American Water Works Association
VirginiaSection

2026 VA AWWA Rodeo Events Rules



Note: No walk-on registrants on the day of events. All contestants shall be pre-registered. All contestants shall be active members, either Individual or Utility, of the Virginia Section of the AWWA (VA AWWA) to compete.
Revised July 2026

AWWA ACE Competitions - Rules and Regulations PIPE TAPPING

INTRODUCTION

1. The teams will be required to tap a water pressurized ductile iron pipe, install a corporation stop, cut and flare 3/4'' copper tubing for installation of a water service line with a curb stop and connect this line to a meter yoke.
2. Each team will be allowed to have two (2) official taps (turns), at their option, to complete the tapping event with the shortest time of the two taps to be their Official Time for the event.
3. A time period of 30 minutes shall be allowed for each team to complete their two (2) official taps.
4. A time period of 15 minutes shall be allowed for each team to prepare for the tapping event in a staging area (this may include a five (5) minute time period in a designated area between the staging and tapping carpet), this includes cutting copper and securing all parts and material needed to complete their two (2) official taps.
5. The title will be awarded to the fastest tapping time.

DISCLAIMER

8. VA AWWA specifically does not endorse products manufactured by sponsors and takes no position concerning the adequacy of such products or their compliance with any AWWA Standard.
9. Each competitor will be required to complete the proper waiver and registration documentation prior to competing in any event. **Verification of eligibility will be required at the time of registration.**
10. This competition is officiated by competent officials who are striving for fairness in their judgement for the events so that all competitors are judged as equally as possible. Fair and equal treatment for each competitor is the goal of this competition. There is no intention to provide anyone with an advantage. This competition is for the fun and enjoyment of the participants and spectators.
11. In order to be eligible, Sections must verify that each person is authorized to compete. Details regarding eligibility are noted in the next section.

ELIGIBILITY & MEMBERSHIP

13. A tapping team shall consist of no more than four (4) persons: three (3) workers and one coach. The coach may also serve as the alternate worker whenever the team shall deem

appropriate and a new coach appointed from the four original team members for the next tap. No more than three (3) workers and one (1) coach are permitted in the secured tapping area during the team's preparation period and during the two (2) official taps.

14. Each Utility may enter one (1) men's team and one (1) women's team in the VA AWWA ACE Pipe Tapping Competition. Women's and Men's teams will not be separated in conducting the preliminaries. Utilities with the returning champion may enter up to two teams, the returning champions in addition to one other team.
15. Each VA AWWA ACE Pipe Tapping Competition participant must be a current AWWA member from the time of registration through the event. This membership may be an individual membership, or the participant can be a regular employee of an AWWA Utility member. The Section is responsible for verifying the membership status of each participant before entering them into the competition.

REGISTRATION

17. To enter, follow the instructions on the Distribution Rodeo web page web page. **No registration is available onsite.** A coach's meeting will be held each day of the event for those teams competing that day. All coaches are expected to attend.
18. Each competitor and coach must register themselves and sign their own waiver. Please ensure that all members of the team register with the same team name.
19. Each team must make its own travel and lodging arrangements. VA AWWA will not make travel or lodging arrangements for any team. VA AWWA does not reimburse travel expenses (airfare, lodging, food) for any team.

WHAT WINNING TEAM RECEIVES

21. The VA AWWA Annual Pipe Tapping Champion is automatically eligible for the next year's VA AWWA Pipe Tapping Competition as a special entry and is not counted as the Utility's entry.
22. The Championship team (including coach) will:
    a. Be presented with one traveling team trophy to keep at the close of the competition for one year.
    b. Be presented with individual trophies for each team member.
    c. May be featured on the VA AWWA website and in publications.
    d. Receive a stipend for expenses to represent the Virginia Section and compete at the next AWWA ACE Hydrant Hysteria Competition (In general, expense reimbursement covers transportation costs to and from the convention site, hotel, and meals).
    e. Amount of Stipend will be determined in December of each year and will be based on location of the Annual AWWA ACE Conference. Amount will be no less than $1,000 per team member.
    f. Winners will be informed of the exact amount before ACE Registration opens.
23. The Second and Third-place teams will:
    a. Be presented with individual trophies for each team member.
    b. May be featured on the VA AWWA website and in publications.

COMPETITION

24. There is no such thing as equipment failure. All equipment was received in good working order prior to the VA AWWA ACE Pipe Tapping competition. This is a contest of skill and dexterity as well as speed.
25. All equipment utilized in the pipe tapping competition is new or reconditioned and in perfect working condition, and as such is in new condition. Any tools, equipment, and other supplies

provided for this competition that are broken/damaged will be considered to be broken/damaged by neglect of the team and will not be replaced during their turn.

a. Broken bits are the result of neglect by the team and only two bits are allowed per team, one for each tap. A broken bit is the problem of the team with the broken bit and will not be replaced during their turn.
b. There is no time penalty for broken equipment or drill bits unless resulting from obvious malicious mishandling.
c. Malicious treatment of equipment may be considered a safety violation depending on the circumstances.

26. The location and the size of the space for the VA AWWA ACE Pipe Tapping competition will be determined at the discretion of VA AWWA Distribution Systems Committee and dependent on the layout of the facility. The work area for the pipe tapping competition shall be large enough to accommodate all competitors and judges and their equipment. Equal space must be provided for each team. A minimum of 10’ clear area shall be provided between the working area and the spectators to afford safety from accidental flying tools or materials during the competition.
27. Arrangements should be made to eliminate all water spilled during an event before the next event starting so as to provide the best possible working conditions for each team for both of their taps.
28. The team is responsible for ensuring the water supply is turned on and the air has been bled from the Ductile Iron Pipe prior to each tap. The corporation stop shall be tapped into the pipe at approximately 45 degrees from the top of the pipe.
29. Pipe shall be securely fastened to support blocks at a height of 8.5’’ to the bottom of the pipe above the ground or stage floor. Support blocks shall be of adequate construction so as to secure the pipe firmly in position suitable for the rough handling required.
30. Distance from the pipe to the meter yoke shall be approximately 10’ and nearly perpendicular to the pipe as best will accommodate the use of two straight 6’ lengths of copper service pipe. This meter yoke stand may be set by the team, under the supervision of the official(s), to any precise distance that will best accommodate their style of work. Angle meter yoke shall be approximately two (2) feet above the ground or stage floor; this includes the 1/2’’ plate attached to the bottom of the tripod.
31. Curb stop to be located approximately half way between the pipe and the meter yoke. End connectors will be inspected and attached, by a team member, to each end of the curb stop and to the meter yoke prior to the start of the event. The officials will then inspect the fitting to insure the end connectors are in the proper position, fully threaded, but not tight, prior to start.
32. The tubing representing the service line shall be 3/4’’ type K copper, four straight 6’ lengths, each team will cut and crimp the copper before the start of their team’s official time under supervision of an official.
33. Curb stop position after connections to tubing shall be no more than 4’’ above the ground/floor to the top of the inlet tubing and shall be in a “near vertical” position, i.e., no more than 10 degrees left or right of vertical.
34. All connections shall be flared and drip-tight. The official(s) will bleed air from the service line before checking for leaks.
35. The service line shall contain no crimps that would impede the normal flow of water through the pipe. Officials shall determine the severity of any crimp by disconnecting the nearest joint carefully without disturbing the crimped section of the pipe and passing a marble or sphere approximately 1/2’’ diameter through the pipe past the crimped section. If the marble passes through the crimp, the crimp is not damaging and there is no penalty. If the marble does not pass through the crimp, a penalty will be assessed to the event time.
36. An end connector will be utilized on the one end of the meter yoke, which will be connected to the service line. This connector will serve to protect the threads on the meter yoke. The competing team will examine the connector threads carefully prior to the start of the event and

request a new adapter from the head official if the threads are damaged enough to impair their work

37. The tapping team shall position themselves and all equipment, tools, and materials beside the pipe to be tapped prior to the start of the tap. At the start of the tap, team workers may be standing or kneeling on the floor but shall not be touching any piece of equipment or tools.
38. The coach shall be positioned out of the way of the team and the official(s) and may be located anywhere in the area. The coach may lead the team by instructions and encouragement in any way but shall not be allowed to physically assist the team or utilize in any way the tools or equipment during the tap.
39. The tapping machine may be inspected, cleaned, and lubricated as necessary by the team before starting either turn. The drill bit will be chosen by the team from a ready supply of bits provided and may be assembled in the tapping machine prior to the tap at the option of the team. The corporation stop may be placed in the adapter prior to the tap at the option of the team. Joint compound may be applied to the threads of the corporation stop after time starts at the option of the team.
    a. WD-40 and Tapping Grease to be used in a designated 3'x3' box during the first 10 minutes only.
    b. WD-40 and Tapping Grease must be returned to the tool table after the 10 minutes has been completed.
40. Saddles and rubbers for the tapping machine may be assembled and ready on the floor before the tap. Chain hooks may be in the chain yoke on the floor, but the chain must be on the floor and not hooked to the chain hooks before the start of the tap.
41. The same bar shall be used to make the tap and insert the corporation stop. Two bars will not be allowed for a tap.
42. The tapping machine feed-nut-and-yoke shall be securely in place around the boring bar at all times while the pipe is being drilled, tapped, (*) and inserting the corporation stop. If the feed-nut-and-yoke falls off and there is no attempt to continue inserting (turning ratchet) the drill or corporation stop, THE TEAM WILL NOT BE PENALIZED.
43. The corporation stop shall be securely inserted into the pipe with no more than four (4) threads showing when the tap is completed. A designated official will count threads. The threads are counted at the half-way-point on both sides of the corporation. If more than four (4) threads are counted on both sides, THE TEAM WILL BE PENALIZED. The official(s) decision on the matter will be final.
    a. When removing the boring bar from the tapping machine after threading has been completed, the yoke MUST be in place until the tap has disengaged from the pipe and the boring bar must be FULLY extended before the cap is removed from the cylinder.
    b. Failure to follow this procedure will be considered a SAFETY VIOLATION and the team shall be penalized accordingly.
    c. When inserting the corporation stop, the cap MUST be installed on the cylinder before the yoke is placed on the boring bar. The corporation stop will be considered to be inserted when the ratchet is reversed to disengaged from the corporation stop.
44. Pine tar or grip enhancers may be applied to gloves. Once the pine tar or grip enhancer has been applied, the gloves cannot be used to touch any portion of the equipment or materials until after the official start of the tap.
45. The timing for the event shall begin at the head official’s signal and end when the corporation stop is turned on by one of the workers and all work has ceased. At that time, the head official shall shout STOP or sound a suitable signal announcing the end of the tap. All team members will back out of the immediate work area to permit the officials to evaluate the work.

EQUIPMENT & MATERIALS

46. All equipment, **with the exception of Combined drill-and-tap tools** is to be provided by the VA AWWA, InKind Material Sponsors, and the Local Host for each tap.
    a. Mueller B-101 tapping machines (not 100), completely outfitted, including new style ratchets; old style ratchet may be allowed in competition if available. Bicycle-type chain is not allowed.
    b. Brass corporation stops, Mueller Co. (H-15000N), and curb stops, Mueller (H-1502-2N), 3/4'', new, one each, to be provided for each tap.
    c. Flaring nuts shall be provided for all connections to stops and meter yoke and shall be as manufactured by Mueller Co. (H-15430N).
    d. Type K copper tubing, 3/4'', 6' lengths, two (2) lengths for each tap.
    e. Meter yoke, Mueller Co. (H-14180), 5/8'' x 3/4'', secured firmly to a portable stand.
    f. End connector, Mueller Co. (H-15460N), 90-degree female connector, 3/4'', shall be provided to allow the service line to be connected to the meter yoke. This connector is utilized to protect the threads of the meter yoke from the service line connections.
    g. Pipe wrenches, four (4), 14'', REED Manufacturing Company (RW-14)
    h. Hammers, two (2), shall be a brass, 3lb hammer for flaring, Mueller Co. (H-18025) or REED Manufacturing Company (HAM3, 3lb, 06088).
    i. Adjustable (crescent-type) wrenches, two (2), 12'', REED Manufacturing Company (CW12).
    j. Tubing cutters, two (2), heavy duty, REED Manufacturing Company (T-20). The team shall examine the cutting wheels before each tap to determine their condition and ask the officials for a replacement if necessary.
    k. Flaring tools, two (2), Mueller Company (H-18000), or REED Manufacturing Company (HF 3/4).
    l. Cutting grease, Mueller Co. (88366) shall be supplied for all teams to utilize in the contest.
47. ONLY lubricating grease from Mueller Co., light machine oil in spray or liquid, and WD- 40 lubricant shall be provided for teams to lubricate the equipment and tools. No lubrication of any type will be allowed on the end connectors, threads, or flaring tool prior to the start of the tap.
48. Combined drill-and-tap tools will be supplied for each team. This tool shall be as manufactured by Mueller Co. (680539), Decatur, IL (217)254-7000, Salser Co. (Super- Tuff 3/4''cc), Ocala, FL (800)782-5268, REED Manufacturing Company (DT 75, 3/4''-cc), and Erie, PA (814)452-3691.
49. Pipe to be tapped shall be AWWA C151, Class 52, 6'' Ductile Iron Pipe, cement lined, capped on each end, pressurized and regulated to a pressure of 40-45 psi, by a suitable connection to the water supply.

JUDGING

50. The VA AWWA Distribution Committee Head Judge may appoint one of the officials as head official for the daily competition. The head official shall be in charge of the pipe tapping on the floor each day to make rulings as required by the circumstances for any penalties. If there is a disagreement between the head official and a team coach on any interpretation of the rules, the pipe tapping committee chair shall make the final ruling. **Officials will not be allowed to judge their respective Utility's team(s).**
51. The number of teams for each round shall be limited to the space available for the competitors to perform adequately or to the number of officials available for each round.
52. The officials shall be responsible for timing the events with the head official being the one to announce the START and STOP of the event. Each competitor's time as recorded by the

official, plus any penalties accrued, shall be used to determine the official time for each contestant. The head official shall be in charge of the competition and after consulting with the other officials of any infraction of the rules shall make the ruling as required by the circumstances for any penalties to be assessed.

53. The head official shall see that all tools, materials, and teams are in the required positions prior to starting the event. He/She shall also ensure the work area is free from any obstructions or spectators; this includes any standing water.
54. The officials shall watch for safety violations during the actual events and assess appropriate penalty times as required. During the time of the event not taken up by the actual competition, the officials shall see that all preparations for the event are accomplished in a safe manner.
55. No timing official will be assigned to a contestant who works for the same organization.
56. Squirting, continuous leaking connection spraying water on any other connection of the service line shall be covered appropriately with a towel or something to deter the water away from another connection while judging the next connection for leaks. If such measures are insufficient to block the flow of water to allow proper judging of the next joint, the connection may be tightened by the officials, at the head official's option, during the inspection, so that other joints will not be doused with water.

SAFETY & CONDUCT

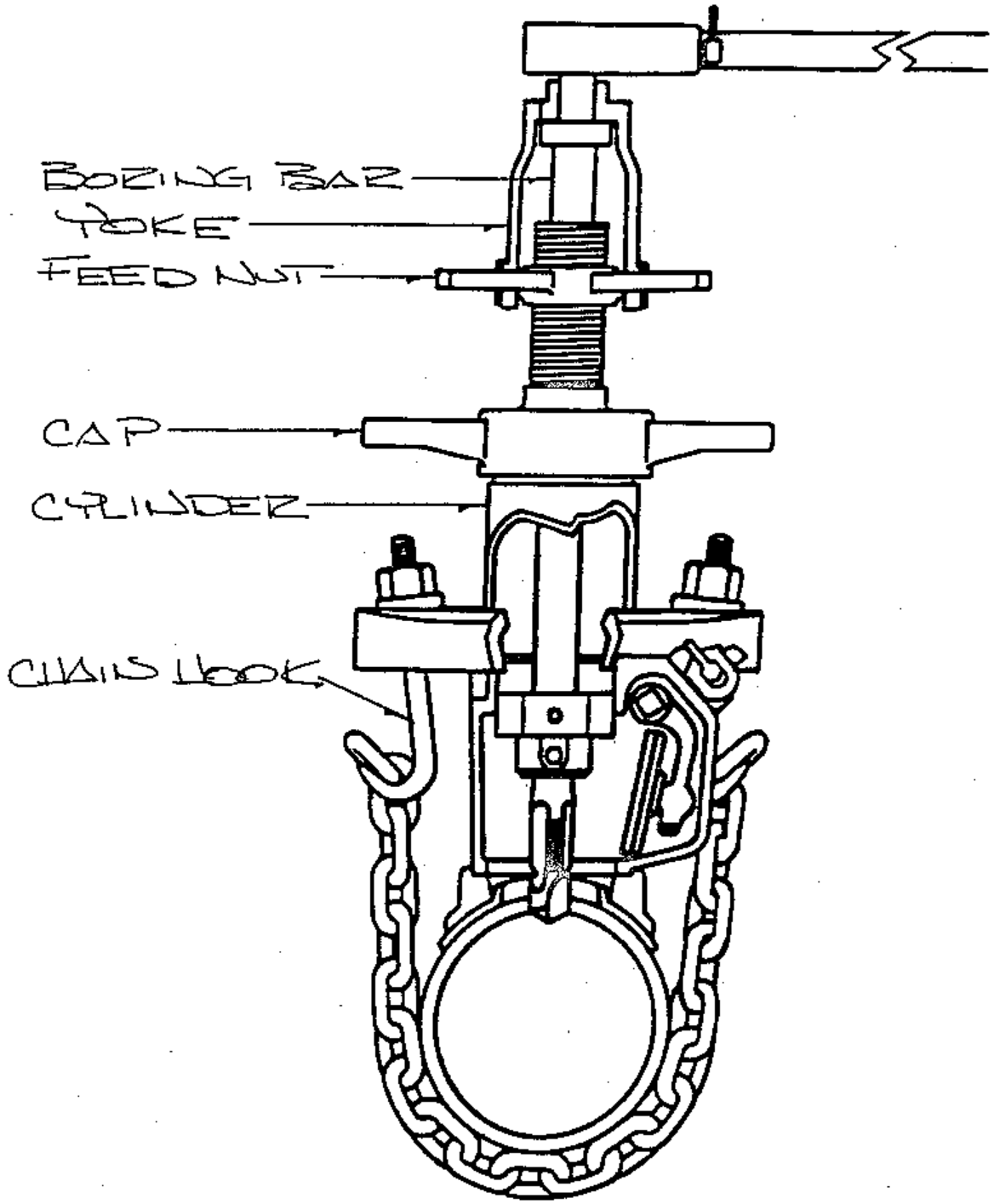
57. Standard water utility safety practices will be observed at all times during the competition. Any flagrant violations will be penalized by the addition of time to the competitor's raw time as described in Procedural Violations.
58. Unsportsmanlike behavior will not be tolerated and could result in individuals or teams being disqualified from the competition. Judges, Competitors, and/or volunteers may not use, possess, or be under the influence of alcohol and/or illegal substances while performing duties related to the competition. Violations of this will be determined at the discretion of AWWA Staff and the Pipe Tapping Competition Subcommittee Chair.
59. Teams will not be allowed to participate if they are wearing articles of clothing or using equipment plainly displaying offensive language, slogans, or graphics.
60. Safety equipment will be required to be provided by each competitor. Teams without proper personal protective equipment as described below will not be allowed to compete until they have obtained the proper personal protective equipment in a reasonable amount of time during the competition. The safety equipment required of each competitor shall be:
    a. Head protection for ALL team members (includes the coach) shall be worn during the event. The head protection (hard hats) shall conform to the **American National Standard Safety Requirements for Industrial Head Protection (ANSI Z89.1-2014).** If a hard hat falls or is knocked off of a team member, the hat must be replaced on the team members head as soon as possible or a safety violation will be imposed. Head protection must be worn in accordance with manufacturer's recommendation and is not to be worn backwards.
    b. Eye protection (Glasses or Goggles) are required to be worn by ALL team members (including the coach) during the pipe tapping contest. Eye protection must conform to the **American National Standard for Occupational and Education Eye and Face Protection (ANSI Z87.1-2015).**
    c. Gloves are required to be worn by all three team members. The coach is exempt while performing coaching duties. Gloves shall be full-fingered and suitable for construction related tasks. Lab type gloves, such as latex material, and gloves without complete fingers are not acceptable for the competition. Sport gloves with full fingers are allowed.
    d. Foot Protection shall be required to be worn by ALL team members (includes the coach) and shall conform to the **ASTM F243-17 - Standard Specification for Performance**

Requirements for Protective (Safety) Toe Cap Footwear (incorporates ANSI Z41.1 by reference). Sneakers and dress shoes that meet this standard are also allowed.

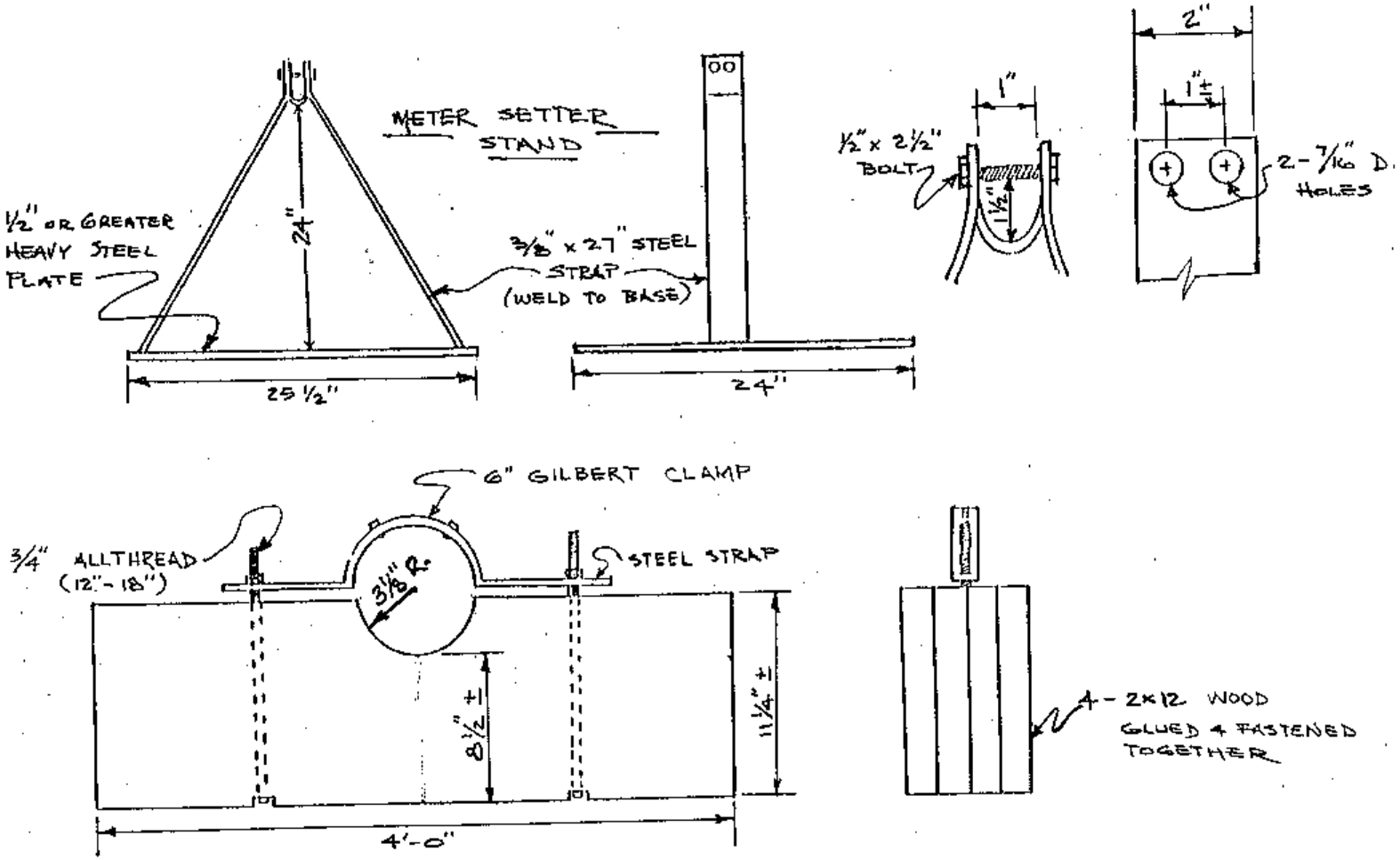
61. Long or short sleeved shirts and long-legged trousers are required to be worn by all three workers during the event. No tanks or cutoff shirts, and no shorts are allowed.
62. No personal bags will be allowed on the floor.
63. During this contest, an ordinary task (tapping a distribution pipe) is performed in an extraordinary manner. Therefore, for this contest to be conducted safely, it is necessary for the yoke to be in place at all times during the use of the drilling, tapping, and inserting procedure as outlined in these rules. Failure to follow this procedure will be considered a safety violation PLUS TWO (2) PROCEDURAL VIOLATIONS (10+10+10=30 SECOND VIOLATION) AT THE DISCRETION OF THE HEAD OFFICIAL.
64. Children under the age of 16 entering the competition area during show hours need to be accompanied by a parent or guardian at all times.

PENALTIES

66. Various penalties will be assessed by the head official for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.
67. The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event time which will then be the OFFICIAL TIME of that event.
68. In the event of any disagreement with penalty decision, the head official's decision is final.
69. There will be NO INSTANT REPLAY allowed for reversing any decision after the head official has made a final determination of any infraction in these rules.
70. Penalties shall be:
    a. Safety violation such as throwing of tools, PPE penalty, etc. (+10 seconds each)
    b. Procedural violation by any member of the team. This is a general penalty for actions of the team that may not specifically be covered in these rules but are of sufficient gravity to the Judges as to warrant a penalty. (+10 seconds each)
    c. Leaking connection, barely oozing water and just discernable to the judges (+4 seconds each)
    d. Slow, obviously dripping connection (+6 seconds each)
    e. Squirting, continuous leaking connection (+8 seconds each)
    f. Curb stop too high above ground/floor and/or not vertical (4'', + or – 10 degrees, (+4 seconds each)
    g. Crimp in service line that will not pass 1/2'' marble (+10 seconds each)
    h. More than four (4) threads showing on the inserted corps (+10 seconds)
    i. YOKE PENALTY - shall be 10+10+10=30 (or less at the discretion of the Judges depending on the nature of the violation). Having the yoke slip off the bar accidentally and a member of the team immediately place the yoke back on the bar DOES NOT constitute a violation. (+30 seconds)
    j. If the corporation stop blows out of pipe or any connection blows apart after time is stopped, the team is DISQUALIFIED for that tap.



TAPPING MACHINE
(FIG. 1)



(NOT TO SCALE)

D.I.P. STAND (2 - MIN. REQD)

(FIG. 2)