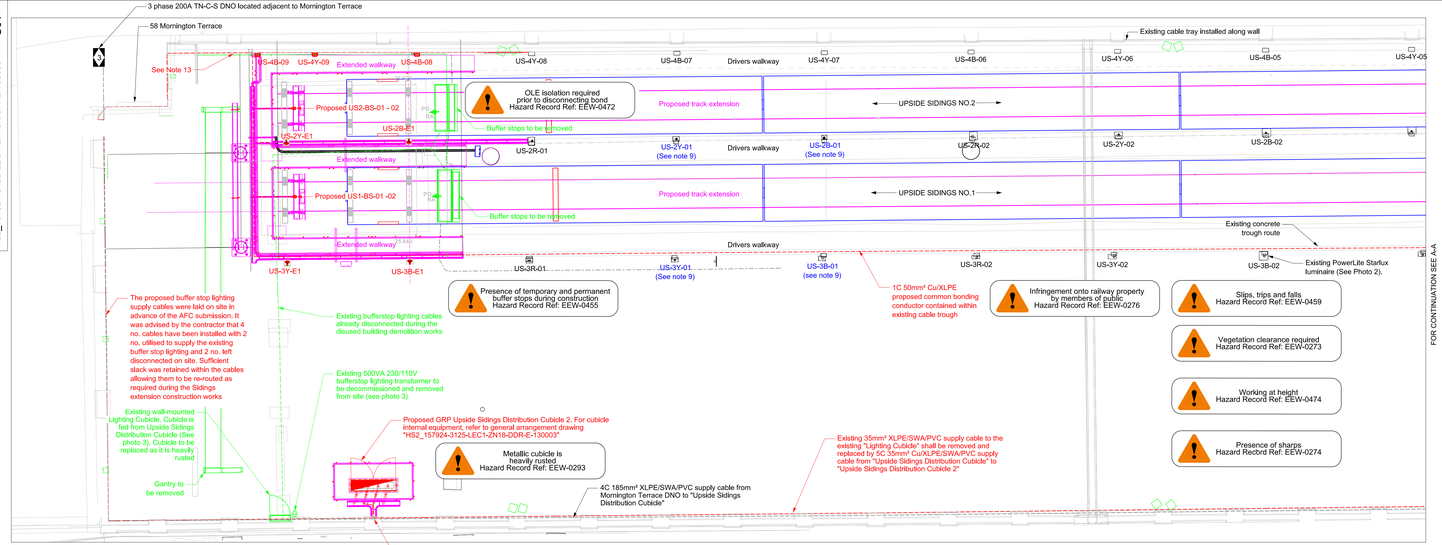
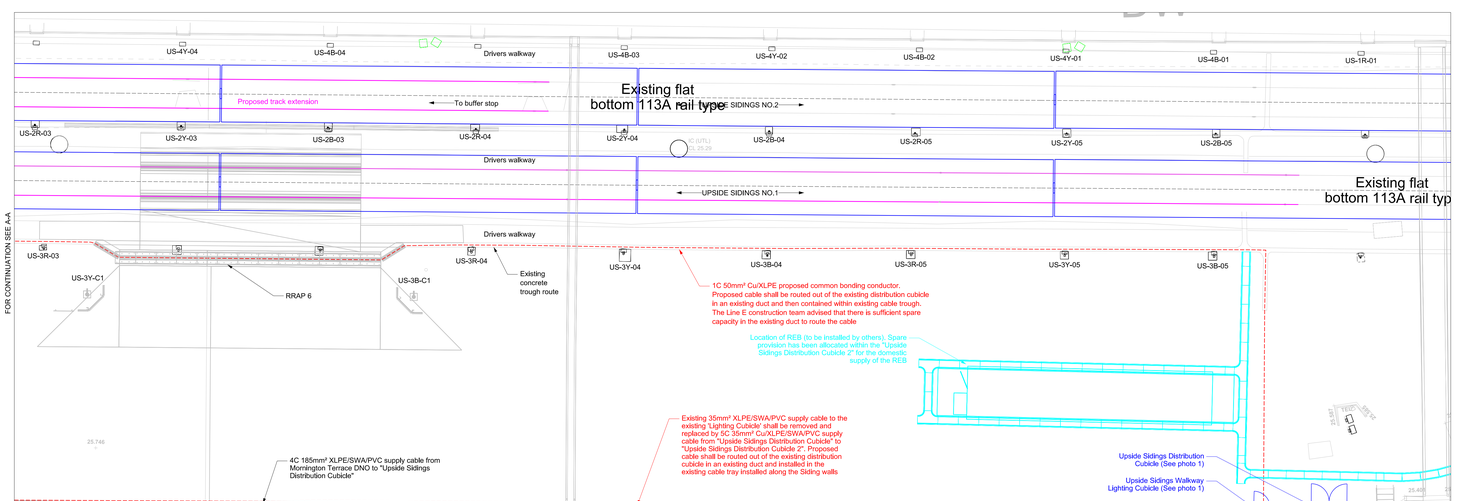
Drawing Number HS2_157924-3125-LEC1-ZN18-DDR-E-130003 C01



UP SIDINGS LAYOUT PLAN 1 OF 2



UP SIDINGS LAYOUT PLAN 2 OF 2

Luminaire Schedule		
Layout	Luminaire Description	Image
	Holophane Denver Elite LED Bollard 12W 815lm 4000k DEB.NAJP.L014.PAY.DO.H75.C7.C.MCB.X132.X133 750mm Bollard	
	RegorLED1 15W 1835lm 4000k R1L304K-6MM Wall Mounted Mounting Height: 1.7m	
	Part no. 084-501-75 (or similar approved) 110V LED buffer stop luminaire of Red aspect Mounted on buffer stops PADS No. 0055/050262	
	Existing redundant luminaires mounted at high-level within the Up Sidings	
	Existing Starlux luminaires Post-mounted Mounting Height: 1.1m, 1.6m	

Authorised Walkway Illumination Levels as per BS EN 12464 - 2:2014		
Reference	Avg. Lux	Uniformity
Target	10	=>0.25
Proposed Extended Walkway at US-1, Central Walkway and US-2	31	0.35

KEY:
Cables
Cable troughing

Lighting Circuitry Schedule		
From	To	Cable
US-3B-01	US-3B-E1	3C 6mm² XLPE/SWA/PVC
US-3Y-01	US-3Y-E1	3C 6mm² XLPE/SWA/PVC
US-2B-01	US-2B-E1	3C 6mm² XLPE/SWA/PVC
US-2Y-01	US-2Y-E1	3C 6mm² XLPE/SWA/PVC
US-4B-07	US-4B-08	3C 6mm² XLPE/SWA/PVC
US-4Y-08	US-4Y-09	3C 6mm² XLPE/SWA/PVC
US-4B-08	US-4B-09	3C 6mm² XLPE/SWA/PVC

For earthing and bonding schematic refer to schematic drawing no. HS2_157924-3125-LEC1-ZN18-DDR-E-130001

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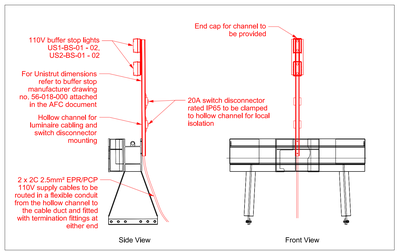
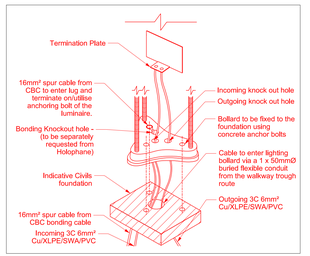
Significant or unusual residual health and safety hazard. Action is required by the person implementing this design to manage the residual hazard. A full list of hazards is contained in the Project Hazard Record (EB Ref: 150248-NWR-REG-MPM-000006)

Bollard Label Key:
US/XX/EX
Upsidings.
Circuit ID.
Extension/Luminaire ID.

Bulkhead Luminaire Label Key:
US/XX/XX
Upsidings.
Circuit ID.
Luminaire ID.



BUFFER STOP CABLING DETAIL A1 (N.T.S)



HOLOPHANE DENVER ELITE BOLLARD MOUNTING DETAILS (A2) (N.T.S)

KEY:
Existing Equipment
Proposed Equipment
Modified Equipment
Removed Equipment
Equipment Proposed by others
Design Managed by others

PHOTO 1 - EXISTING UPSIDE SIDINGS DISTRIBUTION CUBICLE & EXISTING UPSIDE SIDINGS WALKWAY LIGHTING CUBICLE

Existing Starlux Powerlite luminaire.

PHOTO 2 - EXISTING LUMINAIRE

PHOTO 3 - EXISTING LIGHTING CUBICLE TO BE REMOVED AND REPLACED BY UPSIDE SIDINGS DISTRIBUTION CUBICLE 2

GUIDE TO PHASE COLOURS

OLD	1Φ	NEW
red	L	brown
black	N	blue

	3Φ	
red	L1	brown
yellow	L2	black
blue	L3	grey
black	N	blue

If both new and old colour versions are used together - a warning label MUST be affixed at or near the distribution board.

CAUTION
This Installation has wiring colours to two versions of BS 7671. Great care should be taken before undertaking extensions, alteration or repair that all conductors are correctly identified.

The warning label must comprise black text upon a yellow background

Legend/Notes

1. Electrical information only to be read from this drawing.
2. All electrical installation to be in compliance with BS 7671.
3. This drawing is to be read in conjunction with: "Up Sidings LV Electrical Schematic" drawing - HS2_157924-3125-LEC1-ZN18-DDR-E-130001. "Upside Sidings Distribution Cubicle 2 Electrical Schematic" drawing - HS2_157924-3125-LEC1-ZN18-DDR-E-130002. "Up Sidings Distribution Cubicle 2 General Arrangement" drawing - HS2_157924-3125-LEC1-ZN18-DDR-E-130004. AFC Report - 158157-ACM-REP-EP-130001.
4. All symbols are indicative only and not drawn to scale.
5. Proposed bollards shall be 750mm Denver Elite bollards mounted on 250mm foundations.
6. The existing concrete trough has sufficient spare capacity for the proposed luminaire power supply cables and CBC.
7. Proposed buffer stop luminaires are to be fed from the proposed "Upside Sidings Distribution Cubicle 2" via 2 number 230/110V 500VA transformers through the existing cable tray and proposed C/1/7 trough routes.
8. Existing cable routing shown based on the findings of non-intrusive site surveys and tag & trace surveys.
9. A terminal box shall replace the existing terminal boxes installed at on the metallic pole supporting the existing luminaires where the existing lighting circuit is to be extended. Refer to Detail A2 on drawing no. HS2_157924-3125-LEC1-ZN18-DDR-E-130001.
10. All new exposed and extraneous conductive parts shall be effectively bonded, as per PAN/E&P/E/EE/ESD/0102 & NR/L2/21085, to the proposed 50mm² Common Bonding Conductor using cables with a minimum cross sectional area of 16mm² (Cu). The 16mm² tap-off shall be derived from the CBC via a C-Crimp (see Photo 4 and detail A1). C-Crimp joints shall be wrapped (with Denso tape or similar) and laid in the cable trough.
11. High level wall mounted luminaires and the associated cabling will be decommissioned and removed from site as part of these works.
12. The existing wall mounted Lighting Cubicle fed from the Upside Sidings Distribution Cubicle shall be removed and replaced by proposed GRP "Upside Sidings Distribution Cubicle 2". The existing 4 core supply cable will become redundant, and supply to the cubicle 2 will be provided by 5 core cable to avoid the use of a separate CPC.
13. 50mm² CBC 1C Cu/XLPE bonding cable shall be bonded to the cable tray at the annotated location to bond the proposed wall mounted luminaires. The end of the cable will be fitted with an earth lug and shall be fixed to the cable tray using a bolt and nut, utilising the existing holes in the cable tray.

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
P02	29/03/18	For Approval	SM	PR	SM
B01	10/05/18	For Approval	SM	PR	SM
P03	18/05/18	For AFC Submission	FR	PR	PR
C01	18/05/18	For AFC Submission	FR	PR	PR

Status: Fit for Construction
Suitability: A

NetworkRail

Authorised	A.Flockhart	Signed	Electronically Signed	Date	18/05/18

Contractor(s): AECOM Ltd
Asset Location: Location
Sub-Asset:
Type: CAD Drawing
Sub-Type: Plan
Role: Electrical Engineer
Sub-Role: General
Location Zone: LONDON EUSTON - RUGBY TRENT VALLEY JCN
Phasing: Proposed
Grip Stage: 5
Withdrawn:
Project: HS2 On-Network Works
Contract No.: 157924
Contract Title: Euston Up Sidings Extension
Drawing Title: Up Sidings Buffer stop and Walkway Lighting Layout

Designed	S. Mahil	Signed	Electronically Signed	Date	20/03/18
Drawn	F.Roberts	Signed	Electronically Signed	Date	18/05/18
Checked	P.Raghavan	Signed	Electronically Signed	Date	18/05/18
Approved	P.Raghavan	Signed	Electronically Signed	Date	18/05/18

Scale(s)		ELR & Mileage	To	From
1:100		LEC1	83.0495	-0.0066

Alternative Reference: HS2_139278-3125-LEC1-ZN18-DDR-E-130003
Sheet: of
Drawing Number: HS2_157924-3125-LEC1-ZN18-DDR-E-130003
Revision: C01

Published