Network Rail

King's Cross Station Redevelopment Programme

Package 6

GRIP5 CCRF UPDATE

Volume III – Section B4

PA/VA Field Equipment Schedule

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ISSUE 6.0

ISSUE/REVISION SCHEDULE

Prepared By
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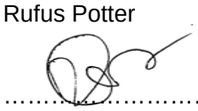

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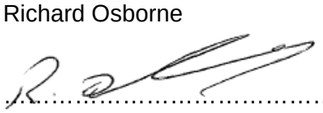

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Alastair Knights

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Date	Issue	Comments
March 2010	Issue 1.0	Issued for IDC Review
April 2010	Issue 2.0	Issued for Construction
June 2010	Issue 3.0	Issued for Construction. Minor corrections.
September 2010	Issue 3.1	Issued for IDC Review (CCRF00043)
October 2010	Issue 4.0	Issued for Construction
April 2011	Issue 5.0	Issued for IDC incorporating CCRF updates
April 2011	Issue 6.0	Issued for Construction incorporating VO56 and VO60

CONTENTS

1 PAVA SYSTEM FIELD EQUIPMENT SCHEDULE

1.1 SPEAKERS AND SPEAKER PRESENTATION JUNCTION BOXES

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
001	Footbridge Gridline W19/20 Plat 1	Bridge	MTS	M2/2A	0.1	0.0	240.0	240.0	S4-5	Totem	By Totem designer (5)	2400	KX6-CCP0-1602	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 7016 Anthracite Grey	13Kg
002	Footbridge Gridline W19/20 Plat 2&3	Bridge	MTS	M2/2B	0.1	0.0	240.0	240.0	S4-5	Totem	By Totem designer (5)	2400	KX6-CCP0-1602	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 7016 Anthracite Grey	13Kg
003	Footbridge Gridline W19/20 Plat 5	Bridge	MTS	M2/5A	0.1	0.0	240.0	240.0	S4-5	Totem	By Totem designer (5)	2400	KX6-CCP0-1602	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 7016 Anthracite Grey	13Kg
004	Footbridge Gridline W19/20 Plat 6&7	Bridge	MTS	M2/5B	0.1	0.0	240.0	240.0	S4-5	Totem	By Totem designer (5)	2400	KX6-CCP0-1601	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 7016 Anthracite Grey	13Kg
102	WCR between C/L & r8 Perimeter Walkway	Ground	WCR	M1/1A	0.1	0.0	103.0	103.0	S2-1	Totem	By Totem designer (5)	2400	WRB-CCP0-2110	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
103	WCR at r3/r6 Perimeter Walkway	Ground	WCR	M1/1B	0.1	0.0	66.8	66.8	S2-1	Totem	By Totem designer (5)	2400	WRB-CCP0-2110	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
104	WCR at r4 Perimeter Walkway	Ground	WCR	M1/1A	0.1	0.0	51.4	51.4	S2-1	Totem	By Totem designer (5)	2400	WRB-CCP0-2110	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
105	Gridline W2/W3	Ground	WCR	M1/1A	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
106	Gridline W2/W3	Ground	WCR	M1/1B	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
107	Gridline W3/W4	Ground	WCR	M1/1B	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
108	Gridline W3/W4	Ground	WCR	M1/1A	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
109	Gridline W4/W5	Ground	WCR	M1/1A	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
110	Gridline W4/W5	Ground	WCR	M1/1B	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
111	Gridline W5/W6	Ground	WCR	M1/1B	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
112	Gridline W5/W6	Ground	WCR	M1/1A	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
113	Gridline W6/W7	Ground	WCR	M1/1A	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
114	Gridline W6/W7	Ground	WCR	M1/1B	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
115	Gridline W2/W3	Ground	WCR	M1/1B	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
116	Gridline W2/W3	Ground	WCR	M1/1A	3.0	0.0	n/a	0.0	S5-2	Steel Ceiling Panels CLG-54	n/a	3800	WRB-CCPO-2108	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
123	Gridline W21-W22 (Room 1/33b)	Mezz	WCR	M1/2A	3.0	0.0	n/a	0.0	S5-2	Ceiling (Metal Mesh CLG14)	n/a	4330	WRB-CCP0-2206	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
124	Gridline W21-W22 (Room 1/33b)	Mezz	WCR	M1/2B	3.0	0.0	n/a	0.0	S5-2	Ceiling (Metal Mesh CLG14)	n/a	4330	WRB-CCP0-2206	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
125	Gridline W21-W22 (Room 1/33a)	Mezz	WCR	M1/2A	3.0	0.0	n/a	0.0	S5-2	Ceiling (Metal Mesh CLG14)	n/a	4330	WRB-CCP0-2206	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
126	Above Mezz ground seating area. Row 1 r5/r6	Ground	WCR	M1/4A	5.0	90.6	n/a	90.6	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
127	Above Mezz ground seating area. Row 1 r8/r9	Ground	WCR	M1/4A	5.0	90.6	n/a	90.6	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
128	Above Mezz ground seating area. Row 1 r8/r9	Ground	WCR	M1/4A	5.0	90.6	n/a	90.6	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
129	Above Mezz ground seating area. Row 1 r7/r8	Ground	WCR	M1/4A	5.0	90.6	n/a	90.6	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
130	Above Mezz ground seating area. Row 2 r9/r10	Ground	WCR	M1/4B	5.0	91.4	n/a	91.4	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
131	Above Mezz ground seating area. Row 2 r8/r9	Ground	WCR	M1/4B	5.0	91.4	n/a	91.4	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
132	Above Mezz ground seating area. Row 2 r8/r9	Ground	WCR	M1/4B	5.0	91.4	n/a	91.4	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
133	Above Mezz ground seating area. Row 2 r7/r8	Ground	WCR	M1/4B	5.0	91.4	n/a	91.4	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
134	Above Mezz ground seating area. Row 3 r9/r10	Ground	WCR	M1/5A	5.0	93.9	n/a	93.9	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
135	Above Mezz ground seating area. Row 3 r8/r9	Ground	WCR	M1/5A	5.0	93.9	n/a	93.9	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
136	Above Mezz ground seating area. Row 3 r8/r9	Ground	WCR	M1/5A	5.0	93.9	n/a	93.9	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
137	Above Mezz ground seating area. Row 3 r8/r9	Ground	WCR	M1/5A	5.0	93.9	n/a	93.9	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
138	Mezz Balcony, Gridline r4, next to escalator	Mezz	WCR	M1/3A	0.1	106.0	0.0	106.0	S4-4	Totem	By Totem designer (5)	2400	WRB-CCP0-2210	Duran Audio	Intellivox DS115 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	13Kg
139	Mezz Balcony, Gridline r5, escalator signage	Mezz	WCR	M1/3B	0.1	106.0	0.0	106.0	S4-2	Built into Directional signage	Assumed Standard (13)	2400	WRB-CCP0-2210	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
140	Mezz Balcony,Gridline r5/r6, within retail signage	Mezz	WCR	M1/3A	0.1	106.0	0.0	106.0	S4-2	Built into Retail signage	Assumed Standard (13)	2400	WRB-CCP0-2210	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
141	Mezz Balcony,Gridline r7, within retail signage	Mezz	WCR	M1/3B	0.1	106.0	0.0	106.0	S4-2	Built into Retail signage	Assumed Standard (13)	2400	WRB-CCP0-2210	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
142	Mezz Balcony,Gridline r8, within retail signage	Mezz	WCR	M1/3A	0.1	106.0	0.0	106.0	S4-2	Built into Retail signage	Assumed Standard (13)	2400	WRB-CCP0-2210	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
143	Mezz Balcony,Gridline r9, within retail signage	Mezz	WCR	M1/3B	0.1	106.0	0.0	106.0	S4-2	Built into Retail signage	Assumed Standard (13)	2400	WRB-CCP0-2209	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
144	Mezz Balcony,Gridline r10, within retail signage	Mezz	WCR	M1/3A	0.1	106.0	0.0	106.0	S4-2	Built into Retail signage	Assumed Standard (13)	2400	WRB-CCP0-2209	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
145	Mezz Balcony,Gridline r11, within retail signage	Mezz	WCR	M1/3B	0.1	106.0	0.0	106.0	S4-2	Built into Retail signage	Assumed Standard (13)	2400	WRB-CCP0-2209	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
146	Mezz Balcony,Gridline r12, escalator signage	Mezz	WCR	M1/3A	0.1	106.0	0.0	106.0	S4-2	Built into Directional signage	Assumed Standard (13)	2400	WRB-CCP0-2209	Duran Audio	Intellivox DS115 Amp at Bottom	KX6-CCD-2900	RAL 9006 15% Gloss	13Kg
147	Mezz Bridge Gridline r13, next to escalator	Mezz	WCR	M1/3B	0.1	106.0	0.0	106.0	S2-1	Totem	By Totem designer (5)	2400	WRB-CCP0-2209	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
148	Mez r/6 above stairs	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
149	Mez r/6 above stairs	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
150	Mez r/11 above stairs	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2209	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
151	Mez r/11 above stairs	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2209	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
152	Mez r/11 above stairs	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2209	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
160	Gridline W25 G/30 Corridor to public WC	Ground	WCR	M1/2A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
161	Gridline W26 G/30 Corridor to public WC	Ground	WCR	M1/2B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
162	Gridline W27 G/30 Corridor to public WC	Ground	WCR	M1/2A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
163	Gridline W27 Room G/30c Baby Change	Ground	WCR	M1/2B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
164	Gridline W25 on outside of STS wall	Ground	WCR	M1/2A	50.0	0.0	0.0	0.0	S8-1	Cladding panel around steel columns	Standard bracket (17)	2350	WRB-CCP0-2106	Duran Audio	Intellivox ADC V90	See Note (16)	TBD	13Kg
170	Gridline R5	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
171	Gridline R5	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
172	Gridline R4	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-2	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	RAL 9006 (15% Gloss)	2Kg
173	Gridline R5	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
174	Gridline R5	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
175	Gridline R5	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
176	Mez Corridor between C/L & r/8	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
177	Mez Corridor between C/L & r/8	Mezz	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
178	Mez Corridor between C/L & r/8	Mezz	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	2500	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
180	Gridline W4, front of G/00b	Ground	WCR	M1/1A	0.1	0.0	0.0	0.0	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2108	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
181	Gridline W6, front of G/00b	Ground	WCR	M1/1B	0.1	0.0	0.0	0.0	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2108	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
182	Gridline W8, front of G/01	Ground	WCR	M1/1A	0.1	0.0	8.4	8.4	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2107	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
183	Gridline W11, front of G/11	Ground	WCR	M1/1B	0.1	0.0	27.5	27.5	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2107	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
184	Gridline W14, front of G/11	Ground	WCR	M1/1A	0.1	0.0	29.9	29.9	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2107	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
185	Gridline W17, front of G/16	Ground	WCR	M1/1B	0.1	0.0	12.4	12.4	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2107	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
186	Gridline W19, front of G/16a	Ground	WCR	M1/1A	0.1	0.0	0.0	0.0	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2106	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
187	Gridline W21, front of G/21	Ground	WCR	M1/1B	0.1	0.0	0.0	0.0	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2106	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
188	Gridline W23, front of G/24	Ground	WCR	M1/1A	0.1	0.0	0.0	0.0	S2-1	Totem, 600mm in front of wall	By Totem designer (5)	2400	WRB-CCP0-2106	Duran Audio	Intellivox DSX280 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	37Kg
189	Gridline W24, on steel column at r16	Ground	WCR	M1/2B	0.1	0.0	0.0	0.0	S4-3	Totem	By Totem designer (5)	2400	WRB-CCP0-2106	Duran Audio	Intellivox DS115 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss) -tbc	13Kg
190	Gridline W25-W26 at W end of Pub Balcony	First	WCR	M1/2A	0.1	0.0	0.0	0.0	S4-3	Totem	By Totem designer (5)	2400	WRB-CCP0-2206	Duran Audio	Intellivox DS115 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss) -tbc	13Kg
191	Totem in front of GNH at R3	Ground	WCR	M1/1B	0.1	0.0	40.0	40.0	S4-7	Totem	By Totem designer (5)	2400	WRB-CCP0-2206	Duran Audio	Intellivox DS115 Amp at Top	KX6-CCD-2900	RAL9005 (15% Gloss)	13Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
201	P8 West Wall @ gridline 26	Ground	MTS	M2/5B	0.1	0.0	320.0	320.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
202	P5 Spine Wall @ Gridline 29	Ground	MTS	M2/5A	0.1	0.0	367.0	367.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
203	P4 Spine Wall @ Gridline 29	Ground	MTS	M2/2A	0.1	0.0	368.0	368.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
204	P1 East Wall @ Gridline 26	Ground	MTS	M2/2B	0.1	0.0	324.0	324.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
205	Opp. P2 track bed Gridline 0, South Façade.	Ground	MTS	M2/1A	0.1	0.0	0.0	0.0	S4-6	Southern Facade	Assumed Standard (6)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS115 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	13Kg
206	Opp. P7 track bed Gridline 0, South Façade.	Ground	MTS	M2/4B	0.1	0.0	0.0	0.0	S4-6	Southern Facade	Assumed Standard (6)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS115 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	13Kg
210	P8 West Wall @ gridline6	Ground	MTS	M2/4B	0.1	0.0	60.0	60.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
211	P1 Gridline 0, South Façade, buffer end	Ground	MTS	M2/1B	0.1	0.0	0.0	0.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
212	P2/3 Gridline 0, South Façade, buffer end	Ground	MTS	M2/1B	0.1	0.0	5.0	5.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
213	P4 Gridline 0, South Façade, buffer end	Ground	MTS	M2/1A	0.1	0.0	0.0	0.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
214	P5 Gridline 0, South Façade, buffer end	Ground	MTS	M2/4B	0.1	0.0	2.0	2.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
215	P6/7 Gridline 0, South Façade, buffer end	Ground	MTS	M2/4A	0.1	0.0	0.0	0.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
216	P8 Gridline 0, South Façade, buffer end	Ground	MTS	M2/4A	0.1	0.0	0.0	0.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
217	P8 West wall Gridline 10	Ground	MTS	M2/4A	0.1	0.0	109.0	109.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2507	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
218	P5 Spine wall Gridline 9	Ground	MTS	M2/4B	0.1	0.0	85.0	85.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
219	P4 Spine wall Gridline 9	Ground	MTS	M2/1A	0.1	0.0	84.0	84.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
220	P1 East wall Gridline 10	Ground	MTS	M2/1A	0.1	0.0	104.0	104.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
221	P1 East Wall at gridline 22	Ground	MTS	M2/2A	0.1	0.0	262.0	262.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
222	P4 Spine wall at gridline 24	Ground	MTS	M2/2B	0.1	0.0	290.0	290.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
223	P5 Spine wall at gridline 24	Ground	MTS	M2/5B	0.1	0.0	290.0	290.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
224	P8 West wall at gridline 22	Ground	MTS	M2/4A	0.1	0.0	263.0	263.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
225	Gridline W28 Male WC	Ground	WRB	M2/7B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
226	Gridline W29 Male WC	Ground	WRB	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
227	Gridline W29 Male WC	Ground	WRB	M2/7B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
228	Gridline W30 Male WC	Ground	WRB	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
229	P1 East wall at Gridline 30	Ground	MTS	M2/2A	0.1	0.0	368.0	368.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
230	Gridline W28 WC Entrance Room G/29	Ground	WCR	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
231	P4 Spine wall at Gridline 32	Ground	MTS	M2/2B	0.1	0.0	402.0	402.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
232	P5 Spine wall at Gridline 32	Ground	MTS	M2/5B	0.1	0.0	403.0	403.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
233	Gridline W28 WC Entrance Room G/29	Ground	WCR	M2/7B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
234	P8 West wall at Gridline 30	Ground	MTS	M2/5A	0.1	0.0	369.0	369.0	S1-1	Wall	Assumed Standard (6)	2400	KX6-CCP0-2509	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
235	P1 East wall at Gridline 38	Ground	MTS	M2/2A	0.1	0.0	518.0	518.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2504	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
236	Gridline W28 Disabled WC Room G/29	Ground	WCR	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
237	P4 Spine wall Gridline 38	Ground	MTS	M2/2A	0.1	0.0	488.0	488.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2504	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
238	P5 Spine wall Gridline 38	Ground	MTS	M2/5A	0.1	0.0	487.0	487.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2510	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
239	P8 West Wall @ gridline 35	Ground	MTS	M2/5B	0.1	0.0	470.0	470.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2509	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
240	P8 West Wall Gridline 39	Ground	MTS	M2/5A	0.1	0.0	521.0	521.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2510	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
241	Gridline W28 Female WC	Ground	WRB	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
242	Gridline W29 Female WC	Ground	WRB	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
243	Gridline W29 Female WC	Ground	WRB	M2/7B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
244	Gridline W30 Female WC	Ground	WRB	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
246	Gridline W28 Disabled WC Room G/29	Ground	WRB	M2/7B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
247	P2/3, Gridline7, Column	Ground	MTS	M2/1A	0.1	0.0	78.0	78.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
248	P2/3 Gridline11, Column	Ground	MTS	M2/1B	0.1	0.0	139.0	139.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
249	P2/3 Gridline14, Column	Ground	MTS	M2/1A	0.1	0.0	177.0	177.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
250	P2 Gridline 18, East Side of lift	Ground	MTS	M2/2B	0.1	0.0	241.0	241.0	S3-3	Lift MIP4 - North face, Eastern edge	Assumed Standard (11)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
251	P3, Gridline 18, West Side of lift	Ground	MTS	M2/1A	0.1	0.0	239.0	239.0	S3-3	Lift MIP4 - North face, Western edge	Assumed Standard (11)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
252	P2/3 Gridline25, Column	Ground	MTS	M2/2B	0.1	0.0	319.0	319.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
253	P2/3 Gridline28, Column	Ground	MTS	M2/2A	0.1	0.0	355.0	355.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
254	P2/3 Gridline31, Column	Ground	MTS	M2/2B	0.1	0.0	397.0	397.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
255	P2/3 Gridline34, Column	Ground	MTS	M2/2A	0.1	0.0	444.0	444.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
256	P2/3 Gridline37, Column	Ground	MTS	M2/2B	0.1	0.0	495.0	495.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
257	P6/7 Gridline7, Column	Ground	MTS	M2/4A	0.1	0.0	77.0	77.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2506	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
258	P6/7 Gridline11, Column	Ground	MTS	M2/4B	0.1	0.0	144.0	144.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2507	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
259	P6/7 Gridline14, Column	Ground	MTS	M2/4A	0.1	0.0	189.0	189.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2507	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
260	P6, Gridline 18, East Side of lift	Ground	MTS	M2/5B	0.1	0.0	242.0	242.0	S3-3	Lift MIP6 - North face, Eastern edge	Assumed Standard (11)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
261	P7 Gridline 18, West Side of lift	Ground	MTS	M2/4A	0.1	0.0	244.0	244.0	S3-3	Lift MIP6 - North face, Western edge	Assumed Standard (11)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
262	P6/7 Gridline25, Column	Ground	MTS	M2/5B	0.1	0.0	320.0	320.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
263	P6/7 Gridline28, Column	Ground	MTS	M2/5A	0.1	0.0	353.0	353.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
264	P6/7 Gridline31, Column	Ground	MTS	M2/5B	0.1	0.0	398.0	398.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2509	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
265	P6/7 Gridline34, Column	Ground	MTS	M2/5A	0.1	0.0	443.0	443.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2509	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
266	P6/7 Gridline37, Column	Ground	MTS	M2/5B	0.1	0.0	495.0	495.0	S3-4	Totem	By Totem designer (5)	2400	KX6-CCP0-2509	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 (30% Gloss)	19Kg
267	Gridline W31 G/32c Access Way	Ground	MTS	M2/7B	10.0	0.0	n/a	0.0	S7-1	Wall	Assumed Standard (6)	2400	WRB-CCP0-2105	Penton	MCS20	KX6-CCD-2902	TBA	3Kg
268	Gridline W31 G/32c Access Way	Ground	MTS	M2/7A	10.0	0.0	n/a	0.0	S7-1	Wall	Assumed Standard (6)	2400	WRB-CCP0-2105	Penton	MCS20	KX6-CCD-2902	TBA	3Kg
269	P1 East Wall @ Gridline 35	Ground	MTS	M2/2B	0.1	0.0	476.0	476.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
270	P1 Lighting column 2	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
271	P1 Lighting column 3	Ground	MTS	M2/3A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
272	P1 Lighting column 4	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
273	P1 Lighting column 5	Ground	MTS	M2/3A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
274	P2/3 Lighting column on island platform tip	Ground	MTS	M2/3A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
275	P2/3 Lighting column on island platform tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
276	P2/3 Lighting column on island platform tip	Ground	MTS	M2/3A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
277	P2/3 Lighting column on island platform tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
278	P4/5 Lighting column on island platform tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2503	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
279	P4/5 Lighting column on island platform tip	Ground	MTS	M2/6A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2503	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
280	P4/5 Lighting column on island platform tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2503	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
281	P4/5 Lighting column on island platform tip	Ground	MTS	M2/6A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2511	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
282	P4/5 Lighting column on island platform tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2511	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
283	P6/7 Lighting column on island platform tip	Ground	MTS	M2/6A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
284	P6/7 Lighting column on island platform tip	Ground	MTS	M2/6B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
285	P6/7 Lighting column on island platform tip	Ground	MTS	M2/6A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
286	P6/7 Lighting column on island platform tip	Ground	MTS	M2/6B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
287	P6/7 Lighting column on island platform tip	Ground	MTS	M2/6A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2511	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
288	P8 island platform tip	Ground	MTS	M2/6B	10.0	680.0	n/a	680.0	S6-1	TBA (20)	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
289	P8 island platform tip	Ground	MTS	M2/6A	10.0	680.0	n/a	680.0	S6-1	TBA (20)	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
290	P8 island platform tip	Ground	MTS	M2/6B	10.0	680.0	n/a	680.0	S6-1	TBA (20)	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
291	P5 Spine Wall @ Gridline 5	Ground	MTS	M2/4A	0.1	0.0	52.0	52.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
292	P4 Spine Wall @ Gridline 5	Ground	MTS	M2/1B	0.1	0.0	51.0	51.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
293	P1 East Wall @ Gridline 6	Ground	MTS	M2/1B	0.1	0.0	65.0	65.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2500	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
294	P8 West Wall @ gridline 18	Ground	MTS	M2/5B	0.1	0.0	242.0	242.0	S3-3	Lift MIP7 - North face, Eastern edge	Assumed Standard (11)	2400	KX6-CCP0-2508	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
295	P5 Spine Wall @ Gridline 16	Ground	MTS	M2/4A	0.1	0.0	194.0	194.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
296	P4 Spine Wall @ Gridline 16	Ground	MTS	M2/1B	0.1	0.0	190.0	190.0	S3-2	Wall	Assumed Standard (6)	2400	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL7016 (30% Gloss)	19Kg
297	P1 East Wall @ Gridline 18-19	Ground	MTS	M2/1B	0.1	0.0	242.0	242.0	S3-3	Lift MIP3 - North face, Western edge	Assumed Standard (11)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
298	P5 Spine Wall @ Gridline 19	Ground	MTS	M2/1A	0.1	0.0	242.0	242.0	S3-3	Lift MIP5 - North face, Western edge	Assumed Standard (11)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
299	P4 Spine Wall @ Gridline 19	Ground	MTS	M2/2A	0.1	0.0	242.0	242.0	S3-3	Lift MIP5 - North face, Eastern edge	Assumed Standard (11)	2400	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	TBA	19Kg
302	P9 South-East corner	Ground	STS	M3/1B	0.1	67.0	0.0	67.0	S1-1	TBC	TBA (20)	2400	KX6-CCP0-2512	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
303	P10/11 Southern end	Ground	STS	M3/1A	0.1	67.0	0.0	67.0	S1-1	TBC	TBA (20)	2400	KX6-CCP0-2512	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
304	P10/11 Mid-platform, aligned 305	Ground	STS	M3/1B	0.1	67.0	154.0	221.0	S1-1	TBC	TBA (20)	2400	KX6-CCP0-2513	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
305	P9 Mid-platform, near cross-passage	Ground	STS	M3/1A	0.1	67.0	154.0	221.0	S1-1	TBC	TBA (20)	2400	KX6-CCP0-2513	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
306	P10/11 North end	Ground	STS	M3/1A	0.1	67.0	282.0	349.0	S1-1	TBC	TBA (20)	2400	KX6-CCP0-2513	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
307	P9 North end	Ground	STS	M3/1B	0.1	67.0	282.0	349.0	S1-1	TBC	TBA (20)	2400	KX6-CCP0-2513	Duran Audio	Intellivox DS500 Amp at rear	KX6-CCD-2900	RAL7016 (30% Gloss)	44Kg
310	P10/11 Lighting column on island platform tip	Ground	STS	M3/2B	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2514	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
311	P10/11 Lighting column on island platform tip	Ground	STS	M3/2A	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2514	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
312	P10/11 Lighting column on island platform tip	Ground	STS	M3/2B	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2514	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
313	P10/11 Lighting column on island platform tip	Ground	STS	M3/2A	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2514	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
314	P9 Lighting column on platform tip	Ground	STS	M3/2A	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
315	P9 Lighting column on platform tip	Ground	STS	M3/2B	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
316	P9 Lighting column on platform tip	Ground	STS	M3/2A	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2510	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
317	P9 Lighting column on platform tip	Ground	STS	M3/2B	10.0	445.0	n/a	445.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2511	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
320	Gridline T2, in ceiling above gateline	Ground	STS	M3/1B	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
321	Gridline T1, between gateline and buffers	Ground	STS	M3/1A	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
322	Gridline T1, between gateline and buffers	Ground	STS	M3/1B	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
323	Gridline T2, in ceiling above gateline	Ground	STS	M3/1A	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
324	Gridline T2, in ceiling above gateline	Ground	STS	M3/1B	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
325	Gridline T1, between gateline and buffers	Ground	STS	M3/1A	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
326	Gridline T1, between gateline and buffers	Ground	STS	M3/1B	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
327	Gridline T1, between gateline and buffers	Ground	STS	M3/1A	3.0	67.0	n/a	67.0	S5-1	Ceiling (Metal Plank CLG54)	n/a	In ceiling	KX6-CCP0-2512	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
328	Escape Corridor at r11	Ground	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
329	Escape Corridor at r11	Ground	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
330	Above Mezz ground seating area. Row 3 r7/r8	Ground	WCR	M1/5A	5.0	93.9	n/a	93.9	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
331	Above Mezz ground seating area. Row 4 r9/r10	Ground	WCR	M1/5B	5.0	100.0	n/a	100.0	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
332	Above Mezz ground seating area. Row 4 r9	Ground	WCR	M1/5B	5.0	100.0	n/a	100.0	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
333	Above Mezz ground seating area. Row 4 r8/r9	Ground	WCR	M1/5B	5.0	100.0	n/a	100.0	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
334	Above Mezz ground seating area. Row 4 r8/r9	Ground	WCR	M1/5B	5.0	100.0	n/a	100.0	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
335	Above Mezz ground seating area. Row 4 r7/r8	Ground	WCR	M1/5B	5.0	100.0	n/a	100.0	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
336	Above Mezz ground seating area. Row 4 r7/r8	Ground	WCR	M1/5B	5.0	100.0	n/a	100.0	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
337	Above Mezz ground seating area. Row 5 r9/r10	Ground	WCR	M1/6A	5.0	106.1	n/a	106.1	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
338	Above Mezz ground seating area. Row 5 r9	Ground	WCR	M1/6A	5.0	106.1	n/a	106.1	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
339	Above Mezz ground seating area. Row 5 r8/r9	Ground	WCR	M1/6B	5.0	112.8	n/a	112.8	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
340	Above Mezz ground seating area. Row 5 r7/r8	Ground	WCR	M1/6B	5.0	112.8	n/a	112.8	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
341	Above Mezz ground seating area. Row 5 r7/r8	Ground	WCR	M1/6A	5.0	106.1	n/a	106.1	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
342	Above Mezz ground seating area. Row 5 r7	Ground	WCR	M1/6A	5.0	106.1	n/a	106.1	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
343	Above Mezz ground seating area. Row 6 r7/r8	Ground	WCR	M1/6B	5.5	112.8	n/a	112.8	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
344	Above Mezz ground seating area. Row 6 r7	Ground	WCR	M1/6B	5.0	112.8	n/a	112.8	S5-3	Ceiling	n/a	3070	WRB-CCP0-2110	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
345	Above Mezz ground seating area. Row 6 r9	Ground	WCR	M1/6B	5.0	112.8	n/a	112.8	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
346	Above Mezz ground seating area. Row 6 r9/r10	Ground	WCR	M1/6B	5.0	112.8	n/a	112.8	S5-3	Ceiling	n/a	3070	WRB-CCP0-2109	Penton	RCS5FTSCOAX	KX6-CCD-2901	RAL 9010 (30% Gloss)	2Kg
347	Mezz First Floor Public Toilet r4	First	WCR	M1/3A	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	3070	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
348	Mezz First Floor Public Toilet r4	First	WCR	M1/3B	3.0	106.0	n/a	106.0	S5-1	Ceiling	n/a	3070	WRB-CCP0-2210	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
349	Gridline W28 Male WC	Ground	WRB	M2/7B	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
350	Gridline W28 Male WC	Ground	WRB	M2/7A	3.0	0.0	n/a	0.0	S5-1	Ceiling	n/a	2350	WRB-CCP0-2105	Penton	RCS6FTS	KX6-CCD-2901	TBA	2Kg
Z01	South end Plat 0 @ Gridline 3	Ground	MTS	M2/ZB	0.1	0.0	0.0	0.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2500	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z02	South end Plat 0 @ Gridline 6	Ground	MTS	M2/ZA	0.1	0.0	39.0	39.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2500	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z03	South end Plat 0 @ Gridline 9	Ground	MTS	M2/ZB	0.1	0.0	85.0	85.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z04	Plat 0 @ Gridline 12	Ground	MTS	M2/ZA	0.1	0.0	132.0	132.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z05	Plat 0 @ Gridline 15	Ground	MTS	M2/ZB	0.1	0.0	183.0	183.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2501	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
Z06	Plat 0 @ Gridline 18	Ground	MTS	M2/ZA	0.1	0.0	233.0	233.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z07	Plat 0 @ Gridline 22	Ground	MTS	M2/ZB	0.1	0.0	301.0	301.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z08	Plat 0 @ Gridline 25	Ground	MTS	M2/ZA	0.1	0.0	349.0	349.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z09	Plat 0 @ Gridline 28	Ground	MTS	M2/ZB	0.1	0.0	397.0	397.0	S3-6	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2502	Duran Audio	Intellivox DS180 Amp at Back	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z10	Plat 0 @ Gridline 31	Ground	MTS	M2/ZA	0.1	0.0	446.0	446.0	S3-1	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z11	Plat 0 @ Gridline 34	Ground	MTS	M2/ZB	0.1	0.0	497.0	497.0	S3-1	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z12	Plat 0 @ Gridline 37	Ground	MTS	M2/ZA	0.1	0.0	547.0	547.0	S3-1	Existing Column	Swivel Bracket 90 (806608) x 2	2300 (4)	KX6-CCP0-2503	Duran Audio	Intellivox DS180 Amp at Top	KX6-CCD-2900	RAL 7016 Anthracite Grey	19Kg
Z13	Lighting column 2 - Plat 0/1 tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
Z14	Lighting column 3 - Plat 0/1 tip	Ground	MTS	M2/3A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
Z15	Lighting column 4 - Plat 0/1 tip	Ground	MTS	M2/3B	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
Z16	Lighting column 5 - Plat 0/1 tip	Ground	MTS	M2/3A	10.0	680.0	n/a	680.0	S6-1	Lamp Post	Assumed Standard	3000	KX6-CCP0-2504	DNH	CAP-15 WT	KX6-CCD-2903	RAL 7016	2Kg
2001	Western Barrel Colonade Ceiling	Ground	MTS	M2/4A	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2002	Western Barrel Colonade Ceiling	Ground	MTS	M2/4B	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2003	Western Barrel Colonade Ceiling	Ground	MTS	M2/4A	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2004	Western Barrel Colonade Ceiling	Ground	MTS	M2/4B	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2005	Eastern side of Colonade ceiling	Ground	MTS	M2/1A	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2006	Eastern side of Colonade ceiling	Ground	MTS	M2/1B	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2007	Eastern side of Colonade ceiling	Ground	MTS	M2/1A	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2008	Eastern side of Colonade ceiling	Ground	MTS	M2/1B	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
2009	Eastern side of Colonade ceiling	Ground	MTS	M2/1A	15.0	0.0	n/a	0.0	S9-1	Ceiling	n/a		KX6-CCP0-2500	Bosch	LC-PC60G-8H	See Note(18)	RAL 9010 (White)	6.0Kg
145A	Riser D Second Floor	Second	WRB	M5/4A	64.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCO0-1303	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
145B	Riser D Second Floor	Second	WRB	M5/4B	32.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCO0-1303	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
150A	WRB at gridline W18 Room G/16a	Ground	WRB	M1/1A	0.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
150B	WRB at gridline W18 Room G/16a	Ground	WRB	M1/1B	3.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
501A	Gridline r12 Room CG/04a r11	Ground	WCR	M5/1A	7.5	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
501B	Gridline r12 Room CG/04a r11	Ground	WCR	M5/1B	7.5	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
502A	Gridline r11 Room CG/04b r10	Ground	WCR	M5/1A	1.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
502B	Gridline r11 Room CG/04b r10	Ground	WCR	M5/1B	1.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
503A	Gridline r10 Room CG/04c	Ground	WCR	M5/1A	1.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
503B	Gridline r10 Room CG/04c	Ground	WCR	M5/1B	1.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
504A	Gridline r10 Room CG/04d	Ground	WCR	M5/1A	4.5	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
504B	Gridline r10 Room CG/04d	Ground	WCR	M5/1B	4.5	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
505A	Gridline r10 Room CG/04e	Ground	WCR	M5/1A	10.5	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
505B	Gridline r10 Room CG/04e	Ground	WCR	M5/1B	10.5	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
506A	Gridline r13 Room CG/05 r12	Ground	WCR	M5/1A	3.0	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
506B	Gridline r13 Room CG/05 r12	Ground	WCR	M5/1B	3.0	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2109	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
507A	Gridline r7 Room CG/10a	Ground	WCR	M5/1A	4.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
507B	Gridline r7 Room CG/10a	Ground	WCR	M5/1B	4.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
508A	Gridline r7 Room CG/10b	Ground	WCR	M5/1A	3.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
508B	Gridline r7 Room CG/10b	Ground	WCR	M5/1B	3.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
509A	Gridline r7 Room CG/10c	Ground	WCR	M5/1A	3.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
509B	Gridline r7 Room CG/10c	Ground	WCR	M5/1B	3.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
511A	Gridline W9 Room G/03	Ground	WRB	M5/3A	10.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2107	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
511B	Gridline W9 Room G/03	Ground	WRB	M5/3B	10.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2107	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
512A	Gridline W19 Room G/12 (North) (Retail)	Ground	WRB	M5/3A	7.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
512B	Gridline W19 Room G/12 (North) (Retail)	Ground	WRB	M5/3B	7.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
513A	Gridline r5 Room CG/11a	Ground	WCR	M5/1A	3.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
513B	Gridline r5 Room CG/11a	Ground	WCR	M5/1B	3.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
514A	Gridline r6 Room CG/11b r5	Ground	WCR	M5/1A	4.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
514B	Gridline r6 Room CG/11b r5	Ground	WCR	M5/1B	4.5	120.0	n/a	120.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
516A	Gridline R11 M1/02	Mezz	WCR	M5/2A	3.0	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2209	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
516B	Gridline R11 M1/02	Mezz	WCR	M5/2B	3.0	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2209	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
517A	Gridline r6 Room CG/11c r5	Ground	WCR	M5/1A	9.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
517B	Gridline r6 Room CG/11c r5	Ground	WCR	M5/1B	9.0	120.0	n/a	120.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2110	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
518A	Gridline R10 M1/08a	Mezz	WCR	M5/2A	4.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2209	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
518B	Gridline R10 M1/08a	Mezz	WCR	M5/2B	4.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2209	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
519A	Gridline R9 M1/08b	Mezz	WCR	M5/2A	7.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2209	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
519B	Gridline R9 M1/08b	Mezz	WCR	M5/2B	7.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2209	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
520A	Gridline R8 M1/11a	Mezz	WCR	M5/2A	7.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2210	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
520B	Gridline R8 M1/11a	Mezz	WCR	M5/2B	7.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2210	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
521A	Gridline R7 M1/11b	Mezz	WCR	M5/2A	4.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2210	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
521B	Gridline R7 M1/11b	Mezz	WCR	M5/2B	4.5	106.0	n/a	106.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2210	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
522A	Gridline R6 M1/12	Mezz	WCR	M5/2A	1.5	106.0	n/a	106.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2210	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay (ms)	I/Vox Delay Time (ms)	Total Delay (ms)	Build	Fixed to	Bracket details	Fixing Height AFFL (mm) (Note 10)	Layout Drawing	Manufacturer	Model	Wire Drawing	Colour Ref.	Weight
522B	Gridline R6 M1/12	Mezz	WCR	M5/2B	1.5	106.0	n/a	106.0	JB6	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2210	N/A	End Chain Audio Presentation JB with EOL	KX6-CCD-2929	N/A	2Kg
523A	Gridline W19 Room G/17 (Retail)	Ground	WRB	M5/3A	1.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
523B	Gridline W19 Room G/17 (Retail)	Ground	WRB	M5/3B	1.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
524A	Gridline W22 Room G/25 (Retail)	Ground	WRB	M5/3A	7.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
524B	Gridline W22 Room G/25 (Retail)	Ground	WRB	M5/3B	7.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
525A	Gridline W23 Room G/27i (Retail)	Ground	WRB	M5/3A	4.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
525B	Gridline W23 Room G/27i (Retail)	Ground	WRB	M5/3B	4.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2106	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
526A	Gridline W26 Room G/31a (Retail)	Ground	WRB	M5/3A	6.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2105	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
526B	Gridline W26 Room G/31a (Retail)	Ground	WRB	M5/3B	6.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2105	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
527A	Gridline W26 Room G27d (Left Luggage)	Ground	WRB	M5/3A	1.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2105	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
527B	Gridline W26 Room G/27d (Left Luggage)	Ground	WRB	M5/3B	1.5	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2105	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
528A	Gridline W16 Room G/12 (South)(Retail)	Ground	WRB	M5/3A	12.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2107	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
528B	Gridline W16 Room G/12 (South)(Retail)	Ground	WRB	M5/3B	12.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2107	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
529A	Gridline W26 Room G27d (Left Luggage - P8 side)	Ground	WRB	M5/3A	6.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a		WRB-CCP0-2105	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
529B	Gridline W26 Room G27d (Left Luggage - P8 side)	Ground	WRB	M5/3B	6.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a		WRB-CCP0-2105	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
801A	Gridline W23 Room 1/36 (Pub)	1st Floor	WRB	M8/1A	60.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2206	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
801B	Gridline W23 Room 1/36 (Pub)	1st Floor	WRB	M8/1B	60.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2206	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
802A	Gridline W16 Room 1/26 1st Class Lounge	1st Floor	WRB	M8/1A	27.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2206	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg
802B	Gridline W16 Room 1/26 1st Class Lounge	1st Floor	WRB	M8/1B	27.0	0.0	n/a	0.0	JB1	Within Ceiling Void	n/a	Above Ceiling	WRB-CCP0-2206	N/A	Mid-Chain Audio Presentation JB	KX6-CCD-2929	N/A	2Kg

Note (1) Existing Column, fixed to rear of cladding

Note (2) Monolith designer to design or select bracket to suit Monolith design

Note (3) Installed in an IP-rated Access Floor Box

Note (4) Height previously identified as 2400mm to the acoustic centre. All heights now specified to lower edge for ease of identification

Note (5) Totem designer to design or select bracket to suit Totem design

Note (6) The suitability of standard brackets for actual wall surfaces will need to be assessed by survey when exact mounting locations have been established.

Note (7) The exact location for this microphone within the room will have to be determined when the room layout is known.

Note (8) The wall location for the Fire Microphone will have to be determined when the room layout is known, but will, in any case, need to be coordinated with the location of the local Fire Panel.

Note (9) The ANS should be mounted to the rear of the cladding, with the microphone port of the ANS offered through a hole in the cladding. A layer of silicone rubber sheet should be installed between mic and panel to minimise vibration coupling.

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Note (11) Detailed design of the bridge and the MIP lifts should take account of the need to mount the speakers in these locations

Note (12) Speaker 101 has been deleted from the design

Note (13) Speaker mounting integrated into the Retail or Way-finding Signage on the first floor Mezz. Fixing/mounting design subject to design and coordination with Arup and JMP, the location of the power supplies and junction boxes to be determined, refer to Arup drawing WCC-CAD-5331.

Note (14) The details of the AFIL loops and the ceiling speakers in the Ticket Hall are given in the separate Ticket Hall Comms design. JB145 and the loop output terminals of AFILA1/1A and AFILA1/1B constitute the demarcation point between this design and that one.

Note (15) The cavity wall to which this speaker is mounted may resonate at one or more frequencies, degrading the audio performance significantly. The comms installation contractor is advised to insert rockwool or similar sound-absorbing material into the cavity in the vicinity of the loudspeaker.

Note (16) The speaker should be cabled via a local JB concealed behind a cladding panel. The LJB should be constructed in a similar manner to a JB1. The tail from the JB should be shrouded by the Adaptaflex, and should terminate on the speaker as shown on the data sheet.

Note (17) The Comms installation contractor shall select a suitable bracket from the types specified in the installation data sheet to suit the specifics of the mounting surface. The speaker shall be vertical and aimed parallel to the STS wall against which it mounts.

Note (18) These ceiling speakers should be cabled directly in a manner similar to the Penton RCS6-FTS speakers, as shown on drawing KX6-CCD-2901. Note that there is no glanded cable entry hole so the flexible secondary containment should stop just short of the speaker terminal block.

Note (19) For AFIL loops 1/1A and 1/1B please see ticket hall design.

Note (20) The Comms Installation contractor shall seek further information from the client regarding the installation of these speakers

1.2 SPUR AND DOUBLE SPUR JUNCTION BOXES

Reference	Location	Level	Building	Speaker Circuit	Build	Fixed to	Layout Drawing	Model	Wire Drawing	Weight
JBM11A-1	Service corridor B/15e between W15/16	Basement	WRB	M1/1A	JB2	Wall	WRB-CCP0-2003	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11A-2	Riser D Ground Floor	Ground	WRB	M1/1A	JB2	Wall	WRB-CCP0-2107	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11A-4	Service corridor B/15e between W15/16	Basement	WRB	M1/1A	JB2	Wall	WRB-CCP0-2003	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11A-5	Riser in CG/06	Ground	WCR	M1/1A	JB2	Wall	WRB-CCP0-2109	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11A-6	Service corridor B/15c between W9/10	Basement	WRB	M1/1A	JB2	Wall	WRB-CCP0-2003	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11B-1	Service corridor B/15e between W15/16	Basement	WRB	M1/1B	JB2	Wall	WRB-CCP0-2003	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11B-3	Service corridor B/15c between W9/10	Basement	WRB	M1/1B	JB2	Wall	WRB-CCP0-2003	Audio Spur JB	KX6-CCD-2904	2Kg
JBM11B-4	Service corridor B/15c between W9/10	Basement	WRB	M1/1B	JB2	Wall	WRB-CCP0-2003	Audio Spur JB	KX6-CCD-2904	2Kg
JBM12A-1	Riser A, Gnd Level	Ground	WRB	M1/2A	JB3	Wall	WRB-CCP0-2106	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM12B-1	Riser A, Gnd Level	Ground	WRB	M1/2B	JB2	Wall	WRB-CCP0-2106	Audio Spur JB	KX6-CCD-2904	2Kg
JBM13A-1	Riser @ Lift AB @ Mezz first floor	First	WCR	M1/3A	JB2	Wall	WRB-CCP0-2209	Audio Spur JB	KX6-CCD-2904	2Kg
JBM13B-1	Riser @ Lift AB @ Mezz first floor	First	WCR	M1/3B	JB3	Wall	WRB-CCP0-2209	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM21A-1	OBS Subway Under Platform 4	Basement	MTS	M2/1A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM21A-2	OBS Subway Under Platform 2&3	Basement	MTS	M2/1A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM21A-3	Clock Tower Riser	Basement	MTS	M2/1A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM21B-1	OBS Subway Under Platform 4	Basement	MTS	M2/1B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM21B-2	OBS Subway Under Platform 2&3	Basement	MTS	M2/1B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM21B-3	Clock Tower Riser	Basement	MTS	M2/1B	JB3	Wall	WRB-CCP0-2005	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM22A-1	OBS Subway Under Platform 4	Basement	MTS	M2/2A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM22A-2	OBS Subway Under Platform 2&3	Basement	MTS	M2/2A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM22A-3	OBS Subway Under Platform 1	Basement	MTS	M2/2A	JB2	Wall	WRB-CCP0-2006	Audio Spur JB	KX6-CCD-2904	2Kg
JBM22A-4	Gridline 28	Ground	MTS	M2/2A	JB2	Wall	KX6-CCP0-2502	Audio Spur JB	KX6-CCD-2904	2Kg
JBM22A-5	Gridline 28	Ground	MTS	M2/2A	JB2	Wall	KX6-CCP0-2502	Audio Spur JB	KX6-CCD-2904	2Kg
JBM22B-1	OBS Subway Under Platform 4	Basement	MTS	M2/2B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM22B-2	OBS Subway Under Platform 2&3	Basement	MTS	M2/2B	JB3	Wall	WRB-CCP0-2005	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM22B-3	Gridline 28	Ground	MTS	M2/2B	JB2	Wall	KX6-CCP0-2502	Audio Spur JB	KX6-CCD-2904	2Kg
JBM23A-1	OBS Subway Under Platform 2&3	Basement	MTS	M2/3A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM23B-1	OBS Subway Under Platform 4	Basement	MTS	M2/3B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM23B-2	OBS Subway Under Platform 2&3	Basement	MTS	M2/3B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM24A-1	OBS Subway Under Platform 8	Basement	MTS	M2/4A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM24A-2	OBS Subway Under Platform 6&7	Basement	MTS	M2/4A	JB3	Wall	WRB-CCP0-2005	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM24A-3	Gridline 2	Ground	MTS	M2/4A	JB2	Wall	KX6-CCP0-2506	Audio Spur JB	KX6-CCD-2904	2Kg
JBM24A-4	Gridline 3 AFIL2/4 Monolith	Ground	MTS	M2/4A	JB2	Within Monolith	KX6-CCP0-2506	Audio Spur JB	KX6-CCD-2904	2Kg
JBM24B-2	OBS Subway Under Platform 6&7	Basement	MTS	M2/4B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM24B-3	Gridline 2	Ground	MTS	M2/4B	JB2	Wall	KX6-CCP0-2506	Audio Spur JB	KX6-CCD-2904	2Kg
JBM24B-4	Gridline 3 AFIL2/4 Monolith	Ground	MTS	M2/4B	JB2	Within Monolith	KX6-CCP0-2506	Audio Spur JB	KX6-CCD-2904	2Kg
JBM25A-1	OBS Subway Under Platform 8	Basement	MTS	M2/5A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM25A-2	OBS Subway Under Platform 6&7	Basement	MTS	M2/5A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM25A-3	OBS Subway Under Platform 5	Basement	MTS	M2/5A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM25A-4	Gridline 28	Ground	MTS	M2/5A	JB2	Wall	KX6-CCP0-2508	Audio Spur JB	KX6-CCD-2904	2Kg
JBM25B-1	OBS Subway Under Platform 8	Basement	MTS	M2/5B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM25B-2	OBS Subway Under Platform 6&7	Basement	MTS	M2/5B	JB3	Wall	WRB-CCP0-2005	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM25B-3	Gridline 28	Ground	MTS	M2/5B	JB2	Wall	KX6-CCP0-2508	Audio Spur JB	KX6-CCD-2904	2Kg
JBM26A-1	OBS Subway Under Platform 8	Basement	MTS	M2/6A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg

JBM26A-2	OBS Subway Under Platform 6&7	Basement	MTS	M2/6A	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM26B-1	OBS Subway Under Platform 8	Basement	MTS	M2/6B	JB2	Wall	WRB-CCP0-2005	Audio Spur JB	KX6-CCD-2904	2Kg
JBM27A-1	Gridline W28 WC Entrance Room G/29	Ground	WCR	M2/7A	JB2	Within Ceiling Void	WRB-CCP0-2105	Audio Spur JB	KX6-CCD-2904	2Kg
JBM27B-1	Gridline W28 WC Entrance Room G/29	Ground	WCR	M2/7B	JB2	Within Ceiling Void	WRB-CCP0-2105	Audio Spur JB	KX6-CCD-2904	2Kg
JBM2ZA-1	Node 2 - E end of OBS Subway	Basement	MTS	M2/ZA	JB2	Wall	WRB-CCP0-2006	Audio Spur JB	KX6-CCD-2904	2Kg
JBM2ZB-1	Node 2 - E end of OBS Subway	Basement	MTS	M2/ZB	JB2	Wall	WRB-CCP0-2006	Audio Spur JB	KX6-CCD-2904	2Kg
JBM2ZB-2	P0 Gridline 22	Ground	MTS	M2/ZB	JB2	Existing Column	KX6-CCP0-2502	Audio Spur JB	KX6-CCD-2904	2Kg
JBM2ZANS-1	Node 2 - E end of OBS Subway	Basement	MTS		JB4	Wall	WRB-CCP0-2006	In-Line Cat5e JB	KX6-CCD-2929	2Kg
JBM31A-1	P11 Buffer Stops	Ground	STS	M3/1A	JB3	Within Monolith M-04.12	KX6-CCP0-2512	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM31A-2	P9 Gridline W29	Ground	STS	M3/1A	JB2	Wall	KX6-CCP0-2512	Audio Spur JB	KX6-CCD-2904	2Kg
JBM31B-1	P9/P10 Buffer Stops	Ground	STS	M3/1B	JB2	Within Monolith M-04.10	KX6-CCP0-2512	Audio Spur JB	KX6-CCD-2904	2Kg
JBM31B-2	P11 Gridline W29	Ground	STS	M3/1B	JB2	Wall	KX6-CCP0-2512	Audio Spur JB	KX6-CCD-2904	2Kg
JBM51A-1	Riser @ Lift AB @ Mezz first floor	First	WCR	M5/1A	JB3	Within riser	WRB-CCP0-2209	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM51A-2	Mezz first floor service corridor	First	WCR	M5/1A	JB2	At H/L in access corridor	WRB-CCP0-2209	Audio Spur JB	KX6-CCD-2904	2Kg
JBM51A-3	Mezz first floor service corridor	First	WCR	M5/1A	JB2	At H/L in access corridor	WRB-CCP0-2209	Audio Spur JB	KX6-CCD-2904	2Kg
JBM51A-4	Mezz first floor service corridor	First	WCR	M5/1A	JB2	At H/L in access corridor	WRB-CCP0-2210	Audio Spur JB	KX6-CCD-2904	2Kg
JBM51B-1	Riser @ Lift AB @ Mezz first floor	First	WCR	M5/1B	JB3	Within riser	WRB-CCP0-2209	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM51B-2	Mezz first floor service corridor	First	WCR	M5/1B	JB2	At H/L in access corridor	WRB-CCP0-2209	Audio Spur JB	KX6-CCD-2904	2Kg
JBM51B-3	Mezz first floor service corridor	First	WCR	M5/1B	JB2	At H/L in access corridor	WRB-CCP0-2209	Audio Spur JB	KX6-CCD-2904	2Kg
JBM51B-4	Mezz first floor service corridor	First	WCR	M5/1B	JB2	At H/L in access corridor	WRB-CCP0-2210	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53A-1	Back of room B/21 @ containment intersect	Basement	WRB	M5/3A	JB2	Wall	WRB-CCP0-2002	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53A-2	Riser B, Gnd Level	Ground	WRB	M5/3A	JB2	Wall	WRB-CCP0-2106	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53A-3	B-16 Fork	Basement	WRB	M5/3A	JB2	Wall	WRB-CCP0-2002	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53A-4	Riser A, Gnd Level	Ground	WRB	M5/3A	JB2	Wall	WRB-CCP0-2106	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53B-1	Back of room B/21 @ containment intersect	Basement	WRB	M5/3B	JB2	Wall	WRB-CCP0-2002	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53B-2	Riser B, Gnd Level	Ground	WRB	M5/3B	JB2	Wall	WRB-CCP0-2106	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53B-3	B-16 Fork	Basement	WRB	M5/3B	JB2	Wall	WRB-CCP0-2002	Audio Spur JB	KX6-CCD-2904	2Kg
JBM53B-4	Riser A, Gnd Level	Ground	WRB	M5/3B	JB2	Wall	WRB-CCP0-2106	Audio Spur JB	KX6-CCD-2904	2Kg
JBM81A-1	B-16 Fork	Basement	WRB	M8/1A	JB3	Wall	WRB-CCP0-2002	Audio Double Spur JB	KX6-CCD-2904	2Kg
JBM81B-1	B-16 Fork	Basement	WRB	M8/1B	JB3	Wall	WRB-CCP0-2106	Audio Double Spur JB	KX6-CCD-2904	2Kg
Spur Junction Boxes - Intellivox Data Cables										
JBM11A-4D	Service corridor B/15e between W15/16	Basement	WRB	PDAT1/1	JB5	Wall	WRB-CCP0-2003	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM13A-1D	Riser @ Lift AB @ Mezz first floor	First	WCR	PDAT1/2	JB5	Wall	WRB-CCP0-2209	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM21A-2D	OBS Subway Under Platform 2&3	Basement	MTS	PDAT2/3	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM21B-2D	OBS Subway Under Platform 2&3	Basement	MTS	PDAT2/4	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM23A-1D	OBS Subway Under Platform 2&3	Basement	MTS	PDAT2/1	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM23A-2D	Clock Tower Riser	Basement	MTS	PDAT2/1	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM23B-1D	OBS Subway Under Platform 4	Basement	MTS	PDAT2/2	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM24A-2D	OBS Subway Under Platform 6&7	Basement	MTS	PDAT2/3	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM24B-2D	OBS Subway Under Platform 6&7	Basement	MTS	PDAT2/4	JB5	Wall	WRB-CCP0-2005	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM2ZD-1	Node 2 - E end of OBS Subway	Basement	MTS	PDAT2/Z	JB5	Wall	WRB-CCP0-2006	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM31A-1D	P11 Buffer Stops	Ground	STS	PDAT3/1	JB5	Within Monolith M-04.12	KX6-CCP0-2512	RS485 Spur JB	KX6-CCD-2929	2Kg
JBM53A-1D	Back of room B/21 @ containment intersect	Basement	WRB	PDAT1/1	JB5	Wall	WRB-CCP0-2002	RS485 Spur JB	KX6-CCD-2929	2Kg

Note (1) Existing Column, fixed to rear of cladding

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Note (3) Installed in an IP-rated Access Floor Box

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Note (9) The ANS should be mounted to the rear of the cladding, with the microphone port of the ANS offered through a hole in the cladding. A layer of silicone rubber sheet should be installed between mic and panel to minimise vibration coupling.

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Note (11) Detailed design of the bridge and the MIP lifts should take account of the need to mount the speakers in these locations

Note (12) Speaker 101 has been deleted from the design

Note (13) Speaker mounting integrated into the Retail or Way-finding Signage on the first floor Mezz. Fixing/mounting design subject to design and coordination with Arup and JMP, the location of the power supplies and junction boxes to be determined, refer to Arup drawing WCC-CAD-5331.

Note (14) The details of the AFIL loops and the ceiling speakers in the Ticket Hall are given in the separate Ticket Hall Comms design. JB145 and the loop output terminals of AFILA1/1A and AFILA1/1B constitute the demarcation point between this design and that one.

Note (15) The cavity wall to which this speaker is mounted may resonate at one or more frequencies, degrading the audio performance significantly. The comms installation contractor is advised to insert rockwool or similar sound-absorbing material into the cavity in the vicinity of the loudspeaker.

Note (16) The speaker should be cabled via a local JB concealed behind a cladding panel. The LJB should be constructed in a similar manner to a JB1. The tail from the JB should be shrouded by the Adaptaflex, and should terminate on the speaker as shown on the data sheet.

Note (17) The Comms installation contractor shall select a suitable bracket from the types specified in the installation data sheet to suit the specifics of the mounting surface. The speaker shall be vertical and aimed parallel to the STS wall against which it mounts.

Note (18) These ceiling speakers should be cabled directly in a manner similar to the Penton RCS6-FTS speakers, as shown on drawing KX6-CCD-2901. Note that there is no glanded cable entry hole so the flexible secondary containment should stop just short of the speaker terminal block.

Note (19) For AFIL loops 1/1A and 1/1B please see ticket hall design.

Note (20) The Comms Installation contractor shall seek further information from the client regarding the installation of these speakers

1.3 AFIL AMPLIFIERS AND LOOPS

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay	I/Vox Delay Time	Total Delay	Build	Fixed to	Bracket details	Layout Drawing	Manufacturer	Model	Wire Drawing	Weight
AFILA1/1A	Riser D Ground Floor	Ground	WRB	M1/1A	0.1	24ms	n/a	n/a	AF2	Wall, in 9U 19" wall-box	n/a	WRB-CCP0-2107	Current Thinking	ET300 plus ETHVP 100V Input Module	KX6-CCO0-2934	2Kg
PS1	Riser D Ground Floor	Ground	WRB	M1/1A	0.1	24ms	n/a	n/a	AF3	Wall, in 9U 19" wall-box	n/a	WRB-CCP0-2107	Current Thinking	ET Phase		2Kg
AFILA1/1B	Riser D Ground Floor	Ground	WRB	M1/1A	0.1	24ms	n/a	n/a	AF2	Wall, in 9U 19" wall-box	n/a	WRB-CCP0-2107	Current Thinking	ET300 plus ETHVP 100V Input Module	KX6-CCO0-2934	2Kg
AFILA1/2	Corridor B15/h Gridline W9-W10	Basement	WRB	M1/1B	0.1	26ms	n/a	n/a	AF2	Wall, in 6U 19" wall-box	n/a	WRB-CCP0-2003	Current Thinking	ET300 plus ETHVP 100V Input Module	KX6-CCO0-2934	2Kg
AFILA1/3	Corridor B15/e Gridline W15-W16	Basement	WRB	M1/1A	0.1	24ms	n/a	n/a	AF2	Wall, in 6U 19" wall-box	n/a	WRB-CCP0-2003	Current Thinking	ET300 plus ETHVP 100V Input Module	KX6-CCO0-2934	2Kg
AFILA2/1	P1/2 Buffer Stops Gridline 1	Ground	MTS	M2/1B	0.1	36ms	n/a	n/a	AF1	Within Monolith M-04.08	By Monolith designer. (2)	KX6-CCP0-2500	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/2	P3/4 Buffer Stops Gridline 1	Ground	MTS	M2/1B	0.1	36ms	n/a	n/a	AF1	Within Monolith M-04.06	By Monolith designer. (2)	KX6-CCP0-2500	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/3	P5/6 Buffer Stops Gridline 2	Ground	MTS	M2/4B	0.1	34ms	n/a	n/a	AF1	Within Monolith M-04.04	By Monolith designer. (2)	KX6-CCP0-2506	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/4	P7/8 Buffer Stops Gridline 2	Ground	MTS	M2/4A	0.1	36ms	n/a	n/a	AF1	Within Monolith M-04.02	By Monolith designer. (2)	KX6-CCP0-2506	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/5	P1 Gridline 28	Ground	MTS	M2/2B	0.1	5ms	n/a	n/a	AF1	Within Monolith M-05.01	By Monolith designer. (2)	KX6-CCP0-2502	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/6	P2/3 Gridline 28	Ground	MTS	M2/2A	0.1	6ms	n/a	n/a	AF1	Within Monolith M-05.02	By Monolith designer. (2)	KX6-CCP0-2502	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/7	P4/5 Gridline 28	Ground	MTS	M2/2A	0.1	6ms	n/a	n/a	AF1	Within Monolith M-05.03	By Monolith designer. (2)	KX6-CCP0-2508	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/8	P6/7 Gridline 28	Ground	MTS	M2/5A	0.1	5ms	n/a	n/a	AF1	Within Monolith M-05.04	By Monolith designer. (2)	KX6-CCP0-2508	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA2/9	P8 Gridline 28	Ground	MTS	M2/5B	0.1	4ms	n/a	n/a	AF1	Within Monolith M-05.05	By Monolith designer. (2)	KX6-CCP0-2508	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA3/1	P9/P10 Buffer Stops	Ground	STS	M3/1B	0.1	16ms	n/a	n/a	AF1	Within Monolith M-04.10	By Monolith designer. (2)	KX6-CCP0-2512	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA3/2	P11 Buffer Stops	Ground	STS	M3/1A	0.1	16ms	n/a	n/a	AF1	Within Monolith M-04.11	By Monolith designer. (2)	KX6-CCP0-2512	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA3/3	P9 Gridline W29	Ground	STS	M3/1A	0.1	16ms	n/a	n/a	AF1	Within access floor box (3)	n/a	KX6-CCP0-2512	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA3/4	P10/P11 Gridline W29	Ground	STS	M3/1B	0.1	16ms	n/a	n/a	AF1	Within access floor box (3)	n/a	KX6-CCP0-2512	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA3/5	P9 Gridline W40	Ground	STS	M3/1B	0.1	16ms	n/a	n/a	AF1	Within access floor box (3)	n/a	KX6-CCP0-2513	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILA3/6	P10/P11 Gridline W40	Ground	STS	M3/1A	0.1	16ms	n/a	n/a	AF1	Within access floor box (3)	n/a	KX6-CCP0-2513	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILAZ/1	P0 Gridline 6	Ground	MTS	M2/ZA	0.1	3ms	n/a	n/a	AF1	Column 6	n/a	KX6-CCP0-2500	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFILAZ/2	P0 Gridline 22	Ground	MTS	M2/ZB	0.1	3ms	n/a	n/a	AF1	Column 22	n/a	KX6-CCP0-2502	Current Thinking	ET60 AFIL Amplifier	KX6-CCO0-2934	1Kg
AFIL Loops																
AFIL1/1A	Gridline W10 to W15	Ground	WCR	M1/1A	0.1					Below Floor Level	n/a	Note (19)		See Ticket Hall Comms Design for details		
AFIL1/1B	Gridline W10 to W15	Ground	WCR	M1/1A	0.1					Below Floor Level	n/a	Note (19)		See Ticket Hall Comms Design for details		
AFIL1/2	Gridline W4 to W9	Ground	WCR	M1/1B	0.1				AFL3	Below Floor Level	n/a	WRB-CCP0-2107	n/a	Four loops, 4.0m x 31.4m; 2.5mm copper	KX6-CCO0-2935	n/a
AFIL1/3	Gridline W15 to W20	Ground	WCR	M1/1A	0.1				AFL3	Below Floor Level	n/a	WRB-CCP0-2106	n/a	Four loops, 4.0m x 31.4m; 2.5mm copper	KX6-CCO0-2935	n/a

Ref No	Location	Level	Building	Speaker Circuit	Tapped At (W)	Amp Time Delay	I/Vox Delay Time	Total Delay	Build	Fixed to	Bracket details	Layout Drawing	Manufacturer	Model	Wire Drawing	Weight
AFIL2/1	P1/2 Buffer Stops Gridline 1	Ground	MTS	M2/1B	0.1				AFL4	Below Floor Level	n/a	KX6-CCP0-2500	n/a	Four loops, 3.6m x 6.4m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/2	P3/4 Buffer Stops Gridline 1	Ground	MTS	M2/1B	0.1				AFL4	Below Floor Level	n/a	KX6-CCP0-2500	n/a	Four loops, 3.6m x 6.4m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/3	P5/6 Buffer Stops Gridline 2	Ground	MTS	M2/4B	0.1				AFL4	Below Floor Level	n/a	KX6-CCP0-2506	n/a	Four loops, 3.6m x 6.4m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/4	P7/8 Buffer Stops Gridline 2	Ground	MTS	M2/4A	0.1				AFL4	Below Floor Level	n/a	KX6-CCP0-2506	n/a	Four loops, 3.6m x 6.4m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/5	P1 Gridline 28	Ground	MTS	M2/2B	0.1				AFL5	Below Floor Level	n/a	KX6-CCP0-2502	n/a	Four loops, 2.8m x 2.6m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/6	P2/3 Gridline 28	Ground	MTS	M2/2A	0.1				AFL6	Below Floor Level	n/a	KX6-CCP0-2502	n/a	Four loops, 2.8m x 4.8m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/7	P4/5 Gridline 28	Ground	MTS	M2/2A	0.1				AFL6	Below Floor Level	n/a	KX6-CCP0-2508	n/a	Four loops, 2.8m x 4.8m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/8	P6/7 Gridline 28	Ground	MTS	M2/5A	0.1				AFL6	Below Floor Level	n/a	KX6-CCP0-2508	n/a	Four loops, 2.8m x 4.8m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL2/9	P8 Gridline 28	Ground	MTS	M2/5B	0.1				AFL5	Below Floor Level	n/a	KX6-CCP0-2508	n/a	Four loops, 2.8m x 2.6m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL3/1	P9/P10 Buffer Stops	Ground	STS	M3/1B	0.1				AFL4	Below Floor Level	n/a	KX6-CCP0-2512	n/a	Four loops, 3.6m x 6.4m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL3/2	P11 Buffer Stops	Ground	STS	M3/1A	0.1				AFL7	Below Floor Level	n/a	KX6-CCP0-2512	n/a	Four loops, 3.8m x 3.6m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL3/3	P9 Gridline W29	Ground	STS	M3/1A	0.1				AFL8	Below Floor Level	n/a	KX6-CCP0-2512	n/a	Four loops, 2.8m x 2.4m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL3/4	P10/P11 Gridline W29	Ground	STS	M3/1B	0.1				AFL9	Below Floor Level	n/a	KX6-CCP0-2512	n/a	Four loops, 2.8m x 4.0m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL3/5	P9 Gridline W40	Ground	STS	M3/1B	0.1				AFL7	Below Floor Level	n/a	KX6-CCP0-2513	n/a	Four loops, 3.8m x 3.6m; 1.0mm copper	KX6-CCO0-2935	n/a
AFIL3/6	P10/P11 Gridline W40	Ground	STS	M3/1A	0.1				AFL10	Below Floor Level	n/a	KX6-CCP0-2513	n/a	Four loops, 2.8m x 3.6m; 1.0mm copper	KX6-CCO0-2935	n/a
AFILZ/1	P0 Gridline 6	Ground	MTS	M2/ZA	0.1				AFL1	Below Floor Level		KX6-CCP0-2500	n/a	Four loops, 6.0m x 3.0m; 1.0mm copper	KX6-CCO0-2935	n/a
AFILZ/2	P0 Gridline 22	Ground	MTS	M2/ZB	0.1				AFL1	Below Floor Level		KX6-CCP0-2502	n/a	Four loops, 6.0m x 3.0m; 1.0mm copper	KX6-CCO0-2935	n/a

Note (1) Existing Column, fixed to rear of cladding

Note (2) Monolith designer to design or select bracket to suit Monolith design

Note (3) Installed in an IP-rated Access Floor Box

Note (4) Height previously identified as 2400mm to the acoustic centre. All heights now specified to lower edge for ease of identification

Note (5) Totem designer to design or select bracket to suit Totem design

Note (6) The suitability of standard brackets for actual wall surfaces will need to be assessed by survey when exact mounting locations have been established.

Note (7) The exact location for this microphone within the room will have to be determined when the room layout is known.

Note (8) The wall location for the Fire Microphone will have to be determined when the room layout is known, but will, in any case, need to be coordinated with the location of the local Fire Panel.

Note (9) The ANS should be mounted to the rear of the cladding, with the microphone port of the ANS offered through a hole in the cladding. A layer of silicone rubber sheet should be installed between mic and panel to minimise vibration coupling.

Note (10) All heights now specified to lower edge for ease of identification

Note (11) Detailed design of the bridge and the MIP lifts should take account of the need to mount the speakers in these locations

Note (12) Speaker 101 has been deleted from the design

Note (13) Speaker mounting integrated into the Retail or Way-finding Signage on the first floor Mezz. Fixing/mounting design subject to design and coordination with Arup and JMP, the location of the power supplies and junction boxes to be determined, refer to Arup drawing WCC-CAD-5331.

Note (14) The details of the AFIL loops and the ceiling speakers in the Ticket Hall are given in the separate Ticket Hall Comms design. JB145 and the loop output terminals of AFILA1/1A and AFILA1/1B constitute the demarcation point between this design and that one.

Note (15) The cavity wall to which this speaker is mounted may resonate at one or more frequencies, degrading the audio performance significantly. The comms installation contractor is advised to insert rockwool or similar sound-absorbing material into the cavity in the vicinity of the loudspeaker.

Note (16) The speaker should be cabled via a local JB concealed behind a cladding panel. The LJB should be constructed in a similar manner to a JB1. The tail from the JB should be shrouded by the Adaptaflex, and should terminate on the speaker as shown on the data sheet.

Note (17) The Comms installation contractor shall select a suitable bracket from the types specified in the installation data sheet to suit the specifics of the mounting surface. The speaker shall be vertical and aimed parallel to the STS wall against which it mounts.

Note (18) These ceiling speakers should be cabled directly in a manner similar to the Penton RCS6-FTS speakers, as shown on drawing KX6-CCD-2901. Note that there is no glanded cable entry hole so the flexible secondary containment should stop just short of the speaker terminal block.

Note (19) For AFIL loops 1/1A and 1/1B please see ticket hall design.

1.4 MICROPHONES

Ref No	Location	Level	Building	Build	Fixed to	Bracket details	Layout Drawing	Manufacturer	Model	Wire Drawing	Weight
ANS1/1	Gridline C/L, front of CG/08b	Ground	WCR	ANS	Cladding above Retail unit CG/08b	To suit cladding	WRB-CCP0-2110	Ateis	PABFMP24 ANS Mic.	KX6-CCX-2933	2Kg
ANS2/1	P2/3, Gridline 7	Ground	MTS	ANS	Totem, above DS180, facing north	By Totem designer (5)	KX6-CCP0-2500	Ateis	PABFMP24 ANS Mic.	KX6-CCX-2933	2Kg
ANS2/2	P6/7, Gridline 7	Ground	MTS	ANS	Totem, above DS180, facing north	By Totem designer (5)	KX6-CCP0-2506	Ateis	PABFMP24 ANS Mic.	KX6-CCX-2933	2Kg
ANS3/1	P10/11, Gridline W25, Near buffer stops	Ground	STS	ANS	Totem, above DS500, facing north	By Totem designer (5)	KX6-CCP0-2512	Ateis	PABFMP24 ANS Mic.	KX6-CCX-2933	2Kg
ANSZ/1	P0, Gridline 8	Ground	MTS	ANS	Existing Column, fixed to rear of cladding (9)	To suit cladding	KX6-CCP0-2500	Ateis	PABFMP24 ANS Mic.	KX6-CCX-2933	2Kg
FMIC01	Control Room 1/01	1st Floor	WRB	FMIC	Wall (8)	Fastened directly to wall		Ateis	PSS24FM Fire Mic.	None	10Kg
FMIC02	NR Reception (G/01)	Ground	WRB	FMIC	Wall (8)	Fastened directly to wall		Ateis	PSS24FM Fire Mic.	None	10Kg
SMC01	Control Room 1/01	1st Floor	WRB	SMC	On desk (7)	On desk		Ateis	PSS24DT Paging Mic.	None	2Kg
SMC02	Control Room 1/01	1st Floor	WRB	SMC	On desk (7)	On desk		Ateis	PSS24DT Paging Mic.	None	2Kg
SMC03	Control Room 1/01	1st Floor	WRB	SMC	On desk (7)	On desk		Ateis	PSS24DT Paging Mic.	None	2Kg

Note (1) Existing Column, fixed to rear of cladding

Note (2) Monolith designer to design or select bracket to suit Monolith design

Note (3) Installed in an IP-rated Access Floor Box

Note (4) Height previously identified as 2400mm to the acoustic centre. All heights now specified to lower edge for ease of identification

Note (5) Totem designer to design or select bracket to suit Totem design

Note (6) The suitability of standard brackets for actual wall surfaces will need to be assessed by survey when exact mounting locations have been established.

Note (7) The exact location for this microphone within the room will have to be determined when the room layout is known.

Note (8) The wall location for the Fire Microphone will have to be determined when the room layout is known, but will, in any case, need to be coordinated with the location of the local Fire Panel.

Note (9) The ANS should be mounted to the rear of the cladding, with the microphone port of the ANS offered through a hole in the cladding. A layer of silicone rubber sheet should be installed between mic and panel to minimise vibration coupling.

Note (10) All heights now specified to lower edge for ease of identification

Note (11) Detailed design of the bridge and the MIP lifts should take account of the need to mount the speakers in these locations

Note (12) Speaker 101 has been deleted from the design

Note (13) Speaker mounting integrated into the Retail or Way-finding Signage on the first floor Mezz. Fixing/mounting design subject to design and coordination with Arup and JMP, the location of the power supplies and junction boxes to be determined, refer to Arup drawing WCC-CAD-5331.

Note (14) The details of the AFIL loops and the ceiling speakers in the Ticket Hall are given in the separate Ticket Hall Comms design. JB145 and the loop output terminals of AFILA1/1A and AFILA1/1B constitute the demarcation point between this design and that one.

Note (15) The cavity wall to which this speaker is mounted may resonate at one or more frequencies, degrading the audio performance significantly. The comms installation contractor is advised to insert rockwool or similar sound-absorbing material into the cavity in the vicinity of the loudspeaker.

Note (16) The speaker should be cabled via a local JB concealed behind a cladding panel. The LJB should be constructed in a similar manner to a JB1. The tail from the JB should be shrouded by the Adaptaflex, and should terminate on the speaker as shown on the data sheet.

Note (17) The Comms installation contractor shall select a suitable bracket from the types specified in the installation data sheet to suit the specifics of the mounting surface. The speaker shall be vertical and aimed parallel to the STS wall against which it mounts.

Note (18) These ceiling speakers should be cabled directly in a manner similar to the Penton RCS6-FTS speakers, as shown on drawing KX6-CCD-2901. Note that there is no glanded cable entry hole so the flexible secondary containment should stop just short of the speaker terminal block.

Note (19) For AFIL loops 1/1A and 1/1B please see ticket hall design.

2 PAVA SPEAKER PRE-BUILD SCHEDULES

2.1 BUILD S1-1

Speakers designated Build S1-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS500 – Amp at rear
Speaker Colour	RAL 7016 30% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Not required
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.2 BUILD S2-1

Speakers designated Build S2-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DSX280 Amp at Top
Speaker Colour	RAL9005 15% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Plate (802110)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.3 BUILD S3-1

Speakers designated Build S3-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS180 Amp at Top
Speaker Colour	RAL 7016 Anthracite Grey
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.4 BUILD S3-2

Speakers designated Build S3-2 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS180 Amp at Top
Speaker Colour	RAL 7016 30% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.5 BUILD S3-3

Speakers designated Build S3-3 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS180 Amp at Top
Speaker Colour	TBA
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.6 BUILD S3-4

Speakers designated Build S3-4 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS180 Amp at Top
Speaker Colour	RAL 7016 30% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Plate (802110)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.7 BUILD S3-5

Speaker Build S3-5 is not used.

2.8 BUILD S3-6

Speakers designated Build S3-6 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS180 Amp at back
Speaker Colour	RAL 7016 30% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Plate (802110)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.9 BUILD S4-2

Speakers designated Build S4-2 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS115 Amp at Bottom
Speaker Colour	RAL9006 15% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 2.0m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 2.0m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.10 BUILD S4-3

Speakers designated Build S4-3 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS115 Amp at Top
Speaker Colour	RAL9005 15% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 1.5m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 1.5m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.11 BUILD S4-4

Speakers designated Build S4-4 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS115 Amp at Top
Speaker Colour	RAL9005 15% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Plate (802110)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 2.0m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 2.0m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.12 BUILD S4-5

Speakers designated Build S4-5 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS115 Amp at Bottom
Speaker Colour	RAL 7016 Anthracite Grey
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 2.0m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 2.0m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.13 BUILD S4-6

Speakers designated Build S4-6 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS115 Amp at Back
Speaker Colour	RAL 7016 Anthracite Grey
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Box 58mm (802100)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 2.0m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 2.0m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.14 BUILD S4-7

Speakers designated Build S4-7 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox DS115 Amp at Top
Speaker Colour	RAL9005 15% Gloss
Special Speaker Options	100V line Input Card P/N 381003
Cable Entry Plate	Cover Plate (802110)
Wire Drawing for Speaker Termination	KX6-CCD-2900

25mm Entry Hole - Qty 2	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 2.0m	Audio Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		Earth Cable	Gn/Yw 16mm sq	Length 2m.
		Mains Cable	Standard stranded cable, LSOH	Length 2m
Hole 2	Adaptaflex SPB25, 2.0m	Fault Loop Cable	FP Plus (Enhanced), 2 Core, 1.5mm	Length 2m.
		RS-485 Data	Belden 89729	Length 2m.

2.15 BUILD S5-1

Speakers designated Build S5-1 should be procured and prebuilt according to the following details.

Speaker Type	Penton RCS6FTS
Speaker Colour	TBA
Special Speaker Options	none
Cable Entry	2 x 20mm Gland
Wire Drawing for Speaker Termination	KX6-CCD-2901

2.16 BUILD S5-2

Speakers designated Build S5-2 should be procured and prebuilt according to the following details.

Speaker Type	Penton RCS6FTS
Speaker Colour	RAL9006 15% Gloss
Special Speaker Options	none
Cable Entry	2 x 20mm Gland
Wire Drawing for Speaker Termination	KX6-CCD-2901

2.17 BUILD S5-3

Speakers designated Build S5-2 should be procured and prebuilt according to the following details.

Speaker Type	Penton RCS5FTSCOAX
Speaker Colour	RAL9010 30% Gloss
Special Speaker Options	none
Cable Entry	2 x 20mm Gland
Wire Drawing for Speaker Termination	KX6-CCD-2901

2.18 BUILD S6-1

Speakers designated Build S6-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	DNH CAP-15 WT
Speaker Colour	RAL7016
Special Speaker Options	W signifies Weather option (IP)
Cable Entry	1 x 20mm Gland
Wire Drawing for Speaker Termination	KX6-CCD-2903

20mm Entry Hole - Qty 1	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB20, 1.5m	Tail Cable	FP Plus (Enhanced), 4 Core, 1.0mm	Length 2m.

2.19 BUILD S7-1

Speakers designated Build S7-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Penton MCS20
Speaker Colour	TBA
Special Speaker Options	none
Cable Entry	1 x 20mm Gland
Wire Drawing for Speaker Termination	KX6-CCD-2902

20mm Entry Hole - Qty 1	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB20, 1.5m	Tail Cable	FP Plus (Enhanced), 4 Core, 1.0mm	Length 2m.

2.20 BUILD S8-1

Speakers designated Build S8-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Intellivox ADC V90
Speaker Colour	TBD
Special Speaker Options	none
Cable Entry	1 x PG13.5 Gland
Wire Drawing for Speaker Termination	See Note (16)

PG13.5 Gland - Qty 1	Conduit Type, Length	Cable	Cable Type	Length
Hole 1	Adaptaflex SPB25, 2.0m, x 1	Tail Cable	FP Plus (Enhanced), 4 Core, 1.0mm	Length 2m.

2.21 BUILD S9-1

Speakers designated Build S9-1 should be procured and prebuilt according to the following details.

The lengths given in the table below are only indicative. The installation contractor will need to choose the actual pre-wire lengths to suit the locations of the speaker local junction boxes.

Speaker Type	Bosch LC-PC60G-8H
Speaker Colour	RAL 9010 (White)
Special Speaker Options	none
Cable Entry	None – wired direct
Wire Drawing for Speaker Termination	See Note(18)