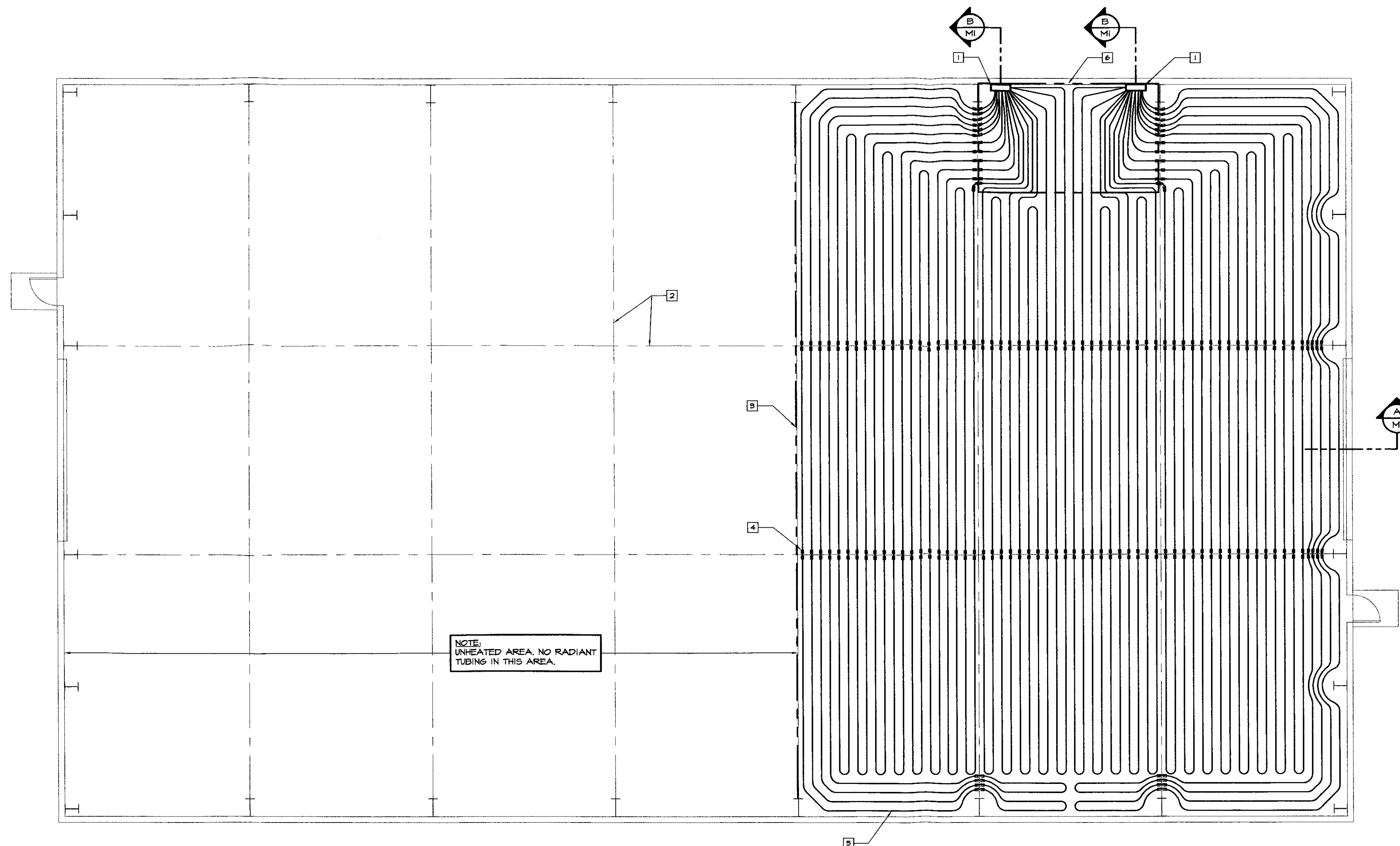
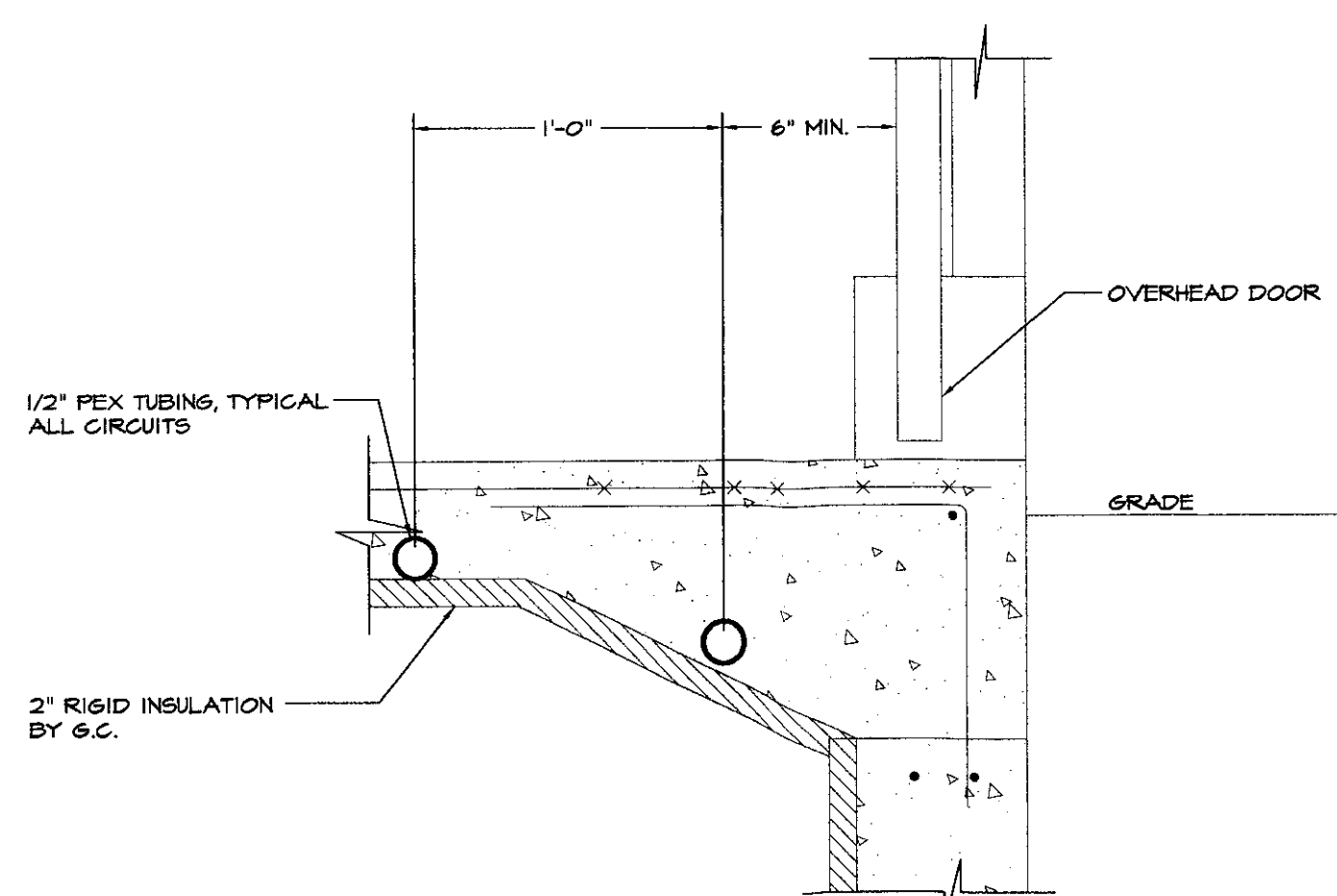


(B) TYPICAL RADIANT TUBING DETAIL
NOT TO SCALE

1. PROVIDE SCHEDULE 40 PVC CONDUIT SLEEVE PROTECTION TO A MINIMUM OF 18" ABOVE FINISHED CONCRETE FLOOR SLAB.



FLOOR PLAN - MECHANICAL
SCALE: 1/8"=1'-0"



(A) SECTION AT OVERHEAD DOOR
NOT TO SCALE

DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- 1) TERMINATE AND CAP TUBING AS DETAILED IN DETAIL B-MI FOR FUTURE HEADER INSTALLATION. (4) CIRCUITS.
- 2) SLAB CONTROL JOINT, TYPICAL.
- 3) THERMAL ISOLATION JOINT. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 4) PROVIDE 1'-0" LONG ARMAFLEX INSULATION CENTERED ON ALL CONTROL JOINTS. SEE STRUCTURAL DRAWINGS FOR EXACT LOCATIONS OF CONTROL JOINTS.
- 5) 1/2" PEX TUBING, TYPICAL FOR ALL CIRCUITS. TUBING SPACING SHALL BE 1'-0" UNLESS OTHERWISE SPECIFIED.
- 6) FUTURE BOILER ROOM LOCATION.

MATERIAL SPECIFICATIONS:

RADIANT TUBING AND ACCESSORIES:

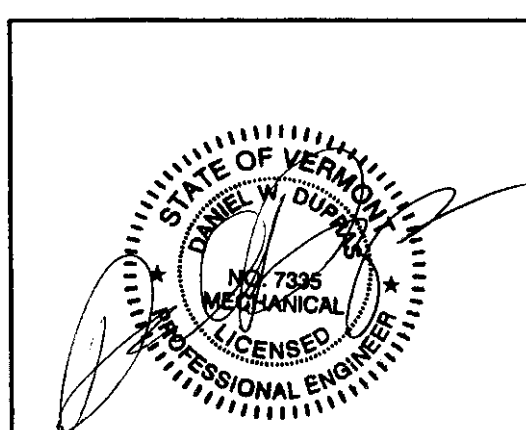
PROVIDE RADIANT TUBING IN LENGTHS AND LOCATIONS AS INDICATED, WITH CAPACITIES, SIZES, SPACINGS, AND DEPTHS AS INDICATED BY DRAWINGS. RADIANT TUBING SHALL BE A SINGLE LAYER, CROSS-LINKED POLYETHYLENE EXTRUSION WITH AN OUTER LAYER COMPOSED OF AN EVOH OXYGEN BARRIER. TUBING SHALL BE 1/2" O.D. TUBING SHALL CONFORM TO THE STANDARD THERMOPLASTIC PIPE DIMENSION RATION (SDR-4). TUBING SHALL CONTAIN A MINIMUM CROSS-LINKING VALUE OF 68% AND NO GREATER THAN 84% INCLUSIVE. TUBING SHALL MEET ASTM STANDARDS F-976 AND F-977. TUBING SHALL BE WARRANTED TO 180° F. IN HYDRONIC HEATING APPLICATIONS WITHOUT DETRIMENTAL EFFECT. TUBING SHALL BE HYDROSTATICALLY DESIGNED FOR 315 PSI AT 200° F. AND DESIGNED FOR OPERATIONAL PRESSURE OF 80 PSI AT 200° F. TUBING SHALL BE DESIGNED FOR A BURST PRESSURE OF 185 PSI AT 200° F.

TESTING REQUIREMENTS:

- 1) FLOW TEST ALL RADIANT CIRCUITS USING FRESH WATER PRIOR TO TESTING.
- 2) TEST ALL RADIANT TUBING USING WATER AT 75 PSI FOR A MINIMUM OF (4) HOURS CONTINUOUS WITH NO PRESSURE DROP. FOLLOWING THE APPROVED TEST, FILL TUBING WITH A 50/50 SOLUTION OF PROPYLENE GLYCOL AND WATER AND CAP TUBING FOR FUTURE.

GENERAL NOTES:

- 1) THE INSTALLING CONTRACTOR SHALL INSTALL ALL TUBING BELOW REINFORCING, DIRECTLY TO RIGID INSULATION BOARD IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION MANUAL.
- 2) NO TUBING JOINTS ARE PERMITTED BELOW SLAB.
- 3) ALL TUBING SHALL BE TESTED AND FILLED WITH ANTIFREEZE SOLUTION AS SPECIFIED.
- 4) LOCATIONS OF STRUCTURAL CONTROL JOINTS AND COLUMNS ARE INDICATED ON THIS DRAWING FOR COORDINATION AND DESIGN PURPOSES. OBTAIN A FINAL APPROVED SET OF STRUCTURAL DRAWINGS TO LOCATE ALL FINAL STRUCTURAL ITEMS PRIOR TO INSTALLING TUBING.



NO.	ISSUED FOR	DATE
1	BIDDING & CONSTRUCTION	04/11/05

LANE ASSOCIATES
CONSULTING ENGINEERS, P.C.

HEATING, VENTILATION, & AIR CONDITIONING, PLUMBING, FIRE PROTECTION, & ELECTRICAL

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**FLOOR PLAN - MECHANICAL
DETAILS & MECHANICAL SPECIFICATIONS**

**BERLIN COLD STORAGE
BERLIN AOT
BERLIN, VT**

**M
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APPR: DWD DRAWN: RRT/KPC SCALE: AS NOTED PROJ. NO. 0312-20