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| ECMWF:<br>Proposed SW Drainage Network<br>Car Park + Eastern Road Catchment                    |  |  |  | Date:<br>07/08/2025 |             |              |  |  |  |  |  |
|                                                                                                |  |  |  | Designed by:        | Checked by: | Approved By: |                                                                                     |  |  |  |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Catchment 4 (Car Park and Eastern |  |  |  | COB                 | LJ          | CHF          |                                                                                     |  |  |  |  |
|                                                                                                |  |  |  | Company:<br>BDP     |             |              |                                                                                     |  |  |  |  |

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|------------|------------------------------------------------------------------|------|--------------|--------------------|--------|--------|-------|--------|-----|------|------|----------------|
| S1.010     | Design<br>Criteria FSR:<br>30 years: +0<br>%: 15 mins:<br>Winter | Pipe | BYPAS<br>S S | SW.44              | 66.373 | 64.963 | 0.225 | 38.086 | 1.1 | 1.22 | 44.7 | Surch<br>arged |
| S1.010 (1) | Design<br>Criteria FSR:<br>30 years: +0<br>%: 15 mins:<br>Winter | Pipe | SW.44        | Simple<br>Junction | 66.346 | 64.903 | 0.225 | 37.836 | 1.1 | 1.15 | 45.1 | Surch<br>arged |

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| ECMWF:<br>Proposed SW Drainage Network<br>Car Park + Eastern Road Catchment                    | Date:<br>07/08/2025 |             |              |  |
|                                                                                                | Designed by:        | Checked by: | Approved By: |                                                                                     |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Catchment 4 (Car Park and Eastern | COB                 | LJ          | CHF          |                                                                                     |
|                                                                                                | Company:<br>BDP     |             |              |                                                                                     |



**Design Criteria FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow**

| Connection | Storm Event                                            | Connection Type | From    | To      | Upstream Cover Level (m) | Max. US Water Level (m) | Max. Flow Depth (m) | Discharge Volume (m³) | Max. Velocity (m/s) | Flow / Capacity | Max. Flow (L/s) | Status     |
|------------|--------------------------------------------------------|-----------------|---------|---------|--------------------------|-------------------------|---------------------|-----------------------|---------------------|-----------------|-----------------|------------|
| S12.000    | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe            | SWMH2 5 | SWMH2 6 | 66.963                   | 66.625                  | 0.225               | 7.679                 | 0.8                 | 0.12            | 9.2             | Surcharged |
| S12.001    | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe            | SWMH2 6 | SWMH2 7 | 66.917                   | 66.532                  | 0.225               | 7.406                 | 0.5                 | 0.14            | 9.9             | Surcharged |
| S13.000    | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe            | SWMH2 8 | SWMH2 7 | 66.641                   | 66.366                  | 0.225               | 8.165                 | 0.5                 | 0.49            | 16.7            | Surcharged |
| S12.002    | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe            | SWMH2 7 | SW.03   | 66.799                   | 66.616                  | 0.225               | 19.042                | 0.5                 | 0.61            | 21.1            | Surcharged |
| S14.000    | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe            | SW.01   | SW.02   | 66.704                   | 66.453                  | 0.225               | 13.083                | 0.7                 | 0.68            | 23.7            | Surcharged |
| S14.001    | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe            | SW.02   | SW.03   | 66.588                   | 66.345                  | 0.225               | 12.963                | 0.6                 | 0.55            | 24.6            | Surcharged |
| S11.001    | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe            | SW.26   | SW.24   | 66.705                   | 66.346                  | 0.225               | 19.615                | 0.8                 | 0.69            | 29.3            | Surcharged |
| S12.003    | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe            | SW.03   | SW.24   | 66.827                   | 66.560                  | 0.225               | 49.608                | 1.4                 | 1.6             | 55.2            | Surcharged |
| S3.011     | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe            | SW.29   | SW.30   | 66.931                   | 66.178                  | 0.300               | 46.907                | 1.1                 | 1.25            | 79.8            | Surcharged |
| S15.001    | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe            | SWMH3 3 | SWMH3 4 | 66.777                   | 66.093                  | 0.225               | 0.263                 | 0.1                 | 0.06            | 2.0             | Surcharged |
| S15.002    | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe            | SWMH3 4 | SWMH3 5 | 66.843                   | 66.196                  | 0.225               | 1.425                 | 0.4                 | 0.46            | 15.7            | Surcharged |

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| ECMWF:<br>Proposed SW Drainage Network<br>Car Park + Eastern Road Catchment                    |  |  |  | Date:<br>07/08/2025 |             |              |  |  |  |  |  |  |
|                                                                                                |  |  |  | Designed by:        | Checked by: | Approved By: |                                                                                     |  |  |  |  |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Catchment 4 (Car Park and Eastern |  |  |  | COB                 | LJ          | CHF          |                                                                                     |  |  |  |  |  |
|                                                                                                |  |  |  | Company:<br>BDP     |             |              |                                                                                     |  |  |  |  |  |

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| S15.003 | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe | SWMH3 5 | SW.30   | 66.953 | 66.130 | 0.225 | 1.917  | 0.7 | 0.47 | 16.3 | Surcharged |
| S17.000 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP6.1   | SWMH3 5 | 66.953 | 66.108 | 0.150 | 0.569  | 1.6 | 0.03 | 3.8  | OK         |
| S3.001  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SWMH1 2 | SW.27   | 66.585 | 66.151 | 0.225 | 0.449  | 0.4 | 0.08 | 4.0  | Surcharged |
| S3.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP1     | SWMH1 2 | 66.587 | 66.150 | 0.150 | 0.570  | 2.3 | 0.05 | 4.0  | Surcharged |
| S3.002  | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe | SW.27   | SWMH1 4 | 66.629 | 66.186 | 0.225 | 0.330  | 0.4 | 0.06 | 2.2  | Surcharged |
| S4.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP2     | SWMH1 4 | 66.662 | 66.145 | 0.150 | 0.895  | 1.7 | 0.05 | 6.0  | OK         |
| S3.003  | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe | SWMH1 4 | SWMH1 5 | 66.669 | 66.186 | 0.225 | 0.810  | 0.5 | 0.13 | 4.9  | Surcharged |
| S3.006  | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe | SW.28   | SWMH1 8 | 66.674 | 66.195 | 0.225 | 1.716  | 0.4 | 0.21 | 7.8  | Surcharged |
| S3.007  | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe | SWMH1 8 | SWMH1 9 | 66.729 | 66.200 | 0.225 | 1.702  | 0.4 | 0.17 | 6.2  | Surcharged |
| S7.000  | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | PP4.1   | SWMH1 8 | 66.724 | 66.232 | 0.150 | 0.430  | 1.4 | 0.01 | 1.7  | Surcharged |
| S8.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP4.2   | SWMH1 9 | 66.744 | 66.178 | 0.150 | 2.407  | 1.7 | 0.04 | 5.2  | Surcharged |
| S3.008  | Design Criteria FSR: 100 years: +40 %: 60 mins: Winter | Pipe | SWMH1 9 | SWMH2 0 | 66.742 | 66.272 | 0.225 | 2.699  | 0.6 | 0.24 | 8.9  | Surcharged |
| S3.009  | Design Criteria FSR: 100 years: +40 %: 60 mins: Winter | Pipe | SWMH2 0 | SWMH2 1 | 66.856 | 66.275 | 0.225 | 5.315  | 0.5 | 0.29 | 11.1 | Surcharged |
| S3.010  | Design Criteria FSR: 100 years: +40 %: 60 mins: Winter | Pipe | SWMH2 1 | SW.29   | 66.875 | 66.276 | 0.225 | 16.861 | 0.5 | 0.36 | 13.3 | Surcharged |

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| ECMWF:<br>Proposed SW Drainage Network<br>Car Park + Eastern Road Catchment                          |  |  |  | Date:<br>07/08/2025 |             |              |  |  |  |  |  |  |
|                                                                                                      |  |  |  | Designed by:        | Checked by: | Approved By: |                                                                                     |  |  |  |  |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Catchment 4 (Car Park and Eastern Road) |  |  |  | COB                 | LJ          | CHF          |                                                                                     |  |  |  |  |  |
|                                                                                                      |  |  |  | Company:<br>BDP     |             |              |                                                                                     |  |  |  |  |  |

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| S9.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP5.1  | SWMH20           | 66.858 | 66.189 | 0.150 | 0.750  | 0.3 | 0.03 | 4.1  | Surcharged |
| S10.000 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP5.2  | SWMH21           | 66.873 | 66.200 | 0.150 | 5.052  | 1.8 | 0.05 | 6.7  | Surcharged |
| S3.012  | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe | SW.30  | Cellular Storage | 66.931 | 66.161 | 0.300 | 18.791 | 0.7 | 0.63 | 40.0 | Surcharged |
| S3.004  | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe | SWMH15 | SWMH16           | 66.680 | 66.189 | 0.225 | 1.323  | 0.5 | 0.21 | 7.8  | Surcharged |
| S3.005  | Design Criteria FSR: 100 years: +40 %: 30 mins: Summer | Pipe | SWMH16 | SW.28            | 66.640 | 66.191 | 0.225 | 1.902  | 0.5 | 0.26 | 9.7  | Surcharged |
| S6.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP3.2  | SWMH16           | 66.641 | 66.159 | 0.150 | 1.843  | 1.5 | 0.06 | 6.8  | Surcharged |
| S15.000 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP7    | SWMH33           | 66.778 | 66.056 | 0.150 | 0.409  | 1.6 | 0.05 | 3.0  | OK         |
| S16.000 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP6.2  | SWMH34           | 66.841 | 66.119 | 0.150 | 1.945  | 2.0 | 0.2  | 20.4 | Surcharged |
| S5.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP3.1  | SWMH15           | 66.680 | 66.152 | 0.150 | 0.878  | 1.6 | 0.06 | 6.8  | Surcharged |
| S11.002 | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe | SW.24  | SW.29            | 66.943 | 66.250 | 0.300 | 53.462 | 1.2 | 1.27 | 81.3 | Surcharged |
| S11.000 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP9    | SW.26            | 66.631 | 66.628 | 0.150 | 4.906  | 0.8 | 0.18 | 8.8  | Flood      |
| S1.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.33  | SW.34            | 66.553 | 66.554 | 0.225 | 6.660  | 0.4 | 0.41 | 14.3 | Flood      |
| S1.001  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.34  | SW.35            | 66.725 | 66.529 | 0.225 | 15.822 | 0.6 | 0.59 | 20.2 | Surcharged |
| S1.002  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.35  | SW.36            | 66.682 | 66.456 | 0.225 | 23.307 | 0.7 | 0.75 | 25.8 | Surcharged |

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| ECMWF:<br>Proposed SW Drainage Network<br>Car Park + Eastern Road Catchment                     |  |  |  | Date:<br>07/08/2025 |             |              |  |  |  |  |  |  |
|                                                                                                 |  |  |  | Designed by:        | Checked by: | Approved By: |                                                                                     |  |  |  |  |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Catchment 4 (Car Park and Eastern) |  |  |  | COB                 | LJ          | CHF          |                                                                                     |  |  |  |  |  |
|                                                                                                 |  |  |  | Company:<br>BDP     |             |              |                                                                                     |  |  |  |  |  |

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| S1.003  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.36            | SW.37    | 66.508 | 66.358 | 0.225 | 26.509 | 0.7 | 0.85 | 29.3 | Flood Risk |
| S1.004  | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | SW.37            | SW.38    | 66.487 | 66.310 | 0.225 | 51.610 | 1.0 | 1.18 | 40.7 | Surcharged |
| S1.005  | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | SW.38            | SW.39    | 66.409 | 66.025 | 0.225 | 57.313 | 1.1 | 1.3  | 45.0 | Surcharged |
| S3.013  | Design Criteria FSR: 100 years: +40 %: 15 mins: Summer | Pipe | Cellular Storage | SW.31    | 66.931 | 66.161 | 0.300 | 4.362  | 0.7 | 0.73 | 48.6 | Surcharged |
| S3.014  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.31            | SW.32    | 66.864 | 66.194 | 0.225 | 7.601  | 0.8 | 0.2  | 7.1  | Surcharged |
| S3.015  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.32            | SW.43    | 66.830 | 65.446 | 0.225 | 7.511  | 0.5 | 0.13 | 9.4  | Surcharged |
| S18.000 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | PP.8             | SWMH37   | 66.791 | 66.119 | 0.150 | 6.360  | 1.1 | 0.07 | 6.8  | OK         |
| S18.001 | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SWMH37           | SW.31    | 66.805 | 66.197 | 0.150 | 5.721  | 0.7 | 0.09 | 6.0  | Surcharged |
| S1.008  | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | SW.41            | SW.43    | 66.235 | 65.619 | 0.225 | 76.363 | 1.5 | 1.68 | 57.9 | Surcharged |
| S1.009  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.43            | BYPASS S | 66.724 | 65.443 | 0.225 | 64.067 | 1.6 | 2.14 | 63.7 | Surcharged |
| S1.006  | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | SW.39            | SW.40    | 66.331 | 65.894 | 0.225 | 63.295 | 1.3 | 1.45 | 49.9 | Surcharged |
| S1.007  | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | SW.40            | SW.41    | 66.153 | 65.689 | 0.225 | 68.765 | 1.4 | 1.59 | 54.7 | Surcharged |
| S2.000  | Design Criteria FSR: 100 years: +40 %: 15 mins: Winter | Pipe | SW.41 (1)        | SW.41    | 66.011 | 65.681 | 0.225 | 5.702  | 0.8 | 0.34 | 11.8 | OK         |
| Pipe    | Design Criteria FSR: 100 years: +40 %: 30 mins: Winter | Pipe | PP9              | SW.24    | 66.897 | 66.641 | 0.150 | 13.658 | 1.2 | 0.16 | 10.5 | Flood      |

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|                                                                                               |  |  |  | Designed by:        | Checked by: | Approved By: |                                                                                     |  |  |  |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Catchment 4 (Car Park and Easten |  |  |  | COB                 | LJ          | CHF          |                                                                                     |  |  |  |  |
|                                                                                               |  |  |  | Company:<br>BDP     |             |              |                                                                                     |  |  |  |  |

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| S1.010     | Design<br>Criteria FSR:<br>100 years:<br>+40 %: 15<br>mins: Winter | Pipe | BYPAS<br>S S | SW.44              | 66.373 | 65.332 | 0.225 | 63.966 | 1.6 | 1.74 | 64.1 | Surch<br>arged |
| S1.010 (1) | Design<br>Criteria FSR:<br>100 years:<br>+40 %: 15<br>mins: Winter | Pipe | SW.44        | Simple<br>Junction | 66.346 | 65.210 | 0.225 | 63.682 | 1.6 | 1.64 | 64.4 | Surch<br>arged |