

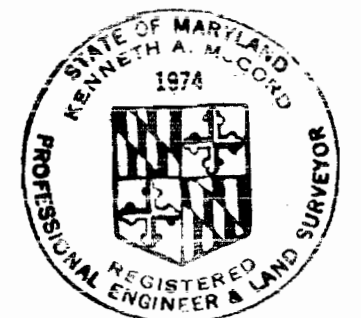
**GENERAL NOTES**

1. Approximate location of existing mains are shown. The Contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately.
2. All pipe elevations shown are invert elevations.
3. All manholes shall be 4'-0" inside diameter unless otherwise noted.
4. Sewer pipe shall be V.C.P.X., C.S.P.X., or Asbestos Cement, Class 2400 except as otherwise noted.
5. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
6. All horizontal and vertical controls are based on Maryland State Datum.
7. For all standard details, see standards bound in specifications.
8. Clear all utilities by a minimum of 6'; clear all poles by 2'-0" or tunnel as required.
9. The Contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole walls.
10. Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on plans:
  - Miss Utility - 559-0100
  - Baltimore Gas and Electric Company - Underground Electric Distribution Engineering - "Damage Control" - 234-5691
  - Baltimore Gas and Electric Company - Underground Gas Distribution Engineering - 234-5621
  - Chesapeake and Potomac Telephone Co. - 725-9976
  - American Telephone and Telegraph - Cable Location Division - 301-393-3553
11. Manhole designed W.T. in profile shall have watertight frame and cover.
12. Build all manholes to existing ground or paving unless otherwise noted.
13. Trees are to be protected from damage to maximum extent. Trees located within the construction strip are not to be removed or damaged by the Contractor.
14. Gabions and Reno Mattresses may be used in place of rip-rap.

**CONTRACT NO. 580-S-A**  
**LICKING CREEK INTERCEPTOR**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

| QUANTITIES |         |          |                      |
|------------|---------|----------|----------------------|
| ITEM       | BID     | AS-BUILT | MATERIAL/SUPPLIER    |
| 8" Sewer   | 3630 LF | 3624 LF  | ACP - Johns Manville |
| 12" Sewer  | 3150 LF | 3143 LF  | ACP - Johns Manville |
| 16" Sewer  | 100 LF  | 100 LF   | ACP - Johns Manville |
| Meter      | 1       | 1        | Palmer Bowler Flume  |
| Manholes   | 2000 F  | 1856 F   | Atlantic Precast M-I |

Diary FB # 6410  
Stakeout FB # 6231



*Kenneth A. McLeod*

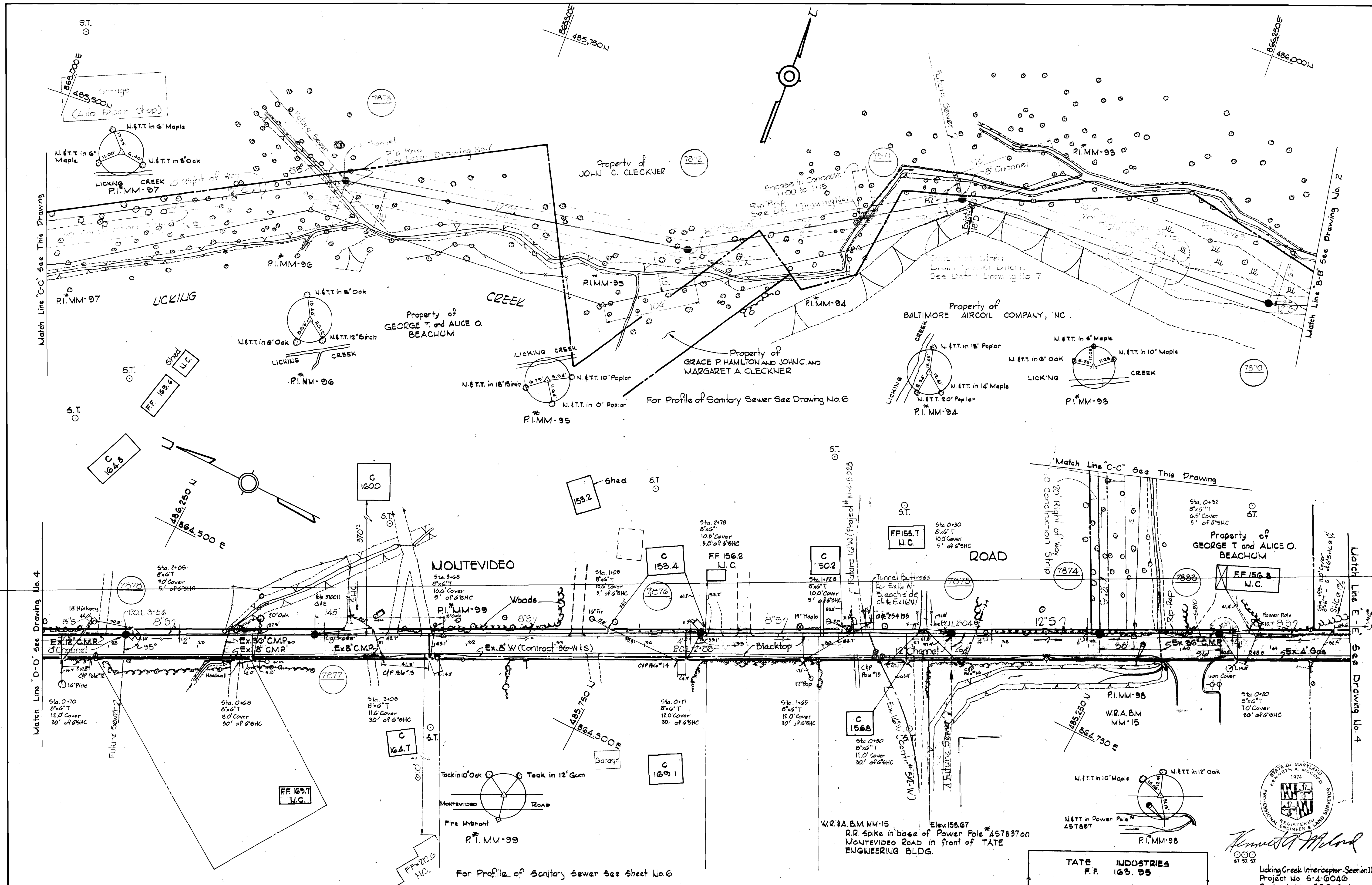
Licking Creek Interceptor - Section II  
Project No. 5-4-6046  
Contract No. 580-S-A

|  |   |  |                            |  |                                     |                          |
|--|---|--|----------------------------|--|-------------------------------------|--------------------------|
| <b>WHITMAN, REQUARDT &amp; ASSOCIATES</b><br>ENGINEERS<br>1304 ST. PAUL ST.<br>BALTIMORE, MARYLAND | <b>DEPARTMENT OF PUBLIC WORKS</b><br>HOWARD COUNTY, MARYLAND<br><i>P. J. Reardon</i> 2-23-77<br>DIRECTOR OF PUBLIC WORKS - DATE | <b>CONTRACT NO. 580-S-A</b><br><b>PROJECT NO. S-4-6046</b> | <b>LOCATION</b> <b>MAP</b> | <b>ELECTION DISTRICT</b><br>ELKRIDGE NO. 1 | <b>DRAWING NO. 1</b><br><b>OF 8</b> | <b>SCALE</b><br>1" = 60' |
|--|---|--|----------------------------|--|-------------------------------------|--------------------------|









WS 580-S-A/3

WHITMAN, REQUARDT & ASSOCIATES  
ENGINEERS  
1304 ST. PAUL ST.  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
2-23-77  
DIRECTOR OF PUBLIC WORKS - DATE

CONTRACT NO. 580-S-A  
PROJECT NO. S-4-6046  
2-23-77  
CHIEF-BUREAU OF ENGINEERING - DATE

PLAN OF  
SEWER MAINS

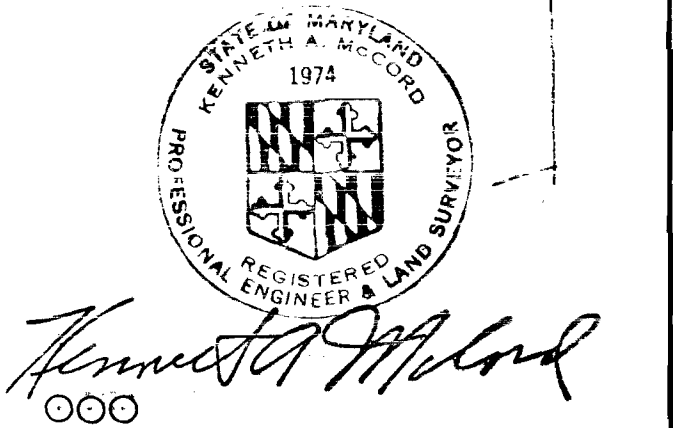
LICKING CREEK INTERCEPTOR  
TATE INDUSTRIES  
F.F. 163.95

DRAWING NO. 3 OF 8  
SCALE 1" = 50'  
488-09  
488-10  
488-11  
488-12

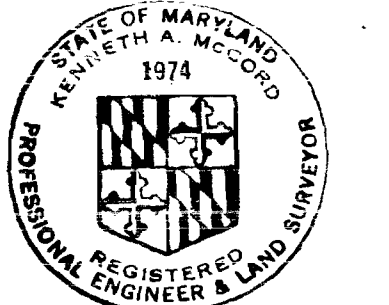
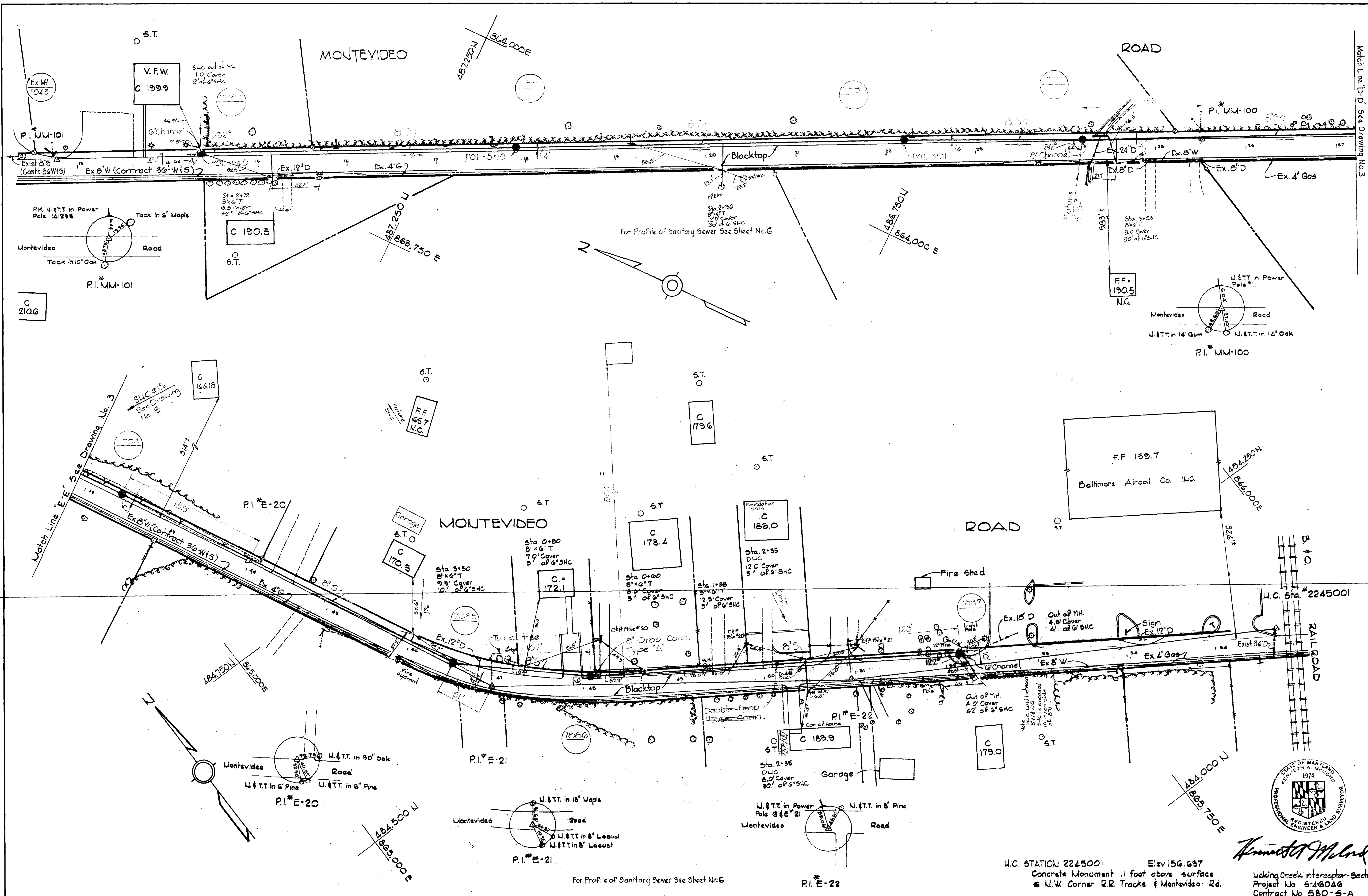
W. O. 6800-2

AS-BUILT January 26, 1982

October 1, 1979



Licking Creek Interceptor - Section II  
Project No. S-4-6046  
Contract No. 580-S-A



*Kenneth M. Clark*  
 H.C. STATION 2245001 Elev 156.637  
 Concrete Monument .1 foot above surface  
 • N.W. Corner R.R. Tracks & Montevideo Rd.  
 Licking Creek Interceptor - Section II  
 Project No 5-46046  
 Contract No 580-S-A

|   |  |   |                        |                           |  |
|---|--|---|------------------------|---------------------------|--|
| WHITMAN, REQUARDT & ASSOCIATES<br>ENGINEERS<br>1304 ST. PAUL ST.<br>BALTIMORE, MARYLAND | DEPARTMENT OF PUBLIC WORKS<br>HOWARD COUNTY, MARYLAND<br><i>P.R. Reynolds</i> 2-23-77<br>DIRECTOR OF PUBLIC WORKS - DATE | CONTRACT NO. 580-S-A<br>PROJECT NO. S-4-6046<br><i>W.O. Gilbert</i> 2-23-77<br>CHIEF BUREAU OF ENGINEERING - DATE | PLAN OF<br>SEWER MAINS | LICKING CREEK INTERCEPTOR | DRAWING NO. 4 OF 8<br>SCALE 1" = 50'<br>484-19<br>486-18<br>487-18 |
|---|--|---|------------------------|---------------------------|--|

W. O. 6800-2

'AS-BUILT' January 26, 1982  
 FB #5425, 5426

WS 580-S-A/4

SUSPENSE

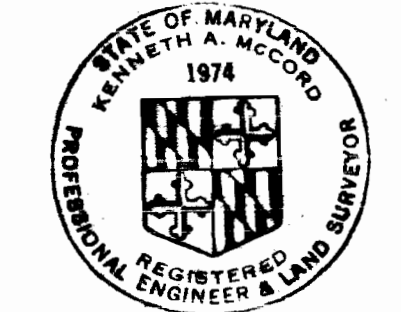
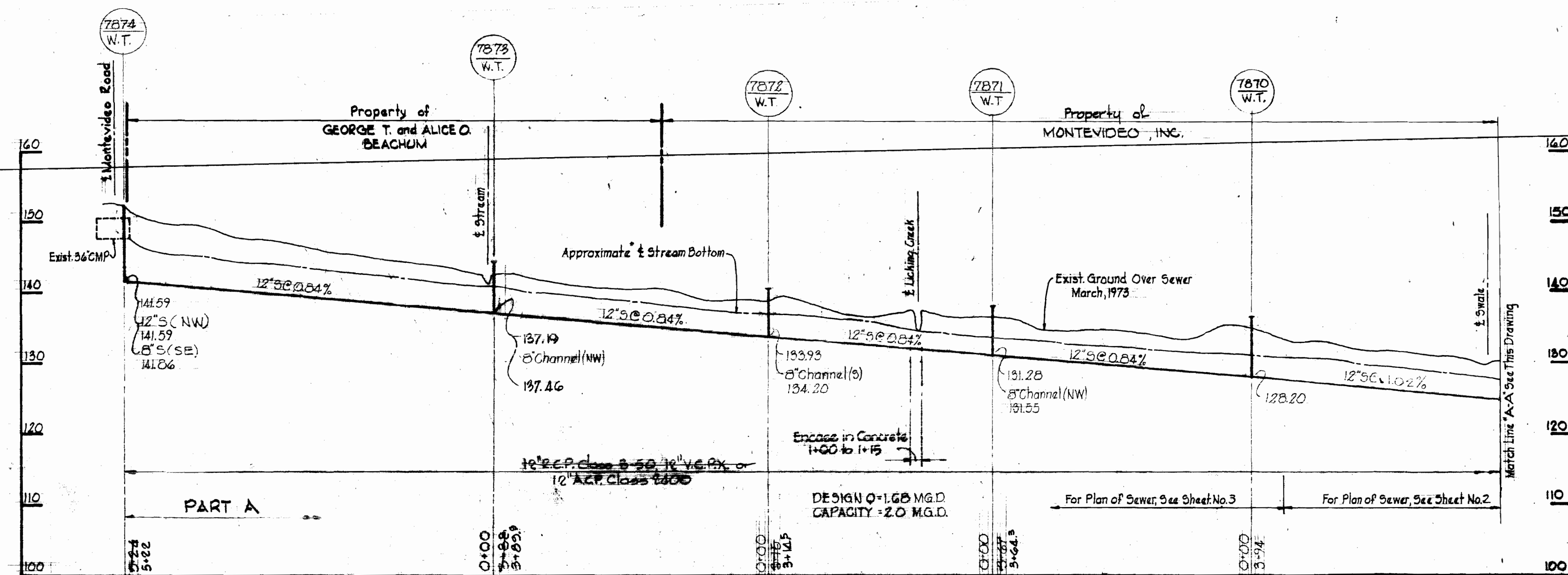
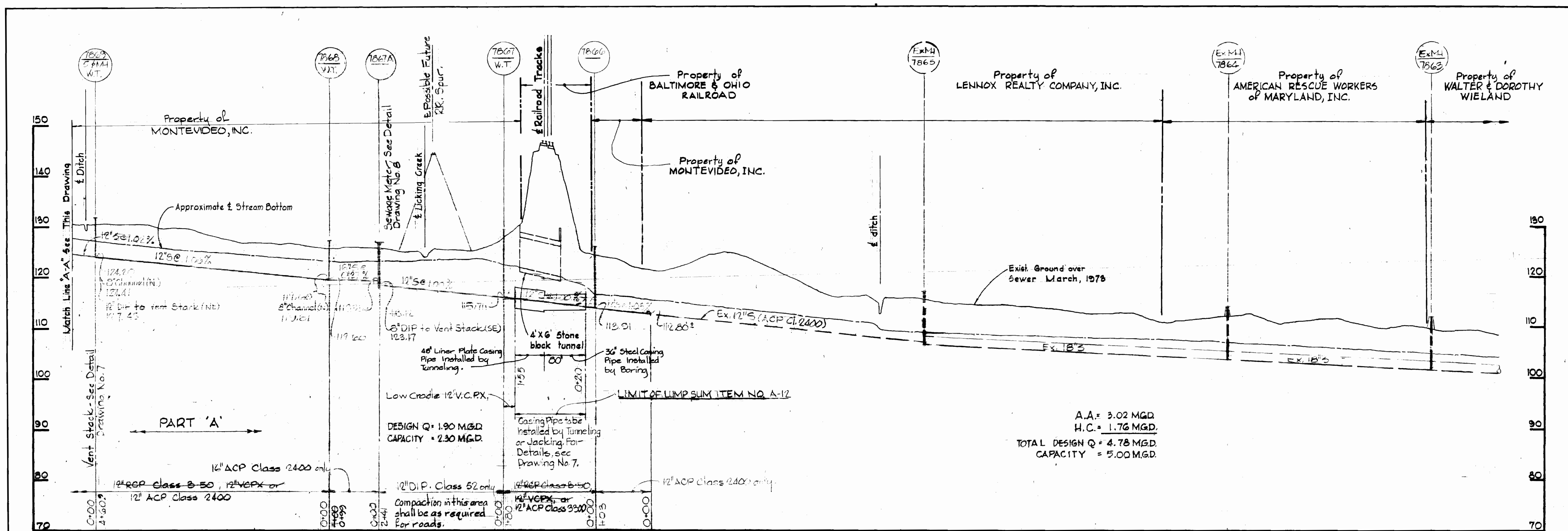
SUSPENSE



580-S-A/5

580-S-A/5

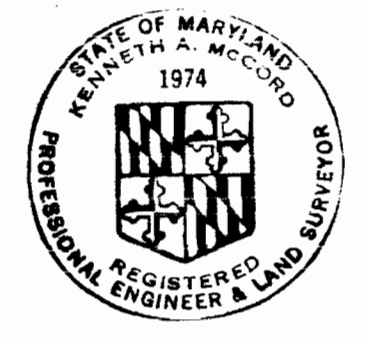
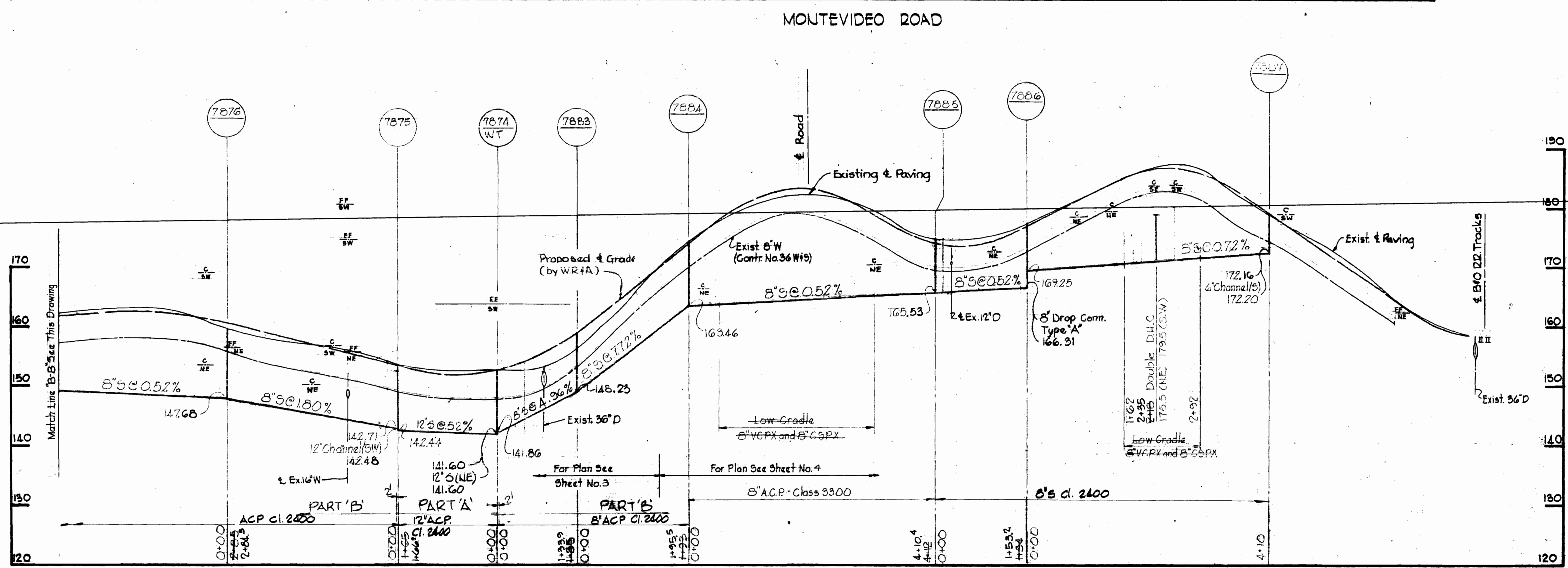
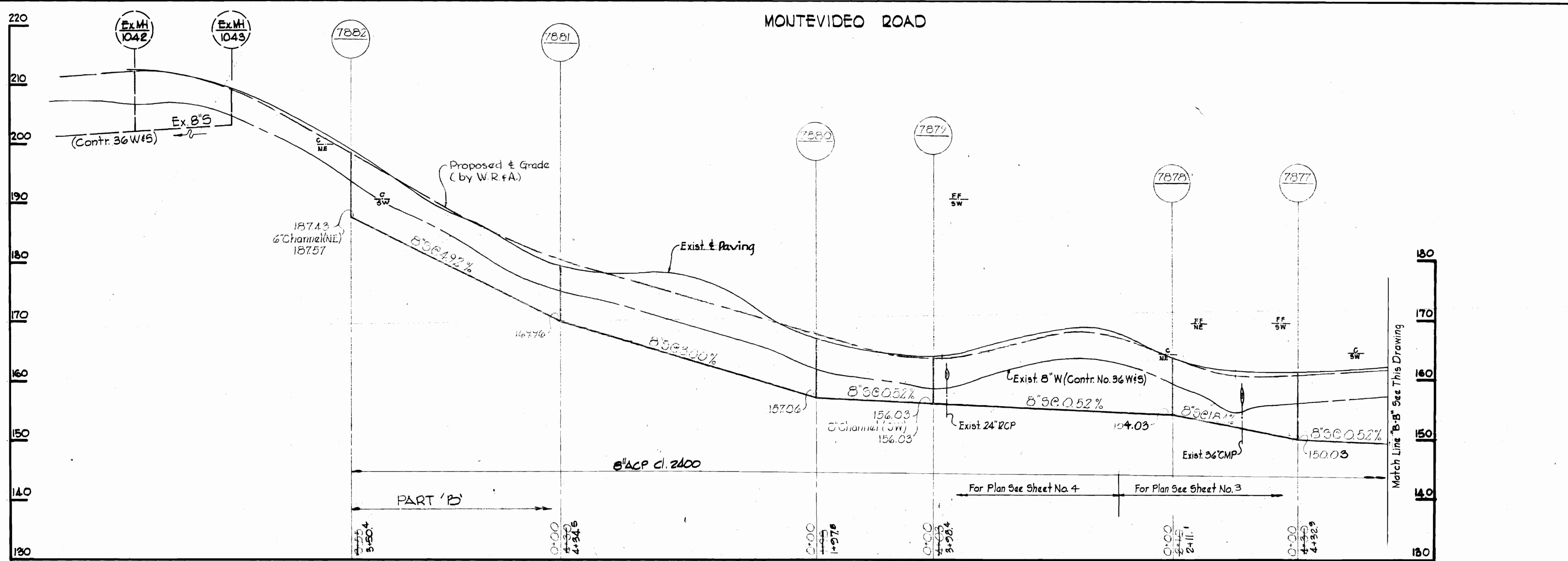
580-S-A/5



*Kenneth A. McLeod*

Licking Creek Interceptor - Section II  
 Project No. 5-4-6046  
 Contract No. 580-S-A

|   |   |  |                            |                           |  |
|---|---|--|----------------------------|---------------------------|--|
| WHITMAN, REQUARDT & ASSOCIATES<br>ENGINEERS<br>1304 ST. PAUL ST.<br>BALTIMORE, MARYLAND | DEPARTMENT OF PUBLIC WORKS<br>HOWARD COUNTY, MARYLAND<br>2-23-77<br>W.O. Folbert 2-23-77<br>DIRECTOR OF PUBLIC WORKS - DATE<br>CHIEF-BUREAU OF ENGINEERING - DATE | CONTRACT NO. 580-S-A<br>PROJECT NO. 3-4-6046 | PROFILES OF<br>SEWER MAINS | LICKING CREEK INTERCEPTOR | DRAWING NO. 5 OF 8<br>SCALE H:V = 1" = 10' |
|---|---|--|----------------------------|---------------------------|--|



*Kenneth A. McCord*

Licking Creek Interceptor, 5611  
 Project No. 5-4-6046  
 Contract No. 585-B-A

|   |  |  |                            |                           |                      |                                   |
|---|--|--|----------------------------|---------------------------|----------------------|-----------------------------------|
| WHITMAN, REQUARDT & ASSOCIATES<br>ENGINEERS<br>1304 ST. PAUL ST.<br>BALTIMORE, MARYLAND | DEPARTMENT OF PUBLIC WORKS<br>HOWARD COUNTY, MARYLAND<br><i>P. J. [Signature]</i> 2-23-77<br>DIRECTOR OF PUBLIC WORKS - DATE | CONTRACT NO. <u>580-S-A</u><br>PROJECT NO. <u>5-4-6046</u> | PROFILES OF<br>SEWER MAINS | LICKING CREEK INTERCEPTOR | DRAWING NO. <u>6</u> | SCALE<br>H:V = 100'<br>V:1" = 10' |
|   |  |  |                            |                           | OF <u>8</u>          |                                   |

W. O. 6800-2

AS-BUILT January 26, 1982 October 1, 1979

WS 580-S-A/6

SUSPENSE

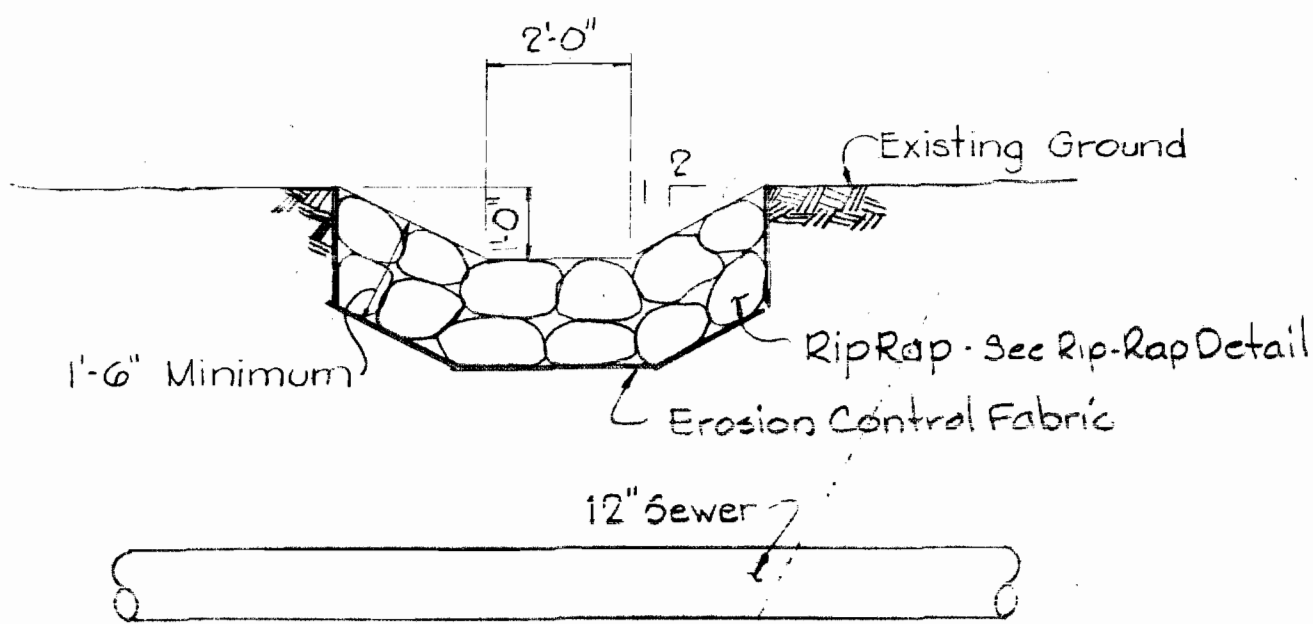
SUSPENSE

DRAWING 14 510 6802



**NOTE**

Fill around Manholes required at manholes where rim elevations are to be more than 3" above existing grade. See profiles.



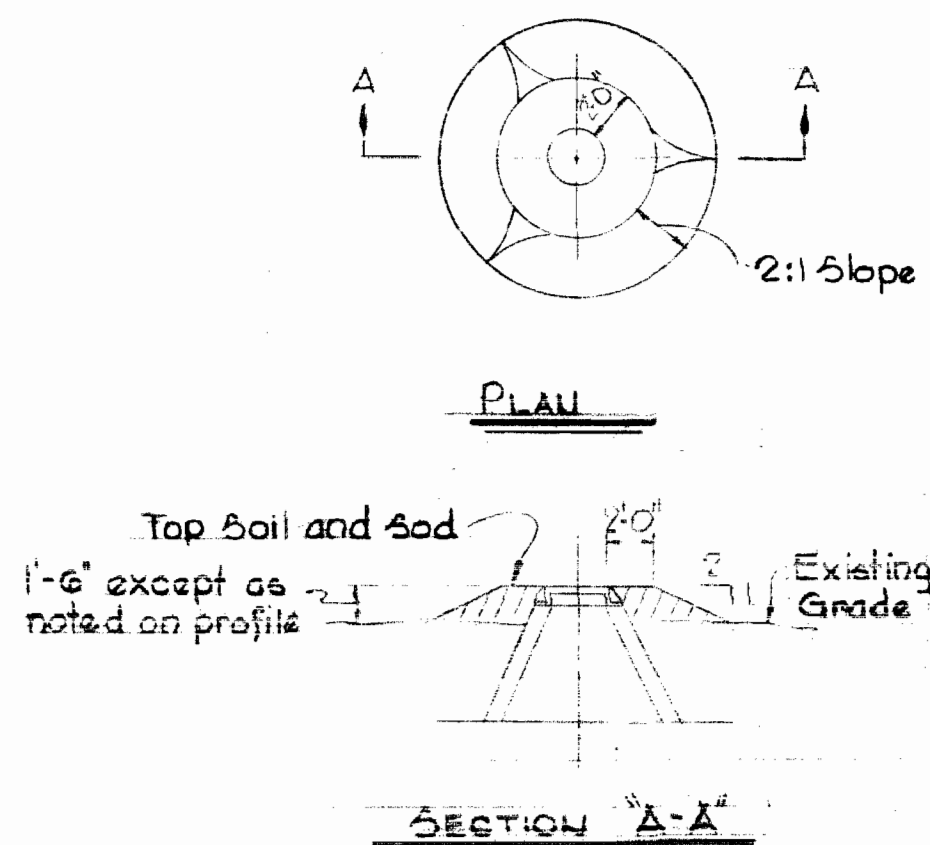
NOTE: Payment for storm drain outlet ditch will be made at unit price bid for rip-rap.

**DETAIL OF STORM DRAIN  
OUTLET AT MANHOLE 7871**

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

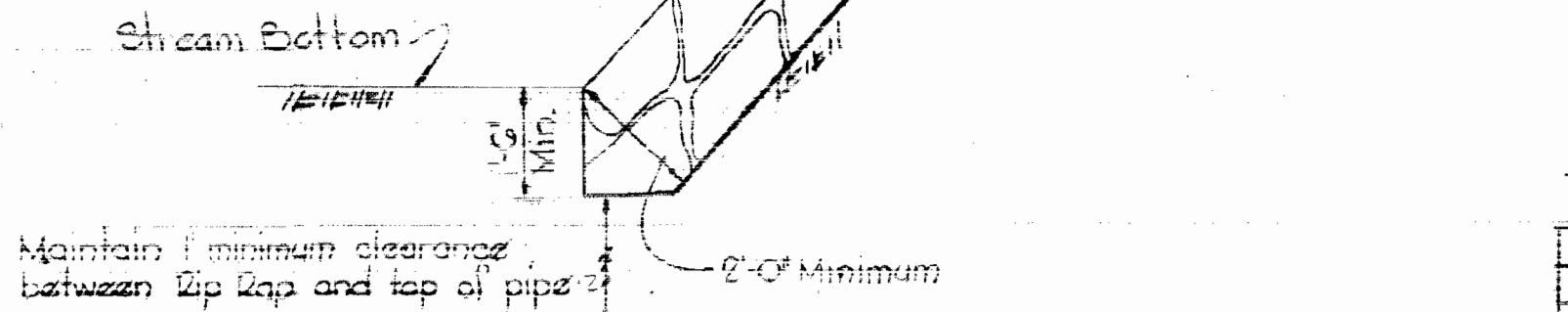
**FILL AT MANHOLES**

Scale: 1/8" = 1'-0"



**NOTES:**

1. Payment for Rip-Rap will be made at the Unit Price bid for furnishing material for and placing Rip-Rap.
2. Rip-Rap shall be placed a minimum each side of sewer as shown.
3. Erosion Control Fabric shall be Poly Filter-X as manufactured by Carriage Mills, Inc., Erosion Control Division, 124 W. 66th Street, Cincinnati, Ohio; Laurel Erosion Control Cloth as manufactured by Laurel Plastic Inc., Madison, Maine, or equal.
4. Rip-Rap shall consist of dense rocks of random shapes and sizes, resistant to the action of air and water and suitable for bank protection. All rocks shall weigh a minimum of 150 pounds.

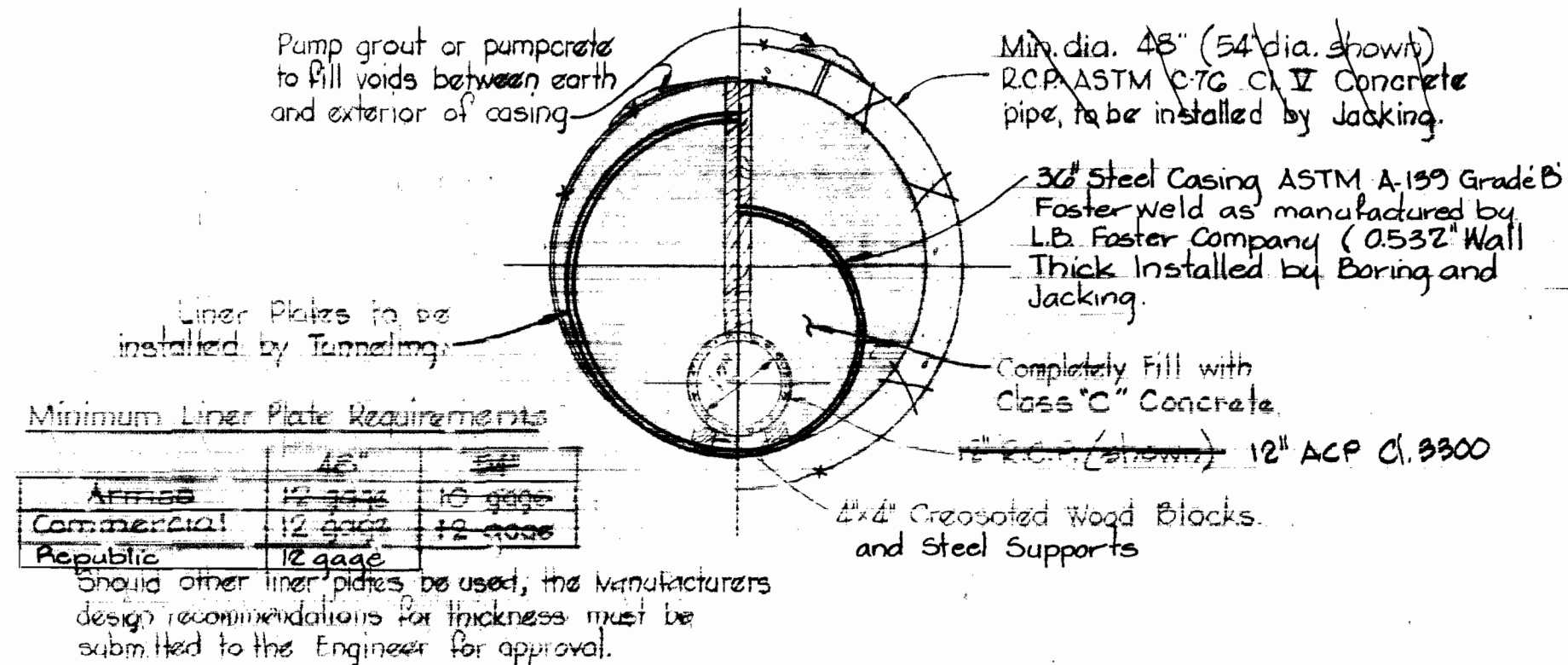


**RIP RAP DETAIL**

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

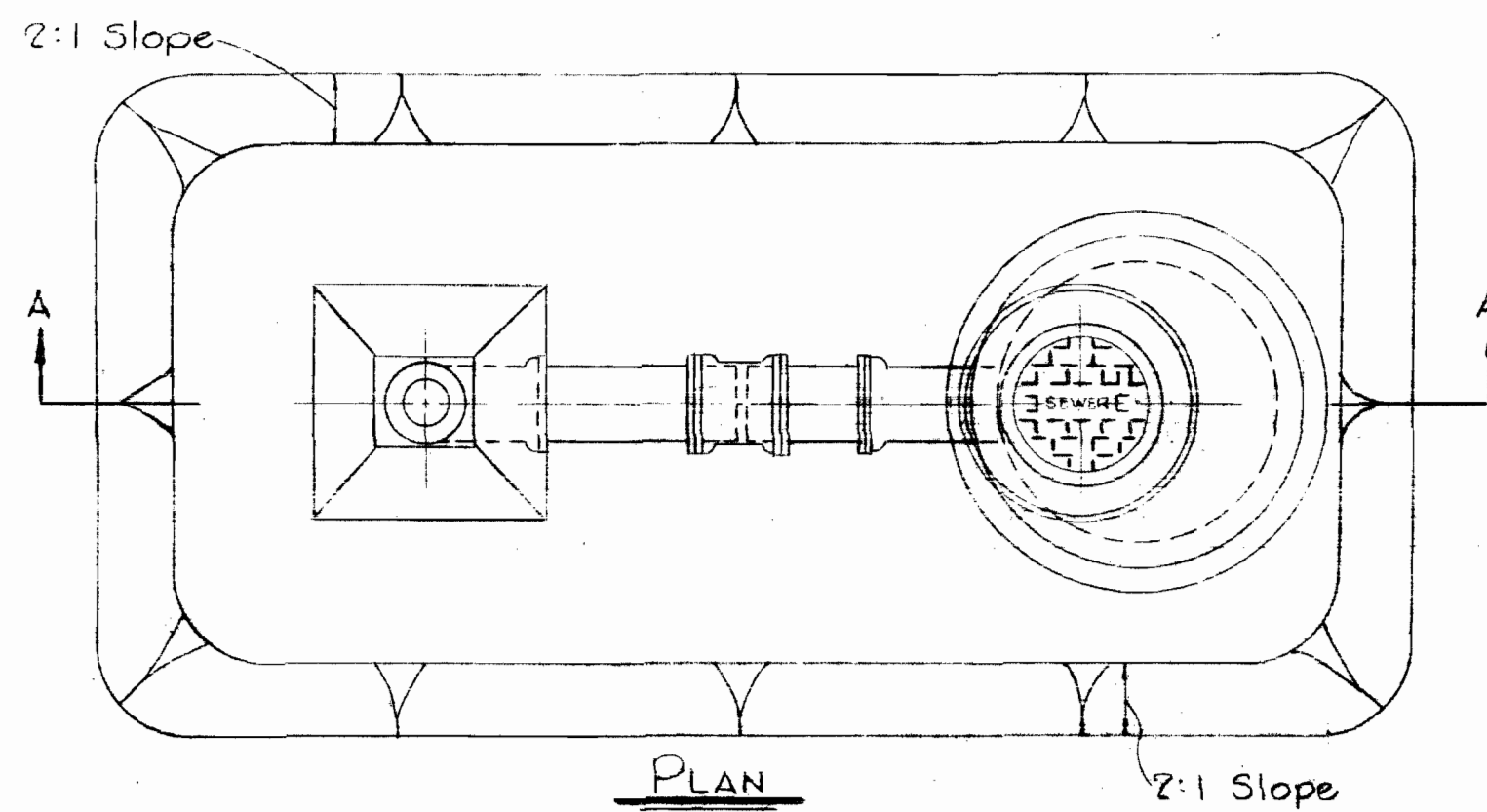
**NOTES:**

1. A joint shall be provided in the sewer main within 12-inches of each end of casing.
2. Block 12" Sewer inside of casing to prevent floatation.
3. Poling plates and breast boards or shields shall be used in poor soil or running sand and there shall be no unsupported faces of earth under the tracks during passage of trains.
4. Headings at ends of tunnel shall be properly sheeted and braced.



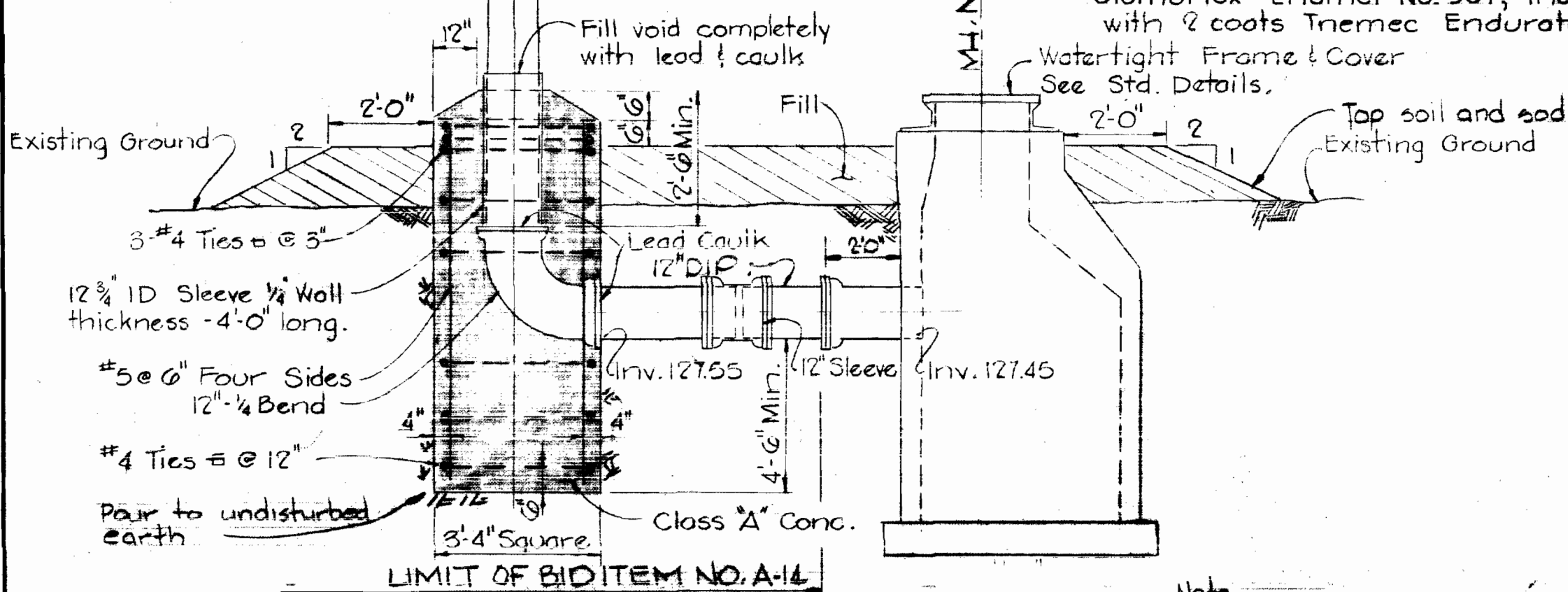
**DETAIL OF CASING PIPE  
CROSSING B. & O. RAILROAD**

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



Tapered Steel Pole, 11 Gauge Monatube or approved equal, minimum 20' in length, to be 12" O.D. at the base and 8" O.D. at the top. Both ends to be open.

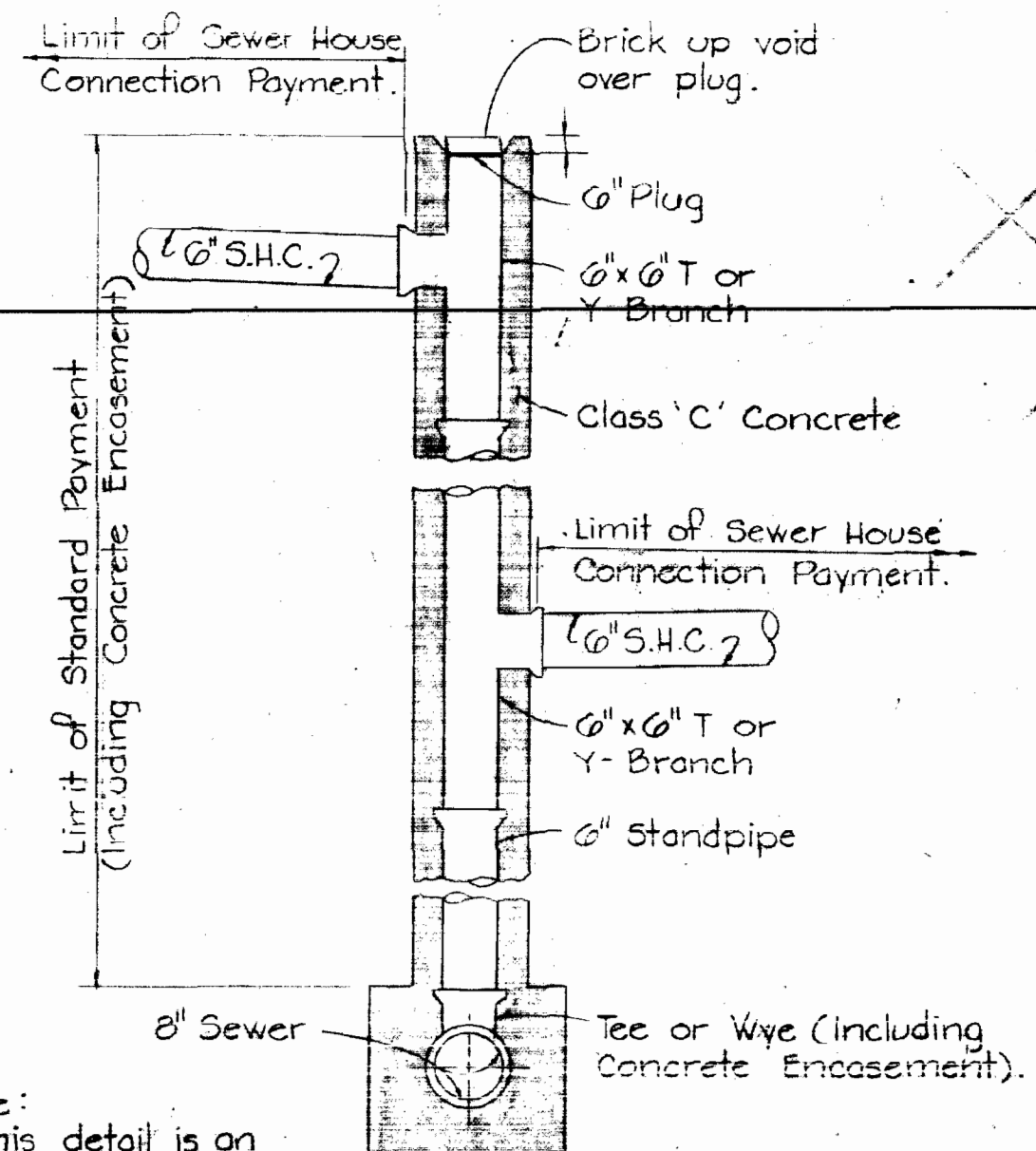
- Note: Steel Pole shall be painted as follows; point shall be Koppers Co. Inc., Inemec Co. or equal.
- a. Interior - Koppers No. 626 Primer with 3 coats Koppers Inertal 49 Thick; Inemec 77 Chem-Prime with 3 coats Inemec 457 Inemecal.
  - b. Exterior - Koppers 622 Primer with 2 coats Koppers Glomortex Enamel No. 501; Inemec 77 Chem-Prime with 2 coats Inemec Endurstone Enamel.



**DETAIL OF VENT STACK**

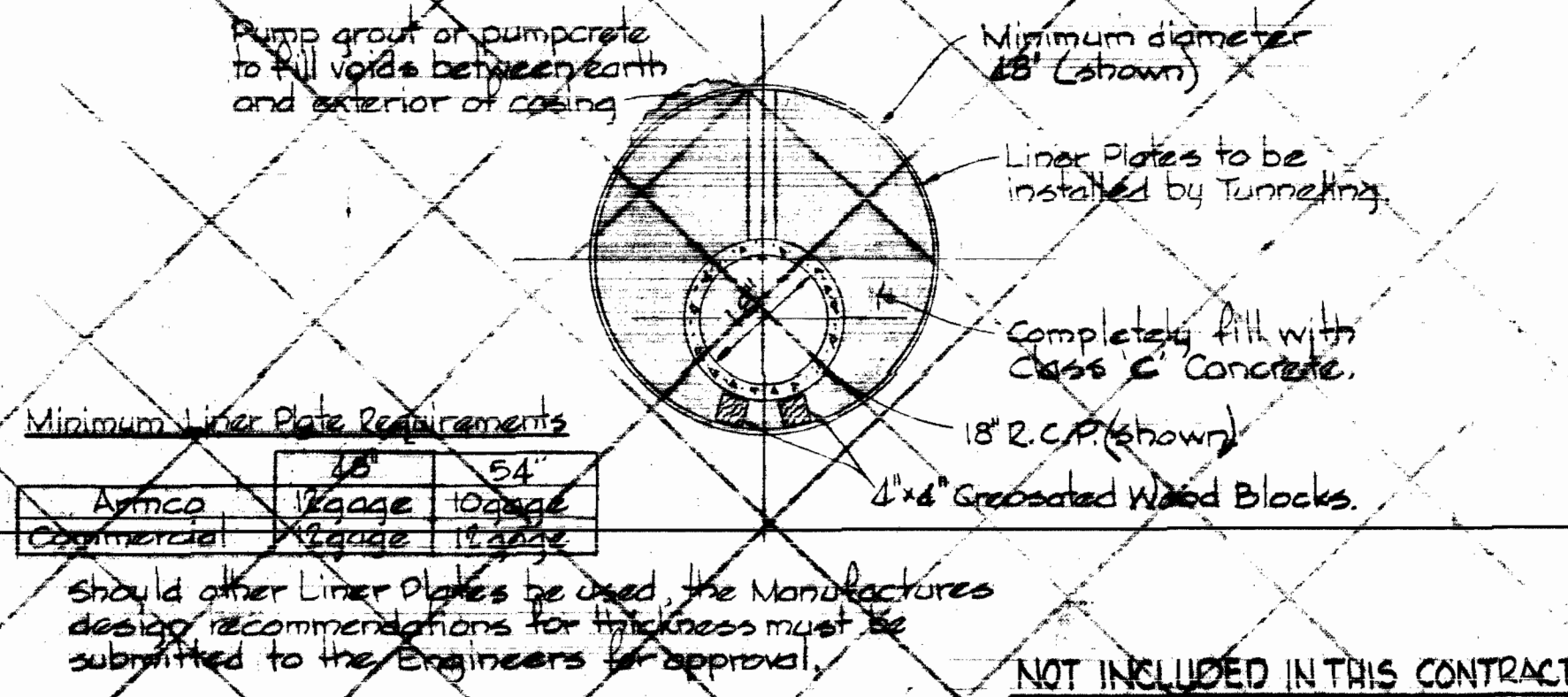
Scale: 3/8" = 1'-0"

Note: Vent Stack for Sewage Meter Vault shall be constructed as shown on drawing No. B and as shown in this detail.



**DETAIL OF DOUBLE DROP  
HOUSE CONNECTION**

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



**DETAIL OF CASING PIPE  
CROSSING DORSEY ROAD**

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

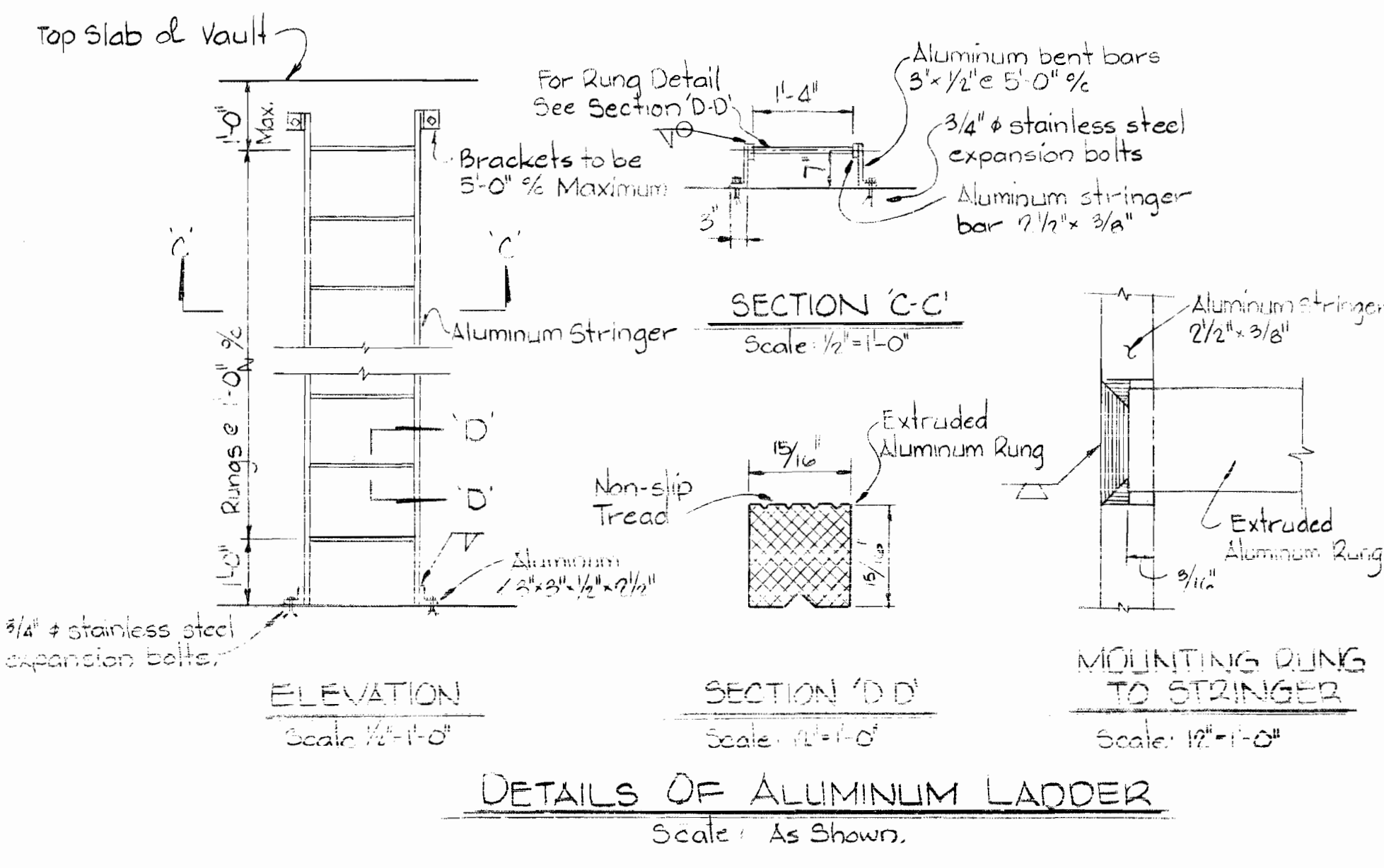
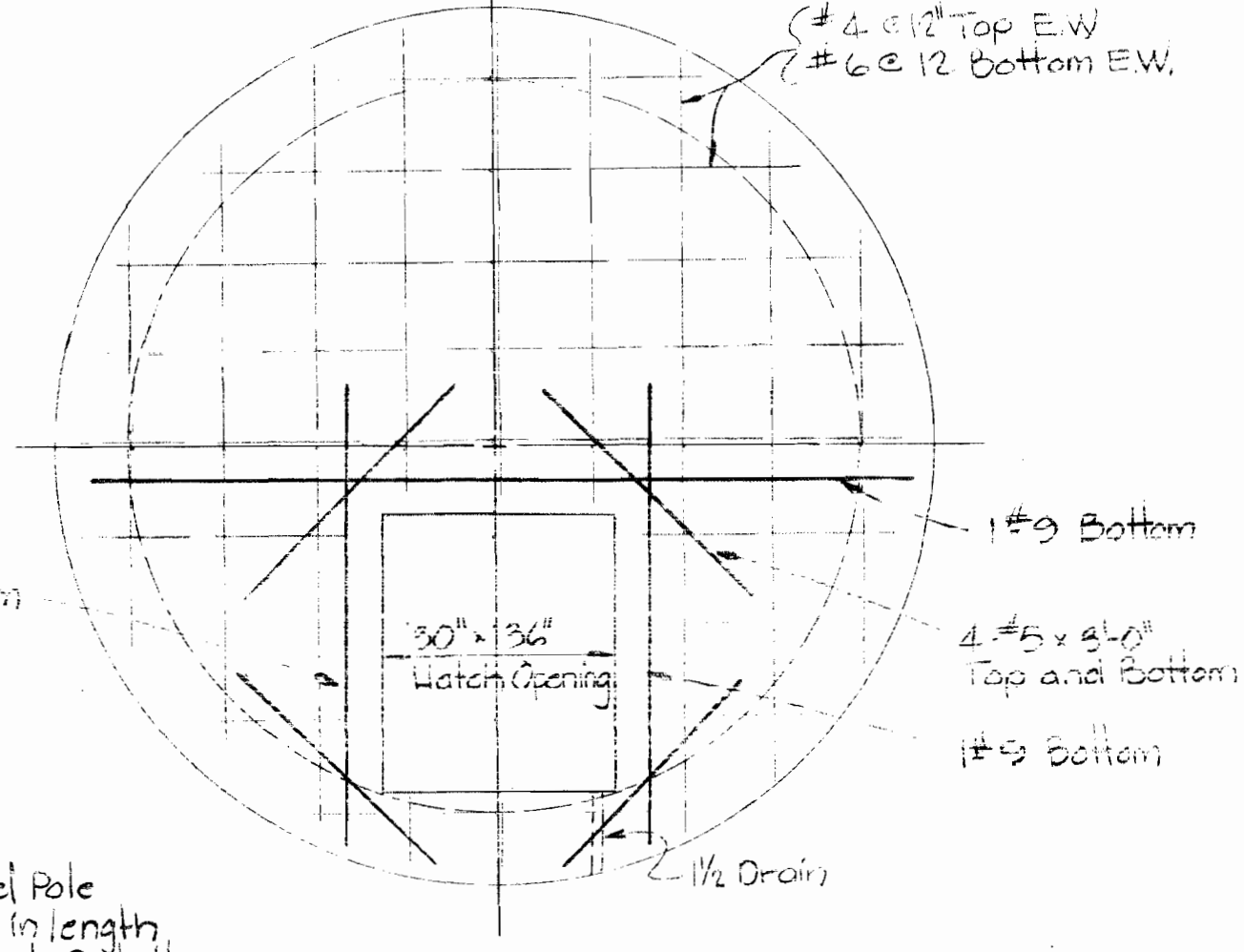
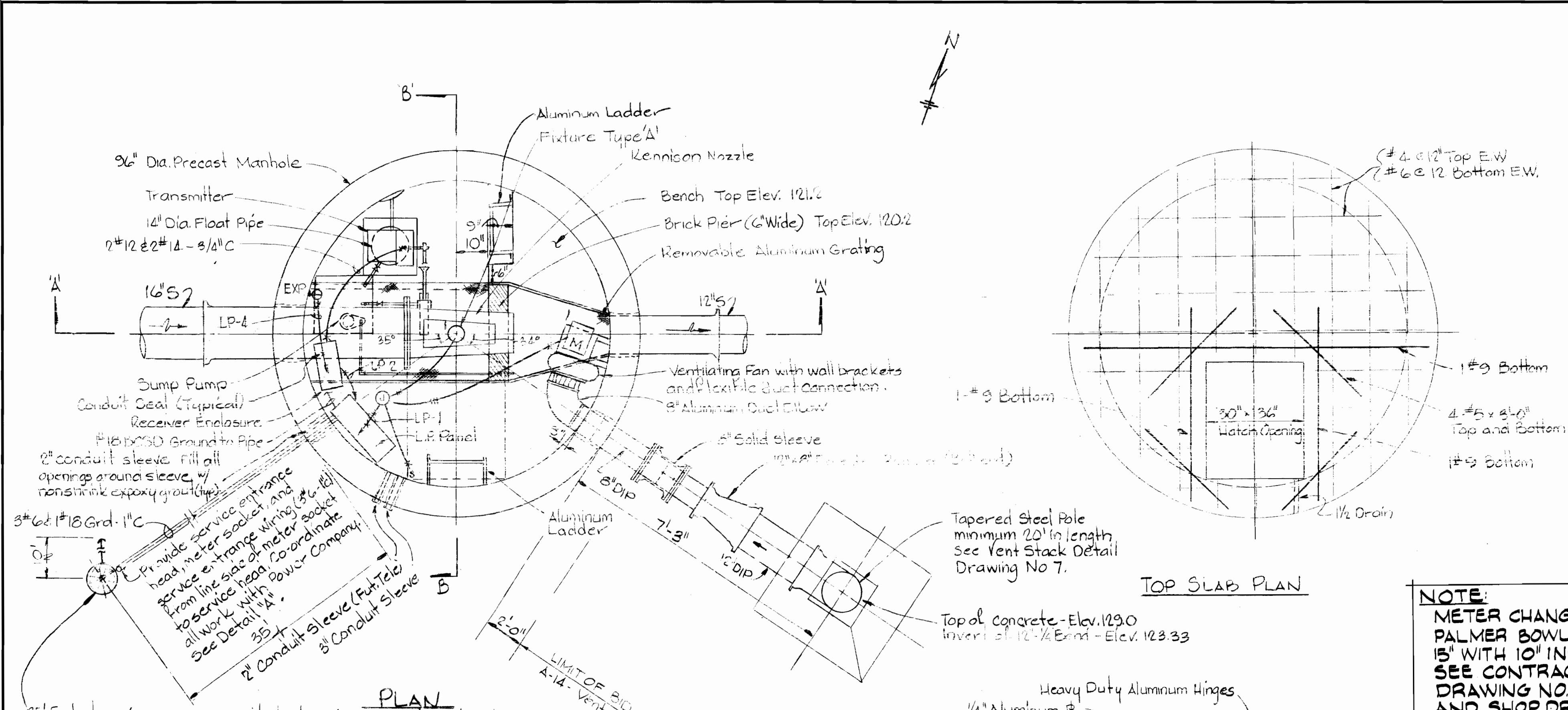


*Kenneth M. Melick*

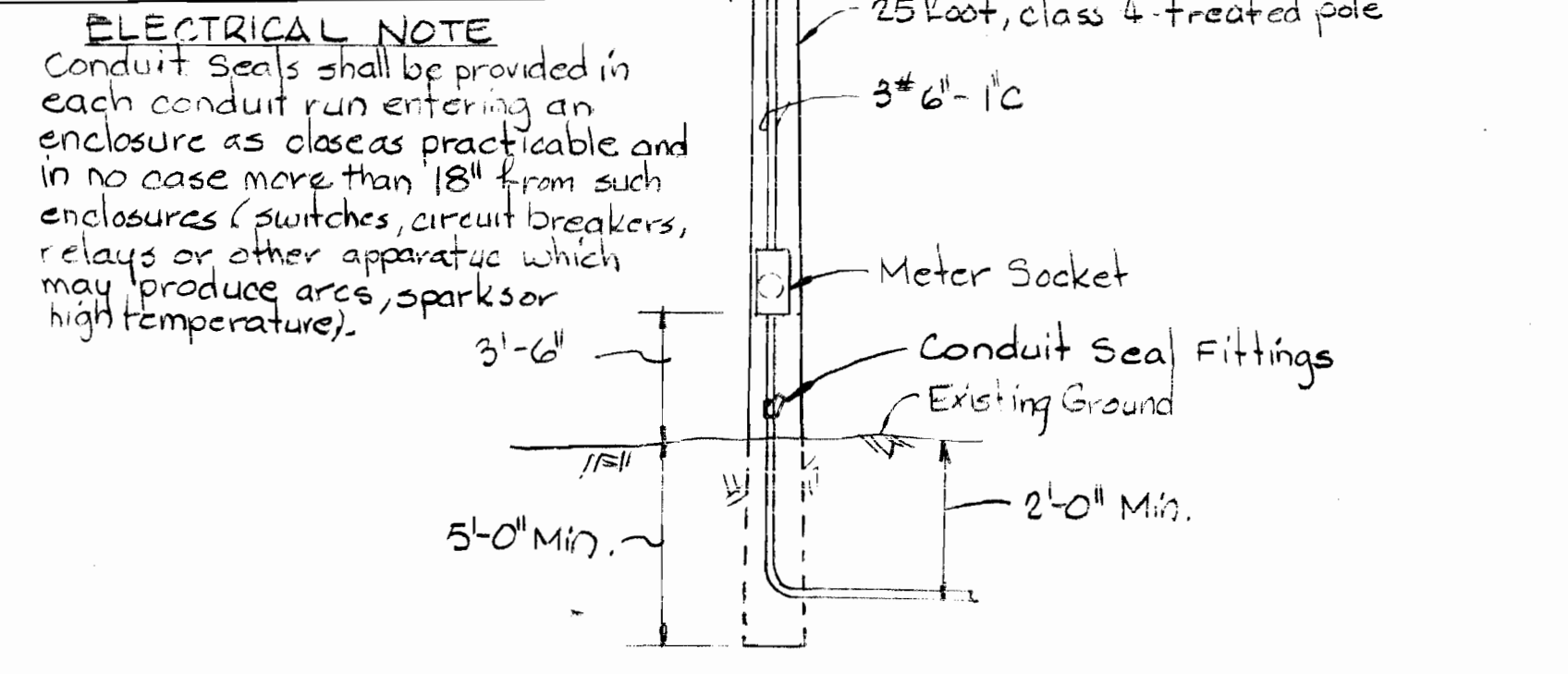
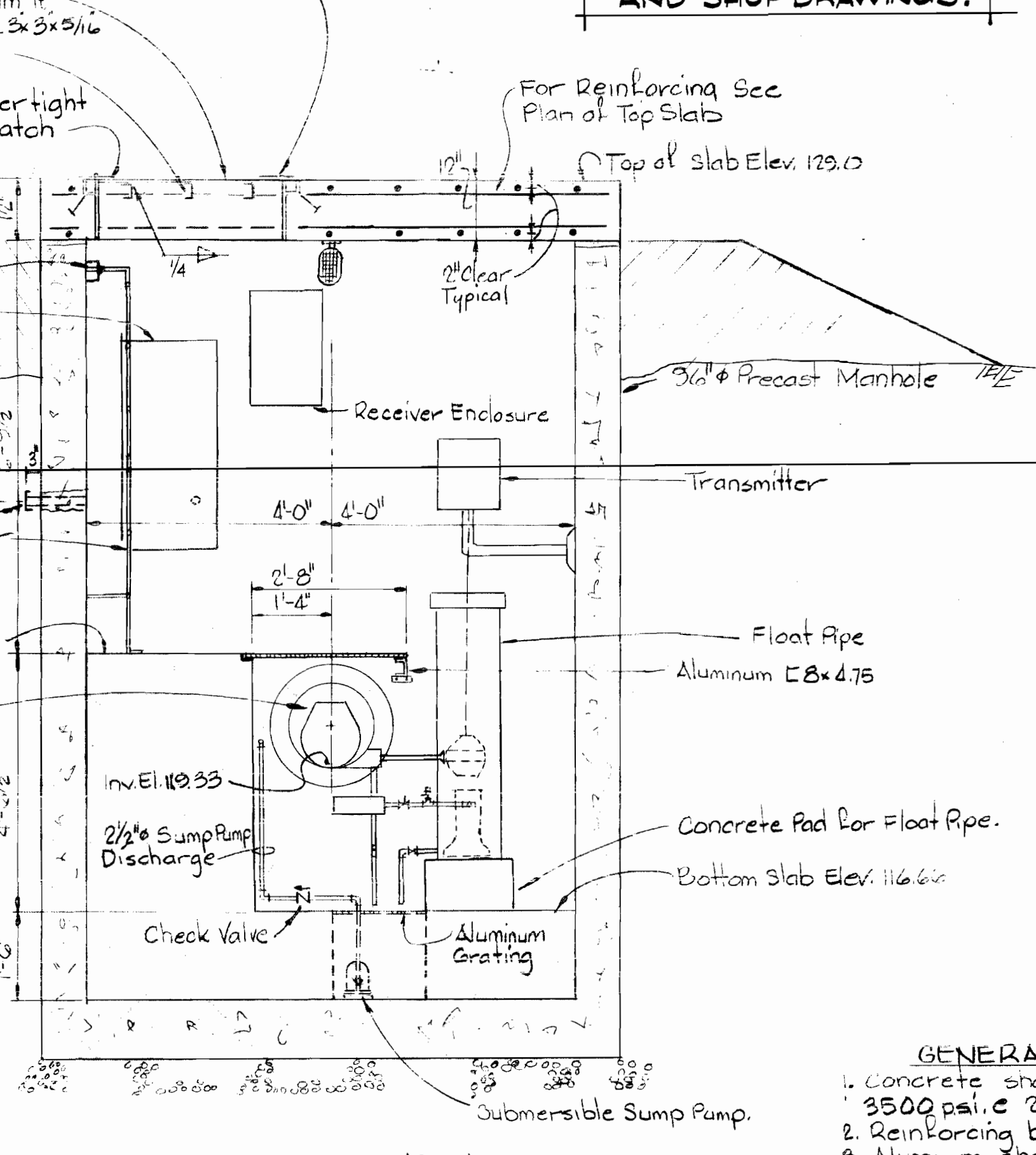
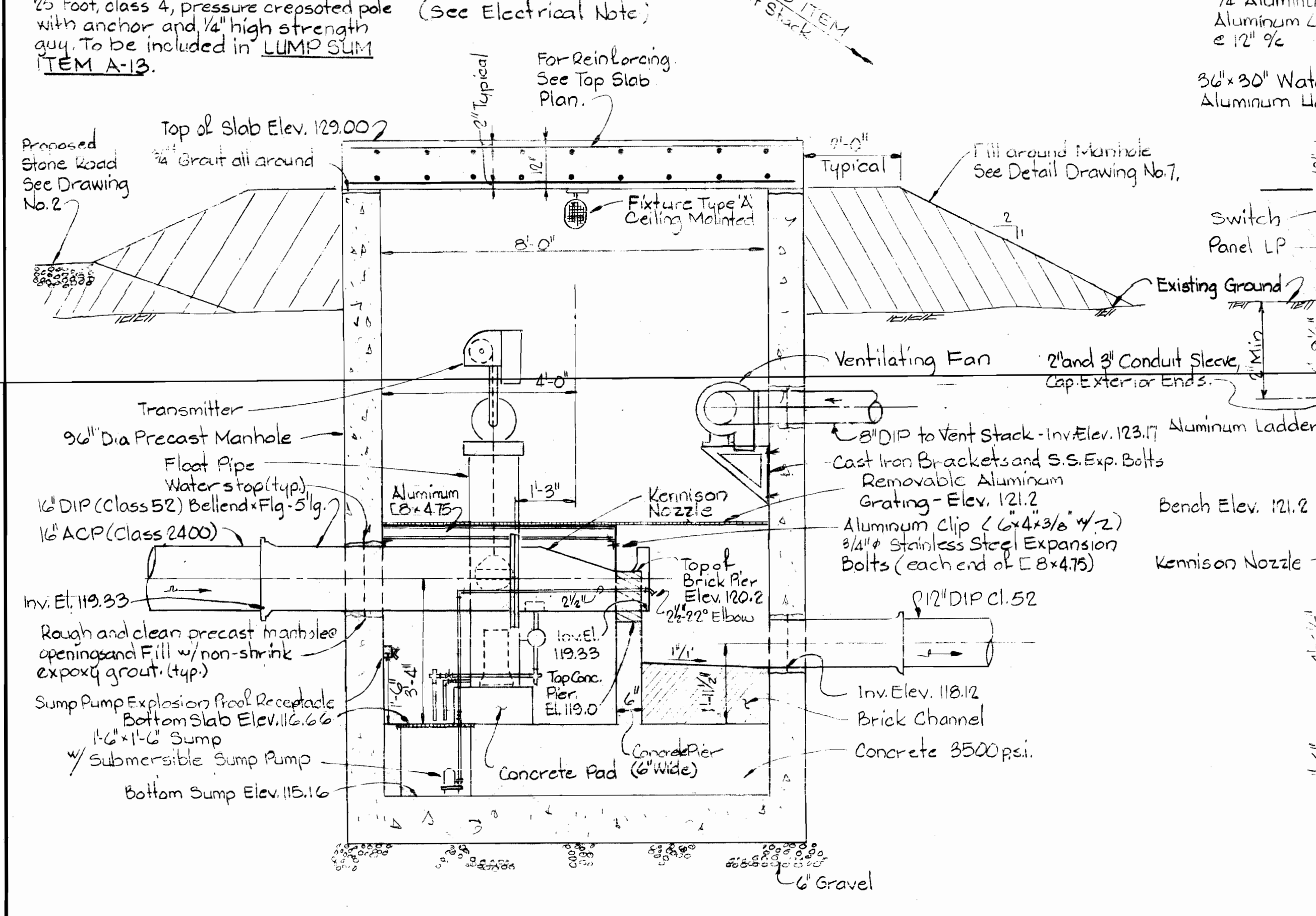
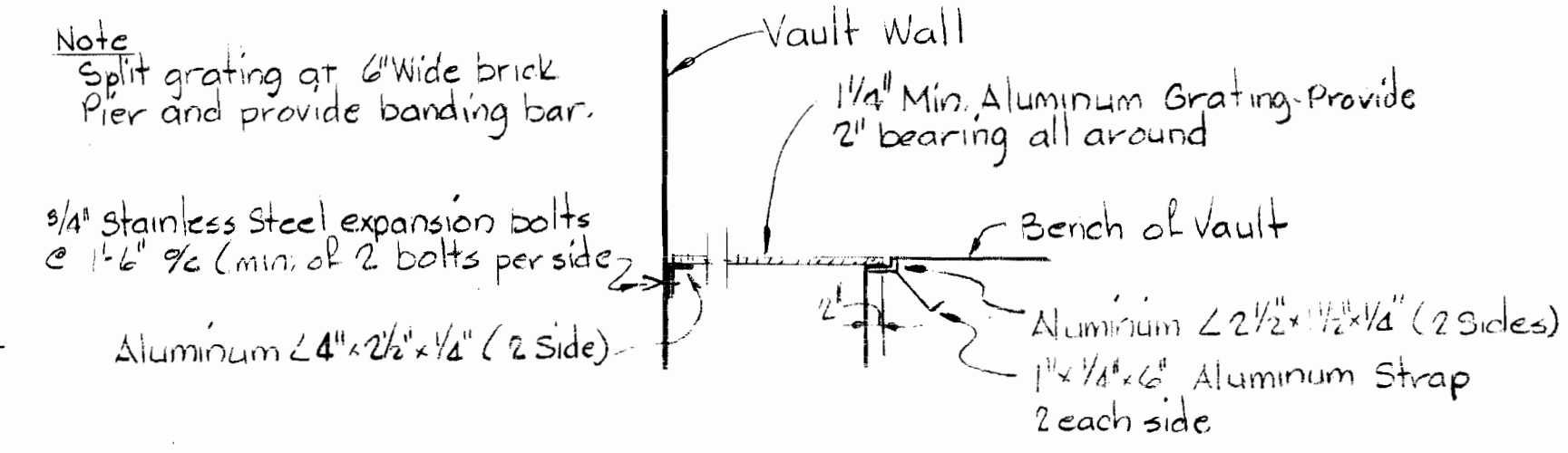
Licking Creek Interceptor  
Project No. S-4-6046  
Contract No. 580-5A

|   |   |   |         |                           |                       |                |
|---|---|---|---------|---------------------------|-----------------------|----------------|
| WHITMAN, REQUARDT & ASSOCIATES<br>ENGINEERS<br>1304 ST. PAUL ST.<br>BALTIMORE, MARYLAND | DEPARTMENT OF PUBLIC WORKS<br>HOWARD COUNTY, MARYLAND<br>2-23-77<br>DIRECTOR OF PUBLIC WORKS - DATE | CONTRACT NO. 580-S-A<br>PROJECT NO. S-4-6046<br>W. O. Gilbert 2-23-77<br>CHIEF BUREAU OF ENGINEERING - DATE | DETAILS | LICKING CREEK INTERCEPTOR | DRAWING NO. 7<br>OF 8 | SCALE AS SHOWN |
|---|---|---|---------|---------------------------|-----------------------|----------------|





**NOTE:**  
METER CHANGED TO PALMER BOWLUS FLUME 15" WITH 10" INSERT SEE CONTRACTOR'S DRAWING NO. M-100 AND SHOP DRAWINGS.



**ELECTRICAL NOTE**  
Conduit seals shall be provided in each conduit run entering an enclosure as close as practicable and in no case more than 18" from such enclosures (switches, circuit breakers, relays or other apparatus which may produce arcs, sparks or high temperatures).

**GENERAL NOTES - STRUCTURAL**

- Concrete shall have a minimum compressive strength of 3500 psi. @ 28 days.
- Reinforcing bars shall conform to ASTM-A 615, Grade 40.
- Aluminum shall conform to 6063-T6.
- All Exposed Concrete shall be chamfered 3/8" unless otherwise noted.
- Paint all Aluminum in contact with concrete with a heavy coat of alkaline-resistant bituminous paint.

Note: Electrical Work shall conform to NEC requirements for Class I, Division I hazardous locations.

(LUMP SUM ITEM NO. A-13)  
**DETAIL OF SEWAGE METER VAULT**  
Scale 1/2" = 1'-0"

**WHITMAN, REQUARDT & ASSOCIATES**  
ENGINEERS  
1304 ST. PAUL ST.  
BALTIMORE, MARYLAND

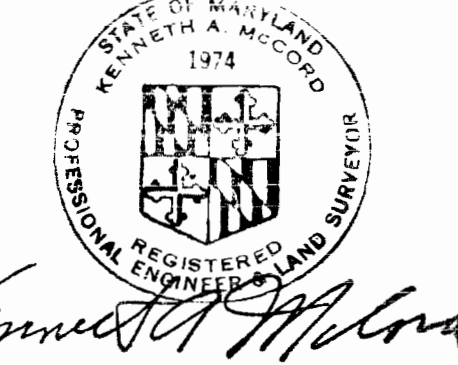
**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND  
W. F. N... 10-8-79  
DIRECTOR OF PUBLIC WORKS - DATE

**CONTRACT NO. 580-S-A**  
**PROJECT NO. S4 6046**

**DETAILS OF**  
**SEWAGE METER VAULT**

**LICKING CREEK INTERCEPTOR**

**DRAWING NO. 8 OF 8**  
**SCALE AS SHOWN**



*Kenneth A. McCord*  
Licking Creek Interceptor - Section II  
Project No. S-4-6046  
Contract No. 580-S-A

WS 580-S-A/B



