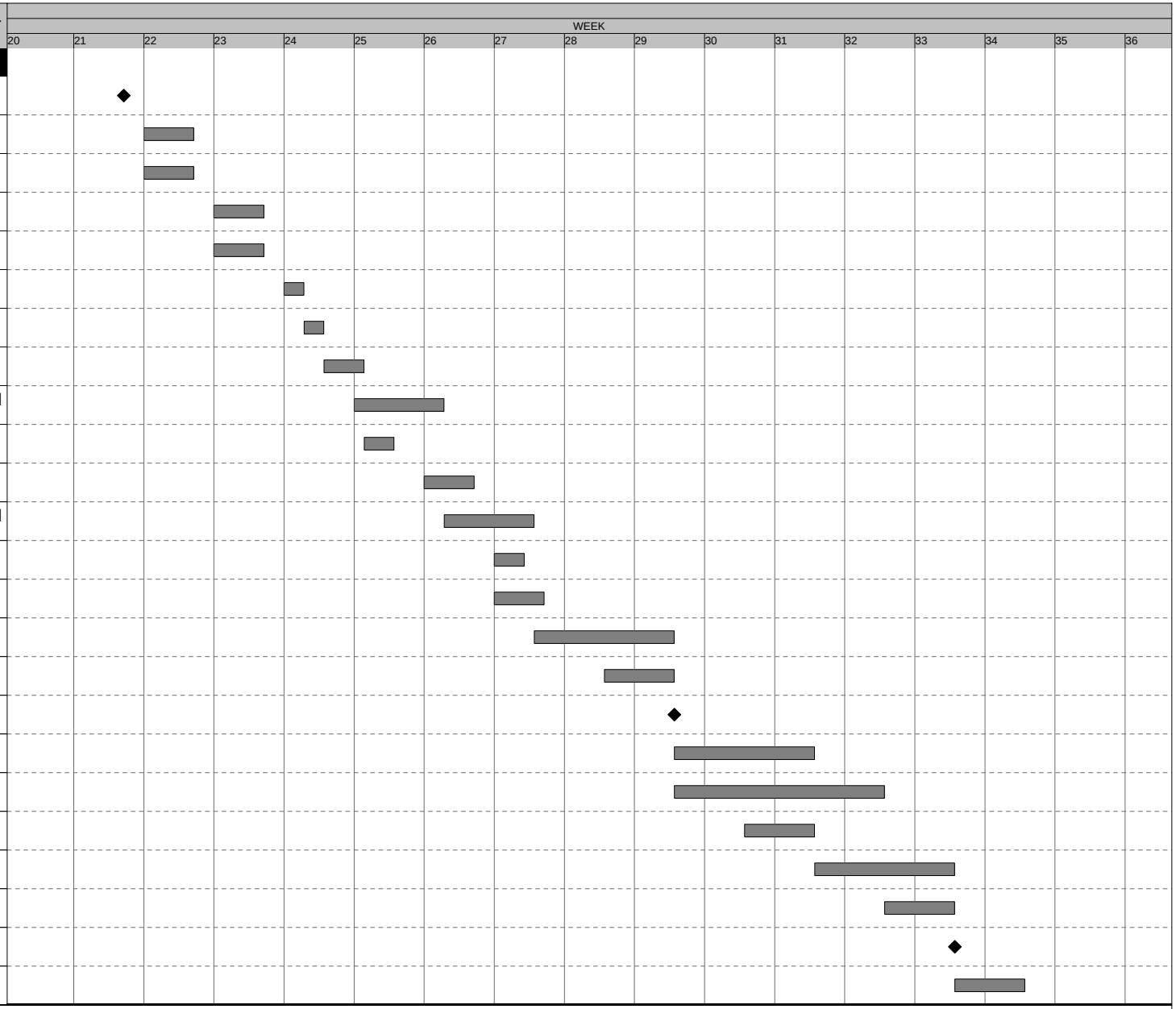
Activity ID	Description	Duration
Main Office Supply Air /Smoke Extract Plant Room		
TP07-01	Main office supply air P/R (MOS) Av. to	0
TP07-02	MOS H/L Drainage pipework	1w
TP07-03	MOS H/L Sprinkler pipework	1w
TP07-04	MOS H/L Condenser water P/work above AHU's	1w
TP07-05	MOS H/L Chilled water P/work above AHU's 1 &	1w
TP07-06	Deliver & position office supply air AHU No 1	2d
TP07-07	MOS Construct steel support frame for AHU No 2	2d
TP07-08	Deliver & position office supply air AHU No 2	2d
TP07-09	Office supply air AHU's 1 & 2 intake air plenum	1w2d
TP07-10	Del & position AHU's 1 & 2 elec control panels	3d
TP07-11	Deliver & position smoke Ext fans F18 & F19	1w
TP07-12	Office supply air AHU's 1 & 2 supply air plenum	1w2d
TP07-13	Del & position Ext fans F18 & F19 control panels	3d
TP07-14	Smoke Ext fans F18 & F19 ductwork & dampers	1w
TP07-15	MOS Supply air ductwork & dampers to riser	2w
TP07-16	Supply air AHU's 1 & 2 chilled water P/wk conns.	1w
TP07-17	MOS ductwork testing complete	0
TP07-18	MOS LV containment	2w
TP07-19	MOS plant wiring & terminations	3w
TP07-20	MOS Del & position LV electrical control panels	1w
TP07-21	MOS BMS interface connections	2w
TP07-22	MOS fire alarm interface connections	1w
TP07-23	MOS plantroom control interfaces Comp	0
TP07-24	MOS LV cable terminations	1w



Template Programme TP07 - Main Office Supply Air / Smoke Extract

Activity ID	Activity Description	Predecessors / Comments
TP07-01	Main office supply air P/R (MOS) Av. to commence	Identification of the commencement date. Plinths constructed and painted. Walls built, access available, area dry and free of debris etc.
TP07-02	MOS H/L Drainage pipework	High level drainage pipework from gullies cast into the slab above. Not associated with the installation of the ventilation plant, but needs to be included as part of the co-ordinated plant room installation. Needs to be installed before the mechanical pipework and ventilation ductwork because it is one of the highest services and has to be installed at specific invert levels to create a fall. Plus it would not be accessible to install following the installation of mechanical pipework and ventilation ductwork.
TP07-03	MOS H/L Sprinkler pipework	General sprinkler protection - not part of the system's installation - but has to be installed before mechanical pipework & ductwork because it is a higher service
TP07-04	MOS H/L Condenser water P/work above AHU's 1 & 2	Large diameter pipework routed through the plant room. Not part of the supply air "system", but forms part of the co-ordinated installation within the plant room, and it will be advantageous to install it before the AHU's are delivered.
TP07-05	MOS H/L Chilled water P/work above AHU's 1 & 2	Similar to the condenser water pipework installation. Except that there are branches to be installed from the high level runs that connect onto the AHU's following their delivery and positioning.
TP07-06	Deliver & position office supply air AHU No 1	The office supply air AHU No1 as indicated in Figure 1.1 sits on a pre-formed concrete plinth. The construction of the plinth could be deferred until after the high level pipework had been installed. There could also be logistical issues concerning the AHU's delivery. The AHU's could be delivered in sections, which would then require additional activities for their assembly.
TP07-07	MOS Construct steel support frame for AHU No 2	This steel framework supports AHU No 2, which sits above AHU No1
TP07-08	Deliver & position office supply air AHU No 2	Main supply air AHU No 2 as indicated in Figure 1.1 sits on the steel framework above AHU No 1.
TP07-09	Office supply air AHU's 1 & 2 intake air plenum	This ductwork plenum links both AHU No's 1 & 2 to the outside air supply louvre. The intake air flow is controlled by dampers inserted within the plenum. The installation of this plenum requires both AHU No's 1 & 2 to be located in their final positions.
TP07-10	Del & position AHU's 1 & 2 elec control panels	These may be delivered pre-mounted on the AHU's. There could be separate control panels for the electrical heating sections of the AHU's.
TP07-11	Deliver & position smoke Ext fans F18 & F19	In most cases these smoke extract fans will be installed at high level above AHU's 1 & 2. These fire rated extract fans will be part of the fire and life safety arrangements. These fans could be installed before AHU's 1 & 2.
TP07-12	Office supply air AHU's 1 & 2 supply air plenum	This ductwork plenum links both AHU No's 1 & 2 to the plant room supply air ductwork. Similarly to the intake plenum the supply air is controlled by dampers inserted within the plenum.
TP07-13	Del & position Ext fans F18 & F19 control panels	Electrical control panels associated with the operation of the fans. Manufactured by the fan supplier. Delivery held back to avoid damage during pipework installation.
TP07-14	Smoke Ext fans F18 & F19 ductwork & dampers	Could be installed prior to the fans, but needs the supply air plenum installed before it can be completed. Either the ductwork or fans could be installed first. Controlled by fire dampers, which operate automatically when fire is detected within the building.

Template Programme TP07 - Main Office Supply Air / Smoke Extract

Activity ID	Activity Description	Predecessors / Comments
TP07-15	MOS Supply air ductwork & dampers to riser	Could be part installed before the AHU deliveries. This links the supply air plenum to the riser ductwork and is controlled by dampers. In theory the office supply air riser ductwork should be protruding into the plantroom and available for connection.
TP07-16	Supply air AHU's 1 & 2 chilled water P/wk conns.	Connections to the flow and return pipework of the chilled water "system". Requires the high level chilled water pipework in situ, and the AHU's in their final locations. These connections form part of the main office supply air ventilation "system".
TP07-17	MOS ductwork testing complete	Progress identification milestone for the plantroom ductwork.
TP07-18	MOS LV containment	Installed by the electrical contractor. Containment for the LV cables (installed from a LV switch room) that supply the main control panels. And from the main control panels to supply the control panels provided and installed by the fire protection contractor. Generally the electrical installation will be the lowest M&E service and is therefore dependant on the pipework completion.
TP07-19	MOS plant wiring & terminations	Refers to the local wiring between the ventilation plant to the control panels by the ventilation contractor. The main electrical LV supplies are to be provided by the electrical contractor. Needs about half of the control panels and plant installed prior to worthwhile commencement.
TP07-20	MOS Del & position LV electrical control panels	LV electrical control panels associated with the distribution of electrical supplies to the ventilation contractor's AHU No's 1 & 2 and extract fan control panels. Manufactured by one of the electrical contractor's subcontractors. This will include changeover panels for the extract fans, which form part of the fire and life safety arrangements. Delivery held back to avoid damage during pipework installation.
TP07-21	MOS BMS interface connections	Requires the ventilation contractor to have his control panels installed. The BMS 1st fix would form part of a general installation of the whole floor.
TP07-22	MOS fire alarm interface connections	These interface with the fire and life safety arrangements and will require all control panels to be installed. The fire alarm 1st fix would form part of a general installation of the whole floor.
TP07-23	MOS plantroom control interfaces Comp	Signifies that the ventilation plant, control and BMS wiring and associated control panels are all terminated and available for testing / commissioning.
TP07-24	MOS LV cable terminations	Carried out by the electrical contractor. Refers to termination of the LV cables into the changeover / control panels provided by the electrical contractor, and the control panels that are provided and installed by other contractors. The actual LV cable installation will form part of a separate LV electrical switch room template programme. This LV cable termination activity will be a successor to that cable installation.

General Notes:

1 To be read in conjunction with Figure 1.1