Purpose: This IR provides various requirements for non-structural masonry walls.

1. Garden Wall and Screen Wall Construction: A garden wall or screen wall is any non-bearing wall, which is not part of the structural system of a building. In general, construction is as required for non-bearing partitions except that minimum thickness permitted is six inches. Wall reinforcement is as required for design loads with minimum of #4 @ 24” o.c. vertical for running bond, or #4 @ 16” o.c. for stacked bond. Horizontal steel is to be 0.001 times the nominal cross sectional area and may be spaced up to 4’-0” o.c. maximum. Cells containing reinforcement shall be grouted. Though walls less than six feet high are not required to be approved by the Division of the State Architect (DSA), if shown on drawings, the design should consider the above requirements.

2. Grouting: If a 16” grout lift is called for, horizontal steel spacing should be 16” o.c. The high lift grout method will be allowed for both brick and block walls when the design indicates the use is feasible. Specifications should include the procedures outlined in DSA IR 21-2 and IR 21-3.

3. Thickness of Walls: In figuring stresses use the net dimensions of the block or brick walls. It is not necessary to deduct for raked or tooled joints less than 1/2” in depth.

4. Wall Projection Beyond Foundation: The maximum allowable projection for a brick wall is one-half brick for a block wall, the shell thickness minus 1/2”. Design the wall to be capable of carrying its load on the reduced area.

5. Concentrated Loads: Extra bars are necessary only when required by design. For concentrated loads causing eccentric moments, use four times the wall thickness plus length of bearing to compute bending stresses for interior supports. Use two times the wall thickness plus length of bearing for support at ends of walls.