

Appendix 18.13: Site noise mitigation



Content

- Masterplan Bulk Earthworks Option 5 Bund Volumes (embedded mitigation) (1 page)
- Proposed worst case adaptive screening based on parameters plan (2 pages)
- Indicative adapted acoustic screening based on illustrative masterplan (2 pages)

Embedded mitigation



Bund 1

SURFACE LEVEL DATA					
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR	AREA	VOLUME
1	-6.00	-5.00		46.843m2	11.821m3
2	-5.00	-4.00		258.725m2	160.894m3
3	-4.00	-3.00		370.557m2	482.690m3
4	-3.00	-2.00		533.499m2	926.247m3
5	-2.00	-1.00		630.637m2	1527.347m3
6	-1.00	0.00		886.325m2	2225.496m3
7	0.00	1.00		4427.874m2	31146.514m3
8	1.00	2.00		8538.897m2	25082.892m3
9	2.00	3.00		5969.874m2	17251.873m3
10	3.00	4.00		5255.667m2	11884.651m3
11	4.00	5.00		3885.512m2	7092.431m3
12	5.00	6.00		3297.373m2	3352.777m3
13	6.00	7.00		1637.407m2	1109.934m3
14	7.00	8.00		358.983m2	54.797m3

Bund 2

SURFACE LEVEL DATA					
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR	AREA	VOLUME
1	-4.00	-3.00		12.818m2	1.602m3
2	-3.00	-2.00		252.103m2	107.697m3
3	-2.00	-1.00		577.331m2	531.388m3
4	-1.00	0.00		4140.689m2	2407.346m3
5	0.00	1.00		7746.885m2	89233.181m3
6	1.00	2.00		9389.193m2	80194.515m3
7	2.00	3.00		8488.737m2	71417.470m3
8	3.00	4.00		9234.833m2	62730.848m3
9	4.00	5.00		10686.713m2	52913.167m3
10	5.00	6.00		9209.154m2	42288.334m3
11	6.00	7.00		7515.869m2	34227.157m3
12	7.00	8.00		6756.722m2	27140.966m3
13	8.00	9.00		7901.774m2	20165.168m3
14	9.00	10.00		8258.330m2	12609.947m3
15	10.00	11.00		3918.862m2	7462.227m3
16	11.00	12.00		2439.188m2	4419.791m3
17	12.00	13.00		1694.706m2	2333.763m3
18	13.00	14.00		1075.069m2	997.206m3
19	14.00	15.00		467.305m2	210.106m3
20	15.00	16.00		28.401m2	6.233m3

Bund 3

SURFACE LEVEL DATA					
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR	AREA	VOLUME
1	-2.00	-1.00		4.155m2	0.078m3
2	-1.00	0.00		1401.889m2	730.639m3
3	0.00	1.00		3939.627m2	22713.407m3
4	1.00	2.00		5863.177m2	17451.205m3
5	2.00	3.00		4924.635m2	11888.173m3
6	3.00	4.00		4488.677m2	7251.804m3
7	4.00	5.00		3579.361m2	3108.468m3
8	5.00	6.00		1499.789m2	307.486m3

Bund	Cut (m³)	Fill (m³)	Shortfall (m³)	Surplus (m³)
Bund 1	5,500	96,500	91,000	
Bund 2	3,500	508,000	504,500	
Bund 3	800	62,800	62,000	
Total Cut Fill Bunds	9,800	667,300	657,500	

Surplus material from site cut fill analysis (Refer to drawing NK018318-00-XX-DR-C-SK0010)				
Surplus from plateau formation	51,000			
Surplus from balancing ponds 3.5m deep (TBC by Hydrock)	138,250			
250mm Topsoil Strip (Analysis area = 1,717,000)	429,250			
Total surplus	618,500			
Fill requirement to bunds		657,500		
Total Cut Fill	618,500	657,500	39,000	

Reference Drawings:
Site Masterplan
Michael Sparks Associates
Illustrative Masterplan
30708-FE-93

Survey information from
MK surveys
22223 - June 2016

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Notes

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B Volumes updated following updates to Bulk Earthworks Analysis SK0010		LM	JKC	12.04.17
A Unit 4 Plateau level corrected		LM	JKC	24.03.17
Rev	Description	By	Old	Date



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Client Ashfield Land

Project Rail Central

Title Masterplan Bulk Earthworks
Bund Volumes, Option 5

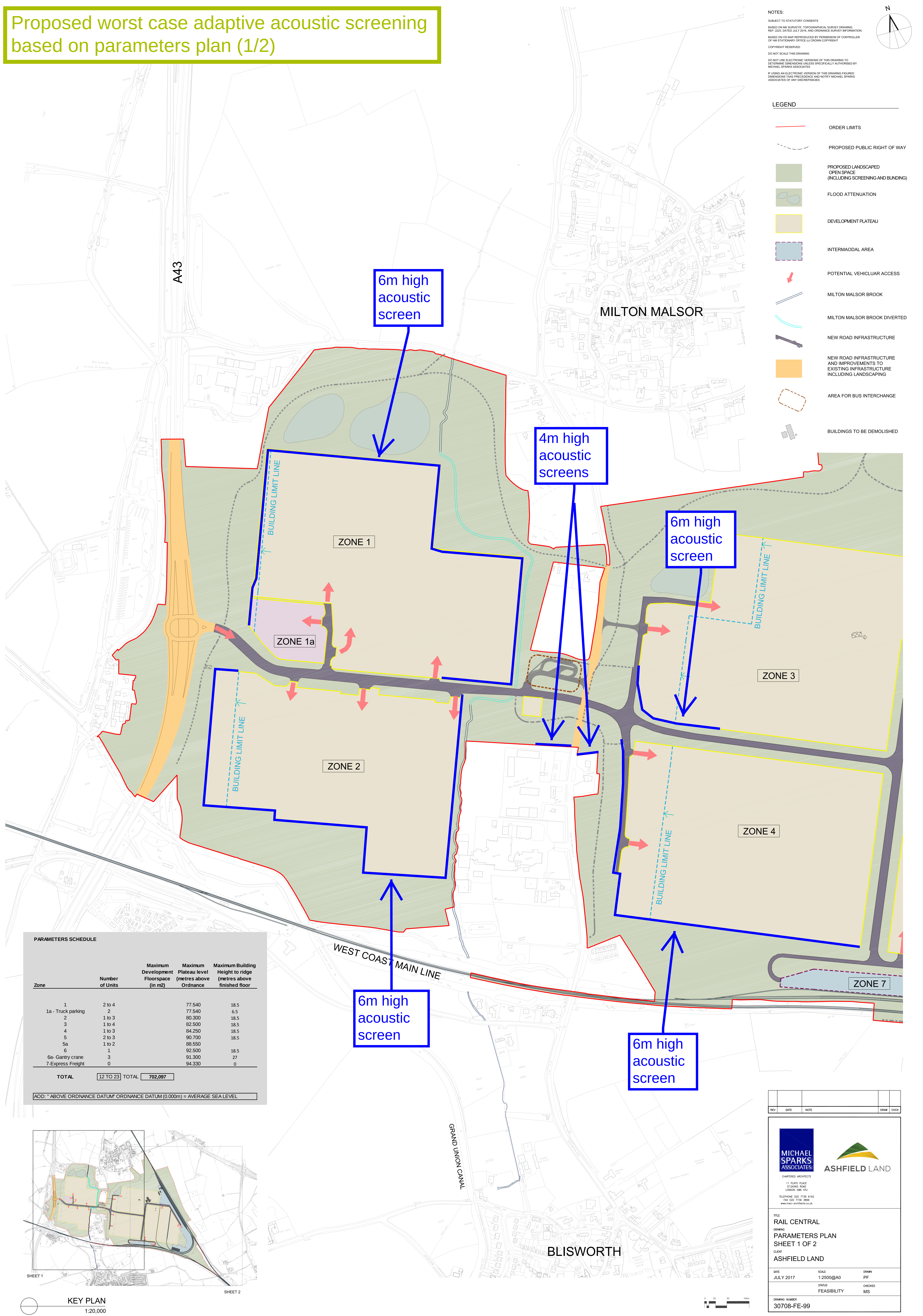
Status Preliminary	Scale 1:2500 @A0	Date Created 04.07.2016
Project Leader JKC	Drawn By LM	Checked by JKC

Document Number	Revision	Quantity
NK018318-RPS-00-XX-DR-C-SK0011	B	S0

50m SCALE 1:2500

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Proposed worst case adaptive acoustic screening
based on parameters plan (1/2)



NOTES:

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- ORDER LIMITS
- PROPOSED PUBLIC RIGHT OF WAY
- PROPOSED LANDSCAPED OPEN SPACE (INCLUDING SCREENING AND BUNDING)
- FLOOD ATTENUATION
- DEVELOPMENT PLATEAU
- INTERMODAL AREA
- POTENTIAL VEHICULAR ACCESS
- MILTON MALSOR BROOK
- MILTON MALSOR BROOK DIVERTED
- NEW ROAD INFRASTRUCTURE
- NEW ROAD INFRASTRUCTURE AND IMPROVEMENTS TO EXISTING INFRASTRUCTURE INCLUDING LANDSCAPING
- AREA FOR BUS INTERCHANGE
- BUILDINGS TO BE DEMOLISHED

PARAMETERS SCHEDULE				
Zone	Number of Units	Maximum Development Floorspace (in m2)	Maximum Plateau level (metres above Ordnance)	Maximum Building Height to ridge (metres above finished floor)
1	2 to 4		77.540	18.5
1a - Truck parking	2		77.540	6.5
2	1 to 3		80.300	18.5
3	1 to 4		82.500	18.5
4	1 to 3		84.250	18.5
5	2 to 3		90.700	18.5
5a	1 to 2		89.550	
6	1		92.500	18.5
6a - Gantry crane	3		91.300	27
7-Express Freight	0		94.330	0
TOTAL	12 TO 23	TOTAL	702,097	
AOD: " ABOVE ORDNANCE DATUM" ORDNANCE DATUM (0.000m) = AVERAGE SEA LEVEL				



REV	DATE	NOTE	DRAW	CHK

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LONDON SW6 4TU

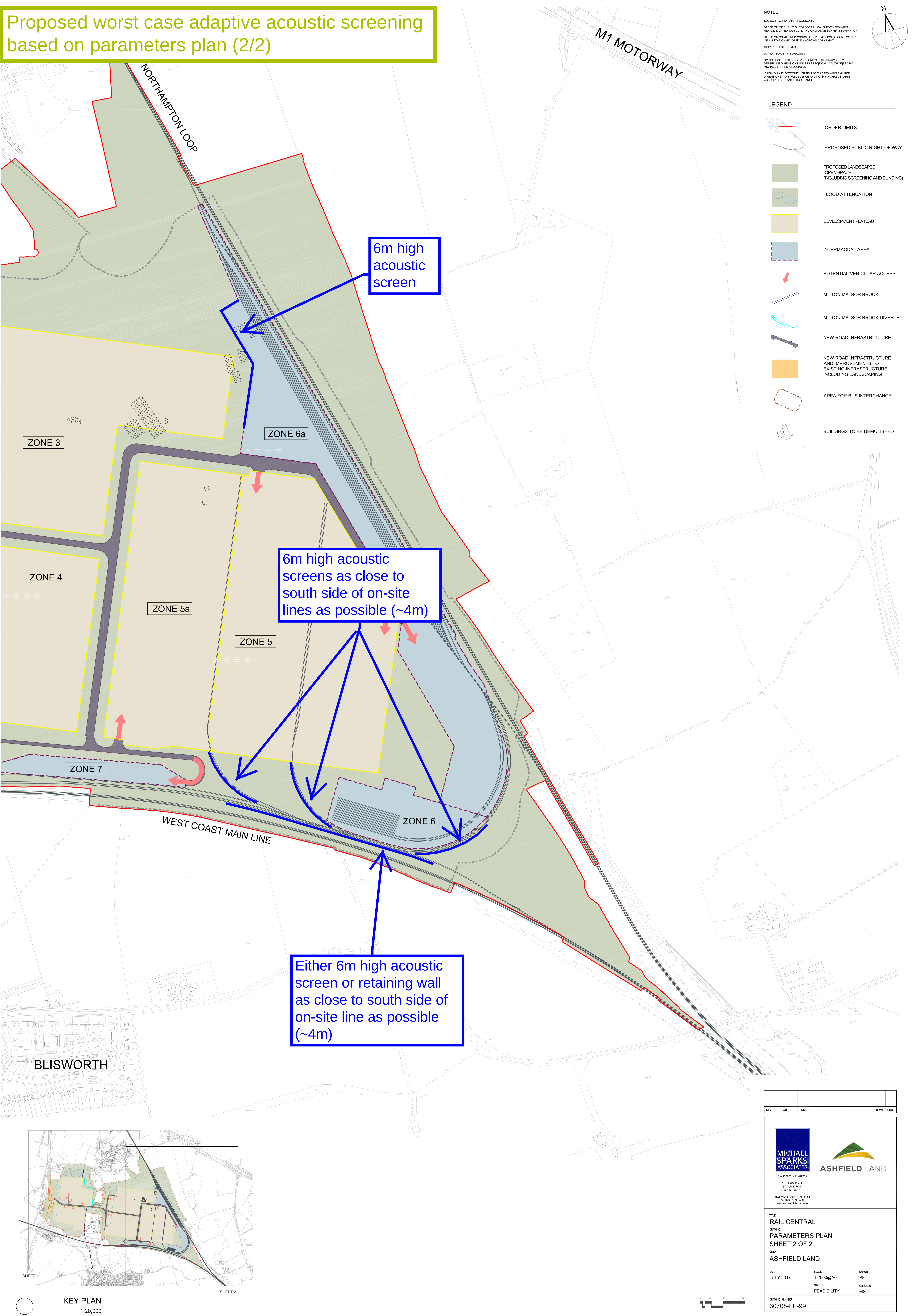
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DRAWING NUMBER 30708-FE-99		

Proposed worst case adaptive acoustic screening
based on parameters plan (2/2)



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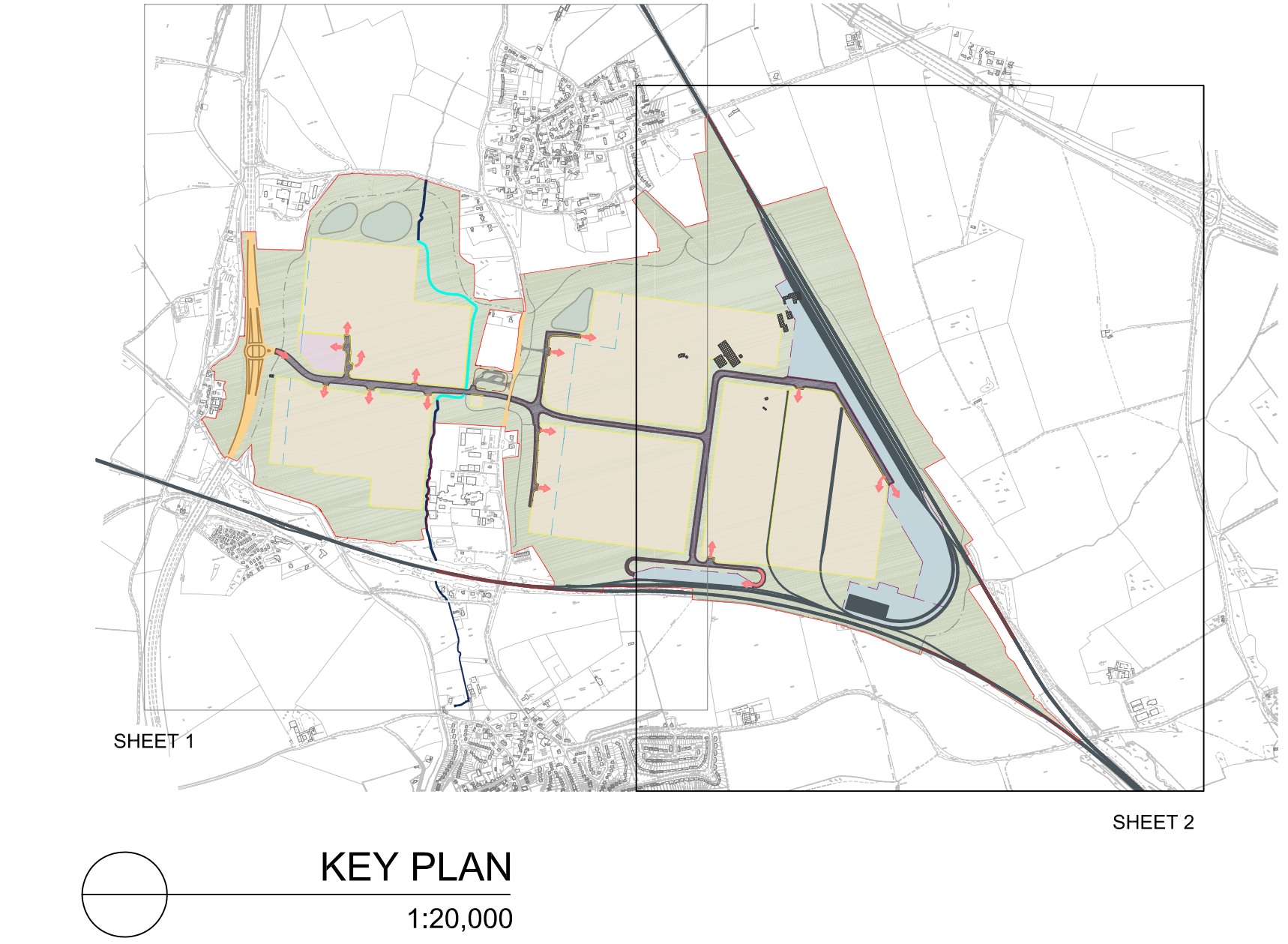
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- AREA FOR BUS INTERCHANGE
- BUILDINGS TO BE DEMOLISHED



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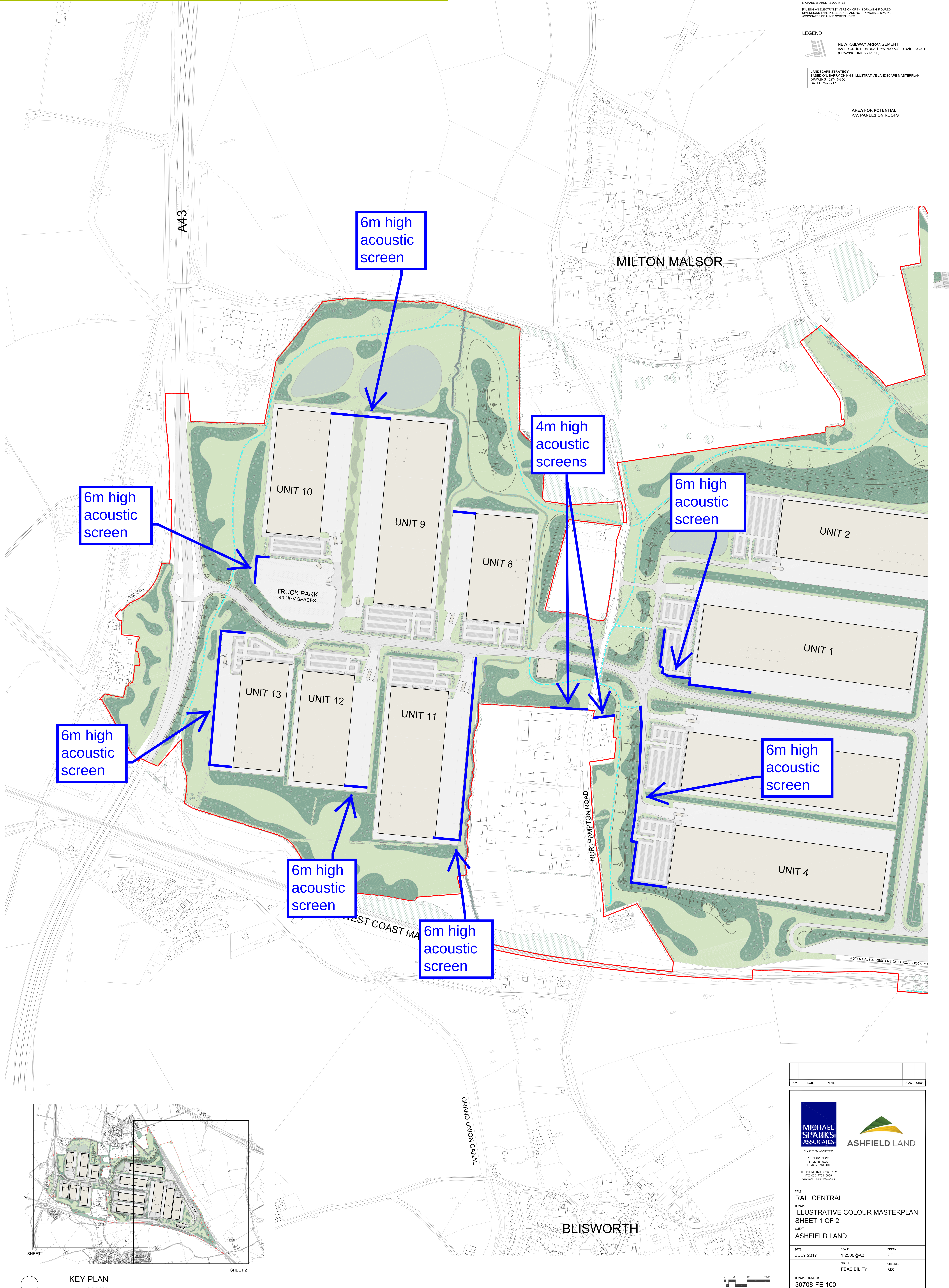
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Indicative adapted acoustic screening based on illustrative masterplan (1/2)



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NEW RAILWAY ARRANGEMENT, BASED ON INTERMODALITY'S PROPOSED RAIL LAYOUT, (DRAWING: IMT SC D1.17.)

LANDSCAPE STRATEGY.
BASED ON: BARRY CHIN'S ILLUSTRATIVE LANDSCAPE MASTERPLAN
(DRAWING: IEST-16-002)
DATED: 24-03-17

AREA FOR POTENTIAL P.V. PANELS ON ROOFS



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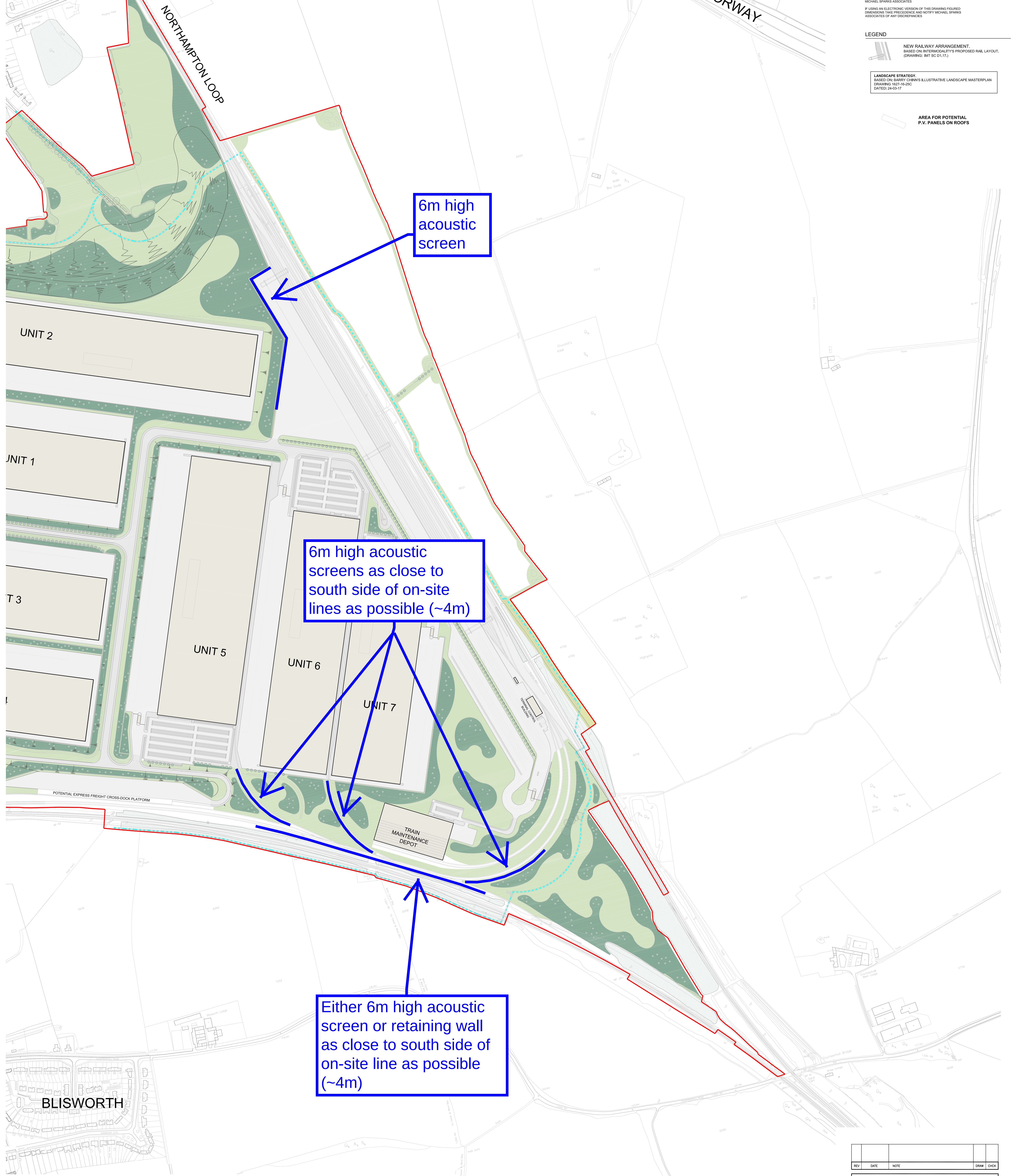
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DATE	SCALE	DRAWN
JULY 2017	1:2500@A0	PF

STATUS	CHECKED
FEASIBILITY	MS

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Indicative adapted acoustic screening based on illustrative masterplan (2/2)



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AREA FOR POTENTIAL P.V. PANELS ON ROOFS



KEY PLAN
1:20,000

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