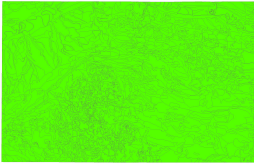


Whitehead_Detailed_Soils1to20k

Type File Geodatabase Feature Class



Tags soil, survey, Manitoba

Summary

Manitoba Agriculture and Resource Development data containing Detailed Soils Intensity Level 2: 1 to 20,000 Scale.

The purpose of this file is to provide GIS information of the soils data that has been collected in the Rural Municipality of Whitehead, Manitoba, Canada at a survey intensity level of the second order. This includes data collected at a scale of 1:20,000. This level of information is commonly referred to as detailed data.

Further information can be found online at:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#>

Description

Soil is essential to human survival. We rely on it for the production of food, fibre, timber and energy crops. Together with climate, the soil determines which crops can be grown, where, and how much they will yield. In addition to supporting our agricultural needs, we rely on the soil to regulate the flow of rainwater and to act as a filter for drinking water. With such a tremendously important role, it is imperative that we manage our soils for their long-term productivity, sustainability and health.

The first step in sustainable soil management is ensuring that the soil will support the land use activity. For example, only the better agricultural soils in Manitoba will support grain and vegetable production, while more marginal agricultural soils will support forage and pasture-based production. For this reason, agricultural development should only occur in areas where the soil resource will support the agricultural activity. The only way to do this is to understand the soil resource that is available. Soil survey information is the key to understanding the soil resource.

Soil survey is an inventory of the properties of the soil (such as texture, internal drainage, parent material, depth to groundwater, topography, degree of erosion, stoniness, pH, and salinity) and their spatial distribution over a landscape. Soils are grouped into similar types and their boundaries are delineated on a map. Each soil type has a unique set of physical, chemical and mineralogical characteristics and has similar reactions to use and management. The information assembled in a soil survey can be used to predict or estimate the potentials and limitations of the soils' behaviour under different uses. As such, soil surveys can be used to plan the development of new lands or to evaluate the conversion of land to new uses. Soil surveys also provide insight into the kind and intensity of land management that will be needed.

The survey scale of soils data for Manitoba ranges from 1:5,000 to 1:126,720. This file contains GIS information of the soils data that has been collected in the Rural Municipality of Whitehead, Manitoba, Canada at a survey intensity level of the second order. This contains data collected at a scale of 1:20,000. The survey objective is to collect field scale data and it is mostly used in agricultural production and planning such as precision farming, agriculture capability, engineering, recreation, potato/irrigation suitability, and productivity indices. Soil pits are generally about 200 metres apart and are dug along transects which are about 500 metres apart. This translates to about 32 inspections sites per section (640 acres). The soils in each delineation are identified by field observations and remotely sensed data. Boundaries are verified at closely spaced intervals. Profile descriptions are collected for all major named soils and 10 inspection sites/section and 2 to 3 horizons per site require lab analyses. At least one soil inspection exists in over 90% of delineations and the minimum size delineation is generally about 4 acres at 1:20,000. The soil taxonomy is generally Phases of Soil Series. The mapping scale is 1:20,000 or 3.2 inch/ mile.

This file has an organizational framework similar to the original SoilAID digital files and a portion of this geographic extent was originally available on the Manitoba Land Initiative (MLI) website.

Domains and coded values have also been integrated into the geodatabase files. This allows the user to view attribute information in either an abbreviated or a more descriptive manner. Choosing to display the description of the coded values allows the user to view the expanded information associated with the attribute value (reducing the need to constantly refer to the descriptions within the metadata). To change these settings in ArcCatalog, go to Customize --> ArcCatalog Options --> Tables tab --> check or uncheck 'Display coded value domain and subtype descriptions'. To change these settings in ArcMap, go to Customize --> ArcMapOptions --> Tables tab --> check or uncheck 'Display coded value domain and subtype descriptions'. This setting can also be changed by opening the attribute table, then Table Options (top left) --> Appearance --> check or uncheck 'Display coded value domain and subtype descriptions'. The file also contains field aliases, which can also be turned on or off under Table Options.

For more info:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#>

Credits

The file - "Manitoba Municipal Boundaries" - from Manitoba Community Planning Services was used as one of the base administrative references for the soil polygon layer.

Also used as references were the hydrological features mapped in the 1:20,000 and 1:50,000 NTS topographical layers (National Topographic System of Canada). Typically this would relate to larger hydrological features such as those designated as perennial lakes and perennial rivers.

Use limitations

Manitoba Agriculture and Resource Development makes every effort to ensure that soil survey data and interpretations are accurate, verified, and up-to-date. However, as data is continuously updated, sorted and verified, future updates may contain additional information.

The data is intended to be used at the appropriate scale, as identified in the 'SCALE' attribute field of the feature class.

The data represent the results of data collection/processing for a specific activity and indicate the general existing conditions. As such, each dataset is only valid for its intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than their intended purpose.

<https://www.gov.mb.ca/legal/disclaimer.html>

Extent

West -100.468341 East -100.049070
North 49.891069 South 49.704884

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:50,000

Topics and Keywords ▶

Themes or categories of the resource farming, environment

Content type ⇔ Downloadable Data

Export to FGDC CSDGM XML format as Resource Description No

Theme keywords Soil survey

Citation ▶

Title ⇔ Whitehead_Detailed_Soils1to20k

Creation date 2012-03-08 00:00:00

Edition Version 2.1

Presentation formats ⇔ digital map

FGDC geospatial presentation format vector digital data

Citation Contacts ▶

Responsible party - originator

Individual's name Steve Hamm

Organization's name Manitoba Agriculture and Resource Development

Contact's position Soil Cartographer

Contact information



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Address

Type both

Delivery point 36 Armitage Avenue

City Minnedosa

Administrative area Manitoba

Postal code R0J 1E0

Country Canada

e-mail address Steve.Hamm@gov.mb.ca

Hours of service

Monday - Friday, 8:30 - 16:30 CST

Resource Details ▶

Dataset languages English (CANADA)

Dataset character set utf8 - 8 bit UCS Transfer Format

Spatial representation type ⇔ vector

Spatial resolution

Dataset's scale

Scale denominator 50000

Ground sample distance

Precision of spatial data m (meter)

Processing environment ⇔ Microsoft Windows 10 Version 10.0 (Build 17134) ; Esri ArcGIS 12.4.2.19948

Credits

The file - "Manitoba Municipal Boundaries" - from Manitoba Community Planning Services was used as one of the base administrative references for the soil polygon layer.

Also used as references were the hydrological features mapped in the 1:20,000 and 1:50,000 NTS topographical layers (National Topographic System of Canada). Typically this would relate to larger hydrological features such as those designated as perennial lakes and perennial rivers.

ArcGIS item properties

Name ⇔ Whitehead_Detailed_Soils1to20k

Location ⇔ file://A:\GOMC-1178842\D\$\WFH\Y_Drive\tdixon\MLI_updates\Soils\20210223\Whitehead.gdb

Access protocol ⇔ Local Area Network

Extents ►

Extent
Geographic extent
Bounding rectangle
Extent type

Extent used for searching

West longitude ⇔ -100.468341
East longitude ⇔ -100.049070
North latitude ⇔ 49.891069
South latitude ⇔ 49.704884
Extent contains the resource ⇔ Yes

Extent in the item's coordinate system

West longitude ⇔ 394522.790000
East longitude ⇔ 424364.650000
South latitude ⇔ 5506846.305000
North latitude ⇔ 5527051.000000
Extent contains the resource ⇔ Yes

Resource Points of Contact ►

Point of contact - originator
Individual's name Steve Hamm
Organization's name Manitoba Agriculture and Resource Development
Contact's position Soil Cartographer

Contact information

Phone
Voice 204-868-5759
Fax 2094-867-6578
Address
Type both
Delivery point 36 Armitage Avenue
City Minnedosa
Administrative area Manitoba
Postal code R0J 1E0
Country CANADA
e-mail address Steve.Hamm@gov.mb.ca
Hours of service
Monday - Friday, 8:30 - 16:30 CST

Resource Maintenance ►

Resource maintenance
Update frequency as needed

Resource Constraints ►

Constraints
Limitations of use
Manitoba Agriculture and Resource Development makes every effort to ensure that soil survey data and interpretations are accurate, verified, and up-to-date. However, as data is continuously updated, sorted and verified, future updates may contain additional information.

The data is intended to be used at the appropriate scale, as identified in the 'SCALE' attribute field of the feature class.

The data represent the results of data collection/processing for a specific activity and indicate the general existing conditions. As such, each dataset is only valid for its intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than their intended purpose.

<https://www.gov.mb.ca/legal/disclaimer.html>

Spatial Reference ►

ArcGIS coordinate system
Type ⇔ Projected
Geographic coordinate reference ⇔ GCS_North_American_1983
Projection ⇔ NAD_1983_UTM_Zone_14N
Coordinate reference details ⇔
Projected coordinate system
Well-known identifier 26914
X origin -5120900
Y origin -9998100
XY scale 10000
Z origin -100000
Z scale 10000
M origin -100000
M scale 10000
XY tolerance 0.00020000000000000001

Z tolerance 0.001
M tolerance 0.001
High precision true
Latest well-known identifier 26914
VCSWKID 5713
LatestVCSWKID 5713
Well-known text
PROJCS["NAD_1983_UTM_Zone_14N",GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",

Reference system identifier

Dimension horizontal
Value ↔ 26914
Codespace ↔ EPSG
Version ↔ 6.13(3.0.1)

Spatial Data Properties ▶

Vector

Level of topology for this dataset ↔ geometry only

Geometric objects

Feature class name Whitehead_Detailed_Soils1to20k
Object type ↔ composite
Object count ↔ 1672

ArcGIS Feature Class Properties

Feature class name Whitehead_Detailed_Soils1to20k
Feature type ↔ Simple
Geometry type ↔ Polygon
Has topology ↔ FALSE
Feature count ↔ 1672
Spatial index ↔ TRUE
Linear referencing ↔ FALSE

Data Quality ▶

Scope of quality information

Resource level feature

Scope description

Attributes

The data is intended to be used at the appropriate scale, as identified in the 'SCALE' attribute field of the feature class.

Lineage ▶

Lineage statement

This file represents the official 1:20,000 detailed soils layer created for Manitoba. It is based upon the previous and recent 1:20,000 soil survey reports. However, the original interpretation values (such as agricultural capability) in the SoilAID files have been replaced by those from the current Manitoba Agriculture database.

After the completion of the necessary field survey, lab analysis, and landscape interpretation, Soil Survey Specialists digitize soil boundaries in a 3D GIS environment. These boundaries are originally created as line features and named according to soil series and classes by means of a point file. The lines are then converted to the desired format which is a polygon file. A spatial join is conducted on the points and polygons in order to associate the soil series and classes to the polygons. Polygons are then verified and edited to ensure topological integrity. Each polygon can contain up to 3 soil series names. Each of the soil series within each polygon is then joined to the Manitoba Agriculture soils interpretations database to add:

1. derived information such as drainage and textural characteristics
2. interpretive information such as agricultural capability and suitability for irrigation

This file has an organizational framework similar to the original SoilAID digital files. The significant revisions include:

1. The addition of soil series names that provide a definition of the soil series abbreviation
2. The somewhat redundant 'Modifier' scheme in the original SoilAID has been replaced by the new and more descriptive 'Variant' and 'Phase' system. See the metadata information under 'Fields' for more information.
3. The addition of the irrigation suitability rating index for potato production.
4. The addition of soil surface texture group, which is a generalized rating to complement the existing texture information.
5. The addition of agricultural capability groupings used for legislative regulations.
6. The addition of engineering and recreational interpretation ratings.

Distribution ▶

Distributor

Available format

Name ↔ File Geodatabase Feature Class
Version Version 1

Transfer options

Transfer size ↔ 2.906

Online source

Location ↔ -
Access protocol ↔ Local Area Network
Description ↔ Downloadable Data

Distribution format

Name ↔ File Geodatabase Feature Class
Version Version1

Fields ▶

Details for object Whitehead_Detailed_Soils1to20k



Type ↔ Feature Class
Row count ↔ 1672
Definition
Shapefile Attribute Table

Definition source
None

Field OBJECTID



Alias ↔ OBJECTID
Data type ↔ OID
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description ↔
Internal feature number.

Description source ↔
ESRI

Description of values ↔
Sequential unique whole numbers that are automatically generated.

Field Shape



Alias ↔ Shape
Data type ↔ Geometry
Width ↔ 0
Precision ↔ 0
Scale ↔ 0

Field description
Feature geometry.

Description source
ESRI

Description of values
Coordinates defining the features.

Field RM



Alias ↔ RURAL_MUNICIPALITY
Data type ↔ String
Width ↔ 100
Precision ↔ 0
Scale ↔ 0

Field description
Rural municipality within feature is located.

Description source
Manitoba Agriculture

Field REPORT_NUM

Alias ↔ REPORT_NUMBER
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Soil survey report number

Digital copies of detailed soil survey reports can be found at:
<https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#detailed>

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#detailed>

Field REPORT_NAM

Alias ↔ REPORT_NAME
Data type ↔ String
Width ↔ 100
Precision ↔ 0
Scale ↔ 0

Field description
Soil survey report name

Digital copies of detailed soil survey reports can be found at:
<https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#detailed>

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#detailed>

Field SCALE

Alias ↔ FIELD_SURVEY_SCALE
Data type ↔ String
Width ↔ 9
Precision ↔ 0
Scale ↔ 0

Field description
There are two basic types of soils surveys:
Detailed: based on a large number of soil observations
Scales: 1:5,000, 1:20 000, 1:40 000, 1:50 000
Reconnaissance: based on fewer soil observations
Scales: 1:63 360, 1:100 000, 1:125 000, 1:126 720

For more info:
http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#why_scale

Description source
https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#why_scale

Field DATE

Alias ↔ DATE_REVISIED
Data type ↔ Date
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description
Date Revised

Description source
Date Revised

Field MAPUNITNOM

Alias ↔ SOIL_MAP_UNIT_SYMBOL
Data type ↔ String
Width ↔ 68

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil map unit symbol indicating the soil series, class, and variant(s)/phases(s) when applicable. Any record with no class indicated implies that the class has a value of 'xxxx'.

Examples:

'WKD'

represents a map polygon that contains predominantly Waskada soil series and has a class of 'xxxx'.

'RIV5-OBOD5'

represents a map polygon that contains 50% Red River soil series and 50% Osborne, drained soil series and that both soil series have a class of 'xxxx'.

'NDL7-RUF3/xcxx'

represents a map polygon that contains 70% Newdale soil series and 30% Rufford soil series and the class of 'xcxx' applies to both soil series.

'NDL6-RUF2-ANL2/xcxx-xbxx-1cxx'

represents a map polygon that contains 60% Newdale soil series, 20% Rufford soil series and 20% Angusville soil series. The first class value (xcxx) pertains to the first soil series (NDL), the second class value (xbxx) pertains to the second soil series (RUF), and the third class value (1cxx) pertains to the third soil series (ANL).

For more info:

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field MUNOM1

Alias ⇔ SOIL_1_MAP_UNIT

Data type ⇔ String

Width ⇔ 20

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil code and class of the first soil series named in the mapped polygon (along with variant and phase when applicable).

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field SOIL_CODE1

Alias ⇔ SOIL_1_CODE

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Three character code for the first soil series named in the map polygon.

A list of the soil code abbreviations, along with their associated soil series names and descriptions can be found at:

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Description source

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Field SOILNAME1

Alias ⇔ SOIL_1_NAME

Data type ⇔ String

Width ⇔ 45

Precision ⇔ 0

Scale ⇔ 0

Field description

Name of the first soil series indicated in the map polygon.

A list of the soil series names and descriptions can be found at:

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Description source

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Field VARIANT1

Alias ↔ SOIL_1_VARIANT
Data type ↔ String
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description
Soil series variant

Description source
Internal Soils Interpretations Database

List of values

Value cs
Description clay substrate

Value cl
Description classification

Value sh
Description shallow

Value sp
Description sphagnic

Value v
Description very poorly drained

Value 1
Description textural variant

Value 2
Description textural variant

Value 3
Description textural variant

Field PHASE1

Alias ↔ SOIL_1_PHASE
Data type ↔ String
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description
Phase of the first soil series named in the mapped polygon.

Description source
Soils Interpretations Database

List of values

Value a
Description active, dunes

Value d
Description drained

Value p
Description peaty

Value pd
Description peaty, drained

Field CLASS1

Alias ↔ SOIL_1_CLASS
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Combines the values from EROSION1, SLOPE1, STONINESS1 and SALINITY1 fields.

Description source
http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field EXTENT1

Alias ↔ PERCENT_OF_SOIL_1
Data type ↔ SmallInteger
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description

Percent of the map unit occupied by the first named soil series and class (by intervals of 10).

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=11>

Field MUNOM2

Alias ↔ SOIL_2_MAP_UNIT
Data type ↔ String
Width ↔ 20
Precision ↔ 0
Scale ↔ 0

Field description

Same as MUNOM1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field SOIL_CODE2

Alias ↔ SOIL_2_CODE
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Same as SOIL_CODE1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Field SOILNAME2

Alias ↔ SOIL_2_NAME
Data type ↔ String
Width ↔ 45
Precision ↔ 0
Scale ↔ 0

Field description

Same as SOILNAME1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Field VARIANT2

Alias ↔ SOIL_2_VARIANT
Data type ↔ String
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description

Same as VARIANT1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

Internal Soils Interpretations Database

Field PHASE2

Alias ↔ SOIL_2_PHASE
Data type ↔ String

Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description
Same as PHASE1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
Internal Soils Interpretations Database

Field CLASS2

Alias ↔ SOIL_2_CLASS
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Same as CLASS1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field EXTENT2

Alias ↔ PERCENT_OF_SOIL_2
Data type ↔ SmallInteger
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description
Same as EXTENT1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=11>

Field MUNOM3

Alias ↔ SOIL_3_MAP_UNIT
Data type ↔ String
Width ↔ 20
Precision ↔ 0
Scale ↔ 0

Field description
Same as MUNOM1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field SOIL_CODE3

Alias ↔ SOIL_3_CODE
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Same as SOIL_CODE1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Field SOILNAME3

Alias ↔ SOIL_3_NAME
Data type ↔ String
Width ↔ 45
Precision ↔ 0
Scale ↔ 0

Field description

Same as SOILNAME1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/description_of_soil_series_in_mb.pdf

Field VARIANT3



Alias ↔ SOIL_3_VARIANT

Data type ↔ String

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

Same as VARIANT1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

Internal Soils Interpretations Database

Field PHASE3



Alias ↔ SOIL_3_PHASE

Data type ↔ String

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

Same as PHASE1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

Internal Soils Interpretations Database

Field CLASS3



Alias ↔ SOIL_3_CLASS

Data type ↔ String

Width ↔ 4

Precision ↔ 0

Scale ↔ 0

Field description

Same as CLASS1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#what_reports

Field EXTENT3



Alias ↔ PERCENT_OF_SOIL_3

Data type ↔ SmallInteger

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

Same as EXTENT1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=11>

Field SLOPE1



Alias ↔ SOIL_1_SLOPE_PERCENT

Data type ↔ Single

Width ↔ 4

Precision ↔ 0

Scale ↔ 0

Field description

Slope steepness in percent of the first named soil series in the map polygon.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value -99

Description No data

Field SLOPEP2

Alias ↔ SOIL_2_SLOPE_PERCENT

Data type ↔ Single

Width ↔ 4

Precision ↔ 0

Scale ↔ 0

Field description

Same as SLOPEP1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field SLOPEP3

Alias ↔ SOIL_3_SLOPE_PERCENT

Data type ↔ Single

Width ↔ 4

Precision ↔ 0

Scale ↔ 0

Field description

Same as SLOPEP1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field TOPO1

Alias ↔ SOIL_1_TOPOGRAPHY

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Slope classification of Soil 1

Description source

<https://agrimaps.gov.mb.ca/agrimaps/extras/info/Topography.pdf>

List of values

Value x

Description Level, 0 - 0.5%

Value b

Description Nearly level, >0.5 - 2.0%

Value c

Description Very gently sloping, >2.0 - 5.0%

Value d

Description Gently sloping, >5.0 - 9.0%

Value e

Description Moderately sloping, >9.0 -15.0%

Value f

Description Strongly sloping, >15.0-30.0%

Value g

Description Very strongly sloping, >30.0-45.0%

Value h

Description Extremely sloping, >45.0-70.0%

Value i

Description Steeply sloping, >70.0-100%

Value j

Description Very steeply sloping, >100%

Field TOPO2

Alias ↔ SOIL_2_TOPOGRAPHY

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Same as TOPO1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://agrimaps.gov.mb.ca/agrimaps/extras/info/Topography.pdf>

Field TOPO3

Alias ↔ SOIL_3_TOPOGRAPHY

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Same as TOPO1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

<https://agrimaps.gov.mb.ca/agrimaps/extras/info/Topography.pdf>

Field STONE1

Alias ↔ SOIL_1_STONINESS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Percentage of ground surface occupied by stones.

Description source

<https://agrimaps.gov.mb.ca/agrimaps/extras/info/Stoniness.pdf>

List of values

Value x

Description Non-stony. Land having less than 0.01% of surface occupied by stones.

Value 1

Description Slightly stony. Land having >0.01 to 0.1% of surface occupied by stones. Stones 15 to 30 cm in diameter, 10 to 30 m apart. The stones offer only slight to no hindrance to cultivation.

Value 2

Description Moderately stony. Land having >0.1 to 3% of surface occupied by stones. Stones 15 to 30 cm in diameter, 2 to 10 m apart. Stones cause some interference with cultivation.

Value 3

Description Very stony. Land having >3 to 15% of surface occupied by stones. Stones 15 to 30 cm in diameter, 1 to 2 m apart. There are sufficient stones to constitute a serious handicap to cultivation.

Value 4

Description Exceedingly stony. Land having >15 to 50% of surface occupied by stones. Stones 15 to 30 cm in diameter, 0.7 to 1.5 m apart. There are sufficient stones to prevent cultivation until considerable clearing has been done.

Value 5

Description Excessively stony. Land having more than 50% of surface occupied by stones. Stones 15 to 30 cm in diameter, less than 0.7 m apart. The land is too stony to permit cultivation until considerable clearing has occurred.

Value \$ER

Description Eroded slopes complex

Value \$ML

Description Modified land

Value \$UL

Description Unclassified land

Value \$ZZ

Description Water

Value \$UR
Description Urban land

Value ORG
Description Organic soil

Field STONE2

Alias ↔ SOIL_2_STONINESS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Same as STONE1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
<https://agrimaps.gov.mb.ca/agrimaps/extras/info/Stoniness.pdf>

Field STONE3

Alias ↔ SOIL_3_STONINESS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Same as STONE1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
<https://agrimaps.gov.mb.ca/agrimaps/extras/info/Stoniness.pdf>

Field EROSION1

Alias ↔ SOIL_1_EROSION
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Degree of soil erosion

Description source
<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/soil-salinity.html>

List of values

Value x
Description non-eroded or minimal

Value 1
Description slightly eroded

Value 2
Description moderately eroded

Value 3
Description severely eroded

Value o
Description overwash/overblown

Value \$ML
Description Modified land

Value \$UL
Description Unclassified land

Value \$UR
Description Urban land

Value \$ZZ
Description Water

Value ORG
Description Organic soil

Field EROSION2

Alias ↔ SOIL_2_EROSION
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Same as EROSION1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/soil-salinity.html>

Field EROSION3

Alias ↔ SOIL_3_EROSION
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Same as EROSION1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/soil-salinity.html>

Field SALINITY1

Alias ↔ SOIL_1_SALINITY
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Degree of soil salinity

Description source
<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/soil-salinity.html>

List of values

Value x
Description non-saline, 0-4 mS/cm

Value s
Description weakly saline, >4-8 mS/cm

Value t
Description moderately saline, >8-16 mS/cm

Value u
Description strongly saline, >16 mS/cm

Value \$ML
Description Modified land

Value \$UL
Description Unclassified land

Value \$UR
Description Urban land

Value \$ZZ
Description Water

Value ORG
Description Organic soil

Field SALINITY2

Alias ↔ SOIL_2_SALINITY
Data type ↔ String
Width ↔ 3
Precision ↔ 0

Scale ↔ 0

Field description

Same as SALINITY1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/soil-salinity.html>

Field SALINITY3

Alias ↔ SOIL_3_SALINITY

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Same as SALINITY1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/soil-salinity.html>

Field SLOPE_LEN1

Alias ↔ SOIL_1_SLOPE_LENGTH

Data type ↔ String

Width ↔ 1

Precision ↔ 0

Scale ↔ 0

Field description

Slope length class code associated with the first named soil series in the map polygon. Dominant slope length within the polygon measured from the crest to the base of the slope.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 1

Description <50 metres

Value 2

Description >50 - 200 m

Value 3

Description >200 - 400 m

Value 4

Description >400 - 800 m

Value 5

Description >800 - 1600 m

Value 6

Description >1600 m

Value -

Description Not Applicable

Field SLOPE_LEN2

Alias ↔ SOIL_2_SLOPE_LENGTH

Data type ↔ String

Width ↔ 1

Precision ↔ 0

Scale ↔ 0

Field description

Same as SLOPE_LEN1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field SLOPE_LEN3

Alias ↔ SOIL_3_SLOPE_LENGTH

Data type ↔ String

Width ↔ 1
Precision ↔ 0
Scale ↔ 0

Field description
Same as SLOPE_LEN1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field LS_MEAN1

Alias ↔ SOIL_1_SLOPE_AND_STEEPNESS
Data type ↔ Single
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Slope and steepness factor associated with the first named soil series in the soil map polygon. Calculated slope length and slope steepness value used by Universal Soil Loss Equation.

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field LS_MEAN2

Alias ↔ SOIL_2_SLOPE_AND_STEEPNESS
Data type ↔ Single
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Same as LS_MEAN1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field LS_MEAN3

Alias ↔ SOIL_3_SLOPE_AND_STEEPNESS
Data type ↔ Single
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Same as LS_MEAN1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field C_ERPOLY

Alias ↔ WATER_EROSION_RISK_CODE
Data type ↔ SmallInteger
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description
Classification field for water erosion risk class categorized by summarizing the estimated soil loss on bare unprotected soil using all soil components in the map polygon.

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 21
Description Negligible

Value 22
Description Low

Value 23
Description Moderate

Value 24
Description High

Value 25
Description Severe

Value 6
Description Water

Value 15
Description Modified land

Value 16
Description Unclassified land

Value 17
Description Urban land

Value -99
Description No data

Field C_AGRI

Alias ↔ SOIL_1_AGRI_CAPABILITY_CODE
Data type ↔ SmallInteger
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description

Classification field summarizing the field AGRI_CAP1 (Agriculture Capability Dryland Agriculture) representing the first named soil and class in the map polygon.

Coded values for agricultural capability provided to generate statistics and to facilitate modelling processes.

For more info:

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#ag_capability

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 21
Description Class 1 (Most capable)

Value 22
Description Class 2

Value 23
Description Class 3

Value 24
Description Class 4

Value 25
Description Class 5

Value 26
Description Class 6

Value 27
Description Class 7 (Least capable)

Value 6
Description Water

Value 15
Description Modified land

Value 16
Description Unclassified land

Value 17
Description Urban land

Value 28
Description Organic

Field C_SLOPE

Alias ↔ SOIL_1_SLOPE_CODE
Data type ↔ SmallInteger

Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description

Coded value representing slope steepness in percent, based on the dominant slope gradient of the map polygon.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 21

Description 0 - 2.0%

Value 22

Description >2.0 - 5.0%

Value 23

Description >5.0 - 9.0%

Value 24

Description >9.0 - 15.0%

Value 25

Description >15.0 - 30.0%

Value 26

Description >30% (eroded slopes)

Value 6

Description Water

Value 15

Description Modified land

Value 16

Description Unclassified land

Value 17

Description Urban land

Value -99

Description No data

Field C_GEN

Alias ↔ SOIL_1_IRRIGATION_SUIT_CODE

Data type ↔ SmallInteger

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

This is a coded rating for general irrigated crop production. Soil and landscape characteristics such as texture, drainage, depth to water table, salinity, geological uniformity, topography and stoniness are considered

For more info:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

List of values

Value 21

Description Excellent

Value 22

Description Good

Value 23

Description Fair

Value 24

Description Poor

Value 25

Description Organic

Value 6

Description Water

Value 15

Description Modified land

Value 16

Description Unclassified land

Value 17

Description Urban land

Field C_DRAIN

Alias ↔ SOIL_1_DRAINAGE_CODE

Data type ↔ SmallInteger

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

Classification field for representing the dominant soil and class condition in the map polygon.

Soil drainage is the speed and extent of water removal from the soil by runoff (surface drainage) and downward flow through the soil profile (internal drainage). It also refers to the frequency and duration when the soil is not saturated.

For more info:

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/pubs/soil-management-guide.pdf>

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 22

Description rapidly drained

Value 23

Description well drained

Value 25

Description imperfectly drained

Value 26

Description poorly drained

Value 27

Description very poorly drained

Value 28

Description rock

Value 6

Description Water

Value 13

Description Marsh

Value 15

Description Modified land

Value 16

Description Unclassified land

Value 17

Description Urban land

Field C_MAN

Alias ↔ SOIL_1_MANAGEMENT_CONS_CODE

Data type ↔ SmallInteger

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

Classification field for summarizing the MANCON1 (Management Considerations) field representing the dominant soil and class condition in the map polygon.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 20

Description No constraints

Value 21

Description C (Coarse Texture (loamy sands, sands and gravels))

Value 22
Description Rock

Value 24
Description T (Topography (slopes > 5.0%))

Value 24
Description CWT (Coarse Texture, Wetness and Topography)

Value 24
Description FWT (Fine Texture, Wetness and Topography)

Value 30
Description B (Bedrock)

Value 30
Description WB (wetness and bedrock)

Value 31
Description W (Wetness, poor and very poor drainage)

Value 31
Description WT (Wetness and Topography)

Value 33
Description F (Fine Texture (clays and silty clays))

Value 35
Description CW (Coarse Texture and Wetness)

Value 35
Description CT (Coarse Texture and Topography)

Value 40
Description FW (Fine Texture and Wetness)

Value 45
Description Organic

Value 49
Description FT (Fine Texture and Topography)

Value 6
Description Water

Value 13
Description Marsh complex

Value 15
Description Modified land

Value 16
Description Unclassified land

Value 17
Description Urban land

Value -99
Description No data

Field C_SALT

Alias ↔ SALINITY_CODE
Data type ↔ SmallInteger
Width ↔ 2
Precision ↔ 0
Scale ↔ 0

Field description

Coded value for summarizing soil map database salinity. Indicates the presence and severity of salinity in the polygon independent of whether it is with SOIL_CODE1, SOIL_CODE2 or SOIL_CODE3.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 21
Description non-saline, 0-4 mS/cm

Value 22
Description weakly saline, >4-8 mS/cm

Value 23
Description moderately saline, >8-16 mS/cm

Value 24
Description strongly saline, > 16 mS/cm

Value 6
Description Water

Value 7
Description Eroded slopes complex

Value 13
Description Marsh complex

Value 15
Description Modified land

Value 16
Description Unclassified land

Value 17
Description Urban land

Field C_SOIL

Alias ⇔ SOIL_ASSOCIATION_CODE
Data type ⇔ SmallInteger
Width ⇔ 2
Precision ⇔ 0
Scale ⇔ 0

Field description

Coded value summarizing Soil Association organized by Order, Mode of Deposition, Sub Group, Texture, Drainage, Chemical Composition, and Climatic Zone.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 6
Description Water

Value 14
Description Salt flats

Value 15
Description Modified land

Value 16
Description Unclassified land

Value 17
Description Urban land

Value 18
Description Sand and gravel

Value 19
Description Eroded slopes

Value 20
Description Sand and gravel (Gleysols)

Value 21
Description Sandy lacustrine

Value 22
Description Variable textured alluvium (Regosols)

Value 25
Description Permafrost, mineral

Value 26
Description Sandy eolian

Value 27
Description Loamy till with water worked surfaces

Value 28
Description Loamy till (Black Chernozem)

Value 29
Description Loamy till (Gleysols)

Value 30
Description Sandy loam lacustrine

Value 31
Description Loamy lacustrine

Value 32
Description Strongly acidic clay till

Value 33
Description Clayey lacustrine (Black Chernozems)

Value 34
Description Sandy lacustrine (Gleysols)

Value 35
Description Shallow organic fen peat

Value 36
Description Deep organic fen peat

Value 37
Description Sandy loam lacustrine (Gleysols)

Value 38
Description Loam lacustrine

Value 40
Description Clayey lacustrine

Value 42
Description Clay over shale bedrock

Value 44
Description Permafrost, organic

Value 48
Description Loamy till (Dark Grey Chernozems)

Value 49
Description Marsh

Value 50
Description Highly calcareous loamy till (Brunisols and Dark Gray Chernozems)

Value 51
Description Loamy till (Luvisols)

Value 52
Description Highly calcareous loam till (Black Chernozems)

Value 53
Description Acidic, coarse loamy till

Value 54
Description Weakly calcareous sandy loam till

Value 55
Description Weakly calcareous sandy loam till (Gleysols)

Value 56
Description Extremely calcareous loamy till (Brunisols and Dark Gray Chernozems)

Value 57
Description Extremely calcareous loamy till (Black Chernozems)

Value 60
Description Variable textured alluvium (Gleysols)

Value 62
Description Highly calcareous loamy till (Gleysols)

Value 63
Description Clayey lacustrine (Gleysols)

Value 64
Description Clayey lacustrine (Luvisols and Dark Gray Chernozems)

Value 68
Description Shallow organic forest peat

Value 69
Description Deep organic forest or sphagnum peat

Value 71
Description Precambrian bedrock

Value 72
Description Sand and gravel with overlays

Value 73
Description Limestone bedrock

Value 74
Description Sand and gravel with overlays (Gleysols)

Value 79
Description Shale bedrock

Value -99
Description No data

Field C_SURFTEXT

Alias ↔ SOIL_1_SURFACE_TEXTURE_CODE

Data type ↔ SmallInteger

Width ↔ 2

Precision ↔ 0

Scale ↔ 0

Field description

Classification field for summarizing SURFTEXT1 (surface texture) representing the dominant soil series of the map polygon.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value 21
Description Clayey

Value 22
Description Fine loamy

Value 23
Description Coarse loamy

Value 24
Description Sand

Value 25
Description Coarse sands

Value 26
Description Organic

Value 6
Description Water

Value 15
Description Modified land

Value 16
Description Unclassified land

Value 17
Description Urban land

Field ERCLS1

Alias ↔ SOIL_1_WATER_EROSION_RISK

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Field containing water erosion risk class for the first named soil series in the map polygon. Calculation of estimated soil loss on bare unprotected soil implementing the Universal Soil Loss Equation (USLE) for SOIL_CODE1 in the map polygon measured in tonnes/hectare/year.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value N
Description Negligible (<6 t/h/y)

Value L

Description Low (6 - 11 t/h/y)

Value M

Description Moderate (> 11 - 22 t/h/y)

Value H

Description High (>22 - 33 t/h/y)

Value S

Description Severe (>33 t/h/y)

Field ERCLS2

Alias ⇔ SOIL_2_WATER_EROSION_RISK

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Same as ERCLS1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field ERCLS3

Alias ⇔ SOIL_3_WATER_EROSION_RISK

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Same as ERCLS1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field ERPOLY

Alias ⇔ SUM _WATER_EROSION_RISK

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Field containing calculation obtained from summing ERCLS1, ERCLS2, ERCLS3. Summary calculation of estimated soil loss on bare unprotected soil implementing the Universal Soil Loss Equation (USLE) in the map polygon measured in tonnes/hectare/year.

Same list of values as ERCLS.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field ERSYMBOL

Alias ⇔ WATER_EROSION_RISK_SYMBOL

Data type ⇔ String

Width ⇔ 8

Precision ⇔ 0

Scale ⇔ 0

Field description

Field containing water erosion risk symbol. Weighted average compilation of ERCLS1,2,3 and the area covered by the soils associated with those calculations. Used to create map symbol for polygon.

Same list of values as ERCLS, broken down by percentages according to the number of soil series named in the map polygon.

For example: N6-M4 = 60% of the polygon contains soil that has a negligible risk of erosion, and the remaining 40% has a moderate risk of erosion.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field AGRI_CAP1

Alias ↔ SOIL_1_AGRICULTURAL_CAPABILITY
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description

Agricultural capability is a 7 class rating of mineral soils based on the severity of limitations for dryland farming. This system does not rate the productivity of the soil, but rather its capability to sustain agricultural crops based on limitations due to soil properties and landscape features and climate. This system is usually applied on a soil polygon basis and the individual soil series are assessed and maps portray the condition represented by the dominant soil in the polygon. Class 1 soils have no limitations, whereas Class 7 soils have such severe limitations that they are not suitable for agricultural purposes. The agricultural capability scheme is based on the Canada Land Inventory rating system.

Refers to the agricultural capability class of the first soil series named in the mapped polygon.

Examples:

2T = Class 2 with a topography limitation

O4WL = Organic soil that has an agriculture capability rating of 4 and has limitations of excess water and coarse wood fragments

For more info:

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#ag_capability

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#ag_capability

List of values

Value C

Description Climate

Value D

Description Undesirable soil structure or permeability

Value E

Description Erosion

Value F

Description Low fertility

Value I

Description Inundation

Value L

Description Coarse wood fragments

Value M

Description Moisture limitation

Value N

Description Salinity

Value P

Description Stoniness

Value R

Description Consolidated bedrock

Value T

Description Topography

Value W

Description Excess water

Value X

Description Cumulative minor adverse characteristics

Field AGRI_CAP2

Alias ↔ SOIL_2_AGRICULTURAL_CAPABILITY
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description

Same as AGRI_CAP1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#ag_capability

Field AGRI_CAP3

Alias ↔ SOIL_3_AGRICULTURAL_CAPABILITY
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description

Same as AGRI_CAP1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

http://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/using-soil-survey-information.html#ag_capability

Field AGCAP_GRP1

Alias ↔ SOIL_1_GROUP_AGRICULTURAL_CAP_CLASSES
Data type ↔ String
Width ↔ 7
Precision ↔ 0
Scale ↔ 0

Field description

Agricultural management groups identify soils that require similar kinds of practices to achieve acceptable performance for a soil use. Agricultural management groups have been developed in Manitoba that group soils based on their agricultural capability (class and limitation) into various programs like environmental farm plans (Section A) and into different Acts and Regulations.

Refers to the agricultural management group of the first soil series named in the mapped polygon.

Description source

Manitoba Agriculture

List of values

Value Group 1

Description Group 1 includes agricultural capability classes 1, 2 and 3 (except 3M and 3M combinations)

Value Group 2

Description Group 2 includes agricultural capability classes 3M, 3M combinations, and class 4

Value Group 3

Description Group 3 includes agricultural capability class 5

Value Group 4

Description Group 4 includes agricultural capability classes 6, 7 and unimproved organics

Field AGCAP_GRP2

Alias ↔ SOIL_2_GROUP_AGRICULTURAL_CAP_CLASSES
Data type ↔ String
Width ↔ 7
Precision ↔ 0
Scale ↔ 0

Field description

Same as AGCAP_GRP1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

Manitoba Agriculture

Field AGCAP_GRP3

Alias ↔ SOIL_3_GROUP_AGRICULTURAL_CAP_CLASSES
Data type ↔ String
Width ↔ 7
Precision ↔ 0
Scale ↔ 0

Field description

Same as AGCAP_GRP1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

Manitoba Agriculture

Field SOIL_FACT1

Alias ↔ SOIL_1_IRRIGATION_SOIL_CLASS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil property classes for irrigation suitability classification system for the first named soil and class combination contained in the soil map polygon. A complete Description of the rating guidelines are in "An Irrigation Suitability Classification System for the Prairie Provinces" (ISC,1987).

The degree of limitation is categorized into four classes:

1 - None

2 - Slight

3 - Moderate

4 - Severe

Limitations within the four class soil property classification are:

d - Structure

g - Geological Unconformity

h - Depth to Water Table

k - Hydraulic Conductivity

m - Available Water holding Capacity

n - Sodicity

q - Intake Rate

r - Depth to Bedrock

s - Salinity

w - Drainage

x - Drainability

Example: 2kx = slight soil limitations due to hydraulic conductivity and drainability

For more info:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

List of values

Value 1

Description No limitation

Value 2

Description Slight limitation

Value 3

Description Moderate limitation

Value 4

Description Severe limitation

Value d

Description structure

Value g

Description geological unconformity

Value h

Description depth to water table

Value k

Description hydraulic conductivity

Value m

Description available water holding capacity

Value n

Description sodicity

Value q

Description intake rate

Value r

Description depth to bedrock

Value s

Description salinity

Value w

Description drainage

Value x

Description drainability

Field LANDSCAPE1

► Alias ⇔ SOIL_1_IRRIG_LANDSCAPE_CLASS
Data type ⇔ String
Width ⇔ 4
Precision ⇔ 0
Scale ⇔ 0

Field description

Landscape feature classes for irrigation suitability classification system for the first named soil and class combination contained in the soil map polygon. A complete description of the rating guidelines are in "An Irrigation Suitability Classification System for the Prairie Provinces" (ISC,1987).

The degree of limitation is categorized into four classes:

A - None
B - Slight
C - Moderate
D – Severe

Limitations within the four class landscape feature classification are:

e - Local Relief
i - Inundation
p - Stoniness
t1 – Topography – simple slope
t2 – Topography – complex slope

Example: Bt2 = slight landscape limitations due to topography (complex slopes)

For more info:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

List of values

Value A
Description No limitation

Value B
Description Slight limitation

Value C
Description Moderate limitation

Value D
Description Severe limitation

Value e
Description Local relief

Value i
Description Inundation

Value p
Description Stoniness

Value t1
Description Topography - simple slope

Value t2
Description Topography - complex slope

Field IRRIG_CLA1

► Alias ⇔ SOIL_1_IRRIGATION_SUIT_CLASS
Data type ⇔ String
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description

Irrigation suitability class representing the first named soil and class combination contained in the soil map polygon. Combination of SOIL_FACT and LANDSCAPE codes for classification matrix. A complete description of the rating guidelines are in "An Irrigation Suitability Classification System for the Prairie Provinces" (ISC,1987).

Example: 2kxBt2 = slight soil limitations due to hydraulic conductivity and drainability, AND slight landscape limitations due to topography (complex slopes)

For more info:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field GEN_RATIN1

► Alias ↔ SOIL_1_IRRIGATION_SUIT_RATING
Data type ↔ String
Width ↔ 9
Precision ↔ 0
Scale ↔ 0

Field description

This is a rating for general irrigated crop production. Soil and landscape characteristics such as texture, drainage, depth to water table, salinity, geological uniformity, topography and stoniness are considered

For more info:

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field SOIL_FACT2

► Alias ↔ SOIL_2_IRRIGATION_SOIL_CLASS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Same as SOIL_FACT2, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field LANDSCAPE2

► Alias ↔ SOIL_2_IRRIG_LANDSCAPE_CLASS
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description

Same as LANDSCAPE1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field IRRIG_CLA2

► Alias ↔ SOIL_2_IRRIGATION_SUIT_CLASS
Data type ↔ String
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description

Same as IRRIG_CLA1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field GEN_RATIN2

► Alias ↔ SOIL_2_IRRIGATION_SUIT_RATING
Data type ↔ String
Width ↔ 9
Precision ↔ 0
Scale ↔ 0

Field description

Same as GEN_RATIN1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field SOIL_FACT3

► Alias ↔ SOIL_3_IRRIGATION_SOIL_CLASS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description
Same as SOIL_FACT1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field LANDSCAPE3

► Alias ↔ SOIL_3_IRRIG_LANDSCAPE_CLASS
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Same as LANDSCAPE1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field IRRIG_CLA3

► Alias ↔ SOIL_3_IRRIGATION_SUIT_CLASS
Data type ↔ String
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description
Same as IRRIG_CLA1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field GEN_RATIN3

► Alias ↔ SOIL_3_IRRIGATION_SUIT_RATING
Data type ↔ String
Width ↔ 9
Precision ↔ 0
Scale ↔ 0

Field description
Same as GEN_RATIN1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/interpretive-maps.html#irrigation>

Field SPUD_RTNG1

► Alias ↔ SOIL_1_POTATO_IRRIGATION_SUIT
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description
Soil polygon suitability for irrigation specific to potato production for processing are evaluated based on drainage, texture group of the entire profile, slope, stoniness and salinity.

For more info:
<https://www.gov.mb.ca/agriculture/crops/production/potatoes-suitability-of-land-for-irrigated-potato-production.html>

Description source
<https://www.gov.mb.ca/agriculture/crops/production/potatoes-suitability-of-land-for-irrigated-potato-production.html>

List of values
Value Class 1
Description Most suitable

Value Class 5
Description Least suitable

Field SPUD_RTNG2

Alias ⇔ SOIL_2_POTATO_IRRIGATION_SUIT
Data type ⇔ String
Width ⇔ 4
Precision ⇔ 0
Scale ⇔ 0

Field description

Same as SPUD_RTNG1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/crops/production/potatoes-suitability-of-land-for-irrigated-potato-production.html>

Field SPUD_RTNG3

Alias ⇔ SOIL_3_POTATO_IRRIGATION_SUIT
Data type ⇔ String
Width ⇔ 4
Precision ⇔ 0
Scale ⇔ 0

Field description

Same as SPUD_RTNG1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/crops/production/potatoes-suitability-of-land-for-irrigated-potato-production.html>

Field DRAINAGE1

Alias ⇔ SOIL_1_DRAINAGE
Data type ⇔ String
Width ⇔ 3
Precision ⇔ 0
Scale ⇔ 0

Field description

Soil drainage is the speed and extent of water removal from the soil by runoff (surface drainage) and downward flow through the soil profile (internal drainage). It also refers to the frequency and duration when the soil is not saturated.

For more info:

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/pubs/soil-management-guide.pdf>

Description source

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/pubs/soil-management-guide.pdf>

List of values

Value R
Description rapidly drained

Value W
Description well drained

Value I
Description imperfectly drained

Value P
Description poorly drained

Value VP
Description very poorly drained

Value \$ML
Description Modified land

Value \$UL
Description Unclassified land

Value \$UR
Description Urban land

Value \$ZZ
Description Water

Field DRAINAGE2

Alias ↔ SOIL_2_DRAINAGE
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Same as DRAINAGE1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/pubs/soil-management-guide.pdf>

Field DRAINAGE3

Alias ↔ SOIL_3_DRAINAGE
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Same as DRAINAGE1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

<https://www.gov.mb.ca/agriculture/environment/soil-management/soil-management-guide/pubs/soil-management-guide.pdf>

Field SURFTEXT1

Alias ↔ SOIL_1_SURFACE_TEXTURE
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description

Soil surface texture of the first named soil series in the map polygon.

Soil texture is the relative proportion of sand, silt and clay particles. The texture of a soil cannot be altered. In agriculture, soil texture is determined by measuring the size and distribution of particles less than 2.0 mm in diameter. Particles larger than 2.0 mm in diameter, such as gravel and stones, are included in the textural description only if present in significant amounts (e.g. gravelly sand (GrS)).

Sand (S) = 2.0 - 0.05 mm in diameter (coarse material) – referred to as “light” soils, since they are easily tilled (not because of the soil’s weight)

Silt (Si) = <0.05 - 0.002 mm (medium material)

Clay (C) = <0.002 mm (fine material) – referred to as “heavy” soils, because of their difficult workability

Loams (L) are medium textured soils made up of a mixture of sand, silt and clay

Gravel and stones are particles > 2.0 mm in diameter

Description source

https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

List of values

Value C
Description Clay

Value SiC
Description Silty Clay

Value SC
Description Sandy Clay

Value CL
Description Clay Loam

Value SiCL
Description Silty Clay Loam

Value SCL
Description Sandy Clay Loam

Value L
Description Loam

Value VFSL
Description Very Fine Sandy Loam

Value SiL
Description Silt Loam

Value FSL
Description Fine Sandy Loam

Value VFS
Description Very Fine Sand

Value LVFS
Description Loamy Very Fine Sand

Value SL
Description Sandy Loam

Value LFS
Description Loamy Fine Sand

Value LS
Description Loamy Sand

Value FS
Description Fine Sand

Value CSL
Description Coarse Sandy Loam

Value CS
Description Coarse Sand

Value S
Description Sand

Value MS
Description Medium Sand

Value GRSL
Description Gravelly Loamy Sand

Value GRSL
Description Gravelly Sandy Loam

Value LCS
Description Loamy Coarse Sand

Value CB
Description Cobble Beach

Value M
Description Mesic

Value O
Description Organic

Value H
Description Humic

Value F
Description Fibric

Value \$ML
Description Modified land

Value \$UL
Description Unclassified land

Value \$UR
Description Urban land

Value \$ZZ
Description Water

Field SURFTEXT2

Alias ⇔ SOIL_2_SURFACE_TEXTURE
Data type ⇔ String
Width ⇔ 4
Precision ⇔ 0
Scale ⇔ 0

Field description
Same as SURFTEXT1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

Field SURFTEXT3

Alias ↔ SOIL_3_SURFACE_TEXTURE
Data type ↔ String
Width ↔ 4
Precision ↔ 0
Scale ↔ 0

Field description

Same as SURFTEXT1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

Field SURFTEXTM1

Alias ↔ SOIL_1_SURFAC_TEXTURE_MODIFIER
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Surface texture modifier.

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value GR
Description Gravelly

Value VG
Description Very gravelly

Value MU
Description Mucky

Value WY
Description Woody

Field SURFTEXTM2

Alias ↔ SOIL_2_SURFAC_TEXTURE_MODIFIER
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Same as SURFTEXTM1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field SURFTEXTM3

Alias ↔ SOIL_3_SURFAC_TEXTURE_MODIFIER
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Same as SURFTEXTM1, except that it applies to the third named soil series in the polygon (where applicable).

Description source

http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field TEX_GROUP1

Alias ↔ SOIL_1_SURFACE_TEXTURE_GROUP
Data type ↔ String
Width ↔ 15
Precision ↔ 0
Scale ↔ 0

Field description

Soil surface texture group of the first named soil series

For more info:

https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

Description source

https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

List of values

Value VC

Description Very coarse

Value CO

Description Coarse

Value MC

Description Moderately coarse

Value ME

Description Medium

Value MF

Description Moderately Fine

Value F

Description Fine

Value VF

Description Very Fine

Value Om

Description Organic, mesic

Value Of

Description Organic, fibric

Value Oh

Description Organic, humic

Value \$ER

Description Eroded slope complex

Value \$ML

Description Modified land

Value \$UL

Description Unclassified land

Value \$UR

Description Urban land

Value \$ZZ

Description Water

Field TEX_GROUP2

Alias ⇔ SOIL_2_SURFACE_TEXTURE_GROUP

Data type ⇔ String

Width ⇔ 15

Precision ⇔ 0

Scale ⇔ 0

Field description

Same as TEX_GROUP1, except that it applies to the second named soil series in the polygon (where applicable).

Description source

https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

Field TEX_GROUP3

Alias ⇔ SOIL_3_SURFACE_TEXTURE_GROUP

Data type ⇔ String

Width ⇔ 15

Precision ⇔ 0

Scale ⇔ 0

Field description

Same as TEX_GROUP1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
https://agrimaps.gov.mb.ca/agrimaps/extras/info/Surface_Texture.pdf

Field MANCON1

Alias ↔ SOIL_1_MANAGEMNT_CONSIDERATION
Data type ↔ String
Width ↔ 14
Precision ↔ 0
Scale ↔ 0

Field description

Management considerations portray the most common and wide spread combinations of soil and landscape attributes that should be considered for intended land use. Field representing the soil and class combination contained in the soil map polygon.

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

List of values

Value F
Description Fine Texture (clays and silty clays)

Value FW
Description Fine Texture and Wetness

Value FT
Description Fine Texture and Topography

Value FWT
Description Fine Texture, Wetness and Topography

Value C
Description Coarse Texture (loamy sands, sands and gravels)

Value CW
Description Coarse Texture and Wetness

Value CT
Description Coarse Texture and Topography

Value CWT
Description Coarse Texture, Wetness and Topography

Value T
Description Topography (slopes > 5.0%)

Value TB
Description Topography and Bedrock

Value B
Description Bedrock

Value W
Description Wetness (poor and very poor drainage)

Value WB
Description Wetness and Bedrock

Value WT
Description Wetness and Topography

Field MANCON2

Alias ↔ SOIL_2_MANAGEMNT_CONSIDERATION
Data type ↔ String
Width ↔ 14
Precision ↔ 0
Scale ↔ 0

Field description

Same as MANCON1, except that it applies to the second named soil series in the polygon (where applicable).

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field MANCON3

Alias ↔ SOIL_3_MANAGEMNT_CONSIDERATION
Data type ↔ String

Width ⇔ 14
Precision ⇔ 0
Scale ⇔ 0

Field description
Same as MANCON1, except that it applies to the third named soil series in the polygon (where applicable).

Description source
http://mli2.gov.mb.ca/soils/soilaid/meta_files/soilaid_description.doc

Field TOPSOIL1

Alias ⇔ SOIL_1_SUIT_SOURCE_OF_TOPSOIL
Data type ⇔ String
Width ⇔ 3
Precision ⇔ 0
Scale ⇔ 0

Field description
Soil 1 suitability as source of topsoil. The term "topsoil" includes soil materials used to cover barren surfaces exposed during construction, and materials used to improve soil conditions on lawns, gardens, flower beds, etc. The factors to be considered include not only the characteristic of the soil itself, but also the ease or difficulty of excavation, and where removal of topsoil is involved, accessibility to the site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=54>

Field TOPSOIL2

Alias ⇔ SOIL_2_SUIT_SOURCE_OF_TOPSOIL
Data type ⇔ String
Width ⇔ 3
Precision ⇔ 0
Scale ⇔ 0

Field description
Soil 2 suitability as source of topsoil. The term "topsoil" includes soil materials used to cover barren surfaces exposed during construction, and materials used to improve soil conditions on lawns, gardens, flower beds, etc. The factors to be considered include not only the characteristic of the soil itself, but also the ease or difficulty of excavation, and where removal of topsoil is involved, accessibility to the site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=54>

Field TOPSOIL3

Alias ⇔ SOIL_3_SUIT_SOURCE_OF_TOPSOIL
Data type ⇔ String
Width ⇔ 3
Precision ⇔ 0
Scale ⇔ 0

Field description
Soil 3 suitability as source of topsoil. The term "topsoil" includes soil materials used to cover barren surfaces exposed during construction, and materials used to improve soil conditions on lawns, gardens, flower beds, etc. The factors to be considered include not only the characteristic of the soil itself, but also the ease or difficulty of excavation, and where removal of topsoil is involved, accessibility to the site.

Description source
<http://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=54>

Field SAND_GRAV1

Alias ⇔ SOIL_1_SUIT_SOURCE_SAND_GRAVEL
Data type ⇔ String
Width ⇔ 3
Precision ⇔ 0
Scale ⇔ 0

Field description
Soil 1 suitability as source of sand and gravel. The purpose of this table is to provide guidance for assessing the probable supply as well as quality of the sand or gravel for use as road base material and in concrete. The interpretation pertains mainly to the characteristics of substratum to a depth of 150 cm, augmented by observations made in deep cuts as well as geological knowledge where available.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=55>

Field SAND_GRAV2

Alias ↔ SOIL_2_SUIT_SOURCE_SAND_GRAVEL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability as source of sand and gravel. The purpose of this table is to provide guidance for assessing the probable supply as well as quality of the sand or gravel for use as road base material and in concrete. The interpretation pertains mainly to the characteristics of substratum to a depth of 150 cm, augmented by observations made in deep cuts as well as geological knowledge where available.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=55>

Field SAND_GRAV3

Alias ↔ SOIL_3_SUIT_SOURCE_SAND_GRAVEL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability as source of sand and gravel. The purpose of this table is to provide guidance for assessing the probable supply as well as quality of the sand or gravel for use as road base material and in concrete. The interpretation pertains mainly to the characteristics of substratum to a depth of 150 cm, augmented by observations made in deep cuts as well as geological knowledge where available.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=55>

Field ROADFILL1

Alias ↔ SOIL_1_SUIT_AS_SOURCE_ROADFILL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability as source of roadfill. Fill material for building or roads are included in this use. The performance of the material when removed from its original location and placed under load at the building site or road bed are to be considered. Since surface materials are generally removed during road or building construction their properties are disregarded. Aside from this layer, the whole soil to a depth of 150-200 cm should be evaluated. Soil materials which are suitable for fill can be considered equally suited for road subgrade construction.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=56>

Field ROADFILL2

Alias ↔ SOIL_2_SUIT_AS_SOURCE_ROADFILL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability as source of roadfill. Fill material for building or roads are included in this use. The performance of the material when removed from its original location and placed under load at the building site or road bed are to be considered. Since surface materials are generally removed during road or building construction their properties are disregarded. Aside from this layer, the whole soil to a depth of 150-200 cm should be evaluated. Soil materials which are suitable for fill can be considered equally suited for road subgrade construction.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=56>

Field ROADFILL3

Alias ↔ SOIL_3_SUIT_AS_SOURCE_ROADFILL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability as source of roadfill. Fill material for building or roads are included in this use. The performance of the material when removed from its original location and placed under load at the building site or road bed are to be considered. Since surface materials are generally removed during road or building construction their properties are disregarded. Aside from this layer, the whole soil to a depth of 150-200 cm should be evaluated. Soil materials which are suitable for fill can be considered equally suited for road subgrade construction.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=56>

Field BASMNT1

Alias ↔ SOIL_1_SUIT_BLDNG_BASEMENT

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 1 suitability for permanent buildings. This guide applies to undisturbed soils to be evaluated for single-family dwellings and other structures with similar foundation requirements. The emphasis for rating soils for buildings is on foundation requirements; but soil slope, susceptibility to flooding and other hydrologic conditions, such as wetness, that have effects beyond those related exclusively to foundations are considered as well. Also considered are soil properties, particularly depth to bedrock, which influence excavation, landscaping and septic tank absorption fields.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=57>

Field BASMNT2

Alias ↔ SOIL_2_SUIT_BLDNG_BASEMENT

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 2 suitability for permanent buildings. This guide applies to undisturbed soils to be evaluated for single-family dwellings and other structures with similar foundation requirements. The emphasis for rating soils for buildings is on foundation requirements; but soil slope, susceptibility to flooding and other hydrologic conditions, such as wetness, that have effects beyond those related exclusively to foundations are considered as well. Also considered are soil properties, particularly depth to bedrock, which influence excavation, landscaping and septic tank absorption fields.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=57>

Field BASMNT3

Alias ↔ SOIL_3_SUIT_BLDNG_BASEMENT

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 3 suitability for permanent buildings. This guide applies to undisturbed soils to be evaluated for single-family dwellings and other structures with similar foundation requirements. The emphasis for rating soils for buildings is on foundation requirements; but soil slope, susceptibility to flooding and other hydrologic conditions, such as wetness, that have effects beyond those related exclusively to foundations are considered as well. Also considered are soil properties, particularly depth to bedrock, which influence excavation, landscaping and septic tank absorption fields.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=57>

Field NO_BASMNT1

Alias ↔ SOIL_1_SUIT_BLDNG_NO_BASEMENTS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 1 suitability for permanent buildings. This guide applies to undisturbed soils to be evaluated for single-family dwellings and other structures with similar foundation requirements. The emphasis for rating soils for buildings is on foundation requirements; but soil slope, susceptibility to flooding and other hydrologic conditions, such as wetness, that have effects beyond those related exclusively to foundations are considered as well. Also considered are soil properties, particularly depth to bedrock, which influence excavation, landscaping and septic tank absorption fields.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=57>

Field NO_BASMNT2

Alias ↔ SOIL_2_SUIT_BLDNG_NO_BASEMENTS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 2 suitability for permanent buildings. This guide applies to undisturbed soils to be evaluated for single-family dwellings and other structures with similar foundation requirements. The emphasis for rating soils for buildings is on foundation requirements; but soil slope, susceptibility to flooding and other hydrologic conditions, such as wetness, that have effects beyond those related exclusively to foundations are considered as well. Also considered are soil properties, particularly depth to bedrock, which influence excavation, landscaping and septic tank absorption fields.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=57>

Field NO_BASMNT3

Alias ↔ SOIL_3_SUIT_BLDNG_NO_BASEMENTS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 3 suitability for permanent buildings. This guide applies to undisturbed soils to be evaluated for single-family dwellings and other structures with similar foundation requirements. The emphasis for rating soils for buildings is on foundation requirements; but soil slope, susceptibility to flooding and other hydrologic conditions, such as wetness, that have effects beyond those related exclusively to foundations are considered as well. Also considered are soil properties, particularly depth to bedrock, which influence excavation, landscaping and septic tank absorption fields.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=57>

Field ROAD_ST1

Alias ↔ SOIL_1_SUIT_FOR_ROADS_STREETS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 1 suitability for local roads and streets. This guide applies to soils to be evaluated for construction and maintenance of local roads and streets. These are improved roads and streets having some kind of all-weather surfacing, commonly asphalt or concrete, and are expected to carry automobile traffic all year. They consist of: (1) the underlying local soil material (either cut or fill) called the subgrade; (2) the base material of gravel, crushed rock, lime or soil cement, stabilized soil called the subbase; and (3) the actual road surface or pavement, either flexible or rigid. They are also graded to shed water and have ordinary provisions for drainage. With the probable exception of the hardened surface layer, the roads and streets are built mainly from the soil at hand, and cuts and fills are limited, usually less than 2 metres. Excluded from consideration in this guide are highways designed for fast moving, heavy trucks.

Properties that affect design and construction of roads and streets are: (1) those that affect the load supporting capacity and stability of the subgrade, and (2) those that affect the workability and amount of cut and fill. The AASHO and Unified Classification give an indication of the traffic supporting capacity. Wetness and flooding affect stability. Slope, depth of bedrock, stoniness, rockiness, and wetness affect the ease of excavation, and the amount of cut and fill to reach an even grade.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=58>

Field ROAD_ST2

Alias ↔ SOIL_2_SUIT_FOR_ROADS_STREETS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 2 suitability for local roads and streets. This guide applies to soils to be evaluated for construction and maintenance of local roads and streets. These are improved roads and streets having some kind of all-weather surfacing, commonly asphalt or concrete, and are expected to carry automobile traffic all year. They consist of: (1) the underlying local soil material (either cut or fill) called the subgrade; (2) the base material of gravel, crushed rock, lime or soil cement, stabilized soil called the subbase; and (3) the actual road surface or pavement, either flexible or rigid. They are also graded to shed water and have ordinary provisions for drainage. With the probable exception of the hardened surface layer, the roads and streets are built mainly from the soil at hand, and cuts and fills are limited, usually less than 2 metres. Excluded from consideration in this guide are highways designed for fast moving, heavy trucks.

Properties that affect design and construction of roads and streets are: (1) those that affect the load supporting capacity and stability of the subgrade, and (2) those that affect the workability and amount of cut and fill. The AASHO and Unified Classification give an indication of the traffic supporting capacity. Wetness and flooding affect stability. Slope, depth of bedrock, stoniness, rockiness, and wetness affect the ease of excavation, and the amount of cut and fill to reach an even grade.

Description source

Field ROAD_ST3

Alias ↔ SOIL_3_SUIT_FOR_ROADS_STREETS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability for local roads and streets. This guide applies to soils to be evaluated for construction and maintenance of local roads and streets. These are improved roads and streets having some kind of all-weather surfacing, commonly asphalt or concrete, and are expected to carry automobile traffic all year. They consist of: (1) the underlying local soil material (either cut or fill) called the subgrade; (2) the base material of gravel, crushed rock, lime or soil cement, stabilized soil called the subbase; and (3) the actual road surface or pavement, either flexible or rigid. They are also graded to shed water and have ordinary provisions for drainage. With the probable exception of the hardened surface layer, the roads and streets are built mainly from the soil at hand, and cuts and fills are limited, usually less than 2 metres. Excluded from consideration in this guide are highways designed for fast moving, heavy trucks.

Properties that affect design and construction of roads and streets are: (1) those that affect the load supporting capacity and stability of the subgrade, and (2) those that affect the workability and amount of cut and fill. The AASHO and Unified Classification give an indication of the traffic supporting capacity. Wetness and flooding affect stability. Slope, depth of bedrock, stoniness, rockiness, and wetness affect the ease of excavation, and the amount of cut and fill to reach an even grade.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=58>

Field TRENCHTYP1

Alias ↔ SOIL_1_SUIT_TRENCH_TYP_LANDFIL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability for trench-type sanitary landfills. The trench-type sanitary landfill, involves the daily burial of dry garbage and trash in an open trench that is covered with a layer of soil material. Suitability of the site is dependent upon the potential for pollution of water sources through groundwater contact with the refuse, or leachate arising from the site. Those properties affecting ease of excavation of the site must be supplemented with geological and hydrological knowledge to provide subsurface soil and groundwater data to a depth of at least 3 to 4.5 m, a common depth of landfills.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=59>

Field TRENCHTYP2

Alias ↔ SOIL_2_SUIT_TRENCH_TYP_LANDFIL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability for trench-type sanitary landfills. The trench-type sanitary landfill, involves the daily burial of dry garbage and trash in an open trench that is covered with a layer of soil material. Suitability of the site is dependent upon the potential for pollution of water sources through groundwater contact with the refuse, or leachate arising from the site. Those properties affecting ease of excavation of the site must be supplemented with geological and hydrological knowledge to provide subsurface soil and groundwater data to a depth of at least 3 to 4.5 m, a common depth of landfills.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=59>

Field TRENCHTYP3

Alias ↔ SOIL_3_SUIT_TRENCH_TYP_LANDFIL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability for trench-type sanitary landfills. The trench-type sanitary landfill, involves the daily burial of dry garbage and trash in an open trench that is covered with a layer of soil material. Suitability of the site is dependent upon the potential for pollution of water sources through groundwater contact with the refuse, or leachate arising from the site. Those properties affecting ease of excavation of the site must be supplemented with geological and hydrological knowledge to provide subsurface soil and groundwater data to a depth of at least 3 to 4.5 m, a common depth of landfills.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=59>

Field AREA_TYPE1

Alias ↔ SOIL_1_SUIT_AREA_TYPE_LANDFILL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability for area-type sanitary landfills. In the area-type sanitary landfill, refuse is placed on the surface of the soil in successive layers. The daily and final cover material is generally imported. A final cover of soil material at least 60 cm thick is placed over the fill when it is completed.

The soil under the proposed site should be investigated to determine the probability that leachates from the landfill may penetrate the soil and thereby pollute water supplies.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=60>

Field AREA_TYPE2

Alias ↔ SOIL_2_SUIT_AREA_TYPE_LANDFILL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability for area-type sanitary landfills. In the area-type sanitary landfill, refuse is placed on the surface of the soil in successive layers. The daily and final cover material is generally imported. A final cover of soil material at least 60 cm thick is placed over the fill when it is completed.

The soil under the proposed site should be investigated to determine the probability that leachates from the landfill may penetrate the soil and thereby pollute water supplies.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=60>

Field AREA_TYPE3

Alias ↔ SOIL_3_SUIT_AREA_TYPE_LANDFILL
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability for area-type sanitary landfills. In the area-type sanitary landfill, refuse is placed on the surface of the soil in successive layers. The daily and final cover material is generally imported. A final cover of soil material at least 60 cm thick is placed over the fill when it is completed.

The soil under the proposed site should be investigated to determine the probability that leachates from the landfill may penetrate the soil and thereby pollute water supplies.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=60>

Field COVER_MAT1

Alias ↔ SOIL_1_SUIT_COVR_MATL_AREA_TYP
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability as cover material for area-type sanitary landfills. The term cover material includes soil materials used to put a daily and final covering layer in area-type sanitary landfills. This cover material may be derived from the area of the landfill or may be brought in from surrounding areas.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=61>

Field COVER_MAT2

Alias ↔ SOIL_2_SUIT_COVR_MATL_AREA_TYP
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability as cover material for area-type sanitary landfills. The term cover material includes soil materials used to put a daily and final covering layer in area-type sanitary landfills. This cover material may be derived from the area of the landfill or may be brought in from surrounding areas.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=61>

Field COVER_MAT3

Alias ↔ SOIL_3_SUIT_COVR_MATL_AREA_TYP

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 3 suitability as cover material for area-type sanitary landfills. The term cover material includes soil materials used to put a daily and final covering layer in area-type sanitary landfills. This cover material may be derived from the area of the landfill or may be brought in from surrounding areas.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=61>

Field S_LAGOON1

Alias ↔ SOIL_1_SUIT_FOR_SEWAGE_LAGOONS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 1 suitability for reservoirs and sewage lagoons. Factors affecting the ability of undisturbed soils to impound water or sewage and prevent seepage, are considered for evaluating the suitability of soils for reservoir and lagoon areas. This evaluation considers soil both as a vessel for the impounded area and as material for the enclosing embankment. As the impounded liquids could be potential sources of contamination of nearby water supplies, e.g. sewage lagoons, the landscape position of the reservoir as it affects risk of flooding must also be considered.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=62>

Field S_LAGOON2

Alias ↔ SOIL_2_SUIT_FOR_SEWAGE_LAGOONS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 2 suitability for reservoirs and sewage lagoons. Factors affecting the ability of undisturbed soils to impound water or sewage and prevent seepage, are considered for evaluating the suitability of soils for reservoir and lagoon areas. This evaluation considers soil both as a vessel for the impounded area and as material for the enclosing embankment. As the impounded liquids could be potential sources of contamination of nearby water supplies, e.g. sewage lagoons, the landscape position of the reservoir as it affects risk of flooding must also be considered.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=62>

Field S_LAGOON3

Alias ↔ SOIL_3_SUIT_FOR_SEWAGE_LAGOONS

Data type ↔ String

Width ↔ 3

Precision ↔ 0

Scale ↔ 0

Field description

Soil 3 suitability for reservoirs and sewage lagoons. Factors affecting the ability of undisturbed soils to impound water or sewage and prevent seepage, are considered for evaluating the suitability of soils for reservoir and lagoon areas. This evaluation considers soil both as a vessel for the impounded area and as material for the enclosing embankment. As the impounded liquids could be potential sources of contamination of nearby water supplies, e.g. sewage lagoons, the landscape position of the reservoir as it affects risk of flooding must also be considered.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=62>

Field SEP_FIELD1

Alias ↔ SOIL_1_SUIT_FOR_SEPTIC_FIELDS

Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability for septic tank absorption fields. This guide applies to soils to be used as an absorption and filtering medium for effluent from septic tank systems. A subsurface tile system laid in such a way that effluent from the septic tank is distributed reasonably uniformly into the natural soil is assumed when applying this guide. A rating of poor need not mean that a septic system should not be installed in the given soil, but rather, may suggest the difficulty, in terms of installation and maintenance, which can be expected.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=63>

Field SEP_FIELD2

Alias ↔ SOIL_2_SUIT_FOR_SEPTIC_FIELDS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability for septic tank absorption fields. This guide applies to soils to be used as an absorption and filtering medium for effluent from septic tank systems. A subsurface tile system laid in such a way that effluent from the septic tank is distributed reasonably uniformly into the natural soil is assumed when applying this guide. A rating of poor need not mean that a septic system should not be installed in the given soil, but rather, may suggest the difficulty, in terms of installation and maintenance, which can be expected.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=63>

Field SEP_FIELD3

Alias ↔ SOIL_3_SUIT_FOR_SEPTIC_FIELDS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability for septic tank absorption fields. This guide applies to soils to be used as an absorption and filtering medium for effluent from septic tank systems. A subsurface tile system laid in such a way that effluent from the septic tank is distributed reasonably uniformly into the natural soil is assumed when applying this guide. A rating of poor need not mean that a septic system should not be installed in the given soil, but rather, may suggest the difficulty, in terms of installation and maintenance, which can be expected.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=63>

Field PLAY_GRND1

Alias ↔ SOIL_1_SUIT_FOR_PLAYGROUNDS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability for playgrounds. This guide applies to soils to be used intensively for playgrounds, football, badminton, and for other similar organized games. These areas are subject to intensive foot traffic. A nearly level surface, good drainage, and a soil texture and consistence that provide a firm surface generally are required. The most desirable soils are free of rock outcrops and coarse fragments.
Soil suitability for growing and maintaining vegetation is not a part of this guide, except as influenced by moisture, but is an important item to consider in the final evaluation of site.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=64>

Field PLAY_GRND2

Alias ↔ SOIL_2_SUIT_FOR_PLAYGROUNDS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability for playgrounds. This guide applies to soils to be used intensively for playgrounds, football, badminton, and for other similar organized games. These areas are subject to intensive foot traffic. A nearly level surface, good drainage, and a soil texture and consistence that provide a firm surface generally are required. The most desirable soils are free of rock outcrops and coarse fragments.
Soil suitability for growing and maintaining vegetation is not a part of this guide, except as influenced by moisture, but is an important item to consider in the final evaluation of site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=64>

Field PLAY_GRND3

Alias ↔ SOIL_3_SUIT_FOR_PLAYGROUNDS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability for playgrounds. This guide applies to soils to be used intensively for playgrounds, football, badminton, and for other similar organized games. These areas are subject to intensive foot traffic. A nearly level surface, good drainage, and a soil texture and consistence that provide a firm surface generally are required. The most desirable soils are free of rock outcrops and coarse fragments.

Soil suitability for growing and maintaining vegetation is not a part of this guide, except as influenced by moisture, but is an important item to consider in the final evaluation of site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=64>

Field PICNIC1

Alias ↔ SOIL_1_SUIT_FOR_PICNIC_AREAS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 1 suitability for picnic areas. This guide applies to soils considered for intensive use as park-type picnic areas. It is assumed that most vehicular traffic will be confined to the access roads. Soil suitability for growing and maintaining vegetation is not a part of this guide, except as influenced by moisture, but is an important item to consider in the final evaluation of site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=65>

Field PICNIC2

Alias ↔ SOIL_2_SUIT_FOR_PICNIC_AREAS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 2 suitability for picnic areas. This guide applies to soils considered for intensive use as park-type picnic areas. It is assumed that most vehicular traffic will be confined to the access roads. Soil suitability for growing and maintaining vegetation is not a part of this guide, except as influenced by moisture, but is an important item to consider in the final evaluation of site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=65>

Field PICNIC3

Alias ↔ SOIL_3_SUIT_FOR_PICNIC_AREAS
Data type ↔ String
Width ↔ 3
Precision ↔ 0
Scale ↔ 0

Field description

Soil 3 suitability for picnic areas. This guide applies to soils considered for intensive use as park-type picnic areas. It is assumed that most vehicular traffic will be confined to the access roads. Soil suitability for growing and maintaining vegetation is not a part of this guide, except as influenced by moisture, but is an important item to consider in the final evaluation of site.

Description source
<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=65>

Field CAMP_AREA1

Alias ↔ SOIL_1_SUIT_FOR_CAMP_AREAS
Data type ↔ String
Width ↔ 3
Precision ↔ 0

Scale ⇔ 0

Field description

Soil 1 suitability for camp areas. This guide applies to soils to be used intensively for tents and camp trailers and the accompanying activities of outdoor living. It is assumed that little site preparation will be done other than shaping and levelling for campsites and parking areas. The soil should be suitable for heavy foot traffic by humans and limited vehicular traffic. Soil suitability for growing and maintaining vegetation is not a part of this guide, but is an important item to consider in the final evaluation of site.

Back country campsites differ in design, setting and management but require similar soil attributes. These guides should apply to evaluations for back country campsites but, depending on the nature of the facility, the interpreter may wish to adjust the criteria defining a given degree of limitation to reflect the changed requirement. For example, small tent sites may allow rock exposures greater than 10 m apart to be considered slight limitations.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=66>

Field CAMP_AREA2

Alias ⇔ SOIL_2_SUIT_FOR_CAMP_AREAS

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil 2 suitability for camp areas. This guide applies to soils to be used intensively for tents and camp trailers and the accompanying activities of outdoor living. It is assumed that little site preparation will be done other than shaping and levelling for campsites and parking areas. The soil should be suitable for heavy foot traffic by humans and limited vehicular traffic. Soil suitability for growing and maintaining vegetation is not a part of this guide, but is an important item to consider in the final evaluation of site.

Back country campsites differ in design, setting and management but require similar soil attributes. These guides should apply to evaluations for back country campsites but, depending on the nature of the facility, the interpreter may wish to adjust the criteria defining a given degree of limitation to reflect the changed requirement. For example, small tent sites may allow rock exposures greater than 10 m apart to be considered slight limitations.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=66>

Field CAMP_AREA3

Alias ⇔ SOIL_3_SUIT_FOR_CAMP_AREAS

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil 3 suitability for camp areas. This guide applies to soils to be used intensively for tents and camp trailers and the accompanying activities of outdoor living. It is assumed that little site preparation will be done other than shaping and levelling for campsites and parking areas. The soil should be suitable for heavy foot traffic by humans and limited vehicular traffic. Soil suitability for growing and maintaining vegetation is not a part of this guide, but is an important item to consider in the final evaluation of site.

Back country campsites differ in design, setting and management but require similar soil attributes. These guides should apply to evaluations for back country campsites but, depending on the nature of the facility, the interpreter may wish to adjust the criteria defining a given degree of limitation to reflect the changed requirement. For example, small tent sites may allow rock exposures greater than 10 m apart to be considered slight limitations.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=66>

Field PATH1

Alias ⇔ SOIL_1_SUIT_FOR_PATHS_TRAILS

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil 1 suitability for paths and trails. It is assumed that the trails will be built at least 45 cm wide and that obstructions such as cobbles and stones will be removed during construction. It is also assumed that a dry, stable tread is desirable and that muddy, dusty, worn or eroded trail treads are undesirable. Hiking and riding trails are not treated separately, but as the design requirements for riding trails are more stringent, a given limitation will be more difficult to overcome. Poor or very poor suitability does not indicate that a trail cannot or should not be built. It does, however, suggest higher design requirements and maintenance to overcome the limitations.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=67>

Field PATH2

Alias ⇔ SOIL_2_SUIT_FOR_PATHS_TRAILS

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil 2 suitability for paths and trails. It is assumed that the trails will be built at least 45 cm wide and that obstructions such as cobbles and stones will be removed during construction. It is also assumed that a dry, stable tread is desirable and that muddy, dusty, worn or eroded trail treads are undesirable. Hiking and riding trails are not treated separately, but as the design requirements for riding trails are more stringent, a given limitation will be more difficult to overcome. Poor or very poor suitability does not indicate that a trail cannot or should not be built. It does, however, suggest higher design requirements and maintenance to overcome the limitations.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=67>

Field PATH3

Alias ⇔ SOIL_3_SUIT_FOR_PATHS_TRAILS

Data type ⇔ String

Width ⇔ 3

Precision ⇔ 0

Scale ⇔ 0

Field description

Soil 3 suitability for paths and trails. It is assumed that the trails will be built at least 45 cm wide and that obstructions such as cobbles and stones will be removed during construction. It is also assumed that a dry, stable tread is desirable and that muddy, dusty, worn or eroded trail treads are undesirable. Hiking and riding trails are not treated separately, but as the design requirements for riding trails are more stringent, a given limitation will be more difficult to overcome. Poor or very poor suitability does not indicate that a trail cannot or should not be built. It does, however, suggest higher design requirements and maintenance to overcome the limitations.

Description source

<https://www.gov.mb.ca/agriculture/soil/soil-survey/pubs/d91blanshard.pdf#page=67>

Field Shape_Length

Alias ⇔ Shape_Length

Data type ⇔ Double

Width ⇔ 8

Precision ⇔ 0

Scale ⇔ 0

Field description ⇔

Length of feature in internal units.

Description source ⇔

ESRI

Description of values ⇔

Positive real numbers that are automatically generated.

Field Shape_Area

Alias ⇔ Shape_Area

Data type ⇔ Double

Width ⇔ 8

Precision ⇔ 0

Scale ⇔ 0

Field description ⇔

Area of feature in internal units squared.

Description source ⇔

ESRI

Description of values ⇔

Positive real numbers that are automatically generated.

Metadata Details ▶

Metadata language English (CANADA)

Metadata character set ⇔ utf8 - 8 bit UCS Transfer Format

Metadata identifier 357788A5-5EBD-48F7-AE47-AFE8AA1B9ADA

Scope of the data described by the metadata ⇔ dataset

Scope name ⇔ dataset

Last update ⇄ 2021-02-23

ArcGIS metadata properties

Metadata format ArcGIS 1.0

Metadata style North American Profile of ISO19115 2003

Standard or profile used to edit metadata NAP

Created in ArcGIS for the item 2013-09-30 11:11:32

Last modified in ArcGIS for the item 2021-02-23 08:49:51

Automatic updates

Have been performed Yes

Last update 2021-02-23 08:49:51

Metadata Contacts ►

Metadata contact - originator

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Organization's name Manitoba Agriculture and Resource Development

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Hours of service

Monday - Friday, 8:30 - 16:30 CST

Metadata Maintenance ►

Maintenance

Update frequency as needed

Metadata Constraints ►

Constraints

Limitations of use

Manitoba Agriculture and Resource Development makes every effort to ensure that soil survey data and interpretations are accurate, verified, and up-to-date. However, as data is continuously updated, sorted and verified, future updates may contain additional information.

The data is intended to be used at the appropriate scale, as identified in the 'SCALE' attribute field of the feature class.

The data represents the results of data collection/processing for a specific activity and indicate the general existing conditions. As such, each dataset is only valid for its intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than their intended purpose.

Thumbnail and Enclosures ►

Thumbnail

Thumbnail type

Image file

