

MECHANICAL LEGEND

MECHANICAL ABBREVIATIONS

DUCTWORK SYMBOLS

SYMBOL	DESCRIPTION
	HUMIDISTAT
	THERMOSTAT
	CARBON DIOXIDE SENSOR
	AIR FLOW
	TRANSFER AIR FLOW (INDICATE CFM)
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	FIRE DAMPER
	VOLUME DAMPER
	SMOKE DETECTOR
	FLEXIBLE CONNECTION
	DUCTWORK WITH SOUND LINING
	HORIZONTAL ACCESS DOOR
	VERTICAL ACCESS DOOR
	ELBOW WITH DOUBLE THICKNESS TURNING VANES
	RECTANGULAR BRANCH TAKE-OFF
	DUCT TRANSITION
	DUCTWORK CHANGE IN ELEVATION (UP OR DOWN)
	SUPPLY/OUTSIDE AIR DUCT RISER
	RETURN AIR DUCT RISER
	EXHAUST/RELIEF AIR DUCT RISER
	AIR DEVICE IDENTIFIER
	POINT OF CONNECTION TO EXISTING
	POINT OF DISCONNECTION
	DEMO LINE TYPE
	EXISTING LINE TYPE
	NEW WORK LINE TYPE

EQUIPMENT DESIGNATIONS

SYMBOL	DESCRIPTION
B-X	BOILER DESIGNATION
ACCU-X	AIR COOLED CHILLER UNIT DESIGNATION
FCU-X	FAN COIL UNIT DESIGNATION
EF-X	EXHAUST FAN DESIGNATION
UH-X	UNIT HEATER DESIGNATION
P-X	PUMP DESIGNATION
CF-X	CHEMICAL FEED TANK DESIGNATION
BP-X	BOILER PUMP DESIGNATION

PIPING SYMBOLS

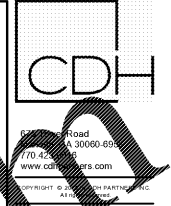
SYMBOL	DESCRIPTION
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
CD	CONDENSATE DRAIN
HR	HEATING WATER RETURN
HS	HEATING WATER SUPPLY

PIPING COMPONENTS AND SPECIALTIES

SYMBOL	DESCRIPTION
	PIPE DROP
	PIPE RISE
	PIPE CAP
	BRANCH TAKE OFF
	PIPE DROP TEE
	PIPE RISE TEE
	SHUTOFF VALVE (REFER TO SPECS FOR TYPE)
	AUTOMATIC CONTROL VALVE (TWO-WAY)
	AUTOMATIC CONTROL VALVE (THREE-WAY)
	BUTTERFLY VALVE
	BALANCING VALVE (WITH MEMORY STOP)
	AUTOFLOW CONTROL VALVE
	CHECK VALVE
	STRAINER
	STRAINER WITH BLOWDOWN VALVE
	PRESSURE REDUCING VALVE
	BALL VALVE
	SHUTOFF VALVE COCK
	GLOBE VALVE
	UNION
	PIPE FLANGE
	ECCENTRIC REDUCER (FLAT ON BOTTOM)
	ECCENTRIC REDUCER (FLAT ON TOP)
	CONCENTRIC REDUCER
	FLOWMETER FITTING
	HOSE END DRAIN VALVE
	PRESSURE SENSOR
	TEMPERATURE SENSOR
	PRESSURE GAUGE WITH BALL VALVE
	THERMOMETER
	PRESSURE/TEMPERATURE PLUG
	FLOW ARROW

NOTE: THIS IS A STANDARD ABBREVIATION LIST. SOME ABBREVIATIONS MAY NOT APPEAR ON THE ACCOMPANYING DRAWINGS.

A	COMPRESSED AIR	HTHS	HIGH TEMPERATURE HEATING WATER SUPPLY	TYP	TYPICAL
AAV	AUTOMATIC AIR VENT	HW	HOT WATER	UCD	UNDERCUT DOOR
ACV	AUTOMATIC CONTROL VALVE	HWR	HOT WATER RECIRCULATION	UL	UNDERWRITERS LABORATORIES
AD	ACCESS DOOR, AREA DRAIN	HZ	HERTZ	V	VACUUM, VOLTS
AF	ANTIFREEZE	ICW	INDUSTRIAL COLD WATER	VD	VOLUME DAMPER
AFF	ABOVE FINISHED FLOOR	IHW	INDUSTRIAL HOT WATER	VFD	VARIABLE FREQUENCY DRIVE
AR	ARGON GAS	IHR	INDUSTRIAL HOT WATER RECIRCULATION	VPD	VACUUM PUMP DISCHARGE
ATC	AUTOMATIC TEMPERATURE CONTROL	IN	INCH, INCHES	VSD	VARIABLE SPEED DRIVE
BAS	BUILDING AUTOMATION SYSTEM	INV EL	INVERT ELEVATION	VTR	VENT THROUGH ROOF
BBD	BOILER BLOWDOWN	KW	KILOWATTS	W	WATTS, WATT
BCWR	BEARING COOLING WATER RETURN	L	LONG, LENGTH	WB	WET BULB
BCWS	BEARING COOLING WATER SUPPLY	LA	LABORATORY AIR	WC	WATER COLUMN
BDD	BACKDRAFT DAMPER	LAT	LEAVING AIR TEMPERATURE	WG	WATER GAUGE
BFP	BACKFLOW PREVENTER	LBS	POUNDS	WH	WALL HYDRANT
BHP	BRAKE HORSEPOWER	LBS/HR	POUNDS PER HOUR	WWM	WELDED WIRE FABRIC
BMS	BUILDING MANAGEMENT SYSTEM	LN	LIQUID NITROGEN		
BO	BLOW OFF	LP	LIQUID PROPANE		
BTU	BRITISH THERMAL UNIT	LPG	LIQUID PETROLEUM GAS		
BTUH	BRITISH THERMAL UNIT PER HOUR	LPR	LOW PRESSURE STEAM RETURN		
°C	DEGREE(S) CELSIUS	LPS	LOW PRESSURE STEAM SUPPLY		
CA	CONTROL AIR	LV	LABORATORY VENT, LABORATORY VACUUM		
CBD	CONTINUOUS BLOWDOWN	LW	LABORATORY WASTE		
CC	CAMPUS CONDENSATE	LWT	LEAVING WATER TEMPERATURE		
CCMS	CENTRAL CONTROL AND MONITORING SYSTEM	M	MEDICAL AIR		
CD	CONDENSATE DRAIN	M3	MANUAL AIR VENT		
CF	CHEMICAL FEED	M3	THOUSAND BRITISH THERMAL UNITS PER HOUR		
CFM	CUBIC FEET PER MINUTE	MCC	MOTOR CONTROL CENTER		
CHR	CHILLED WATER RETURN	MO	MOTOR ON PIPING		
CHS	CHILLED WATER SUPPLY	MOD	MOTOR OPERATED DAMPER		
CO	CLEANOUT	MPR	MEDIUM PRESSURE STEAM RETURN		
CO2	CARBON DIOXIDE	MPS	MEDIUM PRESSURE STEAM SUPPLY		
CS	CLEAN STEAM	MV	MEDICAL VACUUM		
CW	COLD WATER, CITY WATER	N	NITROGEN		
CWR	CONDENSER WATER RETURN	NA	NOT APPLICABLE		
CWS	CONDENSER WATER SUPPLY	NC	NOISE CRITERIA, NORMALLY CLOSED		
D	DEEP, DRAIN WATER	NFFA	NATIONAL FIRE PROTECTION ASSOCIATION		
DB	DECIBEL, DRY BULB	NO	NORMALLY OPEN, NITROUS OXIDE		
DDC	DIRECT DIGITAL CONTROL	NPSH	NET POSITIVE SUCTION HEAD		
DHR	DISTRIBUTION HEATING WATER RETURN	O	OXYGEN		
DHS	DISTRIBUTION HEATING WATER SUPPLY	OA	OUTSIDE AIR		
DIR	DEIONIZED WATER RETURN	OD	OVERFLOW DRAIN		
DIS	DEIONIZED WATER SUPPLY	OED	OPEN ENDED DUCT		
DL	DOOR LOUVER	OS&Y	OUTSIDE STEM AND YOKE		
DN	DOWN	P&ID	PROCESS AND INSTRUMENTATION DIAGRAM		
DP	DRY SPRINKLER PIPE	PA	PLANT AIR		
DR	DRIVE TEMPERATURE RETURN	PC	PUMPED CONDENSATE		
DT	DUAL TEMPERATURE SUPPLY	PCR	PUMPED CONDENSATE RECIRCULATION		
DW	DISTILLED WATER	PCHS	PRIMARY CHILLED WATER RETURN		
EA	EXHAUST AIR	PCHS	PRIMARY CHILLED WATER SUPPLY		
EAT	ENTERING AIR TEMPERATURE	PCWR	PROCESS COOLING WATER RETURN		
EJ	EXPANSION JOINT	PCWS	PROCESS COOLING WATER SUPPLY		
EMS	ENERGY MANAGEMENT SYSTEM	PD	PRESSURE DROP, PUMP DISCHARGE		
ESP	EXTERNAL STATIC PRESSURE	PGR	PROCESS GLYCOL WATER RETURN		
ETC	ETCETERA	PS	PROCESS GLYCOL WATER SUPPLY		
EVAC	GAS EVACUATION	PH	PHASE		
EWT	ENTERING WATER TEMPERATURE	PHR	PRIMARY HEATING RETURN		
EX	EXISTING	PHS	PRIMARY HEATING SUPPLY		
°F	DEGREE(S) FAHRENHEIT	PIV	POST INDICATING VALVE		
F	FIRE LINE	PPH	POUNDS PER HOUR		
FC	FLEXIBLE CONNECTION	PRV	PRESSURE REDUCING VALVE, PRESSURE REGULATING VALVE		
FD	FIRE DAMPER, FOUNDATION DRAIN	PSI	POUNDS PER SQUARE INCH		
FDV	FIRE DEPARTMENT VALVE	PSIG	POUNDS PER SQUARE INCH GAUGE		
FF	FINISHED FLOOR	RA	RETURN AIR, RELIEF AIR		
FFE	FINISHED FLOOR ELEVATION	RD	REFRIGERANT DISCHARGE		
FIN/FT	FINS PER FEET	RH	RELATIVE HUMIDITY		
FIN/INCH	FINS PER INCH	RHR	REHEAT WATER RETURN		
FM	FLOWMETER	RHS	REHEAT WATER SUPPLY		
FMF	FLOWMETER FITTING	RL	REFRIGERANT LIQUID		
FOF	FUEL OIL FILL	ROR	REVERSE OSMOSIS WATER RETURN		
FOO	FUEL OIL OVERFLOW	ROS	REVERSE OSMOSIS WATER SUPPLY		
FOR	FUEL OIL RETURN	RPM	REVOLUTIONS PER MINUTE		
FOS	FUEL OIL SUPPLY	RS	REFRIGERANT SUCTION		
FOT	FUEL OIL TRANSFER	RV	RELIEF VENT, REFRIGERANT VENT		
FOV	FUEL OIL VENT	RX	REMOVE EXISTING		
FPM	FEET PER MINUTE	SA	SUPPLY AIR		
FPS	FEET PER SECOND	SAN	SANITARY, SOIL, WASTE		
FS	FLOW SWITCH	SCHR	SECONDARY CHILLED WATER RETURN		
FT	FOOT, FEET	SCHS	SECONDARY CHILLED WATER SUPPLY		
FWR	FEED WATER RETURN	SD	STORM DRAIN, SMOKE DETECTOR		
FWS	FEED WATER SUPPLY	SF	SQUARE FOOT		
G	NATURAL GAS	SHR	SECONDARY HEATING WATER RETURN		
GHR	GLYCOL HEATING RETURN	SHS	SECONDARY HEATING WATER SUPPLY		
GHS	GLYCOL HEATING SUPPLY	SL	SOUND LINING		
GPH	GALLONS PER HOUR	SP	STATIC PRESSURE		
GPM	GALLONS PER MINUTE	SPR	SPRINKLER LINE		
GR	AUTOMOTIVE LUBRICATION PIPING	SS	STAINLESS STEEL		
H	HIGH	SO FT	SQUARE FOOT		
HB	HOSE BIBB	SW	SOFT WATER		
HED	HOSE END DRAIN VALVE	ΔT	TEMPERATURE DIFFERENCE		
HP	HORSEPOWER	TS	TAMPER SWITCH		
HPR	HIGH PRESSURE STEAM RETURN	TSP	TOTAL STATIC PRESSURE		
HPS	HIGH PRESSURE STEAM SUPPLY	TWR	TEMPERED WATER RETURN		
HR	HEATING WATER RETURN	TWS	TEMPERED WATER SUPPLY		
HRR	HEAT RECOVERY RETURN	TW	TREATED WATER		
HRS	HEAT RECOVERY SUPPLY				
HS	HEATING WATER SUPPLY				
HT	HEIGHT				
HTHR	HIGH TEMPERATURE HEATING WATER RETURN				



FULTON COUNTY SCHOOL SYSTEM
RIVER EVES ELEMENTARY SCHOOL - RENOVATION
 8000 EVES ROAD
 ROSWELL, GA 30076

PROJECT NO.	18046.00
50% CD'S	8/07/2018
PERMIT SET	8/29/2018
95% CD'S	11/08/2018
BID SET	2/03/2019



CONTRACT DOCUMENT
 ISSUED FOR
 CONSTRUCTION

SHEET TITLE	SHEET NUMBER
MECHANICAL SYMBOLS AND ABBREVIATIONS	M001

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SHEET NUMBER

M001

Order Plans