



MECHANICAL PERMIT APPLICATION

City of Portland, Oregon - Bureau of Development Services

1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7300 • TTY 503-823-6868 • www.portlandoregon.gov/bds

18-185297-MT

Type of work

- ☐ New construction ☒ Addition/alteration/replacement
☐ Demolition ☐ Other:

Category of construction

- ☐ 1 & 2 family dwelling ☒ Commercial/industrial ☐ Accessory building
☐ Multifamily ☐ Master builder ☐ Other:

Job site information and location

Job no.: Job address: 14021 NE Glisan St.
 City/State/ZIP: Portland, OR, 97230
 Suite/bldg./apt. no.: Project name: VON EBERT BREWING
 Cross street/directions to job site:

Subdivision: Lot no. Tax map/parcel no.

Description of work (example: upstairs bath fan/dryer exhaust)

See attached

Provide RS permit no.

Property owner ☒ Tenant

Name: Sean Burke E-mail: sburke@fatheadsglobal.com

Address: 14021 NE Glisan St.

City/State/ZIP: Portland, OR, 97230

Phone: FAX:

Owner installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.

Owner signature: Date:

Contractor ☒ Subcontractor

Business name: G&D Chillers E-mail: mark@gdchillers.com

Address: 760 Bailey Hill Rd.

City/State/ZIP: Eugene, OR, 97402

Phone: (800) 555-0973 FAX:

Lic. no. CCB lic. no. 190967

Authorized signature: Mark Mahla Date: 5/18/2018

Print name: Mark Mahla Date: 5/18/2018

Applicant ☒ Contact Person

Business name: G&D Chillers

Contact name: Seth McElowney

Address: 760 Bailey Hill Rd.

City/State/ZIP: Eugene, OR, 97402

Phone: (800) 555-0973 FAX:

E-mail: seth@gdchillers.com

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Commercial Fee Schedule - Use Checklist

Mechanical permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar of all mechanical materials, equipment, labor, overhead and profit.

Value: \$97,526.36

Residential Equipment / Systems Fees

For special information use checklist

Description	Qty.	Fee	Total
Heating / cooling			
Air conditioner (site plan required)		\$26	
Furnace / burner including duct work / vent / liner		\$55	
Heat pump (site plan required)		\$51	
Air handling unit		\$26	
Hydronic hot water system		\$32	
Residential boiler (radiator or hydronic) includes piping		\$32	
Unit heaters (fuel type, not electric) in-wall, in-duct, suspended, etc.		\$26	
Vent for appliance other than furnace		\$22	
Alteration of existing HVAC system		\$32	

Other fuel appliances

Decorative gas fireplace		\$26	
Flue vent for water heater or gas fireplace		\$22	
Wood / pellet stove		\$57	
Gas or wood fireplace / insert		\$57	
Chimney / liner / flue / vent		\$22	
Other:		\$32	

Environmental exhaust and ventilation

Range hood / other kitchen equipment		\$14	
Clothes dryer exhaust		\$14	
Single-duct exhaust (bathrooms, toilet compartments, utility rooms)		\$14	
Exhaust system apart from Heating or AC		\$22	
Other:		\$32	

Gas fuel piping

\$15 for the first four, \$2.70 for each additional. Please indicate number of fuel gas piping outlets below:

Furnace, etc.			
Gas heat pump			
Wall / suspended / unit heater			
Water heater / boiler			
Fireplace			
Range			
Barbecue			
Clothes dryer			
Other:			

Other appliances

Including oil tanks, gas and diesel generators, gas and electric kilns, gas appliances / equipment not included above		\$32	
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Mechanical permit fees

Subtotal	
Minimum permit fee (\$95)	
Commercial plan review (60% of permit fee)	
State surcharge (12% of permit fee)	
TOTAL PERMIT FEE	

Installing new d75 mm (2.5" ID) GF Cool-fit ABS+ mainline to feed 3- single jacket BBTs, 4- 2 jacket FVs, 2- 3 jacket FVs and 1- 2 stage HX/ wort chiller. Mainline will be supported via unistrut trapeze (unistrut long enough to support other utilities) and non-corrosive strut clamps. Mainline will be routed in a reverse-return flow direction.

A 2.5" Belimo 2-way, actuated BFV will be installed in the return close to the chiller connection. A 2.5" high flow wafer check will be installed in the supply close to the chiller connection. Both of the above to prevent glycol flood back to chiller reservoir in the event of power shut down or pump failure. 2.5" flanged wye strainer with GF service BV will be installed in return. GF d32 mm air vents will be installed at all high points or reverse traps in piping system (assuming 2).

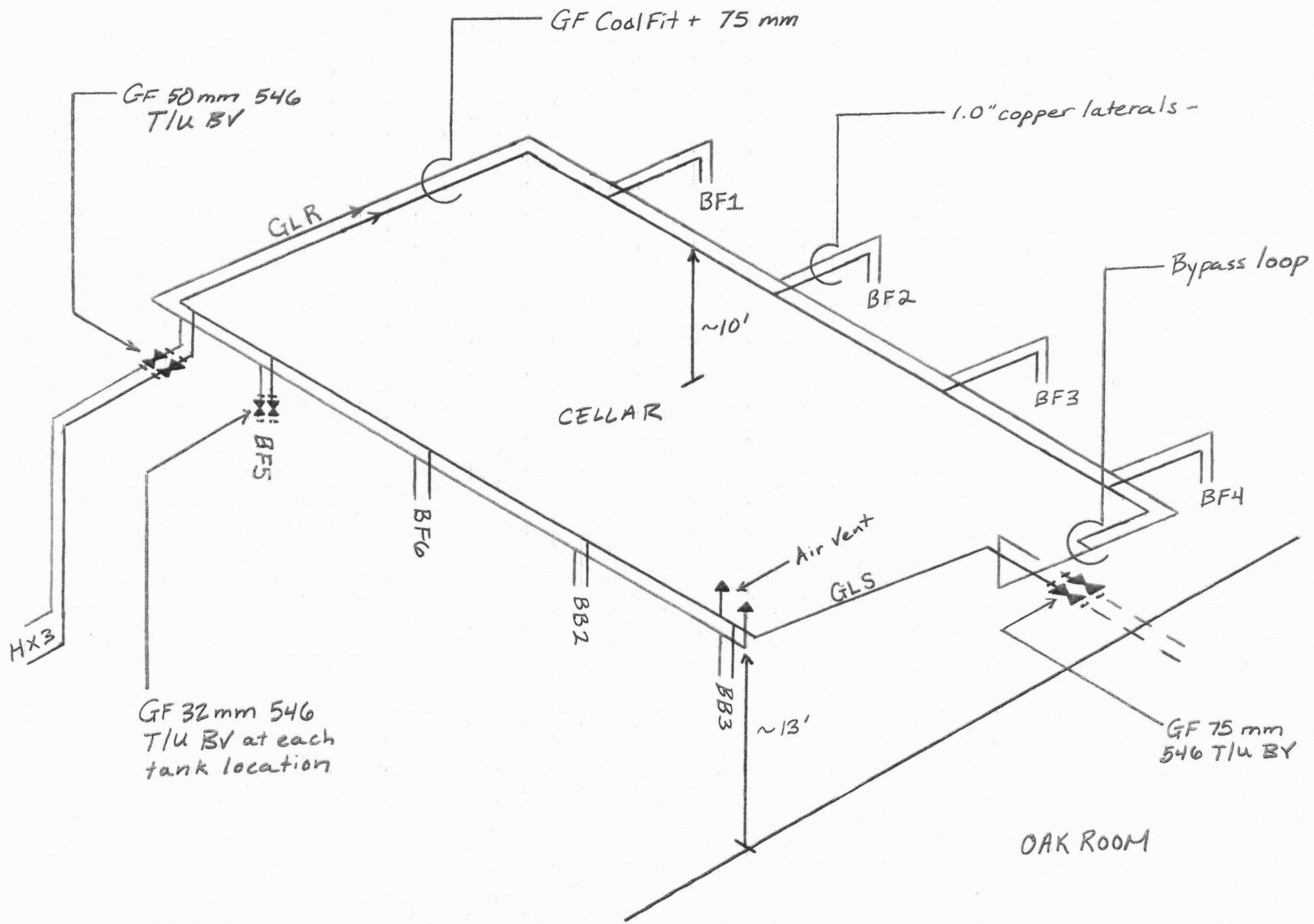
A 1.25" copper bypass loop will be installed at the end of the supply mainline run for process system monitoring and system start up assistance. 1.25" brass Apollo globe valve (throttling glycol flow), PSI gauge and column thermometer will be installed in bypass loop.

2- stage heat exchanger will be piped from d75 mm GF mainline in 1.5" copper tube. d50 mm 546 T/U BVs will be installed at mainline for isolation/ service. 1.5" brass Apollo globe valve will be installed at supply connection for throttling glycol flow. 1.5" brass Apollo isolation BV will be installed at return connection. G&D will weld stainless tri-clamp connections for copper transition.

All tank locations will be provided with GF d32 mm T/U isolation BVs. All tank piping to GF BVs will be 1.0" copper tube. Each tank will be provided with a B225 stainless Belimo full-port BV, Belimo LF120 actuator, 1.0" brass drain valve and 1.0" brass ball valve to throttle glycol flow to cones on FVs.

All GF joints will be insulated with gap filler, sealed with vapor tape and black heat-shrink sleeves installed. All GF T/U BVs will be covered with GF BV insulation kits. All exposed copper will be insulated with Armaflex tube and wrapped with black PVC jacketing (to match GF mainline piping).

System will be hydrotested at 1.5X operating pressure and flushed with water. System will be charged with 35% v/v glycol- mixed from 100%. Quote includes 1- 55ga drum of 100% glycol, system start-up and end user training.



Cellar

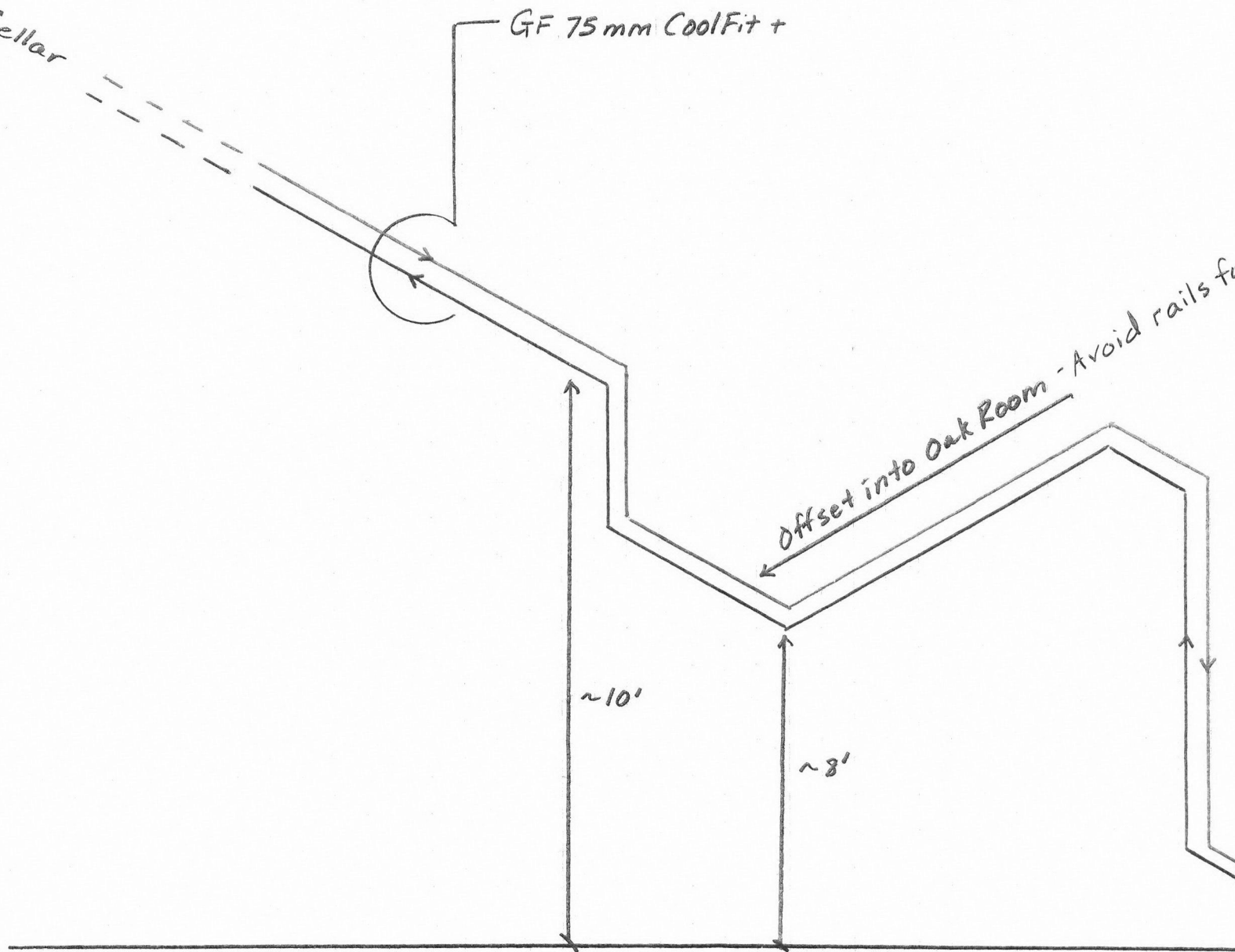
GF 75 mm CoolFit +

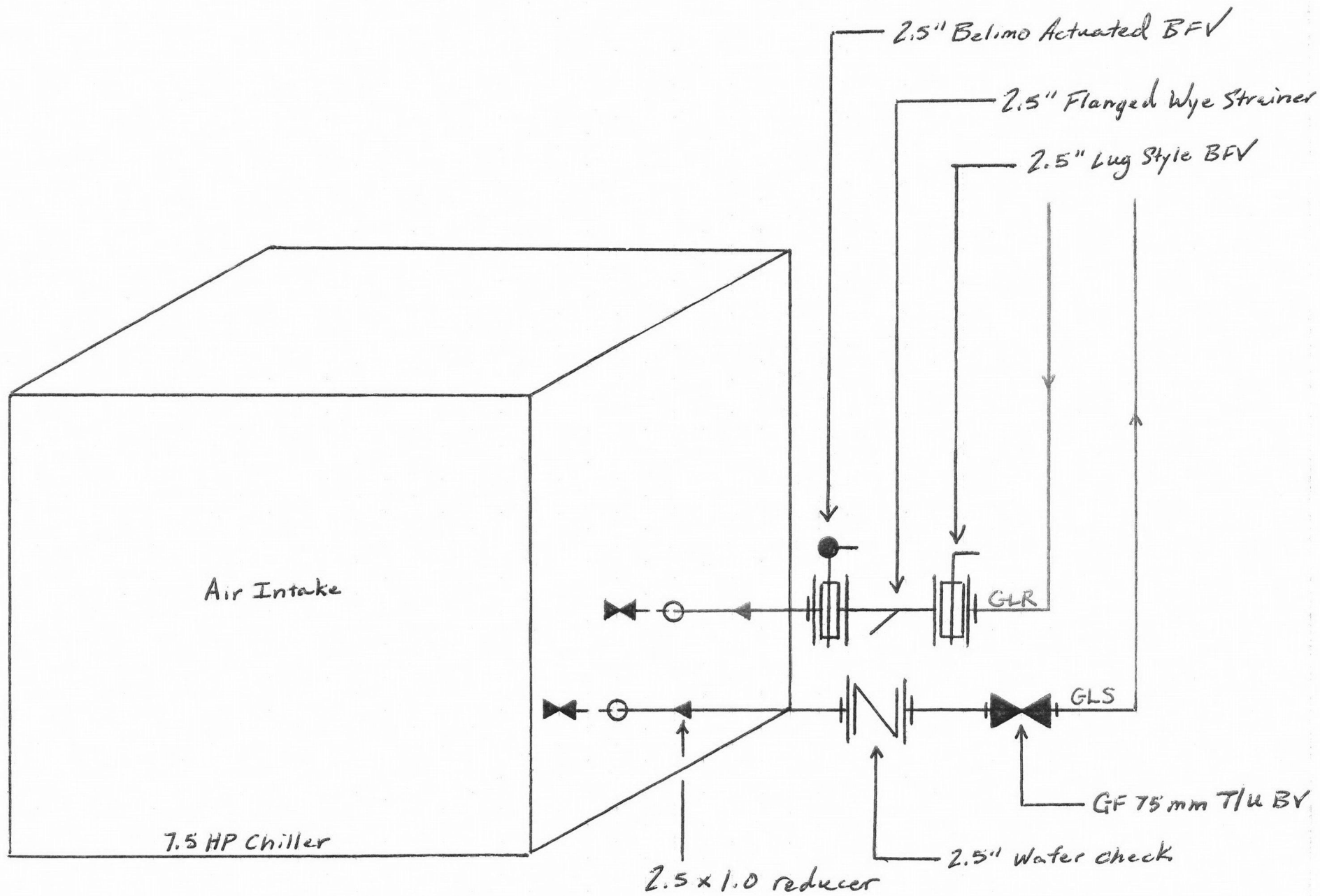
Offset into Oak Room - Avoid rails for roll-up

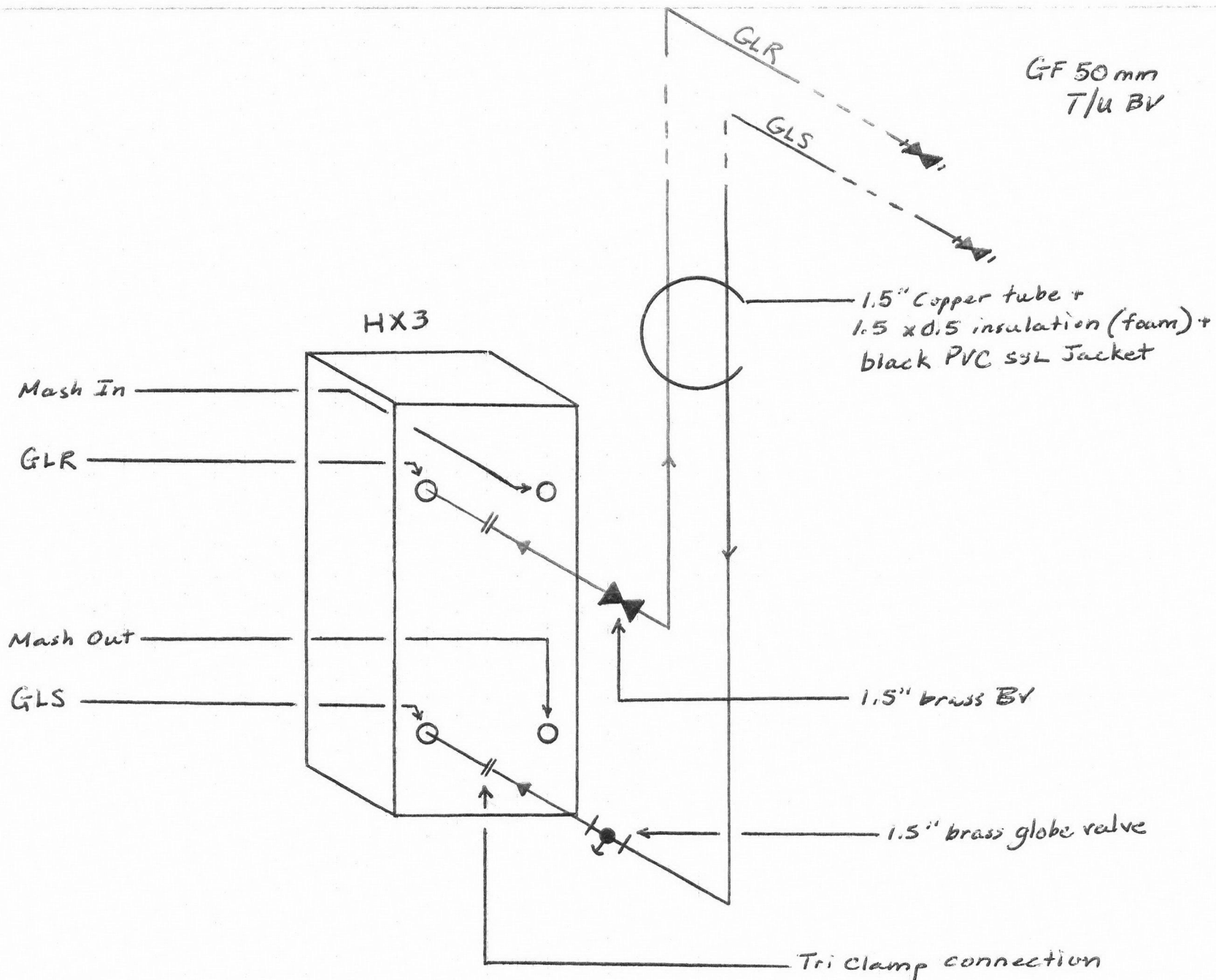
~10'

~8'

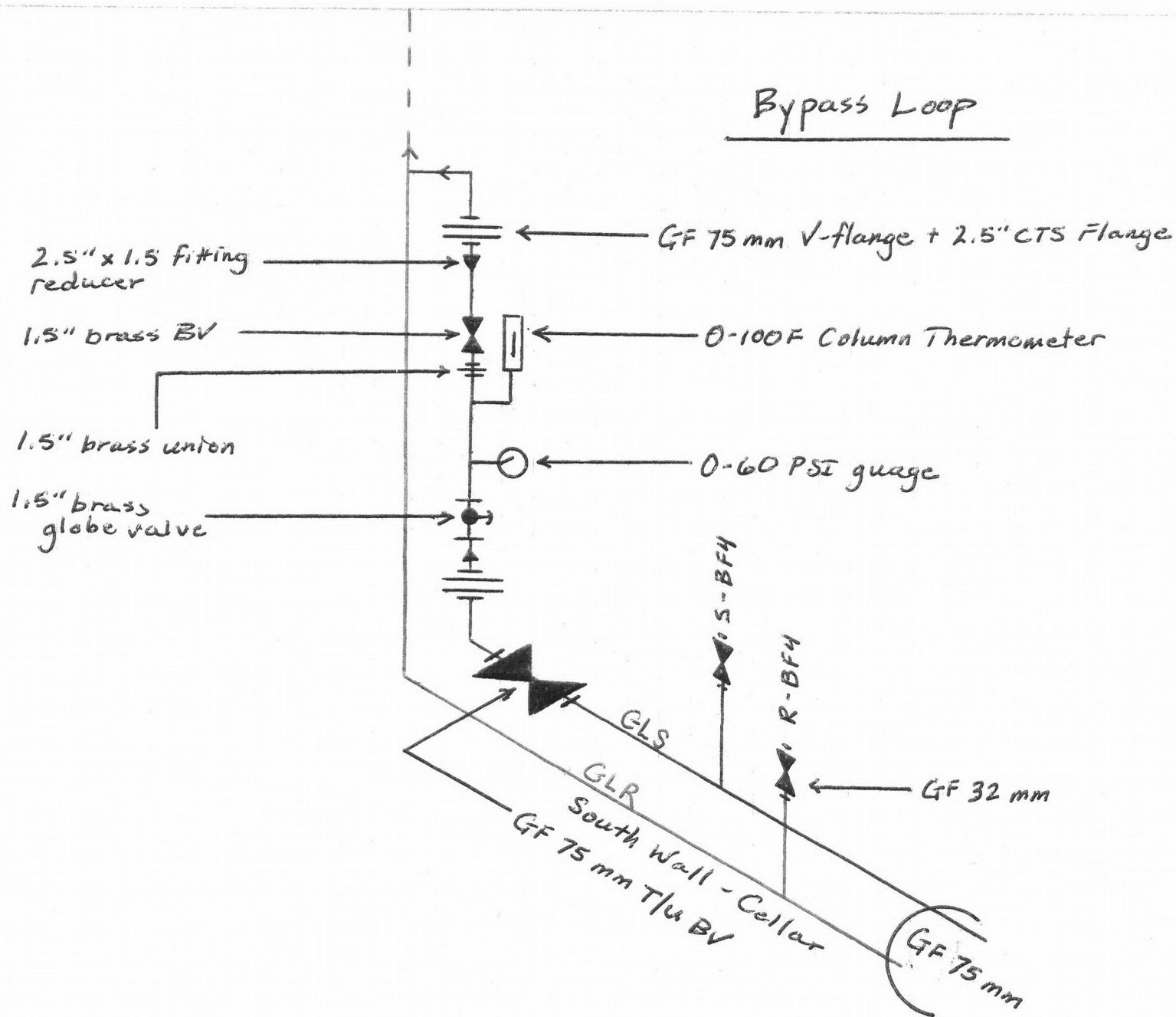
Chiller Connections

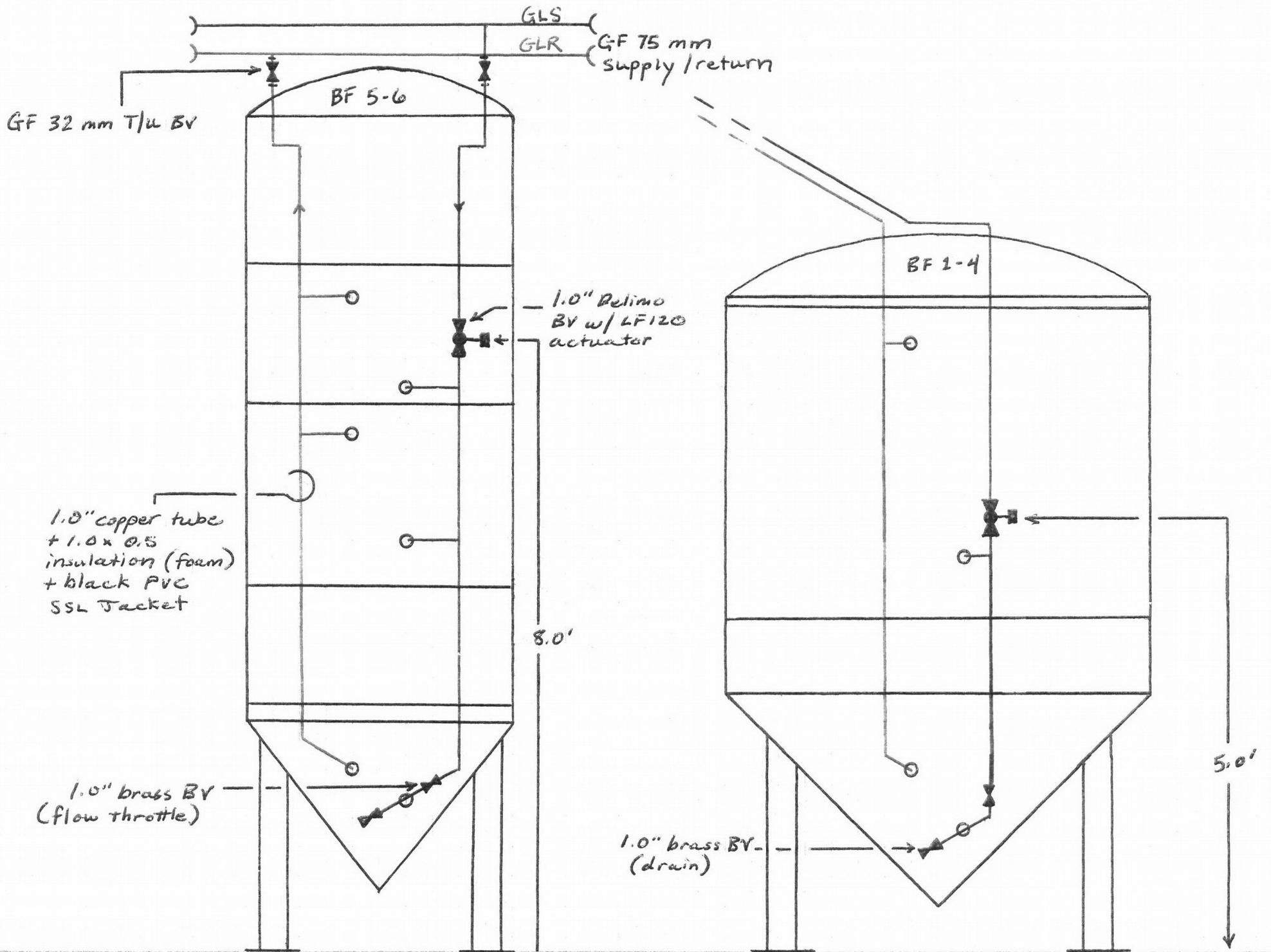


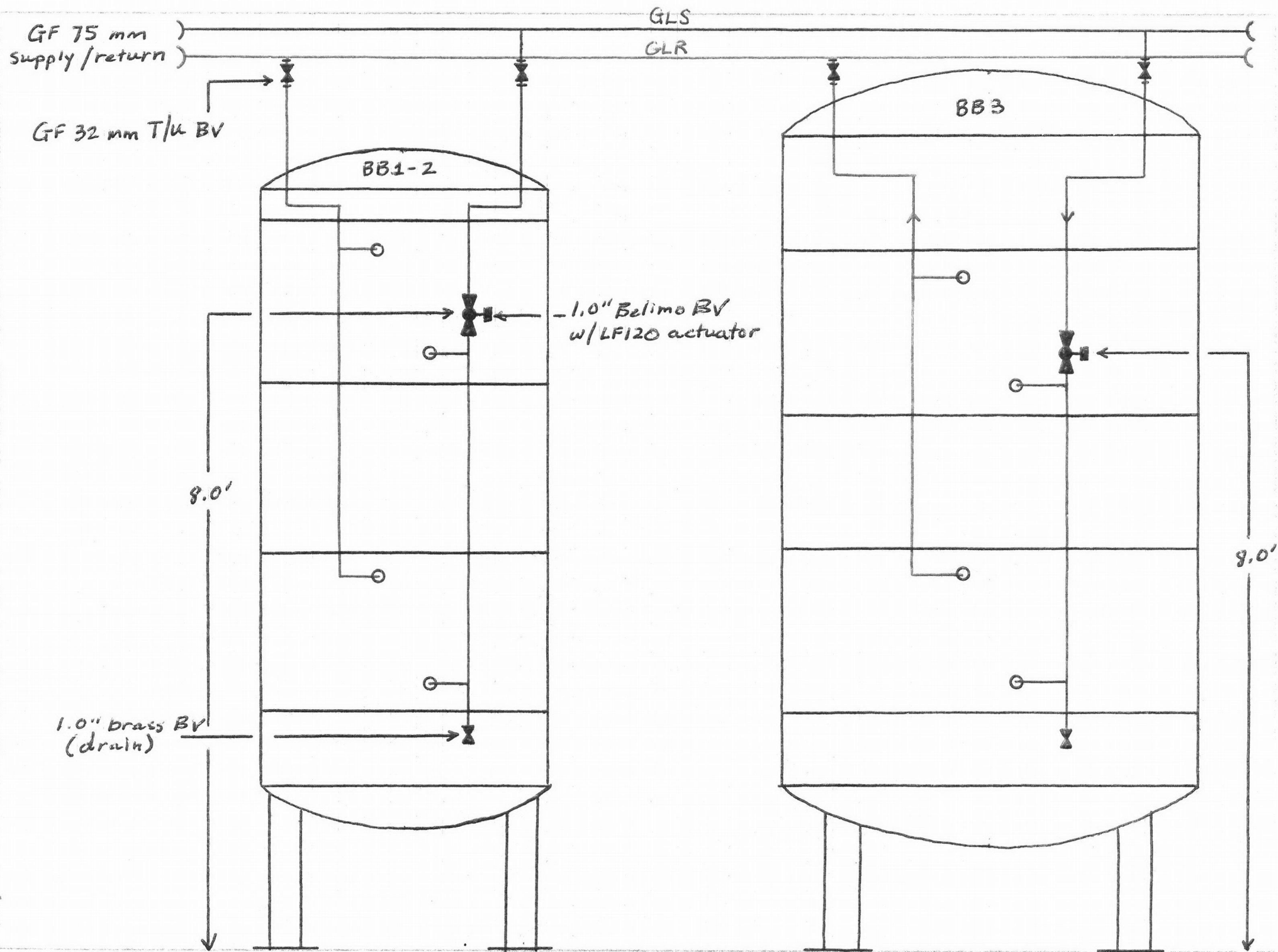




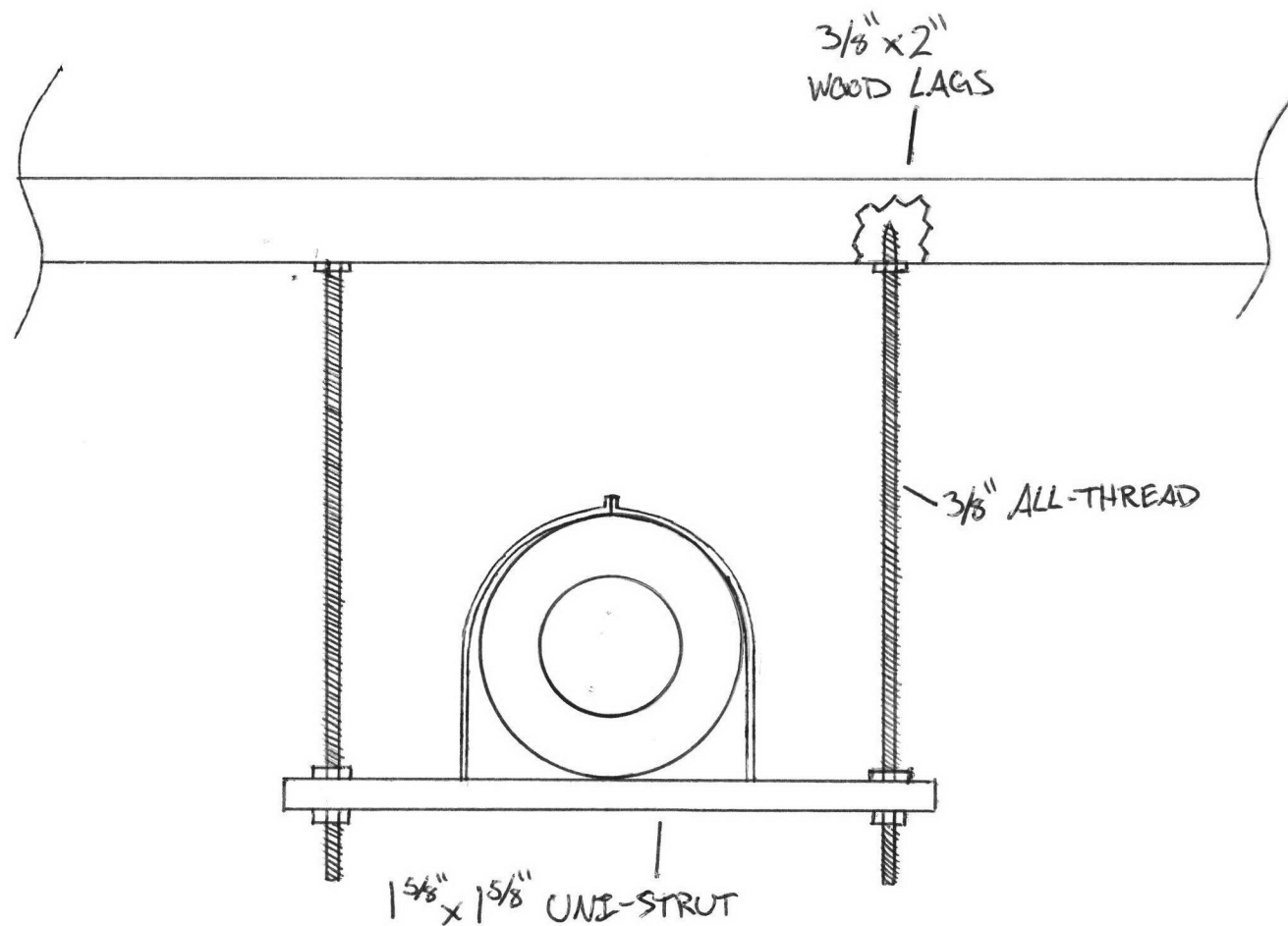
Bypass Loop







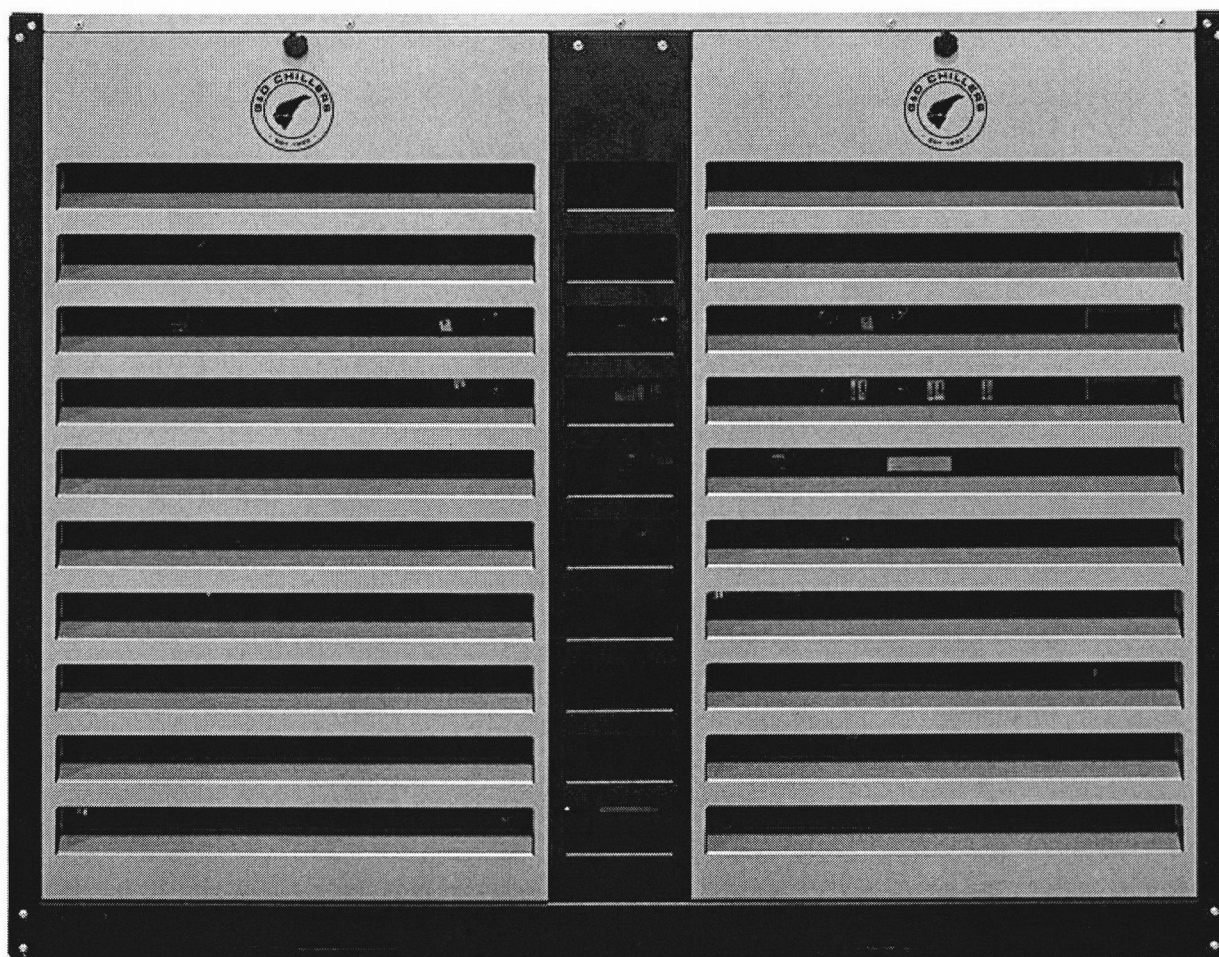
PIPING WILL BE SUPPORTED EVERY FIVE FEET.
EACH SUPPORT WILL HOLD 48.6 LBS.



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SINGLE STAGE CHILLERS

// GD – 7H Micro Chill



* Photo is for representation purposes only and may not reflect actual product

[REQUEST A QUOTE ▶ \(/REQUEST-A-QUOTE/\)](#)

DESCRIPTION

Our Micro Chill Series offers compact chillers available in 3 HP, 5 HP and 7 HP to cover the range of needs in smaller process cooling applications. With an oversized stainless steel reservoir and heavy duty process pump

with built-in fluid dynamic bypass valve, these compact chillers provide precise cooling with the same quality components as their larger siblings, but in a more compact design with an equally compact price.

KEY SPECS

DIMENSIONS (WxLxH)	34" X 61" X 49"
TANK VOLUME	60 GALLONS
PROCESS PUMP	1.5 HP
GPM @ 25PSI	40 GPM
OPERATING WEIGHT	1450 LBS.
CONNECTION SIZE	1"

TECHNICAL SPECS ▶ ([HTTP://GDCHILLERS.COM/WP-CONTENT/UPLOADS/GD-7H-SPEC-DWG-REVC.PDF](http://gdchillers.com/wp-content/uploads/gd-7h-spec-dwg-revc.pdf))

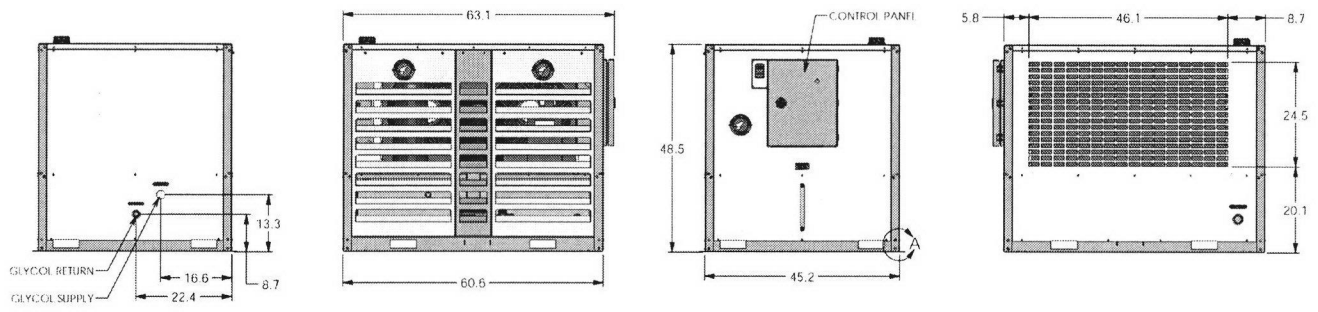
WARRANTY STATEMENT ▶ ([HTTP://66.147.244.83/~GDCHILLE/WP-CONTENT/UPLOADS/G-D_LIMITED-WARRANTY.PDF](http://66.147.244.83/~GDCHILLE/WP-CONTENT/UPLOADS/G-D_LIMITED-WARRANTY.PDF))

FEATURES

- Complete refrigeration circuit
- Engineered high efficiency heat exchanger for maximum energy savings
- Glycol pump
- Dynamic fluid bypass valve
- Insulated stainless steel glycol reservoir with level indicator
- All insulated copper piping
- ETL 508A listed complete control panel with single point electrical connection, breakers, starters & safety switches
- High and low pressure controls
- Freeze stat safety switch
- High temp alarm
- Low ambient control
- Anti-cycle timer to prevent short cycling of compressor
- On/pump down/off switch
- Single stage digital temperature controller for simple operation
- Supply and return ball valves
- Fully powder coated steel frame
- Powder coated aluminum housing
- Louvered access panels for easy service and maintenance
- Factory run tested and fully charged with refrigerant

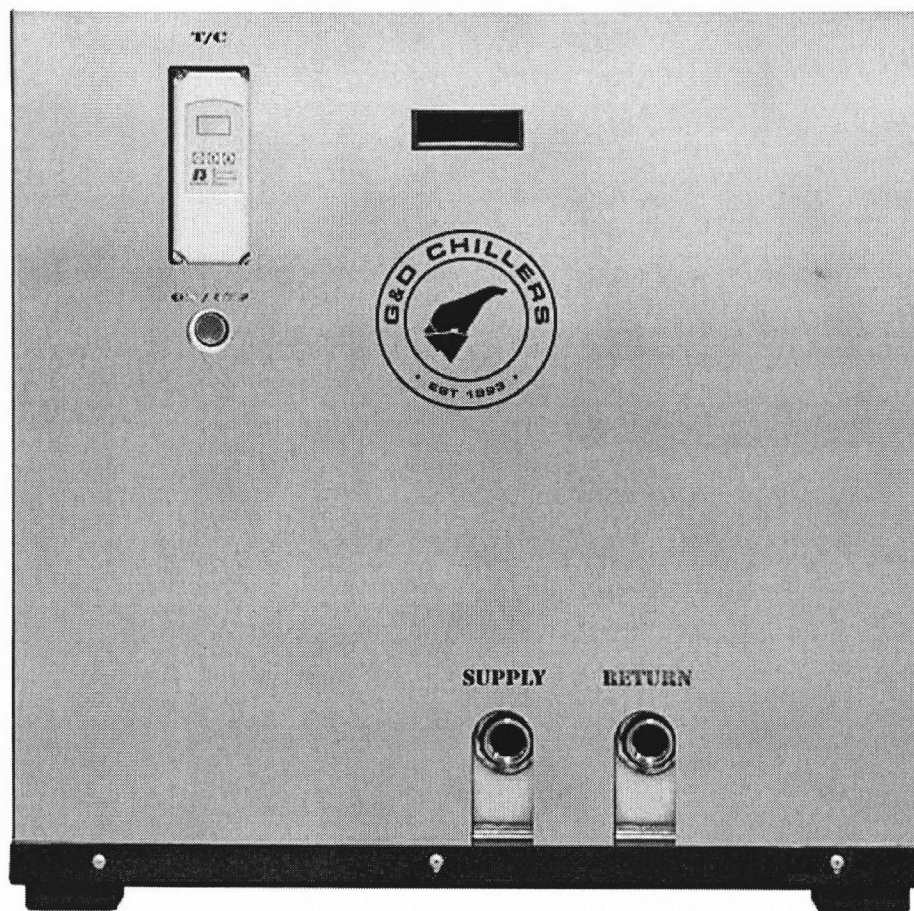
- One year parts and labor warranty

TECHNICAL SPECS



(<http://gdchillers.com/wp-content/uploads/GD-7H-spec-dwg-revC.pdf>)

RELATED PRODUCTS

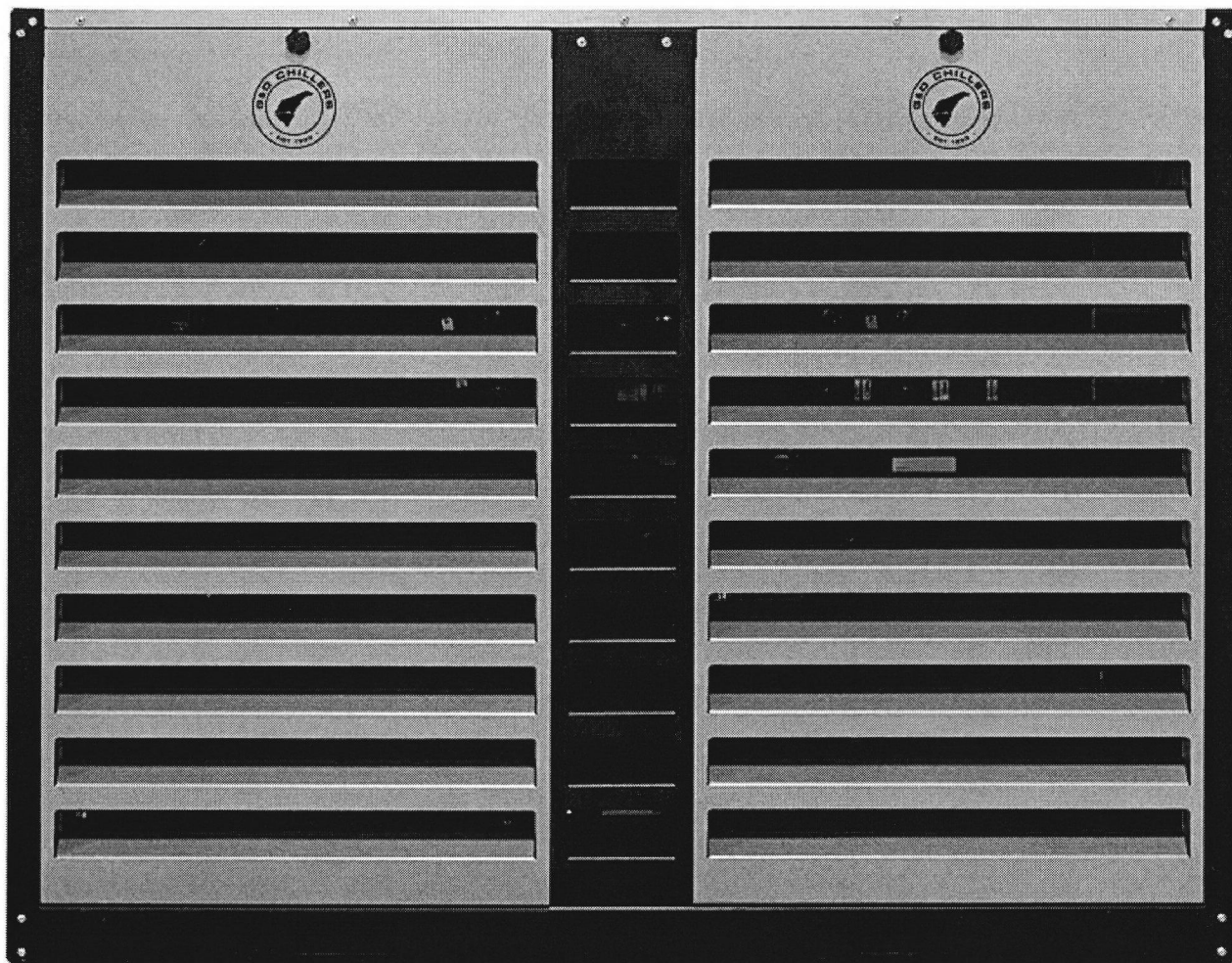


(<http://gdchillers.com/products/gd-1-5-h-nano-chill/>)

GD - 1.5H NANO CHILL

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GD - 3H MICRO CHILL

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REQUEST A QUOTE

lets build together

full name*

email*

Breweries

phone*

company*

message*

SUBMIT

OUR LOCATION

760 Bailey Hill Rd.
Eugene, Oregon 97402

CALL US DIRECTLY

541.345.3903 800.555.0973

(mailto:info@gdchillers.com)

(https://www.facebook.com/pages/GD-Chillers-Inc/294034670698280)

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