JAMES A. RHODES, Governor

EMMETT W. ARNOLD, M.D.
Director of Health

450 East Town Street
P.O. Box 118
Columbus, Ohio 43216

State of Ohio

Department of Health

Re: Hamler
Sewerage

May 20, 1969

To the Mayor and Council
Hamler
Ohio

Gentlemen:

You are hereby notified that, in accordance with the provisions of section 3701.18 of the Ohio Revised Code, the Ohio Department of Health has on this twentieth day of May, 1969, taken the following action:

Approved detail plans of proposed Sewerage Improvements, Section B-Pumping Station and Waste Stabilization Ponds, Hamler, received May 7, 1969, from Finkbeiner, Pettis and Strout, consulting engineers, subject to the following conditions:

1st. That the village shall provide for proper maintenance of the entire sewerage system and for proper operation of the sewage pumping station;

2nd. That the village shall provide for proper supervision of the operation of the sewage treatment plant and that daily records of operation shall be maintained and submitted to the Ohio Department of Health at monthly intervals;

3rd. That any major additions to or deviation from the approved plan shall have received the approval of the Ohio Department of Health before such additions or deviations are incorporated in the work; and

4th. That additional sewage treatment facilities shall be installed when deemed necessary by the Director of Health.

This approval is limited to conformity with accepted sanitary engineering practices and to the other considerations that may affect the public health.

Please acknowledge receipt of this letter and state your acceptance of the conditions imposed.

Yours truly,

E.W. Arnold, M.D.
Director of Health

by

George H. Eagle, P.E.
Chief Engineer

Copy to Finkbeiner, Pettis and Strout
Consulting Engineers
" " Northwest District Office
" " Dr. R.J. Manahan, H'lth Comm'r

SEWERAGE IMPROVEMENTS

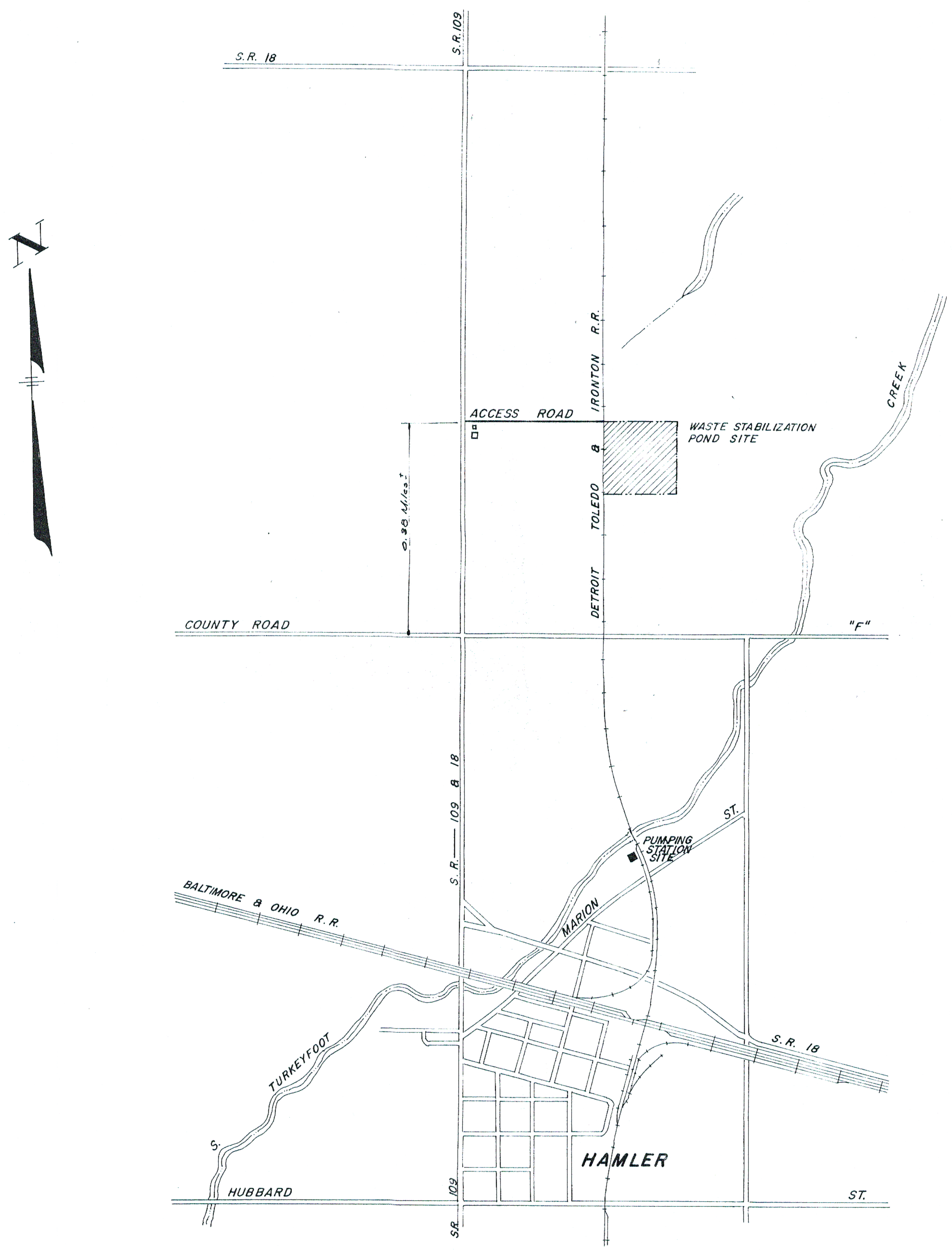
SECTION B

WASTE STABILIZATION PONDS
AND
PUMPING STATION

HAMLER, OHIO

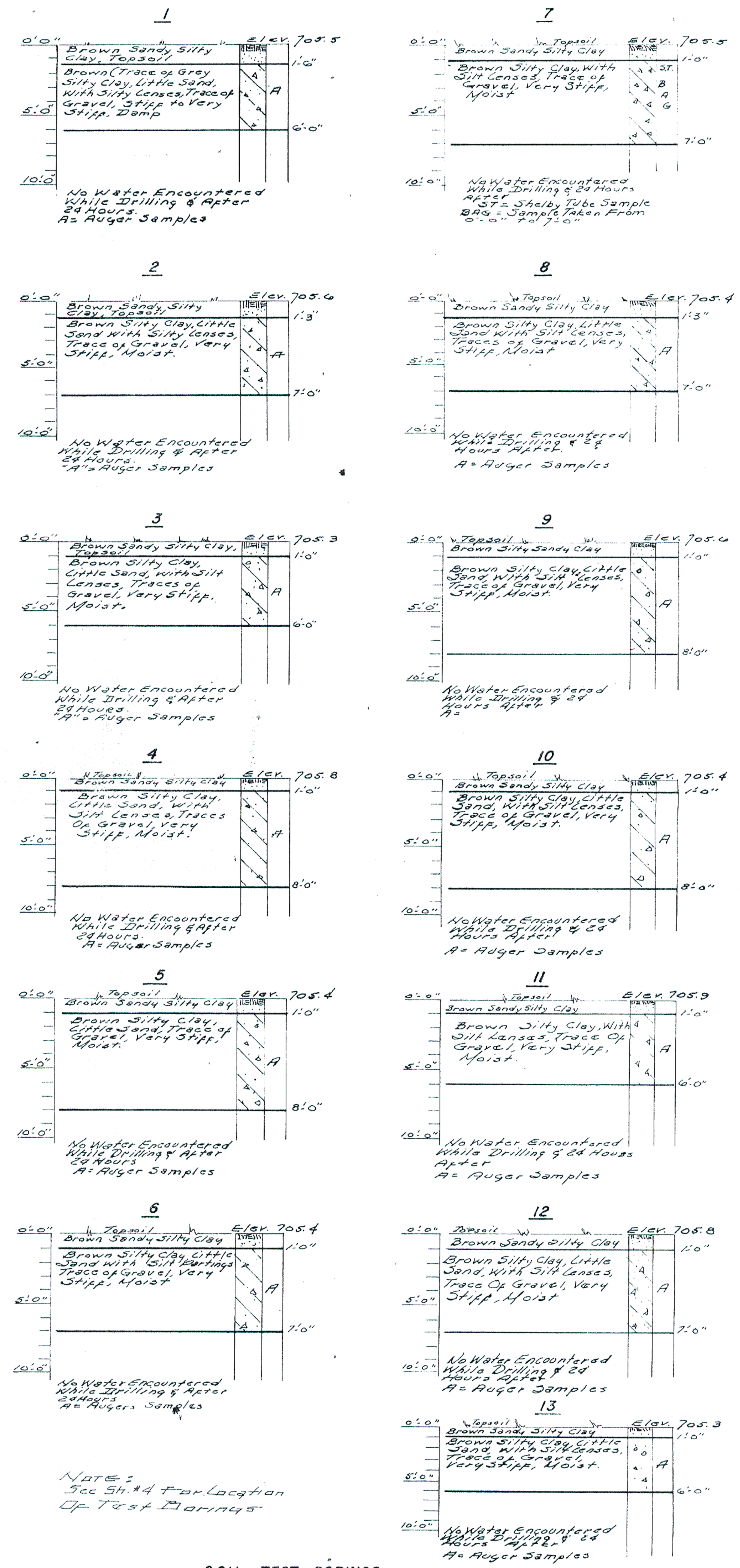
1968

FINKBEINER, PETTIS AND STROUT CONSULTING ENGINEERS — TOLEDO, OHIO



LOCATION PLAN

Scale: 1" = 660'



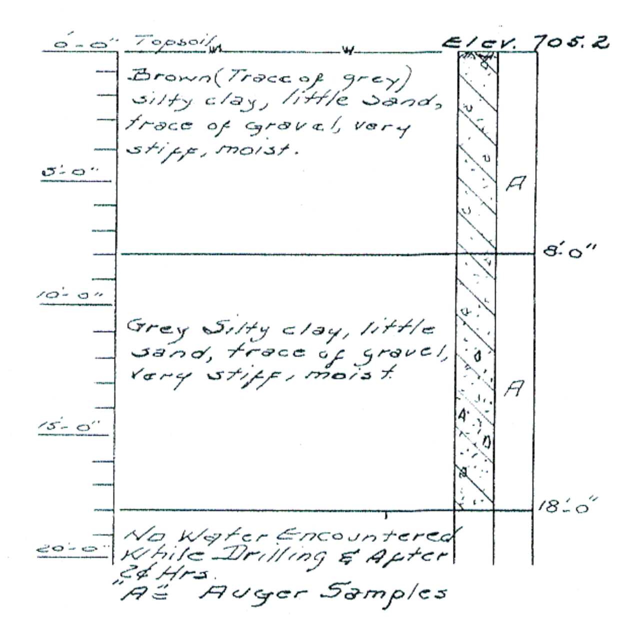
Note:
See Sh. #4 For Location Of Test Borings

SOIL TEST BORINGS

SHEET INDEX

SOIL TESTS AT BORING NO. 7

NATURAL MOISTURE CONTENT - 20.6 %
DRY DENSITY - 104.2 LB./CU.FT.
COEFF. OF PERMEABILITY - 3.54 x 10^{-5} CM./SEC.
MAXIMUM DRY DENSITY - 112.7 LB./CU.FT.
OPTIMUM MOISTURE CONTENT - 16.7 %.



SOIL TEST BORING AT PUMPING STATION

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: No Scale
DESIGNED BY:
DRAWN BY: [signature]
CHECKED BY: R.B.W.

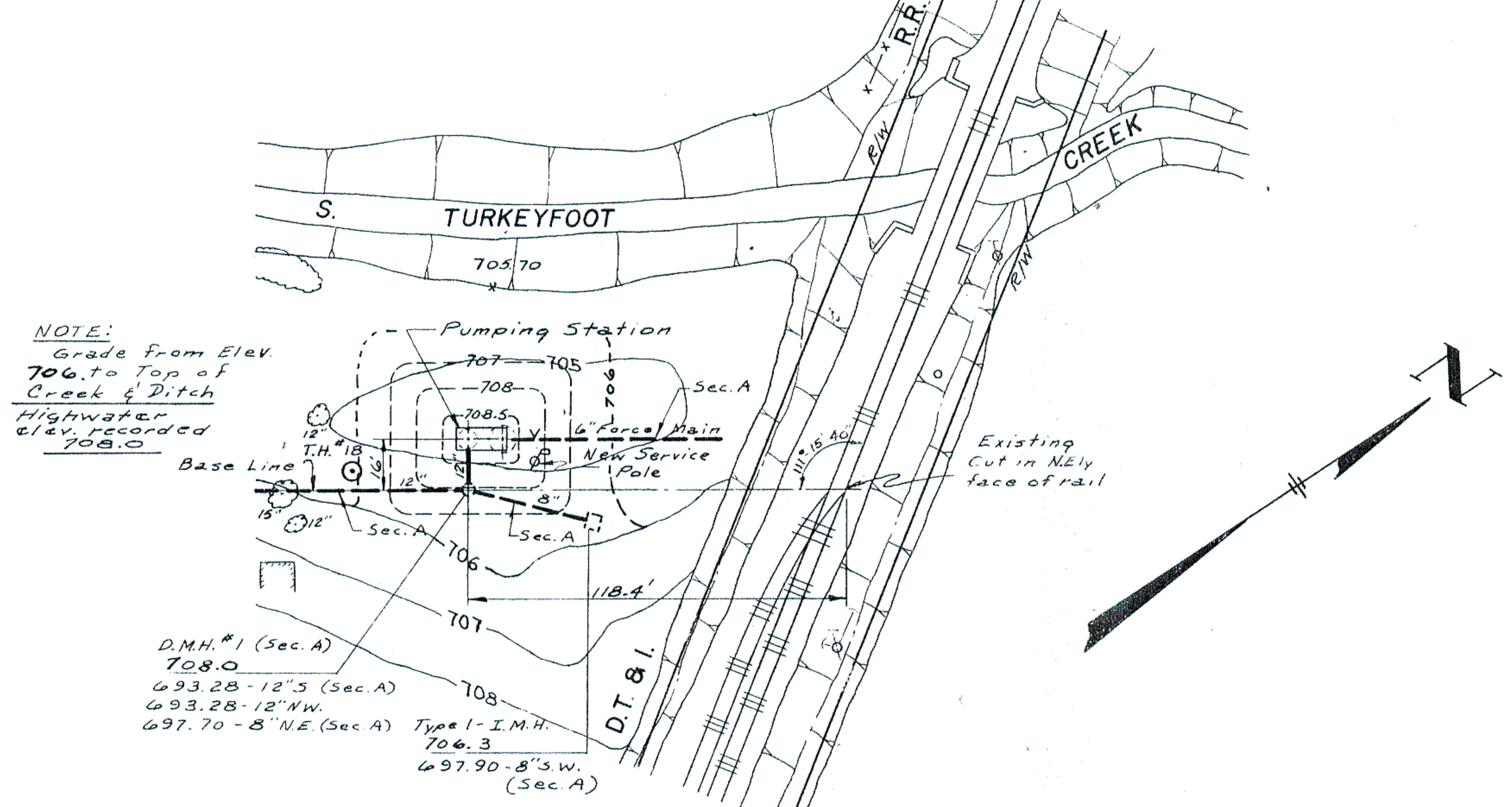
WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER:
SECTION: B
DATE: 12-16-68
1 OF 9

LEGEND

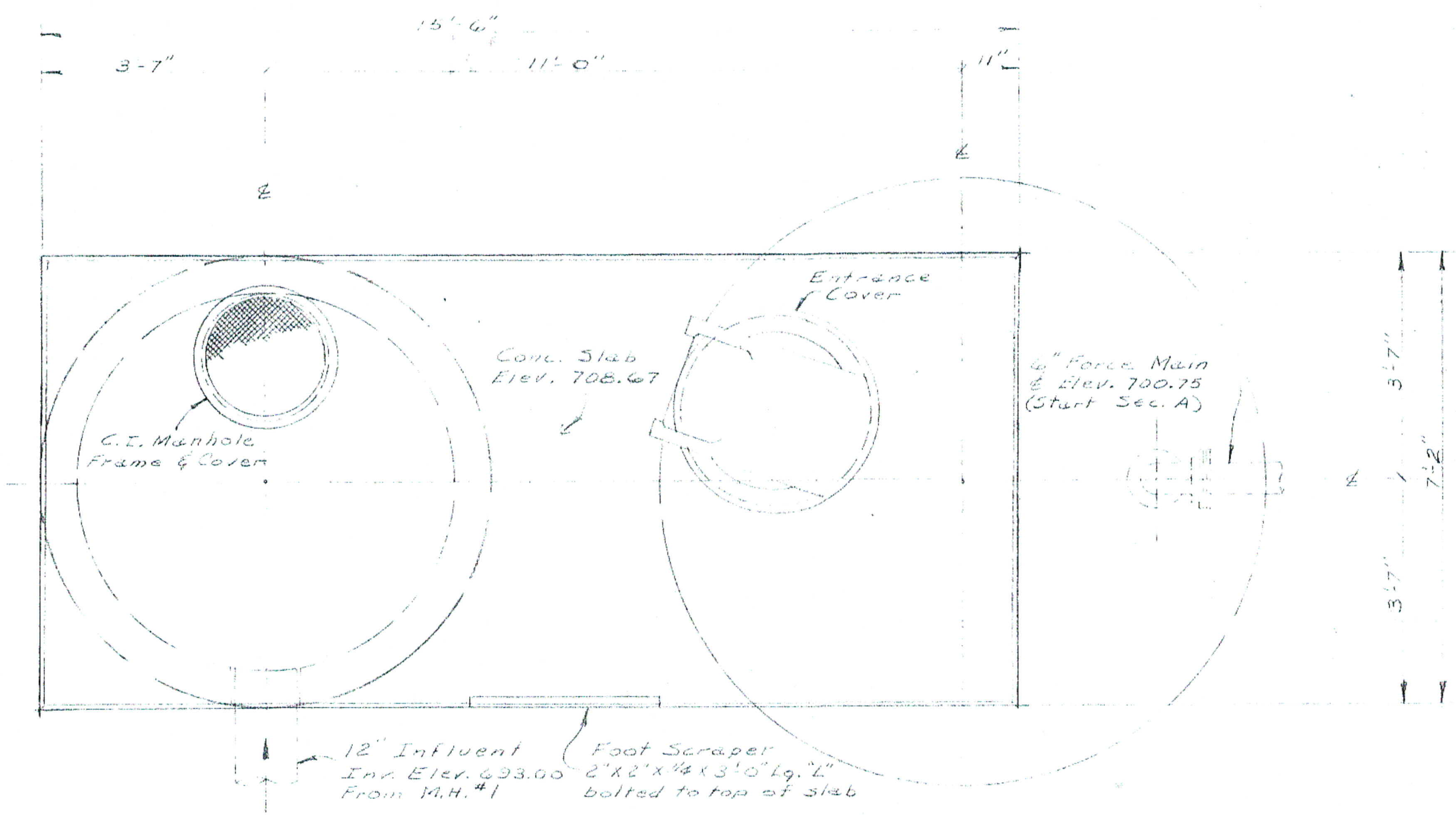
- - - - - NEW CONTOURS

——— EXISTING CONTOURS

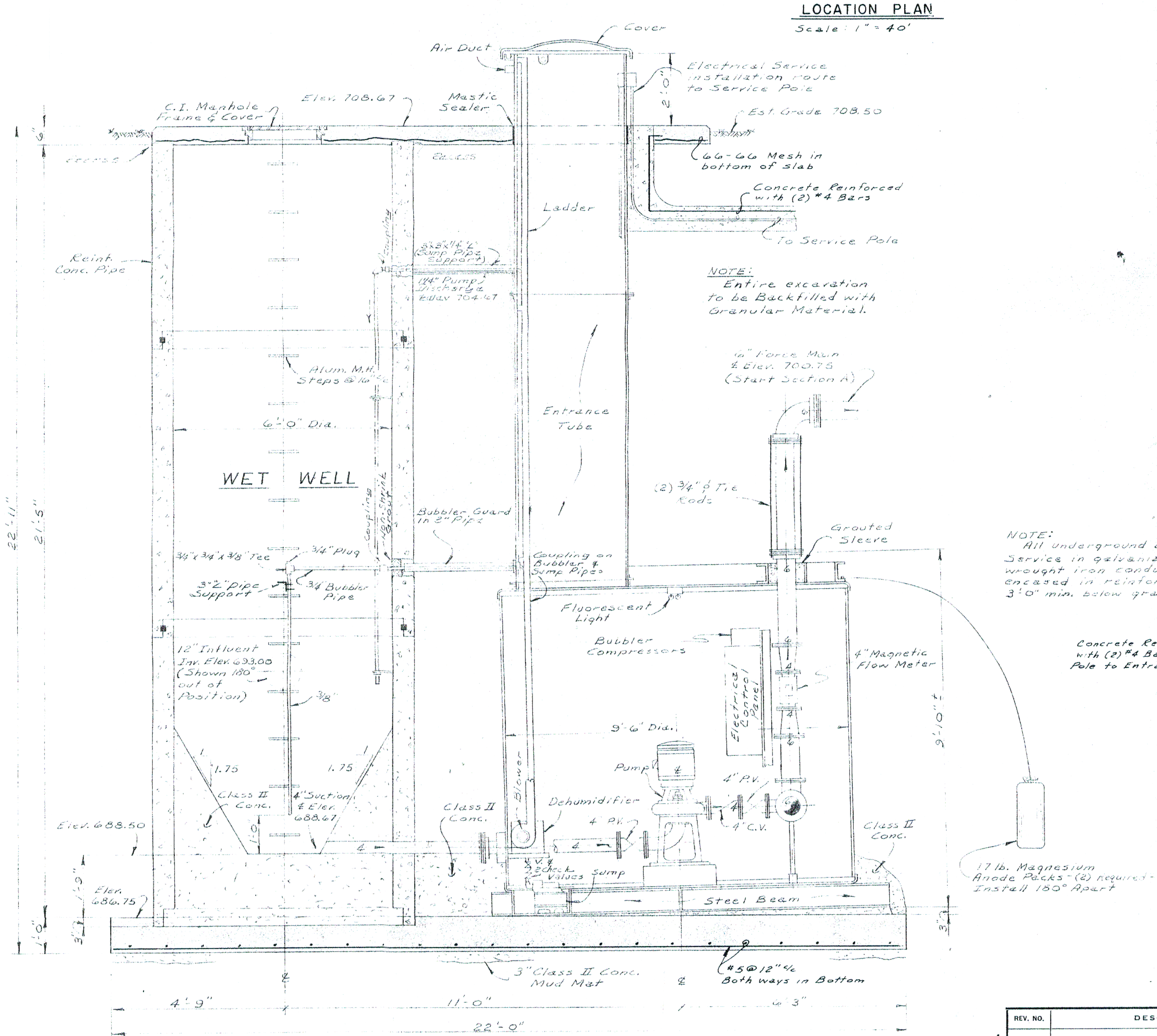


LOCATION PLAN

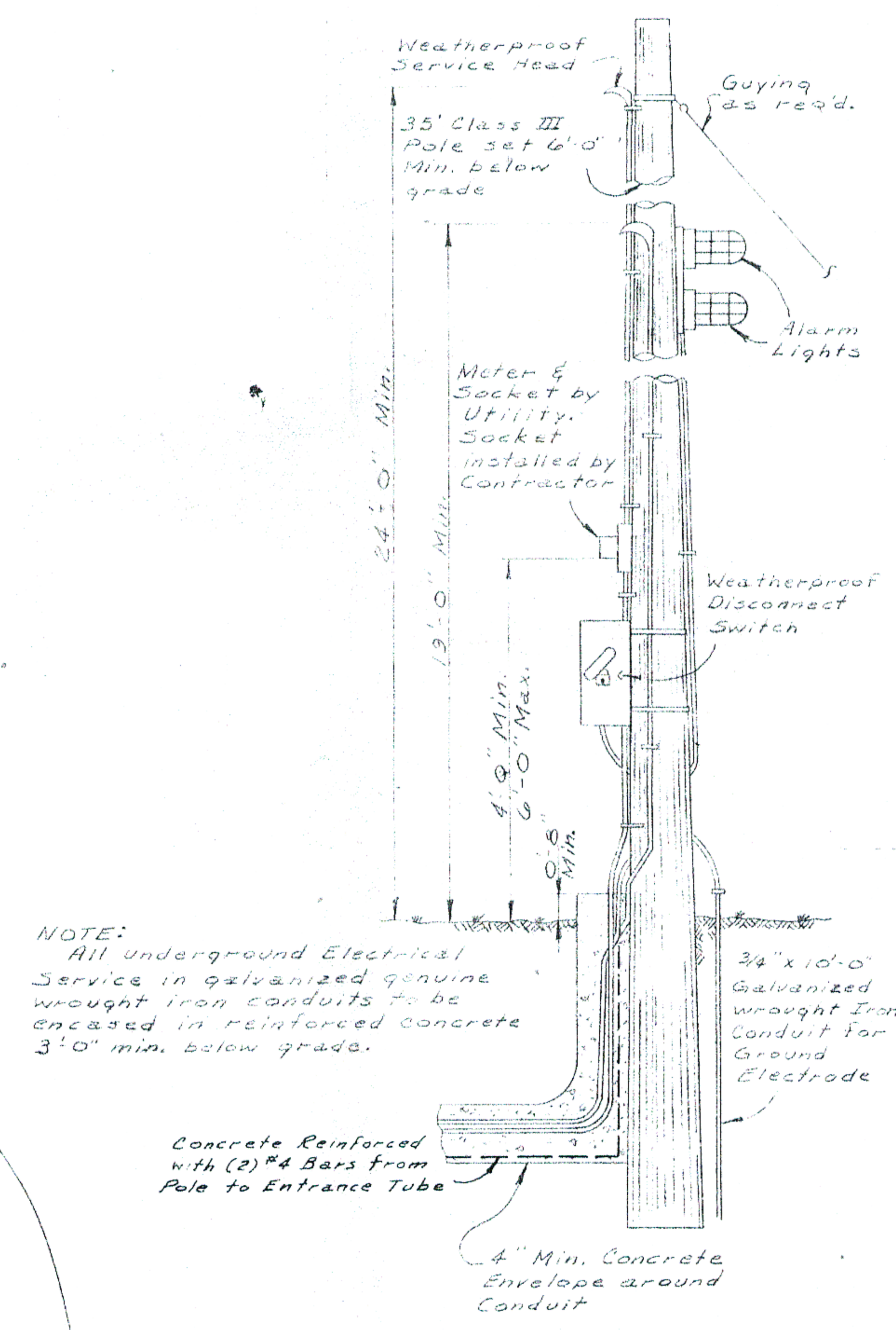
Scale 1" = 40'



PLAN

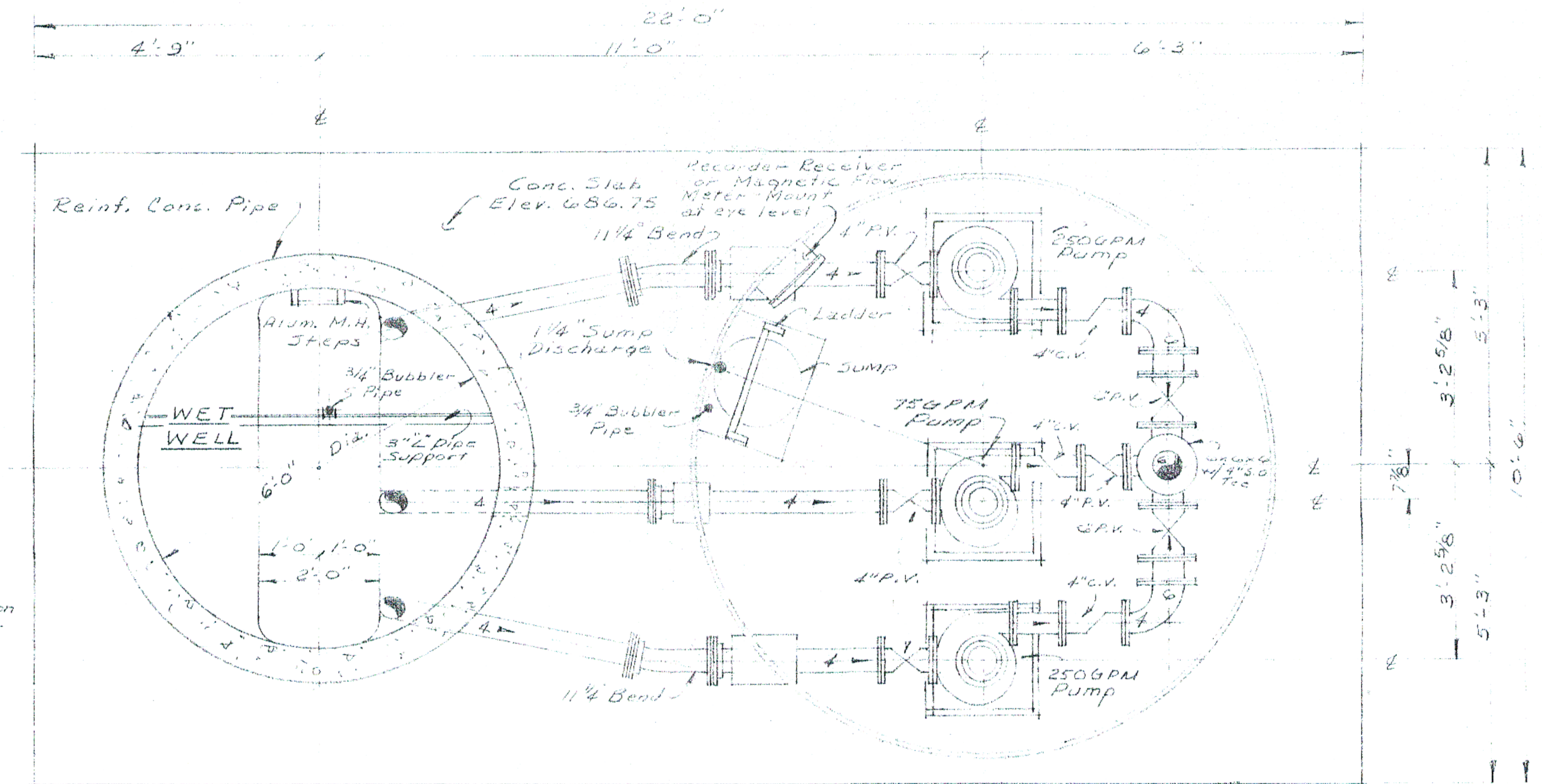


SECTION



SERVICE POLE DETAIL

No Scale



SECTIONAL PLAN

SEWERAGE APPROVED

STATE OF OHIO DEPARTMENT OF HEALTH

AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

RECEIVED

MAY, 1969

OHIO DEPARTMENT OF HEALTH

PUMPING STATION

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT

CONSULTING ENGINEERS

TOLEDO, OHIO

SCALE: 1/2" = 1'-0" or as noted

DESIGNED BY

DRAWN BY: R.W.C.

CHECKED BY: R.B.W.

WASTE STABILIZATION PONDS

SEWERAGE IMPROVEMENTS

HAMLER, OHIO

PROJECT NUMBER

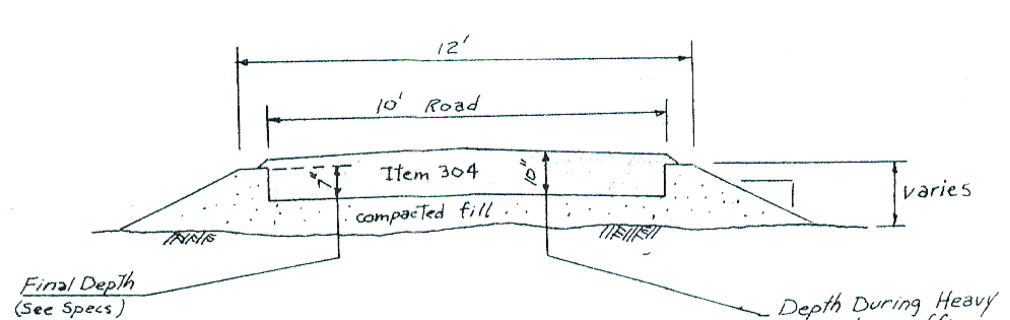
SECTION: B

DATE: 12-16-68

2 of 9

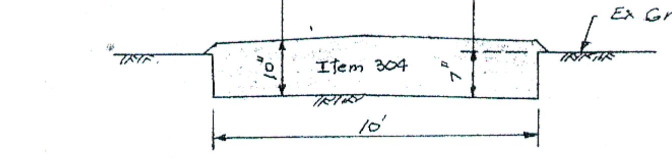
NOTE: For continuation of Drive See Sht. #5.

F.P. & S. BM #8
Top conc fence post
42' E of D.T. & I
Elev. - 710.11



SECTION THRU FILL

No Scale



ROAD SECTION

No Scale

ACCESS ROAD

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE
HORIZ. 1" = 40'
VERT. 1" = 4'

DESIGNED BY

DRAWN BY
H.E.G.

CHECKED BY
R.B.W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER

SECTION
B

DATE
12-16-68

3 OF 9

GENERAL NOTES

CONCRETE - All Class I Concrete shall test 3750 psi at 28 days with not less than 6 sacks of cement per cu. yd. of concrete, regardless of strength obtained, and not over 6½ gallons of water per sack of cement and not over 5" slump.

All exposed concrete corners to be beveled with 3/4" x 3/4" chamfer strips unless otherwise noted.

Construction joints in other than places shown on the plans shall be provided and located only with the approval of the Engineer.

Provide P.V.C. waterstops for full length of construction joints in walls and slabs which are subject to any water and as called for on the plans.

Dimensions shown for door and window openings are merely nominal and Contractor shall check actual dimensions before pouring concrete or laying up masonry.

All Class II concrete where called for on the plans or in these General Notes shall contain 4 sacks of cement per cu. yd. of concrete with the remaining volume being made up with approximately equal parts of sand and stone. Not more than 30 gallons of water per cu. yd. shall be added at the mixer.

All dowels to be anchored in place before placing concrete.

Wall mats shall be securely wired to the forms at intervals of 5'-0" minimum.

REINFORCING - Allow 500 lbs. of reinforcing bars to be used as directed by the Engineer. Extra reinforcing not to be fabricated or delivered to the project until ordered by Engineer.

All reinforcing steel to be deformed bars meeting ASTM A-432(intermediate grade new billet) or ASTM A-61 (rail) with deformations conforming to ASTM A-305.

All detailing, fabrication and erection to comply with "Manual of Standard Practices for Detailing Reinforced Concrete Structures" (ACI A-315)

All bars to be supported and spaced in the forms with accessories meeting the regulations of the above manual. In addition, the cover for wall reinforcement for #5 bars and smaller shall be 1½" and for larger than #5 bars shall be 2" unless otherwise noted.

All walls when not otherwise reinforced to have #4 @ 12" c/c H. & V. each face.

At all corners of walls or slab openings, or where sleeves or pipe lines pass through walls or slabs, provide four sets of 2-#4 x 3'-0" longer than opening each face on all four diagonal sides unless otherwise noted.

Submit five copies of shop drawings for all reinforcing steel and secure approval of Engineer before fabrication.

All reinforcing bars shall be securely wired together in the forms. Two way mats of steel shall be tied sufficiently to hold them securely in place.

Bars not continuous throughout their length shall be lapped a minimum of 24 bar diameters (unless otherwise noted) but in no event shall lap be less than 12".

Minimum reinforcement transverse to the direction of main reinforcement shall be #4 @ 12" c/c unless otherwise noted.

Dowels placed in construction joints shall project at least 24 bar diameters each way from the joint, unless otherwise noted, and shall be of the same size and spacing as the bars they lap.

Where not otherwise noted, hook all outside wall bars at least 24 bar diameters around corners.

When foundation walls span from foundation to first floor, both foundation slab and first floor slab shall be in place before any backfill is placed. All slabs when not otherwise reinforced to have #4 @ 12" c/c each way in bottom.

MISCELLANEOUS - After excavation is completed, obtain Engineer's approval on soil bearing before placing concrete. Foundation is designed for a soil pressure of 2500 PSF.

All loosened earth under footings and slabs shall be thoroughly removed and the spaces backfilled with Class II concrete where shown, or sand or gravel well tamped in place before footings or slabs are poured.

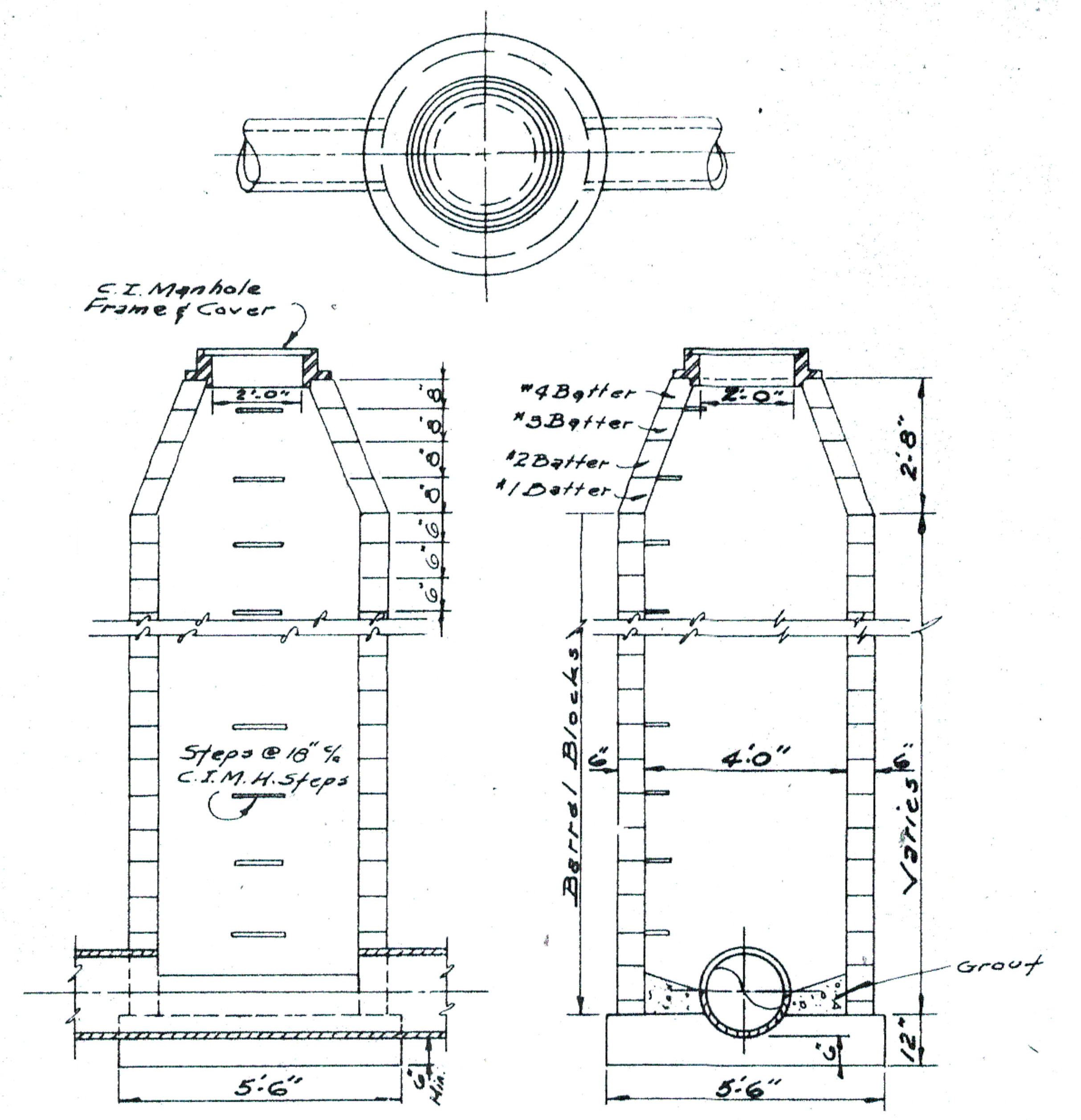
Suitable pipe supports shall be provided and installed at points shown or as directed by the Engineer.

Set all sleeves, castings, inserts, bolts, etc. before placing concrete.

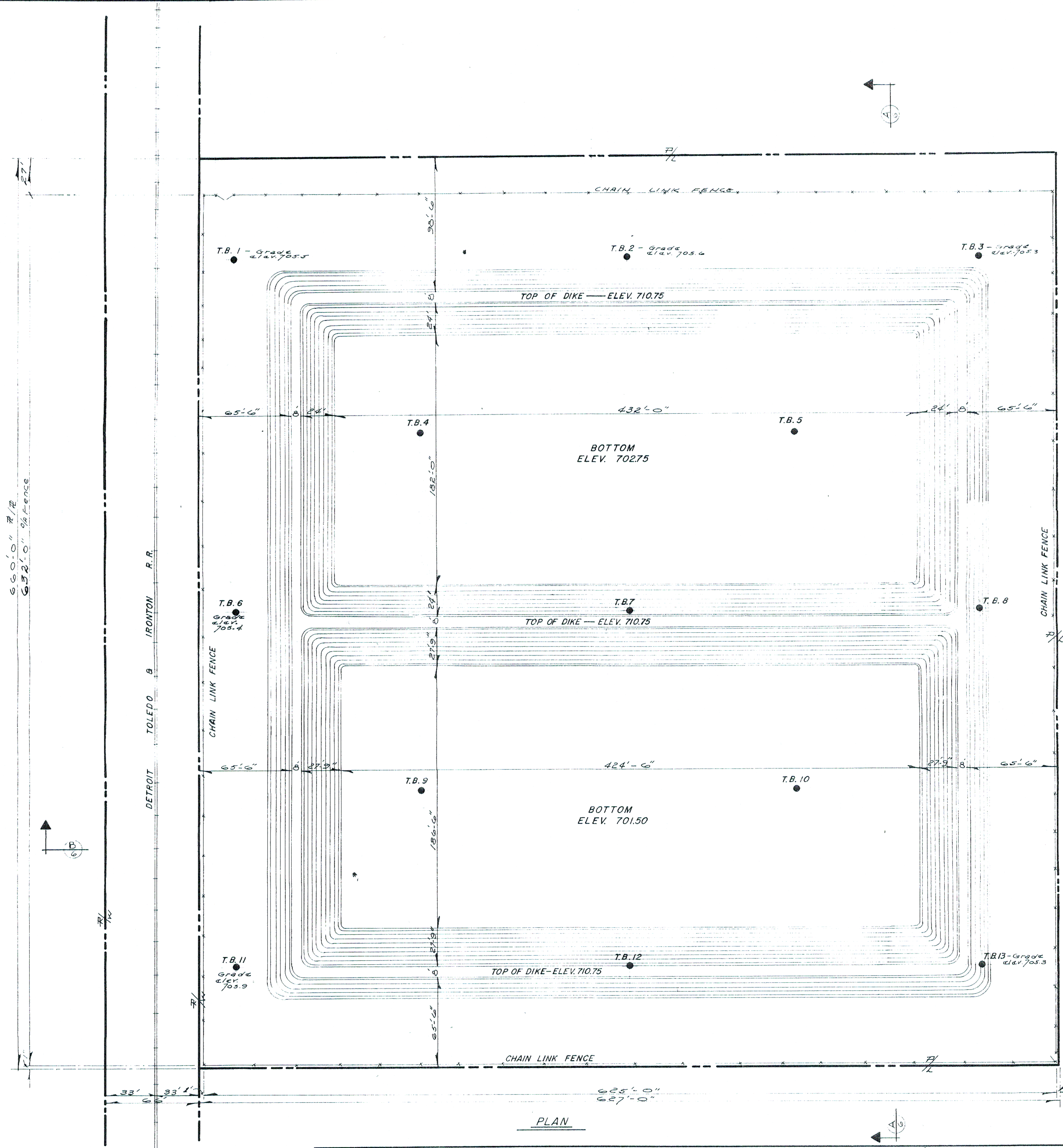
After excavation, before placing concrete, Engineer is to pass on quality of soil, order auger borings or tests needed and, if necessary, deepen or widen footings as provided in the specifications.

All excavation for pipe, etc. that occurs below a main foundation slab or footing shall be filled with Class II concrete to the bottom of the slab or footing.

Excessive excavation beyond limits shown on the plans to be filled with Class II concrete unless otherwise approved by the Engineer.



CONCRETE BLOCK MANHOLE



PLAN

SEWERAGE APPROVED
STATE OF OHIO DEPARTMENT OF HEALTH
AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

RECEIVED
MAY 1969
OHIO DEPARTMENT OF HEALTH

GRADING PLAN

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

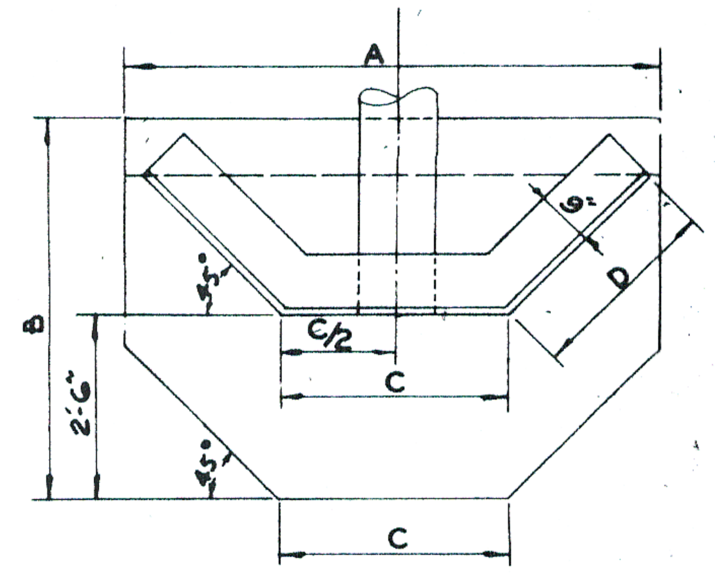
SCALE 1"=40'-0"
DESIGNED BY H.W.H.
DRAWN BY
CHECKED BY R.B.W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

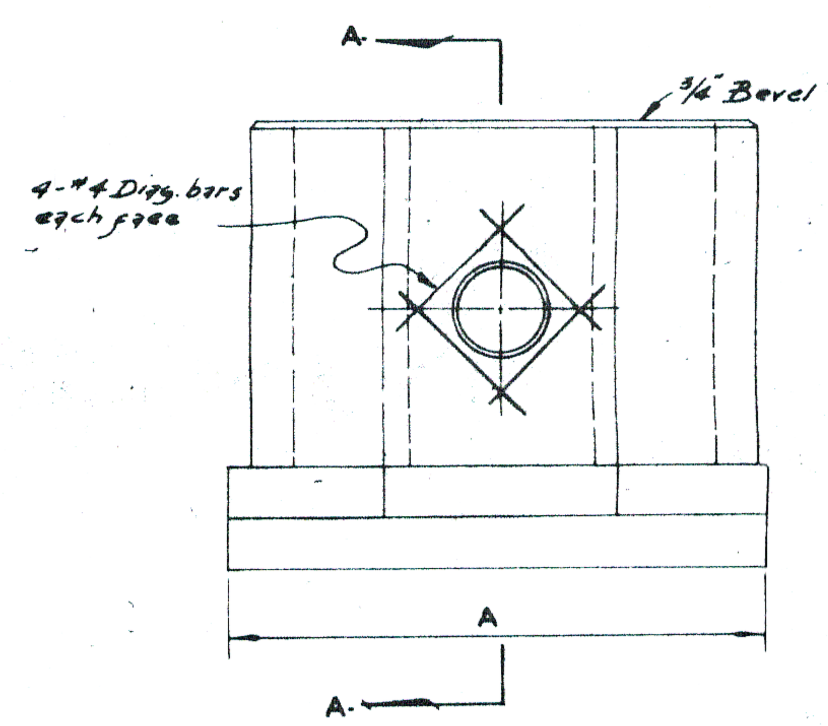
PROJECT NUMBER
SECTION B
DATE 12-16-68
4 of 9

HEADWALL DIMENSION TABLE

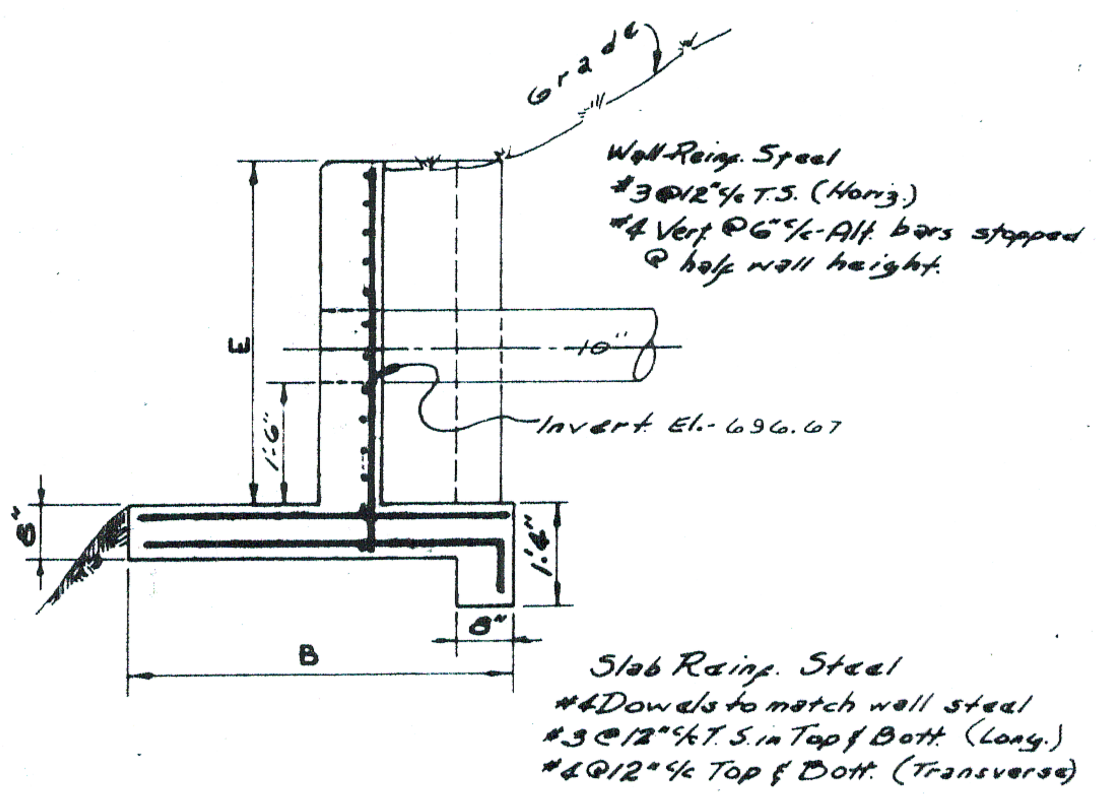
PIPE SIZE	A	B	C	D	E	CONC.	REINF.
12" & Under	7'-0"	5'-0"	3'-0"	2'-6"	4'-6"	1.9 C.Y.	160#



PLAN



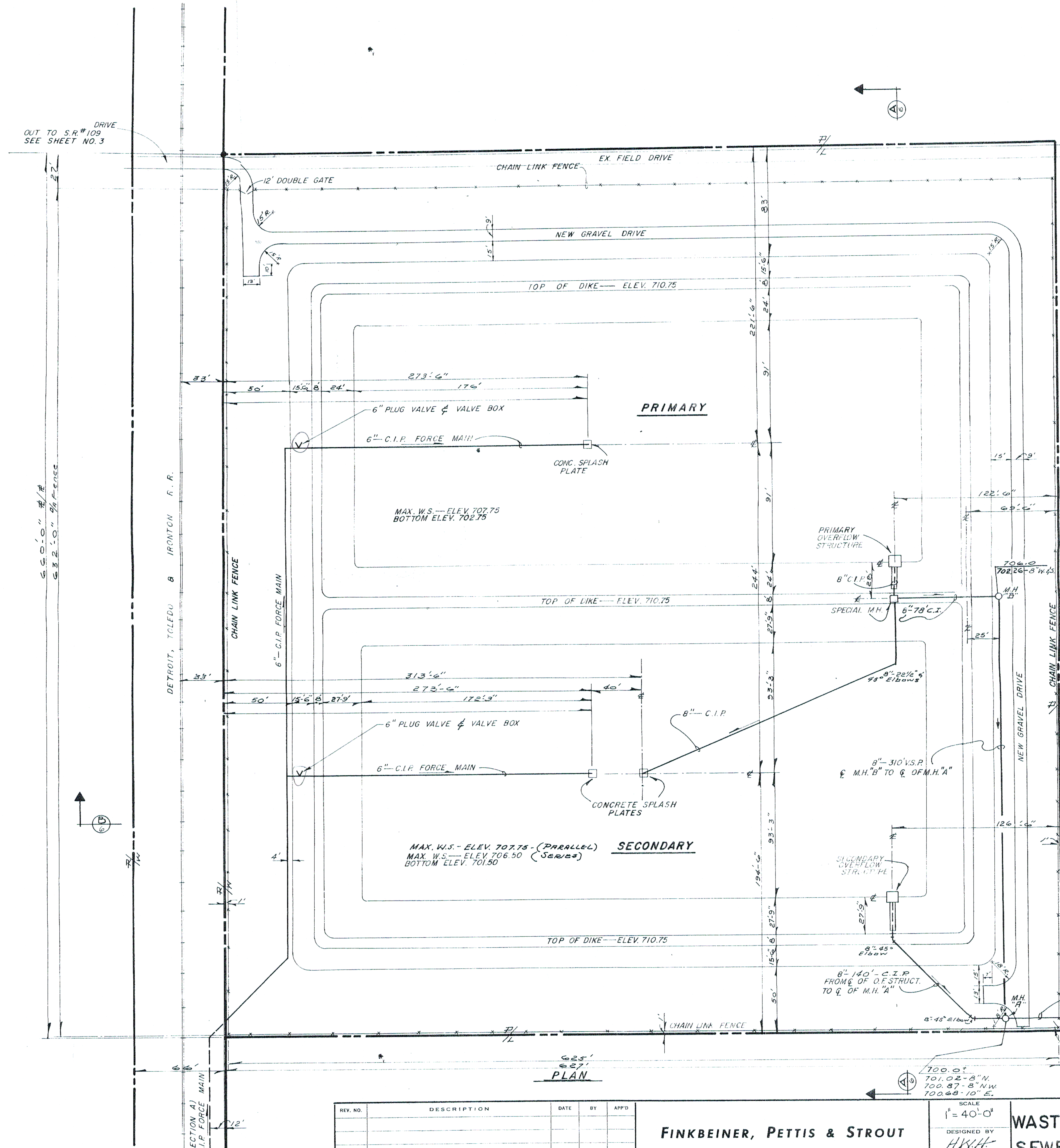
ELEVATION



SECTION A-A

HEADWALL DETAILS

No Scale



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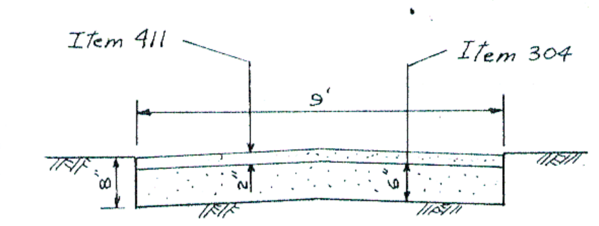


DRIVE SECTION

No Scale

PIPING & STAKING PLAN

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

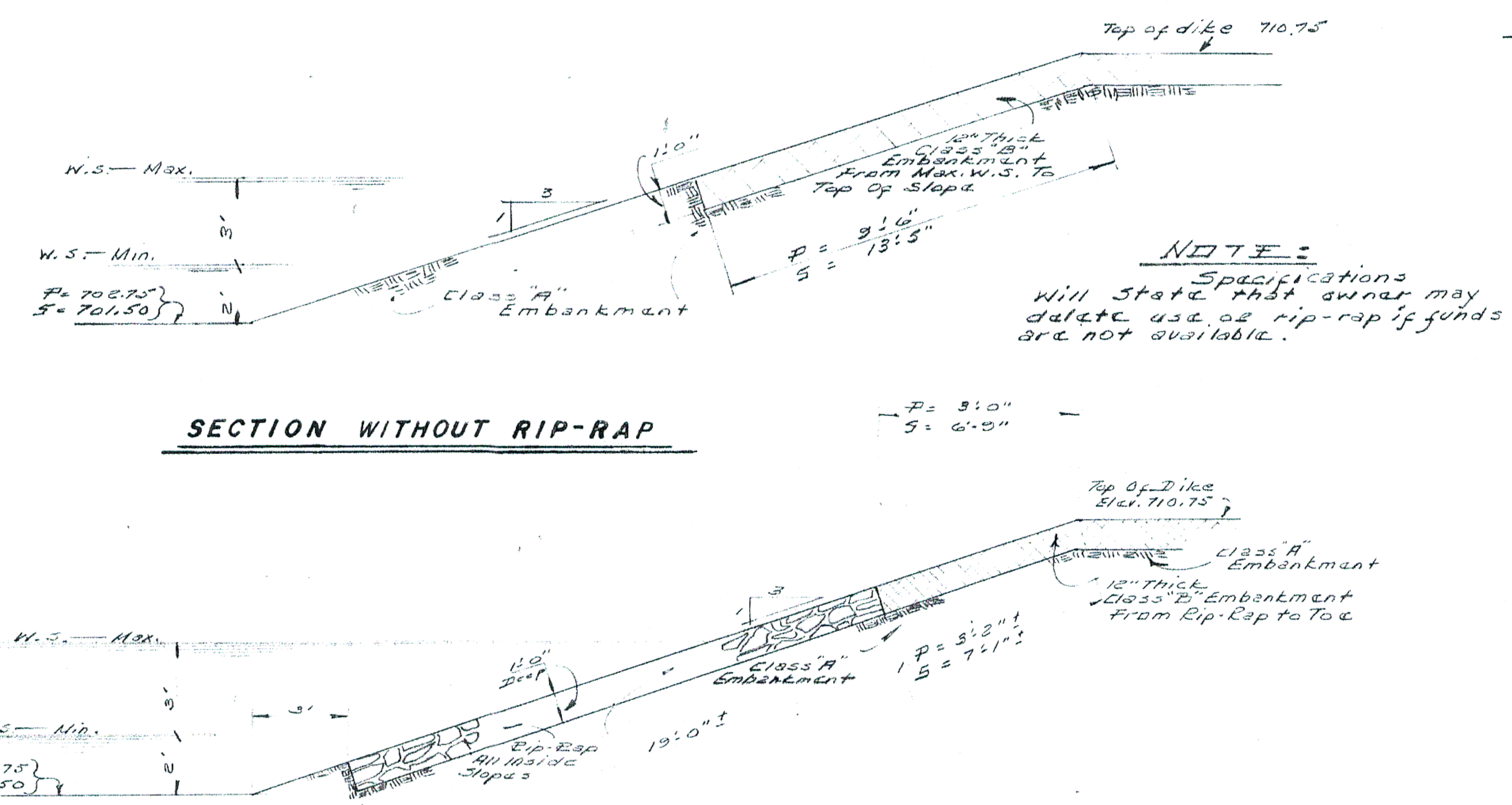
SCALE 1" = 40'-0"
DESIGNED BY H.W.H.
DRAWN BY M.J.M.
CHECKED BY R.B.W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER
SECTION B
DATE 12-16-68
5 OF 9

SECTION A-A
1" = 10'

SECTION B-B
1" = 10'

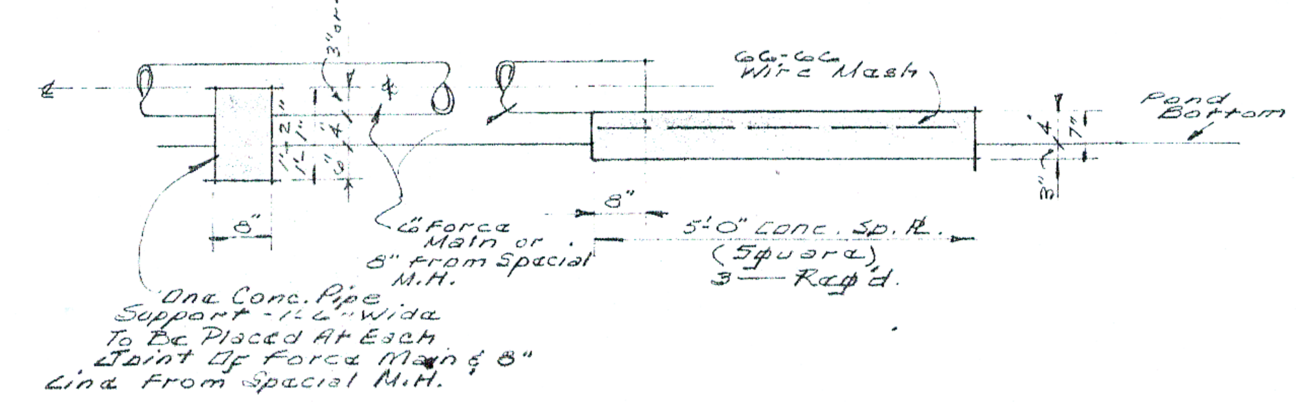


NOTE: Specifications will state that owner may delete use of rip-rap if funds are not available.

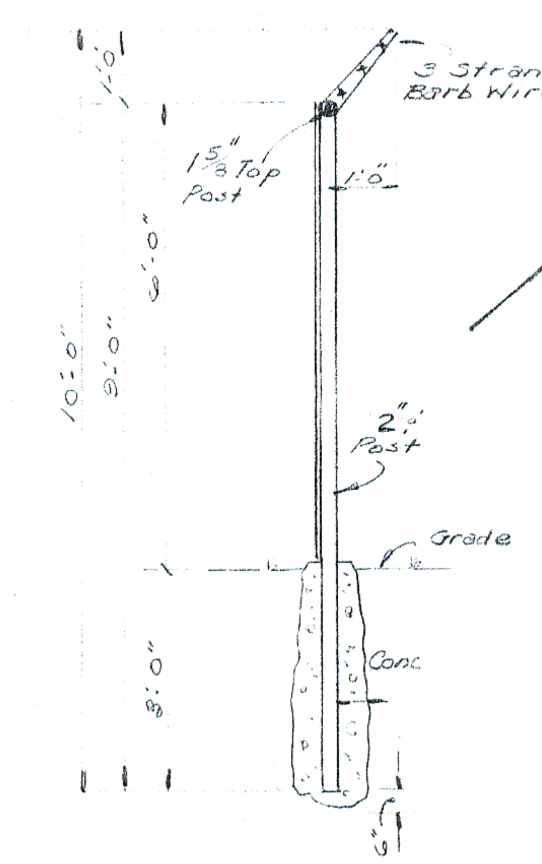
SECTION WITHOUT RIP-RAP

SECTION SHOWING RIP-RAP

DIKE DETAILS
1/4" = 1'-0"



PIPE SUPPORT & CONCRETE SPLASH PLATE DETAILS
1/2" = 1'-0"



SEWERAGE APPROVED
STATE OF OHIO DEPARTMENT OF HEALTH
AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

RECEIVED
MAY 1969
OHIO DEPARTMENT OF HEALTH

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: As Noted
DESIGNED BY: HWH
DRAWN BY: MJM
CHECKED BY: R.B.W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER
SECTION: B
DATE: 12-16-68
6 of 9

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: As Noted
DESIGNED BY:
DRAWN BY: R.D.O.
CHECKED BY: R.B.W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER
SECTION: B
DATE: 12-16-68
7 of 9

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: HORIZ. 1"=40' VERT. 1"=4'
DESIGNED BY
DRAWN BY: H.E.G.
CHECKED BY: R.B.W.

OUTFALL SEWER

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER
SECTION: B
DATE: 12-16-68

OUTFALL SEWER

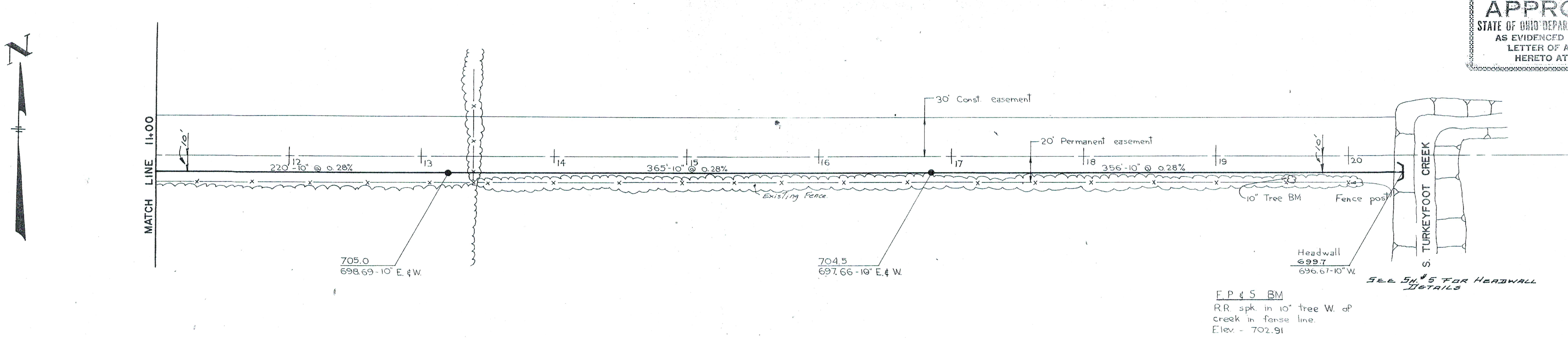
REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE
HORIZ. 1"=40'
VERT. 1"=4'
DESIGNED BY
DRAWN BY
H E G
CHECKED BY
R. B. W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER
SECTION
B
DATE
12-16-68
8 OF 9



SEWERAGE APPROVED
STATE OF OHIO DEPARTMENT OF HEALTH
AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

RECEIVED MAY 7 1969 OHIO DEPARTMENT OF HEALTH

OUTFALL SEWER

REV. NO.	DESCRIPTION	DATE	BY	APP'D

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE HORIZ. 1"=40' VERT. 1"=4'
DESIGNED BY
DRAWN BY H.E.G.
CHECKED BY R.B.W.

WASTE STABILIZATION PONDS
SEWERAGE IMPROVEMENTS
HAMLER, OHIO

PROJECT NUMBER
SECTION B
DATE 12-16-68
9 OF 9