

PILECAP SETTING OUT

REF	EASTING (m)	NORTHING (m)	LEVEL (m)
A1-1	510642.440	173230.678	21.220
A1-2	510645.016	173227.423	21.220
A2-1	510638.444	173219.270	20.820
A2-2	510640.638	173216.164	20.820
B1-1	510650.109	173208.275	20.830
B1-2	510652.233	173205.121	20.830
B2-1	510654.994	173220.052	21.150
B2-2	510657.117	173216.898	21.150

PILE SETTING OUT

REF	EASTING (m)	NORTHING (m)	CUT-OFF (m)	PILE LENGTH
P01	510642.756	173230.152	20.295	20m
P02	510644.783	173229.364	20.295	20m
P03	510644.294	173228.106	20.295	25m
P04	510642.267	173228.894	20.295	25m
P05	510638.658	173218.785	19.895	25m
P06	510640.397	173218.082	19.895	25m
P07	510639.917	173216.847	19.895	20m
P08	510638.169	173217.527	19.895	20m
P09	510655.700	173219.353	20.225	20m
P10	510657.432	173218.635	20.225	20m
P11	510656.914	173217.388	20.225	25m
P12	510655.183	173218.106	20.225	25m
P13	510650.815	173207.576	19.905	25m
P14	510652.547	173206.858	19.905	25m
P15	510652.030	173205.611	19.905	20m
P16	510650.298	173206.329	19.905	20m

DECK SETTING OUT

REF	EASTING (m)	NORTHING (m)	LEVEL (m)
D1-1	510642.478	173229.644	22.045
D1-2	510645.432	173228.495	22.045
D1-3	510638.028	173218.198	21.570
D1-4	510640.982	173217.050	21.570
D2-1	510654.625	173219.176	21.960
D2-2	510657.558	173217.960	21.960
D2-3	510649.669	173207.212	21.585
D2-4	510652.597	173205.998	21.585

PRECAST BEAM SETTING OUT

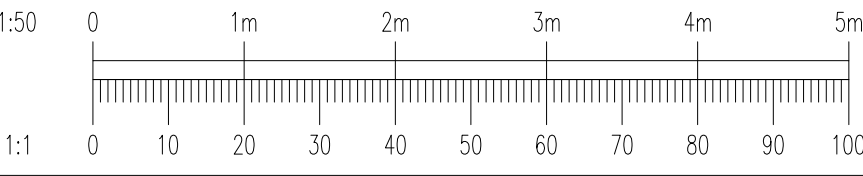
REF	EASTING (m)	NORTHING (m)	LEVEL (m)
PB1A	510642.900	173228.675	21.265
PB1B	510639.002	173218.649	20.850
PB2A	510643.804	173228.323	21.265
PB2B	510639.906	173218.297	20.850
PB3A	510644.708	173227.972	21.265
PB3B	510640.810	173217.946	20.850
PB4A	510654.791	173218.296	21.188
PB4B	510650.410	173207.735	20.855
PB5A	510655.687	173217.924	21.188
PB5B	510651.306	173207.364	20.855
PB6A	510656.583	173217.553	21.188
PB6B	510652.202	173206.992	20.855

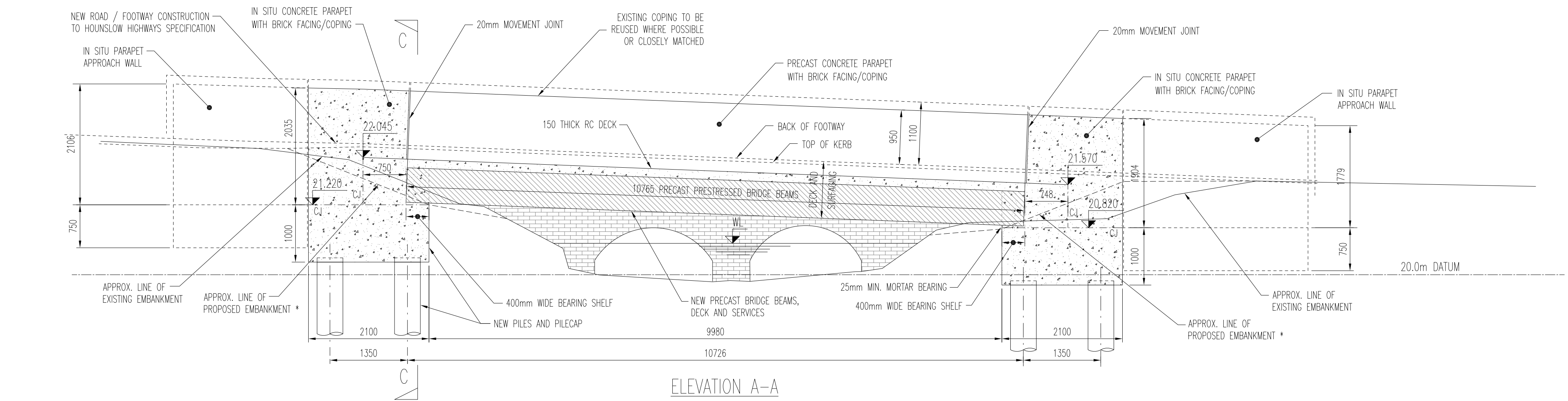
- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
 2. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM
 3. FINISHED LEVELS OF HIGHWAY/FOOTWAY TO BE TO HOUNSLOW HIGHWAYS DESIGN
 4. ALL WORKS TO COMPLY WITH HIGHWAYS AGENCY DMBS AND MCHW AS APPROPRIATE AND IN ACCORDANCE WITH DESIGNER'S SPECIFICATIONS
 5. WATERPROOFING SYSTEM TO TOP SIDE OF DECK TO BE AN APPROVED WATERPROOFING SYSTEM WITH CURRENT BRITISH BOARD OF AGREEMENT CERTIFICATION
 6. ALL BURIED CONCRETE SURFACES OF ABUTMENTS TO BE WATERPROOFED WITH TWO COATS OF BITUMINOUS PAINT (R/W HYDROCOAT OR SIMILAR APPROVED) OVERLAPPING 300mm ONTO DECK WATERPROOFING SYSTEM (ENSURE COMPATIBILITY BETWEEN BITUMINOUS PAINT AND DECK WATERPROOFING)
 7. THE CONTRACTOR SHALL PROVIDE TEMPORARY WORKS TO ENABLE NEW STRUCTURE CONSTRUCTION WITH MINIMAL EFFECT ON THE RIVER
 8. CONCRETE GRADE FOR PRECAST BEAMS TO BE C50/60 AND C32/40 FOR INSITU CONCRETE TO BS8500-1:2006
 9. PRECAST CONCRETE BEAMS TO BE BANAGHER MY7 BRIDGE BEAMS OR SIMILAR APPROVED
 10. IT SHOULD BE NOTED THAT THE GROUND INVESTIGATION REPORT (GIR) FOUND EVIDENCE OF FREE FIBRES OF CHRYSOTILE IN THE VICINITY OF THE EXISTING LONGFORD BRIDGE FOUNDATIONS AS WELL AS IN TWO OF THE BOREHOLES. AS SUCH, ANY CONSTRUCTION ACTIVITIES SHOULD IMPLEMENT MEASURES TO ELIMINATE THE RISK OF CONTAMINATION. THE PROJECT GIR SHOULD BE CONSULTED FOR FURTHER INFORMATION

- RESIDUAL RISKS:
1. EXISTING BURIED SERVICES
 2. EXTENT OF EXISTING MASONRY BRIDGE ABUTMENT

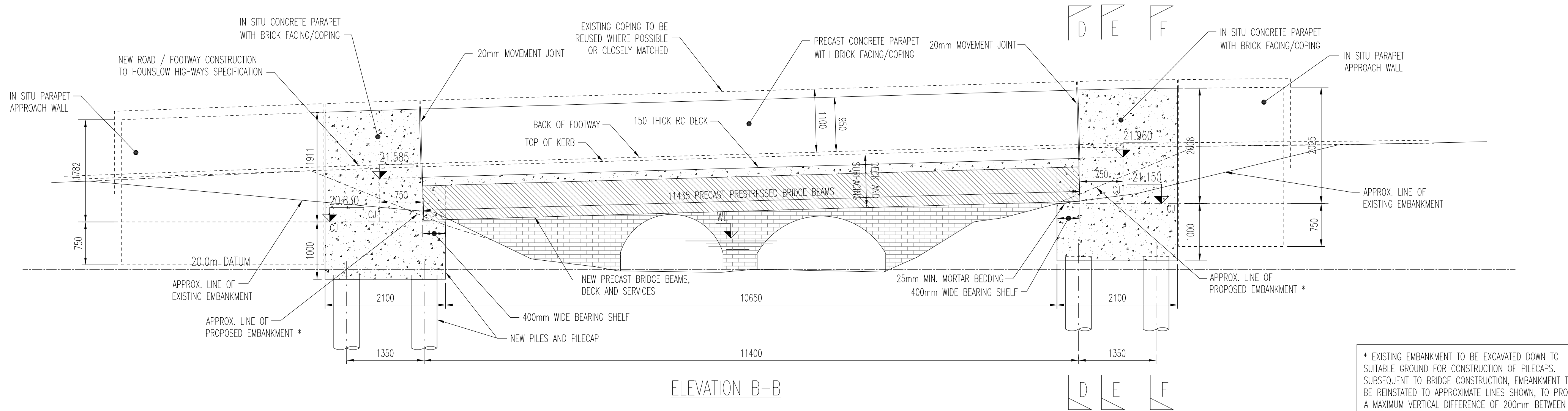
CO3	24.08.16	ADDITIONAL CO-ORDINATES ADDED	SPO
CO2	19.08.16	ISSUED FOR TENDER. CO-ORDINATES ADDED	SPO
CO1	05.04.16	ISSUED FOR TENDER	SPO
A07	18.01.16	WEST FOOTBRIDGE SHORTENED. SERVICES REVISED	SPO
A06	08.01.16	PARAPET REVISED TO BRICK FACED CONCRETE AT CLIENT'S REQUEST	SPO
A05	06.01.16	REVISED FOLLOWING COMMENTS ON AIP	SPO
A04	28.10.15	ISSUED FOR AIP	SPO
A03	26.10.15	KERB ADJACENT TO CYCLEWAY RELOCATED. NOTE ADDED	SPO
A02	11.09.15	ROAD LAYOUT REVISED TO LATEST ALIGNMENT. PILES CHANGED TO 450 DIA. ABUTMENT REVISED TO SUIT	SPO
A01	08.09.15	FIRST ISSUE FOR COMMENT	SPO

Rev	Date	Description	By
Amendments			
Project FELTHAM HIGH STREET			
Title HOUNSLOW ROAD RIVER BRIDGE BRIDGE WIDENING GENERAL ARRANGEMENT PLAN			
Client London Borough of Hounslow			
Pickfords Wharf Clerk Street London SE1 9DG t 020 7928 7888 mail@watermangroup.com www.watermangroup.com			
Drawing Status TENDER			
Designed by LF		Checked by AAK	
Drawn by SPO		Date AUGUST 2015	
Scales @ A1 work to figured dimensions only		AS SHOWN	
Computer File No WIE-17189-SA-04-0015.dwg			
Publisher WIE	Zone SA	Category 04	Number 0015
			Revision C03



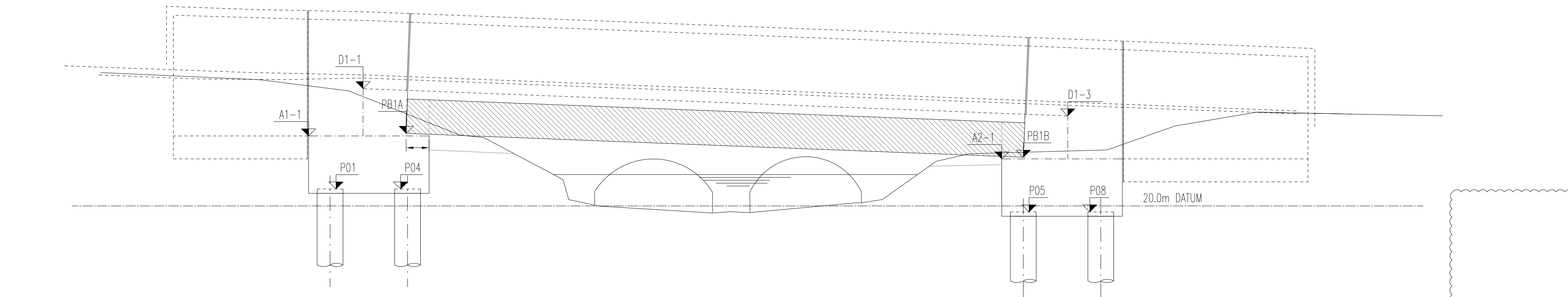


ELEVATION A-A

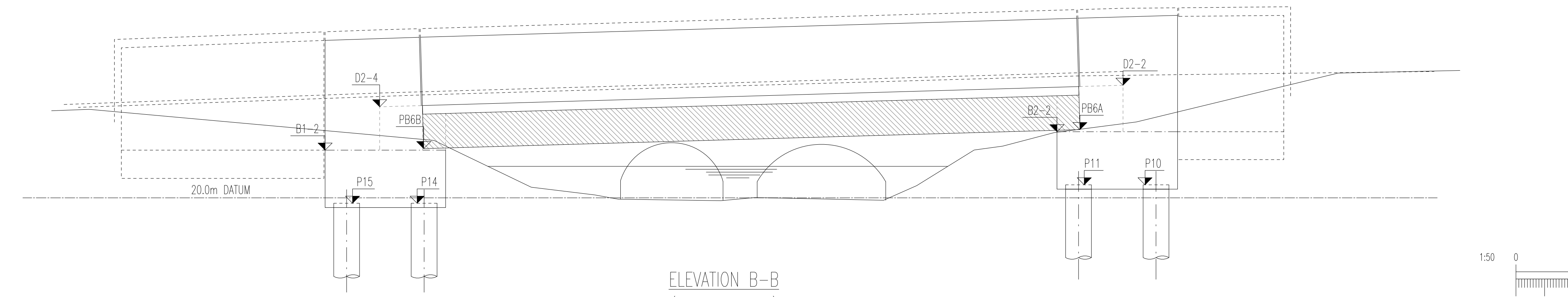


ELEVATION B-B

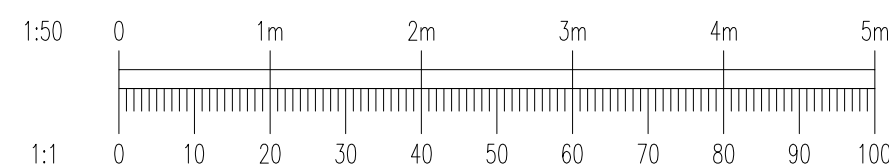
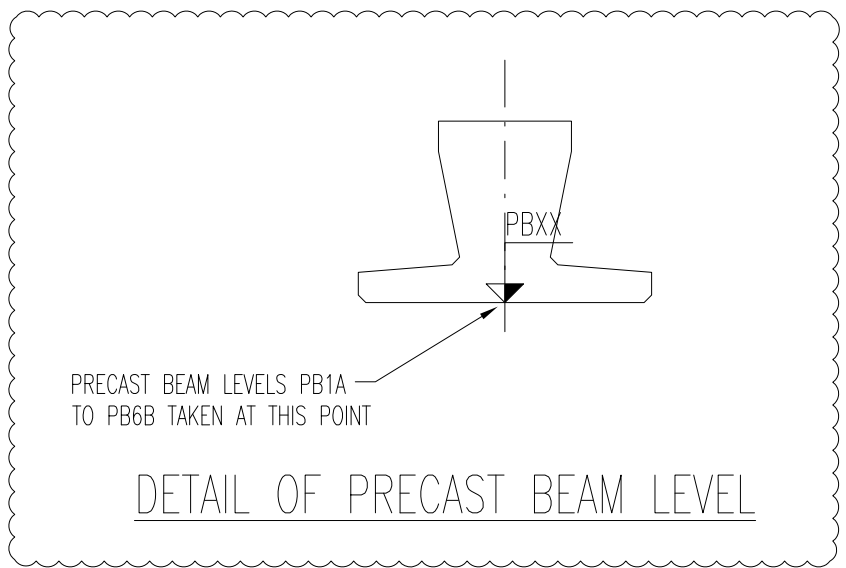
* EXISTING EMBANKMENT TO BE EXCAVATED DOWN TO SUITABLE GROUND FOR CONSTRUCTION OF PILECAPS. SUBSEQUENT TO BRIDGE CONSTRUCTION, EMBANKMENT TO BE REINSTATED TO APPROXIMATE LINES SHOWN, TO PROVIDE A MAXIMUM VERTICAL DIFFERENCE OF 200mm BETWEEN BACK OF FOOTPATH AND ADJACENT BACKFILL ALONG THE LENGTH OF THE IN-SITU PARAPET APPROACH WALLS, AND TO CONCEAL EXPOSED CONCRETE FROM THE IN-SITU PILECAPS



ELEVATION A-A
(SHOWING LEVEL LOCATIONS)



ELEVATION B-B
(SHOWING LEVEL LOCATIONS)



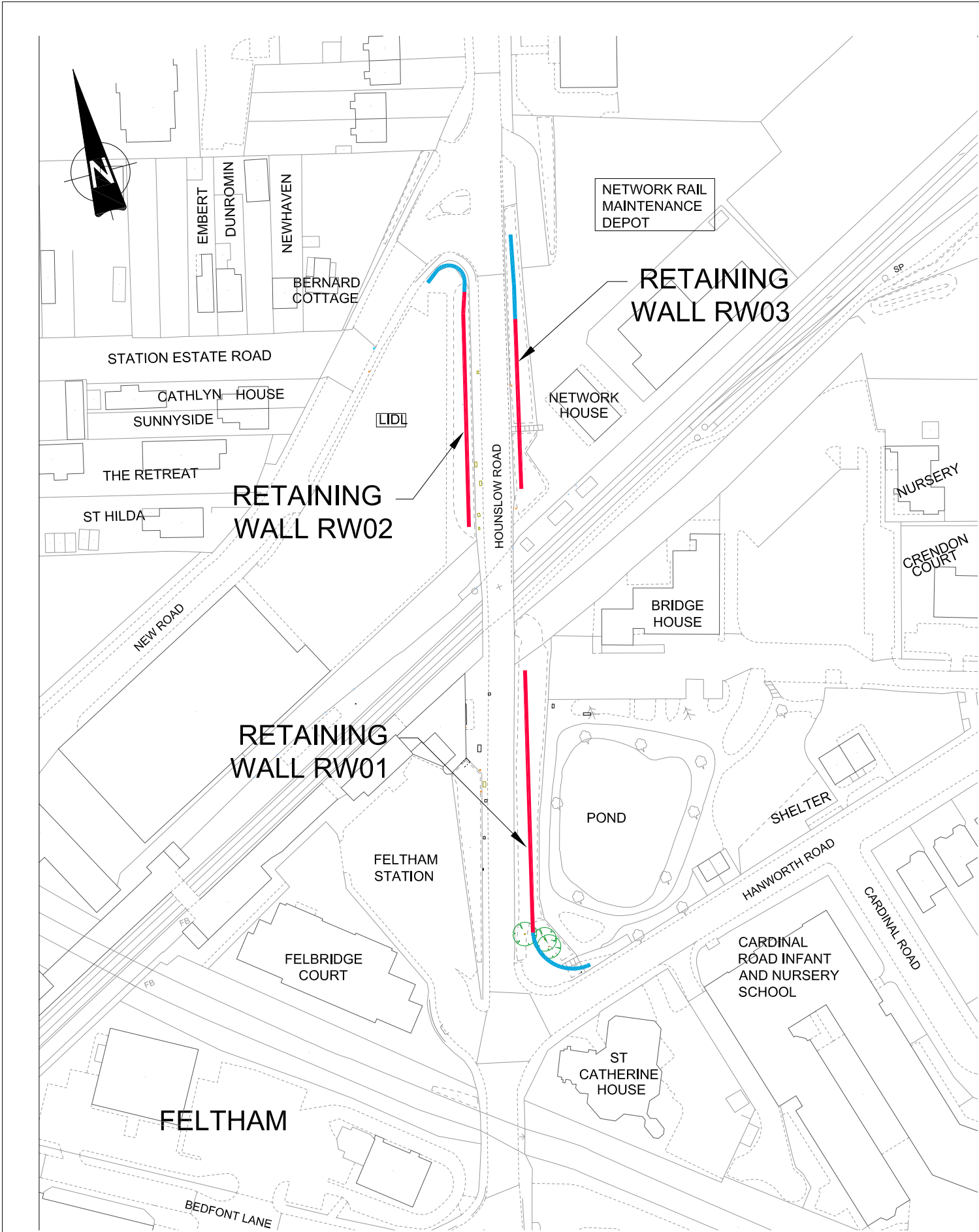
NOTES:
1. FOR GENERAL NOTES REFER TO DRAWING WIE-SA-04-0015

CO2	23.08.16	ADDITIONAL DETAIL AND SETTING OUT ADDED	SPO
CO1	19.08.16	ISSUED FOR TENDER	SPO
Rev	Date	Description	By

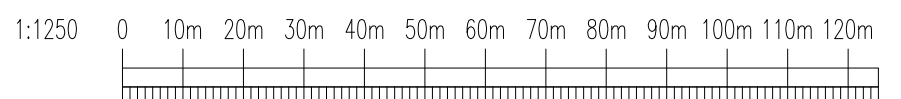
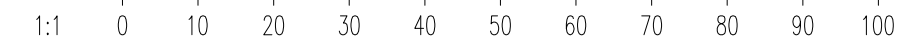
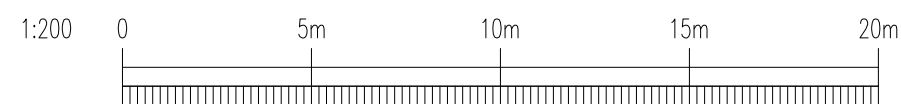
Project		FELTHAM HIGH STREET	
Title		HOUNSLOW ROAD RIVER BRIDGE BRIDGE WIDENING GENERAL ARRANGEMENT ELEVATIONS	
Client		London Borough of Hounslow	

Pickfords Wharf Clink Street London SE1 9DG t 020 7928 7888 mail@watermangroup.com www.watermangroup.com	

Drawing Status		TENDER	
Designed by	LF	Checked by	AAK
Drawn by	SPO	Date	AUGUST 2015
Scales @ A1 work to figured dimensions only		AS SHOWN	Computer File No WIE-17189-SA-04-0016.dwg
Publisher	Zone	Category	Number
WIE	SA	04	0016
		Revision	C02

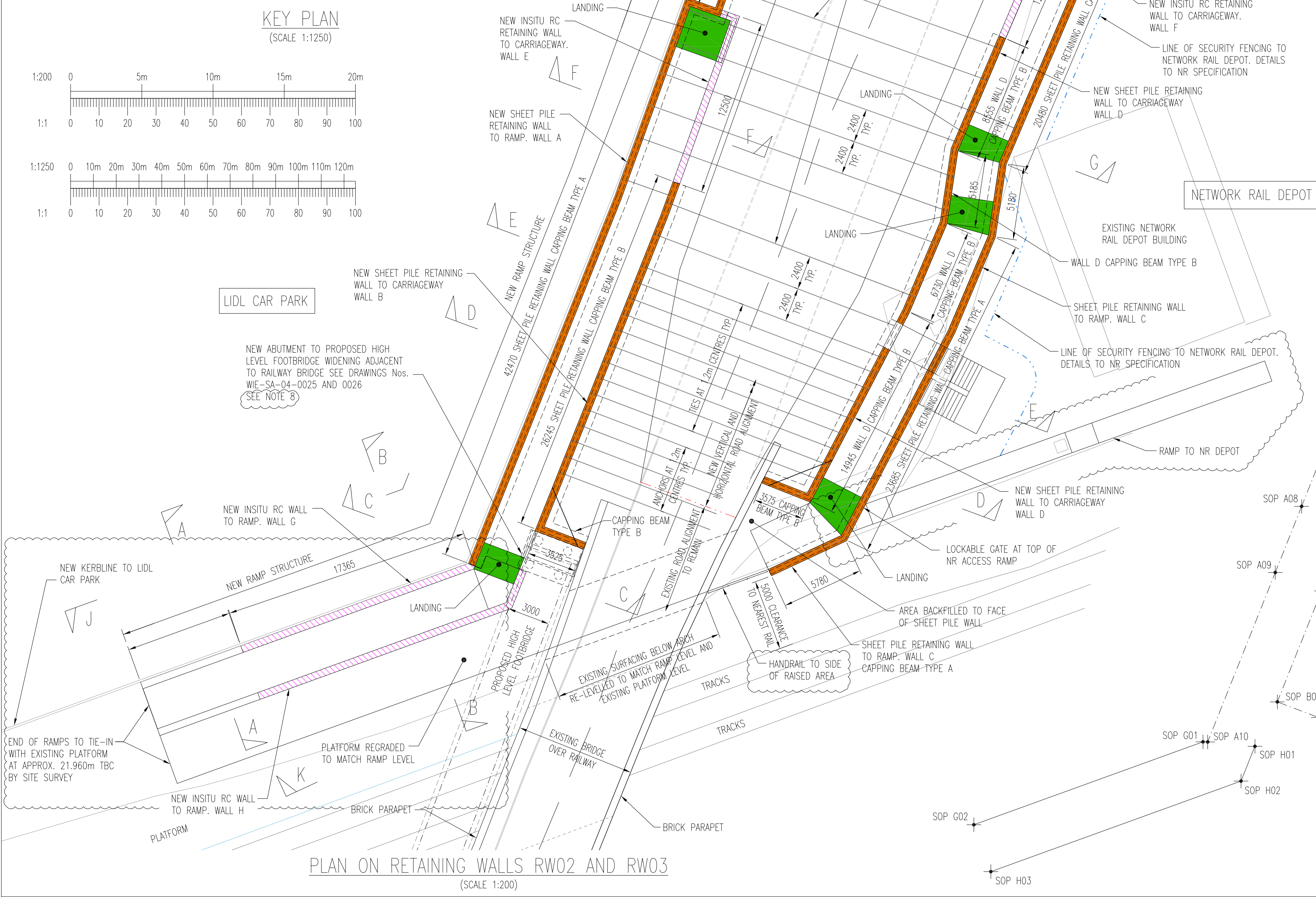


KEY PLAN
(SCALE 1:1250)



LIDL CAR PARK

NEW ABUTMENT TO PROPOSED HIGH LEVEL FOOTBRIDGE ADJACENT TO RAILWAY BRIDGE SEE DRAWINGS Nos. WIE-SA-04-0025 AND 0026 SEE NOTE 8



PLAN ON RETAINING WALLS RW02 AND RW03
(SCALE 1:200)

SHEET PILE AND INSITU WALL SCHEDULE TABLE

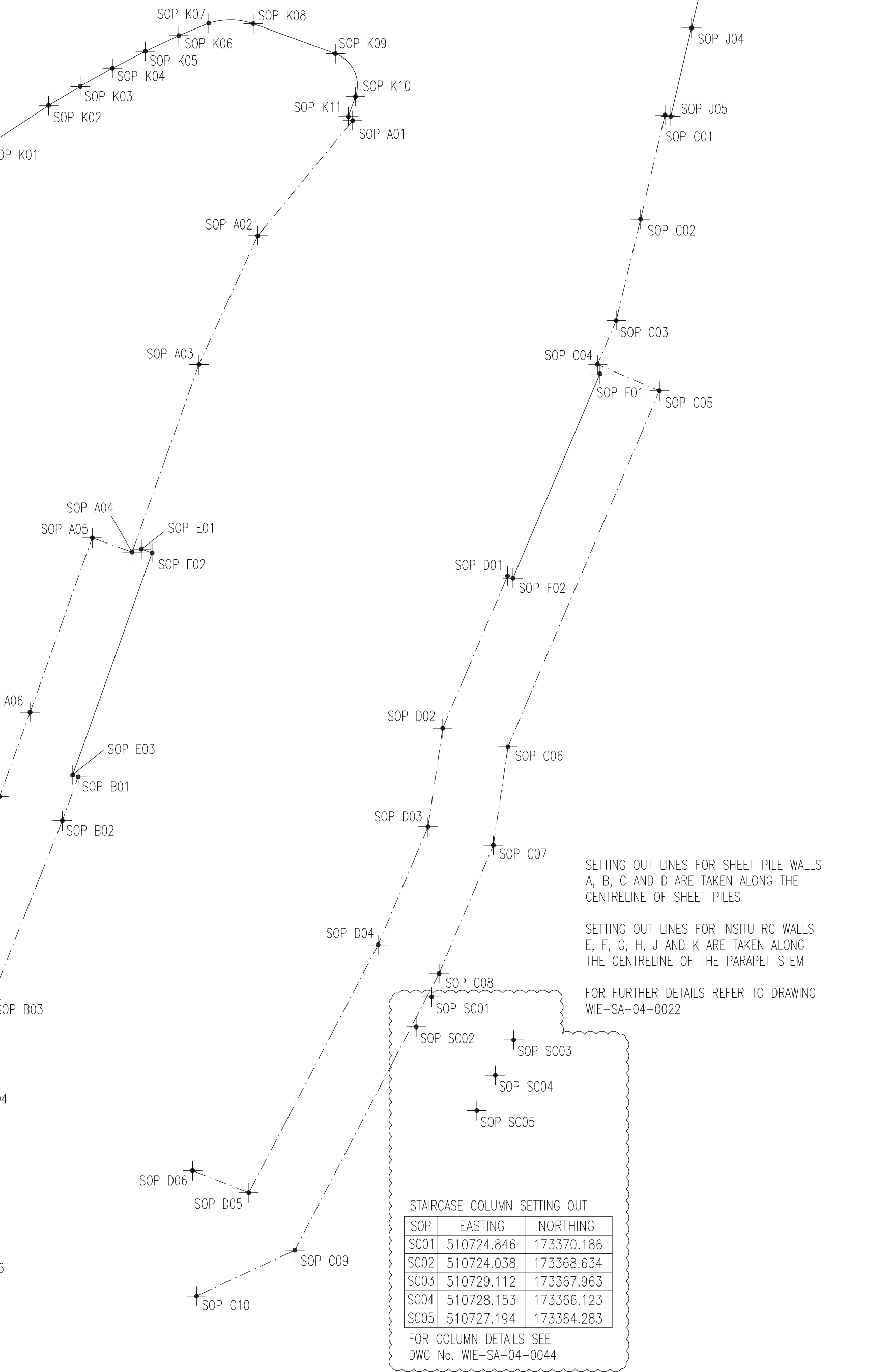
SOP	EASTING	NORTHING	CUT OFF
A01	510720.734	173415.752	23.018
A02	510715.806	173409.771	23.473
A03	510712.744	173403.067	23.833
A04	510709.272	173393.321	24.396
A05	510707.199	173394.059	24.380
A06	510703.967	173384.988	24.199
A07	510702.373	173380.599	23.964
A08	510698.694	173371.356	23.468
A09	510696.846	173366.713	23.218
A10	510691.771	173354.823	22.587
B01	510706.468	173381.641	25.067
B02	510705.644	173379.354	25.182
B03	510701.946	173370.062	25.655
B04	510700.097	173365.416	25.900
B05	510696.990	173357.628	26.310
B06	510699.871	173356.535	26.310
C01	510736.978	173416.042	22.762
C02	510735.705	173410.623	22.981
C03	510734.440	173405.364	23.240
C04	510733.466	173403.076	23.385
C05	510736.686	173401.705	23.522
C06	510728.815	173383.206	22.724
C07	510728.052	173378.080	22.605
C08	510725.227	173371.412	22.253
C09	510717.730	173357.028	21.593
C10	510712.624	173354.649	21.361

Eastings and Northings are in metres and relate to Ordnance Survey co-ordinates
Levels are in metres and relative to Ordnance Datum

For further setting out information refer to details on drawing WIE-SA-04-0022

SHEET PILE AND INSITU WALL SCHEDULE TABLE

SOP	EASTING	NORTHING	CUT OFF
D01	510728.790	173392.087	24.052
D02	510725.419	173384.165	24.537
D03	510724.655	173379.036	24.823
D04	510722.059	173372.905	25.213
D05	510715.340	173360.014	25.925
D06	510712.415	173361.164	25.845
E01	510709.752	173393.477	N/A
E02	510710.309	173393.279	N/A
E03	510706.183	173381.743	N/A
F01	510733.593	173402.587	N/A
F02	510729.074	173391.967	N/A
G01	510692.099	173354.813	N/A
G02	510675.680	173348.998	N/A
H01	510695.417	173354.509	N/A
H02	510694.439	173352.066	N/A
H03	510676.871	173345.707	N/A
J01	510745.922	173441.195	N/A
J02	510741.292	173429.784	N/A
J03	510739.461	173425.269	N/A
J04	510738.357	173420.566	N/A
J05	510737.278	173415.972	N/A
K01	510701.783	173414.476	N/A
K02	510704.932	173416.539	N/A
K03	510706.575	173417.535	N/A
K04	510708.252	173418.473	N/A
K05	510709.960	173419.351	N/A
K06	510711.698	173420.168	N/A
K07	510713.252	173420.816	N/A
K08	510715.569	173420.792	N/A
K09	510719.838	173419.232	N/A
K10	510720.885	173417.001	N/A
K11	510720.509	173415.965	N/A



SETTING OUT LINES FOR SHEET PILE WALLS A, B, C AND D ARE TAKEN ALONG THE CENTRELINE OF SHEET PILES

SETTING OUT LINES FOR INSITU RC WALLS E, F, G, H, J AND K ARE TAKEN ALONG THE CENTRELINE OF THE PARAPET STEM

FOR FURTHER DETAILS REFER TO DRAWING WIE-SA-04-0022

STAIRCASE COLUMN SETTING OUT

SOP	EASTING	NORTHING
SC01	510724.846	173370.186
SC02	510724.038	173368.634
SC03	510729.112	173367.963
SC04	510728.153	173366.123
SC05	510727.194	173364.283

FOR COLUMN DETAILS SEE DWG No. WIE-SA-04-0044

NOTES:

- All dimensions are in millimetres unless noted otherwise
- All levels are in metres and relate to Ordnance Datum
- Details shown on these drawings are based on currently available GI information and are subject to change following receipt of final GI report
- Maximum allowable sheet pile deflection to be 20mm
- Setting out, levels and dimensions on these drawings are based on Topographical Surveys by Hounslow Highways, drawing nos:
 - SDG 14146-14-01 with Network Rail and LBH Additions 2015 REV 1 received 16 July 2015
 - A0609814 FIC Topo Survey - Lidl & NR Compound 2015-07-03 REV 1 received 16 July 2015
 - '3d proposed ramp and stairs' received 07 Sept 2015
- Joints in insitu RC walls and brick facings to be provided at suitable locations
- New brick finishes to retaining walls and ramps to match existing Rail Bridge bricks as closely as possible
- For concept design of pedestrian footbridge see drawing no. WIE-SA-04-0033

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION
UNUSUAL SIGNIFICANT HAZARDS

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement. In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

CONSTRUCTION

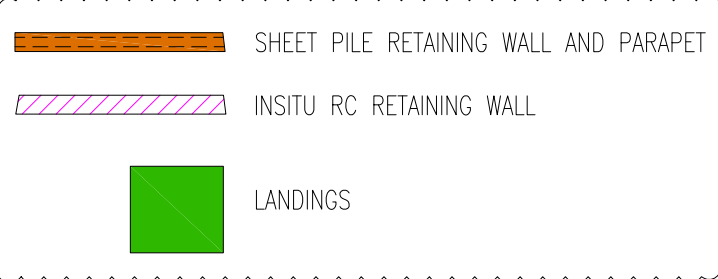
- Working near excavations
- Presence of buried services
- Installation of ties
- Risk of piling falling on railway during pitching.
- Sheet piling hitting existing bridge foundations.
- Noise and vibration associated with driving piles.

MAINTENANCE / CLEANING

- Working near an operational depot/service yard.
- Risks associate with carrying out repairs on a tied structure.
- Future service excavation hitting anchors.
- Possible requirement for maintenance painting of finishing

DECOMMISSIONING / DEMOLITION

- Stability of wall in case of accidental removal of tie



E02	25.07.16	HOUNSLOW HIGHWAYS COMMENTS INCORPORATED	SPO
E01	30.06.16	ISSUED FOR CONSTRUCTION	SPO
C02	26.04.16	WALL LENGTH, SETTING OUT AND LANDING REVISED	SPO
C01	05.04.16	ISSUED FOR TENDER	SPO
A05	17.12.15	SHEET PILE AND INSITU WALL LENGTHS REVISED, BRIDGE ABUTMENT RELOCATED	SPO
A04	11.11.15	ISSUED FOR AIP RAMP UNDER ARCH REVISED	SPO
A03	26.10.15	SHEET PILE WALLS REPLACE INSITU WALLS TO RAMPS. NOTES AND DIMENSIONS ADDED	SPO
A02	22.10.15	ISSUED FOR COMMENT. NOTES ADDED, SHEET PILE LENGTH REVISED	SPO
A01	01.10.15	FIRST ISSUE FOR COMMENT	SPO
Rev	Date	Description	By

Amendments

Project **FELTHAM HIGH STREET**

Title **RETAINING WALLS Nos. RW02 AND RW03 AND RAMP STRUCTURES GENERAL ARRANGEMENT PLAN**

Client **London Borough of Hounslow**



Pickfords Wharf Clink Street London SE1 9DG
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mail@watermangroup.com www.watermangroup.com

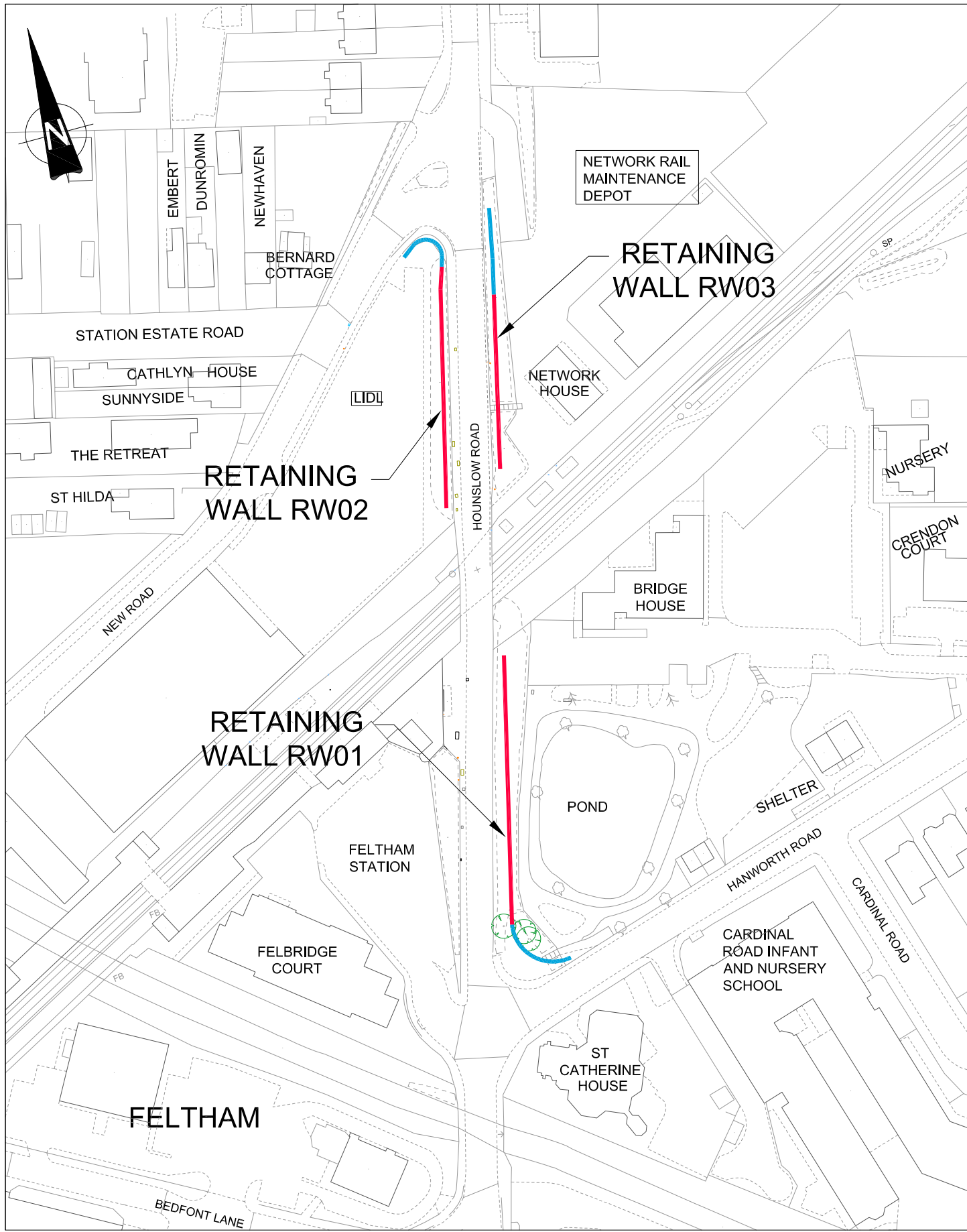
Drawing Status **CONSTRUCTION**

Designed by **VB** Checked by **AAK** Project No **CIV17189**

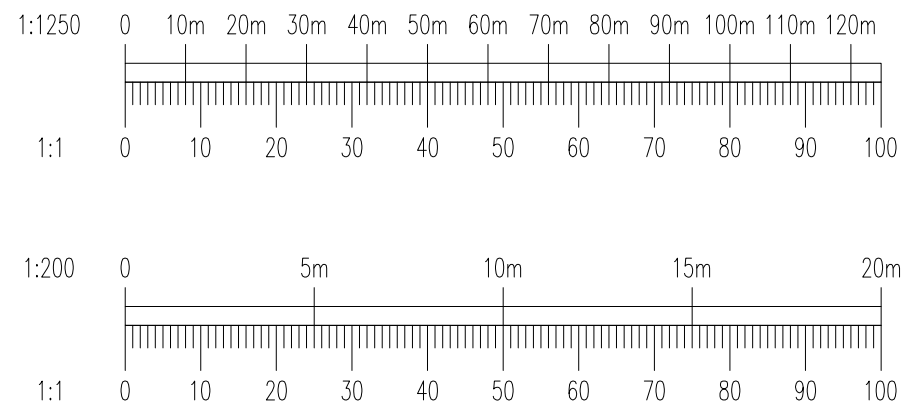
Drawn by **SPO** Date **SEPT 2015** Computer File No **WIE-17189-SA-04-0020.dwg**

Scales @ A1 work to figured dimensions only **1:200 1:1250**

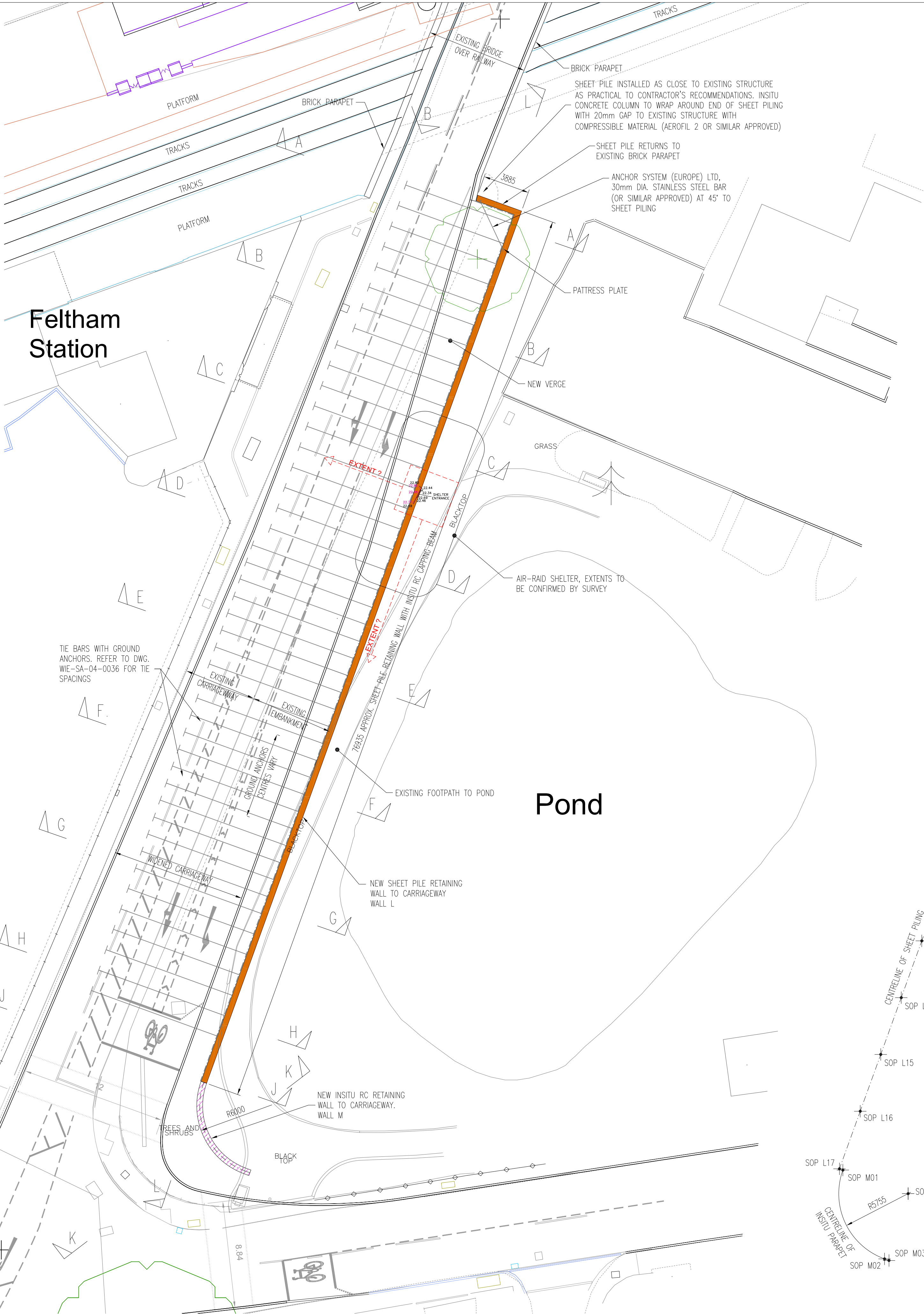
Publisher **WIE** Zone **SA** Category **04** Number **0020** Revision **E02**



KEY PLAN
(SCALE 1:1250)



Feltham Station



PLAN ON RETAINING WALL RW01
(SCALE 1:200)

SOP	EASTING	NORTHING	CUT OFF
L01	510698.985	173329.459	26.182
L02	510702.068	173328.348	26.182
L03	510700.030	173322.704	25.894
L04	510698.328	173317.993	25.654
L05	510696.626	173313.281	25.414
L06	510694.924	173308.570	25.175
L07	510693.222	173303.858	24.916
L08	510691.521	173299.148	24.659
L09	510689.753	173294.254	24.376
L10	510688.052	173289.544	24.104
L11	510686.350	173284.834	23.831
L12	510684.649	173280.123	23.559
L13	510682.948	173275.413	23.287
L14	510681.246	173270.703	23.014
L15	510679.545	173265.992	22.728
L16	510677.843	173261.282	22.442
L17	510676.118	173256.505	22.143
M01	510676.403	173256.401	N/A
M02	510679.861	173249.034	N/A
M03	510680.227	173248.901	N/A
M04	510681.816	173254.446	N/A

Eastings and Northings are in metres and relate to Ordnance Survey co-ordinates
Levels are in metres and relative to Ordnance Datum

For sheet pile toe levels refer to drawing WIE-SA-04-0036

For further setting out information refer to details on drawing WIE-SA-04-0028

RETAINING WALL SETTING OUT
(SCALE 1:200)

- NOTES:
- All dimensions are in millimetres unless noted otherwise
 - All levels are in metres and relate to Ordnance Datum
 - Maximum allowable sheet pile deflection to be 20mm (during all stages of construction)
 - Setting out, levels and dimensions on these drawings are based on Topographical Surveys by Hounslow Highways, drawing nos:
 - SDC 14146-14-01 with Network Rail and LBH Additions 2015 REV 1 received 16 July 2015
 - Movement joints in capping beams, parapets, insitu RC walls and brick facings to be at nom. 12m centres
 - New brick finishes to retaining wall to be as follows:
 - Traffic face (carriageway side) to match existing Rail Bridge bricks as closely as possible
 - Pond side face to match existing brick retaining wall adjacent to pond footpath as closely as possible

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION
UNUSUAL SIGNIFICANT HAZARDS

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement. In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

- CONSTRUCTION
- Working near excavations
 - Presence of buried services
 - Installation of ties
 - Risk of piling falling on railway during pitching.
 - Sheet piling hitting existing bridge foundations.
 - Noise and vibration associated with driving piles.
 - Driven anchors hitting services.
 - Stability of existing embankment

- MAINTENANCE / CLEANING
- Working near an operational depot/service yard.
 - Risks associate with carrying out repairs on a tied structure.
 - Future service excavation hitting anchors.
 - Possible requirement for maintenance painting of finishing

- DECOMMISSIONING / DEMOLITION
- Stability of wall in case of accidental removal of tie

E04	??,??,??	PILE CUT-OFF LEVELS AND NOTE ADDED	SPO
E03	29.07.16	NOTE REVISED	SPO
E02	25.07.16	HOUNSLOW HIGHWAYS COMMENTS INCORPORATED	SPO
E01	01.07.16	ISSUED FOR CONSTRUCTION	SPO
C01	05.04.16	ISSUED FOR TENDER	SPO
A05	15.12.15	MINOR REVISIONS TO NOTES	SPO
A04	06.11.15	ISSUED FOR AIP GROUND ANCHOR SPACINGS REDUCED AND ADDITIONAL ANCHORS ADDED TO PILING CONTRACTOR'S DESIGN	SPO
A03	26.10.15	WALL REVISED AT HANWORTH ROAD JUNCTION TO HOUNSLOW HIGHWAYS REALIGNMENT	SPO
A02	22.10.15	ISSUED FOR COMMENT: SHEET PILE WALL REALIGNED TO HOUNSLOW HIGHWAYS ALIGNMENT	SPO
A01	07.10.15	FIRST ISSUE FOR COMMENT	SPO

Rev	Date	Description	By
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Amendments

Project

FELTHAM HIGH STREET
RETAINING WALL No. RW01
GENERAL ARRANGEMENT
PLAN

Client
 London Borough of Hounslow



Pickfords Wharf Clink Street London SE1 9DG
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mail@watermangroup.com www.watermangroup.com

Drawing Status
CONSTRUCTION

Designed by	VB	Checked by	AAK	Project No	CIV17189
Drawn by	SPO	Date	SEPT 2015	Computer File No	WIE-17189-SA-04-0027.dwg
Scales @ A1	work to figured dimensions only 1:200 1:1250			Number	Revision
Publisher	Zone	Category	Number	Revision	
WIE	SA	04	0027	E04	