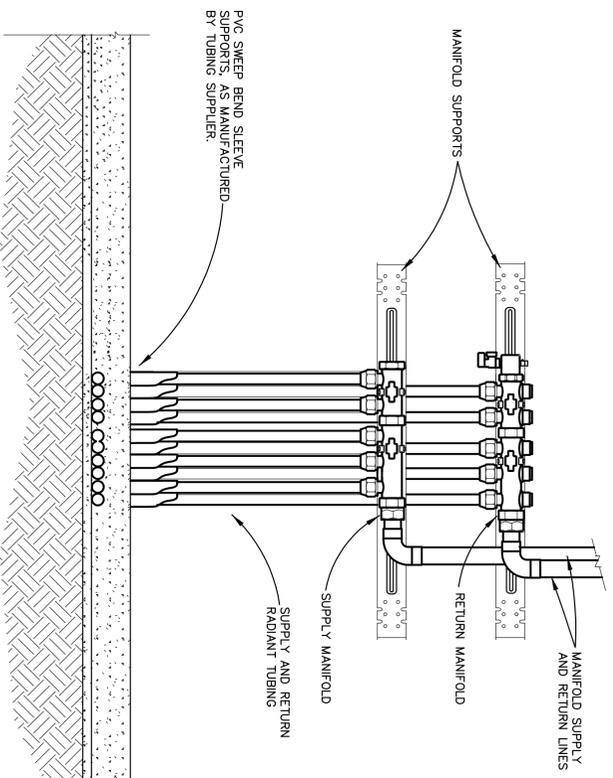


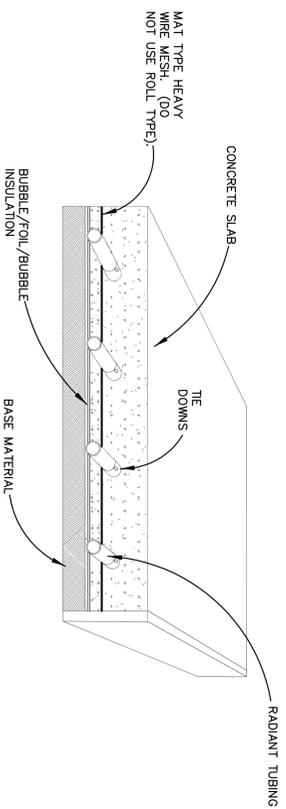
RADIANT HEAT SCHEDULE								
CIRCUIT NO.	LOCATION	PANEL TYPE	ZONE	TUBE TYPE	TUBE SPACING INCHES	LOOP LENGTH FEET	CONTROL	REMARKS
①	BREAK ROOM	FLOOR	1	1/2" HEPEX	* 6/12	180	MANIFOLD CONTROL	THERMOSTAT TO ENABLE LOOP ACTUATOR ON RETURN MANIFOLD ON HEATING DEMAND
②	UNISEX T.L.T.	FLOOR	1	1/2" HEPEX	* 6/12	130	MANIFOLD CONTROL	THERMOSTAT TO ENABLE LOOP ACTUATOR ON RETURN MANIFOLD ON HEATING DEMAND
③	OFFICE	FLOOR	1	1/2" HEPEX	* 6/12	190	MANIFOLD CONTROL	THERMOSTAT TO ENABLE LOOP ACTUATOR ON RETURN MANIFOLD ON HEATING DEMAND
④	GARAGE	FLOOR	1	1/2" HEPEX	12	285	MANIFOLD CONTROL	THERMOSTAT TO ENABLE LOOP ACTUATOR ON RETURN MANIFOLD ON HEATING DEMAND
⑤	GARAGE	FLOOR	1	1/2" HEPEX	12	265	MANIFOLD CONTROL	THERMOSTAT TO ENABLE LOOP ACTUATOR ON RETURN MANIFOLD ON HEATING DEMAND

* OUTSIDE LOOPS ARE 6" SPACING AND INTERIOR LOOPS ARE 12" SPACING. INSTALL AS LAID OUT ON THE HEATING PLAN THIS SHEET.



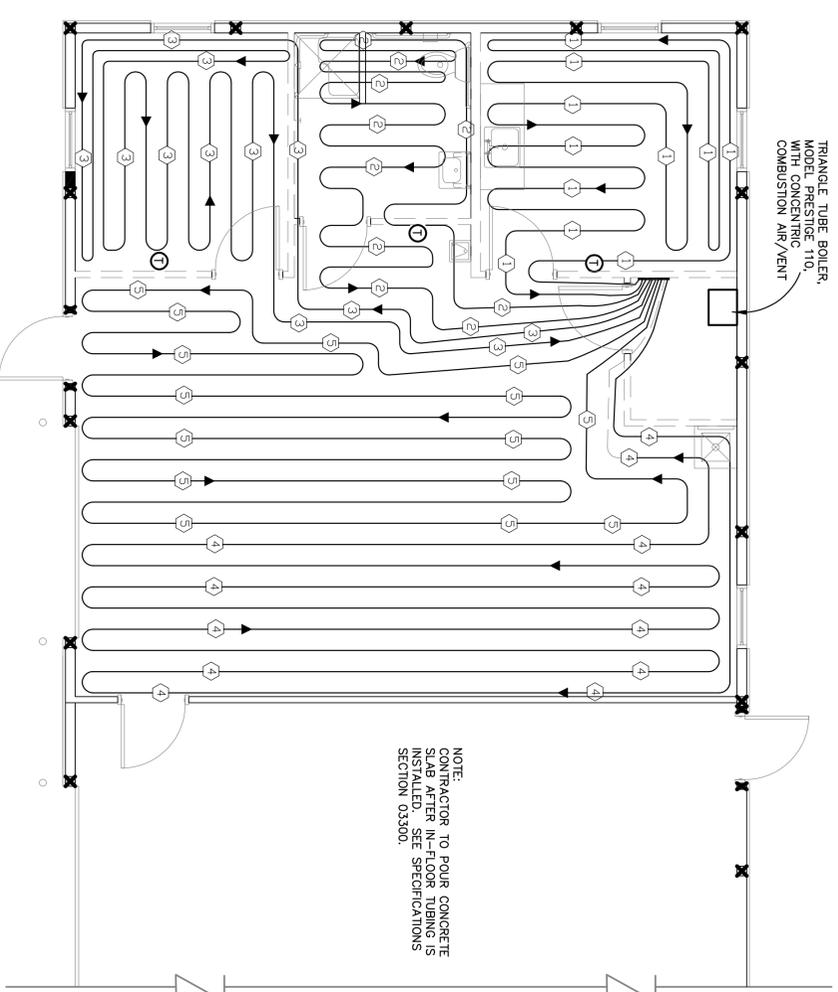
RADIANT MANIFOLD DETAIL

NOTE TO SCALE



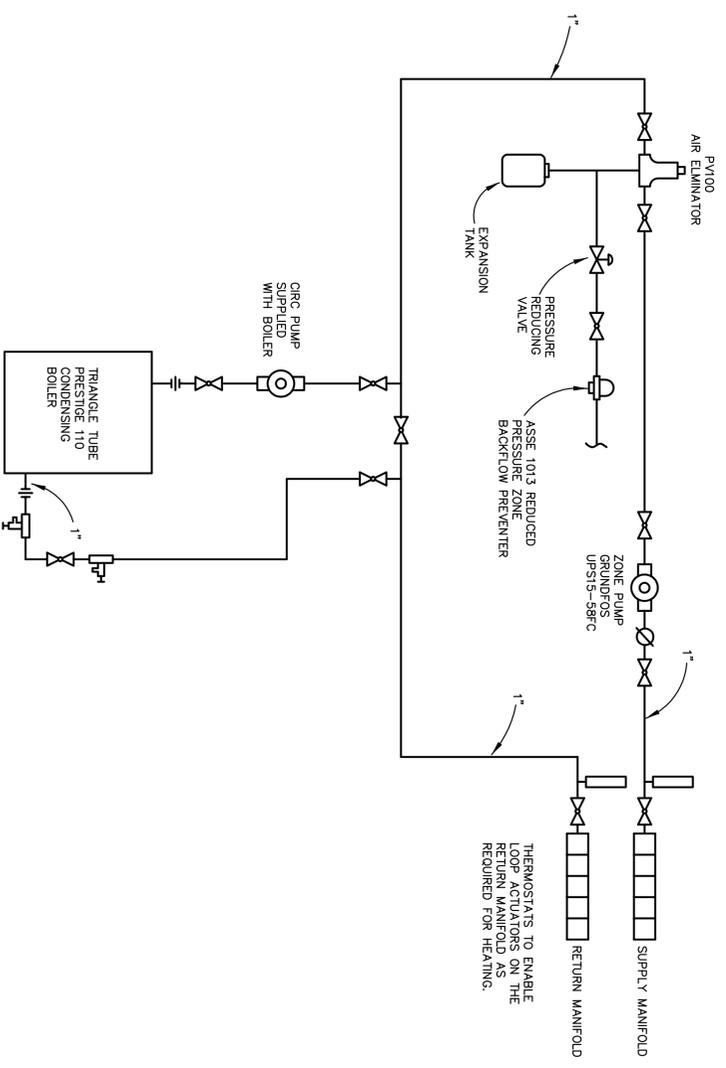
RADIANT FLOOR TUBING DETAIL

NOTE TO SCALE



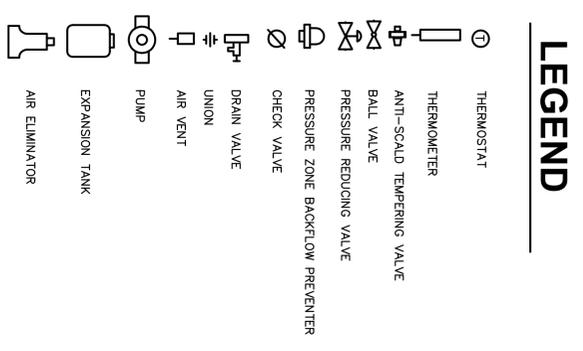
NOTE: CONTRACTOR TO POUR CONCRETE WITH REINFORCING BARS AND INSTALL RADIANT TUBING IN ACCORDANCE WITH SECTION 03300.

- NOTES:
1. INSTALL ALL TUBING IN CONTINUOUS LENGTHS WITH NO SPLICES.
 2. THE LOOP LENGTHS ARE LISTED ON THE RADIANT TUBING SCHEDULE.
 3. NO CONCRETE FLOORING SHALL BE POURED UNTIL THE MANUFACTURERS REPRESENTATIVE AND THE PROJECT ENGINEER HAS GIVEN APPROVAL OF THE SYSTEM.
 4. COORDINATE THE TUBING LAYOUT AND INSTALLATION WITH MECHANICAL, ELECTRICAL AND PLUMBING MATERIALS AND EQUIPMENT.
 5. FASTEN TUBING TO CONCRETE FLOOR REINFORCEMENT IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, DETAILS AND AS SPECIFIED.
 6. ALL CONTROL WIRING SHALL BE IN CONDUIT.
 7. CONDUIT AND DEVICE BOXES SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. LOW VOLTAGE CONTROL WIRING SHALL BE INSTALLED BY THE HEATING CONTRACTOR. LOCATION OF THE DEVICE BOXES AND CONDUIT SHALL BE COORDINATED BETWEEN THE ELECTRICAL AND HEATING CONTRACTORS.
 8. COORDINATE WITH LP GAS CO. THE LOCATION OF THE NEW LP GAS REGULATOR AND INSTALLATION OF THE NEW LP GAS SERVICE FOR THE BOILER.
 9. ZONE CONTROL THERMOSTATS FINAL INSTALLATION TO BE COMPLETED AFTER CONSTRUCTION OF INTERIOR PARTITIONS. CONSTRUCTION OF INTERIOR PARTITIONS BY OWNER.



BOILER PIPING DETAIL

NOTE TO SCALE



PROJECT NO.	24-3156
INDEX	55010
PCA	95713
DRAWN BY	PS
DESIGNED BY	PS
PROJ. MGR.	PS

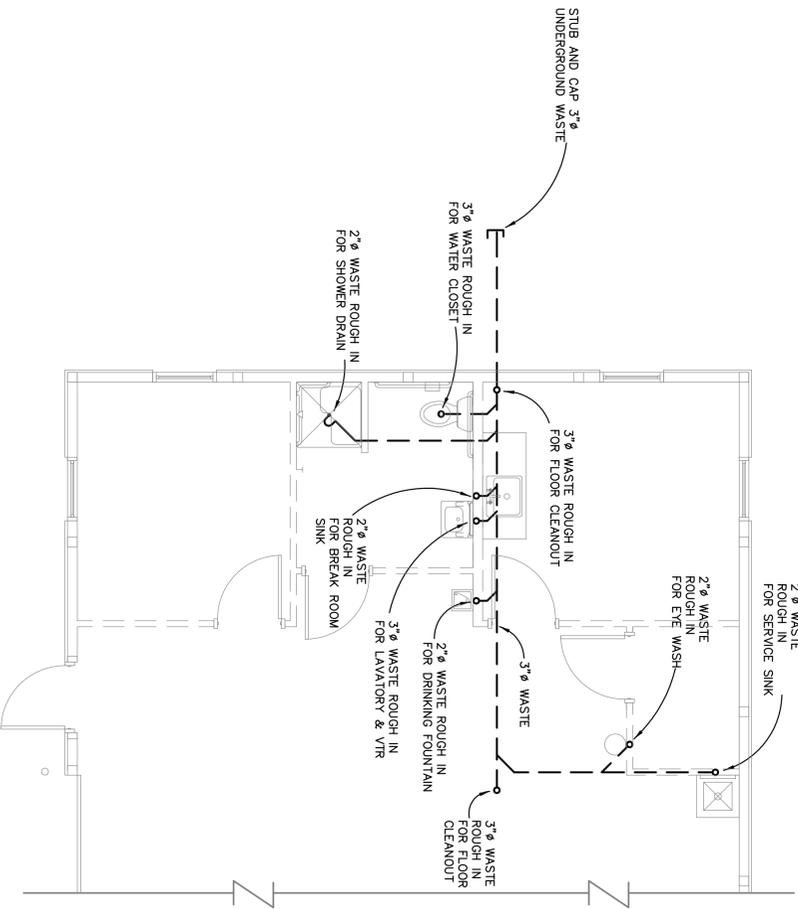
MECHANICAL PLANS

NEW COLD STORAGE BUILDING FOR
TIPPY DAM
 FIELD OFFICE
 MANISTEE COUNTY

08/06/07	PLAN REVIEW REVISIONS
06/05/07	BIDS & CONSTRUCTION
05/16/07	90% OWNER REVIEW
04/06/07	50% OWNER REVIEW

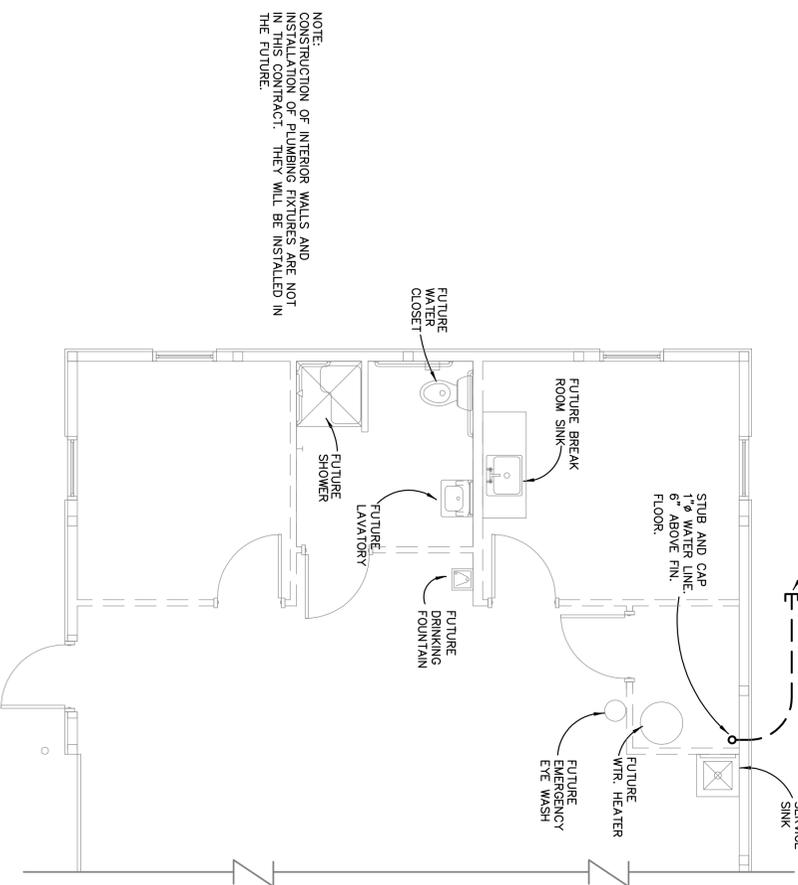
STATE OF MICHIGAN
 DEPARTMENT OF NATURAL RESOURCES
 OFFICE OF LAND AND FACILITIES
 DESIGN & CONSTRUCTION SECTION
 P.O. BOX 30033 LANSING, MI 48909-7933
 517.241.1919 VOICE 517.241.4278 FAX

M-1



NOTE:
PROVIDE ROUGH IN WASTE PLUMBING FOR FUTURE INSTALLATION OF PLUMBING FIXTURES.

WASTE PLUMBING PLAN
SCALE: 1/4"=1'-0"



NOTE:
CONSTRUCTION OF INTERIOR WALLS AND INSTALLATION OF PLUMBING FIXTURES ARE NOT IN THIS CONTRACT. THEY WILL BE INSTALLED IN THE FUTURE.

SUPPLY PLUMBING PLAN
SCALE: 1/4"=1'-0"

PLUMBING LEGEND	
U	TRAP
---	BELOW SLAB WASTE LINE
CD	CLEAN OUT
VTR	VENT THRU ROOF
W	WASTE

PROJECT NO.	24-3156
INDEX	55010
PCA	95713
DRAWN BY	PS
DESIGNED BY	PS
PROJ. MGR.	PS

08/06/07	PLAN REVIEW REVISIONS
06/05/07	BIDS & CONSTRUCTION
05/16/07	90% OWNER REVIEW
04/06/07	50% OWNER REVIEW