

## *Appendix F      Calculations*

|                                                        |                     |                   |              |
|--------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                              | Date:<br>08/05/2026 |                   |              |
|                                                        | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Phase | Stantec:            |                   |              |



Catchment Area

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.019 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.950                 |
| Winter Volumetric Runoff     | 0.950                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |



Catchment Area (1)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.005 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.950                 |
| Winter Volumetric Runoff     | 0.950                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |



Catchment Area (2)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.019 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.950                 |
| Winter Volumetric Runoff     | 0.950                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |



Catchment Area (3)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.007 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.950                 |
| Winter Volumetric Runoff     | 0.950                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |

|                                                        |                     |                   |              |
|--------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                              | Date:<br>08/05/2026 |                   |              |
|                                                        | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Phase | Stantec:            |                   |              |



Catchment Area (4)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.001 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.950                 |
| Winter Volumetric Runoff     | 0.950                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |



Catchment Area (5)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.057 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.950                 |
| Winter Volumetric Runoff     | 0.950                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |

|                                                          |                     |                   |              |
|----------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                | Date:<br>08/05/2026 |                   |              |
|                                                          | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Junctions<br>Storm Phase: Phase | Stantec:            |                   |              |



| Name                 | Junction Type | Easting (m) | Northing (m) | Cover Level (m) | Depth (m) | Invert Level (m) | Chamber Shape | Diameter (m) |
|----------------------|---------------|-------------|--------------|-----------------|-----------|------------------|---------------|--------------|
| SW-01                | Manhole       | 468472.007  | 173634.154   | 51.350          | 0.575     | 50.775           | Circular      | 0.600        |
| FC-01 (flow control) | Manhole       | 468488.625  | 173664.797   | 50.840          | 0.640     | 50.200           | Circular      | 0.600        |
| PUBLIC SEWER OUTFALL | Manhole       | 468484.649  | 173666.936   | 51.000          | 4.000     | 47.000           | Circular      | 1.200        |

| Name                 | Lock |
|----------------------|------|
| SW-01                | None |
| FC-01 (flow control) | None |
| PUBLIC SEWER OUTFALL | None |

### Outlets

| Junction             | Outlet Name       | Outgoing Connection                    | Outlet Type    |
|----------------------|-------------------|----------------------------------------|----------------|
| SW-01                | Outlet            | Pipe (1)                               | Free Discharge |
|                      | Outlet            | Pipe (4)                               | Hydro-Brake®   |
|                      | Invert Level (m)  | 50.200                                 |                |
|                      | Design Depth (m)  | 0.640                                  |                |
|                      | Design Flow (L/s) | 1.0                                    |                |
|                      | Objective         | Minimise Upstream Storage Requirements |                |
|                      | Application       | Surface Water Only                     |                |
|                      | Sump Available    | <input checked="" type="checkbox"/>    |                |
|                      | Unit Reference    | SHE-0051-1000-0640-1000                |                |
| FC-01 (flow control) |                   |                                        |                |

|                                                                    |                     |                   |              |
|--------------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                          | Date:<br>08/05/2026 |                   |              |
|                                                                    | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Stormwater Controls<br>Storm Phase: Phase | Stantec:            |                   |              |





**AS-01**

Type : Porous Paving

#### Dimensions

|                             |        |
|-----------------------------|--------|
| Exceedance Level (m)        | 51.820 |
| Depth (m)                   | 0.540  |
| Base Level (m)              | 51.280 |
| Paving Layer Depth (mm)     | 80     |
| Membrane Percolation (m/hr) | 50.0   |
| Porosity (%)                | 30     |
| Length (m)                  | 22.739 |
| Long. Slope (1:X)           | 200.00 |
| Width (m)                   | 8.312  |
| Total Volume (m³)           | 26.082 |

#### Advanced

|                     |       |
|---------------------|-------|
| Conductivity (m/hr) | 216.0 |
|---------------------|-------|



**AS-02**

Type : Porous Paving

#### Dimensions

|                             |        |
|-----------------------------|--------|
| Exceedance Level (m)        | 51.350 |
| Depth (m)                   | 0.550  |
| Base Level (m)              | 50.800 |
| Paving Layer Depth (mm)     | 80     |
| Membrane Percolation (m/hr) | 50.0   |
| Porosity (%)                | 30     |
| Length (m)                  | 29.513 |
| Long. Slope (1:X)           | 200.00 |
| Width (m)                   | 6.303  |
| Total Volume (m³)           | 26.229 |

#### Advanced

|                     |       |
|---------------------|-------|
| Conductivity (m/hr) | 216.0 |
|---------------------|-------|



**AS-03**

Type : Porous Paving

#### Dimensions

|                             |        |
|-----------------------------|--------|
| Exceedance Level (m)        | 50.760 |
| Depth (m)                   | 0.460  |
| Base Level (m)              | 50.300 |
| Paving Layer Depth (mm)     | 80     |
| Membrane Percolation (m/hr) | 50.0   |
| Porosity (%)                | 30     |
| Length (m)                  | 38.755 |
| Long. Slope (1:X)           | 150.00 |
| Width (m)                   | 13.574 |
| Total Volume (m³)           | 59.969 |

#### Advanced

|                     |       |
|---------------------|-------|
| Conductivity (m/hr) | 216.0 |
|---------------------|-------|

|                                                 |                     |                   |              |                                                                                     |
|-------------------------------------------------|---------------------|-------------------|--------------|-------------------------------------------------------------------------------------|
| Dee Park:                                       | Date:<br>08/05/2026 |                   |              |  |
|                                                 | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |                                                                                     |
| Report Details:                                 | Stantec:            |                   |              |                                                                                     |
| Type: Stormwater Controls<br>Storm Phase: Phase |                     |                   |              |                                                                                     |



AS-04

Type : Porous Paving

Dimensions

|                             |        |
|-----------------------------|--------|
| Exceedance Level (m)        | 51.000 |
| Depth (m)                   | 0.600  |
| Base Level (m)              | 50.400 |
| Paving Layer Depth (mm)     | 130    |
| Membrane Percolation (m/hr) | 50.0   |
| Porosity (%)                | 30     |
| Length (m)                  | 22.517 |
| Long. Slope (1:X)           | 21.00  |
| Width (m)                   | 3.134  |
| Total Volume (m³)           | 9.950  |

Advanced

|                     |       |
|---------------------|-------|
| Conductivity (m/hr) | 216.0 |
|---------------------|-------|

|                                                               |                     |                   |              |
|---------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                     | Date:<br>08/05/2026 |                   |              |
|                                                               | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase |                     | Stantec:          |              |



| Inflow Label       | Connected To | Flow (L/s) | Runoff Method         | Area (ha)    | Percentage Impervious (%) | Urban Creep (%) | Adjusted Percentage Impervious (%) | Area Analysed (ha) |
|--------------------|--------------|------------|-----------------------|--------------|---------------------------|-----------------|------------------------------------|--------------------|
| Catchment Area     | AS-01        |            | Time of Concentration | 0.019        | 100                       | 0               | 100                                | 0.019              |
| Catchment Area (1) | AS-02        |            | Time of Concentration | 0.005        | 100                       | 0               | 100                                | 0.005              |
| Catchment Area (2) | AS-02        |            | Time of Concentration | 0.019        | 100                       | 0               | 100                                | 0.019              |
| Catchment Area (3) | AS-04        |            | Time of Concentration | 0.007        | 100                       | 0               | 100                                | 0.007              |
| Catchment Area (4) | AS-01        |            | Time of Concentration | 0.001        | 100                       | 0               | 100                                | 0.001              |
| Catchment Area (5) | AS-03        |            | Time of Concentration | 0.057        | 100                       | 0               | 100                                | 0.057              |
| <b>TOTAL</b>       |              | <b>0.0</b> |                       | <b>0.108</b> |                           |                 |                                    | <b>0.108</b>       |

|                                             |                     |                   |              |                                                                                     |
|---------------------------------------------|---------------------|-------------------|--------------|-------------------------------------------------------------------------------------|
| Dee Park:                                   | Date:<br>08/05/2026 |                   |              |  |
|                                             | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |                                                                                     |
| Report Title:<br>Rainfall Analysis Criteria | Stantec:            |                   |              |                                                                                     |

|                                 |                          |
|---------------------------------|--------------------------|
| Runoff Type                     | Dynamic                  |
| Output Interval (mins)          | 10                       |
| Time Step                       | Default                  |
| Urban Creep                     | Apply Global Value       |
| Urban Creep Global Value (%)    | 0                        |
| Junction Flood Risk Margin (mm) | 100                      |
| Perform No Discharge Analysis   | <input type="checkbox"/> |

|            |                                     |  |
|------------|-------------------------------------|--|
| Rainfall   |                                     |  |
| FSR        | Type: FSR                           |  |
| Region     | England And Wales                   |  |
| M5-60 (mm) | 18.8                                |  |
| Ratio R    | 0.400                               |  |
| Summer     | <input checked="" type="checkbox"/> |  |
| Winter     | <input checked="" type="checkbox"/> |  |

|                       |                       |
|-----------------------|-----------------------|
| Return Period         |                       |
| Return Period (years) | Increase Rainfall (%) |
| 1.0                   | 0.000                 |
| 30.0                  | 35.000                |
| 100.0                 | 40.000                |

|                 |                 |
|-----------------|-----------------|
| Storm Durations |                 |
| Duration (mins) | Run Time (mins) |
| 15              | 30              |
| 30              | 60              |
| 60              | 120             |
| 120             | 240             |
| 180             | 360             |
| 240             | 480             |
| 360             | 720             |
| 480             | 960             |
| 600             | 1200            |
| 720             | 1440            |
| 960             | 1920            |
| 1440            | 2880            |
| 2160            | 4320            |
| 2880            | 5760            |
| 4320            | 8640            |
| 5760            | 11520           |
| 7200            | 14400           |
| 8640            | 17280           |
| 10080           | 20160           |

|                                                                |                     |                   |              |
|----------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                      | Date:<br>08/05/2026 |                   |              |
|                                                                | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Inflows Summary<br>Storm Phase: Phase | Stantec:            |                   |              |

I  
DRN



**FSR: 1 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow**

| Inflow             | Storm Event                         | Inflow Area (ha) | Max. Inflow (L/s) | Total Inflow Volume (m³) |
|--------------------|-------------------------------------|------------------|-------------------|--------------------------|
| Catchment Area     | FSR: 1 years: +0 %: 15 mins: Summer | 0.02             | 3.0               | 1.301                    |
| Catchment Area (1) | FSR: 1 years: +0 %: 15 mins: Summer | 0.01             | 0.8               | 0.350                    |
| Catchment Area (2) | FSR: 1 years: +0 %: 15 mins: Summer | 0.02             | 2.9               | 1.280                    |
| Catchment Area (3) | FSR: 1 years: +0 %: 15 mins: Summer | 0.01             | 1.1               | 0.485                    |
| Catchment Area (4) | FSR: 1 years: +0 %: 15 mins: Summer | 0.00             | 0.2               | 0.093                    |
| Catchment Area (5) | FSR: 1 years: +0 %: 15 mins: Summer | 0.06             | 9.0               | 3.906                    |

|                                                                |                     |                   |              |
|----------------------------------------------------------------|---------------------|-------------------|--------------|
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|                                                                | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Inflows Summary<br>Storm Phase: Phase |                     | Stantec:          |              |





**FSR: 30 years: Increase Rainfall (%): +35: Critical Storm Per Item: Rank By: Max. Inflow**

| Inflow             | Storm Event                           | Inflow Area (ha) | Max. Inflow (L/s) | Total Inflow Volume (m³) |
|--------------------|---------------------------------------|------------------|-------------------|--------------------------|
| Catchment Area     | FSR: 30 years: +35 %: 15 mins: Summer | 0.02             | 9.9               | 4.306                    |
| Catchment Area (1) | FSR: 30 years: +35 %: 15 mins: Summer | 0.01             | 2.7               | 1.150                    |
| Catchment Area (2) | FSR: 30 years: +35 %: 15 mins: Summer | 0.02             | 9.8               | 4.243                    |
| Catchment Area (3) | FSR: 30 years: +35 %: 15 mins: Summer | 0.01             | 3.7               | 1.602                    |
| Catchment Area (4) | FSR: 30 years: +35 %: 15 mins: Summer | 0.00             | 0.7               | 0.308                    |
| Catchment Area (5) | FSR: 30 years: +35 %: 15 mins: Summer | 0.06             | 29.8              | 12.937                   |

|                                                                |                     |                   |              |
|----------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                      | Date:<br>08/05/2026 |                   |              |
|                                                                | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Inflows Summary<br>Storm Phase: Phase | Stantec:            |                   |              |

I

DRN



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

| Inflow             | Storm Event                            | Inflow Area (ha) | Max. Inflow (L/s) | Total Inflow Volume (m³) |
|--------------------|----------------------------------------|------------------|-------------------|--------------------------|
| Catchment Area     | FSR: 100 years: +40 %: 15 mins: Summer | 0.02             | 13.4              | 5.786                    |
| Catchment Area (1) | FSR: 100 years: +40 %: 15 mins: Summer | 0.01             | 3.6               | 1.545                    |
| Catchment Area (2) | FSR: 100 years: +40 %: 15 mins: Summer | 0.02             | 13.1              | 5.694                    |
| Catchment Area (3) | FSR: 100 years: +40 %: 15 mins: Summer | 0.01             | 5.0               | 2.159                    |
| Catchment Area (4) | FSR: 100 years: +40 %: 15 mins: Summer | 0.00             | 0.9               | 0.410                    |
| Catchment Area (5) | FSR: 100 years: +40 %: 15 mins: Summer | 0.06             | 40.1              | 17.368                   |

|                                                                  |                     |                   |              |
|------------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                        | Date:<br>08/05/2026 |                   |              |
|                                                                  | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Phase | Stantec:            |                   |              |





FSR: 1 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

| Junction             | Storm Event                            | Cover Level (m) | Invert Level (m) | Max. Level (m) | Max. Depth (m) | Max. Inflow (L/s) | Max. Resident Volume (m³) | Max. Flooded Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Status     |
|----------------------|----------------------------------------|-----------------|------------------|----------------|----------------|-------------------|---------------------------|--------------------------|--------------------|-----------------------------|------------|
| SW-01                | FSR: 1 years: +0 %:<br>30 mins: Summer | 51.35<br>0      | 50.77<br>5       | 50.789         | 0.014          | 0.5               | 0.004                     | 0.000                    | 0.5                | 0.515                       | OK         |
| FC-01 (flow control) | FSR: 1 years: +0 %:<br>60 mins: Summer | 50.84<br>0      | 50.20<br>0       | 50.303         | 0.103          | 1.0               | 0.029                     | 0.000                    | 0.9                | 2.017                       | Surcharged |
| PUBLIC SEWER OUTFALL | FSR: 1 years: +0 %:<br>60 mins: Summer | 51.00<br>0      | 47.00<br>0       | 47.009         | 0.009          | 0.9               | 0.000                     | 0.000                    | 0.9                | 2.012                       | OK         |

|                                                                  |                     |                   |              |
|------------------------------------------------------------------|---------------------|-------------------|--------------|
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|                                                                  | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Phase | Stantec:            |                   |              |





**FSR: 30 years: Increase Rainfall (%): +35: Critical Storm Per Item: Rank By: Max. Depth**

| Junction             | Storm Event                             | Cover Level (m) | Invert Level (m) | Max. Level (m) | Max. Depth (m) | Max. Inflow (L/s) | Max. Resident Volume (m³) | Max. Flooded Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Status     |
|----------------------|-----------------------------------------|-----------------|------------------|----------------|----------------|-------------------|---------------------------|--------------------------|--------------------|-----------------------------|------------|
| SW-01                | FSR: 30 years: +35 %: 1440 mins: Summer | 51.350          | 50.775           | 50.829         | 0.054          | 0.5               | 0.015                     | 0.000                    | 0.5                | 31.942                      | OK         |
| FC-01 (flow control) | FSR: 30 years: +35 %: 120 mins: Summer  | 50.840          | 50.200           | 50.389         | 0.189          | 1.1               | 0.053                     | 0.000                    | 1.0                | 11.751                      | Surcharged |
| PUBLIC SEWER OUTFALL | FSR: 30 years: +35 %: 60 mins: Summer   | 51.000          | 47.000           | 47.009         | 0.009          | 1.0               | 0.000                     | 0.000                    | 1.0                | 5.966                       | OK         |

|                                                                  |                     |                   |              |
|------------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                        | Date:<br>08/05/2026 |                   |              |
|                                                                  | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Phase | Stantec:            |                   |              |





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

| Junction             | Storm Event                                    | Cover Level (m) | Invert Level (m) | Max. Level (m) | Max. Depth (m) | Max. Inflow (L/s) | Max. Resident Volume (m³) | Max. Flooded Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Status     |
|----------------------|------------------------------------------------|-----------------|------------------|----------------|----------------|-------------------|---------------------------|--------------------------|--------------------|-----------------------------|------------|
| SW-01                | FSR: 100 years:<br>+40 %: 1440 mins:<br>Summer | 51.35<br>0      | 50.77<br>5       | 50.904         | 0.129          | 0.7               | 0.036                     | 0.000                    | 0.7                | 42.749                      | OK         |
| FC-01 (flow control) | FSR: 100 years:<br>+40 %: 360 mins:<br>Summer  | 50.84<br>0      | 50.20<br>0       | 50.483         | 0.283          | 1.0               | 0.080                     | 0.000                    | 1.0                | 36.485                      | Surcharged |
| PUBLIC SEWER OUTFALL | FSR: 100 years:<br>+40 %: 15 mins:<br>Summer   | 51.00<br>0      | 47.00<br>0       | 47.009         | 0.009          | 1.0               | 0.000                     | 0.000                    | 1.0                | 1.364                       | OK         |

|                                                                            |                     |                   |              |
|----------------------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                                  | Date:<br>08/05/2026 |                   |              |
|                                                                            | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Stormwater Controls Summary<br>Storm Phase: Phase | Stantec:            |                   |              |





**FSR: 1 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth**

| Stormwater Control | Storm Event                           | Max. US Level (m) | Max. DS Level (m) | Max. US Depth (m) | Max. DS Depth (m) | Max. Inflow (L/s) | Max. Residual Volume (m³) | Max. Flooded Volume (m³) | Total Lost Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Percentage Available (%) | Status |
|--------------------|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|--------------------------|------------------------|--------------------|-----------------------------|--------------------------|--------|
| AS-01              | FSR: 1 years: +0 %: 960 mins: Summer  | 51.440            | 51.284            | 0.047             | 0.004             | 0.3               | 2.476                     | 0.000                    | 0.000                  | 0.1                | 4.594                       | 90.506                   | OK     |
| AS-02              | FSR: 1 years: +0 %: 2160 mins: Summer | 51.086            | 50.808            | 0.139             | 0.008             | 0.3               | 5.435                     | 0.000                    | 0.000                  | 0.1                | 13.169                      | 79.277                   | OK     |
| AS-03              | FSR: 1 years: +0 %: 2880 mins: Summer | 50.647            | 50.307            | 0.089             | 0.007             | 0.5               | 11.814                    | 0.000                    | 0.000                  | 0.2                | 32.452                      | 80.299                   | OK     |
| AS-04              | FSR: 1 years: +0 %: 120 mins: Summer  | 51.491            | 50.410            | 0.019             | 0.010             | 0.5               | 0.538                     | 0.000                    | 0.000                  | 0.2                | 0.942                       | 94.596                   | OK     |

|                                                                            |                     |                   |              |
|----------------------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                                  | Date:<br>08/05/2026 |                   |              |
|                                                                            | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Stormwater Controls Summary<br>Storm Phase: Phase | Stantec:            |                   |              |





**FSR: 30 years: Increase Rainfall (%): +35: Critical Storm Per Item: Rank By: Max.  
Avg. Depth**

| Stormwater Control | Storm Event                             | Max. US Level (m) | Max. DS Level (m) | Max. US Depth (m) | Max. DS Depth (m) | Max. Inflow (L/s) | Max. Residant Volume (m³) | Max. Flooded Volume (m³) | Total Lost Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Percentage Available (%) | Status |
|--------------------|-----------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|--------------------------|------------------------|--------------------|-----------------------------|--------------------------|--------|
| AS-01              | FSR: 30 years: +35 %: 720 mins: Summer  | 51.541            | 51.306            | 0.148             | 0.026             | 1.2               | 6.720                     | 0.000                    | 0.000                  | 0.5                | 12.297                      | 74.235                   | OK     |
| AS-02              | FSR: 30 years: +35 %: 1440 mins: Summer | 51.296            | 50.830            | 0.349             | 0.030             | 1.2               | 13.054                    | 0.000                    | 0.000                  | 0.5                | 31.949                      | 50.232                   | OK     |
| AS-03              | FSR: 30 years: +35 %: 1440 mins: Winter | 50.829            | 50.313            | 0.271             | 0.013             | 1.7               | 30.999                    | 0.000                    | 0.000                  | 0.7                | 66.911                      | 48.308                   | OK     |
| AS-04              | FSR: 30 years: +35 %: 120 mins: Summer  | 51.533            | 50.418            | 0.061             | 0.018             | 1.5               | 1.647                     | 0.000                    | 0.000                  | 0.5                | 2.998                       | 83.443                   | OK     |

|                                                                            |                     |                   |              |
|----------------------------------------------------------------------------|---------------------|-------------------|--------------|
| Dee Park:                                                                  | Date:<br>08/05/2026 |                   |              |
|                                                                            | Designed by:<br>HM  | Checked by:<br>JM | Approved By: |
| Report Details:<br>Type: Stormwater Controls Summary<br>Storm Phase: Phase | Stantec:            |                   |              |





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

| Stormwater Control | Storm Event                             | Max. US Level (m) | Max. DS Level (m) | Max. US Depth (m) | Max. DS Depth (m) | Max. Inflow (L/s) | Max. Residant Volume (m³) | Max. Flooded Volume (m³) | Total Lost Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Percentage Available (%) | Status |
|--------------------|-----------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|--------------------------|------------------------|--------------------|-----------------------------|--------------------------|--------|
| AS-01              | FSR: 100 years: +40 %: 480 mins: Summer | 51.594            | 51.381            | 0.200             | 0.101             | 2.3               | 9.763                     | 0.000                    | 0.000                  | 0.8                | 14.028                      | 62.567                   | OK     |
| AS-02              | FSR: 100 years: +40 %: 960 mins: Summer | 51.372            | 50.903            | 0.424             | 0.103             | 2.1               | 16.724                    | 0.000                    | 0.000                  | 0.8                | 36.233                      | 36.239                   | OK     |
| AS-03              | FSR: 100 years: +40 %: 720 mins: Summer | 50.902            | 50.472            | 0.344             | 0.172             | 5.4               | 44.714                    | 0.000                    | 0.000                  | 1.0                | 58.598                      | 25.438                   | OK     |
| AS-04              | FSR: 100 years: +40 %: 120 mins: Summer | 51.556            | 50.465            | 0.084             | 0.065             | 2.0               | 2.305                     | 0.000                    | 0.000                  | 0.7                | 4.123                       | 76.836                   | OK     |

## *Appendix G      Overland Flow Routes*



KEY PLAN

NOTES

LEGEND

1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.

2. The DWG file is issued for the purposes of coordination only and do not represent formal drawing issue and are not to be reprinted in any form. Formal issue of drawings is via DWF, Adobe PDF files and/or hard copies and their associated information issue sheets.

3. Note that all care has been taken with the export of DWG files and their content, but we recommend that you make due dimensional checks before using any DWG file information. Any errors found are to be reported to Hydrock immediately.

4. All levels are shown in metres above Ordnance Datum (m AOD).

OVERLAND FLOW ROUTE

|     |                         |          |            |          |             |          |
|-----|-------------------------|----------|------------|----------|-------------|----------|
| PO2 | SITE PLAN UPDATED       |          |            |          |             |          |
|     | B.MURPHY                | 16/05/25 | H.MILLER   | 16/05/25 | A.TODD      | 16/05/25 |
| PO1 | PRELIMINARY ISSUE       |          |            |          |             |          |
|     | H.MILLER                | 18/11/24 | A.TODD     | 18/11/24 | A.TODD      | 18/11/24 |
| REV | REVISION NOTES/COMMENTS |          |            |          |             |          |
|     | DRAWN BY                | DATE     | CHECKED BY | DATE     | APPROVED BY | DATE     |

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CLIENT

READING BOROUGH COUNCIL

PROJECT

DEE PARK OPEN SPACE

TITLE

OVERLAND FLOW ROUTES

HYDROCK PROJECT NO.  
C-36064-C

SCALE @ A1  
1:125

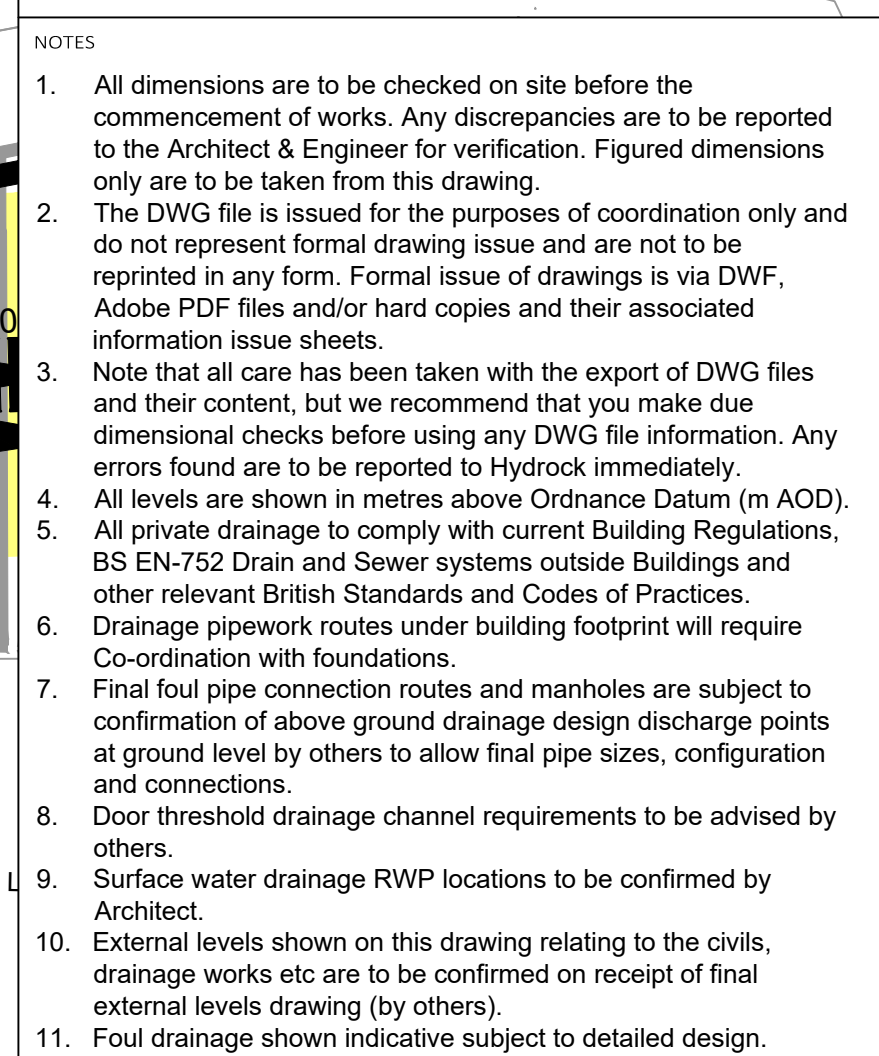
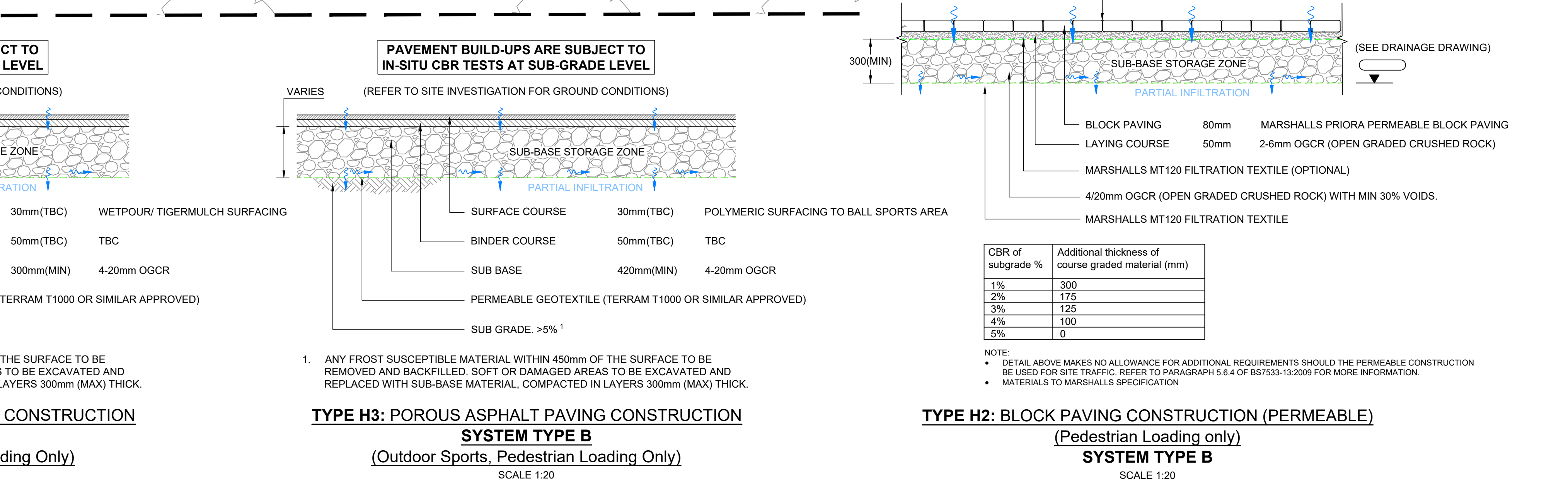
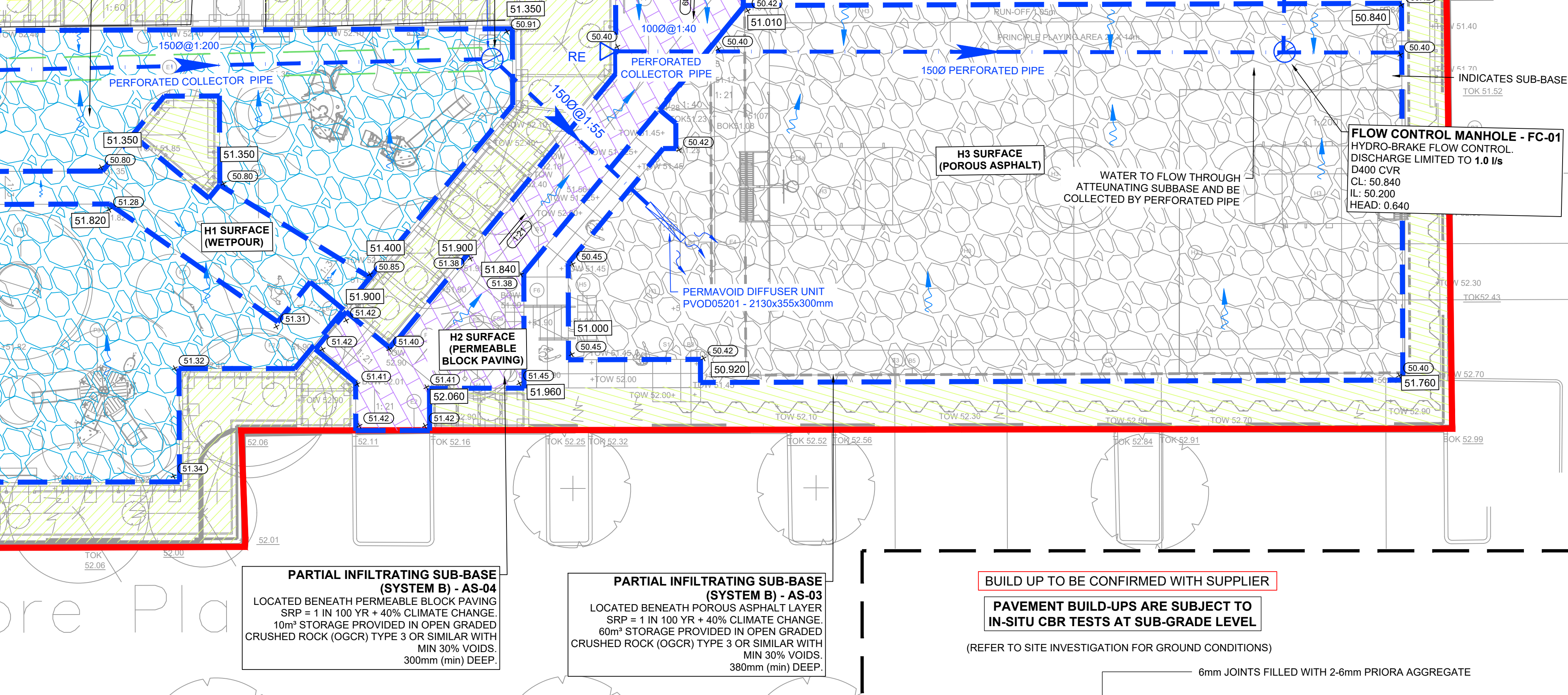
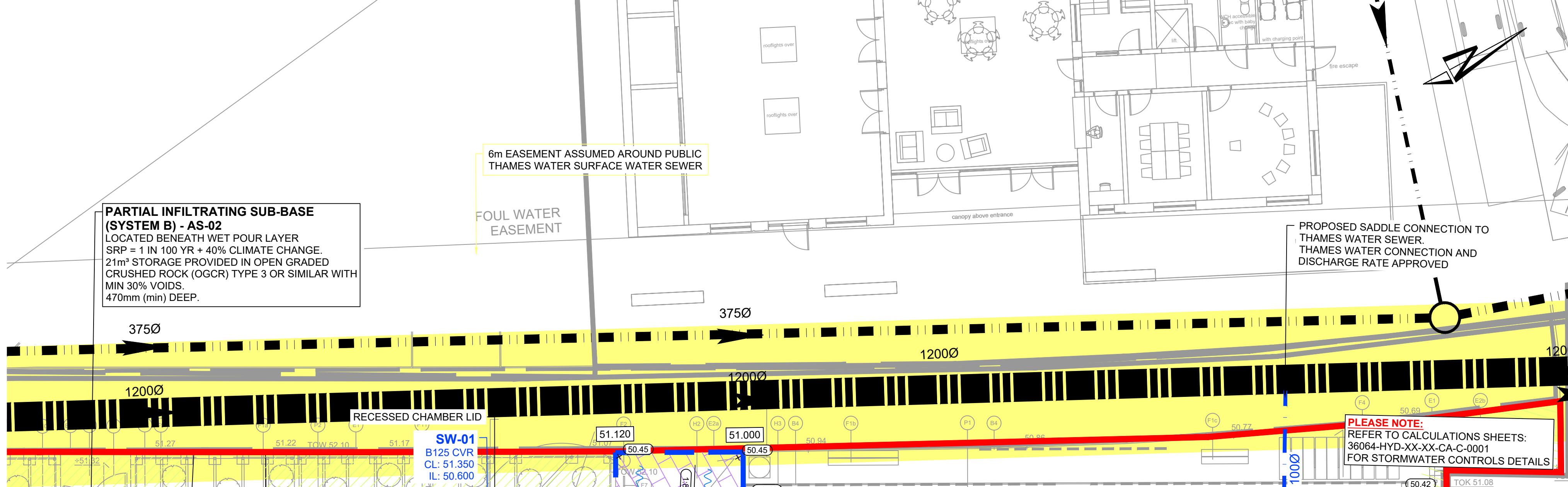
STATUS DESCRIPTION  
PLANNING

STATUS  
S2

DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)  
36064-HYD-00-ZZ-SK-C-7730

REVISION  
PO2

## *Appendix H      Drainage Strategy*



|     |                                   |          |            |          |             |          |
|-----|-----------------------------------|----------|------------|----------|-------------|----------|
| P03 | PROPOSED SEWER CONNECTION UPDATED |          |            |          |             |          |
|     | H.MILLER                          | 08/05/25 | J.MAGEE    | 08/05/25 | J.MAGEE     | 08/05/25 |
| P02 | UPDATED TO SUIT NEW LAYOUT        |          |            |          |             |          |
|     | H.MILLER                          | 16/05/25 | J.MAGEE    | 16/05/25 | J.MAGEE     | 16/05/25 |
| P01 | PRELIMINARY ISSUE                 |          |            |          |             |          |
|     | H.MILLER                          | 18/11/24 | A.TODD     | 18/11/24 | A.TODD      | 18/11/24 |
| REV | REVISION NOTES/COMMENTS           |          |            |          |             |          |
|     | DRAWN BY                          | DATE     | CHECKED BY | DATE     | APPROVED BY | DATE     |

|                                                                                                |  |                                                                                                                         |  |
|------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|--|
|           |  | Merchants' House North<br>Wapping Road<br>Bristol<br>BS1 4RW<br>t: +44 (0)117 945 9225<br>e: bristolcentral@hydrock.com |  |
| CLIENT                                                                                         |  |                                                                                                                         |  |
| READING BOROUGH COUNCIL                                                                        |  |                                                                                                                         |  |
| PROJECT                                                                                        |  |                                                                                                                         |  |
| DEE PARK OPEN SPACE                                                                            |  |                                                                                                                         |  |
| TITLE                                                                                          |  |                                                                                                                         |  |
| DRAINAGE STRATEGY                                                                              |  |                                                                                                                         |  |
| HYDROCK PROJECT NO.<br>C-36064-C                                                               |  | SCALE @ A1<br>1:125                                                                                                     |  |
| STATUS DESCRIPTION<br>PLANNING                                                                 |  | STATUS<br>S2                                                                                                            |  |
| DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)<br>36064-HYD-00-ZZ-DR-C-7000 |  | REVISION<br>P03                                                                                                         |  |