Appendix B11

Proposed Surface Water Drainage Works

BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME

PROPOSED SURFACE WATER DRAINAGE WORKS

DRAWING SERIES NUMBER(S)	DRAWING SERIES DESCRIPTION
BCIDB-JFM-DNG_IX-0002_XX_00-DR-CD-0001	SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME. PROPOSED SURFACE WATER DRAINAGE WORKS. COVER SHEET
BCIDB-JFM-DNG_KP-0002_XX_00-DR-CD-0001	SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME. PROPOSED SURFACE WATER DRAINAGE WORKS. KEY PLAN
BCIDB-JFM-DNG_RD-0002_XX_00-DR-CD-1001 to 1006	SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME. OVERALL CATCHMENT AREAS
BCIDB-JFM-DNG_RD-0002_XX_00-DR-CD-0001 to 0037	SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME. PROPOSED SURFACE WATER DRAINAGE WORKS

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Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	NTS @ A1 NTS @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JFM	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS COVER SHEET

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_IX -0002_XX_00 -DR-CD-0001	01 of 01	A	M01

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LEGEND:

PROPOSED DESIGN SHEET EXTENTS

NO DESIGN CONTENT

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Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:15000 @ A1 1:30000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JFM	

Programme Title: **BUSCONNECTS DUBLIN**
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title:
SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS
KEY PLAN

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_KP-0002_XX_00 -DR-CD-0001	01 of 01	A	M01

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0 50 100 200 300 400 500m

SCALE 1:5000 @ A1; 1:10000 @ A3

N

WARD WATERCOURSE

GREENFIELDS WATERCOURSE

CATCHMENT AREA M01
368.95 HECTARES
EXISTING STORMWATER NETWORK OUTFALLS TO THE WARD WATERCOURSE

CATCHMENT AREA 02
402.42 HECTARES
EXISTING STORMWATER NETWORK OUTFALLS TO THE RIVER SLUICE

SLUICE STREAM

LEGEND:

- CATCHMENT AREA 1
- CATCHMENT AREA 2
- CATCHMENT AREA 3
- CATCHMENT AREA 4
- CATCHMENT AREA 5
- CATCHMENT AREA 6
- DISCHARGE POINT
- CATCHMENT AREA 7
- EXISTING SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING OVERFLOW DRAINAGE
- EXISTING FOUL DRAINAGE
- TEMPORARY LAND ACQUISITION
- SITE BOUNDARY LINE
- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREAS TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED

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Engineering Designer: Jacobs

Programme Title: **BUSCONNECTS DUBLIN**
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRECORE BUS CORRIDOR SCHEME
OVERALL CATCHMENT AREAS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:5000 @ A1 1:10000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-1001	01 of 06	A	M01

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LEGEND:

- CATCHMENT AREA 1
- CATCHMENT AREA 2
- CATCHMENT AREA 3
- CATCHMENT AREA 4
- CATCHMENT AREA 5
- CATCHMENT AREA 6
- DISCHARGE POINT
- CATCHMENT AREA 7
- EXISTING SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING OVERFLOW DRAINAGE
- EXISTING FOUL DRAINAGE
- TEMPORARY LAND ACQUISITION
- SITE BOUNDARY LINE
- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREAS TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED

0 50 100 200 300 400 500m

SCALE 1:5000 @ A1; 1:10000 @ A3

CATCHMENT AREA 02
402.42 HECTARES
EXISTING STORMWATER NETWORK OUTFALLS TO THE RIVER SLUICE

CATCHMENT AREA 03
391.74 HECTARES
EXISTING STORMWATER NETWORK OUTFALLS TO THE CUCKOO STREAM

CUCKOO STREAM

N

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Engineering Designer: Jacobs

Programme Title: **BUSCONNECTS DUBLIN**
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRECORE BUS CORRIDOR SCHEME
OVERALL CATCHMENT AREAS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:5000 @ A1 1:10000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
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0 50 100 200 300 400 500m

SCALE 1:5000 @ A1; 1:10000 @ A3

N

CATCHMENT AREA 04
217.99 HECTARES
EXISTING STORMWATER
NETWORK OUTFALLS TO
THE RIVER MAYNE

RIVER
MAYNE
09

MAYNE 09
WATERCOURSE

CATCHMENT AREA 05
906.724 HECTARES
EXISTING STORMWATER
NETWORK OUTFALLS TO
THE RIVER SANTRY

SANTRY
WATERCOURSE

BALLYMUN
WATERCOURSE

LEGEND:

- CATCHMENT AREA 1
- CATCHMENT AREA 2
- CATCHMENT AREA 3
- CATCHMENT AREA 4
- CATCHMENT AREA 5
- CATCHMENT AREA 6
- DISCHARGE POINT
- CATCHMENT AREA 7
- EXISTING SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING OVERFLOW DRAINAGE
- EXISTING FOUL DRAINAGE
- TEMPORARY LAND ACQUISITION
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Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRECORE BUS CORRIDOR SCHEME
OVERALL CATCHMENT AREAS

Date	Scale	Drawn	Checked	Approved
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Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
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0 50 100 200 300 400 500m

SCALE 1:5000 @ A1; 1:10000 @ A3

CATCHMENT AREA 06
3168.06 HECTARES
EXISTING STORMWATER
NETWORK OUTFALLS TO
THE RIVER TOLKA

CATCHMENT AREA 05
906.724 HECTARES
EXISTING STORMWATER
NETWORK OUTFALLS TO
THE RIVER SANTRY

LEGEND:

- CATCHMENT AREA 1
- CATCHMENT AREA 2
- CATCHMENT AREA 3
- CATCHMENT AREA 4
- CATCHMENT AREA 5
- CATCHMENT AREA 6
- DISCHARGE POINT
- CATCHMENT AREA 7
- EXISTING SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING OVERFLOW DRAINAGE
- EXISTING FOUL DRAINAGE
- TEMPORARY LAND ACQUISITION
- SITE BOUNDARY LINE
- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREAS TO BE PAVED)
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Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:5000 @ A1 1:10000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: **BUSCONNECTS DUBLIN**
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRECORE BUS CORRIDOR SCHEME
OVERALL CATCHMENT AREAS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-1004	04 of 06	A	M01

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0 50 100 200 300 400 500m

SCALE 1:5000 @ A1; 1:10000 @ A3

N

RIVER TOLKA

CATCHMENT AREA 06
3168.06 HECTARES
EXISTING STORMWATER NETWORK OUTFALLS TO THE RIVER TOLKA

LEGEND:

- CATCHMENT AREA 1
- CATCHMENT AREA 2
- CATCHMENT AREA 3
- CATCHMENT AREA 4
- CATCHMENT AREA 5
- CATCHMENT AREA 6
- DISCHARGE POINT
- CATCHMENT AREA 7
- EXISTING SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING OVERFLOW DRAINAGE
- EXISTING FOUL DRAINAGE
- TEMPORARY LAND ACQUISITION
- SITE BOUNDARY LINE
- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREAS TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED

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Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRECORE BUS CORRIDOR SCHEME
OVERALL CATCHMENT AREAS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:5000 @ A1 1:10000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-1005	05 of 06	A	M01

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0 50 100 200 300 400 500m

SCALE 1:5000 @ A1; 1:10000 @ A3

N

RIVER TOLKA

CATCHMENT AREA 07
25.19 HECTARES
EXISTING STORMWATER NETWORK DRAIIL TO RINGSEND WwTP. COMBINED SEWER OVERFLOWS TO TO THE RIVER LIFFEY ALONG THE NETWORK

RIVER LIFFEY

LEGEND:

- CATCHMENT AREA 1
- CATCHMENT AREA 2
- CATCHMENT AREA 3
- CATCHMENT AREA 4
- CATCHMENT AREA 5
- CATCHMENT AREA 6
- DISCHARGE POINT
- CATCHMENT AREA 7
- EXISTING SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING OVERFLOW DRAINAGE
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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:5000 @ A1 1:10000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRECORE BUS CORRIDOR SCHEME
OVERALL CATCHMENT AREAS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-1006	06 of 06	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

FLOW CONTROL DEVICE 2.0l/s

CATCHMENT
1a OUTFALL

PROPOSED UNDERGROUND
GEOCELLULAR TANK - VOLUME
150M^3

A 0

A 50

A 100

A 150

A 200

A 250

A 300

A 350

SHEET 1

SHEET 2

CHAINAGE A0 - A300

- Drainage catchment 1a
- Additional impermeable area 2965m^2
- Design attenuation volume 150m^3
- Drainage to existing surface water network
- Attenuation to be provided through interception of existing surface water network
- Where kerbline is to be changed existing gullies to be removed and replaced with side entry gullies

TRAVELODGE HOTEL

SWORDS ROAD

CARLTON COURT

PINNOCK HILL ROUNDABOUT

DUBLIN ROAD

PROPOSED TREE PITS TO DRAIN TO EXISTING SURFACE WATER NETWORK

NOTES:

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7. ALL THE EXIFMING GULLIES THAT ARE NOT ADJACENT TO THE PROPOSED KERBLINE WILL BE REMOVED AND REPLACED BY NARROW PROFILE GULLIES WHICH SHALL BE RELOCATED AT THE PROPOSED ROAD KERBLINE.
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11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Volatt: VOLUME OF ATTENUATION

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

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- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

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Project Ireland 2040
Building Ireland's Future

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Engineering Designer: Jacobs

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Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0001	01 of 37	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

A 250 A 300 A 350 A 400 A 450 A 500 A 550 A 600 A 650

CHAINAGE A300 - A650
- Design catchment 1b
- New impermeable area -595m^2
- Existing gullies to be removed and replaced with side entry gullies

SWORDS ROAD (R132)

DUBLIN ROAD

BORODALE WILLOWS

SHEET 1

SHEET 2

SHEET 3

FOSTERSTOWN LAP LANDS

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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06/04/2023	1:500 @ A1, 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0002	02 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A650 - A1000 (east)
- Design catchment 1c
- New impermeable area 198m^2
- Design attenuation volume 6m^3
- Where kerbline is to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by new surface water drainage pipes

CHAINAGE A650 - A1000 (west)
- Design catchment 1c
- New impermeable area 802m^2
- Design attenuation volume 25m^3
- New impermeable area to drain to new surface water drainage system running to new rain garden
- Existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by intercepting existing surface water network

PROPOSED OVERSIZED PIPES

NEW IMPERMEABLE AREAS TO DISCHARGE TO EXISTING SURFACE WATER NETWORK - DISCHARGE LOCATION TBC

PROPOSED RAIN GARDEN, 0.5m DEEP, 100m^2. STORAGE VOLUME 25M^3

FLOW CONTROL DEVICE - 2.0 l/s

PROPOSED FILTER DRAIN 0.5m WIDE. STORAGE VOLUME 4M^3

FLOW CONTROL DEVICE 2.0l/s

PREMIER INN

AIRSIDE

AIRSIDE RETAIL PARK

AIRSIDE JUNCTION

NEVINSTOWN LANE

BOROIMHE ROAD

SWORDS ROAD (R132)

DUBLIN ROAD

TEXACO

Clinic

Car Park

A 650 A 700 A 750 A 800 A 850 A 900 A 950 A 1000

SHEET 2 SHEET 3 SHEET 4

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Volatt: VOLUME OF ATTENUATION

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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0003	03 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A1000 - A1450
- Design catchment 2a
- New impermeable area 463m^2
- Design attenuation volume 84.5m^3
- New impermeable area to drain to new surface water network
- Where kerbline is to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by dry detention basin

N1 BUSINESS PARK

GLENMORE HOUSE

KILRONAN HOUSE

SWORDS ROAD (R132)

MC COMISH LTD

A 1050 A 1100 A 1150 A 1200 A 1250 A 1300 A 1350 A 1400

DN225

SHEET 3 SHEET 4 SHEET 5

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9. 2NO. OF GULLIES SHALL BE PROVIDED AT LOW POINTS AND AT LEAFM ONE GULLY TO BE PROVIDED IMMEDIATELY UPFMREAM OF PEDEFMRIAN CROSSINGS.
10. ALL SUDS FEATURES SHALL PROVIDE SURFACE WATER QUALITY TREATMENT.
11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0004	04 of 37	A	M01

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

LEGEND:

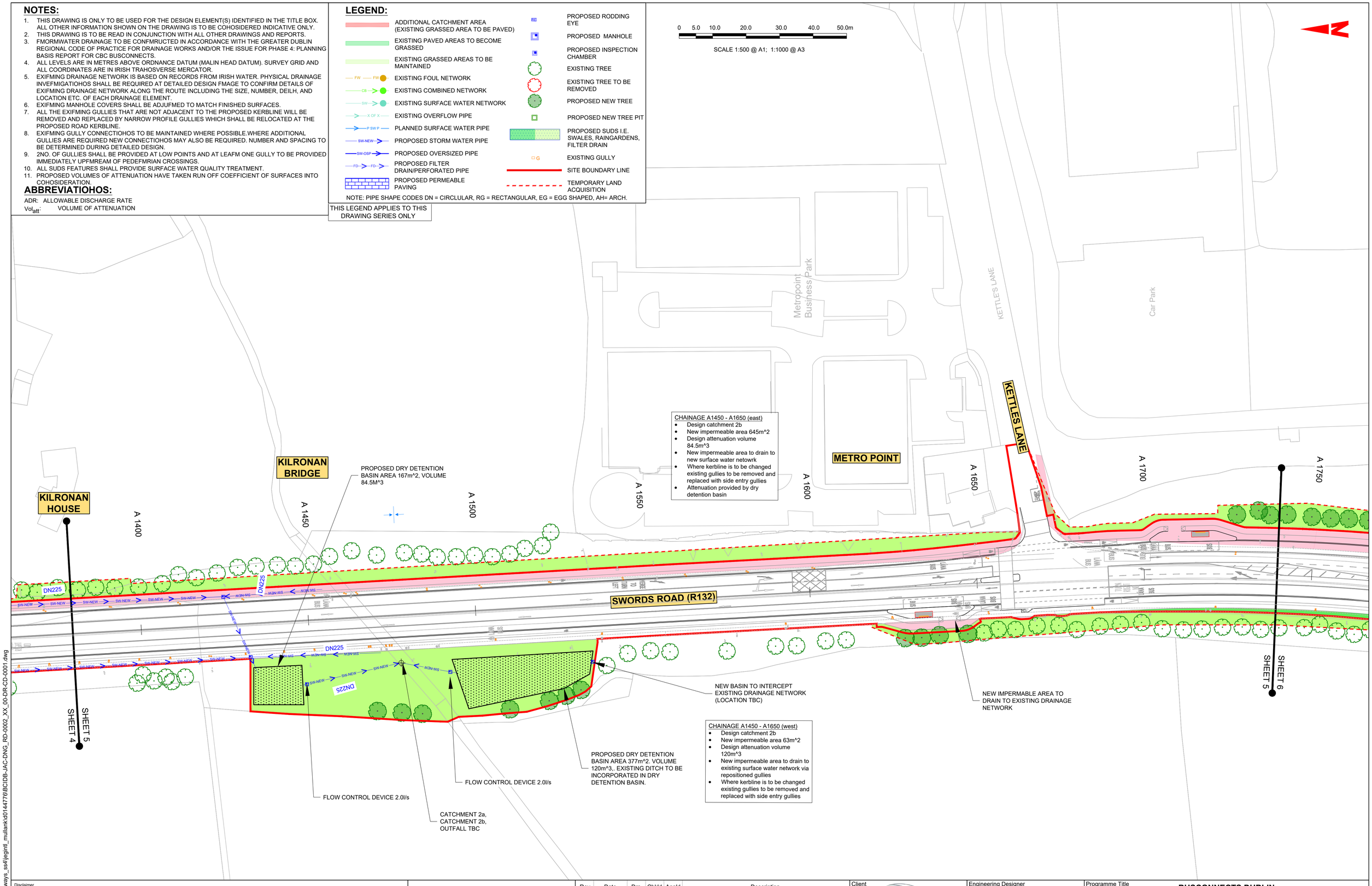
- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



CHAINAGE A1450 - A1650 (east)

- Design catchment 2b
- New impermeable area 645m^2
- Design attenuation volume 84.5m^3
- New impermeable area to drain to new surface water netowrk
- Where kerbline is to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by dry detention basin

CHAINAGE A1450 - A1650 (west)

- Design catchment 2b
- New impermeable area 63m^2
- Design attenuation volume 120m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline is to be changed existing gullies to be removed and replaced with side entry gullies

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority	Engineering Designer: Jacobs			
Date: 06/04/2023	Scale: 1:500 @ A1, 1:1000 @ A3	Drawn: FM	Checked: IL	Approved: HOS
Project Code: BCIDB	Originator Code: JAC	QMS Code		

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0005	05 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A1650 - A2150 (east)
- Design catchment 3a
- New impermeable area 2167m^2
- Design attenuation volume 200m^3
- New impermeable area to drain to proposed swale
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

PROPOSED BIORETENTION ZONE 3.5m WIDE 212m LONG, VOLUME 200m^3 - EXISTING TREES TO BE REPLANTED

A 1750

A 1800

A 1850

A 1900

A 1950

A 2000

A 2050

A 2100

SHEET 5

SHEET 6

SHEET 7

SWORDS ROAD (R132)

DN225

OUTFALL TO EXISTING SURFACE WATER NETWORK TBC

CHAINAGE A1650 - A2050 (west)
- Catchment 3a
- New impermeable area 167m2
- Drainage to existing surface network
- Where kerbline is realigned existing gullies to be removed and replaced with side entry gullies

CLOGHRAN JUNCTION

NEW IMPERMABLE AREA TO DRAIN TO EXISTING DRAINAGE NETWORK

NAUL ROAD

CHAINAGE A2050 - A2150 (west)
- Design catchment 3b
- New impermeable area 697m^2
- Design attenuation volume 25m^3
- New impermeable area to drain to proposed swale
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

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- EXISTING PAVED AREAS TO BECOME GRASSED
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- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
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- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
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Project Ireland 2040 Building Ireland's Future

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Client: NTA — Údarás Náisiúnta Iompair, National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1, 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0006	06 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

OLD STOCKHOLE ROAD

COACHMANS INN

ULSTER BANK

NEW IMPERMABLE AREA TO DRAIN TO EXISTING DRAINAGE NETWORK

CHAINAGE A2250 - A2650 (east)
- Design catchment 4a
- New impermeable area 802m^2
- Design attenuation volume 468m^3
- New impermeable area to drain to new piped drainage network to discharge to attenuation tank
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

CHAINAGE A2250 - A2650 (west)
- Design catchment 4a
- New impermeable area 1328m^2
- Design attenuation volume 468m^3
- New impermeable area to drain to new piped drainage network to discharge to attenuation tank
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

A 2100 A 2150 A 2200 A 2250 A 2300 A 2350 A 2400 A 2450 A 2500

SHEET 6 SHEET 7 SHEET 8

SWORDS ROAD (R132)

CASTLEMOATE HOUSE

Further Education College

Car Park Car Park Car Park Car Park

CLOGHRAN

SW-NEW DN225

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Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDB	JAC		BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0007	07 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

PROPOSED UNDERGROUND ATTENUATION TANK,
VOLUME 468m^3
FLOW CONTROL DEVICE 2L/S. OUTFALL LOCATION
TBC DEPENDENT ON RECEIPT OF SURFACE WATER
DRAINAGE PLANS

CHAINAGE A2250 - A2650 (west)
- Design catchment 4a
- New impermeable area 1328m^2
- Design attenuation volume 468m^3
- New impermeable area to drain to new piped drainage network to discharge to attenuation tank
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

CHAINAGE A2650 - A2900
- Design catchment 4c
- New impermeable area 702m^2
- Design attenuation volume 25m^3
- New impermeable area to drain to new piped drainage network
- Attenuation provided by oversized pipe and new pipe network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

M1

A 2500 A 2550 A 2600 A 2650 A 2700 A 2750 A 2800 A 2850

AIRPORT ROUNDABOUT

SWORDS ROAD (R132)

DUBLIN AIRPORT

SHEET 7 SHEET 8 SHEET 9

DN225 DN500

Car Park Car Park Dublin Airport

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- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
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- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
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NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
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Date	Scale	Drawn	Checked	Approved
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Project Code: BCIDB
Originator Code: JAC
QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS
Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0008	08 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

GREEN LONG TERM CAR PARK

RED LONG TERM CAR PARK

SWORDS ROAD (R132)

KEALY'S PUB

SOUTH CORBALLIS ROAD

A 2900 A 2950 A 3000 A 3050 A 3100 A 3150 A 3200 A 3250

SHEET 8 SHEET 9 SHEET 9 SHEET 10

DN500 DN375

NEW NETWORK TO DISCHARGE TO EXISTING SURFACE WATER NETWORK - LOCATION TBC

NEW OVERSIZED PIPE TO DISCHARGE TO EXISTING SURFACE WATER NETWORK - LOCATION TBC

CHAINAGE A3050 - A3200
- Design catchment 4b
- New impermeable area 259m^2
- Design attenuation volume 13m^3
- New impermeable area to drain to new piped drainage network
- Attenuation provided by oversized pipe and new pipe network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

Car Park

Dublin Airport

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Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0009	09 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

A 3250 A 3300 A 3350 A 3400 A 3450 A 3500 A 3550

A 3200

SHEET 9

SHEET 10

SHEET 11

SWORDS ROAD (R132)

ALSAA

SOUTH CORBALLIS ROAD

Car Park

CHAINAGE A3200 - A3950

- Design catchment 5a
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

LEGEND:

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Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0010	10 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

A 3600 A 3650 A 3700 A 3750 A 3800 A 3850 A 3900 A 3950

SWORDS ROAD (R132)

SHEET 10 SHEET 11 SHEET 11 SHEET 12

Area Under Construction

PART OF CLOGHRAN

CHAINAGE A3200 - A3950

- Design catchment 5a
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

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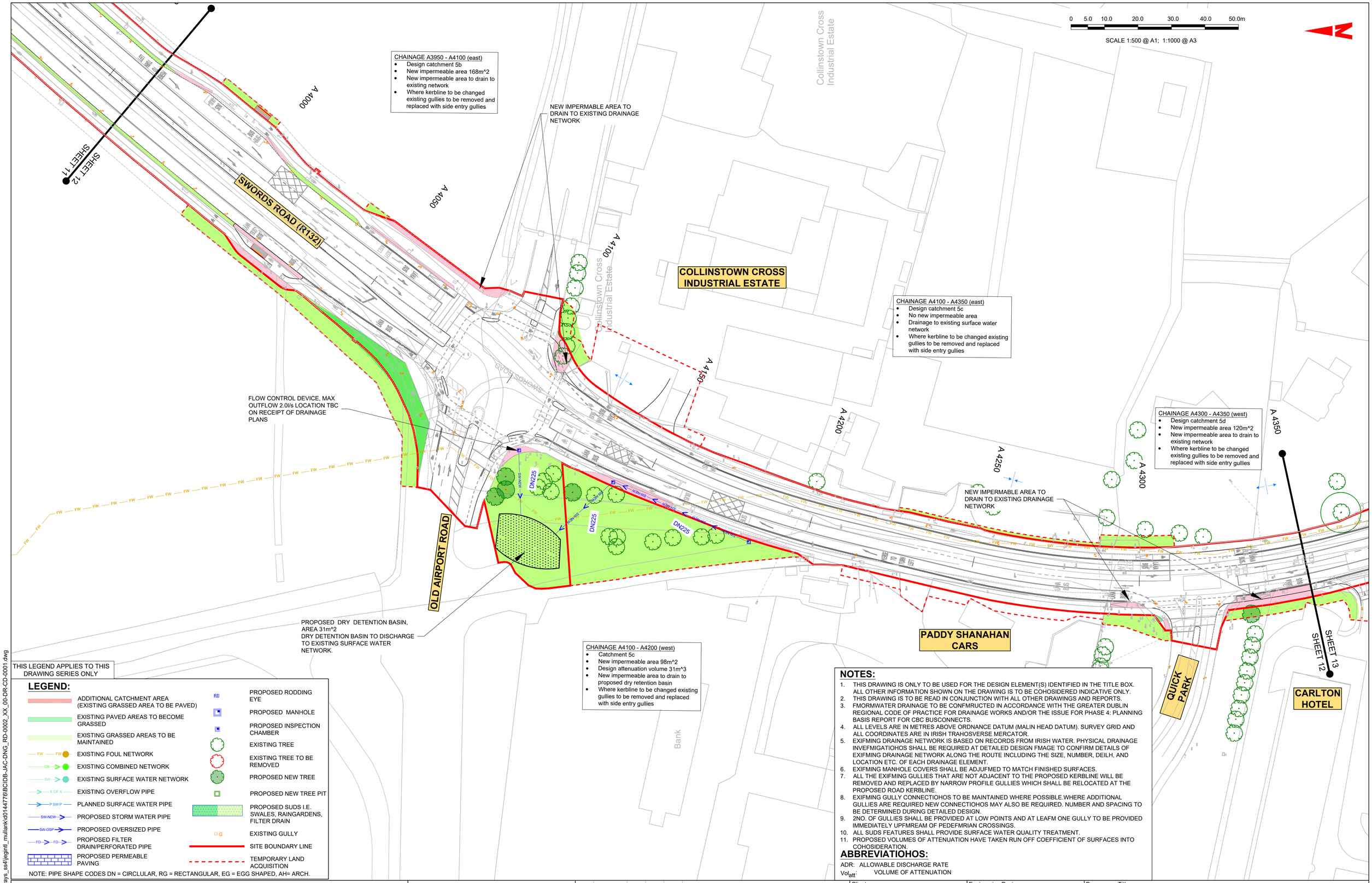
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- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

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10. ALL SUDS FEATURES SHALL PROVIDE SURFACE WATER QUALITY TREATMENT.
11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority
Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0012	12 of 37	A	M01

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LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
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- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

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THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A4400 - A4700
- Design catchment 6
- New impermeable area 479m^2
- Design attenuation volume 9m^3
- New impermeable area to drain to new surface water drainage network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

A 4350 A 4400 A 4450 A 4500 A 4550 A 4600 A 4650 A 4700 A 4750

CATCHMENT 6 OUTFALL

DN225

SWORDS ROAD

SWORDS ROAD (R132)

GLEN DIMPLEX

ANNESLEY WILLIAMS

GREATGAS EXPRESS

SANTRY SERVICE STATION

ROYAL COLLEGE OF SURGEONS SPORTS GROUND

WHITEHALL COLMCILLE GAA CLUB

CARLTON HOTEL

SHEET 12

SHEET 13

SHEET 14

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING SURFACE WATER DRAINAGE NETWORK - DISCHARGE LOCATION TBC (ATTENUATION PROVIDED BY UNDERGROUND TANK TO SOUTH)

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10. ALL SUDS FEATURES SHALL PROVIDE SURFACE WATER QUALITY TREATMENT.
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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

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Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0013	13 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

PROPOSED UNDERGROUND ATTENUATION TANK TO INTERCEPT EXISTING SURFACE WATER NETWORK - VOLUME 9M^3

CATCHMENT 6, CATCHMENT 7a OUTFALL TBC

FLOW CONTROL DEVICE MAX OUTFLOW 2.0l/s

CHAINAGE A4700 - A5050

- Design catchment 7a
- New impermeable area 343m^2
- Design attenuation volume 9m^3
- New impermeable area to drain to new surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING NETWORK

GLEN DIMPLEX

TURNAPIN BRIDGE

SWORDS ROAD (R132)

M50

NEED MORE SPACE

NORTH RING BUSINESS PARK

SANTRY SERVICE STATION

Car Park

A 4700 A 4750 A 4800 A 4850 A 4900 A 4950 A 5000 A 5050 A 5100

SHEET 13 SHEET 14 SHEET 15

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0014	14 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

WOODFORD HOUSE

TURNAPIN LANE

DN225

DN450

A 5050

A 5100

A 5150

A 5200

A 5250

A 5300

A 5350

A 5400

SHEET 14

SHEET 15

SHEET 16

SWORDS ROAD (R132)

AIRWAYS INDUSTRIAL ESTATE

DUBLIN AIRPORT BUSINESS PARK

Car Park

SANTRY BUSINESS PARK CAR PARK - POTENTIAL UNDERGROUND STORAGE LOCATION

CHAINAGE A5000 - A5400
- Design catchment 7b
- New impermeable area 1765m^2
- Design attenuation volume 65m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

CATCHMENT 7b OUTFALL

CATCHMENT 7b OUTFALL

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- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
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Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDB	JAC		BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0015	15 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

AIRWAYS INDUSTRIAL ESTATE

FURRY PARK INDUSTRIAL ESTATE

SANTRY RIVER

SANTRY CLOSE

NORTHWOOD AVENUE

SWORDS ROAD

CONSTELLATION ROAD

Dublin Baile Átha Cliath

Car Park

A5400 A5450 A5500 A5550 A5600 A5650 A5700 A5750

SHEET 15 SHEET 16 SHEET 17

CHAINAGE A5400 - A5750
- Design catchment 8
- New impermeable area 557m^2
- Design attenuation volume 15m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

OVERSIZED PIPE INSTALLED TO EXISTING DRAINAGE NETWORK

CATCHMENT 9 OUTFALL

CATCHMENT 8 OUTFALL

OIL INTERCEPTOR

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6. EXIFMING MANHOLE COVERS SHALL BE ADJUFMED TO MATCH FINISHED SURFACES.
7. ALL THE EXIFMING GULLIES THAT ARE NOT ADJACENT TO THE PROPOSED KERBLINE WILL BE REMOVED AND REPLACED BY NARROW PROFILE GULLIES WHICH SHALL BE RELOCATED AT THE PROPOSED ROAD KERBLINE.
8. EXIFMING GULLY CONNECTIOHOS TO BE MAINTAINED WHERE POSSIBLE.WHERE ADDITIONAL GULLIES ARE REQUIRED NEW CONNECTIOHOS MAY ALSO BE REQUIRED. NUMBER AND SPACING TO BE DETERMINED DURING DETAILED DESIGN.
9. 2NO. OF GULLIES SHALL BE PROVIDED AT LOW POINTS AND AT LEAFM ONE GULLY TO BE PROVIDED IMMEDIATELY UPFMREAM OF PEDEFMRIAN CROSSINGS.
10. ALL SUDS FEATURES SHALL PROVIDE SURFACE WATER QUALITY TREATMENT.
11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDB	JAC		BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0016	16 of 37	A	M01

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SCALE 1:500 @ A1; 1:1000 @ A3

0 5.0 10.0 20.0 30.0 40.0 50.0m

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

SANTRY CLOSE

A 5750 A 5800 A 5850 A 5900 A 5950 A 6000 A 6050 A 6100

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING SURFACE WATER DRAINAGE NETWORK

SWORDS ROAD (R132)

DN225 DN300 DN450

SHEET 16 SHEET 17 SHEET 18

SANTRY DEMESNE (pNHA)

CHAINAGE A5700 - A6100
- Design catchment 9
- New impermeable area 564m^2
- Design attenuation volume 37m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by oversized pipe

MORTON STADIUM

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- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
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- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
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Project Ireland 2040 Building Ireland's Future

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Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

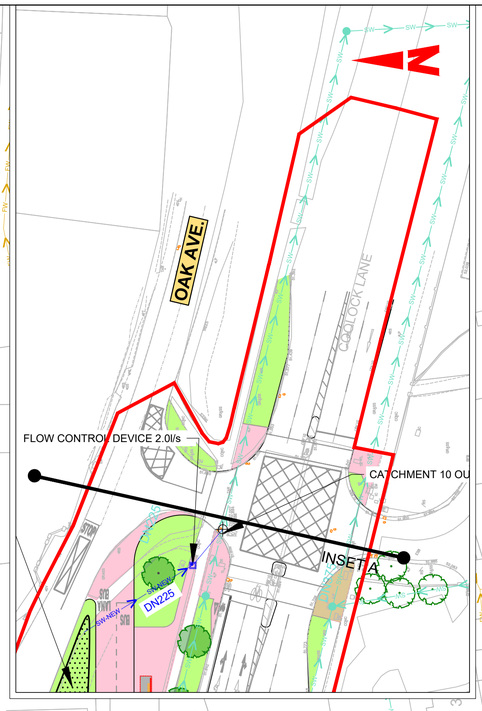
Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0017	17 of 37	A	M01

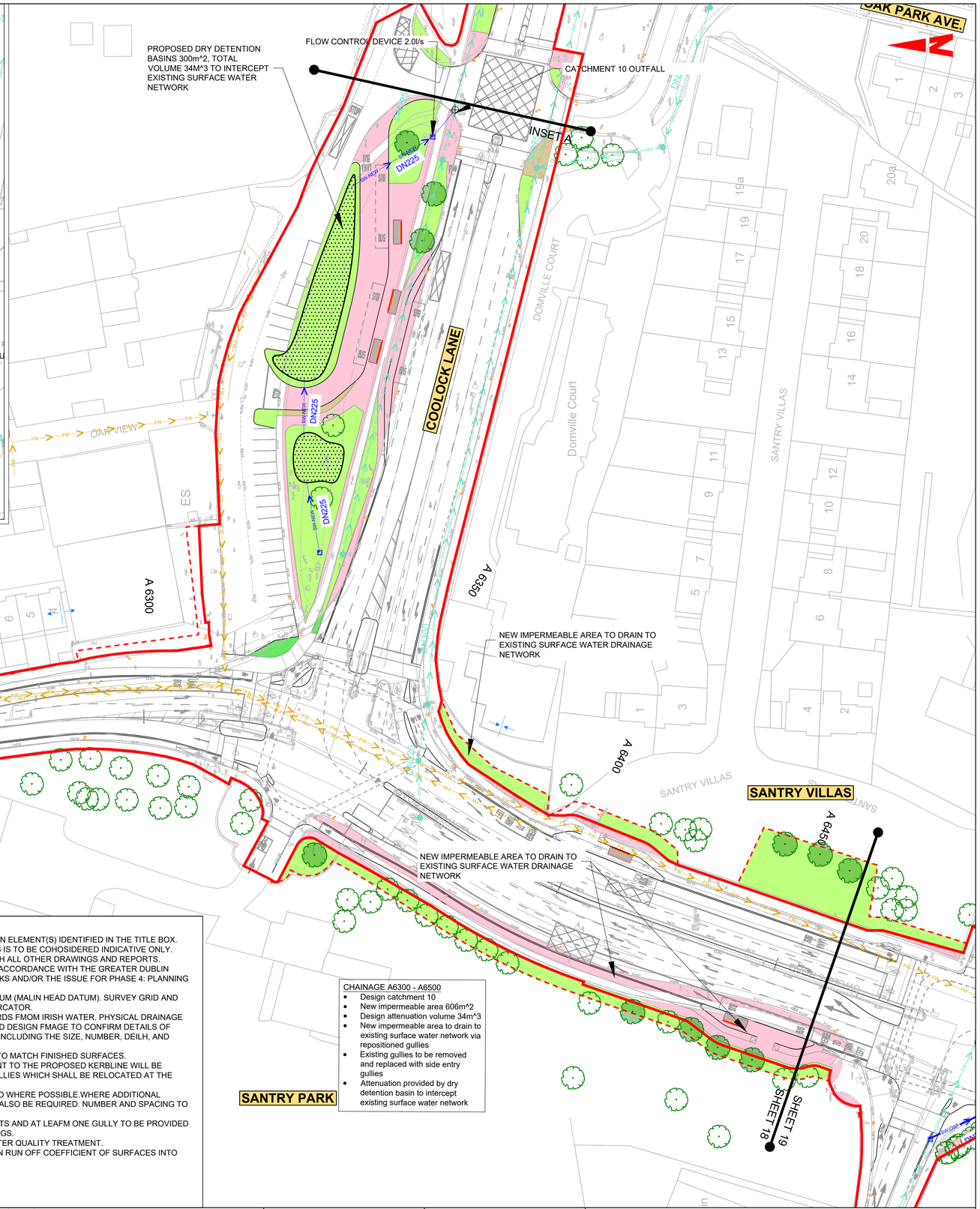
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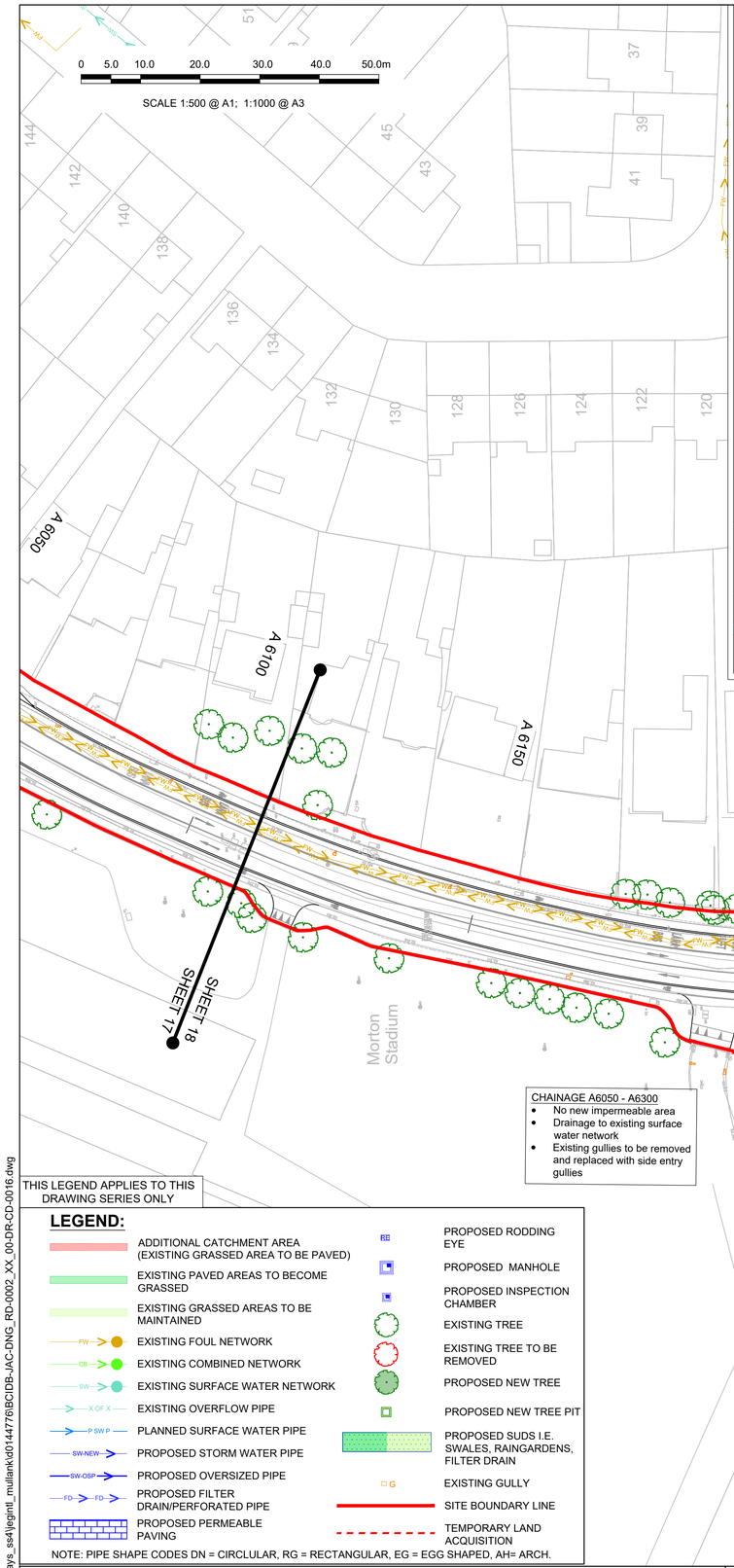
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SCALE 1:500 @ A1; 1:1000 @ A3

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CHAINAGE A6050 - A6300
- No new impermeable area
- Drainage to existing surface water network
- Existing gullies to be removed and replaced with side entry gullies

CHAINAGE A6300 - A6500
- Design catchment 10
- New impermeable area 606m^2
- Design attenuation volume 34m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by dry detention basin to intercept existing surface water network

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

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- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
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- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

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Programme Title: BUSCONNECTS DUBLIN
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Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0018	18 of 37	A	M01

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SCALE 1:500 @ A1; 1:1000 @ A3

SANTRY VILLAS

CHURCH LANE

SCHOOLHOUSE MEWS

SCHOOLHOUSE LANE

SWISS COTTAGE

SWORDS ROAD (R132)

MAGENTA CRESCENT

SANTRY AVE.

ST. JOHNS COURT

AIB

SANTRY HALL INDUSTRIAL ESTATE

A 6450 A 6500 A 6550 A 6600 A 6650 A 6700 A 6800

CATCHMENT 11 OUTFALL

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING SURFACE WATER DRAINAGE NETWORK

SHEET 18

SHEET 19

SHEET 20

DN225 DN300 DN400

CHAINAGE A6500 - A6750

- Design catchment 11
- New impermeable area 510m^2
- Design attenuation volume 18m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by oversized pipe network

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code: BCIDB | Originator Code: JAC | QMS Code:

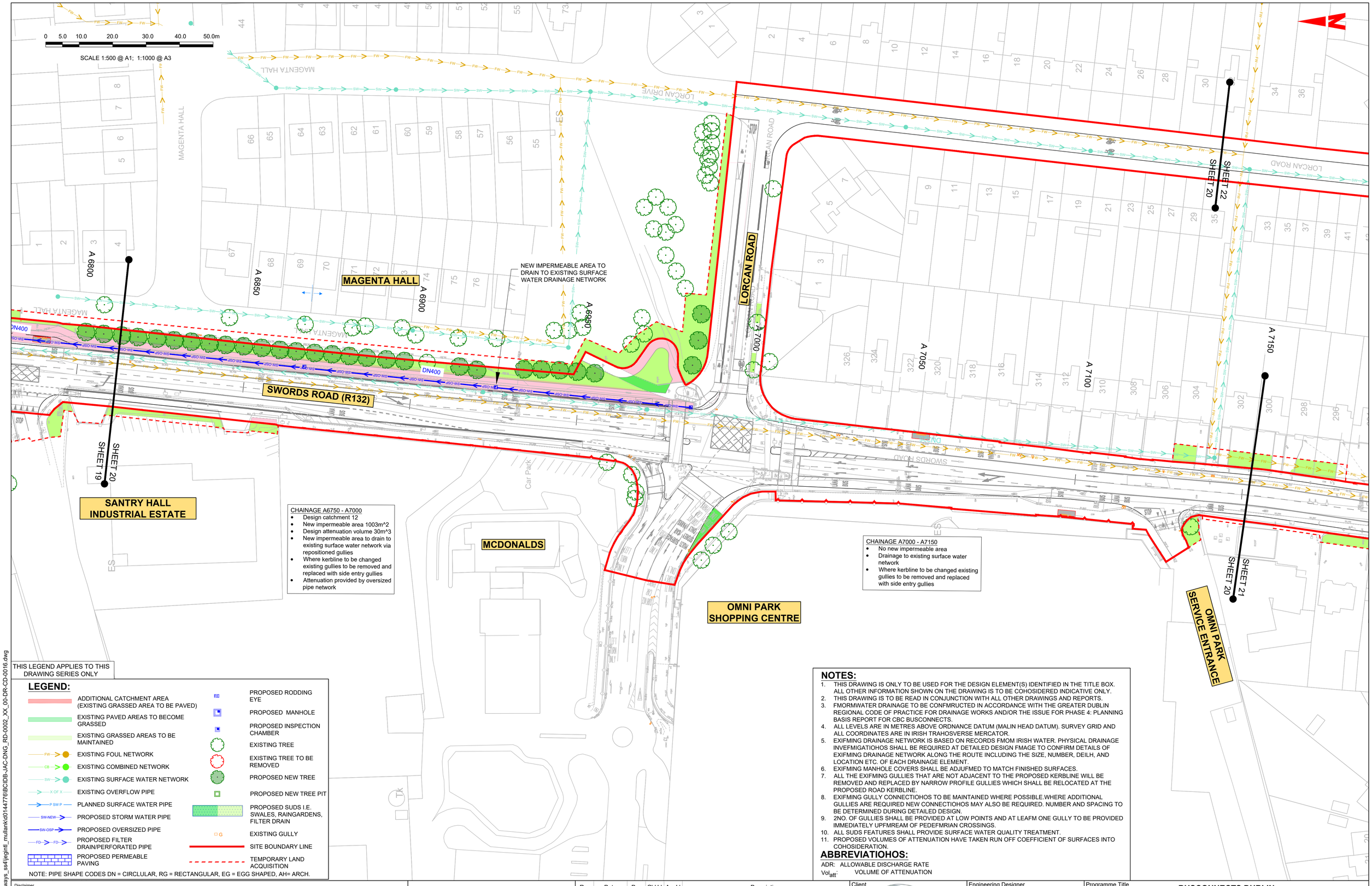
Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0019	19 of 37	A	M01

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ABBREVIATIOHOS:

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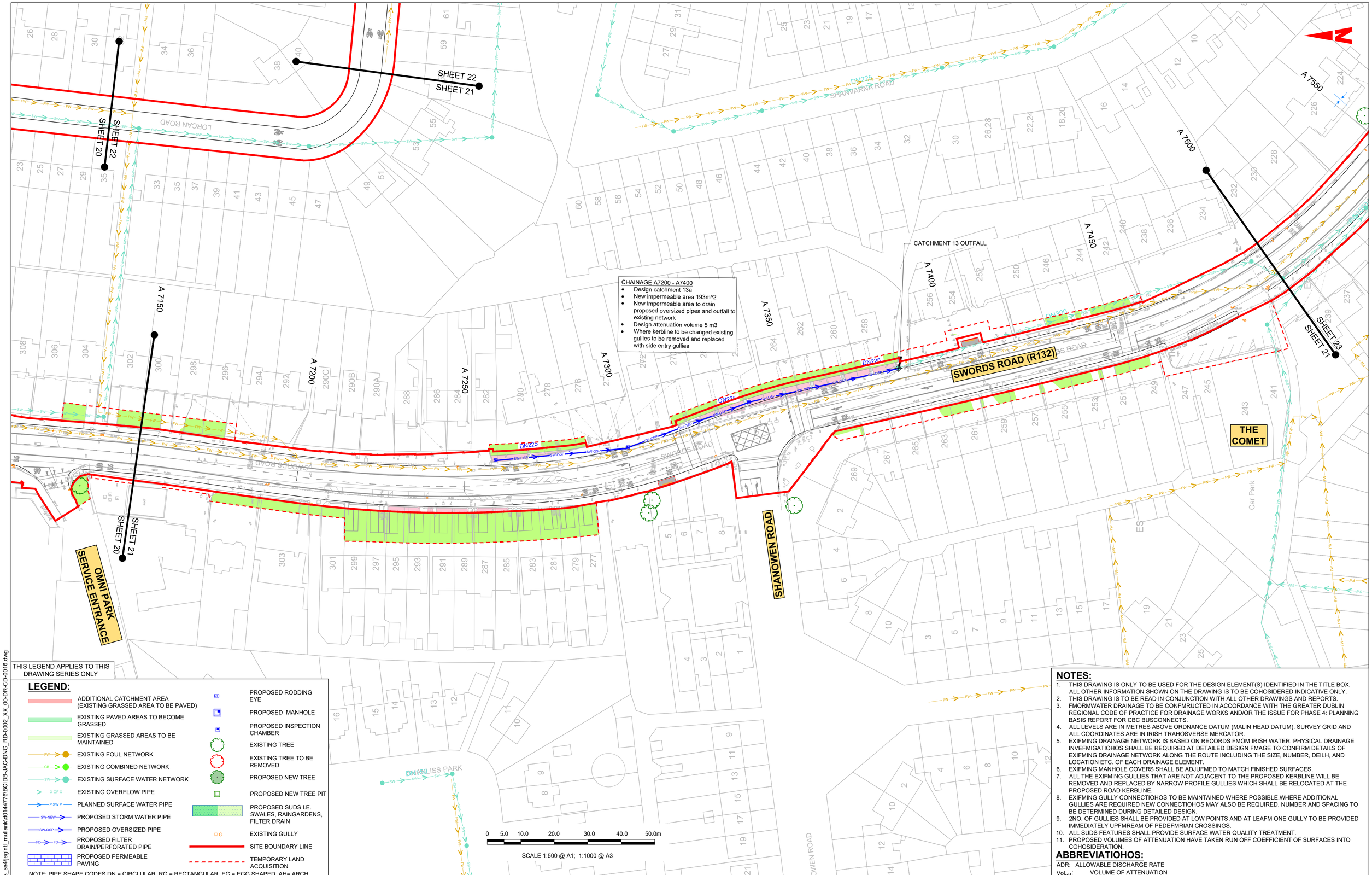
Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0020	20 of 37	A	M01

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ABBREVIATIOHOS:

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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0021	21 of 37	A	M01

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SCALE 1:500 @ A1; 1:1000 @ A3

SANTRY BYPASS

SHEET 22
SHEET 21

SHEET 23
SHEET 22

SHANARVARNA ROAD

SHANARVARNA ROAD

SHANARVARNA ROAD

SWORDS ROAD (R132)

CATCHMENT 13 OUTFALL

CHAINAGE A7200 - A7400
- Design catchment 13a
- New impermeable area 193m^2
- New impermeable area to drain proposed oversized pipes and outfall to existing network
- Design attenuation volume 5 m3
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

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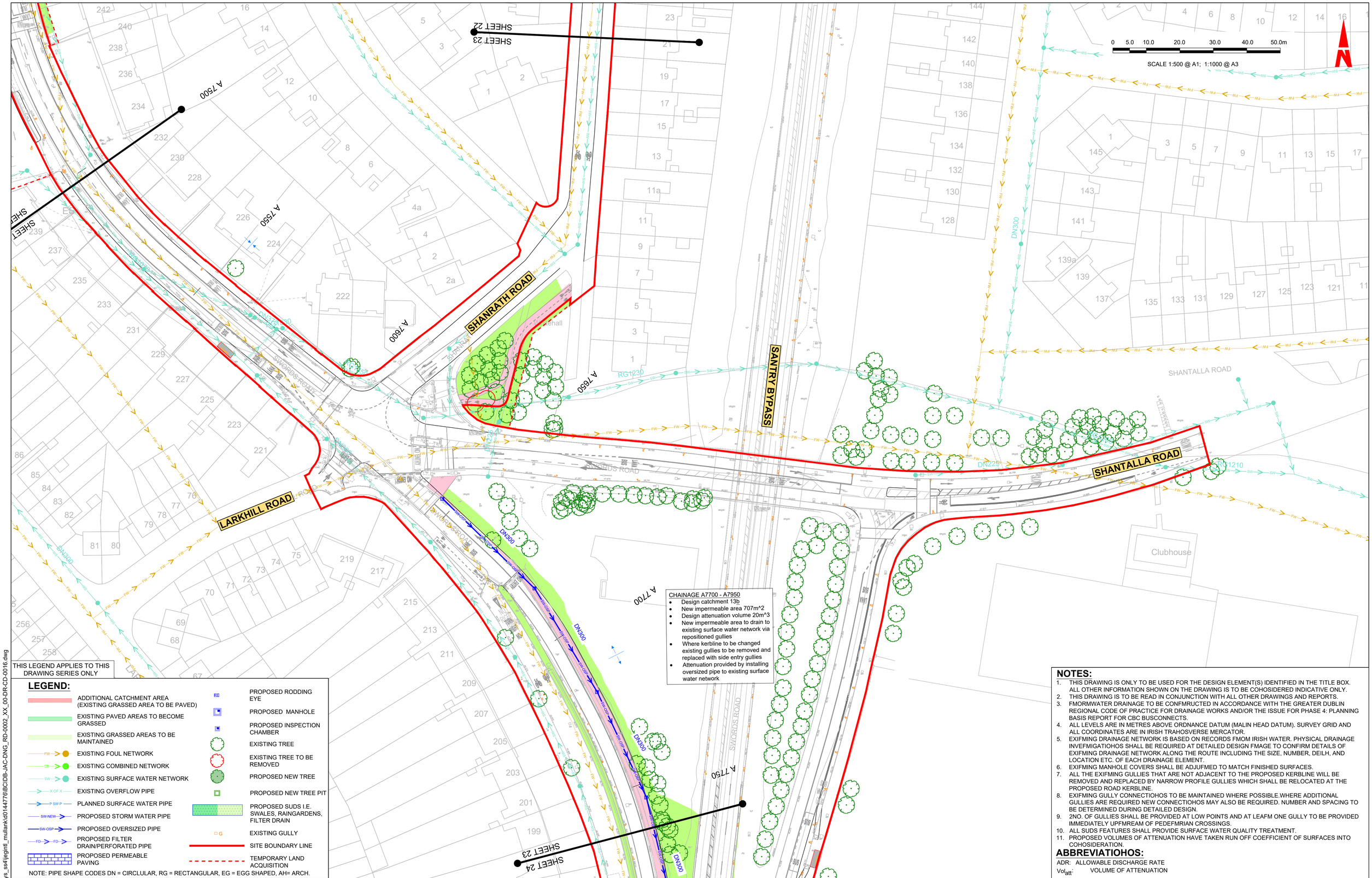
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CHAINAGE A7700 - A7950

- Design catchment 13b
- New impermeable area 707m^2
- Design attenuation volume 20m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority
Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0023	23 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

ELLENFIELD PARK

CHAINAGE A7700 - A7950
- Design catchment 13b
- New impermeable area 707m^2
- Design attenuation volume 20m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

CHAINAGE A7950 - A8050
- Design catchment 14
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

CATCHMENT 13 OUTFALL

CATCHMENT 15a OUTFALL

WHITEHALL HOLYCHILD CHURCH

CAR PARK

SWORDS ROAD

A 7750 A 7800 A 7850 A 7900 A 7950 A 8000 A 8050 A 8100

DN300 DN350 DN600 DN225

SHEET 23 SHEET 24 SHEET 25

Church of The Holy Child

Holy Child Girls National School

Holy Child Boys School National School

Scoil Náisiúnta An Leinbh Íosa

THE THATCH ROAD

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

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- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
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11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Drawing File Name: BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0024

Sheet Number: 24 of 37

Status: A

Rev: M01

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SCALE 1:500 @ A1; 1:1000 @ A3

SHEET 26
SHEET 25

WHITEHALL COLMCILLE GAA CLUB

THE THATCH ROAD

B 200

CHAINAGE A8350 - A8800
- Design catchment 15c
- New impermeable area 428m2
- Design attenuation volume 10m3
- Drainage to oversized pipes and outflowing to the existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

CHAINAGE A8250 - A8350
- Design catchment 15b
- New impermeable area 285m^2
- Design attenuation volume 10m^3
- New impermeable area to drain to new piped surface water network via side entry gullies to drain to new dry detention basin
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by new stormwater network

CHAINAGE A8050 - A8250
- Design catchment 15a
- New impermeable area 1380m^2
- Design attenuation volume 60m^3
- New impermeable area to drain to new piped surface water network via side entry gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

B 250

A 8100 A 8150 A 8200 A 8300 A 8350 A 8400 A 8450

COLLINS AVENUE

FLOW CONTROL DEVICE 2.0l/s

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING SURFACE WATER DRAINAGE NETWORK

DN600 DN225 DN300

B 300

CATCHMENT 15b OUTFALL

CHAINAGE A8250 - A8350
- Design catchment 15b
- New impermeable area 285m^2
- Design attenuation volume 10m^3
- New impermeable area to drain to new piped surface water network via side entry gullies to drain to new dry detention basin
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by new stormwater network

SWORDS ROAD

COLLINS AVENUE WEST

IVERAGH ROAD

SHEET 24 SHEET 25 SHEET 27 SHEET 25

CATCHMENT 15a OUTFALL

B 350 B 383

COLLINS AVE.

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
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Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0025	25 of 37	A	M01

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THIS DRAWING CONTAINS NO DESIGN CONTENT

SCALE 1:500 @ A1; 1:1000 @ A3

0 5.0 10.0 20.0 30.0 40.0 50.0m

THE THATCH ROAD

YELLOW ROAD

COLLINS AVENUE

BEAUMONT ROAD

GRACE PARK ROAD

HIGH PARK

THE COURT

GOOSE GREEN COURT

The Belfry Student Apts.

B 150 B 100 B 50 B 0

SHEET 25 SHEET 26

CHAINAGE A8350 - A11764
- No new impermeable area
- Drainage to existing surface water network
- Existing gullies to be removed and replaced with side entry gullies

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- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
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- PROPOSED NEW TREE PIT
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- EXISTING GULLY
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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0026	26 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

- CHAINAGE A8350 - A8800
- Design catchment 15c
- New impermeable area 428m2
- Design attenuation volume 10 m3
- Drainage to oversized pipes and outflowing to the existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

- CHAINAGE A8350 - A8800
- Design catchment 15c
- New impermeable area 428m2
- Design attenuation volume 10m3
- Drainage to oversized pipes and outflowing to the existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

A 8450 A 8500 A 8550 A 8600 A 8650 A 8700 A 8750 A 8800

HIGHFIELD HOSPITAL

BONNINGTON HOTEL

PLUNKET COLLEGE

DN225

CATCHMENT 15c OUTFALL

CATCHMENT 15c OUTFALL

SHEET 25 SHEET 27

SHEET 27 SHEET 28

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6. EXIFMING MANHOLE COVERS SHALL BE ADJUFMED TO MATCH FINISHED SURFACES.
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10. ALL SUDS FEATURES SHALL PROVIDE SURFACE WATER QUALITY TREATMENT.
11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDB	JAC		BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0027	27 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

BONNINGTON HOTEL

SEVEN OAKS

SWORDS ROAD

GRIFFITH DOWNS

GRIFFITH AVENUE

WHITEHALL GARDA STATION

A 8800

A 8850

A 8900

A 8950

A 9000

A 9050

A 9100

A 9150

SHEET 27

SHEET 28

SHEET 29

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING SURFACE WATER DRAINAGE NETWORK

NEW IMPERMEABLE AREA TO DRAIN TO EXISTING SURFACE WATER DRAINAGE NETWORK

CHAINAGE A8800 - A9500

- Design catchment 16a
- New impermeable area 200m^2
- Design attenuation volume 11m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

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- EXISTING PAVED AREAS TO BECOME GRASSED
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- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

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ABBREVIATIOHOS:

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Vol_{att}: VOLUME OF ATTENUATION

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Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0028	28 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A8800 - A9500
- Design catchment 16a
- New impermeable area 200m^2
- Design attenuation volume 11m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

ABLE AREA TO DRAIN TO
FACE WATER DRAINAGE

CATCHMENT 16a OUTFALL

UPPER DRUMCONDRA ROAD

WELLPARK AVENUE

HOME FARM ROAD

SKYLON HOTEL

SHEET 28

SHEET 29

SHEET 30

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Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

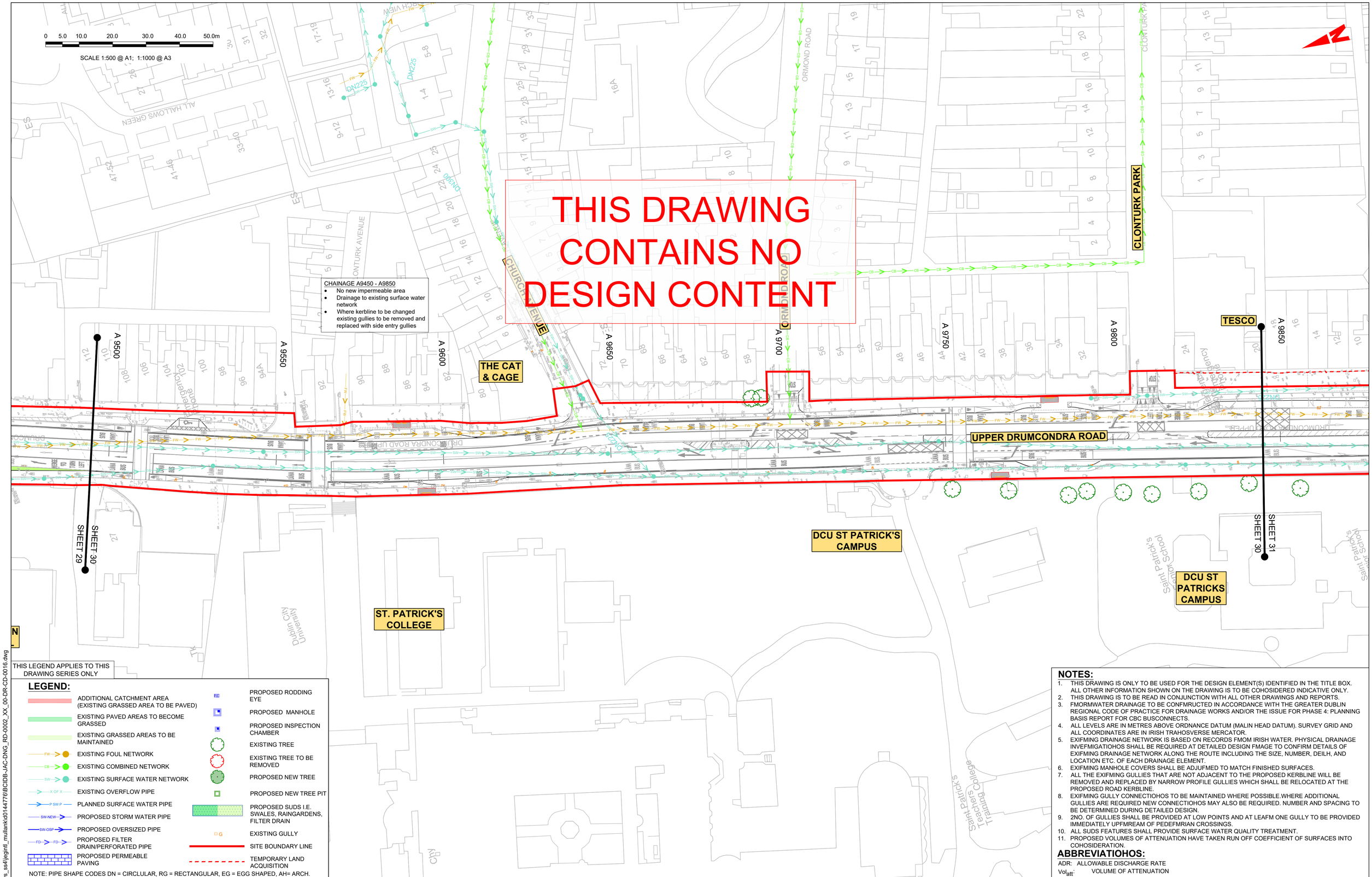
Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG_RD-0002_XX_00 -DR-CD-0029	29 of 37	A	M01

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- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
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- PROPOSED PERMEABLE PAVING
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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

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CHAINAGE A9500 - A10150
- Design catchment 16b
- New impermeable area 644m^2
- Design attenuation volume 20m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network and tree pits

CHAINAGE A10150 - A10500
- Design catchment 17a
- New impermeable area 213m^2
- Design attenuation volume 3m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

TOLKA RIVER
RICHMOND ROAD
CIAN PARK
DRUMCONDRA BRIDGE
DRUMCONDRA ROAD LOWER
TESCO
CATCHMENT 16b OUTFALL
CATCHMENT 16c OUTFALL
NEW BRIDGE RUNOFF TO BE COLLECTED BY SLOT DRAIN OR SIMILAR - DRAINAGE TO CONNECT TO EXISTING SURFACE WATER NETWORK
MILLMOUNT HOUSE
MILLMOUNT AVENUE
MILLMOUNT TERRACE
MILLMOUNT PLACE
DCU ST PATRICKS CAMPUS
SHEET 30
SHEET 31
SHEET 32
FAGAN'S
BOTANIC AVE.
BOTANIC AVENUE
HOLLYBANK ROAD
CARLINGFORD ROAD
GLENARM AVENUE
A 9850
A 9900
A 9950
A 10000
A 10050
A 10100
A 10150
A 10200

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- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUED FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority
Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1, 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG-RD-0002_XX_00-DR-CD-0031	31 of 37	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A10150 - A10500
- Design catchment 17a
- New impermeable area 213m^2
- Design attenuation volume 3m^3
- New impermeable area to drain to existing surface water network via repositioned gullies
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies
- Attenuation provided by installing oversized pipe to existing surface water network

CHAINAGE A10150 - A10500
- Design catchment 17a
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A 10200 A 10250 A 10300 A 10350 A 10400 A 10450 A 10500 A 10550

DRUMCONDRA ROAD LOWER

CARLINGFORD ROAD

DARGLE ROAD

CLONLIFFE ROAD

ST. ALPHONSUS AVE

SAINT JOSEPH'S AVENUE

CATCHMENT 17a OUTFALL

SHEET 31

SHEET 32

SHEET 33

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
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- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUED FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG-RD-0002_XX_00-DR-CD-0032	32 of 37	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

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SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A10500 - A10850
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

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- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
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- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
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- PROPOSED INSPECTION CHAMBER
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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUED FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority
Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG-RD-0002_XX_00-DR-CD-0033	33 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

BELVIDERE ROAD

NORTH CIRCULAR ROAD

SHERRARD STREET LOWER

GARDINER STREET UPPER

CHAINAGE A10850 - A11764
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

THIS DRAWING CONTAINS NO DESIGN CONTENT

A 10900 A 10950 A 11000 A 11050 A 11100 A 11150 A 11200 A 11250

DORSET STREET LOWER

DORSET STREET LOWER

INNISFALLIN PARADE

NORTH CIRCULAR ROAD

SAINT BENEDICT'S GARDENS

SYNOTT PLACE

SYNOTT ROW

DE VALERA PLACE

ECCLES PLACE

SHEET 33

SHEET 34

SHEET 34

SHEET 35

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Client: NTA — Údarás Náisiúnta Iompair, National Transport Authority

Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1, 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDB	JAC		BCIDB-JAC-DNG-RD-0002_XX_00-DR-CD-0034	34 of 37	A	M01

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0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

CHAINAGE A10850 - A11764
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

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A 11200 A 11250 A 11300 A 11350 A 11400 A 11450 A 11500 A 11550 A 11600

C 0 C 50 C 100

FREDERICK STREET NORTH

DORSET STREET LOWER

DORSET STREET UPPER

ECCLES PLACE

ECCLES STREET

MATER HOSPITAL

SAINT JOSEPH'S PARADE

SAINT JOSEPH'S PLACE

BLESSINGTON COURT

SHEET 34 SHEET 35 SHEET 36 SHEET 37 SHEET 39

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- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- PLANNED SURFACE WATER PIPE
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
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11. PROPOSED VOLUMES OF ATTENUATION HAVE TAKEN RUN OFF COEFFICIENT OF SURFACES INTO COHOSIDERATION.

ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040 Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	06/04/2023	FM	IL	HOS	ISSUED FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code
BCIDB	JAC	

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS

Drawing File Name	Sheet Number	Status	Rev
BCIDB-JAC-DNG-RD -0002_XX_00 -DR-CD-0035	35 of 37	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

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SCALE 1:500 @ A1; 1:1000 @ A3

0 5.0 10.0 20.0 30.0 40.0 50.0m

CHAINAGE C000 - C450
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

CHAINAGE C000 - C450
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

CHAINAGE D000 - D374
- No new impermeable area
- Drainage to existing surface water network
- Where kerbline to be changed existing gullies to be removed and replaced with side entry gullies

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ABBREVIATIOHOS:

ADR: ALLOWABLE DISCHARGE RATE

Vol_{att}: VOLUME OF ATTENUATION

THIS LEGEND APPLIES TO THIS DRAWING SERIES ONLY

LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED NETWORK
- EXISTING SURFACE WATER NETWORK
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THIS DRAWING CONTAINS NO DESIGN CONTENT

FREDERICK STREET NORTH · PARNELL SQUARE EAST · CAVENDISH ROW · PARNELL SQUARE NORTH · ROTUNDA HOSPITAL · GARDEN OF REMEMBRANCE · PARNELL SQUARE · PARNELL STREET · PARNELL SQUARE WEST · GRANBY ROW · FREDERICK LANE NORTH · BERESFORD PLACE · MOORE LANE

SHEET 35 · SHEET 36 · SHEET 37

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M01	06/04/2023	FM	IL	HOS	ISSUED FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: Jacobs

Programme Title: BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

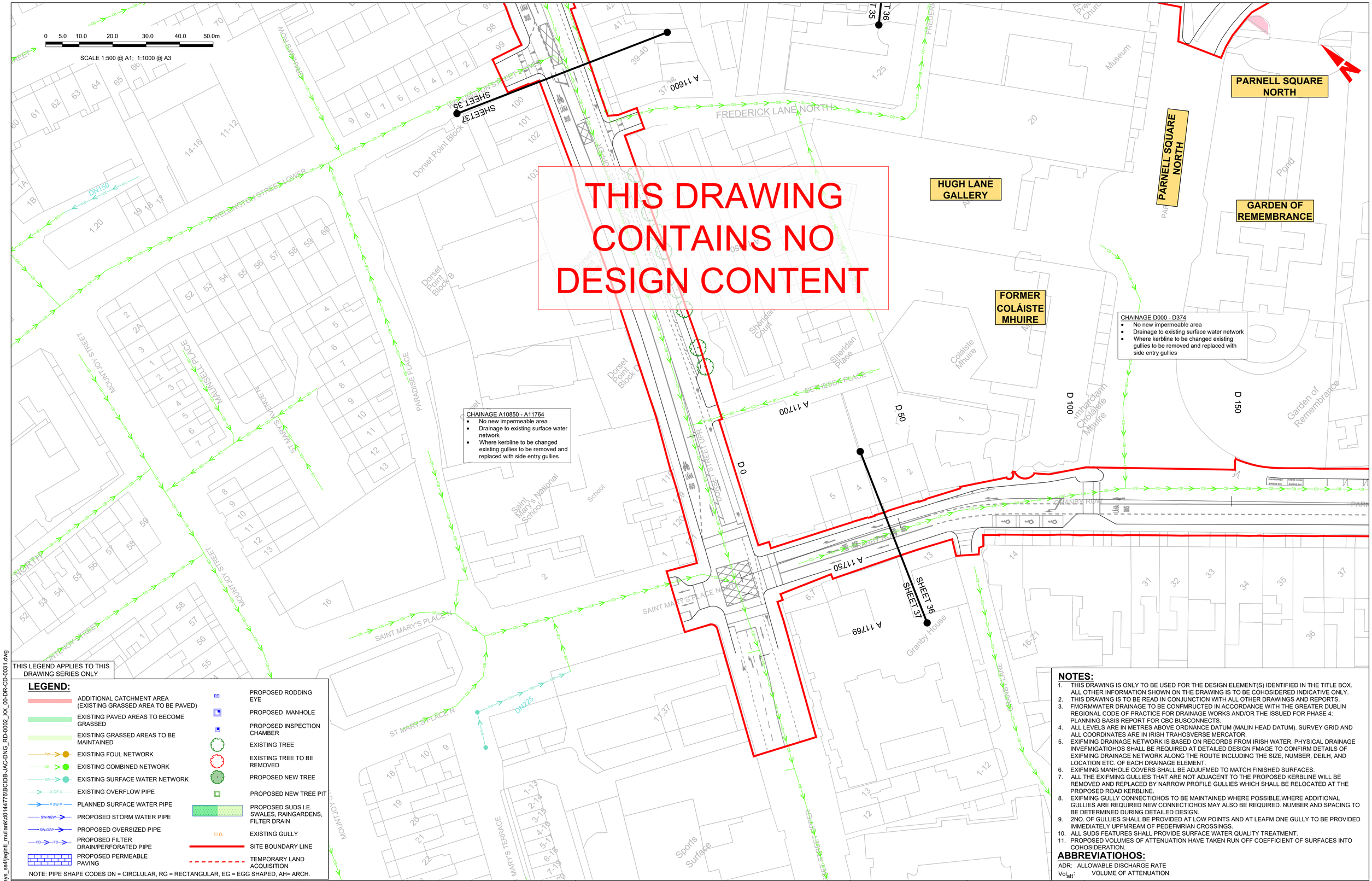
Drawing Title: SWORDS TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS

Date	Scale	Drawn	Checked	Approved
06/04/2023	1:500 @ A1 1:1000 @ A3	FM	IL	HOS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDB	JAC		BCIDB-JAC-DNG-RD-0002_XX_00-DR-CD-0036	36 of 37	A	M01

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