



LIGHTING SERVICES LAYOUT

GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL DRAWINGS & SPECIFICATIONS.
- THE CONTRACTOR SHALL CO-ORDINATE FULLY WITH ALL OTHER TRADES BEFORE COMMENCING WORK. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL THE NECESSARY INFORMATION TO ALLOW THE MAIN CONTRACTOR CO-ORDINATE ALL SERVICES.
- THE MECHANICAL CONTRACTOR SHALL ALLOW FOR CO-ORDINATING THE MECHANICAL INSTALLATION WITH THE ELECTRICAL CONTRACTOR ON SITE. EXTRA COSTS INCURRED DUE TO THE CO-ORDINATION EXERCISE NOT BEING COMPLETED WILL NOT BE ACCEPTED BY THE ENGINEER.
- DO NOT SCALE THIS DRAWING. ALL DIMENSIONS TO BE TAKEN ON SITE.
- THE CONTRACTOR SHALL ALLOW FOR THE SUPPLY AND INSTALLATION OF ALL ELECTRICAL SERVICES INDICATED ON THIS DRAWING.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY SUITABLE FINAL ROUTES FOR CABLE CONTAINMENT, ELECTRICAL SERVICES, ETC. AS INDICATED ON THE DRAWINGS.
- NEW MAINS RUN OF ELECTRICAL CONTAINMENT SHALL BE INSTALLED IN THE AREAS AS INDICATED. THIS IS INDICATIVE ONLY AND IF THE CONTRACTOR FINDS A MORE CONVENIENT ROUTE FOR THE ELECTRICAL SERVICES ON SITE THEN THAT WILL BE ACCEPTABLE.
- FINAL LOCATION OF ALL ITEMS OF SOCKETS/IT POINTS/LIGHTING, ETC. SHALL BE AGREED ON SITE WITH THE EMPLOYERS REPRESENTATIVE AND THE CLIENT.
- ALL SERVICES THROUGH FIRE BARRIERS SHALL BE SLEEVED EACH SIDE OF THE BARRIER. THE MAIN CONTRACTOR SHALL ALLOW FOR FIRE PROOFING THE OPS AFTER SERVICES IS INSTALLED.
- THE CONTRACTOR SHALL ALLOW FOR ALL NECESSARY LABOUR, WIRING AND ATTENDANCES IN COMPLETING ALL THE ELECTRICAL WORKS AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS.
- ALL AREAS ALL ELECTRICAL SERVICES BELOW CEILING LEVEL FOR THE ELECTRICAL INSTALLATION IN ALL AREAS SHALL BE RECESSED/CONCEALED AND FINISHED FLUSH WITH THE FINISHED WALL, UNLESS STATED OTHERWISE. LIAISE WITH THE MAIN CONTRACTOR FOR ALL NECESSARY CHASES OR BOXING OUT TO CONCEAL SERVICES IN THE UNIT.

LIGHTING SERVICES NOTES:

- ALL LIGHT FITTINGS SPECIFIED IN THE CLASSROOMS, QUIET ROOMS, MULTI-ACTIVITY ROOM SHALL HAVE A REMOTE PIR/DAYLIGHT SENSOR IN EACH OF THE ROOMS. THIS SENSOR SHALL BE A DEDICATED SENSOR FOR EACH ROOM AND LIGHT FITTING SHALL HAVE THE FACILITY TO TURN OFF THE LIGHTS WHEN DAYLIGHT LEVELS ARE ADEQUATE, DAYLIGHT SENSING TO DIM THE LIGHTS AS REQUIRED TO 'OFF' IN RESPONSE TO THE CHANGES IN DAYLIGHT LEVELS AND ABSENCE DETECTION TO TURN OFF LIGHTS WHEN ROOMS ARE NOT OCCUPIED.
- THE LIGHTING IN THE MULTI ACTIVITY ROOM SHALL HAVE THE FACILITY TO SWITCH THE LIGHTING ON/OFF & DIM THE FITTINGS IN THE ROOM.
- THERE SHALL BE AN ULTRAVIOLET LIGHT FITTING INSTALLED IN THE MULTI ACTIVITY ROOM WITH THE FACILITY TO SWITCH THE LIGHT ON/OFF & DIM THE FITTING IN THE ROOM.
- ALL AREAS AND ROOMS SHALL HAVE 'ON/OFF' MANUAL SWITCHING AND SHALL HAVE LIGHTING CONTROLS BASED ON PHOTOCCELL CONTROL TO TURN OFF THE LIGHTS WHEN DAYLIGHT LEVELS ARE ADEQUATE, DAYLIGHT SENSING TO DIM THE LIGHTS AS REQUIRED TO 'OFF' IN RESPONSE TO THE CHANGES IN DAYLIGHT LEVELS AND ABSENCE DETECTION TO TURN OFF LIGHTS WHEN ROOMS ARE NOT OCCUPIED. WHERE POSSIBLE, THE SMART SENSOR FOR THE LIGHT FITTINGS SHALL BE REMOTE SENSOR IN EACH ROOM.
- ALL LIGHT SWITCHES SHALL BE 'PUSH-TO-MAKE' TYPE LIGHT SWITCHES FOR USE WITH THE LIGHTING CONTROLS IN EACH ROOM. IN SOME ROOMS MANUAL DIMMER SWITCHES SHALL BE USED TO CONTROL THE LIGHTING LEVELS.
- ALL LIGHT FITTINGS IN CORRIDOR AND WC/SHOWER AREAS SHALL BE INSTALLED WITH PRESENCE DETECTION. SEE DRAWING AND SPECIFICATIONS FOR FURTHER DETAILS.
- ALL LIGHTING LAYOUTS IN ROOMS SHALL BE REVIEWED ON SITE WITH EMPLOYERS REPRESENTATIVE PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL ALLOW FOR COMMISSIONING THE LIGHTING CONTROLS WITH THE LIGHTING SUPPLIER AS PER SPECIFICATION. LUX LEVELS AND LIGHTING CONTROLS STRATEGY AS HIGHLIGHTED IN THE SPECIFICATIONS.
- ALLOW FOR SUPPLYING AND INSTALLING 2-CORE LOW VOLTAGE CABLES BETWEEN LIGHT FITTINGS ON THE SAME LIGHTING CIRCUIT FOR LIGHTING CONTROL.
- SEE SPECIFICATION FOR FURTHER DETAILS AND INFORMATION ON LIGHT FITTINGS.
- ALL LIGHTING THROUGHOUT THE EXTENSION OF THE BUILDING AND AREAS TO BE REFURBISHED THROUGHOUT THE EXISTING BUILDING SHALL BE LED FITTINGS. SEE SPECIFICATIONS FOR FURTHER DETAILS.

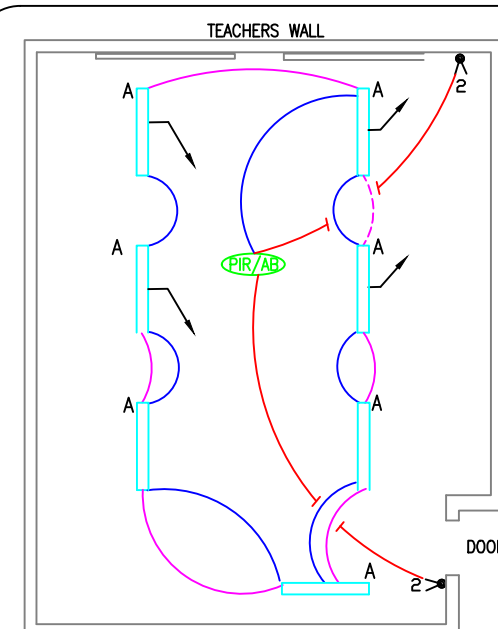
EMERGENCY LIGHTING SERVICES NOTES:

- A NEW EMERGENCY LIGHTING SYSTEM SHALL BE INSTALLED FOR THE EXTENSION OF THE BUILDING AS INDICATED ON THE DRAWINGS. THE EMERGENCY LIGHTING INSTALLATION SHALL COMPLY WITH LS. 3217:2023.
- EMERGENCY LIGHTING TO BE CO-ORDINATED WITH SAFETY SIGNS AND FIRST AID WHICH ARE SUBJECT TO STATUTORY REQUIREMENT.
- THE NEW EMERGENCY LIGHTING INSTALLATION IN THE EXTENSION OF THE BUILDING SHALL BE A STAND ALONE EMERGENCY LIGHTING SYSTEM WITH REMOTE LED EMERGENCY LIGHTS. A CENTRAL TEST UNIT SHALL BE INSTALLED IN THE NEW SUB-DISTRIBUTION ELECTRICAL BOARD IN THE EXTENSION OF THE BUILDING FOR THE TESTING OF THE EMERGENCY LIGHTING IN THE BUILDING.
- THE CONTRACTOR SHALL CARRY OUT A TEST ON THE EMERGENCY LIGHTING AT NIGHT TO SEE IF THE LIGHTING LEVELS ARE SUFFICIENT. THE CONTRACTOR SHALL ALSO RECORD THE FINDINGS AND ISSUE TO THE CONSULTANT.

EXTERNAL LIGHTING SERVICES NOTES:

- NEW WALL MOUNTED EXTERNAL LIGHT FITTINGS SHALL BE INSTALLED AROUND THE PERIMETER OF THE EXTENSION AS INDICATED ON THE DRAWINGS. ALL EXTERNAL LIGHTING FOR THE BUILDING SHALL BE CONTROLLED FROM THE NEW ELECTRICAL SUB-DISTRIBUTION BOARD (SDB-01) IN THE STORE ROOM OF THE EXTENSION. EXTERNAL LIGHTING FOR THE EXTENSION OF THE BUILDING SHALL BE CONTROLLED VIA A INDEPENDENT PHOTOCCELL AND DIGITAL TIME CLOCK COMBINATION FOR THE EXTENSION OF THE BUILDING. A 'HAND-OVER-AUTO' SWITCH SHALL BE INSTALLED INSIDE THE BOARD. ALL TIME CLOCKS SHALL BE INTEGRAL TO ELECTRICAL DISTRIBUTION BOARD FOR THE BUILDING.

ALL ELECTRICAL SERVICES
THROUGHOUT THE NEW EXTENSION
ARE TO BE CHASED INTO WALLS.



'DETAIL A' FOR TYPICAL GENERAL LIGHTING SCHEMATIC FOR TEACHING SPACE LIGHTING CONTROLS

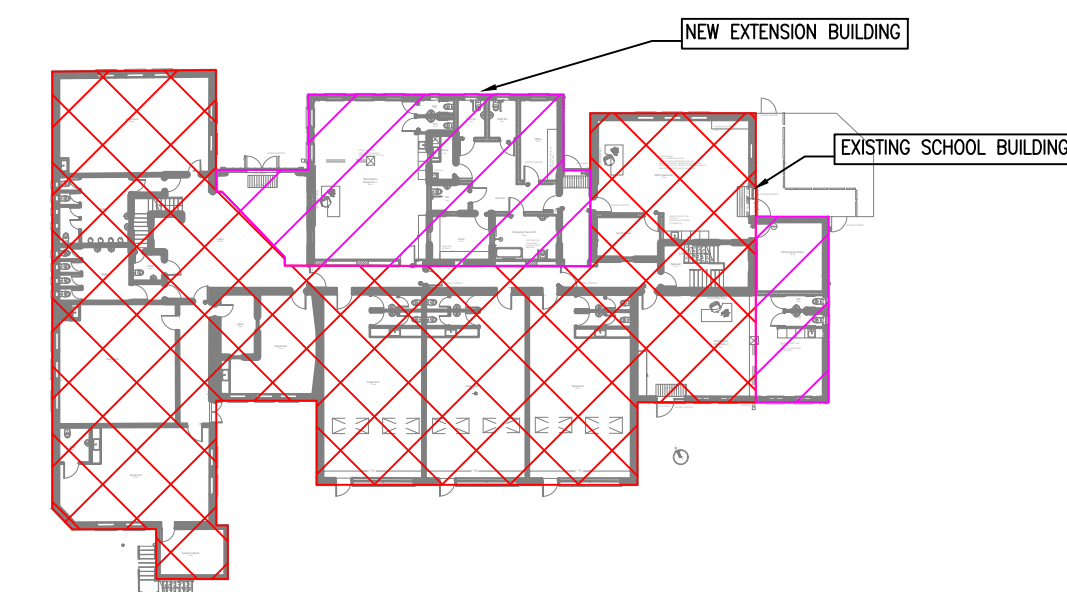
DAYLIGHT/ABSENCE DETECTOR
MANS INPUT CABLE (LIVE, EARTH, NEUTRAL, EMERGENCY LUMINAIRES WILL REQUIRE A PERMANENT FEED.
DSI LOW VOLTAGE PAIR CABLE
2-CORE LOW VOLTAGE PAIR BUS CABLE
CABLE TO PUSH-TO-MAKE SWITCH/BELL PUSH SWITCH TO ALLOW MANUAL GROUP OVERRIDE.
PUSH-TO-MAKE SWITCH WIRED IN PARALLEL TO THE 2-CORE LOW VOLTAGE BUS CABLE. WHEN PUSHED IT CREATES A SHORT ON THE CABLE.
NOTE: CONTROL CABLES TO BE TWIN CORE PVC 1.5mm² CABLE AND CAN BE RUN WITHIN SAME CONTAINMENT AS THE NORMAL MAINS CABLE.

ONE-WAY 'PUSH-TO-MAKE' LIGHT SWITCH (* DENOTES NUMBER OF GANGS)
TWO-WAY 'PUSH-TO-MAKE' LIGHT SWITCH (* DENOTES NUMBER OF GANGS)
ONE-WAY DIMMER LIGHT SWITCH (* DENOTES NUMBER OF GANGS)
TWO-WAY DIMMER LIGHT SWITCH (* DENOTES NUMBER OF GANGS)
THREE-WAY 'PUSH-TO-MAKE' LIGHT SWITCH (* DENOTES NUMBER OF GANGS)
NEW SUB-DISTRIBUTION BOARD (* DENOTES NUMBER OF BOARD)
WIRING FOR SWITCHING
WIRING FOR FINAL CIRCUITS
SDB-01-LT-1 DENOTES FINAL CIRCUIT NUMBERING FOR THE INTERNAL LIGHTING

LIGHTING SERVICES SYMBOLS

SDB-01-EXL-1 DENOTES FINAL CIRCUIT NUMBERING FOR THE EXTERNAL LIGHTING
PIR CEILING MOUNTED REMOTE PIR SENSOR FOR THE LIGHTING CONTROLS
PIR/AB STANDALONE RECESSED DAYLIGHT ABSENCE DETECTOR AND DAYLIGHT SENSOR
A NEW 16W LED LUMINAIRE. SEE SPECIFICATION FOR FURTHER DETAILS.
BD NEW 37W LED DIMMABLE LUMINAIRE (1520mm). SEE SPECIFICATION FOR FURTHER DETAILS.
C NEW IP66 35W LED LUMINAIRE (1100mm). SEE SPECIFICATION FOR FURTHER DETAILS.
D NEW 24W RECESSED LED LUMINAIRE (600 x 600). SEE SPECIFICATION FOR FURTHER DETAILS.
F NEW LED ULTRAVIOLET LUMINAIRE. SEE SPECIFICATION FOR FURTHER DETAILS.

X1/E NEW IP66 25W EXTERNAL EYELID LUMINAIRE. SEE SPECIFICATION FOR FURTHER DETAILS.
E1 EMERGENCY ESCAPE EXIT SIGN WITH DIRECTIONS. REFER TO THE DRAWING FOR THE DIRECTION.
E2 STAND-ALONE 'AREA VERSION' LED EMERGENCY LIGHT FITTING (RECESSED)
E3 STAND-ALONE 'CORRIDOR VERSION' LED EMERGENCY LIGHT FITTING (RECESSED)
E4 IP65 PROTECTED SURFACE MOUNTED EMERGENCY BULKHEAD
EXTERNAL LIGHTING PHOTOCCELL



KEYPLAN 1:500

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