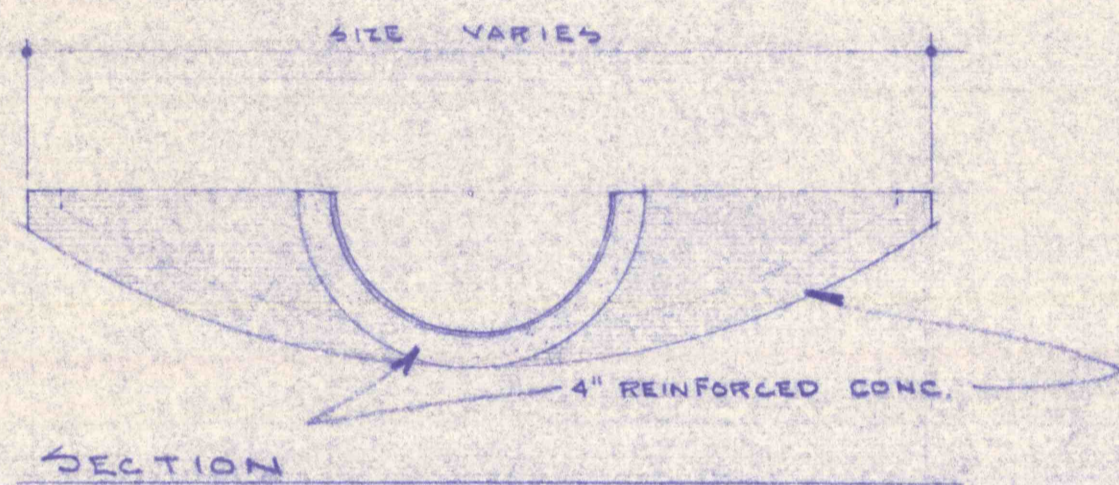
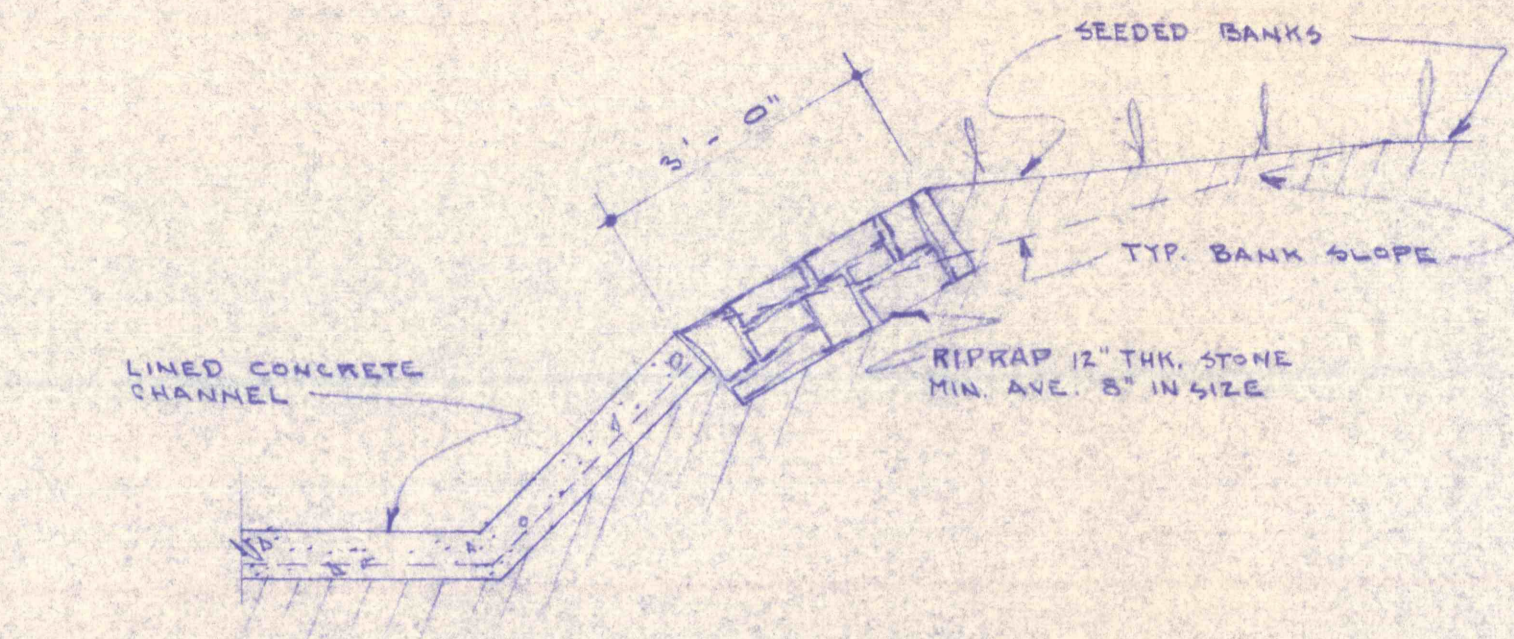


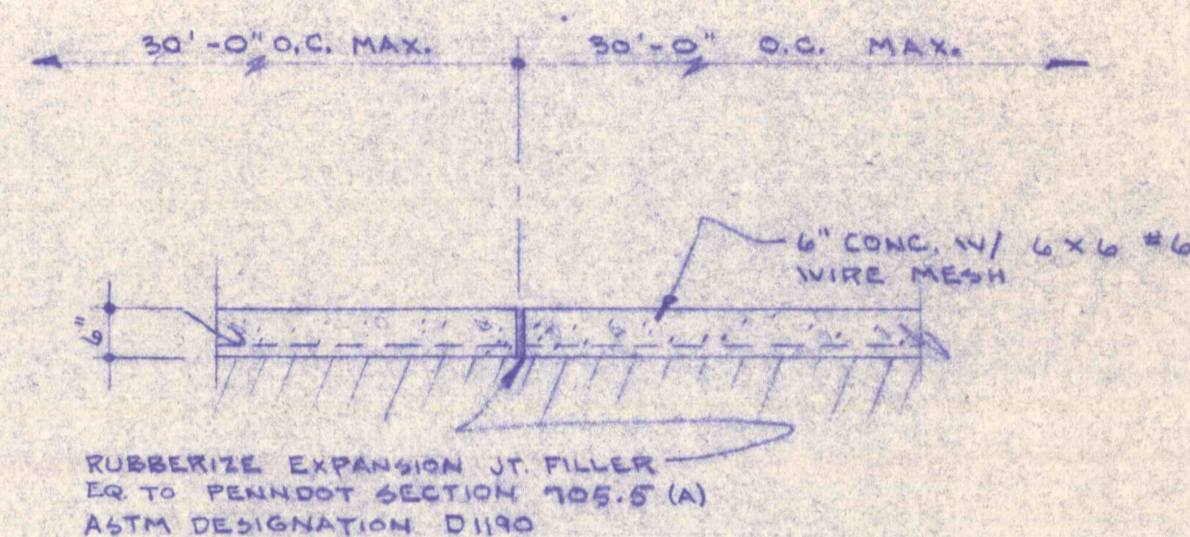
PLAN



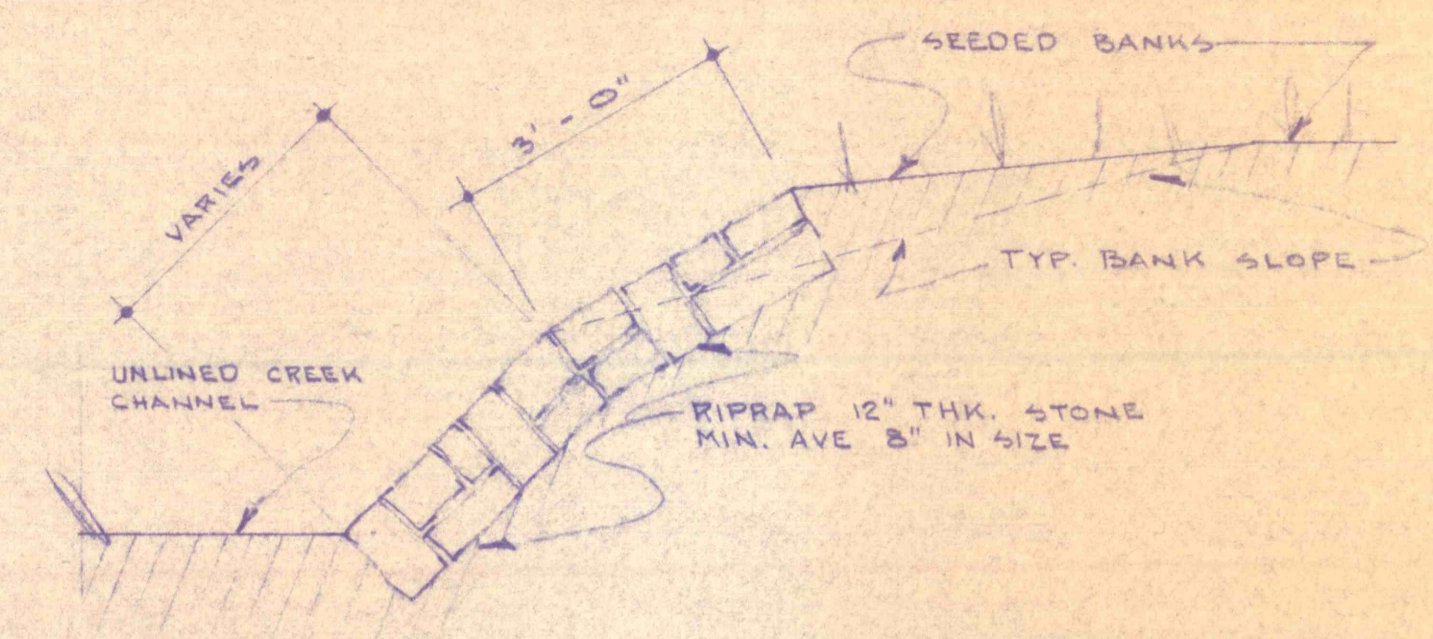
TYPICAL CONCRETE END SECTION  
SCALE - 1/2" = 1' - 0"



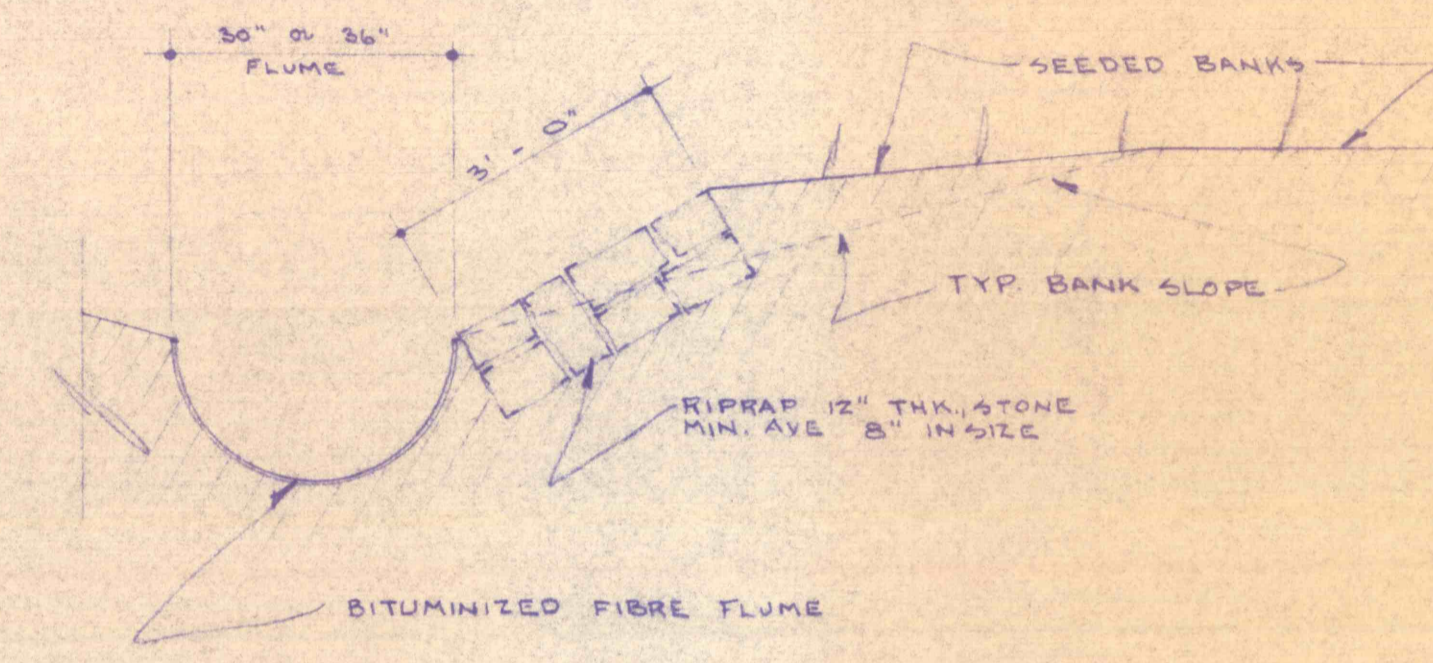
TYPICAL RIPRAP DETAIL AT CHANNEL CURVES ⑪  
SCALE - 1/2" = 1' - 0"



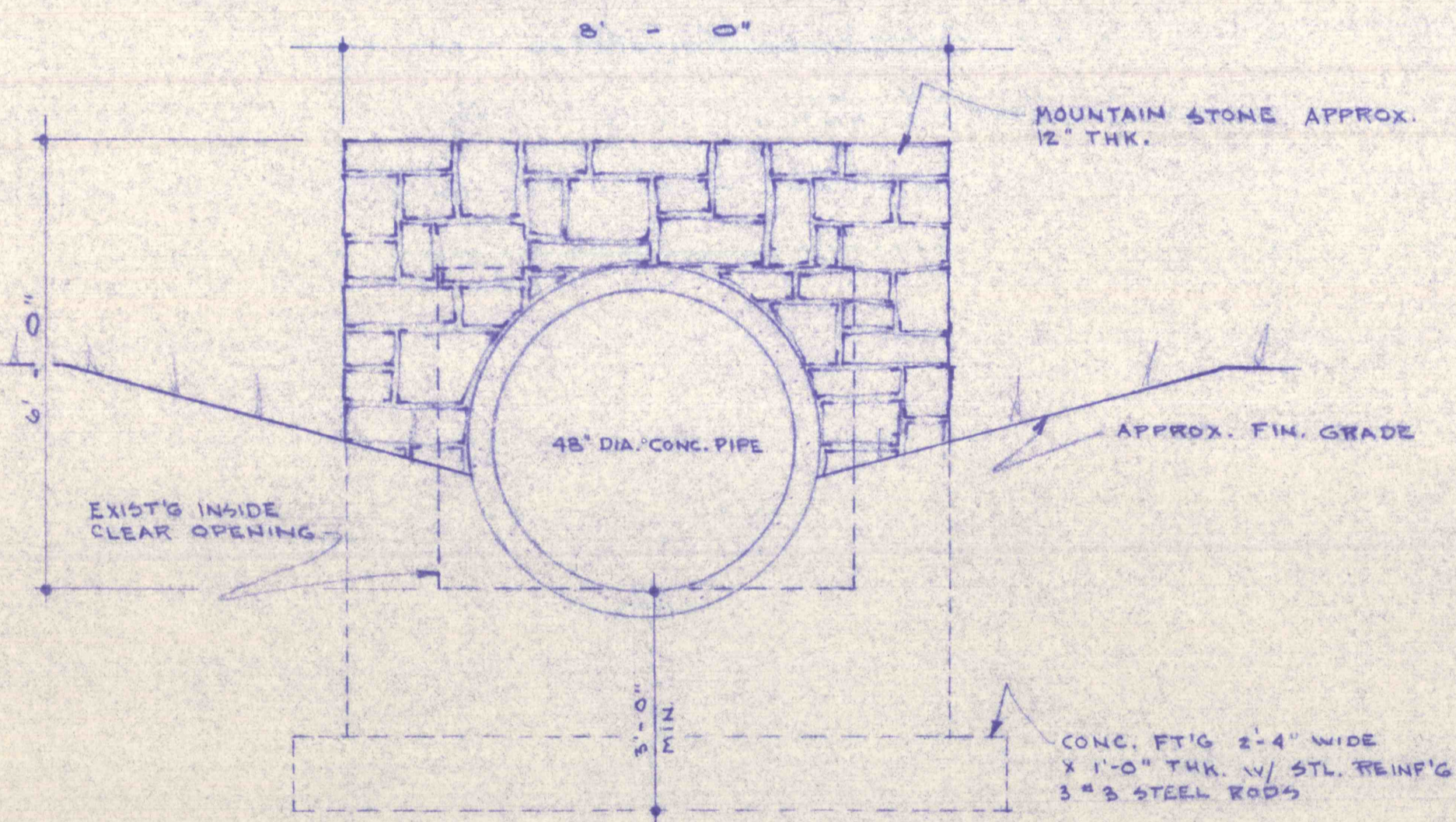
TYP. CONC. CHANNEL EXPANSION JOINT DETAIL  
SCALE - 1/2" = 1' - 0"



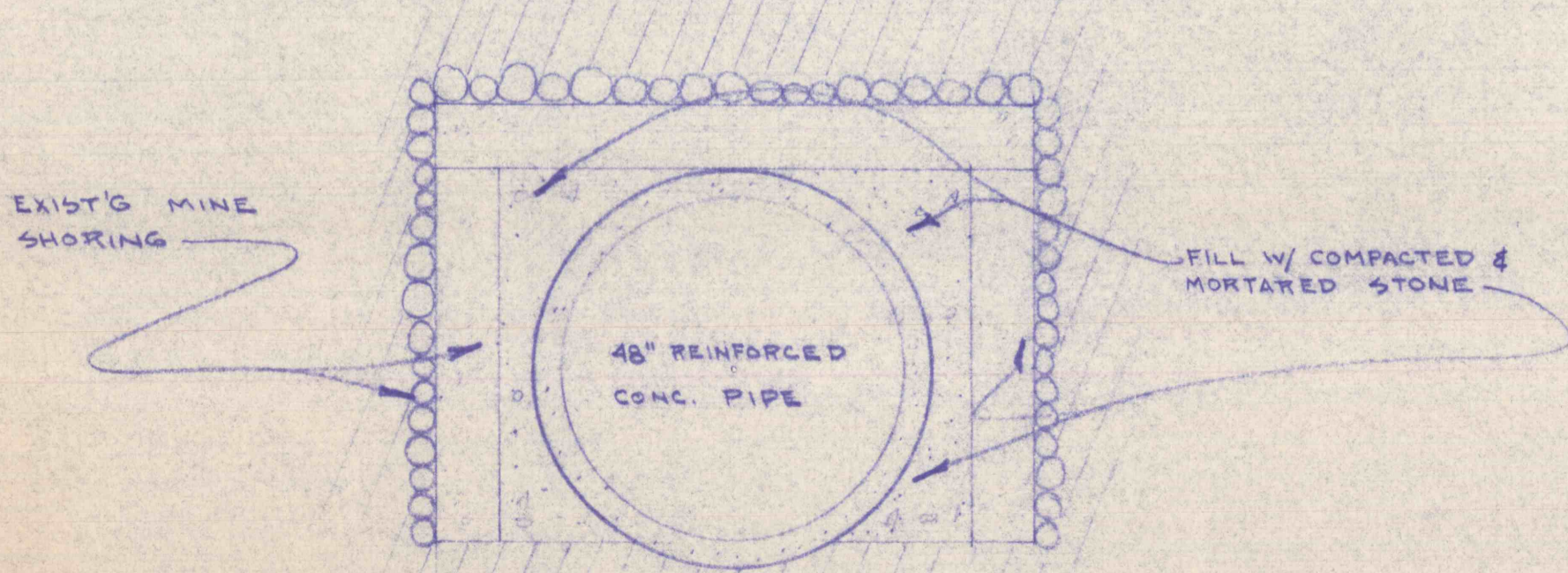
TYP. RIPRAP DETAIL AT UNLINED CHANNEL CURVES ⑫  
SCALE - 1/2" = 1' - 0"



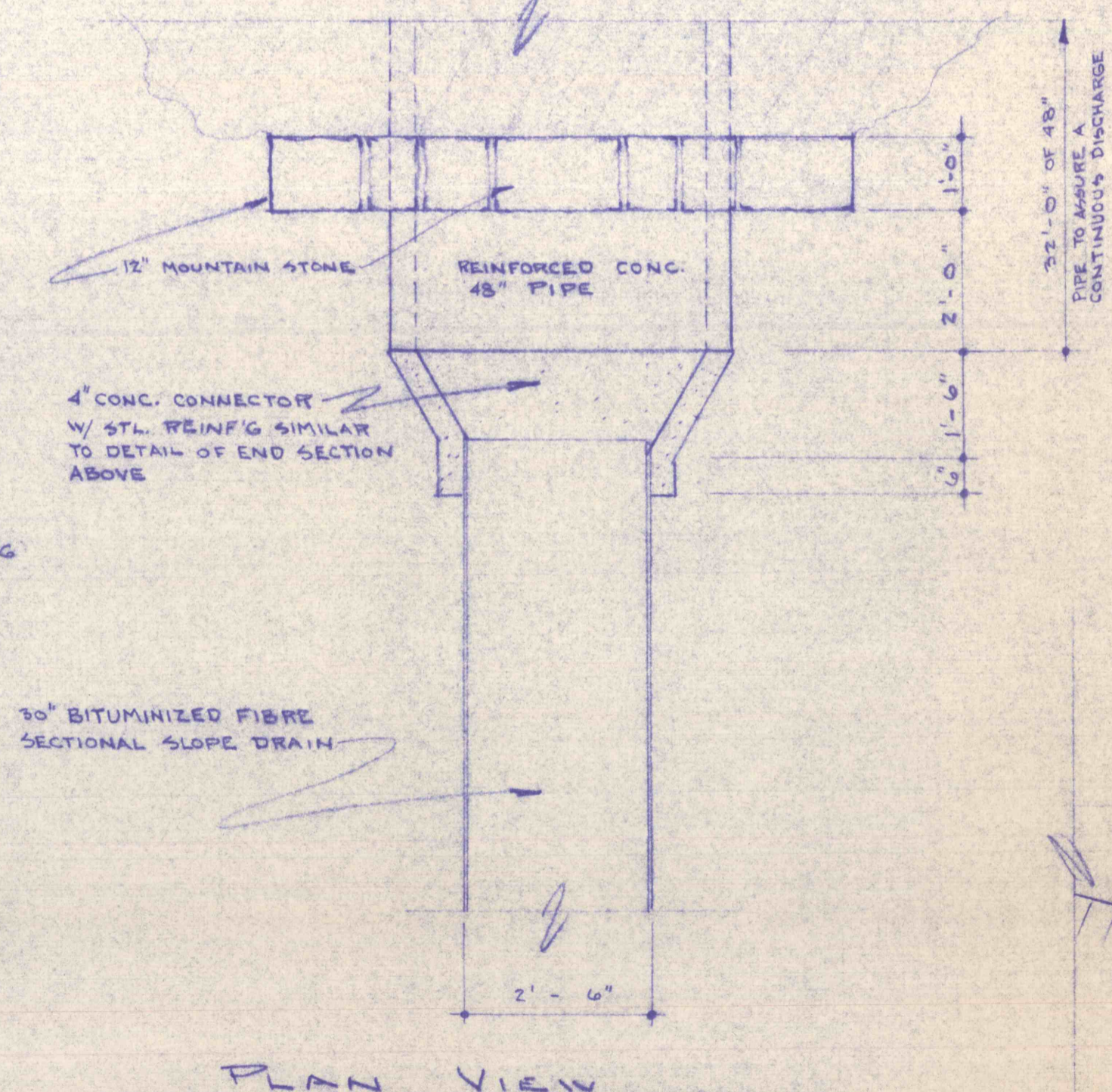
TYP. RIPRAP DETAIL AT BIT. FIBRE FLUME CURVES ⑬  
SCALE - 1/2" = 1' - 0"



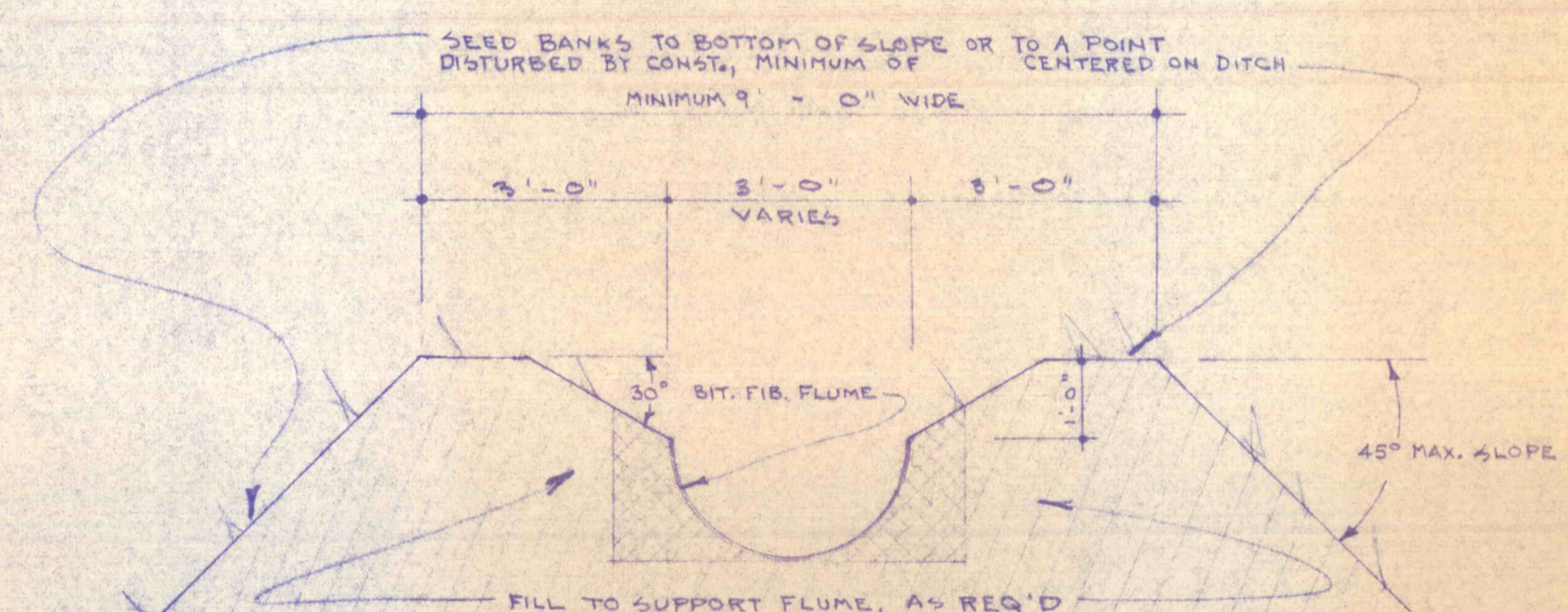
ELEVATION



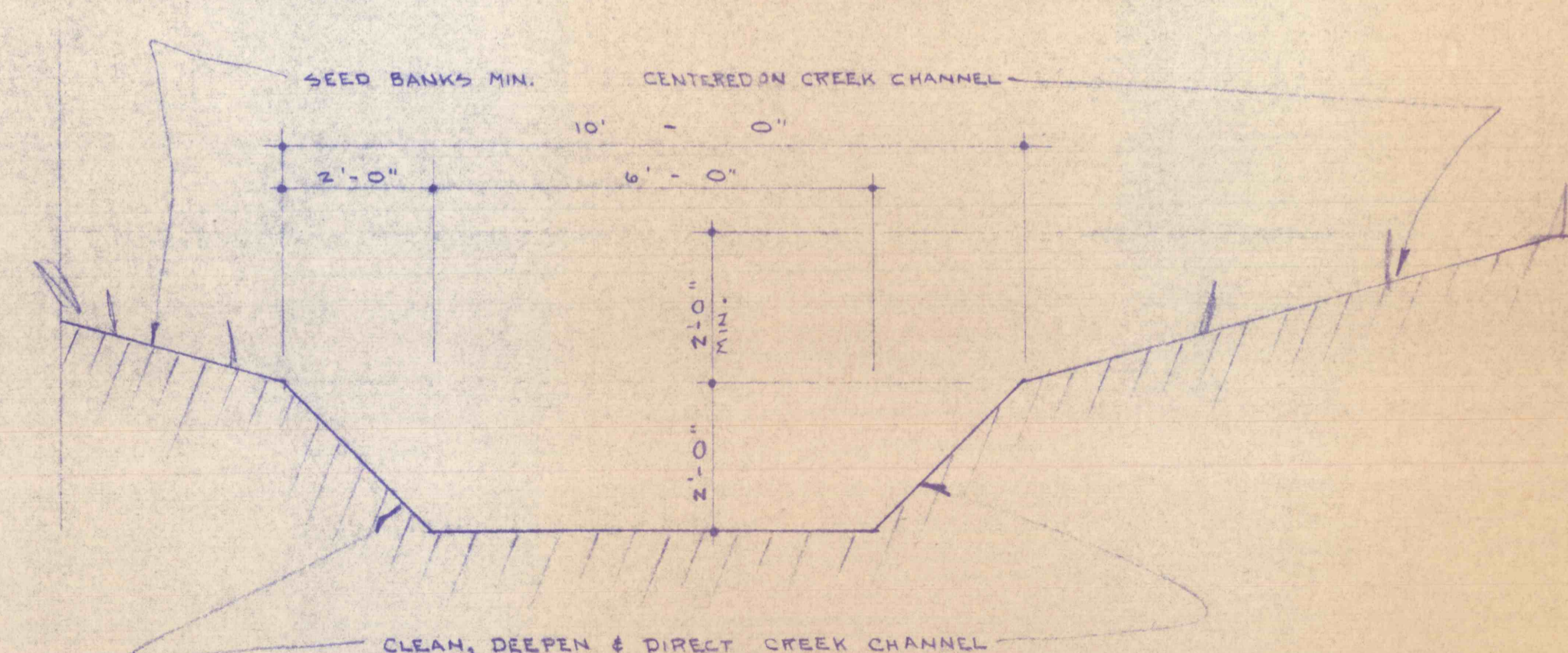
TYPICAL CROSS - SECTION



DETAILS OF PORTAL AMD #4 MINE TUNNEL — DITCH - F  
SCALE - 1/2" = 1' - 0"



TYPICAL SECTION OF FLUME  
SCALE - 1/2" = 1' - 0"



TYP. UNLINED CREEK CHANNEL CROSS - SECTION ⑭  
SCALE - 1/2" = 1' - 0"

|   |       |             |       |
|---|-------|-------------|-------|
| NO  | DATE  | REVISION    | APPR. |
| SUBMITTED   |       |             |       |
| PROFESSIONAL  |       |             |       |
| APPROVED  |       |             |       |
| CHIEF-DIVISION OF MINE DRAINAGE REHABILITATION  |       |             |       |
| APPROVED  |       |             |       |
| DIRECTOR-BUREAU OF CONSULTING SERVICES  |       |             |       |
| COMMONWEALTH OF PENNSYLVANIA<br>DEPARTMENT OF ENVIRONMENTAL RESOURCES<br>OFFICE OF ENGINEERING AND CONSTRUCTION |       |             |       |
| PROJECT NO. SL 113-2  |       |             |       |
| MINE DRAINAGE POLLUTION ABATEMENT<br>QUICK STARTS A and B<br>SHAMOKIN CREEK WATERSHED                           |       |             |       |
| JOHN S. LUCKENS ASSOC.  |       |             |       |
| P.O. Box 190 Shamokin, Penna.   |       |             |       |
| SECTIONS AND DETAILS  |       |             |       |
| DRAWN BY  | DATE  | DRAWING NO. |       |
| CHECKED BY  | SCALE | 13 of 13    |       |
|   |       | As Shown    |       |