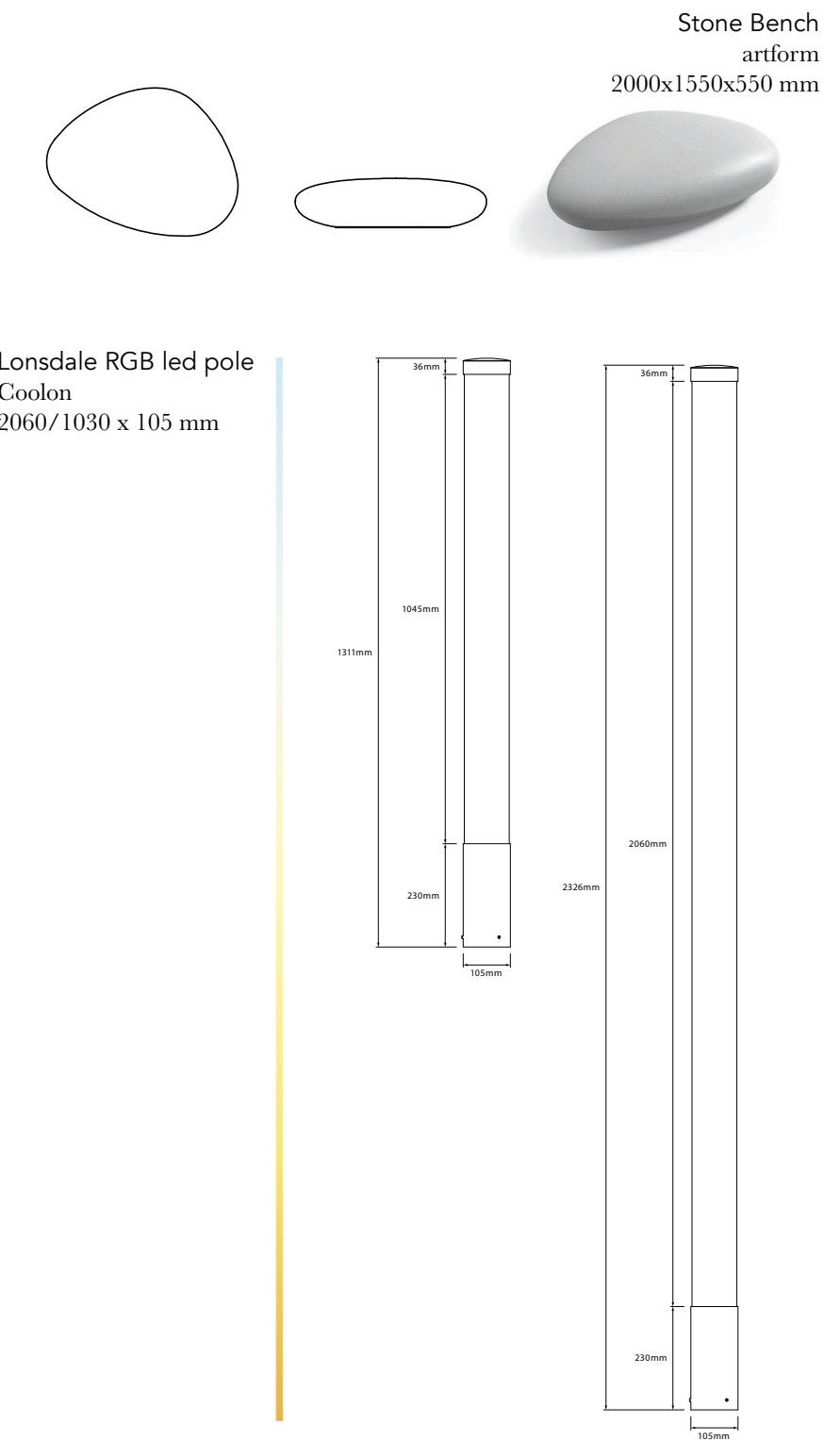


# THE URBAN DRAINAGE SYSTEM

Water management and rainwater collection for the sustenance of the park

Water drainage takes place mainly through nature itself as the entire coastal front is transformed into a long linear park. Nevertheless, in the part which is occupied by the tram line and the driveway, it is proposed a drainage system able to collect and purify stormwater; then, through a filtering system, it is possible to irrigate the entire natural belt of the coast.



## GARDEN SIDEWALK- DRAINAGE TILES

1. Underground edge stone
2. Reinforcement pre-cast concrete block
3. Frost protection layer
4. Soil
5. Stone tiles, 7 cm
6. Sand, 10 cm
7. Gravel, 20 cm

## DRIVING ROAD (1% slope on both sides, with integrated water collection system)

1. Rubber finishing layer, 2 cm
2. Permeable bituminous layer, 4 cm
3. Mineral mixture 0/32, 15 cm
4. Firm - subbase or esplanade

## DRAINAGE SYSTEM

1. Water collection canal (Material: polymer, vibro-pressed concrete)
2. Containment steel profile
3. Frost protection layer 0/32
4. Siphon and filter
5. Drainage pipe
6. Storage tube
7. Well
8. Gravel
9. Sand
10. Control system
11. Tube to connect the water to the ground, 7 cm
12. Irrigation system

## TRAM (tram with rubber wheels)

1. "phoenix glue" shaped lanes
2. Fixing profiles, h. 15 cm
3. Rubber profiles
4. 30 cm of concrete base slab

## WATERFRONT SIDEWALK AND WOOD TERRACES

(Pine wood: very resinous >> very resistant)

1. Main beams in laminated wood h. 10 cm, each meter
2. Secondary beams in laminated wood h. 7 cm
3. Wooden plank, 25 cm x 240 cm, h. 5 cm
4. 30 cm of resistant material, gravel, slope of the 1%
5. Base pillars in laminated wood, tip diameter between 10 e 20 cm
6. Wood cladding panel

