for Information Systems -

Spatial Data Transfer Standard (SDTS) -Part 2, Spatial Features



American National Standard for Information Systems -

Spatial Data Transfer Standard (SDTS) - Part 2, Spatial Features



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American National Standard for Information Systems

Spatial Data Transfer Standard - Part 2, Spatial Features

1 Introduction

This part of the standard responds to the need for common definitions of spatial features in the process of data transfer. The conceptual model and defined terms are the foundation for exchanging data between existing digital cartographic systems and may also be used as a viable approach to creating a new spatial feature file.

Traditional map symbols and their digital code equivalents often refer to real world features which have been defined only in the mind of the cartographer responsible for compiling the data. Even when agencies make an effort to define systematically the features portrayed in their data bases, these definitions are likely to vary from one organization to another. Thus, agreement on a common format for data exchange is not sufficient to ensure that the information provided by the supplier organization will be meaningful or useful to the receiving organization.

In order to facilitate transfer of data that is meaningful both to exporters and to importers, a common bridge of well understood feature definitions is required. The feature and attribute lists and definitions contained in the annexes to part 2 are a first step in this direction. These lists and definitions are the product of several years of effort during which approximately 2,600 definitions of geographic features were compared and distilled into the initial list of 200 entity types. The definitions of these entity types encompass the meanings found in the definitions of over 1,200 alternative terms.

1.1 Purpose

The purpose of part 2 is to provide a common classification and meaningful definitions for the spatial features identified in a transfer.

1.2 Objectives

Based on the sources consulted at the time of the preparation of this part of the standard, existing hydrographic and topographic features could, with few exceptions, be encoded to one of the 200 defined standard entity types, thereby facilitating transfer between organizations that might otherwise differ on the nuances of their particular term for, or definition of, essentially the same real-world phenomenon.

This list and these definitions are not presented as a definitive product, but as a living compendium subject to future amendments and extensions to meet the diverse needs of the spatial data community.

The primary focus of this initial effort is on topographic and hydrographic features, using sources available at the time of preparation. Among the extensions anticipated are (a) updating to accommodate new topographic and hydrographic products and (b) addition of features from other disciplines concerned with the exchange of spatially referenced geographic information.

Because all spatial data are likely to be exchanged in the future, organizations considering the development of new data bases may use these standard categories as the basis for classifying phenomena to be entered into such data bases.

2 Conceptual Model

2.1 Definitions

Spatial features are defined entity types and the representation of instances of those types by spatial objects, as specified in section 2 of part 1.

Spatial features shall be described by the concepts: Entity Type, Entity Instance, Attribute, and Attribute Value; and by the terms Standard and Included. These are defined as follows:

2.1.1 Entity Type - the definition and description of a set into which similar entity instances are classified (e.g., bridge).

2.1.2 Entity Instance - a spatial phenomenon of a defined type that is embedded in one or more phenomena of a different type, or that has at least one key attribute value different from the corresponding attribute values of the surrounding phenomena

(e.g., the 10th Street Bridge).

- **2.1.3** Attribute a defined characteristic of an Entity Type (e.g., composition).
- **2.1.4** Attribute Value a specific quality or quantity assigned to an attribute (e.g., steel) for a specific Entity Instance.
- **2.1.5** Standard Term primary label of an Entity Type or Attribute (listed in annex A and B).
- **2.1.6** Included Term nonstandard label of an Entity Type or Attribute that is cross-referenced to a Standard Term of an Entity Type or Attribute. Included Terms used in more than one context may be cross-referenced to more than one Standard Term. (See annex C.)

2.2 Conceptual Approach

Many feature classification schemes are based on a hierarchical system. This standard specifically avoids adopting any particular hierarchy, in part because the higher level classifications differ from one organization to another. Hierarchical classification, if desired, may be constructed using standard attributes (such as air/land/water, or manmade/natural) or through user-defined non-standard attributes.

Network, relational, and object-oriented structures of feature data may also be constructed from this non-hierarchized list of standard features and attributes.

The features presented are defined independently of map or geographic scale. Scale independence implies that no specific spatial object (such as a point, line, or area representation) is necessarily used to represent a given Entity Type. Further, the list includes features defined at any level of geographic interest, from mountain ranges and oceans to sidewalks and trees.

3 Scope and Field of Application

3.1 Scope

This part of the standard applies to the terms and definitions used for Entity Types, Attributes, and Attribute Values in a transfer. The terms may appear in the Data Dictionary/Definition, Data Dictionary/Domain, Data Dictionary/Schema, Attribute Primary, and Attribute Secondary module types as specified in part 1. Definitions included in part 2 need not be repeated in a Data Dictionary/Definition module in a given transfer, provided that

the Standard Term is used with its standard meaning.

The definitions of standard Entity Types are mutually exclusive, but not exhaustive. Future extensions are anticipated.

3.2 Field of Application

There are two intended applications of this part of the standard for systems employing spatial data in digital form: a) new users will have a model and the definitions needed for creating a features set, and b) transfer of the meaning of feature information between existing systems will be facilitated.

4 Relationship to Other Standards

Federal Information Processing Standard codes exist for the instances of certain Entity Types, for example states of the United States (FIPSPUB 5-2). By implication, the Entity Type for which these codes are provided (i.e., states and outlying areas of the United States) has already been recognized as a standard Entity Type.

Many federal agencies have agency standards for the classification and definition of features within their particular realms of responsibility. This standard is not intended to replace existing agency standards, but to provide a basis whereby existing data can be shared with other organizations that do not necessarily accept the same terms and definitions for similar real-world phenomena. Depending on the conformance level selected and the functional requirements of a particular transfer, each agency may find it useful to develop a cross-reference between its internal feature and attribute classification system and the Standard Terms and definitions in annexes A and B.

5 References

Selected references used in the preparation of part 2 of the standard are included in annex F of part 1. The following is a short list of the authors included in these references:

- Canadian Council on Surveying and Mapping
- Defense Intelligence Agency
- Defense Mapping Agency
- Monkhouse, F.J.

- Moore, W.G.
- Stamp, D.
- U.S. Geological Survey, Geographic Names Information System
- U.S. National Ocean Service

This list will be updated and expanded as additional feature lists and definitions are submitted to the maintenance authority.

6 Conformance

All entity type, attribute, and attribute value terms and (or) codes used in a transfer shall be defined. Non-standard Entity Type and Attribute terms shall be specified through the use of the Data Dictionary/Definition module. Attribute Value terms shall be defined in the Data Dictionary/Domain module. See also part 1, 4.1.3.6 (Attributes).

The mandatory Features Level subfield of the Identification Module specifies the conformance level of a transfer with respect to feature definitions (see part 1, 5.2.1.2.3). Use of conformance levels 2, 3, or 4 for features limits the scope of transfer and are discouraged. Recurring needs to resort to non-standard terms and definitions should be referred to the maintenance authority, for possible amendment and extension of the standard.

7 Status of Annexes

Annex A contains definitions for standard Entity Type terms. Annex B contains definitions for standard Attribute terms. Annex C contains cross-reference lists between Included Terms and Standard Terms.

These annexes are normative in that they shall be used for transfers of feature conformance levels 1 and 2, as described in part 1, 5.2.1.2.3. However, use of the terms and definitions contained in these annexes is optional for feature conformance levels 3 and 4.

Annex A

(normative)

Entity Types

AIRPORT A facility, either on land or water, where aircraft can take off and land; usu-

ally consists of hard-surfaced landing strips, a control tower, hangars, and

accommodations for passengers and cargo.

ALLUVIUM All unconsolidated fragmental material laid down by a stream.

AMMUNITION_DUMP A military installation used for the storage of explosives and other warlike

stores.

ANTENNA A metallic apparatus for sending and receiving electro-magnetic waves.

ANTENNA_ARRAY A group of directional antennas.

APPROACHWAY The airspace through which aircraft approach or leave a landing area.

ARCH A curved structure that supports the weight of material over an open space.

BACKWATER An area of calm water unaffected by the current of a stream.

BAR A submerged or emerged mound, ridge, or succession of ridges of sand or

other material extending across the bottom, and which may obstruct navi-

gation.

BASIN Any bowl-shaped depression in the surface of the land or ocean floor.

BEACH The gently sloping shore which is washed by waves or tides, especially the

parts covered by sand or pebbles.

BEACON A fixed signal, mark, or light and associated facilities erected for the guid-

ance of mariners or airplane pilots.

BERTH The place where a ship lies when at anchor secured to a pier or wharf.

BOTTOM The portion of the ground surface which lies below water.

BOUNDARY A nonphysical line indicating the limit or extent of an area or territory.

BREAKERS A zone or region of waves breaking into foam as they advance toward the

shore.

BREAKWATER A structure built to break the force of waves so as to protect a beach, har-

bor, or other waterfront facility.

BRIDGE A structure erected over a depression or obstacle to carry traffic or some

facility such as a pipeline.

BRIDGE_

Those elements of the bridge structure which are above the uppermost

SUPERSTRUCTURE deck.

BUILDING A permanent walled and roofed construction.

BUILDING_COMPLEX A group of buildings and associated facilities functioning together as a unit.

BUOY A float moored or anchored in water.

CABLEWAY A conveyor system in which carrier units run on wire cables string between

supports.

CAMPGROUND The ground or area on which tents, huts, etc., are erected for temporary

shelter.

CAPE A relatively extensive land area jutting into a water body, which prominently

marks a change in or interrupts notably the coastal trend of that water body.

CATCHMENT An area drained by a single watercourse; a natural drainage area which

may coincide with a river basin, in which the divides direct the water from the rainfall and percolation into a river. However, where underground flow is involved, the catchment may be larger or smaller than that that may be

apparent from the surface relief.

CAVE Naturally formed, subterranean open area or chamber.

CEMETERY A place for burying the dead.

CHIMNEY A structure containing a passage or flue for discharging smoke and gases

from combustion.

CIRQUE A deep natural hollow near the crest of a mountain.

CLEARING An open area in a forest.

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

COAST The general region of indefinite width that extends from the sea inland to

the first major change in terrain features.

CONTINENT One of the large, unbroken masses of land into which the Earth's surface is

divided.

CONTROL_POINT A point of known location.

CRATER Circular-shaped depression at the summit of a volcanic cone or on the sur-

face of the land.

CREVASSE A deep fissure in snow or ice.

CRIB A crate-like construction of logs or beams, usually filled with stones, placed

in water as a free standing mooring device or as the foundation of a pier or

wharf.

CROPLAND Land that has been plowed or otherwise cultivated.

CUT An excavation of the Earth's surface to provide passage for a road, railway,

canal, etc.

DAM A barrier constructed across a watercourse to control the flow or raise the

level of water.

DELTA A tract of alluvium formed at the mouth of a river where the deposition of

some of its load exceeds its rate of removal, crossed by the divergent chan-

nels (distributaries) of the river.

DEMILITARIZED_

ZONE

An area in which military activity is prohibited.

DESERT A region rendered barren or partially barren by environmental extremes,

especially by low rainfall.

DRY_DOCK An artificial basin fitted with gate or caisson into which a vessel may be

floated and from which the water may be pumped out to expose the bottom

of the vessel.

DUMPING_GROUND Area designated for dumping various types of materials.

EARTH_SURFACE The outermost surface of the land and waters of the planet.

EMBANKMENT A raised structure of earth, ground, etc.

EXHIBITION_GROUND A public area containing buildings, paddocks, etc., for the display of live-

stock, agricultural produce, machinery, etc.

FARM A tract of crop or grazing land, as well as the group of buildings with and

often surrounding a farmhouse, including barns, sheds, and other outbuild-

ings, used for agricultural production.

FAULT A fracture in the Earth's crust with displacement on one side of the fracture

relative to the other.

FENCE An enclosure or barrier made of wire, rails, slats or other relatively light

material, as opposed to a wall which is of stone or other heavy material.

FILTRATION_BEDS An area containing layers of material used to filter or aerate water.

FISH_HATCHERY A facility used for the spawning of fish which are subsequently used to

stock lakes and streams.

FISH_LADDER A facility consisting of a series of small pools each one slightly higher than

the preceding, built around a dam to enable fish to make their way

upstream.

FISH_TRAP A device used to catch fish.

FISHING GROUND A water area in which fishing is frequently carried on.

FLAT A level tract lying at a small depth below the surface of water, or alternately

covered and left bare by the tide.

FLOOD_PLAIN An area which is subject to periodic flooding.

FORD The shallow part of a river which can be easily crossed.

FORT A fortified place or position.

FUMAROLE A hole in the Earth's crust from which steam and gases are emitted.

GANTRY A frame structure raised on side supports so as to span over or around

something.

GAP Low point or opening between hills or mountains or in a ridge or mountain

range.

GATE A structure that may be swung, drawn, or lowered to block an entrance or

passageway.

GEYSER An intermittent fountain of hot water ejected with force from a hole in the

Earth's crust.

GOLF_COURSE An area set out for the playing of golf.

GRANDSTAND A usually roofed structure for viewing events and having tiers of seats for

spectators.

GRASSLAND An uncultivated area of grass or grass-like vegetation.

GRAVE A place within a graveyard used for burial.

GROUND The solid portion of the Earth up to and including the ground surface.

GROUND_SURFACE The land surface of the Earth, both exposed and underwater.

GUARD RAIL A strong fence or barrier to prevent vehicles from leaving the roadway, or

for people's safety.

HARBOR An area of water where ships, planes or other watercraft can anchor or

dock. Also spelled HARBOUR.

HEADWATERS The upper part of a river system, denoting the upper basin and source

streams of a river.

HEDGE A dense growth of shrubbery planted as a fence or boundary.

HELIPAD A transportation structure used for the landing of helicopters.

HOPPER A top loading funnel-shaped structure for temporary storage of loose mate-

rials which will be dispensed from its bottom.

ICE_FIELD Large area of permanent sea or land ice.

ICE_RINK A surface of ice for ice skating.

ICEBERG A large mass of detached land ice in the sea or stranded in shallow water.

INDIAN

An area set aside for the use of an indian tribe or tribes.

RESERVATION

INLET An opening of the sea into the land, or of a lake into its shore.

INSHORE TRAFFIC

IONE_INALLIO_ AC

ZONE

LAKE

A designated area between the landward boundary of a traffic separation

scheme and the adjacent coast, intended for local traffic.

INTERSECTION The junction of roads or tracks.

IRRIGATION_SYSTEM A system designed to supply land with water.

ISLAND Area of dry or relatively dry land surrounded by water or low wetland.

ISLAND_CLUSTER A group of islands.

ISTHMUS Narrow section of land in a body of water connecting two larger land areas.

LAGOON A sheet of salt water separated from the open sea by sand or shingle

banks. The sheet of water between an offshore reef, esp. of coral and mainland. The sheet of water within a ring or horseshoe shaped atoll.

Any standard body of inland water.

LANDING_PLACE A place for loading and unloading passengers or cargo to and from water

vessels.

LANE A prescribed course for ships or aircraft, or a strip delineated on a road to

accommodate a single line of automobiles; not to be confused with the road

itself.

LAUNCHING_RAMP A transportation structure used for launching boats.

LOCK An enclosure in a water body with gates at each end to raise or lower ves-

sels as they pass from one level to another.

MARINA A harbor facility for recreational craft where supplies, repairs, and various

services are available.

MILITARY_BASE An area owned and operated by the government in which various military

activities take place.

MILITARY_BUNKER A military strong point, usually part of an extensive fortification.

MINE An excavation in the Earth for the purpose of extracting earth materials.

MINE FIELD An area where explosive mines have been anchored or sunk in water or

buried on land.

MISSILE_SITE An area for housing and launching guided missiles.

MOBILE_HOME A trailer that is a permanent dwelling and is designed without a permanent

foundation.

MOBILE_HOME_PARK An area maintained for the parking of inhabited mobile homes.

MONUMENT A structure erected as a memorial.

MOORING The place where a craft may be secured to the ground, wharf, pier, post, or

buoy.

MORAINE An accumulation of boulders, stones, or other debris carried and deposited

by a glacier.

MOUNT A mountain or hill.

MOUNT_RANGE A series of connected and aligned mountains or mountain ridges.

MOUTH The exit or point of discharge of a stream into another stream, lake or sea.

OASIS A small, isolated, fertile or green area in a desert region, usually having a

spring or well.

OFF ROAD An area for the testing of, or use by, vehicles that are designed to travel

VEHICULAR AREA across the terrain.

OFFSHORE_ A raised surface located in a sea.

PLATFORM

OIL_FIELD An area where petroleum is or was removed from the Earth.

OUTDOOR THEATER An outdoor area consisting of a stage or other focal point, and an area

where the audience can be seated.

OVERFALLS Short breaking waves occurring when a current passes over a shoal or

other submarine obstruction or meets a contrary current or wind.

OVERRUN/STOPWAY An area beyond the take-off runway able to support an airplane during an

aborted take-off.

PARK A place or area set aside for recreation or preservation of a cultural or natu-

ral resource.

PARKING_AREA An area set aside for the parking of motor vehicles.

PEAK The summit of a mountain.

PENINSULA A body of land jutting out into and nearly surrounded by water.

PIER A structure built out into the water, usually with its greatest dimension at

right angles to the shore, forming a landing place or a place alongside

which vessels can lie.

PILING A set of posts forced into the earth to serve as a support, as for a pier, or to

resist lateral pressure.

PILOT_WATERS Areas in which the services of a marine pilot are essential.

PINNACLE A tall, slender, spire-shaped rock projecting from a level or more gently

sloping surface.

PLACE An area with definite or indefinite boundaries.

PLAIN A region of general uniform slope, comparatively level, and of considerable

extent.

PLATEAU An elevated and comparatively level expanse of land.

PLUNGE_POOL A hollow eroded by the force of the falling water at the base of a waterfall,

particularly by the eddying effect.

POLYNA Any enclosed water area in pack ice other than a lead, not large enough to

be called open water. When frozen over, a polyna becomes an ice skylight from the point of view of the submariner. Also called BIG CLEARING, CLEARING, GLADE, ICE CLEARING, POOL, REGIONAL CLEARING.

PORT A landing place provided with terminal and transfer facilities for loading and

discharging cargo or passengers, usually located in a harbor.

POST A long relatively slender, and generally round piece of wood or other mate-

rial.

PUMP_OUT_FACILITY A holding place where ship's bilges and cargo are pumped.

PYRAMID An ancient structure having a broad base with sides narrowing towards the

top.

QUICKSAND A bed of loose sand mixed with water forming a soft, shifting mass that

yields easily to pressure.

RACETRACK A course laid out for racing.

RADAR_DOME A dome shaped structure used to protect the antenna of a radar installation.

RADAR_REFLECTOR A device capable of or intended for reflecting radar signals.

RAILWAY A permanent way having one or more rails which provides a track for cars.

RAILWAY_YARD An area provided with a system of tracks where railroad trains are made up

and cars are switched, stored, or serviced.

RAPIDS An area of broken, fast flowing water in a stream, 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.

REEF A ridge of rocks, lying near the surface of the sea, which may be visible at

low tide, but is usually covered by water.

REFUELING_TRACK Airspace designated for conducting aerial refueling.

RESERVE A tract of land set aside for a specific use.

RESTRICTED AREA An area of air, land, or water in which travel or other activities are subject to

specified conditions or constraints.

REVETMENT A facing, other than a wall, of stone, concrete, wood, etc., built to sustain an

embankment.

RIDGE A long and narrow upland with steep sides.

RIDGE_LINE The line separating drainage basins.

RIG Vertical structure fitted for drilling or lifting operations.

ROAD An open way for the passage of vehicles, persons, or animals on land.

ROCK An isolated rocky formation or a single large stone, usually one constituting

a danger to navigation. It may be always submerged, always uncovered, or

alternately covered and uncovered by the tide.

ROUNDABOUT Area of water subject to a routing measure restricting ship movement to a

counter-clockwise direction.

RUNWAY A straight path used for landing, taxiing, and take-off of aircraft.

SALT PAN An area of salt deposits.

SEA The great body of salt water of the oceans.

SHAFT A long narrow passage sunk in the earth.

SHINGLE A collection of loose pebbles on the shore of the sea or a lake.

SHIPYARD A yard or area where ships are built or repaired.

SHORE That part of the land in immediate contact with a body of water including the

area between high and low water lines.

SHORELINE The line of contact between a body of water and the land.

SIGN A roadway associated feature which provides information to people pass-

ing.

SKI_AREA An area used for skiing.

SKI_JUMP A ramp used for ski jumping.

SNAG A stem or trunk of a tree above or below the surface of the water.

SNOWFIELD A region of permanent snow in mountainous areas or high latitudes.

SOLAR_PANEL A unit of solar cells for converting sunlight into electrical energy or heat.

SPORTS_FIELD A field on which sporting activities are carried out.

SPRING The place where water issues from the ground naturally.

STADIUM Large often unroofed structure in which athletic events are held.

STOCKYARD An enclosed area in which livestock are temporarily kept.

SWASH The mass of broken foaming water which rushes bodily up a beach as a

wave breaks. Synonymous with SEND.

TALUS Slopes of broken rock debris on a mountainside.

TANK A structure used for the storage of fluids.

TENNIS_COURT A recreational area used for playing tennis.

TERRACE A step-like feature between higher and lower ground: a relatively flat or

gently inclined shelf of earth, backed and fronted by steep slopes or man-

made retaining walls.

TIDAL GAUGE An instrument for measuring the height of the tide.

TIME_ZONE A geographic region within which the same standard time is used.

TOWER A tall framework or structure, the elevation of which is functional.

TRAFFIC_ SEPARATION_

sel traffic.

SCHEME AREA

TREE A woody perennial plant, having a self-supporting main stem or trunk.

TROUGH A long depression of the sea floor.

TUNDRA A treeless area poleward or upward of the tree line of arctic or alpine

regions, having a permanently frozen subsoil and supporting low-growing

Area of water with lanes designated to separate opposing streams of ves-

vegetation such as lichens, mosses, and stunted shrubs.

TUNNEL An underground or underwater passage.

TURNING_BASIN A water area used for turning vessels.

TURNTABLE A circular horizontal rotating platform equipped with a railway track, used

for turning locomotives, as in a roundhouse.

UTILITY A linear distribution system consisting of pipelines, high tension wires,

cables, etc., providing a public service and usually subject to government

regulations.

VALLEY A long, narrow depression in the Earth's surface, usually with a fairly regu-

lar downslope.

WALL An upright structure of masonry, wood, plaster, or other building material

serving to enclose, divide, or protect an area.

WATERCOURSE A way or course through which water may or does flow.

WATERFALL A sudden descent of water over a step or ledge in the bed of a river.

WATER_SURFACE The water portion of the Earth's surface, including the surface of sea and

inland waters.

WATERING PLACE A place other than a spring or well where vessels and vehicles replenish

their water supply.

WELL A pit or hole dug or bored into the earth, for the extraction of oil, water, other

fluids or gases.

WETLAND A vegetated area that is inundated or saturated by surface or groundwater.

WHARF A structure extending parallel to the shoreline so that vessels may lie close

alongside to receive and discharge cargo.

WIND_INDICATOR A visual device used to provide wind information.

WINDBREAK A shelter, either natural (e.g., a line of trees or a thick hedge) or artificial (a

screen), which breaks or interrupts the force of the wind.

WINDMILL A mill or other machine that runs on the energy generated by a wheel of

adjustable blades or flats rotated by the wind.

WOODLAND Land having a cover of trees, shrubs, or both.

WRECK A wrecked vessel, either submerged or visible, which is attached to or foul

of the bottom or cast up on the shore.

ZONE_OF_ OCCUPATION An area, usually temporary, held and controlled by a foreign military force.

Annex B

(normative)

Attributes

ABANDONED Deserted.

ACCESS The type of connection available to a given transportation feature.

ACIDITY The degree to which hydrogen ions are held by soil colloids or water.

ACTIVE/INACTIVE Engaged in activity versus no longer in use.

ADMINISTRATION The organization that has charge of or directs or manages the opera-

tion of the feature.

AERONAUTICAL_ Involving transmission of special radio signals intended to assist in the

determination of aircraft position including that relative to collision haz-

ards.

AGE The first year in existence.

AIR/LAND/WATER Existing in or part of the atmosphere, the Earth's dry surface, or a body

of water.

AIRCRAFT LANDING Suitable for or designed for aircraft to descend toward and settle on.

ALTITUDE The height of a thing above a reference level, especially above the

Earth's surface. See also HEIGHT, ELEVATION.

ANNUAL_PRECIPITATION The quantity of rain and snow falling within the period of a year.

ARCHITECTURAL_

PROPERTIES

NAVIGATIONAL

The style or method of design or construction.

AREA The measure of a planar region of the Earth's surface.

AREA_DIVIDED The part of the Earth's surface apportioned.

ARTIFICIALLY_IMPROVED/

MANMADE/NATURAL

Artificially improved: naturally existing feature with manmade alterations; manmade: made by man rather than occurring in nature; naturations.

ral: present in or produced by nature.

ATTACHED_TO_LAND Connected to a body of land.

BARE Exposed, not covered with such things as ice, snow or trees.

BEARING_CAPACITY The ability of a surface or a structure to bear weight.

BLIND/OPEN Blind, not having an outlet versus open, allowing continuous passage.

BOUNDARY_MARKER Serving to preserve and identify the location of the boundary line.

BRAIDED Split into many parts or choked with sandbars that divide it into an intri-

cate network of interlacing channels.

BRANCH/PARENT Relationship between a main stream and one of its tributaries.

BUILDINGS_NUMBER_OF The number of permanent walled constructions present.

BUOYED Marked with buoys used as navigation aids.

CARGO_TRANSPORTATION Used for the moving of freight from one place to another.

CHAMBERS_NUMBER_OF The number of enclosed spaces or compartments.

CHARTED_DEPTH The vertical distance from the tidal datum to the bottom.

CIRCUMFERENCE The length of the boundary line of any closed curvilinear feature.

CLEARANCE The vertical distance from a surface to the nearest overhead obstruc-

tion.

COASTAL Pertaining to the edge of land next to the sea.

COG Equipped with teeth to transmit motive force to a corresponding wheel.

COLOR That aspect of things that is caused by differing wave lengths of light

reflected or emitted by them.

COLOR_PATTERN The color or combination of colors in the geometrical design or pattern.

COMMERCIAL Used or exploited for financial gain.

COMMERCIAL SHIPPING Travel or traffic by water vessels carrying commercial goods.

Used for transmission or reception of communication signalsversus not COMMUNICATION/ NONCOMMUNICATION used for the transmission or reception of communication signals.

COMPOSITION The specified mixture or combination of one or more elements or ingre-

dients.

CONNECTED BY Connected by switches: a railway segment such as a siding or spur, SWITCHES/MAIN TRACK

requiring passing through a switch to gain access to the main track.

CONSTRICTION Having a narrow place in the feature.

CONSTRUCTION_TYPE The structural configuration of a feature.

CONTINENTAL DIVIDE Separates drainage basins that flow to opposite sides of a continent.

CONTROL To exercise authority or dominating influence over; direct; regulate/ver-

ify.

CONTROL_OVER_WATER_

LEVEL

Having some means of regulating the height of a specific body of

water.

CONTROLLING DEPTH The least depth in the approach or channel to an area governing the

maximum draft of vessels that can enter.

CONTROLLED/

UNCONTROLLED

Authority or dominating influence exercised over; directed; applies to

air traffic near and at an airport.

COVERED/UNCOVERED Having something placed over the feature versus not having anything

over it.

CROP USE The employment or purpose of an agricultural product.

CROSS_SECTIONAL_AREA A section formed by a plane cutting through an object at right angles to

an axis.

CULTIVATED Improved and prepared land; plowed or fertilized or tended for growing

crops.

DANGER_TYPE The kind of or source of peril.

DANGEROUS Involving or fraught with danger; perilous. Apt or able to do harm.

DECIDUOUS/EVERGREEN Deciduous, characterized by shedding foliage at the end of its growing

season.

DENSITY_OF_GROWTH The degree or measured degree to which the area is filled or occupied

by plant life.

DEPTH_BELOW_GROUND_

SURFACE

Distance downward from the elevation of the local ground surface to

the bottom of a feature.

DIAGNOSTIC Used to check system accuracy.

DIAMETER The length of a line segment passing through the center of a circular

shaped feature.

DIRECTION The relationship by which the alignment or orientation of any position

with respect to any other position is established.

DIRECTION_OF_FLOW The line or course of movement of water or lava shown by the position

of one point relative to another without reference to the distance between them. The direction is usually indicated in terms of its angular

distance from a reference direction.

DISCHARGE Cubic measure of water flowing per unit of time.

DISCOLORED Having a changed or spoiled color.

DRAINAGE Used for removing water from the ground surface.

DRAINED Water has been drawn off the ground surface.

DREDGED Deepened by various machines equipped with scooping or suction

devices usually attached to barges or boats.

DUAL_GAUGE Having a third rail to permit use by non-standard gauge rolling stock.

DWELLING Used as a residence or an abode.

EDDIES PRESENT Presence of currents moving contrary to the direction of the main cur-

rent especially in a circular motion.

ELECTRIFIED Equipped for use by electric power driven engines.

EMBANKED Confined, supported or protected by a piled up mass.

ELEVATION Vertical distance above or below a vertical datum, especially on the

Earth's surface. See also ALTITUDE and

DEPTH BELOW GROUND SURFACE.

EMBEDDED_IN_PAVEMENT Permits land vehicles to travel along a railway.

ENCLOSED Surrounded on all sides by for example a fence.

EQUIPMENT_PRESENT Devices or machinery or tools present.

EVENT_HELD The organized program or parts of a program taking place at the site.

EXERCISE Used for activities that require physical exertion especially when per-

formed to develop or maintain fitness.

EXISTING/PROPOSED Previously constructed and presently existing versus in the planning

stage.

EXPOSED/SHELTERED Not protected versus protected as from the weather.

EXTERNAL

CONSTRUCTION_MATERIAL

The specified mixture or combination of elements used to construct the

outer layer of the feature.

FACILITIES PRESENT The structures or installations available for enhancing the use of the

feature being described.

FALLOW Cultivated land that is allowed to lie idle during the growing season.

FEATURE_BOUNDED The feature that has its border identified or marked.

FEATURE CONNECTED Another feature which is joined to the feature being described.

FEATURE_CROSSED_

CONNECTED

The feature that is passed under by the feature being described.

FEATURE_MARKED The feature that is distinguished by some physical sign, symbol or visi-

ble impression or some physical object.

FEATURE_PRESENT Presence of one feature within another feature, for example, dam in

watercourse, breakwater in harbor.

FEATURE_SPANNED A feature that the feature being described crosses above without join-

ing.

FEATURE_SUPPORTED The feature that has its weight borne from below by the feature being

described.

FIRE LINE Cleared or plowed strip of land to stop the spread of fire.

FLOATING Suspended within or on the surface of water.

FLOOD_CONTROL Designed for the control or drainage of a rising and overflowing body of

water.

FLOOD_FREQUENCY How often an area is subject to inundation.

FLOODED Inundated with or submerged under an excess amount of water.

FORCE_OF_FLOW The strength of energy exerted by the movement of water or lava.

FORM RATIO The relationship between the depth and width of a stream, expressed

as a ratio.

FOUL_GROUND Having holding qualities for anchoring that are poor, or where danger of

striking or fouling the ground or other obstructions exist.

FUNCTION The activity or need that the feature is designed for or adapted to.

GAS_EMITTED_TYPE Kind of gaseous substance released.

GLACIAL Of, pertaining to or derived from a glacier.

GRADE_SEPARATION An intersection using an overpass or underpass.

GRAZING Land which supplies herbage for grazing animals.

GROWING_PATTERN The layout or arrangement of growing plant life.

GROWING_SEASON The period of time during the year characterized by environmental con-

ditions suitable for planting and growing crops.

HEIGHT The vertical distance from the base to the top.

HORIZONTAL/VERTICAL Parallel to or in the plane of the horizon versus perpendicular to the

plane of the horizon.

HYDRAULIC_RADIUS The ratio between the cross-sectional area of a stream and its wetted

perimeter.

ICE_PRESENT Containing water which is either partially or completely frozen.

INCORPORATED/ United or combined into an organized body which is maintained

UNINCORPORATED through a series of laws or rules.

INFORMATION_DISPLAYED The idea communicated through exhibition.

INTERMITTENT/PERENNIAL Occurring or appearing in interrupted sequence versus present at all

seasons of the year.

INTERNATIONAL_DATE_

LINE

The imaginary line through the Pacific Ocean roughly corresponding to 180 degrees longitude, to the east of which, by international agree-

ment, the calendar date is one day earlier than to the west.

IRRIGATED Supplied with water by means of pipes, ditches or streams for agricul-

tural purposes.

IRRIGATION Used for the supplying of water by artificial means to land for agricul-

tural purposes.

ITEM(S)_STORED The articles or substances reserved or put away for future use.

LAND_USE_ CATEGORY Broad classification of the use of land for planning and zoning pur-

poses.

LANDFILL Land being rehabilitated for future productive use.

LANDING/TAKE-OFF/

TAXIING

Used as the place for aircraft to descend from flight or to rise up into flight versus the place for aircraft to roll to and from the landing/take-off

place.

LANDMARK A prominent and identifying feature of a landscape.

LANES NUMBER OF The number of paths available side by side for the simultaneous pas-

sage of vehicles in a road, railway or navigation route.

LATITUDINAL_ZONE One of the large regions delimited by distance from the equator, used

as a basis for classifying climates.

LEADING_LIGHTS Presence of two or more lights forming a leading line or course to be

followed.

LEAD TYPE Characteristics or category of lead.

LENGTH The longer or longest dimension of a feature.

A tract with a relatively uniform horizontal uppermost layer. LEVEL SURFACE

LIGHT_CHARACTERISTIC The distinctive character or quality typical of a specific light emitted.

LIGHT DISPLAY The sequence and approximate length of light and dark periods of a

specific light.

LIGHTED/UNLIGHTED Marked with lights used as aids to navigation, or to general night use.

Presence of lights marking area limits, cable alignments for anchoring, LIGHTS_IN_A_LINE

etc., not marking direction or course.

LOADING/UNLOADING Used as a place where cargo or passengers can be receivedor dis-

charged.

LOCATION The place, site or space occupied by a specified feature.

MATERIAL_CONVEYED The substance or item(s) being transported.

MATERIAL_PROCESSED The substance being altered through an industrial procedure.

The tidal datum that is the arithmetic average of the high water heights MEAN HIGH WATER

observed over a specific 19-year metonic cycle. See also DATUM.

MEAN SEA LEVEL A standard datum for heights and elevation in coastal areas.

Presence of a dividing area often paved or landscaped, between MEDIAN_PRESENT

opposing lanes.

MEMORIAL Designed or established to serve as a remembrance to a person or an

event.

Determined astronomically versus determined by triangulation METHOD_OF_

MEASUREMENT

MICROWAVE The act or process of sending a signal of electromagnetic radiation TRANSMISSION

having a wavelength in the approximate range from one centimeter to

one meter.

MINERAL CONTENT Presence of any naturally occurring, homogeneous inorganic sub-

stances.

MOUNTED Fitted into or set in a backing or support.

MOVABLE/STATIONARY Ability to change position versus fixed in position unable to move.

NAME A word or phrase that constitutes the distinctive designation of an

occurrence of a feature.

NAVAIDS Serving as aids to navigation.

NAVIGABLE Having water deep enough and wide enough to afford passage to

ships; capable of being steered.

NEGOTIATED/UNILATERAL Arranged or settled through consultation and agreement with two or

more parties versus arranged or settled by one party without consulta-

tion or agreement with any other interested party.

NUMBER_OF_SITES The number of places or plots of land designated for a specific use. OBSERVATION Used as a place to watch over attentively.

OBSTRUCTION Acting as an obstacle impeding passage.

OFFSHORE/ONSHORE Located or occurring at a distance from shore versus located or occur-

ring on shore.

ONE_WAY/TWO_WAY Accommodating a lane or lanes of traffic moving in one direction only

versus traffic moving in opposing directions.

OWNER TYPE Characteristics or category of owners of the feature.

PARK_ATTRACTION The presence of various mechanical contraptions operated as amuse-

ment park entertainment.

PASSENGER_ TRANSPORTATION Used for the conveyance of human passengers.

PASSING Used for traveling at a faster speed or for going around others using

the feature.

PEDESTRIAN_USE Used by people traveling on foot.

PERMANENTLY_ICE_

COVERED

Having a fixed outer layer of ice which does not melt.

PERMEABILITY The ability of substances to pass through the openings or interstices.

PHYSICAL Of or pertaining to material things.

PHYSICAL CONDITION OF

FEATURE

The state of repair of a feature or the extent of deterioration.

PHYSICAL_CONDITION_OF_

SURFACE MATERIAL

The physical condition of a specified transportation surface which allows for use ranging from sustained use by heaviest vehicles to non-

use due to disrepair or deterioration.

POPULATION The number of people inhabiting a specified area.

PREDOMINANT_SPECIES The most common, conspicuous, or prevalent animal or life belonging

to a distinct biological species.

PRIMARY/SECONDARY/ TERTIARY/QUATERNARY Order of importance, degree of priority or degree of use.

PRODUCT The item or substance produced through an industrial process.

RADAR_GUIDED Users directed or steered by signals of reflected high frequency radio

waves.

RADAR TYPE The kind of or intensity of the high frequency radio waves used for

guidance or detection of objects.

RADIO_SIGNAL_ The distinctive characteristic or quality typical of a specific radio signal

CHARACTERISTIC emitted.

RADIO_TRANSMISSION Used for or containing the equipment used to transmit radio signals,

electromagnetic waves in approximate frequency range from 10 kilocycles/second to 300,000 megacycles/second. To transmit or to receive electric signals without wires connecting the points of transmission and

reception.

RAIL CONNECTOR TYPE The method used to join or connect consecutive rails of a specific rail

line or segment.

RAIL_DIRECTION_ Facility available at a specific location to change the direction of a loco-

CHANGES motive.

UNRECOGNIZED

RAIL_GAUGE The distance between two rails of a railway track.

RAIL_GAUGE_ Method used to change the gauge on a specific piece orcategory of

ADAPTABILITY railway equipment.

RAILS_NUMBER_OF Having parallel bars for conveyance versus a single bar system.

RECOGNIZED/ Acknowledged as being valid versus not acknowledged.

RECREATIONAL Used for the refreshment of one's mind or body after labor through

diverting activity; play.

RELATIONSHIP TO The occupation of space in relation to the solid surface of the Earth.

GROUND_SURFACE

RELATIONSHIP_TO_ The position of the feature above or below the surface of the local water feature.

RELIEF The difference between high and low places in a locality.

RESTRICTIONS Limitations on the use for legal, safety, security or other reasons.

ROAD_TYPE Characteristics or category of road.

RUNWAYS NUMBER OF The number of prepared surfaces available to accommodate the land-

ing and take-off of aircraft.

SAFE_PASSAGE Having been established as a route free from hazards.

SALINITY The proportion of dissolved salts in pure water, stated in parts per thou-

sand by mass.

SCREEN_PRESENT The presence of a large flat white or silver surface upon which a picture

is projected.

SEA_ICE_PRESENT Presence of more than 10 percent sea ice inhibiting free navigation.

SEASON_USED The specified season or time of year that something can be used,

especially in reference to something that is dependent on or controlled

by seasonal changes.

SEASONAL DEPTH The measurement from the water surface to the bottom of that water

body at different seasons; used in relation to water bodies which have

marked changes due to season change.

SEAWEED_PRESENT Presence of any of numerous marine algae, such as kelp, rockweed, or

gulfweed.

SERVICES_PROVIDED Kinds of services provided at a given facility. See also FACILITIES

AVAILABLE.

SHAFTS_NUMBER_OF The number of long narrow passages sunk in the Earth.

SHAPE Spatial form.

MULTIPLE_WIRES

SHARP_CURVE Presence of an abrupt acute bend in the feature.

SHORE_ORIENTATION The position of something relative to the shore, for example, parallel.

SIGNAL_DIRECTION The line or course along which the sound, image, or other transmitted

message travels.

SIGNAL_INTENSITY The concentration of power or force of the signal emitted.

SIGNAL_TYPE The kind of electronic impulse used for communication.

SINGLE_WIRE/ Presence of one strand of wires versus more than one strand of wire

together.

SIZE The physical dimensions, proportions, magnitude, or extent of some-

thing.

SLIPS_NUMBER_OF The number of spaces between wharfs or piers designed to accommo-

date water vessels.

SLOPE The slant or deviation from horizontal measured in degrees.

SLOPE_OF_SHAFT The slant or deviation from horizontal measured in degrees of the

shaft.

SLOPE_OF_SIDES Same as for "SLOPE," but measured between the upper and lower sur-

faces of the feature, along its sides.

SMOKE_EMISSION The venting of vapor made up of small particles of carbonaceous mat-

ter in the air, resulting mainly from incomplete combustion of organic

material, such as wood or coal.

SOIL_TEXTURE The kind of ground material characterized by the relative proportions of

the various size groups of individual soil grains in a mass of soil.

SOIL_TYPE The principal unit used in soil mappings as defined by the Soil Conser-

vation Service.

SOUND_CHARACTERISTIC The distinctive character of quality typical of a specific sound emitted.

SOVEREIGNTY The supreme authority or control over the feature.

SPAN_LENGTH The length of the section between intermediate supports of a bridge.

SPAN_MOVEMENT The manner in which the section between two intermediate supports of

a bridge moves.

SPECIES A fundamental category of taxonomic classification, ranking after a

genus, and consisting of organisms capable of interbreeding.

SPECIES_CULTIVATED The form of life grown and nurtured for harvest.

SPORTS_TYPE The type of organized competitive game(s) that the feature is used for.

STAFFED/UNSTAFFED Presence or absence of personnel who carry out a specific enterprise.

STORAGE Used for maintaining a stock or supply for future use.

STRUCTURE_TYPE The configuration or arrangement of a feature.

SUBSTANCE_EXTRACTED The matter (liquid, solid or gaseous) being drawn forth by mechanical

or chemical processes.

SUPPORT_TYPE The kind of feature used to bear the weight of the feature being

described.

TELEVISION_ The transmission of visual images of moving and stationary objects, TRANSMISSION generally with accompanying sound, as electromagnetic waves, and

the reconversion of received waves into visual images.

TEMPERATURE A specific degree of hotness or coldness as indicated on or referred to

a standard scale.

TIDAL Subject to the alternating rise and fall of water level caused by the

astronomic tide-producing forces.

TOLL A fixed charge or tax for access, especially for passage across a bridge

or along a road.

TRAFFIC_LIGHTS_

PRESENT

Presence of road signals that beam a red or green light or an amber

warning light to direct traffic to stop or proceed.

TRANSPORTATION MODE

ACCOMMODATED

The kind of transportation that a feature is adapted to or suited to.

TREE_COVER The amount or density of tall woody plants occupying the surface of a

specified area.

TREE_LINED Having a border of trees along its sides.

UNDERGROWTH_PRESENT Presence of low growing plants, saplings, and shrubs beneath the

trees in a forest.

USER_TYPE Characteristics or category of users of the feature.

VEHICLE_ACCOMMODATED The type of vehicle that the feature is adapted to or designed to serve.

VEHICLE_SIZE_SERVED The physical dimension, proportion, magnitude, or extent of any device

for carrying passengers, goods, or equipment that the specified feature

has space for storage or service for.

VENT_PRESENT Presence of an opening permitting the passage or escape of liquids or

gas.

VOLCANIC Pertaining to or produced by volcanic eruptions.

VOLUME Space occupied or cubic capacity as measured in cubic units.

WASTE_MATERIAL The useless or worthless byproducts of a process or the like; refuse or

excess material.

WATER_BODY_ Acting as a link between two larger bodies of water.

CONNECTION

WATER_PRESENT Presence of water in the feature.

WATER_SUPPLY Equipped or used to furnish water.

WATERAGE The movement of goods or merchandise (such as logs) by water.

WETTED_PERIMETER Length of the line of cross-sectional contact between the water in a

stream and its watercourse.

WIDTH The maximum horizontal measurement taken at right angles to the

length; breadth; the maximum horizontal measurement of the extent of

something from side to side.

WINDBREAK A hedge, row of trees, or fence serving to lessen or break the force of

the wind.

WIRE_DRAGGED Cleared of hazards through the use of a wire dragged through the

water.

WORK_IN_PROGRESS Presence of construction or other work that is incomplete and that may

limit access or pose some hazard.

ZOO Presence of wild animals for public display.

Annex C

(normative)

Included Terms

C.1 Entity Types

Accessway ROAD
Administrative boundary BOUNDARY

Aeration beds FILTRATION BEDS

CABLEWAY Aerial cableway Aerial cableway lines **CABLEWAY** Aerial cableway pylon **TOWER** Aerodrome **AIRPORT** Aerodrome beacon **BEACON** Aerodrome control tower **TOWER** Aeronautical beacon **BEACON** Aeronautical light **BEACON**

Aeronautical navigational radio station BUILDING, BUILDING COMPLEX

Aeronautical radio beacon
Air beacon
BEACON
Air route
Airdrome
Airdrome
Airfield
RUNWAY

Airfield RUNWAY
Airfield revetment WALL
Airport beacon BEACON

Airport traffic area APPROACHWAY

Airport traffic control tower

Airstrip

Alley

Alluvial fan

Alternate aerodrome

Alternating light

TOWER

RUNWAY

ROAD

DELTA

AIRPORT

BEACON

Amphitheater OUTDOOR THEATER

Amusement park PARK

Anabranch WATERCOURSE

Anchor buoy
Anchor light
BEACON
Anchorage
HARBOR
Anchorage buoy
Animal sanctuary
Animal sanctuary
BOUNDARY
Anco

Anse INLET Apartment building BUILDING

Apartment complex BUILDING COMPLEX Approach area APPROACHWAY

Approach lights BEACON

Approach path APPROACHWAY

Approach to highway ROAD

Apron PARKING AREA, PLAIN
Aqueduct WATERCOURSE BRIDGE

Arched iceberg ICEBERG

Archipelago SEA, ISLAND CLUSTER

Archipelago apron PLAIN
Arctic pack ICE FIELD
Arena BUILDING
Arete RIDGE
Arm INLET
Armistice line BOUNDARY

Armory BUILDING, BUILDING COMPLEX

Army camp

Army camp

MILITARY BASE

WATERCOURSE

Art gallery

BUILDING

Artificial harbor

Athletic club

BUILDING

Astronomic position CONTROL POINT
Athletic field SPORTS FIELD
Atoll REEF, ISLAND

Atoll reef REEF Auditorium BUILDING

Automobile plant BUILDING COMPLEX

Auxiliary aerodrome AIRPORT
Avenue ROAD
Awash rock ROCK

Awawa WATERCOURSE
Back marsh WETLAND
Backswamp WETLAND

Bald CLEARING, MOUNT

Ball BAR

Ball park PARK, SPORTS FIELD

Bamboo WOODLAND

Bandstand OUTDOOR THEATER
Bank MOUNT, SHORE

Bank reef REEF
Bar buoy BUOY
Bar port PORT
Bare rock ROCK
Barn BUILDING

Barracks BUILDING, BUILDING COMPLEX

Barrage DAM

Barranca WATERCOURSE

Barrier basin BASIN Barrier beach BAR

Barrier flat WETLAND, FLAT
Barrier iceberg

Barrier iceberg

Barrier island

BAR, ISLAND

Barrier lagoon

Barrier reef

Bascule bridge

Battery

FORT

Bay

Bay INLET
Bay head bar BAR
Bay bar BAR
Bay barrier BAR
Bay delta DELTA
Bay ice ICE FIELD
Baymouth bar BAR

Bayou LAKE, WATERCOURSE

Beach berm
Beach cusps
RIDGE
Beach face
SHORE
Beach ridge
RIDGE
Beach scarp
CLIFF
Beaver dam
DAM

Beck WATERCOURSE

Bell buoy BUOY TERRACE

Bench mark CONTROL POINT
Bend WATERCOURSE
Bery MOUNT, ICEBERG

Bicycle path **ROAD** Bicycle trail **ROAD BUOY** Bifurcation buoy **Bight INLET** Billboard SIGN Bird sanctuary **PARK** Blanket bog **WETLAND** Blast barrier WALL

Bluff CLIFF, WOODLAND

Boardwalk ROAD
Boat basin HARBOR
Boat harbor HARBOR

Boat landing WHARF, PIER, LANDING PLACE

Boathouse BUILDING
Bog WETLAND
Bollard MOORING
Boom BREAKWATER

Borough PLACE
Borrow pit MINE
Botanical garden PARK
Boulevard ROAD
Boundary line BOUNDARY

Boundary lights BOUNDARY BEACON
Boundary monument CONTROL POINT

Boundary sign SIGN

Braided river WATERCOURSE
Braided stream WATERCOURSE
Brake WOODLAND
Branch WATERCOURSE
Brigalow WOODLAND

Brine well WELL

Brook WATERCOURSE
Brush WOODLAND

Built up area PLACE

Bulkhead BREAKWATER, EMBANKMENT, WALL

Burn CLEARING
Burnt over area CLEARING
Bush WOODLAND
Butte PLATEAU
Caatinga WOODLAND
Cable UTILITY

Cable buoyBUOYCadastral boundaryBOUNDARYCadastral monumentCONTROL POINTCairnCONTROL POINT

Caisson GATE
Caldera CRATER
Calibration radiobeacon BEACON

Camber HARBOR BASIN Campsite CAMPGROUND

Can buoy BUOY

Canal WATERCOURSE

Canal port PORT

Cannery BUILDING, BUILDING COMPLEX

Canyon **VALLEY** Canyon delta **DELTA** Carline **RAILWAY** Cart track **ROAD** Cascade WATERFALL Cask buoy **BUOY** Cataract **RAPIDS** Catch basin LAKE, TANK Cathedral **BUILDING** Cattle gate **GATE** Cattle underpass **TUNNEL** Cauldron **BASIN** Causeway **ROAD** CAVE Cavern **ISLAND**

Cay ISLAND
Cease fire line BOUNDARY
Ceia CLIFF

Cement plant BUILDING COMPLEX

Cerrito MOUNT

Cerro MOUNT, RIDGE Chanaral WOODLAND

Channel WATERCOURSE, LANE

Channel buoy
Channel light
Channel marker
BEACON
BEACON
BEACON

Channel marker
Chaparral
Chapeirao
Chasm
Checkered buoy

BEACON, BUOY
WOODLAND
PINNACLE
VALLEY
BUOY

Chemical plant BUILDING COMPLEX

Church **BUILDING** Cinder cone **MOUNT BEACON** Circular beacon Cistern TANK City **PLACE** City hall **BUILDING** City limits **BOUNDARY** City square **PARK**

City square PARK
Claim line BOUNDARY
Cleared area CLEARING
Clinic BUILDING

Closed bay **INLET** Closed sea **SEA**

Clover leaf interchange INTERSECTION Coastal shoreline SHORELINE

Coast guard station BUILDING, BUILDING COMPLEX

Coast guard lines **BOUNDARY** Coastal area COAST Coastal plain PLAIN, COAST Coastline **SHORELINE** Code beacon **BEACON** Col **GAP**

College BUILDING, BUILDING COMPLEX

BEACON

Colored light **BEACON** Colregs demarcation line **BOUNDARY** Combination buoy **BUOY** Community **PLACE** Conical buoy **BUOY** Coniferous forest WOODLAND Conservation area **RESERVE ICE FIELD** Continental glacier Continental ice ICE FIELD Continuous radiobeacon

Control survey monument **CONTROL POINT**

Control tower **TOWER**

Controlled access road **ROAD** Controlled aerodrome **AIRPORT** Convent **BUILDING** Cooling tower **TOWER** Copse WOODLAND Convention mandate line **BOUNDARY** Coral head **PINNACLE**

Coral reef **REEF** Corduroy road **ROAD**

Coulee VALLEY, WATERCOURSE LANE, WATERCOURSE Course

Courthouse **BUILDING** Cove **INLET** Covered bridge **BRIDGE**

CLIFF, PINNACLE Crag Creek WATERCOURSE Crematorium BUILDING

Crest **RIDGE** Crevice CREVASSE, VALLEY INTERSECTION Crossing

Crossing gate **GATE**

RIDGE, MOUNT Cuesta

Cul de sac **ROAD** Cultivated field **CROPLAND** Cultivated area **CROPLAND** Culvert WATERCOURSE

Cuspate bar **BAR** Cuspate spit **BAR**

Custom boundary **BOUNDARY** Cut line **CLEARING**

Cut off WATERCOURSE

Dale VALLEY Dan buoy **BUOY** Danger buoy **BUOY** Dangerous wreck **WRECK** Dangerous rock **ROCK** Daybeacon **BEACON** Dead end street **ROAD** Deciduous forest WOODLAND Deep TROUGH De facto boundary **BOUNDARY**

Defile GAP, VALLEY Dell **VALLEY** Delta moraine **MORAINE** Demilitarized line **BOUNDARY** Depot BUILDING Depression BASIN, VALLEY Diagnostic point **CONTROL POINT** Diamond intersection INTERSECTION

Dike EMBANKMENT
Directional beacon BEACON
Directional antenna ANTENNA
Dish ANTENNA

Disk ANTENNA
Dismal WETLAND
Display sign SIGN

Disposal area DUMPING GROUND
Disposal bed DUMPING GROUND
Distributary WATERCOURSE
Ditch WATERCOURSE

Divided highway **ROAD** Dock **BERTH** Dockyard **SHIPYARD** Dolphin **MOORING** Dome **MOUNT** Double track railway **RAILWAY** Down **GRASSLAND** Downland **GRASSLAND** Downs **GRASSLAND**

Drain WATERCOURSE
Drainage basin CATCHMENT
Draw WATERCOURSE

Draw bridge BRIDGE

Dredged channel LANE, WATERCOURSE

Dredging buoy

BUOY

Drill hall

BUILDING

Drive in theater OUTDOOR THEATER

Driveway ROAD Drowned valley VALLEY

Drumlin MOUNT, RIDGE
Dry harbor HARBOR
Dual highway ROAD

Dump Dump site DUMPING GROUND Dump site

Dyke EMBANKMENT

Early warning radar site BUILDING, BUILDING COMPLEX

Ecological area RESERVE

Electric power generating station BUILDING, BUILDING COMPLEX

Electrical tower TOWER

Electric substation BUILDING, BUILDING COMPLEX

Elevated highway ROAD

Elevation point CONTROL POINT

End moraine MORAINE

Engine test cell BUILDING, BUILDING COMPLEX

Entrance lock LOCK Entrepot PORT

Equatorial forest WOODLAND Equatorial rain forest WOODLAND Escarpment CLIFF

Esker RIDGE
Estuary INLET, MOUTH
Everglade WETLAND

Excavation MINE Expressway ROAD

Factory BUILDING, BUILDING COMPLEX

Fairground EXHIBITION GROUND

Fairway

EXTIBITION
Fairway

LANE
Fairway buoy

Falls

WATERFALL
Fan

DELTA
Fan delta

DELTA
Fan marker become

Fan marker beacon
Farm lane
ROAD
Feedlot
Fen
WETLAND
Ferry
WHARF, PIER

Ferry crossing LANE

Ferry site BERTH, PIER, WHARF

Ferry slip

Ferry station

BUILDING

Ferry terminal

PIER, WHARF

Field CROPLAND, GRASSLAND

Filling station BUILDING, BUILDING COMPLEX

Filtration plant BUILDING COMPLEX

Fiord INLET
Fire line CLEARING
Fire lookout tower TOWER
Fire lookout building BUILDING
Fire road ROAD

Fire station BUILDING, BUILDING COMPLEX

Fire tower TOWER
Firebreak CLEARING
Firth INLET

Fish haven FISHING GROUND

Fish net buoy
Fish pound
Fish stakes
Fish trap area

BUOY
FISH TRAP
FISH TRAP, POST
FISH TRAP, POST
FISHING GROUND

Fish weir **FISH TRAP**

Fishery FISHING GROUND, FISH HATCHERY

GATE

Fishing zone **FISHING GROUND**

Fixed and flashing light BEACON Fixed and group flashing light **BEACON** Fixed light **BEACON Fjord INLET** Flag tower **TOWER** Flame float **BUOY** Flare pipe **CHIMNEY** Flashing light **BEACON** Floating breakwater **BREAKWATER** Floating dock DRY DOCK Floating marsh **WETLAND** Floeberg **ICEBERG**

Flume WATERCOURSE

Fog signal **BEACON** Footbridge **BRIDGE** Foothill **MOUNT** Footpath **ROAD**

Floodgate

Forces base MILITARY BASE Foredeep **TROUGH** Foreland **PENINSULA** Foreshore SHORE Foreshore flats **BEACH** Forest WOODLAND Forest/park boundary **BOUNDARY** Forest reserve **RESERVE**

Fork WATERCOURSE

ROAD Freeway Fringing reef **REEF** Funeral home **BUILDING** Garage **BUILDING** Garden **CROPLAND** WOODLAND Garigue Gas field OIL FIELD Gasometer **TANK** Glacial gorge **VALLEY** Glacial moraine **MORAINE** Glacial stream

WATERCOURSE

VALLEY Glacial trough Glacier ICE FIELD Glacier berg **ICEBERG** Glacier iceberg **ICEBERG ICE FIELD** Glacier tongue

Glade CLEARING, GRASSLAND

Glen VALLEY Goe VALLEY

Golf driving range **GOLF COURSE**

Gorge **VALLEY** Graben **VALLEY**

Grade crossing INTERSECTION Grade intersection INTERSECTION Grain elevator **BUILDING BUILDING** Granary Grave marker **MONUMENT** Gravel pit MINE Graveyard **CEMETERY** Graving dock DRY DOCK Greenhouse **BUILDING** Groin **BREAKWATER**

Grotto CAVE Grove WOODLAND

Groyne BREAKWATER Guide rail GUARD RAIL

Gulch VALLEY, WATERCOURSE

Gulf INLET

Gully VALLEY, WATERCOURSE

Gut WATERCOURSE Gutter WATERCOURSE

Guyot **PLATEAU** Half tide basin **LOCK** Hamlet **PLACE** Hangar BUILDING Harbor limit **BOUNDARY** Harbor line **BOUNDARY** Harbor of refuge **HARBOR** Haven **HARBOR** Hay meadow **GRASSLAND** Head **PENINSULA**

Headland PENINSULA

Heath WOODLAND, WETLAND

HedgerowHEDGEHelicopter landing padHELIPADHeliportAIRPORTHerbaceous areaGRASSLAND

Highway ROAD
Highway route number SIGN
Hill MOUNT
Hillock MOUNT
Hockey rink ICE RINK
Holding pen STOCKYARD
Hollow VALLEY

Homing beacon
Hook
BEACON
BAR, PENINSULA

Hook BAR, PEN Hooked spit BAR Horizon lights BEACON

Horizontal control point CONTROL POINT Horizontal control monument CONTROL POINT

Horn buoy BUOY Hospital BUILDING

Hospital complex BUILDING COMPLEX

Hostel BUILDING
Hotel BUILDING
Hotspring SPRING
House BUILDING
Hovercraft station BUILDING

Hovercraft terminal PIER, WHARF Hulk WRECK

Hummock MOUNT, ISLAND
Hut BUILDING

Hydro tower TOWER
Hydrofoil station BUILDING
Hydrofoil terminal PIER, WHARF

Ice buoyBUOYIce capICE FIELDIce cliffCLIFFIce peakPEAKIce sheetICE FIELDIdentification beaconBEACON

Improved channel WATERCOURSE, LANE

Incline railway
Indian treaty line
Inland sea
Inner harbor
Inner lead
Inshore

RAILWAY
BOUNDARY
HAKE
HARBOR
LANE
SHORE

Interchange INTERSECTION

Intermittent light
Intermittent light
Intermontane plateau
International boundary
International date line
Interprovincial boundary
Interprovincial

Island arc ISLAND CLUSTER

Island harborHARBORIsland iceICE FIELDIsletISLANDJailBUILDINGJettyBREAKWATER

Junction buoy BUOY
Jungle WOODLAND

Junk yard DUMPING GROUND
Kame MOUNT, RIDGE
Kame terrace TERRACE
Keg buoy BUOY
Kettle BASIN

Key ISLAND

Kill WATERCOURSE
Kilometer post SIGN
Knob MOUNT
Knoll MOUNT

Knoll MOUNT
Lagoon beach BEACH
Laguna LAGOON
Land grant line BOUNDARY

Landing LANDING PLACE, PIER, WHARF

Landing area AIRPORT, RUNWAY

Landing beacon BEACON Landing field RUNWAY

Landing lane RUNWAY, LANE

Landing strip RUNWAY Landmark beacon BEACON

Large automatic navigational buoy Lateral moraine

Launch pad Lava cone

Lawn bowling green

Lead
Leading light
Ledge
Levee

Library

Life saving station

Lift bridge
Light
Light float
Light standard
Light station
Light vessel
Lighted beacon
Lighted buoy
Lighted sound buoy
Lighthouse
Lightship

Liquid waste disposal area

Locality

Limits

Lode
Logged area
Long flashing light
Longshore bar
Lookout tower
Loop antenna
Lumber camp

Maintenance road Major fog signal Major light Mallee scrub

Mangrove swamp

Maquis Marginal sea

Marine automatic meteorlogical station
Marine bench

Marine cliff
Marine light
Marine radiobeacon
Marker beacon
Marker radiobeacon
Market garden
Marsh

Marsh bar Mattress Meadow

Meander

Memorial park Mesa BUOY MORAINE MISSILE SITE MOUNT

PARK LANE BEACON REEF

EMBANKMENT BUILDING

BUILDING, BUILDING COMPLEX

BRIDGE
BEACON
BUOY
POST
BEACON
BUOY
BEACON
BUOY
BUOY
BUOY
BUOY
BEACON
BUOY
BOUNDARY

DUMPING GROUND

PLACE

WATERCOURSE CLEARING BEACON BAR TOWER ANTENNA CAMPGROUND

ROAD BEACON BEACON WOODLAND

WETLAND, WOODLAND

WOODLAND

SEA

BUOY TERRACE CLIFF BEACON BEACON BEACON BEACON CROPLAND WETLAND BAR

REVETMENT GRASSLAND WATERCOURSE

PARK PLATEAU Microwave tower TOWER
Mid channel buoy BUOY
Mile post SIGN
Mileage post SIGN
Military reserve RESERVE

Mill BUILDING, BUILDING COMPLEX

Millpond LAKE
Mine danger area BOUNDARY

Mineral pile DUMPING GROUND

Mineral springSPRINGMinor fog signalBEACONMinor lightBEACONMireWETLANDMississippi River type buoyBUOY

Moat WATERCOURSE, VALLEY

Mole BREAKWATER Monadnock MOUNT

Monastery BUILDING, BUILDING COMPLEX

Monorail RAILWAY
Monsoon forest WOODLAND
Monumented control point CONTROL POINT

Moor WOODLAND, WETLAND, GRASSLAND

Mooring buoyBUOY, MOORINGMooring mastMOORING, POSTMooring ringMOORING

Morass WETLAND
Mortlake LAKE
Mosque BUILDING

Motel BUILDING, BUILDING COMPLEX

MotteWOODLANDMoundMOUNTMountainMOUNTMountain passGAP

Mountain range MOUNT RANGE Mulga WOODLAND Mulga scrub WOODLAND Multiple track railway **RAILWAY** Municipal park **PARK** Municipality **PLACE** Museum **BUILDING** Muskeg **WETLAND**

Narrows WATERCOURSE
National park PARK
Natural harbor HARBOR

Naval station MILITARY BASE

Navigation light BEACON

Neck ISTHMUS, PENINSULA Neutral zone DEMILITARIZED ZONE

Non tidal basin

Notch

GAP, CAVE

Nuclear accelerator

BUILDING

Nuclear reactor BUILDING, BUILDING COMPLEX

Nullah WATERCOURSE

Nunatak PEAK

Nun buoy BUOY Nursery FARM

Obsequent stream WATERCOURSE
Obelisk MONUMENT

Observation tower **TOWER** Obstruction beacon **BEACON** Obstruction marker **BEACON** Obstruction light **BEACON** Obstruction buoy **BUOY** Occasional light **BEACON** Occasional fog signal **BEACON** Occulting light **BEACON BEACON**

Occulting quick flashing light
Ocean
SEA
Office building
Offshore bar
Offshore light station
Offshore loading facility
BEACON
OFFSHORE loading facility
BEACON
OFFSHORE loading facility

Offshore tower **BEACON** Oil well WELL Omnidirectional beacon **BEACON** Open pit mine MINE Open berth **HARBOR** Open harbor **HARBOR** Open roadstead **HARBOR** Open sea **SEA**

Open sound SEA
Open water SEA, LAKE
Orchard CROPLAND
Outlet MOUTH
Outport PORT
Outwash DELTA

Outwash plain DELTA, PLAIN
Overflow channel WATERCOURSE

Overpass BRIDGE Oxbow LAKE

Oyster bed FISHING GROUND

Pack ice ICE FIELD Paddy field **CROPLAND** Palisade **CLIFF** Palsa bog **WETLAND GRASSLAND Pampas** Parish **PLACE** Parking garage **BUILDING** Parking lot PARKING AREA

Parkway ROAD
Parti colored buoy BUOY

Pass GAP, WATERCOURSE, LANE Passage WATERCOURSE, LANE

Pasteuer lake LAKE

Pasture CROPLAND, GRASSLAND

Paternoster lake
Path
ROAD
Peat bog
WETLAND

Peat cutting WETLAND
Pedestrian crossing INTERSECTION

Pedestrian-bicycle overpass BRIDGE
Pedestrian underpass TUNNEL

Penitentiary BUILDING, BUILDING COMPLEX

Pens WHARF

Penstock UTILITY, WATERCOURSE

Perch BEACON

Photogrammetric horizontal control point CONTROL POINT

Picnic site **PARK** Pile **POST** Pile beacon **BEACON** Pile dolphin **BEACON** Pile lighthouse **BEACON** Pillar **PINNACLE** Pillar buoy **BUOY** Pilot lightship **BUOY**

Pingo MOUNT
Pipe UTILITY
Pipeline UTILITY
Pit MINE, BASIN
Placer mine MINE

Planetarium BUILDING

Plant BUILDING, BUILDING COMPLEX

Plantation CROPLAND Plantation field CROPLAND

Platform OFFSHORE PLATFORM

Playground PARK
Plaza PARK
Pocosin WETLAND

Point BAR, PENINSULA

Polar ice ICE FIELD Polar ice pack ICE FIELD

Police station BUILDING, BUILDING COMPLEX

Pond LAKE
Pontoon bridge BRIDGE
Pool LAKE
Populated place PLACE
Post office BUILDING
Powder magazine BUILDING

Power line

Power plant BUILDING COMPLEX

Power transmission line
UTILITY
Power transmission pole
Power transmission pylon
Prairie
Precipice
UTILITY
POST
TOWER
GRASSLAND
CLIFF, PINNACLE

Primary tide station BUILDING, BUILDING COMPLEX Prison BUILDING, BUILDING COMPLEX

UTILITY

Private road ROAD
Proglacial lake LAKE
Prohibited anchorage HARBOR

Prohibited area RESTRICTED AREA Prohibited flying area RESTRICTED AREA

Promontory PENINSULA

Pumping station BUILDING, BUILDING COMPLEX

Pup WATERCOURSE
Puszta GRASSLAND
Pylon TOWER
Quagmire WETLAND
Quaking bog WETLAND

Quarantine anchorageHARBORQuarryMINEQuayWHARFQuick flashing lightBEACON

Race WATERCOURSE

Racon BEACON
Radar beacon BEACON
Radar buoy BUOY
Radar responder beacon BEACON

Radar station BUILDING, BUILDING COMPLEX

Radio beacon monitor station BUILDING, BUILDING COMPLEX Radio direction finder station BUILDING, BUILDING COMPLEX

Radio mast TOWER

Radio station BUILDING, BUILDING COMPLEX

Radio tower TOWER
Radiobeacon BEACON
Radiobeacon buoy BUOY
Railroad RAILWAY

Railroad crossing INTERSECTION

Railroad gantry

Railroad passing

Railroad repair building

Railroad storage building

Railroad yard

Railway tunnel

GANTRY

RAILWAY

RAILWAY

RAILWAY

RAILWAY

RAILWAY

RAILWAY

TUNNEL

Railway turner

Railway turntable

Raised beach

Raised bog

TURNTABLE

TERRACE

WETLAND

Ramp ROAD, LAUNCHING RAMP

Ranch FARM

Range GRASSLAND, LANE, MOUNT-RANGE, RIDGE,

CROPLAND

Ranger station BUILDING, BUILDING COMPLEX

Ranging light BEACON Ranging marker BEACON

Ravine VALLEY, WATERCOURSE

Re-entrant VALLEY

Reach WATERCOURSE

Rear light BEACON

Recreational vehicle area CAMPGROUND, PARKING AREA

Recurved spit
Red sector
Red sector light
Reef flat
BAR
BEACON
BEACON
Reef flat
REEF

Reference point location CONTROL POINT

Refinery BUILDING, BUILDING COMPLEX

Reforested area WOODLAND

Regional park PARK

Research center BUILDING COMPLEX

Reservation INDIAN RESERVATION, RESERVE

Reservation boundary line

Reserve boundary line

BOUNDARY

BOUNDARY

Reservoir

LAKE

Responder beacon

BEACON

Responder beacon BEACON Rest area PARK

Restricted waters RESTRICTED AREA

Retaining wall
Ria INLET
Rift valley VALLEY

Rill WATERCOURSE

Rincon INLET
Rink ICE RINK
Rio WATERCOURSE
Riprap REVETMENT
Riprap mounds REVETMENT

Rise MOUNT

Rivage BEACH, COAST, SHORE

River WATERCOURSE River bed WATERCOURSE

River buoy BUOY

Rivulet WATERCOURSE

Roadstead HARBOR Rock glacier ICE FIELD Rock terrace TERRACE

Rocket station BUILDING, BUILDING COMPLEX

Rotating beacon
Rotating loop-radiobeacon
Rotating light
Roundhouse
BEACON
BEACON
BEACON
BEACON
BUILDING
Route marker
SIGN
Ruins
PLACE

Run WATERCOURSE

Runaway preventer ROAD

Runnel TROUGH, WATERCOURSE

Runway lights BEACON, RUNWAY Runway radar reflector RADAR REFLECTOR

Sabkha BASIN
Saddle GAP
Safety fairway LANE

Sagebrush WOODLAND Salina WETLAND, LAKE

Salt lake LAKE
Salt marsh WETLAND
Salting WETLAND
Sanctuary PARK
Sand bank BAR

Sand dune MOUNT, RIDGE Sand hills MOUNT, RIDGE

Sand horn BAR
Sand lobe BAR
Sand pit MINE

Sand spitBARSandbarBARSanitariumBUILDINGSavannaGRASSLANDScarCLIFF, PINNACLE

Scarp CLIFF
Scaw CLIFF

School BUILDING, BUILDING COMPLEX

Science center BUILDING

Scrap yard DUMPING GROUND Scrub WOODLAND

Sea beacon BEACON
Sea buoy BUOY
Sea coast COAST

Sea gateBREAKWATER, GATESeachannelVALLEY, WATERCOURSESeadromeAIRPORT, RUNWAY

Seaknoll MOUNT
Seamount MOUNT
Seamount chain MOUNT RANGE
Seamount group MOUNT RANGE

Seamount group MOUNT RANGE
Seamount range MOUNT RANGE
Seapeak PEAK
Seaplane base AIRPORT

Seaplane landing/take off area RUNWAY
Seaport PORT, PLACE
Seashore SHORE

Seawall BREAKWATER, EMBANKMENT, WALL

Seaway WATERCOURSE, LANE

Secondary tide station BUILDING, BUILDING COMPLEX, TIDAL

GAUGE
Section line
Sectored light
Sectored light
Seep
SPRING
Send
Service lane
GAUGE
BOUNDARY
BEACON
SEACON
SYRING
SYRING
SWASH
ROAD, LANE

Service street ROAD
Settlement PLACE

Sewage treatment plant BUILDING COMPLEX

Shelf ice ICE FIELD
Shelterbelt HEDGE
Shield volcano MOUNT

Ship canal WATERCOURSE

Shipping lane LANE
Shoal BAR
Shoal patches BAR

Shopping center BUILDING COMPLEX

Shore reef REEF
Shoreface SHORE
Short flashing light BEACON
Short long flashing light BEACON
Shrine MONUMENT
Shrub WOODLAND

Sidewalk ROAD

Siding RAILWAY Sign post SIGN

Signal station BUILDING, BUILDING COMPLEX

Sill RIDGE, GAP
Silo BUILDING
Silva WOODLAND
Single track railway RAILWAY
Sink BASIN

Sink BASIN
Sinkhole BASIN
Ski lift CABLEWAY
Ski pylon TOWER

Slag heap DUMPING GROUND

Slash WETLAND Slip BERTH

Slipway LAUNCHING RAMP

Slough WETLAND, WATERCOURSE

Slue WETLAND

Sluice WATERCOURSE, GATE

Sluice gate GATE
Smoke stack CHIMNEY
Snow shed BUILDING
Sonobuoy BUOY

Sound WATERCOURSE, LAKE, INLET

Sound barrier FENCE, WALL

Sound buoy
Sovereignty limit
Spar buoy
Special purpose buoy
Special track railway
BUOY
BUOY
BUOY
RAILWAY

Spillway WATERCOURSE

Spit BAR

Spoil areaDUMPING GROUNDSpoil banksDUMPING GROUNDSpoil groundDUMPING GROUND

Spoil ground buoy BUOY

Sports playing field SPORTS FIELD Sports track RACETRACK

Spur RIDGE, RAILWAY, ROAD

Square PARK
Stable BUILDING
Stack ISLAND
Stake net FISH TRAP
Stakes BEACON
Stand WOODLAND

Standpipe TANK

Station BUILDING, BUILDING COMPLEX

Station buoy BUOY

Steel mill BUILDING, BUILDING COMPLEX

Steppe GRASSLAND Stone mound monument CONTROL POINT

Storage bunker BUILDING
Storage tank TANK
Store BUILDING

Strait WATERCOURSE

Strand SHORE
Stranded wreck WRECK
Stranding harbor HARBOR
Strath VALLEY

Stream WATERCOURSE Stream channel WATERCOURSE

Street **ROAD** Streetcar line **RAILWAY WETLAND** String bog Strip mine MINE Stump **SNAG** Submarine isthmus **ISTHMUS** Submarine cable UTILITY Submerged reef **REEF**

Substation/transformer yard BUILDING, BUILDING COMPLEX

Subway RAILWAY, TUNNEL

Summit PEAK
Sunken rock ROCK
Sunken wreck WRECK
Super buoy BUOY
Supplementary aerodrome AIRPORT

Survey monument CONTROL POINT

Suspension bridge **BRIDGE** Swale **TROUGH** Swamp **WETLAND** Swamp forest **WETLAND** Swimming pool **LAKE** Swing bridge **BRIDGE** Swinging buoy **BUOY** Synagogue **BUILDING** Tableknoll **PLATEAU Tableland PLATEAU Tablemount PLATEAU**

TaigaWOODLANDTailing dumpDUMPING GROUNDTailing pileDUMPING GROUND

Taxi channel RUNWAY
Taxi channel light BEACON
Taxiway RUNWAY

Taxiway lights BEACON, RUNWAY

Telegraph buoy
Telegraph line
UTILITY
Telegraph pole
Telegraph pylon
Telephone line
Telephone pole
Telephone pole
Telephone pylon
TOWER
Telephone pylon
TOWER

Television station BUILDING, BUILDING COMPLEX

Television tower TOWER
Temple BUILDING
Temporary anchorage HARBOR
Terminal BUILDING
Terminal MORAINE

Territorial waters limit

MORAINE
BOUNDARY

Texas tower TOWER
Theater BUILDING
Thermobuoy BUOY
Thicket WOODLAND
Thorn forest WOODLAND

Thorofare ROAD, WATERCOURSE Thoroughfare ROAD, WATERCOURSE

Threshold light BEACON

Throughfare ROAD, WATERCOURSE

Thruway **ROAD** Tidal basin **BASIN** Tidal flat **FLAT** Tidal harbor **HARBOR** Tidal light **BEACON** Tidal marsh WETLAND Tidal quay **WHARF** Tide gate **GATE** Tide limit **BOUNDARY** Tide lock **LOCK BEACON** Tide signal Tide rips **OVERFALLS**

Tide station BUILDING, BUILDING COMPLEX

Tideway WATERCOURSE
Timber line BOUNDARY
Toll gate GATE

Tollroad ROAD
Tombolo BAR, ISLAND
Tongue BAR, PENINSULA

Topmark buoy BUOY

Torrent WATERCOURSE

Tourist cabin
Tourist lodge
Tourist lodge
Town
PLACE
Town hall
BUILDING
BUILDING
PLACE
Town hall
BUILDING
Town limits
BOUNDARY
Track
RAILWAY, ROAD
Traffic circle
INTERSECTION

Traffic sign SIGN Trail ROAD

Trailer MOBILE HOME
Trailer park MOBILE HOME PARK

Training wall BREAKWATER Tramway CABLEWAY

Transformer station BUILDING, BUILDING COMPLEX

Transmission line UTILITY

Transmitter station BUILDING, BUILDING COMPLEX

Transobuoy BUOY
Transponder beacon BEACON
Transverse bar BAR

Tree line BOUNDARY
Trench VALLEY, TROUGH

Trestle BRIDGE

Triangulation station CONTROL POINT Tributary WATERCOURSE

Tropical rain forest WOODLAND Truck farm **CROPLAND** Truck garden **CROPLAND** Trumpet buoy **BUOY BUOY** Trunk buoy **Tulelands WETLAND** Tunny nets **FISH TRAP** Turning buoy **BUOY** Turnpike **ROAD** Unattended light **BEACON** Underpass **TUNNEL** Undulating light **BEACON**

University BUILDING COMPLEX

Unwatched light
Urban area
PLACE
Utilidor
Utility
Veld
GRASSLAND
Vertical control point
Vertical control monument
CONTROL POINT
CONTROL POINT

ViaductBRIDGEVillagePLACEVineyardCROPLANDVolcanoMOUNTVolcanic dikeRIDGE

Water Water

WalkROADWarehouseBUILDINGWarning beaconBEACONWarning lightBEACONWarning radiobeaconBEACONWarping buoyBUOY

Wash WATERCOURSE

Watched light BEACON

Water gap VALLEY, WATERCOURSE

Water hole WELL Water intake tower TOWER

Water lane RUNWAY, LANE

Water tower TOWER Waterway LANE

Wave basin BREAKWATER, BASIN

Wave trap BREAKWATER
Way LANE, ROAD
Way point CONTROL POINT

Wayside park PARK
Weak light BEACON

Weir FISH TRAP, DAM Weir jetty BREAKWATER

Wetdock BERTH
Whistle buoy BUOY
Winged headland PENINSULA
Winter buoy BUOY

Winter budy
Winter light
Winter marker
BEACON
Winter road
ROAD

Wood Wooded area Woods Wreck buoy Wrecking yard Zoo WOODLAND WOODLAND WOODLAND BUOY DUMPING GROUND PARK

C.2 Attributes

Airport lighting LIGHTED/UNLIGHTED

Alkaline ACIDITY

Approach lighting LIGHTED/UNLIGHTED

Astronomically determined METHOD (
Brackish SALINITY

Civilian OWNER TYPE, USER TYPE

Constructional material COMPOSITION

Crop grown SPECIES CULTIVATED
Cross lines CHARTED DEPTH
Cul-de-sac BLIND/OPEN
Dead end BLIND/OPEN

Depth CHARTED DEPTH, DEPTH BELOW GROUND

SURFACE

METHOD OF MEASUREMENT

Determined by triangulation METHOD OF MEASUREMENT
Drilling EQUIPMENT PRESENT
Evergreen DECIDUOUS/EVERGREEN

Fresh SALINITY
Gauge RAIL GAUGE
Gradient SLOPE

Gradient of sides SLOPE OF SIDES Land AIR/LAND/WATER

Main track

Manmade

CONNECTED BY SWITCHES/ MAIN TRACK

ARTIFICIALLY IMPROVED/MANMADE/

NATURAL

Military OWNER TYPE, USER TYPE

Mode transported TRANSPORTATION MODE ACCOMMODATED

Multiple wires SINGLE WIRE/MULTIPLE WIRES

Municipal ADMINISTRATION

Natural ARTIFICIALLY IMPROVED/MANMADE/

NATURAL

Noncommunication COMMUNICATION/ NONCOMMUNICATION

Onshore OFFSHORE/ONSHORE

Open BLIND/OPEN Parent BRANCH/PARENT

Perennial INTERMITTENT/PERENNIAL
Pillar construction CONSTRUCTION TYPE
Private OWNER TYPE, USER TYPE

Proposed EXISTING/PROPOSED

Quaternary PRIMARY/SECONDARY/TERTIARY/

Rocky QUATERNARY SOIL TEXTURE

Salt SALINITY
Seasonal limits PESTRICTIONS SE

Seasonal limits RESTRICTIONS, SEASON USED Secondary PRIMARY/SECONDARY/TERTIARY/

QUATERNARY

Sheltered EXPOSED/SHELTERED
Solid construction CONSTRUCTION TYPE
Sounding CHARTED DEPTH
Special use RESTRICTIONS

Stationary MOVABLE/STATIONARY
Substance being processed MATERIAL PROCESSED

Substance stored ITEM(S) STORED

Substance transported

Surface material Through road

Tertiary

Track gauge Two way Uncontrolled

Uncovered Unilateral

Unincorporated Unlighted Unloading

Unrecognized Unstaffed Use restrictions

Use type Vehicle served Vehicle type Vertical

Vessel accommodated

Vessel type Watched Water

Water temperature
Weight bearing capacity

MATERIAL CONVEYED

COMPOSITION BLIND/OPEN

PRIMARY/SECONDARY/TERTIARY/

QUATERNARY RAIL GAUGE

ONE WAY/TWO WAY

CONTROLLED/UNCONTROLLED

COVERED/UNCOVERED NEGOTIATED/UNILATERAL

INCORPORATED/UNINCORPORATED

LIGHTED/UNLIGHTED LOADING/UNLOADING

RECOGNIZED/UNRECOGNIZED

STAFFED/UNSTAFFED

RESTRICTIONS

LAND USE CATEGORY, FUNCTION

VEHICLE ACCOMMODATED VEHICLE ACCOMMODATED HORIZONTAL/VERTICAL VEHICLE ACCOMMODATED VEHICLE ACCOMMODATED STAFFED/UNSTAFFED AIR/LAND/WATER TEMPERATURE