Do Not Scale

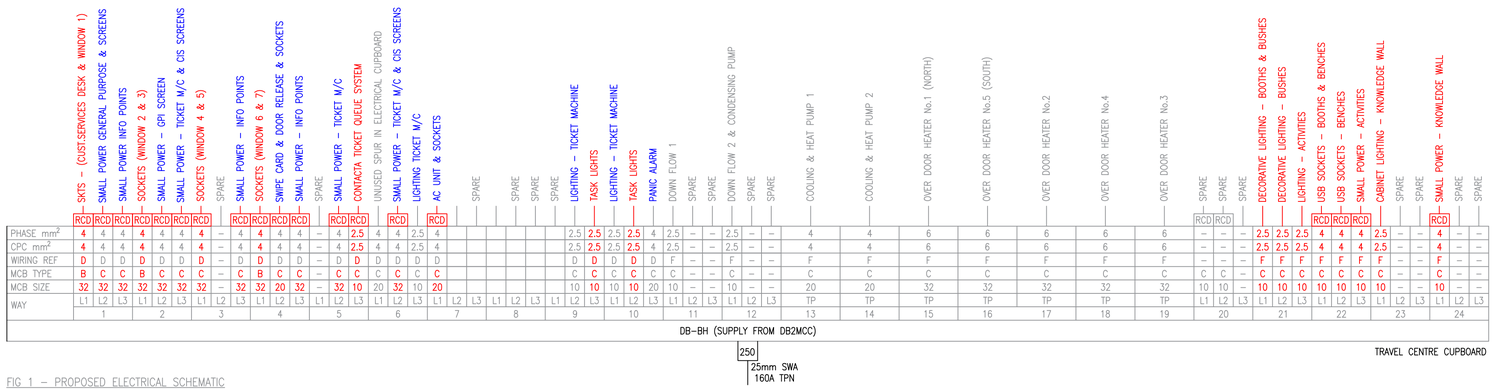
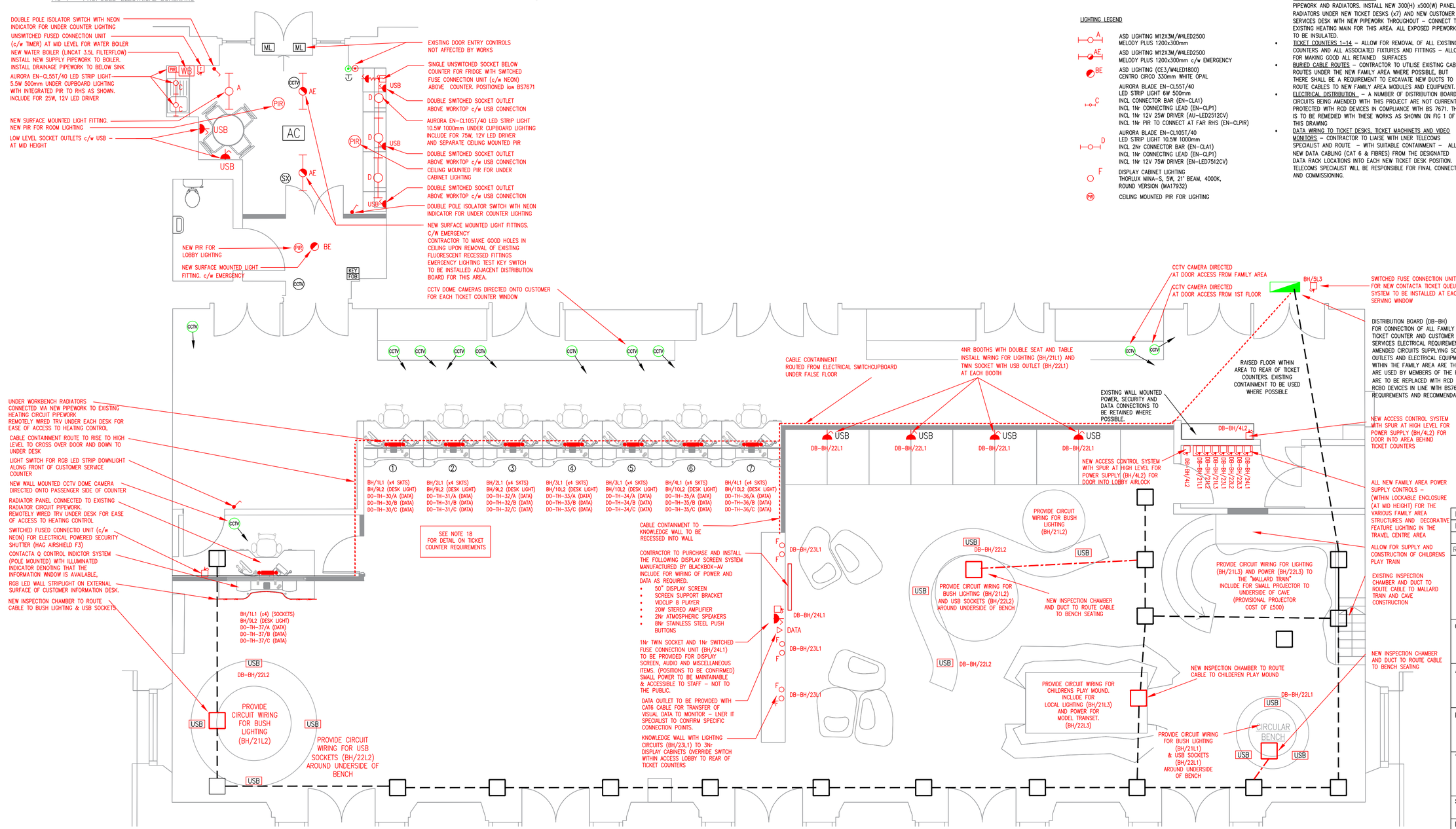


FIG 1 – PROPOSED ELECTRICAL SCHEMATIC



LEGEND

- EXISTING DISTRIBUTION BOARD (DB-BH, 24-WAY TPN)
- USB CONNECTOR – TWIN USB SOCKET MODULE (WITHOUT 13A SOCKET OUTLET PROVISION) AS MK K5837WHI
- TWIN SOCKET OUTLET WITH USB CONNECTION
- UNSWITCHED SINGLE SOCKET BELOW WORKTOP CONNECTED TO SWITCHED FUSED CONNECTION UNIT (c/w NEON) ABOVE WORKTOP
- SWITCHED FUSED CONNECTION UNIT WITH NEON INDICATOR
- DIGITAL FUSED SPUR WITH TIME SWITCH (AS TIMEGUARD FST77)
- TWIN SOCKET OUTLET
- DATA OUTLET
- CCTV DOME CAMERA WITH DIRECTION INDICATOR
- NEW RADIATOR PANEL – 300mm(H) x 500mm(W)
- NEW WATER BOILER (LINCAT 3.5L FILTERFLOW)
- EXISTING DUCT & CHAMBER
- PROPOSED DUCT & CHAMBER

LIGHTING LEGEND

- A — ASD LIGHTING M12X3M/W4LED2500 MELODY PLUS 1200x300mm
- AE — ASD LIGHTING M12X3M/W4LED2500 MELODY PLUS 1200x300mm c/w EMERGENCY
- BE — ASD LIGHTING (CE3/W4LED1800) CENTRO CIRCO 330mm WHITE OPAL
- C — AURORA BLADE EN-CL55T/40 LED STRIP LIGHT 6W 500mm INCL CONNECTOR BAR (EN-CLA1) INCL 1Nr CONNECTING LEAD (EN-CLP1) INCL 1Nr 12V 25W DRIVER (AU-LED2512CV) INCL 1Nr PIR TO CONNECT AT FAR RHS (EN-CLPIR)
- D — AURORA BLADE EN-CL1051/40 LED STRIP LIGHT 10.5W 1000mm INCL 2Nr CONNECTOR BAR (EN-CLA1) INCL 1Nr CONNECTING LEAD (EN-CLP1) INCL 1Nr 12V 75W DRIVER (EN-LED7512CV)
- F — DISPLAY CABINET LIGHTING THORLUX MINA-S, 5W, 21° BEAM, 4000K, ROUND VERSION (MA17932)
- PIR — CEILING MOUNTED PIR FOR LIGHTING

NOTES (CONT)

28. ELECTRICAL AMENDMENTS AND ADDITIONS WITHIN THE KITCHEN AREA SHALL BE INSTALLED, WIRED / REWIRED AND CONNECTED ONTO EXISTING DISTRIBUTION BOARD DB–P6.
29. INSTALL LINCAT 3.5L FILTERFLOW WALL MOUNTED WALL BOILER AND LOCAL ISOLATION USING SWITCHED FUSE CONNECTION UNIT WITH TIMER (AS TIMEGUARD 7–DAY DIGITAL FUSED SPUR TIME SWITCH – FST77).UNDERCABINET STRIP LIGHTING ABOVE SINK SHALL BE ORDERED WITH INTEGRATED PIR TO BE FITTED AT RHS OF LIGHTS AS YOU FACE THE SINK. SEPARATE 12V LED DRIVER TO BE ORDERED – SEE LEGEND.
30. UNDERCABINET STRIP LIGHTING ON OPPOSITE COUNTER SHALL BE CONTROLLED BY SEPARATE CEILING MOUNTED PIR. 12V LED DRIVER TO BE ORDERED FOR THESE LIGHTS – SEE LEGEND.

EXISTING SERVICES

- VENTILATION – EXISTING BELOW FLOOR VENTILATION TO REAR OF TICKET COUNTERS WILL BE RETAINED.
- FIRE ALARM – EXISTING FIRE ALARM SYSTEM SHALL BE RETAINED
- LIGHTING – EXISTING HIGH LEVEL BOOKING HALL LIGHTING NOT AFFECTED BY THESE WORKS.
- CCTV – EXISTING CCTV CAMERAS AT REAR OF TICKET COUNTERS ARE TO BE AMENDED ENSURING THAT THERE IS CCTV COVERAGE OF ALL NEW TICKET COUNTERS AS WELL AS ONTO ALL ACCESS DOORS LEADING TO REAR OF TICKET COUNTER AREA. NEW CCTV CAMERA TO BE LOCATED WITHIN CUSTOMER SERVICES WINDOW
- HEATING – EXISTING OVERDOOR AIR CURTAINS (5Nr) WILL SUFFICE FOR PROPOSED FAMILY AREA AND AMENDED BOOKING HALL REQUIREMENTS.
- UNDER TICKET COUNTER HEATING. STRIP OUT ALL EXISTING PIPEWORK AND RADIATORS. INSTALL NEW 300(H) x500(W) PANEL RADIATORS UNDER NEW TICKET DESKS (x7) AND NEW CUSTOMER SERVICES DESK WITH NEW PIPEWORK THROUGHOUT – CONNECT TO EXISTING HEATING MAIN FOR THIS AREA. ALL EXPOSED PIPEWORK TO BE INSULATED.
- TICKET COUNTERS 1–14 – ALLOW FOR REMOVAL OF ALL EXISTING COUNTERS AND ALL ASSOCIATED FIXTURES AND FITTINGS – ALLOW FOR MAKING GOOD ALL RETAINED SURFACES
- BURIED CABLE ROUTES – CONTRACTOR TO UTILISE EXISTING CABLE ROUTES UNDER THE NEW FAMILY AREA WHERE POSSIBLE, BUT THERE SHALL BE A REQUIREMENT TO EXCAVATE NEW DUCTS TO ROUTE CABLES TO NEW FAMILY AREA MODULES AND EQUIPMENT.
- ELECTRICAL DISTRIBUTION – A NUMBER OF DISTRIBUTION BOARD CIRCUITS BEING AMENDED WITH THIS PROJECT ARE NOT CURRENTLY PROTECTED WITH RCD DEVICES IN COMPLIANCE WITH BS 7671. THIS IS TO BE REMEDIED WITH THESE WORKS AS SHOWN ON FIG 1 OF THIS DRAWING
- DATA WIRING TO TICKET DESKS, TICKET MACHINETS AND VIDEO MONITORS – CONTRACTOR TO LIAISE WITH LNER TELECOMS SPECIALIST AND ROUTE – WITH SUITABLE CONTAINMENT – ALL NEW DATA CABLING (CAT 6 & FIBRES) FROM THE DESIGNATED DATA RACK LOCATIONS INTO EACH NEW TICKET DESK POSITION. TELECOMS SPECIALIST WILL BE RESPONSIBLE FOR FINAL CONNECTION AND COMMISSIONING.

NOTES

1. ONLY AREA SHOWN WITH SERVICES ARE INCLUDED IN THIS SCOPE OF WORKS
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ARCHITECTS DRAWINGS FOR DETAILS IN TERMS OF EQUIPMENT POSITIONS AND PROPOSED WORKS BY OTHERS.
4. THE INSTALLATION SHALL BE FULL COORDINATED WITH OTHER SERVICES AND THE BUILDING STRUCTURE.
5. ALL WIRING SHALL BE IN SINGLE CORE LSZH CABLE.
6. EXISTING CABLE CONTAINMENT SHALL BE REUSED WHERE POSSIBLE.
7. THE CONTRACTOR SHALL INCLUDE FOR ALL NECESSARY BUILDERS WORKS IN RELATION TO M&E ALTERATIONS / ADDITIONS INCLUDING BUT NOT LIMITED TO FORMING OF NEW OPENINGS, CHASES IN WALLING AND FLOORING AND THE LIKE TO ENABLE WIRING TO REACH NEW INSTALLATION LOCATIONS.
8. INCLUDE FOR ALL ASSOCIATED MAKING GOOD WORKS UPON COMPLETION.
9. ALLOW FOR THE REMOVAL OF THE EXISTING TICKET COUNTERS AND ALL ASSOCIATED FIXTURES AND FITTINGS. ALLOW FOR MAKING GOOD ALL RETAINED SURFACES.
10. ALL IT EQUIPMENT, TICKET MACHINES, PRINTERS AND SCREENS ETC FROM THE EXISTING TICKET COUNTERS ARE TO BE HANDED BACK TO CLIENT.
11. TICKET MACHINES ARE TO BE REMOVED BY THE CLIENT PRIOR TO COMMENCEMENT OF WORKS.
12. DISPOSE ALL REMAINING DEBRIS ARISING FROM SITE.
13. ALLOW FOR SAFE DISCONNECTION AND REMOVAL OF ALL EXISTING WALL MOUNTED ELECTRICAL FIXTURES AND FITTINGS INCLUDING LIGHT SWITCHES, SOCKETS AND SPURS, TRUNKING ETC. IN PREPARATION FOR NEW ITEMS TO BE WIRED / REWIRED TO EXISTING ELECTRICAL CIRCUIT.
14. ALL NEW ACCESSORIES IN FAMILY AREA SHALL BE OF POLISHED CHROME FINISH WITH BLACK INTERIOR USING THE SCHNEIDER ELECTRIC'S 'ULTIMATE SCREWLESS FLAT PLATE' RANGE.
15. CONTRACTOR IS TO ALLOW FOR MAKING GOOD SURFACES
16. ALL ELECTRICAL AMENDMENTS AND ADDITIONS AT TICKET COUNTERS, CUSTOMER INFORMATION WINDOW AND FAMILY AREA ARE TO BE CONNECTED ONTO EXISTING DISTRIBUTION BOARD DB–BH.
17. ALL EQUIPMENT WITH METAL STRUCTURE SHALL BE EQUIPOTENTIALLY BONDED.
18. EACH TICKET COUNTER AS WELL AS THE CUSTOMER INFORMATION DESK SHALL BE FITTED WTH –
    - CONTACTA Q–CONTROL SYSTEM FOR MANAGEMENT FOR QUEUES. WITH HIGH LEVEL INDICATOR ON POLE AND QUEUE CALL FORWARD PAD BELOW COUNTER.
    - SPEECH TRANSFER SYSTEM – WITH MIC AND SPEAKERS AND CONTROL PANEL BELOW COUNTER.
    - INDUCTION LOOP INTERFACED WITH SPEECH TRANSFER SYSTEM.
    - PANIC ALARM BUTTON – LINKED TO SECURITY SYSTEM.
    - 2 Nr TWIN SWITCHED SOCKET OUTLETS
    - 2 Nr TWIN SWITCHED SOCKET OUTLET c/w USB
    - 1Nr 3–WAY DATA OUTLET – 3Nr CAT6 CABLES WIRED BACK TO EXISTING DATA RACK FROM EACH SERVING COUNTER POSITION.
    - 1 Nr SWITCHED FUSED CONNECTION UNIT FOR TASK LIGHT
    - 1 Nr LOCAL DIMMABLE TASK LIGHT & ASSOCIATED DIMMER SWITCH
    - 1 Nr RADIATOR PANEL (300mm HIGH X 500m LONG – WITH NEW PIPEWORK TO EXISTING CONNECTION POINT.
    - WIRED TRV AT ACCESSIBLE POSITION UNDER DESK FOR CONTROL OF RADIATOR HEATING.
19. THE CUSTOMER SERVICES INFORMATION DESK SHALL ALSO HAVE AN ELECTRICALLY OPERATED SECURITY ROLLER SHUTTER INSTALLED.
20. EXISTING CCTV CAMERAS BEHIND TICKET COUNTERS AND CUSTOMER INFORMATION DESK ARE TO BE REPOSITIONED / REDIRECTED TO ENSURE SECURITY COVERAGE OF –
    - EACH TICKET COUNTER ENSURING FULL VISIBILITY OF CUSTOMER STANDING AT EACH WINDOW.
21. EXISTING CCTV CAMERAS BEHIND TICKET COUNTERS ARE ALSO TO BE REPOSITIONED / REDIRECTED TO ENSURE SECURITY COVERAGE OF
    - EACH ENTRANCE DOOR THAT LEADS INTO AREA BEHIND TICKET COUNTERS
22. KNOWLEDGE WALL IS TO HAVE 3 LOCKABLE DISPLAY CASES WITH CLEAR LAMINATED SAFETY GLASS AND INTERNAL RECESSED LIGHT FITTINGS.
23. CONTRACTOR TO PROVIDE 50 INCH MONITOR ONTO KNOWLEDGE WALL WITH SPEAKER SYSTEM AND AN ARRAY OF PUSH BUTTONS FOR PROGRAM SELECTION – AS BLACKBOX–AV SYSTEM DESCRIBED ON THIS DRAWING. CONTACTOR IS TO ROUTE POWER SUPPLY CABLE & DATA CABLE FOR AUDIO VISUAL PROGRAM SIGNAL FOR THIS VISUAL SYSTEM.
24. ALL DECORATIVE BUSHES WILL HAVE LED LIGHTING WITH LOCAL UNSWITCHED SPUR– ACCESSIBLE BUT HIDDEN FROM PUBLIC. AN OVERRIDE SWITCH FOR ALL BUSH LIGHTING TO BE WITHIN STAFF AREA.
25. ALL NEW CIRCUITS FOR SOCKET OUTLETS AND FOR POWER SUPPLIES WITHIN THE NEW FAMILY AREA ARE TO HAVE RCD / RCBO PROTECTION IN LINE WITH BS7671 REQUIREMENTS AND RECOMMENDATIONS.
26. ALLOW FOR THE STRIPPING OUT OF EXISTING KITCHEN UNITS AND ALL ASSOCIATED FIXTURES AND FITTINGS.
27. ALLOW FOR MAKING GOOD ALL SURFACES.

REV.	DATE	DRN	CHKD	DESCRIPTION
P3	06.05.22	GM	DH	LLC ISSUE
P2	12.04.22	GM	DH	MINOR AMDTS FOLLOWING CLIENT COMMENT
P1	11.04.22	GM	DH	FIRST ISSUE

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Architect: AHR

Project: KINGS CROSS RAILWAY STATION FAMILY AREA

Title: M&E SERVICES PROPOSED LAYOUT

Scale:	Sheet:	Date:	Drawn by: GM
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