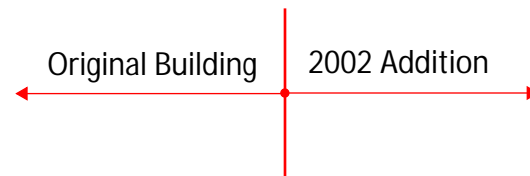




South Entry Elevation



Site Location Diagram

MECHANICAL KEYED NOTES: (see RFP for full mechanical specification requirements).

1. Remove existing radiant heat piping and manifolds where exposed below the existing floor deck typical throughout.
2. Remove existing unit-heater to crawl space.
3. Replace existing pump with new pump/alarms and new hard discharge pipe to exterior.
4. Replace pump and flex hose with new pump / alarm and hard pipe to existing foundation penetration pipe.
5. Remove all existing boiler piping and equipment remaining in room.
6. Existing electric hot water heater to remain.

ARCHITECTURAL KEYED NOTES:

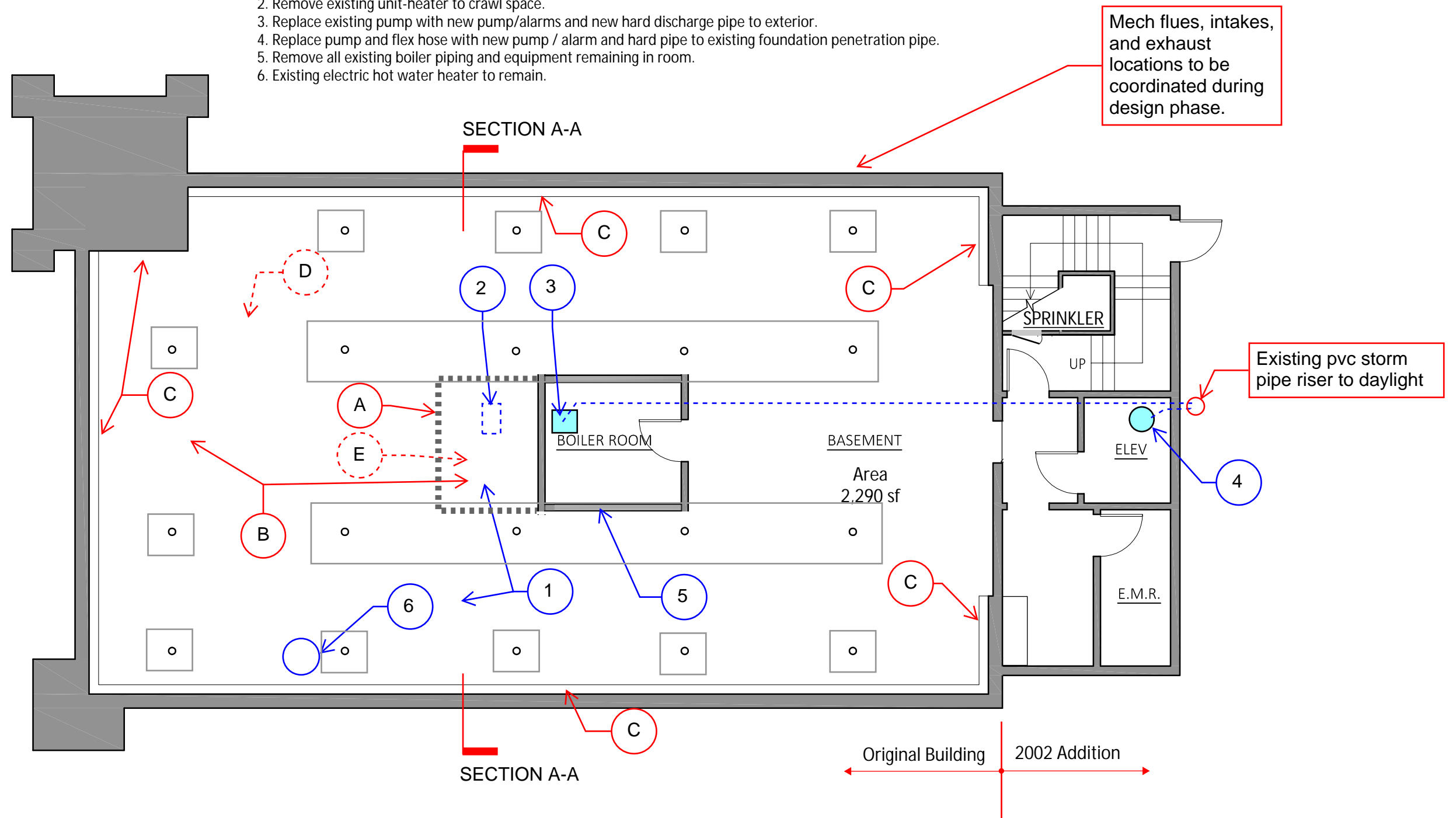
A. MECH. RM. EXPANSION (OPTIONAL IF NEEDED): Demolish existing west boiler room wall. Build new pressure-treated 2x4 wood stud wall on 8" wide x 8" high conc. curb. Insulate cavities with mineral wool batt insulation. Cover both sides with 5/8" moisture-resistant drywall. Tape all joints, no paint. Seal 3/8" drywall joint around floor joists and wood deck above with latex caulk (smoke separation only).

B. CRAWL SPACE FLOOR: Remove dirt to expose and remove any existing 6" poly vapor barrier. Install new 10mil polyolefin vapor barrier throughout over dirt and footings. Install 12"h vertical strips at walls and posts. Tape vertical strips to base layer, and tape all base layer joints. Cover with 4" of 3/4" crushed stone.

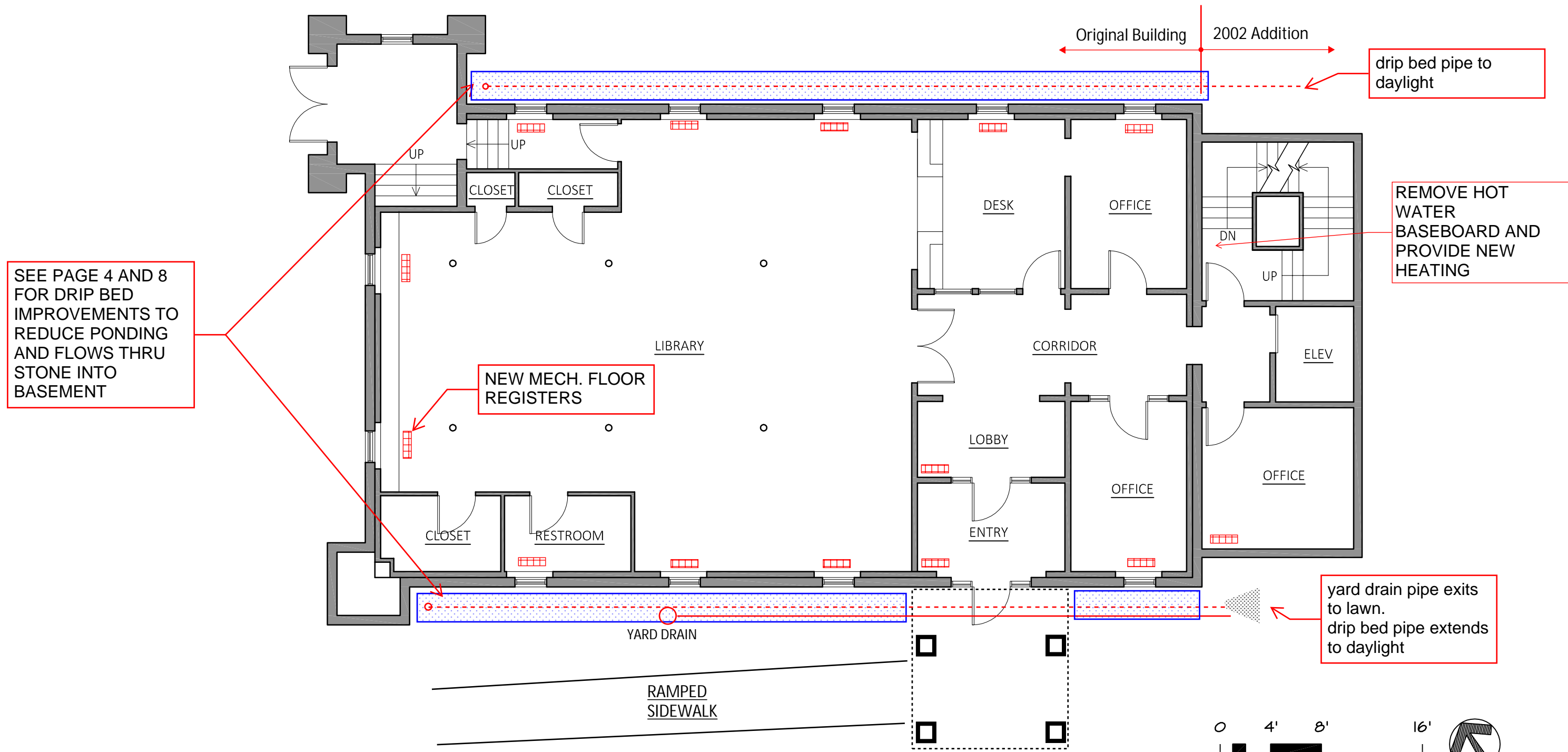
C. PERIMETER STONE FOUNDATION: Remove existing spray cellulose from stone masonry foundation walls. See Page 7 for insulation and water infiltration remediation options.

D. CRAWL SPACE CEILING: Remove existing paper-faced R30 fiberglass insulation due to paper facing flame spread, Ref. IBC 720.3. Install 7.25" (R32) Rockwool Comfortbatt in joist cavities. (Optional: Install 5" GacoOnePass R6.5/inch)

E. NEW MECH. RM. CEILING: See Notes A & D. Apply 5/8" moisture resistant drywall with joints taped under insulated joists. Revise sprinkler layout as required.



Proposed Basement Floor Plan



SEE PAGE 4 AND 8 FOR DRIP BED IMPROVEMENTS TO REDUCE PONDING AND FLOWS THRU STONE INTO BASEMENT

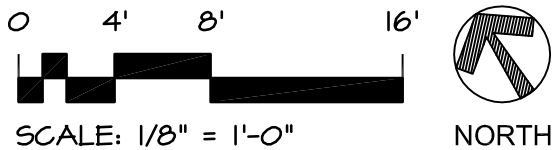
NEW MECH. FLOOR REGISTERS

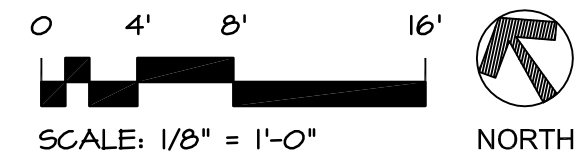
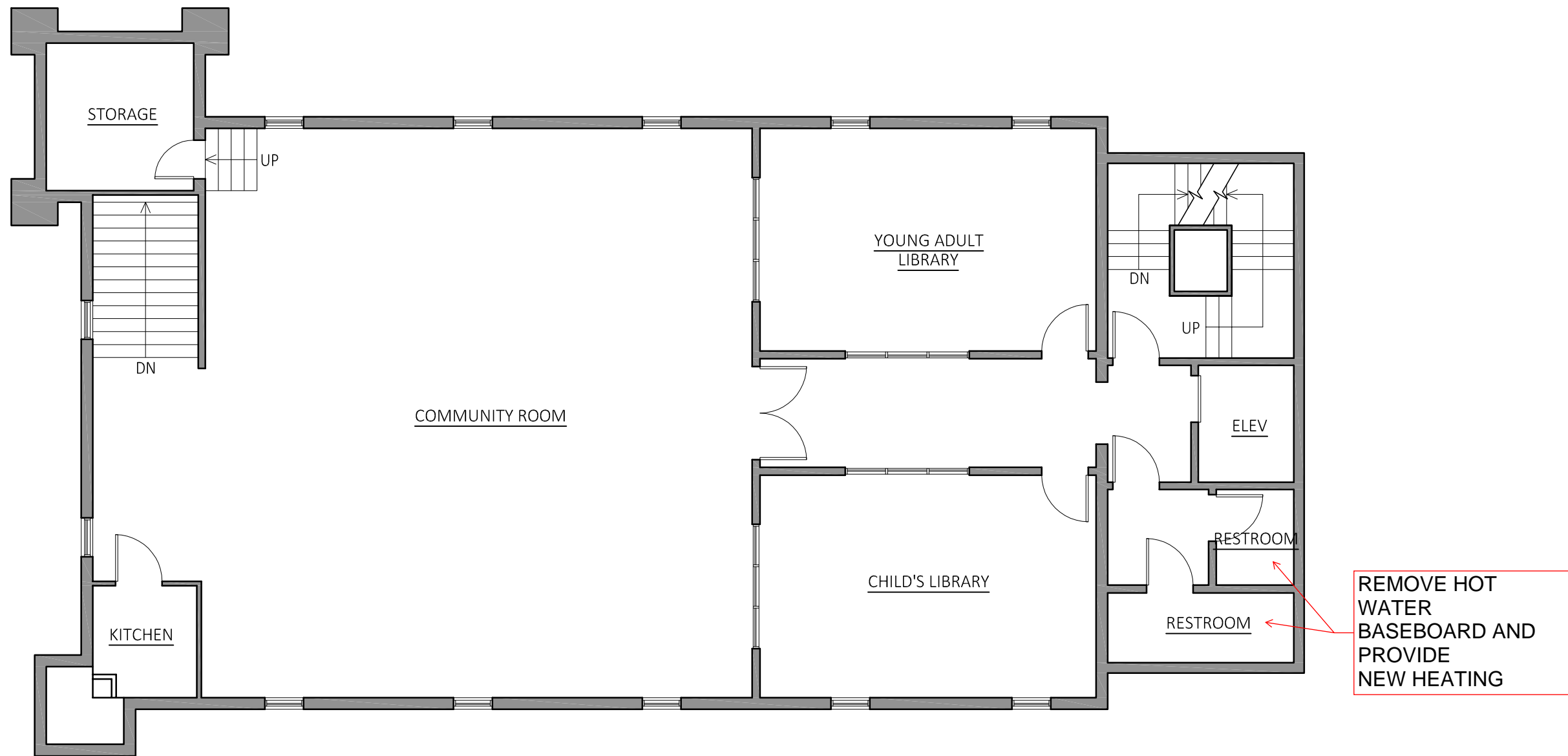
drip bed pipe to daylight

REMOVE HOT WATER BASEBOARD AND PROVIDE NEW HEATING

yard drain pipe exits to lawn. drip bed pipe extends to daylight

Proposed 1st Floor Plan

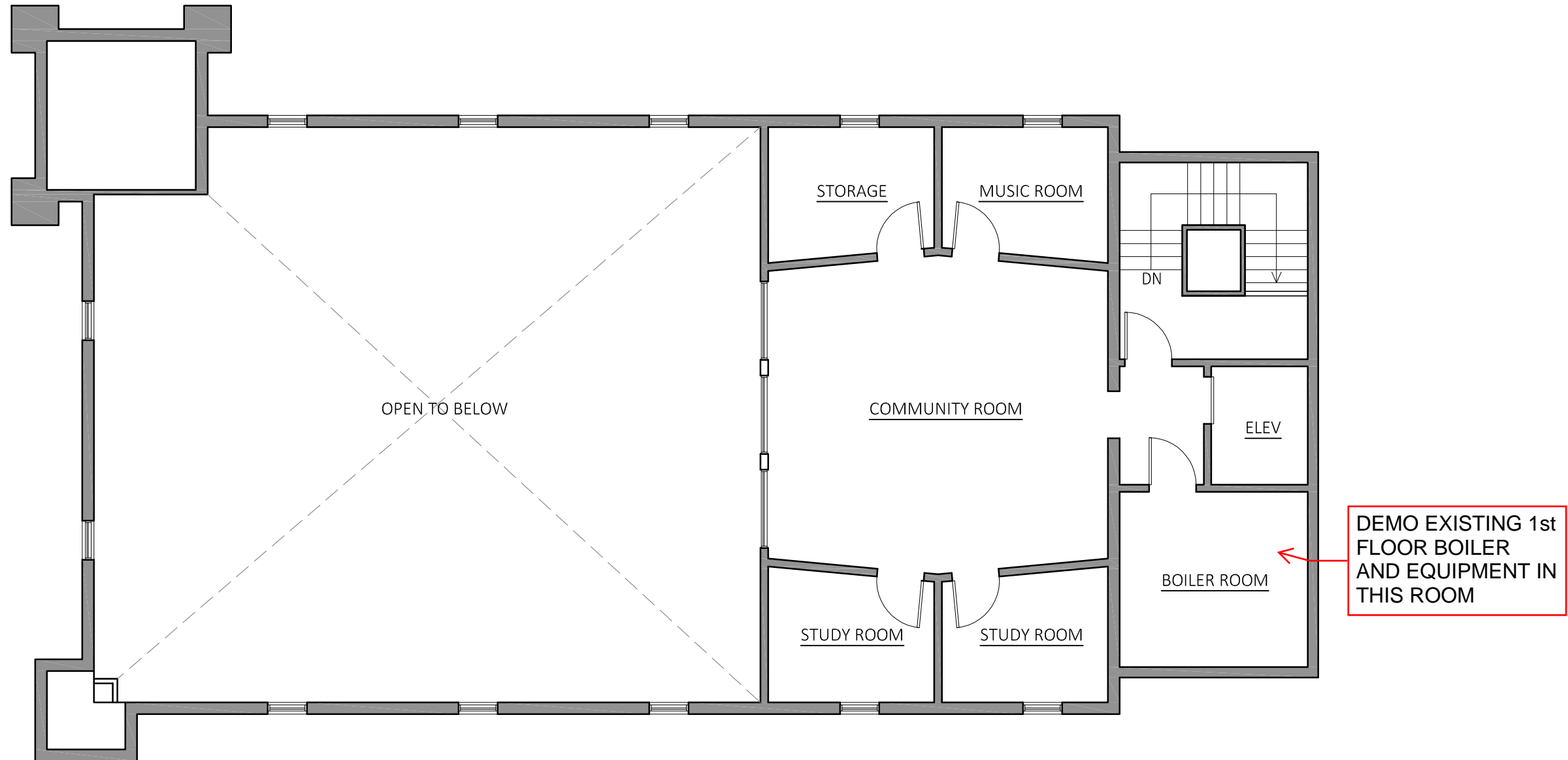




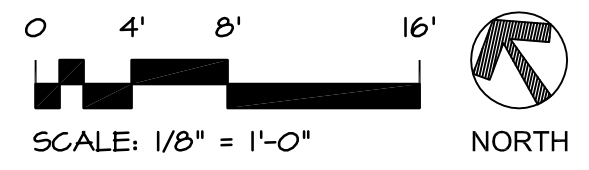
Richmond Free Library - 1st Floor HVAC Replacement - Preliminary Scope of Work Package

TOWN OF RICHMOND, VERMONT

6/29/2020



Proposed Mezzanine Floor Plan



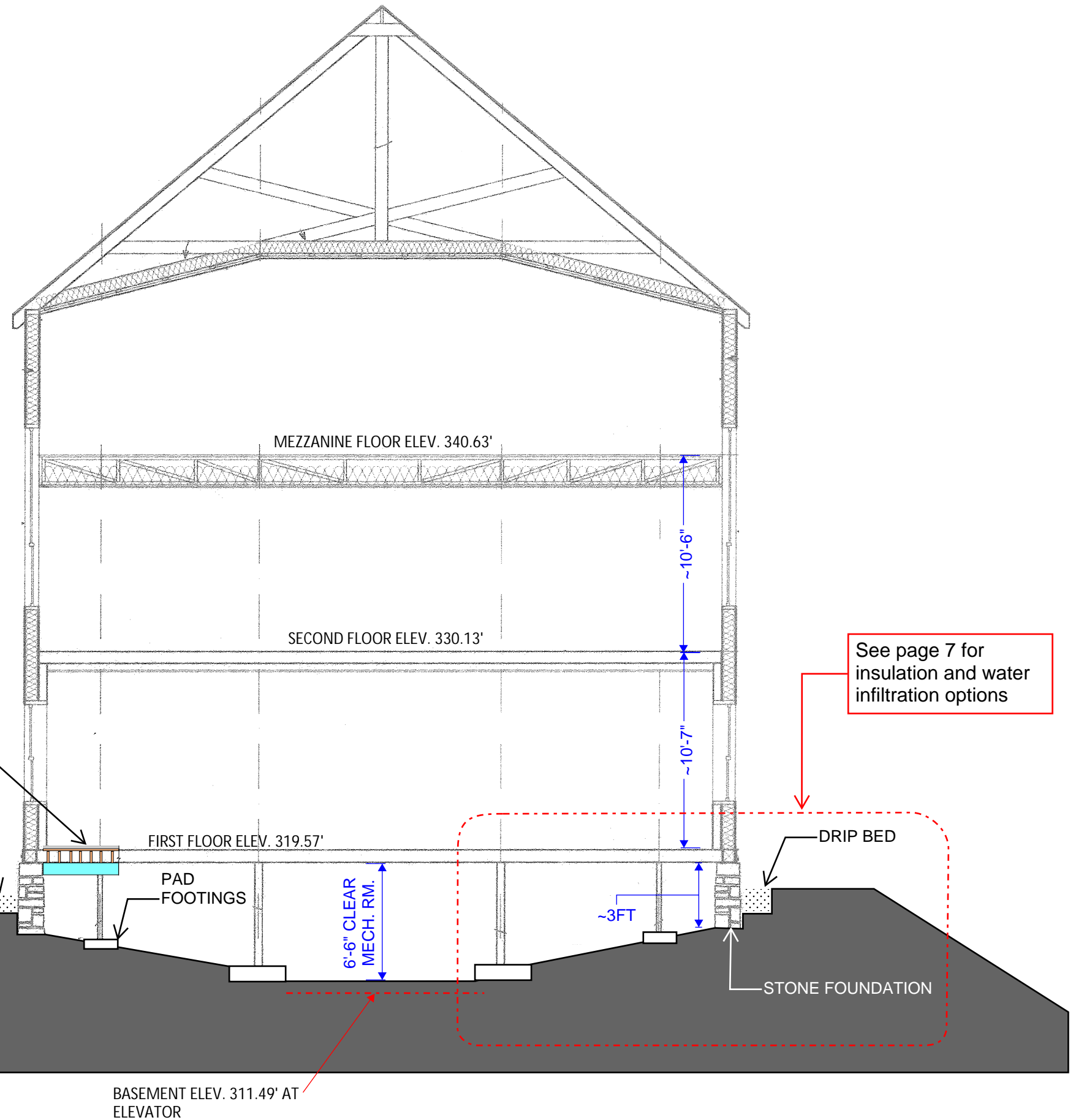


ENTRY GARDEN DRAINAGE IMPROVEMENTS

1. See page 7 for new foundation waterproofing and drip bed improvements. Extend drain pipe under entry porch to east side of eave and extend to daylight.
2. Install new yard drain at low point of grade in landscaped zone to new solid 4" pvc pipe extended under entry porch and out to east lawn at 18" below grade.



TYPICAL FLOOR CONSTRUCTION:
 1. CARPET OR VCT FLOORING ON 2" LIGHTWGT. CONC. TOPPING SLAB.
 2. 5/4 PLANK DECKING
 3. 2"x8 1/2" ROUGH JOISTS EACH SISTERED WITH (1) 1.5"x8 1/2" NEW JOIST AT 16"O.C.
 4. EAST-WEST 8X8 ROUGH TIMBER BEAMS EACH WITH a 10" STEEL CHANNEL SISTERED TO EACH SIDE ALONG COLUMN LINES.



SECTION A-A

STONE FOUNDATION WALL INSULATION AND MOISTURE MITIGATION:

A. Review perimeter sill drip edge to confirm it is shedding water away from stone face. Repair as necessary.

B. Along north and south eaves, excavate foundation down to level equal to crawl space depth at perimeter, and out 4ft from face. Repoint all exposed stone mortar joints. Apply sheet waterproofing membrane loose laid against foundation 4" higher than surrounding grade, held to foundation at top with stainless retainer bar w/ neoprene gasket behind. Sheet waterproofing membrane to extend down to bottom of drip bed and out 4ft from bldg. face to create a swale.

C. Line outer face of drip trench with filter fabric. Set filter fabric-wrapped 4" perf. pvc pipe at bottom of swale, extended to daylight with solid pvc pipe beyond. Fill swale with stone rip rap up to 6" below grade, top swale with 3/4" crushed stone with no fines. Provide 2x8 p.t. landscape edge to keep lawn/organics from entering drip bed.

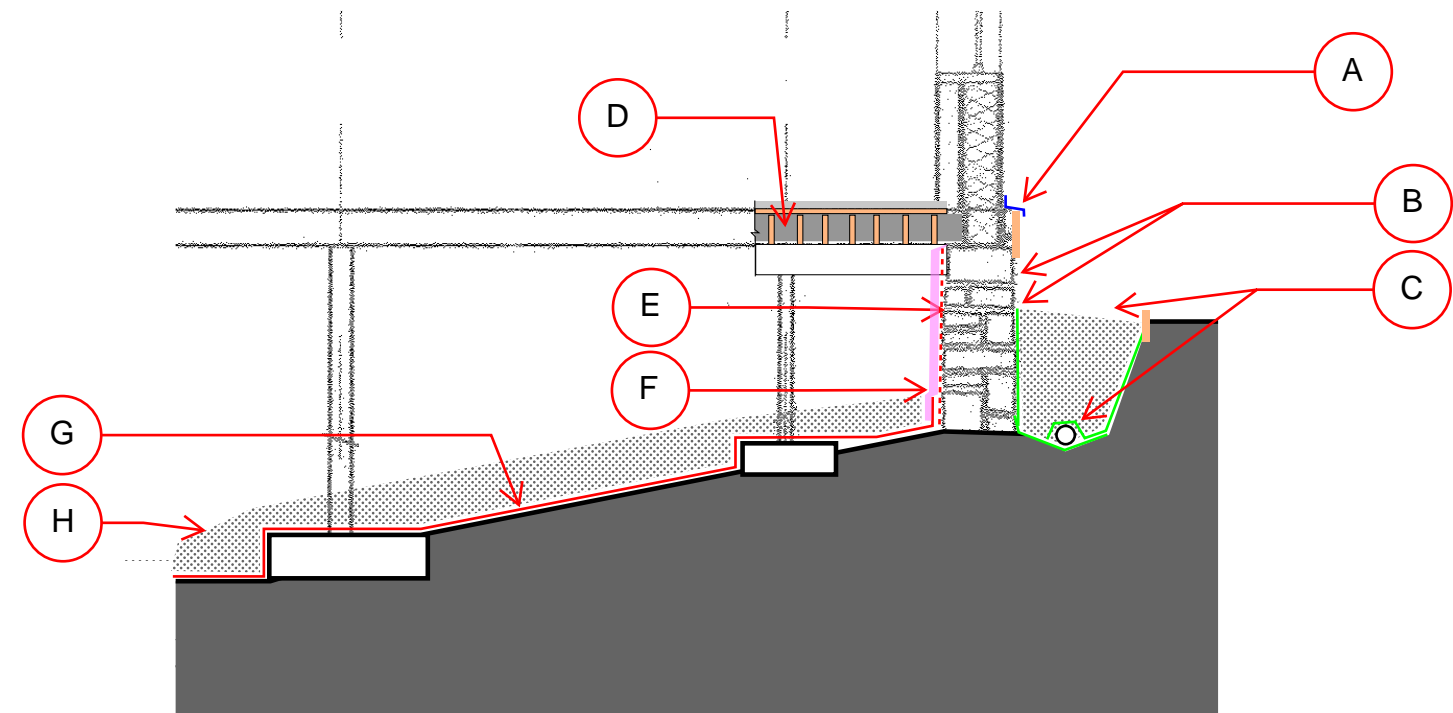
D. (2) layers of 3" mineral wool batt insulation (R27) between wood joists. (Optional: Spray joist cavities with 4" of R6.5 closed cell spray foam (R26), cover joists below with 1" spf. Do not spray timber beams and steel channels below to allow for drying.)

E. Geotextile drainage mat sheet applied to interior face of stone foundation. Fasten to wood sill at top.

F. 2" of closed-cell spray-foam insulation / air barrier with intumescent spray coating thermal barrier. (Confirm insulation thickness will allow heat loss to keep stone wall mortar above freezing assuming 50degF basement and -10degF exterior). Do not spray interior side of perimeter wood sill. Overlap sheet vapor barrier at wall base.

G. 10mil polyolefin vapor barrier, extend over footings and up interior face of drainage mat at perimeter walls 12". Tape all joints.

H. 4" of 3/4" crushed stone ballast over vapor barrier throughout.

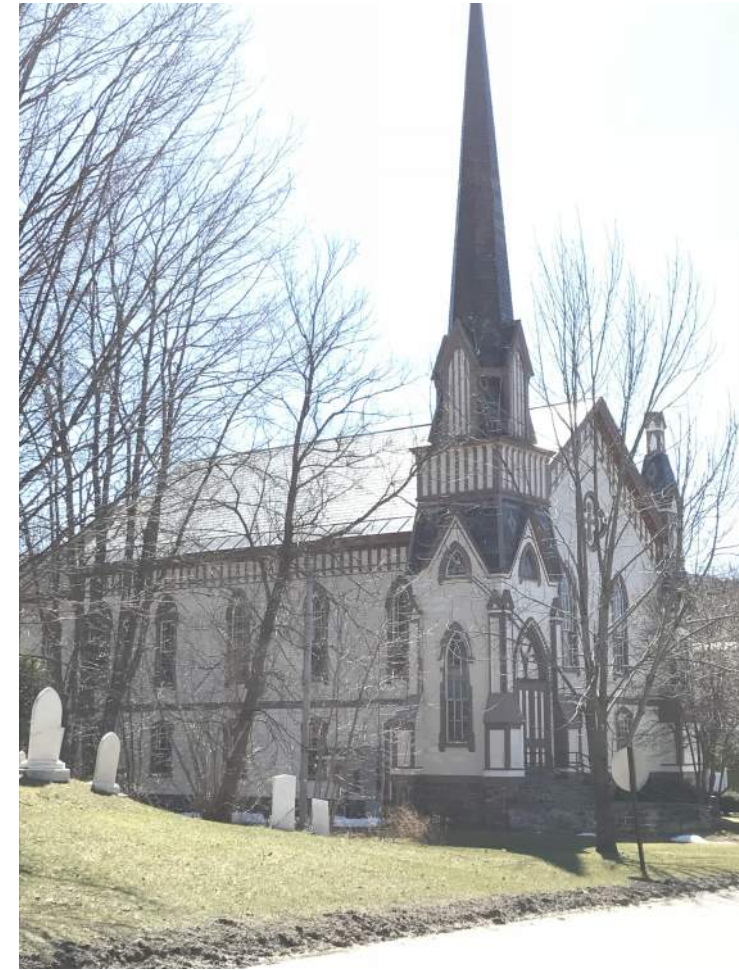




2002 EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION



NORTH ELEVATION