Claims

1 ~~A system for assembling a road having a road deck and a road direction, wherein the system comprises a plurality of road deck elements for forming the road deck by placement of the road deck elements next to each other in at least the road direction, wherein the system further comprises a plurality of plastic support structures, wherein each of the support structures comprises a base plate and at least one supporting element, extending, or for extending, upwardly from the base plate for supporting at least partly one of the road deck elements, wherein in an assembled condition the system is such that when rainwater falls onto the road deck, it predominantly flows away over the road deck to one or more rainwater collection points adjacent each support structure and/or each road deck element, wherein the plurality of plastic support structures comprises a multi-functional support structure which is provided with at least one filter for filtering rainwater that has from the one or more rainwater collection points entered a treatment volume, wherein at least a part of the at least one filter is positioned within that treatment volume.~~

2 ~~A system according to claim 1, wherein the treatment volume is spanned by dimensions of the multifunctional support structure and/or is within outer dimensions of the multifunctional support structure.~~

3 ~~A system according to claim 1 or 2, wherein the treatment volume excludes the one or more rainwater collection points.~~

4 ~~A system according to claims 1, 2 or 3, wherein in the assembled condition the system is such that rainwater which is collected by the one or more rainwater collection points and that has entered the treatment volume includes rainwater which has flowed over at least an other area of road deck, wherein the other area of road deck is different from an area of road deck that covers that at least one multifunctional plastic support structure.~~

5 ~~A system according to any one of claims 1 -4, wherein in an assembled condition the system is such that rainwater which has been filtered by the at least one filter finds its way away from the treatment volume into other volume.~~

6 ~~A system according to claim 5 wherein that other volume is covered by the other area of road deck.~~

7 A system according to claims 4, 5 or 6 wherein the other area of road deck is area of road deck under which no such multifunctional plastic support structure is present.

8 A system according to any one of claims 4-7, wherein the other area of road deck is area of road deck under which an infiltration system is present for temporarily storing water before it permeates into the ground, or under which an attenuation system is present.

9 A system according to any one of claims 1-8, wherein the system comprises a plurality of inlet-gutter parts, so that in an assembled condition of the system adjacent each support structure and/or each road deck element at least a part of an inlet gutter extends in the road direction for functioning as rainwater collection points, and/or extends in a direction transverse to the road direction for functioning as rainwater collection points.

10 A system according to claim 4 and 9, wherein in an assembled condition of the system, the inlet gutter streamlines in the road direction a flow of rainwater of which at least some rainwater has flowed over the other area of road deck.

11 A system according to claim 9 or 10, wherein in an assembled condition of the system, the inlet gutter also collects rainwater that has flowed over the area of road deck that covers one of the multi-functional plastic support structures.

12 A system according to any one of claims 9-11, wherein in the assembled condition of the system, rainwater flows into the treatment volume when the rainwater has reached a predetermined height in the inlet gutter.

13 A system according to anyone of the previous claims, wherein in the assembled condition of the system, the treatment volume is in its entirety under area of road deck that covers that at least one multi-functional support structure.

14 A system according to any one of claims 1-13, wherein the system comprises a plurality of outlet gutter parts, so that in an assembled condition of the system adjacent each support structure and/or each road deck element at least a part of an outlet-gutter extends in the direction of the road, for streamlining in a traffic direction of the road a flow of rainwater that has been filtered by the at least one filter.

15 A system according to at least claims 4 and 14, wherein in the assembled condition of the system, rainwater that has been filtered by the at least one filter enters via the outlet gutter volume under the other area of road deck.

16 A system according to claim 15, wherein the system in the assembled condition comprises under the other area of road deck an infiltration system for temporarily storing

~~water before it permeates into the ground, and/or comprises under the other area of road deck an attenuation system.~~

~~17. A system according to any one of the previous claims, wherein the at least one filter comprises upstream a coarse filter for filtering particles out of the water based on a mesh size of the filter.~~

~~18. A system according to claim 17, wherein in an assembled condition of the system, at least a part of the coarse filter is oriented parallel to the surface of the water or includes an acute angle with the surface of the water, and rainwater is upstream the coarse filter arranged to pass a position that is below that part of the coarse filter.~~

~~19. A system according to claim 17 or 18, wherein the at least one filter comprises downstream of the coarse filter a relatively fine filter that is configured to adsorb and capture at least one of Petroleum Hydrocarbons (TPH), Fats, Oils and Grease (FOG), oily sheen, microplastic particles and small rubber particles.~~

~~20. A system according to at least claim 14 and 19, wherein the relatively fine filter comprises a number of walls which are water permeable, wherein a downstream side of the walls preferably has a fluid communication with the outlet gutter or allows for water to flow away from the treatment volume.~~

~~21. A system according to claim 20, wherein the system is such that a downstream side of the walls forms the outlet gutter or forms at least partly other volume as referred to in claim 5 or 6.~~

~~22. A system according to claim 20 or 21, wherein the walls have at least partly the shape of pipes of which an upstream end is closed by a part of the walls and of which a downstream end streamlines a flow of filtered rainwater into the outlet gutter.~~

~~23. A system according to claim 22, wherein the longitudinal direction of the pipes are across the traffic direction of the road or parallel to the traffic direction of the road.~~

~~24. A system according to any one of the previous claims, wherein the road deck that covers one of the multi-functional plastic support structures, has a first part and a second part, wherein the first part, can be lifted independently of the second part, and wherein the first part extends at most up to a part of the width of the road.~~

~~25. A system according to any one of the previous claims, wherein each of the plastic support structures of the plurality of plastic support structures is in structure the same, and preferably also in dimensions the same.~~

~~26. A system according to any one of the previous claims, wherein one out of at least 5, preferably out of at least 10 and even more preferably at least out of 15 plastic support structures out of the plurality of support structures corresponds to one of the multi-functional plastic support structures.~~

~~27. A system according to any one of the previous claims, wherein a dimension of a road deck element in traffic direction of the road is able to span in an assembled condition of the road at least two plastic support structures.~~

~~28. A system according to any one of the previous claims, wherein the road deck elements are shaped such that in an assembled condition of the system the road slightly slopes off towards one side of the road.~~

~~29. A system according to any one of the previous claims, wherein each road deck element has a most upper road deck that in the assembled condition of the system slightly slopes off in one direction across a traffic direction of the road.~~

~~30. A system according to any one of the previous claims, wherein the treatment volume includes at least one part for facilitating sedimentation.~~

~~31. A system according to claim 30, wherein the at least one part for facilitating sedimentation comprises a first part for facilitating sedimentation upstream the at least one filter.~~

~~32. A system according to any one of the previous claims 19-23, wherein the at least one part for facilitating sedimentation comprises a second part for facilitating sedimentation upstream the relatively fine filter.~~

~~33. A system according any one of the previous claims, wherein the treatment volume is at least partially delimited by impermeable material shaped for holding a volume of water.~~

~~34. A system according to claim 9 and 33, wherein the system is such that in an assembled condition of the system the inlet gutter extends through the impermeable material.~~

~~35. A system according to claim 14 and 33, wherein the system is such that in an assembled condition of the system, the outlet gutter extends through the impermeable material.~~

~~36. A system according to claim 33, wherein the treatment volume is at least partly delimited by a downstream side of at least a part of the at least one filter.~~

~~37. A system according to any one of claims 33-36, wherein in the assembled condition the system comprises at least one overflow-exit and/or at least one pathway for aeration, preferably under the road deck.~~

~~38. A system according to any one of claims 33-37, wherein the treatment volume is provided with an overflow-exit for regulating that the treatment volume at most holds a volume of water that is equal to the treatment volume.~~

~~39. A system according to any one of claims 9-12, wherein in the assembled condition of the system, the inlet gutter parts adjacent the multi-functional support structure are provided with flow exits for releasing rainwater into the treatment volume.~~

~~40. A system according to any one of claims 14, 15, 16 and 17, wherein in the assembled condition of the system, the outlet gutter parts adjacent the plastic support structures which are different from the multi-functional support structure, are provided with flow exits for releasing filtered rainwater into volume under the other area of road deck.~~

~~41. A system according to claims 39 and 40, wherein in the assembled condition of the system, the flow exits for the inlet gutter parts for releasing rainwater into the treatment volume facilitate flow when a first height of water in the inlet gutter is reached, and the flow exits for the outlet gutter parts for releasing rainwater into volume under other road deck facilitate flow when a second height of water in the outlet gutter is reached, wherein the first and the second height are the same.~~

~~42. A system according to any one of the previous claims, wherein in the assembled condition of the system, the system provides at least one overflow exit facilitating release of water away from a footprint of the system when the amount of rainwater that is available for entering the treatment volume in a certain period of time is larger than the amount of rainwater that the treatment volume can refresh in that certain period of time.~~

~~43. A system according to any one of the previous claims, wherein in the assembled condition the system, the treatment volume comprises a pathway for aeration.~~

~~44. A system according to any one of the previous claims, wherein the at least one filter further comprises a floating dirt separator for separating floating dirt from the rainwater, wherein the floating dirt separator preferably includes an oil separator.~~

~~45. A system according to any one of the previous claims, wherein the system is provided with at least one sensor for detecting the status of the at least one filter, wherein status includes one of filter sensitivity, filtercapacity, and pressure exerted onto the filter.~~

~~46. A method for capturing contamination out of rainwater that has flowed over a road deck, comprising:~~

- collecting rainwater that has flowed over a road deck to one or more rainwater collection points adjacent the road deck;
- allowing the collected rainwater to flow into a treatment volume;
- allowing floating dirt in the treatment volume to be separated from the rainwater;
- allowing the rainwater in a part of that treatment volume to flow through a relatively coarse filter;
- allowing the rainwater downstream of that coarse filter to flow through a relatively fine filter that is configured to capture at least one of Petroleum Hydrocarbons (TPH), Fats, Oils and Grease (FOG), oily sheen, microplastic particles and small rubber particles;
- allowing the rainwater downstream of that relatively fine filter to move away from the treatment volume.

47 A method according to claim 46, wherein the treatment volume is underneath the road deck.

48 A method according to claim 46 or 47, wherein the collected rainwater is collected from parts of the road deck which are free from having underneath the road the treatment volume.

49 A method according to claim 48, wherein the parts of the road deck that are free from having underneath the road the treatment volume, have underneath the road deck an attenuation system for temporarily storing rainwater before it permeates into the ground.

50 A method according to claim 49, wherein rainwater downstream of that relatively fine filter moves into the attenuation system.

51 Use of a system of filters for removing contamination from rainwater, wherein the filter system is placed under a road.

52 Use of a system of filters according to claim 45, wherein the road is according to any of claims 1-45 in the assembled condition.

53 A support structure made of plastic and comprising a base plate and at least one supporting element, extending, or for extending, upwardly from the base plate for supporting at least partly a road deck element in a system according to any one of

~~claims 1-45 wherein the support structure is provided with at least one filter for filtering rainwater that has entered a treatment volume, wherein the treatment volume is spanned by dimensions of the support structure, wherein at least a part of the at least one filter is oriented parallel to the surface of the water or includes an acute angle with the surface of the water, and/or wherein at least a part of the at least one filter is configured to adsorb and capture at least one of Petroleum Hydrocarbons (TPH), Fats, Oils and Grease (FOG), oily sheen, microplastic particles and small rubber particles, the at least one filter being positioned around and/or between the at least one supporting element, so that the support structure itself is unchanged by the presence or absence of the at least one filter.~~

~~54. A road having a road direction, the road comprising a plurality of road deck elements placed next to each other in at least the road direction, the plurality of road deck elements being supported by a plurality of plastic support structures, each of the plastic support structures comprising a base plate and at least one supporting element, extending, or for extending, upwardly from the base plate for supporting at least partly one of the road deck elements, the road deck being configured so that when rainwater falls onto the road deck, it predominantly flows away over the road deck to one or more rainwater collection points adjacent each support structure and/or each road deck element, wherein the road is provided with a treatment volume for removing contamination from rainwater that fall onto the road and wherein the plurality of plastic support structures comprises at least one multi-functional support structure which is provided with at least one filter for filtering rainwater, that has from the one or more rainwater collection points entered the treatment volume, wherein at least a part of the at least one filter is positioned within the treatment volume.~~

~~55. A road according to claim 54, wherein the road is provided with a number of fluid communications for replacement of water according to a predetermined route.~~

~~56. A road according to claim 55, wherein the number of fluid communications comprise a fluid communication of a first type, a fluid communications of a second type, and preferably a fluid communication of a third type, wherein the fluid communication of the first type requires the presence of water to establish the communication under influence of the force of gravity, wherein the communication of the second type~~

~~requires the presence of an amount of water in terms of a certain height relative to a height of a structural element, and wherein the fluid communication of the third type relies on the principle of interconnecting vessels.~~

~~57. A road according to claims 54-56, having a fluid communication of the first type between the road deck and the one or more rainwater collection points, and having a fluid communication of a first type and/or a fluid communication of a second type between the one or more collection points and the treatment volume.~~

~~58. A road according to any one of claims 54-57, wherein the treatment volume is spanned by dimensions of the multifunctional support structure and/or is within outer dimensions of the multifunctional support structure.~~

~~59. A road according to any one of claim 54-58, wherein the treatment volume excludes the one or more rainwater collection points.~~

~~60. A road according to any one of claims 54-59, wherein the road is configured so that rainwater which is collected by the one or more rainwater collection points and that has entered the treatment volume includes rainwater which has flowed over at least another area of road deck, wherein the other area of road deck is different from an area of road deck that covers that at least one multifunctional plastic support structure.~~

~~61. A road according to claims 54-61, wherein the road is configured such that rainwater which has been filtered by the at least one filter finds its way away from the treatment volume into other volume.~~

~~62. A road according to claims 61, having between the treatment volume and the other volume a fluid communication of the first type or a fluid communication the second type.~~

~~63. A road according to claims 60 - 62 wherein that other volume is covered by the other area of road deck.~~

~~64. A road according to claims 60 - 63 wherein the other area of road deck is area of road deck under which no such multifunctional plastic support structure is present.~~

~~65. A road according to any one of claims 60-64, wherein the other area of road deck is area of road deck under which an infiltration system is present for temporarily storing water before it permeates into the ground, or under which an attenuation system is present.~~

66. A road according to any one of claims 54-65, wherein the road is provided with an inlet gutter which extends in the road direction for functioning as rainwater collection points, and/or extends in a direction transverse to the road direction for functioning as rainwater collection points.

67. A road according to 60 and 66n wherein, the inlet gutter is configured for streamlining in the road direction a flow of rainwater of which at least some rainwater has flowed over the other area of road deck.

68. A road according to claim 60 or 66, wherein the inlet gutter is configured for collecting rainwater that has flowed over the area of road deck that covers one of the multi-functional plastic support structures.

69. A road according to any one of claims 66-68, the inlet gutter is configured for letting rainwater flow into the treatment volume when the rainwater has reached a predetermined height in the inlet gutter.

70. A road according to anyone of the previous claims, wherein the treatment volume is in its entirety under area of road deck that covers that at least one multi-functional support structure.

71. A road according to any one of claims 64-70, wherein the road is provided with an outlet gutter, which extends in the direction of the road, for streamlining in the road direction a flow of rainwater that has been filtered by the at least one filter.

72. A road according to claim 71, configured so that rainwater which has been filtered by the at least one filter enters via the outlet gutter volume under the other area of road deck.

73. A road according to claim 72, wherein the road comprises under the other area of road deck an infiltration system for temporarily storing water before it permeates into the ground, and/or comprises under the other area of road deck an attenuation system.

74. A road according to any one of claims 54-72, wherein the at least one filter comprises upstream a coarse filter for filtering particles out of the water based on a mesh size of the filter.

75. A road according to claim 74, wherein at least a part of the coarse filter is oriented parallel to the surface of the water or includes an acute angle with the surface of the

~~water, and wherein the configuration is such that rainwater upstream the coarse filter passes a position that is below that part of the coarse filter.~~

~~76. A road according to claim 74 or 75, wherein the at least one filter comprises downstream of the coarse filter a relatively fine filter that is configured to adsorb and capture at least one of Petroleum Hydrocarbons (TPH), Fats, Oils and Grease (FOG), oily sheen, microplastic particles and small rubber particles.~~

~~77. A road according to at least claim 74 and 76, wherein the relatively fine filter comprises a number of walls which are water permeable, wherein preferably a downstream side of the walls has a fluid communication with the outlet gutter or allows for water to flow away from the treatment volume.~~

~~78. A road according to claim 77, such that a downstream side of the walls forms the outlet gutter or forms at least partly other volume as referred to in claim 61.~~

~~79. A road according to claim 71 and 77, wherein the walls have at least partly the shape of pipes of which an upstream end is closed by a part of the walls and of which a downstream end is configured for streamlining a flow of filtered rainwater into the outlet gutter.~~

~~80. A road according to claim 79 , wherein the longitudinal direction of the pipes are across the traffic direction of the road or parallel to the traffic direction of the road.~~

~~81. A road according to any one of the previous claims 54-80, wherein the road deck that covers one of the multi-functional plastic support structures, has a first part and a second part, wherein the first part, can be lifted independently of the second part, and wherein the first part extends at most up to a part of the width of the road.~~

~~82. A road according to any one of the previous claims 54-81, wherein each of the plastic support structures of the plurality of plastic support structures is in structure the same, and preferably also in dimensions the same.~~

~~83. A road according to any one of the previous claims 54-82, wherein one out of at least 5, preferably out of at least 10 and even more preferably at least out of 15 plastic support structures out of the plurality of support structures corresponds to one of the multi-functional plastic support structures.~~

~~84. A road according to any one of the previous claims 54-84, wherein a dimension of a road deck element in traffic direction of the road is able to span in an assembled condition of the road at least two plastic support structures.~~

~~85. A road according to any one of the previous claims 54-85, wherein the road deck elements are shaped such that the road slightly slopes off towards one side of the road.~~

~~86. A road according to any one of the previous claims 54-85, wherein each road deck element has a most upper road deck that slightly slopes off in one direction across a traffic direction of the road.~~

~~87. A road according to any one of the previous claims 54-86, wherein the treatment volume includes at least one part for facilitating sedimentation.~~

~~88. A road according to claim 87, wherein the at least one part for facilitating sedimentation comprises a first part for facilitating sedimentation upstream the at least one filter.~~

~~89. A road according to any one of the previous claims 87 and 76, wherein the at least one part for facilitating sedimentation comprises a second part for facilitating sedimentation upstream the relatively fine filter.~~

~~90. A road according any one of the previous claims 54-89, wherein the treatment volume is at least partially delimited by impermeable material shaped for holding a volume of water.~~

~~91. A road according to claim 66 and 90, wherein the system is such that in an assembled condition of the system the inlet gutter extends through the impermeable material.~~

~~92. A road according to claim 71 and 90, wherein the road is such that the outlet gutter extends through the impermeable material.~~

~~93. A road according to claim 90, wherein the treatment volume is at least partly delimited by a downstream side of at least a part of the at least one filter.~~

~~94. A road according to any one of claims 90-93, wherein the road comprises at least one overflow-exit and/or at least one pathway for aeration, preferably under the road deck.~~

~~95. A road according to any one of claims 33-37, wherein the treatment volume is provided with an overflow-exit for regulating that the treatment volume at most holds a volume of water that is equal to the treatment volume.~~

~~96. A road according to any one of claims 66-68, wherein inlet gutter parts adjacent the multi-functional support structure are provided with flow exits for releasing rainwater into the treatment volume.~~

~~97. A road according to any one of claims 71 or 72, wherein the outlet gutter parts adjacent the plastic support structures which are different from the multi-functional support structure, are provided with flow exits for releasing filtered rainwater into volume under the other area of road deck.~~

~~98. A road according to claims 66 and 96, wherein in the assembled condition of the system, the flow exits for the inlet gutter parts for releasing rainwater into the treatment volume facilitate flow when a first height of water in the inlet gutter is reached, and the flow exits for the outlet gutter parts for releasing rainwater into volume under other road deck facilitate flow when a second height of water in the outlet gutter is reached, wherein the first and the second height are the same.~~

~~99. A road according to any one of the previous claims 54-98, wherein the road comprises at least one overflow exit facilitating release of water away from a footprint of the system when the amount of rainwater that is available for entering the treatment volume in a certain period of time is larger than the amount of rainwater that the treatment volume can refresh in that certain period of time.~~

~~100 A road according to any one of the previous claims 54-99, wherein in the assembled condition the system, the treatment volume comprises a pathway for aeration.~~

~~101 A road according to any one of the previous claims 54-100, wherein the at least one filter further comprises a floating dirt separator for separating floating dirt from the rainwater, wherein the floating dirt separator preferably includes an oil separator.~~

~~102 A road according to any one of the previous claims 54-101, wherein the system is provided with at least one sensor for detecting the status of the at least one filter, wherein status includes one of filter sensitivity, filtercapacity, and pressure exerted onto the filter.~~

1. A system for assembling a road having a road deck and a road direction, wherein the system comprises a plurality of road deck elements for forming the road deck by placement of the road deck elements next to each other in at least the road direction, wherein the system further comprises a plurality of plastic support structures, wherein each of the support structures comprises a base plate and at least one supporting element, extending, or for extending, upwardly from the base plate for supporting at

least partly one of the road deck elements, wherein in an assembled condition the system is such that when rainwater falls onto the road deck, it predominantly flows away over the road deck to one or more rainwater collection points adjacent each support structure and/or each road deck element, wherein the plurality of plastic support structures comprises a multi-functional support structure which is provided with at least one filter for filtering rainwater that has from the one or more rainwater collection points entered a treatment volume, wherein at least a part of the at least one filter is positioned within that treatment volume, wherein in the assembled condition the system is such that rainwater which is collected by the one or more rainwater collection points and that has entered the treatment volume includes rainwater which has flowed over at least an other area of road deck, wherein the other area of road deck is different from an area of road deck that covers that at least one multifunctional plastic support structure.

2. The system according to claim 1, wherein in the assembled condition the system is such that rainwater which has been filtered by the at least one filter finds its way away from the treatment volume into other volume, wherein that other volume is covered by the other area of road deck.

3. The system according to claim 1 or 2, wherein the system comprises a plurality of inlet-gutter parts, so that in the assembled condition of the system adjacent each support structure and/or each road deck element at least a part of an inlet gutter extends in the road direction for functioning as rainwater collection points, and/or extends in a direction transverse to the road direction for functioning as rainwater collection points.

4. The system according to claim 3, wherein in the assembled condition of the system, rainwater flows into the treatment volume when the rainwater has reached a predetermined height in the inlet gutter.

5. The system according to any one of the previous claims, wherein in the assembled condition of the system, the treatment volume is in its entirety under area of road deck that covers that at least one multi-functional support structure.

6. The system according to any one of claims 1-5, wherein the system comprises a plurality of outlet gutter-parts, so that in the assembled condition of the system adjacent each support structure and/or each road deck element at least a part of an outlet-gutter

extends in the direction of the road, for streamlining in a traffic direction of the road a flow of rainwater that has been filtered by the at least one filter.

7. The system according to any one of the previous claims, wherein the at least one filter comprises upstream a coarse filter for filtering particles out of the water based on a mesh size of the filter, wherein preferably in the assembled condition of the system, at least a part of the coarse filter is oriented parallel to the surface of the water or includes an acute angle with the surface of the water, and rainwater is upstream the coarse filter arranged to pass a position that is below that part of the coarse filter.

8. The system according to claim 7, wherein the at least one filter comprises downstream of the coarse filter a relatively fine filter that is configured to adsorb and capture at least one of Petroleum Hydrocarbons (TPH), Fats, Oils and Grease (FOG), oily sheen, microplastic particles and small rubber particles.

9. The system according to any one of the previous claims, wherein each of the plastic support structures of the plurality of plastic support structures is in structure the same, and preferably also in dimensions the same.

10. The system according to any one of the previous claims, wherein the road deck elements are shaped such that in the assembled condition of the system the road slightly slopes off towards one side of the road and/or wherein each road deck element has a most upper road deck that in the assembled condition of the system slightly slopes off in one direction across a traffic direction of the road.

11. The system according to any one of the previous claims, wherein the treatment volume includes at least one part for facilitating sedimentation.

12. The system according to claim 11, wherein the at least one part for facilitating sedimentation comprises a first part for facilitating sedimentation upstream the at least one filter.

13. The system according to claim 12, wherein the at least one part for facilitating sedimentation comprises a second part for facilitating sedimentation upstream the relatively fine filter.

14. The system according any one of the previous claims, wherein the treatment volume is at least partially delimited by impermeable material shaped for holding a volume of water.

15. The system according to claim 14 when dependent on claim 3, wherein the system is such that in the assembled condition of the system the inlet gutter extends through the impermeable material.

16. The system according to claim 14 when dependent on claim 6, wherein the system is such that in the assembled condition of the system, the outlet gutter extends through the impermeable material.

17. The system according to any one of claims 14-16, wherein in the assembled condition the system comprises at least one overflow-exit and/or at least one pathway for aeration, preferably under the road deck.

18. The system according to any one of the previous claims, wherein the treatment volume is provided with an overflow-exit for regulating that the treatment volume at most holds a volume of water that is equal to the treatment volume.

19. The system according to any one of claims 3-19, wherein in the assembled condition of the system, the inlet gutter parts adjacent the multi-functional support structure are provided with flow exits for releasing rainwater into the treatment volume.

20. The system according to any one of the previous claims, wherein the system is provided with at least one sensor for detecting the status of the at least one filter, wherein status includes one of filter sensitivity, filter capacity, and pressure exerted onto the filter.