## ROOFTOP HVAC UNIT SCHEDULE

| TAG | AREA SERVED | CFM | EXT. SP. | % O.A. | ELECTRICAL | MCA | HEATING | | | | COOLING | | | | | | MODEL | WEIGHT (LBS) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | EAT | LAT | FUEL | MBH | EWB | EDB | LWB | LDB | TONS | APD | | | |
| HVAC-1 | LEXUS SHOWROOM | 6000 | 1.50 | 0-100 | 460/60/3 | 40.0 | 64 | 110 | GAS | 275 | 67 | 80 | LWB | 55 | 15.0 | ---- | TRANE YCD180C4HBAA | 2,200 | |
| HVAC-2 | SUPPORT OFFICES | 3000 | 1.10 | 0-100 | 460/60/3 | 24.0 | 64 | 110 | GAS | 200 | 67 | 80 | LWB | 55 | 7.50 | ---- | TRANE YCD090C4HBAA | 1,700 | |
| HVAC-3 | SECOND FLOOR OFFICES | 8000 | 0.85 | 0-100 | 460/60/3 | 50.0 | 58 | 105 | GAS | 325 | 67 | 80 | LWB | 55 | 20.0 | ---- | TRANE YCD240C4HBAA | 2,500 | |
| HVAC-4 | SECOND FLOOR OFFICES | 2500 | 0.65 | 0-100 | 460/60/3 | 19.0 | 64 | 110 | GAS | 150 | 67 | 80 | LWB | 55 | 6.25 | ---- | TRANE YSC075C4HCAA | 900 | |
| HVAC-5 | SUPPORT OFFICES | 4000 | 1.10 | 0-100 | 460/60/3 | 34.0 | 58 | 105 | GAS | 200 | 67 | 80 | LWB | 55 | 10.0 | ---- | TRANE YCD120C4HBAA | 1,700 | |
| HVAC-6 | TOYOTA SHOWROOM | 7000 | 1.50 | 0-100 | 460/60/3 | 46.0 | 56 | 100 | GAS | 275 | 67 | 80 | LWB | 55 | 17.5 | ---- | TRANE YCD210C4HBAA | 2,500 | |

NOTE: ALL HVAC UNITS OVER 2000 CFM, SHALL BE PROVIDED WITH RETURN AIR SMOKE DETECTORS
HVAC UNITS 1,2,3,5,6 SHALL HAVE OVERSIZED SUPPLY FAN MOTORS

## FAN SCHEDULE

| TAG | SERVES | CFM | SP | V/PH | HP | TS | RPM | WGHT | MOD. NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | W.G. | | | | | POUNDS | | |
| EF-1,6 | SERVICE GARAGE AREA | 15,000 | 1.25 | 460/3 | 7.5 | ---- | 575 | 600 | ACME PV425N | ROOF |
| EF-2 | CONFERENCE ROOM | 600 | 0.25 | 120/1 | 1/3 | ---- | 1550 | 25 | ACME PRN110 | ROOF |
| EF-3 | LEXUS BATHROOMS | 975 | 0.40 | 120/1 | 1/2 | ---- | 1489 | 50 | ACME PV120E6 | ROOF |
| EF-4 | TOYOTA BATHROOMS | 500 | 0.40 | 120/1 | 1/2 | ---- | 1489 | 50 | ACME PV120E6 | ROOF |
| EF-5 | ELEVATOR MECH | 75 | 0.25 | 120/1 | 1/10 | ---- | ---- | 12 | ACME VQ100 | INLINE |
| SF-1,2 | SERVICE GARAGE MAKE-UP | 15,000 | 1.25 | 460/3 | 15.0 | ---- | 1800 | 2,700 | TRANE DF1A125IDE | XXX |
| SF-3 | BOILER RM | 1250 | 0.25 | 120/1 | 1/6 | ---- | 1760 | 30 | ACME FQ12D4 | WALL MTD SUPPLY MOD W/TIME DELAY |

## INTAKE LOUVER SCHEDULE

| TAG | LOCATION | SERVES | CFM | FREE AREA | WALL OPENING SIZE | REMARKS |
|---|---|---|---|---|---|---|
| L-1,2 | WALL | HEAT RECOVERY | 15,000 | 17.5 $FT^2$ | 48"Hx96"W | RUSKIN ELF375X |
| L-3 | WALL | MECHANICAL ROOM | - | 4.3 $FT^2$ | 48"Hx24"W | RUSKIN ELF375X |

## CONTROLS POINT SCHEDULE

| TAG | SERVES | EQUIPMENT | T-STAT | HUMIDISTAT | HEAT VALVE | COOLING VALVE | VALVE ACT | AQUA STAT | RETURN SENSOR | DAMPER | DAMPER ACT | SMOKE DETECTOR | RESET CONTROL | ROOM ALRM SENS | ECONOMIZER CONTROL | DISCH AIR CONTR | OCCUPANCY | FREEZESTAT | ROOM PRES SEN | CEN. UNIT CONTROL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - | -<br>- | | | | X | | | | | | | | | | | | | | | | - |
| - | -<br>- | | | | | | | | | | | | | | | | | | | | - |
| - | - | | | | | | | | | | | | | | | | | | | | - |
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| - | - | | | | | | | | | | | | | | | | | | | | - |
| - | - | | | | | | | | | | | | | | | | | | | | - |
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## PUMP SCHEDULE

| TAG | SERVES | TYPE | GPM | HEAD | HP | RPM | ELECTRIC | WGHT | MOD. NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | POUNDS | | |
| P-1,2 | HEAT RECOVERY | IN-LINE | 80 | 20 | 3/4 | 1750 | 460/60/3 | - | 1632 | TACO |
| P-3 | DOM. HW RECIRC PUMP | IN-LINE | 5 | 13 | 1/8 | 3250 | 120/60/1 | 15 | 008 BRONZE | TACO |
| P-4,5 | HWS/R | IN-LINE | 50 | 40 | 1.0 | 1750 | 460/60/3 | - | 1616 | TACO |
| P-6 | INDIR. DOM. HOT WATER HTR | IN-LINE | 15 | 12 | 1/8 | 3250 | 120/60/1 | 15 | 0012 | TACO |
| P-7 | RADIANT CARWASH RAMP | IN-LINE | 6 | 18 | 1/8 | 3250 | 120/60/1 | 15 | 0014 | TACO |
| P-8 | WASTE OIL CAN-TO-TANK TRANSF | IN-LINE | 5.6 | - | - | - | 120/60/1 | 8 | 4RN64 | TEEL |

## INDIRECT FIRED WATER HEATER SCHEDULE

| TAG | AREA SERVED | TANK VOLUME | 1ST HOUR (GAL/HR) | CONT. (GAL/HR) | DIAM IN | HEIGHT IN | REMARKS |
|---|---|---|---|---|---|---|---|
| WH-1 | DOM. HOT WATER | 80 | 379 | 346 | 26 | 66 | AMTROL WHS-80ZC-DW |

## VAV BOX SCHEDULE

| TAG | SERVES | MAX CFM | MIN CFM | MIN CFM | MODEL | REMARKS |
|---|---|---|---|---|---|---|
| | | COOLING | COOLING | HEATING | SIZE | |
| VAV-1.1 | LEXUS SHOWROOM SOUTH PORTION | 2900 | 1450 | 1450 | TRANE VCCF-XX | HVAC-1 |
| VAV-1.2 | LEXUS SHOWROOM NORTH PORTION | 2100 | 1050 | 1050 | TRANE VCCF-XX | HVAC-1 |
| VAV-1.3 | CUSTOMER LOUNGE AREA | 900 | 450 | 450 | TRANE VCCF-XX | HVAC-1 |
| VAV-2.1 | TRAINING LUNCH RM. | 600 | 300 | 300 | TRANE VCCF-XX | HVAC-2 |
| VAV-2.2 | 123 CONF. ROOM. | 310 | 155 | 155 | TRANE VCCF-XX | HVAC-2 |
| VAV-2.3 | UNIFORM STORAGE | 250 | 125 | 125 | TRANE VCCF-XX | HVAC-2 |
| VAV-2.4 | 121 STEVE'S OFFICE | 215 | 110 | 110 | TRANE VCCF-XX | HVAC-2 |
| VAV-2.5 | 126 LUNCH ROOM | 850 | 425 | 425 | TRANE VCCF-XX | HVAC-2 |
| VAV-2.6 | 133-137 CUSTOMER | 625 | 310 | 310 | TRANE VCCF-XX | HVAC-2 |
| VAV-3.1 | 2ND FLOOR OFFICE | 2660 | 1330 | 1330 | TRANE VCCF-XX | HVAC-3 |
| VAV-3.2 | 2ND FLOOR OFFICE | 2660 | 1330 | 1330 | TRANE VCCF-XX | HVAC-3 |
| VAV-3.3 | 2ND FLOOR OFFICE | 2660 | 1330 | 1330 | TRANE VCCF-XX | HVAC-3 |
| VAV-5.1 | 149 PARTS SHOP | 1150 | 575 | 575 | TRANE VCCF-XX | HVAC-5 |
| VAV-5.2 | 149 SERVICE MGR | 750 | 375 | 375 | TRANE VCCF-XX | HVAC-5 |
| VAV-5.3 | 155 MANAGER | 725 | 360 | 360 | TRANE VCCF-XX | HVAC-5 |
| VAV-5.4 | 159 PARTS STORAGE | 1500 | 575 | 575 | TRANE VCCF-XX | HVAC-5 |
| VAV-6.1 | 109 SCION DISPLAY | 1875 | 940 | 940 | TRANE VCCF-XX | HVAC-6 |
| VAV-6.2 | 110 TOYOTA SHOWRM | 1800 | 900 | 900 | TRANE VCCF-XX | HVAC-6 |
| VAV-6.3 | 110 TOYOTA SHOWRM | 3300 | 1650 | 1650 | TRANE VCCF-XX | HVAC-6 |

## RADIANT HEATING TUBING SCHEDULE

| ZONE | MANIFOLD | LOCATION | AREA FT2 | LOOPS | LENGTH FT | GPM TOTAL | HEAD FT | TUBE TYPE | TUBE SPACING | CONTROL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | CARWASH RAMP & ENTRANCE | 330 | 4 | 175, 165<br>155, 130 | 6 | 18' | 3/4" PEX | 6" O.C. | IN-SLAB THERMOSTAT | 40% P. GLYCOL IN WATER |

## HOT WATER COIL SCHEDULE

| TAG | TYPE | ROWS | MBH | GPM | LENGTH IN | HEIGHT IN | DEPTH IN | WGHT POUNDS | MOD. NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| HWC-1,2,3&4 | HEAT RECOVERY | 6 | 650 | 80 | - | - | - | 450 | TRANE DELTA FLO H | MEDIUM COIL MOD. "UN" COIL |

INCLUDE FILTER MODULE AND FILTERS WITH EACH HOT WATER COIL MODULE AND COIL.

## CABINET & UNIT HEATER SCHEDULE

| TAG | AREA SERVED | TYPE | MBH | GPM | CFM | HP | RPM | ELECTRIC | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| CUH-1,2 | STAIR TOWERS | SEMI-RECESS | 14.5 | 1.0 | 211 | .03 | 980 | 120/60/1 | TRANE MOD No. FFHB020 |
| UH-1,2,3,4,5 | SVC GARAGE | HORIZ. | 120 | 10 | 3300 | 1/4 | 1100 | 120/60/1 | TRANE MOD No. 230-S |

NOTES: PROVIDE CUH UNITS WITH RETURN AIR T-STAT AND AQUASTAT

## GENERAL NOTES

1. PROVIDE DUCTWORK IN ACCORDANCE WITH NFPA 90A AND LOCAL CODES AND STANDARDS.
2. PROVIDE DUCTWORK IN ACCORDANCE WITH SMACNA STANDARDS (SECOND EDITION - 1995) "STD" PRESSURE CLASSIFICATION, SEAL CLASS "C", USING GALVINIZED SHEET METAL.
3. INSTALL FLEX DUCT IN MAXIMUM 5 FOOT LENGTHS, FULLY EXTENDED, PROPERLY SUPPORTED, WITHOUT CRIMPS.
4. DUCT ELBOWS SHALL BE STANDARD RADIUS TYPE OR SQUARE WITH SINGLE TURNING VANES.
5. PROVIDE TRANSFER DUCT ASSEMBLIES CONSISTING OF (2) TG-1 GRILLES CONNECTED WITH FLEX DUCT SIZE AS SHOWN ON DRAWING TO TRANSFER AIR OUT OF ROOMS TO ADJACENT CORRIDOR WHERE SUPPLY AIR EXCEEDS 100 CFM.

## EXPANSION TANK SCHEDULE

| TAG | AREA SERVED | TANK VOLUME | ACCEPT VOLUME | TANK PRESS | DIAM IN | HEIGHT IN | REMARKS |
|---|---|---|---|---|---|---|---|
| EX-1 | HOT WATER | 45 | 24 | 12 | 12 | 70 | TACO CAX 170 |
| EX-2 | DOM. HW | 4.4 | - | 12 | 11 | 15 | AMTROL ST-12 |
| EX-3 | HEAT RECOVERY | 4.4 | 2.5 | 12 | 11 | 15 | AMTROL EXTROL 30 |
| EX-4 | SNOW MELT | 4.4 | 2.5 | 12 | 11 | 15 | AMTROL RX-30 |

## NATURAL GAS DIRECT FIRED MAKE-UP AIR UNIT SCHEDULE

| TAG | SERVES | INPUT MBH | OUTPUT MBH | EFF. % | BURNER GFH | SIZE LXDXH | VENT SIZE IN | WGHT POUNDS | MOD. NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| MUA-1,2 | SERVICE SHOP | 990 | 792 | 80 | 1.0 | - | N/A | 2000 | TRANE | PART OF HEAT RECOVERY SYSTEM |

## BOILER SCHEDULE

| TAG | SERVES | INPUT MBH | OUTPUT MBH | EFF. % | BURNER GPH | SIZE LXDXH | VENT SIZE IN | WGHT POUNDS | MOD. NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-1 | UNIT HEATERS DOM. HOT WATER | 500 | 416 | 83 | 3.57 | 40x69x41 | 7"Φ | 2000 | RAB 500 | BURNER MOTOR - 1/2 HP SUPPLIED BY OWNER |

## BYPASS VAV BOX SCHEDULE

| TAG | SERVES | UNIT CFM | MIN CFM HEATING | BYPASS CFM | DAMPER SIZE | REMARKS |
|---|---|---|---|---|---|---|
| BYVAV-1 | HVAC-1 | 6000 | 2950 | 1850 | 14" | VADA |
| BYVAV-2 | HVAC-2 | 3000 | 1425 | 975 | 10" | VADA |
| BYVAV-3 | HVAC-3 | 8000 | 4000 | 2400 | 16" | VADA |
| BYVAV-5 | HVAC-5 | 4000 | 2060 | 800 | 10" | VADA |
| BYVAV-6 | HVAC-6 | 7000 | 3940 | 1400 | 12" | VADA |

## GAS FIRED INFRARED HEATER SCHEDULE

| TAG | SERVES | INPUT MBH | OUTPUT MBH | EFF. % | BURNER FUEL | SIZE LXWXH | VENT SIZE IN | WGHT POUNDS | MOD. NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| IRH-1 | CARWASH | 40 | 32 | 80 | NAT. GAS | - | 4" | - | SOLARONICS STG-40-10 | ALL STAINLESS STEEL |

## SYMBOLS AND ABBREVIATIONS

| | |
|---|---|
| AFF | ABOVE FINISH FLOOR |
| AFG | ABOVE FINISH GRADE |
| AP | ACCES PANEL |
| CFM | CUBIC FEET PER MINUTE |
| D | DRAIN |
| DIW | DOWN IN WALL |
| DSD | DUCT SMOKE DETECTOR |
| EF | EXHAUST FAN |
| EWT | ENTERING WATER TEMPERATURE |
| FP | FINNED PIPE |
| G | GAS PIPING |
| GC | GENERAL CONTRACTOR |
| GPM | GALLONS PER MINUTE |
| GV | GATE VALVE |
| HC | HEATING CONTRACTOR |
| HWR | HOT WATER RETURN |
| HWS | HOT WATER SUPPLY |
| HZ | HERTZ |
| MV | MANUAL VENT |
| MBH | 1000 BTU PER HOUR |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| P | PUMP |
| PG | PRESSURE GAUGE |
| PH | PHASE |
| PRV | PRESSURE REDUCING VALVE |
| T | THERMOSTAT |
| VT | VENT |
| V | VOLTS |
| WPD | WATER PRESSURE DROP |
| WTD | WATER TEMPERATURE DROP |
| WTR | WATER TEMPERATURE RISE |

HWS — HOT WATER SUPPLY PIPING
HWR — HOT WATER RETURN PIPING
FLOW CONTROL VALVE
ZONE CIRCULATOR
MANUAL VENT
FLOAT VENT
RELIEF VENT
PIPE ANCHOR
D — DRAIN PIPING
UNION
FLANGE
GATE VALVE
GLOBE VALVE
CHECK VALVE
THERMOMETER
FINNED PIPE ELEMENT
STRAINER
INVERTED ECCENTRIC REDUCER
T — THERMOSTSAT
FLEXIBLE DUCT

SCHEDULE ADDITIONS 7-26-04

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| SCHEDULE ADDNS | 7-26 |

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MAINE MALL MOTORS — CLIENT
NEW DEALERSHIP — PROJECT
SCHEDULES — DRAWING TITLE

DATE: 5/12/04
SCALE: AS NOTED
DRAWN BY:
CHECKED BY: JPN
JOB NUMBER:
CAD FILE: XXXX
SHEET NUMBER

M6

SHEET 6 OF 7