MECHANICAL SPECIFICATIONS:

1.0 GENERAL: 1.1 SCOPE OF WORK:

1. REMOVAL AND DISPOSAL OF EXISTING SUPPLY AND RETURN GRILLES AND ASSOCIATED DUCTWORK

2. REMOVAL AND DISPOSAL OF EXISTING PLUMBING FIXTURES AND ASSOCIATED WATER AND DRAINAGE PIPING AS SHOWN.

3. SUPPLY AND INSTALL NEW SUPPLY AND RETURN GRILLES AND ASSOCIATED DUCTWORK AS SHOWN.

4. SUPPLY AND INSTALL NEW PLUMBING FIXTURES AND ASSOCIATED WATER AND DRAINAGE PIPING AS

5. COMMISSION ALL NEW EQUIPMENT.

1.2 DESCRIPTION WORK:
THE CONTRACTOR SHALL INCLUDE THE FURNISHING OF ALL LABOR, NEW MATERIALS, EQUIPMENT AND INSTALLATION OF EQUIPMENT AND SERVICES NECESSARY FOR AND INCIDENTAL TO THE COMPLETE INSTALLATION OF THE WORK SHOWN AND DESCRIBED ON THIS DRAWINGS AND TO THE SATISFACTION OF CONTRACT ADMINITRATOR.

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR REQUIRED WORK AND PAY ALL FEES. OBTAIN DOL APPROVAL FOR NEW INSTALLATION.

WORK SHALL BE PERFORMED IN ACCORDANCE TO ALL APPLICABLE LOCAL CODES, STANDARDS AND REGULATIONS. CONTRACTOR TO COORDINATE ACCESS TO THE SITE WITH CONTRACT ADMINISTRATOR AND FOLLOW THEIR INSTRUCTIONS.

1.3 SUBMITTALS:

- SUBMIT SHOP DRAWINGS FOR APPROVAL FOR EQUIPMENT SPECIFIED.

- SUBMIT THREE (3) SETS OF 0 & M MANUALS.

- PROVIDE O & M TRAINING TO THE CONTRACT ADMINISTRATOR. - AS-BUILTS OF INSTALLED SYSTEM. SUBMIT AS-BUILTS TO CONTRACT ADMINISTRATOR.

1.4 WORKMANSHIP:

WORKMANSHIP SHALL BE OF BEST QUALITY, EXECUTED BY WORKERS EXPERIENCED AND SKILLED IN RESPECTIVE DUTIES FOR WHICH THEY ARE EMPLOYED.

INSTALLATION OF EQUIPMENT:

TO NATIONAL BUILDING CODE, AND ALL LOCAL CODES, STANDARDS AND REGULATIONS. CONFORM TO DEPARTMENT OF LABOR REQUIREMENTS.

INSTALL ALL EQUIPMENT SPECIFIED OR INDICATED ON DRAWINGS IN A MANNER THAT WILL ENSURE ITS SATISFACTORY OPERATION UPON COMPLETION AND ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

THE SAFE DELIVERY TO THE SITE OF ALL MATERIALS SHALL BE ENTIRELY THE CONTRACTOR'S RESPONSIBILITY. MATERIALS AND EQUIPMENT SHALL BE HANDLED AT ALL TIMES WITH CARE TO AVOID

FOLLOW APPROVED MANUFACTURER'S RECOMMENDATIONS FOR SAFETY, EASY ACCESS FOR INSPECTION, AND MANUFACTURER'S REPAIRS.

PERMIT EQUIPMENT MAINTENANCE AND DISASSEMBLY WITH MINIMUM DISTURBANCE TO ADJACENT EQUIPMENT AND WITHOUT INTERFERENCE WITH BUILDING STRUCTURE OR OTHER EQUIPMENT.

BEFORE COMMENCING THE INSTALLATION, THE CONTRACTOR SHALL CONFIRM RECEIPT OF AN APPROVED COPY OF THE MANUFACTURER'S DRAWINGS AND INSTALLATION MANUAL FOR THE INSTALLATION THEREOF.

DISCREPANCIES OR IRREGULARITIES IN THE WORK OR DEFECTS OR DAMAGES TO THE EQUIPMENT, ATTRIBUTABLE TO FAULTY OR INCORRECT INSTALLATION, SHALL BE RECTIFIED BY THE CONTRACTOR AT HIS OWN EXPENSE.

MAINTAIN ADEQUATE ACCESS TO PROJECT SITE. COORDINATE WORK TO MINIMIZE INTERFERENCE OR DISRUPTION TO THE CITY'S OPERATION.

MAINTAIN WORK IN TIDY CONDITION, FREE FROM ACCUMULATION OF WASTE PRODUCTS AND DEBRIS.

PROTECT EQUIPMENT AND DUCTWORK FROM ACCUMULATION OF DUST ETC. SEAL ALL DUCT OPENINGS DURING DUST PRODUCING ACTIVITIES.

INSPECTION AND TESTING:

THE WORK SHALL BE AT ALL TIMES AVAILABLE FOR INSPECTION BY THE CONTRACT ADMINISTRATOR. ALL WORK SHALL BE ACCORDANCE WITH AND SHALL BE INSPECTED TO MEET THE REQUIREMENTS OF THIS

ALL STARTUP AND TESTING SHALL BE PERFORMED IN THE PRESENCE OF CONTRACT ADMINISTRATOR. NOTICE OF THE DATE OF WHEN TESTS SHALL BE PERFORMED MUST BE RECEIVED BY CONTRACT

WORK SHALL BE NOT INSULATED OR CONCEALED PRIOR TO BEING TESTED OR APPROVED.

OPERATE SYSTEM FOR A SUFFICIENT PERIOD OF TIME TO INSURE COMPLETE ACCEPTANCE; DEFECTS SHALL BE REMEDIED AT CONTRACTOR'S EXPENSE.

2.0 HVAC PRODUCTS 2.1 DUCTWORK:

CONFORM TO SMACNA STANDARDS FOR SUPPLY AND INSTALLATION OF DUCTWORK. PERFORM WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. DUCTWORK SHALL BE RATED FOR 2" W.C. (500 PA).

SEAL ALL DUCTWORK JOINTS USING "DURO-DYNE" DUCT SEALER. SEAL ALL JOINTS IN DUCT INSULATION VAPOR BARRIER USING TAPE AND DUCT SEALER.

2.2 GRILLES:GRILLES AS PER GRILLE SCHEDULE ON DRAWING MO4.

2.3 LOUVRE: LOUVRE AS PERS LOUVRE SCHEDULE ON DRAWING MO4.

2.4 RANGE HOOD (RH-1): EUROPEAN DESIGN CHIMNEY HOOD, PUSH BUTTON CONTROL WITH LCD INTERFACE, TIME DISPLAY AND DELAY FUNCTION, 3 VENTILATION SPEEDS, CENTRIFUGAL BLOWER, 90 L/s (190 CFM) @ LOW SPEED, 212 L/s (450 CFM) @ HIGH SPEED, BRUSHED STAINLESS STEEL FINISH, DUAL 20-WATT HALOGEN BULBS INCLUDED, DUCTED TELESCOPIC FLUE, DISHWASHER SAFE ALUMINUM FILTERS, 120V, 3.3 AMPS, 325W TOTAL HOOD POWER CONSUMPTION. 1 YEAR WARRANTY.

ACCESSORIES: OPTION 09877 - FLUE EXTENSION.

ACCEPTABLE PRODUCT: "VENMAR JAZZ" MODEL: FUSION

2.0 HVAC PRODUCTS CONT'D:

2.5 AIR BALANCING:

FOLLOW START-UP PROCEDURES AS RECOMMENDED BY CONTRACT ADMINISTRATOR, UNLESS OTHERWISE SPECIFIED. CONTRACTOR TO PROVIDE ABILITY FOR CONTRACT ADMINISTRATOR TO ADJUST OCCUPANCY SCHEDULE, SINCE HOURS OF WORK VARY FROM DAY-TO-DAY. INSTALL SHEAVES IF REQUIRED TO ACHIEVE FINAL AIR BALANCE.

BALANCE FOLLOWING SYSTEM: ALL NEW SUPPLY AND RETURN AIR GRILLES.

QUALIFICATIONS: PERSONNEL PERFORMING AIR BALANCING TO BE CURRENT MEMBER IN GOOD STANDING

QUALITY ASSURANCE: PERFORM AIR BALANCE UNDER DIRECTION OF SUPERVISOR QUALIFIED BY AABC.

REFERENCE STANDARDS: DO TAB OF COMPLETE MECHANICAL SYSTEMS OVER ENTIRE OPERATING RANGE IN ACCORDANCE WITH MOST STRINGENT CONDITIONS OF SELECT STANDARD: -AABC (ASSOCIATED AIR BALANCE COUNCIL)

-SMACNA (SHEET METAL & AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION)

ACCURACY: DO TAB TO WITHIN +/-5% OF DESIGN VALUES.

INSTRUMENT CALIBRATION: TO BE IN ACCORDANCE WITH TAB REF. STANDARD, BUT WITHIN 3 MONTHS OF COMMENCEMENT.

REPORT: FORMAT TO BE IN ACCORDANCE WITH TAB SCHEMATICS SHOWN AND RESULTS OF TAB. SUBMIT ONE COPY OF DRAFT TAB REPORT FOR VERIFICATION AND APPROVAL OF CONTRACT ADMINISTRATOR. SUBMIT THREE FINAL COPIES WITH REVIEW COMMENTS INCORPORATED.

AIR MOVING SYSTEMS:

MEASUREMENTS AS REQUIRED BY REFERENCED STANDARDS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING MEASUREMENTS:

- STATIC PRESSURE

BHP AMPERAGE

3.0 PLUMBING PRODUCTS: 3.1 PIPING:

DOMESTIC WATER - COPPER TYPE "K" DRAINAGE - DRAINAGE PIPING SHALL BE PVC-DWV.

3.2 PIPING INSULATION:

PRE-FORMED MINERAL FIBER PIPE INSULATION WITH CANVAS JACKET. THICKNESS: UP TO 50mm(2") NPS IS 25mm(1") THICK, 63mm(2 1/2") TO 100mm(4") NPS IS 38mm(1 1/2") THICK.

NPS 2" AND UNDER, SOLDERED - 600 LB. BRONZE BODY, CHROME PLATED BRASS BALL, TEFLON SEAT, STEEL LEVER HANDLE WITH SOLDERED CONNECTIONS.

ACCEPTABLE PRODUCT: "TOYO" FIG. 5049A, GRINNEL, CRANE OR APPROVED EQUAL.

NPS 2" AND UNDER, SCREWED - 600 LB. BRONZE BODY, CHROME PLATED BRASS BALL, TEFLON SEAT, AND STEEL LEVER HANDLE.

APEGIN

Certificate of Authorization

KGS Group

No. 245

NO. REVISIONS

ACCEPTABLE PRODUCT: "TOYO" FIG. 5044A, GRINNEL, CRANE OR APPROVED EQUAL.

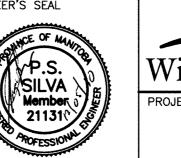
3.4 P-1 SINGLE SINK: REFER TO INTERIOR DESIGN SPECIFICATIONS.

3.5 P-2 TRIPLE SINK:
REFER TO INTERIOR DESIGN SPECIFICATIONS.

KGS ENGINEER'S SEAL ELEV. GROUP CONSULTING CHECKED TJC DRAWN APPROVED TJC RELEASED FOR HOR. SCALE: AS SHOWN RE-ISSUED FOR TENDER 12/05/10 CONSTRUCTION: CONSULTANT DRAWING NO. VERTICAL: 12/04/23 PSS 0 ISSUED FOR TENDER

DATE

DATE BY DATE



Winnipeg PROJECT TITLE

MECHANICAL SPECIFICATIONS

THE CITY OF WINNIPEG PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT

KITCHEN UPGRADES AND RENOVATIONS FOR FORT ROUGE LEISURE CENTRE - 625 OSBORNE STREET

CITY DRAWING NUMBER

COMPUTER FILE NAME

001

12-2326-001_M05