



State highway database operation manual (SM050)

Appendix 3: Asset register

Waka Kotahi NZ Transport Agency

29 June 2022

Version 15

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More information

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Contents

STATE HIGHWAY DATABASE OPERATION MANUAL (SM050)	1
Overview	5
Ownership and updating	5
How to use this appendix	5
References	6
TABLE: ROAD NAMES.....	7
TABLE: CARRIAGEWAY	9
TABLE: CARRIAGEWAY SURFACINGS	14
TABLE: CCTV MAST	21
TABLE: CABLING	24
TABLE: DRAINAGE.....	29
TABLE: DRAINAGE WALLS.....	33
TABLE: FEATURES	36
TABLE: GANTRY.....	39
TABLE: GEOTECHNICAL ASSETS - DRAINAGE	42
TABLE: GEOTECHNICAL ASSETS - GROUND TREATMENT	45
TABLE: GEOTECHNICAL ASSETS - ROCKFALL PROTECTION STRUCTURE	48
TABLE: HIGH MAST LIGHT TOWERS	51
TABLE: INTELLIGENT TRANSPORTATION SYSTEMS.....	54
TABLE: MARKINGS	60
TABLE: MINOR STRUCTURES	64
TABLE: NOISE WALL	68
TABLE: PAVEMENT LAYER.....	72
TABLE: PAVEMENT TEST PIT.....	75
TABLE: PAVEMENT TEST PIT HEADER.....	76
TABLE: RAILINGS.....	78
TABLE: RETAINING WALL	83
TABLE: SHOULDER	88
TABLE: SIGN	91
TABLE: STREET LIGHT – LIGHT.....	96
TABLE: STREET LIGHT – POLE.....	100
TABLE: STREET LIGHT – BRACKET.....	106
TABLE: STREET LIGHT - CMS	109
TABLE: STREET LIGHT – LED LUMINAIRE.....	111
TABLE: SURFACE WATER CHANNEL	115
TABLE: TRAFFIC SIGNAL - CONTROLLER.....	119
TABLE: TRAFFIC SIGNAL – COMMUNICATIONS DEVICE.....	125
TABLE: TRAFFIC SIGNAL – LOGIC RACK	129

TABLE: TRAFFIC SIGNAL – DETECTION DEVICE	132
TABLE:	137
TABLE: VEGETATION	140
TABLE: WEIGH FACILITY	165

Overview

This appendix outlines the asset register of Waka Kotahi New Zealand Transport Agency (NZTA). This register is used to describe the various elements of the road corridor and outlines requirements for data entered into the State Highway (SH NZ) RAMM database.

Ownership and updating

RAMM Software Limited and NZTA are the owners of the RAMM data structure. The information supplied in this appendix cannot be used for the purposes of recreating RAMM.

This document is maintained by the Data Management team at National Office. Please contact SM050@nzta.govt.nz for any proposed modifications.

How to use this appendix

This appendix consists of the following 42 tables:

- Road Names
- Carriageway Section
- Carriageway Surfacing
- Cabling
- CCTV Mast
- Drainage
- Drainage Wall
- Features
- Gantry
- Geotechnical Assets – Drainage
- Geotechnical Assets – Ground Treatment
- Geotechnical Assets – Rockfall Protection Structures
- High Mast Light Towers
- Intelligent Transportation Systems (ITS)
- Markings
- Minor Structures
- Pavement Layer
- Pavement Test Pit Layer
- Pavement Test Pit Header
- Railings
- Retaining Wall
- Shoulder
- Signs
- Street Lighting – Bracket
- Street Lighting – Central Management System (CMS)
- Street Lighting – Light
- Street Lighting – LED Luminaire
- Street Lighting – Pole
- Surface Water Channel
- Traffic Signal – Controller
- Traffic Signal – Communications
- Traffic Signal – Logic Rack
- Traffic Signal – Detection Device
- Traffic Signal – Detector Card
- Traffic Signal – Pole
- Traffic Signal – Target Board
- Traffic Signal – Lantern
- Traffic Signal – Pedestrian Call Box

- Traffic Signal – Cabling
- Traffic Signal - Attachment
- Vegetation
- Weigh Facility

Column name	Code	Details
Required by Software	Y	This field is required by RAMM.
Generated Value		This field is automatically generated by RAMM with a default code, but this field can be user defined.
Required by Waka Kotahi	Y, Y[C] or O	Y denotes this field is required by Waka Kotahi. Y [C] field is mandatory based on conditions detailed in the field description. O denotes an optional field and is not required by Waka Kotahi.

Each table gives an overview of all data fields which includes field name, field type, description and allowed values. Many of the data fields use values contained within the look up tables listed on the My Roads wiki. These can be accessed using the following link: <https://wiki.myroads.co.nz>.

All items highlighted in red text represent a change to this item or show a new field or data requirement since the last update to this Appendix in December 2021.

References

The Asset Register is to be used in accordance with the Location Referencing Management System Manual (LRMS – SM051) and Section 8: Field Validation Procedures.

TABLE: ROAD NAMES

Road name field	Field type	Required by software	Generated value	Required by Waka Kotahi	Road name field description	Allowed values
road_id	Integer (6)	Y	G	Y	Road Identification Code	
sh_ne_unique	Character (20)		G	Y	Highways Unique Road Element Code	
road_name	Character (20)	Y		Y	Name of the Road	
suburb	Character (25)				Name of the Suburb	
town	Character (30)			Y	Name of the Town	
postal_code	Small Integer (4)				The postal code	
sh_state_hway	Character (3)			Y	State Highway Number	
sh_element_type	Character (3)			Y	Road Element Type	RSL - RS Length, RMP - Ramp, RND - Roundabout
sh_ref_station_no	Integer (4)			Y	Reference Station Number	Looks up on reference_station
sh_rp_km	Decimal (4,2)			Y	Displacement in km along RSL to Road Element	
sh_direction	Character (1)			Y	The Direction of Traffic Flow	I - Increasing, D - Decreasing, B - Both
sh_common	Character (3)			Y	State Highway Number of Common State Highway (if applicable)	
sh_int_rnd_no	Integer (4)			Y	Roundabout or Interchange Number - if applicable	
sh_ramp_no	Integer (2)			Y	Number of Ramp	Between 1 and 99
sh_ramp_type	Character (3)			Y	The Type of Ramp	ON - On Ramp, OFF - Off Ramp
sh_ramp_hier	Character (1)			Y	Ramp Hierarchy (if applicable)	1 - Primary, 2 - Secondary, 3 - Tertiary
external_name	Character (35)			Y	The Local Name	
external_id	Character (10)				An External ID Reference Number	

Road name field	Field type	Required by software	Generated value	Required by Waka Kotahi	Road name field description	Allowed values
road_region	Integer (2)			Y	The Territorial Region Code	Looks up on road_region
road_council	Integer (2)			Y	Local Authority identifier	Looks up on road_council
road_type	Character (1)	Y		Y	Road Type	Looks up on road_type
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: CARRIAGEWAY

Carriageway field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Carriageway field description	Allowed values
carr_way_no	Serial (8)	Y	G	Y	The Unique Carriageway Serial Number	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
carrway_start_m	Integer (6)	Y		Y	Start Displacement from the Road Origin (in metres)	Between 0 and 999999
carrway_end_m	Integer (6)	Y		Y	End Displacement from the Road Origin (in metres)	Between 0 and 999999
start_name	Character (35)			Y	Name of the road or feature at the start of the section	
end_name	Character (35)			Y	Name of the road or feature at the end of the section	
cway_area	Character (15)			Y	Area in which road section falls e.g., suburb, ward etc...	Looks up on cway_area
cway_sub_area	Integer (4)			Y	Sub Networks	Looks up on cway_sub_area
maint_group	Integer (1)				The Maintenance Grouping as per State Highways	1 - Maintenance Group 1 through to and including 7 - Maintenance Group 7
pavement_type	Character (1)	Y	T	Y	Pavement Type for Calculation	B - Bridge C - Concrete, S - Structural Asphaltic Concrete, T - Thin Surfaced Flexible, U - Unsealed
pavement_use	Integer (1)	Y	1	Y	Pavement Use Code Categories	1 - ADT < 100, 2 - ADT 100 - 500, 3 - ADT 500 - 2000, 4 - ADT 2000 - 4000, 5 - ADT 4000 - 10000, 6 - ADT 10000 - 20000, 7 - ADT > 20000
road_class	Character (1)	Y	1	Y	Road Class	road_class IN ("1" or "C")
urban_rural	Character (1)	Y	U	Y	Type of Area	R - Rural, U - Urban
cway_hierarchy	Character (15)			Y	Functional Classification of Road Section	Looks up on c_way hierarchy
lanes	Integer (1)	Y	2	Y	Number of Traffic Lanes	Between 1 and 9
lane_width	Decimal (3,1)			Y	Lane Width (in metres)	

Carriageway field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Carriageway field description	Allowed values
length_m	Integer (6)	Y		Y	Carriageway Length (in metres)	Between 0 and 999999
length_adjust_m	Integer (6)				Length of the Asset above or below the Calculated Length	Between -999999 and 999999 or is null
len_adjust_rsn	Character (5)				Reason for Adjusting the Calculated Length of the Asset	Looks up on len_adjust_rsn
cway_width	Decimal (2,1)	Y	1.0	Y	Carriageway Width (in metres to one decimal place)	Between 0.5 and 99.9 or is null
irr_width	Character (1)	Y	R	Y	Carriageway Width Regularity Indicator	R - Regular, I - Irregular
res_width	Decimal (2,1)			Y	Road Reserve Width (in metres to one decimal point)	Between 1 and 60.0 or is null
misc_area	Integer (4)	Y	0		Extra Areas such as Parking Bays (in m ²)	misc_area between 0 and 9999
bus_bays	Integer (4)	Y	0		Area of Bus Bays (in m ²)	bus_bays between 0 and 9999
islands	Integer (4)	Y	0		Area of Traffic Islands (in m ²)	Islands between 0 and 9999
intersection	Integer (4)	Y	0		Additional Area at Intersections (in m ²)	Intersection between -9999 and 9999
owner_type	Character (1)	Y	L	Y	Owner of Carriageway Section	C - Crown, LA - Local Authority, P - Private
controlled_by	Character (3)			Y	Defaults to Waka Kotahi if owner_type is Crown	Looks up on organisation
maintained_by	Character (3)				Organisation responsible for maintenance of carriageway section	Looks up on organisation
managed_by	Character (3)				Organisation responsible for maintenance of carriageway section	Looks up on organisation
road_group	Integer (4)		G		Maintenance Guidelines based on New Zealand Transport Agency Average Daily Traffic (ADT) Groups	110 Urban A - ADT > 10000, 120 Urban B - ADT 5000-10000, 130 Urban C - ADT 1000-5000, 140 Urban D - ADT 200-1000, 150 Urban E - ADT < 200, 220 Rural B - ADT > 5000, 230 Rural C - ADT 1000-5000, 240 Rural D - ADT 200-1000, 250 Rural E - ADT 50-200, 260 Rural F - ADT < 50

Carriageway field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Carriageway field description	Allowed values
loading_status	Character (1)	Y	G		Loading Status	C - Count, E - Estimate, D - Default
loading_pc_heavy	Integer (3)		G	Y	Latest percentage of volume of Heavy Vehicles	Between 0 and 100 or is null
loading_esa_heavy	Decimal (1,1)		G	Y	The Equivalent Single Axles (ESA) per vehicle for Heavy Vehicles	Between 0 and 9.9 or is null
traffic_adt_est	Integer (6)		G	Y	Latest estimate of Average Daily Traffic (ADT) in vehicles per day	Between 1 and 999000
traffic_adt_count	Integer (6)		G	Y	Latest count of Average Daily Traffic (ADT) in vehicles per day	Between 1 and 999000
count_date	Date				Date of traffic count	
traff_manage_level	Character (5)	Y	U		Traffic Management Level	Looks up on traff_manage_level
naasra_min	Integer (3)		G	Y	Minimum latest roughness values in NAASRA (counts/km)	Between 10 and 999
naasra_max	Integer (3)		G	Y	Maximum latest roughness values in NAASRA (counts/km)	Between 10 and 999
naasra_avg	Integer (3)		G	Y	Average of latest roughness values in NAASRA (counts/km)	Between 10 and 999
cway_use_category	Character (2)	Y	UN	Y	The Road Use Category of the carriageway section	Looks up on cway_use_category
cway_group_1	Character (4)			Y	Legal Motorway	Looks up on cway_group_1
cway_group_2	Character (4)			Y	Seasonal Factor Zone	Looks up on cway_group_2
cway_group_3	Character (4)				Optional Group 3	Looks up on cway_group_3
cway_group_4	Character (4)				Optional Group 4	Looks up on cway_group_4
cway_group_5	Character (4)				Optional Group 5	Looks up on cway_group_5
house_start_lhs	Character (10)				The house number on the left at the start of the section	
house_end_lhs	Character (10)				The house number on the left at the end of the section	
house_start_rhs	Character (10)				The house number on the right at the start of the section	
house_end_rhs	Character (10)				The house number on the right at the end of the section	
terrain	Character (1)				The type of terrain in the cway section or treatment length	F - Flat, M - Mountainous, R - Rolling

Carriageway field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Carriageway field description	Allowed values
coastal_inland	Character (1)				Flag to indicate whether the cway or treatment length is coastal or inland	C - Coastal, I - Inland
est_mmp	Character (2)				Unique Identifier for the Estimated Mean Monthly Precipitation	Looks up on cway_est_mmp
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
left_lanes	Integer (1)			Y	The number of lanes on the left-hand side of the road	Between 1 and 9 or is null
right_lanes	Integer (1)			Y	The number of lanes on the right-hand side of the road	Between 1 and 9 or is null
lighting_category	Character (3)				Lighting category code for this carriageway section	Looks up on lighting_category
collect_name	Character (3)				Name of individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date when this data was collected	
travel_direction	Character (1)	Y	B	Y	Direction of travel permitted on this carriageway	B - Both, I - Increasing, D - Decreasing
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this carriageway section	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				The date the condition of the asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value was last updated	

Carriageway field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Carriageway field description	Allowed values
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate at the start of the carriageway	Between 1,000,000 and 2,500,000 or is null
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at the start of the carriageway	Between 4,000,000 and 6,000,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate at the end of the carriageway	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at the end of the carriageway	Between 4,000,000 and 6,000,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique ID for the gps_method table	Looks up on gps_method
map_gps_date	Date				Populated when the new GPS coordinates are supplied by the user	
map_gps_by	Character (20)				The login name of the individual who set map_gps_date	
map_import_date	Date				Populated with the data of the Critchlow map	
map_import_by	Character (20)				The login name of the individual who ran the initial population	
rnm_edit_date	Date				The date this section was last changed using Network Manager	
rnm_edit_by	Character (20)				The login name of the individual who last changed this section using Network Manager	
notes	Character (255)				General comments	
as_tip_note	Character (255)				General notes for the Assessor when they are assessing this asset	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: CARRIAGEWAY SURFACINGS

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
c_surface_id	Serial (8)	Y	G		The unique identifier of the surfacing	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Surfacing start displacement from the road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	Surfacing end displacement from the road origin (in metres)	Between 1 and 999999
start_name	Character (35)				Name of the road or feature at the start of the surfacing section	
end_name	Character (35)				Name of the road or feature at the end of the surfacing section	
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate taken at the start of the surface treatment	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate taken at the start of the surface treatment	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate taken at the end of the surface treatment	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate taken at the end of the surface treatment	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date the GPS was collected	
gps_by	Character (3)				The individual or organisation who collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique ID for the gps_method table	Looks up on gps_method
surface_date	Date	Y		Y	Date the surfacing was placed	
removed_date	Date			Y [C]	Date the surface was removed. <i>[C] only applicable to existing surface records which have been removed</i>	

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
surf_width	Decimal (2,1)			Y	Width of surfacing (in metres to one decimal point)	Between 0.5 and 60.0
full_width_flag	Character (1)	Y	Y		Does the surface cover the full width of the carriageway?	N - No, Y - Yes
length_m	Integer (5)		G		Length of the surfacing asset (in metres)	Between 0 and 30000 or is null
surf_offset	Decimal (3,1)	Y	0	Y	Distance from left hand side of edge of seal (in metres)	Between 0 and 60.0
lane_coverage	Integer (2)			Y	Number of surfaced lanes excluding slipways and shoulder	Between 0 and 10
design_life	Integer (2)			Y	Expected life of surface at the time of design and is site specific. Determined by surfacing designer (not default life). Not to be changed during life of surface.	Between 1 and 100 or is null
default_life	Integer (2)		G		Original Waka Kotahi New Zealand Transport Agency default life (from surface life table default field) assigned by RAMM on entry and never updated (in years)	Between 1 and 80 or is null
mod_default_life	Integer (2)		G		Current Waka Kotahi New Zealand Transport Agency default life derived from the surface life table	Between 1 and 80 or is null
surf_material	Character (5)	Y		Y	Construction material used for carriageway surface	Looks up on surf_material
surf_function	Character (1)	Y		Y	Function of the surface	1 - First Coat, 2 - Second Coat, R - Reseal, M - Membrane, E - Enrichment, P - Pre-levelling
surf_depth	Integer (3)	Y	0	Y	Depth of surface layer. For chipseals enter 0. For thin asphaltic surfacing, slurry and cape seals enter known seal depth > 0	Between 0 and 500
use_calc_depth	Character (1)	Y	Y	Y	Whether to calculate depth for this surface or not (use entered surf_depth). Enter Y for all chipseals and N for thin asphaltic surfacing, slurry and cape seals	use_calc_depth IN ("Y", "N")

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
chip_size	Integer (2)	Y		Y	Record either grade of chip or mix design (as per M specifications), or slurry (1,2,3,4) depending on type	Between 0 and 40
chip_2nd_size	Integer (2)			Y [C]	Grade of second chip used on multiple chip seals and cape seals. <i>[C] only applicable to multiple chip seals including cape seals</i>	Between 0 and 40
pave_source	Character (20)			Y	Source of aggregate for chips or mix. For multiple chip seals and cape seals this refers to the largest chip.	Looks up on pave_source
surf_binder	Character (4)	Y		Y	Base binder type only. Record polymer modification under polymer_additive	Looks up on surf_binder
flux	Integer (1)	Y	0	Y [C]	Amount of flux in binder. <i>[C] 0 if not used or the value of the amount of flux added</i>	Between 0 and 9
cutter	Integer (2)	Y	0	Y [C]	Amount of cutter in binder. <i>[C] 0 if not used or the value of the amount of cutter used</i>	Between 0 and 20
cutter_type	Character (4)			Y [C]	Type of cutter used. <i>[C] Required if cutter amount is not 0</i>	KERO - Kerosene, OTHR - Other, TURP - Turpentine
adhesion	Decimal (1,1)	Y	0	Y [C]	Amount of adhesion agent in binder. <i>[C] 0 if not used or the value of the amount of adhesion agent added</i>	Between 0 and 5.0
surf_adhesion	Character (4)			Y [C]	Type of adhesion agent used. <i>[C] Required if adhesion amount is not 0</i>	Looks up on surf_adhesion
additive	Integer (2)	Y	0	Y [C]	Amount of non-polymer additive in binder. <i>[C] 0 if not used or the value of the amount of additive added</i>	Between 0 and 99
surf_additive	Character (4)			Y [C]	Type of non-polymer additive used in the binder (largest component, if multiple binders used). <i>[C] Required if additive is not 0</i>	Looks up on surf_additive

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
polymer_type	Integer (10)			Y [C]	Type of polymer used in the binder (largest component, if multiple polymers used). [C] Required if polymer is used in the binder	Looks up on surf_polymer_type
polymer_mod_pcnt	Integer (2)			Y [C]	Percentage polymer modification (%). [C] Null if not used or value if polymer_type is not null	Between 0 and 100 or is null
elastic_recovery	Integer (2)			Y [C]	Minimum torsional recovery (%) to test method AG: PT/T122. [C] Applicable to polymer modified binders only	
softening_point	Integer (3)			Y [C]	Minimum softening point (°C) to test method ASTM D36. [C] Applicable to polymer modified binders only	Between 0 and 100 or is null
rate	Decimal (2,1)			Y [C]	Residual bitumen application rate in l/m ² at 15°C. [C] Only applicable to chipseals including cape seals	Between 0.2 and 9.99 or is null
sealed_area	Integer (8)			Y	The total area covered by the seal (in m ²) including all extra areas associated with the surface record (as measured)	
sealed_area_ok	Character (1)	Y		Y	Is the provided sealed area acceptable?	Y - Yes, N - No
contract_number	Character (12)			Y	The Principal Contract Number under which the sealing was performed	
organisation	Character (3)			Y	The organisation who constructed the surfacing (performed the physical works)	Looks up on organisation
surf_spec	Character (10)			Y	Details of the end user specification of the constructed surfacing	Looks up on surf_spec
polished_stone	Integer (2)			Y [C]	Polished stone value (PSV) of largest grade chip or uppermost layer. [C] Not applicable to membrane seals	

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
average_dim	Decimal (2,2)			Y [C]	Average least dimension (ALD) units for the largest chip (in millimetres). <i>[C] Only applicable to chipseals including cape seals</i>	Between 3.5 and 13
recycling	Boolean	Y	FALSE	Y	Is this surfacing using recycled material such as recycled asphalt or other added recycled materials? Not to be used for recycled pavements.	TRUE or FALSE
pct_recycled	Integer (3)			Y [C]	Percentage of the surface containing recycled component. <i>[C] Only required if recycled material is used</i>	Between 0 and 100
surf_recycled_cpnt	Character (7)			Y [C]	Type of recycled component. <i>[C] Only required if recycled material is used</i>	Looks up on surf_recycled_cpnt
surf_reason	Character (5)			Y	Primary reason for surfacing as per Chipsealing in New Zealand Manual Chapter 6: Practice Note 1	Looks up on surf_reason
fw_treatment	Character (7)				Treatment Code in Forward Work Programming (FWP)	Looks up on fw_treatment
ru_life	Integer (3)				Expected life (in years) of the asset or asset component	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this surface	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				The date the condition of this surface was established	
asset_owner	Character (3)				Unique identifier of the asset owner	Looks up on asset_owner
standard_rc	Integer (8)				Unique identifier for the Asset Valuation Standard Replacement Cost	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement Cost for this asset	
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)			Y [C]	General comments. <i>[C] If SS is selected for surf_reason, demonstrate an appropriate reason such as Traffic Threshold, Urban Issues, Damage, High Skid Resistance or Rumble Strips. If surf_material is COMB and 3CHIP then details of this material type need to be recorded.</i>	
activity	Character (5)			Y	The type of work that has been done on the surface	OC - Original Construction, RC - Reconstruction, RH - Rehabilitation, RS - Reseal
work_origin_id	Character (100)			Y	Associates the carriageway surface inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project and developments, for example)	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
added_on	Date		today	Y	The date this row was added	

Surfacing field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surfacing field description	Allowed values
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y [C]	The date this row was last changed. <i>[C] Only required if an existing record is edited</i>	
chgd_by	Character (20)			Y [C]	The login name of the individual who last changed this record. <i>[C] Only required if an existing record is edited</i>	Looks up on staff

TABLE: CCTV MAST

CCTV mast field name	Field type	Required by software	Generated value	Required by Waka Kotahi	CCTV mast field description	Allowed values
system_id	Serial (8)	Y	G	Y	Unique identifier of each CCTV mast	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement of feature from the road origin (in metres)	Between 0 and 999999
loc_desc	Character (250)				Description of CCTV mast location	
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both
offset	Decimal (3,1)			Y	Offset of the feature from the centreline (in metres)	Between 0 and 200.0 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate	Between 1,000,000 and 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)			Y	Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method
pole_type	Character (5)	Y		Y	How pole is attached to CCTV asset	Looks up on ud_cctv_pole_type
cctv_material	Character (5)	Y		Y	Material of the CCTV mast	Looks up on sl_pole_material
cctv_no	Character (10)				CCTV asset number	
notes	Character (250)				General comments	
external_id	Serial (8)				Unique identifier for the CCTV mast from an external source <i>[C] Applicable only when the asset is known by an external ID</i>	
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner

CCTV mast field name	Field type	Required by software	Generated value	Required by Waka Kotahi	CCTV mast field description	Allowed values
construct_date	Date			Y	Date the asset was constructed	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original Cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement Cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of the asset	
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_cctv
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch

CCTV mast field name	Field type	Required by software	Generated value	Required by Waka Kotahi	CCTV mast field description	Allowed values
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
collect_name	Character (3)			T	Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date			T	Date this data was collected	
added_on	Date		today	T	Date this row was added	
added_by	Character (20)			T	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			T	Date this row was last changed	
chgd_by	Character (20)			T	The login name of the individual who last changed this row	Looks up on staff

TABLE: CABLING

Cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
cable_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal cabling	
cable_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
node_id_one	Integer (6)			Y	Number of the first node along the cable	
node_id_two	Integer (6)			Y	Number of the second node along the cable	
installation_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ud_cabling
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch

Cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
cable_make	Character (20)				Code for the cabling manufacturer	Looks up on ud_cable_make
cable_model	Character (20)				Model of the cabling asset	Looks up on ud_cable_model
cable_type	Character (20)			Y	Cable type	Looks up on ud_cable_type
cable_configuration	Character (5)				Is the cabling asset protected?	Looks up on ud_cable_configuration
cable_comms	Character (5)				Is the cable used for electricity or communications?	Looks up on ud_cable_comms
number_cores	Integer (6)			Y [C]	Number of cores in the cable	
duct_type	Character (20)			Y [C]	Ducting type code <i>[C] only when ducting is present</i>	Looks up on ud_ducting_type
duct_make	Character (20)			Y [C]	Ducting manufacturer code <i>[C] Only when ducting is present.</i>	Looks up on ud_duct_make
duct_model	Character (20)			Y [C]	Model of ducting asset <i>[C] Only when ducting is present.</i>	Looks up on ud_ducting_model
duct_mat	Character (20)			Y [C]	Material of ducting asset <i>[C] Only when ducting is present.</i>	Looks up on ud_ducting_material
duct_colour	Character (20)			Y [C]	Colour of duct <i>[C] Only when ducting is present.</i>	Looks up on ud_ducting_colour
duct_diameter	Character (20)			Y [C]	Diameter of duct <i>[C] Only when ducting is present.</i>	Looks up on ud_duct_diameter
depth_of_cover	Integer (6)			Y [C]	Depth of cover over the ducting (in millimetres) <i>[C] Only when ducting is present</i>	Between 0 and 2000
endbox_in_use	Character (3)			Y	Is the cabling asset attached to an endbox?	YES - Yes, NO - No
endbox_type	Character (20)			Y [C]	Cabling end box type <i>[C] Only required if endbox_in_use = YES</i>	Looks up on ud_endbox_type
endbox_make	Character (20)			Y [C]	Cabling end box manufacturer <i>[C] Only required if endbox_in_use = YES</i>	Looks up on ud_endbox_make

Cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
endbox_model	Character (20)			Y [C]	Cabling end box model <i>[C] Only required if endbox_in_use = YES</i>	Looks up on ud_endbox_model
endbox_mat	Character (20)			Y [C]	Cabling end box material <i>[C] Only required if endbox_in_use = YES</i>	Looks up on ud_endbox_material
guarantee_date	Date				End date for the guarantee period for this asset	
metered	Character (20)			Y	Is the cable metered or unmetered?	Looks up on metered
meter_no	Integer (6)			Y [C]	Meter number <i>[C] Only required when load is metered</i>	
icp_cable	Character (5)			Y	ICP group of the cabling asset	Looks up on ud_cabling_icp_group
criticality	Character (5)			Y	Criticality rating of the cabling asset	Looks up on ud_cable_criticality
multi_purpose	Character (5)			Y	Is the duct used for multiple purposes?	YES - Yes, NO - No
multi_purpose_use	Character (5)			Y [C]	Multiple purposes of the ducting <i>[C] Only required if multi_purpose = YES</i>	Looks up on ud_cable_multi_purpose_use
cable_location	Character (5)			Y	Is the cabling located underground, overground or attached to a building or structure?	Looks up on ud_cable_location
bedding_type	Character (5)			Y	Type of bedding used around the cabling	Looks up on ud_bedding_type
backfill_type	Character (5)			Y	Type of backfill used around the cabling	Looks up on ud_backfill_type
marker_tape	Character (3)			Y	Is marker tape in use?	YES - Yes, NO - No
geotextile	Character (3)			Y	Are the ducts wrapped in geotextile?	YES - Yes, NO - No
voltage	Integer (6)			Y	Voltage of the cabling asset	
ru_life	Integer (6)				Remaining useful life of the asset	Looks up on ud_ru_life

Cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	Looks up on ud_condition_wt
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset Please note this field should be updated every 12 months.	1 - Excellent, 2 - Good, 3 Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	Looks up on ud_condition_date
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	

Cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: DRAINAGE

Drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage field description	Allowed values
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
carrway_start_m	Integer (6)	Y		Y	Start displacement from the road origin (in metres)	Looks up on carr_way
drainage_id	Serial (8)	Y	G	Y	The unique identifier of the drainage feature	
drain_type	Character (5)	Y		Y	Type of drainage feature	Looks up on drain_type
construct_date	Date	Y		Y	Date of construction if known	
culv_number	Decimal (6,2)			Y [C]	Culvert number if known <i>[C] Applicable when drain_type is culvert</i>	
location	Integer (6)	Y		Y	Displacement from road origin (in metres)	Between 0 and 999999
offset_kerb	Decimal (3,1)				Offset from the nearest kerb to the drain (in metres)	Between 0 and 200.0 or is null
offset	Decimal (3,1)			Y	Distance from the road centreline to the drain (in metres)	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)				Offset from the left-hand side of the road to the drain (in metres)	Between 0 and 200.0 or is null
offset_side	Character (1)			Y	Side of carriageway drainage feature is located on	E- End, L - Left, R - Right, C - Centre, A - Across
drain_length	Decimal (4,1)			Y	Length of feature (in metres to one decimal place)	Between 0 and 9999 or is null
drain_size	Integer (4)			Y	Height of culvert or other drainage feature	Between 50 and 9000 or is null
drain_material	Character (5)			Y	Material of drainage feature	Looks up on drain_material
inlet	Character (2)			Y	Inlet Type if present	Looks up on drain_entry
outlet	Character (2)			Y	Outlet Type if present	Looks up on drain_entry
drain_culvert	Character (9)			Y [C]	Culvert Type <i>[C] Applicable when drain_type is culvert</i>	Looks up on drain_culvert
cul_width	Integer (4)			Y [C]	Width of box or arch (in millimetres) <i>[C] Applicable when drain_type is culvert</i>	Between 100 and 9000 or is null
cul_area	Decimal (3,2)		G		Width of box or arch (in m ²)	Between 0.01 and 200.0 or is null
inspect_date	Date				Date of last inspection undertaken on this asset	

Drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage field description	Allowed values
hazard	Character (1)	Y	U		Existence of a hazard due to feature	Y - Yes, N - No, U - Unknown
adequacy	Character (1)				Adequacy of feature	Y - Yes, N - No
maint_type	Character (6)				Maintenance type required	DIGGER - Digger, GRADER - Grader, HAND - By hand, SP - Suction Pump
organisation	Character (3)				Organisation responsible for maintenance of this facility	Looks up on organisation
file_ref	Character (10)				File reference regarding joint and other party responsibility	
maint_date	Date				Date drainage feature was last maintained	
maint_cycle	Integer (3)				Maintenance cycle in weeks	Between 1 and 999 or is null
wway	Character (30)				The name of the waterway crossed by the bridge	Looks up on br_waterway
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
depth_of_cover	Decimal (3,1)			Y [C]	Depth of cover at the centreline (in metres) <i>[C] Applicable when the asset is a culvert</i>	
wall_thickness	Integer (3)				Thickness of the drain wall (in millimetres)	
drain_shape	Character (1)			Y	Shape of the drain	S - Square, O - Oval, R - Round
bridge_id	Integer (6)				Unique identifier for the bridge	Looks up on br_bridge
drain_lining	Character (3)				Culvert invert lining	Looks up on drain_lining
fish_passage	Boolean	Y	FALSE	Y	Does this drain have a fish passage installed?	TRUE or FALSE
flow_direction	Character (1)	Y	N	Y	Direction in which the water flows through the culvert	N - Not Applicable, L - Left to Right, R - Right to Left, I - Increasing, D - Decreasing
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate taken at the drain	Between 4,000,000 and 6,000,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate taken at the drain	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	

Drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage field description	Allowed values
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique ID for the gps_method table	Looks up on gps_method
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this drainage asset	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value was last updated	
ru_life	Integer (3)				Expected life (in years) of the asset or asset component	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original Cost of constructing or installing this asset or asset component	
rc_value	Currency (12,2)				Replacement Cost of this asset or asset component	

Drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage field description	Allowed values
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments or notes	
work_origin_id	Character (100)			Y	Associates the drainage inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project or development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
as_tip_note	Character (255)				General notes for the Assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: DRAINAGE WALLS

Drainage walls field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage walls field description	Allowed values
drainwall_id	Integer (6)	Y		Y	The unique identifier of the drainage wall	
drainwall_no	Integer (6)				Drainage wall number	
drainage_id	Serial (8)	Y		Y	The unique identifier of the drainage feature	Looks up on drainage
inlet_outlet	Character (20)	Y		Y	Does this drainage wall have an inlet or outlet?	
drainwall_type	Character (20)	Y		Y	Type of drainage wall	Looks up on drainwall_type
drainwall_count	Integer (6)				Number of drainage walls	
drain_material	Character (5)			Y	Material of drainage feature	Looks up on drain_material
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
length_m	Integer (5)			Y	Length of the drainage wall asset (in metres)	Between 0 and 30000 or is null
width	Integer (3)			Y	Width of the drainage wall from side to side.	Between 0.5 and 99.9 or is null
height_m	Integer (4)			Y	Height/depth of the drainage wall in metres	
constructed	Date			Y	Date the drainage wall was constructed	
ru_life	Integer (3)				Expected life (in years) of the asset or asset component	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this drainage asset	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown

Drainage walls field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage walls field description	Allowed values
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value was last updated	
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original Cost of constructing or installing this asset or asset component	
rc_value	Currency (12,2)				Replacement Cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments or notes	
work_origin_id	Character (100)			Y	Associates the drainage inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project or development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
as_tip_note	Character (255)				General notes for the Assessor when assessing this asset	

Drainage walls field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Drainage walls field description	Allowed values
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: FEATURES

Features field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Features field description	Allowed values
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
carrway_start_m	Integer (6)	Y		Y	Start displacement from the road origin (in metres)	Looks up on carr_way
feature_id	Serial (8)	Y	G	Y	Unique identifier of each feature	
location	Integer (6)	Y		Y	Displacement of feature from the road origin (in metres)	Between 0 and 999999
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
offset	Decimal (3,1)				Offset of the feature from the centreline (in metres)	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)				Offset of the feature from the left-hand side of the carriageway (in metres)	Between 0 and 200.0 or is null
offset_kerb	Decimal (3,1)				Offset of the feature to the nearest kerb (in metres)	Between 0 and 200.0 or is null
feature_type	Character (6)	Y		Y	Type of feature	Looks up on feature_type
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
constructed	Date			Y	Date the feature was constructed	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	

Features field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Features field description	Allowed values
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value was last updated	
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original Cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement Cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of the asset	

Features field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Features field description	Allowed values
notes	Character (255)			Y	General notes or comments	
as_tip_note	Character (255)				General notes for the Assessor when assessing this asset	
collect_name	Character (3)			Y	Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date			Y	Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: GANTRY

Gantry field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Gantry field description	Allowed values
system_id	Serial (8)	Y	G	Y	Unique identifier of each gantry	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement of feature from the road origin (in metres)	Between 0 and 999999
loc_desc	Character (250)				Description of gantry location	
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both
offset	Decimal (3,1)			Y	Offset of the feature from the centreline (in metres)	Between 0 and 200.0 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate	Between 1,000,000 and 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)			Y	Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method
material	Character (5)	Y		Y	Material of the gantry	Looks up on ud_gantry_material
type	Character (20)	Y		Y	Type of gantry	Looks up on ud_gantry_type
sign_legend	Character (250)				Legend of the sign	
external_id	Serial (8)				Unique identifier for the gantry from an external source <i>[C] Applicable only when the asset is known by an external ID</i>	
notes	Character (250)				General comments	

Gantry field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Gantry field description	Allowed values
length	Integer (6)			Y	Length of gantry (in metres)	
height	Integer (6)			Y	Height of gantry (in metres)	
clearance	Integer (6)			Y	Clearance of gantry in metres (from ground height)	
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
construct_date	Date			Y	Date the asset was constructed	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original Cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement Cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of the asset	

Gantry field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Gantry field description	Allowed values
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_gantry
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
collect_name	Character (3)			Y	Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date			Y	Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: GEOTECHNICAL ASSETS - DRAINAGE

Geotechnical drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical drainage field description	Allowed values
asset_id	Integer (6)	Y		Y	Unique ID for the geotechnical drainage table	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Geotechnical drainage start displacement from the road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	Geotechnical drainage end displacement from the road origin (in metres)	Between 0 and 999999
start_name	Character (35)				Name of the road or feature at the start of the geotechnical drainage asset	
end_name	Character (35)				Name of the road or features at the end of the geotechnical drainage asset	
offset	Integer (3)			Y	Offset of the start of the geotechnical drainage asset from the centreline (in metres)	Between 0 and 200
offset_end	Integer (3)				Offset of the end of the geotechnical drainage asset from the centreline (in metres)	Between 0 and 200
side	Character (1)			Y	Side of the carriageway of which the asset is located	L - Left, R - Right, B - Both, C - Centre
asset_type	Character (35)	Y		Y	Type of geotechnical drainage asset	Looks up on ud_geotech_drainage_type
external_id	Character (10)			Y	Unique identifier of this asset in the HSIMS database	
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the beginning of the asset	Between 1,000,000 and 2,500,000 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the beginning of the asset	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the end of the asset	Between 1,000,000 and 2,500,000 or is null

Geotechnical drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical drainage field description	Allowed values
northing_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the end of the asset	Between 4,000,000 and 6,500,000 or is null
gps_date	Date				Date when the GPS was taken	
gps_by	Character (3)				Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
length_m	Integer (6)				Length of geotechnical drainage asset in metres	Between 0 and 999999
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length	Between -999999 and 999999
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_ren
diameter	Character (5)	Y		Y	Diameter of the geotechnical drainage asset (in millimetres)	Looks up on ud_geo_drainage_diameter
construct_date	Date			Y	Date this geotechnical drainage asset was constructed	
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
drainage_owner	Character (35)			Y	Owner of the geotechnical drainage asset	Looks up on ud_geotech_drainage_owner
notes	Character (250)				General comments about the asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	

Geotechnical drainage field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical drainage field description	Allowed values
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_geotech_drainage
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
added_on	Date			Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual or organisation who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual or organisation who changed this row	Looks up on staff

TABLE: GEOTECHNICAL ASSETS - GROUND TREATMENT

Geotechnical ground treatment field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical ground treatment field description	Allowed values
asset_id	Integer (6)	Y		Y	Unique ID for the geotechnical ground treatment table	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Geotechnical ground treatment start displacement from the road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	Geotechnical ground treatment end displacement from the road origin (in metres)	Between 0 and 999999
start_name	Character (35)				Name of the road or feature at the start of the geotechnical ground treatment asset	
end_name	Character (35)				Name of the road or features at the end of the geotechnical ground treatment asset	
offset	Integer (3)			Y	Offset of the start of the geotechnical ground treatment asset from the centreline (in metres)	Between 0 and 200
offset_end	Integer (3)				Offset of the end of the geotechnical ground treatment asset from the centreline (in metres)	Between 0 and 200
side	Character (1)			Y	Side of the carriageway of which the asset is located	L - Left, R - Right, B - Both, C - Centre
asset_type	Character (35)	Y		Y	Type of geotechnical ground treatment asset	Looks up on ud_ground_treat_asset_type
external_id	Character (10)			Y	Unique identifier of this asset in the HSIMS database	
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the beginning of the asset	Between 1,000,000 and 2,500,000 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the beginning of the asset	Between 4,000,000 and 6,500,000 or is null

Geotechnical ground treatment field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical ground treatment field description	Allowed values
easting_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the end of the asset	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the end of the asset	Between 4,000,000 and 6,500,000 or is null
gps_date	Date				Date when the GPS was taken	
gps_by	Character (3)				Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
length_m	Integer (6)				Length of geotechnical drainage asset in metres	Between 0 and 999999
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length	Between -999999 and 999999
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_ren
depth	Integer (2)	Y		Y	Depth of ground treatment asset (to the nearest metre). <i>Depth must be specified if thickness and height do not apply for this asset record.</i>	Between 0 and 25. <i>Select 0 if depth does not apply for the asset type.</i>
thickness	Integer (2)	Y		Y	Thickness of ground treatment asset (to the nearest metre). <i>Thickness must be specified if depth and height do not apply for this asset record.</i>	Between 0 and 25. <i>Select 0 if thickness does not apply for the asset type.</i>
height	Integer (2)	Y		Y	Height of the ground treatment asset (to the nearest metre). <i>Height must be specified if depth and thickness do not apply for this asset record.</i>	Between 0 and 25. <i>Select 0 if height does not apply for the asset type.</i>
construct_date	Date			Y	Date this geotechnical ground treatment asset was constructed	

Geotechnical ground treatment field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical ground treatment field description	Allowed values
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
ground_treatment_owner	Character (35)	Y		Y	Owner of the geotechnical ground treatment asset	Looks up on ud_geotech_drainage_owner
notes	Character (250)				General comments about the asset	
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_geotech_ground_treatment
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date			Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual or organisation who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual or organisation who changed this row	Looks up on staff

TABLE: GEOTECHNICAL ASSETS - ROCKFALL PROTECTION STRUCTURE

Geotechnical rockfall protection structure field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical rockfall protection structure field description	Allowed values
asset_id	Integer (6)	Y		Y	Unique ID for the geotechnical drainage table	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Geotechnical rockfall protection structure start displacement from the road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	Geotechnical rockfall protection structure end displacement from the road origin (in metres)	Between 0 and 999999
start_name	Character (35)				Name of the road or feature at the start of the geotechnical rockfall protection structure asset	
end_name	Character (35)				Name of the road or features at the end of the geotechnical rockfall protection structure asset	
offset	Integer (3)			Y	Offset of the start of the geotechnical rockfall protection structure asset from the centreline (in metres)	Between 0 and 200
offset_end	Integer (3)				Offset of the end of the geotechnical rockfall protection structure asset from the centreline (in metres)	Between 0 and 200
side	Character (1)			Y	Side of the carriageway of which the asset is located	L - Left, R - Right, B - Both, C - Centre
asset_type	Character (35)	Y		Y	Type of geotechnical rockfall protection structure asset	Looks up on ud_rockfall_protection_type
asset_form	Character (35)	Y		Y	Form of geotechnical rockfall protection structure asset	Looks up on ud_rockfall_asset_form
external_id	Character (10)			Y	Unique identifier of this asset in the HSIMS database	

Geotechnical rockfall protection structure field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical rockfall protection structure field description	Allowed values
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the beginning of the asset	Between 1,000,000 and 2,500,000 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the beginning of the asset	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the end of the asset	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the end of the asset	Between 4,000,000 and 6,500,000 or is null
gps_date	Date				Date when the GPS was taken	
gps_by	Character (3)				Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
length_m	Integer (6)				Length of geotechnical drainage asset in metres	Between 0 and 999999
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length	Between -999999 and 999999
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
construct_date	Date			Y	Date this geotechnical drainage asset was constructed	
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
rockfall_protection_owner	Character (35)			Y	Owner of the geotechnical rockfall protection asset	Looks up on ud_geotech_drainage_owner
notes	Character (250)				General comments about the asset	

Geotechnical rockfall protection structure field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Geotechnical rockfall protection structure field description	Allowed values
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_rockfall_protection
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date			Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual or organisation who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual or organisation who changed this row	Looks up on staff

TABLE: HIGH MAST LIGHT TOWERS

High mast light towers field name	Field type	Required by software	Generated value	Required by Waka Kotahi	High mast light towers field description	Allowed values
asset_id	Integer (6)	Y		Y	Unique ID for the high mast light tower	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement of feature from the road origin (in metres)	Between 0 and 999999
loc_desc	Character (250)				Description of high mast light tower location	
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both
offset	Decimal (3,1)			Y	Offset of the feature from the centreline (in metres)	Between 0 and 200.0 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate	Between 1,000,000 and 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)			Y	Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method
external_id	Character (10)				Unique identifier of this asset in an external database	
pole_type	Character (3)	Y		Y	Type of pole	Looks up on ud_high_mast_pole_type
material	Character (6)	Y		Y	Material of the pole	Looks up on post_material

High mast light towers field name	Field type	Required by software	Generated value	Required by Waka Kotahi	High mast light towers field description	Allowed values
construct_date	Date			Y	Date this high mast light tower asset was constructed	
asset_owner	Character (3)			Y	Owner of the high mast light tower asset	
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_high_mast
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
notes	Character (250)				General comments about the asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date			Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual or organisation who added this row	Looks up on staff

High mast light towers field name	Field type	Required by software	Generated value	Required by Waka Kotahi	High mast light towers field description	Allowed values
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual or organisation who changed this row	Looks up on staff

TABLE: INTELLIGENT TRANSPORTATION SYSTEMS

ITS field name	Field type	Required by software	Generated value	Required by Waka Kotahi		ITS field description	Allowed values
				Type	Notes		
asset_id	Serial (8)	Y	G	Y		Unique identifier for the custom asset	
road_id	Integer (6)	Y		Y [C]	<i>[C] Not mandatory if GPS is provided. Mobile or In Store assets will be Road ID 3364 (000-0000). Non-SH assets will be assigned to applicable SH section Road ID and location</i>	RAMM Road ID (related to where asset is located along SH corridor or SH section asset is managing for non-SH located assets)	Looks up on roadnames
location	Integer (6)	Y		Y	RP 0 for In Store and Mobile assets/RP of applicable SH section for non-SH assets	Displacement in metres from the road origin for all fixed assets (RP location)	Between 0 and 999999
street_address	Character (18)			O		The street address of the asset (for areas where this is applicable)	
site	Character (8)			O		The name of the site this asset is located at. The grouped name of a number of assets such as North-Western Motorway in Auckland. The grouping can be geographical or other.	Looks up on site
location_general	Character (255)			Y	Required for mobile or In Store assets to describe location	The location of the asset in general terms (e.g., Hobson Street - on footpath behind barrier) to assist with locating asset and describing possible access issues	
nma	Character (8)	Y		Y		What Network Management Area (NMA) is the asset in?	Looks up on nma

ITS field name	Field type	Required by software	Generated value	Required by Waka Kotahi		ITS field description	Allowed values
				Type	Notes		
gps_by	Character (3)	Y		Y [C]	[C] Not mandatory for mobile, In Store or Disposed assets	The organisation that collected the GPS data	Looks up on organisation
northing	Integer (7)			Y [C]	[C] Mandatory if no road location details provided (road_id, location, side and offset)	NZ Transverse Mercator (NZTM) northing coordinate of the asset	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y [C]	[C] Mandatory if no road location details provided (road_id, location, side and offset)	NZ Transverse Mercator (NZTM) easting coordinate of the asset	Between 1,000,000 and 2,500,000 or is null
gps_date	Date			Y [C]		Date when the GPS was collected	
gps_method_id	Integer (5)	Y		Y [C]		Unique identifier for the gps_method table	Looks up on gps_method
offset	Decimal (3,1)			Y [C]	[C] Not mandatory if GPS provided or for mobile, In Store or Disposed assets	Distance from the centreline (Standard offsets of 0m, 6m and 15m can be used if offset cannot be safely measured)	Between 0 and 200 or is null
side	Character (1)			Y [C]	[C] Not mandatory if GPS provided or for mobile, In Store or Disposed assets	Side of road asset is located on including when not adjacent to SH.	Looks up on side
transit_region	Character (8)	Y		Y		Which NZTA reporting region is the asset in?	Looks up on transit_region
field_name	Character (30)			O		The unique name of the asset	
its_state	Character (8)	Y	1	Y		Current status of the asset	Looks up on its_state
its_state_date	Date	Y	today	Y		The date the state of the asset changed	

ITS field name	Field type	Required by software	Generated value	Required by Waka Kotahi		ITS field description	Allowed values
				Type	Notes		
asset_type	Character (8)	Y		Y		The main asset type (group)	Looks up on asset_type
asset_sub_type	Character (8)	Y		Y		The asset sub type	Looks up on asset_sub_type
asset_description	Character (255)			O	<i>Optional but required to be completed if type and sub type do not sufficiently describe the asset</i>	An overall description of the asset where details are not provided by type and sub type	
make	Character (8)	Y		Y		Manufacturer of the asset. Not the organisation who installed the asset	Looks up on ud_its_make
model	Character (8)			O		Model number of the asset	Looks up on ud_its_make
serial_no	Character (255)			O		Manufacturers' serial number	
supplier	Character (8)	Y		Y		The supplier of this asset (who it was purchased from for installation/ not the manufacturer or origin)	Looks up on supplier
support_type	Character (8)			O		Support type	Looks up on support_type
owner	Character (8)	Y	NZTA	Y		Who is the owner of this asset (includes important ITS assets within SH corridor that are not owned by Waka Kotahi)?	Looks up on owner
control_system	Character (8)			O		The control system used to access the asset or NONE for mechanical assets or assets not yet online	Looks up on control_system

ITS field name	Field type	Required by software	Generated value	Required by Waka Kotahi		ITS field description	Allowed values
				Type	Notes		
comms	Character (8)			O		The type of communications connection (if any)	Looks up on comms
mtce_contract_no	Character (30)	Y		Y		The NZTA Contract Number under which the asset is maintained. This will be different during and after DLP (Construction Contract Number during DLP and Maintenance Contract Number after)	
maintained_by	Character (3)	Y		Y		Organisation responsible for maintaining this asset based on current contract (including during DLP)	Looks up on organisation
expected_replace	Date			O		The year in which the asset is assessed to require renewal. Assessed during condition inspections (6 months/annual)	
construct_contract_no	Character (30)			O		NZTA Contract Number under which the asset was constructed	
contract_mgd_by	Character (8)	Y	1	Y		The organisation which manages this asset (also includes non Waka Kotahi values)	Looks up on contract_mgd_by
ip_address	Character (30)			O		Internet Protocol address	
notes	Character (255)			O		General comments	
nat_contract	Character (30)			O		Is this asset part of the Waka Kotahi National Contract?	YES - Yes, NO - No, NA - Not applicable

ITS field name	Field type	Required by software	Generated value	Required by Waka Kotahi		ITS field description	Allowed values
				Type	Notes		
metered	Character (5)			Y		Is the power supplied a metered or unmetered load?	MTRD - Metered Load, UMTD - Unmetered Load
meter_number	Character (30)			Y [C]		Meter number <i>[C] Only required if power is on a metered load</i>	
icp_number	Character (30)			Y		ICP number of power supply	Looks up on ud_its_icp_group
total_power	Integer (8)			Y		Total power drawn by the ITS asset	Between 0 and 1000000
installation_date	Date	Y		Y		Installation date or acquired date for assets kept in store and not installed immediately	
design_life	Integer (8)	Y	0	Y		The design life of this asset (in years)	design_life between 0 and 50
condition_rating	Character (8)			O		What is the asset condition?	Looks up on condition_rating
condition_rat_date	Date			O		When was the condition of the asset determined (assessed)?	
purchase_cost	Integer	Y	0	Y		The original cost at time of installation (the total asset purchase cost)	
dlp_start_date	Date			Y [C]	<i>[C] Only required for assets currently under DLP</i>	Start of defects liability period (DLP) if applicable	
dlp_end_date	Date			Y [C]	<i>[C] Only required for assets currently under DLP</i>	End of defects liability period (DLP) if applicable	
criticality	Character (8)			O		What is the impact of the asset failing (as per the NZTA guidelines provided)?	Looks up on criticality

ITS field name	Field type	Required by software	Generated value	Required by Waka Kotahi		ITS field description	Allowed values
				Type	Notes		
prior_id	Serial (8)					Prior ID of the asset before it was replaced	Looks up on ud_its
in_contract_id	Integer (6)					The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)					The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)					The reason this asset was replaced	Looks up on replace_reason
replace_date	Date					Date the asset was replaced	
rep_contract_id	Integer (6)					The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)					The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)					The reason this asset was replaced	Looks up on replace_reason
added_on	Date		Today	Y		The date this row was added	
added_by	Variable Character (20)	Y	User	Y		The login name of the individual who added this row	Looks up on staff
chgd_on	Date	Y		O		The date this row was last changed	
chgd_by	Character (20)	Y		O		The login name of the individual who last changed this row	Looks up on staff

TABLE: MARKINGS

Markings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Markings field description	Allowed values
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Distance from road origin to the start of the marking (in metres)	Between 0 and 999999
end_m	Integer (6)			Y	Distance from road origin to the end of the marking (in metres)	Between 1 and 999999 or is null
start_name	Character (35)				Name of the road or feature at the start of the marking	
end_name	Character (35)				Name of the road or feature at the end of the marking	
northing	Integer (7)				NZ Transverse Mercator (NZTM) Northing Coordinate at the start of the marking	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) Easting Coordinate at the start of the marking	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) Northing Coordinate at the end of the marking	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) Easting Coordinate at the end of the marking	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique ID for the gps_method table	Looks up on gps_method
marking_id	Serial (8)	Y	G	Y	Unique serial number of markings	
length_m	Integer (6)			Y	Length of marking (in metres)	Between 0 and 999999 or is null
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length	Between -999999 and 999999 or is null
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
quantity	Integer (5)	Y	1		The number of markings	Between 1 and 32000

Markings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Markings field description	Allowed values
offset_kerb	Decimal (3,1)				Offset from the nearest kerb to the marking	Between 0 and 200.0 or is null
offset	Decimal (3,1)				Distance from road centreline to the marking	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)				Offset from the left-hand side to the marking	Between 0 and 200.0 or is null
offset_kerb_end	Decimal (3,1)				Offset from the nearest kerb to the end of the marking	Between 0 and 200.0 or is null
offset_end	Decimal (3,1)				Offset from the centreline at the end of the marking	Between 0 and 200.0 or is null
offset_lhs_end	Decimal (3,1)				Offset from the left-hand side at the end of the marking	Between 0 and 200.0 or is null
side	Character (1)	Y		Y	Side of the carriageway that the marking is located	C - Centre, L - Left, R - Right, U - Unknown
marking_type	Character (8)	Y		Y	The type of marking at this location	Looks up on marking_type
angle	Integer (3)				Angle of the marking	
marking_colour	Character (2)			Y	The predominant colour of the marking	Looks up on marking_colour
individual_length	Integer (3)				The individual length for multiple markings (in metres)	
spacing	Integer (3)				The interval between multiple markings (in metres)	
thickness	Integer (4)				The thickness of the marking (in microns)	
paint_make	Character (2)				The manufacturer of the paint used for marking	Looks up on paint_make
paint_brand_name	Character (8)				The brand name of the paint made by manufacturer specified above	Looks up on paint_brand_name
reflectorised	Character (1)			Y	Is the marking reflectorised?	N - Normal, R - Reflectorised
application_rate	Integer (5)				The application rate used when applying the marking per m ²	
paint_apply_type	Character (2)				Paint application type	Looks up on paint_apply_type

Markings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Markings field description	Allowed values
marking_attach	Character (8)				Type of attachments used on this marking	Looks up on marking_attach
painted_date	Date			Y	Date the marking was made	
marking_material	Character (2)			Y	The code for the marking material	Looks up on marking_material
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this marking	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of the asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value was last updated	
asset_owner	Character (3)			Y	Unique identifier for asset owner	Looks up on asset_owner
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User

Markings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Markings field description	Allowed values
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of the asset	
notes	Character (250)				General comments	
as_tip_note	Character (255)				General notes for the assessor when assessing this asset	
work_origin_id	Character (100)			Y	Associates the drainage inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project or development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: MINOR STRUCTURES

Minor structures field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Minor structures field description	Allowed values
minor_structures_id	Serial (8)	Y	G	Y	Unique identifier of the minor structures asset	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Start displacement from the road origin (in metres)	Between 0 and 999999
start_desc	Character (40)				Description of the start location	
end_m	Integer (6)				End displacement from the road origin (in metres)	Between 1 and 999999 or is null
end_desc	Character (40)				Description of the end location	
side	Character (1)	Y		Y	Side of the road where the minor structure is located	C - Centre, L - Left, R - Right, U- Unknown
offset	Decimal (3,1)	Y		Y	Offset of the minor structure from the centreline	Between 0 and 200.0 or is null
offset_end	Decimal (3,1)				Offset from the centreline at the end of the minor structure	Between 0 and 200.0 or is null
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at start displacement	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate at start displacement	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at end displacement	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTIM) easting coordinate at end displacement	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
type	Character (6)	Y		Y	Minor structure type code	Looks up on ud_minor_structures_type

Minor structures field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Minor structures field description	Allowed values
subtype	Character (6)			Y[C]	Minor structure subtype code <i>[C] Only required where subtype is relevant</i>	Looks up on ud_minor_structures_subtype
quantity	Integer (5)	Y	1		The number of minor structures at this displacement	Between 1 and 32000
length_m	Decimal (8,2)			Y	The length of the asset (in metres to one decimal point)	Between 0.0 and 3000000.00 or is null
length_adjust	Integer (5)				Adjusted length above or below the calculated length (in metres)	Between -30000 and 30000 or is null
length_adjust_reason	Character (6)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
width_m	Decimal (5,1)			Y[C]	Width of the minor structure <i>[C] Only required when type isn't ducting</i>	Between 0.0 and 30000.0 or is null
height	Decimal (8,2)			Y[C]	Height of the minor structure (in metres) <i>[C] Only required when type isn't ducting</i>	Between 0.0 and 3000000.00 or is null
ms_area	Decimal (8,2)				Area covered by the minor structure	Between 0.0 and 3000000.00 or is null
material	Character (5)			Y	Minor structure material code	Looks up on ms_material
lockable	Character (1)			Y[C]	Is this asset lockable? <i>[C] Only required if type is a gate</i>	Looks up on ud_ms_lockable
external_no	Character (10)				External number for this asset	
install_date	Date	Y		Y	Date when this minor structure was installed	
ru_life	Integer (3)				Remaining useful life of the asset	
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_minor_structures
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on ms_replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract

Minor structures field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Minor structures field description	Allowed values
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on ms_replace_reason
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this minor structure	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date condition of this minor structure was established	
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset or asset component	
valuation_date	Date				Date of the last valuation of the asset	
notes	Character (255)				General comments	
collect_name	Character (3)				The name of the individual or organisation who collected the data	Looks up on organisation
collect_date	Date				Date the data was collected	

Minor structures field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Minor structures field description	Allowed values
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: NOISE WALL

Noise wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Noise wall field description	Allowed values
system_id	Serial (8)	Y	G	Y	Unique identifier of each noise wall	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Start displacement of noise wall from the road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	End displacement of noise wall from the road origin (in metres)	Between 1 and 999999
loc_desc	Character (250)				Description of noise wall location	
side	Character (1)	Y		Y	Side of the carriageway of which noise wall is located	L - Left, R - Right, C - Centre, B - Both
offset	Decimal (3,1)			Y	Offset of the start of the noise wall from the centreline (in metres)	Between 0 and 200.0 or is null
offset_end	Decimal (3,1)				Offset of the end of noise wall from the centreline (in metres)	Between 1 and 200.0 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate taken at the start of the noise wall	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate taken at the start of the noise wall	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate taken at the end of the noise wall	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate taken at the end of the noise wall	Between 1,000,000 and 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)				Login name of the individual or organisation who collected the GPS	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method

Noise wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Noise wall field description	Allowed values
wall_mat	Character (5)			Y	Material of the noise wall	Looks up on ud_noise_wall_material
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
external_id	Serial (8)				Unique identifier for the noise wall from an external source <i>[C] Applicable only when the asset is known by an external ID</i>	
notes	Character (250)				General comments	
length_m	Integer (6)			Y	Length of noise wall (in metres)	
length_adjust_m	Integer (6)				Adjustment length of noise wall (in metres)	Between 0 and 999999 or is null
length_adjust_rsn	Integer (6)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
max_height	Decimal (3,1)			Y	Maximum height of noise wall (in metres)	Between 0 and 999999 or is null
min_height	Decimal (3,1)				Minimum height of noise wall (in metres)	Between 0 and 999999 or is null
construct_date	Date			Y	Date the asset was constructed	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this feature	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User

Noise wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Noise wall field description	Allowed values
original_cost	Currency (12,2)				Original Cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement Cost of this asset or asset component	
drc_value	Currency (12,2)				Depreciated Replacement Cost of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual Depreciation of this asset or asset component	
valuation_date	Date				Date of the last valuation of the asset	
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_noise_wall
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
collect_name	Character (3)			Y	Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date			Y	Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff

Noise wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Noise wall field description	Allowed values
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: PAVEMENT LAYER

Pavement layer field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Pavement layer field description	Allowed values
layer_id	Serial (8)	Y	G	Y	Unique identifier for pavement layer	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (5)	Y		Y	Pavement layer/subgrade start displacement from road origin (in metres)	Between 0 and 999999
end_m	Integer (5)	Y		Y	Pavement layer/subgrade end displacement from road origin (in metres)	Between 1 and 999999
start_name	Character (35)				Name of the road or feature at the start of the pavement section	
end_name	Character (35)				Name of the road or feature at the end of the pavement section	
layer_subgrade	Character (1)	Y	L	Y	Is this a layer or subgrade?	L - Pavement Layer, S - Subgrade
layer_date	Date	Y		Y	Date subgrade was tested, or layer was constructed	
removed_date	Date			Y	Date the layer was removed. Indicates that the layer is historic	
offset	Decimal (2,1)		0	Y	Distance from left hand side seal edge to left hand side of layer (in metres)	Between 0 and 60. Null is an allowed value for subgrade.
width	Decimal (2,1)			Y [C]	Width of layer (in metres to one decimal point)	Between 0.5 and 60. Null is an allowed value for subgrade. [C] Only required if layer_subgrade is pavement layer.
full_width_flag	Character (1)	Y	N	Y	Does the layer cover the full width of the carriageway?	N - No, Y - Yes
lane_coverage	Integer (2)			Y [C]	Number of surfaced lanes excluding slipways and shoulder	Between 0 and 10. [C] Only required if layer_subgrade is pavement layer.

Pavement layer field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Pavement layer field description	Allowed values
estimate_status	Character (1)	Y	K	Y	Is the layer based on estimated or known pavement layer data?	E - Estimate, K - Known
layer_strength	Decimal (3,1)			Y	Strength of the layer measured in CBR (0 - 120%) or UCS (0-99.9)	
cbr_ucs	Character (1)	Y	C	Y	Layer strength measure	C - CBR, U - UCS
pave_subgrade	Character (20)			Y	Material type	Looks up on pave_subgrade
thickness	Integer (5)			Y	Thickness of pavement layer (in millimetres)	Between 0 and 99999 or is null
pave_material	Character (6)			Y	Type of material used	Looks up on pave_material
pave_source	Character (20)			Y	Pavement material source type	Looks up on pave_source
recycling	Boolean	Y	FALSE	Y	Is this layer using recycled material?	TRUE or FALSE
pave_spec	Character (10)			Y	Details of the end user specification	Looks up on pave_spec
reconstructed	Character (1)	Y	U	Y	Has the layer been reconstructed or left undisturbed?	R - Reconstructed, U - Undisturbed
pave_st_agent	Character (20)			Y	Stabilising agent type	
stab_percent	Decimal (2,1)			Y	Percentage of stabilising agent used (to one decimal point)	Between 1.0 and 10.0 or is null
plan_no	Character (20)			Y	Construction Plan number	
design_life	Integer (3)			Y [C]	Estimated/Design Life of the pavement layer	Between 1 and 60. Null is an allowed value for subgrade. [C] Only required if layer_subgrade is pavement layer.
design_esa	Decimal (4,2)			Y [C]	Estimated/ Design Equivalent Standard Axle (ESA) of the pavement layer over its life	[C] Only required if layer_subgrade is pavement layer.
fw_treatment	Character (7)			Y	Treatment Code used in Forward Work Planning	Looks up on fw_treatment

Pavement layer field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Pavement layer field description	Allowed values
work_origin_id	Character (100)			Y	Associates the pavement layer inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project and development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
notes	Character (255)			Y	General comments	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: PAVEMENT TEST PIT

Pavement test pit field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Pavement test pit field description	Allowed values
test_pit_no	Integer (6)	Y		Y	Unique system generated ID for this test pit	Looks up on pave_test_pit_hdr
layer_type	Character (1)	Y	L	Y	Test pit layer type	C - Surface, L - Pavement Layer, S - Subgrade
start_depth	Integer (4)	Y		Y	Start depth measured from the top of the basecourse (in millimetres)	Between 0 and 3000 or is null
end_depth	Integer (4)	Y		Y	End depth measured from the start depth of the following layer (in millimetres)	Between 0 and 3000 or is null
pave_material	Character (6)			Y	Test pit layer material if this is a pavement layer	Looks up on pave_material
pave_subgrade	Character (20)			Y	Test pit layer material for subgrade layers	Looks up on pave_subgrade
layer_strength	Decimal (3,1)				Strength of the layer measured in CBR (0-120%) or UCS (0-99.9)	
cbr_ucs	Character (1)	Y	C	Y	Layer strength measure	C - CBR, U - UCS
pave_st_agent	Character (20)				Stabilising agent found in this test pit layer	Looks up on pave_st_agent
notes	Character (255)				General comments	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: PAVEMENT TEST PIT HEADER

Pavement test pit header field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Pavement test pit header field description	Allowed values
test_pit_no	Serial (8)	Y	G	Y	Unique system generated ID for this test pit	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement from the road origin (in metres)	Between 0 and 999999 or is null
offset	Decimal (2,1)	Y		Y	Distance from left hand side of carriageway to test pit location	Between 0.0 and 60.0 or is null
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at start displacement	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate at start displacement	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
historic	Character (1)	Y	C		Set to historic if pavement layers are altered since test date	C - Current; Pavement layers are undisturbed since test date, H - Historic; Pavement layers have been altered since test date
test_date	Date	Y		Y	Date of the test pit survey	
pave_tp_method	Character (1)	Y		Y	Test pit survey method	Looks up on pave_tp_method
test_consultant	Character (30)				The survey was performed by this group	C - CBR, U - UCS
job_no	Character (20)				Consultants' job number or job name reference for this survey	
snp	Decimal (4,2)				Adjusted Structural Number (SNP)	
snp_method	Character (5)				Method used to calculate the SNP	Looks up on snp_method
snp_organisation	Character (3)				Individual or organisation who calculated the SNP	Looks up on organisation

Pavement test pit header field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Pavement test pit header field description	Allowed values
snp_date	Date				Date the SNP was calculated	
test_notes	Character (255)			Y	General comments	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: RAILINGS

Railings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Railings field description	Allowed values
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Distance from the road origin to the start of the railing (in metres)	Between 0 and 999999
end_m	Integer (6)			Y	End displacement of railing from the road origin (in metres)	Between 1 and 999999 or is null
start_name	Character (35)				Name of the road or feature at the start of the railing	
end_name	Character (35)				Name of the road or feature at the end of the railing	
railing_id	Serial (7)	Y	G	Y	Unique identifier of this asset	
length_m	Integer (6)	Y		Y	Length of the railing (in metres)	Between 0 and 999999
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length	Between -999999 and 999999 or is null
length_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at the start of the railing	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate at the start of the railing	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate at the end of the railing	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate at the end of the railing	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				Login name of the individual or organisation who collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method_id

Railings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Railings field description	Allowed values
offset_kerb	Decimal (3,1)				Offset of the start of the railing from the nearest kerb	Between 0 and 200.00 or is null
offset	Decimal (3,1)			Y	Offset at the start of the railing from the centreline	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)				Offset of the start of the railing from the left-hand side of the road	Between 0 and 200.0 or is null
offset_kerb_end	Decimal (3,1)				Offset of the end of the railing from the nearest kerb	Between 0 and 200.0 or is null
offset_end	Decimal (3,1)				Offset of the end of the railing from the centreline	Between 0 and 200.0 or is null
offset_lhs_end	Decimal (3,1)				Offset of the end of the railing from the left-hand side	Between 0 and 200.0 or is null
side	Character (1)	Y		Y	Side of the carriageway section the railing is located	C - Centre, L - Left, R - Right, E - End
railing_type	Character (5)	Y		Y	Type of railing	Looks up on railing_type
install_date	Date	Y		Y	The date the asset was installed	
ground_height	Decimal (4,1)			Y	Height of the railing from the ground (in metres to one decimal point)	
railing_width	Decimal (4,1)				Width of the railing (in metres to one decimal point)	
railing_make	Character (5)			Y [C]	Railing manufacturer <i>[C] Not applicable when railing is timber sight rail</i>	Looks up on railing_make
shape	Character (1)			Y	General shape of the railing	C - Curved, S - S Bend, T - Straight
railing_colour	Character (2)				Major colour of railing	Looks up on railing_colour
railing_material	Character (5)			Y	Predominant material the railing is constructed from	Looks up on railing_material

Railings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Railings field description	Allowed values
railing_attach	Character (2)			Y	Attachments found on the railing	Looks up on railing_attach
rail_start_style	Character (5)			Y	Start style used on the railing	Looks up on rail_end_style
rail_end_style	Character (5)			Y	End style used on the railing	Looks up on rail_end_style
safe_height	Character (1)				Does the handrail conform to the current safety standard?	Y - Yes, N - No
railing_ground_fix	Character (4)			Y	How the railing is set in the ground	Looks up on railing_ground_fix
railing_purpose	Character (100)				The reason the railing was erected	
loc_house1_no	Character (10)				Number of the house nearest to the start of this railing	
loc_house2_no	Character (10)				Number of the house nearest to the end of this railing	
other_road_id	Integer (6)				Road ID if the railing is situated on an intersection	Looks up on roadnames
other_side	Character (1)				The side of the other road the railing is located on	C - Centre, L - Left, R - Right, U - Unknown
other_start_m	Integer (6)				Start displacement of carriageway section (in metres)	Between 0 and 999999 or is null
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this railing	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of the asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	

Railings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Railings field description	Allowed values
risk_likelihood	Character (1)	Y	U	Y	Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Most Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U	Y	Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U- Unknown
risk_date	Date				Date the risk value of this asset was last updated	
asset_owner	Character (3)			Y	Unique identifier of the asset owner	Looks up on asset_owner
post_count	Integer (2)		0		Number of posts supporting this rail	Between 0 and 99
post_material	Character (5)				Material of posts	Looks up on railing_material
post_condition	Character (1)	Y	U		The condition of this post	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
bridge_id	Integer (6)				Unique identifier of bridge	Looks up on br_bridge
retaining_wall_id	Integer (6)				Unique identifier for retaining wall	Looks up on retaining_wall
paint_system	Character (3)	Y			Paint system used	Looks up on br_paint_system
standard_rc	Integer (8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset or asset component	

Railings field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Railings field description	Allowed values
drc_value	Currency (12,2)				Depreciated replacement value of this asset or asset component	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)			Y	General comments	
post_notes	Character (255)				General comments on railing posts	
as_tip_note	Character (255)				General notes for the assessor when assessing this asset	
work_origin_id	Character (100)			Y	Associates the drainage inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project or development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: RETAINING WALL

Retaining wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Retaining wall field description	Allowed values
retaining_wall_id	Serial (8)	Y	G	Y	Unique identifier for retaining wall	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Start displacement from the road origin (in metres)	Between 0 and 999999
start_desc	Character (40)				Description of the start location	
end_m	Integer (6)			Y	End displacement from the road origin (in metres)	Between 1 and 999999 or is null
end_desc	Character (40)				Description of the end location	
ret_wall_type	Character (5)			Y	Retaining wall type	Looks up on ret_wall_type
quantity	Integer (5)	Y	1		The number of retaining walls at this displacement	Between 1 and 32000
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the start of the retaining wall	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the start of the retaining wall	Between 1,000,000 or 2,500,000 or is null
northing_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the end of the retaining wall	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the end of the retaining wall	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method_id
side	Character (1)	Y		Y	Side of the road where the retaining wall is located	C - Centre, L - Left, R - Right, U - Unknown
offset_kerb	Decimal (3,1)				Offset from the retaining wall to the nearest kerb	Between 0 and 200.0 or is null

Retaining wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Retaining wall field description	Allowed values
offset	Decimal (3,1)			Y	Offset of the retaining wall from the centreline	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)				Offset of the retaining wall from the left-hand side of the road	Between 0 and 200.0 or is null
offset_kerb_end	Decimal (3,1)				Offset of the nearest kerb from the end of the retaining wall	Between 0 and 200.0 or is null
offset_end	Decimal (3,1)				Offset of the centreline from the end of the retaining wall	Between 0 and 200.0 or is null
offset_lhs_end	Decimal (3,1)				Offset of the left-hand side of the road at the end of the retaining wall	Between 0 and 200.0 or is null
loc_house_start	Character (10)				Number of the house nearest to the start of the retaining wall	
loc_house_end	Character (10)				Number of the second house nearest to the start of the retaining wall	
length_m	Decimal (5,1)			Y	Length of the retaining wall (in metres)	Between 0 and 30000.0 or is null
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length (in metres)	Between -999999 and 999999 or is null
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
width	Decimal (5,1)				The width of the retaining wall	Between 0.0 and 30000 or is null
height_m_avg	Decimal (5,1)			Y	Average height of the retaining wall (in metres)	Between -30000.0 and 30000 or is null
height_m_min	Decimal (5,1)				Minimum height of the retaining wall (in metres)	Between -30000.0 and 30000 or is null
height_m_max	Decimal (5,1)				Maximum height of the retaining wall (in metres)	Between -30000.0 and 30000 or is null
area	Decimal (5,1)				Area covered by the retaining wall	Between 0.0 and 30000.0 or is null
overburden_avg	Integer (3)				Average angle of overburden for the retaining wall	Between -150 and 150 or is null

Retaining wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Retaining wall field description	Allowed values
overburden_min	Integer (3)				Minimum angle of overburden for the retaining wall	Between -150 and 150 or is null
overburden_max	Integer (3)				Maximum angle of overburden for the retaining wall	Between -150 and 150 or is null
lean_angle_avg	Integer (3)				Average lean angle for the retaining wall	Between -150 and 150 or is null
lean_angle_min	Integer (3)				Minimum lean angle for the retaining wall	Between -150 and 150 or is null
lean_angle_max	Integer (3)				Maximum lean angle for the retaining wall	Between -150 and 150 or is null
edge_offset_avg_a	Decimal (3,1)				Average offset to the edgeline of the retaining wall (above)	Between 0 and 200.0 or is null
edge_offset_min_a	Decimal (3,1)				Minimum offset to the edgeline of the retaining wall (above)	Between 0 and 200.0 or is null
edge_offset_max_a	Decimal (3,1)				Maximum offset to the edgeline of the retaining wall (above)	Between 0 and 200.0 or is null
edge_offset_avg_b	Decimal (3,1)				Average offset to the edgeline of the retaining wall (below)	Between 0 and 200.0 or is null
edge_offset_min_b	Decimal (3,1)				Minimum offset to the edgeline of the retaining wall (below)	Between 0 and 200.0 or is null
edge_offset_max_b	Decimal (3,1)				Maximum offset to the edgeline of the retaining wall (below)	Between 0 and 200.0 or is null
ms_material	Character (5)			Y	Retaining wall material	Looks up on ms_material
land_use_above	Character (50)				Land use above the retaining wall	
land_use_below	Character (50)				Land use below the retaining wall	
ret_wall_cat	Character (5)				Retaining wall category code	Looks up on ret_wall_cat
ret_wall_fnd	Character (5)				Retaining wall foundation code	Looks up on ret_wall_fnd
external_id	Character (10)				External identifier for this retaining wall outside of RAMM	

Retaining wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Retaining wall field description	Allowed values
constructed	Date	Y		Y	Date this retaining wall was constructed	
ru_life	Integer (3)				Remaining useful life of this asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		Condition of this retaining wall	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this retaining wall was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Most Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk value for this retaining wall	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value for this retaining wall was last updated	
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	

Retaining wall field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Retaining wall field description	Allowed values
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments	
as_tip_note	Character (255)				General notes for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or the organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (8)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (8)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: SHOULDER

Shoulder field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Shoulder field description	Allowed values
shoulder_id	Serial (8)	Y	G	Y	Unique identifier for the shoulder	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
carrway_start_m	Integer (6)	Y		Y	Start displacement from the road origin (in metres)	Looks up on carr_way
start_m	Integer (6)	Y		Y	Start displacement from the road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	End displacement from the road origin (in metres)	Between 1 and 999999 or is null
side	Character (1)	Y		Y	Side of the road the shoulder is situated	B - Both, L - Left, R - Right
offset	Decimal (3,1)				Offset of the shoulder from the centreline	Between 0 and 200.0 or is null
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate located at the start of the shoulder	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate located at the start of the shoulder	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate located at the end of the shoulder	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate located at the end of the shoulder	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when this GPS data was collected	
gps_by	Character (3)				The name of the organisation who collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
length_m	Integer (6)	Y		Y	Length of the shoulder (in metres)	Between 0 and 999999
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length	Between -999999 and 999999 or is null

Shoulder field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Shoulder field description	Allowed values
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
width	Decimal (1,1)			Y	Width of the shoulder (in metres to one decimal point)	Between 0.1 and 9.8 or is null
material	Character (5)			Y	Construction material of carriageway surface	Looks up on shoulder_material
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
maint_date	Date				Date the shoulder was last maintained	
maint_cycle	Character (3)				Maintenance cycle (in weeks)	Between 1 and 999 or is null
constructed	Date			Y	Date the shoulder was constructed	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		Condition of the shoulder asset	1 - Excellent, 2 - Good, 3 -Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of the asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U	Y	Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Most Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U	Y	Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk value of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown

Shoulder field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Shoulder field description	Allowed values
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the maxtrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments	
as_tip_note	Character (255)				General comments for assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: SIGN

Sign field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Sign field description	Allowed values
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
carrway_start_m	Integer (6)		G	Y	Start displacement from the road origin (in metres)	Looks up on carr_way
sign_id	Serial (8)	Y	G	Y	Unique identifier for this sign	
post_count	Integer (2)	Y	0	Y	Number of posts attached to this sign	Between 0 and 99
sign_group	Character (7)				The group that this sign is part of	Looks up on sign_group
sign_class	Character (3)	Y		Y	The classification of this sign	Looks up on sign_class
sign_type	Character (7)	Y		Y	The sign type code	Looks up on sign_type
location	Integer (6)			Y	Displacement from the road origin (in metres)	Between 0 and 999999 or is null
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the sign	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the sign	Between 1,000,000 and 2,500,000 or is null
gps_date	Date			Y	Date the GPS data was collected	
gps_by	Character (3)			Y	The name of the individual or organisation who collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method
side	Character (1)	Y		Y	Side of the carriageway the sign is situated	C - Centre, L - Left, R - Right, U - Unknown
offset_kerb	Decimal (3,1)				Offset from the nearest kerb to the sign	Between 0 and 200.0 or is null
offset	Decimal (3,1)			Y	Offset from the centreline to the sign	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)				Offset from the left-hand side of the road to the sign	Between 0 and 200.0 or is null
sign_angle	Integer (3)				Angle clockwise from road forward direction (in degrees)	Between 0 and 359 or is null

Sign field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Sign field description	Allowed values
quantity	Integer (5)	Y	1	Y	Number in section of this sign type (for multiple signs only)	Between 1 and 32000
indicating_dir	Character (1)	Y	N		Direction indicated by sign	A - Against, B - Both, F - For, L - Left, N - Not Applicable, R - Right, S - Side, U - Unknown
sign_owner	Character (2)			Y	The owner of the sign/post	Looks up on sign_owner
legend_note	Character (255)	Y		Y	Legend on the sign	
legend2_note	Character (255)			Y[C]	Legend on the reverse of the sign <i>[C] Only required when a reverse legend is present.</i>	
legend_material	Character (2)	Y		Y	The type of material used for the legend	Looks up on sign_material
legend_colour	Character (2)	Y		Y	The colour of the legend	Looks up on sign_colour
bground_material	Character (2)	Y		Y	The type of material used for the background	Looks up on sign_material
bground_colour	Character (2)	Y		Y	The colour of the background	Looks up on sign_colour
sign_substrate	Character (2)	Y			The sign substrate material	Looks up on sign_substrate
sign_width	Integer (6)			Y	The sign width (in millimetres)	Between 0 and 999999 or is null
sign_height	Integer (6)			Y	The sign height (in millimetres)	Between 0 and 999999 or is null
ground_height	Integer (6)				Height of the sign from the ground	Between 0 and 999999 or is null
frame	Character (1)	Y	N		Does the sign have a frame?	F - Framed, N - Not Framed, U - Unknown
install_date	Date	Y		Y	Date the sign was installed	
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)			Y	The reason this asset was replaced	Looks up on sig_replace_reason
replace_date	Date			Y	Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on sig_replace_reason

Sign field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Sign field description	Allowed values
other_road_id	Integer (6)				Road identification code of the other road	Looks up on roadnames
other_cway_start_m	Integer (6)				Start displacement of the other carriageway section (in metres)	Looks up on carr_way
other_side	Character (1)				Side of the other road the sign is located on	L - Left, R - Right, C - Centre, U - Unknown
other_location	Integer (6)				Start displacement of the sign on the other carriageway section (in metres)	Between 0 and 999999 or is null
loc_house_no	Character (10)				The number of the house located nearest to this sign	
loc_feature	Character (35)				General notes about any features located near this sign	
loc_house1	Integer (5)				House number for sign location (without unit numbers)	
photo_ref	Character (15)				Reference to the physical location of a photograph of this sign	
sign_number	Integer (6)				A user defined number for the sign	
batch_number	Character (10)				Number engraved on the back of the sign	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		Condition of the sign	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of the asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	

Sign field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Sign field description	Allowed values
risk_likelihood	Character (1)	Y	U	Y	Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U	Y	Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value was last updated	
prior_id	Integer (8)				Unique identifier of the prior asset situated at this location	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)			Y	Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset	
valuation_date	Date				Date of the last valuation of this asset	
general_note	Character (255)			T	General comments	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	

Sign field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Sign field description	Allowed values
work_origin_id	Character (100)			Y	Associates the drainage inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project or development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: STREET LIGHT – LIGHT

Streetlight - light field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - light field description	Allowed values
light_id	Serial (8)	Y	G	Y	Unique identifier for this light	
bracket_id	Integer (6)	Y		Y	Unique identifier for the bracket	Looks up on sl_bracket_type
owner	Character (2)			Y	Owner of the light or pole	Looks up on sl_owner
light_make	Character (4)			Y	The light manufacturers' make code	Looks up on sl_light_make
light_model	Character (4)			Y	The light manufacturers' model code	Looks up on sl_light_model
light_status	Character (4)	Y	N	Y	The installation status	N - New, R - Reconditioned, U - Unknown
light_tilt	Integer (3)			Y	Upcast angle (whole degrees where horizontal = 0)	Between 0 and 359 or is null
supply_point	Character (2)	Y			Type of supply point	Looks up on sl_supply_point
icp_group	Integer (2)			Y	ICP group code	Looks up on sl_icp_group
light_supply_point	Character (40)				Location of supply point for the light unit	
coating	Character (4)				Coating for the light	Looks up on sl_coating
light_colour	Character (30)				Colour temperature of the light (in Kelvins)	3000K (warm white), 4000K (neutral white), 5000K (cool white)
light_shade	Character (1)				Type of light shade (if installed)	Looks up on sl_light_shade
light_install_date	Date			Y	Installation date of light	
light_in_reason	Character (2)				The reason code why this asset is being replaced	Looks up on sl_replace_reason
light_in_contract_id	Integer (6)				The contract number for this work	
light_in_disp_id	Integer (6)				The unique number given to each call	
light_replace_date	Date			Y	Date this asset was replaced	
light_rep_reason	Character (2)				The reason code as to why this asset is being replaced	Looks up on sl_replace_reason

Streetlight - light field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - light field description	Allowed values
light_rep_cont_id	Integer (6)				The contract number for this work	
light_rep_disp_id	Integer (6)				The unique number given to each call	
light_notes	Character (40)				General comments about the light.	
gear_make	Character (4)			Y	Gear manufacturers' code	Looks up on sl_gear_make
gear_model	Character (4)			Y	The gear manufacturers' model code	Looks up on sl_gear_model
gear_status	Character (1)	Y	N		Installation status of the asset	N - New, R - Reconditioned, U - Unknown
ballast	Character (4)				Code for gear ballast	Looks up on sl_ballast
ignitor	Character (4)				Gear ignitor code	Looks up on sl_ignitor
capacitor	Character (4)				Gear capacitor code	Looks up on sl_capacitor
gear_install_date	Date			Y	Installation date of gear	
gear_in_reason	Character (2)				The reason code as to why this asset is being replaced	Looks up on sl_replace_reason
gear_in_cont_id	Integer (6)				The contract number for this work	
gear_in_disp_id	Integer (6)				The unique number given to each call	
gear_replace_date	Date				Date the gear was replaced	
gear_rep_reason	Character (2)				The reason code as to why this asset is being replaced	
gear_rep_cont_id	Integer (6)				The contract number for the replacement of the gear	Looks up on sl_replace_reason
gear_rep_disp_id	Integer (6)				The dispatch ID to replace this gear	
gear_notes	Character (40)				General comments about the gear	
lamp_make	Character (4)			Y	The lamp manufacturers' code	Looks up on sl_lamp_make
lamp_model	Character (4)			Y	The lamp manufacturers' model code	Looks up on sl_lamp_model
lamp_install_date	Date			Y	Installation date of lamp	
lamp_in_reason	Character (2)				The reason code why this asset is being replaced	Looks up on sl_replace_reason

Streetlight - light field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - light field description	Allowed values
lamp_in_cont_id	Integer (6)				The contract number for this work	
lamp_in_disp_id	Integer (6)				The unique number given to each call	
lamp_replace_date	Date			Y	Date the lamp was replaced	
lamp_rep_reason	Character (2)			Y	The reason code why this asset is being replaced	Looks up on sl_replace_reason
lamp_rep_cont_id	Integer (6)				The contract number for the replacement of the lamp	
lamp_rep_disp_id	Integer (6)				The dispatch ID to replace this lamp	
lamp_notes	Character (40)				General comments about the lamp.	
last_cleaned_dt	Date				Date the lens of the diffuser was last cleaned	
prior_id	Integer (8)				The unique identifier of the prior asset at the same location	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		Condition of the light/gear/lamp	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of the asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	

Streetlight - light field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - light field description	Allowed values
risk_consequence	Character (1)				Consequence of the asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U- Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected the data	Looks up on organisation
collect_date	Date				Date the data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: STREET LIGHT – POLE

Streetlight - pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - pole field description	Allowed values
pole_id	Serial (8)	Y	G	Y	Unique numeric identifier of pole	
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
carrway_start_m	Integer (6)			Y	Start displacement from the road origin (in metres)	Looks up on carr_way
location	Integer (6)				Displacement from the road origin (in metres)	Between 0 and 999999 or is null
offset_kerb	Decimal (3,1)				Offset from the nearest kerb of the pole (in metres)	Between 0 and 200.0 or is null
offset	Decimal (3,1)			Y	Offset from the centreline to the pole (in metres)	Between 0 and 200.0 or is null
offset_lhs	Decimal (3,1)		0		Distance from left hand side of carriageway to the pole (in metres)	Between 0 and 250.0 or is null
offset_side	Character (1)	Y		Y	Side of the road the pole is situated	C - Centre, L - Left, R - Right, U - Unknown
vertical_distance	Decimal (2,1)				Vertical distance from the left-hand side seal to pole base	Between -10 and 99.9 or is null
vertical_ind	Character (1)	Y	N		Is the vertical level an estimate or measure?	E - Estimate, M - Measured, N - Not Applicable
pole_material	Character (4)	Y		Y	Code for pole material	Looks up on sl_pole_material
pole_shape	Character (4)	Y		Y	Code for pole shape	Looks up on sl_pole_shape
pole_make	Character (4)			Y	Code for pole manufacturer	Looks up on sl_pole_make
pole_model	Character (4)				The model number or code of the pole	
pole_mount	Character (2)	Y		Y	Pole mounting type	Looks up on sl_pole_mount
pole_attach	Character (5)				Pole attachment code	Looks up on sl_pole_attach
max_base_dim	Integer (4)				Pole maximum dimension at base. Diameter if round or multi sided.	Between 0 and 9999 or is null
min_base_dim	Integer (4)				Pole minimum dimension at base (in millimetres)	Between 0 and 9999 or is null

Streetlight - pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - pole field description	Allowed values
pole_purpose	Character (1)	Y		Y	Main purpose of pole	Looks up on sl_pole_purpose
owner	Character (2)	Y	U	Y	Owner of the pole or light	Looks up on sl_owner
coating	Character (4)			Y	Coating applicable to pole	Looks up on sl_coating
pole_colour	Character (30)				The colour of the asset	
pole_status	Character (1)	Y	N	Y	Installation: New, Reconditioned or Unknown	N - New, R - Reconditioned, U - Unknown
install_date	Date			Y	Installation date of pole	
in_replace_reason	Character (2)			Y	The reason code why this asset is being replaced	Looks up on sl_replace_reason
in_contract_id	Integer (6)				The contract number for this work	
in_dispatch_id	Integer (6)				The unique number given to each call	
replace_date	Date			Y	The date this pole was replaced	
rep_replace_reason	Character (2)			Y	The reason code why this asset is being replaced	Looks up on sl_replace_reason
rep_contract_id	Integer (6)				The contract number for the replacement of this pole	
rep_dispatch_id	Integer (6)				The dispatch ID given to the replacement of this pole	
use_height	Decimal (2,1)				Estimated height of the highest point for mounting a light	Between 0 and 99.9 or is null
pole_in_use	Character (1)	Y	Y	Y	Is the pole being used for lighting?	Y - Yes, N - No, U - Unknown
pole_control	Character (1)	Y	U	Y	The light control mechanism for the pole	Looks up on sl_pole_control
lux	Integer (3)				Light illumination reading	Between 0 and 999 or is null
power_company	Character (2)			Y	The name of the power supply company	Looks up on sl_power_company
loc_house1	Integer (5)				Number of the first house adjacent to the pole	
loc_house1_a	Character (1)				Letter of the first house adjacent to the pole	

Streetlight - pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - pole field description	Allowed values
loc_house2	Integer (5)				Number of the second house adjacent to the pole (if near side boundary)	
loc_house2_a	Character (1)				Letter of the second house adjacent to the pole	
loc_feature	Character (35)				Closest feature adjacent to the pole	
loc_opp_house1	Integer (5)				Number of the first house opposite the pole	
loc_opp_house1_a	Character (1)				Letter of the first house opposite the pole	
loc_opp_house2	Integer (5)				Number of the second house opposite the pole (if near side boundary)	
loc_opp_house2_a	Character (1)				Letter of the second house opposite the pole	
loc_opp_feature	Character (35)				Closest feature opposite the pole	
other_road_id	Integer (6)				Road ID if the pole is on an intersection	Looks up on roadnames
other_cway_start_m	Integer (6)				Start displacement from the road origin for the other carriageway section (in metres)	Looks up on carr_way
other_side	Character (1)				The side of the other road the pole is located on	C - Centre, L - Left, R - Right, U - Unknown
other_location	Integer (6)				Displacement from the road origin (in metres)	Between 0 and 999999 or is null
power_board_no	Character (10)				Unique power company number (Power Co internal asset number)	
pole_no	Character (10)			Y	Pole number visible on the pole	
map_pole_id	Character (10)				Unique number which links this pole to the map pole ID	
ts_pole_id	Integer (6)				Traffic signal pole ID from the Traffic Signals data	Looks up on ts_pole
post_id	Integer (6)			Y	Unique identifier for this post	Looks up on sign_post
bulk_circuit	Character (5)				The bulk circuit the pole is part of	Looks up on sl_bulk_circuit
circuit_sequence	Integer (5)				The sequence number of the pole in the bulk change circuit	

Streetlight - pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - pole field description	Allowed values
light_last_tested	Date				The date the safety tests were last carried out on the assets	
guarantee_date	Date				The end date of the guarantee period	
northing	Integer (7)			Y	The NZ Transverse Mercator (NZTM) northing coordinate taken at the pole site.	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	The NZ Transverse Mercator (NZTM) easting coordinate taken at the pole site.	Between 1,000,000 and 3,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)			Y	The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique ID for the gps_method table	Looks up on gps_method
prior_id	Integer (8)				The unique identifier of the prior asset at the same location	
date_tightened	Date			Y	Date when the bolts were last tightened	
power_supply_id_1	Integer (6)				Primary power supply point	Looks up on sl_power_supply
power_supply_id_2	Integer (6)				Secondary power supply point	Looks up on sl_power_supply
supply_point_seq	Integer (2)				Sequence number for the pole from the primary supply point	
men_point	Character (1)	Y	U		Multiple earth neutral point	L - Local, R - Remote, U - Unknown
men_location	Character (50)				Description of the contact or location for a remote MEN point	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		The condition of this light pole	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown

Streetlight - pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - pole field description	Allowed values
condition_date	Date				Date the condition of this light pole was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				The date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of constructing or installing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments	
as_tip_note	Character (255)				General notes for the assessor when assessing the asset	
collect_name	Character (3)				Name of the person or organisation who collected this data	Looks up on organisation

Streetlight - pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - pole field description	Allowed values
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: STREET LIGHT – BRACKET

Streetlight - bracket field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - bracket field description	Allowed values
bracket_id	Serial (8)	Y	G	Y	Unique identifier for this bracket	
pole_id	Integer (6)	Y		Y	Unique numeric identifier of the pole	Looks up on sl_pole
bracket_type	Character (4)	Y		Y	Bracket type code	Looks up on sl_bracket_type
bracket_angle	Integer (3)	Y		Y	Angle clockwise from road forward direction (in degrees)	Between 0 and 359
bracket_height	Decimal (2,1)			Y	Height of the bracket from the base of the pole	Between 0 and 99.9 or is null
height_ind	Character (1)	Y		Y	Is the bracket height an estimate or measure?	E - Estimate, M - Measured, N - Not Applicable
outreach	Decimal (2,1)			Y	Outreach of bracket (in metres)	Between 0 and 99.9 or is null
coating	Character (4)				Coating for bracket	Looks up on sl_coating
bracket_colour	Character (30)				Colour of the bracket	
bracket_status	Character (1)	Y			Status of installation	N - New, R - Reconditioned, U - Unknown
install_date	Date			Y	Installation date of the bracket	
in_replace_reason	Character (2)			Y	The reason code why this asset was replaced	Looks up on sl_replace_reason
in_contract_id	Integer (6)				The contract number for this work	
in_dispatch_id	Integer (6)				The unique number given to each call	
replace_date	Date			Y	Date the bracket was replaced	
rep_replace_reason	Character (3)				The reason code why this asset was replaced	Looks up on sl_replace_reason
rep_contract_id	Integer (6)				The contract number for this work	
rep_dispatch_id	Integer (6)				The dispatch unique identifier to replace this bracket	

Streetlight - bracket field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - bracket field description	Allowed values
prior_id	Integer (8)				Unique identifier of the prior asset at this location	
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y			Condition of the bracket	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of the bracket was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	

Streetlight - bracket field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Streetlight - bracket field description	Allowed values
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of this asset	
valuation_date	Date				Date of the last valuation of the asset	
notes	Character (255)				General comments	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: STREET LIGHT - CMS

Streetlight – CMS field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
asset_id	Serial (8)	Y	G	Y	Unique identifier for the Central Management System (CMS) asset	
pole_id	Integer (6)				Unique numeric identifier of the pole	Looks up on sl_pole
light_id	Integer (6)	Y		Y	Unique numeric identifier of the light	Looks up on sl_light
central_management_system_type	Character (6)			Y	Type of central management system	Looks up on ud_central_mgmt_system_type
luminaire_controller_make	Character (5)			Y	Manufacturer code of the luminaire controller	Looks up on ud_luminaire_controller_make
luminaire_controller_model	Character (5)			Y	Model of the luminaire controller	Looks up on ud_luminaire_controller_md1
luminaire_adaptive_group	Character (5)			Y[C]	Adaptive control group of the luminaire controller <i>[C] Only required if luminaire is adaptively controlled</i>	Looks up on ud_luminaire_adaptive_cntrl
luminaire_adaptive_pgm	Character (5)			Y[C]	Adaptive control programme of the luminaire controller <i>[C] Only required if luminaire adaptive control group is populated</i>	Looks up on ud_luminaire_adaptive_pgm
luminaire_controller_wattage	Integer (6)			Y	Actual wattage of the luminaire controller (in watts)	
asset_owner	Character (3)			T	Owner of the central management system	Looks up on asset_owner
luminaire_controller_owner	Character (3)			T	Owner of the luminaire controller	Looks up on organisation
install_date	Date			Y	Date the luminaire was installed	
notes	Character (255)				General comments	
added_on	Date		today	Y	Date this row was added	

Streetlight – CMS field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: STREET LIGHT – LED LUMINAIRE

Streetlight – LED Luminaire field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
asset_id	Serial (8)	Y	G	Y	Unique identifier for this LED luminaire	
pole_id	Integer (6)				Unique numeric identifier of the pole	Looks up on sl_pole
light_id	Integer (6)	Y		Y	Unique numeric identifier of the light	Looks up on sl_light
optic_code	Character (6)			Y	Code of the LED optic	Looks up on ud_led_optic_code
optic_application	Character (5000)			Y	Application of the optic <i>This field is automatically populated from LED optic code</i>	
m30_mass_range	Character (30)			Y	Mass range of luminaire (in kg) as detailed in M30 Specification: Accepted Luminaires <i>This field is automatically populated from make and model</i>	
actual_mass	Integer (6)			Y[C]	Actual mass of luminaire (in kg) <i>[C] Only required if luminaire model has a mass range</i>	
maximum_system_wattage	Integer (6)				Maximum system wattage (in watts)	
rated_led_power_wattage	Integer (6)				Rated power wattage of the LED luminaire	
luminaire_efficiency	Integer (6)				Measure of how well a light source produces visible light. Ratio of luminous flux to power measured in lumens per watt (lm/w).	
actual_output_wattage	Integer (6)			Y	Actual output wattage of the luminaire	
nominal_colour_temperature	Character (5)			Y	Nominal colour temperature of the luminaire (in Kelvins). <i>This field is automatically populated from make and model</i>	

Streetlight – LED Luminaire field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
actual_colour_temperature	Integer			Y	Actual colour temperature of the luminaire (in Kelvins)	
installation_tilt	Integer (2)			Y	Tilt of the luminaire at time of installation	
tilt_control	Character (5)				Tilt control of the luminaire	Looks up on ud_tilt_control
adaptive_control	Boolean (1)		N		Are lighting schedulers and occupant sensors to reduce LED wastage in use?	
percentage_adaptive_control	Integer (3)		0	Y [C]	Percentage of the luminaire that is adaptively controlled. <i>[C] Actual value must be entered if luminaire is adaptively controlled</i>	
connect_to_cms	Boolean (1)		N	Y	Is the luminaire connected to a Central Management System (CMS)?	
category	Character (5)				Category of the luminaire	Looks up on ud_led_category
led_chip	Character (5)				Type of LED chip in luminaire	Looks up on ud_led_chip
load_type	Character (3)				Is the load metered or unmetered?	Looks up on ud_led_load_type
luminaire_make	Character (5)			Y	Manufacturer code of the luminaire	Looks up on ud_led_make
luminaire_model	Character (5)			Y	Model of the luminaire	Looks up on ud_led_model
luminaire_supplier	Character (5)			Y	Supplier of the luminaire <i>This field is automatically populated from make and model</i>	
lumens	Integer (6)				Total lumens of the luminaire	
led_driver_make	Character (5)			Y [C]	Manufacturer code of the LED driver <i>[C] Only required if LED has a driver</i>	Looks up on ud_led_driver_make
led_driver_model	Character (5)			Y [C]	Model of the LED driver <i>[C] Only required if LED has a driver</i>	Looks up on ud_led_driver_model

Streetlight – LED Luminaire field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
led_driver_current	Integer (6)			Y [C]	Current of the LED driver (in milliamps) [C] Only required if LED has a driver	
photocell	Boolean (1)		N	Y	Is there a photocell or daylight sensor present?	
luminaire_interface_socket	Character (3)				Type of Luminaire Interface Socket used for adaptive control	Looks up on ud_interface_socket
adaptive_control_interface	Character (5)				System used for adaptive control	Looks up on ud_adaptive_cntrl_interface
number_of_leds	Integer (6)				Number of light engines present in the luminaire	
power_factor	Integer (6)				The ratio of real power (wattage used by the load) to apparent power (voltage drawn into the circuit).	
install_date	Date			Y	Date the luminaire was installed	
notes	Character (255)				General comments	
asset_owner	Character (3)			Y	Owner of the LED luminaire asset	Looks up on asset_owner
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_ledl
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)			Y	The reason this asset was replaced	Looks up on replace_reason
replace_date	Date			Y	Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch

Streetlight – LED Luminaire field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: SURFACE WATER CHANNEL

Surface water channel field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surface water channel field description	Allowed values
road_id	Integer (6)	Y		Y	RAMM Road ID	Looks up on roadnames
start_m	Integer (6)	Y		Y	Start displacement from road origin (in metres)	Between 0 and 999999
end_m	Integer (6)	Y		Y	End displacement from road origin (in metres)	Between 1 and 999999
side	Character (1)	Y		Y	Side of the road the asset is located	R - Right, L - Left, B - Both
northing	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate taken at the start of the surface water channel	Between 4,500,000 and 6,000,000 or is null
easting	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate taken at the start of the surface water channel	Between 1,000,000 and 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate taken at the end of the surface water channel	Between 4,500,000 and 6,000,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate taken at the end of the surface water channel	Between 1,000,000 and 2,500,000 or is null
gps_date	Date				Date when the GPS was collected	
gps_by	Character (3)				The organisation who collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method
length_m	Integer (6)	Y		Y	Length of surface water channel (in metres)	Between 0 and 999999
length_adjust_m	Integer (6)			Y [C]	Adjusted length above or below the calculated length. <i>[C] only when the length of the channel is greater than end_m minus start_m</i>	Between 0 and 999999 or is null

Surface water channel field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surface water channel field description	Allowed values
len_adjust_rsn	Character (5)			Y [C]	Reason for adjusting the calculated length of the asset. <i>[C] only when the length_adjust_m is populated</i>	Looks up on len_adjust_rsn
seal_dist	Decimal (2,1)			Y	Distance from seal edge to invert of earth channel	Between 0 and 20.0 or is null
offset	Decimal (3,1)			Y	Offset from the centreline to the surface water channel (in metres)	Between 0 and 200.0 or is null
swc_type	Character (5)	Y		Y	Surface Water Channel type	Looks up on swc_type
maint_date	Date				Date this asset was last maintained	
maint_cycle	Integer (3)				Maintenance cycle in weeks	Between 1 and 999 or is null
constructed	Date	Y		Y	The date this surface water channel was constructed	
work_origin_id	Character (100)			Y	Associates the surface water channel inventory records with the National Land Transport Programme (NLTP) Activity Classes and Work Categories. Recording the Work Origin indicates the activity performed (renewal, maintenance, capital project and development, for example).	Looks up on fund_work_origin
work_category	Integer (3)		G	Y	The National Land Transport Programme (NLTP) work categories	Looks up on fund_work_origin
ru_life	Integer (3)				Remaining useful life of the asset	
rul_reset	Character (1)	Y	N		Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		Condition of this surface water channel asset	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown

Surface water channel field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surface water channel field description	Allowed values
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U	Y	Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U	Y	Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
asset_owner	Character (3)			Y	Unique identifier for the asset owner	Looks up on asset_owner
sw_channel_id	Serial (8)	Y	G	Y	Unique identifier for the surface water channel table	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	

Surface water channel field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Surface water channel field description	Allowed values
notes	Character (255)			Y [C]	General comments. <i>[C] only required when additional clarification is useful</i>	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	Date this row was added	
added_by	Character (20)			Y	The login name of the individual or organisation who added this row	Looks up on staff
chgd_on	Date			Y	Date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual or organisation who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL - CONTROLLER

Traffic signal controller field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
controller_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal controller	Looks up on ts_controller
road_id	Integer (6)	Y	G	Y	RAMM road id	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement from road origin (in metres)	Between 0 and 999999
offset	Decimal (3,1)			Y	Distance from the road centreline to the drain (in metres)	Between 0 and 200.0 or is null
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the start of the traffic signal asset	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the start of the traffic signal asset	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method_id
location_note	Character (250)				Description of the communications device's location	
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason

Traffic signal controller field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)				Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_controller
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
cntl_group	Integer (6)			Y	The number of groups this controller can manage	
cntl_make	Character (20)			Y	Controller manufacturer code	Looks up on ts_cntlr_make
cntl_model	Character (20)			Y	Controller model code	Looks up on ts_cntlr_model
vp_type	Character (20)	Y		Y	Type of vehicle pre-emption installed in this controller	

Traffic signal controller field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
telecom_dp_number	Character (20)				Telecom DP number for this controller	
key_model	Character (20)				Model of key used with this controller	
power_company	Character (20)			Y	Power company code	Looks up on ts_power_company
line_company	Character (20)			Y	Line company code	Looks up on ts_line_company
router_make	Character (5)				Router manufacturer code	JUN - Juniper, ALTEL - Allied Telesis, CISCO - Cisco, MOXA - Moxa
router_model	Character (5)				Router model code	AR440 - AR440S, C887 - C887, C819 - C819, SRX11 - SRX110H2-VA, NPORT - Nport
icp_group	Character (20)			Y	Unique identifier for the traffic signal ICP group	Looks up on ts_icp_group
power_meter_no	Character (20)			Y [C]	Power meter number [C] Only when power meter is present.	
last_tested_date	Date				Date this traffic signal group was last tested	
line_type	Character (5)				Type of data transmitted by the lines company	1 - ADSL, 2 - VDSL, 3 - Fibre Optic, 4 - Cellular
guarantee_date	Date				End date for the guarantee period for this asset	

Traffic signal controller field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset Please note this field should be updated every 12 months.	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc

Traffic signal controller field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff

Traffic signal controller field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – COMMUNICATIONS DEVICE

Traffic signal communications device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
comm_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal communications device	
controller_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal controller	Looks up on ts_controller
road_id	Integer (6)	Y	G	Y	RAMM road id	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement from road origin (in metres)	Between 0 and 999999
offset	Decimal (3,1)			Y	Distance from the road centreline to the drain (in metres)	Between 0 and 200.0 or is null
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the start of the traffic signal asset	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the start of the traffic signal asset	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method_id
location_note	Character (250)				Description of the communications device's location	
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	

Traffic signal communications device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_comms
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
comm_make	Character (20)			Y	Communications device manufacturer	Looks up on ts_comms_make
comm_model	Character (20)			Y	Communications device model	Looks up on ts_comms_model
guarantee_date	Date				End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero

Traffic signal communications device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	

Traffic signal communications device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – LOGIC RACK

Traffic signal logic rack field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
rack_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal logic rack	
controller_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal controller to which this lantern is attached	Looks up on ts_controller
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_logic_rack
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
rack_make	Character (20)			Y	Logic rack's manufacturer code	Looks up on ts_rack_make
rack_model	Character (20)			Y	Logic rack's model code	Looks up on ts_rack_model
software_version	Character (20)			Y	Version of the software installed in the controller	
guarantee_date	Date				End date for the guarantee period for this asset	

Traffic signal logic rack field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	

Traffic signal logic rack field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – DETECTION DEVICE

Traffic signal detection device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
loop_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal detector loop	
detector_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal detector card	Looks up on ts_detector
loop_no	Integer (2)			Y	Number of the loop	Between 1 and 99
disp_from_stop	Integer (6)				Distance from the stop line to the location of the loop	Between 1 and 999999
road_id	Integer (6)			Y	RAMM road ID	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement from road origin (in metres)	Between 0 and 999999
offset	Decimal (3,1)			Y	Distance from the road centreline to the drain (in metres)	Between 0 and 200.0 or is null
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the start traffic signal asset	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the start of the traffic signal asset	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method_id
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	

Traffic signal detection device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_loop
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
loop_type	Character (20)			Y	Detector loop type code	Looks up on ts_loop_type
loop_make	Character (20)			Y	Detector loop manufacturer code	Looks up on ts_loop_make
loop_model	Character (20)			Y	Detector loop model code	Looks up on ts_loop_model
loop_mat	Character (20)				Detector loop material code	Looks up on ts_loop_mat

Traffic signal detection device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
guarantee_date	Date				End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc

Traffic signal detection device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	

Traffic signal detection device field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – DETECTOR CARD

Traffic signal detector card field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
detector_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal detector card	
controller_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal controller	Looks up on ts_controller
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_detector
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
detector_make	Character (20)			Y	Detector card manufacturer code	Looks up on ts_detector_make
detector_model	Character (20)			Y	Detector card model code	Looks up on ts_detector_model
guarantee_date	Date				End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	

Traffic signal detector card field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation

Traffic signal detector card field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – POLE

Traffic signal pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
ts_pole_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pole	
controller_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal controller	Looks up on ts_controller
pole_no	Integer (2)	Y		Y	Unique pole number within the intersection	Between 1 and 99
intersection_id	Integer (6)			Y	Unique identifier for the road intersection	Looks up on intersection
road_id	Integer (6)	Y		Y	RAMM road ID	Looks up on roadnames
location	Integer (6)	Y		Y	Displacement from road origin (in metres)	Between 0 and 999999
offset	Decimal (3,1)			Y	Distance from the road centreline to the drain (in metres)	Between 0 and 200.0 or is null
side	Character (1)	Y		Y	Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate at the start of the traffic signal asset	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate at the start of the traffic signal asset	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)				Unique identifier for the gps_method table	Looks up on gps_method_id
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract

Traffic signal pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_pole
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
pole_make	Character (20)			Y	Pole manufacturer code	Looks up on ts_pole_make
pole_type	Character (20)			Y	Pole type code	Looks up on ts_pole_type
pole_mount	Character (20)			Y	Pole mounting type code	Looks up on ts_pole_mount
guarantee_date	Date				End date for the guarantee period for this asset	
pole_id	Integer (6)				Unique identifier for the street light pole	Looks up on sl_pole
post_id	Integer (6)				Unique identifier for the signpost	Looks up on sign_post
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	

Traffic signal pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	

Traffic signal pole field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – TARGET BOARD

Traffic signal target board field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
board_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal target board	
ts_pole_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pole to which this target board is attached	Looks up on ts_pole
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_date	Date				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_board
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
board_type	Character (20)			Y	Target board type	Looks up on ts_board_type
board_mat	Character (20)			Y	Target board material code	Looks up on ts_board_mat
number_aspects	Integer (6)			Y	Number of aspects in this target board	Between 1 and 20

Traffic signal target board field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
lens_size	Character (20)			Y	Size of the lenses in this lantern	100 - 100mm, 200 - 200mm, 300 - 300mm
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	

Traffic signal target board field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – LANTERN

Traffic signal lantern field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
lantern_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal lantern	
ts_pole_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pole to which this lantern is attached	Looks up on ts_pole
board_id	Integer (6)			Y	Unique identifier for the traffic signal target board to which this lantern is attached	Looks up on ts_board
lantern_no	Integer (6)			Y	Unique number for the lantern within the pole	
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_lantern
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
lantern_type	Character (20)			Y	Lantern type code	Looks up on ts_lantern_type
lantern_make	Character (20)			Y	Lantern manufacturer code	Looks up on ts_lantern_make
lantern_mat	Character (20)			Y	Lantern material code	Looks up on ts_lantern_mat

Traffic signal lantern field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
number_aspects	Integer (6)			Y	Number of aspects in the lantern	Between 1 and 20
lamp_type	Character (20)			Y	Lamp type code	Looks up on ts_lamp_type
lamp_wattage_1	Integer (6)				Wattage allowed for this lamp type	Looks up on ts_lamp_type_watt
lamp_wattage_2	Integer (6)				Wattage allowed for this lamp type	Looks up on ts_lamp_type_watt
lamp_wattage_3	Integer (6)				Wattage allowed for this lamp type	Looks up on ts_lamp_type_watt
lamp_wattage_4	Integer (6)				Wattage allowed for this lamp type	Looks up on ts_lamp_type_watt
total_wattage	Integer (6)				Total wattage of traffic signal lantern	
display_type	Character (20)			Y	Lantern display type code	Looks up on ts_display_type
lens_size	Character (20)			Y	Size of the lenses in this lantern	100 - 100mm, 200 - 200m, 300 - 300mm
ts_aspect_colour	Character (3)			Y	Colour of the aspect in this lantern	1 - Red, 2 - Amber, 3 - Green, 4 - White, 5 - Black
guarantee_date	Date				End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset Please note this field should be updated every 12 months.	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	

Traffic signal lantern field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – PEDESTRIAN CALL BOX

Traffic signal pedestrian call box field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
callbox_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pedestrian call box	
ts_pole_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pole to which this call box is attached	Looks up on ts_pole
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_call_box
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
callbox_type	Character (20)			Y	Pedestrian call box type	Looks up on ts_callbox_type
callbox_make	Character (20)			Y	Pedestrian call box manufacturer	Looks up on ts_callbox_make
callbox_model	Character (20)			Y	Pedestrian call box model	Looks up on ts_callbox_model

Traffic signal pedestrian call box field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
guarantee_date	Date				End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	

Traffic signal pedestrian call box field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – CABLING

Traffic signal cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
cable_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal cabling	
controller_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal controller cabinet	Looks up on ts_controller
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
end_1_cpnt	Integer (6)	Y	G		Type of component at end 1 of the cable	
end_1_cpnt_id	Integer (6)				Unique identifier for the controller or pole at end 1 of the cable	Looks up on ts_controller or ts_pole
end_2_pole_id	Integer (6)				Unique identifier for the pole attached at end 2 of the cable	Looks up on ts_pole
install_date	Date			Y	Installation date of the asset	
in_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_cabling
replace_date	Date				Replacement date of the asset	

Traffic signal cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
cable_make	Character (20)				Code for the cabling manufacturer	Looks up on ts_cable_make
cable_model	Character (20)				Model of the cabling asset	Looks up on ts_cable_model
number_cores	Character (5)			Y	Number of cores in the cable	7C - 7 Core, 12C - 12 Core, 19C - 19 Core, 36C - 36 Core
duct_type	Character (20)			Y [C]	Ducting type code <i>[C] Only when ducting is present</i>	Looks up on ts_duct_type
duct_make	Character (20)			Y [C]	Ducting manufacturer code <i>[C] Only when ducting is present.</i>	Looks up on ts_duct_make
duct_model	Character (20)			Y [C]	Model of ducting asset <i>[C] Only when ducting is present.</i>	Looks up on ts_duct_model
duct_mat	Character (20)			Y [C]	Material of ducting asset <i>[C] Only when ducting is present.</i>	Looks up on ts_duct_mat
duct_colour	Character (20)				Colour of duct	Looks up on ts_duct_colour
depth_of_cover	Integer (6)			Y [C]	Depth of cover over the ducting <i>[C] Only when ducting is present</i>	Between 0 and 9.9
endbox_connection	Character (3)			Y	Is a pole terminal attached to the cabling asset?	YES - Yes, NO - No

Traffic signal cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
endbox_type	Character (20)			Y [C]	Cabling pole terminal type <i>[C] Only required if endbox_connection = YES</i>	Looks up on ts_endbox_type
endbox_make	Character (20)			Y [C]	Cabling pole terminal manufacturer <i>[C] Only required if endbox_connection = YES</i>	Looks up on ts_endbox_make
endbox_model	Character (20)			Y [C]	Cabling pole terminal model <i>[C] Only required if endbox_connection = YES</i>	Looks up on ts_endbox_model
endbox_mat	Character (20)			Y [C]	Cabling pole terminal material <i>[C] Only required if endbox_connection = YES</i>	Looks up on ts_endbox_mat
guarantee_date	Date				End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
rul_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	

Traffic signal cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation

Traffic signal cabling field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: TRAFFIC SIGNAL – ATTACHMENT

Traffic signal attachment field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
attach_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pole attachment	
ts_pole_id	Integer (6)	Y	G	Y	Unique identifier for the traffic signal pole to which this attachment is attached	Looks up on ts_pole
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
install_date	Date			Y	Installation date of the asset	
in_replace_date	Date				Reason the asset was replaced	Looks up on ts_replace_reason
in_contract_id	Integer (6)				Unique identifier for the installation contract	Looks up on mt_contract
in_dispatch_id	Integer (6)				Unique identifier for the installation dispatch	Looks up on mt_dispatch
install_company	Character (20)			Y	Organisation that installed the asset	Looks up on ts_install_company
prior_id	Integer (6)				Unique identifier for inventory assets where replacement records are maintained	Looks up on ts_attach
replace_date	Date				Replacement date of the asset	
rep_replace_reason	Character (250)				Reason the asset was replaced	Looks up on ts_replace_reason
rep_contract_id	Integer (6)				Unique identifier for replacement contract	Looks up on mt_contract
rep_dispatch_id	Integer (6)				Unique identifier for the replacement dispatch	Looks up on mt_dispatch
attach_type	Character (20)			Y	Pole attachment type	Looks up on ts_attach_type
attach_make	Character (20)			Y	Pole attachment manufacturer code	Looks up on ts_attach_make
attach_model	Character (20)			Y	Pole attachment model	Looks up on ts_attach_model
guarantee_date	Date			Y	End date for the guarantee period for this asset	
ru_life	Integer (6)				Remaining useful life of the asset	
ru_reset	Character (1)				Has the RUL been reset from below zero to equal zero?	N - Not Reset, R - Reset to Zero

Traffic signal attachment field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U	Y	Condition of this traffic signal asset <i>Please note this field should be updated every 12 months.</i>	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	
likelihood_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_likelihood	Character (1)	Y	U		Likelihood of this asset failing	1 - Rare, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Almost Certain, U - Unknown
consequence_wt	Decimal (5,3)				Calculated weighting from assessment	
risk_consequence	Character (1)	Y	U		Consequence of this asset failing	1 - Insignificant, 2 - Minor, 3 - Moderate, 4 - High, 5 - Extreme, U - Unknown
risk	Character (1)	Y	U		The risk of this asset failing	1 - Very Low, 2 - Low, 3 - Medium, 4 - High, 5 - Extreme, U - Unknown
risk_date	Date				Date the risk value of this asset was last updated	
standard_rc	Integer (8)				Unique identifier for the standard RC definition	Looks up on av_standard_rc
use_default_rc	Character (1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D - Default, U - User
original_cost	Currency (12,2)				Original cost of installing or constructing this asset	
rc_value	Currency (12,2)				Replacement cost of this asset	
drc_value	Currency (12,2)				Depreciated replacement cost of this asset	
annual_drc_value	Currency (12,2)				Annual depreciation of the asset	
valuation_date	Date				Date of the last valuation of this asset	
notes	Character (255)				General comments.	
as_tip_note	Character (255)				General comments for the assessor when assessing this asset	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation

Traffic signal attachment field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Description	Allowed values
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: VEGETATION

Vegetation field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Vegetation field description	Allowed values
asset_id	Integer (6)	Y	G	Y	Unique identifier for the vegetation	
carriageway_id	Integer (6)				Carriageway the vegetation is situated	Looks up on carriageway section
road_id	Integer (6)				RAMM road ID	Looks up on roadnames
object_id	Integer (6)			Y	Unique identifier for the shapefile	
location	Integer (6)				Displacement to the centroid of the vegetated area (in metres)	Between 0 and 999999
offset	Decimal (3,1)				Distance from the road centreline to the centroid of the vegetated area	Between 0 and 200.0 or is null
offset_end	Decimal (3,1)				Distance from the road centreline to the centroid of the vegetated area	Between 0 and 200.0 or is null
side	Character (1)				Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
start_m	Integer (6)				Start Displacement of the vegetated area (in metres)	Between 0 and 999999
end_m	Integer (6)				End Displacement of the vegetated area (in metres)	Between 0 and 999999
length_m	Integer (6)				Length of the vegetated area along the carriageway (in metres)	Between 0 and 999999
length_adjust_m	Integer (6)				Adjusted length above or below the calculated length.	Between 0 and 999999 or is null
len_adjust_rsn	Character (5)				Reason for adjusting the calculated length of the asset.	Looks up on len_adjust_rsn
area	Integer (6)				Area of vegetation (in m ²)	Between 0 and 999999
extra_area	Integer (6)				Extra area of the vegetated area not calculated in area (in m ²)	Between 1 and 999999 or is null
total_area	Integer (6)				Total area of the vegetation (in m ²)	Between 0 and 999999
width	Decimal (5,1)				The width of the retaining wall	Between 0.0 and 999999 or is null

Vegetation field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Vegetation field description	Allowed values
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate (taken at centroid of vegetated area)	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate (taken at centroid of vegetated area)	Between 1,000,000 or 2,500,000 or is null
northing_end	Integer (7)				NZ Transverse Mercator (NZTM) northing coordinate (taken at centroid of vegetated area)	Between 4,000,000 and 6,500,000 or is null
easting_end	Integer (7)				NZ Transverse Mercator (NZTM) easting coordinate (taken at centroid of vegetated area)	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)			Y	The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method_id
maintained_by	Character (6)			Y	The organisation responsible for maintenance of the asset	Looks up on ud_maintained_by
local_authority	Character (3)			Y	Name of the local authority whose jurisdiction the vegetation is situated within	Looks up on road_council
vege_type	Character (5)			Y	Type of vegetation	Looks up on ud_vegetation_type
vege_zone	Character (6)			Y	Is the vegetation situated in grassland, planting or hard landscape zone?	Looks up on ud_vege_zone_type
landscape_zone	Character (6)			Y	Landscape zone type	Looks up on ud_landscape_zone
spatial_categorisation	Character (6)			Y	Type of vegetation that dominates the vegetation zone.	Looks up on ud_spatial_categorisation
weed_status	Character (5)			Y	Status of pest plants, weeds and/or exotic nuisance trees	Looks up on ud_pest_plants
healthy_vegetation	Character (5)			Y	Are the plants healthy and thriving or are they wilted/fading/dying?	Looks up on ud_healthy_vegetation
customer_aesthetic	Character (5)			Y	How does the landscape look/feel/appeal to the customer?	Looks up on ud_customer_aesthetic

Vegetation field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Vegetation field description	Allowed values
biodiversity	Character (5)			Y	Does the vegetated area have high ecological value and/or supports biodiversity?	Looks up on ud_biodiversity
site_name	Character (60)				Name of the site of the vegetation	For example, specially landscaped area
PMP_area	Character (254)			Y [C]	Name of the plant management area (PMP) as defined by resource consent <i>[C] Only required when consent is required</i>	
site_group	Character (254)			Y [C]	Groups of plant management areas (PMP) <i>[C] Only required when PMP_area is mandatory.</i>	
ttm_risk	Character (60)			Y [C]	Areas where temporary traffic management is required for maintenance and operations. <i>[C] Only required when TTM is required</i>	For example, 2m buffer behind barrier or 5m behind edge line where no barrier present.
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
maintenance_activity	Character (5)			Y	Type of maintenance activity required	Looks up on ud_maintenance_activity
management_function	Character (5)			Y	Type of management process used in vegetated area	Looks up on ud_management_function
corridor_safety	Character (5)			Y	Is the corridor landscape safe for customers and network operators?	Looks up on ud_corridor_safety
state_of_ground	Character (5)			Y	What is the ground condition within the landscaped area?	Looks up on ud_state_of_ground
consent	Character(30)			Y [C]	Details of any resource consents that the landscaped area falls under. <i>[C] Only required when a consent is in place</i>	
planting_date	Date			Y	Planting date of the asset	
notes	Character (255)				General comments.	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	

Vegetation field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Vegetation field description	Allowed values
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

TABLE: WEIGH FACILITY

Weigh facility field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Weigh facility field description	Allowed values
asset_id	Integer (6)	Y	G	Y	Unique identifier for the weigh facility	
carriageway_id	Integer (6)				Carriageway the vegetation is situated	Looks up on carriageway section
road_id	Integer (6)				RAMM road ID	Looks up on roadnames
location	Integer (6)				Displacement of the weigh facility (in metres)	Between 0 and 999999
loc_desc	Character (60)				Description of the weigh facility location	
side	Character (1)				Side of the carriageway of which feature is located	L - Left, R - Right, C - Centre, B - Both, N - Not Applicable
northing	Integer (7)			Y	NZ Transverse Mercator (NZTM) northing coordinate of weigh facility	Between 4,000,000 and 6,500,000 or is null
easting	Integer (7)			Y	NZ Transverse Mercator (NZTM) easting coordinate of weigh facility	Between 1,000,000 or 2,500,000 or is null
gps_date	Date			Y	Date when the GPS was collected	
gps_by	Character (3)			Y	The organisation that collected the GPS data	Looks up on organisation
gps_method_id	Integer (5)			Y	Unique identifier for the gps_method table	Looks up on gps_method_id
type	Character (5)	Y		Y	Type of weigh facility	Looks up on ud_weigh_facility_type
asset_owner	Character (20)			Y	The organisation who owns or is responsible for the asset	Looks up on organisation
construct_date	Date			Y	Construction date of the asset	
ru_life	Integer (3)				Remaining useful life of the asset	
condition_wt	Decimal (5,3)				Calculated weighting from assessment	
condition	Character (1)	Y	U		Condition of this vegetation asset	1 - Excellent, 2 - Good, 3 - Average, 4 - Poor, 5 - Very Poor, U - Unknown
condition_date	Date				Date the condition of this asset was established	

Weigh facility field name	Field type	Required by software	Generated value	Required by Waka Kotahi	Weigh facility field description	Allowed values
prior_id	Serial (8)				Prior ID of the asset before it was replaced	Looks up on ud_noise_wall
in_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
in_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
in_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
replace_date	Date				Date the asset was replaced	
rep_contract_id	Integer (6)				The contract number for this work	Looks up on mt_contract
rep_dispatch_id	Integer (6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	Character (2)				The reason this asset was replaced	Looks up on replace_reason
notes	Character (255)				General comments.	
external_id	Character (10)				Unique identifier of this asset in an external database	
collect_name	Character (3)				Name of the individual or organisation who collected this data	Looks up on organisation
collect_date	Date				Date this data was collected	
added_on	Date		today	Y	The date this row was added	
added_by	Character (20)			Y	The login name of the Individual who added this row	Looks up on staff
chgd_on	Date			Y	The date this row was last changed	
chgd_by	Character (20)			Y	The login name of the individual who last changed this row	Looks up on staff

