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Product data specification

Vicmap™ Transport

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Version 5.8 April 2022

Applies to data model 4.1 October 2021

AS/NZS ISO 19131:2008 compliant

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# Document history

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| --- | --- | --- |
| Version | Date | Note |
| 1.1 | February 2003 | Standardised document |
| 1.2 | August 2006 | Added new products, MoG changes, Privacy Statement, Proposed / Required Quality Assurance applications |
| 1.3 | July 2008 | Metashare entries removed |
| 1.8 | September 2009 | MoG changes, updated privacy, licensing, product list & future plans. |
| 1.9 | July 2010 | Web address changes |
| 2.0 | December 2011 | Updated logos, Current Data Development & Future Plans, Glossary |
| 2.1 | May 2012 | MoG changes, air improvements |
| 3.3 | October 2012 | New template |
| 3.4 | December 2012 | DataVic Access Policy information added |
| 4.0 | June 2013 | New template, updated reference tables, data dictionary |
| 5.0 | May 2016 | New template, major content review |
| 5.1 | February 2018 | New template |
| 5.2 | February 2020 | Gazettals in Road Locality |
| 5.3 | April 2020 | Incorporated material from Technical Specifications document and retired the Technical Specifications document. |
| 5.4 | October 2020 | Modified EZI Road Name label |
| 5.5 | December 2020 | Updated template & consistency check |
| 5.6 | July 2021 | Road management changes for the Victorian Grants Commission |
| 5.7 | Septemer 2021 | Seasonal Closure addition and clarification of descriptions for road use |
| 5.8 | April 2022 | Removal of rail trail. Updated private road restriction to match data model = 4 |

This document has been formatted and structured in compliance with AS/NZS ISO 19131:2008 Geographic Information – Data product specifications.

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# Overview

## Vicmap™

Vicmap™ is the foundation that underlies most spatial information in Victoria. This portfolio of spatial related authoritative data products, made up from individual datasets, is developed and managed by the Department of Environment, Land, Water & Planning. The information provides the foundation to Victoria’s primary mapping and spatial information systems and is used for building business information and systems.

Vicmap is a registered trademark of the Victorian Government and is synonymous with authoritative statewide mapping since 1975.

The Vicmap data portfolio includes:

|  |  |
| --- | --- |
| Vicmap Address  Vicmap Admin  Vicmap Crown Land Tenure  Vicmap Elevation  Vicmap Features of Interest  Vicmap Hydro  Vicmap Imagery  Vicmap Index | Vicmap Lite  Vicmap Planning  Vicmap Position  Vicmap Property  Vicmap Topographic Mapping  Vicmap Transport  Vicmap Vegetation |

Vicmap data is supported by a collection of Reference Tables, Vicmap Reference Tables. A reference table may list the full name, description and other attributes associated with a feature code or identifier.

Further information can be found at [Vicmap catalogue (land.vic.gov.au)](https://www.land.vic.gov.au/maps-and-spatial/spatial-data/vicmap-catalogue)

## Data product specification title

Vicmap™ Transport

## Responsible party

Department of Environment, Land, Water and Planning

PO Box 527, Melbourne VIC 3001 Australia

[vicmap.help@delwp.vic.gov.au](mailto:vicmap.help@delwp.vic.gov.au)

## Terms and definitions

For the purpose of this document, the following terms and definitions apply.

|  |  |
| --- | --- |
| **Term** | **Definition** |
| ANZLIC ID | A unique identifier enabling metadata records to be discovered and differentiated within a structured data library. |
| Attribute | A characteristic of a feature that may occur as a type or an instance. |
| Custodian | An organisation responsible for ensuring the accuracy, currency, distribution of their data and the terms and conditions of access and use. |
| Data type | Specification of a value domain with operations allowed on values in this domain  Refer to AS/NZS ISO 19103 |
| Dataset | Identifiable collection of data. Maybe as small as a single feature or feature attribute contained within a larger dataset. A hardcopy map maybe considered a dataset.  Refer to AS/NZS ISO 19115 |
| Dataset series | Collection of datasets sharing the same product specification, also known as a product. |
| Domain | A well-defined set both necessary and sufficient, as everything that satisfies the definition in the set and everything that does not satisfy the definition is necessarily outside the set.  Refer to ISO/TS 19103 |
| the Department | Meaning the Department of Environment, Land, Water & Planning (DELWP). |
| Entity | A unit of data that can be classified and have stated relationship with other entities. |
| Feature | An abstraction of real-world phenomena. A feature may occur as a type or an instance. Feature type or instance shall be used when only one is meant.  The feature structure of the feature-based data model can be summarised as:  feature instance = [spatial object + attribute object] |
| Metadata | Metadata is ‘data about data’ and provides a synopsis about the data lineage, accuracy and details about access permissions.  Refer to ISO 19115 Geographic information ― Metadata |
| Parent metadata record | Parent metadata records act as a cover note for a product that contains a dataset series for search, discovery & delivery purposes. |
| Persistent Feature Identifier (PFI) | The unique code provided at creation of the feature which remains until the feature is retired. |
| Product | Dataset or dataset series that conforms to a data product specification. |
| Quality | Totality of characteristics of a product that bear on its ability to satisfy stated and implied needs. Refer to:  ISO 19113 Geographic information ― Quality principles  ISO 19114 Geographic information ― Quality evaluation procedures |
| the State | Victoria. |
| Unique Feature identifier (UFI) | Each feature is uniquely identified and renewed with each change. |

## Acronyms

For the purpose of this document, the following acronyms may apply.

|  |  |
| --- | --- |
| **Acronym** | **Definition** |
| AHD | Australian Height Datum |
| DALA | DELWP Data Access License Agreement |
| DELWP | Department of Environment, Land, Water & Planning |
| DSV | Data Search Victoria |
| CFA | Country Fire Authority |
| DALA | DELWP Data Access License Agreement |
| DELWP | Department of Environment, Land, Water & Planning |
| FIB | Forest Industry Brigade |
| GDA | Geographic Datum Australia |
| GIS | Geographic Information System |
| GNR | Geographic Place Names Register |
| MoU | Memorandum of Understanding |
| VES | Vicmap Editing Service |
| PIQA | Property Information Quality Audit |
| RMSE | Root-Mean-Square Error |
| SDM | Spatial DataMart |
| SPOT | Satellite Pour l’Observation de la Terre (French) |

## Informal description of the data product

Vicmap Transport was created in 2000 and provides an accurate representation of Victoria’s statewide road, rail and airport assets. It is used in a variety of applications, particularly in emergency services, route management, logistics planning and development.

Vicmap Transport is a framework product that forms an essential element to the map base for the State’s Topographic mapping program.

Product updates are made available weekly through the Vicmap maintenance lifecycle. The data is sourced from authoritative Custodians via the Departments Custodianship Program.

# Specification scope

### Level

Dataset series

### Extent & coverage

Covering statewide Victoria. Additional cross border data for Vicmap Transport is provided to DELWP under an arrangement with New South Wales and South Australia. The cross-border data extends up to 100 kilometres into New South Wales and a 1 x 1:100 000 tile into South Australia.

# Data product identification

### Title

Vicmap™ Transport

### Abstract

Vicmap Transport represents the trafficable transport network for Victoria and is made up of point, line and polygon vector features in a seamless and topologically structured dataset series. It is comprised of a basic framework of linear features supplemented by related point and polygon features to value add data for the transport networks across the State. Attribute tables classify and describe the real-world features using code lists that can be used for search, discovery and analysis.

Use applications for Vicmap Transport include road and rail networking and routing examination.

The following transport features are fundamental to Vicmap Transport:

* Road network
* Road related structures – including fords, bridges, tunnels, gates, intersections, roundabouts, barriers, rail crossings and ferry routes
* Rail network, railway yard, tramway, railway bridge, railway tunnel
* Rail related structures – including railway sidings, stations, railway bridges, railway tunnels
* Tramway network, and
* Air related structures – including (major) airport extents, runways, landing strips, helipads.

This product should also be used in conjunction with Vicmap Reference Tables.

### Topic Category

Transportation

Location

### Main themes

The main themes associated with Vicmap Transport are:

* *Trafficable roads* – a statewide coverage of network roads at all levels within Victoria. Including major highways to walking tracks, ferry routes, new roads and changes to current roads.
* *Airports* – all aspects of airports infrastructure within Victoria, including all airports from international to local landing strips.
* *Rail* – the statewide rail network as well as tram lines are provided in one layer with a separate layer showing railway stations.

# Data content and structure

### Data content

The feature based datasets that comprises Vicmap Transport are listed below:

|  |  |  |  |
| --- | --- | --- | --- |
| **ANZLIC ID** | **Dataset name** | **Description** | **Feature type** |
| ANZVI0803002441\* | [VICMAP\_TRANSPORT](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002441&extractionProviderId=1) | Parent metadata record | N/A |
| ANZVI0803002870 | [TR\_AIRPORT\_AREA\_POLYGON](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002870&extractionProviderId=1) | Airport Area | Polygon |
| ANZVI0803002446 | [TR\_AIRPORT\_INFRASTRUCTURE](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002446&extractionProviderId=1) | Airport Infrastructure | Line |
| ANZVI0803002447 | [TR\_AIR\_INFRA\_AREA\_POLYGON](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002447&extractionProviderId=1) | Airport Infrastructure Area | Polygon |
| ANZVI0803002612 | [TR\_AIR\_INFRA\_POINT](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002612&extractionProviderId=1) | Airport Infrastructure | Point |
| ANZVI0803002442 | [TR\_RAIL](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002442&extractionProviderId=1) | Rail Network | Line |
| ANZVI0803002457 | [TR\_RAIL\_INFRASTRUCTURE](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002457&extractionProviderId=1) | Rail Infrastructure | Point |
| ANZVI0803002595 | [TR\_ROAD](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002595&extractionProviderId=1) | Road Network | Line |
| ANZVI0803002444 | [TR\_ROAD\_INFRASTRUCTURE](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002444&extractionProviderId=1) | Road Infrastructure | Point |
| ANZVI0803008954 | [TR\_ROAD\_USE](http://services.land.vic.gov.au/SpatialDatamart/dataSearchViewMetadata.html?anzlicId=ANZVI0803002444&extractionProviderId=1) | Road Use | N/A |
| ANZVI0803008955 | TR\_ROAD\_REGISTER | Road Register | Line |
| ANZVI0803003245 | TR\_ROAD\_LOCALITY\_SECTION | Road Locality Section |  |
| ANZVI0803003244 | TR\_ROAD\_LOCALITY | Road Locality |  |

Table 1: Vicmap Transport datasets.

*\*Parent metadata record for Vicmap Transport. Parent metadata records act as a cover note for a product that contains a dataset series for search, discovery & delivery purposes.*

The Vicmap Reference Tables associated with Vicmap Transport are referred to in **Appendix D**.

*Line data:*  Linear features such as roads and railways can be considered as linear networks and are of special interest in GIS for network analysis processes such as shortest path computations. Linear Networks are composed of nodes and chains. Nodes may be distinct features in their own right and are used in Vicmap Transport to represent such features as a road end or an intersection with other linear features.

*Point data:* Relatively small area features, less than 50m in length, may be generalised as entity points such as the centroids of bridges, tunnels, gates, railway stations and helipads, etc. Some larger area features, e.g. helipads are represented as entity points.

*Polygon data:* Some larger area features have been captured in more detail and will be represented as entity polygons. Examples include airport perimeters and sealed runways at major airports.

*Attribution:* Every entity in this dataset is attributed, including detail both specific to the individual entity (e.g. road name) and generalised information about the feature (e.g. feature type). Generalised classes of common attribution are coded and indexed in separately maintained reference tables.

|  |  |
| --- | --- |
| **Attributes** | **Description** |
| Spatial Feature | Description of a spatial feature within the dataset including feature ID, date stamping and type |
| Feature Quality | Defines accuracy and other quality information pertaining to this spatial feature |
| Capture Method | The method used to capture this data |
| Data Source | The source of the data in this dataset |
| Layer | The layer to which the features belong |
| Theme | The Theme to which the features belong |
| Named Feature | The list of all names of features used within Victoria, with linkages to the official Geographic Place Names Register (GNR). Vicmap Transport defines the named extent of roads within the product rather than a single point. |
| Alternate Name | The list of alternative names applicable to features. Names may or may not occur in the Geographic Place Names Register (GNR) |
| Feature Type | The holding of all the different feature types |

Table 2: Attribute class tables associated with Vicmap Transport

For further information please refer to the metadata records for each dataset at [Data Search Victoria](http://services.land.vic.gov.au/SpatialDatamart/).

## Feature based data

### Data model

Refer to Appendix A.

The majority of Vicmap product data models are published on the department’s website <https://www.land.vic.gov.au/maps-and-spatial/spatial-data/vicmap-catalogue/vicmap-transport>

### Data dictionary

Refer to Appendix B.

### Data structure

Rules and/or characteristics that apply to Vicmap Transport:

* A Persistent Feature Identifier (PFI) is generated once for each feature at the point of creation and remains constant until a feature is retired. A PFI is unique to and cannot be reused within a particular table. However, you may have the same PFI number in different tables but does not relate to the same feature entity
* The Unique Feature Identifier (UFI) is generated for each feature at the point of creation and changes with each modification or version. This allows users to track the changes made to a feature over time
* Direction code to indicate forward or reverse direction of roads with respect to each vector, the digitised direction of feature
* Connectors or pseudo roads are used to provide topologically correct representation to allow for linear analysis of road networks through roundabouts or implied intersections
* Feature attribution to further describe or classify features e.g. Name, locality, route number, class, road seal, road restriction, bridge construction type, structure type, physical condition
* *Feature\_Quality\_ID* attribute is the pointer to a Feature Quality Table that provides data quality information (feature reliability dates, spatial accuracy and data source)
* Seamless storage of the data across full extent (non-tiled)
* Meaningful alphanumeric feature codes are held directly on spatial features to facilitate data maintenance e.g. *rail\_cross*, *bridge*
* Ramp naming convention employed to uniquely identify freeway interchange ramps using a derived logical traffic flow of either *INbound* or *OUTbound* ramps relative to Melbourne
* Road chain features carry locality (suburb) left and right as attributes, helping orientate users and the differentiation of roads with duplicate or ambiguous names
* National and State Road Route Numbers
* Underpinned by a road centreline layer across the State
* GNR uses Vicmap Transport to define the extend of a road name
* Public Land managed roads indicated by the *NRE Route Number*, and
* Alternate/alias road names.

Cross border data is not subject to the same data structures or accuracy as the content within Victoria. This is due to the differences in the data models between the States.

Further information regarding the structure of the product can be referred to Appendix C.

# Reference systems

Vicmap Address is mapped to the Geocentric Datum of Australia (GDA) and the Australian Height Datum (AHD). Data is held in geographic latitude and longitude computed in terms of the GDA at 01 January 1994 (GDA94).

The temporal reference system for Vicmap is the Gregorian calendar.

# Data quality

## Accuracy

Vicmap relies heavily on Custodianship Agreements or MoUs to source its data from authoritative Custodians.

The spatial accuracy of data within a Vicmap product is where possible better than 1:25,000 and retains vertical alignment with other Vicmap datasets.

The following procedures are undertaken as normal update/maintenance routines, to ensure conformity of the data to specification:

* Customised menus for data editing which provide on the fly logical consistency attribute checking as data is edited
* Automated data QA processes to validate topological integrity, completeness and logical consistency. The Department reviews road name content against authoritative Custodian sources through the annual Property Information Quality Audit (PIQA).
* Automated data loading routines, reflecting business rules for data population, to ensure data accuracy
* Independent review of data upon loading including aspatial attributes, spatial extents and successful data load
* Validation of accepted types according to approved reference tables
* Adoption of ICSM guidelines for incremental updates - to assist in temporal data management (features are date-stamped)
* Validation of entity PFI/UFI tags for uniqueness.

Approximately 5% of all maintenance advice notices processed are separately audited by the Department to confirm accuracy, completeness and correctness in the capture process.

### Positional accuracy

The positional accuracy of Vicmap Transport within the Melbourne Metropolitan area and Victorian rural areas:

Not more than 10% of well-defined points will be in error by more than 8.2m for the Melbourne Metropolitan area and 33m for rural areas.

The largest error in the data is ±15m for the Melbourne Metropolitan area and ±60m for rural Victoria.

## Completeness

The Department continuously reviews Vicmap data in collaboration with authoritative Custodians. Reliability figures indicating completeness of content between the data set and real world. Estimated completeness of content in Victoria for the main Vicmap Transport datasets:

|  |  |
| --- | --- |
| **Dataset** | **Percentage of completeness** |
| Road infrastructure (ford, bridge, tunnel, gate, intersection points) | 96% |
| Road (road, bridge, tunnel, ford) | 96% |
| Ferry Route | 90% |
| Rail (railway, tramway, station, bridge, tunnel, yard) | 90% |
| Airport Infrastructure (runway, helipad) | 95% |
| Airport Area (airport) | 95% |

Table 3: Vicmap Transport completeness 2013 results.

The figures in Table 3 are anecdotal, sometimes supported by limited feature and/or attribute comparisons with other datasets. They have not been confirmed through statistical methodologies and/or large-scale field trials.

# Data capture

Created in 2000 the original line work and points for Vicmap Transport were derived from the Department’s digital topographic map base at a capture scale of 1:25,000.

Vicmap relies on the agreements and MoU’s signed with authoritative Custodians, through the *DELWP Custodianship Program*, for its data.

The Department may also use imagery to improve the completeness of a dataset in absence of an authoritative Custodian.

Examples of Custodians and/or those that may supplement or verify Vicmap data are listed below:

* Federal, State and Local Government
* Government agencies and authorities (e.g. Parks Victoria, Melbourne Water, VicRoads)
* Registrar of Geographic Names – Department of Environment, Land, Water, and Planning
* Crown Land Management – Department of Environment, Land, Water, and Planning
* Fire Management - Department of Environment, Land, Water, and Planning
* Emergency & Essential Services, and
* Utility companies.

Primary Custodians for Vicmap Transport specifically are:

* Local government for new and changed road information
* Vicroads for major roads
* The GNR for locality and topographic feature name detail, and
* DELWP for roads on public land.

Primarily Vicmap Transport content is supplemented and/or verified by:

* Licensed Surveyors
* Regional Water Authorities
* Street Directories
* Melbourne Water
* Victoria’s Emergency Services
  + CFA brigade feedback through Spatial Vision’s Vicmap Book publication schedule
* Emergency Services Telecommunications Authority (ESTA)
* Parks Victoria
* State Government, Land Registry
* Data capture and verification using aerial imagery, and
* Victorian Government Gazette.

# Data maintenance

Vicmap can change under one of the following two terms:

* *Vicmap maintenance -* The incorporation of new data to an existing dataset via an M1, spatial change requests or scheduled Custodial supply. No changes are made to the data or object model, therefore does not require change management processes. Additions can be seen in the weekly Vicmap update.
* *Vicmap improvements –* changes to a dataset that may see existing data over a large area replaced and/or may require the data model changed. Vicmap Improvement must be managed through the Vicmap Change Management Forum and are typically carried out as part of a project requiring additional funding. and may reinvolve a new Custodial data requiring change management.

DELWP obtains updates to data from authoritative Custodians at various intervals based on the agreed Custodianship arrangements (i.e. quarterly, yearly and ad hoc). Updates are incorporated into Vicmap daily and made available weekly: noting that Vicmap data is never deleted, only retired and archived for legal purposes. Data is date stamped to reflect the last time the record was verified.

Reported errors or omissions are verified with the authoritative source before a change is made. Most notifications regarding anomalies are received via the Vicmap Editing Service (VES) and once verified will be incorporated into Vicmap. Feedback from users and stakeholders, including emergency services dispatch providers, ensures that the highest standards are maintained.

Approximately 5% of all maintenance advice notices processed are separately audited by DELWP to confirm accuracy, completeness and correctness in the capture process.

Cross border data is maintained to a limited extent into New South Wales and South Australia to assist primarily emergency and essential service activities. A cross boarder agreement between the State Government departments manages the relationship and distribution of this data. Data is updated on an annual basis subject to funding being available. The data made available to DELWP is subject to the maintenance regime of the relevant jurisdiction and their respective quality, accuracy and completeness specifications which may differ from Vicmap.

# Data product delivery

## Access & licensing

**Data ava**i**lable under the DataVic policy** [www.data.vic.gov.au](http://www.data.vic.gov.au)

Vicmap Transport is freely available through the Data.Vic platform at [www.data.vic.gov.au](http://www.data.vic.gov.au) under a Creative Commons Attribution 4.0 Australia license.

The Victorian Government Data Directory also provides details such as:

* Timetable for release
* Usage and availability restrictions
* License restrictions and conditions
* Access constraints
* Exclusion of liability
* Supply and media formats
* Projections.

Cross boarder data is restricted to internal and emergency services use and therefore not available through the Data.Vic platform.

Vicmap is also available through a network of Data Service Providers listed at: <https://www2.delwp.vic.gov.au/maps/spatial-data/victorian-spatial-data/licensing#DSP>

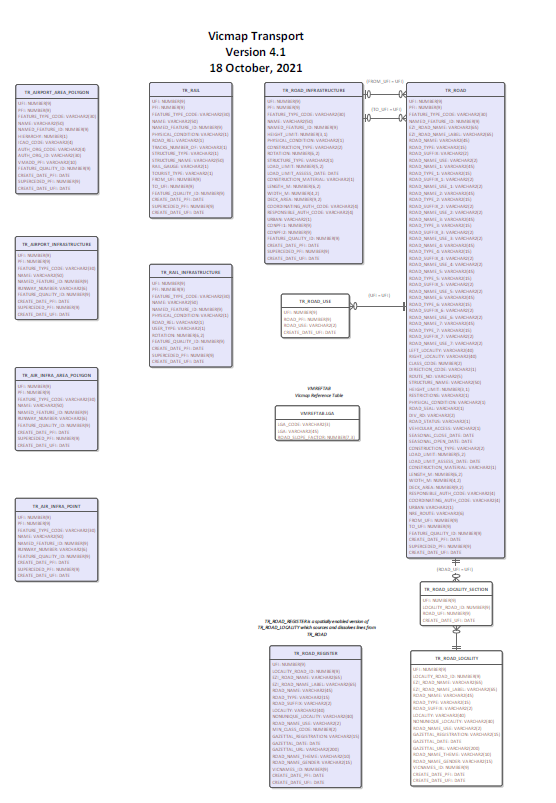
Historical versions of Vicmap data is only available under special and exceptional circumstances, such as a legal proceeding, and may incur an administration fee.

# Metadata

The metadata, abstract, and preview for the datasets within Vicmap products can be viewed at Spatial DataMart (SDM) located at [www.delwp.vic.gov.au/datasearch](http://www.delwp.vic.gov.au/datasearch) by searching for the ANZLIC ID.

# Appendix A: Data & object models

Vicmap data models can be located at [www2.delwp.vic.gov.au/maps](http://www.delwp.vic.gov.au/vicmap)



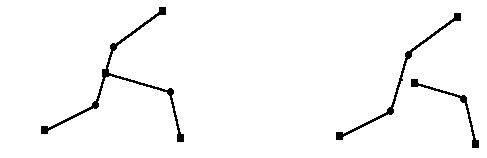
To conform as far as possible to the national (ICSM) topographic data model, some specific requirements were identified by DELWP, with respect to the handling of cartographic text, unformed polygon based features, and temporal and status management.

## Spatial Data Integrity

Vicmap Transport data will comply with the following rules for spatial data integrity. (The maximum allowable errors are described in the ‘Data Quality’ section. The rules will be enforced with a 95% or better confidence level when full Vicmap Transport compliance has been reached.)

* The spatial data will have no overshoots, undershoots, broken lines, pseudo nodes or other artefacts of the data capture process.

These possible errors in the data and their correct structure are illustrated below.



*Correct Representation Incorrect Representation*

##### **Undershoot in data**



*Correct Representation Incorrect Representation*

##### **Overshoot in data**

*Pseudo node*



*Same feature with identical attribute values*

##### **Pseudo-node in data**

*Correct Representation*



*Incorrect Representation*

##### **Broken line in data**



*Correct Intersection Incorrect Intersection Incorrect Intersection*



*Correct Linear Feature Spike in Linear Feature*

##### **Artefacts**

Artifacts such as spikes and deviations of a linear feature from its expected position are removed from the data to the extent that they will not be visible when the data is plotted or displayed at half its nominal scale i.e. 1:12 500 for 1:25 000 data.

* All linear features within the same layer are broken by a node at intersections, or at the point where an attribute of the feature changes. A node will exist at these intersection points.
* Within a layer there will be no coincident features.

## Coincident features

There will be no coincident polygons, lines (whole or in part) or points of the same feature type in the data (also frequently known as double digitising). Differing features may be coincident, as may be the case where a dam wall also forms part of a dam polygon, (in these cases, the common data repeats for each feature type, and is appropriately tagged and supplied as part of each feature type)

## Point Density Reduction

Data point reduction filters linear spatial objects so that the locational information is conveyed by the minimum number of points while still retaining the smooth shape of the source data.

The following specifications have been adopted:

* The length of a line segment should be equal to, or greater than 2.5 metres.
* The length of a line segment should not be greater than 10,000 metres.

## Resolution of coordinates

Co-ordinates of all spatial objects will be quoted to the nearest 0.001 metres

## Unique Feature Identifier Attribute

Feature identification is managed through the use of two identifier attributes, the Persistent Feature identifier (PFI) and the Unique Feature Identifier (UFI).

The PFI is a sequential number allocated to new features at creation and remains with the feature throughout all editing actions. Over time the PFI itself will not be unique within the database as edit actions result in splitting and merging of features. Old PFI’s are retired after merge and split edits. A PFI does not change when edits are undertaken on attributes or modifications done to spatial representation of a feature.

A Unique Feature Identifier (UFI) will be an alphanumeric string attached to each feature instance as an attribute. The UFI will be unique on a State basis (depending on systems adopted by other States), and is expected to facilitate the efficient incremental update of Vicmap Transport features.

The UFI attribute will be assigned to new or edited features as maintenance occurs. The UFI attribute will always be unique.

Both PFI and UFI items are numeric by definition and will be managed with the same domain across all themes in Vicmap Digital.

# Appendix B: Data dictionary

This section sets out the layers, entities, attribute tables, and fields within these tables that comprise the Vicmap Transport product.

For a complete list of Vicmap Reference Tables utilised by Vicmap Transport see **Appendix D.**

## Spatial services PFI /UFI Applications

The following incremental update attributes are required with behaviour as described:

* PFI – a sequential number applied across the whole VDRT database.

A new PFI is assigned in the following instances:

Creation of a new feature, i.e. when a new object is added to the database.

When two or more existing features are merged, the final merged feature assumes a new PFI. The old PFIs of the features making up the merged feature are retired.

When a feature is split into two or more new features. Each of the new features is assigned a new PFI. The PFI of the original feature is retired.

PFIs do not change when a feature is edited in any other way. i.e. when the following edits are undertaken on features :-

Attributes of a feature are modified

Physical or spatial representation of a feature is modified.

* UFI - a unique sequential number applied across the whole VDRT database. New UFIs are created on a feature whenever edits are undertaken on the feature.
* Create\_date\_UFI, The date that a UFI is created on a feature
* Retire\_date\_UFI, The date that a feature is retired. A feature is retired when any physical change, attribute change, or deletion of a feature occurs.
* Superceded\_UFI; This is the UFI of a feature prior to the last edit of the feature
* create\_date\_pfi, (format dd-mmm-yyyy hh:mm:ss) is the date/time stamped against each feature when it is originally created and remains with the feature through all editing actions to attributes or modification of feature spatial representation.
* ‘retire\_date\_pfi, (format dd-mmm-yyyy hh:mm:ss) is the date/time stamped against each feature when it is retired as a result of merge, split or deletion actions.

Vicmap data is never deleted, only retired. All key features are tagged with the above attributes to enable an audit trail to be maintained and to facilitate incremental updating.

## Feature Quality Class Attributes

**GENERAL REFERENCE CLASSES**



**Class: feature\_quality**

***Definition:*** *Defines accuracy and other quality information pertaining to this spatial feature*

***Features:*** *Aspatial*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Definition** | **Data Type** | **Code List** | **Key** | **Mandatory** |
| Id | Identifier for the feature quality record | number |  | yes | yes |
| feat\_reli\_date | reliability date for spatial features | date |  |  | yes |
| attr\_reli\_date | reliability date attribute | date |  |  | yes |
| plan\_accuracy | plan accuracy | real |  |  | yes |
| elevation\_accuracy | elevation accuracy | real |  |  | yes |
| data\_sour\_code | Source Code | number |  |  | yes |
| Scale | VICMAP Digital data scale indicating position accuracy | number |  |  | yes |
| create\_date | Date the record was created on | date |  |  | yes |

**Data Source Code**

***Data Source Class Attributes***

|  |  |
| --- | --- |
| **Source** | **Source Description** |
| 1 | MMBW |
| 10 | MELWAYS/UBD |
| 20 | VICROADS |
| 21 | VICROADS - DESIGN |
| 30 | DELWP |
| 31 | DELWP - TOPOGRAPHIC |
| 32 | DELWP - PROPERTY |
| 40 | LOCAL GOVERNMENT AUTHORITIES |
| 50 | EMERGENCY SERVICES/BEST |
| 60 | WATER AUTHORITIES |
| 70 | FIELD DATA CAPTURE |
| 80 | SATELLITE IMAGERY |
| 81 | AERIAL PHOTOGRAPHY |
| 90 | NSW – LAND INFORMATION CENTRE |
| 999 | UNKNOWN |

***REFERENCE TABLE CODELISTS APPLICABLE:***

**Derivation of Planimetric Accuracy**

The proposed derivation of planimetric accuracy is based on the SDRN (State Digital Road Network) specification absolute accuracy definitions (Refer SDRN Technical Specification version 5.0).

Standard deviations proposed to be adopted as detailed below:-

| **Scale** | **source** | **theoretical plan\_acc** | **Formula Used** | **adopted plan\_acc** |
| --- | --- | --- | --- | --- |
| 40 | 1, 32 (cadas) | 0 | scale\*0.00063 | 0.5 |
| 480 | 1, 32 | 0.3 |  | 0.5 |
| 500 | 1, 32 | 0.3 |  | 0.5 |
| 1000 | 1, 32 | 0.6 |  | 1 |
| 2500 | 1, 32 | 1.6 |  | 2 |
| 5000 | 1, 32 | 3.2 |  | 4 |
| 7500 | 1, 32 | 4.7 |  | 5 |
| 10000 | 1, 32 | 6.3 |  | 10 |
| 20000 | 1, 32 | 12.6 |  | 15 |
| 25000 | 1, 32 | 15.8 |  | 20 |
| 50000 | 1, 32 | 31.5 |  | 35 |
| 40 | 31 (topo) | 0 | scale \* 0.00033 | 0.5 |
| 480 | 31 | 0.2 |  | 0.5 |
| 500 | 31 | 0.2 |  | 0.5 |
| 1000 | 31 | 0.3 |  | 0.5 |
| 2500 | 31 | 0.8 |  | 2 |
| 5000 | 31 | 1.7 |  | 3 |
| 7500 | 31 | 2.5 |  | 4 |
| 10000 | 31 | 3.3 |  | 6 |
| 20000 | 31 | 6.6 |  | 11 |
| 25000 | 31 | 8.3 |  | 14 |
| 50000 | 31 | 16.5 |  | 28 |
|  | All other sources | scale \* 0.00033 |  | Round up to appropriate whole metre |
| 9999999 |  | 9999 |  | 9999 |
|  |  |  |  |  |

**Class: data\_source**

***Definition:*** *The source of the data in this dataset*

***Features****: Aspatial*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Definition** | **Data Type** | **Code List** | **Key** | **Mandatory** |
| Code | Source code | number |  | yes | yes |
| Name | Data source name | character |  |  | yes |
| description | Source description | character |  |  | no |

**Data Layer Class Attributes**

**Class: Layer**

***Definition****: The layer to which the features belong*

***Features****: Aspatial*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Definition** | **Data Type** | **Code List** | **Key** | **Mandatory** |
| Code | Layer code | number |  | yes | yes |
| Name | Layer name | character |  |  | yes |
| Description | Layer description | character |  |  | no |
| theme\_code | Theme code | character |  |  | yes |

**Data Theme Class Attributes**

**Class: Theme**

***Definition****: The Theme to which the features belong*

***Features****: Aspatial*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Definition** | **Data Type** | **Code List** | **Key** | **Mandatory** |
| Code | Theme code | number |  | yes | yes |
| Name | Theme name | character |  |  | yes |
| Description | Theme description | character |  |  | no |

**Class: spatial\_feature**

*Definition:* ***A spatial feature within the dataset***

*Features:* ***Spatial***

| **Name** | **Definition** | **Data Type** | **Key** | **Mandatory** | **Unique** |
| --- | --- | --- | --- | --- | --- |
| PFI | VICMAP Digital unique identifier for a feature over time (common to all versions of a single feature) | number | yes | yes |  |
| UFI | VICMAP Digital unique identifier for a feature | Number | yes | yes | yes |
| feature\_type\_code | feature code to identify feature type | Character |  | yes |  |
| named\_feature\_id | Feature Name Identifier for the feature | number |  |  |  |
| feature\_quality\_id | Identifier for the feature quality record | number |  | yes |  |
| Create\_date\_pfi | Date the PFI originally created | date |  | yes |  |
| Superceded\_pfi | PFI of feature before merge or split operation | number |  |  |  |
| create\_date\_ufi | Date the ufi was created on | date |  | yes |  |

***Spatial Feature Class Common Attributes***

## Feature Coding Conventions

Meaningful alphanumeric feature codes are held directly on the spatial features to assist in data maintenance. In a number of instances, feature codes are expanded to inherently hold some ‘type’ attributes, that are normalized in the Spatial Information Infrastructure Unified Data Store model. Type attributes in the Transport Theme have been absorbed using this approach as per the following Table.

| **Aggregated Feature** | **Type Attribute** | **Entities** | **Feature Type Codes** |
| --- | --- | --- | --- |
| Road Infrastructure | Road Infrastructure\_type | Ford | ford |
|  |  | Dip | dip |
|  |  | Bridge | bridge |
|  |  | Tunnel | tunnel |
|  |  | Gate | gate |
|  |  | Barrier | barrier |
|  |  | Level Crossing | level crossing |
|  |  | Intersection | int\_admin  int\_attribute  int\_coast  int\_locality  int\_nosignal  int\_signal  roundabout  road\_end |

***Transport Feature Codes incorporating type***

**Transport Theme Layer Entity Attribute Relationships**

| **Aggregated Feature** | **Geometric Type** | **Included Entities** | **Class Specific Attributes** |
| --- | --- | --- | --- |
| **Airport Area** | Polygon | **Airport** |  |
| **Airport Infrastructure Area** | Polygon | **Runway** | runway\_number |
| **Airport Infrastructure** | Line | **Runway** | runway\_number |
| Point | **Helipad** |  |
| **Rail** | Line | **Railway**  **Tramway**  **Tunnel**  **Bridge**  **Railway Yard** | structure\_  physical\_condition  road\_rel  track\_number\_of  structure\_construction\_type  rail\_gauge  tourist\_type |
| **Rail Infrastructure** | Point | **Railway Exit** |  |
| Point | **Railway Station**  **Tunnel**  **Bridge** | structure\_physical\_condition  rotation  user\_type |
| **Road** | Line | **Road Segment**  **Ford**  **Bridge**  **Tunnel**  **Ferry** | road\_name  road\_type  road\_suffix  class\_code  direction\_code  route\_no  nre\_route  structure\_height\_limit  restrictions  road\_seal  structure\_ physical\_condition  structure\_  construction\_type  left\_locality  right\_locality  structure\_name  ferry\_type |
| **Road Infrastructure** | Point |  | related\_feature\_ufi  rotation |
| **Ford** | class\_code  route\_no  nre\_route |
| **Dip** | class\_code  route\_no  nre\_route |
| **Bridge** | class\_code  height\_limit  road\_id  route\_no  nre\_route  physical\_condition  construction\_type |
| **Tunnel** | class\_code  height\_limit  route\_no  nre\_route |
| **Gate** | structure\_type |
| **Intersection** |  |
| **Barrier** |  |
| **Level Crossing** |  |

**LAYER TABLE STRUCTURE**

### 1 AIRPORT AREA (POLYGON)

**1.1 Summary information**

|  |  |
| --- | --- |
| **Description** | A facility, either on land or water, where aircraft can take off and land; usually consists of hard surfaced landing strips a control tower, hangars, and accommodations for passengers and cargo. |
| **Entity** | Airport |
| **Included terms** | Aerodrome, Seadrome, Seaplane base, Landing Area, Apron, Taxiway |
| **Entity Type** | Spatial |
| **Feature Type** | airport |

**1.2 Table description: TR\_AIRPORT\_AREA\_POLYGON**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| AUTH\_ORG\_CODE | VARCHAR2 | 4 | Y | The code of the Authoritative Organisation where the record is sourced.  VMREFTAB.FT\_AUTHORITATIVE\_ORGANISATION.AUTH\_ORG\_CODE |
| AUTH\_ORG\_ID | VARCHAR2 | 30 | Y | The identifier of the Authoritative Organisation where the record is sourced. |
| HIERARCHY | VARCHAR2 | 1 | N | CASA hierarchy of Airports. VMREFTAB.TR\_AIRPORT\_HIERARCHY.HIERARCHY |
| ICAO CODE | VARCHAR2 | 4 | Y | International Civil Aviation Organisation unique identifier |
| NAME | VARCHAR2 | 50 | Y | name of a feature |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| RUNWAY\_NUMBER | VARCHAR2 | 6 | Y | Number of Runways associated with the Airport |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record  VMREFTAB.TP\_FEATURE\_QUALITY.ID |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB.FEATURE\_TYPE\_TOPO.FEATURE\_TYPE\_CODE |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature |

**1.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

VMREFTAB.FT\_AUTHORITATIVE\_ORGANISATION

VMREFTAB.TP\_FEATURE\_QUALITY

VMREFTAB.TR\_AIRPORT\_HIERARCHY

### 2 AIRPORT INFRASTRUCTURE AREA (POLYGON)

**2.1 Summary information**

|  |  |
| --- | --- |
| **Description** | A straight path used for landing and take-off of aircraft. |
| **Entity** | Runway |
| **Included terms** | Airstrip, Landing strip, Landing area |
| **Entity Type** | Spatial |
| **Feature Type** | runway |

**2.2 Table description: TR\_AIR\_INFRA\_AREA\_POLYGON**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB.FEATURE\_TYPE\_TOPO.FEATURE\_TYPE\_CODE |
| NAME | VARCHAR2 | 50 | Y | name of a feature |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| RUNWAY\_NUMBER | VARCHAR2 | 6 | Y | Number of Runways associated with the Airport |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature |

**2.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

### 3 AIRPORT INFRASTRUCTURE (LINE)

**3.1 Summary information**

|  |  |
| --- | --- |
| **Description** | A straight path used for landing and take-off of aircraft. |
| **Entity** | Runway |
| **Included terms** | Airstrip, Landing strip, Landing area |
| **Entity Type** | Spatial |
| **Feature Type** | runway |

**3.2 Table description: TR\_AIRPORT\_INFRASTRUCTURE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB.FEATURE\_TYPE\_TOPO.FEATURE\_TYPE\_CODE |
| NAME | VARCHAR2 | 50 | Y | name of a feature |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| RUNWAY\_NUMBER | VARCHAR2 | 6 | Y | Number of Runways associated with the Airport |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature |

**3.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

### 4 AIRPORT INFRASTRUCTURE (POINT)

**4.1 Summary information**

|  |  |
| --- | --- |
| **Description** | An area set aside or designated for the landing of helicopters |
| **Entity** | Helipad |
| **Included terms** | Helicopter landing pad, helipad, heliport |
| **Entity Type** | Spatial |
| **Feature Type** | helipad |

**4.2 Table description: TR\_AIR\_INFRA\_POINT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB.FEATURE\_TYPE\_TOPO.FEATURE\_TYPE\_CODE |
| NAME | VARCHAR2 | 50 | Y | name of a feature |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| RUNWAY\_NUMBER | VARCHAR2 | 6 | Y | Number of Runways associated with the Airport |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature |

**4.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

### 5 RAIL (LINE)

**5.1 Summary information**

|  |  |
| --- | --- |
| **Description** | A permanent way having one or more rails which provide a track for trains. |
| **Entity** | Railway |
| **Included terms** | Abandoned railway, Disused railway, Double track railway, Light rail, Monorail, Single track railway, Spur line, Underground railway |
| **Entity Type** | Spatial |
| **Feature Type** | rail\_disused, rail\_light, rail\_siding, rail\_uground\_o, railway |

|  |  |
| --- | --- |
| **Description** | A permanent way having one or more rails which provide a track for trams. |
| **Entity** | Tramway |
| **Included terms** | Tramway |
| **Entity Type** | Spatial |
| **Feature Type** | tramway |

|  |  |
| --- | --- |
| **Description** | An underground or underwater passage. |
| **Entity** | Tunnel |
| **Included terms** | Cattle underpass, Pedestrian underpass, Subway, Underground railway tunnel, Underpass |
| **Entity Type** | Spatial |
| **Feature Type** | tunnel\_rail\_o |

|  |  |
| --- | --- |
| **Description** | An area of land with one or more sidings or spur lines to allow trains to be parked, serviced, assembled or unloaded |
| **Entity** | Railway yard |
| **Included terms** | Marshalling yard, siding |
| **Entity Type** | Spatial |
| **Feature Type** | marshalling\_yard\_rail, railway\_siding |

|  |  |
| --- | --- |
| **Description** | A structure that facilitates the crossing of a road, railway or watercourse over another feature |
| **Entity** | Bridge |
| **Included terms** | Operational railway bridge, Disused railway bridge, Dismantled railway bridge |
| **Entity Type** | Spatial |
| **Feature Type** | bridge\_rail\_o, bridge\_rail\_du, rail |

**6.2 Table description: TR\_RAIL**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB.FEATURE\_TYPE\_TOPO.FEATURE\_TYPE\_CODE |
| NAME | VARCHAR2 | 50 | Y | name of a feature |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| PHYSICAL\_CONDITION | VARCHAR2 | 1 | Y | Condition of Rail Infrastructure  VMREFTAB.TR\_RAIL\_PHYSICAL\_CONDITION.PHYSICAL\_CONDITION\_CODE |
| ROAD\_REL | VARCHAR2 | 1 | Y | Code to indicate relationship of Rail to roads  [on road / off road or underground]  VMREFTAB.TR\_RAIL\_ROAD\_RELATIONSHIP.ROAD\_RELATIONSHIP\_CODE |
| TRACKS\_NUMBER\_OF | VARCHAR2 | 1 | Y | number of tracks |
| STRUCTURE\_TYPE | VARCHAR2 | 1 | Y | Type of Railway  VMREFTAB.TR\_RAIL\_STRUCTURE\_TYPE.STRUCTURE\_TYPE\_CODE |
| RAIL\_GAUGE | VARCHAR2 | 1 | Y | Rail track gauge  VMREFTAB.TR\_RAIL\_GAUGE.RAIL\_GAUGE\_CODE |
| TOURIST\_TYPE | VARCHAR2 | 1 | Y | Flag to indicate tourist railway  VMREFTAB.TR\_RAIL\_TOURIST\_TYPE.TOURIST\_TYPE\_CODE |
| FROM\_UFI | NUMBER | (9,0) | Y | UFI of Node Feature from which Rail Segment starts |
| TO\_UFI | NUMBER | (9,0) | Y | UFI of Node to which the segment is going |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record  VMREFTAB.TP\_FEATURE\_QUALITY.ID |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature |

**6.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

VMREFTAB.TP\_FEATURE\_QUALITY

VMEREFTAB.TR\_RAIL\_PHYSICAL\_CONDITION

VMEREFTAB.TR\_RAIL\_ROAD\_RELATIONSHIP *(Rail-Road Relationship)*

VMREFTAB.TR\_RAIL\_GAUGE

VMREFTAB.TR\_RAIL\_STRUCTURE\_TYPE

VMREFTAB.TR\_RAIL\_TOURIST\_TYPE

7 **RAIL INFRASTRUCTURE (POINT)**

**7.1 Summary information**

|  |  |
| --- | --- |
| **Description** | A point on a railway designated as a stopping place to set down or pick up passengers or freight. |
| **Entity** | Railway Station |
| **Included terms** | Train stop, Light rail stop |
| **Entity Type** | Spatial |
| **Feature Type** | rail\_station |

|  |  |
| --- | --- |
| **Description** | Emergency exit from underground railway |
| **Entity** | Railway Exit |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** |  |

|  |  |
| --- | --- |
| **Description** | A structure that facilitates the crossing of a road, railway or watercourse over another feature |
| **Entity** | Bridge |
| **Included terms** | Operational railway bridge, Disused railway bridge, Dismantled railway bridge |
| **Entity Type** | Spatial |
| **Feature Type** | bridge\_rail\_o, bridge\_rail\_du, bridge\_rail\_dm |

|  |  |
| --- | --- |
| **Description** | An underground or underwater passage. |
| **Entity** | Tunnel |
| **Included terms** | Cattle underpass, Pedestrian underpass, Subway, Underground railway tunnel, Underpass |
| **Entity Type** | Spatial |
| **Feature Type** | tunnel\_rail\_o, tunnel\_rail\_dm |

**7.2 Table description: TR\_RAIL\_INFRASTRUCTURE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB. FEATURE\_TYPE\_TOPO.FEATURE\_TYPE\_CODE |
| NAME | VARCHAR2 | 50 | Y | name of a feature |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| PHYSICAL\_CONDITION | VARCHAR2 | 1 | Y | Condition of Rail Infrastructure  VMREFTAB.TR\_RAIL\_PHYSICAL\_CONDITION.PHYSICAL\_CONDITION\_CODE |
| ROAD\_REL | VARCHAR2 | 1 | N | Code to indicate relationship of Rail to roads  [on road / off road or underground]  VMREFTAB.TR\_RAIL\_ROAD\_RELATIONSHIP.NONE |
| USER\_TYPE | VARCHAR2 | 1 | Y | Type of Rail Station  VMREFTAB. TR\_RAIL\_STATION\_STRUCTURE\_TYPE.STRUCTURE\_TYPE\_CODE |
| ROTATION | NUMBER | (6,2) | N | Rotation angle [in degrees] of symbol for cartographic placement |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature |

**7.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

VMREFTAB.TR\_RAIL\_STATION\_STRUCTURE\_TYPE

VMREFTAB.TR\_RAIL\_ROAD\_RELATIONSHIP *(Rail-Road Relationship)*

VMEREFTAB.TR\_RAIL\_PHYSICAL\_CONDITION

### 8 ROAD (LINE)

**8.1 Summary information**

|  |  |
| --- | --- |
| **Description** | An open way for the passage of vehicles, persons or animals on land. |
| **Entity** | Road |
| **Included terms** | Access road, Alley, Boardwalk, Boulevard, Cart track, Causeway, Cul de sac, Cycle path, Divided highway, Driveway, Elevated highway, Express way, Farm track (N), Ferry Route, Fire line, Fire track, Foot track, Footpath, Freeway, Highway, Horse trail, Maintenance track, Path, Pedestrian mall, Private road, ramp, Road on causeway, Service road, Ramp, Slipway, Bicycle Track, Shared Pathway |
| **Entity Type** | Spatial |
| **Feature Type** | Connector, ferry\_route, road, roundabout |

|  |  |
| --- | --- |
| **Description** | An underground or underwater passage. |
| **Entity** | Tunnel |
| **Included terms** | Cattle underpass, Pedestrian underpass, Subway, Underground railway tunnel, Underpass |
| **Entity Type** | Spatial |
| **Feature Type** | tunnel |

|  |  |
| --- | --- |
| **Description** | A shallow or flat portion of the bed of a watercourse where a crossing may be effected. |
| **Entity** | Ford |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** | ford |

|  |  |
| --- | --- |
| **Description** | A road section inundated during periods of flood. Depth indicators are present. |
| **Entity** | Dip |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** | dip |

|  |  |
| --- | --- |
| **Description** | A structure erected over a depression or obstacle to carry traffic or some facility such as a pipeline. |
| **Entity** | Bridge |
| **Included terms** | Bicycle bridge, Covered bridge, Draw bridge, Foot bridge, Lift bridge, Overpass, Pontoon bridge, Suspension bridge, Swing bridge, Viaduct |
| **Entity Type** | Spatial |
| **Feature Type** | Bridge, foot\_bridge |

**8.2 Table description: TR\_ROAD**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | Y | Feature Code  VMREFTAB.FEATURE\_TYPE\_TOPO. FEATURE\_TYPE |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name |
| EZI ROAD NAME | VARCHAR2 | 65 | N | Combination of ROAD\_NAME, ROAD\_TYPE & ROAD\_SUFFIX |
| EZI ROAD NAME LABEL | VARCHAR2 | 65 | N | Combination of ROAD\_NAME, ROAD\_TYPE & ROAD\_SUFFIX formatted in title case |
| ROAD\_NAME | VARCHAR2 | 45 | N | Road name (Primary) |
| ROAD\_TYPE | VARCHAR2 | 15 | Y | Road name type (Primary)  VMREFTAB.ROAD\_TYPE.ROAD\_TYPE |
| ROAD\_SUFFIX | VARCHAR2 | 2 | Y | Road Name Suffix (Primary)  VMREFTAB.ROAD\_SUFFIX.ROAD\_SUFFIX |
| ROAD\_NAME\_USE | NUMBER | 2 | Y | Road Name Use (Primary)  VMTRANS.TR\_ROAD\_USE |
| ROAD\_NAME\_{1..7} | VARCHAR2 | 45 | Y | Road name (alternate or secondary) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| ROAD\_TYPE\_ {1..7} | VARCHAR2 | 15 | Y | RoadtType associated with alternate or secondary road name  VMREFTAB.ROAD\_TYPE.ROAD\_TYPE |
| ROAD\_SUFFIX\_ {1..7} | VARCHAR2 | 2 | Y | Road Suffix associated with alternate or secondary road name  VMREFTAB.ROAD\_SUFFIX.ROAD\_SUFFIX |
| ROAD\_NAME\_USE\_ {1..7} | NUMBER | 2 | Y | Road Use associated with alternate or secondary road name  VMTRANS.TR\_ROAD\_USE |
| LEFT\_LOCALITY | VARCHAR2 | 40 | Y | Left of road locality name  VMREFTAB.LOCALITY.LOCALITY\_UNIQUE |
| RIGHT\_LOCALITY | VARCHAR2 | 40 | Y | Right of road locality name |
| CLASS\_CODE | NUMBER | (2,0) | N | Code to indicate Road Classification  VMREFTAB.TR\_ROAD\_CLASS.ROAD\_CLASS\_CODE |
| DIRECTION\_CODE | VARCHAR2 | 1 | Y | Direction Code to indicate possible traffic direction  VMREFTAB.TR\_ROAD\_DIRECTION. DIRECTION\_CODE |
| ROUTE\_NO | VARCHAR2 | 5 | Y | VicRoads Route Number |
| STRUCTURE\_NAME | VARCHAR2 | 45 | y | Name of Structure |
| HEIGHT\_LIMIT | NUMBER | (3,1) | N | Height limit applicable to road section |
| RESTRICTIONS | CHAR | 1 | Y | Code to indicate any restrictions that apply to the road section  VMREFTAB.TR\_ROAD\_RESTRICTIONS |
| PHYSICAL\_CONDITION | VARCHAR2 | 1 | Y | Code to indicate the physical condition of a bridge  VMREFTAB.TR\_BRIDGE\_PHYSICAL\_CONDITION. PHYSICAL\_CONDITION\_CODE |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| ROAD\_SEAL | VARCHAR2 | 1 | Y | Code to indicate the Road surface type  VMREFTAB.TR\_ROAD\_SEAL.ROAD\_SEAL\_CODE |
| DIV\_RD | VARCHAR2 |  |  | Code to indicate if the Road is divided  VMREFTAB.TR\_DIVIDED\_ROAD.DIV\_RD\_CODE |
| ROAD\_STATUS | VARCHAR2 | 1 | N | VMREFTAB.TR\_ROAD\_STATUS |
| VEHICULAR\_ACCESS | VARCHAR2 | 1 | N | VMREFTAB.TR.VEHICULAR\_ACCESS |
| SEASONAL\_OPEN\_DATE | DATE |  | Y | Date when road is re-opened. |
| SEASONAL\_CLOSE\_DATE | DATE |  | Y | Date when road is closed. |
| CONSTRUCTION\_TYPE | VARCHAR2 | 2 | Y | Code to indicate construction type of bridges  VMREFTAB.TR\_BRIDGE\_CONSTRUCTION\_TYPE.CONSTRUCTION\_TYPE\_CODE |
| LOAD\_LIMIT | NUMBER | (5,2) | Y | The latest recorded level 3 load limit of the bridge |
| LOAD\_LIMIT\_ASSESS\_DATE | DATE |  |  | The date of the last recorded assessment of the bridges load limit. Null if not ‘Y’ to Assessed. |
| CONSTRUCTION\_MATERIAL | VARCHAR2 | 1 |  | The material that the bridge has been constructed from.  VMREFTAB.TR\_ROAD\_CONSTRUCTION\_MATERIAL |
| LENGTH\_M | NUMBER | (4,2) |  | The length of the actual bridge structure |
| WIDTH\_M | NUMBER | (6,2) |  | The width of the actual bridge structure |
| DECK\_AREA | NUMBER | (9,2) |  | The surface area of the trafficable space on the bridge. Not including pedestrian walkways |
| RESPONSIBLE\_AUTH\_CODE | VARCHAR2 | 4 | Y | VMREFTAB.FT\_AUTHORITATIVE\_ORGANISATION |
| COORDINATING\_AUTH\_CODE | VARCHAR2 | 4 | Y | VMREFTAB.FT\_AUTHORITATVVE\_ORGANISATION |
| URBAN | VARCHAR2 | 1 | Y | Will move to mandatory when data becomes available. |
| NRE\_ROUTE | VARCHAR2 | 5 | Y | Department of Natural Resources and Environment Route Number |
| FROM\_UFI | NUMBER | (9,0) | Y | UFI of Node Feature from which Road Segment starts |
| TO\_UFI | NUMBER | (9,0) | Y | UFI of Node to which the segment is going |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record  VMREFTAB.TP\_FEATURE\_QUALITY.ID |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation |
| CREATE\_DATE\_UFI | DATE |  | N | Date of Creation of Feature |

**8.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

VMREFTAB.LOCALITY

VMREFTAB.TP\_FEATURE\_QUALITY

VMREFTAB.TR\_BRIDGE\_CONSTRUCTION\_TYPE (Construction relating to bridges)

VMREFTAB.TR\_BRIDGE\_PHYSICAL\_CONDITION (Condition relating to bridges)

VMREFTAB.TR\_DIVIDED\_ROAD

VMREFTAB.TR\_ROAD\_CLASS

VMREFTAB.TR\_ROAD\_CONSTRUCTION\_MATERIAL

VMREFTAB.TR\_ROAD\_DIRECTION

VMREFTAB.TR\_ROAD\_RESTRICTIONS (Road usage restriction description)

VMREFTAB.TR\_ROAD\_STATUS

VMREFTAB.ROAD\_SUFFIX

VMREFTAB.TR\_ROAD\_SEAL

VMREFTAB.ROAD\_TYPE

VMREFTAB.TR\_ROAD\_USE

VMREFTAB.TR.VEHICULAR\_ACCESS

VMREFTAB\_FT\_AUTHORITATIVE\_ORGANISATION

Road Class Code Definitions

|  |  |  |
| --- | --- | --- |
| **Class Code** | **Class** | **Definition** |
| 0 | Freeway | Hard surface formation, high volume, high speed roads declared as “Freeway”; comprising dual carriageway and full access control and grade separated intersections; i.e. no direct access from adjoining properties or side roads and all crossings are by means of overpass or underpass bridges with traffic entering or leaving carriageways by means of ramps. Single carriageway sections forming part of declared freeways may be included within this category. |
| 1 | Highway | Hard surface roads which:  Are of importance in a national sense, and/or  Are of a major interstate through route, and/or  Are principal connector roads between capitals and/or major regions and/or key towns. |
| 2 | Arterial | Well maintained and widely used hard surface formation roads which are major connectors between:  Freeways and/or National Highways, and/or  Major centres, and/or key towns, or  Have major tourist importance or  Which main function is to form the principle avenue of communication for metropolitan traffic movements, not catered for by freeways. |
| 3 | Sub-Arterial | Hard surface formation road, which acts as:  A connector between highways and/or arterial roads, or  An alternate route for class 2 roads, or  A principal avenue for massive traffic movements. |
| 4 | Collector Road | Hard surface or improved, loose surface formation road acting to:  Provide for traffic movement (connects class 3 to class 5), or  To distribute traffic to local street systems. |
| 5 | Local Road | Hard surface or improved, loose surface formation road providing access to properties or public land.  Caters for moderate travel speed of a full range of vehicles including large vehicles.  All weather two-lane road includes: sealed, formed and gravelled or single lane sealed road with gravel shoulders. |

|  |  |  |
| --- | --- | --- |
| **Class Code** | **Class** | **Definition** |
| 6 | Minor Road | A hard surface, improved or unformed road usually with a dry weather or natural surface.  A road that services a small number of properties, is a dead end road, or provides access to low to moderate use sites within public land.  Caters for low travel speed and a range of vehicles in dry weather.  It may be seasonally closed.  Generally an all weather single lane two-way unsealed formed road usually lightly gravelled.  A fair quality of service road.  Designed for moderate to low speed standards according to terrain.  Minimum carriageway width is 4 m. |
| 7 | Major Track | Provides access to low use visitor sites, parks and forest areas.  Can be a short term, temporary or a feeder road.  Will cater for low travel speeds and a range of vehicles in dry weather, it may be seasonally closed.  A formed (natural materials), generally dry-weather track/road that is substantially single lane and two way, or  A low quality of service track with a minimum carriageway width of 4 m  Includes forest tracks and may be restricted to four wheel-drive vehicles. |
| 8 | Minor Track | Provides access primarily for four wheel-drive vehicles.  Will cater for very low travel speeds and may be seasonally closed.  Predominantly single lane two way earth tracks (unformed) at or near the natural surface level, or  A very low quality of service track, predominantly not conforming to any geometric design standards.  Includes forest tracks, access to, and within, private properties.  Minimum cleared width is 3 m. |
| 9 | Trail | Not designed for vehicular traffic. |
| 13 | Paper Road | Not published as part of TR\_ROAD. Published in TR\_ROAD\_ALL for address validation purposes only. |
| 14 | Ferry Route | A route across a river or lake used by a vessel for the regular transport of vehicles or passengers from one terminal point to another. |

**Class Codes and default Vehicular Access**

**Where the road has not been assessed for vehicular access:**

* Road Class 1 to 5 will default to VEHICULAR\_ACCESS\_CODE of 1, ‘2WD’.  New subdivision roads would default to code 5, ‘Not Assessed’.
* Minor Road, Major Track and Minor Track, Class Code 6, 7 & 8 will default to ‘Not Assessed’.
* Trail, Class Code 9, would default to Vehicular Access of 4, ‘No Vehicular Access’.
* Trail, Class Code 9, that are both ‘4WD’ and ‘Dry Weather Only’ will be classified as Vehicular Access of ‘4WD’.

### 9 ROAD INFRASTRUCTURE (POINT)

**9.1 Summary information**

|  |  |
| --- | --- |
| **Description** | A structure erected over a depression or obstacle to carry traffic or some facility such as a pipeline. |
| **Entity** | Bridge |
| **Included terms** | Bicycle bridge, Covered bridge, Draw bridge, Foot bridge, Lift bridge, Overpass, Pontoon bridge, Suspension bridge, Swing bridge, Viaduct |
| **Entity Type** | Spatial |
| **Feature Type** | bridge |

|  |  |
| --- | --- |
| **Description** | An underground or underwater passage. |
| **Entity** | Tunnel |
| **Included terms** | Cattle underpass, Pedestrian underpass, Subway, Underground railway tunnel, Underpass |
| **Entity Type** | Spatial Point |
| **Feature Type** | tunnel |

|  |  |
| --- | --- |
| **Description** | A structure to prevent entrance or passageway. |
| **Entity** | Gate |
| **Included terms** | Boom gate, Bush gate, Cattle grid (N),Crossing gate, Gate (N),Slip rails, Toll barrier (N),Turnstile |
| **Entity Type** | Spatial Point |
| **Feature Type** | Barrier, gate |
|  |  |
| **Description** | A road section inundated during periods of flood. Depth indicators are present. |
| **Entity** | Dip |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** | dip |

|  |  |
| --- | --- |
| **Description** | A shallow or flat portion of the bed of a watercourse where a crossing may be affected. |
| **Entity** | Ford |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** | ford |

|  |  |
| --- | --- |
| **Description** | road segment endpoint not at an intersection |
| **Entity** | Road end |
| **Included terms** |  |
| **Entity Type** | Spatial Point |
| **Feature Type** | road\_end |

|  |  |
| --- | --- |
| **Description** | The junction of roads or tracks. |
| **Entity** | Intersection |
| **Included terms** | Level crossing, Railroad crossing, Roundabout, signalized and non-signalised intersection, intersection with coast |
| **Entity Type** | Spatial Point |
| **Feature Type** | int\_attribute, int\_coast, int\_locality, int\_nosignal, int\_paper, int\_signal, level\_crossing, roundabout |

**9.2 Table description: TR\_ROAD\_INFRASTRUCTURE**

| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** | |
| --- | --- | --- | --- | --- | --- |
| PFI | NUMBER | (9,0) | N | Persistent Feature Identifier | |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier | |
| FEATURE\_TYPE\_CODE | VARCHAR2 | 30 | N | Feature Code  VMREFTAB. FEATURE\_TYPE\_TOPO.FEATURE\_TYPE | |
| NAME | VARCHAR2 | 50 | Y | name of a feature | |
| NAMED\_FEATURE\_ID | NUMBER | (9,0) | Y | Unique identifier for feature name | |
| HEIGHT\_LIMIT | NUMBER | (3,1) | N | Height limit applicable to road point feature | |
| PHYSICAL\_CONDITION | VARCHAR2 | 1 | Y | Code to indicate the physical condition of a bridge  VMREFTAB.TR\_BRIDGE\_PHYSICAL\_CONDITION. PHYSICAL\_CONDITION\_CODE | |
| CONSTRUCTION\_TYPE | VARCHAR2 | 2 |  | Type of bridge | |
| ROTATION | NUMBER | (6,2) | Y | Rotation angle [in degrees] of symbol for cartographic placement | |
| STRUCTURE\_TYPE | VARCHAR2 | 1 | Y | Code to indicate type of barrier  VMREFTAB.TR\_ROAD\_STRUCTURE\_TYPE.STRUCTURE\_TYPE\_CODE | |
| LOAD\_LIMIT | NUMBER | (5,2) | Y | The latest recorded level 3 load limit of the bridge |
| LOAD\_LIMIT\_ASSESS\_DATE | DATE |  |  | The date of the last recorded assessment of the bridges load limit. Null if not ‘Y’ to Assessed. |
| CONSTRUCTION\_MATERIAL | VARCHAR2 | 1 | Y | The material that the bridge has been constructed from.  VMREFTAB.TR\_ROAD\_CONSTRUCTION\_MATERIAL |
| WIDTH\_M | NUMBER | (4,2) | Y | The width of the actual bridge structure |
| LENGTH\_M | NUMBER | (6,2) | Y | The length of the actual bridge structure |
| DECK\_AREA | NUMBER | (9,2) | Y | The surface area of the trafficable space on the bridge. Not including pedestrian walkways |
| COORDINATING\_AUTH\_CODE | VARCHAR2 | 4 | Y | VMREFTAB.FT\_AUTHORITATIVE\_ORGANISATION |
| RESPONSIBLE\_AUTH\_CODE | VARCHAR2 | 4 | Y | VMREFTAB.FT\_AUTHORITATIVE\_ORGANISATION |
| URBAN | VARCHAR2 | 1 | Y | Will move to mandatory when data becomes available. |
| CONPFI1 | NUMBER | (9) |  |  | |
| CONPFI2 | NUMBER | (9) |  |  | |
| FEATURE\_QUALITY\_ID | NUMBER | (9,0) | N | Identifier for the feature quality record  VMREFTAB.TP\_FEATURE\_QUALITY.ID | |
| CREATE\_DATE\_PFI | DATE | 7 | N | Date of original Creation of Feature | |
| SUPERCEDED\_PFI | NUMBER | (9,0) | Y | PFI of feature prior to merge or split operation | |
| CREATE\_DATE\_UFI | DATE | 7 | N | Date of Creation of Feature | |

**9.3 REFERENCE TABLES:**

VMREFTAB.FEATURE\_TYPE\_TOPO

VMREFTAB.TP\_FEATURE\_QUALITY

VMREFTAB.TR\_BRIDGE\_PHYSICAL\_CONDITION

VMREFTAB.TR\_ROAD\_CONSTRUCTION\_MATERIAL

VMREFTAB.TR\_ROAD\_STRUCTURE\_TYPE

### 10 ROAD USE (N/A)

**10.1 Summary information**

**10.2 Table description: TR\_ROAD\_USE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| ROAD\_PFI | NUMBER | (9,0) | N | Persistent Feature Identifier |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| ROAD\_USE | VARCHAR2 | 2 | Y | Road Use includes Walking Track, On Road Bike Path and Ski Trail |
| CREATE\_DATE\_UFI | DATE |  | N | Create Date UFI |

**10.3 REFERENCE TABLES:**

VMREFTAB.TR\_ROAD\_USE

### 11 TR\_ ROAD REGISTER (LINE)

The spatial representation of the authoritative Vicnames road names register.

Road segements (TR\_ROAD) are grouped by road name, road type, road suffix and locality using the TR\_ROAD\_LOCALITY\_SECTION and TR\_ROAD\_LOCALITY tables to create a single line feature for each unique combination of values.

This dataset compliments TR\_ROAD. Where a road segment has multiple names TR\_ROAD\_REGISTER will have multiple overlappling road lines while TR\_ROAD will have one road with multiple names.

**11.1 Summary information**

|  |  |
| --- | --- |
| **Description** | An open way for the passage of vehicles, persons or animals on land. |
| **Entity** | Road |
| **Included terms** | Access road, Alley, Boardwalk, Boulevard, Cart track, Causeway, Cul de sac, Cycle path, Divided highway, Driveway, Elevated highway, Express way, Farm track (N), Ferry Route, Fire line, Fire track, Foot track, Footpath, Freeway, Highway, Horse trail, Maintenance track, Path, Pedestrian mall, Private road, ramp, Road on causeway, Service road, Ramp, Slipway, Bicycle Track, Shared Pathway |
| **Entity Type** | Spatial |
| **Feature Type** | Connector, ferry\_route, road, roundabout |

|  |  |
| --- | --- |
| **Description** | An underground or underwater passage. |
| **Entity** | Tunnel |
| **Included terms** | Cattle underpass, Pedestrian underpass, Subway, Underground railway tunnel, Underpass |
| **Entity Type** | Spatial |
| **Feature Type** | Tunnel |

|  |  |
| --- | --- |
| **Description** | A shallow or flat portion of the bed of a watercourse where a crossing may be effected. |
| **Entity** | Ford |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** | Ford |

|  |  |
| --- | --- |
| **Description** | A road section inundated during periods of flood. Depth indicators are present. |
| **Entity** | Dip |
| **Included terms** |  |
| **Entity Type** | Spatial |
| **Feature Type** | Dip |

|  |  |
| --- | --- |
| **Description** | A structure erected over a depression or obstacle to carry traffic or some facility such as a pipeline. |
| **Entity** | Bridge |
| **Included terms** | Bicycle bridge, Covered bridge, Draw bridge, Foot bridge, Lift bridge, Overpass, Pontoon bridge, Suspension bridge, Swing bridge, Viaduct |
| **Entity Type** | Spatial |
| **Feature Type** | Bridge, foot\_bridge |

**11.2 Table description: TR\_ROAD\_REGISTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| LOCALITY\_ROAD\_ID | NUMBER | (9,0) | N | Road Locality Identifier |
| EZI ROAD NAME | VARCHAR2 | 65 | N | Combination of ROAD\_NAME, ROAD\_TYPE & ROAD\_SUFFIX |
| EZI ROAD NAME LABEL | VARCHAR2 | 65 | N | Combination of ROAD\_NAME, ROAD\_TYPE & ROAD\_SUFFIX formatted in title case |
| ROAD\_NAME | VARCHAR2 | 45 | N | Road name (Primary) |
| ROAD\_TYPE | VARCHAR2 | 15 | Y | Road name type (Primary)  VMREFTAB.ROAD\_TYPE.ROAD\_TYPE |
| ROAD\_SUFFIX | VARCHAR2 | 2 | Y | Road Name Suffix (Primary)  VMREFTAB.ROAD\_SUFFIX.ROAD\_SUFFIX |
| LOCALITY | VARCHAR2 | 40 | N | Locality |
| NOUNIQUE\_LOCALITY | VARCHAR2 | 40 | Y | No unique locality |
| ROAD\_NAME\_USE | NUMBER | 2 | Y | Road Name Use (Primary)  VMTRANS.TR\_ROAD\_USE |
| MIN\_CLASS\_CODE | NUMBER | 2 | Y | unique cominbination of identifer vaules. For example, if the road segments associated with the unique road identifer have CLASS\_CODES of 0 (Freeway), 1 (Highway) and 2 (Arterial), the MIN\_CLASS\_CODE of that road will be 0 (Freeway) |
| GAZETTAL\_REGISTRATION | VARCHAR2 | 15 | Y | Gazettal Regsitration |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| GAZETTAL\_DATE | DATE | 7 | Y | Gazettal Date |
| GAZETTAL\_URL | VARCHAR2 | 200 | Y | Gazettal URL |
| ROAD\_NAME\_THEME | VARCHAR2 | 10 | Y | Road name theme |
| ROAD\_NAME\_GENDER | VARCHAR2 | 15 | Y | Road name gender |
| VICNAMES\_ID | NUMBER | (9,0) | N | Vicnames ID |
| CREATE\_DATE\_PFI | DATE |  | N | Create Date PFI |
| CREATE\_DATE\_UFI | DATE |  | N | Create Date UFI |

**11.3 REFERENCE TABLES:**

VMREFTAB.LOCALITY

VMREFTAB.TR\_ROAD\_CLASS

VMREFTAB.ROAD\_NAME\_GENDER

VMREFTAB.ROAD\_NAME\_THEME

VMREFTAB.ROAD\_SUFFIX

VMREFTAB.ROAD\_TYPE

### 12 TR\_ROAD LOCALITY

**12.1 Summary information**

A register of unique roads based on road name, road type, road suffix and locality and associated road attributes. This register is the foundation of the authoritative Vicnames road names register.

**12.2 Table description: TR\_ROAD\_LOCALITY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| LOCALITY\_ROAD\_ID | NUMBER | (9,0) | N | Road Locality Identifier |
| EZI ROAD NAME | VARCHAR2 | 65 | N | Combination of ROAD\_NAME, ROAD\_TYPE & ROAD\_SUFFIX |
| EZI ROAD NAME LABEL | VARCHAR2 | 65 | N | Combination of ROAD\_NAME, ROAD\_TYPE & ROAD\_SUFFIX formatted in title case |
| ROAD\_NAME | VARCHAR2 | 45 | N | Road name (Primary) |
| ROAD\_TYPE | VARCHAR2 | 15 | Y | Road name type (Primary)  VMREFTAB.ROAD\_TYPE.ROAD\_TYPE |
| ROAD\_SUFFIX | VARCHAR2 | 2 | Y | Road Name Suffix (Primary)  VMREFTAB.ROAD\_SUFFIX.ROAD\_SUFFIX |
| LOCALITY | VARCHAR2 | 40 | N | Locality |
| NOUNIQUE\_LOCALITY | VARCHAR2 | 40 | Y | No unique locality |
| ROAD\_NAME\_USE | NUMBER | 2 | Y | Road Name Use (Primary)  VMTRANS.TR\_ROAD\_USE |
| GAZETTAL\_REGISTRATION | VARCHAR2 | 15 | Y | Gazettal Regsitration |
| GAZETTAL\_DATE | DATE | 7 | Y | Gazettal Date |
| GAZETTAL\_URL | VARCHAR2 | 200 | Y | Gazettal URL |
| ROAD\_NAME\_THEME | VARCHAR2 | 10 | Y | Road name theme |
| ROAD\_NAME\_GENDER | VARCHAR2 | 15 | Y | Road name gender |
| VICNAMES\_ID | NUMBER | (9,0) | N | Vicnames ID |
| CREATE\_DATE\_PFI | DATE |  | N | Create Date PFI |
| CREATE\_DATE\_UFI | DATE |  | N | Create Date UFI |

**12.3 REFERENCE TABLES:**

VMREFTAB.LOCALITY

VMREFTAB.ROAD\_NAME\_GENDER

VMREFTAB.ROAD\_SUFFIX

VMREFTAB.ROAD\_NAME\_THEME

VMREFTAB.ROAD\_TYPE

### 13 ROAD LOCALITY SECTION

**13.1 Summary information**

This aspatial table supports many-to-many relationships between TR\_ROAD and TR\_ROAD\_LOCALTY

**13.2 Table description: TR\_ROAD\_LOCALITY\_SECTION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLUMN NAME** | **DATA TYPE** | **FIELD SIZE** | **NULL** | **COLUMN DESCRIPTION** |
| UFI | NUMBER | (9,0) | N | Unique Feature Identifier |
| LOCALITY\_ROAD\_ ID | NUMBER | (9,0) | N | Road Locality Identifier |
| ROAD\_UFI | NUMBER | (9,0) | N | Road Unique Feature Identifier |
| CREATE\_DATE\_UFI | DATE |  | N | Create Date UFI |

# Appendix C: Feature attribute rules

## Assignment of road names in Vicmap Transport

Local Government Authority assigned road names are assigned as the primary Vicmap Transport road name. The extent of a road is indicated by formally assigned street addresses.

Where a council has formally defined the name and extent of a road section (such as may be found on a council issued/endorsed lodged plan or council listing of roads for the respective LGA), that road name is used as the primary Vicmap Transport road name. Where no council endorsed name appears evident, a road name may be adopted as a primary road name in Vicmap Transport if evidence appears to support its common use. For example, roads in national parks and on crown land or a VicRoads “from-to” name or any other VicRoads assigned name.

A LGA may assign a local name to a segment of a major through road (e.g. *Black Stump-Woop Woop Road*) and refer to it as such on its official maps, plans and road records (e.g. *Main Street*). Council may later assign addresses to this same segment of road and use the through road name (not the local name) for the address assignments – particularly in cases of rural addressing. In such cases, the primary road name will be that of the street addressing, i.e. the through road name (*Black Stump-Woop Woop Road*) and the alias will be the local road name (*Main Street*).

The reverse origin to destination, destination to origin road names will be added to rad name fields within the road arcs where the naming satisfies the following:

1. The name is A-B, B-A
2. Multiple hyphenated road names e.g. (A-B-C) will not have additional versions of the road name added as these should be seen as multi-parts of the same name. Further variations of this naming are incorrect. The name order is important.
3. Origin – Destination road names and their reversal population within Vicmap Transport shall be limited to road arcs within Victoria
4. On and Off ramps are excluded from this process
5. Road names where the origin or destination is a number (e.g. 26-STANHOPE or STANHOPE-26) are excluded from this process as the order of the number within the road name defines the road name, and
6. Road names that contain ‘RAIL’ will have the source and destination names reversed excluding the ‘RAIL’ component. E.g. BEECHWORTH-EVERTON RAIL. Alternative name populated with EVERTON-BEECHWORTH RAIL.

The determination that council names take priority over other naming authorities such as VicRoads and the Department is based on the power to name roads given to Local Government under the Local Government Act 1989 and the principles espoused in the leaflet “A Guide to Road Naming in Victoria” published by the Registrar of Geographic Names (Victoria) 2002.

#### Road name content

Road name content will be determined according to the following rules:

* The only characters permitted are; A..Z, 0..9, - , (space).

Apostrophes, commas, and periods are removed, e.g. Ross', Ross's will be coded as ROSS, O'Brien's as OBRIENS, A’Beckett as ABECKETT.

* All names are in UPPER CASE, e.g. McClure will be coded as MCCLURE.
* No characters are permitted in superscript or subscript, e.g. McDuff is coded as MCDUFF.
* No spaces are allowed to be embedded within words, single spaces only are allowed between words and no spaces are allowed to surround hyphens, e.g. GEMBROOK-LAUNCHING PLACE ROAD.
* Origin–Destination roads names as primary road names reflect addressing road name within Vicmap Address. The reverse origin-destination road name is added as an alias road name.
* Initials are separated by a single space, e.g. A.I.F. Street becomes A I F STREET and A. H. CAPP SCENIC DRIVE becomes A H CAPP SCENIC DRIVE.
* Road type is spelt in full.
* (Primary) Road names are recorded as actually used. Numbers are not converted into words unless they are used that way (see note below where aliases are created for ease of use).
* Road name prefixes Saint and Mount are to be abbreviated to ST and MT respectively where in common use, e.g. ST KILDA ROAD, MT DANDENONG ROAD. Other cases of possible but, uncommonly used abbreviation, including POINT (PT), will continue to be coded in full, e.g. MOUNT VUE ROAD, MOUNT VIEW COURT, VIEW POINT AVENUE, VIEW MOUNT ROAD, MOUNTAIN VIEW ROAD, LONG POINT ROAD, POINT COOK ROAD, POINT ORMOND AVENUE.
* Only where limitations in field size make it necessary, will truncation of road name or road type be accepted. Such abbreviations are to be at the right-hand end and should comply with the provisions of Australian Standard AS4590.
* The road name field is to be non-null. Where the name of a road is not known or the road is unnamed, the name 'UNNAMED' is to be used.
* Road type and suffix fields may, or may not be, null.
* Bridge and tunnel features inherit the road description of the linked road they service.
* Rights of Way, where included, are to have the road name 'R O W Y'.
* Road type suffixes are to be abbreviated to one or two characters as per the following;

|  |  |  |  |
| --- | --- | --- | --- |
| N | ….. North | CN | ….. Central |
| S | ….. South | U | ….. Upper |
| E | ….. East | L | ….. Lower |
| W | ….. West | EX | ….. Extension |
| NE | ….. North East | ML | ….. Mall |
| NW | ….. North West | ON | ….. On (ramp) |
| SE | ….. South East | OF | ….. Off (ramp) |
| SW | ….. South West |  |  |

* Road suffixes are to be recorded in the Road-Suffix field, e.g. Vincent Street North would have N in the road suffix field. Where no suffix exists, this field is to be ‘null’.

**Note** that a suffix is not a directional or similar element derived from a locality name. Directions or similar devices occurring in a locality name that has subsequently been used in a road name, will remain unchanged in the road name field. For example, Wandin East Road is recorded as *road-name* - WANDIN EAST, *road-type* - ROAD, *suffix* - “”.

* Validation files of currently-accepted road types and road suffixes are held by and are available from the Department. Any types or suffixes found not to conform to these lists should be brought to the attention of the Department, for validation and incorporation into such validation files.
* Where two road types exist in a road description, the first is included in the Road Name field and the second in the Road Type field. For example, High Street Road will contain HIGH STREET in the Road Name field and ROAD in the Road Type field. For the purposes of this definition, 'Mall' is considered to be a Road Type suffix. For example, 'Bourke Street Mall' will have 'Bourke' in the Road Name field, STREET in the Road Type field, and 'ML' in the Road Suffix field.
* Where the first word of a road description is 'The', the subsequent word is included in the road name. If the Road Type is not used then any suffix is recorded wholly within the Road Name field. For example, 'The Pass' contains 'THE PASS' in the Road Name field and the Road Type and Road Suffix fields are null. `The Parade West' contains 'THE PARADE WEST' in the Road Name field and Road Type and Road Suffix fields are null.
* Roads having two or more names have their more usual description as the primary road description. The second or next most popular name, should there be more than two, form Alias Road Name descriptions.
* Connecting ramps linking roads, freeways, highways and major arterial roads are named according to the Departments convention for the unique naming of ramps.
* All Road Attribute fields, (excepting feature codes), are upper case only.

#### Maintenance of road names with inclusive numeric characters

A number of road names include numeric characters. Many are fire or access tracks and are unlikely to have property addresses assigned to them. However, some are urban roads and do have associated addresses. It is known that some computer systems have difficulty in deciphering a house number from a road name with an embedded number. For example, “10 MILE ROAD” could be interpreted both as house number 10 located in Mile Road or as no house number and road name Ten Mile Road. In some cases, a number has a distinct association with an existing feature. For example, 3CV LANE is named after the radio station at the end of the lane. Spelled out as THREE CV LANE it would lose that link. Similarly, HARPERS NUMBER ONE NORTH TRACK is long winded. It is unlikely to be signposted in full or shown on maps or in directories as such.

Road names are recorded as advised by the overarching responsible authority. All such authorities were informed of the Australian addressing standard; AS/NZS4819:2011 Rural and urban addressing, and in particular the associated guidelines that recommend that “numbers included as all or part of a road name should be written in full” (exceptions include the case of 3CV Land cited above).

Where the use a numeric is still to be the authoritative form of the road name, then an alias road name is created with the number spelled out in full. e.g. BSEVENTY ONE ROAD.

* No spaces are inserted between an alpha prefix, a number and/or an alpha suffix. E.g. 4W FIRETRAIL.
* If an abbreviation for the word “number” is used then no space is inserted after the abbreviation. E.g. NO6 TRACK.
* Similarly, abbreviations for second, third, fourth or other like numbers will have no space inserted. E.g. 5TH AVENUE.
* Where spelled out in full, formats will be as follows:

D3 TRACK: …. *road\_name* = DTHREE *road\_type* = TRACK

10 MILE ROAD …. *road\_name* = TEN MILE *road\_type* = ROAD

3RD AVENUE: …. *road\_name* = THIRD *road\_type* = AVENUE

NO5 FIRETRAIL …. *road\_name* = NUMBER FIVE *road\_type* = FIRETRAIL

3CV LANE …. *road\_name* = THREE CV *road\_type* = LANE

In the case of conflicting names for a road feature or for features matching across different source map boundaries, the incompatibility should have been resolved and the features uniquely named.

#### Alias ‘Numeric’ Road names

All road names with inclusive numerics have an associated alias with the number spelt out in full to assist in easy road identification.

#### Alias ‘From – To’ Roads

In the case of ‘From – To’ road names, alias names with the ‘From – To’ road name reversed have been created to assist in easy road identification. e.g.

ROAD NAME = MELTON HIGHWAY

ALIAS NAME = KEILOR-MELTON ROAD

ALIAS NAME = MELTON-KEILOR ROAD

ROAD NAME = GISBORNE-MELTON ROAD

ALIAS NAME = MELTON-GISBORNE ROAD

#### Height\_limit

Where vehicular height restrictions of below seven metres apply along road segments, at bridges or at tunnels, the height limit, in metres to one decimal place, is recorded.

#### Direction\_code

Direction of traffic flow is indicated, related to the vector depicting the road segment:

ONE WAY TRAFFIC - **F** .... forward

**R** .... reverse

TWO WAY TRAFFIC - **B** .... both

As a general rule, vectors are flipped to tag one way traffic as having a direction of **F**orward.

#### Class\_code

A road classification code has been applied to indicate function and condition of each road. For details refer Appendix B, Section 8.

#### Road\_seal

An attribute indicating whether the road surface is fully sealed (asphalt, concrete, etc.) or unsealed is included. For details refer Appendix B.

#### Route\_ no

The route number assigned by VicRoads under their system indicating road condition and suitability is included. E.g. C146. For details refer Appendix B.

#### Divided Road

Column is DIV\_RD

DD Divided Double Line (one line per carriageway) representation

DS Divided Single Centreline Representation

ND Not Divided

U Unknown

#### Node types

The following road node types may be found in the data:

|  |  |
| --- | --- |
| **administrative** | at the intersection of roads and administration boundaries (e.g. LGA, locality, etc.) |
| **Attribute** | where a change of road attribute/s occur (e.g. source scale, name, class) |
| **Barrier** | at the location of permanent traffic barriers |
| **connector** | as an artificial device to indicate roads connect within a given distance |
| **drainage** | road/stream intersection where crossing type is unknown (e.g. Bridge, culvert) |
| **edge** | at the edge limit of the data or tile to indicate that the road does physically continue beyond this point |
| **ford** | where the average vehicle can cross an intersecting stream under normal conditions |
| **dip** | A road section inundated during periods of flood. Depth indicators are present. |
| **gate** | where a gate limits passage |
| **signalised intersection** | where electronically controlled traffic lights control an intersection |
| **non-signalised intersection** | at road intersections not controlled by traffic lights |
| **level crossing** | where roads intersect with rail/tramway lines in current use |
| **road bridge** | at points where the road is carried by a structure across some other physical feature |
| **road end** | where a road is discontinued, other than the edge of the data or at a barrier or gate |
| **road tunnel** | at points where a road is continued via an underground or under water passage |
| **roundabout** | at intersections characterised by a central median feature and circular road arrangement |

### Road Feature representation

### Roads as chains

Generally, with the exception of cases noted below, all roads, including multiple lane and minor dual carriageway roads, will be simplified into a single-line bi-directional representation. That is, a single chain will represent roadways between intersections, regardless of traffic direction – as per the example below.

Single line representation of a minor dual carriageway road



### Connector features (pseudo roads)

To allow linear analysis of road networks to be carried out, an artificial feature called a 'connector' may be added to the data. ‘Connector' or pseudo road features will allow reduction of substantial roundabouts to a single node feature for network computational purposes. They may also be used to form an implied intersection where a local road does not directly intersect a highway but may be considered to do so as entry via a service road is possible. For example:



The connector feature is composed of one or more chains, providing a topologically correct representation of the feature for analysis purposes. The points that make up this chain cannot be given any value for planimetric accuracy and this is indicated in the Data Quality attribute for the feature by a value of 9999999 (not applicable) for the planimetric accuracy scale attribute. The general rule for the attribution of connectors is that connectors carry the attributes of the road they represent.

### Dual carriageways

All known divided roads are attributed as *‘divided\_road’*.

To be represented as separated carriageways in Vicmap Transport, a road must meet the following criteria:

* There exists a physical divider (for example, a raised concrete/asphalt strip, kerb and channel, planted or grassed median, etc.) between carriageways.
* The centre-line of each carriageway is separated by at least 20 metres.
* The length of the dual carriageway is greater than 100 metres.

A small number of yet to be identified minor “local” roads with separate carriageways and divided sections of road that fail to meet the above criteria are represented as single line features.

#### Carriageways of Freeways and Motorways

A separate road chain for each carriageway will represent all freeways and motorways. For example, Tullamarine Freeway, Western Ring Road, City Link, East Link).

#### Carriageways with different names

Differently named carriageways are represented separately. That is, separate roads of differing names, running parallel or in close proximity to each other will be depicted and attributed as separate chains.

#### Locality boundaries along dual carriageways

Where a divided road defines a locality boundary, one half of the dual carriageway is represented to the left of the locality boundary and the other to the right of the locality boundary.

#### Service roads

Service roads are separately captured and identified. Unless a service road is identified as having its own individual road name, the road\_name will that of the main road it services.

#### Cross roads and cross-overs

Where crossovers occur, the names of any crossing roads are included as alternate names to cater for the identification of the intersecting roads (see example figures below).

Road Class will reflect the appropriate level of the road to which it is assigned. E.g.

Cross-overs joining opposing dual-carriageways of a highway are by necessity low speed and therefore a lower class (Class = 5).

Crossing road segments reflect the lower classification of any intersecting roads …

…. Highway / Collector: crossing road segment = 4

…. Highway / Local: crossing road segment = 5

…. Collector / Highway / Local: crossing road segment = 5

Cross roads and cross-overs are named using road name aliases to ensure that user systems can form logical intersects of both carriageways with all adjoining roads.

Where two roads of differing names intersect a dual carriageway road, the primary name used for the crossing will be that of the highest classification. The name of the lesser class road will be used for the first alias. The name of the dual carriageway will be used as a final alias to indicate that opposing carriageways are also linked. For example:

NEW STREET

FRED STREET

PRINCES HIGHWAY

NEW STREET

Primary name = NEW STREET

Alias name = PRINCES HIGHWAY

SERVICE ROAD HIGHWAY

PRINCES HIGHWAY

Primary name = FRED STREET

1st Alias HARRY ROAD

2nd Alias = PRINCES HIGHWAY

SERVICE ROAD

SERVICE ROAD HIGHWAY

HARRY ROAD

SMITH STREET

JONES STREET

SERVICE ROAD HIGHWAY

PRINCES HIGHWAY

Primary name = SMITH STREET

Alias name = PRINCES HIGHWAY

PRINCES HIGHWAY

MARKET LANE

Primary name = JONES STREET

1st Alias = MARKET LANE

2nd Alias = PRINCES HIGHWAY

#### Crossovers on Freeways

Individual chains will represent emergency vehicle crossovers on freeways.



### Bike paths

Bike paths sharing roadway with vehicular traffic are inclusive features. Road classification will reflect the road they are part of and a Road Use of ‘On road bike path’.

Bike paths existing off-road for the specific purpose of bike riding will have a road classification of 9 and a Road Use of either or all of ‘Separated bike path’, ‘Off road bike path’ and ‘Mountain Bike Track’.

Bike paths existing as shared pathways with pedestrians will have a road classification of 9 and a Road use of ‘A pathway designed for traffic on foot’ and any or all of the Road Uses listed above.

### Walking Tracks

Walking tracks existing off-road for the principal purpose of walking or hiking have a road classification of 9 and Road Use of ‘Walking Track’.

### Bridge and tunnel connecting feature identification system.

Longer bridges and tunnels of span greater than 50 metres are represented by *chains*. Tunnels and Bridges shorter than the above spans are represented by *nodes.* Feature codes possible for bridge and tunnel features are *bridge* (chain), *bridge* (node), and *tunnel\_road* (chain), *tunnel* (node). A feature is a bridge when the length of the upper feature exceeds its width. A feature is a tunnel when the width of the upper feature exceeds its length. (The direction of traffic flow on the upper feature defines the dimension of length).

In order to allow systems to logically model traffic flow and not see bridge/tunnel nodes as any other four-way linked intersection, it is important to identify which chains a bridge/tunnel node links. This is achieved by adding attributes to show connecting PFI values (*conpfi1* and *conpfi2*). In this manner, user systems can determine which road chains join and go over (bridge) or join and go under (tunnel). This methodology has not been applied to rail bridges and tunnels.

Typical representations include:

#### Tunnel greater than 50 metres length

Example - a road tunnel of greater than 50 metres length joining single line road under dual carriageway (double line) road.



In this example, the tunnel feature passes beneath the dual carriageways of a freeway. As it is greater than 50 metres in length is represented by two tunnel nodes (at the points where roads intersect) and a tunnel chain representing the roadway passing under the freeway.

Attributes *conpfi1* and *conpfi2* for the tunnel node features are populated with the PFI’s of their respective connecting road and tunnel chains. That is:

*NODE 1 …. conpfi1* = PFI value ‘c’ and *conpfi2* = PFI value ‘b’

*NODE 2 …. conpfi1* = PFI value ‘b’ and *conpfi2* = PFI value ‘a’

#### Bridge less than 50 metre span

Example - single line road bridge of less than 50 metres length over a single line road.

Image showing how tunnels less than 50 metres will be portrayed in Vicmap.In this example the logical intersection of the two features is represented by a bridge node. ‘Road1’ passes over ‘Road2’. Consequently, attributes *conpfi1* and *conpfi2* for the bridge node feature are populated with the PFI’s of the connecting ‘Road1’ chains, i.e.

*conpfi1* = PFI value ‘a’ and *conpfi2* = PFI value ‘b’.

#### Bridge greater than 50 metres span

Example - Linear Bridge - single line road over single line road.

**Image showing how a linear bridge with a span greater than 50 metres is portrayed in Vimap.**

In this example, a bridge chain feature represents the bridge. The extent of the bridge (the span, causeway, etc.) will be bounded by attribute nodes. The logical intersection of the upper/lower features will be the location of a bridge node, the *conpfi* attributes of which will enable user systems to determine which road chains join and pass over.

Case 1: Bridge over non road feature (e.g. Watercourse, rail line etc.)

The bridge point will have a conpfi1 and conpfi2 equal to the pfi values of the two adjoining road arcs.

Case 2: Road bridge over another road

The bridge point will have four intersecting arcs. The conpfi1 and conpfi2 values will equal the pfi values of the two road arcs that the bridge is located on.

### Naming of Structures

**Line Representation**

### Where the road arc is greater than 50 metres in length:

The feature type code shall be the structure type i.e. bridge, tunnel.

The primary road name will be populated within that arcs road name field. The structure name will be populated in the structure name field where it is known. Structure Name sources include Geographic Names Register, Local Government Authorities, Vicroads, DELWP Road Management as well as other road and asset managers.

**Road Name = Road Name 2**

**Feature Type = Road**

**Example:**

**Feature Type = Bridge**

**Primary Road = Road Name1**

**Alias Road Name = Road Name 2**

**(If relevant)**

**Structure Name = Bridge Name**

**Road Name = Road Name 1**

**Feature Type = Road**

**Advantages**:

This approach has two advantages:

All bridge / tunnel names are named within the Transport data model.

The structure name is separated from the road name(s).

**Point Representation**

Where the feature is less than 50 metres in length the feature shall be depicted as a point within Tr\_ road\_infrastructure.

Bridge and tunnel exist as feature types. No road name fields exist within the point as these are present in the connecting road arcs.

The name field will be populated by the structure name.

**TR Road**

**Feature Type = Road**

**Road Name = Road Name2**

**TR\_Road Infrastructure:**

**Feature Type = Bridge**

**Name = Bridge Name**

**TR Road**

**Feature Type = Road**

**Road Name 1**

### Intersections

Road junctions will be represented as a single node. Multi-junction intersections may comprise a series of nodes. Simplification will occur in the following cases.

#### Single Logical (or ‘bent line’) Intersections

Intersections formed on a through road by slightly offset side roads (less than ten metres apart), will be considered to be a single logical intersection. Single logical intersections will be forced by bending the arms (within the intersection area), to a single node. For example:



#### Small Roundabouts

Roundabouts that can be included within a circle of 20 metres diameter are generalised to a single node.

20 metres

***Small Roundabout (< 20m diameter) Transport Representation***

#### Substantial Roundabouts

Substantial roundabouts are those that have a nominal diameter of 20 metres or greater.

These roundabouts are constructed from road arcs representing the equivalent of their actual road centre lines on the ground. To facilitate connectivity for network analysis, the intersection of the converging roads are represented by ‘connector’ (or pseudo) arcs joined at a ‘roundabout’ node at the approximate centroid of the roundabout.

Complex roundabouts may be generalised as per the rules for generalisation for slip lanes and forked intersections, etc.

Feature\_type = int\_nosignal

traffic direction

MIDLAND HWY

Feature\_type = connector

traffic direction

Feature\_type = connector

Feature\_type = int\_nosignal

MIDLAND HWY

Feature\_type = roundabout

Feature\_type = road

MAIN STREET

MAIN STREET

Feature\_type = road

Feature\_type = int\_nosignal

Where converging and diverging road arcs intersect the roundabout proper, they meet at ‘int\_nosignal’ nodes.

* ‘Connector’ or pseudo-road arcs join these converging and diverging road arcs from the point where they meet the roundabout proper to a ‘roundabout’ node at a nominal centre of the roundabout.
* The road name/type/suffix of converging and diverging road arcs meeting the roundabout proper are continued along the roundabout arc in a clockwise direction from the point of intersection to the next point of intersection.
* The road class of the entire outer ring of road arcs representing the roundabout is that of the highest class road entering the roundabout.
* The road class of the ‘connectors’ extending to the centre ‘roundabout’ node is that of the roads they extend from.
* The road arc vector direction of the entire outer ring arcs representing the roundabout is clockwise around the roundabout.
* The road traffic direction of the entire outer ring arcs representing the roundabout is forward (F) in a clockwise direction.
* The road name/type/suffix of the ‘connectors’ extending to the centre ‘roundabout’ node is that of the roads they extend from.
* The road arc vector direction of the ‘connectors’ extending to the centre ‘roundabout’ node is that of the road arcs they extend from.
* The road traffic direction of the ‘connectors’ extending to the centre ‘roundabout’ node is that of the roads they extend from.
* Although the ICSM Road Working Group data model 2010 <http://www.icsm.gov.au/icsm/roads/index.html> recommends a 20 meter diameter this is yet to be fully adopted across the Vicmap Transport data model.

### Forks

#### Forks at Intersections

Intersections will be depicted ‘as built’ with the exception of short legs of less than 50 metres.

Short legs of less than 50 metres are to be deleted – for example:

**’as-built’ Vicmap Transport**

#### Slip Lanes

Left turn slip lanes less than 50 metres in extent will be omitted

< 50m

**’as-built’ Vicmap Transport**

### Road ends

#### Logical ends of roads

Logical road endings (as reflected on the ground by cul-de-sacs, court bowls, track ends, etc.), will be represented by a “road\_end” node. For example:

ARC - road

(road)

NODE - road end

(road\_end)

NODE - intersection-non signalised

(int\_nosignal)

#### Artificial road ends

There will be occurrences where a non-real or artificial road ending has to be created, for example, at tile edges or at State Borders. These will not be true road endings, existing on the ground. Rather, they will be the end of the data in a particular file, the roads logically extending in the next file, on the next sheet, or across the border into the next State. Any nodes created here will subsequently be dissolved when the abutting data file is adjoined. At these points, a temporary node may be added. These nodes will be termed “edge”. Pictorially, they could be represented as:

CONTRACT EDGE

Road alignment beyond contract limit

NODE - State border/tile edge/contract edge

(edge)

### Roads on Private Land

Roads on private land are valuable to emergency services to show property access to dwellings, water bodies and assets. To delineate these from local roads default settings are being assigned. These are road class = 6 (2wd), road seal = 2 (unsealed) and road restriction = 4 (private access). These roads are generally UNNAMED. Cartographically it is recommended that these roads appear less prominently than local roads. Assume these roads are gated and not intended for public access.

### Proposed Roads

Proposed Roads created from proposed subdivisions are supplied from the Vicmap Land Administration Themes maintainer on a weekly basis to the Vicmap Topographic Themes maintainer. These are assigned a road status = P (Proposed Road) and a road seal of 3 (Unknown).

The road name provided on the proposed plan is included at the same time. If no road name is present the road name is assigned UNNAMED.

Where the proposed road is within a common parcel or not within the road casement this road may also be given a road restriction of 4 (private access only)

Under the Planning and Subdivisions Act 1988 subdivisions can exist as a proposal for five years. Consequently proposed roads can also exist with this status for five years in Vicmap Transport.

Periodic investigations are undertaken to verify the existence of proposed roads within Vicmap Transport beyond five years. These are given an appropriate road class if required, with appropriate attribution. Redundant data verified from aerial imagery is deleted.

As Vicmap Address points are approved these are periodically compared to Vicmap Transport Roads. Where required roads are changed from proposed to approved status.

### EZI Road Name and EZI Road Name Label

These fields are concatenations of Road Name / Road Type abbreviation and Road Suffix to provide a string useful for labelling within a GIS environment or to produce map products.

These are generated to take advantage of the road attribute data and reduce the reliance upon a separate text layer for road labelling.

EZI ROAD NAME LABEL has each word capitalized, uses VMREFTAB.ROAD\_TYPE.ROAD\_TYPE and separates hyphens with a space.

EZI ROAD NAME LABEL displays the text string in both upper and lower case.

Both label fields are applied to the primary road name only.

VMREFTAB.ROAD\_TYPE.ROAD\_TYPE ABBREVIATION provides a definitive list of road type abbreviations.

Suffixes OFF and ON are not included in the concatenation.

### Rail and Tram feature Representation

Railway, Light rail and Tramway are treated as common features. They can be separately identified by means of their feature codes and structure types.

### Generalisation of rail features

Rail features are generalised within Vicmap Transport. Up to three adjacent tracks (usually representing an up-line, down-line and express passing line) may be represented in Vicmap Transport by a single line feature.

Marshalling yards are generalised using a similar multiple track relationship, the intent being to indicate the density and extent of the yards and the direction and layout of sidings and crossings.

### Relationship of rail features with roads

Tram, train and light rail lines are tagged as being on-road, off-road or underground as appropriate. Tracks will be identified as being ‘on road’ where they run coincident with road carriageways. Within Vicmap Transport, these lineal features will be coincident with corresponding road line features. Where tracks run in their own reserve separate to a road, even where the reserve acts as a median strip to dual carriageway roads, the rail features will be tagged as ‘off road’. Below ground rail lines are tagged as ‘underground’.

### Ferry feature Representation

Vehicular ferry routes only included where facilities exist for the transportation of road vehicles over water. Ferry routes are shown as lineal features, approximating the shortest likely route between nominated landing points. Passenger only ferries and formal shipping channels/routes are not defined in Vicmap Transport.

### Air feature Representation

Vicmap Transport includes the ground location of air infrastructure. It does not include air routes.

### AIRPORT\_AREA

Civil Aviation Safety Authority (CASA) registered and certified airports are depicted within Vicmap Transport (Air) as both airport\_area and air infrastructure polygons. All airports are named.

The International Civil Aviation Organisation Code has been populated for airports in Vicmap Transport. E.g. YMCO Mallacoota

Sealed runways at larger airports are also captured as polygons.

### Hierarchy

To assist with mapping / categorisation a hierarchy has been adopted for airports. Vicmap Lite also uses hierarchy 1 to 3 below to depict airports as points.

The hierarchy is as follows:

1. CASA airport certified with CASA id and ICOA code
2. CASA airport registered with CASA id and ICOA code
3. Other CASA airport with ICAO code
4. Non CASA airport.

CASA classifications are taken from the CASA website <http://casa.gov.au/aerodromes>

There is no identified need to add hierarchy to TR\_AIR\_INFRA\_AREA\_POLYGON which show the actual airstrips as the CASA information will be held in the parent TR\_AIRPORT\_AREA\_POLYGON.

The attributes

* AUTH\_ORGANISATION\_CODEVARCHAR2(4)
* AUTH\_ORGANISATION\_ID VARCHAR2(30)

hold CASA as the authoritative organization and the CASA certification/registration number as the authoritative organization identifier.

### AIR\_INFRASTRUCTURE\_ AREA\_POLYGON

Airstrips both sealed and unsealed, within an airport or not are depicted as a polygon within Air\_Infrastructure\_Area\_Polygon. Where possible these airstrips are named from authoritative sources.

### AIR INFRASTRUCTURE LINE

This depicts the airfield centreline and includes all airstrips depicted within Air Infrastructure Area. These also include airstrips sourced from New South Wales Land and Property Management Authority (NSW LPMA) and reflect the source data. I.e. the NSW data is supplied as centreline linework only.

# Appendix D: Reference tables

Vicmap Transport should be used in conjunction with Vicmap Reference Tables to fully utilise the information it contains. Relevant reference tables include:

|  |  |
| --- | --- |
| **ANZLIC ID** | **Dataset name** |
| ANZVI0803003226 | VMREFTAB\_FEATURE\_TYPE\_TOPO |
|  | VMREFTAB\_FT\_AUTHORITATIVE\_ORGANISATION |
| ANZVI0803003138 | VMREFTAB\_LOCALITY |
| ANZVI0803003159 | VMREFTAB\_ROAD\_SUFFIX |
| ANZVI0803003160 | VMREFTAB\_ROAD\_TYPE |
|  | VMREFTAB.TP\_FEATURE\_QUALITY |
|  | VMREFTAB.TR\_AIRPORT\_HIERACHY |
|  | VMREFTAB.TR\_BRIDGE\_CONSTRUCTION\_TYPE |
|  | VMREFTAB.TR\_BRIDGE\_PHYSICAL\_CONDITION |
|  | VMREFTAB.TR\_DIVIDED\_ROAD |
|  | VMREFTAB.TR\_FERRY\_TYPE |
|  | VMREFTAB.TR\_RAIL\_GAUGE |
|  | VMREFTAB.TR\_RAIL\_PHYSICAL\_CONDITION |
|  | VMREFTAB.TR\_RAIL\_ROAD\_RELATIONSHIP |
|  | VMREFTAB.TR\_RAIL\_STATION\_STRUCTURE\_TYPE |
|  | VMREFTAB.TR\_RAIL\_ STRUCTURE\_TYPE |
|  | VMREFTAB.TR\_RAIL\_TOURIST\_TYPE |
|  | VMREFTAB.TR\_ROAD\_CLASS |
|  | VMREFTAB.TR\_ROAD\_CONSTRUCTION\_MATERIAL |
|  | VMREFTAB.TR\_ROAD\_DIRECTION |
|  | VMREFTAB.TR\_ROAD\_NAME\_GENDER |
|  | VMREFTAB.TR\_ROAD\_NAME\_THEME |
|  | VMREFTAB.TR\_ROAD\_RESTRICTIONS |
|  | VMREFTAB.TR\_ROAD\_SEAL |
|  | VMREFTAB.TR\_ROAD\_STATUS |
|  | VMREFTAB.TR\_ROAD\_STRUCTURE\_TYPE |
|  | VMREFTAB.TR\_ROAD\_URBAN |
|  | VMREFTAB.TR\_ROAD\_USE |
|  | VMREFTAB.TR\_VEHICULAR\_ACCESS |

|  |  |
| --- | --- |
| **Code** | **Description** |
| L | An address that is accessed from a road |
| W | An address that is accessed from a water way |
| I | An address that is located on an island that cannot be accessed from the mainland by road. |

**VMREFTAB. FEATURE\_TYPE\_TOPO**

| **UFI** | | **PFI** | | **FTYPE** | **FEATSUBTYP** | | **FEATSTATUS** | | **VMADDPFILK** | **DESC** | | **PFI\_CR** | | **UFI\_CR** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10107692 | | 1215 | | airport |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107693 | | 1217 | | barrier |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107694 | | 1218 | | beach |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107695 | | 1219 | | beacon |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107696 | | 1220 | | breakwater |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107697 | | 1221 | | bridge |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107698 | | 1222 | | bua |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107703 | | 1232 | | causeway |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107704 | | 1233 | | cave |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107707 | | 1236 | | cliff |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107709 | | 1238 | | coast |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107711 | | 1240 | | connector\_structure |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107712 | | 1241 | | contour |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107713 | | 1242 | | contour\_approx |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107714 | | 1243 | | contour\_dep |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107715 | | 1244 | | contour\_dep\_approx |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107716 | | 1245 | | contour\_dep\_index |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107717 | | 1246 | | contour\_index |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107718 | | 1247 | | cutting\_both | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107719 | | 1248 | | cutting\_one | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107720 | | 1249 | | dam\_batter | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107721 | | 1250 | | dam\_wall | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107722 | | 1251 | | dam\_wall\_road | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107724 | | 1253 | | dse\_region | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107725 | | 1255 | | embankment\_both | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107726 | | 1256 | | embankment\_one | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107731 | | 1262 | | fence | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107732 | | 1263 | | ferry\_route | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107733 | | 1264 | | flat\_sti | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107734 | | 1265 | | foot\_bridge | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107735 | | 1266 | | ford | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107736 | | 1267 | | forest | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107737 | | 1268 | | gate | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107740 | | 1271 | | helipad | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107741 | | 1272 | | int\_attribute | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107742 | | 1273 | | int\_coast | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107743 | | 1274 | | int\_locality | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107744 | | 1275 | | int\_nosignal | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107745 | | 1276 | | int\_signal | |  | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107746 | | 1277 | | island |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107747 | | 1278 | | island\_marine |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107748 | | 1279 | | island\_terrestrial |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107749 | | 1280 | | junction |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107752 | | 1283 | | launching\_ramp |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107753 | | 1284 | | levee |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107754 | | 1285 | | level\_crossing |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107755 | | 1286 | | lga |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **UFI** | | **PFI** | | **FTYPE** | | **FEATSUBTYP** | | **FEATSTATUS** | | **VMADDPFILK** | **DESC** | | **PFI\_CR** | | **UFI\_CR** | |
| 10107758 | | 1289 | | locality | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107759 | | 1290 | | lock | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107760 | | 1291 | | lookout | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107761 | | 1292 | | mainland | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107762 | | 1293 | | mapsheet | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107763 | | 1294 | | marine\_place | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107764 | | 1295 | | marshalling\_yard\_rail | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107767 | | 1298 | | mountain | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107768 | | 1299 | | named\_natural\_region | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107769 | | 1300 | | observatory | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107773 | | 1304 | | pass | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107774 | | 1305 | | peninsula | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107777 | | 1308 | | pipe\_water\_uground | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107778 | | 1309 | | plateau | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107779 | | 1310 | | pondage | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107780 | | 1311 | | pondage\_saltpan | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107781 | | 1312 | | pondage\_sewerage | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107782 | | 1313 | | postcode | |  | | ACTIVE | | N |  | | 12/01/2010 | | 1/02/2012 | |
| 10107804 | | 1336 | | roundabout | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107805 | | 1337 | | route\_marker\_nat | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107807 | | 1339 | | runway | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107808 | | 1340 | | sand | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107809 | | 1341 | | sand\_dune | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107810 | | 1342 | | scrub | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107811 | | 1343 | | sea | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107812 | | 1344 | | shoreline | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107814 | | 1346 | | sign\_post | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107816 | | 1348 | | sinkhole | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107817 | | 1349 | | spillway | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107821 | | 1353 | | spot\_height | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107822 | | 1354 | | spring | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107823 | | 1355 | | state\_border | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107826 | | 1358 | | survey\_beacon | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107827 | | 1359 | | tank | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107828 | | 1360 | | tank\_water | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107830 | | 1362 | | timber | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107831 | | 1363 | | timber\_scattered | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107833 | | 1366 | | tram\_dismantled | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107834 | | 1367 | | tramway | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107836 | | 1369 | | tunnel | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107839 | | 1373 | | valley | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107840 | | 1374 | | vegetation | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107841 | | 1375 | | vicgov\_region | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107842 | | 1376 | | vicmap\_boundary | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107843 | | 1377 | | watercourse\_area | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107844 | | 1378 | | watercourse\_channel | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107845 | | 1379 | | watercourse\_channel\_drain | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107846 | | 1380 | | watercourse\_drain | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107847 | | 1381 | | watercourse\_river | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| **UFI** | | **PFI** | | **FTYPE** | | **FEATSUBTYP** | | **FEATSTATUS** | | **VMADDPFILK** | | **DESC** | **PFI\_CR** | | **UFI\_CR** | |
| 10107848 | | 1382 | | watercourse\_stream | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107849 | | 1383 | | waterfall | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107850 | | 1384 | | watering\_place | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107851 | | 1385 | | wb\_dam | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107852 | | 1386 | | wb\_lake | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107853 | | 1387 | | wb\_lake\_salt | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107856 | | 1390 | | well | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107857 | | 1391 | | well\_water | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107858 | | 1392 | | wetland\_swamp | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107860 | | 1394 | | windbreak | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107861 | | 1395 | | windpump | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107862 | | 1396 | | wreck | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107863 | | 1439 | | bay | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107864 | | 1440 | | brickyard | |  | | ACTIVE | | N | |  | 12/01/2010 | | 1/02/2012 | |
| 10107865 | | 1498 | | bridge\_rail\_du | |  | | ACTIVE | | N | |  | 15/11/2011 | | 1/02/2012 | |
| 10107866 | | 1490 | | wharf | |  | | ACTIVE | | N | |  | 21/01/2011 | | 1/02/2012 | |
| 10107867 | | 1491 | | tunnel\_rail\_o | |  | | ACTIVE | | N | |  | 30/08/2011 | | 1/02/2012 | |
| 10107868 | | 1493 | | buoy | |  | | ACTIVE | | N | |  | 30/08/2011 | | 1/02/2012 | |
| 10107869 | | 1494 | | marina | |  | | ACTIVE | | N | |  | 30/08/2011 | | 1/02/2012 | |
| 10107870 | | 1495 | | pipe\_water | |  | | ACTIVE | | N | |  | 21/10/2011 | | 1/02/2012 | |
| 10107871 | | 1496 | | rail\_uground\_o | |  | | ACTIVE | | N | |  | 21/10/2011 | | 1/02/2012 | |
| 10107872 | | 1497 | | bridge\_rail\_dm | |  | | ACTIVE | | N | |  | 15/11/2011 | | 1/02/2012 | |
| 10107873 | | 1499 | | bridge\_rail\_o | |  | | ACTIVE | | N | |  | 15/11/2011 | | 1/02/2012 | |
| 10110849 | | 1516 | | connector\_channel | |  | | ACTIVE | | N | |  | 1/02/2011 | | 14/02/2012 | |
| 10110850 | | 1517 | | connector\_channel\_drain | |  | | ACTIVE | | N | |  | 1/02/2011 | | 14/02/2012 | |
| 10110851 | | 1518 | | connector\_drain | |  | | ACTIVE | | N | |  | 1/02/2011 | | 14/02/2012 | |
| 10110852 | | 1519 | | connector\_stream | |  | | ACTIVE | | N | |  | 1/02/2011 | | 14/02/2012 | |
| 10110854 | | 1520 | | connector\_river | |  | | ACTIVE | | N | |  | 1/02/2011 | | 14/02/2012 | |
| 10110857 | | 1521 | | connector | |  | | ACTIVE | | N | |  | 1/01/2000 | | 14/02/2012 | |
| 10127689 | | 1522 | | watercourse\_area\_channel\_drain | |  | | INACTIVE | | N | |  | 1/05/2012 | | 28/05/2012 | |
| 10127690 | | 1523 | | watercourse\_area\_river | |  | | INACTIVE | | N | |  | 1/05/2012 | | 28/05/2012 | |
| 10127691 | | 1524 | | watercourse\_area\_drain | |  | | INACTIVE | | N | |  | 1/05/2012 | | 28/05/2012 | |
| 10127693 | | 1525 | | watercourse\_area\_channel | |  | | INACTIVE | | N | |  | 1/05/2012 | | 28/05/2012 | |

**VMREFTAB. FT\_AUTHORITATIVE\_ORGANISATION**

| **AUTH\_ORG\_CODE** | **AUTH\_ORG** | **AUTHORGNAM** | **AUTHORGC** | **AUTH\_ORG** |
| --- | --- | --- | --- | --- |
| 100 | DSE-SII | Department of Sustainability and Environment - Spatial information Infrastructure | 100 | DSE-SII |
| 101 | DEECD | Department of Education and Early Childhood Development | 101 | DEECD |
| 102 | DHA | Department of Health and Aging | 102 | DHA |
| 103 | AMBULANCE VIC | Ambulance Victoria | 103 | AMBULANCE VIC |
| 104 | DHS | Department of Human Services | 104 | DHS |
| 105 | MFB | Metropolitan Fire Brigade | 105 | MFB |
| 106 | CFA | Country Fire Authority | 106 | CFA |
| 107 | VICPOL | Victorian Police | 107 | VICPOL |
| 108 | DOJ | Department of Justice | 108 | DOJ |
| 109 | DOJ-ESP&S | Department of Justice - Emergency Services Policy and Support | 109 | DOJ-ESP&S |
| 110 | NSW | New South Wales | 110 | NSW |
| 111 | SA | South Australia | 111 | SA |
| 112 | CASA | Civil Aviation Safety Authority | 112 | CASA |
| 113 | CEO | Catholic Education Office | 113 | CEO |
| 114 | IndependantDEECD | Independant Schools DEECD | 114 | IndependantDEECD |
| 115 | SPAUSNET | SP Ausnet | 115 | SPAUSNET |
| 116 | AUSTRALIAN CAMPS ASSOCIATION | Australian Camps Association | 116 | AUSTRALIAN CAMPS ASSOCIATION |
| 117 | SCOUTS AUSTRALIA | Scouts Australia | 117 | SCOUTS AUSTRALIA |
| 118 | GIRL GUIDES AUSTRALIA | Girl Guides Australia | 118 | GIRL GUIDES AUSTRALIA |
| 119 | LSV | Life Saving Victoria | 119 | LSV |
| 120 | ARC | Alpine Resorts Commission | 120 | ARC |
| 121 | DSE-FIRE | Department of Sustainability and Environment - Fire Management | 121 | DSE-FIRE |
| 122 | APA | Australian Pipeline Trust Group | 122 | APA |
| 123 | SES | State Emergency Service | 123 | SES |
| 124 | ESTA | Emergency Services Telecommunication Authority | 124 | ESTA |
| 125 | ATHLETICS VIC | Athletics Victoria | 125 | ATHLETICS VIC |
| 126 | BV | Baseball Victoria | 126 | BV |
| 127 | CAMS | Confederation of Australian Motor Sport | 127 | CAMS |
| 128 | CV | Croquet Victoria | 128 | CV |
| 129 | CSV | CycleSport Victoria | 129 | CSV |
| 130 | FFV | Football Federation Victoria | 130 | FFV |
| 131 | MV | Motorcycling Victoria | 131 | MV |
| 132 | RVBA | Royal Victorian Bowls Association | 132 | RVBA |
| 133 | VRA | Victorian Rifle Association | 133 | VRA |
| 134 | DPCD-LGV | Department of Planning and Community Development - Local Government Victoria | 134 | DPCD-LGV |
| 135 | TV | Tourism Victoria | 135 | TV |
| 136 | HV | Hockey Victoria | 136 | HV |
| 137 | VCPA | Victorian Caravan Parks Association | 137 | VCPA |
| 138 | AKD | AKD Softwoods | 138 | AKD |
| 139 | PFO | PF Olsen Australia | 139 | PFO |
| 140 | CHW | Central Highlands Water | 140 | CHW |
| 141 | DEMETER FARMING AUS | Demeter Farming Aus | 141 | DEMETER FARMING AUS |
| 142 | FORESTRYSA | ForestrySA | 142 | FORESTRYSA |
| 143 | GPFL | GPFL | 143 | GPFL |
| 144 | GTFP | Green Triangle Forest Products | 144 | GTFP |
| 145 | HVP PLANTATIONS | HVP Plantations | 145 | HVP PLANTATIONS |
| 146 | ELDERS FORESTRY | Elders Forestry | 146 | ELDERS FORESTRY |
| 147 | MCEWAN | McEWAN | 147 | MCEWAN |
| 148 | MIDWAY-AFFOREST | Midway Afforestation | 148 | MIDWAY-AFFOREST |
| 149 | PTG | Plantation Timbers Group | 149 | PTG |
| 150 | MIDWAY | Midway Limited | 150 | MIDWAY |
| 151 | S.E.F.E | S.E.F.E | 151 | S.E.F.E |
| 152 | AUSTGUM | AUSTGUM | 152 | AUSTGUM |
| 153 | WF | Willmott Forest | 153 | WF |
| 154 | MFPM | Macquarie Financial Products Management | 154 | MFPM |
| 155 | GRP | GRP | 155 | GRP |
| 156 | APP | APP | 156 | APP |
| 157 | SERIC | SERIC | 157 | SERIC |
| 158 | ABG | Australian Blue Gum | 158 | ABG |
| 159 | SPL | Southern Plantation Forest | 159 | SPL |
| 160 | CALCO | CALC Trusses and Timber | 160 | CALCO |
| 161 | SMF | Snowy Mountain Forests | 161 | SMF |
| 162 | NFAM | New Forest Asset Management | 162 | NFAM |
| 163 | DOHA | Department of Health and Ageing | 163 | DOHA |
| 164 | TP | Timberlands Pacific | 164 | TP |
| 200 | TBC | To Be Confirmed | 200 | TBC |
| 300 | ALPINE | Alpine Shire | 300 | ALPINE |
| 301 | ARARAT | Ararat Rural City | 301 | ARARAT |
| 302 | BALLARAT | Ballarat City | 302 | BALLARAT |
| 303 | BANYULE | Banyule City | 303 | BANYULE |
| 304 | BASS COAST | Bass Coast Shire | 304 | BASS COAST |
| 305 | BAW BAW | Baw Baw Shire | 305 | BAW BAW |
| 306 | BAYSIDE | Bayside City | 306 | BAYSIDE |
| 307 | BOROONDARA | Boroondara City | 307 | BOROONDARA |
| 308 | BRIMBANK | Brimbank City | 308 | BRIMBANK |
| 309 | BULOKE | Buloke Shire | 309 | BULOKE |
| 310 | CAMPASPE | Campaspe Shire | 310 | CAMPASPE |
| 311 | CARDINIA | Cardinia Shire | 311 | CARDINIA |
| 312 | CASEY | Casey City | 312 | CASEY |
| 313 | CENTRAL GOLDFIELDS | Central Goldfields Shire | 313 | CENTRAL GOLDFIELDS |
| 314 | COLAC OTWAY | Colac Otway Shire | 314 | COLAC OTWAY |
| 315 | CORANGAMITE | Corangamite Shire | 315 | CORANGAMITE |
| 316 | DAREBIN | Darebin City | 316 | DAREBIN |
| 317 | DELATITE | Delatite Shire | 317 | DELATITE |
| 318 | DOCKLANDS | Docklands | 318 | DOCKLANDS |
| 319 | EAST GIPPSLAND | East Gippsland Shire | 319 | EAST GIPPSLAND |
| 320 | FRANKSTON | Frankston City | 320 | FRANKSTON |
| 321 | GANNAWARRA | Gannawarra Shire | 321 | GANNAWARRA |
| 322 | GLEN EIRA | Glen Eira City | 322 | GLEN EIRA |
| 323 | GLENELG | Glenelg Shire | 323 | GLENELG |
| 324 | GOLDEN PLAINS | Golden Plains Shire | 324 | GOLDEN PLAINS |
| 325 | GREATER BENDIGO | Greater Bendigo City | 325 | GREATER BENDIGO |
| 326 | GREATER DANDENONG | Greater Dandenong City | 326 | GREATER DANDENONG |
| 327 | GREATER GEELONG | Greater Geelong City | 327 | GREATER GEELONG |
| 328 | GREATER SHEPPARTON | Greater Shepparton City | 328 | GREATER SHEPPARTON |
| 329 | HEPBURN | Hepburn Shire | 329 | HEPBURN |
| 330 | HINDMARSH | Hindmarsh Shire | 330 | HINDMARSH |
| 331 | HOBSONS BAY | Hobsons Bay City | 331 | HOBSONS BAY |
| 332 | HORSHAM | Horsham Rural City | 332 | HORSHAM |
| 333 | HUME | Hume City | 333 | HUME |
| 334 | INDIGO | Indigo Shire | 334 | INDIGO |
| 335 | KINGSTON | Kingston City | 335 | KINGSTON |
| 336 | KNOX | Knox City | 336 | KNOX |
| 337 | LATROBE | Latrobe City | 337 | LATROBE |
| 338 | LODDON | Loddon Shire | 338 | LODDON |
| 339 | MACEDON RANGES | Macedon Ranges Shire | 339 | MACEDON RANGES |
| 340 | MANNINGHAM | Manningham City | 340 | MANNINGHAM |
| 341 | MARIBYRNONG | Maribyrnong City | 341 | MARIBYRNONG |
| 342 | MAROONDAH | Maroondah City | 342 | MAROONDAH |
| 343 | MELBOURNE | Melbourne City | 343 | MELBOURNE |
| 344 | MELTON | Melton Shire | 344 | MELTON |
| 345 | MILDURA | Mildura Rural City | 345 | MILDURA |
| 346 | MITCHELL | Mitchell Shire | 346 | MITCHELL |
| 347 | MOIRA | Moira Shire | 347 | MOIRA |
| 348 | MONASH | Monash City | 348 | MONASH |
| 349 | MOONEE VALLEY | Moonee Valley City | 349 | MOONEE VALLEY |
| 350 | MOORABOOL | Moorabool Shire | 350 | MOORABOOL |
| 351 | MORELAND | Moreland City | 351 | MORELAND |
| 352 | MORNINGTON PENINSULA | Mornington Peninsula Shire | 352 | MORNINGTON PENINSULA |
| 353 | MOUNT ALEXANDER | Mount Alexander Shire | 353 | MOUNT ALEXANDER |
| 354 | MOYNE | Moyne Shire | 354 | MOYNE |
| 355 | MURRINDINDI | Murrindindi Shire | 355 | MURRINDINDI |
| 356 | NILLUMBIK | Nillumbik Shire | 356 | NILLUMBIK |
| 357 | NORTHERN GRAMPIANS | Northern Grampians Shire | 357 | NORTHERN GRAMPIANS |
| 358 | PORT PHILLIP | Port Phillip City | 358 | PORT PHILLIP |
| 359 | PYRENEES | Pyrenees Shire | 359 | PYRENEES |
| 360 | QUEENSCLIFFE | Queenscliffe Borough | 360 | QUEENSCLIFFE |
| 361 | SOUTH GIPPSLAND | South Gippsland Shire | 361 | SOUTH GIPPSLAND |
| 362 | SOUTHERN GRAMPIANS | Southern Grampians Shire | 362 | SOUTHERN GRAMPIANS |
| 363 | STONNINGTON | Stonnington City | 363 | STONNINGTON |
| 364 | STRATHBOGIE | Strathbogie Shire | 364 | STRATHBOGIE |
| 365 | SURF COAST | Surf Coast Shire | 365 | SURF COAST |
| 366 | SWAN HILL | Swan Hill Rural City | 366 | SWAN HILL |
| 367 | TOWONG | Towong Shire | 367 | TOWONG |
| 368 | WANGARATTA | Wangaratta Rural City | 368 | WANGARATTA |
| 369 | WARRNAMBOOL | Warrnambool City | 369 | WARRNAMBOOL |
| 370 | WELLINGTON | Wellington Shire | 370 | WELLINGTON |
| 371 | WEST WIMMERA | West Wimmera Shire | 371 | WEST WIMMERA |
| 372 | WHITEHORSE | Whitehorse City | 372 | WHITEHORSE |
| 373 | WHITTLESEA | Whittlesea City | 373 | WHITTLESEA |
| 374 | WODONGA | Wodonga City | 374 | WODONGA |
| 375 | WYNDHAM | Wyndham City | 375 | WYNDHAM |
| 376 | YARRA | Yarra City | 376 | YARRA |
| 377 | YARRA RANGES | Yarra Ranges Shire | 377 | YARRA RANGES |
| 378 | YARRIAMBIACK | Yarriambiack Shire | 378 | YARRIAMBIACK |
| 379 | FRENCH ISLAND (UNINC) | French Island (Unincorporated) | 379 | FRENCH ISLAND (UNINC) |
| 380 | UNINCORPORATED | Unincorporated | 380 | UNINCORPORATED |
| 381 | BENALLA | Benalla Rural City | 381 | BENALLA |
| 382 | MANSFIELD | Mansfield Shire | 382 | MANSFIELD |
| 383 | MOUNT BAW BAW ALPINE RESORT (U | Mount Baw Baw Alpine Resort (Unincorporated) | 383 | MOUNT BAW BAW ALPINE RESORT (U |
| 384 | MOUNT BULLER ALPINE RESORT (UN | Mount Buller Alpine Resort (Unincorporated) | 384 | MOUNT BULLER ALPINE RESORT (UN |
| 385 | LAKE MOUNTAIN ALPINE RESORT (U | Lake Mountain Alpine Resort (Unincorporated) | 385 | LAKE MOUNTAIN ALPINE RESORT (U |
| 386 | FALLS CREEK ALPINE RESORT (UNI | Falls Creek Alpine Resort (Unincorporated) | 386 | FALLS CREEK ALPINE RESORT (UNI |
| 387 | MOUNT STIRLING ALPINE RESORT ( | Mount Stirling Alpine Resort (Unincorporated) | 387 | MOUNT STIRLING ALPINE RESORT ( |
| 388 | MOUNT HOTHAM ALPINE RESORT (UN | Mount Hotham Alpine Resort (Unincorporated) | 388 | MOUNT HOTHAM ALPINE RESORT (UN |
| 389 | ALPINE RESORTS (UNINC) | Alpine Resorts (Unincorporated) | 389 | ALPINE RESORTS (UNINC) |
| 998 | PORT OF MELBOURNE (PLANNING ON | Port Of Melbourne (Planning Only) | 998 | PORT OF MELBOURNE (PLANNING ON |
| 999 | UNKNOWN | Unknown | 999 | UNKNOWN |

**VMREFTAB.LOCALITY** (sample only – there are over 2500 localities in total)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **LOCALITY\_UNIQUE** | **LOCALITY** | **VICNAMESID** | **UFI** | **UFI\_CR** |
| ABBEYARD | ABBEYARD | 100117 | 10026296 | 28/02/2008 |
| ABBOTSFORD | ABBOTSFORD | 100118 | 10026297 | 28/02/2008 |
| ABERFELDIE | ABERFELDIE | 100119 | 10026298 | 28/02/2008 |
| ABERFELDY | ABERFELDY | 100120 | 10026299 | 28/02/2008 |
| ACHERON | ACHERON | 100121 | 10026300 | 28/02/2008 |
| ADA | ADA | 100122 | 10026301 | 28/02/2008 |

**VMREFTAB.ROAD\_SUFFIX**

| **ROAD\_SUFFIX** | **LONGNAME** | **UFI** | **UFI\_CR** |
| --- | --- | --- | --- |
| N | North | 10012581 | 28/02/2008 |
| S | South | 10012582 | 28/02/2008 |
| E | East | 10012583 | 28/02/2008 |
| W | West | 10012584 | 28/02/2008 |
| LR | Lower | 10012585 | 28/02/2008 |
| UP | Upper | 10012586 | 28/02/2008 |
| NE | North East | 10012587 | 28/02/2008 |
| NW | North West | 10012588 | 28/02/2008 |
| SE | South East | 10012589 | 28/02/2008 |
| SW | South West | 10012590 | 28/02/2008 |
| CN | Central | 10012591 | 28/02/2008 |
| EX | Extension | 10012592 | 28/02/2008 |
| ML | Mall | 10012593 | 28/02/2008 |
| OT | Outer | 10012594 | 28/02/2008 |
| IN | Inner | 10012595 | 28/02/2008 |
| OF | Off | 10012596 | 28/02/2008 |
| ON | On | 10012597 | 28/02/2008 |
| A | A | 10012598 | 28/02/2008 |
| B | B | 10012599 | 28/02/2008 |
| C | C | 10012600 | 28/02/2008 |
| DV | Deviation | 10014961 | 27/05/2008 |
| BR | Branch | 10015101 | 18/07/2008 |

**VMREFTAB.ROAD\_TYPE**

| **ROAD\_TYPE** | **RDTYPEABB** | **GNR\_APPROV** | **UFI** | **UFI\_CR** |
| --- | --- | --- | --- | --- |
| ALLEY | ALLY | Y | 10151321 | 3/10/2012 |
| ARCADE | ARC | Y | 10151360 | 3/10/2012 |
| AVENUE | AV | Y | 10151334 | 3/10/2012 |
| BAY | BAY | N | 10151378 | 4/10/2012 |
| BEND | BEND | N | 10151379 | 4/10/2012 |
| BOULEVARD | BVD | Y | 10151335 | 3/10/2012 |
| BOWL | BOWL | N | 10151380 | 4/10/2012 |
| BRAE | BRAE | N | 10151381 | 4/10/2012 |
| BREAK | BRK | Y | 10151336 | 3/10/2012 |
| BYPASS | BYPA | Y | 10151337 | 3/10/2012 |
| CHASE | CH | Y | 10151322 | 3/10/2012 |
| CIRCLE | CIR | N | 10151382 | 4/10/2012 |
| CIRCUIT | CCT | Y | 10151338 | 3/10/2012 |
| CLOSE | CL | Y | 10151315 | 3/10/2012 |
| CONCOURSE | CON | Y | 10151339 | 3/10/2012 |
| COURSE | CRSE | N | 10151383 | 4/10/2012 |
| COURT | CT | Y | 10151316 | 3/10/2012 |
| COVE | COVE | N | 10151384 | 4/10/2012 |
| CRESCENT | CR | Y | 10151340 | 3/10/2012 |
| CREST | CRST | Y | 10151323 | 3/10/2012 |
| CROSS | CRSS | N | 10151385 | 4/10/2012 |
| DALE | DALE | N | 10151386 | 4/10/2012 |
| DELL | DELL | N | 10151387 | 4/10/2012 |
| DIVIDE | DIV | N | 10151388 | 4/10/2012 |
| DRIVE | DR | Y | 10151341 | 3/10/2012 |
| EDGE | EDGE | N | 10151389 | 4/10/2012 |
| ESPLANADE | ESP | Y | 10151343 | 3/10/2012 |
| FIRELINE | FLNE | N | 10151390 | 4/10/2012 |
| DASH | DASH | N | 10151391 | 4/10/2012 |
| FORD | FORD | N | 10151392 | 4/10/2012 |
| FREEWAY | FWY | Y | 10151345 | 3/10/2012 |
| GARDENS | GDNS | N | 10151393 | 4/10/2012 |
| GATE | GTE | N | 10151394 | 4/10/2012 |
| GATEWAY | GTWY | N | 10151395 | 4/10/2012 |
| GLADE | GLDE | Y | 10151324 | 3/10/2012 |
| GLEN | GLEN | N | 10151396 | 4/10/2012 |
| GRANGE | GRA | Y | 10151346 | 3/10/2012 |
| GREEN | GRN | N | 10151397 | 4/10/2012 |
| GROVE | GR | Y | 10151325 | 3/10/2012 |
| HEATH | HTH | N | 10151398 | 4/10/2012 |
| HEIGHTS | HTS | N | 10151399 | 4/10/2012 |
| HIGHWAY | HWY | Y | 10151347 | 3/10/2012 |
| HILL | HILL | N | 10151400 | 4/10/2012 |
| HUB | HUB | N | 10151401 | 4/10/2012 |
| JUNCTION | JNC | N | 10151402 | 4/10/2012 |
| LANE | LANE | Y | 10151326 | 3/10/2012 |
| LINK | LINK | N | 10151403 | 4/10/2012 |
| MALL | MALL | Y | 10151362 | 3/10/2012 |
| MEWS | MEWS | Y | 10151368 | 3/10/2012 |
| NOOK | NOOK | N | 10151404 | 4/10/2012 |
| OUTLOOK | OTLK | N | 10151405 | 4/10/2012 |
| PARADE | PDE | Y | 10151375 | 4/10/2012 |
| PARKWAY | PWY | Y | 10151374 | 4/10/2012 |
| PASS | PASS | N | 10151406 | 4/10/2012 |
| PATH | PATH | Y | 10151363 | 3/10/2012 |
| PLACE | PL | Y | 10151318 | 3/10/2012 |
| PLAZA | PLZA | Y | 10151319 | 3/10/2012 |
| POCKET | PKT | N | 10151407 | 4/10/2012 | |
| POINT | PNT | N | 10151408 | 4/10/2012 | |
| PURSUIT | PRST | N | 10151410 | 4/10/2012 | |
| QUADRANT | QDRT | N | 10151411 | 4/10/2012 | |
| QUAY | QY | N | 10151412 | 4/10/2012 | |
| REACH | RCH | N | 10151413 | 4/10/2012 | |
| RETREAT | RTT | Y | 10151320 | 3/10/2012 | |
| RETURN | RTN | N | 10151414 | 4/10/2012 | |
| RIDE | RIDE | N | 10151415 | 4/10/2012 | |
| RIDGE | RDGE | Y | 10151353 | 3/10/2012 | |
| RISE | RISE | Y | 10151327 | 3/10/2012 | |
| RISING | RSNG | N | 10151416 | 4/10/2012 | |
| ROUND | RND | N | 10151417 | 4/10/2012 | |
| ROW | ROW | N | 10151418 | 4/10/2012 | |
| RUN | RUN | N | 10151419 | 4/10/2012 | |
| SLOPE | SLPE | N | 10151420 | 4/10/2012 | |
| SQUARE | SQ | Y | 10151328 | 3/10/2012 | |
| STREET | ST | Y | 10151354 | 3/10/2012 | |
| STRIP | STRP | N | 10151421 | 4/10/2012 | |
| TERRACE | TCE | Y | 10151329 | 3/10/2012 | |
| THROUGHWAY | THRU | N | 10151422 | 4/10/2012 | |
| TRACK | TRK | Y | 10151356 | 3/10/2012 | |
| TRAIL | TRL | Y | 10151357 | 3/10/2012 | |
| TURN | TURN | N | 10151423 | 4/10/2012 | |
| VALLEY | VLLY | N | 10151424 | 4/10/2012 | |
| VIEW | VIEW | Y | 10151330 | 3/10/2012 | |
| VIEWS | VEWS | N | 10151425 | 4/10/2012 | |
| VISTA | VSTA | Y | 10151331 | 3/10/2012 | |
| WALK | WALK | Y | 10151371 | 3/10/2012 | |
| WATERS | WTRS | N | 10151426 | 4/10/2012 | |
| WAY | WAY | Y | 10151359 | 3/10/2012 | |
| WOODS | WDS | N | 10151427 | 4/10/2012 | |
| ACCESS | ACCS | N | 10151428 | 4/10/2012 | |
| AMBLE | AMBL | N | 10151429 | 4/10/2012 | |
| COMMON | CMMN | N | 10151430 | 4/10/2012 | |
| CONNECTION | CNTN | N | 10151431 | 4/10/2012 | |
| CUTTING | CUTT | N | 10151432 | 4/10/2012 | |
| GULLY | GLY | N | 10151433 | 4/10/2012 | |
| HOLLOW | HLLW | N | 10151434 | 4/10/2012 | |
| ISLAND | ISLD | N | 10151435 | 4/10/2012 | |
| REST | REST | N | 10151436 | 4/10/2012 | |
| APPROACH | APP | Y | 10151333 | 3/10/2012 | |
| BOARDWALK | BWLK | Y | 10151361 | 3/10/2012 | |
| BRIDGE | BDGE | N | 10151437 | 4/10/2012 | |
| CENTRE | CTR | N | 10151439 | 4/10/2012 | |
| CENTREWAY | CNWY | N | 10151440 | 4/10/2012 | |
| CIRCUS | CRCS | N | 10151441 | 4/10/2012 | |
| CLUSTER | CLR | N | 10151442 | 4/10/2012 | |
| CORNER | CNR | N | 10151443 | 4/10/2012 | |
| CROSSING | CRSG | N | 10151444 | 4/10/2012 | |
| DEVIATION | DEVN | N | 10151445 | 4/10/2012 | |
| CRUISEWAY | CUWY | N | 10151446 | 4/10/2012 | |
| DIP | DIP | N | 10151447 | 4/10/2012 | |
| ELBOW | ELB | N | 10151448 | 4/10/2012 | |
| END | END | N | 10151449 | 4/10/2012 | |
| ENTRANCE | ENT | Y | 10151342 | 3/10/2012 | |
| EXTENSION | EXTN | N | 10151450 | 4/10/2012 | |
| FAIRWAY | FAWY | N | 10151451 | 4/10/2012 | |
| INTERSECTION | INTN | Y | 10151349 | 3/10/2012 | |
| KEY | KEY | N | 10151452 | 4/10/2012 | |
| LANDING | LDG | N | 10151453 | 4/10/2012 | |
| LANEWAY | LNWY | N | 10151454 | 4/10/2012 | |
| LINE | LINE | N | 10151455 | 4/10/2012 | |
| LOOP | LOOP | Y | 10151369 | 3/10/2012 | |
| PATHWAY | PWAY | N | 10151456 | 4/10/2012 | |
| PASSAGE | PSGE | Y | 10151364 | 3/10/2012 | |
| PARK | PARK | N | 10151457 | 4/10/2012 | |
| QUAYS | QYS | Y | 10151351 | 3/10/2012 | |
| RAMP | RAMP | Y | 10151352 | 3/10/2012 | |
| RESERVE | RES | N | 10151458 | 4/10/2012 | |
| ROUTE | RTE | N | 10151459 | 4/10/2012 | |
| ROAD | RD | Y | 10151370 | 3/10/2012 | |
| SUBWAY | SBWY | Y | 10151366 | 3/10/2012 | |
| STEPS | STPS | Y | 10151365 | 3/10/2012 | |
| WYND | WYND | N | 10151460 | 4/10/2012 | |
| SPUR | SPUR | N | 10151461 | 4/10/2012 | |
| WOOD | WD | N | 10151462 | 4/10/2012 | |
| WHARF | WHRF | Y | 10151332 | 3/10/2012 | |
| WALKWAY | WKWY | N | 10151463 | 4/10/2012 | |
| VALE | VALE | N | 10151464 | 4/10/2012 | |
| UNDERPASS | UPAS | Y | 10151358 | 3/10/2012 | |
| TUNNEL | TUNL | N | 10151465 | 4/10/2012 | |
| TOP | TOP | N | 10151466 | 4/10/2012 | |
| TOLLWAY | TLWY | Y | 10151355 | 3/10/2012 | |
| DOMAIN | DOM | N | 10151467 | 4/10/2012 | |
| DENE | DENE | N | 10151468 | 4/10/2012 | |
| BOULEVARDE | BVDE | N | 10151469 | 4/10/2012 | |
| KEYS | KEYS | N | 10151470 | 4/10/2012 | |
| OUTLET | OTLT | N | 10151471 | 4/10/2012 | |
| FORK | FORK | N | 10151472 | 4/10/2012 | |
| MANOR | MAN | N | 10151473 | 4/10/2012 | |
| FIRETRAIL | FTRL | Y | 10151344 | 3/10/2012 | |
| CROOK | CRK | N | 10151474 | 4/10/2012 | |
| FIREBREAK | FBRK | N | 10151475 | 4/10/2012 | |
| FLATS | FLTS | N | 10151476 | 4/10/2012 | |
| TWIST | TWST | N | 10151477 | 4/10/2012 | |
| TRAVERSE | TVRS | N | 10151478 | 4/10/2012 | |
| ARTERIAL | ARTL | N | 10151479 | 4/10/2012 | |
| MAZE | MAZE | N | 10151480 | 4/10/2012 | |
| CAUSEWAY | CSWY | Y | 10151376 | 4/10/2012 | |
| PROMENADE | PROM | Y | 10151377 | 4/10/2012 | |

**VMREFTAB. TP\_FEATURE\_QUALITY**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **UFI** | **ID** | **FEATRELDT** | **ATTRELDT** | **SCALE** | **DATASRCC** | **DESC** |
| 11323704 | 1 | 1/07/1994 | 1/07/1994 | 9999999 | 999 |  |
| 11323705 | 2 | 1/07/1994 | 1/07/1994 | 40 | 1 |  |
| 11323706 | 3 | 1/07/1994 | 1/07/1994 | 40 | 1 |  |
| 11323707 | 4 | 1/07/1994 | 1/07/1994 | 40 | 1 |  |

**VMREFTAB.TR\_AIRPORT\_HIERACHY**

|  |  |  |
| --- | --- | --- |
| **CODE** | **HIER\_FNAME** | **Description** |
| 1 | CASA CERTIFIED | Regular Public Transport (RPT) operation or frequent charter with more than 30 passengers certified by CASA |
| 2 | CASA REGISTERED | Same physical standards as certified aerodrome registered by an approved person and recognised by CASA |
| 3 | CASA OTHER | Not certified or registered but served by Regular Public Transport (RPT) operation or by charter operations at least once per week and recognised by CASA |
| 4 | NON-CASA | Not recognised by CASA |

**VMREFTAB.TR\_BRIDGE\_CONSTRUCTION\_TYPE**

|  |  |  |
| --- | --- | --- |
| **CONSTRUCTION\_TYPE\_CODE** | **CONST\_TYPE** | **DESC** |
| 1 | BICYCLE BRIDGE | Bicycle Bridge |
| 2 | COVERED BRIDGE | Covered Bridge |
| 3 | DRAW BRIDGE | Draw Bridge |
| 4 | FOOT BRIDGE | Foot Bridge |
| 5 | LIFT BRIDGE | Lift Bridge (Bridge with span that raises) |
| 6 | OVERPASS | Overpass |
| 7 | PONTOON BRIDGE | Pontoon Bridge |
| 8 | SUSPENSION BRIDGE | Suspension Bridge |
| 9 | SWING BRIDGE | Swing Bridge |
| 10 | VIADUCT | Viaduct |
| 11 | CONVENTIONAL BRIDGE | Conventional Bridge (bridges that don’t fall into the above categories) |

**VMREFTAB.TR\_BRIDGE\_PHYSICAL\_CONDITION**

|  |  |
| --- | --- |
| **PHYSICAL\_CONDITION\_CODE** | **DESC** |
| 1 | Operational |
| 2 | Closed |

**VMREFTAB.TR\_FERRY\_TYPE**

|  |  |  |
| --- | --- | --- |
| **FERRY\_TYPE** | **FERRY\_TY\_1** | **DESC** |
| 1 | Divided Single | Divided Single Centreline Representation |
| 2 | Not Divided | Not Divided |
| 3 | Unknown | Unknown |
| 4 | Divided Double | Divided Double Line (one line per carriageway) Representation |

**VMREFTAB.TR\_DIVIDED\_ROAD**

|  |  |  |
| --- | --- | --- |
| **DIV\_RD\_CODE** | **DIV\_RD** | **DESCRIPTION** |
| DS | Divided Single | Divided Single Centreline Representation |
| ND | Not Divided | Not Divided |
| U | Unknown | Unknown |
| DD | Divided Double | Divided Double Line (one line per carriageway) Representation |

**VMREFTAB.TR\_RAIL\_GAUGE**

|  |  |  |
| --- | --- | --- |
| **RAIL\_GAUGE\_CODE** | **RAIL\_GAUGE** | **DESCRIPTION** |
| 1 | STANDARD | 4ft 8.5in Gauge |
| 2 | BROAD | 5ft 4in Gauge |
| 3 | BOTH | Both 4ft 8.5 in and 5ft 4in Gauge |
| 4 | VRNARROW | 2ft 6in Victorian Railways Narrow Gauge |
| 5 | NARROW | 3ft 6in Narrow Gauge |

**VMREFTAB.TR\_RAIL\_PHYSICAL\_CONDITION**

|  |  |  |
| --- | --- | --- |
| **PHYSYICAL\_CONDITION\_CODE** | **PHYS\_CONDITION** | **DESCRIPTION** |
| 1 | DISMANTLED | Dismantled |
| 2 | DISUSED | Disused |
| 3 | OPERATIONAL | Operational |

**VMREFTAB.TR\_RAIL\_ROAD\_RELATIONSHIP**

|  |  |  |
| --- | --- | --- |
| **ROAD\_RELATIONSHIP\_CODE** | **ROAD\_RELATIONSHIP** | **DESCRIPTION** |
| 1 | ON ROAD | On Road |
| 2 | OFF ROAD | Off Road |
| 3 | UNDERGROUND | Underground |

**VMREFTAB.TR\_RAIL\_STATION\_STRUCTURE\_TYPE**

|  |  |  |  |
| --- | --- | --- | --- |
| **STRUCUTURE\_TYPE\_CODE** | **STRUCTURE\_TYPE** | **IS\_DEPRECATED** | **DESC** |
| 1 | RAILWAY STATION | No | Railway Station |
| 2 | LIGHT RAIL STOP | No | Light Rail Stop |
| 3 | TRAM STOP | No | Tram Stop |

**VMREFTAB.TR\_RAIL\_ STRUCTURE\_TYPE**

|  |  |  |
| --- | --- | --- |
| **STRUCTURE\_TYPE\_CODE** | **STRUCTURE\_TYPE** | **DESCRIPTION** |
| 1 | LIGHT RAIL | Light Rail |
| 2 | TRAMWAY | Tramway |
| 3 | MONO RAIL | Mono Rail |
| 4 | NORMAL RAIL | Normal Rail |
| 5 | HEAVY RAIL | Heavy Rail |
| 6 | UNDERGROUND | Underground |

**VMREFTAB.TR\_RAIL\_TOURIST\_TYPE**

|  |  |  |
| --- | --- | --- |
| **TOURIST\_TYPE\_CODE** | **TOURIST\_TYPE** | **DESCRIPTION** |
| Y | YES | Flag to indicate tourist railway |
| N | NO |  |

**VMREFTAB.TR\_ROAD\_CLASS**

|  |  |  |
| --- | --- | --- |
| **ROAD\_CLASS\_CODE** | **ROAD\_CLASS** | **DESCRIPTION** |
| 0 | FREEWAY | Hard surface formation, high volume, high speed roads declared as “Freeway”; comprising dual carriageway and full access control and grade separated intersections; i.e. no direct access from adjoining properties or side roads and all crossings are by means of overpass or underpass bridges with traffic entering or leaving carriageways by means of ramps. Single carriageway sections forming part of declared freeways may be included within this category. |
| 1 | HIGHWAY | Hard surface roads which:  Are of importance in a national sense, and/or  Are of a major interstate through route, and/or  Are principal connector roads between capitals and/or major regions and/or key towns. |
| 2 | ARTERIAL | Well maintained and widely used hard surface formation roads which are major connectors between:  Freeways and/or National Highways, and/or  Major centres, and/or key towns, or  Have major tourist importance or  Which main function is to form the principle avenue of communication for metropolitan traffic movements, not catered for by freeways. |
| 3 | SUB-ARTERIAL | Hard surface formation road, which acts as:  A connector between highways and/or arterial roads, or  An alternate route for class 2 roads, or  A principal avenue for massive traffic movements. |
| 4 | COLLECTOR | Hard surface or improved, loose surface formation road acting to:  Provide for traffic movement (connects class 3 to class 5), or  To distribute traffic to local street systems. |
| 5 | LOCAL | Hard surface or improved, loose surface formation road providing access to properties or public land.  Caters for moderate travel speed of a full range of vehicles including large vehicles.  All weather two-lane road includes: sealed, formed and gravelled or single lane sealed road with gravel shoulders. |

|  |  |  |
| --- | --- | --- |
| 6 | MINOR | A hard surface, improved or unformed road usually with a dry weather or natural surface.  A road that services a small number of properties, is a dead end road, or provides access to low to moderate use sites within public land.  Caters for low travel speed and a range of vehicles in dry weather.  It may be seasonally closed.  Generally an all weather single lane two-way unsealed formed road usually lightly gravelled.  A fair quality of service road.  Designed for moderate to low speed standards according to terrain.  Minimum carriageway width is 4 m. |
| 7 | MAJOR TRACK | Provides access to low use visitor sites, parks and forest areas.  Can be a short term, temporary or a feeder road.  Will cater for low travel speeds and a range of vehicles in dry weather, it may be seasonally closed.  A formed (natural materials), generally dry-weather track/road that is substantially single lane and two way, or  A low quality of service track with a minimum carriageway width of 4 m  Includes forest tracks and may be restricted to four wheel-drive vehicles. |
| 8 | MINOR TRACK | Provides access primarily for four wheel-drive vehicles.  Will cater for very low travel speeds and may be seasonally closed.  Predominantly single lane two way earth tracks (unformed) at or near the natural surface level, or  A very low quality of service track, predominantly not conforming to any geometric design standards.  Includes forest tracks, access to, and within, private properties.  Minimum cleared width is 3 m. |
| 9 | TRAIL | Not designed for vehicular traffic. |
| 13 | PAPER ROAD | Not published as part of TR\_ROAD. Published in TR\_ROAD\_ALL for address validation purposes only. |
| 14 | FERRY ROUTE | A route across a river or lake used by a vessel for the regular transport of vehicles or passengers from one terminal point to another. |

**VMREFTAB.TR\_ROAD\_CONSTRUCTION\_MATERIAL**

|  |  |
| --- | --- |
| **CONSTRUCTION\_MATERIAL\_CODE** | **CONSTRUCTION MATERIAL** |
| 1 | CONCRETE |
| 2 | TIMBER |

**VMREFTAB.TR\_ROAD\_DIRECTION**

|  |  |  |
| --- | --- | --- |
| **DIRECTION\_CODE** | **DIRECTION** | **DESCRIPTION** |
| F | FORWARD | Forward Direction of traffic with respect to digitized direction of feature |
| R | REVERSE | Reverse Direction of traffic with respect to digitized direction of feature |
| B | BOTH | Traffic possible in both directions |

**VMREFTAB.TR\_ROAD\_NAME\_GENDER**

|  |  |
| --- | --- |
| **ROAD\_NAME\_GENDER** | **DESCRIPTION** |
| MAN | Man |
| WOMAN | Woman |
| MULTI GENDER | Multi Gender |
| SELF DESCRIBED | Self-described |
| NO GENDER | No Gender |

**VMREFTAB.TR\_ROAD\_NAME\_THEME**

|  |  |
| --- | --- |
| **ROAD\_NAME\_THEME** | **DESCRIPTION** |
| ABORIGINAL | Aboriginal |
| OTHER | Other |

**VMREFTAB.TR\_ROAD\_RESTRICTIONS**

|  |  |  |
| --- | --- | --- |
| **ROAD\_RESTRICIONS\_CODE** | **ROAD\_RESTRICTIONS** | **DESCRIPTION** |
| 1 | MANAGEMENT VEHICLES | Maintenance Vehicles Only |
| 2 | HT OR WT LIMIT | Subject To Height Or Weight Limits |
| 3 | UNMAINTAINED | Road Unmaintained, not for vehicular use. |
| 4 | PRIVATE | Private Access |
| 5 | COMPLEX SITE | Complex Address Site |

**VMREFTAB.TR\_ROAD\_SEAL**

|  |  |  |
| --- | --- | --- |
| **ROAD\_SEAL\_CODE** | **ROAD\_SEAL** | **DESCRIPTION** |
| 1 | SEALED | Road Sealed (sprayed seals, asphalt or concrete) |
| 2 | UNSEALED | Road Unsealed (includes rock or processed gravel) |
| 3 | UNKNOWN | Unknown |
| 4 | NATURAL | A formed or unformed road consisting  of locally available earth material not included in unsealed |

**VMREFTAB.TR\_ ROAD\_STATUS**

|  |  |  |
| --- | --- | --- |
| **ROAD\_STATUS\_CODE** | **ROAD\_STATUS** | **DESCRIPTION** |
| **P** | PROPOSED | Road centreline alignments have been received from plans of subdivision or VicRoads and are yet to be constructed or construction is not complete​. |
| **O** | OPEN | Road centreline alignment that is currently in use. |
| **S** | SEASONAL CLOSURE | Road centreline alignment subject to Seasonal Closures’ |
| **C** | CLOSED | Road centreline alignment that has been permanently closed to traffic. |

**VMREFTAB.TR\_ROAD\_STRUCTURE\_TYPE**

|  |  |  |
| --- | --- | --- |
| **STRUCTURE\_TYPE\_CODE** | **STRUCTURE\_TYPE** | **DESCRIPTION** |
| 1 | BOOM GATE | Boom Gate |
| 2 | BUSH GATE | Bush Gate |
| 3 | CATTLE GRID | Cattle Grid |
| 4 | CROSSING GATE | Crossing Gate |
| 5 | SLIP RAIL | Slip Rail |
| 6 | TOLL BARRIER | Toll Barrier |
| 7 | TURNSTILE | Turnstile |

Table 14: add\_access\_type

**VMREFTAB.TR\_ROAD\_USE**

|  |  |  |
| --- | --- | --- |
| **ROAD\_USE\_CODE** | **ROAD\_USE** | **DESCRIPTION** |
| 10 | WALKING TRACK | A pathway designed for traffic on foot. |
| 11 | ON ROAD BICYCLE LANE | A pathway allowing bicycle traffic. This is a shared roadway with vehicular traffic. Painted/marked lanes. |
| 12 | SEPARATED BICYCLE LANE | Bicycle path on road separated by road formed barriers. |
| 13 | OFF ROAD BIKE PATH | Bike path designed for bicycle use and not shared with motor vehicles. |
| 14 | MOUNTAIN BIKE TRACK | A pathway designed for and allowing mountain bike traffic in the main. |
| 15 | HORSE RIDING TRAIL | A pathway designed for and allowing horse riding traffic in the main. |
| 16 | SKI TRAIL | A pathway for cross country or downhill skiing. |
| 17 | BEACH ACCESS | An undefined pathway providing access to bathing boxes and boatsheds. |

**VMREFTAB.TR \_ROAD\_URBAN**

|  |  |  |
| --- | --- | --- |
| **URBAN\_CODE** | **URBAN** | **DESCRIPTION** |
| **Y** | **YES** | A flag indicating a road is located within an urban area. |
| **N** | **NO** | A flag indicating a road is located outside an urban area. |

**VMREFTAB.TR\_ VEHICULAR\_ACCESS**

|  |  |  |
| --- | --- | --- |
| **VEHICULAR\_ACCESS\_CODE** | **VEHICULAR\_ACCESS** | **DESCRIPTION** |
| 1 | 2WD | The road is accessible by 2 wheel drive vehicles. All year round. |
| 2 | DRY WEATHER ONLY | Road that can only be accessed by 2WD during dry weather. |
| 3 | 4WD | The road is accessible by 4 wheel drive vehicles only. |
| 4 | NO VEHICULAR ACCESS | The road has been assessed as being not accessible by a vehicle. |
| 5 | NOT ASSESSED | The road has not been assessed for vehicular access. |

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