Network Rail

170248 Headbolt Lane New Station GRIP 4

Environmental Statement
Volume II: Figures

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 276736

Ove Arup & Partners Ltd
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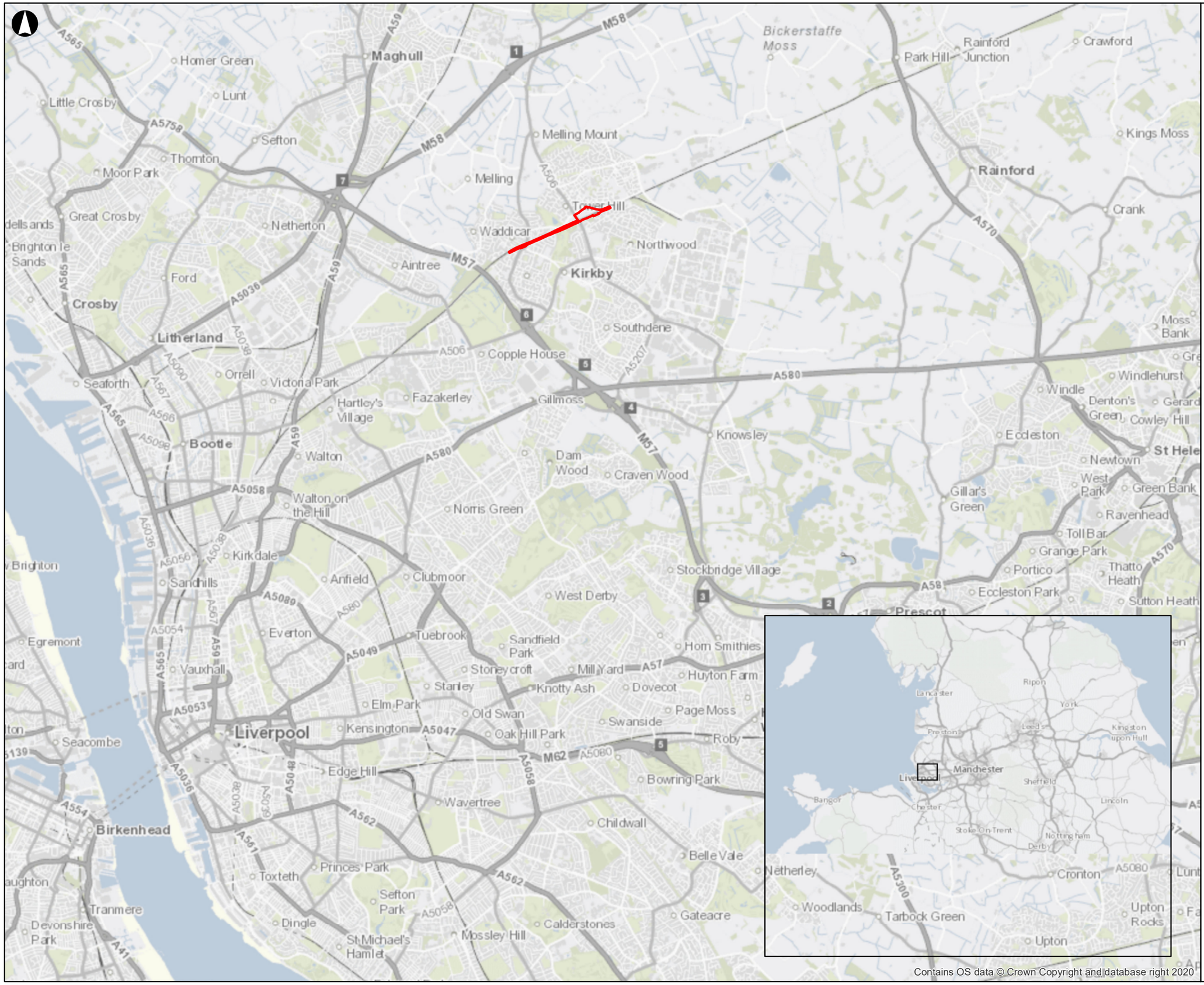
Figure 2.1

Scheme Location

A3



Legend

Proposed Red Line Boundary

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Issue	Date	By	Chkd	Appd
P1	16-08-21	JK	EB	EC

Metres

0 750 1,500 3,000

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170248 Headbolt Lane New Station GRIP 4

Figure 1.1
Scheme Location

Scale at A3

1:62,500

Job No	Drawing Status
276736-00	Issue

Drawing No	Issue
276736/1.1	P1

MXD Location

© Arup

Figure 2.1

Proposed Scheme Boundary

A3

Legend

Proposed Red Line Boundary

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres: 0, 80, 160, 320

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Figure 2.1: Proposed Scheme Boundary

Scale at A3 **1:6,000**

Job No **276736-00**

Drawing Status **Issue**

Drawing No **276736/2.1**

Issue **P3**

MXD Location

© Arup

Figure 2.2

Proposed Scheme Boundary on Aerial Photograph

A3

Legend

Proposed Red Line Boundary

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres
0 80 160 320

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Figure 2.2: Proposed Scheme Boundary on Aerial Photograph

Scale at A3 **1:6,000**

Job No **276736-00**

Drawing Status **Issue**

Drawing No **276736/2.2**

Issue **P3**

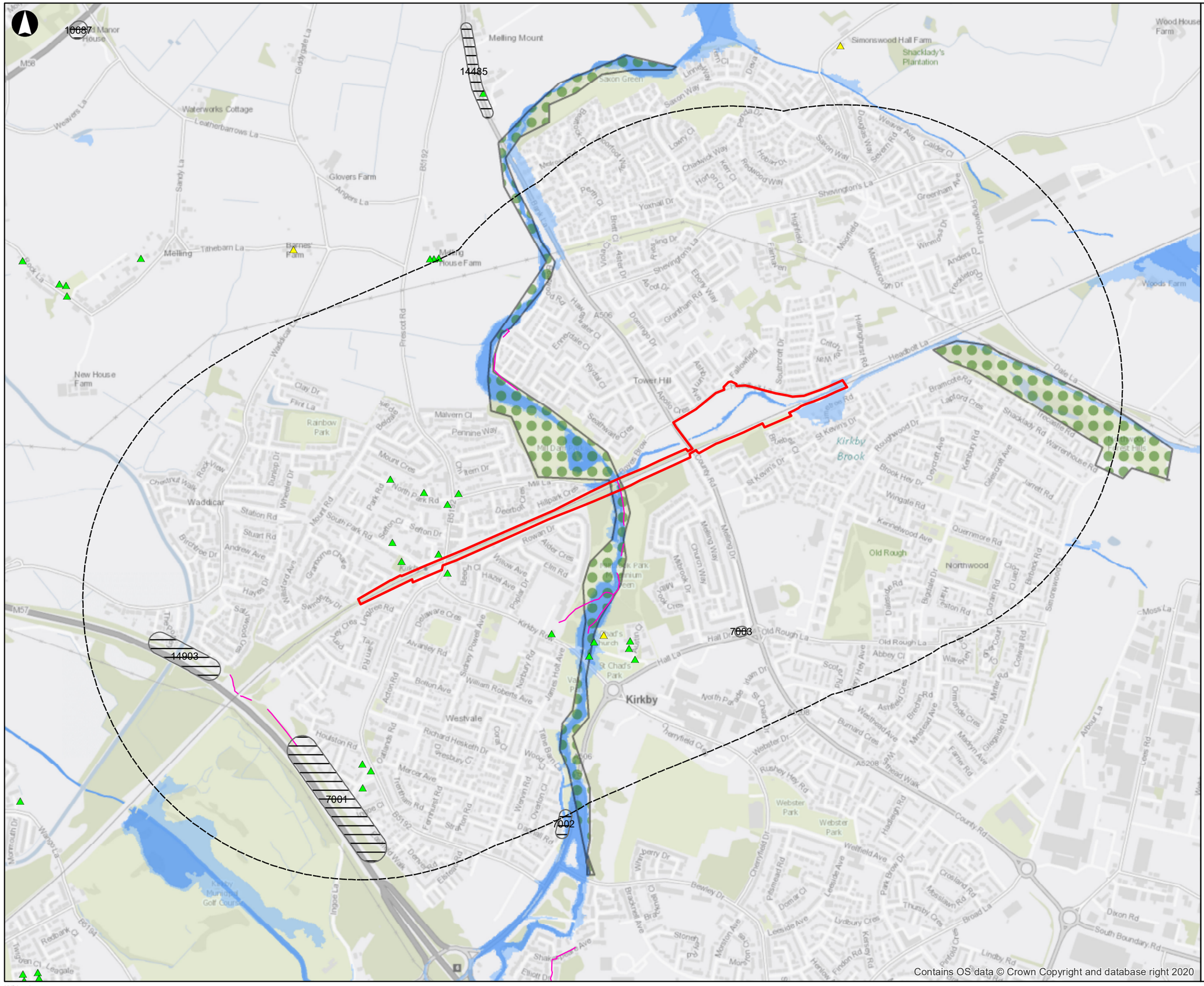
MXD Location

© Arup

Figure 2.3

Environmental Constraints Plan

A3



Legend

- Proposed Red Line Boundary
- 1km study area
- Noise Action Planning Important Area
- Public Right of Way
- Grade I Listed Building
- Grade II* Listed Building
- Grade II Listed Building
- Local Wildlife Site
- Flood Zone 2
- Flood Zone 3

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres: 0, 175, 350, 700

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Figure 2.3: Environmental Constraints Plan

Scale at A3 **1:13,000**

Job No	Drawing Status
276736-00	Issue

Drawing No	Issue
276736/2.3	P3

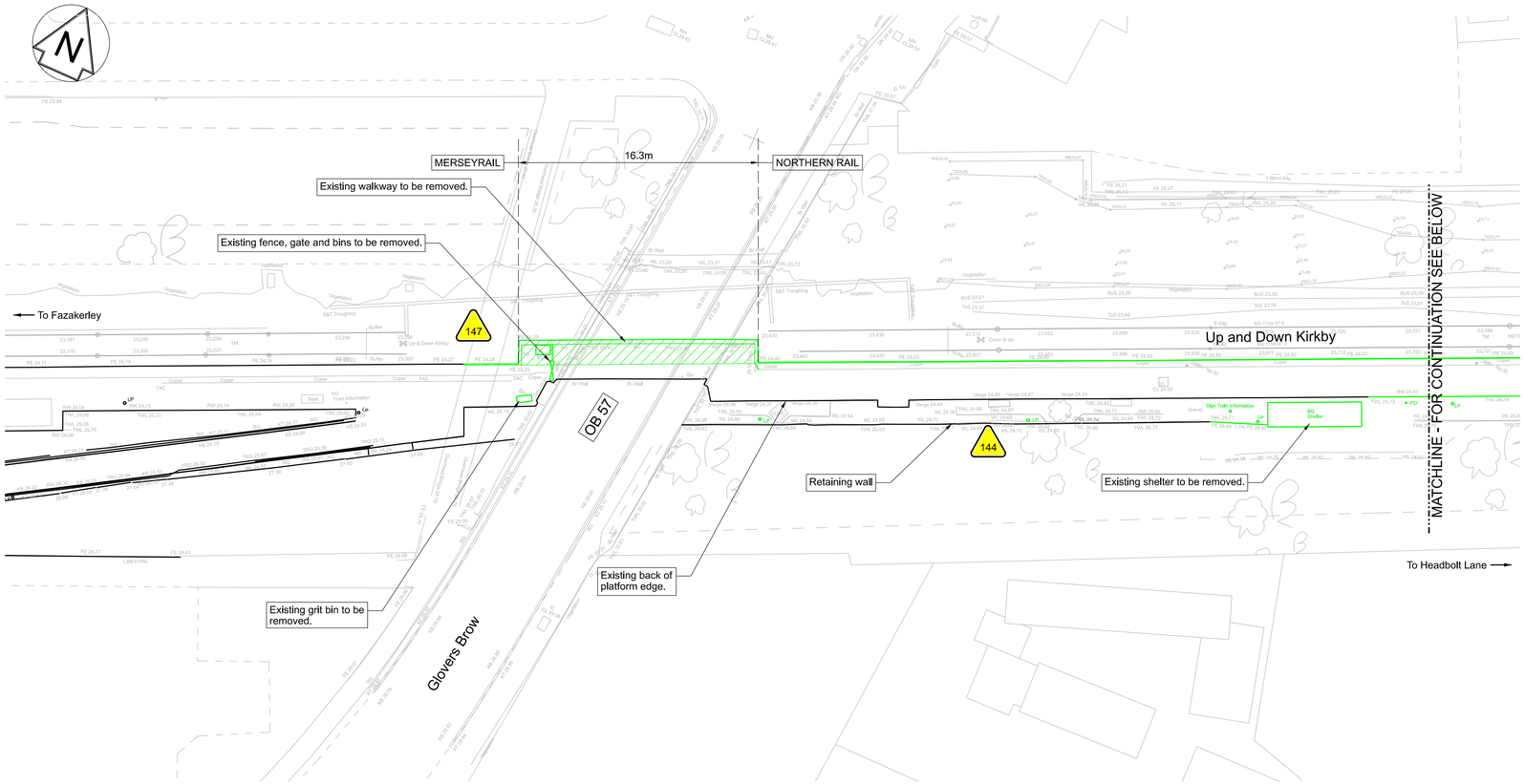
MXD Location

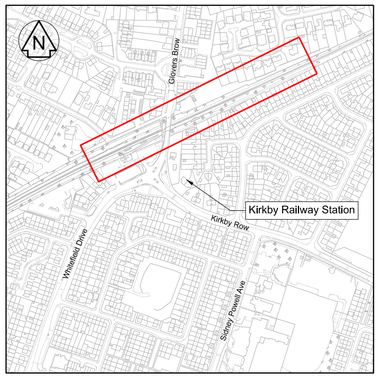
© Arup

Figure 2.4a & 2.4b

Kirkby Station Modifications

Drawing Number
170248-15854-ZZ-ZZZ-DRG-C-CV-023100 P02.1





Location Plan
Scale 1:5000

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORK:

CONSTRUCTION
144 - Site clearance and excavation works adjacent to existing existing masonry retaining wall.
147 - Potential for public to come in close proximity to construction works.
OPERATIONS
Not applicable to existing site plan.

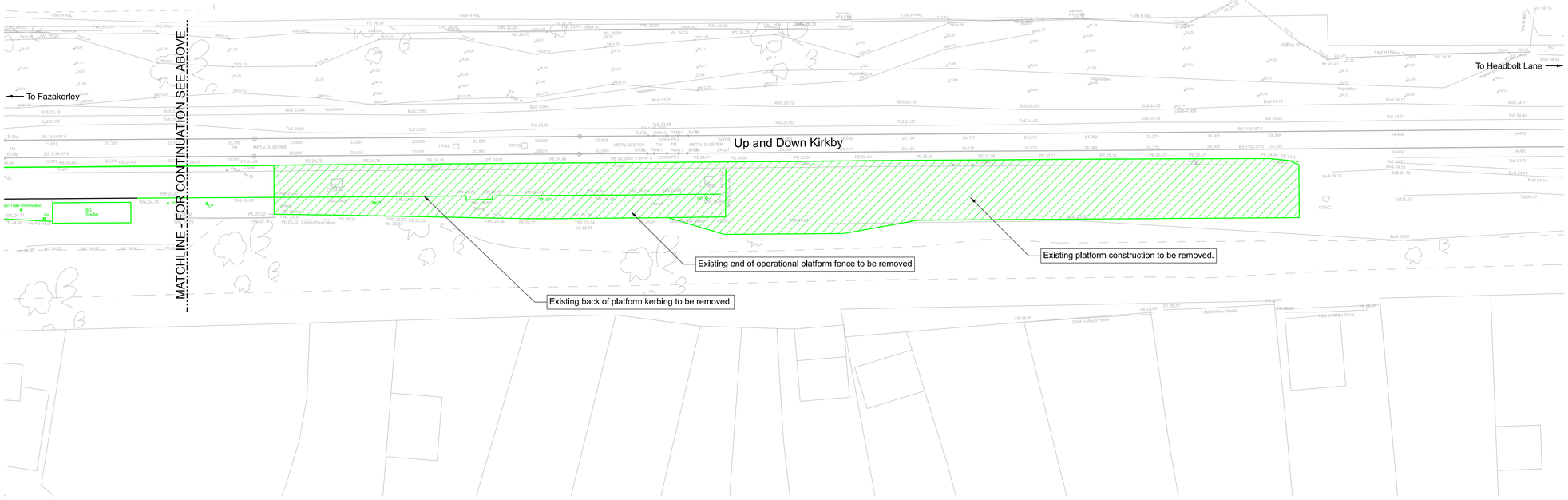
THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING.

Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in millimetres unless shown otherwise.
3. Items of street furniture on the existing Northern Rail platform are to be removed as shown.
4. For details of electrical and telecommunications infrastructure to be removed from the existing platforms refer to drawings 170248-ARU-DRG-EPT-00011 to 170248-ARU-DRG-EPT-00013.
5. Safety, Health and Environmental information to be read in conjunction with the project Hazard Assessment document number 170248-ARU-RCD-EMG-000001.

RAILWAY SYSTEMS COLOUR CONVENTION KEY:
- EXISTING OR UNCHANGED
- MODIFIED OR TO BE MOVED
- REDUNDANT OR TO BE REMOVED
- NEW, PROPOSED OR ADDITIONAL
- FOR TEMPORARY WORKS
- OS/SURVEY DATA

Platform Plan
Scale 1:200



0 5 10 15 20 25m
SCALE 1:250

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Network Rail

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Figure 2.4a: Kirkby Station Modifications

Scale at A3
As Shown

Job No
276736-00

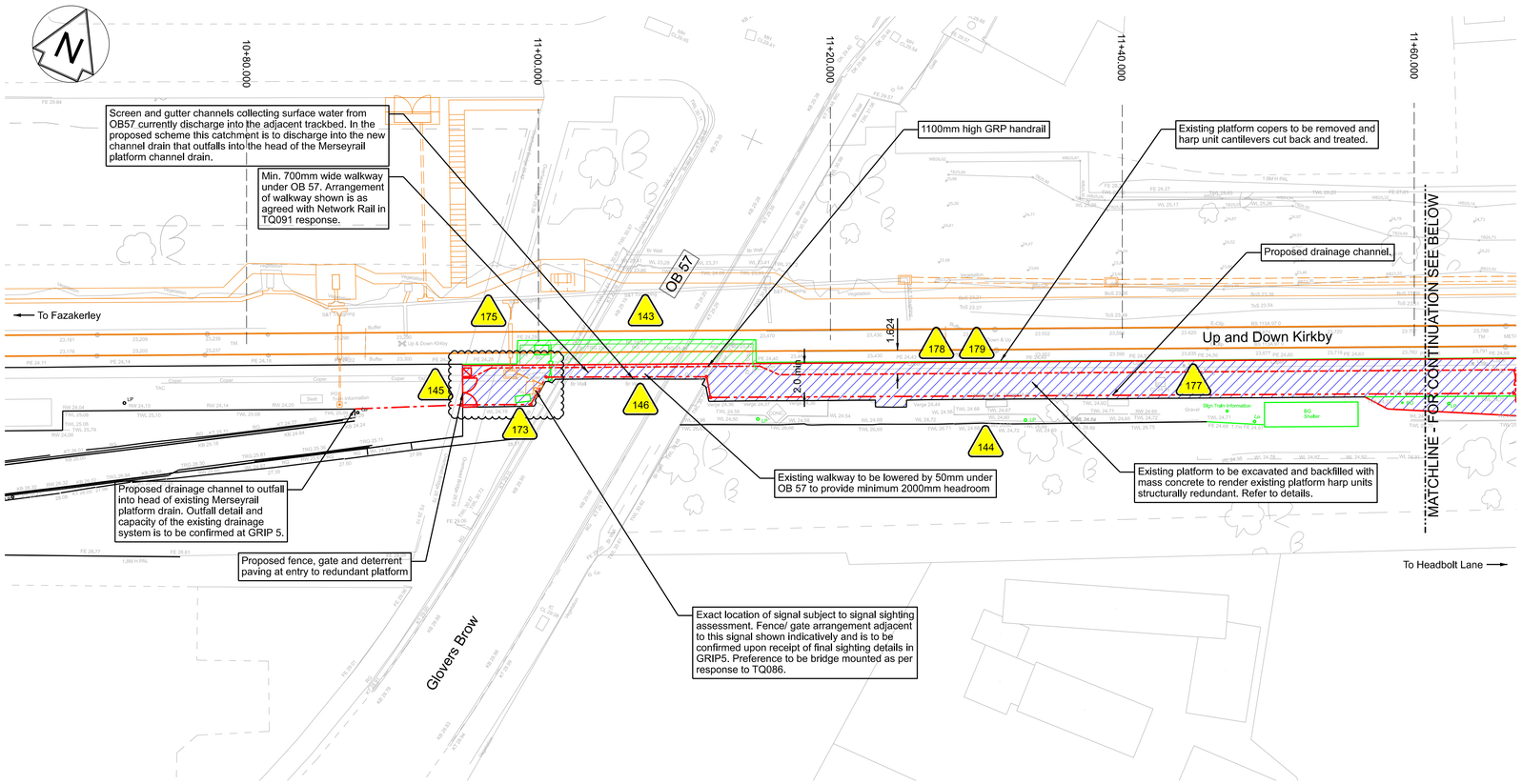
Drawing Status
Issue

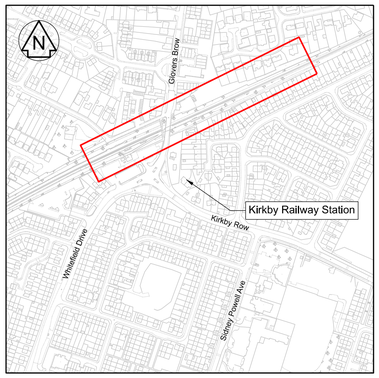
Drawing No
276736/2.4a

Issue
P1

Sheet Size A1 594 x 841

Drawing Number
170248-15854-ZZ-ZZZ-DRG-C-CV-023101 P02.1





Location Plan
Scale 1:5000

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORK:

CONSTRUCTION
144 - Site clearance and excavation works adjacent to existing masonry retaining wall.
173 - Failure of existing foundations during construction
174 - Failure of the existing slope
176 - Falling during construction on cutting
177 - Failure of the harp units
178 - Working in close proximity to the third rail
179 - Unidentified service strike
180 - Distrubance to adjacent properties.

OPERATIONS
143 - Potential for maintenance staff to be within kinematic envelope of trains.
145 - Potential for public to enter restricted area leading to harm from equipment, falls or train strike.
146 - Potential for head strike or dislodgement of equipment being carried under OB 57.
175 - Use of maintenance walkway under OB57 when trains are passing.

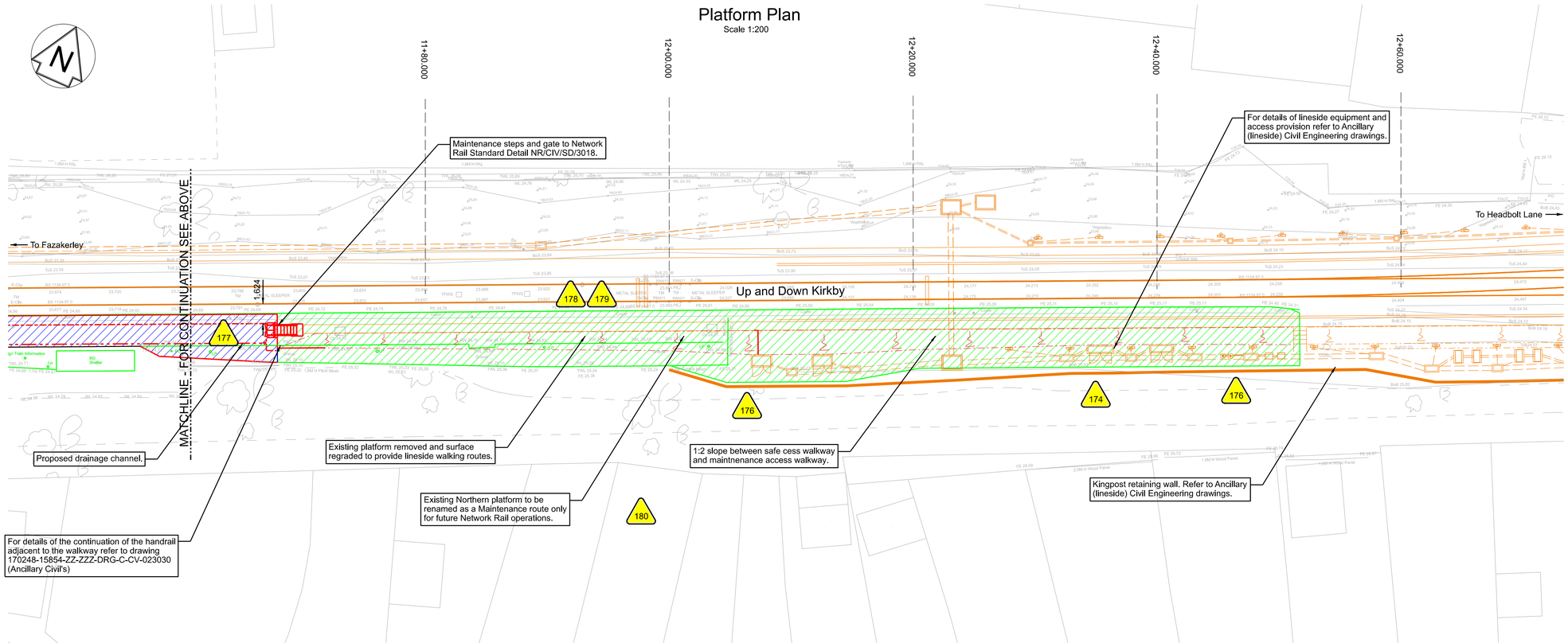
THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING.

Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in metres unless stated otherwise.
3. For sections 10+20.000 to 11+00.000 refer to drawing 170248-15854ZZ-ZZZ-DRG-C-CV-023102.
4. For sections 11+20.000 to 12+00.000 refer to drawing 170248-15854-ZZ-ZZZ-DRG-C-CV-023103.
5. For sections 12+20.000 to 12+80.000 refer to drawing 170248-15854-ZZ-ZZZ-DRG-C-CV-023104.
6. For details of electrical and telecommunications infrastructure to be removed from the existing platforms refer to drawings 170248-ARU-DRG-EPT-00011 to 170248-ARU-DRG-EPT-00013.
7. Safety, Health and Environmental information to be read in conjunction with the project Hazard Assessment document number 170248-ARU-RCD-EMG-000001.
8. Further assessment of the capacity of the existing Merseyrail back of platform drainage channel is to be undertaken at GRIP5 to confirm strategy for providing positive drainage for the decommisioned platform as shown on this drawing.
9. Temporary works associated with the infilling of the harp units will be required to facilitate construction. Construction sequence to be approved by temporary works designer during subsequent design stage.

RAILWAY SYSTEMS COLOUR CONVENTION KEY:
- EXISTING OR UNCHANGED
- MODIFIED OR TO BE MOVED
- REDUNDANT OR TO BE REMOVED
- NEW, PROPOSED OR ADDITIONAL
- FOR TEMPORARY WORKS
- OS/SURVEY DATA

Platform Plan
Scale 1:200



0 5 10 15 20 25m
SCALE 1:250

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Figure 2.4b: Kirkby Station Modifications

Scale at A3
As Shown

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/2.4b

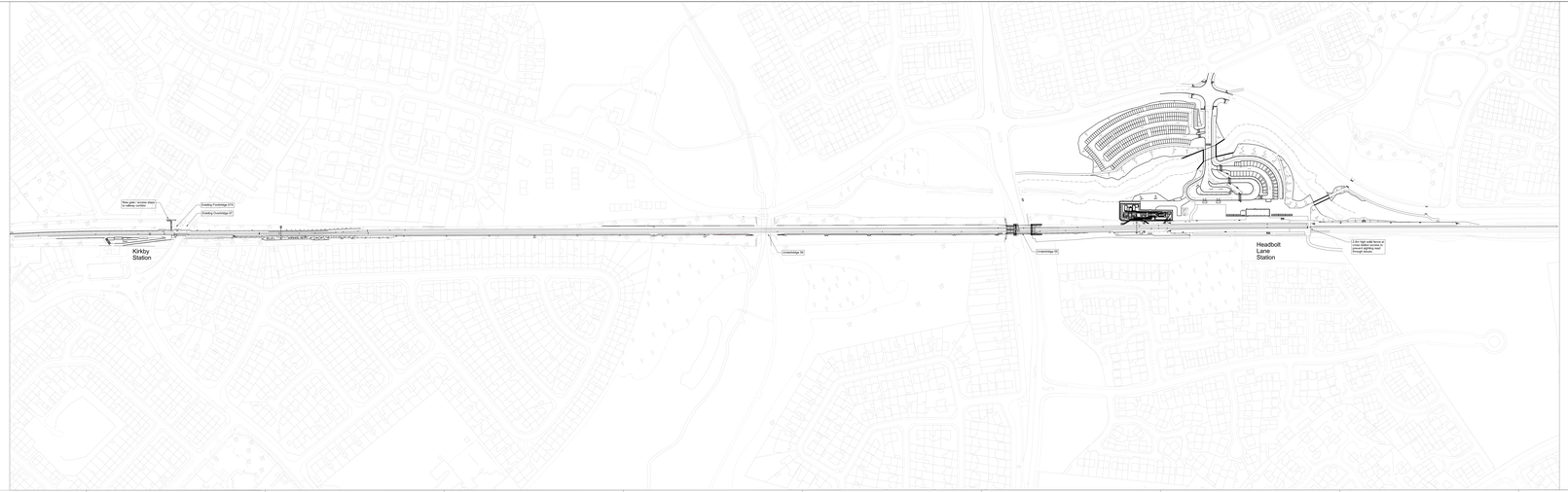
Issue
P1

Sheet Size A1 594 x 841

Figure 2.5a-2.5d

Railway Corridor GA Drawings

Drawing Number
1170248-1994-JD-ZZZ-DR-CJ-MP-JC0006 P01.2



0 5 10 15 20 25 30 35 40 45 50m
SCALE 1:1000

Legend/Notes

1. Do not scale from this drawing.

Issue	Date	By	Chkd	Appd
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Figure 2.5a: Railway Corridor General Arrangement 1 of 4

Scale at A1
As Shown

Job No
278736-00

Drawing Status
Issue

Drawing No
278736/2.5a

Issue
P3

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Sheet Size A1 - 841 x 594 mm

Drawing Number
170248-15854-ZZ-ZZZ-DRG-R-CV-113202 P01.1

Boundary Fence to be replaced with 1.8m galvanised welded mesh or galvanised palisade fence along existing fenceline where fence is missing or existing fence is substandard.

Boundary Fence to be replaced with 1.8m galvanised welded mesh or galvanised palisade fence along existing fenceline where fence is missing or existing fence is substandard.

Fence to climb wing wall and if necessary run along parapet

Boundary Fence to be replaced with 1.8m galvanised welded mesh or galvanised palisade fence along existing fenceline where fence is missing or existing fence is substandard.

Boundary Fence to be replaced with 1.8m galvanised welded mesh or galvanised palisade fence along existing fenceline where fence is missing or existing fence is substandard.

Fence to climb wing wall and if necessary run along parapet

For continuation see drawing 170248-15854-ZZ-ZZZ-DRG-R-CV-120102

For continuation see drawing 170248-15854-ZZ-ZZZ-DRG-R-CV-120104

0 10 20 30 40 50m
SCALE 1:500

Legend/Notes

1. Drawing is for planning purposes only and indicates fencing proposals only
2. Utilities and buried services not shown.

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Figure 2.5c: Railway Corridor General Arrangement 2 of 4

Scale at A3
As Shown

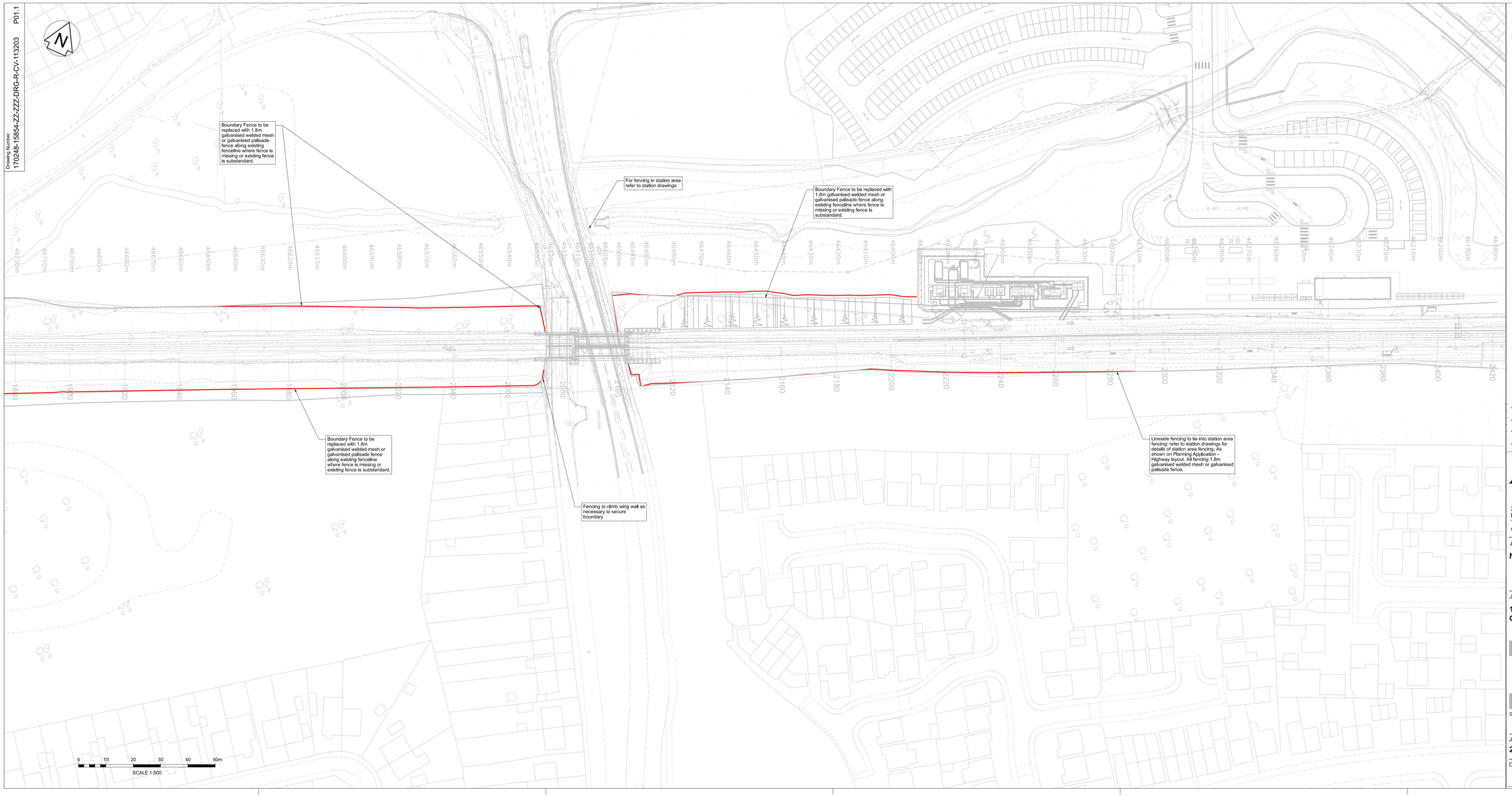
Job No
276736-00

Drawing Status
Issue

Drawing No
276736/2.5c

Issue
P3

Drawing Number
170248-15854-ZZ-ZZZ-DRG-R-CV-113203 P01.1



Legend/Notes

1. Drawing is for planning purposes only and indicates fencing proposals only
2. Utilities and buried services not shown.

Issue	Date	By	Chkd	Appd
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Figure 2.5d: Railway Corridor General Arrangement 4 of 4

Scale at A3

As Shown

Job No **276736-00**

Drawing Status **Issue**

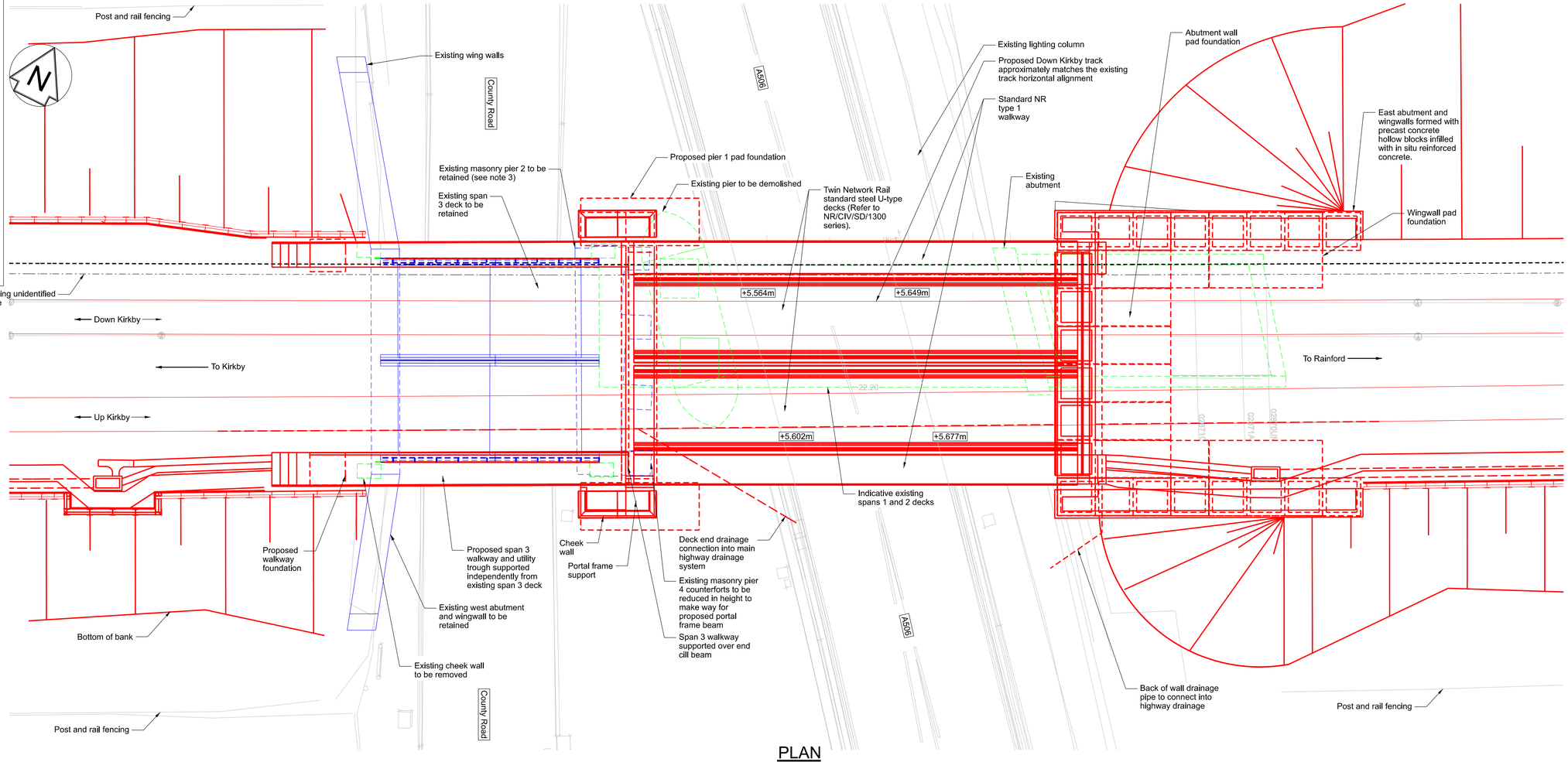
Drawing No **276736/2.5d**

Issue **P3**

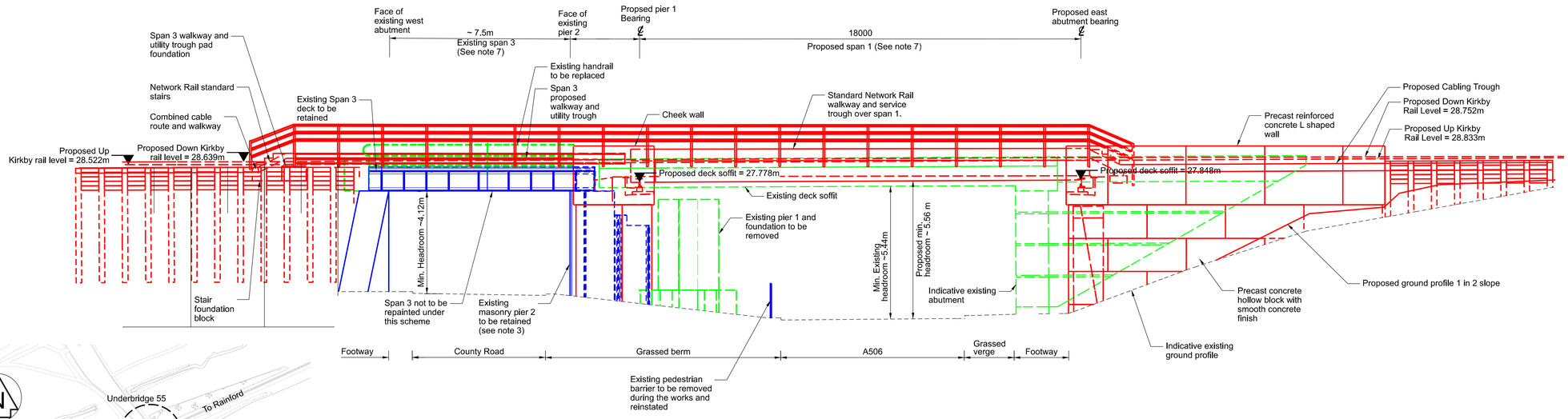
Figure 2.6a-2.6b

Underbridge 55 GA Drawings

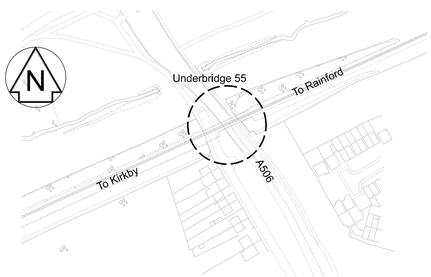
Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243012 P01.1



PLAN
SCALE 1:100



SOUTH ELEVATION
SCALE 1:100



LOCATION PLAN
NTS

Legend/Notes

Notes:
1. All dimensions are in millimetres unless noted otherwise. Dimensions should not be scaled from the drawing.
2. All levels are in metres AOD.
3. The proposed underbridge 55 layout comprises two spans. Span 1 replaces existing spans 1 and 2. Existing span 3 is to be retained.
4. Walkway pedestrian parapets and walkway steel brackets to be galvanised steel (grey).
5. New bridge span 1 steel deck painted to match the existing span 3 colour (green).
6. All exposed concrete surfaces to have a smooth concrete finish.

Legend:
- +5.564m Proposed headroom clearance
- Precast Concrete
- In-situ Concrete
- Modified or to be moved
- New, proposed or additional
- Existing or unchanged
- Redundant or to be removed
- OS/Survey data

Issue	Date	By	Chkd	Appd
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Figure 2.6a: Underbridge 55 General Arrangement Sheet 1 of 2

Scale at A3
1:200

Job No
276736-00

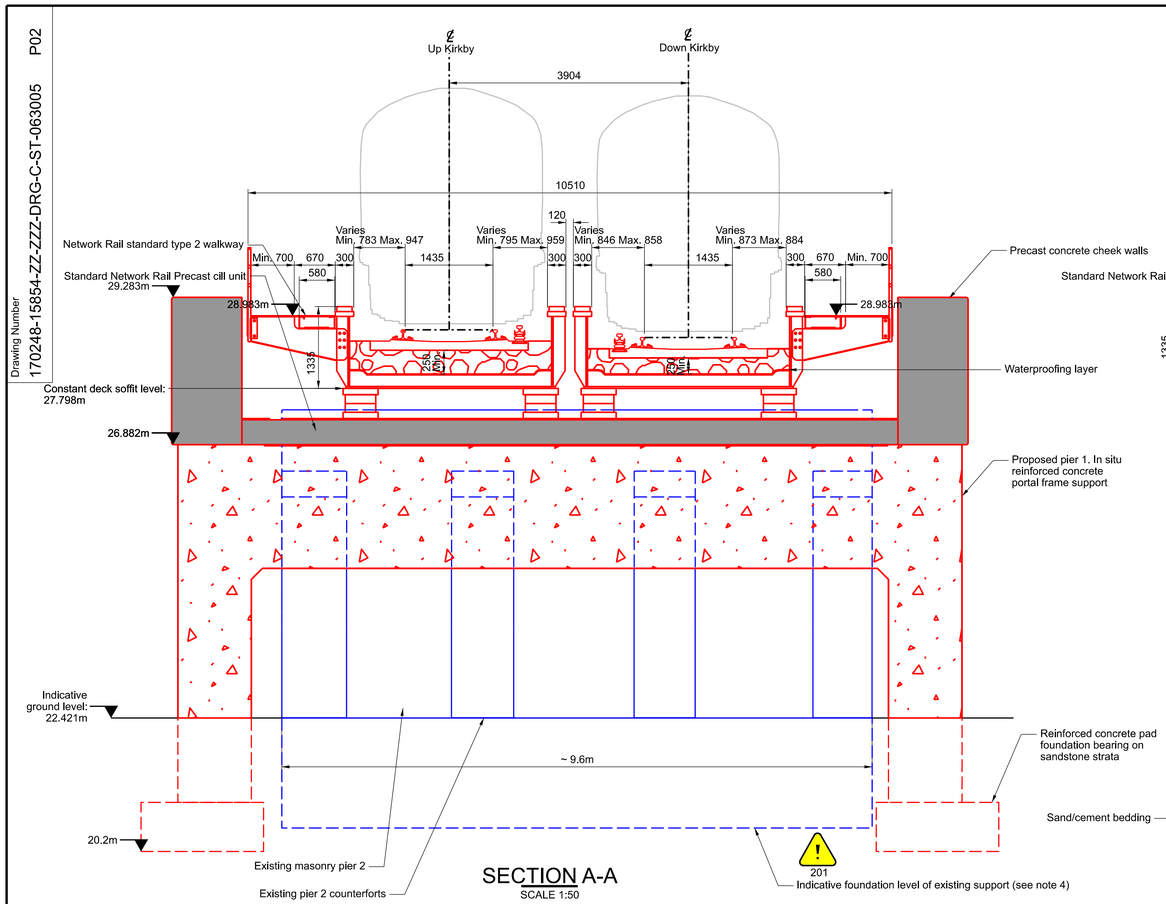
Drawing Status
Issue

Drawing No
276736-6a

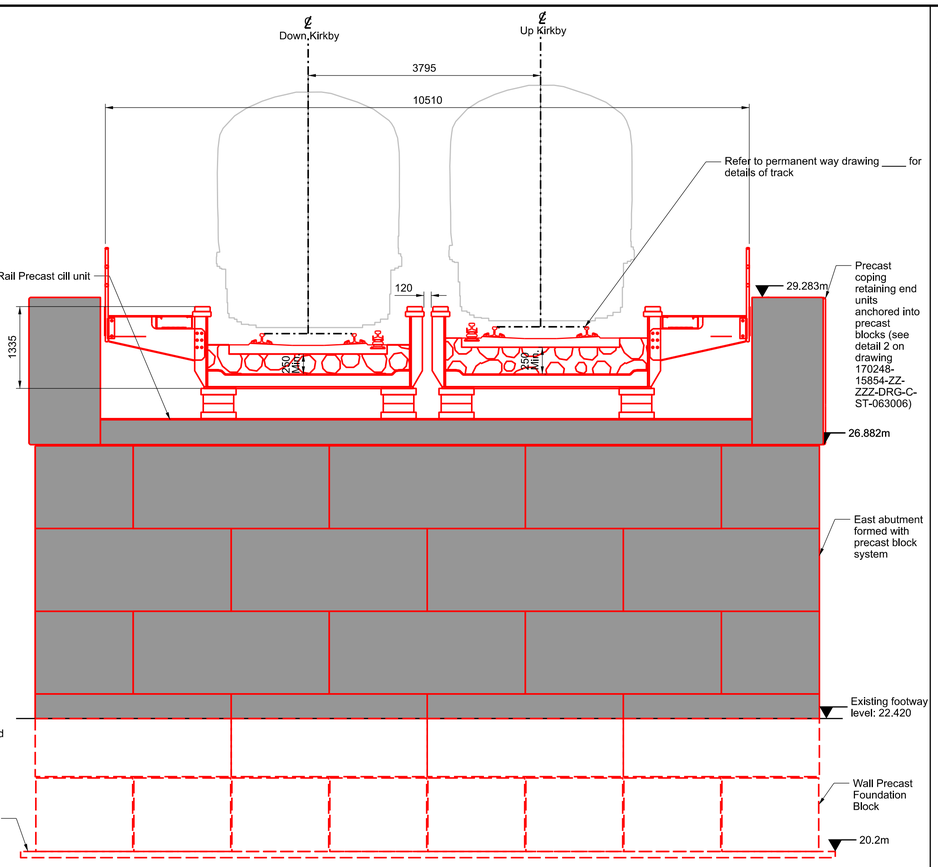
Issue
P3

Sheet Size A1 594 x 841

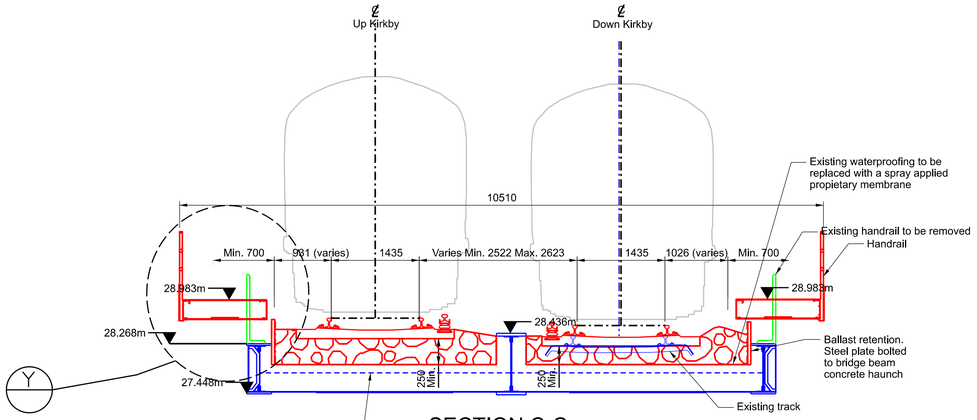
Drawing Number 170248-15854-ZZ-ZZZ-DRG-C-ST-063005 P02



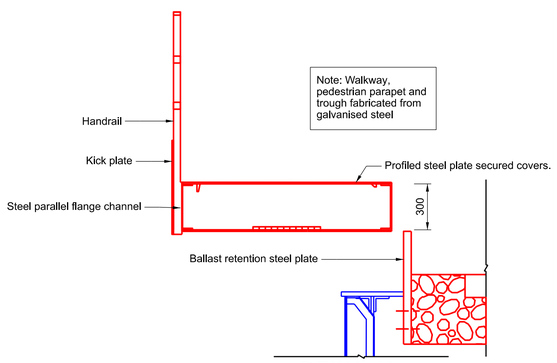
SECTION A-A
SCALE 1:50



SECTION B-B
SCALE 1:50



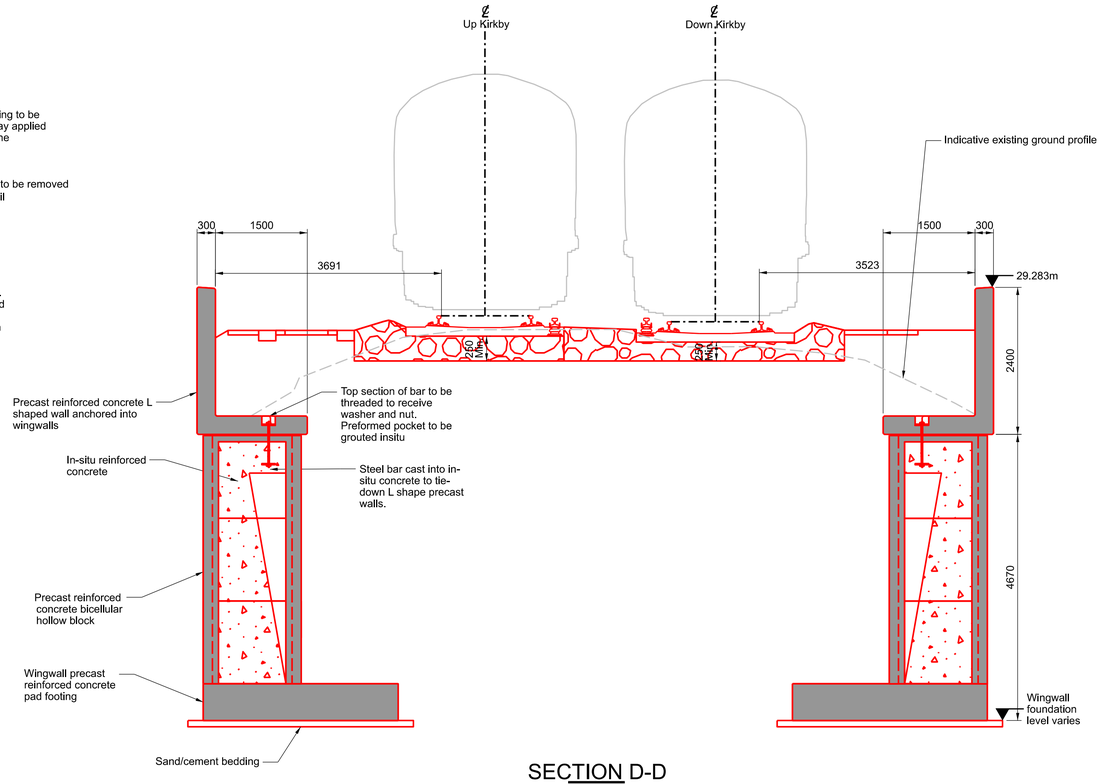
SECTION C-C
SCALE 1:50



Note: Walkway, pedestrian parapet and trough fabricated from galvanised steel

DETAIL Y
SCALE 1:20

SECTION B-B
SCALE 1:50



SECTION D-D
SCALE 1:50

Legend/Notes

Notes:
1. All dimesions are in millimetres unless noted otherwise. Dimensions should not be scaled from the drawing.
2. All levels are in metres AOD.
3. The details of the existing structure are subject to topographic survey and site investigation confirmation
4. Further investigation is required to determine the foundation level of the existing pier 2.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORK:

CONSTRUCTION
201. Undermining of existing pier 1 foundation.

OPERATIONS
.

MAINTENANCE
.

DISMANTLING/DEMOLITION (FUTURE)
.

THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING.

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Figure 2.6b: Underbridge 55 General Arrangement Sheet 2 of 2

Scale at A3
As Shown

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/2.6b

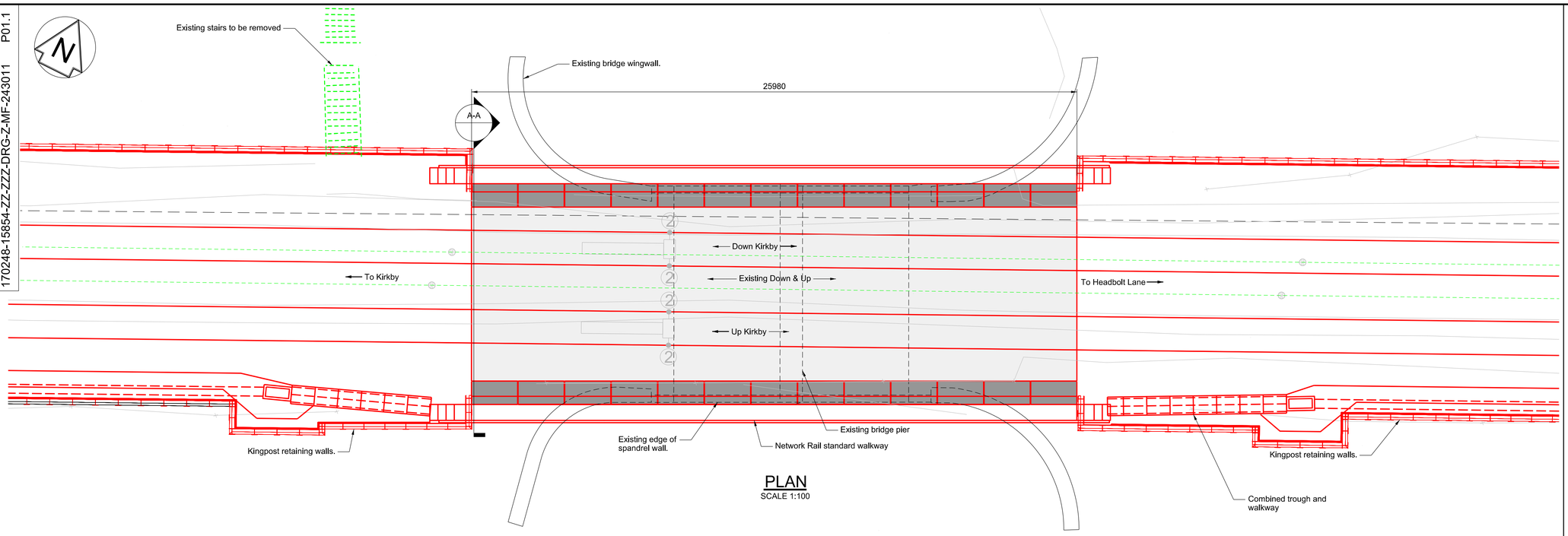
Issue
P3

Sheet Size A1 594 x 841

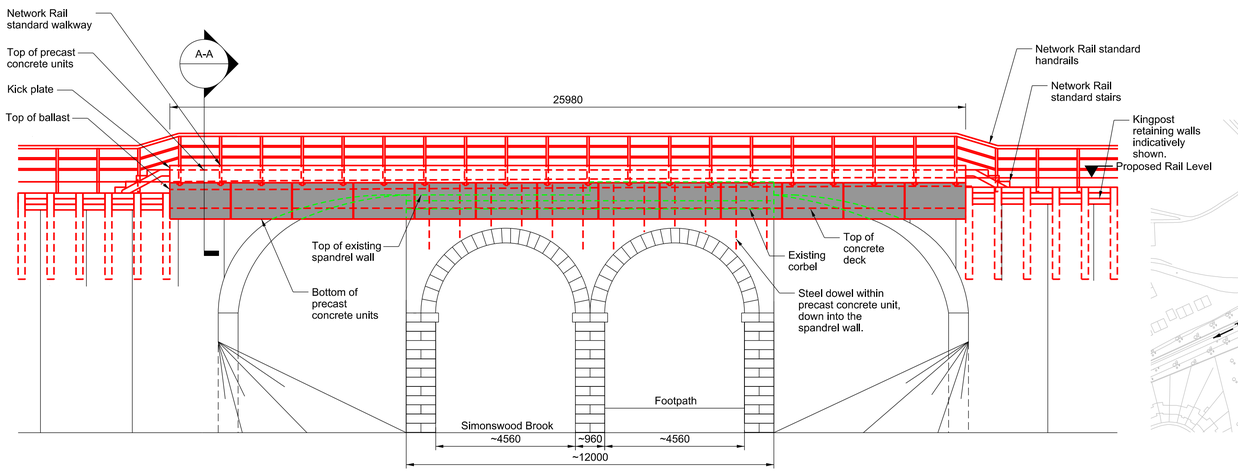
Figure 2.7a-2.7b

Underbridge 56 GA Drawings

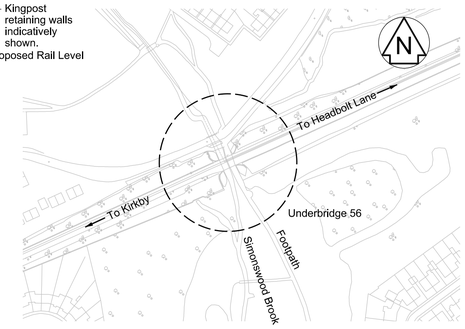
Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243011 P01.1



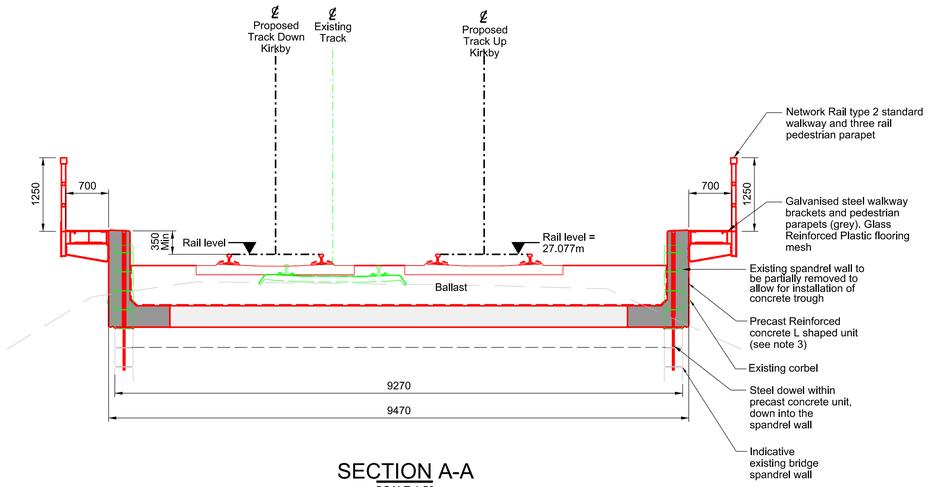
PLAN
SCALE 1:100



SOUTH ELEVATION
SCALE 1:100



LOCATION PLAN
NTS



SECTION A-A
SCALE 1:50

Legend/Notes

Notes:

1. All dimesions are in millimetres unless noted otherwise. Dimensions should not be scaled from the drawing.
2. All levels are in metres AOD.
3. Externally visible precast concrete surfaces to have a smooth concrete finish.

Legend:

- Precast Concrete
- In-situ Concrete
- Modified or to be moved
- New, proposed or additional
- Existing or unchanged
- Redundant or to be removed
- OS/Survey data

Issue	Date	By	Chkd	Appd
P3	19-/08-21	JK	EB	EC

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Figure 2.7a: Underbridge 56 General Arrangement Sheet 1 of 2

Scale at A3
1:200

Job No
276736-00

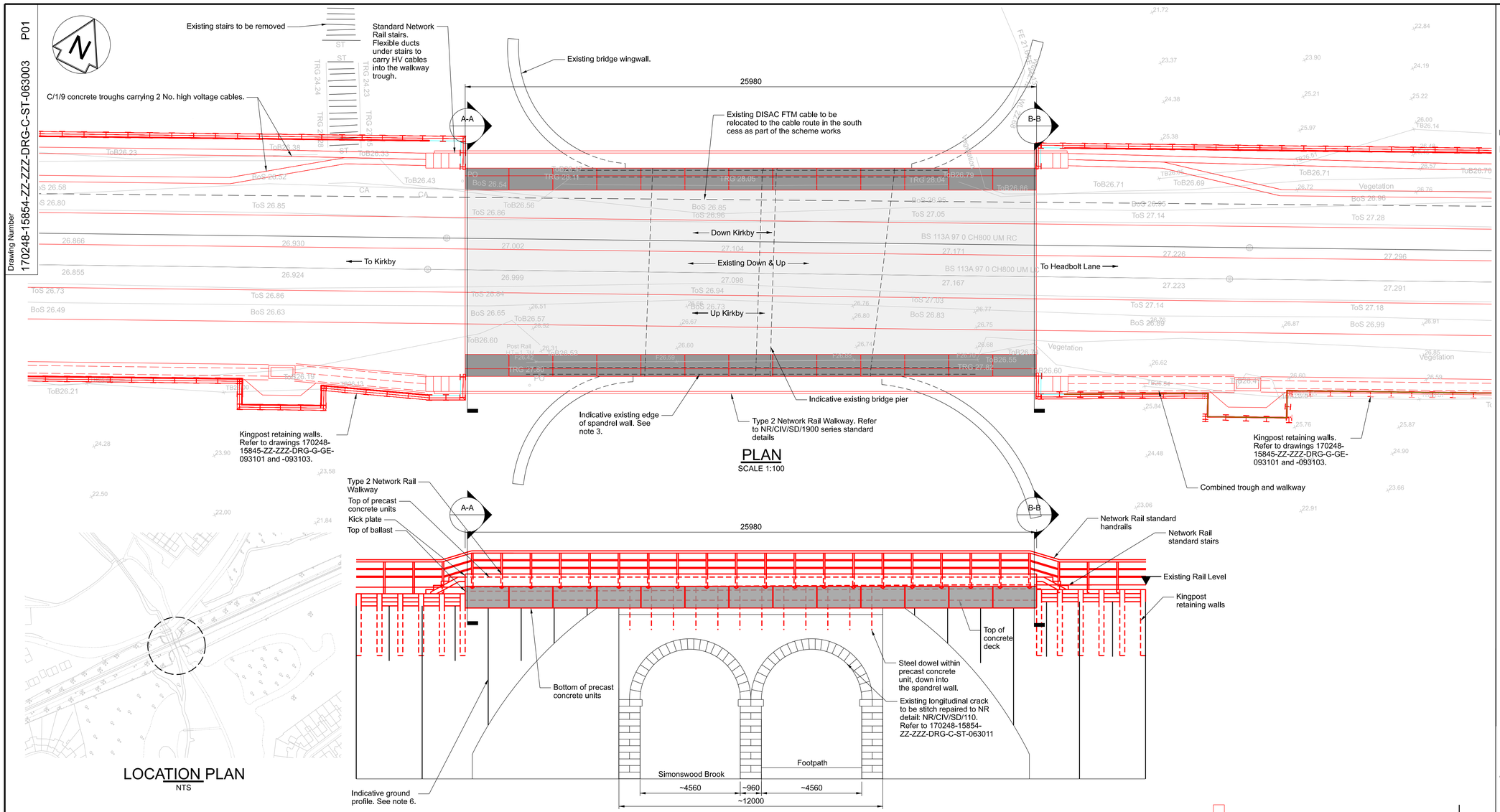
Drawing Status
Issue

Drawing No
276736-7a

Issue
P3

Sheet Size A1 594 x 841

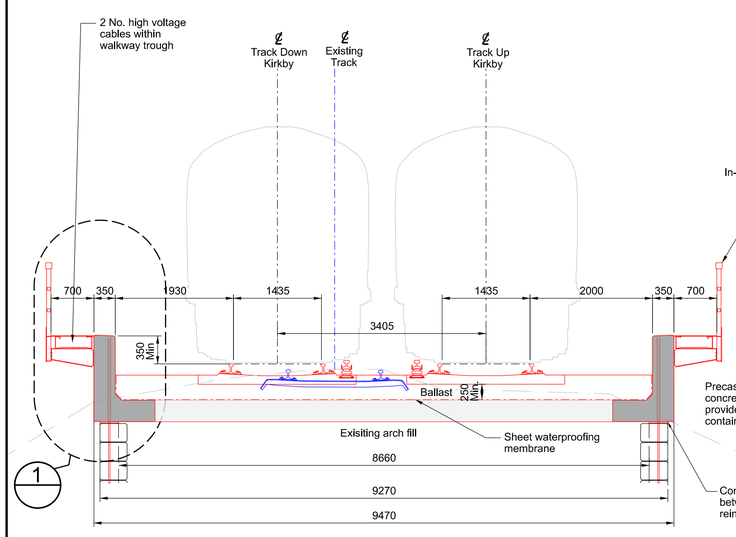
Drawing Number
170248-15854-ZZ-ZZZ-DRG-C-ST-063003 P01



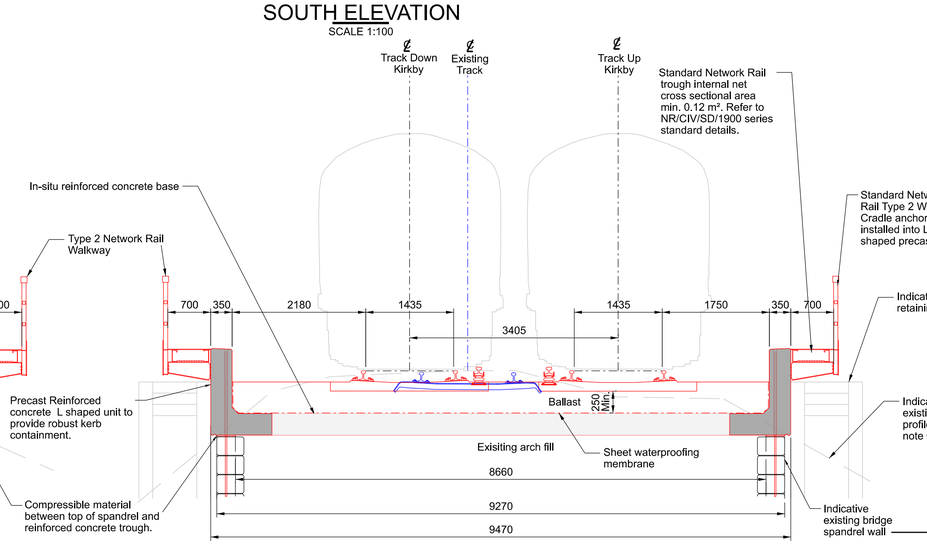
PLAN
SCALE 1:100

LOCATION PLAN
NTS

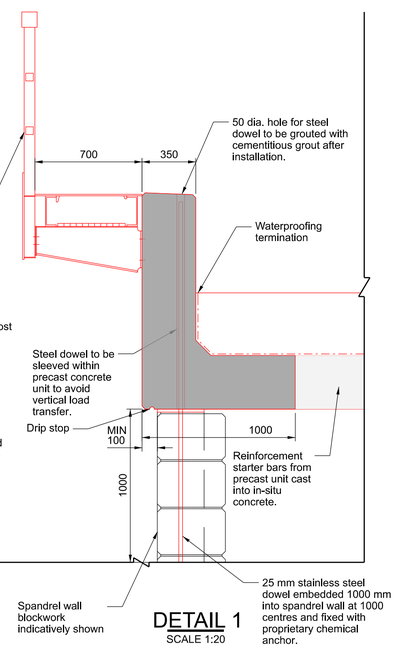
SOUTH ELEVATION
SCALE 1:100



SECTION A-A
SCALE 1:50



SECTION B-B
SCALE 1:50



DETAIL 1
SCALE 1:20

Legend/Notes

Notes:
1. All dimesions are in millimetres unless noted otherwise. Dimensions should not be scaled from the drawing.
2. All levels are in metres AOD.
3. The details of the existing structure are subject to topographic survey and site investigation confirmation. Final geometry of the proposed structure is dependant upon the geometry of the existing structure.
4. At risk notice for DISAC cable to be in place in accordance with NR/GN/TEL/30140
5. For details of structure repair, refer to drawing NR/CIV/SD/110
6. Confirmation of ground levels on the approaches to the bridge and close to wingwalls to be confirmed

Legend:
- Precast Concrete
- In-situ Concrete

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P3	19-/08-21	JK	EB	EC

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Figure 2.7b: Underbridge 56 General Arrangement Sheet 2 of 2

Scale at A3
As Shown

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/2.7b

Issue
P2

Sheet Size A1 594 x 841

Figure 2.8

Station Car Park and Access Layouts

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243010 P01.2

Signalised site access junction.
Combined pedestrian / cycle crossings connecting to site active travel routes
1 in 3 max earthworks
Main car park providing 270no. standard parking bays.
2.0m wide footway
7.3m wide access road.
Bi-directional 3.0m wide cycle route.
Foul sewer invert level 21.62m (based on United Utilities record plans)
Existing foul water culvert to remain.
Proposed bridge over Kirkby Brook.
3 no. staff parking bays.
2no. Network Rail maintenance bays.
Existing footpath and footbridge to remain.
Existing footpath diverted to provide station access.
Existing United Utilities 1140mm x 910mm foul water culvert
15no. blue badge parking bays and 15no. enlarged bays.
Parking area for 5no. motorcycles.
Proposed uncontrolled crossing
Section 38/278 highway works.
Proposed uncontrolled crossing
Foul sewer invert level 20.06m (based on United Utilities record plans)
DNO Cubicle
Drop off for 4no. vehicles
2no. bus stops
1 in 30
Station building
Cycle storage
Proposed footbridge.
New pedestrian / cycle link to east
Emergency fire egress walkway back towards car park
Relocatable Equipment Building
HV substation and access.
Emergency fire egress walkway
Emergency fire egress walkway

0 10 20 30 40 50m
SCALE 1:500

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Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in millimetres unless shown otherwise.

Key:

- Existing Network Rail Boundary
- Proposed Network Rail boundary alterations
- Works subject to Section 278 Agreement
- Seating
- CCTV Column
- Lighting Column

Key (Utilities):

- Existing BT Network
- Existing Surface Water Sewer
- Existing Foul Sewer
- Existing Potable Water
- Existing LV Electric
- Existing HV Electric
- Existing Virgin Media
- Existing Low Pressure Gas

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Figure 2.8: Station Car Park and Access Layout

Scale at A3
As Shown

Job No
276736-00

Drawing Status
Issue

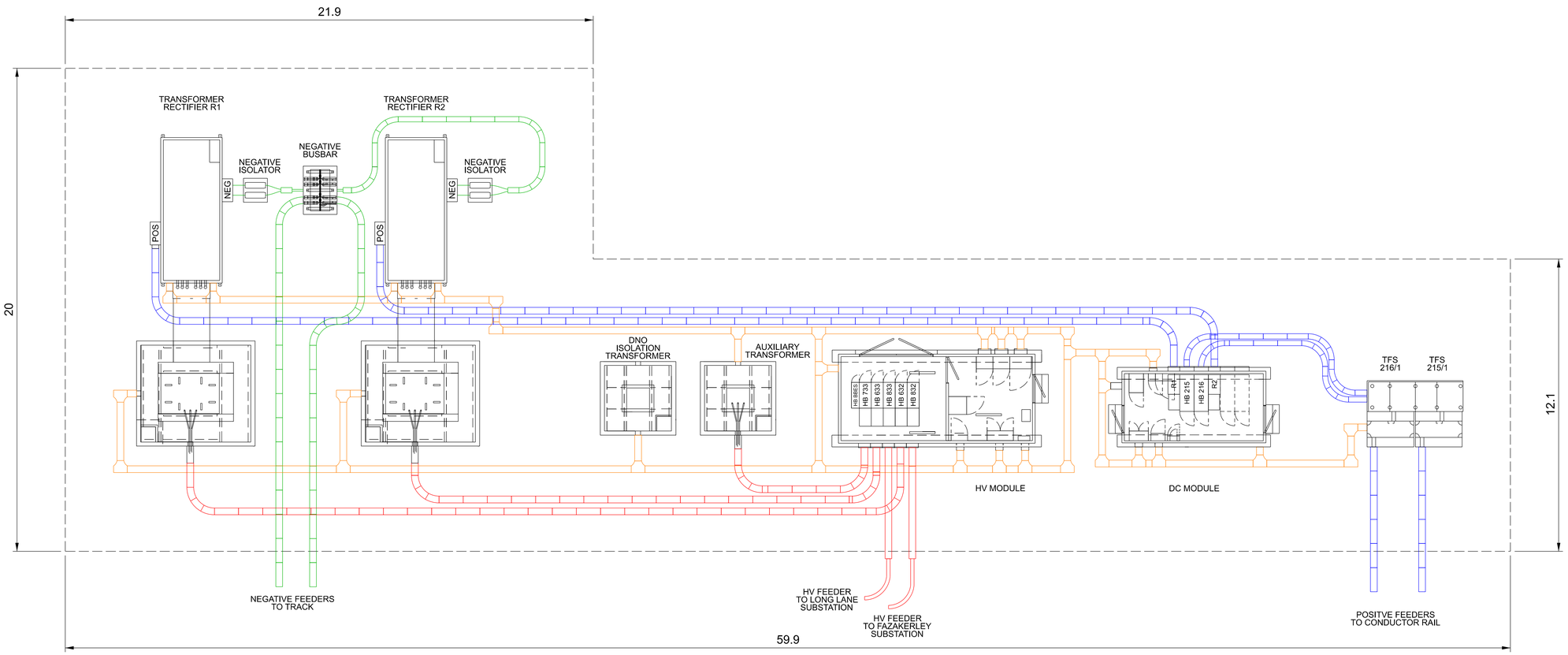
Drawing No
276736/2.8

Issue
P3

Figure 2.9

Substation General Arrangement

Drawing Number
170248-15854-ZZ-ZZZ-DRG-R-DS-000015 P01



GENERAL NOTES:

1. DO NOT SCALE FROM THIS DRAWING.
2. DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

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Figure 2.9: Substation General Arrangement

Scale at A3

Not to scale

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/2.9

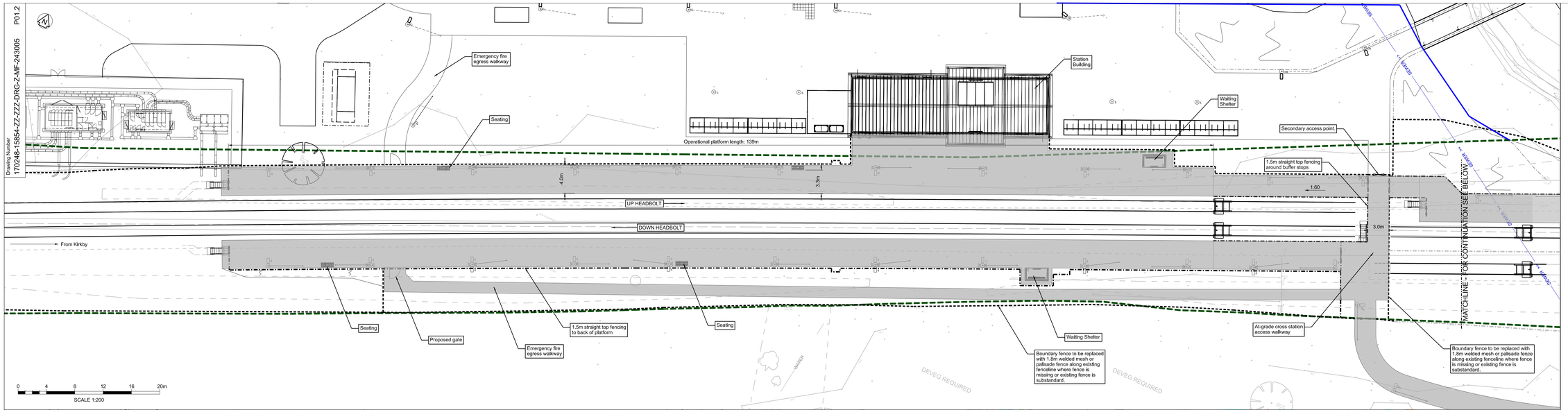
Issue
P3

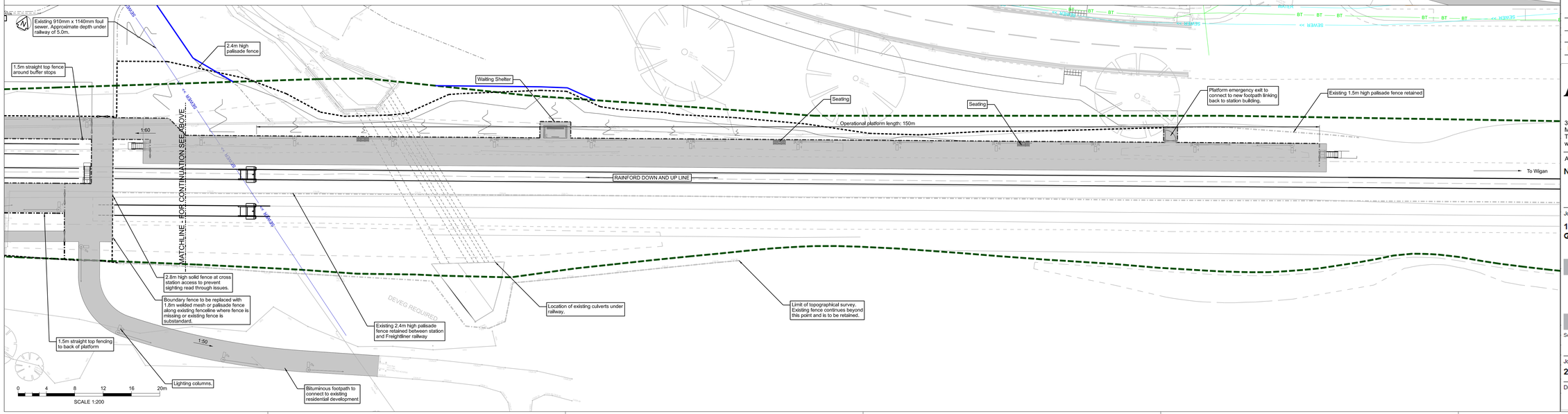
Sheet Size A1 594 x 841

Figure 2.10

Platform General Arrangement

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243005 P01.2





Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in metres unless stated otherwise.
3. All levels are in metres above Ordnance Datum.

Key:

- Proposed Platform Extents
- Proposed Palisade Fencing (Height as noted)
- Proposed 1.5m Straight Top Fencing
- Proposed Lighting Column and Fall Direction (5m)
- Proposed CCTV Mast and fall direction (4.5m)
- Existing Network Rail Ownership Boundary
- Proposed Network Rail Ownership boundary alteration

Issue	Date	By	Chkd	Appd
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Figure 2.10: Platform General Arrangement

Scale at A3

As Shown

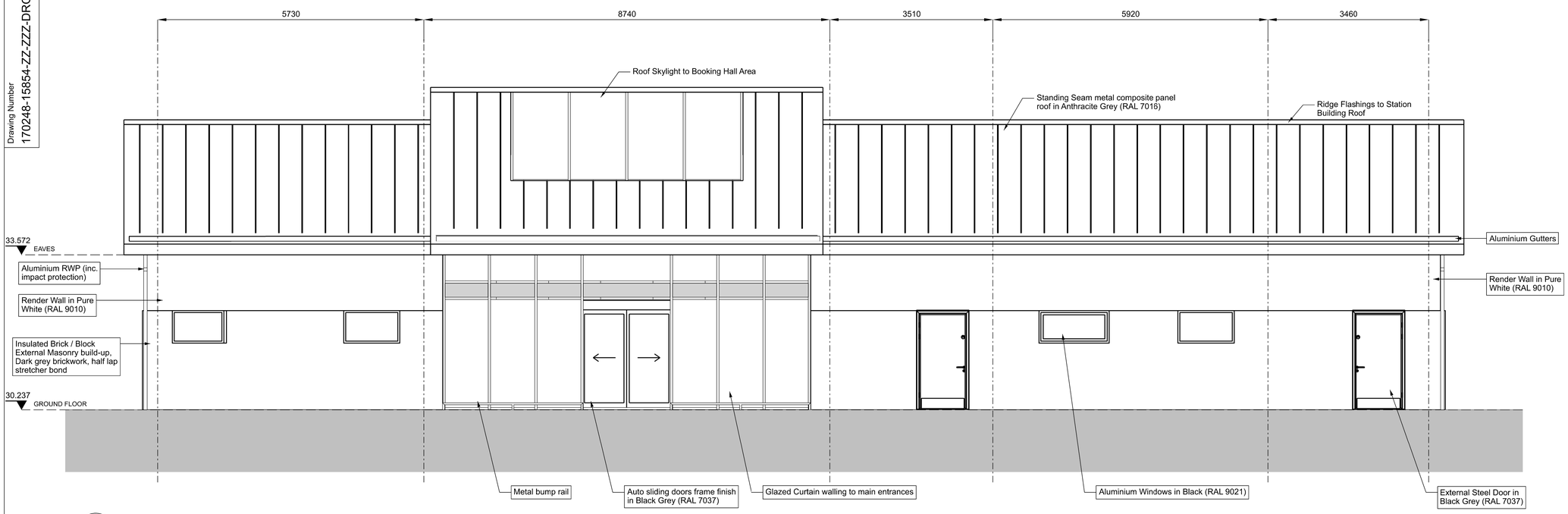
Job No	Drawing Status
276736-00	Issue

Drawing No	Issue
276736/2.10	P3

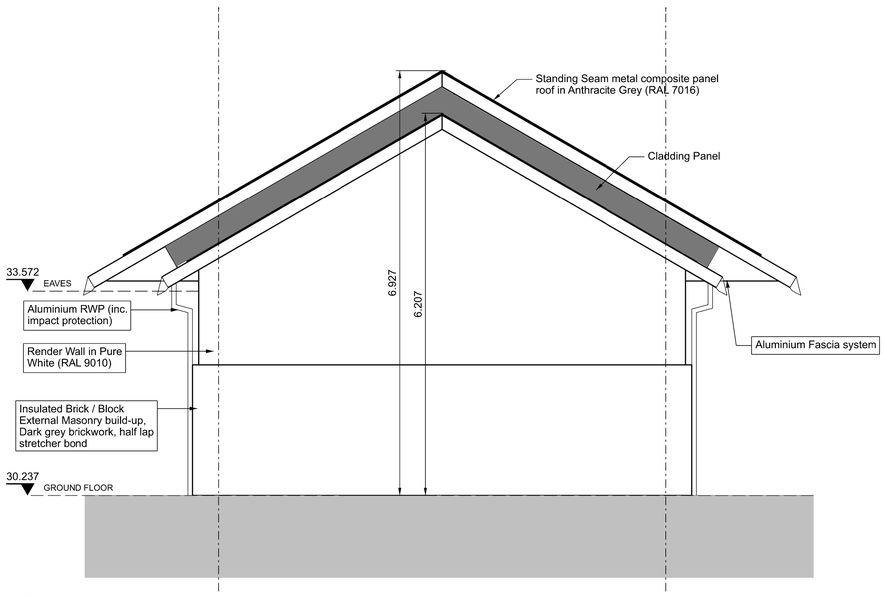
Figure 2.11a - 2.11b

Proposed Station External General Arrangement

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243002 P01.1



1 / 013020 Proposed Station North Elevation
1:50



2 / 013020 Proposed Station East Elevation
1:50

Legend/Notes

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Figure 2.11a: Proposed Station External General Arrangement 1 of 2

Scale at A3
1:200

Job No
276736-00

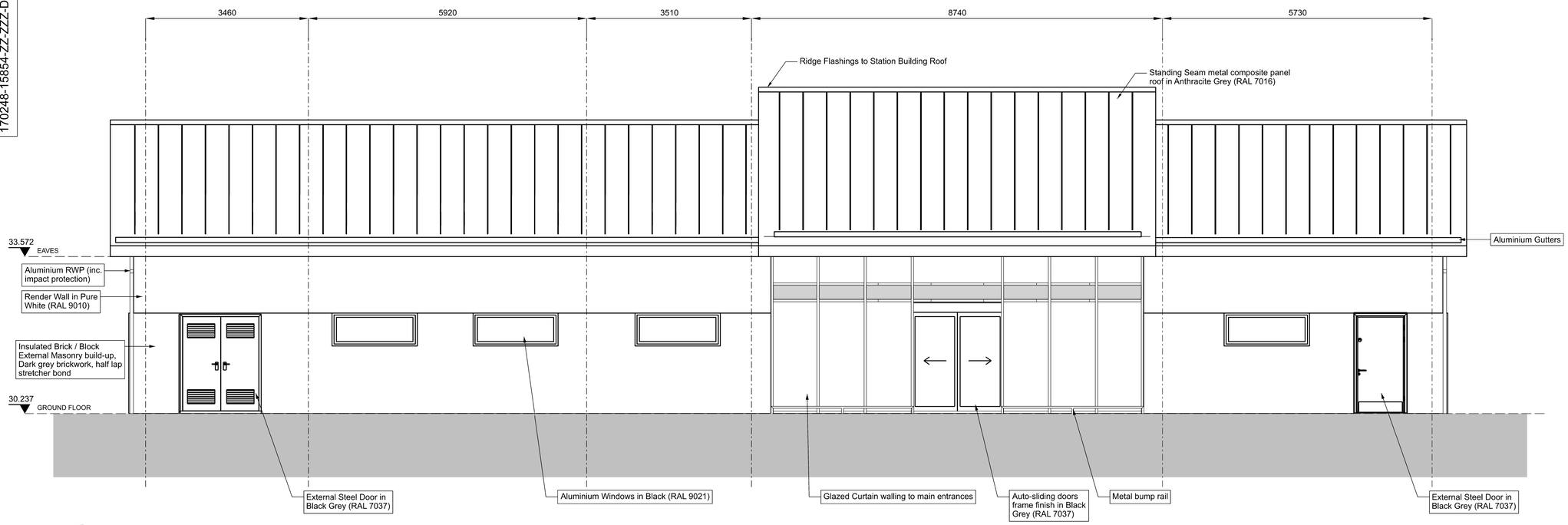
Drawing Status
Issue

Drawing No
276736-11a

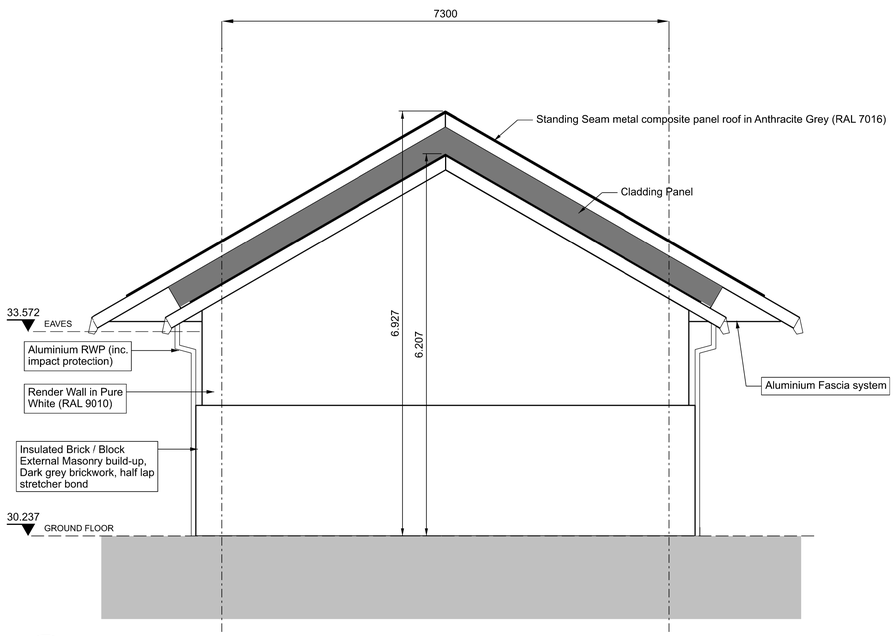
Issue
P3

Sheet Size A1 594 x 841

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243003 P01.1



1 013021 Proposed Station South Elevation
1:50



2 013021 Proposed Station West Elevation
1:50

Legend/Notes

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Figure 2.11b: Proposed Station External General Arrangement 2 of 2

Scale at A3
1:200

Job No
276736-00

Drawing Status
Issue

Drawing No
276736-11b

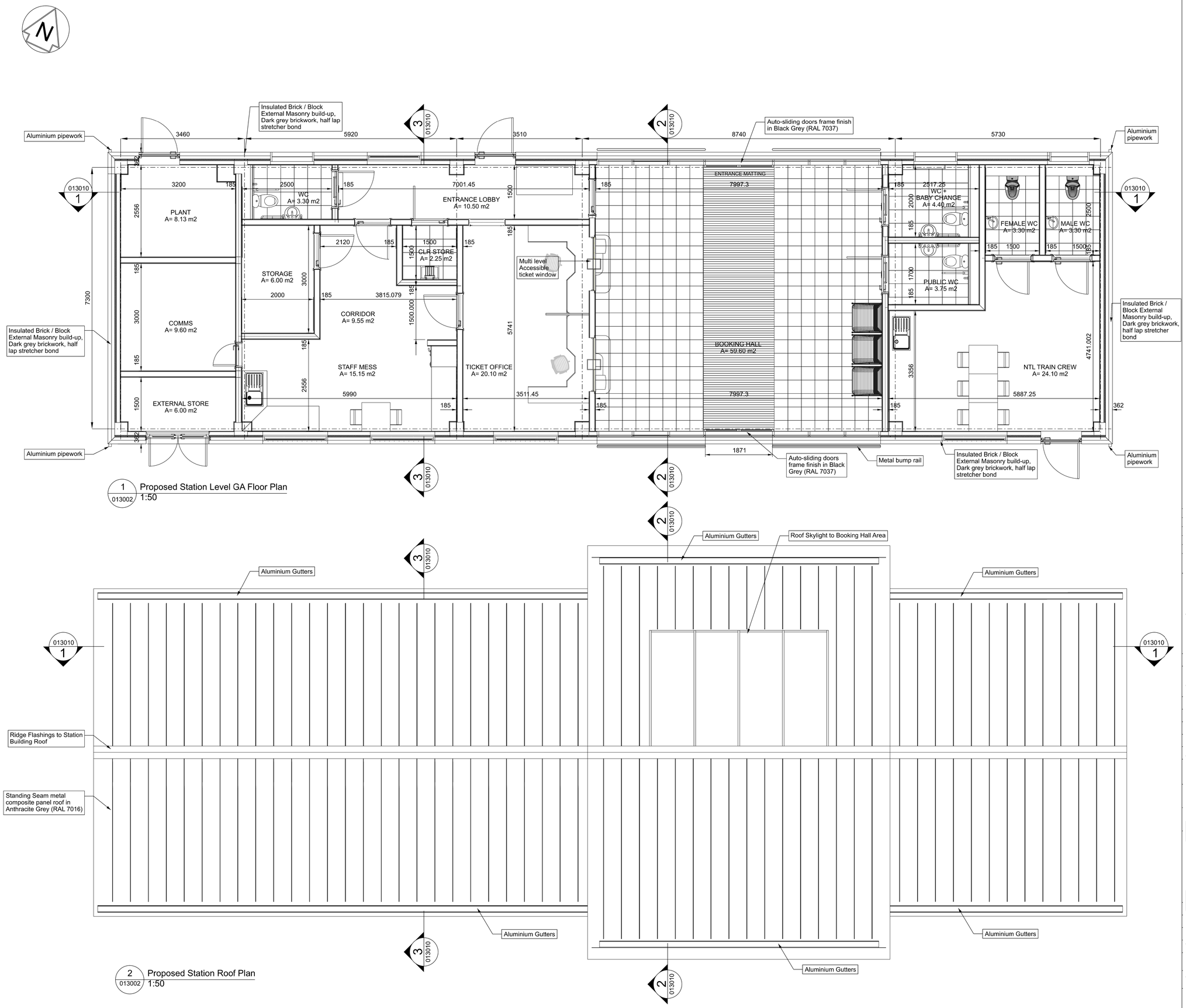
Issue
P3

Sheet Size A1 594 x 841

Figure 2.12

Proposed Station Internal General Arrangement

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243001 P01.1



1 / 013002 Proposed Station Level GA Floor Plan
1:50

2 / 013002 Proposed Station Roof Plan
1:50

Legend/Notes

Issue	Date	By	Chkd	Appd
P3	19-/08-21	JK	EB	EC

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Figure 2.12: Proposed Station Internal General Arrangement

Scale at A3
1:200

Job No
276736-00

Drawing Status
Issue

Drawing No
276736-12

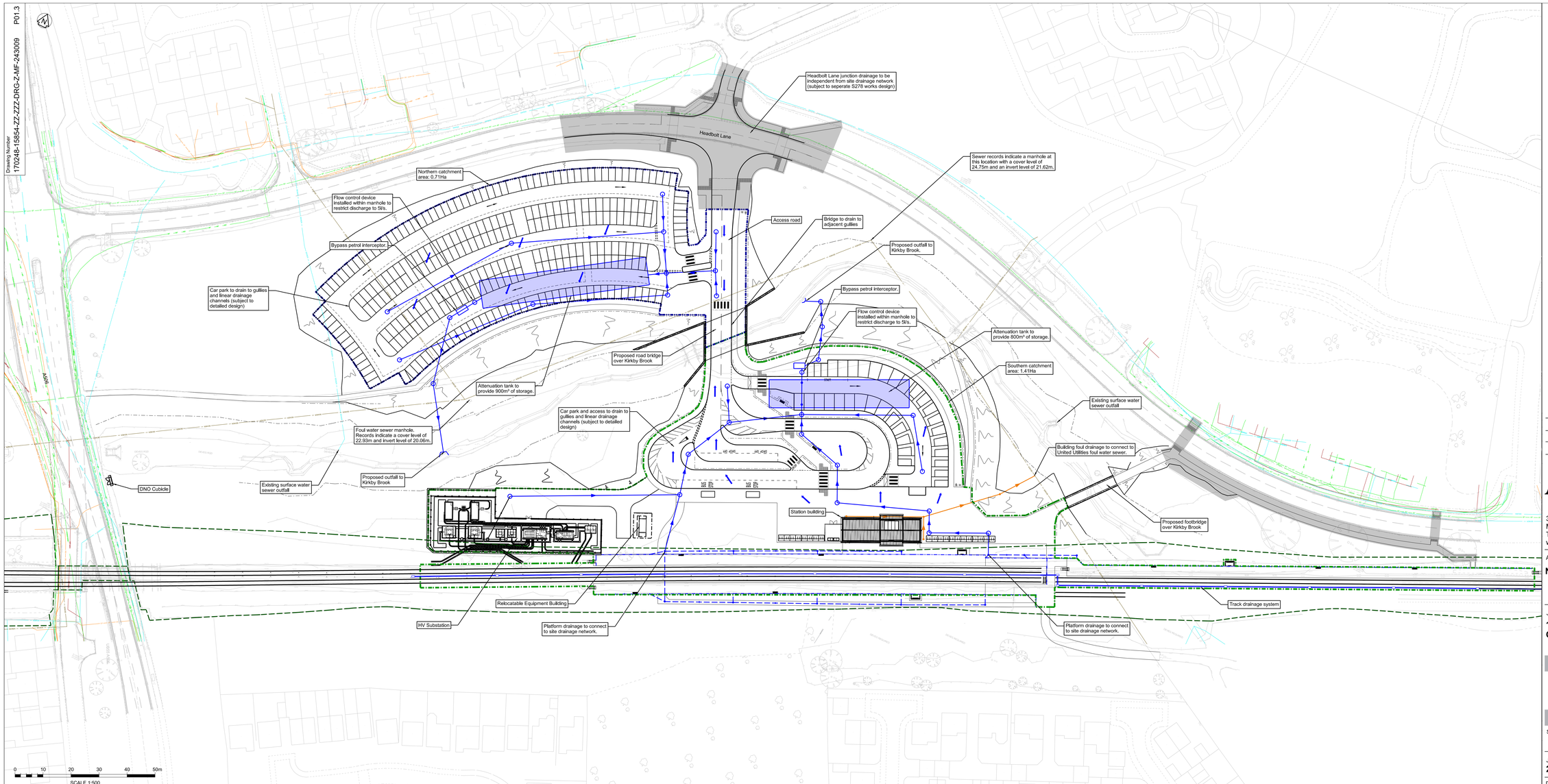
Issue
P3

Sheet Size A1 594 x 841

Figure 2.13

Station and Car Park Drainage

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243009 P01.3



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Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in metres unless stated otherwise.
3. All levels are in metres above Ordnance Datum.
4. Attenuation volumes are based on Microdrainage Quick Storage Estimates.
5. Proposed discharge rates are as agreed with Knowsley MBC.
6. Surface collection features (gullies, linear drains, etc.) to be confirmed at detailed design.
7. Proposals subject to approval from the Lead Local Flood Authority and Environment Agency.
8. Road gullies are to be trapped as part of pollution prevention.
9. Surface water run-off from isolated footpaths shall drain to adjacent landscaping.
10. Run-off from soft landscaping is assumed to infiltrate and discharge to Kirkby Brook as existing.
11. Refer to document 170248-ARU-REP-ECV-000003 for further details of flood risk associated with the site.

Drainage key:

- Network Rail Existing Ownership Boundary
- Northern Catchment Area: 0.71Ha
- Southern Catchment Area: 1.41Ha
- Proposed Surface Drainage Network
- Proposed Foul Drainage Network
- Proposed Attenuation Tank
- Indicative Surface Fall
- Existing Foul Sewer
- Existing Surface Water Sewer
- Proposed Works subject to S278 Agreement

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Figure 2.13: Station and Car Park Drainage

Scale at A3

1:200

Job No
276736-00

Drawing Status
Issue

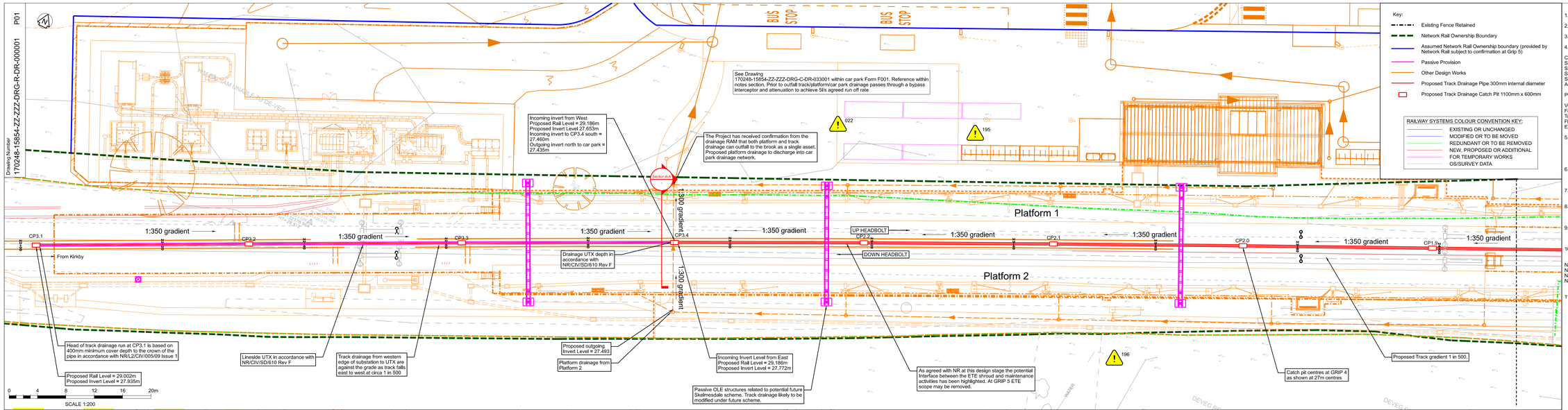
Drawing No
276736-13

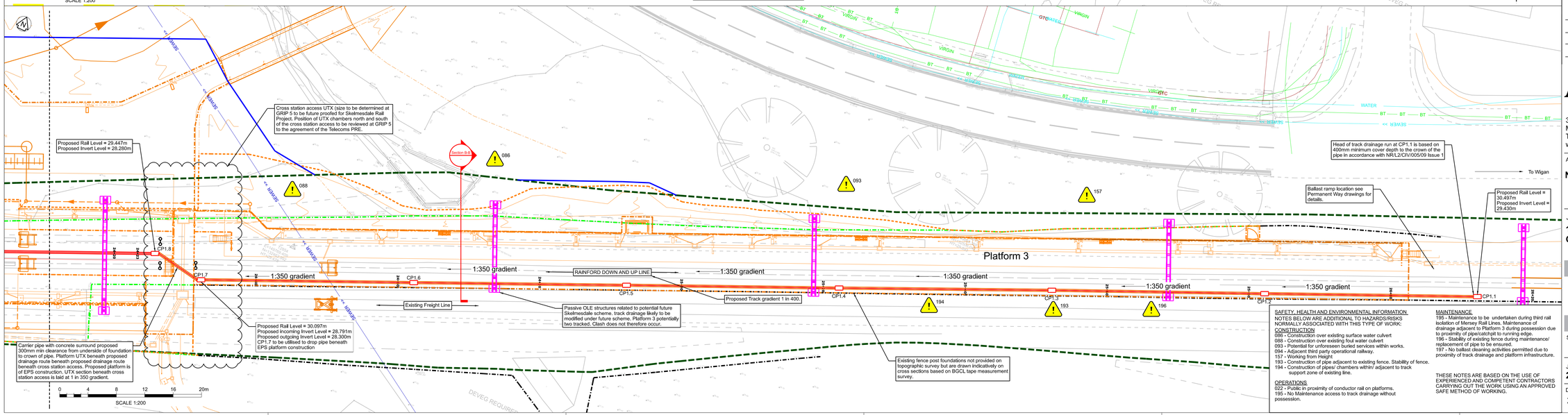
Issue
P3

Figure 2.14

Track Drainage

Drawing Number
170248-15854-ZZ-ZZZ-DRG-R-DR-000001 P01





Key:

- Existing Fence Retained
- Network Rail Ownership Boundary
- Assumed Network Rail Ownership boundary (provided by Network Rail subject to confirmation at Grip 5)
- Passive Provision
- Other Design Works
- Proposed Track Drainage Pipe 300mm internal diameter
- Proposed Track Drainage Catch Pit 1100mm x 600mm

RAILWAY SYSTEMS COLOUR CONVENTION KEY:

- EXISTING OR UNCHANGED
- MODIFIED OR TO BE MOVED
- REDUNDANT OR TO BE REMOVED
- NEW, PROPOSED OR ADDITIONAL
- FOR TEMPORARY WORKS
- OS/SURVEY DATA

Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in metres unless stated otherwise.
3. All levels are in metres above Ordnance Datum.
4. To be read in conjunction with the following documents;

Car Park & Access Layout: 170248-15854-ZZ-ZZZ-DRG-C-HW-053010
Station Platform Proposed Details: 170248-15854-ZZ-ZZZ-DRG-C-CV-023040
Station Platform Proposed Sections: 170248-15854-ZZ-ZZZ-DRG-C-CV-023041
Station Car Park Form 001: 170248-ARU-REP-ECV-000005
Station Platform Form 001: 170248-ARU-REP-ECV-000004
Ancillary (Lineside) Civil Engineering Form 001: 170248-ARU-REP-ECV-000006
Permanent Way Horizontal Alignment: 170248-15854-ZZ-ZZZ-DRG-R-DR-000002
Vertical Alignment: 170248-15854-ZZ-ZZZ-DRG-R-TR-193002
Form A: 170248-ARU-REP-ETR-00001
Track Drainage Section & Detail: 170248-15854-ZZ-ZZZ-DRG-R-DR-000002
Flood Risk Assessment: 170248-ARU-REP-E-CV-000003
ETE Form A: 170248-ARU-FOA-ELE-000001

5. Merseyrail platforms (Platforms 1 & 2) are to be Traditional Front Wall construction in accordance with Network Rail standard details. Northern Rail Platform (Platform 3) and the cross station access are to be an EPS modular system in accordance with Network Rail standard detail drawing NR/CIV/DWG/3090.
6. All pipes are collector pipes such as Aqua TDK or equivalent due to location within track support zone.run of carrier pipe beneath the cross station access.
7. All track drainage catch pits are 1100mm x 600mm Sterling units or equivalent due to location within track support zone.
8. Position of pipe through Platform 3 is based on further on site measurements of the existing fence post foundation. Catchpits have been offset longitudinally from fence post foundations to maximise space.
9. Following TQ43, 87 and minutes DDR-075 it has been agreed that track drainage is only required where the proposed Mersey Rail Platform 1/2, Headbolt Lane substation and platform 3 are located.
10. The following standard drawings have been utilised in the production of the track drainage design;

NR/CIV/SD/610 Rev F - Undertrack Crossing Open Cut Method
NR/CIV/SD/351 Rev D - Standard Catchpit details CP1 and CP2
NR/CIV/SD/350 Rev D - Standard Cess Drain 6ft Drain and UTX Drain Details
NR/CIV/SD/322 Rev E - Pipes, Channel & Ditch Standard Details P1-P15, CH1 & D1

11. All catch pits to contain a minimum sump of 300mm. All catchpits include 25mm drop minimum from incoming invert level to outgoing invert level.

Issue	Date	By	Chkd	Appd
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SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION.
NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORK:

CONSTRUCTION
086 - Construction over existing surface water culvert
088 - Construction over existing foul water culvert
093 - Potential for unforeseen buried services within works.
094 - Adjacent third party operational railway.
157 - Working from Height
193 - Construction of pipe adjacent to existing fence. Stability of fence.
194 - Construction of pipes/ chambers within/ adjacent to track support zone of existing line.

OPERATIONS
022 - Public in proximity of conductor rail on platforms.
195 - No Maintenance access to track drainage without possession.

MAINTENANCE
195 - Maintenance to be undertaken during third rail isolation of Mersey Rail Lines. Maintenance of drainage adjacent to Platform 3 during possession due to proximity of pipe/catchpit to running edge.
196 - Stability of existing fence during maintenance/ replacement of pipe to be ensured.
197 - No ballast cleaning activities permitted due to proximity of track drainage and platform infrastructure.

THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING.

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Figure 2.14: Track Drainage

Scale at A3

As Shown

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/2.14

Issue
P3

Figure 2.15

Landscape Plan

Indicitave locations of trees removed, for further detail refer to Headbolt Lane Tree Survey Plan Figures 1.1 &2

KEY

GENERAL INFORMATION

PLANNING APP BOUNDARY
Wider Works by Others

WATERCOURSE

HARDWORKS

PAVING TYPE A
TO PEDESTRIAN AREAS

GREENGAP PAVING
TO SERVICE AREA

MACADAM
TO VEHICULAR AREAS

MACADAM
TO PEDESTRIAN AREAS

SOFTWORKS

EXISTING TREE REMOVED /RETAINED
REFER TO TREE SURVEY/ ARB REPORT

CLEAR-STEM SPECIMEN TREE PLANTING
TO STATION & CAR PARK
REFER TO PLANTING SCHEDULE

MULTI-STEM SPECIMEN TREE PLANTING
TO STATION & CAR PARK
REFER TO PLANTING SCHEDULE

NATIVE TREE PLANTING
TO HABITAT AREAS
REFER TO PLANTING SCHEDULE

SUB CANOPY & UNDERSTORY PLANTING
TO NATIVE TREE PLANTING
REFER TO PLANTING SCHEDULE

ORNAMENTAL SHRUB & GRASSES
REFER TO PLANTING SCHEDULE

WILDFLOWER MEADOW
REFER TO PLANTING SCHEDULE

NATIVE HEDGE
REFER TO PLANTING SCHEDULE

CLIMBER PLANTING
REFER TO PLANTING SCHEDULE

NEUTRAL GRASSLAND ENHANCEMENT
HABITAT AREAS
REFER TO PLANTING SCHEDULE / SHEET 3004

NEUTRAL GRASSLAND CREATION
HABITAT AREAS
REFER TO PLANTING SCHEDULE / SHEET 3004

MODIFIED GRASSLAND PLANTING
HABITAT AREAS
REFER TO PLANTING SCHEDULE / SHEET 3004

RETAINED HABITATS

FURNITURE

FEATURE SEATING
SUBJECT TO FUTURE DETAIL

BIN
SUBJECT TO FUTURE DETAIL

LIGHTING LOCATIONS
REFER TO LIGHTING STRATEGY (ARUP)

Issue	Date	By	Chkd	Appd
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Figure 2.15: Landscape Plan

Scale at A3

1:200

Job No
276736-00

Drawing Status
Issue

Drawing No
276736-15

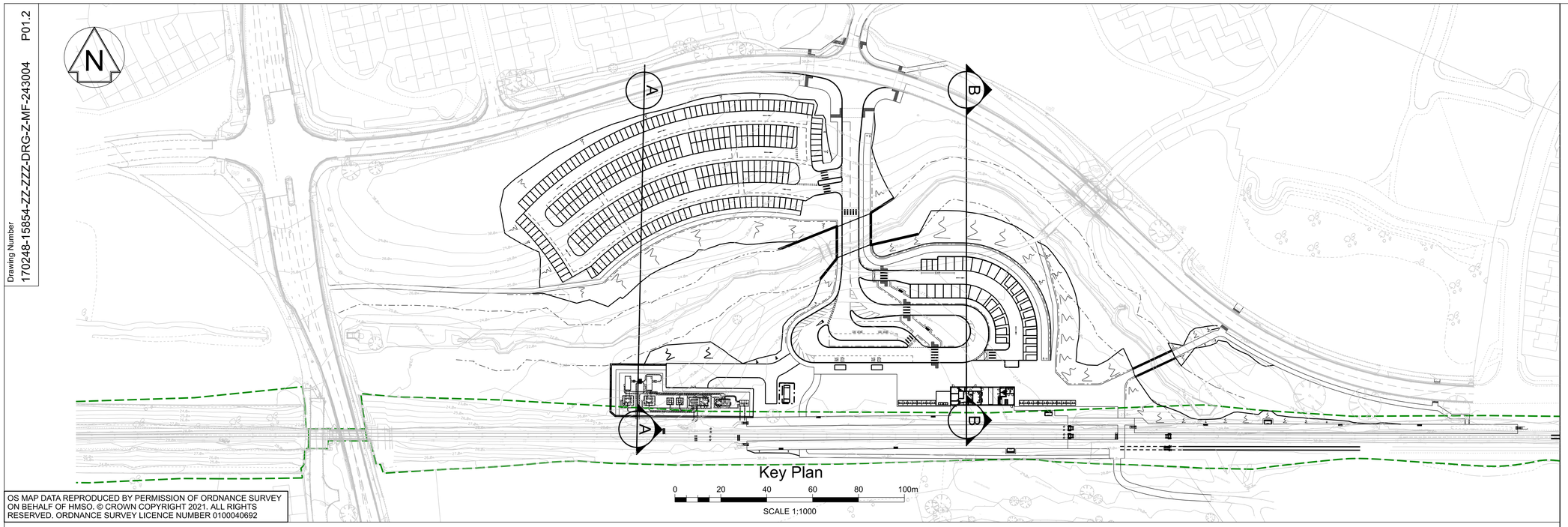
Issue
P3

Sheet Size A1 594 x 841

Figure 2.16

Car Park Cross Section

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243004 P01.2



Key Plan

0 20 40 60 80 100m

SCALE 1:1000

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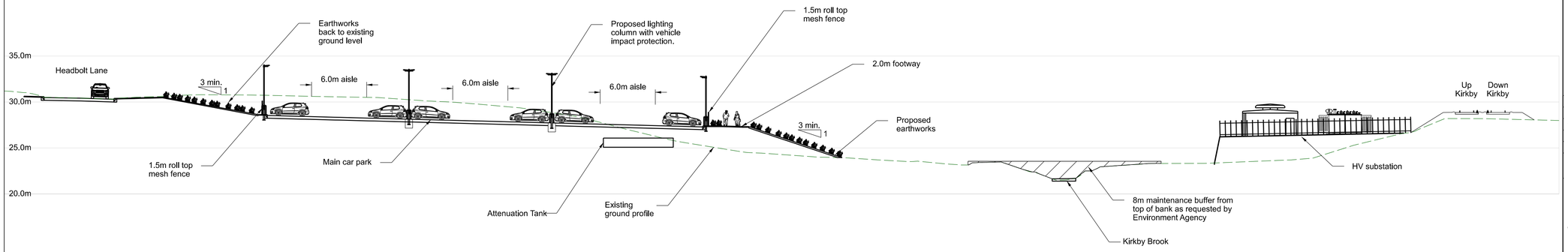
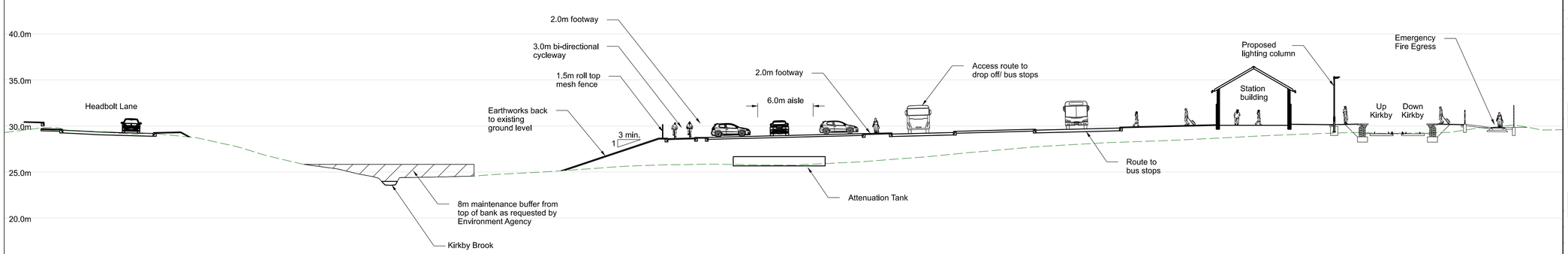


Section A-A

0 5 10 15 20 25m

SCALE 1:250



Section B-B

0 5 10 15 20 25m

SCALE 1:250

Legend/Notes

1. Do not scale from this drawing.
2. All dimensions are in millimetres unless shown otherwise.
3. Existing ground levels based on InoRail Topographical Survey P-116-099-SUR-DM3-0001 A03.

Key:

Proposed Works

Network Rail Boundary

Issue	Date	By	Chkd	Appd
P3	19-/08-21	JK	EB	EC

ARUP

3 Piccadilly Place
Manchester M1 3NB
Tel +44 161 228 2331
www.arup.com

Applicant

Network Rail

Job Title

170248 Headbolt Lane New Station Grip 4

Figure 2.16: Car Park Cross Section

Scale at A3

1:200

Job No
276736-00

Drawing Status
Issue

Drawing No
276736-13

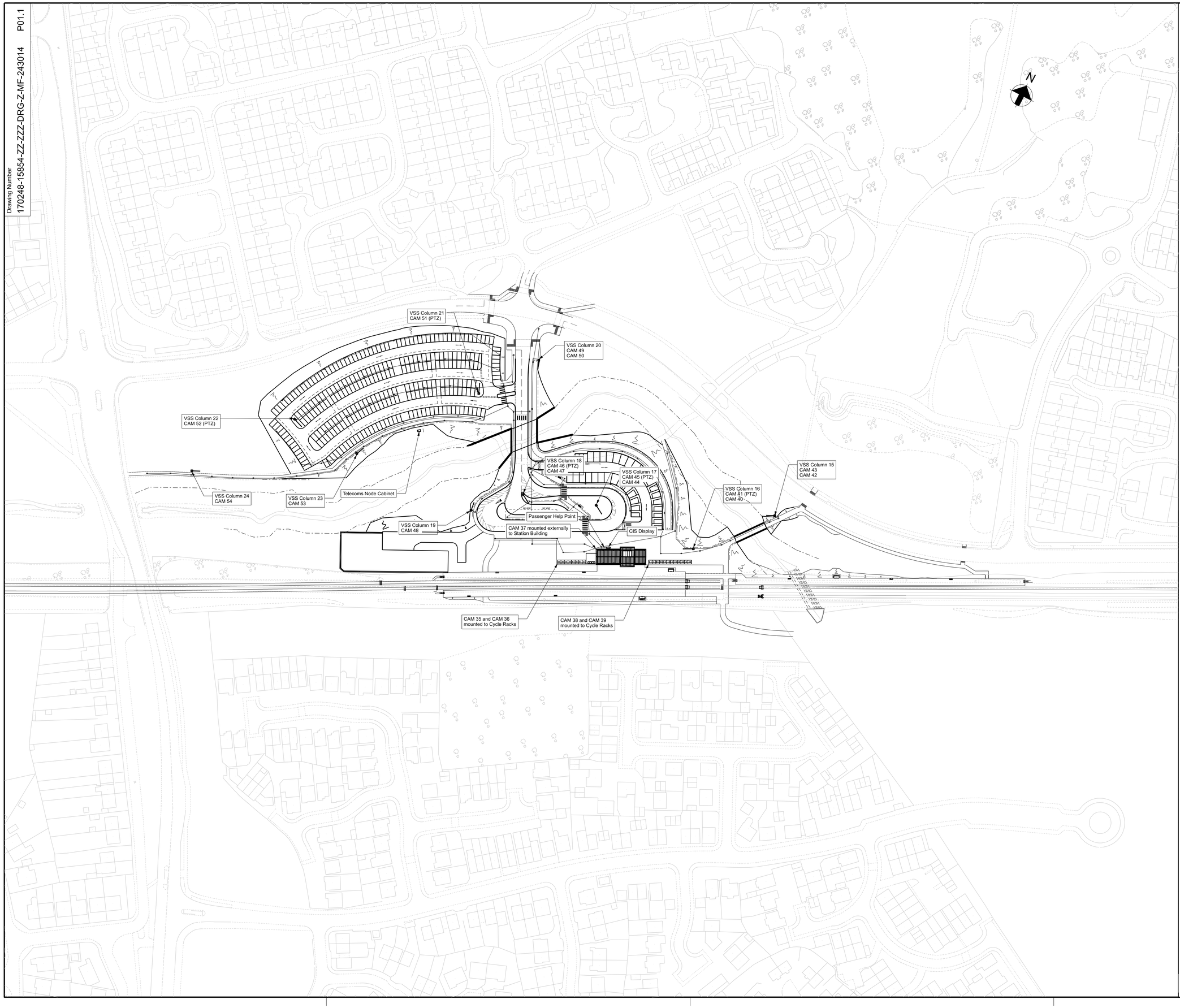
Issue
P3

Sheet Size A1 594 x 841

Figure 2.17a-2.17c

Tannoy and Telecom General Arrangement

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243014 P01.1



Legend/Notes

1. VSS COLUMNS 16, 17, 18, 21 & 22 TO BE ALTRON ACC2 6m TILT OVER COLUMNS.
2. VSS COLUMNS 15, 19, 20, 23 & 24 TO BE ALTRON ACC1 4.5m TILT OVER COLUMNS.
3. ALL COLUMNS ARE GALVANISED (GREY).

VIDEO SURVEILLANCE COLUMN

Issue	Date	By	Chkd	Appd
P3	19-/08-21	JK	EB	EC

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Figure 2.17a Station Car Park Tannoy and Telecommunications GA

Scale at A3

1:200

Job No
276736-00

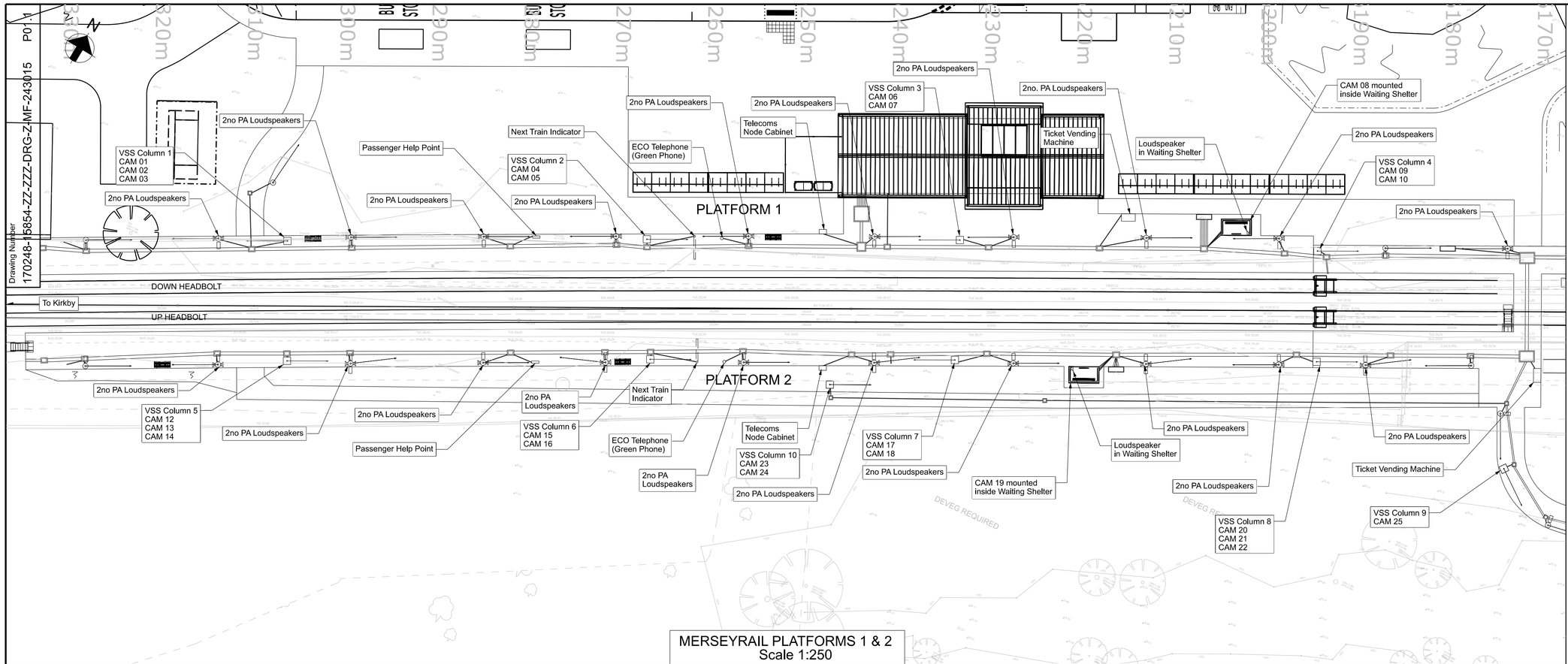
Drawing Status
Issue

Drawing No
276736-17a

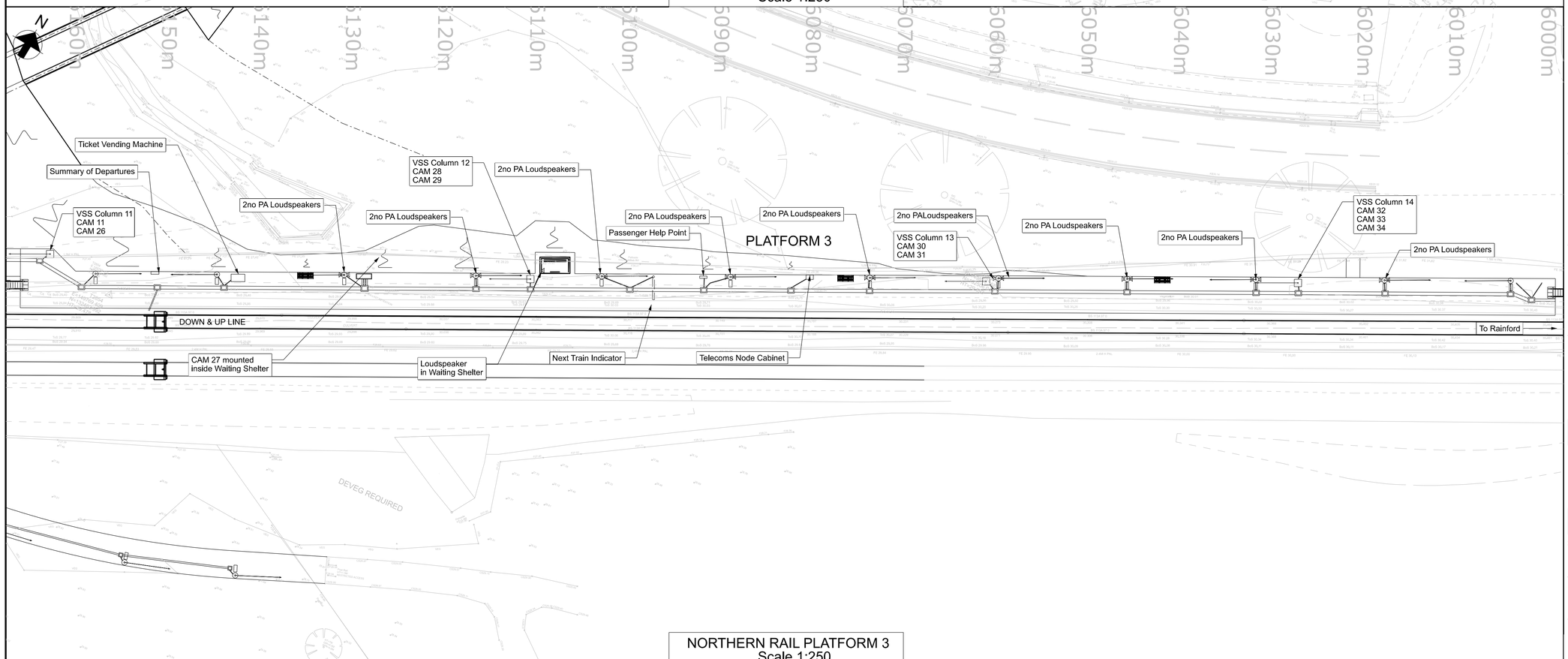
Issue
P3

Sheet Size A1 594 x 841

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243015 P01.1



MERSEYRAIL PLATFORMS 1 & 2
Scale 1:250



NORTHERN RAIL PLATFORM 3
Scale 1:250

Legend/Notes

1. VSS COLUMNS TO BE ALTRON ACC 4.5m TILT OVER COLUMNS.
2. PA LOUDSPEAKERS TO BE MOUNTED TO LIGHTING COLUMNS.
3. PASSENGER HELP POINTS TO BE FIXED TO FLOOR MOUNTED COLUMNS.
4. NEXT TRAIN INDICATORS TO BE DOUBLE SIDED AND FIXED TO FLOOR MOUNTED GALLOWS.
5. ALL COLUMNS ARE GALVANISED (GREY).

VIDEO SURVEILLANCE COLUMN

Issue	Date	By	Chkd	Appd
P3	19-/08-21	JK	EB	EC

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Figure 2.17b: Station Platform Tannoy and Telecommunications GA

Scale at A3
1:200

Job No
276736-00

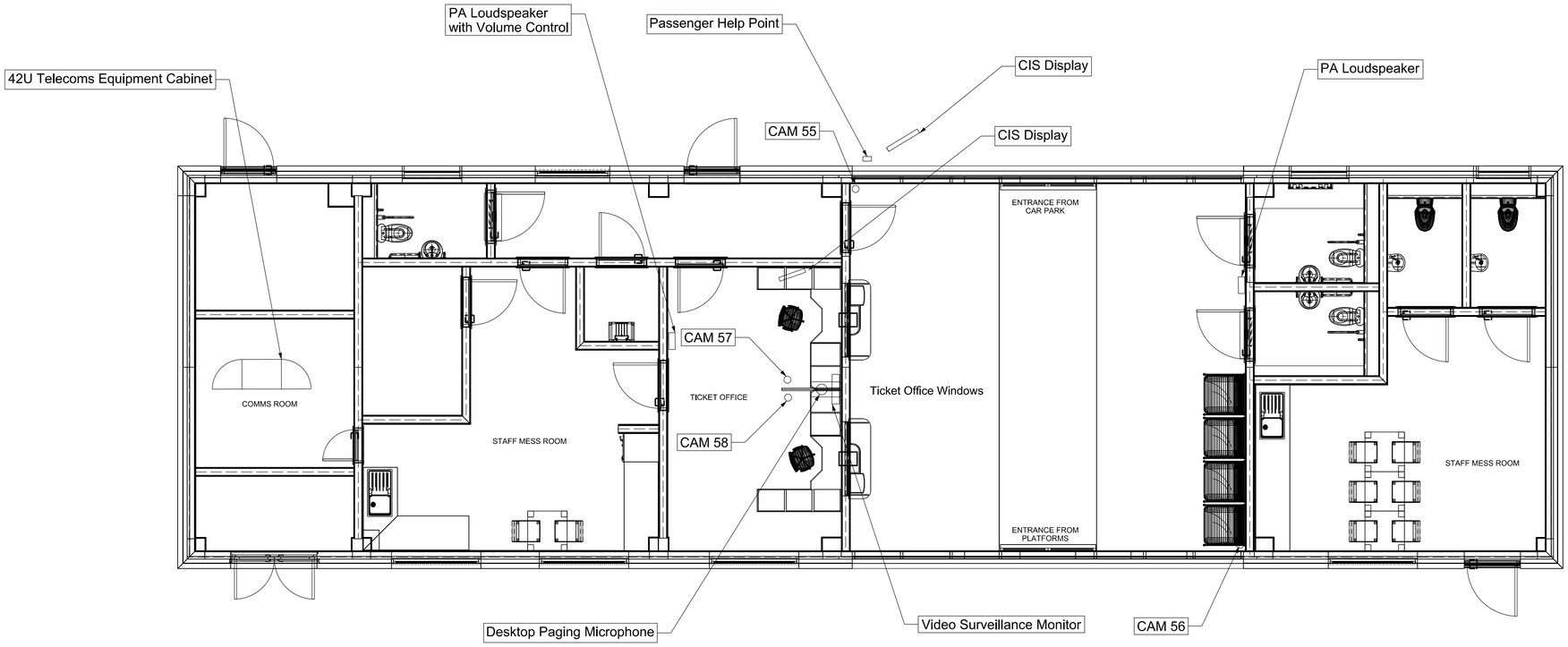
Drawing Status
Issue

Drawing No
276736-17b

Issue
P3

Sheet Size A1 594 x 841

Drawing Number
170248-15854-ZZ-ZZZ-DRG-Z-MF-243016 P01.1



Legend/Notes

1. SONIC COUNTER INTERCOM SYSTEM TO BE PROVIDED AT EACH TICKET OFFICE WINDOW.
2. CIS DISPLAY AT STATION ENTRANCE TO BE GALLOWS MOUNTED.
3. CIS DISPLAY IN THE TICKET OFFICE TO BE WALL MOUNTED.
4. PA LOUDSPEAKERS TO BE SURFACE MOUNTED ON THE WALLS.
5. A VOLUME CONTROL SHALL BE PROVIDED FOR THE TICKET OFFICE LOUDSPEAKER.
6. TELECOMS EQUIPMENT CABINET TO BE AN ABACUS PRO (42U H X 600mm W X 800mm D) WHICH REQUIRES FRONT AND REAR ACCESS.
7. VSS CAMERAS ARE CEILING MOUNTED DOME CAMERAS.

Issue	Date	By	Chkd	Appd
P3	19-/08-21	JK	EB	EC

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Figure 2.17c: Station Building Tannoy and Telecommunications GA

Scale at A3
1:200

Job No
276736-00

Drawing Status
Issue

Drawing No
276736-17c

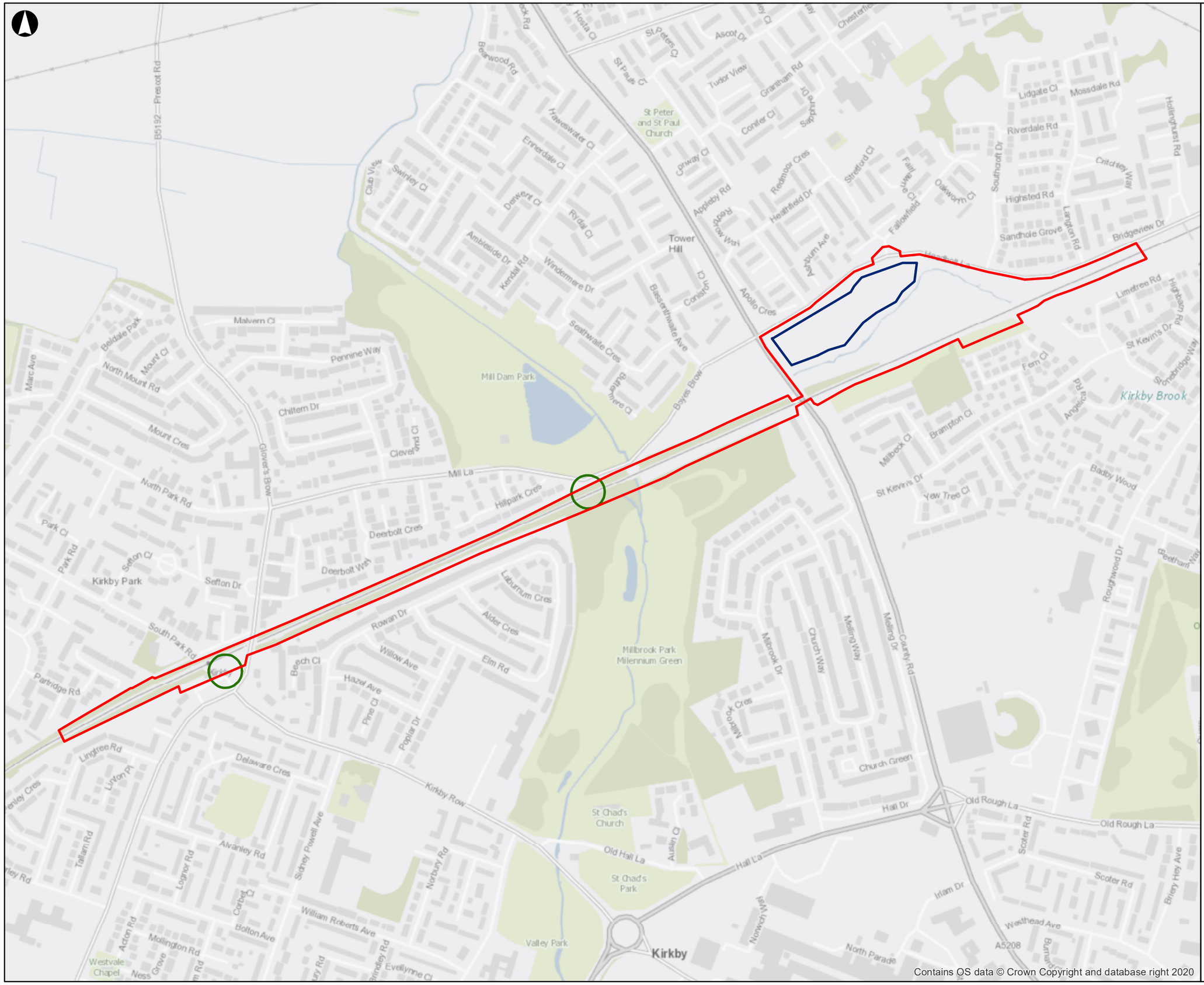
Issue
P3

Sheet Size A1 594 x 841

Figure 2.18

Temporary Laydown Areas and Construction Compounds

A3



Legend

- Proposed Red Line Boundary
- Main Construction Compound
- Temporary Construction Compound and Welfare

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Issue	Date	By	Chkd	Appd
P1	16-08-21	JK	EB	EC

Metres

0 75 150 300

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78 East Street
Leeds LS9 8EE

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Job Title

170248 Headbolt Lane New Station GRIP 4

Figure 2.18: Temporary Laydown Areas and Construction Compounds

Scale at A3

1:5,843

Job No	Drawing Status
276736-00	**Issue**

Drawing No	Issue
276736/2.18	**P1**

MXD Location

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Figure 4.1

Local Key Routes

A3

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres
0 245 490 980

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Network Rail

Job Title
170248 Headbolt Lane
New Station GRIP 4

Figure 4.1: Local Key Routes

Scale at A3 **Not at scale**

Job No **276736-00**
Drawing Status **Issue**
Drawing No **276736/4.1**
Issue **P3**

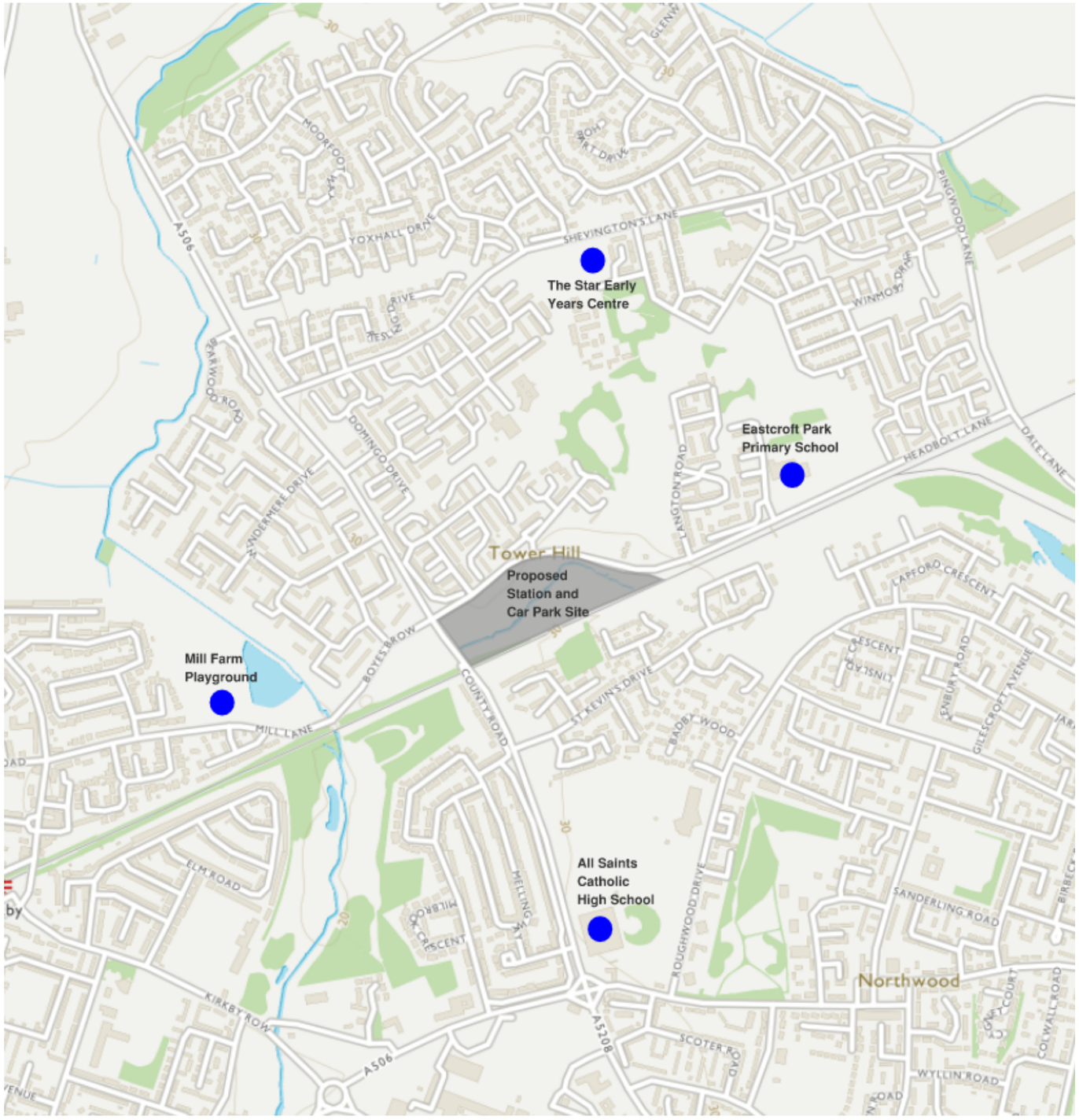
MXD Location

© Arup

Figure 4.2

Key Sensitive Receptors

A3



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Issue	Date	By	Chkd	Appd

Metres
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Figure 4.2: Key Sensitive Receptors

Scale at A3 **Not at scale**

Job No **276736-00**

Drawing Status **Issue**

Drawing No **276736/4.2**

Issue **P3**

MXD Location

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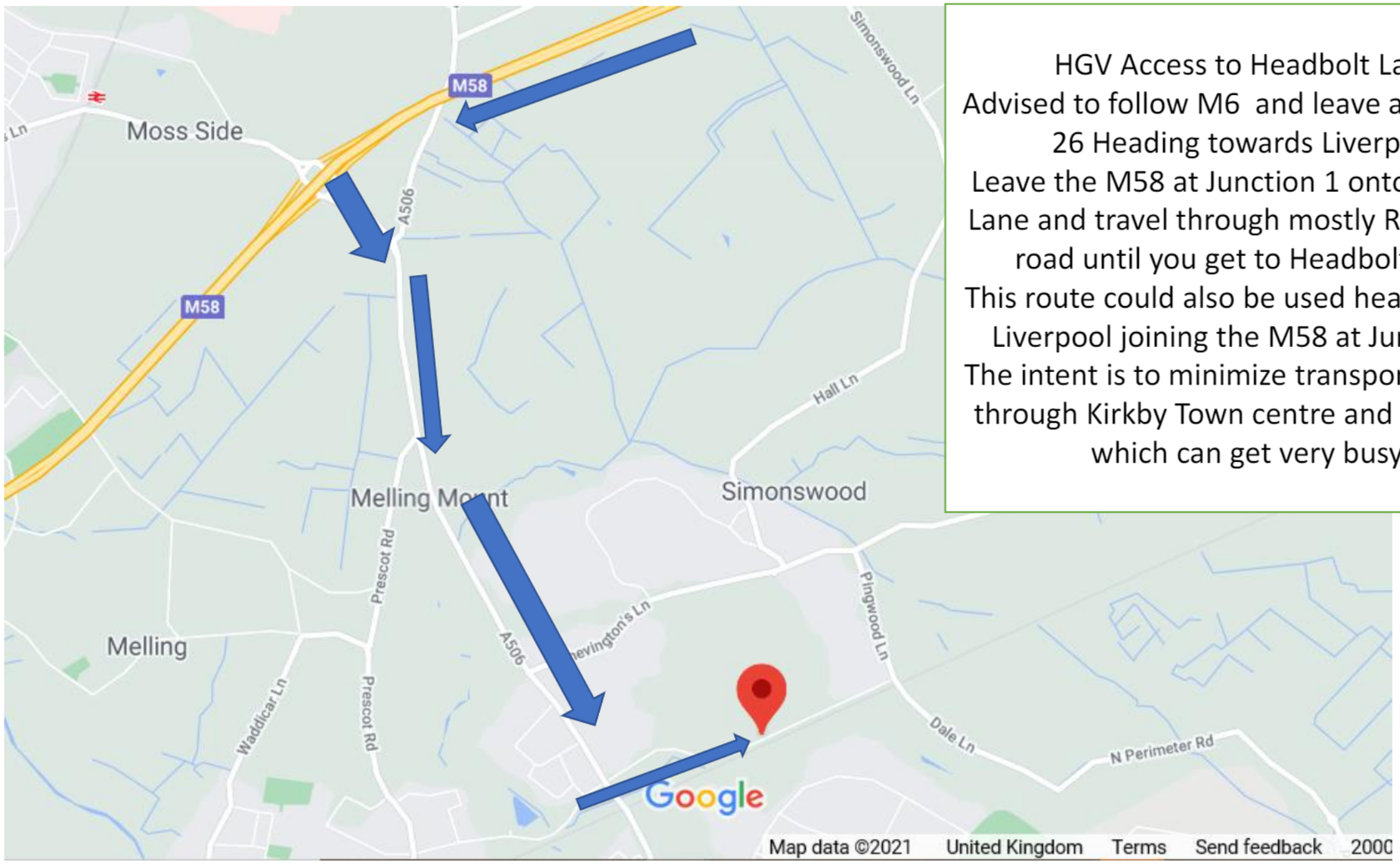
Figure 4.3

Construction HGV Routing Plan

A3



HGV Access to Headbolt Lane
Advised to follow M6 and leave at Junction 26 Heading towards Liverpool
Leave the M58 at Junction 1 onto Maghull Lane and travel through mostly Rural A506 road until you get to Headbolt Lane
This route could also be used heading from Liverpool joining the M58 at Junction 1
The intent is to minimize transport heading through Kirkby Town centre and Westvale which can get very busy

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres
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Network Rail

Job Title
170248 Headbolt Lane
New Station GRIP 4

Figure 4.3: Construction HGV Routing Plan

Scale at A3 **Not at scale**

Job No **276736-00**
Drawing Status **Issue**
Drawing No **276736/4.3**
Issue **P3**

MXD Location

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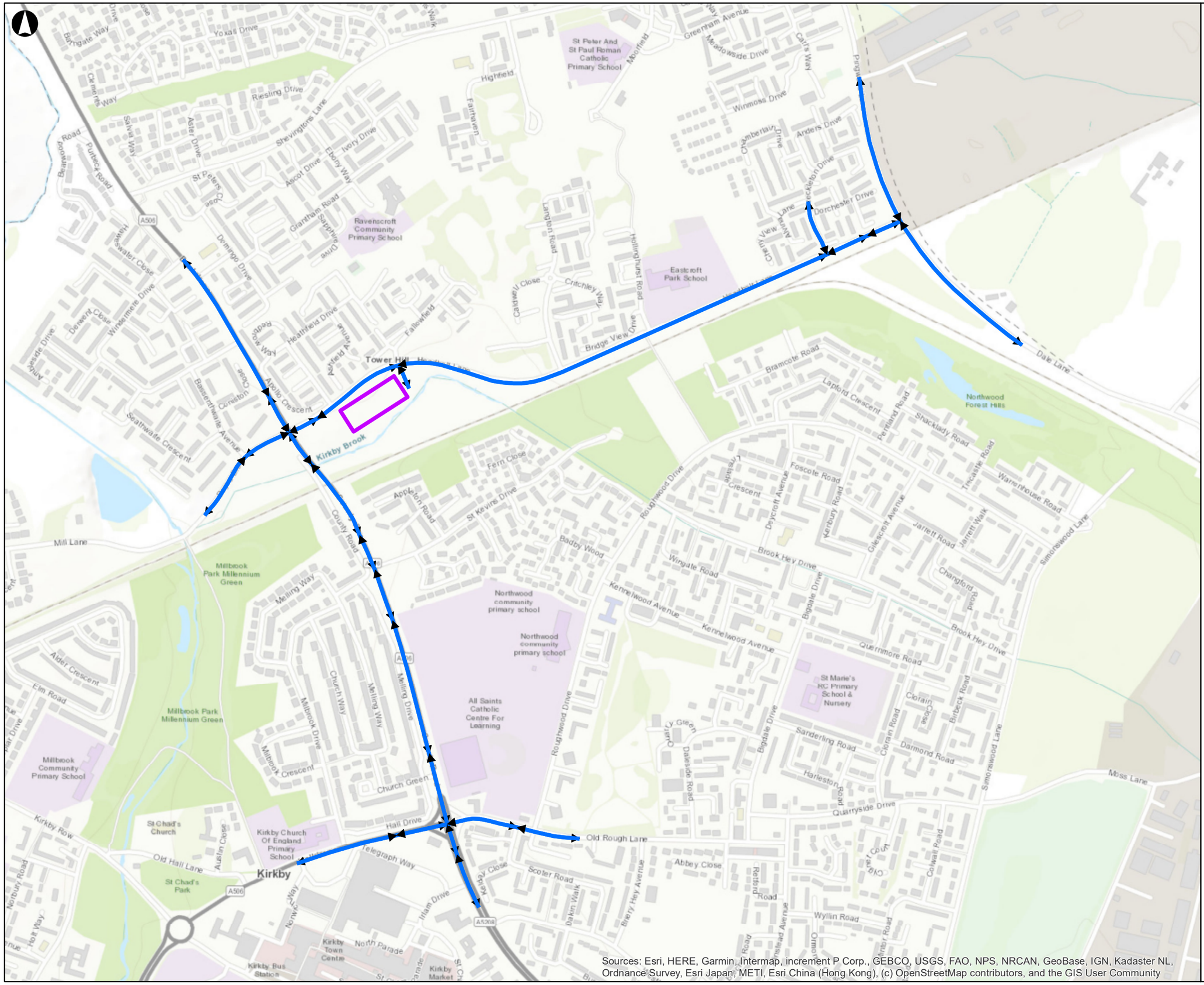
Figure 5.1

Modelled Road Network

A3



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Legend

Modelled car park

Modelled roads

Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres
0 75 150 300

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Job Title
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Figure 5.1: Modelled road network

Scale at A3
1:7,000

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/5.1

Issue
P3

19/05/2021 22:55:24

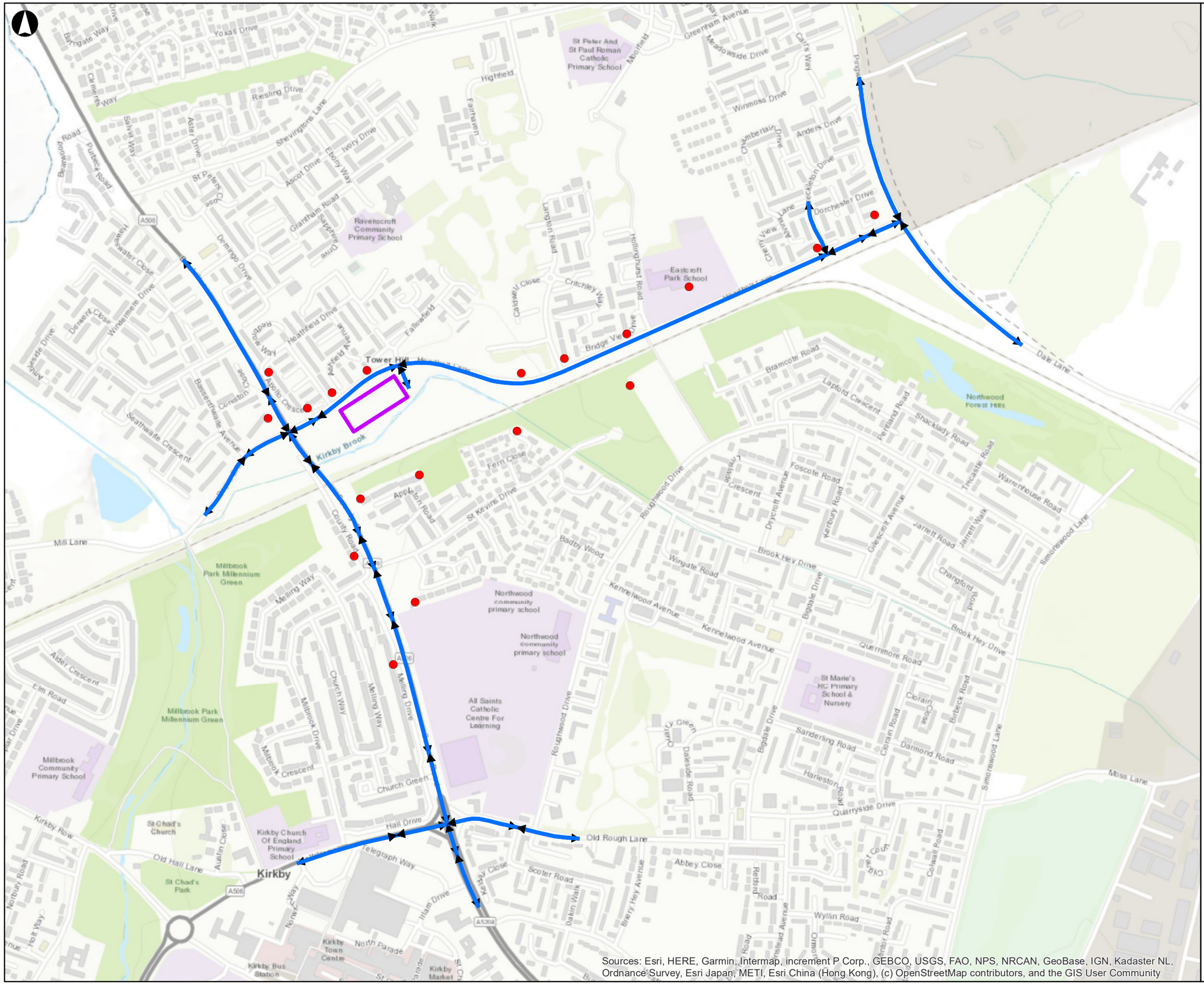
MXD Location

© Arup

Figure 5.2

Location of Sensitive Receptors

A3



Legend

- Modelled car park
- Sensitive receptors
- Modelled roads

Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres
0 75 150 300

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Figure 5.2: Location of sensitive receptors

Scale at A3
1:7,000

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/5.2

Issue
P3

19/05/2021 22:55:24

MXD Location

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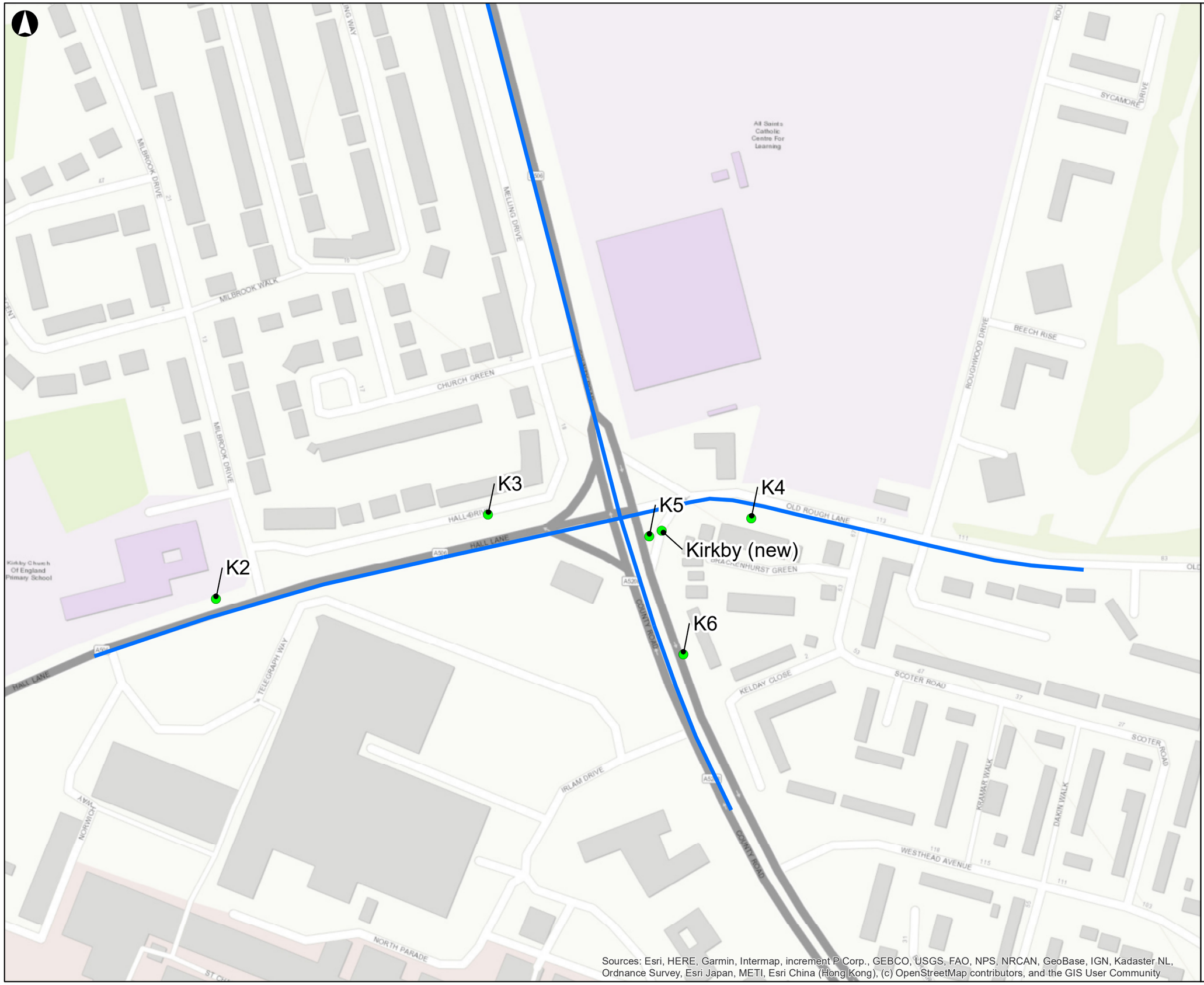
Figure 5.3

Local Monitoring Locations

A3



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Legend

- Local monitoring sites
- Modelled roads

Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres
0 25 50 100

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Figure 5.3: Local monitoring locations

Scale at A3
1:2,000

Job No
276736-00

Drawing Status
Issue

Drawing No
276736/5.3

Issue
P3

19/05/2021 22:55:24

MXD Location

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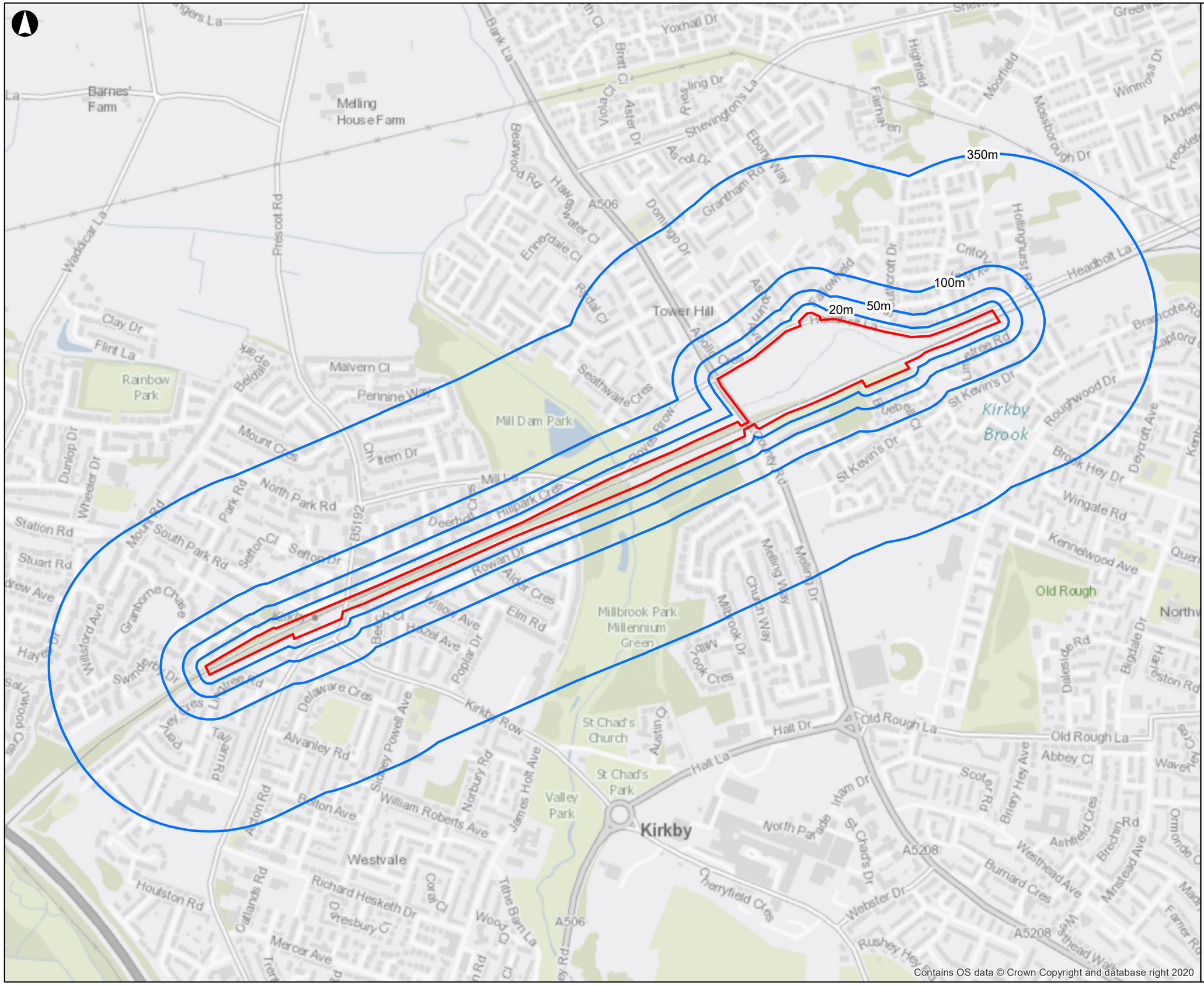
Figure 5.4

Construction Dust

A3



Legend

Proposed Red Line Boundary

Construction Dust Buffers

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres

0 100 200 400

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Job Title

170248 Headbolt Lane New Station GRIP 4

Figure 5.4: Construction Dust

Scale at A3

1:8,000

Job No	Drawing Status
276736-00	**Issue**

Drawing No	Issue
276736/5.4	**P3**

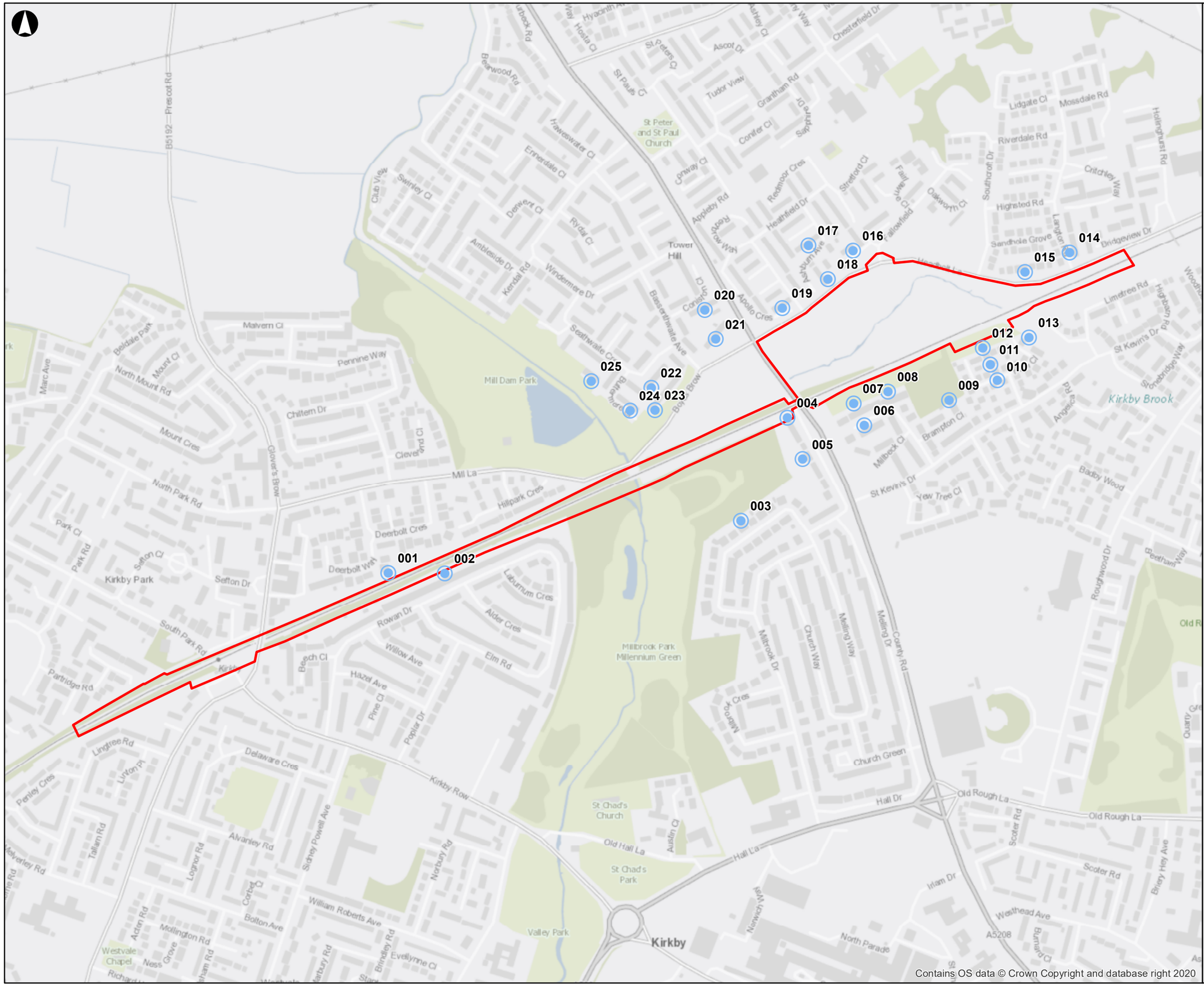
MXD Location

© Arup

Figure 6.1

Noise and Vibration Receptor Locations

A3



Legend

Receptors

Proposed Red Line Boundary

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres

0 75 150 300

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Figure 6.1: Noise and Vibration Receptor Locations

Scale at A3

1:6,000

Job No **276736-00**

Drawing Status **Issue**

Drawing No **276736/6.1**

Issue **P3**

MXD Location

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Figure 8.1

Proposed Station and Car Park Site

A3

Legend

Indicative Red Line Boundary

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Issue	Date	By	Chkd	Appd
P3	17-08-21	RSB	SG	SG

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Client

Buckingham Group Contracting Ltd

Job Title

Headbolt Lane New Station

Figure 8.1
Proposed Station and Car Park Site

Scale at A3

1:3,000

Job No: **P20566**

Drawing Status: **Issue**

Drawing No: **P20566-00-002-GIL-0611**

Issue: **P3**

R:\P20566-00-001 Headbolt Lane\GIS\Layouts\P20566-00-001-GIL-0611-XX Site Satellite Imagery.mxd

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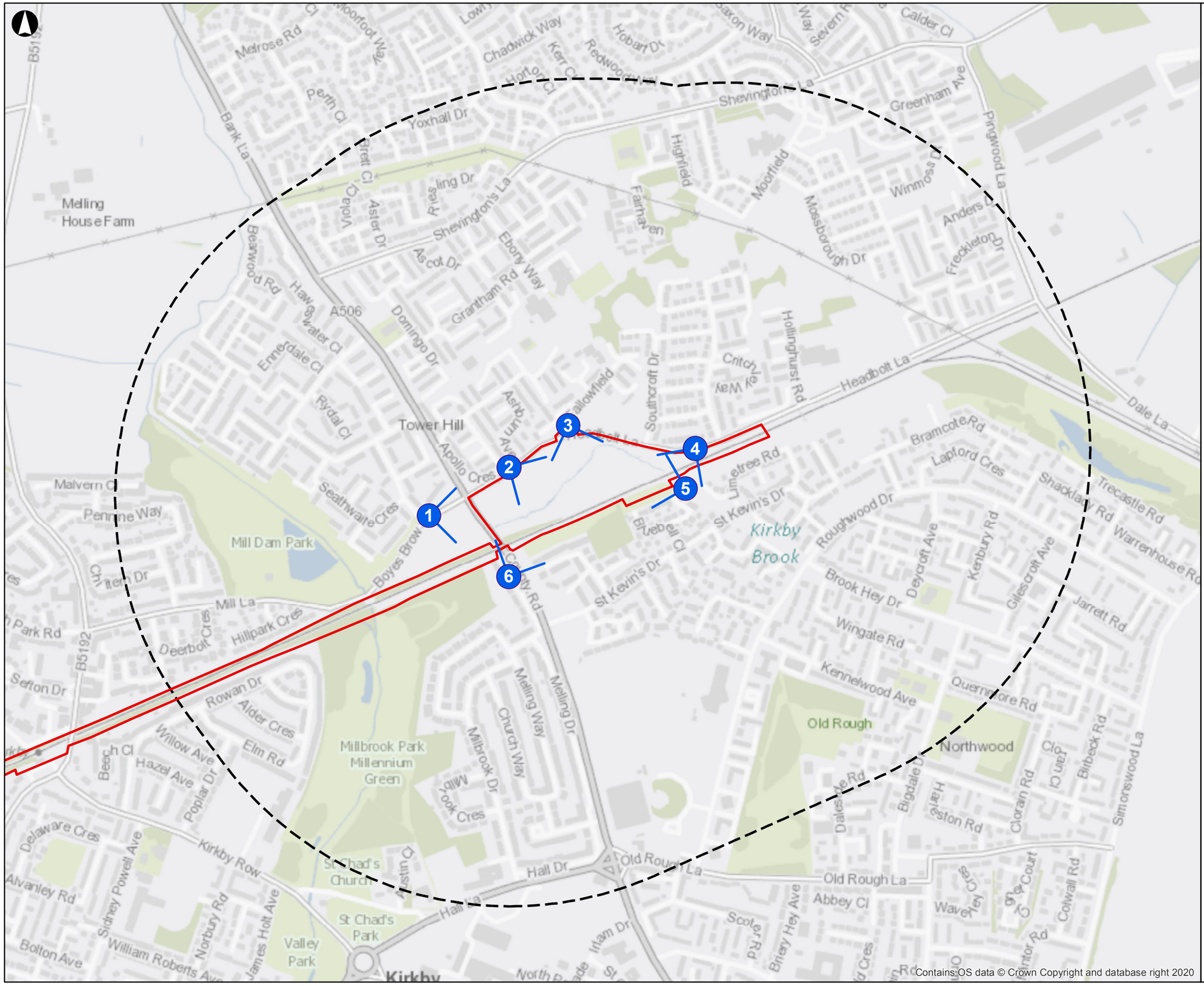
Figure 8.2

Study Area and Viewpoint Location Plan

A3



Legend

- Indicative Red Line Boundary
- Study Area
- Viewpoint

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Issue	Date	By	Chkd	Appd
P3	17-08-21	RSB	SG	SG

Metres
0 100 200 400

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Client
Buckingham Group Contracting Ltd

Job Title
Headbolt Lane New Station

Figure 8.2
Study Area and Viewpoint Location Plan

Scale at A3
1:7,500

Job No	Drawing Status
P20566	Issue

Drawing No	Issue
P20566-00-002-GIL-0605	P3

R:\P20566-00-001 Headbolt Lane\GIS\Layouts\P20566-00-001-GIL-0605-XX Viewpoint Location Plan.mxd

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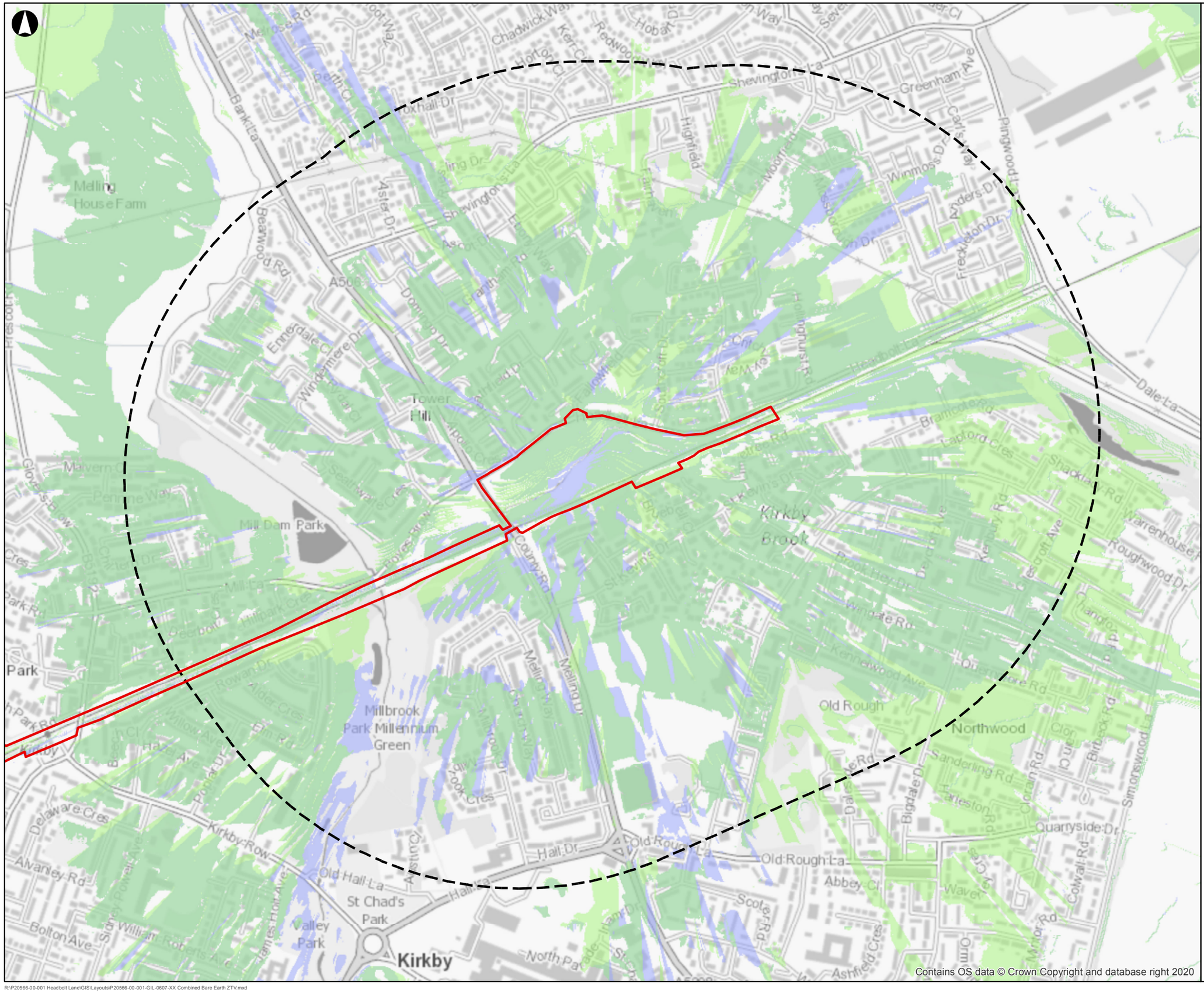
Figure 8.3

Bare Earth ZTV

A3



Legend

- Indicative Red Line Boundary
- Study Area

Station Visibility:

- Not Visible
- Visible

Car Park Lighting Visibility:

- Not Visible
- Visible
- Station & Lighting Visible

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Issue	Date	By	Chkd	Appd
P3	17-08-21	RSB	SG	EP

Metres
0 100 200 400

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Job Title
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Figure 8.3
Bare Earth ZTV

Scale at A3
1:7,500

Job No
P20566

Drawing Status
Issue

Drawing No
P20566-00-002-GIL-0607

Issue
P3

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Figure 8.4

Google Earth Station Viewshed

A3

Legend

Indicative Red Line Boundary

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Viewshed created using terrain and building data from Google Earth Pro

Issue	Date	By	Chkd	Appd
P3	17-08-21	RSB	SG	SG

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Client

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Job Title

Headbolt Lane New Station

Figure 8.4
Google Earth Station Viewshed

Scale at A3

Not to scale

Job No	Drawing Status
P20566	**Issue**

Drawing No	Issue
P20566-00-002-GIL-0602	**P3**

R:\P20566-00-001 Headbolt Lane\GIS\Layouts\P20566-00-001-GIL-0602-XX Google Earth Station Viewshed.mxd

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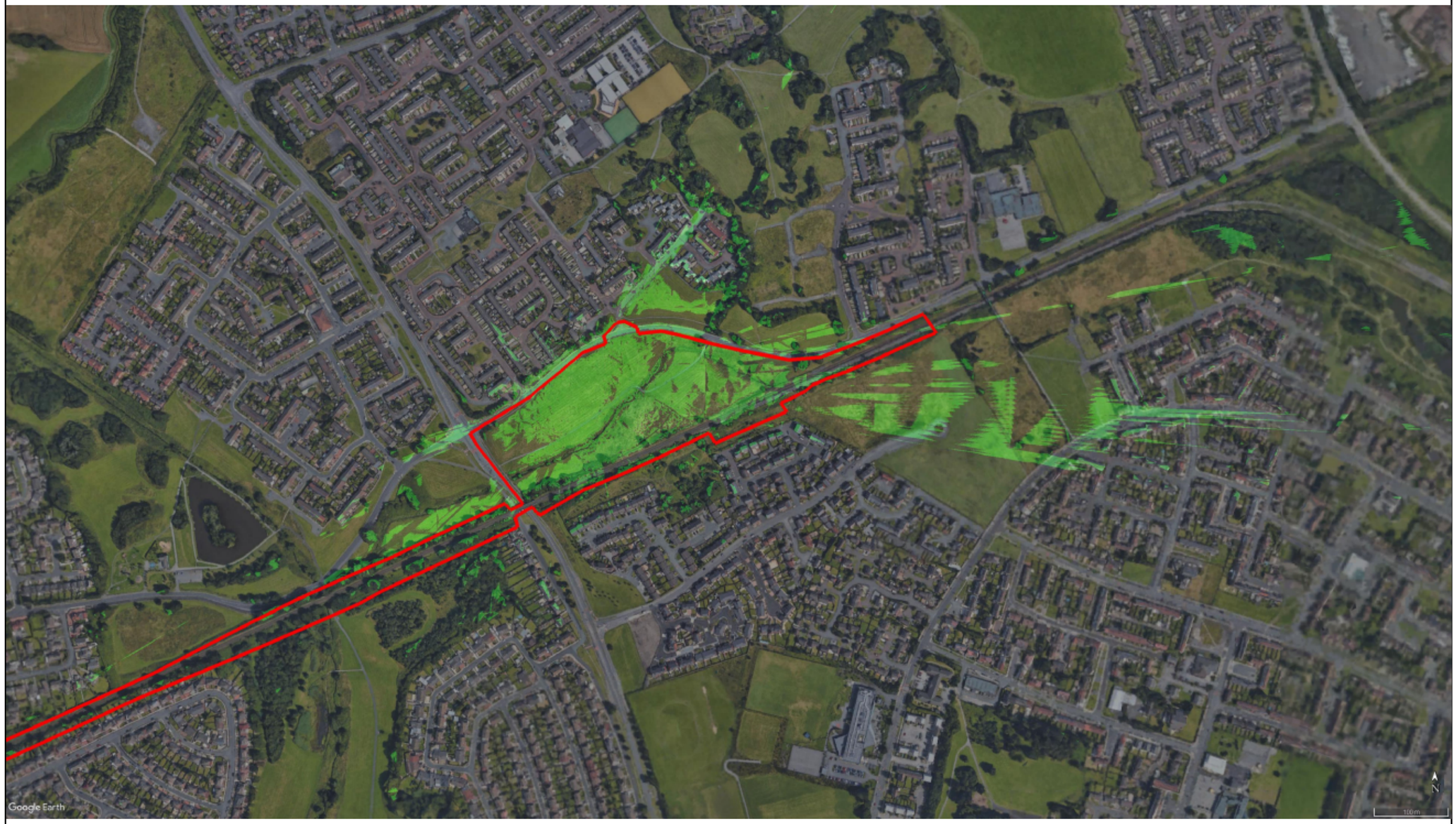
Figure 8.5

Google Earth Car Park Lighting Viewshed

A3



Legend

Indicative Red Line Boundary

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Client

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Job Title

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Figure 8.5
Google Earth Car Park
Lighting Viewshed

Scale at A3

Not to scale

Job No	Drawing Status
P20566	**Issue**

Drawing No	Issue
P20566-00-002-GIL-0604	**P3**

R:\P20566-00-001 Headbolt Lane\GIS\Layouts\P20566-00-001-GIL-0604-XX Google Earth Car Park Lighting Viewshed.mxd

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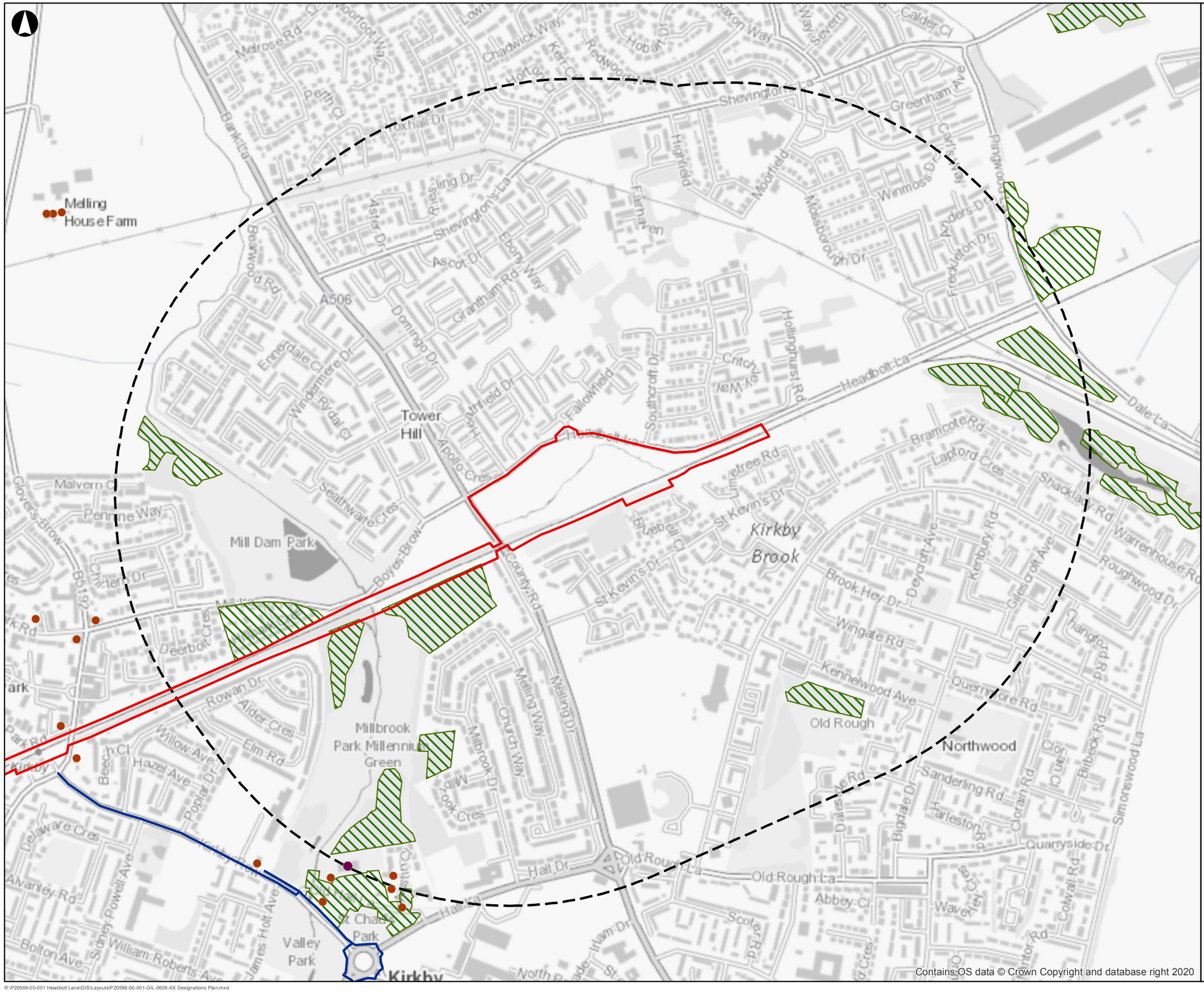
Figure 8.6

Landscape Designations Plan

A3



Legend

- Indicative Red Line Boundary
- Study Area

Listed Building Grade:

- II
- II*
- National Forest Inventory
- National Cycle Network

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Issue	Date	By	Chkd	Appd
P3	17-08-21	RSB	SG	SG

Metres
0 100 200 400

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Client
Buckingham Group Contracting Ltd

Job Title
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Figure 8.6
Landscape Designations Plan

Scale at A3
1:7,500

Job No	Drawing Status
P20566	**Issue**

Drawing No	Issue
P20566-00-002-GIL-0609	**P3**

R:\P20566-00-001 Headbolt Lane\GIS\Layouts\P20566-00-001-GIL-0609-XX Designations Plan.mxd

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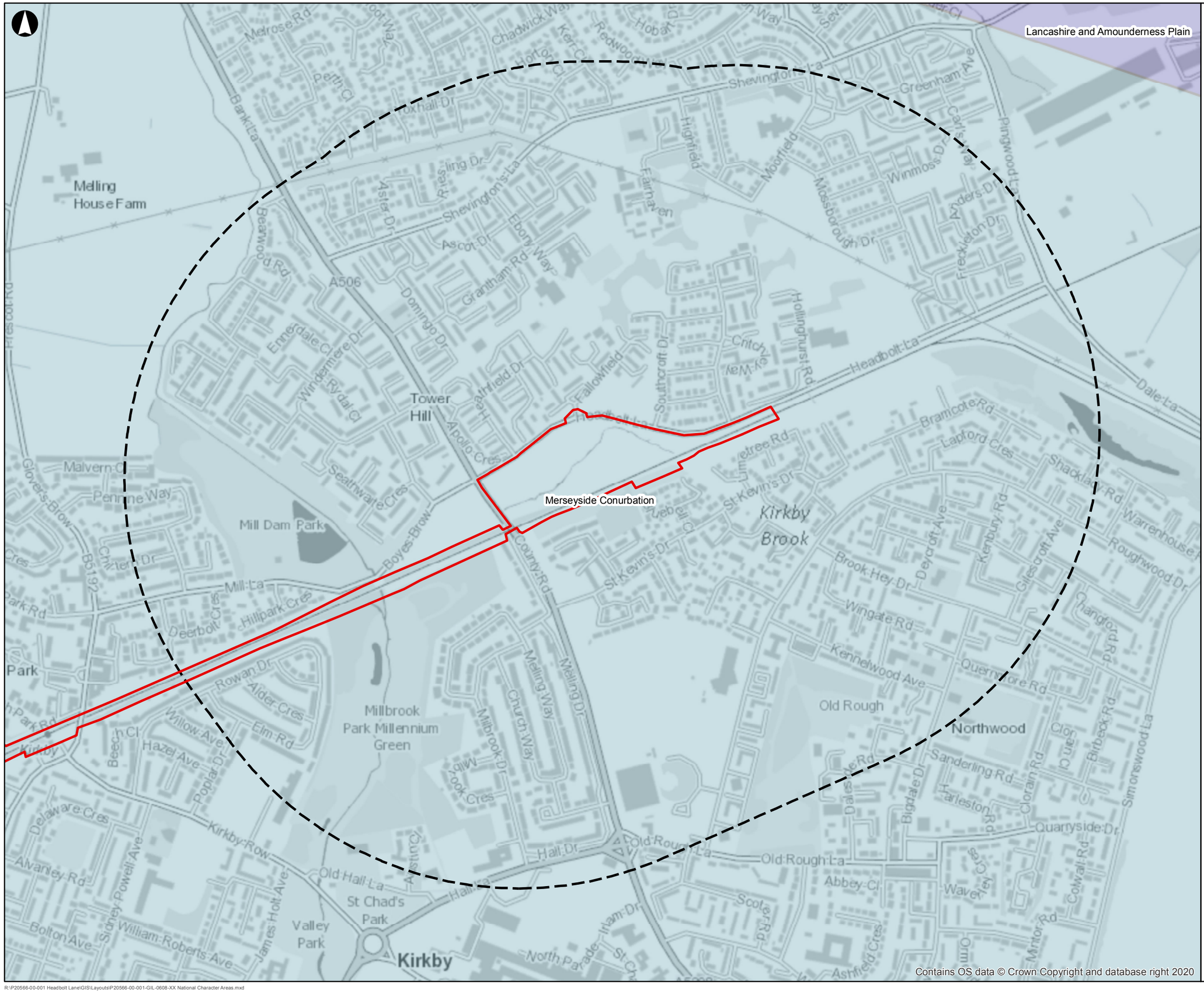
Figure 8.7

National Character Areas

A3



Legend

- Indicative Red Line Boundary
- Study Area

National Character Area:

- Lancashire and Amounderness Plain
- Merseyside Conurbation

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Issue	Date	By	Chkd	Appd
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Metres
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Client
Buckingham Group Contracting Ltd

Job Title
Headbolt Lane New Station

Figure 8.7
National Character Areas

Scale at A3
1:7,500

Job No
P20566

Drawing Status
Issue

Drawing No
P20566-00-002-GIL-0608

Issue
P3

R:\P20566-00-001 Headbolt Lane\GIS\Layouts\P20566-00-001-GIL-0608-XX National Character Areas.mxd

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Figure 9.1

Flood Zones Across the Site

A3

Contains OS data © Crown Copyright and database right 2020

Legend

- Proposed Red Line Boundary
- Flood Zone 2
- Flood Zone 3

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres

0 100 200 400

ARUP

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Applicant

Network Rail

Job Title

170248 Headbolt Lane New Station GRIP 4

Figure 9.1: Flood Zones Across the Site

Scale at A3

1:8,000

Job No	Drawing Status
276736-00	**Issue**

Drawing No	Issue
276736/9.1	**P3**

MXD Location

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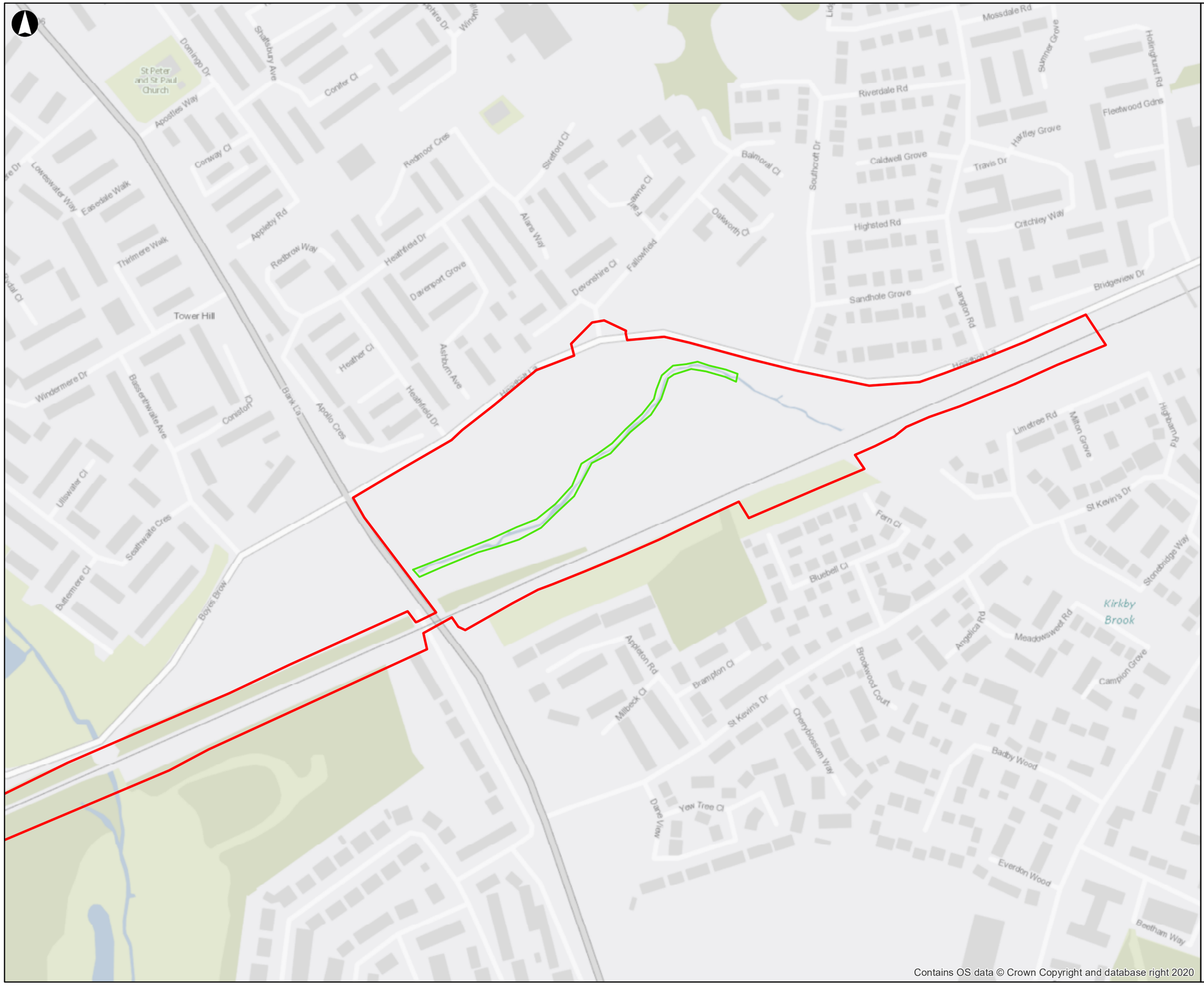
Figure 10.1

Local Geological Site

A3



Legend

Proposed Red Line Boundary

Local Geological Site

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres

0 37.5 75 150

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Figure 10.1: Local Geological Site

Scale at A3 **1:3,000**

Job No **276736-00**

Drawing Status **Issue**

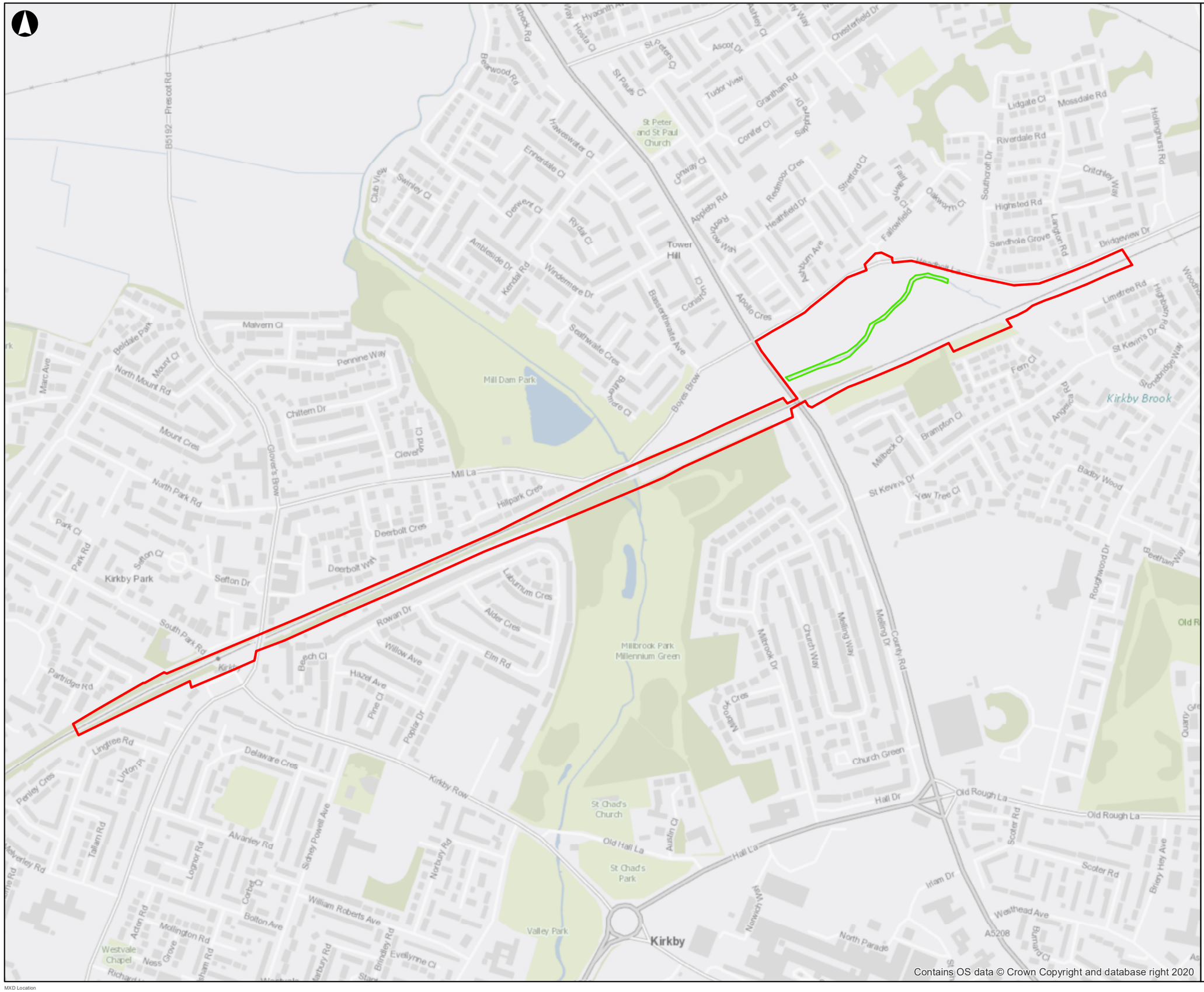
Drawing No **276736/10.1**

Issue **P3**

MXD Location

© Arup

A3



Legend

Proposed Red Line Boundary

Local Geological Site

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Issue	Date	By	Chkd	Appd
P3	19-08-21	JK	EB	EC

Metres

0 75 150 300

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Figure 10.1: Local Geological Site

Scale at A3

1:6,000

Job No	Drawing Status
276736-00	**Issue**

Drawing No	Issue
276736/10.1	**P3**

MXD Location

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