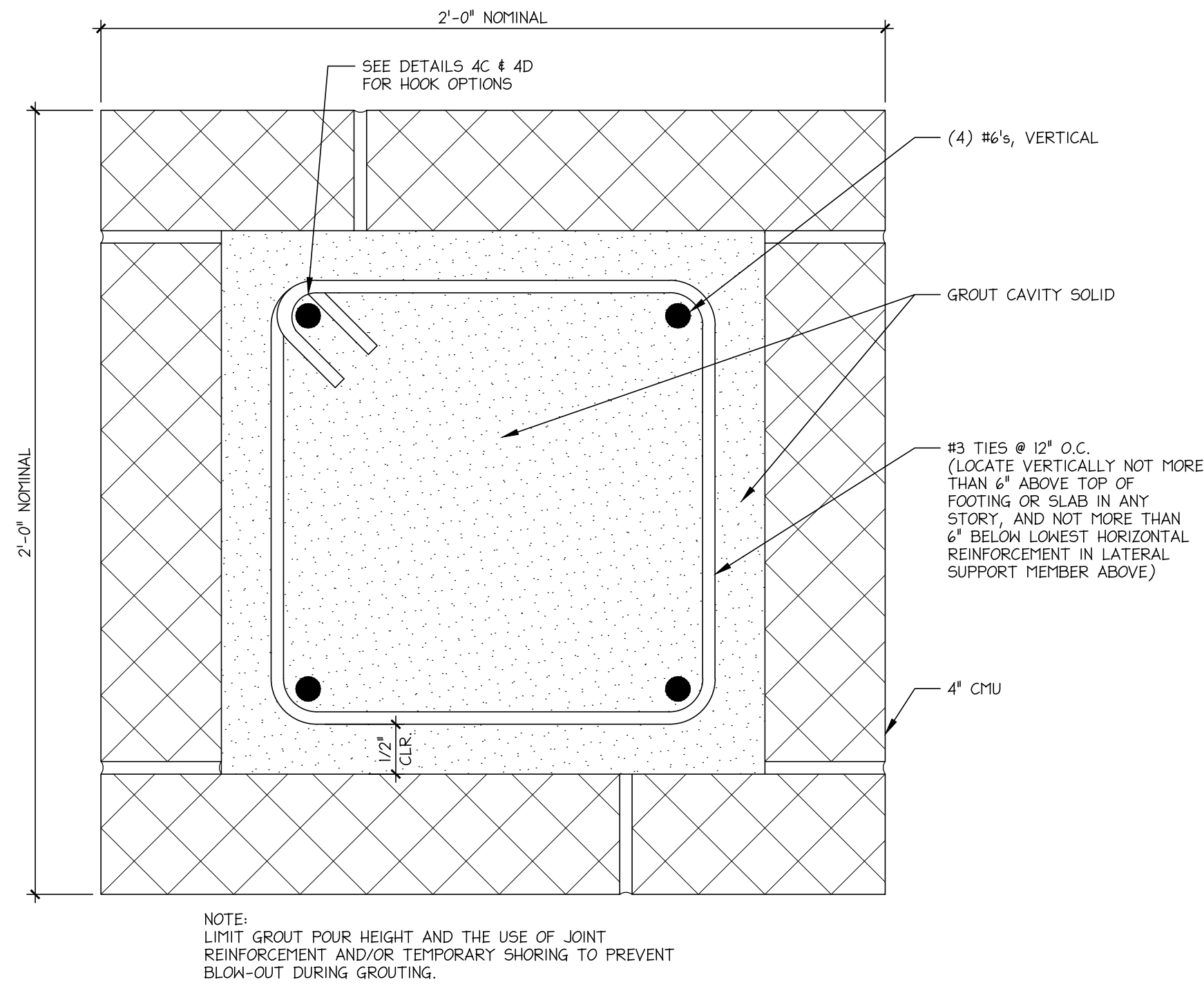
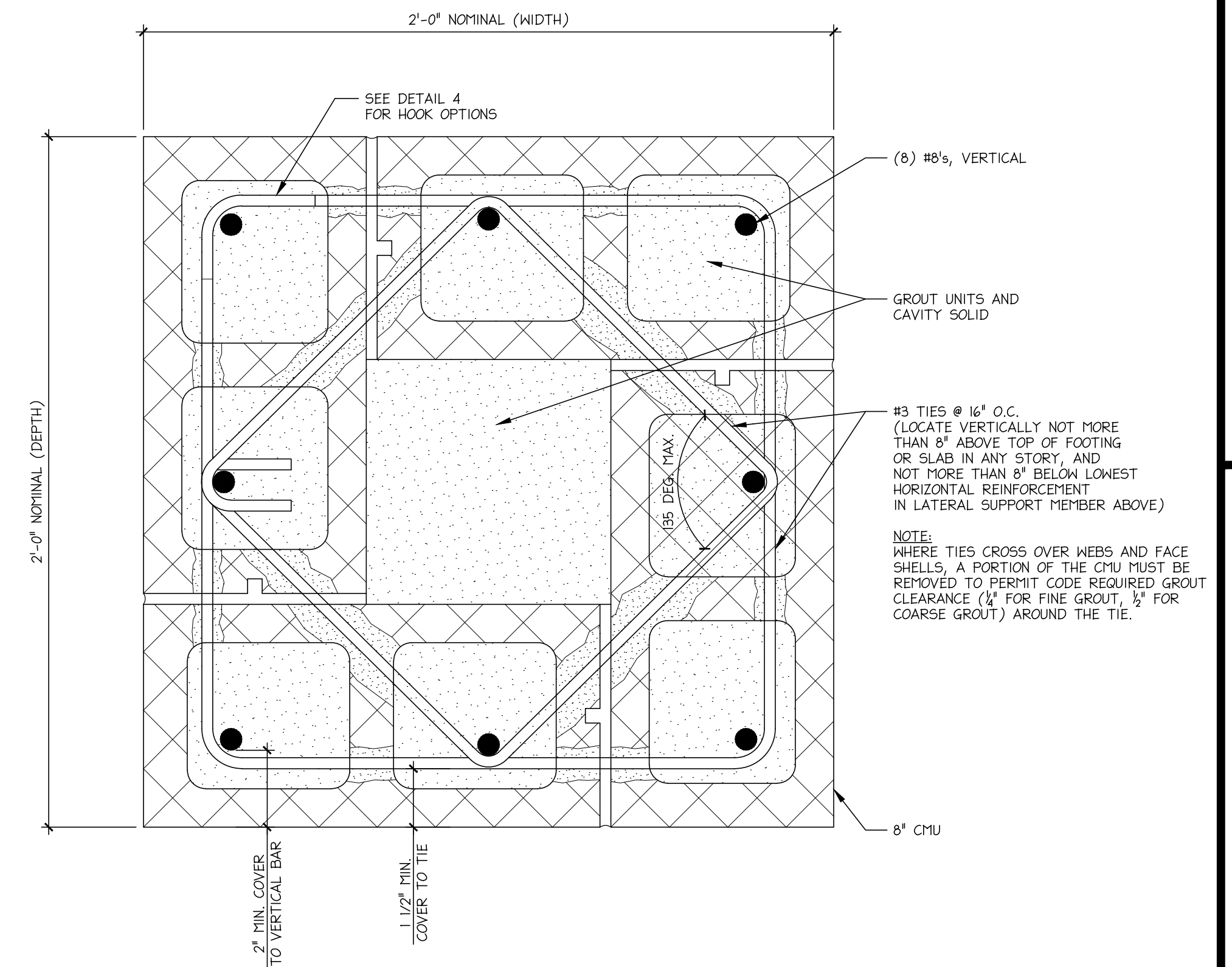


1 24"x24" CMU COLUMN PLAN DETAIL #1  
SCALE: 1/2"=1'-0"



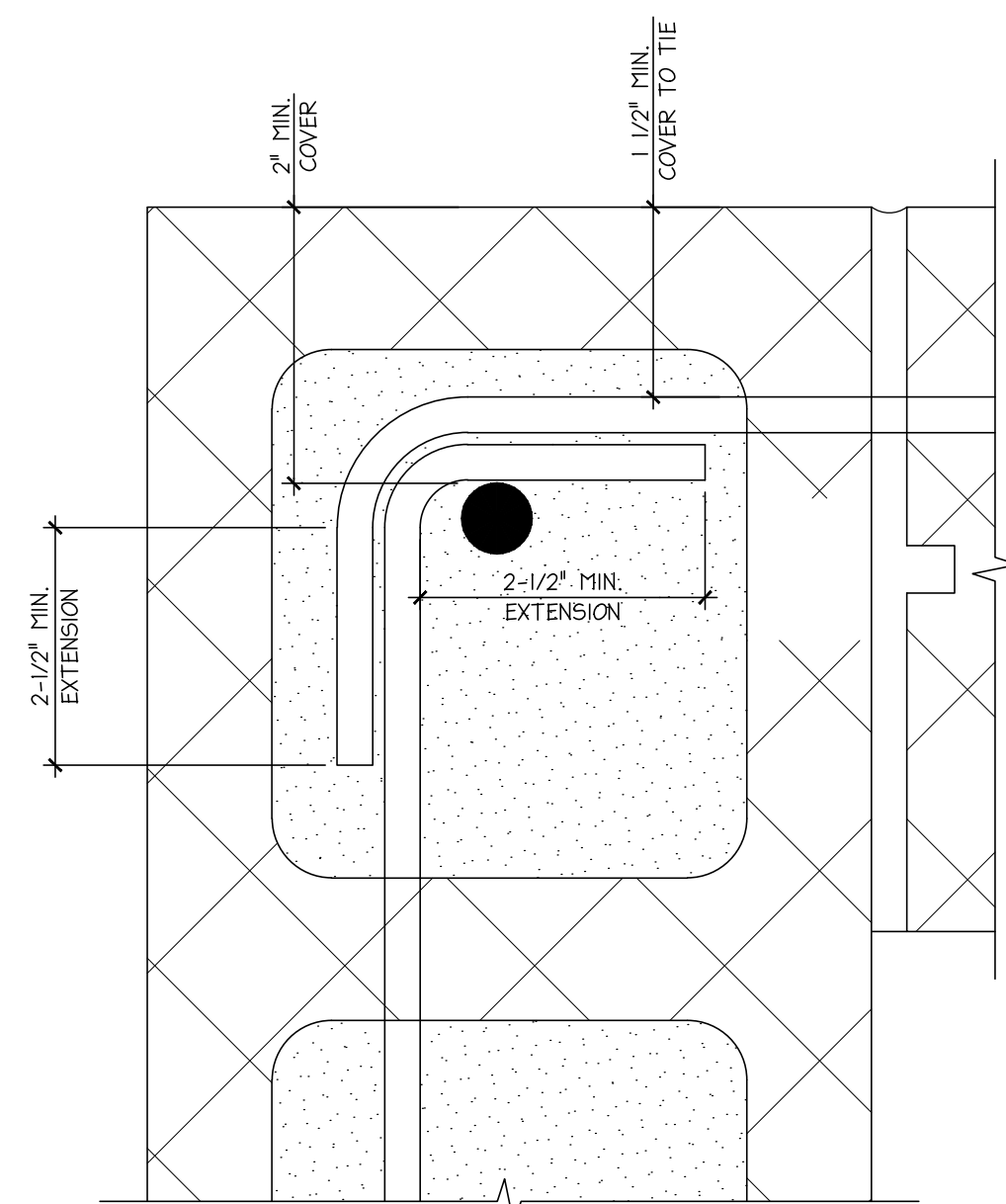
2 24"x24" CMU COLUMN PLAN DETAIL #2  
SCALE: 1/2"=1'-0"



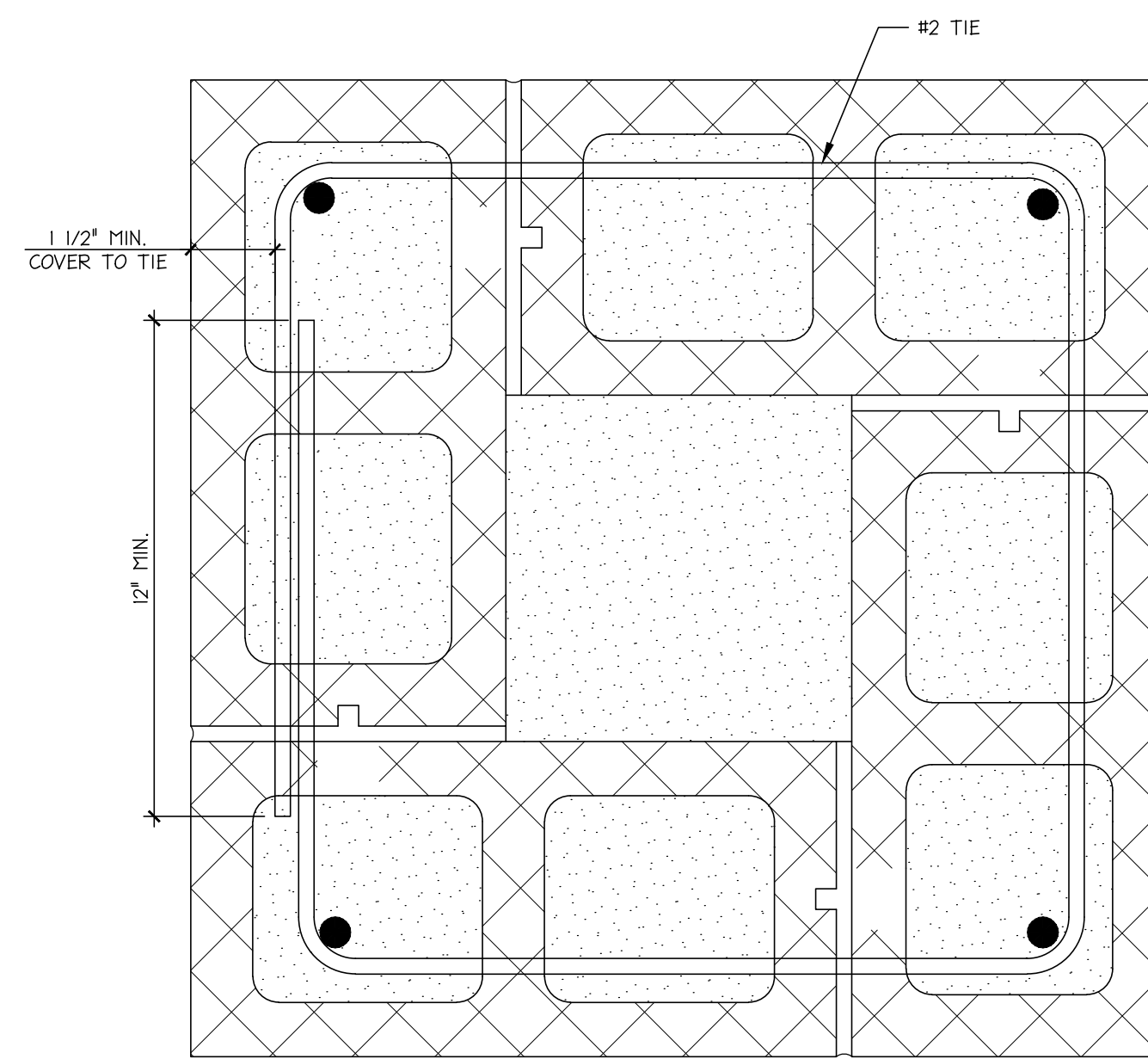
3 24"x24" CMU COLUMN PLAN DETAIL #3  
SCALE: 1/2"=1'-0"

NOTES TO DESIGNER:

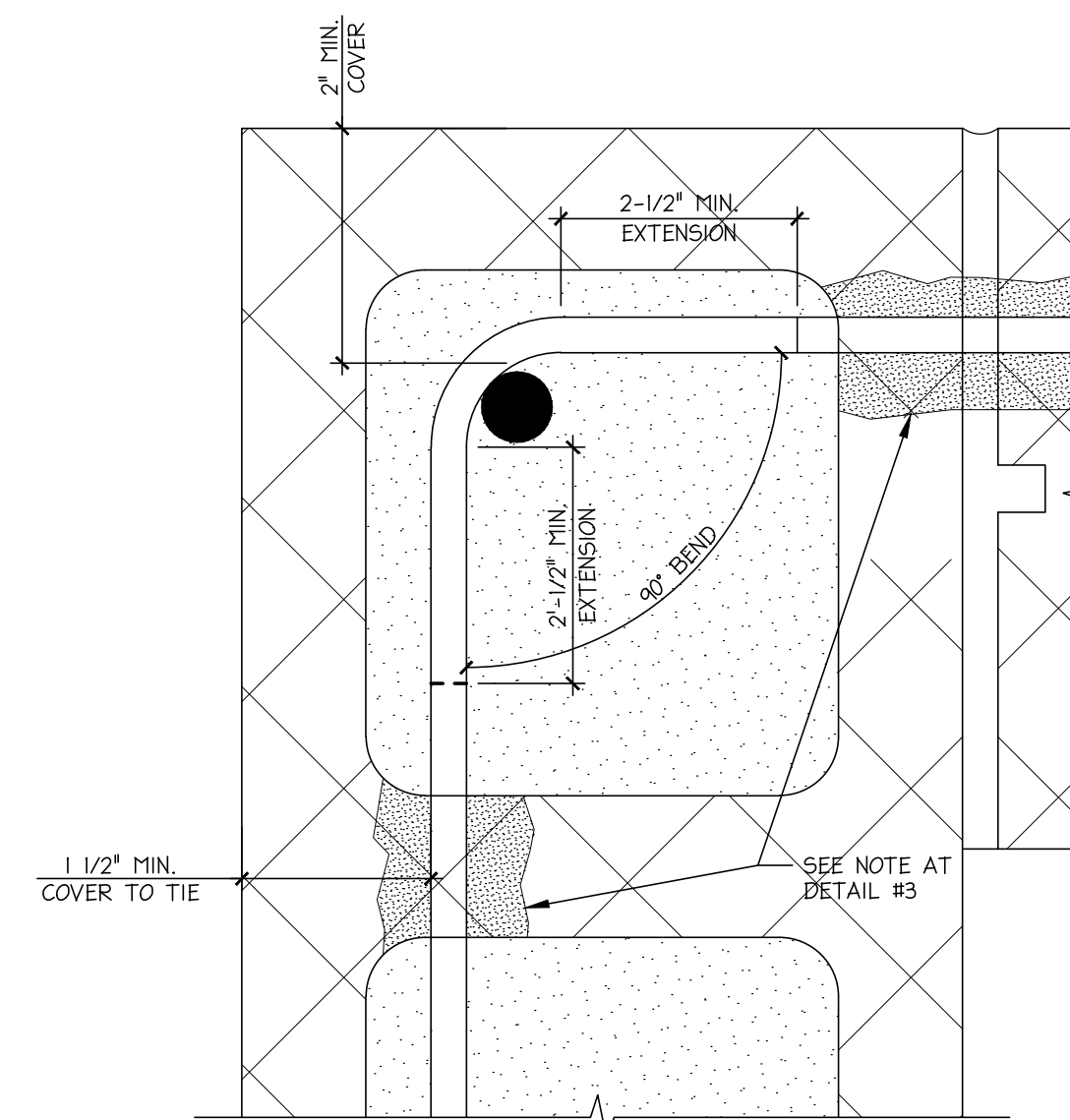
- 1) General:
  - A) The three column details have been developed in an effort to clarify TM15 402/602-16 requirements and provide working details suitable for construction documents.
  - B) Detail #1 is "Masonry Contractor" friendly (minimizes cutting and notching of units by allowing for ties to be placed in mortar joints, and places longitudinal bars in hollow cells of the units) and therefore is economical.
  - C) The possible combinations of column size, shape, and reinforcement are endless. The notes below provide some guidance if the user desires to modify the details.
- 2) Longitudinal (Vertical) Reinforcement:
  - A) Reinforcement is required to be within a range of 0.0025 An (minimum) to 0.04 An (maximum).
  - B) A minimum of 4 bars is required.
- 3) Ties:
  - A) Minimum size is 3/8" diameter. A maximum size of 5/8" is recommended.
  - B) Vertical spacing of ties shall be the lesser of:
    - 16 db of the longitudinal reinforcement
    - 48 db of the tie size
    - Least cross sectional dimension of the member
  - C) Ties may be either deformed bar or deformed wire.
  - D) Every corner and alternate longitudinal bar shall have lateral support provided by the corner of a lateral tie with an included angle of not more than 135 degrees. No bar shall be farther than 6" clear on each side from such a laterally supported bar.
  - E) In detail #4 the required hook extension is the greater of 6 db or 2-1/2".
  - F) For additional information on standard hooks, see TM15 402-16 table 6.1.8.



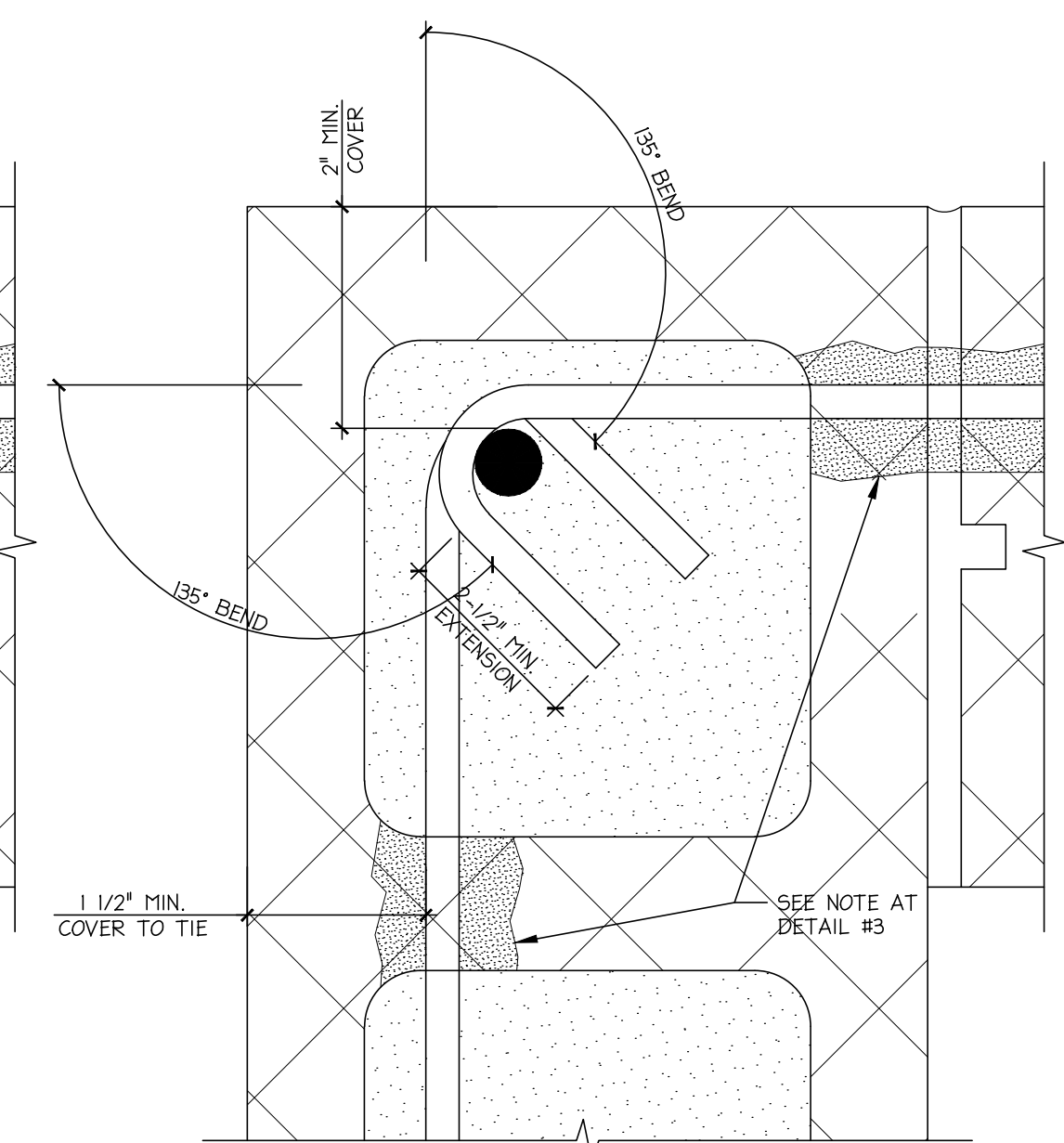
OPTION 4A : 90° IN-PLANE TIE HOOK DETAIL



OPTION 4B : IN-PLANE LAP SPLICE DETAIL



OPTION 4C : 90° NON-PLANE TIE HOOK DETAIL



OPTION 4D : 135° TIE HOOK DETAIL

4 TIE HOOK (AND LAP SPLICE) OPTIONS  
SCALE: 1/2"=1'-0"

