

For General Notes see Drawing No. 6 of 9
 For Hydraulic Profile see Drawing No. 8 of 9

CONTRACT 145-S
PATAPSCO RIVER INTERCEPTOR
HOWARD COUNTY METROPOLITAN COMMISSION
ELLICOTT CITY, MARYLAND

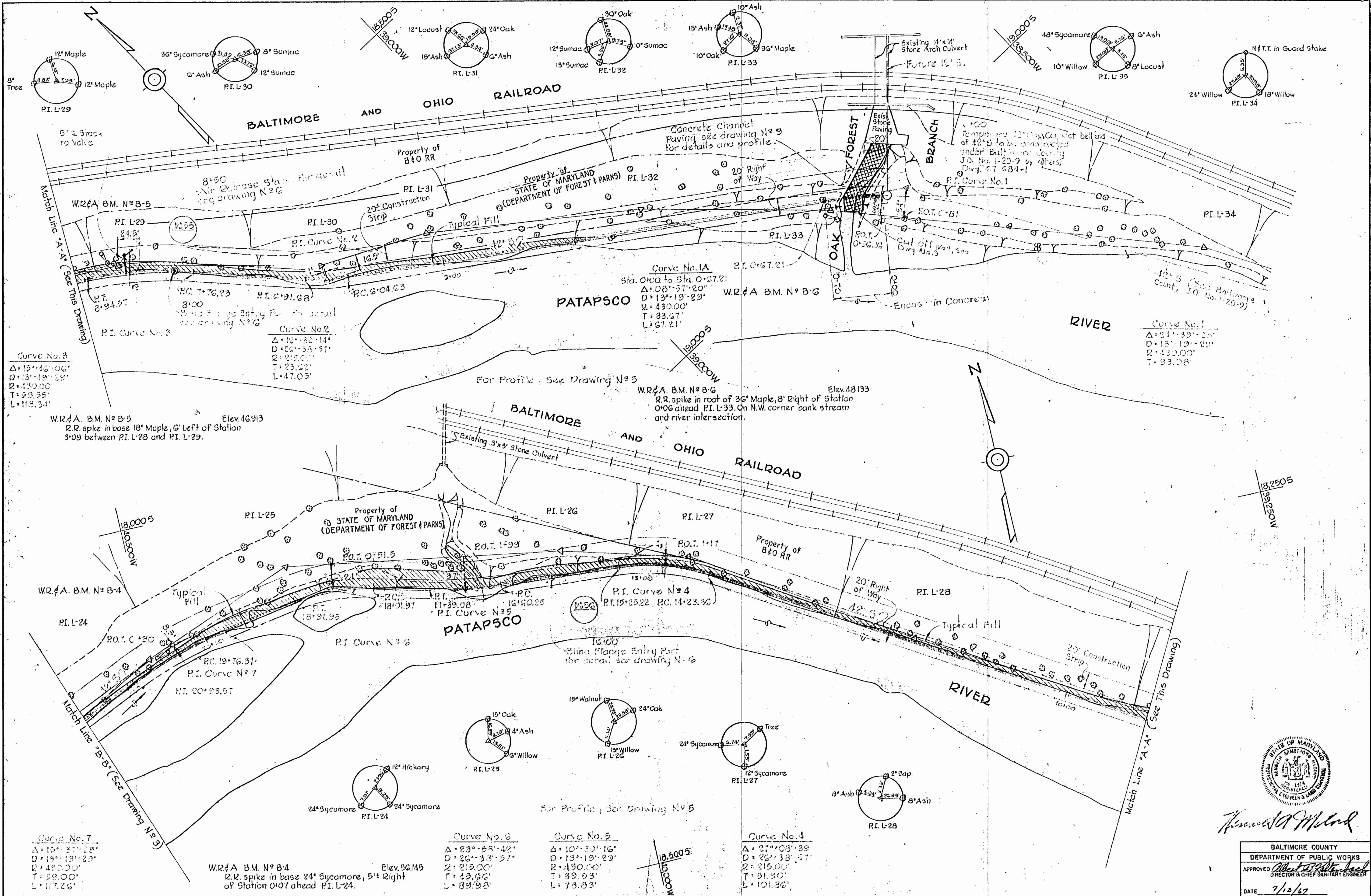
Diary F/B 4299
 F/B 4465
 Stakeout F/B 4322



Harold M. ...

BALTIMORE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 APPROVED *[Signature]*
 DIRECTOR & CHIEF SANITARY ENGINEER
 DATE 1/12/67

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION DATE 1-12-67 <i>[Signature]</i> CHIEF ENGINEER	CONTRACT NO. 145-S	PATAPSCO INTERCEPTOR LOCATION PLAN OAK FOREST BRANCH TO THISTLE BRANCH	ELECTION DISTRICT ELICOTT CITY NO. 2	DRAWING NO. 1 OF 9 SCALE AS SHOWN
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Howard J. Meland

BALTIMORE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: *Robert J. ...*
 DIRECTOR & CHIEF SANITARY ENGINEER
 DATE: 7/12/67

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

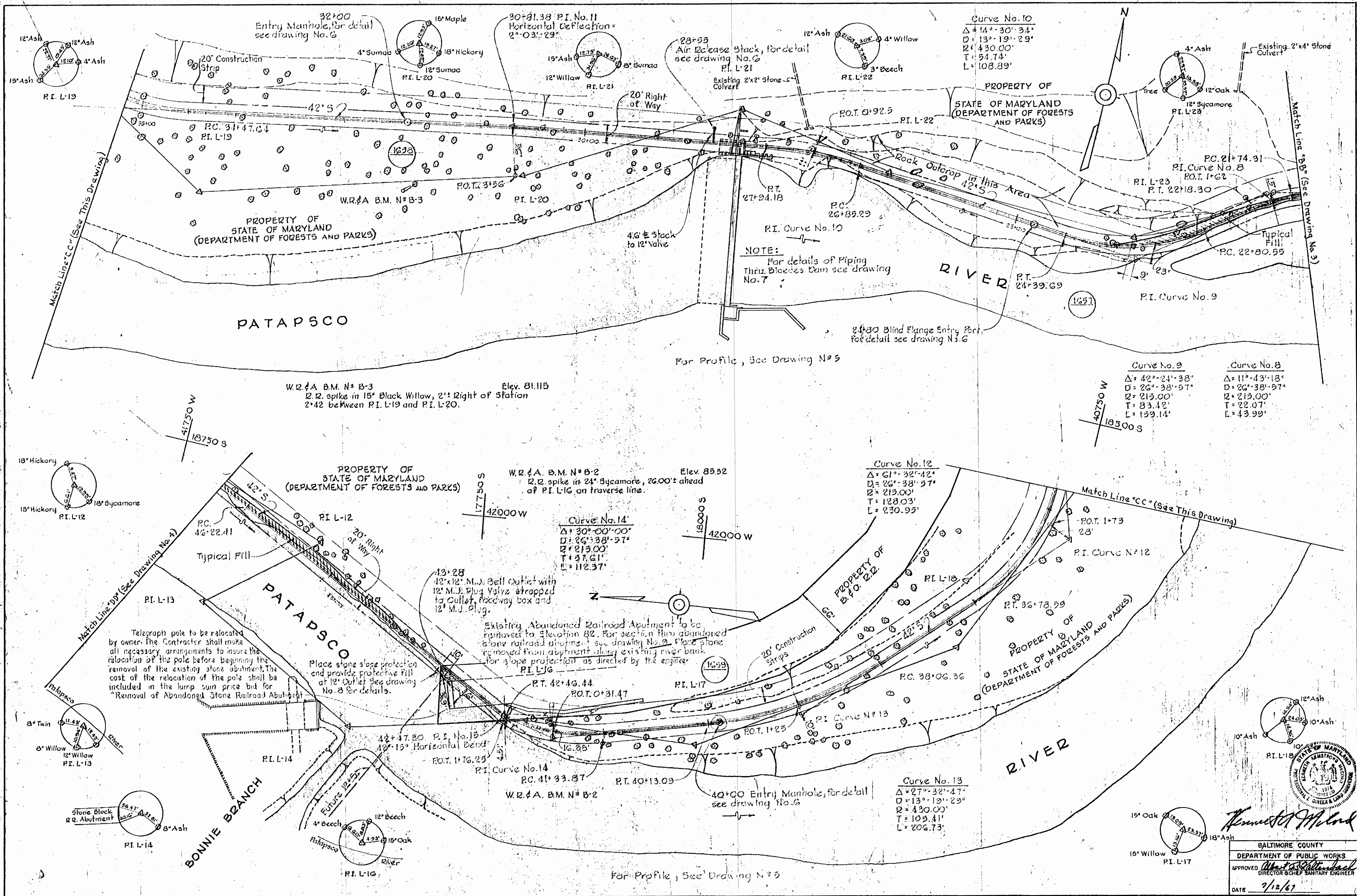
HOWARD COUNTY METROPOLITAN COMMISSION
 DATE: 7-12-67
 CHIEF ENGINEER: *W. O. ...*

CONTRACT NO. 145-S

PATAPSCO INTERCEPTOR
 PLAN
 OAK FOREST BRANCH TO THISTLE BRANCH

ELECTION DISTRICT
 ELLICOTT CITY NO. 2

DRAWING NO. 2 OF 9
 SCALE 1" = 50'



NOTE:
For details of Piping
Through Bleeders Dam see drawing
No. 7

Telegraph pole to be relocated
by owner. The Contractor shall make
all necessary arrangements to insure the
relocation of the pole before beginning the
removal of the existing stone abutment. The
cost of the relocation of the pole shall be
included in the lump sum price bid for
"Removal of Abandoned Stone Railroad Abutment"

Existing Abandoned Railroad Abutment to be
removed to Elevation 82. For section thru abandoned
stone railroad abutment see drawing No. 2. Place stone
removed from abutment along existing river bank
for slope protection as directed by the engineer

Place stone slope protection
and provide protective fill
at 12' Outlet. See drawing
No. 8 for details.

For Profile, See Drawing No. 5

APPROVED
Director of Public Works
DATE 7/12/67

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BALTIMORE, MARYLAND

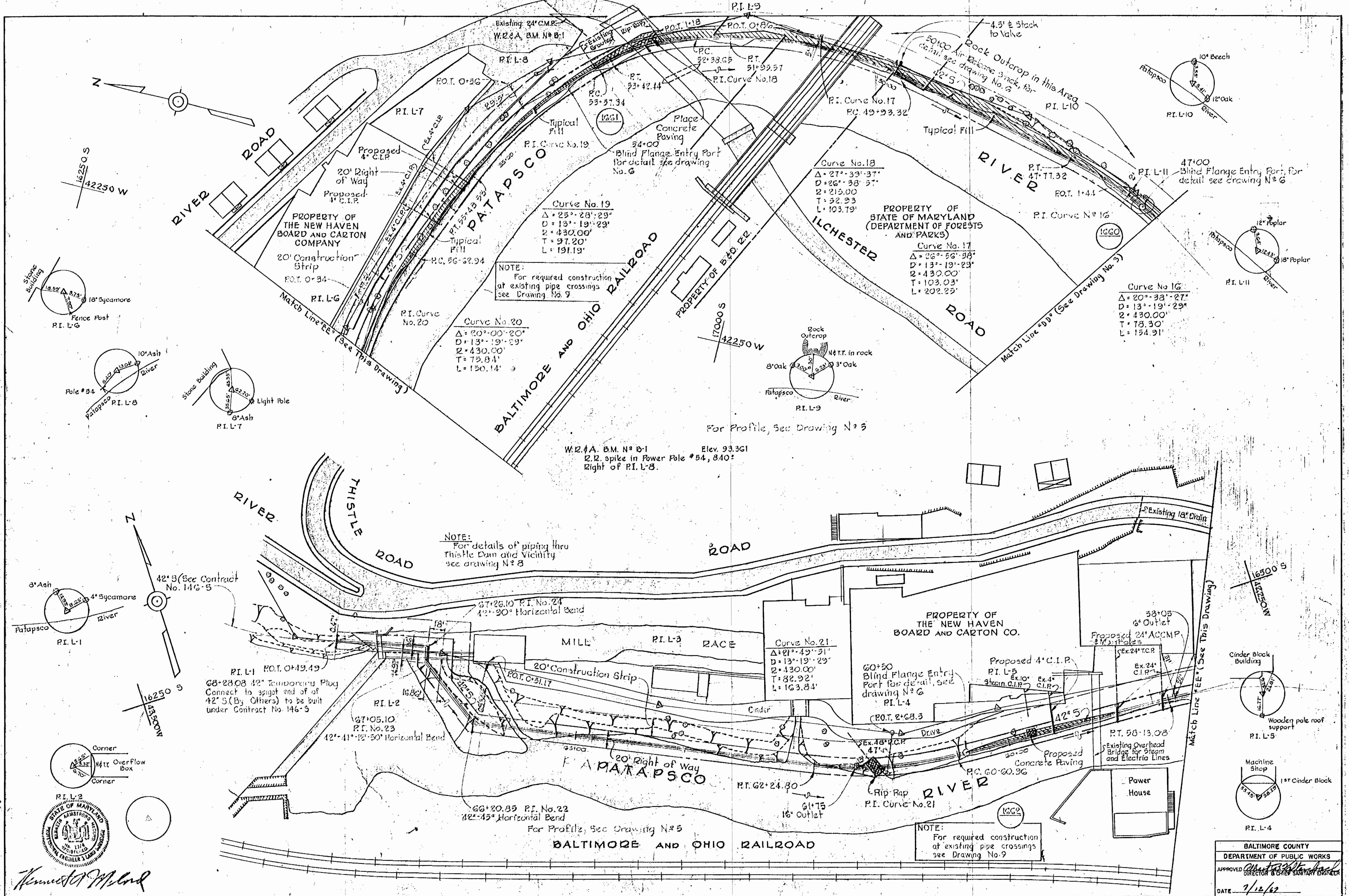
HOWARD COUNTY METROPOLITAN COMMISSION
DATE 1-12-67
W. O. L. Chief Engineer

CONTRACT NO. 145-S

**PATAPSCO INTERCEPTOR
PLAN
OAKFOREST BRANCH TO THISTLE BRANCH**

**ELECTION DISTRICT
ELLCOTT CITY NO. 2**

**DRAWING NO. 3
OF 9**
SCALE 1" = 50'



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BALTIMORE, MARYLAND

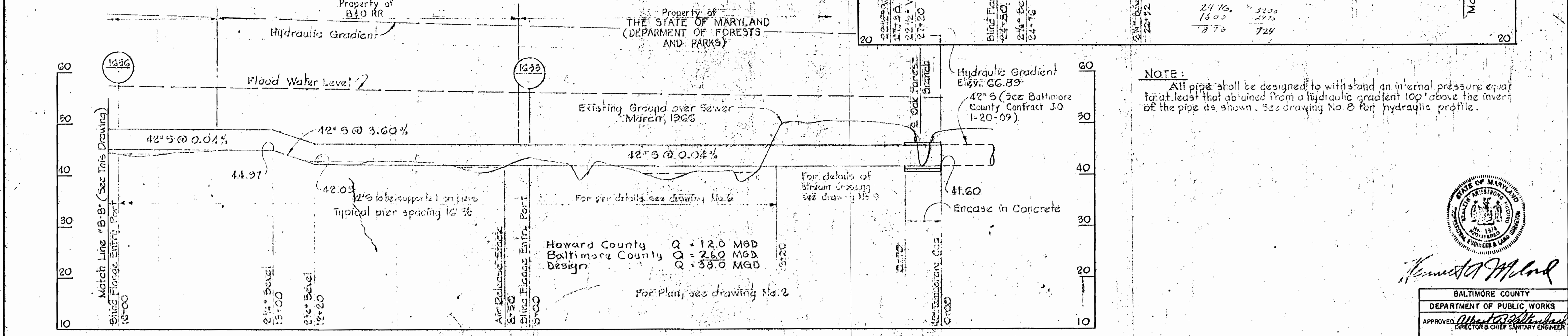
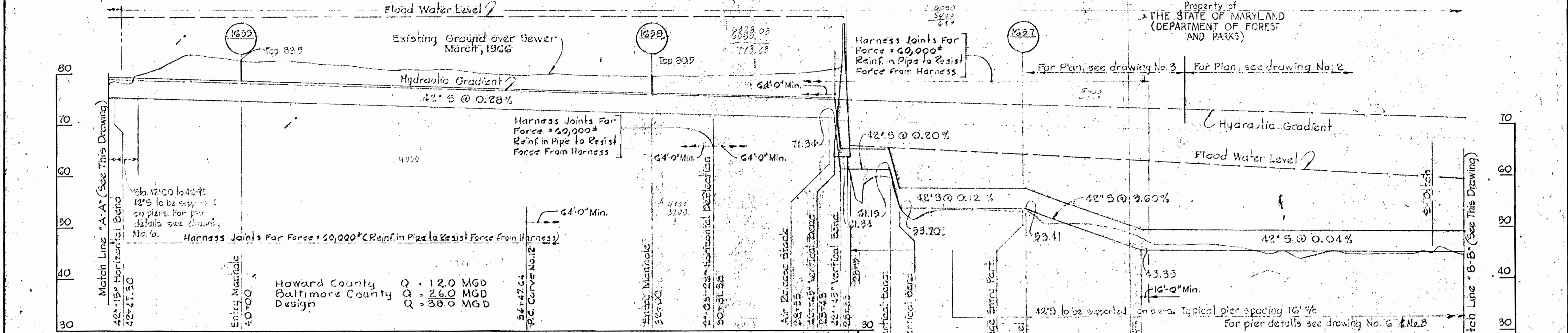
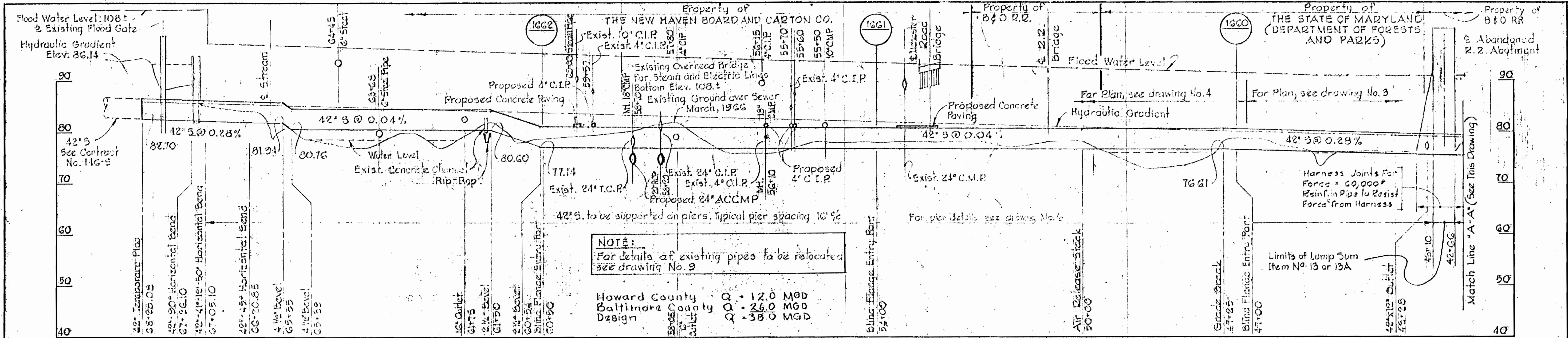
HOWARD COUNTY METROPOLITAN COMMISSION
DATE 1-12-67
CHIEF ENGINEER

CONTRACT NO. 145-S

PATAPSCO INTERCEPTOR
PLAN
OAKFOREST BRANCH TO THISTLE BRANCH

ELECTION DISTRICT
ELLICOTT CITY NO. 2

DRAWING NO. 4 OF 9
SCALE 1" = 50'



NOTE:
 All pipe shall be designed to withstand an internal pressure equal to at least that obtained from a hydraulic gradient 100' above the invert of the pipe as shown. See drawing No. 3 for hydraulic profile.



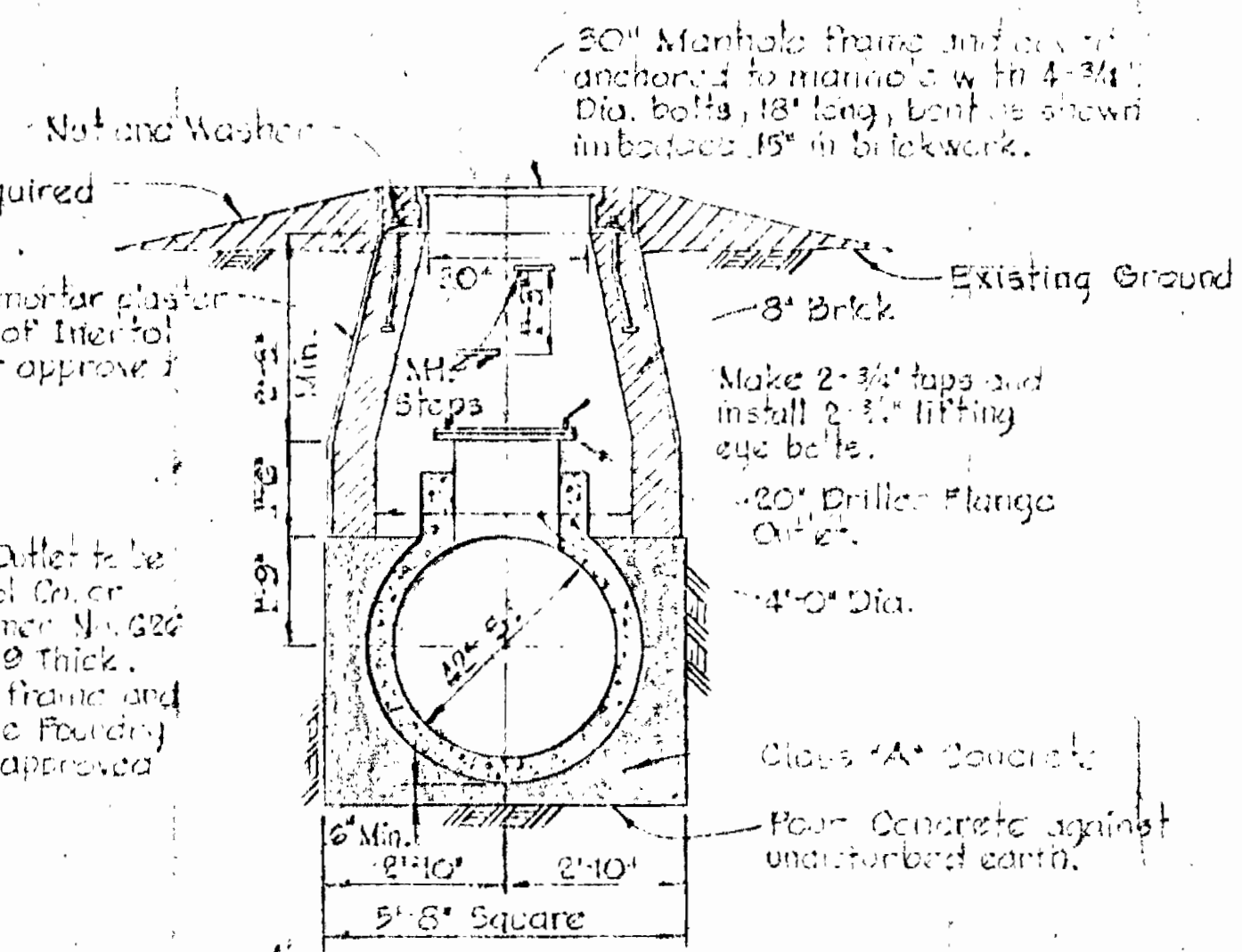
Kenneth J. McLeod

BALTIMORE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: *Robert J. Ballenger*
 DIRECTOR & CHIEF SANITARY ENGINEER
 DATE: 7/12/67

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 1-12-67 DATE	CONTRACT NO. 145-S CHIEF ENGINEER	PATAPSCO INTERCEPTOR PROFILE OAKFOREST BRANCH TO THISTLE BRANCH	ELECTION DISTRICT ELLCOTT CITY NO. 2	DRAWING NO. 5 OF 9	SCALE H: 1"=100' V: 1"=10'
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GENERAL NOTES

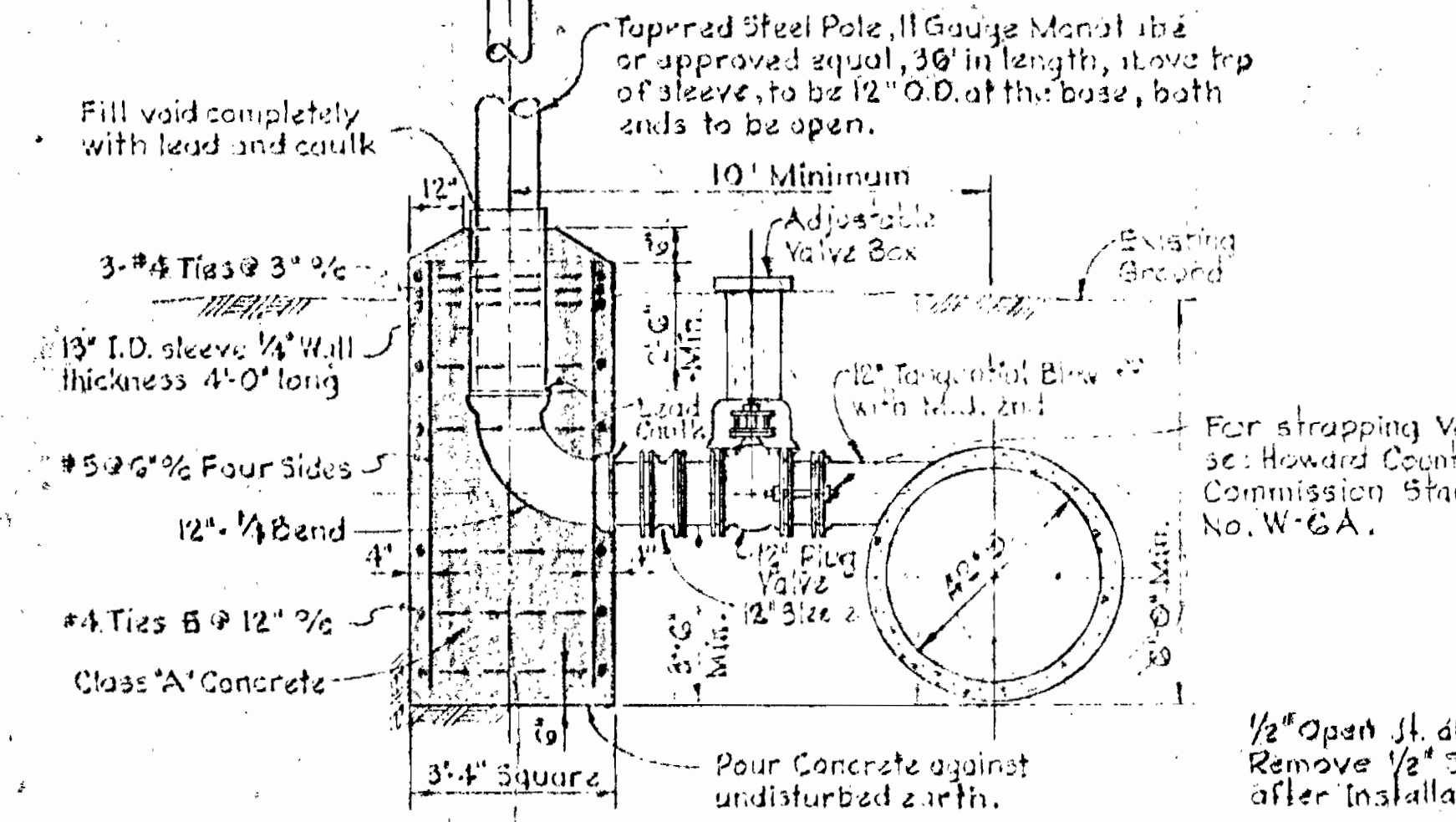
1. Approximate location of existing mains are shown. The Contractor shall take all necessary precautions to protect the existing mains and services and maintain utility supply. Any damage incurred shall be repaired immediately at Contractor's expense.
2. All pipe elevations shown are invert. (I) Elevation.
3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operation in vicinity of utilities.
4. For all standard details, see standards bound in the Specifications.
5. Build all manholes to finished elevation.
6. 42" sewer hold non-flush reinforced concrete pressure pipe with rubber and steel joints. No prestressed concrete cylinder pipe will be permitted to be used where the pipe is indicated to be supported on piers.
7. All joints on existing pipe to be made with "RAM-NEK" flexible plastic gaskets as manufactured by K.T. Simpson Co. or approved equal. For detail see drawing, No. 2.
8. The cost of furnishing and placing fill in accordance with Typical Fill Detail and as specified shall be included and covered in the unit prices bid for items of "Trench Excavation and Backfill" for 42-inch sewer.
9. Area within indicated limits disturbed by construction shall be seeded in accordance with the applicable specifications.
10. Cast Iron Pipe and Fitting
 - (a) All cast iron pipe shall be centrifugally cast and shall be furnished in accordance with ASA Specification A 216-1962 (AWWA C 106-62) or A 218-1962 (AWWA C 108-62) A 5-A Class 25. End design shall conform to ASA Specifications A 211-1964 (AWWA C 111-64)
 - (b) All cast iron fittings and specials shall be furnished in accordance with AWWA Specifications C 110-62 (ASA A 210-1962) for short body cast iron fittings with thickness of metal and weights as specified in the Cast Iron Pipe Association handbook for Class 250.
 - (c) All cast iron pipe and fittings shall be cement lined in accordance with the requirements of American Standard Specifications for Cement Mortar Lining for Cast Iron Pipe and Fittings, A 214-1964 (AWWA C 104-64), except that the thickness shall be twice that as specified in Section 4-10 thickness of lining, paragraph 4-10.1 and the curing shall be effected by the application of a bituminous seal coating which shall continuously cover and seal the cement mortar.
11. Rising valve boxes shall be round head, sliding type and adjustable with 5/8" shaft complete with cover marked "Sewer".
12. All poured in place concrete shall be Air Entrained Class 'A' concrete having a minimum compressive strength of 3500 psi at 28 days unless otherwise noted on the drawings.
13. All reinforcing steel shall conform to ASTM Designation A-15 for new intermediate grade billet steel with a minimum yield strength of 40,000 psi.
14. Welded wire fabric shall conform to "Specification for welded steel wire fabric for concrete reinforcement" A.S.T.M. Designation A195.



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

NOTE:
1. 20" Flange Outlet to be painted with Inertol Co. or approved equal, Primer No. 622 and 2-coats No. 49 Thick.
2. 30" Manhole frame and cover to be Temple Foundry Inc. Figure 21 or approved equal.

Note:
Steel Pole to be painted as follows, paint to be Inertol Co. or approved equal.
(a) Interior - Shop coated with Primer No. 626 and 3-coats No. 49 Thick.
(b) Exterior - Primer No. 622 and 2-coats of Glomar Enamel No. 323 (1.4 mill per coat)

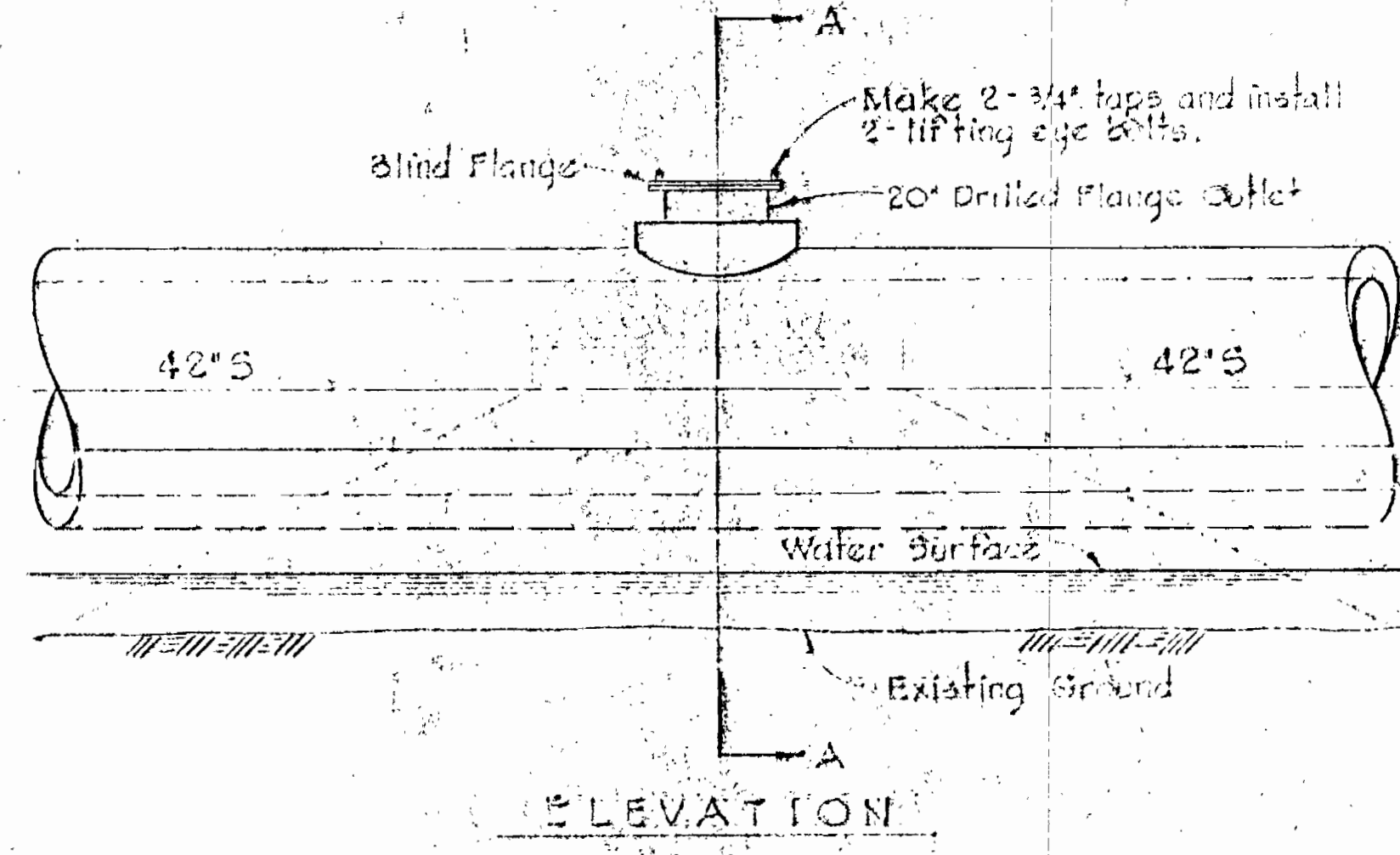


DETAIL OF AIR RELEASE STACK
Scale: 3/8" = 1'-0"

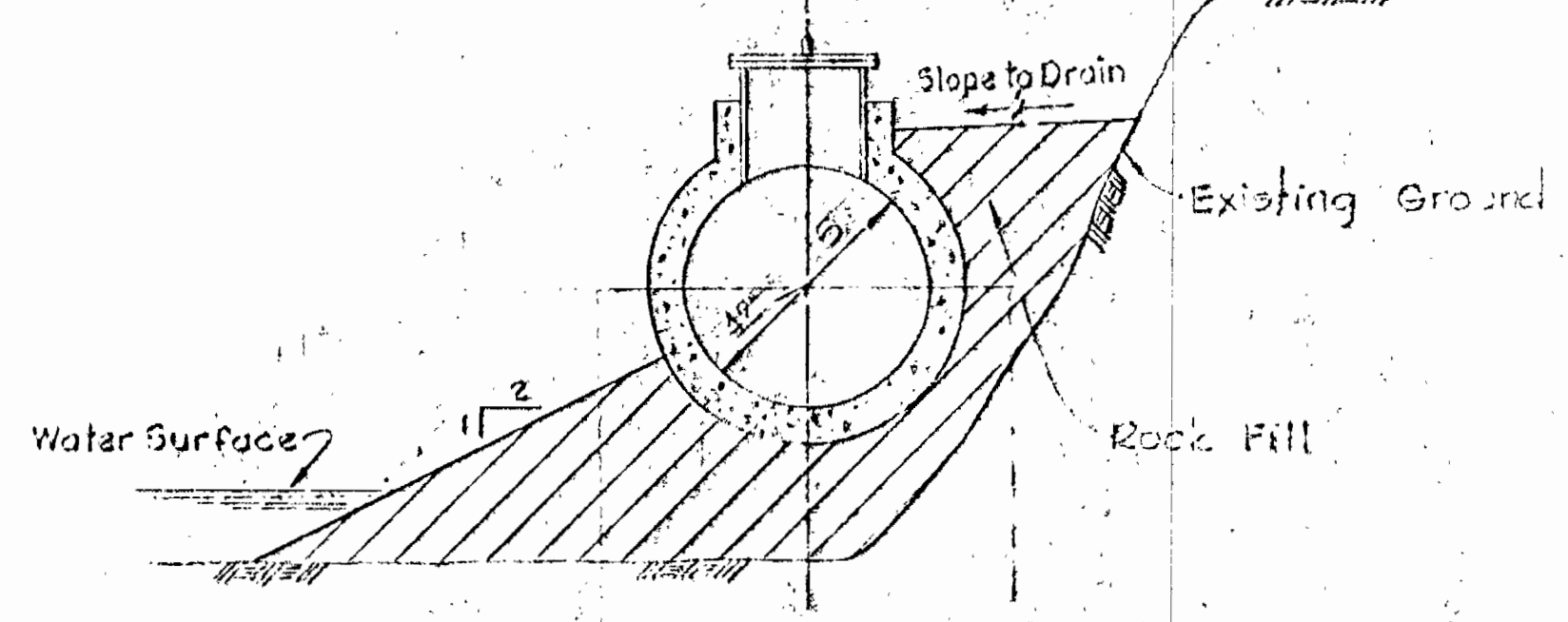
PIER TABLE

TYPE	X	Y	Z
A	5.00'	3.00'	0 to 2.5'
A	6.00'	10.00'	2.6' to 3.5'
B	7.25'	11.25'	3.6' to 4.5'
B	8.50'	12.50'	4.6' to 5.5'
B	9.75'	13.75'	5.6' to 6.5'
B	11.00'	15.00'	6.6' to 7.5'
B	12.25'	16.25'	7.6' to 8.5'

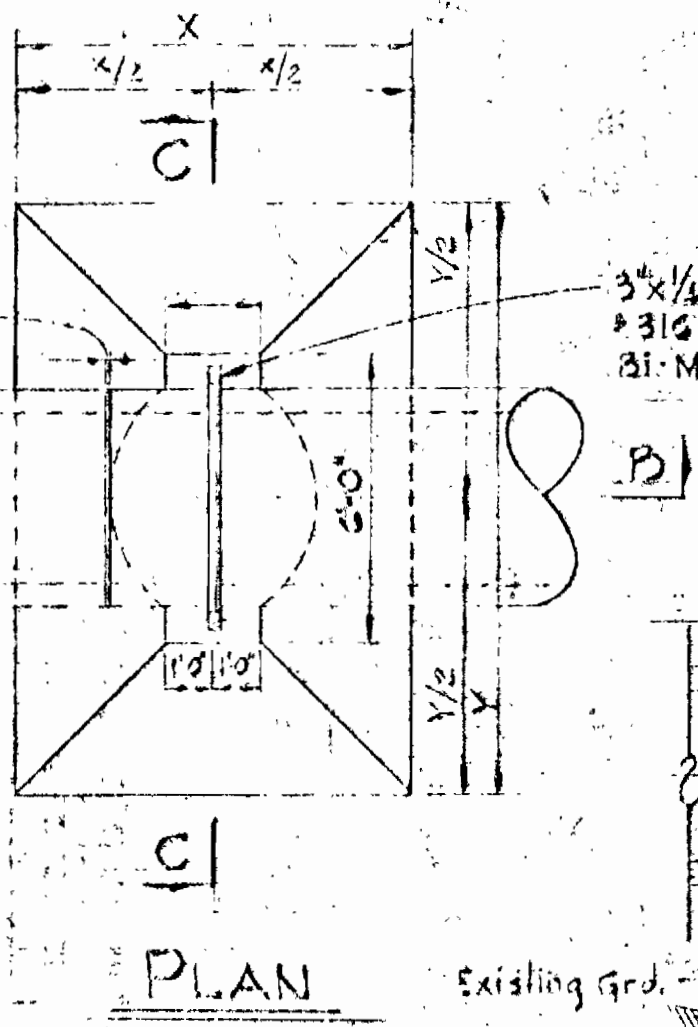
NOTE:
Fill shall consist of earth material meeting the requirements of Section 2-15(b) of the Specification and shall be placed in layers not exceeding 2" thick and each layer compacted by a minimum of three passes. For all vibratory compactor that the outer 1/8" shall be protected by well graded materials containing at least 60% by weight of stone or rock particles ranging in size between 1/4" and 2 1/4" in greatest dimension and weighing between 100 and 400 pounds.



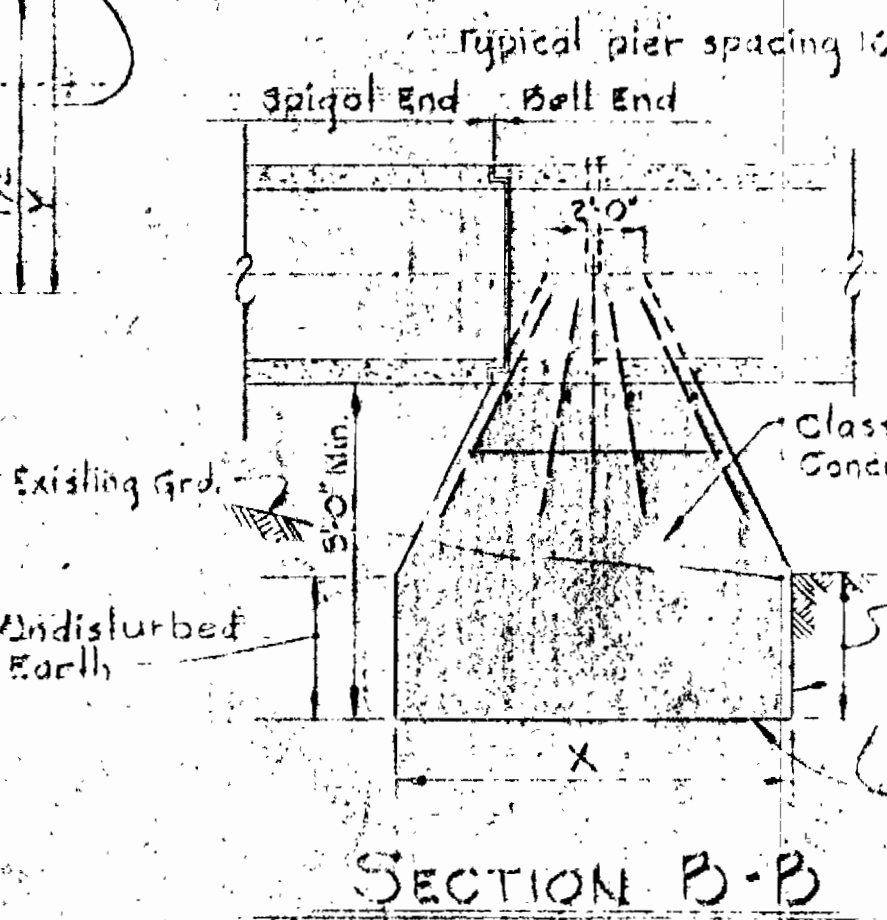
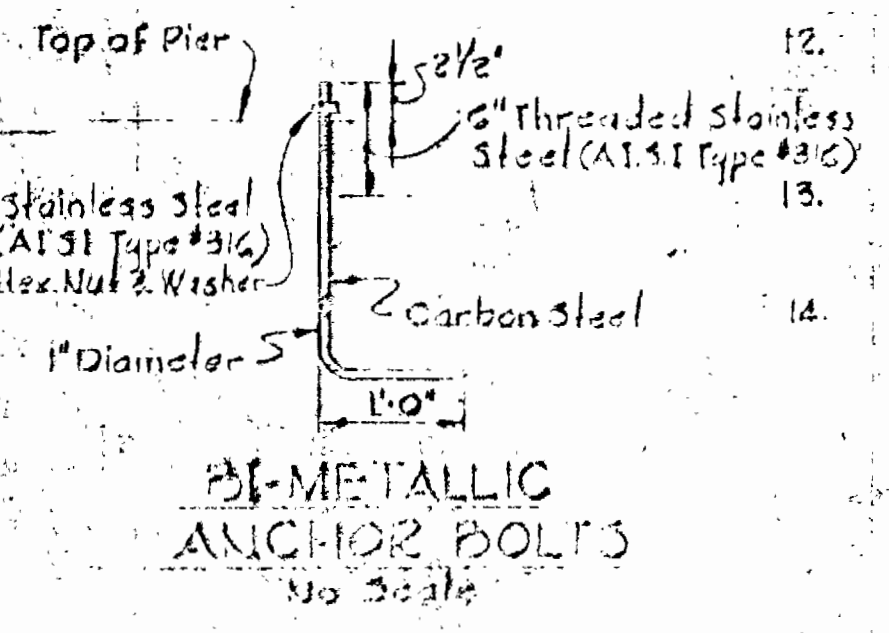
NOTE:
20" Flange Outlet to be painted with Inertol Co. or approved equal, Primer No. 622 and 2-coats No. 49 Thick.



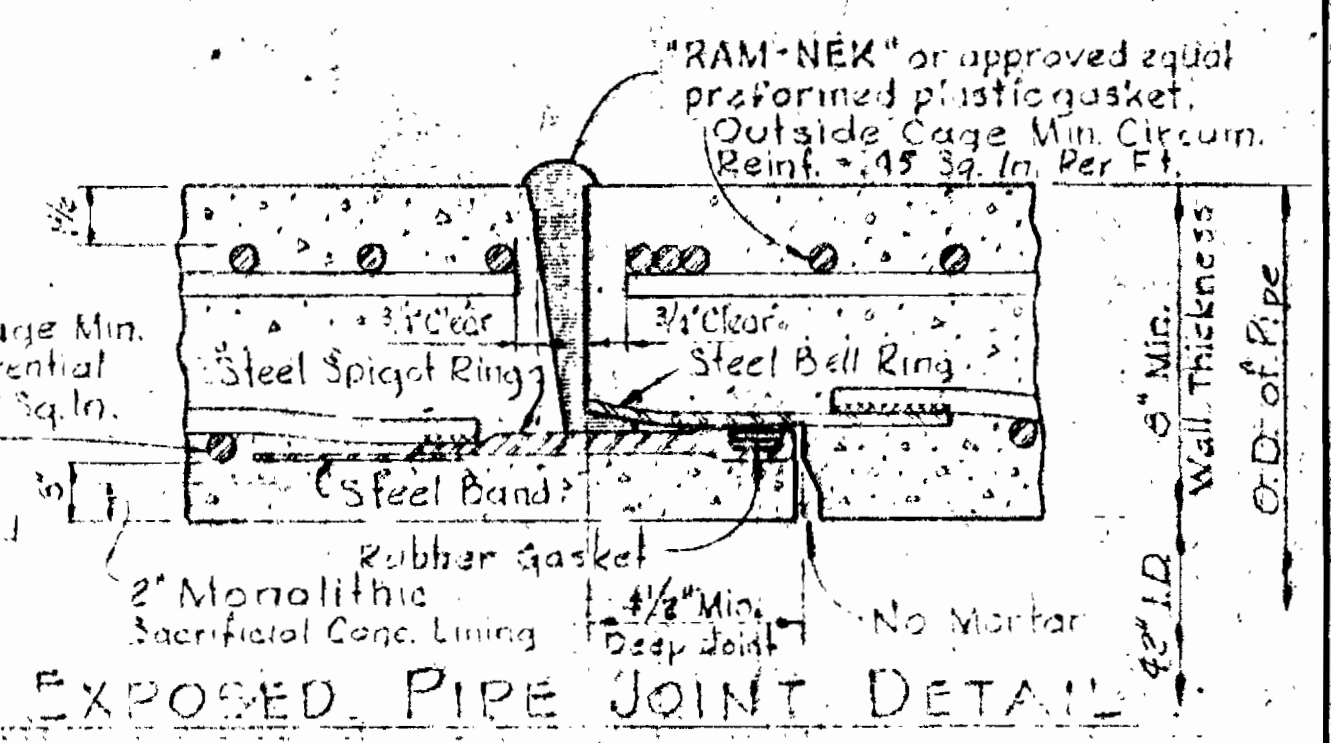
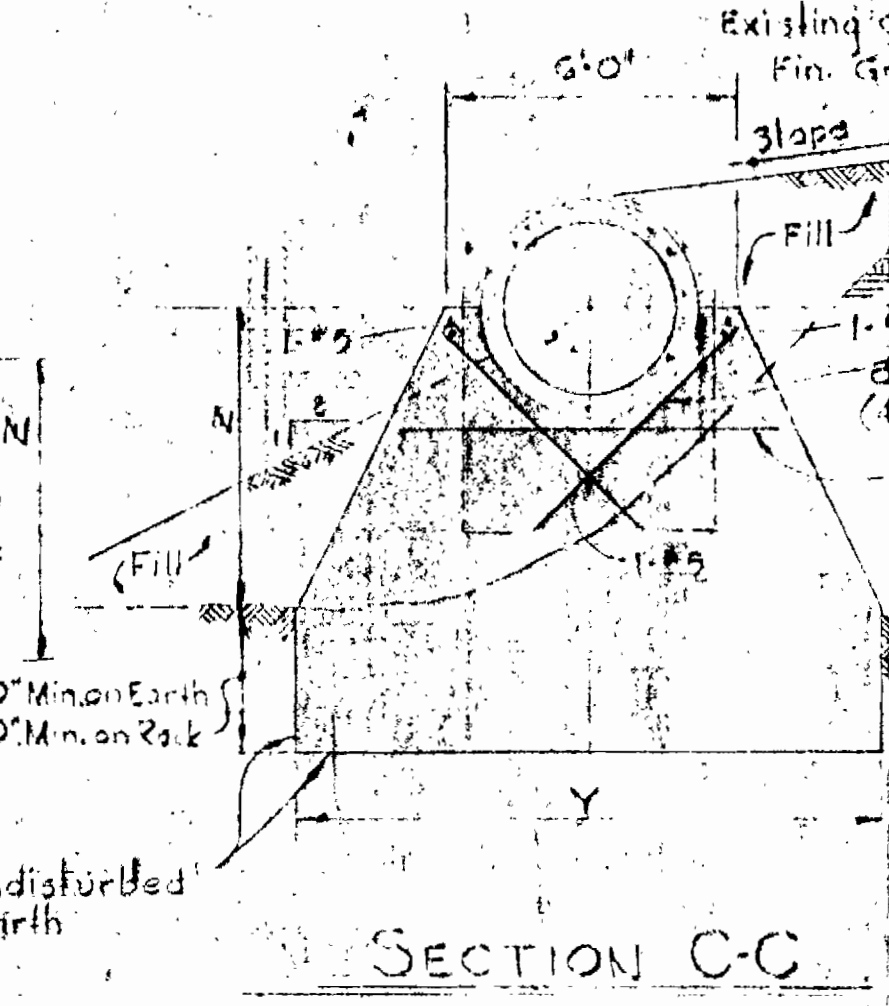
DETAIL OF ENTRY PORT
Scale: 3/8" = 1'-0"



Note:
See Sheet No. B For Typical Type B Pier Detail



TYPE 'A' PIER DETAILS
Scale: 1/4" = 1'-0"



APPROVED: *James M. Lind*
DIRECTOR & CHIEF SANITARY ENGINEER

BALTIMORE COUNTY
DEPARTMENT OF PUBLIC WORKS
APPROVED: *James M. Lind*
DIRECTOR & CHIEF SANITARY ENGINEER
DATE: 7/12/67

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BALTIMORE, MARYLAND

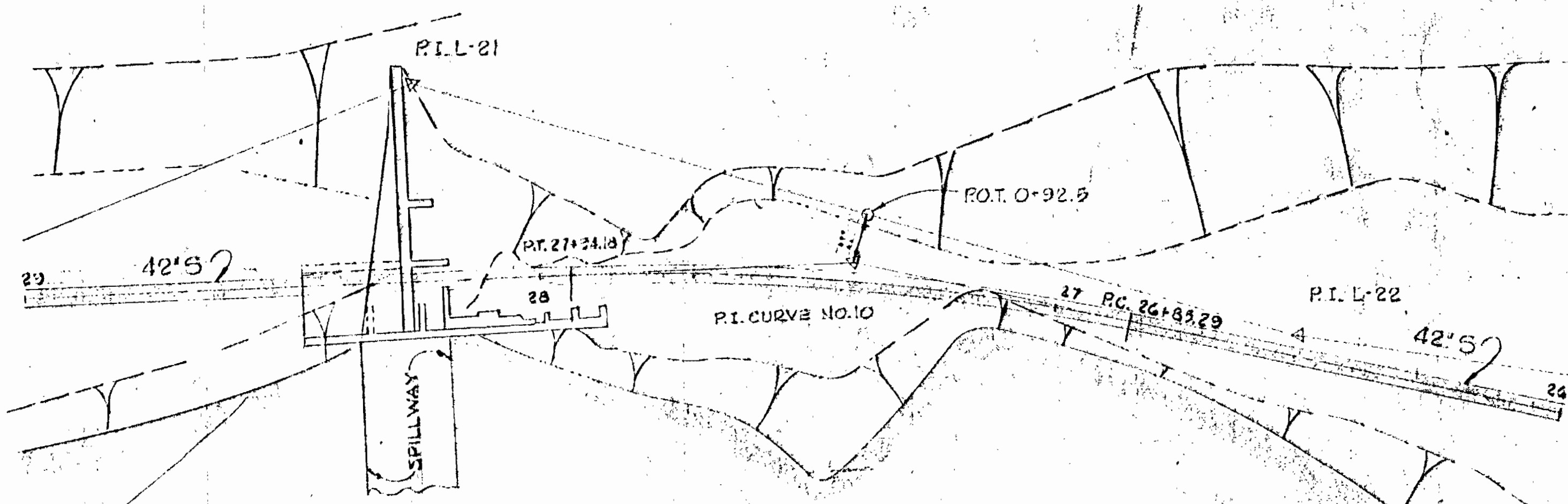
HOWARD COUNTY METROPOLITAN COMMISSION
DATE: 7-12-67
W. O. Falbert
CHIEF ENGINEER

CONTRACT NO. 145-S

PATAPSCO INTERCEPTOR
DETAILS
OAK FOREST BRANCH TO THISTLE BRANCH

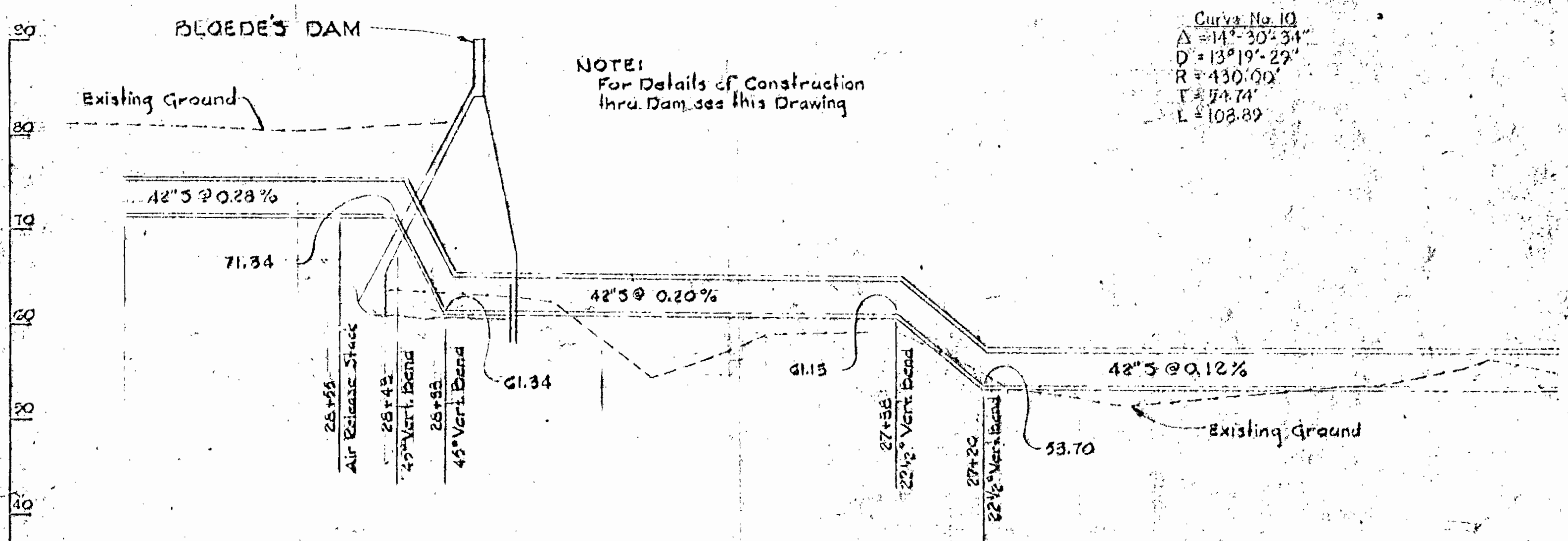
ELECTION DISTRICT
ELLICOTT CITY NO. 2

DRAWING NO. 6 OF 9
SCALE AS SHOWN

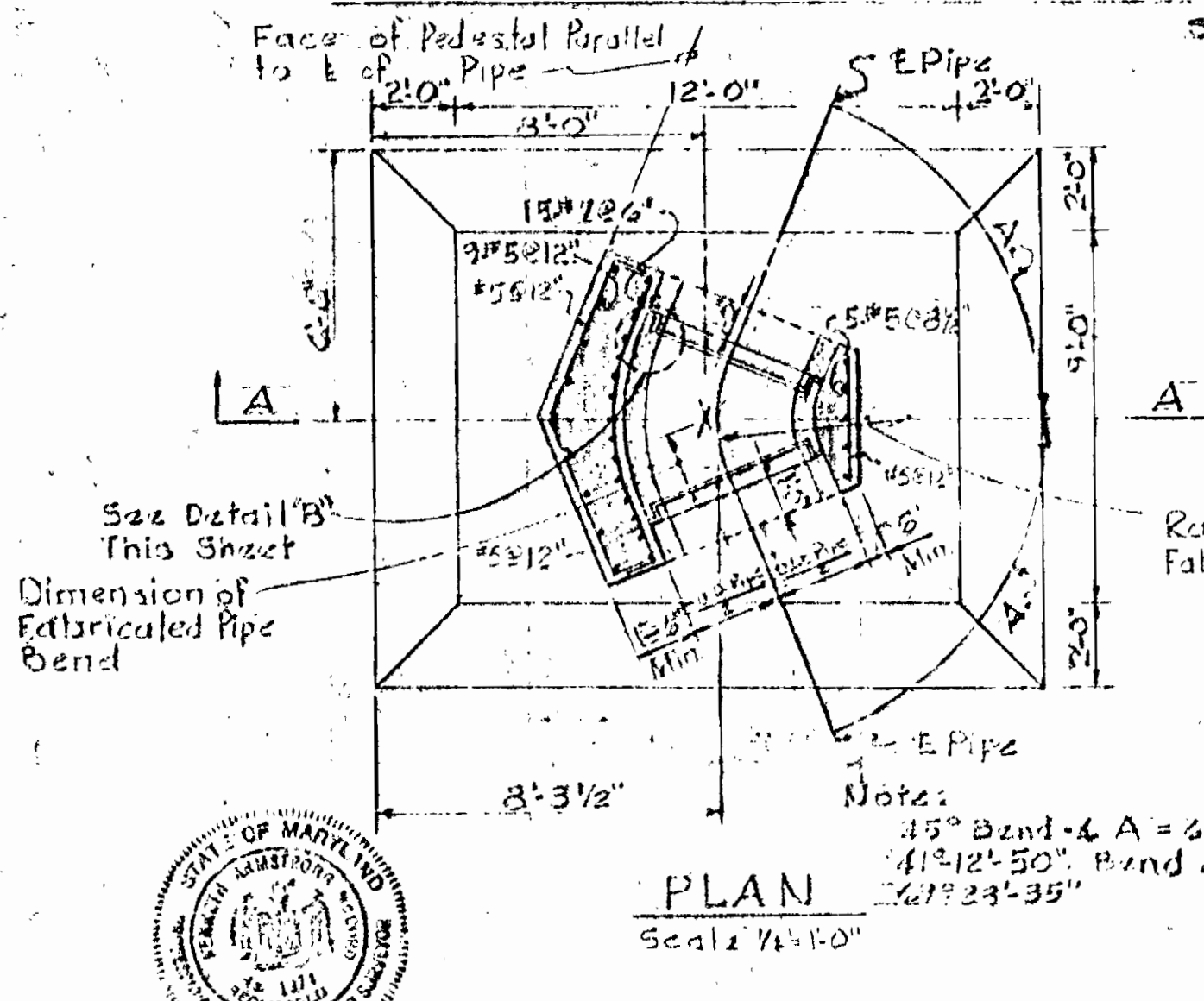


PLAN - BLOEDE'S DAM & VICINITY
Scale: 1"=20'

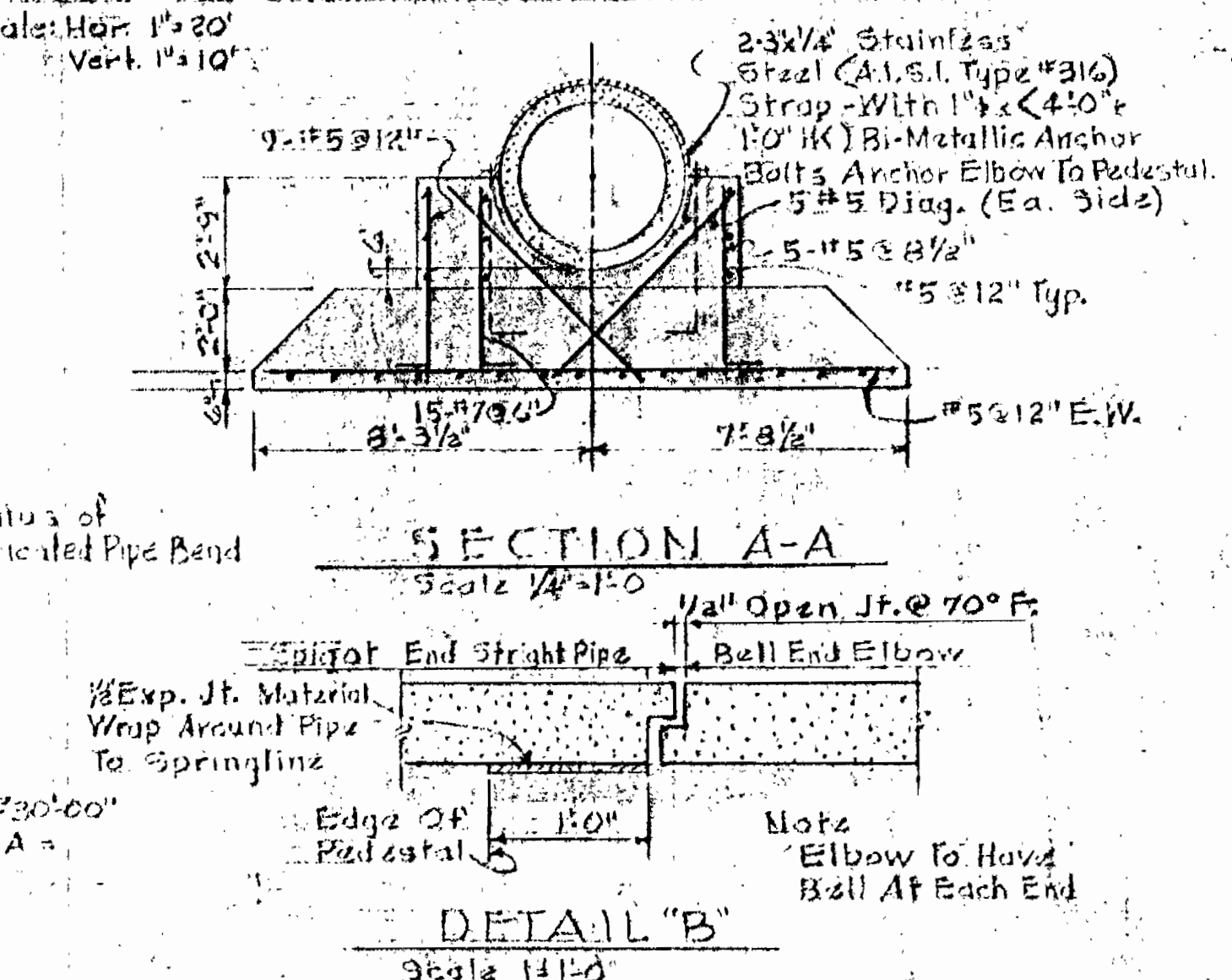
Curve No. 10
 $\Delta = 14^\circ 30' 34''$
 $D = 130' 19' 29''$
 $R = 430' 00''$
 $L = 74.74'$
 $E = 108.89'$



PROFILE OF 42" INTERCEPTER SEWER THRU BLOEDE'S DAM
Scale: Horz. 1"=20' Vert. 1"=10'



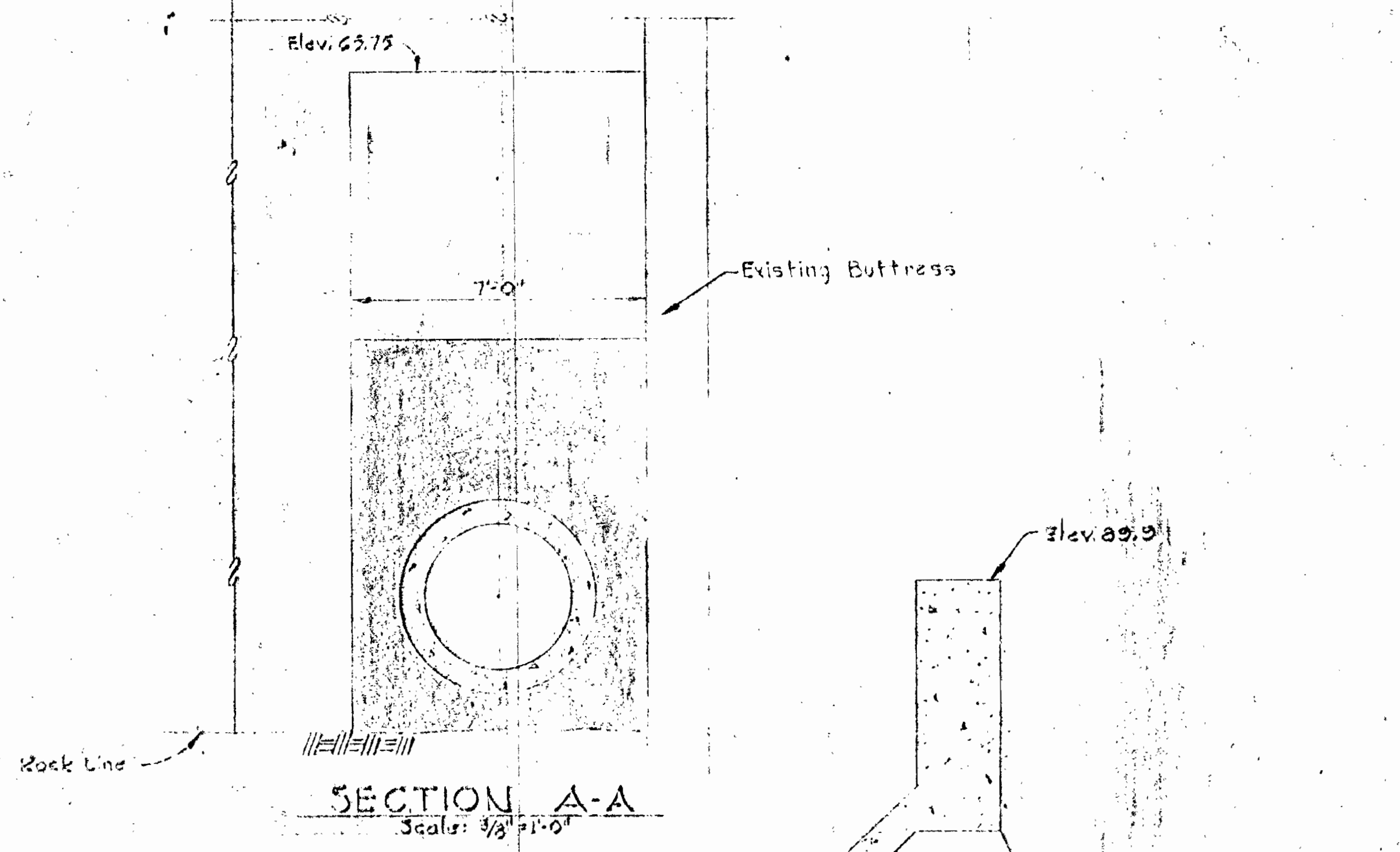
PLAN
Scale: 1/4"=1'-0"



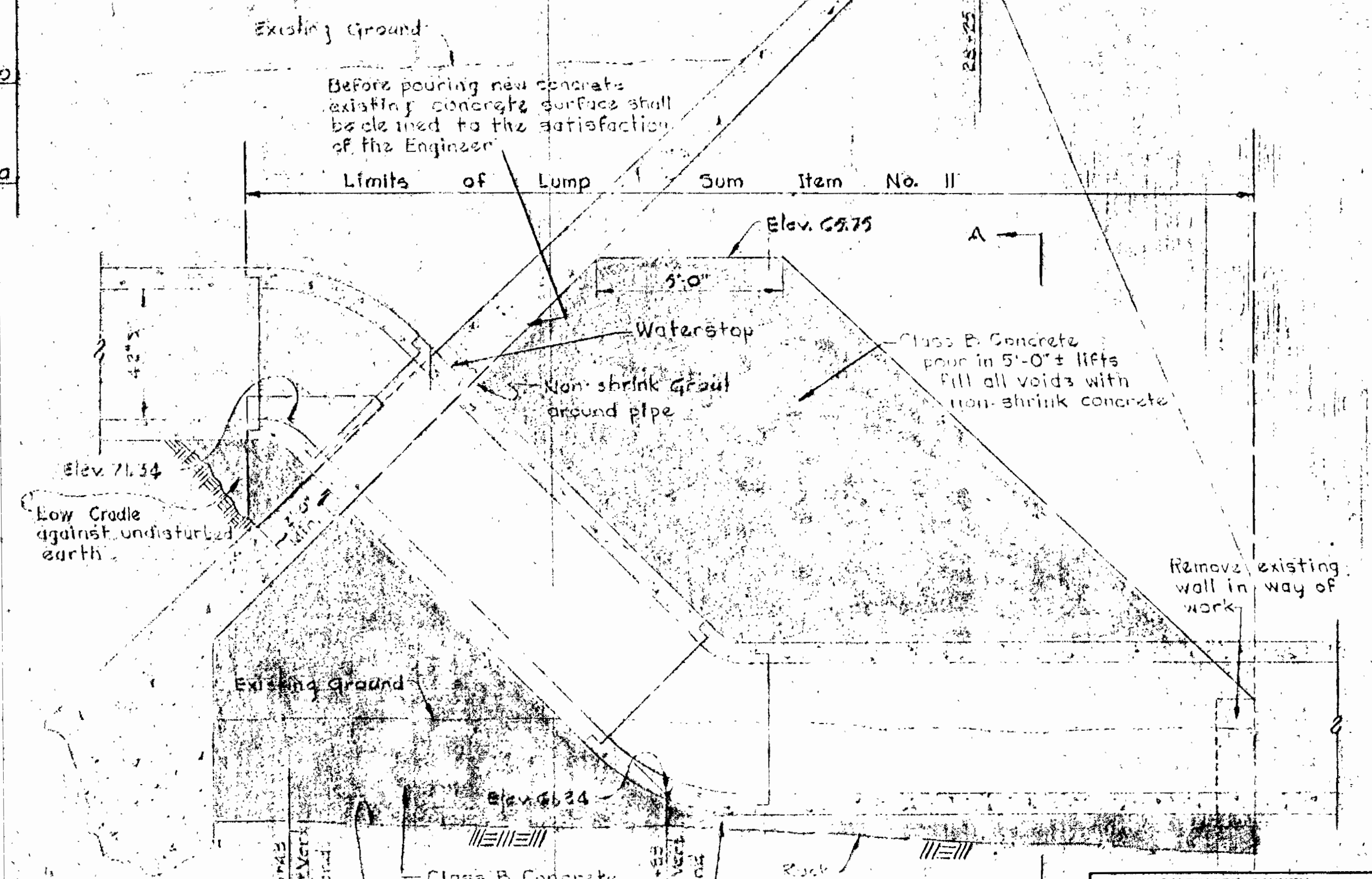
SECTION A-A
Scale: 1/4"=1'-0"

DETAIL "B"
Scale: 1/4"=1'-0"

PIPE SUPPORT FOR BENDS AT PI-22 & PI-23
Scale: As Shown



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



SECTION AT BLOEDE'S DAM
Scale: 3/8"=1'-0"



Whitman, Requardt & Associates

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 BALTIMORE, MARYLAND

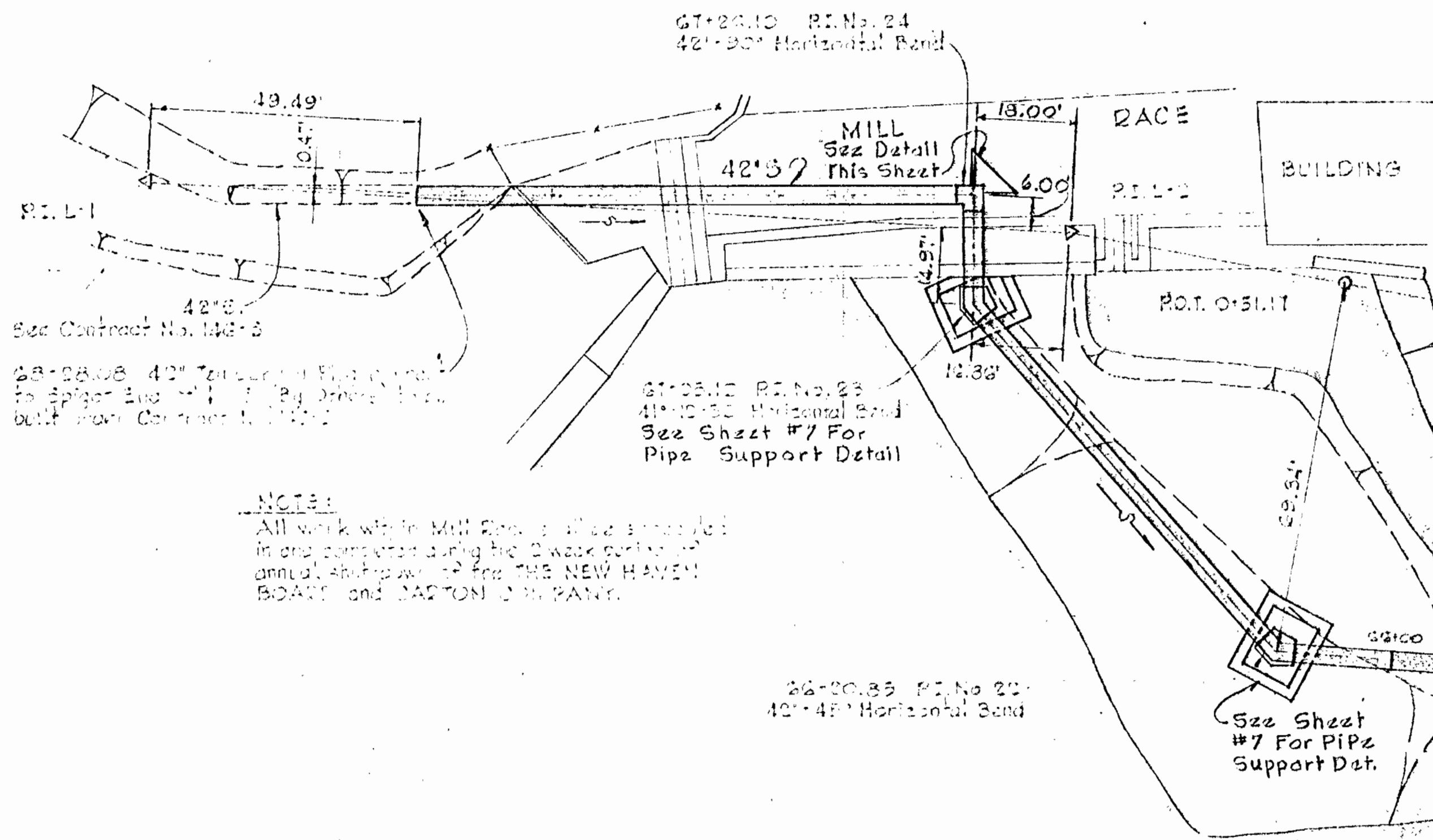
HOWARD COUNTY METROPOLITAN COMMISSION
 1-17-67
 DATE
W. O. S. [Signature]
 CHIEF ENGINEER

CONTRACT NO. 145-S

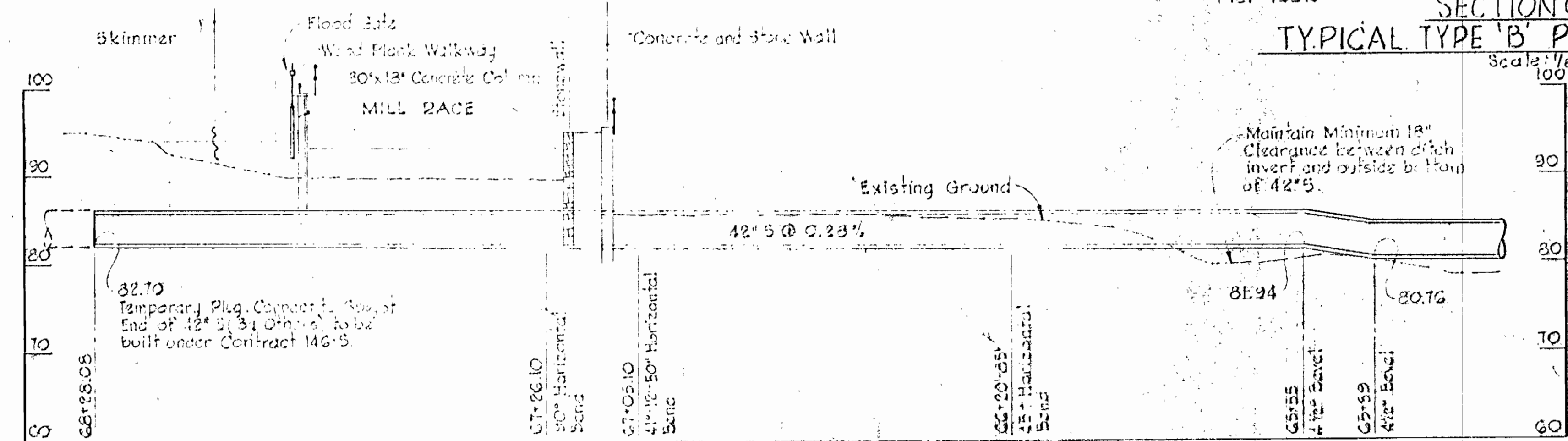
PATARSCO INTERCEPTOR
 PLAN, PROFILE & SECTION
 OAK FOREST BRANCH TO THISTLE BRANCH

ELECTION DISTRICT
 ELLICOTT CITY NO. 2

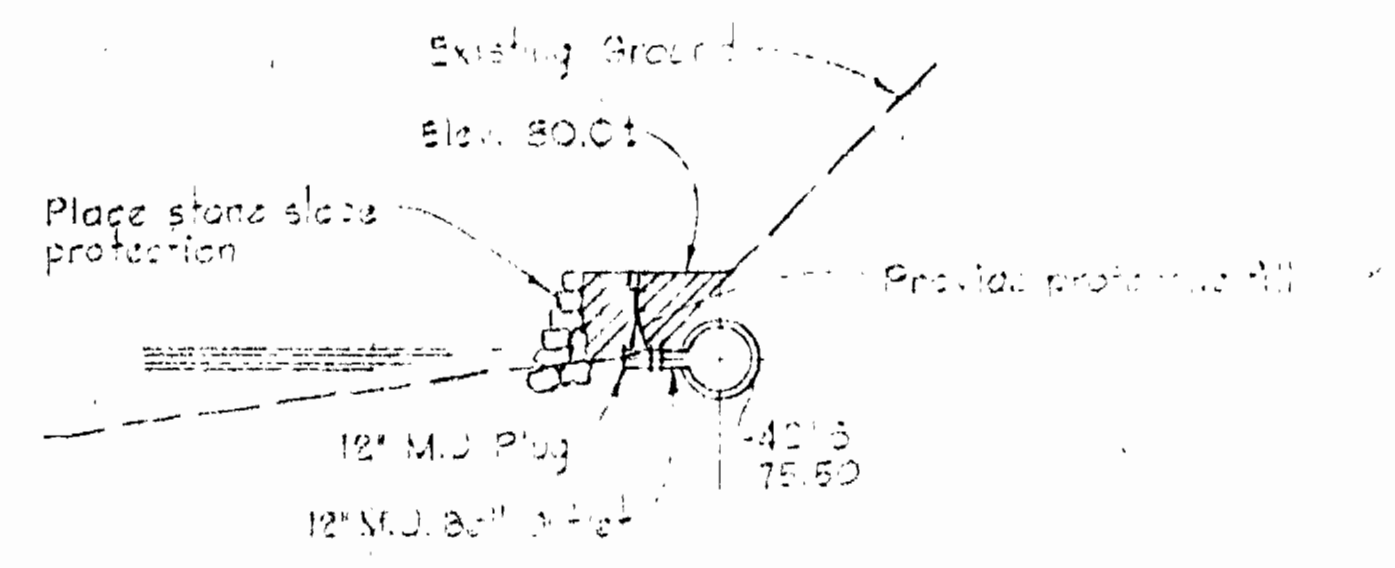
BALTIMORE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 APPROVED *[Signature]*
 DIRECTOR & CHIEF SANITARY ENGINEER
 DATE 1/12/67



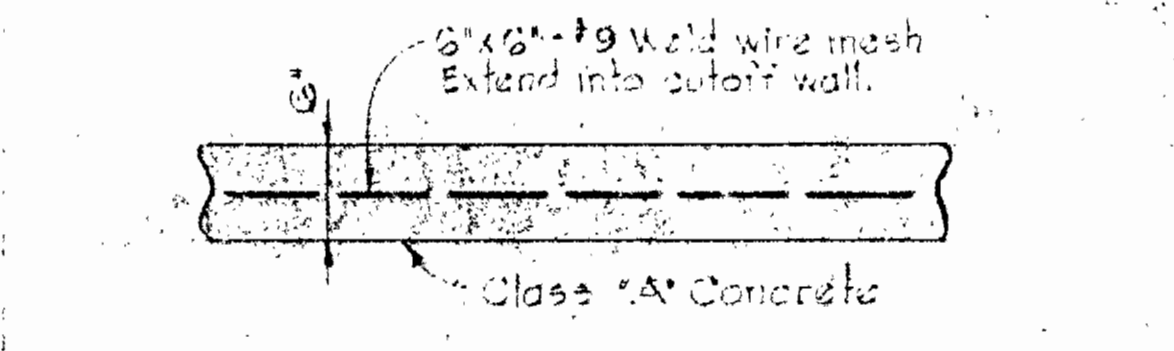
PLAN OF THISTLE DAM AND VICINITY
Scale: 1" = 20'



PROFILE OF 42" INTERCEPTOR SEWER THRU THISTLE DAM
Scale: Horiz. 1" = 20', Vert. 1" = 10'

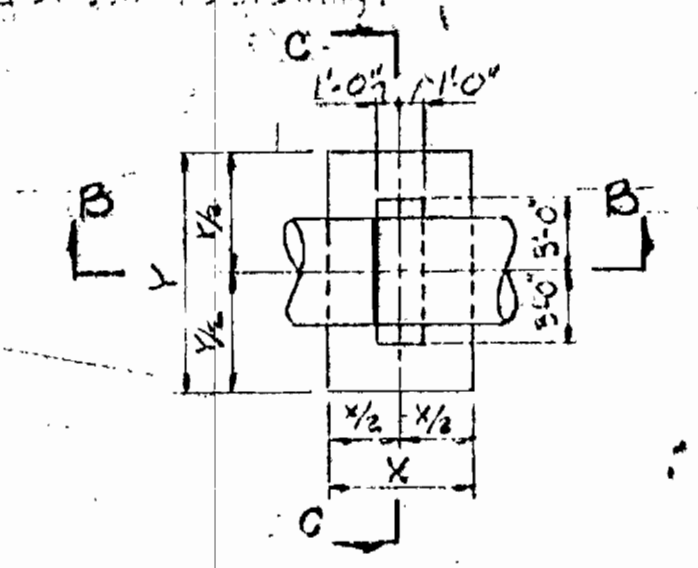


SECTION AT STATION 43+28
Scale: Horiz. 1" = 10', Vert. 1" = 10'

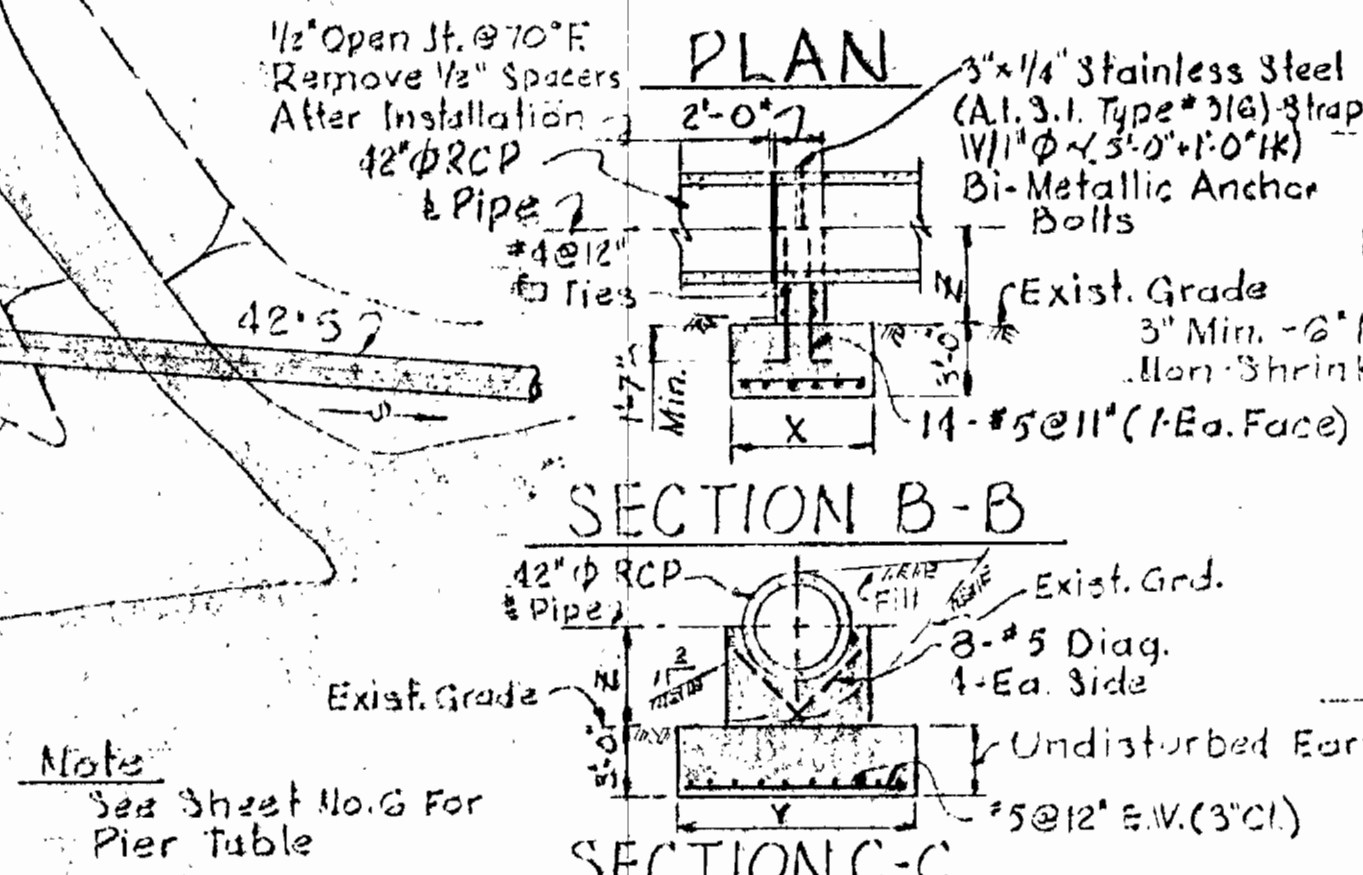


TYPICAL CONCRETE PAVING
No Scale

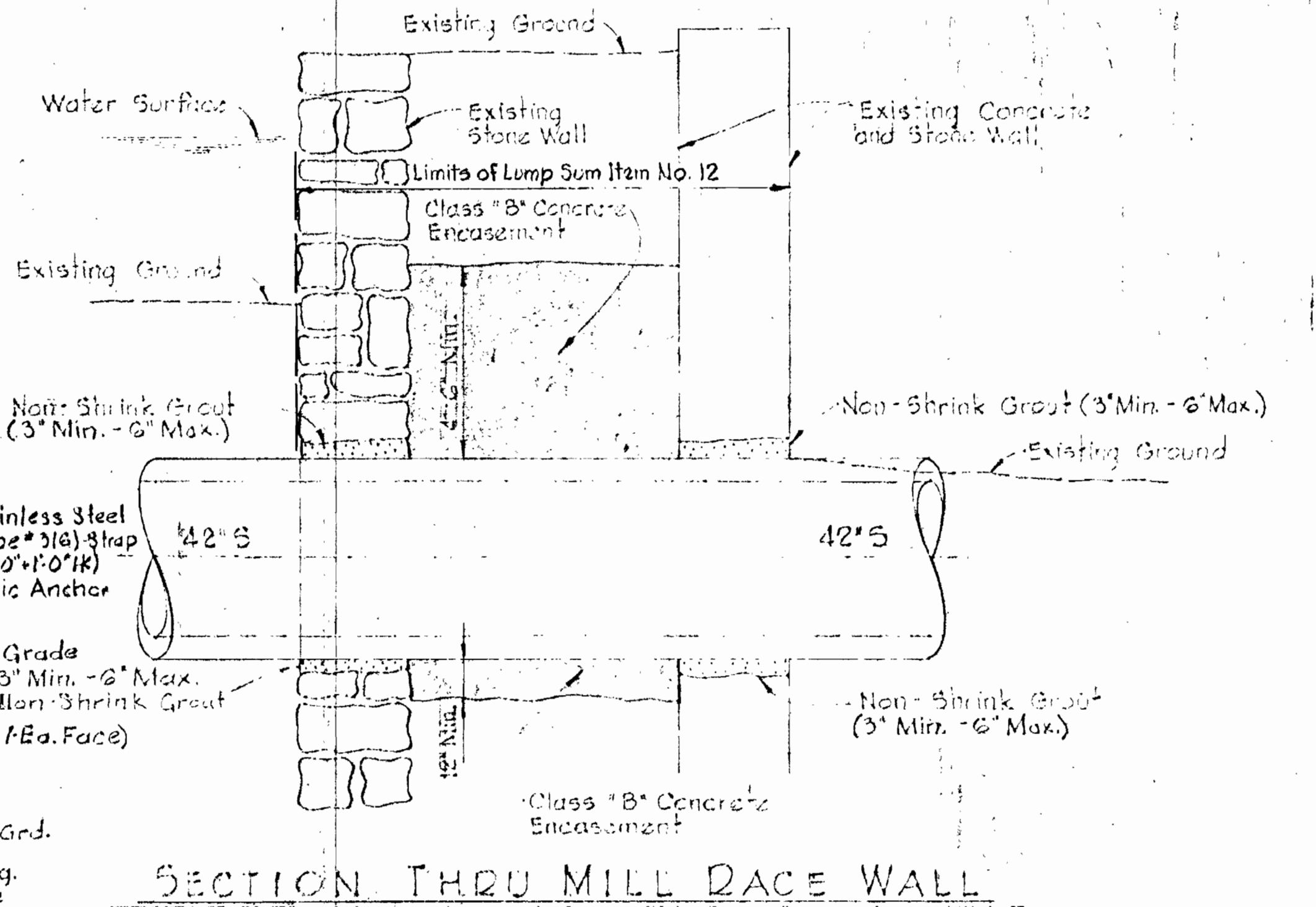
- NOTE:**
1. For construction details thru Mill Race wall see this drawing.
 2. For details of blocking of Horizontal Bands at P.I. No. 22, 23 and 24 see this drawing.



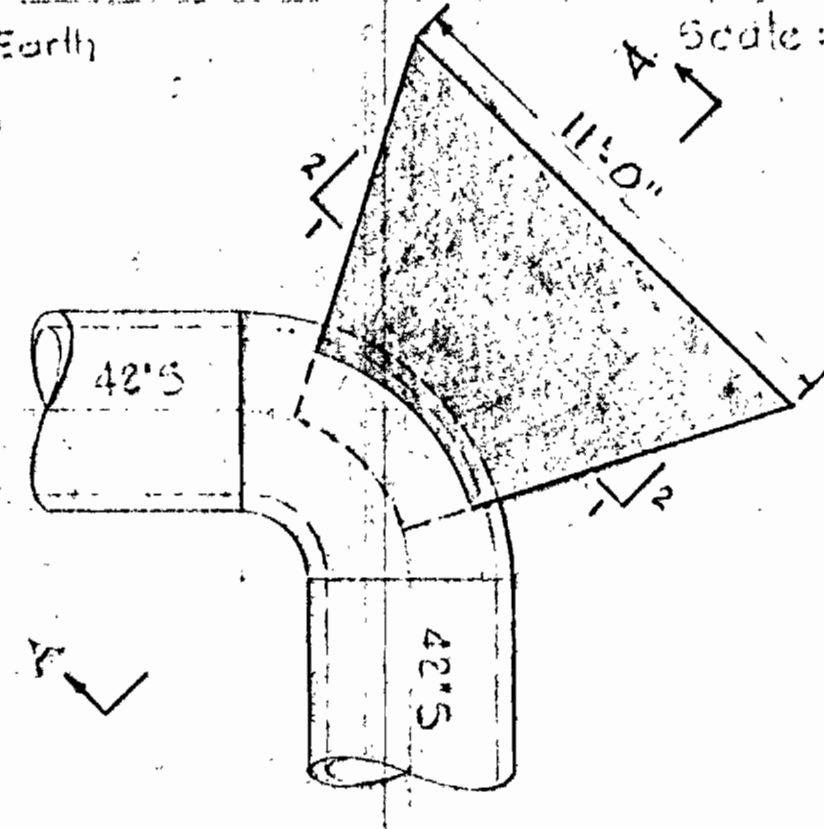
SECTION B-B
Scale: 3/8" = 1'-0"



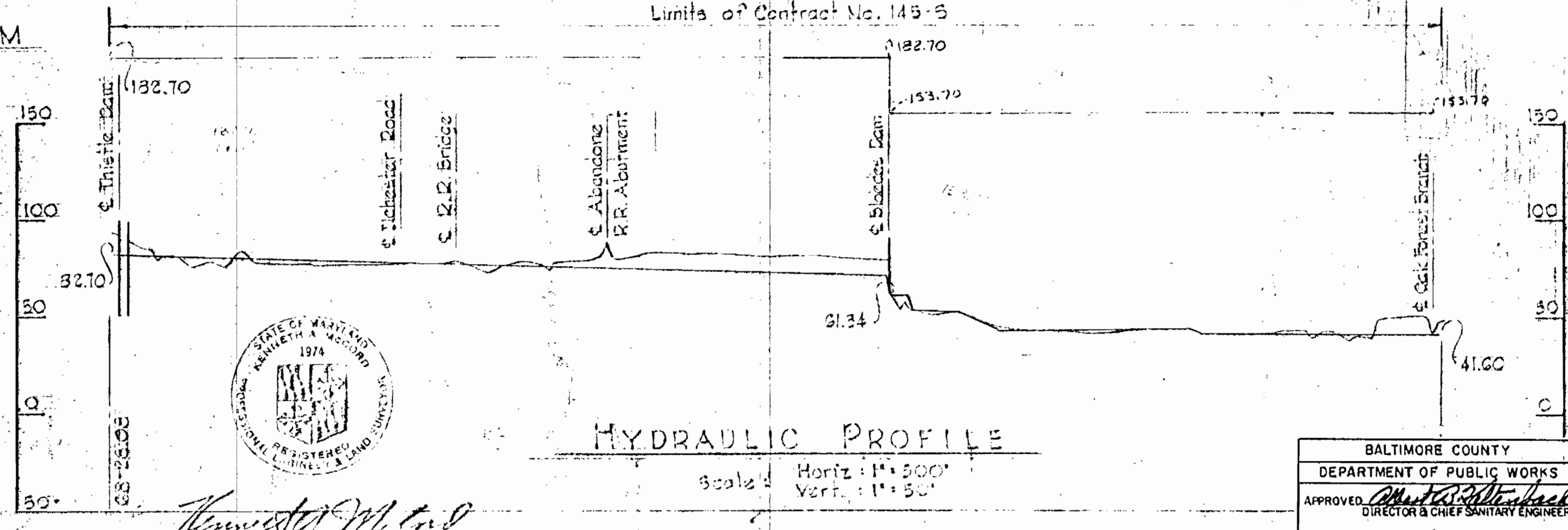
TYPICAL TYPE 'B' PIER DETAIL
Scale: 1/8" = 1'-0"



SECTION THRU MILL DACE WALL
Scale: 3/8" = 1'-0"



BLOCKING DETAIL FOR 90° BEND AT PI. 24
Scale: 1/4" = 1'-0"



HYDRAULIC PROFILE
Scale: Horiz. 1" = 500', Vert. 1" = 5'

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BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE _____
W. O. S. G. T. 2
CHIEF ENGINEER

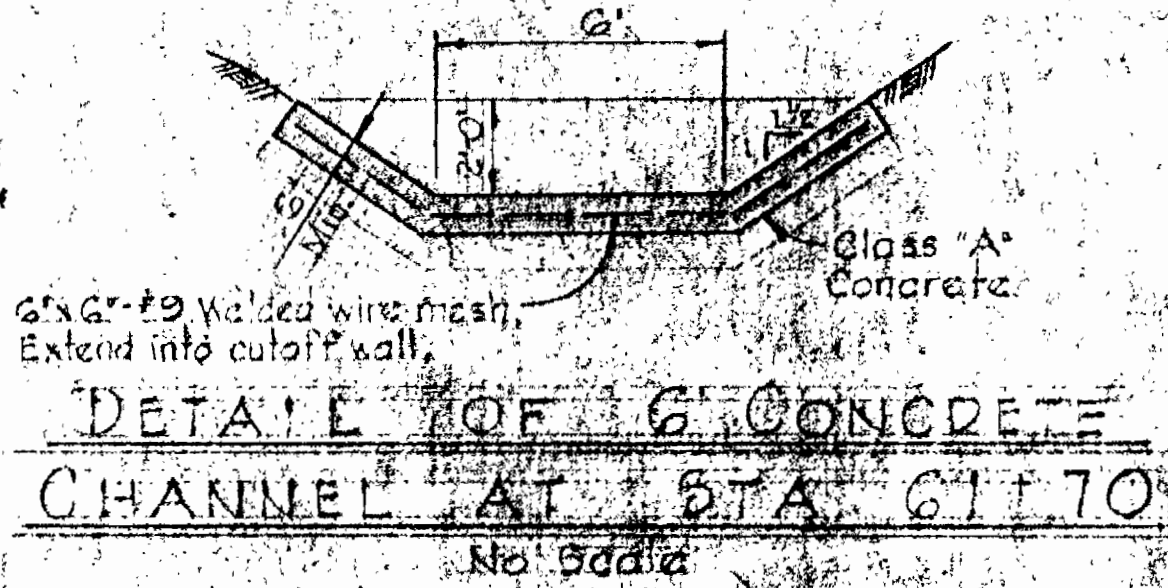
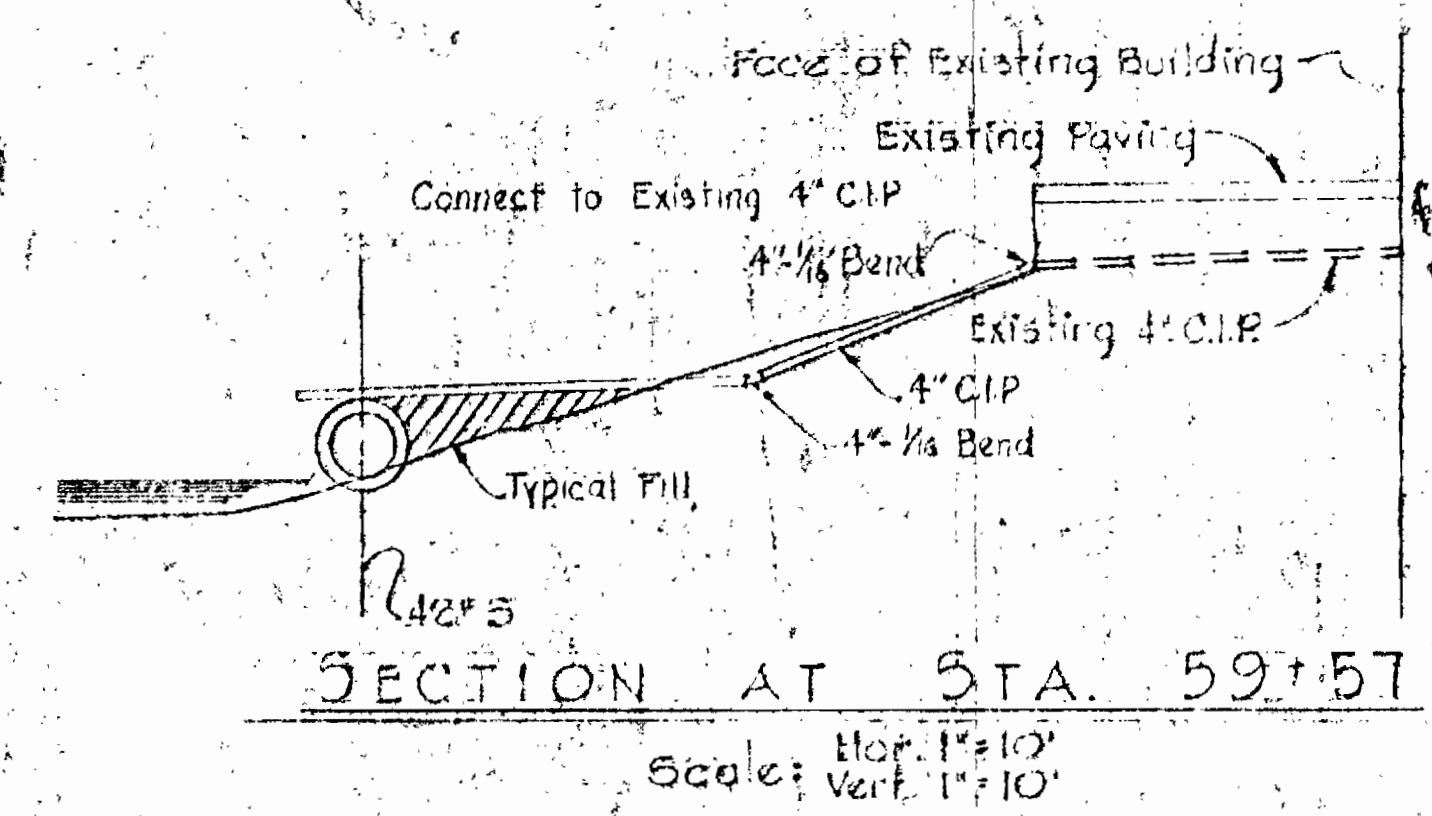
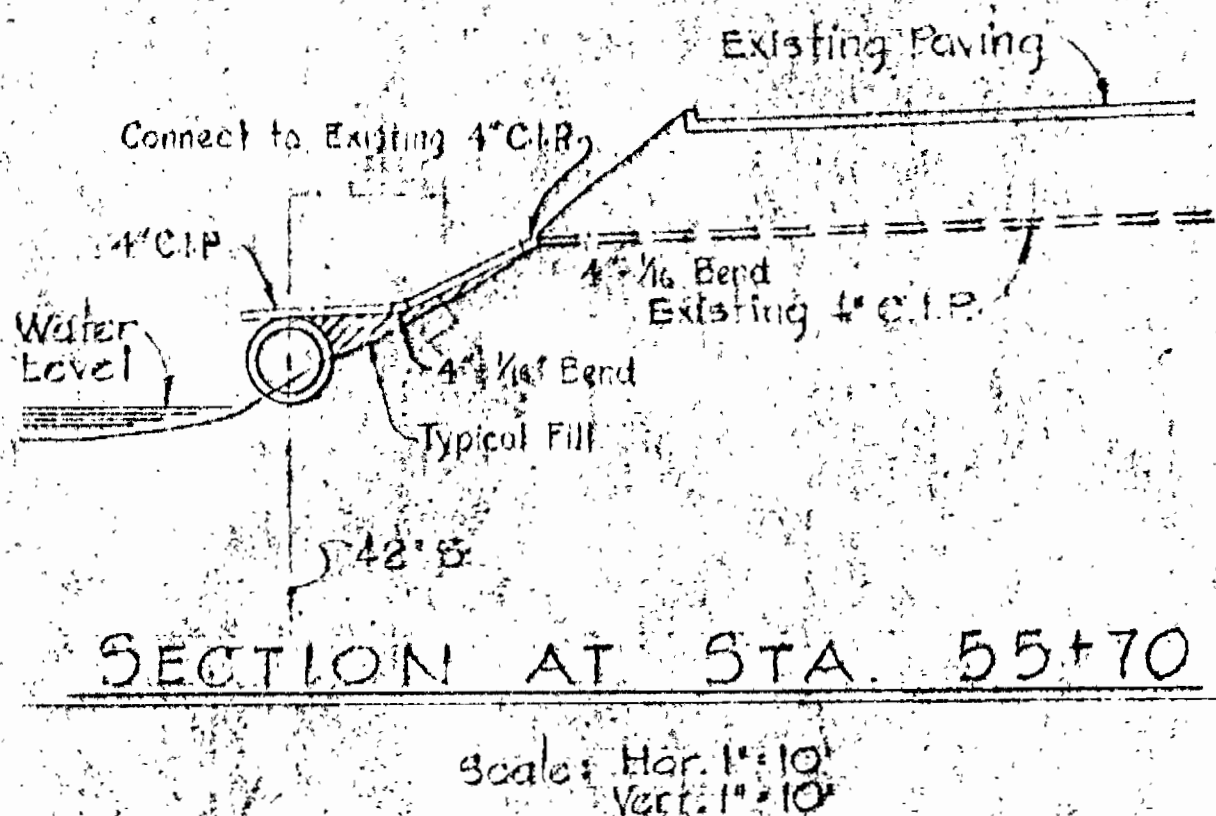
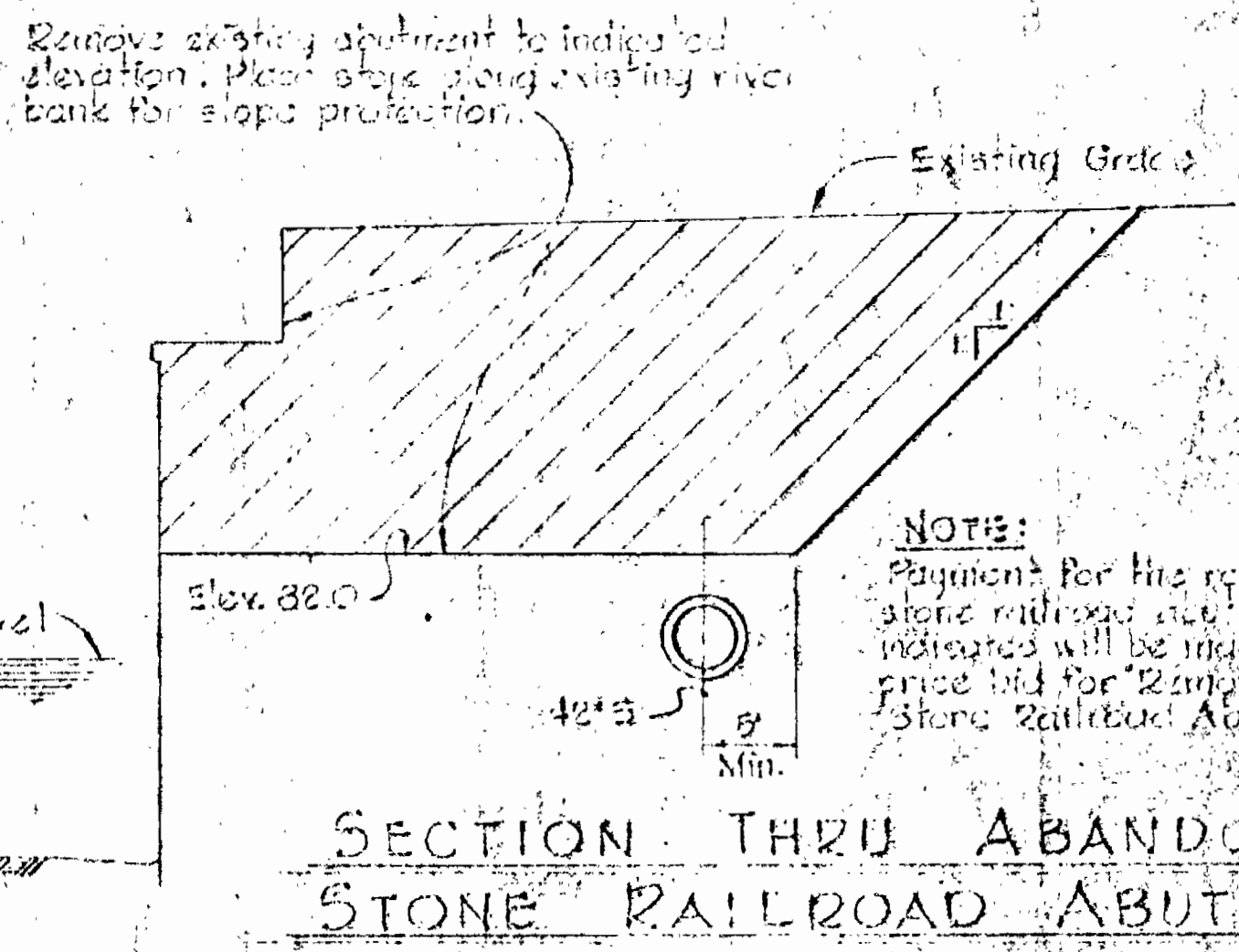
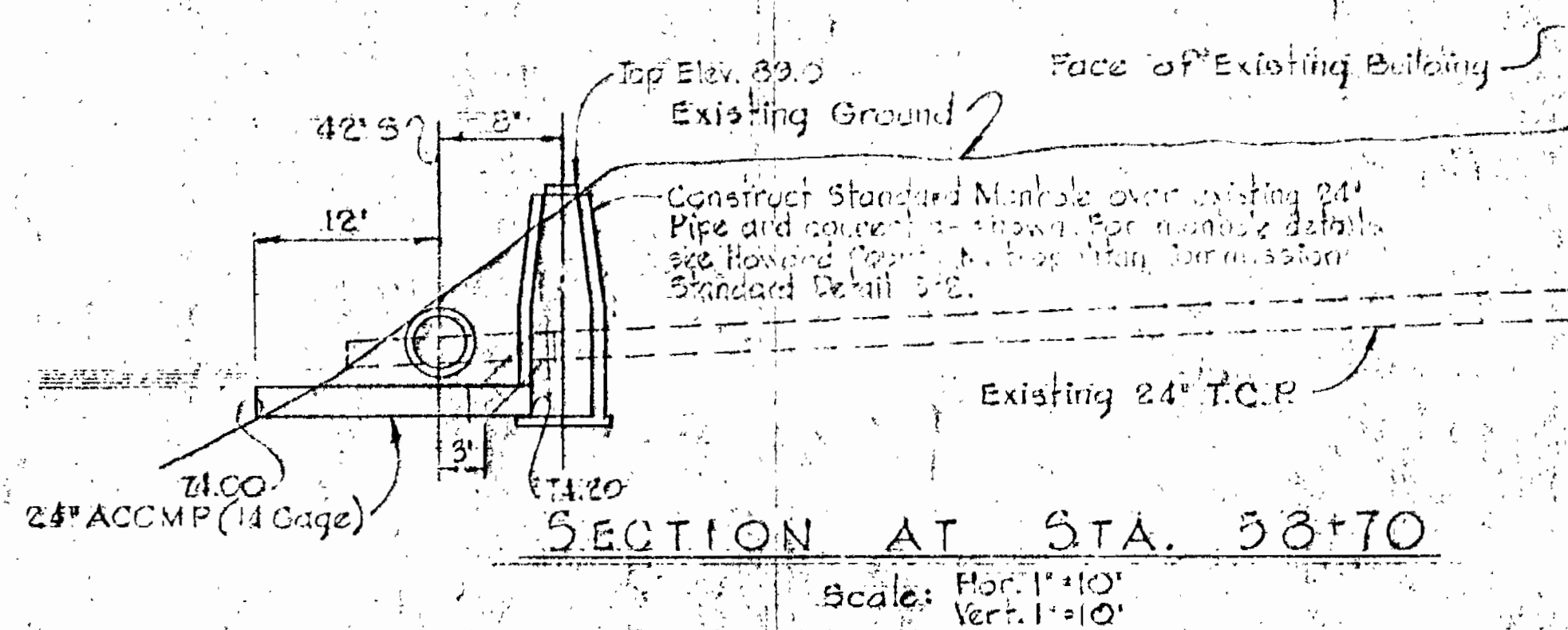
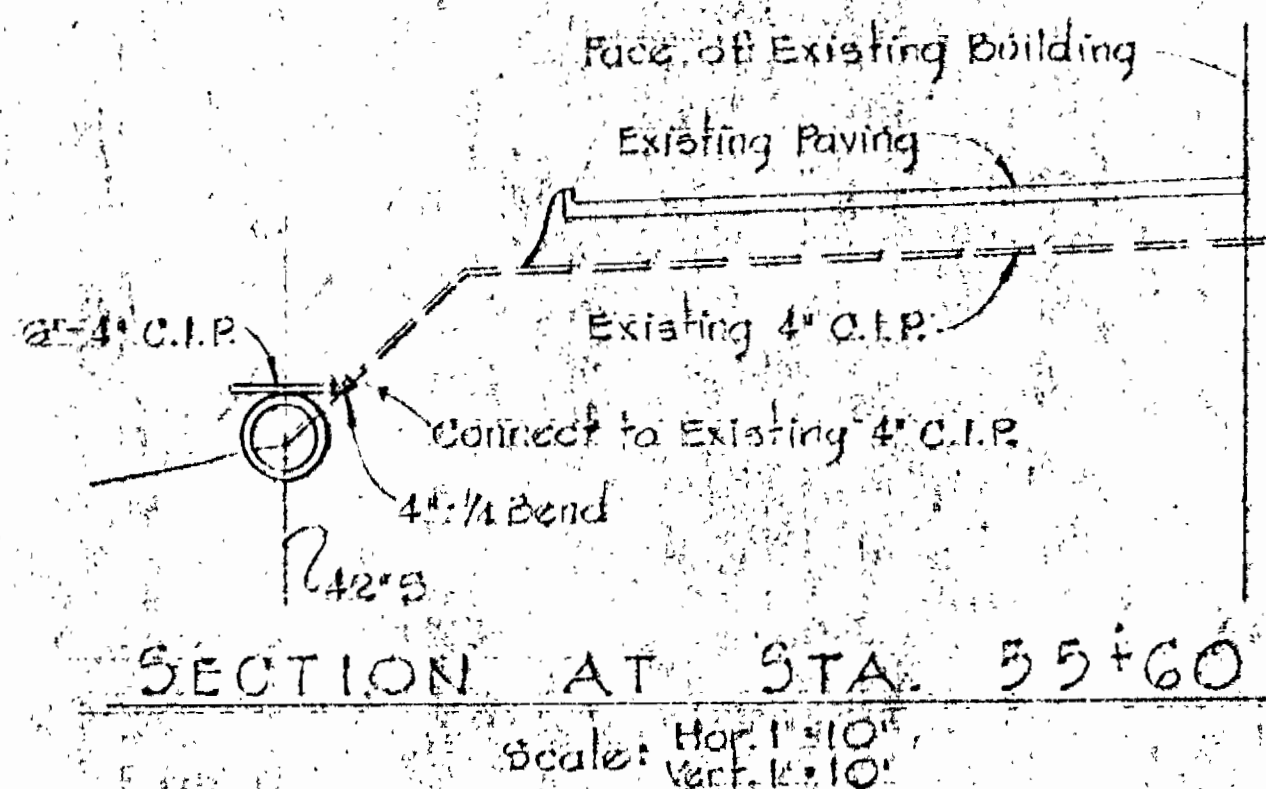
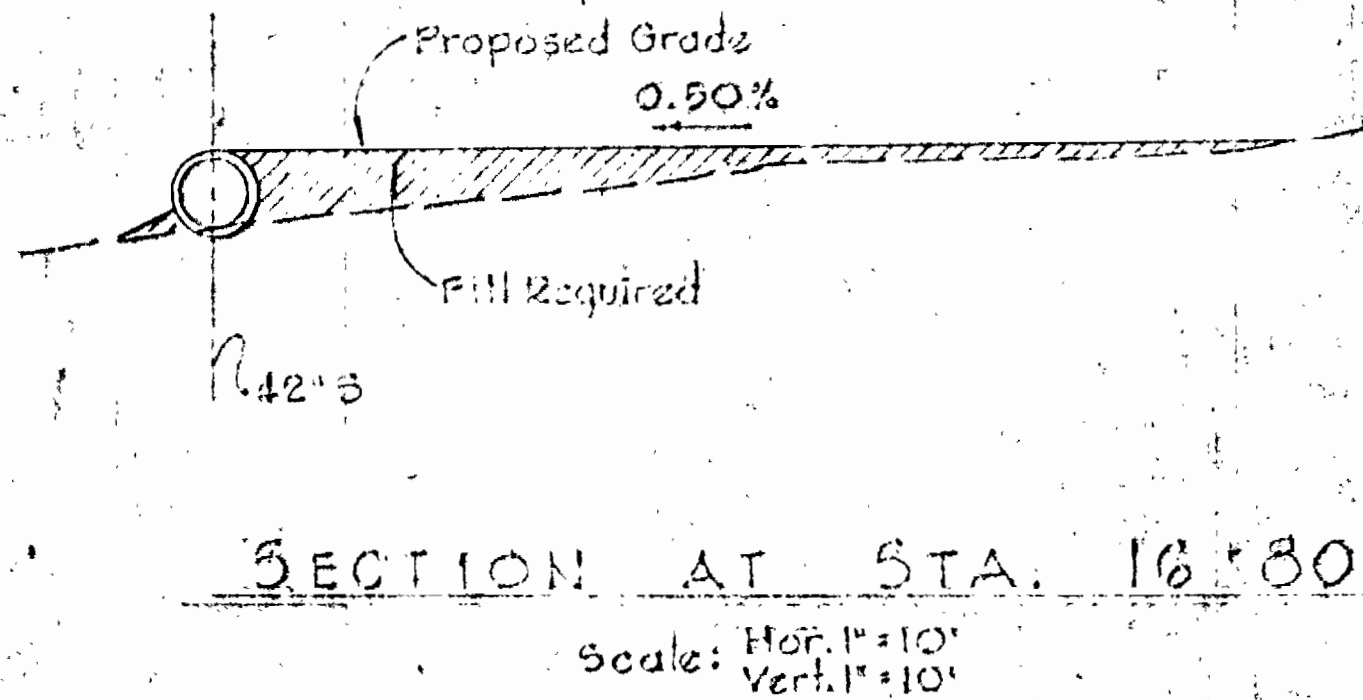
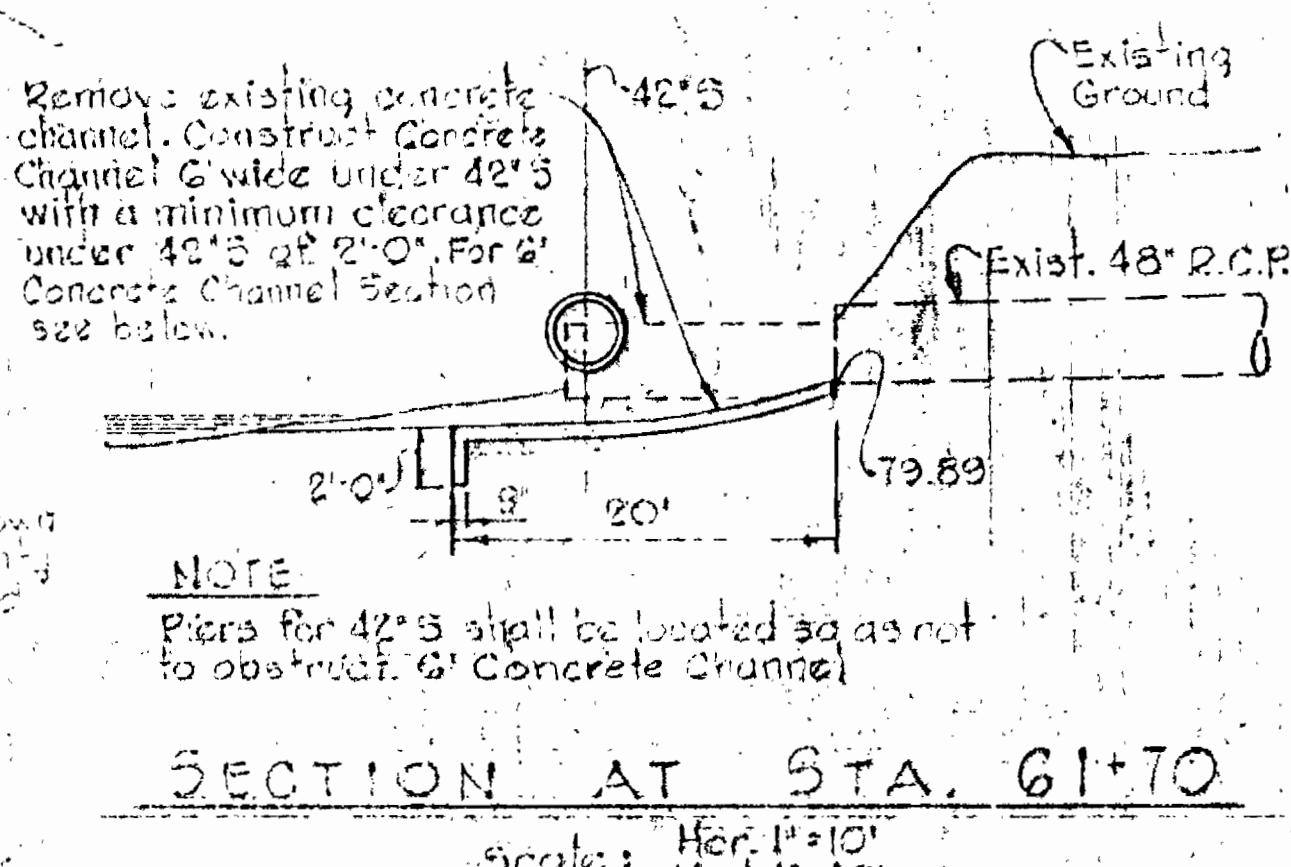
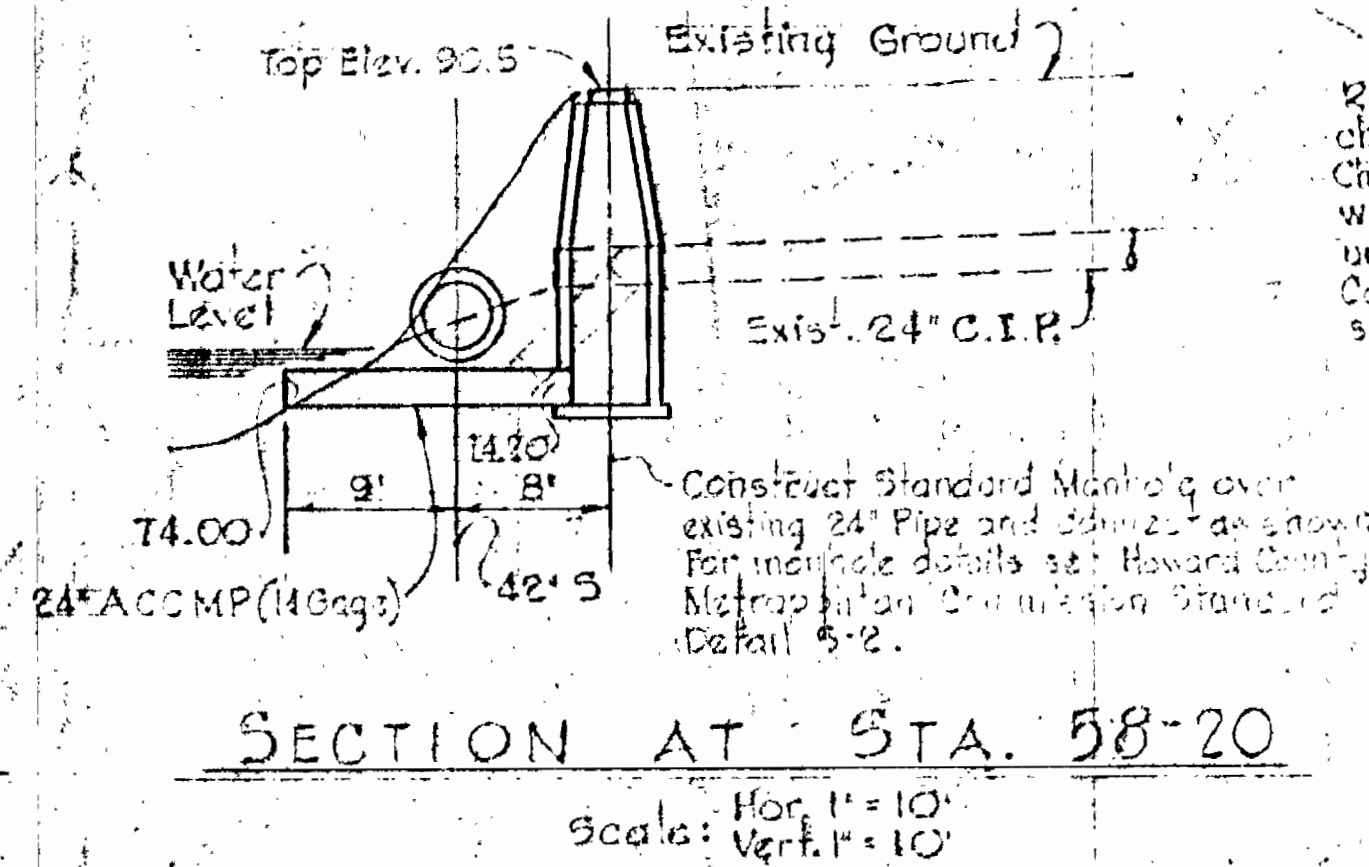
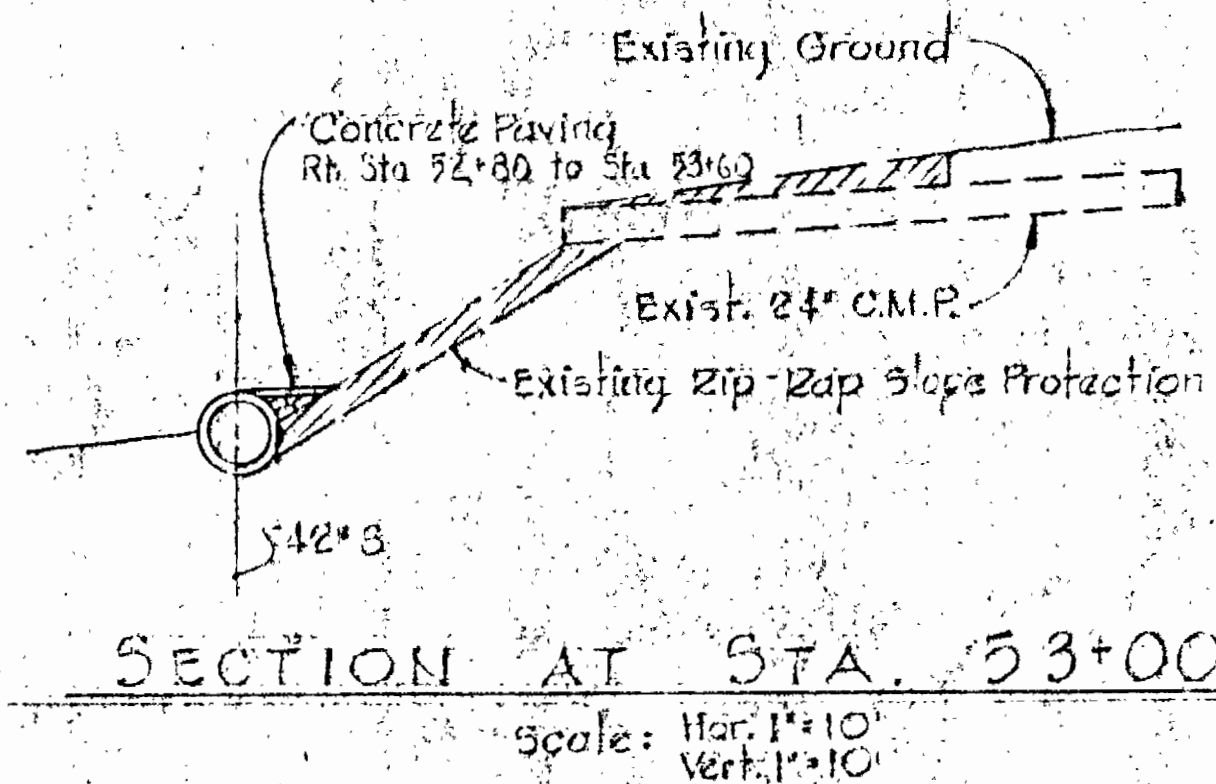
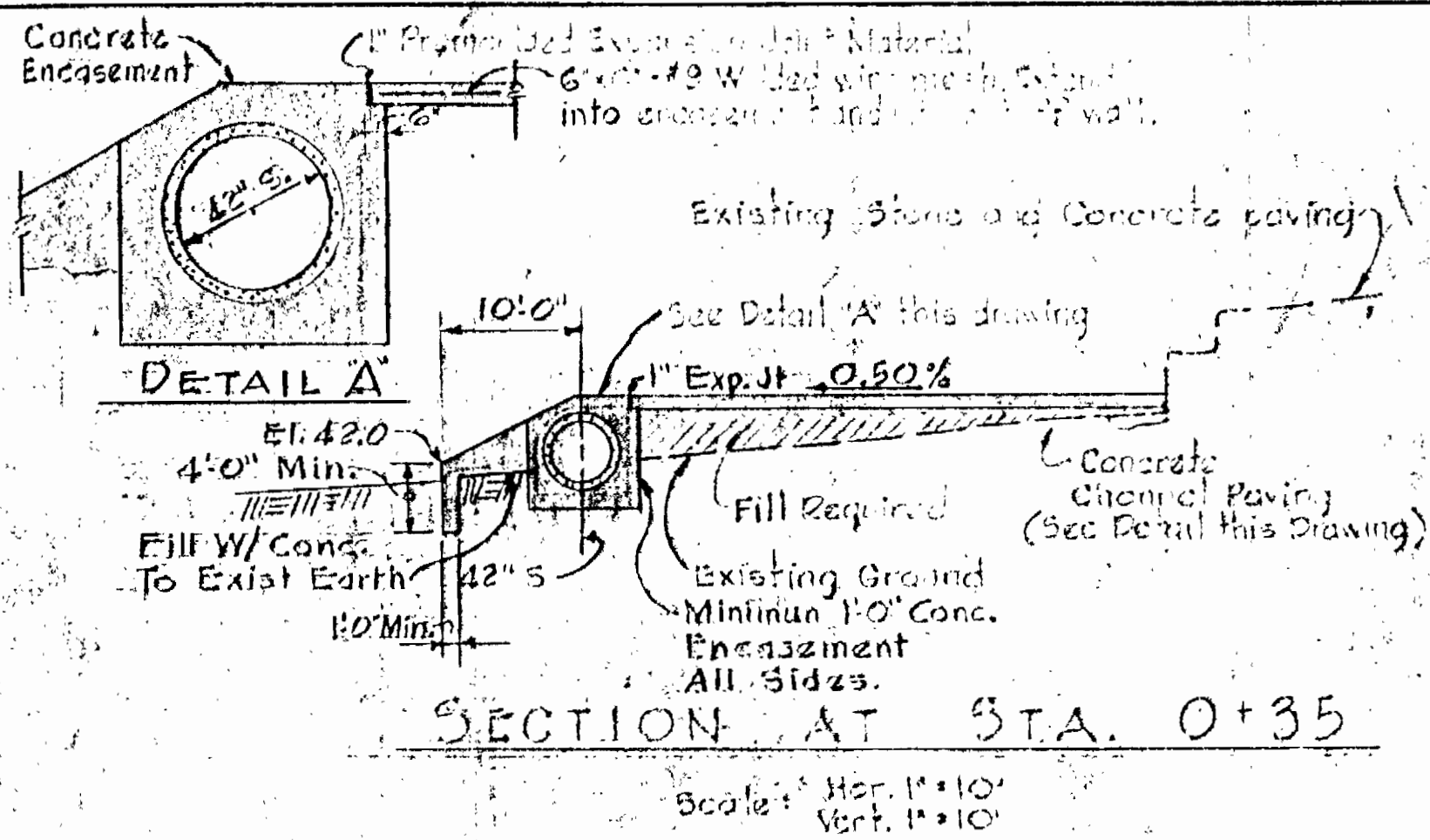
CONTRACT NO. 145-S

PATAPSCO INTERCEPTOR
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OAK FOREST BRANCH TO THISTLE BRANCH

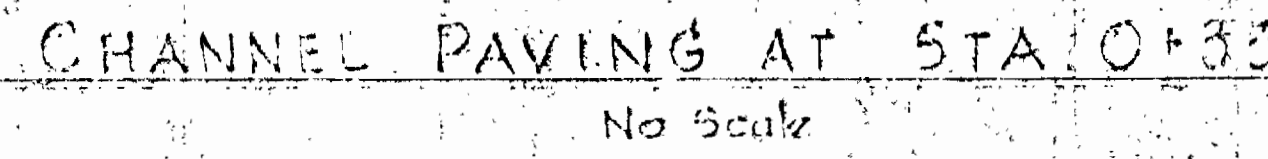
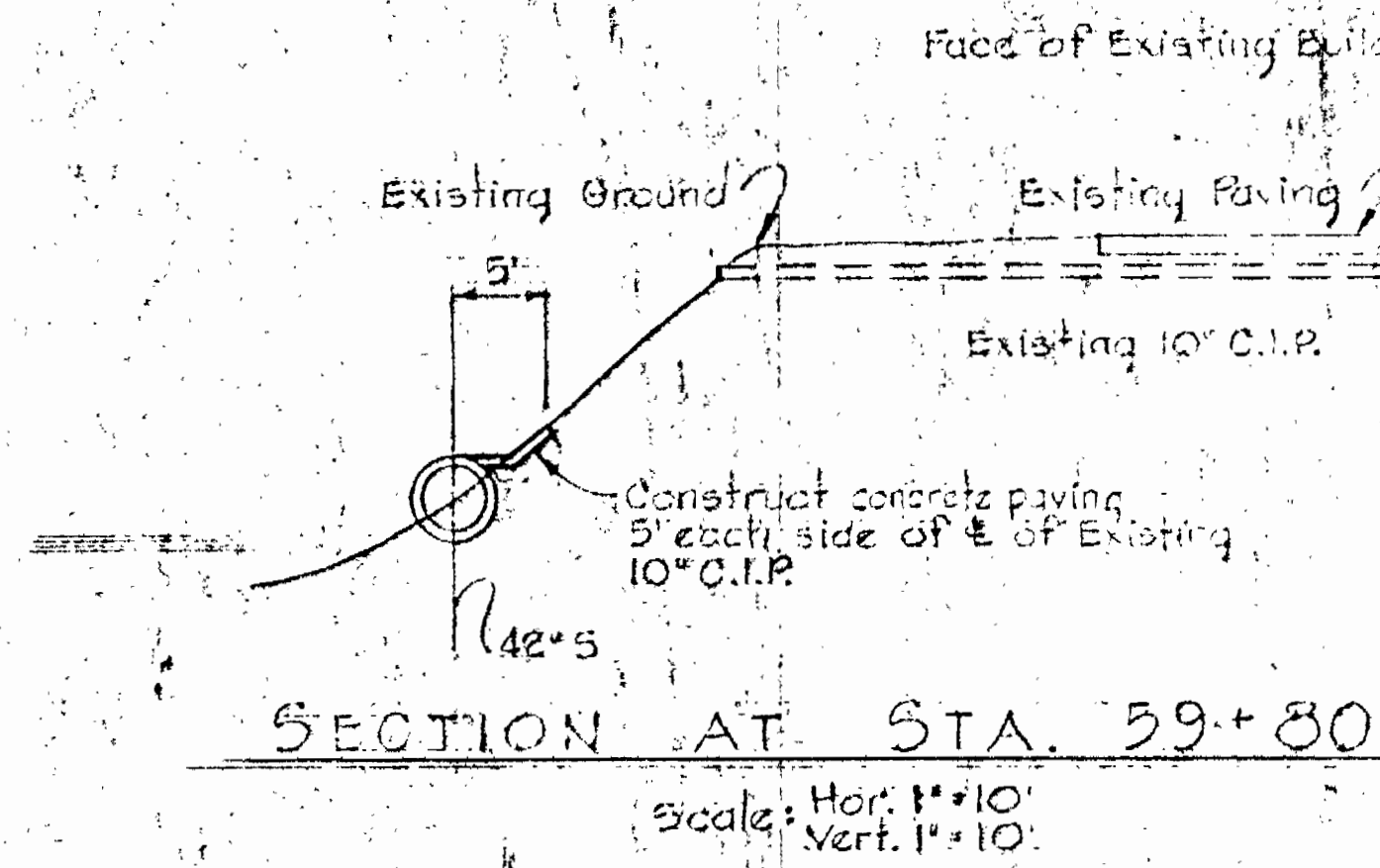
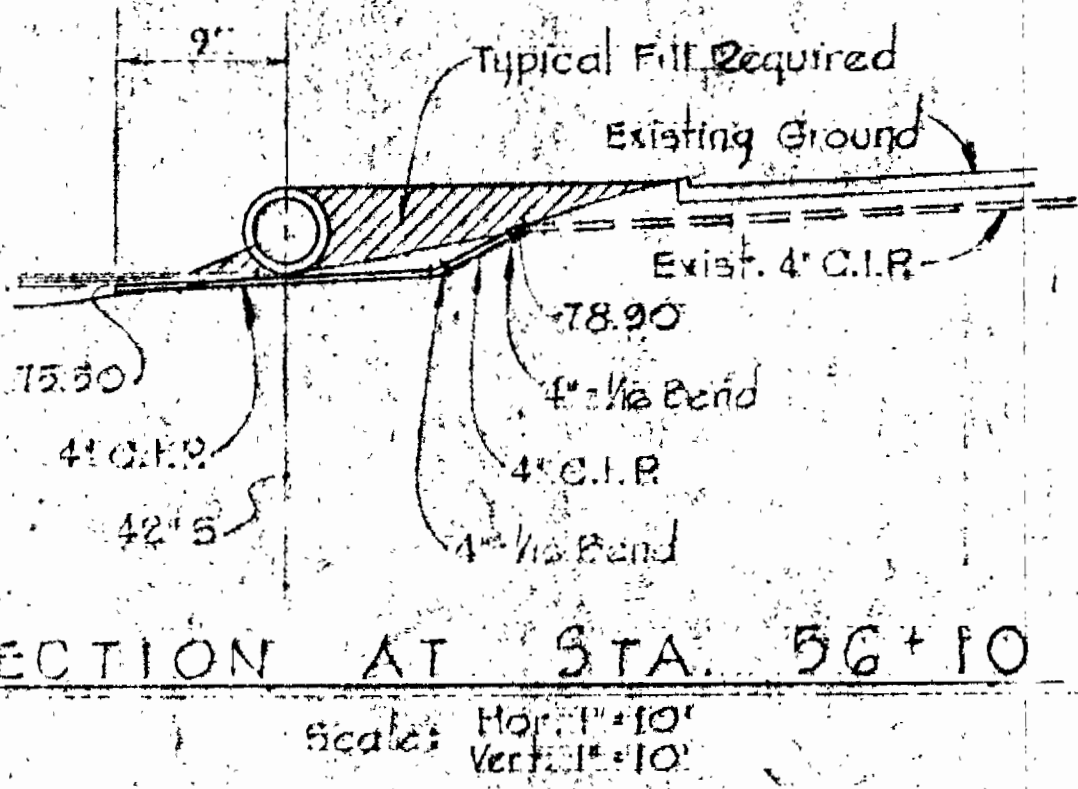
ELECTION DISTRICT
ELLCOTT CITY NO. 2

BALTIMORE COUNTY
DEPARTMENT OF PUBLIC WORKS
APPROVED: *[Signature]*
DIRECTOR & CHIEF SANITARY ENGINEER
DATE: 7/10/69

DRAWING NO. 8 OF 9
SCALE AS SHOWN



NOTE:
Payment for furnishing materials for and constructing all piping required to pass the flow of existing pipes around the 42" sewer between Station 53+00 and Station 62+00 as shown or directed by the Engineer shall be included and covered in the price bid for the items of "Furnishing and laying 42" Pipe Sewers supported on piers."



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

HOWARD COUNTY METROPOLITAN COMMISSION
DATE 1-12-67
CHIEF ENGINEER

CONTRACT NO. 145-S

PATAPSCO INTERCEPTOR
DETAIL & SECTION
OAK FOREST BRANCH TO THISTLE BRANCH

ELECTION DISTRICT
ELLCOTT CITY NO. 2

DRAWING NO. 9 OF 9
SCALE AS SHOWN



Ernest J. Meland

BALTIMORE COUNTY
DEPARTMENT OF PUBLIC WORKS
APPROVED: [Signature]
DIRECTOR'S CHIEF SANITARY ENGINEER
DATE 7/12/67