

Appendix A - Data dictionary

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1. Use of the data dictionary

The data dictionary has six components:

- **The feature class cross reference**
- **The included terms cross reference**
- **The feature class dictionary**
- **The secondary table dictionary**
- **The symbol dictionary**
- **The layer table dictionary**

The feature class cross reference relates commonly used terms to feature classes in the data. The list is sorted alphabetically by the commonly used terms. While the list is not exhaustive it is designed to help assigning entities to the appropriate feature class. Once the appropriate feature class has been determined the feature class dictionary should be consulted for the conditions of use of the feature. Where a commonly used term relates to more than one feature the dictionary entries for both features should be consulted to determine the appropriate feature class for a particular entity.

The included terms cross reference relates the feature classes to commonly used terms. This list is sorted alphabetically by feature class and should be used to determine the range of features that fall within a feature class. Again the list is not exhaustive and the feature class dictionary should be consulted for the conditions of use of the feature class.

The feature class dictionary gives detailed information on the definition, conditions of use and other reference information for valid feature classes. An explanation of the feature class dictionary's components is given on the next page.

The secondary table dictionary defines secondary tables which are included in the GEODATA database. For the data quality table, the tile quality information table and the tile frequency table, the purpose and a brief description are included. The fields for the table are also defined. A field descriptor eg KEY FIELD is followed by the field code in round brackets e.g. (Q_INFO) and the data type in square brackets [CHARACTER; 8]. This information is followed by a short definition of the field. The remaining secondary tables decode attribute entries specific to certain feature classes. The dictionary entries for these secondary tables replicate the table. The table name is the name of the attribute in the primary table, the first column is the attribute code for legal entries and the second the description for each code. The first row defines the field names and data types. These secondary attribute tables are common to all GEODATA tiles and are included for reference.

The symbol dictionary defines the symbols that will be used on the map. Colours appearing in the dictionary are indicative only; the printed colours will be as specified. Symbols are not drawn to scale.

The layer table dictionary gives definitions of the attribute tables for each layer.

1.1 The feature class dictionary layout

The facing page gives a sample dictionary entry. The entries include the following information:

Feature Class	This is the name of the feature class.
Definition	The definition which applies to the feature class Classification of features is to be based on their match to the feature class definition and not their name. For example, an area named Williams Swamp may need to be classified as Land Subject to inundation.
Minimum size for inclusion	The size criteria for inclusion. Length and/or height criteria may apply to linear features such as levees or vertical features such as towers. Area criteria may apply to polygons. All additional features captured from any other source must comply with the size criteria as stated in these specifications. Length criteria will not apply to features that join two or more features in the same network at each end. The minimum area indicated for polygon feature classes is the minimum area for the whole feature, ie. where a polygon feature crosses a tile edge the minimum area criteria will be applied against the total area of the polygon itself, not just that individual part appearing on either the GEODATA tile or the working database. Similarly for linear features the minimum length applies to the whole feature not just that part which falls on the tile.
Scales	This gives the scales for which the feature class applies. Some feature classes are only used for 1:100 000 or 1:250 000 mapping and data, others at both scales.
Feature usage	This shows whether the data is used for GEODATA and mapping, GEODATA only, mapping only or for the <u>Working database only</u> . Features used for GEODATA and/or mapping will also be included in the working database. The example on the facing page indicates a feature class used in GEODATA and the working database. A mapping entry indicates that some aspect of the feature's spatial object or its attribute object will appear on the map. In some cases this will be a text note attribute which will be reflected in an annotation feature. For example, a Crater feature is not symbolised on the map but the name and text note attributes will be reflected in the type on the map

Spatial object

Representation	This is the spatial object type; polygon, chain or point (see Section 1 chapter 2.1). Some features may have two representations depending on the size of the entity or the scale which is being applied.
Planimetric accuracy	Planimetric accuracy is given in metres with the accuracy for 1:250 000 before the slash and for 1:100 000 after the slash. Where planimetric accuracy is not applicable for a spatial object at a particular scale this is indicated by a dash (-).
Feature code	The feature code is the code which identifies that spatial object type for the feature class. The first field in every primary attribute table, <i>feat_code</i> , holds this code. This field has a data type of CHARACTER; 12. Feature codes will be all lower case.
Coverage	The letter code for the Arc/Info coverage(s) the feature is stored in.

Data attributes

The data attributes define the fields in the primary table with the exception of *feat_code*. For each field a field descriptor eg UNIQUE FEATURE IDENTIFIER is followed by the field code in round brackets e.g. (*ufi*) and the data type in square brackets e.g. [character; 10] and a brief description e.g. Alphanumeric feature Identifier. This information may be followed by legal entries used in the field and their description if held as codes (this information is also given in the secondary attribute tables). The data type definitions are standard ARC/INFO data type definitions of the form, Input width (n), output width (n), type. Input and output width is numbers. Types are:

I means Integer
 D means Date
 C means Character
 B means Binary

N,d means Number followed by the number of decimal places eg N,2 for a number with two decimal places

F,d means Floating point number followed by the number of decimal places eg F,2 for a Floating point number with two decimal places.

Attributes used in GEODATA and the working database are shown in normal type. Attributes specific to the working database are shown in italics.

General notes

The general notes section includes any additional selection criteria which may apply and other notes on usage which apply to the working database or both the maps and GEODATA.

GEODATA

The GEODATA section gives information specific to the use of the feature class in GEODATA. This section will be blank if there are no specific notes or the feature class is not used in GEODATA.

Map	The map section gives information specific to the use of the feature class on the map. This section will be blank if there are no specific notes or information from the feature class is not used on the map.
Data rules	The data rules section specifies usage of the feature class in the working database and, if relevant, GEODATA. The relationship of the feature class to other classes is outlined.
Related features	Feature classes which have a relationship with this feature class.
Related chapters	Chapters in the specification which include information relevant to this feature class.

Note: Geoscience Australia does not warrant the Related features and Related chapters sections of the Feature class dictionary as being complete. Bidders and producers are cautioned to familiarise themselves with the whole specification (see page ii of the preamble to the specifications).

Feature Class

Definition

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

1:250 000
&
1:100 000

GEODATA
feature

Spatial object

Representation	Spatial object type	
Planimetric Accuracy	1:250K / 1:100K	
Feature code	Feature code	
Coverage (see Section 3 chapter 4)		

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (See Section 1 chapter 3.5 and Section 3 chapter 5.4)

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (See Section 1 chapter 3.4 and Section 3 chapter 5.4)

Working database only

SYMBOL (symbol) [binary; 4,5,B,0]

Symbol number applicable:

420

General Notes

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GEODATA

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Map

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Data rules

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Related features

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Related chapters

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2. FEATURE CLASS CROSS REFERENCE

Commonly used term **Feature class**

Abandoned road	Road
Aboriginal Area (Indigenous Area)	Reserve – Nature Conservation
Aboriginal community (indigenous community)	Building
Aboriginal community (indigenous community)	Builtup area
Aboriginal place (Indigenous Place)	Reserve – Nature Conservation
Aboriginal Reserve (Indigenous Reserve)	Reserve - Indigenous area
Aboriginal Site (Indigenous Site)	Reserve – Nature Conservation
Aerial Cableway	Aerial cableway
Aerodrome	Aircraft facility
Aerodrome	Airport
Aircraft facility	Aircraft facility
Aircraft facility line	Aircraft facility line
Airport	Aircraft facility
Airport	Airport
Alpine Reserve	Reserve - Nature conservation
Annotation	Annotation
Aquaculture pens (non land based)	Landmark area
Aquaculture pond	Settling pond
Aquarium	Water tank
Aquatic Reserve	Reserve - Nature conservation
Aqueduct	Canal
Area subject to inundation	Land subject to inundation
Artificial lake	Reservoir
Automatic weather station	Landmark point
Backshore	Saline coastal flat
Bank	Reef
Barchan dunes	Sand dunes
Barrage	Dam
Bay	Locality
Beach	Locality
Beach	Sand
Beacon	Landmark point
Bench mark	Bench mark
Billabong	Lake
Billabong	Waterhole

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Billabong boundary	Waterline
Blowhole	Cave
Bluff	Cliff
Boat lift	Lock
Boat ramp	Boat ramp
Boom gate	Gate
Border - State or Territory	State border
Bore	Bore
Bore drain	Canal
Boulder	Pinnacle
Boulder field	Rocky outcrop
Boundary - National Park	Reserve line
Boundary - Nature Reserve	Reserve line
Boundary - Prohibited area	Prohibited area line
Boundary - Recreation Reserve	Reserve line
Boundary - Reserved area	Reserve line
Boundary - Reserved Indigenous Land	Reserve line
Boundary - Scenic Reserve	Reserve line
Boundary - State	State border
Boundary - State Forest	Reserve line
Boundary - State or Territory	State border
Boundary - State Park	Reserve line
Boundary - Territory	State border
Boundary - Water Catchment Area	Reserve line
Boundary Conservation Area	Reserve line
Boundary Defence Force	Prohibited area line
Boundary Fauna Reserve	Reserve line
Boundary Flora Reserve	Reserve line
Boundary Forest Reserve	Reserve line
Boundary Game Reserve	Reserve line
Boundary Historical Area	Reserve line
Boundary International	Boundary International
Breakaway	Cliff
Breakwater	Breakwater
Bridge - foot	Foot bridge
Bridge - railway	Railway bridge
Bridge - road	Road bridge
Bridle path	Foot track
Brook	Watercourse

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Building	Building
Building - factory	Building
Building - hospital	Building
Building - ruin	Building
Building - shopping complex	Building
Building line	Building line
Built-up area	Built-up area
Built-up area line	Built-up area line
Built-up area void	Built-up area void
Bush gate	Gate
Butte	Pinnacle
Cableway (aerial)	Aerial cableway
Canal	Canal
Canal	Salt evaporator internal line
Cane grass	Marine swamp
Cape	Locality
Cascade	Waterfall
Cataracts	Waterfall
Cattle grid	Stock grid
Causeway - rail	Railway causeway
Causeway - road	Road causeway
Cave	Cave
Cavern	Cave
Cay	Island
Cay	Reef
Cemetery	Cemetery
Cemetery	Locality
Chair lift	Aerial cableway
Channel	Canal
Chimney	Landmark point
City	Built-up area
Civic square	Park
Claypan	Lake
Claypan boundary	Waterline
Claypit	Open cut/Mining area
Cleared line	Seismic line/Cleared line
Cliff	Cliff
Coastal Park	Reserve - Nature conservation
Coastal Reserve	Reserve - Nature conservation

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Coastline	Waterline
Connecting road	Road
Connector	Connector
Conservation Area	Reserve - Nature conservation
Conservation Area boundary	Reserve line
Conservation Park	Reserve - Nature conservation
Conservation Reserve	Reserve - Nature conservation
Contour	Contour
Control point - bench mark	Bench mark
Control point - horizontal	Horizontal control point
Control point - trig station	Horizontal control point
Conveyor	Conveyor
Conveyor belt	Conveyor
Cooling tower	Landmark point
Coral	Offshore rock
Coral	Reef
Cotton Gin (seasonal)	Landmark area
Cove	Locality
Cowal	Watercourse
Crater	Crater
Creek	Watercourse
Crescent dunes	Sand dunes
Culvert	Canal
Cut	Cutting
Cutting	Cutting
Dam	Dam
Dam - carrying road	Dam
Defence area	Prohibited area
Defence Force boundary	Prohibited area line
Defence Reserve	Prohibited area
Destination arrow - road	Road destination arrow
Digging	Mine
Digging	Open cut/mining area
Distance indicator	Kilometric distance indicator
Distorted surface	Distorted surface
Diversion cut	Spillway
Divided road	Road
Dock	Jetty
Dog fence	Fence

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Doline	Cave
Double line watercourse	Lake
Double line watercourse boundary	Waterline
Double line watercourse infill	Lake
Drain	Canal
Dry dock	Dry dock
Dunes - barchan	Sand dunes
Dunes - crescent	Sand dunes
Dunes - longitudinal	Sand ridge
Dunes - sand	Sand dunes
Embankment	Embankment
Environmental Park	Reserve - Nature conservation
Escarpment	Cliff
Factory	Building
Falls	Waterfall
Fauna Reserve	Reserve - Nature conservation
Fauna Sanctuary	Reserve - Nature conservation
Feature identifier arrow	Feature pointer
Feature pointer	Feature pointer
Fence	Fence
Fence - dog	Fence
Fence - vermin proof	Fence
Ferry	Ferry route
Ferry crossing	Ferry route
Ferry route	Ferry route
Ferry terminal	Jetty
Fire tower	Landmark point
Fish Habitat Reserve	Reserve - Nature conservation
Fish hatchery	Settling pond
Fish pen	Settling pond
Fish pond	Water tank
Floating dry dock	Dry dock
Floodway	Road causeway
Flora and Fauna Reserve	Reserve - Nature conservation
Flora Reserve	Reserve - Nature conservation
Foot bridge	Foot bridge
Foot path	Foot track
Foot track	Foot track
Ford	Ford

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Foreshore flat	Foreshore flat
Foreshore flat line	Offshore line
Forest	Woody vegetation
Forest Park	Reserve - Forestry
Forest Reserve	Reserve - Forestry
Freeway	Road
Game Reserve	Reserve - Nature conservation
Game Reserve boundary	Reserve line
Gap	Locality
Gardens	Park
Gas pipeline	Pipeline
Gas well	Gas well
Gate	Gate
Gateway	Gate
Geothermal power station	Landmark area
Gilgai	Distorted surface
Gnamma hole	Waterpoint
Golf course	Park
Gorge	Locality
Graticule line	Graticule line
Grave	Locality
Gravel pit	Open cut/Mining area
Graveyard	Cemetery
Graving dock	Dry dock
Grid	Stock grid
Grid line	Grid line
Groyne	Breakwater
Gully	Watercourse
Headland	Locality
Hedge	Windbreak
Hedgerow	Windbreak
Helipad	Aircraft facility
Heliport	Aircraft facility
Highway	Road
Hill	Locality
Historical Area	Reserve - Nature conservation
Historical Area boundary	Reserve line
Homestead	Locality
Homestead tank	Water tank

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Horizontal control point	Horizontal control point
Hospital	Building
Hovercraft route	Ferry route
Hut	Building
Hydrofoil route	Ferry route
Hypso area	Hypsometric area
Indigenous Area (refer Aboriginal entry)	Reserve – Nature Conservation
Inlet	Locality
International boundary	Boundary - International
Intertidal flat	Foreshore flat
Inundation area	Land subject to inundation
Island	Island
Jetty	Jetty
Jump-up	Cliff
Junction	Junction
Kilometric distance indicator	Kilometric distance indicator
Kilometric distances	Kilometric distance indicator
Knob	Locality
Lagoon	Lake
Lagoon	Waterhole
Lagoon boundary	Waterline
Lagoon infill	Lake
Lake	Lake
Lake	Waterpoint
Lake - artificial	Reservoir
Lake boundary	Waterline
Lake infill	Lake
Land subject to inundation	Land subject to inundation
Landing	Jetty
Landing Ground	Aircraft facility
Landing platform	Jetty
Landing stage	Jetty
Landing strip	Aircraft facility
Landmark	Landmark
Launching ramp	Boat ramp
Lava flow	Distorted surface
Levee	Levee
Levee	Salt evaporator internal line
Levee	Settling pond internal line

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Lighthouse	Lighthouse
Lignun	Marine Swamp
Locality	Locality
Lock	Lock
Lookout	Landmark point
Lookout	Locality
Mainland	Mainland
Mangrove	Mangrove
Mangrove flat	Mangrove flat
Map area	Map area
Map mask	Map mask
Marina	Jetty
Marina pens	Jetty
Marine and Coastal Park	Reserve - Nature conservation
Marine Park	Reserve - Nature conservation
Marine Park/Defence Reserve	Reserve - Nature conservation
Marine Park/Fish Habitat Reserve	Reserve - Nature conservation
Marine Reserve	Reserve - Nature conservation
Marine swamp	Marine swamp
Marker - National route	Route marker - National
Marker - state route	Route marker - State
Marsh	Swamp
Marshalling yard	Railway
Mast	Landmark point
Microwave tower	Landmark point
Mill	Windpump
Mine	Mine
Mine - open cut	Open cut/Mining area
Mole	Breakwater
Monorail	Railway
Monument	Landmark point
Mountain	Locality
Mountain range	Locality
Muttonbird Reserve	Reserve - Nature conservation
National Highway marker	Route marker - National
National Park	Reserve - Nature conservation
National Park boundary	Reserve line
National Park/Fish Habitat Reserve	Reserve - Nature conservation
National Park/Water Supply Reserve	Reserve - Nature conservation

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

National Park/Wetland Reserve	Reserve - Nature conservation
National route marker	Route marker - National
Native well	Waterpoint
Nature conservation reserve	Reserve - Nature conservation
Nature Park	Reserve - Nature conservation
Nature Reserve	Reserve - Nature conservation
Nature Reserve boundary	Reserve line
Neatline	Tile edge
Nomenclature	Annotation
Notation	Annotation
Nursery	Orchard or vineyard
Ocean	Sea
Offshore line	Offshore line
Offshore rock	Offshore rock
Offshore void	Offshore void
Oil pipeline	Pipeline
Oil refinery	Building
Oil refinery	Landmark area
Oil refinery	Storage tank
Oil storage tank	Storage tank
Oil well	Gas well
Open Cut	Open cut/Mining area
Open cut mine	Open cut/Mining area
Orchard	Orchard or vineyard
Outcamp	Locality
Outcamp	Locality
Outstation	Building
Outstation	Locality
Outstation	Locality
Oval	Park
Overflow	Spillway
Overpass	Road bridge
Overpass/underpass	Rail overpass
Overpass/underpass	Road overpass
Oxbow	Lake
Oxbow	Waterhole
Oxbow boundary	Waterline
Oxbow infill	Lake

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Oyster beds	Landmark area
Park	Park
Pass	Locality
Patch	Reef
Patent slipway	Boat ramp
Peak	Locality
Peninsula	Locality
Penstock	Pipeline
Pier	Jetty
Pine plantation	Plantation
Pinnacle	Pinnacle
Pipeline	Pipeline
Pipeline - gas	Pipeline
Pipeline - oil	Pipeline
Pipeline - other than water	Pipeline
Pipeline - water	Pipeline
Place name	Locality
Plantation	Orchard or vineyard
Point	Locality
Pond	Lake
Pond	Waterhole
Pond - settling	Settling ponds
Pond - tailing	Settling ponds
Pond boundary	Waterline
Pond infill	Lake
Pondage	Reservoir
Pontoon	Jetty
Pool	Lake
Pool	Waterhole
Pool	Waterpoint
Pool - swimming	Water tank
Pool infill	Lake
Populated place	Locality
Power transmission line	Powerline
Powerline	Powerline
Precipice	Cliff
Prohibited area	Prohibited area
Prohibited area boundary	Prohibited area line
Prohibited area line	Prohibited area line

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Prohibited area void	Prohibited area void
Protected area	Reserve - Nature conservation
Punt	Ferry route
Punt crossing point	Ferry route
Quarantine area	Prohibited area
Quarry	Open cut/Mining area
Quay	Jetty
Racecourse	Park
Racetrack	Park
Railway	Railway
Railway bridge	Railway bridge
Railway causeway	Railway causeway
Railway station	Railway station
Railway tunnel	Railway tunnel
Rainforest	Rainforest
Rainforest - temperate	Rainforest
Rainforest - tropical	Rainforest
Rapid area line	Rapid area line
Rapids	Rapid
Razorback	Razorback
Recreation area	Park
Recreation Park (SA only)	Reserve - Nature conservation
Recreation Reserve	Reserve - Nature conservation
Recreation Reserve boundary	Reserve line
Reef	Offshore rock
Reef	Reef
Reef line	Offshore line
Reference Area	Reserve - Nature conservation
Regional Reserve	Reserve - Nature conservation
Relief area line	Relief area line
Relief area void	Relief area void
Research station	Landmark area
Reserve boundary - recreation	Reserve line
Reserved Indigenous Land boundary	Reserve line
Reserved line	Reserve line
Reserved void	Reserve void
Reservoir	Reservoir
Reservoir	Water tank
Reservoir boundary	Waterline

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Rest area	Landmark area
Ridge	Locality
Rifle range	Park
Ring road	Road
River	Watercourse
Road	Road
Road - abandoned	Road
Road - approximate position	Road
Road bridge	Road bridge
Road causeway	Road causeway
Road destination arrow	Road destination arrow
Road distance marker	Kilometric distance indicator
Road junction	Locality
Road on dam	Road on dam
Road tunnel	Road tunnel
Road underground	Road tunnel
Roadhouse	Building
Rock	Locality
Rock	Offshore rock
Rock	Pinnacle
Rock	Reef
Rock column	Pinnacle
Rock ledge	Offshore rock
Rock ledge	Reef
Rockhole	Waterpoint
Rocky outcrops	Rocky outcrop
Rodeo grounds	Park
Route marker - national	Route marker - National
Route marker - State	Route marker - State
Rubbish tip	Rubbish tip
Ruin	Building
Runway	Aircraft facility
Runway	Runway centreline
Runway boundary line	Aircraft facility line
Runway centreline	Runway centreline
Runway void	Aircraft facility void
Saline coastal flat	Saline coastal flat
Salt evaporator	Salt evaporator
Salt evaporator internal line	Salt evaporator internal line

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Saltpan	Lake
Saltpan boundary	Waterline
Saltpan infill	Lake
Saltworks	Salt evaporator
Sand	Sand
Sand dunes	Sand dunes
Sand pit	Open cut/Mining area
Sand ridge	Sand ridge
Sandridge	Sand ridge
Scarp	Cliff
Scenic Reserve	Reserve - Nature conservation
Scientific Area	Reserve - Nature conservation
Scientific Purposes Reserve	Reserve - Nature conservation
Scientific Reserve	Reserve - Nature conservation
Scrape	Open cut/Mining area
Scrub	Woody vegetation
Sea	Sea
Sea wall	Sea wall
Seismic line	Seismic line/Cleared line
Settlement	Built-up area
Settling pond internal line	Settling pond internal line
Settling ponds	Settling ponds
Sewage filtration beds	Settling ponds
Sewage treatment plant	Settling ponds
Shaft	Mine
Shipwreck	Wreck
Shoal	Offshore rock
Shoal	Reef
Shopping complex	Building
Shoreline	Waterline
Showgrounds	Park
Shrub	Woody vegetation
Siding	Railway
Silo	Landmark point
Sinkhole	Cave
Ski lift	Aerial cableway
Slip rails	Gate
Slipway	Boat ramp
Slurry pond	Settling ponds

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Smokestack	Landmark point
Soak	Waterpoint
Solar farm	Landmark area
Solar panels	Landmark point
Spillway	Spillway
Spoil dump	Open cut/Mining area
Spot elevation	Spot elevation
Spot height	Spot elevation
Spring	Spring
Spur line	Railway
State border	State border
State Boundary	State border
State forest	Reserve - Forestry
State Forest boundary	Reserve line
State Park	Reserve - Nature conservation
State Park boundary	Reserve line
State Reserve	Reserve - Nature conservation
State route marker	Route marker - State
Station - railway	Railway station
Stilling basin	Settling pond
Stock grid	Cattle grid
Stock grid	Stock grid
Storage tank	Storage tank
Storage well	Storage tank
Stream	Watercourse
Subject to inundation area	Land subject to inundation
Submerged rock	Offshore rock
Submerged rock	Reef
Suburb	Built-up area
Swamp	Swamp
Swimming pool	Water tank
Tailing ponds	Settling ponds
Tailings dump	Open cut/Mining area
Tank	Water tank
Tank - storage (other than water)	Storage tank
Taxiway	Aircraft Facility Line
Temperate rainforest	Rainforest
Territory border	State border
Territory Boundary	State border

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Through route	Road
Tidal flat	Foreshore flat
Tidal power farm	Landmark area
Tile edge	Tile edge
Timber Reserve	Reserve - Forestry
Tollway	Road
Tor	Locality
Tower	Landmark point
Town	Built-up area
Track - foot	Foot track
Track - vehicle	Road
Track - walking	Foot track
Tracking station	Landmark area
Trail	Foot track
Training track	Park
Tramway	Railway
Transition point	Transition point
Transmission line - power	Powerline
Trig station	Horizontal control point
Tropic of Capricorn	Tropic of Capricorn
Tropical rainforest	Rainforest
Tunnel - railway	Railway tunnel
Tunnel - road	Road tunnel
Turkey nest	Water tank
Underground road	Road tunnel
Underpass	Road bridge
Vegetation	Woody vegetation
Vegetation - clear	Vegetation Void
Vegetation - dense	Woody vegetation
Vegetation - Forest	Woody vegetation
Vegetation - hedge	Windbreak
Vegetation - medium	Woody vegetation
Vegetation - nursery	Orchard or vineyard
Vegetation - orchard	Orchard or vineyard
Vegetation - pine plantation	Plantation
Vegetation - plantation	Orchard or vineyard
Vegetation - rainforest	Rainforest
Vegetation - temperate rainforest	Rainforest
Vegetation - tropical rainforest	Rainforest

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

Vegetation - vineyard	Orchard or vineyard
Vegetation - windbreak	Windbreak
Vegetation line	Vegetation Line
Vegetation void	Vegetation Void
Vehicle track	Road
Vermin proof fence	Fence
Village	Built-up area
Vineyard	Orchard or vineyard
Walking track	Foot track
Waste disposal site	Rubbish tip
Water body boundary	Waterline
Water body void	Water body void
Water Catchment Area	Reserve - Water Supply
Water pipeline	Pipeline
Water supply Reserve	Reserve - Water supply
Water tank	Water tank
Waterbody island	Locality
Waterbody island	Waterbody void
Watercourse	Watercourse
Watercourse - double line	Lake
Watercourse - double line boundary	Waterline
Watercourse - double line infill	Lake
Waterfall	Waterfall
Waterhole	Lake
Waterhole	Waterhole
Waterhole boundary	Waterline
Waterhole infill	Lake
Waterline	Waterline
Waterpoint	Waterpoint
Weir	Dam
Well	Bore
Well - gas	Gas well
Well - oil	Gas well
Well - storage	Storage tank
Well - water	Bore
Well (native)	Waterpoint
Wetland	Swamp
Wetland Reserve	Reserve - Nature conservation
Wharf	Wharf

FEATURE CLASS CROSS REFERENCE**Commonly used term****Feature class**

White water	Rapid
Wilderness	Reserve - Nature conservation
Wildlife Sanctuary	Reserve - Nature conservation
Wind farm	Landmark area
Wind generator	Landmark point
Windbreak	Windbreak
Windmill	Windpump
Windpump	Windpump
Woodland	Woody vegetation
Woolshed	Building
Wreck	Wreck
Yard	Yard

3. INCLUDED TERMS CROSS REFERENCE

Feature class

Commonly used term

Aerial cableway	Aerial Cableway
Aerial cableway	Cableway (aerial)
Aerial cableway	Chair lift
Aerial cableway	Ski lift
Aircraft facility	Aerodrome
Aircraft facility	Aircraft facility
Aircraft facility	Airport
Aircraft facility	Helipad
Aircraft facility	Heliport
Aircraft facility	Landing Ground
Aircraft facility	Landing strip
Aircraft facility	Runway
Aircraft facility line	Aircraft facility line
Aircraft facility line	Runway boundary line
Aircraft facility line	Taxiway
Aircraft facility void	Runway void
Airport	Aerodrome
Airport	Airport
Annotation	Annotation
Annotation	Nomenclature
Annotation	Notation
Bench mark	Bench mark
Bench mark	Control point - bench mark
Boat ramp	Boat ramp
Boat ramp	Launching ramp
Boat ramp	Patent slipway
Boat ramp	Slipway
Bore	Bore
Bore	Well
Bore	Well - water
Boundary - International	International boundary
Boundary International	Boundary International
Breakwater	Breakwater
Breakwater	Groyne

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Breakwater	Mole
Building	Aboriginal Community (Indigenous Community)
Building	Building
Building	Building - factory
Building	Building - hospital
Building	Building - ruin
Building	Building - shopping complex
Building	Factory
Building	Hospital
Building	Hut
Building	Oil Refinery
Building	Outstation
Building	Roadhouse
Building	Ruin
Building	Shopping complex
Building	Woolshed
Building line	Building line
Builtup area	Aboriginal community (indigenous community)
Built-up area	Built-up area
Built-up area	City
Built-up area	Settlement
Built-up area	Suburb
Built-up area	Town
Built-up area	Village
Built-up area line	Built-up area line
Built-up area void	Built-up area void
Canal	Aqueduct
Canal	Bore drain
Canal	Canal
Canal	Channel
Canal	Culvert
Canal	Drain
Cave	Blowhole
Cave	Cave
Cave	Cavern
Cave	Doline
Cave	Sinkhole

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Cemetery	Cemetery
Cemetery	Graveyard
Cliff	Bluff
Cliff	Breakaway
Cliff	Cliff
Cliff	Escarpment
Cliff	Jump-up
Cliff	Precipice
Cliff	Scarp
Connector	Connector
Contour	Contour
Conveyor	Conveyor
Conveyor	Conveyor belt
Crater	Crater
Cutting	Cut
Cutting	Cutting
Dam	Barrage
Dam	Dam
Dam	Dam - carrying road
Dam	Weir
Distorted surface	Distorted surface
Distorted surface	Gilgai
Distorted surface	Lava flow
Dry dock	Dry dock
Dry dock	Floating dry dock
Dry dock	Graving dock
Embankment	Embankment
Feature pointer	Feature identifier arrow
Feature pointer	Feature pointer
Fence	Dog fence
Fence	Fence
Fence	Fence - dog
Fence	Fence - vermin proof
Fence	Vermin proof fence
Ferry route	Ferry
Ferry route	Ferry crossing
Ferry route	Ferry route
Ferry route	Hovercraft route

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Ferry route	Hydrofoil route
Ferry route	Punt
Ferry route	Punt crossing point
Foot bridge	Bridge - foot
Foot bridge	Foot bridge
Foot track	Bridle path
Foot track	Foot path
Foot track	Foot track
Foot track	Track - foot
Foot track	Track - walking
Foot track	Trail
Foot track	Walking track
Ford	Ford
Foreshore flat	Foreshore flat
Foreshore flat	Intertidal flat
Foreshore flat	Tidal flat
Woody vegetation	Forest
Woody vegetation	Scrub
Woody vegetation	Shrub
Woody vegetation	Vegetation
Woody vegetation	Vegetation - dense
Woody vegetation	Vegetation - Forest
Woody vegetation	Vegetation - medium
Woody vegetation	Woodland
Gas well	Gas well
Gas well	Oil well
Gas well	Well - gas
Gas well	Well - oil
Gate	Boom gate
Gate	Bush gate
Gate	Gate
Gate	Gateway
Gate	Slip rails
Graticule line	Graticule line
Grid line	Grid line
Horizontal control point	Control point - horizontal
Horizontal control point	Control point - trig station
Horizontal control point	Horizontal control point

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Horizontal control point	Trig station
Hypsometric area	Hypso area
Island	Cay
Island	Island
Jetty	Dock
Jetty	Ferry terminal
Jetty	Jetty
Jetty	Landing
Jetty	Landing platform
Jetty	Landing stage
Jetty	Marina
Jetty	Marina pens
Jetty	Pier
Jetty	Pontoon
Jetty	Quay
Junction	Junction
Kilometric distance indicator	Distance indicator
Kilometric distance indicator	Kilometric distance indicator
Kilometric distance indicator	Kilometric distances
Kilometric distance indicator	Road distance marker
Lake	Billabong
Lake	Claypan
Lake	Double line watercourse
Lake	Double line watercourse infill
Lake	Lagoon
Lake	Lagoon infill
Lake	Lake
Lake	Lake infill
Lake	Oxbow
Lake	Oxbow infill
Lake	Pond
Lake	Pond infill
Lake	Pool
Lake	Pool infill
Lake	Saltpan
Lake	Saltpan infill
Lake	Watercourse - double line
Lake	Watercourse - double line infill

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Lake	Waterhole
Lake	Waterhole infill
Land subject to inundation	Area subject to inundation
Land subject to inundation	Inundation area
Land subject to inundation	Land subject to inundation
Land subject to inundation	Subject to inundation area
Landmark	Landmark
Landmark area	Aquaculture pens (non land based)
Landmark area	Cotton Gin (seasonal)
Landmark area	Geothermal Power Station
Landmark area	Oil refinery
Landmark area	Oyster Beds
Landmark area	Research station
Landmark area	Rest Area
Landmark area	Solar Farm
Landmark area	Tidal Power Farm
Landmark area	Tracking Station
Landmark area	Wind Farm
Landmark point	Automatic weather station
Landmark point	Beacon
Landmark point	Chimney
Landmark point	Cooling tower
Landmark point	Fire tower
Landmark point	Lookout
Landmark point	Mast
Landmark point	Microwave tower
Landmark point	Monument
Landmark point	Silo
Landmark point	Smokestack
Landmark point	Solar panels
Landmark point	Tower
Landmark point	Wind generator
Levee	Levee
Lighthouse	Lighthouse
Locality	Bay
Locality	Beach
Locality	Cape

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Locality	Cemetery
Locality	Cove
Locality	Gap
Locality	Gorge
Locality	Grave
Locality	Headland
Locality	Hill
Locality	Homestead
Locality	Inlet
Locality	Knob
Locality	Locality
Locality	Lookout
Locality	Mountain
Locality	Mountain Range
Locality	Outcamp
Locality	Outcamp
Locality	Outstation
Locality	Outstation
Locality	Pass
Locality	Peak
Locality	Peninsula
Locality	Place Name
Locality	Point
Locality	Populated Place
Locality	Ridge
Locality	Road Junction
Locality	Rock
Locality	Tor
Locality	Waterbody Island
Lock	Boat lift
Lock	Lock
Mainland	Mainland
Mangrove	Mangrove
Mangrove flat	Mangrove flat
Map area	Map area
Map mask	Map mask
Marine swamp	Cane grass

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Marine swamp	Lignun
Marine swamp	Marine swamp
Mine	Digging
Mine	Mine
Mine	Shaft
Offshore line	Foreshore flat line
Offshore line	Offshore line
Offshore line	Reef line
Offshore rock	Coral
Offshore rock	Offshore rock
Offshore rock	Reef
Offshore rock	Rock
Offshore rock	Rock ledge
Offshore rock	Shoal
Offshore rock	Submerged rock
Offshore void	Offshore void
Open cut/Mining area	Claypit
Open cut/Mining area	Digging
Open cut/Mining area	Gravel pit
Open cut/Mining area	Mine - open cut
Open cut/Mining area	Open Cut
Open cut/Mining area	Open cut mine
Open cut/Mining area	Quarry
Open cut/Mining area	Sand pit
Open cut/Mining area	Scrape
Open cut/Mining area	Spoil dump
Open cut/Mining area	Tailings dump
Orchard or vineyard	Nursery
Orchard or vineyard	Orchard
Orchard or vineyard	Plantation
Orchard or vineyard	Vegetation - nursery
Orchard or vineyard	Vegetation - orchard
Orchard or vineyard	Vegetation - plantation
Orchard or vineyard	Vegetation - vineyard
Orchard or vineyard	Vineyard
Park	Civic square
Park	Gardens
Park	Golf course

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Park	Oval
Park	Park
Park	Racecourse
Park	Racetrack
Park	Recreation area
Park	Rifle range
Park	Rodeo grounds
Park	Showgrounds
Park	Training track
Plantation	Pine plantation
Plantation	Vegetation - pine plantation
Pinnacle	Boulder
Pinnacle	Butte
Pinnacle	Pinnacle
Pinnacle	Rock
Pinnacle	Rock column
Pipeline	Gas pipeline
Pipeline	Oil pipeline
Pipeline	Penstock
Pipeline	Pipeline
Pipeline	Pipeline - gas
Pipeline	Pipeline - oil
Pipeline	Pipeline - other than water
Pipeline	Pipeline - water
Pipeline	Water pipeline
Powerline	Power transmission line
Powerline	Powerline
Powerline	Transmission line - power
Prohibited area	Defence area
Prohibited area	Defence Reserve
Prohibited area	Prohibited area
Prohibited area	Quarantine area
Prohibited area line	Boundary - Prohibited area
Prohibited area line	Boundary Defence Force
Prohibited area line	Defence Force boundary
Prohibited area line	Prohibited area boundary
Prohibited area line	Prohibited area line
Prohibited area void	Prohibited area void

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Rail overpass	Overpass/underpass
Railway	Marshalling yard
Railway	Monorail
Railway	Railway
Railway	Siding
Railway	Spur line
Railway	Tramway
Railway bridge	Bridge - railway
Railway bridge	Railway bridge
Railway causeway	Causeway - rail
Railway causeway	Railway causeway
Railway station	Railway station
Railway station	Station - railway
Railway tunnel	Railway tunnel
Railway tunnel	Tunnel - railway
Rainforest	Rainforest
Rainforest	Rainforest - temperate
Rainforest	Rainforest - tropical
Rainforest	Temperate rainforest
Rainforest	Tropical rainforest
Rainforest	Vegetation - rainforest
Rainforest	Vegetation - temperate rainforest
Rainforest	Vegetation - tropical rainforest
Rapid	Rapids
Rapid	White water
Rapid area line	Rapid area line
Razorback	Razorback
Reef	Bank
Reef	Cay
Reef	Coral
Reef	Patch
Reef	Reef
Reef	Rock
Reef	Rock ledge
Reef	Shoal
Reef	Submerged rock
Relief area line	Relief area line
Relief area void	Relief area void

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Reserve - Forestry	Forest Park
Reserve - Forestry	Forest Reserve
Reserve - Forestry	State forest
Reserve - Forestry	Timber Reserve
Reserve - Indigenous area	Aboriginal Reserve (Indigenous Reserve)
Reserve - Nature conservation	Aboriginal Area (Indigenous Area)
Reserve - Nature conservation	Aboriginal Place (Indigenous Place)
Reserve - Nature conservation	Aboriginal Site (Indigenous Site)
Reserve - Nature conservation	Alpine Reserve
Reserve - Nature conservation	Aquatic Reserve
Reserve - Nature conservation	Coastal Park
Reserve - Nature conservation	Coastal Reserve
Reserve - Nature conservation	Conservation Area
Reserve - Nature conservation	Conservation Park
Reserve - Nature conservation	Conservation Reserve
Reserve - Nature conservation	Environmental Park
Reserve - Nature conservation	Fauna Reserve
Reserve - Nature conservation	Fauna Sanctuary
Reserve - Nature conservation	Fish Habitat Reserve
Reserve - Nature conservation	Flora and Fauna Reserve
Reserve - Nature conservation	Flora Reserve
Reserve - Nature conservation	Game Reserve
Reserve - Nature conservation	Historical Area
Reserve - Nature conservation	Marine and Coastal Park
Reserve - Nature conservation	Marine Park
Reserve - Nature conservation	Marine Park/Defence Reserve
Reserve - Nature conservation	Marine Park/Fish Habitat Reserve
Reserve - Nature conservation	Marine Reserve
Reserve - Nature conservation	Muttonbird Reserve
Reserve - Nature conservation	National Park
Reserve - Nature conservation	National Park/Fish Habitat Reserve
Reserve - Nature conservation	National Park/Water Supply Reserve
Reserve - Nature conservation	National Park/Wetland Reserve
Reserve - Nature conservation	Nature conservation reserve
Reserve - Nature conservation	Nature Park
Reserve - Nature conservation	Nature Reserve
Reserve - Nature conservation	Protected area
Reserve - Nature conservation	Recreation Park (SA only)

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Reserve - Nature conservation	Recreation Reserve
Reserve - Nature conservation	Reference Area
Reserve - Nature conservation	Regional Reserve
Reserve - Nature conservation	Scenic Reserve
Reserve - Nature conservation	Scientific Area
Reserve - Nature conservation	Scientific Purposes Reserve
Reserve - Nature conservation	Scientific Reserve
Reserve - Nature conservation	State Park
Reserve - Nature conservation	State Reserve
Reserve - Nature conservation	Wetland Reserve
Reserve - Nature conservation	Wilderness
Reserve - Nature conservation	Wildlife Sanctuary
Reserve - Water Supply	Water Catchment Area
Reserve - Water supply	Water supply Reserve
Reserve line	Boundary - National Park
Reserve line	Boundary - Nature Reserve
Reserve line	Boundary - Recreation Reserve
Reserve line	Boundary - Reserved area
Reserve line	Boundary - Reserved Indigenous Land
Reserve line	Boundary - Scenic Reserve
Reserve line	Boundary - State Forest
Reserve line	Boundary - State Park
Reserve line	Boundary - Water Catchment Area
Reserve line	Boundary Conservation Area
Reserve line	Boundary Fauna Reserve
Reserve line	Boundary Flora Reserve
Reserve line	Boundary Forest Reserve
Reserve line	Boundary Game Reserve
Reserve line	Boundary Historical Area
Reserve line	Conservation Area boundary
Reserve line	Game Reserve boundary
Reserve line	Historical Area boundary
Reserve line	National Park boundary
Reserve line	Nature Reserve boundary
Reserve line	Recreation Reserve boundary
Reserve line	Reserve boundary - recreation
Reserve line	Reserved Aboriginal Land boundary
Reserve line	Reserved line

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Reserve line	State Forest boundary
Reserve line	State Park boundary
Reserve void	Reserved void
Reservoir	Artificial lake
Reservoir	Lake - artificial
Reservoir	Pondage
Reservoir	Reservoir
Road	Abandoned road
Road	Connecting road
Road	Divided road
Road	Freeway
Road	Highway
Road	Ring road
Road	Road
Road	Road - abandoned
Road	Road - approximate position
Road	Through route
Road	Tollway
Road	Track - vehicle
Road	Vehicle track
Road bridge	Bridge - road
Road bridge	Overpass
Road bridge	Road bridge
Road bridge	Underpass
Road causeway	Causeway - road
Road causeway	Floodway
Road causeway	Road causeway
Road destination arrow	Destination arrow - road
Road destination arrow	Road destination arrow
Road on dam	Road on dam
Road overpass	Overpass/underpass
Road tunnel	Road tunnel
Road tunnel	Road underground
Road tunnel	Tunnel - road
Road tunnel	Underground road
Rocky outcrop	Boulder field
Rocky outcrop	Rocky outcrops
Route marker - National	Marker - National route

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Route marker - National	National Highway marker
Route marker - National	National route marker
Route marker - National	Route marker - national
Route marker - State	Marker - state route
Route marker - State	Route marker - State
Route marker - State	State route marker
Rubbish tip	Rubbish tip
Rubbish tip	Waste disposal site
Runway centreline	Runway
Runway centreline	Runway centreline
Saline coastal flat	Backshore
Saline coastal flat	Saline coastal flat
Salt evaporator	Salt evaporator
Salt evaporator	Saltworks
Salt evaporator internal line	Canal
Salt evaporator internal line	Levee
Salt evaporator internal line	Salt evaporator internal line
Sand	Beach
Sand	Sand
Sand dunes	Barchan dunes
Sand dunes	Crescent dunes
Sand dunes	Dunes - barchan
Sand dunes	Dunes - crescent
Sand dunes	Dunes - sand
Sand dunes	Sand dunes
Sand ridge	Dunes - longitudinal
Sand ridge	Sand ridge
Sand ridge	Sandridge
Sea	Ocean
Sea	Sea
Sea wall	Sea wall
Seismic line/Cleared line	Cleared line
Seismic line/Cleared line	Seismic line
Settling pond	Fish hatchery
Settling pond	Fish pen
Settling pond	Stilling basin
Settling pond internal line	Levee
Settling pond internal line	Settling pond internal line

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Settling ponds	Aquaculture pond
Settling ponds	Pond - settling
Settling ponds	Pond - tailing
Settling ponds	Settling ponds
Settling ponds	Sewage filtration beds
Settling ponds	Sewage treatment plant
Settling ponds	Slurry pond
Settling ponds	Tailing ponds
Spillway	Diversion cut
Spillway	Overflow
Spillway	Spillway
Spot elevation	Spot elevation
Spot elevation	Spot height
Spring	Spring
State border	Border - State or Territory
State border	Boundary - State
State border	Boundary - State or Territory
State border	Boundary - Territory
State border	State border
State border	State Boundary
State border	Territory border
State border	Territory Boundary
Stock grid	Grid
Stock grid	Stock grid
Storage tank	Oil refinery
Storage tank	Oil storage tank
Storage tank	Storage tank
Storage tank	Storage well
Storage tank	Tank - storage (other than water)
Storage tank	Well - storage
Swamp	Marsh
Swamp	Swamp
Swamp	Wetland
Tile edge	Neatline
Tile edge	Tile edge
Transition point	Transition point
Tropic of Capricorn	Tropic of Capricorn
Vegetation Line	Vegetation line

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Vegetation Void	Vegetation - clear
Vegetation Void	Vegetation void
Water body void	Water body void
Water tank	Aquarium
Water tank	Fish pond
Water tank	Homestead tank
Water tank	Pool - swimming
Water tank	Reservoir
Water tank	Swimming pool
Water tank	Tank
Water tank	Turkey nest
Water tank	Water tank
Waterbody void	Waterbody island
Watercourse	Brook
Watercourse	Cowal
Watercourse	Creek
Watercourse	Gully
Watercourse	River
Watercourse	Stream
Watercourse	Watercourse
Waterfall	Cascade
Waterfall	Cataracts
Waterfall	Falls
Waterfall	Waterfall
Waterhole	Billabong
Waterhole	Lagoon
Waterhole	Oxbow
Waterhole	Pond
Waterhole	Pool
Waterhole	Waterhole
Waterline	Billabong boundary
Waterline	Claypan boundary
Waterline	Coastline
Waterline	Double line watercourse boundary
Waterline	Lagoon boundary
Waterline	Lake boundary
Waterline	Oxbow boundary
Waterline	Pond boundary

FEATURE CLASS CROSS REFERENCE**Feature Class****Commonly used term**

Waterline	Reservoir boundary
Waterline	Saltpan boundary
Waterline	Shoreline
Waterline	Water body boundary
Waterline	Watercourse - double line boundary
Waterline	Waterhole boundary
Waterline	Waterline
Waterpoint	Gnamma hole
Waterpoint	Lake
Waterpoint	Native well
Waterpoint	Pool
Waterpoint	Rockhole
Waterpoint	Soak
Waterpoint	Waterpoint
Waterpoint	Well (native)
Wharf	Wharf
Windbreak	Hedge
Windbreak	Hedgerow
Windbreak	Vegetation - hedge
Windbreak	Vegetation - windbreak
Windbreak	Windbreak
Windpump	Mill
Windpump	Windmill
Windpump	Windpump
Wreck	Shipwreck
Wreck	Wreck
Yard	Yard

4. Feature Class Dictionary

Feature classes are listed in alphabetical order commencing on the next page.

AERIAL CABLEWAY

A conveyor system in which carrier units run on wire cables strung between supports.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
3 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	chairlift	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of aerial cableway

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
30

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

GEODATA

Map

A descriptive note is to be added e.g. 'chairlift'.

Data rules

--

Related features

Conveyor

Related chapters

--

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

AIRCRAFT FACILITY

A paved or cleared strip on which aircraft take off and land.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	Polygon
Planimetric Accuracy	100 / -	- / 9999
Feature code	aircraft_flt	aircraft_f_a
Coverage (see Section 3 chapter 4)	a	z

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of aircraft facility.

AIRCRAFT FACILITY TYPE (facility) [integer; 1,1,I] Code for type of facility being

- 1 - Airport (a licensed facility)
- 2 - Landing Ground (other facilities)
- 3 - Heliport

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

featcode aircraft_flt

<tile-id>1 - Facility Type 1

<tile-id>4 - Facility Type 2 or 3

featcode aircraft_f_a

<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

Point symbols;

701 : Airport (circle @ 250K)

703 : Landing Ground

708 : Heliport

0 : non printing for landing grounds on very small islands or helipads at 1:100000 where symbolisation can not occur do to rules set out in general notes

Polygon;

700 : Airport & Landing Ground (area @ 100K)

*FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0
Attribute for point only.*

*ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360
Attribute for point only. Features Aircraft facility type: Airport and Heliport have orientation of 0.*

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

*OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).
Attribute for point only.*

General Notes

Only operational Aircraft Facilities found in the revision source material supplied for Aircraft Facilities and are clearly visible on imagery, will be included regardless of whether it was shown on/in the base material/digital data.

Only operational facilities will be shown. Abandoned facilities will not be shown.

The classification of facilities will be done according to the Enroute Supplement Australia published by the Airservices Australia and supplied as revision source material.

Only facilities shown as licensed in the Enroute Supplement are to be classified as airports. If the facility is not listed in the supplement or is listed as unlicensed it will be classified as a landing ground, with the feature and attribute reliabilities of the supplement or the base material/digital data respectively.

Only civilian licensed facilities will be named. Military facilities and unlicensed facilities will not be named.

Where an Aerodrome Reference Point (ARP) symbol is shown on the Enroute supplement diagram, the Aircraft facility point will be at the geographic coordinates given in the supplement. Where no ARP symbol exists in the Enroute supplement, the feature will be centred on the longest runway.

All runway centrelines for all licenced aircraft facilities will be captured.

Runway centrelines >457 metres (1500 feet) will be captured for unlicensed aircraft facilities.

At 1:100000 Helipads will be included within the boundaries of another Aircraft facility, a Builtup Area or a Park Polygon, however it will only be symbolised if space and cartographic generalisation permits.

At 1:250000 Helipads will be not be captured when they exist within the boundaries of another Aircraft Facility, Builtup Area or Park polygon.

At 1:100 000 Runways and Landing Grounds drawn to scale will be formed using parallel lines and should give the appearance of right angles at each end.

GEODATA

This feature will be shown as a point in the 1:250 000 product and a combination of polygon, chain and point in the 1:100 000 product (see section 1 chapter 3.8.10 Aircraft Facilities).

Map

For Landing grounds the orientation of the runway will be shown. If there is more than one runway the orientation of the main runway will be shown.

For named Aircraft Facilities, 'Airport' or 'Aerodrome' will be included in the name. The form used will be that used on the latest previous edition map. If the Aircraft Facility was not previously named 'Aerodrome' will be used.

Military aircraft facilities will be symbolised in the same way as civil facilities, but will not be named nor given any other indication of their military nature.

1:100 000:

All land airports and landing grounds will be drawn to scale with the landing strips or runways and taxiways outlined and correctly oriented. All polygon runways and landing grounds should have the appearance that they are formed using parallel lines and right angles at each end. All landing grounds will be labelled with a descriptive note "landing ground"

1:250 000:

For Airports the position, length and orientation of sealed runways will be shown. If there are no sealed runways, only the length and orientation of the main unsealed runway will be shown. See Runway centreline feature.

Data rules

The polygon feature will be bounded by an Aircraft facility line.

Related features

Aircraft facility line, Airport, Runway centreline, Taxiway and Tile edge

Related chapters

Section 1 chapter 3.8.10
Section 3 chapters 3.2.4 and 5.9

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

AIRCRAFT FACILITY LINE

A line defining the limits of an airfield, airport or the edge of runways, taxiways or aprons.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	aircraft_f_l	
Coverage (see Section 3 chapter 4)	z	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

702 : surrounding Aircraft Facility & Aircraft Facility Void Polygons

0 : surrounding Airport Polygons

General Notes

GEODATA

Map

Data rules

Bounds the Aircraft facility, Airport and Aircraft facility void polygons.

Related features

Aircraft facility, Aircraft facility void, Airport, Taxiway and Vegetation line

Related chapters

Section 1 chapter 3.8.10

Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

AIRCRAFT FACILITY VOID

A void in an Aircraft facility polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	- / 9999	
Feature code	airc_f_void	
Coverage (see Section 3 chapter 4)	z	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

GEODATA

Map

Data rules

Will be bounded by an Aircraft facility line.

Related features

Aircraft facility line and Tile edge

Related chapters

Section 1 chapters 3.8.2 and 3.8.10

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

AIRPORT

An area reserved for aircraft operations, excluding landing strips, runways and associated voids.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	- / 9999	
Feature code	airport_a	
Coverage (see Section 3 chapter 4)	z	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
0

General Notes

Abandoned airports will not be shown.

GEODATA

Map

Data rules

Will be bounded by an Aircraft facility line.

Related features

Aircraft facility, Aircraft facility line and tile edge

Related chapters

Section 1 chapter 3.8.10

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ANNOTATION

Type that appears on the map.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Annotation	
Planimetric Accuracy		
Feature code		
Coverage (see Section 3 chapter 4)	5 and 6	

Data Attributes

GEODATA and working database

Working database only

Type size (\$SIZE) Type point size as specified in Section 2 chapter 8 is 87.5 metres per point for 1:250 000 eg. where point size is 10 point, \$SIZE will be 875. Type point size as specified in Section 2 chapter 9 is 35 metres per point for 1:100 000 eg. where point size is 10 point, \$SIZE will be 350.

Text to be printed (\$TEXT) This attribute will not include "\ (backslash characters)

Justification (\$JUSTIFY) any legitimate ARC/INFO annotation command option.

x coordinate offset (\$OFFSETX) Any value in metres on the ground to give type a suitable position along the x axis.

y coordinate offset (\$OFFSETY) Any value in metres on the ground to give type a suitable position along the y axis.

Font and colour of type (\$SYMBOL) Valid entries; 6-11, 26-31, 36-41

Attributes which have standard values across all annotation are:

(\$ALIGN) null or LEFT

(\$FIT) OFF

(\$WORD) 0

(\$ID), (\$LEVEL) and (\$RECNO) should not be required and may have any value

General Notes

The annotation feature class uses the ARC/INFO annotation feature type.

GEODATA

Map

Data rules

Type for large polygons and long linear features may be held in an annotation feature for each word to allow for spacing and differences in orientation, see Section 2 chapter 4.

There are no subclasses for annotation.

Annotation will appear only in the Cartographic Features, Graticule and Map Grid layers in the working database. The Cartographic Features, Graticule and Map Grid layers will not be built for annotation.

Related features

Feature pointer, Grid line, Graticule line, Kilometric distance indicator, Route marker - National and Route marker - State

Related chapters

Section 2 chapters 2.9, 3.1.1, 5, 6 and 7
Section 3 chapters 3.2.4, 5.2, 5.3 5.10, 6.9.1, 6.9.2 and 6.10.1
Appendix E
Appendix F

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

AUXILIARY CONTOUR

A line augmenting relief presentation where significant topographic features are not shown by the prescribed contour interval. The line represents an imaginary line on the ground joining points of equal elevation in relation to the Australian Height Datum.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5mm			

Scales

1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	auxil_cont	
Coverage (see Section 3 chapter 4)	2	

Data Attributes

GEODATA and working database

ELEVATION (elevation) [number; 7,7,N,2] Elevation of contour in metres from the Australian Height Datum.

CONTOUR CODE (contour) [integer; 1,1,I] Type of contour;

- 1 - Standard
- 3 - Connector on cliff/cuttings/embankments/razorback
- 4 - Connector standard

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>3

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

- 59 - standard
 - 0 - Connector on cliff/cuttings/embankments/razorback
(non printing line)
 - 0 - Connector standard
(non printing line)

General Notes

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GEODATA

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Map

All auxiliary contours will be labelled with their elevation, where space permits.

Contours will be given symbol 0 where they cross Waterbodies such as Watercourse areas, Salt evaporators, Sewage ponds, Canal and Rapid areas to scale;
There will be no gap between the contour and the feature it is broken for.

Contours with a CONTOUR CODE attribute of 3 or 4 will not be shown on the map.

Data rules

Auxiliary contours of different height must not touch each other or other contour features (in the coverage).

No auxiliary contour can cross itself, another auxiliary contour or other contour features (in the coverage)

Auxiliary contours height must not equal a standard 20m contour interval at 1:100 000.

Auxiliary contours will not be used to represent depressions.

Auxiliary Contours cannot fall over Sea, Perennial lake, Reservoir or Open Cut mine.

Contours of code 3 will adhere to the rules in Section 3 chapter 6.1.1. These coincidence rules do not apply to contours of code 3 passing through cuttings and embankments.

Spot heights and Survey Marks must not contradict Auxiliary contours.

Related features

Benchmark, Cliff, Horizontal control point, Hypsometric area, Razorback, Contour, Spot elevation

Related chapters

Section 1 chapter 3.6.5

Section 2 chapter 2.8

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BENCH MARK

A permanently marked point, the elevation of which above sea level has been determined by levelling.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	bench_mark	
Coverage (see Section 3 chapter 4)	y	

Data Attributes

GEODATA and working database

ELEVATION (elevation) [number; 7,7,N,2] elevation in metres from the Australian Height Datum.

CODE (Code) [character; 24,24,C] Code which identifies the benchmark (to be populated if revision source material supplied). Alpha characters in this field are to be in the case used on the revision source material.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>10

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

50

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

No new features will be added. Bench Marks currently existing in the 250K product will be retained.

The elevation will not be duplicated in the text_note field.

GEODATA

Map

Bench marks will be labelled 'BM' followed by the elevation to the nearest metre eg BM1902.

Data rules

Bench marks must fit logically with contours.

Related features

Contour, Horizontal control point and Spot elevation

Related chapters

Section 1 chapter 3.6.5

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BOAT RAMP

A sloping construction to facilitate launching or retrieving vessels from water.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	boat_ramp	
Coverage (see Section 3 chapter 4)	h	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
755

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

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GEODATA

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Map

All boat ramps will be labelled with a descriptive note or named eg 'boat ramp'.

Data rules

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Related features

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Related chapters

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Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BORE

A small diameter hole in the ground for the purpose of obtaining subterranean water by natural flow or mechanical pumping.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	bore	
Coverage (see Section 3 chapter 4)	x	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Bore name – for 100K use only

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] Bore name - for 250K use only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

11

0 (non printing) see map rules.

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

This feature will not be shown in densely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' regardless of whether it was shown on/in the base material/digital data. Refer to Appendix C for more information on when to capture this feature.

At 1:100 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to all feature occurrences.

At 1:250 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Where a bore and a windpump are situated together, only the windpump will be shown as it usually has the greater landmark value. (Refer to entity Windpump).

GEODATA

Map

Names of these features will be shown.

Where a bore and a water tank are situated together, both will be included in the data but only the water tank will be shown as it usually has the greater landmark value. Bore should be symbolised to 0 (non – printing on the map face).

Bores plotted within 2.5 mm at map scale of a populated place will not be shown (symbolised to 0 non-printing).

When due to the density of general map detail, the symbols are omitted, a suitable note will be added, eg, 'numerous bores'.

Bores will mask all other detail except dry docks, kilometric distance indicators, route markers and annotation.

Data rules

Related features

Spring, Water tank and Windpump

Related chapters

Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BOUNDARY - INTERNATIONAL

Boundaries defining the territorial sovereignty of a country. The international boundary will be taken to be the line of sea bed jurisdictions.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	internat_I	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

62

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

All International boundaries will be shown.
See also feature class 'State Border'.

GEODATA

Map

The names of the Countries will be shown on the relevant side of the boundary as Annotation.

Data rules

Related features

State Border

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BREAKWATER

A solid structure to break the force of the waves, sometimes detached from the coast, protecting a harbour or anchorage.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	breakwater	
Coverage (see Section 3 chapter 4)	h	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

751

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

GEODATA

Map

Features will be named if named on the latest previous edition map.

All breakwaters are to have an accompanying descriptive note eg 'breakwater'

Data rules

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Related features

Jetty, Sea wall and Wharf

Related chapters

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Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BUILDING

A permanent walled and roofed construction or the ruin of such a construction.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		22500	140625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	Polygon
Planimetric Accuracy	100 / 40	9999/9999
Feature code	building	building_a
Coverage (see Section 3 chapter 4)	g	i

Data Attributes

GEODATA and working database

BUILDING CODE (building) [integer; 1,1,I] Status of the building;

- 1 - Operational
- 2 - Ruin
- 3 - Abandoned homestead

BUILDING FUNCTION (function) [integer; 2,2,I] Function of Operational Building (if known);

- 1- Ambulance Station
- 2- Aged Care Facility
- 3- Community Centre
- 4- Day care centres/Kindergartens
- 5- Doctors Surgery
- 6- Fire Station
- 7- Historical Building
- 8- Hospital
- 9- Place of Worship
- 10- Police Station
- 11 -Power Station
- 12 -Public Hall
- 13- Refinery
- 14 -School
- 15 -Emergency Services Centre
- 16 -Shopping Centre
- 99- Other or Function Unknown

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>4 - feat_code "building"
<tile-id>2 - feat_code "building_a"

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only**SYMBOL (symbol) [binary; 4,5,B]***Symbol number applicable:**Point symbols;**430 - Operational building & Abandoned homestead**41 - Ruin**40 - Significant Building**0 - non-printing**Polygon;**26 - Operational building & Abandoned homestead**0 - Ruin***FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;***0**Attribute for point only.***ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0***Attribute for point only.***TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map****General Notes**

The area criteria in the 'Minimum Size for Inclusion' box relates only to the building area feature code, not to building point features.

At 1:100 000 buildings captured from the base material/digital data will be shown unless there is strong evidence they no longer exist.

At 1:250 000 all feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

A new homestead may be shown by a single feature representing a group of buildings.

New buildings will be captured from supplied imagery where there is strong evidence on the image to support the interpretation or where other revision source material assists the interpretation.

Buildings will not be shown within Built-up areas. Buildings will be shown in Park, Cemetery and Built-up area void features.

The point entity will be used to represent the location of a group of buildings as well as an individual building. However, individual buildings will be shown as far as the scale permits.

A group of buildings that cannot be shown individually may also be shown by a representative pattern of building features. A group of buildings will not be aggregated to form a building drawn to scale.

Significant buildings should have landmark value. It is not intended that farm or poultry sheds would be considered significant, particularly in areas where there are many such features. Some examples of significant buildings may be: power stations, hospitals, oil refineries. In remote areas features may take on more significance than in populated centres for example: large roadhouses, paper mills, etc. A significant building such as a papermill that cannot be drawn to scale will be shown using symbol 40.

At 1:100 000 operational buildings of known function should be populated with a building function code. Buildings whose function is not known or not in the numbered list should be coded as "other or function unknown". Text_notes should reflect the function of the building.

Building polygons will be cloned as building point features.

At 1:250 000 the building item for building area features is a working database only item.
 At 1:100 000 the building item for building area features is a GEODATA and working database item.
 At both scales the building item for building point features is a GEODATA and working database item.

GEODATA

Named buildings other than operational homesteads will be cloned as Localities coded as place name. The name will be held against the Locality and not as a text note for building.

Operational homesteads will be shown as localities and cloned as a building subject to the rules for inclusion of homesteads. Operational homesteads that fail the rules for inclusion as Locality homesteads may still be shown as unnamed buildings. Abandoned homesteads will be shown as buildings of building code 3 and will named in a similar manner to the method of capture of locality homesteads (code 4) in reference to Appendix C. (i.e. In densely settled areas locality code 4 homesteads are not captured unless considered significant (e.g. historical) therefore buildings of code 3 Abandoned Homesteads should not be named in densely settled regions unless they are also considered significant).

At 1:250 000 building polygons will not be included in GEODATA. All buildings will be represented as points. Building polygons will be included at 1:100 000.

Map

The building symbol will be aligned parallel to the map grid.

If black type falls unavoidably over the building symbol, the feature's symbol attribute will be '0' (non-printing).

Buildings other than homesteads will be named or labelled where they have a distinctive function, eg. 'factory', 'sawmill', 'Wikipin Agricultural College', or where they were labelled on the latest previous edition map.

Operational homesteads will be shown by the feature class Locality code 'Homestead' subject to the rules for inclusion of homesteads. Abandoned homesteads and operational homesteads that fail the rules for inclusion as Locality homesteads may still be shown as buildings.

All ruins will be labelled 'ruin'. Abandoned homesteads will be labelled 'abandoned'.

Data rules

Operational Buildings, Ruins etc shown to scale will be bounded by a Building Line feature at 1:250 000 and a Cultural Area Line at 1:100 000.

The text_note attribute field will be used as required for adding descriptions or names to buildings which have a distinctive function.

Related features

Building line, Landmark Point, Locality (homestead), Locality (place name) and Tile edge

Related chapters

Section 2 chapter 2.2.3
 Section 3 chapters and 6.5.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BUILDING LINE

A line defining the limits of a building large enough to show to scale.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / -	
Feature code	building_l	
Coverage (see Section 3 chapter 4)	i	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0 - Operational building

60 - Ruin

General Notes

GEODATA

Only applicable for GEODATA at 1:100 00 scale. See building & Cultural Area Line.

Map

Data rules

Bounds a building shown to scale at 1:250 000.

Related features

Building, Built-up area line, Cultural Area Line and Vegetation line

Related chapters

Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BUILT-UP AREA

An area where buildings are close together and have associated road and other infrastructure networks.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	builtup_a	
Coverage (see Section 3 chapter 4)	b	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the built-up area

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14).

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

420

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

A built-up area will include all buildings which are set out on street patterns and which are too close to be shown using individual symbols at map scale.

Dual carriageways, highways/principal roads and secondary roads will be shown through Built-up areas. The selection of minor roads within Built-up Area varies according to scale. (See Road)

Areas of open space which are not parks and have an area greater than 390625 square metres at 1:250 000 and 62500 square metres at 1:100 000 will be excluded from the built-up area.

In some instances, parts or suburbs of a town or city may be split from the main body of the built-up area by open land or a double sided stream, in which case the separate built-up area polygons will carry the same name, eg 'Melbourne' which may be attached to a number of built-up area polygon features.

Built-up area names will be as listed for the census. Where names have been combined for the census (eg hyphenated) they will be combined unless separate populations are given for the components in which case the components will be named separately.

Unless they are disconnected sections of a larger area, Built-up areas less than 390625 sq m. at 1:250 000 or 62500 sq m. at 1:100 000 will be represented by a Locality feature with a code of place name or populated place (see Locality).

GEODATA

The paracentroid of the polygon has no positional meaning, ie, it does not indicate the CBD, GPO or any other point considered the focus of that built-up-area.

The name of the built-up area will be attached to the paracentroid of the built-up area. Names of suburbs of a city or town will be included as separate Locality features with the code place name.

Map

Built-up areas will be named.

Built-up areas will mask contours.

Data rules

Built-up areas will be bounded by a built-up area line feature.

Built-up area features cannot overlap Built-up Area Void, Park, Lake, Watercourse Area, Canal Area, Mangrove, Mangrove Flat, Reservoir, Land Subject to Inundation and Sea features.

Related features

Built-up area line, Kilometric distance indicator, Locality (populated place), Locality (place name) and Tile edge

Related chapters

Section 3 chapter 6.5.1
Section 3 chapter 6.7.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BUILT-UP AREA LINE

The bounding line of a Built-up-area, Built-up area void, park, cemetery or rubbish tip polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	builtup_l	
Coverage (see Section 3 chapter 4)	b	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Note: The Built-up area line feature can bound various polygon types & will have its symbol number changed accordingly. The symbol numbers shown apply to Built-up lines bounding the following features.

Line	Polygon area
symbol ; bounded;	
0	Built-up area (non printing line)
0	Park area (non printing line)
170	Rubbish tip (@1:100K)
60	Cemetery

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

GEODATA

Map

Symbols 170 (bounding Rubbish tip) and 60 (bounding Cemetery) will be masked out by symbolised linear features such as roads.

Symbols 170 (bounding Rubbish tip) and 60 (bounding Cemetery) will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data).

Data rules

Built-up area lines bound built-up areas, built-up area voids, cemeteries, parks and rubbish tips.

Where a built-up area line is within 50 meters at 1:250 000 and 20 meters at 1:100 000 of and runs alongside the following features it will be coincident with the other feature:

- Waterline
- Sea wall
- Building line
- Cultural Area Line
- Offshore line
- Road
- Railway
- Prohibited area line
- Reserve area line
- Vegetation line

Related features

Building line, Built-up area, Built-up area void, Cemetery, Offshore line, Park, Prohibited area line, Railway, Reserve line, Road, Rubbish tip, Sea wall, Vegetation line and Waterline

Related chapters

Section 3 chapters 5.11.2 and 5.11.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

BUILT-UP AREA VOID

An empty or void area in a Built-up area, Park or Cemetery polygon which is not occupied by a Park or a Cemetery feature.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	bua_void	
Coverage (see Section 3 chapter 4)	b	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

Areas of open space which are not parks and have an area greater than 390625 square metres at 1:250 000 and 62500 square metres at 1:100 000 will be excluded from the built-up area.

This feature will complete voids in builtup area left by Lake, Watercourse Area, Canal Area, Mangrove, Mangrove Flat, Reservoir, Land Subject to Inundation. As well as completing voids in Park left by Aeronautical Areas. When used for this purpose the minimum size will be that of the feature that creates the void. For example 62 500 sq m at 1:250 000 and 10 000 sq m at 1:100 000 if the void is created by a new lake.

GEODATA

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Map

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Data rules

Built-up Area Void features cannot overlap Built-up Area and Park features.

Related features

Built-up area line, Cemetery, Park, Rubbish tip and Tile edge

Related chapters

Section 1 chapter 3.8.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CANAL

An artificial watercourse conveying water for inland navigation, irrigation or drainage purposes.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm		50000	312500

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	Polygon
Planimetric Accuracy	100 / 40	9999/9999
Feature code	canal	canal_a
Coverage (see Section 3 chapter 4)	d	w

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Canal name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>4 - feat_code "canal"

<tile-id>5 - feat_code "canal_a"

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

947 (line)

10 (polygon)

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features

old_ufi will only be an attribute for canal chains.

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

When a new undersized length of canal exists between two water pipelines which meet their selection criterion, then the section of canal should be represented as a pipeline feature, accepting

the attributes of its adjoining pipelines.

Features plotted wider than 1.0 mm to scale will be shown as polygons.

Canals do not carry perenniality or hierarchy attributes.

GEODATA

Map

Canals will be masked for roads. The break will be the same as the width of the road it crosses. If not included in the name canals will have a descriptive note eg 'canal', 'drain'.

Data rules

Waterlines and Junctions bound canal polygons.

Polygon canals cannot overlap Built-up or Vegetation areas.

Connectors will be placed through polygon canals to complete stream networking.

With respect to contours, only standard connectors can cross polygon canals.

The following cannot overlap or fall within polygon canals;
Spot elevations, Localities, any morphology coverage features any waterpoint coverage feature, Windbreaks, Horizontal control points, Bench marks, Aircraft facilities and Sea.

Related features

Connector, Junction, Salt evaporator, Salt evaporator internal line, Tile edge, Watercourse and Waterline

Related chapters

Section 1 chapters 3.8.3 and 3.8.4
Section 2 chapter 2.2.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CAVE

The mouth of a naturally formed, subterranean open area or chamber.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	cave	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The Cave's name

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable :

96

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology;

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Only caves shown on the base material/digital data or the latest previous edition map (if provided) will be shown.

This feature will be used to represent the location of an individual cave as well as groups of caves.

GEODATA

Named caves will be cloned as localities with locality code 10 (Place name)

Map

Caves will be named where they were named on the base material/digital data or the latest previous edition map.

All caves are to have an accompanying descriptive note 'cave', 'sinkhole', etc. unless the word 'cave', 'sinkhole', etc. is included in the name.

Data rules

Caves cannot fall within the following polygons;
Lakes, Reservoirs, Watercourses, Canals, Buildings and Offshore coverage polygons other than voids.

Related features**Related chapters**

Section 3 chapter 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CEMETERY

An area of land for burying the dead

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		22 500	140 625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	100 / 40	
Feature code	cemetery	
Coverage (see Section 3 chapter 4)	b	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Cemetery name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Named features whose area is less than the minimum size for inclusion shall be shown as Localities coded cemetery.

See Locality

Cemeteries to scale can be surrounded by built-up areas or can be isolated polygons.

GEODATA

Map

All cemeteries are to have an accompanying descriptive note 'cemetery' unless the word 'cemetery' is included in the name.

Data rules

Cemeteries to scale are bounded by built-up area line.

Cemeteries cannot appear in or overlap the following polygons;
Lakes, Reservoirs, Watercourses, Canals, Buildings and Offshore coverage polygons other than voids.

Related features

Built-up area line, Built-up area void, Locality and Tile edge

Related chapters

Section 3 chapter 6.5.5

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CLIFF

A high, steep, significant or overhanging face of rock.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	cliff	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

924

0 - non-printing - see Map rules

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Height of high cliffs and escarpments are to be indicated by the use of spot elevations where available.

Geological faults will be shown as cliffs when there is a relative vertical displacement of the land mass at the fault.

GEODATA

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Map

Contours & Auxiliary Contours will be broken for cliffs.

Coastal cliffs will be treated in the same way as inland cliffs. Coastline (Waterline feature) will be non-printing (symbol 0) where cliff and waterline symbols overlap, disregarding the ticks on cliff symbols. A cliff will be symbolised to 0 a maximum of 0.8 mm either side of the location point of a lighthouse or horizontal control point symbol where the symbol touches the cliff.

No differentiation will be made between cliffs and escarpments.

Cliffs will be named where named on the latest previous edition map unless adjacent development means this would lead to clutter.

Cliff symbols will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

The feature shall be digitised such that the down hill side is on the left going from start node to end node.

Cliffs cannot appear in;
Sea, Lakes, Reservoirs, Building Area and Offshore polygons.

Cliffs cannot intersect Roads and Railways.

Related features

Auxiliary Contour, Contour, Lighthouse, Razorback, Waterfall and Waterline

Related chapters

Section 3 chapters 5.7 and 6.1.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CONNECTOR

An artificial line used to connect linear Hydrographic features across an area feature to allow network analysis of riverine networks.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Chain	
Planimetric Accuracy	9999 / 9999	
Feature code	connector	
Coverage (see Section 3 chapter 4)	d	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of associated watercourse

PERENNIALITY (perennial) [integer; 1,1,I] Code for perenniality;

- 0 - Not Applicable
- 1 - Perennial
- 2 - Non-perennial

HIERARCHY (hierarchy) [integer; 1,1,I] Importance of associated watercourse

- 0 - Not Applicable
- 1 - Major
- 2 - Minor

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

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GEODATA

Where a connector joins two canals, or joins a canal to another connector it will have a perennality of '0' and a hierarchy of '0'. A connector joining a canal to a stream will take the perennality of the stream. See Section 1 3.8.3

Map

Data rules

Connectors must fall wholly within waterbodies except where there is evidence that a loss in hydrological connectivity would occur eg. a connector may be used to duplicate a water pipeline to provide hydrological connectivity. Such a connector may also be used in areas where a watercourse feature flows underground and re-emerges.

The number of vertices used to define connectors should be sufficient only to keep it well within the waterbody area.

Connectors may be used through all waterbodies except Mangrove Flat, Waterbody Voids, Salt Evaporators and Settling ponds. An exception is where a watercourse ends at a Mangrove Flat and there is no channel to the sea. In this case a connector may cross a mangrove flat.

If there is no flow through the waterbody then no connector feature will be added.

Connectors will carry the attributes of the watercourse they represent ie. the classification and perennality shown in the supplied Water Guide in Appendix D (see Section 1, chapter 3.8.3).

Connectors will be used to extend the stream network to the coastline where applicable.

It is preferable that the ends of connectors are positioned perfectly over a node or vertice in the underlying waterbodies perimeter, and at worst should fall within 1 metre of the features perimeter line.

Connectors will not be shown around both sides of an island. That is, only one main connector will appear, with associated tributary connectors coming in from one or both sides.

Connectors will pass through Reservoirs to connect to the Spillway linear feature.

Related features

Canal, Junction, Lake, Land subject to inundation, Lock, Mangrove, Marine swamp, Rapid, Reservoir, Spillway, Swamp, Watercourse and Waterhole

Related chapters

Section 1 chapters 3.8.3 and 3.9.1
Section 3 chapters 5.11.2, 5.11.3 and 6.10.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CONTOUR

A line which represents an imaginary line on the ground joining points of equal elevation in relation to the Australian Height Datum.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	contour	
Coverage (see Section 3 chapter 4)	c	

Data Attributes

GEODATA and working database

ELEVATION (elevation) [number; 7,7,N,2] Elevation of contour in metres from the Australian Height Datum.

CONTOUR CODE (contour) [integer; 1,1,I] Type of contour;

- 1 - Standard
- 2 - Depression
- 3 - Connector on cliff/cuttings/embankments/razorback
- 4 - Connector standard
- 5 - Interpolated contour

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>3 - contour code <= 3

<tile-id>8 - contour code >= 4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

- 56 - Standard
- 55 - Index standard
- 58 - Standard depression
- 57 - Index depression
- 0 - Connector on cliff/cuttings/embankments/razorback
(non printing line)
- 0 - Connector standard
(non printing line)
- 0 - 0 elevation contour when cloned from Waterlines, Junctions and other features forming the coastline.

Interpolated contours;

These may or may not be printed on the map, according to requirements. Use 0 for non printing lines, and the appropriate class symbol no. above for printable lines.

General Notes

See Section 3 chapter 6.1.

GEODATA

Map

Contours will be given symbol 0 where they cross Waterbodies such as Watercourse areas, Salt evaporators, Sewage ponds, Canal and Rapid areas to scale;

There will be no gap between the contour and the feature it is broken for.

Contours with a CONTOUR CODE attribute of 3 or 4 will not be shown on the map.

For depression contours the ticks will be on the downhill side of the line.

Contours with a CONTOUR CODE attribute of 5 will be shown on the map where the contours were previously deleted from symbols such as highway shields and the new symbols are smaller on the revised map or shown in a different location. In some instances contours were unnecessarily deleted well before cliff symbols or broken for sand ridges. These contours should also be interpolated and shown on the map, provided they do not run into each other.

Where contours in steep terrain were deleted from previous maps to avoid them running into each other, they must be interpolated to close the Hypsometric polygons but they should not print ie they will be given symbol 0.

Data rules

Contours of different height must not touch each other. No contour can cross itself, another contour or an auxiliary contour.

The Standard contour interval is 20m (1:100 000) and 50m (1:250 000).

Depression contours shall be digitised such that the downhill side is on the left going from start node to end node.

Waterline, Junctions & other features forming the coastline will be cloned as 0 (zero) elevation contours. The 0 contour will have a CONTOUR CODE of 1 except where there are coastal cliffs in which case it will have a code of 3 or where it is cloned from a junction in which case it will have a code of 4.

One contour is to be shown at each contour interval height.

At 1:250 000 no intermediate contours shall be used. At 1:100 000 intermediate contours may be shown using the feature 'Auxiliary Contour'.

Contours will carry the Symbol code for Index contours at every 100m (1:100 000) & 250m (1:250 000) taken from elevation 0.

Contours of code 3 will adhere to the rules in Section 3 chapter 6.1.1. These coincidence rules do not apply to contours of code 3 passing through cuttings and embankments.

No gaps should appear in contours.

Contours cannot fall over Sea, Perennial lake and Reservoir polygons.

Benchmarks, Spot heights and Survey Marks must not contradict contours.

Related features

Auxiliary Contour, Benchmark, Cliff, Horizontal control point, Hypsometric area, Junction, Razorback, Sea wall and Waterline

Related chapters

Section 1 chapter 3.6.5
Section 2 chapter 2.8
Section 3 chapters 5.7 5.11.1 and 6.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CONVEYOR

A continuous belt or series of belts mounted on rollers and used to move large quantities of goods, especially grain or ore.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
3 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	conveyor	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

183

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Conveyor features inside built-up areas will not be shown.

GEODATA

Map

All conveyors are to have an accompanying descriptive note 'conveyor' unless the word 'conveyor' is included in the name.

Conveyors will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

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Related features

Aerial Cableway

Related chapters

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Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CRATER

A bowl shaped natural depression with steep slopes at the rim, formed by volcanic activity or meteor impact.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		10000	62500

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	crater	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The crater's name

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Crater polygons will extend to the top of the crater rim.

GEODATA

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Map

See relief area line

All craters are to have an accompanying descriptive note 'crater' unless the word 'crater' is included in the name.

Data rules

Craters will be bounded by a Relief area line feature.

Crater features cannot overlap Sea polygons.

The crater perimeter cannot cross the perimeter of other relief area features.

Related features

Relief area line and Tile edge

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CULTURAL AREA LINE

A line defining the limits of either a building large enough to show to scale or a Landmark area.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	cultural_a_l	
Coverage (see Section 3 chapter 4)	i	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0 - Operational building

60 - Ruin

63 - Landmark Area

General Notes

GEODATA

See building.

Map

When a Landmark Area and Ruin to Scale are adjacent then the ruin boundary symbology should take precedence. When a Landmark Area or Ruin to Scale is adjacent to an operational building then the symbology for Landmark Area or Ruin to Scale should take precedence.

Data rules

Bounds a building shown to scale & Landmark Area.

Related features

Building, Built-up area line and Vegetation line & Landmark Area , Building Line

Related chapters

Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

CUTTING

An open excavation of the Earth's surface to provide passage for a road, railway, canal or similar entity.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
2 mm	½ contour int.		

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	cutting	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

923

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

The linear feature for which the cutting was made need no longer exist, eg a dismantled railway line.

A cutting may be either on one side of the linear feature (or its former position) or may be paired with a second cutting on the other side. The combination of a cutting on one side and an embankment on the other is permissible.

GEODATA

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Map**Data rules**

A Cutting feature represents the bottom of the cutting entity. The feature will always be oriented so that the upslope will be on the right going from start node to end node.

Cuttings can not cross the feature for which the cutting was created or other Roads, Railways, Canals, Watercourses, Dam or other Morphology coverage features.

Cuttings cannot appear in Sea, Lakes, Reservoirs, Watercourse, Canal and Building Area polygons.

Related features

Embankment

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

DAM

A barrier of earth and rock, concrete or masonry constructed to form a reservoir for water storage purposes or to raise the water level.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	dam	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Dam's name.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

925 - for normal dam

0 - where coincident with Road on dam.

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Dams will not be shown where the associated water storage is shown as a Water tank feature.

Dams not shown to scale on the latest previous edition map will be captured as a chain 1mm long at map scale.

Dam features will be associated with a spillway feature where the spillway is behind the wall or separated from it and meets other selection criteria for spillways. Where excess water overtops the dam wall along all or most of its length a spillway will not be shown e.g. Hume Dam or Scrivener Dam (see Spillway).

In densely and moderately settled regions as defined by Appendix C where a Dam wall meets the minimum size criteria, the attached reservoir should be shown regardless of whether or not it is below the minimum size criteria for reservoirs. If a reservoir no longer exists (ie. Filled with sediment) then the dam wall will not be shown.

GEODATA

Where a spillway feature is not included (see Spillway), the reservoir connector and watercourse or watercourse connector will meet node to node at the dam.

Map

Where the dam carries a road the dam will be symbolised as a road on dam. See feature class Road on dam.

If a dam wall and its associated reservoir have the same name, then :

- where the name of the reservoir can be placed on the map face in a cartographically acceptable manner the associated dam wall name will not be included but a descriptive note e.g. 'dam', 'weir' will be added where space permits.
- where the reservoir name can not be placed on the map face in a cartographically acceptable manner then the waterbody feature will remain unnamed but its associated dam wall would be named, where the name is known. It should also have an accompanying descriptive note e.g. 'dam', 'weir' unless the word 'dam', 'weir' is included in the name.

Data rules

Dams that carry roads across them will be cloned to the roads cover as a Road on dam feature.

Dams cannot cross any drainage coverage feature (excepting Watercourse chains and connectors) or Roads and Railways.

Dams cannot appear in the following; Sea, Lakes, Canal, Watercourse and Building Area polygons.

Related features

Reservoir, Road on dam, Spillway and Water tank

Related chapters

Section 3 chapters 3.2.4 and 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

DISTORTED SURFACE

An area over which vehicular movement is difficult or impossible due to the fractured nature of the ground, or rock debris lying on the surface.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	dist_surf	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

90

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that form clusters may be represented by one large polygon if the individual polygons that constitute the cluster are smaller than the minimum size for inclusion.

This feature can include distinctive broken country characterised by fractures, joints, faults, gilgai, or broken stone.

GEODATA

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Map

See Relief area line.

All distorted surfaces are to have an accompanying descriptive note, eg 'gilgai', 'lava flow'.

Data rules

Distorted surface polygons will be bounded by a Relief area line feature.

Where the boundary of an area of Distorted Surface has a similar shape to another natural feature such as a cliff, the relevant section of Relief Area Line will be made coincident with this other feature (see Relief Area Line).

Distorted surfaces can not appear in or overlap Sea, Lake, Watercourse area, canal area or reservoir polygons. Distorted surfaces can not overlap other relief area coverage polygons.

Related features

Relief area line and Tile edge

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

DRY DOCK

A structure or basin providing support for a vessel and from which water can be removed so that the bottom of the vessel is exposed.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		22500	

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Point	
Planimetric Accuracy	- / 40	
Feature code	dry_dock	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Dry dock's name.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:
753

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology; 0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

GEODATA

Map

All dry docks are to have an accompanying descriptive note 'dry dock' unless the word 'dry dock' is included in the name.

Dry Docks will mask all other detail except route markers, kilometric distance indicators and annotation.

Data rules

Dry Docks must appear over the sea or waterbody features. ie. they cannot appear over land.

Related features

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

EMBANKMENT

An artificial bank of earth and or stone built above the natural surface.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
2 mm	½ contour int.		

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	embankment	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

31

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

The linear feature for which the embankment was made need no longer exist, eg a dismantled railway line.

An embankment may be either on one side of the linear feature (or its former position) or may be paired with a second embankment on the other side. The combination of an embankment on one side and a cutting on the other is permissible.

GEODATA

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Map**Data rules**

An embankment feature represents the top of the embankment entity. The feature will always be oriented so that the downslope will be on the right going from start node to end node.

Embankments can not cross the feature for which the embankment was created or other Roads, Railways, Canals, Watercourses, Dam or other Morphology coverage features.

Embankments cannot appear over the following;
Sea, Lakes, Reservoirs, Offshore and Building Area features.

Related features

Cutting and Levee

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FEATURE POINTER

A symbol used to graphically link text to a feature where the density of detail may result in ambiguity.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	9999 / 9999	
Feature code	pointer	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4.0]

Symbol number applicable:

265

General Notes

Use to identify the feature to which a name or descriptive note refers in areas of dense detail. See Section 2 chapter 5.3 rule 6.

To be used only where a feature such as a small polygon must be named or labelled and the name or label can not be placed without ambiguity.

The use of this feature is to be kept to a minimum.

GEODATA

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Map

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Data rules

Feature pointers will be digitised such that the start node is near the annotation and the end node is near the feature being indicated.

Related features

Annotation

Related chapters

Section 2 chapter 5.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FENCE

A structure which encloses, bounds or divides a property or part thereof. Includes vermin proof fences.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
10 mm			

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	Fence	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

927

0 Where a vermin proof fence follows a state border or road.

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide'. The exception is that major vermin proof fences will be shown in all locations. Size and any other selection criteria apply to all feature occurrences.

At 1:250 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide', regardless of whether it previously existed in the base Series 2 data. The exception is that major vermin proof fences will be shown in all locations. Size and any other selection criteria apply to new feature occurrences. All vermin proof fences and feature occurrences in sparsely settled regions existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Fences around small paddocks adjacent to farm houses and homesteads will be omitted.

Fence features less than 10 mm in length may be used to depict yards greater than 2.5 mm x 2.5 mm at map scale - refer feature 'Yard'.

Where a vermin proof fence follows a state border or a road (excluding Vehicle Tracks), the fence feature should be symbolised to 0 (non-printing) and the text_note 'vermin proof fence follows state border' or 'vermin proof fence follows road' should be applied.

Where a vermin proof fence and a vehicle track are adjacent, an assessment must be made as to whether

- The vehicle track is considered important in terms of road network connectivity; and/or
- The vehicle track is servicing a natural or cultural feature, excluding the fence, represented within the new topographic map and data product eg. Tower, mine, spring, etc.

If the track is deemed important, show the track, add the text_note 'vermin proof fence follows track' and symbolise vermin proof fence to 0. If not, the track should not be included in the data and a text_note 'track follows vermin proof fence' should be added to the fence feature shown on the map.

All of the above text_notes should be applied to the features in the utilities coverage.

Where a fence follows a road (excluding vehicle tracks) the fence should not be included in the data. Where a fence and a vehicle track are adjacent, an assessment must be made as to whether:

- The vehicle track is considered important in terms of road network connectivity ; and/or
- The vehicle track is servicing a natural or cultural feature, excluding the fence, represented within the new topographic map and data product eg. Tower, mine, spring, etc.

If the vehicle track meets either of the above criteria then the vehicle track should be shown on the map, in accordance with the specifications. Alternatively, if the vehicle track does not meet either of the above criteria then the fence should be shown, provided it adds a meaningful connection to the existing fence network. These guidelines apply to both features existing on the previous edition maps and new features and are subject to Appendix C rules regarding fence selection.

GEODATA

Map

Vermin proof fences will have an accompanying descriptive note eg 'vermin proof fence'.

Fences will be masked by gate stock grid and yard symbols and by roads.

Fences will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Fences cannot overlap;
Sea and Building area features.

If the fence feature crosses other utilities features a node will be shown at the intersection point. ie. the arcs will be split.

Related features

Gate, Stock grid and Yard

Related chapters

Section 3 chapter 5.11.2
Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FERRY ROUTE

A route across a river, lake, reservoir or sea used by a vessel for the regular transport of vehicles or passengers from one terminal point to another.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	9999 / 9999	
Feature code	ferry_route	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the ferry service.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

20

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 All feature occurrences existing in the base material/digital data will be retained unless there is clear evidence they no longer exist. Revision source material will be provided for ferry routes to be shown.

At 1:250 000 All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist. Revision source material will be provided for new ferry routes to be shown.

Only operational ferry routes will be shown. If a ferry route is not part of the road network, ie the ferry does not carry vehicles, the route will only be shown if it is longer than 3 mm at map scale.

Trans- Tasman and other long distance Ferry routes will be shown.

GEODATA

Ferry routes that form part of the road network will connect to the road network.

Map

All ferry routes, including those not symbolised, are to be labelled 'ferry'.

Where a Ferry route crosses the edge of the map a note will be placed along the route close to the edge giving the main destination eg 'Sydney to Devonport.'

Data rules

Ferry Routes will have as their starting point the appropriate terminating point of Road or Rail features. That is, the end node of the Road/Railway will be a shared node used for the starting point of the Ferry Route. This is required to ensure network connectivity.

Where one Ferry Route crosses another Ferry Route or overhead bridge a node will be shown at their intersection point. ie. the arcs will be split.

Ferry Routes will only appear over; Rivers, Lakes, Reservoirs and Sea area features.

Related features

Railway and Road

Related chapters

Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FLOW DIRECTION ARROW

A symbol used to indicate the direction of flow of water through a river system where it is unclear using the topological relationships shown on the map face.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

Map

Spatial object

Representation	Point	
Planimetric Accuracy	9999	
Feature code	flow_direct	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

948

ORIENTATION (orientation) [binary; 4,5,B]

Orientation in whole degrees from East going anti-clockwise; 0-360

General Notes

The flow direction arrow will be used for the last chain of watercourses which dissipate and where the direction of flow may be unclear. The flow direction arrow must be coincident with the node at the downstream end of the feature. No direction of flow arrow will be added when a watercourse symbol stops in a swamp, or where direction of flow can be reasonably determined from the interpretation of the topography at 1:100 000.

The flow direction arrow should be orientated so it appears that the stream connects directly through the centre of the arrow symbol (e.g. approximately 30 degrees should exist between each branch of the arrow and the drainage centreline.) See symbol dictionary for example.

GEODATA

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Map

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Data rules

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Related features

Watercourse

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FOOT BRIDGE

A structure erected over a depression or obstacle to carry foot traffic.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	foot_bridge	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the foot track on which the bridge is located.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
268

General Notes

GEODATA

Map

Data rules

Foot bridges will meet with a foot track. The start and end points of the bridge must fall exactly on the node at the respective ends of the foot track.

Related features

Foot track

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FOOT TRACK

A track designed to carry pedestrian traffic only.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	foot_track	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the foot track.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

22

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:250 000 details of foot tracks to be included will be supplied, only tracks of national significance will be included.

At 1:100 000 scale popular scenic / tourist foot or bridle paths will be shown.

Foot tracks will only be shown where they do not follow roads or vehicle tracks shown on the map.

GEODATA

Map

Foot tracks are to have an accompanying descriptive note 'foot track' unless 'foot track' or an equivalent term is included in the name.

Where the position of new foot tracks can not be verified on the imagery or other revision source material they are to be labelled ' (position approximate)'

A descriptive note may be added on the map where a Foot track is not included because it follows a road, for example 'Hume and Hovell Walking Trail follows track'.

Foot tracks will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Related features

Foot bridge

Related chapters

Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FORD

A shallow or flat portion of the bed of a watercourse or lake where a crossing may be effected.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	Point
Planimetric Accuracy	100 / 40	100 / 40
Feature code	ford_l	ford_p
Coverage (see Section 3 chapter 4)	v	v

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road on which the ford is located.

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only**SYMBOL (symbol) [binary; 4,5,B]**

Symbol number applicable:

21 (line)

0 (point / non printing line)

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

Attribute for point only.

ORIENTATION (orientation) [binary; 4,5,B] Currently not used for symbology;0

Attribute for point only.

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map**General Notes**

All feature occurrences on the base material/digital data or the latest previous edition map will be shown unless there is clear evidence they no longer exist.

The NAME attribute will carry the name of the road the ford is on. Named fords may be shown as a locality coded place name.

GEODATA

Where a ford creates a gap in the road network it will be closed by a chain Ford.

Map

Fords shorter than 3 mm at map scale, including point features, will not be symbolised.

All fords, including those not symbolised, are to be labelled 'ford'.

Data rules

Linear Fords can only appear over Watercourse areas or perennial Lakes, and must connect end to end with a road (ie. node to node) on either side of the watercourse.

Point Fords must be within a metre of the chord on a linear watercourse in both geographical and MGA94 coordinates, and be coincident with a node in the road network.

The Formation, National route number, State route number & Classification attributes will be shown on the Ford feature exactly as on the Road feature to which it is attached.

Related features

Road, Road bridge, Road causeway and Watercourse

Related chapters

Section 3 chapters 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

FORESHORE FLAT

That part of the seabed or estuarine areas, between mean high water and the line of lowest astronomical tide.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	forshor_flat	
Coverage (see Section 3 chapter 4)	o	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

22

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

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Map

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Data rules

Foreshore flats are bounded by the offshore line feature.

Foreshore Flats must be over either Sea, Watercourse area or Lake, and cannot overlap other Offshore areas.

Related features

Mainland, Offshore line and Tile edge

Related chapters

Section3 chapter 6.9.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

GAS WELL

A pipe sunk in the ground for the purpose of obtaining subterranean oil or gas.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	gas_well	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

103

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

All feature occurrences on the base material/digital data or the latest previous edition map will be captured/retained unless there is clear evidence they no longer exist.

Wells will not be shown within a built-up area.

These features may be located inland or offshore.

Abandoned wells will only be shown if of landmark significance.

GEODATA

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Map

Gas wells are to have an accompanying descriptive note eg 'gas well', 'oil well' unless the words 'gas well', 'oil well' etc are included in the name.

Abandoned wells will have '(abandoned)' at the end of the descriptive note or name.

Data rules

Gas wells can not appear over Building area or Built-up areas.

Related features

Mine

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

GATE

An opening in a fence or wall for the passage of vehicles, people or animals and which may contain a device to limit passage.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	gate	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

26

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' except for gates on Vermin Proof fences which will be shown in all areas.

At 1:250 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide', regardless of whether it previously existed in the base Series 2 data, except for gates on Vermin Proof fences which will be shown in all areas.

Gates will not be shown on vehicle tracks with the exception of gates in Vermin or Dog-proof fences which will be shown in all areas.

GEODATA**Map**

The underlying fence symbol will be masked out for the gate symbol.

Data rules

Gates must fall exactly on the Fence and underlying road feature. They will be coincident with a node in the road. If necessary a vertice can be added to the fence to ensure the fence, road and gate are coincident with each other.

Gates cannot appear in;
Building Area, Sea, Lake, Canal area, Watercourse area or Reservoir features.

Related features

Fence, Road and Stock grid

Related chapters

Section 3 chapters 5.9 and 5.11.2
Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

GRATICULE LINE

A line on a map or chart representing a parallel of latitude or a meridian of longitude including cross ticks.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100/40	
Feature code	graticule	
Coverage (see Section 3 chapter 4)	7	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

575

General Notes

See appendix B for spacing of lines and ticks

GEODATA

Map

Type should be placed such that it does not overprint the graticule. If this is unavoidable then it is preferable that the graticule intersections are kept visible, as these are important reference points on the map.

The Graticule will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Related features

Annotation and Grid line

Related chapters

Section 2 chapter 3.1.2,
Section 3 chapter 5.10
Appendix B chapters 2, 3 and 9

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

GRID LINE

A line forming part of a rectangular Cartesian coordinate system that is superimposed on maps and charts to permit identification of ground locations with respect to other locations and the computation of direction and distance to other points.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100/40	
Feature code	grid_map	
Coverage (see Section 3 chapter 4)	6	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

573 - Standard line

574 – 100 000 metre line at 1:250 000 & 10 000 metre line at 1:100 000

0 - Where the grid line follows the central meridian.

General Notes

The grid line will be broken for grid values. Breaks on northings will be 2 mm and breaks on eastings will be 3 mm.

GEODATA

Map

Black and red type should be placed such that it does not overprint the grid. If this is unavoidable then it is preferable that the grid intersections are kept visible, as these are an important mensuration points on the map.

The grid will not be broken where overprinted by black and red type.

The grid line will have a symbol 0, ie: will not print, where it follows the central meridian of the UTM zone.

Data rules

Related features

Annotation and Graticule line

Related chapters

Section 2 chapters 2.4 and 3.1.1
Appendix B chapters 2 and 3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

HORIZONTAL CONTROL POINT

A point on the ground, the geographical position of which has been determined by geodetic survey.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	1 / 1	
Feature code	trig_station	
Coverage (see Section 3 chapter 4)	y	

Data Attributes

GEODATA and working database

ELEVATION (elevation) [number; 7,7,N,2] elevation in metres from the Australian Height Datum.

CODE (code) [character; 24,24,C] The code which identifies the Horizontal control point. Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>6

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The name of the feature the Horizontal control point is located on.

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

51

0 - see Section 3 chapter 6.6 - Locality mountain features, Spot elevations and Horizontal control points

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

ORDER (order) [character, 4,4,C] The horizontal control point's horizontal accuracy order

General Notes

Horizontal control points will be selected from the Horizontal control points data file. Only permanently marked and monumented horizontal control points (ie those with a beacon, cairn or pole) that have elevations will be shown. Only points with a horizontal accuracy of double zero, zero, first, second and third order will be shown.

No more than fifty points will be included on a standard map area. Where the land area of the map differs from the standard size, the maximum number will be in proportion.

If the number of monumented stations in the working database exceeds fifty all lowest order stations will be dropped. This process will be repeated until the number is less than the maximum. This process will take precedence over the overlap rules in Section 3 chapter 5.3

The NAME field will be populated with the name of a prominent feature upon which the horizontal control point is situated. This feature must have a defined position within a localised area and should be represented elsewhere in the database under a different feature class, such as a locality mountain or a locality place name of clear locality (symbolised with symbol 52). Large area features such as ranges are not appropriate. The National Geodetic Database items name 1, name 2 and name 3 will not be used to populate the horizontal control point name field.

The CODE field will be populated with the alphanumeric designations from the National Geodetic Database. The alphanumeric designation will be found in the name 1, name 2 or name 3 field in the National Geodetic Database. Where there is no alphanumeric designation code this field will be left blank. Only alphanumeric designations containing letters and numerals will be included. Solely numeric designations will not be included nor will designations including words or place names such as 'Ravensthorpe 1' or 'log2'. Horizontal control point names from the name 1, name 2 or name 3 field will not be shown in the code field. Where more than one alphanumeric designation exists in the National Geodetic Database for a Horizontal control point an arbitrary choice will be made.

GEODATA

Map

Where a horizontal control point and another cultural feature such as a Landmark Point feature are adjacent or coincident, precedence will be given to the other cultural feature (see Section 3 chapter 6.6).

Alphanumeric designations will be shown when the horizontal control has no feature name. If a horizontal control point has a feature name, the alphanumeric designation will not be shown (See Section 2 chapter 5.13).

Data rules

Horizontal control points will not appear over;
Sea, Lakes, Reservoirs, Canal areas, Watercourse areas and Building Areas.

Auxiliary Contours, Contours and Horizontal Control Points or Spot elevations will not contradict each other.

Except for the application of the datum shift, Horizontal control points will not be moved from the coordinates supplied.

Related features

Auxiliary Contour, Benchmark, Contour, Landmark Point, Locality (mountain) and Spot elevation

Related chapters

Section 1 chapter 3.6.5 Section 2 chapter 5.13 Section 3 chapters 3.2.4 and 6.6

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

HYPSONETRIC AREA

The area enclosed between adjacent contours.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	hypso_a	
Coverage (see Section 3 chapter 4)	c	

Data Attributes

GEODATA and working database

ELEVATION (elevation) [number; 7,7,N,2] Elevation in metres from the Australian Height Datum (see general notes)

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

The elevation of the hypsonetric areas is defined as the minimum elevation of all the bounding contours (excluding auxiliary contours).

Areas enclosed by one depression contour will carry for elevation the value of the depression contour minus the contour interval.

This feature will not be shown in sea areas.

Where hypsonetric areas meet the edge of the working database the elevations must match those of any adjoining areas which have working data available.

GEODATA

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Map**Data rules**

Hypsometric areas are bounded by contour features.

Waterbodies do not form voids in Hypsometric areas.

All non-sea areas must be covered by Hypsometric areas

Adjacent Hypsometric areas must have their elevations differing by only one contour interval.

Related features

Contour and Tile edge

Related chapters

Section 3 chapter 6.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ISLAND

An area of land fully surrounded by the sea.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		625	3906

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	island	
Coverage (see Section 3 chapter 4)	f	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the island

STATE/TERRITORY (state) [integer; 1,1,I] State identifier code;

- 0 - NOT APPLICABLE
- 1 - ACT: Australian Capital Territory
- 2 - JBT: Jervis Bay Territory
- 3 - NSW: New South Wales
- 4 - NT: Northern Territory
- 5 - QLD: Queensland
- 6 - SA: South Australia
- 7 - TAS: Tasmania
- 8 - VIC: Victoria
- 9 - WA: Western Australia

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

This feature refers to offshore islands only.

New features smaller than the minimum size will be shown as Offshore Rocks with a RELATIONSHIP of 4 – Bare.

See Section 1 chapter 3.8.5.

GEODATA

Map

The island name will appear on the map.

Data rules

Islands are bounded by Waterline Junction and/or Sea wall features.

Islands cannot overlap each other.

Related features

Junction, Sea Wall, Tile edge and Waterline

Related chapters

Section 1 chapter 3.8.5

Section 3 chapters 6.3 and 6.9.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

JETTY

A structure projecting into a body of water for use as a promenade or as a platform alongside which vessels may be secured for loading and unloading passengers and cargo.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	jetty	
Coverage (see Section 3 chapter 4)	h	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

70

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

See also Wharf.

GEODATA

Map

Jetties are to have an accompanying descriptive note eg 'jetty', 'marina', 'pier' unless the words 'jetty', 'marina' 'pier' etc are included in the name.

Data rules

Jetties can not overlap Building areas.

Related features

Breakwater, Sea wall and Wharf

Related chapters

Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

JUNCTION

An artificial line used to separate adjacent hydrographic areas which have differing attributes and across which flow can occur.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA

Spatial object

Representation	chain	
Planimetric Accuracy	9999 / 9999	
Feature code	junction	
Coverage (see Section 3 chapter 4)	f and w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

See Section 1 chapter 3.8.4

GEODATA

Map

Data rules

Junctions will be included in the Framework coverage where they form part of the coastline, and will replace the equivalent section of waterline. They will also appear in the framework cover where they separate two seas.

Junctions may also form a section of the boundary of lakes, Land subject to inundation, swamps, marine swamps, reservoirs, settling ponds, canal polygons and watercourse polygons.

Junctions are generally 2 point lines except where more vertices are needed to close the polygon and maintain the correct polygon closing line shape.

Junctions must be bordered by waterbodies in the Waterbodies coverage or by the sea on one side in the Framework coverage.

Junctions are only used to separate water polygons where there is no physical feature already doing so.

They are most commonly used to separate water polygon features with different names.

Related features

Canal, Connector, Contour, Island, Lake, Land subject to inundation, Mainland, Reservoir, Sea, Saline coastal flat, Swamp and Watercourse

Related chapters

Section 1 chapter 3.8.4

Section 3 chapters 5.11.1 and 5.11.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

KILOMETRIC DISTANCE INDICATOR

A symbol used to indicate points between which road distances are given.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Point	
Planimetric Accuracy	9999 / 9999	
Feature code	distance_ind	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
54

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

General Notes

Pairs of Kilometric distance indicators must have a number showing distance between them.

Distances shall be measured to the nearest kilometre.

Use to show distances between two significant features eg between towns, major road intersections and road junctions or a combination of the above.

At 1:250 000

When a destination point falls on an adjoining sheet to the south or west, a kilometric distance marker will be placed at the intersection of the road and the neatline. When a destination point falls on an adjoining sheet to the north or east, a kilometric distance marker will be placed at the intersection of the road and the graticule line which forms the boundary of the adjoining map. When a destination falls within the bleed edge the Kilometric distance indicator will be placed on the destination. In these two cases no distance is required between the Kilometric distance indicator at the graticule and the trim line of the map. See Section 2 chapter 5.9

At 1:100 000

When a destination point falls on an adjoining sheet to the south or west, a kilometric distance marker will be placed at the intersection of the road and the neatline. When a destination point falls on an adjoining sheet to the north or east, a kilometric distance marker will be placed at the intersection of the road and the GDA94 graticule line which forms the boundary of the adjoining GDA94 map. No destination point will be indicated within the area between the GDA94 and AGD66 neatlines. No distance is required between the Kilometric distance indicator at the graticule and the trim line of the map. See Section 2 chapter 5.9

GEODATA**Map**

The needle end of the symbol should point exactly at the town or road junction from which the distance is to be measured and will just touch the outside of the road or town symbol.

Kilometric distance indicators along the graticule lines that form the edge of the adjacent maps to the north and east will preferably be aligned so that the symbol falls in the bleed edge for 1:250 000 and inside the Geodata tile extents for 1:100 000 – see section 3 chapter 6.4.

Distances between Kilometric distance indicators will be shown as Annotation features.

Data rules**Related features**

Annotation, Built-up area, Locality, Road, Road destination arrow and Tile edge

Related chapters

Section 2 chapter 5.9
Section 3 chapters 5.9 and 6.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LAKE

A naturally occurring body of mainly static water surrounded by land.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		10000	62500

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	lake	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Lake's name

PERENNIALITY (perennial) [integer; 1,1,I] Code for perenniality;

1 - Perennial

2 - Non-perennial

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

10 - Perennial

11 - Non-perennial

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

New features smaller than the minimum area and on a watercourse will be shown by the feature 'waterhole'.

New features smaller than the minimum area and not on a watercourse will be shown by the feature 'Waterpoint'. This includes small lakes within the boundaries of a braided stream which are not on a watercourse.

Perenniality of lakes will be according to Appendix D - Inland water features guide where the lake is shown on the guide. Perenniality of Lakes not on the guide will be as shown on the base material/digital data. Where a lake was not previously shown, perenniality should be non-perennial unless there is strong evidence to the contrary.

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

Map

In areas containing numerous small lakes, sufficient will be shown to indicate the extent of the area and a suitable descriptive note added eg 'numerous small lakes'.

Claypans and saltpans will be labelled eg 'claypan'. Lakes will be labelled 'salt' where known to be saline.

Lakes will mask parks.

Data rules

Lakes will be bounded by Waterline and Junction features. (See Section 1, 3.8.4).

Lakes cannot overlap other waterbody cover polygons or Sea, Built-up area, Relief area cover features (except for Relief area voids) or Vegetation polygons (except voids and Woody vegetation).

Perennial Lakes cannot overlap Woody vegetation.

Related features

Connector, Junction, Reservoir, Tile edge, Watercourse, Waterhole, Waterline and Waterpoint

Related chapters

Section 1 chapters 3.8.3, 3.8.4, 3.8.9 and 3.9.1

Section 3 chapters 6.9.1 and 6.9.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LAND SUBJECT TO INUNDATION

Low lying land usually adjacent to lakes or watercourses, which is regularly covered with flood water for short periods.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	sub_to_inund	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The feature's name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

14

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where the small polygons are less than 0.5 mm apart at map scale.

GEODATA

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Map**Data rules**

Land subject to inundation will be bounded by waterline and junction features. (See Section 1, 3.8.4).

Land subject to inundation cannot overlap other waterbody cover polygons or Sea or Built-up areas.

Connectors may be shown through this feature.

Related features

Connector, Junction, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.3, 3.8.9 and 3.8.4

Section 3 chapter 6.9.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LANDMARK AREA

Man-made or defined permanent features having landmark value or useful for navigation.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		40 000	

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	- / 9999	
Feature code	landmark_a	
Coverage (see Section 3 chapter 4)	i	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The feature's name

DESCRIPTION (description) [character; 20,20,C] Description of the type of Landmark area feature, for example 'wind farm', 'oyster beds', 'solar farm'. The description field will be all lower case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

Landmark area features will only be used for man made entities or areas defined by man for a specific use which are clearly identifiable either through signage or infrastructure.

Landmark area features will not be used for entities covered by another feature class, for example buildings, park, prohibited areas.

Landmark area features include the following or any other feature specified by Geoscience Australia through a special instruction or action request:

Wind Farm

Tidal Power Farm

Solar Farm

Cotton Gin (seasonal)

Tracking Station

Rest Area

Geothermal Power Farm Research Station	Oyster Beds Recycling Facilities	Aquaculture Pens (non land based)
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When representing a Windfarm as a landmark area individual Wind generators should still be captured in landmark points but not symbolised. Similar situations where landmark points have a direct relationship with a landmark area may be treated in the same manner.

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

Map

Landmark area features are to have an accompanying descriptive note eg 'wind farm', 'oyster bed' unless the words 'wind farm', 'oyster bed' etc are included in the name.

Data rules

Landmark areas cannot overlap: Built-up Areas, Airport, Park, Cemetery, Rubbish Tip, Open Cut Mine

Landmark Area will be bounded by a Cultural Area Line feature.

Related features

Building, Settling Pond, Reserve Areas, Prohibited Areas, Park, Cemetery, Rubbish Tip, Airport, Landmark Point, Cultural Area Line

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LANDMARK POINT

Man-made permanent features having landmark value or useful for navigation. Such features will have a height above the local terrain.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	landmark_p	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

DESCRIPTION (description) [character; 20] Description of the type of Landmark Point feature, for example 'microwave tower', 'wind generator', 'chimney'. The description field will be all lower case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

HEIGHT (height) [number; 6,6,N,2] Height of feature above ground level

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

501

0 – At 1:100 000 where landmark points have a direct relationship with landmark area (see general notes)

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map, may include a name

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

New towers and other obstructions will be added from the towers revision source material. Where the position of new towers can not be verified on the imagery or other revision source material they be labelled '(position approximate)'. If the feature is in a closely settled area, the exact location should be sought via an Action Request.

Landmark point features will only be used for man made entities. See the included terms cross reference.

Landmark point features are not shown in or in close proximity to Built-up areas, unless the feature is of significant landmark value.

Landmark point features will only be used for entities which cover a small area on the ground and which are usually prominent from a distance.

See the included terms cross reference. Landmark point features will not be used for entities covered by another feature class, for example buildings.

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

Offshore marine lights and beacons will not be included as landmark point features at 1:250 000. All features meeting selection criteria will be shown at 1:100 000.

At 1:250 000 the height attribute will only be populated where it is greater than or equal to **44.5** metres and a figure is provided in the base material/digital data or revision source material. At 1:100 000 the height attribute will be populated where a figure is provided in the base material/digital data or revision source material.

At 1:100 000 landmark point features whose area is larger than 40 000 sq. m will be shown as a landmark area feature.

At 1:100 000 when representing a Windfarm as a landmark area individual Wind generators should still be captured in landmark points but not symbolised. Similar situations where landmark points have a direct relationship with a landmark area may be treated in the same manner.

GEODATA

Map

Landmark point features are to have an accompanying descriptive note eg 'tower', 'lookout' unless the words 'tower', 'lookout' etc are included in the name.

Height above ground level of features will be shown as part of the descriptive note where it equals or exceeds **44.50** metres rounded to the nearest metre and when that information is available.

The height shown on the map will be rounded to the nearest metre.

Data rules

Related features

Building, Horizontal control point, Landmark Area, Lighthouse, Spot elevation, Storage tank and Water tank

Related chapters

Section 3 chapters 3.2.4 and 6.6

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LEVEE

A low earth wall erected to restrain flood waters or to contain irrigation water.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
2 mm	2 m		

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	levee	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

921

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Height criteria will not apply to levees within Salt evaporators. (see Salt evaporator)

Where a levee and a road co-exist and the road travels the whole length of the levee then an embankment feature should be used instead of a levee.

GEODATA

Map

Data rules

Levees cannot overlap Sea, or Building area features.

Levees cannot cross other morphology coverage lines.

Related features

Embankment, Salt evaporator and Salt evaporator internal line

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LIGHTHOUSE

A building or structure housing a light used as a navigation aid to shipping.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	lighthouse	
Coverage (see Section 3 chapter 4)	n	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Lighthouse's name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

72

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Lighthouse will be named in the data, but will only be named on the map (in accordance with approved reference sources) where the lighthouse does not have the same root name as the Island or Cape feature. For example, the name Bedout Lighthouse would not be shown when it is situated on Bedout Island.

The lighthouse need not be operational to be included.

Navigation beacons will not be classified as lighthouses.

Reference should be made to Supplementary Guideline No 6 (Lighthouses vs Marine Lights) when making decisions on whether a feature should be included in the new product.

Revision source material for Lighthouses will be supplied.

GEODATA

Where a Lighthouse and an Offshore rock are shown on the base material/digital data or revision source material to be coincident, one of the two features will be displaced by a maximum of 10 metres in any direction so both can be included in the data.

Map

Where a lighthouse and an offshore rock are in close proximity the lighthouse symbol will be given precedence but the name of the offshore rock will take precedence over the lighthouse name.

Data rules

Lighthouses cannot overlap the sea except when within 10m of an offshore rock.

Related features

Cliff, Landmark point and Offshore rock

Related chapters

Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LOCALITY

A named place or area.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	Codes 4, 5 & 12: 100 / 40	Other codes: 9999 / 9999
Feature code	locality	
Coverage (see Section 3 chapter 4)	I	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The locality's name.

LOCALITY CODE (locality) [integer; 2,2,I] Code identifying the type of locality;

- 1 - Bay-inlet-cove
- 2 - Beach
- 3 - Cape-headland-point
- 4 - Homestead
- 5 - Road junction
- 6 - Mountain-peak-hill
- 7 - Pass
- 8 - Populated place
- 9 - Waterbody island
- 10 - Place name
- 11 - Gorge
- 12 - Cemetery

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>1 - locality code 5

<tile-id>2 - locality code < 12 and not 4 or 5

<tile-id>4 - locality code 4 or 12

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

0 - Bay-inlet-cove
(non printing)

0 - Beach

- (non printing)
- 0 - Cape-headland-point
(non printing)
- 40 - Homestead
- 0 - Road junction
(non printing)
- 0 - Mountain-peak-hill (non-printing - see data rules for exceptions where symbol to be 52)
- 0 - Pass
(non printing)
- 0 - Populated place (non-printing - see data rules for exceptions where symbol to be 420)
- 0 - Waterbody island
(non printing)
- 0 - Place name
(non-printing - see data rules for exceptions where symbol to be 420 or 52)
- 0 - Gorge
(non printing)
- 451 - Cemetery (see map rules for exceptions where symbol is to be 0 non-printing)

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

See also Section 3 chapter 6.5.

The homestead feature (Code 4) will only be shown in densely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' when considered significant. This will be regardless of whether it was shown on the base material/digital data (at 1:100 000) or base Series 2 data (at 1:250 000). For information on capture and display of the homesteads feature (Code 4) in moderately and sparsely settled areas refer to Appendix C.

Code 1, Bay, inlet, and cove: This code will be used for an indentation of the sea into the land and for the equivalent features in inland waterbodies. The Locality point will be positioned at a point in the sea or waterbody in the middle of the indentation.

Code 2, Beach: The names of all beaches on the base material/digital data and revision source material are to be included except where an adjacent populated place has the same root-name. ie. 'Bondi Beach' would not appear if there is an adjacent populated place on the map named 'Bondi'. The position of the Locality point will be coincident with the Waterline at the approximate centre of the beach.

Code 3, Cape, headland, head, point: This code will be used for a section of land protruding into the sea and for the equivalent features in inland waterbodies. The Locality point will be positioned at a point on the land representative of the location of the entity.

Code 4, Homesteads: Only operational homesteads will have this code. Outstations are to be considered as homesteads. The locality point for a homestead must be cloned with a building (see Building). Outcamps will be shown as a locality place name not as a homestead.

Code 5, Road Junction: Named road junctions are included. The position of the Locality point will be coincident with the node of the road intersection.

Code 6, Mountain-peak-hill: The locality point will be positioned exactly as shown on the latest previous edition map or base material/digital data. If a positioning point is not shown on the map

then other compilations or large scale maps may be used to position the locality feature.

Code 7, Pass: Named passes on the road network will be included. Any other passes included on the latest previous edition map or base material/digital data will be included. The locality point will be at the highest point on the pass. Where a pass is traversed by a road feature, the point will be coincident with a vertice on the road. If necessary, a vertice will be created on the road coincident with the highest point on the road.

Code 8, Populated Places: Populated places have a population of 200 or more. All populated places in the supplied Census database clip will be included as populated place localities. The names of populated places will be as named for the census. Where names have been combined for the census (eg hyphenated) they will be combined unless separate populations are given for the components in which case the components will be named separately.

The feature point for a populated place will be positioned coincident with a node or vertice on the road network unless there is no road within 1 mm at map scale of the built-up area associated with the populated place. If necessary, a vertice will be created on the road coincident with the locality populated place feature. For populated places with a population over 20 000 the point should be placed as near as possible on the road network to the location of the central post office.

The name of some populated places may appear two or three times in the Infrastructure layer eg. if there is also a Railway Station or a Built-up area polygon of the same name.

Code 9, Waterbody island: Only named inland islands and those which form part of the coastline will be depicted. (See Section 1 3.8.5). The locality point will be placed on land at the approximate centre of the island. Offshore islands will be named as an attribute of the polygon, see Island.

Code 10, Place Name: This category will be used to show localities that do not fall in any other category. Text & the locality point for large area features shown on Appendix F will be placed within the limits of the area. If the area on Appendix F occupies less than 5% of the area of the map (including the bleed edges) it will not be shown. The Locality point for other area features will be located where the name was located in the base material/digital data or where text was placed on the latest previous edition map.

'Other Waters' indicated on Appendix E will be shown as Locality Place Names. Oceans that overlay Seas will only be shown as annotation features in the Working Database.

Text & the locality point for Indigenous Lands shown on Appendix O will be placed within the limits of the area. If the area on Appendix O occupies less than 20% of the area of the map (including the bleed edges) it will not be shown.

Suburb names included on the latest previous edition map and confirmed on the authorised revision source material for suburb names will be included as place names.

Code 11, Gorge: The locality point will be placed approximately half way along the length of the gorge. The locality point will be coincident with a vertice on the main watercourse in the gorge, where there is a watercourse. Where there is no water course the locality point will be placed central to the gorge.

Code 12, Cemeteries: Used for cemeteries smaller than the size criteria for the Cemetery feature. Cemeteries which exceed the size criteria will be shown using the feature 'cemetery'. The locality point is to be placed within the cemetery.

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

Code 4, Homestead; Homestead localities will be cloned as buildings.

Map

Code 4,
Homestead names will be shown as on the reference material supplied.

1:100 000

Individual buildings around the main homestead will be shown, if scale permits, by Building features.

Where a number of buildings in a homestead complex are grouped together and cannot be shown individually, they will be shown using one Homestead.

1:250 000

A homestead may be shown by a single feature representing a group of buildings.

Code 6, Mountain-peak-hill:

Locality Mountain-peak-hills will be named. See Section 2 chapter 5.10 for naming conventions.

Code 8, Populated place: Populated places will be named.

Code 10, Where symbol 420 is used, the symbol will mask all other detail.

Code 12, Where inclusion of a locality Cemetery would result in clutter they are to be symbolised to 0 non-printing.

Data rules

Where a locality name refers to a wide area the name may appear on a number of adjacent tiles eg 'Nullarbor Plain'. A locality of the same code and name should not be repeated on the same tile unless it relates to a number of entities sharing the same name.

Code 6 Mountain-peak-hill: If a Mountain-peak-hill feature appears on the latest previous edition map with a name and spot identifier only and a matching spot elevation does not exist then the Locality will have a symbol code of 52, otherwise a symbol code of 0.

Where there is a known elevation for the Mountain-peak-hill feature it will be cloned as a Spot elevation (see Spot elevation). Should the spot elevation need to be moved (see Section 3 chapter 6.6) the Locality Mountain-peak-hill will be moved with it.

Code 8 Populated places: Populated places will not be symbolised on the map if they fall within a Built-up area polygon but will have symbol 420 when no Built-up area polygon exists.

Code 10 Place name: Places with a population of less than 200 and a Built-up area not large enough to be shown as a polygon will be positioned coincident with a vertice or node on the road network. These places will have a symbol code 420. Note: symbol 420 will only be used where the place name is associated with a small built-up area. Small features with an indentifiable location that are not represented by another feature class will be represented using symbol 52 (e.g. historical markers, rocks, etc).

Related features

Building, Built-up area, Cemetery, Horizontal control point, Kilometric distance marker, Railway station, Road, Spot elevation, Watercourse and Waterbody void

Related chapters

Section 1 chapters 3.8.5 and 3.8.7
Section 3 chapters 3.2.4, 5.11.1, 5.11.2, 6.3, 6.5 and 6.6
Appendix E
Appendix F

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LOCK

An enclosure in a water body with gates at both ends to raise or lower the water level to enable vessels to pass from one level to another.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	lock	
Coverage (see Section 3 chapter 4)	d	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Lock's name.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

754

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

The lock should appear central to the watercourse area passage width.

GEODATA

--

Map

The symbol will be oriented so the point faces upstream.

Locks are to have an accompanying descriptive note 'lock' unless the word 'lock' is included in the name.

Features should be labelled or named appropriately.

Locks will mask Lock Lines.

Data rules

Locks must appear in a watercourse area.

Locks must be coincident with a node on the connector feature.

At 1:100 000 Locks must be coincident with the middle vertex on a Lock Line.

Related features

Connector, Watercourse and Lock Line

Related chapters

Section 3 chapters 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

LOCK LINE

A line used to complete the representation of a lock and ensure the impression of an obstruction across the full width of the water passage (i.e a watercourse area).

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	Lock_I	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

42

General Notes

Lock Lines should be a 3 vertex straight line feature extending the full width of a watercourse area at right angles to the orientation of the lock feature under which it is situated.

GEODATA

Map

Data rules

Lock Lines must appear in a watercourse area.

Each end of the Lock Line must be coincident with a vertex in the underlying waterline surrounding the watercourse area.

At 1:100 000 Locks must be coincident with the middle vertex on a Lock Line.

Related features

Connector, Watercourse and Lock

Related chapters

Section 3 chapters 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MAINLAND

The area of continental Australia including Tasmania.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	mainland	
Coverage (see Section 3 chapter 4)	f	

Data Attributes

GEODATA and working database

STATE/TERRITORY (state) [integer; 1,1,I] State identifier code;

- 1 - ACT: Australian Capital Territory
- 2 - JBT: Jervis Bay Territory
- 3 - NSW: New South Wales
- 4 - NT: Northern Territory
- 5 - QLD: Queensland
- 6 - SA: South Australia
- 7 - TAS: Tasmania
- 8 - VIC: Victoria
- 9 - WA: Western Australia

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

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GEODATA

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Map**Data rules**

The mainland feature will be bounded by a combination of Waterline, State border, Sea wall and Junction features.

Mainland excludes Sea areas, and Islands surrounded by the Sea.

Mainland cannot overlap Offshore areas except Foreshore flats and associated Offshore voids in estuarine areas (see Foreshore flat).

Related features

Foreshore flat, Junction, Offshore void, Sea wall, State border, Waterline and Tile edge

Related chapters

Section 3 chapter 6.9.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MANGROVE

A dense growth of mangrove trees, which grow to a uniform height on mud flats in estuarine or salt waters.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	mangrove	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

7

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Mangroves will be revised from the thematic mapper imagery to be supplied.

Size criteria will not apply where mangrove completely covers small islands i.e boundary of island is completely coincident with boundary of mangrove.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where the small areas of mangrove are less than 0.5 mm apart at map scale.

GEODATA**Map****Data rules**

Mangrove will be bounded by a vegetation line feature.

Mangrove cannot overlap;

Aircraft facility polygon, Airport Area, Sand, Open cut/Mining area, Sand dunes, Windbreaks, other vegetation polygons, Sea, Building area and waterbody coverage features except Mangrove Flat.

At 1:250 000 Mangrove and Mangrove Flat must be a perfect clone of each other. ie each arc must be replicated in the other feature.

Related features

Connector, Woody vegetation, Mangrove flat, Tile edge, Vegetation line and Watercourse

Related chapters

Section 3 chapter 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MANGROVE FLAT

A nearly level tract of land between the low and high water lines vegetated with mangroves

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / -	
Feature code	mangroveflt	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

See Mangrove.

At 1:250 000 Mangrove flats will be cloned from the revised Mangrove features.

GEODATA

Map

Data rules

Mangrove flats will be bounded by a waterline feature. They will not be bounded by a junction feature.

At 1:250 000 mangrove flats will be cloned from the revised Mangroves, and must perfectly match the mangrove, ie: each arc must be replicated in the other feature.

Related features

Mangrove, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.3, 3.8.4 and 3.8.9

Section 3 chapter 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MAP AREA

The area covered by the working database.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Working database only

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	map_area	
Coverage (see Section 3 chapter 4)	8	

Data Attributes

GEODATA and working database

Working database only

General Notes

GEODATA

Map

Data rules

Related features

Map mask

Related chapters

Appendix H

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MAP MASK

The bounding line for Map area.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Scales

1:250 000 & 1:100 000

Feature Usage

Working database only

Spatial object

Representation	Chain	
Planimetric Accuracy	1/1	
Feature code	map_mask	
Coverage (see Section 3 chapter 4)	8	

Data Attributes

GEODATA and working database

Working database only

General Notes

GEODATA

Map

Data rules

The distance between vertices will be 0.002 degrees (approximately 200 metres on the ground).

Related features

Map area and Tile edge

Related chapters

Appendix H

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MARINE SWAMP

That low lying part of the backshore area of tidal waters, usually immediately behind saline coastal flat, which maintains a high salt water content, and is covered with characteristic thick grasses and reed growths.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		40000	250000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	swamp_marine	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

908

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where the small areas of marine swamp are less than 0.5 mm apart at map scale.

GEODATA

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Map

Watercourses entering swampy areas will be shown only to the limits of eroded channels.

Marine Swamps having distinctive vegetation will be labelled appropriately e.g. lignum, marsh, wetlands, cane grass unless a description is included in the name.

Marine Swamps will have a descriptive note "marine swamp". Where clutter occurs this note will take precedence to the distinctive vegetation label, otherwise where applicable both shall be shown.

Data rules

Marine Swamps cannot overlap;

Other waterbody coverage polygons, Sea or Open cut polygon areas.

Marine swamps will be bounded by Waterlines and may be bounded by Junction features (see Section 1 chapter 3.8.4)

Related features

Connector, Swamp, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.3, 3.8.4 and 3.8.9

Section 3 chapters 6.9.2 and 6.9.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

MINE

An excavation for the extraction of minerals.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	mine	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Mine's name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

106 - symbolised mine

0 - Cloned Open cut/mining area

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Indicative revision source material for mines will be supplied. However, mines will be retained from the existing base material/digital data unless there is clear evidence they no longer exist and new mines will only be added when their position can be verified on the imagery or other reliable revision source material.

This feature may be used to indicate a small group of mines.

Open cut/mining area paracentroids will be cloned as mines.

GEODATA

Map

Mines larger than 140 625 square metres at 1:250 000 and 22 500 at 1:100 000 scale will be shown as Open Cut/Mining area features on the map.

Abandoned mines will be labelled 'abandoned'

Mines may have a descriptive note where its known function is expanded beyond that of the strict definition of a mine and where it provides additional meaningful detail to the map e.g. clay pit, gravel pit, mining area unless the words clay pit, gravel pit, mining area, etc are included in the name.

Where a mine is a clone of an open cut paracentroid a descriptive note may only be included where its known function is expanded beyond that of the strict definition of a mine and an open cut mine and where it would provide additional meaningful detail to the map. Descriptive notes meeting this criterion should be duplicated in the open cut mine feature but not on the map face. A descriptive note of "mine" is not to be used.

Data rules

Mines can appear in Built-up area. They will not overlap Building area features.

Related features

Gas well, Open Cut/mining area and Settling ponds

Related chapters

Section 3 chapters 3.2.4 and 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

OFFSHORE LINE

The line bounding polygons in the Offshore layer.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	offshor_l	
Coverage (see Section 3 chapter 4)	o	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

95 - where forming a boundary between Reef of code 2 (shoal) and Offshore void, and between Reef of code 2 (shoal) and the open sea.

0 - all other cases.

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

GEODATA

Map

Data rules

Offshore lines will bound Foreshore flat, Offshore void and Reef features.

Offshore lines will be coincident with waterlines bounding the sea, estuarine lakes or estuarine

watercourse areas where the area enclosed by the Offshore line abuts the features and falls within 50 metres at 1:250 000 and 20 metres at 1:100 000 of that Waterline feature.

Related features

Built-up area line, Foreshore flat, Offshore void, Reef and Waterline

Related chapters

Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

OFFSHORE ROCK

A rock located offshore that represents a hazard to shipping.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	rock_offshor	
Coverage (see Section 3 chapter 4)	n	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Offshore rock's name.

RELATIONSHIP (relationship) [Integer; 1,1,I] Code for relationship to sea level;

- 4 - Bare
- 5 - Tidal
- 6 - Submerged

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

980 - Submerged

98 - Bare or Tidal

0 - when in close proximity to a lighthouse or unavoidably clashes with text.

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

When larger than 390625 sq. m at 1:250 000 or 62 500 sq. m at 1:100 000 and has a RELATIONSHIP Code of 5, the Reef feature will be used.

GEODATA

Where a Lighthouse and an Offshore rock are shown on the base material/digital data or revision source material to be coincident, one of the two features will be displaced by a maximum of 10 metres in any direction so both can be included in the data.

Map

Offshore rocks may be symbolised as non printing (Symbol Number 0) where they unavoidably clash with text.

Where a lighthouse and an offshore rock are in close proximity, the lighthouse symbol will be given precedence (the offshore rock will have a symbol number of 0) but the name of the offshore rock will take precedence over the lighthouse name.

Data rules

Offshore rocks must appear in the Sea, Reefs, Foreshore flats or Offshore voids.

Related features

Lighthouse and Reef

Related chapters

Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

OFFSHORE VOID

A void in an offshore polygon

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	offshor_void	
Coverage (see Section 3 chapter 4)	o	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

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GEODATA

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Map

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Data rules

Offshore voids will be bounded by an offshore line.

Related features

Mainland, Offshore line and Tile edge

Related chapters

Section 1 chapter 3.8.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

OPEN CUT/MINING AREA

An excavation made by the removal of stone, gravel, clay or mineral from the ground for commercial or industrial purposes and tailings dumps from mining operations.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		22500	140625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	open_cut	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The Mine's name

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

102

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

New features smaller than the minimum size for inclusion will be represented as Mines. (see Mines).

GEODATA

Open cut/mining area paracentroids will be cloned as mines except where they relate to tailings dumps not adjacent to a mine or where a mine feature already exists.

Map

Open cut/mining areas are NOT to be labelled with descriptive text indicating the mineral which is extracted.

Tailings dumps not adjacent to a mine will be labelled 'tailings'.

Abandoned mines will be labelled 'abandoned'.

A descriptive note may be included where its known function is expanded beyond that of the strict definition an open cut mine, and where it would provide additional meaningful detail to the map. A descriptive note of "mine" is not to be used.

Data rules

Open cut/Mining areas will be bounded by a Relief area line symbol.

The following cannot overlap or appear inside Open Cut/Mining areas;
Aeronautical points, Aeronautical area, Built-up areas, Contours other than of type connector standard, Watercourses, Spot elevations, Sea, any waterbody coverage feature, any vegetation coverage feature or any other relief area polygon.

Related features

Mine, Relief area line, Settling ponds and Tile edge

Related chapters

Section 3 chapters 3.2.4 and 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ORCHARD OR VINEYARD

An area covered by an orderly planting of trees, vines or bushes which yield fruits, nuts or other edible products.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	orchard	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

PLANTING TYPE (type) [integer; 1,1,I] Type for horticultural planting and/or product.

3 – Vineyard

4 – Coffee

5 – Bananas

6 – Tree Nuts

7 – Other Orchard type (unspecified).

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

5

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

Map

At 1:100 000 orchards are to have an accompanying descriptive note e.g. 'bananas', 'tree nuts', 'vineyard', etc if the horticultural type/product is known.

Data rules

Orchard or vineyards will be bounded by a Vegetation line feature.

The following cannot overlap Orchard or vineyard areas;
Aircraft facility polygons, Airport area, Built-up areas, Building areas, Sea, Offshore coverage features (except Offshore void), Reservoirs, Lakes, Canal areas, Watercourse areas, Mangrove Flats, Salt evaporators, Settling ponds, Open cut, Sand, Sand dunes or other vegetation coverage polygons.

Related features

Woody vegetation, Plantation, Tile edge and Vegetation line

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PARK

An area of land developed for recreational purposes.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		22500	140625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	park	
Coverage (see Section 3 chapter 4)	b	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The park's name

PARK CODE (park) [integer; 2,2,I] Code for type of park;

- 1 - Gardens
- 2 - Recreation area
- 3 - Golf course
- 4 - Racecourse
- 5 - Oval
- 6 - Multiple use
- 7 - Civic square
- 8 - Showground
- 9 - Rifle range
- 10 - Other

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

24

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Parks such as ovals shown on the latest previous edition map as a Landmark point symbol will not be shown unless they meet the size criteria for Parks.

Parks will usually occur surrounded by built-up areas. They may also be isolated polygons outside the built up area.

Parks should not be confused with the Reserve - Nature Conservation feature.

Parks may overlap waterbody polygons. Waterbodies fully included in parks will be considered part of the park. These waterbodies will also be shown in the waterbodies layer.

Where different types of park adjoin one another, each area which meets or exceeds the minimum size for inclusion will be shown as a separate polygon and attributed accordingly. Adjoining areas too small to show separately but which together create an area at or above the minimum size will be shown as a single polygon.

GEODATA

Map

Parks will be named where they are considered to be nationally cultural or historically significant. E.g. Melbourne Botanical Gardens, Taronga Zoo.

Parks are to have an accompanying descriptive note eg 'golf course', 'showgrounds' unless the words 'golf course', 'showgrounds' etc are included in the name. 'Multiple use' and 'other' will not be used as descriptive labels.

In areas where there are a number of parks and other detail the labels may be dropped to avoid clutter. In such cases preference will be given to showing labels on the following types of park in descending order.

rifle range
showground
racecourse
golf course
oval
All other categories

Data rules

Parks will be bounded by a Built-up area line feature.

Parks cannot overlap;
Sea, Aeronautical areas and other built-up area coverage polygons.

Related features

Built-up area line, Reserve - Nature Conservation and Tile edge

Related chapters

Section 1 chapter 3.8.9

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PINNACLE

A tall, slender spire shaped rock; projecting from a level or gently sloping surface, or the top of a mountain.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	pinnacle	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The pinnacle's name

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

84

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

All feature occurrences on in the base material/digital data will be retained unless there is clear evidence they no longer exist.

If the elevation of the top of the Pinnacle is known it will be cloned as a Spot elevation..

GEODATA

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Map

Pinnacles will be named where known.

Where a pinnacle is coincident with a spot elevation feature the elevation of the spot elevation will be shown on the map.

Data rules

Pinnacles cannot appear in the following;
Sea, Lakes, Reservoirs, Canal areas, Watercourse areas, Building areas and Aircraft facilities.

Related features

Spot elevation

Related chapters

Section 3 chapter 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PIPELINE

A pipe used for carrying gases and/or liquids.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	pipeline	
Coverage (see Section 3 chapter 4)	p	

Data Attributes

GEODATA and working database

PRODUCT CODE (product) [integer; 1,1,I] Code for the liquid or gas transported by the pipe;

- 1 - Water
- 2 - Gas
- 3 - Oil
- 4 - Gas and Oil
- 5 - Other
- 6 - Unknown

RELATIONSHIP (relationship) [integer; 1,1,I] code for the relationship of the feature to ground level

- 1 - Elevated
- 2 - Above ground
- 3 - Underground

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The pipeline's name

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

281 - Above ground/Elevated Pipelines whose product is not water

282 - Underground Pipelines whose product is not water

947 - Water Pipelines

0 - Pipeline running too close to another pipeline to be shown or pipeline within or bounding a Built-up Area or areas nested within Built-up area

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences. Submerged pipelines will not be shown.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist. However, submerged pipelines will not be shown.

When a new undersized length of water pipeline exists between two canals which meet their selection criterion, then the section of water pipeline should be represented as a canal feature, accepting the attributes of its adjoining canals.

Only Pipelines included in the revision source material for pipelines will be added. Two or more pipelines running closer than 1mm to scale, parallel to each other and carrying the same substance will be shown as a single feature.

Small pipelines serving individual homesteads or farmhouses will not be shown.

If base material/digital data and revision source material does not provide information on oil or gas pipeline relationships to ground level, then they should be attributed as Underground. However, if base material/digital data and revision source material does not provide information on water pipeline relationships to ground level, then this information be sought via an Action Request to Geoscience Australia.

GEODATA

Map

Pipelines are to have an accompanying descriptive note eg 'pipeline', 'gas pipeline', unless the word 'pipeline' is included in the name. Underground pipelines will be labelled with a descriptive note, 'underground'.

Two or more pipelines running closer than 1mm to scale, parallel to each other and carrying the different substances will be symbolised as a single line. In this case one or more of the pipelines will have a symbol number 0 and the descriptive note will describe both substances, for example 'gas and oil pipelines'.

Pipelines in or bounding a Built-up Area and areas nested in Built-up areas will not be symbolised, they will be allocated symbol '0' (non-printing).

Pipelines will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Where the pipeline meets the edge of a Built-up area polygon boundary it will be snapped to either a node or vertice on that boundary.

Where one pipeline crosses another a node will be shown at the intersection point. ie. the arcs will be split.

Related features

Related chapters

Section 3 chapter 5.11.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PLANTATION

Intensively managed stands of trees of either native or exotic species, created by the regular placement of seedlings or seeds.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	plantation	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

PLANTING TYPE (type) [integer;1,1,I] Code for the type of plantation wood product planted and/or produced.

- 1 – Softwood (e.g. pine plantation)
- 2 – Hardwood (e.g. eucalyptus)

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:

Polygons (250K only)
6

Polygons (100K only)
6 - Softwood
600 - Hardwood

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

Map

Data rules

Plantations will be bounded by a Vegetation line feature.

Plantations cannot overlap;

Open cut, Sand, Sand dunes, other Vegetation types, Lakes, Reservoirs, Canal areas, Watercourse areas, Building areas, Built-up areas, Aircraft facility polygons, Airport areas, Sea, Mangrove Flats, Salt evaporators and Settling ponds.

Related features

Woody vegetation, Orchard or vineyard, Tile edge and Vegetation line

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

POWERLINE

Wire or wires supported on poles, towers or pylons, used for the transmission of high voltage electricity.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
10 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	powerline	
Coverage (see Section 3 chapter 4)	k	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

541 (250K only)

542 (100K only)

0 non printing line

General Notes

At 1:100 000 only powerlines included in the supplied revision source materials for powerlines will be shown.

At 1:250 000 only powerlines included in the supplied revision source materials for powerlines with a rated capacity of 110kv or greater will be shown.

Several powerlines running closer than 1 mm to scale and parallel to each other will be shown as one line.

Cartographic generalisation should take into account the width of the powerline symbol. It is acceptable for Powerline pylon symbols to overprint linear features such as roads.

GEODATA

--

Map

Powerlines in or bounding Built-up Area and areas nested in Built-up areas will not be symbolised , they will be allocated symbol '0' (non-printing).

Powerlines will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Powerlines sourced from the electricity (ele) database with the words 'position approximate' indicated in the 'data supplier assessment column' will be labelled with a descriptive note *position approximate* where practical.

Data rules

Where the powerline meets the Built-up Area it will be snapped to either a node or vertice on that feature.

Where one powerline crosses another a node will be shown at their intersection point. ie. the arcs will be split.

Related features

Powerline pylon symbol

Related chapters

Section 3 chapters 3.2.4 and 5.11.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

POWERLINE PYLON SYMBOL

A cartographic feature to complete powerline symbology.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000

Feature Usage

Map

Spatial object

Representation	Point	
Planimetric Accuracy	9999 / -	
Feature code	pylon	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
 540

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 180

General Notes

The placement of Powerline pylon symbols is for cartographic purposes only and does not match real world entities.

GEODATA

Map

The Powerline pylon symbol should be oriented such that it does not appear 'upside down' when viewed from the southern neatline.

Powerline pylon symbols will be placed a minimum of 20 mm and a maximum of 30 mm apart along Powerlines. Powerline pylon symbols will be placed to avoid clashes with other map detail. Powerline pylon symbols will be regularly spaced along powerlines where this can be achieved without clashing with other detail.

Powerline pylon symbols will be aligned so that the long axis of the symbol is perpendicular with the Powerline.

Data rules

Powerline pylon symbols must fall exactly on the underlying Powerline feature. If necessary a vertice will be added to ensure the Powerline and the Powerline pylon symbol are coincident with one another.

Related features

Powerline

Related chapters

Section 3 chapter 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PROHIBITED AREA

Area into which entry is prohibited without permission from the controlling authority.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		500000	3125000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	proh_a	
Coverage (see Section 3 chapter 4)	1	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.4)

AUTHORITY CODE (authority) [Integer; 4,4,I] Code for identifying controlling authority

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

At 1:250 000 all prohibited areas should be fully revised using the NPIL database clip supplied. All features in the NPIL database meeting the size and other selection criteria will be included in the new database. The only exceptions to this rule are those prohibited areas in the base Series 2 data with an authority code of 9999 or 0 which do not have an equivalent feature in NPIL as well as any additional features which may appear on the source map (when the source map is not the previous edition NTMS). These features should be reviewed against the project file and if no instruction has been supplied the producer should seek clarification from Geoscience Australia on how and/or if these features should be represented in the revised database.

At 1:100 000 size and other selection criteria apply to all feature occurrences. All features in the NPIL database clip supplied will be included which meet the selection criteria. Feature occurrences on the latest previous edition map or in base material/digital data (e.g. state mapping databases) meeting the selection criteria but which do not have an equivalent feature in the NPIL database should be reviewed against the project file. If a feature is not addressed in the project file the

producer should seek clarification from Geoscience Australia on how and/or if the feature should be represented in the revised database.

The Authority code for prohibited areas should not be populated with a value of 0. All prohibited areas obtained from miscellaneous sources (e.g. previous edition map or special instruction) whose authority is not known should have an authority value of 9999 (other not specified).

Prohibited areas will be named if names are included in the supplied material.

GEODATA

Map

Prohibited areas are to have an accompanying note 'prohibited area' unless the words 'prohibited area' are included in the name. Type style for this note will be that specified for 'notes for areas restricted access' Section 2 chapter 6.1. Where the reserve is identified by a number, only the reserve type will be shown.

Data rules

Prohibited areas will be bounded by a Prohibited area line.

Prohibited areas cannot overlap other Security area polygons.

Related features

Prohibited area line and Tile edge

Related chapters

Section 3 chapters 3.2.4 and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PROHIBITED AREA LINE

The boundary of a prohibited area or prohibited area void polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	proh_a_l	
Coverage (see Section 3 chapter 4)	1	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

64 Single boundary

641 Dual boundary

0 Boundary coincident with coastline

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Offset from coincident features in millimetres
The offset will move the feature to the left when viewed from start node to end node.

TEXT NOTE (text_note) [character; 50,50,C] Descriptive note to appear on map

General Notes

Where different Reserves are separated by a linear feature such as a road two Reserve lines will be shown each at greater than 50 metres at 1:250 00 and 20 metres at 1:100 000 from the feature separating the reserves. Road reserves will not be shown through Prohibited areas.

GEODATA

Map

When a Prohibited area line of symbol number 64 follows linear features symbolised in red, reflex blue or black the Reserve line will be offset from the other feature. The FEATURE WIDTH value will be such that there will be a gap of 0.15 mm between the respective symbols. For example, where a

Reserve line is coincident with a principal Road the FEATURE WIDTH value will be 0.75 (0.15 plus half the width of the principal road symbol (0.45) plus half the width of the Prohibited area line's symbol (0.15)).

The Prohibited area line symbol will not be offset from Reserve line symbols if they are not also coincident with another symbolised linear feature.

Area symbols will be masked for the Prohibited area line verge.

Boundaries of prohibited areas formed by, and coincident with, the coastline will not be shown. (See Section 2 chapter 5.8.)

At 1:100 000 a descriptive note may be added on the map where a prohibited area boundary is not displayed because it follows the coastline, for example 'prohibited area boundary follows coastline'.

Data rules

Prohibited area lines will bound Prohibited areas and Prohibited area voids.

Prohibited area lines of symbol number 64 will be digitised such that the reserve is on the left going from start node to end node.

Where the Prohibited area line has a similar shape to another feature, such as a Road, Reserve line, Watercourse, Waterline or Railway, and is within 50 metres at 1:250 000 and 20 metres at 1:100 000 of the feature, then the relevant section of Prohibited area line will be coincident with this other feature. Where the lines are of similar shape but the distance separating them is greater than 50 metres at 1:250 000 and 20 metres at 1: 100 000 the prohibited area line will be made coincident with the feature if it appears the Prohibited area line should be following the feature, for example where the boundary is following a stream line.

Related features

Built-up area line, Prohibited area, Prohibited area void, Railway, Road Watercourse, and Waterline

Related chapters

Section 2 chapters 2.9 and 5.8

Section 3 chapters 5.7, 5.8, 5.11.2, and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

PROHIBITED AREA VOID

A void in a prohibited area.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	proh_a_void	
Coverage (see Section 3 chapter 4)	1	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

GEODATA

Map

Data rules

Prohibited area voids will be bounded by a Prohibited area line.

Prohibited area voids cannot overlap other Security area polygons.

Related features

Prohibited area line and Tile edge

Related chapters

Section 1 chapter 3.8.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAILWAY

A transportation system using one or more rails to carry freight or passengers.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	railway	
Coverage (see Section 3 chapter 4)	r	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the railway line

TRACKS (tracks) [integer; 1,1,I] Code for number of tracks;

- 1 - One
- 2 - Multiple
- 3 - Unknown

STATUS (status) [integer; 1,1,I] Code for operational status;

- 1 - Operational
- 2 - Abandoned
- 3 - Under Construction

GAUGE (gauge) [integer; 1,1,I] Code for gauge

- 0 - Not applicable
- 1 - Standard : 1435 mm
- 2 - Broad : 1600 mm
- 3 - Narrow : 1067 mm
- 4 - Other
- 5 - Unknown
- 6 - standard-broad
- 7 - standard-narrow

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

206 Single
 210 Multiple
 208 Light
 209 Abandoned
 0 Railway coincident with jetty

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences. Dismantled railways, including those on the latest previous edition map or base data/material will not be shown.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist. Dismantled railways, including those on the latest previous edition map or base data/material will not be shown.

All railways and permanent sections of light railways will be shown. Short lengths of light railways in position only during the seasonal harvesting of crops will be omitted.

Light railways are lightly constructed railways or tramways used for special purposes, for example scenic railways.

Where railways exist upon a jetty they must be coincident for the length of the railway.

GEODATA

Map

All railways, including sidings and marshalling yards should be shown to scale if greater than the minimum size criteria.

Where scale limits the depiction of all tracks, show only those that depict a general representative pattern.

Railways will be labelled with their name. Railway lines will be labelled with their appropriate gauge width (eg. gauge 1435mm) where known. Abandoned railways will be labelled 'abandoned'.

Railways will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Nodes will appear at all Railway intersections.

Railways cannot overlap Canal areas, Perennial lakes, Perennial watercourse areas, Reservoirs or Sea except when coincident with a Jetty.

Railways cannot intersect Cliff, Cutting and Embankment lines.

Related features

Ferry route, Prohibited area line, Railway bridge, Railway causeway, Railway station, Railway tunnel, Reserve line and Transition point

Related chapters

Section 1 chapter 3.8.6 Section 2 chapter 2.2.3 Section 3 chapter 5.11.2
--

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAILWAY BRIDGE

A structure erected over a depression or obstacle to carry rail traffic.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	Chain
Planimetric Accuracy	100 / 40	100 / 40
Feature code	bridge_rl_p	bridge_rl_l
Coverage (see Section 3 chapter 4)	r	r

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the railway line

TRACKS (tracks) [integer; 1,1,I] Code for number of tracks;

- 1 - One
- 2 - Multiple
- 3 - Unknown

STATUS (status) [integer; 1,1,I] Code for operational status;

- 1 - Operational
- 2 - Abandoned
- 3 - Under Construction

GAUGE (gauge) [integer; 1,1,I] Code for gauge

- 0 - Not applicable
- 1 - Standard : 1435 mm
- 2 - Broad : 1600 mm
- 3 - Narrow : 1067 mm
- 4 - Other
- 5 - Unknown
- 6 - standard-broad
- 7 - standard-narrow

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

260 - (Point and line)

0 - Coincident road and rail bridge

FEATURE WIDTH (*feat_wid*) [*Floating point; 8,10,F,4*] Width of symbol in millimetres

0.15 for bridge on light railway

0.25 for bridge on other railways

ORIENTATION (*orientation*) [*binary; 4,5,B*] Orientation in whole degrees from East going anti-clockwise; 0 - 360

Attribute for point only.

TEXT NOTE (*text_note*) [*character; 30,30,C*] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (*old_ufi*) [*character; 10,10,C*] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Only significant bridges will be shown. The significance of the bridge depends on the number of bridges in the vicinity, the importance of the road etc. As guidance, the selection from the latest previous edition map will be taken and a similar approach applied to any new bridges.

Bridges will be shown as points when they are shorter than .4 mm to scale. When the length is longer than .4 mm to scale, bridges will be shown as chains.

The railway line for which the bridge was made need no longer exist, however, to be shown the bridge must still exist.

The name attribute will be populated with the name of the Railway line to which the bridge relates.

GEODATA

Map

Bridges of distinctive construction may be labelled (e.g 'drawbridge','swing bridge').

Data rules

Bridges which carry both road and rail traffic will be held as coincident road bridge and railway bridge features in their respective layers.

Point Railway bridges must fall exactly over a node on the Railway feature.

Linear Railway bridges will replace the equivalent section of the Railway and must meet exactly on the node at each end of the Railway feature.

Railway bridges may be shown off the rail network if they are on a dismantled railway.

Related features

Railway and Road bridge

Related chapters

Section 3 chapters 5.8, 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAILWAY CAUSEWAY

An embankment of earth or masonry erected across open water or area subject to inundation and carrying a railway.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
2 mm			

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	causeway_rl	
Coverage (see Section 3 chapter 4)	r	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the railway line

TRACKS (tracks) [integer; 1,1,I] Code for number of tracks;

- 1 - One
- 2 - Multiple
- 3 - Unknown

STATUS (status) [integer; 1,1,I] Code for operational status;

- 1 - Operational
- 2 - Abandoned
- 3 - Under Construction

GAUGE (gauge) [integer; 1,1,I] Code for gauge

- 0 - Not applicable
- 1 - Standard : 1435 mm
- 2 - Broad : 1600 mm
- 3 - Narrow : 1067 mm
- 4 - Other
- 5 - Unknown
- 6 - standard-broad
- 7 - standard-narrow

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<file-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only**SYMBOL (symbol) [binary; 4,5,B]***Symbol number applicable:*

245 - Rail only

0 - Coincident road and rail causeway

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] *Width of symbol in millimetres*

0.15 - on light railway

0.25 – on other railways

TEXT NOTE (text_note) [character; 30,30,C] *Descriptive note to appear on map***General Notes**

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

The railway line for which the causeway was made need no longer exist, however, to be shown the causeway must still exist.

Causeways which carry both road and rail traffic will be held as coincident road causeway and railway causeway features in their respective layers.

The name attribute will be populated with the name of the Railway line to which the causeway relates.

GEODATA**Map**

Railway causeways will be labelled 'causeway'.

Data rules

Railway causeways will replace the equivalent length section of the Railway and must meet exactly on the node at each end of the Railway feature.

Railway causeways may be shown off the rail network if they are on a dismantled railway.

Related features

Railway and Road Causeway

Related chapters

Section 3 chapter 5.8 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAILWAY OVERPASS

A separation of surface levels constructed to prevent direct intersection with other rail or road networks.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
40			

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	overpass_rl	
Coverage (see Section 3 chapter 4)	r	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the railway line

TRACKS (tracks) [integer; 1,1,I] Code for number of tracks;

- 1 - One
- 2 - Multiple
- 3 - Unknown

STATUS (status) [integer; 1,1,I] Code for operational status;

- 1 - Operational
- 2 - Abandoned
- 3 - Under Construction

GAUGE (gauge) [integer; 1,1,I] Code for gauge

- 0 - Not applicable
- 1 - Standard : 1435 mm
- 2 - Broad : 1600 mm
- 3 - Narrow : 1067 mm
- 4 - Other
- 5 - Unknown
- 6 - standard-broad
- 7 - standard-narrow

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

266

0 - Coincident road overpass

*FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Width of symbol in millimetres
0.15 for overpass on light railway
0.25 for overpass on other railways*

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Only significant overpasses will be shown. The significance of the overpass depends on the number of overpasses in the vicinity, the importance of the road etc. As guidance, the selection from the latest previous edition map (if supplied) will be taken and a similar approach applied to any new overpasses.

The name attribute will be populated with the name of the Railway line to which the overpass relates.

GEODATA

Map

Data rules

Overpasses which carry both road and rail traffic will be held as coincident road overpass and railway overpass features in their respective layers.

Linear Railway overpasses will replace the equivalent section of the Railway and must meet exactly on the node at each end of the Railway feature.

Railway overpasses may be shown off the rail network if they are on a dismantled railway.

Related features

Railway and Road bridge, Road Overpass, Road and Rail Causeway

Related chapters

Section 3 chapters 5.8, 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAILWAY STATION

A recognised stopping place for trains where passengers may board or alight or freight be loaded or unloaded. There may or may not be a platform. The railway station may not be in use.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	rail_station	
Coverage (see Section 3 chapter 4)	r	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the railway station

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

222

0 – when situated on a underground railway

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology;

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

All railway stations on operational and abandoned lines will be shown, including disused railway stations. An exception will be former railway stations where there is clear evidence that the buildings and associated structures no longer exist.

Former railway stations on dismantled railway lines will not be shown as railway stations. Their names will be depicted as Localities (place name) if the same name is not in use for another Locality place name, Locality populated place or Built-up area feature. Unless there is clear evidence they no longer exist, the buildings of former railway stations on dismantled railway lines will be shown as Building features

GEODATA

Map

Type for Railway stations which are cloned as localities (see Data rules) will be as specified for Railway stations and not Locality place names.

Abandoned railway stations on operational lines will be labelled '(abandoned)' outside Builtup Areas. Abandoned Railway stations on abandoned lines will not be so labelled.

Railway stations on underground lines will not be symbolised (e.g symbol = 0 non printing).

1:100 000: all railway stations will be named unless station is not symbolised.

1:250 000: railway stations within Built-up areas will only be named where space permits, all other railway stations will be named unless station is not symbolised.

Data rules

Railway stations will be coincident with a node on a railway line.

A Railway Station situated on a Jetty must be coincident with a vertex on both the Jetty and its associated Railway Line.

Railway stations will be cloned as a Locality place name if the same name is not in use for another Locality feature coded Place name or Populated place.

Related features

Locality (place name) and Railway

Related chapters

Section 3 chapters 5.11.1 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAILWAY TUNNEL

An artificial underground or underwater passage carrying a railway.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	Chain
Planimetric Accuracy	100 / 40	100 / 40
Feature code	tunnel_rl_p	tunnel_rl_l
Coverage (see Section 3 chapter 4)	r	r

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of the railway line

TRACKS (tracks) [integer; 1,1,I] Code for number of tracks;

- 1 - One
- 2 - Multiple
- 3 - Unknown

STATUS (status) [integer; 1,1,I] Code for operational status;

- 1 - Operational
- 2 - Abandoned
- 3 - Under Construction

GAUGE (gauge) [integer; 1,1,I] Code for gauge

- 0 - Not applicable
- 1 - Standard : 1435 mm
- 2 - Broad : 1600 mm
- 3 - Narrow : 1067 mm
- 4 - Other
- 5 - Unknown
- 6 - standard-broad
- 7 - standard-narrow

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

- 205 - Line
- 0 - Point

*FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0
Attribute for point only.*

*ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0
Attribute for point only.*

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

*OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in
GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).*

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Railway tunnels will be shown as points when they are shorter than 1 mm to scale. When the length is longer than 1 mm to scale, tunnels will be shown as chains.

Tunnels which carry both road and railway traffic will be held as a coincident road tunnel and railway tunnel feature in their respective layers.

GEODATA

Map

Railway tunnels may be named.

Data rules

The points of disappearance and emergence of Railway tunnel features will be shown by the feature Transition point.

Point Railway tunnels will be coincident with a node on a railway line.

Linear Railway tunnels will replace the equivalent section of the Railway and must meet exactly on the node at each end of the Railway feature.

Railway tunnels may be shown off the rail network if they are on a dismantled railway.

Related features

Railway, Road tunnel and Transition point

Related chapters

Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAINFOREST

Vegetation community which contains key rainforest species, with a foliage cover greater than 70%

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	rainforest	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

4

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

Map

Rainforest should be named where named on base material/digital data or rainforest revision source material. Type styles for named areas of rainforest will be those used for Vegetation features, see Section 2 chapter 8.4 (for 1:250 000) and 9.4 (for 1:100 000).

Data rules

Rainforest is bounded by a vegetation line feature.

Rainforest cannot overlap other vegetation type polygons.

Rainforest cannot overlap Open Cut, Building Area, Built-up area, Sand, Sand dunes, Aircraft facility polygons, Airport areas, Reservoirs, Settling ponds, Salt evaporators, Lakes, perennial Watercourse areas, Canal areas, Mangrove Flat or Sea.

Related features

Woody vegetation, Tile edge and Vegetation line.

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAPID

An area of broken, fast flowing water in a watercourse, where the slope of the bed increases (but without a prominent break of slope which might result in a waterfall), or where a gently dipping bar of harder rock outcrops.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	Polygon
Planimetric Accuracy	100 / 40	9999 / 9999
Feature code	rapid_l	rapid_a
Coverage (see Section 3 chapter 4)	d	w

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of associated watercourse

PERENNIALITY (perennial) [integer; 1,1,I] Code for perenniality;
1 - Perennial

HIERARCHY (hierarchy) [integer; 1,1,I] Importance of associated watercourse
0 - Not Applicable
1 - Major
2 - Minor

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4 - feat_code "rapid_l"
<tile-id>5 - feat_code "rapid_a"

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
881 (Chain - major watercourse chain)
882 (Chain - minor watercourse chain)

881 (Polygon - watercourse polygon perennial)

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Rapids are only to be shown in perennial streams.

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist or they are on a non-perennial stream.

Rapids in double line streams will be shown as area features.

GEODATA**Map**

Rapids will be labelled 'rapid' if rapid is not included in the name.

Data rules

A rapid polygon will be bounded by a Rapid area line in water and by waterline on the river banks.

Rapid chains break Watercourse chains with coincident nodes with the Watercourses at both ends of the Rapid chain.

Rapids will be digitised with the start node at the upstream end.

Rapids cannot overlap;
Sea, or Building areas.

Related features

Connector, Rapid area line, Tile edge, Watercourse and Waterline

Related chapters

Section 3 chapter 5.7

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAPID AREA LINE

The boundary of a rapid area polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	rapid_a_l	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

See Rapid

GEODATA

Map

Data rules

Rapid area lines will bound Rapid polygons

Related features

Rapid

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RAZORBACK

A Long and Narrow upland with Steep Sides

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	razorback	
Coverage (see Section 3 chapter 4)	m	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

929

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Height of razorbacks are to be indicated by the use of spot elevations where available.

GEODATA

Map

Contour & Auxiliary Contours will be broken for razorbacks.

Razorbacks will be named where named on the latest previous edition map unless adjacent development means this would lead to clutter.

Razorback symbols will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Razorbacks cannot appear in;
Sea, Lakes,Reservoirs, Building Area and Offshore Polygons.

Razorbacks cannot intersect Watercourse, Roads and Railways

Related features

Cliff , Contour

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

REEF

An area of rock or coral that is exposed between mean high water and lowest tide, or just below approximate lowest tide, which is visually prominent or a hazard to shipping.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	reef	
Coverage (see Section 3 chapter 4)	o	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Reef's name

RELATIONSHIP (relationship) [Integer; 1,1,I] Code for relationship to sea level;

- 4 - Bare
- 5 - Tidal
- 6 - Submerged

REEF CODE (reef)

[Integer; 1,1,I] Code for type of reef:

- 1 - Reef, Cay
- 2 - Shoal, Bank, Patch

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

- 97 for Reef and Cay
- 0 for Shoal, Bank, Patch

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

For new features when the area is smaller than the minimum size and REEF code would be 1 (Reef, Cay), the feature 'offshore rock' will be used.

GEODATA

Map

Reefs should be named, where name is known.

Descriptive notes may be included.

Data rules

Reefs cannot overlap other Offshore coverage polygons, Mainland or Islands.

Reef will be bounded by Offshore line features

Related features

Offshore line, Offshore rock, Spot elevation and Tile edge

Related chapters

Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RELIEF AREA LINE

The line bounding a Crater, Distorted Surface, Open cut, Relief area void, Rocky outcrop, Sand or Sand dune polygon

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	rel_area_l	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>1 - if surround "open cut"

<tile-id>4 - if not surround "open cut"

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

Note: The Relief area line feature can bound various polygon types & will have its symbol number changed accordingly. The symbol numbers shown apply to Relief area lines bounding the following features.

Line	Polygon area
symbol;	bounded;
90	Crater
90	Distorted Surface
102	Open cut
912	Rocky outcrops
0	Sand
0	Sand dunes

General Notes

GEODATA

Map

Where symbolised, relief area lines will be masked where black type unavoidably overprints the Feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Where the boundary of an area of Distorted Surface, Rocky Outcrops, Sand and Sand Dunes has a similar shape to another natural feature such as a cliff, the relevant section of Relief Area Line will be made coincident with this other feature.

Data rules

Relief area lines will bound Crater, Distorted Surface, Open cut, Relief area void, Rocky outcrop, Sand and Sand dune polygons.

Relief area lines cannot overlap;
Sea, Watercourse areas, Canal areas, Lakes and Reservoirs.

Related features

Crater, Distorted surface, Open cut/mining area, Relief area void, Rocky outcrop, Sand, Sand dune and Vegetation line

Related chapters

Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RELIEF AREA VOID

An empty or void area in a Distorted Surface, Open cut, Rocky outcrop, Sand or Sand dune polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		10000	62500

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	rel_a_void	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

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GEODATA

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Map

--

Data rules

Relief area voids will be bounded by a relief area line feature.

Relief area voids cannot overlap other Relief area coverage polygons.

Related features

Relief area line and Tile edge

Related chapters

Section 1 chapter 3.8.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVE - INDIGENOUS AREA

Land reserved due to its Indigenous significance, (excludes freehold land).

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		500000	3125000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	abor_res	
Coverage (see Section 3 chapter 4)	3	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Indigenous area's name

AUTHORITY CODE (authority) [Integer; 4,4,I] Code for identifying controlling authority

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

Reserve - Indigenous areas included in the NPIL data base and meeting the size criteria will be shown. Where a Reserve-Indigenous Area is broken into a number of areas each area will be shown regardless of size if the total area of the reserve meets the size criteria.

The Authority code for reserve areas should not be populated with a value of 0. All reserves whose authority is not known or whose authority does not fit within the current categories specified in section 3 5.17 NPIL database, should have a authority value of 9999 (other not specified).

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

--

Map

Reserve - Indigenous areas will be named.

Data rules

Reserve - Indigenous areas will be bounded by a reserve line feature.

Reserve - Indigenous areas cannot overlap other reserved areas coverage polygons ie. two differing reserve types cannot share a common polygon area.

Related features

Reserve line and Tile edge

Related chapters

Section 3 chapters 3.2.4 and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVE - FORESTRY

Public land reserved for forestry purposes.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		500000	3125000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	forest_res	
Coverage (see Section 3 chapter 4)	3	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Reserve - Forestry's name

AUTHORITY CODE (authority) [Integer; 4,4,I] Code for identifying controlling authority

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

Reserve - Forestry areas included in the NPIL database and meeting the size criteria will be shown. Where a Reserve-Forestry Area is broken into a number of areas each area will be shown regardless of size if the total area of the reserve meets the size criteria.

The Authority code for reserve areas should not be populated with a value of 0. All reserves whose authority is not known or whose authority does not fit within the current categories specified in section 3 5.17 NPIL database, should have a authority value of 9999 (other not specified).

GEODATA

--

Map

Reserve - Forestry features will be named where named in the NPIL database. Where the reserve is only identified by a number only the reserve type will be shown.

Data rules

Reserve - Forestry features will be bounded by a reserve line feature.

The Forestry Reserve area cannot overlap other reserved areas coverage polygons. ie. two differing reserve types cannot share a common polygon area.

Related features

Reserve line and Tile edge

Related chapters

Section 3 chapters 3.2.4 and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVE - NATURE CONSERVATION

Land reserved for the conservation of native species.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		500000	3125000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	nat_res	
Coverage (see Section 3 chapter 4)	3	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Reserve - Nature conservation's name.

AUTHORITY CODE (authority) [Integer; 4,4,I] Code for identifying controlling authority

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

Reserve - Nature conservation areas included in the NPIL database and meeting the size criteria will be shown. Where a Reserve-Nature Conservation Area is broken into a number of areas each area will be shown regardless of size if the total area of the reserve meets the size criteria.

The Authority code for reserve areas should not be populated with a value of 0. All reserves whose authority is not known or whose authority does not fit within the current categories specified in section 3 5.17 NPIL database, should have a authority value of 9999 (other not specified).

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

--

Map

Reserve - Nature Conservation features will be named where named in the NPIL database. Where the reserve is only identified by a number only the reserve type will be shown.

Data rules

Reserve - Nature Conservation features will be bounded by a reserve line feature.

The Nature Conservation Reserve area cannot overlap other reserved areas coverage polygons. ie. two differing reserve types cannot share a common polygon area.

Related features

Park, Reserve line and Tile edge

Related chapters

Section 3 chapters 3.2.4 and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVE - WATER SUPPLY

Land reserved to protect water supply catchments.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		500000	3125000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	water_res	
Coverage (see Section 3 chapter 4)	3	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Reserve - Water supply's name

AUTHORITY CODE (authority) [Integer; 4,4,I] Code for identifying controlling authority

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

Reserve - Water Supply Areas included in the NPIL database and meeting the size criteria will be shown. Where a Reserve-Water Supply Area is broken into a number of areas each area will be shown regardless of size if the total area of the reserve meets the size criteria.

The Authority code for reserve areas should not be populated with a value of 0. All reserves whose authority is not known or whose authority does not fit within the current categories specified in section 3 5.17 NPIL database, should have a authority value of 9999 (other not specified).

GEODATA

--

Map

Reserve - Water Supply features will be named where named in the NPIL database. Where the reserve is only identified by a number only the reserve type will be shown.

Where a Water Supply Reserve surrounds, or is coincident with a waterbody of the same root name, name the waterbody in the Waterbodies cover and do not name the Water Supply Reserve.

Data rules

Reserve - Water Supply features will be bounded by a reserve line feature.

The Water Supply Reserve area cannot overlap other reserved areas coverage polygons. ie. two differing reserve types cannot share a common polygon area.

Related features

Reserve line and Tile edge

Related chapters

Section 3 chapters 3.2.4 and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVE LINE

The boundary of a reserved area polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	res_a_l	
Coverage (see Section 3 chapter 4)	3	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

65 - Single boundary

68 - Dual boundary not coincident with another feature

681 - Dual boundary coincident with another symbolised feature

0 - Boundary coincident with coastline

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Offset from coincident features in millimetres. The offset will move the feature to the left when viewed from start to node to end node.

TEXT NOTE (text_note) [character; 50,50,C] Descriptive note to appear on map

General Notes

Road reserves, powerline reserves and other linear feature reserves will not be shown through reserve areas.

GEODATA

Map

When a Reserve line of symbol number 65 follows linear features symbolised in red, reflex blue or black the Reserve line will be offset from the other feature. The FEATURE WIDTH value will be

such that there will be a gap of 0.15 mm between the respective symbols. For example, where a Reserve line is coincident with a principal Road the FEATURE WIDTH value will be 0.725 (0.15 plus half the width of the principal road symbol (0.45) plus half the width of the Reserve line's symbol (0.125)).

The Reserve line symbol will not be offset from coincident Prohibited area line symbols unless the two lines are also coincident with another symbolised feature.

Boundaries of reserves formed by, and coincident with, the coastline will not be shown. Such boundaries will have Symbol 0. (See Section 2 chapter 5.8.). This rule may be overridden in areas where not showing the boundary along the coastline causes ambiguity.

At 1:100 000 a descriptive note may be added on the map where a reserve boundary is not displayed because it follows the coastline, for example 'Reserve boundary follows coastline'

Data rules

Reserve line features will bound Reserve - Indigenous area, Reserve - Forestry, Reserve - Nature Conservation, Reserve - Water Supply and Reserve Void features.

Reserve lines of symbol 65 will be digitised such that the reserve is on the left going from start node to end node.

Where the Reserve line has a similar shape to another feature, such as a Road, Watercourse, Waterline or Railway, and is within 50 metres at 1: 250 000 and 20 metres at 1:100 000 of the feature, then the relevant section of Reserve line will be coincident with this other feature. Where the lines are of similar shape but the distance separating them is greater than 50 metres at 1:250 000 and 20 metres at 1:100 000 the Reserve line will be made coincident with the feature if it appears the Reserve line should be following the feature, for example where the boundary is following a stream line. These rules will not apply where two reserves are separated by a road reserve. In such cases the separation between the two boundaries will be maintained.

Where a Reserve area line has Reserve - Indigenous area, Reserve - Forestry, Reserve - Nature Conservation or Reserve - Water Supply on one side only it will be digitised such that the reserve is on the left going from start node to end node.

Related features

Built-up area line, Railway, Reserve - Indigenous area, Reserve - Forestry, Reserve - Nature conservation, Reserve - Water supply, Reserve void, Road, Watercourse and Waterline

Related chapters

Section 2 chapter 5.8

Section 3 chapters 5.7, 5.8 5.11.2 and 5.17

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVE VOID

A void in a reserved area.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		40000	250000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	res_a_void	
Coverage (see Section 3 chapter 4)	3	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

GEODATA

Map

Data rules

Reserve voids will be bounded by reserve lines.

Reserve voids cannot overlap other reserved areas coverage polygons. ie. two differing reserve types cannot share a common polygon area.

Related features

Reserve line and Tile edge

Related chapters

Section 1 chapter 3.8.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RESERVOIR

A body of water collected and stored behind a constructed barrier for some specific use.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		22500	140625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	reservoir	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Reservoir's name ie the name of the water body not the dam wall.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

10

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

New reservoirs smaller than 140625 sq. m at 1:250 000 or 22500 sq. m at 1:100 000. will be shown as a Water tank feature.

In densely and moderately settled regions as defined by Appendix C where a Dam wall meets the minimum size criteria, the attached reservoir should be shown regardless of whether or not it is

below the minimum size criteria for reservoirs. If a reservoir no longer exists (ie. filled with sediment) then the dam wall will not be shown.

GEODATA

Map

Reservoirs will be named where named in the base material/digital data or revision source material supplied.

Reservoirs are to have an accompanying descriptive note e.g.: aquarium for features not being used directly for human or livestock consumption.

Reservoirs will mask Parks.

Data rules

Reservoirs will be bounded by the waterline feature and segments may be bounded by a Junction feature. (See Section 1, 3.8.4).

Reservoirs cannot overlap ;

Relief area coverage features (except voids), Sand ridges, Roads and Railways (except bridges, tunnels or fords), Waterpoints, Survey marks, other waterbody coverage polygons, Built-up area, Streams of any sort (except connectors), Spot elevations, Sea, Buildings, Vegetation coverage features of any type (except voids), Morphology coverage features, Navigation coverage features, Aircraft facilities and Seismic lines/Cleared lines.

Related features

Connector, Dam, Junction, Lake, Spillway, Tile edge, Water tank, Watercourse and Waterline

Related chapters

Section 1 chapters 3.2.4, 3.8.3, 3.8.4 and 3.8.9
Section 3 chapter 6.9.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD

A route for the movement of vehicles, people or animals.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	road	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road. (see Section 3 chapter 6.7.1)

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

- <tile-id>1 - class not 5
- <tile-id>4 - class 5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

250 – Dual carriageway

251 - Principal sealed

258 - Principal unsealed

256 - Secondary sealed

259 - Secondary unsealed

257 - Minor sealed

253 - Minor unsealed

254 - Vehicular track

252 - Under construction

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Feature width is only used for roads under construction (symbol 252). All other roads will have a feature width of '0'. The width of symbol 252 reflects the road classification, the following values will be used:

Feature width; Road class;

0.9 - Dual carriageway

0.9 - Principal road

0.6 - Secondary road

0.4 - Minor road

0.2 - Vehicular track

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences. An exception will be minor roads in built up areas which will be treated as per the rules below.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist. An exception will be minor roads in built up areas which will be treated as per the rules below.

Road classifications will be as shown on the roads revision source material supplied.

Classifications are:

Dual carriageway - Divided Highway, Freeway, Tollway, or other major roads with separated carriageways in opposite directions.

Principal Road: - Highways, major through routes and major connecting roads as defined by the Australian Automobile Association (AAA) or other approved revision source material.

Secondary road: - Connecting roads that provide a connection between major through routes and/or major connecting roads, or connections between regional centres.

Minor road: - All other roads which form part of the public roads system between Principal roads and Secondary roads.

Vehicle tracks: - Public or private roadways of minimum or no construction which are not necessarily maintained.

Roads not shown on the authorised roads revision source material will maintain the classification on the latest previous edition map at scale or base material/digital data. Where the latest previous edition map uses a different road classification the least important class will be used. For example, road will be classified as minor road. Where use of the latest previous edition map or data would result in an illogical connection, for example if a secondary road connects only to minor roads, a logical connection will be used.

Roads will not be added only from interpretation of the imagery. However obvious road realignments may be captured when significant.

Where the carriage ways of a dual carriageway are separated by less than 1 mm at map scale the dual carriageway will be symbolised using symbol 250. If the separation of the carriageways is greater than 1mm at map scale, each carriageway will be shown in its true position, classified as principal road and have symbol number 251.

For detailed rules regarding situations involving roads, vehicle tracks, fences and vermin proof fences please refer to Appendix A page 106 Fence.

All dual carriageways and principal roads will be named. Secondary roads should be named where named on the latest previous edition map or data, or on the roads revision source material supplied.

At 1:250 000 minor roads and vehicular tracks will be named where named on the base Series 2 data unless there is clear evidence they no longer exist. No new names for Minor roads and vehicular tracks will be added in densely settled regions as defined by Appendix C. New names for Minor roads and vehicular tracks will be added in sparsely settled regions as defined by Appendix C where named on road revision source material supplied. A selection of new names for Minor roads and vehicular tracks may be added in moderately settled regions as defined by Appendix C, these should be taken from the roads revision source material supplied. In moderately settled regions preference should be given to minor roads and vehicular tracks which constitute through routes and/or lead to cultural or natural features.

At 1: 100 000 minor roads and vehicular tracks will be named where named on the base material/digital data (e.g. state mapping source) unless there is clear evidence they no longer exist. New names for Minor roads and vehicular tracks will be added where named on road revision source material supplied.

All dual carriageways, principal and secondary roads will be shown including those in built-up areas.

At 1:250 000 minor roads entering a builtup area will be continued to the first intersection with a dual carriageway, principal or secondary road. Minor roads totally contained in built-up areas will not be shown. This rule extends to other features in the built-up area layer where they are surrounded by a built-up area.

At 1:100 000 minor roads entering a builtup area will be continued to the first intersection with a major through route (preference should be given to intersections with dual carriageways, principal or secondary roads). In addition, sufficient minor roads will be shown to reflect the Built-up Area's road pattern. Select the major through routes (from Primary Reference material) to reflect the road pattern within the area whilst avoiding clutter. This rule will also extend to other features in the built-up area layer where they are surrounded by a built- up area.

GEODATA

Map

All dual carriageways, principal & secondary roads will be named where name is known.

At 1:100 000 naming of minor roads and vehicular tracks should give preference to features which constitute through routes and/or lead to cultural or natural features. Density of detail should determine the number of names shown. If a previous edition 1:100 000 map has been supplied this should be used as a guide for which roads are to be named in the new product.

At 1: 250 000 naming of minor roads and vehicular tracks should be consistent with name content in the digital data, subject to generalisation rules and clutter considerations.

Outside built-up areas, roads and highways should be named as above. The main roads through built-up areas may be named where space permits.

Roads under construction will be labelled 'under construction'.

Roads whose position is questionable will be labelled 'position approximate'.

Vehicle tracks labelled as 'four-wheel drive' on previous edition maps will not be labelled as such on the new product, as legend indicates 'access and condition not assured'.

The road subclass 'Dual Carriageway' will mask all other road subclasses (e.g. 'Principle Road', 'Secondary Road', 'Minor Road', 'Track').

Data rules

Roads will have nodes at all intersections.

Roads cannot overlap;
Sea, Reservoir, Perennial Lakes, Canal areas, Perennial Watercourse areas.

Roads cannot intersect cliff, cutting and embankment lines.

Related features

Built-up area line, Ferry route, Ford, Gate, Kilometric distance indicator, Locality, Prohibited area line, Road bridge, Road causeway, Road destination arrow, Road on dam, Road tunnel, Route marker - National, Route marker - State, Reserve line, Stock grid and Transition point

Related chapters

Section 1 chapters 3.2 and 3.8.6
Section 2 chapter 2.2.3
Section 3 chapters 3.2.4, 5.8, 5.11.2, 6.5.3 and 6.7
Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD BRIDGE

A structure erected over a depression or obstacle to carry road traffic.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	Chain
Planimetric Accuracy	100 / 40	100 / 40
Feature code	bridge_rd_p	bridge_rd_l
Coverage (see Section 3 chapter 4)	v	v

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road on which the bridge is located.

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

260 (Point and line)

0 (Point) When in close proximity to other features causing clutter.

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] The width of the symbol determined by the road classification (in millimetres);

Width; Road class;

0.9 - Dual Carriageway
(note; width varies)

0.9 - Principal road

0.6 - Secondary road

0.4 - Minor road

0.2 - Vehicular track

** - Under construction

* * use appropriate
road width.

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

Attribute for point only.

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences. Road bridges will not be included when the road crossing the bridge has been removed within a Built-up area (see Road).

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist or unless the road crossing the bridge has been removed within a Built-up area (see Road).

Only significant bridges will be shown. The significance of the bridge depends on the number of bridges in the vicinity, the importance of the road etc.

Bridges will be shown as points when they are shorter than 0.4 mm to scale. When the length is longer than 0.4 mm to scale, bridges will be shown as chains.

The road for which the bridge was made need no longer exist, however, to be shown the bridge must still exist.

Bridges which carry both road and rail traffic will be held as coincident road bridge and railway bridge features in their respective layers.

The name attribute will be populated with the name of the Road to which the bridge relates.

GEODATA

Map

Bridges of distinctive construction may be labelled (e.g 'drawbridge','swing bridge').

Where clutter would occur by symbolising a point bridge feature, the point bridge may be symbolised to symbol number '0' non-printing value.

Data rules

Road bridges may be shown off the road network if they are on a dismantled road.

Point Road bridges must fall exactly over a node on the Road feature.

Linear Road bridges break Road chains with coincident nodes with the Roads at both ends of the Road bridge chain.

Related features

Ford, Railway bridge, Road and Road causeway

Related chapters

Section 3 chapters 5.8, 5.9, 5.11.2 and 6.7

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD CAUSEWAY

An embankment of earth or masonry erected across open water or an area subject to inundation and carrying a road.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
2 mm			

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	causeway_rd	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road on which the Causeway is located.

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (*symbol*) [*binary; 4,5,B*]

Symbol number applicable:

245

FEATURE WIDTH (*feat_wid*) [*Floating point; 8,10,F,4*] *The width of the symbol determined by the road classification (in millimetres);*

Width; Road class;

0.9 - Dual Carriageway
(*note; width varies*)

0.9 - Principal road

0.6 - Secondary road

0.4 - Minor road

0.2 - Vehicular track

** - Under construction

* * use appropriate
road width.

TEXT NOTE (*text_note*) [*character; 30,30,C*] *Descriptive note to appear on map*

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

The road for which the causeway was made need no longer exist, however, to be shown the causeway must still exist.

Causeways which carry both road and rail traffic will be held as coincident road causeway and railway causeway features in their respective layers.

The name attribute will be populated with the name of the Road to which the causeway relates.

GEODATA

Map

Road causeways will be labelled 'causeway'.

Data rules

Road causeways break Road chains with coincident nodes with the Roads at both ends of the Road causeway chain.

Related features

Ford, Railway causeway, Road and Road bridge

Related chapters

Section 3 chapters 5.8 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD DESTINATION ARROW

A symbol at the neatline of the map within the margin indicating the direction of a road's destination or objective.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	9999 / 9999	
Feature code	arrow_dest	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

255 - with arrow head

42 - without arrow head (see Appendix B chapter 12)

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear in margin.

General Notes

At 1:250 000 road destination arrows and the name of the destination will be shown on the western and southern map edges only.

At 1:100 000 road destination arrows and the name of the destination will be shown from all edges of the bounding GDA94 Graticule.

Road destination arrows will normally be shown on dual carriageway, principal and secondary Roads. The use of Road destination arrows will be consistent with the use of Kilometric distance indicators, that is, Roads with distances shown will also have Road destination arrows where they meet the western and southern neatline (at 1:250 000) or the bounding GDA94 Graticule (at 1:100 000). When road destination arrows and related text unavoidably clash with Graticule values or are too close to the trim line, see Appendix B chapter 11 (for 1:250 000) or the 1:100 000 Layout Guide (for 1:100 000).

The destination will be a significant town or locality, generally on the adjoining map.

GEODATA

--

Map

The Road destination arrow will be placed in the map margin and will be oriented to show the direction of the destination point. The Road destination arrow will be labelled with the name of the destination and the road distance to the destination point, to the nearest kilometre from the neatline (at 1:250 000) or the bounding GDA94 graticule (at 1:100 000).

Data rules

Road destination arrows will be digitised such that the start node is at the map neatline(at 1:250 000) or the bounding GDA94 graticule (at 1:100 000) and the end node at the arrow head.

Related features

Road, Kilometric distance indicator

Related chapters

Section 3 chapter 5.7
Appendix B chapters 2, 3 and 11

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD ON DAM

The section of a road carried by a dam.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	road_on_dam	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road on which the Road on dam is located.

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

45

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] The width of the symbol determined by the road classification (in millimetres);

Width; Road class;

0.9 - Dual Carriageway
(note; width varies)

0.9 - Principal road

0.6 - Secondary road

0.4 - Minor road

0.2 - Vehicular track

** - Under construction

** use appropriate
road width.

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

The name attribute will be populated with the name of the Road to which the Road on dam relates.

GEODATA**Map**

This feature will take precedence over the Dam feature.

Data rules

The Road on dam feature will be created by cloning the dam feature from the utilities cover, and reassigning the feature class to Road on dam in the roads cover. This feature will replace the relevant section of road. The start and endpoint of the road must snap exactly to the respective start and endpoint of the Road on dam symbol.

Roads on dams cannot overlap;
Sea, Reservoirs, Lakes, Canal areas, Watercourse areas.

Roads on dams cannot intersect; any Morphology coverage lines and Watercourse lines except a spillway and connector.

Roads on dams will have nodes at all intersections.

Related features

Dam and Road

Related chapters

Section 3 chapters 5.8 and 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD OVERPASS

A separation of surface levels constructed to prevent direct intersection with other road or rail networks.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
40			

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	overpass_rd	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road on which the overpass is located.

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>4

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

267

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] The width of the symbol determined by the road classification (in millimetres);

Width; Road class;

0.9 - Dual Carriageway
(note; width varies)

0.9 - Principal road

0.6 - Secondary road

0.4 - Minor road

0.2 - Vehicular track

** - Under construction

* * use appropriate
road width.

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences. Road overpasses will not be included when the road crossing the overpass has been removed within a Built-up area (see Road).

Only significant overpasses will be shown. When a road overpasses another road (only), the overpass will **not** be shown if there are related on and off ramps for full road inter-access. These cases will be shown as standard intersections. When this information is not available then the assumption should be that there is no inter-access.

Overpasses which carry both road and rail traffic will be held as coincident road overpass and railway overpass features in their respective layers.

The name attribute will be populated with the name of the Road to which the overpass relates.

GEODATA**Map****Data rules**

Linear Road overpasses break Road chains with coincident nodes with the Roads at both ends of the Road bridge chain.

Related features

Ford, Railway and Road bridge, Railway and Road causeway, Railway Overpass

Related chapters

Section 3 chapters 5.8, 5.11.2 and 6.7

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROAD TUNNEL

An artificial underground or underwater passage carrying a road.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	Chain
Planimetric Accuracy	100 / 40	100 / 40
Feature code	tunnel_rd_p	tunnel_rd_l
Coverage (see Section 3 chapter 4)	v	v

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The name of the road on which the tunnel is located.

CLASSIFICATION (class) [Integer; 1,1,I] The road's classification;

- 1 - Dual Carriageway
- 2 - Principal Road
- 3 - Secondary Road
- 4 - Minor Road
- 5 - Track

FORMATION (formation) [integer; 1,1,I] Type of road surface;

- 1 - Sealed
- 2 - Unsealed
- 3 - Unknown
- 4 - Under construction

NATIONAL ROUTE NUMBER (NRN) [character; 12,12,C] The national route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

STATE ROUTE NUMBER (SRN) [character; 12,12,C] The state route number/s assigned to the road (if multiple numbers, delimited by a minus sign). Alpha characters in this field are to be in upper case.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (*symbol*) [*binary; 4,5,B*]

Symbol Number applicable;

205 – Line

0- Point

FEATURE WIDTH (*feat_wid*) [*Floating point; 8,10,F,4*] Currently not used by symbology;

0

Attribute for point only.

ORIENTATION (*orientation*) [*binary; 4,5,B*] Currently not used by symbology; 0

Attribute for point only.

TEXT NOTE (*text_note*) [*character; 30,30,C*] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (*old_ufi*) [*character; 10,10,C*] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Road tunnels will be shown as points when they are shorter than 1 mm to scale. When the length is longer than 1 mm to scale, tunnels will be shown as chains.

Tunnels which carry both road and railway traffic will be held as a coincident road tunnel and railway tunnel feature in their respective layers.

The name attribute will be populated with the name of the Road to which the tunnel relates.

GEODATA**Map**

Road tunnels may be named.

Data rules

Linear Road tunnels must meet exactly on the node at each end of the Road feature where they disappear and resurface.

The TEXT_NOTE field will be used to enter the name of the tunnel itself (note: the NAME field is used to enter the name of the road to which the tunnel is attached)

Related features

Railway tunnel, Road and Transition point

Related chapters

Section 3 chapters 5.11.2 and 6.7

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROCKY OUTCROP

An area of land where large rocks or boulders protrude from or rest on the surface.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	rocky_a	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

90

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

New polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

Map

Rocky outcrops are to have an accompanying note 'rocky outcrops'.

Data rules

Rocky outcrop polygons will be bounded by a Relief area line feature.

Rocky outcrops cannot overlap;

Other relief area coverage polygons, aeronautical points, Built-up area, Sea, Building area, Woody vegetation, Lakes, Reservoir, Watercourse area, Canal area and aeronautical area.

Related features

Relief area line and Tile edge

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROUTE MARKER - NATIONAL

The symbol printed over a road indicating a national route.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Point	
Planimetric Accuracy	9999 / 9999	
Feature code	route_nat	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol Number applicable;
27

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology;
0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Route markers are to be shown both inside and outside built-up areas.

Route markers will be placed at sufficient locations to enable the route to be readily identified for its whole length on a map.

A route marker will be placed on each route in close proximity to the map edge. See Section 2, chapter 5.9.

GEODATA

Map

The route number will be shown in the centre of the shield as annotation. Alpha characters in route numbers will be in upper case.

National route markers will generally be placed clear of other map detail, but where this is not possible they will mask all other detail except the route number.

Data rules

The route marker must be coincident with a node or vertice on the road feature to which it relates.

Related features

Annotation and Road

Related chapters

Section 2 chapter 5.9

Section 3 chapters 3.2.4, 5.11.2 and 6.7.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

ROUTE MARKER - STATE

The symbol printed over a road indicating a state route.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Point	
Planimetric Accuracy	9999 / 9999	
Feature code	route_state	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

*SYMBOL (symbol) [binary; 4,5,B]
Symbol Number applicable;
28 Standard symbol
281 – Oversize symbol*

*FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0*

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology;

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

Route markers are to be shown both in and outside built-up areas.

Route markers will be placed at sufficient locations to enable the route to be readily identified for its whole length on a map.

The oversize symbol 281 will be used when the state route number annotation can not comfortably fit within the boundaries of the standard symbol. This will generally be the case when the state route number is formed by 3 or more characters.

A route marker will be placed on each route in close proximity to the map edge. See Section 2, chapter 5.9

GEODATA

--

Map

The route number will be shown in the centre of the rectangle as annotation. Alpha characters in route numbers will be in upper case.

State route markers will generally be placed clear of other map detail, but where this is not possible they will mask all other detail except the route number.

Data rules

The route marker must be coincident with a node or vertice on the road feature to which it relates.

Related features

Annotation and Road

Related chapters

Section 2 chapter 5.9

Section 3 chapters 3.2.4, 5.11.2 and 6.7.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RUBBISH TIP

An area above ground for the disposal of rubbish.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	- / 9999	
Feature code	tip	
Coverage (see Section 3 chapter 4)	b	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

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GEODATA

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Map

Features should be labelled 'rubbish tip'.

Data rules

Rubbish tips will be bounded by a Built-up area line feature.

Related features

Built-up area line, Built-up area void and Tile edge

Related chapters

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Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

RUNWAY CENTRELINE

A symbol used to indicate the length and orientation of an airport's runway.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / -	
Feature code	runway_c_l	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

*SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable;
706 licenced aircraft facility
0 unlicenced aircraft facility*

General Notes

GEODATA

Map

Data rules

This chain will be the length of the runway, and correctly oriented.

All runway centrelines for all licenced aircraft facilities will be captured.

Runway centrelines >457metres (1500 feet) will be captured for unlicenced aircraft facilities.

Related features

Aircraft facility

Related chapters

Section 1 chapter 3.8.10

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SALINE COASTAL FLAT

That nearly level tract of land between mean high water and the line of the highest astronomical tide.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	saln_cstflt	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable;
23

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

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Map

A descriptive note is only required when the previous edition map, revision source material or a special instruction from Geoscience Australia indicates precise characteristics of the foreshore flat e.g. mud.

Data rules

Saline coastal flats will be bounded by the Waterline feature.

Saline coastal flat cannot overlap Sea, other Waterbody coverage polygons.

Related features

Junction, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.3 and 3.8.4
Section 3 chapter 6.9.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SALT EVAPORATOR

A flat area, usually segmented, used for the commercial production of salt by evaporation.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	salt_evapor	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

23

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Levee banks or canals less than 5 mm in length at map scale will not be shown within salt evaporators.

Adjacent segments will be shown as one polygon, divided by salt evaporator internal lines.

GEODATA

Map

Salt evaporators will be labelled 'salt evaporator'.

Data rules

Salt evaporators will be bounded by a Waterline feature.

Salt evaporators cannot overlap ;

Relief area coverage polygons (except voids), Building area, any Built-up area coverage feature, Aeronautical area, Sea, any Vegetation coverage feature (except voids)

Related features

Canal, Levee, Salt evaporator internal line, Tile edge and Waterline

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SALT EVAPORATOR INTERNAL LINE

A levee bank or small canal within a salt evaporator.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	salt_ev_i_l	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

114

95 Warburton Groove only.

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Levee banks or canals less than 5 mm in length at map scale will not be shown within salt evaporators.

The lines bounding the Warburton Groove feature should be included in the drainage coverage with a symbol 95, rather than symbol 114.

GEODATA

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Map

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Data rules

Must be entirely within a Salt Evaporator polygon.

Related features

Canal, Levee, Salt evaporator

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SAND

An area predominantly covered with sand and devoid of vegetation.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	sand	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

22

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Note: where existing areas of sand are overlapped by newly defined Woody vegetation, Rainforest or Plantation by definition the sand feature no longer exists.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

Sand will not be shown in area or braided watercourses. (See features Lake and Watercourse).

GEODATA

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Map**Data rules**

Sand will be bounded by a Relief area line feature.

Sand cannot overlap;

Other Relief area coverage polygons, any Vegetation coverage feature (except voids), Aeronautical areas, Lakes, Reservoirs, Watercourse areas, Canal areas or Sea.

Related features

Plantation, Rainforest, Relief area line, Woody vegetation, and Tile edge

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SAND DUNES

Mounds of loose sand usually crescent shaped transverse to the prevailing winds.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	dunes	
Coverage (see Section 3 chapter 4)	q	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable;
25

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one larger representative polygon where they are less than 0.5 mm apart at map scale.

GEODATA

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Map

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Data rules

Sand dunes will be bounded by a Relief area line feature.

Sand dunes cannot overlap;

Other Relief area coverage polygons, any Vegetation coverage feature (except voids), Aeronautical areas, Lakes, Reservoirs, Watercourse areas, Canal areas or Sea.

Related features

Relief area line and Tile edge

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SAND RIDGE

Sand drifts in long ridges tending parallel to and elongating in the direction of the prevailing winds.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	sand_ridge	
Coverage (see Section 3 chapter 4)	s	

Data Attributes

GEODATA and working database

AVERAGE HEIGHT (average_height) [integer; 2,2,I] The average height of the Sand ridges above the surrounding country

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
33

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

The average height of the sand ridges attribute is to be populated, where the average height is shown on the latest previous edition map or compilation. Where the average height was not shown this attribute will be 0.

GEODATA

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Map

Descriptive notes indicating the average height of the sand ridges are to be included, where the average height is shown on the latest previous edition map or compilation.

Data rules

Sand ridges cannot overlap:
Sea, Lakes, Reservoirs, Watercourses or Canals.

Related features

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SEA

The water area surrounding the Australian continent and its offshore islands.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	sea	
Coverage (see Section 3 chapter 4)	f	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Sea or ocean's name.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

10

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

The boundaries and names of Seas will be as defined by Appendix E - 'Limits of Oceans and Seas'.

Note: The sea feature class will be used for seas and oceans on Appendix E. 'Other waters' will be shown as localities. For example, on Burketown E5406 the sea feature will carry the name attribute 'ARAFURA SEA' and the Gulf of Carpentaria would be a locality of type place name.

If two seas/oceans appear on the one tile the boundary will be shown by a junction feature.

Where a sea is nested in an ocean the sea will take precedence.

GEODATA

--

Map

The names of seas will be shown.

The names of Oceans which overlap seas and 'other waters' shown on Appendix E - Limits of Oceans and Seas will be named. Such features will be stored in the working database as Annotation features.

Where space permits, areas of sea will include the note:

'CAUTION: THIS MAP IS NOT TO BE USED
FOR MARITIME NAVIGATION PURPOSES

Refer to the appropriate hydrographic chart for depth information'

The note will be in black, on three lines broken as above and centre justified. The first two lines will be UMC 10 point all caps and the third line will be UMC 5 point caps and lower case.

Data rules

Seas will be bounded by Waterline and Tile edge features. Seas may also be bounded by Junction and Sea wall features.

Sea cannot overlap other framework polygons.

Related features

Junction, Sea wall, Tile edge and Waterline

Related chapters

Section 1 chapter 3.9
Section 3 chapter 6.9.3
Appendix E

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SEA WALL

A solid structure usually of concrete masonry or earth, built to prevent erosion or encroachment by the sea.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	sea_wall	
Coverage (see Section 3 chapter 4)	f	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

71

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Only walls that form part of the coastline and are usually under daily tidal influence will be shown.

GEODATA

Map

Sea walls will be labelled 'sea wall'. Wharves will not be labelled but may be named where named on the latest previous edition map.

Data rules

Sea walls form part of the coastline in the Framework cover, and will replace the equivalent section of waterline.

Wharves coincident with the coastline will be cloned as sea walls.

Related features

Built-up area line, Breakwater, Contour, Island, Jetty, Mainland, Sea, Vegetation line and Wharf

Related chapters

Section 1 chapter 3.8.11
Section 3 chapters 5.11.1 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SEISMIC LINE/CLEARED LINE

A graded path in a straight line.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
10 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	seismic_l	
Coverage (see Section 3 chapter 4)	4	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
99

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:250 000 Seismic Lines/Cleared Lines shown on the base Series 2 data will be shown, unless there is clear evidence they no longer exist. No new Seismic lines/Cleared lines will be added.

At 1:100000 Seismic Lines/Cleared Lines shown on the latest previous edition map and its related 'parent' 250K maps will be shown, unless there is clear evidence they no longer exist. No new Seismic lines/Cleared lines will be added.

GEODATA

Map

Seismic lines/Cleared lines will be labelled, for example 'seismic line', 'cleared line'.

Seismic lines/Cleared lines will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Seismic lines/Cleared lines cannot overlap; Sea, Lakes, Reservoirs, Watercourse areas or Canal areas.

Related features

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SETTLING PONDS

Shallow beds, usually segmented by constructed walls, for the treatment of sewage or other wastes, or used for aquaculture.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		62500	390625

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	sew_pond	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable;
23

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Levee banks less than 5 mm in length at map scale will not be shown within Settling ponds.

Adjacent ponds will be shown as one polygon, separated by Settling pond internal lines.

GEODATA

Map

Settling ponds are to have an accompanying descriptive note eg 'settling ponds', 'tailings pond' unless the words 'settling pond' or 'tailings pond' are included in the name.

Data rules

Settling ponds will be bounded by a Waterline feature.

Settling ponds cannot overlap; Other waterbody coverage polygons, Aeronautical coverage areas, Sea, Vegetation coverage polygons (except voids).

Related features

Mine, Open cut/mining area, Settling pond internal line, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SETTLING POND INTERNAL LINE

Levee banks within settling ponds.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	sew_pond_i_l	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

*SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable; 114*

General Notes

Levee banks less than 5 mm in length at map scale will not be shown within Settling ponds.

GEODATA

Map

Data rules

Must be entirely within a Settling pond polygon.

Related features

Settling ponds

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SPILLWAY

A channel or duct formed around the side of a reservoir past the end of the dam, to convey flood discharge from the watercourse above the reservoir into the watercourse below the dam.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	spillway	
Coverage (see Section 3 chapter 4)	d	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] Name of associated watercourse

PERENNIALITY (perennial) [integer; 1,1,I] Code for perenniality;

- 0 - Not Applicable
- 1 - Perennial
- 2 - Non-perennial

HIERARCHY (hierarchy) [integer; 1,1,I] Importance of associated watercourse

- 0 - Not Applicable
- 1 - Major
- 2 - Minor

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

926

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

A Spillway feature will represent the spillway chute and any associated stilling basins. Where water overtops the dam wall a spillway will not be shown e.g. Hume Dam or Scrivener Dam. (see Dam)

The spillway will carry the Name, Hierarchy and Perenniality attributes of the watercourse to which it relates.

GEODATA

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Map

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Data rules

Spillways must be adjacent to a Reservoir.

Spillways can not overlap;
Built-up areas, Sea, Reservoirs, Lakes, Canal areas or Watercourse areas.

Spillways start on the node of connectors across reservoirs and end on the node of a connector or watercourse below a dam wall.

Related features

Connector, Dam and Reservoir

Related chapters

--

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SPOT ELEVATION

A point on the earth's surface, of known elevation, above or below the Australian Height Datum (AHD66)

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	spot_elevatn	
Coverage (see Section 3 chapter 4)	e	

Data Attributes

GEODATA and working database

ELEVATION (elevation) [number; 7,7,N,2] Elevation in metres from the Australian Height Datum

SOURCE (source) [integer;1,1,I] Code for the source of the Spot elevation;

- 1 - Printed Map
- 2 - Compilation material
- 3 - Digital Topographic Data

POINT DETERMINATION (point) [integer; 1,1,I] Code for the type of Spot elevation

- 1 - Spot elevation
- 2 - Spot elevation inside depression contour
- 3 - Spot elevation on sand ridge
- 4 - Spot elevation captured from contour (to be used only at 1:100 000. For 1:250 000 permission is required from Geoscience Australia see section 3 chapter 6.6.1 Spot Elevations)

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>7

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

52

0 (see Section 3 chapter 6.6)

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

Spot elevations will be selected to best show terrain shape, change of slope and high and low points.

In any group of related features (ridges, peaks, saddles), the highest elevation shall be shown. See Section 3 chapter 6.6.1

The highest spot elevation on the map including the bleed edges shall be shown.

GEODATA

The highest spot elevation within the tile will be shown. See Section 3 chapter 6.6 for treatment of Spot elevations in close proximity to Locality mountains and Horizontal control points and chapter 6.6.1 for selection rules for Spot elevations.

Map

Spot elevations will be labelled with their elevation (See Section 2 chapter 5.12)

Data rules

Contours and Auxiliary Contours must fit logically with Spot elevations.

Spot elevations cannot overlap Lakes, Reservoirs, Watercourse areas, Canal areas, Sea, Building area.

Related features

Benchmark, Horizontal control point, Landmark point, Locality (mountain), Pinnacle and Reef

Related chapters

Section 1 chapter 3.6.5

Section 3 chapters 5.11.1 and 6.6

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SPRING

A place where water issues from the ground naturally.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	spring	
Coverage (see Section 3 chapter 4)	x	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Spring's name - for 100K use only

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The Spring's name - for 250K use only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

73

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology; 0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

This feature will not be shown in densely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' regardless of whether it was shown on/in the base material/digital data. Refer to Appendix C for more information on when to capture this feature.

At 1:100 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to all feature occurrences.

At 1:250 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to new feature occurrences. All

feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

GEODATA**Map****Data rules**

Springs cannot overlap Perennial Lakes, Reservoirs, Watercourse areas, Canal areas or Sea.

Related features

Bore and Waterpoint

Related chapters

Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

STATE BORDER

The boundary defining the division of the Commonwealth of Australia into State/Territory administrations.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	state_border	
Coverage (see Section 3 chapter 4)	f	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable;
80
0 non-printing

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

State Borders which do not follow physical features will be imported from the Geoscience Australia GEODATA 100K Coast Product. State borders which follow physical features will be coincident with those features.

Where a state border coincides with a lock symbol it is logical that the border symbol should be broken and the lock symbol shown. In such circumstances, the state border symbol may be symbolised to symbol number '0' non-printing value.

GEODATA

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Map

State borders will be labelled with State names (See Section 2, 4.6)

State borders will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

State borders will bound mainland polygons.

State borders cannot overlap Sea.

Related features

Boundary - International and Mainland

Related chapters

Section 3 chapters 3.2.4, 5.11.2 and 6.8

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

STOCK GRID

A grid at the opening in a fence to prevent livestock crossing but allowing for the free passage of vehicles.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	grid	
Coverage (see Section 3 chapter 4)	v	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

25

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

General Notes

At 1:100 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' except for Stock grids on Vermin Proof fences which will be shown in all areas.

At 1:250 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide', regardless of whether it previously existed in the base Series 2 data, except for Stock grids on Vermin Proof fences which will be shown in all areas.

Stock grids will not be shown on vehicle tracks with the exception of Stock grids in Vermin or Dog Proof fences which will be shown in all areas.

GEODATA**Map**

The underlying fence symbol will be masked out for the stock grid symbol.

Data rules

Stock grids must be coincident with a node on the road feature, and must fall exactly on the fence. If necessary a vertice should be added to ensure the fence, road and stock grid are coincident with each other.

Stock grids cannot overlap Lakes, Reservoirs, Watercourse areas, Canal areas, Building areas or Sea.

Related features

Fence, Gate and Road

Related chapters

Section 3 chapters 5.9 and 5.11.2
Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

STORAGE TANK

Large vessel for the storage of liquids (not water) or gases, usually associated with refineries or chemical plants.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	stor_tank_p	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

801

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Storage tanks will be shown when the features are sufficiently prominent to serve as landmarks.

This feature will be used to represent the location of an individual storage tank as well as groups of tanks. A group of tanks that cannot be shown individually may also be shown by a representative pattern.

GEODATA

Map

Storage tanks are to have an accompanying descriptive note eg 'storage tanks', 'oil tanks' unless a description is included in the name.

Data rules

Related features

Landmark point and Water tank

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

SWAMP

Land which is so saturated with water that it is not suitable for agricultural or pastoral use and presents a barrier to free passage.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		250000	1562500

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	swamp	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Swamp's name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

908

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Polygons that are smaller than the minimum size for inclusion and are in groups may be aggregated into one large representative polygon where the small areas of swamp are less than 0.5mm apart at map scale.

GEODATA

Map

Watercourses entering swampy areas will be shown only to the limits of the eroded channels.

No direction of flow arrow will be added when a watercourse symbol stops in a swamp. (see Watercourse)

Swamps having distinctive vegetation will be labelled appropriately e.g. lignum, marsh, wetlands, cane grass unless a description is included in the name

Data rules

Swamps will be bounded by Waterlines and may be bounded by Junction features. (See Section 1 3.8.4)

Swamps cannot overlap;
Other waterbody coverage polygons or Sea.

Related features

Connector, Junction, Marine swamp, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.3, 3.8.4 and 3.8.9
Section 3 chapter 6.9.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

TAXIWAY

A route for the movement of Aircraft and vehicles which service them.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:100 000

Feature Usage

GEODATA &
Map

Spatial object

Representation	Chain	
Planimetric Accuracy	- / 40	
Feature code	taxiway	
Coverage (see Section 3 chapter 4)	a	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable;

709

General Notes

Sufficient taxiways will be shown to reflect the movement pattern. Select the major through routes within the area whilst avoiding clutter. Where all taxiways can be shown without causing clutter then they shall be shown.

The end nodes of taxiways shall be coincident with a vertex on the perimeter of the Aircraft Facility Area polygon or with a building representing its destination point.

GEODATA

Map

Data rules

Taxiways must fall wholly within Airport features.

Related features

Aircraft facility, Airport, Aircraft Facility Line

Related chapters

Section 1 chapter 3.8.10

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

TILE EDGE

The line defining the limits of the GEODATA and working database extents.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	1 / 1	
Feature code	tile_edge	
Coverage (see Section 3 chapter 4)	b, c, f, i, o, q, t, w, z, 1 and 3	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>9

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).
For framework cover only.

General Notes

Tile edge features will be used to show the extent of both the working database and GEODATA tile. For the extents of Working data and GEODATA see appendices G and H.

GEODATA

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Map

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Data rules

Tile edge features will bound all polygon features which touch the tile edge in either the working database or the GEODATA tile database.

Sections of tile edge in layers other than the Framework layer will be coincident with the Tile edge in the Framework layer.

Related features

Aircraft facility, Aircraft facility void, Airport, Building, Built-up area, Built-up area void, Canal, Cemetery, Crater, Distorted surface, Foreshore flat, Woody vegetation, Hypsometric area, Island, Kilometric distance indicator, Lake, Land subject to inundation, Mainland, Mangrove, Mangrove flat, Map mask, Marine swamp, Offshore void, Open Cut/mining area, Orchard or vineyard, Park, Plantation, Prohibited area, Prohibited area void, Rainforest, Rapid, Reef, Relief area void, Reserve - Indigenous area, Reserve - Forestry, Reserve - Nature conservation, Reserve - Water supply, Reserve void, Reservoir, Rocky outcrop, Rubbish tip, Saline coastal flat, Salt evaporator, Sand, Sand dunes, Sea, Settling ponds, Swamp, Vegetation Void, Water body void and Watercourse

Related chapters

Section 1 chapters 3.2, 3.7 and 3.8.1
Section 3 chapters 5.11.2 and 5.12
Appendix H

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

TRANSITION POINT

The point where a road or railway enters a tunnel.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	transition_p	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
290

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

General Notes

See Railway tunnel and Road tunnel.

GEODATA

Map

Data rules

Transition points only appear on linear tunnels and not on point tunnels.

Transition points cannot overlap Lakes, Reservoirs, Watercourse areas, Canal areas or Sea.

Transition points must be coincident with a node on the railway or road to which they relate.

Related features

Railway, Railway tunnel, Road, Road tunnel

Related chapters

Section 3 chapters 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

TROPIC OF CAPRICORN

The parallel of latitude 23°26.5'S.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

Map

Spatial object

Representation	Chain	
Planimetric Accuracy	1 / 1	
Feature code	tropic_cap	
Coverage (see Section 3 chapter 4)	5	

Data Attributes

GEODATA and working database

Working database only

*SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
66*

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map; TROPIC OF CAPRICORN

General Notes

GEODATA

Map

The Tropic of Capricorn will be labelled 'Tropic of Capricorn' close to the east and west edges of any map on which it occurs.

The Tropic of Capricorn will be masked where black type unavoidably overprints the feature. The break measurement will be 0.2 mm on either side of the type where it crosses the feature. (Note: the feature will be masked only on the map and will be complete in the data.)

Data rules

Related features

Related chapters

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Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

VEGETATION LINE

A line depicting the boundary of a vegetation polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	veg_l	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>1

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

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GEODATA

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Map

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Data rules

Vegetation lines will bound Woody vegetation, Mangrove, Orchard or vineyard, Plantation, Rainforest and Vegetation void polygons.

Vegetation lines must be coincident with the following features if they fall within 50m at 1:250 000 and 20m at 1:100 000 or if the area created between the boundaries of these features and the vegetation line is less than 62 500 sq m at 1:250 000 and 10 000 sq m at 1:100 000:

Built-up area lines
Building lines
Cultural Area Lines
Offshore lines
Relief area lines where they surround open cut, sand & dunes.
Waterlines where they bound Reservoirs, Settling ponds, Salt evaporators, Sea, Lakes and Perennial Watercourse areas.
Sea wall.
Aircraft facility lines.

Related features

Aircraft facility line, Built-up area line, Building line, Woody vegetation, Mangrove, Offshore line, Orchard or vineyard, Plantation, Rainforest, Relief area line, Sea Wall, Vegetation void and Waterline

Related chapters

Section 2 chapter 2.2.3
Section 3 chapter 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

VEGETATION VOID

An area of land with less than 10% foliage cover of trees or scrub.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		40 000	250 000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	veg_void	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

General Notes

The feature will be used for cleared areas within Woody vegetation, Mangrove, Orchard or vineyard, Plantation and Rainforest polygons. When used for this purpose the minimum size will be 250 000 square metres at 1:250 000 scale and 40 000 square metres for 1:100 000 scale.

This feature will also complete voids in vegetation left by Lakes, Perennial watercourses, Built-up areas, Open cut mines, Runways, Dunes, Aircraft facilities, Airport areas, Reservoirs, Canal areas, Sewage ponds, Salt evaporators, salt pans, claypans and other features which have low tree or shrub coverage. When used for this purpose the minimum size will be that of the feature that creates the void. For example 62 500 sq m at 1:250 000 and 10 000 sq m at 1:100 000 if the void is created by a new lake.

GEODATA

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Map

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Data rules

Vegetation voids will be bounded by a Vegetation line.

Vegetation voids cannot overlap;
Other vegetation coverage polygons or Sea.

Related features

Tile edge and Vegetation line

Related chapters

Section 1 chapter 3.8.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATER BODY VOID

A void in a water body polygon.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		10000	62500

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	w_body_void	
Coverage (see Section 3 chapter 4)	w	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>5

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

0

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

This feature will be used for islands in the mainland.

GEODATA

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Map

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Data rules

Water body voids will be bounded by a Waterline feature.

Water body voids can not overlap other water body area coverage polygons or Sea.

Related features

Locality, Tile edge and Waterline

Related chapters

Section 1 chapters 3.8.2 and 3.8.5

Section 3 chapter 6.3

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATER TANK

A feature constructed on or below the ground for the storage of water.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	tank_dam_p	
Coverage (see Section 3 chapter 4)	x	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Water tank's name – for 100K use only.

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The Water tank's name –for 250K use only.

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

86

0 – Non-printing in close proximity to a populated place.

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

This feature will not be shown in densely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' regardless of whether it was shown on/in the base material/digital data. Refer to Appendix C for more information on when to capture this feature.

At 1:100 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to all feature occurrences.

At 1:250 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Water tanks larger than 140625 sq. m at 1:250 000 or 22500 sq. m at 1:100 000. will be shown as a Reservoir feature.

This feature may represent a group of tanks.

Where a Water tank and Windpump are situated together, only the Windpump, which has the greater landmark value, will be shown. (Refer feature Windpump).

GEODATA

Map

Names will be shown in sparsely settled areas.

As the density of the cultural detail increases, names will be progressively omitted.

Water Tanks to have an accompanying descriptive note e.g.: aquarium for features not being used directly for human or livestock consumption.

Where a bore and a water tank are situated together, both will be included in the data but only the water tank will be shown as it usually has the greater landmark value. Bore should be symbolised to 0 (non - printing).

Water Tanks plotted within 2.5 mm at map scale of a populated place will be symbolised to 0 (non-printing).

Data rules

Water tanks can not overlap Reservoirs, Building area, Watercourse areas, Canal areas or Sea.

Related features

Bore, Dam, Landmark point, Reservoir, Storage tank, Waterpoint and Windpump

Related chapters

Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATERCOURSE

A natural channel along which water may flow from time to time.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
10 mm		100000	625000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	Polygon
Planimetric Accuracy	100 / 40	9999 / 9999
Feature code	watercours_l	watercours_a
Coverage (see Section 3 chapter 4)	d	w

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Watercourse name

PERENNIALITY (perennial) [integer; 1,1,I] Code for perenniality;

- 1 - Perennial
- 2 - Non-perennial

HIERARCHY (hierarchy) [integer; 1,1,I] Importance of associated watercourse

- 1 - Major
- 2 - Minor

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

- <tile-id>4 - feat_code "watercours_l"
- <tile-id>5 - feat_code "watercours_a"

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

Lines (250K only) :

- 92 - Major
- 940 - Minor
- 942 - Minor with direction of flow
- 922 - Major with direction of flow

Lines (100K only) :

- 91 - Major Non Perennial
- 92 - Major Perennial
- 940 - Minor Perennial
- 944 - Minor Non Perennial

Polygons (250K & 100K);
 10 - *Perennial*
 11 - *Non perennial*
 0 - *Containing linear braided watercourses.*

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Watercourses shown as double line streams on the latest previous edition map or compilation material at the comparable scale will be shown as polygons. Other watercourses will be shown as polygons where they are wider than 1 mm at scale and meet the area criteria.

The perenniality and hierarchy of Watercourses will be classified according to Appendix D - Inland water features guide where the watercourse is shown on the guide. Perenniality of watercourses not on the guide will be non-perennial unless there is strong evidence to the contrary. Watercourse not shown on the guide will be classified as minor-non perennial except for tidal watercourses in mangrove. Once a watercourse enters or bounds a mangrove, that watercourse will become perennial and then remains perennial from that point to the coastline.

A watercourse may be classified on the guide as perennial but shown as an area with one or more channels running down its length. The channels will be coded as perennial watercourse lines and the watercourse areas will be coded as non-perennial watercourse areas. In this situation a channel may at times be in close proximity to or coincident with the waterline that defines the edge of the watercourse area. Both the linear and area instances will be coded as major. See GEODATA notes for the handling of braided streams.

Braided streams fall into two categories; those that flow within clearly defined primary banks and those that don't. There is slightly different handling of each category. Section 3 chapter 6.9.4 shows the handling of braided streams lying in primary banks

GEODATA

For braided streams within clearly defined primary banks all channels will carry the name and perenniality of the Watercourse. All channels will have a planimetric accuracy of 9999. For Watercourses with hierarchy major the channel(s) identified in Appendix D will be coded as major. Remaining channels will have a hierarchy of minor. The area between the primary banks will be shown as a watercourse area.

For braided streams not in clearly defined banks, at least one channel will carry the name and perenniality of the watercourse. Other channels that form part of the watercourse should carry the name and perenniality. However, if it is unclear whether the channel is part of the named watercourse it should be left unnamed and follow the rules for watercourses not shown on Appendix D. For Watercourses with hierarchy major a contiguous channel will be coded as major. Where possible this channel will be an identifiable main channel. Where there is no identifiable main channel a channel will be selected which follows the general course of the stream and, where possible, links waterholes. Remaining channels will have a hierarchy of minor

Map

At 1:250 000 symbols 922 and 942 will be used for the last chain of watercourses which dissipate and where the direction of flow may be unclear. The end node must be at the downstream end of the feature. No direction of flow arrow will be added when a watercourse symbol stops in a swamp, or where direction of flow can be reasonably determined from the interpretation of topography at 1:250 000.

The perenniality of single line watercourses will not appear on the map. The hierarchy of double line Watercourses will not be shown.

There is no polygon infill associated with a braided watercourse. Braided streams with a hierarchy of major will have only the channel coded as major shown with symbol 92 (major watercourse).

Data rules

Watercourses will have nodes at all intersections.

Watercourse lines cannot overlap Lake perennial, Reservoirs, Perennial Watercourse areas and Canal areas.

Perennial watercourse polygons cannot overlap Sea, Built-up areas, other waterbody coverage areas or vegetation coverage polygons (except voids).

Non-perennial watercourse polygons cannot overlap Sea, Built-up areas, other waterbody coverage areas or vegetation coverage polygons (except voids, Woody vegetation and Rainforest).

Watercourse polygons will be bounded by waterline features and may be bounded by Junction and Rapid area line features.

Related features

Canal, Connector, Flow Direction Arrow, Ford, Junction, Lake, Locality (gorge), Lock, Mangrove, Prohibited area line, Rapid, Rapid area line, Reserve line, Reservoir, Tile edge, Waterfall, Waterhole and Waterline

Related chapters

Section 1 chapters 3.8.3, 3.8.4, 3.8.8 and 3.9.1

Section 2 chapters 2.2.3 and 5.16

Section 3 chapters 5.7, 5.11.2, 6.9.1, 6.9.4 and 6.10

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATERFALL

A sudden descent of water over a step or ledge in the bed of a watercourse.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	fall_p	
Coverage (see Section 3 chapter 4)	d	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Waterfall's name

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

89 - printing

0 - where coincident with a cliff symbol

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Width of symbol in millimetres; minimum feature width is 1.

ORIENTATION (orientation) [binary; 4,5,B] Orientation in whole degrees from East going anti-clockwise; 0 - 360

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

GEODATA

Map

Waterfalls will be symbolised except where the waterfall is associated with a symbolised cliff, in which case the Waterfall symbol will not be shown.

Whether or not they are symbolised Waterfalls are to have an accompanying descriptive note 'falls' or 'numerous falls' unless the word 'falls' or 'waterfall' is included in the name.

Data rules

Waterfalls must be coincident with a node on a watercourse chain or fall within a watercourse area.

Waterfalls cannot overlap;
Sea, Lakes, Canal areas or Reservoirs.

Related features

Cliff and Watercourse

Related chapters

Section 3 chapters 5.8, 5.9 and 5.11.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATERHOLE

A natural depression which holds water, within a non-perennial watercourse or a non-perennial lake.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	waterhole	
Coverage (see Section 3 chapter 4)	d	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Waterhole's name

PERENNIALITY (perennial) [integer; 1,1,I] Code for perenniality;
1 - Perennial

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]
Symbol number applicable:
81

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;
0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

This feature will be shown when it does not exceed 62500 sq m for 1:250 000 or 10000 sq m for 1:100 000. Features larger than these dimensions will be shown as lakes. (see Lakes and Waterpoints)

All waterholes will be classified as perennial.

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

Map

Waterholes which are distinctive may have an accompanying descriptive note e.g: 'salt', 'billabong' unless the words 'salt', 'billabong' etc are included in the name.

Data rules

Waterholes must be coincident with a node on a Watercourse chain or fall within a Watercourse polygon.

Waterholes cannot overlap;
Sea, perennial Lakes or Reservoirs.

Related features

Connector, Lake, Watercourse and Waterpoint,

Related chapters

Section 3 chapters 5.11.2 and 6.9.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATERLINE

A line depicting the boundary of a hydrographic area feature.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	waterline	
Coverage (see Section 3 chapter 4)	f	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<tile-id>1 - in Framework layer

<tile-id>1 - in Waterbody layer, delimiting "lake" or "reservoir"

<tile-id>4 - in Waterbody layer, not delimiting "lake" or "reservoir"

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol numbers applicable:

Note: The Waterline feature can bound various polygon types & will have its symbol number changed accordingly. The symbol numbers shown apply to Waterlines bounding the following features.

Line Polygon area

symbol ; bounded;

94 Definite boundary on Lake, watercourse area, canal area, coastline

0 Coastline under cliff
(non printing line)

0 Subject to inundation
(non printing line)

0 Mangrove flat
(non printing line)

94 Reservoir

0 Saline coastal flat
(non printing line)

0 Swamp
(non printing line)

0 Marine swamp
(non printing line)

114 Salt evaporator
114 Settling pond

OLD UNIQUE FEATURE IDENTIFIER (old_ufi) [character; 10,10,C] UFI used for this feature in GEODATA TOPO-250K Series 1.x. Null for new features (see Section 3 chapter 5.15).

General Notes

When bounding sea and estuarine areas, the line is indicative of the position of mean high water. The exception is in Mangroves, where the line is indicative of the position of the seaward side of the mangroves.

The shoreline of lakes will be the line washed by the water when the feature is filled.

The shoreline of reservoirs formed by water impounded by dams or weirs will be shown at the top water level.

This feature is also used to depict the banks of a double line watercourse.

GEODATA

Map

Data rules

Waterlines will bound Canal, Island, Lake, Land subject to inundation, Mainland, Mangrove Flat, Marine swamp, Reservoir, Saline Coastal Flat, Salt evaporator, Sea, Settling pond, Swamp, Waterbody void and Watercourse polygons.

Waterlines bounding saline coastal flats and mangrove flats will be coincident with the waterline in the framework layer where the saline coastal flat or mangrove abuts the sea.

Related features

Built-up area line, Canal, Cliff, Contour, Island, Lake, Land subject to inundation, Mainland, Mangrove flat, Marine swamp, Offshore line, Prohibited area line, Rapid, Reserve line, Reservoir, Saline coastal flat, Salt evaporator, Sea, Settling ponds, Swamp, Vegetation line, Water body void and Watercourse

Related chapters

Section 1 chapter 3.9
Section 2 chapter 2.2.3
Section 3 chapters 5.11.1, 5.11.2, 6.9.3 and 6.9.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WATERPOINT

An isolated natural depression which holds water, not within Watercourses.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	waterpoint	
Coverage (see Section 3 chapter 4)	x	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Waterpoint's name – for 100K use only

WATERPOINT CODE (waterpoint) [integer; 1,1,I] Code for the type of Waterpoint;

- 1 - Native well
- 2 - Gnamma hole
- 3 - Soak
- 4 - Rockhole
- 5 - Pool

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The Waterpoint's name –for 250K use only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

82

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

This feature will not be shown in densely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' regardless of whether it was shown on/in the base material/digital data. Refer to Appendix C for more information on when to capture this feature.

At 1:100 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to all feature occurrences.

At 1:250 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

This feature will be shown when it does not exceed 62500 sq m for 1:250 000 or 10000 sq m for 1:100 000. Features larger than these dimensions will be shown as lakes. (see Lakes and Waterholes)

Indigenous sacred sites will not be named as sacred sites on the map even if named on a previous edition map, but the feature may be a lake, pool or waterhole in which case the appropriate map symbol and hydrological name will be used.

GEODATA

Map

Waterpoints are to have an accompanying descriptive note eg 'pool', 'soak' unless the words 'pool' or 'soak' etc are included in the name.

Data rules

Waterpoints can not overlap Sea, Watercourse line, Watercourse area, Lakes, Canal areas, Reservoirs or Building areas.

Related features

Lake, Spring, Water Tank and Waterhole

Related chapters

Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WHARF

A structure built from the land parallel to shore to provide for the berthing of vessels.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
1 mm			

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	wharf	
Coverage (see Section 3 chapter 4)	h	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:
752

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

See also Jetty

GEODATA

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Map

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Data rules

Wharves coincident with coastlines will be cloned to the Framework coverage as sea walls.

Related features

Breakwater, Jetty and Sea wall

Related chapters

Section 3 chapters 3.2.4 and 5.11.1

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WINDBREAK

A narrow strip of natural or planted trees, or scrub, positioned so as to break the force of the prevailing wind.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
5 mm			

Scales

1:250 000
&
1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Chain	
Planimetric Accuracy	100 / 40	
Feature code	windbreak	
Coverage (see Section 3 chapter 4)	j	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

87

General Notes

At 1:250 000 Windbreaks shown on base Series 2 data will be retained, unless there is clear evidence they no longer exist. No new Windbreaks will be added.

At 1:100 000 Windbreaks shown on the latest previous edition map and its related 'parent' 250K maps will be shown, unless there is clear evidence they no longer exist. Windbreaks will be added when they can be confirmed on imagery and on additional approved revision source material.

No distinction will be made between different types of trees. This feature does not include uncleared portions of road reserves or fauna protection corridors regardless of whether or not that feature is represented on the previous edition map or in the data.

GEODATA

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Map

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Data rules

Windbreaks cannot overlap;
Sea, Watercourse areas, Lakes, Canal areas, Reservoirs, Building areas, Sand areas, Open Cut areas or Sand dune areas.

Related features

Woody vegetation

Related chapters

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WINDPUMP

A tower fitted with a wind-driven pump.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	windpump	
Coverage (see Section 3 chapter 4)	x	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Windpump's name – for 100K use only

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

NAME (name) [character; 50,50,C] The Windpump's name – for 250K use only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

434

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology;

0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

This feature will not be shown in densely settled regions as defined by Appendix C 'Fence and Water Facilities Guide' regardless of whether it was shown on/in the base material/digital data. Refer to Appendix C for more information on when to capture this feature.

At 1:100 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to all feature occurrences.

At 1:250 000 in sparsely and moderately settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

Windpumps will be shown when the features are sufficiently prominent to serve as landmarks.

This feature will be used to represent the location of an individual windpump as well as groups of windpumps. A group of windpumps that cannot be shown individually may also be shown by a representative pattern.

GEODATA

Map

Windpumps will be named where named on the latest previous edition map.

Data rules

Windpumps cannot overlap Sea, perennial Watercourse areas, Lakes perennial, Canal areas, Reservoirs or Building areas.

Related features

Bore and Water tank

Related chapters

Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WOODY VEGETATION

An area of land with woody vegetation greater than 10% foliage cover (includes trees and shrubs).

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K
		40000	250000

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Polygon	
Planimetric Accuracy	9999 / 9999	
Feature code	forest	
Coverage (see Section 3 chapter 4)	t	

Data Attributes

GEODATA and working database

COVER DENSITY (coverdensity) [integer; 1,1,I] Density of foliage coverage;

1 - Sparse (Foliage coverage of 10–30%)

2 – Dense (Foliage coverage of 30-70%)

3 – Closed (Foliage coverage of 70%+)

GROWTH FORM (growthform) [integer; 1,1,I] The Majority Growth Form Type;

1 - Tree

2 – Tree Mallee

3 – Shrub

4 – Mallee Shrub

5 – Heath Shrub

6 – Chenopod Shrub

7 – Other (unknown)

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

<file-id>2

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

Polygons (250K only)

2

Polygons (100K only)

201 – Sparse

200 – Dense

2 – Closed

General Notes

This classification excludes mangroves, orchards, plantations and rainforest.

Size criteria will not apply where Woody vegetation completely covers small islands, i.e. such islands will have a matching Woody vegetation polygon.

GEODATA

Woody vegetation can overlap Built-up area.

Map

Woody vegetation will be masked for Built-up areas on the map

Data rules

Woody vegetation is bounded by a Vegetation line feature.

Woody vegetation cannot overlap;

Open Cut, Building area, Sand, Sand dunes, Aircraft facility polygons, Airport area, Canal area, Reservoirs, Rocky Outcrop, Settling ponds, Salt evaporators, Lake perennial, Watercourse area perennial, Mangrove Flat and Sea.

Related features

Mangrove, Orchard or vineyard, Plantation, Rainforest, Sand, Tile edge, Vegetation line and Windbreak

Related chapters

Section 3 chapter 6.2

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

WRECK

A disabled vessel, either submerged or visible, which is attached to, or foul of, the bottom or cast up on the shore.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	wreck	
Coverage (see Section 3 chapter 4)	n	

Data Attributes

GEODATA and working database

NAME (name) [character; 50,50,C] The Wreck's name

RELATIONSHIP (relationship) [Integer; 1,1,I] Code for relationship to sea level;

- 4 - Bare
- 5 - Tidal
- 6 - Submerged

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable;

756 - Bare or Tidal

759 - Submerged

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 size and any other selection criteria apply to all feature occurrences.

At 1:250 000 size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data will be retained unless there is clear evidence they no longer exist.

All wrecks visible above water level and all those submerged wrecks which constitute a danger to shipping will be shown.

GEODATA

Map

Wrecks may be named and the date the vessel went aground may be included when it is of historical or general interest.

Data rules

Wrecks cannot overlap Building areas.

Related features

Related chapters

Section 2 Chapter 8.1, 9.1, 10
Section 3 chapter 3.2.4

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

YARD

A small area of land enclosed by a fence and generally used for confining stock.

Minimum Size for Inclusion

Dimensions		Area (sq m)	
Length	Height	100K	250K

Scales

1:250 000 & 1:100 000

Feature Usage

GEODATA & Map

Spatial object

Representation	Point	
Planimetric Accuracy	100 / 40	
Feature code	yard	
Coverage (see Section 3 chapter 4)	u	

Data Attributes

GEODATA and working database

DATA QUALITY POINTER (q_info) [character; 8,8,C] Pointer to attribute and feature reliability (see Section 1 chapter 3.5 and Section 3 chapter 5.14);
<tile-id>4

UNIQUE FEATURE IDENTIFIER (ufi) [character; 10,10,C] Alphanumeric feature identifier (see Section 1 chapter 3.4 and Section 3 chapter 5.14)

Working database only

SYMBOL (symbol) [binary; 4,5,B]

Symbol number applicable:

433

0 – non-printing in close proximity to a bore or homestead

FEATURE WIDTH (feat_wid) [Floating point; 8,10,F,4] Currently not used by symbology;

0

ORIENTATION (orientation) [binary; 4,5,B] Currently not used by symbology; 0

TEXT NOTE (text_note) [character; 30,30,C] Descriptive note to appear on map

General Notes

At 1:100 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide', size and any other selection criteria apply to all feature occurrences.

At 1:250 000 this feature will only be shown in sparsely settled regions as defined by Appendix C 'Fence and Water Facilities Guide', regardless of whether it previously existed in the base Series 2 data. Size and any other selection criteria apply to new feature occurrences. All feature occurrences existing in the base Series 2 data in sparsely settled regions will be retained unless there is clear evidence they no longer exist.

Features greater than 390625 sq m for 1:250 000 scale and 62500 for 1:100 000 will be depicted using the feature Fence (see Fence).

GEODATA

Map

Yards that are within 2mm at map scale of a bore or homestead will be symbolised to 0 (non-printing)

Data rules

Yards cannot overlap Sea, Watercourse area perennial, Lakes perennial, Canal areas, Reservoirs or Building areas.

Related features

Fence

Related chapters

Appendix C

Note: See disclaimer in Appendix A chapter 1.1 regarding **Related features** and **Related chapters**

5. Secondary Table Dictionary

5.1 Data Quality Table

The Data Quality Table is a secondary table which holds data quality information about each feature instance in the data set. Each tile has one DQT, which has six fields.

COLUMNS

KEY FIELD (Q_INFO) [CHARACTER; 8]

Value held in the foreign key attribute of the primary attribute tables.

FEATURE RELIABILITY (FEAT_REL) [DATE]

Date of satellite imagery, field verification or other event which verified the existence of the feature. For first production of Series 2 GEODATA see table in Section 1 chapter 4.3. Only month and year information are significant. The default will be the first of the respective month. If the month is not known then the default is 1 January of that year.

ATTRIBUTE RELIABILITY (ATT_REL) [DATE]

Date on which an attribute value of the feature was last verified. If one attribute of the feature is amended it is assumed that all attributes have been verified. For first production of Series 2 GEODATA see table in Section 1 chapter 4.3. The default will be the first of the respective month. If the month is not known then the default is 1 January of that year.

PLANIMETRIC ACCURACY (PLAN_ACC) [INTEGER; 4]

Standard deviation in metres of the position of the feature in horizontal coordinates. If a planimetric accuracy for the feature is not applicable relevant or cannot be reliably quoted then this field shall contain 9999.

ELEVATION ACCURACY (ELEV_ACC) [INTEGER; 4]

Standard deviation in metres of the accuracy of the elevation coordinates of the feature.

SOURCE AUTHORITY (SOURCE) [CHARACTER; 50]

Official name of the authority which originated the spatial object.

5.2 Tile Quality Information Table

The Tile Quality Information Table is a secondary table holding quality information about the data set in general. Each layer has attached its own copy of this table, which has eight fields.

COLUMNS

TILE NAME (<i>TILE_NAME</i>) [<i>CHARACTER; 50</i>]
TILE CODE OR MAP NUMBER (<i>TILE_CODE</i>) [<i>CHARACTER; 10</i>]
THEME (<i>THEME</i>) [<i>CHARACTER, 20</i>]
TECHNICAL SPECIFICATION / VERSION (<i>TECH_SPEC</i>) [<i>CHARACTER; 20</i>]
QUALITY CONTROL PASSED DATE (<i>QC_PASSED</i>) [<i>DATE</i>]
FORMAT CONVERSION SOFTWARE (<i>FMT_CONV_SW</i>) [<i>CHARACTER, 30</i>]
FORMAT CONVERSION DATE (<i>FMT_CONV_DT</i>) [<i>DATE</i>]
DATUM (<i>DATUM</i>) [<i>CHARACTER, 30</i>]

5.3 Tile Frequency Table

The Tile Frequency Table is a secondary table holding data quality information about the quantities of each feature class in a layer. Each layer has attached its own copy of this table, which has two fields. Note: the universe polygon will not be listed.

COLUMNS

FEATURE CLASS (<i>FEAT_CODE</i>) [<i>CHARACTER; 12</i>]
NUMBER OF FEATURE INSTANCES (<i>FREQUENCY</i>) [<i>BINARY;4,5,B</i>]

Examples of the contents held by Tile Quality Information table and the Tile Frequency table can be found in Appendix I.

5.4 Secondary Attribute Tables

Most of the attributes in GEODATA are 'encoded'. The Secondary Attribute Tables set out the meaning of the attribute codes.

The following secondary tables are required:

AUTHORITY

authority [integer; 4]	description [character; 80]
0	Not applicable
1	State/Territory National Parks and Wildlife Service or equivalent
2	Aboriginal and Torres Strait Islander Commission
3	Aboriginal Lands Trust
4	State Wildlife Authority
5	Local Government authority
6	Department of the Environment and Heritage
7	Department of Defence (Commonwealth)
9	State Forestry Commission
10	State/Territory Lands Department
11	Aboriginal Land Council
12	ACT Parks and Conservation Service
13	Other State or Federal Government organisations
14	Great Barrier Reef Marine Park Authority
15	State Department of Primary Industry
16	State Department of Water Resources/Public Works
17	Queensland Department of Family and Community Services and Aboriginal and Islander Affairs
18	Department of Natural Resources, Mines and Energy
19	Conservation and Land Management
20	Department of Indigenous Affairs
9999	Other (not specified)

BUILDING

building [integer; 1]	description [character; 20]
1	OPERATIONAL
2	RUIN
3	ABANDONED HOMESTEAD

CLASSIFICATION

class [integer; 1]	description [character; 20]
0	N/A
1	DUAL CARRIAGEWAY
2	PRINCIPAL ROAD
3	SECONDARY ROAD
4	MINOR ROAD
5	TRACK

CONTOUR

contour [integer; 1]	description [character; 20]
0	N/A
1	STANDARD
2	DEPRESSION
3	CONNECTOR ON CLIFF/ CUTTINGS/ EMBANKMENT/ RAZORBACK
4	CONNECTOR STANDARD
5	INTERPOLATED CONTOUR

COVER DENSITY

coverdensity [integer; 1]	description [character; 10]
0	N/A
1	SPARSE
2	DENSE
3	CLOSED

FACILITY

facility [integer; 1]	description [character; 20]
1	AIRPORT
2	LANDING GROUND
3	HELIPORT

FORMATION

formation [integer; 1]	description [character; 20]
0	N/A
1	SEALED
2	UNSEALED
3	UNKNOWN
4	UNDER CONSTRUCTION

FUNCTION

facility [integer; 2]	description [character; 35]
0	N/A
1	AMBULANCE STATION
2	AGED CARE FACILITY
3	COMMUNITY CENTRE
4	DAY CARE CENTRES / KINDERGARTENS
5	DOCTORS SURGERY
6	FIRE STATION
7	HISTORICAL BUILDING
8	HOSPITAL
9	PLACE OF WORSHIP
10	POLICE STATION
11	POWER STATION
12	PUBLIC HALL
13	REFINERY
14	SCHOOL
15	EMERGENCY SERVICES CENTRE
16	SHOPPING CENTRE
99	OTHER OR FUNCTION UNKNOWN

GAUGE

gauge [integer; 1]	description [character; 20]
0	N/A
1	STANDARD
2	BROAD
3	NARROW
4	OTHER
5	UNKNOWN
6	STANDARD-BROAD
7	STANDARD-NARROW

GROWTH FORM

growthform [integer; 1]	description [character; 20]
0	N/A
1	TREE
2	TREE MALLEE
3	SHRUB
4	MALLEE SHRUB
5	HEATH SHRUB
6	CHENOPOD SHRUB
7	OTHER (UNKNOWN)

HIERARCHY

hierarchy [integer; 1]	description [character; 15]
0	N/A
1	MAJOR
2	MINOR

LOCALITY

locality [integer; 2]	description [character; 25]
1	BAY-INLET-COVE
2	BEACH
3	CAPE-HEADLAND-POINT
4	HOMESTEAD
5	ROAD JUNCTION
6	MOUNTAIN-PEAK-HILL
7	PASS
8	POPULATED PLACE
9	WATERBODY ISLAND
10	PLACE NAME
11	GORGE
12	CEMETERY

PARK

park [integer; 2]	description [character; 20]
0	N/A
1	GARDEN
2	RECREATION AREA
3	GOLF COURSE
4	RACECOURSE
5	OVAL
6	MULTIPLE USE
7	CIVIC SQUARE
8	SHOWGROUND
9	RIFLE RANGE
10	OTHER

PERENNIALITY

perenniality [integer; 1]	description [character; 15]
0	N/A
1	PERENNIAL
2	NON PERENNIAL

PLANTING TYPE

type [integer; 1]	description [character; 40]
1	SOFTWOOD
2	HARDWOOD
3	VINEYARD
4	COFFEE
5	BANANAS
6	TREE NUTS
7	OTHER ORCHARD TYPE (unspecified)

POINT DETERMINATION

point [integer; 1]	description [character; 40]
1	SPOT HEIGHT
2	SPOT HEIGHT IN DEPRESSION
3	SPOT HEIGHT ON SAND RIDGE
4	SPOT HEIGHT CAPTURED FROM CONTOUR

PRODUCT

product [integer; 1]	description [character; 15]
1	WATER
2	GAS
3	OIL
4	GAS AND OIL
5	OTHER
6	UNKNOWN

REEF

reef [integer; 1]	description [character; 15]
1	REEF-CAY
2	SHOAL-BANK-PATCH

RELATIONSHIP

relationship [integer; 1]	description [character; 20]
0	N/A
1	ELEVATED
2	ABOVE GROUND
3	UNDERGROUND
4	BARE
5	TIDAL
6	SUBMERGED

SOURCE

source [integer; 1]	description [character; 40]
1	PRINTED MAP
2	COMPILATION MATERIAL
3	DIGITAL TOPOGRAPHIC DATA

STATE/ TERRITORY

state [integer; 1]	Description [character; 3]
0	N/A
1	ACT
2	JBT
3	NSW
4	NT
5	QLD
6	SA
7	TAS
8	VIC
9	WA

STATUS

status [integer; 1]	description [character; 20]
1	OPERATIONAL
2	ABANDONED
3	UNDER CONSTRUCTION

TRACKS

tracks [integer; 1]	description [character; 10]
1	ONE
2	MULTIPLE
3	UNKNOWN

WATERPOINT

waterpoint [integer; 1]	description [character; 20]
0	N/A
1	NATIVE WELL
2	GNAMMA HOLE
3	SOAK
4	ROCK HOLE
5	POOL

6. Symbol Dictionary

6.1 Symbols

Symbols are arranged in alphanumeric order by symbol number. The same number may be used for different symbols provided they have different spatial object types.

Hot spots and orientation are given for point symbols. The hot spot is the location on the symbol of the point feature in the database which the symbol represents. Where a value is given for orientation, the example in the symbol dictionary is aligned in that orientation. Where no value is given the orientation is not used for that feature and it is shown in the default orientation of 0.

For chain features the symbol is the length of the feature and centred on the feature unless otherwise stated.

Measurements follow these conventions: for Point symbols the measurement will be to the outer boundary of the symbol unless otherwise indicated; for Chains measurements will be from line centre to line centre for spacing ticks etc and from line centre to the edge for tick lengths and verges. Both conventions for chains will be unless otherwise indicated.



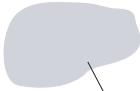

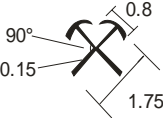


Screen angles will be measured in a clockwise direction from horizontal.

Samples of screens referenced are given in the following section.

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
eg: Screen: LINE_25_45_41_RED 485

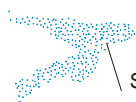

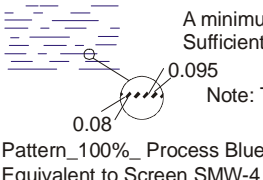
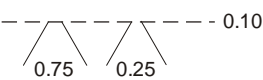
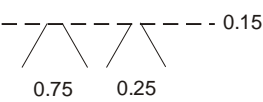


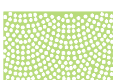
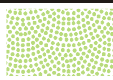

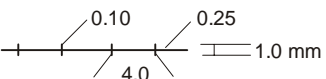
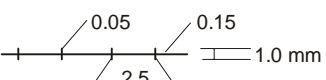
Symbol Number Feature Description Symbol colour is Black unless otherwise specified

Symbol Number	Feature Type	Feature	Description	Symbol colour is Black unless otherwise specified
10	Polygon	Lake perennial Canal Watercourse perennial Reservoir Sea	 Dot_20_105_150_ Process Blue	
102	Chain	Relief area line Bounding open cut/ mining area	0.15 	
102	Polygon	Open cut/ mining area	 Screen: Dot_10_45_150_Black	
103	Point	Gas well	 0.60mm	Hot spot at the centre of the circle
106	Point	Mine		Hot spot 
11	Point	Bore	0.75mm  Colour: Process Blue	Hot spot at the centre of the circle

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
eg: Screen: LINE_25_45_41_RED 485

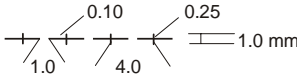
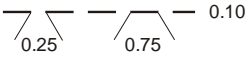
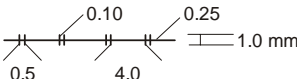
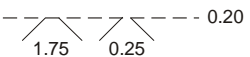

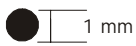


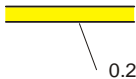
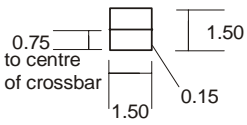
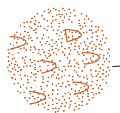
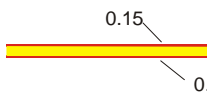

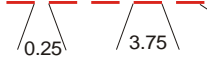
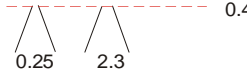
Symbol Number	Type	Feature	Description	Symbol colour is Black unless otherwise specified
11	Polygon	Lake <i>non-perennial</i> Watercourse <i>non-perennial</i>		Screen: Equivalent to Screen Random Dot 1 100% PROCESS BLUE
114	Chain	Waterline <i>Bounding salt evaporator & settling pond</i> Salt evaporator internal line Settling pond internal line		Colour: Process Blue
14	Polygon	Land subject to inundation		A minimum of two lines will be included in each polygon. Sufficient lines will be included in small polygons to indicate their shape. Note: The horizontal line will be broken by a line screen at 45°. Pattern_100%_Process Blue Equivalent to Screen SMW-4
170	Chain	Built-up area line <i>Bounding Rubbish tip</i>		
183	Chain	Conveyor		
2	Polygon	Woody Vegetation <i>All 250K or Closed (100K)</i>		Screens: Dot_15%_60_150_Green PMS 347 Dot_30%_90_150_Process Yellow
20	Chain	Ferry route		
200	Polygon	Woody Vegetation <i>Dense</i>		Pattern Screen: DW-10 Screens: Dot_15%_60_150_Green PMS 347 Dot_30%_90_150_Process Yellow
201	Polygon	Woody Vegetation <i>Sparse</i>		Pattern Screen: DW-9 Screens: Dot_15%_60_150_Green PMS 347 Dot_30%_90_150_Process Yellow
205	Chain	Railway and Road Tunnel		0.1 mm line weight
206	Chain	Railway <i>Single</i>		Cross ties at 90° to the line and centred on the line
208	Chain	Railway <i>Light</i>		Cross ties at 90° to the line and centred on the line

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

Symbol Number Type Feature Description Symbol colour is Black unless otherwise specified

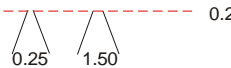
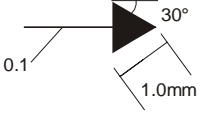



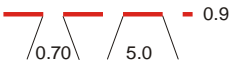
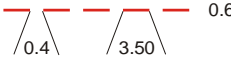
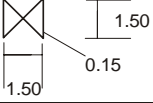

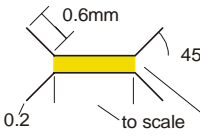
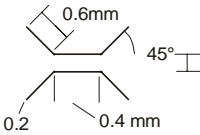
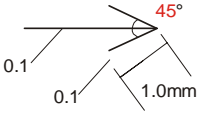
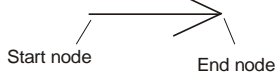


209	Chain	Railway Abandoned		Cross ties at 90° to the line and centred on the line Gaps centred between cross ties
21	Chain	Ford		
210	Chain	Railway Multiple		Cross ties at 90° to the line and centred on the line
22	Chain	Foot track		
22	Polygon	Foreshore flat Sand		Screen: Equivalent to Screen Random Dot 1 Solid BROWN 471
222	Point	Railway station		Hot spot at the centre of the circle
23	Polygon	Saline coastal flat Salt evaporator Settling ponds		Screen: Equivalent to Screen Random Dot 1 100% PROCESS BLUE
24	Polygon	Park		Screen: Dot_80%_60_150_Green PMS 347
245	Chain	Railway causeway Road causeway		If feat_wid is 0.15 or 0.25 the symbol is 0.5 wide and solid black. For other valid feat_wid values the symbol is 0.4 plus the value of feat_wid wide and the infill is the value of feat_wid wide and solid red PMS 485.
25	Point	Stock grid		Hot spot at centre of square Orientation 0
25	Polygon	Sand dunes		Screen: Equivalent to Screen Sand Dunes 1 100% BROWN PMS 471
250	Chain	Road Dual carriageway		Digital feature lies halfway between the two lines Gap will have 100% Process Yellow Infill Colour: 100% Red PMS 485
251	Chain	Road Principal sealed		Colour: 100% Red PMS 485
252	Chain	Road Under construction		Lineweight as per classification Colour: 100% Red PMS 485
253	Chain	Road Minor unsealed		Colour: 100% Red PMS 485

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

Symbol Number Feature Description Symbol colour is Black unless otherwise specified

254	Chain	Road Vehicular track	 0.2 Colour: 100% Red PMS 485
255	Chain	Road destination arrow (With Arrow)	 30° 0.1 1.0mm  Start node End node
256	Chain	Road Secondary sealed	 0.6 Colour: 100% Red PMS 485
257	Chain	Road Minor sealed	 0.4 Colour: 100% Red PMS 485
258	Chain	Road Principal unsealed	 0.70 5.0 0.9 Colour: 100% Red PMS 485
259	Chain	Road Secondary unsealed	 0.4 3.50 0.6 Colour: 100% Red PMS 485
26	Point	Gate	 1.50 0.15 Hot spot Road Orientation 90 Fence line
26	Polygon	Building Building type: operational	 100% black
260	Chain	Railway bridge Road bridge	 0.6mm 45° 0.2 to scale Infill the lineweight of the road or railway symbol. Where the value of feat_wid is 0.15 or 025 the infill will be solid black. For other valid feat_wid values the infill will be solid red PMS 485. Digital feature
260	Point	Railway bridge Road bridge	 0.6mm 45° 0.2 0.4 mm Gap of the lineweight of the road or railway symbol. Hot spot Orientation 0
265	Chain	Feature Pointer	 45° 0.1 1.0mm  Start node End node
266	Chain	Railway Overpass	0.2mm space on either side of inner rail symbol will mask all rail and road features which cross its path (measurement to be taken from edge of rail line symbol)  Lineweight of the rail symbol (feat_wid).
267	Chain	Road Overpass	0.2mm space on either side of inner road symbol will mask all rail and road features which cross its path (measurement to be taken from edge of road line symbol)  lineweight of the road symbol (feat_wid).

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

Symbol Number Type Feature Description Symbol colour is Black unless otherwise specified






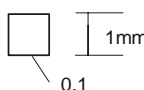
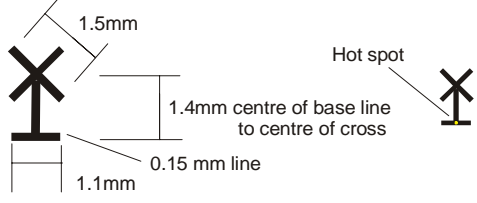
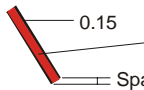
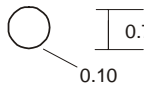
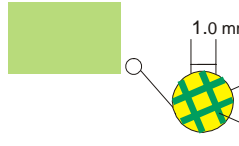

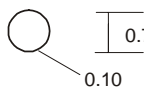
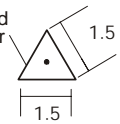

268	Chain	Foot bridge		Digital feature	
27	Point	Route marker - national		Route Number in black as annotation feature	
28	Point	Route marker - State		Route Number in black as annotation feature	<p>Infill: Screen: DOT_20%_105_150_PROCESS BLUE</p>
281	Point	Route marker - State (oversize)		Route Number in black as annotation feature	<p>Infill: Screen: DOT_20%_105_150_PROCESS BLUE</p>
281	Chain	Pipeline above ground & elevated (not water)			
282	Chain	Pipeline underground (not water)			
290	Point	Transition point On roads and railways		Hot spot	<p>Tunnel Road or railway</p>
30	Chain	Aerial Cableway			
31	Chain	Embankment		Feature in database	
33	Chain	Sand ridge	<p>screened to Dot_60_90_150_BROWN PMS 471</p>		
4	Polygon	Rainforest	<p>Screens: Dot_15_60_150_Green 347 Dot_30_90_150_Process Yellow with Line_solid_Green 347 Pattern:</p>		
40	Point	Locality Locality code: Homestead & Building Significant (under size)		Hot spot at the centre of the square	
41	Point	Building Building code: ruin		Hot spot at the centre of the square	

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

Symbol Number Feature Type Description Symbol colour is Black unless otherwise specified

42	Chain	Lock Line & Road Destination Arrow (without arrow)	 0.10	Length as required	 River	Point of Lock faces upstream
420	Point	Locality Locality code: populated place & place name	 0.10	Hot spot at the centre of the circle Red circle: Colour red PMS 485 Yellow fill: Colour Solid Process Yellow		
420	Polygon	Builtup area	 Screen: DOT_30_75_150_RED PMS 485			
430	Point	Building Building code: operational & abandoned homestead	 0.5 mm	Hot spot at the centre of the square		
433	Point	Yard	 1mm 0.1	Hot spot at the centre of square		
434	Point	Windpump	 1.5mm 1.1mm 0.15 mm line 1.4mm centre of base line to centre of cross	Hot spot		
45	Chain	Road on dam	 0.15 Solid Red PMS 485 infill Spacing is dependent on road/rail width			
451	Point	Locality Cemetery	 0.75mm 0.10	Hot spot at the centre of the circle		
5	Polygon	Orchard or Vineyard	 1.0 mm line centre to line centre Dot_40_90_150_Process Yellow with 0.05mm lines 100% Process Blue at 45 degrees			
50	Point	Bench mark	 0.5	Hot spot at the centre of the circle		
501	Point	Landmark	 0.75mm 0.10	Hot spot at the centre of the circle		
51	Point	Horizontal control point	 1.5 1.5 0.15 line and dot diameter	Hot spot at the centre of the dot within the triangle		
52	Point	Spot elevation Locality Mountain-peak-hill & place name	 0.375mm	Hot spot at the centre of the circle		

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

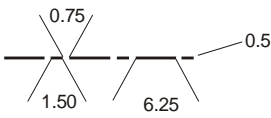
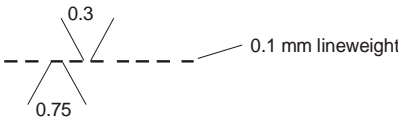
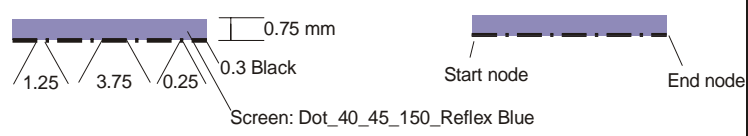
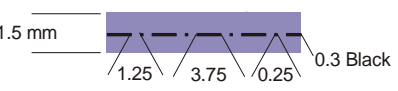
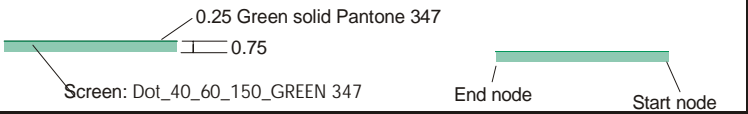

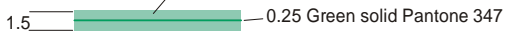
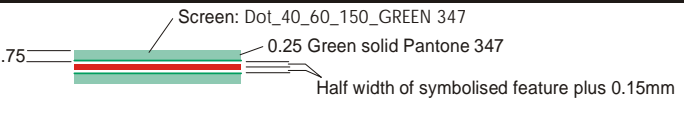

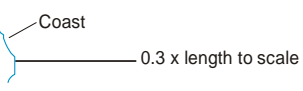



Symbol Number Type Feature Description Symbol colour is Black unless otherwise specified

54	Point	Kilometric distance indicator	
540	Point	Powerline pylon	
541	Chain	Powerline	
542	Chain	Powerline (100K only)	
55	Chain	Contour Index standard	
56	Chain	Contour Standard	
57	Chain	Contour Index depression	
573	Chain	Grid line Standard	
574	Chain	Grid line 100 000 m @ 250K 10 000m @ 100K	
575	Chain	Graticule line	
58	Chain	Contour Standard Depression	
59	Chain	Auxiliary Contour	
6	Polygon	Plantation All features at 250K & Softwood (100K only)	<p>Screens: Dot_40%_90_150_Process Yellow with Pattern_solid_Process Blue Pattern equivalent to Screen MP-2</p>
60	Chain	Building & Cultural Area line Bounding ruin Built-up area line Bounding cemetery	
600	Polygon	Plantation Hardwood (100K only)	<p>Screens: Dot_40%_90_150_Process Yellow with Pattern_solid_Process Blue Pattern equivalent to Screen Hardwood</p>

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

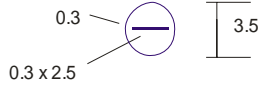

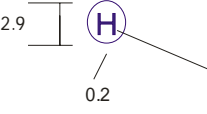



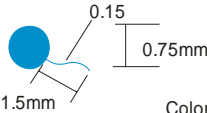


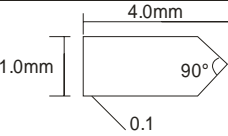
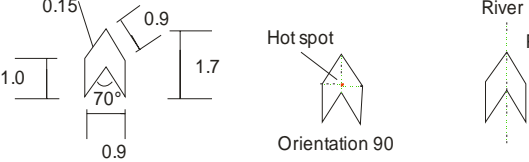
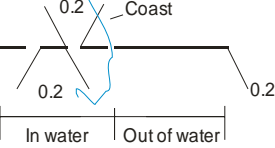
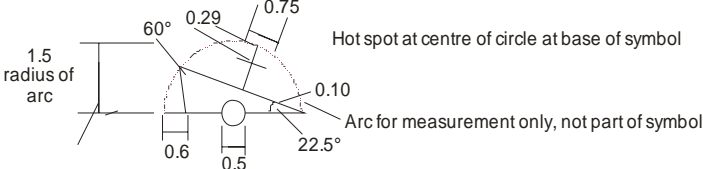
Symbol Number	Type	Feature	Description	Symbol colour is Black unless otherwise specified
62	Chain	Boundary - International		
63	Chain	Cultural Area Line Bounding Landmark Area		
64	Chain	Prohibited area line Single boundary		Screen: Dot_40_45_150_Reflex Blue
641	Chain	Prohibited area line Dual boundary		Note: black line on the boundary Screen: Dot_40_45_150_Reflex Blue
65	Chain	Reserve line Single boundary		Screen: Dot_40_60_150_GREEN 347
66	Chain	Tropic of Capricorn		
68	Chain	Reserve line Dual boundary not coincident with a symbolised feature		Note: solid green line on the boundary Screen: Dot_40_60_150_GREEN 347
681	Chain	Reserve line Dual boundary coincident with a symbolised feature		Note: solid green line on the boundary Screen: Dot_40_60_150_GREEN 347
7	Polygon	Mangrove		Dot_45%_105_150_Process Blue Dot_40%_90_150_Process Yellow
70	Chain	Jetty		
700	Polygon	Aircraft Facility Polygon Airport and Landing Ground		Dot_30%_45_150_Reflex Blue
701	Point	Aircraft facility Point Airport		Hot spot at the centre of the circle Colour: Reflex Blue
702	Chain	Aircraft facility line		Colour: Reflex Blue

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

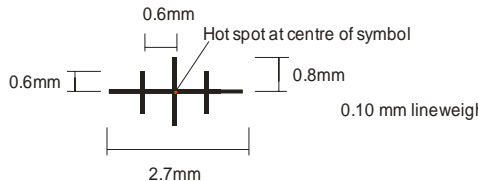
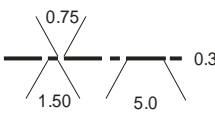
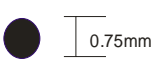
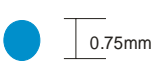
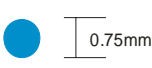
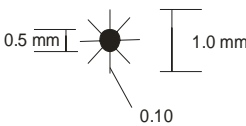
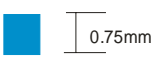

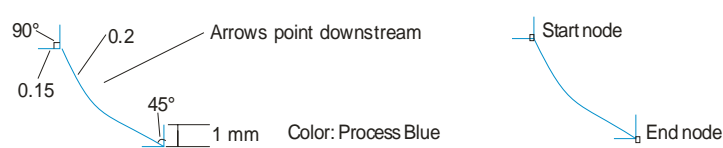
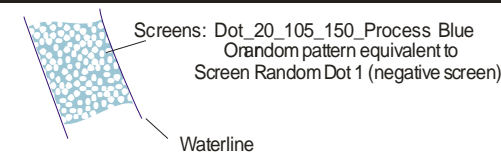
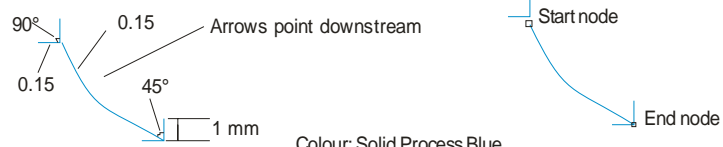
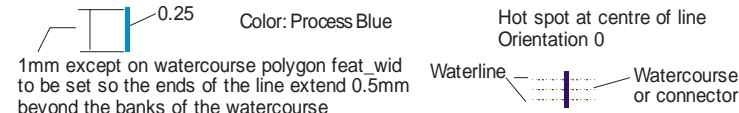
Symbol Number Type Feature Description Symbol colour is Black unless otherwise specified

703	Point	Aircraft facility Point <i>Landing ground</i>		Hot spot at the centre of the circle Orientation 0. Colour: Reflex Blue
706	Chain	Runway centre line	 0.4mm	Colour: Reflex Blue
708	Point	Aircraft facility Point <i>Heliport</i>		Hot spot at the centre of the circle Line weight for vertical bars of H 0.4mm, Line weight for horizontal bar of H 0.3mm, Height of H 1.75 mm, Width of H 1.42mm Crossbar halfway up uprights, centre of crossbar at centre of circle. Colour: Reflex Blue
709	Chain	Taxiway	 0.30	Colour: Reflex Blue
71	Chain	Sea wall	 0.30	
72	Point	Lighthouse		Hot spot at the centre of the circle
73	Point	Spring		Hot spot at the centre of the circle Orientation 0 Color: Process Blue
751	Chain	Breakwater	 0.3	
752	Chain	Wharf	 0.3	
753	Point	Dry dock		Hot spot Orientation 0
754	Point	Lock		Hot spot Orientation 90 River Point faces upstream
755	Chain	Boat ramp		
756	Point	Wreck <i>Bare or Tidal</i>		Hot spot at centre of circle at base of symbol Arc for measurement only, not part of symbol

SYMBOL DICTIONARY

All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

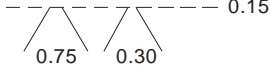



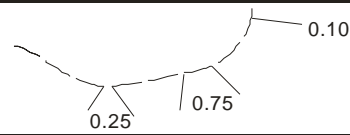

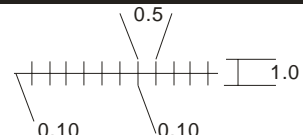
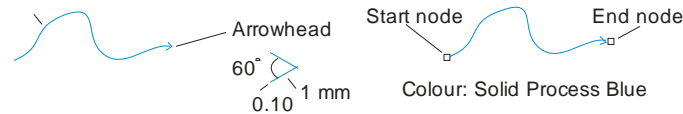
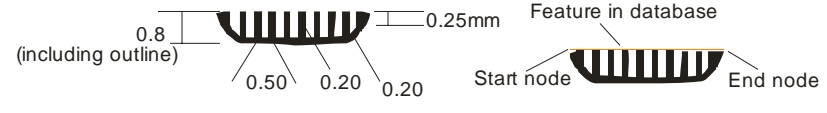
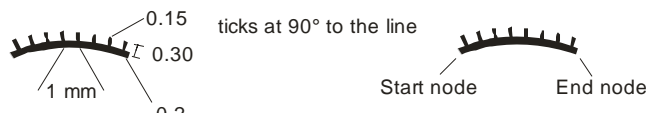
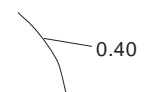
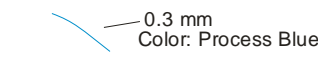

Symbol Number	Type	Feature	Description	Symbol colour is Black unless otherwise specified
759	Point	Wreck Submerged		Hot spot at centre of symbol 0.10 mm line weight
80	Chain	State border		
801	Point	Storage Tank		Hot spot at centre of circle
81	Point	Waterhole		Hot spot at centre of circle Color: Process Blue
82	Point	Waterpoint		Hot spot at centre of circle Color: Process Blue
84	Point	Pinnacle		Hot spot at the centre of the circle
86	Point	Water tank		Hot spot at centre of square Color: Solid Process Blue
87	Chain	Windbreak		Colour: Green PMS 347
881	Chain	Rapids On major watercourse chain		Arrows point downstream Colour: Process Blue
881	Polygon	Rapids On perennial watercourse polygon		Screens: Dot_20_105_150_Process Blue Random pattern equivalent to Screen Random Dot 1 (negative screen) Waterline
882	Chain	Rapids On minor watercourse chain		Arrows point downstream Colour: Solid Process Blue
89	Point	Waterfall		Colour: Process Blue Hot spot at centre of line Orientation 0 Waterline Watercourse or connector

SYMBOL DICTIONARY

All measurements are in mm

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 eg: Screen: LINE_25_45_41_RED 485

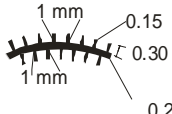


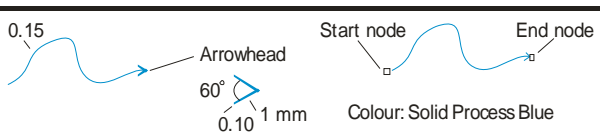
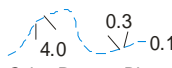
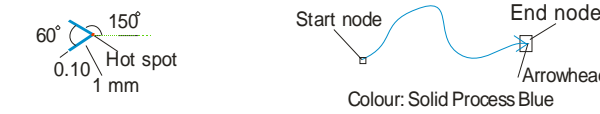

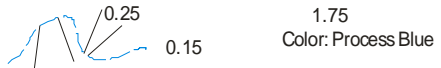
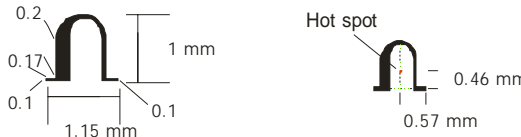

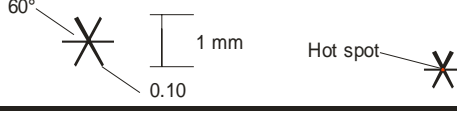
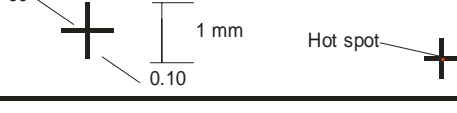
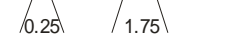
Symbol Number Type Feature Description Symbol colour is Black unless otherwise specified

90	Chain	Relief area line Bounding a crater & distorted surface	
90	Polygon	Distorted surface Rocky outcrop	 Screen: Dot_15_90_150 Brown PMS 471
908	Polygon	Swamp Marine Swamp	 Screen: Pattern_100%_ Process Blue Equivalent of Screen P-90 At least one grass symbol is to fall in each polygon Color: Process Blue
91	Chain	Watercourse Hierarchy: Major (100K use only for Non-perennial features)	
912	Chain	Relief area line Bounding Rocky outcrops	
92	Chain	Watercourse Hierarchy: Major (250K no flow arrow & 100K use only for Perennial features)	 Color: Process Blue
921	Chain	Levee	 cross ticks at 90° to the line and centre on the line
922	Chain	Watercourse Hierarchy: Major with direction of flow	
923	Chain	Cutting	
924	Chain	Cliff	
925	Chain	Dam	
926	Chain	Spillway	
927	Chain	Fence	

SYMBOL DICTIONARY

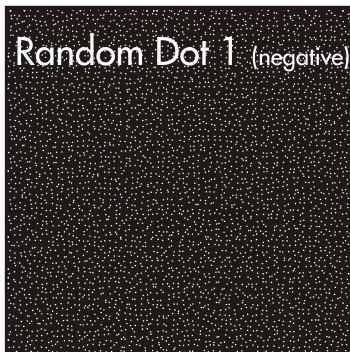
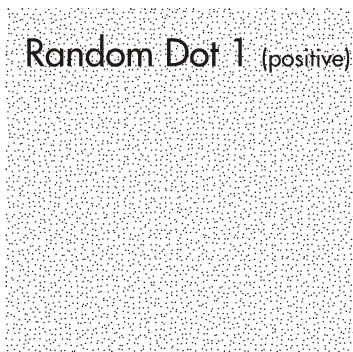
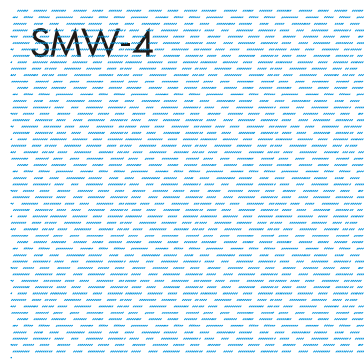
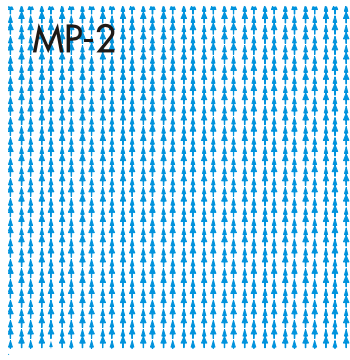
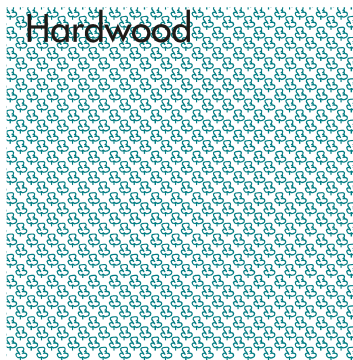
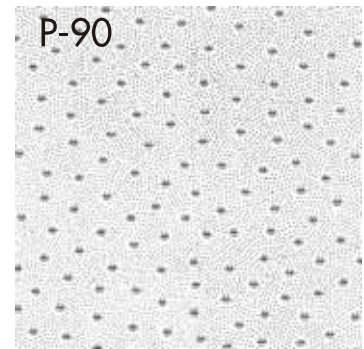
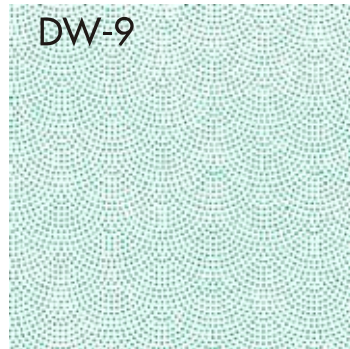
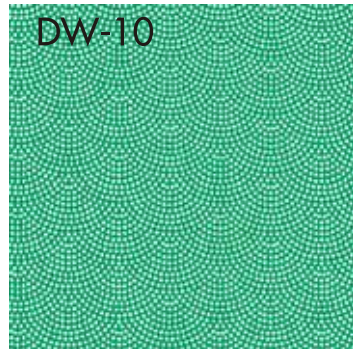
All measurements are in mm

Screen: LINE/PATTERN/DOT_%_ANGLE_LPI_COLOUR
 eg: Screen: LINE_25_45_41_RED 485

Symbol Number	Type	Feature	Description	Symbol colour is Black unless otherwise specified
929	Chain	Razorback	 ticks at 90° to the line	
94	Chain	Waterline definite		Color: Process Blue
940	Chain	Watercourse Hierarchy: Minor (250K no flow arrow & 100K used for Perennial features only.)		Color: Process Blue
942	Chain	Watercourse Hierarchy: Minor with direction of flow		Colour: Solid Process Blue
944	Chain	Watercourse Hierarchy: Minor (100K use only for Non-perennial features)		Color: Process Blue
948	Point	Flow Direction Arrow		Colour: Solid Process Blue
947	Chain	Canal and Pipeline Water		Color: Process Blue
95	Chain	Offshore line Shoal		Color: Process Blue
96	Point	Cave		
97	Polygon	Reef Reef and Cay		Screen: Dot_50_105_150_PROCESS BLUE
98	Point	Offshore rock Bare and/or Tidal		
980	Point	Offshore rock Submerged		
99	Chain	Seismic line		

6.2 Screens

The following representations of the screens were embedded in this document as a WMF graphic, a clearer view of these may occur through increasing the zoom factor of the document. They are supplied as an indication of the screen only, film or eps copies must be used when building the symbol libraries.



7. Cover Table Definitions

The following tables show the required attribute field definitions, including the column starting position for the tables as held in ARC/INFO coverages. A typical cover name has been shown as an example of how a normal working file would look.

Normal type: indicates standard **ARC/INFO system coverage items**.

Bold type: indicates items common to both GEODATA and working database.

Italic type: indicates items relevant to the Working database only.

7.1 1:250 000 TABLES

H5504AAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504AAD#	4	5	B	-		-
21	H5504AAD- ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	FACILITY	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	UFI	10	10	C	-		-
106	<i>SYMBOL</i>	4	5	B	-		-
110	<i>FEAT_WID</i>	8	10	F	4		-
118	<i>ORIENTATION</i>	4	5	B	-		-
122	<i>OLD_UFI</i>	10	10	C	-		-

H5504BAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504BAD#	4	5	B	-		-
29	H5504BAD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	<i>SYMBOL</i>	4	5	B	-		-
67	<i>OLD_UFI</i>	10	10	C	-		-

H5504BAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504BAD#	4	5	B	-		-
21	H5504BAD- ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	PARK	2	2	I	-		-
89	Q_INFO	8	8	C	-		-
97	UFI	10	10	C	-		-
107	<i>SYMBOL</i>	4	5	B	-		-
111	<i>TEXT_NOTE</i>	30	30	C	-		-
141	<i>OLD_UFI</i>	10	10	C	-		-

H5504CAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504CAD#	4	5	B	-		-
29	H5504CAD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	ELEVATION	7	7	N	2		-
52	CONTOUR	1	1	I	-		-
53	Q_INFO	8	8	C	-		-
61	UFI	10	10	C	-		-
71	<i>SYMBOL</i>	4	5	B	-		-

H5504CAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504CAD#	4	5	B	-		-
21	H5504CAD- ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	ELEVATION	7	7	N	2		-
44	Q_INFO	8	8	C	-		-
52	UFI	10	10	C	-		-
62	<i>SYMBOL</i>	4	5	B	-		-

H5504DAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504DAD#	4	5	B	-		-
29	H5504DAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	PERENNIAL	1	1	I	-		-
96	HIERARCHY	1	1	I	-		-
97	Q_INFO	8	8	C	-		-
105	UFI	10	10	C	-		-
115	SYMBOL	4	5	B	-		-
119	TEXT_NOTE	30	30	C	-		-
149	OLD_UFI	10	10	C	-		-

H5504DAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504DAD#	4	5	B	-		-
21	H5504DAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	PERENNIAL	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	UFI	10	10	C	-		-
106	SYMBOL	4	5	B	-		-
110	FEAT_WID	8	10	F	4		-
118	ORIENTATION	4	5	B	-		-
122	TEXT_NOTE	30	30	C	-		-

H5504EAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504EAD#	4	5	B	-		-
21	H5504EAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	ELEVATION	7	7	N	2		-
44	SOURCE	1	1	I	-		-
45	POINT	1	1	I	-		-
46	Q_INFO	8	8	C	-		-
54	UFI	10	10	C	-		-
64	SYMBOL	4	5	B	-		-
68	FEAT_WID	8	10	F	4		-
76	ORIENTATION	4	5	B	-		-
80	OLD_UFI	10	10	C	-		-

H5504FAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504FAD#	4	5	B	-		-
29	H5504FAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	TEXT_NOTE	30	30	C	-		-
97	OLD_UFI	10	10	C	-		-

H5504FAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504FAD#	4	5	B	-		-
21	H5504FAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	STATE	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	UFI	10	10	C	-		-
106	SYMBOL	4	5	B	-		-
110	OLD_UFI	10	10	C	-		-

H5504GAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504GAD#	4	5	B	-		-
21	H5504GAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	BUILDING	1	1	I	-		-
38	Q_INFO	8	8	C	-		-
46	UFI	10	10	C	-		-
56	SYMBOL	4	5	B	-		-
60	FEAT_WID	8	10	F	4		-
68	ORIENTATION	4	5	B	-		-
72	TEXT_NOTE	30	30	C	-		-

H5504HAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504HAD#	4	5	B	-		-
29	H5504HAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	TEXT_NOTE	30	30	C	-		-

H5504IAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504IAD#	4	5	B	-		-
29	H5504IAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-

H5504IAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504IAD#	4	5	B	-		-
21	H5504IAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	SYMBOL	4	5	B	-		-
41	TEXT_NOTE	30	30	C	-		-
71	BUILDING	1	1	I	-		-

H5504JAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504JAD#	4	5	B	-		-
29	H5504JAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-

H5504KAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504KAD#	4	5	B	-		-
29	H5504KAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-

H5504LAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504LAD#	4	5	B	-		-
21	H5504LAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	LOCALITY	2	2	I	-		-
89	Q_INFO	8	8	C	-		-
97	UFI	10	10	C	-		-
107	SYMBOL	4	5	B	-		-
111	FEAT_WID	8	10	F	4		-
119	ORIENTATION	4	5	B	-		-
123	TEXT_NOTE	30	30	C	-		-
153	OLD_UFI	10	10	C	-		-

H5504MAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504MAD#	4	5	B	-		-
29	H5504MAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	TEXT_NOTE	30	30	C	-		-

H5504MAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504MAD#	4	5	B	-		-
21	H5504MAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	Q_INFO	8	8	C	-		-
45	UFI	10	10	C	-		-
55	NAME	50	50	C	-		-
105	SYMBOL	4	5	B	-		-
109	FEAT_WID	8	10	F	4		-
117	ORIENTATION	4	5	B	-		-
121	TEXT_NOTE	30	30	C	-		-

H5504NAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504NAD#	4	5	B	-		-
21	H5504NAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	RELATIONSHIP	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	UFI	10	10	C	-		-
106	SYMBOL	4	5	B	-		-
110	FEAT_WID	8	10	F	4		-
118	ORIENTATION	4	5	B	-		-
122	TEXT_NOTE	30	30	C	-		-

H5504OAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504OAD#	4	5	B	-		-
29	H5504OAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	OLD_UFI	10	10	C	-		-

H5504OAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504OAD#	4	5	B	-		-
21	H5504OAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	RELATIONSHIP	1	1	I	-		-
88	REEF	1	1	I	-		-
89	Q_INFO	8	8	C	-		-
97	UFI	10	10	C	-		-
107	SYMBOL	4	5	B	-		-
111	TEXT_NOTE	30	30	C	-		-
141	OLD_UFI	10	10	C	-		-

H5504PAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504PAD#	4	5	B	-		-
29	H5504PAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	PRODUCT	1	1	I	-		-
46	RELATIONSHIP	1	1	I	-		-
47	Q_INFO	8	8	C	-		-
55	UFI	10	10	C	-		-
65	NAME	50	50	C	-		-
115	SYMBOL	4	5	B	-		-
119	TEXT_NOTE	30	30	C	-		-

H5504QAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504QAD#	4	5	B	-		-
29	H5504QAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-

H5504QAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504QAD#	4	5	B	-		-
21	H5504QAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	Q_INFO	8	8	C	-		-
45	UFI	10	10	C	-		-
55	NAME	50	50	C	-		-
105	SYMBOL	4	5	B	-		-
109	TEXT_NOTE	30	30	C	-		-

H5504RAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504RAD#	4	5	B	-		-
29	H5504RAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	TRACKS	1	1	I	-		-
96	STATUS	1	1	I	-		-
97	GAUGE	1	1	I	-		-
98	Q_INFO	8	8	C	-		-
106	UFI	10	10	C	-		-
116	SYMBOL	4	5	B	-		-
120	FEAT_WID	8	10	F	4		-
128	TEXT_NOTE	30	30	C	-		-
158	OLD_UFI	10	10	C	-		-

H5504RAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504RAD#	4	5	B	-		-
21	H5504RAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	TRACKS	1	1	I	-		-
88	STATUS	1	1	I	-		-
89	GAUGE	1	1	I	-		-
90	Q_INFO	8	8	C	-		-
98	UFI	10	10	C	-		-
108	SYMBOL	4	5	B	-		-
112	FEAT_WID	8	10	F	4		-
120	ORIENTATION	4	5	B	-		-
124	TEXT_NOTE	30	30	C	-		-
154	OLD_UFI	10	10	C	-		-

H5504SAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504SAD#	4	5	B	-		-
29	H5504SAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	AVERAGE_HEIGHT	2	2	I	-		-
47	Q_INFO	8	8	C	-		-
55	UFI	10	10	C	-		-
65	SYMBOL	4	5	B	-		-

H5504TAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504TAD#	4	5	B	-		-
29	H5504TAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-

H5504TAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504TAD#	4	5	B	-		-
21	H5504TAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	Q_INFO	8	8	C	-		-
45	UFI	10	10	C	-		-
55	SYMBOL	4	5	B	-		-
59	TEXT_NOTE	30	30	C	-		-

H5504UAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504UAD#	4	5	B	-		-
29	H5504UAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	Q_INFO	8	8	C	-		-
103	UFI	10	10	C	-		-
113	SYMBOL	4	5	B	-		-
117	TEXT_NOTE	30	30	C	-		-

H5504UAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504UAD#	4	5	B	-		-
21	H5504UAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	DESCRIPTION	20	20	C	-		-
107	Q_INFO	8	8	C	-		-
115	UFI	10	10	C	-		-
125	HEIGHT	6	6	N	2		-
131	SYMBOL	4	5	B	-		-
135	FEAT_WID	8	10	F	4		-
143	ORIENTATION	4	5	B	-		-
147	TEXT_NOTE	30	30	C	-		-

H5504VAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504VAD#	4	5	B	-		-
29	H5504VAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	CLASS	1	1	I	-		-
96	FORMATION	1	1	I	-		-
97	NRN	12	12	C	-		-
109	SRN	12	12	C	-		-
121	Q_INFO	8	8	C	-		-
129	UFI	10	10	C	-		-
139	SYMBOL	4	5	B	-		-
143	FEAT_WID	8	10	F	4		-
151	TEXT_NOTE	30	30	C	-		-
181	OLD_UFI	10	10	C	-		-

H5504VAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504VAD#	4	5	B	-		-
21	H5504VAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	CLASS	1	1	I	-		-
88	FORMATION	1	1	I	-		-
89	NRN	12	12	C	-		-
101	SRN	12	12	C	-		-
113	Q_INFO	8	8	C	-		-
121	UFI	10	10	C	-		-
131	SYMBOL	4	5	B	-		-
135	FEAT_WID	8	10	F	4		-
143	ORIENTATION	4	5	B	-		-
147	TEXT_NOTE	30	30	C	-		-
177	OLD_UFI	10	10	C	-		-

H5504WAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H5504WAD#	4	5	B	-		-
29	H5504WAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	OLD_UFI	10	10	C	-		-

H5504WAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504WAD#	4	5	B	-		-
21	H5504WAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	PERENNIAL	1	1	I	-		-
88	HIERARCHY	1	1	I	-		-
89	Q_INFO	8	8	C	-		-
97	UFI	10	10	C	-		-
107	SYMBOL	4	5	B	-		-
111	TEXT_NOTE	30	30	C	-		-
141	OLD_UFI	10	10	C	-		-

H5504XAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504XAD#	4	5	B	-		-
21	H5504XAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	WATERPOINT	1	1	I	-		-
38	Q_INFO	8	8	C	-		-
46	UFI	10	10	C	-		-
56	NAME	50	50	C	-		-
106	SYMBOL	4	5	B	-		-
110	FEAT_WID	8	10	F	4		-
118	ORIENTATION	4	5	B	-		-
122	TEXT_NOTE	30	30	C	-		-

H5504YAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H5504YAD#	4	5	B	-		-
21	H5504YAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	ELEVATION	7	7	N	2		-
44	CODE	24	24	C	-		-
68	Q_INFO	8	8	C	-		-
76	UFI	10	10	C	-		-
86	NAME	50	50	C	-		-
136	SYMBOL	4	5	B	-		-
140	FEAT_WID	8	10	F	4		-
148	ORIENTATION	4	5	B	-		-
152	TEXT_NOTE	30	30	C	-		-
182	ORDER	4	4	C	-		-

H55041AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55041AD#	4	5	B	-		-
29	H55041AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	FEAT_WID	8	10	F	4		-

H55041AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H55041AD#	4	5	B	-		-
21	H55041AD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	AUTHORITY	4	4	I	-		-
91	Q_INFO	8	8	C	-		-
99	UFI	10	10	C	-		-
109	<i>SYMBOL</i>	4	5	<i>B</i>	-		-

H55043AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55043AD#	4	5	B	-		-
29	H55043AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	<i>SYMBOL</i>	4	5	<i>B</i>	-		-
67	<i>FEAT_WID</i>	8	10	<i>F</i>	4		-

H55043AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H55043AD#	4	5	B	-		-
21	H55043AD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	AUTHORITY	4	4	I	-		-
91	Q_INFO	8	8	C	-		-
99	UFI	10	10	C	-		-
109	<i>SYMBOL</i>	4	5	<i>B</i>	-		-

H55044AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55044AD#	4	5	B	-		-
29	H55044AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	UFI	10	10	C	-		-
63	SYMBOL	4	5	B	-		-
67	TEXT_NOTE	30	30	C	-		-

H55045AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55045AD#	4	5	B	-		-
29	H55045AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-
49	TEXT_NOTE	30	30	C	-		-

H55045AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H55045AD#	4	5	B	-		-
21	H55045AD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	SYMBOL	4	5	B	-		-
41	FEAT_WID	8	10	F	4		-
49	ORIENTATION	4	5	B	-		-
53	TEXT_NOTE	30	30	C	-		-

H55046AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55046AD#	4	5	B	-		-
29	H55046AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-

H55047AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55047AD#	4	5	B	-		-
29	H55047AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-

H55048AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	H55048AD#	4	5	B	-		-
29	H55048AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-

H55048AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	H55048AD#	4	5	B	-		-
21	H55048AD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-

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S7922AAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922AAD#	4	5	B	-		-
29	S7922AAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922AAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922AAD#	4	5	B	-		-
21	S7922AAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	FACILITY	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	SYMBOL	4	5	B	-		-
100	FEAT_WID	8	10	F	4		-
108	ORIENTATION	4	5	B	-		-
112	TEXT_NOTE	30	30	C	-		-

S7922BAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922BAD#	4	5	B	-		-
29	S7922BAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922BAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922BAD#	4	5	B	-		-
21	S7922BAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	PARK	2	2	I	-		-
89	Q_INFO	8	8	C	-		-
97	SYMBOL	4	5	B	-		-
101	TEXT_NOTE	30	30	C	-		-

S7922CAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922CAD#	4	5	B	-		-
29	S7922CAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	ELEVATION	7	7	N	2		-
52	CONTOUR	1	1	I	-		-
53	Q_INFO	8	8	C	-		-
61	SYMBOL	4	5	B	-		-

S7922CAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922CAD#	4	5	B	-		-
21	S7922CAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	ELEVATION	7	7	N	2		-
44	Q_INFO	8	8	C	-		-
52	SYMBOL	4	5	B	-		-

S7922DAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922DAD#	4	5	B	-		-
29	S7922DAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	PERENNIAL	1	1	I	-		-
96	HIERARCHY	1	1	I	-		-
97	Q_INFO	8	8	C	-		-
105	SYMBOL	4	5	B	-		-
109	TEXT_NOTE	30	30	C	-		-

S7922DAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922DAD#	4	5	B	-		-
21	S7922DAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	PERENNIAL	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	SYMBOL	4	5	B	-		-
100	FEAT_WID	8	10	F	4		-
108	ORIENTATION	4	5	B	-		-
112	TEXT_NOTE	30	30	C	-		-

S7922EAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922EAD#	4	5	B	-		-
21	S7922EAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	ELEVATION	7	7	N	2		-
44	SOURCE	1	1	I	-		-
45	POINT	1	1	I	-		-
46	Q_INFO	8	8	C	-		-
54	SYMBOL	4	5	B	-		-
58	FEAT_WID	8	10	F	4		-
66	ORIENTATION	4	5	B	-		-

S7922FAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922FAD#	4	5	B	-		-
29	S7922FAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-
57	TEXT_NOTE	30	30	C	-		-

S7922FAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922FAD#	4	5	B	-		-
21	S7922FAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	STATE	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	SYMBOL	4	5	B	-		-

S7922GAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922GAD#	4	5	B	-		-
21	S7922GAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	BUILDING	1	1	I	-		-
38	FUNCTION	2	2	I	-		-
40	Q_INFO	8	8	C	-		-
48	SYMBOL	4	5	B	-		-
52	FEAT_WID	8	10	F	4		-
60	ORIENTATION	4	5	B	-		-
64	TEXT_NOTE	30	30	C	-		-

S7922HAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922HAD#	4	5	B	-		-
29	S7922HAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-
57	TEXT_NOTE	30	30	C	-		-

S7922IAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922IAD#	4	5	B	-		-
29	S7922IAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922IAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922IAD#	4	5	B	-		-
21	S7922IAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	BUILDING	1	1	I	-		-
38	FUNCTION	2	2	I	-		-
40	NAME	50	50	C	-		-
90	DESCRIPTION	20	20	C	-		-
110	Q_INFO	8	8	C	-		-
118	SYMBOL	4	5	B	-		-
122	TEXT_NOTE	30	30	C	-		-

S7922JAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922JAD#	4	5	B	-		-
29	S7922JAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922KAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922KAD#	4	5	B	-		-
29	S7922KAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922LAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922LAD#	4	5	B	-		-
21	S7922LAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	LOCALITY	2	2	I	-		-
89	Q_INFO	8	8	C	-		-
97	SYMBOL	4	5	B	-		-
101	FEAT_WID	8	10	F	4		-
109	ORIENTATION	4	5	B	-		-
113	TEXT_NOTE	30	30	C	-		-

S7922MAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922MAD#	4	5	B	-		-
29	S7922MAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-
57	TEXT_NOTE	30	30	C	-		-

S7922MAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922MAD#	4	5	B	-		-
21	S7922MAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	Q_INFO	8	8	C	-		-
45	NAME	50	50	C	-		-
95	SYMBOL	4	5	B	-		-
99	FEAT_WID	8	10	F	4		-
107	ORIENTATION	4	5	B	-		-
111	TEXT_NOTE	30	30	C	-		-

S7922NAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922NAD#	4	5	B	-		-
21	S7922NAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	RELATIONSHIP	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	SYMBOL	4	5	B	-		-
100	FEAT_WID	8	10	F	4		-
108	ORIENTATION	4	5	B	-		-
112	TEXT_NOTE	30	30	C	-		-

S7922OAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922OAD#	4	5	B	-		-
29	S7922OAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922OAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922OAD#	4	5	B	-		-
21	S7922OAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	RELATIONSHIP	1	1	I	-		-
88	REEF	1	1	I	-		-
89	Q_INFO	8	8	C	-		-
97	SYMBOL	4	5	B	-		-
101	TEXT_NOTE	30	30	C	-		-

S7922PAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922PAD#	4	5	B	-		-
29	S7922PAD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	PRODUCT	1	1	I	-		-
46	RELATIONSHIP	1	1	I	-		-
47	Q_INFO	8	8	C	-		-
55	NAME	50	50	C	-		-
105	SYMBOL	4	5	B	-		-
109	TEXT_NOTE	30	30	C	-		-

S7922QAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922QAD#	4	5	B	-		-
29	S7922QAD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922QAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922QAD#	4	5	B	-		-
21	S7922QAD- ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	Q_INFO	8	8	C	-		-
45	NAME	50	50	C	-		-
95	SYMBOL	4	5	B	-		-
99	TEXT_NOTE	30	30	C	-		-

S7922RAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922RAD#	4	5	B	-		-
29	S7922RAD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	TRACKS	1	1	I	-		-
96	STATUS	1	1	I	-		-

97	GAUGE	1	1	I	-	-
98	Q_INFO	8	8	C	-	-
106	SYMBOL	4	5	B	-	-
110	FEAT_WID	8	10	F	4	-
118	TEXT_NOTE	30	30	C	-	-

S7922RAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922RAD#	4	5	B	-		-
21	S7922RAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	TRACKS	1	1	I	-		-
88	STATUS	1	1	I	-		-
89	GAUGE	1	1	I	-		-
90	Q_INFO	8	8	C	-		-
98	SYMBOL	4	5	B	-		-
102	FEAT_WID	8	10	F	4		-
110	ORIENTATION	4	5	B	-		-
114	TEXT_NOTE	30	30	C	-		-

S7922SAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922SAD#	4	5	B	-		-
29	S7922SAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	AVERAGE_HEIGHT	2	2	I	-		-
47	Q_INFO	8	8	C	-		-
55	SYMBOL	4	5	B	-		-

S7922TAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922TAD#	4	5	B	-		-
29	S7922TAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922TAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922TAD#	4	5	B	-		-
21	S7922TAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	COVERDENSITY	1	1	I	-		-
38	GROWTHFORM	1	1	I	-		-
39	TYPE	1	1	I	-		-
40	Q_INFO	8	8	C	-		-
48	SYMBOL	4	5	B	-		-
52	TEXT_NOTE	30	30	C	-		-

S7922UAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922UAD#	4	5	B	-		-
29	S7922UAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	Q_INFO	8	8	C	-		-
103	SYMBOL	4	5	B	-		-
107	TEXT_NOTE	30	30	C	-		-

S7922UAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922UAD#	4	5	B	-		-
21	S7922UAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	DESCRIPTION	20	20	C	-		-
107	Q_INFO	8	8	C	-		-
115	HEIGHT	6	6	N	2		-
121	SYMBOL	4	5	B	-		-
125	FEAT_WID	8	10	F	4		-
133	ORIENTATION	4	5	B	-		-
137	TEXT_NOTE	30	30	C	-		-

S7922VAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922VAD#	4	5	B	-		-
29	S7922VAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	NAME	50	50	C	-		-
95	CLASS	1	1	I	-		-
96	FORMATION	1	1	I	-		-

97	NRN	12	12	C	-	-
109	SRN	12	12	C	-	-
121	Q_INFO	8	8	C	-	-
129	SYMBOL	4	5	B	-	-
133	FEAT_WID	8	10	F	4	-
141	TEXT_NOTE	30	30	C	-	-

S7922VAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922VAD#	4	5	B	-		-
21	S7922VAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	CLASS	1	1	I	-		-
88	FORMATION	1	1	I	-		-
89	NRN	12	12	C	-		-
101	SRN	12	12	C	-		-
113	Q_INFO	8	8	C	-		-
121	SYMBOL	4	5	B	-		-
125	FEAT_WID	8	10	F	4		-
133	ORIENTATION	4	5	B	-		-
137	TEXT_NOTE	30	30	C	-		-

S7922WAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922WAD#	4	5	B	-		-
29	S7922WAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922WAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922WAD#	4	5	B	-		-
21	S7922WAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	PERENNIAL	1	1	I	-		-
88	HIERARCHY	1	1	I	-		-
89	Q_INFO	8	8	C	-		-
97	SYMBOL	4	5	B	-		-
101	TEXT_NOTE	30	30	C	-		-

S7922XAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922XAD#	4	5	B	-		-
21	S7922XAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	WATERPOINT	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	SYMBOL	4	5	B	-		-
100	FEAT_WID	8	10	F	4		-
108	ORIENTATION	4	5	B	-		-
112	TEXT_NOTE	30	30	C	-		-

S7922YAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922YAD#	4	5	B	-		-
21	S7922YAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	ELEVATION	7	7	N	2		-
44	CODE	24	24	C	-		-
68	Q_INFO	8	8	C	-		-
76	NAME	50	50	C	-		-
126	SYMBOL	4	5	B	-		-
130	FEAT_WID	8	10	F	4		-
138	ORIENTATION	4	5	B	-		-
142	TEXT_NOTE	30	30	C	-		-
172	ORDER	4	4	C	-		-

S7922ZAD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S7922ZAD#	4	5	B	-		-
29	S7922ZAD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-

S7922ZAD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S7922ZAD#	4	5	B	-		-
21	S7922ZAD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	FACILITY	1	1	I	-		-
88	Q_INFO	8	8	C	-		-
96	SYMBOL	4	5	B	-		-

S79221AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79221AD#	4	5	B	-		-
29	S79221AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-
57	FEAT_WID	8	10	F	4		-
65	TEXT_NOTE	50	50	C	-		-

S79221AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S79221AD#	4	5	B	-		-
21	S79221AD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	AUTHORITY	4	4	I	-		-
91	Q_INFO	8	8	C	-		-
99	SYMBOL	4	5	B	-		-

S79222AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79222AD#	4	5	B	-		-
29	S79222AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	ELEVATION	7	7	N	2		-
52	CONTOUR	1	1	I	-		-
53	Q_INFO	8	8	C	-		-
61	SYMBOL	4	5	B	-		-

S79223AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79223AD#	4	5	B	-		-
29	S79223AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-
57	FEAT_WID	8	10	F	4		-
65	TEXT_NOTE	50	50	C	-		-

S79223AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S79223AD#	4	5	B	-		-
21	S79223AD- ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	NAME	50	50	C	-		-
87	AUTHORITY	4	4	I	-		-
91	Q_INFO	8	8	C	-		-
99	SYMBOL	4	5	B	-		-

S79224AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79224AD#	4	5	B	-		-
29	S79224AD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	Q_INFO	8	8	C	-		-
53	SYMBOL	4	5	B	-		-
57	TEXT_NOTE	30	30	C	-		-

S79225AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79225AD#	4	5	B	-		-
29	S79225AD- ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-
49	TEXT_NOTE	30	30	C	-		-

S79225AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S79225AD#	4	5	B	-		-
21	S79225AD- ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
37	SYMBOL	4	5	B	-		-
41	FEAT_WID	8	10	F	4		-
49	ORIENTATION	4	5	B	-		-
53	TEXT_NOTE	30	30	C	-		-

S79226AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79226AD#	4	5	B	-		-
29	S79226AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-

S79227AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79227AD#	4	5	B	-		-
29	S79227AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-
45	SYMBOL	4	5	B	-		-

S79228AD.AAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	FNODE#	4	5	B	-		-
5	TNODE#	4	5	B	-		-
9	LPOLY#	4	5	B	-		-
13	RPOLY#	4	5	B	-		-
17	LENGTH	8	18	F	5		-
25	S79228AD#	4	5	B	-		-
29	S79228AD-ID	4	5	B	-		-
33	FEAT_CODE	12	12	C	-		-

S79228AD.PAT TABLE

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC	ALTERNATE NAME	INDEXED?
1	AREA	8	18	F	5		-
9	PERIMETER	8	18	F	5		-
17	S79228AD#	4	5	B	-		-
21	S79228AD-ID	4	5	B	-		-
25	FEAT_CODE	12	12	C	-		-
