Rail Baltic Estonia OÜ
Reg. No 12734109
Veskiposti 2/1
Tallinn, 10138,
Estonia

CONFIDENTIAL

RAIL BALTICA HARJUMAA MAIN ROUTE
RAILWAY I STAGE CONSTRUCTION WORKS

Clash Detection Report

RW0401

Document Submittal History:

Rev.:	Date:	Doc Status:	Prepared	Checked	Approved	Accepted
01	17.02.2025	Submitted	P.Kaldamäe	P.Kaldamäe		
02	07.04.2025	Submitted	P.Kaldamäe	P.Kaldamäe		
03	13.05.2025	Submitted	P.Kaldamäe	P.Kaldamäe		
	Signatures:					

Co-financed by the European Union
Connecting Europe Facility

Contents

1. GENERAL

1.1. RELATED DOCUMENTS

BEP - RBDTD-EE-DS2-DPS1_TRE_RW0401-ZZ_ZZZZ_CD_GE-AA_DTD_000001_BEP.docx

1.2. SUMMARY

This report includes the list of Clash Detection applicable to:

TABEL 1

RBDTD-EE-DS2-DPS1_ALL_OS021042-ZZ_0001_IF_LV-EN_DTD_000001_DuctModel
RBDTD-EE-DS2-DPS1_ALL_OS021131-ZZ_0001_IF_ED-EL_DTD_000001_ELV10kVModel
RBDTD-EE-DS2-DPS1_ALL_OS021131-ZZ_0001_IF_ED-EL_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OS021131-ZZ_0001_IF_ED-EL_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OS021133-ZZ_ZZZZ_IF_DE-AA_DTD_000001_DemoModel
RBDTD-EE-DS2-DPS1_ALL_OS025013-ZZ_ZZZZ_IF_ED-EL_DTD_000001_ELV10kVModel
RBDTD-EE-DS2-DPS1_ALL_OS025013-ZZ_ZZZZ_IF_ED-EL_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OS025013-ZZ_ZZZZ_IF_ED-EL_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OS025014-ZZ_ZZZZ_IF_LV-EN_DTD_000001_TeliaTelcoModel
RBDTD-EE-DS2-DPS1_ALL_OS025014-ZZ_ZZZZ_IF_LV-EN_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OS025014-ZZ_ZZZZ_IF_LV-EN_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OS025032-ZZ_ZZZZ_IF_ED-EL_MD_000001_ELModel
RBDTD-EE-DS2-DPS1_ALL_OS025033-ZZ_ZZZZ_IF_OL-ELT_MD_000001_LightModel
RBDTD-EE-DS2-DPS1_ALL_OS025033-ZZ_ZZZZ_IF_OL-ELT_MD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OS025034-ZZ_ZZZZ_IF_LV-EN_DTD_000001_DuctModel
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_0001_IF_OT-TR_DTD_000001_CatenaryModel
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_0001_IF_OT-TR_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_0001_IF_OT-TR_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_0001_IF_VS-ENT_DTD_000001_VideoModel
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_0001_IF_VS-ENT_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_0001_IF_VS-ENT_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_ZZZZ_IF_ED-EL_DTD_000001_10kVModel
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_ZZZZ_IF_ED-EL_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_ZZZZ_IF_ED-EL_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_ZZZZ_IF_LV-EN_DTD_000001_TelcoModel
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_ZZZZ_IF_LV-EN_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OU0400-ZZ_ZZZZ_IF_LV-EN_DTD_000003_Fill

RBDTD-EE-DS2-DPS1_ALL_OU0440-ZZ_ZZZZ_IF_LV-EN_DTD_000001_TeliaTelcoModel
RBDTD-EE-DS2-DPS1_ALL_OU0440-ZZ_ZZZZ_IF_LV-EN_DTD_000002_Excavation
RBDTD-EE-DS2-DPS1_ALL_OU0440-ZZ_ZZZZ_IF_LV-EN_DTD_000003_Fill
RBDTD-EE-DS2-DPS1_ALL_OU0440-ZZ_ZZZZ_IF_LV-EN_DTD_000003_Filll
RBDTD-EE-DS2-DPS1_ALL_RW040310-ZZ_ZZZZ_IF_LV-EN_DTD_000001_DuctModel
RBDTD-EE-DS2-DPS1_TRE_CU037081-ZZ_0005_IF_STR-EK_DTD_000101_CulvertModel
RBDTD-EE-DS2-DPS1_TRE_CU037081_CU037082-ZZ_0005_IF-TU-TS_DTD_000101_Excavation
RBDTD-EE-DS2-DPS1_TRE_CU037081_CU037082-ZZ_0005_IF-TU-TS_DTD_000101_Fill-Frost
RBDTD-EE-DS2-DPS1_TRE_CU037082-ZZ_0005_IF_STR-EK_DTD_000101_CulvertModel
RBDTD-EE-DS2-DPS1_TRE_ME0440-ZZ_ZZZZ_IF_DR-TL_DTD_000001_MeliorationModel
RBDTD-EE-DS2-DPS1_TRE_ME0440-ZZ_ZZZZ_IF_DR-TL_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OR0070-ZZ_ZZZZ_IF_RO_TL_DTD_000003_TrafficModel
RBDTD-EE-DS2-DPS1_TRE_OS021002-ZZ_ZZZZ_IF_RO-TL_DTD_000001_RoadModel
RBDTD-EE-DS2-DPS1_TRE_OS021002-ZZ_ZZZZ_IF_RO-TL_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS021041-ZZ_ZZZZ_IF_DR-TL_DTD_000001_DrainageModel
RBDTD-EE-DS2-DPS1_TRE_OS021041-ZZ_ZZZZ_IF_DR-TL_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS021041-ZZ_ZZZZ_IF_DR-TL_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OS021041-ZZ_ZZZZ_IF_TR_TR_DTD_000001_SubstructureModel
RBDTD-EE-DS2-DPS1_TRE_OS021041-ZZ_ZZZZ_IF_TR_TR_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS021041-ZZ_ZZZZ_IF_TR_TR_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OS02116-ZZ_ZZZZ_IF_WE-VK_DTD_000001_WaterSewerageModel
RBDTD-EE-DS2-DPS1_TRE_OS0250-ZZ_ZZZZ_IF_WE-VKV_DTD_000001_WaterSewerageModel
RBDTD-EE-DS2-DPS1_TRE_OS0250-ZZ_ZZZZ_IF_WE-VKV_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS0250-ZZ_ZZZZ_IF_WE-VKV_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OS025011-ZZ_ZZZZ_IF_UD-MA_DTD_000101_DitchProtectionModel
RBDTD-EE-DS2-DPS1_TRE_OS025011-ZZ_ZZZZ_IF_UD-MA_DTD_00101_RetainingWallModel
RBDTD-EE-DS2-DPS1_TRE_OS025018-ZZ_ZZZZ_IF_EG-GV_DTD_000001_GasModel
RBDTD-EE-DS2-DPS1_TRE_OS025121-ZZ_ZZZZ_IF_RO_TL_DTD_000001_MaintenanceRoadModel
RBDTD-EE-DS2-DPS1_TRE_OS025121-ZZ_ZZZZ_IF_RO_TL_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS025121-ZZ_ZZZZ_IF_RO_TL_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OS02516-ZZ_ZZZZ_IF_WE-VKV_DTD_000001_WaterSewerageModel
RBDTD-EE-DS2-DPS1_TRE_OS02516-ZZ_ZZZZ_IF_WE-VKV_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS02516-ZZ_ZZZZ_IF_WE-VKV_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000001_DrainageModel
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000001_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000002_KM1Model
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000002_KM1_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000002_KM1_Fill
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000003_KM2Model

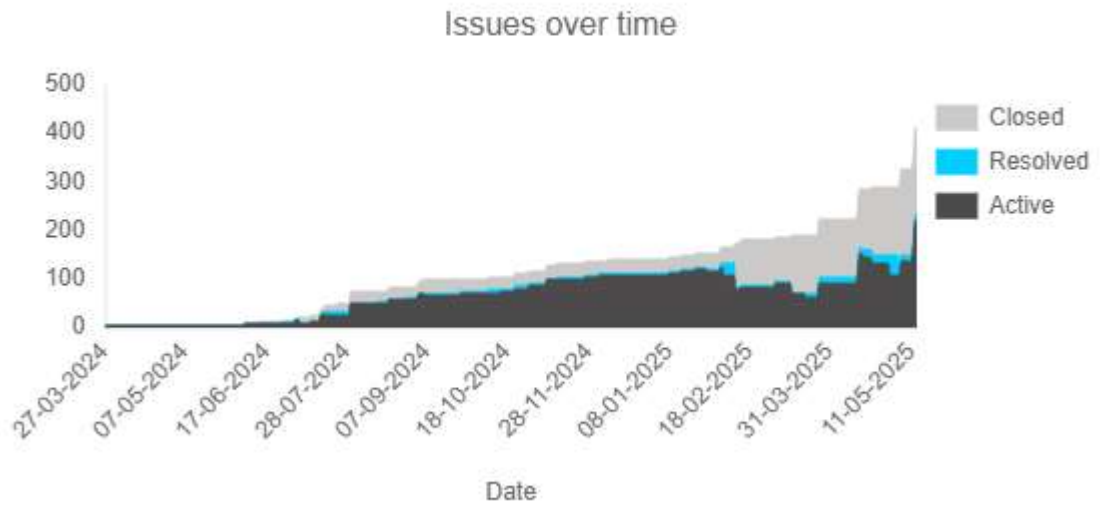
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000003_KM2_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000003_KM2_Fill
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000004_KM3Model
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000004_KM3_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000004_KM3_Fill
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000005_KM4Model
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000005_KM4_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000005_KM4_Fill
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000006_KM5Model
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000006_KM5_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000006_KM5_Fill
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000007_KM6Model
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000007_KM6_Excavation
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_DR-TL_DTD_000007_KM6_Fill
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_TR_TR_DTD_000001_SubstructureModel
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_TR_TR_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OS025311-ZZ_ZZZZ_IF_TR_TR_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OU0410-ZZ_ZZZZ_IF_WE-VKV_DTD_000001_WaterSewerageModel
RBDTD-EE-DS2-DPS1_TRE_OU0410-ZZ_ZZZZ_IF_WE-VKV_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OU0410-ZZ_ZZZZ_IF_WE-VKV_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_OU0430-ZZ_0003_IF_EG-GV_DTD_000005_GasModel
RBDTD-EE-DS2-DPS1_TRE_OU0430-ZZ_0003_IF_EG-GV_DTD_000024_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_OU0430-ZZ_0003_IF_EG-GV_DTD_000024_FillModel
RBDTD-EE-DS2-DPS1_TRE_OU0450-ZZ_ZZZZ_IF_WE-VK_DTD_000001_WaterSewerageModel
RBDTD-EE-DS2-DPS1_TRE_OU0470-ZZ_ZZZZ_IF_EG-GV_DTD_000003_GasModel
RBDTD-EE-DS2-DPS1_TRE_RW0401-ZZ_ZZZZ_CM_MO-AA_DTD_000002_FederatedModel
RBDTD-EE-DS2-DPS1_TRE_RW040100-ZZ_ZZZZ_IF_DR-TL_DTD_000101_DrainageModel
RBDTD-EE-DS2-DPS1_TRE_RW040100-ZZ_ZZZZ_IF_TR-TR_DTD_000002_ExcavationModel
RBDTD-EE-DS2-DPS1_TRE_RW040100-ZZ_ZZZZ_IF_TR-TR_DTD_000003_FillModel
RBDTD-EE-DS2-DPS1_TRE_RW040100-ZZ_ZZZZ_IF_TR-TR_DTD_000005_SubstructureModel

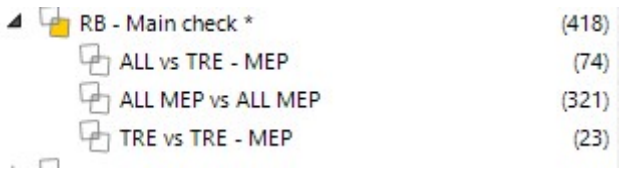
1.3. TOLERANCES

LOD 400:

- **Self-clash of elements**:
  - Drainage and flooding: 0.01 m
  - Geotechnical: N/A
  - MEP: 0.01 m
  - Rail: 0.02 m
  - Roads: 0.02 m
  - Structures and bridges: 0.01 m (reinforcements: 0.01 m, excavation earthworks: 0.05 m)
  - Tunnels: 0.01 m (reinforcements: 0.01 m, excavation earthworks: 0.05 m)
  - Utilities: 0.01 m
  - Railway clearance under structures (gauge control): 0.0 m
- **Interdisciplinary clash of elements**:
  - Drainage and flooding, MEP, Rail, Roads, Structures and bridges, Tunnels: 0.02 m
  - Geotechnical: N/A
  - Utilities: Soft clash evaluation/clearance

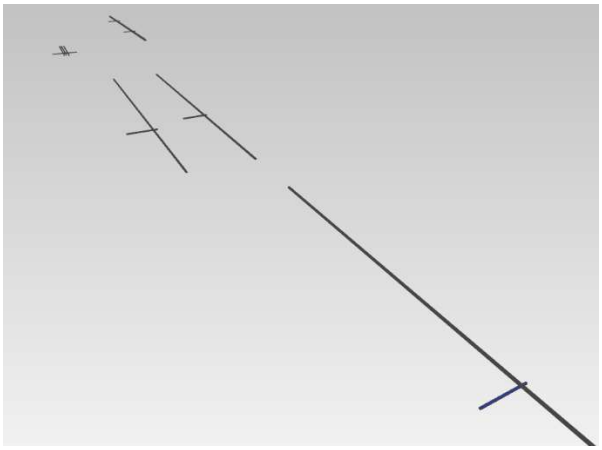
1.4. CLASH DETECTION





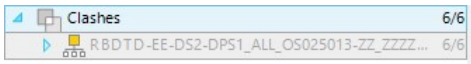
ALL vs TRE – MEP

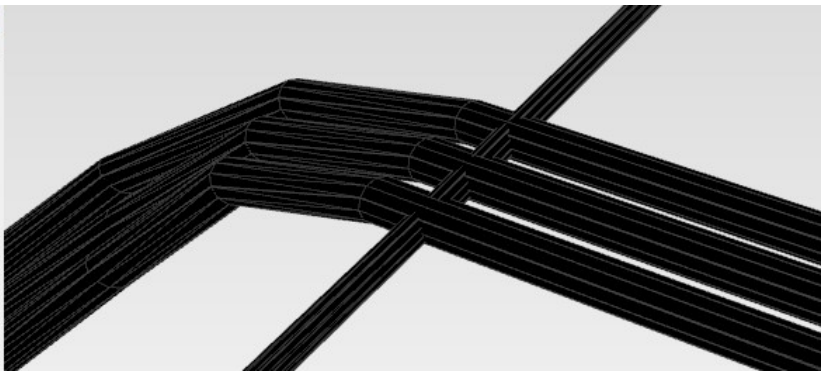
Critical Issues – need to be resolved.



ALL MEP vs ALL MEP

Critical Issues – need to be resolved.





TRE vs TRE – MEP

Unimportant Clashes – will be ignored.

These conflicts are between the same system elements are built this way.