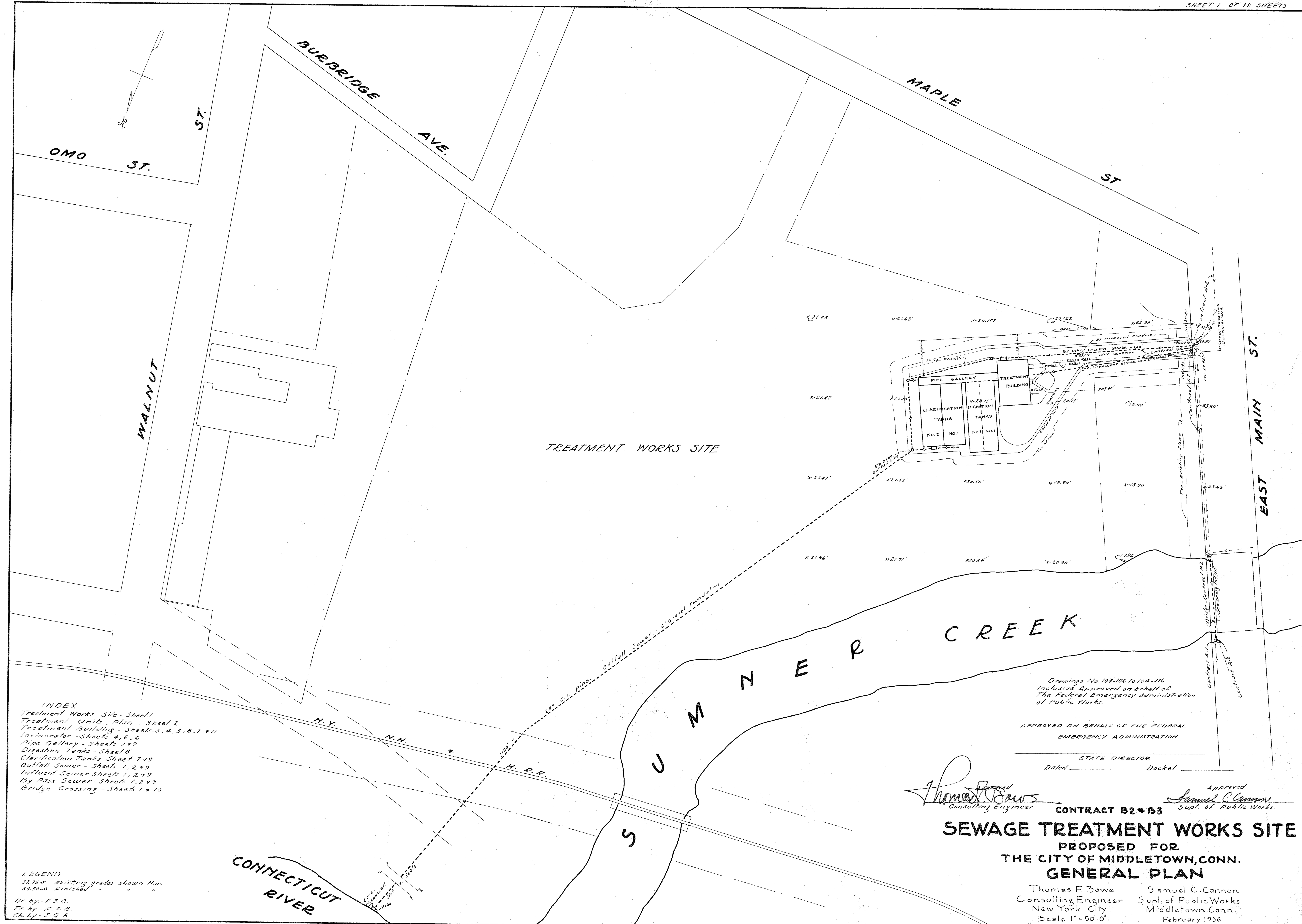


INDEX

Treatment Works Site - Sheet 1
Treatment Units, Plan - Sheet 2
Treatment Building - Sheets-3, 4, 5, 6, 7 & 11
Incinerator - Sheets 4, 5, 6
Pipe Gallery - Sheets 7 & 9
Digestion Tanks - Sheet 8
Clarification Tanks Sheet 7 & 9
Outfall Sewer - Sheets 1, 2 & 9
Influent Sewer - Sheets 1, 2 & 9
By Pass Sewer - Sheets 1, 2 & 9
Bridge Crossing - Sheets 1 & 10

LEGEND

32.75-x Existing grades shown thus.
34.50-o Finished " " "

Dr. by - F.S.B.
Tr. by - F.S.B.
Ch. by - J.G.A.

Drawings No. 104-106 to 104-116 Inclusive Approved on behalf of The Federal Emergency Administration of Public Works.

APPROVED ON BEHALF OF THE FEDERAL EMERGENCY ADMINISTRATION

STATE DIRECTOR

Dated ______ Docket ______

Approved Thomas F. Bowe
Consulting Engineer

Approved Samuel C. Cannon
Supt. of Public Works.

CONTRACT B2 & B3

SEWAGE TREATMENT WORKS SITE

PROPOSED FOR THE CITY OF MIDDLETOWN, CONN.

GENERAL PLAN

Thomas F. Bowe
Consulting Engineer
New York City

Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.

Scale 1" = 50'-0"

February 1936

Drawing No. ~~104-106~~
SU2-2

SEWAGE TREATMENT WORKS
PROPOSED FOR
THE CITY OF MIDDLETOWN, CONN.
GENERAL PLAN

Thomas F. Bowe
Consulting Engineer
New York City

Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.

Scale 1/8" = 1'-0"
February 1936

Drawing No. 104-107
SUZ-3
FILE V 29

LEGEND
32.76 X — Existing Grades Shown thus.
34.50 — Finished " " ".

Dr. by - F.S.B.
Tr. by - F.S.B.
Ch. by - J.G.A.

TREATMENT BUILDING
Floors El. 38.00

DIGESTION TANKS
NO. 1 NO. 2
GAS HOLDER
Top of Tanks 35.50'

CLARIFICATION TANKS
NO. 1 NO. 2
Top of Tanks 33.00'

All Slopes 1½:1

All Slopes 1 Vertical to 1½ Horiz.

Approx. Toe of Slope

Crest of Slope

Approx. Top of Slope

BITUMINOUS MACADAM ROADWAY

3'-10" CONC. SIDEWALK REINFORCED

Sidewalks to be Constructed under Contract 82.

200' - 12" C.I. LOW LEVEL INFLUENT SEWER

240' - 30" CONC. INFLUENT SEWER GRADE 0.17% ON PILE SUPPORTS - BENTS 8'-0" O.C.

Power Line ?

Flagpole

4" C.I. Fresh Water To plant

PAVED PLAZA

4" C.I. sludge pumps

FILL PIPE

1200 GAL. OIL TANK

VENT

Concrete Floor

Gravel & Conc. Foundation

GATE & BY-PASS CHAMBER

2-24" C.I. 2-30° Bends

100' - 24" C.I. @ 0.30% + 100' GRAVEL FOUNDATION - 6" DEEP

34 - 24" C.I. @ 0.30% - GRAVEL FOUNDATION 6" DEEP

Gravelly Conc. Foundation

24" C.I. Outfall Sewer

Sta. 0+00 Outfall Sewer

Inv. 18.41

Inv. 18.70

Inv. 19.00

Inv. 29.46

Rail Type - on wall Bracket

Sidewalk Lights 16 Sq. Ft. 4 Reg. on Pilot Gallery

These Sidewalk Lights To be designed for 500# per sq. ft.

To be designed for 350# per sq. ft.

2" Flush Hydrant

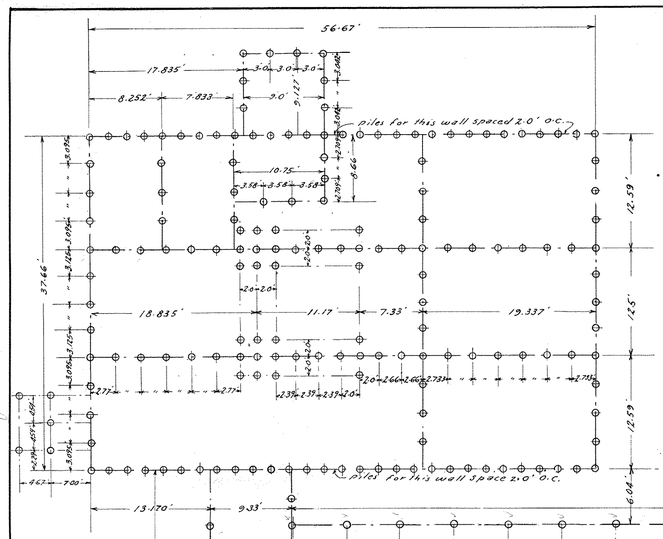
4" C.I. Fresh Water

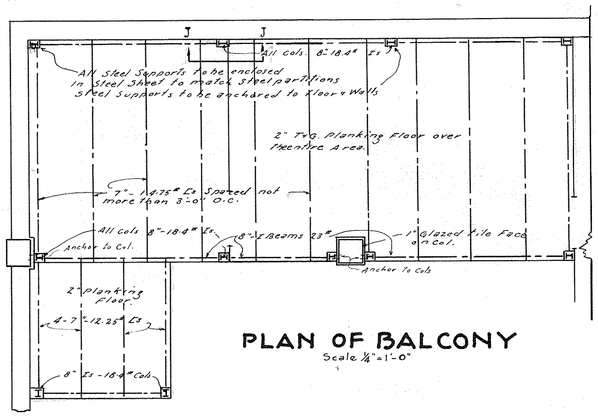
Fence Posts 10' o.c.

Fence

N

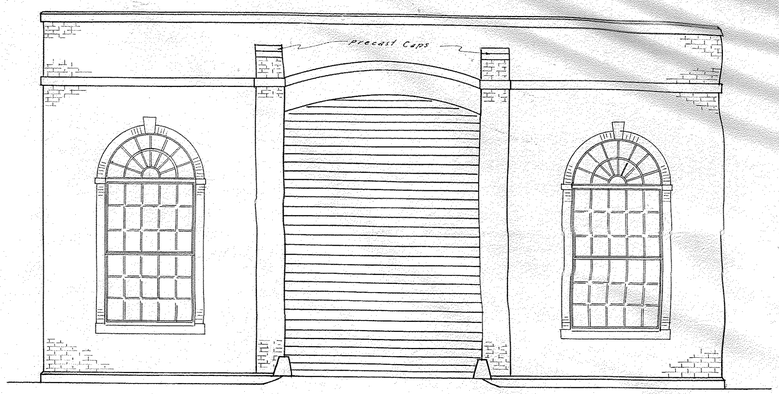
X-19.00'
X-19.30'
X-20.19'
X-20.50'
X-21.52'
X-21.70'
X-21.42'
X-22.00'
X-21.48'
X-21.98'
X-18.88'
X-22.80'
X-20.12'
X-20.16'
X-21.68'
X-22.40'
X-20.21'





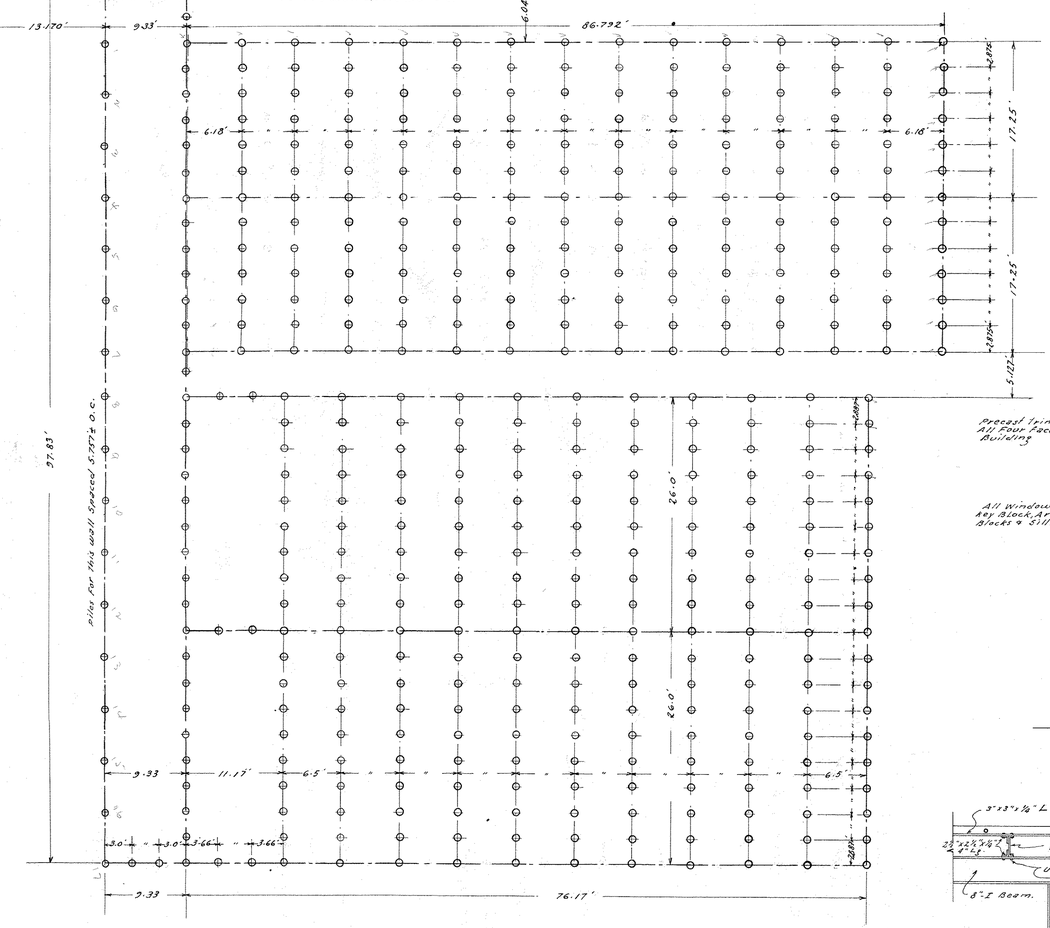
PLAN OF BALCONY

Scale 1/8"=1'-0"



NORTH ELEVATION

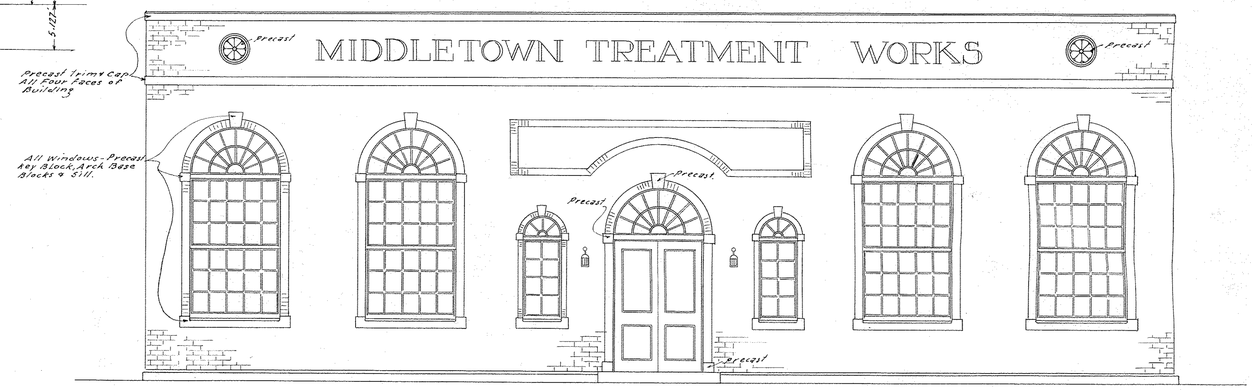
Scale 1/4"=1'-0"



PLAN - PILE FOUNDATION

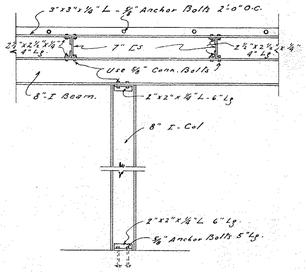
Note :- PILES ARE INDICATED BY CIRCLE BUT ARE ACTUALY 12"x11" Sq. PILES.
LOCATION OF PILES ARE TENTATIVE - FINAL LOCATION TO BE ESTABLISHED AFTER LOADING TESTS ARE COMPLETED.

Scale 1/8"=1'-0"



FRONT ELEVATION

Scale 1/4"=1'-0"



SECTION - J.J.

BALCONY STEEL FRAMEWORK

Scale 1/2"=1'-0"

SEWAGE TREATMENT WORKS

PROPOSED FOR

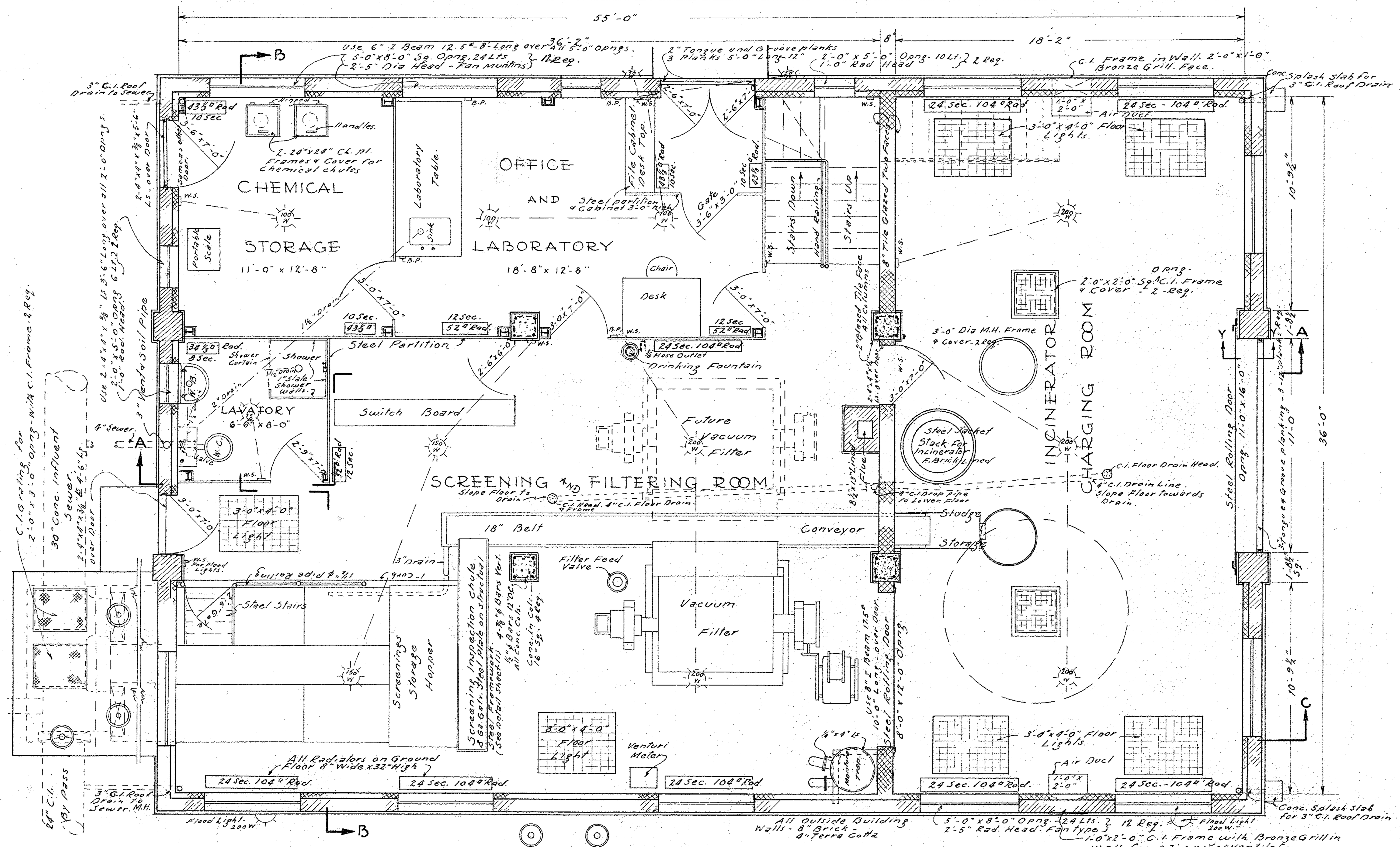
THE CITY OF MIDDLETOWN, CONN.

PILE FNDN. ELEVATION & DETAILS

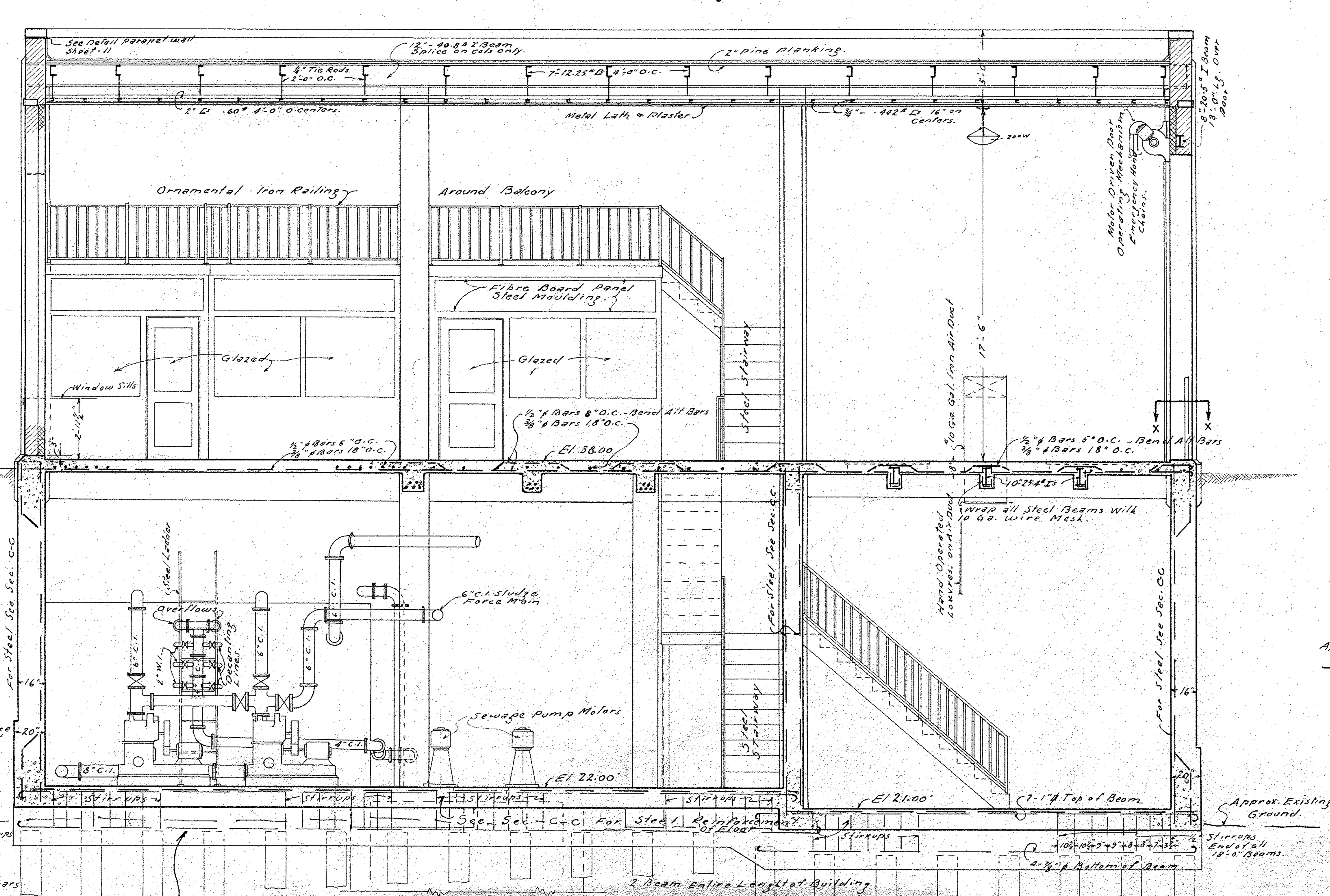
Thomas F. Bowe, Consulting Engineer, New York City
Samuel C. Cannon, Supt. of Public Works, Middletown, Conn.
Scale as shown
February 1936

Drawing No. 104-108

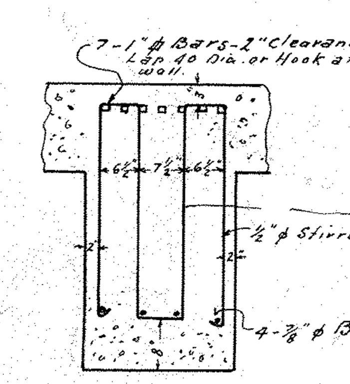
SU2-3



SECTIONAL PLAN - GROUND FLOOR

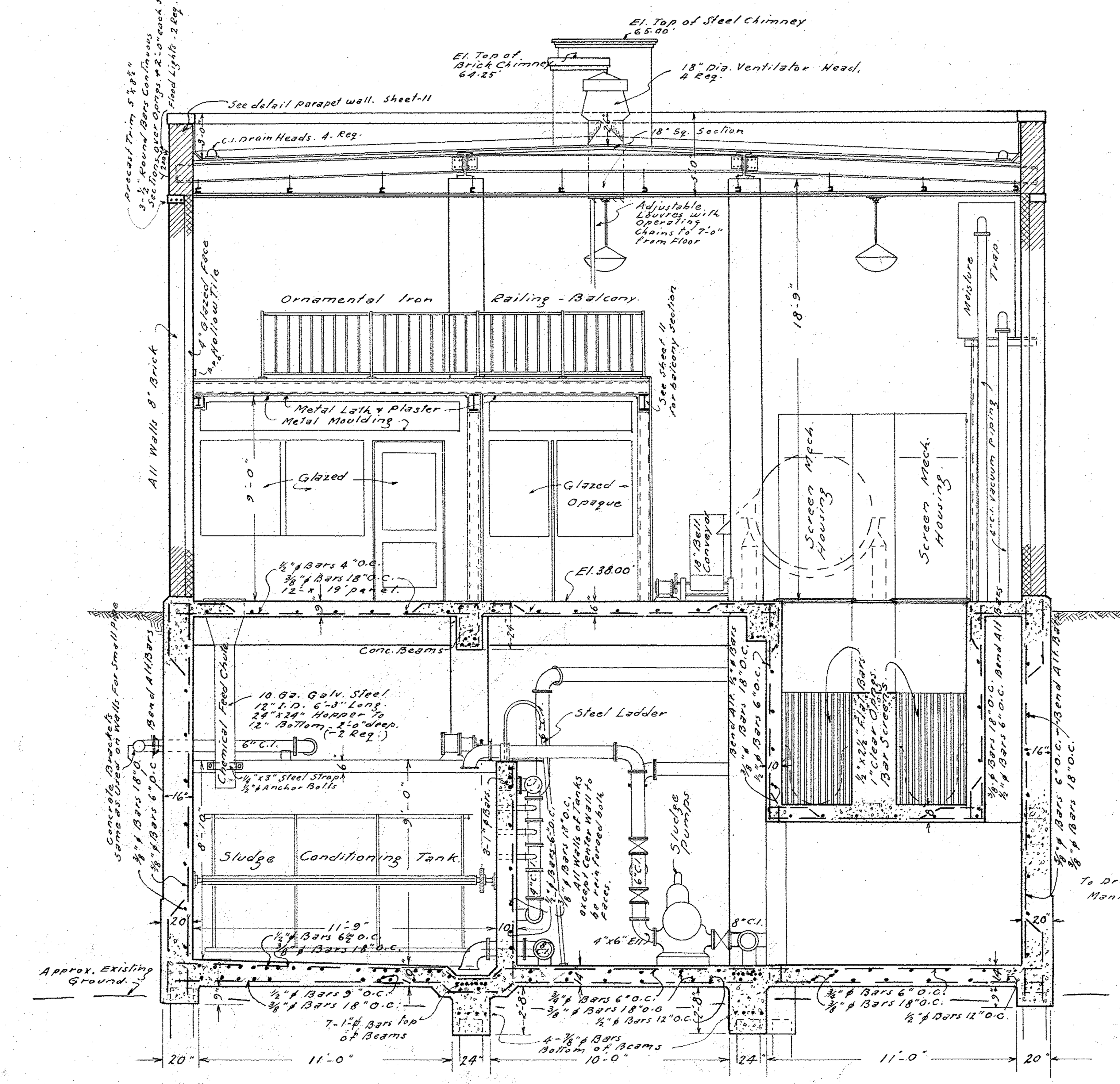


Dr. by F.S.B.
Tr. by F.S.B.
Ch. by C.E.P.

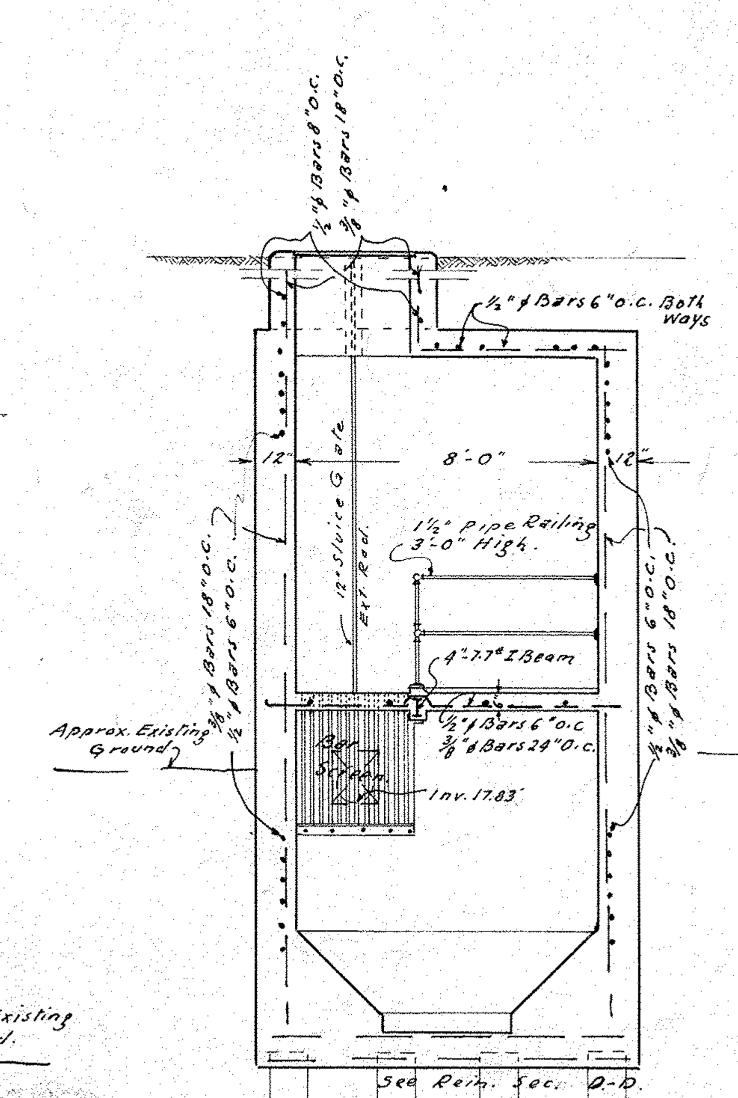


SECTION OF BEAM SHOWING STIRRUPS
Scale 1/2" = 1'-0"

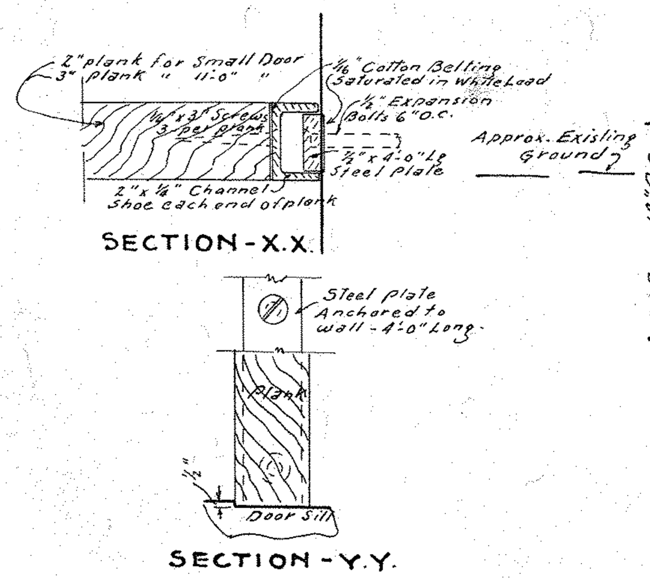
SECTIONAL ELEVATION - A.A.



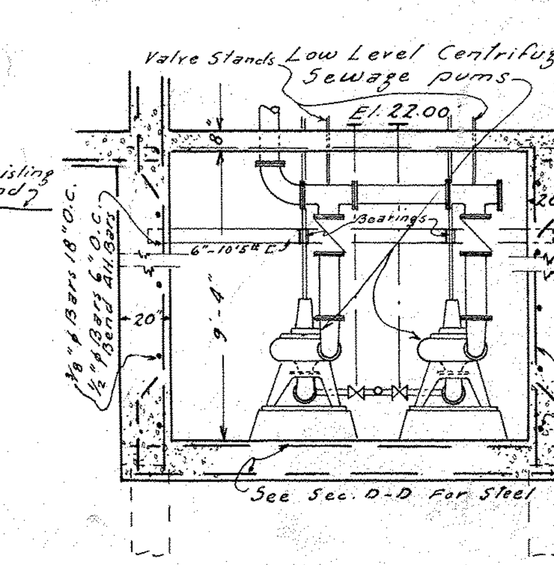
SECTIONAL ELEVATION - B.B.



SECTION-F.F.
Sheet. 5



DOOR BULKHEADS
Scale 1/4" = 1"



SECTION-E.E.
Sheet-5

SEWAGE TREATMENT WORKS
PROPOSED FOR
THE CITY OF MIDDLETOWN, CONN.
TREATMENT BUILDING

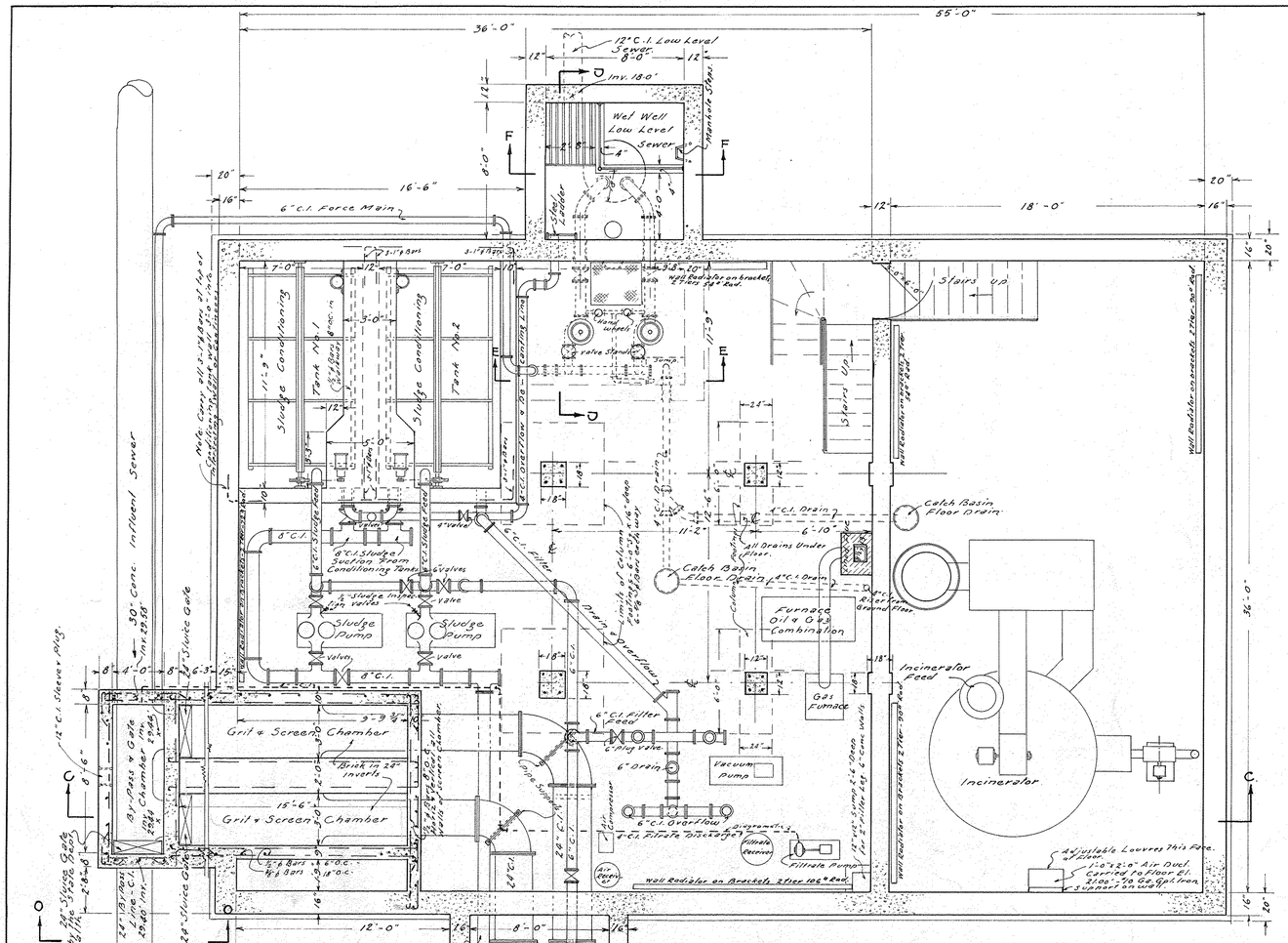
Thomas F. Bowe
Consulting Engineer
New York City
Scale 1/4" = 1'-0" or as shown

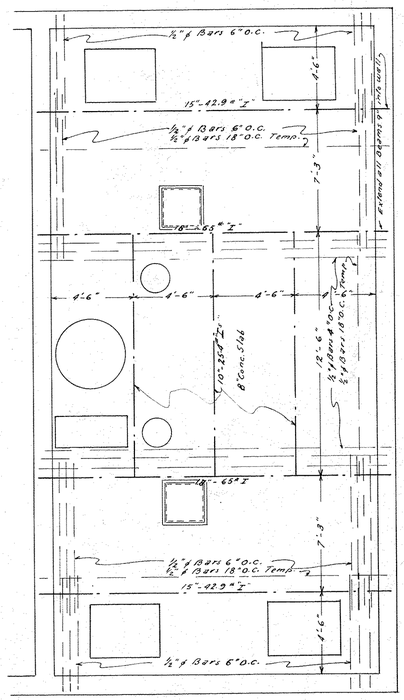
Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.
February 1936

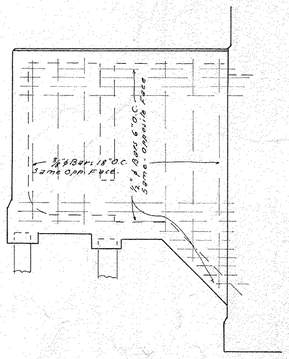
Drawing No. 104-109

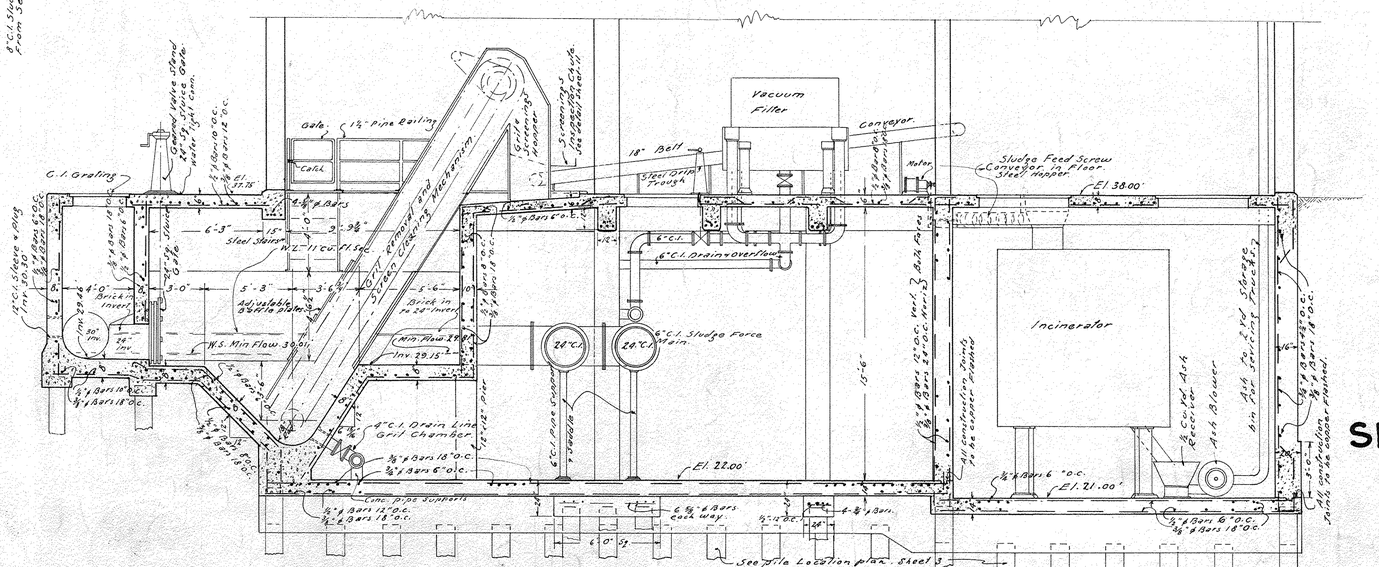
SU2-3

File V-29









SEWAGE TREATMENT WORKS

PROPOSED FOR

THE CITY OF MIDDLETOWN, CONN.

TREATMENT BUILDING

Thomas F. Bowe
Consulting Engineer
New York City
Scale 1/4"=1'-0"

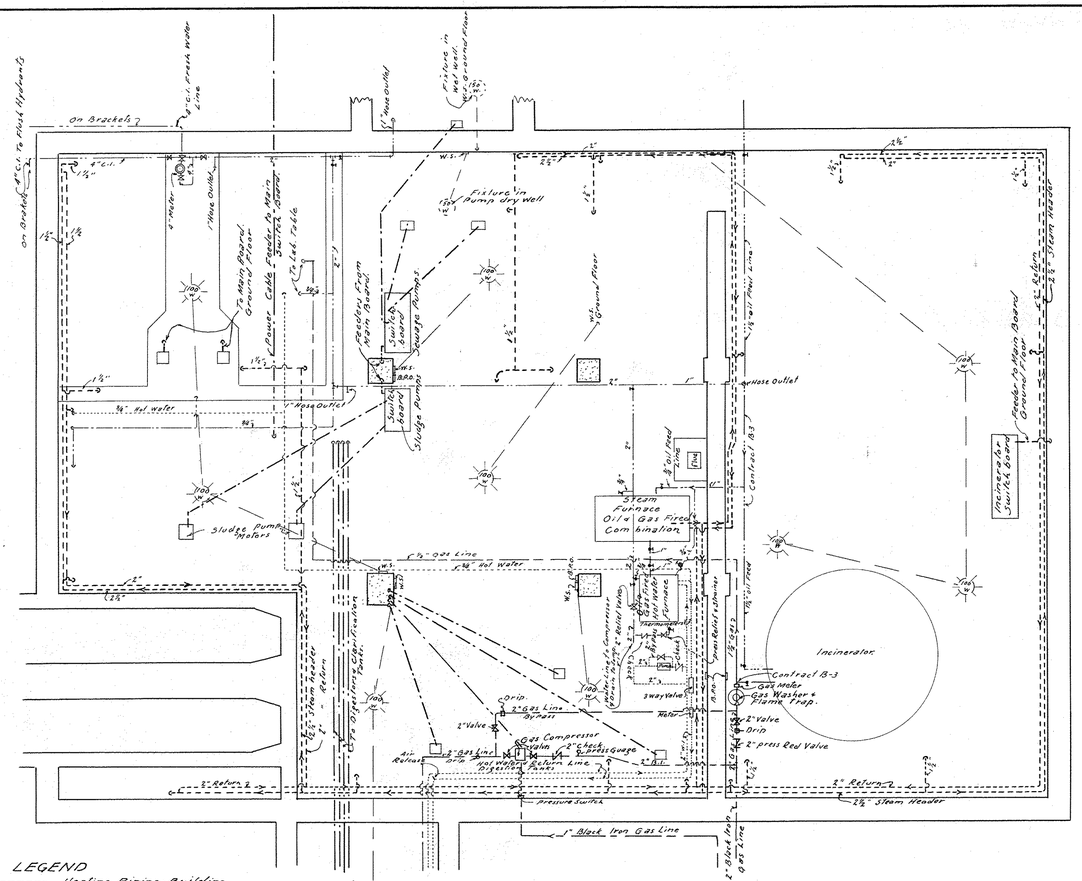
Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.
February 1936

Dr. by F.S.B.
Tr. by F.S.B.
Ch. by C.E.P.

Drawing No. 104-110

SU2-3

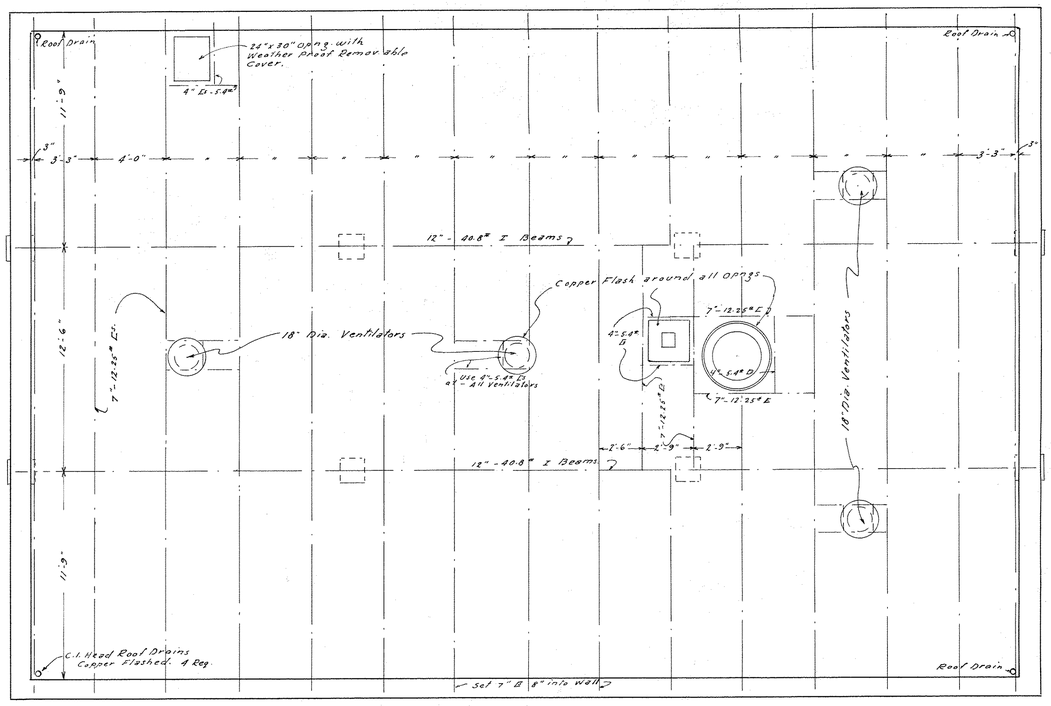
File V-29



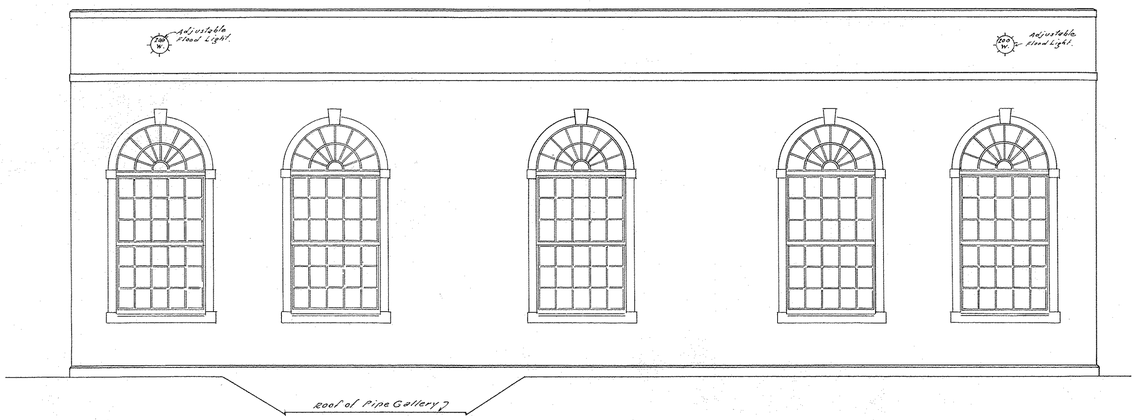
LEGEND

- Heating Piping - Building
- Hot Water Piping
- Fresh Water Piping
- Lighting Wiring
- Fuel Oil Lines
- Gas lines
- Power Cables
- Note: All Fixtures water Proof below Ground Floor.

BASEMENT PLAN



ROOF PLAN



EAST ELEVATION

SOUTH ELEVATION

SEWAGE TREATMENT WORKS

PROPOSED FOR

THE CITY OF MIDDLETOWN, CONN.

TREATMENT BUILDING

Thomas F. Bowe
Consulting Engineer
New York City
Scale 1/4" = 1'-0"

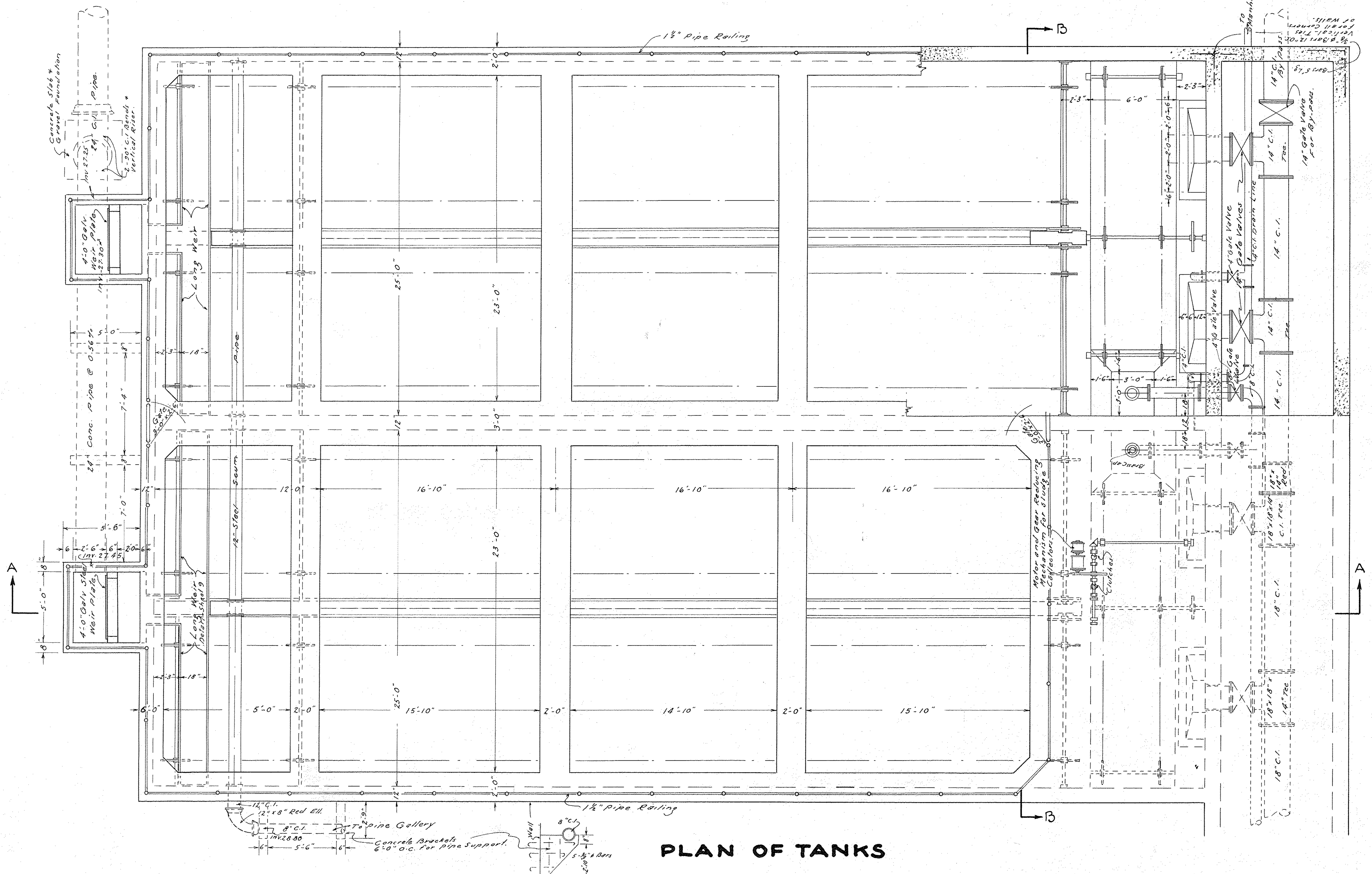
Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.
February 1936

Dr. by F.S.B.
Tr. by F.S.B.
Ch. by J.G.A.

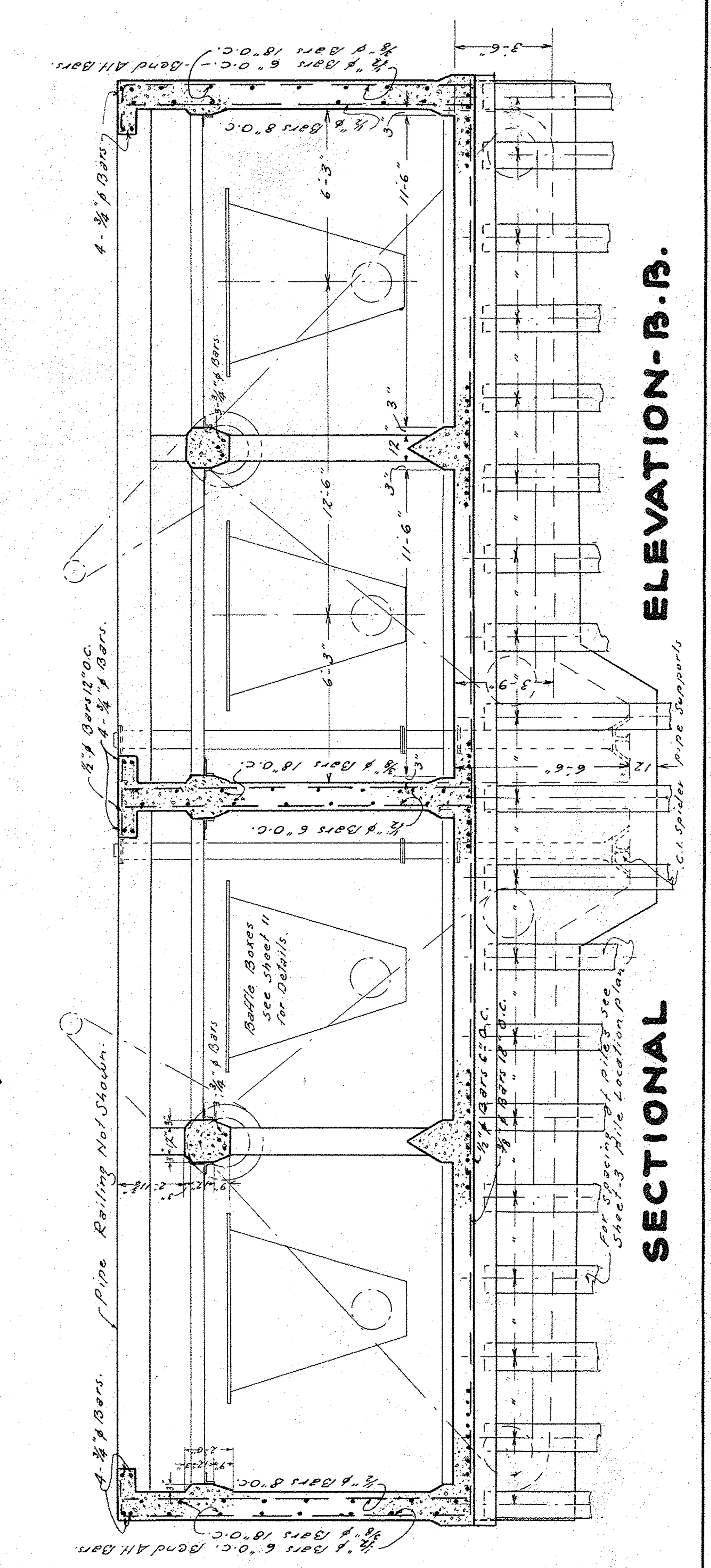
Drawing No. 104-111

SU2-3

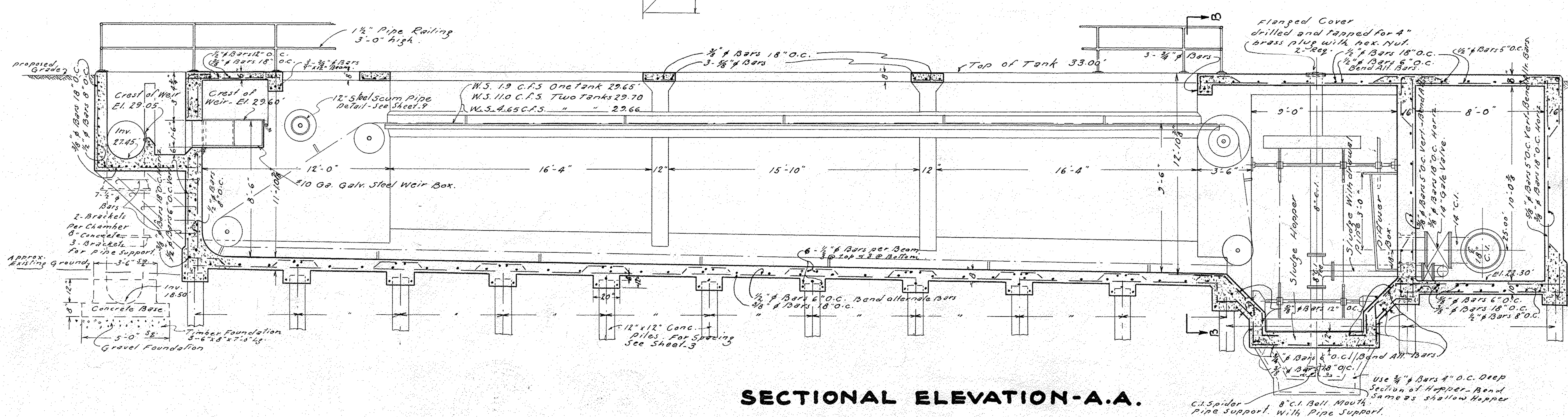
File V-29



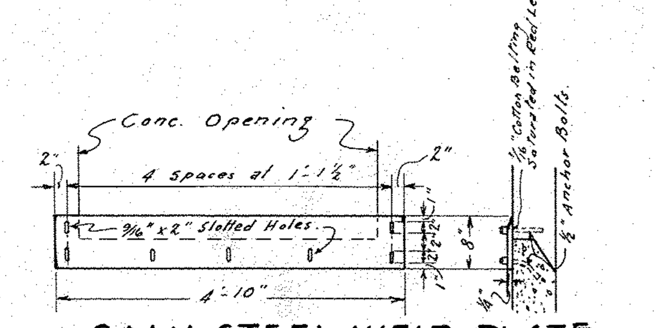
PLAN OF TANKS



SECTIONAL ELEVATION-B.B.



SECTIONAL ELEVATION-A.A.



GALV. STEEL WEIR PLATE

SEWAGE TREATMENT WORKS

PROPOSED FOR

THE CITY OF MIDDLETOWN, CONN.

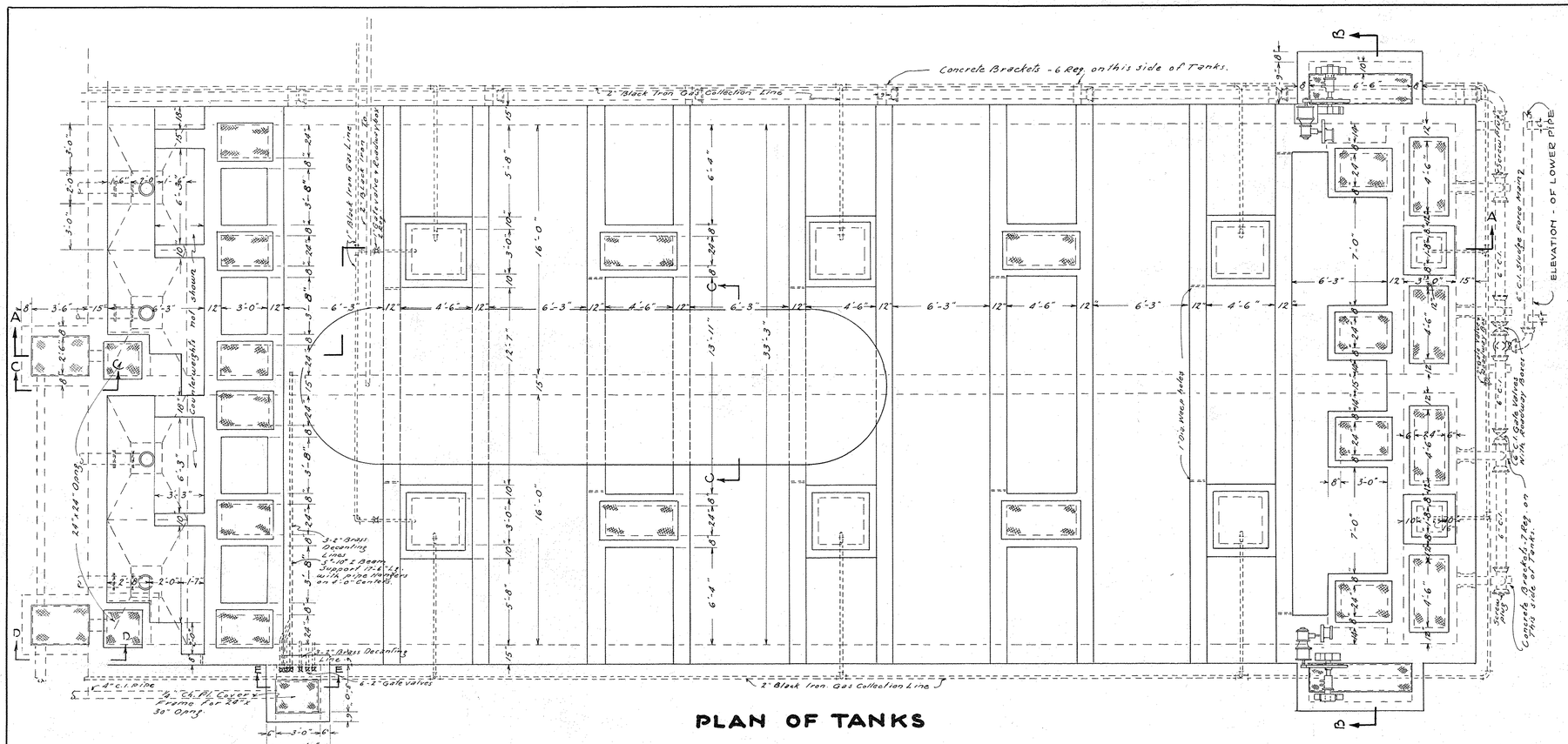
CLARIFICATION TANKS

Thomas F. Bowe	Samuel C. Cannon
Consulting Engineer	Supt. of Public Works
New York City	Middletown, Conn.
Scale ¼" = 1'-0"	February 1936

Dr. by-F.S.B.
Tr. by-F.S.B.
Ch. by-C.E.P.

Drawing No. 104-112

SV2-3



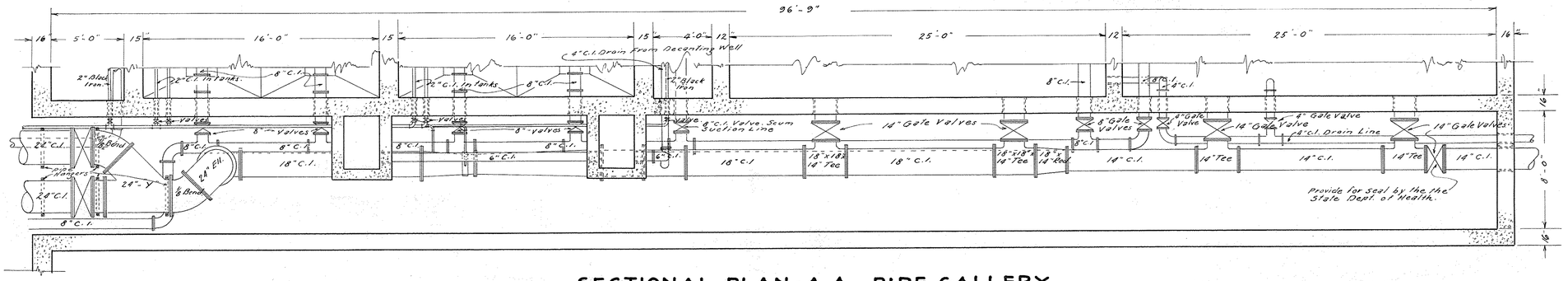
SEWAGE TREATMENT WORKS
PROPOSED FOR
THE CITY OF MIDDLETOWN, CONN.
DIGESTION TANKS

Thomas F. Bowe
Consulting Engineer
New York City
Scale 1/4" = 1'-0"

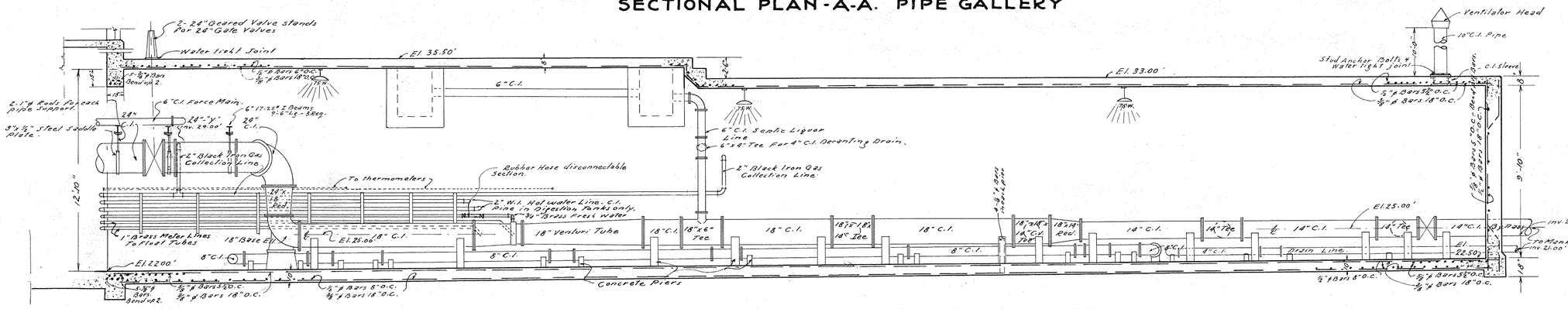
Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.
February 1936

Dr. by F.S.B.
Tr. by F.S.B.
Ch. by J.G.A.

Drawing No. 104-113
S U2-3
FILE



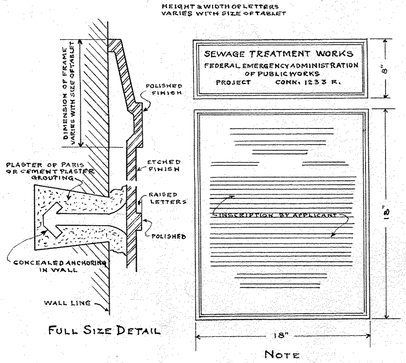
SECTIONAL PLAN - A-A. PIPE GALLERY



SECTIONAL ELEVATION - B.B. PIPE GALLERY

CUM

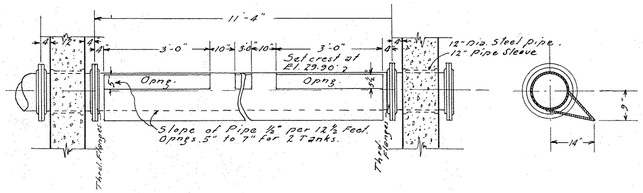
TYPE OF LETTERING
HEIGHT & WIDTH OF LETTERS VARIES WITH SIZE OF TABLET



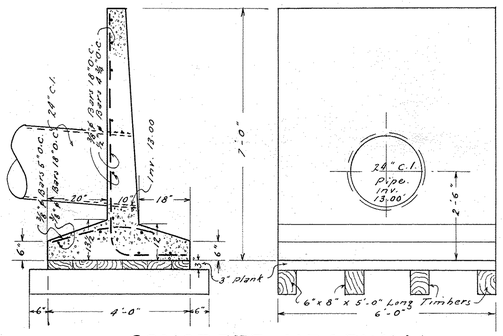
FULL SIZE DETAIL

NOTE
BOTH BRONZE TABLETS TO BE FURNISHED BY CONTRACTOR
DESIGN OF TABLETS TO BE SUBMITTED TO P.W.A. FOR APPROVAL

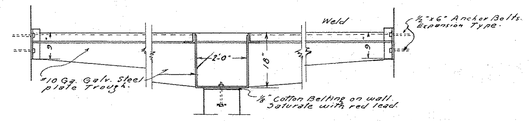
NAME PLATE



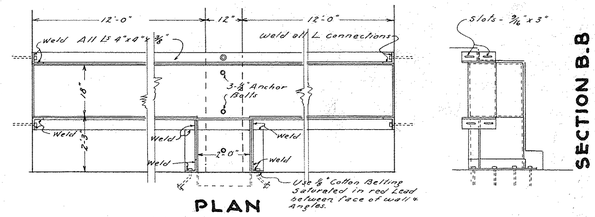
SCUM PIPE DETAIL
CLARIFICATION TANKS
Scale ½" = 1'-0"



CONCRETE HEADWALL
Scale ½" = 1'-0"



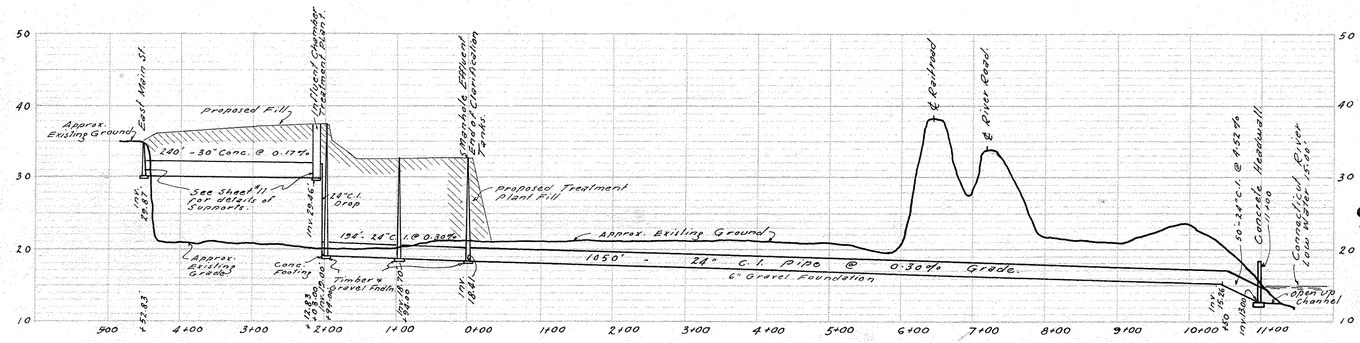
SECTION A-A



PLAN

SECTION B.B

EFFLUENT TROUGHS
Scale ½" = 1'-0"



INFLUENT SEWER - BY PASS AND OUTFALL SEWER
Scale 1" = 10' Vert. 1" = 100' Horiz.

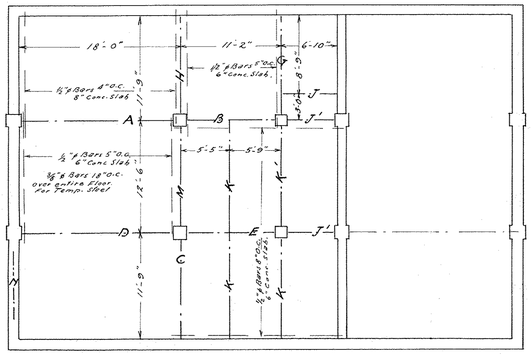
SEWAGE TREATMENT WORKS
PROPOSED FOR
THE CITY OF MIDDLETOWN, CONN.
PIPE GALLERY - OUTFALL SEWER - ECT.

Thomas F. Bowe
Consulting Engineer
New York City
Scale as shown

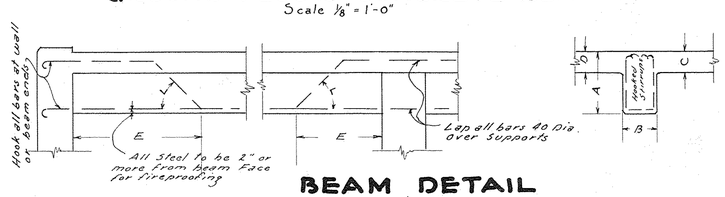
Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.

Dr. by - F.S.B.
Tr. by - F.S.B.
Ch. by - J.G.A.

Drawing No. 104-114
SV2-3



GROUND FLOOR - CONCRETE BEAMS
Scale 1/8" = 1'-0"



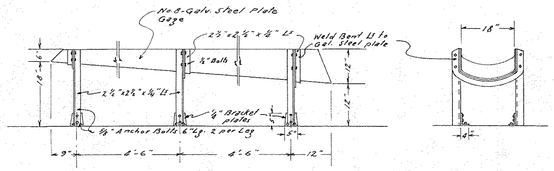
BEAM DETAIL
Scale - None

BEAM SCHEDULE

BEAM	CONCRETE BEAM DIMENSIONS A	B	C	D	REINFORCEMENT BARS BAR SIZE	NO STRAIGHT	NO BENT	ANGLE "L"	DISTANCE "E" WALL	COLUMN	BEAM	STIRRUPS NO	BAR SIZE	SPACING AT EACH END
A	26"	14"	6"	9"	1"	2	3	45°	1@2'-4" 1@3'-10" 1@5'-4"	Same		12	⅜"	1@1½" 5@3"
B	14"	14"	6"	6"	⅞"	2	2	40°	2@2'-0"	Same		24	⅜"	1@1½" 1@3½" 3@4" 1@7" 3@4½" 3@5½"
C	11"	12"	6"	6"	⅞"	1	2	45°	2@2'-2"	Same		18	⅜"	1@1½" 1@3½" 4@4" 1@5" 2@5½"
D	10"	9"	6"	6"	¾"	1	1	30°	1@1'-4"	Same		12	⅜"	1@1" 3@2½" 1@2½" 10@3"
E	20"	14"	6"	6"	1" & ⅞"	2	3	45°		1@2'-4" 2@1'-4"		15	½"	1@1½" 1@4½" 1@1'-10" 5@6"
G	14"	9"	6"	4"	¾"	2	1	45°	1@1'-4"	1@1'-4"		10	⅜"	1@3" 4@7"
H	12"	9"	6"	9"	⅜"	1	2	30°	2@2'-6"	Same		6	⅜"	1@3½" 2@7"
J	9"	8"	4"	—	½"	1	1	30°	1@1'-3"		1@1'-3"	4	½"	1@2" 1@6"
J'	9"	8"	4"	6"	½"	1	1	30°	1@1'-3"	1@1'-3"		4	½"	1@2" 1@6"
K	14"	14"	6"	6"	⅞"	2	2	40° 40°	1@2'-6" 1@2'-6"	1@2'-6" 1@2'-6"		20	⅜"	1@3½" 3@4" 1@4½" 10@5" 3@5"
K'	14"	14"	6"	6"	⅞"	2	2	40° 40°		@2'-6" @2'-6"		20	⅜"	1@3½" 3@4" 1@4½" 10@5" 3@5"
M	10"	8"	6"	6"	⅜"	1	2	30°		1@2'-3" 1@2'-3"		6	⅜"	1@4½" 2@9"
N	15"	15"	6"		⅝"	2	2	40°	2@1'-8"					

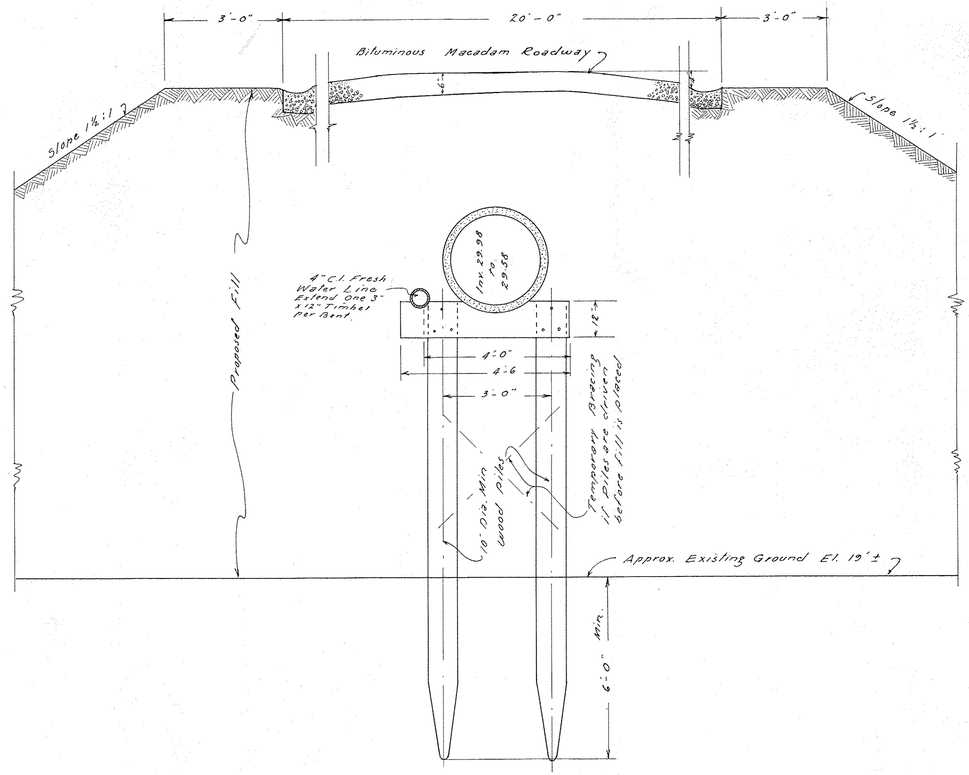
Bar Arrangement

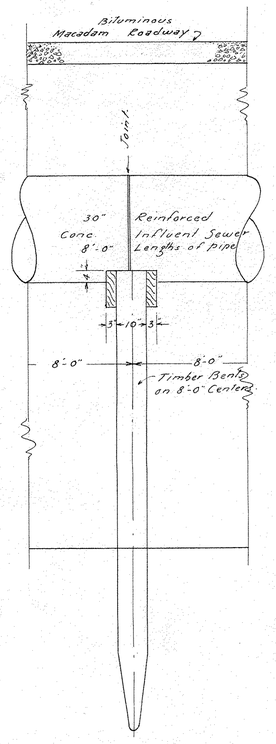
Bar Arrangement



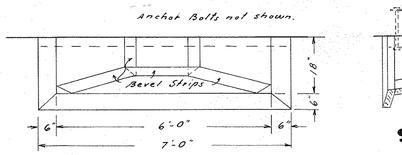
DETAIL - SCREENING INSPECTION CHUTE
Scale ½" = 1'-0"

Dr. by - F.S.B.
Tr. by - F.S.B.
Ch. by - J.G.A.

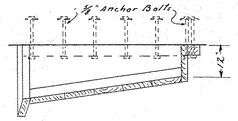




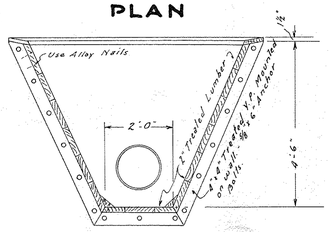
SECTIONS - PROPOSED ROADWAY FILL SHOWING PIPE SUPPORTS
Scale - None.



PLAN

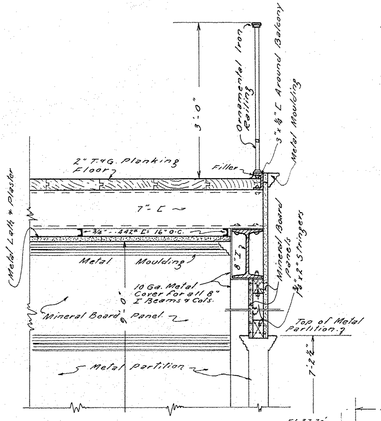


SECTION A-A

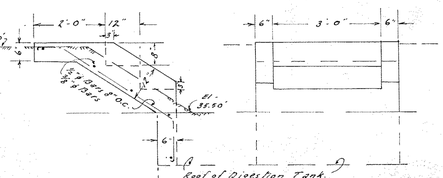


SECTION B-B

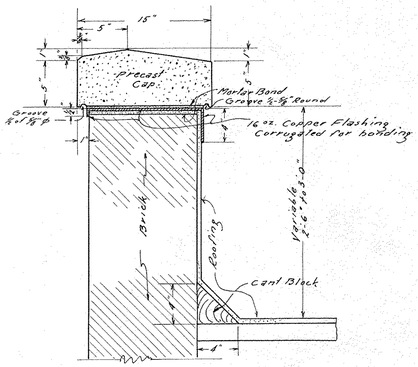
INLET BAFFLE BOX
Scale ½" = 1'-0"



BALCONY SECTION
Scale 1" = 1'-0"



CONCRETE STEPS
NORTH EAST CORNER OF TREAT. BLDG.
Scale ½" = 1'-0"



PARAPET WALL SECTION
Scale 1½" = 1'-0"

SEWAGE TREATMENT WORKS
PROPOSED FOR
THE CITY OF MIDDLETOWN, CONN.
GENERAL DETAILS

Thomas F. Bowe
Consulting Engineer
New York City
Scale as shown

Samuel C. Cannon
Supt. of Public Works
Middletown, Conn.
February 1936

Drawing No. ~~704-46~~ SU2-1 SU11