MECHANICAL ABBREVIATION LIST <u>DESCRIPTION</u> <u>ABBREVIATION</u> <u>DESCRIPTION</u> COMPRESSED AIR FULL LOAD AMPS PACKAGED AIR CONDITIONING UNIT COMPRESSED AIR (SPECIFIC PSIG) FLR FLOOR PBD PARALLEL BLADE DAMPER FLOW METER AUTOMATIC AIR VENT PUMPED CONDENSATE ACC AIR COOLED CONDENSER FLOW MEASURING STATION PROCESS COOLING WATER PCW ACCU AIR COOLED CONDENSING UNIT FLAT ON BOTTOM PROCESS COOLING WATER RETURN ACCESS DOOR FLAT ON TOP PROCESS COOLING WATER SUPPLY PRESSURE DROP (FEET OF WATER) AREA DRAIN FEET PER MINUTE AIR EXTRACTOR FIRE PUMP PERIMETER HEAT ABOVE FINISHED FLOOR FPTU FAN POWERED (AIR) TERMINAL UNIT PERIMETER HEAT RETURN AIR HANDLING UNIT PERIMETER HEAT SUPPLY FLOOR SINK FOOD SERVICE EQUIPMENT CONTRACTOR ALTERNATE PARTS PER MILLION AMPERE AIR PRESSURE DROP FINNED TUBE RADIATION PRESS PRESSURE FACE VELOCITY PRESSURE REDUCING VALVE AMERICAN SOCIETY OF HEATING, REFRIGERATION ASHRAE PUMPED SANITARY AND AIR-CONDITIONING ENGINEERS NATURAL GAS PUMPED STORM ASR AUTOMATIC SPRINKLER RISER GAUGE POUNDS PER SQUARE INCH ATD AIR TRANSFER DUCT GALLON PSIA POUNDS PER SQUARE INCH - ABSOLUTE GRAVITY RELIEF HOOD AUX AUXILIARY POUNDS PER SQUARE INCH - GAUGE GALLONS PER HOUR ACID VENT ACID VENT THROUGH ROOF GALLONS PER MINUTE RELOCATED GREASE SANITARY WASTE RETURN GRILLE OR REGISTER ACID WASTE RETURN AIR BUILDING AUTOMATION SYSTEM **HYDROGEN** RETURN AIR TEMPERATURE BLOWER COIL UNIT HOSE BIBB RAIN CONDUCTOR BACKDRAFT DAMPER HEATING COIL RADIANT CEILING PANEL BELOW FINISHED FLOOR HOT DECK ROOF DRAIN HIGH EFFICIENCY PARTICULATE ARRESTANCE REQUIRED BACKFLOW PREVENTER BRAKE HORSEPOWER ROOF EXHAUST FAN HIGH LIMIT BOTTOM OF DUCT HAND/OFF/AUTO RETURN FAN RELATIVE HUMIDITY BOTTOM OF PIPE HEAT PUMP REFRIGERANT LIQUID BRITISH THERMAL UNIT HORSEPOWER BTUH BRITISH THERMAL UNIT PER HOUR HPCW HIGH PRESSURE DOMESTIC COLD WATER RELIEF AIR BEVERAGE CONDUIT HIGH PRESSURE DOMESTIC HOT WATER ROR REVERSE OSMOSIS RETURN ROS BACKWATER VALVE HIGH PRESSURE DOMESTIC HOT WATER RETURN REVERSE OSMOSIS SUPPLY HEAT PUMP LOOP REVOLUTIONS PER MINUTE REDUCED PRESSURE BACKFLOW PREVENTION DETER COMMON HEAT PUMP LOOP RETURN CAPACITY HEAT PUMP LOOP SUPPLY REDUCED PRESSURE BACKFLOW PREVENTION ZONE CONSTANT AIR VOLUME REFRIGERANT SUCTION CATCH BASIN ROOFTOP UNIT COOLING COIL HEATING VENTILATING COLD DECK HEATING, VENTILATING, AIR CONDITIONING SUPPLY AIR DIFFUSER OR GRILLE CONDENSATE DRAIN HOT WATER HEATING SOUND ATTENUATOR CONTRACTOR FURNISHED, CONTRACTOR INSTALLED HOT WATER HEATING RETURN SUPPLY AIR CUBIC FEET PER HOUR HOT WATER HEATING SUPPLY SANITARY WASTE CUBIC FEET PER MINUTE DOMESTIC HOT WATER SUPPLY AIR TEMPERATURE DOMESTIC HOT WATER (SPECIFIC TEMP \*F) SECTION SHORT CIRCUIT CURRENT RATING CHILLED WATER DOMESTIC HOT WATER RETURN CHILLED WATER RETURN DOMESTIC HOT WATER RETURN (SPECIFIC TEMP \*F) SUPPLY FAN CHWS CHILLED WATER SUPPLY HEAT EXCHANGER SHOWER SNOW MELT RETURN CONDENSATE CONDENSATE (SPECIFIC PSIG) INDOOR AIR QUALITY SNOW MELT SUPPLY INSIDE DIAMETER STATIC PRESSURE CO2 CONT SPECIFICATION CARBON DIOXIDE INVERT ELEVATION CONTINUATION OR CONTINUED INTAKE HOOD SPRINKLER CONTR CONTRACTOR INCHES SQUARE FOOT/SQUARE FEET CONV CONVECTOR INFRARED HEATER START/STOP SERVICE SINK COEFFICIENT OF PERFORMANCE INDIRECT WASTE CIRCULATING PUMP STORM CONDENSATE RETURN UNIT JANITOR'S CLOSET STANDARD CLINICAL SERVICE SINK JOCKEY PUMP STACK COOLING TOWER STEAM CABINET UNIT HEATER THOUSAND AMP STEAM (SPECIFIC PSIG) DOMESTIC COLD WATER KILOWATT SUMMER WINTER DOMESTIC COLD WATER - FILTERED KILOWATT-HOUR SWITCH KWH CONDENSER WATER RETURN LAT LEAVING AIR TEMPERATURE TRANSFER GRILLE CONDENSER WATER SUPPLY LABORATORY TEMPERATURE CONTROL DRIP AND TRAP LAVATORY TEMPERING COIL TEMPERATURE CONTROL PANEL DISCHARGE AIR POUNDS DISCHARGE AIR TEMPERATURE LEAVING DRY BULB TRENCH DRAIN DRY BULB LOW LIMIT TEMPERATURE DIRECT DIGITAL CONTROL LOW PRESSURE CONDENSATE TEMPORARY LOW PRESSURE STEAM TERMINAL HEATING DRAINAGE FIXTURE UNITS LOCKED ROTOR AMPS TOTAL HEAT ABSORBED TERMINAL HEATING RETURN LWB LEAVING WET BULB DIAMETER DEIONIZED RETURN LEAVING WATER TEMPERATURE TOTAL HEAT REJECTED DEIONIZED SUPPLY TERMINAL HEATING SUPPLY MIXED AIR DAMPER DAY/NIGHT MIXED AIR TEMPERATURE TIMER SWITCH MAKE-UP AIR UNIT TEPID WATER DOWNSPOUT NOZZLE TOTAL STATIC PRESSURE MAXIMUM THOUSAND BRITISH THERMAL UNITS PER HOUR DUCT SILENCER (AIR) TERMINAL UNIT MEDICAL COMPRESSED AIR TURNING VANES DRAIN TILE DRAIN TILE CONNECTION MINIMUM CIRCUIT AMPACITY TEMPERED WATER DOMESTIC WATER HEATER MOTOR CONTROL CENTER TYPICAL MECH MECHANICAL MEZZANINE UNIT HEATER MANUFACTURER UNDERWRITER'S LABORATORY EXHAUST GRILLE OR REGISTER MANHOLE UNLESS OTHERWISE NOTED 1/1000th INCH EXHAUST AIR UNIT VENTILATOR MINIMUM ENTERING AIR TEMPERATURE MISCELLANEOUS MILLION BRITISH THERMAL UNITS PER HOUR EXPANSION COMPENSATOR VENT ELECTRONICALLY COMMUTATED MOTOR MAXIMUM OVERCURRENT PROTECTION ELECTRIC CABINET UNIT HEATER MOTOR STARTER VACUUM ENTERING DRY BULB MOUNTED VARIABLE AIR VOLUME ENERGY EFFICIENCY RATIO MOTOR VACUUM BREAKER VOLUME DAMPER (MANUALLY ADJUSTABLE) EMERGENCY EYE WASH / SHOWER MANUAL AIR VENT EMERGENCY EYE WASH MEDICAL VACUUM VOLUME EXHAUST FAN VARIABLE FREQUENCY CONTROLLER NITROGEN VENT THROUGH ROOF NITROUS OXIDE ELECTRIC HEATING COIL VENTURI TERMINAL UNIT NOISE CRITERIA VERTICAL UNIT VENTILATOR EXPANSION JOINT ELEVATION NORMALLY CLOSED NORMALLY CLOSED TIMED CLOSED ELECTRICAL NCTC ENERGY MANAGEMENT SYSTEM WASTE AND VENT NCTO NORMALLY CLOSED TIMED OPEN ENERGY RECOVERY LOOP NFPA NATIONAL FIRE PROTECTION ASSOCIATION WASTE ANESTHETIC GAS DISPOSAL WAGD ENERGY RECOVERY LOOP RETURN NOTC NORMALLY OPEN TIMED CLOSED WET BULB ENERGY RECOVERY LOOP SUPPLY NORMALLY OPEN TIMED OPEN WATER CLOSET WATER COLUMN ENERGY RECOVERY UNIT NOT IN CONTRACT EMERGENCY SHOWER WATER GAUGE NORMALLY OPEN EXTERNAL STATIC PRESSURE NOM NOMINAL WALL HYDRANT NON POTABLE COLD WATER WASHING MACHINE SUPPLY AND DRAIN BOX ELECTRIC UNIT HEATER NPCW NON POTABLE HOT WATER ENTERING WET BULB WATER PRESSURE DROP ELECTRIC WATER COOLER WEIGHT ENTERING WATER TEMPERATURE OXYGEN OUTSIDE AIR TRANSFORMER OUTSIDE AIR TEMPERATURE FIRE PROTECTION ZONE VALVE BOX OUTLET BOX DEGREES FAHRENHEIT OPPOSED BLADE DAMPER FACE AND BYPASS ON CENTER/CENTER TO CENTER FLOAT AND THERMOSTATIC OUTSIDE DIAMETER FACE AREA OPEN ENDED DUCT OWNER FURNISHED. CONTRACTOR INSTALLED FAN COIL UNIT FLOOR DRAIN OWNER FURNISHED, OWNER INSTALLED FUNNEL FLOOR DRAIN OVERLOAD FUEL GAS RETURN OVERFLOW RAIN CONDUCTOR FUEL GAS SUPPLY OVERFLOW ROOF DRAIN FIRE HYDRANT OUTSIDE SCREW AND YOKE FIRE HOSE CABINET OUTLET VELOCITY OPERATOR WORKSTATION FIRE HOSE RACK FIRE HOSE VALVE TEMPERATURE CONTROL - PARTIAL SYMBOLS LIST <u>DESCRIPTION</u> OCCUPANCY SENSOR CARBON DIOXIDE SENSOR CARBON MONOXIDE SENSOR PRESSURE TRANSMITTER STATIC PRESSURE SENSOR OR PROBE DIFFERENTIAL PRESSURE TRANSMITTER FLOW METER VALVE - 2 WAY CONTROL VALVE GUARD FOR STAT OR SENSOR VALVE - 3 WAY CONTROL VALVE

THERMOSTAT OR TEMPERATURE SENSOR

(AS DEFINED ON TC DRAWINGS)

HUMIDISTAT OR HUMIDITY SENSOR

NOTE: LIST OF ADDITIONAL SYMBOLS & ABBREVIATIONS ASSOCIATED WITH TEMPERATURE CONTROLS ARE IDENTIFIED ON TC DRAWINGS.

(AS DEFINED ON TC DRAWINGS)

	<u>BOLS</u>	DU
<u>SYMBOL</u> Дач	<u>DESCRIPTION</u>	<u>SYI</u>
	— AIR VENT — AUTOMATIC — AIR VENT — MANUAL	, <u>"</u>
BFP—	— BACKFLOW PREVENTER	\ <b>_</b>
	— CATCH BASIN	<del></del>
	— CIRCULATING PUMP	<u> </u>
——————————————————————————————————————	CLEAN OUT - IN FLOOR  CLEAN OUT - FLANGE	_
——————————————————————————————————————	— DIRECTION OF FLOW	
	— DIRECTION OF PITCH — DOWN	
	FINNED TUBE RADIATION	
ď,	FIRE PROTECTION — SIAMESE CONNECTION — FREE STANDING	
	FIRE PROTECTION — SIAMESE CONNECTION — WALL MOUNTED  — FIRE PROTECTION — SPRINKLER HEAD, CONCEALED	
	— FIRE PROTECTION — SPRINKLER HEAD, PENDANT	
<del></del> •	— FIRE PROTECTION - SPRINKLER HEAD, UPRIGHT	
	FIRE PROTECTION - SPRINKLER HEAD, SIDEWALL	
<b></b> □ <b>□</b>	FLOOR DRAIN	
<b>∀</b>	FLOOR DRAIN — ELEVATION FLOOR DRAIN — FUNNEL	
₹	FLOOR DRAIN — FUNNEL, ELEVATION	
<b>Y</b>	FLOW MEASURING DEVICE (FOR TEST AND BALANCING)	
<u>'                                 </u>	FLOW SWITCH	
HB	- FLOW METER	
MH	HOSE BIBB  MANHOLE	
<b>─</b>	OPEN SITE DRAIN	
—×	— PIPE – ANCHOR	
	PIPE - CAP OR PLUG	
	PIPE — ELBOW DOWN	
<b>─</b>	PIPE — ELBOW UP  — PIPE — EXPANSION JOINT OR COMPENSATOR	5
——————————————————————————————————————	PIPE - EXPANSION JOINT OR COMPENSATOR  PIPE - FLANGE	<b></b>
<del></del>	— PIPE - HOSE AND BRAID FLEXIBLE CONNECTION	•
—— <del>   </del>	PIPE - RUBBER FLEXIBLE CONNECTION	
	PIPE - GUIDE PIPE - TEE DOWN	
		5
——⊮—	— PIPE – UNION	5
© <u>∓P/T</u>		
<u></u>	— PRESSURE GAUGE AND COCK	7
<b>─</b>	- REDUCER - CONCENTRIC	5
<del></del>	REDUCER - ECCENTRIC	-
——⊚ _	ROOF/OVERFLOW DRAIN	
	STEAM TRAP — FLOAT AND THERMOSTATIC  STEAM TRAP — BUCKET	
	— STRAINER	
	STRAINER WITH VALVE AND BLOW-OFF	5
<u></u>	— THERMOMETER	5
——∞	TRAP	5
<b>≱</b>	— VALVE – ANGLE	·
—б—	- VALVE - BALL	
—— <u>/</u> —	VALVE - BUTTERFLY	5
—— <u></u>	VALVE - BALANCE (i.e. BALANCE VALVE TO 0.5 GPM)	
$\overline{\boxtimes}_{\overline{0.5}}$	— VALVE — COMBINATION BALANCE & FLOW MEASURING (i.e. BALANCE VALVE TO 0.5 GPM)	=
<b>──</b>	- VALVE - CHECK	
— <b>,</b> %—	VALVE - SPRING CHECK	
—————————————————————————————————————	— VALVE – GAS (MANUAL) — VALVE – GLOBE	5
——₩—	— VALVE — GLOBE — VALVE — ISOLATION	<b>&gt;</b>
—— <del> </del>	- VALVE - NEEDLE	
<u> </u>	VALVE - OS&Y	
—ф 	VALVE - PLUG	5.4
——————————————————————————————————————	VALVE - PRESSURE REGULATING	<u>D(</u> <u>S)</u>
——————————————————————————————————————	VALVE - PRESSURE REDUCING	<u>}</u>
<u>}</u>	VALVE - PRESSURE RELIEF	F
\$		ł
	VENT THROUGH ROOF	F
——— <del> </del>		<u>}</u>
	VENT	F
WM	WATER METER	1
GM	GAS METER	۲
DOUBLEIN	E PIPING SYMBOLS	<b>.</b>
SYMBOL	<u>DESCRIPTION</u>	4
	FLANGE	ı
	FLEX CONNECTION	1
	STRAINER - BASKET	8
	STRAINER — Y TYPE	_ إ
		ر ا
<mark>────</mark> ⋛ ───────	VALVE - 2 WAY CONTROL	۶
	3 VALVE — 3 WAY CONTROL	}
	3 VALVE — BUTTERFLY	ţ
IV III		
	NAIVF - CHECK	

VALVE – CHECK

VALVE – DETECTOR CHECK

VALVE — OS&Y HORIZONTAL STEM

VALVE - OS&Y VERTICAL STEM

DUCTWORK S	YMBOLS _
SYMBOL	<u>DESCRIPTION</u> AIR TERMINAL UNIT
<u>TU-101</u>	AIR TERMINAL UNIT WITH HEATING COIL
	VENTURI AIR TERMINAL UNIT
/ <u>VIU-101</u> /	VENTURI AIR TERMINAL UNIT WITH HEATING COIL
<u>VIIU-101</u> ✓	
	DAMPER - HORIZONTAL FIRE (EXISTING, NEW)
	DAMPER — HORIZONTAL FIRE / SMOKE (EXISTING, NEW)  DAMPER — SMOKE (EXISTING, NEW)
^_	DAMPER - VERTICAL FIRE (EXISTING, NEW)
_&	DAMPER - VERTICAL FIRE / SMOKE (EXISTING, NEW)
BDD 	DAMPER - BACK DRAFT
M T	DAMPER - MOTORIZED
	DAMPER - VOLUME (MANUALLY ADJUSTABLE)
ìo	DIFFUSER - BLANK OFF
<del></del>	DIFFUSER - LINEAR SLOT
	DIFFUSER - SQUARE OR RECTANGULAR
	DUCT CROSS SECTION - SUPPLY
	DUCT CROSS SECTION - RETURN
	DUCT CROSS SECTION - EXHAUST
	DUCT - FLEXIBLE CONNECTION
<del></del>	DUCT - FLEXIBLE DUCT
<del>\ \ \</del>	DUCT TAKE-OFF - ROUND CONICAL
<del>\</del>	DUCT TAKE-OFF - RECTANGULAR WITH SHOE TAP
	ELBOW - RECTANGULAR WITH TURNING VANES
	ELBOW - RECTANGULAR/ ROUND SMOOTH RADIUS
$\leftarrow$	ELBOW DOWN - RECTANGULAR
$\leftarrow$	ELBOW DOWN — ROUND
$\smile$	ELBOW UP - RECTANGULAR
<b>├</b>	ELBOW UP - ROUND
	FAN – AXIAL
لره)	FAN - CENTRIFUGAL (ELEVATION)
VFC XX-#	VARIABLE FREQUENCY CONTROLLER SERVING EQUIPMENT XX-
<b>├</b>	HEATING COIL
<del>∫                                    </del>	INCLINED DROP IN DIRECTION OF AIRFLOW
<del>∫                                    </del>	INCLINED RISE IN DIRECTION OF AIRFLOW
	INTAKE OR RELIEF HOOD
\\	REGISTER - RETURN OR EXHAUST
/	REGISTER - RETURN WITH BOOT
	REGISTER - TRANSFER GRILLE
$(\bigcirc)$	ROOF EXHAUST FAN
$\leftarrow$	TRANSITION - CONCENTRIC
<b>├</b> - <b>└</b> -	TRANSITION - ECCENTRIC
<b>Ū</b> →	UNIT HEATER — HORIZONTAL THROW
	UNIT HEATER — VERTICAL THROW
DOUBLE LINE SYMBOL	DUCTWORK SYMBOLS  DESCRIPTION
	DUCT TAKE-OFF - RECTANGULAR WITH SHOE TAP
<u> </u>	DUCT TAKE-OFF - ROUND CONICAL
	DOOT TAKE OF TOOME COMICAL
	ELBOW - RECTANGULAR WITH TURNING VANES
<b>├</b>	
₹ <u></u> £;//	ELBOW - RECTANGULAR SHORT RADIUS WITH SPLITTER VANES

ELBOW - RECTANGULAR SHORT RADIUS WITH SPLITTER VANES ELBOW - ROUND ELBOW - RECTANGULAR SMOOTH RADIUS ELBOW DOWN - RECTANGULAR ELBOW DOWN — ROUND

ELBOW UP - RECTANGULAR ELBOW UP - ROUND HEATING COIL

INCLINED DROP IN DIRECTION OF AIRFLOW INCLINED RISE IN DIRECTION OF AIRFLOW

TRANSITION - CONCENTRIC TRANSITION - ECCENTRIC

> NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

## MECHANICAL DRAWING INDEX

SHEET NO. SHEET TITLE MECHANICAL STANDARDS AND DRAWING INDEX M0.1 M0.2 FIRST FLOOR MECHANICAL COMPOSITE PLAN MECHANICAL SPECIFICATIONS

STANDARD METHODS OF NOTATION

10" DIAMETER NECK SIZE

SUPPLY DIFFUSER WITH SCHEDULE TAG "1",

350-4 350 CFM TYPICAL FOR 4 RETURN REGISTER WITH SCHEDULE TAG "1", 22"x 22" NECK SIZE 22x22 640 CFM TYPICAL FOR 2 640-2 EXHAUST REGISTER E DESIGNATION SIMILAR. AIR TERMINAL UNIT WITH HEATING COIL NO. 101 WITH SERVICE CLEARANCE SHOWN VENTURI AIR TERMINAL WITH HEATING COIL NO. 101 WITH SERVICE CLEARANCE SHOWN

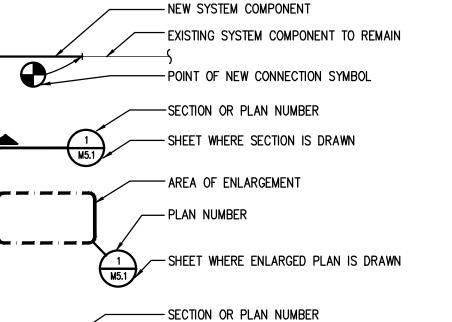
10ø

PLUMBING FIXTURE UNIT IDENTIFICATION TAG WATER CLOSET TYPE "1" TYPICAL FOR 2

DUCT SIZE NOTATION ALL SIZES IN INCHES 22x10 18x14ø -OVAL DUCT

- RECTANGULAR DUCT CONSTRUCTION KEY NOTE (NUMBER) OR DEMOLITION KEY NOTE (LETTER) EQUIPMENT DESIGNATION, (i.e. EXHAUST FAN NUMBER 1)

PIPING RISER DESIGNATION (i.e. HOT WATER RISER NUMBER 1)



SECTION OR ENLARGED PLAN \ M5.1 , SCALE: 1/8" - 1' - 0" - SHEET WHERE SECTION IS CUT OR

ENLARGED PLAN IS REFERENCED

HEAVY LINE WEIGHT INDICATES NEW WORK LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT OR REFERENCED INFORMATION GRAY LINE INDICATES BACKGROUND INFORMATION DASHED LINES INDICATE PIPING \_\_\_\_\_

ROUTED BELOW SLAB OR GRADE HATCH MARKS INDICATE EQUIPMENT OR MATERIALS TO BE DISCONNECTED AND REMOVED.

ctio **C** DATE 03/24/2025

> ISSUE CONSTRUCTION DOCUMENTS SHEET No.