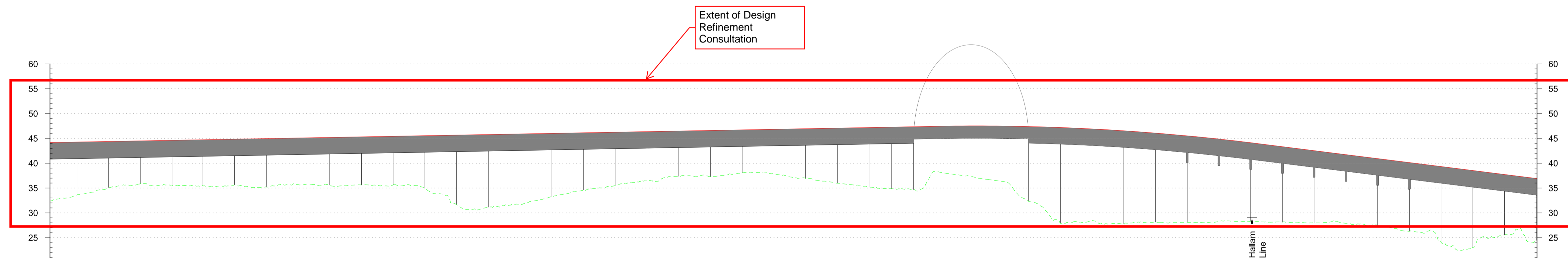


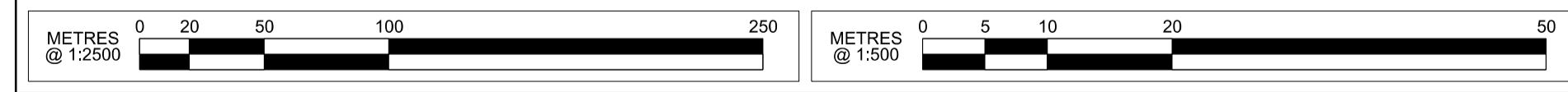
Plan
Scale 1:2500 @ A1



Key
 - HS2 Phase 2b Alignment
 - Existing Ground Level

Route Element ID	L325-L1 Rothwell Country Park Viaduct																														
Chainage	LS 325+300	LS 325+350	LS 325+400	LS 325+450	LS 325+500	LS 325+550	LS 325+600	LS 325+650	LS 325+700	LS 325+750	LS 325+800	LS 325+850	LS 325+900	LS 325+950	LS 326+000	LS 326+050	LS 326+100	LS 326+150	LS 326+200	LS 326+250	LS 326+300	LS 326+350	LS 326+400	LS 326+450	LS 326+500	LS 326+550	LS 326+600	LS 326+650	LS 326+700	LS 326+750	LS 326+800
Horizontal Alignment	R=-2030.0 L=748.1				L=270.0				L=215.0				R=1704.0 L=493.6				L=230.3				L=1136.6										
Vertical Alignment	L=1419.9 G=0.37%														R=11350.0 L=325.0				L=293.2 G=-2.50%												
Existing Level	32.4	34.6	35.5	35.4	35.3	35.7	35.5	33.6	31.2	33.0	34.9	36.5	37.4	38.1	37.1	35.9	34.9	38.1	36.6	31.3	28.4	28.2	28.1	28.2	28.1	26.1	27.2	24.7	24.9	24.4	
Proposed Level	44.2	44.4	44.5	44.7	44.9	45.1	45.3	45.5	45.6	45.8	46.0	46.2	46.4	46.6	46.7	46.9	47.1	47.3	47.5	47.5	47.3	46.9	46.3	45.5	44.4	43.2	41.9	40.7	39.4	38.2	36.9
Cut and Fill	+11.8	+9.8	+9.0	+9.3	+9.6	+8.4	+9.8	+10.0	+12.0	+14.6	+13.0	+11.3	+9.9	+9.2	+8.6	+9.8	+11.2	+12.4	+9.4	+10.9	+16.0	+18.5	+18.1	+17.4	+16.2	+15.1	+13.8	+13.5	+14.7	+13.3	+12.5
Design Speed:	200km/h														180km/h																

Profile
Scale H:1:2500 V:1:500 @ A1



Fit for Acceptance

Rev	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.
P06	CP2.1 Draft Interim Preliminary Design	LK	IB	PC	29/03/2019	29/03/2019
P05	CP2 Initial Preliminary Design	LK	IB	PC	29/06/2018	29/06/2018
P04	For CP2 IDR Meeting Initial Preliminary Design	AT	IB	PC	16/05/2018	16/05/2018
P03	Design for inclusion in working draft ES	LK	JLI	IB	28/02/2018	28/02/2018
P02	CP1 Draft Initial Preliminary Design	LK	IB	PC	14/12/2017	14/12/2017

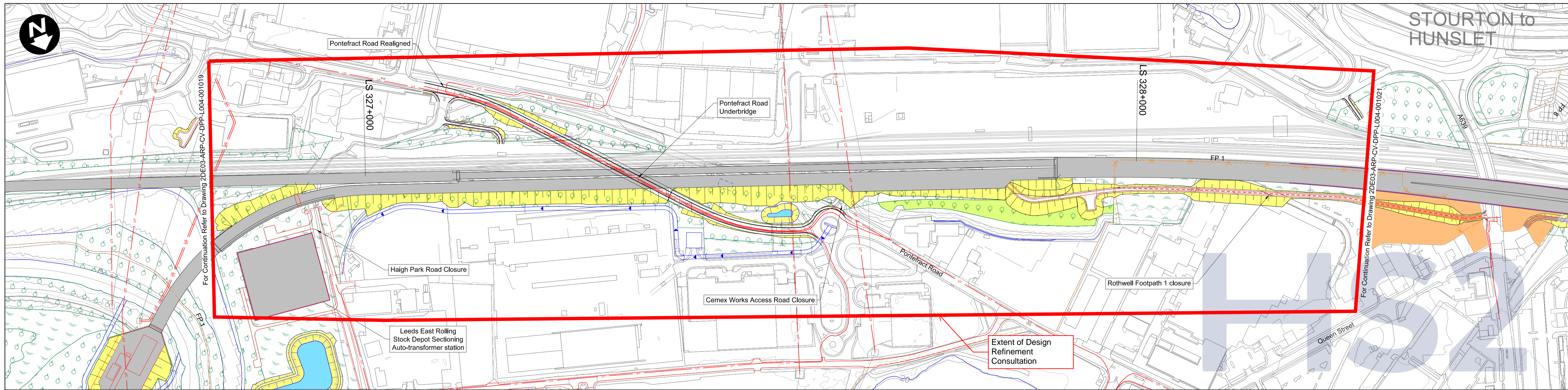
Legends/Notes:

- Depot, station, headhouse, shaft or portal building
- Tunnel portal
- Electricity substation
- Ecological mitigation pond
- Balancing pond
- Pumping station
- Replacement floodplain storage area
- Woodland habitat creation
- Wetland habitat creation
- Grassland habitat creation
- Landscape mitigation planting (scrub / woodland)
- Grassed areas
- Local placement
- Public realm
- Engineering earthworks
- Landscape earthworks
- Rail alignment formation
- Returned to suitable development use
- County boundary
- Borough / District boundary
- Major contour
- Community area boundary
- Existing watercourse
- Watercourse diversions
- New Ditches
- Hedgerow habitat creation
- Major utility works
- Noise fence barrier
- Existing public right of way
- New, diverted or realigned public right of way
- Public right of way closure
- Tunnels external extent
- HS2 access road
- Realigned highway
- Rail alignment

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 Registered office:
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 Birmingham, B4 6GA

Creator/Organator
Ove Arup & Partners International Ltd

Zone	L4 Sharlston Common to Leeds and Ulleskelf		Project/Contract	CEDS Area 3 (CE3)	
Design Stage	Hybrid Bill - Draft Interim Preliminary Design		Discipline/Function	Civil	
Drawing Title	L4 Leeds Spur Plan & Profile		Drawn	Checked	Approved
	LH	JBA	PC		
	Date	Scale	Size		
	25/08/2017	AS SHOWN	A1		
	Chainage - 325+300 - 326+800				
	Sheet 21 of 38				
Drawing No.	2DE03-ARP-CV-DPP-L004-001019		Rev.	P06	

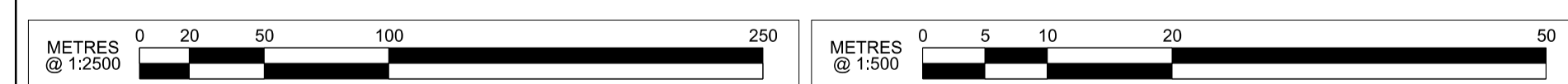


Plan
Scale 1:2500 @ A1



Route Element ID	L325-L1 Rothwell Country Park Viaduct						L327-L1 Stourton Embankment										L327-L2 Leeds Viaduct																	
Chainage	LS 326+800	LS 326+850	LS 326+900	LS 326+950	LS 327+000	LS 327+050	LS 327+100	LS 327+150	LS 327+200	LS 327+250	LS 327+300	LS 327+350	LS 327+400	LS 327+450	LS 327+500	LS 327+550	LS 327+600	LS 327+650	LS 327+700	LS 327+750	LS 327+800	LS 327+850	LS 327+900	LS 327+950	LS 328+000	LS 328+050	LS 328+100	LS 328+150	LS 328+200	LS 328+250	LS 328+300			
Horizontal Alignment	L=199.7 R=8000.0						L=1136.6										L=65.0 R=4704.0 L=871.1																	
Vertical Alignment	L=199.7 R=8000.0						L=678.0 G=0.00%										L=255.3 R=11350.0						L=348.6 G=2.25%						L=164.0 R=8000.0					
Existing Level	24.4	25.3	25.0	25.1	25.3	25.6	26.0	27.2	27.7	28.2	27.8	28.8	28.1	23.4	28.1	29.5	28.5	29.2	29.2	28.7	28.9	28.9	28.7	28.0	28.6	28.2	28.2	28.2	28.4	28.6	28.6			
Proposed Level	36.9	35.8	34.9	34.4	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.3	34.7	35.3	36.1	37.2	38.3	39.4	40.6	41.7	42.8	43.9	45.1			
Cut and Fill	+12.5	+10.5	+9.9	+8.3	+8.9	+8.6	+8.2	+7.0	+6.5	+6.0	+6.4	+5.4	+5.1	+10.8	+6.1	+4.7	+5.7	+5.0	+5.0	+5.6	+5.8	+6.4	+7.4	+8.2	+9.7	+11.2	+12.4	+13.5	+14.4	+15.3	+16.5			
Design Speed:	180km/h																																	

Profile
Scale H:1:2500 V:1:500 @ A1



Fit for Acceptance

Rev	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.
P06	CP2.1 Draft Interim Preliminary Design	LK	IB	PC	29/03/2019	29/03/2019
P05	Initial Preliminary Design	LK	IB	PC	29/06/2018	29/06/2018
P04	For CP2 IDR Meeting Initial Preliminary Design	LK	IB	PC	16/05/2018	16/05/2018
P03	Design for inclusion in working draft ES	LK	JLI	IB	28/02/2018	28/02/2018
P02	CP1 Draft Initial Preliminary Design	LK	IB	PC	14/12/2017	14/12/2017

Legends/Notes:

- Depot, station, headhouse, shaft or portal building
- Tunnel portal
- Electricity substation
- Ecological mitigation pond
- Balancing pond
- Pumping station
- Replacement floodplain storage area
- Woodland habitat creation
- Wetland habitat creation
- Grassland habitat creation
- Landscape mitigation planting (scrub / woodland)
- Local placement
- Public realm
- Engineering earthworks
- Landscape earthworks
- Rail alignment formation
- Returned to suitable development use
- County boundary
- Borough / District boundary
- Major contour
- Community area boundary
- Existing watercourse
- Watercourse diversions
- New Ditches
- Hedgerow habitat creation
- Major utility works
- Noise fence barrier
- Existing public right of way
- New, diverted or realigned public right of way
- Public right of way closure
- Tunnels external extent
- HS2 access road
- Realigned highway
- Rail alignment

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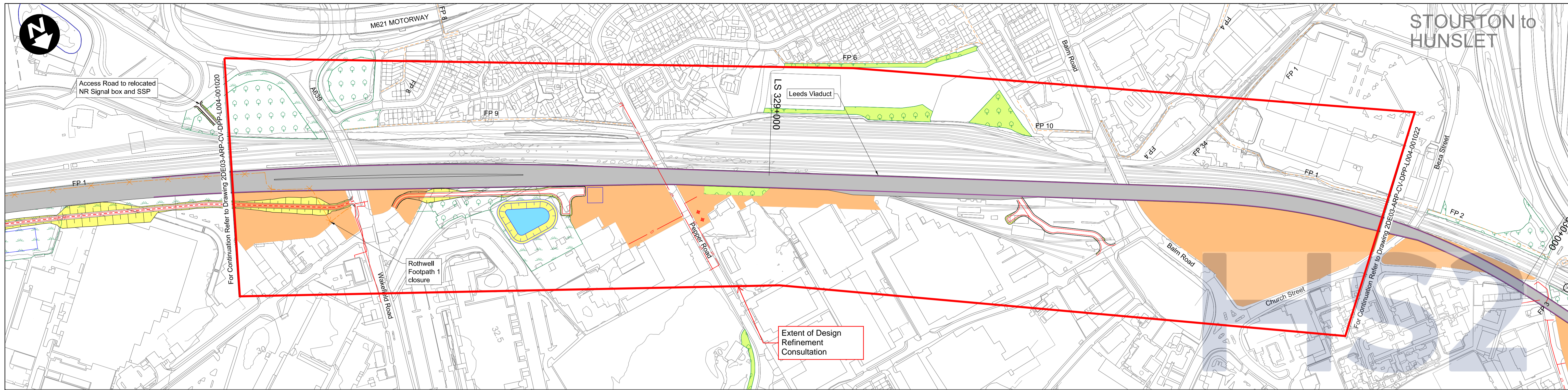
Zone
L4 Sharlston Common to Leeds and Ulleskelf

Design Stage
Hybrid Bill - Draft Interim Preliminary Design

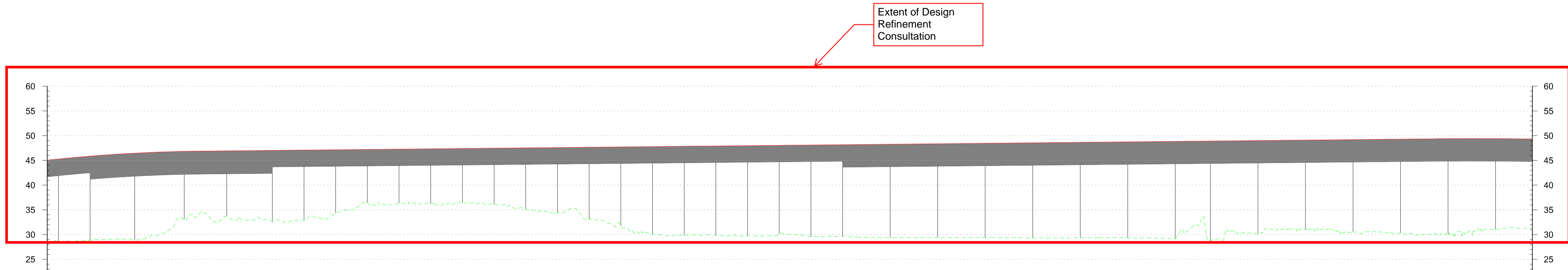
Drawing Title
L4 Leeds Spur Plan & Profile
Chainage - 326+800 - 328+300

Sheet 22 of 38

Project/Contract	CDES Area 3 (CE3)		
Discipline/Function	Civil		
Drawn	Checked	Approved	
LH	JBA	PC	
Date	Scale	Size	
25/08/2017	AS SHOWN	A1	
Drawing No.	Rev.		
2DE03-ARP-CV-DPP-L004-001020	P06		



Plan
Scale 1:2500 @ A1

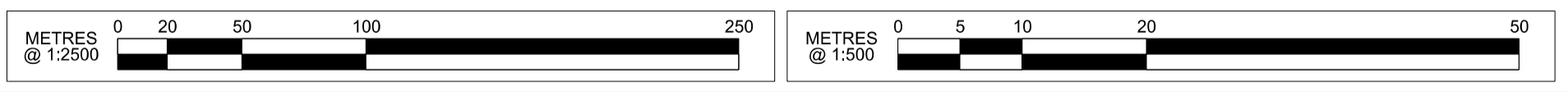


Extent of Design Refinement Consultation

Key
 — HS2 Phase 2b Alignment
 - - - Existing Ground Level

Route Element ID	L327-L2 Leeds Viaduct																														
Chainage	LS 328+300	LS 328+350	LS 328+400	LS 328+450	LS 328+500	LS 328+550	LS 328+600	LS 328+650	LS 328+700	LS 328+750	LS 328+800	LS 328+850	LS 328+900	LS 328+950	LS 329+000	LS 329+050	LS 329+100	LS 329+150	LS 329+200	LS 329+250	LS 329+300	LS 329+350	LS 329+400	LS 329+450	LS 329+500	LS 329+550	LS 329+600	LS 329+650	LS 329+700	LS 329+750	LS 329+800
Horizontal Alignment	R=4704.0 L=871.1				L=65.0				L=705.7				L=140.3				R=805.5 L=310.2														
Vertical Alignment	L=164.0 R=8000.0				L=1243.5 G=0.20%																L=168.4 R=20000.0										
Existing Level	28.6	29.0	29.3	33.4	33.0	32.9	35.0	36.1	36.3	36.2	34.7	33.1	30.6	29.9	29.7	30.0	29.6	29.4	29.4	29.4	29.3	29.3	29.3	30.4	30.6	31.1	30.9	30.5	30.2	30.9	31.3
Proposed Level	45.1	46.0	46.6	46.9	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	49.0	49.1	49.2	49.3	49.4	49.4	49.3
Cut and Fill	+16.5	+17.0	+17.3	+13.5	+14.0	+14.2	+12.2	+11.2	+11.1	+11.3	+12.9	+14.6	+17.2	+18.0	+18.3	+18.1	+18.6	+18.9	+19.0	+19.1	+19.3	+19.4	+19.5	+18.5	+18.4	+18.0	+18.3	+18.8	+19.2	+18.5	+18.0
Design Speed:	180km/h																130km/h														

Profile
Scale H:1:2500 V:1:500 @ A1



Fit for Acceptance

Rev	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.
P06	CP2.1 Draft Interim Preliminary Design	LK	IB	PC	29/03/2019	29/03/2019
P05	CP2 Initial Preliminary Design	LK	IB	PC	29/06/2018	29/06/2018
P04	For CP2 IDR Meeting Initial Preliminary Design	LK	IB	PC	16/05/2018	16/05/2018
P03	Design for inclusion in working draft ES	LK	JLI	IB	28/02/2018	28/02/2018
P02	CP1 Draft Initial Preliminary Design	LK	IB	PC	14/12/2017	14/12/2017

Legends/Notes:

- Depot, station, headhouse, shaft or portal building
- Tunnel portal
- Electricity substation
- Ecological mitigation pond
- Balancing pond
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- Public realm
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- Major contour
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- Watercourse diversions
- New Ditches
- Hedgerow habitat creation
- Major utility works
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- New, diverted or realigned public right of way
- Public right of way closure
- Tunnels external extent
- HS2 access road
- Realigned highway
- Rail alignment

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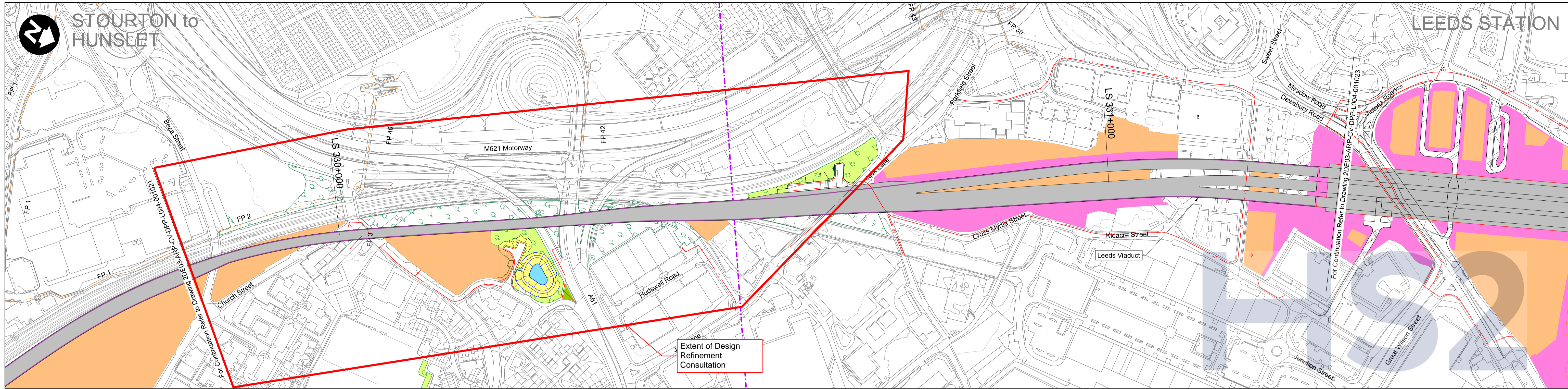
Zone
L4 Sharlston Common to Leeds and Ulleskelf

Design Stage
Hybrid Bill - Draft Interim Preliminary Design

Drawing Title
L4 Leeds Spur Plan & Profile
 Chainage - 328+300 - 329+800

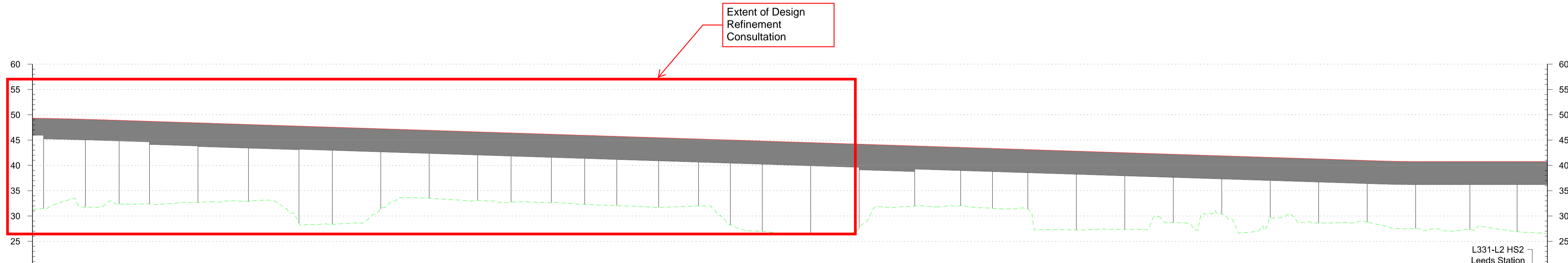
Sheet 23 of 38

Project/Contract	CDER Area 3 (CE3)		
Discipline/Function	Civil		
Drawn	Checked	Approved	
LH	JBA	PC	
Date	Scale	Size	
25/08/2017	AS SHOWN	A1	
Drawing No.	Rev.		
2DE03-ARP-CV-DPP-L004-001021	P06		



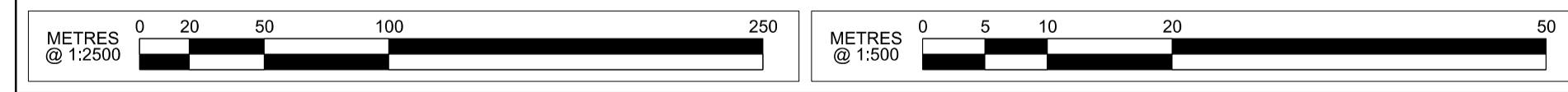
Plan
Scale 1:2500 @ A1

Key
 - - - HS2 Phase 2b Alignment
 - - - Existing Ground Level



Route Element ID	L327-L2 Leeds Viaduct																												L331-L2 HS2 Leeds Station			
Chainage	LS 329+800	LS 329+850	LS 329+900	LS 329+950	LS 330+000	LS 330+050	LS 330+100	LS 330+150	LS 330+200	LS 330+250	LS 330+300	LS 330+350	LS 330+400	LS 330+450	LS 330+500	LS 330+550	LS 330+600	LS 330+650	LS 330+700	LS 330+750	LS 330+800	LS 330+850	LS 330+900	LS 330+950	LS 331+000	LS 331+050	LS 331+100	LS 331+150	LS 331+200	LS 331+250	LS 331+300	
Horizontal Alignment	R=805.5 L=310.2			L=140.3				L=982.3														L=35.1 R=754.0 L=75.8		L=35.1		L=531.8						
Vertical Alignment	L=168.4 R=20000.0		L=1262.8 G=-0.64%																								L=44.9 R=7000.0		L=582.3 G=-0.00%			
Existing Level	31.3	31.8	32.3	32.7	33.0	31.7	28.4	31.9	33.4	33.0	32.7	32.2	31.9	31.9	27.4	26.6	26.7	31.7	31.9	31.5	27.3	27.2	27.3	27.5	27.5	26.7	29.5	28.7	27.5	27.0	27.5	26.6
Proposed Level	49.3	49.1	48.8	48.5	48.2	47.8	47.5	47.2	46.9	46.6	46.2	45.9	45.6	45.3	45.0	44.6	44.3	44.0	43.7	43.3	43.0	42.7	42.4	42.1	41.7	41.4	41.1	40.8	40.8	40.8	40.8	40.8
Cut and Fill	+16.0	+17.3	+16.5	+15.8	+15.2	+16.1	+18.1	+15.3	+13.5	+13.6	+13.5	+13.7	+13.7	+13.4	+17.6	+18.0	+17.6	+12.3	+11.8	+11.8	+15.7	+15.5	+15.1	+14.6	+15.0	+11.9	+12.4	+13.3	+13.8	+13.3	+14.2	
Design Speed:	130km/h																								80km/h							

Profile
Scale H:1:2500 V:1:500 @ A1



Fit for Acceptance

Rev	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.
P05	CP2.1 Draft Interim Preliminary Design	LK	IB	PC	29/03/2019	29/03/2019
P04	CP2 Initial Preliminary Design	LK	IB	PC	29/06/2018	29/06/2018
P03	For CP2 IDR Meeting Initial Preliminary Design	LK	IB	PC	16/05/2018	16/05/2018
P02	CP1 Draft Initial Preliminary Design	LK	IB	PC	14/12/2017	14/12/2017
P01	Issued for IDC Review	LK	JBA	PC	11/10/2017	11/10/2017

Legends/Notes:

- Depot, station, headhouse, shaft or portal building
- Tunnel portal
- Electricity substation
- Ecological mitigation pond
- Balancing pond
- Pumping station
- Replacement floodplain storage area
- Woodland habitat creation
- Wetland habitat creation
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- Landscape mitigation planting (scrub / woodland)
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- Major utility works
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Zone
L4 Sharlston Common to Leeds and Ulleskelf

Design Stage
Hybrid Bill - Draft Interim Preliminary Design

Drawing Title
L4 Leeds Spur Plan & Profile
 Chainage - 329+800 - 331+300

Sheet 24 of 38

Project/Contract	CDER Area 3 (CE3)		
Discipline/Function	Civil		
Drawn	Checked	Approved	
LH	JBA	PC	
Date	Scale	Size	
25/08/2017	AS SHOWN	A1	
Drawing No.	Rev.		
2DE03-ARP-CV-DPP-L04-001022	P05		