

National Underground Asset Register (NUAR)

NUAR Data Model Publication

MUDDI UK Excavation Profile - Logical Model - Diagrams

Publication History

Date	Version	Description
12/08/2024	0.1	First publication of the NUAR Data Model
10/03/2025	1.0	Publication of the NUAR Data Model – V2.1.3

Purpose of this document

This document includes diagrams for the logical UK: Excavation profile of the MUDDI Conceptual Model.

Table of Contents

1.1 MUDDI - UK Excavation Profile - Logical diagram	3
1.1.1 MUDDI - UK Excavation Profile - Logical - Codelists-Transformation diagram	4
1.1.1.1 Codelist Register - Protected Sites diagram	5
1.1.1.2 Codelist Register - Sewer Network diagram	6
1.1.2 MUDDI - UK Excavation Profile - Logical - Core Data diagram	7
1.1.2.1 Core Relationships diagram	8
1.1.2.2 Drainage diagram	9
1.1.2.3 Electricity Network diagram	10
1.1.2.4 Fuel and Chemicals Network diagram	11
1.1.2.5 Gas Network diagram	12
1.1.2.5.1 Planning Areas diagram	13
1.1.2.5.1.1 Historical Land Use diagram	14
1.1.2.5.1.2 Protected Sites diagram	15
1.1.2.5.1.3 Restricted Sites diagram	16
1.1.2.6 Sewer Network diagram	17
1.1.2.7 Telecommunications Network diagram	18
1.1.2.8 Thermal Network diagram	19
1.1.2.9 Transport diagram	20
1.1.2.10 Water Network diagram	21
1.1.3 MUDDI - UK Excavation Profile - Logical - CustomBackdrop diagram	22
1.1.4 MUDDI - UK Excavation Profile - Logical - Organisations diagram	23
1.1.4.1 MUDDI - UK Excavation Profile - Logical - Organisations - Rules diagram	24
1.1.5 MUDDI - UK Excavation Profile - Logical - UserCreatedData diagram	25
1.1.6 MUDDI - UK Excavation Profile - Logical - Version diagram	26

1.1 MUDDI - UK Excavation Profile - Logical diagram

GML diagram in package 'MUDDI - UK Excavation Profile - Logical'

MUDDI - UK Excavation Profile - Logical Version 2.1.3 Created on 06/10/2023. Last modified 09/03/2025

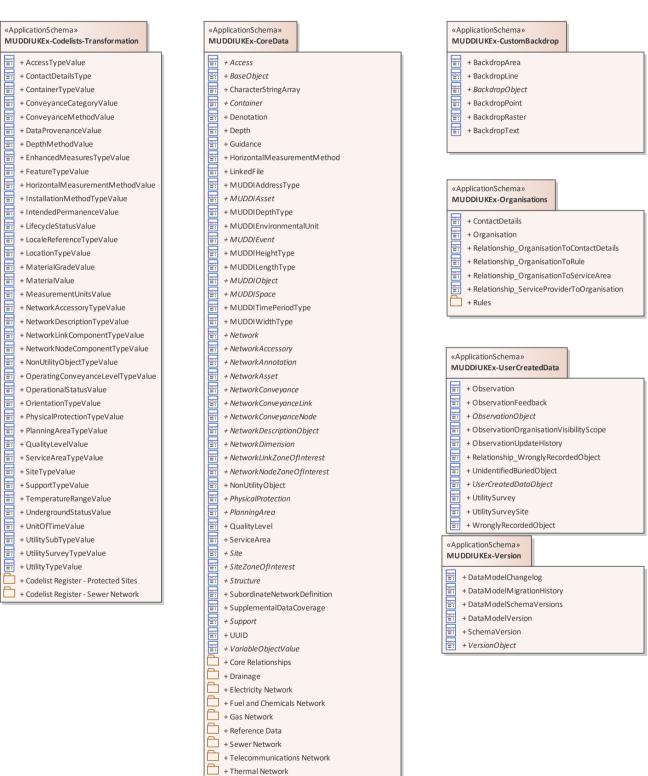


Figure 1: MUDDI - UK Excavation Profile - Logical

+ Transport + Water Network

1.1.1 MUDDI - UK Excavation Profile - Logical - Codelists-Transformation diagram

GML diagram in package 'MUDDIUKEx-Codelists-Transformation'

MUDDI - UK Excavation Profile - Logical - Codelists-Transformation Version~2.1.3 Created on 09/06/2023. Last modified 09/03/2025



Figure 2: MUDDI - UK Excavation Profile - Logical - Codelists-Transformation

1.1.1.1 Codelist Register - Protected Sites diagram

GML diagram in package 'Codelist Register - Protected Sites'

 $\begin{tabular}{ll} Codelist Register - Protected Sites \\ Version 2.1.3 \\ Created on 21/08/2021. Last modified 09/03/2025 \\ \end{tabular}$

Conservation Area

 Mossland
 Protecting And Enhancing Biodiversity And Habitats

Wildlife Enhancement Corridors

Figure 3: Codelist Register - Protected Sites

1.1.1.2 Codelist Register - Sewer Network diagram

GML diagram in package 'Codelist Register - Sewer Network'

«CodeList» SewerDepthTypeValue

- + Downstream Invert Depth
- + Unknown
- + Upstream Invert Depth

Figure 4: Codelist Register - Sewer Network

1.1.2 MUDDI - UK Excavation Profile - Logical - Core Data diagram

GML diagram in package 'MUDDIUKEx-CoreData'

MUDDI - UK Excavation Profile - Logical - Core Data Version~2.1.3 Created on 17/08/2021. Last modified 09/03/2025

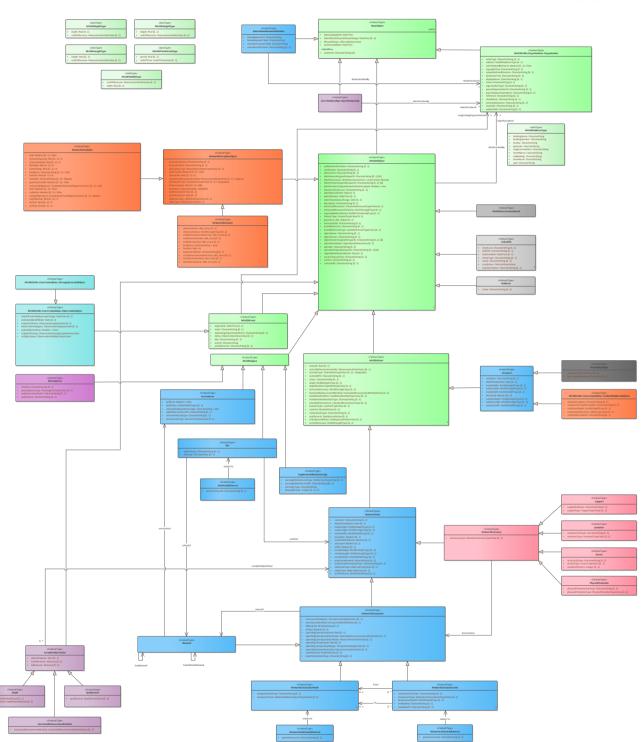


Figure 5: MUDDI - UK Excavation Profile - Logical - Core Data

1.1.2.1 Core Relationships diagram

Class diagram in package 'Core Relationships'

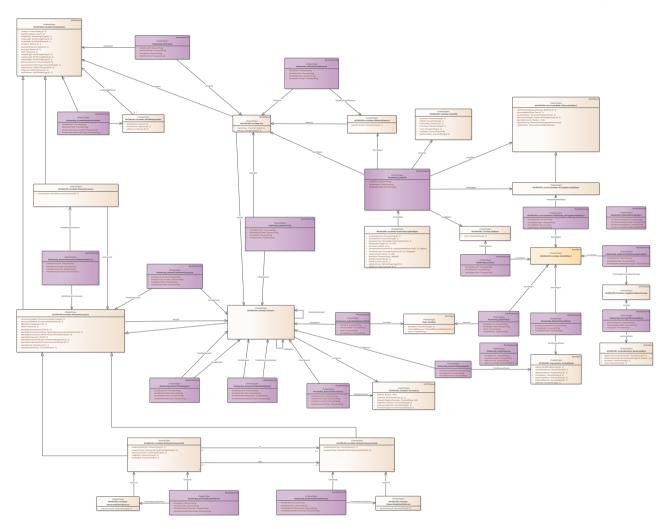


Figure 6: Core Relationships

1.1.2.2 Drainage diagram

Class diagram in package 'Drainage'

Drainage Version 2.1.3 Created on 15/10/2020. Last modified 09/03/2025

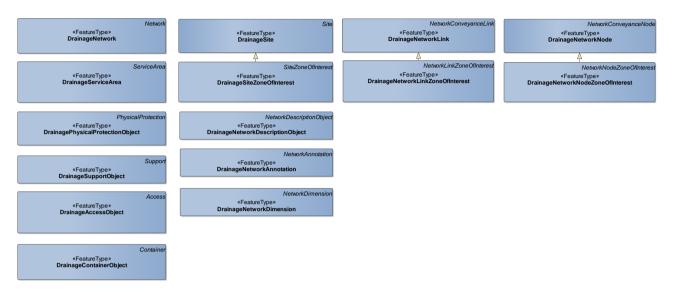


Figure 7: Drainage

1.1.2.3 Electricity Network diagram

Class diagram in package 'Electricity Network'

Electricity Network
Version 2.1.3
Created on 06/08/2019. Last modified 09/03/2025

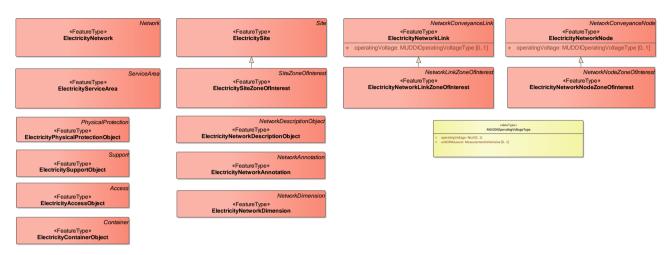


Figure 8: Electricity Network

1.1.2.4 Fuel and Chemicals Network diagram

Class diagram in package 'Fuel and Chemicals Network'

Fuel and Chemicals Network
Version 2.1.3
Created on 06/08/2019. Last modified 09/03/2025

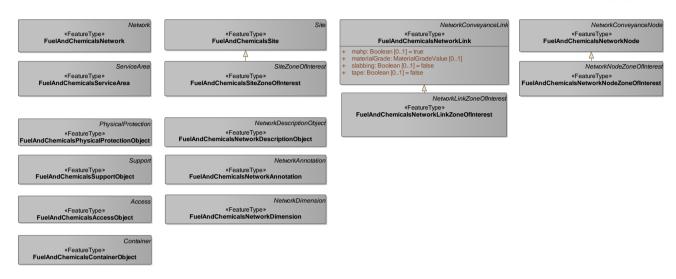


Figure 9: Fuel and Chemicals Network

1.1.2.5 Gas Network diagram

Class diagram in package 'Gas Network'

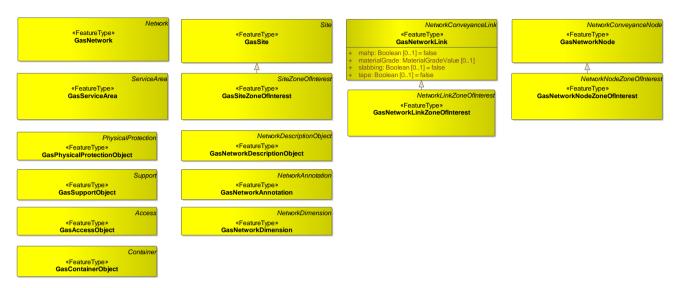


Figure 10: Gas Network

1.1.2.5.1 Planning Areas diagram

GML diagram in package 'Planning Areas'

Planning Areas
Version 2.1.3
Created on 30/03/2022. Last modified 09/03/2025





Figure 11: Planning Areas

1.1.2.5.1.1 Historical Land Use diagram

Class diagram in package 'Historical Land Use'

 $\begin{tabular}{ll} Historical\ Land\ Use \\ Version\ 2.1.3 \\ Created\ on\ 15/10/2020. \ Last\ modified\ 09/03/2025 \\ \end{tabular}$

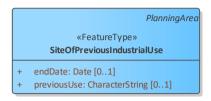


Figure 12: Historical Land Use

1.1.2.5.1.2 Protected Sites diagram

Class diagram in package 'Protected Sites'

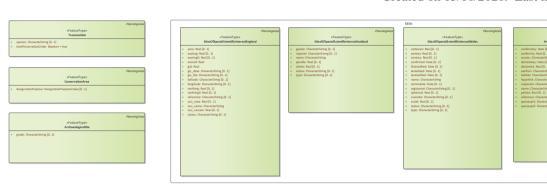


Figure 13: Protected Sites

1.1.2.5.1.3 Restricted Sites diagram

GML diagram in package 'Restricted Sites'

Restricted Sites
Version 2.1.3
Created on 30/03/2022. Last modified 09/03/2025

PlanningArea «FeatureType» RestrictedPlanningArea

Figure 14: Restricted Sites

1.1.2.6 Sewer Network diagram

GML diagram in package 'Sewer Network'

 $\begin{array}{c} \text{Sewer Network} \\ \text{Version 2.1.3} \\ \text{Created on 06/08/2019. Last modified 09/03/2025} \end{array}$

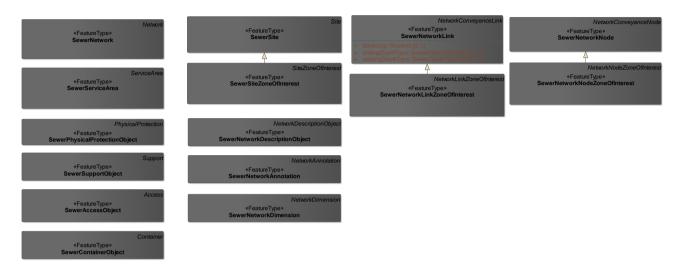


Figure 15: Sewer Network

1.1.2.7 Telecommunications Network diagram

GML diagram in package 'Telecommunications Network'

Telecommunications Network
Version 2.1.3
Created on 06/08/2019. Last modified 09/03/2025

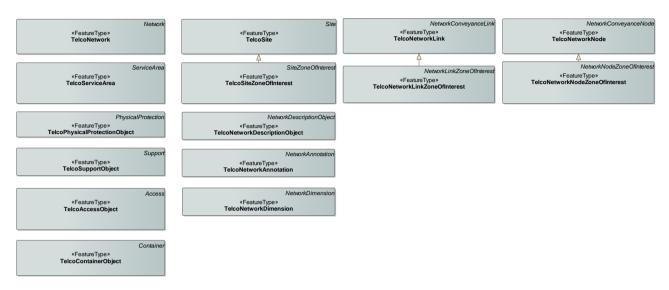


Figure 16: Telecommunications Network

1.1.2.8 Thermal Network diagram

Class diagram in package 'Thermal Network'

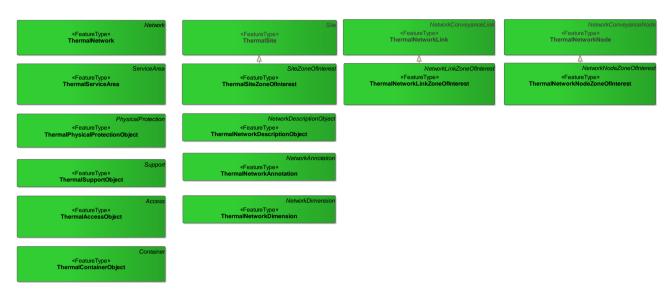


Figure 17: Thermal Network

1.1.2.9 Transport diagram

Class diagram in package 'Transport'

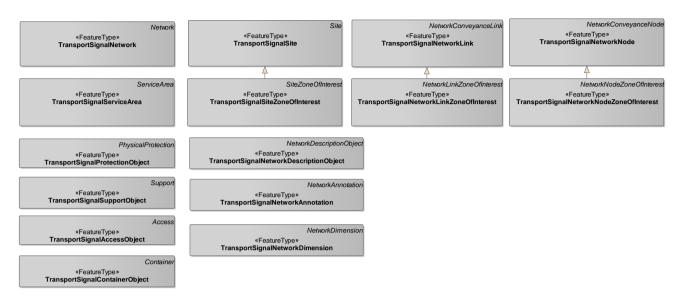


Figure 18: Transport

1.1.2.10 Water Network diagram

Class diagram in package 'Water Network'

 $Water\ Network \\ Version\ 2.1.3$ Created on 06/08/2019. Last modified 09/03/2025

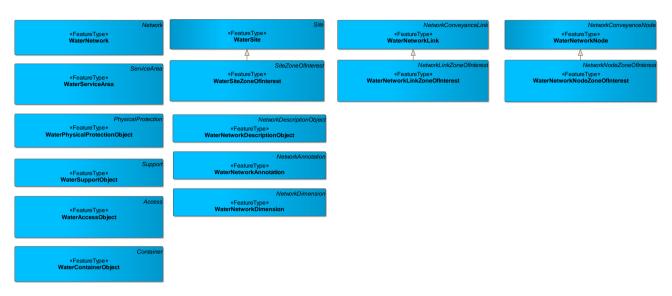


Figure 19: Water Network

1.1.3 MUDDI - UK Excavation Profile - Logical - CustomBackdrop diagram

Class diagram in package 'MUDDIUKEx-CustomBackdrop'

MUDDI - UK Excavation Profile - Logical - CustomBackdrop Version 2.1.3 Created on 11/07/2022. Last modified 09/03/2025

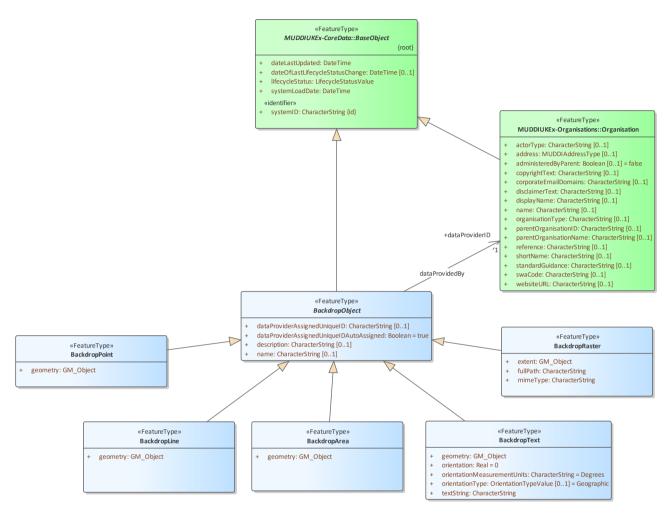


Figure 20: MUDDI - UK Excavation Profile - Logical - CustomBackdrop

1.1.4 MUDDI - UK Excavation Profile - Logical - Organisations diagram

GML diagram in package 'MUDDIUKEx-Organisations'

MUDDI - UK Excavation Profile - Logical - Organisations Version 2.1.3 Created on 30/01/2023. Last modified 09/03/2025

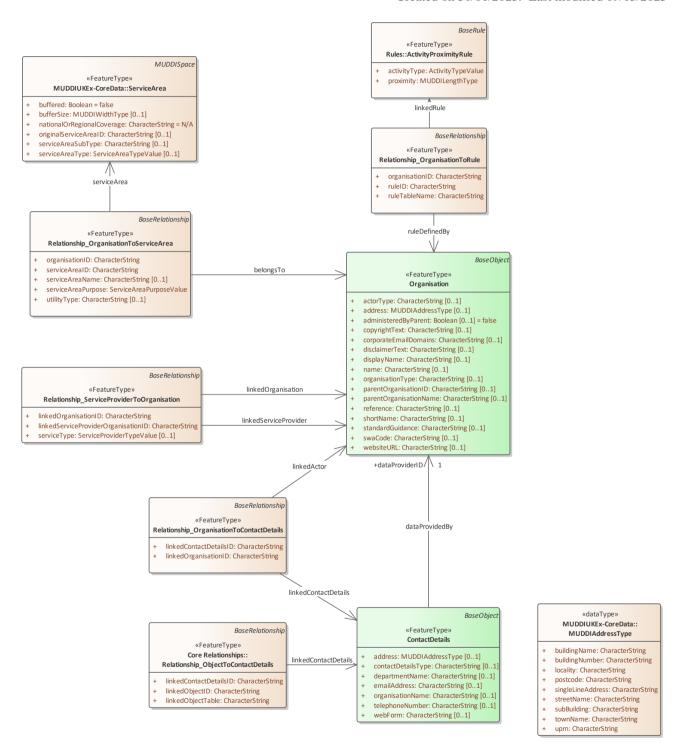


Figure 21: MUDDI - UK Excavation Profile - Logical - Organisations

1.1.4.1 MUDDI - UK Excavation Profile - Logical - Organisations - Rules diagram

GML diagram in package 'Rules'

MUDDI - UK Excavation Profile - Logical - Organisations - Rules Version 2.1.3 Created on 18/08/2021. Last modified 09/03/2025

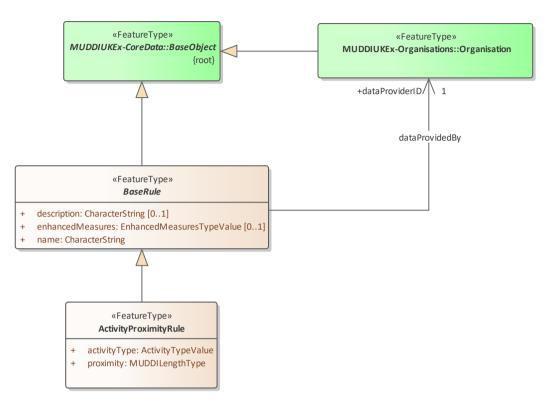


Figure 22: MUDDI - UK Excavation Profile - Logical - Organisations - Rules

1.1.5 MUDDI - UK Excavation Profile - Logical - UserCreatedData diagram

GML diagram in package 'MUDDIUKEx-UserCreatedData'

MUDDI - UK Excavation Profile - Logical - UserCreatedData Version 2.1.3 Created on 31/01/2023. Last modified 09/03/2025

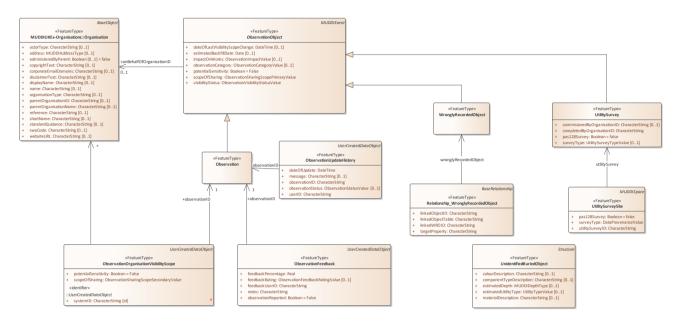


Figure 23: MUDDI - UK Excavation Profile - Logical - UserCreatedData

1.1.6 MUDDI - UK Excavation Profile - Logical - Version diagram

GML diagram in package 'MUDDIUKEx-Version'

MUDDI - UK Excavation Profile - Logical - Version Version 2.1.3 Created on 11/03/2022. Last modified 09/03/2025

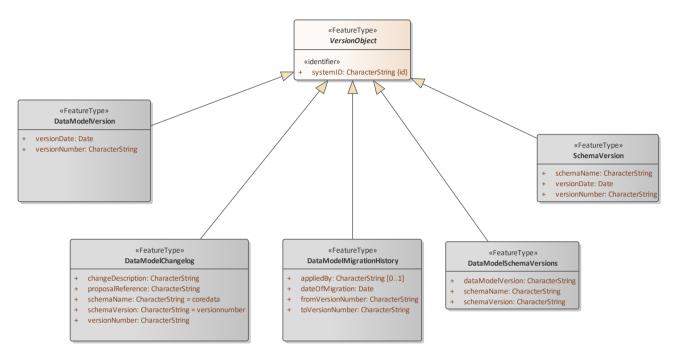


Figure 24: MUDDI - UK Excavation Profile - Logical - Version