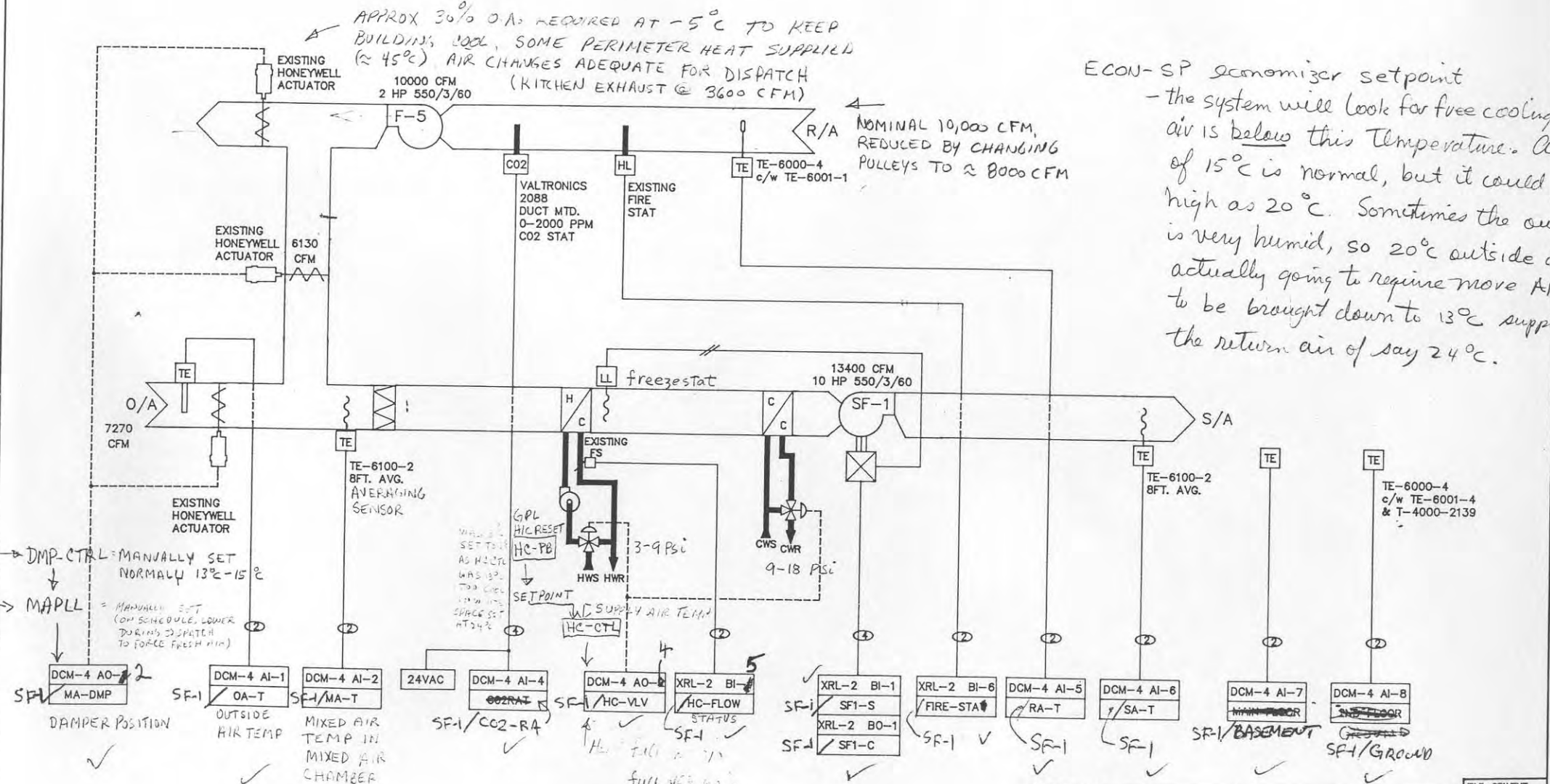


SF-1 VENTILATION SYSTEM

APPROX 30% O/A REQUIRED AT -5°C TO KEEP BUILDING COOL, SOME PERIMETER HEAT SUPPLIED (~ 45°C) AIR CHANGES ADEQUATE FOR DISPATCH (KITCHEN EXHAUST @ 3600 CFM)

ECON-SP economizer setpoint
 - the system will look for free cooling if air is below this temperature. A setpoint of 15°C is normal, but it could go as high as 20°C. Sometimes the outside air is very humid, so 20°C outside air is actually going to require more A/C capacity to be brought down to 13°C supply than the return air of say 24°C.



DMP-CTL = MANUALLY SET NORMALLY 13°C-15°C
 MAPLL = MANUALLY SET (ON SCHEDULE, LOWER DURING DISPATCH TO FORCE FRESH AIR)

3-9 Psi
 9-18 Psi
 SET POINT
 W/C SUPPLY AIR TEMP
 HWS HWR

- SF-1 DCM-4 AO-2 MA-DMP DAMPER POSITION ✓
- SF-1 DCM-4 AI-1 OA-T OUTSIDE AIR TEMP ✓
- SF-1 DCM-4 AI-2 MA-T MIXED AIR TEMP IN MIXED AIR CHAMBER ✓
- SF-1 DCM-4 AI-4 CO2-RA ✓
- SF-1 DCM-4 AO-2 HC-VLV ✓
- SF-1 XRL-2 BI-1 HC-FLOW STATUS ✓
- SF-1 XRL-2 BI-1 SF-1-S ✓
- SF-1 XRL-2 BI-6 FIRE-STA ✓
- SF-1 DCM-4 AI-5 RA-T ✓
- SF-1 DCM-4 AI-6 SA-T ✓
- SF-1 DCM-4 AI-7 MAIN FLOOR ✓
- SF-1 DCM-4 AI-8 SUB FLOOR ✓

PRESSURE RANGE
 3 TO 18 Psi
 full heat full cool

9 Psi heat shuts off, cooling valve opens (separate coil, drained during winter)

50% = 3psi + 0.5(18-3) = 10.5 psi

DRAWING TITLE SF-1 VENTILATION SYSTEM				FILE: SFVENT	
PROJECT WINNIEG TRANSIT ADMINISTRATION AND 6 SECTION METASYS FACILITY MANAGEMENT SYSTEM				CONTRACT NUMBER 91098-5006	
SALES ENGINEER BH				DATE 01/25/10	
PROJECT MANAGER RC				APPROVED DATE	
DESIGNER RC				DRAWN DATE	
CHECKER RC				DATE	
APPROVED DATE				DATE	
JOHNSON CONTROLS Systems & Services Division				JOHNSON CONTROLS LTD 600 WILBY STREET WINNIPEG, MANITOBA R3J 3Y9 204-885-4360	