

APPENDIX 3

ASSET REGISTER

Purpose	This appendix outlines NZ Transport Agency's (NZTA) asset register used to describe the various elements of the road corridor.
Ownership and updating	<p>CJN Technologies 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.</p> <p>The Asset Management team, NZTA National Office, maintains the "Required by NZTA" field. Refer to the Asset Information Engineer, Highways and Network Operations Group, NZTA National Office for any proposed modifications.</p>
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.

Appendix 3: Asset Register

Table: roadnames

Description: Road Name Table - Road names

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	iteger(6)	Y	G	T	Road identification code	
sh_ne_unique	char(20)		G	T	Highways Unique Road Element Code	
road_name	char(35)	Y		T	Name of the road	
suburb	char(25)				The name of the suburb	
town	char(30)			T	The name of the town	
postal_code	smallint(4)				The postal code	
sh_state_hway	char(3)			T	State Highway Number e.g. 01N	
sh_element_type	char(3)			T	Road Element Type (RSL, RMP, RND)	RSL RS Length, RMP Ramp RND Roundabout
sh_ref_station_no	smallint(4)			T	Reference Station Number e.g. 0014	Looks up on reference_station
sh_rp_km	decimal(4,2)			T	Displacement in km along RSL to Road Element	
sh_direction	char(1)			T	The Direction of Traffic Flow (B/I/D)	I Increasing D Decreasing B Both
sh_common	char(3)			T	State Highway Number of common SH e.g. 01N - if applicable	
sh_int_rnd_no	smallint(4)			T	Interchange or Roundabout Number - if applicable	
sh_ramp_no	smallint(2)			T	Ramp number 1, 2, 3, etc.	
sh_ramp_type	char(3)			T	The Type of Ramp. (ON/OFF)	OFF Offramp ON Onramp
sh_ramp_hier	char(1)			T	Ramp Hierarchy (1,2,3) - if applicable	1 Primary 2 Secondary 3 Tertiary
external_name	char(35)			T	The Local Name	
external_id	char(10)				An external ID reference number	
road_region	smallint(2)			T	The Territorial Region code	Looks up on road_region
road_council	smallint(2)			T	Local Authority identifier	Looks up on road_council
road_type	char(1)	Y		T	Road Type	Looks up on road_type
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the consultant who added this row	
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the consultant who last changed this row	

Appendix 3: Asset Register

Table: carr_way

Description: Carriageway Table - Dimensional & General Information

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
carr_way_no	serial(8)	Y	G	T	The unique carriageway serial number	
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
carrway_start_m	integer(5)	Y		T	Start displacement in metres from the road origin	between 0 and 99999
carrway_end_m	integer(5)	Y		T	End displacement(m) in metres from the road origin	between 1 and 99999
start_name	char(35)			T	Name of the road or feature at the start of the section	
end_name	char(35)			T	Name of the road or feature at the end of the section	
cway_area	char(15)			T	Area within which road section falls - suburb, ward, etc.	Looks up on cway_area
cway_sub_area	smallint(4)			T	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 inc. 7 Maintenance Group 7
pavement_type	char(1)	Y	T	T	Pavement type for calculation	B Bridge, C Concrete, S Structural Asphaltic Concrete, T Thin Surfaced Flexible, U Unsealed
pavement_use	smallint(1)	Y	1	T	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	char(1)	Y	1	T	Road Class e.g. 1, C	road_class IN ("1", "C")
urban_rural	char(1)	Y	U	T	Type of area. e.g. Rural, Urban (U/R)	R Rural U Urban
cway_hierarchy	char(15)			T	Functional classification of road section	Looks up on cway_hierarchy
lanes	smallint(1)	Y	2	T	Number of traffic lanes	lanes between 1 and 9
lane_width	decimal(3,1)			T	Lane width in metres	
length_m	integer(5)	Y		T	Carriageway length in metres	length_m between 0 and 30000
length_adjust_m	integer(5)				Length of the Asset above or below the calculated length	length_adjust_m between -30000 and 30000 or length_adjust_m is null
len_adjust_rsn	char(5)				Reason for Adjusting the Calculated Length of the Asset	looks up on len_adjust_rsn
cway_width	decimal(3,1)	Y	1.0	T	Carriageway width in metres to one decimal place e.g. 8.6m lane	between 0.5 and 99.9 or is null
irr_width	char(1)	Y	R	T	Carriageway width regularity indicator.	Regular / Irregular(R/I)
res_width	decimal(3,1)			T	Road reserve width in metres to one decimal place e.g. 20.1	between 1 and 60.0 or is null
misc_area	smallint(4)	Y	0		Extra areas in m ² e.g. Parking bays	misc_area between 0 and 9999
bus_bays	smallint(4)	Y	0		Area of bus bays in m ²	bus_bays between 0 and 9999
islands	smallint(4)	Y	0		Area traffic islands in m ²	islands between 0 and 9999
intersection	smallint(4)	Y	0		Additional area at intersections in m ²	intersection between -9999 and 9999

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Table: carr_way

Description: Carriageway Table - Dimensional & General Information

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
owner_type	char(1)	Y	L	T	Owner of section e.g. LA, PTE, CROWN (L/P/C)	C Crown L Local Authority P Private
controlled_by	char(3)			T	Defaults to NZTA if owner type is Crown	Looks up on organisation
maintained_by	char(3)				Organisation responsible for maintenance of carriageway section	Looks up on organisation
managed_by	char(3)				Organisation responsible for management of carriageway section	Looks up on organisation
road_group	integer(4)		G		Land Transport New Zealand for Maintenance Guidelines	110 Urban A ADT > 10,000 120 Urban B ADT 5,000 - 10,000 130 Urban C ADT 1,000 - 5,000 140 Urban D ADT 200 - 1,000 150 Urban E ADT < 200 220 Rural B ADT > 5,000 230 Rural C ADT 1,000 - 5,000 240 Rural D ADT 200 - 1,000 250 Rural E ADT 50 - 200 260 Rural F ADT < 50
loading_status	char(1)		G		Loading status: Count, Estimate or Default	C Count D Default E Estimate
loading_pc_heavy	smallint(3)		G	T	Latest percentage of volume of heavy vehicles	between 0 and 100 or is null
loading_esa_heavy	decimal(4,3)		G	T	The Equivalent Single Axles(ESA) per vehicle for heavy vehicles	between 0 and 9.9 or is null
traffic_adt_est	integer(10)		G	T	Latest estimate of average daily traffic in vehicles per day	between 1 and 999000 or is null
traffic_adt_count	integer(10)		G	T	Latest count of average daily traffic in vehicles per day	between 1 and 999000 or is null
count_date	date				Date of traffic count	
traff_manage_level	char(5)	Y	U		Traffic Management Level	looks up on traff_manage_level
naasra_min	smallint(3)		G	T	Minimum latest roughness value in NAASRA (counts/km)	between 10 and 999 or is null
naasra_max	smallint(3)		G	T	Maximum latest roughness value in NAASRA (counts/km)	between 10 and 999 or is null
naasra_avg	smallint(3)		G	T	Average of latest roughness values in NAASRA (counts/km)	between 10 and 999 or is null
cway_use_category	char(2)	Y	UN	T	The Road Use Category of the carriageway section	Looks up on cway_use_category
cway_group_1	char(4)			T	Legal Motorway	Looks up on cway_group_1
cway_group_2	char(4)			T	Seasonal Factor Zone	Looks up on cway_group_2
cway_group_3	char(4)				Optional group 3	Looks up on cway_group_3
cway_group_4	char(4)				Optional group 4	Looks up on cway_group_4
cway_group_5	char(4)				Optional group 5	Looks up on cway_group_5
house_start_lhs	char(10)				The house number on the left at the start of the section	
house_end_lhs	char(10)				The house number on the left at the end of the section	
house_start_rhs	char(10)				The house number on the right at the start of the section	
house_end_rhs	char(10)				The house number on the right at the end of the section	
terrain	char(1)				The type of terrain in the cway section or treatment length	F Flat, M Mountainous, R Rolling
coastal_inland	char(1)				Flag to indicate whether the cway or tl is coastal or inland	C Coastal, I Inland

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Table: carr_way

Description: Carriageway Table - Dimensional & General Information

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
est_mmp	char(2)				Unique identifier for the Estimated Mean Monthly Precipitation	Looks up on cway_est_mmp
asset_owner	char(3)				Unique identifier for the asset owner	Looks up on asset_owner
left_lanes	smallint(1)			T	The number of lanes on the left hand side of the road	between 1 and 9 or is null
right_lanes	smallint(1)			T	The number of lanes on the right hand side of the road	between 1 and 9 or is null
lighting_category	char(3)				Lighting category code for this carriageway section	looks up on lighting_category
collect_name	char(3)				Name of personal or organisation who collected this data	looks up on organisation
collect_date	date				Date when this data was collected	
travel_direction	char(1)	Y	B	T	Direction of travel permitted on this carriageway	B Both, D Decreasing, I Increasing
condition_wt	decimal(5,3)				Calculated Weighting from Assessment	
condition	char(1)		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	char(1)		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	char(1)		U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(1)		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	
easting	decimal(12,4)				Easting at the start of the Carriageway	between -99.9999 and 9999999.9 or is null
northing	decimal(12,4)				Northing at the start of the Carriageway	between -99.9999 and 9999999.9 or is null
easting_end	decimal(12,4)				Easting at the end of the Carriageway	between -99.9999 and 9999999.9 or is null
northing_end	decimal(12,4)				Northing at the end of the Carriageway	between -99.9999 and 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(3)				The organisation that collected the GPS data	looks up on organisation
gps_method_id	interger(5)				Unique ID for the gps_method table	looks up on gps_method
map_gps_date	date				Populated when new GPS cororinates are supplied by the user	
map_gps_by	char(20)				The logname of the user who set the map_gps_date	
map_import_date	date				Populated with the data of the Critchlow map	
map_import_by	char(20)				The logname of the person who ran the initial population	
rnm_edit_date	date				The date this section was last changed using Network Manager	
rnm_edit_by	char(20)				The logname of the person who changed using Network Manager	
notes	vchar(255)				General comments	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the consultant who added this row	
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the consultant who last changed this row	

Table: c_surface Description: Carriageway surfacings

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
c_surface_id	serial(5)	Y	G	-	The unique number of the surfacing	
road_id	integer(6)	Y		T(M)	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y		T(M)	Surfacing start displacement (m) from the road origin	between 0 and 99999
end_m	integer(5)	Y		T(M)	Surfacing end displacement (m) from the road origin	between 1 and 99999
start_name	char(35)				Name of the road or feature at the start of the surfacing sect.	
end_name	char(35)				Name of the road or feature at the end of the surfacing section	
northing	number				northing of the start of the surface treatment	
easting	number				easting at the start of the surface treatment	
northing_end	number				northing at the end of the surface treatment	
east_end	number				easting at the end of the surface treatment	
gps_date	date time				date the GPS was collected	
gps_by	char(3)				The organisation that collected the GPS data	looks up on organisation
gps_method_id	number				Unique identifier for the GPS method	looks up on gps_method
surface_date	date	Y		T(M)	Date surfacing placed	
removed_date	date			T(C)	Date the surface was removed (C) <i>Only applicable to existing surface records which have been removed</i>	
surf_width	decimal(3,1)			T(M)	Width of surfacing in metres to 1 decimal place. e.g. 8.6	between 0.5 and 60.0 or is null
full_width_flag	char(1)	Y	Y		Surface covers the full width of the carriageway? Yes or No	N No, Y Yes
surf_offset	decimal(3,1)	Y	0	T(M)	Dist. from LHS of c/way to LHS of surface in metres	between 0 and 60.0
design_life	smallint(5)			T(M)	Expected life of surface at 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 60 or is null
default_life	smallint(5)		G	-	Original NZTA default life (from surface life table default field), assigned by RAMM on entry and never updated (yrs)	between 1 and 60 or is null
mod_default_life	smallint(5)		G	-	Current NZTA Default Life derived from the surface life table	between 1 and 60 or is null
surf_material	char(5)	Y		T(M)	Construction material used for carriageway surface	Looks up on surf_material
surf_function	char(1)	Y		T(M)	Function of the surface: 1st Coat, 2nd Coat, Reseal, Membrane	1 1st Coat, 2 2nd Coat, R Reseal, M Membrane
surf_depth	smallint(3)	Y	0	T(M)	Depth of surface layer. For chipseals enter 0. For thin asphaltic surfacing, slurry & cape seals enter known seal depth >0.	between 0 and 500
use_calc_depth	char(1)	Y	Y	T(M)	Calculate depth for this surface or Not (use entered surf_depth) Enter Y for all chipseals, N for thin asphaltic surfacing, slurry & cape seals	use_calc_depth IN ("Y","N")
chip_size	smallint(2)	Y		T(M)	Record either Grade of chip, or mix design (e.g. mix 10 as per M specifications). Or Slurry: 1, 2, 3 or 4 depending on type.	between 1 and 40
chip_2nd_size	smallint(2)			T(C)	Grade of 2nd chip used on multiple chip seals & cape seals. (C) Only applicable to multiple chip seals, including cape seals	between 1 and 40
pave_source	char(20)			T(M)	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	char(4)	Y		T(M)	Base Binder type only: E180, E80, B180, B80, B60, etc. Record polymer modification under polymer_additive.	Looks up on surf_binder
flux	smallint(1)	Y	0	T(C)	Amount of flux in binder (C) 0 if not used or the value of the amount of flux added	between 0 and 9
cutter	smallint(2)	Y	0	T(C)	Amount of cutter in binder (C) 0 if not used or the value of the amount of cutter added	between 0 and 20

Table: c_surface **Description:** Carriageway surfacings

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
cutter_type	char(4)			T(C)	Type of cutter used (KERO / TURP / OTHR) <i>(C) Required if cutter amount is not 0</i>	KERO Kerosene OTHR Other Turpentine TURP
adhesion	decimal(2,1)	Y	0	T(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	char(4)			T(C)	Type of adhesion agent used <i>(C) Required if adhesion amount is not 0</i>	Looks up on surf_adhesion
additive	smallint(2)	Y	0	T(C)	Amount of non-polymer additive in binder, e.g plastic, epoxy etc. <i>(C) 0 if not used or the value of the amount of additive added</i>	between 0 and 99
surf_additive	char(4)			T(C)	Type of non-polymer additive used in the binder (largest component) <i>(C) Required if additive amount is not 0</i>	Looks up on surf_additive
polymer_type	integer(10)			T(C)	Type of polymer used in the binder (largest component) - in RAMM 6.1 <i>(C) Required if polymer is used in binder</i>	Looks up on surf_polymer_type
polymer_mod_pcmt	smallint(2)			T(C)	Percentage polymer modification (%) <i>(C) Null if not used or value if polymer_type is not null</i>	between 0 and 100 or is null
elastic_recovery	smallint(2)			T(C)	Minimum torsional recovery (%) to test method AG:PT/T122 <i>(C) Applicable to polymer modified binders only</i>	
softening_point	smallint(2)			T(C)	Minimum softening point (degrees Celsius) to test method ASTM D36 <i>(C) Applicable to polymer modified binders only</i>	between 0 and 100 or is null
rate	decimal(3,2)			T(C)	Residual bitumen application rate in l/m2 at 15 degrees celsius <i>(C) Only applicable to chipseals, including capeseals</i>	between 0.2 and 9.99 or is null
sealed_area	integer(8)			T(M)	The total area covered by the seal (square metres) including all extra areas associated with the surface record (as measured).	
sealed_area_ok	char(1)	Y		T(M)	Yes/No (confirmation the provided sealed area is acceptable)	Y Yes, N No
contract_number	char(12)			T(M)	The Principal Contract number under which the sealing was performed	
organisation	char(3)			T(M)	The Organisation who constructed the surfacing (physical works).	Looks up on organisation
surf_spec	char(10)			T(M)	Details of the end user specification of the constructed surfacing.	Looks up on surf_spec
polished_stone	smallint(2)			T(C)	Polished stone value (PSV), of largest grade chip, or uppermost layer <i>(C) Not applicable to membrane seals</i>	
average_dim	decimal(4,2)			T(C)	Average least dimension (ALD) units in mm for the largest chip <i>(C) Only applicable to chipseals, including capeseals</i>	between 3.00 and 20.00
recycling	boolean	Y	FALSE	T(M)	Is this surfacing using Recycled Material? (e.g. recycled asphalt or other added recycled materials). Not to be used for recycled pavements.	True or False
pct_recycled	smallint(3)			T(C)	Percentage of the Surface containing Recycled Component <i>(C) Only required if recycled material is used</i>	<=100
surf_recycled_cpnt	char(7)			T(C)	Type of recycled component <i>(C) Only required if recycled material is used</i>	Looks up on surf_recycled_cpnt
surf_reason	char(5)			T(M)	Primary Reason for surfacing as per Chipsealing in New Zealand Chapter 6: Practice Note 1	looks up on surf_reason
fw_treatment	char(7)			-	Treatment code in forward work programming	Looks up on fw_treatment
ru_life	number				Expected life (in years) of the asset or asset component	
rul_reset	char(1)				Has the RUL been reset from zero to equal zero	N Not Reset, R Reset to Zero
condition_wt	number				Calculated Weighting from Assessment	

Table: c_surface **Description:** Carriageway surfacings

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
condition	char(1)	Y	U		The condition of this surface	1 Excellent, 2 Good, 3 Average, 4 Poor, 5 Very Poor, U Unknown
condition_date	date time				The date the Condition of this asset was established	
asset_owner	char(3)				Unique identifier of the Asset Owner	Looks up on asset_owner
standard_rc	number				Unique identifier for the Asset Valuation Standard Replacement Cost	Looks up on av_standard_rc
use_default_rc	char(1)	Y	D		Does this asset use the default RC definition	D Default, U User
original_cost	money				Original cost of installing or constructing this asset	
rc_value	money				Replacement cost for this asset	
drc_value	money				Depreciated Replacement Value of the asset or component	
annual_drc_value	money				Annual Depreciation for this asset	
valuation_date	date time				Date of the last valuation for this asset	
notes	vchar(255)			T(C)	General comments (C) If SS is selected for surf_reason supply an appropriate reason. (Traffic Threshold, Urban Issues, Damage, High Skid Resistance, Rumble strips)	
activity	char(5)				The type of work that was done such as Reseal, Rehabilitation, Original Construction or Reseal	OC Original Construction, RC Reconstruction, RH Rehabilitation, RS Reseal
added_on	date		today	T(M)	The date this row was added	
added_by	char(20)			T(M)	The logname of the person who added this row	looks up on staff
chgd_on	date			T(C)	The date this row was last changed <i>Only required if an existing record is edited</i>	(C)
chgd_by	char(20)			T(C)	The logname of the person who last changed this row <i>(C) Only required if an existing record is edited</i>	looks up on staff

(C) Conditional Mandatory, (M) Mandatory

Table: drainage **Description:** Drainage Table - drainage features within road reserve (not SWC)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
carrway_start_m	integer(5)	Y		T	Start displacement in metres from the road origin	Looks up on carr_way
drainage_id	serial(5)	Y	G	T	The unique number of the drainage feature	
drain_type	char(5)	Y		T	Type of drainage feature	Looks up on drain_type
construct_date	date			T	Date of construction if known	
culv_number	decimal(6,2)			T	Culvert number if known	
location	integer(5)	Y		T	Displacement in metres from road origin	Between 0 & 99999
offset_kerb	decimal(4,1)				Offset from the nearest kerb to the Drain	Between 0 & 120.0 or is null
offset	decimal(4,1)			T	Distance from the road centreline to drain in metres	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset from the left hand side to the Drain	Between 0 & 120.0 or is null
offset_side	char(1)			T	Side of carriageway. Left, Right, End, Centre (L/R/E/C)	E End, L Left, R Right, C Centre, A Across
drain_length	decimal(5,1)			T	Length of feature (m) to 1 decimal place eg.8.6, if applicable	Between 1.0 & 15000.0 or is null
drain_size	integer(5)			T	Height of culvert or depth of cesspit , soakpit etc (mm)	Between 50 & 9000 or is null
drain_material	char(5)			T	Material used. (CON/STEEL/AC/EW/ARMCO/WOOD/PVC/NG)	Looks up on drain_material
inlet	char(2)			T	Inlet Type if present	Looks up on drain_entry
outlet	char(2)			T	Outlet Type if present	Looks up on drain_entry
drain_culvert	char(9)			T	Type (CIRC/BOX/ARCH/TWIN_CIRC/TWIN_BOX/TWIN_ARCH/OTHER)	Looks up on drain_culvert
cul_width	integer(5)			T	Width of box or arch in mm	Between 100 & 9000 or is null
cul_area	decimal(5,2)		G	T	Area of box or arch in m ²	Between 0.01 & 200.0 or is null
inspect_date	date				Last inspection date	
hazard	char(1)	Y	U		Existence of a hazard due to feature (Y/N/U)	N No, Y Yes, U Unknown
adequacy	char(1)				Adequacy of feature. (Y/N)	N No, Y Yes
maint_type	char(6)				Maint. type required (GRADER/DIGGER/HAND/SP)	DIGGER Digger GRADER Grader HAND By Hand SP Suction Pump
organisation	char(3)				Organisation responsible for the maintenance of this facility	Looks up on organisation
file_ref	char(10)				File ref. regarding joint and other party responsibility	
maint_date	date				Date drainage feature last maintained	
maint_cycle	integer(3)				Maintenance cycle in weeks	Between 1 & 999 or is null
wway	char(30)			T	The name of the waterway crossed by the bridge	Looks up on br_waterway
asset_owner	char(3)				Unique identifier for the asset owner	Looks up on asset_owner
depth_of_cover	decimal(3,1)				Depth of cover at the Centreline (metres)	
wall_thickness	smallint(3)				Thickness of the Drain Wall (mm)	
drain_shape	char(1)			T	Shape of the Drain	O Oval R Round S Square
bridge_id	integer(5)				Unique bridge ID	Looks up on br_bridge

Table: drainage **Description:** Drainage Table - drainage features within road reserve (not SWC)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
drain_lining	char(3)				Culvert invert lining	Looks up on drain_lining
fish_passage	boolean	Y	FALSE	T	Does this drain have a fish passage installed	True or False
flow_direction	char(1)	Y	N	T	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	decimal(12,4)				NZ Map Grid Northing Co-ordinate	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				NZ Map Grid Easting Co-ordinate	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(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	char(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				The date the Condition of the asset was established	
likelihood_wt	decimal(5,3)				Calculated Weighting from Assessment	
risk_likelihood	char(1)	Y	U		Likelihood of this asset failing	1 Rare, 2 Unlikely, 3 Possible, 4 Likely, 5 Almost Certain
consequence_wt	decimal(5,3)				Calculated Weighting from Assessment	
risk_consequence	char(1)	Y	U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	smallint(3)				Expected life (in years) of the asset or asset component	
ru_reset	char(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	char(1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D Default, U User
original_cost	money(12,2)				Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Replacement Cost of this asset	
drc_value	money(12,2)				Depreciated Replacement Cost of this asset	
annual_drc_value	money(12,2)				Annual Depreciation for this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)			T	General comments or notes	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	

Table: drainage **Description:** Drainage Table - drainage features within road reserve (not SWC)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Table: features **Description:** Miscellaneous features within the road reserve

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
carrway_start_m	integer(5)	Y		T	Start displacement in metres from the road origin	Looks up on carr_way
location	integer(5)	Y		T	Displacement (m) of feature from the road origin	Between 0 & 99999
side	char(1)	Y		T	Side of the cway on which feature is located (L/R/B/C/N)	L Left, R Right, B Both, C Centre, N Not applicable
offset	decimal(4,1)				Offset the feature from the Centreline	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset the feature from the Left Hand Side of the cway	Between 0 & 120.0 or is null
offset_kerb	decimal(4,1)				Offset of the Feature to the nearest kerb	Between 0 & 120.0 or is null
feature_type	char(6)	Y		T	Lookup code to the Feature Type table	Looks up on feature_type
northing	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(3)				Responsibility code	Looks up on organisation
gps_method_id	integer(5)				Unique ID for the gps_method table	Looks up on gps_method
constructed	date				The date the Feature was constructed	
ru_life	smallint(3)				Remaining Useful Life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of this feature	1 Excellent, 2 Good, 3 Average, 4 Poor, 5 Very Poor, 6 Unknown
condition_date	date				The date the Condition of the asset was established	
likelihood_wt	decimal(5,3)				Calculated Weighting from Assessment	
risk_likelihood	char(1)	Y	U		Likelihood of this asset failing	1 Rare, 2 Unlikely, 3 Possible
consequence_wt	decimal(5,3)				Calculated Weighting from Assessment	
risk_consequence	char(1)	Y	U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	char(3)				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	char(1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D Default, U User
original_cost	money(12,2)				Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Gross Replacement Value in Dollars of the asset or component	
drc_value	money(12,2)				Depreciated Replacement value of the asset or component	

Appendix 3: Asset Register

Table: features **Description:** Miscellaneous features within the road reserve

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
annual_drc_value	money(12,2)				Annual DRC value	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)			T	Description of feature	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
feature_id	serial(5)	Y	G	T	Feature Unique Identifier	
collect_name	char(3)			T	Name of the person or organisation who collected the data	Looks up on organisation
collect_date	date			T	Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Table: ud_its **Description:** General placeholder for ITS assets

Field Name	Type	Required by Software	Generated Value	Type	Required by NZTA Notes	Description	Allowed Values
system_id	serial(10)	Y	G	T(M)		Unique Identifier for the Custom Asset	
road_id	integer(6)	Y		T(C)	Not mandatory if GPS provided. Mobile or in store assets will be Road ID 3177 (SH0/RS0) / Non SH assets will be assigned to applicable SH section Road ID & location	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(5)	Y		T(M)	Not mandatory if GPS provided. RP 0 for in store & 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 & 99999
street_address	varchar(18)			O		The street address of the asset (for areas where this is applicable)	
site	char(8)			O		The name of the site this asset is located at (The grouped name of a number of assets e.g. Northwestern Motorway. The grouping can be geographical or other.).	Looks up on site
location_general	char(254)			T(M)	Required for mobile or in-store assets to describe location	The location of the asset in general terms (e.g. Hobson St - on footpath behind barrier) to assist with locating asset & describing possible access issues	
nma	char(8)	Y		T(M)		What NMA is the asset in?	Looks up on nma
gps_by	char(3)	Y		T(C)	Not mandatory for mobile, in store & disposed assets	The organisation that collected the GPS data	Looks up on organisation
northing	decimal(12,4)			T(C)	Mandatory if no road location details provided (road_id, location, side & offset)	NZ Map Grid Co-ordinate of the asset (in meters)	Between - 99999999.9999 & 99999999.9999 or is null
easting	decimal(12,4)			T(C)	Mandatory if no road location details provided (road_id, location, side & offset)	NZ Map Grid Co-ordinate of the asset (in meters)	Between - 99999999.9999 & 99999999.9999 or is null
gps_date	date			T(C)		Date when the GPS was collected	
gps_method_id	integer(10)	Y		T(C)		Unique Identifier for the GPS Method (e.g. map, GPS device etc.)	Looks up on gps_method

Appendix 3: Asset Register

Table: ud_its **Description:** General placeholder for ITS assets

Field Name	Type	Required by Software	Generated Value	Type	Required by NZTA Notes	Description	Allowed Values
offset	decimal(4,1)			T(C)	Not mandatory if GPS provided or for mobile, in store & disposed assets	Distance from the centreline (Standard offsets of 0m, 6m, 15m can be used if offset cannot be safely measured)	Between -999.9 & 999.9 or is null
side	char(1)			T(C)	Not mandatory if GPS provided or for mobile, in store & disposed assets	Side of road asset is located on (L=Left hand side, R=Right hand side, B=Both, C=Centre) including when not adjacent to SH	Looks up on side
transit_region	char(8)	Y		T(M)		Which NZTA Reporting Region is the asset in? (e.g. Waikato, Northland etc.)	Looks up on transit_region
field_name	varchar(30)			O		The unique name of the asset (e.g. PTZ1, SLV01)	
its_state	char(8)	Y	1	T(M)		Current status of the asset (e.g. In service, In store, Unavailable, Disposed).	Looks up on its_state
its_state_date	date	Y	Today	T(M)		The date this status changed.	
asset_type	char(8)	Y		T(M)		The asset main type (group) e.g. Camera, Electronic Signs etc.	Looks up on asset_type
asset_sub_type	char(8)	Y		T(M)		The asset sub-type e.g. CCTV Camera, Variable Message Sign etc.	Looks up on asset_sub_type
asset_description	varchar(254)			O	Optional but required to be completed if Type & Sub Type does not sufficiently describe asset (e.g. VMS Type B)	An overall description of the asset (details not provided by Type & subtype)	
manufacturer	char(8)	Y		T(M)		Manufacturer of the asset (e.g. Sony). Not the organisation who installed the asset.	Looks up on manufacturer
model	char(8)			O		Model number of the asset	Looks up on model
serial_no	char(254)			O		Manufacturers serial number	
supplier	char(8)	Y		T(M)		The supplier of this asset (who it was purchased from for installation / not the manufacturer or origin)	Looks up on supplier
support_type	char(8)			O		Support type	Looks up on support_type

Appendix 3: Asset Register

Table: ud_its **Description:** General placeholder for ITS assets

Field Name	Type	Required by Software	Generated Value	Type	Required by NZTA Notes	Description	Allowed Values
owner	char(8)	Y	NZTA	T(M)		Who is the owner of the asset (includes important ITS assets within SH corridor not owned by NZTA)	Looks up on owner
control_system	char(8)			O		The control system used to access the asset (e.g. Dynac etc.) or None for assets not on-line yet or mechanical	Looks up on control_system
comms	char(8)			O		The type of communications connection (if any) e.g. XT-cellular, DSL etc.	Looks up on comms
mtce_contract_no	varchar(30)	Y		T(M)		he NZTA Contract number under which the asset is maintained (e.g. TNZ606N). This will be different during and after DLP (Construction contract number during DLP & maintenance contract number after)	
maintained_by	char(3)	Y		T(M)		Organisation responsible for maintaining this asset based on the current contract (including during DLP).	Looks up on organisation
expected_replace	date			O		The year in which the asset is assessed to require renewal (e.g. condition, technology etc.) Assessed during condition inspections (6 month / annual)	
construct_contract	varchar(30)			O		NZTA Contract number under which the asset was constructed	
contract_mgd_by	char(8)	Y	1	M		The organisation which manages this asset (also includes non NZTA)	Looks up on contract_mgd_by
ip_address	varchar(30)			O		Internet Protocol address	
notes	varchar(255)			O		General Comments	
installation_date	date	Y		T(M)		Installation Date or acquired date for assets kept in store and not installed immediately.	
design_life	integer	Y	0	T(M)		The design life, in years, of this asset	design_life between 0 and 50

Appendix 3: Asset Register

Table: ud_its **Description:** General placeholder for ITS assets

Field Name	Type	Required by Software	Generated Value	Type	Required by NZTA Notes	Description	Allowed Values
condition_rating	char(8)			O		What is the asset condition?	Looks up on condition_rating
condition_rat_date	date			O		When was the asset condition determined (assessed).	
purchase_cost	integer	Y	0	M		The original cost at time of installation (the total asset purchase cost)	
dlp_start_date	date			T(C)	Only required for assets currently under DLP	Start of defects liability period (DLP), if applicable.	
dlp_end_date	date			T(C)	Only required for assets currently under DLP	End of defects liability period (DLP), if applicable.	
criticality	char(8)			O		What is the impact of the asset failing (as per the NZTA guidelines provided).	Looks up on criticality
added_on	date	Y	Today	M		The date this row was added	
added_by	varchar(20)	Y	User	M		The logname of the person who added this row	
chgd_on	date	Y		O		The date this row was last changed	
chgd_by	varchar(20)	Y		O		Person who last changed the record	

(C) Conditional Mandatory, (M) Mandatory, (O) Optional

Table: markings **Description:** Pavement markings - **Regulatory only**

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y		T	Distance in metres from road origin to the start of the marking	Between 0 & 99999
end_m	integer(5)			T	Distance in metres from road origin to the end of the marking	Between 1 & 99999 or is null
start_name	char(35)				Name of the road or feature at the start of the marking	
end_name	char(35)				Name of the road or feature at the end of the marking	
northing	decimal(12,4)				Northing at the start of the Marking	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				Easting at the start of the Marking	Between -99.9999 & 9999999.9 or is null
northing_end	decimal(12,4)				Northing at the end of the Marking	Between -99.9999 & 9999999.9 or is null
easting_end	decimal(12,4)				Easting at the end of the Marking	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(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(7)	Y	G	T	Unique serial number of markings	
length_m	integer(5)			T	Length in metres	Between 1 & 99999 or is null
length_adjust_m	integer(5)				Adjusted length above or below the calculated length	Between -30000 & 30000 or is null
len_adjust_rsn	char(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 & 32000
offset_kerb	decimal(4,1)				Offset from the nearest kerb to the Marking	Between 0 & 120.0 or is null
offset	decimal(4,1)				Dist. from road centreline to the Marking	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset from the left hand side of the Marking	Between 0 & 120.0 or is null
offset_kerb_end	decimal(4,1)				Offset from the nearest kerb to the end of the Marking	Between 0 & 120.0 or is null
offset_end	decimal(4,1)				Offset from the centreline at the end of the Marking	Between 0 & 120.0 or is null
offset_lhs_end	decimal(4,1)				Offset from the left hand side at the end of the Marking	Between 0 & 120.0 or is null
side	char(1)	Y		T	Side of the carriageway section that the marking is located	C Centre, L Left, R Right, U Unknown
marking_type	char(8)	Y		T	The type of marking at this location	Looks up on marking_type
angle	smallint(3)				Angle of the marking	
marking_colour	char(2)			T	The predominant colour of the marking	Looks up on marking_colour
individual_length	smallint(3)				The individual length for multiple markings in metres	
spacing	smallint(3)				The interval between multiple markings in metres	
thickness	smallint(4)				The thickness of the marking in microns	
paint_make	char(2)				The manufacturer of the paint used for the marking	Looks up on paint_make
paint_brand_name	char(8)				The brand name of the paint within the manufacturer	Looks up on paint_brand_name
reflectorised	char(1)			T	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	char(2)				Paint application type	Looks up on paint_apply_type
marking_attach	char(8)				Type of attachments used on this marking	Looks up on marking_attach
painted_date	date				The date the marking was made	
marking_material	char(2)			T	The code for the marking material	Looks up on marking_material

Appendix 3: Asset Register

Table: markings **Description:** Pavement markings - **Regulatory only**

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
ru_life	smallint(3)				Remaining Useful Life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of this marking	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	char(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	char(1)	Y	U		Consequence of this asset failing	1 Insignifiacnt, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	char(3)				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	char(1)	Y	D		Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)				Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Replacement Cost of this asset	
drc_value	money(12,2)				Depreciated Replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual Depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(250)			T	Note to 250 characters	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Table: minor_structure **Description:** Minor Structures Table

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
minor_structure_id	serial(5)	Y	G	T	Minor Structure Unique Identifier	
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y			Start displacement in metres from the road origin	Between 0 & 99999
start_desc	char(40)				Description of the Start Location	
end_m	integer(5)				End displacement(m) in metres from the road origin	Between 1 & 99999 or is null
end_desc	char(40)				Description of the End Location	
ms_type	char(6)	Y		T	Minor structure type code	Looks up on ms_type
ms_subtype	char(5)			T	Minor structure subtype code	Looks up on ms_subtype
quantity	integer(5)	Y	1		The Number of Minor Structures at this Displacement	Between 1 & 32000
northing	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
northing_end	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
easting_end	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(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
side	char(1)	Y		T	Side of the Road where the Minor Structure is located	C Centre, L Left, R Right, U Unknown
offset_kerb	decimal(4,1)				Offset of the Minor Structure to the nearest kerb	Between 0 & 120.0 or is null
offset	decimal(4,1)			T	Offset of the Minor Structure from the Centreline	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset of the Minor Structure from the Left Hand Side	Between 0 & 120.0 or is null
offset_kerb_end	decimal(4,1)				Offset from the Kerb at the End of the Minor Structure	Between 0 & 120.0 or is null
offset_end	decimal(4,1)				Offset from the Centreline of the end of the Minor Structure	Between 0 & 120.0 or is null
offset_lhs_end	decimal(4,1)				Offset from the Left Hand Side at the end of the Minor Struct	Between 0 & 120.0 or is null
length_m	decimal(6,1)			T	The length of an asset but as a decimal	Between 0.0 & 30000.0 or is null
length_adjust_m	integer(5)				Adjusted Length above or below the calculated Length	Between -30000 & 30000 or is null
len_adjust_rsn	char(5)				Reason for Adjusting the Calculated Length of the Asset	Looks up on len_adjust_rsn
width	decimal(6,1)			T	Width of the Minor Structure	Between 0.0 & 30000.0 or is null
height_m	decimal(6,1)			T	Height of the Minor Structure	Between 0.0 & 30000.0 or is null
clearance	decimal(6,1)			T	Clearance to the Minor Structure	Between 0.0 & 30000.0 or is null
area	decimal(6,1)				Area covered by the Minor Structure	Between 0.0 & 30000.0 or is null
ms_material	char(5)			T	Minor structure material code	Looks up on ms_material
loc_house_start	char(10)				Number of the House nearest the Start of the Minor Structure	
loc_house_end	char(10)				House No. of the 2nd House nearest to the Minor Structure	
ms_surf_treat	char(5)				Minor Structure Surface Treatment Code	Looks up on ms_surf_treat
ms_colour	char(5)				Minor Structure Colour Code	Looks up on ms_colour
ms_style	char(5)			T	Minor Structure Style Code	Looks up on ms_style
lockable	char(1)				Is this asset Lockable or not?	M Mixture of Permanent & Removable, P Permanent, R Removable

Table: minor_structure **Description:** Minor Structures Table

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
artist_name	char(50)				Name of the Artist whose work this is	
tree_guard	char(1)				Is a Tree Guard built into this asset	N No, Y Yes
external_no	char(10)				External Number for this asset	
constructed	date				Date when this Minor Structure was Constructed	
ru_life	smallint(2)				Remaining Useful Life of the asset	
rul_reset	char(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	char(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				The date the Condition of the asset was established	
likelihood_wt	decimal(5,3)				Calculated Weighting from Assessment	
risk_likelihood	char(1)	Y	U		Likelihood of this asset failing	1 Rare, 2 Unlikely, 3 Possible, 4 Likely
consequence_wt	decimal(5,3)				Calculated Weighting from Assessment	
risk_consequence	char(1)	Y	U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(1)	Y	U		Risk Value for this Minor Structure	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	char(3)				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	char(1)	Y			Flag to indicate whether the GRV is the matrix default or not	D Default, U User
original_cost	money(12,2)				Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Replacement Cost of this asset	
drc_value	money(12,2)				Depreciated Replacement Cost of this asset	
annual_drc_value	money(12,2)				Annual Depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)			T	General comments	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
collect_name	char(3)				Name of the Person or Organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who added this row	Looks up on staff

Appendix 3: Asset Register

Table: pave_layer

Description: Pavement sub-grade and structure information

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
layer_id	serial(5)	Y	G	T	Unique pavement layer ID	
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y		T	Pavement layer/subgrade start displacement (m) from road origin	Between 0 & 99999
end_m	integer(5)	Y		T	End displacement (m) in metres from the road origin	Between 0 & 99999
start_name	char(35)				Name of the road or feature at the start of the pavement	
end_name	char(35)				Name of the road or feature at the end of the pavement section	
layer_subgrade	char(1)	Y	L	T	Is this a Layer or Subgrade	L Pavement Layer, S Subgrade
layer_date	date	Y		T	Date subgrade was tested or layer constructed	
removed_date	date			T	Date the layer was removed. Indicates that the layer is historic.	
offset	decimal(3,1)		0	T	Distance from LHS seal edge to LHS of layer in metres	Between -9.9 & 60.0 or is null
width	decimal(3,1)			T	Width of layer in metres to 1 decimal place	Between 0.5 & 60.0 or is null
full_width_flag	char(1)	Y	N	T	Layer covers the full width of the carriageway? Yes or No	N No, Y Yes
estimate_status	char(1)	Y	K	T	Layer is based on Estimated or Known pavement layer data	E Estimate, K Known
layer_strength	decimal(4,1)			T	Strength of the layer measured in CBR (0-120%) or UCS (0-99.9)	
cbr_ucs	char(1)	Y	C	T	Layer strength measure is CBR or UCS	C CBR, U UCS
pave_subgrade	char(20)			T	Material type e.g. Clay	Looks up on pave_subgrade
thickness	integer(5)			T	Thickness of pavement layer in mm	Between 20 & 999 or is null
pave_material	char(6)			T	Type of material used e.g. M3	Looks up on pave_material
pave_source	char(20)			T	Pavement material source type	Looks up on pave_source
recycling	boolean	Y	FALSE	T	Is this layer using Recycled Material?	True or False
pave_spec	char(10)			T	Details of the end user specification	Looks up on pave_spec
reconstructed	char(1)	Y	U	T	Layer has been Reconstructed or remains Undisturbed	R Reconstructed, U Undisturbed
pave_st_agent	char(20)			T	Stabilising agent type	
stab_percent	decimal(3,1)			T	Percentage of stabilisation agent used to 1 decimal place	Between 1 & 10.0 or is null
plan_no	char(20)			T	Construction plan number	
design_life	smallint(5)			T	Estimated/design life of the Pavement Layer	Between 1 & 60 or is null
design_esa	decimal(4,2)			T	Estimated/design ESA for the Pavement Layer over its life	
fw_treatment	char(7)			T	Treatment code used in forward work programming	Looks up on fw_treatment
notes	vchar(255)			T	General comments	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Appendix 3: Asset Register

Table: pave_test_pit **Description:** Pavement test pit survey results for a single layer

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
test_pit_no	integer(5)	Y		T	Unique system generated id for this test pi	Looks up on pave_test_pit_hd
layer_type	char(1)	Y	L	T	test pit layer is C Surface, L Pavement layer, S Subgrad	C Surface, L Pavement layer S Subgrade
start_depth	smallint(4)	Y		T	Start depth measured from the top of the basecourse (mm	Between 0 & 3000 or is nul
end_depth	smallint(4)	Y		T	End depth (start depth of following layer) (mm	Between 0 & 3000 or is nul
pave_material	char(6)			T	Test pit layer material if this is a pavement laye	Looks up on pave_materia
pave_subgrade	char(20)				Test pit material type for subgrade layers e.g. Clay	Looks up on pave_subgrade
layer_strength	decimal(4,1)				Strength of the layer measured in CBR (0-120%) or UCS (0-99.9)	
cbr_ucs	char(1)	Y	C		Layer strength measure is CBR or UCS	C CBR, U UCS
pave_st_agent	char(20)				Stabilising agent type found in this test pit layer	Looks up on pave_st_agent
notes	vchar(255)				General comments	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

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Table: pave_test_pit_hdr **Description:** Pavement test pit survey header

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
test_pit_no	serial(5)	Y	G	T	Unique system generated id for this test pit	
road_id	integer(6)	Y		T	RAMM Road ID	
location	integer(5)	Y		T	Displacement in metres from the road origin	Between 0 & 99999 or is null
offset	decimal(3,1)	Y		T	Distance from LHS of c/way to test pit location	Between 0 & 60.0 or is null
historic	char(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		T	The date of the test pit survey	
pave_tp_method	char(1)	Y		T	Test pit survey method	Looks up on pave_tp_method
test_consultant	char(30)				The survey was performed by this group	C CBR, U UCS
job_no	char(20)				Consultants job number/job name ref for this survey	
snp	decimal(4,2)				Adjusted Structural Number (SNP)	
snp_method	char(5)				Method used to calculate the SNP	Looks up on snp_method
snp_organisation	char(3)				Person or organisation who calculated the SNP	Looks up on organisation
snp_date	date				Date when the SNP was calculated	
test_notes	char(255)			T	General comments	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Table: railings **Description:** Railings

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y		T	Distance in metres from road origin to the start of the railing	Between 0 & 99999
end_m	integer(5)			T	End Displacement(m) in metres from the road origin	Between 1 & 99999 or is null
start_name	char(35)				Name of the road or feature at the start of the railing	
end_name	char(35)				Name of the road or feature at the end of the railing	
railing_id	serial(7)	Y	G	T	Unique number of railing	
length_m	integer(5)	Y		T	Length in metres	Between 0 & 30000
length_adjust_m	integer(5)				Adjusted Length above or below the calculated length	Between -30000 & 30000 or is null
len_adjust_rsn	char(5)				Reason for Adjusting the Calculated Length of the Asset	Looks up on len_adjust_rsn
northing	decimal(12,4)				Northing at the start of the Railing	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				Easting at the start of the Railing	Between -99.9999 & 9999999.9 or is null
northing_end	decimal(12,4)				Northing at the end of the Railing	Between -99.9999 & 9999999.9 or is null
easting_end	decimal(12,4)				Easting at the end of the Railing	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(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
offset_kerb	decimal(4,1)				Offset of the start of the Railing from the nearest kerb	Between 0 & 120.0 or is null
offset	decimal(4,1)			T	Offset at the start of the Railing from the centreline	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset of the start of the Railing from the LHS	Between 0 & 120.0 or is null
offset_kerb_end	decimal(4,1)				Offset of the end of the Railing from the nearest Kerb	Between 0 & 120.0 or is null
offset_end	decimal(4,1)				Offset of the end of the Railing from the centreline	Between 0 & 120.0 or is null
offset_lhs_end	decimal(4,1)				Offset of the end of the Railing from the left hand side	Between 0 & 120.0 or is null
side	char(1)	Y		T	Side of the carriageway section that the railing is located	B Both, C Centre, E End, L Left, N Not Applicable
railing_type	char(5)	Y		T	Type of railing	Looks up on railing_type
install_date	date			T	The date the asset was installed	
ground_height	decimal(4,1)			T	Height of the railing from the ground (m)	
railing_width	decimal(4,1)				Width of railing (m)	
railing_make	char(5)			T	Railing manufacturer	Looks up on railing_make
shape	char(1)			T	General shape of railing	C Curved, S S Bend, T Straight
railing_colour	char(2)				Major colour of railing	Looks up on railing_colour
railing_material	char(5)			T	Predominate material that the railing is constructed from	Looks up on railing_material
railing_attach	char(2)			T	Attachments found on the railing	Looks up on railing_attach
rail_start_style	char(5)			T	Start style used on railing	Looks up on rail_end_style
rail_end_style	char(5)			T	Ending style used on railing	Looks up on rail_end_style
safe_height	char(1)				Does the Handrail conform to the current Safety Standard	N No, Y Yes
railing_ground_fix	char(4)			T	How the railing is set in the ground	Looks up on railing_ground_fix

Table: railings **Description:** Railings

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
railing_purpose	char(100)				The purpose the railing was erected	
loc_house1_no	char(10)				House Number nearest to the start of this Railing	
loc_house2_no	char(10)				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	char(1)				The side of the other road the pole is located on	C Centre, L Left, R Right, U Unknown
other_start_m	integer(5)				Start displacement of carriageway section in metres	Between 0 & 99999 or is null
ru_life	smallint(3)				Remaining Useful Life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of this railing	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	char(1)	Y	U	T	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	char(1)	Y	U	T	Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	char(3)				Unique identifier for the asset owner	Looks up on asset_owner
post_count	smallint(2)		0		Number of posts supporting this railing	Between 0 & 99
post_material	char(5)				Material of posts	Looks up on railing_material
post_condition	char(1)	Y	U		The condition of this post	1 Excellent, 2 Good, 3 Average, 4 Poor, 5 Very Poor, U Unknown
bridge_id	integer(5)				Unique bridge ID	Looks up on br_bridge
retaing_wall_id	integer(5)				Retaining Wall Unique Identifier	Looks up on retaining_wall
paint_system	char(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	char(1)	Y	D		Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)				Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Replacement Cost of this asset	
drc_value	money(12,2)				Depreciated Replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual Depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	

Appendix 3: Asset Register

Table: railings **Description:** Railings

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
notes	char(255)			T	General comments	
post_notes	char(255)				General Comments on Railing Posts	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Table: retaining_wall **Description:** Retaining Wall table

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
retaining_wall_id	serial(5)	Y	G	T	Retaining Wall Unique identifier	
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y		T	Start displacement in metres from the road origin	Between 0 & 99999
start_desc	char(40)				Description of the Start Location	
end_m	integer(5)			T	End displacement in metres from the road origin	Between 1 & 99999 or is null
end_desc	char(40)				Description of the End location	
ret_wall_type	char(5)			T	Retaining Wall type	Looks up on ret_wall_type
quantity	integer(5)	Y	1		The number of retaining walls at this displacement	Between 1 & 32000
northing	decimal(12,4)			T	NZ map grid co-ordinate	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)			T	NZ map grid co-ordinate	Between -99.9999 & 9999999.9 or is null
northing_end	decimal(12,4)			T	NZ map grid co-ordinate	Between -99.9999 & 9999999.9 or is null
easting_end	decimal(12,4)			T	NZ map grid co-ordinate	Between -99.9999 & 9999999.9 or is null
gps_date	date			T	Date when the GPS was collected	
gps_by	char(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
side	char(1)	Y		T	Side of the road where the retaining wall is located	C Centre, L Left, R Right, U Unknown
offset_kerb	decimal(4,1)				Offset from the retaining wall to the nearest kerb	Between 0 & 120.0 or is null
offset	decimal(4,1)			T	Offset of the retaining wall from the centreline	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset of the retaining wall from the left hand side	Between 0 & 120.0 or is null
offset_kerb_end	decimal(4,1)				Offset from the kerb of the end of the retaining wall	Between 0 & 120.0 or is null
offset_end	decimal(4,1)				Offset from the centreline of the end of the retaining wall	Between 0 & 120.0 or is null
offset_lhs_end	decimal(4,1)				Offset from the left hand side at the end of the retaining wall	Between 0 & 120.0 or is null
loc_house_start	char(10)				Number of the house nearest to the start of the retaining wall	
loc_house_end	char(10)				House number of the 2nd house nearest to the retaining wall	
length_m	decimal(6,1)			T	The length of the retaining wall	Between 0.0 & 30000.0 or is null
length_adjust_m	integer(5)				Adjusted length above or below the calculated length	Between -30000.0 & 30000.0 or is null
len_adjust_rsn	char(5)				Reason for adjusting the calculated length of the asset	Looks up on len_adjust_rsn
width	decimal(6,1)				The width of the retaining wall	Between 0.0 & 30000.0 or is null
height_m_avg	decimal(6,1)			T	Average height of the retaining wall	Between -30000.0 & 30000.0 or is null
height_m_min	decimal(6,1)				Minimum height of the retaining wall	Between -30000.0 & 30000.0 or is null
height_m_max	decimal(6,1)				Maximum height of the retaining wall	Between -30000.0 & 30000.0 or is null
area	decimal(6,1)				Area covered by the retaining wall	Between 0.0 & 30000.0 or is null
overburden_avg	smallint(2)				Average angle of overburden for the retaining wall	Between -90 & 90 or is null
overburden_min	smallint(2)				Minimum angle of overburden for the retaining wall	Between -90 & 90 or is null
overburden_max	smallint(2)				Maximum angle of overburden for the retaining wall	Between -90 & 90 or is null
lean_angle_avg	smallint(2)				Average lean angle for the retaining wall	Between -90 & 90 or is null

Table: retaining_wall **Description:** Retaining Wall table

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
lean_angle_min	smallint(2)				Minimum lean angle for the retaining wall	Between -90 & 90 or is null
lean_angle_max	smallint(2)				Maximum lean angle for the retaining wall	Between -90 & 90 or is null
edge_offset_avg_a	decimal(4,1)				Average offset to the edgeline of the retaining wall - above	Between 0 & 120.0 or is null
edge_offset_min_a	decimal(4,1)				Minimum offset to the edgeline of the retaining wall - above	Between 0 & 120.0 or is null
edge_offset_max_a	decimal(4,1)				Maximum offset to the edgeline of the retaining wall - above	Between 0 & 120.0 or is null
edge_offset_avg_b	decimal(4,1)				Average offset to the edgeline of the retaining wall - below	Between 0 & 120.0 or is null
edge_offset_min_b	decimal(4,1)				Minimum offset to the edgeline of the retaining wall - below	Between 0 & 120.0 or is null
edge_offset_max_b	decimal(4,1)				Maximum offset to the edgeline of the retaining wall - below	Between 0 & 120.0 or is null
ms_material	char(5)			T	Retaining wall material	Looks up on ms_material
land_use_above	char(50)				Land use above the retaining wall	
land_use_below	char(50)				Land use below the retaining wall	
ret_wall_cat	char(5)				Retaining wall category code	Looks up on ret_wall_cat
ret_wall_fnd	char(5)				Retaining wall foundation code	Looks up on ret_wall_fnd
external_id	char(10)				External identifier for this retaining wall outside RAMM	
constructed	date				Date when this retaining wall was constructed	
ru_life	smallint(2)				Remaining useful life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of this retaining wall	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	char(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	char(1)	Y	U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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 was last updated	
asset_owner	char(3)				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	char(1)	Y	D		Flag to indicate whether the GRV is the matrix default or not	D Default, U User
original_cost	money(12,2)				Original cost of installing or constructing this asset	
rc_value	money(12,2)				Replacement cost of this asset	
drc_value	money(12,2)				Depreciated replacement cost of this asset	

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Table: retaining_wall **Description:** Retaining Wall table

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
annual_drc_value	money(12,2)				Annual depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)				General comments	
as_tip_note	char(255)				General tip for the assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(8)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(8)			T	The logname of the person who last changed this row	Looks up on staff

Table: sign **Description:** Traffic sign

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
carrway_start_m	integer(5)			T	Start displacement in metres from the road origin	Looks up on carr_way
sign_id	serial(8)	Y	G	T	Unique sign ID	
post_count	smallint(2)	Y	0		The number of posts attached to this sign	Between 0 & 99
sign_group	char(7)				The group that this sign is part of	Looks up on sign_group
sign_class	char(3)	Y			The classification of the sign	Looks up on sign_class
sign_type	char(7)	Y		T	The Sign type code	Looks up on sign_type
location	integer(5)			T	Displacement in metres from the road origin	Between 0 & 99999 or is null
side	char(1)	Y		T	Side of the carriageway section that the sign is located on	C Centre, L Left, R Right, U Unknown
offset_kerb	decimal(4,1)				Offset from the nearest kerb to the sign	Between 0 & 120.0 or is null
offset	decimal(4,1)				Dist. from road centreline to sign in metres	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)				Offset from the left hand side to the Sign	Between 0 & 120.0 or is null
sign_angle	smallint(3)				Angle in degrees clockwise from road forward direction	Between 0 & 359 or is null
quantity	integer(5)	Y	1	T	Number in section of this sign type (multiple signs only)	Between 1 & 32000
latest	char(1)	Y	N		Status of the road-speed record	L Latest, N Not Latest
indicating_dir	char(1)	Y	N		The direction this sign is indicating. Left, Right or N/A	A Against, B Both, F For, L Left, N Not applicable, R Right, S Side, U Unknown
sign_owner	char(2)				The owner of the sign / post	Looks up on sign_owner
legend_note	char(255)	Y		T	The legend that is on the sign	
legend2_note	char(255)			T	Sign legend on the reverse side of the sign	
legend_material	char(2)	Y		T	The type of material used for the legend	Looks up on sign_material
legend_colour	char(2)	Y		T	The colour of the legend	Looks up on sign_colour
bground_material	char(2)	Y		T	The type of material used for the background	Looks up on sign_material
bground_colour	char(2)	Y		T	The colour of the background	Looks up on sign_colour
sign_substrate	char(2)	Y			The sign substrate material	Looks up on sign_substrate
sign_width	integer(5)			T	The sign width in mm	Between 0 & 99999 or is null
sign_height	integer(5)			T	The sign height in mm	Between 0 & 99999 or is null
ground_height	integer(5)				Height of sign from ground	Between 0 & 99999 or is null
frame	char(1)	Y	N		Is the sign Framed, Not framed or Unknown	F Framed, N Not framed, U Unknown
install_date	date			T	The date the sign was installed	
in_contract_id	smallint(2)				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	char(2)			T	The reason why this asset was replaced	Looks up on sig_replace_reason
replace_date	date			T	The date the asset was replaced	
rep_contract_id	smallint(2)				The contract number for this work	Looks up on mt_contract

Table: sign **Description:** Traffic sign

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
rep_dispatch_id	integer(6)				The unique number given to each call	Looks up on mt_dispatch
rep_replace_reason	char(2)				The reason why this asset was replaced	Looks up on sig_replace_reason
other_road_id	integer(6)				Road identification code of the other road	Looks up on roadnames
other_cway_start_m	integer(5)				Start displacement of the other carriageway section	Looks up on carr_way
other_side	char(1)				The side of the other road that the sign is located (L/R/C)	L Left, R Right, U Unknown
other_location	integer(5)				Start displacement of the sign on the other road	Between 0 & 99999 or is null
loc_house_no	char(10)				The house no. of this sign. eg. 10A, 10-12,10A-10E	
loc_feature	char(35)				Notes about any features near this sign	
loc_house1	integer(5)				House number (without flat numbers etc.) for sign location	
photo_ref	char(15)				Reference to the physical location of a photo of this sign	
sign_number	integer(6)				A user defined number for the sign	
batch_number	char(10)				Number engrave on the back of the sign	
northing	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				NZ Map Grid Co-ordinate	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(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
ru_life	smallint(3)				Remaining Useful Life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of this sign	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	char(1)	Y	U	T	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	char(1)	Y	U	T	Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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)				The ID of the prior asset at the same location	
standard_rc	integer(8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	char(1)	Y	D		Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)			T	Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Replacement Cost of this asset	

Appendix 3: Asset Register

Table: sign **Description:** Traffic sign

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
drc_value	money(12,2)				Depreciated Replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual Depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
general_note	char(255)			T	General comments	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Table: sl_bracket **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
bracket_id	serial(6)	Y	G	T	Unique bracket number	
pole_id	serial(6)	Y		T	Unique numeric identifier of pole	Looks up on sl_pole
bracket_type	char(4)	Y		T	Bracket type code	Looks up on sl_bracket_type
bracket_angle	smallint(3)			T	Angle in degrees clockwise from road forward direction	0 0, 120 120, 135 135, 150 150, 180 180, 210 210, 240 240, 255 255, 270 270, 285 285, 30 30, 300 300, 315 315, 330 330, 345 345, 45 45, 60 60, 75 75, 90 90
bracket_height	decimal(3,1)			T	Height of the bracket from the base of the pole	Between 0 and 99.9 or is null
height_ind	char(1)			T	Is the bracket height an estimate or measure	E Estimate, M Measured, N Not applicable
outreach	decimal(3,1)			T	Outreach of bracket in metres	Between 0 and 99.9 or is null
coating	char(4)				Coating for bracket	Looks up on sl_coating
bracket_colour	char(30)				The colour of the bracket	
bracket_status	char(1)				Installation: New, Reconditioned or Unknown	N New, R Reconditioned, U Unknown
install_date	date			T	Installation date of the bracket	
in_replace_reason	char(2)			T	The reason code as to why this asset is being replaced	Looks up on sl_replace_reason
in_contract_id	smallint(2)				The contract number for this work	
in_dispatch_id	integer(6)				The unique number given to each call	
replace_date	date			T	The date this bracket was replaced	
rep_replace_reason	char(2)				The reason code as to why this bracket was replaced	Looks up on sl_replace _reason
rep_contract_id	smallint(2)				The contract number for this work	
rep_dispatch_id	integer(6)				The dispatch id to replace this bracket	
prior_id	integer(8)				The id of the prior asset at the same location	
ru_life	smallint(2)				Remaining useful life of the asset	
rul_reset	char(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	char(1)	Y			The condition of this retaining wall	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	char(1)	Y	U		Likelihood of this asset failing	1 Rare, 2 Unlikely, 3 Possible, 4 Likely,
consequence_wt	decimal(5,3)				Calculated weighting from assessment	
risk_consequence	char(1)	Y	U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	Looks up on av_standard_rc
use_default_rc	char(1)	Y	D		Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)				Original cost of installing or constructing this asset	

Appendix 3: Asset Register

Table: sl_bracket **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
rc_value	money(12,2)				Replacement cost of this asset	
drc_value	money(12,2)				Depreciated replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)				General comments	
as_tip_note	char(255)				General tip for the assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(8)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(8)			T	The logname of the person who last changed this row	Looks up on staff

Table: sl_light **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
light_id	serial(7)	Y	G	T	Unique light number	
bracket_id	integer(6)	Y		T	Unique bracket number	Looks up on sl_bracket_type
owner	char(2)			T	Owner of the pole or light	Looks up on sl_owner
light_make	char(4)			T	The light manufacturers code	Looks up on sl_light_make
light_model	char(4)			T	The light manufacturers model code	Looks up on sl_light_model
light_status	char(1)	Y	N	T	Installation: New, Reconditioned or Unknown	N New, R Reconditioned, U Unknown
light_tilt	integer(3)			T	Upcast angle, whole degrees where horizontal = 0	Between 0 and 359 or is null
supply_point	char(2)	Y			Type of supply point	Looks up on sl_supply_point
icp_group	integer(2)				ICP Group Code	Looks up on sl_icp_group
light_supply_point	char(40)				Location of supply point for the light unit	
coating	char(4)				Coating for light	Looks up on sl_coating
light_colour	char(30)				The colour of the light	
light_shade	char(1)				Type of light shade if installed	Looks up on sl_light_shade
light_install_date	date			T	Installation date of light	
light_in_reason	char(2)				The reason code as to why this asset is being replaced	Looks up on sl_replace_reason
light_in_contract_id	smallint(2)				The contract number for this work	
light_in_disp_id	integer(6)				The unique number given to each call	
light_replace_date	date			T	The date this asset was replaced	
light_rep_reason	char(2)				The reason code as to why this light was replaced	Looks up on sl_replace_reason
light_rep_cont_id	smallint(2)				The contract number for the replacement of the light	
light_rep_disp_id	integer(6)				The dispatch id to replace this light	
light_notes	char(40)				Any general comments about the light	
gear_make	char(4)				Gear manufacturers code	Looks up on sl_gear_make
gear_model	char(4)				The Gear manufacturers model code	Looks up on sl_gear_model
gear_status	char(1)	Y	N		Installation: New, Reconditioned or Unknown	See column light_status for details
ballast	char(4)				Code for gear ballast	Looks up on sl_ballast
ignitor	char(4)				Gear ignitor code	Looks up on sl_ignitor
capacitor	char(4)				Gear Capacitor code	Looks up on sl_capacitor
gear_install_date	date				Installation date of gear	
gear_in_reason	char(2)				The reason code as to why this asset is being replaced	Looks up on sl_replace_reason
gear_in_cont_id	smallint(2)				The contract number for this work	
gear_in_disp_id	integer(6)				The unique number given to each call	
gear_replace_date	date				The date this gear was replaced	
gear_rep_reason	char(2)				The reason code as to why this gear was replaced	Looks up on sl_replace_reason
gear_rep_cont_id	smallint(2)				The contract number for the replacement of the gear	
gear_rep_disp_id	integer(6)				The dispatch id to replace this gear	

Table: sl_light **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
gear_notes	char(40)				Any general comments about the gear	
lamp_make	char(4)			T	The lamp manufacturers code	Looks up on sl_lamp_make
lamp_model	char(4)			T	The lamp manufacturers model code	Looks up on sl_lamp_model
lamp_install_date	date			T	Installation date of lamp	
lamp_in_reason	char(2)				The reason code as to why this asset is being replaced	Looks up on sl_replace_reason
lamp_in_cont_id	smallint(2)				The contract number for this work	
lamp_in_disp_id	integer(6)				The unique number given to each call	
lamp_replace_date	date			T	The date this lamp was replaced	
lamp_rep_reason	char(2)			T	The reason code as to why this lamp was replaced	Looks up on sl_replace_reason
lamp_rep+_cont_id	smallint(2)				The contract number for the replacement of the lamp	
lamp_rep_disp_id	integer(6)				The dispatch ID to replace this lamp	
lamp_notes	char(40)				Any general notes about the lamp	
last_cleaned_dt	date				Date when the lens of diffuser was last cleaned	
prior_id	integer(8)				The ID of the prior asset at the same location	
ru_life	smallint(3)				Remaining useful life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of the light/gear/lamp	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	char(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	char(1)				Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	Looks up on av_standard_rc
use_default_rc	char(1)	Y	D		Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)				Original cost of installing or constructing this asset	
rc_value	money(12,2)				Replacement cost of this asset	
drc_value	money(12,2)				Depreciated replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	

Appendix 3: Asset Register

Table: sl_light **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
as_tip_note	char(255)				General tip for the assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	

Table: sl_pole **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
pole_id	serial(6)	Y	G	T	Unique numeric identifier of pole	
road_id	integer(6)	Y		T	RAMM Road ID	Looks up on roadnames
carrway_start_m	integer(5)			T	Start displacement in metres from the road origin	Looks up on carr_way
location	integer(5)				Displacement in metres from the road origin	Between 0 & 99999 or is null
offset_kerb	decimal(4,1)				Offset from the nearest kerb of the Pole	Between 0 & 120.0 or is null
offset	decimal(4,1)			T	Offset from the centreline to the pole	Between 0 & 120.0 or is null
offset_lhs	decimal(4,1)		0		Distance from lhs of carriageway to the pole in metres	Between 0 & 250 or is null
offset_side	char(1)	Y		T	Side of the road, left, right or centre	C Centre, L Left, R Right, U Unknown
vertical_distance	decimal(3,1)				Vertical distance from left hand side seal to pole base	Between -10 & 99.9 or is null
vertical_ind	char(1)	Y	N		Is the vertical level an estimate, measure or n/a	E Estimate, M Measured, N Not applicable
pole_material	char(4)	Y		T	Pole material code	Looks up on sl_pole_material
pole_shape	char(4)	Y		T	The pole shape code	Looks up on sl_pole_shape
pole_make	char(4)			T	The pole manufacturer code	Looks up on sl_pole_make
pole_model	char(4)				The model number or code of the pole	
pole_mount	char(2)	Y		T	Pole mounting type	Looks up on sl_pole_mount
pole_attach	char(5)				Pole attachment code	Looks up on sl_pole_attach
max_base_dim	smallint(4)				Pole maximum dimension at base, dia if round or multi sided	Between 0 & 9999 or is null
min_base_dim	smallint(4)				Pole minimum dimension at base (mm)	Between 0 & 9999 or is null
pole_purpose	char(1)	Y		T	Main purpose of pole	Looks up on sl_pole_purpose
owner	char(2)	Y	U	T	Owner of the pole or light	Looks up on sl_owner
coating	char(4)			T	Coating applicable to pole	Looks up on sl_coating
pole_colour	char(30)				The colour of the asset	
pole_status	char(1)	Y	N	T	Installation: New, Reconditioned or Unknown	N New, R Reconditioned, U Unknown
install_date	date			T	Installation date of pole	
in_replace_reason	char(2)			T	The reason code as to why this asset is being replaced	Looks up on sl_replace_reason
in_contract_id	smallint(2)				The contract number for this work	
in_dispatch_id	integer(6)				The unique number given to each call	
replace_date	date			T	The date this pole was replaced	
rep_replace_reason	char(2)			T	The reason code as to why this pole was replaced	Looks up on sl_replace_reason
rep_contract_id	smallint(2)				The contract number for the replacement of this pole	
rep_dispatch_id	integer(6)				The dispatch id to replace this pole	
use_height	decimal(3,1)				Estimated height of the highest point for mounting a light	Between 0 & 99.9 or is null
pole_in_use	char(1)	Y	Y	T	Is the pole being used for lighting Yes, No, Unknown	N No, Y Yes, U Unknown
pole_control	char(1)	Y	U	T	The light control mechanism for the pole	Looks up on sl_pole_control
lux	smallint(3)				Light illumination reading	Between 0 & 9999 or is null
power_company	char(2)			T	The name of the power supply company	Looks up on sl_power_company
loc_house1	integer(5)				House number adjacent to pole	
loc_house1_a	char(1)				Letter of the 1st house adjacent to the pole	
loc_house2	integer(5)				2nd house number adjacent to pole, if near side boundary	

Table: sl_pole **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
loc_house2_a	char(1)				Letter of the 2nd house adjacent to the pole	
loc_feature	char(35)				Feature (business, etc.) adjacent to pole	
loc_opp_house1	integer(5)				House number opposite pole	
loc_opp_house1_a	char(1)				Letter of the first house opposite the pole	
loc_opp_house2	integer(5)				2nd house number opposite pole, if pole near boundary	
loc_opp_house2_a	char(1)				Letter of the 2nd house opposite the pole	
loc_opp_feature	char(35)				Feature (business, etc.) opposite to pole	
other_road_id	integer(6)				Road id if the pole is on an intersection	Looks up on roadnames
other_cway_start_m	integer(5)				Start disp. in metres from the road origin for other section	Looks up on carr_way
other_side	char(1)				The side of the other road the pole is located on	C Centre, L Left, R Right, U Unknown
other_location	integer(5)				Displacement in metres from the road origin	Between 0 & 99999 or is null
power_board_no	char(10)				Unique power co number (Power Co internal asset number)	
pole_no	char(10)			T	Pole number visible on the pole	
map_pole_id	char(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(5)			T	Unique post id	Looks up on sign_post
bulk_circuit	char(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	
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	decimal(12,4)			T	NZ map grid co-ordinate	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)			T	NZ map grid co-ordinate	Between -99.9999 & 9999999.9 or is null
gps_date	date			T	Date when the GPS was collected	
gps_by	char(3)				The organisation that collected the GPS data	Looks up on organisation
gps_method_id	integer(5)			T	Unique ID for the gps_method table	Looks up on gps_method
prior_id	integer(8)				The id of the prior asset at the same location	
date_tightened	date			T	Date when the bolts were last tightened	
power_supply_id_1	integer(5)				Primary power supply point	Looks up on sl_power_supply
power_supply_id_2	integer(5)				Secondary power supply point	Looks up on sl_power_supply
supply_point_seq	smallint(2)				Sequence number for the pole from the primary supply point	
men_point	char(1)	Y	U		Multiple Earth Neutral point	L Local, R Remote, U Unknown
men_location	char(50)				Description of the contact or location for a remote MEN point	
ru_life	smallint(2)				Remaining useful life of the asset	
rul_reset	char(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	char(1)	Y			The condition of this retaining wall	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	

Appendix 3: Asset Register

Table: sl_pole **Description:** SLIM (Street Lights)

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
risk_likelihood	char(1)	Y	U		Likelihood of this asset failing	1 Rare, 2 Unlikely, 3 Possible, 4 Likely,
consequence_wt	decimal(5,3)				Calculated weighting from assessment	
risk_consequence	char(1)	Y	U		Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 Major, 5 Extreme, U Unknown
risk	char(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	Looks up on av_standard_rc
use_default_rc	char(1)	Y	D		Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)				Original cost of installing or constructing this asset	
rc_value	money(12,2)				Replacement cost of this asset	
drc_value	money(12,2)				Depreciated replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)				General comments	
as_tip_note	char(255)				General tip for the assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected this data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T	The date this row was added	
added_by	char(20)			T	The logname of the person who added this row	Looks up on staff
chgd_on	date			T	The date this row was last changed	
chgd_by	char(20)			T	The logname of the person who last changed this row	Looks up on staff

Appendix 3: Asset Register

Table: sw_channel

Description: Surface Water Channels - for earth and surfaced eg concreted, chip seal, etc.

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
road_id	integer(6)	Y		T(M)	RAMM Road ID	Looks up on roadnames
start_m	integer(5)	Y		T(M)	Start Displacement from road origin	Between 0 & 99999
end_m	integer(5)	Y		T(M)	End Displacement from road origin	Between 0 & 99999
side	char(1)	Y		T(M)	L=Left hand side, R=Right hand side, B=Both	B Both, L Left, R Right
northing	decimal(12,4)				Northing at the start of the SWC	Between -99.9999 & 9999999.9 or is null
easting	decimal(12,4)				Easting at the start of the SWC	Between -99.9999 & 9999999.9 or is null
northing_end	decimal(12,4)				Northing at the end of the SWC	Between -99.9999 & 9999999.9 or is null
easting_end	decimal(12,4)				Easting at the end of the SWC	Between -99.9999 & 9999999.9 or is null
gps_date	date				Date when the GPS was collected	
gps_by	char(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
length_m	integer(5)	Y		T(M)	Length in metres	Between 0 & 30000
length_adjust_m	integer(5)			T(C)	Adjusted length above or below the calculated length (C) Only when the length of the channel is greater than end_m - start_m	Between -30000 & 30000 or is null
len_adjust_rsn	char(5)			T(C)	Reason for Adjusting the Calculated Length of the Asset (C) Only when length_adjust_m is populated	Looks up on len_adjust_rsn
seal_dist	decimal(3,1)			F	Distance from seal edge to invert of earth channel	Between -20.0 & 20.0 or is null
offset	decimal(4,1)			T(M)	Distance from seal edge to invert of channel	Between 0 & 120.0 or is null
swc_type	char(5)	Y		T(M)	Surface Water Channel Type	Looks up on swc_type
maint_date	date				Date drainage feature last maintained	
maint_cycle	integer(3)				Maintenance cycle in weeks	Between 1 & 999 or is null
constructed	date			T(M)	The date the SWC was constructed	
ru_life	smallint(3)				Remaining Useful Life of the asset	
rul_reset	char(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	char(1)	Y	U		The condition of this surface water channel	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	char(1)	Y	U	T(M)	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	char(1)	Y	U	T(M)	Consequence of this asset failing	1 Insignificant, 2 Minor, 3 Moderate, 4 High, 5 Extreme, U Unknown
risk	char(1)	Y	U		The Risk of this asset failing	1 Very Low, 2 Low, 3 Medium, 4 High, 5 Extreme, U Unknown

Appendix 3: Asset Register

Table: sw_channel

Description: Surface Water Channels - for earth and surfaced eg concreted, chip seal, etc.

Field Name	Type	Required by Software	Generated Value	Required by NZTA	Description	Allowed Values
risk_date	date				Date the Risk value was last updated	
asset_owner	char(3)				Unique identifier for the asset owner	Looks up on asset_owner
sw_channel_id	serial(5)	Y	G	T(M)	Surface Water Channel Unique Identifier	
standard_rc	integer(8)				Unique identifier for the Standard RC definition	Looks up on av_standard_rc
use_default_rc	char(1)	Y			Does this asset use the Default RC definition	D Default, U User
original_cost	money(12,2)				Original Cost of Installing or Constructing this Asset	
rc_value	money(12,2)				Replacement Cost of this asset	
drc_value	money(12,2)				Depreciated Replacement value of the asset or component	
annual_drc_value	money(12,2)				Annual Depreciation of this asset	
valuation_date	date				Date of the last valuation of the asset	
notes	char(255)			T(C)	General comments (C) Only required where additional clarification is useful	
as_tip_note	char(255)				General tip for the Assessor when assessing this asset	
collect_name	char(3)				Name of the person or organisation who collected the data	Looks up on organisation
collect_date	date				Date when this data was collected	
added_on	date		today	T(M)	The date this row was added	
added_by	char(20)			T(M)	The logname of the person who added this row	Looks up on staff
chgd_on	date			T(M)	The date this row was last changed	
chgd_by	char(20)			T(M)	The logname of the person who last changed this row	Looks up on staff