N

OUTFALL 4
DISCHARGE RATE: 100 l/s
UNIT 9 & RAILPORT
EXISTING CATCHMENT: 4

EX.IL: 82.90m

RAILPORT EAST
AREA: 4.20ha
IMP. AREA: 4.20ha
QBAR: 17.2 /s
STORAGE: 2,730m³

SW POND 2 (UNITS 12 & RAILPORT)
CATCHMENT: 24.39ha
DISCHARGE: 100.0 l/s
REQUIRED VOLUME: 15,854m³
AVAILABLE: 4,260m³

OUTFALL 3
DISCHARGE RATE: 46.1 l/s
UNIT 8
EXISTING CATCHMENT: 3

EXISTING RAILWAY
CULVERT TO BE
EXTENDED INTO THE SITE

OUTFALL 2
DISCHARGE RATE: 93.6 l/s
UNIT 7 & RAILPORT
EXISTING CATCHMENT: 2

EX.IL: 88.69m

SW POND (ACCESS ROAD)
CATCHMENT: 0.59ha
DISCHARGE: 2.4 l/s
REQUIRED VOLUME: 384m³

UNIT 09
AREA: 22.43ha
IMP. AREA: 20.19ha
QBAR: 82.8 /s
STORAGE: 13,124m³

EXISTING RAILWAY
CULVERT TO BE
EXTENDED INTO THE SITE

EX.IL: 89.32m

SW POND 3 (UNITS 4 & 5)
CATCHMENT: 14.62ha
DISCHARGE: 59.9 l/s
REQUIRED VOLUME: 9,504m³
AVAILABLE: 8,850m³

RAILPORT WEST
AREA: 7.75ha
IMP. AREA: 7.75ha
QBAR: 31.7 /s
STORAGE: 5,038m³

HIGHWAY
IMP. AREA: 0.59ha
STORAGE: 384m³

EX.IL: 84.70m

OUTFALL 5
DISCHARGE RATE: 59.9 l/s
HIGHWAYS, UNITS 4 & 5
EXISTING CATCHMENT: 5

UNIT 08
AREA: 13.19ha
IMP. AREA:11.9ha
QBAR: 46.1 /s*
STORAGE: 8,050m³

SW
CL: 96.45
IL: 94.05

UNIT 04
AREA: 9.19ha
IMP. AREA: 8.27ha
QBAR: 33.9 /s
STORAGE: 5,376m³

SW POND (UNITS 3)
CATCHMENT: 4.77ha
DISCHARGE: 19.6 l/s
AVAILABLE VOLUME: 1,000m³

HIGHWAY
IMP. AREA: 1.65ha
STORAGE: 1,073m³

UNIT 07
AREA: 16.33ha
IMP. AREA:14.7ha
QBAR: 60.3 /s
STORAGE: 9,555m³

SW
CL:102.90
IL: 101.40

SW
CL: 96.45
IL: 94.05

UNIT 05
AREA: 6.40ha
IMP. AREA: 5.76ha
QBAR: 23.6 /s
STORAGE: 3,744m³

SW
CL: 92.65
IL: 91.15

OUTFALL 6
DISCHARGE RATE: 19.6 l/s
UNIT 3
EXISTING CATCHMENT: 5

OUTFALL 1
DISCHARGE RATE: 10.7 l/s
HIGHWAY & LORRY PARK
EXISTING CATCHMENT: 1

EX.IL: 92.44m

UNIT 03
AREA: 5.30ha
IMP. AREA: 4.77ha
QBAR: 19.6 /s
STORAGE: 3,101m³

EX.IL: 87.18m

EX.IL: 91.70m

SW POND (NORTHERN LOOP ROAD)
CATCHMENT: 1.65ha
DISCHARGE: 6.84 l/s
REQUIRED VOLUME: 1,073m³

SW POND 1 (ACCESS ROAD & RAILPORT)
CATCHMENT: 9.16ha
DISCHARGE: 10.7 l/s
REQUIRED VOLUME: 7,788m³

SW
CL: 96.45
IL: 92.90

IL: 91.54m

OUTFALL 7
DISCHARGE RATE: 100.9 l/s
HIGHWAY & UNIT 6
EXISTING CATCHMENT: 5

HIGHWAY
IMP. AREA: 1.1ha
STORAGE: 715m³

UNIT 02
AREA: 5.04ha
IMP. AREA: 4.54ha
QBAR: 18.6 /s
STORAGE: 2,951m³

AREA: 5.88ha
IMP. AREA: 5.3ha
QBAR: 10.7 /s*
STORAGE: 4,506m³

SW
CL: 96.45
IL: 94.05

SW
CL: 97.20
IL: 95.70

UNIT 06
AREA: 24.30ha
IMP. AREA: 21.87ha
QBAR: 89.6 /s
STORAGE: 14,216m³

IL: 91.76m

OUTFALL 8
DISCHARGE RATE: 18.6 l/s
UNIT 2
EXISTING CATCHMENT: 5

SW SWALES (SOUTHERN LOOP ROAD)
HIGHWAY GULLIES TO DISCHARGE
DIRECTLY TO SWALE
CATCHMENT: 1.1ha
DISCHARGE: 4.5 l/s
REQUIRED VOLUME: 715m³

UNIT 01
AREA: 13.01ha
IMP. AREA: 11.71ha
QBAR: 48.0 /s
STORAGE: 7,612m³

IL: 93.44m

OUTFALL 9
DISCHARGE RATE: 48.0 l/s
UNIT 1
EXISTING CATCHMENT: 5

HIGHWAY
IMP. AREA: 3.86ha
STORAGE: 3,282m³

SW
CL: 98.00
IL: 95.60

EX.IL: 100.12m

IL: 94.74m

SW
CL: 103.50
IL: 102.00

IL: 97.60m

IL: 95.64m

SW POND
CATCHMENT: 0.95ha
DISCHARGE: 3.9 l/s
REQUIRED VOLUME: 618m³

OUTFALL 10
DISCHARGE RATE: 3.9 l/s
HIGHWAY
EXISTING CATCHMENT: 5

QBAR: 4.1 l/s/ha
APPROXIMATE ATTENUATION REQUIREMENT PER HECTARE: 650m³
1 IN 100yr + 25% CC DESIGN STORM EVENT
90% IMPERMEABLE AREA FOR DEVELOPMENT PLOTS
100% IMPERMEABLE AREA FOR HIGHWAY CORRIDORS & RAILPORT
*DENOTES PROPOSED FLOW RATES BEING LOWERED TO EQUAL
THE EXISTING QBAR RATE FOR THE ASSOCIATED CATCHMENT

Burbage Common & Woods

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

Date:	25-05-2021
Paper size:	A1
Scale:	1:4000

0 40 80 120 160 200 m

Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. Drawing provided for illustrative purposes only. Design subject to further coordination and approvals.
6. Layout based on AJA drawing: 5905-177.
7. Attenuation indicatively sized for the 1 in 100 year storm event plus a 25% allowance for climate change for the estimated impermeable areas. Allowance made for 650m² storage per 1ha of impermeable area. To be agreed with the LLFA.
8. Equivalent greenfield runoff rates have been estimate to be 4.1 l/s/ha. To be agreed with the LLFA.
9. Foul water connection and site wide pumping requirements to be discussed and agreed with Severn Trent Water.

Legend

- APPLICATION BOUNDARY
- EXISTING WATERCOURSE
- PROPOSED WATERCOURSE DIVERSION
- INDICATIVE SURFACE WATER DRAINAGE RUN
- ABOVE GROUND ATTENUATION FEATURE
- HIGHWAY SWALE/ATTENUATION
- BELOW GROUND ATTENUATION FEATURE
- PERMEABLE PAVING AND SUB-BASE STORAGE

TRITAX SYMMETRY
A TRITAX BIG BOX COMPANY

ES FIGURE 14.4 - MAIN HNRFI SITE CONCEPT SURFACE WATER DRAINAGE STRATEGY

APFP Regulation:	5(2)(a)
Document Ref:	6.3.14.4
Drawing Number:	Figure 14.4
Drawing Status:	FINAL
Revision:	V4
Drawn by:	R. Jobling
Approved by:	C. Dodd