



# ADAC Asset Data Dictionary

Feb 2026

V6.0.0

ADAC Cadastre

DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION		
Cadastre * <i>Data structure constraining information relating to cadastral features.</i>	LandParcels * <i>Represents the feature class of cadastral parcels</i>		Lot * <i>Represents a cadastral lot feature.</i>  <i>Represents the boundary of a titled, or proposed lot</i>		LotNo *	<i>The lot number as described on the originating survey plan</i>		String_32		
					PlanNo *	<i>The plan number of the originating survey plan.</i>		String_32		
					CancelledLotPlan	<i>The lot on plan cancelled by this boundary if applicable.</i>		String_32		
					TitledArea_m2 *	<i>The area in square metres enclosed by the boundary, as described by the survey plan.</i>		Float_Positive_NonZero		
					Geometry *	<i>The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines and complex curves.</i>		geometry_area_multipatch_complex		
			WaterCourseReserve	<i>Represents the boundary of a Water Course Reserve.</i>	Name *	<i>The name of the watercourse reserve represented by this boundary</i>		String_128		
					Geometry *	<i>The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines and complex curves.</i>		geometry_area_multipatch_complex		
			RoadReserve	<i>Represents the boundary of a Road Reserve.</i>	Name *	<i>The name of the road reserve represented by this boundary</i>		String_128		
					Geometry *	<i>The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines and complex curves.</i>		geometry_area_multipatch_complex		
			Easements * <i>Represents the feature class of cadastral easements</i>		Easement <i>Represents a cadastral easement feature.</i>  <i>Represents the boundary of an existing or new easement</i>		LotNo *	<i>The lot number as described on the originating survey plan</i>		String_32
							PlanNo *	<i>The plan number of the originating survey plan.</i>		String_32
	Geometry *	<i>The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines and complex curves.</i>						geometry_area_multipatch_complex		
	SurveyMarks * <i>Represents the feature class of Survey Marks</i>		SurveyMark <i>Represents a cadastral SurveyMark feature.</i>		MarkName *	<i>The name by which the survey mark may be uniquely identified from control records.</i>		String_64		
					Geometry *	<i>The geometry of this feature in coordinate space.</i>		geometry_point_singlepoint		
	Connections * <i>Represents the feature class of cadastral Connections</i>		Connection <i>Represents an observed and reduced cadastral connection feature.</i>  <i>A connection must run from the survey mark to the connected feature. If this feature is used, the bearing and distance must be expressed on the same coordinate system as the project. If this is other than the system on which the survey was conducted, then connections should not be represented.</i>		Bearing *	<i>The bearing in decimal degrees clockwise from North in the coordinate system of this project.</i>		Float_Positive_Zero		
					Distance_m *	<i>The distance in metres on the coordinate system of this project.</i>		Float_Positive_NonZero		
					Geometry *	<i>The geometry of this feature in coordinate space.</i>		geometry_linear_segment_simple		
	ChainageLines * <i>Represents the feature class of cadastral Connections</i>		ChainageLine <i>A line of measured chainage with a defined start and end value. Polyline shape is only an approximation of true curve geometry, but the start and end points should coincide exactly with the actual start and end of chainage.</i>		ChainageID *	<i>Unique ID of this chainage line.</i>		String_64		
					StartChainage_m *	<i>Start Chainage in metres of this section.</i>		Float_Positive_Zero		
EndChainage_m *					<i>End Chainage in metres of this section.</i>		Float_Positive_Zero			
Geometry *					<i>The geometry of this feature in coordinate space.</i>		geometry_linear_singlepath_complex			

# ADAC Communication

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION												
Communication *	Data structure constraining information for communication features	Pits *	Element representing the feature class of Communication Pits	Pit *	Represents a communication pit feature	Type *	The type of communication pit	Tri Truff Circular 600 Type 1 Type 2 Type 3 Type 4 Type 5 Type 6 Type 7 Type 8 Type 9 Type 66	Tri Truff Circular 600 Type 1 Type 2 Type 3 Type 4 Type 5 Type 6 Type 7 Type 8 Type 9 Type 66																
						Surface	The surface in which the pit is installed	Bitumen Concrete Grass	Bitumen Concrete Grass																
						Material *	The pit material type eg: Plastic, Concrete	Asbestos Cement Concrete Fibreglass Plastic Polymer Concrete	Asbestos Cement Concrete Fibreglass Plastic Polymer Concrete																
						LidMaterial *	The Lid material type eg: Plastic, Concrete	Aluminium Cast Iron Composite Plastic Concrete Fibreglass Galvanised Mild Steel Galvanised Mild Steel - In-Fill Polymer Concrete	Aluminium Cast Iron Composite Plastic Concrete Fibreglass Galvanised Mild Steel (GMS) Galvanised Mild Steel (GMS) - In-Fill Polymer Concrete																
						LidDesignation	Label on Lid	Blank Communications Communications + Local Govt Name Traffic Signals	Blank Communications E.g. Communications - BCC Traffic Signals																
						LidLoadRating	Access Cover & Frames Load Rating as per AS3996	Class A Class B Class C Class D	Extra Light - 10kN Light - 80kN Medium - 150kN Heavy - 210kN																
						KeyType	Type of locking for the pit lid	Allen Key None Padlock Smart Key	Allen Key None Padlock Smart Key																
						Size *	Represents the essential dimensions of the pit. Contains a choice of structures that pertain to different configurations.	Rectangular *	Dimensions of a rectangular pit	Length_mm *	Length in millimetres	positiveInteger													
								Circular *	Dimensions of a circular pit	Width_mm *	Width in millimetres	positiveInteger													
										Diameter_mm *	Diameter in millimetres	positiveInteger													
						Depth_m *	The depth of the pit in metres.		Float_Positive_NonZero																
						SurfaceLevel_m	Surface level of pit, measured at the centre of the pit lid (in metres against the vertical datum).		Float																
						Geometry *	The geometry representing this feature in coordinate space.		geometry point singlepoint																
						Conduits *	Element representing the feature class of Communication Conduits	Conduit *	Represents an communication conduit feature	Conduit *	Represents an communication conduit feature	Use *	The primary use for the conduit	Coaxial Data - Other Fibre Marked for Future Use	Coaxial Data - Other Fibre Marked for Future Use										
												Material *	The conduit material type eg: PVC, Other	Galvanised HDPE Other PE PVC	Galvanised High Density Polyethylene Other - define other in notes field Polyethylene Polyvinyl Chloride										
												Placement	This describes where/how the communication conduit is placed	Mixed Submerged Surface Mounted Underground	Mixed Submerged (water) Surface Mounted Underground										
												Protection	The type of conduit protection used eg: Concrete encased, warning tape only	Concrete Encased Rubber Matting Warning Tape Polymetric Cable Cover Concrete Batts Galvanised Steel Pavers	Concrete Encased Rubber Matting Warning Tape Polymetric Cable Cover Concrete Batts Galvanised Steel Pavers										
												Size_mm *	The size of the conduit in millimetres	16 20 25 32 50 63 100 110 Other	16 20 25 32 50 63 100 110 Other - define other size in notes field										
												TraceWire	True or false value indicating whether a trace wire is present		boolean										
												Configuration	Utilised when there is multiple conduit diameters utilised in the same trench. The configuration of the conduits laid in the trench, ie Quantity x Size eg. 2 x 80mm + 1 x 50mm		String_64										
												NoOfConduits *	Total number of communication conduits on alignment		positiveInteger										
												AverageDepth_mm	The average depth of the communication conduit in the trench/run in millimetres		positiveInteger										
												Geometry *	The geometry representing this feature in coordinate space.		geometry linear multipath complex										
												Cables *	Element representing the feature class of Communication Cables	Cable *	Represents an communication cable feature	Cable *	Represents an communication cable feature	Type *	The type of cable	ADSS Cat 5 Cat 6 Cat 7 Coaxial Flat Ribbon OPGW Other Pre-terminated Rodent Resistant SWR	Arial Dielectric Self Support Cat 5 Cat 6 Cat 7 Coaxial Flat Ribbon Optical Ground Wire Other - define other type in notes field Pre-terminated Rodent Resistant Spider Web Ribbon				
																		ConductorMaterial *	Describes the material of the conductor utilised in the cable	Copper Glass Fibre Plastic Fibre	Copper Glass Fibre Plastic Fibre				
																		Insulation	Insulation around cable	Gel Filled LSZH Nylon Paper Lead PVC SWA	Gel Filled Low Smoke Zero Halogen Nylon (Termite Resistant) Paper Lead Polyvinyl Chloride Steel Wire Armour				
																		NoOfCores *	The number of cores or fibres in the cable	6 Core 12 Core 24 Core 48 Core 72 Core	6 Core 12 Core 24 Core 48 Core 72 Core				

# ADAC Communication

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								96 Core 144 Core 216 Core 288 Core 360 Core 432 Core 720 Core 864 Core Other	96 Core 144 Core 216 Core 288 Core 360 Core 432 Core 720 Core 864 Core Other - define other in notes field				
						Placement	Describes the placement of the cable	Other Overhead Underground	Other - define other in notes field Overhead Underground				
						FibreType	The type of fibre	MMOF SMOF	Multi-Mode Optic Fibre Single Mode Optic Fibre				
						NoOfCables *	The number of cables in the conduit/run		positiveInteger				
						Configuration	Utilised when there is multiple cable sizes utilised in the same conduit. The configuration of the cables in conduit, ie Quantity x Size eg. 2 x 6 Core + 1 x 72 Core		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		geometry linear multipath complex				
		Fittings *	Element representing the feature class of Communication Fittings	Fitting *	Represents an communication fitting feature	Purpose *	Purpose of the communication fitting	5G Communication Cycling Flood LoRaWAN Parking Pedestrian SCADA Surveillance Traffic Waste	5G equipment may include antenna etc. Communication Cycling Flood e.g. Flood height sensor Long Range Wide Area Networking Parking Pedestrian Supervisory Control and Data Acquisition Surveillance Traffic Waste e.g. Bin sensor				
						Type *	The type of Communication fitting e.g. Splice Point, Junction	Amplifier Antenna Camera FOBOT Gateway IDF Information Board ITS Microwave MDF Other	Amplifier Antenna Camera Fibre Optic Break Out Tray Gateway Intermediate Distribution Frame Information Board ITS Microwave Main Distribution Frame Other - define other type in notes field Eg. 5G Equipment, LoRaWan Equipment				
						MountType *	Type of mount made for the communication fitting	Projector Repeater RJ45 Patch Panel Sensor Speaker Wireless Access Point	Projector Repeater RJ45 Patch Panel Sensor Speaker Wireless Access Point				
						Manufacturer	The Manufacturer of the unit	Pillar Pit Plinth Pole Post Rack Roof Wall	Pillar Pit Plinth Pole Post Rack Roof Wall				
						ModelNumber	The standard code, model number or part number for the unit		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		String_64				
		MonitoringStations	Element representing the feature class of Communication Monitoring Stations	MonitoringStation	Represents an communication monitoring station feature	Type *	The type of the monitoring station		geometry point_singlepoint				
								BOM Standard Dune Height Dust Early Warning Sirens Environmental Gauge Board Ground Water Maximum Height Gauge Other Rainfall Rainfall and River Height River Height Waste Gases Water Sampling Point Weather Station Wind Gauge Station	BOM Standard Dune Height Dust Monitoring Early Warning Sirens Environmental Gauge Board Ground Water Maximum Height Gauge Other - define other type in notes field Rainfall Rainfall and River Height River Height Waste Gases Water Sampling Point Weather Station Wind Gauge Station				
						Telemetry *	True or false value indicating whether a station has telemetry fitted		boolean				
						Geometry *	The geometry representing this feature in coordinate space.		geometry point_singlepoint				

ADAC Electrical

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
Electrical *	Data structure constraining information for electrical features	Switchboards *	Element representing the feature class of Electrical Switchboards	Switchboard *	Represents an electrical switchboard feature	Type *	The type of switchboard	Control Board	Control Board for housing Control gear, including but not limited to Electricity Meters, Pump Control, Lighting Control, etc				
						Distribution Board	Distribution Board						
						Main Switchboard	Main Switchboard						
						Traffic Controller Board	Controller Board for Traffic Signals						
						EnclosureMaterial *	The material of the switchboard enclosure	Aluminium	Aluminium				
						Plastic	Plastic						
						Sheet Steel	Sheet Steel						
						Stainless Steel	Stainless Steel						
						EnclosureCoating	The coating of the switchboard enclosure	Galvanised	Galvanised				
						Nil	Nil						
						Paint	Paint						
						Powdercoat	Powdercoat						
						EnclosureConstruction	Enclosure construction for a switchboard	Bell	IP Rated enclosure to house a Switchboard inside a Pit				
						Custom	Custom						
						Generic Meter Box	Residential/Commercial Box incorporation Electricity Meter and Switchboard						
						Package Board	Off the shelf plastic Switchboard enclosure						
						Panel Board	Off the shelf Metal Switchboard enclosure, which incorporates Switchboard. But not a Electricity Meter.						
						Pillar	Electricity Pillar, aka "Green Boy"						
						Pole	Inside a Pole						
						MountType	The mounting type used to fix the switchboard	Plinth	Plinth				
						Pit	Located in a Pit						
						Pole	Pole (Attached to or mounted inside)						
						Post	Post (Mounted on or attached to)						
						Structure	Attached to Structure e.g. Building, Shelter, Wall, Fence etc						
						Surface	Surface Mounted						
						ElectricityTariff *	The Electricity tariff of the switchboard	Metered	Metered				
						Rate 3	Regulated Unmetered Public Safety Lighting						
Solar	Solar												
Tariff 91	Unregulated Unmetered Supply (Non-contestable Electricity Retailer)												
SupplyArrangement	Supply phase	1 Phase	1 Phase										
3 Phase	3 Phase												
TypeOfSupply	Type of supply to switchboard	N/A	Standalone e.g. solar										
Overhead Supply	Overhead Supply												
Underground Supply	Underground Supply												
Height_mm *	The height of the enclosure measured in the vertical in millimetres		positiveInteger										
Width_mm *	The width of the enclosure measured horizontally in millimetres		positiveInteger										
Depth_mm *	The depth of the enclosure in millimetres		positiveInteger										
NoOfDoors	The number of doors on the enclosure		positiveInteger										
MeterNumber	The supply authority electrical meter asset number. When multiple meters are present, meter numbers are to be recorded ie. 123456, 567890		String_64										
NationalMeterIdentifier	Identification number for the connection to the National Electricity Network. NMI number in most States will be an 10 or 11 digit number, such as 44012345678 or two letters followed by digits, such as QB044123456		String_64										
PointOfSupply	Details of Point of Supply		String_32										
IP_Rating	Refers to the IP (Ingress Protection) of switchboard. The rating is used to describe levels of sealing protection on electrical enclosures against solid objects and moisture.		String_64										
Manufacturer	The Manufacturer of the unit		String_64										
ModelNumber	The standard code, model number or part number for the unit		String_64										
Geometry *	Point geometry representing the feature in coordinate space.		geometry_point_singlepoint										
Pits *	Element representing the feature class of Electrical Pits	Pit *	Represents an electrical pit feature	Type *	Type of pit	Tri Truff Circular 600	Tri Truff Circular 600						
				Type 1	Type 1								
				Type 2	Type 2								
				Type 3	Type 3								
				Type 4	Type 4								
				Type 5	Type 5								
				Type 6	Type 6								
				Type 7	Type 7								
				Type 8	Type 8								
				Type 9	Type 9								
				Type 66	Type 66								
				Use	What is the pit used for	High Voltage	High Voltage						
				Low Voltage	Low Voltage								
				Low and High Voltage	Low and High Voltage								
				Material *	The pit material type eg: Plastic, Concrete	Asbestos Cement	Asbestos Cement						
				Concrete	Concrete								
				Fibreglass	Fibreglass								
				Plastic	Plastic								
				Polymer Concrete	Polymer Concrete								
				LidLoadRating	Access cover and frames load rating as per AS3996	Class A	Extra Light - 10kN						
				Class B	Light - 80kN								
				Class C	Medium - 150kN								
				Class D	Heavy - 210kN								
				LidMaterial *	The Lid material type eg: Plastic, Concrete	Aluminium	Aluminium						
				Cast Iron	Cast Iron								
				Composite Plastic	Composite Plastic								
				Concrete	Concrete								
Fibreglass	Fibreglass												
Galvanised Mild Steel	Galvanised Mild Steel (GMS)												
Galvanised Mild Steel - In-Fill	Galvanised Mild Steel (GMS) - In-Fill												
Polymer Concrete	Polymer Concrete												
LidDesignation	Label on Lid	Blank	Blank										
Electrical	Electrical												
Electrical + Local Govt Name	E.g. Electrical - BCC												
Electrical + Electrical Distributor	E.g. Electrical - Energex												
N/A	Applicable for in-fill lids												
Traffic Signals	Traffic Signals												
KeyType	Key type used to open lid	Allen Key	Allen Key										
None	None												
Padlock	Padlock												
Smart Key	Smart Key												
Size *	Represents the essential dimensions of the pit. Contains a choice of structures that pertain to different configurations.	Rectangular *	Dimensions of a rectangular pit	Length_mm *	Length in millimetres		positiveInteger						
				Width_mm *	Width in millimetres		positiveInteger						
		Circular *	Dimensions of a circular pit	Diameter_mm *	Diameter in millimetres		positiveInteger						
Depth m *	The depth of the pit in metres		Float Positive NonZero										

# ADAC Electrical

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						SurfaceLevel_m	Surface level of pit, measured at the centre of the pit lid (in metres against the vertical datum).		Float				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
		Conduits *	Element representing the feature class of Electrical Conduits	Conduit *	Represents an electrical conduit feature	Material *	The conduit material type eg: PVC, Galvanised etc	Galvanised HDPE PE PVC	Galvanised High Density Polyethylene Polyethylene Polyvinyl Chloride				
						Protection	The type of conduit protection used eg: Concrete encased, warning tape only	Concrete Batts Concrete Encased Galvanised Steel Pavers Polymetric Cable Cover Rubber Matting Warning Tape	Concrete Batts Concrete Encased Galvanised Steel Pavers Polymetric Cable Cover Rubber Matting Warning Tape				
						Placement	Describes the placement of the conduit	Other Overhead Surface Mounted Underground	Other - define other in notes field Overhead Surface Mounted Underground				
						Colour	Colour of conduit	Grey Orange White	Grey Orange White				
						Size_mm *	The size of the conduit in millimetres ie. 16mm-63mm OD, 80mm-150mm ID	16 20 25 32 40 50 63 80 100 110 125 150 Other	16mm 20mm 25mm 32mm 40mm 50mm 63mm 80mm 100mm 110mm 125mm 150mm Other - define other size in notes field				
						Configuration	The configuration of the conduits laid in the trench, ie Quantity x Size eg. 2 x 80mm + 1 x 50mm		String_64				
						NoOfConduits *	Total number of conduits on alignment		positiveInteger				
						AverageDepth_mm	The average depth of the electrical conduit in the trench/run		positiveInteger				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_linear_multipath_complex				
		Cables *	Element representing the feature class of Electrical Cables	Cable *	Represents an electrical cable feature	Type	The cable type	Building Wire Circular Flat Multicore	Building Wire Circular Flat Multicore				
						Material *	The cable core material type eg: Copper, Aluminium	Aluminium Copper Other	Aluminium Copper Other - define other in notes field				
						Insulation	Cable Insulation material	PVC PVC/PVC XLPE/PVC	PVC PVC/PVC XLPE/PVC				
						Placement	Describes the placement of the cable	Other Overhead Underground	Other - define other in notes field Overhead Underground				
						Size_mm2 *	The size of the cable in mm2 ie. 4, 6, 10, 16, 25, 35, 50, 70 etc	1.5 2.5 4 6 10 16 25 35 50 70 95 120 150 185 240 Other	1.5mm2 2.5mm2 4mm2 6mm2 10mm2 16mm2 25mm2 35mm2 50mm2 70mm2 95mm2 120mm2 150mm2 185mm2 240mm2 Other - define other size in notes field				
						Configuration	The configuration of the cables in conduit, ie Quantity x Size eg. 2 x 16mm2 + 1 x 6mm2		String_64				
						NoOfCables *	Total number of cables in conduits on alignment		positiveInteger				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_linear_multipath_complex				
		Fittings *	Element representing the feature class of Electrical Fittings	Fitting *	Represents an electrical fitting feature	Type *	The type of electrical fitting eg: Power Outlet, Earth Point etc	Earth Point Junction Box Other Power Outlet	Earth point Junction Box Other - define other in comments field Power Outlet				
						MountType *	Type of mount made for the electrical fitting	Other Pillar Pit Pole Post Rack Roof Wall	Other - define in comments field Pillar Pit Pole Post Rack Roof Wall				
						PowerSource	Power source supply the fitting	Battery Extra Low Voltage High Voltage Low Voltage Solar	Battery Extra Low Voltage High Voltage Low Voltage Solar				
						Manufacturer	The manufacturer of the unit		String_64				
						ModelNumber	The standard code, model number or part number for the unit in metres		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
		Lights *	Element representing the feature class of Electrical Lights	Light *	Represents an electrical light feature, whether freestanding or fixed to an existing structure	Function *	The major function of the light	Bikeway Lighting Carpark Lighting Decorative/Creative Lighting Park Lighting Pathway Lighting Road Lighting Sports Lighting Waterway Lighting	Lighting for Public Safety for Bikeways Lighting for Public Safety for Carpark Decorative or Creative lighting for public amenity Lighting for Public Safety in Parks Lighting for Public Safety for Pathway Lighting for Public Safety for Roads Lighting for Public Safety for Sports fields Lighting for Public Safety for Waterway Assets, e.g. Pontoons, Jetties, etc				
						Type *	The type of luminaire	Aeroscreen	Aeroscreen				

ADAC Electrical

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								Bespoke Decorative Luminaire	Bespoke Decorative Luminaire				
								Bespoke Furniture Luminaire incorporated into Street Furniture	Bespoke Furniture Luminaire incorporated into Street Furniture				
								Bollard	Bollard				
								Bud Lighting	Bud Lighting				
								Bulk Head	Bulk Head				
								Catenary Lighting	Catenary Lighting				
								Downlight	Downlight				
								Flood	Flood				
								High Bay	High Bay				
								High Mast	High Mast				
								Linear	Linear				
								Post Top	Post Top				
								Projector	Projector				
								Semi Cut Off	Semi Cut Off				
								Spot	Spot				
								Strip Lighting	Strip Lighting				
								Strobe	Strobe				
								Uplight	Uplight				
						Source *	The light source of the luminaire	Compact Fluorescent Fluorescent (CFL)	Compact Fluorescent (CFL)				
								Fluorescent (F)	Fluorescent (F)				
								Halogen	Halogen				
								High Pressure Sodium Vapour (S)	High Pressure Sodium Vapour (S)				
								Incandescent	Incandescent				
								LED	Light Emitting Diode				
								Metal Halide (H)	Metal Halide (H)				
								Other	Other - define in comments field				
						Tarif *	Type of Public Lighting Tarif used to light the luminaire	Metered	Lighting of private roads, walkways and open areas that are not dedicated as public roads. Lighting is supplied, owned, installed and maintained by the Public Body. The Electricity Entity only provides electrical energy to the installation via a Metered connection.				
								Rate 3	Public Lighting, as defined by AS/NZS1158, supplied, installed, owned and maintained by the Public Body or Developer (Known as Rate 3).				
								Solar	Lighting is supplied, owned, installed and maintained by the Public Body. For standalone installations, there is no energy consumption charges from the Electricity Entity.				
								Tariff 91	Lighting is supplied, owned, installed and maintained by the Public Body. In Qld, an unmetered tariff for small loads, as approved by electricity retailer, and applies where the load pattern is predictable (billable in 12 or 24 hours periods).				
						Wattage *	Nominal Wattage value of the luminaire		Float Positive NonZero				
						OpticsConfiguration	Optical distribution pattern		String_64				
						Controller	Base for PE Cell	7 Pin NEMA - Bottom	7 Pin NEMA - Bottom				
								7 Pin NEMA - Top	7 Pin NEMA - Top				
								Bottom - Null	Bottom - Null				
								Top - Null	Top - Null				
								Zhaga Base - Bottom	Zhaga Base - Bottom				
								Zhaga Base - Top	Zhaga Base - Top				
						Sensor	Luminaire Sensor type		String_64				
						MountType	How the luminaire is installed or supported	Ground Mounted	Luminaire is affixed to the ground				
								In Ground	Luminaire is installed underground and is flush with the surface				
								Pole Mounted	Luminaire is attached directly to a pole or via an outreach or bracket				
								Structure Mounted	Luminaire is attached directly to a structure or via a mechanical attachment, bracket or outreach				
						MountingHeight_m	Mounting Height of Luminaire in metres		Float Positive NonZero				
						NoOfLuminaire	The number of luminaires		positiveInteger				
						Shielding	True or false value indicating whether shielding is present		boolean				
						ShieldingType	Type of Shielding	External	Shielding affixed to the luminaire externally				
								Internal	Shielding internally affixed to the luminaire, e.g. adhesive to diffuser				
						Manufacturer	The Manufacturer of the unit		String_64				
						ModelNumber	The standard code, model number or part number for the unit		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
		Poles *	Element representing the feature class of Electrical Poles	Pole *	Represents an electrical pole feature	Function *	The function of the pole	Electrical	Electrical				
								Joint Use	Joint Use ie Lights and Traffic Signal Pole				
								Light	Light				
								Multi Function	Multi Function ie Smart pole				
								Multi Function Joint Use	Multi Function ie Smart pole and Joint Use ie Lights and Traffic Signal Pole				
								Traffic Signals	Traffic Signal only Pole				
						Material *	Predominant construction material of a pole	Aluminium	Aluminium				
								Concrete	Concrete				
								Other	Other - define in comments field				
								Stainless Steel	Stainless Steel				
								Steel	Steel				
								Timber	Timber				
						Base	How pole is supported/affixed to footing	Base Plate	Base Plate				
								Buried in Ground	Buried Directly in Ground (BIG)				
								Offset	Separate attaching Footing to Base Plate				
								Slip Base	Slip Base				
						HingeType	Pole hinged configuration	Base Plate Hinged	Base Plate Hinged				
								Mid Pole Hinged	Mid Pole Hinged				
								N/A	Not Applicable				
						Coating	Pole Coating	Galvanised	Galvanised				
								None	None				
								Paint	Paint				
								Powder Coated	Powder Coated				
						OutreachArmType	Type of Outreach	Attached	Outreach is attached to pole in a manner that can be separated e.g. bolted				
								Integral on the luminaire	Luminaire and outreach are a single unit				
								Integral on the pole	Permanently attached to the pole e.g. welded				
						OutreachShape	Shape of the Outreach	C Hook	Outreach attached perpendicular to the pole and bends 180°. Forming the letter "C"				
								Composite	Combination of Straight and curved				
								Curved	Outreach is curved				
								Gooseneck	Outreach attaches to the pole in a vertical position then bends 180deg so the luminaire is mounted from the top				
								Straight	Outreach is straight				
						OutreachArmStay	True or false value indicating whether an additional structure to support the outreach is present		boolean				
						NoOfOutreach	Number of Outreaches	1	Single				
								2	Double				
								3	Triple				

ADAC Electrical

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								4 None	Quadruple None				
						BasePlatePCD	The Pitch Circle Diameter (PCD) is the diameter of the circle which passes through the centre of all the base plate studs		String_32				
						Manufacturer *	Manufacturer of pole		String_64				
						ModelNumber *	Model number of pole		String_64				
						Height_m *	The height of the pole		Float_Positive_NonZero				
						Width_mm *	The width/diameter of the light pole at 1.5m in millimetres		positiveInteger				
						OutreachLength_m	The length of the Outreach in metres (0.1 - 6m)		Float_Positive_NonZero				
						OutreachUplift_m	The uplift height of the Outreach		Float_Positive_NonZero				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
		SolarUnits *	Element representing the feature class of Solar Units	SolarUnit *	Represents a solar unit feature	GridConnected	Is the unit connected to the Electricity Grid	Off-Grid On-Grid	Off-Grid On-Grid				
						InverterCapacity_kW *	The capacity of the Inverter in kW		Float_Positive_NonZero				
						InverterManufacturer *	Manufacturer of Inverter		String_64				
						InverterModelNumber *	Model number of Inverter		String_64				
						NoOfInverters	Quantity of Inverters in the Unit		positiveInteger				
						PanelCapacity_kW *	The capacity of the Panel in kW		Float_Positive_NonZero				
						PanelManufacturer *	Manufacturer of Panel		String_64				
						PanelModelNumber *	Model number of Panel		String_64				
						NoOfPanels	Quantity of Panels in the Unit		positiveInteger				
						BatteryStorageTotalCapacity_kWh *	Total battery storage capacity. Record 0 if no Batteries.		Float_Positive_Zero				
						BatteryManufacturer *	Manufacturer of Battery (if no Battery is present in unit record as None Present)		String_64				
						BatteryModelNumber *	Model number of Battery (if no Battery is present in unit record as None Present)		String_64				
						NoOfBatteries	Number of Batteries in Unit if present		positiveInteger				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
		EV_ChargeStations *	Element representing the feature class of Electronic Vehicle Charge Stations	EV_ChargeStation *	Represents an electronic vehicle charge station feature	ChargeLevel *	The level of charging	Level 1 - Trickle Level 2 - Fast Level 3 - Rapid	AC Trickle Charging - Typically 8-20 hours, depending on current battery charge AC Fast Charging - Typically 10 x faster than trickle, depending on car, battery and charger DC/AC Rapid Charging - Typically 10 - 30 mins, depending on car, battery and charger				
						PlugType *	Charging Station Plug Type	CCS CHAdEMO Type 1 AC Type 2 AC	The CCS plug is an enhanced version of the type 2 plug supporting both AC and DC charging Charge de Move plug Also referred to as J1772 or SAE J1772 plug Also referred to as the IEC 62196 or Mennekes plug				
						ChargingOutput_kW *	Charging output in kW		Float_Positive_NonZero				
						Manufacturer *	Manufacturer of the Charging Station		String_64				
						ModelNumber *	Model of the Charging Station		String_64				
						ElectricalSupply	What is the Electrical Supply to the Station		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
		TrafficSignalLights *	Element representing the feature class of Traffic Signal Lights	TrafficSignalLight *	Represents a traffic signal light feature	LanternFunction *	The purpose of the lantern	Bicycle Signal Pedestrian Signal Traffic Signal Train/Tram Signal	Lantern function is to control Bicycle movement Lantern functioning is to manage pedestrian crossings Lantern function is to control traffic Lantern function is to control Tram or Train				
						LanternType *	Type of Lantern	1 Aspect 2 Aspect 3 Aspect Straight Through 3 Aspect Turn Arrows 4 Aspect 5 Aspect 6 Aspect Target Board 7 Aspect 8 Aspect Target Board 9 Aspect Advanced Warning Flasher Bicycle Lantern Pedestrian Countdown Timer Pedestrian Lantern	1 Aspect lantern 2 Aspect lantern 3 Aspect lantern 3 Aspect turn arrow lantern 4 Aspect lantern 5 Aspect lantern 6 Aspect lantern 7 Aspect lantern 8 Aspect lantern 9 Aspect lantern Advanced Warning Flasher Bicycle Lantern Pedestrian Countdown Timer Pedestrian Lantern				
						LanternActivation	Lantern activation type	Button control Radar Road Loop	Button control Radar Road Loop				
						LuminaireType *	Type of light for the lantern	Halogen LED	Halogen Light Emitting Diode				
						LanternSize_mm *	Size of the lantern in millimetres		positiveInteger				
						Manufacturer *	The Manufacturer of the unit		String_64				
						ModelNumber *	The standard code, model number or part number for the unit		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				

# ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION				
OpenSpace *	Data structure constraining information relating to public open space features.	OpenSpaceAreas *	Represents the feature class of open space areas	OpenSpaceArea *	Represents a top-level area of open space regarded as a single functional area, such as a park or recreation area. May be, but not necessarily, coincident with cadastral boundary	Name *	The official name or description of the Open Space area (eg: Smith St Park, Stockland Park Sporting complex)		String_64						
						Type *	The type of Open Space area eg: Recreational, Bushland, Sporting Complex	Recreational Bushland Road Reserve Special Facility	Recreational Bushland Road Reserve Special Facility						
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_mullipatch_complex						
		ActivityAreas *	Represents the feature class of activity areas	ActivityArea *	Represents an activity area such as a playground or exercise area	Use *	The type of use for the Activity Site eg: Animal, Fitness, Play, Sport	Animal Fitness General Play Sports	Animal Fitness General Play Sports						
						Type *	The type of Activity Site. Eg: Sports Field, Cycling Facility		String_64						
						SurfaceTreatment *	The type of surface treatment used	Acrylic Coating Anti Slip Paint None	Acrylic Coating Anti Slip Paint None						
						Material *	The material type of Undersurfacing eg: Bark, Rubber, Grassed	Bark Bitumen Concrete Grass Gravel Rubber Matting Sand Synthetic Grass Clay Decomposed Granite Earth Tartan	Bark Bitumen Concrete Grass Gravel Rubber Matting Sand Synthetic Grass Clay Decomposed Granite Earth Tartan						
						Thickness_mm *	Thickness of material in millimetres.		Float_Positive_NonZero						
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_mullipatch_complex						
						ActivityLandscapeEdging *	Represents the Edging of an Activity Area or Landscaping Area	Edging *	Represents the Edging of an Activity Area or Landscaped Area	Material *	The material type of edging	Aluminium Brick Concrete Paver Plastic Rock Rubber Timber	Aluminium Brick Concrete Paver Plastic Rock Rubber Timber		
						Length_mm *	Length of material in millimetres.		positiveInteger						
						Width_mm *	Width of material in millimetres.		positiveInteger						
						Geometry *	The geometry representing this feature in coordinate space.		geometry_linear_singlepath_complex						
		ActivityPoints *	Represents the feature class of activity points	ActivityPoint *	Represents an activity point feature. E.g: Animal, Fitness, Play or Sports activity item.	Use *	The activity use category	Animal Fitness Play Sports	Animal Fitness Play Sports						
						Type *	The activity item type. Eg: Play Equipment, Fitness Equipment, Animal Agility Equipment, Sports (court, field, skate, practice nets)		String_64						
						Material *	The material type of Activity Item eg: Timber, Aluminium	Aluminium Combination Fibreglass Plastic Rubber Steel Galvanised Steel Powder Coated Stainless Steel Timber	Aluminium Combination Fibreglass Plastic Rubber Steel Galvanised Steel Powder Coated Stainless Steel Timber						
						Theme	The theme of the Activity item. Eg: Kangaroo, Boat, Fort, Car		String_64						
						Units	The number of units present eg: 1, 2, 3		positiveInteger						
						Manufacturer	The Manufacturer of the unit		String_64						
						ModelNumber	The standard code, model number or part number for the unit		String_64						
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean						
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint						
										Barbeques *	Represents the feature class of barbeques	Barbeque *	Represents an individual barbeque facility	EnergySource *	The Source of energy for the BBQ. Ie: Mains, Bottled, Solar
						Plates *	The number of plates fitted in the BBQ structure.		Minimum (Inclusive) Value: 1 Maximum (Inclusive) Value: 10	At least one plate must be recorded. Up to ten plates are provided for, where they are built into a single structure.					
						SurroundingMaterial *	The material type of the surround structure ie: brick, steel and Timber	Masonry Steel and Timber	Masonry Steel and Timber						
						TopMaterial *	The material type of the top structure ie: Tiled, marble, steel	Concrete Tiled Marble Stainless Steel	Concrete Tiled Marble Stainless Steel						
						Manufacturer	The Manufacturer of the unit		String_64						
						ModelNumber	The standard code, model number or part number for the unit		String_64						
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean						
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint						
		Tables *	Represents the feature class of Tables	Table *	Represents a table unit that may include fixed seating. Not to be used for seating that does not include a table as its main feature.	Type *	The type of Unit eg: Table, Bench or counter.	Bench Counter Table	Bench Counter Table						
						Seating	Seating details. Element should be nil if no seating is present.	SeatType *	The configuration of the associated seating.	Bench Post and Stool Post and Seat	Bench seat Fixed post with stool top Fixed post with non-swivelling seat				

# ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
										Post and Swivel Seat	Fixed post with swivelling seat
								Places *	The number of individuals the seating is designed for. This attribute may be used to help determine the capacity of a recreational facility.		positiveInteger
						Material *	The material type of Table/Seat eg: Timber, Aluminium	Aluminium Concrete Plastic Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel	Aluminium Concrete Plastic Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel		
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete None Paved Timber	Concrete None Paved Timber		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		Seats *	Represents the feature class of seats. Does not include seating that is part of a table feature.	Seat *	Represents a seat feature. Includes freestanding seats and border seating mounted in garden walls. Represents a seat unit that does not include a table as its main feature.	SeatType *	The configuration of the seating.	Freestanding Border Spectator Seating	Freestanding bench seat Border seating set in garden wall or similar low structure. Spectator Seating		
						Places *	The number of individuals the seating is designed for. This attribute may be used to help determine the capacity of a recreational facility.			positiveInteger	
						Material *	The primary material type of Seat eg: Timber, Aluminium	Aluminium Concrete Plastic Plastic and Steel Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel Other	Aluminium Concrete Plastic Plastic and Steel Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel Another material not included in the Schema		
						Length_m *	Length in metres (2 Decimal Places)			Float_Positive_NonZero	
						Width_m *	Width in meters (2 Decimal Places)			Float_Positive_NonZero	
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete None Paved Timber	Concrete None Paved Timber		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		WasteCollectionPoints *	Represents the feature class of waste collection points	WasteCollectionPoint *	Represents a waste collection point feature	Type *	The type of Bin/Waste collection point eg: Std Litter Bin, Wheelie Bin Enclosure	Recycle Bin Standard Litter Bin Wheelie Bin Enclosure Wheelie Bin Stand	Recycle Bin Standard Litter Bin Wheelie Bin Enclosure Wheelie Bin Stand		
						Material *	The material type of Bin/Waste collection point eg: Aluminium, Steel	Aluminium Plastic Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel	Aluminium Plastic Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel		
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete None Paved Timber	Concrete None Paved Timber		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		BicycleFittings *	Represents the feature class of bicycle fittings	BicycleFitting *	Represents a bicycle fitting feature Represents an individual fitting for the use or safety of cyclists.	Type *	The type of Bicycle fitting eg: Bicycle Rack, Banana Rail	Banana Rail Bicycle Rack Bicycle Hoop Bicycle Repair Station Chicane	Banana Rail Bicycle Rack Bicycle Hoop Bicycle Repair Station Chicane		
						Material *	The material type of Bicycle fitting eg: Timber, Aluminium	Aluminium Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel	Aluminium Stainless Steel Steel Galvanised Steel Powder Coated Timber Timber and Steel		
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete None Paved Timber	Concrete None Paved Timber		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		GeneralFixtures *	Represents the feature class of general fixtures.	Fixture *	Represents a general fixture feature. This is a class of minor point based fixtures not complex enough for a specific feature class.	Type *	The type of Fixture eg: Dog bag dispensers, Fish cleaning station, Grease trap			String_32	
						Material *	The material type of Fixture eg: Timber, Aluminium	Aluminium Plastic Stainless Steel Steel Galvanised Steel Powder Coated Timber Masonry Combination	Aluminium Plastic Stainless Steel Steel Galvanised Steel Powder Coated Timber Masonry Combination		

# ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete None Paved Timber	Concrete None Paved Timber		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		BarriersContinuous *	Represents the feature class of continuous linear barriers.	BarrierContinuous *	Represents a continuous linear barrier feature, such as fencing, walls, handrail or bollard run. Do not use for retaining walls.	Type *	The type of Barrier eg: Safety Fencing, Bollard Run, Gate	Bollard Run Dunal Fencing Fauna Fencing General Fencing Handrail Noise Barrier Pedestrian Gate Safety Fencing Slide Rail Stock Fencing Vehicle Gate Wall	Bollard Run Dunal Fencing Fauna Fencing General Fencing Handrail  An acoustic barrier fence, normally between road or rail and residential areas. Pedestrian Gate Safety Fencing A lockable slide bar between two fixed uprights. Stock Fencing Vehicle Gate Wall		
						UprightMaterial *	The material type of Barrier Uprights eg: Timber, Aluminium	Aluminium Concrete Plastic Steel Stainless Steel Steel Galvanised Steel Powder Coated Stone Boulder Timber	Aluminium Concrete Plastic Steel Stainless Steel Steel Galvanised Steel Powder Coated Stone Boulder Timber		
						LinkMaterial *	The material type of Barrier Link Material eg: None, Chain, Wire	None Aluminium Brick Chain Concrete Concrete Block Plastic Safety Glass Timber Panel Timber Paling Wire Mesh Wire Strand Chain Wire Steel Wire Rope Corrugated Galvanised Steel Coated Rolled Steel	None Aluminium Brick Chain Concrete Concrete Block Plastic Safety Glass Timber Panel Timber Paling Wire Mesh Wire Strand Chain Wire Steel Wire Rope Corrugated galvanised steel sheeting Rolled steel sheeting, with a primed and painted or baked finish. (includes the product commercially known as Colorbond)		
						TopMaterial *	The material type of Barrier Topping Material eg: None, Chain, Barbed Wire	None Aluminium Chain Steel Rail Timber Rail Wire Barbed Wire Strand Plastic	None Aluminium Chain Steel Rail Timber Rail Wire Barbed Wire Strand Plastic		
						Length_m *	The lineal length of the barrier in metres		Float_Positive_NonZero		
						Height_m *	The height of the barrier in metres		Float_Positive_NonZero		
						UprightNumber *	Total number of uprights in the run. For fencing, this will be the number of posts. For a bollard run, it will be the number of bollards.		positiveInteger		
						Geometry *	The geometry representing this feature in coordinate space.  It is recommended, but not mandatory, that each vertex represents an upright, particularly for bollard runs. This allows the geometry to be exploited to identify the individual features if necessary.		geometry_linear_singlepath_complex		
		BarriersPoint *	Represents the feature class of point barriers.	BarrierPoint *	Represents a barrier feature that controls access at a single point, such as a locking post or single bollard.	Type *	The type of Barrier Point eg: Bollard, Locking Post	Bollard  Bollard Removable  Horse Steppers Locking Post	A permanently fixed individual bollard, usual forming a barrier to vehicle entry, while permitting pedestrians or cyclists. Runs of bollards forming a barrier line may be better described by BarrierContinuous, especially if linked with a joining material such as chain or stainless wire rope.  A removeable bollard, usually with a fixed base mounting to accept a padlock or similar security device.  Horse Steppers A simple removeable post, usually with a fixed base mounting to accept a padlock or similar security device.		
						UprightMaterial *	The material type of Barrier Uprights eg: Timber, Aluminium	Aluminium Concrete Plastic Steel Stainless Steel Steel Galvanised Steel Powder Coated Stone Boulder Timber	Aluminium Concrete Plastic Steel Stainless Steel Steel Galvanised Steel Powder Coated Stone Boulder Timber		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		RetainingWalls *	Represents the feature class of retaining walls.	RetainingWall *	Represents a continuous retaining wall feature. Includes terrestrial, freshwater and marine revetment walls.	Use *	Context of use for this wall. i.e Terrestrial or Marine	Terrestrial Freshwater  Marine	Terrestrial (land based) revetment wall Freshwater revetment wall. Designed to cope with freshwater flood levels. Also engineered walls for pools and ponds.  Marine revetment wall		
						Material *	The material/type of Retaining Wall eg: Rock, Conc. Block, Conc. Crib	Boulder Concrete Concrete crib Gabions Precast Concrete Slab Masonry	Boulder Concrete, poured in situ. Concrete crib Steel cage with rocks or stones Precast Concrete Slab Masonry bricks or blocks		

# ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								Rock	Rock or stone, either placed, or mortared		
								Timber Sleeper	Timber sleepers or logs		
								Timber Crib	Timber Crib		
								Shot Binding	Pneumatically projected binding material, usually concrete or stabilising mortar		
						Construction *	Construction principle of this wall (eg: Gravity, Piled, Cantilever)	Gravity	These walls use their own weight and any captured soil or fill weight to resist the lateral soil pressure.		
								Piled	These walls use the embedded depth of vertical posts and the strength of the posts to resist lateral soil forces.		
								Cantilever	These walls cantilever vertically from the concrete footing and typically resist overturning by the mass of the soil or material on the heel of the footing.		
								Caged	These walls use cage or basket to retain rocks or stones to resist lateral soil pressure		
						Length m *	The lineal length of the wall in metres		Float Positive NonZero		
						Height m *	The height (or average height) of the wall in metres		Float Positive NonZero		
						Width m	The width of the wall in metres		Float Positive NonZero		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_linear_multipath_complex		
		Shelters *	Represents the feature class of shelters	Shelter *	Represents an individual open space shelter feature as a point object	Type *	The type of structure eg: Sail, Rigid	Rigid	Rigid		
								Sail	Sail		
						ConstructionType *	The type of shelter constructed eg: Prefab or Built insitu	Prefabricated	Prefabricated		
								Insitu	Built or poured in-situ		
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete	Concrete		
								Paved	Paved		
								None	None		
								Timber	Timber		
						WallMaterial *	The material type of the Walls eg: Timber/cladding, Reinforced Block	None	None		
								Concrete	Concrete		
								Cladding	Cladding		
								Masonry	Masonry		
								Stainless Steel	Stainless Steel		
								Galvanised Steel	Galvanised Steel		
								Powder Coated Steel	Powder Coated Steel		
								Timber	Timber		
						RoofMaterial *	The material type of the Roof eg: Steel Sheeting, Masonry tiles	Masonry Tiles	Masonry Tiles		
								Sail	Sail		
								Steel Sheets	Steel Sheets		
								Timber slats	Timber slats		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
				ShelterPolygon *	Represents an individual open space shelter feature as a polygon object	Type *	The type of structure eg: Sail, Rigid	Rigid	Rigid		
								Sail	Sail		
						ConstructionType *	The type of shelter constructed eg: Prefab or Built insitu	Prefabricated	Prefabricated		
								Insitu	Built or poured in-situ		
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete	Concrete		
								Paved	Paved		
								None	None		
								Timber	Timber		
						WallMaterial *	The material type of the Walls eg: Timber/cladding, Reinforced Block	None	None		
								Concrete	Concrete		
								Cladding	Cladding		
								Masonry	Masonry		
								Stainless Steel	Stainless Steel		
								Galvanised Steel	Galvanised Steel		
								Powder Coated Steel	Powder Coated Steel		
								Timber	Timber		
						RoofMaterial *	The material type of the Roof eg: Steel Sheeting, Masonry tiles	Masonry Tiles	Masonry Tiles		
								Sail	Sail		
								Steel Sheets	Steel Sheets		
								Timber slats	Timber slats		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_singlepatch_complex		
		Artworks *	Represents the feature class of open space artworks	Artwork *	Represents an individual instance of open space artwork	Type *	The type of Artwork eg: Sculpture, Statue	Entry Statement	Entry Statement		
								Memorial	Memorial		
								Monument	Monument		
								Mosaic	Mosaic		
								Plaque	Plaque		
								Sculpture	Sculpture		
								Statue	Statue		
								Other	Other		
						Material *	The material type of Artwork eg: Timber, Aluminium	Aluminium	Aluminium		
								Bronze	Bronze		
								Concrete	Concrete		
								Fibreglass	Fibreglass		
								Masonry	Masonry		
								Plastic	Plastic		
								Stainless Steel	Stainless Steel		
								Steel Galvanised	Steel Galvanised		
								Steel Powder Coated	Steel Powder Coated		
								Stone	Stone		
								Tile	Tile		
								Timber	Timber		
								Combination	Combination		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		Buildings *	Represents the feature class of open space buildings	Building *	Represents an open space building feature, such as a toilet block, bandstand. Not to be used for shelters.	Type *	The type of Building eg: Grandstand, Bandstand	Amenities	Amenities		
								Amphitheatre	Amphitheatre		
								Arbour	Arbour		

ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								Administration or Depot Cabin Clubhouse Community Centre / Hall Demountable Grandstand Library Shed Other	Administration or Depot Cabin Clubhouse Community Centre / Hall Demountable site office Grandstand Library Shed Another type not included in the Schema		
						WallMaterial *	The material type of the walls eg: Timber, Brick, Cladding	Aluminium Concrete Cladding Masonry Stainless Steel Steel Galvanised Steel Powder Coated Timber Combination Other	Aluminium Concrete Cladding Masonry Stainless Steel Steel Galvanised Steel Powder Coated Timber Combination Another type not included in the Schema		
						FloorMaterial *	The material type of the Floor eg: Concrete, Timber	Concrete Paved Timber Other	Concrete Paved Timber Another material not included in the Schema		
						RoofMaterial *	The material type of the Roof eg: Steel Sheetting, Masonry tiles	Masonry Tiles Steel Sheets Other	Masonry Tiles Steel Sheets Another material not included in the Schema		
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_singlepatch_complex		
		BoatingFacilities *	Represents the feature class of boating facilities	BoatingFacility *	Represents a boating facility feature, such as a pontoon, ramp or jetty.	Type *	The type of Boating Facility eg: Jetty, Pier	Jetty Pier Ramp Pontoon Slipway	Jetty Pier Ramp Pontoon Slipway		
						Material *	The material type of Boating Facility eg: Timber, Aluminium	Aluminium Concrete Stainless Steel Steel Galvanised Steel Powder Coated Timber Combination	Aluminium Concrete Stainless Steel Steel Galvanised Steel Powder Coated Timber Combination		
						SubStructureMaterial	Sub Structure Material	Concrete Steel Timber Other	Concrete Steel Timber Another material not included in the Schema		
						BalustradeMaterial	Predominant material of the platform balustrade	Metal Railing Panel Chain Railing Safety Glass Steel Wire Rope Timber Panel Other	Metal Railing Panel Chain Railing Safety Glass Steel Wire Rope Timber Panel Another material not included in the Schema		
						HandrailMaterial	Predominant material of the platform balustrade handrail	None Metal Timber Stainless Steel Other	None Metal Timber Stainless Steel Another material not included in the Schema		
						DDA_Compliance	True or false value indicating whether an asset complies with the Disability Discrimination Act (DDA)		Boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_singlepatch_complex		
		LandscapeAreas *	Represents the feature class of landscape areas	LandscapeArea *	Represents a landscape area feature, such as a garden, shaped lawn, or landscape feature area.	Type *	The type of Garden/L'scape Area eg: Garden, Grass, Rem Vegetation	Garden Grass Gravel Earth Remnant Vegetation Revegetation Synthetic Grass	Garden Grass Gravel Earth Remnant Vegetation Revegetation Synthetic Grass		
						RootBarrier *	Does Root Barrier exist - Yes or No		boolean		
						Irrigated *	Is Landscaped Area irrigated?		boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_multipatch_complex		
		Trees *	Represents the feature class of trees	Tree *	Represents a tree feature. Trees may qualify as assets when planted as street trees, or when significant specimens are retained or planted as part of an open space development.	Species *	The Tree Species		String 32		
						Genus *	The Tree Genus		String 32		
						RootBarrier *	Does Root Barrier exist - Yes or No		boolean		
						Grate *	Does Tree Grate exist - Yes or No		boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		Signs *	Represents the feature class of signs	Sign *	Represents a sign. May also be used for transport signs	Type *	The type of Sign eg: Regulatory, Naming, Information The purpose of a sign. Applied to individual sign blades as blades may have different purposes in a compound sign.	Traffic Control  Regulatory Information Direction Warning Naming	Traffic control signs such as speed, parking, hazard, street name and guide signs. Signs with standard meanings or mandated specifications as defined in a Manual of Standard Traffic Control Devices relevant to a state or country should be given this value. Where this value is used, then the sign feature should also be attributed with the applicable standard identifying code in the ModelNumber property.  Regulating non-traffic control matters such as council regulations, prohibited behaviours etc. Providing non-traffic control information of a historical, environmental or other topical nature. Providing non-traffic control directions, distances or maps to places of interest Providing non-traffic control warning of general hazards Non-traffic control sign identifying a locality, park, facility or place of interest		
						Material *	The material type of sign eg: Timber, Steel/Aluminium, Carved stone	Stainless Steel Aluminium Timber Masonry Steel Galvanised	Stainless Steel Aluminium Timber Masonry Steel Galvanised		

# ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								Plastic Steel Powder Coated Glass	Plastic Steel Powder Coated Glass		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						Structure *	The type of structure this sign blade is fixed to.	Post Gantry Free Standing Monopole Overpass	Fixed to an existing post or pole Fixed to a gantry Free standing, having its own poles or supports Fixed to a monopole Fixed to an overpass or bridge		
						SignText	Sign Text		string		
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East) May be used to denote direction of facing.		Float_Direction		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		Platforms *	Represents the feature class of platforms	Platform *	Represents a platform feature such as a viewing or fishing platform	Function *	Platform function	Fishing Viewing Other	Fishing Viewing Another function not included in the Schema		
						Material *	Deck material	Concrete Fibreglass FRP Paved Timber Wood Composite Polymer Reinforced Polymer Recycled Plastic Composite Other	Concrete Fibreglass Fibre Reinforced Plastic Paved Timber Wood Composite Polymer Reinforced Polymer Recycled Plastic Composite Another material not included in the Schema		
						SubStructureMaterial	Sub Structure Material	Concrete Steel Timber Other	Concrete Steel Timber Another material not included in the Schema		
						BalustradeMaterial	Predominant material of the platform balustrade	Metal Railing Panel Chain Railing Safety Glass Steel Wire Rope Timber Panel Other	Metal Railing Panel Chain Railing Safety Glass Steel Wire Rope Timber Panel Another material not included in the Schema		
						HandrailMaterial	Predominant material of the platform balustrade handrail	None Metal Timber Stainless Steel Other	None Metal Timber Stainless Steel Another material not included in the Schema		
						Height_m	The maximum distance between the deck and the ground in metres		Float_Positive_NonZero		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_singlepatch_complex		
		FaunaInfrastructure *	Represents the feature class of fauna infrastructure	FaunaPoint *	Represents the artificial fauna habitat, such as glider poles recorded as a point feature	Type *	Fauna Infrastructure Type	Escape Ladder Fauna Pole Fish Friendly Ground Hollow Log Nesting Box Nesting Platform	Escape Ladder Fauna Pole Fish Friendly Ground Hollow Log Nesting Box Nesting Platform		
						Material *	The material type of the habitat	Combination Concrete Fibreglass Masonry Plastic Rock Steel Galvanised Steel Powder Coated Timber	Combination Concrete Fibreglass Masonry Plastic Rock Steel Galvanised Steel Powder Coated Timber		
						Height_m *	The height of the habitat in metres		Float_Positive_NonZero		
						PoleMounted *	Is the habitat mounted to a pole		boolean		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
						FaunaPolyline *	Represents the artificial fauna habitat, such as rope bridge crossings recorded as a polyline feature				
						Type *	Fauna Infrastructure Type	Elevated Walkway Fauna Underpass Fishing Crossing Glider Rope Land Bridge Crossing	Elevated walkways built through culverts Fauna Underpass Fishing Crossing Glider Rope Land Bridge Crossing		
						Material *	The material type of the habitat	Combination Concrete Fibreglass Masonry Plastic Rock Steel Galvanised Steel Powder Coated Timber	Combination Concrete Fibreglass Masonry Plastic Rock Steel Galvanised Steel Powder Coated Timber		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_linear_singlepath_complex		
		LandStabilisation *	Represents the feature class of Land Stabilisation	LandStabilisation *	Represents the land stabilisation area that works to eliminate erosion	Material *	Material of stabilisation	Anchored Wire Mesh Laminated Glass Wire Mesh Reinforced Concrete Shotcrete	Anchored Wire Mesh Laminated Glass Wire Mesh Reinforced Concrete Shotcrete		
						NumberOfAnchors *	Number of anchors		positiveInteger		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_multipatch_simple		
		PreparedSurfaces *	Represents the feature class of prepared surface	PreparedSurface *	Represents a prepared surface, such as Annex Slab, Storage and Bin Set Down Area	Function *	The primary purpose of the prepared surface	Annex Slab Bin Set Down Area Hose Down Pad Recreational Storage Other	Annex Slab Bin Set Down Area Hose Down Pad Recreational - Not a Playing Surface Storage Another function not included in the Schema		
						Material *	The material of the prepared surface	Bitumen Concrete	Bitumen Concrete		

# ADAC OpenSpace

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								Exposed Aggregated	<i>Exposed Aggregated</i>		
								Gravel	<i>Gravel</i>		
								Other	<i>Other</i>		
								Pavers	<i>Pavers</i>		
								Stone	<i>Stone</i>		
								Synthetic Grass	<i>Synthetic Grass</i>		
								Tiled	<i>Tiled</i>		
								Timber	<i>Timber</i>		
						Geometry *	<i>Polygon geometry representing the feature in coordinate space.</i>		geometry_area_multipart_complex		

## ADAC\_Project

* denotes ADAC mandatory status											
ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	DETAIL	DESCRIPTION				
ADAC *	The ADAC element is the root element of an ADAC XML. It constrains all enclosed elements as follows. There can be no other element in the root level of the document.	Project *	<p>The Project element encloses all data that is common to the whole project.</p> <p>In Version 4.1.0, for technical simplicity, only a single project may exist within an instance document, but in future it may be feasible for multiple independent projects to be delivered in a single instance.</p> <p>In version 4.2.0 while this limitation remains, certain fields at the project level have been repeated at the asset level to allow assets to differ from the global values set in Project</p>	ExportDateTime *	Export date and time in UTC. Format is yyyy-mm-ddThh:mm:ssZ (eg 2006-08-08T20:00:00Z) ISO 8601.						
				Name *	The project or development name.						
				Owner *	Are assets for the whole project owned by Council or another entity.						
				Receiver *	The receiver of the ADAC file						
				WorksApprovalID	The works approval ID for the development that this information represents.						
				DrawingNumber *	The Council drawing number of the as constructed plans. This may not be known at the time of compilation.						
				DrawingRevision	Date the drawing was revised. ISO 8601 is the accepted format.						
				ConstructionDate *	The accepted date of construction for the whole project. Usually the project completion date. ISO 8601 is the accepted format. Date may be used to calculate remaining life in an asset management system.						
				CoordinateSystem *	Records the particulars of the horizontal and vertical coordinate systems for the whole project.	HorizontalCoordinateSystem *	Specifies the horizontal coordinate system used. e.g. MGA56. Well known projections may be referred to by name only. All spatial information in the project will be considered to be referenced to this system. If custom local plane systems or projections are used by agreement with the receiver, then any parameters should be specified in the notes.				
						HorizontalDatum *	To Specify the Datum that the Horizontal Coordinate System is based on. E.g. GDA2020.				
						VerticalDatum *	To Specify the Datum of Height values. E.g. AHD.				
						IsApproximate *	Are the values supplied accurate or approximations. If data is plane rectangular approximating MGA-56 then set to true				
						OriginMark	When data is plane rectangular this is the Permanent Survey Mark used as the origin.				
						Notes	To contain any additional data required to specify the coordinate system				
						DrawingExtents *	The rectangular coordinate envelope enclosing the project area	SouthWest *	The coordinates of the southwest corner.	NorthEast *	The coordinates of the northeast corner.
				Description *	Descriptive text summarising the project.						
				ProjectStatus *	The reason for the ADAC file creation. This is not the same as Asset_status, which is at the asset level Submission Status is usually related to the development assessment process or to data transfer between entities or systems						
				Software *	Details of the software product used to create the ADAC data set.	Product *	The name of the software product.	Version *	The version or release number of the product.		
				Surveyor	Structure containing information from the certifying surveyor.	Name *	The name of the surveyor.	DateFinalSurvey *	The date of the final survey. ISO 8601 is the accepted format.		
				Engineer	Structure containing information from the certifying engineer.	DateApproved *	The date of the final approval. ISO 8601 is the accepted format.	Name *	The name of the consulting engineer		
						DateApproved *	The date of approval. ISO 8601 is the accepted format.				
				ProjectData *		Sewerage *	The Sewerage element encloses all sewerage (waste water) feature	Transport *	The Roads element encloses all roads feature descriptions.		
						WaterSupply *	The Water element encloses all water supply feature descriptions.	StormWater *	The StormWater element encloses all stormwater feature descriptions.		
						OpenSpace *	The OpenSpace element encloses all public open space feature descriptions.	Cadastre *	The Cadastre element encloses all cadastral feature descriptions.		
						Surface *	The Surface element encloses Supplementary surface feature descriptions.	Enhancements *	The Enhancements element encloses enhancements such as annotations and dimensions.		
						Supplementary *	The Supplementary element encloses all feature data not described specifically in the schema. It is recommended to keep the use of unstructured data to a bare minimum.				
				Version	The version attribute marks the version of the instance document. Only a value of 6.0.0 will validate against this schema. Instance documents created against other versions of the ADAC schema should only be	Fixed Value = 6.0.0	validated against the version of the ADAC schema to which they correspond.				

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION										
Sewerage *	Data structure constraining information relating to sewerage (waste water) features.	MaintenanceHoles *	Element representing the feature class of Sewerage Maintenance Holes (formerly Manholes)	MaintenanceHole *	Element representing a sewerage Maintenance Hole (formerly Manhole).	Use *	Use or purpose of this MaintenanceHole in the network	Overflow	Maintenance Hole with an overflow to the environment, receiving waters or stormwater network		Maintenance hole with two or more outgoing pipes. These typically have internal weirs or flow control devices.										
								Bifurcation	Maintenance Hole with two or more outgoing sewer pipes including: (a) twin pipes (or multiple augmented pipes) (b) Major bifurcations that divert flows to separate sub-catchments (c) Minor bifurcation that diverts flow for only short distance downstream before merging into same trunk main (d) emergency storage												
								Blank End	Maintenance hole with no incoming connection												
								Pump Station	Pit housing a sewer pump station												
								Valve Pit	Access Pit for a Sewer Valve												
								Grit Collector MH	Grit Collector Maintenance Hole												
								Outlet	Outlet												
								Rising Main Discharge MH	A sewer MH that is the receiving MH for a rising main discharge												
								Vacuum Sewerage Pump Station	A pit housing a Vacuum Sewerage Pump Station												
								Vacuum Sewerage MH	A Maintenance Hole on a vacuum system with incoming house connections or gravity sewers that may also contain a vacuum valve												
								Vacuum Lift	A chamber on a vacuum system containing a lift or vacuum valve but no incoming laterals												
								Storage Tank	An off-stream sewage storage tank for emergency or other use												
								Maintenance Hole	A standard Sewerage Maintenance Hole also known as a Manhole with one outgoing pipe												
								Temporary Works	A shaft used during construction that is left in place but does not form part of the final infrastructure												
								Screen Chamber	Maintenance hole on overflow pipes with screens												
								Unknown	Chamber of unknown use at time of data submission												
								Other	Type of maintenance structure other than those used as standard in the Schema												
								ChamberSize *	Data structure describing the chamber configuration and dimensions.									Rectangular *	Data container for rectangular dimensions	Length_mm *	Data container for rectangular dimensions. Length in millimetres.
																				Width_mm *	Data container for rectangular dimensions. Width in millimetres.
																		Circular *	Data container for circular dimensions	Diameter_mm *	Data container for circular dimensions. Diameter in millimetres.
																		Custom *	Custom Shaped chamber. Such a feature should be associated with a plan or document describing its layout and dimensions	Area_m2 *	Custom Shaped chamber. Such a feature should be associated with a plan or document describing its layout and dimensions. Area in square metres.
								ShaftSizeDiameter_mm *	Diameter of narrowest section of upper shaft immediately below access lid where different to ChamberSize. NOT expected to apply to Use; Blank End, Pump Station, Valve Pit, Outlet, Screen Chamber. Intent is to indicate if personnel entry is possible.									positiveInteger		Important to specify as diameters less than 600 are not suitable for man entry	
								SurfaceLevel_m *	The height of the top surface of the lid, hatch, rim or roof. Surface level in metres against the vertical datum for this project.									float			
								InvertLevel_m *	The height of the top surface of interior floor/bottom. Invert level in metres against the vertical datum for this project.									float			
								FloorConstruction *	Method of chamber floor construction.									Prefabricated Insitu	Prefabricated Built or poured in-situ		
								FloorMaterial *	Material type for chamber construction									Concrete	Concrete		
																		FRP	Fibre Reinforced Plastic		
																		GRP	Glass Reinforced Plastic		
																		PE	Polyethylene		
																		PP	Polypropylene		
																		PVC	Poly Vinyl Chloride		
																		M_1	A new material not yet in the Schema as agreed with the receiving entity		
M_2	A new material not yet in the Schema as agreed with the receiving entity																				
Unknown	Material is unknown at time of data submission																				
Other	Another material not included in the Schema																				
WallConstruction *	Method of chamber wall construction.							Prefabricated Insitu	Prefabricated Built or poured in-situ												
WallMaterial *	Material type for chamber wall construction							Concrete	Concrete												
								FRP	Fibre Reinforced Plastic												
								GRP	Glass Reinforced Plastic												
								PE	Polyethylene												
								PP	Polypropylene												
								PVC	Poly Vinyl Chloride												
								M_1	A new material not yet in the Schema as agreed with the receiving entity												
								M_2	A new material not yet in the Schema as agreed with the receiving entity												
								Unknown	Material is unknown at time of data submission												
								Other	Another material not included in the Schema												
RoofMaterial *	Material type for chamber roof construction							PVC	Poly Vinyl Chloride												
								PE	Polyethylene												
								PP	Polypropylene												
								Concrete	Concrete												
								FRP	Fibre Reinforced Plastic												
								MS	Mild Steel												
								SS	Stainless Steel												
								Aluminium	Aluminium												
								Cast Iron	Cast Iron												
								Grid Mesh - GRP	Grid Mesh - GRP												
								Grid Mesh - Aluminium	Grid Mesh - Aluminium												
								No Roof	No Roof												
								Grid Mesh - SS	Grid Mesh - Stainless Steel												
								M_1	A new material not yet in the Schema as agreed with the receiving entity												
								M_2	A new material not yet in the Schema as agreed with the receiving entity												
								Unknown	Material is unknown at time of data submission												
Other	Another material not included in the Schema																				
Lining	Material type of chamber lining							PVC	Poly Vinyl Chloride												
								Epoxy	Epoxy												
								Polyurea	Polyurea												
								PE	Polyethylene												
								M_1	A new lining material not yet in the Schema as agreed with the receiving entity												
								M_2	A new lining material not yet in the Schema as agreed with the receiving entity												
Unknown	Material is unknown at time of data submission																				
Unlined	An alternative to entering a null value where there is no lining																				
Other	Another lining material not included in the Schema																				
LidType *	Lid Structure loading type							Trafficable Non-trafficable	Trafficable Non- trafficable												
LidAccessRestraint *	Restraint applied to accessing structure							Bolt Down	Lid is bolted down												
								Hinged	Lid fixed by hinges on one side												
								Crab Pot	Steel frame over lid with central pole allowing lid to raise and lower during overflow event. Used on Emergency Overflow Structures												
								Meshed	Mesh added for void/fall protection												

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						LidMaterial *	Chamber lid material	None Cast Iron Aluminium CI Concrete Infill Composite Concrete DI PVC PE PP MS SS No Lid M_1 M_2 Unknown Other	Lid is free to lift off Maintenance structure allowing unimpeded access Cast Iron (Default Value) Aluminium Cast Iron with Concrete Infill Composite Concrete Ductile Iron Poly Vinyl Chloride Polyethylene Polypropylene Mild Steel Stainless Steel This structure has no lid (possibly because it has no roof) A new lid material not yet in the Schema as agreed with the receiving entity A new lid material not yet in the Schema as agreed with the receiving entity Lid Material is unknown at time of data submission Another lid material not included in the Schema		
						DropType *	Chamber drop types	External Drop Alternative External Drop Internal Drop Oblique 45deg Backdrop No Drop	MH with one or more external backdrop vertical entries Alternative drop type with complex access arrangement or modified benching as shown on WSA drawing SEW-206 MH with one or more internal backdrop vertical entries MH with an oblique 45° backdrop entry MH has no drop inlets or MH is a pump station, valve chamber, or storage tank		
						Benching *	Indication of benching level relative to outlet pipe. Used for volumetric calculations in modelling.	Top of outgoing pipe Mid level of outgoing pipe No benching Other	Indication of level of benching compared with structure outlet pipe Indication of level of benching compared with structure outlet pipe No benching Benching other than top or mid level of outlet pipe		
						CatchmentPS	The identifier of the pumpstation or Waste Water treatment plant that this node flows to.		String_32		
						LineNumber	The identifier of the line that this node connects to		String_32		
						MH_Number *	The identifier of this manhole or pit.		String_32		
						Chainage_m	The distance upstream from end of line.		Float_Positive_NonZero		
						TieDistance_m	The tie distance in metres to a cadastral corner		Float_Positive_NonZero		
						OffsetDistance_m	The offset distance in metres from a cadastral boundary		Float_Positive_NonZero		
						Rotation *	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		MaintenanceShafts *	Element representing the feature class of Sewerage Maintenance Shafts (Maintenance Structures other than Maintenance Holes)	MaintenanceShaft *	Element representing a sewerage maintenance structure other than a Maintenance Hole.	Type *	Type of Maintenance Shaft	IS IT Lamphole MC MS RE TMS TEP Unknown Other T_1	Inspection Shaft. An inspection opening fitted with a shaft to surface level sealed with a removable cap Inspection Tee. A tee fitting at the upstream end of a property connection sewer as an inspection opening with screw caps on all the inspection points A legacy type of maintenance structure, typically with a DN375 concrete shaft Maintenance Chamber. A type of Maintenance Shaft with a diameter of at least DN450 Maintenance Shaft. A proprietary maintenance structure usually prefabricated and of smaller diameter than a standard MH or MC Rodding End. A maintenance structure at the end of a DN150 reticulation sewer comprising a short radius bend and a vertical shaft, which terminates in a removable cover. (Used mostly on PVC sewer systems) Terminal Maintenance Shaft. A Maintenance Shaft installed at the end of a reticulation sewer. Terminal Entry Point. A maintenance structure used on the end of DN 250 or less polyethylene sewers comprising a short radius bend and a vertical shaft. Type is unknown at time of data submission Another Type not included in the Schema A new type of maintenance shaft not yet in the Schema as agreed with the receiving entity		
						Diameter_mm *	Diameter of base of maintenance shaft		positiveInteger		
						RiserDiameter_mm *	Diameter of shaft riser		positiveInteger		
						SurfaceLevel_m *	The height of the top surface of the lid, hatch, rim or roof. Surface level in metres against the vertical datum for this project.		float		
						InvertLevel_m *	The height of the top surface of interior floor/bottom. Invert level in metres against the vertical datum for this project.		float		
						BaseMaterial *	Material type for maintenance shaft base	Concrete FRP GRP PE PP PVC M_1 M_2 Unknown Other	Concrete Fibre Reinforced Plastic Glass Reinforced Plastic Polyethylene Polypropylene Poly Vinyl Chloride A new material not yet in the Schema as agreed with the receiving entity A new material not yet in the Schema as agreed with the receiving entity Material is unknown at time of data submission Another material not included in the Schema		
						RiserMaterial *	Material type for maintenance shaft riser	Concrete FRP GRP PE PP PVC M_1 M_2 Unknown Other	Concrete Fibre Reinforced Plastic Glass Reinforced Plastic Polyethylene Polypropylene Poly Vinyl Chloride A new material not yet in the Schema as agreed with the receiving entity A new material not yet in the Schema as agreed with the receiving entity Material is unknown at time of data submission Another material not included in the Schema		
						LidType *	Lid Structure loading type		Trafficable Non-trafficable		
						LidAccessRestraint *	Restraint applied to accessing structure.	Bolt Down Hinged Crab Pot Meshed None	Lid is bolted down Lid fixed by hinges on one side Steel frame over lid with central pole allowing lid to raise and lower during Mesh added for void/fall protection Lid is free to lift off Maintenance structure allowing unimpeded access		
						LidMaterial *	Surface lid material	Cast Iron Aluminium CI Concrete Infill Composite Concrete	Cast Iron (Default Value) Aluminium Cast Iron with Concrete Infill Composite Concrete		

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								DI PVC PE PP MS SS No Lid M_1 M_2 Unknown Other	Ductile Iron Poly Vinyl Chloride Polyethylene Polypropylene Mild Steel Stainless Steel This structure has no lid (possibly because it has no roof) A new lid material not yet in the Schema as agreed with the receiving entity A new lid material not yet in the Schema as agreed with the receiving entity Lid Material is unknown at time of data submission Another lid material not included in the Schema		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						CatchmentPS	The identifier of the pumpstation that this node flows to.		String_32		
						LineNumber	The identifier of the line that this node connects to		String_32		
						MS_Number *	The identifier of this maintenance shaft		String_32		
						Chainage_m	The distance upstream from end of line.		Float_Positive_NonZero		
						TieDistance_m	The tie distance in metres to a cadastral corner		Float_Positive_NonZero		
						OffsetDistance_m	The offset distance in metres from a cadastral boundary		Float_Positive_NonZero		
						Rotation *	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		PipesNonPressure *	Element representing the feature class of Sewerage Pipes Non-Pressure	PipeNonPressure *	Element representing a sewer pipe non-pressurised. Includes all gravity reticulation and trunk gravity mains.	LineNumber	The sewer line identifier		String_32		
						Use *	The function of this pipe in the network.	Enveloper Pipe Disused Effluent Overflow Reuse Stub Trunk Vent Syphon Vacuum Reticulation Unknown Other	Secondary Pipe (enveloper) outside primary conduit pipe, which does not connect hydraulically with the reticulation system Non-pressure (gravity) pipe that is no longer in use but still present Pipe conveying treated effluent (usually from a treatment plant) A pipe that directs excessive sewer flows to another system or the external environment A pipe conveying low-grade (class B and below) treated effluent for reuse. Class A and A+ should use the water feature classes. A short length of pipe for a future connection pipe that is not connected at its upstream end at time of data submission A larger size sewer as defined by the receiving entity's standard definition A pipe to a vent pipe or deodorising apparatus, which not primarily designed to convey sewage A gravity sewer that flows uphill over part of its length due to syphonic action A gravity sewer flowing into a vacuum sewerage system (vacuum system pipes are part of the pressure pipe schema). A standard reticulation sewer that is not a trunk sewer Use unknown at time of submission A use other than those specified above		
						Diameter_mm *	Nominal pipe diameter in millimetres.		positiveInteger		
						Material *	Pipe material	PVC-U DI MS RCP FRC PRC GRP ABS PE-100 SWPP HDPE VC AC M_1 M_2 Unknown Other	Unplasticised PolyVinylChloride Ductile Iron Mild Steel Steel Reinforced Concrete Pipe Fibre Reinforced Concrete Polyester Resin Concrete jacking pipe e.g. Iplex Polycrete Glass Reinforced Plastic (includes the product known commercially as Hobas) Acrylonitrile Butadiene Styrene Medium Density Polyethylene Structural Wall Polypropylene Pipe (includes commercial brands SewerMax and SewerPro) High Density Polyethylene (includes the product known commercially as Haries Black Brute) Vitrified Clay Asbestos Cement (Only used for existing infrastructure not new works) A new material not yet in the Schema used by agreement with the receiving entity A new material not yet in the Schema used by agreement with the receiving entity A pipe material that is unknown at the time of the submission A pipe material other than those provided above		
						Class *	The pipe class as specified by the manufacture. Pipe class refers to the wall thickness and performance of the material.	4 6 8 9 10 12 16 18 20 SN4 SN8 SN10 SN12 SN5000 SN8000 SN10000 PN1 PN6 PN6.3 PN8 PN10 PN12 PN12.5 PN16 PN18 PN20 PN35 FLCL X Y Z	Class 4 Class 6 Class 8 Class 9 Class 10 Class 12 Class 16 Class 18 Class 20 Class SN4, formerly Sewer Heavy Class SN8, formerly Sewer Extra Heavy Class SN10 Class SN12 SN5000 SN8000 SN10000 PN1 PN6 PN6.3 PN8 PN10 PN12 PN12.5 PN16 PN18 PN20 PN35 (Standard for ductile iron) Class FLCL (ductile iron flanged class) Class X (Reinforced Concrete) Class Y (Reinforced Concrete) Class Z (Reinforced Concrete)		

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								SDR7.4 SDR9 SDR11 SDR13.5 SDR17 SDR21 Unknown Other	SDR7.4 SDR9 SDR11 SDR13.5 SDR17 SDR21 Unknown at time of submission A class other than provided above		
						Lining	The internal corrosion protection method employed on the pipe material.	CL CL_SR CL_AC PVC FBE PU Unlined L_1 L_2 Rehab_NS Rehab_ST Unknown Other	Cement Lined Normal. Centrifugally spun cement mortar (default for Ductile Iron and Mild Steel) Cement Lined - Sulphate Resistant (DI and MS) Cement Lined - Calcium Aluminate (DI and MS) Plasticised PVC (includes Humes Plastiline) Fusion Bonded Epoxy Polyurethane Unlined (Default for plastic pipes) A new protection type not yet included in the Schema as agreed with the receiving entity. A new protection type not yet included in the Schema as agreed with the receiving entity. A non-structural rehabilitation liner. A structural rehabilitation liner. The protection type is not known at the time of the data submission. A protection type not included above.		
						Protection *	The external corrosion protection method applied to the pipe.	FBE FBPE PU Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Uncoated Unknown Other P_1 P_2	Fusion Bonded Epoxy Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote) Polyurethane Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Uncoated Protection Type unknown at time of data submission Another type of protection not covered in the schema choices above A new protection type not yet included in the Schema as agreed with the receiving entity. A new protection type not yet included in the Schema as agreed with the receiving entity.		
						JointType *	Pipe to pipe join method.	RRJ RRRJ SWJ WJ FJ MCJ BW EFW JT_1 Unknown Other	Rubber Ring Rubber Ring Restrained Joint (Ductile Iron) Solvent Welded Joint (PVC) Welded Joint (Mild Steel pipe) Flanged Joint Mechanical Compression Joint (PE pipe and Copper) Butt Weld (PE pipe) Electrofusion Weld (PE pipe) A new joint type not yet included in the Schema used by agreement with the receiving entity. Joint type unknown at time of data submission A joint type not already included in the above choices		
						US_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).		Float		
						DS_InvertLevel_m *	Invert level of this pipe end at Maintenance hole entry or the top of any internal/external drop. (in metres against the vertical datum).		Float		This needs to ensure dropper pipes records the higher pipe details
						US_SurfaceLevel_m *	Surface level (in metres against the vertical datum) vertically above this pipe end.		Float		
						DS_SurfaceLevel_m *	Surface level (in metres against the vertical datum) vertically above this pipe end.		Float		
						Alignment_m	Average offset distance in metres from cadastral boundary to the main.		Float_Positive_NonZero		
						Depth_m *	Nominal depth in metres to the top of the pipe.		Float		
						Embedment *	Embedment type.	Natural GBH GBS GBSonConc GBSonGTP GBSonCSS GBSonPiles CemStabBS ConcBS ConcBSonPiles Enveloped Above Ground None Unknown Other EB_1 EB_2	Pipe laid directly on natural in-situ material Granular bed and haunch Granular bed and surround Granular bed and surround on concrete support Granular bed and surround on geo-textile pillow Granular bed and surround on cement stabilised support Granular bed and surround on piles Cement stabilised bed and surround Concrete bed and surround Concrete bed and surround on piles Within an envelope pipe Pipe is above ground on piers or a bridge deck Thrust bored or Trenchless method Embedment Type unknown at time of data submission Another type of embedment type that is not already included in the standard types A non-standard or new type of embedment as agreed with the data receiving entity A non-standard or new type of embedment as agreed with the data receiving entity		
						RockExcavated	Value indicating whether rock was excavated from the pipe channel.		boolean		
						PipeGrade	Pipe grade as a percentage. Derivable as the difference in invert levels divided by the horizontal length (not the length of pipe) multiplied by 100.		Float_Positive_Zero		
						Length_m	Actual material length of the pipe. Not the horizontal length of the geometry.		Float_Positive_NonZero		
						Geometry *	The linear geometry of the pipe feature in coordinate space. At version 4.1.0 these features may include curves due to modern flexible materials.		geometry_linear_singlepath_complex		
		PipesPressure *	Element representing the feature class of Sewerage Pipes Pressure	PipePressure *	Element representing a sewer pipe pressurised (rising main).	Use *	The function of this pipe in the network.	Disused Effluent Reuse Rising Scour Vacuum PressureSewerCollection Unknown	Disused Pressure Pipe that remains in place Pressure pipe conveying treated effluent (usually from a treatment plant) Treated Wastewater Reuse Pipe for class B and below. Class A and A+ should use the water supply feature classes A standard rising main or pressure sewer A pipe maintained under pressure to scour a pressure main to a discharge point. Gravity scours should use the non-pressure pipe feature class A pressure pipe in a vacuum system that is subject to negative pressure The connection pipe from a household proprietary pressure sewer pump unit to the external pressure main Use unknown at time of data submission		

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								Other	A use other than those provided above in the schema		
						Diameter_mm *	Nominal pipe diameter in millimetres.		positiveInteger		
						InternalDiameter_mm	Actual pipe diameter in millimetres.		positiveInteger		
						US_InvertLevel_m	Invert level of this pipe end (in metres against the vertical datum)		Float		
						DS_InvertLevel_m	Invert level of this pipe end (in metres against the vertical datum).		Float		
						US_SurfaceLevel_m	Surface level (in metres against the vertical datum) vertically above this pipe end		Float		
						DS_SurfaceLevel_m	Surface level (in metres against the vertical datum) vertically above this pipe end		Float		
						Material *	Pipe material	ABS GRP DI MS PE-100 PE-80B PVC-M PVC-O PVC-U AC FRC M_1 M_2 Unknown Other	Acrylonitrile Butadiene Styrene Glass Reinforced Plastic (includes the product known commercially as Hobas) Ductile Iron Mild Steel Polyethylene (100) Polyethylene (80B) Polyvinyl Chloride (Modified) Polyvinyl Chloride (Oriented) Polyvinyl Chloride (Unplasticised) Asbestos Cement (not for new works - legacy pipes only) Fibre reinforced concrete New material not included in schema as agreed with data receiving entity New material not included in schema as agreed with data receiving entity Material type unknown at time of data submission A material not included in schema types provided above		
						Class *	The pipe class as specified by the manufacture. Pipe class refers to the wall thickness and performance of the material.	SN5000 SN8000 SN10000 PN1 PN6 PN6.3 PN8 PN9 PN10 PN12 PN12.5 PN16 PN18 PN20 PN35 FLCL X Y Z 4.8mm 5mm 6mm 7mm 8mm 9mm 10mm 11mm 12mm 16mm Unknown Other	Class SN5000 Class SN8000 Class SN10000 Class PN1 Class PN6 Class PN6.3 Class PN8 Class PN9 Class PN10 Class PN12 Class PN12.5 Class PN16 - default for PE_100, PVC_O and PVC_M Class PN18 Class PN20 Class PN35 (Standard for DI) Class FLCL (ductile iron flanged class) Class X (Reinforced Concrete) Class Y (Reinforced Concrete) Class Z (Reinforced Concrete) 4.8mm wall thickness Class (Mild Steel) 5mm wall thickness Class (Mild Steel) 6mm wall thickness Class (Mild Steel) 7mm wall thickness Class (Mild Steel) 8mm wall thickness Class (Mild Steel) 9mm wall thickness Class (Mild Steel) 10mm wall thickness Class (Mild Steel) 11mm wall thickness Class (Mild Steel) 12mm wall thickness Class (Mild Steel) 16mm wall thickness Class (Mild Steel) Class unknown at time of data submission A Class other than those currently provided for in the Schema		
						Lining	The internal corrosion protection method employed on the pipe material.	CL CL_SR CL_AC PVC FBE PU Unlined Unknown Other	Cement Lined Normal. Centrifugally spun cement mortar (default for Ductile Iron and Mild Steel) Cement Lined - Sulphate Resistant (DI and MS) Cement Lined - Calcium Aluminate (DI and MS) Plasticised PVC (includes Humes Plastiline) Fusion Bonded Epoxy Polyurethane Unlined Lining type unknown at time of data submission Another type of liner that is not currently in the Schema		
						Protection	The external protection for the pipe.	FBE FBPE PU Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Uncoated P_1 P_2 Zinc Zinc-Aluminium Alloy Unknown Other	Fusion Bonded Epoxy Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote) Polyurethane Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Uncoated A new protection type not yet in the schema as agreed with the data receiving entity A new protection type not yet in the schema as agreed with the data receiving entity Galvanized or zinc painted Zinc Aluminium alloy coating Protection type unknown at time of data submission Another type of protection not covered by the schema		
						JointType *	Pipe to pipe join method.	RRJ RRRJ SWJ WJ FJ MCJ BW EFW JT_1 Unknown Other	Rubber Ring Rubber Ring Restrained Joint (Ductile Iron) Solvent Welded Joint (PVC) Welded Joint (Mild Steel pipe) Flanged Joint Mechanical Compression Joint (PE pipe and Copper) Butt Weld (PE pipe) Electrofusion Weld (PE pipe) A new joint type not yet included in the Schema used by agreement with the receiving entity. Joint type unknown at time of data submission A joint type not already included in the above choices		
						Alignment_m	Average offset distance from cadastre boundary to the main.		Float_Positive_NonZero		
						Depth	Nominal depth in metres to the top of the pipe.		Float		
						Embedment	Embedment type.	Natural GBH GBS	Pipe laid directly on natural in-situ material Granular bed and haunch Granular bed and surround		

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								GBSSonConc GBSSonGTP GBSSonCSS GBSSonPiles CemStabBS ConcBS ConcBSonPiles Enveloped Above Ground None Unknown Other EB_1 EB_2	Granular bed and surround on concrete support Granular bed and surround on geo-textile pillow Granular bed and surround on cement stabilised support Granular bed and surround on piles Cement stabilised bed and surround Concrete bed and surround Concrete bed and surround on piles Within an enveloper pipe Pipe is above ground on piers or a bridge deck Thrust bored or Trenchless method Embedment Type unknown at time of data submission Another type of embedment type that is not already included in the standard types A non-standard or new type of embedment as agreed with the data receiving entity A non-standard or new type of embedment as agreed with the data receiving entity		
						RockExcavated	Value indicating whether rock was excavated from the pipe channel.		boolean		
						Length_m	Actual material length of the pipe. Not the horizontal length of the geometry.		Float_Positive_NonZero		
						Geometry *	The linear geometry of the pipe feature in coordinate space. At version 4.1.0 these features may include curves due to modern flexible materials.		geometry_linear_singlepath_complex		
		Valves *	Element representing the feature class of Sewerage Valves	Valve *	Element representing a sewer valve fitting	Use *	The function of this valve in the network.	Non-Return Service Stop Scour Diversion Zone Boundary Flow Control Pressure Control Gas Release Other Unknown	Used to prevent backflow can be of type Generic, Rubber Gate or Swing Check Used to isolate a service on a pressure sewer or vacuum sewerage system An isolation valve to stop flow in a pipeline Used to open and close access to a scour pipe Used to divert flow along another route Used to isolate sewer catchments or service zones Used to control the rate of flow in a pipe Used to control or maintain the pressure in a pipeline; can be of the type Overflow, Pressure Relief or Vacuum Release. Used to release gas or air from a pipeline and should be of type Air Valve Used to for some other purpose not provided for in the Schema and can be of Type Special Use is unknown at time of data submission		
						Type *	The physical configuration of the valve	Generic Rubber Gate Swing Check Gate Butterfly Knife Gate Eccentric Plug Globe Ball Penstock Overflow Pressure Release Vacuum Release Air Valve Special	Non-return valve of an unknown or generic type. Also control or stop valve of a generic type Non-return valve of a the rubber gate type Non-return valve of the swing check type Gate Valve Butterfly Valve Knife Gate Valve Eccentric Plug valve Globe Valve Ball Valve A Penstock formally known as Penstock Gate An overflow valve A pressure release valve A vacuum release valve A proprietary valve for releasing gas or air A Specialist type of valve not covered in the Schema		
						Diameter_mm *	The nominal bore diameter of the valve		positiveInteger		
						Lining	The internal corrosion protection material or method employed on the valve	CL CL_SR CL_AC PVC FBE Unlined Unknown Other	Cement Lined Normal. Centrifugally spun cement mortar (default for Ductile Iron and Mild Steel) Cement Lined - Sulphate Resistant (DI and MS) Cement Lined - Calcium Aluminate (DI and MS) Plasticised PVC (includes Humes Plastiline) Fusion Bonded Epoxy Unlined (Default for plastic pipes) Lining type unknown at time of data submission Another type of liner that is not currently in the Schema		
						Protection	The external protection for the valve	FBPE Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Uncoated P_1 P_2 Zinc Zinc-Aluminium Alloy Unknown Other	Fusion Bonded Epoxy Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote) Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Uncoated A new protection type not yet in the schema as agreed with the data receiving entity A new protection type not yet in the schema as agreed with the data receiving entity Galvanized or zinc painted Zinc Aluminium alloy coating Protection type unknown at time of data submission Another type of protection not covered by the schema		
						Manufacturer	The Manufacturer of the unit		String_64		
						ModelNumber	The standard code, model number or part number for the unit		String_64		
						GearboxActuator *	The valve is fitted with an external gearbox or actuator to facilitate opening and closing		boolean		
						ConnectionType *	The type of connection configuration for the valve	FL-FL FL-SO FL-SP SO-SO SO-SP SP-SP Gripper CT_1 Unknown Other	Flange connections both sides Flange - Socket Flange - Spigot Socket connections both sides Socket - Spigot Spigot connections both sides Gripper type connector both sides A new connection type not yet in the schema as agreed with the data receiving entity Unknown types of connection Other types of connection		
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		

# ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
		Fittings *	Element representing the feature class of Sewerage Fittings	Fitting *	Element representing a sewer fitting other than a valve	Type *	The physical configuration of the fitting	Bend Connector Connector Thrust Dismantling Joint Duck Bill Frog Flap Gibault Taper Tee Header Pipe Wye Cathodic Protection Point Dead Plate External Dead End Tee Branch Dead End Tee Branch Ext Dead End Puddle Flange Sampling Point Booster Pump Inspection Opening Other	Bend fitting usually with change of direction of more than 11 degrees but may be less in plastic pipes Straight connector with no direction change Straight connector capable of transmitting axial thrust Straight connector specifically included to facilitate future dismantling of pumps or complex pipe layouts. Duck Bill fitting typically located at the end of a pipe feature. Frog Flap fitting typically located at the end of a pipe feature. Standard gibault connection Fitting with differing inlet and outlet diameters Tee-fitting with 3 arms or branches where one arm is at 90 degrees to the other 2. Connection point of all outgoing pipes from wet well to common main to discharge point. Often identified as chainage zero for Pressure Sewer Mains Y-fitting with three arms where the arms is are not all separated by integer multiples of 90 degrees An electrical connection point for cathodic protection A Dead Plate or blank flange secured to one arm of another fitting An external fitting incorporating a dead end such as a dead end cap. A dead end plate pre-fitted to one branch of a Tee for access or future connection An end cap pre fitted externally to a Tee Branch for access or future connection A Puddle Flange fitted externally to a pipe to transmit axial thrust into a structure or to provide sealing with a structure A point designed for taking sewage or effluent samples A pump providing the motive force to move sewage through a pressure main against the force of gravity An inspection Opening on a pressure pipe Another type of fitting not included in the schema		
						Material *	Fitting material	ABS Aluminium GRP DI MS PE-100 PE-80B PVC-M PVC-O PVC-U Rubber SS VC Concrete AC FRC M_1 M_2 Unknown Other	Acrylonitrile Butadiene Styrene Aluminium Glass Reinforced Plastic (includes the product known commercially as Hobas) Ductile Iron Mild Steel Polyethylene (100) Polyethylene (80B) Polyvinyl Chloride (Modified) Polyvinyl Chloride (Oriented) Polyvinyl Chloride (Unplasticised) Rubber Stainless Steel Vitreous Clay Concrete Asbestos Cement (Existing infrastructure only) Fibre reinforced concrete New material not included in schema as agreed with data receiving entity New material not included in schema as agreed with data receiving entity Material type unknown at time of data submission A material not included in schema types provided above		
						Lining	The internal corrosion protection material or method for the fitting.	CL CL_SR CL_AC PVC FBE PU Unlined Unknown Other	Cement Lined Normal. Centrifugally spun cement mortar (default for Ductile Iron and Mild Steel) Cement Lined - Sulphate Resistant (DI and MS) Cement Lined - Calcium Aluminate (DI and MS) Plasticised PVC (includes Humes Plastiline) Fusion Bonded Epoxy Polyurethane Unlined (Default for plastic pipes) Lining type unknown at time of data submission Another type of liner that is not currently in the Schema		
						Protection	The external protection for the fitting.	FBE FBPE Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint PU Uncoated P_1 P_2 Zinc Zinc-Aluminium Alloy Unknown Other	Fusion Bonded Epoxy Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote) Plastic Wrapped Tape Wrapped Concrete Encased Sheathed Epoxy Paint Polyurethane Uncoated A new protection type not yet in the schema as agreed with the data receiving entity A new protection type not yet in the schema as agreed with the data receiving entity Galvanized or zinc painted Zinc Aluminium alloy coating Protection type unknown at time of data submission Another type of protection not covered by the schema		
						BodySize_mm *	The nominal diameter of the major connecting pipe.		positiveInteger		
						BranchSize_mm *	The nominal diameter of the minor connecting pipe.		positiveInteger		
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction		
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint		
		Connections *	Element representing the feature class of sewer property connections	Connection *	Element representing a sewer property connection	SurfaceLevel_m *	Surface level of this feature (in metres against the vertical datum).		Float		
						InvertLevel_m *	Invert level of this feature (in metres against the vertical datum).		Float		
						Use *	The function of the house connection in the network.	House Combined	House Drain - standard sanitary drain conveying sewage only Combined House Drain - a sanitary drain conveying both sewage and storm water in a combined sewerage system		
						Diameter_mm *	The nominal diameter of the connection conduit.		positiveInteger		
						Material *	The material of the connection conduit.	PVC-U PVC-M PVC-O Cast Iron RCP DI FRC FRP PE	PolyVinylChloride Unplasticised PolyVinylChloride Modified PolyVinylChloride Orientated Cast Iron Steel Reinforced Concrete Pipe Ductile Iron Fibre Reinforced Concrete Fibre Reinforced Plastic Polyethylene		



## ADAC Sewerage

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Geometry *	The linear geometry of the house connection feature in coordinate space. Digitise this line downstream from the inspection opening to the pipe or pit If a point is desired, the inspection opening position may be taken as the start of the line At version 4.1.0 these features may include curves due to modern flexible materials.		geometry_linear_singlepath_complex		
		SepticTanks *	Element representing the feature class of Sewerage Septic Tanks	SepticTank *	Element representing a self-contained septic tank feature (council owned) which is not a storage tank and not connect to the main wastewater network. Not to be used for bulk storage features that are part of the main water supply and wastewater distribution network.	Material *	The material that the storage tank is made from	Concrete Plastic Steel Unknown Other	Concrete Plastic Steel Tank material is unknown Some other material not included in the standard Schema		
						Source *	The source of water in the tank	Wastewater Other	Wastewater from home or toilet discharge Some other source not included in the standard Schema		
						Volume_m3 *	The effective volume in cubic metres.		Float_Positive_NonZero		
						Manufacturer *	The Manufacturer of the unit		String_64		
						ModelNumber *	The standard code, model number or part number for the unit		String_64		
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction		
						Geometry *	Point geometry representing the feature in coordinate space.		geometry_point_singlepoint		

# ADAC StormWater

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION													
StormWater *	Data structure constraining information on stormwater features.	Pits *	Represents the feature class of stormwater pits	Pit *	Represents a stormwater maintenance hole or pit feature.	PitNumber *	The pit identifier.	String_32																				
						Use *	Purpose of the feature in the network.	Junction Pit with access Junction Pit no access Kerb Inlet Field Inlet Roofwater Inspection Chamber Roofwater Outlet	Maintenance or access point Pit only - no access Kerb Inlet Field Inlet Roofwater Inspection Chamber Roofwater outlet to swale																			
						ChamberConstruction *	Method of chamber construction.	Prefabricated Insitu	Prefabricated Built or poured in-situ																			
						ChamberSize *	Represents the essential dimensions of the chamber. Contains a choice of structures that pertain to different configurations.	Rectangular *	Dimensions of a rectangular chamber.	Length_mmm *	Length in millimetres	Width_mmm *	Width in millimetres			positivelnteger												
								Circular *	Dimensions of a circular chamber.	Diameter_mmm *	Diameter in millimetres					positivelnteger												
								Extended *	Dimensions of a circular chamber.	Radius_mmm *	Radius, in millimetres, of the circular ends					positivelnteger												
										Extension_mmm *	Distance, in millimetres, between the centre points of the circular ends					positivelnteger												
						LidType	The type of lid or grate covering the opening.	Circ Cast Iron Circ Conc Infill Sqr Cast Iron Sqr Conc Infill Rect Cast Iron Rect Conc Infill CI Frame Conc Infill Galv Grate Cast Iron Grate Hydroflow Grate Cast Iron Bike/Ped Safe Grate Precast Cover Slabs	Circular Cast Iron Lid Circular Concrete Infill Lid Square Cast Iron Lid Square Concrete Infill Lid Rectangular Cast Iron Rectangular Concrete Infill Lid Cast Iron Frame Concrete Infill Galvanised Steel Grate Cast Iron Grate Hydroflow Grate Cast Iron Bicycle and Pedestrian Safe Grate Long Rectangular Concrete Cover Slabs (usually 2 per pit)																			
						SurfaceLevel_m *	Surface level of this feature (in metres against the vertical datum).		float																			
						InvertLevel_m *	Invert level of this feature (in metres against the vertical datum).		float																			
						Depth_m *	The depth of the structure in metres. May be user-entered, or auto-calculated as the difference between the surface level and the invert level of the pit.		Float_Positive_NonZero																			
						Inlet	Represents a surface inlet to the pit. Set to nil if this pit does not have a surface inlet	InletConfig *	Positioning of the inlet against the pit when looking at the pit from the verge facing the road	Left Centre Right	Left hand side Centre Right hand side																	
								InletType *		Field Inlet Dome Top Grade Field Inlet Surcharge Grate Field Inlet Flush Grate Kil Gully Lil Gully Anti-Ponding Gully Bro-Pit Kerb Inlet Drainway Kerb Inlet OTHER - Field Inlet OTHER - Kil Gully OTHER - Lil Gully OTHER - Side Entry Pit OTHER - Trench Grate Null Node	Galvanised - raised dome top grade for a field inlet Field Inlet Surcharge Grate Field Inlet Flush Grate Kerb Inline Gully Pit Lip Inline Gully Pit Anti-Ponding Gully Bro-Pit Kerb Inlet Drainway Kerb Inlet Council Specific Field Inlet Council Specific Kerb Inline Gully Pit Council Specific Lip Inline Gully Pit Council Specific Side Entry Pit Council Specific Trench Grate Null asset only applicable when Use != Junction Pit no access.																	
								InletSize *	Dimensions of the inlet e.g. Diameter or Length x Width.																			
						Lintel	Represents the pit lintel. Set to nil if this pit does not have a lintel.	LintelConstruction *	Method of lintel construction.	Prefabricated Insitu	Prefabricated Built or poured in-situ																	
								LintelLength_m *	Represents the length in metres of the lintel.		Float_Positive_NonZero																	
						OutletType *	The type of outlet for this pit.	Dry Surcharge	Dry Surcharge																			
						FireRetardant *	True of false value indicating whether fire retardant measures are incorporated.	boolean	boolean																			
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction	Float_Direction																			
						Geometry *	Point geometry representing the manhole or pit feature in coordinate space.	geometry_point_singlepoint	geometry_point_singlepoint																			
						EndStructures *	Represents the feature class of stormwater EndStructures	EndStructure *	Represents a stormwater endstructure feature as a Point object	EndStructureID *	The identifier for this end structure. Usually the textual identifier it would be labelled with on the face of a plan.	String_32																
												EndWall	Data structure representing the end wall. Set to nil if this End Structure does not have an end wall.	Type *	The type of stormwater end wall structure	Pipe Endwall Box Endwall Multi Cell Pipe Endwall Multi Cell Box Endwall Multi Cell Pipe and Box Endwall Sloping Pipe Endwall	Pipe Endwall Box Endwall Multi Cell Pipe Endwall Multi Cell Box Endwall Multi Cell Pipe and Box Endwall Sloping Pipe Endwall											
														Size *	Define the number of cells and sizes penetrating the End Structure ie. 3/750 or 2/1200x900 or 2/900x600+1/600.	String_32												
														Length_m *	Represents the length in metres of the end wall.	Float_Positive_Zero												
														Height_m *	Represents the height in metres of the end wall.	Float_Positive_Zero												
				Thickness_m *	Represents the Thickness in metres of the end wall.							Float_Positive_Zero																
				Material *	The predominant construction material of the end wall structure.							Concrete Reinforced Concrete Grouted Rock Revetment Mattress N/A	Concrete Reinforced Concrete Grouted Rock Revetment Mattress Not Applicable - To be used if not present															
				Construction *	The method of construction of the end wall structure.							Prefabricated Insitu	Prefabricated Built or poured in-situ															
				OutletProtection	Data structure representing the outlet protection. Set to nil if this End Structure does not have any protection.							Material *	Material used for the Outlet Protection	Grassed Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Geotextile Concrete Energy Dissepiment	Grassed banks Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Geotextile Concrete Energy Dissepiment													
												Area_m2	The Outlet Protection area, in square metres															
				GrateType	Type of grate used, if applicable.							Baffled Grated Siltng Basin None	Baffled Grated Siltng basin No grate fitted															
				TideGate	Type of tide or flood gate used, if applicable.							Fibreglass Proprietary Fabricated Controlled Rubber None	Fibreglass proprietary Fabricated Controlled Rubber No tidegate fitted															
				Geometry	Point geometry representing the EndStructure in coordinate space.							geometry_point_singlepoint	geometry_point_singlepoint															
		EndStructurePolyline *	Represents a stormwater endstructure feature as a Polyline object	EndStructurePolylineID *	The identifier for this end structure. Usually the textual identifier it would be labelled with on the face of a plan.							String_32																
												EndWall	Data structure representing the end wall. Set to nil if this End Structure does not have an end wall.	Type	The type of stormwater end wall structure	Pipe Endwall Box Endwall Multi Cell Pipe Endwall Multi Cell Box Endwall Multi Cell Pipe and Box Endwall Sloping Pipe Endwall	Pipe Endwall Box Endwall Multi Cell Pipe Endwall Multi Cell Box Endwall Multi Cell Pipe and Box Endwall Sloping Pipe Endwall											
														Size	Define the number of cells and sizes penetrating the End Structure ie. 3/750 or 2/1200x900 or 2/900x600+1/600.	String_32												
														Length_m	Represents the length in metres of the end wall.	Float_Positive_Zero												
														Height_m	Represents the height in metres of the end wall.	Float_Positive_Zero												
														Thickness_m	Represents the Thickness in metres of the end wall.	Float_Positive_Zero												
														Material	The predominant construction material of the end wall structure.	Concrete Reinforced Concrete Grouted Rock Revetment Mattress N/A	Concrete Reinforced Concrete Grouted Rock Revetment Mattress Not Applicable - To be used if not present											
														Construction	The method of construction of the end wall structure.	Prefabricated Insitu	Prefabricated Built or poured in-situ											
														Outlet Protection		Material	Material used for the Outlet Protection	Grassed	Grassed banks									

# ADAC StormWater

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION		
								Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Geotextile Concrete Energy Dissepiment	Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Geotextile Concrete Energy Dissepiment								
						Area_m2	The Outlet Protection area, in square metres										
						GrateType	Type of grate used, if applicable.	Baffled Grated Siting Basin None	Baffled Grated Siting basin No grate fitted								
						TideGate	Type of tide or flood gate used, if applicable.	Fibreglass Proprietary Fabricated Controlled Rubber None	Fibreglass proprietary Fabricated Controlled Rubber No tidegate fitted								
						Geometry	Point geometry representing the EndStructure in coordinate space.		geometry_linear_singlepath_simple								
		Fittings *	Represents the feature class of stormwater Fittings	Fitting *	Represents a point fitting in a stormwater system.	FittingType *	The type of stormwater fitting.	End Cap Tide Gate Frog Flap Duckbill Valve	A stormwater end cap Tide Gate Frog Flap Duckbill Valve								
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction								
						Geometry *	Point geometry representing the fitting in coordinate space.		geometry_point_singlepoint								
		Pipes *	Represents the feature class of stormwater pipes	Pipe *	Represents a stormwater pipe feature.	US_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).		float								
						DS_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).		float								
						US_SurfaceLevel_m *	Surface level (in metres against the vertical datum) vertically above this pipe end.		float								
						DS_SurfaceLevel_m *	Surface level (in metres against the vertical datum) vertically above this pipe end.		float								
						PipeStructure *	Container for a choice of pipe cross-sectional measures.	CircPipe *	Data structure describing stormwater pipe with a circular cross section	Diameter_mm *	The internal diameter of the pipe in millimetres.	Material *	The pipe wall material	RCP FRC PVC-U HDPE PP RPP GRP CSP CAP SFRC	Steel Reinforced Concrete Pipe Fibre Reinforced Concrete Pipe Polyvinylchloride Unplasticised High Density Polyethylene (includes the product known commercially as Hanes Black Brute) Polypropylene Pipe (also known as Black Max) Ribbed Polypropylene Pipe (also known as RibStruct) Glass Reinforced Plastic (includes the product known commercially as Hobas) Helically Corrugated Galv Steel Pipe Helically Corrugated Aluminium Pipe Slotted fibre reinforced concrete		
										Class *	The pipe wall class			1 2 3 4 6 8 10 SN2 SN4 SN8	Class 1 Class 2 Class 3 Class 4 Class 6 Class 8 Class 10 Class SN2 Class SN4 Class SN8		
										JointType *	The joint type of the pipe section			FJ RRJ SWJ	Flush Joint Rubber Ring Joint Solvent Welded Joint		
								BoxPipe *	Rectangular pipe cross-sectional description.	Height_mm *	Height in millimetres of the internal cross section	Width_mm *	Width in millimetres of the internal cross section				
										Material *	Wall material of the box section.			RCBC SLBC RUBBLE	Reinforced Concrete Box Culvert Slab Link Box Culvert Rubble Infiltration Drain		
						Cells *	The number of cells in the pipe course.		positivelnteger								
						ConcreteCoverType *	The pipe protection regime employed.	Standard Saltwater									
						Grade	Pipe gradient as a percentage. Derivable from invert levels and horizontal length.		Float_Positive_Zero								
						Length_m	Pipe material length in metres.		Float_Positive_NonZero								
						Geometry *	Polyline geometry representing the feature in coordinate space. The recommendation for multicell courses is to store multiple paths within the polyline. It is recommended that all paths are digitised in the direction of flow.		geometry_linear_multipath_simple								
		SurfaceDrains *	Represents the feature class of stormwater surface drains	SurfaceDrain *	Represents a linear surface drain. May include natural features as well as constructed where they function as part of a contributed asset.	Type *	The type of drain or channel.	Canal Open Drain Overland Flow Path Flat Open Surface Natural Waterway Infiltration Trench Batter Chute Diversion Drain	Canal Open Drain Overland Flow Path Flat Open Surface Natural Waterway Infiltration Trench Structure to convey runoff down a cut or fill batter and discharge at either non-rosive velocities or onto a non-erodible surface. Diversion Drain. Also called Whoa Boy, check, cross or roll over banks. Constructed to divert water off a track without causing erosion.								
						DrainShape *	Cross-sectional shape of the drain.	Flat Bottom Drain Vee Drain Swale Drain Natural Channel Diversion Profile	Flat Bottom Drain Vee Drain Swale Drain Natural Channel Diversion Profile								
						LiningMaterial *	The material that the channel is lined with.	Grassed Earth Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Natural Channel	Grassed Earth Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Natural Channel								
						BaseWidth_m	The base width, in metres, if flat bottom, nil if vee drain		Float_Positive_NonZero								
						LinedWidth_m *	The width, in metres, of the lined portion of the channel.		Float_Positive_NonZero								
						BatterMaterial	The material that the drain batter is lined with. A null value may be supplied where the drain has no batter.	Grassed Earth Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Natural Channel	Grassed Earth Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Natural Channel								
						BatterWidth_m	The total width, in metres, from top lip of batter to opposite top lip of batter. A null value may be supplied where the drain has no batter.		Float_Positive_NonZero								
						US_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).		float								
						DS_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).		float								
						AverageGrade	The average gradient over the whole length of the feature, as a percentage. Derivable from the difference in invert levels and the horizontal length of the geometry.		Float_Positive_Zero								
						Length_m	The material length, in metres, of the centreline of the channel.		Float_Positive_NonZero								

# ADAC StormWater

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	
						Geometry *	Polyline geometry representing the feature in coordinate space. Digitise each individual length of channel as a single unbroken path.	geometry_linear_singlepath_simple								
		WSUDPoints *	Represents the feature class of Water Sensitive Urban Design (WSUD) point features	GPTComplex *	Represents a complex commercial or custom StormWater Quality Improvement Device (SQID).	Sqid_Id	The string identifier of the device, as it would appear on a plan.	String_32								
						Construction *		Commercial	Manufacturer *	The manufacturer of the unit	String_64					
									ModelNumber *	The standard code, model number or part number for the unit	String_64					
									Size	The planimetric size of the device. This element is suitable because the manufacturer and model are mandatory, but if capture software designers wish to automatically populate the sizes from a list of known device models, then all of the appropriate dimensions must be supplied	Rectangular *	Planimetric dimensions of a rectangular device.	Length_mm *	Length in millimetres	positiveInteger	
												Width_mm *	Width in millimetres	positiveInteger		
												Circular *	Planimetric dimensions of a circular device.	Diameter_mm *	Diameter in millimetres	positiveInteger
									Size *	The dimensions of the device. This element is mandatory for custom built devices. The appropriate dimensions must be supplied	Rectangular *	Planimetric dimensions of a rectangular device.	Length_mm *	Length in millimetres	positiveInteger	
												Circular *	Planimetric dimensions of a circular device.	Diameter_mm *	Diameter in millimetres	positiveInteger
						Function1 *	The first function of the WSUD point. The device must have at least one function. Usually Gross Pollutant Capture will be the most important function.	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	Filtration of fine particulates from stormwater before discharging to a downstream drainage system.						
						Function2	The second function of the WSUD point, if applicable	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	Filtration of fine particulates from stormwater before discharging to a downstream drainage system.						
						Function3	The third function of the device, if applicable	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	Filtration of fine particulates from stormwater before discharging to a downstream drainage system.						
						US_PipeDiameter_mm	The upstream pipe diameter in millimetres	positiveInteger								
						DS_PipeDiameter_mm	The downstream pipe diameter in millimetres	positiveInteger								
						SurfaceLevel_m *	The surface level at the top of the device	float								
						US_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).	float								
						DS_InvertLevel_m *	Invert level of this pipe end (in metres against the vertical datum).	float								
						CleanoutLevel_m *	The level to which the device must be cleaned out, in metres against the vertical datum of the project.	float								
						Depth_m	The depth, in metres, of the device.	Float_Positive_NonZero								
						SumpDepth_m	The depth, in metres, of the sump, if applicable	Float_Positive_NonZero								
						HasFilterMedia	True if the device has filtration media or a filter capsule installed.	boolean								
						HasBasket	True if the device has a litter basket installed.	boolean								
						HasBoards	True if the device has drop-boards or penstock installed.	boolean								
						DesignFlow_m3s *	Design Flow in cubic metres per second	Float_Positive_NonZero								
						MaxContaminantVolume_m3	Maximum contaminant retention volume in cubic metres.	Float_Positive_NonZero								
						MaxInternalVolume_m3	Maximum internal volume in cubic metres.	Float_Positive_NonZero								
						MaintenanceCycle_mnth	The minimum maintenance cycle in months (refer to specifications)	positiveInteger								
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction								
						Geometry *	Point geometry representing the feature in coordinate space.	geometry_point_singlepoint								
					GPTSimple *	Represents a Water Sensitive Urban Design point feature that is a simple grate, basket or net fitted to existing infrastructure. Includes custom In-Pit or End-of-Line features or In-Line features such as trash-racks on drainage lines. Spatially, these features must be collocated with pits, endstructures or placed on pipes or drainage lines. Therefore, as in reality, whether the feature is In-Pit, In-Line or End-of-Line is determined by its placement with other features.	Sqid_Id	The string identifier of the device, as it would appear on a plan.	String_32							
						Construction *	The construction method	Prefabricated In-situ	Prefabricated Built or poured in-situ							
						Manufacturer	The manufacturer if applicable	String_64								
						ModelNumber	The model if applicable	String_64								
						TreatmentMeasure *	Simple treatment measures fitted to existing infrastructure to intercept solid litter being transported in stormwater.	Basket Net Vertical Grate Horizontal Grate	A simple basket fitted to existing infrastructure to intercept solid litter being transported in stormwater. A simple net fitted to existing infrastructure to intercept solid litter being transported in stormwater. A vertical grate across a drainage line or endstructure to intercept solid litter being transported in stormwater. A horizontal grate across an inlet to intercept solid litter being transported in stormwater.							
						Function1 *	The first function of the WSUD point. Has a fixed value because all GPTSimple points are.	String_32								
						Length_mm *	The length of the device	positiveInteger								
						Width_mm *	The width of the device	positiveInteger								
						Material	Predominant material of device	String_64								
						MaintenanceCycle_mnth	The minimum maintenance cycle in months. This is the revisit interval for clearing captured rubbish.	positiveInteger								
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction								
						Geometry *	Point geometry representing the feature in coordinate space.	geometry_point_singlepoint								
					NonGPTSimple *	Represents a WSUD point feature that is not a simple litter trap, such as a small sand filter, sediment pond, aquifer storage, infiltration measure or energy dissipater.	Sqid_Id	The string identifier of the device, as it would appear on a plan.	String_32							
						Construction *	The construction method	Prefabricated In-situ	Prefabricated Built or poured in-situ							
						Manufacturer	The manufacturer if applicable	String_64								
						ModelNumber	The model if applicable	String_64								
						TreatmentMeasure *	Treatment measures applicable to WSUD points that are neither simple nor complex Gross Pollutant Traps	Aquifer Storage Tank Energy Dissipater Floating Boom Infiltration Pond Infiltration Tank Rubble Pit Sand Filter Sediment Forebay	An installation in a drainage line, usually of concrete or stone, designed to dissipate the kinetic energy of flowing stormwater, to minimise its potential for erosion and damage. Often placed immediately downstream of an endstructure, but may conceivably be anywhere needed in a drainage line. Floating Boom Infiltration measure designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal. Infiltration measure designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal. A rubble pit designed to promote infiltration of untreated runoff to surrounding soils. A sand filter is a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system. A Sediment Forebay, usually associated with a WSUD area to intercept coarse sediment.							
						Function1 *	The first function of the WSUD point. Must be supplied.	Sediment Capture Sand Filtration Infiltration Aquifer Storage Energy Dissipation	Sediment Capture Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system. Infiltration measures typically consist of holding pond or tank designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal. Aquifer Storage The dissipation of kinetic energy from flowing stormwater to reduce its potential for erosion and damage.							
						Function2	The second function of the WSUD point, if applicable	Sediment Capture Sand Filtration	Sediment Capture Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.							

# ADAC StormWater

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	
							Infiltration Infiltration measures typically consist of holding pond or tank designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.									
							Aquifer Storage The dissipation of kinetic energy from flowing stormwater to reduce its potential for erosion and damage.									
						Function3 The third function of the device, if applicable	Sediment Capture Sediment Capture occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.									
							Infiltration Infiltration measures typically consist of holding pond or tank designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.									
							Aquifer Storage The dissipation of kinetic energy from flowing stormwater to reduce its potential for erosion and damage.									
						Length_mm *	The length of the device	positivelnteger								
						Width_mm	The width of the device	positivelnteger								
						MaintenanceCycle_mnths	The minimum maintenance cycle in months. This is the revisit interval for maintenance or inspection, if applicable	positivelnteger								
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction								
						Geometry *	Point geometry representing the feature in coordinate space	geometry_point_singlepoint								
		WSUDPolyline *	Represents the feature class of Water Sensitive Urban Design (WSUD) polyline features	FlowManagementDevice *	Represents a Flow Management Device. Also often called a Stormwater Quality Improvement Device (SQID).	Sqid_Id	The string identifier of the device, as it would appear on a plan.	String_32								
						Type *	Stormwater Flow Management Device Type	Levee Spillway Weir								
						Material	The predominant material of the Stormwater Flow Management Device.	Concrete Earth Grassed Grouted Rock Metal Placed Rock Timber								
						Length_m		Float_Positive_NonZero								
						CrestElevation_m		Float								
						Geometry *	Polyline geometry representing the feature in coordinate space.	geometry_linear_multipath_simple								
		WSUDAreas *	Represents the feature class of Water Sensitive Urban Design (WSUD) area features	WSUDArea *	Represents a Water Sensitive Urban Design (WSUD) area feature. Also often called a Stormwater Quality Improvement Device (SQID). Use area features to represent constructed wetlands, bioretention basins, biofiltration beds, swales etc.	Sqid_Id	The string identifier of the device, as it would appear on a plan.	String_32								
						TreatmentMeasure *	The treatment measure employed. Choose from a list relevant to complex area features.	Buffer Strip Swale Bioretention Swale Sedimentation Basin Bioretention Basin Detention Basin Constructed Wetland	A buffer strip is a vegetated slope. Stormwater flows across a buffer strip. Treatment is provided by infiltration to the soil and by filtration of shallow flow through the vegetation. A swale is a shallow trapezoidal channel lined with vegetation. Stormwater flows along a swale. Treatment is provided by infiltration to the soil and by filtration of shallow flow through the vegetation. Bioretention swales include a vegetated infiltration trench within the invert of a swale. Incorporating the infiltration trench enhances removal of both particles and nutrients. A sedimentation basin is a small pond, about 1m deep, designed to capture coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles. A bioretention basin is a vegetated bed of filter material, such as sand and gravel. The basin is designed to capture stormwater runoff which then drains through the filter media. Pollutants are removed by filtration and by biological uptake of nutrients. A detention basin/pond temporarily stores stormwater runoff. The basin is designed to manage stormwater runoff by storing it and releasing it gradually until completed drained. Constructed wetland systems are shallow, vegetated water bodies the use enhanced sedimentation, fine filtration and biological uptake processes to remove pollutants from stormwater.							
						Function1 *	The first function of the WSUD area. At least one function must be supplied. Choose from a list relevant to complex area features.	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Sand Filtration Permeation Temporarily Stormwater Storage Vegetated Filtration Bioretention	Gross Pollutant Capture is the function of removing coarse particulate matter from stormwater. Sediment Capture is the function of capturing coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles. Oil / Grit Separation Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system. Permeation allows water to penetrate the surface and join subterranean flows Temporarily stores stormwater runoff Vegetated Filtration Bioretention							
						Function2	The second function of the WSUD area, if applicable.	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Sand Filtration Permeation Temporarily Stormwater Storage Vegetated Filtration Bioretention	Gross Pollutant Capture is the function of removing coarse particulate matter from stormwater. Sediment Capture is the function of capturing coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles. Oil / Grit Separation Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system. Permeation allows water to penetrate the surface and join subterranean flows Temporarily stores stormwater runoff. Vegetated Filtration Bioretention							
						Function3	The third function of the WSUD area, if applicable.	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Sand Filtration Permeation Temporarily Stormwater Storage Vegetated Filtration Bioretention	Gross Pollutant Capture is the function of removing coarse particulate matter from stormwater. Sediment Capture is the function of capturing coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles. Oil / Grit Separation Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system. Permeation allows water to penetrate the surface and join subterranean flows Temporarily stores stormwater runoff. Vegetated Filtration Bioretention							
						PondingArea_m2	Area of Temporary Ponding or Extended Detention in square metres.	Float_Positive_NonZero								
						PondingDepth_m	Average depth of Temporary Ponding or Extended Detention in metres.	Float_Positive_NonZero								
						FilterArea_m2	Area of Bioretention filter media in square metres.	Float_Positive_NonZero								
						FilterDepth_m	Depth of Bioretention filter media in metres.	Float_Positive_NonZero								
						TransitionDepth_m	Depth of the Bioretention Transition Layer in metres.	Float_Positive_NonZero								
						DrainageDepth_m	Depth of the Bioretention Drainage Layer in metres.	Float_Positive_NonZero								
						MacrophyteZoneArea_m2	The vegetated area in square metres (may be zero). Area of vegetated portion of constructed wetland (macrophyte zone)	Float_Positive_Zero								
						MacrophyteZoneDepth_m	Average depth of vegetated portion of constructed wetland (macrophyte zone)	Float_Positive_NonZero								
						CoarseSedimentArea_m2	Maximum area of ponding (for coarse sediment capture) before bypass.	Float_Positive_Zero								
						SedimentVolume_m3	Volume of sediment capacity in cubic metres	Float_Positive_NonZero								
						MinSurfaceLevel_m	Minimum surface level within structure (above or below water surface level).	float								
						PermanentPondLevel_m	Water surface level during normal dry weather.	float								

# ADAC StormWater

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						OutletLevel_m	The surface level in metres of the bypass, or spillway, or other overflow outlet structure.	float							
						DesignFlow_m3s	The maximum design flow of the feature in cubic metres per second	Float_Positive_NonZero							
						HasSpillway *	Whether the feature has a spillway	boolean							
						MaintenanceCycle_mnths	The minimum maintenance cycle in months (refer to specifications)	positiveInteger							
						Geometry *	Polygon geometry representing the feature in coordinate space.	geometry_area_multipart_complex							

# ADAC Transport

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
Transport *	Data structure constraining information on road related features.	PavementAreas *	Represents the feature class of road pavement areas	Pavement *	Represents an area of road pavement.	Name *	The gazetted, or proposed, road name.	String_254					
						Surface *	Data container for surface characteristics.	SurfaceType *	The surface type of the road or street	AC FDA 2CBS 1CBS DUST SMA SSSL CPAV Concrete BPAV GRVL PMB Earth GCELL	Asphalt Full Depth Asphalt 2 Coat Prime and Seal 1 Coat Prime and Seal Dust Seal Stone Mastic Asphalt Slurry Seal Concrete Pavers Concrete, Stencilled/Aggregate Brick Pavers Gravel Road Poly Modified Bitumen Earth Grass Cell		
						SurfaceThickness_mm	The surface thickness in millimetres			positiveInteger			
						SurfaceNomLength_m	The nominal length of the surface of the road or street as a decimal number in metres.			Float_Positive_NonZero			
						SurfaceNomWidth_m *	The nominal width of the surface of the road or street as a decimal number in metres.			Float_Positive_NonZero			
						PavementStructure *	Data container for pavement structure characteristics.	PavementType *	Pavement construction type	Flexible Rigid Floodway	Flexible pavement Rigid pavement Pavement section hardened for flood passage.		
						BaseLayer	Describes the pavement base layer	LayerType *	Construction type of the base layer. Must be Concrete if PavementType is Rigid, otherwise must not be Concrete	GR21 GR22 GR23 GR24 GR25 NGRL Earth EME2 AC Concrete Class 1 DGB Class 2 DGB MB20 MB40 GMB20	Gravel 2.1 CBR80 Gravel 2.2 CBR60-80 Gravel 2.3 CBR45-60 Gravel 2.4 CBR35-45 Gravel 2.5 CBR15-35 Natural Gravel/Conglomerate Earth High Modulus Asphalt Asphalt Concrete 20mm nominal size Densely Graded Base (Class 1) 20mm nominal size Densely Graded Base (Class 2) 20mm nominal size Material to be Bound 40mm nominal size Material to be Bound 20mm nominal size Graded Macadam Base		
						LayerDepth_mm *	Base layer depth in millimetres			Float_Positive_NonZero			
						Stabilisation	Base layer stabilisation method			Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement		
						SubBaseLayer	Describes the pavement sub-base layer	LayerType *	Construction type of the sub-base layer.	GR21 GR22 GR23 GR24 GR25 NGRL Earth DGS20 DGS40 MB20 MB40 GMS40 GMS60 MS50 MS75	Gravel 2.1 CBR80 Gravel 2.2 CBR60-80 Gravel 2.3 CBR45-60 Gravel 2.4 CBR35-45 Gravel 2.5 CBR15-35 Natural Gravel/Conglomerate Earth 20mm nominal size Densely Graded Subbase 40mm nominal size Densely Graded Subbase 20mm nominal size Material to be Bound 40mm nominal size Material to be Bound 40mm nominal size Graded Macadam Subbase 60mm nominal size Graded Macadam Subbase 50mm nominal size Macadam Subbase 75mm nominal size Macadam Subbase		
						LayerDepth_mm *	Sub-base layer depth in millimetres			Float_Positive_NonZero			
						Stabilisation	Sub-base layer stabilisation method			Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement		
						LowerSubBaseLayer	Describes the pavement lower sub-base layer	LayerType *	Construction type of the lower sub-base layer.	GEOT Rock GTRK GR25 DGS20 DGS40 MB20 MB40 GMS40 GMS60 MS50 MS75	Geotextile Rock Geotextile/Rock Gravel 2.5 CBR15-35 20mm nominal size Densely Graded Subbase 40mm nominal size Densely Graded Subbase 20mm nominal size Material to be Bound 40mm nominal size Material to be Bound 40mm nominal size Graded Macadam Subbase 60mm nominal size Graded Macadam Subbase 50mm nominal size Macadam Subbase 75mm nominal size Macadam Subbase		
						LayerDepth_mm *	Lower sub-base layer depth in millimetres			Float_Positive_NonZero			
						Stabilisation	Lower sub-base layer stabilisation method			Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement		
		PavementHierarchy	Pavement Hierarchy	Arterial Sub-Arterial Trunk Collector Access/Local	Arterial Sub-Arterial Trunk Collector Access/Local								
		PavementGeoTextile	Pavement geotextile type. Road Pavement Geotextile Types As per MRS11-27 Table 3.	Class A Class B Class C Class D Class E	G Rating range 900 up to 1350 G Rating range 1350 up to 2000 G Rating range 2000 up to 3000 G Rating range 3000 up to 4500 G Rating 4500								
		SubGrade *	Data container for subgrade structure characteristics.	CBR *	California Bearing Ratio. An expression of the load bearing and shear properties of the material.		Float_Positive_NonZero						
		Stabilisation	Subgrade stabilisation method			Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement						
		Geometry *	Polygon geometry delineating the pavement area in coordinate space.				geometry_area_multipatch_complex						
		ParkingAreas *	Represents the feature class of parking areas	Parking *	Represents an area of parking pavement.	Name *	Parking area name	String_254					
						NoOfCarparks	Number of individual vehicle spaces.	positiveInteger					
						OnOffStreet *	Value indicating whether the parking is an uninterrupted part of the road pavement, or	On Street Off Street	On street parking Off street parking				
						Surface	Data container for surface characteristics.	SurfaceType	The surface type of the parking area	AC	Asphalt		

ADAC Transport

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
										FDA 2CBS 1CBS DUST SMA SSSL CPAV CONC BPAV GRVL PMB Earth GCELL	Full Depth Asphalt 2 Coat Prime and Seal 1 Coat Prime and Seal Dust Seal Stone Mastic Asphalt Slurry Seal Concrete Pavers Concrete, Stencilled/Aggregate Brick Pavers Gravel Road Poly Modified Bitumen Earth Grass Cell		
						SurfaceThickness_mm	The surface thickness in millimetres				positiveInteger		
						SurfaceArea_m2	The area of the parking surface as a decimal number in square metres.				Float_Positive_NonZero		
						PavementStructure *	Data container for pavement structure characteristics.	PavementType *	Pavement construction type	Flexible Rigid Floodway	Flexible pavement Rigid pavement Pavement section hardened for flood passage		
						BaseLayer	Describes the pavement base layer	LayerType *	Construction type of the base layer. Must be Concrete if PavementType is Rigid, otherwise must not be Concrete	GR21 GR22 GR23 GR24 GR25 NGRL Earth EME2 AC Concrete Class 1 DGB Class 2 DGB MB20 MB40 GMB20	Gravel 2.1 CBR80 Gravel 2.2 CBR60-80 Gravel 2.3 CBR45-60 Gravel 2.4 CBR35-45 Gravel 2.5 CBR15-35 Natural Gravel/Conglomerate Earth High Modulus Asphalt Asphalt Concrete 20mm nominal size Densely Graded Base (Class 1) 20mm nominal size Densely Graded Base (Class 2) 20mm nominal size Material to be Bound 40mm nominal size Material to be Bound 20mm nominal size Graded Macadam Base		
								LayerDepth_mm *	Base layer depth in millimetres		Float_Positive_NonZero		
								Stabilisation	Base layer stabilisation method	Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement		
						SubBaseLayer	Describes the pavement sub-base layer	LayerType *	Construction type of the sub-base layer.	GR21 GR22 GR23 GR24 GR25 NGRL Earth DGS20 DGS40 MB20 MB40 GMS40 GMS60 MS50 MS75	Gravel 2.1 CBR80 Gravel 2.2 CBR60-80 Gravel 2.3 CBR45-60 Gravel 2.4 CBR35-45 Gravel 2.5 CBR15-35 Natural Gravel/Conglomerate Earth 20mm nominal size Densely Graded Subbase 40mm nominal size Densely Graded Subbase 20mm nominal size Material to be Bound 40mm nominal size Material to be Bound 40mm nominal size Graded Macadam Subbase 60mm nominal size Graded Macadam Subbase 50mm nominal size Macadam Subbase 75mm nominal size Macadam Subbase		
								LayerDepth_mm *	Sub-base layer depth in millimetres		Float_Positive_NonZero		
								Stabilisation	Sub-base layer stabilisation method	Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement Default Value		
						LowerSubBaseLayer	Describes the pavement lower sub-base layer	LayerType *	Construction type of the lower sub-base layer.	GEOT Rock GTRK GR25 DGS20 DGS40 MB20 MB40 GMS40 GMS60 MS50 MS75	Geotextile Rock Geotextile/Rock Gravel 2.5 CBR15-35 20mm nominal size Densely Graded Subbase 40mm nominal size Densely Graded Subbase 20mm nominal size Material to be Bound 40mm nominal size Material to be Bound 40mm nominal size Graded Macadam Subbase 60mm nominal size Graded Macadam Subbase 50mm nominal size Macadam Subbase 75mm nominal size Macadam Subbase		
								LayerDepth_mm *	Lower sub-base layer depth in millimetres		Float_Positive_NonZero		
								Stabilisation	Lower sub-base layer stabilisation method	Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement		
						PavementGeoTextile	Pavement geotextile type.	Class A Class B Class C Class D Class E	G Rating range 900 up to 1350 G Rating range 1350 up to 2000 G Rating range 2000 up to 3000 G Rating range 3000 up to 4500 G Rating 4500				
						SubGrade *	Data container for subgrade structure characteristics.	CBR *	California Bearing Ratio. An expression of the load bearing and shear properties of the material.		Float_Positive_NonZero		
								Stabilisation	Subgrade stabilisation method	Lime Foamed Bitumen Geogrid Cement	Lime Foamed Bitumen Earth Reinforcing Mat Cement		
						Geometry *	Polygon geometry delineating the pavement area in coordinate space.		geometry_area_multipatch_complex				
		RoadEdges *	Represents the feature class of road edges	RoadEdge *	Represents an edge feature of a pavement area.	Type *	Road edge configuration	Barrier Kerb Barrier Kerb and Channel Semi-Mountable Kerb Semi-Mountable Kerb and Channel Mountable Kerb Mountable Kerb and Channel Edge Restraint Channel Separation Kerb	Barrier Kerb Barrier Kerb and Channel Semi-Mountable Kerb Semi-Mountable Kerb and Channel Mountable Kerb Mountable Kerb and Channel Edge Restraint Channel Separation Kerb				
						Material *	Material of Road Edge.	Concrete Reinforced Concrete Asphalt Other	Concrete Reinforced Concrete Asphalt Other				
						Width_mm *	Width in millimetres of the Edge feature.		positiveInteger				
						Length_m	Length in metres of edge material.		Float_Positive_NonZero				

ADAC Transport

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
						PavementExtension_mm *	The pavement extension, in millimetres, behind the back of kerb.		positiveInteger				
						Geometry *	Polyline geometry describing the feature in coordinate space.		geometry_linear_multipath_complex				
		RoadIslands *	Represents the feature class of road islands	RoadIsland *	Represents an area of road island, local traffic calming, or median structure. Where the structure incorporates water sensitive urban design (WSUD) features, those features should be independently captured.	Type *	Type of Road Island	Splitter Pedestrian Refuge Center Median Roundabout Road Hump Chicane LATM	Splitter Island Pedestrian Refuge Center Median Roundabout Road Hump - speed management measure Chicane - often constricting passage to a single lane Local Area Traffic Management feature				
						Area_m2	The area, in square metres, of the infill.		Float_Positive_NonZero				
						InfillType *	Type of Road Island Infill	AC Concrete Grass Gravel Landscape Pavers Synthetic Grass Rubber Other Material	Asphalt Concrete Grass Gravel Landscape Pavers Synthetic Grass Rubber Other Material				
						Geometry *	Polygon geometry describing the feature in coordinate space.		geometry_area_multipatch_complex				
		Pathways *	Represents the feature class of pathways. Subtypes are provided for the correct validation of in-ground paths, on-road cycleways and structures functioning as part of a linear path network.	Pathway *	Represents an on-ground footpath or cycleway feature. Do not use to describe on-road cycleway.	Use *	Intended traffic use of the structure.	Shared CycleWay Pedestrian Horse Trail Mountain Bike Fire Trail	Shared Pedestrian and Cycleway Bicycles only Pedestrians only Defined use horse trail Defined use mountain bike trail Fire Trail				
						Structure *	Type of pathway structure. A fixed value of In Ground is required for this sub type	In Ground (hardcoded)	String_32				
						SurfaceMaterial *	Surface material of the structure.	Concrete CPAV BPAV Bitumen Gravel Earth Recycled Plastic Steel Stone Timber Sand	Concrete Concrete Pavers Brick Pavers Bitumen Gravel Earth Recycled Plastic Steel Stone Timber Sand				
						Width_m *	Nominal width of the pathway in metres.		Float_Positive_NonZero				
						Depth_mm *	The nominal depth of the pathway material in millimetres.		positiveInteger				
						Geometry *	Polyline geometry describing the feature in coordinate space.		geometry_linear_singlepath_complex				
				RoadPathway *	Represents a linear section of on-road cycleway.	Use *	Intended traffic use of the structure. A fixed value of CycleWay is applied to this sub type.	Shared CycleWay (hardcoded) Pedestrian Horse Trail Mountain Bike Fire Trail	Shared Pedestrian and Cycleway Bicycles only Pedestrians only Defined use horse trail Defined use mountain bike trail Fire Trail				
						Structure *	Type of pathway structure. A fixed value of On Road is required for this sub type	On Road (hardcoded)	String_32				
						SurfaceMaterial *	Surface material of the structure. A fixed value of Road Pavement is applied to this sub type.	Road Pavement (hardcoded)	String_32				
						Width_m *	Nominal width of the marked pathway in metres.		Float_Positive_NonZero				
						Geometry *	Polyline geometry describing the feature in coordinate space.		geometry_linear_singlepath_complex				
				PathStructure *	Represents a structure functioning as a linear section of footpath or cycleway. Do not use to describe on-road cycleway.	Use *	Intended traffic use of the structure.	Shared CycleWay Pedestrian Horse Trail Mountain Bike Fire Trail	Shared Pedestrian and Cycleway Bicycles only Pedestrians only Defined use horse trail Defined use mountain bike trail Fire Trail				
						Structure *	Type of pathway structure.	Boardwalk Causeway Foot Bridge Stairs Ramp Underpass	Boardwalk Causeway Foot Bridge Stairs Ramp Underpass				
						SurfaceMaterial *	Surface material of the structure.	Concrete CPAV BPAV Bitumen Gravel Earth Aluminium Fibre Reinforced Plastic Recycled Plastic Steel Stone Timber Sand	Concrete Concrete Pavers Brick Pavers Bitumen Gravel Earth Aluminium Fibre Reinforced Plastic Recycled Plastic Steel Stone Timber Sand				
						SubStructureMaterial *	Material of the sub structure.	Concrete Steel Stone Brick Timber	Concrete Steel Stone Brick Timber				
						Width_m *	Nominal width of the pathway in metres.		Float_Positive_NonZero				
						Geometry *	Polyline geometry describing the feature in coordinate space.		geometry_linear_singlepath_complex				
		RoadSafetyBarriers *	Represents the feature class of transport barriers	RoadSafetyBarrier *	Represents a barrier dedicated to transport features.	Type *	The type of road safety barrier employed.	Energy-absorbing Bollard Energy-absorbing Terminal Flexible Flexible/Rigid Combination Flexible/Semi-rigid Combination Rigid Rigid/Semi-rigid Combination Semi-rigid	Energy-absorbing Bollard Energy-absorbing Terminal Wire Rope Combination of wire rope and concrete or similar barrier Flexible/Semi-rigid Combination Concrete barrier or similar with very little deflection Combination of concrete or similar barrier and W or Thrie beam W beam or Thrie beam				

# ADAC Transport

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
						LeadingEndTreatment *	The type of Leading End treatment.	Brakemaster ET2000 Plus X Tension 350 FLEAT MELT NEAT Omnistop QuadGuard QuadGuard Elite QuadGuard Wide QuadTrend 350 React 350 Rubber Crash Cushion SKT TAU II Thrie-Beam bull nose TRACC	Brakemaster ET2000 Plus X Tension 350 FLEAT MELT NEAT Omnistop QuadGuard QuadGuard Elite QuadGuard Wide QuadTrend 350 React 350 Rubber Crash Cushion SKT TAU II Thrie-Beam bull nose TRACC				
						TrailingEndTreatment *	The type of Trailing End treatment.	Brakemaster DOT ET2000 Plus X Tension 350 FLEAT MELT Omnistop QuadGuard QuadGuard Elite QuadGuard Wide QuadTrend 350 React 350 Rubber Crash Cushion SKT TAU II Thrie-Beam bull nose TRACC	Brakemaster DOT ET2000 Plus X Tension 350 FLEAT MELT Omnistop QuadGuard QuadGuard Elite QuadGuard Wide QuadTrend 350 React 350 Rubber Crash Cushion SKT TAU II Thrie-Beam bull nose TRACC				
						StandardHeight	Is barrier height standard?		boolean				
						Height_m	Nominal height of the barrier in metres.		Float_Positive_NonZero				
						Length_m *	Nominal length of the barrier in metres including terminals.		Float_Positive_NonZero				
						MotorcyclistProtectionType *	The type of motorcyclist protection rail.	Rub Rail Hiassa Rail None	Rub Rail Hiassa Rail None				
						PedestrianProtectionSheeting *	as pedestrian protection sheeting been installed?		boolean				
						BridgeTransition *	Is this a bridge transition?		boolean				
						StandardPostSpacing	Is the post spacing standard?		boolean				
						PostSpacing_m	Spacing of posts in metres.		Float_Positive_NonZero				
						PostType	The type of post installed with road safety barrier.	Steel Timber	Steel Timber				
						RailType *	The type of rail installed with road safety barrier.	Steel Timber	Steel Timber				
						HorizontalAlignment	Horizontal alignment of road safety barrier.	Straight Convex Concave	Straight Convex Concave				
						NumberOfBollards	Number of bollards.		positiveInteger				
						Geometry *	Polyline geometry describing the feature in coordinate space.		geometry_linear_mullipath_complex				
		PramRamps *		PramRamp *	Represents a pram ramp or disabled entry-point to a road edge as a point object	Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_point_singlepoint				
				PramRampPolygon *	Represents a pram ramp or disabled entry-point to a road edge as a polygon object	Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_singlepatch_complex				
		SubSoilDrains *		SubSoilDrain *	Represents a road sub-soil drain. Formerly called RoadSubsoilDrain in ADAC Version 3.0.1	Use *	The use (orientation) of the drain.	Side Drain Mitre Drain	Parallel to the kerb Cross road drain				
						Type *	The type (configuration) of the drain.	Perforated Pipe Strip Filter	Perforated Pipe with textile sleeve Strip Filter Drain				
						Length_m	The length in metres of the drain.		Float_Positive_NonZero				
						Geometry *	Polyline geometry representing the centreline of the sub-soil drain in coordinate space.		geometry_linear_singlepath_simple				
		FlushPoints *		FlushPoint *	Represents a sub-soil drain flush point.	Function *	The function of the flushing out point	Cleanout  Surface Outlet	A cleanout flushpoint inlet generally protected by a sunken valve box. May have a removable cap on the pipe mouth.  A subsoil drain outlet point discharging to the surface, rather than into a gully pit or manhole etc.				
						Geometry *	Point geometry representing the flush point of the sub-soil drain in coordinate space.		geometry_point_singlepoint				
		Bridges *		BridgeExtent *	Describes the envelope or footprint for the whole structure and all of its parts. It holds properties that apply at the assembly level.	BridgeID *	Unique identifier, used to associate components of the same bridge assembly.		String_64				
						Name	Road name or nearest road where bridge resides, or the recognised name of the bridge.		String_254				
						Use *	Predominant use of bridge.	Cycleway Pedestrian Rail Road Shared Stock	Cycleway Pedestrians and/or bicycle. Rail Road Shared Stock				
						Type *	Type of bridge construction.	Arch Beam Box Girder Cable-Stayed Cantilever Deck Unit Moveable Open Girder Slab Suspension Tressle Truss	Arch Beam Box Girder Cable-Stayed Cantilever Deck Unit Moveable Open Girder Slab Suspension Tressle Truss				
						CrossingType *	The layout and configuration of this structure.	Fresh Water Land Rail	Fresh Water Land Rail				

# ADAC Transport

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
								Road	Road				
								Salt Water	Salt Water				
						Spans *	Number of spans.		positiveInteger				
						MinimumClearance_m	Minimum clearance in metres.		float				
						PredominantMaterial *	Predominant Material of bridge.	Aluminium	Aluminium				
								Fibre Composite	Fibre Composite				
								Prestressed Cast-Insitu Concrete	Prestressed Cast-Insitu Concrete				
								Prestressed Precast Concrete	Prestressed Precast Concrete				
								Reinforced Concrete	Reinforced Concrete				
								Steel	Steel				
								Timber	Timber				
						DesignLoad	Design load of bridge as per AS5100.		String_64				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_singlepatch_complex				
		BridgeDeck *	Represents a single deck unit between abutments or supports. There may be one or more BridgeDeck objects for any given bridge assembly.			BridgelD *	Unique identifier, used to associate components of the same bridge assembly.		String_64				
						Material *	Material types for Bridge deck.	Fibre Composite	Fibre Composite				
								Prestressed Cast-Insitu Concrete	Prestressed Cast-Insitu Concrete				
								Prestressed Precast Concrete	Prestressed Precast Concrete				
								Reinforced Concrete	Reinforced Concrete				
								Steel	Steel				
								Timber	Timber				
						NomWidth_m *	Nominal Width of deck in metres.		Float_Positive_NonZero				
						DeckLength_m *	Length of Bridge deck between joints at abutments in metres.		Float_Positive_NonZero				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_multipatch_complex				
		ContainmentClass *	Containment Class of Parapet/Railing as per AS5100.			BridgelD *	Unique identifier, used to associate components of the same bridge assembly.		String_64				
						ContainmentClass *	Containment Class of Parapet/Railing as per AS5100.	Low	Low				
								Regular	Regular				
								Medium	Medium				
								Special	Special				
		BridgeSuperstructure *	Represents superstructure of bridge.			BridgelD *	Unique identifier, used to associate components of the same bridge assembly.		String_64				
						Material *	Material types for the Superstructure.	Fibre Composite	Fibre Composite				
								Prestressed Cast-Insitu Concrete	Prestressed Cast-Insitu Concrete				
								Prestressed Precast Concrete	Prestressed Precast Concrete				
								Reinforced Concrete	Reinforced Concrete				
								Steel	Steel				
								Timber	Timber				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_multipatch_complex				
		BridgeAbutment *	Represents the extent of one abutment for a bridge assembly. A BridgeAbutment will be independently described at each end of the structure.			BridgelD *	Unique identifier, used to associate components of the same bridge assembly.		String_64				
						Material *	The predominant material of the abutment.	Compressed Aggregate	Compressed Aggregate				
								Masonry	Masonry				
								Prestressed Precast Concrete	Prestressed Precast Concrete				
								Reinforced Concrete	Reinforced Concrete				
								Steel	Steel				
								Timber	Timber				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_multipatch_complex				
		BridgePier *	Represents a single supporting structure that supports deck spans between abutments.			BridgelD *	Unique identifier, used to associate components of the same bridge assembly.		String_64				
						Material *	Predominant Pier material type.	Composite	Composite				
								Masonry	Masonry				
								Prestressed Precast Concrete	Prestressed Precast Concrete				
								Reinforced Concrete	Reinforced Concrete				
								Steel	Steel				
								Stone	Stone				
								Timber	Timber				
						Geometry *	The geometry representing this feature in coordinate space.		geometry_area_multipatch_complex				

# ADAC Water Supply

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
WaterSupply *	Data structure constraining the description of water supply features.	WaterServices *	Represents the feature class of domestic sized water services	WaterService *	Represents a domestic water service feature.	Diameter_mm *	Nominal diameter of the pipe in millimetres.	Minimum (Inclusive) Value: 20 Maximum (Inclusive) Value: 63	Minimum service diameter is 20mm Maximum service diameter to use this feature class is 63mm				
						Material *	The service pipe material.	DI Copper PE M_1 Other Unknown	Ductile Iron Copper Polyethylene A new material not in the schema as agreed with the receiving entity Material not currently in the schema Material Unknown at time of data submission				
						Class	The service pipe class as specified by the manufacture and relevant to the material.	PN6 PN6.3 PN8 PN9 PN10 PN12 PN12.5 PN16 PN18 PN20 PN35 Type A Other Unknown	Class PN6 for poly services Class PN6.3 for poly services Class PN8 for poly services Class PN9 for poly services Class PN10 for poly services Class PN12 for poly services Class PN12.5 for poly services Class PN16 - default for PE-100, PVC-O and PVC-M Class PN18 for poly services Class PN20 for poly services Class PN35 (Standard for DI) Type A for copper services Some other service pipe class not included in the schema Service class unknown at time of data submission				
						Protection	Provision of conduit or other protection	Conduit No Conduit Other Unknown	The water service is laid in a protective conduit The water service is not in a protective conduit Some other type of protection Service protection type unknown at time of data submission				
						Termination	Fitting or valve at the customer end of the service	Ball Valve No Valve Other Unknown	Service ends in a Ball Valve Service ends in an open pipe or blank end Service ends in some other way Service termination unknown at time of data submission				
						WaterQuality *	Type of water supplied through water service. Drinking water, recycled water or disused service	Drinking Water Recycled Aplus Recycled A Other Disused Unknown	Service supplying drinking quality water to a premises Service providing class A+ or better recycled water to a premises served by dual reticulation for toilet flushing, laundry and external use Service providing class A recycled water to a premises via dual reticulation for outdoor uses only Another use not specified in the schema A disused water service Water service providing a type of water unknown at time of data submission				
						Length_m	Material length of the pipe in metres.		Float_Positive_NonZero				
						Geometry *	Point geometry representing the feature in coordinate space.		geometry_linear_singlepath_simple				
Pipes *	Represents the feature class of water supply pipes	Pipe *	Represents a water supply pipe feature.	Use *	The purpose of this feature in the network.	Commercial Service	The purpose of this feature in the network.	Envelope Pipe	Commercial Service pipes. Secondary Pipe (enveloper) outside primary conduit pipe, which does not connect hydraulically with the reticulation system				
								Disused	Disused Main				
						Fire Service	Fire Service - usually used for private customer-owned infrastructure not owned by the water service provider						
						Fire Domestic	Domestic Fire Service - usually used for private customer-owned infrastructure not owned by the water service provider						
						Fire Sprinkler	Dedicated un-metered fire sprinkler service - usually used for private customer-owned infrastructure not owned by the water service provider						
						Fire Service Thru Meter	Metered Fire Service - usually used for private customer-owned infrastructure not owned by the water service provider						
						Intake	Intake pipe feeding a water treatment plant or irrigation system (usually with non potable water)						
						Internal	Customer owned pipe on customer side of the meter distributing water from mains to internal fixtures						
						Irrigation	Irrigation Pipe - usually used for private customer-owned infrastructure not owned by the water service provider						
						Reticulation	Normal mains water distribution Pipe						
						Scour	Scour main from reticulation to an outlet						
						Service	Used for service connections > DN63 from main to meter. Domestic Services use water service feature class						
						Trunk	Trunk Water Main being a reticulation main above a size as defined by the receiving entity						
						Waste	Waste Pipe from a reservoir or tank						
						Other	Another use not specified in the schema						
						WaterQuality *	The quality of the water being carried by the pipe.	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	Drinking-quality (potable) water for normal mains supply by the municipal water service provider Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses Treated Effluent to class B through class D for irrigation only Rain Water collected directly into the system for irrigation Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system Untreated water from bores used to feed a water treatment plant or irrigation system Non-potable process water of some description Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent) Type of water carried by this pipe is unknown at time of submission				
						Alignment_m	Offset from cadastral boundary to the main.		Float_Positive_NonZero				
						Diameter_mm *	Nominal diameter of the pipe in millimetres.		positiveInteger				
						Material *	The pipe material.	DI PVC-U PVC-M PVC-O ABS Copper GRP MS SS PE-100 PE-80B RCP AC M_1 M_2 Other Unknown	Ductile Iron PolyVinylChloride Unplasticised PolyVinylChloride Modified PolyVinylChloride Orientated Acrylonitrile Butadiene Styrene Copper Glass Reinforced Plastic (includes the product known commercially as Hobas) Mild Steel Stainless Steel Polyethylene 100 Polyethylene 80B Reinforced Concrete Pipe Asbestos Cement (Existing Infrastructure Only) A new material not in the schema as agreed with the receiving entity A new material not in the schema as agreed with the receiving entity Material not currently in the schema Material Unknown at time of data submission				
						Class	The pipe class as specified by the manufacture. Pipe class refers to the wall thickness and performance of the material.	SN5000 SN8000 SN10000	Class SN5000 Class SN8000 Class SN10000				

ADAC Water Supply

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
								PN6 Class PN6					
								PN6.3 Class PN6.3					
								PN8 Class PN8					
								PN9 Class PN9					
								PN10 Class PN10					
								PN12 Class PN12					
								PN12.5 Class PN12.5					
								PN16 Class PN16 - default for PE-100, PVC-O and PVC-M					
								PN18 Class PN18					
								PN20 Class PN20					
								PN35 Class PN35 (Standard for DI)					
								FLCL Class FLCL (ductile iron flanged class)					
								Type A Type A					
								Type B Type B					
								4.8mm 4.8mm wall thickness class (Mild Steel)					
								5mm 5mm wall thickness class (Mild Steel)					
								6mm 6mm wall thickness class (Mild Steel)					
								7mm 7mm wall thickness class (Mild Steel)					
								8mm 8mm wall thickness class (Mild Steel)					
								9mm 9mm wall thickness class (Mild Steel)					
								10mm 10mm wall thickness class (Mild Steel)					
								11mm 11mm wall thickness class (Mild Steel)					
								12mm 12mm wall thickness class (Mild Steel)					
								16mm 16mm wall thickness class (Mild Steel)					
								Other Another class not specified by the schema					
								Unknown Pipe class unknown at time of data submission					
						Lining	The internal corrosion protection method employed on the pipe material.	CL Cement Lined normal (default for Ductile Iron and Mild Steel)					
								CL_SR Cement Lined - Sulphate Resistant (DI and MS)					
								CL_AC Cement Lined - Calcium Aluminate (DI and MS)					
								PVC Plasticised PVC (includes Humes Plastiline)					
								FBE Fusion Bonded Epoxy					
								PU Polyurethane					
								Unlined Unlined					
								Unknown Lining type unknown at time of data submission					
								Other Another type of liner that is not currently in the Schema					
						Protection	The external corrosion protection method employed on the pipe material.	FBE Fusion Bonded Epoxy					
								FBPE Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote)					
								PU Polyurethane					
								Plastic Wrapped Plastic Wrapped					
								Concrete Encased Concrete Encased					
								Tape Wrapped Wrapped in pipe and flange protection anti-corrosion tape. Commonly a synthetic fabric tape coated with a neutral petroleum compound.					
								Uncoated Uncoated					
								Sheathed Sheathed					
								Epoxy Epoxy paint or coating					
								P_1 A new protection type not yet in the schema as agreed with the data receiving entity					
								P_2 A new protection type not yet in the schema as agreed with the data receiving entity					
								Zinc Galvanized or zinc painted					
								Zinc-Aluminium Alloy Zinc Aluminium alloy coating					
								Unknown Protection type unknown at time of data submission					
								Other Another type of protection not covered by the schema					
						JointType	Pipe jointing method employed.	RRJ Rubber Ring					
								RRRJ Rubber Ring Restrained Joint (Ductile Iron)					
								SWJ Solvent Welded Joint (PVC)					
								WJ Welded Joint (Mild Steel pipe)					
								FJ Flanged Joint					
								MCJ Mechanical Compression Joint (PE pipe and Copper)					
								BW Butt Weld (PE pipe)					
								EFW Electrofusion Weld (PE pipe)					
								JT_1 A new joint type not yet included in the Schema used by agreement with the receiving entity.					
								Unknown Joint type unknown at time of data submission					
								Other A joint type not already included in the above choices					
						Depth_m	The average depth in metres that the pipe is buried. This measure is useful in most residential developments, but will be less reliable in sharply changing terrain or where significant cuts and fills have been applied. Negative depths may be used to indicate exposed or suspended pipes above the surface.						
								Float					
						Embedment	Embedment types.	Natural Pipe laid directly on natural in-situ material					
								GBH Granular bed and haunch					
								GBS Granular bed and surround					
								GBSonConc Granular bed and surround on concrete support					
								GBSonGTP Granular bed and surround on geo-textile pillow					
								GBSonCSS Granular bed and surround on cement stabilised support					
								GBSonPiles Granular bed and surround on piles					
								CemStabBS Cement stabilised bed and surround					
								ConcBS Concrete bed and surround					
								ConcBSonPiles Concrete bed and surround on piles					
								Enveloped Within an enveloper pipe					
								Above Ground Pipe is above ground on piers or a bridge deck					
								None Thrust bored or Trenchless method					
								Unknown Embedment Type unknown at time of data submission					
								Other Another type of embedment type that is not already included in the standard types					
								EB_1 A non-standard or new type of embedment as agreed with the data receiving entity					
								EB_2 A non-standard or new type of embedment as agreed with the data receiving entity					
						Length_m	Material length of the pipe in metres.						
								Float Positive NonZero					
						Geometry *	Polyline representing the geometry of the feature in coordinate space.						
								geometry_linear_singlepath_simple					
		Valves *	Represents the feature class of water supply valves	Valve *	Represents a water supply valve feature.	Use *	The purpose of the valve in the network.	Non-Return A valve allowing flow in only one direction of types Generic, Rubber Gate, Swing Check Wafer or RPZ					
								Stop An isolating valve to prevent flow down a pipe.					
								Scour A valve that is opened to scour a water main					
								Diversion A valve the main function of which is to select an alternative flow path					
								Zone Boundary A Valve normally closed to separate water supply zones					
								Flow Control A valve used to control or stop the rate of flow					
								Pressure Control A valve designed to control the pressure in a water supply system of types Overflow, Pressure Relief, Altitude Valve, or Vacuum Release					
								Gas Release A valve used to purge air or gas from the high points of a water pipeline					
								Bypass An isolating valve used on a bypass line					
								Other A valve use for a use not provided for in the schema					

## ADAC Water Supply

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Type *	The type of valve.	Service Generic NR Rubber Gate Swing Check Wafer RPZ Gate Butterfly Knife Gate Eccentric Plug Globe Ball Valve Vee Ported Ball Control Overflow Pressure Relief Pressure Sustaining Altitude Valve Vacuum Release Air Valve Special	A valve controlling flow between a water main and a water service A generic type of non return valve A rubber gate type non-return valve eg Val-Matic Swing-Flex A swing check type non-return valve A wafer type non-return valve An Reduced Pressure Zone type non return valve A standard gate valve Butterfly Valve. Knife Gate Valve. An eccentric plug type control Valve Globe Valve A ball valve for flow control A vee-ported ball valve A generic or unknown type of control valve An overflow valve An pressure releasing valve A pressure sustaining valve Altitude Valve. Vacuum Release or surge control valve Air valve for gas or air release A special type of valve not specified elsewhere in the schema				
						Diameter mm *	The nominal bore diameter of the valve.	positiveInteger					
						Manufacturer	The Manufacturer of the unit.	String_64					
						ModelNumber	The standard code, model number or part number for the unit.	String_64					
						GearboxActuator *	The valve is fitted with an external gearbox or actuator to facilitate opening and closing	Boolean					
						ConnectionType *	The type of connection configuration for the valve	FL-FL FL-SO FL-SP SO-SO SO-SP SP-SP Gripper CT_1 Other Unknown	Flange connections both sides Flange - Socket Flange - Spigot Socket connections both sides Socket - Spigot Spigot connections both sides Gripper type connector both sides A new connection type not yet in the schema as agreed with the data receiving entity Other Types of connection Unknown types of connection				
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction					
						WaterQuality *	The quality of the water in the network the valve is part of.	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	Drinking-quality (potable) water for normal mains supply by the municipal water service provider Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses Treated Effluent to class B through class D for irrigation only Rain Water collected directly into the system for irrigation Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system Untreated water from bores used to feed a water treatment plant or irrigation system Non-potable process water of some description Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent) Type of water carried by this pipe is unknown at time of submission				
						Geometry *	Point geometry representing the feature in coordinate space.	geometry_point_singlepoint					
		Hydrants *	Represents the feature class of water supply hydrants	Hydrant *	Represents a water supply hydrant feature.	Use *	The purpose of the hydrant in the network.	Spring Filling Point Duckfoot Pillar	Spring Hydrant. Hydrant (usually of spring type) with a metered standpipe semi-permanently in place. End of line with bend at base of riser Pillar Hydrant.				
						Diameter mm *	The nominal bore size of the hydrant.	positiveInteger					
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction					
						WaterQuality *	The quality of the water being delivered through the hydrant.	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	Drinking-quality (potable) water for normal mains supply by the municipal water service provider Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses Treated Effluent to class B through class D for irrigation only Rain Water collected directly into the system for irrigation Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system Untreated water from bores used to feed a water treatment plant or irrigation system Non-potable process water of some description Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent) Type of water carried by this pipe is unknown at time of submission				
						Geometry *	Point geometry representing the feature in coordinate space.	geometry_point_singlepoint					
		Meters *	Represents the feature class of water supply meters	Meter *	Represents a water supply meter feature.	SerialNumber *	The manufacturers serial number, as stamped or fixed on the meter.	String_64					
						Type *	Configuration of the meter.	Irrigation Conventional Manifold Magflow Turbine Ultrasonic Other Unknown	Small in-line meter used in irrigation systems to give a general indication of flow volumes but not at the accuracy needed for billing or control Standard volumetric meter Meter with built-in valve Electro-magnetic Metering System with no moving parts Meter using a turbine or moving vane to measure flow Meter using ultra-sound to measure flow Another unspecified type of water meter Meter type unknown at time of data submission				
						Diameter mm *	The nominal bore diameter of the meter.	positiveInteger					
						Dials	The number of dials on the reading face.	positiveInteger					
						Manufacturer	The Manufacturer of the unit	String_64					
						ModelNumber	The standard code, model number or part number for the unit.	String_64					
						InitialReading	The reading on the meter face at the time of installation.	integer					
						PrivateBooster *	True indicates that the meter is associated with a private pressure boosting system.	boolean					
						OffsetSide *	Is the offset from the left or the right side boundary when looking from the road.	Left Right	Left hand side Right hand side				

# ADAC Water Supply

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Offset_m *	The distance in metres to measure along the frontage from the indicated side.		Float_Positive_Zero				
						InstallationDate *	Installation Date of the meter. ISO 8601 is the accepted format.		date				
						LotNo *	The lot number as described on the originating survey plan		String_32				
						PlanNo *	The plan number of the originating survey plan.		String_32				
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction				
						WaterQuality *	The quality of the water being metered.	Drinking Water	Drinking-quality (potable) water for normal mains supply by the municipal water service provider				
								Recycled Aplus	Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses				
								Recycled A	Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses				
								Treated Effluent	Treated Effluent to class B through class D for irrigation only				
								Rain Water	Rain Water collected directly into the system for irrigation				
								Raw Water	Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system				
								Ground Water	Untreated water from bores used to feed a water treatment plant or irrigation system				
								Process Water	Non-potable process water of some description				
								Other	Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)				
								Unknown	Type of water carried by this pipe is unknown at time of submission				
						Geometry *	Point geometry representing the feature in coordinate space.		geometry_point_singlepoint				
		Fittings *	Represents the feature class of water supply fittings	Fitting *	Represents a water supply pipe fitting, other than a valve, meter or hydrant	Type *	The fitting type.	Bend	Bend, a fitting not a recurved pipe that changes the direction of a pipeline				
								Connector	A straight through connector with no change of direction				
								Cross Connection	A cross connection with 4 branches				
								Connector Thrust	A straight through connector with no change of direction capable of transmitting axial thrust to the pipeline or a structure				
								Dismantling Joint	A straight connector specifically included to facilitate the dismantling of complex flanged pipework and valves.				
								Gibault	Standard gibault connection				
								Taper	Taper. Joining pipes of unequal diameter.				
								Tee	T - Joint with 3 arms one of which is at right angles to the axis joining the other 2.				
								Wye	Y - Joint with 3 arms where the angle between any 2 arms is not 90 or 180 degrees				
								Cathodic Protection Point	Electrical connection point for cathodic protection				
								Dead Plate	Blank flange on the end of a flanged pipe or fitting				
								External Dead End	Fitting such as an endcap that forms a dead end in a pipe run				
								Tee Branch Dead End	A dead end plate pre-fitted to one branch of a Tee for access or future connection				
								Tee Branch Ext Dead End	Dead end on a Tee fitting with a side branch of extended length				
								Puddle Flange	Puddle Flange on pipe to transmit thrust or seal pipe into a structure				
								Ready Tap	Ready Tap collar with prefabricated water service take off points				
								Sampling Point	Sampling Point to sample water quality				
								Booster Pump	Booster Pump to boost pressure or provide motive force to water in the network				
								Surge Vessel	Surge Vessel fitted to control surge pressures (water hammer)				
								Tapping Band	Tapping Band for the off-take of a water service from a main				
								Flush Point	Flush Point				
								Saddle	Saddle				
								Dirt Box/Strainer	Dirt Box/Strainer				
								Combi Valve	Tees or crosses with built in resilient seated gate valves and/or vertical outlet for hydrant or device				
								Other	Some other type of fitting not included in the schema				
						Material *	The fitting material.	ABS	Acrylonitrile Butadiene Styrene				
								Brass	Brass				
								Copper	Copper				
								DI	Ductile Iron				
								MS	Mild Steel				
								PVC	PolyVinylChloride				
								PE	Polyethylene				
								AC	Asbestos Cement - Existing Infrastructure Only				
								M_1	A new material not in the schema as agreed with the receiving entity				
								M_2	A new material not in the schema as agreed with the receiving entity				
								Other	Another material not in the Schema				
								Unknown	Material unknown at time of data submission				
						Lining	The internal corrosion protection method employed on the fitting material.	CL	Cement Lined normal (default for Ductile Iron and Mild Steel)				
								CL_SR	Cement Lined - Sulphate Resistant (DI and MS)				
								CL_AC	Cement Lined - Calcium Aluminate (DI and MS)				
								PVC	Plasticised PVC (includes Humes Plastiline)				
								FBE	Fusion Bonded Epoxy				
								Unlined	Unlined				
								Unknown	Lining type unknown at time of data submission				
								Other	Another type of liner that is not currently in the Schema				
						Protection	The external corrosion protection method employed on the fitting material.	FBE	Fusion Bonded Epoxy				
								FBPE	Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote)				
								PU	Polyurethane				
								Plastic Wrapped	Plastic Wrapped				
								Concrete Encased	Concrete Encased				
								Tape Wrapped	Wrapped in pipe and flange protection anti-corrosion tape. Commonly a synthetic fabric tape coated with a neutral petroleum compound.				
								Uncoated	Uncoated				
								Epoxy	Epoxy paint or coating				
								P_1	A new protection type not yet in the schema as agreed with the data receiving entity				
								P_2	A new protection type not yet in the schema as agreed with the data receiving entity				
								Zinc	Galvanized or zinc painted				
								Zinc-Aluminium Alloy	Zinc Aluminium alloy coating (Petair Saint-Gobain)				
								Unknown	Protection type unknown at time of data submission				
								Other	Another type of protection not covered by the schema				
						BodySize_mm *	The nominal diameter of the largest pipe entering the fitting. Although not constrained, software may use the simpleType water_fittings_boresize for a starting list of values		positiveInteger				

# ADAC Water Supply

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						BranchSize_mm	The nominal diameter of the smallest pipe entering the fitting. Although not constrained, software may use the simpleType water_fittings_boresize for a starting list of values	positiveInteger					
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction					
						WaterQuality *	The quality of the water being carried by the network to which the fitting is a part	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	Drinking-quality (potable) water for normal mains supply by the municipal water service provider Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses Treated Effluent to class B through class D for irrigation only Rain Water collected directly into the system for irrigation Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system Untreated water from bores used to feed a water treatment plant or irrigation system Non-potable process water of some description Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent) Type of water carried by this pipe is unknown at time of submission				
						Geometry *	Point geometry representing the feature in coordinate space.	geometry_point_singlepoint					
		MaintenanceHoles *	Represents the feature class of water supply maintenance access holes	MaintenanceHole *	Represents a water supply maintenance access hole feature.	Use *	Purpose of Water maintenance hole.	Valve Pit Disused Complex Pressure Regulation Pump Station Temporary Works Other Unknown	Valve Pit Valve Pit that is no longer used Valve Pit that houses a combination of valves and other equipment Pit housing a pressure regulation or surge control device Water pumping station Pit used during construction that is no longer used but has been left in place Valve Pit with some other use not provided for in the schema Valve Pit of a type that is unknown at time of data submission				
						ChamberSize *	Data structure describing the chamber configuration and dimensions.	Rectangular *	Data container for rectangular dimensions.	Length_mm *	Internal length in millimetres for rectangular water maintenance holes.	positiveInteger	
										Width_mm *	Internal width in millimetres for rectangular water maintenance holes.	positiveInteger	
										Diameter_mm *	Diameter in millimetres	positiveInteger	
						SurfaceLevel_m *	The height of the top surface of the lid, hatch, rim or roof. Surface level in metres against the vertical datum for this project.	Float					
						InvertLevel_m *	The height of the top surface of interior floor/bottom. Invert level in metres against the vertical datum for this project.	Float					
						FloorConstruction *	Method of chamber construction.	Prefabricated Insitu	Prefabricated Built or poured in-situ				
						FloorMaterial *	Material type for chamber floor construction.	PVC PE PP GRP Concrete M_1 M_2 Other Unknown	PolyVinylChloride Polyethylene Polypropylene Glass Reinforced Plastic Concrete A new material not in the schema as agreed with the receiving entity A new material not in the schema as agreed with the receiving entity Another material not included in the Schema Material unknown at time of data submission				
						WallConstruction *	Method of chamber wall construction.	Prefabricated Insitu	Prefabricated Built or poured in-situ				
						WallMaterial *	Material type for chamber wall construction.	PVC PE PP GRP Concrete M_1 M_2 Other Unknown	PolyVinylChloride Polyethylene Polypropylene Glass Reinforced Plastic Concrete A new material not in the schema as agreed with the receiving entity A new material not in the schema as agreed with the receiving entity Another material not included in the Schema Material unknown at time of data submission				
						RoofMaterial *	Material type for chamber roof construction.	PVC PE PP Concrete MS SS Aluminium Cast Iron Frame Grid Mesh - GRP Grid Mesh - Aluminium Grid Mesh - SS No Roof M_1 M_2 Other Unknown	PolyVinylChloride Polyethylene Polypropylene Concrete Mild Steel Stainless Steel Aluminium Cast Iron Frame Grid Mesh - GRP Grid Mesh - Aluminium Grid Mesh - Stainless Steel No Roof A new roof material not in the schema as agreed with the receiving entity A new roof material not in the schema as agreed with the receiving entity Another roof material not included in the Schema Roof material unknown at time of data submission				
						LidMaterial *	Chamber lid configuration and material.	Aluminium Cast Iron CI Conc Infill Concrete GRP PVC PE PP MS SS M_1 M_2 No Lid Other Unknown	Aluminium Cast Iron Cast Iron Concrete Infill Concrete Glass Reinforced plastic PolyVinylChloride Polyethylene Polypropylene Mild Steel Stainless Steel A new lid material not in the schema as agreed with the receiving entity A new lid material not in the schema as agreed with the receiving entity Valve pit is open topped and has no lid Another lid material not included in the Schema Lid material unknown at time of data submission				
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)	Float_Direction					
						Geometry *	Point geometry representing the feature in coordinate space.	geometry_point_singlepoint					
		ServiceFittings *	Represents the	ServiceFitting *	Represents a water	Type *	The type of service fitting	Control Panel	Irrigation control panel which may or may not be hydraulically connected				

ADAC Water Supply

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
			feature class of water service fittings		service fitting feature.			Dog Bowl Drinking Fountain Drip Line Fountain Decorative Filling Station Filter Goose Neck Hot Water System Nipple Other Pop Up Sprinkler Shower Spray Nozzle Tap	Fixed animal drinking bowl attached to customer owned water connection Drinking Fountain or bubbler to provide drinking water to patrons Fixed perforated pipe for drip irrigation A decorative fountain Card-accessed water delivery point for commercial access In line filter to prevent irrigation line blockages Downward pointing outlet on a vertical riser Hot Water System. Normally attached to a structure.  Simple riser or short length of small bore pipe providing a point of discharge Some other irrigation fitting - do not use for pipe fittings, valves pumps etc as these exist in other feature classes Pop-up type sprinkler head Open air public shower point, such as may be found at beachside parks Fixed Irrigation sprayer, sprinkler, bubbler or drip nozzle Water delivery tap. Not a stopcock or control valve				
						BelowGround	Is the fitting below ground		boolean				
						WaterSaver	Does the fitting employ waste minimisation technology (other than auto shut-off)		boolean				
						AutoShutOff	Does the fitting employ auto shut-off technology		boolean				
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction				
						WaterQuality *	The quality/source of the water being supplied through the service fitting.	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	Drinking-quality (potable) water for normal mains supply by the municipal water service provider Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses Treated Effluent to class B through class D for irrigation only Rain Water collected directly into the system for irrigation Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system Untreated water from bores used to feed a water treatment plant or irrigation system Non-potable process water of some description Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent) Type of water carried by this pipe is unknown at time of submission				
						Geometry *	Point geometry representing the feature in coordinate space.		geometry_point_singlepoint				
		StorageTanks *	Represents the feature class of water storage points	StorageTank *	Represents a domestic storage tank feature. Includes roofwater storage not fed from mains service. Not to be used for bulk storage features that are part of the mains distribution network.	Material *	The material that the storage tank is made from.	Plastic Steel Concrete Other Unknown	Plastic Steel Concrete Tank made from another material not in the schema Tank material is unknown				
						Source *	The source of water in the tank.	Rain Water Ground Water Ponded Water Mains Service	Roof water catchment Ground water extracted from a bore Ponded water pumped from a surface water catchment Drawn from a mains water supply service				
						Manufacturer	The Manufacturer of the unit		String_64				
						ModelNumber	The standard code, model number or part number for the unit		String_64				
						Volume_m3 *	The effective volume in cubic metres.		Float_Positive_NonZero				
						Rotation	Rotation angle (cartesian - anti-clockwise 0 degrees = East)		Float_Direction				
						Geometry *	Point geometry representing the feature in coordinate space.		geometry_point_singlepoint				