STANDA	\RD	HVAC	SYMBO	IS
CHILLED WATER SUP			CHS	
CHILLED WATER SOP				
HEATING WATER SUP				-
HEATING WATER RET				-
DUAL TEMP. WATER				-
DUAL TEMP. WATER			HCHR	- -
CONDENSER WATER :			cs	
CONDENSER WATER I	RETURN			
STEAM (LOW PRESSU	IRE)			
STEAM (PRESSURE II	NDICAT.)		S-30 	-
CONDENSATE RETUR	1		R	-
PUMPED CONDENSAT	E			
WELL WATER SUPPLY	,			
MAKEUP WATER				
PIPE TO BE REMOVE	0			
REFRIGERANT DISCHA	RGE			
refrigerant suction	N			
refrigerant liquid				•
DRAIN			D	•
HEAT PUMP WATER S	SUPPLY			
HEAT PUMP WATER I	RETURN			
PIPE DOWN				
PIPE UP			+ 0	
PIPE SLOPE DIRECTIO)N			•
FLOW				•
PLAN NOTE			1	
SPACE SENSOR WITH	UNIT DESIGNAT	ION, WHITE COVER.	H T_{x-x}	
SPACE SENSOR WITH	UNIT DESIGNAT	ION & QUANITY OF	\bigcirc_{DD-2}	
FLOOR DIFFUSERS. SPACE SENSOR WITH	PRICHED STAIR	ALESS STEEL COVED	(H)(T) ^{SS}	
			•	
SPACE SENSOR WITH	BRUSHED BRAS	SS COVER, #3 FINISH.	(H)(T) ^{BS}	
SPACE SENSOR WITH	BRUSHED ALUM	INUM COVER.	$\Theta \bigcirc^{AL}$	
ALUMINUM DUCT			ALUM	
internally lined di	JCTWORK		ļ	
PRE-INSULATED FLEX	KIBLE DUCT			
FLEXIBLE CONNECTION	4			
BALANCING DAMPER,	ROUND DUCT		J BD	
BALANCING DAMPER,	RECT. DUCT		BD BD	
FIRE DAMPER AND A	CCESS DOOR		FDR	
TEMPERATURE CONTR	OL DAMPER AN	D ACCESS DOOR		
square ceiling diff	USER			
SLOT/LINEAR DIFFUS	ER			
Ceiling return/exh	AUST GRILLE			
DETAIL REFERENCE			DET# SHT#	
SECTION REFERENCE			SEC#	

FIRE PROTEC	CTION SYMBOLS
AUTOMATIC SPRINKLER/ FIRE MAIN DRY STANDPIPE VALVE IN VERTICAL SHUTOFF VALVE CHECK VALVE PITCH PIPE DOWN IN DIRECTION OF ARROW FLOW IN DIRECTION OF ARROW RISER DOWN (ELBOW) RISER UP (ELBOW) RISER OR DROP BRANCH TOP CONNECTION BRANCH BOTTOM CONNECTION PUMPER CONNECTION DOUBLE CHECK VALVE ASSEMBLY DOUBLE CHECK DETECTOR VALVE ASSEMBLY	
EXISTING AUTOMATIC SPRINKLER/ FIRE MAIN	

SPRINKLER LEGEND		
UPRIGHT SPRINKLER HEAD	0	
PENDENT SPRINKLER HEAD	4	
CONCEALED SPRINKLER HEAD	•	
SIDEWALL SPRINKLER HEAD	\triangleright	

POOL	SYSTEM	SYMBOLS
MAIN DRAIN		——— мр ———
POOL SUCTION		PS
POOL RETURN (F	LTERED)	
POOL BACKWASH		PB
BROMINE SUCTION	1	BS
CO2 INJECTION		CO ₂
POLY 'A' SUCTION	١	PAS
ozone suction	•	
COMPRESSED AIR	(SPARGER)	CA
POOL MAKE UP V	WATER	———Рм———
CHEMICAL SAMPL	ING LINE	
POOL HEATER SU	PPLY	PHS
POOL HEATER RE	TURN	
GUTTER DRAIN		GD
ozone off—gas		
OZONE RETURN		OR
POLY 'A' RETURN		
BROMINE RETURN		
DECK DRAIN		
WATER AGITATOR	UNE	WA

OVERFLOW ROOF DRAIN OSD OPEN SITE DRAIN OUTLET VELOCITY PRESSURE DROP PRESSURE GAUGE PHASE (ELECTRICAL) POST INDICATOR VALVE PARTS PER MILLION PPM PRV PRESSURE REGULATING VALVE POUNDS PER SQUARE INCH PSIA PSI ABSOLUTE PSIG PSI GAUGE PVC POLYVINYL CHLORIDE ROOF CONDUCTOR ROOF DRAIN RPM REVOLUTIONS PER MINUTE SILL COCK SCFM STANDARD CUBIC FEET PER MINUTE SQFT SQUARE FOOT SHOWER SHD SHOWER DRAIN SK SINK DEGREES FARENHEIT STATIC PRESSURE SS FLOOR DRAIN SOIL STACK FIRE EXTINGUISHER SSK SERVICE SINK SSTL FIRE EXTINGUISHER CABINET STAINLESS STEEL STM STEAM TCV TEMPERATURE CONTROL VALVE TEMPERATURE DROP TOTAL DYNAMIC HEAD TDR TRENCH DRAIN TRM THERMOMETER UR URINAL GENERAL CONTRACTOR VENT GALVANIZED IRON VA VALVE VACUUM BREAKER GALLONS PER DAY GPD VITRIFIED CLAY PIPE VCP GPM VENT STACK vitrified tile HBD VTR VENT THROUGH ROOF HORSEPOWER WASTE WATER CLOSET HOT WATER RETURN WCO WALL CLEANOUT WATER GAUGE WALL HYDRANT LAV LAVATORY WS WASTE STACK LFD LAB FLOOR DRAIN YARD DRAIN

LAB WASTE

MANHOLE

NO HUB

MC

MSB

MECHANICAL CONTRACTOR

NET POSITIVE SUCTION HEAD

MOP SERVICE BASIN

NORMALLY CLOSED

XVT EXTRA-STRENGTH VITRIFIED TILE

NORMALLY OPEN

STANDARD PLL	JMBING SYMBOLS
DOMESTIC COLD WATER DOMESTIC HOT WATER	
DOMESTIC HOT WATER RETURN	
STORM WATER — SUSPENDED	
STORM WATER — BURIED	
SANITARY WASTE — SUSPENDED	
SANITARY WASTE — BURIED	
CONDENSATE/DRAIN PIPE	D
SANITARY WASTE VENT	
GAS	G
UNIONS/COUPLINGS	
STRAINERS	
BACKFLOW PREVENTER	——————————————————————————————————————
VALVE IN VERTICAL	
THREE-WAY VALVE	——————————————————————————————————————
PRESSURE REDUCING VALVE	
GLOBE VALVE	
SHUTOFF VALVE	——————————————————————————————————————
CHECK VALVE	
SOLENOID VALVE	
PITCH PIPE DOWN IN DIRECTION OF ARROW	
FLOW IN DIRECTION OF ARROW	
RISER DOWN (ELBOW)	
RISER UP (ELBOW)	
RISER OR DROP	
BRANCH TOP CONNECTION	i t
BRANCH BOTTOM CONNECTION	

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Planning

MECHANICAL SHEET INDEX

MECHANICAL

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ENLARGED MECHANICAL AND SHOWER ROOMS — PLUMBING

DIAGRAMS - PLUMBING POOL SYSTEMS PIPING DIAGRAM - PLUMBING

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DETAILS - PLUMBING

FIRE PROTECTION

MAIN LEVEL FLOOR PLAN — FIRE PROTECTION MECHANICAL FLOOR PLAN - FIRE PROTECTION

DIAGRAMS - FIRE PROTECTION

<u>HVAC</u>

APPROVAL

H101 SITE PLAN - HVAC

MAIN LEVEL FLOOR PLAN - HVAC MECHANICAL FLOOR PLAN — HVAC MAIN LEVEL FLOOR PLAN — HVAC PIPING

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MECHANICAL FLOOR PLAN — HVAC PIPING

SECTIONS - HVAC SECTIONS — HVAC

DIAGRAMS - HVAC SCHEDULES - HVAC

DETAILS - HVAC H601 DETAILS - HVAC

PROJECT MECHANICAL **GENERAL NOTES**

1. VERIFY EXISTING CONDITIONS (HPES BUILDING) IN THE FIELD PRIOR TO BIDDING AND BEFORE BEGINNING WORK. 2. REVIEW THE WORK OF OTHER TRADES. COORDINATE AND PLAN WORK WITH THE OTHER TRADES. ADJUST AS A RESULT OF COORDINATION. REVIEW COORDINATED EFFORTS WITH ENGINEER FOR

3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL CEILING

4. STORE EQUIPMENT AND COMPONENTS IN A CLEAN, DRY LOCATION UNTIL READY FOR INSTALLATION. PROTECT FROM WEATHER, THEFT, DIRT, FUMES, WATER, CONSTRUCTION DEBRIS, ETC. AT ALL

DUCTWORK, EQUIPMENT, AND APPURTENANCES. THEY SHALL BE FOLLOWED AS CLOSELY AS

7. LABEL ALL ROOM THERMOSTATS AND/OR SENSOR DEVICES AS TO WHAT THE DEVICE CONTROLS

TIMES. ANY DAMAGED EQUIPMENT OR COMPONENT SHALL BE RESTORED AS NEW OR REPLACED. 5. MECHANICAL DRAWINGS SHOW THE INTENDED ARRANGEMENT AND ROUTING OF ALL PIPING,

ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT.

6. PERFORM ALL WORK IN A SKILLED, PROFESSIONAL, MANNER, MEETING THE ACCEPTANCE OF THE ENGINEER, ARCHITECT AND OWNER.

WITH A PLASTIC ENGRAVED LABEL AFFIXED TO THE COVERS.

8. SMALLEST PIPE SIZE ALLOWABLE IS 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE. 9. MOUNTING HEIGHTS OF DEVICES SHALL FOLLOW THE LISTING BELOW UNLESS SPECIFICALLY NOTED

OTHERWISE ON THE DRAWINGS. ALL HEIGHTS ARE TO CENTERLINE OF THE DEVICE.

THERMOSTAT OR TEMPERATURE/HUMIDITY SENSOR......+54" A.F.F. 10. PAINT PIPING IN MECHANICAL ROOMS. REFER TO SPECIFICATIONS FOR COLOR CODING. PREPAINT

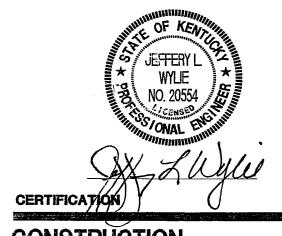
ALL STEEL CHILLED WATER PIPING PRIOR TO INSTALLATION.

11. CLEAN ALL EQUIPMENT TO PRESENT A "LIKE NEW" CONDITION AT PROJECT COMPLETION. VACUUM CLEAN INTERNAL AREAS OF EQUIPMENT AND PANELS.

NATIONAL ELECTRICAL CODE.

12. CLEAN ALL MECHANICAL AND ELECTRICAL AREAS AND ROOMS OF DEBRIS AND UNUSED MATERIALS.

VACUUM FLOORS. 13. OFFSET PIPING AROUND ELECTRICAL PANELS TO PROVIDE CLEARANCES AS REQUIRED BY



CARDINAL PARK

UNIVERSITY OF LOUISVILLE

Project: 03006 TERRY GUNN

GREG CHAMPION Checked: NO SCALE Issue Date: AUGUST 28, 2003

SYMBOLS AND ABBREVIATIONS MECHANICAL