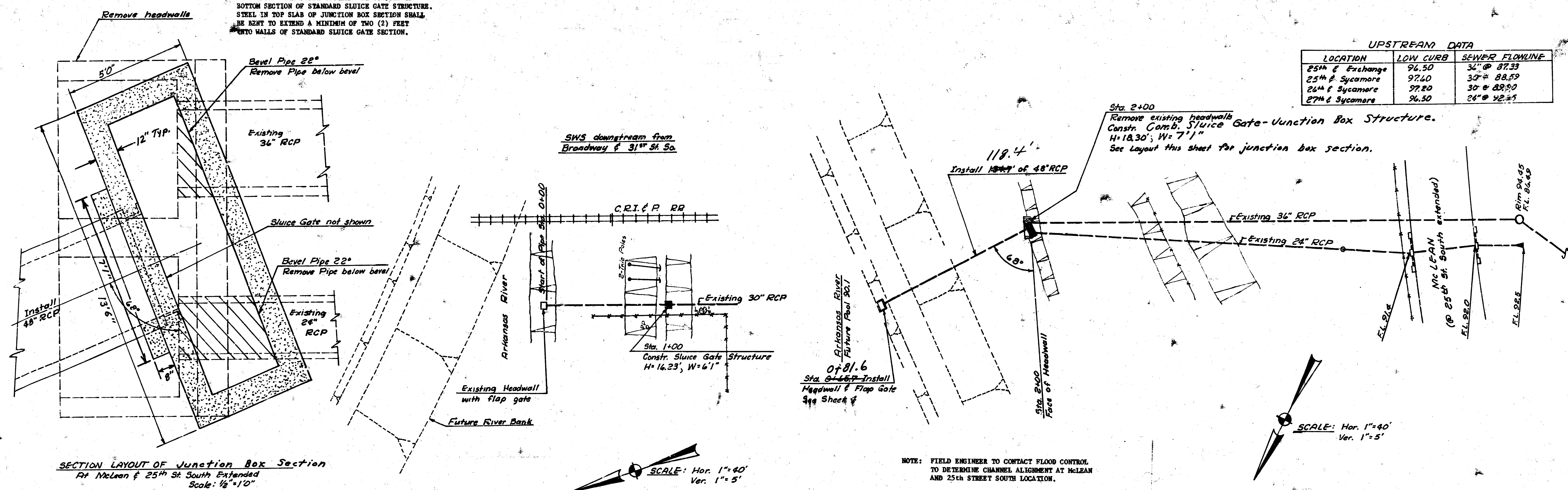


NOTE: REINFORCING STEEL IN JUNCTION BOX SECTION TO CONFORM WITH STEEL PATTERN AND SPACING IN BOTTOM SECTION OF STANDARD SLUICE GATE STRUCTURE. STEEL IN TOP SLAB OF JUNCTION BOX SECTION SHALL BE BENT TO EXTEND A MINIMUM OF TWO (2) FEET INTO WALLS OF STANDARD SLUICE GATE SECTION.

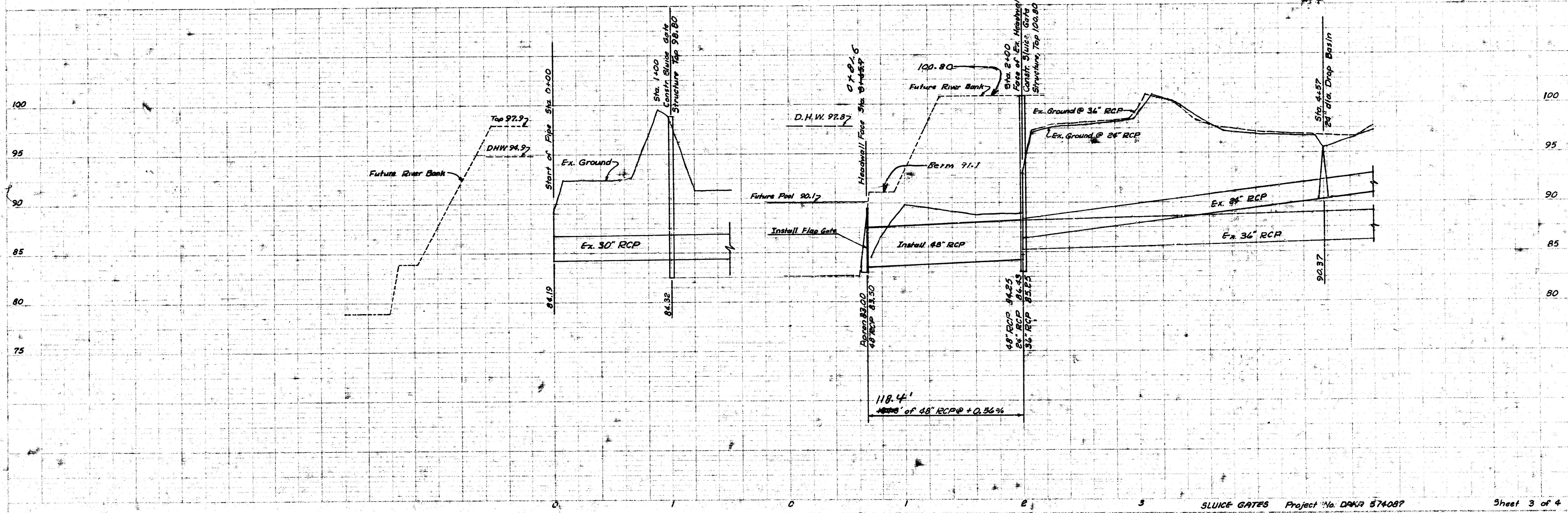
B.M. 96.72 SF Cor. Headwall to pipe, S. Side Dike, 100' West of RR R/W.

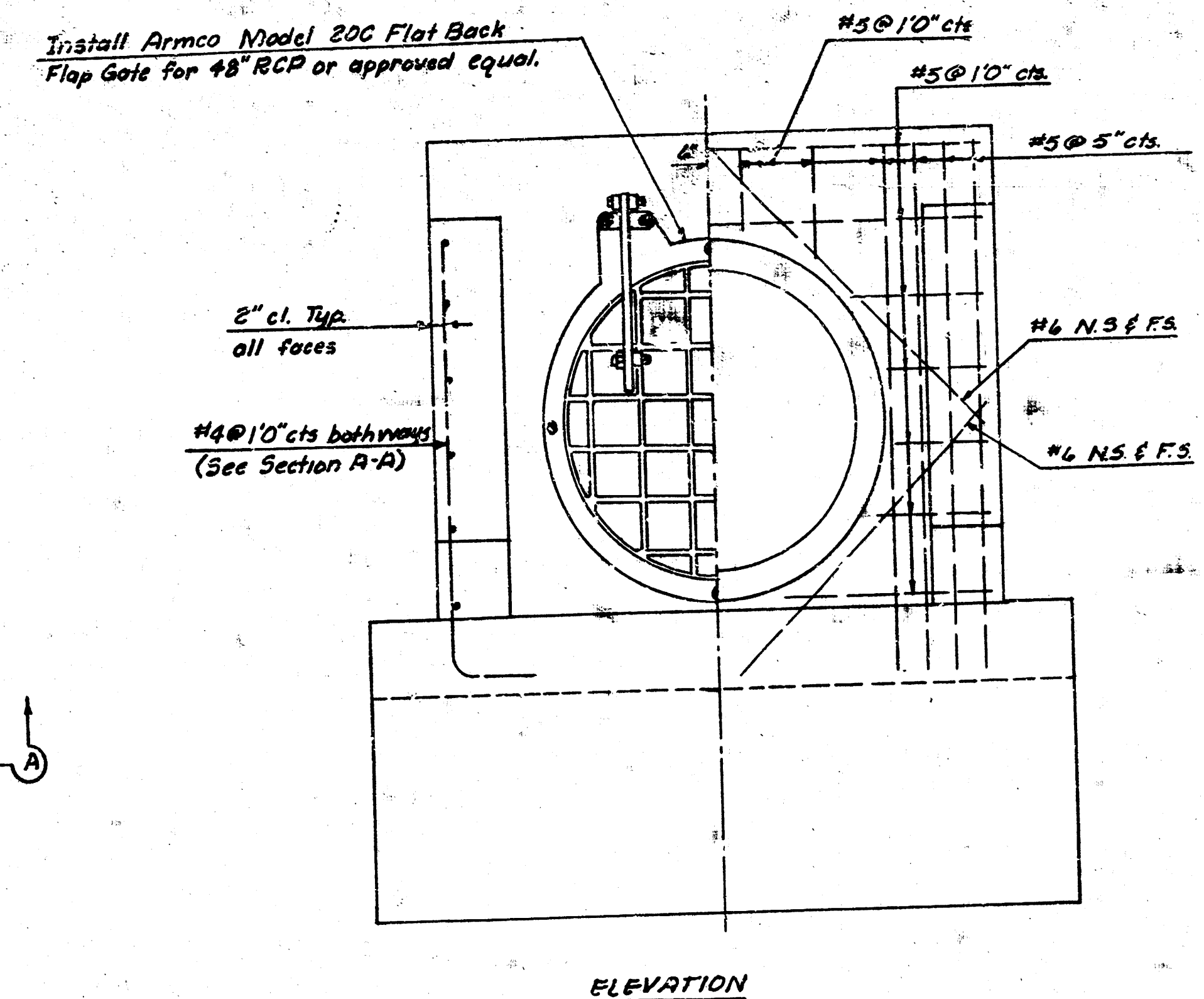
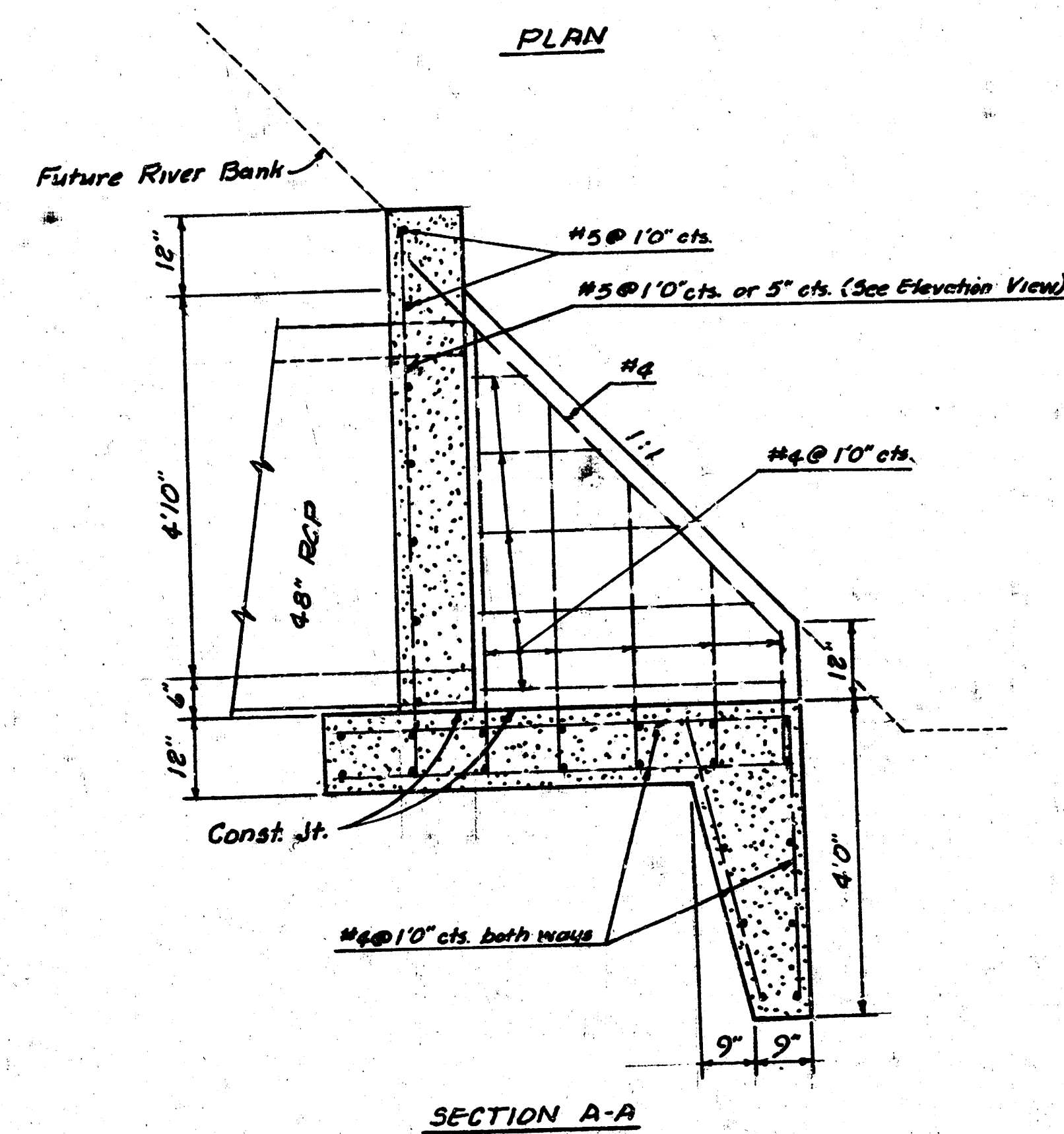
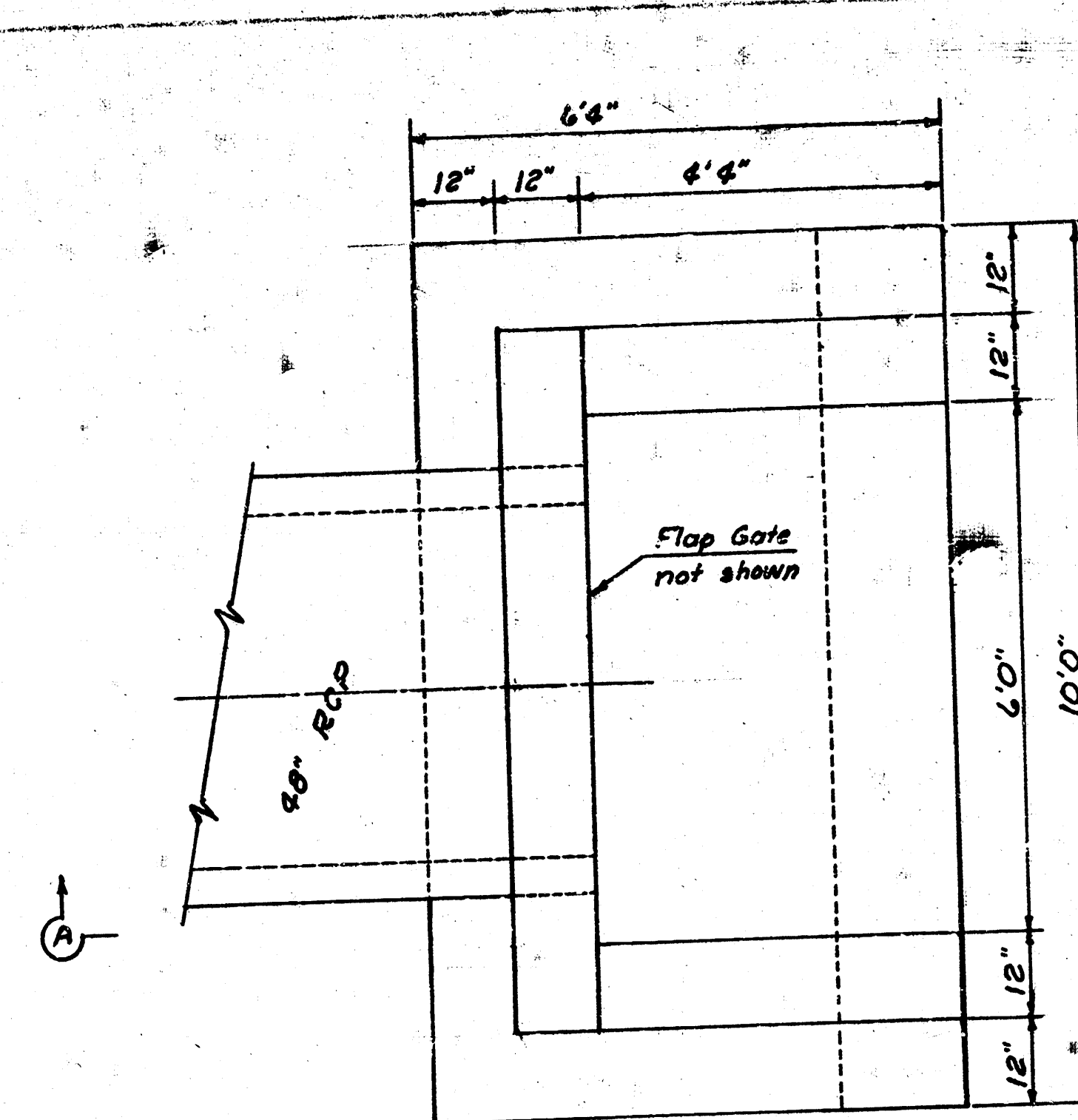
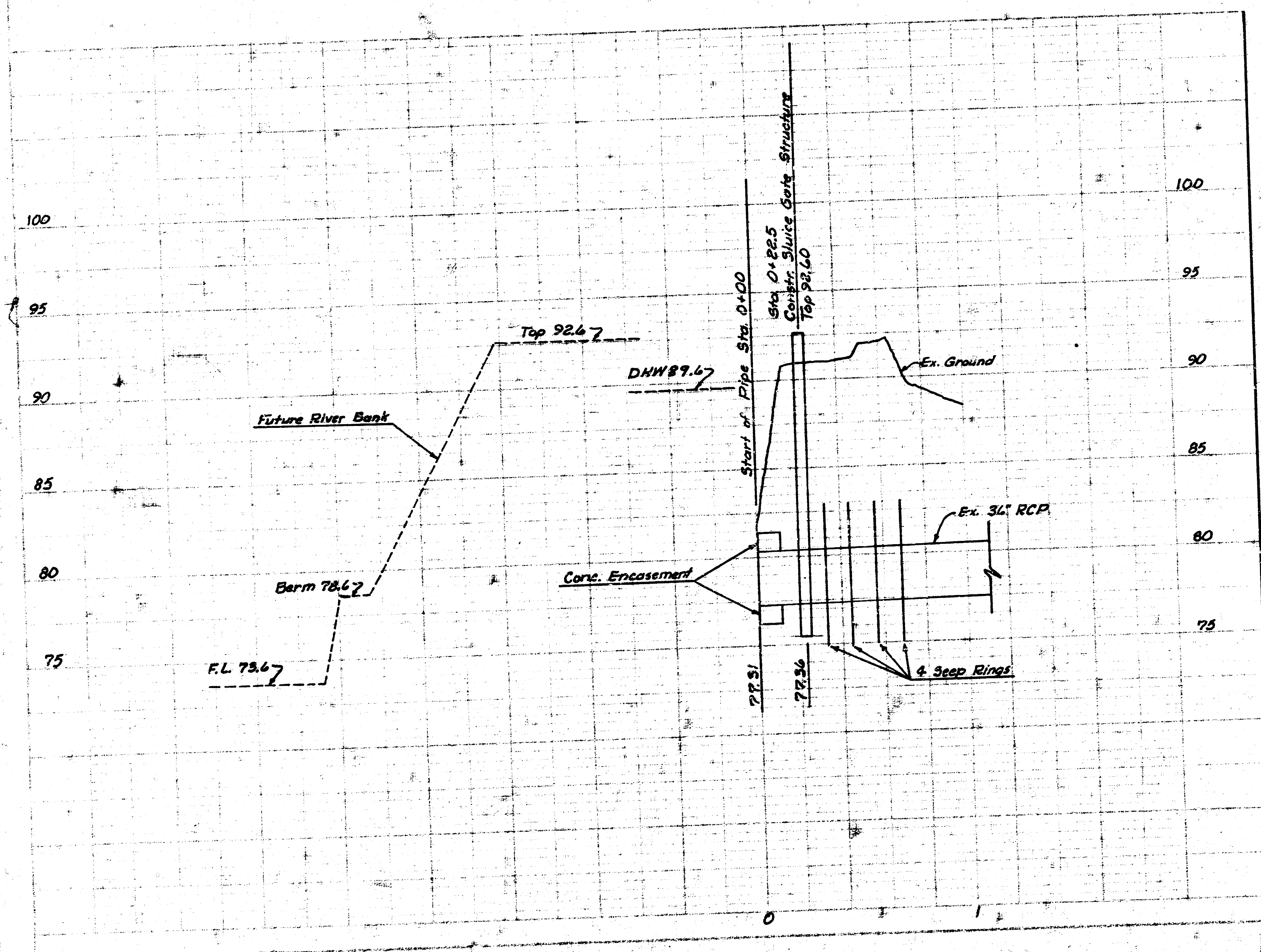
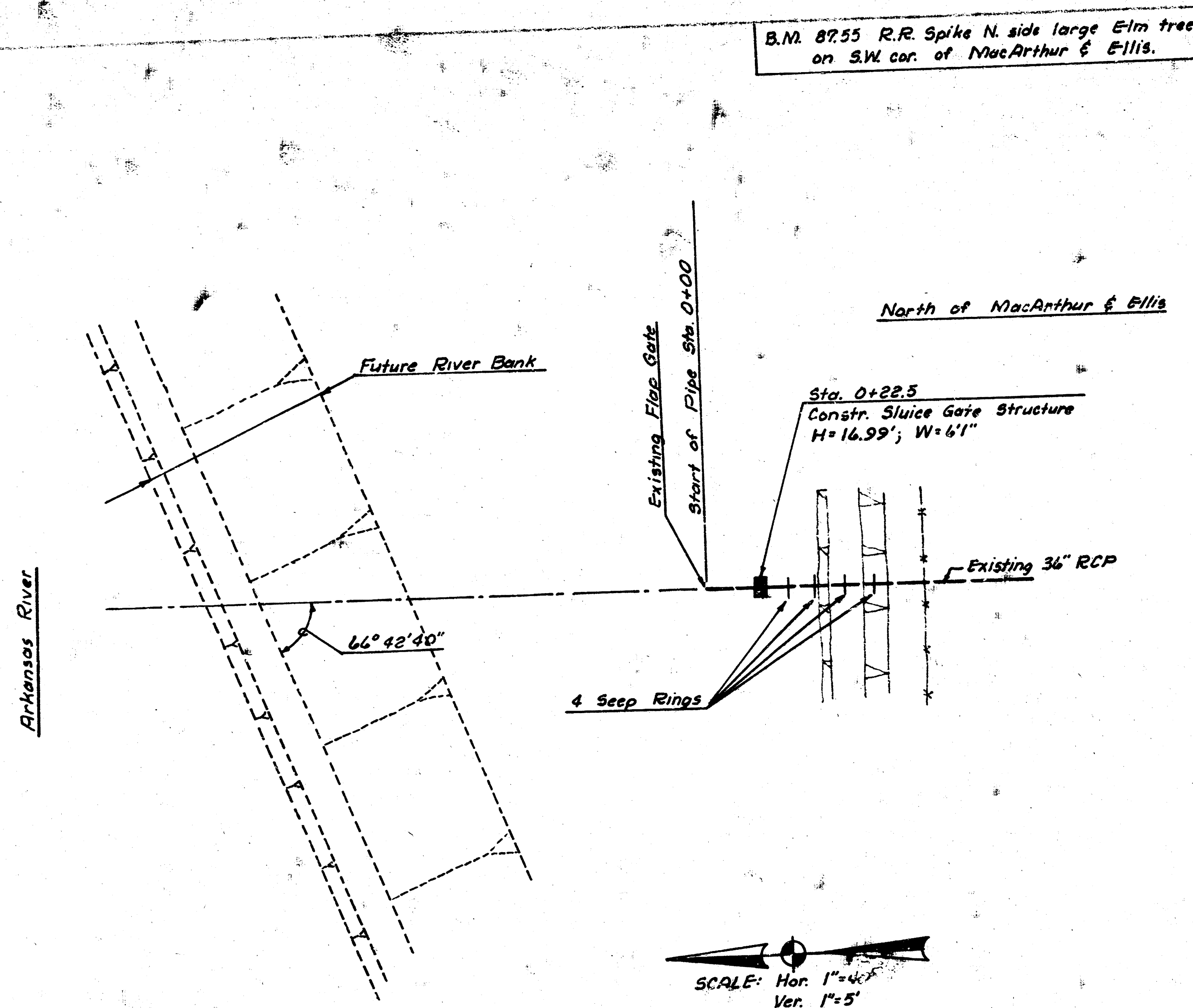
B.M. 95.03 "x" cut on S.W. cor. Headwall SWS outfall W. Bank River, E. S. McLean @ 25th So.

UPSTREAM DATA		
LOCATION	LOW CURB	SEWER FLOWLINE
25th & Exchange	96.50	34" @ 87.33
25th & Sycamore	97.10	30" @ 88.59
26th & Sycamore	97.20	30" @ 89.20
27th & Sycamore	96.50	24" @ 92.55



SECTION LAYOUT OF Junction Box Section
At McLean & 25th St. South Extended
Scale: 1/2" = 10'





HEADWALL
Scale: 1/2"=1'0"

INSTALLATION AND ADJUSTMENT OF LIFT, STEM AND GUIDES

1. Place anchor bolts for lift and stem guides as shown on installation drawing. Check for proper alignment of lift, stem guides and gate.
2. Provide opening with adequate clearance in lift platform for gate stem (and splice where installation drawing indicated it will raise into hole in lift platform).
3. Pour concrete as required. Remove forms.
4. When more than one gate is to be installed stems may be of different diameters, lengths, etc. Stems are marked and/or tagged for each gate installation. Separate the stems per individual gate installation. CAUTION: Extreme care must be taken in handling and installing threaded stems. Loose protective wrapping on threaded stems until stem is installed. Nicks or bends will damage threads in the lift nut.
5. The stem block was attached to the bottom section of stem for shipment. Loosen the set screw through this block and remove the block.
6. Insert stem block in gate slide pocket. Be sure the set screw is exposed or pointing toward you.
7. Stems may be in more than one piece. If two or more pieces are furnished for an installation, they must be installed in their proper order from bottom to top to place splices in correct location so that they won't interfere with the stem guides when the gate is opened or closed. The ends of each stem section and connecting components, if any, must be marked to insure installation in the correct location.
8. Lower bottom section of stem into place through the hole of the gate slide and screw it into the stem block. With the set screw removed from the block, turn the stem into the block until set screw hole is properly aligned.
9. CAUTION: Immediately insert the set screw and tighten to lock bottom section of the stem to the block. (Set screw is omitted

- on non-rising stem gates as the turning motion is between the block and the stem.)
9. Place succeeding stem section. Double check shop marking of sections to make sure each is in its proper location. Join together with splices as provided. CAUTION: Insert all bolts, washers, or keys in each stem splice immediately after stem sections are located and aligned. Failure to take this safety precaution may cause one section to be disconnected from another when the gate is operated. Breakage of gate parts or serious injury to personnel might result.
10. The lifting device was shipped with a plastic plug in the top of the top hole to protect the threads in the lift nut. Remove this plug and carefully clean the interior threads of the nut. Since any foreign material in these threads may cause damage to them and make the gate harder to operate, each threaded nut must be carefully cleaned out even though it appears to be clean.
- Electrically operated lifting devices have threaded nuts marked to fit threaded stems. These marks appear on the top of the lift nut and the top of the threaded stem. These are further identified by a tag attached to the electric lift to show Armco drawing numbers. Make certain that these matching parts are used together to insure ease of installation and avoid possible service problems.
11. Remove protective wrapping from the threaded section of the stem and thoroughly clean of all foreign material.
12. The top section of the stem may be threaded into the lift before or after the last fitting in the adaptor at maximum intervals of gate movement of 5 or 6 inches.
21. Place stop collar (if used) against the upward stop. Mark stem with set screw. Side collar out of position and spot drill stem 1/8-inch deep. Reposition collar and tighten all fasteners securely.
22. Lower the gate to its fully closed position and check wedges and seating faces as described under final gate adjustment.
23. Run stop nut down on the top of the projecting threaded stem until it makes firm contact with the top of the lift nut. (See illustration.) Tighten the set screws through the stop nut to hold it in place.
24. Install stem cover, indicator, etc., as required. (Separate installation information is furnished.)

16. Place two-piece stem guide collars around the stem above each bracket. Place bolts through the projection of the bracket and the ends of the collars. Do not tighten. CAUTION: Washers are not supplied and should not be used as they may allow the collar to slip on the bracket after it is locked in place.
17. Grout under the lift (if required). After grout has set, tighten the anchor bolts uniformly.
18. CAUTION: Before opening the gate, close all power, stoppers or other foreign material from the top of the gate. Also recheck projection of washers or studs across the top of the gate opening. Excess bolt projection will damage the top brace seating face as the slide as it is opened.
19. Turn lift or handwheel to open the gate, until gate slide is pulled from its wedges. The stem is now in tension and should be straight. Check: To make certain that stem is straight. Beginning at the bottom, make final alignment of stem if required and tighten nuts on bolts holding collars to the guide bracket.
20. Move the gate to its fully opened position. Apply grease to the stem through the fitting in the adaptor at maximum intervals of gate movement of 5 or 6 inches.

