

## **Photogrammetry (Digital Surface Modeling) - An European Client**

---

### **LAYERS**

#### **Buildings**

Buildings are restituted by the top: buildings with more than 2m<sup>2</sup> and elevation > 1m. Each building is a closed polygon.

#### **Way Axle**

Line that describe the way axle

#### **Exterior Limit of sidewalks**

Lines that limit road lanes

#### **Interior Limit of Sidewalks**

Line that divides public sidewalks from private property. These limits are broken up whenever they meet buildings or walls, or any other element. Basically they unify all the information regarding the separation between public and private property.

#### **Walls**

All elements that physically delimit land parcels or separate private property from public ways, such as walls of support, brick walls, stonewalls etc.

#### **Railways**

Each railway should be drawn by its axle, which represents that the center of the railway.

#### **Water**

##### 1.1.1 Areas

All the water areas with dimension > 4m<sup>2</sup> (dams, lakes, lagoons, pools, tanks watercourses, etc.)

##### 1.1.2 Lines

Watercourses with width < 1.5m, restituted with a line. Watercourses should be broken up whenever they meet road limits.

#### **Green Areas**

Tree areas with more than 10m<sup>2</sup>

### **Additional Specifications**

Restitution Priorities:

**Areas:** All area elements should be restituted first:

- Buildings: Each building is a closed polygon: adjacent buildings should never intersect (Level 1)
- Water areas (Level 6)
- Green areas: these may overlap other elements (Level 9)

For these layers, since they are closed areas, elements should be fully restituted.

## Lines

- Support Walls (Level 16)
- Other Walls (Level 2)
- Exterior Sidewalk Limits (Level 4)
- Break Lines (Level 13)
- Way Axles (Level 10)
- Railway (Level 7)
- Interior Sidewalk Limits (Level 5)

Overshoots or Undershoots cannot exist. Connections between elements should be done by the last vertex (using the tentative point). Each Level and color lever to be respected.

## Points

- Mass points in the ground (Level 12)

## Feature Classes:



LEVEL / NIVEL	COLOR / COR	ELEMENTS	ELEMENTS (IN PORTUGUESE)	STYLE / ESTILO
1	0	Buildings	Edifícios	Areas
2	5	Wall	Muros	Lines
4	4	Exterior Limit of Sidewalks	Limite Exterior do passeio (Rade Viaria)	Lines
5	1	Interior Limit of Sidewalks	Limite Interior do Passeio	Lines
6	151	Water Areas	Zonas de Agua	Lines / Areas
7	29	Railways	Linha de Comboio (Rede Ferroviaria)	Lines
9	2	Green Areas	Zonas Verdes (Coberto arboreo)	Areas
10	3	Way Axles	Eixos de Via	Lines
11	6	Mass Points (top of buildings)	Pontos Cotados (Edifícios)	Points
12	10	Mass Points (Ground)	Pontos Cotados (Terreno)	Points
13	13	Breaklines	Breaklines	Lines

**Technology: Leica Photogrammetry (LPS) 9.0, Microstation 8.1**