



Summit House, Riparian Way, The Crossings  
Cross Hills, Keighley, West Yorkshire, BD20 7BW

22228-PWA-00-XX-CA-C-1001

Genesis Business Park

Drainage Attenuation Storage

REVISION P01

DESIGNED. IB

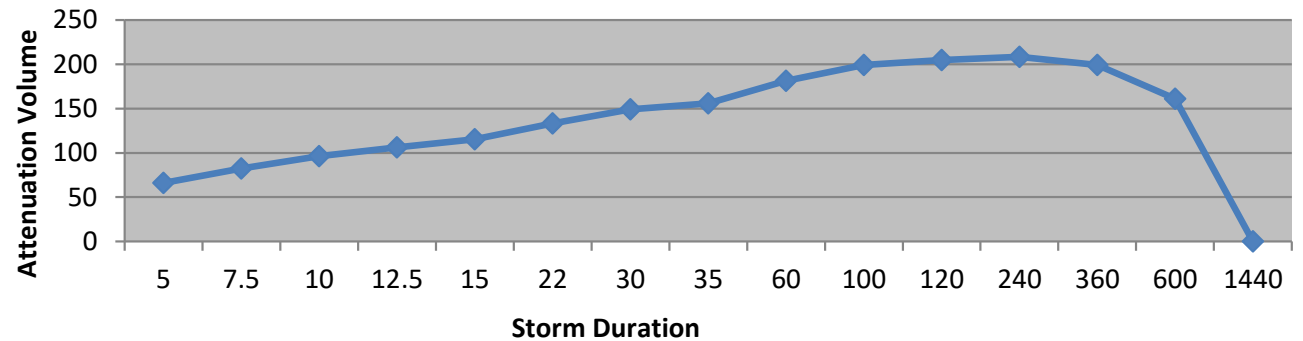
CHECKED. LS

DATE. 12/10/22

### Input Data

|                       |       |                |         |
|-----------------------|-------|----------------|---------|
| M5-60 =               | 20    | mm             | Fig A.1 |
| r =                   | 0.4   |                | Fig A.2 |
| T =                   | 100   | yrs            |         |
| C =                   | 2.78  |                |         |
| Max Allowable Flow =  | 5     | l/s            |         |
| Contributing Area =   | 3635  | m <sup>2</sup> |         |
| Flow/Ha =             | 13.76 | l/s/Ha         |         |
| Percentage Increase = | 35    | %              |         |

### Output Data



| Duration (Mins) | Z1   | M5-D<br>(M5-60)*Z1 |  | Z2   | I<br>mm/h | Increased<br>Rainfall | Qp<br>l/s | Increased<br>Flow | Storage<br>m <sup>3</sup> | Percentage<br>Increased<br>Storage m <sup>3</sup> |
|-----------------|------|--------------------|--|------|-----------|-----------------------|-----------|-------------------|---------------------------|---------------------------------------------------|
| 5               | 0.37 | 7.5                |  | 1.85 | 165       | 223                   | 167       | 226               | 49                        | 66                                                |
| 7.5             | 0.46 | 9.1                |  | 1.89 | 138       | 186                   | 140       | 188               | 61                        | 83                                                |
| 10              | 0.53 | 10.6               |  | 1.92 | 122       | 164                   | 123       | 166               | 71                        | 96                                                |
| 12.5            | 0.58 | 11.6               |  | 1.94 | 108       | 145                   | 109       | 147               | 78                        | 106                                               |
| 15              | 0.63 | 12.5               |  | 1.95 | 98        | 132                   | 99        | 133               | 84                        | 115                                               |
| 22              | 0.72 | 14.4               |  | 1.98 | 78        | 105                   | 78        | 106               | 97                        | 133                                               |
| 30              | 0.81 | 16.1               |  | 2.00 | 64        | 87                    | 65        | 88                | 108                       | 149                                               |
| 35              | 0.85 | 16.9               |  | 2.01 | 58        | 78                    | 59        | 79                | 113                       | 156                                               |
| 60              | 1.00 | 20.0               |  | 2.03 | 41        | 55                    | 41        | 55                | 130                       | 181                                               |
| 100             | 1.16 | 23.1               |  | 2.02 | 28        | 38                    | 28        | 38                | 140                       | 199                                               |
| 120             | 1.22 | 24.4               |  | 2.01 | 25        | 33                    | 25        | 33                | 142                       | 205                                               |
| 240             | 1.44 | 28.9               |  | 1.98 | 14        | 19                    | 14        | 19                | 136                       | 208                                               |
| 360             | 1.60 | 32.0               |  | 1.95 | 10        | 14                    | 11        | 14                | 119                       | 199                                               |
| 600             | 1.81 | 36.2               |  | 1.92 | 7         | 9                     | 7         | 9                 | 73                        | 161                                               |
| 1440            | 2.22 | 44.5               |  | 1.85 | 3         | 5                     | 3         | 5                 | 0                         | 0                                                 |