# **Purpose of the document**

The purpose of this API description document is to provide a technology-agnostic overview of the vineyard block map API and describes specifics of file formats, returned and consumed by the services implementing this API.

Services implementing the vineyard map template provide information about vineyard blocks and may enable managing information about vineyard blocks.

# **Operational context**

Vineyard map services may be used to synchronize information about vineyards in various systems using Collabriculture vineyard logical schema data model.

# **Endpoints**

# /vineyard\_blocks

## GET:

Summary	Returns array of available vineyards in the microservice as a JSON array of <i>VineyardBlock Objects</i> .
Response	JSON array of VineyardBlock Objects

### POST:

Summary	Adds a vineyard block
Input	request body – a vineyard block in <i>VineyardBlockMap File</i> structure
Response	Returns a <i>VineyardBlockObject</i> of the added vineyard.

## /vineyard\_block/{id}

## GET:

Summary	Returns a GeoPackage file of VineyardBlockMap File structure
Input	id – unique id of the vineyard block
Response	GeoPackage file of VineyardBlockMap File structure

## POST:

Summary	Returns a GeoPackage file of VineyardBlockMap File structure
Input	id – unique id of the vineyard block request body – a vineyard block in <i>VineyardBlockMap File</i> structure
Response	Returns a <i>VineyardBlockObject</i> of the updated vineyard.

### DELETE:

Summary	Deletes a vineyard block in the system
Input	id – unique id of the vineyard block
Response	Returns OK if successfully deleted, NO if nothing was deleted.

### **Data schemas**

#### JSON schema

### **VineyardBlock Object**

Description: a JSON object that describes availability of a vineyard block in the system Properties: id (Integer) name (String)

### GeoPackage schemas

### VineyardBlockMap File

Description: a GeoPackage file that holds the layers related to a particular vineyard block, in accordance with the Collabriculture vineyard logical schema data structure.

### Data tables:

```
vineyard:
 Layer properties:
  id (Integer)
  name (String)
  geom (Geometry, polygon)
block:
 Layer properties:
  id (Integer)
  vineyard_id (Integer)
  geom (Geometry, polygon)
  user_defined_id (String)
row:
 Layer properties:
  id (Integer)
  block_id (Integer)
  geom (Geometry, polygon)
  user_defined_id (String)
vine:
 Layer properties:
  id (Integer)
  vinerow_id (Integer)
  variety_id (Integer)
  geom (Geometry, polygon)
  user_defined_id (String)
```

## VineyardBlockMap file Table definitions

		L
 LJ		vineyard    -==========++
ROW	COLUMN	DATA TYPE
	geom	GEOMETRY
	id	MEDIUMINT
	name	TEXT
	owned_by	TEXT
	street_address	TEXT
<b>⊦====</b> -	·	+========++
		block
ROW	COLUMN	
	COLOTIN	DATA TYPE
	conorm     geom	DATA TYPE
<del>-</del>   		+
	-     geom 	+   GEOMETRY
+	+   geom +   id +	GEOMETRY
+		GEOMETRY   GEOMETRY   HOLD   HOLD
	geom 	GEOMETRY
	geom  id  vineyard_id  user_defined_id  row_spacing_m	GEOMETRY
	geom 	GEOMETRY

geom	====+		+=====================================
geom	====+		
id	ROW	COLUMN	DATA TYPE
block_id	'   +	geom	GEOMETRY
user_defined_id   TEXT		id	MEDIUMINT
orientation   MEDIUMINT   vinerow_num   MEDIUMINT   TABLE vine   MEDIUMINT   VINEROW_NUM   DATA TYPE   GEOMETRY   id   MEDIUMINT   vinerow_id   MEDIUMINT   vinerow_id   MEDIUMINT   variety_id   MEDIUMINT   clone   TEXT   rootstock   TEXT	'   	block_id	   MEDIUMINT
vinerow_num	<sub>1</sub>	user_defined_id	TEXT
TABLE vine  TABLE vine  GOW   COLUMN	'   +	orientation	   MEDIUMINT
TABLE vine    COLUMN		vinerow_num	MEDIUMINT
ROW   COLUMN			
geom	-===+		
id	====+	TABLE	vine -=============
vinerow_id	·	TABLE	vine 
variety_id	====+	TABLE COLUMN geom	vine  -====================================
clone   TEXT  +	====+	TABLE  COLUMN  geom  id	vine  -====================================
+	====+	TABLE  COLUMN  geom  id  vinerow_id	vine 
+	====+	TABLE  COLUMN  geom  id  vinerow_id  user_defined_id	vine -====================================
   vine num	====+	TABLE  COLUMN  geom  id  vinerow_id  user_defined_id  variety_id	vine
1 110_1011111	====+	TABLE  COLUMN  geom  id  vinerow_id  user_defined_id  variety_id  clone	vine