





**CITY OF DETROIT**  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE. DATE 9-7-60

APPROVED  
*W.R. Rasmussen*  
 Designed by

DRAWN BY  
*Edward E. Hodge*  
 Secondary Engineer

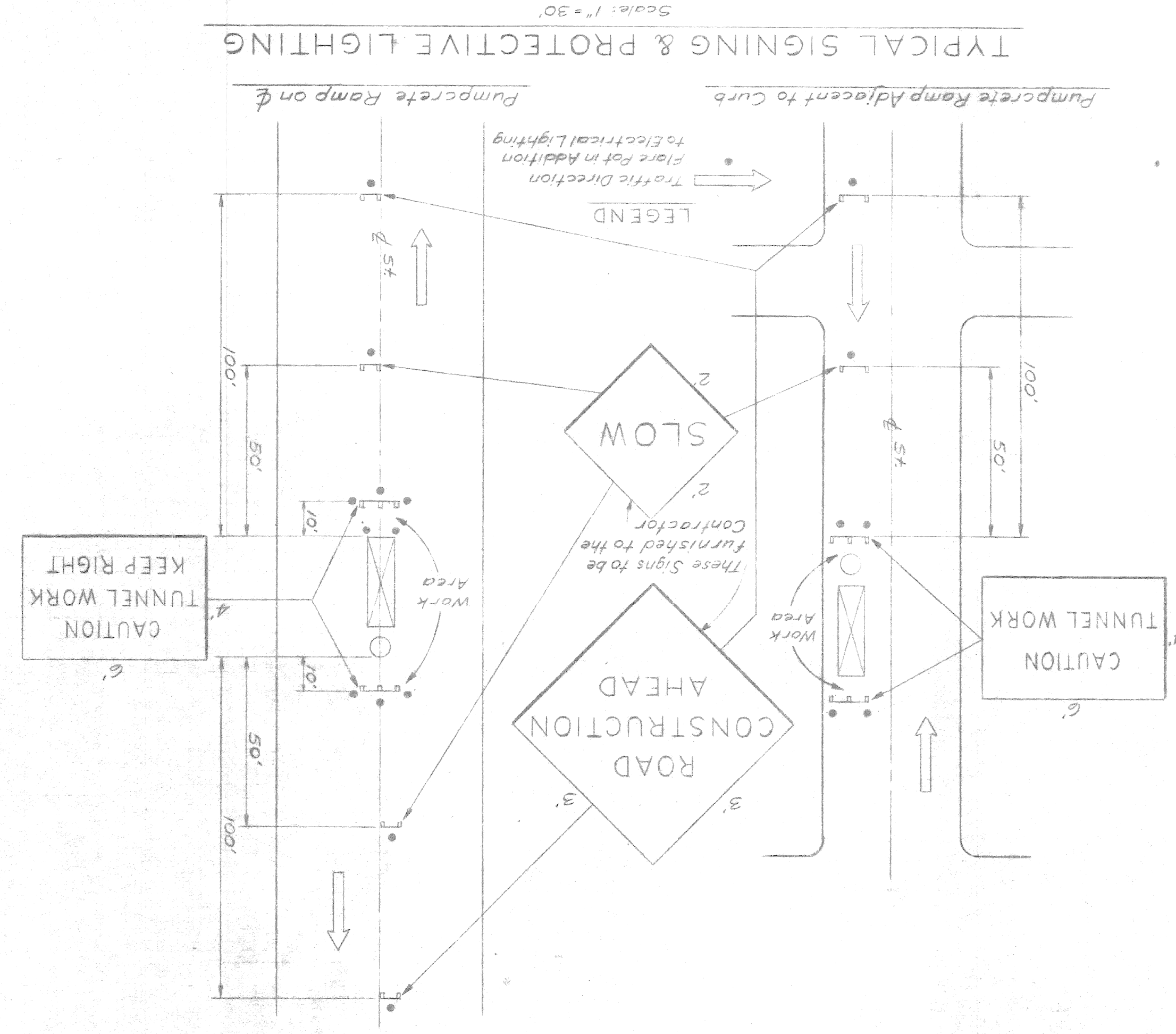
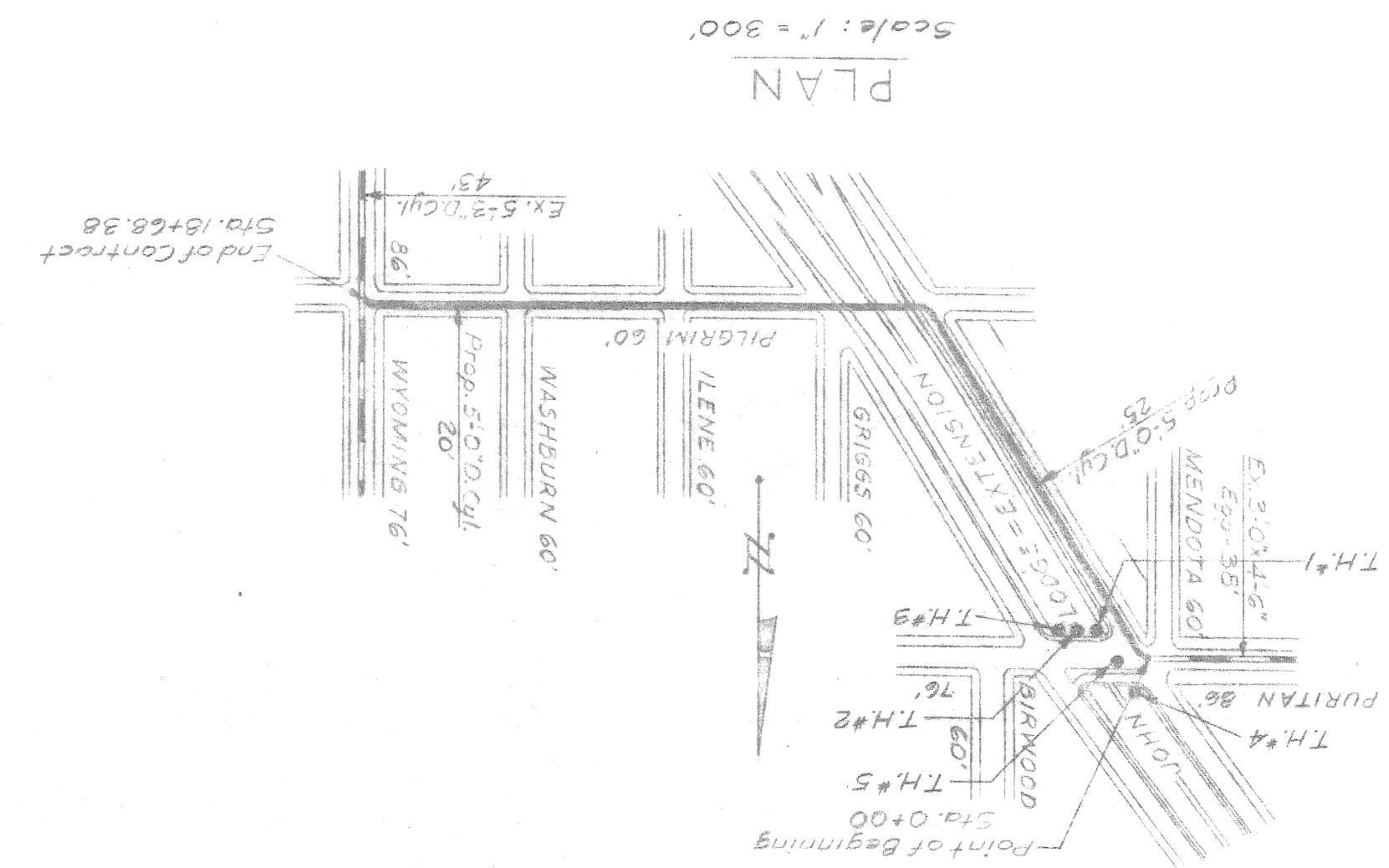
CHECKED BY  
*M. J. ...*  
 City Engineer

City Engineer

**MICHIGAN STATE HIGHWAY DEPARTMENT**  
 JOHN C. LODGE EXTENSION  
 RELOCATION OF PURITAN AVE. SEWER  
 LOG OF BORINGS, PUMPCRETE SIGNS, AND LIGHTING

| NO. | DESCRIPTION | DATE | BY |
|-----|-------------|------|----|
|     |             |      |    |
|     |             |      |    |
|     |             |      |    |

SHEET 2 OF 82112 C10



**NOTE**  
 (1) Denotes number of blows required to drive a 2" O.D. Split Spoon Sampler 12" using a 140# hammer falling 30".

**LOG OF BORINGS**

| Boring No. | Depth (ft) | Soil Description                                 |
|------------|------------|--|
| TH#1       | 1          | Black Loamy Sand                                 |
|            | 2          | Loose Dr. Med. Fine Sand                         |
|            | 3          | Mod. Comp. Gravel                                |
|            | 4          | Pebble Gravel                                    |
|            | 5          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 6          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 7          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 8          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 9          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 10         | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
| TH#2       | 1          | Black Loamy Sand                                 |
|            | 2          | Loose Dr. Med. Fine Sand                         |
|            | 3          | Mod. Comp. Gravel                                |
|            | 4          | Pebble Gravel                                    |
|            | 5          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 6          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 7          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 8          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 9          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 10         | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
| TH#3       | 1          | Black Loamy Sand                                 |
|            | 2          | Loose Dr. Med. Fine Sand                         |
|            | 3          | Mod. Comp. Gravel                                |
|            | 4          | Pebble Gravel                                    |
|            | 5          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 6          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 7          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 8          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 9          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 10         | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
| TH#4       | 1          | Black Loamy Sand                                 |
|            | 2          | Loose Dr. Med. Sand                              |
|            | 3          | Mod. Comp. Gravel                                |
|            | 4          | Pebble Gravel                                    |
|            | 5          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 6          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 7          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 8          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 9          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 10         | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
| TH#5       | 1          | Black Loamy Sand                                 |
|            | 2          | Loose Dr. Med. Fine Sand                         |
|            | 3          | Mod. Comp. Gravel                                |
|            | 4          | Pebble Gravel                                    |
|            | 5          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 6          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 7          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 8          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 9          | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |
|            | 10         | 5' Stiff Gray Clay, Trace to Heavy Trace of Sand |



|            |      |
|------------|------|
| CHECKED BY | DATE |
| TRACED BY  |      |
| DRAWN BY   |      |
| SQUAD BOSS |      |

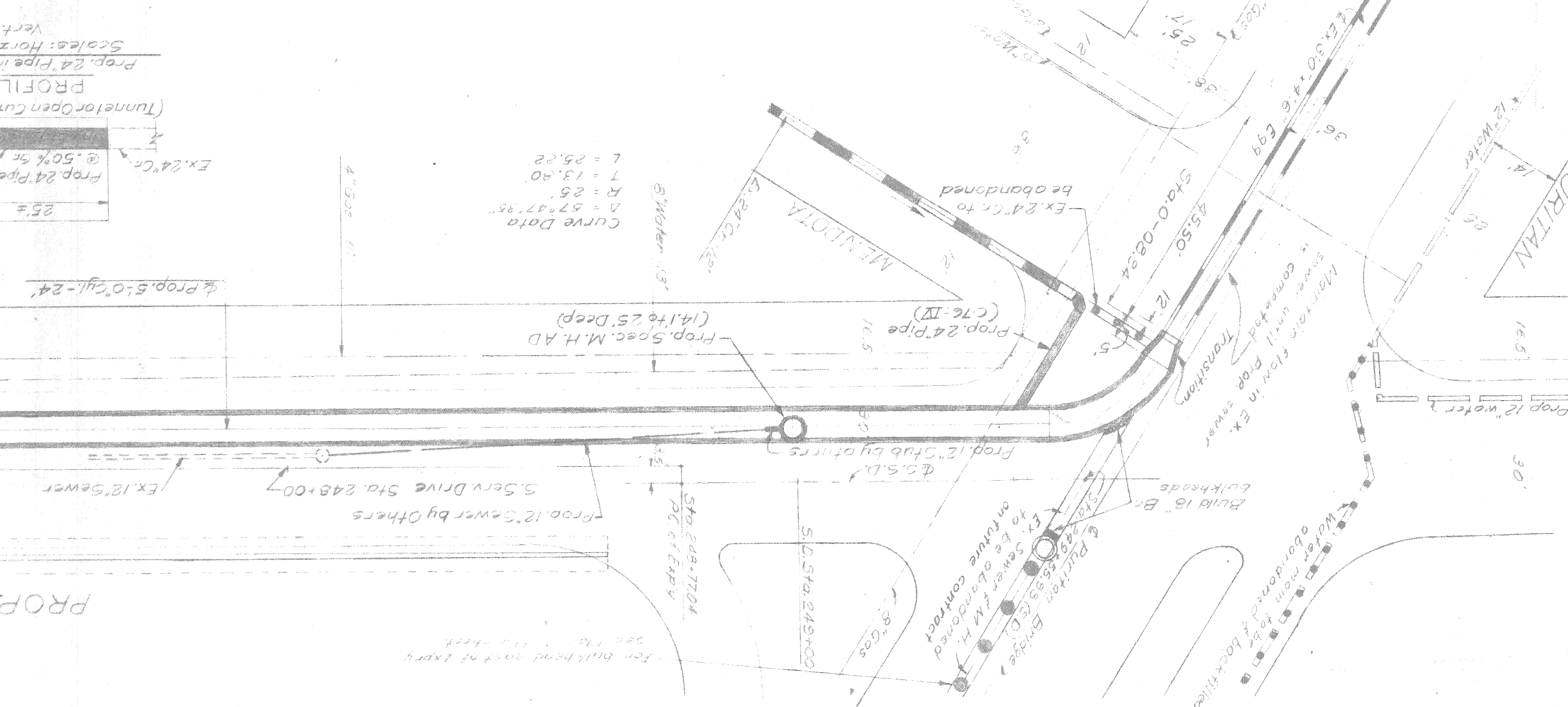
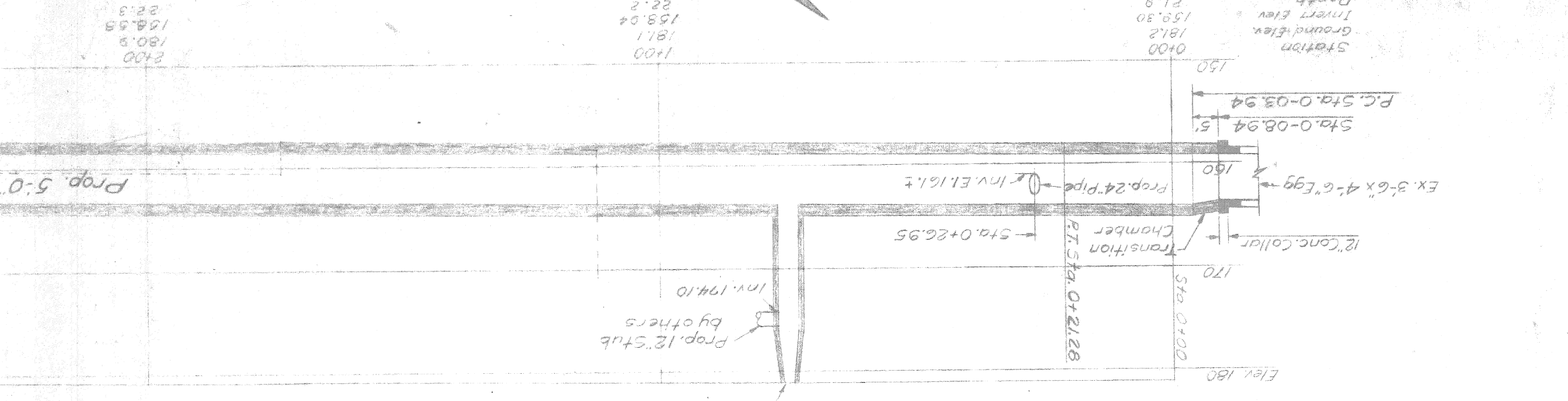
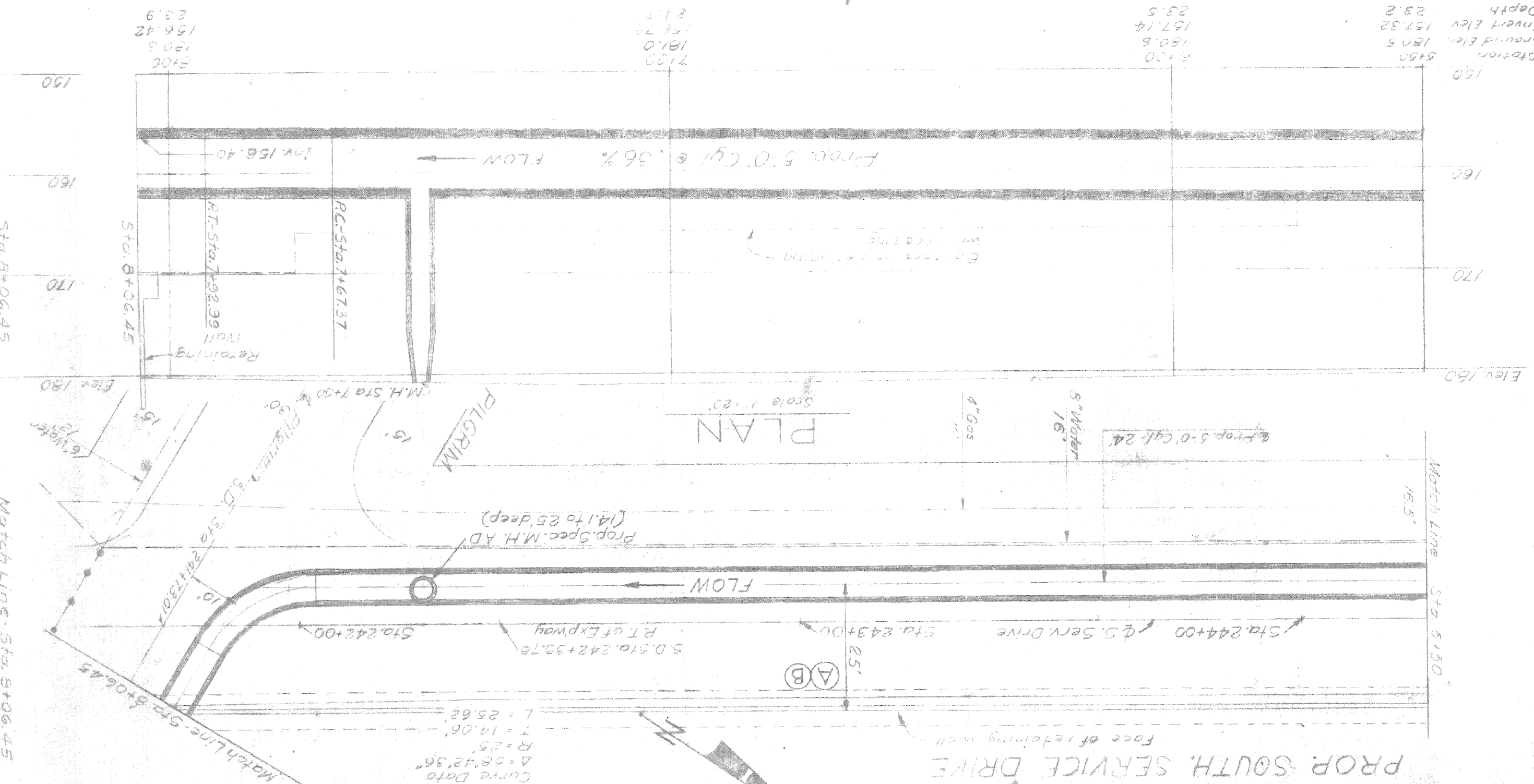
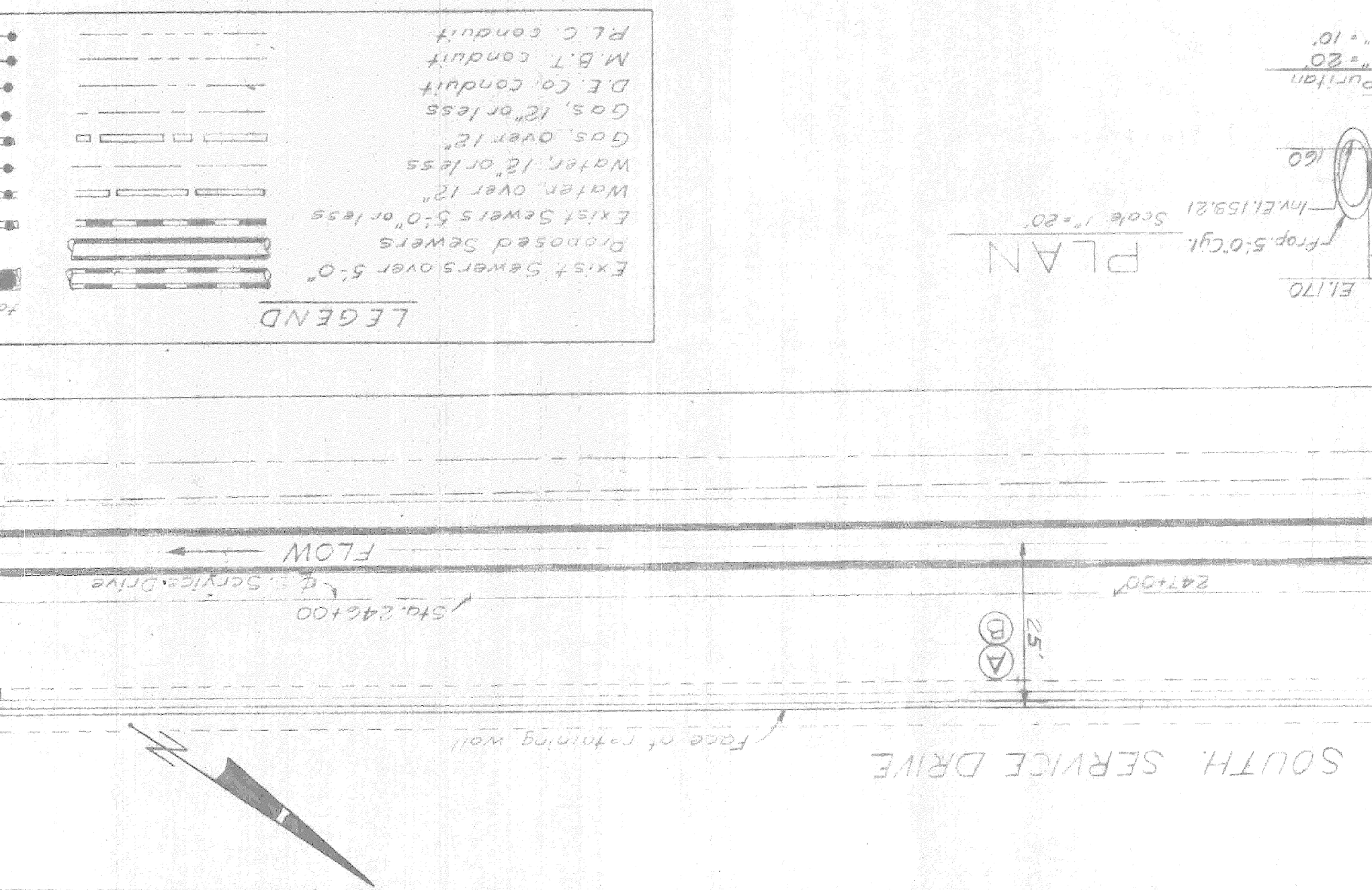
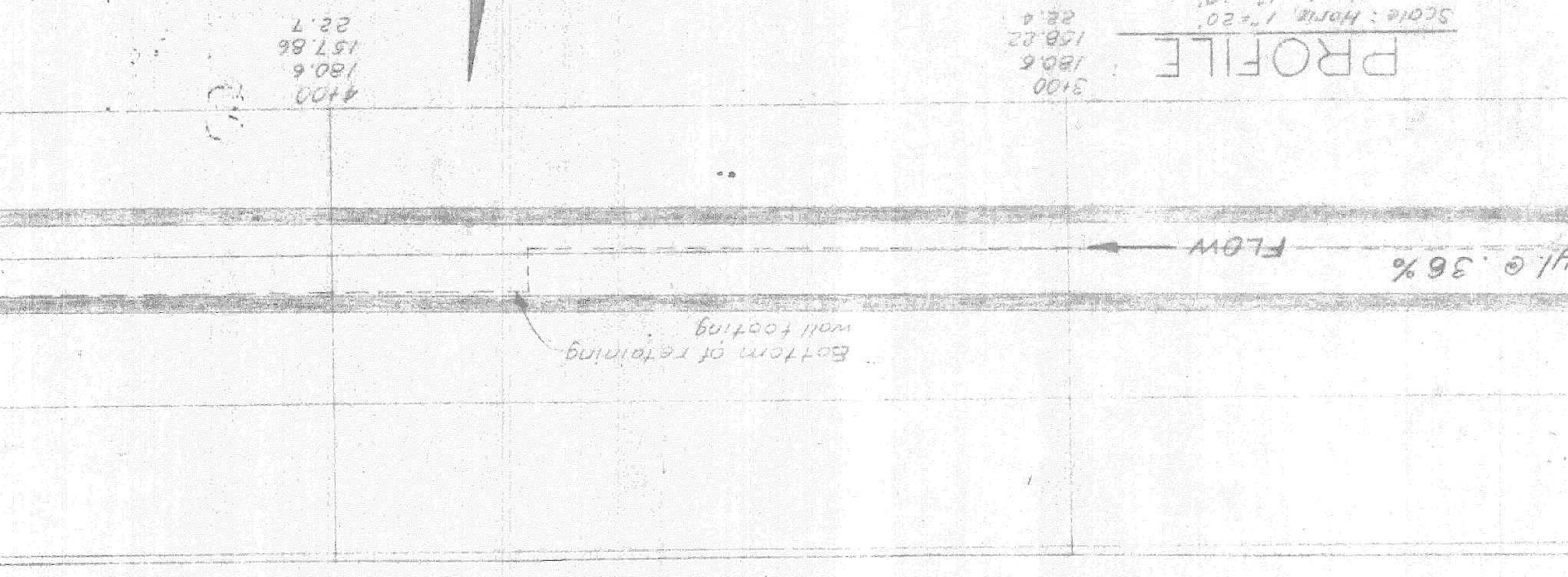
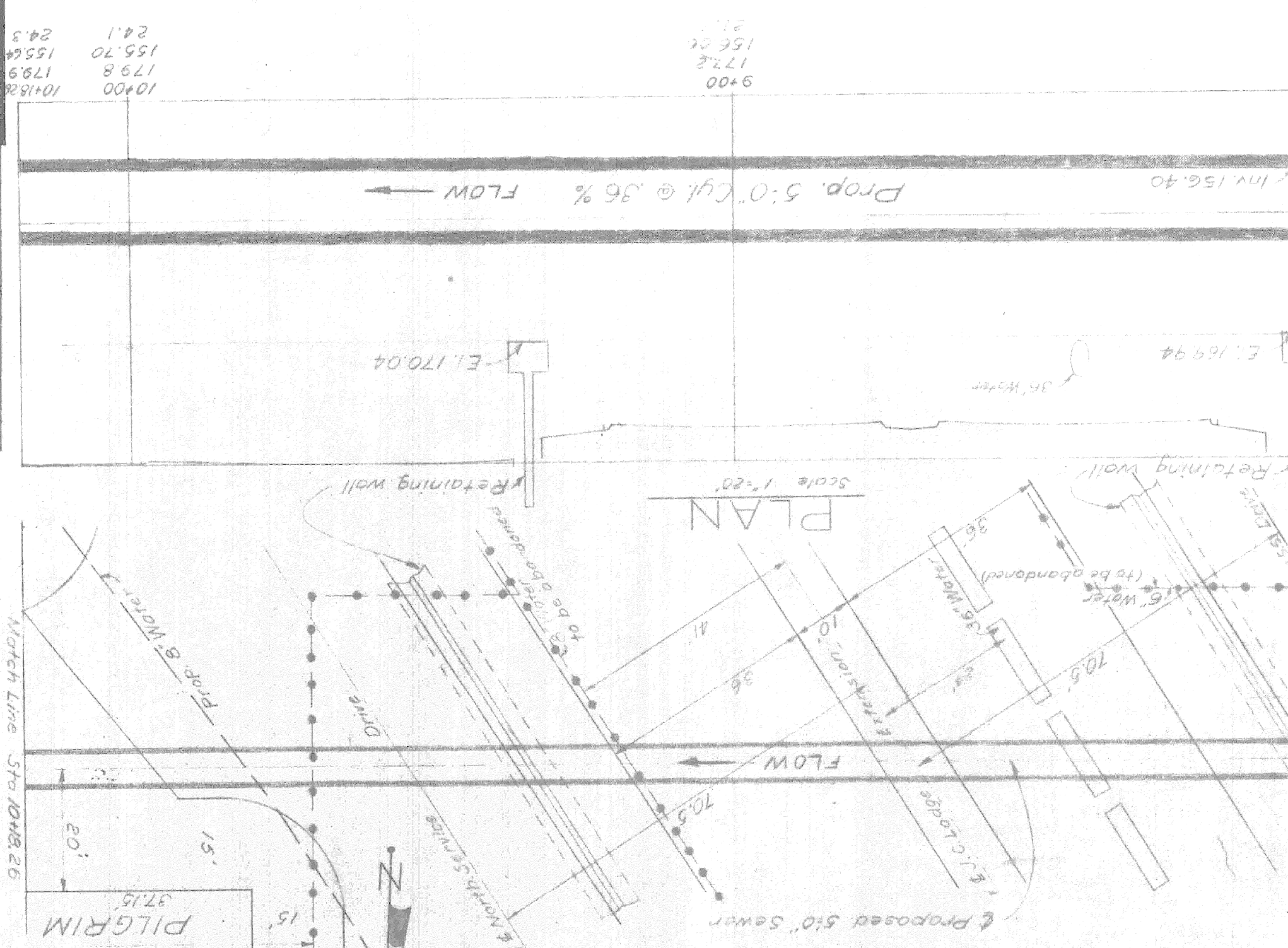
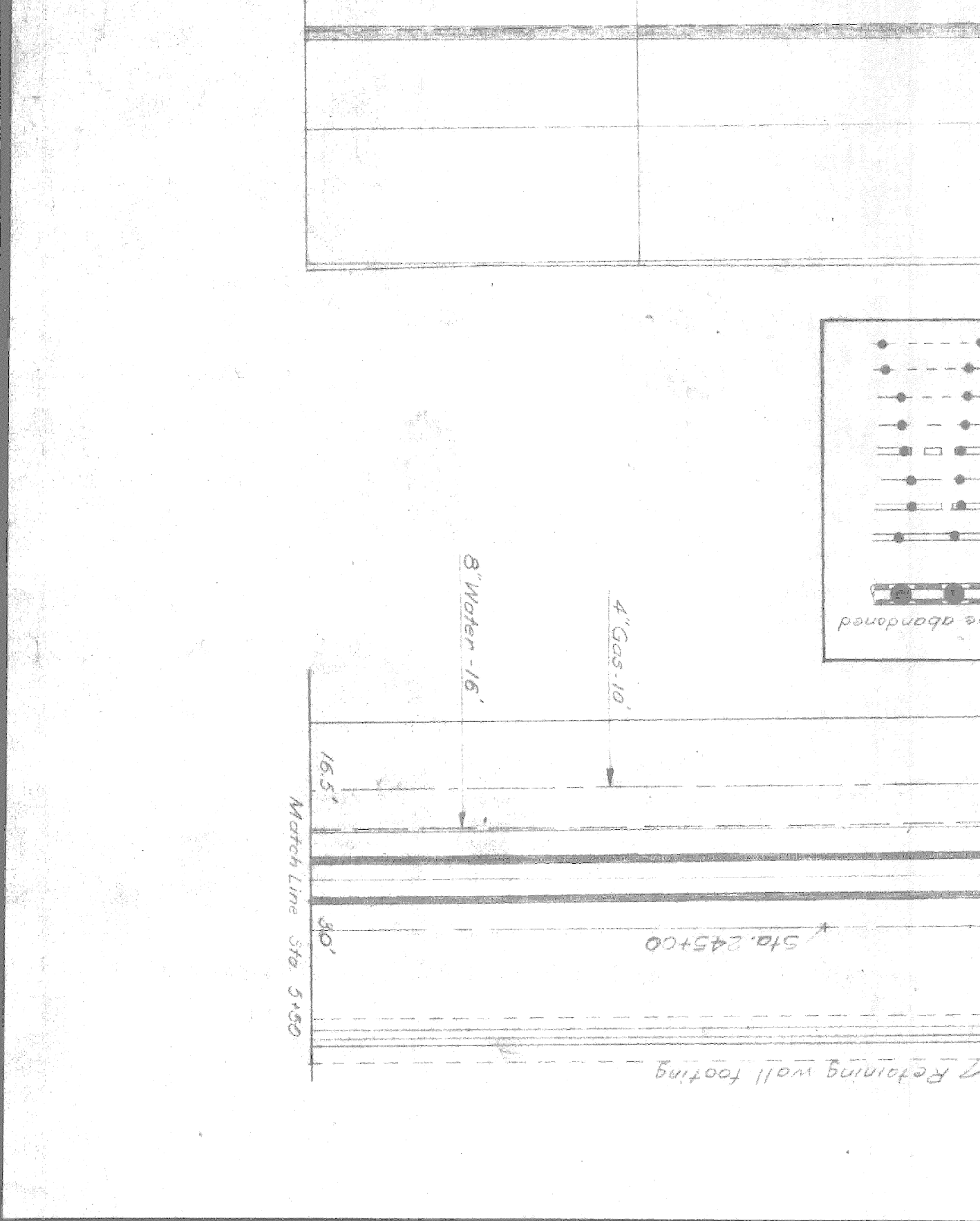
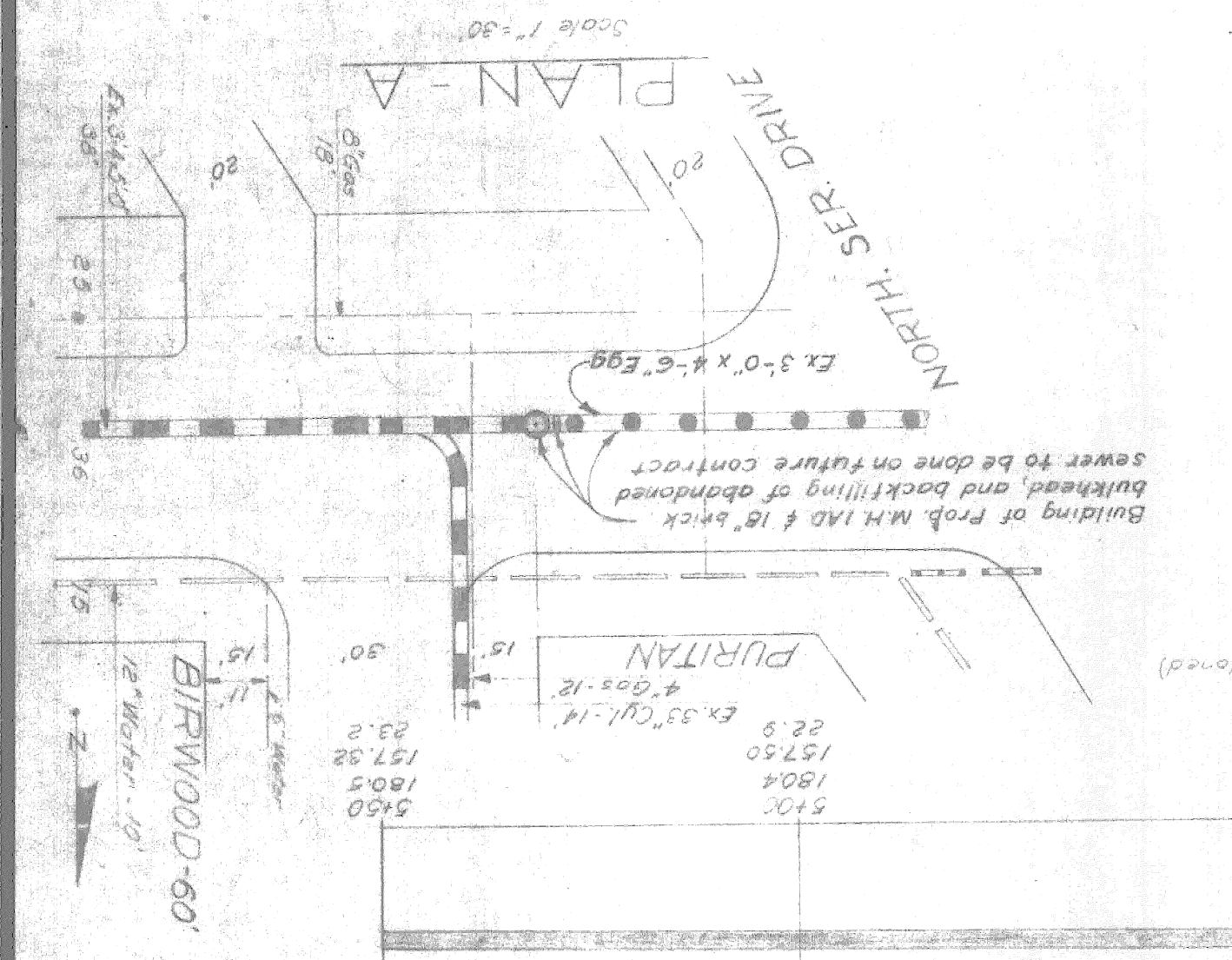
| NO. | DESCRIPTION                       | DATE    | BY |
|-----|-----------------------------------|---------|----|
| A   | 17.5' loc dim for sewer was 17.5' | 8-15-60 | WJ |
| B   | 25' loc dim for sewer was 13.5'   | 9-12-60 | WJ |

**MICHIGAN STATE HIGHWAY DEPARTMENT**  
 JOHN C LODGE EXTENSION  
 RELOCATION OF PURITAN AVE SEWER  
 PLAN & PROFILE - STA. 0+00 TO STA. 10+18.26

CITY ENGINEERS OFFICE  
 DEPARTMENT OF PUBLIC WORKS  
 CITY OF DETROIT

APPROVED BY: *W.R. Conner*  
 DESIGNED BY: *W.R. Conner*  
 DRAWN BY: *Allyce M. Smith*  
 CHECKED BY: *K. Sinks*

DATE 9-7-60

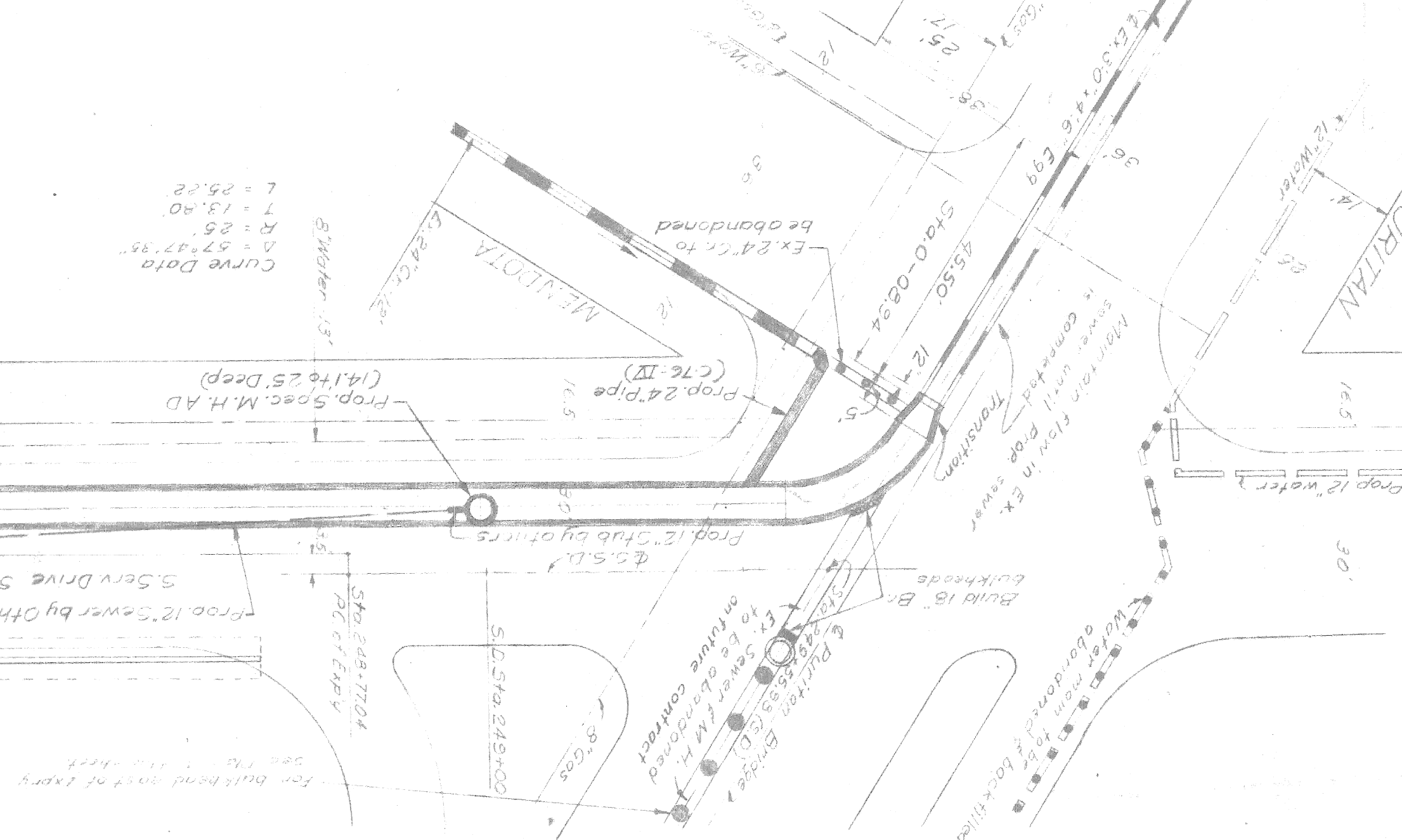
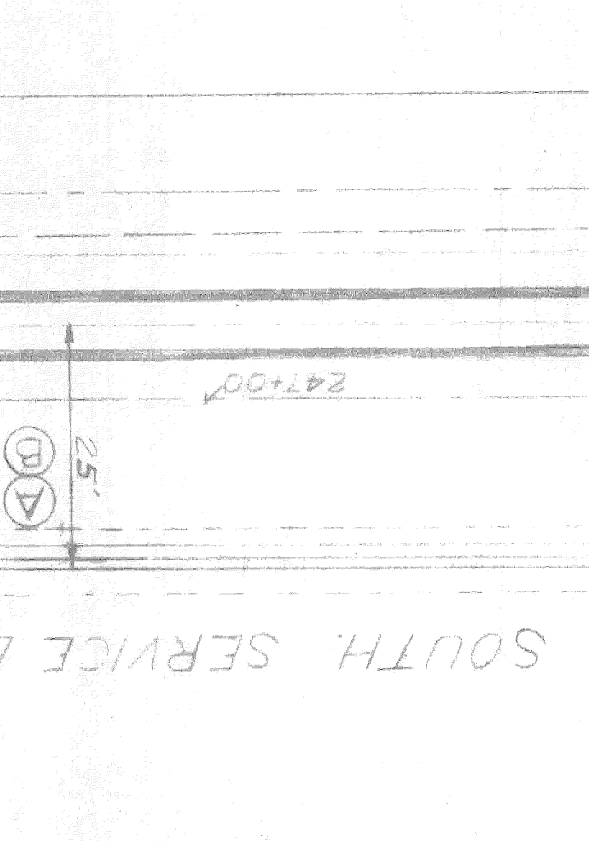
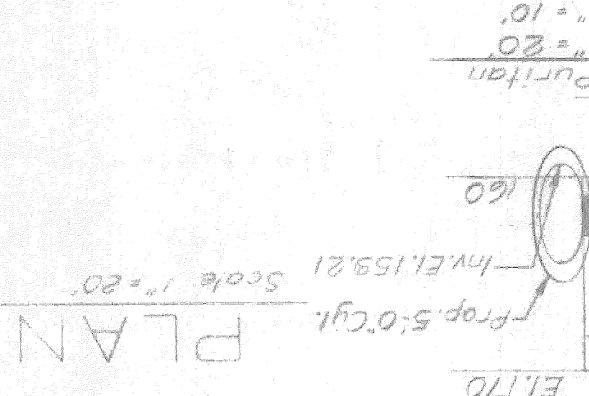


**LEGEND**

|  |                               |
|--|-------------------------------|
|  | RL C. conduit                 |
|  | M.B.T. conduit                |
|  | D.E. Co. conduit              |
|  | Gas, 12" or less              |
|  | Gas, over 12"                 |
|  | Water, 12" or less            |
|  | Water, over 12"               |
|  | Existing Sewers 5'-0" or less |
|  | Existing Sewers over 5'-0"    |
|  | to be abandoned               |

PROFILE  
 Scale: Horiz. 1" = 20'  
 Vert. 1" = 10'

PROFILE  
 Scale: Horiz. 1" = 20'  
 Vert. 1" = 10'





|     |             |      |    |
|-----|-------------|------|----|
| NO. | DESCRIPTION | DATE | BY |
|     |             |      |    |
|     |             |      |    |

REVISIONS

NO. DESCRIPTION DATE BY

1 12.5' loc. dim. for sewer was 175' 4-15-60 JPK

PLAN # PROFILE - STA. 0+00 TO STA. 10+16.26

JOHN C. LODGE, EXTENSION ALLOCATION OF PURITAN AND SEWER

MICHIGAN STATE HIGHWAY DEPARTMENT

Checked by K. Sinks

Drawn by George A. Kalk

Designed by W.R. Bannard

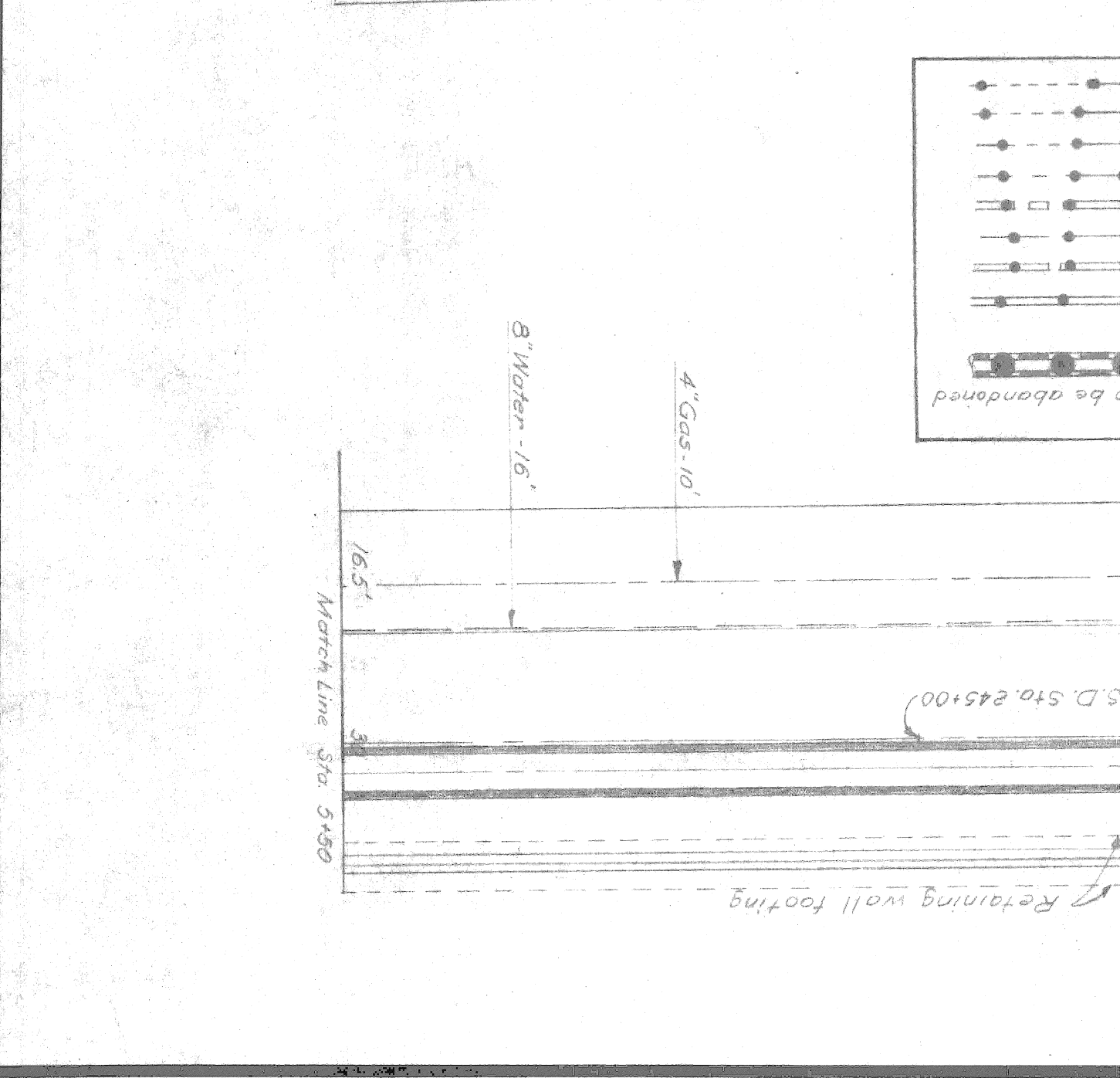
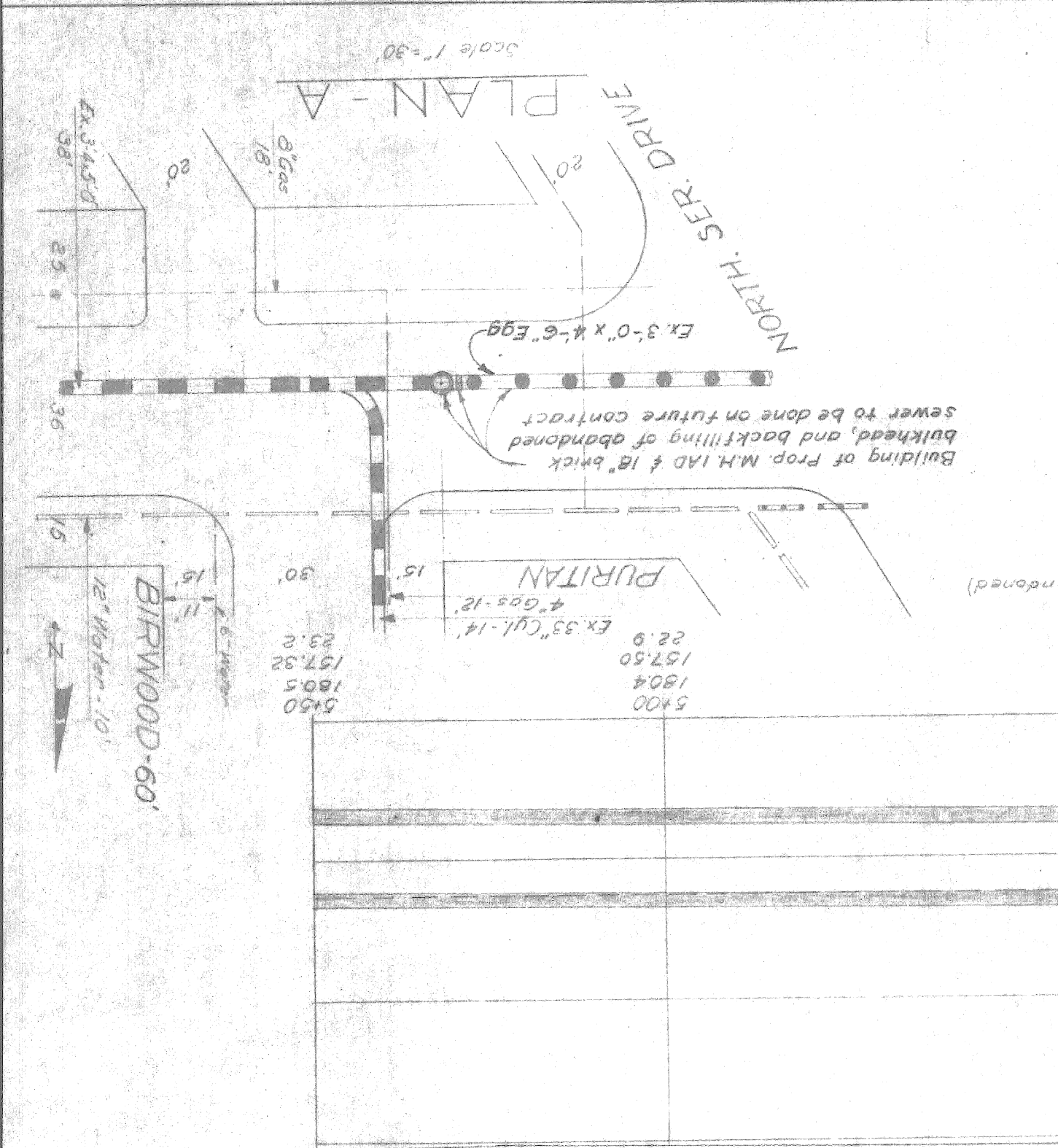
APPROVED Street & Sewer Engineering

CITY ENGINEERS OFFICE

DEPARTMENT OF PUBLIC WORKS

CITY OF DETROIT

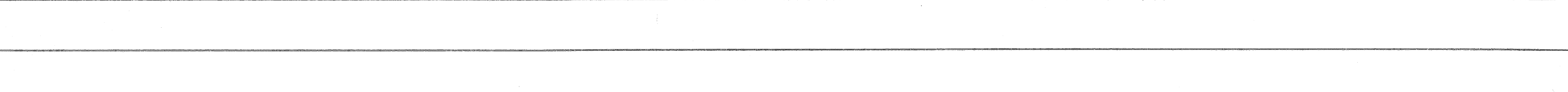
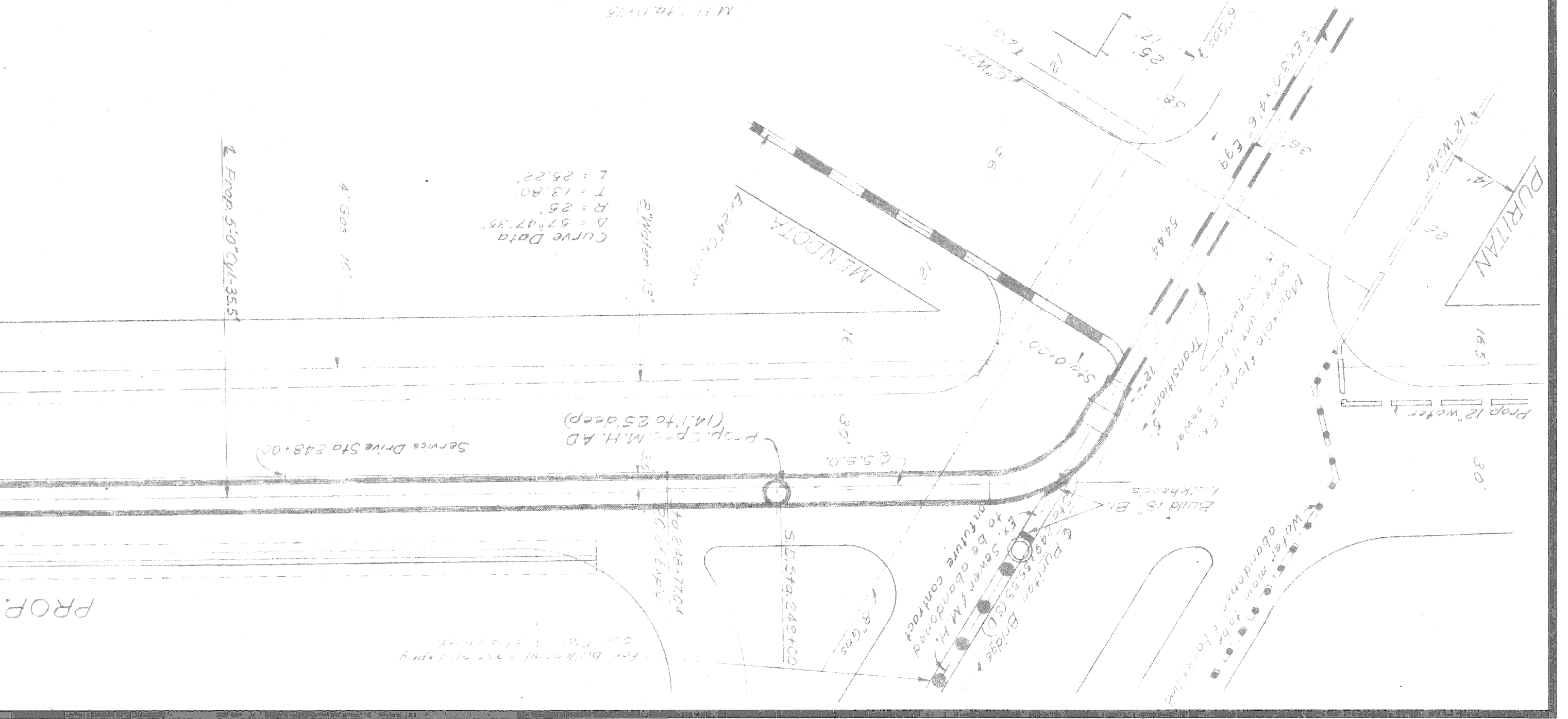
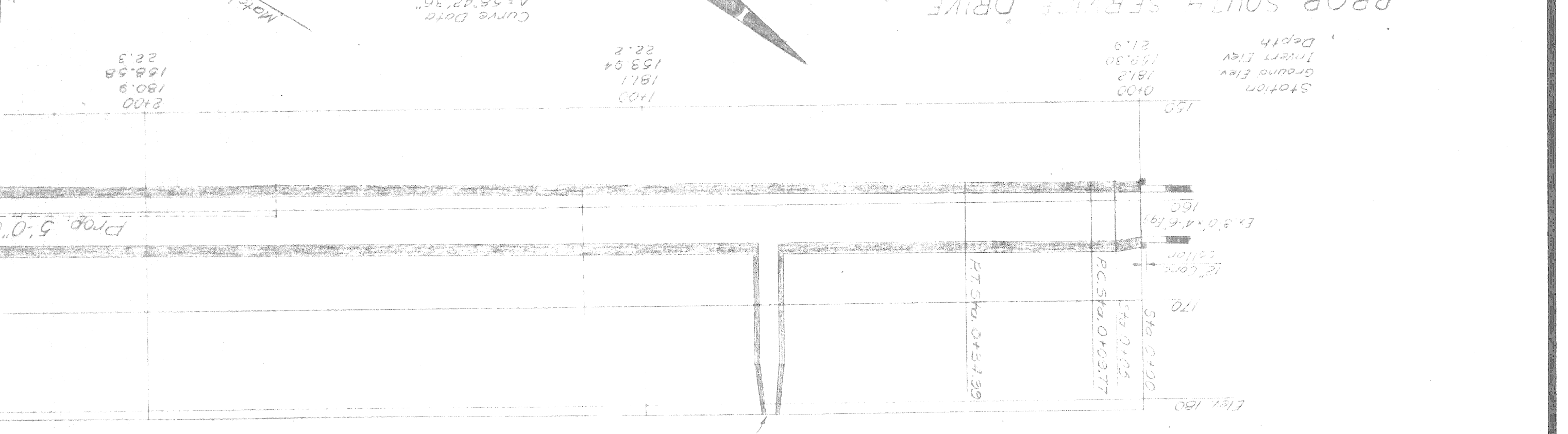
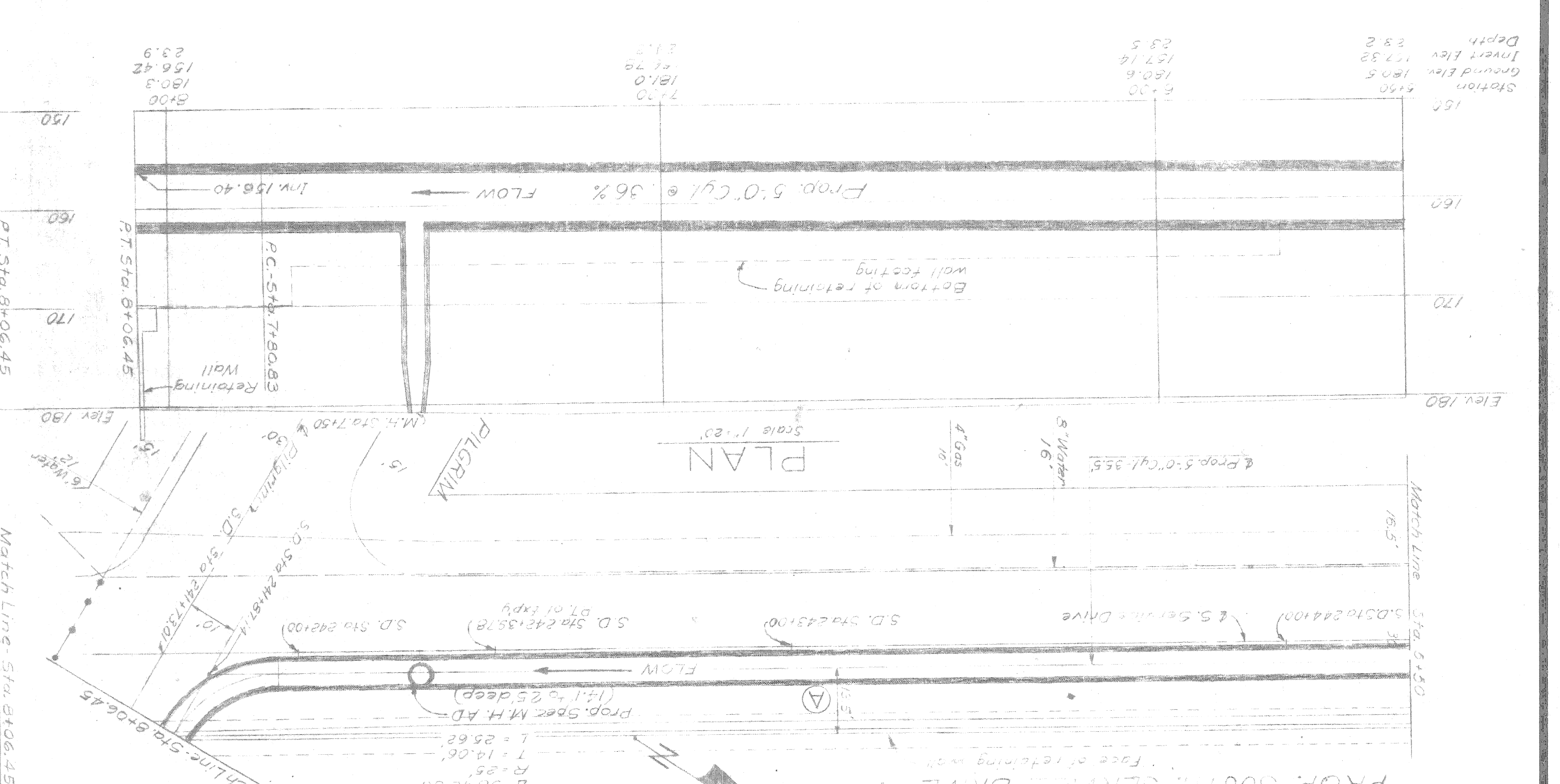
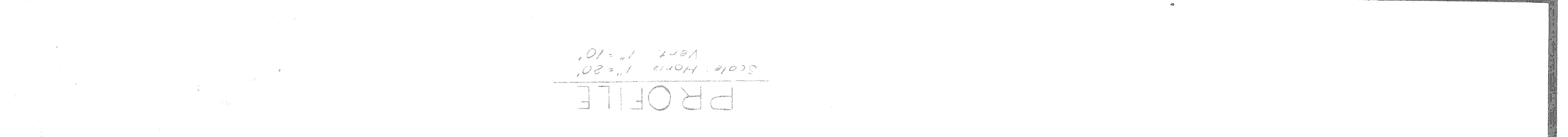
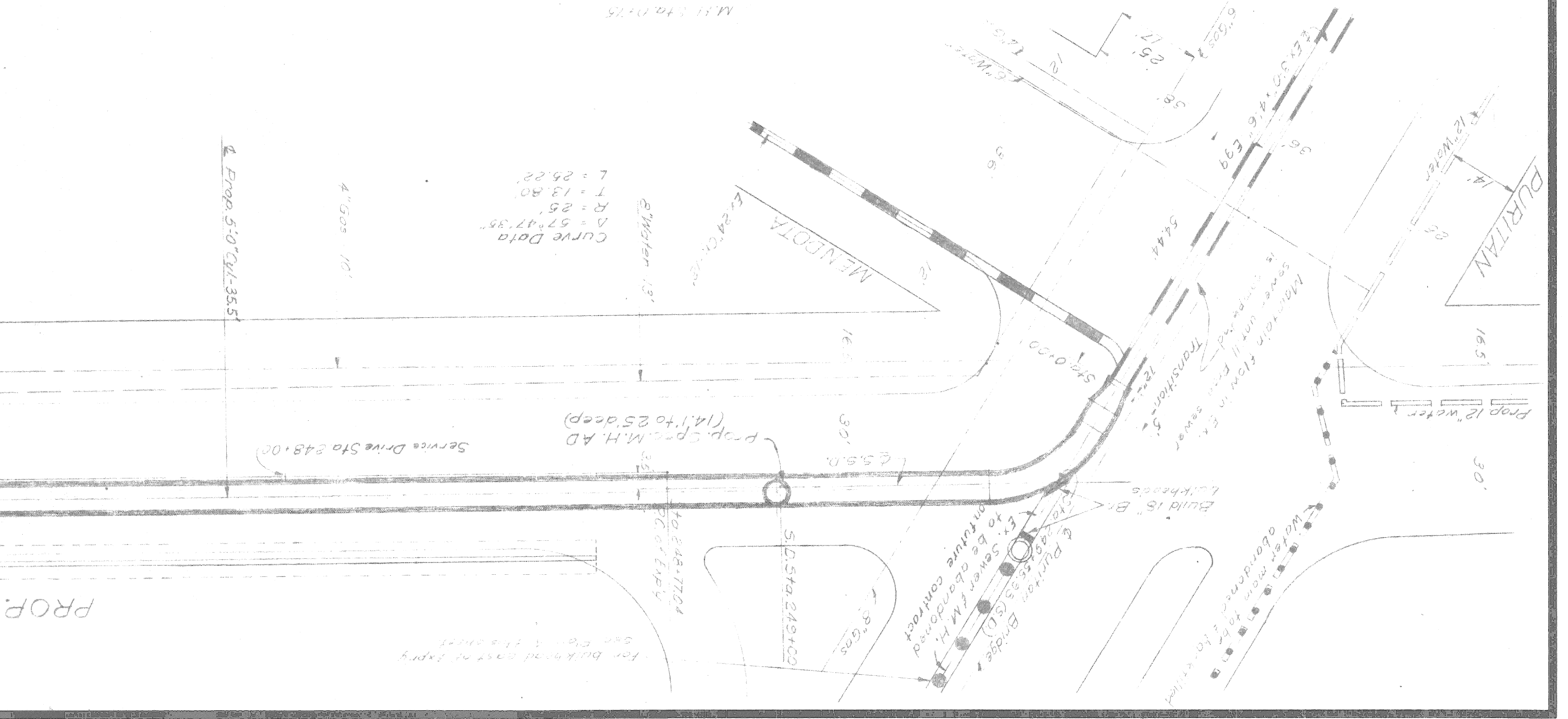
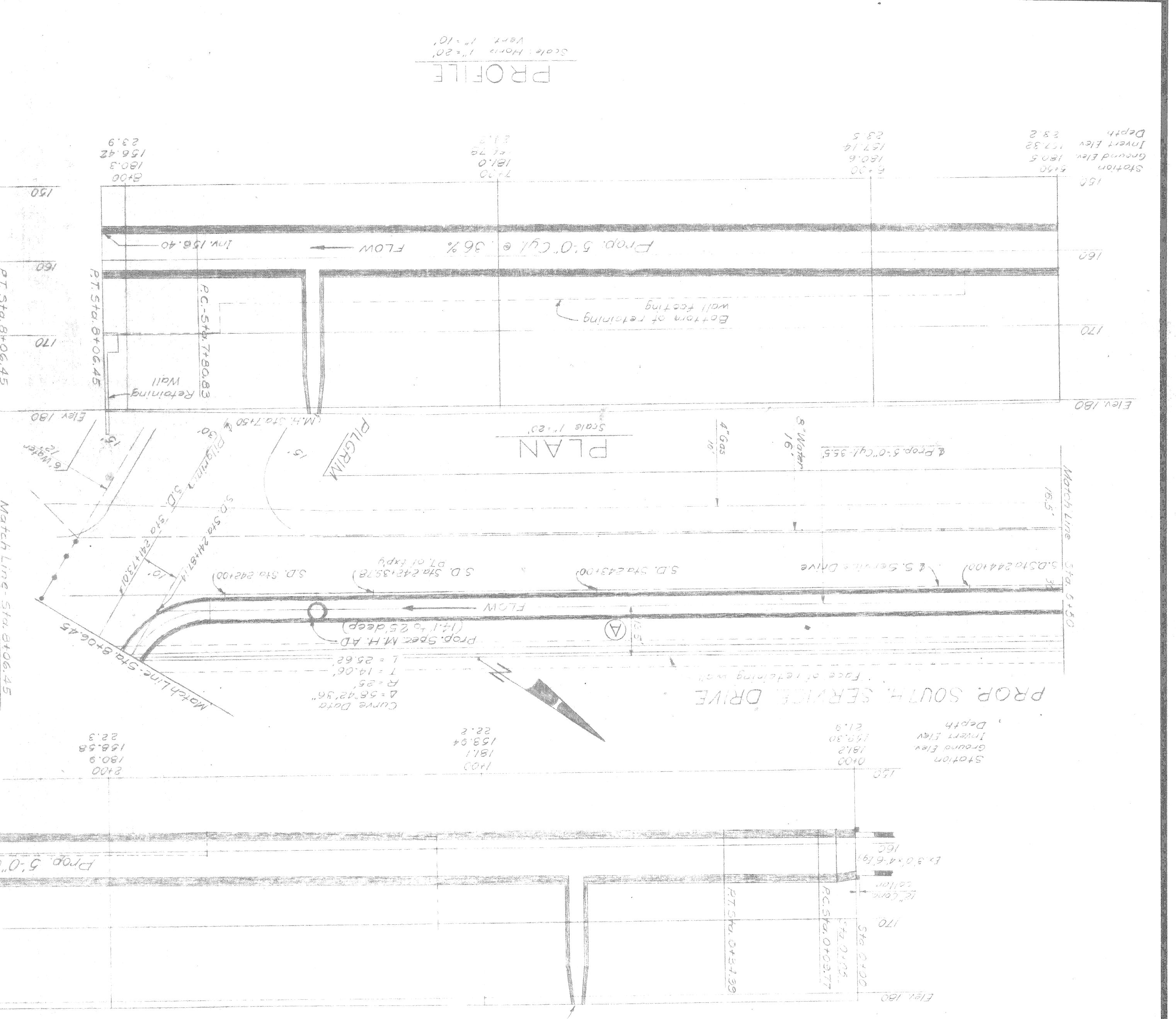
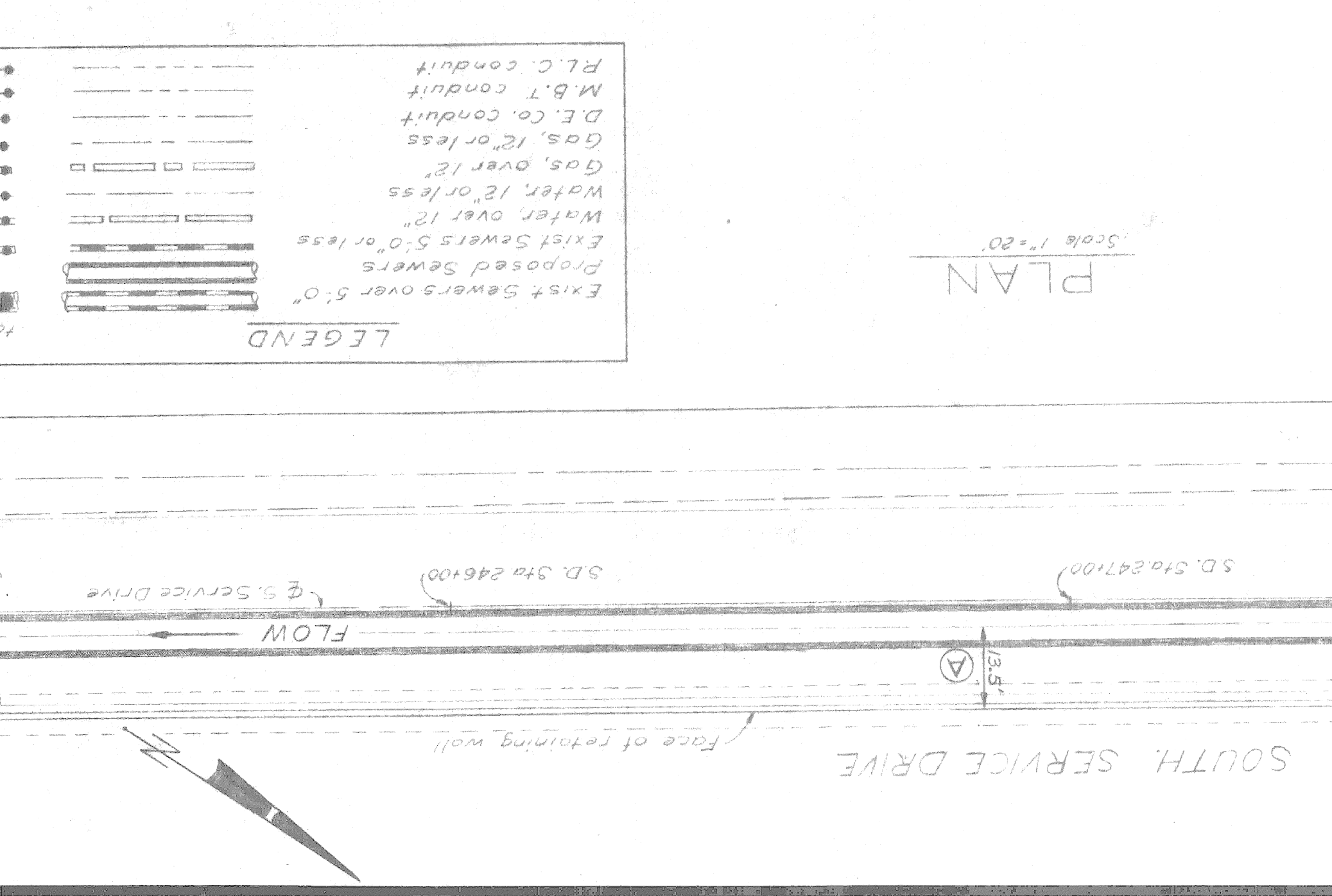
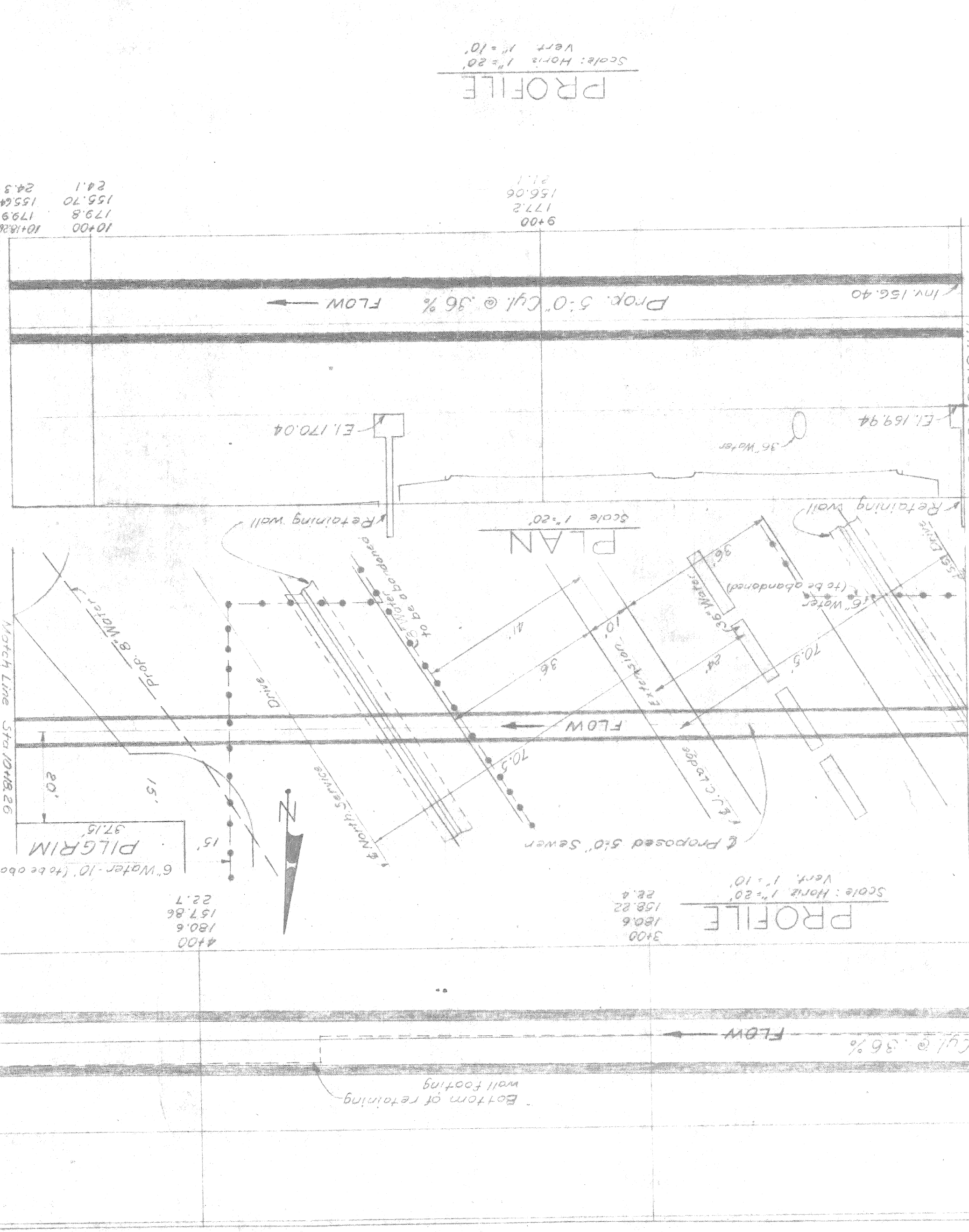
DATE 9-7-60



LEGEND

|  |                           |
|--|---------------------------|
|  | R.C. conduit              |
|  | M.B.T. conduit            |
|  | D.E. Co. conduit          |
|  | Gas, 12" or less          |
|  | Gas, over 12"             |
|  | Water, 12" or less        |
|  | Water, over 12"           |
|  | Proposed Sewers           |
|  | Exist Sewers 5.0' or less |
|  | Exist Sewers over 5.0'    |

to be abandoned





82112 C10

|     |      |    |             |
|-----|------|----|-------------|
| NO. | DATE | BY | DESCRIPTION |
|     |      |    |             |

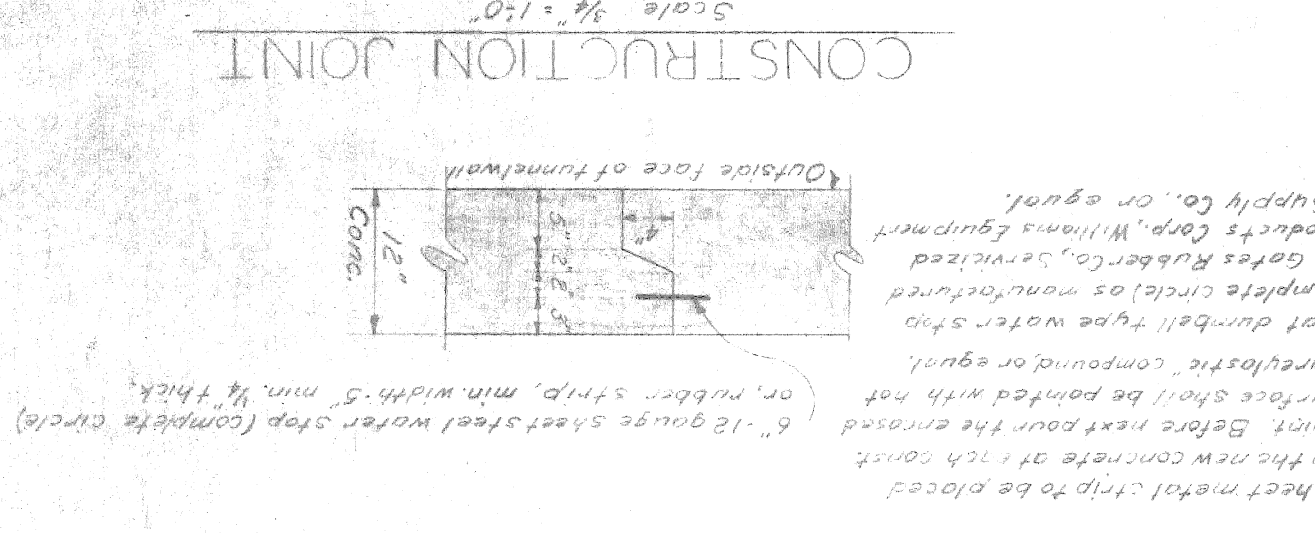
**MICHIGAN STATE HIGHWAY DEPARTMENT**  
 JOHN C. LODGE EXTENSION  
 RELOCATION OF PURITAN AVE SEWER  
 PLAN & PROFILE - STA. 10+18.26 TO END OF CONTRACT

**CITY OF DETROIT**  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 DATE 9-7-60

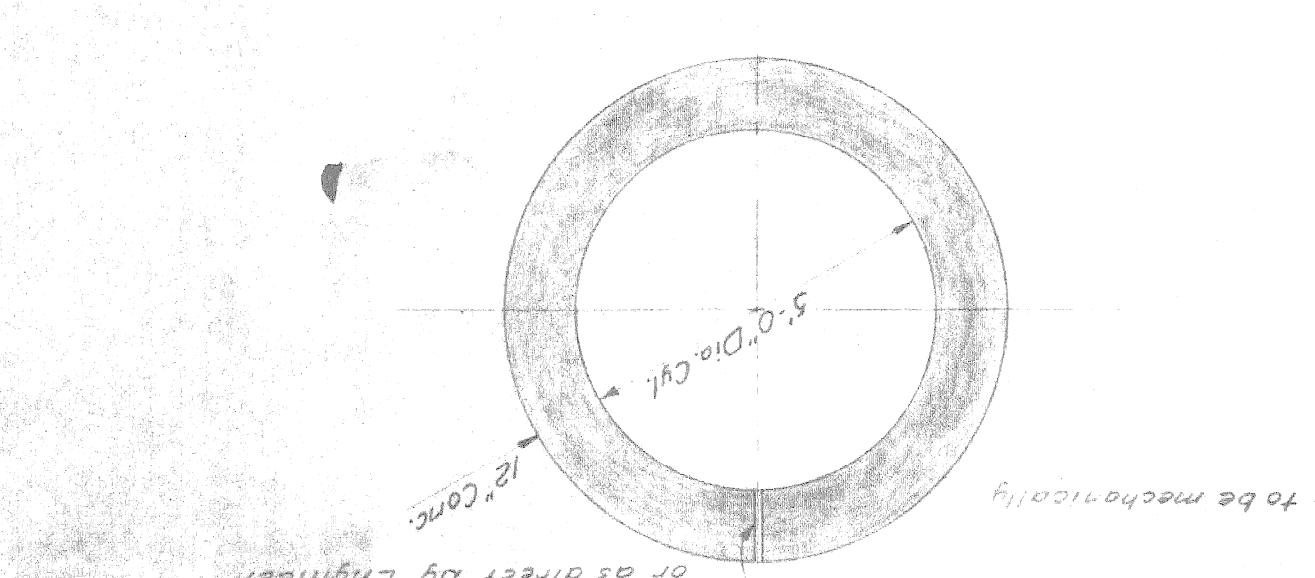
Design by *W.R. Bannard*  
 Drawn by *George N. Hill*  
 Checked by *R. Stinks*

APPROVED *Grant E. Hudge*  
 City Engineers  
 Ass'y City Engineer

NOTE: This construction joint to be used from Sta. 0+00 to Sta. 11+00  
 Scale 3/8" = 1'-0"

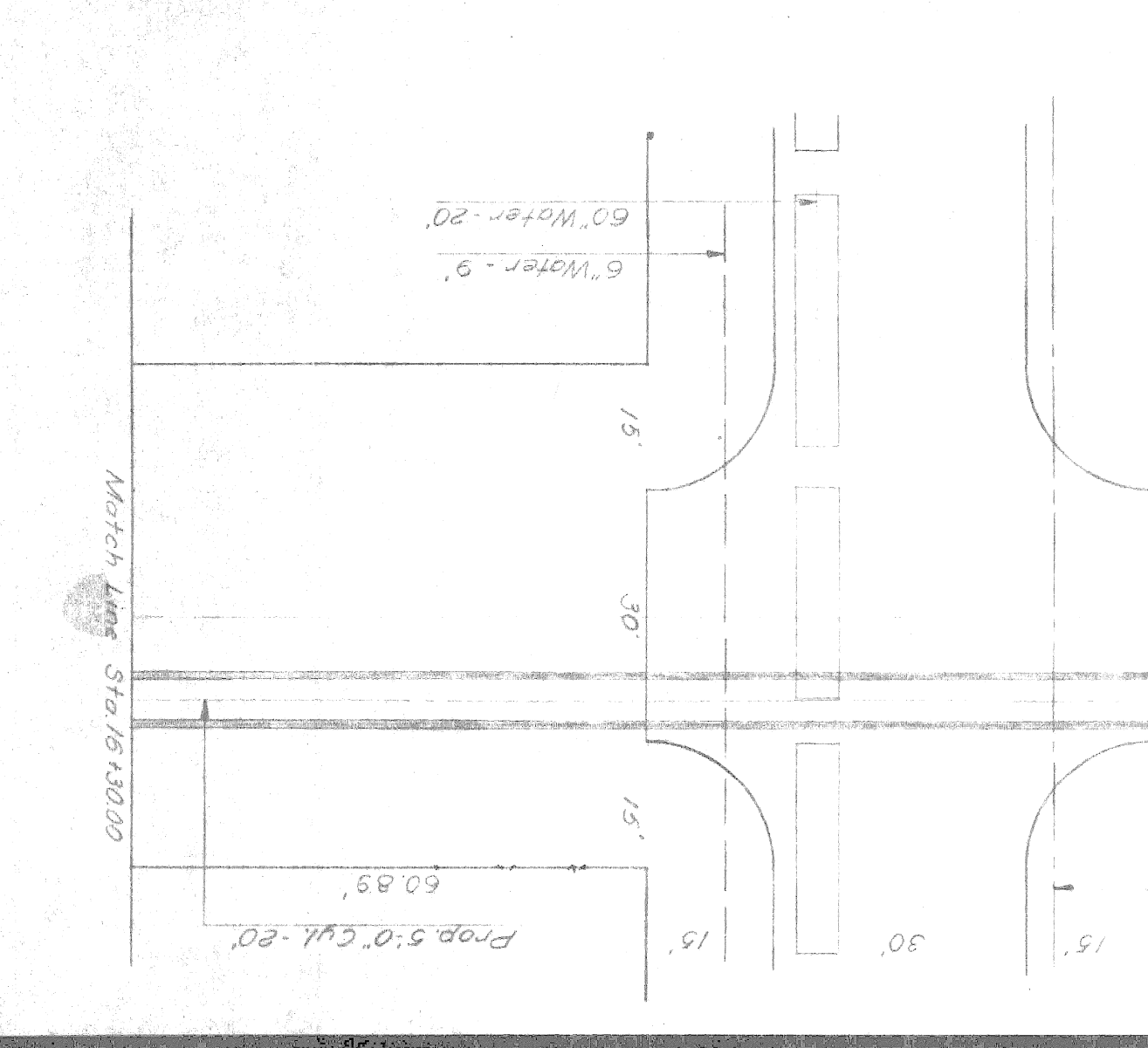


Sheet metal clips to be placed in the new concrete at 12" centers. Before next pour the exposed joint. Before next pour the exposed joint. Before next pour the exposed joint. Before next pour the exposed joint.



Concrete to be mechanically placed.  
 1/2" Grout holes spaced @ 20" oc or as direct by Engineer.

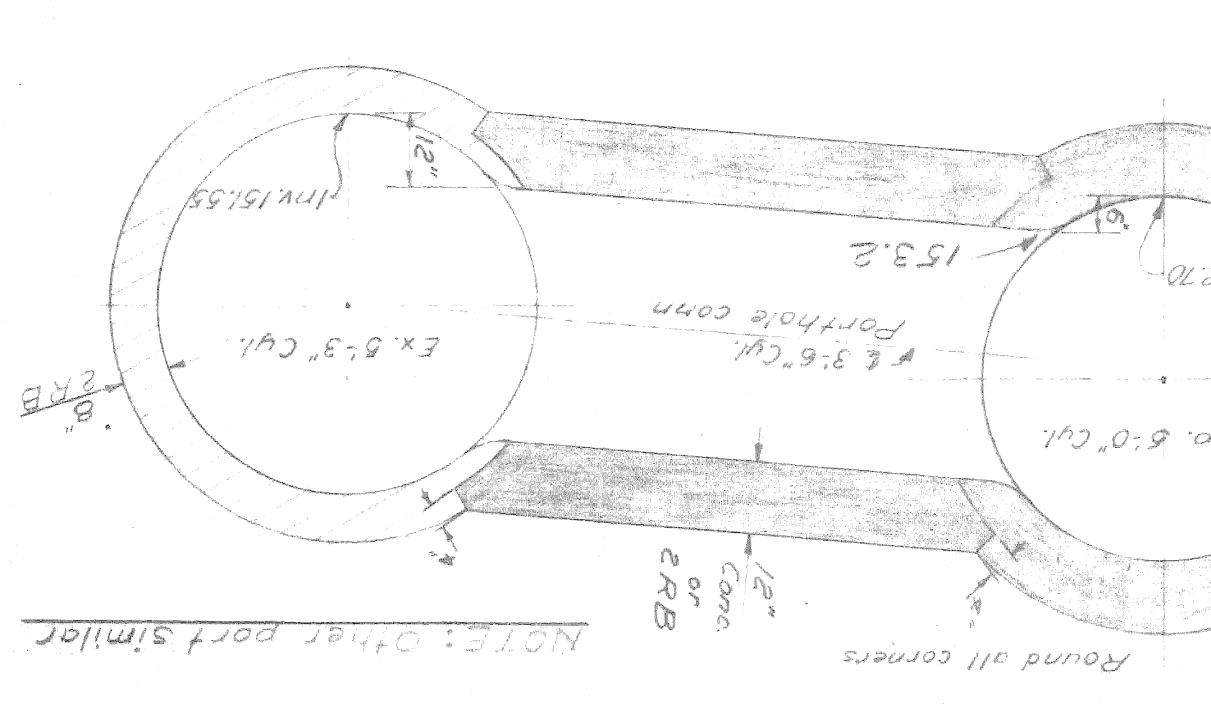
|              |       |       |       |       |
|--------------|-------|-------|-------|-------|
| Station      | 16+00 | 15+00 | 14+00 | 13+00 |
| Invert Elev. | 179.5 | 179.5 | 179.7 | 179.7 |
| Ground Elev. | 179.6 | 179.5 | 179.5 | 179.7 |
| Depth        | 0.1   | 0.0   | 0.0   | 0.0   |



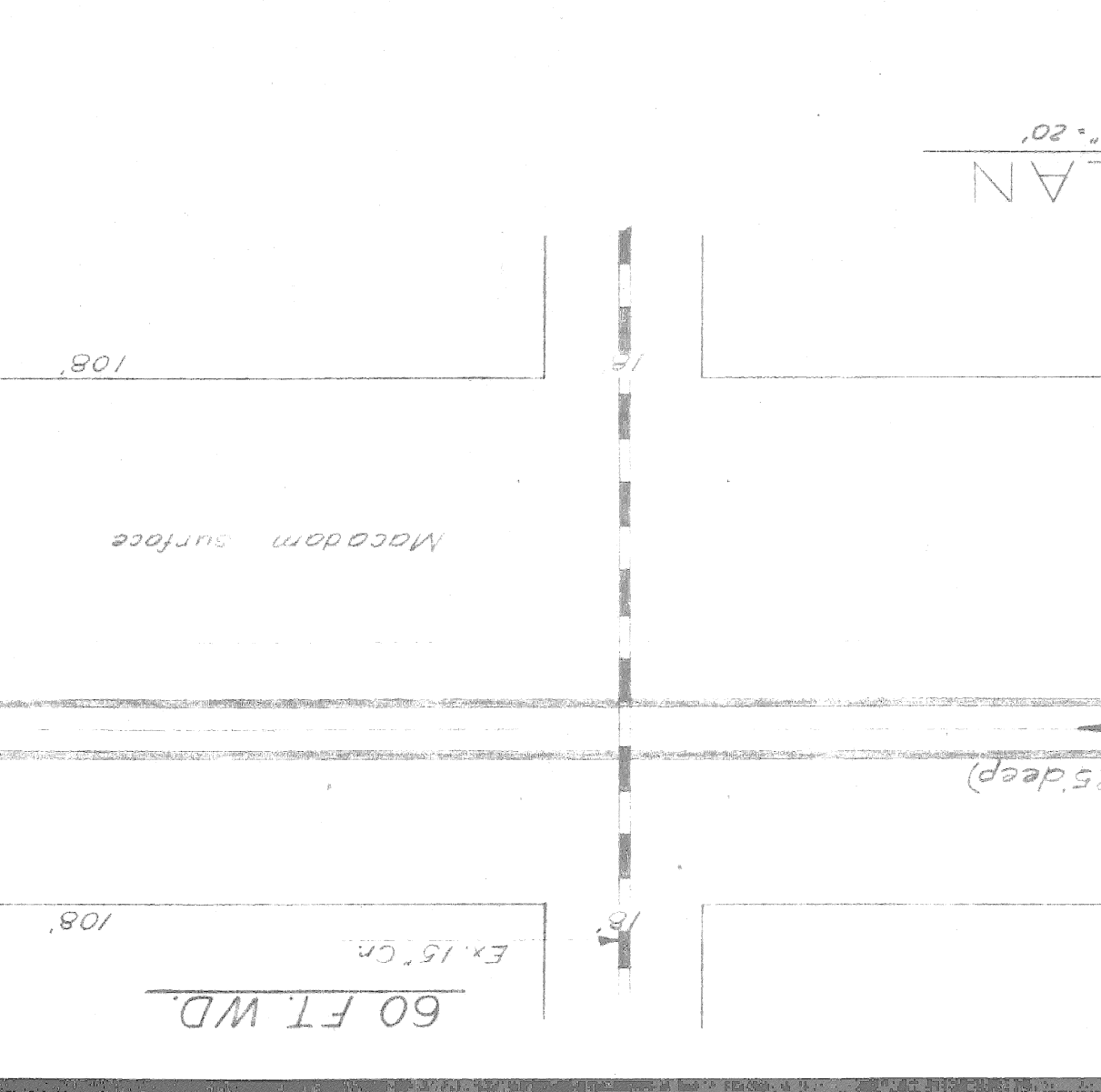
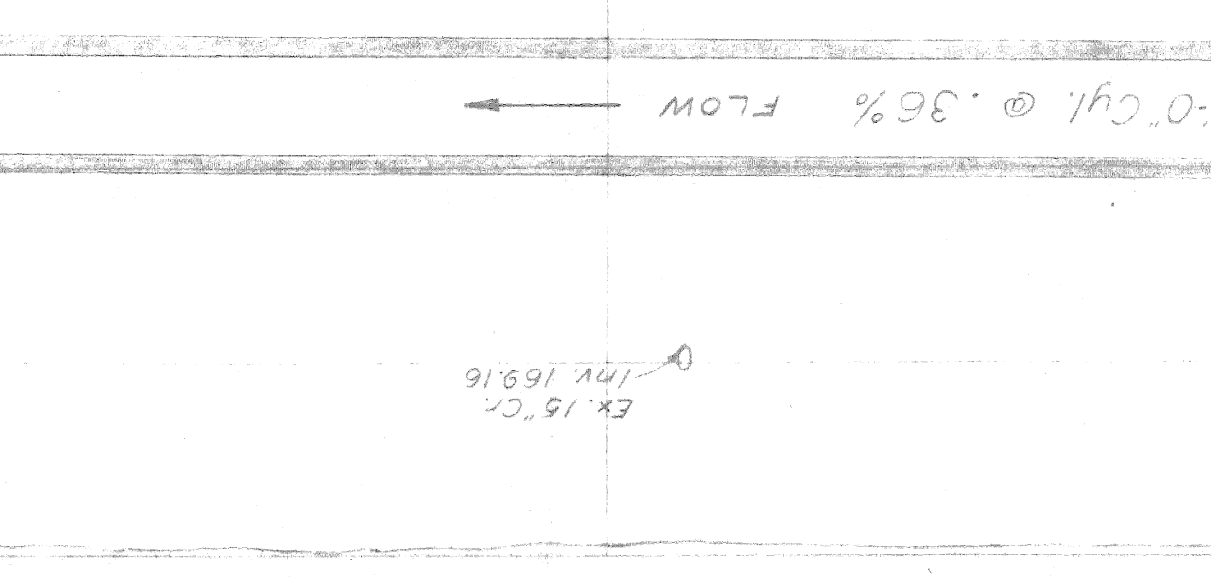
**LEGEND**  
 Scale: 3/8" = 1'-0"

|  |                             |
|--|-----------------------------|
|  | R.L.C. conduit              |
|  | M.B.T. conduit              |
|  | D.E. Co. conduit            |
|  | Gas, 12" or less            |
|  | Water, 12" or less          |
|  | Water, over 12"             |
|  | Exist. Sewers 5'-0" or less |
|  | Proposed Sewers             |
|  | Exist. Sewers over 5'-0"    |

SECTION A-A  
 DETAILS OF 3-6" PORT CONN.  
 Scale: 3/8" = 1'-0"



|              |       |       |       |
|--------------|-------|-------|-------|
| Station      | 15+00 | 14+00 | 13+00 |
| Invert Elev. | 179.5 | 179.5 | 179.7 |
| Ground Elev. | 179.6 | 179.5 | 179.7 |
| Depth        | 0.1   | 0.0   | 0.0   |



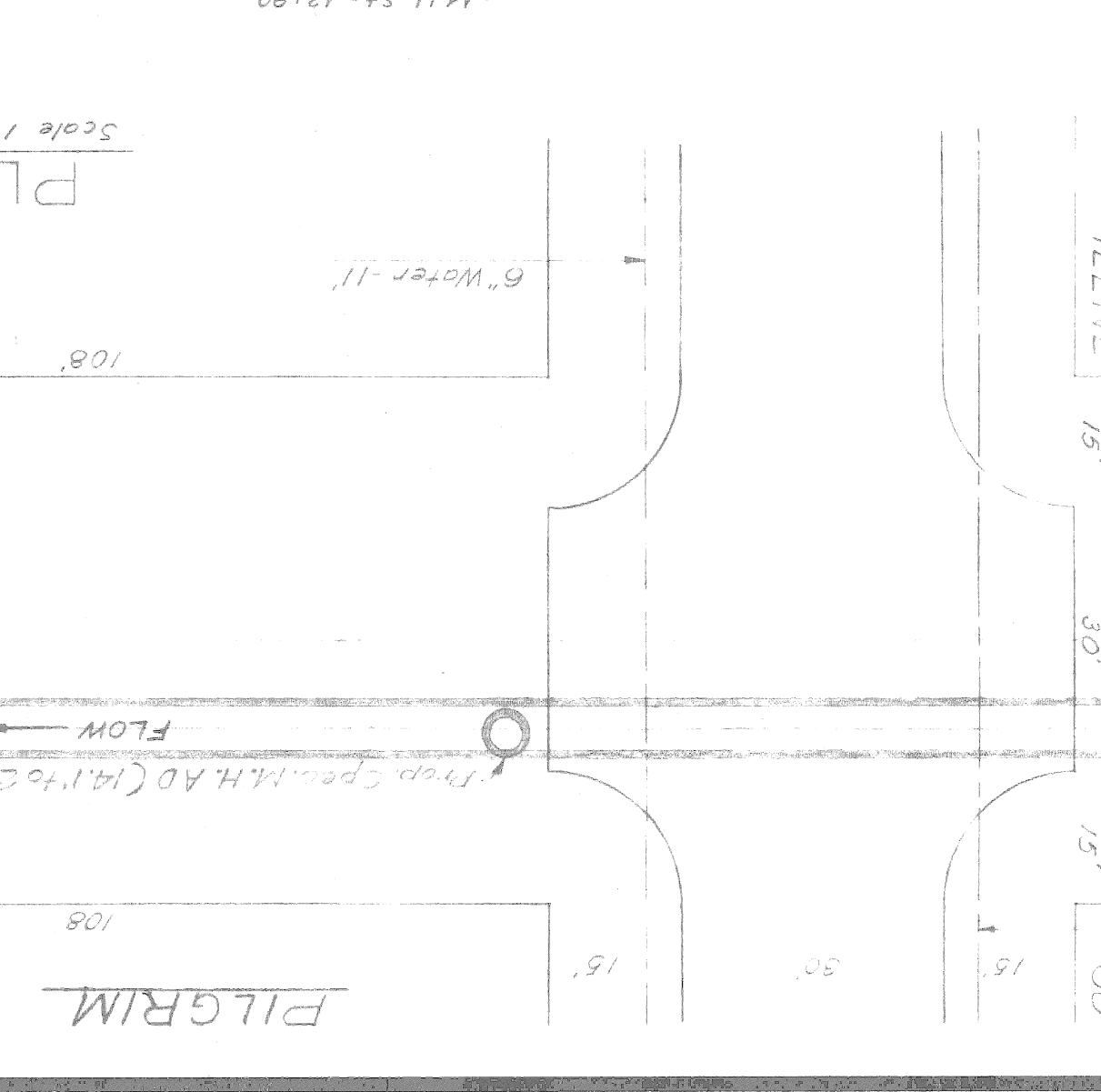
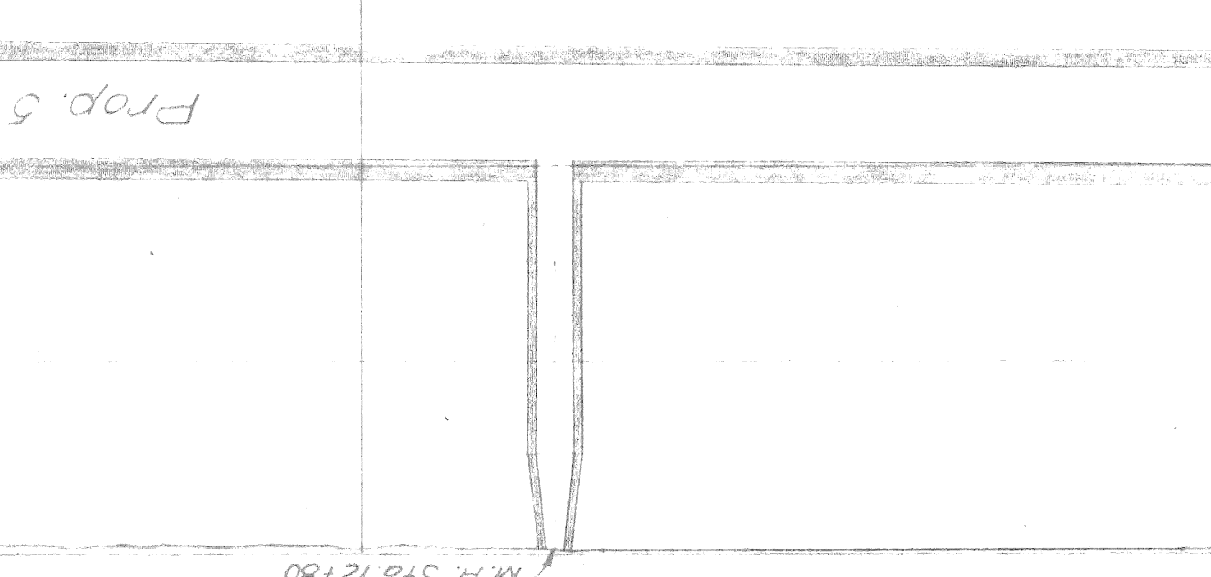
**LEGEND**  
 Scale: 3/8" = 1'-0"

|  |                             |
|--|-----------------------------|
|  | R.L.C. conduit              |
|  | M.B.T. conduit              |
|  | D.E. Co. conduit            |
|  | Gas, 12" or less            |
|  | Water, 12" or less          |
|  | Water, over 12"             |
|  | Exist. Sewers 5'-0" or less |
|  | Proposed Sewers             |
|  | Exist. Sewers over 5'-0"    |

SECTION A-A  
 DETAILS OF 3-6" PORT CONN.  
 Scale: 3/8" = 1'-0"



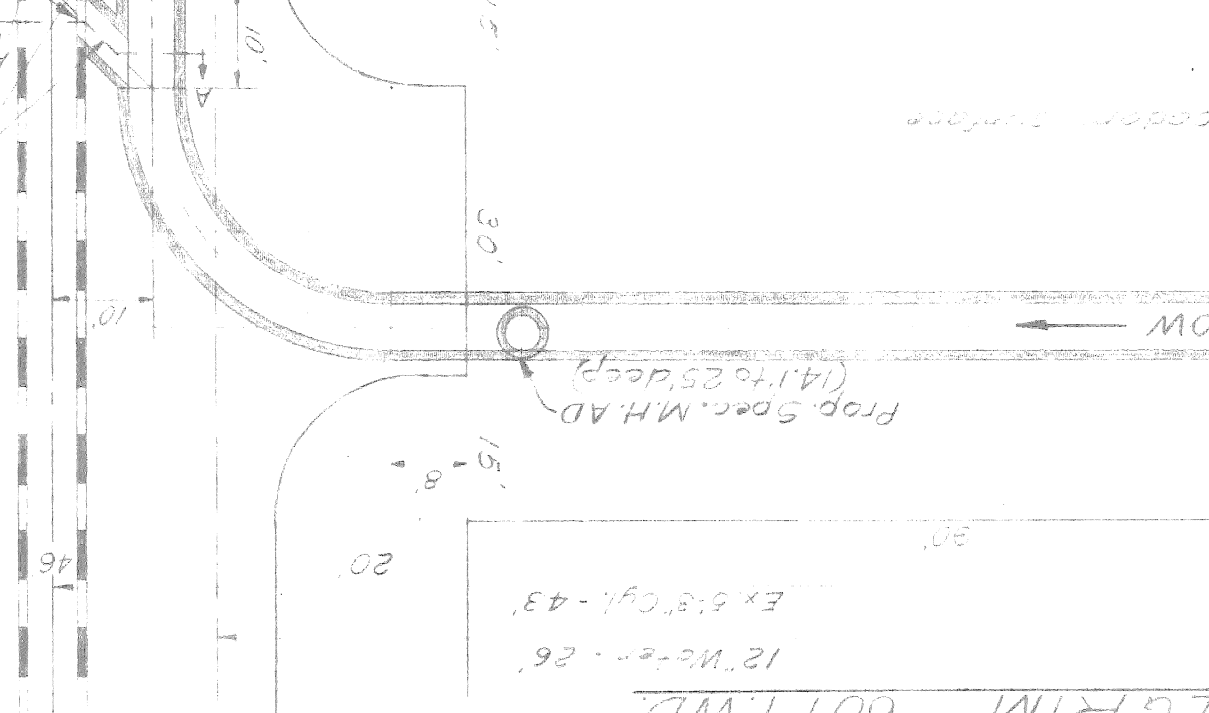
|              |       |       |       |
|--------------|-------|-------|-------|
| Station      | 15+00 | 14+00 | 13+00 |
| Invert Elev. | 179.5 | 179.5 | 179.7 |
| Ground Elev. | 179.6 | 179.5 | 179.7 |
| Depth        | 0.1   | 0.0   | 0.0   |



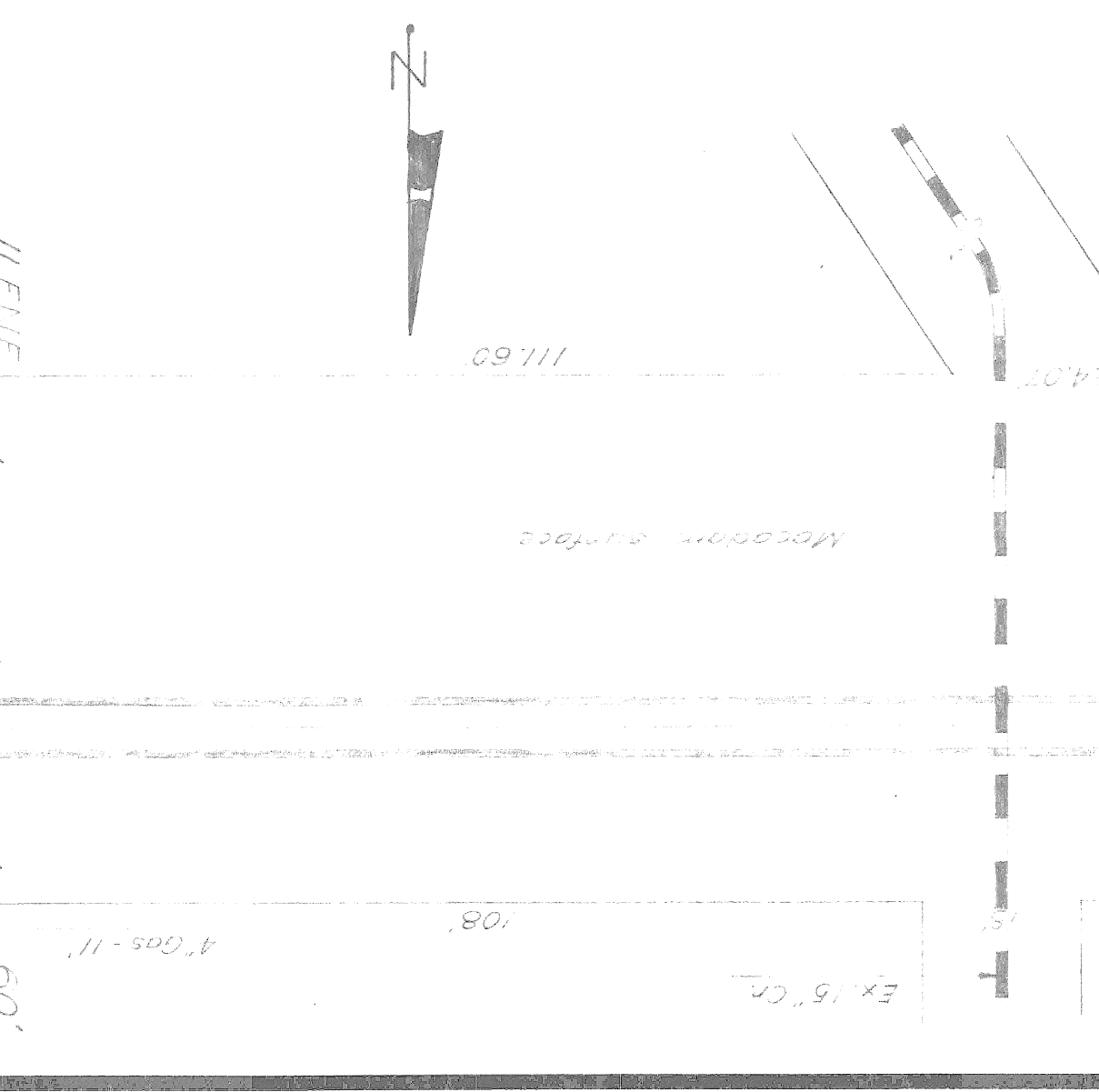
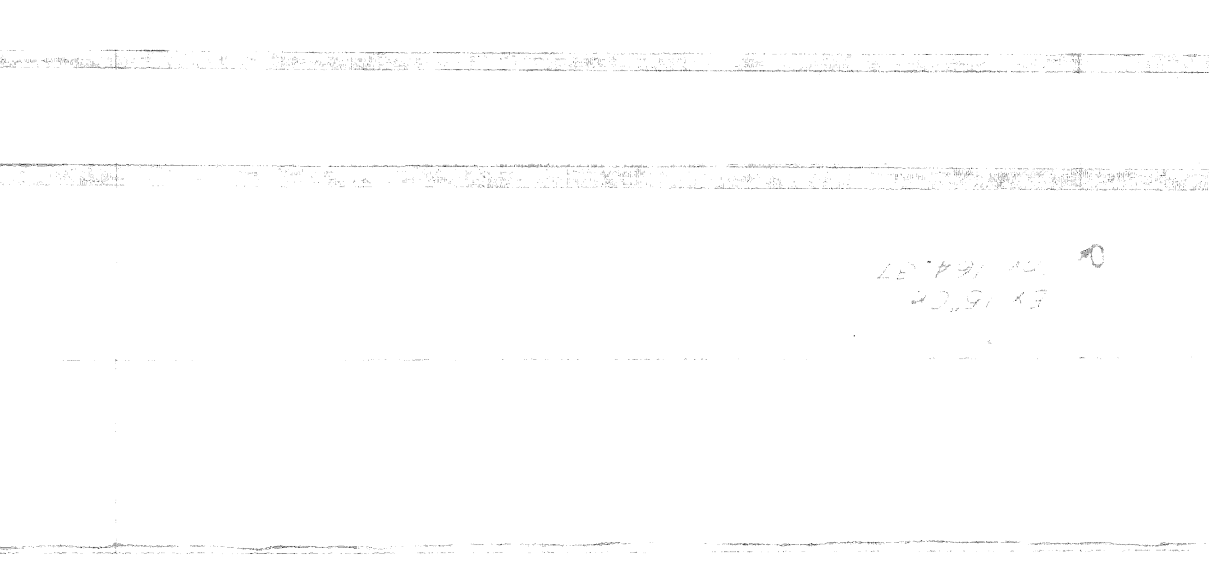
**LEGEND**  
 Scale: 3/8" = 1'-0"

|  |                             |
|--|-----------------------------|
|  | R.L.C. conduit              |
|  | M.B.T. conduit              |
|  | D.E. Co. conduit            |
|  | Gas, 12" or less            |
|  | Water, 12" or less          |
|  | Water, over 12"             |
|  | Exist. Sewers 5'-0" or less |
|  | Proposed Sewers             |
|  | Exist. Sewers over 5'-0"    |

SECTION A-A  
 DETAILS OF 3-6" PORT CONN.  
 Scale: 3/8" = 1'-0"



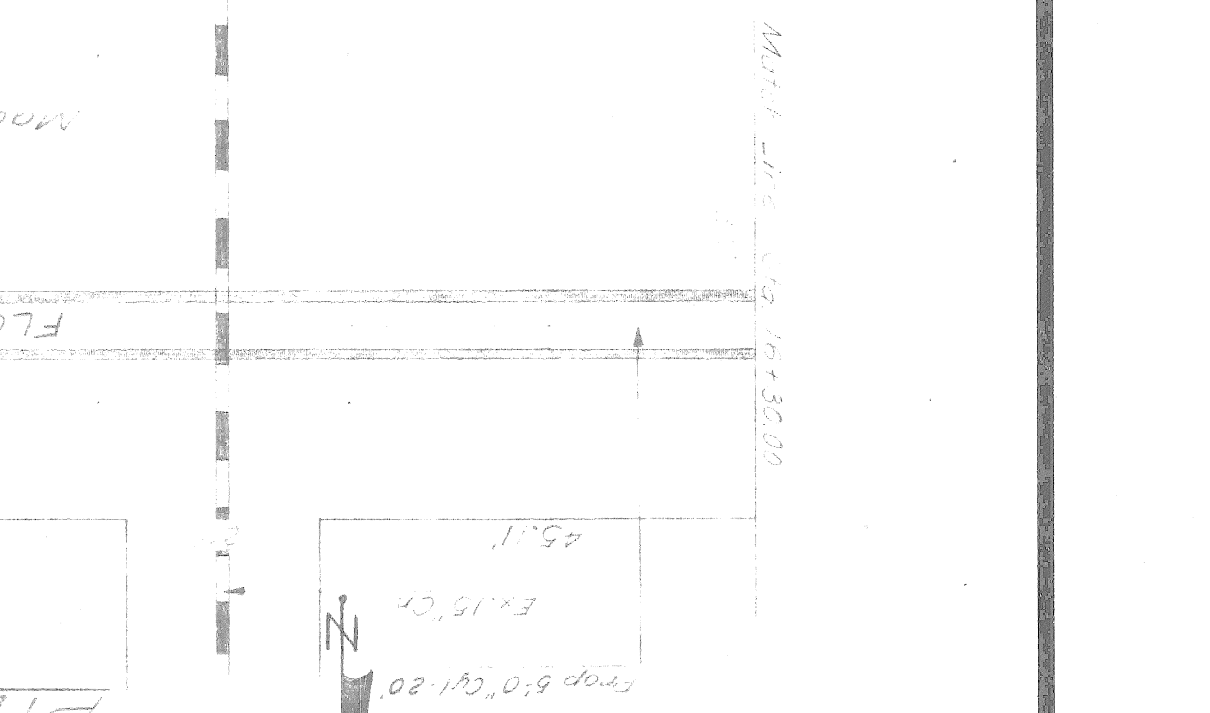
|              |       |       |       |
|--------------|-------|-------|-------|
| Station      | 15+00 | 14+00 | 13+00 |
| Invert Elev. | 179.5 | 179.5 | 179.7 |
| Ground Elev. | 179.6 | 179.5 | 179.7 |
| Depth        | 0.1   | 0.0   | 0.0   |



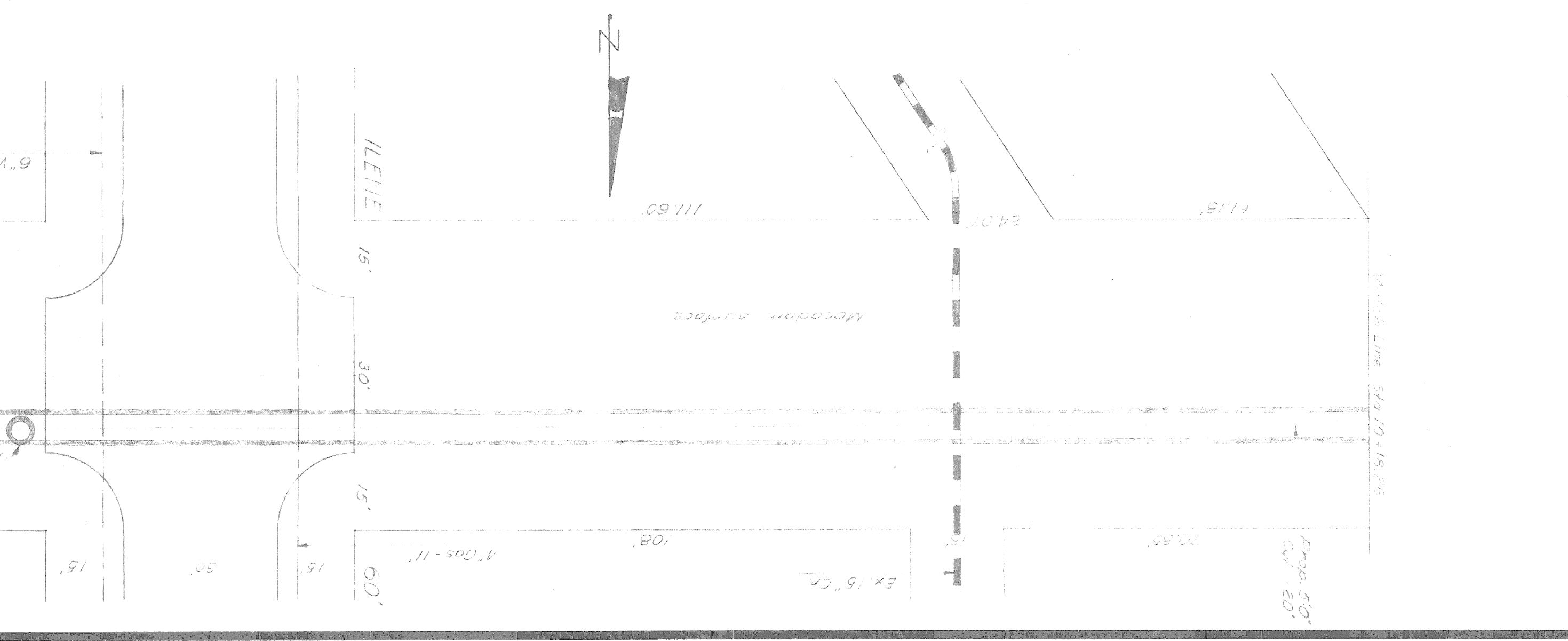
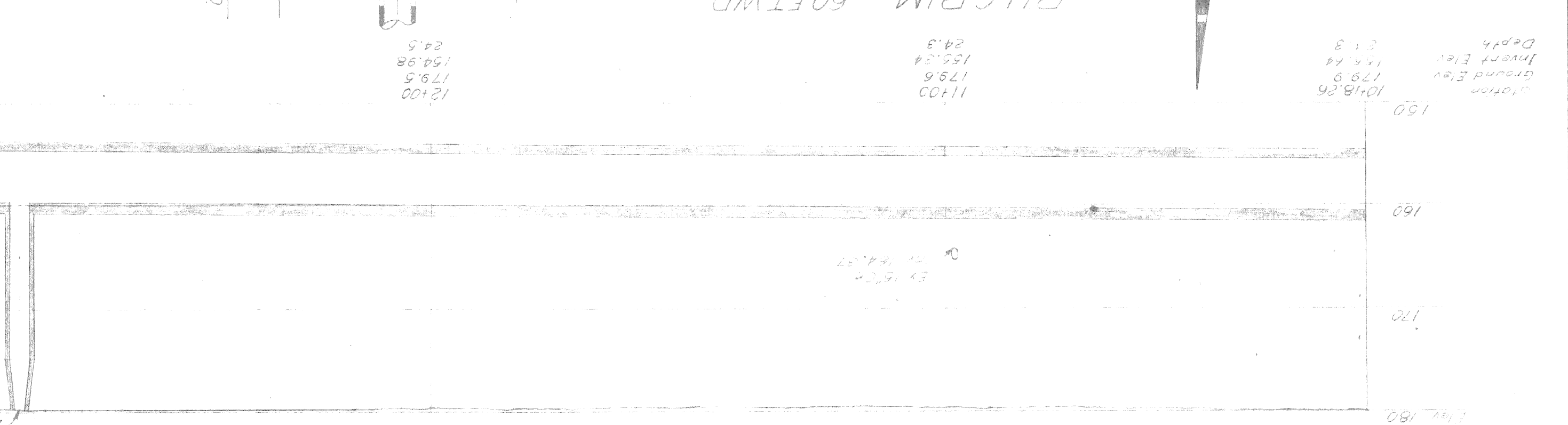
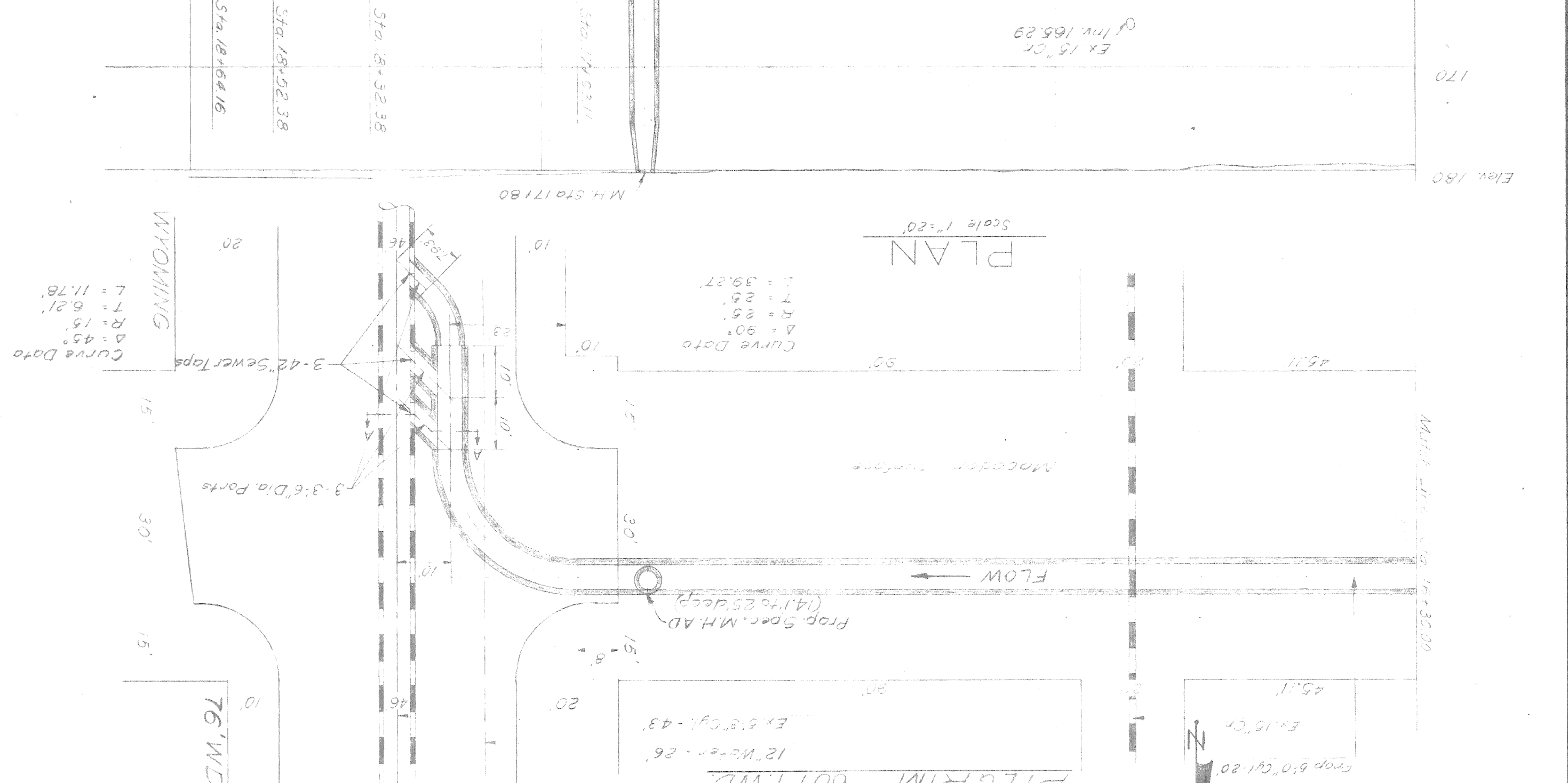
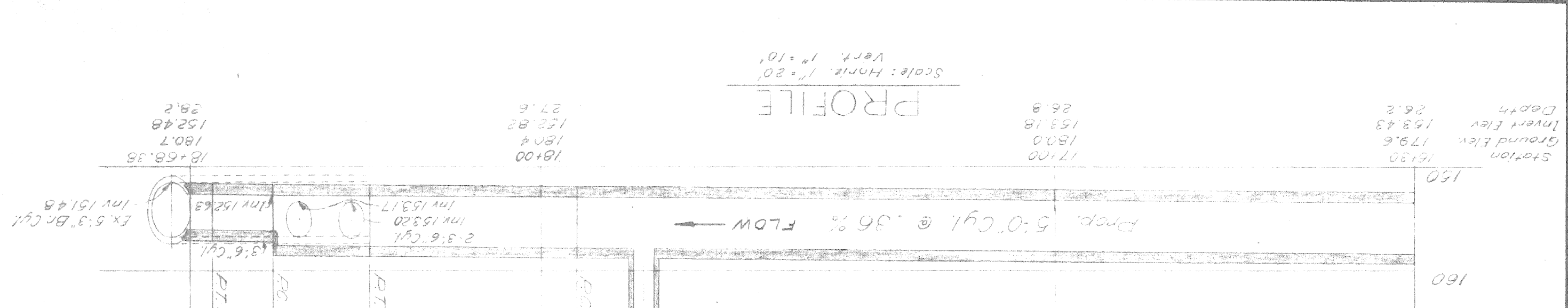
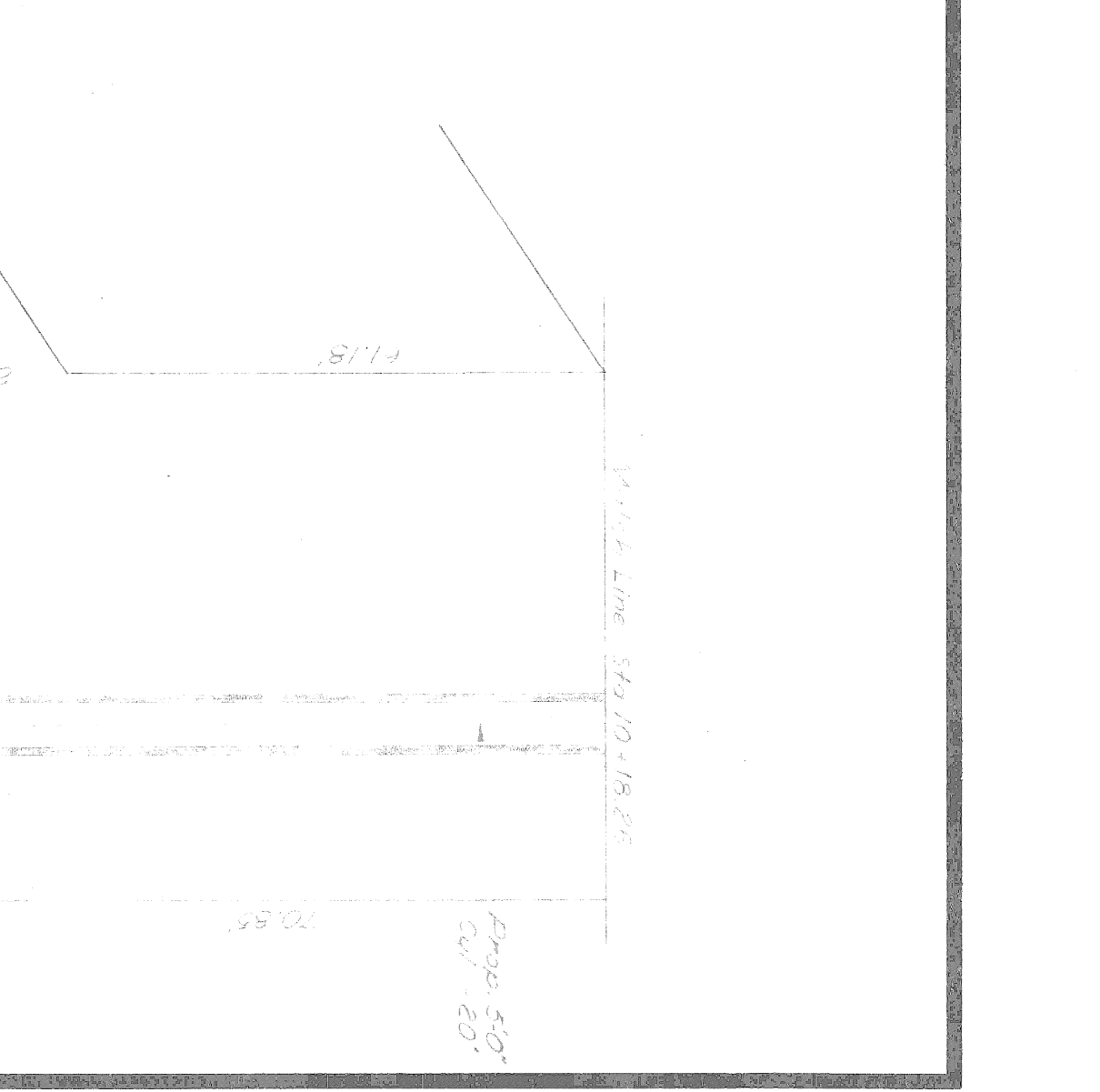
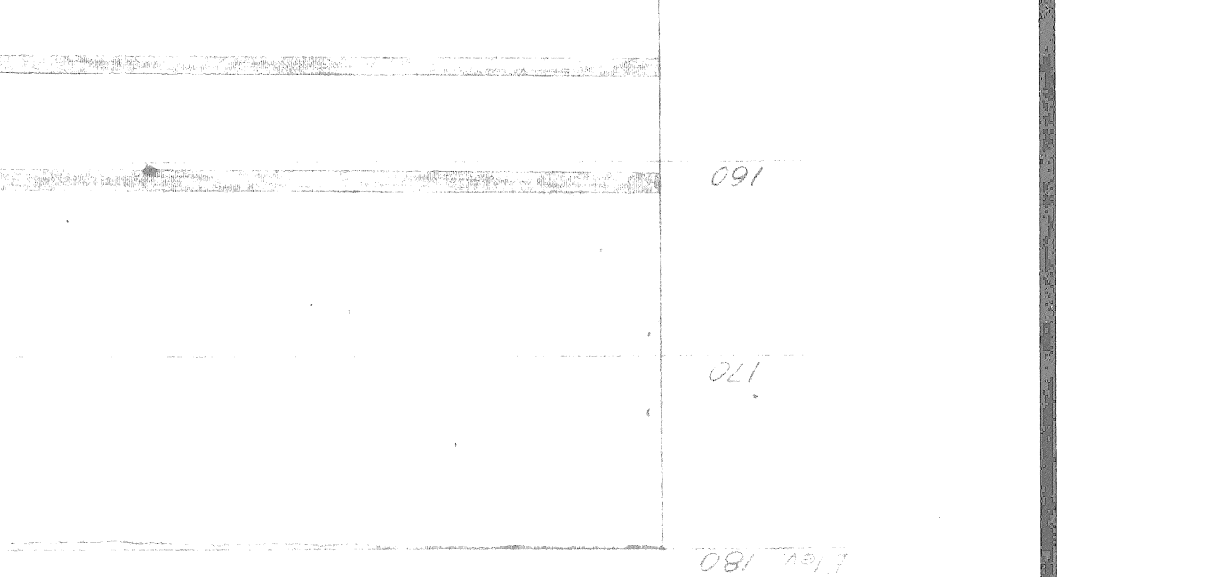
**LEGEND**  
 Scale: 3/8" = 1'-0"

|  |                             |
|--|-----------------------------|
|  | R.L.C. conduit              |
|  | M.B.T. conduit              |
|  | D.E. Co. conduit            |
|  | Gas, 12" or less            |
|  | Water, 12" or less          |
|  | Water, over 12"             |
|  | Exist. Sewers 5'-0" or less |
|  | Proposed Sewers             |
|  | Exist. Sewers over 5'-0"    |

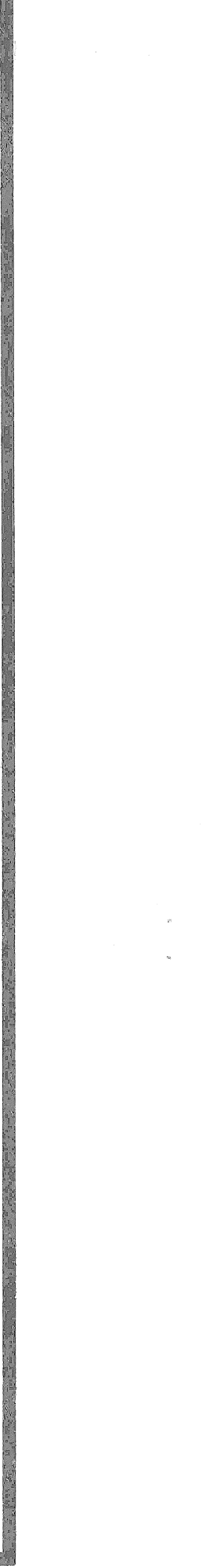
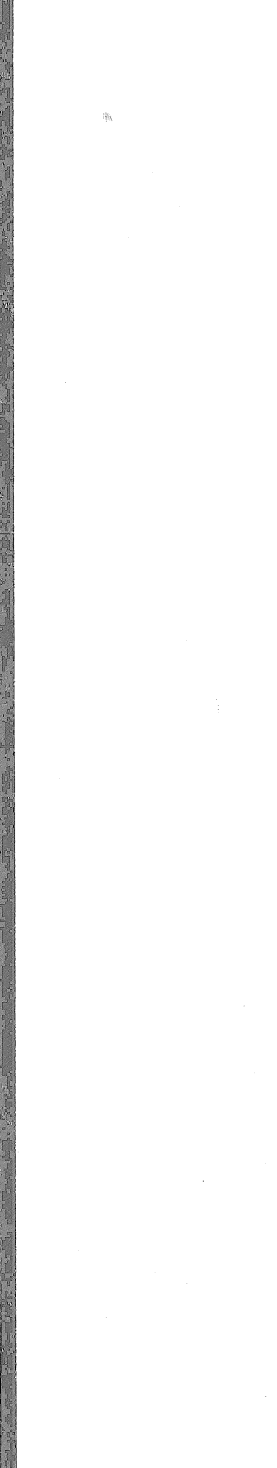
SECTION A-A  
 DETAILS OF 3-6" PORT CONN.  
 Scale: 3/8" = 1'-0"



|              |       |       |       |
|--------------|-------|-------|-------|
| Station      | 15+00 | 14+00 | 13+00 |
| Invert Elev. | 179.5 | 179.5 | 179.7 |
| Ground Elev. | 179.6 | 179.5 | 179.7 |
| Depth        | 0.1   | 0.0   | 0.0   |

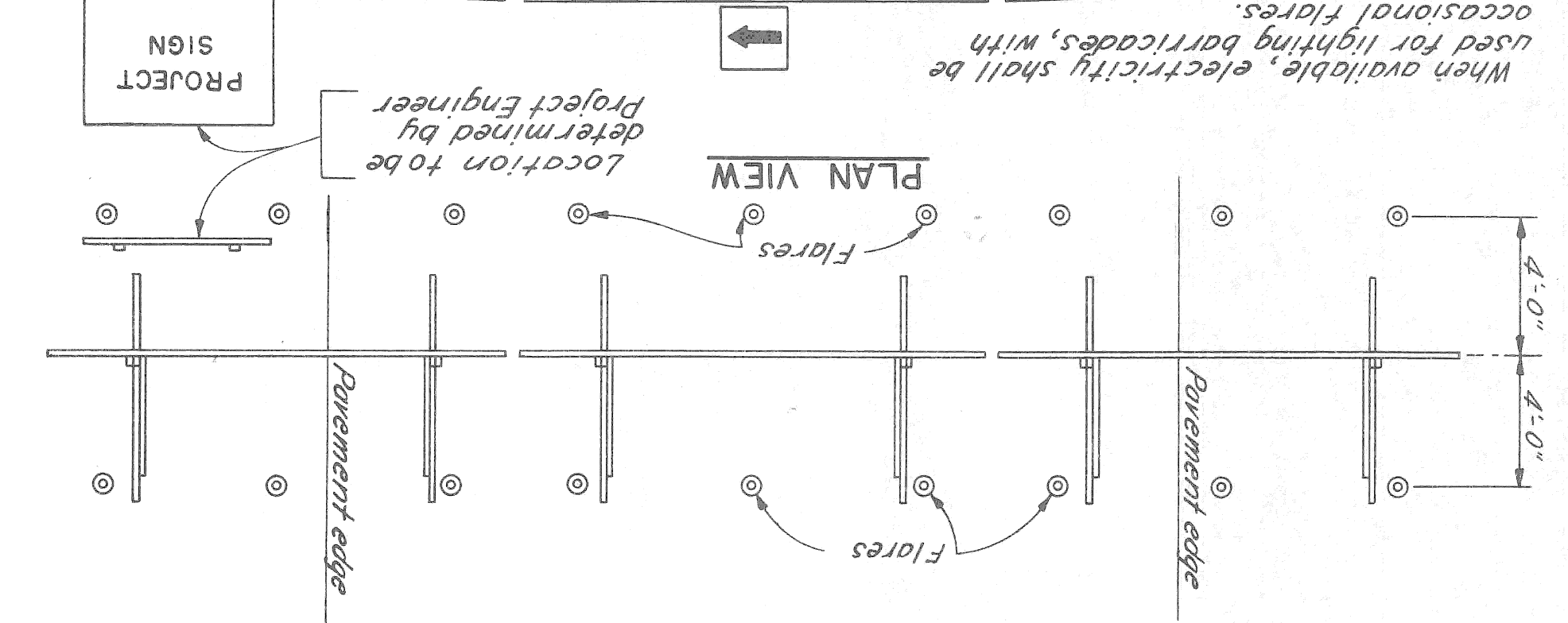
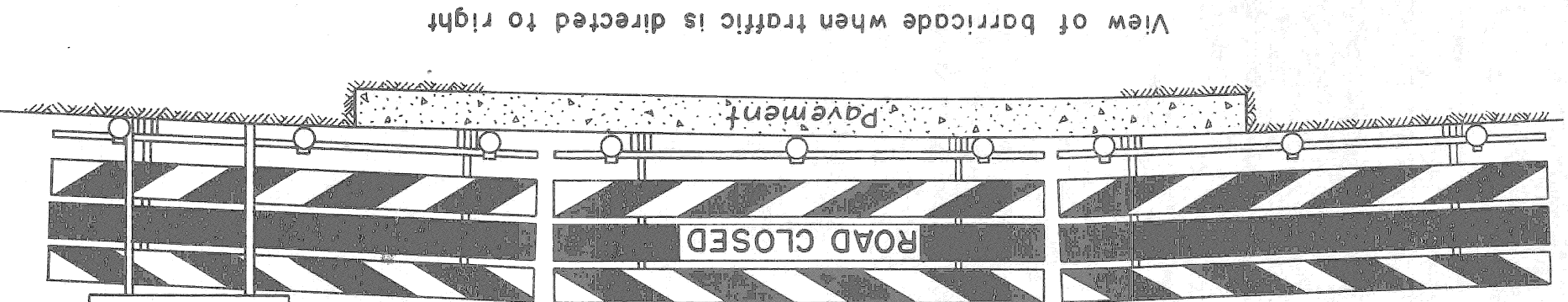
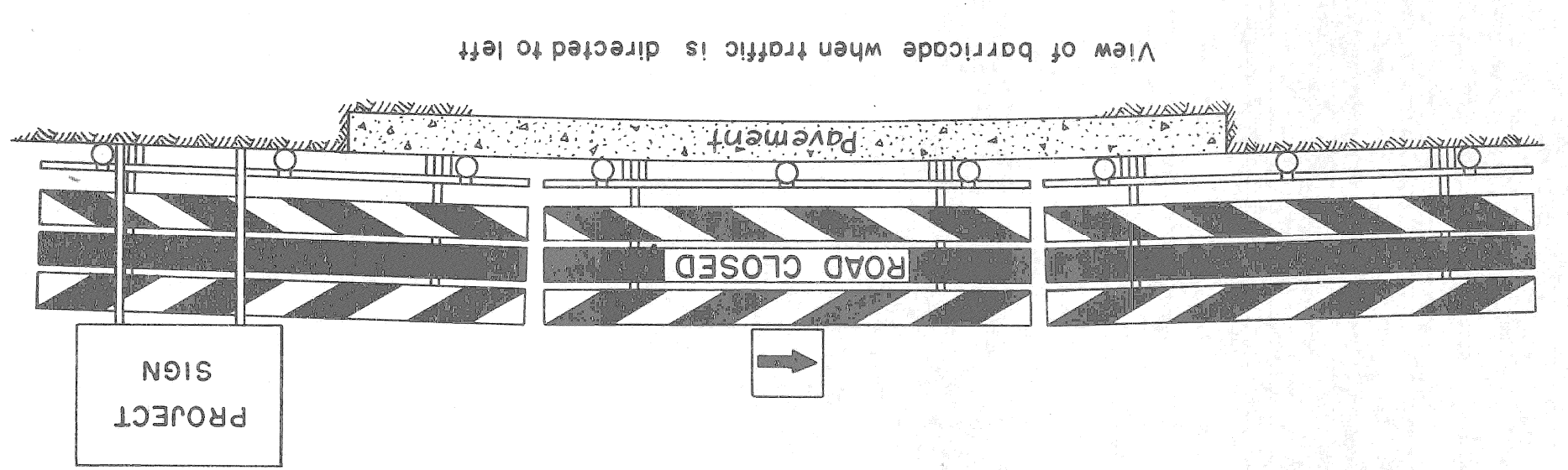
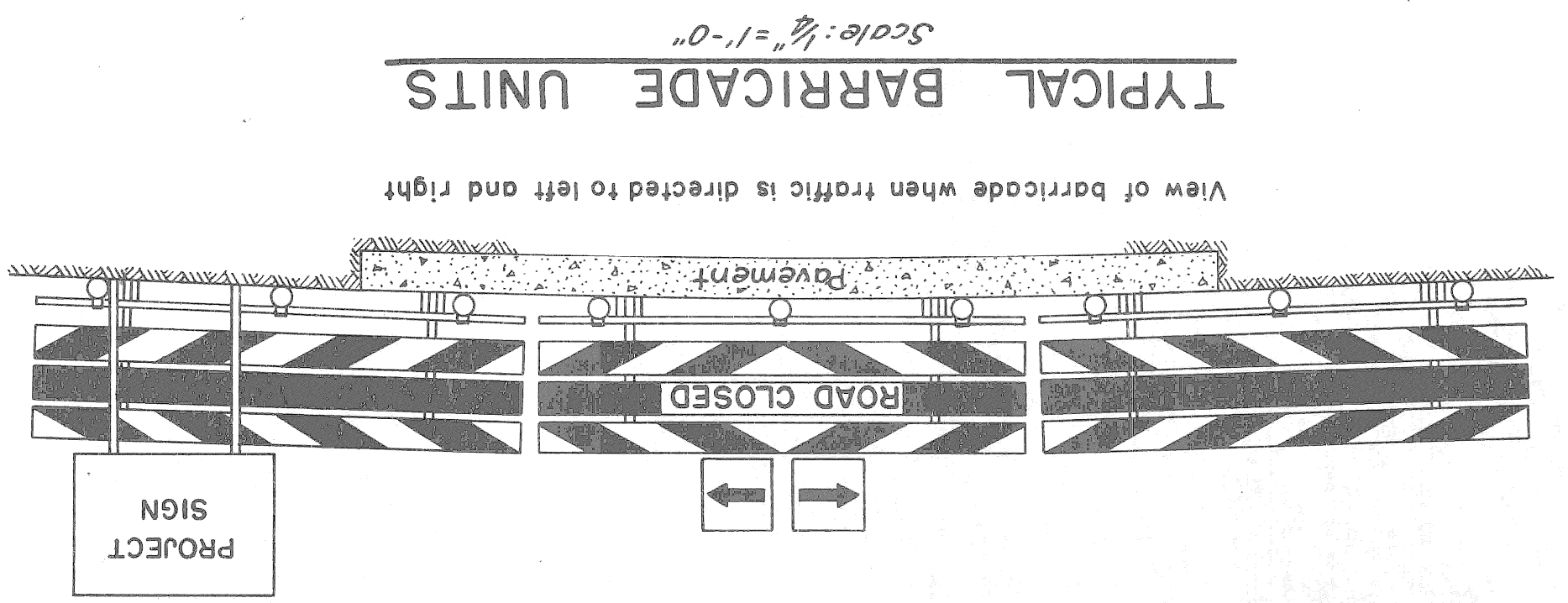


|              |       |       |       |       |
|--------------|-------|-------|-------|-------|
| Station      | 16+00 | 15+00 | 14+00 | 13+00 |
| Invert Elev. | 179.6 | 179.5 | 179.7 | 179.7 |
| Ground Elev. | 179.6 | 179.5 | 179.5 | 179.7 |
| Depth        | 0.0   | 0.0   | 0.0   | 0.0   |



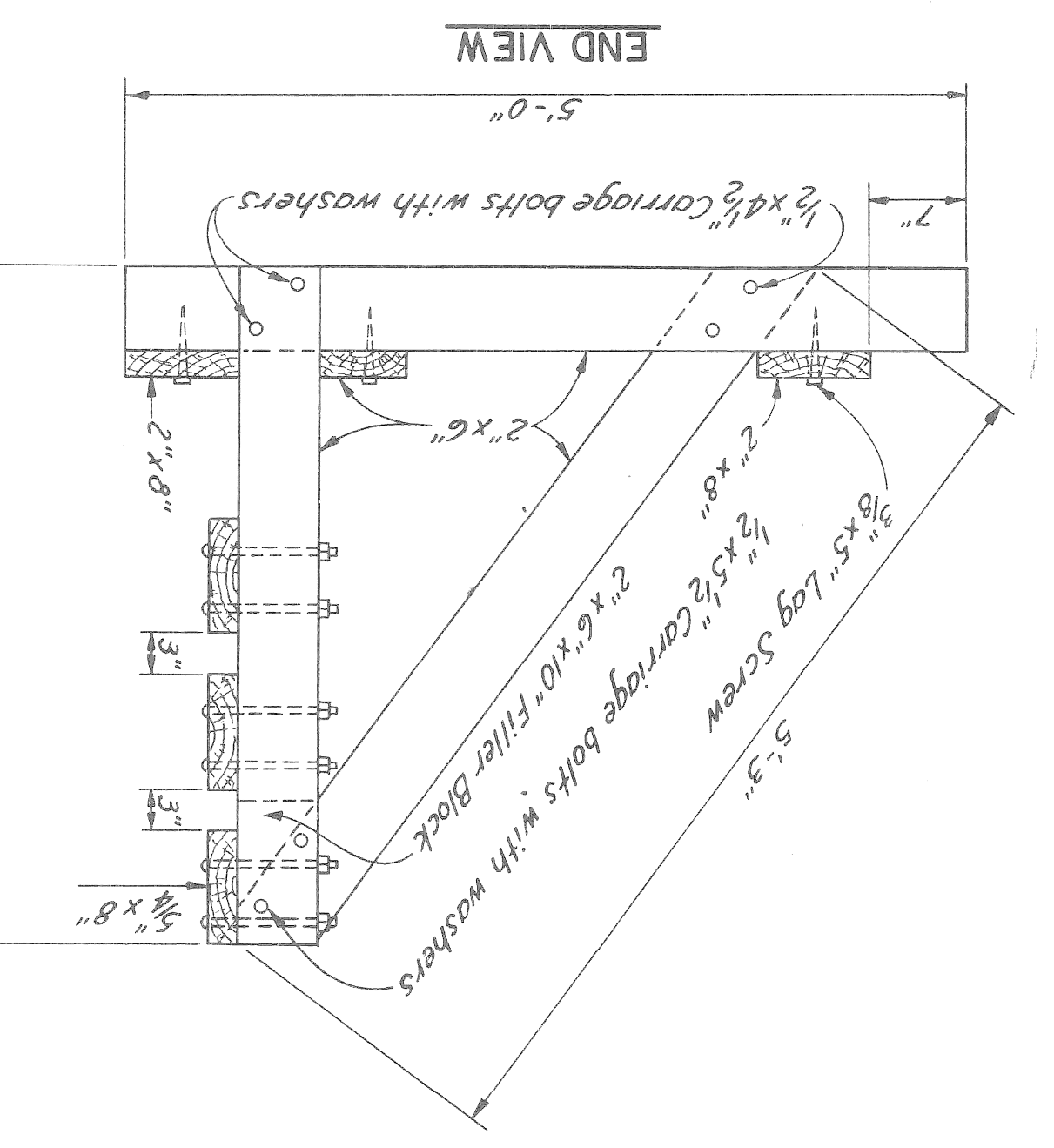
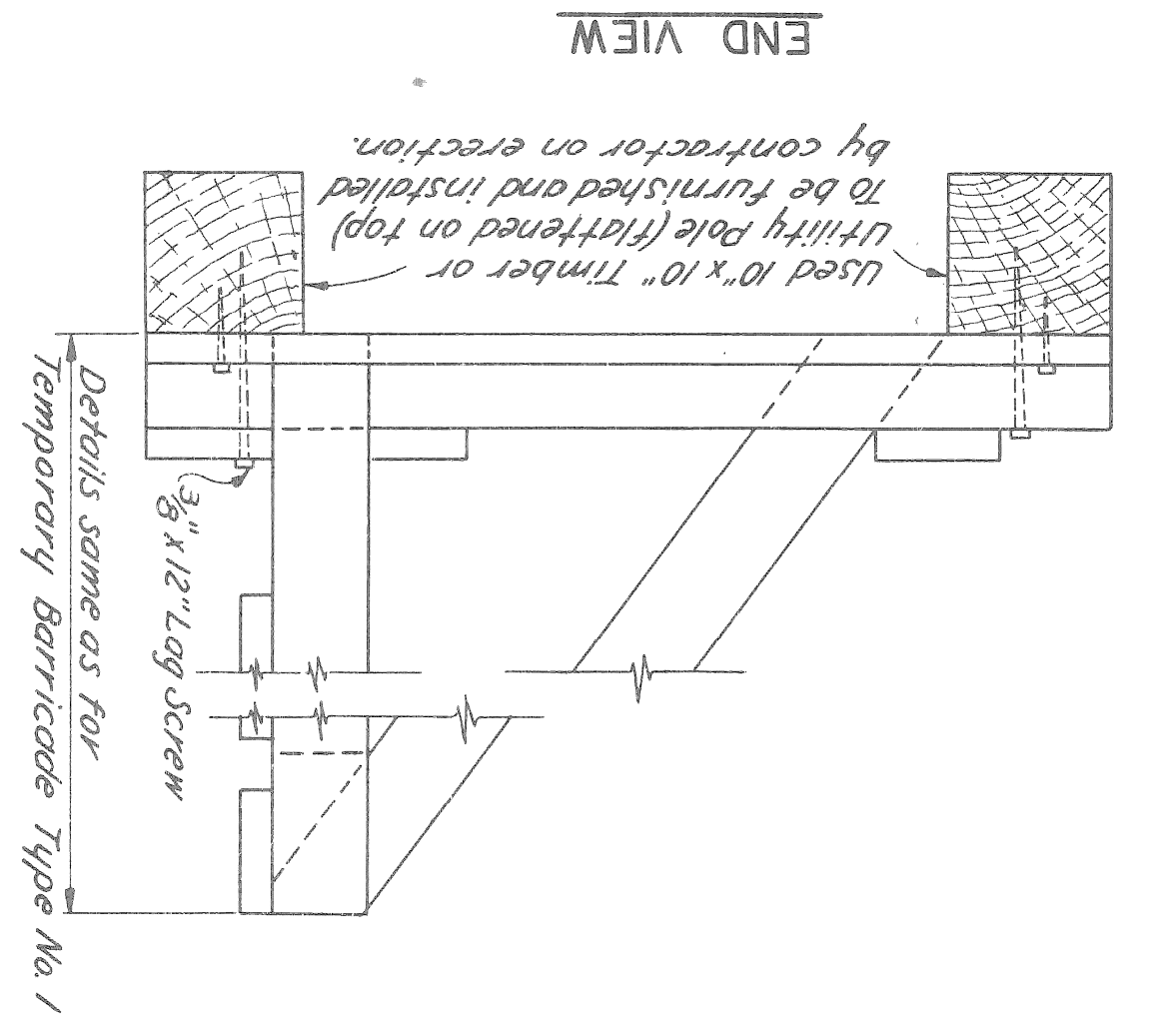
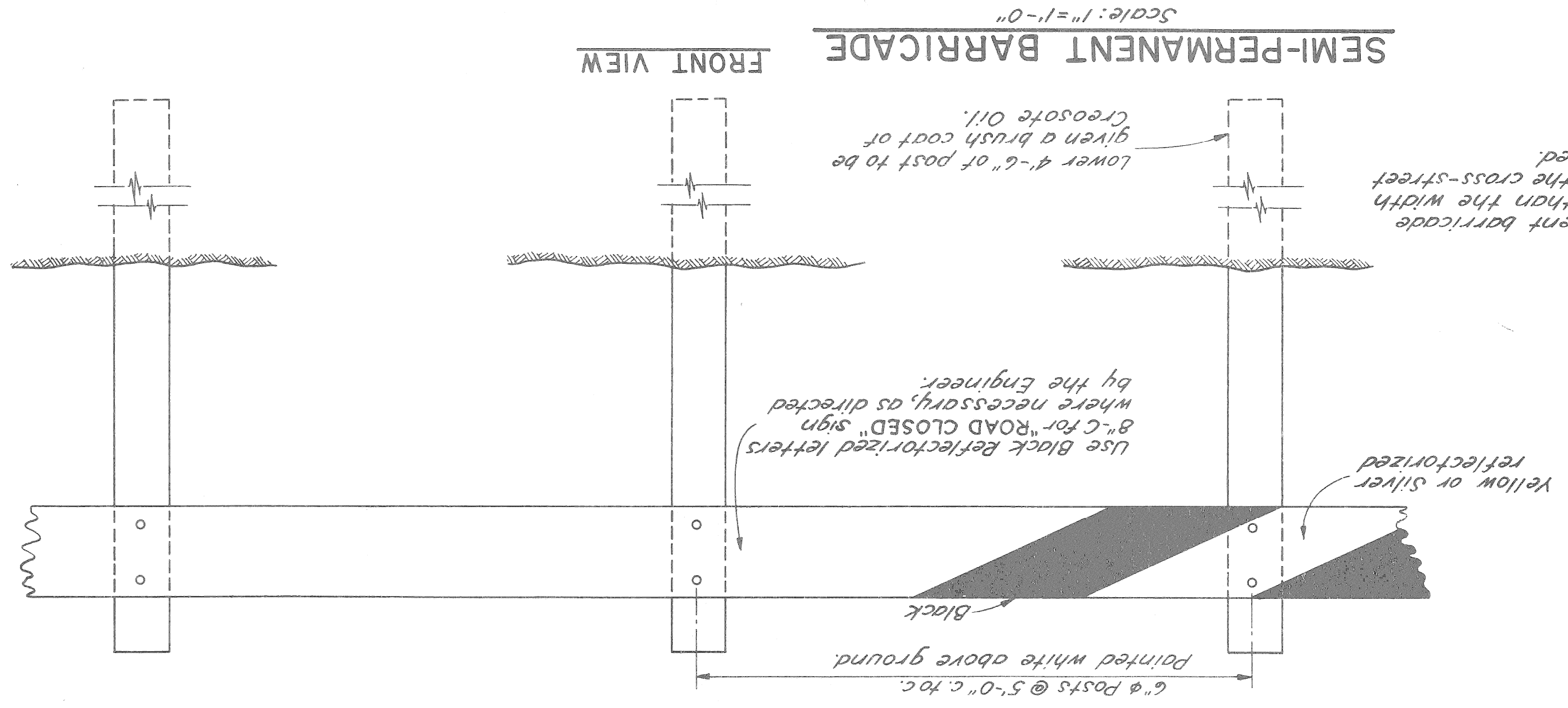
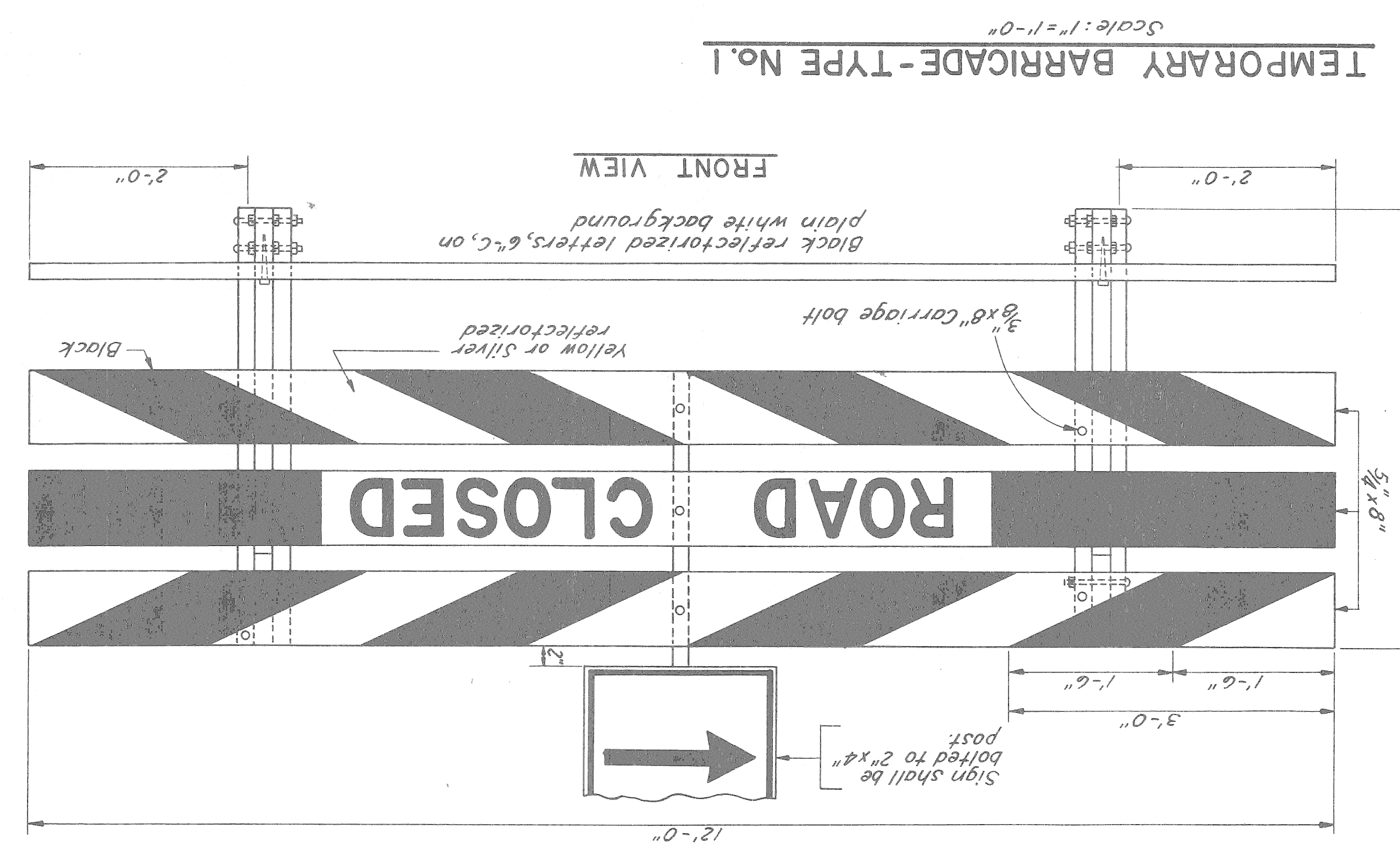
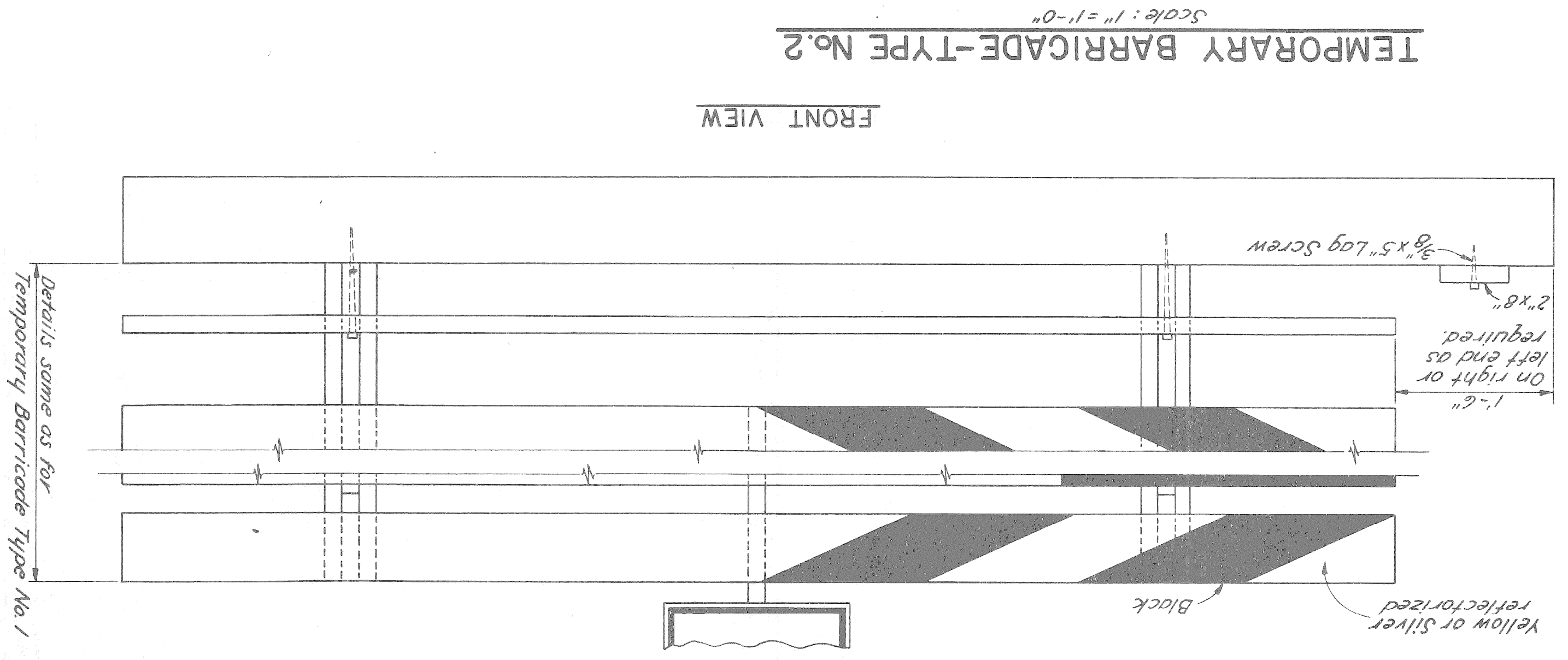


DETAILS FOR BARRICADES

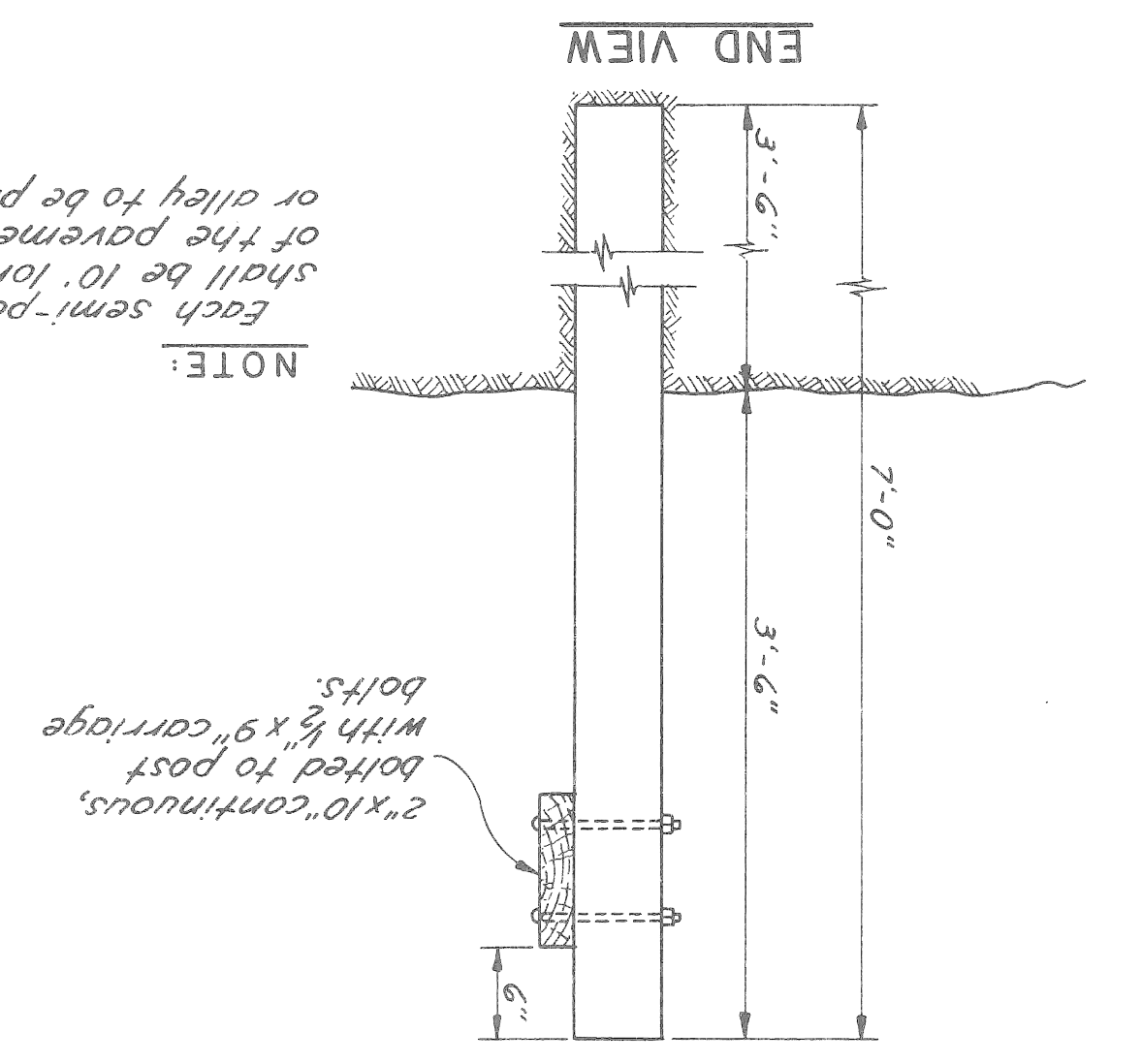
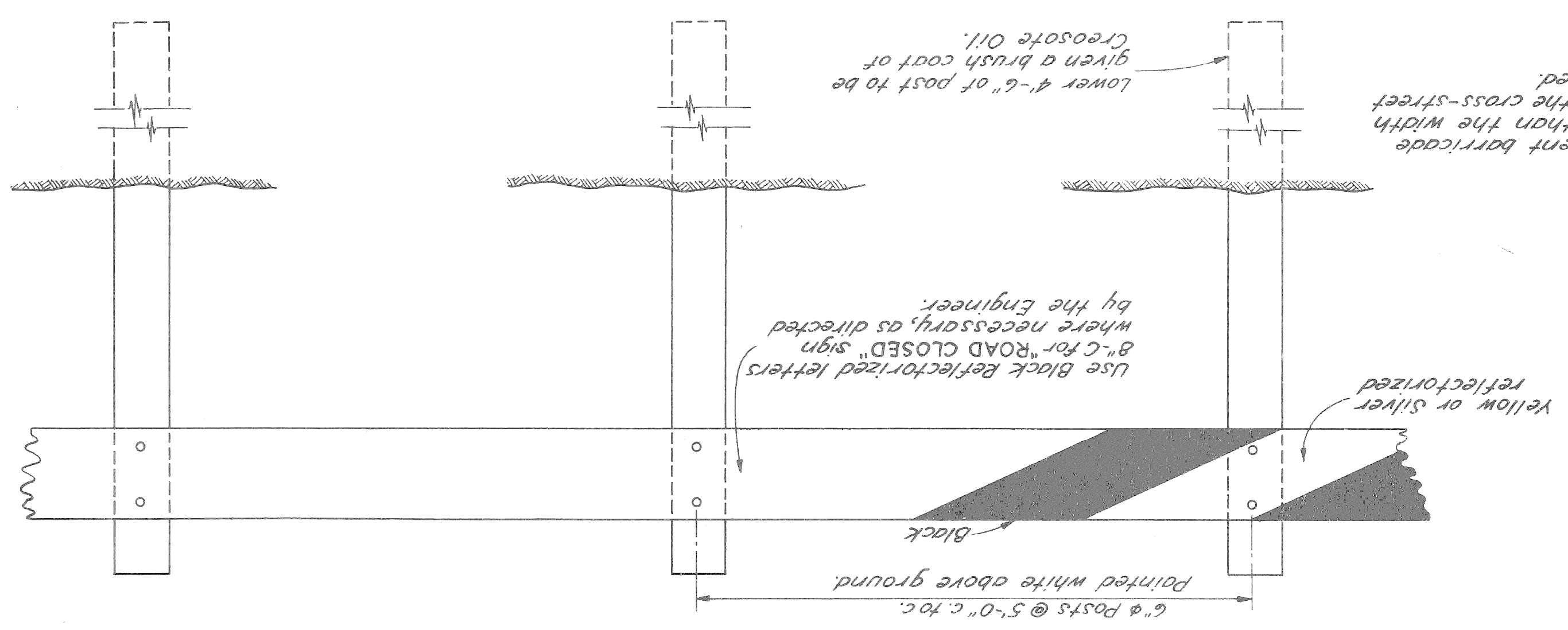


|                   |        |             |       |
|-------------------|--------|-------------|-------|
| STATE PROJECT NO. | 82112  | CITY        | Wayne |
| ROUTE PROJECT     | COUNTY | STATE       | MICH. |
| SHEET NO.         | 5      | SHEET TOTAL | 5     |
| YEAR              | 1971   | YEAR        | 1971  |
| STATE PROJECT NO. | 82112  | CITY        | Wayne |
| ROUTE PROJECT     | COUNTY | STATE       | MICH. |
| SHEET NO.         | 5      | SHEET TOTAL | 5     |
| YEAR              | 1971   | YEAR        | 1971  |
| STATE PROJECT NO. | 82112  | CITY        | Wayne |
| ROUTE PROJECT     | COUNTY | STATE       | MICH. |
| SHEET NO.         | 5      | SHEET TOTAL | 5     |
| YEAR              | 1971   | YEAR        | 1971  |

NOTE:  
 All face boards to be Douglas Fir.  
 All other boards and posts to be Fir.



**SEMI-PERMANENT BARRICADE**  
 Scale: 1" = 1'-0"



NOTE:  
 Each semi-permanent barricade shall be 10' longer than the width of the pavement of the cross-street or alley to be protected.

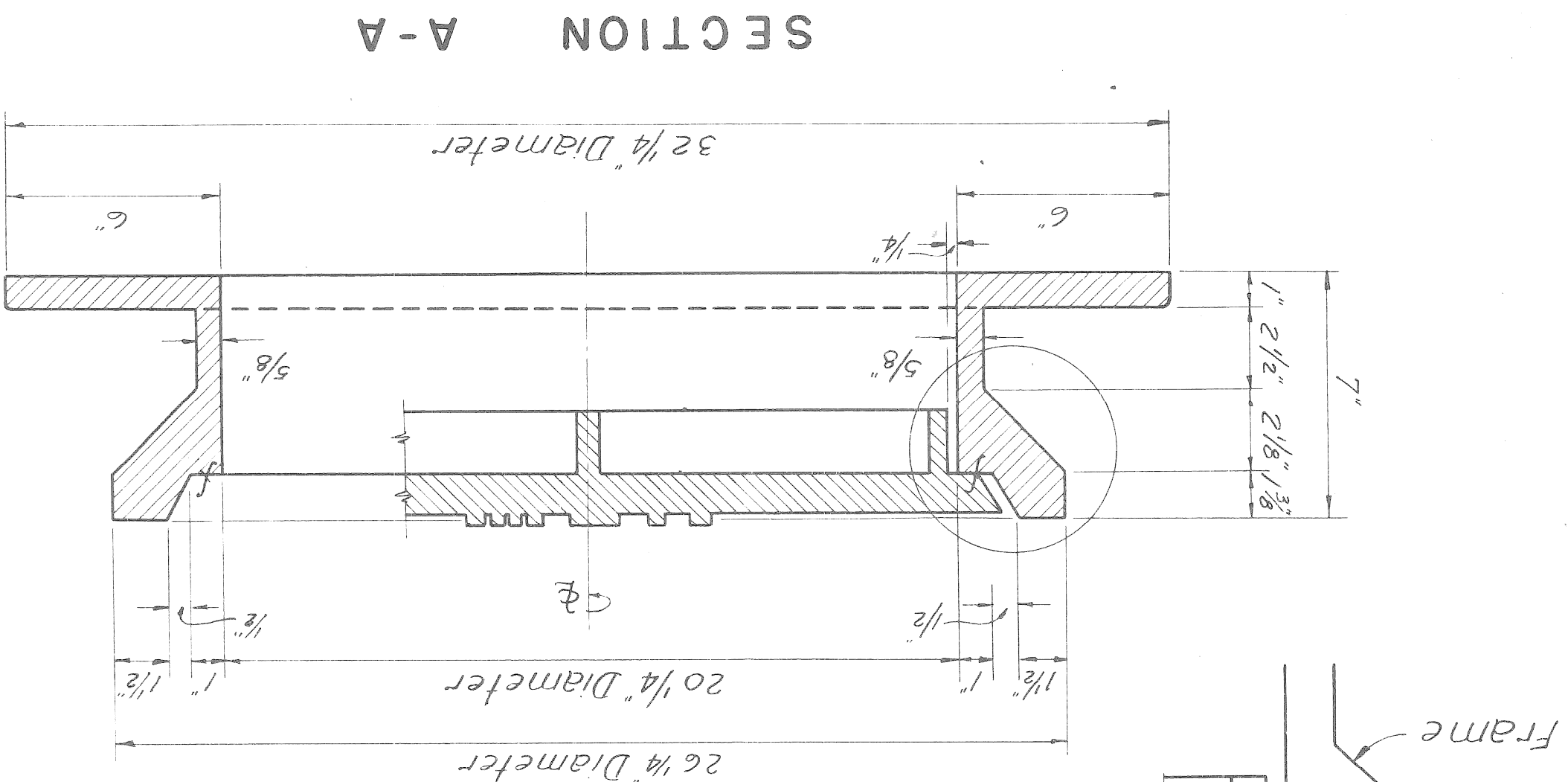
Use Black ReflectORIZED letters where necessary, as directed by the Engineer.

Lower 4'-6" of post to be given a brush coat of Creosote Oil.

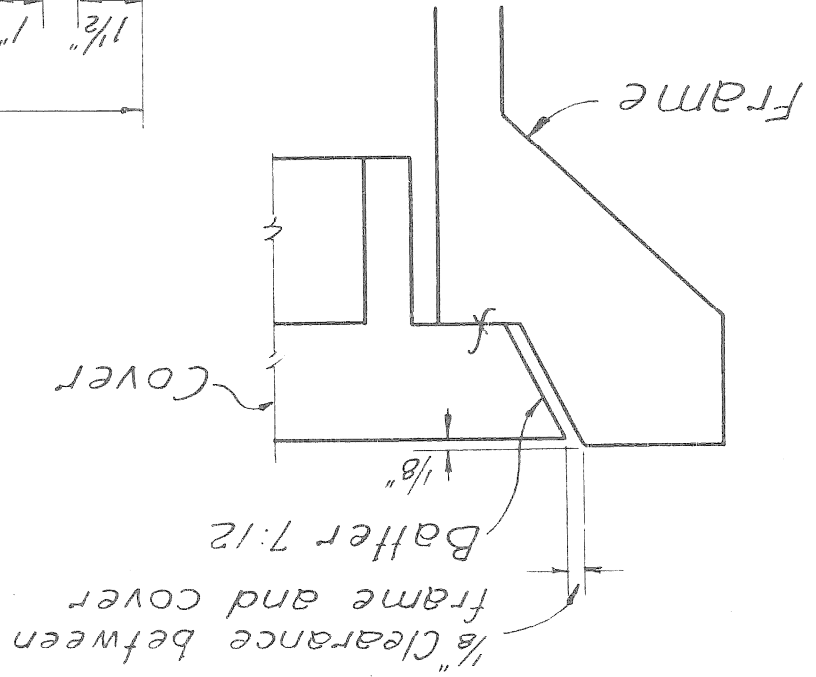
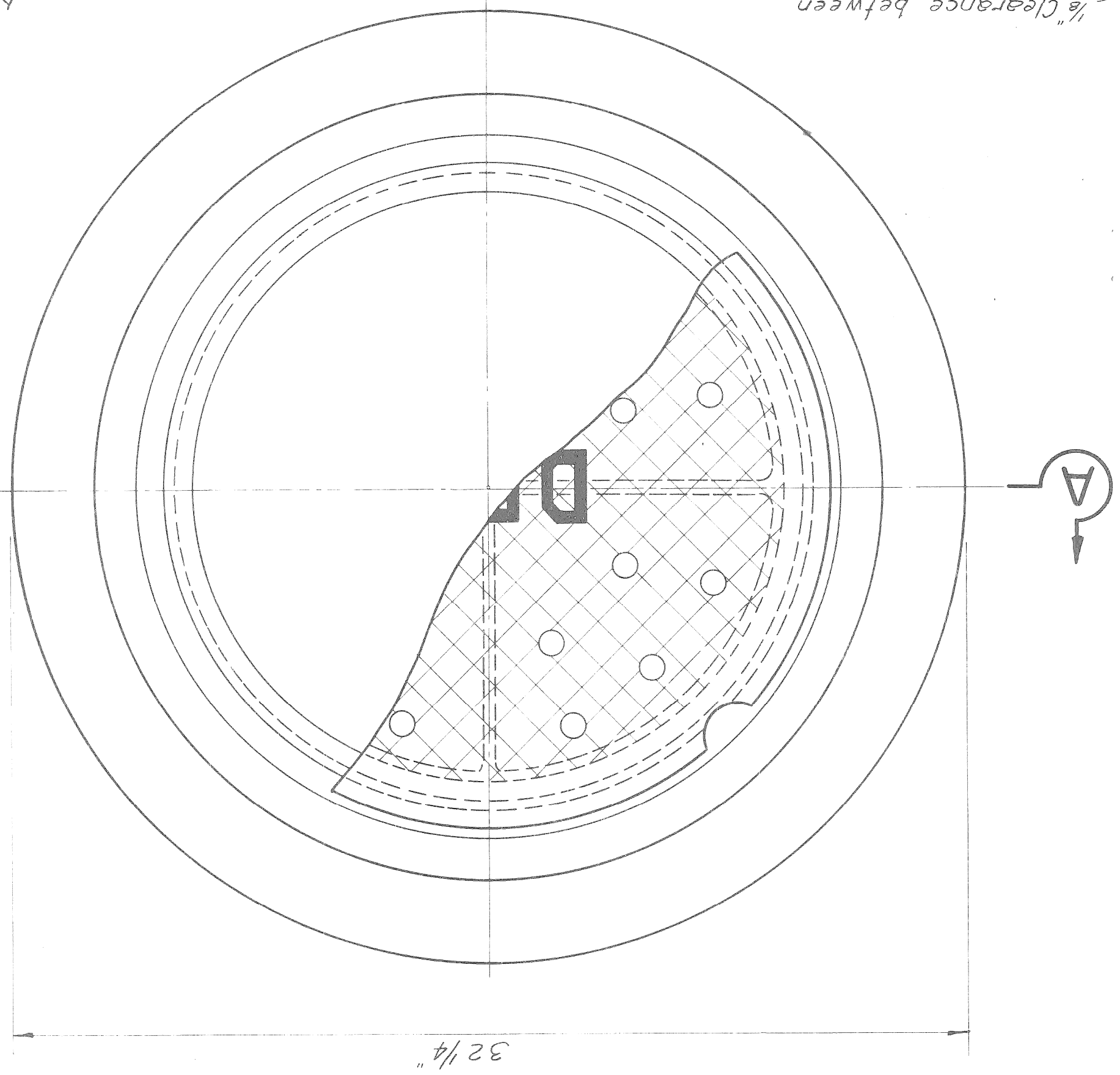
NOTE:  
 2"x10" continuous, bolted to post with 1/2"x9" carriage bolts.



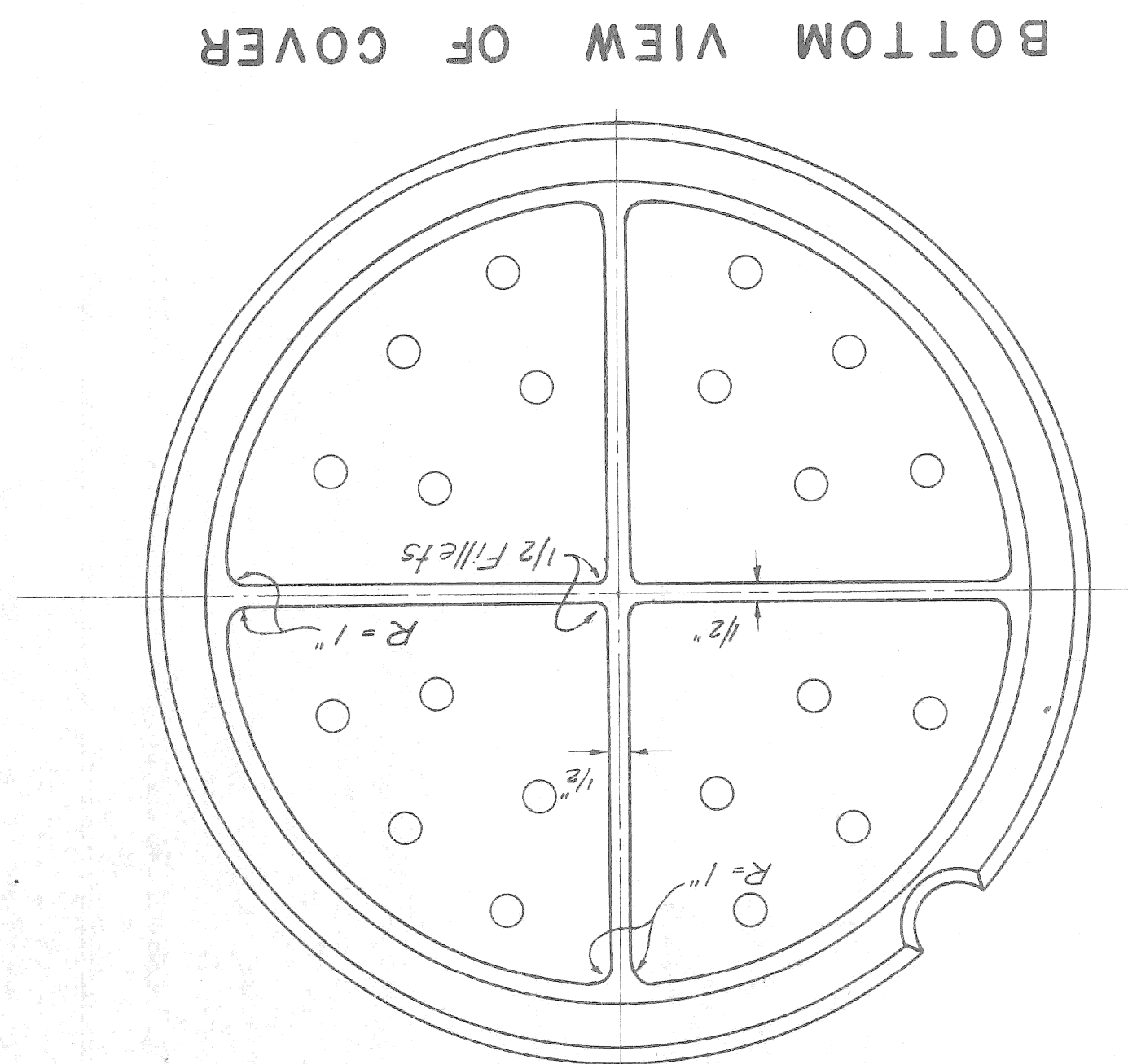
| NO. | BY | DESCRIPTION |
|-----|----|-------------|
| 0   |    |             |
| 1   |    |             |
| 2   |    |             |
| 3   |    |             |
| 4   |    |             |
| 5   |    |             |
| 6   |    |             |
| 7   |    |             |
| 8   |    |             |
| 9   |    |             |
| 10  |    |             |



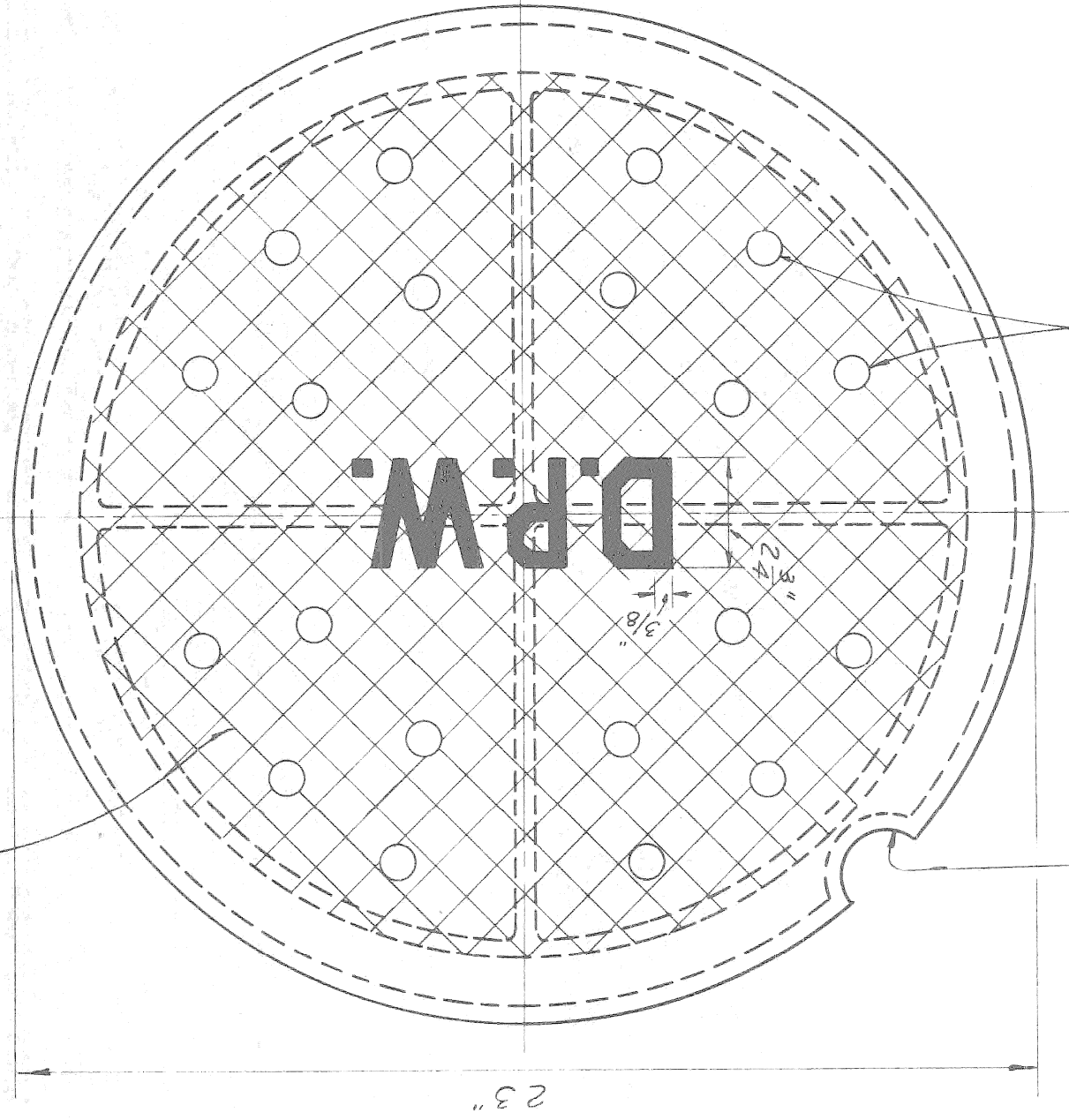
PLAN VIEW OF FRAME



NOTES:  
 Frame and cover to be gray iron castings  
 Total weight = 409# (Perf cover)  
 Manhole frame = 262#  
 Cover (Perf.) = 147#  
 Cover (Blank) = 157#



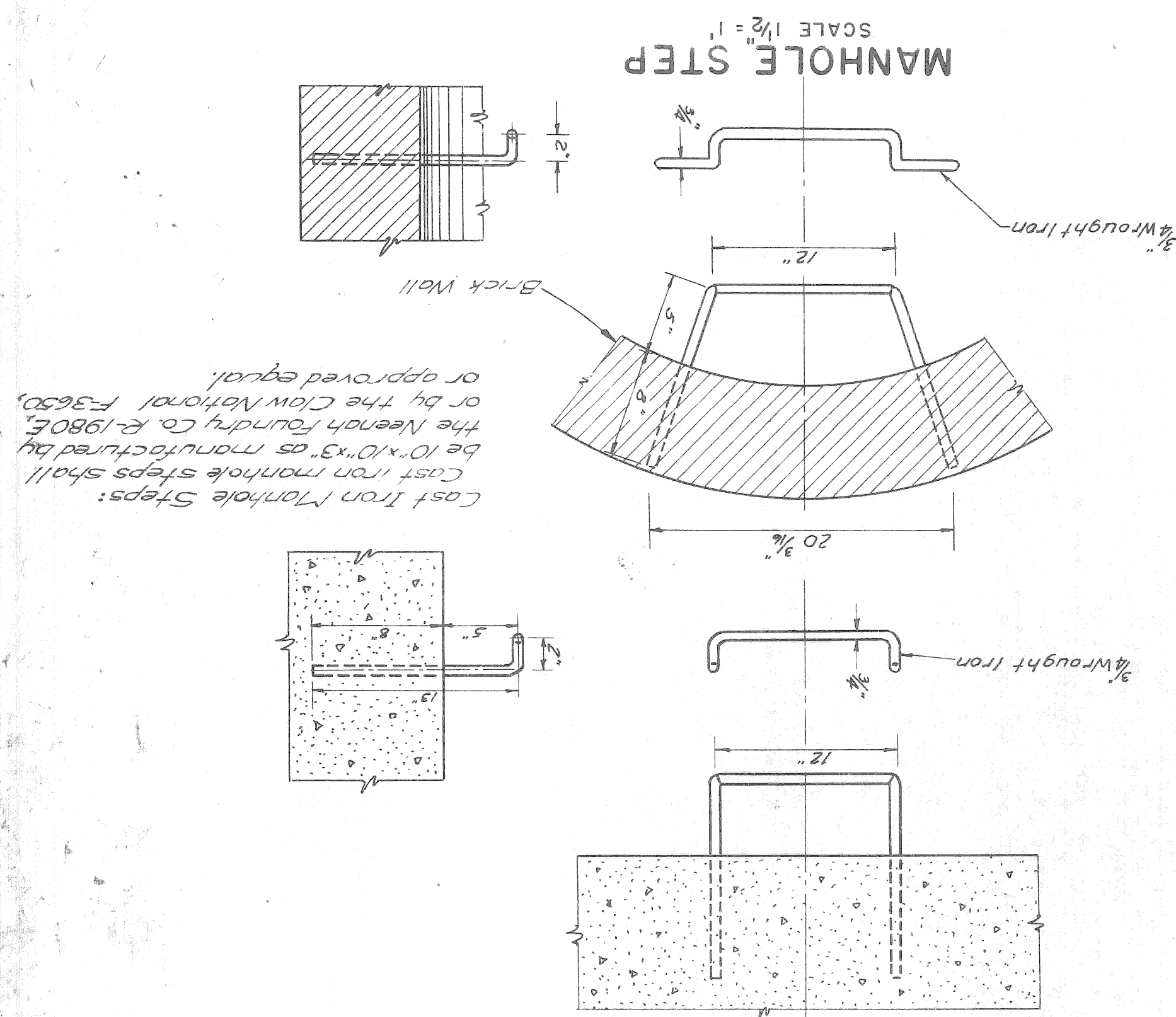
PLAN VIEW OF COVER



NOTES:  
 1" Radius pickhold in solid covers only.  
 Letters to be 3/8" wide 2 3/4" high and raised 1/4". Location & spacing as shown.  
 20-1 1/4" Dia perforations  
 24.54 Sq. in. = 5.91%

BOTTOM VIEW OF COVER

SCALE 3"=1"



Cast Iron Manhole Steps shall be 10"x10"x3" as manufactured by the Neenah Foundry Co. R-1980E, or by the Claw National F-3650, or approved equal.

| NO. | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
|     |      |             |    |
|     |      |             |    |
|     |      |             |    |

REVISIONS

DESIGNED BY: W. R. Bunnell  
 DRAWN BY: J. J. Mudge  
 CHECKED BY: M. J. Sinks  
 CITY ENGINEERS OFFICE

DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 DATE

MICHIGAN STATE HIGHWAY DEPARTMENT  
 JOHN C. LODGE EXTENSION  
 RELOCATION OF PURITAN AVE. SEWER  
 MANHOLE FRAME AND COVER AD

SHEET NO. 4 OF 4

| NO. | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
|     |      |             |    |
|     |      |             |    |
|     |      |             |    |

REVISIONS

DESIGNED BY: W. R. Bunnell  
 DRAWN BY: J. J. Mudge  
 CHECKED BY: M. J. Sinks  
 CITY ENGINEERS OFFICE

DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 DATE

MICHIGAN STATE HIGHWAY DEPARTMENT  
 JOHN C. LODGE EXTENSION  
 RELOCATION OF PURITAN AVE. SEWER  
 MANHOLE FRAME AND COVER AD

SHEET NO. 4 OF 4

SPECIAL DETAIL OF MANHOLE FRAME AND COVER AD

82112 C 10



| REV. NO. | DESCRIPTION                              | DATE    |
|----------|--|---------|
| A        | Top 5' Part of Manholes to be Demolished | 5/11/48 |
| B        | Section of Precast Manhole               | 5/11/48 |
| C        |  |         |
| D        |  |         |

|                     |                         |
|---------------------|-------------------------|
| FILE NO. 82112 C 10 | PROJECT NO. U 404(10) 7 |
| DATE                | BY                      |
| DESIGNED BY         | DRAMA BT                |
| CHECKED BY          | DATE                    |
| APPROVED            | SHEET 7 OF 7            |

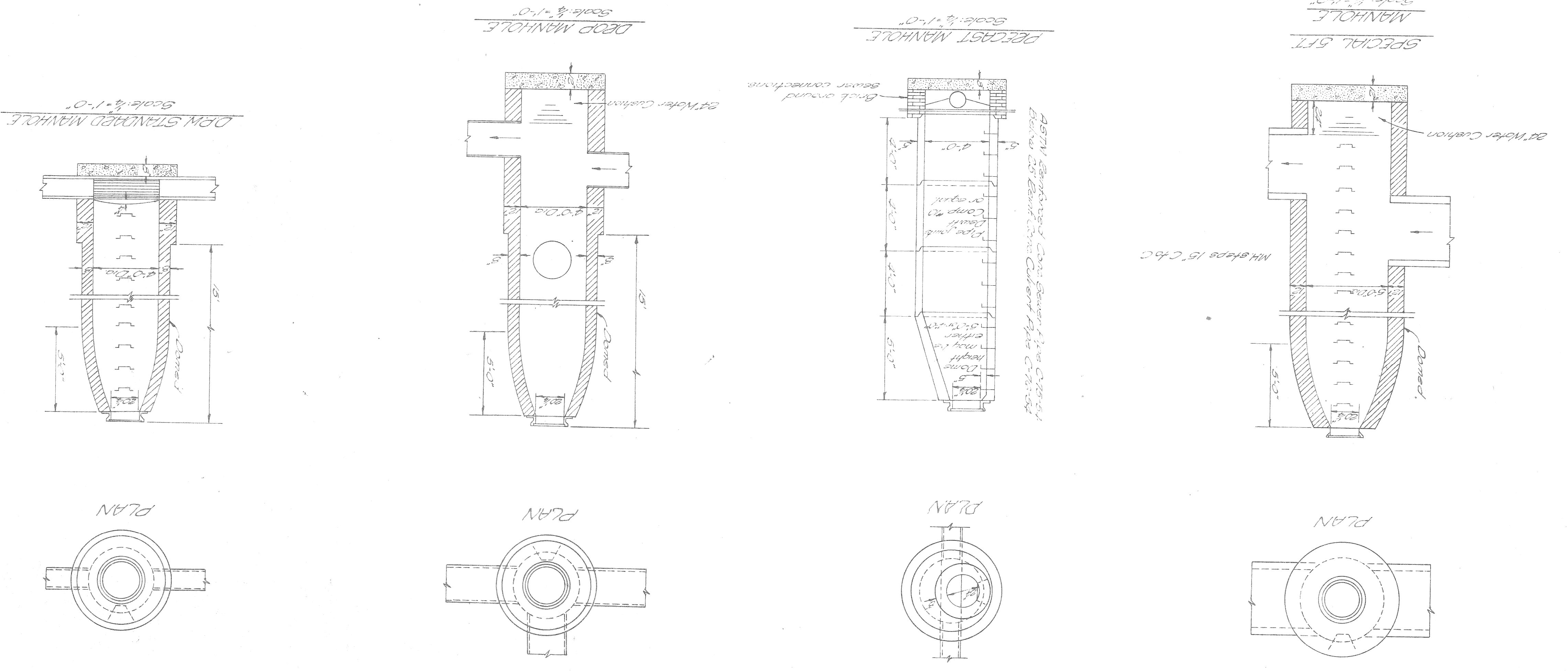
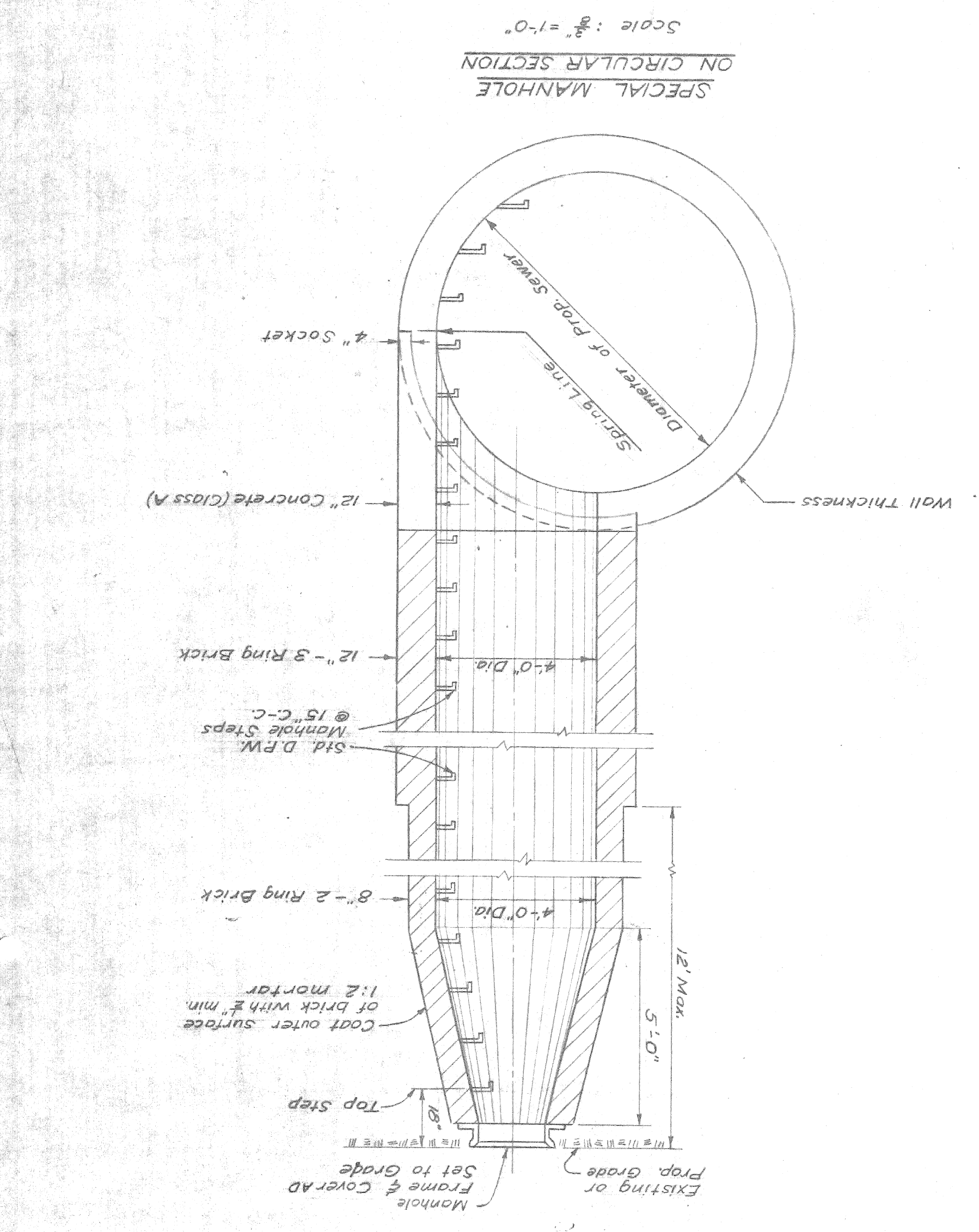
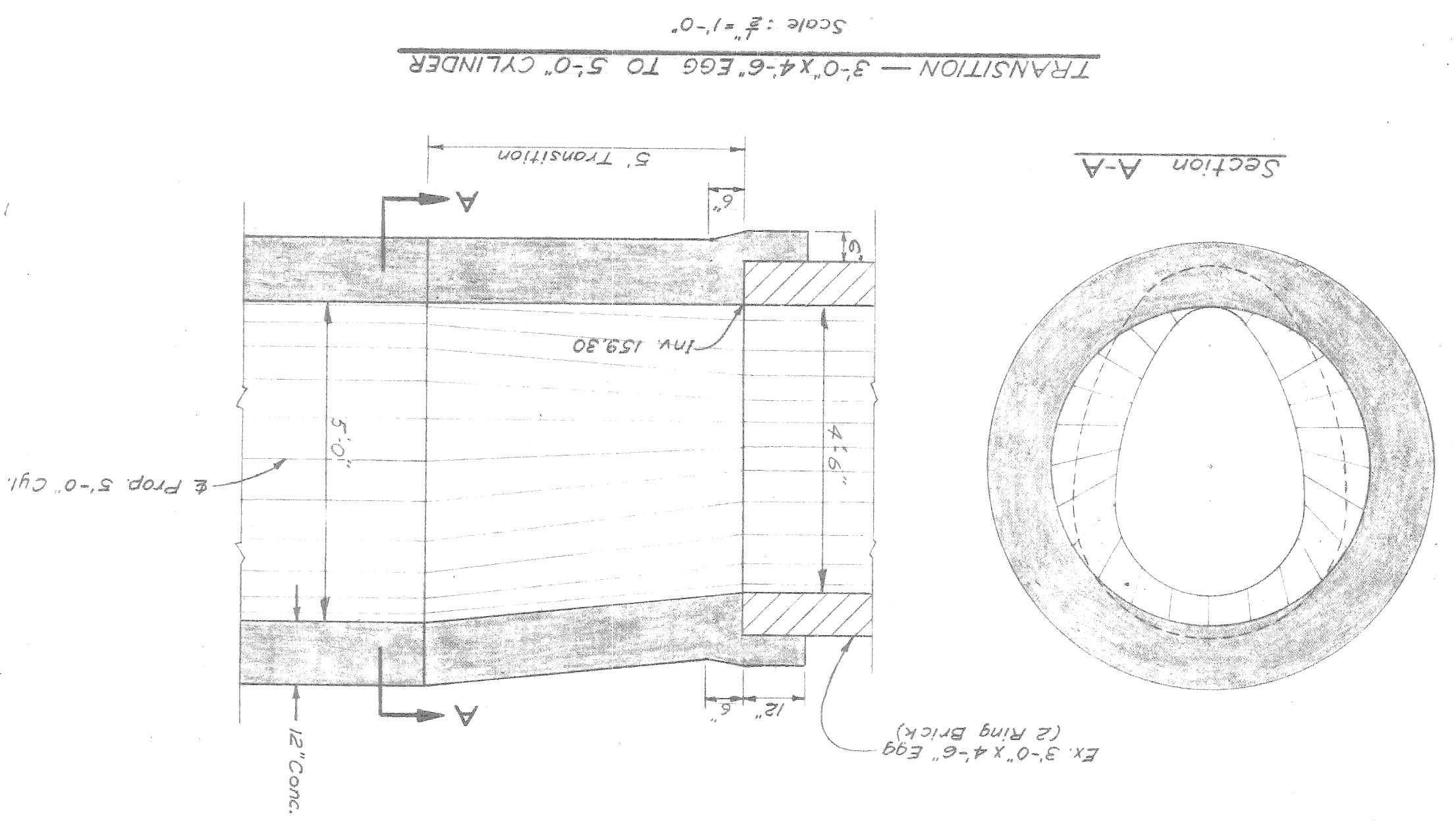
MICHIGAN STATE HIGHWAY DEPARTMENT  
 JOHN C. LODGE EXTENSION  
 RELOCATION OF PURITAN AVE. SEWER  
 SPECIAL MANHOLE DETAILS, TRANSITION, &  
 QUANTITY LIST

Designed by *W.R. Gammal*  
 Drawn by *R.B. Bolding*  
 Checked by *K. Smiks*  
 City Engineer

APPROVED *Grant E. Judge*  
 Sanitary Engineer

CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 DATE

| CODE NO.      | ITEMS OF WORK                                      | QUANTITY      | REMARKS |
|---------------|--|---------------|---------|
|               | 5'-0" Diameter Monolithic Concrete Sewer-In Tunnel | 1861 Lin. Ft. |         |
|               | 3'-6" Diameter Sewer Connections - In Tunnel       | 50 Lin. Ft.   |         |
|               | 42" Sewer Taps                                     | 3 Each        |         |
|               | Special Manhole AD, (14.1' to 25.0' Deep)          | 4 Each        |         |
|               | Maintaining Traffic                                | Lump Sum      |         |
|               | 24" Sewer C-76-IX, (14.1' to 25.0' Deep)           | 25 Lin. Ft.   |         |
| AS PER PLANS  |  |               |         |
| QUANTITY LIST |  |               |         |



|            |             |                 |              |             |              |
|------------|-------------|-----------------|--------------|-------------|--------------|
| DIV. NO. 4 | STATE MICH. | PROJ. NO. 82112 | CITY DETROIT | SHEET NO. 7 | TOTAL SHEETS |
| DIV. NO. 4 | STATE MICH. | PROJ. NO. 82112 | CITY DETROIT | SHEET NO. 7 | TOTAL SHEETS |