6	70	N	-	-	27.0	Y	N	N
A2-2a-11	12	71.5	A2-2a	-	41.9	0	68.4	45.3	0	29.5	68.4	68.5	70	N	-	-	26.6	Y	N	N
A2-2a-11	13	74.3	A2-2a	-	42.3	0	68.3	45.4	0	29.7	68.3	68.3	70	N	-	-	26.0	Y	N	N
A2-2a-11	14	77.1	A2-2a	-	42.7	0	68.1	45.5	0	29.8	68.1	68.1	70	N	-	-	25.4	Y	N	N
A2-2a-11	15	79.9	A2-2a	-	42.9	0	68	45.6	0	30	68	68.0	70	N	-	-	25.1	Y	N	N
A2-2a-11	16	82.7	A2-2a	-	43.2	0	67.8	45.7	0	30.1	67.8	67.8	70	N	-	-	24.6	Y	N	N
A2-2a-11	17	85.5	A2-2a	-	43.6	0	67.7	45.7	0	30.1	67.7	67.7	70	N	-	-	24.1	Y	N	N
A2-2a-11	18	88.3	A2-2a	-	43.8	0	67.5	45.7	0	30.2	67.6	67.6	70	N	-	-	23.8	Y	N	N
A2-2a-11	19	91.1	A2-2a	-	44	0	67.4	45.8	0	30.4	67.4	67.5	70	N	-	-	23.5	Y	N	N
A2-2a-11	20	93.9	A2-2a	-	44.2	0	67.3	45.8	0	30.4	67.3	67.3	70	N	-	-	23.1	Y	N	N
A2-2a-11	21	96.7	A2-2a	-	44.4	0	67.2	45.8	0	30.6	67.2	67.2	70	N	-	-	22.8	Y	N	N
A2-2a-11	22	99.5	A2-2a	-	44.5	0	67	45.9	0	30.5	67.1	67.1	70	N	-	-	22.6	Y	N	N
A2-2a-11	23	102.3	A2-2a	-	44.7	0	66.9	45.9	0	30.5	66.9	67.0	70	N	-	-	22.3	Y	N	N
A2-2a-11	24	105.1	A2-2a	-	44.8	0	66.8	45.9	0	30.6	66.8	66.8	70	N	-	-	22.0	Y	N	N
A2-2a-11	25	107.9	A2-2a	-	44.9	0	66.7	46	0	30.8	66.7	66.7	70	N	-	-	21.8	Y	N	N
A2-2a-11	26	110.7	A2-2a	-	45	0	66.6	46	0	30.8	66.6	66.6	70	N	-	-	21.6	Y	N	N
A2-2a-11	27	113.5	A2-2a	-	45.1	0	66.5	46.1	0	30.8	66.5	66.5	70	N	-	-	21.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-11	28	116.3	A2-2a	-	45.2	0	66.4	46.2	0	30.9	66.4	66.4	70	N	-	-	21.2	Y	N	N
A2-2a-11	29	119.1	A2-2a	-	45.2	0	66.3	46.2	0	30.9	66.3	66.3	70	N	-	-	21.1	Y	N	N
A2-2a-11	30	121.9	A2-2a	-	45.3	0	66.2	46.2	0	31	66.2	66.2	70	N	-	-	20.9	Y	N	N
A2-2a-11	31	124.7	A2-2a	-	45.3	0	66.1	46.2	0	31	66.1	66.2	70	N	-	-	20.9	Y	N	N
A2-2a-11	32	127.5	A2-2a	-	45.4	0	66	46.3	0	31.1	66	66.1	70	N	-	-	20.7	Y	N	N
A2-2a-11	33	130.3	A2-2a	-	45.4	0	65.9	46.3	0	31.3	65.9	66.0	70	N	-	-	20.6	Y	N	N
A2-2a-11	34	133.1	A2-2a	-	45.4	0	65.8	46.3	0	31.3	65.9	65.9	70	N	-	-	20.5	Y	N	N
A2-2a-11	35	135.9	A2-2a	-	45.4	0	65.7	46.3	0	31.6	65.8	65.8	70	N	-	-	20.4	Y	N	N
A2-2a-11	36	138.7	A2-2a	-	45.4	0	65.6	46.3	0	31.6	65.7	65.7	70	N	-	-	20.3	Y	N	N
A2-2a-11	37	141.5	A2-2a	-	45.4	0	65.6	46.3	0	31.6	65.6	65.7	70	N	-	-	20.3	Y	N	N
A2-2a-11	38	144.3	A2-2a	-	45.5	0	65.5	46.3	0	31.7	65.5	65.6	70	N	-	-	20.1	Y	N	N
A2-2a-11	39	147.1	A2-2a	-	45.4	0	65.4	46.3	0	31.7	65.5	65.5	70	N	-	-	20.1	Y	N	N
A2-2a-12	1	40.7	A2-2a	-	34.7	0	67.4	43.7	0	23.9	67.4	67.4	70	N	-	-	32.7	Y	N	N
A2-2a-12	2	43.5	A2-2a	-	35.8	0	67.3	44.2	0	24.5	67.3	67.3	70	N	-	-	31.5	Y	N	N
A2-2a-12	3	46.3	A2-2a	-	37	0	67.1	44.5	0	25.4	67.2	67.2	70	N	-	-	30.2	Y	N	N
A2-2a-12	4	49.1	A2-2a	-	38.2	0	66.9	44.6	0	25.7	67	67.0	70	N	-	-	28.8	Y	N	N
A2-2a-12	5	51.9	A2-2a	-	39	0	66.8	44.8	0	26	66.8	66.8	70	N	-	-	27.8	Y	N	N
A2-2a-12	6	54.7	A2-2a	-	39.5	0	66.6	44.8	0	26.6	66.6	66.6	70	N	-	-	27.1	Y	N	N
A2-2a-12	7	57.5	A2-2a	-	40	0	66.4	44.9	0	27.3	66.4	66.5	70	N	-	-	26.5	Y	N	N
A2-2a-12	8	60.3	A2-2a	-	40.3	0	66.2	44.9	0	27.9	66.3	66.3	70	N	-	-	26.0	Y	N	N
A2-2a-12	9	63.1	A2-2a	-	40.8	0	66.1	45	0	28.4	66.1	66.1	70	N	-	-	25.3	Y	N	N
A2-2a-12	10	65.9	A2-2a	-	41.3	0	65.9	45.1	0	28.7	66	66.0	70	N	-	-	24.7	Y	N	N
A2-2a-12	11	68.7	A2-2a	-	41.5	0	65.7	45.2	0	29	65.8	65.8	70	N	-	-	24.3	Y	N	N
A2-2a-12	12	71.5	A2-2a	-	41.9	0	65.6	45.3	0	29.3	65.6	65.6	70	N	-	-	23.7	Y	N	N
A2-2a-12	13	74.3	A2-2a	-	42.2	0	65.4	45.4	0	29.5	65.5	65.5	70	N	-	-	23.3	Y	N	N
A2-2a-12	14	77.1	A2-2a	-	42.6	0	65.3	45.5	0	29.6	65.3	65.3	70	N	-	-	22.7	Y	N	N
A2-2a-12	15	79.9	A2-2a	-	42.9	0	65.1	45.6	0	29.8	65.2	65.2	70	N	-	-	22.3	Y	N	N
A2-2a-12	16	82.7	A2-2a	-	43.3	0	65	45.7	0	30	65	65.1	70	N	-	-	21.8	Y	N	N
A2-2a-12	17	85.5	A2-2a	-	43.4	0	64.8	45.8	0	30	64.9	64.9	70	N	-	-	21.5	Y	N	N
A2-2a-12	18	88.3	A2-2a	-	43.7	0	64.7	45.8	0	30.1	64.8	64.8	70	N	-	-	21.1	Y	N	N
A2-2a-12	19	91.1	A2-2a	-	44.1	0	64.6	45.9	0	30.2	64.6	64.7	70	N	-	-	20.6	Y	N	N
A2-2a-12	20	93.9	A2-2a	-	44.2	0	64.4	45.9	0	30.3	64.5	64.5	70	N	-	-	20.3	Y	N	N
A2-2a-12	21	96.7	A2-2a	-	44.3	0	64.3	46	0	30.3	64.4	64.4	70	N	-	-	20.1	Y	N	N
A2-2a-12	22	99.5	A2-2a	-	44.5	0	64.2	46	0	30.4	64.3	64.3	70	N	-	-	19.8	Y	N	N
A2-2a-12	23	102.3	A2-2a	-	44.6	0	64.1	46	0	30.4	64.2	64.2	70	N	-	-	19.6	Y	N	N
A2-2a-12	24	105.1	A2-2a	-	44.7	0	64	46.1	0	30.5	64.1	64.1	70	N	-	-	19.4	Y	N	N
A2-2a-12	25	107.9	A2-2a	-	44.9	0	63.9	46.1	0	30.6	63.9	64.0	70	N	-	-	19.1	Y	N	N
A2-2a-12	26	110.7	A2-2a	-	45	0	63.8	46.1	0	30.7	63.8	63.9	70	N	-	-	18.9	Y	N	N
A2-2a-12	27	113.5	A2-2a	-	45.1	0	63.7	46.1	0	30.6	63.8	63.8	70	N	-	-	18.7	Y	N	N
A2-2a-12	28	116.3	A2-2a	-	45.2	0	63.6	46.2	0	30.7	63.7	63.7	70	N	-	-	18.5	Y	N	N
A2-2a-12	29	119.1	A2-2a	-	45.2	0	63.5	46.3	0	30.8	63.6	63.6	70	N	-	-	18.4	Y	N	N
A2-2a-12	30	121.9	A2-2a	-	45.3	0	63.4	46.3	0	30.9	63.5	63.6	70	N	-	-	18.3	Y	N	N
A2-2a-12	31	124.7	A2-2a	-	45.3	0	63.3	46.3	0	30.9	63.4	63.5	70	N	-	-	18.2	Y	N	N
A2-2a-12	32	127.5	A2-2a	-	45.4	0	63.3	46.4	0	30.9	63.4	63.4	70	N	-	-	18.0	Y	N	N
A2-2a-12	33	130.3	A2-2a	-	45.4	0	63.2	46.4	0	31.1	63.3	63.4	70	N	-	-	18.0	Y	N	N
A2-2a-12	34	133.1	A2-2a	-	45.4	0	63.1	46.4	0	31.2	63.2	63.3	70	N	-	-	17.9	Y	N	N
A2-2a-12	35	135.9	A2-2a	-	45.4	0	63.1	46.4	0	31.3	63.2	63.2	70	N	-	-	17.8	Y	N	N
A2-2a-12	36	138.7	A2-2a	-	45.4	0	63	46.4	0	31.5	63.1	63.2	70	N	-	-	17.8	Y	N	N
A2-2a-12	37	141.5	A2-2a	-	45.4	0	62.9	46.4	0	31.6	63	63.1	70	N	-	-	17.7	Y	N	N
A2-2a-12	38	144.3	A2-2a	-	45.4	0	62.9	46.4	0	31.6	63	63.0	70	N	-	-	17.6	Y	N	N
A2-2a-12	39	147.1	A2-2a	-	45.4	0	62.8	46.4	0	31.5	62.9	63.0	70	N	-	-	17.6	Y	N	N
A2-2a-13	1	40.7	A2-2a	-	35.3	0	70.9	43.9	0	23.9	70.9	70.9	70	Y	-	-	35.6	Y	Y	Y
A2-2a-13	2	43.5	A2-2a	-	36.4	0	70.8	44.3	0	24.5	70.8	70.8	70	Y	-	-	34.4	Y	Y	Y
A2-2a-13	3	46.3	A2-2a	-	37.5	0	70.6	44.6	0	25.4	70.6	70.6	70	Y	-	-	33.1	Y	Y	Y
A2-2a-13	4	49.1	A2-2a	-	38.4	0	70.4	44.7	0	25.7	70.4	70.4	70	N	-	-	32.0	Y	N	N
A2-2a-13	5	51.9	A2-2a	-	39.1	0	70.3	44.8	0	26	70.3	70.3	70	N	-	-	31.2	Y	N	N
A2-2a-13	6	54.7	A2-2a	-	39.6	0	70.1	44.9	0	26.6	70.1	70.1	70	N	-	-	30.5	Y	N	N
A2-2a-13	7	57.5	A2-2a	-	40	0	69.9	45	0	27.3	69.9	69.9	70	N	-	-	29.9	Y	N	N
A2-2a-13	8	60.3	A2-2a	-	40.4	0	69.7	45.1	0	27.9	69.7	69.7	70	N	-	-	29.3	Y	N	N
A2-2a-13	9	63.1	A2-2a	-	40.9	0	69.5	45.1	0	28.3	69.6	69.6	70	N	-	-	28.7	Y	N	N
A2-2a-13	10	65.9	A2-2a	-	41.4	0	69.4	45.2	0	28.7	69.4	69.4	70	N	-	-	28.0	Y	N	N
A2-2a-13	11	68.7	A2-2a	-	41.6	0	69.2	45.3	0	29	69.2	69.2	70	N	-	-	27.6	Y	N	N
A2-2a-13	12	71.5	A2-2a	-	41.9	0	69	45.5	0	29.3	69	69.1	70	N	-	-	27.2	Y	N	N
A2-2a-13	13	74.3	A2-2a	-	42.3	0	68.9	45.6	0	29.5	68.9	68.9	70	N	-	-	26.6	Y	N	N
A2-2a-13	14	77.1	A2-2a	-	42.7	0	68.7	45.7	0	29.6	68.7	68.7	70	N	-	-	26.0	Y	N	N
A2-2a-13	15	79.9	A2-2a	-	43	0	68.6	45.8	0	29.8	68.6	68.6	70	N	-	-	25.6	Y	N	N
A2-2a-13	16	82.7	A2-2a	-	43.3	0	68.4	45.8	0	29.9	68.4	68.4	70	N	-	-	25.1	Y	N	N
A2-2a-13	17	85.5	A2-2a	-	43.5	0	68.2	45.9	0	30	68.3	68.3	70	N	-	-	24.8	Y	N	N
A2-2a-13	18	88.3	A2-2a	-	43.8	0	68.1	46	0	30.1	68.1	68.2	70	N	-	-	24.4	Y	N	N
A2-2a-13	19	91.1	A2-2a	-	44.1	0	68	46.1	0	30.2	68	68.0	70	N	-	-	23.9	Y	N	N
A2-2a-13	20	93.9	A2-2a	-	44.2	0	67.9	46.1	0	30.3	67.9	67.9	70	N	-	-	23.7	Y	N	N
A2-2a-13	21	96.7	A2-2a	-	44.4	0	67.7	46.2	0	30.3	67.8	67.8	70	N	-	-	23.4	Y	N	N
A2-2a-13	22	99.5	A2-2a	-	44.6	0	67.6	46.2	0	30.4	67.7	67.7	70	N	-	-	23.1	Y	N	N
A2-2a-13	23	102.3	A2-2a	-	44.7	0	67.5	46.3	0	30.4	67.5	67.6	70	N	-	-	22.9	Y	N	N
A2-2a-13	24	105.1	A2-2a	-	44.8	0	67.4	46.3	0	30.5	67.4	67.4	70	N	-	-	22.6	Y	N	N
A2-2a-13	25	107.9	A2-2a	-	45	0	67.3	46.3	0	30.6	67.3	67.3	70	N	-	-	22.3	Y	N	N
A2-2a-13	26	110.7	A2-2a	-	45.1	0	67.2	46.4	0	30.6	67.2	67.3	70	N	-	-	22.2	Y	N	N
A2-2a-13	27	113.5	A2-2a	-	45.2	0	67.1	46.4	0	30.7	67.1	67.1	70	N	-	-	21.9	Y	N	N
A2-2a-13	28	116.3	A2-2a	-	45.2	0	67	46.5	0	30.7	67	67.1	70	N	-	-	21.9	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-13	29	119.1	A2-2a	-	45.3	0	66.9	46.5	0	30.8	66.9	67.0	70	N	-	-	21.7	Y	N	N
A2-2a-13	30	121.9	A2-2a	-	45.3	0	66.8	46.6	0	30.8	66.8	66.9	70	N	-	-	21.6	Y	N	N
A2-2a-13	31	124.7	A2-2a	-	45.4	0	66.7	46.6	0	30.9	66.7	66.8	70	N	-	-	21.4	Y	N	N
A2-2a-13	32	127.5	A2-2a	-	45.4	0	66.6	46.6	0	31	66.6	66.7	70	N	-	-	21.3	Y	N	N
A2-2a-13	33	130.3	A2-2a	-	45.5	0	66.5	46.7	0	31.1	66.6	66.6	70	N	-	-	21.1	Y	N	N
A2-2a-13	34	133.1	A2-2a	-	45.5	0	66.4	46.7	0	31.1	66.5	66.5	70	N	-	-	21.0	Y	N	N
A2-2a-13	35	135.9	A2-2a	-	45.5	0	66.4	46.7	0	31.3	66.4	66.5	70	N	-	-	21.0	Y	N	N
A2-2a-13	36	138.7	A2-2a	-	45.5	0	66.3	46.7	0	31.5	66.3	66.4	70	N	-	-	20.9	Y	N	N
A2-2a-13	37	141.5	A2-2a	-	45.5	0	66.2	46.7	0	31.7	66.3	66.3	70	N	-	-	20.8	Y	N	N
A2-2a-13	38	144.3	A2-2a	-	45.5	0	66.1	46.7	0	31.5	66.2	66.2	70	N	-	-	20.7	Y	N	N
A2-2a-13	39	147.1	A2-2a	-	45.5	0	66	46.7	0	31.5	66.1	66.1	70	N	-	-	20.6	Y	N	N
A2-2a-14	1	40.7	A2-2a	-	36	0	70.9	43.8	0	23.7	70.9	70.9	70	Y	-	-	34.9	Y	Y	Y
A2-2a-14	2	43.5	A2-2a	-	36.8	0	70.8	44.2	0	24.3	70.8	70.8	70	Y	-	-	34.0	Y	Y	Y
A2-2a-14	3	46.3	A2-2a	-	37.9	0	70.6	44.5	0	25.2	70.6	70.6	70	Y	-	-	32.7	Y	Y	Y
A2-2a-14	4	49.1	A2-2a	-	38.6	0	70.5	44.7	0	25.6	70.5	70.5	70	Y	-	-	31.9	Y	Y	Y
A2-2a-14	5	51.9	A2-2a	-	39.2	0	70.3	44.8	0	25.9	70.3	70.3	70	N	-	-	31.1	Y	N	N
A2-2a-14	6	54.7	A2-2a	-	39.8	0	70.1	44.9	0	26.4	70.1	70.1	70	N	-	-	30.3	Y	N	N
A2-2a-14	7	57.5	A2-2a	-	40.1	0	69.9	45	0	27.1	69.9	69.9	70	N	-	-	29.8	Y	N	N
A2-2a-14	8	60.3	A2-2a	-	40.5	0	69.7	45	0	27.7	69.8	69.8	70	N	-	-	29.3	Y	N	N
A2-2a-14	9	63.1	A2-2a	-	40.9	0	69.6	45.1	0	28.2	69.6	69.6	70	N	-	-	28.7	Y	N	N
A2-2a-14	10	65.9	A2-2a	-	41.4	0	69.4	45.2	0	28.6	69.4	69.4	70	N	-	-	28.0	Y	N	N
A2-2a-14	11	68.7	A2-2a	-	41.6	0	69.2	45.3	0	28.9	69.2	69.2	70	N	-	-	27.6	Y	N	N
A2-2a-14	12	71.5	A2-2a	-	41.9	0	69	45.4	0	29.1	69.1	69.1	70	N	-	-	27.2	Y	N	N
A2-2a-14	13	74.3	A2-2a	-	42.3	0	68.9	45.6	0	29.3	68.9	68.9	70	N	-	-	26.6	Y	N	N
A2-2a-14	14	77.1	A2-2a	-	42.6	0	68.7	45.7	0	29.5	68.7	68.8	70	N	-	-	26.2	Y	N	N
A2-2a-14	15	79.9	A2-2a	-	43	0	68.6	45.8	0	29.6	68.6	68.6	70	N	-	-	25.6	Y	N	N
A2-2a-14	16	82.7	A2-2a	-	43.3	0	68.4	45.9	0	29.9	68.4	68.4	70	N	-	-	25.1	Y	N	N
A2-2a-14	17	85.5	A2-2a	-	43.5	0	68.3	46	0	30	68.3	68.3	70	N	-	-	24.8	Y	N	N
A2-2a-14	18	88.3	A2-2a	-	43.9	0	68.2	46.1	0	30	68.2	68.2	70	N	-	-	24.3	Y	N	N
A2-2a-14	19	91.1	A2-2a	-	44.1	0	68	46.2	0	30.1	68.1	68.1	70	N	-	-	24.0	Y	N	N
A2-2a-14	20	93.9	A2-2a	-	44.3	0	67.9	46.2	0	30.2	67.9	68.0	70	N	-	-	23.7	Y	N	N
A2-2a-14	21	96.7	A2-2a	-	44.4	0	67.8	46.3	0	30.2	67.8	67.8	70	N	-	-	23.4	Y	N	N
A2-2a-14	22	99.5	A2-2a	-	44.5	0	67.7	46.4	0	30.4	67.7	67.7	70	N	-	-	23.2	Y	N	N
A2-2a-14	23	102.3	A2-2a	-	44.6	0	67.6	46.5	0	30.3	67.6	67.6	70	N	-	-	23.0	Y	N	N
A2-2a-14	24	105.1	A2-2a	-	44.8	0	67.5	46.5	0	30.4	67.5	67.5	70	N	-	-	22.7	Y	N	N
A2-2a-14	25	107.9	A2-2a	-	44.9	0	67.4	46.6	0	30.4	67.4	67.4	70	N	-	-	22.5	Y	N	N
A2-2a-14	26	110.7	A2-2a	-	45	0	67.3	46.6	0	30.6	67.3	67.4	70	N	-	-	22.4	Y	N	N
A2-2a-14	27	113.5	A2-2a	-	45.1	0	67.2	46.7	0	30.7	67.3	67.3	70	N	-	-	22.2	Y	N	N
A2-2a-14	28	116.3	A2-2a	-	45.2	0	67.2	46.7	0	30.6	67.2	67.2	70	N	-	-	22.0	Y	N	N
A2-2a-14	29	119.1	A2-2a	-	45.3	0	67.1	46.8	0	30.7	67.1	67.2	70	N	-	-	21.9	Y	N	N
A2-2a-14	30	121.9	A2-2a	-	45.3	0	67	46.8	0	30.8	67	67.1	70	N	-	-	21.8	Y	N	N
A2-2a-14	31	124.7	A2-2a	-	45.4	0	66.9	46.9	0	30.8	66.9	67.0	70	N	-	-	21.6	Y	N	N
A2-2a-14	32	127.5	A2-2a	-	45.4	0	66.8	46.9	0	30.8	66.9	66.9	70	N	-	-	21.5	Y	N	N
A2-2a-14	33	130.3	A2-2a	-	45.4	0	66.8	46.9	0	30.9	66.8	66.8	70	N	-	-	21.4	Y	N	N
A2-2a-14	34	133.1	A2-2a	-	45.5	0	66.7	47	0	31.1	66.7	66.8	70	N	-	-	21.3	Y	N	N
A2-2a-14	35	135.9	A2-2a	-	45.5	0	66.6	46.9	0	31.2	66.7	66.7	70	N	-	-	21.2	Y	N	N
A2-2a-14	36	138.7	A2-2a	-	45.5	0	66.5	47	0	31.3	66.6	66.6	70	N	-	-	21.1	Y	N	N
A2-2a-14	37	141.5	A2-2a	-	45.5	0	66.5	47	0	31.6	66.5	66.5	70	N	-	-	21.0	Y	N	N
A2-2a-14	38	144.3	A2-2a	-	45.5	0	66.4	47	0	31.6	66.4	66.5	70	N	-	-	21.0	Y	N	N
A2-2a-14	39	147.1	A2-2a	-	45.5	0	66.3	47	0	31.6	66.4	66.4	70	N	-	-	20.9	Y	N	N
A2-2a-15	1	40.7	A2-2a	-	36.4	0	70.9	43.6	0	23.7	70.9	70.9	70	Y	-	-	34.5	Y	Y	Y
A2-2a-15	2	43.5	A2-2a	-	37.2	0	70.7	44.1	0	24.3	70.7	70.7	70	Y	-	-	33.5	Y	Y	Y
A2-2a-15	3	46.3	A2-2a	-	38	0	70.6	44.4	0	25.2	70.6	70.6	70	Y	-	-	32.6	Y	Y	Y
A2-2a-15	4	49.1	A2-2a	-	38.7	0	70.4	44.5	0	25.6	70.4	70.4	70	N	-	-	31.7	Y	N	N
A2-2a-15	5	51.9	A2-2a	-	39.3	0	70.2	44.7	0	25.9	70.3	70.3	70	N	-	-	31.0	Y	N	N
A2-2a-15	6	54.7	A2-2a	-	39.8	0	70.1	44.8	0	26.4	70.1	70.1	70	N	-	-	30.3	Y	N	N
A2-2a-15	7	57.5	A2-2a	-	40.1	0	69.9	44.9	0	27.1	69.9	69.9	70	N	-	-	29.8	Y	N	N
A2-2a-15	8	60.3	A2-2a	-	40.5	0	69.7	44.9	0	27.6	69.7	69.7	70	N	-	-	29.2	Y	N	N
A2-2a-15	9	63.1	A2-2a	-	40.9	0	69.5	45	0	28.1	69.5	69.6	70	N	-	-	28.7	Y	N	N
A2-2a-15	10	65.9	A2-2a	-	41.4	0	69.4	45.1	0	28.5	69.4	69.4	70	N	-	-	28.0	Y	N	N
A2-2a-15	11	68.7	A2-2a	-	41.6	0	69.2	45.1	0	28.8	69.2	69.2	70	N	-	-	27.6	Y	N	N
A2-2a-15	12	71.5	A2-2a	-	41.9	0	69	45.3	0	29.1	69	69.1	70	N	-	-	27.2	Y	N	N
A2-2a-15	13	74.3	A2-2a	-	42.2	0	68.9	45.4	0	29.3	68.9	68.9	70	N	-	-	26.7	Y	N	N
A2-2a-15	14	77.1	A2-2a	-	42.6	0	68.7	45.5	0	29.5	68.7	68.7	70	N	-	-	26.1	Y	N	N
A2-2a-15	15	79.9	A2-2a	-	42.9	0	68.5	45.6	0	29.6	68.6	68.6	70	N	-	-	25.7	Y	N	N
A2-2a-15	16	82.7	A2-2a	-	43.3	0	68.4	45.7	0	29.7	68.4	68.4	70	N	-	-	25.1	Y	N	N
A2-2a-15	17	85.5	A2-2a	-	43.5	0	68.2	45.7	0	29.8	68.3	68.3	70	N	-	-	24.8	Y	N	N
A2-2a-15	18	88.3	A2-2a	-	43.8	0	68.1	45.8	0	29.9	68.2	68.2	70	N	-	-	24.4	Y	N	N
A2-2a-15	19	91.1	A2-2a	-	44.1	0	68	45.9	0	30.1	68	68.0	70	N	-	-	23.9	Y	N	N
A2-2a-15	20	93.9	A2-2a	-	44.2	0	67.9	46	0	30.2	67.9	67.9	70	N	-	-	23.7	Y	N	N
A2-2a-15	21	96.7	A2-2a	-	44.3	0	67.7	46	0	30.1	67.8	67.8	70	N	-	-	23.5	Y	N	N
A2-2a-15	22	99.5	A2-2a	-	44.5	0	67.6	46.1	0	30.2	67.7	67.7	70	N	-	-	23.2	Y	N	N
A2-2a-15	23	102.3	A2-2a	-	44.6	0	67.5	46.1	0	30.3	67.6	67.6	70	N	-	-	23.0	Y	N	N
A2-2a-15	24	105.1	A2-2a	-	44.8	0	67.4	46.2	0	30.4	67.4	67.5	70	N	-	-	22.7	Y	N	N
A2-2a-15	25	107.9	A2-2a	-	44.9	0	67.3	46.3	0	30.4	67.3	67.4	70	N	-	-	22.5	Y	N	N
A2-2a-15	26	110.7	A2-2a	-	45	0	67.2	46.2	0	30.4	67.2	67.3	70	N	-	-	22.3	Y	N	N
A2-2a-15	27	113.5	A2-2a	-	45.1	0	67.1	46.3	0	30.5	67.1	67.2	70	N	-	-	22.1	Y	N	N
A2-2a-15	28	116.3	A2-2a	-	45.2	0	67	46.3	0	30.6	67.1	67.1	70	N	-	-	21.9	Y	N	N
A2-2a-15	29	119.1	A2-2a	-	45.3	0	66.9	46.4	0	30.7	67	67.0	70	N	-	-	21.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-15	30	121.9	A2-2a	-	45.3	0	66.8	46.5	0	30.7	66.9	66.9	70	N	-	-	21.6	Y	N	N
A2-2a-15	31	124.7	A2-2a	-	45.3	0	66.7	46.5	0	30.7	66.8	66.8	70	N	-	-	21.5	Y	N	N
A2-2a-15	32	127.5	A2-2a	-	45.3	0	66.6	46.5	0	30.8	66.7	66.7	70	N	-	-	21.4	Y	N	N
A2-2a-15	33	130.3	A2-2a	-	45.4	0	66.6	46.6	0	30.9	66.6	66.6	70	N	-	-	21.2	Y	N	N
A2-2a-15	34	133.1	A2-2a	-	45.5	0	66.5	46.6	0	31	66.5	66.6	70	N	-	-	21.1	Y	N	N
A2-2a-15	35	135.9	A2-2a	-	45.4	0	66.4	46.6	0	31.1	66.4	66.5	70	N	-	-	21.1	Y	N	N
A2-2a-15	36	138.7	A2-2a	-	45.4	0	66.3	46.6	0	31.2	66.4	66.4	70	N	-	-	21.0	Y	N	N
A2-2a-15	37	141.5	A2-2a	-	45.4	0	66.2	46.6	0	31.4	66.3	66.3	70	N	-	-	20.9	Y	N	N
A2-2a-15	38	144.3	A2-2a	-	45.5	0	66.2	46.6	0	31.6	66.2	66.2	70	N	-	-	20.7	Y	N	N
A2-2a-15	39	147.1	A2-2a	-	45.5	0	66.1	46.6	0	31.5	66.1	66.2	70	N	-	-	20.7	Y	N	N
A2-2a-16	1	40.7	A2-2a	-	0	0	59.6	47.5	8.9	0	59.8	59.8	70	N	-	-	59.8	Y	N	N
A2-2a-16	2	43.5	A2-2a	-	0	0	59.5	47.5	8.9	0	59.7	59.7	70	N	-	-	59.7	Y	N	N
A2-2a-16	3	46.3	A2-2a	-	0	0	59.4	47.7	8.9	0	59.7	59.7	70	N	-	-	59.7	Y	N	N
A2-2a-16	4	49.1	A2-2a	-	0	0	59.3	48	8.9	0	59.6	59.6	70	N	-	-	59.6	Y	N	N
A2-2a-16	5	51.9	A2-2a	-	0	0	59.1	48.9	8.8	0	59.5	59.5	70	N	-	-	59.5	Y	N	N
A2-2a-16	6	54.7	A2-2a	-	0	0	59	49.7	8.8	0	59.5	59.5	70	N	-	-	59.5	Y	N	N
A2-2a-16	7	57.5	A2-2a	-	0	0	58.9	50.1	8.8	0	59.4	59.4	70	N	-	-	59.4	Y	N	N
A2-2a-16	8	60.3	A2-2a	-	0	0	58.7	50.3	8.8	0	59.3	59.3	70	N	-	-	59.3	Y	N	N
A2-2a-16	9	63.1	A2-2a	-	0	0	58.6	50.3	8.8	0	59.2	59.2	70	N	-	-	59.2	Y	N	N
A2-2a-16	10	65.9	A2-2a	-	0	0	58.5	50.3	8.7	0	59.1	59.1	70	N	-	-	59.1	Y	N	N
A2-2a-16	11	68.7	A2-2a	-	0	0	58.4	50.4	8.7	0	59	59.0	70	N	-	-	59.0	Y	N	N
A2-2a-16	12	71.5	A2-2a	-	0	0	58.3	50.4	8.7	0	58.9	58.9	70	N	-	-	58.9	Y	N	N
A2-2a-16	13	74.3	A2-2a	-	0	0	58.1	50.5	8.7	0	58.8	58.8	70	N	-	-	58.8	Y	N	N
A2-2a-16	14	77.1	A2-2a	-	0	0	58	50.6	8.7	0	58.7	58.7	70	N	-	-	58.7	Y	N	N
A2-2a-16	15	79.9	A2-2a	-	0	0	57.9	50.8	8.6	0	58.7	58.7	70	N	-	-	58.7	Y	N	N
A2-2a-16	16	82.7	A2-2a	-	0	0	57.8	51.2	8.6	0	58.7	58.7	70	N	-	-	58.7	Y	N	N
A2-2a-16	17	85.5	A2-2a	-	0	0	57.7	51.5	8.6	0	58.7	58.7	70	N	-	-	58.7	Y	N	N
A2-2a-16	18	88.3	A2-2a	-	0	0	57.7	51.8	8.6	0	58.7	58.7	70	N	-	-	58.7	Y	N	N
A2-2a-16	19	91.1	A2-2a	-	0	0	57.8	52	8.5	0	58.8	58.8	70	N	-	-	58.8	Y	N	N
A2-2a-16	20	93.9	A2-2a	-	0	0	57.9	52.2	8.5	0	58.9	58.9	70	N	-	-	58.9	Y	N	N
A2-2a-16	21	96.7	A2-2a	-	0	0	58.1	52.2	8.5	0	59.1	59.1	70	N	-	-	59.1	Y	N	N
A2-2a-16	22	99.5	A2-2a	-	0	0	58.3	52.2	8.5	0	59.2	59.2	70	N	-	-	59.2	Y	N	N
A2-2a-16	23	102.3	A2-2a	-	0	0	58.4	52.2	8.5	0	59.3	59.3	70	N	-	-	59.3	Y	N	N
A2-2a-16	24	105.1	A2-2a	-	0	0	58.6	52.2	8.4	0	59.5	59.5	70	N	-	-	59.5	Y	N	N
A2-2a-16	25	107.9	A2-2a	-	0	0	58.7	52.2	8.4	0	59.6	59.6	70	N	-	-	59.6	Y	N	N
A2-2a-16	26	110.7	A2-2a	-	0	0	59	52.2	8.4	0	59.8	59.8	70	N	-	-	59.8	Y	N	N
A2-2a-16	27	113.5	A2-2a	-	0	0	59.3	52.1	8.3	0	60.1	60.1	70	N	-	-	60.1	Y	N	N
A2-2a-16	28	116.3	A2-2a	-	0	0	59.6	52.1	8.3	0	60.3	60.3	70	N	-	-	60.3	Y	N	N
A2-2a-16	29	119.1	A2-2a	-	0	0	59.8	52.1	8.2	0	60.5	60.5	70	N	-	-	60.5	Y	N	N
A2-2a-16	30	121.9	A2-2a	-	0	0	60	52	8.2	0	60.6	60.6	70	N	-	-	60.6	Y	N	N
A2-2a-16	31	124.7	A2-2a	-	0	0	60.2	52	8.2	0	60.8	60.8	70	N	-	-	60.8	Y	N	N
A2-2a-16	32	127.5	A2-2a	-	0	0	60.4	52	8.1	0	60.9	60.9	70	N	-	-	60.9	Y	N	N
A2-2a-16	33	130.3	A2-2a	-	0	0	60.5	52	8.1	0	61.1	61.1	70	N	-	-	61.1	Y	N	N
A2-2a-16	34	133.1	A2-2a	-	0	0	60.7	52	8.1	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A2-2a-16	35	135.9	A2-2a	-	0	0	60.8	52	8	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A2-2a-16	36	138.7	A2-2a	-	0	0	60.9	52	8	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A2-2a-16	37	141.5	A2-2a	-	0	0	60.9	52.1	8	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A2-2a-16	38	144.3	A2-2a	-	0	0	60.9	52.1	7.9	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A2-2a-16	39	147.1	A2-2a	-	0	0	60.9	52.3	7.9	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A2-2a-17	1	47.2	A2-2a	-	15.5	0	58	38.3	0	0	58	58.0	70	N	-	-	42.5	Y	N	N
A2-2a-17	2	50	A2-2a	-	15.5	0	58	38.8	0	0	58.1	58.1	70	N	-	-	42.6	Y	N	N
A2-2a-17	3	52.8	A2-2a	-	15.5	0	58	39.2	0	0	58	58.0	70	N	-	-	42.5	Y	N	N
A2-2a-17	4	55.6	A2-2a	-	15.5	0	57.9	39.4	0	0	58	58.0	70	N	-	-	42.5	Y	N	N
A2-2a-17	5	58.4	A2-2a	-	15.5	0	57.9	39.6	0	0	58	58.0	70	N	-	-	42.5	Y	N	N
A2-2a-17	6	61.2	A2-2a	-	15.5	0	57.9	39.8	0	0	57.9	57.9	70	N	-	-	42.4	Y	N	N
A2-2a-17	7	64	A2-2a	-	15.5	0	57.9	39.9	0	0	57.9	57.9	70	N	-	-	42.4	Y	N	N
A2-2a-17	8	66.8	A2-2a	-	15.5	0	57.8	39.9	0	0	57.9	57.9	70	N	-	-	42.4	Y	N	N
A2-2a-17	9	69.6	A2-2a	-	15.5	0	57.7	39.9	0	0	57.8	57.8	70	N	-	-	42.3	Y	N	N
A2-2a-17	10	72.4	A2-2a	-	15.5	0	57.7	40	0	0	57.8	57.8	70	N	-	-	42.3	Y	N	N
A2-2a-17	11	75.2	A2-2a	-	15.5	0	57.7	40	0	0	57.7	57.7	70	N	-	-	42.2	Y	N	N
A2-2a-17	12	78	A2-2a	-	15.5	0	57.6	40.1	0	0	57.7	57.7	70	N	-	-	42.2	Y	N	N
A2-2a-17	13	80.8	A2-2a	-	15.5	0	57.5	40	0	0	57.6	57.6	70	N	-	-	42.1	Y	N	N
A2-2a-17	14	83.6	A2-2a	-	15.5	0	57.5	40	0	0	57.6	57.6	70	N	-	-	42.1	Y	N	N
A2-2a-17	15	86.4	A2-2a	-	15.4	0	57.4	40.1	0	0	57.5	57.5	70	N	-	-	42.1	Y	N	N
A2-2a-17	16	89.2	A2-2a	-	15.4	0	57.4	40.1	0	0	57.4	57.4	70	N	-	-	42.0	Y	N	N
A2-2a-17	17	92	A2-2a	-	15.4	0	57.3	40.2	0	0	57.4	57.4	70	N	-	-	42.0	Y	N	N
A2-2a-17	18	94.8	A2-2a	-	15.4	0	57.3	40.3	0	0	57.4	57.4	70	N	-	-	42.0	Y	N	N
A2-2a-17	19	97.6	A2-2a	-	15.4	0	57.2	40.3	0	0	57.3	57.3	70	N	-	-	41.9	Y	N	N
A2-2a-17	20	100.4	A2-2a	-	15.4	0	57.2	40.4	0	0	57.2	57.2	70	N	-	-	41.8	Y	N	N
A2-2a-17	21	103.2	A2-2a	-	15.4	0	57.1	40.5	0	0	57.2	57.2	70	N	-	-	41.8	Y	N	N
A2-2a-17	22	106	A2-2a	-	15.4	0	57	40.6	0	0	57.1	57.1	70	N	-	-	41.7	Y	N	N
A2-2a-17	23	108.8	A2-2a	-	15.4	0	57	40.7	0	0	57.1	57.1	70	N	-	-	41.7	Y	N	N
A2-2a-17	24	111.6	A2-2a	-	15.3	0	56.9	40.7	0	0	57	57.0	70	N	-	-	41.7	Y	N	N
A2-2a-17	25	114.4	A2-2a	-	15.3	0	56.8	40.8	0	0	56.9	56.9	70	N	-	-	41.6	Y	N	N
A2-2a-17	26	117.2	A2-2a	-	15.3	0	56.8	40.9	0	0	56.9	56.9	70	N	-	-	41.6	Y	N	N
A2-2a-17	27	120	A2-2a	-	15.3	0	56.7	41	0	0	56.9	56.9	70	N	-	-	41.6	Y	N	N
A2-2a-17	28	122.8	A2-2a	-	15.3	0	56.7	41.1	0	0	56.8	56.8	70	N	-	-	41.5	Y	N	N
A2-2a-17	29	125.6	A2-2a	-	15.3	0	56.6	41.2	0	0	56.7	56.7	70	N	-	-	41.4	Y	N	N
A2-2a-17	30	128.4	A2-2a	-	15.3	0	56.6	41.2	0	0	56.7	56.7	70	N	-	-	41.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
A2-2a-17	31	131.2	A2-2a	-	15.3	0	56.5	41.3	0	0	56.7	56.7	70	N	-	-	41.4	Y	N	N
A2-2a-17	32	134	A2-2a	-	15.2	0	56.5	41.2	0	0	56.6	56.6	70	N	-	-	41.4	Y	N	N
A2-2a-17	33	136.8	A2-2a	-	15.2	0	56.5	41.3	0	0	56.6	56.6	70	N	-	-	41.4	Y	N	N
A2-2a-17	34	139.6	A2-2a	-	15	0	56.5	41.3	0	0	56.6	56.6	70	N	-	-	41.6	Y	N	N
A2-2a-17	35	142.4	A2-2a	-	16.6	0	56.4	41.3	0	0	56.6	56.6	70	N	-	-	40.0	Y	N	N
A2-2a-17	36	145.2	A2-2a	-	18.5	0	56.4	41.4	0	0	56.6	56.6	70	N	-	-	38.1	Y	N	N
A2-2a-17	37	148	A2-2a	-	20.7	0	56.4	41.4	0	0	56.6	56.6	70	N	-	-	35.9	Y	N	N
A2-2a-17	38	150.8	A2-2a	-	23.1	0	56.4	41.4	0	0	56.6	56.6	70	N	-	-	33.5	Y	N	N
A2-2a-18	1	47.2	A2-2a	-	37.7	0	59.7	12.3	0	24.1	59.7	59.7	70	N	-	-	22.0	Y	N	N
A2-2a-18	2	50	A2-2a	-	38.2	0	59.7	12.3	0	25	59.7	59.7	70	N	-	-	21.5	Y	N	N
A2-2a-18	3	52.8	A2-2a	-	38.8	0	59.6	12.2	0	25	59.6	59.6	70	N	-	-	20.8	Y	N	N
A2-2a-18	4	55.6	A2-2a	-	39.1	0	59.5	12.2	0	25.4	59.5	59.6	70	N	-	-	20.5	Y	N	N
A2-2a-18	5	58.4	A2-2a	-	39.5	0	59.5	12.2	0	25.9	59.5	59.6	70	N	-	-	20.1	Y	N	N
A2-2a-18	6	61.2	A2-2a	-	39.7	0	59.4	12.2	0	26.6	59.4	59.5	70	N	-	-	19.8	Y	N	N
A2-2a-18	7	64	A2-2a	-	40.1	0	59.4	12.2	0	27.1	59.4	59.5	70	N	-	-	19.4	Y	N	N
A2-2a-18	8	66.8	A2-2a	-	40.5	0	59.3	12.2	0	27.5	59.3	59.4	70	N	-	-	18.9	Y	N	N
A2-2a-18	9	69.6	A2-2a	-	40.8	0	59.3	12.2	0	27.9	59.3	59.3	70	N	-	-	18.5	Y	N	N
A2-2a-18	10	72.4	A2-2a	-	41	0	59.2	12.2	0	28.3	59.2	59.3	70	N	-	-	18.3	Y	N	N
A2-2a-18	11	75.2	A2-2a	-	41.3	0	59.1	12.2	0	28.4	59.1	59.2	70	N	-	-	17.9	Y	N	N
A2-2a-18	12	78	A2-2a	-	41.5	0	59.1	12.2	0	28.6	59.1	59.1	70	N	-	-	17.6	Y	N	N
A2-2a-18	13	80.8	A2-2a	-	41.8	0	59	12.2	0	28.8	59	59.1	70	N	-	-	17.3	Y	N	N
A2-2a-18	14	83.6	A2-2a	-	42.1	0	58.9	12.1	0	29	58.9	59.0	70	N	-	-	16.9	Y	N	N
A2-2a-18	15	86.4	A2-2a	-	42.3	0	58.9	12.1	0	29.1	58.9	59.0	70	N	-	-	16.7	Y	N	N
A2-2a-18	16	89.2	A2-2a	-	42.5	0	58.8	12.1	0	29.3	58.8	58.9	70	N	-	-	16.4	Y	N	N
A2-2a-18	17	92	A2-2a	-	42.7	0	58.7	12.1	0	29.4	58.7	58.8	70	N	-	-	16.1	Y	N	N
A2-2a-18	18	94.8	A2-2a	-	42.8	0	58.6	12	0	29.4	58.6	58.8	70	N	-	-	16.0	Y	N	N
A2-2a-18	19	97.6	A2-2a	-	42.9	0	58.5	12	0	29.5	58.5	58.7	70	N	-	-	15.8	Y	N	N
A2-2a-18	20	100.4	A2-2a	-	43.1	0	58.5	12	0	29.6	58.5	58.6	70	N	-	-	15.5	Y	N	N
A2-2a-18	21	103.2	A2-2a	-	43.2	0	58.4	12	0	29.6	58.4	58.6	70	N	-	-	15.4	Y	N	N
A2-2a-18	22	106	A2-2a	-	43.2	0	58.4	12	0	29.7	58.4	58.5	70	N	-	-	15.3	Y	N	N
A2-2a-18	23	108.8	A2-2a	-	43.3	0	58.3	11.9	0	29.8	58.3	58.4	70	N	-	-	15.1	Y	N	N
A2-2a-18	24	111.6	A2-2a	-	43.3	0	58.2	11.9	0	29.8	58.2	58.3	70	N	-	-	15.0	Y	N	N
A2-2a-18	25	114.4	A2-2a	-	43.4	0	58.1	11.9	0	29.8	58.1	58.3	70	N	-	-	14.9	Y	N	N
A2-2a-18	26	117.2	A2-2a	-	43.4	0	58.1	11.9	0	29.9	58.1	58.3	70	N	-	-	14.9	Y	N	N
A2-2a-18	27	120	A2-2a	-	43.4	0	58	11.8	0	30	58	58.2	70	N	-	-	14.8	Y	N	N
A2-2a-18	28	122.8	A2-2a	-	43.4	0	58	11.8	0	30.1	58	58.1	70	N	-	-	14.7	Y	N	N
A2-2a-18	29	125.6	A2-2a	-	43.5	0	58	11.8	0	30	58	58.1	70	N	-	-	14.6	Y	N	N
A2-2a-18	30	128.4	A2-2a	-	43.4	0	57.9	11.7	0	30.1	58	58.1	70	N	-	-	14.7	Y	N	N
A2-2a-18	31	131.2	A2-2a	-	43.4	0	58	11.7	0	30.2	58	58.1	70	N	-	-	14.7	Y	N	N
A2-2a-18	32	134	A2-2a	-	43.4	0	58	11.7	0	30.3	58	58.1	70	N	-	-	14.7	Y	N	N
A2-2a-18	33	136.8	A2-2a	-	43.4	0	58	11.6	0	30.3	58	58.2	70	N	-	-	14.8	Y	N	N
A2-2a-18	34	139.6	A2-2a	-	43.4	0	58	11.6	0	30.3	58	58.2	70	N	-	-	14.8	Y	N	N
A2-2a-18	35	142.4	A2-2a	-	43.4	0	58.1	12.3	0	30.4	58.1	58.2	70	N	-	-	14.8	Y	N	N
A2-2a-18	36	145.2	A2-2a	-	43.4	0	58.1	13.2	0	30.5	58.1	58.3	70	N	-	-	14.9	Y	N	N
A2-2a-18	37	148	A2-2a	-	43.4	0	58.2	14.4	0	30.7	58.2	58.3	70	N	-	-	14.9	Y	N	N
A2-2a-18	38	150.8	A2-2a	-	43.4	0	58.2	15.9	0	30.8	58.2	58.3	70	N	-	-	14.9	Y	N	N
A2-2a-19	1	47.2	A2-2a	-	0	0	58.1	64.3	0	5.2	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	2	50	A2-2a	-	0	0	58.6	64.2	0	6.7	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-19	3	52.8	A2-2a	-	0	0	58.8	64.2	0	8.5	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-19	4	55.6	A2-2a	-	0	0	58.9	64.1	0	10.6	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	5	58.4	A2-2a	-	0	0	59	64	0	12.9	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	6	61.2	A2-2a	-	0	0	59	63.9	0	15.5	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-19	7	64	A2-2a	-	0	0	58.9	63.8	0	17.6	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-19	8	66.8	A2-2a	-	0	0	58.9	63.7	0	19.8	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-19	9	69.6	A2-2a	-	0	0	58.9	63.6	0	22.4	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	10	72.4	A2-2a	-	0	0	59	63.5	0	25.6	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	11	75.2	A2-2a	-	0	0	59.2	63.4	0	26.7	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	12	78	A2-2a	-	0	0	59.7	63.3	0	27.1	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	13	80.8	A2-2a	-	0	0	60.4	63.2	0	27.4	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-19	14	83.6	A2-2a	-	0	0	61	63	0	27.5	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-19	15	86.4	A2-2a	-	0	0	61.3	62.9	0	27.8	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	16	89.2	A2-2a	-	0	0	61.4	62.8	0	27.9	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	17	92	A2-2a	-	0	0	61.6	62.7	0	28.1	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	18	94.8	A2-2a	-	0	0	61.7	62.6	0	28.2	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	19	97.6	A2-2a	-	0	0	61.8	62.5	0	28.2	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-19	20	100.4	A2-2a	-	0	0	61.9	62.4	0	28.3	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-19	21	103.2	A2-2a	-	0	0	61.9	62.3	0	28.5	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-19	22	106	A2-2a	-	0	0	61.9	62.2	0	28.5	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-19	23	108.8	A2-2a	-	0	0	61.9	62.1	0	28.6	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-19	24	111.6	A2-2a	-	0	0	61.8	62	0	28.7	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-19	25	114.4	A2-2a	-	0	0	61.8	61.9	0	28.8	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-19	26	117.2	A2-2a	-	0	0	61.8	61.8	0	28.8	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	27	120	A2-2a	-	0	0	61.9	61.7	0	28.8	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	28	122.8	A2-2a	-	0	0	61.9	61.6	0	28.9	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-19	29	125.6	A2-2a	-	0	0	61.9	61.5	0	29	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-19	30	128.4	A2-2a	-	0	0	61.8	61.4	0	29	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-19	31	131.2	A2-2a	-	0	0	61.8	61.3	0	29.1	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-19	32	134	A2-2a	-	0	0	61.8	61.2	0	29.1	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-19	33	136.8	A2-2a	-	0	0	61.9	61.1	0	29.1	64.5	64.5	70	N	-	-	64.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]					New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)				
A2-2a-19	34	139.6	A2-2a	-	0	0	61.8	61.1	0	29.2	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-19	35	142.4	A2-2a	-	0	0	61.9	61	0	29.3	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-19	36	145.2	A2-2a	-	0	0	62	60.9	0	29.3	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-19	37	148	A2-2a	-	0	0	62	60.8	0	29.4	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-19	38	150.8	A2-2a	-	0	0	62.1	60.7	0	29.5	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-20	1	47.2	A2-2a	-	0	0	47	66	51.3	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-20	2	50	A2-2a	-	0	0	46.9	66	51.4	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-20	3	52.8	A2-2a	-	0	0	46.8	65.9	51.4	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-20	4	55.6	A2-2a	-	0	0	46.8	65.8	51.2	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-20	5	58.4	A2-2a	-	0	0	46.7	65.7	51	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-20	6	61.2	A2-2a	-	0	0	46.6	65.7	50.7	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-20	7	64	A2-2a	-	0	0	46.6	65.6	50.5	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-20	8	66.8	A2-2a	-	0	0	46.5	65.5	50.2	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-20	9	69.6	A2-2a	-	0	0	46.4	65.3	50	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-20	10	72.4	A2-2a	-	0	0	46.3	65.2	49.8	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-20	11	75.2	A2-2a	-	0	0	46.2	65.1	49.6	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-20	12	78	A2-2a	-	0	0	46.1	65	49.3	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-20	13	80.8	A2-2a	-	0	0	46.1	64.9	49.1	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-20	14	83.6	A2-2a	-	0	0	46	64.8	49	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-20	15	86.4	A2-2a	-	0	0	45.9	64.7	48.7	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-20	16	89.2	A2-2a	-	0	0	45.8	64.6	48.6	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-20	17	92	A2-2a	-	0	0	45.7	64.4	48.4	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-20	18	94.8	A2-2a	-	0	0	45.6	64.3	48.2	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-20	19	97.6	A2-2a	-	0	0	45.5	64.2	48.2	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-20	20	100.4	A2-2a	-	0	0	45.4	64.2	48	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-20	21	103.2	A2-2a	-	0	0	45.3	64	47.8	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-20	22	106	A2-2a	-	0	0	45.2	63.9	47.7	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-20	23	108.8	A2-2a	-	0	0	45.2	63.8	47.6	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-20	24	111.6	A2-2a	-	0	0	45.1	63.7	47.4	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-20	25	114.4	A2-2a	-	0	0	45	63.6	47.3	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-20	26	117.2	A2-2a	-	0	0	44.9	63.5	47.2	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-20	27	120	A2-2a	-	0	0	44.8	63.4	47.1	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-20	28	122.8	A2-2a	-	0	0	44.7	63.3	47	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-20	29	125.6	A2-2a	-	0	0	44.6	63.2	46.9	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2a-20	30	128.4	A2-2a	-	0	0	44.5	63.1	46.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-20	31	131.2	A2-2a	-	0	0	44.5	63	46.7	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2a-20	32	134	A2-2a	-	0	0	44.4	63	46.6	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
A2-2a-20	33	136.8	A2-2a	-	0	0	44.3	62.9	46.5	0	63	63.0	70	N	-	-	63.0	Y	N	N
A2-2a-20	34	139.6	A2-2a	-	0	0	44.2	62.8	46.4	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
A2-2a-20	35	142.4	A2-2a	-	0	0	44.1	62.7	46.3	0	62.8	62.8	70	N	-	-	62.8	Y	N	N
A2-2a-20	36	145.2	A2-2a	-	0	0	44.1	62.6	46.2	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
A2-2a-20	37	148	A2-2a	-	0	0	44	62.5	46.2	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
A2-2a-20	38	150.8	A2-2a	-	0	0	43.9	62.4	46.1	0	62.6	62.6	70	N	-	-	62.6	Y	N	N
A2-2a-21	1	47.2	A2-2a	-	0	0	52.8	64.5	16.3	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-21	2	50	A2-2a	-	0	0	55.4	64.6	16.3	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-21	3	52.8	A2-2a	-	0	0	56.3	64.5	16.2	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-21	4	55.6	A2-2a	-	0	0	56.4	64.5	16.2	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-21	5	58.4	A2-2a	-	0	0	56.5	64.5	16.2	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-21	6	61.2	A2-2a	-	0	0	56.4	64.4	16.1	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-21	7	64	A2-2a	-	0	0	56.4	64.4	16.1	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-21	8	66.8	A2-2a	-	0	0	56.4	64.3	16	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-21	9	69.6	A2-2a	-	0	0	56.3	64.2	16	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-21	10	72.4	A2-2a	-	0	0	56.3	64.1	15.9	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-21	11	75.2	A2-2a	-	0	0	56.2	64.1	15.9	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-21	12	78	A2-2a	-	0	0	56.2	64	15.8	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-21	13	80.8	A2-2a	-	0	0	56.1	63.9	15.8	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-21	14	83.6	A2-2a	-	0	0	56.1	63.8	15.7	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-21	15	86.4	A2-2a	-	0	0	56	63.7	15.7	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-21	16	89.2	A2-2a	-	0	0	55.9	63.6	15.6	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-21	17	92	A2-2a	-	0	0	55.9	63.5	15.6	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-21	18	94.8	A2-2a	-	0	0	55.8	63.4	15.5	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-21	19	97.6	A2-2a	-	0	0	55.8	63.3	15.5	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-21	20	100.4	A2-2a	-	0	0	55.7	63.3	15.4	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-21	21	103.2	A2-2a	-	0	0	55.6	63.2	15.3	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-21	22	106	A2-2a	-	0	0	55.6	63.1	15.3	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-21	23	108.8	A2-2a	-	0	0	55.5	63	15.2	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-21	24	111.6	A2-2a	-	0	0	55.5	62.9	15.2	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-21	25	114.4	A2-2a	-	0	0	55.4	62.8	15.2	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-21	26	117.2	A2-2a	-	0	0	55.3	62.7	15.1	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-21	27	120	A2-2a	-	0	0	55.3	62.6	15	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2a-21	28	122.8	A2-2a	-	0	0	55.2	62.6	15	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-21	29	125.6	A2-2a	-	0	0	55.2	62.5	14.9	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2a-21	30	128.4	A2-2a	-	0	0	55.1	62.4	14.9	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
A2-2a-21	31	131.2	A2-2a	-	0	0	55.1	62.3	14.8	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
A2-2a-21	32	134	A2-2a	-	0	0	55	62.2	14.7	0	63	63.0	70	N	-	-	63.0	Y	N	N
A2-2a-21	33	136.8	A2-2a	-	0	0	55	62.1	14.9	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
A2-2a-21	34	139.6	A2-2a	-	0	0	54.9	62.1	15.1	0	62.8	62.8	70	N	-	-	62.8	Y	N	N
A2-2a-21	35	142.4	A2-2a	-	0	0	54.8	62	15.4	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
A2-2a-21	36	145.2	A2-2a	-	0	0	54.8	61.9	15.9	0	62.7	62.7	70	N	-	-	62.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-21	37	148	A2-2a	-	0	0	54.7	61.8	16.4	0	62.6	62.6	70	N	-	-	62.6	Y	N	N
A2-2a-21	38	150.8	A2-2a	-	0	0	54.7	61.7	17.1	0	62.5	62.5	70	N	-	-	62.5	Y	N	N
A2-2a-22	1	35.2	A2-2a	-	0	0	59.6	64	0	3.6	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-22	2	38	A2-2a	-	0	0	59.8	66.2	0	3.6	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2a-22	3	40.8	A2-2a	-	0	0	59.8	66.2	0	3.6	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2a-22	4	43.6	A2-2a	-	0	0	59.8	66	0	3.6	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-22	5	46.4	A2-2a	-	0	0	59.8	65.7	0	3.6	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-22	6	49.2	A2-2a	-	0	0	59.8	65.6	0	3.6	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-22	7	52	A2-2a	-	0	0	59.8	65.4	0	3.6	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-22	8	54.8	A2-2a	-	0	0	59.7	65.1	0	3.6	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-22	9	57.6	A2-2a	-	0	0	59.7	64.9	0	3.6	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-22	10	60.4	A2-2a	-	0	0	59.7	64.7	0	3.6	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-22	11	63.2	A2-2a	-	0	0	59.7	64.5	0	3.6	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-22	12	66	A2-2a	-	0	0	59.6	64.3	0	3.6	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-22	13	68.8	A2-2a	-	0	0	59.6	64.1	0	3.5	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-22	14	71.6	A2-2a	-	0	0	59.6	63.9	0	3.5	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-22	15	74.4	A2-2a	-	0	0	59.6	63.7	0	3.5	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-22	16	77.2	A2-2a	-	0	0	59.5	63.5	0	3.5	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-22	17	80	A2-2a	-	0	0	59.5	63.4	0	3.5	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-22	18	82.8	A2-2a	-	0	0	59.5	63.2	0	3.5	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-22	19	85.6	A2-2a	-	0	0	59.4	63.1	0	3.5	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-22	20	88.4	A2-2a	-	0	0	59.4	62.9	0	3.5	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-22	21	91.2	A2-2a	-	0	0	59.3	62.8	0	3.5	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-22	22	94	A2-2a	-	0	0	59.3	62.6	0	3.5	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-22	23	96.8	A2-2a	-	0	0	59.3	62.5	0	3.4	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-22	24	99.6	A2-2a	-	0	0	59.2	62.4	0	3.4	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-22	25	102.4	A2-2a	-	0	0	59.2	62.2	0	3.4	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-22	26	105.2	A2-2a	-	0	0	59.1	62.1	0	3.4	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-22	27	108	A2-2a	-	0	0	59.1	62	0	3.4	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-22	28	110.8	A2-2a	-	0	0	59	61.9	0	3.4	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-22	29	113.6	A2-2a	-	0	0	59	61.8	0	3.4	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-22	30	116.4	A2-2a	-	0	0	58.9	61.6	0	3.4	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-22	31	119.2	A2-2a	-	0	0	58.9	61.5	0	3.3	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2a-22	32	122	A2-2a	-	0	0	58.8	61.4	0	3.3	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-22	33	124.8	A2-2a	-	0	0	58.8	61.3	0	3.4	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-22	34	127.6	A2-2a	-	0	0	58.7	61.2	0	3.4	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2a-22	35	130.4	A2-2a	-	0	0	58.7	61.1	0	3.4	63.1	63.1	70	N	-	-	63.1	Y	N	N
A2-2a-22	36	133.2	A2-2a	-	0	0	58.7	61	0	3.4	63	63.0	70	N	-	-	63.0	Y	N	N
A2-2a-22	37	136	A2-2a	-	0	0	58.6	60.9	0	3.4	62.9	62.9	70	N	-	-	62.9	Y	N	N
A2-2a-22	38	138.8	A2-2a	-	0	0	58.6	60.8	0	3.3	62.9	62.9	70	N	-	-	62.9	Y	N	N
A2-2a-22	39	141.6	A2-2a	-	0	0	58.5	60.7	0	3.3	62.8	62.8	70	N	-	-	62.8	Y	N	N
A2-2a-22	40	144.4	A2-2a	-	0	0	58.5	60.7	0	3.6	62.7	62.7	70	N	-	-	62.7	Y	N	N
A2-2a-23	1	35.2	A2-2a	-	0	0	59.3	65.1	0	3.5	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-23	2	38	A2-2a	-	0	0	59.9	67.5	0	3.6	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-23	3	40.8	A2-2a	-	0	0	59.9	67.4	0	3.6	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-23	4	43.6	A2-2a	-	0	0	59.9	67.2	0	3.6	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-23	5	46.4	A2-2a	-	0	0	59.9	66.9	0	3.5	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-23	6	49.2	A2-2a	-	0	0	59.9	66.6	0	3.5	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-23	7	52	A2-2a	-	0	0	59.9	66.4	0	3.5	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-23	8	54.8	A2-2a	-	0	0	59.9	66.2	0	3.5	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2a-23	9	57.6	A2-2a	-	0	0	59.8	65.9	0	3.5	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-23	10	60.4	A2-2a	-	0	0	59.8	65.7	0	3.5	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-23	11	63.2	A2-2a	-	0	0	59.8	65.5	0	3.5	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-23	12	66	A2-2a	-	0	0	59.8	65.2	0	3.5	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-23	13	68.8	A2-2a	-	0	0	59.7	65	0	3.5	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-23	14	71.6	A2-2a	-	0	0	59.7	64.8	0	3.5	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-23	15	74.4	A2-2a	-	0	0	59.7	64.6	0	3.5	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-23	16	77.2	A2-2a	-	0	0	59.6	64.4	0	3.6	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-23	17	80	A2-2a	-	0	0	59.6	64.2	0	3.6	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-23	18	82.8	A2-2a	-	0	0	59.5	64.1	0	3.6	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-23	19	85.6	A2-2a	-	0	0	59.5	64	0	3.5	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-23	20	88.4	A2-2a	-	0	0	59.5	63.8	0	3.5	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-23	21	91.2	A2-2a	-	0	0	59.4	63.6	0	3.5	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-23	22	94	A2-2a	-	0	0	59.4	63.5	0	3.5	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-23	23	96.8	A2-2a	-	0	0	59.3	63.3	0	3.5	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-23	24	99.6	A2-2a	-	0	0	59.3	63.2	0	3.5	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-23	25	102.4	A2-2a	-	0	0	59.3	63.1	0	3.5	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-23	26	105.2	A2-2a	-	0	0	59.2	62.9	0	3.5	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-23	27	108	A2-2a	-	0	0	59.2	62.8	0	3.5	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-23	28	110.8	A2-2a	-	0	0	59.1	62.7	0	3.4	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-23	29	113.6	A2-2a	-	0	0	59.1	62.6	0	3.4	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-23	30	116.4	A2-2a	-	0	0	59	62.5	0	3.4	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-23	31	119.2	A2-2a	-	0	0	59	62.3	0	3.4	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-23	32	122	A2-2a	-	0	0	59	62.2	0	3.4	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-23	33	124.8	A2-2a	-	0	0	58.9	62.1	0	3.4	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-23	34	127.6	A2-2a	-	0	0	58.9	62	0	3.4	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-23	35	130.4	A2-2a	-	0	0	58.8	61.9	0	3.3	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-23	36	133.2	A2-2a	-	0	0	58.8	61.8	0	3.3	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-23	37	136	A2-2a	-	0	0	58.7	61.7	0	3.3	63.5	63.5	70	N	-	-	63.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-23	38	138.8	A2-2a	-	0	0	58.7	61.6	0	3.3	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2a-23	39	141.6	A2-2a	-	0	0	58.6	61.5	0	3.3	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-23	40	144.4	A2-2a	-	0	0	58.6	61.4	0	3.7	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2a-24	1	35.2	A2-2a	-	0	0	59.5	66.4	0	3.2	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-24	2	38	A2-2a	-	0	0	60.1	67.5	0	3.5	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-24	3	40.8	A2-2a	-	0	0	60	67.2	0	3.5	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2a-24	4	43.6	A2-2a	-	0	0	60	67	0	3.5	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-24	5	46.4	A2-2a	-	0	0	60	66.7	0	3.5	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-24	6	49.2	A2-2a	-	0	0	60	66.4	0	3.5	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-24	7	52	A2-2a	-	0	0	60	66.1	0	3.5	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-24	8	54.8	A2-2a	-	0	0	60	65.8	0	3.5	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-24	9	57.6	A2-2a	-	0	0	59.9	65.6	0	3.6	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-24	10	60.4	A2-2a	-	0	0	59.9	65.3	0	3.6	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-24	11	63.2	A2-2a	-	0	0	59.9	65.1	0	3.6	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-24	12	66	A2-2a	-	0	0	59.8	64.9	0	3.6	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-24	13	68.8	A2-2a	-	0	0	59.8	64.7	0	3.6	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-24	14	71.6	A2-2a	-	0	0	59.8	64.4	0	3.6	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-24	15	74.4	A2-2a	-	0	0	59.7	64.2	0	3.5	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-24	16	77.2	A2-2a	-	0	0	59.7	64	0	3.5	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-24	17	80	A2-2a	-	0	0	59.7	63.9	0	3.5	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-24	18	82.8	A2-2a	-	0	0	59.6	63.7	0	3.5	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-24	19	85.6	A2-2a	-	0	0	59.6	63.5	0	3.5	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-24	20	88.4	A2-2a	-	0	0	59.6	63.4	0	3.5	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-24	21	91.2	A2-2a	-	0	0	59.5	63.2	0	3.5	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-24	22	94	A2-2a	-	0	0	59.5	63.1	0	3.5	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-24	23	96.8	A2-2a	-	0	0	59.4	62.9	0	3.5	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-24	24	99.6	A2-2a	-	0	0	59.4	62.8	0	3.5	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-24	25	102.4	A2-2a	-	0	0	59.3	62.7	0	3.4	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-24	26	105.2	A2-2a	-	0	0	59.3	62.5	0	3.4	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-24	27	108	A2-2a	-	0	0	59.2	62.4	0	3.4	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-24	28	110.8	A2-2a	-	0	0	59.2	62.3	0	3.4	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-24	29	113.6	A2-2a	-	0	0	59.1	62.1	0	3.4	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-24	30	116.4	A2-2a	-	0	0	59.1	62.1	0	3.4	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-24	31	119.2	A2-2a	-	0	0	59	61.9	0	3.4	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-24	32	122	A2-2a	-	0	0	59	61.8	0	3.4	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-24	33	124.8	A2-2a	-	0	0	58.9	61.7	0	3.3	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-24	34	127.6	A2-2a	-	0	0	58.9	61.6	0	3.3	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2a-24	35	130.4	A2-2a	-	0	0	58.9	61.5	0	3.3	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2a-24	36	133.2	A2-2a	-	0	0	58.8	61.4	0	3.3	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2a-24	37	136	A2-2a	-	0	0	58.8	61.3	0	3.3	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2a-24	38	138.8	A2-2a	-	0	0	58.7	61.2	0	3.3	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2a-24	39	141.6	A2-2a	-	0	0	58.7	61.1	0	3.2	63.1	63.1	70	N	-	-	63.1	Y	N	N
A2-2a-24	40	144.4	A2-2a	-	0	0	58.6	61.1	0	3.6	63	63.0	70	N	-	-	63.0	Y	N	N
A2-2a-25	1	35.2	A2-2a	-	0	0	0	66.2	56.2	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-25	2	38	A2-2a	-	0	0	0	71.6	58.3	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
A2-2a-25	3	40.8	A2-2a	-	0	0	0	71.5	58	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2a-25	4	43.6	A2-2a	-	0	0	0	71.2	57.6	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2a-25	5	46.4	A2-2a	-	0	0	0	70.8	57.3	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2a-25	6	49.2	A2-2a	-	0	0	0	70.5	56.9	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2a-25	7	52	A2-2a	-	0	0	0	70.1	56.6	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2a-25	8	54.8	A2-2a	-	0	0	0	69.8	56.4	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2a-25	9	57.6	A2-2a	-	0	0	0	69.5	56.1	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2a-25	10	60.4	A2-2a	-	0	0	0	69.2	55.9	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2a-25	11	63.2	A2-2a	-	0	0	0	68.9	55.7	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2a-25	12	66	A2-2a	-	0	0	0	68.7	55.5	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-25	13	68.8	A2-2a	-	0	0	0	68.4	55.3	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2a-25	14	71.6	A2-2a	-	0	0	0	68.2	55.2	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2a-25	15	74.4	A2-2a	-	0	0	0	67.9	55	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-25	16	77.2	A2-2a	-	0	0	0	67.7	54.9	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-25	17	80	A2-2a	-	0	0	0	67.5	54.7	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-25	18	82.8	A2-2a	-	0	0	0	67.3	54.6	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-25	19	85.6	A2-2a	-	0	0	0	67.1	54.5	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-25	20	88.4	A2-2a	-	0	0	0	66.9	54.3	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-25	21	91.2	A2-2a	-	0	0	0	66.7	54.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-25	22	94	A2-2a	-	0	0	0	66.6	54.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-25	23	96.8	A2-2a	-	0	0	0	66.4	54	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-25	24	99.6	A2-2a	-	0	0	0	66.2	53.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-25	25	102.4	A2-2a	-	0	0	0	66.1	53.8	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-25	26	105.2	A2-2a	-	0	0	0	66	53.7	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-25	27	108	A2-2a	-	0	0	0	65.8	53.6	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-25	28	110.8	A2-2a	-	0	0	0	65.7	53.5	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-25	29	113.6	A2-2a	-	0	0	0	65.5	53.4	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-25	30	116.4	A2-2a	-	0	0	0	65.4	53.3	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-25	31	119.2	A2-2a	-	0	0	0	65.3	53.2	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-25	32	122	A2-2a	-	0	0	0	65.2	53.1	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-25	33	124.8	A2-2a	-	0	0	0	65	53	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-25	34	127.6	A2-2a	-	0	0	0	64.9	53	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-25	35	130.4	A2-2a	-	0	0	0	64.8	52.9	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-25	36	133.2	A2-2a	-	0	0	0	64.7	52.8	0	65	65.0	70	N	-	-	65.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
ID	Floor	Floor Level (mPD)				RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]				C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						dB (A)													
A2-2a-25	37	136	A2-2a	-	0	0	0	64.6	52.7	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-25	38	138.8	A2-2a	-	0	0	0	64.5	52.6	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-25	39	141.6	A2-2a	-	0	0	0	64.4	52.6	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-25	40	144.4	A2-2a	-	0	0	0	64.3	52.5	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-26	1	35.2	A2-2a	-	0	0	0	67.5	54.5	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-26	2	38	A2-2a	-	0	0	0	72.2	56.4	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2a-26	3	40.8	A2-2a	-	0	0	0	72.3	56.7	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
A2-2a-26	4	43.6	A2-2a	-	0	0	0	72	56.7	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
A2-2a-26	5	46.4	A2-2a	-	0	0	0	71.6	56.5	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2a-26	6	49.2	A2-2a	-	0	0	0	71.2	56.3	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2a-26	7	52	A2-2a	-	0	0	0	70.9	56	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2a-26	8	54.8	A2-2a	-	0	0	0	70.6	55.8	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2a-26	9	57.6	A2-2a	-	0	0	0	70.3	55.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2a-26	10	60.4	A2-2a	-	0	0	0	70	55.4	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2a-26	11	63.2	A2-2a	-	0	0	0	69.7	55.2	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2a-26	12	66	A2-2a	-	0	0	0	69.5	55	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2a-26	13	68.8	A2-2a	-	0	0	0	69.2	54.9	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2a-26	14	71.6	A2-2a	-	0	0	0	69	54.7	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2a-26	15	74.4	A2-2a	-	0	0	0	68.8	54.6	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-26	16	77.2	A2-2a	-	0	0	0	68.5	54.4	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2a-26	17	80	A2-2a	-	0	0	0	68.3	54.3	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2a-26	18	82.8	A2-2a	-	0	0	0	68.1	54.2	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2a-26	19	85.6	A2-2a	-	0	0	0	68	54	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-26	20	88.4	A2-2a	-	0	0	0	67.8	53.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2a-26	21	91.2	A2-2a	-	0	0	0	67.6	53.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-26	22	94	A2-2a	-	0	0	0	67.4	53.7	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-26	23	96.8	A2-2a	-	0	0	0	67.3	53.6	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-26	24	99.6	A2-2a	-	0	0	0	67.1	53.5	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-26	25	102.4	A2-2a	-	0	0	0	67	53.4	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-26	26	105.2	A2-2a	-	0	0	0	66.9	53.3	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-26	27	108	A2-2a	-	0	0	0	66.7	53.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-26	28	110.8	A2-2a	-	0	0	0	66.6	53.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-26	29	113.6	A2-2a	-	0	0	0	66.4	53	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-26	30	116.4	A2-2a	-	0	0	0	66.3	52.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-26	31	119.2	A2-2a	-	0	0	0	66.2	52.9	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-26	32	122	A2-2a	-	0	0	0	66.1	52.8	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-26	33	124.8	A2-2a	-	0	0	0	65.9	52.7	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-26	34	127.6	A2-2a	-	0	0	0	65.8	52.6	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-26	35	130.4	A2-2a	-	0	0	0	65.7	52.5	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-26	36	133.2	A2-2a	-	0	0	0	65.6	52.5	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-26	37	136	A2-2a	-	0	0	0	65.5	52.4	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-26	38	138.8	A2-2a	-	0	0	0	65.4	52.3	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-26	39	141.6	A2-2a	-	0	0	0	65.3	52.3	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-26	40	144.4	A2-2a	-	0	0	0	65.2	52.2	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-27	1	35.2	A2-2a	-	0	0	0	69.5	53.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2a-27	2	38	A2-2a	-	0	0	0	71.9	54.6	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
A2-2a-27	3	40.8	A2-2a	-	0	0	0	71.9	54.6	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2a-27	4	43.6	A2-2a	-	0	0	0	71.7	54.4	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2a-27	5	46.4	A2-2a	-	0	0	0	71.3	54.2	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2a-27	6	49.2	A2-2a	-	0	0	0	71	54.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2a-27	7	52	A2-2a	-	0	0	0	70.7	54	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A2-2a-27	8	54.8	A2-2a	-	0	0	0	70.3	53.8	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2a-27	9	57.6	A2-2a	-	0	0	0	70	53.7	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2a-27	10	60.4	A2-2a	-	0	0	0	69.8	53.5	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2a-27	11	63.2	A2-2a	-	0	0	0	69.5	53.5	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2a-27	12	66	A2-2a	-	0	0	0	69.2	53.3	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2a-27	13	68.8	A2-2a	-	0	0	0	69	53.2	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2a-27	14	71.6	A2-2a	-	0	0	0	68.7	53.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-27	15	74.4	A2-2a	-	0	0	0	68.5	53	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2a-27	16	77.2	A2-2a	-	0	0	0	68.3	52.9	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2a-27	17	80	A2-2a	-	0	0	0	68.1	52.8	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-27	18	82.8	A2-2a	-	0	0	0	67.9	52.7	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-27	19	85.6	A2-2a	-	0	0	0	67.7	52.6	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-27	20	88.4	A2-2a	-	0	0	0	67.6	52.5	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-27	21	91.2	A2-2a	-	0	0	0	67.4	52.4	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-27	22	94	A2-2a	-	0	0	0	67.2	52.4	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2a-27	23	96.8	A2-2a	-	0	0	0	67	52.3	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-27	24	99.6	A2-2a	-	0	0	0	66.9	52.2	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2a-27	25	102.4	A2-2a	-	0	0	0	66.7	52.1	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-27	26	105.2	A2-2a	-	0	0	0	66.6	52.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-27	27	108	A2-2a	-	0	0	0	66.5	52	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-27	28	110.8	A2-2a	-	0	0	0	66.4	51.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-27	29	113.6	A2-2a	-	0	0	0	66.2	51.8	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-27	30	116.4	A2-2a	-	0	0	0	66.1	51.8	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-27	31	119.2	A2-2a	-	0	0	0	66	51.7	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-27	32	122	A2-2a	-	0	0	0	65.8	51.6	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-27	33	124.8	A2-2a	-	0	0	0	65.7	51.6	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-27	34	127.6	A2-2a	-	0	0	0	65.6	51.5	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-27	35	130.4	A2-2a	-	0	0	0	65.5	51.4	0	65.7	65.7	70	N	-	-	65.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-27	36	133.2	A2-2a	-	0	0	0	65.4	51.3	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-27	37	136	A2-2a	-	0	0	0	65.3	51.3	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-27	38	138.8	A2-2a	-	0	0	0	65.2	51.2	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-27	39	141.6	A2-2a	-	0	0	0	65.1	51.2	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-27	40	144.4	A2-2a	-	0	0	0	65	51.1	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-28	1	35.2	A2-2a	-	0	0	0	68	53.5	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-28	2	38	A2-2a	-	0	0	0	69.2	54	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2a-28	3	40.8	A2-2a	-	0	0	0	69.4	54.6	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2a-28	4	43.6	A2-2a	-	0	0	0	69.4	54.8	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2a-28	5	46.4	A2-2a	-	0	0	0	69.3	54.8	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2a-28	6	49.2	A2-2a	-	0	0	0	69	54.6	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2a-28	7	52	A2-2a	-	0	0	0	68.8	54.5	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-28	8	54.8	A2-2a	-	0	0	0	68.5	54.3	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2a-28	9	57.6	A2-2a	-	0	0	0	68.3	54.1	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2a-28	10	60.4	A2-2a	-	0	0	0	68	54	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-28	11	63.2	A2-2a	-	0	0	0	67.8	53.9	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-28	12	66	A2-2a	-	0	0	0	67.5	53.7	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-28	13	68.8	A2-2a	-	0	0	0	67.3	53.5	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-28	14	71.6	A2-2a	-	0	0	0	67.1	53.4	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-28	15	74.4	A2-2a	-	0	0	0	66.9	53.3	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2a-28	16	77.2	A2-2a	-	0	0	0	66.7	53.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-28	17	80	A2-2a	-	0	0	0	66.5	53	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-28	18	82.8	A2-2a	-	0	0	0	66.3	52.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-28	19	85.6	A2-2a	-	0	0	0	66.1	52.9	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-28	20	88.4	A2-2a	-	0	0	0	66	52.8	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-28	21	91.2	A2-2a	-	0	0	0	65.8	52.7	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-28	22	94	A2-2a	-	0	0	0	65.6	52.6	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-28	23	96.8	A2-2a	-	0	0	0	65.5	52.5	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-28	24	99.6	A2-2a	-	0	0	0	65.3	52.4	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-28	25	102.4	A2-2a	-	0	0	0	65.2	52.3	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-28	26	105.2	A2-2a	-	0	0	0	65.1	52.2	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-28	27	108	A2-2a	-	0	0	0	64.9	52.1	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-28	28	110.8	A2-2a	-	0	0	0	64.8	52.1	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-28	29	113.6	A2-2a	-	0	0	0	64.6	52	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-28	30	116.4	A2-2a	-	0	0	0	64.5	51.9	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-28	31	119.2	A2-2a	-	0	0	0	64.4	51.8	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-28	32	122	A2-2a	-	0	0	0	64.3	51.7	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-28	33	124.8	A2-2a	-	0	0	0	64.2	51.7	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-28	34	127.6	A2-2a	-	0	0	0	64	51.6	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2a-28	35	130.4	A2-2a	-	0	0	0	63.9	51.5	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-28	36	133.2	A2-2a	-	0	0	0	63.8	51.5	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-28	37	136	A2-2a	-	0	0	0	63.7	51.4	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-28	38	138.8	A2-2a	-	0	0	0	63.6	51.3	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-28	39	141.6	A2-2a	-	0	0	0	63.5	51.3	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-28	40	144.4	A2-2a	-	0	0	0	63.4	51.2	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-29	1	35.2	A2-2a	-	0	0	0	67.7	53.2	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-29	2	38	A2-2a	-	0	0	0	68.9	58.3	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2a-29	3	40.8	A2-2a	-	0	0	0	69.1	58.8	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2a-29	4	43.6	A2-2a	-	0	0	0	69.1	58.6	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2a-29	5	46.4	A2-2a	-	0	0	0	68.9	58.2	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2a-29	6	49.2	A2-2a	-	0	0	0	68.7	57.9	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2a-29	7	52	A2-2a	-	0	0	0	68.5	57.5	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2a-29	8	54.8	A2-2a	-	0	0	0	68.2	57.3	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2a-29	9	57.6	A2-2a	-	0	0	0	68	57	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2a-29	10	60.4	A2-2a	-	0	0	0	67.8	56.7	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-29	11	63.2	A2-2a	-	0	0	0	67.5	56.5	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-29	12	66	A2-2a	-	0	0	0	67.3	56.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-29	13	68.8	A2-2a	-	0	0	0	67.1	56.1	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2a-29	14	71.6	A2-2a	-	0	0	0	66.9	55.9	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-29	15	74.4	A2-2a	-	0	0	0	66.7	55.7	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-29	16	77.2	A2-2a	-	0	0	0	66.5	55.5	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-29	17	80	A2-2a	-	0	0	0	66.3	55.4	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-29	18	82.8	A2-2a	-	0	0	0	66.1	55.2	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-29	19	85.6	A2-2a	-	0	0	0	65.9	55	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-29	20	88.4	A2-2a	-	0	0	0	65.8	54.9	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-29	21	91.2	A2-2a	-	0	0	0	65.6	54.8	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-29	22	94	A2-2a	-	0	0	0	65.4	54.7	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-29	23	96.8	A2-2a	-	0	0	0	65.3	54.5	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-29	24	99.6	A2-2a	-	0	0	0	65.2	54.4	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-29	25	102.4	A2-2a	-	0	0	0	65	54.3	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-29	26	105.2	A2-2a	-	0	0	0	64.9	54.2	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-29	27	108	A2-2a	-	0	0	0	64.7	54	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-29	28	110.8	A2-2a	-	0	0	0	64.6	54	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-29	29	113.6	A2-2a	-	0	0	0	64.5	53.9	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-29	30	116.4	A2-2a	-	0	0	0	64.3	53.8	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-29	31	119.2	A2-2a	-	0	0	0	64.3	53.7	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-29	32	122	A2-2a	-	0	0	0	64.2	53.6	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-29	33	124.8	A2-2a	-	0	0	0	64	53.5	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2a-29	34	127.6	A2-2a	-	0	0	0	63.9	53.4	0	64.3	64.3	70	N	-	-	64.3	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-29	35	130.4	A2-2a	-	0	0	0	63.8	53.3	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-29	36	133.2	A2-2a	-	0	0	0	63.7	53.2	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-29	37	136	A2-2a	-	0	0	0	63.6	53.1	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-29	38	138.8	A2-2a	-	0	0	0	63.5	53.1	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-29	39	141.6	A2-2a	-	0	0	0	63.4	53	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-29	40	144.4	A2-2a	-	0	0	0	63.3	52.9	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-30	1	35.2	A2-2a	-	0	0	49.9	69.2	58	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2a-30	2	38	A2-2a	-	0	0	53	71.7	60	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2a-30	3	40.8	A2-2a	-	0	0	53.7	71.6	60	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2a-30	4	43.6	A2-2a	-	0	0	53.8	71.3	59.7	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2a-30	5	46.4	A2-2a	-	0	0	53.8	71	59.3	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2a-30	6	49.2	A2-2a	-	0	0	53.7	70.7	58.9	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2a-30	7	52	A2-2a	-	0	0	53.7	70.3	58.7	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2a-30	8	54.8	A2-2a	-	0	0	53.7	70	58.3	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2a-30	9	57.6	A2-2a	-	0	0	53.7	69.7	58.1	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2a-30	10	60.4	A2-2a	-	0	0	53.7	69.4	57.8	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2a-30	11	63.2	A2-2a	-	0	0	53.7	69.2	57.6	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2a-30	12	66	A2-2a	-	0	0	53.6	69	57.3	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2a-30	13	68.8	A2-2a	-	0	0	53.6	68.7	57.1	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2a-30	14	71.6	A2-2a	-	0	0	53.6	68.5	56.9	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-30	15	74.4	A2-2a	-	0	0	53.6	68.2	56.7	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2a-30	16	77.2	A2-2a	-	0	0	53.6	68.1	56.6	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2a-30	17	80	A2-2a	-	0	0	53.5	67.9	56.4	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2a-30	18	82.8	A2-2a	-	0	0	53.5	67.7	56.2	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-30	19	85.6	A2-2a	-	0	0	53.5	67.5	56.1	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-30	20	88.4	A2-2a	-	0	0	53.5	67.3	56	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-30	21	91.2	A2-2a	-	0	0	53.4	67.1	55.8	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-30	22	94	A2-2a	-	0	0	53.4	67	55.7	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2a-30	23	96.8	A2-2a	-	0	0	53.4	66.8	55.6	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-30	24	99.6	A2-2a	-	0	0	53.4	66.7	55.4	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-30	25	102.4	A2-2a	-	0	0	53.3	66.5	55.3	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-30	26	105.2	A2-2a	-	0	0	53.3	66.4	55.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-30	27	108	A2-2a	-	0	0	53.3	66.3	55.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-30	28	110.8	A2-2a	-	0	0	53.2	66.1	55	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-30	29	113.6	A2-2a	-	0	0	53.2	66	54.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-30	30	116.4	A2-2a	-	0	0	53.2	65.9	54.8	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-30	31	119.2	A2-2a	-	0	0	53.1	65.7	54.7	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-30	32	122	A2-2a	-	0	0	53.1	65.6	54.6	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-30	33	124.8	A2-2a	-	0	0	53.1	65.5	54.5	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-30	34	127.6	A2-2a	-	0	0	53	65.4	54.4	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-30	35	130.4	A2-2a	-	0	0	53	65.3	54.3	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-30	36	133.2	A2-2a	-	0	0	53	65.2	54.2	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-30	37	136	A2-2a	-	0	0	52.9	65	54.1	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-30	38	138.8	A2-2a	-	0	0	52.9	65	54.1	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-30	39	141.6	A2-2a	-	0	0	52.9	64.9	54	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-30	40	144.4	A2-2a	-	0	0	52.8	64.8	53.9	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-31	1	35.2	A2-2a	-	0	0	50.7	67.1	59.2	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-31	2	38	A2-2a	-	0	0	53.5	71.9	60.9	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2a-31	3	40.8	A2-2a	-	0	0	54.2	71.9	60.5	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2a-31	4	43.6	A2-2a	-	0	0	54.3	71.6	60.1	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2a-31	5	46.4	A2-2a	-	0	0	54.2	71.3	59.8	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2a-31	6	49.2	A2-2a	-	0	0	54.2	70.9	59.4	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2a-31	7	52	A2-2a	-	0	0	54.2	70.6	59.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2a-31	8	54.8	A2-2a	-	0	0	54.2	70.3	58.7	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2a-31	9	57.6	A2-2a	-	0	0	54.2	70	58.5	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2a-31	10	60.4	A2-2a	-	0	0	54.2	69.7	58.2	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2a-31	11	63.2	A2-2a	-	0	0	54.2	69.4	58	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2a-31	12	66	A2-2a	-	0	0	54.2	69.2	57.7	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2a-31	13	68.8	A2-2a	-	0	0	54.1	69	57.5	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2a-31	14	71.6	A2-2a	-	0	0	54.1	68.7	57.3	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2a-31	15	74.4	A2-2a	-	0	0	54.1	68.5	57.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-31	16	77.2	A2-2a	-	0	0	54.1	68.3	57	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2a-31	17	80	A2-2a	-	0	0	54.1	68.1	56.8	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2a-31	18	82.8	A2-2a	-	0	0	54	67.9	56.6	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2a-31	19	85.6	A2-2a	-	0	0	54	67.7	56.5	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-31	20	88.4	A2-2a	-	0	0	54	67.5	56.3	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2a-31	21	91.2	A2-2a	-	0	0	54	67.4	56.2	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2a-31	22	94	A2-2a	-	0	0	53.9	67.2	56	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2a-31	23	96.8	A2-2a	-	0	0	53.9	67.1	55.9	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-31	24	99.6	A2-2a	-	0	0	53.9	66.9	55.8	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2a-31	25	102.4	A2-2a	-	0	0	53.9	66.8	55.7	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2a-31	26	105.2	A2-2a	-	0	0	53.8	66.6	55.5	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-31	27	108	A2-2a	-	0	0	53.8	66.5	55.4	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-31	28	110.8	A2-2a	-	0	0	53.8	66.3	55.3	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-31	29	113.6	A2-2a	-	0	0	53.7	66.2	55.2	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-31	30	116.4	A2-2a	-	0	0	53.7	66.1	55.1	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-31	31	119.2	A2-2a	-	0	0	53.6	66	55	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-31	32	122	A2-2a	-	0	0	53.6	65.9	54.9	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-31	33	124.8	A2-2a	-	0	0	53.6	65.8	54.8	0	66.3	66.3	70	N	-	-	66.3	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2a-31	34	127.6	A2-2a	-	0	0	53.5	65.6	54.7	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-31	35	130.4	A2-2a	-	0	0	53.5	65.5	54.6	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-31	36	133.2	A2-2a	-	0	0	53.5	65.4	54.6	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-31	37	136	A2-2a	-	0	0	53.4	65.3	54.5	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-31	38	138.8	A2-2a	-	0	0	53.4	65.2	54.4	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-31	39	141.6	A2-2a	-	0	0	53.3	65.1	54.3	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-31	40	144.4	A2-2a	-	0	0	53.3	65	54.2	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-32	1	35.2	A2-2a	-	0	0	0	65.5	60.4	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2a-32	2	38	A2-2a	-	0	0	0	71.1	61.4	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
A2-2a-32	3	40.8	A2-2a	-	0	0	0	71	61	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2a-32	4	43.6	A2-2a	-	0	0	0	70.6	60.6	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2a-32	5	46.4	A2-2a	-	0	0	0	70.3	60.2	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2a-32	6	49.2	A2-2a	-	0	0	0	70	59.9	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2a-32	7	52	A2-2a	-	0	0	0	69.7	59.5	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2a-32	8	54.8	A2-2a	-	0	0	0	69.4	59.2	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2a-32	9	57.6	A2-2a	-	0	0	0	69.1	58.9	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2a-32	10	60.4	A2-2a	-	0	0	0	68.8	58.7	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2a-32	11	63.2	A2-2a	-	0	0	0	68.5	58.4	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2a-32	12	66	A2-2a	-	0	0	0	68.3	58.2	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2a-32	13	68.8	A2-2a	-	0	0	0	68	58	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2a-32	14	71.6	A2-2a	-	0	0	0	67.8	57.8	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-32	15	74.4	A2-2a	-	0	0	0	67.6	57.6	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2a-32	16	77.2	A2-2a	-	0	0	0	67.4	57.4	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-32	17	80	A2-2a	-	0	0	0	67.2	57.2	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-32	18	82.8	A2-2a	-	0	0	0	67	57.1	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2a-32	19	85.6	A2-2a	-	0	0	0	66.8	56.9	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-32	20	88.4	A2-2a	-	0	0	0	66.6	56.7	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2a-32	21	91.2	A2-2a	-	0	0	0	66.5	56.6	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2a-32	22	94	A2-2a	-	0	0	0	66.3	56.5	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-32	23	96.8	A2-2a	-	0	0	0	66.2	56.3	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-32	24	99.6	A2-2a	-	0	0	0	66	56.2	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2a-32	25	102.4	A2-2a	-	0	0	0	65.9	56.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-32	26	105.2	A2-2a	-	0	0	0	65.7	55.9	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2a-32	27	108	A2-2a	-	0	0	0	65.6	55.8	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-32	28	110.8	A2-2a	-	0	0	0	65.4	55.7	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2a-32	29	113.6	A2-2a	-	0	0	0	65.4	55.6	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-32	30	116.4	A2-2a	-	0	0	0	65.2	55.5	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2a-32	31	119.2	A2-2a	-	0	0	0	65.1	55.4	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-32	32	122	A2-2a	-	0	0	0	65	55.3	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-32	33	124.8	A2-2a	-	0	0	0	64.9	55.2	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2a-32	34	127.6	A2-2a	-	0	0	0	64.8	55.1	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-32	35	130.4	A2-2a	-	0	0	0	64.7	55	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-32	36	133.2	A2-2a	-	0	0	0	64.5	54.9	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-32	37	136	A2-2a	-	0	0	0	64.4	54.9	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2a-32	38	138.8	A2-2a	-	0	0	0	64.3	54.8	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-32	39	141.6	A2-2a	-	0	0	0	64.2	54.7	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-32	40	144.4	A2-2a	-	0	0	0	64.1	54.6	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-33	1	35.2	A2-2a	-	0	0	0	58.7	54.8	0	60.1	60.1	70	N	-	-	60.1	Y	N	N
A2-2a-33	2	38	A2-2a	-	0	0	0	65.3	60.5	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-33	3	40.8	A2-2a	-	0	0	0	67.4	60.8	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2a-33	4	43.6	A2-2a	-	0	0	0	68.1	60.5	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2a-33	5	46.4	A2-2a	-	0	0	0	68.1	60.3	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2a-33	6	49.2	A2-2a	-	0	0	0	68	60	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2a-33	7	52	A2-2a	-	0	0	0	67.9	59.8	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2a-33	8	54.8	A2-2a	-	0	0	0	67.6	59.6	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2a-33	9	57.6	A2-2a	-	0	0	0	67.4	59.3	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2a-33	10	60.4	A2-2a	-	0	0	0	67.2	59.1	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2a-33	11	63.2	A2-2a	-	0	0	0	67	58.9	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2a-33	12	66	A2-2a	-	0	0	0	66.8	58.7	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2a-33	13	68.8	A2-2a	-	0	0	0	66.6	58.5	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2a-33	14	71.6	A2-2a	-	0	0	0	66.4	58.3	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2a-33	15	74.4	A2-2a	-	0	0	0	66.2	58.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2a-33	16	77.2	A2-2a	-	0	0	0	66	57.9	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2a-33	17	80	A2-2a	-	0	0	0	65.8	57.8	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2a-33	18	82.8	A2-2a	-	0	0	0	65.7	57.6	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2a-33	19	85.6	A2-2a	-	0	0	0	65.5	57.4	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2a-33	20	88.4	A2-2a	-	0	0	0	65.3	57.3	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2a-33	21	91.2	A2-2a	-	0	0	0	65.2	57.2	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2a-33	22	94	A2-2a	-	0	0	0	65	57	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2a-33	23	96.8	A2-2a	-	0	0	0	64.9	56.9	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2a-33	24	99.6	A2-2a	-	0	0	0	64.7	56.8	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2a-33	25	102.4	A2-2a	-	0	0	0	64.6	56.6	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2a-33	26	105.2	A2-2a	-	0	0	0	64.4	56.5	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2a-33	27	108	A2-2a	-	0	0	0	64.3	56.4	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2a-33	28	110.8	A2-2a	-	0	0	0	64.2	56.3	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2a-33	29	113.6	A2-2a	-	0	0	0	64	56.2	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2a-33	30	116.4	A2-2a	-	0	0	0	63.9	56.1	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2a-33	31	119.2	A2-2a	-	0	0	0	63.8	56	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2a-33	32	122	A2-2a	-	0	0	0	63.7	55.9	0	64.4	64.4	70	N	-	-	64.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
ID	Floor	Floor Level (mPD)				RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]				C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						dB (A)													
A2-2a-33	33	124.8	A2-2a	-	0	0	0	63.6	55.8	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2a-33	34	127.6	A2-2a	-	0	0	0	63.4	55.7	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2a-33	35	130.4	A2-2a	-	0	0	0	63.3	55.6	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2a-33	36	133.2	A2-2a	-	0	0	0	63.3	55.5	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2a-33	37	136	A2-2a	-	0	0	0	63.1	55.4	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2a-33	38	138.8	A2-2a	-	0	0	0	63	55.3	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2a-33	39	141.6	A2-2a	-	0	0	0	62.9	55.2	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2a-33	40	144.4	A2-2a	-	0	0	0	62.8	55.2	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2b-1	1	42.5	A2-2b	-	13.8	0	29.2	65.6	56.2	0	66.1	66.1	70	N	-	-	52.3	Y	N	N
A2-2b-1	2	45.3	A2-2b	-	13.8	0	29.2	66.2	56.2	0	66.6	66.6	70	N	-	-	52.8	Y	N	N
A2-2b-1	3	48.1	A2-2b	-	13.8	0	29.2	66.2	56.1	0	66.6	66.6	70	N	-	-	52.8	Y	N	N
A2-2b-1	4	50.9	A2-2b	-	13.8	0	29.2	66	56	0	66.4	66.4	70	N	-	-	52.6	Y	N	N
A2-2b-1	5	53.7	A2-2b	-	13.8	0	29.2	65.8	55.8	0	66.2	66.2	70	N	-	-	52.4	Y	N	N
A2-2b-1	6	56.5	A2-2b	-	13.8	0	29.1	65.6	55.7	0	66	66.0	70	N	-	-	52.2	Y	N	N
A2-2b-1	7	59.3	A2-2b	-	13.8	0	29.1	65.5	55.5	0	65.9	65.9	70	N	-	-	52.1	Y	N	N
A2-2b-1	8	62.1	A2-2b	-	13.8	0	29.1	65.3	55.4	0	65.7	65.7	70	N	-	-	51.9	Y	N	N
A2-2b-1	9	64.9	A2-2b	-	13.8	0	29.1	65.1	55.3	0	65.5	65.5	70	N	-	-	51.7	Y	N	N
A2-2b-1	10	67.7	A2-2b	-	13.8	0	29.1	64.9	55.2	0	65.3	65.3	70	N	-	-	51.5	Y	N	N
A2-2b-1	11	70.5	A2-2b	-	13.8	0	29.1	64.7	55	0	65.2	65.2	70	N	-	-	51.4	Y	N	N
A2-2b-1	12	73.3	A2-2b	-	13.8	0	29.1	64.6	54.9	0	65	65.0	70	N	-	-	51.2	Y	N	N
A2-2b-1	13	76.1	A2-2b	-	13.8	0	29.1	64.4	54.8	0	64.8	64.8	70	N	-	-	51.0	Y	N	N
A2-2b-1	14	78.9	A2-2b	-	13.8	0	29.1	64.2	54.6	0	64.7	64.7	70	N	-	-	50.9	Y	N	N
A2-2b-1	15	81.7	A2-2b	-	13.7	0	29.1	64.1	54.5	0	64.5	64.5	70	N	-	-	50.8	Y	N	N
A2-2b-1	16	84.5	A2-2b	-	13.7	0	29.1	63.9	54.4	0	64.4	64.4	70	N	-	-	50.7	Y	N	N
A2-2b-1	17	87.3	A2-2b	-	13.7	0	29	63.7	54.3	0	64.2	64.2	70	N	-	-	50.5	Y	N	N
A2-2b-1	18	90.1	A2-2b	-	13.7	0	29	63.6	54.1	0	64.1	64.1	70	N	-	-	50.4	Y	N	N
A2-2b-1	19	92.9	A2-2b	-	13.7	0	29.1	63.5	54	0	63.9	63.9	70	N	-	-	50.2	Y	N	N
A2-2b-1	20	95.7	A2-2b	-	13.7	0	29	63.4	53.9	0	63.8	63.8	70	N	-	-	50.1	Y	N	N
A2-2b-1	21	98.5	A2-2b	-	13.7	0	29	63.2	53.8	0	63.7	63.7	70	N	-	-	50.0	Y	N	N
A2-2b-1	22	101.3	A2-2b	-	13.7	0	29	63.1	53.7	0	63.6	63.6	70	N	-	-	49.9	Y	N	N
A2-2b-1	23	104.1	A2-2b	-	13.7	0	29	62.9	53.6	0	63.4	63.4	70	N	-	-	49.7	Y	N	N
A2-2b-1	24	106.9	A2-2b	-	13.7	0	29	62.8	53.4	0	63.3	63.3	70	N	-	-	49.6	Y	N	N
A2-2b-1	25	109.7	A2-2b	-	13.7	0	29	62.7	53.3	0	63.2	63.2	70	N	-	-	49.5	Y	N	N
A2-2b-1	26	112.5	A2-2b	-	13.7	0	29	62.6	53.2	0	63.1	63.1	70	N	-	-	49.4	Y	N	N
A2-2b-1	27	115.3	A2-2b	-	13.6	0	29	62.5	53.1	0	63	63.0	70	N	-	-	49.4	Y	N	N
A2-2b-1	28	118.1	A2-2b	-	13.6	0	28.9	62.4	53	0	62.9	62.9	70	N	-	-	49.3	Y	N	N
A2-2b-1	29	120.9	A2-2b	-	13.6	0	28.9	62.3	52.9	0	62.8	62.8	70	N	-	-	49.2	Y	N	N
A2-2b-1	30	123.7	A2-2b	-	13.6	0	29	62.2	52.8	0	62.7	62.7	70	N	-	-	49.1	Y	N	N
A2-2b-1	31	126.5	A2-2b	-	13.6	0	28.9	62.1	52.7	0	62.6	62.6	70	N	-	-	49.0	Y	N	N
A2-2b-1	32	129.3	A2-2b	-	13.6	0	28.9	62	52.7	0	62.5	62.5	70	N	-	-	48.9	Y	N	N
A2-2b-1	33	132.1	A2-2b	-	13.6	0	28.9	61.9	52.6	0	62.4	62.4	70	N	-	-	48.8	Y	N	N
A2-2b-1	34	134.9	A2-2b	-	13.4	0	28.9	61.8	52.5	0	62.3	62.3	70	N	-	-	48.9	Y	N	N
A2-2b-1	35	137.7	A2-2b	-	13.5	0	28.9	61.7	52.4	0	62.2	62.2	70	N	-	-	48.7	Y	N	N
A2-2b-1	36	140.5	A2-2b	-	13.5	0	28.8	61.6	52.3	0	62.1	62.1	70	N	-	-	48.6	Y	N	N
A2-2b-1	37	143.3	A2-2b	-	14.3	0	28.9	61.5	52.2	0	62	62.0	70	N	-	-	47.7	Y	N	N
A2-2b-1	38	146.1	A2-2b	-	15.2	0	29	61.4	52.1	0	61.9	61.9	70	N	-	-	46.7	Y	N	N
A2-2b-2	1	42.5	A2-2b	-	0	0	48.7	72.7	62.2	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A2-2b-2	2	45.3	A2-2b	-	0	0	49	72.7	62.1	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A2-2b-2	3	48.1	A2-2b	-	0	0	49	72.4	62	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
A2-2b-2	4	50.9	A2-2b	-	0	0	48.9	72.1	61.9	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-2	5	53.7	A2-2b	-	0	0	48.9	71.9	61.8	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-2	6	56.5	A2-2b	-	0	0	48.9	71.6	61.8	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-2	7	59.3	A2-2b	-	0	0	48.9	71.3	61.7	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
A2-2b-2	8	62.1	A2-2b	-	0	0	48.9	71.1	61.5	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-2	9	64.9	A2-2b	-	0	0	48.9	70.9	61.4	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-2	10	67.7	A2-2b	-	0	0	48.9	70.7	61.3	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A2-2b-2	11	70.5	A2-2b	-	0	0	48.9	70.4	61.2	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2b-2	12	73.3	A2-2b	-	0	0	48.9	70.2	61.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A2-2b-2	13	76.1	A2-2b	-	0	0	48.9	70	61	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
A2-2b-2	14	78.9	A2-2b	-	0	0	48.9	69.8	60.8	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-2	15	81.7	A2-2b	-	0	0	48.9	69.7	60.7	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-2	16	84.5	A2-2b	-	0	0	48.8	69.5	60.6	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-2	17	87.3	A2-2b	-	0	0	48.8	69.3	60.5	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-2	18	90.1	A2-2b	-	0	0	48.8	69.2	60.5	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-2	19	92.9	A2-2b	-	0	0	48.8	69	60.4	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-2	20	95.7	A2-2b	-	0	0	48.8	68.9	60.3	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-2	21	98.5	A2-2b	-	0	0	48.8	68.7	60.2	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-2	22	101.3	A2-2b	-	0	0	48.8	68.6	60.2	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-2	23	104.1	A2-2b	-	0	0	48.7	68.4	60.1	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-2	24	106.9	A2-2b	-	0	0	48.7	68.3	60.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-2	25	109.7	A2-2b	-	0	0	48.7	68.2	60	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-2	26	112.5	A2-2b	-	0	0	48.7	68	60	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-2	27	115.3	A2-2b	-	0	0	48.7	67.9	59.9	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-2	28	118.1	A2-2b	-	0	0	48.7	67.8	59.8	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-2	29	120.9	A2-2b	-	0	0	48.6	67.7	59.7	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-2	30	123.7	A2-2b	-	0	0	48.6	67.6	59.7	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-2	31	126.5	A2-2b	-	0	0	48.6	67.5	59.6	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-2	32	129.3	A2-2b	-	0	0	48.6	67.4	59.5	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-2	33	132.1	A2-2b	-	0	0	48.6	67.3	59.4	0	68	68.0	70	N	-	-	68.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-2	34	134.9	A2-2b	-	0	0	48.5	67.1	59.3	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-2	35	137.7	A2-2b	-	0	0	48.5	67	59.2	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-2	36	140.5	A2-2b	-	0	0	48.5	67	59.2	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-2	37	143.3	A2-2b	-	0	0	48.5	66.9	59.1	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-2	38	146.1	A2-2b	-	0	0	48.4	66.8	59	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-3	1	42.5	A2-2b	-	0	0	0	72.1	62	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-3	2	45.3	A2-2b	-	0	0	0	72.3	61.9	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
A2-2b-3	3	48.1	A2-2b	-	0	0	0	72.1	61.9	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-3	4	50.9	A2-2b	-	0	0	0	71.8	61.8	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
A2-2b-3	5	53.7	A2-2b	-	0	0	0	71.6	61.7	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-3	6	56.5	A2-2b	-	0	0	0	71.3	61.6	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2b-3	7	59.3	A2-2b	-	0	0	0	71.1	61.5	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
A2-2b-3	8	62.1	A2-2b	-	0	0	0	70.8	61.4	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-3	9	64.9	A2-2b	-	0	0	0	70.6	61.2	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-3	10	67.7	A2-2b	-	0	0	0	70.4	61.1	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-3	11	70.5	A2-2b	-	0	0	0	70.2	61	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-3	12	73.3	A2-2b	-	0	0	0	70	60.9	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-3	13	76.1	A2-2b	-	0	0	0	69.8	60.8	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-3	14	78.9	A2-2b	-	0	0	0	69.6	60.7	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-3	15	81.7	A2-2b	-	0	0	0	69.4	60.6	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-3	16	84.5	A2-2b	-	0	0	0	69.2	60.5	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-3	17	87.3	A2-2b	-	0	0	0	69.1	60.4	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-3	18	90.1	A2-2b	-	0	0	0	68.9	60.3	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-3	19	92.9	A2-2b	-	0	0	0	68.7	60.2	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-3	20	95.7	A2-2b	-	0	0	0	68.6	60.2	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-3	21	98.5	A2-2b	-	0	0	0	68.4	60.1	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-3	22	101.3	A2-2b	-	0	0	0	68.3	60.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-3	23	104.1	A2-2b	-	0	0	0	68.1	60.1	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-3	24	106.9	A2-2b	-	0	0	0	68	60	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-3	25	109.7	A2-2b	-	0	0	0	67.9	60	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-3	26	112.5	A2-2b	-	0	0	0	67.8	59.9	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-3	27	115.3	A2-2b	-	0	0	0	67.6	59.9	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-3	28	118.1	A2-2b	-	0	0	0	67.5	59.8	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-3	29	120.9	A2-2b	-	0	0	0	67.4	59.7	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-3	30	123.7	A2-2b	-	0	0	0	67.3	59.6	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-3	31	126.5	A2-2b	-	0	0	0	67.2	59.5	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-3	32	129.3	A2-2b	-	0	0	0	67.1	59.5	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-3	33	132.1	A2-2b	-	0	0	0	67	59.4	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-3	34	134.9	A2-2b	-	0	0	0	66.9	59.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-3	35	137.7	A2-2b	-	0	0	0	66.8	59.2	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-3	36	140.5	A2-2b	-	0	0	0	66.7	59.1	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-3	37	143.3	A2-2b	-	0	0	0	66.6	59.1	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-3	38	146.1	A2-2b	-	0	0	0	66.5	59	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-4	1	42.5	A2-2b	-	0	0	0	72.4	61.8	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
A2-2b-4	2	45.3	A2-2b	-	0	0	0	72.5	61.8	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
A2-2b-4	3	48.1	A2-2b	-	0	0	0	72.3	61.7	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
A2-2b-4	4	50.9	A2-2b	-	0	0	0	72	61.6	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-4	5	53.7	A2-2b	-	0	0	0	71.7	61.6	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
A2-2b-4	6	56.5	A2-2b	-	0	0	0	71.4	61.5	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
A2-2b-4	7	59.3	A2-2b	-	0	0	0	71.2	61.4	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-4	8	62.1	A2-2b	-	0	0	0	71	61.3	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-4	9	64.9	A2-2b	-	0	0	0	70.7	61.1	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A2-2b-4	10	67.7	A2-2b	-	0	0	0	70.5	61.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2b-4	11	70.5	A2-2b	-	0	0	0	70.3	60.9	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A2-2b-4	12	73.3	A2-2b	-	0	0	0	70.1	60.8	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
A2-2b-4	13	76.1	A2-2b	-	0	0	0	69.9	60.7	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-4	14	78.9	A2-2b	-	0	0	0	69.7	60.6	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-4	15	81.7	A2-2b	-	0	0	0	69.6	60.5	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-4	16	84.5	A2-2b	-	0	0	0	69.4	60.4	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-4	17	87.3	A2-2b	-	0	0	0	69.2	60.3	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-4	18	90.1	A2-2b	-	0	0	0	69.1	60.3	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-4	19	92.9	A2-2b	-	0	0	0	68.9	60.2	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-4	20	95.7	A2-2b	-	0	0	0	68.7	60.1	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-4	21	98.5	A2-2b	-	0	0	0	68.6	60.1	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-4	22	101.3	A2-2b	-	0	0	0	68.5	60	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-4	23	104.1	A2-2b	-	0	0	0	68.3	60	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-4	24	106.9	A2-2b	-	0	0	0	68.2	60	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-4	25	109.7	A2-2b	-	0	0	0	68.1	59.9	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-4	26	112.5	A2-2b	-	0	0	0	67.9	59.9	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-4	27	115.3	A2-2b	-	0	0	0	67.8	59.8	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-4	28	118.1	A2-2b	-	0	0	0	67.7	59.7	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-4	29	120.9	A2-2b	-	0	0	0	67.6	59.7	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-4	30	123.7	A2-2b	-	0	0	0	67.5	59.6	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-4	31	126.5	A2-2b	-	0	0	0	67.4	59.5	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-4	32	129.3	A2-2b	-	0	0	0	67.2	59.4	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-4	33	132.1	A2-2b	-	0	0	0	67.1	59.4	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-4	34	134.9	A2-2b	-	0	0	0	67	59.3	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-4	35	137.7	A2-2b	-	0	0	0	66.9	59.2	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-4	36	140.5	A2-2b	-	0	0	0	66.8	59.1	0	67.5	67.5	70	N	-	-	67.5	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
A2-2b-4	37	143.3	A2-2b	-	0	0	0	66.7	59.1	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-4	38	146.1	A2-2b	-	0	0	0	66.6	59	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-5	1	42.5	A2-2b	-	0	0	0	67.7	58.6	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-5	2	45.3	A2-2b	-	0	0	0	69.9	58.6	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-5	3	48.1	A2-2b	-	0	0	0	69.9	58.5	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-5	4	50.9	A2-2b	-	0	0	0	69.8	58.4	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-5	5	53.7	A2-2b	-	0	0	0	69.5	58.3	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-5	6	56.5	A2-2b	-	0	0	0	69.3	58.2	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-5	7	59.3	A2-2b	-	0	0	0	69.1	58.2	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-5	8	62.1	A2-2b	-	0	0	0	68.8	58.1	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-5	9	64.9	A2-2b	-	0	0	0	68.6	58	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-5	10	67.7	A2-2b	-	0	0	0	68.4	57.9	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-5	11	70.5	A2-2b	-	0	0	0	68.2	57.8	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-5	12	73.3	A2-2b	-	0	0	0	68	57.7	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-5	13	76.1	A2-2b	-	0	0	0	67.8	57.7	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-5	14	78.9	A2-2b	-	0	0	0	67.6	57.6	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-5	15	81.7	A2-2b	-	0	0	0	67.5	57.5	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-5	16	84.5	A2-2b	-	0	0	0	67.3	57.4	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-5	17	87.3	A2-2b	-	0	0	0	67.1	57.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-5	18	90.1	A2-2b	-	0	0	0	67	57.2	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-5	19	92.9	A2-2b	-	0	0	0	66.8	57.2	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-5	20	95.7	A2-2b	-	0	0	0	66.7	57.1	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-5	21	98.5	A2-2b	-	0	0	0	66.5	57.1	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-5	22	101.3	A2-2b	-	0	0	0	66.4	57.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-5	23	104.1	A2-2b	-	0	0	0	66.3	57.1	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-5	24	106.9	A2-2b	-	0	0	0	66.1	57.1	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-5	25	109.7	A2-2b	-	0	0	0	66	57	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2b-5	26	112.5	A2-2b	-	0	0	0	65.9	57	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2b-5	27	115.3	A2-2b	-	0	0	0	65.7	57.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2b-5	28	118.1	A2-2b	-	0	0	0	65.6	57	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2b-5	29	120.9	A2-2b	-	0	0	0	65.5	57	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2b-5	30	123.7	A2-2b	-	0	0	0	65.4	56.9	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2b-5	31	126.5	A2-2b	-	0	0	0	65.3	56.9	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2b-5	32	129.3	A2-2b	-	0	0	0	65.2	56.8	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2b-5	33	132.1	A2-2b	-	0	0	0	65.1	56.7	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2b-5	34	134.9	A2-2b	-	0	0	0	65	56.6	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2b-5	35	137.7	A2-2b	-	0	0	0	64.9	56.6	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2b-5	36	140.5	A2-2b	-	0	0	0	64.8	56.5	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2b-5	37	143.3	A2-2b	-	0	0	0	64.7	56.5	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2b-5	38	146.1	A2-2b	-	0	0	0	64.6	56.4	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2b-6	1	42.5	A2-2b	-	0	0	0	65.6	59.2	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2b-6	2	45.3	A2-2b	-	0	0	0	69.4	59.3	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-6	3	48.1	A2-2b	-	0	0	0	70.1	59.2	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-6	4	50.9	A2-2b	-	0	0	0	69.9	59.2	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-6	5	53.7	A2-2b	-	0	0	0	69.8	59.1	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-6	6	56.5	A2-2b	-	0	0	0	69.6	59	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-6	7	59.3	A2-2b	-	0	0	0	69.3	59	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-6	8	62.1	A2-2b	-	0	0	0	69.1	58.9	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-6	9	64.9	A2-2b	-	0	0	0	68.9	58.8	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-6	10	67.7	A2-2b	-	0	0	0	68.8	59	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-6	11	70.5	A2-2b	-	0	0	0	69	60	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-6	12	73.3	A2-2b	-	0	0	0	69	59.9	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-6	13	76.1	A2-2b	-	0	0	0	68.9	59.8	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-6	14	78.9	A2-2b	-	0	0	0	68.7	59.7	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-6	15	81.7	A2-2b	-	0	0	0	68.6	59.7	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-6	16	84.5	A2-2b	-	0	0	0	68.4	59.6	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-6	17	87.3	A2-2b	-	0	0	0	68.2	59.5	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-6	18	90.1	A2-2b	-	0	0	0	68.1	59.4	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-6	19	92.9	A2-2b	-	0	0	0	67.9	59.3	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-6	20	95.7	A2-2b	-	0	0	0	67.8	59.2	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-6	21	98.5	A2-2b	-	0	0	0	67.6	59.2	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-6	22	101.3	A2-2b	-	0	0	0	67.5	59.1	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-6	23	104.1	A2-2b	-	0	0	0	67.4	59	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-6	24	106.9	A2-2b	-	0	0	0	67.3	59	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-6	25	109.7	A2-2b	-	0	0	0	67.1	58.9	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-6	26	112.5	A2-2b	-	0	0	0	67	58.8	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-6	27	115.3	A2-2b	-	0	0	0	66.9	58.8	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-6	28	118.1	A2-2b	-	0	0	0	66.8	58.8	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-6	29	120.9	A2-2b	-	0	0	0	66.6	58.7	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-6	30	123.7	A2-2b	-	0	0	0	66.5	58.6	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-6	31	126.5	A2-2b	-	0	0	0	66.4	58.5	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-6	32	129.3	A2-2b	-	0	0	0	66.3	58.5	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-6	33	132.1	A2-2b	-	0	0	0	66.2	58.4	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-6	34	134.9	A2-2b	-	0	0	0	66.1	58.3	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-6	35	137.7	A2-2b	-	0	0	0	66	58.3	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-6	36	140.5	A2-2b	-	0	0	0	65.9	58.2	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-6	37	143.3	A2-2b	-	0	0	0	65.8	58.1	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2b-6	38	146.1	A2-2b	-	0	0	0	65.7	58	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2b-7	1	42.5	A2-2b	-	0	0	43.5	66.3	59.2	0	67.1	67.1	70	N	-	-	67.1	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-7	2	45.3	A2-2b	-	0	0	44.6	68.9	59.2	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-7	3	48.1	A2-2b	-	0	0	45	69.1	59.2	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-7	4	50.9	A2-2b	-	0	0	45.2	69	59.1	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-7	5	53.7	A2-2b	-	0	0	45.2	68.7	59.1	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-7	6	56.5	A2-2b	-	0	0	45.2	68.5	59.1	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-7	7	59.3	A2-2b	-	0	0	45.2	68.3	59	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-7	8	62.1	A2-2b	-	0	0	45.2	68.1	59	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-7	9	64.9	A2-2b	-	0	0	45.2	67.9	58.9	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-7	10	67.7	A2-2b	-	0	0	45.2	67.6	58.9	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-7	11	70.5	A2-2b	-	0	0	45.2	67.5	58.8	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-7	12	73.3	A2-2b	-	0	0	45.1	67.3	58.8	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-7	13	76.1	A2-2b	-	0	0	45.1	67.1	58.7	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-7	14	78.9	A2-2b	-	0	0	45.1	66.9	58.7	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-7	15	81.7	A2-2b	-	0	0	45.1	66.7	58.6	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-7	16	84.5	A2-2b	-	0	0	45.1	66.5	58.5	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-7	17	87.3	A2-2b	-	0	0	45.1	66.4	58.5	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-7	18	90.1	A2-2b	-	0	0	45.1	66.3	58.4	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-7	19	92.9	A2-2b	-	0	0	45.1	66.1	58.3	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-7	20	95.7	A2-2b	-	0	0	45.1	66	58.3	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-7	21	98.5	A2-2b	-	0	0	45.1	65.8	58.2	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-7	22	101.3	A2-2b	-	0	0	45.1	65.7	58.1	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2b-7	23	104.1	A2-2b	-	0	0	45	65.6	58.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2b-7	24	106.9	A2-2b	-	0	0	45	65.4	58	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2b-7	25	109.7	A2-2b	-	0	0	45	65.3	57.9	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2b-7	26	112.5	A2-2b	-	0	0	45	65.2	57.9	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2b-7	27	115.3	A2-2b	-	0	0	45	65.1	57.8	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2b-7	28	118.1	A2-2b	-	0	0	45	64.9	57.7	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2b-7	29	120.9	A2-2b	-	0	0	45	64.8	57.7	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2b-7	30	123.7	A2-2b	-	0	0	45	64.7	57.6	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2b-7	31	126.5	A2-2b	-	0	0	44.9	64.6	57.5	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2b-7	32	129.3	A2-2b	-	0	0	44.9	64.5	57.5	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2b-7	33	132.1	A2-2b	-	0	0	44.9	64.4	57.4	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2b-7	34	134.9	A2-2b	-	0	0	44.9	64.3	57.3	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2b-7	35	137.7	A2-2b	-	0	0	44.9	64.2	57.3	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2b-7	36	140.5	A2-2b	-	0	0	44.9	64.1	57.2	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2b-7	37	143.3	A2-2b	-	0	0	44.8	64	57.2	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2b-7	38	146.1	A2-2b	-	0	0	44.8	63.9	57.1	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2b-8	1	42.5	A2-2b	-	0	0	47.2	71.6	59.4	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
A2-2b-8	2	45.3	A2-2b	-	0	0	47.7	72.3	59.4	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-8	3	48.1	A2-2b	-	0	0	48	72.1	59.4	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-8	4	50.9	A2-2b	-	0	0	48.1	71.9	59.3	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
A2-2b-8	5	53.7	A2-2b	-	0	0	48.2	71.6	59.3	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
A2-2b-8	6	56.5	A2-2b	-	0	0	48.2	71.4	59.2	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-8	7	59.3	A2-2b	-	0	0	48.2	71.1	59.2	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-8	8	62.1	A2-2b	-	0	0	48.2	70.9	59.1	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A2-2b-8	9	64.9	A2-2b	-	0	0	48.2	70.7	59.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2b-8	10	67.7	A2-2b	-	0	0	48.2	70.4	59	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-8	11	70.5	A2-2b	-	0	0	48.2	70.2	59	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-8	12	73.3	A2-2b	-	0	0	48.1	70	58.9	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-8	13	76.1	A2-2b	-	0	0	48.1	69.8	58.9	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-8	14	78.9	A2-2b	-	0	0	48.1	69.6	58.8	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-8	15	81.7	A2-2b	-	0	0	48.1	69.5	58.7	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-8	16	84.5	A2-2b	-	0	0	48.1	69.3	58.7	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-8	17	87.3	A2-2b	-	0	0	48.1	69.1	58.6	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-8	18	90.1	A2-2b	-	0	0	48.1	69	58.6	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-8	19	92.9	A2-2b	-	0	0	48.1	68.8	58.5	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-8	20	95.7	A2-2b	-	0	0	48.1	68.6	58.4	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-8	21	98.5	A2-2b	-	0	0	48.1	68.5	58.4	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-8	22	101.3	A2-2b	-	0	0	48.1	68.4	58.3	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-8	23	104.1	A2-2b	-	0	0	48	68.2	58.2	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-8	24	106.9	A2-2b	-	0	0	48	68.1	58.2	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-8	25	109.7	A2-2b	-	0	0	48	68	58.1	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-8	26	112.5	A2-2b	-	0	0	48	67.8	58	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-8	27	115.3	A2-2b	-	0	0	48	67.7	58	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-8	28	118.1	A2-2b	-	0	0	48	67.6	57.9	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-8	29	120.9	A2-2b	-	0	0	48	67.5	57.8	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-8	30	123.7	A2-2b	-	0	0	48	67.3	57.7	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-8	31	126.5	A2-2b	-	0	0	47.9	67.2	57.7	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-8	32	129.3	A2-2b	-	0	0	47.9	67.1	57.6	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-8	33	132.1	A2-2b	-	0	0	47.9	67	57.5	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-8	34	134.9	A2-2b	-	0	0	47.9	66.9	57.5	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-8	35	137.7	A2-2b	-	0	0	47.9	66.8	57.4	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-8	36	140.5	A2-2b	-	0	0	47.9	66.7	57.3	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-8	37	143.3	A2-2b	-	0	0	47.9	66.7	57.3	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-8	38	146.1	A2-2b	-	0	0	47.8	66.6	57.2	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-9	1	42.5	A2-2b	-	0	0	47.6	71.3	59.2	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-9	2	45.3	A2-2b	-	0	0	47.9	72	59.2	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-9	3	48.1	A2-2b	-	0	0	48.1	71.9	59.2	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
A2-2b-9	4	50.9	A2-2b	-	0	0	48.2	71.6	59.1	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-9	5	53.7	A2-2b	-	0	0	48.3	71.4	59.1	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-9	6	56.5	A2-2b	-	0	0	48.3	71.1	59.1	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-9	7	59.3	A2-2b	-	0	0	48.3	70.9	59	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A2-2b-9	8	62.1	A2-2b	-	0	0	48.3	70.6	59	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-9	9	64.9	A2-2b	-	0	0	48.3	70.4	58.9	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-9	10	67.7	A2-2b	-	0	0	48.3	70.2	58.9	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-9	11	70.5	A2-2b	-	0	0	48.3	69.9	58.8	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-9	12	73.3	A2-2b	-	0	0	48.3	69.7	58.8	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-9	13	76.1	A2-2b	-	0	0	48.3	69.5	58.7	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-9	14	78.9	A2-2b	-	0	0	48.3	69.4	58.6	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-9	15	81.7	A2-2b	-	0	0	48.3	69.2	58.6	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-9	16	84.5	A2-2b	-	0	0	48.3	69	58.5	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-9	17	87.3	A2-2b	-	0	0	48.3	68.8	58.5	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-9	18	90.1	A2-2b	-	0	0	48.3	68.7	58.4	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-9	19	92.9	A2-2b	-	0	0	48.2	68.5	58.4	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-9	20	95.7	A2-2b	-	0	0	48.2	68.4	58.3	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-9	21	98.5	A2-2b	-	0	0	48.2	68.2	58.2	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-9	22	101.3	A2-2b	-	0	0	48.2	68.1	58.2	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-9	23	104.1	A2-2b	-	0	0	48.2	67.9	58.1	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-9	24	106.9	A2-2b	-	0	0	48.2	67.8	58	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-9	25	109.7	A2-2b	-	0	0	48.2	67.7	58	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-9	26	112.5	A2-2b	-	0	0	48.2	67.5	57.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-9	27	115.3	A2-2b	-	0	0	48.2	67.4	57.8	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-9	28	118.1	A2-2b	-	0	0	48.1	67.3	57.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-9	29	120.9	A2-2b	-	0	0	48.1	67.2	57.7	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-9	30	123.7	A2-2b	-	0	0	48.1	67.1	57.6	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-9	31	126.5	A2-2b	-	0	0	48.1	67	57.6	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-9	32	129.3	A2-2b	-	0	0	48.1	66.9	57.5	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-9	33	132.1	A2-2b	-	0	0	48.1	66.8	57.4	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-9	34	134.9	A2-2b	-	0	0	48.1	66.7	57.4	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-9	35	137.7	A2-2b	-	0	0	48	66.6	57.3	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-9	36	140.5	A2-2b	-	0	0	48	66.5	57.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-9	37	143.3	A2-2b	-	0	0	48	66.4	57.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-9	38	146.1	A2-2b	-	0	0	48	66.3	57.1	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-10	1	42.5	A2-2b	-	0	0	19.5	71.8	58.4	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-10	2	45.3	A2-2b	-	0	0	19.5	72.3	58.3	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-10	3	48.1	A2-2b	-	0	0	19.5	72.1	58.3	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-10	4	50.9	A2-2b	-	0	0	19.5	71.8	58.3	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-10	5	53.7	A2-2b	-	0	0	19.5	71.5	58.2	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2b-10	6	56.5	A2-2b	-	0	0	19.5	71.2	58.2	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-10	7	59.3	A2-2b	-	0	0	19.5	71	58.2	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A2-2b-10	8	62.1	A2-2b	-	0	0	19.5	70.7	58.1	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-10	9	64.9	A2-2b	-	0	0	19.5	70.5	58.1	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-10	10	67.7	A2-2b	-	0	0	19.5	70.3	58	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-10	11	70.5	A2-2b	-	0	0	19.5	70.1	58	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-10	12	73.3	A2-2b	-	0	0	19.5	69.8	57.9	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-10	13	76.1	A2-2b	-	0	0	19.5	69.6	57.9	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-10	14	78.9	A2-2b	-	0	0	19.5	69.5	57.9	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-10	15	81.7	A2-2b	-	0	0	19.5	69.3	57.8	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-10	16	84.5	A2-2b	-	0	0	19.4	69.1	57.8	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-10	17	87.3	A2-2b	-	0	0	19.4	68.9	57.7	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-10	18	90.1	A2-2b	-	0	0	19.4	68.8	57.7	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-10	19	92.9	A2-2b	-	0	0	19.4	68.6	57.6	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-10	20	95.7	A2-2b	-	0	0	19.4	68.5	57.6	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-10	21	98.5	A2-2b	-	0	0	19.4	68.3	57.5	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-10	22	101.3	A2-2b	-	0	0	19.4	68.2	57.5	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-10	23	104.1	A2-2b	-	0	0	19.4	68	57.4	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-10	24	106.9	A2-2b	-	0	0	19.4	67.9	57.3	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-10	25	109.7	A2-2b	-	0	0	19.3	67.8	57.3	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-10	26	112.5	A2-2b	-	0	0	19.3	67.6	57.2	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-10	27	115.3	A2-2b	-	0	0	19.3	67.5	57.1	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-10	28	118.1	A2-2b	-	0	0	19.3	67.4	57.1	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-10	29	120.9	A2-2b	-	0	0	19.3	67.3	57	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-10	30	123.7	A2-2b	-	0	0	19.3	67.2	56.9	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-10	31	126.5	A2-2b	-	0	0	19.3	67	56.9	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-10	32	129.3	A2-2b	-	0	0	19.3	66.9	56.8	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-10	33	132.1	A2-2b	-	0	0	19.2	66.8	56.7	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-10	34	134.9	A2-2b	-	0	0	19.2	66.7	56.7	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-10	35	137.7	A2-2b	-	0	0	19.2	66.6	56.6	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-10	36	140.5	A2-2b	-	0	0	19.2	66.5	56.5	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-10	37	143.3	A2-2b	-	0	0	19.7	66.4	56.5	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-10	38	146.1	A2-2b	-	0	0	21.6	66.3	56.4	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-11	1	42.5	A2-2b	-	0	0	0	67.8	21.3	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-11	2	45.3	A2-2b	-	0	0	0	68.5	21.3	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-11	3	48.1	A2-2b	-	0	0	0	68.5	21.3	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-11	4	50.9	A2-2b	-	0	0	0	68.4	21.3	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-11	5	53.7	A2-2b	-	0	0	0	68.2	21.3	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-11	6	56.5	A2-2b	-	0	0	0	68	21.3	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-11	7	59.3	A2-2b	-	0	0	0	67.8	21.3	0	67.8	67.8	70	N	-	-	67.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-11	8	62.1	A2-2b	-	0	0	0	67.6	21.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-11	9	64.9	A2-2b	-	0	0	0	67.4	21.2	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-11	10	67.7	A2-2b	-	0	0	0	67.2	21.2	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-11	11	70.5	A2-2b	-	0	0	0	67	21.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-11	12	73.3	A2-2b	-	0	0	0	66.8	21.2	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-11	13	76.1	A2-2b	-	0	0	0	66.6	21.1	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-11	14	78.9	A2-2b	-	0	0	0	66.4	21.1	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2b-11	15	81.7	A2-2b	-	0	0	0	66.3	21.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2b-11	16	84.5	A2-2b	-	0	0	0	66.1	21.1	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2b-11	17	87.3	A2-2b	-	0	0	0	66	21	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2b-11	18	90.1	A2-2b	-	0	0	0	65.8	21	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2b-11	19	92.9	A2-2b	-	0	0	0	65.7	21	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2b-11	20	95.7	A2-2b	-	0	0	0	65.5	20.9	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2b-11	21	98.5	A2-2b	-	0	0	0	65.4	20.9	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2b-11	22	101.3	A2-2b	-	0	0	0	65.2	20.9	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2b-11	23	104.1	A2-2b	-	0	0	0	65.1	20.8	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2b-11	24	106.9	A2-2b	-	0	0	0	65	20.8	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2b-11	25	109.7	A2-2b	-	0	0	0	64.9	20.8	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2b-11	26	112.5	A2-2b	-	0	0	0	64.7	20.7	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2b-11	27	115.3	A2-2b	-	0	0	0	64.6	20.7	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A2-2b-11	28	118.1	A2-2b	-	0	0	0	64.5	20.7	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2b-11	29	120.9	A2-2b	-	0	0	0	64.4	20.6	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2b-11	30	123.7	A2-2b	-	0	0	0	64.3	20.6	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A2-2b-11	31	126.5	A2-2b	-	0	0	0	64.2	20.6	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2b-11	32	129.3	A2-2b	-	0	0	0	64.1	20.5	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2b-11	33	132.1	A2-2b	-	0	0	0	64	20.5	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2b-11	34	134.9	A2-2b	-	0	0	0	63.9	20.5	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2b-11	35	137.7	A2-2b	-	0	0	0	63.8	20.4	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2b-11	36	140.5	A2-2b	-	0	0	0	63.7	20.4	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2b-11	37	143.3	A2-2b	-	0	0	0	63.6	20.4	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2b-11	38	146.1	A2-2b	-	0	0	0	63.5	20.4	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2b-12	1	36.5	A2-2b	-	0	0	0	64.6	54	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2b-12	2	39.3	A2-2b	-	0	0	0	67.3	54.2	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-12	3	42.1	A2-2b	-	0	0	0	67.7	54.2	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-12	4	44.9	A2-2b	-	0	0	0	67.6	54.2	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-12	5	47.7	A2-2b	-	0	0	0	67.4	54.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-12	6	50.5	A2-2b	-	0	0	0	67.2	54.2	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-12	7	53.3	A2-2b	-	0	0	0	67	54.2	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-12	8	56.1	A2-2b	-	0	0	0	66.9	54.2	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-12	9	58.9	A2-2b	-	0	0	0	66.7	54.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-12	10	61.7	A2-2b	-	0	0	0	66.4	54.2	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-12	11	64.5	A2-2b	-	0	0	0	66.2	54.1	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2b-12	12	67.3	A2-2b	-	0	0	0	66.1	54.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2b-12	13	70.1	A2-2b	-	0	0	0	65.9	54.1	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2b-12	14	72.9	A2-2b	-	0	0	0	65.7	54.1	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2b-12	15	75.7	A2-2b	-	0	0	0	65.5	54.1	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2b-12	16	78.5	A2-2b	-	0	0	0	65.3	54.1	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2b-12	17	81.3	A2-2b	-	0	0	0	65.2	54	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A2-2b-12	18	84.1	A2-2b	-	0	0	0	65	54	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2b-12	19	86.9	A2-2b	-	0	0	0	64.8	54	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2b-12	20	89.7	A2-2b	-	0	0	0	64.7	54	0	65	65.0	70	N	-	-	65.0	Y	N	N
A2-2b-12	21	92.5	A2-2b	-	0	0	0	64.5	54	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A2-2b-12	22	95.3	A2-2b	-	0	0	0	64.4	54	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A2-2b-12	23	98.1	A2-2b	-	0	0	0	64.3	54.1	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A2-2b-12	24	100.9	A2-2b	-	0	0	0	64.1	54.2	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A2-2b-12	25	103.7	A2-2b	-	0	0	0	64	54.3	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2b-12	26	106.5	A2-2b	-	0	0	0	63.9	54.4	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A2-2b-12	27	109.3	A2-2b	-	0	0	0	63.7	54.3	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A2-2b-12	28	112.1	A2-2b	-	0	0	0	63.6	54.4	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A2-2b-12	29	114.9	A2-2b	-	0	0	0	63.5	54.3	0	64	64.0	70	N	-	-	64.0	Y	N	N
A2-2b-12	30	117.7	A2-2b	-	0	0	0	63.4	54.3	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A2-2b-12	31	120.5	A2-2b	-	0	0	0	63.3	54.2	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A2-2b-12	32	123.3	A2-2b	-	0	0	0	63.2	54.2	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A2-2b-12	33	126.1	A2-2b	-	0	0	0	63.1	54.2	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A2-2b-12	34	128.9	A2-2b	-	0	0	0	63	54.2	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2b-12	35	131.7	A2-2b	-	0	0	0	62.9	54.2	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A2-2b-12	36	134.5	A2-2b	-	0	0	0	62.8	54.2	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A2-2b-12	37	137.3	A2-2b	-	0	0	0	62.7	54.3	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A2-2b-12	38	140.1	A2-2b	-	0	0	0	62.6	54.2	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
A2-2b-13	1	36.5	A2-2b	-	0	6.2	0	70.4	51.3	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-13	2	39.3	A2-2b	-	0	6.2	0	73.8	51.4	0	73.8	73.8	70	Y	-	-	73.8	Y	Y	Y
A2-2b-13	3	42.1	A2-2b	-	0	6.3	0	73.7	51.4	0	73.8	73.8	70	Y	-	-	73.8	Y	Y	Y
A2-2b-13	4	44.9	A2-2b	-	0	6.3	0	73.4	51.4	0	73.5	73.5	70	Y	-	-	73.5	Y	Y	Y
A2-2b-13	5	47.7	A2-2b	-	0	6.3	0	73.1	51.4	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A2-2b-13	6	50.5	A2-2b	-	0	6.3	0	72.8	51.4	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
A2-2b-13	7	53.3	A2-2b	-	0	6.3	0	72.5	51.4	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
A2-2b-13	8	56.1	A2-2b	-	0	6.3	0	72.2	51.4	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-13	9	58.9	A2-2b	-	0	6.3	0	72	51.4	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-13	10	61.7	A2-2b	-	0	6.3	0	71.8	51.3	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-13	11	64.5	A2-2b	-	0	6.3	0	71.5	51.3	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-13	12	67.3	A2-2b	-	0	6.3	0	71.3	51.3	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-13	13	70.1	A2-2b	-	0	6.2	0	71.1	51.2	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-13	14	72.9	A2-2b	-	0	6.2	0	70.9	51.2	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-13	15	75.7	A2-2b	-	0	6.2	0	70.7	51.3	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-13	16	78.5	A2-2b	-	0	6.2	0	70.5	51.2	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-13	17	81.3	A2-2b	-	0	6.2	0	70.3	51.3	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-13	18	84.1	A2-2b	-	0	6.2	0	70.2	51.3	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-13	19	86.9	A2-2b	-	0	6.2	0	70	51.3	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-13	20	89.7	A2-2b	-	0	6.2	0	69.8	51.4	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-13	21	92.5	A2-2b	-	0	6.2	0	69.7	51.5	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-13	22	95.3	A2-2b	-	0	6.2	0	69.5	51.8	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-13	23	98.1	A2-2b	-	0	6.2	0	69.4	52	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-13	24	100.9	A2-2b	-	0	6.1	0	69.2	52.5	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-13	25	103.7	A2-2b	-	0	6.1	0	69.1	52.8	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-13	26	106.5	A2-2b	-	0	6.1	0	69	52.9	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-13	27	109.3	A2-2b	-	0	6.1	0	68.8	53	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-13	28	112.1	A2-2b	-	0	6.1	0	68.7	53	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-13	29	114.9	A2-2b	-	0	6.1	0	68.6	53.1	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-13	30	117.7	A2-2b	-	0	6.1	0	68.5	53	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-13	31	120.5	A2-2b	-	0	6.1	0	68.3	53	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-13	32	123.3	A2-2b	-	0	6.1	0	68.2	52.9	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-13	33	126.1	A2-2b	-	0	6	0	68.1	52.9	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-13	34	128.9	A2-2b	-	0	6	0	68	52.8	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-13	35	131.7	A2-2b	-	0	6	0	67.9	52.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-13	36	134.5	A2-2b	-	0	6	0	67.8	52.9	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-13	37	137.3	A2-2b	-	0	6	0	67.7	52.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-13	38	140.1	A2-2b	-	0	6	0	67.6	52.8	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-14	1	36.5	A2-2b	-	0	5.8	0	69.4	52.1	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-14	2	39.3	A2-2b	-	0	5.9	0	73.7	52.5	0	73.7	73.7	70	Y	-	-	73.7	Y	Y	Y
A2-2b-14	3	42.1	A2-2b	-	0	5.9	0	73.8	52.5	0	73.8	73.8	70	Y	-	-	73.8	Y	Y	Y
A2-2b-14	4	44.9	A2-2b	-	0	5.9	0	73.5	52.5	0	73.6	73.6	70	Y	-	-	73.6	Y	Y	Y
A2-2b-14	5	47.7	A2-2b	-	0	5.9	0	73.2	52.5	0	73.3	73.3	70	Y	-	-	73.3	Y	Y	Y
A2-2b-14	6	50.5	A2-2b	-	0	6	0	72.9	52.5	0	73	73.0	70	Y	-	-	73.0	Y	Y	Y
A2-2b-14	7	53.3	A2-2b	-	0	6	0	72.6	52.5	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
A2-2b-14	8	56.1	A2-2b	-	0	6	0	72.4	52.4	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-14	9	58.9	A2-2b	-	0	6	0	72.1	52.4	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
A2-2b-14	10	61.7	A2-2b	-	0	6	0	71.9	52.4	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-14	11	64.5	A2-2b	-	0	6	0	71.6	52.4	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2b-14	12	67.3	A2-2b	-	0	6	0	71.4	52.4	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
A2-2b-14	13	70.1	A2-2b	-	0	6	0	71.2	52.4	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-14	14	72.9	A2-2b	-	0	6	0	71	52.3	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-14	15	75.7	A2-2b	-	0	6	0	70.8	52.3	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-14	16	78.5	A2-2b	-	0	5.9	0	70.6	52.3	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-14	17	81.3	A2-2b	-	0	5.9	0	70.5	52.3	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-14	18	84.1	A2-2b	-	0	5.9	0	70.3	52.3	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-14	19	86.9	A2-2b	-	0	5.9	0	70.1	52.4	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-14	20	89.7	A2-2b	-	0	5.9	0	69.9	52.4	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-14	21	92.5	A2-2b	-	0	5.9	0	69.8	52.5	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-14	22	95.3	A2-2b	-	0	5.9	0	69.6	52.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-14	23	98.1	A2-2b	-	0	5.9	0	69.5	52.9	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-14	24	100.9	A2-2b	-	0	5.9	0	69.4	53.1	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-14	25	103.7	A2-2b	-	0	5.9	0	69.2	53.4	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-14	26	106.5	A2-2b	-	0	5.8	0	69.1	53.6	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-14	27	109.3	A2-2b	-	0	5.8	0	69	53.7	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-14	28	112.1	A2-2b	-	0	5.8	0	68.9	53.7	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-14	29	114.9	A2-2b	-	0	5.8	0	68.7	53.7	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-14	30	117.7	A2-2b	-	0	5.8	0	68.6	53.8	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-14	31	120.5	A2-2b	-	0	5.8	0	68.5	53.7	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-14	32	123.3	A2-2b	-	0	5.8	0	68.4	53.7	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-14	33	126.1	A2-2b	-	0	5.8	0	68.3	53.7	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-14	34	128.9	A2-2b	-	0	5.7	0	68.2	53.7	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-14	35	131.7	A2-2b	-	0	5.7	0	68.1	53.7	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-14	36	134.5	A2-2b	-	0	5.7	0	68	53.7	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-14	37	137.3	A2-2b	-	0	5.7	0	67.9	53.7	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-14	38	140.1	A2-2b	-	0	5.7	0	67.8	53.7	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-15	1	36.5	A2-2b	-	0	5.8	0	72.1	50.8	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
A2-2b-15	2	39.3	A2-2b	-	0	5.8	0	73.8	51.3	0	73.8	73.8	70	Y	-	-	73.8	Y	Y	Y
A2-2b-15	3	42.1	A2-2b	-	0	5.9	0	73.6	51.3	0	73.6	73.6	70	Y	-	-	73.6	Y	Y	Y
A2-2b-15	4	44.9	A2-2b	-	0	5.9	0	73.4	51.3	0	73.4	73.4	70	Y	-	-	73.4	Y	Y	Y
A2-2b-15	5	47.7	A2-2b	-	0	5.9	0	73.1	51.3	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A2-2b-15	6	50.5	A2-2b	-	0	5.9	0	72.9	51.3	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
A2-2b-15	7	53.3	A2-2b	-	0	5.9	0	72.6	51.3	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
A2-2b-15	8	56.1	A2-2b	-	0	5.9	0	72.3	51.2	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-15	9	58.9	A2-2b	-	0	5.9	0	72.1	51.2	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
A2-2b-15	10	61.7	A2-2b	-	0	5.9	0	71.8	51.2	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
A2-2b-15	11	64.5	A2-2b	-	0	5.8	0	71.6	51.2	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-15	12	67.3	A2-2b	-	0	5.8	0	71.4	51.2	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-15	13	70.1	A2-2b	-	0	5.8	0	71.2	51.1	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-15	14	72.9	A2-2b	-	0	5.8	0	71	51.2	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2b-15	15	75.7	A2-2b	-	0	5.8	0	70.8	51.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A2-2b-15	16	78.5	A2-2b	-	0	5.8	0	70.6	51.1	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
A2-2b-15	17	81.3	A2-2b	-	0	5.8	0	70.4	51.2	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-15	18	84.1	A2-2b	-	0	5.8	0	70.2	51.2	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-15	19	86.9	A2-2b	-	0	5.8	0	70.1	51.2	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-15	20	89.7	A2-2b	-	0	5.8	0	69.9	51.3	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-15	21	92.5	A2-2b	-	0	5.8	0	69.7	51.4	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-15	22	95.3	A2-2b	-	0	5.8	0	69.6	51.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-15	23	98.1	A2-2b	-	0	5.7	0	69.4	51.7	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-15	24	100.9	A2-2b	-	0	5.7	0	69.3	52	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-15	25	103.7	A2-2b	-	0	5.7	0	69.2	52.3	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-15	26	106.5	A2-2b	-	0	5.7	0	69	52.7	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-15	27	109.3	A2-2b	-	0	5.7	0	68.9	52.9	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-15	28	112.1	A2-2b	-	0	5.7	0	68.8	53	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-15	29	114.9	A2-2b	-	0	5.7	0	68.7	53.1	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-15	30	117.7	A2-2b	-	0	5.7	0	68.5	53.1	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-15	31	120.5	A2-2b	-	0	5.6	0	68.4	53.1	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-15	32	123.3	A2-2b	-	0	5.6	0	68.3	53.2	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-15	33	126.1	A2-2b	-	0	5.6	0	68.2	53.2	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-15	34	128.9	A2-2b	-	0	5.6	0	68.1	53.2	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-15	35	131.7	A2-2b	-	0	5.6	0	68	53.3	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-15	36	134.5	A2-2b	-	0	5.6	0	67.9	53.3	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-15	37	137.3	A2-2b	-	0	5.6	0	67.8	53.3	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-15	38	140.1	A2-2b	-	0	5.5	0	67.7	53.4	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-16	1	36.5	A2-2b	-	0	5.8	0	66.7	28.2	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-16	2	39.3	A2-2b	-	0	5.8	0	71.5	28.5	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
A2-2b-16	3	42.1	A2-2b	-	0	5.8	0	71.6	28.9	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-16	4	44.9	A2-2b	-	0	5.8	0	71.7	29.4	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2b-16	5	47.7	A2-2b	-	0	5.8	0	71.6	29.8	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-16	6	50.5	A2-2b	-	0	5.8	0	71.4	30.3	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-16	7	53.3	A2-2b	-	0	5.8	0	71.3	30.8	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-16	8	56.1	A2-2b	-	0	5.8	0	71.1	31.2	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-16	9	58.9	A2-2b	-	0	5.8	0	70.8	31.7	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A2-2b-16	10	61.7	A2-2b	-	0	5.8	0	70.6	32.2	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
A2-2b-16	11	64.5	A2-2b	-	0	5.8	0	70.4	32.7	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-16	12	67.3	A2-2b	-	0	5.8	0	70.2	33.3	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-16	13	70.1	A2-2b	-	0	5.8	0	70	33.8	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-16	14	72.9	A2-2b	-	0	5.8	0	69.8	34.5	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-16	15	75.7	A2-2b	-	0	5.8	0	69.6	35.1	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-16	16	78.5	A2-2b	-	0	5.8	0	69.5	35.8	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-16	17	81.3	A2-2b	-	0	5.8	0	69.3	36.5	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-16	18	84.1	A2-2b	-	0	5.8	0	69.1	37.3	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-16	19	86.9	A2-2b	-	0	5.7	0	69	38.1	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-16	20	89.7	A2-2b	-	0	5.7	0	68.8	39.1	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-16	21	92.5	A2-2b	-	0	5.7	0	68.7	40.1	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-16	22	95.3	A2-2b	-	0	5.7	0	68.5	41.5	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-16	23	98.1	A2-2b	-	0	5.7	0	68.4	42.6	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-16	24	100.9	A2-2b	-	0	5.7	0	68.2	43.9	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-16	25	103.7	A2-2b	-	0	5.7	0	68.1	44.9	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-16	26	106.5	A2-2b	-	0	5.7	0	68	45.7	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-16	27	109.3	A2-2b	-	0	5.7	0	67.8	46.6	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-16	28	112.1	A2-2b	-	0	5.6	0	67.7	47.3	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-16	29	114.9	A2-2b	-	0	5.6	0	67.6	48.2	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-16	30	117.7	A2-2b	-	0	5.6	0	67.5	48.8	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-16	31	120.5	A2-2b	-	0	5.6	0	67.4	49.2	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-16	32	123.3	A2-2b	-	0	5.6	0	67.3	49.5	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-16	33	126.1	A2-2b	-	0	5.6	0	67.2	49.7	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-16	34	128.9	A2-2b	-	0	5.6	0	67	49.8	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-16	35	131.7	A2-2b	-	0	5.5	0	66.9	50	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-16	36	134.5	A2-2b	-	0	5.5	0	66.8	50.1	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-16	37	137.3	A2-2b	-	0	5.5	0	66.7	50.3	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-16	38	140.1	A2-2b	-	0	5.5	0	66.6	50.4	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-17	1	36.5	A2-2b	-	0	5.8	0	60.5	28	0	60.5	60.5	70	N	-	-	60.5	Y	N	N
A2-2b-17	2	39.3	A2-2b	-	0	5.8	0	68	28.3	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-17	3	42.1	A2-2b	-	0	5.8	0	70.4	28.8	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-17	4	44.9	A2-2b	-	0	5.8	0	70.6	29.2	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
A2-2b-17	5	47.7	A2-2b	-	0	5.9	0	70.7	29.6	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-17	6	50.5	A2-2b	-	0	5.9	0	70.7	30.1	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-17	7	53.3	A2-2b	-	0	5.9	0	70.4	30.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-17	8	56.1	A2-2b	-	0	5.9	0	70.2	31	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-17	9	58.9	A2-2b	-	0	5.9	0	70	31.5	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-17	10	61.7	A2-2b	-	0	5.8	0	69.9	32.1	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-17	11	64.5	A2-2b	-	0	5.8	0	69.7	32.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-17	12	67.3	A2-2b	-	0	5.8	0	69.5	33.1	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-17	13	70.1	A2-2b	-	0	5.8	0	69.3	33.7	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-17	14	72.9	A2-2b	-	0	5.8	0	69.1	34.3	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-17	15	75.7	A2-2b	-	0	5.8	0	68.9	34.9	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-17	16	78.5	A2-2b	-	0	5.8	0	68.7	35.6	0	68.8	68.8	70	N	-	-	68.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project										Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						New Roads[1]														
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						dB (A)														
A2-2b-17	17	81.3	A2-2b	-	0	5.8	0	68.6	36.3	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-17	18	84.1	A2-2b	-	0	5.8	0	68.5	37	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-17	19	86.9	A2-2b	-	0	5.8	0	68.3	37.9	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-17	20	89.7	A2-2b	-	0	5.8	0	68.2	38.8	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-17	21	92.5	A2-2b	-	0	5.8	0	68	39.8	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-17	22	95.3	A2-2b	-	0	5.7	0	67.9	41.1	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-17	23	98.1	A2-2b	-	0	5.7	0	67.7	42.3	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-17	24	100.9	A2-2b	-	0	5.7	0	67.6	43.7	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-17	25	103.7	A2-2b	-	0	5.7	0	67.5	44.8	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-17	26	106.5	A2-2b	-	0	5.7	0	67.3	45.6	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-17	27	109.3	A2-2b	-	0	5.7	0	67.2	46.3	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A2-2b-17	28	112.1	A2-2b	-	0	5.7	0	67.1	46.9	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-17	29	114.9	A2-2b	-	0	5.7	0	67	47.6	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-17	30	117.7	A2-2b	-	0	5.6	0	66.9	48.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-17	31	120.5	A2-2b	-	0	5.6	0	66.7	48.8	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-17	32	123.3	A2-2b	-	0	5.6	0	66.6	49.2	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-17	33	126.1	A2-2b	-	0	5.6	0	66.5	49.5	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-17	34	128.9	A2-2b	-	0	5.6	0	66.4	49.6	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2b-17	35	131.7	A2-2b	-	0	5.6	0	66.3	49.9	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2b-17	36	134.5	A2-2b	-	0	5.6	0	66.2	50	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2b-17	37	137.3	A2-2b	-	0	5.5	0	66.1	50.2	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A2-2b-17	38	140.1	A2-2b	-	0	5.5	0	66	50.3	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2b-18	1	36.5	A2-2b	-	0	5.8	0	65	44.9	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2b-18	2	39.3	A2-2b	-	0	5.8	0	71	48	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A2-2b-18	3	42.1	A2-2b	-	0	5.9	0	71.4	48.4	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-18	4	44.9	A2-2b	-	0	5.8	0	71.4	48.3	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-18	5	47.7	A2-2b	-	0	5.8	0	71.4	48.3	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A2-2b-18	6	50.5	A2-2b	-	0	5.8	0	71.2	48.3	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A2-2b-18	7	53.3	A2-2b	-	0	5.9	0	70.9	48.3	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-18	8	56.1	A2-2b	-	0	5.9	0	70.7	48.3	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-18	9	58.9	A2-2b	-	0	5.9	0	70.5	48.2	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-18	10	61.7	A2-2b	-	0	5.9	0	70.3	48.3	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-18	11	64.5	A2-2b	-	0	5.9	0	70.1	48.3	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-18	12	67.3	A2-2b	-	0	5.9	0	69.9	48.3	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-18	13	70.1	A2-2b	-	0	5.9	0	69.7	48.3	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-18	14	72.9	A2-2b	-	0	5.9	0	69.5	48.3	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-18	15	75.7	A2-2b	-	0	5.9	0	69.3	48.3	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-18	16	78.5	A2-2b	-	0	5.9	0	69.1	48.4	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-18	17	81.3	A2-2b	-	0	5.9	0	69	48.4	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-18	18	84.1	A2-2b	-	0	5.8	0	68.8	48.4	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-18	19	86.9	A2-2b	-	0	5.8	0	68.6	48.6	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-18	20	89.7	A2-2b	-	0	5.8	0	68.5	48.7	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-18	21	92.5	A2-2b	-	0	5.8	0	68.3	48.9	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-18	22	95.3	A2-2b	-	0	5.8	0	68.2	49.2	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-18	23	98.1	A2-2b	-	0	5.8	0	68.1	49.5	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-18	24	100.9	A2-2b	-	0	5.8	0	67.9	49.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-18	25	103.7	A2-2b	-	0	5.8	0	67.8	50.4	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-18	26	106.5	A2-2b	-	0	5.8	0	67.7	50.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-18	27	109.3	A2-2b	-	0	5.7	0	67.5	51.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-18	28	112.1	A2-2b	-	0	5.7	0	67.4	51.8	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-18	29	114.9	A2-2b	-	0	5.7	0	67.3	52.4	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-18	30	117.7	A2-2b	-	0	5.7	0	67.2	52.8	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A2-2b-18	31	120.5	A2-2b	-	0	5.7	0	67.1	53	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-18	32	123.3	A2-2b	-	0	5.7	0	66.9	53.1	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A2-2b-18	33	126.1	A2-2b	-	0	5.6	0	66.8	53.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-18	34	128.9	A2-2b	-	0	5.6	0	66.7	53.3	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-18	35	131.7	A2-2b	-	0	5.6	0	66.6	53.4	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A2-2b-18	36	134.5	A2-2b	-	0	5.6	0	66.5	53.5	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-18	37	137.3	A2-2b	-	0	5.6	0	66.4	53.5	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-18	38	140.1	A2-2b	-	0	5.6	0	66.3	53.5	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-19	1	36.5	A2-2b	-	0	0	0	66.8	50.2	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-19	2	39.3	A2-2b	-	0	0	0	70.4	51	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-19	3	42.1	A2-2b	-	0	0	0	70.5	51.2	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-19	4	44.9	A2-2b	-	0	0	0	70.3	51.2	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-19	5	47.7	A2-2b	-	0	0	0	70	51.2	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
A2-2b-19	6	50.5	A2-2b	-	0	0	0	69.7	51.2	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-19	7	53.3	A2-2b	-	0	0	0	69.5	51.2	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-19	8	56.1	A2-2b	-	0	0	0	69.2	51.1	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-19	9	58.9	A2-2b	-	0	0	0	69	51.1	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-19	10	61.7	A2-2b	-	0	0	0	68.8	51.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-19	11	64.5	A2-2b	-	0	0	0	68.6	51.1	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-19	12	67.3	A2-2b	-	0	0	0	68.3	51.1	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-19	13	70.1	A2-2b	-	0	0	0	68.1	51.1	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-19	14	72.9	A2-2b	-	0	0	0	68	51.1	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-19	15	75.7	A2-2b	-	0	0	0	67.8	51.1	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-19	16	78.5	A2-2b	-	0	0	0	67.6	51.1	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-19	17	81.3	A2-2b	-	0	0	0	67.4	51.1	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A2-2b-19	18	84.1	A2-2b	-	0	0	0	67.2	51.1	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A2-2b-19	19	86.9	A2-2b	-	0	0	0	67.1	51.2	0	67.2	67.2	70	N	-	-	67.2	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
ID	Floor	Floor Level (mPD)				RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]				C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						dB (A)													
A2-2b-19	20	89.7	A2-2b	-	0	0	0	66.9	51.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
A2-2b-19	21	92.5	A2-2b	-	0	0	0	66.8	51.4	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A2-2b-19	22	95.3	A2-2b	-	0	0	0	66.6	51.5	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A2-2b-19	23	98.1	A2-2b	-	0	0	0	66.5	51.7	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A2-2b-19	24	100.9	A2-2b	-	0	0	0	66.3	51.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A2-2b-19	25	103.7	A2-2b	-	0	0	0	66.2	52.2	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A2-2b-19	26	106.5	A2-2b	-	0	0	0	66.1	52.5	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A2-2b-19	27	109.3	A2-2b	-	0	0	0	65.9	52.8	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A2-2b-19	28	112.1	A2-2b	-	0	0	0	65.8	53.1	0	66	66.0	70	N	-	-	66.0	Y	N	N
A2-2b-19	29	114.9	A2-2b	-	0	0	0	65.7	53.4	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2b-19	30	117.7	A2-2b	-	0	0	0	65.6	53.7	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A2-2b-19	31	120.5	A2-2b	-	0	0	0	65.5	53.9	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A2-2b-19	32	123.3	A2-2b	-	0	0	0	65.4	54.1	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A2-2b-19	33	126.1	A2-2b	-	0	0	0	65.3	54.1	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A2-2b-19	34	128.9	A2-2b	-	0	0	0	65.1	54.2	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2b-19	35	131.7	A2-2b	-	0	0	0	65	54.3	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A2-2b-19	36	134.5	A2-2b	-	0	0	0	64.9	54.4	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A2-2b-19	37	137.3	A2-2b	-	0	0	0	64.8	54.4	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A2-2b-19	38	140.1	A2-2b	-	0	0	0	64.7	54.5	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A2-2b-20	1	36.5	A2-2b	-	0	5.8	0	71.5	51	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
A2-2b-20	2	39.3	A2-2b	-	0	5.8	0	73.3	51	0	73.3	73.3	70	Y	-	-	73.3	Y	Y	Y
A2-2b-20	3	42.1	A2-2b	-	0	5.9	0	73.4	51	0	73.4	73.4	70	Y	-	-	73.4	Y	Y	Y
A2-2b-20	4	44.9	A2-2b	-	0	5.9	0	73.1	51	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A2-2b-20	5	47.7	A2-2b	-	0	5.8	0	72.8	51	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
A2-2b-20	6	50.5	A2-2b	-	0	5.8	0	72.5	50.9	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-20	7	53.3	A2-2b	-	0	5.9	0	72.2	50.9	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-20	8	56.1	A2-2b	-	0	5.9	0	72	50.9	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
A2-2b-20	9	58.9	A2-2b	-	0	5.9	0	71.7	50.9	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
A2-2b-20	10	61.7	A2-2b	-	0	5.9	0	71.5	50.9	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-20	11	64.5	A2-2b	-	0	5.9	0	71.2	50.9	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-20	12	67.3	A2-2b	-	0	5.9	0	71	50.9	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-20	13	70.1	A2-2b	-	0	5.9	0	70.8	50.9	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-20	14	72.9	A2-2b	-	0	5.9	0	70.6	50.9	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-20	15	75.7	A2-2b	-	0	5.9	0	70.4	50.9	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-20	16	78.5	A2-2b	-	0	5.9	0	70.2	50.9	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-20	17	81.3	A2-2b	-	0	5.9	0	70.1	50.9	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-20	18	84.1	A2-2b	-	0	5.8	0	69.9	51	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-20	19	86.9	A2-2b	-	0	5.8	0	69.7	51	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-20	20	89.7	A2-2b	-	0	5.8	0	69.6	51.1	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-20	21	92.5	A2-2b	-	0	5.8	0	69.4	51.2	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A2-2b-20	22	95.3	A2-2b	-	0	5.8	0	69.3	51.4	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-20	23	98.1	A2-2b	-	0	5.8	0	69.1	51.7	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-20	24	100.9	A2-2b	-	0	5.8	0	69	51.9	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-20	25	103.7	A2-2b	-	0	5.8	0	68.8	52.2	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-20	26	106.5	A2-2b	-	0	5.8	0	68.7	52.4	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-20	27	109.3	A2-2b	-	0	5.7	0	68.6	52.8	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-20	28	112.1	A2-2b	-	0	5.7	0	68.5	53.1	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-20	29	114.9	A2-2b	-	0	5.7	0	68.3	53.5	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-20	30	117.7	A2-2b	-	0	5.7	0	68.2	53.7	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-20	31	120.5	A2-2b	-	0	5.7	0	68.1	53.9	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-20	32	123.3	A2-2b	-	0	5.7	0	68	54.1	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-20	33	126.1	A2-2b	-	0	5.7	0	67.9	54.1	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-20	34	128.9	A2-2b	-	0	5.6	0	67.8	54.2	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-20	35	131.7	A2-2b	-	0	5.6	0	67.7	54.3	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-20	36	134.5	A2-2b	-	0	5.6	0	67.6	54.4	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-20	37	137.3	A2-2b	-	0	5.6	0	67.5	54.5	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A2-2b-20	38	140.1	A2-2b	-	0	5.6	0	67.4	54.5	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A2-2b-21	1	36.5	A2-2b	-	0	3.2	0	69.1	50.5	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A2-2b-21	2	39.3	A2-2b	-	0	3.3	0	73.5	50.6	0	73.5	73.5	70	Y	-	-	73.5	Y	Y	Y
A2-2b-21	3	42.1	A2-2b	-	0	3.3	0	73.6	50.6	0	73.6	73.6	70	Y	-	-	73.6	Y	Y	Y
A2-2b-21	4	44.9	A2-2b	-	0	3.4	0	73.3	50.6	0	73.4	73.4	70	Y	-	-	73.4	Y	Y	Y
A2-2b-21	5	47.7	A2-2b	-	0	3.4	0	73	50.6	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A2-2b-21	6	50.5	A2-2b	-	0	3.5	0	72.7	50.6	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
A2-2b-21	7	53.3	A2-2b	-	0	3.5	0	72.4	50.6	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
A2-2b-21	8	56.1	A2-2b	-	0	3.6	0	72.2	50.6	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
A2-2b-21	9	58.9	A2-2b	-	0	3.6	0	71.9	50.6	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
A2-2b-21	10	61.7	A2-2b	-	0	3.7	0	71.7	50.6	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
A2-2b-21	11	64.5	A2-2b	-	0	3.7	0	71.5	50.6	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
A2-2b-21	12	67.3	A2-2b	-	0	3.7	0	71.2	50.6	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-21	13	70.1	A2-2b	-	0	3.6	0	71	50.5	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-21	14	72.9	A2-2b	-	0	3.6	0	70.8	50.5	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-21	15	75.7	A2-2b	-	0	3.6	0	70.6	50.6	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-21	16	78.5	A2-2b	-	0	3.6	0	70.5	50.6	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-21	17	81.3	A2-2b	-	0	3.6	0	70.3	50.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A2-2b-21	18	84.1	A2-2b	-	0	3.6	0	70.2	50.6	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-21	19	86.9	A2-2b	-	0	3.6	0	70	50.6	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-21	20	89.7	A2-2b	-	0	3.6	0	69.8	50.7	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A2-2b-21	21	92.5	A2-2b	-	0	3.6	0	69.7	50.9	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-21	22	95.3	A2-2b	-	0	3.6	0	69.5	51	0	69.6	69.6	70	N	-	-	69.6	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project														
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-2b-21	23	98.1	A2-2b	-	0	3.5	0	69.4	51.3	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-21	24	100.9	A2-2b	-	0	3.5	0	69.2	51.6	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-21	25	103.7	A2-2b	-	0	3.5	0	69.1	51.8	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-21	26	106.5	A2-2b	-	0	3.5	0	69	52.1	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-21	27	109.3	A2-2b	-	0	3.5	0	68.8	52.4	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-21	28	112.1	A2-2b	-	0	3.5	0	68.7	52.8	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A2-2b-21	29	114.9	A2-2b	-	0	3.5	0	68.6	53	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-21	30	117.7	A2-2b	-	0	3.4	0	68.5	53.3	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-21	31	120.5	A2-2b	-	0	3.4	0	68.4	53.5	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-21	32	123.3	A2-2b	-	0	3.4	0	68.3	53.7	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-21	33	126.1	A2-2b	-	0	3.4	0	68.2	53.8	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-21	34	128.9	A2-2b	-	0	3.4	0	68	53.9	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-21	35	131.7	A2-2b	-	0	3.4	0	67.9	54	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-21	36	134.5	A2-2b	-	0	3.4	0	67.8	54	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-21	37	137.3	A2-2b	-	0	3.3	0	67.7	54.1	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-21	38	140.1	A2-2b	-	0	3.3	0	67.6	54.1	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-2b-22	1	36.5	A2-2b	-	0	3.3	0	70.2	50	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-22	2	39.3	A2-2b	-	0	3.4	0	73.7	50.3	0	73.7	73.7	70	Y	-	-	73.7	Y	Y	Y
A2-2b-22	3	42.1	A2-2b	-	0	3.3	0	73.6	50.4	0	73.6	73.6	70	Y	-	-	73.6	Y	Y	Y
A2-2b-22	4	44.9	A2-2b	-	0	3.4	0	73.3	50.3	0	73.3	73.3	70	Y	-	-	73.3	Y	Y	Y
A2-2b-22	5	47.7	A2-2b	-	0	3.4	0	73	50.3	0	73	73.0	70	Y	-	-	73.0	Y	Y	Y
A2-2b-22	6	50.5	A2-2b	-	0	3.5	0	72.7	50.3	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
A2-2b-22	7	53.3	A2-2b	-	0	3.5	0	72.4	50.3	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
A2-2b-22	8	56.1	A2-2b	-	0	3.5	0	72.2	50.3	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
A2-2b-22	9	58.9	A2-2b	-	0	3.6	0	71.9	50.3	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
A2-2b-22	10	61.7	A2-2b	-	0	3.6	0	71.7	50.3	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A2-2b-22	11	64.5	A2-2b	-	0	3.6	0	71.5	50.3	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
A2-2b-22	12	67.3	A2-2b	-	0	3.6	0	71.2	50.3	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
A2-2b-22	13	70.1	A2-2b	-	0	3.6	0	71	50.3	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
A2-2b-22	14	72.9	A2-2b	-	0	3.6	0	70.8	50.2	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
A2-2b-22	15	75.7	A2-2b	-	0	3.6	0	70.6	50.2	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A2-2b-22	16	78.5	A2-2b	-	0	3.6	0	70.4	50.3	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
A2-2b-22	17	81.3	A2-2b	-	0	3.5	0	70.3	50.3	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
A2-2b-22	18	84.1	A2-2b	-	0	3.5	0	70.1	50.3	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A2-2b-22	19	86.9	A2-2b	-	0	3.5	0	69.9	50.3	0	70	70.0	70	N	-	-	70.0	Y	N	N
A2-2b-22	20	89.7	A2-2b	-	0	3.5	0	69.8	50.4	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
A2-2b-22	21	92.5	A2-2b	-	0	3.5	0	69.6	50.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A2-2b-22	22	95.3	A2-2b	-	0	3.5	0	69.5	50.7	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A2-2b-22	23	98.1	A2-2b	-	0	3.5	0	69.3	51	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A2-2b-22	24	100.9	A2-2b	-	0	3.5	0	69.2	51.2	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A2-2b-22	25	103.7	A2-2b	-	0	3.5	0	69	51.5	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A2-2b-22	26	106.5	A2-2b	-	0	3.4	0	68.9	51.8	0	69	69.0	70	N	-	-	69.0	Y	N	N
A2-2b-22	27	109.3	A2-2b	-	0	3.4	0	68.8	52.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A2-2b-22	28	112.1	A2-2b	-	0	3.4	0	68.6	52.5	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A2-2b-22	29	114.9	A2-2b	-	0	3.4	0	68.5	52.6	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A2-2b-22	30	117.7	A2-2b	-	0	3.4	0	68.4	52.9	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A2-2b-22	31	120.5	A2-2b	-	0	3.4	0	68.3	53.2	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-22	32	123.3	A2-2b	-	0	3.4	0	68.2	53.3	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A2-2b-22	33	126.1	A2-2b	-	0	3.3	0	68.1	53.4	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A2-2b-22	34	128.9	A2-2b	-	0	3.3	0	68	53.5	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A2-2b-22	35	131.7	A2-2b	-	0	3.3	0	67.9	53.6	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A2-2b-22	36	134.5	A2-2b	-	0	3.3	0	67.8	53.7	0	68	68.0	70	N	-	-	68.0	Y	N	N
A2-2b-22	37	137.3	A2-2b	-	0	3.3	0	67.7	53.7	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A2-2b-22	38	140.1	A2-2b	-	0	3.3	0	67.6	53.7	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A2-9a-1	1	18.2	A2-9a	-	3.3	0	0	55.9	57.3	0	59.7	59.7	70	N	-	-	56.4	Y	N	N
A2-9a-1	2	21.4	A2-9a	-	3.3	0	0	55.9	57.1	0	59.6	59.6	70	N	-	-	56.3	Y	N	N
A2-9a-1	3	24.6	A2-9a	-	3.3	0	0	55.9	56.9	0	59.5	59.5	70	N	-	-	56.2	Y	N	N
A2-9a-1	4	27.8	A2-9a	-	3.3	0	0	55.9	56.7	0	59.3	59.3	70	N	-	-	56.0	Y	N	N
A2-9a-1	5	31	A2-9a	-	3.3	0	0	55.9	56.5	0	59.2	59.2	70	N	-	-	55.9	Y	N	N
A2-9a-1	6	34.2	A2-9a	-	3.3	0	0	55.9	56.3	0	59.1	59.1	70	N	-	-	55.8	Y	N	N
A2-9a-1	7	37.4	A2-9a	-	3.4	0	0	55.9	56.1	0	59	59.0	70	N	-	-	55.6	Y	N	N
A2-9a-1	8	40.6	A2-9a	-	4.2	0	0	55.9	55.9	0	58.9	58.9	70	N	-	-	54.7	Y	N	N
A2-9a-1	9	43.8	A2-9a	-	5	0	0	55.9	55.7	0	58.8	58.8	70	N	-	-	53.8	Y	N	N
A2-9a-1	10	47	A2-9a	-	5.7	0	0	56	55.5	0	58.7	58.7	70	N	-	-	53.0	Y	N	N
A2-9a-1	11	50.2	A2-9a	-	6.4	0	0	56.1	55.3	0	58.7	58.7	70	N	-	-	52.3	Y	N	N
A2-9a-1	12	53.4	A2-9a	-	7.2	0	0	56.3	55.1	0	58.8	58.8	70	N	-	-	51.6	Y	N	N
A2-9a-1	13	56.6	A2-9a	-	7.9	0	0	56.7	54.9	0	58.9	58.9	70	N	-	-	51.0	Y	N	N
A2-9a-1	14	59.8	A2-9a	-	8.7	0	0	57	54.8	0	59	59.0	70	N	-	-	50.3	Y	N	N
A2-9a-1	15	63	A2-9a	-	9.5	0	0	57.3	54.6	0	59.2	59.2	70	N	-	-	49.7	Y	N	N
A2-9a-1	16	66.2	A2-9a	-	10.4	0	0	57.5	54.5	0	59.3	59.3	70	N	-	-	48.9	Y	N	N
A2-9a-1	17	69.4	A2-9a	-	11.3	0	0	57.7	54.3	0	59.3	59.3	70	N	-	-	48.0	Y	N	N
A2-9a-1	18	72.6	A2-9a	-	12.2	0	0	57.8	54.2	0	59.4	59.4	70	N	-	-	47.2	Y	N	N
A2-9a-1	19	75.8	A2-9a	-	13	0	0	58.1	54	0	59.5	59.5	70	N	-	-	46.5	Y	N	N
A2-9a-1	20	79	A2-9a	-	14	0	0	58.3	53.9	0	59.6	59.6	70	N	-	-	45.6	Y	N	N
A2-9a-2	1	18.2	A2-9a	-	10.9	0	39.5	55.8	60.7	0	61.9	61.9	70	N	-	-	51.0	Y	N	N
A2-9a-2	2	21.4	A2-9a	-	10.9	0	39.7	55.8	60.5	0	61.8	61.8	70	N	-	-	50.9	Y	N	N
A2-9a-2	3	24.6	A2-9a	-	10.9	0	39.8	55.9	60.3	0	61.7	61.7	70	N	-	-	50.8	Y	N	N
A2-9a-2	4	27.8	A2-9a	-	10.9	0	39.9	55.9	60.2	0	61.6	61.6	70	N	-	-	50.7	Y	N	N
A2-9a-2	5	31	A2-9a	-	11	0	40.1	55.9	59.9	0	61.4	61.4	70	N	-	-	50.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-9a-2	6	34.2	A2-9a	-	11	0	40.3	56	59.6	0	61.2	61.2	70	N	-	-	50.2	Y	N	N
A2-9a-2	7	37.4	A2-9a	-	11	0	40.5	56.1	59.4	0	61.1	61.1	70	N	-	-	50.1	Y	N	N
A2-9a-2	8	40.6	A2-9a	-	11	0	40.7	56.2	59.1	0	61	61.0	70	N	-	-	50.0	Y	N	N
A2-9a-2	9	43.8	A2-9a	-	11.1	0	41	56.3	58.9	0	60.8	60.8	70	N	-	-	49.7	Y	N	N
A2-9a-2	10	47	A2-9a	-	11.1	0	41.4	56.6	58.6	0	60.8	60.8	70	N	-	-	49.7	Y	N	N
A2-9a-2	11	50.2	A2-9a	-	11.1	0	41.9	57.2	58.5	0	61	61.0	70	N	-	-	49.9	Y	N	N
A2-9a-2	12	53.4	A2-9a	-	11.1	0	42.4	58.2	58.3	0	61.3	61.3	70	N	-	-	50.2	Y	N	N
A2-9a-2	13	56.6	A2-9a	-	11.1	0	43.1	58.9	58.2	0	61.6	61.6	70	N	-	-	50.5	Y	N	N
A2-9a-2	14	59.8	A2-9a	-	11.1	0	44.1	59.5	58	0	61.9	61.9	70	N	-	-	50.8	Y	N	N
A2-9a-2	15	63	A2-9a	-	11.1	0	45.2	59.9	57.9	0	62.1	62.1	70	N	-	-	51.0	Y	N	N
A2-9a-2	16	66.2	A2-9a	-	11.1	0	46.4	60.3	57.7	0	62.3	62.3	70	N	-	-	51.2	Y	N	N
A2-9a-2	17	69.4	A2-9a	-	11.1	0	47.2	60.5	57.6	0	62.4	62.4	70	N	-	-	51.3	Y	N	N
A2-9a-2	18	72.6	A2-9a	-	11.1	0	47.7	60.7	57.4	0	62.5	62.5	70	N	-	-	51.4	Y	N	N
A2-9a-2	19	75.8	A2-9a	-	11.1	0	47.9	61	57.3	0	62.7	62.7	70	N	-	-	51.6	Y	N	N
A2-9a-2	20	79	A2-9a	-	11.1	0	48	61.1	57.1	0	62.7	62.7	70	N	-	-	51.6	Y	N	N
A2-9a-3	1	18.2	A2-9a	-	11.6	0	37.9	49.7	59.6	0	60.1	60.1	70	N	-	-	48.5	Y	N	N
A2-9a-3	2	21.4	A2-9a	-	11.6	0	38.2	49.8	59.5	0	60	60.0	70	N	-	-	48.4	Y	N	N
A2-9a-3	3	24.6	A2-9a	-	11.6	0	38.6	50	59.3	0	59.9	59.9	70	N	-	-	48.3	Y	N	N
A2-9a-3	4	27.8	A2-9a	-	11.7	0	38.9	50.2	59.2	0	59.7	59.7	70	N	-	-	48.0	Y	N	N
A2-9a-3	5	31	A2-9a	-	11.7	0	39.3	50.4	58.9	0	59.5	59.5	70	N	-	-	47.8	Y	N	N
A2-9a-3	6	34.2	A2-9a	-	11.7	0	39.7	50.8	58.6	0	59.3	59.3	70	N	-	-	47.6	Y	N	N
A2-9a-3	7	37.4	A2-9a	-	11.7	0	40.1	51.2	58.4	0	59.2	59.2	70	N	-	-	47.5	Y	N	N
A2-9a-3	8	40.6	A2-9a	-	11.7	0	40.6	51.7	58.2	0	59.1	59.1	70	N	-	-	47.4	Y	N	N
A2-9a-3	9	43.8	A2-9a	-	11.7	0	41.2	52.5	58.1	0	59.2	59.2	70	N	-	-	47.5	Y	N	N
A2-9a-3	10	47	A2-9a	-	11.7	0	41.9	53.7	58.3	0	59.6	59.6	70	N	-	-	47.9	Y	N	N
A2-9a-3	11	50.2	A2-9a	-	11.7	0	42.9	55.5	58.4	0	60.3	60.3	70	N	-	-	48.6	Y	N	N
A2-9a-3	12	53.4	A2-9a	-	11.7	0	44.4	57.3	58.4	0	61	61.0	70	N	-	-	49.3	Y	N	N
A2-9a-3	13	56.6	A2-9a	-	11.7	0	45.9	58.6	58.3	0	61.6	61.6	70	N	-	-	49.9	Y	N	N
A2-9a-3	14	59.8	A2-9a	-	11.7	0	47.6	59.5	58.2	0	62.1	62.1	70	N	-	-	50.4	Y	N	N
A2-9a-3	15	63	A2-9a	-	11.7	0	48.5	60	58	0	62.3	62.3	70	N	-	-	50.6	Y	N	N
A2-9a-3	16	66.2	A2-9a	-	11.8	0	49	60.3	58	0	62.5	62.5	70	N	-	-	50.7	Y	N	N
A2-9a-3	17	69.4	A2-9a	-	11.8	0	49.1	60.5	57.9	0	62.6	62.6	70	N	-	-	50.8	Y	N	N
A2-9a-3	18	72.6	A2-9a	-	11.8	0	49.2	60.6	57.7	0	62.6	62.6	70	N	-	-	50.8	Y	N	N
A2-9a-3	19	75.8	A2-9a	-	11.8	0	49.4	60.8	57.6	0	62.7	62.7	70	N	-	-	50.9	Y	N	N
A2-9a-3	20	79	A2-9a	-	11.8	0	49.4	60.9	57.5	0	62.7	62.7	70	N	-	-	50.9	Y	N	N
A2-9b-1	1	18.2	A2-9b	-	12.4	0	55.4	43.1	60.5	0	61.7	61.7	70	N	-	-	49.3	Y	N	N
A2-9b-1	2	21.4	A2-9b	-	12.5	0	55.4	43.7	60.3	0	61.6	61.6	70	N	-	-	49.1	Y	N	N
A2-9b-1	3	24.6	A2-9b	-	12.5	0	55.4	44.4	60	0	61.4	61.4	70	N	-	-	48.9	Y	N	N
A2-9b-1	4	27.8	A2-9b	-	12.5	0	55.4	45.2	59.9	0	61.3	61.3	70	N	-	-	48.8	Y	N	N
A2-9b-1	5	31	A2-9b	-	12.5	0	55.4	46.2	59.6	0	61.1	61.1	70	N	-	-	48.6	Y	N	N
A2-9b-1	6	34.2	A2-9b	-	12.5	0	55.4	47.4	59.4	0	61	61.1	70	N	-	-	48.6	Y	N	N
A2-9b-1	7	37.4	A2-9b	-	12.5	0	55.4	48.9	59.1	0	60.9	60.9	70	N	-	-	48.4	Y	N	N
A2-9b-1	8	40.6	A2-9b	-	12.5	0	55.5	51.1	58.9	0	61	61.0	70	N	-	-	48.5	Y	N	N
A2-9b-1	9	43.8	A2-9b	-	12.5	0	55.5	54.1	58.8	0	61.4	61.4	70	N	-	-	48.9	Y	N	N
A2-9b-1	10	47	A2-9b	-	12.5	0	55.6	56.8	58.7	0	62	62.0	70	N	-	-	49.5	Y	N	N
A2-9b-1	11	50.2	A2-9b	-	12.6	0	55.7	58.5	58.6	0	62.6	62.6	70	N	-	-	50.0	Y	N	N
A2-9b-1	12	53.4	A2-9b	-	12.6	0	55.7	59.3	58.5	0	62.8	62.8	70	N	-	-	50.2	Y	N	N
A2-9b-1	13	56.6	A2-9b	-	12.6	0	55.7	59.7	58.3	0	63	63.0	70	N	-	-	50.4	Y	N	N
A2-9b-1	14	59.8	A2-9b	-	12.6	0	55.8	60	58.1	0	63.1	63.1	70	N	-	-	50.5	Y	N	N
A2-9b-1	15	63	A2-9b	-	12.6	0	55.8	60.3	58	0	63.2	63.2	70	N	-	-	50.6	Y	N	N
A2-9b-1	16	66.2	A2-9b	-	12.6	0	55.8	60.5	57.9	0	63.2	63.2	70	N	-	-	50.6	Y	N	N
A2-9b-1	17	69.4	A2-9b	-	12.6	0	55.8	60.7	57.8	0	63.3	63.3	70	N	-	-	50.7	Y	N	N
A2-9b-1	18	72.6	A2-9b	-	12.6	0	55.8	60.9	57.7	0	63.4	63.4	70	N	-	-	50.8	Y	N	N
A2-9b-1	19	75.8	A2-9b	-	12.6	0	55.8	61	57.6	0	63.5	63.5	70	N	-	-	50.9	Y	N	N
A2-9b-1	20	79	A2-9b	-	12.6	0	55.9	61.1	57.5	0	63.5	63.5	70	N	-	-	50.9	Y	N	N
A2-9b-2	1	18.2	A2-9b	-	16.4	0	63.4	59.2	56.9	0	65.5	65.5	70	N	-	-	49.1	Y	N	N
A2-9b-2	2	21.4	A2-9b	-	16.6	0	63.4	59.3	56.7	0	65.5	65.5	70	N	-	-	48.9	Y	N	N
A2-9b-2	3	24.6	A2-9b	-	16.7	0	63.4	59.4	56.6	0	65.5	65.5	70	N	-	-	48.8	Y	N	N
A2-9b-2	4	27.8	A2-9b	-	16.9	0	63.4	59.6	56.5	0	65.5	65.5	70	N	-	-	48.6	Y	N	N
A2-9b-2	5	31	A2-9b	-	17.2	0	63.4	59.6	56.4	0	65.5	65.5	70	N	-	-	48.3	Y	N	N
A2-9b-2	6	34.2	A2-9b	-	17.4	0	63.3	59.7	56.4	0	65.4	65.4	70	N	-	-	48.0	Y	N	N
A2-9b-2	7	37.4	A2-9b	-	17.7	0	63.3	59.7	56.4	0	65.5	65.5	70	N	-	-	47.8	Y	N	N
A2-9b-2	8	40.6	A2-9b	-	18	0	63.3	59.7	56.4	0	65.4	65.4	70	N	-	-	47.4	Y	N	N
A2-9b-2	9	43.8	A2-9b	-	18.3	0	63.2	59.8	56.3	0	65.4	65.4	70	N	-	-	47.1	Y	N	N
A2-9b-2	10	47	A2-9b	-	18.5	0	63.2	59.8	56.3	0	65.4	65.4	70	N	-	-	46.9	Y	N	N
A2-9b-2	11	50.2	A2-9b	-	18.9	0	63.2	59.9	56.2	0	65.4	65.4	70	N	-	-	46.5	Y	N	N
A2-9b-2	12	53.4	A2-9b	-	19.3	0	63.2	60	56.2	0	65.4	65.4	70	N	-	-	46.1	Y	N	N
A2-9b-2	13	56.6	A2-9b	-	19.6	0	63.2	60.3	56.2	0	65.5	65.5	70	N	-	-	45.9	Y	N	N
A2-9b-2	14	59.8	A2-9b	-	20.1	0	63.2	60.6	56.1	0	65.6	65.6	70	N	-	-	45.5	Y	N	N
A2-9b-2	15	63	A2-9b	-	20.5	0	63.3	60.9	56.1	0	65.8	65.8	70	N	-	-	45.3	Y	N	N
A2-9b-2	16	66.2	A2-9b	-	21	0	63.4	61.1	56	0	65.9	65.9	70	N	-	-	44.9	Y	N	N
A2-9b-2	17	69.4	A2-9b	-	21.5	0	63.5	61.2	55.9	0	66	66.0	70	N	-	-	44.5	Y	N	N
A2-9b-2	18	72.6	A2-9b	-	22.1	0	63.7	61.4	55.8	0	66.1	66.1	70	N	-	-	44.0	Y	N	N
A2-9b-2	19	75.8	A2-9b	-	22.7	0	63.9	61.5	55.7	0	66.3	66.3	70	N	-	-	43.6	Y	N	N
A2-9b-2	20	79	A2-9b	-	23.4	0	64	61.6	55.6	0	66.4	66.4	70	N	-	-	43.0	Y	N	N
A2-9b-3	1	18.2	A2-9b	-	29.8	52.9	69.1	58.3	53	0	69.6	69.6	70	N	-	-	39.8	Y	N	N
A2-9b-3	2	21.4	A2-9b	-	30.4	52.9	69.1	58.3	53.1	0	69.6	69.6	70	N	-	-	39.2	Y	N	N
A2-9b-3	3	24.6	A2-9b	-	31.1	52.9	69	58.5	53.2	0	69.6	69.6	70	N	-	-	38.5	Y	N	N
A2-9b-3	4	27.8	A2-9b	-	31.8	52.9	69	58.8	53.5	0	69.6	69.6	70	N	-	-	37.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
A2-9b-3	5	31	A2-9b	-	32.5	52.9	68.9	58.9	53.8	0	69.6	69.6	70	N	-	-	37.1	Y	N	N
A2-9b-3	6	34.2	A2-9b	-	33.4	52.9	68.9	59.1	54.2	0	69.6	69.6	70	N	-	-	36.2	Y	N	N
A2-9b-3	7	37.4	A2-9b	-	34.4	52.9	68.8	59.2	54.5	0	69.5	69.5	70	N	-	-	35.1	Y	N	N
A2-9b-3	8	40.6	A2-9b	-	35.3	52.8	68.8	59.2	54.7	0	69.5	69.5	70	N	-	-	34.2	Y	N	N
A2-9b-3	9	43.8	A2-9b	-	36	52.8	68.7	59.3	54.8	0	69.4	69.4	70	N	-	-	33.4	Y	N	N
A2-9b-3	10	47	A2-9b	-	37.1	52.8	68.6	59.4	54.9	0	69.4	69.4	70	N	-	-	32.3	Y	N	N
A2-9b-3	11	50.2	A2-9b	-	37.9	52.8	68.6	59.4	54.9	0	69.3	69.3	70	N	-	-	31.4	Y	N	N
A2-9b-3	12	53.4	A2-9b	-	38.5	52.7	68.5	59.5	55	0	69.3	69.3	70	N	-	-	30.8	Y	N	N
A2-9b-3	13	56.6	A2-9b	-	39	52.7	68.5	59.5	54.9	0	69.2	69.3	70	N	-	-	30.3	Y	N	N
A2-9b-3	14	59.8	A2-9b	-	39.4	52.7	68.4	59.6	54.9	0	69.2	69.2	70	N	-	-	29.8	Y	N	N
A2-9b-3	15	63	A2-9b	-	39.7	52.7	68.4	59.6	54.9	0	69.2	69.2	70	N	-	-	29.5	Y	N	N
A2-9b-3	16	66.2	A2-9b	-	39.9	52.7	68.4	59.7	54.9	0	69.2	69.2	70	N	-	-	29.3	Y	N	N
A2-9b-3	17	69.4	A2-9b	-	40.1	52.7	68.4	59.8	54.9	0	69.2	69.2	70	N	-	-	29.1	Y	N	N
A2-9b-3	18	72.6	A2-9b	-	40.3	52.6	68.3	59.8	54.9	0	69.2	69.2	70	N	-	-	28.9	Y	N	N
A2-9b-3	19	75.8	A2-9b	-	40.6	52.6	68.3	59.8	54.9	0	69.1	69.1	70	N	-	-	28.5	Y	N	N
A2-9b-3	20	79	A2-9b	-	40.8	52.6	68.2	59.9	54.8	0	69.1	69.1	70	N	-	-	28.3	Y	N	N
A2-9b-4	1	18.7	A2-9b	-	37.2	55.3	70.1	56.5	52.6	0	70.5	70.5	70	Y	-	-	33.3	Y	Y	Y
A2-9b-4	2	21.9	A2-9b	-	37.5	55.3	70	56.6	52.7	0	70.4	70.4	70	N	-	-	32.9	Y	N	N
A2-9b-4	3	25.1	A2-9b	-	37.8	55.3	70	56.7	52.9	0	70.4	70.4	70	N	-	-	32.6	Y	N	N
A2-9b-4	4	28.3	A2-9b	-	38.1	55.3	69.9	56.8	53.2	0	70.4	70.4	70	N	-	-	32.3	Y	N	N
A2-9b-4	5	31.5	A2-9b	-	38.7	55.3	69.9	57	53.5	0	70.3	70.3	70	N	-	-	31.6	Y	N	N
A2-9b-4	6	34.7	A2-9b	-	39.1	55.3	69.8	57.2	53.8	0	70.3	70.3	70	N	-	-	31.2	Y	N	N
A2-9b-4	7	37.9	A2-9b	-	39.8	55.3	69.7	57.4	54.1	0	70.2	70.2	70	N	-	-	30.4	Y	N	N
A2-9b-4	8	41.1	A2-9b	-	40.5	55.2	69.6	57.6	54.3	0	70.2	70.2	70	N	-	-	29.7	Y	N	N
A2-9b-4	9	44.3	A2-9b	-	41.3	55.2	69.6	57.7	54.4	0	70.1	70.1	70	N	-	-	28.8	Y	N	N
A2-9b-4	10	47.5	A2-9b	-	41.8	55.2	69.5	57.7	54.5	0	70.1	70.1	70	N	-	-	28.3	Y	N	N
A2-9b-4	11	50.7	A2-9b	-	42.2	55.2	69.4	57.8	54.5	0	70	70.0	70	N	-	-	27.8	Y	N	N
A2-9b-4	12	53.9	A2-9b	-	42.6	55.2	69.3	57.9	54.6	0	69.9	69.9	70	N	-	-	27.3	Y	N	N
A2-9b-4	13	57.1	A2-9b	-	42.8	55.1	69.2	58	54.6	0	69.8	69.8	70	N	-	-	27.0	Y	N	N
A2-9b-4	14	60.3	A2-9b	-	42.9	55.1	69.2	58	54.6	0	69.8	69.8	70	N	-	-	26.9	Y	N	N
A2-9b-4	15	63.5	A2-9b	-	43.1	55.1	69.1	58.1	54.6	0	69.7	69.7	70	N	-	-	26.6	Y	N	N
A2-9b-4	16	66.7	A2-9b	-	43.2	55.1	69	58.1	54.5	0	69.6	69.6	70	N	-	-	26.4	Y	N	N
A2-9b-4	17	69.9	A2-9b	-	43.3	55	68.9	58.1	54.5	0	69.5	69.6	70	N	-	-	26.3	Y	N	N
A2-9b-4	18	73.1	A2-9b	-	43.4	55	68.8	58.2	54.5	0	69.5	69.5	70	N	-	-	26.1	Y	N	N
A2-9b-4	19	76.3	A2-9b	-	43.5	55	68.8	58.2	54.5	0	69.4	69.4	70	N	-	-	25.9	Y	N	N
A2-9b-4	20	79.5	A2-9b	-	43.7	54.9	68.7	58.3	54.4	0	69.4	69.4	70	N	-	-	25.7	Y	N	N
A2-9b-5	1	18.2	A2-9b	-	30.5	59.8	70.8	55.6	53.5	0	71.4	71.4	70	Y	-	-	40.9	Y	Y	Y
A2-9b-5	2	21.4	A2-9b	-	31.1	59.8	70.8	55.6	53.6	0	71.3	71.3	70	Y	-	-	40.2	Y	Y	Y
A2-9b-5	3	24.6	A2-9b	-	31.7	59.8	70.8	55.7	53.8	0	71.3	71.3	70	Y	-	-	39.6	Y	Y	Y
A2-9b-5	4	27.8	A2-9b	-	32.3	59.7	70.7	55.7	54.1	0	71.3	71.3	70	Y	-	-	39.0	Y	Y	Y
A2-9b-5	5	31	A2-9b	-	33	59.7	70.7	55.8	54.4	0	71.2	71.2	70	Y	-	-	38.2	Y	Y	Y
A2-9b-5	6	34.2	A2-9b	-	33.7	59.7	70.6	55.9	54.6	0	71.2	71.2	70	Y	-	-	37.5	Y	Y	Y
A2-9b-5	7	37.4	A2-9b	-	34.6	59.7	70.5	56	54.7	0	71.1	71.1	70	Y	-	-	36.5	Y	Y	Y
A2-9b-5	8	40.6	A2-9b	-	35.6	59.7	70.4	56.1	54.7	0	71	71.0	70	Y	-	-	35.4	Y	Y	Y
A2-9b-5	9	43.8	A2-9b	-	36.5	59.6	70.3	56.3	54.7	0	70.9	70.9	70	Y	-	-	34.4	Y	Y	Y
A2-9b-5	10	47	A2-9b	-	37.5	59.6	70.2	56.4	54.7	0	70.9	70.9	70	Y	-	-	33.4	Y	Y	Y
A2-9b-5	11	50.2	A2-9b	-	38.5	59.6	70.1	56.4	54.7	0	70.8	70.8	70	Y	-	-	32.3	Y	Y	Y
A2-9b-5	12	53.4	A2-9b	-	39.3	59.6	70.1	56.4	54.7	0	70.7	70.7	70	Y	-	-	31.4	Y	Y	Y
A2-9b-5	13	56.6	A2-9b	-	40.3	59.5	70	56.5	54.7	0	70.6	70.6	70	Y	-	-	30.3	Y	Y	Y
A2-9b-5	14	59.8	A2-9b	-	41.2	59.5	69.8	56.5	54.7	0	70.5	70.5	70	Y	-	-	29.3	Y	Y	Y
A2-9b-5	15	63	A2-9b	-	42	59.5	69.7	56.5	54.7	0	70.4	70.4	70	N	-	-	28.4	Y	N	N
A2-9b-5	16	66.2	A2-9b	-	43	59.4	69.6	56.5	54.6	0	70.3	70.3	70	N	-	-	27.3	Y	N	N
A2-9b-5	17	69.4	A2-9b	-	43.6	59.4	69.5	56.5	54.6	0	70.2	70.2	70	N	-	-	26.6	Y	N	N
A2-9b-5	18	72.6	A2-9b	-	44.4	59.3	69.4	56.5	54.6	0	70.2	70.2	70	N	-	-	25.8	Y	N	N
A2-9b-5	19	75.8	A2-9b	-	45	59.3	69.3	56.5	54.5	0	70.1	70.1	70	N	-	-	25.1	Y	N	N
A2-9b-5	20	79	A2-9b	-	45.6	59.3	69.2	56.5	54.5	0	70	70.0	70	N	-	-	24.4	Y	N	N
A2-9b-6	1	18.2	A2-9b	-	27	62.1	71.1	57.8	54.8	0	71.9	71.9	70	Y	-	-	44.9	Y	Y	Y
A2-9b-6	2	21.4	A2-9b	-	27.6	62.1	71.1	57.8	55	0	71.9	71.9	70	Y	-	-	44.3	Y	Y	Y
A2-9b-6	3	24.6	A2-9b	-	28.2	62.1	71.1	57.8	55.4	0	71.9	71.9	70	Y	-	-	43.7	Y	Y	Y
A2-9b-6	4	27.8	A2-9b	-	28.8	62.1	71	57.8	55.7	0	71.8	71.9	70	Y	-	-	43.1	Y	Y	Y
A2-9b-6	5	31	A2-9b	-	29.6	62	71	57.8	55.8	0	71.8	71.8	70	Y	-	-	42.2	Y	Y	Y
A2-9b-6	6	34.2	A2-9b	-	30.3	62	70.9	57.8	55.8	0	71.8	71.8	70	Y	-	-	41.5	Y	Y	Y
A2-9b-6	7	37.4	A2-9b	-	31.1	61.9	70.9	57.8	55.8	0	71.7	71.7	70	Y	-	-	40.6	Y	Y	Y
A2-9b-6	8	40.6	A2-9b	-	31.9	61.9	70.8	57.9	55.8	0	71.6	71.6	70	Y	-	-	39.7	Y	Y	Y
A2-9b-6	9	43.8	A2-9b	-	32.8	61.9	70.7	57.9	55.8	0	71.6	71.6	70	Y	-	-	38.8	Y	Y	Y
A2-9b-6	10	47	A2-9b	-	33.8	61.8	70.6	57.9	55.7	0	71.5	71.5	70	Y	-	-	37.7	Y	Y	Y
A2-9b-6	11	50.2	A2-9b	-	35	61.8	70.5	57.9	55.7	0	71.4	71.4	70	Y	-	-	36.4	Y	Y	Y
A2-9b-6	12	53.4	A2-9b	-	36.2	61.7	70.4	58	55.7	0	71.3	71.3	70	Y	-	-	35.1	Y	Y	Y
A2-9b-6	13	56.6	A2-9b	-	37.5	61.6	70.3	58	55.7	0	71.2	71.2	70	Y	-	-	33.7	Y	Y	Y
A2-9b-6	14	59.8	A2-9b	-	38.8	61.6	70.2	58	55.6	0	71.1	71.1	70	Y	-	-	32.3	Y	Y	Y
A2-9b-6	15	63	A2-9b	-	40.1	61.5	70.1	57.9	55.6	0	71	71.0	70	Y	-	-	30.9	Y	Y	Y
A2-9b-6	16	66.2	A2-9b	-	41.1	61.5	70	57.9	55.5	0	70.9	70.9	70	Y	-	-	29.8	Y	Y	Y
A2-9b-6	17	69.4	A2-9b	-	41.8	61.4	69.9	57.9	55.5	0	70.8	70.8	70	Y	-	-	29.0	Y	Y	Y
A2-9b-6	18	72.6	A2-9b	-	42.4	61.4	69.8	57.9	55.5	0	70.7	70.7	70	Y	-	-	28.3	Y	Y	Y
A2-9b-6	19	75.8	A2-9b	-	42.9	61.3	69.7	57.9	55.4	0	70.6	70.7	70	Y	-	-	27.8	Y	Y	Y
A2-9b-6	20	79	A2-9b	-	43.1	61.3	69.6	57.9	55.4	0	70.6	70.6	70	Y	-	-	27.5	Y	Y	Y
A2-9b-7	1	18.2	A2-9b	-	20.7	62.7	68.8	57.7	53.9	0	70.1	70.1	70	N	-	-	49.4	Y	N	N
A2-9b-7	2	21.4	A2-9b	-	21.1	62.7	68.9	57.7	54	0	70.2	70.2	70	N	-	-	49.1	Y	N	N
A2-9b-7	3	24.6	A2-9b	-	21.6	62.7	69	57.7	54.3	0	70.3	70.3	70	N	-	-	48.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A2-9b-7	4	27.8	A2-9b	-	22.1	62.6	69	57.7	54.7	0	70.3	70.3	70	N	-	-	48.2	Y	N	N
A2-9b-7	5	31	A2-9b	-	22.6	62.6	69	57.7	54.9	0	70.3	70.3	70	N	-	-	47.7	Y	N	N
A2-9b-7	6	34.2	A2-9b	-	23.3	62.6	68.9	57.7	54.9	0	70.2	70.2	70	N	-	-	46.9	Y	N	N
A2-9b-7	7	37.4	A2-9b	-	24	62.5	68.9	57.7	54.9	0	70.2	70.2	70	N	-	-	46.2	Y	N	N
A2-9b-7	8	40.6	A2-9b	-	24.7	62.5	68.8	57.6	54.9	0	70.1	70.1	70	N	-	-	45.4	Y	N	N
A2-9b-7	9	43.8	A2-9b	-	25.5	62.4	68.8	57.6	54.8	0	70.1	70.1	70	N	-	-	44.6	Y	N	N
A2-9b-7	10	47	A2-9b	-	26.5	62.4	68.7	57.6	54.8	0	70	70.0	70	N	-	-	43.5	Y	N	N
A2-9b-7	11	50.2	A2-9b	-	27.6	62.3	68.6	57.6	54.8	0	70	70.0	70	N	-	-	42.4	Y	N	N
A2-9b-7	12	53.4	A2-9b	-	28.9	62.3	68.6	57.5	54.7	0	69.9	69.9	70	N	-	-	41.0	Y	N	N
A2-9b-7	13	56.6	A2-9b	-	30.5	62.2	68.5	57.5	54.7	0	69.8	69.8	70	N	-	-	39.3	Y	N	N
A2-9b-7	14	59.8	A2-9b	-	32.3	62.2	68.4	57.5	54.6	0	69.8	69.8	70	N	-	-	37.5	Y	N	N
A2-9b-7	15	63	A2-9b	-	33.7	62.1	68.4	57.4	54.6	0	69.7	69.7	70	N	-	-	36.0	Y	N	N
A2-9b-7	16	66.2	A2-9b	-	35.1	62.1	68.3	57.4	54.5	0	69.6	69.6	70	N	-	-	34.5	Y	N	N
A2-9b-7	17	69.4	A2-9b	-	36	62	68.2	57.4	54.5	0	69.5	69.5	70	N	-	-	33.5	Y	N	N
A2-9b-7	18	72.6	A2-9b	-	36.5	61.9	68.1	57.3	54.4	0	69.4	69.4	70	N	-	-	32.9	Y	N	N
A2-9b-7	19	75.8	A2-9b	-	36.7	61.9	68	57.3	54.4	0	69.4	69.4	70	N	-	-	32.7	Y	N	N
A2-9b-7	20	79	A2-9b	-	36.8	61.8	67.9	57.3	54.3	0	69.3	69.3	70	N	-	-	32.5	Y	N	N
A3-3a-1	1	56.2	A3-3a	-	0	0	51.6	66.8	63.5	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-3a-1	2	59	A3-3a	-	0	0	52	66.7	63.4	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-1	3	61.8	A3-3a	-	0	0	52.3	66.6	63.2	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A3-3a-1	4	64.6	A3-3a	-	0	0	52.8	66.5	63.1	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-1	5	67.4	A3-3a	-	0	0	53.1	66.4	62.9	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-1	6	70.2	A3-3a	-	0	0	53.3	66.3	62.8	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A3-3a-1	7	73	A3-3a	-	0	0	53.4	66.2	62.7	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A3-3a-1	8	75.8	A3-3a	-	0	0	53.4	66.1	62.6	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-1	9	78.6	A3-3a	-	0	0	53.4	66	62.4	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A3-3a-1	10	81.4	A3-3a	-	0	0	53.4	65.8	62.3	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-1	11	84.2	A3-3a	-	0	0	53.4	65.8	62.3	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A3-3a-1	12	87	A3-3a	-	0	0	53.4	65.6	62.1	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-1	13	89.8	A3-3a	-	0	0	53.4	65.5	62	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-1	14	92.6	A3-3a	-	0	0	53.4	65.4	62	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-1	15	95.4	A3-3a	-	0	0	53.4	65.3	61.8	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-1	16	98.2	A3-3a	-	0	0	53.4	65.3	61.7	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-1	17	101	A3-3a	-	0	0	53.3	65.2	61.6	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-1	18	103.8	A3-3a	-	0	0	53.3	65.1	61.5	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-1	19	106.6	A3-3a	-	0	0	53.3	65.1	61.4	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-1	20	109.4	A3-3a	-	0	0	53.3	65	61.2	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-1	21	112.2	A3-3a	-	0	0	53.3	65	61.1	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-1	22	115	A3-3a	-	0	0	53.3	65	61	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-1	23	117.8	A3-3a	-	0	0	53.3	65	60.9	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-1	24	120.6	A3-3a	-	0	0	53.2	64.9	60.8	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-1	25	123.4	A3-3a	-	0	0	53.2	64.9	60.7	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-1	26	126.2	A3-3a	-	0	0	53.2	64.9	60.6	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-1	27	129	A3-3a	-	0	0	53.2	64.9	60.5	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-1	28	131.8	A3-3a	-	0	0	53.2	64.9	60.4	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-1	29	134.6	A3-3a	-	0	0	53.2	64.9	60.3	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-1	30	137.4	A3-3a	-	0	0	53.1	64.8	60.2	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-1	31	140.2	A3-3a	-	0	0	53.1	64.8	60.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-1	32	143	A3-3a	-	0	0	53.1	64.7	60	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-1	33	145.8	A3-3a	-	0	0	53.1	64.6	59.9	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A3-3a-1	34	148.6	A3-3a	-	0	0	53.1	64.5	59.9	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-1	35	151.4	A3-3a	-	0	0	53	64.5	59.8	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-1	36	154.2	A3-3a	-	0	0	53	64.5	59.7	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A3-3a-1	37	157	A3-3a	-	0	0	53	64.4	59.6	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A3-3a-1	38	159.8	A3-3a	-	0	0	53	64.3	59.5	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A3-3a-1	39	162.6	A3-3a	-	0	0	52.9	64.2	59.4	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-1	40	165.4	A3-3a	-	0	0	52.9	64.2	59.4	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-1	41	168.2	A3-3a	-	0	0	52.9	64.1	59.3	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A3-3a-2a	1	56.2	A3-3a	-	0	0	46.1	52.2	41.3	0	53.4	53.4	70	N	-	-	53.4	Y	N	N
A3-3a-2a	2	59	A3-3a	-	0	0	51.7	55.7	44.1	0	57.4	57.4	70	N	-	-	57.4	Y	N	N
A3-3a-2a	3	61.8	A3-3a	-	0	0	52.6	58.6	47.8	0	59.8	59.8	70	N	-	-	59.8	Y	N	N
A3-3a-2a	4	64.6	A3-3a	-	0	0	52.7	61.2	52.1	0	62.2	62.2	70	N	-	-	62.2	Y	N	N
A3-3a-2a	5	67.4	A3-3a	-	0	0	52.7	63.6	54.2	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A3-3a-2a	6	70.2	A3-3a	-	0	0	52.7	65.7	56	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-2a	7	73	A3-3a	-	0	0	52.7	67.7	57.4	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-2a	8	75.8	A3-3a	-	0	0	52.7	68.5	57.7	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A3-3a-2a	9	78.6	A3-3a	-	0	0	52.7	68.8	57.8	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A3-3a-2a	10	81.4	A3-3a	-	0	0	52.7	68.8	57.8	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A3-3a-2a	11	84.2	A3-3a	-	0	0	52.7	68.8	57.8	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A3-3a-2a	12	87	A3-3a	-	0	0	52.7	68.7	57.7	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A3-3a-2a	13	89.8	A3-3a	-	0	0	52.7	68.6	57.6	0	69	69.0	70	N	-	-	69.0	Y	N	N
A3-3a-2a	14	92.6	A3-3a	-	0	0	52.6	68.4	57.5	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A3-3a-2a	15	95.4	A3-3a	-	0	0	52.6	68.4	57.4	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A3-3a-2a	16	98.2	A3-3a	-	0	0	52.6	68.3	57.3	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A3-3a-2a	17	101	A3-3a	-	0	0	52.6	68.1	57.3	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-3a-2a	18	103.8	A3-3a	-	0	0	52.6	68	57.2	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-2a	19	106.6	A3-3a	-	0	0	52.6	67.8	57.1	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-2a	20	109.4	A3-3a	-	0	0	52.6	67.7	57	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-2a	21	112.2	A3-3a	-	0	0	52.6	67.6	56.9	0	68.1	68.1	70	N	-	-	68.1	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-3a-2a	22	115	A3-3a	-	0	0	52.6	67.5	56.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
A3-3a-2a	23	117.8	A3-3a	-	0	0	52.5	67.4	56.8	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A3-3a-2a	24	120.6	A3-3a	-	0	0	52.5	67.2	56.7	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A3-3a-2a	25	123.4	A3-3a	-	0	0	52.5	67.1	56.6	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-2a	26	126.2	A3-3a	-	0	0	52.5	67	56.5	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-2a	27	129	A3-3a	-	0	0	52.5	66.9	56.5	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A3-3a-2a	28	131.8	A3-3a	-	0	0	52.5	66.8	56.4	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-2a	29	134.6	A3-3a	-	0	0	52.5	66.7	56.3	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-2a	30	137.4	A3-3a	-	0	0	52.4	66.7	56.2	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-2a	31	140.2	A3-3a	-	0	0	52.4	66.6	56.2	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-2a	32	143	A3-3a	-	0	0	52.4	66.5	56.1	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-2a	33	145.8	A3-3a	-	0	0	52.4	66.4	56	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-2a	34	148.6	A3-3a	-	0	0	52.4	66.3	55.9	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-2a	35	151.4	A3-3a	-	0	0	52.4	66.2	55.9	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-2a	36	154.2	A3-3a	-	0	0	52.4	66.1	55.8	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-2a	37	157	A3-3a	-	0	0	52.3	66	55.7	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-2a	38	159.8	A3-3a	-	0	0	52.3	66	55.7	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-2a	39	162.6	A3-3a	-	0	0	52.3	65.9	55.6	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-2a	40	165.4	A3-3a	-	0	0	52.3	65.8	55.5	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-2a	41	168.2	A3-3a	-	0	0	52.3	65.7	55.5	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-2b	1	56.2	A3-3a	-	0	0	18.8	51.9	6.1	0	51.9	51.9	70	N	-	-	51.9	Y	N	N
A3-3a-2b	2	59	A3-3a	-	0	0	18.8	55	6.1	0	55	55.0	70	N	-	-	55.0	Y	N	N
A3-3a-2b	3	61.8	A3-3a	-	0	0	18.8	57.8	6.1	0	57.8	57.8	70	N	-	-	57.8	Y	N	N
A3-3a-2b	4	64.6	A3-3a	-	0	0	18.7	60.6	6	0	60.6	60.6	70	N	-	-	60.6	Y	N	N
A3-3a-2b	5	67.4	A3-3a	-	0	0	18.7	63.3	6	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A3-3a-2b	6	70.2	A3-3a	-	0	0	18.7	65.7	6	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-2b	7	73	A3-3a	-	0	0	18.7	67.8	5.9	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-2b	8	75.8	A3-3a	-	0	0	18.7	68.5	5.9	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-2b	9	78.6	A3-3a	-	0	0	18.6	68.8	5.8	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A3-3a-2b	10	81.4	A3-3a	-	0	0	18.6	68.9	5.8	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A3-3a-2b	11	84.2	A3-3a	-	0	0	18.6	68.9	5.8	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A3-3a-2b	12	87	A3-3a	-	0	0	18.5	68.8	5.7	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A3-3a-2b	13	89.8	A3-3a	-	0	0	18.5	68.7	5.6	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A3-3a-2b	14	92.6	A3-3a	-	0	0	18.5	68.5	5.6	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-2b	15	95.4	A3-3a	-	0	0	18.4	68.5	5.6	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-2b	16	98.2	A3-3a	-	0	0	18.4	68.3	5.5	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-2b	17	101	A3-3a	-	0	0	18.4	68.2	5.5	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-2b	18	103.8	A3-3a	-	0	0	18.4	68.1	5.5	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A3-3a-2b	19	106.6	A3-3a	-	0	0	18.3	67.9	5.4	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A3-3a-2b	20	109.4	A3-3a	-	0	0	18.3	67.8	5.3	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-2b	21	112.2	A3-3a	-	0	0	18.2	67.7	5.4	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A3-3a-2b	22	115	A3-3a	-	0	0	18.2	67.5	5.4	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A3-3a-2b	23	117.8	A3-3a	-	0	0	18.2	67.4	5.5	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-2b	24	120.6	A3-3a	-	0	0	18.1	67.3	5.5	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-2b	25	123.4	A3-3a	-	0	0	18.1	67.2	5.6	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-2b	26	126.2	A3-3a	-	0	0	18.1	67.1	5.5	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-2b	27	129	A3-3a	-	0	0	18	67	5.5	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-2b	28	131.8	A3-3a	-	0	0	18	66.9	5.6	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-2b	29	134.6	A3-3a	-	0	0	17.9	66.8	5.6	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-2b	30	137.4	A3-3a	-	0	0	17.8	66.7	5.6	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-2b	31	140.2	A3-3a	-	0	0	17.9	66.6	5.5	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-2b	32	143	A3-3a	-	0	0	17.8	66.5	5.4	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-2b	33	145.8	A3-3a	-	0	0	17.7	66.4	5.5	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-2b	34	148.6	A3-3a	-	0	0	17.8	66.3	5.5	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-2b	35	151.4	A3-3a	-	0	0	17.7	66.2	5.4	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-2b	36	154.2	A3-3a	-	0	0	17.8	66.1	5.2	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A3-3a-2b	37	157	A3-3a	-	0	0	17.9	66	5.2	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-2b	38	159.8	A3-3a	-	0	0	17.9	66	5.2	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-2b	39	162.6	A3-3a	-	0	0	18	65.9	5.3	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A3-3a-2b	40	165.4	A3-3a	-	0	0	18.1	65.8	5.3	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A3-3a-2b	41	168.2	A3-3a	-	0	0	18.2	65.7	5.3	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-3a	1	56.2	A3-3a	-	0	0	18.8	51.5	27.2	0	51.5	51.5	70	N	-	-	51.5	Y	N	N
A3-3a-3a	2	59	A3-3a	-	0	0	18.8	54.5	27.6	0	54.5	54.5	70	N	-	-	54.5	Y	N	N
A3-3a-3a	3	61.8	A3-3a	-	0	0	18.7	57.2	28.1	0	57.3	57.3	70	N	-	-	57.3	Y	N	N
A3-3a-3a	4	64.6	A3-3a	-	0	0	18.7	59.9	28.6	0	59.9	59.9	70	N	-	-	59.9	Y	N	N
A3-3a-3a	5	67.4	A3-3a	-	0	0	18.7	62.4	29.2	0	62.4	62.4	70	N	-	-	62.4	Y	N	N
A3-3a-3a	6	70.2	A3-3a	-	0	0	18.7	64.9	30.1	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A3-3a-3a	7	73	A3-3a	-	0	0	18.7	67.1	31.1	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-3a	8	75.8	A3-3a	-	0	0	18.7	68.2	32.3	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-3a	9	78.6	A3-3a	-	0	0	18.7	68.6	33.8	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-3a-3a	10	81.4	A3-3a	-	0	0	18.6	68.7	36.1	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A3-3a-3a	11	84.2	A3-3a	-	0	0	18.6	68.8	37.8	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A3-3a-3a	12	87	A3-3a	-	0	0	18.6	68.7	39.5	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A3-3a-3a	13	89.8	A3-3a	-	0	0	18.5	68.6	40.7	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-3a-3a	14	92.6	A3-3a	-	0	0	18.5	68.5	41.2	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-3a	15	95.4	A3-3a	-	0	0	18.5	68.4	41.6	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A3-3a-3a	16	98.2	A3-3a	-	0	0	18.5	68.3	41.8	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-3a	17	101	A3-3a	-	0	0	18.4	68.2	41.8	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-3a	18	103.8	A3-3a	-	0	0	18.4	68	41.8	0	68	68.0	70	N	-	-	68.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-3a-3a	19	106.6	A3-3a	-	0	0	18.3	67.9	41.8	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A3-3a-3a	20	109.4	A3-3a	-	0	0	18.3	67.8	41.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-3a	21	112.2	A3-3a	-	0	0	18.3	67.7	41.8	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A3-3a-3a	22	115	A3-3a	-	0	0	18.2	67.6	41.7	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-3a	23	117.8	A3-3a	-	0	0	18.2	67.4	41.7	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-3a	24	120.6	A3-3a	-	0	0	18.1	67.3	41.6	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-3a	25	123.4	A3-3a	-	0	0	18.1	67.2	41.6	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-3a	26	126.2	A3-3a	-	0	0	18	67.1	41.5	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-3a	27	129	A3-3a	-	0	0	18	67	41.5	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-3a	28	131.8	A3-3a	-	0	0	17.9	66.9	41.5	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-3a	29	134.6	A3-3a	-	0	0	17.9	66.8	41.4	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-3a	30	137.4	A3-3a	-	0	0	17.9	66.7	41.4	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-3a	31	140.2	A3-3a	-	0	0	17.7	66.6	41.3	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-3a	32	143	A3-3a	-	0	0	17.7	66.5	41.3	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-3a	33	145.8	A3-3a	-	0	0	17.7	66.4	41.3	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-3a	34	148.6	A3-3a	-	0	0	17.8	66.3	41.2	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-3a	35	151.4	A3-3a	-	0	0	17.8	66.2	41.2	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-3a	36	154.2	A3-3a	-	0	0	17.9	66.2	41.1	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-3a	37	157	A3-3a	-	0	0	17.9	66.1	41.1	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A3-3a-3a	38	159.8	A3-3a	-	0	0	18	66	41	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-3a	39	162.6	A3-3a	-	0	0	18	65.9	41	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A3-3a-3a	40	165.4	A3-3a	-	0	0	17.9	65.8	41	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A3-3a-3a	41	168.2	A3-3a	-	0	0	18	65.7	40.9	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-3b	1	56.2	A3-3a	-	0	0	19.6	53.2	22.5	0	53.2	53.2	70	N	-	-	53.2	Y	N	N
A3-3a-3b	2	59	A3-3a	-	0	0	19.6	56.8	22.8	0	56.8	56.8	70	N	-	-	56.8	Y	N	N
A3-3a-3b	3	61.8	A3-3a	-	0	0	19.6	60	23.1	0	60	60.0	70	N	-	-	60.0	Y	N	N
A3-3a-3b	4	64.6	A3-3a	-	0	0	19.6	62.9	23.6	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
A3-3a-3b	5	67.4	A3-3a	-	0	0	19.6	65.8	24.5	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A3-3a-3b	6	70.2	A3-3a	-	0	0	19.6	68.1	25.8	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A3-3a-3b	7	73	A3-3a	-	0	0	19.6	69	27.7	0	69	69.0	70	N	-	-	69.0	Y	N	N
A3-3a-3b	8	75.8	A3-3a	-	0	0	19.5	69.3	29.2	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A3-3a-3b	9	78.6	A3-3a	-	0	0	19.5	69.3	30	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A3-3a-3b	10	81.4	A3-3a	-	0	0	19.5	69.3	30.5	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A3-3a-3b	11	84.2	A3-3a	-	0	0	19.4	69.2	30.7	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
A3-3a-3b	12	87	A3-3a	-	0	0	19.4	69.1	31	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A3-3a-3b	13	89.8	A3-3a	-	0	0	19.4	69	31.4	0	69	69.0	70	N	-	-	69.0	Y	N	N
A3-3a-3b	14	92.6	A3-3a	-	0	0	19.4	68.9	31.6	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
A3-3a-3b	15	95.4	A3-3a	-	0	0	19.3	68.8	31.6	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A3-3a-3b	16	98.2	A3-3a	-	0	0	19.3	68.6	31.7	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-3a-3b	17	101	A3-3a	-	0	0	19.3	68.5	31.8	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-3b	18	103.8	A3-3a	-	0	0	19.2	68.3	31.9	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-3b	19	106.6	A3-3a	-	0	0	19.2	68.2	31.9	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-3b	20	109.4	A3-3a	-	0	0	19.2	68.1	31.9	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A3-3a-3b	21	112.2	A3-3a	-	0	0	19.2	68	31.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
A3-3a-3b	22	115	A3-3a	-	0	0	19.1	67.8	31.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-3b	23	117.8	A3-3a	-	0	0	19.1	67.7	31.8	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A3-3a-3b	24	120.6	A3-3a	-	0	0	19	67.6	31.8	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-3b	25	123.4	A3-3a	-	0	0	19	67.5	31.8	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A3-3a-3b	26	126.2	A3-3a	-	0	0	18.9	67.4	31.8	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-3b	27	129	A3-3a	-	0	0	18.9	67.3	31.8	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-3b	28	131.8	A3-3a	-	0	0	18.9	67.2	31.7	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-3b	29	134.6	A3-3a	-	0	0	18.8	67.1	31.7	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-3b	30	137.4	A3-3a	-	0	0	18.8	67	31.7	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-3b	31	140.2	A3-3a	-	0	0	18.7	66.9	31.7	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-3b	32	143	A3-3a	-	0	0	18.7	66.8	31.7	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-3b	33	145.8	A3-3a	-	0	0	18.6	66.7	31.7	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-3b	34	148.6	A3-3a	-	0	0	18.8	66.6	31.6	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-3b	35	151.4	A3-3a	-	0	0	18.8	66.5	31.7	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-3b	36	154.2	A3-3a	-	0	0	18.9	66.4	31.7	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-3b	37	157	A3-3a	-	0	0	19	66.4	31.7	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-3b	38	159.8	A3-3a	-	0	0	19	66.3	31.7	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-3b	39	162.6	A3-3a	-	0	0	19	66.2	31.6	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-3b	40	165.4	A3-3a	-	0	0	19	66.1	31.6	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A3-3a-3b	41	168.2	A3-3a	-	0	0	19	66	31.6	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-4a	1	56.2	A3-3a	-	0	0	19.3	52.5	25.3	0	52.5	52.5	70	N	-	-	52.5	Y	N	N
A3-3a-4a	2	59	A3-3a	-	0	0	19.3	56.1	25.5	0	56.1	56.1	70	N	-	-	56.1	Y	N	N
A3-3a-4a	3	61.8	A3-3a	-	0	0	19.3	59.2	25.8	0	59.2	59.2	70	N	-	-	59.2	Y	N	N
A3-3a-4a	4	64.6	A3-3a	-	0	0	19.3	62.2	26.1	0	62.2	62.2	70	N	-	-	62.2	Y	N	N
A3-3a-4a	5	67.4	A3-3a	-	0	0	19.3	65.1	26.5	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
A3-3a-4a	6	70.2	A3-3a	-	0	0	19.3	67.3	26.9	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-4a	7	73	A3-3a	-	0	0	19.2	68.2	27.4	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-4a	8	75.8	A3-3a	-	0	0	19.2	68.5	28	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-4a	9	78.6	A3-3a	-	0	0	19.2	68.6	28.7	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-3a-4a	10	81.4	A3-3a	-	0	0	19.2	68.7	29.6	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
A3-3a-4a	11	84.2	A3-3a	-	0	0	19.2	68.5	31.1	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-3a-4a	12	87	A3-3a	-	0	0	19.2	68.4	32	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A3-3a-4a	13	89.8	A3-3a	-	0	0	19.2	68.3	33.4	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-4a	14	92.6	A3-3a	-	0	0	19.1	68.2	34.3	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-4a	15	95.4	A3-3a	-	0	0	19.1	68.1	35	0	68.1	68.1	70	N	-	-	68.1	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
ID	Floor	Floor Level (mPD)				RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]				C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						dB (A)													
A3-3a-4a	16	98.2	A3-3a	-	0	0	19.1	68	35.6	0	68	68.0	70	N	-	-	68.0	Y	N	N
A3-3a-4a	17	101	A3-3a	-	0	0	19.1	67.8	36.1	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-4a	18	103.8	A3-3a	-	0	0	19.1	67.7	36.8	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
A3-3a-4a	19	106.6	A3-3a	-	0	0	19	67.6	37.2	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-4a	20	109.4	A3-3a	-	0	0	19	67.4	37.9	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-4a	21	112.2	A3-3a	-	0	0	19	67.3	38.5	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
A3-3a-4a	22	115	A3-3a	-	0	0	19	67.2	39	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-4a	23	117.8	A3-3a	-	0	0	18.9	67.1	39.4	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-4a	24	120.6	A3-3a	-	0	0	18.9	67	39.6	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-4a	25	123.4	A3-3a	-	0	0	18.9	66.9	39.9	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-4a	26	126.2	A3-3a	-	0	0	18.9	66.8	40	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-4a	27	129	A3-3a	-	0	0	18.8	66.7	40	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-4a	28	131.8	A3-3a	-	0	0	18.9	66.6	40.1	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-4a	29	134.6	A3-3a	-	0	0	18.9	66.5	40.2	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-4a	30	137.4	A3-3a	-	0	0	19	66.4	40.1	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-4a	31	140.2	A3-3a	-	0	0	19	66.3	40.1	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-4a	32	143	A3-3a	-	0	0	19.1	66.2	40.1	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-4a	33	145.8	A3-3a	-	0	0	19.1	66.1	40.1	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A3-3a-4a	34	148.6	A3-3a	-	0	0	19.3	66	40.1	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-4a	35	151.4	A3-3a	-	0	0	19.3	65.9	40	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A3-3a-4a	36	154.2	A3-3a	-	0	0	19.3	65.8	40	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A3-3a-4a	37	157	A3-3a	-	0	0	19.3	65.7	40	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-4a	38	159.8	A3-3a	-	0	0	19.3	65.6	40	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A3-3a-4a	39	162.6	A3-3a	-	0	0	19.3	65.6	39.9	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A3-3a-4a	40	165.4	A3-3a	-	0	0	19.3	65.5	39.9	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A3-3a-4a	41	168.2	A3-3a	-	0	0	19.3	65.4	39.9	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A3-3a-4b	1	56.2	A3-3a	-	0	0	19.2	52.2	27.6	0	52.2	52.2	70	N	-	-	52.2	Y	N	N
A3-3a-4b	2	59	A3-3a	-	0	0	19.2	55.8	29	0	55.8	55.8	70	N	-	-	55.8	Y	N	N
A3-3a-4b	3	61.8	A3-3a	-	0	0	19.2	59.1	31.5	0	59.1	59.1	70	N	-	-	59.1	Y	N	N
A3-3a-4b	4	64.6	A3-3a	-	0	0	19.2	62	32.5	0	62	62.0	70	N	-	-	62.0	Y	N	N
A3-3a-4b	5	67.4	A3-3a	-	0	0	19.2	64.7	33.1	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A3-3a-4b	6	70.2	A3-3a	-	0	0	19.2	67	33.6	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-4b	7	73	A3-3a	-	0	0	19.2	68	34.3	0	68	68.0	70	N	-	-	68.0	Y	N	N
A3-3a-4b	8	75.8	A3-3a	-	0	0	19.2	68.3	34.7	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-4b	9	78.6	A3-3a	-	0	0	19.2	68.4	35.1	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A3-3a-4b	10	81.4	A3-3a	-	0	0	19.2	68.4	35.3	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
A3-3a-4b	11	84.2	A3-3a	-	0	0	19.2	68.3	35.5	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-3a-4b	12	87	A3-3a	-	0	0	19.1	68.2	35.7	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
A3-3a-4b	13	89.8	A3-3a	-	0	0	19.1	68.1	35.8	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A3-3a-4b	14	92.6	A3-3a	-	0	0	19.1	68	36	0	68	68.0	70	N	-	-	68.0	Y	N	N
A3-3a-4b	15	95.4	A3-3a	-	0	0	19.1	67.9	36.2	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
A3-3a-4b	16	98.2	A3-3a	-	0	0	19.1	67.8	36.5	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-3a-4b	17	101	A3-3a	-	0	0	19	67.6	36.8	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-3a-4b	18	103.8	A3-3a	-	0	0	19	67.5	37.1	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A3-3a-4b	19	106.6	A3-3a	-	0	0	19	67.4	37.6	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
A3-3a-4b	20	109.4	A3-3a	-	0	0	19	67.2	38	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
A3-3a-4b	21	112.2	A3-3a	-	0	0	19	67.1	38.5	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
A3-3a-4b	22	115	A3-3a	-	0	0	18.9	67	39.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
A3-3a-4b	23	117.8	A3-3a	-	0	0	18.9	66.9	40.1	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
A3-3a-4b	24	120.6	A3-3a	-	0	0	18.9	66.8	40.5	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
A3-3a-4b	25	123.4	A3-3a	-	0	0	18.9	66.7	41.1	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
A3-3a-4b	26	126.2	A3-3a	-	0	0	18.8	66.6	42	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
A3-3a-4b	27	129	A3-3a	-	0	0	18.8	66.5	42.6	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
A3-3a-4b	28	131.8	A3-3a	-	0	0	18.9	66.4	43	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
A3-3a-4b	29	134.6	A3-3a	-	0	0	18.8	66.3	43.3	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
A3-3a-4b	30	137.4	A3-3a	-	0	0	18.9	66.2	43.6	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
A3-3a-4b	31	140.2	A3-3a	-	0	0	19	66.1	43.6	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
A3-3a-4b	32	143	A3-3a	-	0	0	19	66	43.7	0	66	66.0	70	N	-	-	66.0	Y	N	N
A3-3a-4b	33	145.8	A3-3a	-	0	0	19	65.9	43.8	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
A3-3a-4b	34	148.6	A3-3a	-	0	0	19.2	65.8	43.9	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
A3-3a-4b	35	151.4	A3-3a	-	0	0	19.2	65.7	43.9	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
A3-3a-4b	36	154.2	A3-3a	-	0	0	19.2	65.6	43.9	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
A3-3a-4b	37	157	A3-3a	-	0	0	19.2	65.5	44	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
A3-3a-4b	38	159.8	A3-3a	-	0	0	19.2	65.4	44	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A3-3a-4b	39	162.6	A3-3a	-	0	0	19.2	65.4	44	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
A3-3a-4b	40	165.4	A3-3a	-	0	0	19.2	65.3	44	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
A3-3a-4b	41	168.2	A3-3a	-	0	0	19.2	65.2	44	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
A3-3a-5	1	45.7	A3-3a	-	0	0	46.8	57.3	36.9	0	57.7	57.7	70	N	-	-	57.7	Y	N	N
A3-3a-5	2	48.5	A3-3a	-	0	0	50.3	58.6	38.4	0	59.2	59.2	70	N	-	-	59.2	Y	N	N
A3-3a-5	3	51.3	A3-3a	-	0	0	50.4	58.7	40	0	59.4	59.4	70	N	-	-	59.4	Y	N	N
A3-3a-5	4	54.1	A3-3a	-	0	0	50.4	58.9	42.4	0	59.6	59.6	70	N	-	-	59.6	Y	N	N
A3-3a-5	5	56.9	A3-3a	-	0	0	50.4	59.1	45.2	0	59.8	59.8	70	N	-	-	59.8	Y	N	N
A3-3a-5	6	59.7	A3-3a	-	0	0	50.4	59.2	47.8	0	60	60.0	70	N	-	-	60.0	Y	N	N
A3-3a-5	7	62.5	A3-3a	-	0	0	50.4	59.3	48.8	0	60.2	60.2	70	N	-	-	60.2	Y	N	N
A3-3a-5	8	65.3	A3-3a	-	0	0	50.4	59.3	49.2	0	60.2	60.2	70	N	-	-	60.2	Y	N	N
A3-3a-5	9	68.1	A3-3a	-	0	0	50.4	59.3	49.5	0	60.2	60.2	70	N	-	-	60.2	Y	N	N
A3-3a-5	10	70.9	A3-3a	-	0	0	50.4	59.3	50	0	60.3	60.3	70	N	-	-	60.3	Y	N	N
A3-3a-5	11	73.7	A3-3a	-	0	0	50.3	59.3	50.5	0	60.3	60.3	70	N	-	-	60.3	Y	N	N
A3-3a-5	12	76.5	A3-3a	-	0	0	50.3	59.3	51.3	0	60.4	60.4	70	N	-	-	60.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-3a-5	13	79.3	A3-3a	-	0	0	50.3	59.4	51.8	0	60.5	60.5	70	N	-	-	60.5	Y	N	N
A3-3a-5	14	82.1	A3-3a	-	0	0	50.3	59.4	52.1	0	60.6	60.6	70	N	-	-	60.6	Y	N	N
A3-3a-5	15	84.9	A3-3a	-	0	0	50.3	59.5	52.3	0	60.7	60.7	70	N	-	-	60.7	Y	N	N
A3-3a-5	16	87.7	A3-3a	-	0	0	50.3	59.6	52.6	0	60.8	60.8	70	N	-	-	60.8	Y	N	N
A3-3a-5	17	90.5	A3-3a	-	0	0	50.3	59.7	52.9	0	60.9	60.9	70	N	-	-	60.9	Y	N	N
A3-3a-5	18	93.3	A3-3a	-	0	0	50.2	59.7	53.1	0	61	61.0	70	N	-	-	61.0	Y	N	N
A3-3a-5	19	96.1	A3-3a	-	0	0	50.2	59.8	53.5	0	61.1	61.1	70	N	-	-	61.1	Y	N	N
A3-3a-5	20	98.9	A3-3a	-	0	0	50.2	59.8	53.9	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A3-3a-5	21	101.7	A3-3a	-	0	0	50.2	59.8	54.1	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A3-3a-5	22	104.5	A3-3a	-	0	0	50.2	59.8	54.3	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A3-3a-5	23	107.3	A3-3a	-	0	0	50.2	59.8	54.5	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-5	24	110.1	A3-3a	-	0	0	50.2	59.8	54.6	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-5	25	112.9	A3-3a	-	0	0	50.2	59.8	54.6	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-5	26	115.7	A3-3a	-	0	0	50.1	59.8	54.7	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-5	27	118.5	A3-3a	-	0	0	50.1	59.9	54.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-5	28	121.3	A3-3a	-	0	0	50.1	59.9	54.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-5	29	124.1	A3-3a	-	0	0	50.1	59.9	54.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-5	30	126.9	A3-3a	-	0	0	50.1	59.9	54.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-5	31	129.7	A3-3a	-	0	0	50.1	60	54.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-5	32	132.5	A3-3a	-	0	0	50	60	54.7	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-5	33	135.3	A3-3a	-	0	0	50	60.1	54.7	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-5	34	138.1	A3-3a	-	0	0	50	60.1	54.7	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-5	35	140.9	A3-3a	-	0	0	50	60.1	54.7	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-5	36	143.7	A3-3a	-	0	0	50	60.1	54.7	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-5	37	146.5	A3-3a	-	0	0	49.9	60.2	54.7	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-5	38	149.3	A3-3a	-	0	0	49.9	60.2	54.8	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-5	39	152.1	A3-3a	-	0	0	49.9	60.2	54.8	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-5	40	154.9	A3-3a	-	0	0	49.9	60.2	54.8	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-5	41	157.7	A3-3a	-	0	0	49.9	60.2	54.8	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-6	1	45.7	A3-3a	-	0	44.1	42.1	61.6	24.1	0	61.7	61.7	70	N	-	-	61.7	Y	N	N
A3-3a-6	2	48.5	A3-3a	-	0	44.2	45.9	61.9	24.1	0	62.1	62.1	70	N	-	-	62.1	Y	N	N
A3-3a-6	3	51.3	A3-3a	-	0	44.2	46.3	61.9	24.1	0	62.1	62.1	70	N	-	-	62.1	Y	N	N
A3-3a-6	4	54.1	A3-3a	-	0	44.2	46.3	61.8	24	0	62	62.0	70	N	-	-	62.0	Y	N	N
A3-3a-6	5	56.9	A3-3a	-	0	44.2	46.3	61.8	24	0	62	62.0	70	N	-	-	62.0	Y	N	N
A3-3a-6	6	59.7	A3-3a	-	0	44.2	46.3	61.8	23.9	0	62	62.0	70	N	-	-	62.0	Y	N	N
A3-3a-6	7	62.5	A3-3a	-	0	44.2	46.3	61.7	23.9	0	61.9	61.9	70	N	-	-	61.9	Y	N	N
A3-3a-6	8	65.3	A3-3a	-	0	44.2	46.3	61.7	23.9	0	61.9	61.9	70	N	-	-	61.9	Y	N	N
A3-3a-6	9	68.1	A3-3a	-	0	44.2	46.3	61.7	23.8	0	61.9	61.9	70	N	-	-	61.9	Y	N	N
A3-3a-6	10	70.9	A3-3a	-	0	44.2	46.3	61.6	23.8	0	61.8	61.8	70	N	-	-	61.8	Y	N	N
A3-3a-6	11	73.7	A3-3a	-	0	44.2	46.3	61.6	23.7	0	61.8	61.8	70	N	-	-	61.8	Y	N	N
A3-3a-6	12	76.5	A3-3a	-	0	44.3	46.3	61.6	23.7	0	61.8	61.8	70	N	-	-	61.8	Y	N	N
A3-3a-6	13	79.3	A3-3a	-	0	44.3	46.3	61.5	23.6	0	61.7	61.7	70	N	-	-	61.7	Y	N	N
A3-3a-6	14	82.1	A3-3a	-	0	44.3	46.3	61.5	23.6	0	61.7	61.7	70	N	-	-	61.7	Y	N	N
A3-3a-6	15	84.9	A3-3a	-	0	44.4	46.3	61.5	23.5	0	61.7	61.7	70	N	-	-	61.7	Y	N	N
A3-3a-6	16	87.7	A3-3a	-	0	44.4	46.3	61.4	23.4	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-6	17	90.5	A3-3a	-	0	44.4	46.2	61.4	23.4	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-6	18	93.3	A3-3a	-	0	44.5	46.2	61.4	23.3	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-6	19	96.1	A3-3a	-	0	44.4	46.2	61.4	23.3	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-6	20	98.9	A3-3a	-	0	44.5	46.2	61.3	23.2	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
A3-3a-6	21	101.7	A3-3a	-	0	44.5	46.2	61.3	23.2	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-6	22	104.5	A3-3a	-	0	44.5	46.2	61.3	23.1	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-6	23	107.3	A3-3a	-	0	44.6	46.2	61.3	23	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-6	24	110.1	A3-3a	-	0	44.6	46.1	61.2	23	0	61.5	61.5	70	N	-	-	61.5	Y	N	N
A3-3a-6	25	112.9	A3-3a	-	0	44.6	46.1	61.2	22.9	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	26	115.7	A3-3a	-	0	44.6	46.1	61.2	22.9	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	27	118.5	A3-3a	-	0	44.7	46.1	61.2	22.8	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	28	121.3	A3-3a	-	0	44.7	46.1	61.2	22.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	29	124.1	A3-3a	-	0	44.7	46.1	61.2	22.7	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	30	126.9	A3-3a	-	0	44.8	46	61.1	22.6	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	31	129.7	A3-3a	-	0	44.9	46	61.1	22.5	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	32	132.5	A3-3a	-	0	44.9	46	61.1	22.5	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
A3-3a-6	33	135.3	A3-3a	-	0	44.9	46	61.1	22.5	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-6	34	138.1	A3-3a	-	0	44.9	46	61.1	22.4	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-6	35	140.9	A3-3a	-	0	45	46	61.1	22.4	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-6	36	143.7	A3-3a	-	0	45	45.9	61	22.3	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-6	37	146.5	A3-3a	-	0	44.9	45.9	61	22.2	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
A3-3a-6	38	149.3	A3-3a	-	0	44.9	45.9	61	22.2	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A3-3a-6	39	152.1	A3-3a	-	0	44.9	45.9	61	22.1	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A3-3a-6	40	154.9	A3-3a	-	0	44.9	45.9	60.9	22.1	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
A3-3a-6	41	157.7	A3-3a	-	0	44.9	45.9	60.9	22	0	61.1	61.1	70	N	-	-	61.1	Y	N	N
A3-6-1	1	22.7	A3-6	-	0	0	0	68.5	68.4	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A3-6-1	2	25.9	A3-6	-	0	0	0	68.4	68.1	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A3-6-1	3	29.1	A3-6	-	0	0	0	68.3	67.8	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A3-6-1	4	32.3	A3-6	-	0	0	0	68.1	67.5	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A3-6-1	5	35.5	A3-6	-	0	0	0	68	67.3	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
A3-6-1	6	38.7	A3-6	-	0	0	0	67.8	67	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A3-6-1	7	41.9	A3-6	-	0	0	0	67.6	66.7	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A3-6-1	8	45.1	A3-6	-	0	0	0	67.5	66.4	0	70	70.0	70	N	-	-	70.0	Y	N	N
A3-6-1	9	48.3	A3-6	-	0	0	0	67.3	66.1	0	69.8	69.8	70	N	-	-	69.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-6-1	10	51.5	A3-6	-	0	0	0	67.1	65.8	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
A3-6-1	11	54.7	A3-6	-	0	0	0	67	65.6	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A3-6-1	12	57.9	A3-6	-	0	0	0	66.8	65.3	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A3-6-1	13	61.1	A3-6	-	0	0	0	66.7	65.1	0	69	69.0	70	N	-	-	69.0	Y	N	N
A3-6-1	14	64.3	A3-6	-	0	0	0	66.5	64.9	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
A3-6-1	15	67.5	A3-6	-	0	0	0	66.3	64.7	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
A3-6-1	16	70.7	A3-6	-	0	0	0	66.2	64.5	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
A3-6-1	17	73.9	A3-6	-	0	0	0	66	64.4	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
A3-6-1	18	77.1	A3-6	-	0	0	0	65.9	64.2	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
A3-6-1	19	80.3	A3-6	-	0	0	0	65.8	64	0	68	68.0	70	N	-	-	68.0	Y	N	N
A3-6-1	20	83.5	A3-6	-	0	0	0	65.6	63.8	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
A3-6-1	21	86.7	A3-6	-	0	0	0	65.5	63.6	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
A3-6-1	22	89.9	A3-6	-	0	0	0	65.3	63.5	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
A3-6-2	1	22.7	A3-6	-	0	0	42.7	72.7	62.8	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
A3-6-2	2	25.9	A3-6	-	0	0	43.1	72.4	62.7	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
A3-6-2	3	29.1	A3-6	-	0	0	43.5	72.2	62.6	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
A3-6-2	4	32.3	A3-6	-	0	0	44	71.9	62.4	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
A3-6-2	5	35.5	A3-6	-	0	0	44.7	71.7	62.3	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
A3-6-2	6	38.7	A3-6	-	0	0	45.4	71.4	62.1	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
A3-6-2	7	41.9	A3-6	-	0	0	46.3	71.2	61.9	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
A3-6-2	8	45.1	A3-6	-	0	0	47.3	70.9	61.8	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
A3-6-2	9	48.3	A3-6	-	0	0	48.1	70.7	61.7	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
A3-6-2	10	51.5	A3-6	-	0	0	48.9	70.5	61.5	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
A3-6-2	11	54.7	A3-6	-	0	0	49.5	70.2	61.3	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
A3-6-2	12	57.9	A3-6	-	0	0	50.3	70	61.2	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
A3-6-2	13	61.1	A3-6	-	0	0	51.1	69.8	61	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
A3-6-2	14	64.3	A3-6	-	0	0	52	69.6	60.8	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
A3-6-2	15	67.5	A3-6	-	0	0	52.5	69.4	60.6	0	70	70.0	70	N	-	-	70.0	Y	N	N
A3-6-2	16	70.7	A3-6	-	0	0	53.2	69.3	60.5	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
A3-6-2	17	73.9	A3-6	-	0	0	53.8	69.1	60.3	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
A3-6-2	18	77.1	A3-6	-	0	0	54.1	68.9	60.2	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
A3-6-2	19	80.3	A3-6	-	0	0	54.3	68.7	60.1	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
A3-6-2	20	83.5	A3-6	-	0	0	54.4	68.6	59.9	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
A3-6-2	21	86.7	A3-6	-	0	0	54.6	68.4	59.8	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
A3-6-2	22	89.9	A3-6	-	0	0	54.6	68.3	59.7	0	69	69.0	70	N	-	-	69.0	Y	N	N
A3-6-3	1	22.7	A3-6	-	3.8	14.1	51.7	73	55.6	0	73.1	73.1	70	Y	-	-	69.3	Y	Y	Y
A3-6-3	2	25.9	A3-6	-	3.8	14.1	55.5	72.8	55.7	0	73	73.0	70	Y	-	-	69.2	Y	Y	Y
A3-6-3	3	29.1	A3-6	-	3.9	14.1	56.8	72.6	55.8	0	72.8	72.8	70	Y	-	-	68.9	Y	Y	Y
A3-6-3	4	32.3	A3-6	-	3.9	14.1	57.1	72.3	55.8	0	72.6	72.6	70	Y	-	-	68.7	Y	Y	Y
A3-6-3	5	35.5	A3-6	-	3.9	14.1	57.4	72.1	55.8	0	72.3	72.3	70	Y	-	-	68.4	Y	Y	Y
A3-6-3	6	38.7	A3-6	-	3.9	14.1	57.7	71.8	55.7	0	72.1	72.1	70	Y	-	-	68.2	Y	Y	Y
A3-6-3	7	41.9	A3-6	-	3.9	14.1	58	71.6	55.7	0	71.9	71.9	70	Y	-	-	68.0	Y	Y	Y
A3-6-3	8	45.1	A3-6	-	4	14.1	58.4	71.4	55.6	0	71.7	71.7	70	Y	-	-	67.7	Y	Y	Y
A3-6-3	9	48.3	A3-6	-	4	14.1	58.7	71.1	55.5	0	71.5	71.5	70	Y	-	-	67.5	Y	Y	Y
A3-6-3	10	51.5	A3-6	-	4	14.1	58.9	70.9	55.5	0	71.3	71.3	70	Y	-	-	67.3	Y	Y	Y
A3-6-3	11	54.7	A3-6	-	4.1	14	59.1	70.6	55.4	0	71.1	71.1	70	Y	-	-	67.0	Y	Y	Y
A3-6-3	12	57.9	A3-6	-	4	14.1	59.1	70.4	55.3	0	70.9	70.9	70	Y	-	-	66.9	Y	Y	Y
A3-6-3	13	61.1	A3-6	-	4	14.1	59.1	70.2	55.2	0	70.7	70.7	70	Y	-	-	66.7	Y	Y	Y
A3-6-3	14	64.3	A3-6	-	4.1	14.1	59.2	70	55.2	0	70.5	70.5	70	Y	-	-	66.4	Y	Y	Y
A3-6-3	15	67.5	A3-6	-	4.1	13.9	59.2	69.9	55.1	0	70.3	70.3	70	N	-	-	66.2	Y	N	N
A3-6-3	16	70.7	A3-6	-	4.1	13.8	59.2	69.7	55.1	0	70.2	70.2	70	N	-	-	66.1	Y	N	N
A3-6-3	17	73.9	A3-6	-	4	14.1	59.2	69.5	55	0	70	70.0	70	N	-	-	66.0	Y	N	N
A3-6-3	18	77.1	A3-6	-	4	14.6	59.2	69.3	55	0	69.9	69.9	70	N	-	-	65.9	Y	N	N
A3-6-3	19	80.3	A3-6	-	4	15	59.2	69.1	54.9	0	69.7	69.7	70	N	-	-	65.7	Y	N	N
A3-6-3	20	83.5	A3-6	-	4	15.3	59.2	69	54.9	0	69.6	69.6	70	N	-	-	65.6	Y	N	N
A3-6-3	21	86.7	A3-6	-	3.9	15.8	59.2	68.8	54.8	0	69.4	69.4	70	N	-	-	65.5	Y	N	N
A3-6-3	22	89.9	A3-6	-	3.9	16.3	59.3	68.7	54.8	0	69.3	69.3	70	N	-	-	65.4	Y	N	N
A3-6-4	1	22.7	A3-6	-	9.5	0	55	73.8	56.6	0	74	74.0	70	Y	-	-	64.5	Y	Y	Y
A3-6-4	2	25.9	A3-6	-	9.6	0	58.7	73.6	56.7	0	73.9	73.9	70	Y	-	-	64.3	Y	Y	Y
A3-6-4	3	29.1	A3-6	-	9.6	0	59.9	73.4	56.6	0	73.7	73.7	70	Y	-	-	64.1	Y	Y	Y
A3-6-4	4	32.3	A3-6	-	9.7	0	60.2	73.2	56.5	0	73.5	73.5	70	Y	-	-	63.8	Y	Y	Y
A3-6-4	5	35.5	A3-6	-	9.7	0	60.4	73	56.4	0	73.3	73.3	70	Y	-	-	63.6	Y	Y	Y
A3-6-4	6	38.7	A3-6	-	9.8	0	60.7	72.7	56.3	0	73.1	73.1	70	Y	-	-	63.3	Y	Y	Y
A3-6-4	7	41.9	A3-6	-	9.8	0	60.9	72.5	56.2	0	72.9	72.9	70	Y	-	-	63.1	Y	Y	Y
A3-6-4	8	45.1	A3-6	-	9.9	0	61	72.2	56.1	0	72.7	72.7	70	Y	-	-	62.8	Y	Y	Y
A3-6-4	9	48.3	A3-6	-	9.8	0	61.1	72	56	0	72.5	72.5	70	Y	-	-	62.7	Y	Y	Y
A3-6-4	10	51.5	A3-6	-	10.1	0	61.1	71.8	55.9	0	72.2	72.2	70	Y	-	-	62.1	Y	Y	Y
A3-6-4	11	54.7	A3-6	-	10.5	0	61.1	71.6	55.8	0	72.1	72.1	70	Y	-	-	61.6	Y	Y	Y
A3-6-4	12	57.9	A3-6	-	11	0	61.2	71.4	55.7	0	71.9	71.9	70	Y	-	-	60.9	Y	Y	Y
A3-6-4	13	61.1	A3-6	-	11.5	0	61.2	71.2	55.6	0	71.7	71.7	70	Y	-	-	60.2	Y	Y	Y
A3-6-4	14	64.3	A3-6	-	12.1	0	61.2	71	55.5	0	71.5	71.5	70	Y	-	-	59.4	Y	Y	Y
A3-6-4	15	67.5	A3-6	-	12.7	0	61.2	70.8	55.4	0	71.4	71.4	70	Y	-	-	58.7	Y	Y	Y
A3-6-4	16	70.7	A3-6	-	13.4	0	61.2	70.6	55.3	0	71.2	71.2	70	Y	-	-	57.8	Y	Y	Y
A3-6-4	17	73.9	A3-6	-	14.2	0	61.3	70.4	55.3	0	71.1	71.1	70	Y	-	-	56.9	Y	Y	Y
A3-6-4	18	77.1	A3-6	-	15	0	61.4	70.3	55.2	0	70.9	70.9	70	Y	-	-	55.9	Y	Y	Y
A3-6-4	19	80.3	A3-6	-	15.9	0	61.4	70.1	55.1	0	70.8	70.8	70	Y	-	-	54.9	Y	Y	Y
A3-6-4	20	83.5	A3-6	-	16.9	0	61.5	69.9	55	0	70.6	70.6	70	Y	-	-	53.7	Y	Y	Y
A3-6-4	21	86.7	A3-6	-	17.9	0	61.5	69.8	55	0	70.5	70.5	70	Y	-	-	52.6	Y	Y	Y
A3-6-4	22	89.9	A3-6	-	19	0	61.5	69.6	54.9	0	70.4	70.4	70	N	-	-	51.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-6-5	1	22.7	A3-6	-	11.4	11	57.8	72.3	56.1	0	72.6	72.6	70	Y	-	-	61.2	Y	Y	Y
A3-6-5	2	25.9	A3-6	-	11.7	11.3	59.7	72.2	56	0	72.5	72.5	70	Y	-	-	60.8	Y	Y	Y
A3-6-5	3	29.1	A3-6	-	11.9	11.6	61.1	72.1	55.9	0	72.5	72.5	70	Y	-	-	60.6	Y	Y	Y
A3-6-5	4	32.3	A3-6	-	12.2	11.9	61.3	71.9	55.7	0	72.4	72.4	70	Y	-	-	60.2	Y	Y	Y
A3-6-5	5	35.5	A3-6	-	12.5	12.3	61.4	71.8	55.4	0	72.2	72.2	70	Y	-	-	59.7	Y	Y	Y
A3-6-5	6	38.7	A3-6	-	12.8	12.6	61.5	71.6	55.2	0	72.1	72.1	70	Y	-	-	59.3	Y	Y	Y
A3-6-5	7	41.9	A3-6	-	13.1	12.9	61.6	71.4	55	0	71.9	71.9	70	Y	-	-	58.8	Y	Y	Y
A3-6-5	8	45.1	A3-6	-	13.4	13.3	61.7	71.3	54.8	0	71.8	71.8	70	Y	-	-	58.4	Y	Y	Y
A3-6-5	9	48.3	A3-6	-	13.7	13.6	61.8	71.1	54.6	0	71.7	71.7	70	Y	-	-	58.0	Y	Y	Y
A3-6-5	10	51.5	A3-6	-	14.2	14	61.8	70.9	54.4	0	71.5	71.5	70	Y	-	-	57.3	Y	Y	Y
A3-6-5	11	54.7	A3-6	-	14.7	14.4	61.8	70.7	54.3	0	71.3	71.3	70	Y	-	-	56.6	Y	Y	Y
A3-6-5	12	57.9	A3-6	-	15.2	14.8	61.8	70.6	54.1	0	71.2	71.2	70	Y	-	-	56.0	Y	Y	Y
A3-6-5	13	61.1	A3-6	-	15.8	15.1	61.8	70.4	54	0	71.1	71.1	70	Y	-	-	55.3	Y	Y	Y
A3-6-5	14	64.3	A3-6	-	16.4	15.5	61.9	70.3	53.8	0	70.9	70.9	70	Y	-	-	54.5	Y	Y	Y
A3-6-5	15	67.5	A3-6	-	16.9	15.8	61.9	70.1	53.7	0	70.8	70.8	70	Y	-	-	53.9	Y	Y	Y
A3-6-5	16	70.7	A3-6	-	17.5	16.2	62	70	53.6	0	70.7	70.7	70	Y	-	-	53.2	Y	Y	Y
A3-6-5	17	73.9	A3-6	-	18.3	16.6	62	69.8	53.4	0	70.6	70.6	70	Y	-	-	52.3	Y	Y	Y
A3-6-5	18	77.1	A3-6	-	19	16.9	62.1	69.7	53.3	0	70.5	70.5	70	Y	-	-	51.5	Y	Y	Y
A3-6-5	19	80.3	A3-6	-	19.8	17.3	62.1	69.6	53.2	0	70.4	70.4	70	N	-	-	50.6	Y	N	N
A3-6-5	20	83.5	A3-6	-	20.6	17.7	62.1	69.4	53.1	0	70.3	70.3	70	N	-	-	49.7	Y	N	N
A3-6-5	21	86.7	A3-6	-	21.5	18.2	62.1	69.3	53	0	70.1	70.1	70	N	-	-	48.6	Y	N	N
A3-6-5	22	89.9	A3-6	-	22.5	18.5	62.1	69.2	52.9	0	70	70.0	70	N	-	-	47.5	Y	N	N
A3-6-6	1	22.7	A3-6	-	7.2	0	55.1	65.2	51.3	0	65.8	65.8	70	N	-	-	58.6	Y	N	N
A3-6-6	2	25.9	A3-6	-	7.5	0	55.1	65.2	51.2	0	65.8	65.8	70	N	-	-	58.3	Y	N	N
A3-6-6	3	29.1	A3-6	-	7.8	0	55.1	65.2	51	0	65.7	65.7	70	N	-	-	57.9	Y	N	N
A3-6-6	4	32.3	A3-6	-	8.1	0	55.1	65.2	50.8	0	65.7	65.7	70	N	-	-	57.6	Y	N	N
A3-6-6	5	35.5	A3-6	-	8.4	0	55.1	65.2	50.6	0	65.7	65.7	70	N	-	-	57.3	Y	N	N
A3-6-6	6	38.7	A3-6	-	8.7	0	55	65.2	50.4	0	65.8	65.8	70	N	-	-	57.1	Y	N	N
A3-6-6	7	41.9	A3-6	-	9	0	55	65.2	50.2	0	65.7	65.7	70	N	-	-	56.7	Y	N	N
A3-6-6	8	45.1	A3-6	-	9.3	0	55	65.2	50.1	0	65.7	65.7	70	N	-	-	56.4	Y	N	N
A3-6-6	9	48.3	A3-6	-	9.7	0	54.9	65.1	49.8	0	65.7	65.7	70	N	-	-	56.0	Y	N	N
A3-6-6	10	51.5	A3-6	-	10	0	54.9	65.1	49.7	0	65.6	65.6	70	N	-	-	55.6	Y	N	N
A3-6-6	11	54.7	A3-6	-	10.4	0	54.9	65	49.5	0	65.6	65.6	70	N	-	-	55.2	Y	N	N
A3-6-6	12	57.9	A3-6	-	10.8	0	54.9	65	49.4	0	65.5	65.5	70	N	-	-	54.7	Y	N	N
A3-6-6	13	61.1	A3-6	-	11	0	54.9	64.9	49.2	0	65.4	65.4	70	N	-	-	54.4	Y	N	N
A3-6-6	14	64.3	A3-6	-	11.4	0	54.8	64.9	49.1	0	65.4	65.4	70	N	-	-	54.0	Y	N	N
A3-6-6	15	67.5	A3-6	-	11.8	0	54.9	64.8	48.9	0	65.3	65.3	70	N	-	-	53.5	Y	N	N
A3-6-6	16	70.7	A3-6	-	12	0	54.9	64.8	48.8	0	65.3	65.3	70	N	-	-	53.3	Y	N	N
A3-6-6	17	73.9	A3-6	-	12.4	0	55	64.7	48.6	0	65.3	65.3	70	N	-	-	52.9	Y	N	N
A3-6-6	18	77.1	A3-6	-	12.8	0	55	64.7	48.5	0	65.2	65.2	70	N	-	-	52.4	Y	N	N
A3-6-6	19	80.3	A3-6	-	13.2	0	55.1	64.6	48.4	0	65.2	65.2	70	N	-	-	52.0	Y	N	N
A3-6-6	20	83.5	A3-6	-	13.6	0	55.2	64.6	48.3	0	65.2	65.2	70	N	-	-	51.6	Y	N	N
A3-6-6	21	86.7	A3-6	-	14	0	55.2	64.6	48.2	0	65.1	65.1	70	N	-	-	51.1	Y	N	N
A3-6-6	22	89.9	A3-6	-	14.4	0	55.3	64.6	48.1	0	65.1	65.1	70	N	-	-	50.7	Y	N	N
A3-6-7	1	22.7	A3-6	-	0	18.9	11.1	57.1	64.2	0	65	65.0	70	N	-	-	65.0	Y	N	N
A3-6-7	2	25.9	A3-6	-	0	19.4	11.1	57.1	64.2	0	65	65.0	70	N	-	-	65.0	Y	N	N
A3-6-7	3	29.1	A3-6	-	0	19.8	11.1	57.1	64.1	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A3-6-7	4	32.3	A3-6	-	0	20.3	11.1	57.1	64.1	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
A3-6-7	5	35.5	A3-6	-	0	20.8	11.1	57	64	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A3-6-7	6	38.7	A3-6	-	0	21.3	11.1	57	64	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
A3-6-7	7	41.9	A3-6	-	0	21.9	11.1	57	63.8	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
A3-6-7	8	45.1	A3-6	-	0	22.4	11.1	57	63.7	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
A3-6-7	9	48.3	A3-6	-	0	22.8	11.2	57	63.6	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A3-6-7	10	51.5	A3-6	-	0	23.3	11.2	57	63.5	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A3-6-7	11	54.7	A3-6	-	0	23.9	11.2	56.9	63.4	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A3-6-7	12	57.9	A3-6	-	0	24.5	11.2	56.9	63.3	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A3-6-7	13	61.1	A3-6	-	0	25.1	11.2	56.9	63.2	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A3-6-7	14	64.3	A3-6	-	0	25.7	11.2	56.9	63.1	0	64	64.0	70	N	-	-	64.0	Y	N	N
A3-6-7	15	67.5	A3-6	-	0	26.3	11.2	56.8	63	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A3-6-7	16	70.7	A3-6	-	0	27	11.2	56.8	62.9	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A3-6-7	17	73.9	A3-6	-	0	27.5	11.2	56.8	62.8	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
A3-6-7	18	77.1	A3-6	-	0	28.2	11.1	56.7	62.7	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A3-6-7	19	80.3	A3-6	-	0	28.9	11.1	56.7	62.6	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A3-6-7	20	83.5	A3-6	-	0	29.7	11.1	56.7	62.5	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A3-6-7	21	86.7	A3-6	-	0	30.5	11.1	56.6	62.4	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A3-6-7	22	89.9	A3-6	-	0	31.3	11.1	56.6	62.3	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A3-6-8	1	22.7	A3-6	-	0	0	13.1	57.6	63.5	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A3-6-8	2	25.9	A3-6	-	0	0	13.1	57.6	63.5	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A3-6-8	3	29.1	A3-6	-	0	0	13.1	57.6	63.5	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
A3-6-8	4	32.3	A3-6	-	0	0	13.1	57.6	63.4	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A3-6-8	5	35.5	A3-6	-	0	0	13.1	57.6	63.4	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
A3-6-8	6	38.7	A3-6	-	0	0	13.1	57.5	63.3	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
A3-6-8	7	41.9	A3-6	-	0	0	13.1	57.5	63.2	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A3-6-8	8	45.1	A3-6	-	0	0	13.1	57.5	63.1	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
A3-6-8	9	48.3	A3-6	-	0	0	13.1	57.4	63	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A3-6-8	10	51.5	A3-6	-	0	0	13.1	57.4	63	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
A3-6-8	11	54.7	A3-6	-	0	0	13.1	57.4	62.9	0	64	64.0	70	N	-	-	64.0	Y	N	N
A3-6-8	12	57.9	A3-6	-	0	0	13.1	57.3	62.8	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
A3-6-8	13	61.1	A3-6	-	0	0	13.1	57.3	62.7	0	63.8	63.8	70	N	-	-	63.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
A3-6-8	14	64.3	A3-6	-	0	0	13.1	57.2	62.6	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
A3-6-8	15	67.5	A3-6	-	0	0	13.1	57.2	62.4	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
A3-6-8	16	70.7	A3-6	-	0	0	13.1	57.2	62.3	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
A3-6-8	17	73.9	A3-6	-	0	0	13.1	57.1	62.2	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
A3-6-8	18	77.1	A3-6	-	0	0	13.1	57.1	62.1	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
A3-6-8	19	80.3	A3-6	-	0	0	13.1	57	62	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
A3-6-8	20	83.5	A3-6	-	0	0	13.1	57	61.9	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
A3-6-8	21	86.7	A3-6	-	0	0	13.1	56.9	61.8	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
A3-6-8	22	89.9	A3-6	-	0	0	13.1	56.9	61.7	0	63	63.0	70	N	-	-	63.0	Y	N	N
B3-5a-1	1	14.7	B3-5a	-	33	0	46.2	66.6	67.5	64	71.1	71.1	70	Y	-	-	38.1	Y	Y	Y
B3-5a-1	2	17.9	B3-5a	-	34.8	0	46.4	66.6	67.5	64.1	71.1	71.1	70	Y	-	-	36.3	Y	Y	Y
B3-5a-1	3	21.1	B3-5a	-	37.1	0	46.5	66.5	67.5	64.2	71.1	71.1	70	Y	-	-	34.0	Y	Y	Y
B3-5a-1	4	24.3	B3-5a	-	38.5	0	46.7	66.4	67.5	64.3	71	71.0	70	Y	-	-	32.5	Y	Y	Y
B3-5a-1	5	27.5	B3-5a	-	39.1	0	46.9	66.3	67.4	64.5	71	71.0	70	Y	-	-	31.9	Y	Y	Y
B3-5a-1	6	30.7	B3-5a	-	39.4	0	47.1	66.3	67.3	64.7	71	71.0	70	Y	-	-	31.6	Y	Y	Y
B3-5a-1	7	33.9	B3-5a	-	39.6	0	47.3	66.2	67.2	65	71	71.0	70	Y	-	-	31.4	Y	Y	Y
B3-5a-1	8	37.1	B3-5a	-	39.7	0	47.5	66.1	67.1	65.3	71	71.0	70	Y	-	-	31.3	Y	Y	Y
B3-5a-1	9	40.3	B3-5a	-	39.7	0	47.9	65.9	67	65.5	71	71.0	70	Y	-	-	31.3	Y	Y	Y
B3-5a-1	10	43.5	B3-5a	-	39.7	0	48.1	65.8	66.9	65.8	71	71.0	70	Y	-	-	31.3	Y	Y	Y
B3-5a-1	11	46.7	B3-5a	-	39.7	0	48.4	65.7	66.8	65.9	71	71.0	70	Y	-	-	31.3	Y	Y	Y
B3-5a-1	12	49.9	B3-5a	-	39.7	0	48.7	65.6	66.6	66.1	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	13	53.1	B3-5a	-	39.7	0	48.9	65.5	66.5	66.2	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	14	56.3	B3-5a	-	39.7	0	49.1	65.4	66.4	66.4	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	15	59.5	B3-5a	-	39.7	0	49.3	65.3	66.3	66.5	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	16	62.7	B3-5a	-	39.7	0	49.4	65.3	66.1	66.7	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	17	65.9	B3-5a	-	39.7	0	49.5	65.2	66	66.8	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	18	69.1	B3-5a	-	39.7	0	49.5	65.1	65.9	67	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-1	19	72.3	B3-5a	-	39.7	0	49.6	65	65.8	67.2	70.9	70.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-2	1	14.7	B3-5a	-	14.1	56.4	58.5	70.1	62.5	42.8	71.2	71.2	70	Y	-	-	57.1	Y	Y	Y
B3-5a-2	2	17.9	B3-5a	-	14.3	56.5	58.5	70	62.5	43.4	71.1	71.1	70	Y	-	-	56.8	Y	Y	Y
B3-5a-2	3	21.1	B3-5a	-	14.6	56.5	58.5	69.9	62.4	44.1	71	71.0	70	Y	-	-	56.4	Y	Y	Y
B3-5a-2	4	24.3	B3-5a	-	14.9	56.5	58.5	69.8	62.4	44.8	70.9	70.9	70	Y	-	-	56.0	Y	Y	Y
B3-5a-2	5	27.5	B3-5a	-	15.2	56.5	58.5	69.7	62.3	45.4	70.8	70.8	70	Y	-	-	55.6	Y	Y	Y
B3-5a-2	6	30.7	B3-5a	-	15.6	56.5	58.5	69.5	62.2	46.1	70.7	70.7	70	Y	-	-	55.1	Y	Y	Y
B3-5a-2	7	33.9	B3-5a	-	15.9	56.5	58.5	69.3	62.2	46.8	70.6	70.6	70	Y	-	-	54.7	Y	Y	Y
B3-5a-2	8	37.1	B3-5a	-	16.4	56.5	58.5	69.2	62.1	47.5	70.4	70.4	70	N	-	-	54.0	Y	N	N
B3-5a-2	9	40.3	B3-5a	-	16.8	56.6	58.4	69	62	48.1	70.3	70.3	70	N	-	-	53.5	Y	N	N
B3-5a-2	10	43.5	B3-5a	-	17.3	56.6	58.4	68.8	61.8	48.8	70.2	70.2	70	N	-	-	52.9	Y	N	N
B3-5a-2	11	46.7	B3-5a	-	17.8	56.6	58.4	68.6	61.7	49.5	70	70.0	70	N	-	-	52.2	Y	N	N
B3-5a-2	12	49.9	B3-5a	-	18.4	56.6	58.4	68.5	61.6	50.3	69.9	69.9	70	N	-	-	51.5	Y	N	N
B3-5a-2	13	53.1	B3-5a	-	19	56.6	58.4	68.3	61.5	50.9	69.7	69.7	70	N	-	-	50.7	Y	N	N
B3-5a-2	14	56.3	B3-5a	-	19.6	56.6	58.4	68.1	61.4	51.6	69.6	69.6	70	N	-	-	50.0	Y	N	N
B3-5a-2	15	59.5	B3-5a	-	20.3	56.6	58.3	67.9	61.2	52.2	69.5	69.5	70	N	-	-	49.2	Y	N	N
B3-5a-2	16	62.7	B3-5a	-	21.4	56.6	58.3	67.8	61.1	52.9	69.3	69.3	70	N	-	-	47.9	Y	N	N
B3-5a-2	17	65.9	B3-5a	-	22.2	56.6	58.3	67.6	61	53.4	69.2	69.2	70	N	-	-	47.0	Y	N	N
B3-5a-2	18	69.1	B3-5a	-	22.8	56.6	58.3	67.4	60.9	54	69.1	69.1	70	N	-	-	46.3	Y	N	N
B3-5a-2	19	72.3	B3-5a	-	23.9	56.6	58.3	67.3	60.8	54.5	69	69.0	70	N	-	-	45.1	Y	N	N
B3-5a-3	1	14.7	B3-5a	-	10.3	52	60.3	69.8	57.3	33.3	70.5	70.5	70	Y	-	-	60.2	Y	Y	Y
B3-5a-3	2	17.9	B3-5a	-	10.3	52	60.3	69.7	57.3	33.9	70.5	70.5	70	Y	-	-	60.2	Y	Y	Y
B3-5a-3	3	21.1	B3-5a	-	10.3	52	60.3	69.6	57.3	34.4	70.4	70.4	70	N	-	-	60.1	Y	N	N
B3-5a-3	4	24.3	B3-5a	-	10.3	52	60.3	69.5	57.3	34.9	70.3	70.3	70	N	-	-	60.0	Y	N	N
B3-5a-3	5	27.5	B3-5a	-	10.3	52	60.3	69.4	57.3	35.4	70.2	70.2	70	N	-	-	59.9	Y	N	N
B3-5a-3	6	30.7	B3-5a	-	10.3	52	60.3	69.3	57.3	35.9	70.1	70.1	70	N	-	-	59.8	Y	N	N
B3-5a-3	7	33.9	B3-5a	-	10.3	52	60.3	69.1	57.3	36.5	70	70.0	70	N	-	-	59.7	Y	N	N
B3-5a-3	8	37.1	B3-5a	-	10.3	51.9	60.3	69	57.2	37.1	69.8	69.8	70	N	-	-	59.5	Y	N	N
B3-5a-3	9	40.3	B3-5a	-	10.3	51.9	60.2	68.8	57.2	37.7	69.7	69.7	70	N	-	-	59.4	Y	N	N
B3-5a-3	10	43.5	B3-5a	-	10.2	51.9	60.2	68.7	57.2	38.3	69.6	69.6	70	N	-	-	59.4	Y	N	N
B3-5a-3	11	46.7	B3-5a	-	10.2	51.8	60.2	68.5	57.1	39	69.4	69.4	70	N	-	-	59.2	Y	N	N
B3-5a-3	12	49.9	B3-5a	-	10.2	51.8	60.2	68.3	57.1	39.5	69.3	69.3	70	N	-	-	59.1	Y	N	N
B3-5a-3	13	53.1	B3-5a	-	10.2	51.8	60.2	68.2	57	40.1	69.2	69.2	70	N	-	-	59.0	Y	N	N
B3-5a-3	14	56.3	B3-5a	-	10.2	51.8	60.1	68	56.9	40.8	69	69.0	70	N	-	-	58.8	Y	N	N
B3-5a-3	15	59.5	B3-5a	-	10.1	51.7	60.1	67.9	56.9	41.4	68.9	68.9	70	N	-	-	58.8	Y	N	N
B3-5a-3	16	62.7	B3-5a	-	10.3	51.7	60.1	67.7	56.8	42	68.8	68.8	70	N	-	-	58.5	Y	N	N
B3-5a-3	17	65.9	B3-5a	-	10.5	51.7	60.1	67.5	56.8	42.6	68.7	68.7	70	N	-	-	58.2	Y	N	N
B3-5a-3	18	69.1	B3-5a	-	10.9	51.7	60	67.4	56.7	43.2	68.5	68.5	70	N	-	-	57.6	Y	N	N
B3-5a-3	19	72.3	B3-5a	-	11.3	51.7	60	67.2	56.6	43.8	68.4	68.4	70	N	-	-	57.1	Y	N	N
B3-5a-4	1	14.7	B3-5a	-	0.9	0	53.1	69.4	56.4	31	69.7	69.7	70	N	-	-	68.8	Y	N	N
B3-5a-4	2	17.9	B3-5a	-	0.9	0	53.1	69.3	56.4	31.1	69.6	69.6	70	N	-	-	68.7	Y	N	N
B3-5a-4	3	21.1	B3-5a	-	0.9	0	53.1	69.2	56.3	31.3	69.5	69.5	70	N	-	-	68.6	Y	N	N
B3-5a-4	4	24.3	B3-5a	-	0.9	0	53.1	69	56.3	31.5	69.3	69.3	70	N	-	-	68.4	Y	N	N
B3-5a-4	5	27.5	B3-5a	-	0.9	0	53.1	68.9	56.3	31.7	69.2	69.2	70	N	-	-	68.3	Y	N	N
B3-5a-4	6	30.7	B3-5a	-	0.9	0	53	68.7	56.3	31.9	69.1	69.1	70	N	-	-	68.2	Y	N	N
B3-5a-4	7	33.9	B3-5a	-	0.9	0	53	68.5	56.3	32.1	68.9	68.9	70	N	-	-	68.0	Y	N	N
B3-5a-4	8	37.1	B3-5a	-	0.9	0	53	68.4	56.3	32.4	68.7	68.7	70	N	-	-	67.8	Y	N	N
B3-5a-4	9	40.3	B3-5a	-	0.9	0	53	68.2	56.3	32.6	68.6	68.6	70	N	-	-	67.7	Y	N	N
B3-5a-4	10	43.5	B3-5a	-	0.9	0	53	68	56.3	33	68.4	68.4	70	N	-	-	67.5	Y	N	N
B3-5a-4	11	46.7	B3-5a	-	0.9	0	52.9	67.8	56.3	33.7	68.2	68.2	70	N	-	-	67.3	Y	N	N
B3-5a-4	12	49.9	B3-5a	-	0.9	0	52.9	67.6	56.2	34.6	68.1	68.1	70	N	-	-	67.2	Y	N	N
B3-5a-4	13	53.1	B3-5a	-	0.7	0	52.9	67.5	56.2	35.5	67.9	67.9	70	N	-	-	67.2	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
B3-5a-4	14	56.3	B3-5a	-	1.5	0	52.9	67.3	56.2	36.5	67.8	67.8	70	N	-	-	66.3	Y	N	N
B3-5a-4	15	59.5	B3-5a	-	2.9	0	52.9	67.1	56.2	37.6	67.6	67.6	70	N	-	-	64.7	Y	N	N
B3-5a-4	16	62.7	B3-5a	-	4.6	0	52.9	67	56.1	38.7	67.5	67.5	70	N	-	-	62.9	Y	N	N
B3-5a-4	17	65.9	B3-5a	-	6.8	0	53	66.9	56.2	39.9	67.4	67.4	70	N	-	-	60.6	Y	N	N
B3-5a-4	18	69.1	B3-5a	-	9.7	0	53	66.7	56.2	41.1	67.3	67.3	70	N	-	-	57.6	Y	N	N
B3-5a-4	19	72.3	B3-5a	-	12.5	0	52.9	66.6	56.2	42.5	67.2	67.2	70	N	-	-	54.7	Y	N	N
B3-5a-5	1	14.7	B3-5a	-	12	63.1	64.3	72.5	55.2	0	73.6	73.6	70	Y	-	-	61.6	Y	Y	Y
B3-5a-5	2	17.9	B3-5a	-	12	63.1	64.3	72.3	55.4	0	73.5	73.5	70	Y	-	-	61.5	Y	Y	Y
B3-5a-5	3	21.1	B3-5a	-	12.1	63.1	64.3	72.1	56	0	73.3	73.3	70	Y	-	-	61.2	Y	Y	Y
B3-5a-5	4	24.3	B3-5a	-	12	63.2	64.3	71.9	57	0	73.2	73.2	70	Y	-	-	61.2	Y	Y	Y
B3-5a-5	5	27.5	B3-5a	-	12	63.5	64.3	71.6	57.8	0	73	73.0	70	Y	-	-	61.0	Y	Y	Y
B3-5a-5	6	30.7	B3-5a	-	12	63.9	64.3	71.4	58	0	72.9	72.9	70	Y	-	-	60.9	Y	Y	Y
B3-5a-5	7	33.9	B3-5a	-	12	64.2	64.3	71.1	58	0	72.8	72.8	70	Y	-	-	60.8	Y	Y	Y
B3-5a-5	8	37.1	B3-5a	-	12	64.5	64.4	70.9	58	0	72.6	72.6	70	Y	-	-	60.6	Y	Y	Y
B3-5a-5	9	40.3	B3-5a	-	12	64.7	64.4	70.6	57.9	0	72.5	72.5	70	Y	-	-	60.5	Y	Y	Y
B3-5a-5	10	43.5	B3-5a	-	11.9	65	64.4	70.4	57.9	0	72.4	72.4	70	Y	-	-	60.5	Y	Y	Y
B3-5a-5	11	46.7	B3-5a	-	12	65.1	64.5	70.1	57.8	0	72.3	72.3	70	Y	-	-	60.3	Y	Y	Y
B3-5a-5	12	49.9	B3-5a	-	12.1	65.1	64.5	69.9	57.8	0	72.1	72.1	70	Y	-	-	60.0	Y	Y	Y
B3-5a-5	13	53.1	B3-5a	-	12.3	65.2	64.5	69.7	57.8	0	72	72.0	70	Y	-	-	59.7	Y	Y	Y
B3-5a-5	14	56.3	B3-5a	-	12.5	65.1	64.5	69.4	57.7	0	71.9	71.9	70	Y	-	-	59.4	Y	Y	Y
B3-5a-5	15	59.5	B3-5a	-	12.7	65.1	64.5	69.2	57.7	0	71.8	71.8	70	Y	-	-	59.1	Y	Y	Y
B3-5a-5	16	62.7	B3-5a	-	13.1	65	64.5	69.1	57.6	0	71.6	71.6	70	Y	-	-	58.5	Y	Y	Y
B3-5a-5	17	65.9	B3-5a	-	13.7	64.9	64.5	68.9	57.6	0	71.5	71.5	70	Y	-	-	57.8	Y	Y	Y
B3-5a-5	18	69.1	B3-5a	-	14.4	64.8	64.5	68.7	57.5	0	71.4	71.4	70	Y	-	-	57.0	Y	Y	Y
B3-5a-5	19	72.3	B3-5a	-	15.1	64.7	64.5	68.5	57.5	0	71.3	71.3	70	Y	-	-	56.2	Y	Y	Y
B3-5a-6	1	14.7	B3-5a	-	13.7	63.4	65.1	72.2	53	0	73.5	73.5	70	Y	-	-	59.8	Y	Y	Y
B3-5a-6	2	17.9	B3-5a	-	13.7	63.4	65.1	72	53.5	0	73.4	73.4	70	Y	-	-	59.7	Y	Y	Y
B3-5a-6	3	21.1	B3-5a	-	13.7	63.5	65.1	71.9	54.8	0	73.2	73.2	70	Y	-	-	59.5	Y	Y	Y
B3-5a-6	4	24.3	B3-5a	-	13.7	63.7	65.1	71.6	56.4	0	73.1	73.1	70	Y	-	-	59.4	Y	Y	Y
B3-5a-6	5	27.5	B3-5a	-	13.7	64.2	65.1	71.4	57.2	0	73.1	73.1	70	Y	-	-	59.4	Y	Y	Y
B3-5a-6	6	30.7	B3-5a	-	13.7	64.6	65.1	71.2	57.4	0	73	73.0	70	Y	-	-	59.3	Y	Y	Y
B3-5a-6	7	33.9	B3-5a	-	13.6	65	65.1	70.9	57.4	0	72.9	72.9	70	Y	-	-	59.3	Y	Y	Y
B3-5a-6	8	37.1	B3-5a	-	13.6	65.4	65.2	70.7	57.3	0	72.8	72.8	70	Y	-	-	59.2	Y	Y	Y
B3-5a-6	9	40.3	B3-5a	-	13.6	65.6	65.2	70.4	57.3	0	72.7	72.7	70	Y	-	-	59.1	Y	Y	Y
B3-5a-6	10	43.5	B3-5a	-	13.6	65.8	65.3	70.2	57.2	0	72.6	72.6	70	Y	-	-	59.0	Y	Y	Y
B3-5a-6	11	46.7	B3-5a	-	13.6	65.8	65.4	70	57.2	0	72.5	72.5	70	Y	-	-	58.9	Y	Y	Y
B3-5a-6	12	49.9	B3-5a	-	13.7	65.9	65.4	69.8	57.1	0	72.4	72.4	70	Y	-	-	58.7	Y	Y	Y
B3-5a-6	13	53.1	B3-5a	-	13.8	65.8	65.4	69.6	57.1	0	72.3	72.3	70	Y	-	-	58.5	Y	Y	Y
B3-5a-6	14	56.3	B3-5a	-	13.9	65.7	65.4	69.4	57	0	72.2	72.2	70	Y	-	-	58.3	Y	Y	Y
B3-5a-6	15	59.5	B3-5a	-	14.1	65.6	65.4	69.2	57	0	72	72.0	70	Y	-	-	57.9	Y	Y	Y
B3-5a-6	16	62.7	B3-5a	-	14.5	65.6	65.4	69	56.9	0	71.9	71.9	70	Y	-	-	57.4	Y	Y	Y
B3-5a-6	17	65.9	B3-5a	-	14.9	65.5	65.4	68.8	56.9	0	71.8	71.8	70	Y	-	-	56.9	Y	Y	Y
B3-5a-6	18	69.1	B3-5a	-	15.5	65.3	65.4	68.6	56.8	0	71.7	71.7	70	Y	-	-	56.2	Y	Y	Y
B3-5a-6	19	72.3	B3-5a	-	16.2	65.3	65.4	68.4	56.7	0	71.5	71.5	70	Y	-	-	55.3	Y	Y	Y
B3-5a-7	1	14.7	B3-5a	-	13.7	53.6	59.6	68.1	46	0	68.8	68.8	70	N	-	-	55.1	Y	N	N
B3-5a-7	2	17.9	B3-5a	-	13.7	56.1	60.8	68	49.9	0	69.1	69.1	70	N	-	-	55.4	Y	N	N
B3-5a-7	3	21.1	B3-5a	-	13.7	59.8	63.9	68	55	0	70	70.0	70	N	-	-	56.3	Y	N	N
B3-5a-7	4	24.3	B3-5a	-	13.7	63.6	65.1	68	57.7	0	70.9	70.9	70	Y	-	-	57.2	Y	Y	Y
B3-5a-7	5	27.5	B3-5a	-	13.7	65.7	65.3	68	58.2	0	71.5	71.5	70	Y	-	-	57.8	Y	Y	Y
B3-5a-7	6	30.7	B3-5a	-	13.7	66.7	65.5	68	58.3	0	71.8	71.8	70	Y	-	-	58.1	Y	Y	Y
B3-5a-7	7	33.9	B3-5a	-	13.7	67.4	65.7	68	58.2	0	72.1	72.1	70	Y	-	-	58.4	Y	Y	Y
B3-5a-7	8	37.1	B3-5a	-	13.6	68	65.9	68	58.1	0	72.3	72.3	70	Y	-	-	58.7	Y	Y	Y
B3-5a-7	9	40.3	B3-5a	-	13.6	68.2	66.1	68	58.1	0	72.4	72.4	70	Y	-	-	58.8	Y	Y	Y
B3-5a-7	10	43.5	B3-5a	-	13.6	68.2	66.1	68	58	0	72.5	72.5	70	Y	-	-	58.9	Y	Y	Y
B3-5a-7	11	46.7	B3-5a	-	13.6	68.1	66.2	67.9	57.9	0	72.4	72.4	70	Y	-	-	58.8	Y	Y	Y
B3-5a-7	12	49.9	B3-5a	-	13.5	68.1	66.2	67.8	57.9	0	72.4	72.4	70	Y	-	-	58.9	Y	Y	Y
B3-5a-7	13	53.1	B3-5a	-	13.5	67.9	66.2	67.7	57.8	0	72.3	72.3	70	Y	-	-	58.8	Y	Y	Y
B3-5a-7	14	56.3	B3-5a	-	13.5	67.8	66.2	67.7	57.7	0	72.2	72.2	70	Y	-	-	58.7	Y	Y	Y
B3-5a-7	15	59.5	B3-5a	-	13.5	67.7	66.2	67.6	57.6	0	72.1	72.1	70	Y	-	-	58.6	Y	Y	Y
B3-5a-7	16	62.7	B3-5a	-	13.4	67.5	66.1	67.6	57.5	0	72	72.0	70	Y	-	-	58.6	Y	Y	Y
B3-5a-7	17	65.9	B3-5a	-	13.4	67.4	66	67.5	57.5	0	71.9	71.9	70	Y	-	-	58.5	Y	Y	Y
B3-5a-7	18	69.1	B3-5a	-	13.4	67.3	65.9	67.4	57.4	0	71.8	71.8	70	Y	-	-	58.4	Y	Y	Y
B3-5a-7	19	72.3	B3-5a	-	13.5	67.1	65.8	67.3	57.3	0	71.7	71.7	70	Y	-	-	58.2	Y	Y	Y
B3-5a-8	1	14.7	B3-5a	-	13.9	54.3	63.5	67.5	47	0	69.1	69.1	70	N	-	-	55.2	Y	N	N
B3-5a-8	2	17.9	B3-5a	-	13.9	57.2	64.6	67.4	51	0	69.6	69.6	70	N	-	-	55.7	Y	N	N
B3-5a-8	3	21.1	B3-5a	-	13.9	61.2	66.8	67.4	56.4	0	70.8	70.8	70	Y	-	-	56.9	Y	Y	Y
B3-5a-8	4	24.3	B3-5a	-	13.9	65.2	67.4	67.4	58.5	0	71.7	71.7	70	Y	-	-	57.8	Y	Y	Y
B3-5a-8	5	27.5	B3-5a	-	13.9	66.9	67.5	67.5	58.8	0	72.3	72.3	70	Y	-	-	58.4	Y	Y	Y
B3-5a-8	6	30.7	B3-5a	-	13.8	68	67.7	67.7	58.8	0	72.7	72.7	70	Y	-	-	58.9	Y	Y	Y
B3-5a-8	7	33.9	B3-5a	-	13.8	68.8	67.9	67.8	58.7	0	73.1	73.1	70	Y	-	-	59.3	Y	Y	Y
B3-5a-8	8	37.1	B3-5a	-	13.8	69	68	67.9	58.7	0	73.3	73.3	70	Y	-	-	59.5	Y	Y	Y
B3-5a-8	9	40.3	B3-5a	-	13.8	69	68.1	68	58.6	0	73.3	73.3	70	Y	-	-	59.5	Y	Y	Y
B3-5a-8	10	43.5	B3-5a	-	13.8	68.9	68.2	68	58.5	0	73.3	73.3	70	Y	-	-	59.5	Y	Y	Y
B3-5a-8	11	46.7	B3-5a	-	13.7	68.8	68.1	68	58.4	0	73.2	73.2	70	Y	-	-	59.5	Y	Y	Y
B3-5a-8	12	49.9	B3-5a	-	13.7	68.6	68.1	68	58.3	0	73.2	73.2	70	Y	-	-	59.5	Y	Y	Y
B3-5a-8	13	53.1	B3-5a	-	13.7	68.5	68	68	58.3	0	73.1	73.1	70	Y	-	-	59.4	Y	Y	Y
B3-5a-8	14	56.3	B3-5a	-	13.7	68.4	67.9	67.9	58.2	0	73	73.0	70	Y	-	-	59.3	Y	Y	Y
B3-5a-8	15	59.5	B3-5a	-	13.6	68.2	67.8	67.9	58.1	0	72.9	72.9	70	Y	-	-	59.3	Y	Y	Y
B3-5a-8	16	62.7	B3-5a	-	13.6	68	67.7	67.8	58	0	72.8	72.8	70	Y	-	-	59.2	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
B3-5a-8	17	65.9	B3-5a	-	13.5	67.9	67.6	67.8	57.9	0	72.7	72.7	70	Y	-	-	59.2	Y	Y	Y
B3-5a-8	18	69.1	B3-5a	-	13.6	67.8	67.5	67.6	57.9	0	72.6	72.6	70	Y	-	-	59.0	Y	Y	Y
B3-5a-8	19	72.3	B3-5a	-	13.7	67.6	67.4	67.5	57.8	0	72.4	72.4	70	Y	-	-	58.7	Y	Y	Y
B3-5a-9	1	14.7	B3-5a	-	34.2	53.3	71.2	61.1	55.8	0	71.8	71.8	70	Y	-	-	37.6	Y	Y	Y
B3-5a-9	2	17.9	B3-5a	-	36.5	56	71.3	61.2	56.1	0	72	72.0	70	Y	-	-	35.5	Y	Y	Y
B3-5a-9	3	21.1	B3-5a	-	38.6	59.5	71.7	61.2	57.2	0	72.5	72.5	70	Y	-	-	33.9	Y	Y	Y
B3-5a-9	4	24.3	B3-5a	-	39.5	63.6	71.9	61.3	58.5	0	73	73.0	70	Y	-	-	33.5	Y	Y	Y
B3-5a-9	5	27.5	B3-5a	-	40.7	65.6	71.9	61.6	58.8	0	73.3	73.3	70	Y	-	-	32.6	Y	Y	Y
B3-5a-9	6	30.7	B3-5a	-	41.6	66.6	72	62	58.8	0	73.6	73.6	70	Y	-	-	32.0	Y	Y	Y
B3-5a-9	7	33.9	B3-5a	-	42.2	67.4	72	62.4	58.8	0	73.8	73.8	70	Y	-	-	31.6	Y	Y	Y
B3-5a-9	8	37.1	B3-5a	-	42.7	68	72	62.8	58.7	0	73.9	73.9	70	Y	-	-	31.2	Y	Y	Y
B3-5a-9	9	40.3	B3-5a	-	42.9	68.2	71.9	63.2	58.7	0	74	74.0	70	Y	-	-	31.1	Y	Y	Y
B3-5a-9	10	43.5	B3-5a	-	43.1	68.2	72	63.5	58.6	0	74	74.0	70	Y	-	-	30.9	Y	Y	Y
B3-5a-9	11	46.7	B3-5a	-	43.2	68.1	71.9	63.7	58.6	0	74	74.0	70	Y	-	-	30.8	Y	Y	Y
B3-5a-9	12	49.9	B3-5a	-	43.2	68	71.9	63.8	58.5	0	74	74.0	70	Y	-	-	30.8	Y	Y	Y
B3-5a-9	13	53.1	B3-5a	-	43.2	67.9	71.9	64	58.4	0	74	74.0	70	Y	-	-	30.8	Y	Y	Y
B3-5a-9	14	56.3	B3-5a	-	43.2	67.7	71.8	64.1	58.4	0	73.9	73.9	70	Y	-	-	30.7	Y	Y	Y
B3-5a-9	15	59.5	B3-5a	-	43.2	67.6	71.7	64.3	58.3	0	73.8	73.8	70	Y	-	-	30.6	Y	Y	Y
B3-5a-9	16	62.7	B3-5a	-	43.2	67.5	71.6	64.4	58.2	0	73.7	73.7	70	Y	-	-	30.5	Y	Y	Y
B3-5a-9	17	65.9	B3-5a	-	43.1	67.3	71.5	64.5	58.2	0	73.6	73.6	70	Y	-	-	30.5	Y	Y	Y
B3-5a-9	18	69.1	B3-5a	-	43.1	67.2	71.4	64.6	58.1	0	73.5	73.5	70	Y	-	-	30.4	Y	Y	Y
B3-5a-9	19	72.3	B3-5a	-	43.1	67.1	71.2	64.5	58	0	73.4	73.4	70	Y	-	-	30.3	Y	Y	Y
B3-5a-10	1	14.7	B3-5a	-	43.8	62.8	71.6	53.2	53.7	0	72.3	72.3	70	Y	-	-	28.5	Y	Y	Y
B3-5a-10	2	17.9	B3-5a	-	44.1	62.8	71.7	53.2	53.7	0	72.3	72.3	70	Y	-	-	28.2	Y	Y	Y
B3-5a-10	3	21.1	B3-5a	-	44.5	62.7	71.8	53.2	54	0	72.4	72.4	70	Y	-	-	27.9	Y	Y	Y
B3-5a-10	4	24.3	B3-5a	-	44.8	62.8	71.9	53.3	54.5	0	72.6	72.6	70	Y	-	-	27.8	Y	Y	Y
B3-5a-10	5	27.5	B3-5a	-	45.1	63	72	53.3	55.2	0	72.7	72.7	70	Y	-	-	27.6	Y	Y	Y
B3-5a-10	6	30.7	B3-5a	-	45.6	63.4	72	53.4	55.8	0	72.7	72.7	70	Y	-	-	27.1	Y	Y	Y
B3-5a-10	7	33.9	B3-5a	-	45.9	63.7	72	53.6	56.1	0	72.8	72.8	70	Y	-	-	26.9	Y	Y	Y
B3-5a-10	8	37.1	B3-5a	-	46.1	63.9	71.9	53.8	56.1	0	72.7	72.7	70	Y	-	-	26.6	Y	Y	Y
B3-5a-10	9	40.3	B3-5a	-	46.3	64	71.9	54.2	56.2	0	72.7	72.7	70	Y	-	-	26.4	Y	Y	Y
B3-5a-10	10	43.5	B3-5a	-	46.4	64.1	71.8	54.6	56.2	0	72.7	72.7	70	Y	-	-	26.3	Y	Y	Y
B3-5a-10	11	46.7	B3-5a	-	46.5	64.3	71.9	55	56.1	0	72.7	72.8	70	Y	-	-	26.3	Y	Y	Y
B3-5a-10	12	49.9	B3-5a	-	46.5	64.5	71.9	55.3	56.1	0	72.8	72.8	70	Y	-	-	26.3	Y	Y	Y
B3-5a-10	13	53.1	B3-5a	-	46.6	64.6	72	55.6	56.1	0	72.9	72.9	70	Y	-	-	26.3	Y	Y	Y
B3-5a-10	14	56.3	B3-5a	-	46.6	64.7	72.1	55.9	56	0	73	73.0	70	Y	-	-	26.4	Y	Y	Y
B3-5a-10	15	59.5	B3-5a	-	46.7	64.7	72	56.1	56	0	73	73.0	70	Y	-	-	26.3	Y	Y	Y
B3-5a-10	16	62.7	B3-5a	-	46.7	64.7	72	56.4	56	0	72.9	72.9	70	Y	-	-	26.2	Y	Y	Y
B3-5a-10	17	65.9	B3-5a	-	46.8	64.7	71.9	56.5	55.9	0	72.8	72.8	70	Y	-	-	26.0	Y	Y	Y
B3-5a-10	18	69.1	B3-5a	-	46.8	64.6	71.8	56.7	55.9	0	72.7	72.8	70	Y	-	-	26.0	Y	Y	Y
B3-5a-10	19	72.3	B3-5a	-	46.9	64.5	71.7	56.8	55.9	0	72.6	72.7	70	Y	-	-	25.8	Y	Y	Y
B3-5a-11	1	14.7	B3-5a	-	44.1	0	70.7	44.8	42.1	0	70.7	70.7	70	Y	-	-	26.6	Y	Y	Y
B3-5a-11	2	17.9	B3-5a	-	44.1	0	70.7	44.8	43.3	0	70.8	70.8	70	Y	-	-	26.7	Y	Y	Y
B3-5a-11	3	21.1	B3-5a	-	44.1	0	70.8	44.8	45	0	70.9	70.9	70	Y	-	-	26.8	Y	Y	Y
B3-5a-11	4	24.3	B3-5a	-	44.2	0	70.9	44.8	47.1	0	71	71.0	70	Y	-	-	26.8	Y	Y	Y
B3-5a-11	5	27.5	B3-5a	-	44.3	0	71	44.8	49.4	0	71	71.0	70	Y	-	-	26.7	Y	Y	Y
B3-5a-11	6	30.7	B3-5a	-	44.6	0	71	44.9	51.1	0	71	71.0	70	Y	-	-	26.4	Y	Y	Y
B3-5a-11	7	33.9	B3-5a	-	44.7	0	70.9	44.9	52.1	0	71	71.0	70	Y	-	-	26.3	Y	Y	Y
B3-5a-11	8	37.1	B3-5a	-	44.7	0	70.9	44.9	52.4	0	71	71.0	70	Y	-	-	26.3	Y	Y	Y
B3-5a-11	9	40.3	B3-5a	-	44.7	0	70.9	45	52.6	0	71	71.0	70	Y	-	-	26.3	Y	Y	Y
B3-5a-11	10	43.5	B3-5a	-	44.8	0	70.8	45	52.6	0	70.9	70.9	70	Y	-	-	26.1	Y	Y	Y
B3-5a-11	11	46.7	B3-5a	-	44.8	0	70.8	45	52.6	0	70.9	70.9	70	Y	-	-	26.1	Y	Y	Y
B3-5a-11	12	49.9	B3-5a	-	44.8	0	70.8	45.1	52.6	0	70.9	70.9	70	Y	-	-	26.1	Y	Y	Y
B3-5a-11	13	53.1	B3-5a	-	44.8	0	70.9	45.2	52.5	0	70.9	70.9	70	Y	-	-	26.1	Y	Y	Y
B3-5a-11	14	56.3	B3-5a	-	44.8	0	70.9	45.3	52.5	0	71	71.0	70	Y	-	-	26.2	Y	Y	Y
B3-5a-11	15	59.5	B3-5a	-	44.8	0	71	45.3	52.5	0	71	71.1	70	Y	-	-	26.3	Y	Y	Y
B3-5a-11	16	62.7	B3-5a	-	44.9	0	71	45.4	52.4	0	71.1	71.1	70	Y	-	-	26.2	Y	Y	Y
B3-5a-11	17	65.9	B3-5a	-	44.9	0	71	45.5	52.4	0	71.1	71.1	70	Y	-	-	26.2	Y	Y	Y
B3-5a-11	18	69.1	B3-5a	-	45	0	71	45.7	52.4	0	71	71.1	70	Y	-	-	26.1	Y	Y	Y
B3-5a-11	19	72.3	B3-5a	-	45.1	0	70.9	45.8	52.4	0	71	71.0	70	Y	-	-	25.9	Y	Y	Y
B3-5a-12	1	14.7	B3-5a	-	44.7	0	70.2	52.8	52.9	47	70.4	70.4	70	N	-	-	25.7	Y	N	N
B3-5a-12	2	17.9	B3-5a	-	44.7	0	70.4	52.8	52.9	47.3	70.5	70.5	70	Y	-	-	25.8	Y	Y	Y
B3-5a-12	3	21.1	B3-5a	-	44.7	0	70.4	52.9	52.9	47.6	70.6	70.6	70	Y	-	-	25.9	Y	Y	Y
B3-5a-12	4	24.3	B3-5a	-	44.7	0	70.5	52.9	53	47.8	70.7	70.7	70	Y	-	-	26.0	Y	Y	Y
B3-5a-12	5	27.5	B3-5a	-	44.8	0	70.6	52.9	53	48.1	70.8	70.8	70	Y	-	-	26.0	Y	Y	Y
B3-5a-12	6	30.7	B3-5a	-	45	0	70.6	52.9	53	48.4	70.8	70.8	70	Y	-	-	25.8	Y	Y	Y
B3-5a-12	7	33.9	B3-5a	-	45.2	0	70.6	53	53	48.7	70.8	70.8	70	Y	-	-	25.6	Y	Y	Y
B3-5a-12	8	37.1	B3-5a	-	45.2	0	70.6	53	53	49	70.8	70.8	70	Y	-	-	25.6	Y	Y	Y
B3-5a-12	9	40.3	B3-5a	-	45.3	0	70.6	53	53	49.4	70.8	70.8	70	Y	-	-	25.5	Y	Y	Y
B3-5a-12	10	43.5	B3-5a	-	45.4	0	70.5	53.1	53.1	49.8	70.7	70.7	70	Y	-	-	25.3	Y	Y	Y
B3-5a-12	11	46.7	B3-5a	-	45.5	0	70.5	53.2	53.2	50.3	70.7	70.7	70	Y	-	-	25.2	Y	Y	Y
B3-5a-12	12	49.9	B3-5a	-	45.5	0	70.5	53.3	53.3	50.9	70.7	70.7	70	Y	-	-	25.2	Y	Y	Y
B3-5a-12	13	53.1	B3-5a	-	45.6	0	70.5	53.5	53.4	51.8	70.7	70.7	70	Y	-	-	25.1	Y	Y	Y
B3-5a-12	14	56.3	B3-5a	-	45.6	0	70.5	53.8	53.6	52.8	70.8	70.8	70	Y	-	-	25.2	Y	Y	Y
B3-5a-12	15	59.5	B3-5a	-	45.6	0	70.5	54.2	53.7	54.1	70.8	70.8	70	Y	-	-	25.2	Y	Y	Y
B3-5a-12	16	62.7	B3-5a	-	45.6	0	70.6	54.8	53.9	55.7	70.9	70.9	70	Y	-	-	25.3	Y	Y	Y
B3-5a-12	17	65.9	B3-5a	-	45.6	0	70.5	55.4	54.2	56.7	70.9	70.9	70	Y	-	-	25.3	Y	Y	Y
B3-5a-12	18	69.1	B3-5a	-	45.7	0	70.5	55.8	54.5	57.2	71	71.0	70	Y	-	-	25.3	Y	Y	Y
B3-5a-12	19	72.3	B3-5a	-	45.8	0	70.5	56.2	54.9	57.4	70.9	71.0	70	Y	-	-	25.2	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
B3-5a-13	1	14.7	B3-5a	-	41.3	0	67.2	54.4	59	57.5	68.4	68.4	70	N	-	-	27.1	Y	N	N
B3-5a-13	2	17.9	B3-5a	-	41.5	0	67.3	54.4	59	57.5	68.4	68.4	70	N	-	-	26.9	Y	N	N
B3-5a-13	3	21.1	B3-5a	-	41.7	0	67.3	54.4	59.1	57.6	68.5	68.5	70	N	-	-	26.8	Y	N	N
B3-5a-13	4	24.3	B3-5a	-	41.8	0	67.4	54.4	59	57.6	68.5	68.5	70	N	-	-	26.7	Y	N	N
B3-5a-13	5	27.5	B3-5a	-	41.9	0	67.5	54.4	58.9	57.7	68.6	68.6	70	N	-	-	26.7	Y	N	N
B3-5a-13	6	30.7	B3-5a	-	41.9	0	67.6	54.5	58.8	57.8	68.7	68.7	70	N	-	-	26.8	Y	N	N
B3-5a-13	7	33.9	B3-5a	-	42	0	67.7	54.5	58.7	57.9	68.7	68.7	70	N	-	-	26.7	Y	N	N
B3-5a-13	8	37.1	B3-5a	-	42	0	67.7	54.5	58.6	58	68.8	68.8	70	N	-	-	26.8	Y	N	N
B3-5a-13	9	40.3	B3-5a	-	42	0	67.8	54.6	58.5	58.1	68.8	68.8	70	N	-	-	26.8	Y	N	N
B3-5a-13	10	43.5	B3-5a	-	42	0	67.8	54.6	58.4	58.3	68.8	68.8	70	N	-	-	26.8	Y	N	N
B3-5a-13	11	46.7	B3-5a	-	42.1	0	67.8	54.8	58.3	58.5	68.9	68.9	70	N	-	-	26.8	Y	N	N
B3-5a-13	12	49.9	B3-5a	-	42.1	0	67.8	55	58.2	58.9	68.9	68.9	70	N	-	-	26.8	Y	N	N
B3-5a-13	13	53.1	B3-5a	-	42.1	0	67.8	55.3	58.1	59.6	69	69.0	70	N	-	-	26.9	Y	N	N
B3-5a-13	14	56.3	B3-5a	-	42.2	0	67.9	55.8	58	60.3	69.1	69.1	70	N	-	-	26.9	Y	N	N
B3-5a-13	15	59.5	B3-5a	-	42.3	0	67.9	56.4	58	61.1	69.3	69.3	70	N	-	-	27.0	Y	N	N
B3-5a-13	16	62.7	B3-5a	-	42.4	0	67.9	57	58	61.6	69.4	69.4	70	N	-	-	27.0	Y	N	N
B3-5a-13	17	65.9	B3-5a	-	42.4	0	67.9	57.5	57.9	61.8	69.5	69.5	70	N	-	-	27.1	Y	N	N
B3-5a-13	18	69.1	B3-5a	-	42.6	0	67.8	57.8	58	61.9	69.5	69.5	70	N	-	-	26.9	Y	N	N
B3-5a-13	19	72.3	B3-5a	-	42.7	0	67.8	58	58.2	62	69.5	69.5	70	N	-	-	26.8	Y	N	N
B3-5a-14	1	14.7	B3-5a	-	39.7	0	64.1	57.2	61.9	63.3	68.3	68.3	70	N	-	-	28.6	Y	N	N
B3-5a-14	2	17.9	B3-5a	-	39.8	0	64.2	57.2	62	63.3	68.4	68.4	70	N	-	-	28.6	Y	N	N
B3-5a-14	3	21.1	B3-5a	-	39.9	0	64.3	57.2	62.1	63.4	68.4	68.4	70	N	-	-	28.5	Y	N	N
B3-5a-14	4	24.3	B3-5a	-	40	0	64.2	57.2	62.2	63.5	68.5	68.5	70	N	-	-	28.5	Y	N	N
B3-5a-14	5	27.5	B3-5a	-	40	0	64.3	57.2	62.2	63.5	68.5	68.5	70	N	-	-	28.5	Y	N	N
B3-5a-14	6	30.7	B3-5a	-	40	0	64.3	57.2	62.2	63.6	68.6	68.6	70	N	-	-	28.6	Y	N	N
B3-5a-14	7	33.9	B3-5a	-	40	0	64.4	57.2	62.3	63.7	68.6	68.6	70	N	-	-	28.6	Y	N	N
B3-5a-14	8	37.1	B3-5a	-	40	0	64.5	57.2	62.2	63.8	68.7	68.7	70	N	-	-	28.7	Y	N	N
B3-5a-14	9	40.3	B3-5a	-	40	0	64.6	57.2	62.2	63.9	68.8	68.8	70	N	-	-	28.8	Y	N	N
B3-5a-14	10	43.5	B3-5a	-	40	0	64.6	57.3	62.2	64	68.8	68.8	70	N	-	-	28.8	Y	N	N
B3-5a-14	11	46.7	B3-5a	-	40	0	64.7	57.3	62.2	64.1	68.9	68.9	70	N	-	-	28.9	Y	N	N
B3-5a-14	12	49.9	B3-5a	-	39.9	0	64.8	57.5	62.1	64.2	69	69.0	70	N	-	-	29.1	Y	N	N
B3-5a-14	13	53.1	B3-5a	-	39.9	0	64.8	57.7	62.1	64.4	69	69.0	70	N	-	-	29.1	Y	N	N
B3-5a-14	14	56.3	B3-5a	-	39.9	0	64.8	58.1	62.1	64.5	69.1	69.1	70	N	-	-	29.2	Y	N	N
B3-5a-14	15	59.5	B3-5a	-	39.9	0	64.9	58.5	62.1	64.6	69.2	69.2	70	N	-	-	29.3	Y	N	N
B3-5a-14	16	62.7	B3-5a	-	39.9	0	65	58.8	62.1	64.8	69.3	69.3	70	N	-	-	29.4	Y	N	N
B3-5a-14	17	65.9	B3-5a	-	39.9	0	65	59	62.1	64.9	69.4	69.4	70	N	-	-	29.5	Y	N	N
B3-5a-14	18	69.1	B3-5a	-	39.9	0	65	59.1	62.1	65.1	69.5	69.5	70	N	-	-	29.6	Y	N	N
B3-5a-14	19	72.3	B3-5a	-	39.8	0	65.1	59.2	62.2	65.4	69.6	69.6	70	N	-	-	29.8	Y	N	N
B3-5a-15	1	14.7	B3-5a	-	33.5	0	62.2	59.7	65.8	64.5	69.6	69.6	70	N	-	-	36.1	Y	N	N
B3-5a-15	2	17.9	B3-5a	-	35.3	0	62.3	59.7	65.8	64.6	69.7	69.7	70	N	-	-	34.4	Y	N	N
B3-5a-15	3	21.1	B3-5a	-	37.5	0	62.4	59.7	65.8	64.8	69.8	69.8	70	N	-	-	32.3	Y	N	N
B3-5a-15	4	24.3	B3-5a	-	38.7	0	62.4	59.7	65.8	64.9	69.8	69.8	70	N	-	-	31.1	Y	N	N
B3-5a-15	5	27.5	B3-5a	-	39.3	0	62.4	59.7	65.8	65.1	69.9	69.9	70	N	-	-	30.6	Y	N	N
B3-5a-15	6	30.7	B3-5a	-	39.6	0	62.4	59.7	65.8	65.3	69.9	69.9	70	N	-	-	30.3	Y	N	N
B3-5a-15	7	33.9	B3-5a	-	39.8	0	62.5	59.7	65.8	65.6	70	70.1	70	N	-	-	30.3	Y	N	N
B3-5a-15	8	37.1	B3-5a	-	40	0	62.5	59.7	65.8	65.9	70.1	70.1	70	N	-	-	30.1	Y	N	N
B3-5a-15	9	40.3	B3-5a	-	40	0	62.6	59.7	65.7	66.1	70.2	70.2	70	N	-	-	30.2	Y	N	N
B3-5a-15	10	43.5	B3-5a	-	40	0	62.7	59.7	65.6	66.2	70.3	70.3	70	N	-	-	30.3	Y	N	N
B3-5a-15	11	46.7	B3-5a	-	40.1	0	62.7	59.7	65.6	66.4	70.3	70.3	70	N	-	-	30.2	Y	N	N
B3-5a-15	12	49.9	B3-5a	-	40.2	0	62.8	59.8	65.5	66.5	70.4	70.4	70	N	-	-	30.2	Y	N	N
B3-5a-15	13	53.1	B3-5a	-	40.3	0	62.9	59.9	65.4	66.7	70.4	70.4	70	N	-	-	30.1	Y	N	N
B3-5a-15	14	56.3	B3-5a	-	40.5	0	63	59.9	65.3	66.9	70.5	70.5	70	Y	-	-	30.0	Y	Y	Y
B3-5a-15	15	59.5	B3-5a	-	40.7	0	63.1	60	65.3	67	70.6	70.6	70	Y	-	-	29.9	Y	Y	Y
B3-5a-15	16	62.7	B3-5a	-	41	0	63.2	60	65.2	67.1	70.6	70.6	70	Y	-	-	29.6	Y	Y	Y
B3-5a-15	17	65.9	B3-5a	-	41.3	0	63.3	60	65.1	67.3	70.7	70.7	70	Y	-	-	29.4	Y	Y	Y
B3-5a-15	18	69.1	B3-5a	-	41.5	0	63.4	60.1	65	67.5	70.8	70.8	70	Y	-	-	29.3	Y	Y	Y
B3-5a-15	19	72.3	B3-5a	-	41.6	0	63.5	60.1	64.9	67.7	70.9	70.9	70	Y	-	-	29.3	Y	Y	Y
B3-8-1	1	14.7	B3-8	-	46.5	0	59.9	17.5	34.3	35.6	59.9	60.1	70	N	-	-	13.6	Y	N	N
B3-8-1	2	17.9	B3-8	-	46.5	0	60.8	17.5	35.8	36	60.8	61.0	70	N	-	-	14.5	Y	N	N
B3-8-1	3	21.1	B3-8	-	46.5	0	62.5	17.5	38.3	36.4	62.5	62.6	70	N	-	-	16.1	Y	N	N
B3-8-1	4	24.3	B3-8	-	46.5	0	63.5	17.5	42.1	36.9	63.5	63.6	70	N	-	-	17.1	Y	N	N
B3-8-1	5	27.5	B3-8	-	46.5	0	64.2	17.5	43.9	37.3	64.3	64.3	70	N	-	-	17.8	Y	N	N
B3-8-1	6	30.7	B3-8	-	46.5	0	64.9	17.4	44.3	37.7	64.9	65.0	70	N	-	-	18.5	Y	N	N
B3-8-1	7	33.9	B3-8	-	46.5	0	65.5	17.4	44.5	38.2	65.5	65.6	70	N	-	-	19.1	Y	N	N
B3-8-1	8	37.1	B3-8	-	46.5	0	65.9	17.3	44.7	38.8	65.9	65.9	70	N	-	-	19.4	Y	N	N
B3-8-1	9	40.3	B3-8	-	46.5	0	66.1	17.3	44.9	39.4	66.2	66.2	70	N	-	-	19.7	Y	N	N
B3-8-1	10	43.5	B3-8	-	46.5	0	66.3	17.3	45.2	40.1	66.3	66.4	70	N	-	-	19.9	Y	N	N
B3-8-1	11	46.7	B3-8	-	46.5	0	66.4	17.2	45.6	40.8	66.5	66.5	70	N	-	-	20.0	Y	N	N
B3-8-1	12	49.9	B3-8	-	46.5	0	66.7	17.2	46.2	41.4	66.7	66.8	70	N	-	-	20.3	Y	N	N
B3-8-1	13	53.1	B3-8	-	46.6	0	67	17.2	47.6	42.2	67.1	67.1	70	N	-	-	20.5	Y	N	N
B3-8-1	14	56.3	B3-8	-	46.6	0	67.5	17	49.2	42.9	67.6	67.6	70	N	-	-	21.0	Y	N	N
B3-8-1	15	59.5	B3-8	-	46.6	0	67.9	17.1	50.2	43.5	68	68.0	70	N	-	-	21.4	Y	N	N
B3-8-1	16	62.7	B3-8	-	46.5	0	68.3	17.6	50.7	44.2	68.4	68.4	70	N	-	-	21.9	Y	N	N
B3-8-2	1	14.7	B3-8	-	38.3	64.8	64.7	43.2	51	0	67.9	67.9	70	N	-	-	29.6	Y	N	N
B3-8-2	2	17.9	B3-8	-	38.3	64.7	65.6	45.5	51	0	68.3	68.3	70	N	-	-	30.0	Y	N	N
B3-8-2	3	21.1	B3-8	-	38.3	64.7	66.1	48.6	51.1	0	68.6	68.6	70	N	-	-	30.3	Y	N	N
B3-8-2	4	24.3	B3-8	-	38.3	64.6	66.6	52.8	51.5	0	68.9	68.9	70	N	-	-	30.6	Y	N	N
B3-8-2	5	27.5	B3-8	-	38.3	64.5	66.9	55.5	51.7	0	69.1	69.1	70	N	-	-	30.8	Y	N	N
B3-8-2	6	30.7	B3-8	-	38.3	64.5	67.2	56.6	51.8	0	69.4	69.4	70	N	-	-	31.1	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
B3-8-2	7	33.9	B3-8	-	38.3	64.5	67.5	57	51.9	0	69.6	69.6	70	N	-	-	31.3	Y	N	N
B3-8-2	8	37.1	B3-8	-	38.3	64.5	67.7	57.2	51.8	0	69.7	69.7	70	N	-	-	31.4	Y	N	N
B3-8-2	9	40.3	B3-8	-	38.3	64.5	68.1	57.2	51.9	0	70	70.0	70	N	-	-	31.7	Y	N	N
B3-8-2	10	43.5	B3-8	-	38.3	64.4	68.7	57.2	51.9	0	70.4	70.4	70	N	-	-	32.1	Y	N	N
B3-8-2	11	46.7	B3-8	-	38.4	64.4	69.5	57.2	51.9	0	70.9	70.9	70	Y	-	-	32.5	Y	Y	Y
B3-8-2	12	49.9	B3-8	-	38.5	64.3	70.1	57.2	52.1	0	71.3	71.4	70	Y	-	-	32.9	Y	Y	Y
B3-8-2	13	53.1	B3-8	-	38.7	64.2	70.5	57.2	52.3	0	71.6	71.6	70	Y	-	-	32.9	Y	Y	Y
B3-8-2	14	56.3	B3-8	-	38.8	64.1	70.6	57.2	52.7	0	71.7	71.7	70	Y	-	-	32.9	Y	Y	Y
B3-8-2	15	59.5	B3-8	-	38.9	64.1	70.7	57.2	53.3	0	71.8	71.8	70	Y	-	-	32.9	Y	Y	Y
B3-8-2	16	62.7	B3-8	-	38.9	64	70.7	57.2	53.6	0	71.8	71.8	70	Y	-	-	32.9	Y	Y	Y
B3-8-3	1	14.7	B3-8	-	32.9	69.3	68.9	60.6	60	0	72.6	72.6	70	Y	-	-	39.7	Y	Y	Y
B3-8-3	2	17.9	B3-8	-	32.9	69.3	69	60.6	60	0	72.7	72.7	70	Y	-	-	39.8	Y	Y	Y
B3-8-3	3	21.1	B3-8	-	32.9	69.2	69.1	61	60	0	72.7	72.7	70	Y	-	-	39.8	Y	Y	Y
B3-8-3	4	24.3	B3-8	-	32.9	69.1	69.1	61.3	59.9	0	72.7	72.7	70	Y	-	-	39.8	Y	Y	Y
B3-8-3	5	27.5	B3-8	-	32.9	69	69.1	61.5	59.9	0	72.7	72.7	70	Y	-	-	39.8	Y	Y	Y
B3-8-3	6	30.7	B3-8	-	33	68.9	69.1	61.6	59.8	0	72.6	72.6	70	Y	-	-	39.6	Y	Y	Y
B3-8-3	7	33.9	B3-8	-	33	68.7	69.1	61.7	59.7	0	72.6	72.6	70	Y	-	-	39.6	Y	Y	Y
B3-8-3	8	37.1	B3-8	-	33	68.6	69.2	61.8	59.6	0	72.6	72.6	70	Y	-	-	39.6	Y	Y	Y
B3-8-3	9	40.3	B3-8	-	33.1	68.5	69.5	61.7	59.5	0	72.6	72.6	70	Y	-	-	39.5	Y	Y	Y
B3-8-3	10	43.5	B3-8	-	33.2	68.3	69.8	61.7	59.4	0	72.7	72.7	70	Y	-	-	39.5	Y	Y	Y
B3-8-3	11	46.7	B3-8	-	33.5	68.2	70.3	61.6	59.3	0	72.9	72.9	70	Y	-	-	39.4	Y	Y	Y
B3-8-3	12	49.9	B3-8	-	34.1	68.1	70.5	61.4	59.2	0	73	73.0	70	Y	-	-	38.9	Y	Y	Y
B3-8-3	13	53.1	B3-8	-	34.4	67.9	70.6	61.3	59.1	0	73	73.0	70	Y	-	-	38.6	Y	Y	Y
B3-8-3	14	56.3	B3-8	-	34.6	67.8	70.6	61.2	59	0	72.9	72.9	70	Y	-	-	38.3	Y	Y	Y
B3-8-3	15	59.5	B3-8	-	34.7	67.6	70.6	61.1	58.9	0	72.9	72.9	70	Y	-	-	38.2	Y	Y	Y
B3-8-3	16	62.7	B3-8	-	34.6	67.5	70.5	61	58.8	0	72.8	72.8	70	Y	-	-	38.2	Y	Y	Y
B3-8-4	1	14.7	B3-8	-	40.8	70.7	68.5	60.7	67	0	74	74.0	70	Y	-	-	33.2	Y	Y	Y
B3-8-4	2	17.9	B3-8	-	41.7	70.4	68.4	60.7	66.9	0	73.8	73.8	70	Y	-	-	32.1	Y	Y	Y
B3-8-4	3	21.1	B3-8	-	42.6	70.3	68.4	60.9	66.8	0	73.7	73.7	70	Y	-	-	31.1	Y	Y	Y
B3-8-4	4	24.3	B3-8	-	43.2	70	68.3	61.2	66.7	0	73.6	73.6	70	Y	-	-	30.4	Y	Y	Y
B3-8-4	5	27.5	B3-8	-	43.5	69.8	68.3	61.5	66.5	0	73.5	73.5	70	Y	-	-	30.0	Y	Y	Y
B3-8-4	6	30.7	B3-8	-	44	69.7	68.2	61.6	66.4	0	73.4	73.4	70	Y	-	-	29.4	Y	Y	Y
B3-8-4	7	33.9	B3-8	-	44.3	69.5	68.1	61.6	66.2	0	73.2	73.2	70	Y	-	-	28.9	Y	Y	Y
B3-8-4	8	37.1	B3-8	-	44.5	69.3	68	61.6	66.1	0	73.1	73.1	70	Y	-	-	28.6	Y	Y	Y
B3-8-4	9	40.3	B3-8	-	44.7	69.1	68	61.5	65.9	0	73	73.0	70	Y	-	-	28.3	Y	Y	Y
B3-8-4	10	43.5	B3-8	-	44.9	69	67.9	61.5	65.7	0	72.8	72.8	70	Y	-	-	27.9	Y	Y	Y
B3-8-4	11	46.7	B3-8	-	45	68.8	67.8	61.4	65.5	0	72.7	72.7	70	Y	-	-	27.7	Y	Y	Y
B3-8-4	12	49.9	B3-8	-	45.1	68.7	67.8	61.3	65.3	0	72.6	72.6	70	Y	-	-	27.5	Y	Y	Y
B3-8-4	13	53.1	B3-8	-	45.2	68.5	67.9	61.2	65.2	0	72.5	72.5	70	Y	-	-	27.3	Y	Y	Y
B3-8-4	14	56.3	B3-8	-	45.2	68.3	67.9	61	65	0	72.4	72.4	70	Y	-	-	27.2	Y	Y	Y
B3-8-4	15	59.5	B3-8	-	45.3	68.2	67.8	60.9	64.9	0	72.3	72.3	70	Y	-	-	27.0	Y	Y	Y
B3-8-4	16	62.7	B3-8	-	45.3	68	67.7	60.8	64.7	0	72.2	72.2	70	Y	-	-	26.9	Y	Y	Y
B3-8-5	1	14.7	B3-8	-	33.2	66.7	65	58.2	69.6	0	72.4	72.4	70	Y	-	-	39.2	Y	Y	Y
B3-8-5	2	17.9	B3-8	-	33.8	66.6	65	58.2	69.4	0	72.3	72.3	70	Y	-	-	38.5	Y	Y	Y
B3-8-5	3	21.1	B3-8	-	34.5	66.6	64.9	58.3	69.1	0	72.2	72.2	70	Y	-	-	37.7	Y	Y	Y
B3-8-5	4	24.3	B3-8	-	34.3	66.5	64.9	58.6	68.9	0	72.1	72.1	70	Y	-	-	37.8	Y	Y	Y
B3-8-5	5	27.5	B3-8	-	34.6	66.5	64.9	58.9	68.6	0	71.9	71.9	70	Y	-	-	37.3	Y	Y	Y
B3-8-5	6	30.7	B3-8	-	34.7	66.4	64.9	59.1	68.3	0	71.8	71.8	70	Y	-	-	37.1	Y	Y	Y
B3-8-5	7	33.9	B3-8	-	35.2	66.3	64.8	59.2	68	0	71.6	71.6	70	Y	-	-	36.4	Y	Y	Y
B3-8-5	8	37.1	B3-8	-	35.7	66.2	64.8	59.3	67.7	0	71.5	71.5	70	Y	-	-	35.8	Y	Y	Y
B3-8-5	9	40.3	B3-8	-	36.1	66.2	64.8	59.3	67.4	0	71.3	71.3	70	Y	-	-	35.2	Y	Y	Y
B3-8-5	10	43.5	B3-8	-	36.4	66.1	64.7	59.3	67.2	0	71.2	71.2	70	Y	-	-	34.8	Y	Y	Y
B3-8-5	11	46.7	B3-8	-	36.7	66	64.7	59.2	66.9	0	71	71.0	70	Y	-	-	34.3	Y	Y	Y
B3-8-5	12	49.9	B3-8	-	37	65.9	64.6	59.2	66.7	0	70.9	70.9	70	Y	-	-	33.9	Y	Y	Y
B3-8-5	13	53.1	B3-8	-	37.2	65.8	64.6	59.1	66.5	0	70.8	70.8	70	Y	-	-	33.6	Y	Y	Y
B3-8-5	14	56.3	B3-8	-	37.4	65.7	64.5	59	66.3	0	70.6	70.6	70	Y	-	-	33.2	Y	Y	Y
B3-8-5	15	59.5	B3-8	-	37.6	65.6	64.5	58.9	66	0	70.5	70.5	70	Y	-	-	32.9	Y	Y	Y
B3-8-5	16	62.7	B3-8	-	37.7	65.5	64.5	58.8	65.8	0	70.4	70.4	70	N	-	-	32.7	Y	N	N
B3-8-6	1	14.7	B3-8	-	41.1	0	34.5	0	66.5	0	66.5	66.5	70	N	-	-	25.4	Y	N	N
B3-8-6	2	17.9	B3-8	-	41.1	0	34.8	0	66.4	0	66.4	66.4	70	N	-	-	25.3	Y	N	N
B3-8-6	3	21.1	B3-8	-	41.1	0	35.2	0	66.2	0	66.2	66.3	70	N	-	-	25.2	Y	N	N
B3-8-6	4	24.3	B3-8	-	41.1	0	35.7	0	66.1	0	66.1	66.1	70	N	-	-	25.0	Y	N	N
B3-8-6	5	27.5	B3-8	-	41.1	0	36.1	0	65.9	0	65.9	65.9	70	N	-	-	24.8	Y	N	N
B3-8-6	6	30.7	B3-8	-	41.1	0	36.5	0	65.7	0	65.7	65.8	70	N	-	-	24.7	Y	N	N
B3-8-6	7	33.9	B3-8	-	41.1	0	37	0	65.5	0	65.5	65.6	70	N	-	-	24.5	Y	N	N
B3-8-6	8	37.1	B3-8	-	41.1	0	37.4	0	65.3	0	65.3	65.4	70	N	-	-	24.3	Y	N	N
B3-8-6	9	40.3	B3-8	-	41.1	0	37.9	0	65.1	0	65.1	65.2	70	N	-	-	24.1	Y	N	N
B3-8-6	10	43.5	B3-8	-	41	0	38.5	0	65	0	65	65.0	70	N	-	-	24.0	Y	N	N
B3-8-6	11	46.7	B3-8	-	41	0	39	0	64.8	0	64.8	64.8	70	N	-	-	23.8	Y	N	N
B3-8-6	12	49.9	B3-8	-	41	0	39.6	0	64.6	0	64.6	64.6	70	N	-	-	23.6	Y	N	N
B3-8-6	13	53.1	B3-8	-	41	0	40.2	0	64.4	0	64.4	64.4	70	N	-	-	23.4	Y	N	N
B3-8-6	14	56.3	B3-8	-	41	0	40.8	0	64.2	0	64.2	64.3	70	N	-	-	23.3	Y	N	N
B3-8-6	15	59.5	B3-8	-	41	0	41.5	0	64	0	64	64.1	70	N	-	-	23.1	Y	N	N
B3-8-6	16	62.7	B3-8	-	41	0	42.3	0	63.8	0	63.9	63.9	70	N	-	-	22.9	Y	N	N
D1-7a-1	1	38.2	D1-7a	-	23.8	48	71.6	64.3	54.2	0	72.4	72.4	70	Y	-	-	48.6	Y	Y	Y
D1-7a-1	2	41.4	D1-7a	-	25.4	48.2	71.4	64.3	54.3	0	72.3	72.3	70	Y	-	-	46.9	Y	Y	Y
D1-7a-1	3	44.6	D1-7a	-	26.4	48.3	71.3	64.2	54.3	0	72.2	72.2	70	Y	-	-	45.8	Y	Y	Y
D1-7a-1	4	47.8	D1-7a	-	27.5	48.3	71.1	64.2	54.3	0	72	72.0	70	Y	-	-	44.5	Y	Y	Y
D1-7a-1	5	51	D1-7a	-	28.9	48.4	70.9	64.2	54.3	0	71.9	71.9	70	Y	-	-	43.0	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-7a-1	6	54.2	D1-7a	-	29.7	48.4	70.8	64.2	54.2	0	71.7	71.7	70	Y	-	-	42.0	Y	Y	Y
D1-7a-1	7	57.4	D1-7a	-	30.8	48.4	70.6	64.2	54.2	0	71.6	71.6	70	Y	-	-	40.8	Y	Y	Y
D1-7a-1	8	60.6	D1-7a	-	32.1	48.4	70.4	64.1	54.1	0	71.4	71.4	70	Y	-	-	39.3	Y	Y	Y
D1-7a-1	9	63.8	D1-7a	-	32.9	48.4	70.3	64.1	54.1	0	71.3	71.3	70	Y	-	-	38.4	Y	Y	Y
D1-7a-1	10	67	D1-7a	-	33.5	48.4	70.1	64.1	54	0	71.2	71.2	70	Y	-	-	37.7	Y	Y	Y
D1-7a-1	11	70.2	D1-7a	-	33.9	48.4	69.9	64	53.9	0	71	71.0	70	Y	-	-	37.1	Y	Y	Y
D1-7a-1	12	73.4	D1-7a	-	34.1	48.4	69.8	64	53.9	0	70.9	70.9	70	Y	-	-	36.8	Y	Y	Y
D1-7a-1	13	76.6	D1-7a	-	34.3	48.3	69.6	64	53.8	0	70.8	70.8	70	Y	-	-	36.5	Y	Y	Y
D1-7a-1	14	79.8	D1-7a	-	34.5	48.3	69.5	64	53.7	0	70.7	70.7	70	Y	-	-	36.2	Y	Y	Y
D1-7a-1	15	83	D1-7a	-	34.4	48.3	69.3	63.9	53.7	0	70.5	70.5	70	Y	-	-	36.1	Y	Y	Y
D1-7a-1	16	86.2	D1-7a	-	34.5	48.3	69.2	63.9	53.6	0	70.4	70.4	70	N	-	-	35.9	Y	N	N
D1-7a-1	17	89.4	D1-7a	-	34.6	48.2	69	63.9	53.5	0	70.3	70.3	70	N	-	-	35.7	Y	N	N
D1-7a-1	18	92.6	D1-7a	-	34.6	48.2	68.9	63.8	53.4	0	70.2	70.2	70	N	-	-	35.6	Y	N	N
D1-7a-1	19	95.8	D1-7a	-	34.6	48.2	68.8	63.8	53.4	0	70.1	70.1	70	N	-	-	35.5	Y	N	N
D1-7a-1	20	99	D1-7a	-	34.6	48.1	68.6	63.8	53.3	0	70	70.0	70	N	-	-	35.4	Y	N	N
D1-7a-1	21	102.2	D1-7a	-	34.6	48.1	68.5	63.7	53.2	0	69.9	69.9	70	N	-	-	35.3	Y	N	N
D1-7a-1	22	105.4	D1-7a	-	34.6	48.1	68.4	63.7	53.2	0	69.8	69.8	70	N	-	-	35.2	Y	N	N
D1-7a-1	23	108.6	D1-7a	-	34.5	48	68.3	63.7	53.1	0	69.7	69.7	70	N	-	-	35.2	Y	N	N
D1-7a-1	24	111.8	D1-7a	-	34.5	48	68.1	63.6	53.1	0	69.6	69.6	70	N	-	-	35.1	Y	N	N
D1-7a-2	1	38.2	D1-7a	-	0	43.9	70.7	67.9	58.7	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
D1-7a-2	2	41.4	D1-7a	-	0	43.9	70.5	67.9	58.6	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
D1-7a-2	3	44.6	D1-7a	-	0	43.9	70.4	67.8	58.7	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
D1-7a-2	4	47.8	D1-7a	-	0	43.9	70.2	67.7	59	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
D1-7a-2	5	51	D1-7a	-	0	43.9	70	67.6	59.8	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
D1-7a-2	6	54.2	D1-7a	-	0	43.9	69.9	67.5	60.2	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
D1-7a-2	7	57.4	D1-7a	-	0	43.8	69.7	67.5	60.2	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
D1-7a-2	8	60.6	D1-7a	-	0	43.8	69.6	67.4	60.1	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
D1-7a-2	9	63.8	D1-7a	-	0	43.8	69.4	67.3	59.9	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
D1-7a-2	10	67	D1-7a	-	0	43.8	69.2	67.2	59.8	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
D1-7a-2	11	70.2	D1-7a	-	0	43.8	69.1	67.1	59.7	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
D1-7a-2	12	73.4	D1-7a	-	0	43.8	69	67	59.6	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
D1-7a-2	13	76.6	D1-7a	-	0	43.8	68.8	66.9	59.4	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
D1-7a-2	14	79.8	D1-7a	-	0	43.8	68.7	66.8	59.3	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
D1-7a-2	15	83	D1-7a	-	0	43.8	68.5	66.7	59.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-7a-2	16	86.2	D1-7a	-	0	43.7	68.4	66.6	59	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
D1-7a-2	17	89.4	D1-7a	-	0	43.7	68.2	66.5	58.9	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7a-2	18	92.6	D1-7a	-	0	43.7	68.1	66.4	58.8	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
D1-7a-2	19	95.8	D1-7a	-	0	43.7	68	66.3	58.6	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
D1-7a-2	20	99	D1-7a	-	0	43.7	67.8	66.2	58.5	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7a-2	21	102.2	D1-7a	-	0	43.7	67.7	66.2	58.4	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-7a-2	22	105.4	D1-7a	-	0	43.7	67.6	66.1	58.3	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-7a-2	23	108.6	D1-7a	-	0	43.6	67.4	66	58.1	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
D1-7a-2	24	111.8	D1-7a	-	0	43.6	67.3	65.9	58	0	70	70.0	70	N	-	-	70.0	Y	N	N
D1-7a-3	1	38.2	D1-7a	-	37.5	0	62.8	68.1	67.3	0	71.4	71.4	70	Y	-	-	33.9	Y	Y	Y
D1-7a-3	2	41.4	D1-7a	-	37.8	0	63.1	68	67	0	71.3	71.3	70	Y	-	-	33.5	Y	Y	Y
D1-7a-3	3	44.6	D1-7a	-	38.1	0	64.3	67.9	66.8	0	71.4	71.4	70	Y	-	-	33.3	Y	Y	Y
D1-7a-3	4	47.8	D1-7a	-	38.4	0	64.6	67.8	66.5	0	71.3	71.3	70	Y	-	-	32.9	Y	Y	Y
D1-7a-3	5	51	D1-7a	-	38.9	0	64.5	67.8	66.3	0	71.2	71.2	70	Y	-	-	32.3	Y	Y	Y
D1-7a-3	6	54.2	D1-7a	-	39.7	0	64.4	67.7	66.1	0	71	71.0	70	Y	-	-	31.3	Y	Y	Y
D1-7a-3	7	57.4	D1-7a	-	40.7	0	64.3	67.6	65.8	0	70.9	70.9	70	Y	-	-	30.2	Y	Y	Y
D1-7a-3	8	60.6	D1-7a	-	41.6	0	64.2	67.4	65.6	0	70.7	70.7	70	Y	-	-	29.1	Y	Y	Y
D1-7a-3	9	63.8	D1-7a	-	42.4	0	64.1	67.3	65.4	0	70.6	70.6	70	Y	-	-	28.2	Y	Y	Y
D1-7a-3	10	67	D1-7a	-	43.2	0	64	67.2	65.2	0	70.4	70.5	70	Y	-	-	27.3	Y	N	Y
D1-7a-3	11	70.2	D1-7a	-	43.9	0	63.9	67.1	65	0	70.3	70.3	70	N	-	-	26.4	Y	N	N
D1-7a-3	12	73.4	D1-7a	-	44.5	0	63.8	67	64.8	0	70.2	70.2	70	N	-	-	25.7	Y	N	N
D1-7a-3	13	76.6	D1-7a	-	45.1	0	63.7	66.9	64.6	0	70	70.1	70	N	-	-	25.0	Y	N	N
D1-7a-3	14	79.8	D1-7a	-	45.6	0	63.5	66.8	64.5	0	69.9	69.9	70	N	-	-	24.3	Y	N	N
D1-7a-3	15	83	D1-7a	-	46	0	63.4	66.7	64.3	0	69.8	69.8	70	N	-	-	23.8	Y	N	N
D1-7a-3	16	86.2	D1-7a	-	46.4	0	63.3	66.6	64.1	0	69.7	69.7	70	N	-	-	23.3	Y	N	N
D1-7a-3	17	89.4	D1-7a	-	46.6	0	63.2	66.5	63.9	0	69.5	69.6	70	N	-	-	23.0	Y	N	N
D1-7a-3	18	92.6	D1-7a	-	46.7	0	63.1	66.4	63.8	0	69.4	69.5	70	N	-	-	22.8	Y	N	N
D1-7a-3	19	95.8	D1-7a	-	46.9	0	63	66.3	63.7	0	69.3	69.4	70	N	-	-	22.5	Y	N	N
D1-7a-3	20	99	D1-7a	-	46.9	0	62.9	66.2	63.5	0	69.2	69.2	70	N	-	-	22.3	Y	N	N
D1-7a-3	21	102.2	D1-7a	-	46.9	0	62.8	66.1	63.4	0	69.1	69.1	70	N	-	-	22.2	Y	N	N
D1-7a-3	22	105.4	D1-7a	-	47	0	62.7	66	63.2	0	69	69.0	70	N	-	-	22.0	Y	N	N
D1-7a-3	23	108.6	D1-7a	-	46.9	0	62.6	66	63.1	0	68.9	68.9	70	N	-	-	22.0	Y	N	N
D1-7a-3	24	111.8	D1-7a	-	46.9	0	62.5	65.9	63	0	68.8	68.8	70	N	-	-	21.9	Y	N	N
D1-7a-4	1	38.2	D1-7a	-	40.4	0	29.8	56.1	61	0	62.2	62.2	70	N	-	-	21.8	Y	N	N
D1-7a-4	2	41.4	D1-7a	-	41.2	0	29.8	60.1	66.3	0	67.2	67.3	70	N	-	-	26.1	Y	N	N
D1-7a-4	3	44.6	D1-7a	-	42.1	0	29.7	60.6	66.4	0	67.4	67.5	70	N	-	-	25.4	Y	N	N
D1-7a-4	4	47.8	D1-7a	-	43.2	0	29.7	60.8	66.3	0	67.4	67.4	70	N	-	-	24.2	Y	N	N
D1-7a-4	5	51	D1-7a	-	43.8	0	29.7	60.9	66	0	67.2	67.2	70	N	-	-	23.4	Y	N	N
D1-7a-4	6	54.2	D1-7a	-	44.5	0	29.7	60.9	65.8	0	67	67.0	70	N	-	-	22.5	Y	N	N
D1-7a-4	7	57.4	D1-7a	-	45.1	0	29.6	60.9	65.5	0	66.8	66.9	70	N	-	-	21.8	Y	N	N
D1-7a-4	8	60.6	D1-7a	-	46	0	29.6	60.9	65.3	0	66.6	66.7	70	N	-	-	20.7	Y	N	N
D1-7a-4	9	63.8	D1-7a	-	46.8	0	29.5	60.9	65.1	0	66.5	66.5	70	N	-	-	19.7	Y	N	N
D1-7a-4	10	67	D1-7a	-	47.4	0	29.5	60.8	64.8	0	66.3	66.3	70	N	-	-	18.9	Y	N	N
D1-7a-4	11	70.2	D1-7a	-	47.8	0	29.5	60.8	64.6	0	66.1	66.2	70	N	-	-	18.4	Y	N	N
D1-7a-4	12	73.4	D1-7a	-	48.3	0	29.4	60.8	64.5	0	66	66.1	70	N	-	-	17.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-7a-4	13	76.6	D1-7a	-	48.7	0	29.4	60.7	64.3	0	65.9	65.9	70	N	-	-	17.2	Y	N	N
D1-7a-4	14	79.8	D1-7a	-	49.1	0	29.3	60.7	64.1	0	65.7	65.8	70	N	-	-	16.7	Y	N	N
D1-7a-4	15	83	D1-7a	-	49.4	0	29.3	60.6	63.9	0	65.6	65.7	70	N	-	-	16.3	Y	N	N
D1-7a-4	16	86.2	D1-7a	-	49.7	0	29.2	60.6	63.7	0	65.5	65.6	70	N	-	-	15.9	Y	N	N
D1-7a-4	17	89.4	D1-7a	-	50	0	29.2	60.6	63.6	0	65.3	65.5	70	N	-	-	15.5	Y	N	N
D1-7a-4	18	92.6	D1-7a	-	50.2	0	29.1	60.5	63.4	0	65.2	65.3	70	N	-	-	15.1	Y	N	N
D1-7a-4	19	95.8	D1-7a	-	50.5	0	29.1	60.5	63.3	0	65.1	65.3	70	N	-	-	14.8	Y	N	N
D1-7a-4	20	99	D1-7a	-	50.7	0	29	60.5	63.1	0	65	65.1	70	N	-	-	14.4	Y	N	N
D1-7a-4	21	102.2	D1-7a	-	50.8	0	29	60.4	63	0	64.9	65.1	70	N	-	-	14.3	Y	N	N
D1-7a-4	22	105.4	D1-7a	-	50.9	0	28.9	60.4	62.8	0	64.8	64.9	70	N	-	-	14.0	Y	N	N
D1-7a-4	23	108.6	D1-7a	-	50.9	0	28.9	60.4	62.7	0	64.7	64.9	70	N	-	-	14.0	Y	N	N
D1-7a-4	24	111.8	D1-7a	-	50.9	0	28.8	60.3	62.5	0	64.6	64.8	70	N	-	-	13.9	Y	N	N
D1-7a-5	1	38.2	D1-7a	-	43	13.8	25.8	22.4	52.9	0	52.9	53.3	70	N	-	-	10.3	Y	N	N
D1-7a-5	2	41.4	D1-7a	-	46.2	13.8	25.7	22.4	57.3	0	57.3	57.6	70	N	-	-	11.4	Y	N	N
D1-7a-5	3	44.6	D1-7a	-	47.4	13.8	25.7	22.4	61.2	0	61.2	61.4	70	N	-	-	14.0	Y	N	N
D1-7a-5	4	47.8	D1-7a	-	48.2	13.8	25.7	22.3	63.5	0	63.5	63.7	70	N	-	-	15.5	Y	N	N
D1-7a-5	5	51	D1-7a	-	49	13.8	25.7	22.3	64.3	0	64.3	64.4	70	N	-	-	15.4	Y	N	N
D1-7a-5	6	54.2	D1-7a	-	49.6	13.8	25.7	22.3	64.5	0	64.5	64.7	70	N	-	-	15.1	Y	N	N
D1-7a-5	7	57.4	D1-7a	-	50.3	13.7	25.7	22.3	64.5	0	64.5	64.6	70	N	-	-	14.3	Y	N	N
D1-7a-5	8	60.6	D1-7a	-	50.9	13.7	25.7	22.2	64.3	0	64.3	64.5	70	N	-	-	13.6	Y	N	N
D1-7a-5	9	63.8	D1-7a	-	51.4	13.7	25.7	22.3	64.2	0	64.2	64.4	70	N	-	-	13.0	Y	N	N
D1-7a-5	10	67	D1-7a	-	51.8	14.1	25.6	22.4	64	0	64	64.2	70	N	-	-	12.4	Y	N	N
D1-7a-5	11	70.2	D1-7a	-	52.3	14	25.6	22.5	63.8	0	63.8	64.1	70	N	-	-	11.8	Y	N	N
D1-7a-5	12	73.4	D1-7a	-	52.8	14.1	25.5	22.6	63.6	0	63.6	64.0	70	N	-	-	11.2	Y	N	N
D1-7a-5	13	76.6	D1-7a	-	53.3	13.7	25.6	22.6	63.5	0	63.5	63.9	70	N	-	-	10.6	Y	N	N
D1-7a-5	14	79.8	D1-7a	-	53.7	13.8	25.5	22.6	63.3	0	63.3	63.8	70	N	-	-	10.1	Y	N	N
D1-7a-5	15	83	D1-7a	-	54	14.1	25.6	22.6	63.2	0	63.2	63.7	70	N	-	-	9.7	Y	N	N
D1-7a-5	16	86.2	D1-7a	-	54.2	14.2	25.9	22.7	63	0	63	63.5	70	N	-	-	9.3	Y	N	N
D1-7a-5	17	89.4	D1-7a	-	54.4	14.3	26.6	22.7	62.8	0	62.8	63.4	70	N	-	-	9.0	Y	N	N
D1-7a-5	18	92.6	D1-7a	-	54.5	14.7	27.5	22.8	62.7	0	62.7	63.3	70	N	-	-	8.8	Y	N	N
D1-7a-5	19	95.8	D1-7a	-	54.5	14.6	28.4	22.8	62.6	0	62.6	63.2	70	N	-	-	8.7	Y	N	N
D1-7a-5	20	99	D1-7a	-	54.6	14.8	29.2	22.8	62.5	0	62.5	63.1	70	N	-	-	8.5	Y	N	N
D1-7a-5	21	102.2	D1-7a	-	54.6	14.9	30.1	23.1	62.3	0	62.3	63.0	70	N	-	-	8.4	Y	N	N
D1-7a-5	22	105.4	D1-7a	-	54.6	14.8	30.9	23.7	62.2	0	62.2	62.9	70	N	-	-	8.3	Y	N	N
D1-7a-5	23	108.6	D1-7a	-	54.6	14.9	31.7	24.4	62.1	0	62.1	62.8	70	N	-	-	8.2	Y	N	N
D1-7a-5	24	111.8	D1-7a	-	54.5	15	32.5	25.6	61.9	0	62	62.7	70	N	-	-	8.2	Y	N	N
D1-7b-1	1	21.2	D1-7b	-	0	48.5	73.1	60.1	51.5	0	73.4	73.4	70	Y	-	-	73.4	Y	Y	Y
D1-7b-1	2	24.4	D1-7b	-	0	48.6	73	60.1	51.4	0	73.3	73.3	70	Y	-	-	73.3	Y	Y	Y
D1-7b-1	3	27.6	D1-7b	-	0	48.8	72.9	60.2	51.4	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
D1-7b-1	4	30.8	D1-7b	-	0	49.2	72.7	60.2	51.4	0	73	73.0	70	Y	-	-	73.0	Y	Y	Y
D1-7b-1	5	34	D1-7b	-	0	49.6	72.5	60.2	51.4	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
D1-7b-1	6	37.2	D1-7b	-	0	50.1	72.3	60.3	51.3	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
D1-7b-1	7	40.4	D1-7b	-	0	50.5	72.1	60.3	51.2	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
D1-7b-1	8	43.6	D1-7b	-	0	50.9	71.9	60.4	51.2	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
D1-7b-1	9	46.8	D1-7b	-	0	51	71.7	60.4	51.1	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
D1-7b-1	10	50	D1-7b	-	0	51.2	71.5	60.5	51.1	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
D1-7b-1	11	53.2	D1-7b	-	0	51.4	71.3	60.5	51.1	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
D1-7b-1	12	56.4	D1-7b	-	0	51.4	71.1	60.6	51	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
D1-7b-1	13	59.6	D1-7b	-	0	51.5	71	60.6	50.9	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
D1-7b-1	14	62.8	D1-7b	-	0	51.5	70.8	60.7	50.9	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
D1-7b-1	15	66	D1-7b	-	0	51.5	70.6	60.7	50.9	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
D1-7b-1	16	69.2	D1-7b	-	0	51.5	70.4	60.7	50.8	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-7b-1	17	72.4	D1-7b	-	0	51.5	70.3	60.7	50.8	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7b-1	18	75.6	D1-7b	-	0	51.5	70.1	60.8	50.7	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
D1-7b-1	19	78.8	D1-7b	-	0	51.5	70	60.8	50.7	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
D1-7b-1	20	82	D1-7b	-	0	51.5	69.8	60.8	50.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7b-1	21	85.2	D1-7b	-	0	51.4	69.6	60.9	50.6	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-7b-1	22	88.4	D1-7b	-	0	51.4	69.5	60.9	50.6	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-7b-1	23	91.6	D1-7b	-	0	51.4	69.3	60.9	50.5	0	70	70.0	70	N	-	-	70.0	Y	N	N
D1-7b-1	24	94.8	D1-7b	-	0	51.4	69.2	60.9	50.4	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
D1-7b-1	25	98	D1-7b	-	0	51.3	69.1	60.9	50.4	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
D1-7b-1	26	101.2	D1-7b	-	0	51.3	69	60.9	50.3	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-7b-2	1	21.2	D1-7b	-	0	54.3	73.1	58.1	54.3	0	73.3	73.3	70	Y	-	-	73.3	Y	Y	Y
D1-7b-2	2	24.4	D1-7b	-	0	54.3	72.9	58.2	54.2	0	73.2	73.2	70	Y	-	-	73.2	Y	Y	Y
D1-7b-2	3	27.6	D1-7b	-	0	54.4	72.8	58.3	54.2	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
D1-7b-2	4	30.8	D1-7b	-	0	54.5	72.6	58.4	54.2	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
D1-7b-2	5	34	D1-7b	-	0	54.7	72.4	58.6	54.1	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
D1-7b-2	6	37.2	D1-7b	-	0	54.9	72.2	58.7	54.1	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
D1-7b-2	7	40.4	D1-7b	-	0	55.1	72	58.8	54.1	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
D1-7b-2	8	43.6	D1-7b	-	0	55.2	71.9	58.9	54	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
D1-7b-2	9	46.8	D1-7b	-	0	55.3	71.7	59	54	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
D1-7b-2	10	50	D1-7b	-	0	55.4	71.5	59.1	54	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
D1-7b-2	11	53.2	D1-7b	-	0	55.4	71.3	59.1	53.9	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
D1-7b-2	12	56.4	D1-7b	-	0	55.5	71.1	59.2	53.9	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
D1-7b-2	13	59.6	D1-7b	-	0	55.5	70.9	59.2	53.9	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
D1-7b-2	14	62.8	D1-7b	-	0	55.5	70.8	59.2	53.9	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
D1-7b-2	15	66	D1-7b	-	0	55.5	70.6	59.3	53.8	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
D1-7b-2	16	69.2	D1-7b	-	0	55.4	70.5	59.3	53.8	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-7b-2	17	72.4	D1-7b	-	0	55.4	70.3	59.4	53.8	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-7b-2	18	75.6	D1-7b	-	0	55.4	70.1	59.5	53.7	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
D1-7b-2	19	78.8	D1-7b	-	0	55.4	69.9	59.5	53.7	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
D1-7b-2	20	82	D1-7b	-	0	55.4	69.8	59.5	53.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7b-2	21	85.2	D1-7b	-	0	55.3	69.7	59.5	53.6	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-7b-2	22	88.4	D1-7b	-	0	55.3	69.5	59.6	53.6	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-7b-2	23	91.6	D1-7b	-	0	55.3	69.4	59.6	53.5	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
D1-7b-2	24	94.8	D1-7b	-	0	55.3	69.3	59.7	53.4	0	70	70.0	70	N	-	-	70.0	Y	N	N
D1-7b-2	25	98	D1-7b	-	0	55.3	69.1	59.7	53.4	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
D1-7b-2	26	101.2	D1-7b	-	0	55.2	69	59.7	53.3	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-7b-3	1	21.2	D1-7b	-	40.2	0	0	22.1	65.1	0	65.1	65.1	70	N	-	-	24.9	Y	N	N
D1-7b-3	2	24.4	D1-7b	-	41.9	0	0	22.1	65.3	0	65.3	65.3	70	N	-	-	23.4	Y	N	N
D1-7b-3	3	27.6	D1-7b	-	43.9	0	0	22	65.3	0	65.3	65.3	70	N	-	-	21.4	Y	N	N
D1-7b-3	4	30.8	D1-7b	-	46.3	0	0	22	65.2	0	65.2	65.2	70	N	-	-	18.9	Y	N	N
D1-7b-3	5	34	D1-7b	-	47.9	0	0	22	65	0	65	65.1	70	N	-	-	17.2	Y	N	N
D1-7b-3	6	37.2	D1-7b	-	49	0	0	22	64.8	0	64.8	64.9	70	N	-	-	15.9	Y	N	N
D1-7b-3	7	40.4	D1-7b	-	49.9	0	0	22	64.7	0	64.7	64.8	70	N	-	-	14.9	Y	N	N
D1-7b-3	8	43.6	D1-7b	-	50.5	0	0	22	64.5	0	64.5	64.7	70	N	-	-	14.2	Y	N	N
D1-7b-3	9	46.8	D1-7b	-	51.1	0	0	22	64.3	0	64.3	64.6	70	N	-	-	13.5	Y	N	N
D1-7b-3	10	50	D1-7b	-	51.7	0	0	22	64.1	0	64.2	64.4	70	N	-	-	12.7	Y	N	N
D1-7b-3	11	53.2	D1-7b	-	52	0	0	22	64	0	64	64.2	70	N	-	-	12.2	Y	N	N
D1-7b-3	12	56.4	D1-7b	-	52.3	0	0	22.1	63.8	0	63.8	64.1	70	N	-	-	11.8	Y	N	N
D1-7b-3	13	59.6	D1-7b	-	52.7	0	0	22.1	63.6	0	63.6	63.9	70	N	-	-	11.2	Y	N	N
D1-7b-3	14	62.8	D1-7b	-	53	0	0	22.1	63.4	0	63.4	63.8	70	N	-	-	10.8	Y	N	N
D1-7b-3	15	66	D1-7b	-	53.3	0	0	21.9	63.3	0	63.3	63.7	70	N	-	-	10.4	Y	N	N
D1-7b-3	16	69.2	D1-7b	-	53.6	0	0	22	63.1	0	63.1	63.5	70	N	-	-	9.9	Y	N	N
D1-7b-3	17	72.4	D1-7b	-	53.9	0	0	21.9	62.9	0	62.9	63.4	70	N	-	-	9.5	Y	N	N
D1-7b-3	18	75.6	D1-7b	-	54.1	0	0	21.9	62.7	0	62.7	63.3	70	N	-	-	9.2	Y	N	N
D1-7b-3	19	78.8	D1-7b	-	54.2	0	0	21.9	62.6	0	62.6	63.2	70	N	-	-	9.0	Y	N	N
D1-7b-3	20	82	D1-7b	-	54.3	0	0	21.9	62.5	0	62.5	63.1	70	N	-	-	8.8	Y	N	N
D1-7b-3	21	85.2	D1-7b	-	54.4	0	0	21.9	62.4	0	62.4	63.0	70	N	-	-	8.6	Y	N	N
D1-7b-3	22	88.4	D1-7b	-	54.5	0	0	21.9	62.2	0	62.2	62.9	70	N	-	-	8.4	Y	N	N
D1-7b-3	23	91.6	D1-7b	-	54.5	0	0	21.8	62.1	0	62.1	62.8	70	N	-	-	8.3	Y	N	N
D1-7b-3	24	94.8	D1-7b	-	54.5	0	0	22	62	0	62	62.7	70	N	-	-	8.2	Y	N	N
D1-7b-3	25	98	D1-7b	-	54.5	0	0	22.5	61.9	0	61.9	62.6	70	N	-	-	8.1	Y	N	N
D1-7b-3	26	101.2	D1-7b	-	54.5	0	0	22.9	61.7	0	61.7	62.5	70	N	-	-	8.0	Y	N	N
D1-7b-4	1	21.2	D1-7b	-	42.3	23	34	34	67.7	0	67.7	67.7	70	N	-	-	25.4	Y	N	N
D1-7b-4	2	24.4	D1-7b	-	45	23	34.4	35.3	67.6	0	67.6	67.6	70	N	-	-	22.6	Y	N	N
D1-7b-4	3	27.6	D1-7b	-	47.6	23	34.7	36.7	67.3	0	67.3	67.4	70	N	-	-	19.8	Y	N	N
D1-7b-4	4	30.8	D1-7b	-	49.8	23	35	38.9	67	0	67.1	67.1	70	N	-	-	17.3	Y	N	N
D1-7b-4	5	34	D1-7b	-	51.1	23	35.3	40	66.7	0	66.7	66.8	70	N	-	-	15.7	Y	N	N
D1-7b-4	6	37.2	D1-7b	-	51.9	23	35.6	41.7	66.4	0	66.5	66.6	70	N	-	-	14.7	Y	N	N
D1-7b-4	7	40.4	D1-7b	-	52.5	23	36.1	42.6	66.2	0	66.2	66.4	70	N	-	-	13.9	Y	N	N
D1-7b-4	8	43.6	D1-7b	-	52.9	23	36.5	43.2	65.9	0	65.9	66.1	70	N	-	-	13.2	Y	N	N
D1-7b-4	9	46.8	D1-7b	-	53.2	23	36.9	43.5	65.6	0	65.6	65.9	70	N	-	-	12.7	Y	N	N
D1-7b-4	10	50	D1-7b	-	53.4	22.9	37.3	43.7	65.4	0	65.4	65.7	70	N	-	-	12.3	Y	N	N
D1-7b-4	11	53.2	D1-7b	-	53.6	23	37.8	43.8	65.1	0	65.2	65.4	70	N	-	-	11.8	Y	N	N
D1-7b-4	12	56.4	D1-7b	-	53.8	23	38.3	43.8	64.9	0	64.9	65.2	70	N	-	-	11.4	Y	N	N
D1-7b-4	13	59.6	D1-7b	-	54.1	23	38.9	43.8	64.7	0	64.7	65.1	70	N	-	-	11.0	Y	N	N
D1-7b-4	14	62.8	D1-7b	-	54.4	23.3	39.4	43.8	64.5	0	64.5	64.9	70	N	-	-	10.5	Y	N	N
D1-7b-4	15	66	D1-7b	-	54.6	23.5	40.2	43.8	64.2	0	64.3	64.7	70	N	-	-	10.1	Y	N	N
D1-7b-4	16	69.2	D1-7b	-	54.7	23.9	40.8	43.8	64.1	0	64.1	64.6	70	N	-	-	9.9	Y	N	N
D1-7b-4	17	72.4	D1-7b	-	54.9	24.1	41.7	43.8	63.9	0	64	64.5	70	N	-	-	9.6	Y	N	N
D1-7b-4	18	75.6	D1-7b	-	55	24.6	43.1	43.8	63.7	0	63.8	64.3	70	N	-	-	9.3	Y	N	N
D1-7b-4	19	78.8	D1-7b	-	55	24.9	43.3	43.8	63.6	0	63.6	64.2	70	N	-	-	9.2	Y	N	N
D1-7b-4	20	82	D1-7b	-	55.1	25.3	44	43.8	63.4	0	63.5	64.1	70	N	-	-	9.0	Y	N	N
D1-7b-4	21	85.2	D1-7b	-	55.1	25.8	45.1	43.8	63.3	0	63.4	64.0	70	N	-	-	8.9	Y	N	N
D1-7b-4	22	88.4	D1-7b	-	55.1	26.3	45.7	43.8	63.1	0	63.3	63.9	70	N	-	-	8.8	Y	N	N
D1-7b-4	23	91.6	D1-7b	-	55.1	26.9	46.2	43.7	63	0	63.1	63.8	70	N	-	-	8.7	Y	N	N
D1-7b-4	24	94.8	D1-7b	-	55.1	27.5	46.6	43.7	62.9	0	63	63.7	70	N	-	-	8.6	Y	N	N
D1-7b-4	25	98	D1-7b	-	55.1	28	46.9	43.7	62.7	0	62.9	63.6	70	N	-	-	8.5	Y	N	N
D1-7b-4	26	101.2	D1-7b	-	55.1	28.7	47	43.7	62.6	0	62.8	63.5	70	N	-	-	8.4	Y	N	N
D1-7c-1	1	17.7	D1-7c	-	49.3	0	60.2	30.4	70.9	0	71.2	71.2	70	Y	-	-	21.9	Y	Y	Y
D1-7c-1	2	20.9	D1-7c	-	49.6	0	60.1	31	70.4	0	70.8	70.9	70	Y	-	-	21.3	Y	Y	Y
D1-7c-1	3	24.1	D1-7c	-	49.7	0	60.1	31.7	70	0	70.4	70.4	70	N	-	-	20.7	Y	N	N
D1-7c-1	4	27.3	D1-7c	-	49.9	0	60.1	32.5	69.6	0	70	70.1	70	N	-	-	20.2	Y	N	N
D1-7c-1	5	30.5	D1-7c	-	50.3	0	60	33.3	69.2	0	69.7	69.7	70	N	-	-	19.4	Y	N	N
D1-7c-1	6	33.7	D1-7c	-	50.8	0	59.9	34.3	68.8	0	69.3	69.4	70	N	-	-	18.6	Y	N	N
D1-7c-1	7	36.9	D1-7c	-	51.4	0	59.9	35.6	68.4	0	69	69.1	70	N	-	-	17.7	Y	N	N
D1-7c-1	8	40.1	D1-7c	-	52.4	0	59.8	36.3	68.1	0	68.7	68.8	70	N	-	-	16.4	Y	N	N
D1-7c-1	9	43.3	D1-7c	-	53.2	0	59.7	37.8	67.7	0	68.4	68.5	70	N	-	-	15.3	Y	N	N
D1-7c-1	10	46.5	D1-7c	-	53.6	0	59.6	38.4	67.4	0	68.1	68.2	70	N	-	-	14.6	Y	N	N
D1-7c-1	11	49.7	D1-7c	-	53.8	0	59.6	39.4	67.1	0	67.8	68.0	70	N	-	-	14.2	Y	N	N
D1-7c-1	12	52.9	D1-7c	-	54	0	59.5	40.2	66.9	0	67.6	67.8	70	N	-	-	13.8	Y	N	N
D1-7c-1	13	56.1	D1-7c	-	54	0	59.4	40.7	66.6	0	67.4	67.6	70	N	-	-	13.6	Y	N	N
D1-7c-1	14	59.3	D1-7c	-	54	0	59.3	41	66.4	0	67.2	67.4	70	N	-	-	13.4	Y	N	N
D1-7c-1	15	62.5	D1-7c	-	54	0	59.2	41.4	66.2	0	67	67.2	70	N	-	-	13.2	Y	N	N
D1-7c-1	16	65.7	D1-7c	-	54	0	59.1	41.6	65.9	0	66.8	67.0	70	N	-	-	13.0	Y	N	N
D1-7c-1	17	68.9	D1-7c	-	53.9	0	59	41.8	65.7	0	66.6	66.8	70	N	-	-	12.9	Y	N	N
D1-7c-1	18	72.1	D1-7c	-	53.9	0	58.9	41.9	65.5	0	66.4	66.7	70	N	-	-	12.8	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-7c-1	19	75.3	D1-7c	-	53.8	0	58.8	42	65.4	0	66.2	66.5	70	N	-	-	12.7	Y	N	N
D1-7c-1	20	78.5	D1-7c	-	53.8	0	58.7	42	65.2	0	66.1	66.3	70	N	-	-	12.5	Y	N	N
D1-7c-2	1	17.7	D1-7c	-	50.2	26.9	31.9	13.4	71	0	71	71.0	70	Y	-	-	20.8	Y	Y	Y
D1-7c-2	2	20.9	D1-7c	-	50.7	26.9	32	13.4	70.3	0	70.3	70.4	70	N	-	-	19.7	Y	N	N
D1-7c-2	3	24.1	D1-7c	-	50.8	26.9	31.9	13.3	69.8	0	69.8	69.8	70	N	-	-	19.0	Y	N	N
D1-7c-2	4	27.3	D1-7c	-	51.3	26.9	31.9	13.3	69.3	0	69.3	69.4	70	N	-	-	18.1	Y	N	N
D1-7c-2	5	30.5	D1-7c	-	51.9	26.9	31.9	13.3	68.8	0	68.8	68.9	70	N	-	-	17.0	Y	N	N
D1-7c-2	6	33.7	D1-7c	-	52.4	26.8	31.9	13.3	68.4	0	68.4	68.5	70	N	-	-	16.1	Y	N	N
D1-7c-2	7	36.9	D1-7c	-	53	26.8	31.8	13.3	68	0	68	68.1	70	N	-	-	15.1	Y	N	N
D1-7c-2	8	40.1	D1-7c	-	53.2	26.7	31.8	13.3	67.7	0	67.7	67.8	70	N	-	-	14.6	Y	N	N
D1-7c-2	9	43.3	D1-7c	-	53.3	26.7	31.7	13.3	67.3	0	67.3	67.5	70	N	-	-	14.2	Y	N	N
D1-7c-2	10	46.5	D1-7c	-	53.2	26.6	31.7	13.3	67	0	67	67.2	70	N	-	-	14.0	Y	N	N
D1-7c-2	11	49.7	D1-7c	-	53.2	26.6	31.6	13.3	66.7	0	66.7	66.9	70	N	-	-	13.7	Y	N	N
D1-7c-2	12	52.9	D1-7c	-	53.1	26.5	31.6	13.3	66.4	0	66.4	66.6	70	N	-	-	13.5	Y	N	N
D1-7c-2	13	56.1	D1-7c	-	53	26.5	31.5	13.2	66.2	0	66.2	66.4	70	N	-	-	13.4	Y	N	N
D1-7c-2	14	59.3	D1-7c	-	52.9	26.4	31.4	13.2	66	0	66	66.2	70	N	-	-	13.3	Y	N	N
D1-7c-2	15	62.5	D1-7c	-	52.8	26.3	31.4	13.6	65.8	0	65.8	66.0	70	N	-	-	13.2	Y	N	N
D1-7c-2	16	65.7	D1-7c	-	52.7	26.3	31.2	14.1	65.5	0	65.5	65.8	70	N	-	-	13.1	Y	N	N
D1-7c-2	17	68.9	D1-7c	-	52.6	26.1	32.3	14.9	65.4	0	65.4	65.6	70	N	-	-	13.0	Y	N	N
D1-7c-2	18	72.1	D1-7c	-	52.5	26.4	33.9	15.8	65.1	0	65.1	65.4	70	N	-	-	12.9	Y	N	N
D1-7c-2	19	75.3	D1-7c	-	52.4	27.3	35.8	16.7	64.9	0	65	65.2	70	N	-	-	12.8	Y	N	N
D1-7c-2	20	78.5	D1-7c	-	52.3	28.4	37.9	17.8	64.8	0	64.8	65.0	70	N	-	-	12.7	Y	N	N
D1-7c-3	1	17.7	D1-7c	-	52.9	0	51.3	12.4	71.5	0	71.5	71.6	70	Y	-	-	18.7	Y	Y	Y
D1-7c-3	2	20.9	D1-7c	-	53.7	0	51.2	12.4	71	0	71.1	71.1	70	Y	-	-	17.4	Y	Y	Y
D1-7c-3	3	24.1	D1-7c	-	53.9	0	51.2	12.3	70.5	0	70.6	70.7	70	Y	-	-	16.8	Y	Y	Y
D1-7c-3	4	27.3	D1-7c	-	54	0	51.2	12.3	70.1	0	70.2	70.3	70	N	-	-	16.3	Y	N	N
D1-7c-3	5	30.5	D1-7c	-	53.8	0	51.1	12.3	69.7	0	69.8	69.9	70	N	-	-	16.1	Y	N	N
D1-7c-3	6	33.7	D1-7c	-	53.6	0	51.1	12.3	69.4	0	69.4	69.6	70	N	-	-	16.0	Y	N	N
D1-7c-3	7	36.9	D1-7c	-	53.5	0	51	12.3	69	0	69.1	69.2	70	N	-	-	15.7	Y	N	N
D1-7c-3	8	40.1	D1-7c	-	53.4	0	51	12.3	68.7	0	68.8	68.9	70	N	-	-	15.5	Y	N	N
D1-7c-3	9	43.3	D1-7c	-	53.2	0	51	12.3	68.4	0	68.5	68.6	70	N	-	-	15.4	Y	N	N
D1-7c-3	10	46.5	D1-7c	-	53	0	50.9	12.3	68.1	0	68.2	68.3	70	N	-	-	15.3	Y	N	N
D1-7c-3	11	49.7	D1-7c	-	52.8	0	50.8	12.3	67.9	0	67.9	68.1	70	N	-	-	15.3	Y	N	N
D1-7c-3	12	52.9	D1-7c	-	52.7	0	50.8	12.3	67.6	0	67.7	67.9	70	N	-	-	15.2	Y	N	N
D1-7c-3	13	56.1	D1-7c	-	52.5	0	50.7	12.3	67.4	0	67.5	67.6	70	N	-	-	15.1	Y	N	N
D1-7c-3	14	59.3	D1-7c	-	52.4	0	50.6	12.3	67.2	0	67.3	67.4	70	N	-	-	15.0	Y	N	N
D1-7c-3	15	62.5	D1-7c	-	52.2	0	50.6	12.2	67	0	67.1	67.2	70	N	-	-	15.0	Y	N	N
D1-7c-3	16	65.7	D1-7c	-	52.1	0	50.5	12.2	66.7	0	66.8	67.0	70	N	-	-	14.9	Y	N	N
D1-7c-3	17	68.9	D1-7c	-	51.9	0	50.4	12.2	66.6	0	66.7	66.8	70	N	-	-	14.9	Y	N	N
D1-7c-3	18	72.1	D1-7c	-	51.8	0	50.4	12.2	66.4	0	66.5	66.6	70	N	-	-	14.8	Y	N	N
D1-7c-3	19	75.3	D1-7c	-	51.7	0	50.3	12.2	66.2	0	66.3	66.5	70	N	-	-	14.8	Y	N	N
D1-7c-3	20	78.5	D1-7c	-	51.6	0	50.3	12.2	66	0	66.1	66.3	70	N	-	-	14.7	Y	N	N
D1-7c-4	1	17.7	D1-7c	-	0	67.8	71.1	61.3	54.4	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
D1-7c-4	2	20.9	D1-7c	-	0	67.7	71	61.3	54.5	0	73	73.0	70	Y	-	-	73.0	Y	Y	Y
D1-7c-4	3	24.1	D1-7c	-	0	67.6	71	61.3	54.5	0	73	73.0	70	Y	-	-	73.0	Y	Y	Y
D1-7c-4	4	27.3	D1-7c	-	0	67.5	70.9	61.3	54.5	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
D1-7c-4	5	30.5	D1-7c	-	0	67.3	70.9	61.2	54.5	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
D1-7c-4	6	33.7	D1-7c	-	0	67.2	71	61.2	54.5	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
D1-7c-4	7	36.9	D1-7c	-	0	67.1	71.3	61.2	54.5	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
D1-7c-4	8	40.1	D1-7c	-	0	67	71.4	61.1	54.4	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
D1-7c-4	9	43.3	D1-7c	-	0	66.9	71.4	61.1	54.4	0	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
D1-7c-4	10	46.5	D1-7c	-	0	66.8	71.4	61	54.3	0	73	73.0	70	Y	-	-	73.0	Y	Y	Y
D1-7c-4	11	49.7	D1-7c	-	0	66.7	71.2	61	54.3	0	72.9	72.9	70	Y	-	-	72.9	Y	Y	Y
D1-7c-4	12	52.9	D1-7c	-	0	66.6	71.1	60.9	54.3	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
D1-7c-4	13	56.1	D1-7c	-	0	66.4	71.1	60.8	54.2	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y
D1-7c-4	14	59.3	D1-7c	-	0	66.3	71	60.8	54.1	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
D1-7c-4	15	62.5	D1-7c	-	0	66.2	70.9	60.7	54.1	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
D1-7c-4	16	65.7	D1-7c	-	0	66.1	70.8	60.6	54	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
D1-7c-4	17	68.9	D1-7c	-	0	66	70.8	60.6	54	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
D1-7c-4	18	72.1	D1-7c	-	0	65.9	70.7	60.5	54	0	72.3	72.3	70	Y	-	-	72.3	Y	Y	Y
D1-7c-4	19	75.3	D1-7c	-	0	65.8	70.6	60.5	53.9	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
D1-7c-4	20	78.5	D1-7c	-	0	65.7	70.6	60.4	53.8	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
D1-7c-5	1	17.7	D1-7c	-	0	61	70.3	53.7	33.2	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
D1-7c-5	2	20.9	D1-7c	-	0	61	70.3	54.7	33.2	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
D1-7c-5	3	24.1	D1-7c	-	0	61	70.2	56.3	33.1	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
D1-7c-5	4	27.3	D1-7c	-	0	61	70.1	57.2	33.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7c-5	5	30.5	D1-7c	-	0	61	70.1	57.6	33.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7c-5	6	33.7	D1-7c	-	0	61	70.1	57.7	33.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7c-5	7	36.9	D1-7c	-	0	60.9	70.1	57.8	33.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7c-5	8	40.1	D1-7c	-	0	60.9	70.3	57.8	33.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-7c-5	9	43.3	D1-7c	-	0	60.9	70.4	57.8	33.1	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
D1-7c-5	10	46.5	D1-7c	-	0	60.8	70.4	57.8	33.1	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
D1-7c-5	11	49.7	D1-7c	-	0	60.8	70.4	57.8	33.1	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-7c-5	12	52.9	D1-7c	-	0	60.8	70.2	57.8	33.1	0	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
D1-7c-5	13	56.1	D1-7c	-	0	60.8	70.1	57.8	33	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7c-5	14	59.3	D1-7c	-	0	60.7	70	57.8	33.1	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-7c-5	15	62.5	D1-7c	-	0	60.7	69.9	57.8	33.1	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
D1-7c-5	16	65.7	D1-7c	-	0	60.7	69.8	57.8	33.1	0	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
D1-7c-5	17	68.9	D1-7c	-	0	60.6	69.7	57.8	33.2	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]					New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)				
D1-7c-5	18	72.1	D1-7c	-	0	60.6	69.7	57.8	33.2	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7c-5	19	75.3	D1-7c	-	0	60.5	69.6	57.7	33.3	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-7c-5	20	78.5	D1-7c	-	0	60.5	69.5	57.7	33.4	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-7c-6	1	17.7	D1-7c	-	5.5	68.2	68.2	60.9	61.6	0	72	72.0	70	Y	-	-	66.5	Y	Y	Y
D1-7c-6	2	20.9	D1-7c	-	5.5	68.1	68.2	60.9	61.6	0	72	72.0	70	Y	-	-	66.5	Y	Y	Y
D1-7c-6	3	24.1	D1-7c	-	5.5	68	68.1	60.8	61.6	0	71.9	71.9	70	Y	-	-	66.4	Y	Y	Y
D1-7c-6	4	27.3	D1-7c	-	5.5	67.8	68.1	60.8	61.6	0	71.8	71.8	70	Y	-	-	66.3	Y	Y	Y
D1-7c-6	5	30.5	D1-7c	-	5.5	67.7	68.1	60.7	61.5	0	71.7	71.7	70	Y	-	-	66.2	Y	Y	Y
D1-7c-6	6	33.7	D1-7c	-	5.4	67.6	68	60.6	61.5	0	71.7	71.7	70	Y	-	-	66.3	Y	Y	Y
D1-7c-6	7	36.9	D1-7c	-	5.4	67.5	67.9	60.6	61.4	0	71.6	71.6	70	Y	-	-	66.2	Y	Y	Y
D1-7c-6	8	40.1	D1-7c	-	6	67.4	67.9	60.5	61.4	0	71.5	71.5	70	Y	-	-	65.5	Y	Y	Y
D1-7c-6	9	43.3	D1-7c	-	6.7	67.3	67.8	60.4	61.3	0	71.4	71.4	70	Y	-	-	64.7	Y	Y	Y
D1-7c-6	10	46.5	D1-7c	-	7.5	67.1	67.7	60.3	61.3	0	71.3	71.3	70	Y	-	-	63.8	Y	Y	Y
D1-7c-6	11	49.7	D1-7c	-	8.3	67	67.6	60.2	61.2	0	71.2	71.2	70	Y	-	-	62.9	Y	Y	Y
D1-7c-6	12	52.9	D1-7c	-	9.2	66.9	67.6	60.1	61.2	0	71.1	71.1	70	Y	-	-	61.9	Y	Y	Y
D1-7c-6	13	56.1	D1-7c	-	10.1	66.8	67.5	60	61.1	0	71	71.0	70	Y	-	-	60.9	Y	Y	Y
D1-7c-6	14	59.3	D1-7c	-	11	66.7	67.5	60	61	0	71	71.0	70	Y	-	-	60.0	Y	Y	Y
D1-7c-6	15	62.5	D1-7c	-	11.9	66.6	67.5	59.9	61	0	70.9	70.9	70	Y	-	-	59.0	Y	Y	Y
D1-7c-6	16	65.7	D1-7c	-	13	66.4	67.4	59.8	60.9	0	70.8	70.8	70	Y	-	-	57.8	Y	Y	Y
D1-7c-6	17	68.9	D1-7c	-	14.1	66.3	67.3	59.7	60.8	0	70.7	70.7	70	Y	-	-	56.6	Y	Y	Y
D1-7c-6	18	72.1	D1-7c	-	15.2	66.2	67.2	59.6	60.8	0	70.6	70.6	70	Y	-	-	55.4	Y	Y	Y
D1-7c-6	19	75.3	D1-7c	-	16.3	66.1	67.1	59.5	60.7	0	70.5	70.5	70	Y	-	-	54.2	Y	Y	Y
D1-7c-6	20	78.5	D1-7c	-	17.6	66	67.1	59.4	60.6	0	70.5	70.5	70	Y	-	-	52.9	Y	Y	Y
D1-7c-7	1	17.7	D1-7c	-	0	62.8	68.3	56.2	25.6	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
D1-7c-7	2	20.9	D1-7c	-	0	62.7	68.3	57	25.6	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
D1-7c-7	3	24.1	D1-7c	-	0	62.7	68.3	58.2	25.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-7c-7	4	27.3	D1-7c	-	0	62.6	68.3	58.7	25.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-7c-7	5	30.5	D1-7c	-	0	62.6	68.2	58.7	25.6	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
D1-7c-7	6	33.7	D1-7c	-	0	62.5	68.3	58.8	25.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-7c-7	7	36.9	D1-7c	-	0	62.4	68.4	58.7	25.6	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
D1-7c-7	8	40.1	D1-7c	-	0	62.4	68.7	58.7	25.6	0	70	70.0	70	N	-	-	70.0	Y	N	N
D1-7c-7	9	43.3	D1-7c	-	0	62.3	69.2	58.7	25.6	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-7c-7	10	46.5	D1-7c	-	0	62.2	69.3	58.7	25.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7c-7	11	49.7	D1-7c	-	0	62.2	69.4	58.7	25.6	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
D1-7c-7	12	52.9	D1-7c	-	0	62.1	69.4	58.7	25.6	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7c-7	13	56.1	D1-7c	-	0	62	69.3	58.6	25.7	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-7c-7	14	59.3	D1-7c	-	0	62	69.3	58.6	25.8	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-7c-7	15	62.5	D1-7c	-	0	61.9	69.2	58.6	26	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-7c-7	16	65.7	D1-7c	-	0	61.9	69.1	58.6	26.3	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
D1-7c-7	17	68.9	D1-7c	-	0	61.8	69	58.5	27	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
D1-7c-7	18	72.1	D1-7c	-	0	61.7	68.9	58.5	27.8	0	70	70.0	70	N	-	-	70.0	Y	N	N
D1-7c-7	19	75.3	D1-7c	-	0	61.7	68.9	58.4	28.6	0	70	70.0	70	N	-	-	70.0	Y	N	N
D1-7c-7	20	78.5	D1-7c	-	0	61.6	68.9	58.4	29.4	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
D1-7d-1	1	15.2	D1-7d	-	48.9	0	0	0	71.2	0	71.2	71.2	70	Y	-	-	22.3	Y	Y	Y
D1-7d-1	2	18.4	D1-7d	-	49.7	0	0	0	71	0	71	71.0	70	Y	-	-	21.3	Y	Y	Y
D1-7d-1	3	21.6	D1-7d	-	50.1	0	0	0	70.8	0	70.8	70.8	70	Y	-	-	20.7	Y	Y	Y
D1-7d-1	4	24.8	D1-7d	-	50.6	0	0	0	70.5	0	70.5	70.5	70	Y	-	-	19.9	Y	Y	Y
D1-7d-1	5	28	D1-7d	-	51	0	0	0	70.2	0	70.2	70.3	70	N	-	-	19.3	Y	N	N
D1-7d-1	6	31.2	D1-7d	-	51.3	0	0	0	69.9	0	69.9	70.0	70	N	-	-	18.7	Y	N	N
D1-7d-1	7	34.4	D1-7d	-	51.7	0	0	0	69.6	0	69.6	69.7	70	N	-	-	18.0	Y	N	N
D1-7d-1	8	37.6	D1-7d	-	51.9	0	0	0	69.4	0	69.4	69.4	70	N	-	-	17.5	Y	N	N
D1-7d-1	9	40.8	D1-7d	-	52	0	0	0	69.1	0	69.1	69.2	70	N	-	-	17.2	Y	N	N
D1-7d-1	10	44	D1-7d	-	52.1	0	0	0	68.8	0	68.8	68.9	70	N	-	-	16.8	Y	N	N
D1-7d-1	11	47.2	D1-7d	-	52.2	0	0	0	68.6	0	68.6	68.7	70	N	-	-	16.5	Y	N	N
D1-7d-1	12	50.4	D1-7d	-	52.3	0	0	0	68.4	0	68.4	68.5	70	N	-	-	16.2	Y	N	N
D1-7d-1	13	53.6	D1-7d	-	52.3	0	0	0	68.1	0	68.1	68.2	70	N	-	-	15.9	Y	N	N
D1-7d-1	14	56.8	D1-7d	-	52.3	0	0	0	67.9	0	67.9	68.0	70	N	-	-	15.7	Y	N	N
D1-7d-1	15	60	D1-7d	-	52.3	0	0	0	67.7	0	67.7	67.8	70	N	-	-	15.5	Y	N	N
D1-7d-1	16	63.2	D1-7d	-	52.3	0	0	0	67.5	0	67.5	67.6	70	N	-	-	15.3	Y	N	N
D1-7d-1	17	66.4	D1-7d	-	52.3	0	0	0	67.3	0	67.3	67.4	70	N	-	-	15.1	Y	N	N
D1-7d-1	18	69.6	D1-7d	-	52.3	0	0	0	67.1	0	67.1	67.2	70	N	-	-	14.9	Y	N	N
D1-7d-1	19	72.8	D1-7d	-	52.2	0	0	0	66.9	0	66.9	67.0	70	N	-	-	14.8	Y	N	N
D1-7d-1	20	76	D1-7d	-	52.2	0	0	0	66.7	0	66.7	66.9	70	N	-	-	14.7	Y	N	N
D1-7d-1	21	79.2	D1-7d	-	52.2	0	0	0	66.6	0	66.6	66.7	70	N	-	-	14.5	Y	N	N
D1-7d-1	22	82.4	D1-7d	-	52.1	0	0	0	66.4	0	66.4	66.5	70	N	-	-	14.4	Y	N	N
D1-7d-1	23	85.6	D1-7d	-	52.1	0	0	0	66.2	0	66.2	66.4	70	N	-	-	14.3	Y	N	N
D1-7d-1	24	88.8	D1-7d	-	52	0	0	0	66.1	0	66.1	66.2	70	N	-	-	14.2	Y	N	N
D1-7d-2	1	15.2	D1-7d	-	36.7	32	56.3	44.5	71.5	0	71.6	71.6	70	Y	-	-	34.9	Y	Y	Y
D1-7d-2	2	18.4	D1-7d	-	36.7	32	56.3	44.5	71.2	0	71.4	71.4	70	Y	-	-	34.7	Y	Y	Y
D1-7d-2	3	21.6	D1-7d	-	36.7	32	56.4	44.5	70.9	0	71	71.0	70	Y	-	-	34.3	Y	Y	Y
D1-7d-2	4	24.8	D1-7d	-	36.7	31.9	56.5	44.5	70.5	0	70.7	70.7	70	Y	-	-	34.0	Y	Y	Y
D1-7d-2	5	28	D1-7d	-	36.7	31.9	56.7	44.5	70.2	0	70.4	70.4	70	N	-	-	33.7	Y	N	N
D1-7d-2	6	31.2	D1-7d	-	36.7	31.9	56.9	44.5	69.8	0	70.1	70.1	70	N	-	-	33.4	Y	N	N
D1-7d-2	7	34.4	D1-7d	-	36.6	31.8	57.1	44.5	69.5	0	69.7	69.7	70	N	-	-	33.1	Y	N	N
D1-7d-2	8	37.6	D1-7d	-	36.6	31.8	57.3	44.5	69.1	0	69.4	69.4	70	N	-	-	32.8	Y	N	N
D1-7d-2	9	40.8	D1-7d	-	36.6	31.8	57.5	44.5	68.8	0	69.2	69.2	70	N	-	-	32.6	Y	N	N
D1-7d-2	10	44	D1-7d	-	36.6	31.7	57.6	44.5	68.5	0	68.9	68.9	70	N	-	-	32.3	Y	N	N
D1-7d-2	11	47.2	D1-7d	-	36.5	31.6	57.7	44.5	68.2	0	68.6	68.6	70	N	-	-	32.1	Y	N	N
D1-7d-2	12	50.4	D1-7d	-	36.5	31.6	57.8	44.5	68	0	68.4	68.4	70	N	-	-	31.9	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-7d-2	13	53.6	D1-7d	-	36.5	31.5	58	44.4	67.7	0	68.2	68.2	70	N	-	-	31.7	Y	N	N
D1-7d-2	14	56.8	D1-7d	-	36.4	31.5	58.1	44.4	67.5	0	68	68.0	70	N	-	-	31.6	Y	N	N
D1-7d-2	15	60	D1-7d	-	36.4	31.4	58.2	44.4	67.2	0	67.8	67.8	70	N	-	-	31.4	Y	N	N
D1-7d-2	16	63.2	D1-7d	-	36.3	31.3	58.3	44.4	67	0	67.6	67.6	70	N	-	-	31.3	Y	N	N
D1-7d-2	17	66.4	D1-7d	-	36.3	31.3	58.4	44.4	66.8	0	67.4	67.4	70	N	-	-	31.1	Y	N	N
D1-7d-2	18	69.6	D1-7d	-	36.2	31.2	58.5	44.4	66.6	0	67.3	67.3	70	N	-	-	31.1	Y	N	N
D1-7d-2	19	72.8	D1-7d	-	36.2	31.3	58.6	44.3	66.4	0	67.1	67.1	70	N	-	-	30.9	Y	N	N
D1-7d-2	20	76	D1-7d	-	36.1	31.5	58.7	44.3	66.2	0	67	67.0	70	N	-	-	30.9	Y	N	N
D1-7d-2	21	79.2	D1-7d	-	36.1	32	58.8	44.3	66.1	0	66.8	66.9	70	N	-	-	30.8	Y	N	N
D1-7d-2	22	82.4	D1-7d	-	36	32.7	58.9	44.3	65.9	0	66.7	66.7	70	N	-	-	30.7	Y	N	N
D1-7d-2	23	85.6	D1-7d	-	36	33.9	59	44.3	65.7	0	66.6	66.6	70	N	-	-	30.6	Y	N	N
D1-7d-2	24	88.8	D1-7d	-	35.9	35.2	59.2	44.4	65.5	0	66.5	66.5	70	N	-	-	30.6	Y	N	N
D1-7d-3	1	15.2	D1-7d	-	38.1	64.2	59	57.1	70.4	0	71.7	71.7	70	Y	-	-	33.6	Y	Y	Y
D1-7d-3	2	18.4	D1-7d	-	38.1	64.2	59	57.1	70.3	0	71.6	71.6	70	Y	-	-	33.5	Y	Y	Y
D1-7d-3	3	21.6	D1-7d	-	38.1	64.1	59.1	57	70.1	0	71.5	71.5	70	Y	-	-	33.4	Y	Y	Y
D1-7d-3	4	24.8	D1-7d	-	38.1	64.1	59.2	57	69.9	0	71.4	71.4	70	Y	-	-	33.3	Y	Y	Y
D1-7d-3	5	28	D1-7d	-	38.1	64	59.4	57.1	69.7	0	71.2	71.2	70	Y	-	-	33.1	Y	Y	Y
D1-7d-3	6	31.2	D1-7d	-	38.1	63.9	59.5	57.1	69.4	0	71	71.0	70	Y	-	-	32.9	Y	Y	Y
D1-7d-3	7	34.4	D1-7d	-	38.1	63.9	59.6	57	69.2	0	70.8	70.8	70	Y	-	-	32.7	Y	Y	Y
D1-7d-3	8	37.6	D1-7d	-	38.1	63.8	59.6	56.9	68.9	0	70.6	70.7	70	Y	-	-	32.6	Y	Y	Y
D1-7d-3	9	40.8	D1-7d	-	38.1	63.7	59.7	56.8	68.7	0	70.5	70.5	70	Y	-	-	32.4	Y	Y	Y
D1-7d-3	10	44	D1-7d	-	38.1	63.7	59.7	56.7	68.4	0	70.3	70.3	70	N	-	-	32.2	Y	N	N
D1-7d-3	11	47.2	D1-7d	-	38.1	63.6	59.7	56.6	68.2	0	70.1	70.1	70	N	-	-	32.0	Y	N	N
D1-7d-3	12	50.4	D1-7d	-	38	63.5	59.8	56.5	68	0	70	70.0	70	N	-	-	32.0	Y	N	N
D1-7d-3	13	53.6	D1-7d	-	38	63.4	59.8	56.5	67.8	0	69.8	69.8	70	N	-	-	31.8	Y	N	N
D1-7d-3	14	56.8	D1-7d	-	38	63.4	59.9	56.3	67.6	0	69.7	69.7	70	N	-	-	31.7	Y	N	N
D1-7d-3	15	60	D1-7d	-	38	63.3	59.9	56.2	67.4	0	69.5	69.5	70	N	-	-	31.5	Y	N	N
D1-7d-3	16	63.2	D1-7d	-	38	63.2	59.9	56.1	67.1	0	69.4	69.4	70	N	-	-	31.4	Y	N	N
D1-7d-3	17	66.4	D1-7d	-	37.9	63.1	60	56.1	66.9	0	69.2	69.2	70	N	-	-	31.3	Y	N	N
D1-7d-3	18	69.6	D1-7d	-	37.9	63.1	60	55.9	66.8	0	69.1	69.1	70	N	-	-	31.2	Y	N	N
D1-7d-3	19	72.8	D1-7d	-	37.9	63	60.1	55.9	66.6	0	69	69.0	70	N	-	-	31.1	Y	N	N
D1-7d-3	20	76	D1-7d	-	37.9	62.9	60.1	55.8	66.4	0	68.9	68.9	70	N	-	-	31.0	Y	N	N
D1-7d-3	21	79.2	D1-7d	-	38	62.8	60.2	55.7	66.2	0	68.8	68.8	70	N	-	-	30.8	Y	N	N
D1-7d-3	22	82.4	D1-7d	-	38	62.8	60.2	55.6	66.1	0	68.7	68.7	70	N	-	-	30.7	Y	N	N
D1-7d-3	23	85.6	D1-7d	-	38	62.7	60.2	55.5	65.9	0	68.5	68.5	70	N	-	-	30.5	Y	N	N
D1-7d-3	24	88.8	D1-7d	-	38	62.6	60.3	55.4	65.7	0	68.4	68.4	70	N	-	-	30.4	Y	N	N
D1-7d-4	1	15.2	D1-7d	-	37.2	66	64.2	57.6	67.3	0	71	71.0	70	Y	-	-	33.8	Y	Y	Y
D1-7d-4	2	18.4	D1-7d	-	37.2	66	64.2	57.6	67.3	0	71	71.0	70	Y	-	-	33.8	Y	Y	Y
D1-7d-4	3	21.6	D1-7d	-	37.2	65.9	64.1	57.5	67.2	0	70.9	70.9	70	Y	-	-	33.7	Y	Y	Y
D1-7d-4	4	24.8	D1-7d	-	37.2	65.8	64.1	57.4	67.1	0	70.8	70.8	70	Y	-	-	33.6	Y	Y	Y
D1-7d-4	5	28	D1-7d	-	37.2	65.8	64.1	57.3	66.9	0	70.7	70.7	70	Y	-	-	33.5	Y	Y	Y
D1-7d-4	6	31.2	D1-7d	-	37.2	65.7	64.1	57.2	66.8	0	70.6	70.6	70	Y	-	-	33.4	Y	Y	Y
D1-7d-4	7	34.4	D1-7d	-	37.2	65.6	64.1	57.1	66.6	0	70.5	70.5	70	Y	-	-	33.3	Y	Y	Y
D1-7d-4	8	37.6	D1-7d	-	37.1	65.5	64.1	57	66.4	0	70.4	70.4	70	N	-	-	33.3	Y	N	N
D1-7d-4	9	40.8	D1-7d	-	37.1	65.4	64	56.9	66.3	0	70.3	70.3	70	N	-	-	33.2	Y	N	N
D1-7d-4	10	44	D1-7d	-	37.1	65.3	64	56.8	66.1	0	70.2	70.2	70	N	-	-	33.1	Y	N	N
D1-7d-4	11	47.2	D1-7d	-	37.1	65.2	64	56.7	66	0	70.1	70.1	70	N	-	-	33.0	Y	N	N
D1-7d-4	12	50.4	D1-7d	-	37.1	65	64	56.6	65.8	0	70	70.0	70	N	-	-	32.9	Y	N	N
D1-7d-4	13	53.6	D1-7d	-	37.1	64.9	63.9	56.5	65.6	0	69.8	69.8	70	N	-	-	32.7	Y	N	N
D1-7d-4	14	56.8	D1-7d	-	37.1	64.9	63.9	56.4	65.4	0	69.7	69.8	70	N	-	-	32.7	Y	N	N
D1-7d-4	15	60	D1-7d	-	37.1	64.7	63.9	56.3	65.2	0	69.6	69.6	70	N	-	-	32.5	Y	N	N
D1-7d-4	16	63.2	D1-7d	-	37	64.6	63.8	56.2	65.1	0	69.5	69.5	70	N	-	-	32.5	Y	N	N
D1-7d-4	17	66.4	D1-7d	-	37	64.6	63.8	56.1	64.9	0	69.4	69.4	70	N	-	-	32.4	Y	N	N
D1-7d-4	18	69.6	D1-7d	-	37	64.4	63.8	56	64.7	0	69.3	69.3	70	N	-	-	32.3	Y	N	N
D1-7d-4	19	72.8	D1-7d	-	37	64.4	63.8	55.9	64.6	0	69.2	69.2	70	N	-	-	32.2	Y	N	N
D1-7d-4	20	76	D1-7d	-	36.9	64.3	63.8	55.8	64.4	0	69.1	69.1	70	N	-	-	32.2	Y	N	N
D1-7d-4	21	79.2	D1-7d	-	36.9	64.2	63.7	55.7	64.3	0	69.1	69.1	70	N	-	-	32.2	Y	N	N
D1-7d-4	22	82.4	D1-7d	-	36.9	64.1	63.7	55.6	64.1	0	69	69.0	70	N	-	-	32.1	Y	N	N
D1-7d-4	23	85.6	D1-7d	-	36.9	64	63.8	55.5	64	0	68.9	68.9	70	N	-	-	32.0	Y	N	N
D1-7d-4	24	88.8	D1-7d	-	36.9	63.9	63.8	55.4	63.8	0	68.8	68.8	70	N	-	-	31.9	Y	N	N
D1-11a-1	1	23.2	D1-11a	-	0	0	58.4	71.4	52.1	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
D1-11a-1	2	26.4	D1-11a	-	0	0	58.4	71.7	52.1	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
D1-11a-1	3	29.6	D1-11a	-	0	0	58.4	71.7	52.1	0	72	72.0	70	Y	-	-	72.0	Y	Y	Y
D1-11a-1	4	32.8	D1-11a	-	0	0	58.4	71.7	52.1	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
D1-11a-1	5	36	D1-11a	-	0	0	58.4	71.5	52.1	0	71.8	71.8	70	Y	-	-	71.8	Y	Y	Y
D1-11a-1	6	39.2	D1-11a	-	0	0	58.3	71.4	52.1	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
D1-11a-1	7	42.4	D1-11a	-	0	0	58.3	71.3	52	0	71.5	71.5	70	Y	-	-	71.5	Y	Y	Y
D1-11a-1	8	45.6	D1-11a	-	0	0	58.2	71.1	52	0	71.3	71.3	70	Y	-	-	71.3	Y	Y	Y
D1-11a-1	9	48.8	D1-11a	-	0	0	58.2	70.9	52	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
D1-11a-1	10	52	D1-11a	-	0	0	58.1	70.7	51.9	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-11a-1	11	55.2	D1-11a	-	0	0	58.1	70.5	51.9	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-11a-1	12	58.4	D1-11a	-	0	0	58.1	70.4	51.8	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
D1-11a-1	13	61.6	D1-11a	-	0	0	58	70.2	51.7	0	70.5	70.5	70	Y	-	-	70.5	Y	Y	Y
D1-11a-1	14	64.8	D1-11a	-	0	0	57.9	70	51.7	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-11a-1	15	68	D1-11a	-	0	0	57.8	69.9	51.6	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-11a-1	16	71.2	D1-11a	-	0	0	57.8	69.7	51.5	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
D1-11a-1	17	74.4	D1-11a	-	0	0	57.7	69.6	51.5	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
D1-11a-1	18	77.6	D1-11a	-	0	0	57.6	69.4	51.4	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
D1-11a-2	1	23.2	D1-11a	-	0	0	61.4	72.2	56.4	0	72.7	72.7	70	Y	-	-	72.7	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-11a-2	2	26.4	D1-11a	-	0	0	61.3	72.4	56.4	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
D1-11a-2	3	29.6	D1-11a	-	0	0	61.3	72.4	56.3	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
D1-11a-2	4	32.8	D1-11a	-	0	0	61.3	72.3	56.3	0	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
D1-11a-2	5	36	D1-11a	-	0	0	61.2	72.2	56.2	0	72.6	72.6	70	Y	-	-	72.6	Y	Y	Y
D1-11a-2	6	39.2	D1-11a	-	0	0	61.2	72.1	56.1	0	72.5	72.5	70	Y	-	-	72.5	Y	Y	Y
D1-11a-2	7	42.4	D1-11a	-	0	0	61.2	71.9	56	0	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
D1-11a-2	8	45.6	D1-11a	-	0	0	61.1	71.8	55.9	0	72.2	72.2	70	Y	-	-	72.2	Y	Y	Y
D1-11a-2	9	48.8	D1-11a	-	0	0	61	71.6	55.8	0	72.1	72.1	70	Y	-	-	72.1	Y	Y	Y
D1-11a-2	10	52	D1-11a	-	0	0	60.9	71.4	55.7	0	71.9	71.9	70	Y	-	-	71.9	Y	Y	Y
D1-11a-2	11	55.2	D1-11a	-	0	0	60.8	71.3	55.6	0	71.7	71.7	70	Y	-	-	71.7	Y	Y	Y
D1-11a-2	12	58.4	D1-11a	-	0	0	60.8	71.1	55.5	0	71.6	71.6	70	Y	-	-	71.6	Y	Y	Y
D1-11a-2	13	61.6	D1-11a	-	0	0	60.7	70.9	55.4	0	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
D1-11a-2	14	64.8	D1-11a	-	0	0	60.6	70.7	55.2	0	71.2	71.2	70	Y	-	-	71.2	Y	Y	Y
D1-11a-2	15	68	D1-11a	-	0	0	60.5	70.6	55.1	0	71.1	71.1	70	Y	-	-	71.1	Y	Y	Y
D1-11a-2	16	71.2	D1-11a	-	0	0	60.4	70.4	55	0	71	71.0	70	Y	-	-	71.0	Y	Y	Y
D1-11a-2	17	74.4	D1-11a	-	0	0	60.3	70.3	54.9	0	70.8	70.8	70	Y	-	-	70.8	Y	Y	Y
D1-11a-2	18	77.6	D1-11a	-	0	0	60.2	70.1	54.8	0	70.7	70.7	70	Y	-	-	70.7	Y	Y	Y
D1-11a-3	1	23.2	D1-11a	-	15.7	0	65.3	70.2	66.2	0	72.5	72.5	70	Y	-	-	56.8	Y	Y	Y
D1-11a-3	2	26.4	D1-11a	-	16.3	0	65.2	70.2	66.1	0	72.5	72.5	70	Y	-	-	56.2	Y	Y	Y
D1-11a-3	3	29.6	D1-11a	-	16.8	0	65.2	70.1	66	0	72.4	72.4	70	Y	-	-	55.6	Y	Y	Y
D1-11a-3	4	32.8	D1-11a	-	17.4	0	65.1	70.1	65.8	0	72.4	72.4	70	Y	-	-	55.0	Y	Y	Y
D1-11a-3	5	36	D1-11a	-	18	0	65	69.9	65.7	0	72.2	72.2	70	Y	-	-	54.2	Y	Y	Y
D1-11a-3	6	39.2	D1-11a	-	18.6	0	64.9	69.8	65.5	0	72.1	72.1	70	Y	-	-	53.5	Y	Y	Y
D1-11a-3	7	42.4	D1-11a	-	19.2	0	64.8	69.7	65.3	0	72	72.0	70	Y	-	-	52.8	Y	Y	Y
D1-11a-3	8	45.6	D1-11a	-	19.7	0	64.8	69.6	65.1	0	71.8	71.8	70	Y	-	-	52.1	Y	Y	Y
D1-11a-3	9	48.8	D1-11a	-	20.3	0	64.7	69.4	65	0	71.7	71.7	70	Y	-	-	51.4	Y	Y	Y
D1-11a-3	10	52	D1-11a	-	21	0	64.6	69.3	64.8	0	71.5	71.5	70	Y	-	-	50.5	Y	Y	Y
D1-11a-3	11	55.2	D1-11a	-	21.8	0	64.4	69.1	64.6	0	71.4	71.4	70	Y	-	-	49.6	Y	Y	Y
D1-11a-3	12	58.4	D1-11a	-	22.4	0	64.3	69	64.4	0	71.3	71.3	70	Y	-	-	48.9	Y	Y	Y
D1-11a-3	13	61.6	D1-11a	-	23.1	0	64.2	68.8	64.2	0	71.1	71.1	70	Y	-	-	48.0	Y	Y	Y
D1-11a-3	14	64.8	D1-11a	-	23.9	0	64.1	68.7	64	0	71	71.0	70	Y	-	-	47.1	Y	Y	Y
D1-11a-3	15	68	D1-11a	-	24.6	0	64	68.5	63.9	0	70.8	70.8	70	Y	-	-	46.2	Y	Y	Y
D1-11a-3	16	71.2	D1-11a	-	25.4	0	63.9	68.4	63.7	0	70.7	70.7	70	Y	-	-	45.3	Y	Y	Y
D1-11a-3	17	74.4	D1-11a	-	26.2	0	63.8	68.3	63.5	0	70.6	70.6	70	Y	-	-	44.4	Y	Y	Y
D1-11a-3	18	77.6	D1-11a	-	27	0	63.7	68.1	63.4	0	70.4	70.4	70	N	-	-	43.4	Y	N	N
D1-11a-4	1	23.2	D1-11a	-	26.1	13.4	60	64.3	67.5	0	69.7	69.7	70	N	-	-	43.6	Y	N	N
D1-11a-4	2	26.4	D1-11a	-	26.7	13.4	60	64.3	67.4	0	69.7	69.7	70	N	-	-	43.0	Y	N	N
D1-11a-4	3	29.6	D1-11a	-	27.3	13.4	60	64.2	67.3	0	69.6	69.6	70	N	-	-	42.3	Y	N	N
D1-11a-4	4	32.8	D1-11a	-	28	13.4	60	64.2	67.1	0	69.4	69.4	70	N	-	-	41.4	Y	N	N
D1-11a-4	5	36	D1-11a	-	28.7	13.4	60	64.2	67	0	69.3	69.3	70	N	-	-	40.6	Y	N	N
D1-11a-4	6	39.2	D1-11a	-	29.4	13.4	60	64.1	66.8	0	69.2	69.2	70	N	-	-	39.8	Y	N	N
D1-11a-4	7	42.4	D1-11a	-	30.2	13.3	59.9	64	66.6	0	69.1	69.1	70	N	-	-	38.9	Y	N	N
D1-11a-4	8	45.6	D1-11a	-	31.2	13.3	59.9	64	66.3	0	68.9	68.9	70	N	-	-	37.7	Y	N	N
D1-11a-4	9	48.8	D1-11a	-	32.1	13.3	59.9	63.9	66.1	0	68.8	68.8	70	N	-	-	36.7	Y	N	N
D1-11a-4	10	52	D1-11a	-	33.3	13.3	59.9	63.8	65.9	0	68.6	68.6	70	N	-	-	35.3	Y	N	N
D1-11a-4	11	55.2	D1-11a	-	34.4	13.3	59.8	63.7	65.7	0	68.5	68.5	70	N	-	-	34.1	Y	N	N
D1-11a-4	12	58.4	D1-11a	-	35.6	13.3	59.8	63.7	65.5	0	68.4	68.4	70	N	-	-	32.8	Y	N	N
D1-11a-4	13	61.6	D1-11a	-	36.7	13.3	59.8	63.6	65.3	0	68.2	68.2	70	N	-	-	31.5	Y	N	N
D1-11a-4	14	64.8	D1-11a	-	37.5	13.3	59.7	63.5	65.1	0	68.1	68.1	70	N	-	-	30.6	Y	N	N
D1-11a-4	15	68	D1-11a	-	38.4	13.3	59.8	63.4	64.9	0	68	68.0	70	N	-	-	29.6	Y	N	N
D1-11a-4	16	71.2	D1-11a	-	39.2	13.3	59.8	63.4	64.7	0	67.8	67.9	70	N	-	-	28.7	Y	N	N
D1-11a-4	17	74.4	D1-11a	-	39.9	13.2	59.9	63.3	64.6	0	67.8	67.8	70	N	-	-	27.9	Y	N	N
D1-11a-4	18	77.6	D1-11a	-	40.5	13.2	59.9	63.2	64.4	0	67.7	67.7	70	N	-	-	27.2	Y	N	N
D1-11a-5	1	23.2	D1-11a	-	31.5	12.2	31.1	0	69.2	0	69.2	69.2	70	N	-	-	37.7	Y	N	N
D1-11a-5	2	26.4	D1-11a	-	33.1	12.2	31.1	0	68.7	0	68.7	68.7	70	N	-	-	35.6	Y	N	N
D1-11a-5	3	29.6	D1-11a	-	36.2	12.2	31.1	0	68.2	0	68.2	68.2	70	N	-	-	32.0	Y	N	N
D1-11a-5	4	32.8	D1-11a	-	40.8	12.2	31.1	0	67.7	0	67.7	67.7	70	N	-	-	26.9	Y	N	N
D1-11a-5	5	36	D1-11a	-	41.9	12.2	31.1	0	67.3	0	67.3	67.3	70	N	-	-	25.4	Y	N	N
D1-11a-5	6	39.2	D1-11a	-	42.4	12.2	31	0	66.9	0	66.9	66.9	70	N	-	-	24.5	Y	N	N
D1-11a-5	7	42.4	D1-11a	-	42.9	12.1	31	0	66.6	0	66.6	66.6	70	N	-	-	23.7	Y	N	N
D1-11a-5	8	45.6	D1-11a	-	43.4	12.1	31	0	66.3	0	66.3	66.3	70	N	-	-	22.9	Y	N	N
D1-11a-5	9	48.8	D1-11a	-	44.2	12.1	31	0	66	0	66	66.0	70	N	-	-	21.8	Y	N	N
D1-11a-5	10	52	D1-11a	-	45.2	12.1	30.9	0	65.7	0	65.7	65.8	70	N	-	-	20.6	Y	N	N
D1-11a-5	11	55.2	D1-11a	-	46.2	12.1	30.9	0	65.4	0	65.5	65.5	70	N	-	-	19.3	Y	N	N
D1-11a-5	12	58.4	D1-11a	-	47.3	12.1	30.9	0	65.2	0	65.2	65.3	70	N	-	-	18.0	Y	N	N
D1-11a-5	13	61.6	D1-11a	-	48.4	12.1	30.8	0	65	0	65	65.1	70	N	-	-	16.7	Y	N	N
D1-11a-5	14	64.8	D1-11a	-	49.2	12.1	30.8	0	64.8	0	64.8	64.9	70	N	-	-	15.7	Y	N	N
D1-11a-5	15	68	D1-11a	-	49.7	12.1	30.7	0	64.6	0	64.6	64.7	70	N	-	-	15.0	Y	N	N
D1-11a-5	16	71.2	D1-11a	-	49.9	12.1	30.7	0	64.4	0	64.4	64.5	70	N	-	-	14.6	Y	N	N
D1-11a-5	17	74.4	D1-11a	-	50	12.1	30.7	0	64.2	0	64.2	64.3	70	N	-	-	14.3	Y	N	N
D1-11a-5	18	77.6	D1-11a	-	50.1	12.5	30.6	0	64	0	64	64.2	70	N	-	-	14.1	Y	N	N
D1-11a-6	1	23.2	D1-11a	-	29.8	0	25.2	21.1	66.1	0	66.1	66.1	70	N	-	-	36.3	Y	N	N
D1-11a-6	2	26.4	D1-11a	-	31.4	0	25.2	21	66.2	0	66.2	66.2	70	N	-	-	34.8	Y	N	N
D1-11a-6	3	29.6	D1-11a	-	33.5	0	25.2	21	66.2	0	66.2	66.2	70	N	-	-	32.7	Y	N	N
D1-11a-6	4	32.8	D1-11a	-	36.8	0	25.2	20.9	66	0	66	66.0	70	N	-	-	29.2	Y	N	N
D1-11a-6	5	36	D1-11a	-	41.4	0	25.2	20.9	65.8	0	65.8	65.8	70	N	-	-	24.4	Y	N	N
D1-11a-6	6	39.2	D1-11a	-	43	0	25.2	20.9	65.5	0	65.5	65.5	70	N	-	-	22.5	Y	N	N
D1-11a-6	7	42.4	D1-11a	-	43.4	0	25.2	20.8	65.3	0	65.3	65.3	70	N	-	-	21.9	Y	N	N
D1-11a-6	8	45.6	D1-11a	-	43.4	0	25.2	20.7	65	0	65	65.0	70	N	-	-	21.6	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-11a-6	9	48.8	D1-11a	-	43.5	0	25.2	20.6	64.7	0	64.7	64.8	70	N	-	-	21.3	Y	N	N
D1-11a-6	10	52	D1-11a	-	43.5	0	25.1	20.6	64.5	0	64.5	64.6	70	N	-	-	21.1	Y	N	N
D1-11a-6	11	55.2	D1-11a	-	43.6	0	25.1	20.5	64.3	0	64.3	64.3	70	N	-	-	20.7	Y	N	N
D1-11a-6	12	58.4	D1-11a	-	43.7	0	25.1	20.4	64.1	0	64.1	64.1	70	N	-	-	20.4	Y	N	N
D1-11a-6	13	61.6	D1-11a	-	43.8	0	25	20.3	63.8	0	63.8	63.9	70	N	-	-	20.1	Y	N	N
D1-11a-6	14	64.8	D1-11a	-	44.1	0	25	20.3	63.7	0	63.7	63.7	70	N	-	-	19.6	Y	N	N
D1-11a-6	15	68	D1-11a	-	44.4	0	25	20.2	63.4	0	63.4	63.5	70	N	-	-	19.1	Y	N	N
D1-11a-6	16	71.2	D1-11a	-	44.7	0	25	20.4	63.3	0	63.3	63.3	70	N	-	-	18.6	Y	N	N
D1-11a-6	17	74.4	D1-11a	-	45	0	24.9	20.9	63.1	0	63.1	63.2	70	N	-	-	18.2	Y	N	N
D1-11a-6	18	77.6	D1-11a	-	45.4	0	24.9	21.4	63	0	63	63.0	70	N	-	-	17.6	Y	N	N
D1-11b-1	1	25.2	D1-11b	-	0	0	0	66.6	14	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
D1-11b-1	2	28.4	D1-11b	-	0	0	0	67.3	14.7	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
D1-11b-1	3	31.6	D1-11b	-	0	0	0	67.7	15.5	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
D1-11b-1	4	34.8	D1-11b	-	0	0	0	67.8	16.3	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
D1-11b-1	5	38	D1-11b	-	0	0	0	67.9	17.2	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
D1-11b-1	6	41.2	D1-11b	-	0	0	0	67.8	18.2	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
D1-11b-1	7	44.4	D1-11b	-	0	0	0	67.7	19.2	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
D1-11b-1	8	47.6	D1-11b	-	0	0	0	67.6	20.4	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
D1-11b-1	9	50.8	D1-11b	-	0	0	0	67.4	21.6	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
D1-11b-1	10	54	D1-11b	-	0	0	0	67.3	22.9	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
D1-11b-1	11	57.2	D1-11b	-	0	0	0	67.1	24.5	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
D1-11b-1	12	60.4	D1-11b	-	0	0	0	67	26.2	0	67	67.0	70	N	-	-	67.0	Y	N	N
D1-11b-1	13	63.6	D1-11b	-	0	0	0	66.8	28.4	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
D1-11b-1	14	66.8	D1-11b	-	0	0	0	66.7	31.2	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
D1-11b-1	15	70	D1-11b	-	0	0	0	66.5	33.9	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
D1-11b-1	16	73.2	D1-11b	-	0	0	0	66.4	35.7	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
D1-11b-1	17	76.4	D1-11b	-	0	0	0	66.2	36.4	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
D1-11b-1	18	79.6	D1-11b	-	0	0	0	66.1	36.7	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
D1-11b-1	19	82.8	D1-11b	-	0	0	0	65.9	36.8	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
D1-11b-1	20	86	D1-11b	-	0	0	0	65.8	36.8	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
D1-11b-2	1	25.2	D1-11b	-	0	0	19.7	69	18	0	69	69.0	70	N	-	-	69.0	Y	N	N
D1-11b-2	2	28.4	D1-11b	-	0	0	19.7	69.7	18.4	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-11b-2	3	31.6	D1-11b	-	0	0	19.7	69.9	18.8	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
D1-11b-2	4	34.8	D1-11b	-	0	0	19.7	69.9	19.3	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
D1-11b-2	5	38	D1-11b	-	0	0	19.6	69.8	20	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
D1-11b-2	6	41.2	D1-11b	-	0	0	19.6	69.7	20.6	0	69.7	69.7	70	N	-	-	69.7	Y	N	N
D1-11b-2	7	44.4	D1-11b	-	0	0	19.6	69.6	21.4	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
D1-11b-2	8	47.6	D1-11b	-	0	0	19.6	69.4	22.3	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
D1-11b-2	9	50.8	D1-11b	-	0	0	19.6	69.3	23.4	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
D1-11b-2	10	54	D1-11b	-	0	0	19.6	69.1	24.6	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
D1-11b-2	11	57.2	D1-11b	-	0	0	19.5	68.9	26.1	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
D1-11b-2	12	60.4	D1-11b	-	0	0	19.5	68.8	27.9	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
D1-11b-2	13	63.6	D1-11b	-	0	0	19.6	68.6	30.4	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
D1-11b-2	14	66.8	D1-11b	-	0	0	19.9	68.4	33	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
D1-11b-2	15	70	D1-11b	-	0	0	20.2	68.3	35.5	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
D1-11b-2	16	73.2	D1-11b	-	0	0	20.6	68.1	36.5	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
D1-11b-2	17	76.4	D1-11b	-	0	0	21.2	68	36.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
D1-11b-2	18	79.6	D1-11b	-	0	0	21.7	67.8	37.1	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
D1-11b-2	19	82.8	D1-11b	-	0	0	22.3	67.7	37.1	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
D1-11b-2	20	86	D1-11b	-	0	0	22.9	67.5	37.1	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
D1-11b-3	1	25.2	D1-11b	-	0	0	24.1	68.9	21.5	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
D1-11b-3	2	28.4	D1-11b	-	0	0	24.1	69.3	22.1	0	69.3	69.3	70	N	-	-	69.3	Y	N	N
D1-11b-3	3	31.6	D1-11b	-	0	0	24.1	69.5	22.9	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
D1-11b-3	4	34.8	D1-11b	-	0	0	24.1	69.6	23.9	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
D1-11b-3	5	38	D1-11b	-	0	0	24.1	69.6	25.1	0	69.6	69.6	70	N	-	-	69.6	Y	N	N
D1-11b-3	6	41.2	D1-11b	-	0	0	24.1	69.5	26.8	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
D1-11b-3	7	44.4	D1-11b	-	0	0	24.1	69.4	29.1	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
D1-11b-3	8	47.6	D1-11b	-	0	0	24.1	69.2	32.4	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
D1-11b-3	9	50.8	D1-11b	-	0	0	24.1	69.1	35.6	0	69.1	69.1	70	N	-	-	69.1	Y	N	N
D1-11b-3	10	54	D1-11b	-	0	0	24	68.9	36.8	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
D1-11b-3	11	57.2	D1-11b	-	0	0	23.8	68.8	37.8	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
D1-11b-3	12	60.4	D1-11b	-	0	0	23.8	68.6	38.9	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
D1-11b-3	13	63.6	D1-11b	-	0	0	24.1	68.5	39.3	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
D1-11b-3	14	66.8	D1-11b	-	0	0	24.3	68.3	39.4	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
D1-11b-3	15	70	D1-11b	-	0	0	24.8	68.2	39.4	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
D1-11b-3	16	73.2	D1-11b	-	0	0	25.4	68	39.3	0	68	68.0	70	N	-	-	68.0	Y	N	N
D1-11b-3	17	76.4	D1-11b	-	0	0	26.1	67.9	39.3	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
D1-11b-3	18	79.6	D1-11b	-	0	0	27	67.7	39.2	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
D1-11b-3	19	82.8	D1-11b	-	0	0	27.8	67.6	39.2	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
D1-11b-3	20	86	D1-11b	-	0	0	28.6	67.5	39.1	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
D1-11b-4	1	25.2	D1-11b	-	0	0	28.1	65.9	24.3	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
D1-11b-4	2	28.4	D1-11b	-	0	0	28.1	66.6	24.8	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
D1-11b-4	3	31.6	D1-11b	-	0	0	28.1	67	25.6	0	67	67.0	70	N	-	-	67.0	Y	N	N
D1-11b-4	4	34.8	D1-11b	-	0	0	28.1	67.1	26.7	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
D1-11b-4	5	38	D1-11b	-	0	0	28.1	67.2	28.3	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
D1-11b-4	6	41.2	D1-11b	-	0	0	28	67.2	31.5	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
D1-11b-4	7	44.4	D1-11b	-	0	0	28	67.2	34.9	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
D1-11b-4	8	47.6	D1-11b	-	0	0	28	67.1	36.3	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
D1-11b-4	9	50.8	D1-11b	-	0	0	28	67	36.9	0	67	67.0	70	N	-	-	67.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
D1-11b-4	10	54	D1-11b	-	0	0	28	66.9	37.1	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
D1-11b-4	11	57.2	D1-11b	-	0	0	27.9	66.8	37.2	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
D1-11b-4	12	60.4	D1-11b	-	0	0	27.8	66.7	37.2	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
D1-11b-4	13	63.6	D1-11b	-	0	0	27.8	66.5	37.1	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
D1-11b-4	14	66.8	D1-11b	-	0	0	28.2	66.5	37.1	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
D1-11b-4	15	70	D1-11b	-	0	0	29	66.3	37	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
D1-11b-4	16	73.2	D1-11b	-	0	0	29.9	66.2	37	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
D1-11b-4	17	76.4	D1-11b	-	0	0	30.9	66	36.9	0	66	66.0	70	N	-	-	66.0	Y	N	N
D1-11b-4	18	79.6	D1-11b	-	0	0	31.8	65.9	36.9	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
D1-11b-4	19	82.8	D1-11b	-	0	0	32.9	65.8	36.8	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
D1-11b-4	20	86	D1-11b	-	0	0	33.9	65.7	36.8	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
D1-11b-5	1	25.2	D1-11b	-	45.8	0	29.8	0	67.7	0	67.7	67.7	70	N	-	-	21.9	Y	N	N
D1-11b-5	2	28.4	D1-11b	-	47.2	0	29.8	0	67.7	0	67.7	67.7	70	N	-	-	20.5	Y	N	N
D1-11b-5	3	31.6	D1-11b	-	49.9	0	29.8	0	67.5	0	67.5	67.6	70	N	-	-	17.7	Y	N	N
D1-11b-5	4	34.8	D1-11b	-	52.2	0	29.8	0	67.2	0	67.2	67.4	70	N	-	-	15.2	Y	N	N
D1-11b-5	5	38	D1-11b	-	52.9	0	29.8	0	66.9	0	66.9	67.1	70	N	-	-	14.2	Y	N	N
D1-11b-5	6	41.2	D1-11b	-	53.1	0	29.7	0	66.6	0	66.6	66.8	70	N	-	-	13.7	Y	N	N
D1-11b-5	7	44.4	D1-11b	-	53.1	0	29.7	0	66.3	0	66.3	66.5	70	N	-	-	13.4	Y	N	N
D1-11b-5	8	47.6	D1-11b	-	53.1	0	29.7	0	65.9	0	65.9	66.2	70	N	-	-	13.1	Y	N	N
D1-11b-5	9	50.8	D1-11b	-	53.1	0	29.7	0	65.7	0	65.7	65.9	70	N	-	-	12.8	Y	N	N
D1-11b-5	10	54	D1-11b	-	53.1	0	29.7	0	65.4	0	65.4	65.6	70	N	-	-	12.5	Y	N	N
D1-11b-5	11	57.2	D1-11b	-	53.1	0	29.8	0	65.1	0	65.1	65.4	70	N	-	-	12.3	Y	N	N
D1-11b-5	12	60.4	D1-11b	-	53	0	30	0	64.9	0	64.9	65.1	70	N	-	-	12.1	Y	N	N
D1-11b-5	13	63.6	D1-11b	-	53	0	30.1	0	64.6	0	64.6	64.9	70	N	-	-	11.9	Y	N	N
D1-11b-5	14	66.8	D1-11b	-	53	0	30.4	0	64.4	0	64.4	64.7	70	N	-	-	11.7	Y	N	N
D1-11b-5	15	70	D1-11b	-	53	0	30.6	0	64.2	0	64.2	64.5	70	N	-	-	11.5	Y	N	N
D1-11b-5	16	73.2	D1-11b	-	52.9	0	30.9	0	63.9	0	63.9	64.3	70	N	-	-	11.4	Y	N	N
D1-11b-5	17	76.4	D1-11b	-	52.9	0	31.3	0	63.8	0	63.8	64.1	70	N	-	-	11.2	Y	N	N
D1-11b-5	18	79.6	D1-11b	-	52.8	0	31.6	0	63.6	0	63.6	63.9	70	N	-	-	11.1	Y	N	N
D1-11b-5	19	82.8	D1-11b	-	52.8	0	32.1	0	63.4	0	63.4	63.7	70	N	-	-	10.9	Y	N	N
D1-11b-5	20	86	D1-11b	-	52.7	0	32.7	0	63.2	0	63.2	63.6	70	N	-	-	10.9	Y	N	N
D1-11b-6	1	25.2	D1-11b	-	48.6	0	26.6	0	65	0	65	65.1	70	N	-	-	16.5	Y	N	N
D1-11b-6	2	28.4	D1-11b	-	52.7	0	26.6	0	66.1	0	66.1	66.3	70	N	-	-	13.6	Y	N	N
D1-11b-6	3	31.6	D1-11b	-	53.2	0	26.6	0	66.2	0	66.2	66.4	70	N	-	-	13.2	Y	N	N
D1-11b-6	4	34.8	D1-11b	-	53.3	0	26.6	0	66	0	66	66.3	70	N	-	-	13.0	Y	N	N
D1-11b-6	5	38	D1-11b	-	53.3	0	26.6	0	65.8	0	65.8	66.0	70	N	-	-	12.7	Y	N	N
D1-11b-6	6	41.2	D1-11b	-	53.3	0	26.6	0	65.5	0	65.5	65.8	70	N	-	-	12.5	Y	N	N
D1-11b-6	7	44.4	D1-11b	-	53.3	0	26.6	0	65.3	0	65.3	65.6	70	N	-	-	12.3	Y	N	N
D1-11b-6	8	47.6	D1-11b	-	53.3	0	26.6	0	65	0	65	65.3	70	N	-	-	12.0	Y	N	N
D1-11b-6	9	50.8	D1-11b	-	53.3	0	26.7	0	64.7	0	64.7	65.0	70	N	-	-	11.7	Y	N	N
D1-11b-6	10	54	D1-11b	-	53.3	0	26.7	0	64.4	0	64.4	64.7	70	N	-	-	11.4	Y	N	N
D1-11b-6	11	57.2	D1-11b	-	53.3	0	26.8	0	64.1	0	64.1	64.5	70	N	-	-	11.2	Y	N	N
D1-11b-6	12	60.4	D1-11b	-	53.3	0	26.8	0	63.8	0	63.8	64.2	70	N	-	-	10.9	Y	N	N
D1-11b-6	13	63.6	D1-11b	-	53.3	0	26.9	0	63.6	0	63.6	63.9	70	N	-	-	10.6	Y	N	N
D1-11b-6	14	66.8	D1-11b	-	53.3	0	27	0	63.4	0	63.4	63.8	70	N	-	-	10.5	Y	N	N
D1-11b-6	15	70	D1-11b	-	53.3	0	27.2	0	63.1	0	63.1	63.5	70	N	-	-	10.2	Y	N	N
D1-11b-6	16	73.2	D1-11b	-	53.3	0	27.4	0	62.9	0	62.9	63.3	70	N	-	-	10.0	Y	N	N
D1-11b-6	17	76.4	D1-11b	-	53.3	0	27.7	0	62.6	0	62.6	63.1	70	N	-	-	9.8	Y	N	N
D1-11b-6	18	79.6	D1-11b	-	53.3	0	28.3	0	62.4	0	62.4	62.9	70	N	-	-	9.6	Y	N	N
D1-11b-6	19	82.8	D1-11b	-	53.3	0	28.9	0	62.2	0	62.2	62.8	70	N	-	-	9.5	Y	N	N
D1-11b-6	20	86	D1-11b	-	53.3	0	29.9	0	62.1	0	62.1	62.6	70	N	-	-	9.3	Y	N	N
D1-11c-1	1	25.2	D1-11c	-	42.2	17.3	0	64.6	8.1	0	64.6	64.6	70	N	-	-	22.4	Y	N	N
D1-11c-1	2	28.4	D1-11c	-	42.2	17.7	0	66	8	0	66	66.0	70	N	-	-	23.8	Y	N	N
D1-11c-1	3	31.6	D1-11c	-	42.2	18.2	0	66.9	7.9	0	66.9	66.9	70	N	-	-	24.7	Y	N	N
D1-11c-1	4	34.8	D1-11c	-	42.2	18.7	0	67.3	8.3	0	67.3	67.3	70	N	-	-	25.1	Y	N	N
D1-11c-1	5	38	D1-11c	-	42.2	19.3	0	67.5	8.6	0	67.5	67.5	70	N	-	-	25.3	Y	N	N
D1-11c-1	6	41.2	D1-11c	-	42.2	19.8	0	67.6	8.9	0	67.6	67.6	70	N	-	-	25.4	Y	N	N
D1-11c-1	7	44.4	D1-11c	-	42.2	20.4	0	67.6	9.1	0	67.6	67.6	70	N	-	-	25.4	Y	N	N
D1-11c-1	8	47.6	D1-11c	-	42.2	21	0	67.6	9.3	0	67.6	67.6	70	N	-	-	25.4	Y	N	N
D1-11c-1	9	50.8	D1-11c	-	42.2	21.6	0	67.5	9.4	0	67.5	67.5	70	N	-	-	25.3	Y	N	N
D1-11c-1	10	54	D1-11c	-	42.1	22.2	0	67.4	9.4	0	67.4	67.4	70	N	-	-	25.3	Y	N	N
D1-11c-1	11	57.2	D1-11c	-	42.1	22.8	0	67.2	9.5	0	67.2	67.2	70	N	-	-	25.1	Y	N	N
D1-11c-1	12	60.4	D1-11c	-	42.1	23.5	0	67.2	9.5	0	67.2	67.2	70	N	-	-	25.1	Y	N	N
D1-11c-1	13	63.6	D1-11c	-	42.1	24.2	0	67	9.5	0	67	67.1	70	N	-	-	25.0	Y	N	N
D1-11c-1	14	66.8	D1-11c	-	42.1	24.8	0	66.9	9.4	0	66.9	66.9	70	N	-	-	24.8	Y	N	N
D1-11c-1	15	70	D1-11c	-	42.1	25.5	0	66.7	9.4	0	66.7	66.8	70	N	-	-	24.7	Y	N	N
D1-11c-1	16	73.2	D1-11c	-	42.1	26.2	0	66.6	9.4	0	66.6	66.6	70	N	-	-	24.5	Y	N	N
D1-11c-1	17	76.4	D1-11c	-	42.1	26.9	0	66.5	9.3	0	66.5	66.5	70	N	-	-	24.4	Y	N	N
D1-11c-1	18	79.6	D1-11c	-	42.1	27.6	0	66.3	9.3	0	66.3	66.3	70	N	-	-	24.2	Y	N	N
D1-11c-1	19	82.8	D1-11c	-	42.1	28.4	0	66.2	9.4	0	66.2	66.2	70	N	-	-	24.1	Y	N	N
D1-11c-1	20	86	D1-11c	-	42.1	29.1	0	66.1	9.3	0	66.1	66.1	70	N	-	-	24.0	Y	N	N
D1-11c-2	1	25.2	D1-11c	-	0	15.7	27.3	68.9	22.3	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
D1-11c-2	2	28.4	D1-11c	-	0	16.1	27.3	69.9	22.3	0	69.9	69.9	70	N	-	-	69.9	Y	N	N
D1-11c-2	3	31.6	D1-11c	-	0	16.4	27.3	70.3	22.3	0	70.3	70.3	70	N	-	-	70.3	Y	N	N
D1-11c-2	4	34.8	D1-11c	-	0	16.9	27.3	70.4	22.3	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-11c-2	5	38	D1-11c	-	0	17.3	27.3	70.4	22.3	0	70.4	70.4	70	N	-	-	70.4	Y	N	N
D1-11c-2	6	41.2	D1-11c	-	0	17.8	27.3	70.2	22.4	0	70.2	70.2	70	N	-	-	70.2	Y	N	N
D1-11c-2	7	44.4	D1-11c	-	0	18.5	27.3	70.1	22.4	0	70.1	70.1	70	N	-	-	70.1	Y	N	N
D1-11c-2	8	47.6	D1-11c	-	0	18.9	27.2	70	22.4	0	70	70.0	70	N	-	-	70.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
D1-11c-2	9	50.8	D1-11c	-	0	19.5	27.2	69.8	22.5	0	69.8	69.8	70	N	-	-	69.8	Y	N	N
D1-11c-2	10	54	D1-11c	-	0	20.1	27.1	69.5	22.6	0	69.5	69.5	70	N	-	-	69.5	Y	N	N
D1-11c-2	11	57.2	D1-11c	-	0	20.6	27.1	69.4	22.6	0	69.4	69.4	70	N	-	-	69.4	Y	N	N
D1-11c-2	12	60.4	D1-11c	-	0	21.4	27.2	69.2	22.8	0	69.2	69.2	70	N	-	-	69.2	Y	N	N
D1-11c-2	13	63.6	D1-11c	-	0	22	27.1	69	23.1	0	69	69.0	70	N	-	-	69.0	Y	N	N
D1-11c-2	14	66.8	D1-11c	-	0	22.7	27.2	68.8	23.5	0	68.8	68.8	70	N	-	-	68.8	Y	N	N
D1-11c-2	15	70	D1-11c	-	0	23.4	27.2	68.6	24	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
D1-11c-2	16	73.2	D1-11c	-	0	24.2	27.5	68.5	24.9	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
D1-11c-2	17	76.4	D1-11c	-	0	24.8	28	68.3	26.4	0	68.3	68.3	70	N	-	-	68.3	Y	N	N
D1-11c-2	18	79.6	D1-11c	-	0	25.5	28.4	68.1	27.8	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
D1-11c-2	19	82.8	D1-11c	-	0	26.3	28.9	68	28.9	0	68	68.0	70	N	-	-	68.0	Y	N	N
D1-11c-2	20	86	D1-11c	-	0	27	29.3	67.8	29.5	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
D1-11c-3	1	25.2	D1-11c	-	11.9	13.4	49.2	56.2	48.6	0	57.6	57.6	70	N	-	-	45.7	Y	N	N
D1-11c-3	2	28.4	D1-11c	-	11.9	13.5	49.2	57.1	49	0	58.3	58.3	70	N	-	-	46.4	Y	N	N
D1-11c-3	3	31.6	D1-11c	-	12	13.5	49.2	58	49.4	0	59	59.0	70	N	-	-	47.0	Y	N	N
D1-11c-3	4	34.8	D1-11c	-	12	13.6	49.2	58.7	49.7	0	59.6	59.6	70	N	-	-	47.6	Y	N	N
D1-11c-3	5	38	D1-11c	-	12	13.7	49.2	59.2	49.8	0	60.1	60.1	70	N	-	-	48.1	Y	N	N
D1-11c-3	6	41.2	D1-11c	-	12.1	13.7	49.2	59.6	50	0	60.4	60.4	70	N	-	-	48.3	Y	N	N
D1-11c-3	7	44.4	D1-11c	-	12.1	13.8	49.2	59.8	50	0	60.6	60.6	70	N	-	-	48.5	Y	N	N
D1-11c-3	8	47.6	D1-11c	-	12.1	13.8	49.2	59.8	50	0	60.6	60.6	70	N	-	-	48.5	Y	N	N
D1-11c-3	9	50.8	D1-11c	-	12.1	13.8	49.2	60	50.1	0	60.7	60.7	70	N	-	-	48.6	Y	N	N
D1-11c-3	10	54	D1-11c	-	12.1	13.9	49.2	60.1	50.1	0	60.8	60.8	70	N	-	-	48.7	Y	N	N
D1-11c-3	11	57.2	D1-11c	-	12.2	13.9	49.2	60.1	50	0	60.8	60.8	70	N	-	-	48.6	Y	N	N
D1-11c-3	12	60.4	D1-11c	-	12.1	13.9	49.2	60.1	50	0	60.8	60.8	70	N	-	-	48.7	Y	N	N
D1-11c-3	13	63.6	D1-11c	-	12.3	13.9	49.2	60.1	50	0	60.8	60.8	70	N	-	-	48.5	Y	N	N
D1-11c-3	14	66.8	D1-11c	-	13.3	14	49.1	60.1	49.9	0	60.8	60.8	70	N	-	-	47.5	Y	N	N
D1-11c-3	15	70	D1-11c	-	14.7	13.9	49.1	60	49.8	0	60.7	60.7	70	N	-	-	46.0	Y	N	N
D1-11c-3	16	73.2	D1-11c	-	16.3	14.7	49.1	60	49.8	0	60.7	60.7	70	N	-	-	44.4	Y	N	N
D1-11c-3	17	76.4	D1-11c	-	18.1	16.7	49.1	59.9	49.8	0	60.6	60.6	70	N	-	-	42.5	Y	N	N
D1-11c-3	18	79.6	D1-11c	-	19.9	19.2	49.1	59.9	49.7	0	60.6	60.6	70	N	-	-	40.7	Y	N	N
D1-11c-3	19	82.8	D1-11c	-	21.8	21.8	49.1	59.8	49.6	0	60.5	60.5	70	N	-	-	38.7	Y	N	N
D1-11c-3	20	86	D1-11c	-	23.7	24.6	49.1	59.8	49.5	0	60.5	60.5	70	N	-	-	36.8	Y	N	N
D1-11c-4	1	36.2	D1-11c	-	54.7	0	28.1	44.8	67.3	0	67.3	67.6	70	N	-	-	12.9	Y	N	N
D1-11c-4	2	39.4	D1-11c	-	54.7	0	28.1	45.2	67	0	67	67.2	70	N	-	-	12.5	Y	N	N
D1-11c-4	3	42.6	D1-11c	-	54.7	0	28.1	45.7	66.6	0	66.7	66.9	70	N	-	-	12.2	Y	N	N
D1-11c-4	4	45.8	D1-11c	-	54.7	0	28	46	66.3	0	66.3	66.6	70	N	-	-	11.9	Y	N	N
D1-11c-4	5	49	D1-11c	-	54.8	0	28	46.3	65.9	0	66	66.3	70	N	-	-	11.5	Y	N	N
D1-11c-4	6	52.2	D1-11c	-	54.8	0	28	46.6	65.6	0	65.7	66.0	70	N	-	-	11.2	Y	N	N
D1-11c-4	7	55.4	D1-11c	-	54.8	0	28.1	46.9	65.3	0	65.3	65.7	70	N	-	-	10.9	Y	N	N
D1-11c-4	8	58.6	D1-11c	-	54.9	0	28.1	47.1	64.9	0	65	65.4	70	N	-	-	10.5	Y	N	N
D1-11c-4	9	61.8	D1-11c	-	54.9	0	28.2	47.3	64.6	0	64.7	65.1	70	N	-	-	10.2	Y	N	N
D1-11c-4	10	65	D1-11c	-	55	0	28.2	47.4	64.3	0	64.4	64.9	70	N	-	-	9.9	Y	N	N
D1-11c-4	11	68.2	D1-11c	-	55.1	0	28.3	47.5	64	0	64.1	64.6	70	N	-	-	9.5	Y	N	N
D1-11c-4	12	71.4	D1-11c	-	55.1	0	28.4	47.7	63.8	0	63.9	64.4	70	N	-	-	9.3	Y	N	N
D1-11c-4	13	74.6	D1-11c	-	55.1	0	28.5	47.8	63.6	0	63.7	64.2	70	N	-	-	9.1	Y	N	N
D1-11c-4	14	77.8	D1-11c	-	55.2	0	28.6	47.9	63.3	0	63.4	64.0	70	N	-	-	8.8	Y	N	N
D1-11c-4	15	81	D1-11c	-	55.2	0	28.7	47.9	63.1	0	63.2	63.8	70	N	-	-	8.6	Y	N	N
D1-11c-4	16	84.2	D1-11c	-	55.1	0	28.8	47.9	62.9	0	63	63.7	70	N	-	-	8.6	Y	N	N
D1-11c-4	17	87.4	D1-11c	-	55.2	0	29	48	62.7	0	62.8	63.5	70	N	-	-	8.3	Y	N	N
D1-11c-4	18	90.6	D1-11c	-	55.2	0	29.2	48.1	62.5	0	62.6	63.4	70	N	-	-	8.2	Y	N	N
D1-11c-4	19	93.8	D1-11c	-	55.1	0	29.4	48	62.3	0	62.4	63.2	70	N	-	-	8.1	Y	N	N
D1-11c-4	20	97	D1-11c	-	55.1	0	29.6	48.1	62.1	0	62.3	63.0	70	N	-	-	7.9	Y	N	N
D1-11c-5	1	36.2	D1-11c	-	56.3	0	26.5	24	64.6	0	64.6	65.2	70	N	-	-	8.9	Y	N	N
D1-11c-5	2	39.4	D1-11c	-	56.3	0	26.5	24	64.5	0	64.5	65.1	70	N	-	-	8.8	Y	N	N
D1-11c-5	3	42.6	D1-11c	-	56.3	0	26.5	24	64.4	0	64.4	65.0	70	N	-	-	8.7	Y	N	N
D1-11c-5	4	45.8	D1-11c	-	56.4	0	26.5	24	64.3	0	64.3	64.9	70	N	-	-	8.5	Y	N	N
D1-11c-5	5	49	D1-11c	-	56.4	0	26.5	23.9	64.1	0	64.1	64.8	70	N	-	-	8.4	Y	N	N
D1-11c-5	6	52.2	D1-11c	-	56.4	0	26.5	23.9	63.9	0	63.9	64.6	70	N	-	-	8.2	Y	N	N
D1-11c-5	7	55.4	D1-11c	-	56.4	0	26.5	23.8	63.7	0	63.7	64.4	70	N	-	-	8.0	Y	N	N
D1-11c-5	8	58.6	D1-11c	-	56.5	0	26.5	23.9	63.5	0	63.5	64.3	70	N	-	-	7.8	Y	N	N
D1-11c-5	9	61.8	D1-11c	-	56.6	0	26.5	24	63.3	0	63.3	64.1	70	N	-	-	7.5	Y	N	N
D1-11c-5	10	65	D1-11c	-	56.6	0	26.4	24.1	63.1	0	63.1	64.0	70	N	-	-	7.4	Y	N	N
D1-11c-5	11	68.2	D1-11c	-	56.6	0	26.4	24.1	62.9	0	62.9	63.8	70	N	-	-	7.2	Y	N	N
D1-11c-5	12	71.4	D1-11c	-	56.6	0	26.4	24.1	62.7	0	62.7	63.6	70	N	-	-	7.0	Y	N	N
D1-11c-5	13	74.6	D1-11c	-	56.7	0	26.4	24.3	62.5	0	62.5	63.5	70	N	-	-	6.8	Y	N	N
D1-11c-5	14	77.8	D1-11c	-	56.7	0	26.4	24.5	62.3	0	62.3	63.4	70	N	-	-	6.7	Y	N	N
D1-11c-5	15	81	D1-11c	-	56.7	0	26.4	24.7	62.1	0	62.1	63.2	70	N	-	-	6.5	Y	N	N
D1-11c-5	16	84.2	D1-11c	-	56.7	0	26.4	24.9	62	0	62	63.1	70	N	-	-	6.4	Y	N	N
D1-11c-5	17	87.4	D1-11c	-	56.6	0	26.4	25.1	61.8	0	61.8	63.0	70	N	-	-	6.4	Y	N	N
D1-11c-5	18	90.6	D1-11c	-	56.7	0	26.3	25.3	61.6	0	61.6	62.8	70	N	-	-	6.1	Y	N	N
D1-11c-5	19	93.8	D1-11c	-	56.7	0	26.3	25.5	61.5	0	61.5	62.7	70	N	-	-	6.0	Y	N	N
D1-11c-5	20	97	D1-11c	-	56.6	0	26.3	25.8	61.3	0	61.3	62.6	70	N	-	-	6.0	Y	N	N
E1-3-1	1	46.7	E1-3	-	0	12.2	0	62.5	0	0	62.5	62.5	70	N	-	-	62.5	Y	N	N
E1-3-1	2	49.7	E1-3	-	0	12.2	0	63	0	0	63	63.0	70	N	-	-	63.0	Y	N	N
E1-3-1	3	52.7	E1-3	-	0	12.2	0	63.4	0	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
E1-3-1	4	55.7	E1-3	-	0	12.1	0	63.7	0	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
E1-3-1	5	58.7	E1-3	-	0	12.9	0	63.8	0	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
E1-3-1	6	61.7	E1-3	-	0	13.8	0	63.8	0	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
E1-3-1	7	64.7	E1-3	-	0	15	0	63.7	0	0	63.7	63.7	70	N	-	-	63.7	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
E1-3-1	8	67.7	E1-3	-	0	16.3	0	63.6	0	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
E1-3-1	9	70.7	E1-3	-	0	18	0	63.5	0	0	63.5	63.5	70	N	-	-	63.5	Y	N	N
E1-3-1	10	73.7	E1-3	-	0	19.5	0	63.4	0	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
E1-3-1	11	76.7	E1-3	-	0	21.5	0	63.4	0	0	63.4	63.4	70	N	-	-	63.4	Y	N	N
E1-3-1	12	79.7	E1-3	-	0	23.8	0	63.3	0	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
E1-3-1	13	82.7	E1-3	-	0	26.6	0	63.2	0	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-1	14	85.7	E1-3	-	0	30.3	0	63.1	0	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
E1-3-1	15	88.7	E1-3	-	0	35.6	0	63	0	0	63	63.0	70	N	-	-	63.0	Y	N	N
E1-3-1	16	91.7	E1-3	-	0	37.7	0	63	0	0	63	63.0	70	N	-	-	63.0	Y	N	N
E1-3-1	17	94.7	E1-3	-	0	38.2	0	62.9	0	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
E1-3-1	18	97.7	E1-3	-	0	38.3	0	62.8	0	0	62.8	62.8	70	N	-	-	62.8	Y	N	N
E1-3-1	19	100.7	E1-3	-	0	38.2	0	62.8	0	0	62.8	62.8	70	N	-	-	62.8	Y	N	N
E1-3-1	20	103.7	E1-3	-	0	38.2	0	62.7	0	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
E1-3-1	21	106.7	E1-3	-	0	38.2	0	62.7	0	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
E1-3-1	22	109.7	E1-3	-	0	38.2	0	62.7	0	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
E1-3-1	23	112.7	E1-3	-	0	38.1	0	62.7	0	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
E1-3-1	24	115.7	E1-3	-	0	38.1	0	62.8	0	0	62.8	62.8	70	N	-	-	62.8	Y	N	N
E1-3-1	25	118.7	E1-3	-	0	38.1	0	62.8	0	0	62.8	62.8	70	N	-	-	62.8	Y	N	N
E1-3-1	26	121.7	E1-3	-	0	38.1	0	62.9	0	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
E1-3-1	27	124.7	E1-3	-	0	38	0	62.9	0	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
E1-3-1	28	127.7	E1-3	-	0	38	0	62.9	0	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
E1-3-2	1	46.7	E1-3	-	0	12	0	66.6	0	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
E1-3-2	2	49.7	E1-3	-	0	11.9	0	66.6	0	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
E1-3-2	3	52.7	E1-3	-	0	11.9	0	66.6	0	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
E1-3-2	4	55.7	E1-3	-	0	12.1	0	66.5	0	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
E1-3-2	5	58.7	E1-3	-	0	12.9	0	66.4	0	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
E1-3-2	6	61.7	E1-3	-	0	13.9	0	66.3	0	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
E1-3-2	7	64.7	E1-3	-	0	15	0	66.1	0	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
E1-3-2	8	67.7	E1-3	-	0	16.2	0	65.9	0	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
E1-3-2	9	70.7	E1-3	-	0	17.5	0	65.8	0	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
E1-3-2	10	73.7	E1-3	-	0	18.8	0	65.6	0	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
E1-3-2	11	76.7	E1-3	-	0	20.5	0	65.5	0	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
E1-3-2	12	79.7	E1-3	-	0	22.3	0	65.3	0	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
E1-3-2	13	82.7	E1-3	-	0	24.4	0	65.1	0	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
E1-3-2	14	85.7	E1-3	-	0	26.9	0	65	0	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-2	15	88.7	E1-3	-	0	30.5	0	64.8	0	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
E1-3-2	16	91.7	E1-3	-	0	34.7	0	64.7	0	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
E1-3-2	17	94.7	E1-3	-	0	37.3	0	64.6	0	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
E1-3-2	18	97.7	E1-3	-	0	38	0	64.4	0	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
E1-3-2	19	100.7	E1-3	-	0	38.1	0	64.3	0	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
E1-3-2	20	103.7	E1-3	-	0	38.1	0	64.2	0	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
E1-3-2	21	106.7	E1-3	-	0	38.1	0	64.1	0	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
E1-3-2	22	109.7	E1-3	-	0	38.1	0	64	0	0	64	64.0	70	N	-	-	64.0	Y	N	N
E1-3-2	23	112.7	E1-3	-	0	38	0	63.9	0	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
E1-3-2	24	115.7	E1-3	-	0	38	0	63.8	0	0	63.8	63.8	70	N	-	-	63.8	Y	N	N
E1-3-2	25	118.7	E1-3	-	0	38	0	63.7	0	0	63.7	63.7	70	N	-	-	63.7	Y	N	N
E1-3-2	26	121.7	E1-3	-	0	38	0	63.6	0	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
E1-3-2	27	124.7	E1-3	-	0	37.9	0	63.6	0	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
E1-3-2	28	127.7	E1-3	-	0	37.9	0	63.6	0	0	63.6	63.6	70	N	-	-	63.6	Y	N	N
E1-3-3	1	46.7	E1-3	-	0	0	58.6	66.9	0	0	67.5	67.5	70	N	-	-	67.5	Y	N	N
E1-3-3	2	49.7	E1-3	-	0	0	58.5	66.7	0	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
E1-3-3	3	52.7	E1-3	-	0	0	58.3	66.6	0	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
E1-3-3	4	55.7	E1-3	-	0	0	58.2	66.5	0	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
E1-3-3	5	58.7	E1-3	-	0	0	58	66.3	0	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
E1-3-3	6	61.7	E1-3	-	0	0	57.9	66.1	0	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
E1-3-3	7	64.7	E1-3	-	0	0	57.8	66	0	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
E1-3-3	8	67.7	E1-3	-	0	0	57.6	65.8	0	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
E1-3-3	9	70.7	E1-3	-	0	0	57.5	65.6	0	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
E1-3-3	10	73.7	E1-3	-	0	0	57.4	65.4	0	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
E1-3-3	11	76.7	E1-3	-	0	0	57.3	65.3	0	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
E1-3-3	12	79.7	E1-3	-	0	0	57.1	65.1	0	0	65.8	65.8	70	N	-	-	65.8	Y	N	N
E1-3-3	13	82.7	E1-3	-	0	0	57	65	0	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
E1-3-3	14	85.7	E1-3	-	0	0	56.9	64.8	0	0	65.5	65.5	70	N	-	-	65.5	Y	N	N
E1-3-3	15	88.7	E1-3	-	0	0	56.8	64.6	0	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
E1-3-3	16	91.7	E1-3	-	0	0	56.7	64.5	0	0	65.2	65.2	70	N	-	-	65.2	Y	N	N
E1-3-3	17	94.7	E1-3	-	0	0	56.6	64.4	0	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-3	18	97.7	E1-3	-	0	0	56.5	64.2	0	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-3	19	100.7	E1-3	-	0	0	56.4	64.1	0	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
E1-3-3	20	103.7	E1-3	-	0	0	56.4	64	0	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
E1-3-3	21	106.7	E1-3	-	0	0	56.3	63.8	0	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
E1-3-3	22	109.7	E1-3	-	0	0	56.2	63.7	0	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
E1-3-3	23	112.7	E1-3	-	0	0	56.2	63.6	0	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
E1-3-3	24	115.7	E1-3	-	0	0	56.1	63.5	0	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
E1-3-3	25	118.7	E1-3	-	0	0	56.1	63.4	0	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
E1-3-3	26	121.7	E1-3	-	0	0	56.1	63.3	0	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
E1-3-3	27	124.7	E1-3	-	0	0	56.1	63.2	0	0	64	64.0	70	N	-	-	64.0	Y	N	N
E1-3-3	28	127.7	E1-3	-	0	0	56	63.2	0	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
E1-3-4	1	46.7	E1-3	-	0	11.3	59.6	67.7	0	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
E1-3-4	2	49.7	E1-3	-	0	11.2	59.3	67.6	0	0	68.2	68.2	70	N	-	-	68.2	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A) [2] [B]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)				dB (A)														
E1-3-4	3	52.7	E1-3	-	0	11.2	59	67.4	0	0	68	68.0	70	N	-	-	68.0	Y	N	N
E1-3-4	4	55.7	E1-3	-	0	11.2	58.7	67.3	0	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
E1-3-4	5	58.7	E1-3	-	0	11.2	58.4	67.1	0	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
E1-3-4	6	61.7	E1-3	-	0	11.2	58.1	66.9	0	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
E1-3-4	7	64.7	E1-3	-	0	11.2	57.8	66.7	0	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
E1-3-4	8	67.7	E1-3	-	0	11.2	57.6	66.5	0	0	67	67.0	70	N	-	-	67.0	Y	N	N
E1-3-4	9	70.7	E1-3	-	0	11.2	57.3	66.3	0	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
E1-3-4	10	73.7	E1-3	-	0	11.2	57.1	66.2	0	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
E1-3-4	11	76.7	E1-3	-	0	11.2	56.8	66	0	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
E1-3-4	12	79.7	E1-3	-	0	11.1	56.6	65.8	0	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
E1-3-4	13	82.7	E1-3	-	0	11.1	56.4	65.6	0	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
E1-3-4	14	85.7	E1-3	-	0	11.1	56.2	65.4	0	0	65.9	65.9	70	N	-	-	65.9	Y	N	N
E1-3-4	15	88.7	E1-3	-	0	11.1	56	65.3	0	0	65.7	65.7	70	N	-	-	65.7	Y	N	N
E1-3-4	16	91.7	E1-3	-	0	11.1	55.8	65.1	0	0	65.6	65.6	70	N	-	-	65.6	Y	N	N
E1-3-4	17	94.7	E1-3	-	0	11.1	55.6	64.9	0	0	65.4	65.4	70	N	-	-	65.4	Y	N	N
E1-3-4	18	97.7	E1-3	-	0	11.1	55.5	64.8	0	0	65.3	65.3	70	N	-	-	65.3	Y	N	N
E1-3-4	19	100.7	E1-3	-	0	11.1	55.3	64.6	0	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
E1-3-4	20	103.7	E1-3	-	0	11.1	55.2	64.5	0	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-4	21	106.7	E1-3	-	0	11.1	55	64.3	0	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
E1-3-4	22	109.7	E1-3	-	0	11	54.9	64.2	0	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
E1-3-4	23	112.7	E1-3	-	0	11.3	54.7	64.1	0	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
E1-3-4	24	115.7	E1-3	-	0	12.5	54.6	63.9	0	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
E1-3-4	25	118.7	E1-3	-	0	13.8	54.5	63.8	0	0	64.3	64.3	70	N	-	-	64.3	Y	N	N
E1-3-4	26	121.7	E1-3	-	0	15.5	54.3	63.7	0	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
E1-3-4	27	124.7	E1-3	-	0	17.3	54.2	63.6	0	0	64	64.0	70	N	-	-	64.0	Y	N	N
E1-3-4	28	127.7	E1-3	-	0	19.5	54.1	63.5	0	0	63.9	63.9	70	N	-	-	63.9	Y	N	N
E1-3-5	1	46.7	E1-3	-	0	0	63.8	67.4	0	0	69	69.0	70	N	-	-	69.0	Y	N	N
E1-3-5	2	49.7	E1-3	-	0	0	63.6	67.3	0	0	68.9	68.9	70	N	-	-	68.9	Y	N	N
E1-3-5	3	52.7	E1-3	-	0	0	63.4	67.2	0	0	68.7	68.7	70	N	-	-	68.7	Y	N	N
E1-3-5	4	55.7	E1-3	-	0	0	63.2	67.1	0	0	68.6	68.6	70	N	-	-	68.6	Y	N	N
E1-3-5	5	58.7	E1-3	-	0	0	63	67	0	0	68.5	68.5	70	N	-	-	68.5	Y	N	N
E1-3-5	6	61.7	E1-3	-	0	0	62.9	66.9	0	0	68.4	68.4	70	N	-	-	68.4	Y	N	N
E1-3-5	7	64.7	E1-3	-	0	0	62.6	66.8	0	0	68.2	68.2	70	N	-	-	68.2	Y	N	N
E1-3-5	8	67.7	E1-3	-	0	0	62.4	66.7	0	0	68.1	68.1	70	N	-	-	68.1	Y	N	N
E1-3-5	9	70.7	E1-3	-	0	0	62.3	66.6	0	0	67.9	67.9	70	N	-	-	67.9	Y	N	N
E1-3-5	10	73.7	E1-3	-	0	0	62.1	66.4	0	0	67.8	67.8	70	N	-	-	67.8	Y	N	N
E1-3-5	11	76.7	E1-3	-	0	0	61.9	66.3	0	0	67.7	67.7	70	N	-	-	67.7	Y	N	N
E1-3-5	12	79.7	E1-3	-	0	0	61.8	66.2	0	0	67.6	67.6	70	N	-	-	67.6	Y	N	N
E1-3-5	13	82.7	E1-3	-	0	0	61.6	66.1	0	0	67.4	67.4	70	N	-	-	67.4	Y	N	N
E1-3-5	14	85.7	E1-3	-	0	0	61.5	66	0	0	67.3	67.3	70	N	-	-	67.3	Y	N	N
E1-3-5	15	88.7	E1-3	-	0	0	61.4	65.9	0	0	67.2	67.2	70	N	-	-	67.2	Y	N	N
E1-3-5	16	91.7	E1-3	-	0	0	61.2	65.8	0	0	67.1	67.1	70	N	-	-	67.1	Y	N	N
E1-3-5	17	94.7	E1-3	-	0	0	61.1	65.7	0	0	67	67.0	70	N	-	-	67.0	Y	N	N
E1-3-5	18	97.7	E1-3	-	0	0	61	65.6	0	0	66.9	66.9	70	N	-	-	66.9	Y	N	N
E1-3-5	19	100.7	E1-3	-	0	0	60.9	65.5	0	0	66.8	66.8	70	N	-	-	66.8	Y	N	N
E1-3-5	20	103.7	E1-3	-	0	0	60.8	65.4	0	0	66.7	66.7	70	N	-	-	66.7	Y	N	N
E1-3-5	21	106.7	E1-3	-	0	0	60.8	65.3	0	0	66.6	66.6	70	N	-	-	66.6	Y	N	N
E1-3-5	22	109.7	E1-3	-	0	0	60.7	65.2	0	0	66.5	66.5	70	N	-	-	66.5	Y	N	N
E1-3-5	23	112.7	E1-3	-	0	0	60.6	65.1	0	0	66.4	66.4	70	N	-	-	66.4	Y	N	N
E1-3-5	24	115.7	E1-3	-	0	0	60.5	65	0	0	66.3	66.3	70	N	-	-	66.3	Y	N	N
E1-3-5	25	118.7	E1-3	-	0	0	60.5	64.9	0	0	66.2	66.2	70	N	-	-	66.2	Y	N	N
E1-3-5	26	121.7	E1-3	-	0	0	60.4	64.8	0	0	66.1	66.1	70	N	-	-	66.1	Y	N	N
E1-3-5	27	124.7	E1-3	-	0	0	60.4	64.7	0	0	66	66.0	70	N	-	-	66.0	Y	N	N
E1-3-5	28	127.7	E1-3	-	0	0	60.3	64.6	0	0	66	66.0	70	N	-	-	66.0	Y	N	N
E1-3-6	1	46.7	E1-3	-	0	0	61.2	61.1	36.2	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
E1-3-6	2	49.7	E1-3	-	0	0	61.1	61.2	36.9	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
E1-3-6	3	52.7	E1-3	-	0	0	61	61.1	37.6	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
E1-3-6	4	55.7	E1-3	-	0	0	60.9	61.3	38.2	0	64.1	64.1	70	N	-	-	64.1	Y	N	N
E1-3-6	5	58.7	E1-3	-	0	0	60.8	61.5	38.9	0	64.2	64.2	70	N	-	-	64.2	Y	N	N
E1-3-6	6	61.7	E1-3	-	0	0	60.7	62	39.7	0	64.4	64.4	70	N	-	-	64.4	Y	N	N
E1-3-6	7	64.7	E1-3	-	0	0	60.5	62.3	40.5	0	64.5	64.5	70	N	-	-	64.5	Y	N	N
E1-3-6	8	67.7	E1-3	-	0	0	60.4	62.5	41.5	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
E1-3-6	9	70.7	E1-3	-	0	0	60.3	62.6	42.6	0	64.6	64.6	70	N	-	-	64.6	Y	N	N
E1-3-6	10	73.7	E1-3	-	0	0	60.2	62.7	44.1	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
E1-3-6	11	76.7	E1-3	-	0	0	60.1	62.8	45.5	0	64.7	64.7	70	N	-	-	64.7	Y	N	N
E1-3-6	12	79.7	E1-3	-	0	0	60	63	47	0	64.8	64.8	70	N	-	-	64.8	Y	N	N
E1-3-6	13	82.7	E1-3	-	0	0	59.9	63.1	47.8	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-6	14	85.7	E1-3	-	0	0	59.8	63.2	48.5	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-6	15	88.7	E1-3	-	0	0	59.6	63.2	49	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-6	16	91.7	E1-3	-	0	0	59.5	63.3	49.6	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-6	17	94.7	E1-3	-	0	0	59.4	63.3	50.2	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-6	18	97.7	E1-3	-	0	0	59.4	63.3	50.6	0	64.9	64.9	70	N	-	-	64.9	Y	N	N
E1-3-6	19	100.7	E1-3	-	0	0	59.4	63.3	51	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	20	103.7	E1-3	-	0	0	59.3	63.4	51.5	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	21	106.7	E1-3	-	0	0	59.3	63.4	51.8	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	22	109.7	E1-3	-	0	0	59.3	63.4	52.2	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	23	112.7	E1-3	-	0	0	59.3	63.4	52.5	0	65.1	65.1	70	N	-	-	65.1	Y	N	N
E1-3-6	24	115.7	E1-3	-	0	0	59.3	63.3	52.8	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	25	118.7	E1-3	-	0	0	59.3	63.3	53	0	65	65.0	70	N	-	-	65.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
E1-3-6	26	121.7	E1-3	-	0	0	59.2	63.3	53.1	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	27	124.7	E1-3	-	0	0	59.2	63.3	53.2	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-6	28	127.7	E1-3	-	0	0	59.1	63.2	53.3	0	65	65.0	70	N	-	-	65.0	Y	N	N
E1-3-7	1	46.7	E1-3	-	0	10.6	57.3	57.9	49	0	60.9	60.9	70	N	-	-	60.9	Y	N	N
E1-3-7	2	49.7	E1-3	-	0	10.6	57.3	58.4	49	0	61.2	61.2	70	N	-	-	61.2	Y	N	N
E1-3-7	3	52.7	E1-3	-	0	10.6	57.3	58.7	49.1	0	61.3	61.3	70	N	-	-	61.3	Y	N	N
E1-3-7	4	55.7	E1-3	-	0	10.6	57.3	58.9	49.2	0	61.4	61.4	70	N	-	-	61.4	Y	N	N
E1-3-7	5	58.7	E1-3	-	0	10.6	57.2	59.2	49.2	0	61.6	61.6	70	N	-	-	61.6	Y	N	N
E1-3-7	6	61.7	E1-3	-	0	10.6	57.2	59.5	49.5	0	61.7	61.7	70	N	-	-	61.7	Y	N	N
E1-3-7	7	64.7	E1-3	-	0	10.6	57.1	59.7	49.8	0	61.9	61.9	70	N	-	-	61.9	Y	N	N
E1-3-7	8	67.7	E1-3	-	0	10.6	57.1	60	50.2	0	62.1	62.1	70	N	-	-	62.1	Y	N	N
E1-3-7	9	70.7	E1-3	-	0	10.6	57	60.3	50.9	0	62.3	62.3	70	N	-	-	62.3	Y	N	N
E1-3-7	10	73.7	E1-3	-	0	10.6	57	60.6	51.8	0	62.5	62.5	70	N	-	-	62.5	Y	N	N
E1-3-7	11	76.7	E1-3	-	0	10.6	56.9	60.8	52.7	0	62.7	62.7	70	N	-	-	62.7	Y	N	N
E1-3-7	12	79.7	E1-3	-	0	10.5	56.9	60.9	53.5	0	62.9	62.9	70	N	-	-	62.9	Y	N	N
E1-3-7	13	82.7	E1-3	-	0	10.5	56.8	60.9	54.1	0	63	63.0	70	N	-	-	63.0	Y	N	N
E1-3-7	14	85.7	E1-3	-	0	10.5	56.8	61	54.6	0	63	63.0	70	N	-	-	63.0	Y	N	N
E1-3-7	15	88.7	E1-3	-	0	10.5	56.7	61	55	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
E1-3-7	16	91.7	E1-3	-	0	10.5	56.7	61	55.3	0	63.1	63.1	70	N	-	-	63.1	Y	N	N
E1-3-7	17	94.7	E1-3	-	0	10.5	56.7	61	55.6	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-7	18	97.7	E1-3	-	0	10.4	56.6	61	55.7	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-7	19	100.7	E1-3	-	0	10.4	56.6	61	55.8	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-7	20	103.7	E1-3	-	0	10.4	56.6	61	55.9	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-7	21	106.7	E1-3	-	0	10.4	56.6	61	55.8	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-7	22	109.7	E1-3	-	0	10.4	56.7	61	55.9	0	63.2	63.2	70	N	-	-	63.2	Y	N	N
E1-3-7	23	112.7	E1-3	-	0	10.8	56.7	61	55.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
E1-3-7	24	115.7	E1-3	-	0	12.1	56.7	61	55.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
E1-3-7	25	118.7	E1-3	-	0	13.9	56.7	61	55.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
E1-3-7	26	121.7	E1-3	-	0	16	56.7	61	55.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
E1-3-7	27	124.7	E1-3	-	0	18.8	56.7	61	55.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
E1-3-7	28	127.7	E1-3	-	0	22.3	56.7	61.1	55.8	0	63.3	63.3	70	N	-	-	63.3	Y	N	N
C1-3-1	1	9.4	C1-3	-	62.7	27.7	59.6	62.8	32.8	61.2	66.2	67.8	70	N	-	-	5.1	Y	N	N
C1-3-1	2	12.1	C1-3	-	62.7	28.2	60.3	62.8	33.5	61.4	66.4	67.9	70	N	-	-	5.2	Y	N	N
C1-3-1	3	14.8	C1-3	-	62.8	28.7	60.9	62.8	34.9	61.7	66.6	68.2	70	N	-	-	5.4	Y	N	N
C1-3-2	1	9.4	C1-3	-	55.6	25.9	56.8	61	21	60	64.4	64.9	70	N	-	-	9.3	Y	N	N
C1-3-2	2	12.1	C1-3	-	55.7	26.9	57.6	61	21	60.1	64.6	65.1	70	N	-	-	9.4	Y	N	N
C1-3-2	3	14.8	C1-3	-	56	27.8	58.2	61	21	60.2	64.7	65.3	70	N	-	-	9.3	Y	N	N
C1-3-3	1	9.4	C1-3	-	55.7	27	57.3	57	20.8	55.9	61.5	62.5	70	N	-	-	6.8	Y	N	N
C1-3-3	2	12.1	C1-3	-	55.7	27.5	58.1	57	20.9	56.1	61.9	62.8	70	N	-	-	7.1	Y	N	N
C1-3-3	3	14.8	C1-3	-	55.9	28	58.7	57	20.9	56.3	62.2	63.2	70	N	-	-	7.3	Y	N	N
C1-3-4	1	10.8	C1-3	-	61.4	0	58.5	63.8	38.6	61.2	66.5	67.6	70	N	-	-	6.2	Y	N	N
C1-3-4	2	14	C1-3	-	61.7	0	59.3	63.8	38.7	61.5	66.7	67.9	70	N	-	-	6.2	Y	N	N
C1-3-4	3	17.2	C1-3	-	61.8	0	60.1	63.7	39	61.8	66.9	68.1	70	N	-	-	6.3	Y	N	N
C1-3-4	4	20.4	C1-3	-	61.8	0	61.1	63.8	39.7	62.5	67.4	68.4	70	N	-	-	6.6	Y	N	N
C1-3-4	5	23.6	C1-3	-	61.7	0	62.3	63.8	40.1	63.4	68	68.9	70	N	-	-	7.2	Y	N	N
C1-3-4	6	26.8	C1-3	-	61.6	0	63.4	63.9	40.5	63.9	68.5	69.3	70	N	-	-	7.7	Y	N	N
C1-3-4	7	30	C1-3	-	61.4	0	64.6	63.9	40.8	64.5	69.1	69.8	70	N	-	-	8.4	Y	N	N
C1-3-4	8	33.2	C1-3	-	61.2	0	65.7	63.9	41.2	65	69.7	70.3	70	N	-	-	9.1	Y	N	N
C1-3-4	9	36.4	C1-3	-	61	0	66.6	63.9	41.4	65.4	70.2	70.7	70	Y	-	-	9.7	Y	N	Y
C1-3-4	10	39.6	C1-3	-	60.7	0	67.3	63.8	41.6	66	70.7	71.1	70	Y	-	-	10.4	Y	Y	Y
C1-3-4	11	42.8	C1-3	-	60.5	0	67.7	63.8	41.6	66.5	71.1	71.4	70	Y	-	-	10.9	Y	Y	Y
C1-3-4	12	46	C1-3	-	60.3	0	68.1	63.8	41.7	66.9	71.4	71.7	70	Y	-	-	11.4	Y	Y	Y
C1-3-5	1	10.8	C1-3	-	64.1	0	60.4	66	41.1	62.2	68.3	69.7	70	N	-	-	5.6	Y	N	N
C1-3-5	2	14	C1-3	-	63.9	0	61.2	66	41.1	62.5	68.5	69.8	70	N	-	-	5.9	Y	N	N
C1-3-5	3	17.2	C1-3	-	63.8	0	62	66	41.1	62.9	68.7	70.0	70	N	-	-	6.2	Y	N	N
C1-3-5	4	20.4	C1-3	-	63.6	0	63	65.9	41.1	63.2	69.1	70.2	70	N	-	-	6.6	Y	N	N
C1-3-5	5	23.6	C1-3	-	63.4	0	64.3	65.9	41.1	63.8	69.5	70.5	70	Y	-	-	7.1	Y	N	Y
C1-3-5	6	26.8	C1-3	-	63.2	0	65.6	65.9	41.1	64.4	70.1	70.9	70	Y	-	-	7.7	Y	N	Y
C1-3-5	7	30	C1-3	-	63	0	66.9	65.8	41.1	65.3	70.8	71.5	70	Y	-	-	8.5	Y	Y	Y
C1-3-5	8	33.2	C1-3	-	62.7	0	68.3	65.7	41.1	66.4	71.7	72.2	70	Y	-	-	9.5	Y	Y	Y
C1-3-5	9	36.4	C1-3	-	62.5	0	69.4	65.6	41.1	67.4	72.5	72.9	70	Y	-	-	10.4	Y	Y	Y
C1-3-5	10	39.6	C1-3	-	62.1	0	70.2	65.6	41.1	68.5	73.3	73.6	70	Y	-	-	11.5	Y	Y	Y
C1-3-5	11	42.8	C1-3	-	61.8	0	70.7	65.5	41.1	69.4	73.8	74.1	70	Y	-	-	12.3	Y	Y	Y
C1-3-5	12	46	C1-3	-	61.5	0	71.1	65.4	41.1	70.1	74.2	74.4	70	Y	-	-	12.9	Y	Y	Y
C1-3-6	1	10.8	C1-3	-	63.7	0	60.8	67.7	45.7	61.5	69.3	70.4	70	N	-	-	6.7	Y	N	N
C1-3-6	2	14	C1-3	-	63.7	0	61.7	67.7	45.7	62	69.6	70.6	70	Y	-	-	6.9	Y	N	Y
C1-3-6	3	17.2	C1-3	-	63.6	0	62.8	67.7	45.7	62.6	69.8	70.8	70	Y	-	-	7.2	Y	N	Y
C1-3-6	4	20.4	C1-3	-	63.3	0	64	67.6	45.7	63.3	70.2	71.0	70	Y	-	-	7.7	Y	N	Y
C1-3-6	5	23.6	C1-3	-	63.1	0	65.6	67.6	45.7	64.3	70.8	71.5	70	Y	-	-	8.4	Y	Y	Y
C1-3-6	6	26.8	C1-3	-	62.9	0	67.4	67.5	45.7	65.5	71.7	72.2	70	Y	-	-	9.3	Y	Y	Y
C1-3-6	7	30	C1-3	-	62.6	0	69	67.4	45.7	67.1	72.7	73.1	70	Y	-	-	10.5	Y	Y	Y
C1-3-6	8	33.2	C1-3	-	62.4	0	70.4	67.3	45.7	68.6	73.7	74.0	70	Y	-	-	11.6	Y	Y	Y
C1-3-6	9	36.4	C1-3	-	62.2	0	71.4	67.2	45.7	70	74.6	74.9	70	Y	-	-	12.7	Y	Y	Y
C1-3-6	10	39.6	C1-3	-	61.9	0	71.9	67	45.7	71	75.2	75.4	70	Y	-	-	13.5	Y	Y	Y
C1-3-6	11	42.8	C1-3	-	61.5	0	72.3	66.9	45.7	72	75.8	75.9	70	Y	-	-	14.4	Y	Y	Y
C1-3-6	12	46	C1-3	-	61.2	0	72.5	66.7	45.7	72.8	76.2	76.3	70	Y	-	-	15.1	Y	Y	Y
C1-3-7	1	10.8	C1-3	-	62.9	0	61.7	69.9	46.1	62.3	71.1	71.7	70	Y	-	-	8.8	Y	Y	Y
C1-3-7	2	14	C1-3	-	62.9	0	62.9	69.9	46.1	63	71.4	72.0	70	Y	-	-	9.1	Y	Y	Y
C1-3-7	3	17.2	C1-3	-	62.7	0	64.4	69.8	46.1	63.9	71.7	72.2	70	Y	-	-	9.5	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
C1-3-7	4	20.4	C1-3	-	62.5	0	66.2	69.6	46.1	65.1	72.2	72.7	70	Y	-	-	10.2	Y	Y	Y
C1-3-7	5	23.6	C1-3	-	62.3	0	68.8	69.5	46.1	66.7	73.2	73.6	70	Y	-	-	11.3	Y	Y	Y
C1-3-7	6	26.8	C1-3	-	62.1	0	71.3	69.3	46.1	68.6	74.7	74.9	70	Y	-	-	12.8	Y	Y	Y
C1-3-7	7	30	C1-3	-	61.9	0	73.1	69.1	46.1	70.7	76	76.2	70	Y	-	-	14.3	Y	Y	Y
C1-3-7	8	33.2	C1-3	-	61.6	0	74.1	68.9	46.1	72.1	77	77.1	70	Y	-	-	15.5	Y	Y	Y
C1-3-7	9	36.4	C1-3	-	61.4	0	74.5	68.7	46.1	73.5	77.6	77.7	70	Y	-	-	16.3	Y	Y	Y
C1-3-7	10	39.6	C1-3	-	61.1	0	74.8	68.5	46.1	74.5	78.1	78.2	70	Y	-	-	17.1	Y	Y	Y
C1-3-7	11	42.8	C1-3	-	60.8	0	74.9	68.3	46.1	75.4	78.6	78.7	70	Y	-	-	17.9	Y	Y	Y
C1-3-7	12	46	C1-3	-	60.5	0	75	68.1	46.1	76.1	79	79.1	70	Y	-	-	18.6	Y	Y	Y
C1-3-8	1	10.8	C1-3	-	60.2	0	61.8	70	46.1	62.6	71.3	71.6	70	Y	-	-	11.4	Y	Y	Y
C1-3-8	2	14	C1-3	-	60.1	0	63.2	70	46.1	63.5	71.6	71.9	70	Y	-	-	11.8	Y	Y	Y
C1-3-8	3	17.2	C1-3	-	60	0	64.9	69.9	46.1	64.5	72	72.2	70	Y	-	-	12.2	Y	Y	Y
C1-3-8	4	20.4	C1-3	-	59.9	0	67	69.8	46.1	65.8	72.6	72.9	70	Y	-	-	13.0	Y	Y	Y
C1-3-8	5	23.6	C1-3	-	59.7	0	70	69.6	46.1	67.4	73.9	74.1	70	Y	-	-	14.4	Y	Y	Y
C1-3-8	6	26.8	C1-3	-	59.6	0	72.7	69.5	46.1	69.4	75.6	75.7	70	Y	-	-	16.1	Y	Y	Y
C1-3-8	7	30	C1-3	-	59.6	0	74.4	69.2	46	71.5	77	77.1	70	Y	-	-	17.5	Y	Y	Y
C1-3-8	8	33.2	C1-3	-	59.5	0	75.2	69	46	73	77.9	77.9	70	Y	-	-	18.4	Y	Y	Y
C1-3-8	9	36.4	C1-3	-	59.2	0	75.5	68.9	46	74.3	78.5	78.5	70	Y	-	-	19.3	Y	Y	Y
C1-3-8	10	39.6	C1-3	-	58.9	0	75.7	68.7	46	75.5	79	79.1	70	Y	-	-	20.2	Y	Y	Y
C1-3-8	11	42.8	C1-3	-	58.7	0	75.7	68.6	46	76.5	79.5	79.5	70	Y	-	-	20.8	Y	Y	Y
C1-3-8	12	46	C1-3	-	58.5	0	75.8	68.4	46	77	79.8	79.8	70	Y	-	-	21.3	Y	Y	Y
C1-3-9	1	10.8	C1-3	-	29.8	0	58.9	57.8	0	57.3	62.8	62.8	70	N	-	-	33.0	Y	N	N
C1-3-9	2	14	C1-3	-	31.6	0	60.2	57.8	0	58.3	63.7	63.7	70	N	-	-	32.1	Y	N	N
C1-3-9	3	17.2	C1-3	-	33.7	0	61.8	58	0	59.3	64.7	64.7	70	N	-	-	31.0	Y	N	N
C1-3-9	4	20.4	C1-3	-	36.3	0	63.6	58.2	0	60.3	66	66.0	70	N	-	-	29.7	Y	N	N
C1-3-9	5	23.6	C1-3	-	39.3	0	66.2	58.8	0	61.4	68	68.0	70	N	-	-	28.7	Y	N	N
C1-3-9	6	26.8	C1-3	-	43	0	69.1	58.9	0	62.6	70.3	70.3	70	N	-	-	27.3	Y	N	N
C1-3-9	7	30	C1-3	-	45.6	0	70.3	59.1	0	63.7	71.4	71.4	70	Y	-	-	25.8	Y	Y	Y
C1-3-9	8	33.2	C1-3	-	46.4	0	71.4	59.2	0	65	72.5	72.5	70	Y	-	-	26.1	Y	Y	Y
C1-3-9	9	36.4	C1-3	-	46.7	0	71.8	59.2	0	66.3	73.1	73.1	70	Y	-	-	26.4	Y	Y	Y
C1-3-9	10	39.6	C1-3	-	46.8	0	72	59.2	0	67.9	73.6	73.6	70	Y	-	-	26.8	Y	Y	Y
C1-3-9	11	42.8	C1-3	-	46.8	0	72.1	59.2	0	69.4	74.2	74.2	70	Y	-	-	27.4	Y	Y	Y
C1-3-9	12	46	C1-3	-	46.8	0	72.1	59.4	0	70.9	74.7	74.7	70	Y	-	-	27.9	Y	Y	Y
C1-3-10	1	10.8	C1-3	-	53.5	0	60.3	65.4	15.1	60.2	67.5	67.7	70	N	-	-	14.2	Y	N	N
C1-3-10	2	14	C1-3	-	53.6	0	61.6	65.4	15	61.3	68	68.1	70	N	-	-	14.5	Y	N	N
C1-3-10	3	17.2	C1-3	-	53.7	0	63.2	65.3	15.1	62.4	68.6	68.7	70	N	-	-	15.0	Y	N	N
C1-3-10	4	20.4	C1-3	-	53.8	0	65.3	65.2	15	63.7	69.6	69.7	70	N	-	-	15.9	Y	N	N
C1-3-10	5	23.6	C1-3	-	54.1	0	68.1	65.2	15	65.2	71.1	71.2	70	Y	-	-	17.1	Y	Y	Y
C1-3-10	6	26.8	C1-3	-	54.8	0	70.9	65.1	15	67.1	73.2	73.2	70	Y	-	-	18.4	Y	Y	Y
C1-3-10	7	30	C1-3	-	55.4	0	72.4	64.9	15.4	69.1	74.6	74.6	70	Y	-	-	19.2	Y	Y	Y
C1-3-10	8	33.2	C1-3	-	55.6	0	73.2	64.7	16.2	70.6	75.5	75.5	70	Y	-	-	19.9	Y	Y	Y
C1-3-10	9	36.4	C1-3	-	55.6	0	73.6	64.6	17.3	71.9	76.2	76.2	70	Y	-	-	20.6	Y	Y	Y
C1-3-10	10	39.6	C1-3	-	55.5	0	73.7	64.6	18.3	73.3	76.8	76.8	70	Y	-	-	21.3	Y	Y	Y
C1-3-10	11	42.8	C1-3	-	55.4	0	73.8	64.4	19.2	74.3	77.3	77.3	70	Y	-	-	21.9	Y	Y	Y
C1-3-10	12	46	C1-3	-	55.4	0	73.8	64.4	20	75.1	77.7	77.8	70	Y	-	-	22.4	Y	Y	Y
C1-3-11	1	10.8	C1-3	-	52.8	0	61.5	65.8	15.1	60.3	68	68.1	70	N	-	-	15.3	Y	N	N
C1-3-11	2	14	C1-3	-	52.8	0	62.9	65.7	15	61.7	68.6	68.7	70	N	-	-	15.9	Y	N	N
C1-3-11	3	17.2	C1-3	-	52.8	0	64.6	65.7	15.1	63	69.4	69.5	70	N	-	-	16.7	Y	N	N
C1-3-11	4	20.4	C1-3	-	53	0	66.7	65.9	14.9	64.5	70.6	70.6	70	Y	-	-	17.6	Y	Y	Y
C1-3-11	5	23.6	C1-3	-	53.3	0	69.6	65.9	14.9	66.1	72.3	72.4	70	Y	-	-	19.1	Y	Y	Y
C1-3-11	6	26.8	C1-3	-	53.8	0	72.4	65.8	15.1	68.1	74.4	74.4	70	Y	-	-	20.6	Y	Y	Y
C1-3-11	7	30	C1-3	-	54.3	0	74	65.7	15.5	70.1	75.9	75.9	70	Y	-	-	21.6	Y	Y	Y
C1-3-11	8	33.2	C1-3	-	54.5	0	74.7	65.5	16.4	71.7	76.8	76.8	70	Y	-	-	22.3	Y	Y	Y
C1-3-11	9	36.4	C1-3	-	54.5	0	75.1	65.5	17.4	73.2	77.5	77.6	70	Y	-	-	23.1	Y	Y	Y
C1-3-11	10	39.6	C1-3	-	54.5	0	75.2	65.4	18.4	74.4	78.1	78.1	70	Y	-	-	23.6	Y	Y	Y
C1-3-11	11	42.8	C1-3	-	54.5	0	75.2	65.3	19.2	75.5	78.6	78.6	70	Y	-	-	24.1	Y	Y	Y
C1-3-11	12	46	C1-3	-	54.4	0	75.1	65.3	19.9	76.3	79	79.0	70	Y	-	-	24.6	Y	Y	Y
C1-3-12	1	10.8	C1-3	-	51.9	0	61.5	64.9	15	60.3	67.5	67.6	70	N	-	-	15.7	Y	N	N
C1-3-12	2	14	C1-3	-	52	0	63.1	65	14.9	61.7	68.2	68.3	70	N	-	-	16.3	Y	N	N
C1-3-12	3	17.2	C1-3	-	52.1	0	64.8	65.1	14.9	63.2	69.2	69.3	70	N	-	-	17.2	Y	N	N
C1-3-12	4	20.4	C1-3	-	52.4	0	67.2	65.3	14.8	64.7	70.6	70.7	70	Y	-	-	18.3	Y	Y	Y
C1-3-12	5	23.6	C1-3	-	52.8	0	70.2	65.4	14.9	66.4	72.6	72.7	70	Y	-	-	19.9	Y	Y	Y
C1-3-12	6	26.8	C1-3	-	53.5	0	72.9	65.3	15.2	68.4	74.8	74.8	70	Y	-	-	21.3	Y	Y	Y
C1-3-12	7	30	C1-3	-	54.2	0	74.5	65.2	15.6	70.4	76.3	76.3	70	Y	-	-	22.1	Y	Y	Y
C1-3-12	8	33.2	C1-3	-	54.5	0	75.2	65.2	16.5	72	77.2	77.2	70	Y	-	-	22.7	Y	Y	Y
C1-3-12	9	36.4	C1-3	-	54.7	0	75.5	65.2	17.5	73.4	77.8	77.9	70	Y	-	-	23.2	Y	Y	Y
C1-3-12	10	39.6	C1-3	-	54.7	0	75.6	65.3	18.3	74.7	78.4	78.4	70	Y	-	-	23.7	Y	Y	Y
C1-3-12	11	42.8	C1-3	-	54.8	0	75.6	65.4	19.1	75.8	78.9	78.9	70	Y	-	-	24.1	Y	Y	Y
C1-3-12	12	46	C1-3	-	54.9	0	75.4	65.4	19.8	76.6	79.3	79.3	70	Y	-	-	24.4	Y	Y	Y
C1-3-12	13	49.2	C1-3	-	55	0	75.4	65.6	20.2	77.1	79.5	79.5	70	Y	-	-	24.5	Y	Y	Y
C1-3-12	14	52.4	C1-3	-	55	0	75.2	65.8	20.7	77.3	79.6	79.6	70	Y	-	-	24.6	Y	Y	Y
C1-3-13	1	10.8	C1-3	-	48.4	0	60.9	63.3	9.7	61.9	66.9	67.0	70	N	-	-	18.6	Y	N	N
C1-3-13	2	14	C1-3	-	48.5	0	62.5	63.3	9.7	62.9	67.7	67.7	70	N	-	-	19.2	Y	N	N
C1-3-13	3	17.2	C1-3	-	48.8	0	64.5	63.3	9.7	64	68.7	68.8	70	N	-	-	20.0	Y	N	N
C1-3-13	4	20.4	C1-3	-	49.5	0	67.4	63.4	10.3	65.2	70.4	70.4	70	N	-	-	20.9	Y	N	N
C1-3-13	5	23.6	C1-3	-	50.3	0	70.5	64.1	12	66.6	72.6	72.6	70	Y	-	-	22.3	Y	Y	Y
C1-3-13	6	26.8	C1-3	-	51.5	0	73.1	64.6	14.1	68.2	74.8	74.8	70	Y	-	-	23.3	Y	Y	Y
C1-3-13	7	30	C1-3	-	52.5	0	74.3	64.6	16.7	70	76	76.0	70	Y	-	-	23.5	Y	Y	Y
C1-3-13	8	33.2	C1-3	-	53	0	75	64.7	19.8	71.4	76.8	76.9	70	Y	-	-	23.9	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project									Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)													
C1-3-13	9	36.4	C1-3	-	53.3	0	75.4	64.8	23.8	72.9	77.6	77.6	70	Y	-	-	24.3	Y	Y	Y
C1-3-13	10	39.6	C1-3	-	53.5	0	75.5	64.9	28.8	74.2	78.1	78.1	70	Y	-	-	24.6	Y	Y	Y
C1-3-13	11	42.8	C1-3	-	53.7	0	75.4	65	37.2	75.4	78.6	78.6	70	Y	-	-	24.9	Y	Y	Y
C1-3-13	12	46	C1-3	-	53.9	0	75.3	65.2	39.6	76.3	79	79.1	70	Y	-	-	25.2	Y	Y	Y
C1-3-13	13	49.2	C1-3	-	54.1	0	75.2	65.4	39.6	76.8	79.3	79.3	70	Y	-	-	25.2	Y	Y	Y
C1-3-13	14	52.4	C1-3	-	54.2	0	75.1	65.7	39.6	77.1	79.4	79.5	70	Y	-	-	25.3	Y	Y	Y
C1-3-14	1	11.6	C1-3	-	39	0	62.4	67.6	10.9	63.5	69.9	69.9	70	N	-	-	30.9	Y	N	N
C1-3-14	2	14.8	C1-3	-	41.2	0	64.7	67.6	10.9	64.5	70.6	70.6	70	Y	-	-	29.4	Y	Y	Y
C1-3-14	3	18	C1-3	-	43.4	0	67.6	67.5	10.9	65.6	71.8	71.8	70	Y	-	-	28.4	Y	Y	Y
C1-3-14	4	21.2	C1-3	-	47.1	0	71.1	67.8	10.9	66.6	73.7	73.7	70	Y	-	-	26.6	Y	Y	Y
C1-3-14	5	24.4	C1-3	-	49.6	0	74	67.8	10.9	67.9	75.7	75.7	70	Y	-	-	26.1	Y	Y	Y
C1-3-14	6	27.6	C1-3	-	51.4	0	75.3	67.8	11	69.4	76.9	76.9	70	Y	-	-	25.5	Y	Y	Y
C1-3-14	7	30.8	C1-3	-	52.3	0	75.9	67.8	11.4	71	77.6	77.6	70	Y	-	-	25.3	Y	Y	Y
C1-3-14	8	34	C1-3	-	53	0	76	67.9	11.9	72.6	78.1	78.1	70	Y	-	-	25.1	Y	Y	Y
C1-3-14	9	37.2	C1-3	-	53.3	0	76.1	67.9	12.3	74	78.6	78.6	70	Y	-	-	25.3	Y	Y	Y
C1-3-15	1	11.6	C1-3	-	40.7	0	63.8	63	25.4	64.4	68.6	68.6	70	N	-	-	27.9	Y	N	N
C1-3-15	2	14.8	C1-3	-	42.4	0	66.4	63.2	28.3	65.5	70	70.0	70	N	-	-	27.6	Y	N	N
C1-3-15	3	18	C1-3	-	44	0	69.7	63.5	30.7	66.3	72	72.0	70	Y	-	-	28.0	Y	Y	Y
C1-3-15	4	21.2	C1-3	-	46.3	0	73.1	64	33.3	67.2	74.5	74.5	70	Y	-	-	28.2	Y	Y	Y
C1-3-15	5	24.4	C1-3	-	48.5	0	75.1	64.7	36.3	68.3	76.2	76.2	70	Y	-	-	27.7	Y	Y	Y
C1-3-15	6	27.6	C1-3	-	50.7	0	75.7	65.6	39.1	69.6	77	77.0	70	Y	-	-	26.3	Y	Y	Y
C1-3-15	7	30.8	C1-3	-	51.9	0	76	66.2	40.1	71.2	77.5	77.6	70	Y	-	-	25.7	Y	Y	Y
C1-3-15	8	34	C1-3	-	52.6	0	76	66.7	40.5	72.8	78	78.0	70	Y	-	-	25.4	Y	Y	Y
C1-3-15	9	37.2	C1-3	-	53	0	75.9	67.2	40.6	74.1	78.5	78.5	70	Y	-	-	25.5	Y	Y	Y
C1-3-16	1	11.6	C1-3	-	38.4	0	61.4	52.6	24.5	59.5	63.9	63.9	70	N	-	-	25.5	Y	N	N
C1-3-16	2	14.8	C1-3	-	40.5	0	64	57.1	27.4	63.8	67.3	67.3	70	N	-	-	26.8	Y	N	N
C1-3-16	3	18	C1-3	-	42	0	67	58.8	30.3	64.8	69.5	69.5	70	N	-	-	27.5	Y	N	N
C1-3-16	4	21.2	C1-3	-	44	0	69.7	59.6	33.3	65.4	71.4	71.4	70	Y	-	-	27.4	Y	Y	Y
C1-3-16	5	24.4	C1-3	-	45.8	0	71.7	60.5	36.4	66.1	73	73.0	70	Y	-	-	27.2	Y	Y	Y
C1-3-16	6	27.6	C1-3	-	48	0	72.4	61.6	39.1	67.1	73.8	73.8	70	Y	-	-	25.8	Y	Y	Y
C1-3-16	7	30.8	C1-3	-	49.3	0	72.8	62.7	40.1	68.3	74.4	74.4	70	Y	-	-	25.1	Y	Y	Y
C1-3-16	8	34	C1-3	-	50.1	0	72.8	63.5	40.6	69.8	74.9	74.9	70	Y	-	-	24.8	Y	Y	Y
C1-3-16	9	37.2	C1-3	-	50.9	0	72.9	64.1	40.6	71.3	75.5	75.5	70	Y	-	-	24.6	Y	Y	Y
C1-3-17	1	10.7	C1-3	-	37.5	0	58.8	49.9	23.6	57.7	61.6	61.6	70	N	-	-	24.1	Y	N	N
C1-3-17	2	13.4	C1-3	-	38.9	0	60.2	51.9	26.2	59.3	63.2	63.2	70	N	-	-	24.3	Y	N	N
C1-3-17	3	16.1	C1-3	-	39.8	0	61.7	55.4	28.8	61.4	65	65.0	70	N	-	-	25.2	Y	N	N
C1-3-18	1	10.7	C1-3	-	37.3	0	59.7	49.8	23.6	57.8	62.2	62.2	70	N	-	-	24.9	Y	N	N
C1-3-18	2	13.4	C1-3	-	38.9	0	61.1	51.5	26.3	59.6	63.7	63.7	70	N	-	-	24.8	Y	N	N
C1-3-18	3	16.1	C1-3	-	40	0	62.4	54.1	29.1	61.7	65.4	65.4	70	N	-	-	25.4	Y	N	N
KTS14_1	1	14.7	OZP Planned Dev	-	5.3	0	39.8	45.2	45.7	54.8	55.8	55.8	70	N	-	-	50.5	Y	N	N
KTS14_1	2	17.8	OZP Planned Dev	-	5.8	0	40.6	46.3	48.7	55.5	56.9	56.9	70	N	-	-	51.1	Y	N	N
KTS14_1	3	20.9	OZP Planned Dev	-	6.3	0	41.4	47.3	51.7	56.3	58.1	58.1	70	N	-	-	51.8	Y	N	N
KTS14_1	4	24	OZP Planned Dev	-	6.9	0	42.1	48.5	54.2	57	59.3	59.3	70	N	-	-	52.4	Y	N	N
KTS14_1	5	27.1	OZP Planned Dev	-	7.4	0	42.9	49.7	55.4	57.8	60.3	60.3	70	N	-	-	52.9	Y	N	N
KTS14_1	6	30.2	OZP Planned Dev	-	7.9	0	43.6	50.8	56.2	58.7	61.1	61.1	70	N	-	-	53.2	Y	N	N
KTS14_1	7	33.3	OZP Planned Dev	-	8.5	0	44.3	52.1	56.7	59.6	62	62.0	70	N	-	-	53.5	Y	N	N
KTS14_1	8	36.4	OZP Planned Dev	-	9.1	0	45	53.4	57	60.6	62.8	62.8	70	N	-	-	53.7	Y	N	N
KTS14_1	9	39.5	OZP Planned Dev	-	9.7	0	45.8	54.8	57.2	61.6	63.7	63.7	70	N	-	-	54.0	Y	N	N
KTS14_1	10	42.6	OZP Planned Dev	-	10.3	0	46.7	56.1	57.4	62.9	64.7	64.7	70	N	-	-	54.4	Y	N	N
KTS14_1	11	45.7	OZP Planned Dev	-	10.9	0	47.6	57.3	57.5	64.2	65.8	65.8	70	N	-	-	54.9	Y	N	N
KTS14_1	12	48.8	OZP Planned Dev	-	11.5	0	48.2	58.1	57.5	65.5	66.8	66.8	70	N	-	-	55.3	Y	N	N
KTS14_1	13	51.9	OZP Planned Dev	-	12.2	0	48.9	58.8	57.5	67	68.1	68.1	70	N	-	-	55.9	Y	N	N
KTS14_1	14	55	OZP Planned Dev	-	12.8	0	49.7	59.3	57.5	67.9	68.8	68.8	70	N	-	-	56.0	Y	N	N
KTS14_1	15	58.1	OZP Planned Dev	-	13.6	0	50.3	59.7	57.5	68.8	69.7	69.7	70	N	-	-	56.1	Y	N	N
KTS14_1	16	61.2	OZP Planned Dev	-	14.3	0	50.8	60	57.5	69.3	70.1	70.1	70	N	-	-	55.8	Y	N	N
KTS14_1	17	64.3	OZP Planned Dev	-	15	0	51.2	60.3	57.5	69.6	70.4	70.4	70	N	-	-	55.4	Y	N	N
KTS14_2	1	14.7	OZP Planned Dev	-	46.8	0	35.2	44	61.2	72.3	72.6	72.7	70	Y	-	-	25.9	Y	Y	Y
KTS14_2	2	17.8	OZP Planned Dev	-	46.8	0	35.8	45.3	62.2	72.5	72.9	72.9	70	Y	-	-	26.1	Y	Y	Y
KTS14_2	3	20.9	OZP Planned Dev	-	46.8	0	36.3	47	62.9	72.7	73.2	73.2	70	Y	-	-	26.4	Y	Y	Y
KTS14_2	4	24	OZP Planned Dev	-	46.8	0	37	48.9	63.3	73.1	73.6	73.6	70	Y	-	-	26.8	Y	Y	Y
KTS14_2	5	27.1	OZP Planned Dev	-	46.8	0	37.5	49.6	63.5	73.5	73.9	73.9	70	Y	-	-	27.1	Y	Y	Y
KTS14_2	6	30.2	OZP Planned Dev	-	46.7	0	38.1	50	63.6	73.6	74.1	74.1	70	Y	-	-	27.4	Y	Y	Y
KTS14_2	7	33.3	OZP Planned Dev	-	46.7	0	38.6	50.4	63.7	73.7	74.1	74.1	70	Y	-	-	27.4	Y	Y	Y
KTS14_2	8	36.4	OZP Planned Dev	-	46.7	0	39.2	50.9	63.7	73.8	74.2	74.2	70	Y	-	-	27.5	Y	Y	Y
KTS14_2	9	39.5	OZP Planned Dev	-	46.7	0	39.7	51.3	63.7	74	74.4	74.4	70	Y	-	-	27.7	Y	Y	Y
KTS14_2	10	42.6	OZP Planned Dev	-	46.7	0	40.1	51.9	63.7	74.1	74.5	74.5	70	Y	-	-	27.8	Y	Y	Y
KTS14_2	11	45.7	OZP Planned Dev	-	46.7	0	40.7	52.4	63.6	74.3	74.7	74.7	70	Y	-	-	28.0	Y	Y	Y
KTS14_2	12	48.8	OZP Planned Dev	-	46.6	0	41.2	52.7	63.6	74.4	74.8	74.8	70	Y	-	-	28.2	Y	Y	Y
KTS14_2	13	51.9	OZP Planned Dev	-	46.6	0	41.6	52.9	63.5	74.4	74.8	74.8	70	Y	-	-	28.2	Y	Y	Y
KTS14_2	14	55	OZP Planned Dev	-	46.7	0	42.1	53.2	63.5	74.4	74.8	74.8	70	Y	-	-	28.1	Y	Y	Y
KTS14_2	15	58.1	OZP Planned Dev	-	46.9	0	42.5	53.3	63.4	74.4	74.8	74.8	70	Y	-	-	27.9	Y	Y	Y
KTS14_2	16	61.2	OZP Planned Dev	-	47.2	0	42.9	53.4	63.3	74.3	74.7	74.7	70	Y	-	-	27.5	Y	Y	Y
KTS14_2	17	64.3	OZP Planned Dev	-	48.5	0	43.4	53.6	63.2	74.2	74.6	74.6	70	Y	-	-	26.1	Y	Y	Y
KTS14_2	18	67.4	OZP Planned Dev	-	51.6	0	43.8	53.7	63.2	74.2	74.6	74.6	70	Y	-	-	23.0	Y	Y	Y
KTS14_2	19	70.5	OZP Planned Dev	-	54.5	0	44.2	53.8	63.1	74.1	74.5	74.5	70	Y	-	-	20.0	Y	Y	Y
KTS15_1	1	21.7	OZP Planned Dev	-	63	0	31.4	46.7	62	66.8	68.1	69.3	70	N	-	-	6.3	Y	N	N
KTS15_1	2	24.7	OZP Planned Dev	-	63	0	31.7	46.9	61.8	66.9	68.1	69.3	70	N	-	-	6.3	Y	N	N
KTS15_1	3	27.7	OZP Planned Dev	-	62.9	0	32	47	61.6	66.9	68	69.2	70	N	-	-	6.3	Y	N	N
KTS15_1	4	30.7	OZP Planned Dev	-	62.8	0	32.4	47	61.4	66.9	68	69.2	70	N	-	-	6.4	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
KTS15_1	5	33.7	OZP Planned Dev	-	62.7	0	32.7	47.1	61.2	66.9	68	69.1	70	N	-	-	6.4	Y	N	N
KTS15_1	6	36.7	OZP Planned Dev	-	62.5	0	33	47.2	61	66.9	68	69.1	70	N	-	-	6.6	Y	N	N
KTS15_1	7	39.7	OZP Planned Dev	-	62.4	0	33.3	47.3	60.8	67	67.9	69.0	70	N	-	-	6.6	Y	N	N
KTS15_1	8	42.7	OZP Planned Dev	-	62.2	0	33.5	47.4	60.6	67	67.9	68.9	70	N	-	-	6.7	Y	N	N
KTS15_1	9	45.7	OZP Planned Dev	-	62.1	0	33.6	47.6	60.4	67	67.9	68.9	70	N	-	-	6.8	Y	N	N
KTS15_1	10	48.7	OZP Planned Dev	-	62	0	33.9	47.7	60.2	67.1	67.9	68.9	70	N	-	-	6.9	Y	N	N
KTS15_1	11	51.7	OZP Planned Dev	-	61.8	0	34.1	47.8	59.9	67.1	67.9	68.9	70	N	-	-	7.1	Y	N	N
KTS15_1	12	54.7	OZP Planned Dev	-	61.7	0	34.4	48	59.7	67.1	67.9	68.8	70	N	-	-	7.1	Y	N	N
KTS15_1	13	57.7	OZP Planned Dev	-	61.6	0	34.6	48.2	59.5	67.1	67.9	68.8	70	N	-	-	7.2	Y	N	N
KTS15_1	14	60.7	OZP Planned Dev	-	61.4	0	34.9	48.5	59.3	67.1	67.9	68.7	70	N	-	-	7.3	Y	N	N
KTS15_1	15	63.7	OZP Planned Dev	-	61.3	0	35.1	48.8	59.2	67.2	67.9	68.7	70	N	-	-	7.4	Y	N	N
KTS15_1	16	66.7	OZP Planned Dev	-	61.2	0	35.5	49	59	67.2	67.9	68.7	70	N	-	-	7.5	Y	N	N
KTS15_2	1	21.7	OZP Planned Dev	-	60.5	0	30.9	46	61.5	63.6	65.8	66.9	70	N	-	-	6.4	Y	N	N
KTS15_2	2	24.7	OZP Planned Dev	-	60.4	0	31.1	46.1	61.3	63.7	65.7	66.9	70	N	-	-	6.5	Y	N	N
KTS15_2	3	27.7	OZP Planned Dev	-	60.4	0	31.4	46.2	61.1	63.8	65.7	66.8	70	N	-	-	6.4	Y	N	N
KTS15_2	4	30.7	OZP Planned Dev	-	60.3	0	31.7	46.3	60.8	63.8	65.6	66.7	70	N	-	-	6.4	Y	N	N
KTS15_2	5	33.7	OZP Planned Dev	-	60.2	0	32	46.4	60.6	63.8	65.5	66.6	70	N	-	-	6.4	Y	N	N
KTS15_2	6	36.7	OZP Planned Dev	-	60	0	32.3	46.5	60.4	63.8	65.4	66.5	70	N	-	-	6.5	Y	N	N
KTS15_2	7	39.7	OZP Planned Dev	-	59.8	0	32.6	46.6	60.1	63.8	65.4	66.4	70	N	-	-	6.6	Y	N	N
KTS15_2	8	42.7	OZP Planned Dev	-	59.7	0	32.8	46.6	59.9	63.8	65.3	66.4	70	N	-	-	6.7	Y	N	N
KTS15_2	9	45.7	OZP Planned Dev	-	59.5	0	33	46.8	59.7	63.8	65.3	66.3	70	N	-	-	6.8	Y	N	N
KTS15_2	10	48.7	OZP Planned Dev	-	59.4	0	33.2	46.9	59.5	63.8	65.2	66.2	70	N	-	-	6.8	Y	N	N
KTS15_2	11	51.7	OZP Planned Dev	-	59.2	0	33.4	47	59.3	63.8	65.2	66.2	70	N	-	-	7.0	Y	N	N
KTS15_2	12	54.7	OZP Planned Dev	-	59.1	0	33.6	47.2	59.1	63.8	65.1	66.1	70	N	-	-	7.0	Y	N	N
KTS15_2	13	57.7	OZP Planned Dev	-	59	0	33.9	47.3	58.9	63.8	65.1	66.0	70	N	-	-	7.0	Y	N	N
KTS15_2	14	60.7	OZP Planned Dev	-	58.9	0	34.1	47.5	58.7	63.8	65	66.0	70	N	-	-	7.1	Y	N	N
KTS15_2	15	63.7	OZP Planned Dev	-	58.7	0	34.4	47.7	58.6	63.7	65	65.9	70	N	-	-	7.2	Y	N	N
KTS15_2	16	66.7	OZP Planned Dev	-	58.6	0	34.7	48	58.4	63.7	65	65.9	70	N	-	-	7.3	Y	N	N
KTS15_3	1	21.7	OZP Planned Dev	-	60	0	29	45.4	60.1	63.3	65	66.2	70	N	-	-	6.2	Y	N	N
KTS15_3	2	24.7	OZP Planned Dev	-	60	0	29.4	45.5	59.9	63.4	65.1	66.2	70	N	-	-	6.2	Y	N	N
KTS15_3	3	27.7	OZP Planned Dev	-	59.9	0	29.6	45.5	59.8	63.5	65.1	66.3	70	N	-	-	6.4	Y	N	N
KTS15_3	4	30.7	OZP Planned Dev	-	59.8	0	30	45.6	59.6	63.6	65.1	66.2	70	N	-	-	6.4	Y	N	N
KTS15_3	5	33.7	OZP Planned Dev	-	59.7	0	30.3	45.7	59.4	63.6	65	66.1	70	N	-	-	6.4	Y	N	N
KTS15_3	6	36.7	OZP Planned Dev	-	59.5	0	30.6	45.6	59.2	63.5	64.9	66.0	70	N	-	-	6.5	Y	N	N
KTS15_3	7	39.7	OZP Planned Dev	-	59.4	0	30.8	45.7	59	63.5	64.9	66.0	70	N	-	-	6.6	Y	N	N
KTS15_3	8	42.7	OZP Planned Dev	-	59.2	0	31	45.8	58.8	63.5	64.8	65.9	70	N	-	-	6.7	Y	N	N
KTS15_3	9	45.7	OZP Planned Dev	-	59.1	0	31.3	45.9	58.6	63.5	64.8	65.8	70	N	-	-	6.7	Y	N	N
KTS15_3	10	48.7	OZP Planned Dev	-	58.9	0	31.5	45.9	58.4	63.5	64.8	65.8	70	N	-	-	6.9	Y	N	N
KTS15_3	11	51.7	OZP Planned Dev	-	58.8	0	31.7	46.1	58.2	63.5	64.7	65.7	70	N	-	-	6.9	Y	N	N
KTS15_3	12	54.7	OZP Planned Dev	-	58.7	0	31.9	46.1	58	63.5	64.6	65.6	70	N	-	-	6.9	Y	N	N
KTS15_3	13	57.7	OZP Planned Dev	-	58.6	0	32	46.2	57.9	63.5	64.6	65.6	70	N	-	-	7.0	Y	N	N
KTS15_3	14	60.7	OZP Planned Dev	-	58.5	0	32.2	46.4	57.7	63.5	64.6	65.5	70	N	-	-	7.0	Y	N	N
KTS15_3	15	63.7	OZP Planned Dev	-	58.3	0	32.4	46.5	57.5	63.5	64.6	65.5	70	N	-	-	7.2	Y	N	N
KTS15_3	16	66.7	OZP Planned Dev	-	58.2	0	32.6	46.8	57.4	63.5	64.5	65.4	70	N	-	-	7.2	Y	N	N
KTS15_4	1	21.7	OZP Planned Dev	-	69.4	0	31.2	48	62.5	67.3	68.6	72.0	70	Y	-	-	2.6	Y	N	Y
KTS15_4	2	24.7	OZP Planned Dev	-	69.3	0	31.6	48.1	62.2	67.4	68.6	72.0	70	Y	-	-	2.7	Y	N	Y
KTS15_4	3	27.7	OZP Planned Dev	-	69.2	0	31.9	48.1	62	67.4	68.6	71.9	70	Y	-	-	2.7	Y	N	Y
KTS15_4	4	30.7	OZP Planned Dev	-	69.1	0	32.3	48.2	61.8	67.5	68.6	71.8	70	Y	-	-	2.7	Y	N	Y
KTS15_4	5	33.7	OZP Planned Dev	-	68.9	0	32.7	48.4	61.6	67.6	68.6	71.8	70	Y	-	-	2.9	Y	N	Y
KTS15_4	6	36.7	OZP Planned Dev	-	68.7	0	33.1	48.5	61.3	67.7	68.6	71.7	70	Y	-	-	3.0	Y	N	Y
KTS15_4	7	39.7	OZP Planned Dev	-	68.6	0	33.4	48.6	61.1	67.8	68.7	71.7	70	Y	-	-	3.1	Y	N	Y
KTS15_4	8	42.7	OZP Planned Dev	-	68.4	0	33.6	48.8	60.9	68	68.8	71.6	70	Y	-	-	3.2	Y	N	Y
KTS15_4	9	45.7	OZP Planned Dev	-	68.2	0	33.9	49	60.7	68.2	69	71.6	70	Y	-	-	3.4	Y	N	Y
KTS15_4	10	48.7	OZP Planned Dev	-	68.1	0	34.1	49.1	60.5	68.5	69.2	71.7	70	Y	-	-	3.6	Y	N	Y
KTS15_4	11	51.7	OZP Planned Dev	-	67.9	0	34.4	49.3	60.3	68.9	69.5	71.8	70	Y	-	-	3.9	Y	N	Y
KTS15_4	12	54.7	OZP Planned Dev	-	67.7	0	34.6	49.5	60.2	69.3	69.8	71.9	70	Y	-	-	4.2	Y	N	Y
KTS15_4	13	57.7	OZP Planned Dev	-	67.6	0	34.9	49.7	60	69.6	70.1	72.0	70	Y	-	-	4.4	Y	N	Y
KTS15_4	14	60.7	OZP Planned Dev	-	67.4	0	35.2	49.9	59.8	70	70.4	72.2	70	Y	-	-	4.8	Y	N	Y
KTS15_4	15	63.7	OZP Planned Dev	-	67.3	0	35.4	50.2	59.6	70.2	70.6	72.3	70	Y	-	-	5.0	Y	Y	Y
KTS15_4	16	66.7	OZP Planned Dev	-	67.1	0	35.8	50.5	59.5	70.4	70.8	72.3	70	Y	-	-	5.2	Y	Y	Y
SHK_1	1	27.2	OZP Planned Dev	-	27.7	0	47	52.1	62.4	71.4	71.9	71.9	70	Y	-	-	44.2	Y	Y	Y
SHK_1	2	30.5	OZP Planned Dev	-	27.7	0	47.6	53.6	63	71.7	72.3	72.3	70	Y	-	-	44.6	Y	Y	Y
SHK_1	3	33.8	OZP Planned Dev	-	27.6	0	48.1	55.1	63.3	71.8	72.5	72.5	70	Y	-	-	44.9	Y	Y	Y
SHK_1	4	37.1	OZP Planned Dev	-	27.6	0	48.7	56.7	63.4	72	72.7	72.7	70	Y	-	-	45.1	Y	Y	Y
SHK_1	5	40.4	OZP Planned Dev	-	27.5	0	49.5	58.1	63.5	72.1	72.9	72.9	70	Y	-	-	45.4	Y	Y	Y
SHK_1	6	43.7	OZP Planned Dev	-	27.5	0	50.1	59.5	63.6	72.3	73.1	73.1	70	Y	-	-	45.6	Y	Y	Y
SHK_1	7	47	OZP Planned Dev	-	27.4	0	51	60.5	63.5	72.6	73.4	73.4	70	Y	-	-	46.0	Y	Y	Y
SHK_1	8	50.3	OZP Planned Dev	-	27.4	0	51.5	61.2	63.5	73.1	73.8	73.8	70	Y	-	-	46.4	Y	Y	Y
SHK_1	9	53.6	OZP Planned Dev	-	27.3	0	52.2	61.7	63.5	73.3	74	74.0	70	Y	-	-	46.7	Y	Y	Y
SHK_1	10	56.9	OZP Planned Dev	-	27.5	0	52.8	62.1	63.5	73.8	74.4	74.4	70	Y	-	-	46.9	Y	Y	Y
SHK_1	11	60.2	OZP Planned Dev	-	27.7	0	53.3	62.4	63.5	74	74.7	74.7	70	Y	-	-	47.0	Y	Y	Y
SHK_1	12	63.5	OZP Planned Dev	-	29	0	53.6	62.5	63.4	74.2	74.8	74.8	70	Y	-	-	45.8	Y	Y	Y
SHK_1	13	66.8	OZP Planned Dev	-	31.2	0	53.9	62.6	63.4	74.2	74.9	74.9	70	Y	-	-	43.7	Y	Y	Y
SHK_1	14	70.1	OZP Planned Dev	-	34.1	0	54.2	62.7	63.4	74.2	74.9	74.9	70	Y	-	-	40.8	Y	Y	Y
SHK_1	15	73.4	OZP Planned Dev	-	37.6	0	54.5	62.7	63.4	74.2	74.9	74.9	70	Y	-	-	37.3	Y	Y	Y
SHK_1	16	76.7	OZP Planned Dev	-	42.2	0	54.7	62.7	63.3	74.2	74.8	74.8	70	Y	-	-	32.6	Y	Y	Y
SHK_1	17	80	OZP Planned Dev	-	48.5	0	54.8	62.7	63.3	74.2	74.8	74.8	70	Y	-	-	26.3	Y	Y	Y
SHK_2	1	27.2	OZP Planned Dev	-	30.7	0	51.2	53	62.4	71.2	71.9	71.9	70	Y	-	-	41.2	Y	Y	Y
SHK_2	2	30.5	OZP Planned Dev	-	34.2	0	53.1	54.5	63	71.6	72.3	72.3	70	Y	-	-	38.1	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
SHK_2	3	33.8	OZP Planned Dev	-	35.1	0	54.2	56.1	63.3	71.8	72.5	72.5	70	Y	-	-	37.4	Y	Y	Y
SHK_2	4	37.1	OZP Planned Dev	-	35.2	0	54.8	57.6	63.4	72	72.7	72.7	70	Y	-	-	37.5	Y	Y	Y
SHK_2	5	40.4	OZP Planned Dev	-	35.2	0	55.3	59.1	63.5	72.1	73	73.0	70	Y	-	-	37.8	Y	Y	Y
SHK_2	6	43.7	OZP Planned Dev	-	35.2	0	55.7	60.4	63.6	72.4	73.2	73.2	70	Y	-	-	38.0	Y	Y	Y
SHK_2	7	47	OZP Planned Dev	-	35.1	0	56.1	61.4	63.6	72.7	73.6	73.6	70	Y	-	-	38.5	Y	Y	Y
SHK_2	8	50.3	OZP Planned Dev	-	35.1	0	56.5	62.2	63.6	73.1	73.9	73.9	70	Y	-	-	38.8	Y	Y	Y
SHK_2	9	53.6	OZP Planned Dev	-	35.1	0	56.9	62.7	63.6	73.6	74.4	74.4	70	Y	-	-	39.3	Y	Y	Y
SHK_2	10	56.9	OZP Planned Dev	-	35.1	0	57.1	63.2	63.6	73.9	74.7	74.7	70	Y	-	-	39.6	Y	Y	Y
SHK_2	11	60.2	OZP Planned Dev	-	35.2	0	57.3	63.5	63.6	74.1	74.9	74.9	70	Y	-	-	39.7	Y	Y	Y
SHK_2	12	63.5	OZP Planned Dev	-	35.4	0	57.5	63.8	63.5	74.2	75	75.0	70	Y	-	-	39.6	Y	Y	Y
SHK_2	13	66.8	OZP Planned Dev	-	35.7	0	57.7	63.9	63.5	74.2	75	75.0	70	Y	-	-	39.3	Y	Y	Y
SHK_2	14	70.1	OZP Planned Dev	-	36.5	0	57.8	64	63.5	74.2	75	75.0	70	Y	-	-	38.5	Y	Y	Y
SHK_2	15	73.4	OZP Planned Dev	-	38	0	58	64.1	63.4	74.2	75	75.0	70	Y	-	-	37.0	Y	Y	Y
SHK_2	16	76.7	OZP Planned Dev	-	40.8	0	58.1	64	63.4	74.2	75	75.0	70	Y	-	-	34.2	Y	Y	Y
SHK_2	17	80	OZP Planned Dev	-	46.2	0	58.3	64	63.3	74.1	74.9	74.9	70	Y	-	-	28.7	Y	Y	Y
SHK_3	1	14	OZP Planned Dev	-	43.6	0	54.6	47.6	55.2	68.1	68.5	68.5	70	N	-	-	24.9	Y	N	N
SHK_3	2	17.3	OZP Planned Dev	-	43.8	0	56.1	49.5	55.9	68.2	68.7	68.7	70	N	-	-	24.9	Y	N	N
SHK_3	3	20.6	OZP Planned Dev	-	44.1	0	57.5	51.6	57.1	68.6	69.3	69.3	70	N	-	-	25.2	Y	N	N
SHK_3	4	23.9	OZP Planned Dev	-	44.4	0	58.7	53.7	59.7	69.6	70.4	70.5	70	Y	-	-	26.1	Y	N	Y
SHK_3	5	27.2	OZP Planned Dev	-	45.2	0	60.5	56	62.4	70.4	71.6	71.6	70	Y	-	-	26.4	Y	Y	Y
SHK_3	6	30.5	OZP Planned Dev	-	46	0	61.8	58	63.1	70.8	72.1	72.1	70	Y	-	-	26.1	Y	Y	Y
SHK_3	7	33.8	OZP Planned Dev	-	46.4	0	62.4	59.8	63.2	71.1	72.5	72.5	70	Y	-	-	26.1	Y	Y	Y
SHK_3	8	37.1	OZP Planned Dev	-	46.7	0	62.8	61.7	63.3	71.6	73	73.0	70	Y	-	-	26.3	Y	Y	Y
SHK_3	9	40.4	OZP Planned Dev	-	46.8	0	63.1	63.1	63.3	72.3	73.6	73.6	70	Y	-	-	26.8	Y	Y	Y
SHK_3	10	43.7	OZP Planned Dev	-	47.1	0	63.4	64.1	63.3	72.7	74.1	74.1	70	Y	-	-	27.0	Y	Y	Y
SHK_3	11	47	OZP Planned Dev	-	47.5	0	63.6	64.9	63.3	73.1	74.5	74.5	70	Y	-	-	27.0	Y	Y	Y
SHK_3	12	50.3	OZP Planned Dev	-	47.7	0	63.8	65.5	63.3	73.3	74.7	74.7	70	Y	-	-	27.0	Y	Y	Y
SHK_3	13	53.6	OZP Planned Dev	-	47.8	0	64	65.9	63.3	73.5	74.9	74.9	70	Y	-	-	27.1	Y	Y	Y
SHK_3	14	56.9	OZP Planned Dev	-	48	0	64.2	66.1	63.2	73.7	75.1	75.1	70	Y	-	-	27.1	Y	Y	Y
SHK_3	15	60.2	OZP Planned Dev	-	48.2	0	64.5	66.2	63.2	73.9	75.2	75.2	70	Y	-	-	27.0	Y	Y	Y
SHK_3	16	63.5	OZP Planned Dev	-	48.4	0	64.7	66.3	63.2	74	75.4	75.4	70	Y	-	-	27.0	Y	Y	Y
SHK_3	17	66.8	OZP Planned Dev	-	48.4	0	64.8	66.4	63.2	74.2	75.5	75.5	70	Y	-	-	27.1	Y	Y	Y
SHK_3	18	70.1	OZP Planned Dev	-	48.6	0	65	66.4	63.1	74.4	75.7	75.7	70	Y	-	-	27.1	Y	Y	Y
SHK_3	19	73.4	OZP Planned Dev	-	48.6	0	65.2	66.4	63.1	74.5	75.8	75.8	70	Y	-	-	27.2	Y	Y	Y
SHK_3	20	76.7	OZP Planned Dev	-	48.8	0	65.3	66.4	63	74.8	76	76.0	70	Y	-	-	27.2	Y	Y	Y
SHK_3	21	80	OZP Planned Dev	-	48.8	0	65.4	66.3	63	75.2	76.3	76.3	70	Y	-	-	27.5	Y	Y	Y
SHK_4	1	14	OZP Planned Dev	-	0	18.6	43	44.8	50.2	66.7	66.8	66.8	70	N	-	-	66.8	Y	N	N
SHK_4	2	17.3	OZP Planned Dev	-	0	19.5	44.2	46.8	51.7	66.7	66.9	66.9	70	N	-	-	66.9	Y	N	N
SHK_4	3	20.6	OZP Planned Dev	-	0	20.4	45.4	49	53.9	67.2	67.4	67.4	70	N	-	-	67.4	Y	N	N
SHK_4	4	23.9	OZP Planned Dev	-	0	21.1	46.8	51.4	57.6	68.3	68.8	68.8	70	N	-	-	68.8	Y	N	N
SHK_4	5	27.2	OZP Planned Dev	-	0	21.7	48.1	53.9	61.4	69.3	70.1	70.1	70	N	-	-	70.1	Y	N	N
SHK_4	6	30.5	OZP Planned Dev	-	0	22.4	49.3	56.1	62.3	69.7	70.6	70.6	70	Y	-	-	70.6	Y	Y	Y
SHK_4	7	33.8	OZP Planned Dev	-	0	23.2	50.5	58	62.4	70	70.9	70.9	70	Y	-	-	70.9	Y	Y	Y
SHK_4	8	37.1	OZP Planned Dev	-	0	24.1	51.7	60	62.5	70.3	71.4	71.4	70	Y	-	-	71.4	Y	Y	Y
SHK_4	9	40.4	OZP Planned Dev	-	0	24.9	52.8	61.3	62.5	71	72	72.0	70	Y	-	-	72.0	Y	Y	Y
SHK_4	10	43.7	OZP Planned Dev	-	0	25.9	53.9	62	62.5	71.4	72.4	72.4	70	Y	-	-	72.4	Y	Y	Y
SHK_4	11	47	OZP Planned Dev	-	0	26.9	54.8	62.6	62.5	71.8	72.8	72.8	70	Y	-	-	72.8	Y	Y	Y
SHK_4	12	50.3	OZP Planned Dev	-	0	28	55.6	63	62.5	72.1	73.1	73.1	70	Y	-	-	73.1	Y	Y	Y
SHK_4	13	53.6	OZP Planned Dev	-	0	29.2	56.3	63.1	62.5	72.2	73.2	73.2	70	Y	-	-	73.2	Y	Y	Y
SHK_4	14	56.9	OZP Planned Dev	-	0	30.4	56.9	63.3	62.4	72.2	73.2	73.2	70	Y	-	-	73.2	Y	Y	Y
SHK_4	15	60.2	OZP Planned Dev	-	0	31.8	57.5	63.2	62.4	72.3	73.3	73.3	70	Y	-	-	73.3	Y	Y	Y
SHK_4	16	63.5	OZP Planned Dev	-	0	33.5	58.2	63.2	62.3	72.4	73.4	73.4	70	Y	-	-	73.4	Y	Y	Y
SHK_4	17	66.8	OZP Planned Dev	-	0	35.9	58.3	63.2	62.3	72.5	73.4	73.4	70	Y	-	-	73.4	Y	Y	Y
SHK_4	18	70.1	OZP Planned Dev	-	0	37.6	58.8	63.2	62.3	72.6	73.5	73.5	70	Y	-	-	73.5	Y	Y	Y
SHK_4	19	73.4	OZP Planned Dev	-	0	39.7	59.2	63.2	62.2	72.7	73.7	73.7	70	Y	-	-	73.7	Y	Y	Y
SHK_4	20	76.7	OZP Planned Dev	-	0	40.8	59.6	63.1	62.2	72.9	73.8	73.8	70	Y	-	-	73.8	Y	Y	Y
SHK_4	21	80	OZP Planned Dev	-	0	41.3	59.8	63.1	62.1	73.2	74.1	74.1	70	Y	-	-	74.1	Y	Y	Y
SHK_5	1	14	OZP Planned Dev	-	28.8	16.8	57.6	46.2	32.2	66.1	66.7	66.7	70	N	-	-	37.9	Y	N	N
SHK_5	2	17.3	OZP Planned Dev	-	30.1	17.6	58.9	47.7	34.9	66.1	66.9	66.9	70	N	-	-	36.8	Y	N	N
SHK_5	3	20.6	OZP Planned Dev	-	31.7	18.4	59.9	49.6	38.4	66.2	67.2	67.2	70	N	-	-	35.5	Y	N	N
SHK_5	4	23.9	OZP Planned Dev	-	33.9	19.2	60.6	51.6	43.3	66.4	67.5	67.5	70	N	-	-	33.6	Y	N	N
SHK_5	5	27.2	OZP Planned Dev	-	37.1	20.1	61.7	53.7	50.8	66.7	68.1	68.1	70	N	-	-	31.0	Y	N	N
SHK_5	6	30.5	OZP Planned Dev	-	41.4	21	63.1	56	55	66.9	68.9	68.9	70	N	-	-	27.5	Y	N	N
SHK_5	7	33.8	OZP Planned Dev	-	43.3	21.8	63.8	58.1	55.7	67.2	69.4	69.4	70	N	-	-	26.1	Y	N	N
SHK_5	8	37.1	OZP Planned Dev	-	44	22.8	64.1	60	55.7	67.5	69.8	69.8	70	N	-	-	25.8	Y	N	N
SHK_5	9	40.4	OZP Planned Dev	-	44.2	23.9	64.3	61.8	55.6	67.8	70.3	70.3	70	N	-	-	26.1	Y	N	N
SHK_5	10	43.7	OZP Planned Dev	-	44.3	24.9	64.4	63	55.5	68	70.6	70.6	70	Y	-	-	26.3	Y	Y	Y
SHK_5	11	47	OZP Planned Dev	-	44.4	26	64.5	64	55.3	68.2	70.9	70.9	70	Y	-	-	26.5	Y	Y	Y
SHK_5	12	50.3	OZP Planned Dev	-	44.5	27.1	64.6	64.8	55.2	68.5	71.3	71.3	70	Y	-	-	26.8	Y	Y	Y
SHK_5	13	53.6	OZP Planned Dev	-	44.5	28.3	64.7	65.4	55	68.9	71.6	71.6	70	Y	-	-	27.1	Y	Y	Y
SHK_5	14	56.9	OZP Planned Dev	-	44.5	29.4	64.8	65.7	54.9	69.3	71.9	71.9	70	Y	-	-	27.4	Y	Y	Y
SHK_5	15	60.2	OZP Planned Dev	-	44.6	30.8	64.9	65.9	54.7	69.7	72.2	72.2	70	Y	-	-	27.6	Y	Y	Y
SHK_5	16	63.5	OZP Planned Dev	-	44.6	32.4	65	66	54.6	70.1	72.5	72.5	70	Y	-	-	27.9	Y	Y	Y
SHK_5	17	66.8	OZP Planned Dev	-	44.7	34.1	65.1	66.1	54.4	70.6	72.8	72.8	70	Y	-	-	28.1	Y	Y	Y
SHK_5	18	70.1	OZP Planned Dev	-	44.7	36.3	65.2	66.1	54.3	71	73.1	73.1	70	Y	-	-	28.4	Y	Y	Y
SHK_5	19	73.4	OZP Planned Dev	-	44.8	38.4	65.3	66.1	54.1	71.3	73.3	73.3	70	Y	-	-	28.5	Y	Y	Y
SHK_5	20	76.7	OZP Planned Dev	-	44.7	40.8	65.4	66.1	54	71.7	73.6	73.6	70	Y	-	-	28.9	Y	Y	Y
SHK_5	21	80	OZP Planned Dev	-	44.7	42.5	65.5	66.1	53.9	72.2	73.9	73.9	70	Y	-	-	29.2	Y	Y	Y
SHK_6	1	14	OZP Planned Dev	-	36.8	17.1	60.9	51.4	0	69.1	69.8	69.8	70	N	-	-	33.0	Y	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
SHK_6	2	17.3	OZP Planned Dev	-	37.3	18	61.9	51.9	0	69.2	70	70.0	70	N	-	-	32.7	Y	N	N
SHK_6	3	20.6	OZP Planned Dev	-	38.3	18.9	62.6	52.5	0	69.1	70.1	70.1	70	N	-	-	31.8	Y	N	N
SHK_6	4	23.9	OZP Planned Dev	-	39.7	19.7	63	53.4	0	69.2	70.2	70.2	70	N	-	-	30.5	Y	N	N
SHK_6	5	27.2	OZP Planned Dev	-	41.5	20.5	63.5	54.7	0	69.2	70.4	70.4	70	N	-	-	28.9	Y	N	N
SHK_6	6	30.5	OZP Planned Dev	-	44.2	21.4	64.4	56.1	0	69.4	70.7	70.7	70	Y	-	-	26.5	Y	Y	Y
SHK_6	7	33.8	OZP Planned Dev	-	45.7	22.3	65.1	57.9	0	69.4	71	71.0	70	Y	-	-	25.3	Y	Y	Y
SHK_6	8	37.1	OZP Planned Dev	-	46.1	23.3	65.4	59.6	0	69.6	71.3	71.3	70	Y	-	-	25.2	Y	Y	Y
SHK_6	9	40.4	OZP Planned Dev	-	46.2	24.2	65.5	61.2	0	69.6	71.4	71.5	70	Y	-	-	25.3	Y	Y	Y
SHK_6	10	43.7	OZP Planned Dev	-	46.3	25.2	65.5	62.5	0	69.7	71.7	71.7	70	Y	-	-	25.4	Y	Y	Y
SHK_6	11	47	OZP Planned Dev	-	46.3	26.3	65.6	63.5	0	69.8	71.9	71.9	70	Y	-	-	25.6	Y	Y	Y
SHK_6	12	50.3	OZP Planned Dev	-	46.3	27.3	65.7	64.4	0	69.9	72.1	72.1	70	Y	-	-	25.8	Y	Y	Y
SHK_6	13	53.6	OZP Planned Dev	-	46.4	28.5	65.7	65	0	70.2	72.4	72.4	70	Y	-	-	26.0	Y	Y	Y
SHK_6	14	56.9	OZP Planned Dev	-	46.4	29.8	65.8	65.4	0	70.4	72.6	72.6	70	Y	-	-	26.2	Y	Y	Y
SHK_6	15	60.2	OZP Planned Dev	-	46.4	31.1	65.8	65.7	0	70.7	72.9	72.9	70	Y	-	-	26.5	Y	Y	Y
SHK_6	16	63.5	OZP Planned Dev	-	46.5	32.6	65.9	65.8	0	71	73.1	73.1	70	Y	-	-	26.6	Y	Y	Y
SHK_6	17	66.8	OZP Planned Dev	-	46.5	34.2	65.9	65.9	0	71.4	73.3	73.3	70	Y	-	-	26.8	Y	Y	Y
SHK_6	18	70.1	OZP Planned Dev	-	46.5	36.4	66	66	0	71.7	73.6	73.6	70	Y	-	-	27.1	Y	Y	Y
SHK_6	19	73.4	OZP Planned Dev	-	46.6	39.2	66.1	66	0	72	73.8	73.8	70	Y	-	-	27.2	Y	Y	Y
SHK_6	20	76.7	OZP Planned Dev	-	46.6	41.7	66.1	66	0	72.3	74	74.0	70	Y	-	-	27.4	Y	Y	Y
SHK_6	21	80	OZP Planned Dev	-	46.6	43.3	66.2	66	0	72.7	74.3	74.3	70	Y	-	-	27.7	Y	Y	Y
SHK_7	1	14	OZP Planned Dev	-	39.3	17	62.2	54	39.4	71.6	72.2	72.2	70	Y	-	-	32.9	Y	Y	Y
SHK_7	2	17.3	OZP Planned Dev	-	40.1	17.8	63.3	54.3	41.6	71.6	72.3	72.3	70	Y	-	-	32.2	Y	Y	Y
SHK_7	3	20.6	OZP Planned Dev	-	41.6	18.7	64.2	54.8	44.3	71.6	72.4	72.4	70	Y	-	-	30.8	Y	Y	Y
SHK_7	4	23.9	OZP Planned Dev	-	43.7	19.6	64.6	55.3	47.7	71.6	72.5	72.5	70	Y	-	-	28.8	Y	Y	Y
SHK_7	5	27.2	OZP Planned Dev	-	45	20.6	64.9	56.3	52.7	71.6	72.6	72.6	70	Y	-	-	27.6	Y	Y	Y
SHK_7	6	30.5	OZP Planned Dev	-	45.8	21.4	65.2	57.6	57.4	71.6	72.8	72.8	70	Y	-	-	27.0	Y	Y	Y
SHK_7	7	33.8	OZP Planned Dev	-	46.2	22.2	65.5	59.3	58.4	71.6	72.9	72.9	70	Y	-	-	26.7	Y	Y	Y
SHK_7	8	37.1	OZP Planned Dev	-	46.4	23.1	65.7	60.9	58.6	71.6	73	73.0	70	Y	-	-	26.6	Y	Y	Y
SHK_7	9	40.4	OZP Planned Dev	-	46.5	24.1	65.7	62.4	58.6	71.6	73.2	73.2	70	Y	-	-	26.7	Y	Y	Y
SHK_7	10	43.7	OZP Planned Dev	-	46.6	25	65.8	63.5	58.5	71.6	73.3	73.3	70	Y	-	-	26.7	Y	Y	Y
SHK_7	11	47	OZP Planned Dev	-	46.7	26.1	65.9	64.6	58.5	71.6	73.4	73.4	70	Y	-	-	26.7	Y	Y	Y
SHK_7	12	50.3	OZP Planned Dev	-	46.7	27.1	65.9	65.4	58.5	71.6	73.5	73.6	70	Y	-	-	26.9	Y	Y	Y
SHK_7	13	53.6	OZP Planned Dev	-	46.7	28.3	65.9	66	58.4	71.7	73.7	73.7	70	Y	-	-	27.0	Y	Y	Y
SHK_7	14	56.9	OZP Planned Dev	-	46.8	29.4	65.9	66.4	58.4	71.9	73.9	73.9	70	Y	-	-	27.1	Y	Y	Y
SHK_7	15	60.2	OZP Planned Dev	-	46.8	30.8	66	66.7	58.3	72	74	74.0	70	Y	-	-	27.2	Y	Y	Y
SHK_7	16	63.5	OZP Planned Dev	-	46.9	32.2	66	66.8	58.3	72.3	74.2	74.2	70	Y	-	-	27.3	Y	Y	Y
SHK_7	17	66.8	OZP Planned Dev	-	46.9	33.8	66	66.9	58.2	72.5	74.3	74.4	70	Y	-	-	27.5	Y	Y	Y
SHK_7	18	70.1	OZP Planned Dev	-	46.9	35.5	66	66.9	58.2	72.6	74.5	74.5	70	Y	-	-	27.6	Y	Y	Y
SHK_7	19	73.4	OZP Planned Dev	-	47	38	66.1	66.9	58.1	72.8	74.6	74.6	70	Y	-	-	27.6	Y	Y	Y
SHK_7	20	76.7	OZP Planned Dev	-	47	40.3	66.1	67	58.1	73.1	74.8	74.8	70	Y	-	-	27.8	Y	Y	Y
SHK_7	21	80	OZP Planned Dev	-	47	42.5	66.1	66.9	58	73.4	75	75.0	70	Y	-	-	28.0	Y	Y	Y
SHK_8	1	14	OZP Planned Dev	-	41	17.1	63.7	55.2	38.6	73.4	73.9	73.9	70	Y	-	-	32.9	Y	Y	Y
SHK_8	2	17.3	OZP Planned Dev	-	41.7	18	64.9	55.5	40.8	73.4	74.1	74.1	70	Y	-	-	32.4	Y	Y	Y
SHK_8	3	20.6	OZP Planned Dev	-	43.3	18.9	65.8	55.9	43.5	73.4	74.1	74.2	70	Y	-	-	30.9	Y	Y	Y
SHK_8	4	23.9	OZP Planned Dev	-	45.5	19.8	66.3	56.4	46.9	73.3	74.2	74.2	70	Y	-	-	28.7	Y	Y	Y
SHK_8	5	27.2	OZP Planned Dev	-	46.6	20.8	66.6	57.2	52.1	73.3	74.3	74.3	70	Y	-	-	27.7	Y	Y	Y
SHK_8	6	30.5	OZP Planned Dev	-	47.1	21.6	66.8	58.3	57.3	73.3	74.4	74.4	70	Y	-	-	27.3	Y	Y	Y
SHK_8	7	33.8	OZP Planned Dev	-	47.4	22.4	67	59.9	58.9	73.3	74.5	74.5	70	Y	-	-	27.1	Y	Y	Y
SHK_8	8	37.1	OZP Planned Dev	-	47.5	23.3	67.1	61.4	59	73.3	74.6	74.6	70	Y	-	-	27.1	Y	Y	Y
SHK_8	9	40.4	OZP Planned Dev	-	47.6	24.2	67.2	62.9	59	73.3	74.6	74.7	70	Y	-	-	27.1	Y	Y	Y
SHK_8	10	43.7	OZP Planned Dev	-	47.6	25.2	67.2	64	59	73.3	74.7	74.8	70	Y	-	-	27.2	Y	Y	Y
SHK_8	11	47	OZP Planned Dev	-	47.6	26.2	67.3	65	58.9	73.2	74.8	74.8	70	Y	-	-	27.2	Y	Y	Y
SHK_8	12	50.3	OZP Planned Dev	-	47.7	27.1	67.3	65.8	58.8	73.2	74.9	74.9	70	Y	-	-	27.2	Y	Y	Y
SHK_8	13	53.6	OZP Planned Dev	-	47.7	28.2	67.3	66.4	58.7	73.4	75.1	75.1	70	Y	-	-	27.4	Y	Y	Y
SHK_8	14	56.9	OZP Planned Dev	-	47.7	29.4	67.3	66.8	58.7	73.4	75.2	75.2	70	Y	-	-	27.5	Y	Y	Y
SHK_8	15	60.2	OZP Planned Dev	-	47.8	30.8	67.4	67	58.6	73.6	75.3	75.3	70	Y	-	-	27.5	Y	Y	Y
SHK_8	16	63.5	OZP Planned Dev	-	47.8	32.1	67.4	67.2	58.5	73.8	75.5	75.5	70	Y	-	-	27.7	Y	Y	Y
SHK_8	17	66.8	OZP Planned Dev	-	47.8	33.7	67.4	67.2	58.5	74	75.6	75.6	70	Y	-	-	27.8	Y	Y	Y
SHK_8	18	70.1	OZP Planned Dev	-	47.8	35.4	67.4	67.3	58.4	74.1	75.7	75.7	70	Y	-	-	27.9	Y	Y	Y
SHK_8	19	73.4	OZP Planned Dev	-	47.9	37.7	67.5	67.3	58.3	74.3	75.8	75.8	70	Y	-	-	27.9	Y	Y	Y
SHK_8	20	76.7	OZP Planned Dev	-	47.9	40	67.5	67.3	58.2	74.6	76	76.0	70	Y	-	-	28.1	Y	Y	Y
SHK_8	21	80	OZP Planned Dev	-	47.9	42.4	67.5	67.3	58.2	74.8	76.2	76.2	70	Y	-	-	28.3	Y	Y	Y
SHK_9	1	14	OZP Planned Dev	-	36.7	0	64.3	50.6	10.3	74.5	74.9	74.9	70	Y	-	-	38.2	Y	Y	Y
SHK_9	2	17.3	OZP Planned Dev	-	39.6	0	66.1	51.8	11.3	74.5	75.1	75.1	70	Y	-	-	35.5	Y	Y	Y
SHK_9	3	20.6	OZP Planned Dev	-	43.7	0	67.4	53.5	12.2	74.4	75.2	75.2	70	Y	-	-	31.5	Y	Y	Y
SHK_9	4	23.9	OZP Planned Dev	-	46.5	0	67.9	55.9	13.4	74.4	75.4	75.4	70	Y	-	-	28.9	Y	Y	Y
SHK_9	5	27.2	OZP Planned Dev	-	47.8	0	68.1	57.8	14.5	74.5	75.5	75.5	70	Y	-	-	27.7	Y	Y	Y
SHK_9	6	30.5	OZP Planned Dev	-	48.3	0	68.3	58.5	15.8	74.6	75.6	75.6	70	Y	-	-	27.3	Y	Y	Y
SHK_9	7	33.8	OZP Planned Dev	-	48.6	0	68.4	59.1	17	74.6	75.7	75.7	70	Y	-	-	27.1	Y	Y	Y
SHK_9	8	37.1	OZP Planned Dev	-	48.7	0	68.5	59.7	18.2	74.6	75.7	75.7	70	Y	-	-	27.0	Y	Y	Y
SHK_9	9	40.4	OZP Planned Dev	-	48.8	0	68.5	60.6	19.3	74.6	75.7	75.7	70	Y	-	-	26.9	Y	Y	Y
SHK_9	10	43.7	OZP Planned Dev	-	48.8	0	68.6	61.5	20.6	74.5	75.6	75.6	70	Y	-	-	26.8	Y	Y	Y
SHK_9	11	47	OZP Planned Dev	-	48.9	0	68.6	62.8	21.9	74.5	75.7	75.8	70	Y	-	-	26.9	Y	Y	Y
SHK_9	12	50.3	OZP Planned Dev	-	49	0	68.6	63.5	23.3	74.5	75.7	75.7	70	Y	-	-	26.7	Y	Y	Y
SHK_9	13	53.6	OZP Planned Dev	-	49.1	0	68.6	64.5	24.8	74.5	75.8	75.8	70	Y	-	-	26.7	Y	Y	Y
SHK_9	14	56.9	OZP Planned Dev	-	49.1	0	68.7	65	26.6	74.6	76	76.0	70	Y	-	-	26.9	Y	Y	Y
SHK_9	15	60.2	OZP Planned Dev	-	49.2	0	68.7	65.5	28.8	74.7	76.1	76.1	70	Y	-	-	26.9	Y	Y	Y
SHK_9	16	63.5	OZP Planned Dev	-	49.2	0	68.7	65.8	31.3	74.9	76.2	76.2	70	Y	-	-	27.0	Y	Y	Y
SHK_9	17	66.8	OZP Planned Dev	-	49.2	0	68.7	65.9	34.1	75	76.4	76.4	70	Y	-	-	27.2	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
SHK_9	18	70.1	OZP Planned Dev	-	49.2	0	68.6	66	37	75.1	76.4	76.4	70	Y	-	-	27.2	Y	Y	Y
SHK_9	19	73.4	OZP Planned Dev	-	49.2	0	68.6	66.1	38.1	75.2	76.5	76.5	70	Y	-	-	27.3	Y	Y	Y
SHK_9	20	76.7	OZP Planned Dev	-	49.3	0	68.6	66.2	38.5	75.3	76.6	76.6	70	Y	-	-	27.3	Y	Y	Y
SHK_9	21	80	OZP Planned Dev	-	49.2	0	68.6	66.2	38.6	75.3	76.6	76.6	70	Y	-	-	27.4	Y	Y	Y
SHK_10	1	14	OZP Planned Dev	-	36.3	0	63.1	50.7	36.6	72.4	73	73.0	70	Y	-	-	36.7	Y	Y	Y
SHK_10	2	17.3	OZP Planned Dev	-	38.8	0	65.3	51.8	39.1	72.5	73.3	73.3	70	Y	-	-	34.5	Y	Y	Y
SHK_10	3	20.6	OZP Planned Dev	-	42.5	0	67.1	53	42.7	72.6	73.7	73.7	70	Y	-	-	31.2	Y	Y	Y
SHK_10	4	23.9	OZP Planned Dev	-	45.6	0	67.7	54.8	47	72.6	73.8	73.9	70	Y	-	-	28.3	Y	Y	Y
SHK_10	5	27.2	OZP Planned Dev	-	47.3	0	68	56.7	49.6	72.7	74.1	74.1	70	Y	-	-	26.8	Y	Y	Y
SHK_10	6	30.5	OZP Planned Dev	-	48	0	68.2	57.9	52	72.9	74.3	74.3	70	Y	-	-	26.3	Y	Y	Y
SHK_10	7	33.8	OZP Planned Dev	-	48.3	0	68.4	58.7	54.3	73.1	74.6	74.6	70	Y	-	-	26.3	Y	Y	Y
SHK_10	8	37.1	OZP Planned Dev	-	48.5	0	68.5	59.6	55.2	73.2	74.7	74.7	70	Y	-	-	26.2	Y	Y	Y
SHK_10	9	40.4	OZP Planned Dev	-	48.6	0	68.6	60.6	55.5	73.3	74.8	74.8	70	Y	-	-	26.2	Y	Y	Y
SHK_10	10	43.7	OZP Planned Dev	-	48.8	0	68.7	61.6	55.6	73.3	74.8	74.9	70	Y	-	-	26.1	Y	Y	Y
SHK_10	11	47	OZP Planned Dev	-	48.9	0	68.8	62.6	55.5	73.2	74.8	74.9	70	Y	-	-	26.0	Y	Y	Y
SHK_10	12	50.3	OZP Planned Dev	-	49	0	68.8	63.5	55.5	73.2	74.9	75.0	70	Y	-	-	26.0	Y	Y	Y
SHK_10	13	53.6	OZP Planned Dev	-	49.1	0	68.8	64.3	55.4	73.3	75.1	75.1	70	Y	-	-	26.0	Y	Y	Y
SHK_10	14	56.9	OZP Planned Dev	-	49.2	0	68.8	64.9	55.3	73.3	75.1	75.1	70	Y	-	-	25.9	Y	Y	Y
SHK_10	15	60.2	OZP Planned Dev	-	49.2	0	68.8	65.5	55.3	73.4	75.2	75.2	70	Y	-	-	26.0	Y	Y	Y
SHK_10	16	63.5	OZP Planned Dev	-	49.3	0	68.8	65.9	55.2	73.6	75.4	75.4	70	Y	-	-	26.1	Y	Y	Y
SHK_10	17	66.8	OZP Planned Dev	-	49.3	0	68.8	66.2	55.2	73.8	75.6	75.6	70	Y	-	-	26.3	Y	Y	Y
SHK_10	18	70.1	OZP Planned Dev	-	49.3	0	68.7	66.4	55.1	73.8	75.6	75.6	70	Y	-	-	26.3	Y	Y	Y
SHK_10	19	73.4	OZP Planned Dev	-	49.4	0	68.7	66.6	55	74.1	75.8	75.8	70	Y	-	-	26.4	Y	Y	Y
SHK_10	20	76.7	OZP Planned Dev	-	49.4	0	68.7	66.7	54.9	74.3	76	76.0	70	Y	-	-	26.6	Y	Y	Y
SHK_10	21	80	OZP Planned Dev	-	49.3	0	68.6	66.7	54.9	74.4	76	76.0	70	Y	-	-	26.7	Y	Y	Y
SHK_11	1	14	OZP Planned Dev	-	38.6	0	60.5	48.9	0	66.4	67.4	67.4	70	N	-	-	28.8	Y	N	N
SHK_11	2	17.3	OZP Planned Dev	-	40.2	0	63.8	50.2	0	66.5	68.5	68.5	70	N	-	-	28.3	Y	N	N
SHK_11	3	20.6	OZP Planned Dev	-	42.5	0	66.5	51.4	0	66.8	69.7	69.7	70	N	-	-	27.2	Y	N	N
SHK_11	4	23.9	OZP Planned Dev	-	45.2	0	67.2	53.1	0	67.1	70.3	70.3	70	N	-	-	25.1	Y	N	N
SHK_11	5	27.2	OZP Planned Dev	-	47.1	0	67.6	55	0	67.6	70.7	70.7	70	Y	-	-	23.6	Y	Y	Y
SHK_11	6	30.5	OZP Planned Dev	-	47.9	0	67.8	56.4	0	68.3	71.2	71.3	70	Y	-	-	23.4	Y	Y	Y
SHK_11	7	33.8	OZP Planned Dev	-	48.3	0	68.1	57.1	0	69.1	71.8	71.8	70	Y	-	-	23.5	Y	Y	Y
SHK_11	8	37.1	OZP Planned Dev	-	48.5	0	68.3	57.7	0	69.5	72.1	72.1	70	Y	-	-	23.6	Y	Y	Y
SHK_11	9	40.4	OZP Planned Dev	-	48.7	0	68.4	58.3	0	69.8	72.3	72.4	70	Y	-	-	23.7	Y	Y	Y
SHK_11	10	43.7	OZP Planned Dev	-	48.8	0	68.5	59	0	69.9	72.5	72.5	70	Y	-	-	23.7	Y	Y	Y
SHK_11	11	47	OZP Planned Dev	-	49	0	68.6	59.7	0	70	72.6	72.6	70	Y	-	-	23.6	Y	Y	Y
SHK_11	12	50.3	OZP Planned Dev	-	49.2	0	68.7	60.4	0	70.1	72.7	72.7	70	Y	-	-	23.5	Y	Y	Y
SHK_11	13	53.6	OZP Planned Dev	-	49.3	0	68.7	61.2	0	70.1	72.8	72.8	70	Y	-	-	23.5	Y	Y	Y
SHK_11	14	56.9	OZP Planned Dev	-	49.4	0	68.7	61.8	0	70.3	72.9	72.9	70	Y	-	-	23.5	Y	Y	Y
SHK_11	15	60.2	OZP Planned Dev	-	49.5	0	68.8	62.6	0	70.5	73.1	73.1	70	Y	-	-	23.6	Y	Y	Y
SHK_11	16	63.5	OZP Planned Dev	-	49.6	0	68.8	63.2	0	70.7	73.3	73.3	70	Y	-	-	23.7	Y	Y	Y
SHK_11	17	66.8	OZP Planned Dev	-	49.7	0	68.8	63.7	0	71	73.5	73.5	70	Y	-	-	23.8	Y	Y	Y
SHK_11	18	70.1	OZP Planned Dev	-	49.7	0	68.8	64.1	0	71.4	73.8	73.8	70	Y	-	-	24.1	Y	Y	Y
SHK_11	19	73.4	OZP Planned Dev	-	49.7	0	68.8	64.4	0	71.5	73.9	73.9	70	Y	-	-	24.2	Y	Y	Y
SHK_11	20	76.7	OZP Planned Dev	-	49.7	0	68.8	64.6	0	71.8	74.1	74.1	70	Y	-	-	24.4	Y	Y	Y
SHK_11	21	80	OZP Planned Dev	-	49.8	0	68.8	64.8	0	72.3	74.4	74.4	70	Y	-	-	24.6	Y	Y	Y
SHK_12	1	14	OZP Planned Dev	-	34	0	61.4	49.2	0	69	69.7	69.7	70	N	-	-	35.7	Y	N	N
SHK_12	2	17.3	OZP Planned Dev	-	37.4	0	63.9	50.2	0	69.1	70.3	70.3	70	N	-	-	32.9	Y	N	N
SHK_12	3	20.6	OZP Planned Dev	-	40.5	0	66.4	51.3	0	69.2	71.1	71.1	70	Y	-	-	30.6	Y	Y	Y
SHK_12	4	23.9	OZP Planned Dev	-	43.8	0	67.1	52.5	0	69.4	71.5	71.5	70	Y	-	-	27.7	Y	Y	Y
SHK_12	5	27.2	OZP Planned Dev	-	46.1	0	67.5	54	0	69.5	71.7	71.7	70	Y	-	-	25.6	Y	Y	Y
SHK_12	6	30.5	OZP Planned Dev	-	47.1	0	67.8	55.6	0	69.8	72	72.1	70	Y	-	-	25.0	Y	Y	Y
SHK_12	7	33.8	OZP Planned Dev	-	47.6	0	68.1	56.5	0	70.2	72.4	72.4	70	Y	-	-	24.8	Y	Y	Y
SHK_12	8	37.1	OZP Planned Dev	-	47.8	0	68.3	57.2	0	70.6	72.7	72.8	70	Y	-	-	25.0	Y	Y	Y
SHK_12	9	40.4	OZP Planned Dev	-	48	0	68.5	57.9	0	70.8	73	73.0	70	Y	-	-	25.0	Y	Y	Y
SHK_12	10	43.7	OZP Planned Dev	-	48.2	0	68.6	58.7	0	70.9	73.1	73.1	70	Y	-	-	24.9	Y	Y	Y
SHK_12	11	47	OZP Planned Dev	-	48.4	0	68.7	59.5	0	70.9	73.1	73.1	70	Y	-	-	24.7	Y	Y	Y
SHK_12	12	50.3	OZP Planned Dev	-	48.6	0	68.7	60.4	0	71	73.3	73.3	70	Y	-	-	24.7	Y	Y	Y
SHK_12	13	53.6	OZP Planned Dev	-	48.7	0	68.7	61.1	0	71	73.3	73.3	70	Y	-	-	24.6	Y	Y	Y
SHK_12	14	56.9	OZP Planned Dev	-	48.9	0	68.8	62	0	71.1	73.4	73.4	70	Y	-	-	24.5	Y	Y	Y
SHK_12	15	60.2	OZP Planned Dev	-	48.9	0	68.8	62.5	0	71.2	73.5	73.5	70	Y	-	-	24.6	Y	Y	Y
SHK_12	16	63.5	OZP Planned Dev	-	48.9	0	68.8	63.2	0	71.2	73.6	73.6	70	Y	-	-	24.7	Y	Y	Y
SHK_12	17	66.8	OZP Planned Dev	-	49	0	68.8	63.8	0	71.3	73.7	73.7	70	Y	-	-	24.7	Y	Y	Y
SHK_12	18	70.1	OZP Planned Dev	-	49	0	68.8	64.2	0	71.5	73.8	73.9	70	Y	-	-	24.9	Y	Y	Y
SHK_12	19	73.4	OZP Planned Dev	-	49.1	0	68.8	64.6	0	71.6	74	74.0	70	Y	-	-	24.9	Y	Y	Y
SHK_12	20	76.7	OZP Planned Dev	-	49	0	68.8	64.9	0	71.9	74.2	74.2	70	Y	-	-	25.2	Y	Y	Y
SHK_12	21	80	OZP Planned Dev	-	49	0	68.8	65.1	0	72.1	74.3	74.4	70	Y	-	-	25.4	Y	Y	Y
SHK_13	1	20.7	OZP Planned Dev	-	39.3	0	66.5	51.1	41.9	66.5	69.6	69.6	70	N	-	-	30.3	Y	N	N
SHK_13	2	24	OZP Planned Dev	-	42.1	0	67.1	52	45.1	67.2	70.2	70.3	70	N	-	-	28.2	Y	N	N
SHK_13	3	27.3	OZP Planned Dev	-	44.8	0	67.5	53.2	47.6	68	70.9	70.9	70	Y	-	-	26.1	Y	Y	Y
SHK_13	4	30.6	OZP Planned Dev	-	46.2	0	67.9	54.4	49.1	68.4	71.3	71.3	70	Y	-	-	25.1	Y	Y	Y
SHK_13	5	33.9	OZP Planned Dev	-	47	0	68.2	55.5	50	68.7	71.6	71.6	70	Y	-	-	24.6	Y	Y	Y
SHK_13	6	37.2	OZP Planned Dev	-	47.6	0	68.5	56.3	50.6	69.2	72	72.0	70	Y	-	-	24.4	Y	Y	Y
SHK_13	7	40.5	OZP Planned Dev	-	48	0	68.7	57	51	69.6	72.3	72.3	70	Y	-	-	24.3	Y	Y	Y
SHK_13	8	43.8	OZP Planned Dev	-	48.2	0	68.8	57.9	51.2	69.8	72.5	72.6	70	Y	-	-	24.4	Y	Y	Y
SHK_13	9	47.1	OZP Planned Dev	-	48.4	0	68.9	58.8	51.3	70	72.7	72.7	70	Y	-	-	24.3	Y	Y	Y
SHK_13	10	50.4	OZP Planned Dev	-	48.6	0	68.9	59.7	51.3	70.1	72.8	72.8	70	Y	-	-	24.2	Y	Y	Y
SHK_13	11	53.7	OZP Planned Dev	-	48.8	0	69	60.6	51.2	70.1	72.9	72.9	70	Y	-	-	24.1	Y	Y	Y
SHK_13	12	57	OZP Planned Dev	-	48.9	0	69	61.3	51.2	70.2	73	73.0	70	Y	-	-	24.1	Y	Y	Y

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
SHK_13	13	60.3	OZP Planned Dev	-	49	0	69	62	51.1	70.3	73.1	73.1	70	Y	-	-	24.1	Y	Y	Y
SHK_13	14	63.6	OZP Planned Dev	-	49	0	69	62.6	51	70.3	73.2	73.2	70	Y	-	-	24.2	Y	Y	Y
SHK_13	15	66.9	OZP Planned Dev	-	49.1	0	69.1	63.1	51	70.4	73.2	73.3	70	Y	-	-	24.2	Y	Y	Y
SHK_13	16	70.2	OZP Planned Dev	-	49.1	0	69	63.7	50.9	70.5	73.3	73.4	70	Y	-	-	24.3	Y	Y	Y
SHK_13	17	73.5	OZP Planned Dev	-	49.1	0	69	64.1	50.9	70.6	73.4	73.4	70	Y	-	-	24.3	Y	Y	Y
SHK_13	18	76.8	OZP Planned Dev	-	49.2	0	69	64.4	50.8	70.7	73.5	73.5	70	Y	-	-	24.3	Y	Y	Y
SHK_13	19	80.1	OZP Planned Dev	-	49.2	0	69	64.7	50.8	70.9	73.7	73.7	70	Y	-	-	24.5	Y	Y	Y
SHK_14	1	14	OZP Planned Dev	-	34.6	0	62.8	49.2	37	64.6	66.9	66.9	70	N	-	-	32.3	Y	N	N
SHK_14	2	17.3	OZP Planned Dev	-	36.2	0	64.7	49.9	38.9	64.9	67.9	67.9	70	N	-	-	31.7	Y	N	N
SHK_14	3	20.6	OZP Planned Dev	-	38.4	0	66.1	50.7	41.3	65.1	68.7	68.7	70	N	-	-	30.3	Y	N	N
SHK_14	4	23.9	OZP Planned Dev	-	40.9	0	66.7	51.4	44.3	65.7	69.3	69.4	70	N	-	-	28.5	Y	N	N
SHK_14	5	27.2	OZP Planned Dev	-	43.6	0	67.2	52.3	47	66.5	70	70.0	70	N	-	-	26.4	Y	N	N
SHK_14	6	30.5	OZP Planned Dev	-	45.3	0	67.6	53.4	48.3	67.2	70.5	70.5	70	Y	-	-	25.2	Y	Y	Y
SHK_14	7	33.8	OZP Planned Dev	-	46.4	0	68	54.5	49.3	67.6	70.9	71.0	70	Y	-	-	24.6	Y	Y	Y
SHK_14	8	37.1	OZP Planned Dev	-	47.1	0	68.3	55.4	49.9	68.1	71.3	71.3	70	Y	-	-	24.2	Y	Y	Y
SHK_14	9	40.4	OZP Planned Dev	-	47.6	0	68.5	56.2	50.3	68.5	71.6	71.6	70	Y	-	-	24.0	Y	Y	Y
SHK_14	10	43.7	OZP Planned Dev	-	47.9	0	68.6	57	50.5	68.9	71.9	71.9	70	Y	-	-	24.0	Y	Y	Y
SHK_14	11	47	OZP Planned Dev	-	48.2	0	68.7	57.7	50.7	69	72.1	72.1	70	Y	-	-	23.9	Y	Y	Y
SHK_14	12	50.3	OZP Planned Dev	-	48.4	0	68.8	58.6	50.7	69.3	72.3	72.3	70	Y	-	-	23.9	Y	Y	Y
SHK_14	13	53.6	OZP Planned Dev	-	48.5	0	68.8	59.4	50.7	69.3	72.3	72.3	70	Y	-	-	23.8	Y	Y	Y
SHK_14	14	56.9	OZP Planned Dev	-	48.7	0	68.8	60.2	50.6	69.4	72.4	72.4	70	Y	-	-	23.7	Y	Y	Y
SHK_14	15	60.2	OZP Planned Dev	-	48.8	0	68.9	60.9	50.6	69.4	72.5	72.5	70	Y	-	-	23.7	Y	Y	Y
SHK_14	16	63.5	OZP Planned Dev	-	48.8	0	68.9	61.5	50.6	69.5	72.6	72.6	70	Y	-	-	23.8	Y	Y	Y
SHK_14	17	66.8	OZP Planned Dev	-	48.9	0	68.9	62	50.5	69.5	72.6	72.7	70	Y	-	-	23.8	Y	Y	Y
SHK_14	18	70.1	OZP Planned Dev	-	48.9	0	68.8	62.5	50.4	69.6	72.7	72.8	70	Y	-	-	23.9	Y	Y	Y
SHK_14	19	73.4	OZP Planned Dev	-	48.9	0	68.8	63.1	50.4	69.7	72.8	72.8	70	Y	-	-	23.9	Y	Y	Y
SHK_14	20	76.7	OZP Planned Dev	-	49	0	68.8	63.5	50.3	69.9	72.9	72.9	70	Y	-	-	23.9	Y	Y	Y
SHK_14	21	80	OZP Planned Dev	-	49	0	68.8	63.8	50.3	70	73	73.0	70	Y	-	-	24.0	Y	Y	Y
SHK_15	1	14	OZP Planned Dev	-	52.6	0	62.2	46.9	0	55.8	63.2	63.6	70	N	-	-	11.0	Y	N	N
SHK_15	2	17.3	OZP Planned Dev	-	52.7	0	64.1	47.6	0	56.3	64.9	65.1	70	N	-	-	12.4	Y	N	N
SHK_15	3	20.6	OZP Planned Dev	-	52.8	0	65.6	48.2	0	56.9	66.2	66.4	70	N	-	-	13.6	Y	N	N
SHK_15	4	23.9	OZP Planned Dev	-	52.8	0	66.3	48.8	0	57.5	66.9	67.0	70	N	-	-	14.2	Y	N	N
SHK_15	5	27.2	OZP Planned Dev	-	53	0	66.8	49.5	0	58.1	67.4	67.6	70	N	-	-	14.6	Y	N	N
SHK_15	6	30.5	OZP Planned Dev	-	53.2	0	67.2	50.5	0	58.8	67.9	68.0	70	N	-	-	14.8	Y	N	N
SHK_15	7	33.8	OZP Planned Dev	-	53.4	0	67.6	51.3	0	59.5	68.3	68.5	70	N	-	-	15.1	Y	N	N
SHK_15	8	37.1	OZP Planned Dev	-	53.6	0	67.9	52.2	0	60.6	68.8	68.9	70	N	-	-	15.3	Y	N	N
SHK_15	9	40.4	OZP Planned Dev	-	53.7	0	68.2	53	0	61.4	69.1	69.2	70	N	-	-	15.5	Y	N	N
SHK_15	10	43.7	OZP Planned Dev	-	53.8	0	68.3	53.6	0	62.6	69.5	69.6	70	N	-	-	15.8	Y	N	N
SHK_15	11	47	OZP Planned Dev	-	53.9	0	68.4	54.3	0	63.3	69.7	69.8	70	N	-	-	15.9	Y	N	N
SHK_15	12	50.3	OZP Planned Dev	-	53.9	0	68.5	55.1	0	63.9	69.9	70.0	70	N	-	-	16.1	Y	N	N
SHK_15	13	53.6	OZP Planned Dev	-	54	0	68.5	55.6	0	64.2	70.1	70.2	70	N	-	-	16.2	Y	N	N
SHK_15	14	56.9	OZP Planned Dev	-	54	0	68.6	56.4	0	64.4	70.2	70.3	70	N	-	-	16.3	Y	N	N
SHK_15	15	60.2	OZP Planned Dev	-	54	0	68.6	57.1	0	64.7	70.3	70.4	70	N	-	-	16.4	Y	N	N
SHK_15	16	63.5	OZP Planned Dev	-	54	0	68.6	57.6	0	64.8	70.3	70.4	70	N	-	-	16.4	Y	N	N
SHK_15	17	66.8	OZP Planned Dev	-	54	0	68.6	58.2	0	65	70.4	70.5	70	Y	-	-	16.5	Y	N	Y
SHK_15	18	70.1	OZP Planned Dev	-	54	0	68.6	58.5	0	65.2	70.5	70.6	70	Y	-	-	16.6	Y	Y	Y
SHK_15	19	73.4	OZP Planned Dev	-	54	0	68.6	59.1	0	65.4	70.6	70.7	70	Y	-	-	16.7	Y	Y	Y
SHK_15	20	76.7	OZP Planned Dev	-	54	0	68.6	59.7	0	65.6	70.7	70.8	70	Y	-	-	16.8	Y	Y	Y
SHK_15	21	80	OZP Planned Dev	-	54	0	68.5	60.1	0	65.9	70.8	70.9	70	Y	-	-	16.9	Y	Y	Y
SHK_16	1	23.7	OZP Planned Dev	-	57.5	0	13.9	22	0	36	36.2	57.6	70	N	-	-	0.1	N	N	N
SHK_16	2	27	OZP Planned Dev	-	60.5	0	13.9	22	0	36	36.2	60.5	70	N	-	-	0.0	N	N	N
SHK_16	3	30.3	OZP Planned Dev	-	61.3	0	13.9	22.1	0	36	36.2	61.3	70	N	-	-	0.0	N	N	N
SHK_16	4	33.6	OZP Planned Dev	-	61.4	0	13.9	22.1	0	36	36.2	61.4	70	N	-	-	0.0	N	N	N
SHK_16	5	36.9	OZP Planned Dev	-	61.3	0	13.9	22.1	0	36	36.2	61.3	70	N	-	-	0.0	N	N	N
SHK_16	6	40.2	OZP Planned Dev	-	61.2	0	13.9	22.1	0	36	36.2	61.2	70	N	-	-	0.0	N	N	N
SHK_16	7	43.5	OZP Planned Dev	-	61.1	0	13.9	22.1	0	36	36.2	61.1	70	N	-	-	0.0	N	N	N
SHK_16	8	46.8	OZP Planned Dev	-	60.9	0	13.9	22.4	0	36	36.2	60.9	70	N	-	-	0.0	N	N	N
SHK_16	9	50.1	OZP Planned Dev	-	60.8	0	13.9	22.7	0	36.2	36.4	60.8	70	N	-	-	0.0	N	N	N
SHK_16	10	53.4	OZP Planned Dev	-	60.6	0	13.9	23	0	36.4	36.6	60.7	70	N	-	-	0.1	N	N	N
SHK_16	11	56.7	OZP Planned Dev	-	60.5	0	13.8	23.5	0	36.7	37	60.6	70	N	-	-	0.1	N	N	N
SHK_16	12	60	OZP Planned Dev	-	60.3	0	13.8	24.3	0	37.3	37.5	60.4	70	N	-	-	0.1	N	N	N
SHK_16	13	63.3	OZP Planned Dev	-	60.2	0	14	25.2	0	38	38.2	60.2	70	N	-	-	0.0	N	N	N
SHK_16	14	66.6	OZP Planned Dev	-	60	0	14.2	26.2	0	38.8	39	60.1	70	N	-	-	0.1	N	N	N
SHK_16	15	69.9	OZP Planned Dev	-	59.9	0	14.4	27.2	0	39.7	39.9	59.9	70	N	-	-	0.0	N	N	N
SHK_16	16	73.2	OZP Planned Dev	-	59.7	0	14.6	28.2	0	40.7	40.9	59.8	70	N	-	-	0.1	N	N	N
SHK_16	17	76.5	OZP Planned Dev	-	59.6	0	14.6	29.3	0	41.7	42	59.6	70	N	-	-	0.0	N	N	N
SHK_16	18	79.8	OZP Planned Dev	-	59.4	0	14.7	30.4	0	42.8	43	59.5	70	N	-	-	0.1	N	N	N
SHK_17	1	23.7	OZP Planned Dev	-	58.9	0	0	0	0	47.5	47.5	59.2	70	N	-	-	0.3	N	N	N
SHK_17	2	27	OZP Planned Dev	-	64.1	0	0	0	0	47.9	47.9	64.2	70	N	-	-	0.1	N	N	N
SHK_17	3	30.3	OZP Planned Dev	-	64.7	0	0	0	0	48	48	64.8	70	N	-	-	0.1	N	N	N
SHK_17	4	33.6	OZP Planned Dev	-	64.5	0	0	0	0	47.9	47.9	64.6	70	N	-	-	0.1	N	N	N
SHK_17	5	36.9	OZP Planned Dev	-	64.1	0	0	0	0	48	48	64.2	70	N	-	-	0.1	N	N	N
SHK_17	6	40.2	OZP Planned Dev	-	63.7	0	0	0	0	48	48	63.9	70	N	-	-	0.2	N	N	N
SHK_17	7	43.5	OZP Planned Dev	-	63.4	0	0	0	0	48.1	48.1	63.5	70	N	-	-	0.1	N	N	N
SHK_17	8	46.8	OZP Planned Dev	-	63.1	0	0	0	0	48.2	48.2	63.2	70	N	-	-	0.1	N	N	N
SHK_17	9	50.1	OZP Planned Dev	-	62.8	0	0	0	0	48.3	48.3	63.0	70	N	-	-	0.2	N	N	N
SHK_17	10	53.4	OZP Planned Dev	-	62.5	0	0	0	0	48.3	48.3	62.7	70	N	-	-	0.2	N	N	N
SHK_17	11	56.7	OZP Planned Dev	-	62.3	0	0	0	0	48.4	48.4	62.4	70	N	-	-	0.1	N	N	N
SHK_17	12	60	OZP Planned Dev	-	62	0	0	0	0	48.6	48.6	62.2	70	N	-	-	0.2	N	N	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Existing and Planned Residential and Educational Uses in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	Without Project	With Project													
				Overall Noise Level in 2044, dB(A) [A]	Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1 hour) dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			At-receiver end Mitigation Measures Required [3,4,5] (Y/N)
						RR	PD	DD	LD	EX	New Roads in 2041, dB(A) [2] [B]								
ID	Floor	Floor Level (mPD)				dB (A)								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
SHK_17	13	63.3	OZP Planned Dev	-	61.7	0	0	0	0	48.7	48.7	61.9	70	N	-	-	0.2	N	N	N
SHK_17	14	66.6	OZP Planned Dev	-	61.5	0	0	0	0	48.8	48.8	61.7	70	N	-	-	0.2	N	N	N
SHK_17	15	69.9	OZP Planned Dev	-	61.3	0	0	0	0	49	49	61.6	70	N	-	-	0.3	N	N	N
SHK_17	16	73.2	OZP Planned Dev	-	61.1	0	0	0	0	49.2	49.2	61.3	70	N	-	-	0.2	N	N	N
SHK_17	17	76.5	OZP Planned Dev	-	60.9	0	0	0	0	49.5	49.5	61.2	70	N	-	-	0.3	N	N	N
SHK_17	18	79.8	OZP Planned Dev	-	60.7	0	0	0	0	49.8	49.8	61.0	70	N	-	-	0.3	N	N	N

Notes:

[1] Other Roads refer to planned road projects carried out by others such as Development of Lok Ma Chau Loop, Liantang / Heung Yuen Wai Boundary Control Point and Associated Works, Widening of Tolo Highway / Fanling Highway etc.

[2] PD - Primary Distributor Road; DD - District Distributor Road; LD - Local Distributor Road; RR - Rural Road; EX - Expressway.

[3] New Roads refer to the proposed road networks including planned internal roads within PC/TKL NDA and modification of connecting roads to NDA.

[4] For landuse planned under NDA project, both at source and at receiver-end noise mitigation measures are required to mitigate the noise levels to within noise criteria.

[5] For existing and planned NSRs outside and within the non-development area of NDA, direct mitigation measures will be required when "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1 dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)".

Title: Detailed Calculation of Road Traffic Noise With Direct Mitigation Measures in place
Scenario: Proposed Social Welfare Facilities in KTN NDA (Mitigated Case on Proposed Roads)

Assessment Point			Location	WITH PROJECT										
				Existing Road in 2041, dB(A)	New Roads[1]						New Roads in 2041, dB(A) [2]	Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX	TR				
ID	No. of Floor	Assessment Floor Level, mPD			dB(A)									
A1-2-s1	1	21.2	A1-2 Social Welfare Facilities	26.5	0	51.6	64.4	10.7	45	64.7	64.7	64.7	70	N
A1-2-s1	2	26.2	A1-2 Social Welfare Facilities	29.6	0	54.4	64.3	15.7	47.4	64.8	64.8	64.8	70	N
A1-2-s2	1	21.2	A1-2 Social Welfare Facilities	28.1	0	54.7	66.7	10.9	46.2	67	67	67	70	N
A1-2-s2	2	26.2	A1-2 Social Welfare Facilities	30.4	0	57.2	66.6	15.8	47.6	67.2	67.2	67.2	70	N
A1-2-s3	1	21.2	A1-2 Social Welfare Facilities	31.5	0	58.7	69.7	21.4	46.8	70.1	70.1	70.1	70	N
A1-2-s3	2	26.2	A1-2 Social Welfare Facilities	33.2	0	61.3	69.5	23.6	47.9	70.1	70.1	70.1	70	N
A1-2-s4	1	21.2	A1-2 Social Welfare Facilities	34	0	41.9	67.4	50.9	46.8	67.5	67.5	67.5	70	N
A1-2-s4	2	26.2	A1-2 Social Welfare Facilities	34.3	0	43.4	67.4	50.8	47.4	67.5	67.5	67.5	70	N
A1-2-s5	1	21.2	A1-2 Social Welfare Facilities	28.2	0	40.8	65.7	51.6	45.8	65.9	65.9	65.9	70	N
A1-2-s5	2	26.2	A1-2 Social Welfare Facilities	28.6	0	42.5	65.7	51.5	46.4	65.9	65.9	65.9	70	N
A1-2-s6	1	21.2	A1-2 Social Welfare Facilities	28.1	0	37.5	64.6	51.6	43.2	64.9	64.9	64.9	70	N
A1-2-s6	2	26.2	A1-2 Social Welfare Facilities	28.5	0	39.2	64.6	51.5	43.7	64.9	64.9	64.9	70	N
A1-2-s7	1	21.2	A1-2 Social Welfare Facilities	30.8	0	51.1	65.7	0	42.3	65.9	65.9	65.9	70	N
A1-2-s7	2	26.2	A1-2 Social Welfare Facilities	32.5	0	52.9	65.6	0	42.8	65.9	65.9	65.9	70	N
A1-2-s8	1	21.2	A1-2 Social Welfare Facilities	0	0	42.7	7	15.4	0	42.7	42.7	42.7	70	N
A1-2-s8	2	26.2	A1-2 Social Welfare Facilities	0	0	46.6	7	15.5	0	46.6	46.6	46.6	70	N
A1-2-s9	1	21.2	A1-2 Social Welfare Facilities	0	0	42.6	7	15.3	0	42.6	42.6	42.6	70	N
A1-2-s9	2	26.2	A1-2 Social Welfare Facilities	0	0	46.6	7	15.4	0	46.6	46.6	46.6	70	N
A1-2-s10	1	21.2	A1-2 Social Welfare Facilities	0	0	42.6	7	15.3	0	42.6	42.6	42.6	70	N
A1-2-s10	2	26.2	A1-2 Social Welfare Facilities	0	0	46.6	7	15.4	0	46.6	46.6	46.6	70	N
A1-2-s11	1	21.2	A1-2 Social Welfare Facilities	0	0	42.5	7	15.2	0	42.5	42.5	42.5	70	N
A1-2-s11	2	26.2	A1-2 Social Welfare Facilities	0	0	46.5	7	15.3	0	46.5	46.5	46.5	70	N
A1-2-s12	1	21.2	A1-2 Social Welfare Facilities	0	0	42	7	15.2	0	42	42	42	70	N
A1-2-s12	2	26.2	A1-2 Social Welfare Facilities	0	0	46.1	7	15.3	0	46.1	46.1	46.1	70	N
A1-2-s13	1	21.2	A1-2 Social Welfare Facilities	0	0	39.3	6.9	15.1	0	39.3	39.3	39.3	70	N
A1-2-s13	2	26.2	A1-2 Social Welfare Facilities	0	0	43.7	7	15.2	0	43.7	43.7	43.7	70	N
A2-2a-s1	1	26.3	A2-2a Social Welfare Facilities	0	0	64.3	53.1	9.8	0	64.6	64.6	64.6	70	N
A2-2a-s1	2	30.3	A2-2a Social Welfare Facilities	0	0	64.3	53.1	9.8	0	64.6	64.6	64.6	70	N
A2-2a-s2	1	26.3	A2-2a Social Welfare Facilities	0	0	63.6	53.7	10	0	64	64	64	70	N
A2-2a-s2	2	30.3	A2-2a Social Welfare Facilities	0	0	63.6	53.7	10	0	64	64	64	70	N
A2-2a-s3	1	26.3	A2-2a Social Welfare Facilities	0	0	58.9	60.7	48.2	0	63	63	63	70	N
A2-2a-s3	2	30.3	A2-2a Social Welfare Facilities	0	0	59	60.7	48.2	0	63.1	63.1	63.1	70	N
A2-2a-s4	1	26.3	A2-2a Social Welfare Facilities	0	0	58.7	61.1	48.3	0	63.2	63.2	63.2	70	N
A2-2a-s4	2	30.3	A2-2a Social Welfare Facilities	0	0	58.8	61.1	48.3	0	63.3	63.3	63.3	70	N
A2-2a-s5	1	32.8	A2-2a Social Welfare Facilities	0	0	56.5	64.9	16.7	0	65.5	65.5	65.5	70	N
A2-2a-s6	1	32.8	A2-2a Social Welfare Facilities	0	0	0	63	23.9	0	63	63	63	70	N
A2-2b-s1	1	22.2	A2-2b Social Welfare Facilities	0	0	29.7	60.7	45.5	0	60.8	60.8	60.8	70	N
A2-2b-s2	1	22.2	A2-2b Social Welfare Facilities	0	0	29.7	61.8	45.9	0	61.9	61.9	61.9	70	N
A2-2b-s3	1	27.7	A2-2b Social Welfare Facilities	9.6	0	30.5	65.9	60.5	0	67	67	67	70	N
A2-2b-s4	1	27.7	A2-2b Social Welfare Facilities	9.6	0	29.3	64.3	59.7	0	65.6	65.6	65.6	70	N
A2-2b-s5	1	27.7	A2-2b Social Welfare Facilities	13.8	0	29.4	62.8	58.7	0	64.3	64.3	64.3	70	N
A2-2b-s6	1	33.9	A2-2b Social Welfare Facilities	13.9	0	29.5	68.4	61.2	0	69.1	69.1	69.1	70	N
A2-2b-s7	1	33.9	A2-2b Social Welfare Facilities	13.9	0	29.6	65.4	59.5	0	66.4	66.4	66.4	70	N
A2-2b-s8	1	33.9	A2-2b Social Welfare Facilities	14	0	29.7	63.2	58.1	0	64.4	64.4	64.4	70	N
A2-7-s1	1	11.2	A2-7 Social Welfare Facilities	0	0	0	73.8	62	0	74	74	74	70	Y
A2-7-s1	2	15.2	A2-7 Social Welfare Facilities	0	0	0	73.6	61.9	0	73.9	73.9	73.9	70	Y
A2-7-s1	3	19.2	A2-7 Social Welfare Facilities	0	0	0	73.2	61.9	0	73.5	73.5	73.5	70	Y
A2-7-s1	4	23.2	A2-7 Social Welfare Facilities	0	0	0	72.6	61.8	0	73	73	73	70	Y
A2-7-s1	5	27.2	A2-7 Social Welfare Facilities	0	0	0	72.1	61.7	0	72.5	72.5	72.5	70	Y
A2-7-s1	6	31.2	A2-7 Social Welfare Facilities	0	0	0	71.6	61.5	0	72	72	72	70	Y
A2-7-s2	1	11.2	A2-7 Social Welfare Facilities	6.2	0	41.6	65.4	63.1	0	67.4	67.4	67.4	70	N

Title: Detailed Calculation of Road Traffic Noise With Direct Mitigation Measures in place
Scenario: Proposed Social Welfare Facilities in KTN NDA (Mitigated Case on Proposed Roads)

Assessment Point			Location	WITH PROJECT										
				Existing Road in 2041, dB(A)	New Roads[1]						Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX	TR	New Roads in 2041, dB(A) [2]			
ID	No. of Floor	Assessment Floor Level, mPD			dB(A)									
A2-7-s2	2	15.2	A2-7 Social Welfare Facilities	7.9	0	41.6	65.4	62.9	0	67.4	67.4	67.4	70	N
A2-7-s2	3	19.2	A2-7 Social Welfare Facilities	9.8	0	41.6	65.4	62.5	0	67.2	67.2	67.2	70	N
A2-7-s2	4	23.2	A2-7 Social Welfare Facilities	12	0	41.7	65.4	62	0	67	67	67	70	N
A2-7-s2	5	27.2	A2-7 Social Welfare Facilities	14	0	41.7	65.4	61.6	0	66.9	66.9	66.9	70	N
A2-7-s2	6	31.2	A2-7 Social Welfare Facilities	15.5	0	41.8	65.3	61.2	0	66.8	66.8	66.8	70	N
A2-7-s3	1	11.2	A2-7 Social Welfare Facilities	0	14.4	14.7	17.6	41.1	0	41.2	41.2	41.2	70	N
A2-7-s3	2	15.2	A2-7 Social Welfare Facilities	0	14.4	14.8	17.7	41.1	0	41.2	41.2	41.2	70	N
A2-7-s3	3	19.2	A2-7 Social Welfare Facilities	0	14.4	14.7	17	41.1	0	41.1	41.1	41.1	70	N
A2-7-s3	4	23.2	A2-7 Social Welfare Facilities	0	14.4	14.8	16.8	41	0	41.1	41.1	41.1	70	N
A2-7-s3	5	27.2	A2-7 Social Welfare Facilities	0	14.4	14.8	17.8	40.9	0	41	41	41	70	N
A2-7-s3	6	31.2	A2-7 Social Welfare Facilities	0	14.4	14.8	17.8	40.8	0	40.9	40.9	40.9	70	N
A2-7-s4	1	11.2	A2-7 Social Welfare Facilities	0	0	0	64	50.5	0	64.2	64.2	64.2	70	N
A2-7-s4	2	15.2	A2-7 Social Welfare Facilities	0	0	0	64	50.5	0	64.2	64.2	64.2	70	N
A2-7-s4	3	19.2	A2-7 Social Welfare Facilities	0	0	0	64	50.5	0	64.2	64.2	64.2	70	N
A2-7-s4	4	23.2	A2-7 Social Welfare Facilities	0	0	0	63.9	50.5	0	64.1	64.1	64.1	70	N
A2-7-s4	5	27.2	A2-7 Social Welfare Facilities	0	0	0	63.8	50.4	0	64	64	64	70	N
A2-7-s4	6	31.2	A2-7 Social Welfare Facilities	0	0	0	63.7	50.4	0	63.9	63.9	63.9	70	N
A2-7-s5	1	17.2	A2-7 Social Welfare Facilities	11.4	45.4	43.4	50.9	54.8	0	56.8	56.8	56.8	70	N
A2-7-s5	2	21.2	A2-7 Social Welfare Facilities	11.4	45.4	43.4	50.9	54.7	0	56.8	56.8	56.8	70	N
A2-7-s6	1	17.2	A2-7 Social Welfare Facilities	0	49.1	43.1	21.8	48.5	0	52.4	52.4	52.4	70	N
A2-7-s6	2	21.2	A2-7 Social Welfare Facilities	0	49.9	44.2	21.9	49	0	53.1	53.1	53.1	70	N
A2-7-s7	1	14.7	A2-7 Social Welfare Facilities	0	0	0	33.6	25.4	0	34.2	34.2	34.2	70	N
A2-7-s7	2	18.7	A2-7 Social Welfare Facilities	0	0	0	34.2	26.8	0	35	35	35	70	N
A2-7-s8	1	17.2	A2-7 Social Welfare Facilities	8.4	0	0	51.7	54.7	0	56.4	56.4	56.4	70	N
A2-7-s8	2	21.2	A2-7 Social Welfare Facilities	8.6	0	0	51.7	54.5	0	56.4	56.4	56.4	70	N
A2-7-s9	1	17.2	A2-7 Social Welfare Facilities	7.1	14.9	14.9	33	26	0	33.9	33.9	33.9	70	N
A2-7-s9	2	21.2	A2-7 Social Welfare Facilities	7.5	14.9	15	34.6	27.3	0	35.4	35.4	35.4	70	N
A2-7-s10	1	17.2	A2-7 Social Welfare Facilities	0	0	0	27.7	43	0	43.1	43.1	43.1	70	N
A2-7-s10	2	21.2	A2-7 Social Welfare Facilities	0	0	0	27.8	44.2	0	44.3	44.3	44.3	70	N
A2-7-s11	1	17.2	A2-7 Social Welfare Facilities	0	0	0	53.4	31.9	0	53.4	53.4	53.4	70	N
A2-7-s11	2	21.2	A2-7 Social Welfare Facilities	0	0	0	53.4	32.2	0	53.4	53.4	53.4	70	N
A2-7-s12	1	17.2	A2-7 Social Welfare Facilities	0	0	0	36.6	44.8	0	45.4	45.4	45.4	70	N
A2-7-s12	2	21.2	A2-7 Social Welfare Facilities	0	0	0	37.8	44.9	0	45.6	45.6	45.6	70	N
A2-7-s13	1	17.7	A2-7 Social Welfare Facilities	0	0	0	53.9	48.2	0	54.9	54.9	54.9	70	N
A2-7-s13	2	21.7	A2-7 Social Welfare Facilities	0	0	0	53.9	48.2	0	54.9	54.9	54.9	70	N
A2-7-s14	1	17.7	A2-7 Social Welfare Facilities	0	0	0	27.8	36.4	0	36.9	36.9	36.9	70	N
A2-7-s14	2	21.7	A2-7 Social Welfare Facilities	0	0	0	27.9	37.4	0	37.9	37.9	37.9	70	N
A2-7-s15	1	17.7	A2-7 Social Welfare Facilities	0	0	0	52.6	41	0	52.9	52.9	52.9	70	N
A2-7-s15	2	21.7	A2-7 Social Welfare Facilities	0	0	0	52.7	41.1	0	52.9	52.9	52.9	70	N
A2-7-s16	1	17.7	A2-7 Social Welfare Facilities	0	0	0	37	38.5	0	40.8	40.8	40.8	70	N
A2-7-s16	2	21.7	A2-7 Social Welfare Facilities	0	0	0	37.2	38.5	0	40.9	40.9	40.9	70	N
A2-7-s17	1	17.7	A2-7 Social Welfare Facilities	0	0	10.4	63.9	56	0	64.6	64.6	64.6	70	N
A2-7-s17	2	21.7	A2-7 Social Welfare Facilities	0	0	10.6	63.9	56	0	64.5	64.5	64.5	70	N
A2-7-s18	1	17.7	A2-7 Social Welfare Facilities	0	12.9	0	17.4	24.6	0	25.6	25.6	25.6	70	N
A2-7-s18	2	21.7	A2-7 Social Welfare Facilities	0	12.9	0	17.1	24.7	0	25.6	25.6	25.6	70	N
A2-7-s19	1	17.7	A2-7 Social Welfare Facilities	0	0	0	62.7	27.2	0	62.7	62.7	62.7	70	N
A2-7-s19	2	21.7	A2-7 Social Welfare Facilities	0	0	0	62.7	27.4	0	62.7	62.7	62.7	70	N
A2-7-s20	1	17.7	A2-7 Social Welfare Facilities	0	0	0	72.3	56	0	72.4	72.4	72.4	70	Y
A2-7-s20	2	21.7	A2-7 Social Welfare Facilities	0	0	0	72.1	56	0	72.2	72.2	72.2	70	Y
A3-3a-s1	1	27.7	A3-3a Social Welfare Facilities	8	43.2	39.4	58.5	59	0	61.9	61.9	61.9	70	N
A3-3a-s1	2	31.7	A3-3a Social Welfare Facilities	8	43.5	39.4	58.5	59	0	61.9	61.9	61.9	70	N

Title: Detailed Calculation of Road Traffic Noise With Direct Mitigation Measures in place
Scenario: Proposed Social Welfare Facilities in KTN NDA (Mitigated Case on Proposed Roads)

Assessment Point			Location	WITH PROJECT										
				Existing Road in 2041, dB(A)	New Roads[1]						Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX	TR	New Roads in 2041, dB(A) [2]			
ID	No. of Floor	Assessment Floor Level, mPD			dB(A)									
A3-3a-s2	1	27.7	A3-3a Social Welfare Facilities	7.9	0	19.2	46.5	59	0	59.3	59.3	59.3	70	N
A3-3a-s2	2	31.7	A3-3a Social Welfare Facilities	7.9	0	19.2	46.5	59	0	59.3	59.3	59.3	70	N
A3-3a-s3	1	27.7	A3-3a Social Welfare Facilities	0	0	13.8	23.3	57.4	0	57.4	57.4	57.4	70	N
A3-3a-s3	2	31.7	A3-3a Social Welfare Facilities	0	0	13.8	23.5	57.4	0	57.4	57.4	57.4	70	N
A3-3a-s4	1	27.7	A3-3a Social Welfare Facilities	0	0	0	33.3	55.3	0	55.3	55.3	55.3	70	N
A3-3a-s4	2	31.7	A3-3a Social Welfare Facilities	0	0	0	33.5	55.2	0	55.3	55.3	55.3	70	N
A3-3a-s5	1	27.7	A3-3a Social Welfare Facilities	0	0	27.1	37.2	60.7	0	60.8	60.8	60.8	70	N
A3-3a-s5	2	31.7	A3-3a Social Welfare Facilities	0	0	27.9	37.7	60.7	0	60.7	60.7	60.7	70	N
A3-3a-s6	1	27.7	A3-3a Social Welfare Facilities	0	0	24.5	48.8	31.8	0	48.9	48.9	48.9	70	N
A3-3a-s6	2	31.7	A3-3a Social Welfare Facilities	0	0	26.8	48.8	32.4	0	48.9	48.9	48.9	70	N
A3-3a-s7	1	27.7	A3-3a Social Welfare Facilities	0	43.3	49.7	60.5	0	0	60.9	60.9	60.9	70	N
A3-3a-s7	2	31.7	A3-3a Social Welfare Facilities	0	43.4	49.7	60.5	0	0	60.9	60.9	60.9	70	N
A3-3a-s8	1	27.7	A3-3a Social Welfare Facilities	0	44.1	46.4	62.2	0	0	62.4	62.4	62.4	70	N
A3-3a-s8	2	31.7	A3-3a Social Welfare Facilities	0	44.2	46.4	62.2	0	0	62.4	62.4	62.4	70	N
A3-3a-s9	1	27.7	A3-3a Social Welfare Facilities	0	6.2	0	26.7	56.4	0	56.4	56.4	56.4	70	N
A3-3a-s9	2	31.7	A3-3a Social Welfare Facilities	0	7	0	26.7	56.3	0	56.3	56.3	56.3	70	N
A3-3a-s10	1	27.7	A3-3a Social Welfare Facilities	0	0	0	58.4	52.1	0	59.3	59.3	59.3	70	N
A3-3a-s10	2	31.7	A3-3a Social Welfare Facilities	0	0	0	58.3	52.1	0	59.2	59.2	59.2	70	N
A3-3a-s11	1	27.7	A3-3a Social Welfare Facilities	0	0	15.1	41.2	48.2	0	49	49	49	70	N
A3-3a-s11	2	31.7	A3-3a Social Welfare Facilities	0	0	15.1	41.2	48.2	0	49	49	49	70	N
A3-3a-s12	1	27.7	A3-3a Social Welfare Facilities	0	3.4	10.7	43.2	32.2	0	43.5	43.5	43.5	70	N
A3-3a-s12	2	31.7	A3-3a Social Welfare Facilities	0	3.4	10.7	43.3	33	0	43.6	43.6	43.6	70	N
A3-3a-s13	1	34.2	A3-3a Social Welfare Facilities	0	0	0	24.8	49.6	0	49.6	49.6	49.6	70	N
A3-3a-s13	2	38.2	A3-3a Social Welfare Facilities	0	0	0	24.7	49.6	0	49.6	49.6	49.6	70	N
A3-3a-s14	1	34.2	A3-3a Social Welfare Facilities	0	0	0	65.8	46.5	0	65.9	65.9	65.9	70	N
A3-3a-s14	2	38.2	A3-3a Social Welfare Facilities	0	0	0	65.7	46.5	0	65.8	65.8	65.8	70	N
A3-3a-s15	1	34.2	A3-3a Social Welfare Facilities	0	0	19.7	73.4	39.3	0	73.4	73.4	73.4	70	Y
A3-3a-s15	2	38.2	A3-3a Social Welfare Facilities	0	0	19.7	72.9	39.3	0	72.9	72.9	72.9	70	Y
A3-3a-s16	1	34.2	A3-3a Social Welfare Facilities	0	0	20.2	74.3	41.3	0	74.3	74.3	74.3	70	Y
A3-3a-s16	2	38.2	A3-3a Social Welfare Facilities	0	0	20.2	73.8	41.3	0	73.8	73.8	73.8	70	Y
A3-3a-s17	1	34.2	A3-3a Social Welfare Facilities	9	0	52.1	74.6	47.9	0	74.7	74.7	74.7	70	Y
A3-3a-s17	2	38.2	A3-3a Social Welfare Facilities	9	0	52.1	74.1	47.9	0	74.2	74.2	74.2	70	Y
A3-3a-s18	1	34.2	A3-3a Social Welfare Facilities	0	0	46.5	67.7	64.4	0	69.4	69.4	69.4	70	N
A3-3a-s18	2	38.2	A3-3a Social Welfare Facilities	0	0	47.6	67.6	64.3	0	69.3	69.3	69.3	70	N
A3-3a-s19	1	34.2	A3-3a Social Welfare Facilities	0	3.8	0	53.4	65.8	0	66.1	66.1	66.1	70	N
A3-3a-s19	2	38.2	A3-3a Social Welfare Facilities	0	3.8	0	53.4	65.7	0	65.9	65.9	65.9	70	N
A3-3a-s20	1	34.2	A3-3a Social Welfare Facilities	0	8.5	0	26.1	53.7	0	53.8	53.8	53.8	70	N
A3-3a-s20	2	38.2	A3-3a Social Welfare Facilities	0	8.6	0	27.5	53.8	0	53.8	53.8	53.8	70	N
A3-3a-s21	1	21.2	A3-3a Social Welfare Facilities	0	0	30.8	51.1	66.3	0	66.5	66.5	66.5	70	N
A3-3a-s21	2	25.2	A3-3a Social Welfare Facilities	0	0	31.7	51.1	66.3	0	66.4	66.4	66.4	70	N
A3-3a-s21	3	29.2	A3-3a Social Welfare Facilities	0	0	32.6	51.1	66.2	0	66.3	66.3	66.3	70	N
A3-3a-s21	4	33.2	A3-3a Social Welfare Facilities	0	0	33.5	51.1	66.1	0	66.2	66.2	66.2	70	N
A3-3a-s21	5	37.2	A3-3a Social Welfare Facilities	0	0	34.5	51.2	65.9	0	66	66	66	70	N
A3-3a-s21	6	41.2	A3-3a Social Welfare Facilities	0	0	35.5	51.2	65.7	0	65.8	65.8	65.8	70	N
A3-3a-s22	1	21.2	A3-3a Social Welfare Facilities	0	7.6	29.9	48.1	70.9	0	70.9	70.9	70.9	70	Y
A3-3a-s22	2	25.2	A3-3a Social Welfare Facilities	0	7.9	30.9	48.1	70.8	0	70.8	70.8	70.8	70	Y
A3-3a-s22	3	29.2	A3-3a Social Welfare Facilities	0	7.9	31.8	48.1	70.4	0	70.4	70.4	70.4	70	N
A3-3a-s22	4	33.2	A3-3a Social Welfare Facilities	0	7.9	32.8	48.2	69.9	0	70	70	70	70	N
A3-3a-s22	5	37.2	A3-3a Social Welfare Facilities	0	7.9	33.7	48.3	69.5	0	69.5	69.5	69.5	70	N
A3-3a-s22	6	41.2	A3-3a Social Welfare Facilities	0	7.9	34.7	48.6	69	0	69.1	69.1	69.1	70	N
A3-3a-s23	1	21.2	A3-3a Social Welfare Facilities	0	0	28.3	55.1	71.7	0	71.8	71.8	71.8	70	Y

Title: Detailed Calculation of Road Traffic Noise With Direct Mitigation Measures in place
Scenario: Proposed Social Welfare Facilities in KTN NDA (Mitigated Case on Proposed Roads)

Assessment Point			Location	WITH PROJECT										
				Existing Road in 2041, dB(A)	New Roads[1]						Overall Noise Level in 2041, L10 (1 hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX	TR	New Roads in 2041, dB(A) [2]			
ID	No. of Floor	Assessment Floor Level, mPD			dB(A)									
A3-3a-s23	2	25.2	A3-3a Social Welfare Facilities	0	0	29.5	55.1	71.5	0	71.6	71.6	71.6	70	Y
A3-3a-s23	3	29.2	A3-3a Social Welfare Facilities	0	0	30.8	55.1	70.9	0	71	71	71	70	Y
A3-3a-s23	4	33.2	A3-3a Social Welfare Facilities	0	0	31.9	55.1	70.3	0	70.4	70.4	70.4	70	N
A3-3a-s23	5	37.2	A3-3a Social Welfare Facilities	0	0	33.1	55.1	69.6	0	69.8	69.8	69.8	70	N
A3-3a-s23	6	41.2	A3-3a Social Welfare Facilities	0	0	34.2	55.1	69	0	69.2	69.2	69.2	70	N
A3-3a-s24	1	21.2	A3-3a Social Welfare Facilities	0	39.4	27.8	59.4	57.8	0	61.7	61.7	61.7	70	N
A3-3a-s24	2	25.2	A3-3a Social Welfare Facilities	0	39.5	29.3	59.4	57.8	0	61.7	61.7	61.7	70	N
A3-3a-s24	3	29.2	A3-3a Social Welfare Facilities	0	39.5	30.8	59.5	57.8	0	61.7	61.7	61.7	70	N
A3-3a-s24	4	33.2	A3-3a Social Welfare Facilities	0	39.6	32.5	59.5	57.7	0	61.7	61.7	61.7	70	N
A3-3a-s24	5	37.2	A3-3a Social Welfare Facilities	0	39.7	34.3	59.5	57.5	0	61.7	61.7	61.7	70	N
A3-3a-s24	6	41.2	A3-3a Social Welfare Facilities	0	39.7	36.1	59.6	57.4	0	61.7	61.7	61.7	70	N

Notes:

[1] PD - Primary Distributor Road; DD - District Distributor Road; LD - Local Distributor Road; RR - Rural Road; EX - Expressway.

[2] New Roads refer to the proposed road networks including planned internal roads within the NDA and modification of connecting roads to NDA.

[3] During the detailed design of the proposed social welfare facilities with residential premises, noise sensitive uses should be located to avoid exceedance as far as practicable.

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Proposed Kindergartens in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	WITH PROJECT									
				Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX			
ID	No. of Floor	Assessment Level, mPD			dB(A)					New Roads in 2041, dB(A)[2]		
A1-2-k1	1	26.2	A1-2 Kindergarten	30.8	0	44.3	55.9	0	40.2	56.3	56.3	65	N
A1-2-k2	1	26.2	A1-2 Kindergarten	30.6	0	56.9	52.8	0	39.2	58.4	58.4	65	N
A1-2-k3	1	26.2	A1-2 Kindergarten	30.6	0	57.5	50.3	0	38.4	58.3	58.3	65	N
A1-2-k4	1	26.2	A1-2 Kindergarten	0	0	58.1	29	17.8	0	58.1	58.1	65	N
A1-2-k5	1	26.2	A1-2 Kindergarten	0	0	57.5	28.1	17.9	0	57.5	57.5	65	N
A1-2-k6	1	26.2	A1-2 Kindergarten	0	0	56.9	20.1	18	0	56.9	56.9	65	N
A1-2-k7	1	26.2	A1-2 Kindergarten	0	0	56.3	18.6	19.4	0	56.3	56.3	65	N
A2-2a-k1	1	25.4	A2-2a Kindergarten	0	0	0	62.5	50.8	0	62.8	62.8	65	N
A2-2a-k2	1	25.4	A2-2a Kindergarten	0	0	0	59.4	52.8	0	60.2	60.2	65	N
A2-2a-k3	1	25.4	A2-2a Kindergarten	0	0	0	57	52.7	0	58.4	58.4	65	N
A2-2a-k4	1	25.4	A2-2a Kindergarten	0	0	0	55.1	51.3	0	56.6	56.6	65	N
A2-2a-k5	1	25.4	A2-2a Kindergarten	14.1	0	27.4	26.8	0	0	30.2	30.2	65	N
A2-2b-k1	1	27.7	A2-2b Kindergarten	0	0	23.7	54.7	50.5	0	56.1	56.1	65	N
A2-2b-k2	1	27.7	A2-2b Kindergarten	0	0	23.7	60.7	52.2	0	61.3	61.3	65	N
A2-2b-k3	1	27.7	A2-2b Kindergarten	0	5.7	0	65.2	28.1	0	65.2	65.2	65	N
A2-2b-k4	1	27.7	A2-2b Kindergarten	0	5.7	0	61.9	27.7	0	61.9	61.9	65	N
A2-2b-k5	1	27.7	A2-2b Kindergarten	0	3	0	64.8	26.5	0	64.8	64.8	65	N
A2-2b-k6	1	27.7	A2-2b Kindergarten	0	2.9	0	63.9	20.8	0	63.9	63.9	65	N
A2-2b-k7	1	27.7	A2-2b Kindergarten	0	2.7	0	63.5	13.8	0	63.5	63.5	65	N
A2-2b-k8	1	27.7	A2-2b Kindergarten	0	2.7	0	61.3	10.5	0	61.3	61.3	65	N
A2-2b-k9	1	27.7	A2-2b Kindergarten	0	0	0	51.3	8	0	51.3	51.3	65	N
A2-2b-k10	1	27.7	A2-2b Kindergarten	0	0	0	45	36.9	0	45.7	45.7	65	N
A2-2b-k11	1	27.7	A2-2b Kindergarten	0	0	0	45.4	39	0	46.3	46.3	65	N
A2-7-k1	1	11.2	A2-7 Kindergarten	0	0	0	73.8	62	0	74	74	65	Y
A2-7-k1	2	16.2	A2-7 Kindergarten	0	0	0	73.5	61.9	0	73.8	73.8	65	Y
A2-7-k1	3	21.2	A2-7 Kindergarten	0	0	0	72.9	61.8	0	73.2	73.2	65	Y
A2-7-k1	4	26.2	A2-7 Kindergarten	0	0	0	72.2	61.7	0	72.6	72.6	65	Y
A2-7-k1	5	31.2	A2-7 Kindergarten	0	0	0	71.6	61.5	0	72	72	65	Y
A2-7-k2	1	11.2	A2-7 Kindergarten	6.2	0	41.6	65.4	63.1	0	67.4	67.4	65	Y
A2-7-k2	2	16.2	A2-7 Kindergarten	8.4	0	41.6	65.4	62.8	0	67.3	67.3	65	Y
A2-7-k2	3	21.2	A2-7 Kindergarten	10.8	0	41.7	65.4	62.3	0	67.1	67.1	65	Y
A2-7-k2	4	26.2	A2-7 Kindergarten	13.6	0	41.7	65.4	61.7	0	66.9	66.9	65	Y
A2-7-k2	5	31.2	A2-7 Kindergarten	15.5	0	41.8	65.3	61.2	0	66.8	66.8	65	Y
A2-7-k3	1	11.2	A2-7 Kindergarten	0	14.4	14.7	17.6	41.3	0	41.3	41.3	65	N
A2-7-k3	2	16.2	A2-7 Kindergarten	0	14.4	14.7	17.6	41.3	0	41.3	41.3	65	N
A2-7-k3	3	21.2	A2-7 Kindergarten	0	14.4	14.7	17	41.2	0	41.3	41.3	65	N
A2-7-k3	4	26.2	A2-7 Kindergarten	0	14.4	14.8	17.8	41.1	0	41.2	41.2	65	N
A2-7-k3	5	31.2	A2-7 Kindergarten	0	14.4	14.8	17.8	41	0	41	41	65	N
A2-7-k4	1	11.2	A2-7 Kindergarten	0	0	0	64	50.5	0	64.2	64.2	65	N
A2-7-k4	2	16.2	A2-7 Kindergarten	0	0	0	64	50.5	0	64.2	64.2	65	N
A2-7-k4	3	21.2	A2-7 Kindergarten	0	0	0	64	50.5	0	64.2	64.2	65	N
A2-7-k4	4	26.2	A2-7 Kindergarten	0	0	0	63.9	50.4	0	64.1	64.1	65	N
A2-7-k4	5	31.2	A2-7 Kindergarten	0	0	0	63.7	50.4	0	63.9	63.9	65	N
A2-7-k5	1	17.2	A2-7 Kindergarten	11.4	45.4	43.4	50.9	54.8	0	56.8	56.8	65	N
A2-7-k5	2	22.2	A2-7 Kindergarten	11.4	45.4	43.4	50.9	54.7	0	56.8	56.8	65	N
A2-7-k6	1	17.2	A2-7 Kindergarten	0	49.1	43.1	21.8	48.5	0	52.4	52.4	65	N
A2-7-k6	2	22.2	A2-7 Kindergarten	0	49.9	44.2	21.9	49	0	53.1	53.1	65	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Proposed Kindergartens in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	WITH PROJECT									
				Existing Road in 2041, dB(A)	New Roads[1]					New Roads in 2041, dB(A)[2]	Overall Noise Level in 2041, L10 (1hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX				
ID	No. of Floor	Assessment Level, mPD			dB(A)								
A2-7-k7	1	14.7	A2-7 Kindergarten	0	0	0	33.6	25.4	0	34.2	34.2	65	N
A2-7-k7	2	19.7	A2-7 Kindergarten	0	0	0	34.4	27.2	0	35.2	35.2	65	N
A2-7-k8	1	17.2	A2-7 Kindergarten	8.4	0	0	51.7	54.7	0	56.4	56.4	65	N
A2-7-k8	2	22.2	A2-7 Kindergarten	8.6	0	0	51.8	54.5	0	56.3	56.3	65	N
A2-7-k9	1	17.2	A2-7 Kindergarten	7.1	14.9	14.9	33	26	0	33.9	33.9	65	N
A2-7-k9	2	22.2	A2-7 Kindergarten	7.6	14.9	15	35	27.7	0	35.8	35.8	65	N
A2-7-k10	1	17.2	A2-7 Kindergarten	0	0	0	27.7	43	0	43.1	43.1	65	N
A2-7-k10	2	22.2	A2-7 Kindergarten	0	0	0	27.9	44.2	0	44.3	44.3	65	N
A2-7-k11	1	17.2	A2-7 Kindergarten	0	0	0	53.4	31.9	0	53.4	53.4	65	N
A2-7-k11	2	22.2	A2-7 Kindergarten	0	0	0	53.4	32.3	0	53.4	53.4	65	N
A2-7-k12	1	17.2	A2-7 Kindergarten	0	0	0	36.6	44.8	0	45.4	45.4	65	N
A2-7-k12	2	22.2	A2-7 Kindergarten	0	0	0	38.1	44.9	0	45.7	45.7	65	N
A2-7-k13	1	17.7	A2-7 Kindergarten	0	0	0	53.9	48.2	0	54.9	54.9	65	N
A2-7-k13	2	22.7	A2-7 Kindergarten	0	0	0	53.9	48.2	0	54.9	54.9	65	N
A2-7-k14	1	17.7	A2-7 Kindergarten	0	0	0	27.8	36.3	0	36.9	36.9	65	N
A2-7-k14	2	22.7	A2-7 Kindergarten	0	0	0	27.9	37.4	0	37.8	37.8	65	N
A2-7-k15	1	17.7	A2-7 Kindergarten	0	0	0	52.6	41	0	52.9	52.9	65	N
A2-7-k15	2	22.7	A2-7 Kindergarten	0	0	0	52.7	41.1	0	52.9	52.9	65	N
A2-7-k16	1	17.7	A2-7 Kindergarten	0	0	0	37	38.5	0	40.8	40.8	65	N
A2-7-k16	2	22.7	A2-7 Kindergarten	0	0	0	37.2	38.5	0	40.9	40.9	65	N
A2-7-k17	1	17.7	A2-7 Kindergarten	0	0	10.4	63.9	56	0	64.6	64.6	65	N
A2-7-k17	2	22.7	A2-7 Kindergarten	0	0	10.7	63.8	56	0	64.5	64.5	65	N
A2-7-k18	1	17.7	A2-7 Kindergarten	0	12.9	0	17.4	24.6	0	25.6	25.6	65	N
A2-7-k18	2	22.7	A2-7 Kindergarten	0	12.9	0	17.2	24.7	0	25.7	25.7	65	N
A2-7-k19	1	17.7	A2-7 Kindergarten	0	0	0	62.7	27.2	0	62.7	62.7	65	N
A2-7-k19	2	22.7	A2-7 Kindergarten	0	0	0	62.7	27.4	0	62.7	62.7	65	N
A2-7-k20	1	17.7	A2-7 Kindergarten	0	0	0	72.3	56	0	72.4	72.4	65	Y
A2-7-k20	2	22.7	A2-7 Kindergarten	0	0	0	72	56	0	72.1	72.1	65	Y
A3-3a-k1	1	27.7	A3-3a Kindergarten	8	43.2	39.4	58.5	59	0	61.9	61.9	65	N
A3-3a-k1	2	32.7	A3-3a Kindergarten	8	43.6	39.4	58.6	58.9	0	61.8	61.8	65	N
A3-3a-k2	1	27.7	A3-3a Kindergarten	7.9	0	19.2	46.5	59	0	59.3	59.3	65	N
A3-3a-k2	2	32.7	A3-3a Kindergarten	7.9	0	19.2	46.5	59	0	59.2	59.2	65	N
A3-3a-k3	1	27.7	A3-3a Kindergarten	0	0	13.8	23.3	57.4	0	57.4	57.4	65	N
A3-3a-k3	2	32.7	A3-3a Kindergarten	0	0	13.8	23.6	57.4	0	57.4	57.4	65	N
A3-3a-k4	1	27.7	A3-3a Kindergarten	0	0	0	33.3	55.3	0	55.3	55.3	65	N
A3-3a-k4	2	32.7	A3-3a Kindergarten	0	0	0	33.5	55.2	0	55.3	55.3	65	N
A3-3a-k5	1	27.7	A3-3a Kindergarten	0	0	27.1	37.2	60.7	0	60.8	60.8	65	N
A3-3a-k5	2	32.7	A3-3a Kindergarten	0	0	28	37.9	60.6	0	60.6	60.6	65	N
A3-3a-k6	1	27.7	A3-3a Kindergarten	0	0	24.5	48.8	31.8	0	48.9	48.9	65	N
A3-3a-k6	2	32.7	A3-3a Kindergarten	0	0	27.4	48.8	32.7	0	49	49	65	N
A3-3a-k7	1	27.7	A3-3a Kindergarten	0	43.3	49.7	60.5	0	0	60.9	60.9	65	N
A3-3a-k7	2	32.7	A3-3a Kindergarten	0	43.4	49.7	60.5	0	0	60.9	60.9	65	N
A3-3a-k8	1	27.7	A3-3a Kindergarten	0	44.1	46.4	62.2	0	0	62.4	62.4	65	N
A3-3a-k8	2	32.7	A3-3a Kindergarten	0	44.2	46.4	62.2	0	0	62.4	62.4	65	N
A3-3a-k9	1	27.7	A3-3a Kindergarten	0	6.2	0	26.7	56.4	0	56.4	56.4	65	N
A3-3a-k9	2	32.7	A3-3a Kindergarten	0	7.2	0	26.7	56.3	0	56.3	56.3	65	N
A3-3a-k10	1	27.7	A3-3a Kindergarten	0	0	0	58.4	52.1	0	59.3	59.3	65	N

Title: Detailed Calculation of Road Traffic Noise with Direct Mitigation Measures in place
Scenario: Proposed Kindergartens in KTN NDA (Mitigated Case on Proposed Roads)

Noise Assessment Point			Location	WITH PROJECT								
				Existing Road in 2041, dB(A)	New Roads[1]					Overall Noise Level in 2041, L10 (1hour) dB(A) [C]	Noise Criteria, L10 (1hour) dB(A)	Exceedance [3] C > Criteria (Y/N)
					RR	PD	DD	LD	EX			
ID	No. of Floor	Assessment Level, mPD			dB(A)					New Roads in 2041, dB(A)[2]		
A3-3a-k10	2	32.7	A3-3a Kindergarten	0	0	0	58.3	52.1	0	59.2	59.2	65	N
A3-3a-k11	1	27.7	A3-3a Kindergarten	0	0	15.1	41.2	48.2	0	49	49	65	N
A3-3a-k11	2	32.7	A3-3a Kindergarten	0	0	15.1	41.2	48.2	0	49	49	65	N
A3-3a-k12	1	27.7	A3-3a Kindergarten	0	3.4	10.7	43.2	32.2	0	43.5	43.5	65	N
A3-3a-k12	2	32.7	A3-3a Kindergarten	0	3.4	10.8	43.3	33.2	0	43.7	43.7	65	N
A3-3a-k13	1	34.2	A3-3a Kindergarten	0	0	0	24.8	49.6	0	49.6	49.6	65	N
A3-3a-k13	2	39.2	A3-3a Kindergarten	0	0	0	24.7	49.6	0	49.6	49.6	65	N
A3-3a-k14	1	34.2	A3-3a Kindergarten	0	0	0	65.8	46.5	0	65.9	65.9	65	Y
A3-3a-k14	2	39.2	A3-3a Kindergarten	0	0	0	65.6	46.5	0	65.7	65.7	65	Y
A3-3a-k15	1	34.2	A3-3a Kindergarten	0	0	19.8	73.4	39.3	0	73.4	73.4	65	Y
A3-3a-k15	2	39.2	A3-3a Kindergarten	0	0	19.8	72.8	39.3	0	72.8	72.8	65	Y
A3-3a-k16	1	34.2	A3-3a Kindergarten	0	0	20.2	74.4	41.3	0	74.4	74.4	65	Y
A3-3a-k16	2	39.2	A3-3a Kindergarten	0	0	20.2	73.7	41.3	0	73.7	73.7	65	Y
A3-3a-k17	1	34.2	A3-3a Kindergarten	9	0	52.1	74.6	47.9	0	74.7	74.7	65	Y
A3-3a-k17	2	39.2	A3-3a Kindergarten	9	0	52.2	74	47.9	0	74	74	65	Y
A3-3a-k18	1	34.2	A3-3a Kindergarten	0	0	46.5	67.7	64.4	0	69.4	69.4	65	Y
A3-3a-k18	2	39.2	A3-3a Kindergarten	0	0	48	67.6	64.3	0	69.3	69.3	65	Y
A3-3a-k19	1	34.2	A3-3a Kindergarten	0	3.8	0	53.4	65.8	0	66.1	66.1	65	Y
A3-3a-k19	2	39.2	A3-3a Kindergarten	0	3.8	0	53.4	65.7	0	65.9	65.9	65	Y
A3-3a-k20	1	34.2	A3-3a Kindergarten	0	8.5	0	26.1	53.7	0	53.8	53.8	65	N
A3-3a-k20	2	39.2	A3-3a Kindergarten	0	8.6	0	27.8	53.7	0	53.7	53.7	65	N
A3-3a-k21	1	21.2	A3-3a Kindergarten	0	0	30.8	51.1	66.3	0	66.5	66.5	65	Y
A3-3a-k21	2	26.2	A3-3a Kindergarten	0	0	31.9	51.1	66.3	0	66.4	66.4	65	Y
A3-3a-k21	3	31.2	A3-3a Kindergarten	0	0	33	51.1	66.1	0	66.3	66.3	65	Y
A3-3a-k21	4	36.2	A3-3a Kindergarten	0	0	34.2	51.2	65.9	0	66.1	66.1	65	Y
A3-3a-k21	5	41.2	A3-3a Kindergarten	0	0	35.5	51.2	65.7	0	65.8	65.8	65	Y
A3-3a-k22	1	21.2	A3-3a Kindergarten	0	7.6	29.9	48.1	70.9	0	70.9	70.9	65	Y
A3-3a-k22	2	26.2	A3-3a Kindergarten	0	7.9	31.1	48.1	70.7	0	70.7	70.7	65	Y
A3-3a-k22	3	31.2	A3-3a Kindergarten	0	7.9	32.3	48.2	70.2	0	70.2	70.2	65	Y
A3-3a-k22	4	36.2	A3-3a Kindergarten	0	7.9	33.4	48.3	69.6	0	69.6	69.6	65	Y
A3-3a-k22	5	41.2	A3-3a Kindergarten	0	7.9	34.7	48.6	69	0	69.1	69.1	65	Y
A3-3a-k23	1	21.2	A3-3a Kindergarten	0	0	28.3	55.1	71.7	0	71.7	71.7	65	Y
A3-3a-k23	2	26.2	A3-3a Kindergarten	0	0	29.8	55.1	71.4	0	71.5	71.5	65	Y
A3-3a-k23	3	31.2	A3-3a Kindergarten	0	0	31.4	55.1	70.6	0	70.7	70.7	65	Y
A3-3a-k23	4	36.2	A3-3a Kindergarten	0	0	32.8	55.1	69.8	0	69.9	69.9	65	Y
A3-3a-k23	5	41.2	A3-3a Kindergarten	0	0	34.2	55.1	69	0	69.2	69.2	65	Y
A3-3a-k24	1	21.2	A3-3a Kindergarten	0	39.4	27.8	59.4	57.8	0	61.7	61.7	65	N
A3-3a-k24	2	26.2	A3-3a Kindergarten	0	39.5	29.6	59.4	57.8	0	61.7	61.7	65	N
A3-3a-k24	3	31.2	A3-3a Kindergarten	0	39.5	31.6	59.4	57.7	0	61.7	61.7	65	N
A3-3a-k24	4	36.2	A3-3a Kindergarten	0	39.6	33.9	59.5	57.6	0	61.7	61.7	65	N
A3-3a-k24	5	41.2	A3-3a Kindergarten	0	39.7	36.1	59.6	57.4	0	61.7	61.7	65	N

Notes:
[1] PD - Primary Distributor Road; DD - District Distributor Road; LD - Local Distributor Road; RR - Rural Road; EX - Expressway.
[2] New Roads refer to the proposed road networks including planned internal roads within PC/TKL NDA and modification of connecting roads to NDA.
[3] During the detailed design of the proposed kindergartens, noise sensitive uses should be located to avoid exceedance as far as practicable.

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Appendix 2.4
Number of Dwellings / Classrooms Protected by and Benefited from the Proposed At-source Noise Mitigation Measures (DP3)

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Appendix 2.4 Number of Dwellings / Classrooms Protected by and Benefited from the Proposed At-source Noise Mitigation Measures (DP3)

NSR [1]		No. of Dwellings / Classrooms Represented	Total Number of Exposed Dwellings / Classrooms		Total Number of Dwellings / Classrooms Protected by the Proposed At-source NMMs [1]	Total Number of Dwellings / Classrooms Beneffited the Proposed At-source NMMs [1]
			Unmitigated Scenario	Mitigated Scenario		
Existing						
A3-7	Dwelling	30	0	0	0	0
C1-4	Dwelling	63	0	0	0	33
D1-6	Dwelling	7	5	0	5	6
D1-9	Dwelling	96	0	0	0	0
KTN-1	Classroom	30	30	0	30	30
KTN-2	Classroom	48	48	0	48	48
	Dwelling	74	74	0	74	74
KTN-12	Dwelling	12	12	0	12	12
KTN-49	Dwelling	10	10	0	10	10
KTN-50	Dwelling	38	38	0	38	38
CPR	Dwelling	7	5	0	5	7
Planned						
A2-11	Classroom	96	48	0	48	96
A2-12	Classroom	96	48	0	48	96
A2-13	Classroom	96	96	0	96	96
A3-1	Classroom	72	72	0	72	72
A3-2	Classroom	72	72	0	72	72
E1-2	Classroom	96	87	0	87	96
E1-4	Classroom	48	0	0	0	0
A1-2	Dwelling	1152	396	47	349	1033
A1-4a	Dwelling	459	3	0	3	459
A1-9a	Dwelling	486	306	77	229	306
A1-9b	Dwelling	594	429	249	180	414
A2-2a	Dwelling	1294	279	57	222	1294
A2-2b	Dwelling	836	518	183	335	836
A2-9a	Dwelling	200	0	0	0	200
A2-9b	Dwelling	540	440	135	305	540
A3-3a	Dwelling	984	168	0	168	740
A3-6	Dwelling	704	350	238	112	484
B3-5a	Dwelling	532	477	260	217	532
B3-8	Dwelling	224	190	128	62	160
D1-5	Dwelling	3	0	0	0	0
D1-7a	Dwelling	312	202	133	69	168
D1-7b	Dwelling	520	260	190	70	260
D1-7c	Dwelling	700	440	320	120	315
D1-7d	Dwelling	288	117	72	45	33
D1-11a	Dwelling	324	162	135	27	94
D1-11b	Dwelling	360	56	0	56	160
D1-11c	Dwelling	160	30	0	30	72
E1-3	Dwelling	364	16	0	16	364
C1-3	Dwelling	166	163	112	51	166
KTS14	Dwelling	36	36	19	17	25
SHK	Dwelling	341	305	254	51	306

Notes:

(1) NSR - Noise Sensitive Receiver
NMMs - Noise Mitigation Measures

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Appendix 2.5
Implementation Schedule of Proposed Road Traffic Noise Mitigation Measures for DP3

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Appendix 2.5 Implementation Schedule of the Proposed Road Traffic Noise Mitigation Measures for DP3

Designated Project	Mitigation Measure ID	Description of Noise Mitigation Measures				Relevant Appendix No.	Implementation Party	Implementation Programme	Environmental Performance Required
		Type [1]	Approx. Length, m	Height, m	Approx. Area, m^2				
Construction and Operation of KTN NDA Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement (DP3)	KTN-NB10	CNB7+3	112	9.1	-	2.5.2	- Construction by Civil Engineering and Development Department - Maintenance by Highway Department	To be in place for protecting the planned noise sensitive receivers at Site A2-13	Refer to Table 2.2 of the TNMP
	KTN-NB13	CNB7+3	86	9.1	-	2.5.2		To be in place for protecting the planned noise sensitive receivers at Site D1-7c	
	KTN-NB15	CNB7+3	54	9.1	-	2.5.2		To be in place for protecting the planned noise sensitive receivers at Site B3-5	
	KTN-NB16	CNB7+3	55	9.1	-	2.5.2		To be in place for protecting the planned noise sensitive receivers at Site B3-5	
	KTN-NB17	CNB7+3	172	9.1	-	2.5.2		To be in place for protecting the planned noise sensitive receivers at Site B3-8	
	KTN-NB35	CNB5+3	244	7.1	-	2.5.2		To be in place for protecting the planned noise sensitive receivers at Kwu Tung South	
	KTN-NB46	NB	130	5	-	2.5.2		To be in place for protecting the existing noise sensitive receivers at Kwu Tung South	
	KTN-NB47	CNB5+3	282	7.1	-	2.5.2		To be in place for protecting the existing noise sensitive receivers at Kwu Tung South	
	KTN-LN06	LNRS	431	-	6296	2.5.2		To be in place for protecting the planned noise sensitive receivers at Sites A1-9b, A2-9b, A2-13, D1-7a, D1-7b, D1-7c & D1-7d	
	KTN-LN07	LNRS	329	-	4910	2.5.1		To be in place for protecting the planned noise sensitive receivers at Sites A1-2 & A2-2a	
	KTN-LN13	LNRS	226	-	2629	2.5.2		To be in place for protecting the planned noise sensitive receivers at Sites B3-5 & B3-8	
	KTN-LN14	LNRS	24	-	222	2.5.2		To be in place for protecting the existing noise sensitive receivers at Kwu Tung South	

Note:

[1] CNB5+3 – 5m vertical noise barrier with 3m cantilevered arm at 45º
CNB7+3 – 7m vertical noise barrier with 3m cantilevered arm at 45º
LNRS – Low Noise Road Surfacing
NB – Noise Barrier
All the proposed noise barriers are absorptive in terms of acoustic characteristics.

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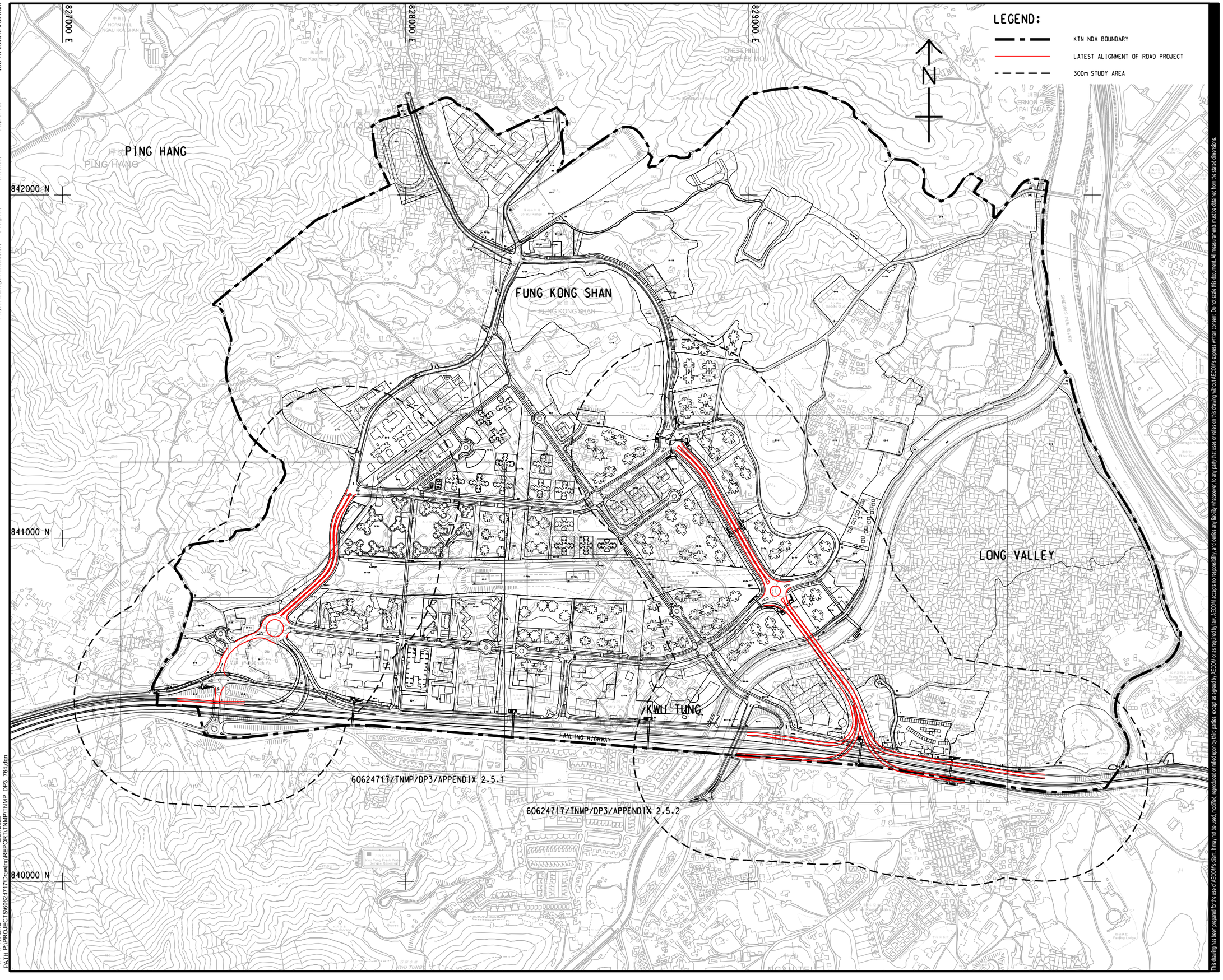
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PROJECT
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DEVELOPMENT OF
KWU TUNG NORTH
NEW DEVELOPMENT AREA,
REMAINING PHASE -
DESIGN & CONSTRUCTION

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CEDD Civil Engineering and Development Department

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SCALE 比例
A1 1 : 5000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

UPDATED TRAFFIC NOISE
MITIGATION MEASURES PLAN
(FOR DP3) - KEY PLAN

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 2.5

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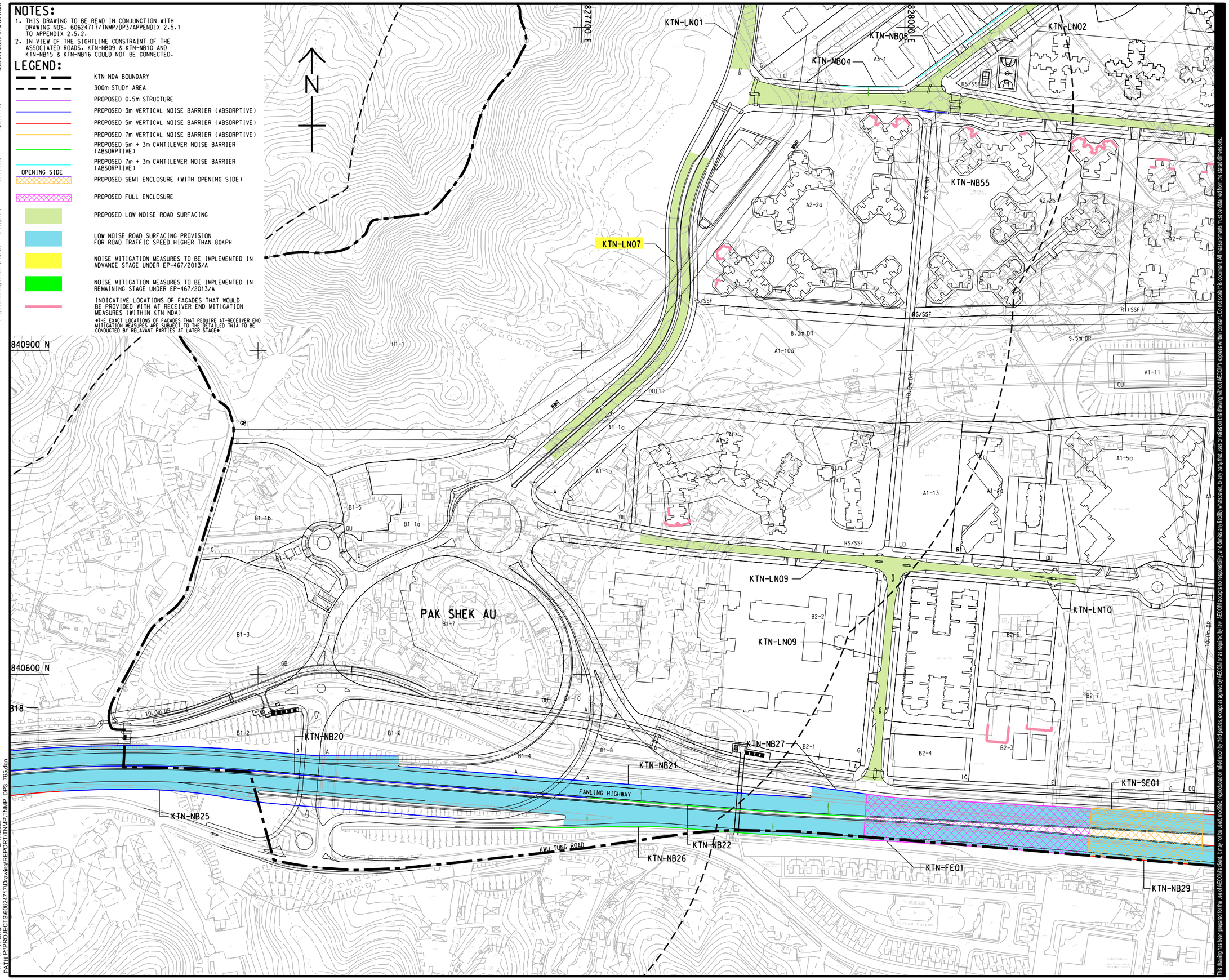
NOTES:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60624717/TNMP/DP3/APPENDIX 2.5.1 TO APPENDIX 2.5.2.
2. IN VIEW OF THE SIGHTLINE CONSTRAINT OF THE ASSOCIATED ROADS, KTN-NB09 & KTN-NB10 AND KTN-NB15 & KTN-NB16 COULD NOT BE CONNECTED.

LEGEND:

- KTN NDA BOUNDARY
- 300m STUDY AREA
- PROPOSED 0.5m STRUCTURE
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- OPENING SIDE
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- PROPOSED LOW NOISE ROAD SURFACING
- LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
- NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN ADVANCE STAGE UNDER EP-467/2013/A
- NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN REMAINING STAGE UNDER EP-467/2013/A
- INDICATIVE LOCATIONS OF FACADES THAT WOULD BE PROVIDED WITH AT RECEIVER END MITIGATION MEASURES (WITHIN KTN NDA)

THE EXACT LOCATIONS OF FACADES THAT REQUIRE AT-RECEIVER END MITIGATION MEASURES ARE SUBJECT TO THE DETAILED TNIA TO BE CONDUCTED BY RELAVANT PARTIES AT LATER STAGE



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DEVELOPMENT OF KWU TUNG NORTH NEW DEVELOPMENT AREA, REMAINING PHASE - DESIGN & CONSTRUCTION

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SCALE 比例
A1 1 : 1600

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

CONTRACT NO. 合約編號
CE 19/2019 (CE)

SHEET TITLE
圖紙名稱

UPDATED TRAFFIC NOISE MITIGATION MEASURES PLAN (FOR DP3)

SHEET 1 OF 2

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 2.5.1

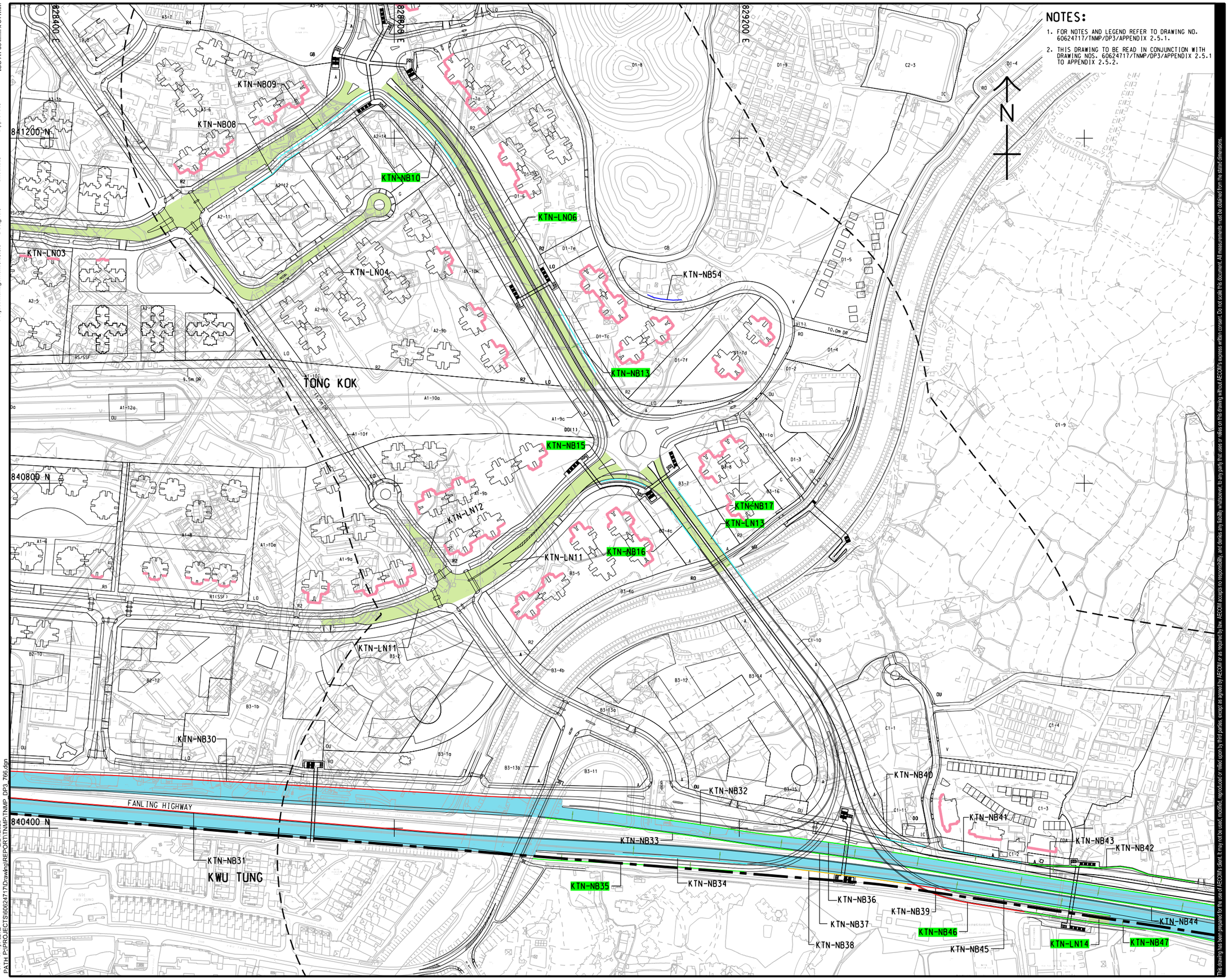
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DEVELOPMENT OF
KWU TUNG NORTH
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STATUS
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SCALE 比例
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DIMENSION UNIT 尺寸單位
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KEY PLAN
索引圖

PROJECT NO. 項目編號
60624717

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CE 19/2019 (CE)

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圖紙名稱

UPDATED TRAFFIC NOISE
MITIGATION MEASURES PLAN
(FOR DP3)

SHEET 2 OF 2

SHEET NUMBER
圖紙編號

60624717/TNMP/DP3/APPENDIX 2.5.2

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