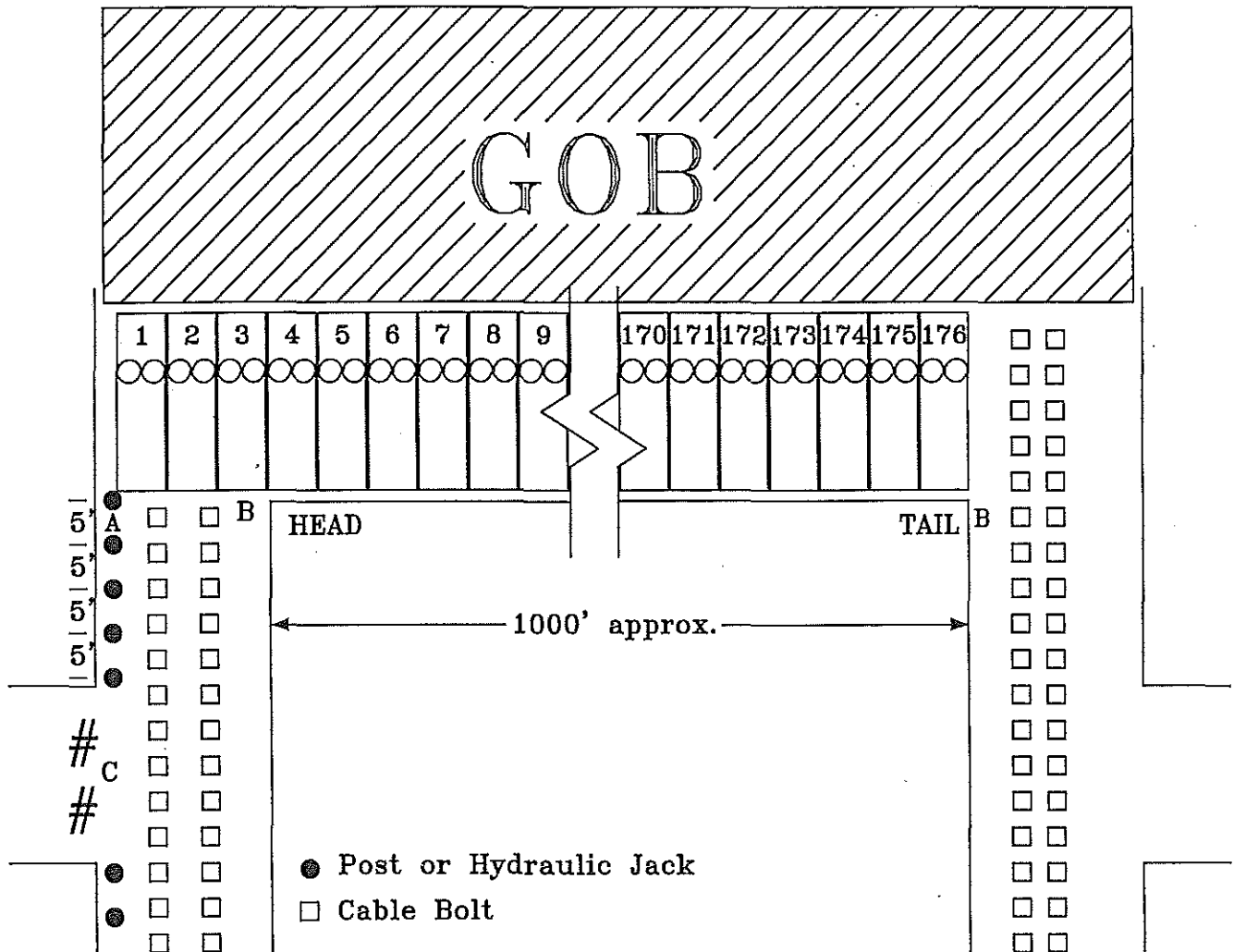


APPENDIX AH

ROOF CONTROL PLAN - HEADGATE AND TAILGATE SUPPORT

ROOF CONTROL PLAN DIAGRAM NO. 8 LONGWALL FACE, HEAD, AND TAIL ENTRY SUPPORT



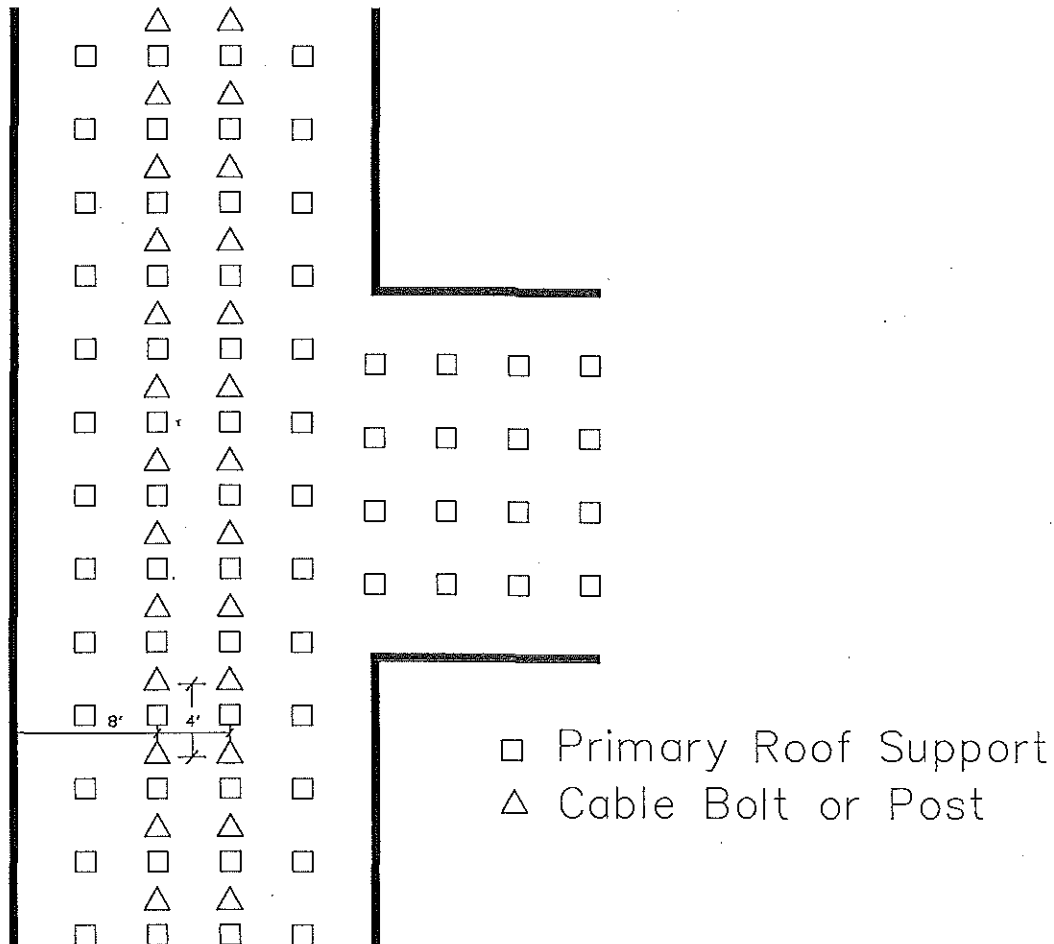
Joy/American Longwall shields shall be installed on approximately 5.75 ft. centers along the longwall face and maximum spacing between the shields shall not exceed twelve inches.

Notes: Right hand face shown. Both right and left hand faces may be used. The headgate entry shall be supported at Location A for a minimum of 50 feet with a minimum of one row of posts and/or hydraulic jacks on 5-foot centers. The location of the row is optional. Two cribs shall be installed at location C near each intersection in lieu of the posts. Person(s) shall not be permitted in area (B) during active longwall development in the face. When men are required to travel in and around the tailgate or stageloader to maintain and service the equipment, additional posts or jacks shall be installed on 5-foot centers in area (B) and maintained to protect the workmen. (IF the area is not supported by shields)

In a case if spacing between the coal rib and the #1 shield exceeds 5ft, supplemental support will be provided in the form of Jacks or Cribs at 4ft intervals.

ROOF CONTROL PLAN DIAGRAM NO. 9

SUPPLEMENTAL SUPPORT IN TAILGATE ENTRY



In Longwall development entries of initial longwall panels, the Tailgate Entry will have supplemental support in the form of two (2) 8' Cable Bolts or Posts installed between primary support. This supplemental support shall be maintained 1000' outby the longwall face at all times.

PERFORMANCE COAL COMPANY, INC.
UPPER BIG BRANCH MINE

MSHA ID NO. 46-08438 WV State # U-3042-92

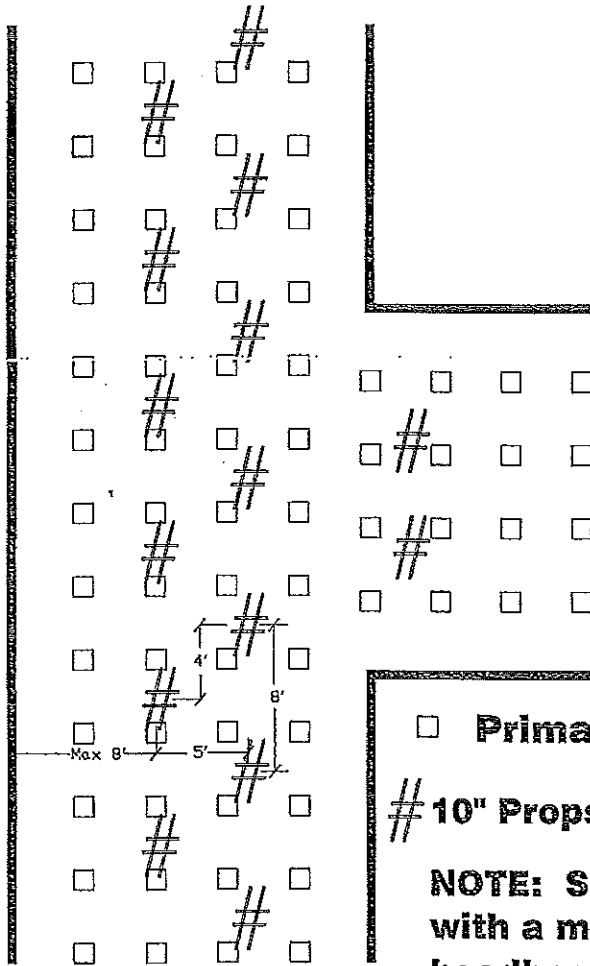
ROOF CONTROL PLAN DIAGRAM NO. 9
SUPPLEMENTAL SUPPORT IN TAILGATE ENTRY

DATE: 10-27-08

SCALE: 1" = 10'

ROOF CONTROL PLAN DIAGRAM NO. 10A

SUPPLEMENTAL SUPPORT IN ADJACENT TAILGATE ENTRIES
(IN AREAS HAVING LESS THAN 1000' COVER)



□ Primary Roof Support

10" Propsetter, Sand Prop or 4-Point Crib

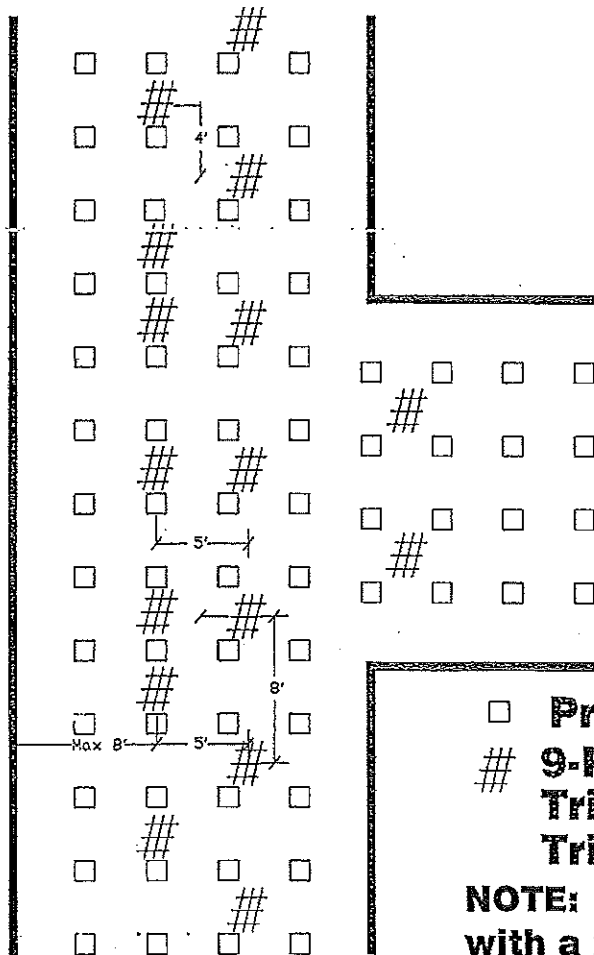
NOTE: Sand Props will be installed with a minimum 2" thick by 10" by 10" headboard and footboard.

In Longwall development entries with longwall gob on one side and less than 1000 feet of cover, the tailgate entry shall be supported as follows:

- a) Adjacent tailgate entry shall be supported with either two rows of 10" Propsetters (with headboards and footboards), two rows of 4-point cribs or two rows of Sand Props. The two rows of 10" Propsetters two rows of 4-point cribs or two rows of Sand Props shall be set on eight-foot lengthwise centers and five-foot crosswise centers with a four-foot lengthwise stagger between the rows. Also, two 10" Propsetters, two Sand Props or two cribs shall be set in the intersection 200' outby the Longwall face for Panel #11(12RT Gate) Only.
- b) Supports will be maintained 50 feet outby the retreating longwall face for the future adjacent tailgate entry.

ROOF CONTROL PLAN DIAGRAM NO. 10B

SUPPLEMENTAL SUPPORT IN ADJACENT TAILGATE ENTRIES
(IN AREAS HAVING GREATER THAN 1000' COVER)



□ Primary Roof Support
9-Point Crib, Link-n-Lock,
Tri-Set Propsetter or
Tri-Set Sand Prop

NOTE: Sand Props will be installed with a minimum 2" thick by 10" by 10" headboard and footboard.

In Longwall development entries with longwall gob on one side and greater than 1,000ft of cover, the following shall apply:

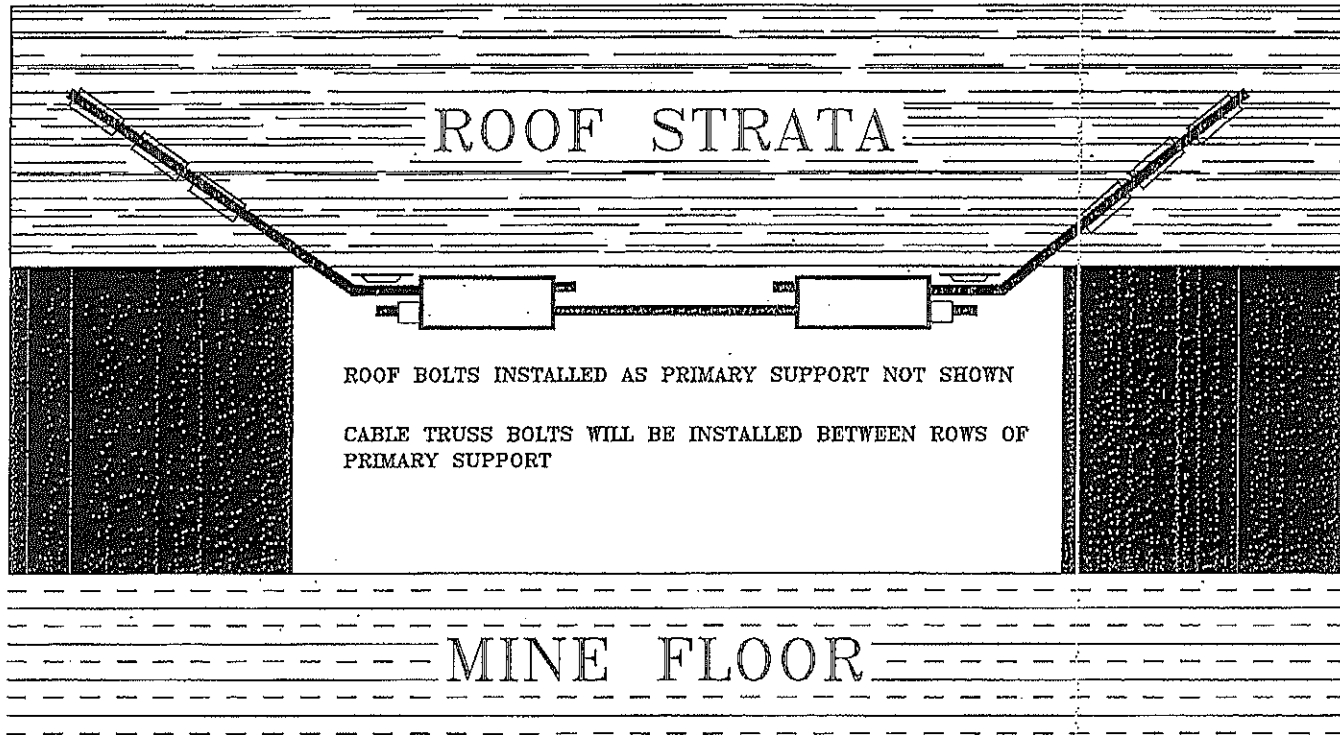
- Adjacent tailgate entry shall be supported with two rows of 9-point cribs. The 9-point cribs shall be set on eight-foot lengthwise centers and five-foot crosswise centers with a four-foot lengthwise stagger between the rows. Intersections shall be supported as shown. Supports of this capacity shall be installed one break inby and outby of the 1000 foot cover areas.
- Supports will be maintained 50 feet outby the retreating longwall face for the future adjacent tailgate entry.

Link-n-Locks Crib Systems, Tri-Set 10" Propsetters on 3' centers or Tri-Set Sand Props on 3' centers can be used in lieu of 9 point cribs in intersections.

J.M.S. CABLE TRUSS SKETCH

— 0.6" Cable
— Truss Plate
(Installation Optional)

□ Splice Tube
□ Housing with Wedge



APPENDIX AI

STABILITY ANALYSIS OF GATEROAD DESIGN