Jones & Henry
ENGINEERS, LTD.

City of Van Wert, OH
Water Treatment Plant Spray Aeration

ADDENDUM 2

September 2, 2026

Planholders on the City of Van Wert, OH, Water Treatment Plant Spray Aeration are hereby notified of the following amendments to the Contract Documents. This Addendum is hereby made a part of the Contract Documents.

SUPPLEMENTARY CONDITIONS

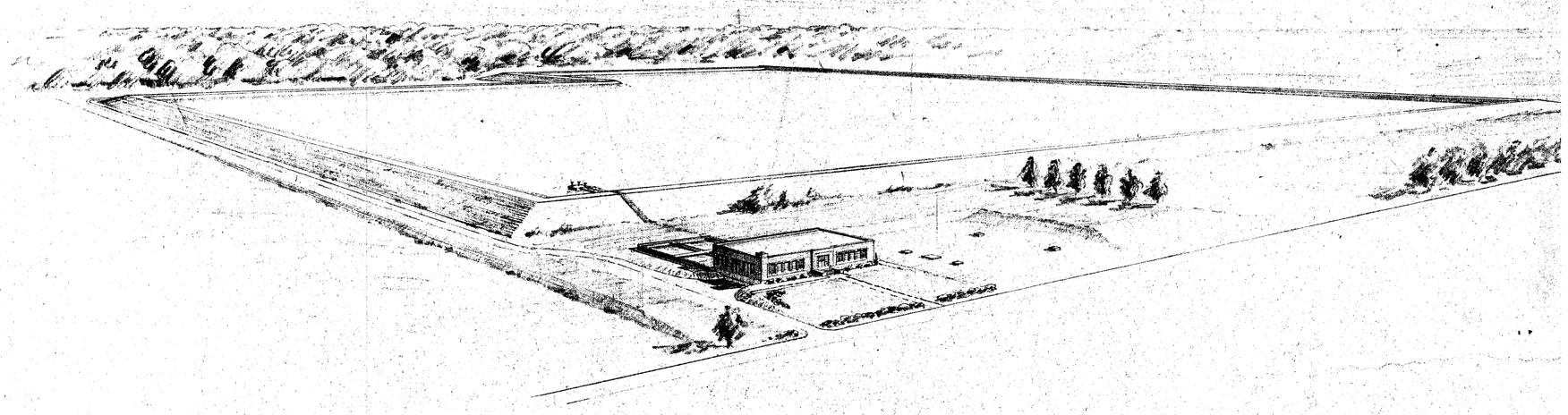
The drawings listed in Section 5.03 D of C-800 Supplementary Conditions are included in this addendum and will be added as Exhibit 2 to the Supplementary Conditions.

Planholders should update the Table of Contents to reflect the above sections.

An updated Table of Contents will be included in the Issued for Construction Project Manual.

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON PAGE C-410-1 OF THE BID.

4357 Ferguson Drive, Suite 220, Cincinnati, Ohio 45245 - 513.528.5599



SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS AND STROUT

CONSULTING ENGINEERS — TOLEDO, OHIO

Sta. 0+00 – Iron Pipe @ South Fence Hilton Bend Country Club
Reference for North - South Stations

90° 6'0" Iron Pipe @ Sta 6+67.5 on Base Line

Sta. 6+77.5

PROPERTY LINE

NORTH BASE LINE

Toe Slope, 2:1

Top of Slope

ROAD

Iron Pipe on North Base Line

B.M. 787.53 @ Sta 7+38 N.E. corner of Conc. C.B.

3" Sludge Line

SETTLING BASINS

SLUDGE BLDG.

Sta 7+90

16" Plant influent

Sta. 8+61 & Outlet Tower

Sta. 8+47.5

WALK-WAY

CLEAR WATER RESERVOIR

HOSPITAL PROPERTY

1330'

Approx. West line of Woods on Hospital Property

The Slope-Apron Blanket

Sta. 12+78

46° 57' 3" Sludge Line

Sta. 13+25

Sta. 15+47.5

175'

& Sta. 15+47.5 INLET STRUCTURE

112'

88°40'

Toe Slope #27

Iron Pipe #1

Raw Water Pumping Station

SLUDGE LAGOON

Elev. Top Dike 786

Dam

FINISH ELEV. BOTTOM RESERVOIR 786.50

Iron Pipe

CENTRAL BASE LINE

Property Line

Iron Pipe @ Sta 15+50 on base line

House

294'

40'

Conc.

8'

57½'

BARN 462'

House

ALBRIGHT PROPERTY

1655'

Sta 17+74

30" Ca. W. Pipe Sta 17+74

Elev. Top of Dike 809.5

U.S. Route #127

B.M. 789.93 @ Sta. 18+27 on N.E. Corner of Conc. Catch Basin

Tail Line is Parallel to Highway

E Sta 18+50

Overflow

Flume

38'PP

TOWN CREEK

MAIN BASE-line
8'-0" from East edge road
Odds of East-West Streets

955'

1505'

1" Sta. BASE LINE (SECOND APP.)

Sta. 25+02.5

Sta. 26+51

Iron Pipe @ Sta. 26+52.3 on base line

B.M. 793.35 @ Sta 26+49 on N.E. Corner of Conc. Catch Basin

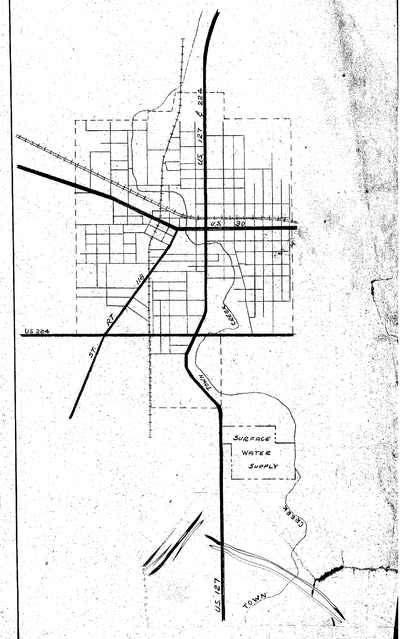
Sta 4+44

Sta 18+49

Iron Pipe

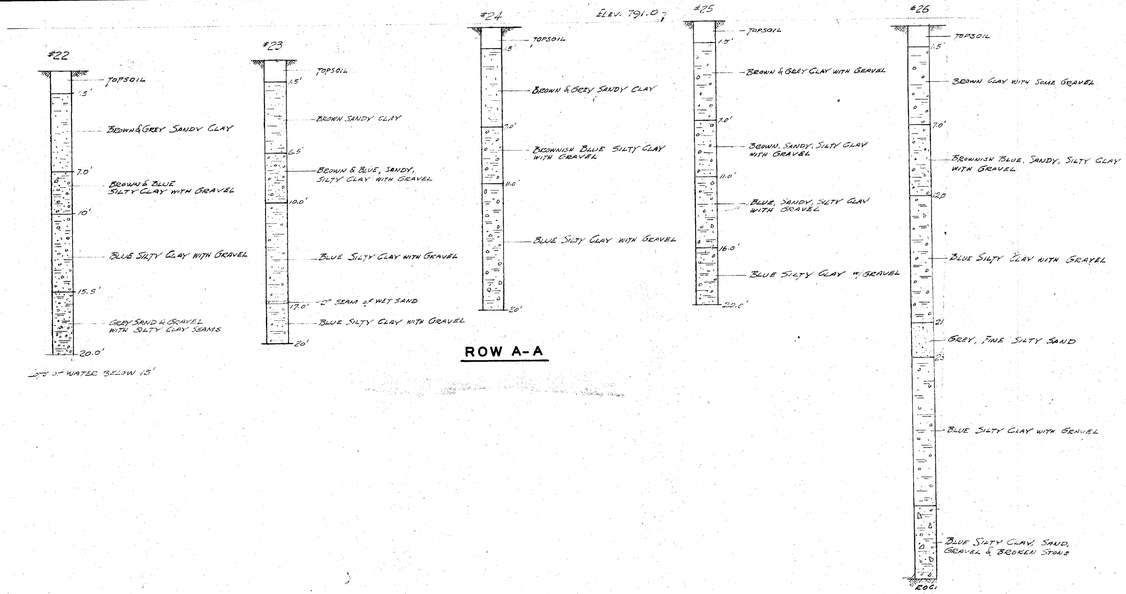
• Indicates Test Borings

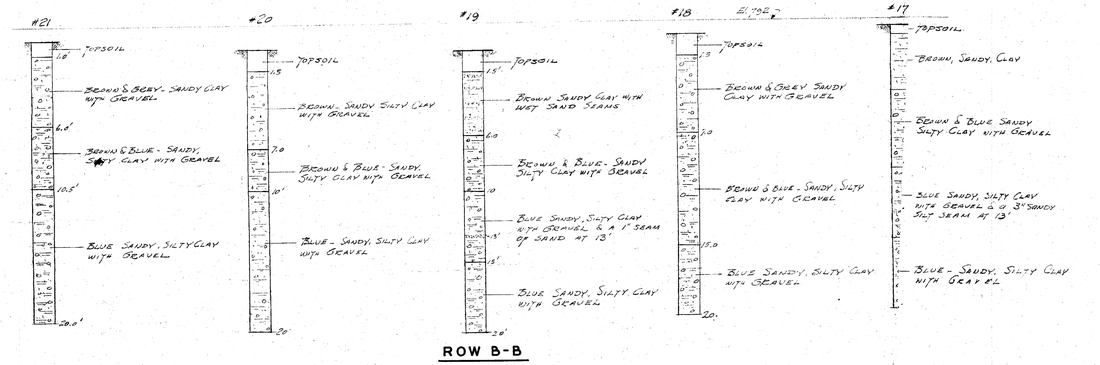
PLOT PLAN
Scale: 1"=100'

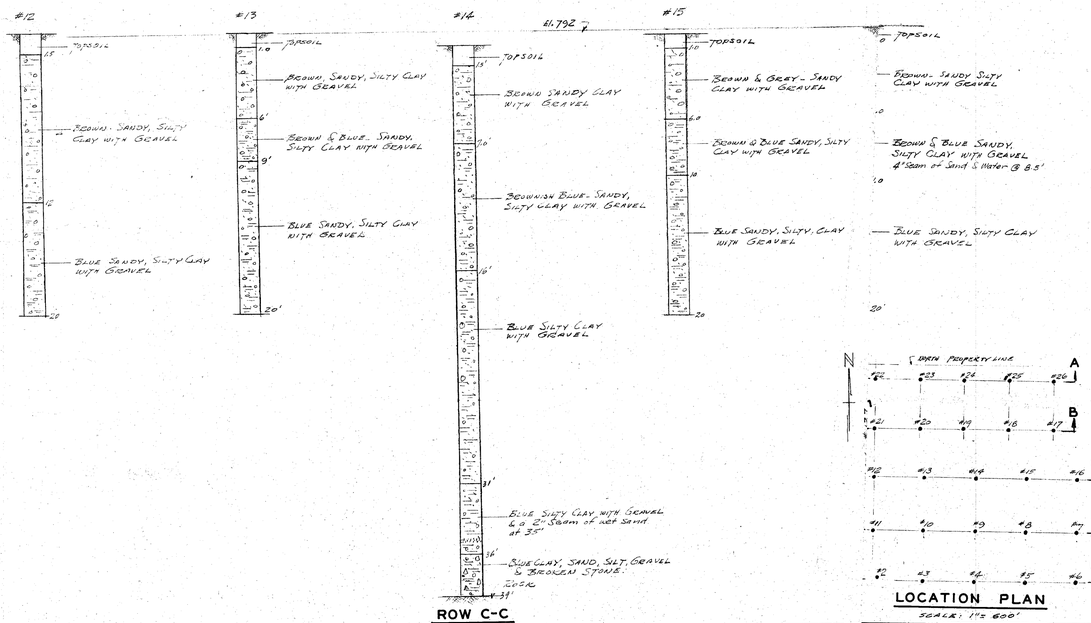


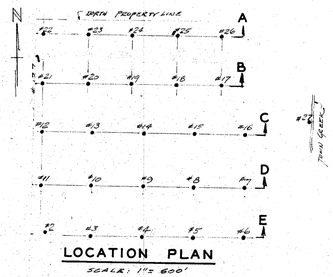
LOCATION PLAN
Scale: 2" = 1 Mile

LOCATION PLAN
PLOT PLAN
SECTIONS A, B & C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: AS NOTED
1949
37



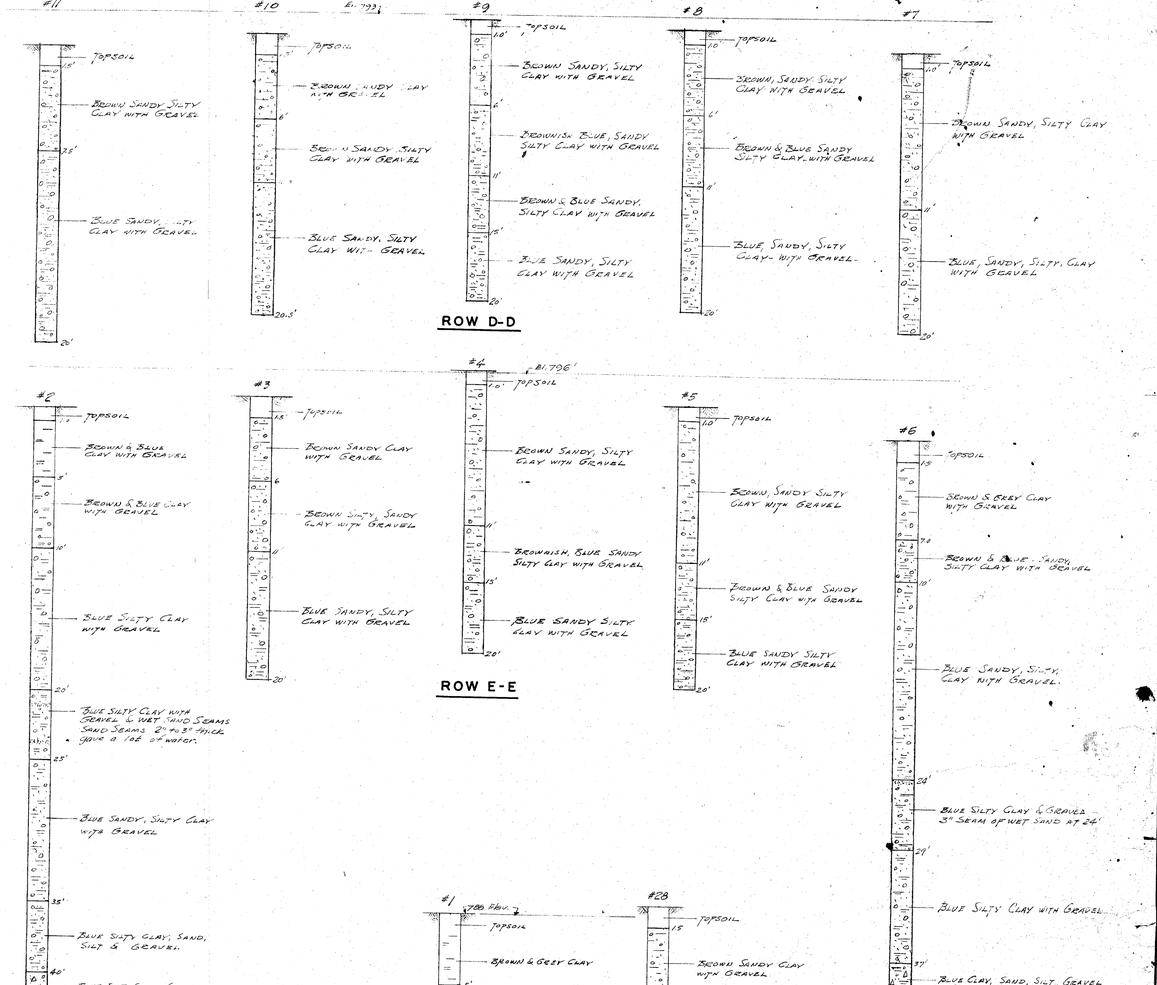






LOCATION PLAN

SCALE: 1"= 600'



#27 EL. approx. 782.5

TOPSOIL 1.0'

BROWN SANDY CLAY WATER SEEPED IN.

4'

BROWN & BLUE SANDY SILTY CLAY WITH GRAVEL

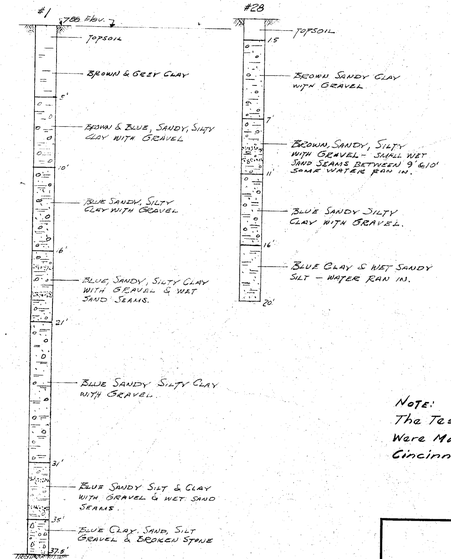
10'

BLUE SANDY SILTY CLAY WITH GRAVEL

15'

BORING NO. 27

LOW SERVICE PUMPING STATION SITE



ROW F-F

TREATMENT PLANT SITE

Note:
The Test Borings Shown On this Sheet Were Made By The H.C. Nutting Company Cincinnati, Ohio

TEST BORINGS

SECTIONS A, B & C

SURFACE WATER SUPPLY

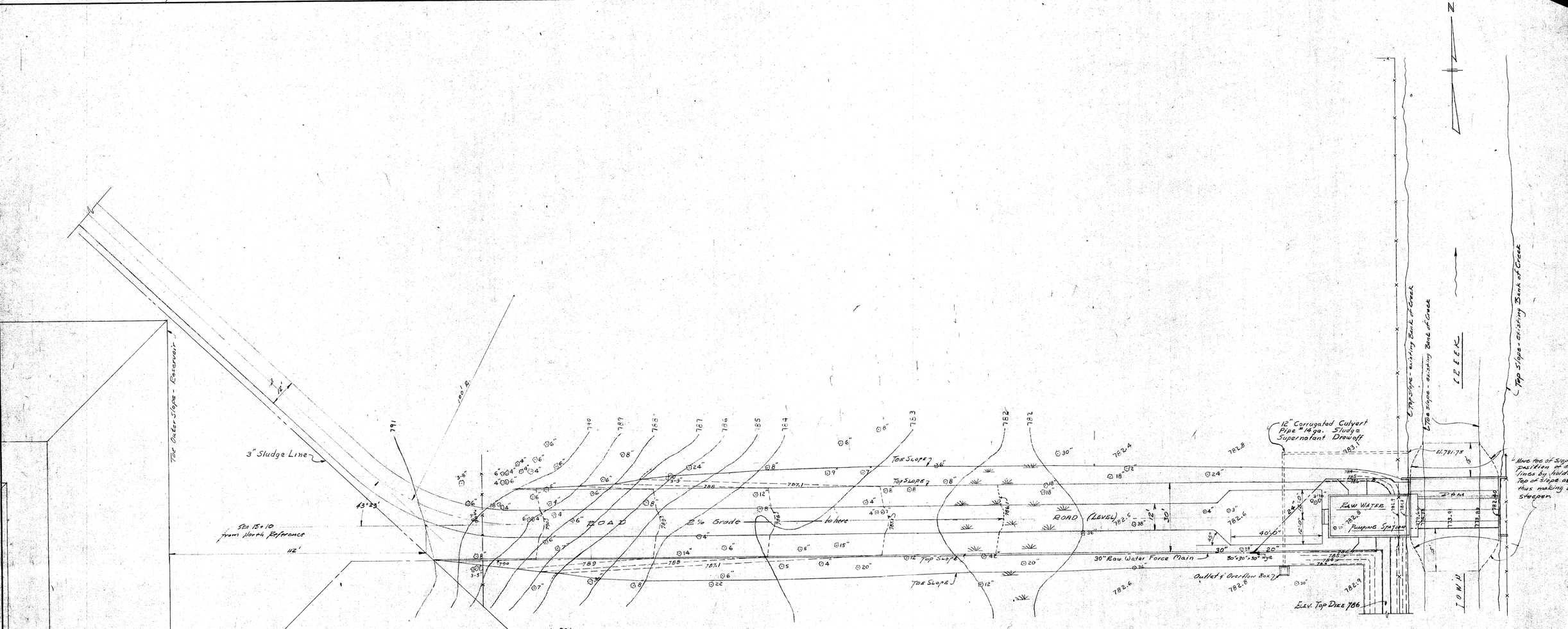
VAN WERT, OHIO

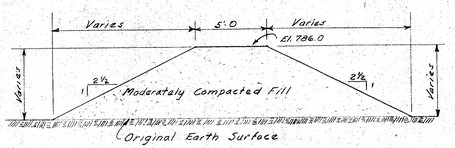
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1"=5'-0"

1949

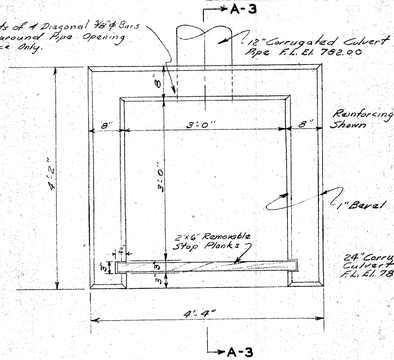
2/37



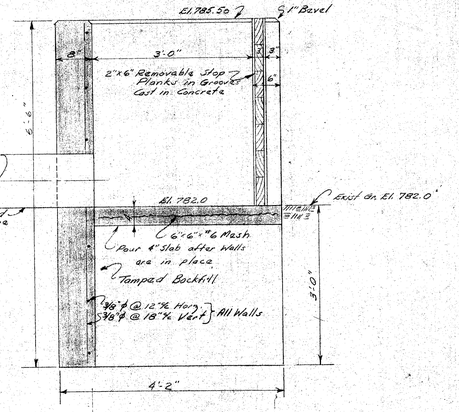


TYPICAL SECTION SLUDGE LAGOON DIKE*
Scale 1"=5'-0"

SECTION C



PLAN



SECTION A-A

SLUDGE LAGOON OUTLET AND OVERFLOW BOX*
Scale ⅜"=1'-0"

SECTION C

PLOT PLAN
SECTION A

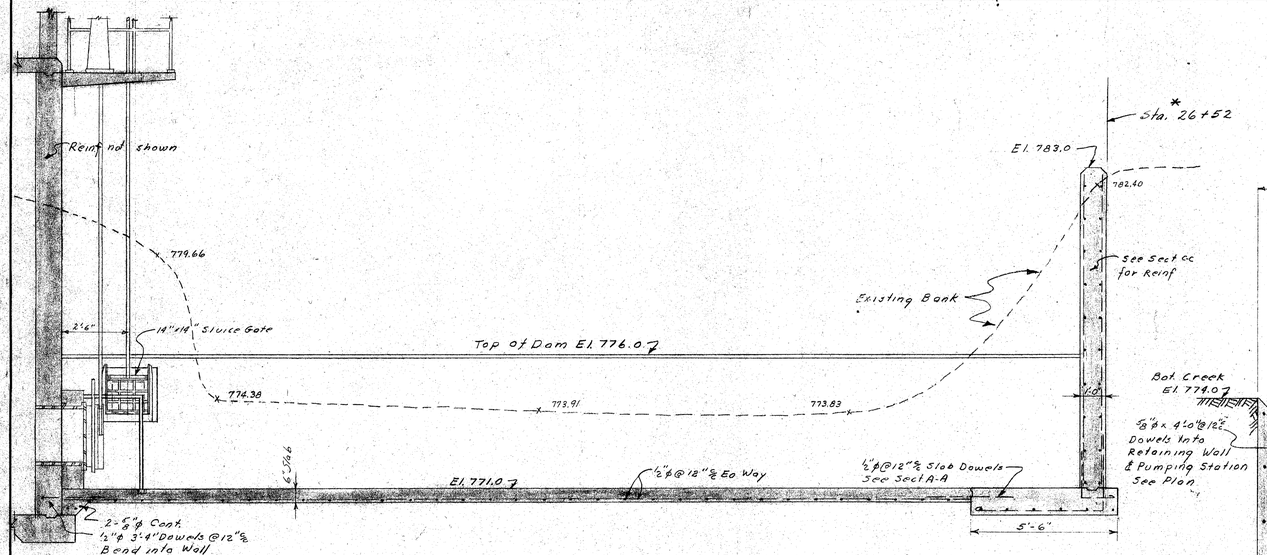
SURFACE WATER SUPPLY
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

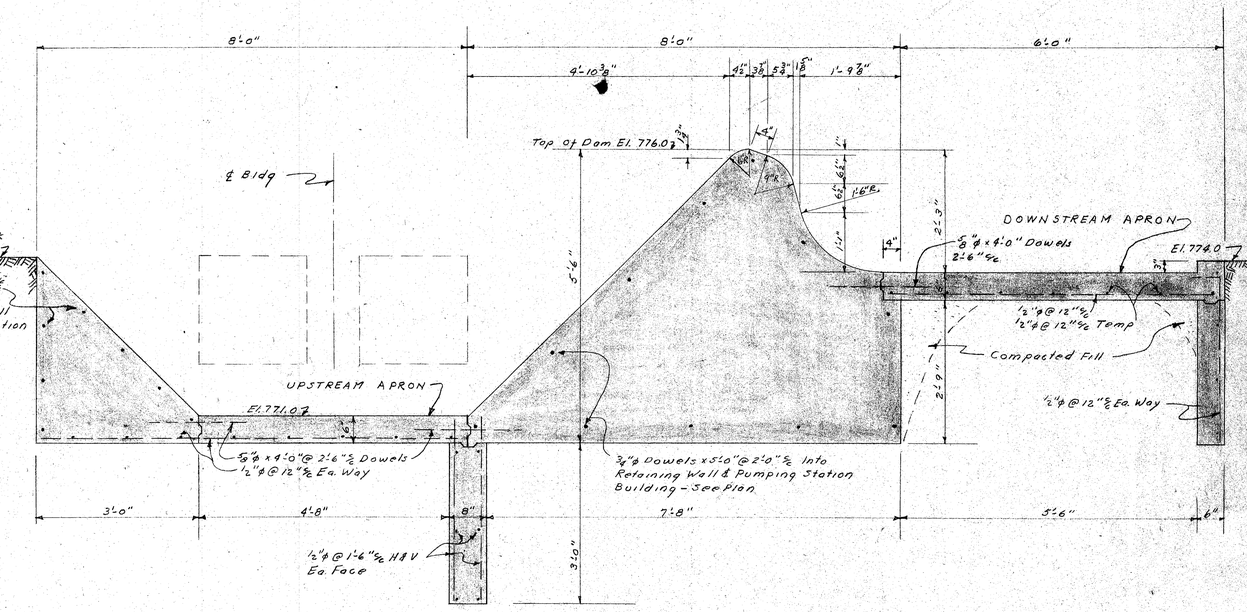
SCALE: 1"= 20'-0"
UNLESS NOTED 1949

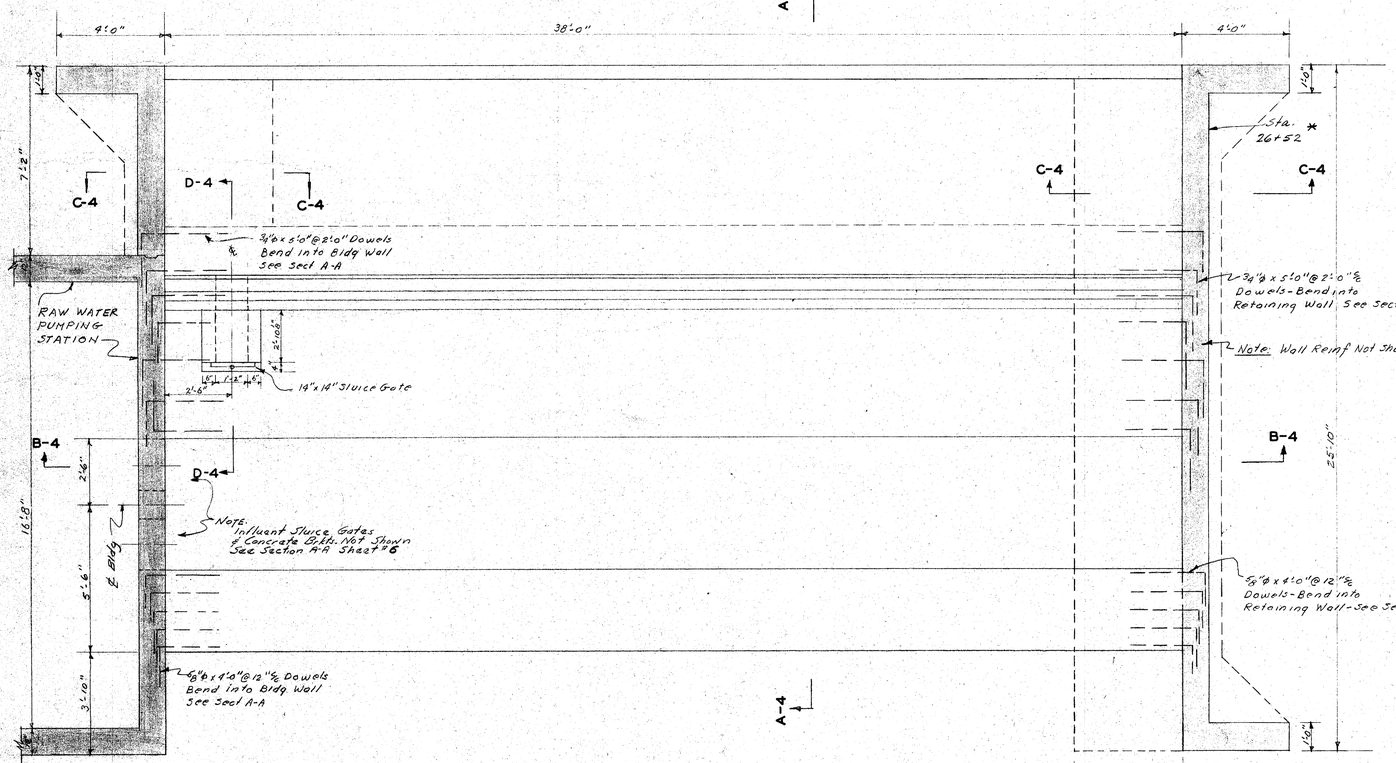
S-27

*Added 8/29/49 U.F.K.



SECTION B-B

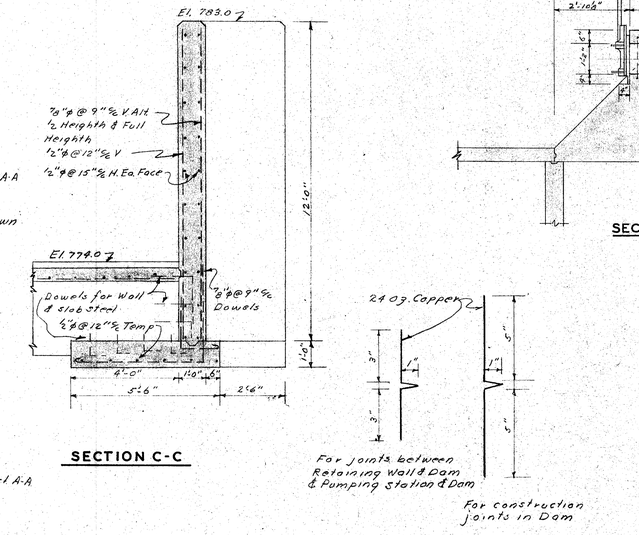




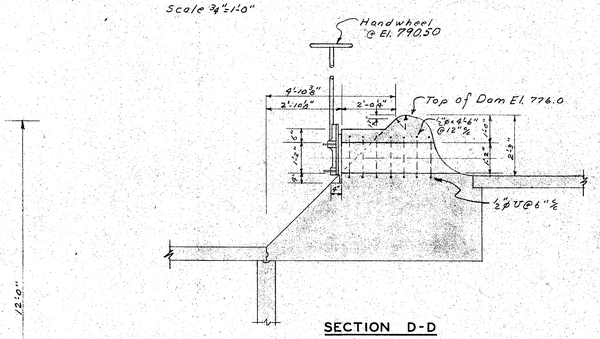
PLAN

SECTION A-A

Scale 3/4"=1'-0"



SECTION C-C



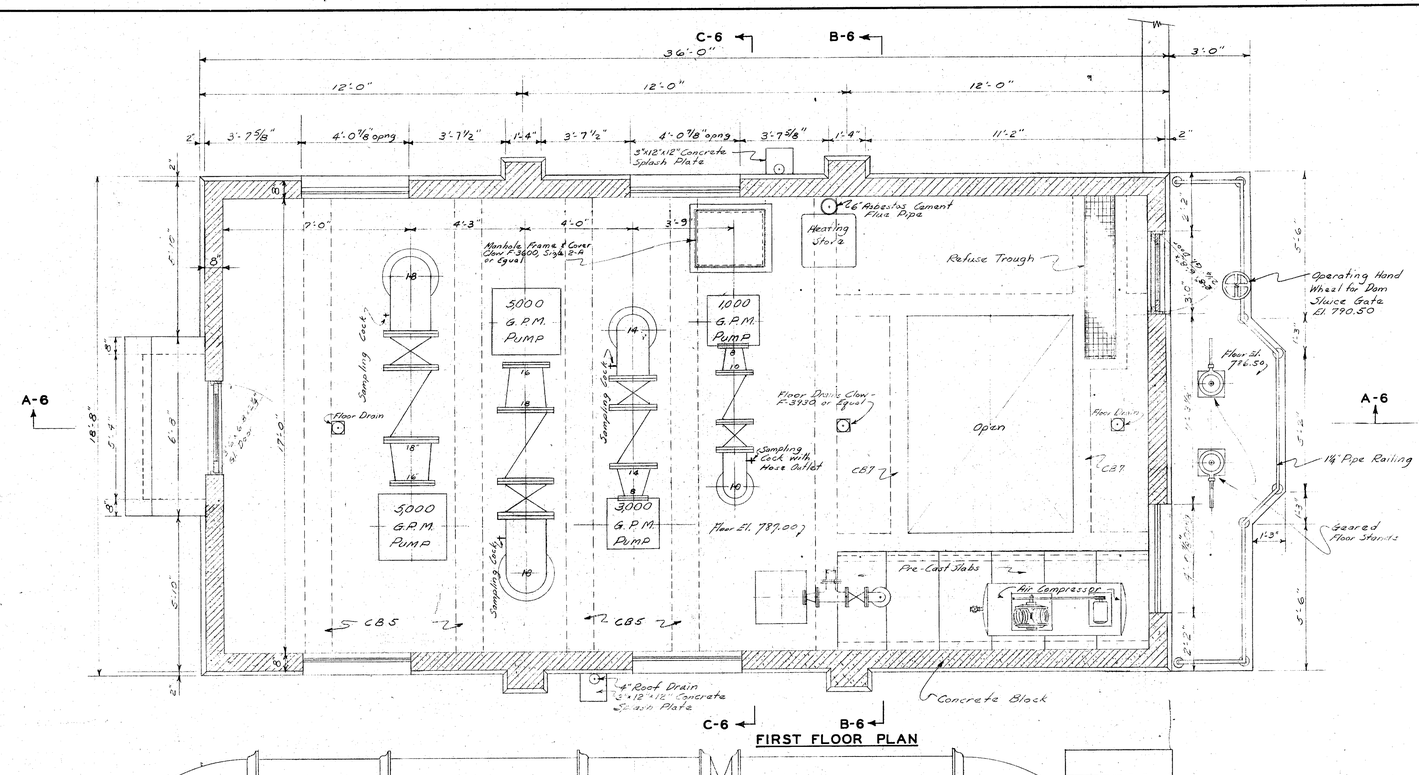
SECTION D-D

COPPER WATER STOPS

Scale 3"=1'-0"

* Revised Sept. 49 GAS

PLAN & SECTIONS
DAM
SECTION A
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 3/8" = 1'-0"
UNLESS NOTED 1949
37



BEAM SCHEDULE

Beam Mark	Size	Straight No.	Straight Size	Truss No.	Truss Size	Stirrups No.	Stirrups Size	Stirrups Spacing	Remarks
CB1	10"x12"	2	¾"ϕ	1	¾"ϕ				1-¾"ϕ x 4'-0" Ea. End, Top
CB2	8"x10"	1	⅝"ϕ	1	⅝"ϕ				
CB3	12"x12"	1	⅝"ϕ	1	⅝"ϕ				
CB4	6"x12"	2	¾"ϕ						
CB5	12"x18"	2	⅝"ϕ	3	¾"ϕ	7	⅜"ϕ	8"c/c	Hook ends Str. Bars
CB6	24"x30"	3	1¼"□	2	1¼"□	See Section AA			Sheet #6
CB7	8"x10"	1	⅝"ϕ	2	⅝"ϕ		⅜"ϕ	Thru out	1-⅝"ϕ x 3'-0" Ea. End, Top
CB8	10"x12"	2	¾"ϕ	1	¾"ϕ				
CB9	10"x12"	2	⅝"ϕ	1	⅝"ϕ	7	⅜"ϕ	6"c/c	1-⅝"ϕ x 4'-0" Ea. End

PLANS & DETAILS
RAW WATER PUMPING STATION
SECTION A

SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 3/8"= 1'-0"
UNLESS NOTED 1949

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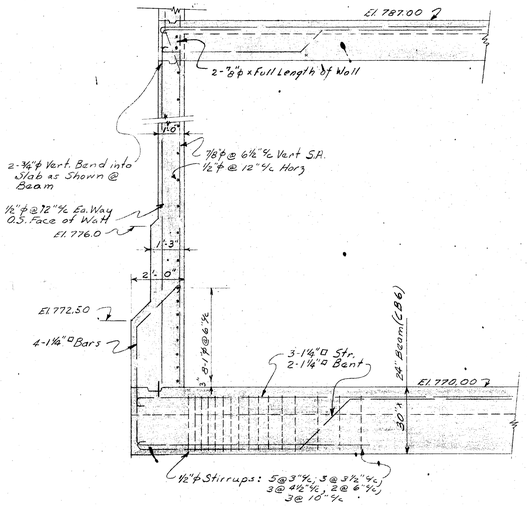
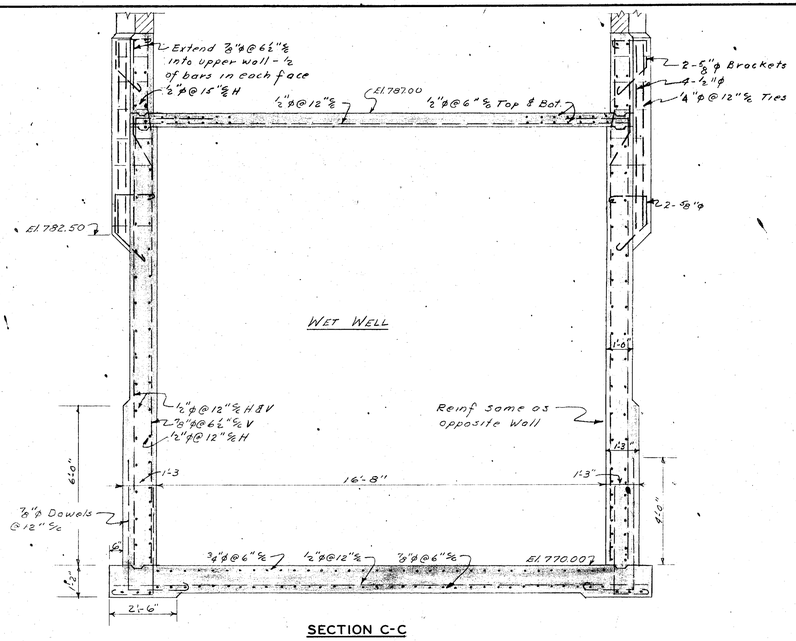
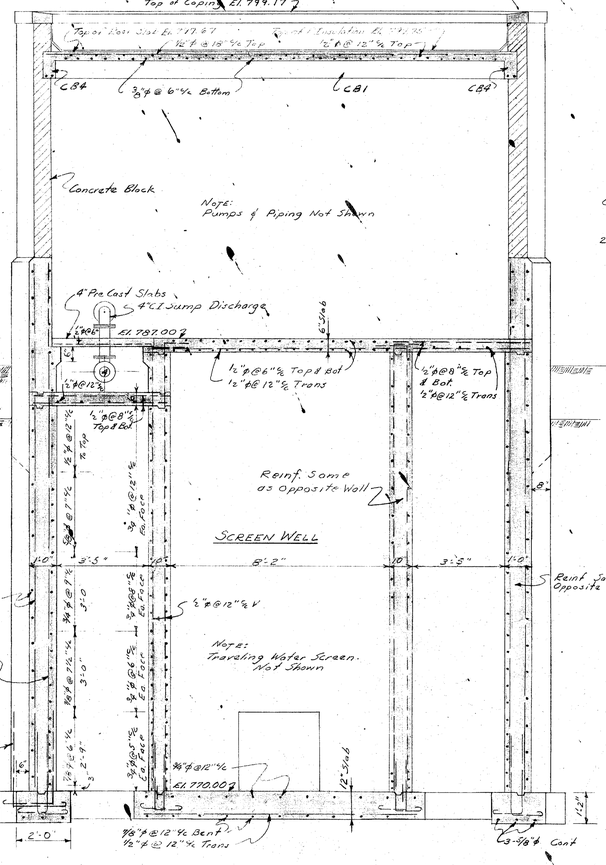


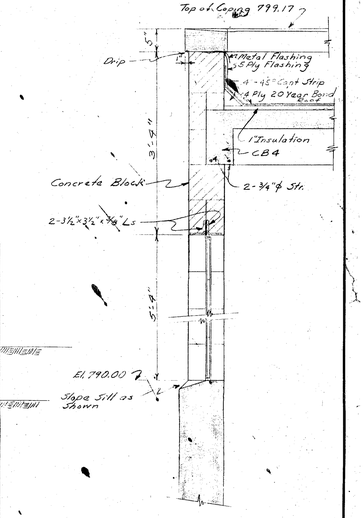
SECTION D-D



SECTION C-C

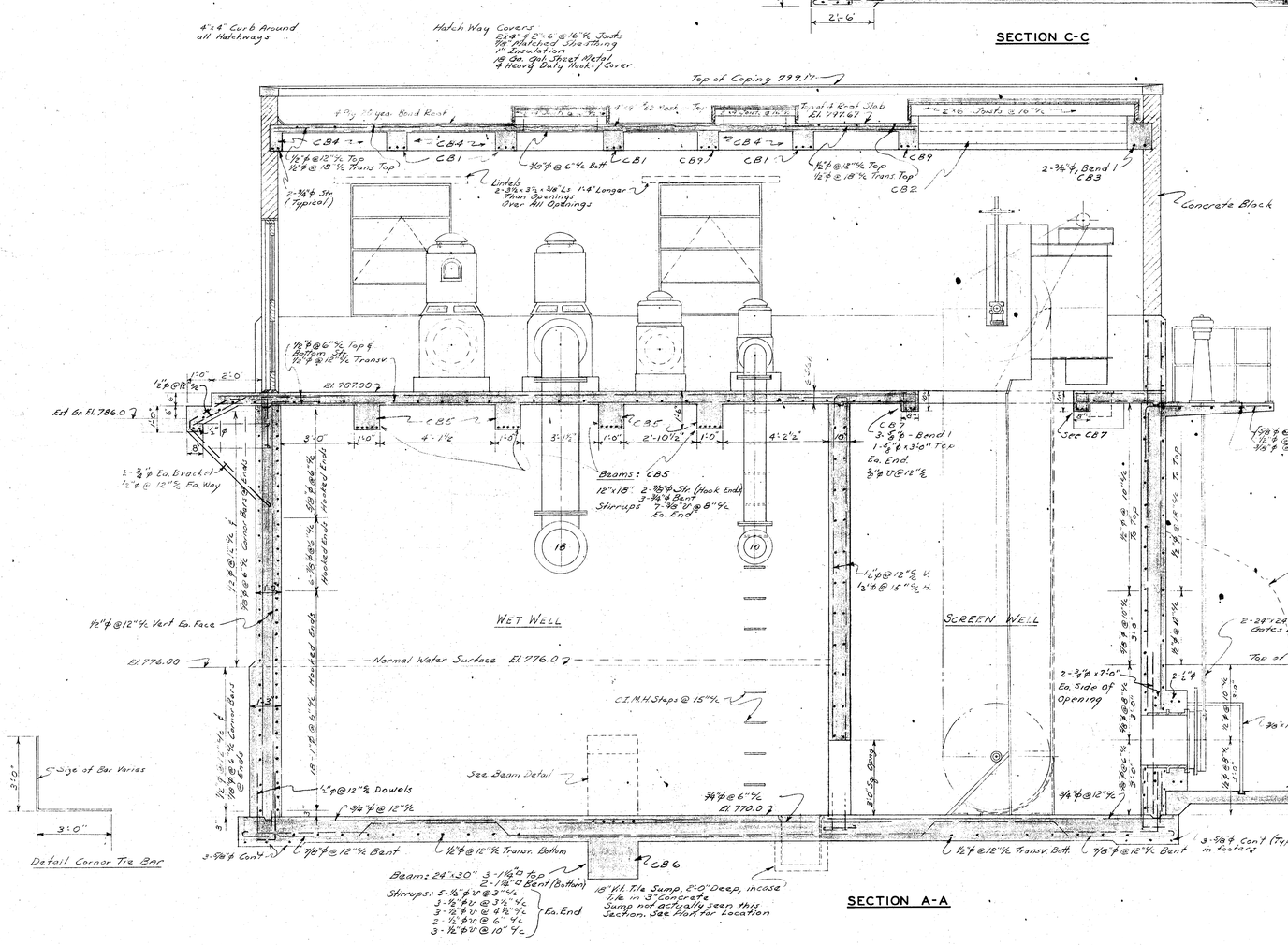


SECTION B-B



EXTERIOR WALL DETAIL

Scale: ¾" = 1'-0"



SECTION A-A

SECTIONS & DETAILS
RAW WATER PUMPING STATION
SECTION A

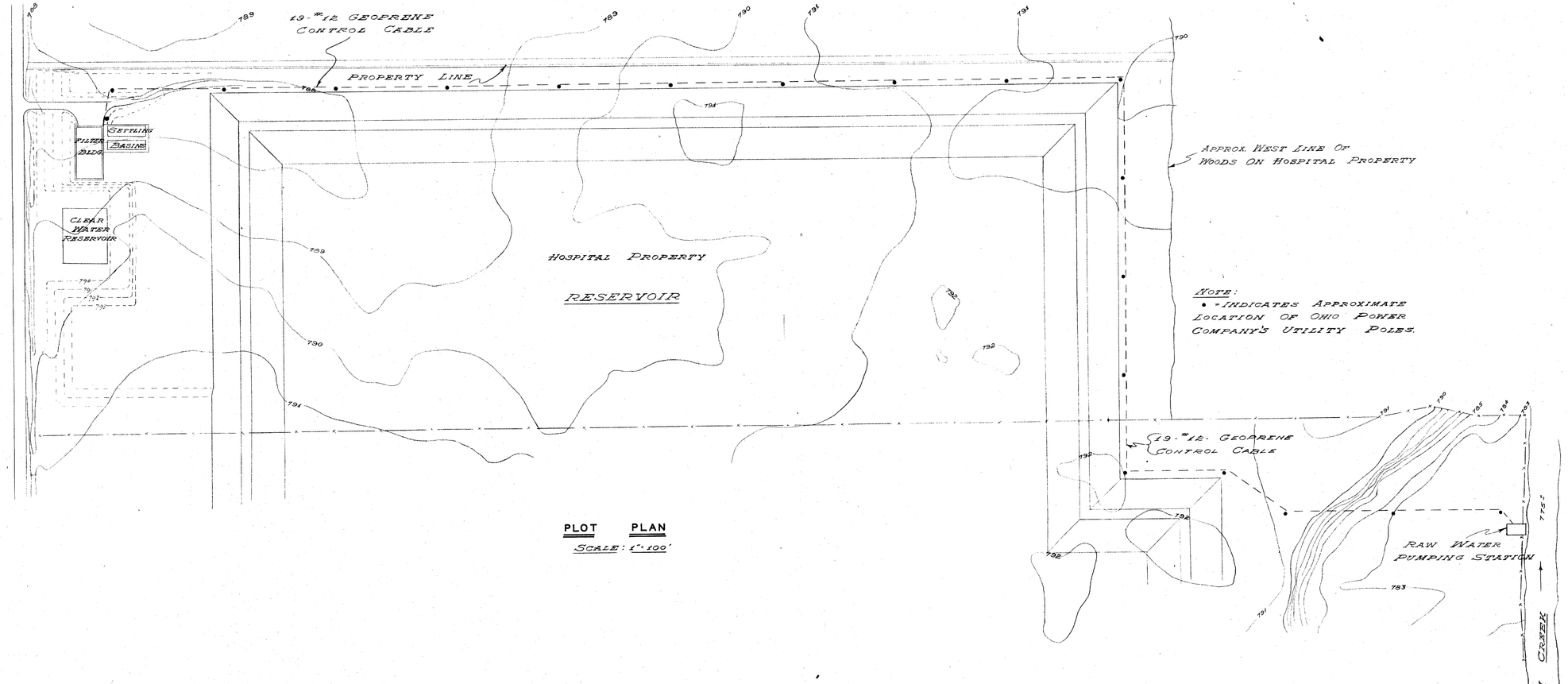
SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

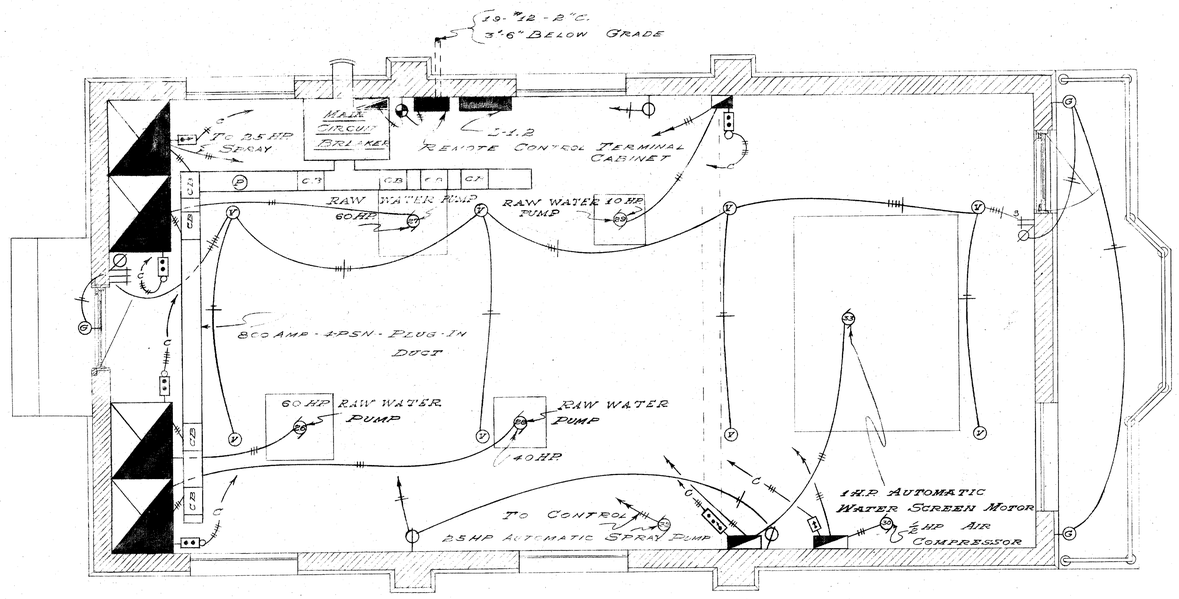
SCALE: 3/8"= 1'-0"
UNLESS NOTED 1949

G 37



PLOT PLAN

SCALE: 1" = 100'



ELECTRIC WIRING LAYOUT FOR RAW WATER PUMPING STATION

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

Note: See Sheet No. 28 for One Line Diagram

ELECTRICAL DETAILS

RAW WATER PUMPING STATION

SECTION A

SURFACE WATER SUPPLY

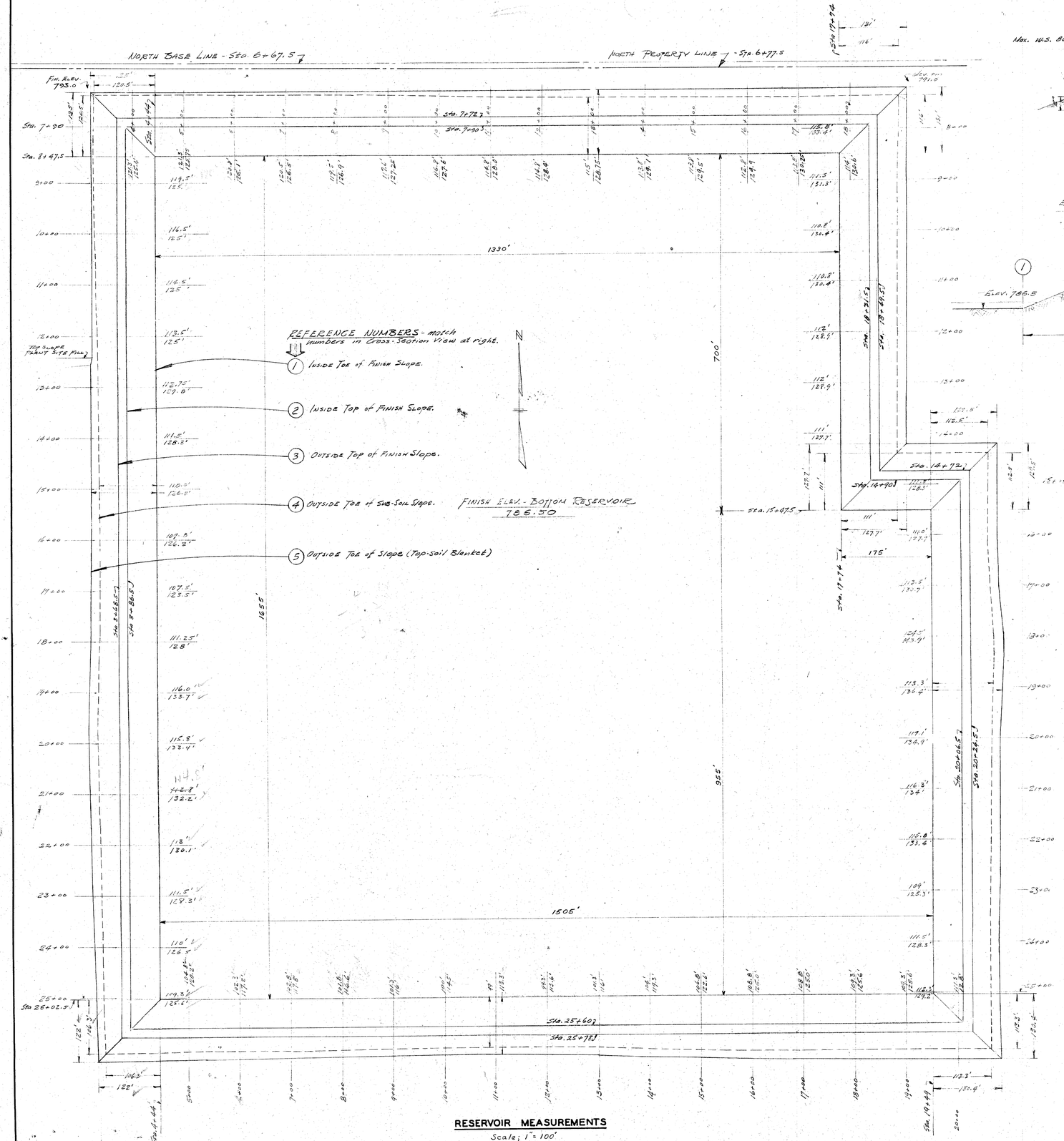
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: AS NOTED

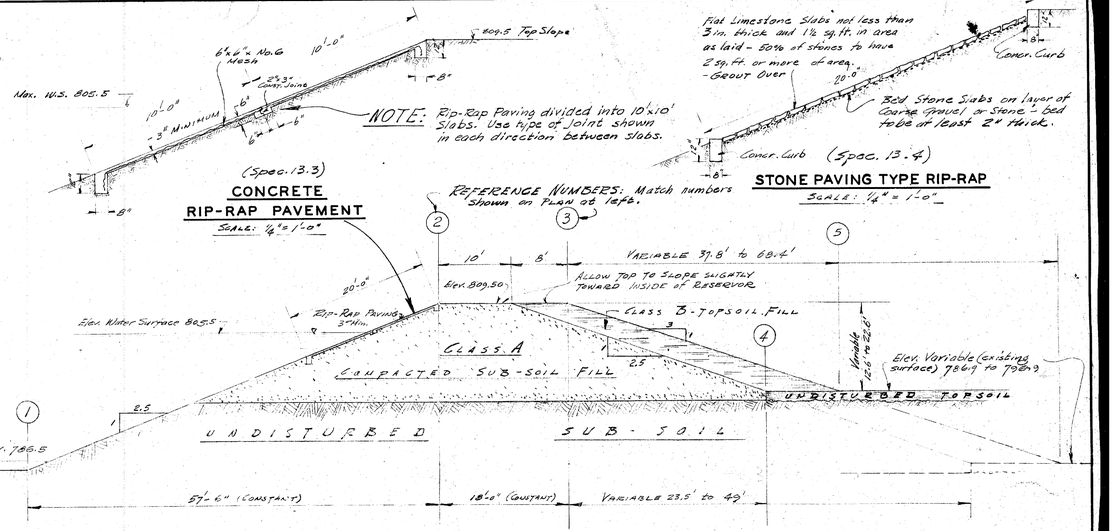
1949

7/37



RESERVOIR MEASUREMENTS

Scale; 1" = 100'



CROSS SECTION OF DIKE

SCALE: 1" = 10'-0"

SOIL STORAGE AREAS

Scale; 1" = 300'

PLANS & SECTION

SECTION B

SURFACE WATER SUPPLY

VAN WERT OHIO

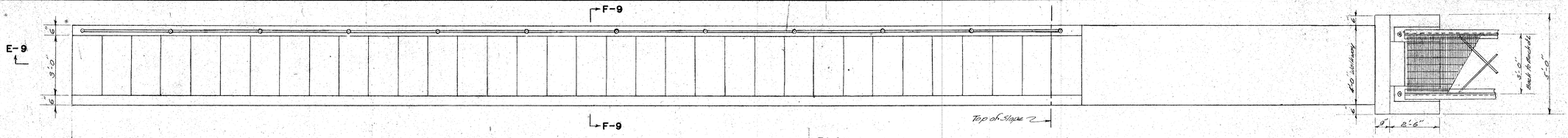
FINKBEINER, PETTIS & STRCUT

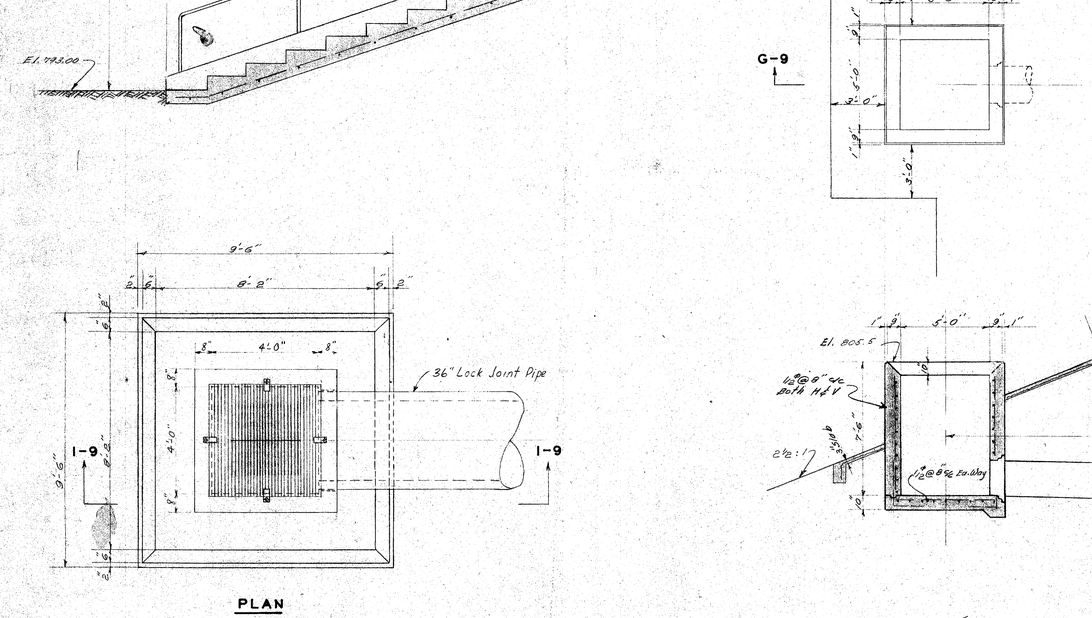
CONSULTING ENGINEERS - TOLEDO, OHIO

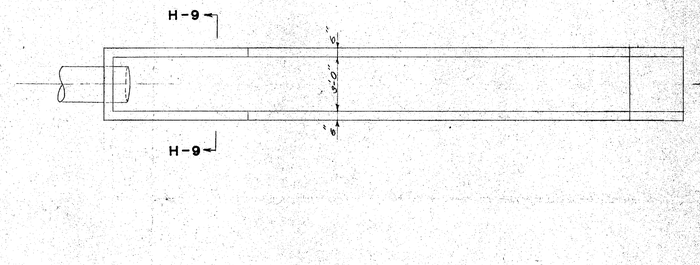
SCALE: 1" = 100'

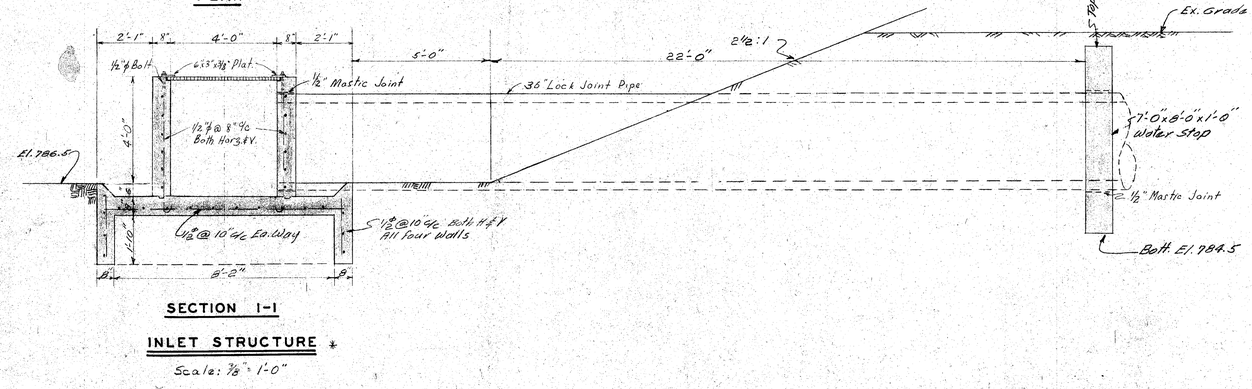
UNLESS NOTED 1949

37



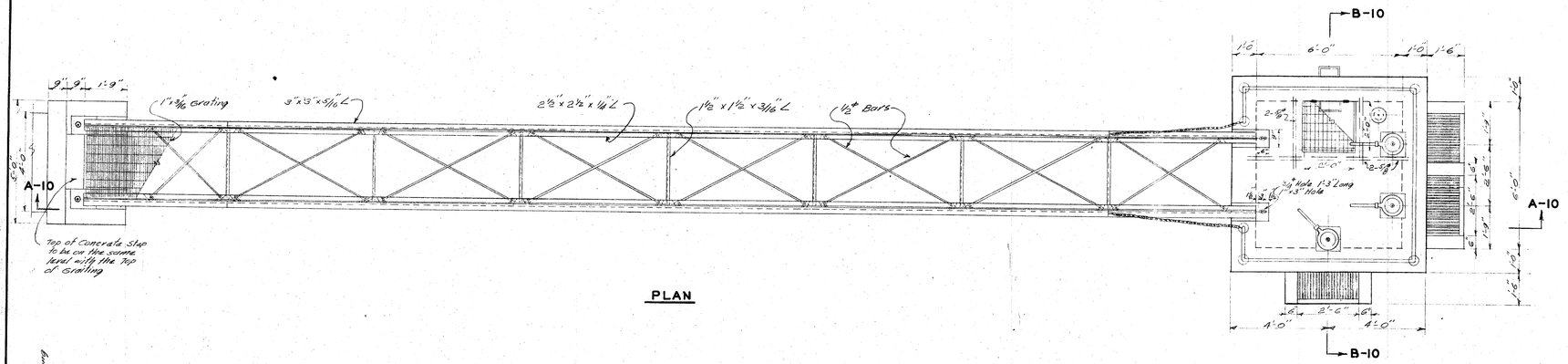




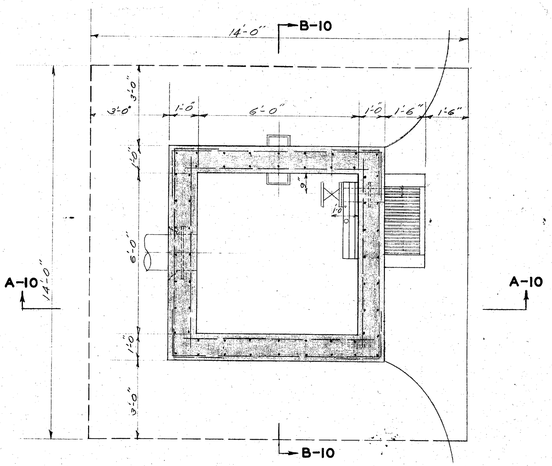


PLANS & SECTIONS
RESERVOIR STRUCTURES
SECTION B
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: AS NOTED
1949
9/37

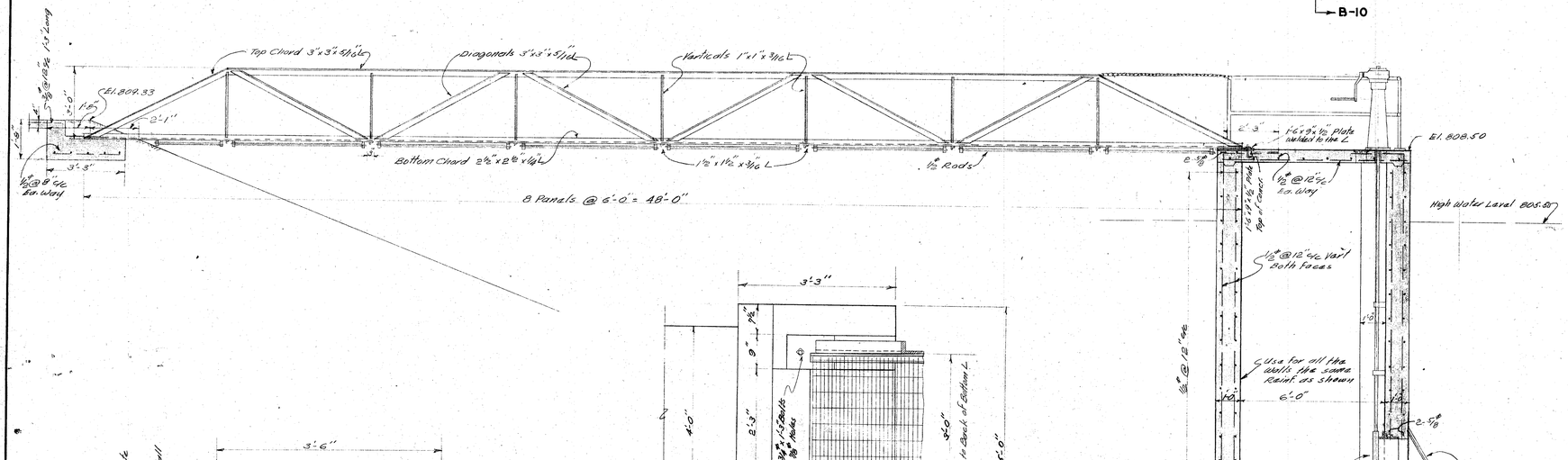
*Revised 9-2-49 RBJ



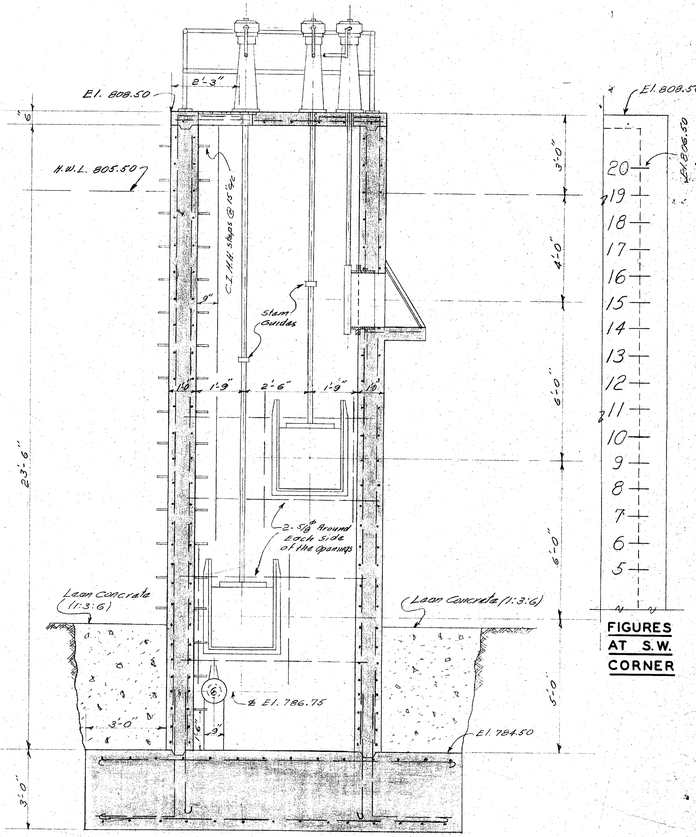
PLAN



SECTIONAL PLAN AT ELEV. 793.0

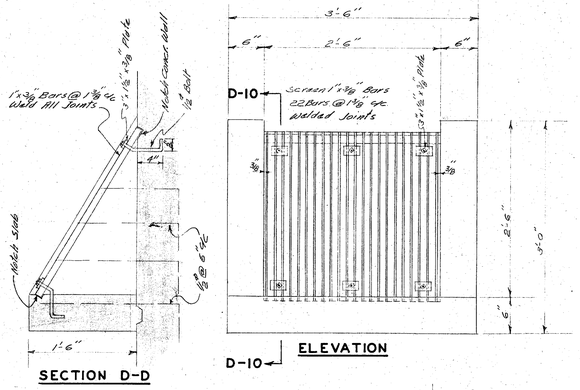


SECTION A-A



FIGURES AT S.W. CORNER

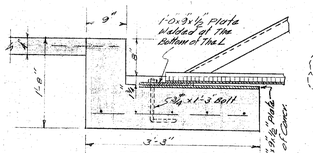
SECTION B-B



SECTION D-D

ELEVATION

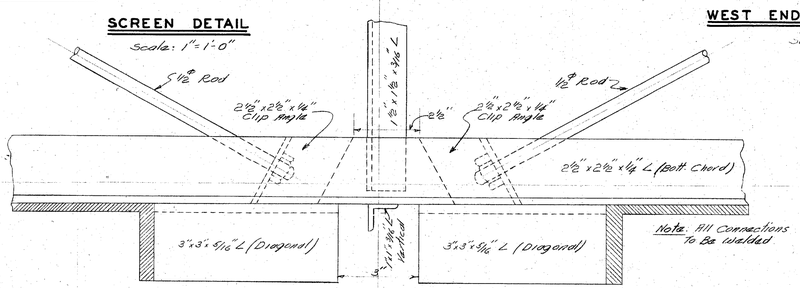
PLAN



SECTION C-C

WEST END SUPPORT DETAIL

Scale: ¾"=1'-0"



PLAN-TYPICAL BOTTOM CONNECTION OF TRUSS

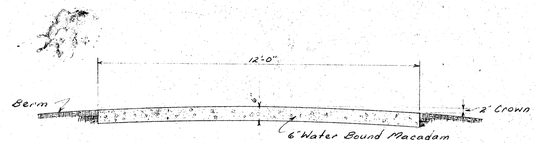
Scale: 3/16" = 1"

SCREEN DETAIL

Scale: 1"=1'-0"

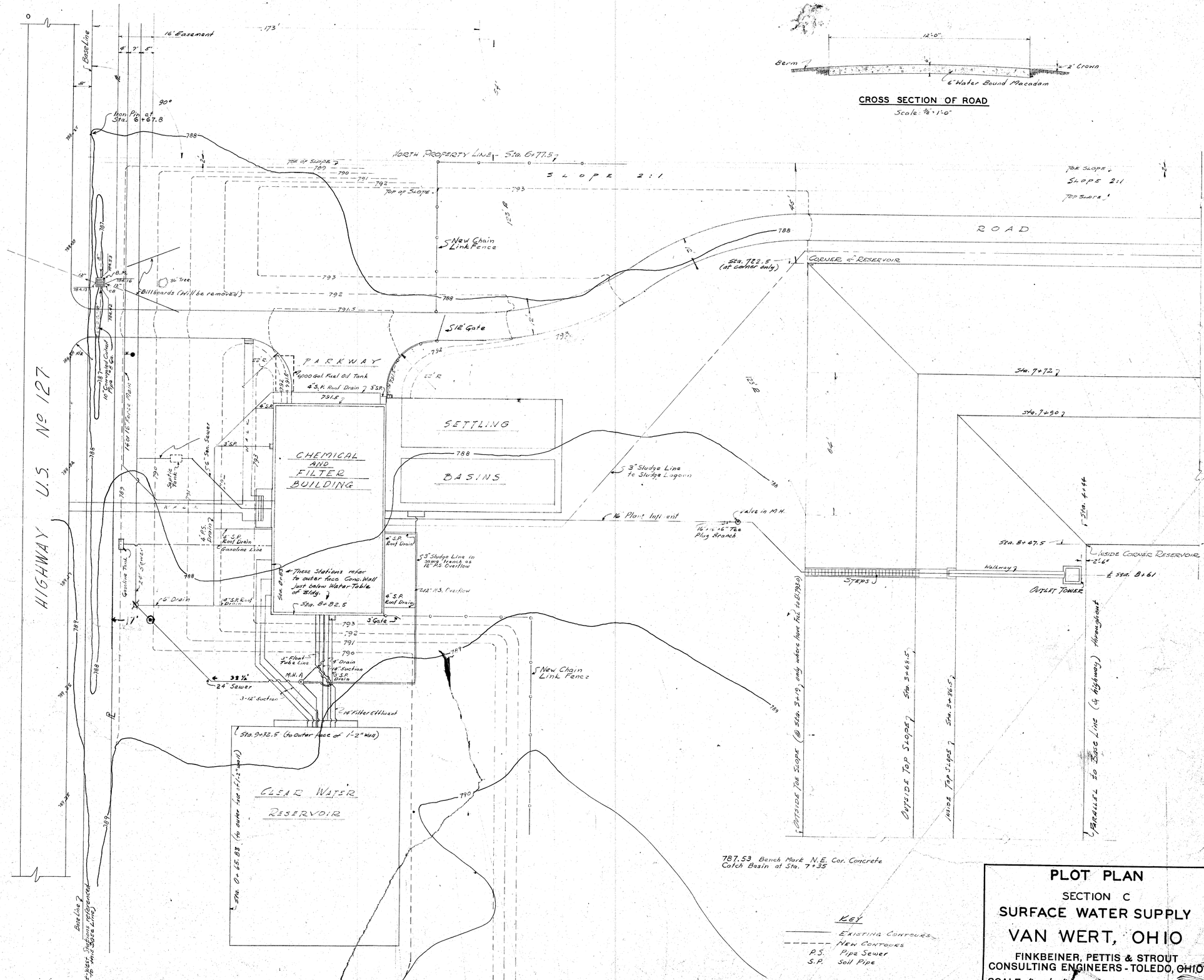
PLANS, SECTIONS & DETAILS
OUTLET TOWER
SECTION B
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 3/8"=1'-0"
UNLESS NOTED 1949

10
37



CROSS SECTION OF ROAD

Scale: ⅜" = 1'-0"



KEY

——— Existing Contours

- - - - - - New Contours

P.S. Pipe Sewer

S.P. Soil Pipe

PLOT PLAN

SECTION C

SURFACE WATER SUPPLY

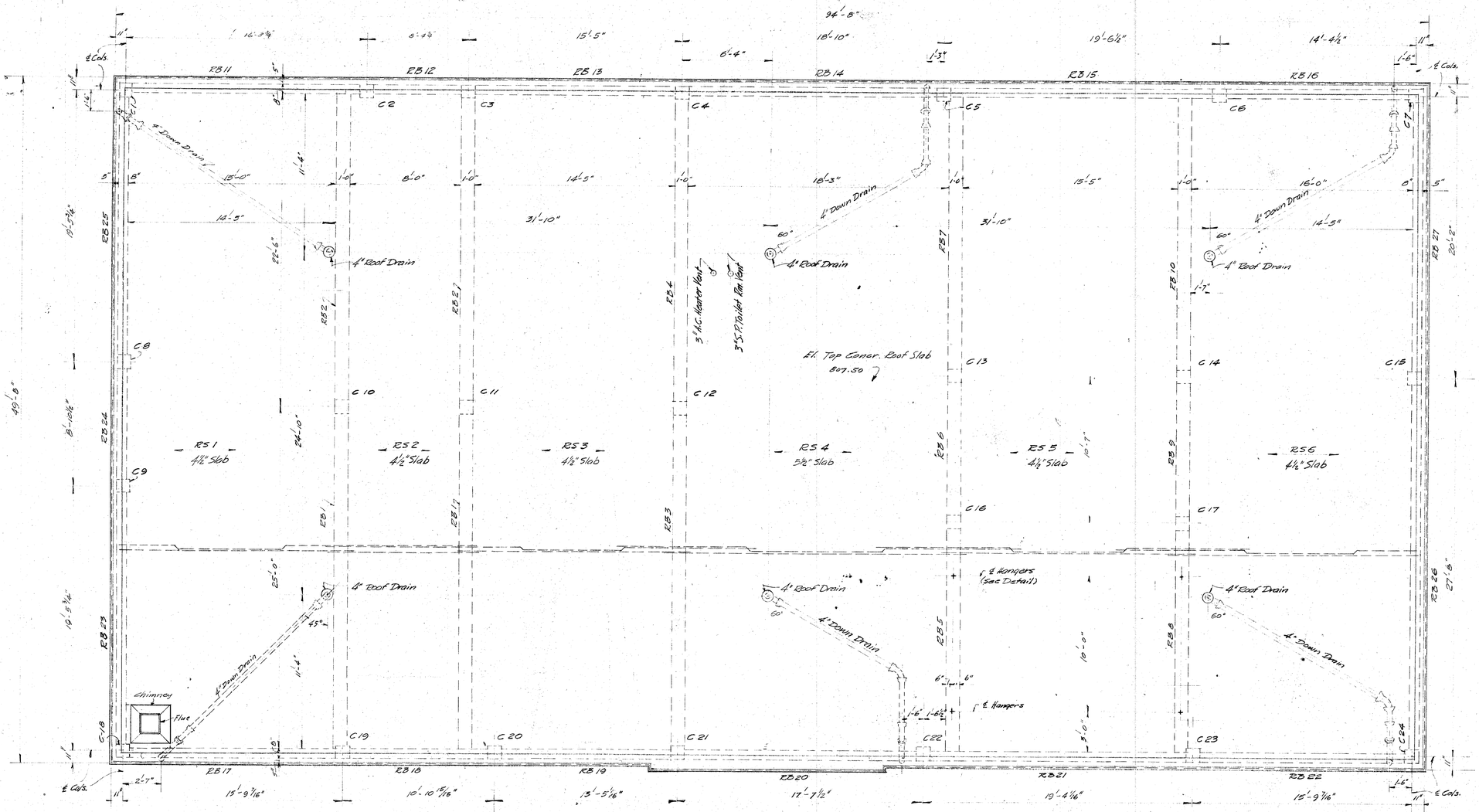
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

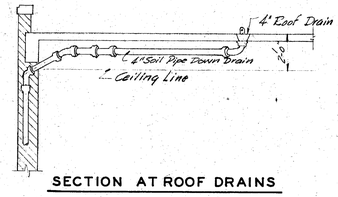
SCALE: 1" = 20'-0"

1949

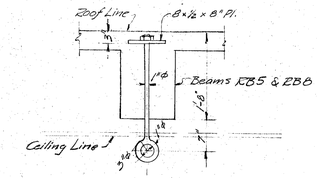
11/37



ROOF PLAN



SECTION AT ROOF DRAINS

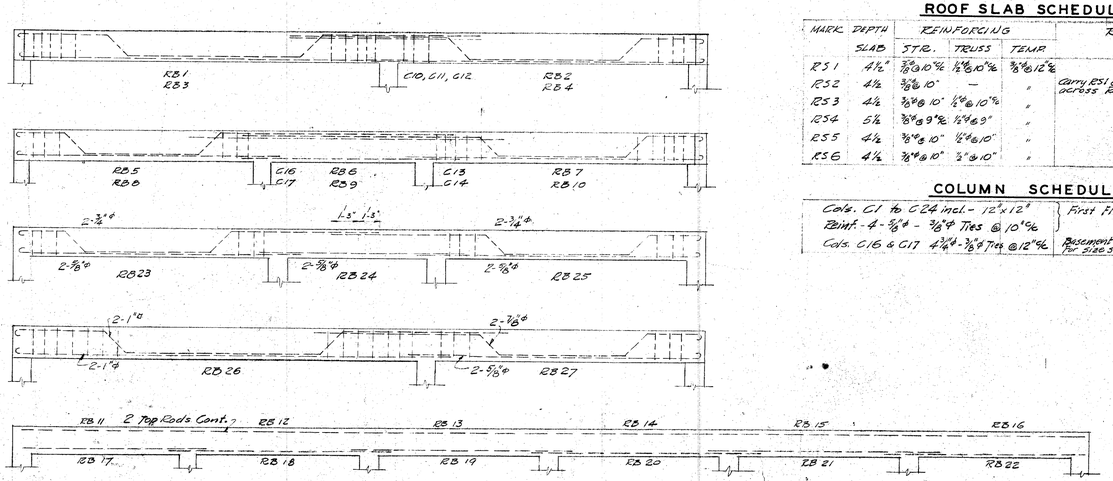


DETAIL-HANGER RODS

SCALE: 3/4" = 1'-0"
4 Req'd.

ROOF BEAM SCHEDULE

MARK	SIZE WIDTH	SIZE DEPTH	CLEAR SPAN	REINFORCING STR.	REINFORCING TRUSS	STIRRUPS SIZE	STIRRUPS SPACING	REMARKS
EB1	12"	20"	1@24'-1" 1@24'-6"	2-⅞"ø	2-⅞"ø	⅜"ø	5 ea. end - 2",5",6",7",10"	2-⅞"ø x 12'-0" Top @ C10 & C11
EB2	"	"	1@22'-6" 1@21'-6"	2-¾"ø	"	"	3 " " - 3",7",10"	
EB3	"	"	24'-2"	3-¾"ø	2-1"ø	"	10 " " - 2,4,4,5,5,5,7,7,8,10"	2-⅞"ø x 13'-0" Top @ C12
EB4	"	"	21'-8"	3-¾"ø	2-1"ø	"	7 " " - 2,5,6,6,7,9,11"	
EB5	"	"	16'-5"	4-1½"ø	2-⅞"ø	"	4 " " - 3,8,8,8"	2-⅞"ø x 7'-0" Top @ C16 2 Layers Both.
EB6	"	"	9'-7"	2-1½"ø	2-1½"ø			
EB7	"	"	19'-6"	3-⅞"ø	2-⅞"ø	⅜"ø	5-Ea. End 2,6,6,8,10"	2-⅞"ø x 7'-0" Top @ C13
EB8	"	"	16'-5"	3-1½"ø	2-⅞"ø	"	2 " - 4", 10"	1-⅞"ø x FL. - Top
EB9	"	"	9'-7"	2-1½"ø	2-1½"ø			1-1½"ø x 7'-0" Top @ C17
EB10	"	"	19'-6"	3-1½"ø	2-⅞"ø	⅜"ø	3 Ea. End 3",8",10"	1-⅞"ø x 7'-0" Top @ C14
EB11	8"	20"	16'-3¾"	2-⅞"ø	2-⅞"ø (Cont. Top)	⅜"ø	5-6,6,6,8,12" to ℄	
EB12	"	"	7'-4⅛"	2-⅞"ø	2-⅞"ø (" ")	⅜"ø @ 12" c/c	F.L.	
EB13	"	"	14'-5"	"	" (" ")	"	"	
EB14	"	"	17'-10"	"	" (" ")	"	"	
EB15	"	"	18'-6½"	3-⅞"ø	" (" ")	"	"	
EB16	"	"	13'-4½"	2-⅞"ø	" (" ")	"	"	
EB17	"	"	14'-9"	"	" (" ")			
EB18	"	"	10'-0⅛"	3-⅞"ø	3-⅞"ø (" ")	⅜"ø	5,5,5,5,4 12" to ℄	
EB19	"	"	12'-3⅜"	2-⅞"ø	2-⅞"ø (" ")	⅜"ø @ 12" c/c	F.L.	
EB20	"	"	16'-7½"	"	" (" ")	"	"	
EB21	"	"	18'-4⅞"	4-⅞"ø	4-⅞"ø (" ")	⅜"ø	8-Ea. End 2",7@4½"	2 Layers
EB22	"	"	14'-9"	"	" (" ")	"	⅜"ø - 6@5",5@12" to ℄	2 "
EB23	"	"	16'-5⅛"	2-⅞"ø	2-⅞"ø	⅜"ø	3-Ea. End 3",6",10"	Extend Tr. Rods 1'-3" past ℄ RB24
EB24	"	"	7'-10⅛"	"	—	—	—	
EB25	"	"	18'-5⅛"	"	2-¾"ø	⅜"ø	3-Ea. End 3",6",10"	" " " " " "
EB26	"	"	26'-8"	2-1"ø	2-1"ø	⅜"ø	7- " " 3",8",8",4@10"	
EB27	"	"	19'-2"	2-⅞"ø	2-⅞"ø	⅜"ø	3- " " 3",8",10"	



TYPICAL BEAM REINFORCING

ROOF SLAB SCHEDULE

MARK	DEPTH SLAB	REINFORCING STR.	REINFORCING TRUSS	REINFORCING TEMP.	REMARKS
RS1	4½"	⅜"ø @ 10" c/c	½"ø @ 10" c/c	⅜"ø @ 12" c/c	
RS2	4½	⅜"ø @ 10"	—	"	Carry RS1 & RS3 Truss Rods across RS2 in typ.
RS3	4½	⅜"ø @ 10" - ½"ø @ 10" c/c		"	
RS4	5½	⅜"ø @ 9" c/c - ½"ø @ 9"		"	
RS5	4½	⅜"ø @ 10" - ½"ø @ 10"		"	
RS6	4½	⅜"ø @ 10" - ⅜"ø @ 10"		"	

COLUMN SCHEDULE

Cols. C1 to C24 incl. - 12"x12" Reinf. - 4-⅝"ø - ⅜"ø Ties @ 10" c/c	First Floor to Roof
Cols. C16 & C17 4-¾"ø - ⅜"ø Ties @ 12" c/c	Basement Floor to First Floor For Size See Details Sheet #4

ROOF PLAN
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1/4" = 1'-0"
UNLESS NOTED 1949

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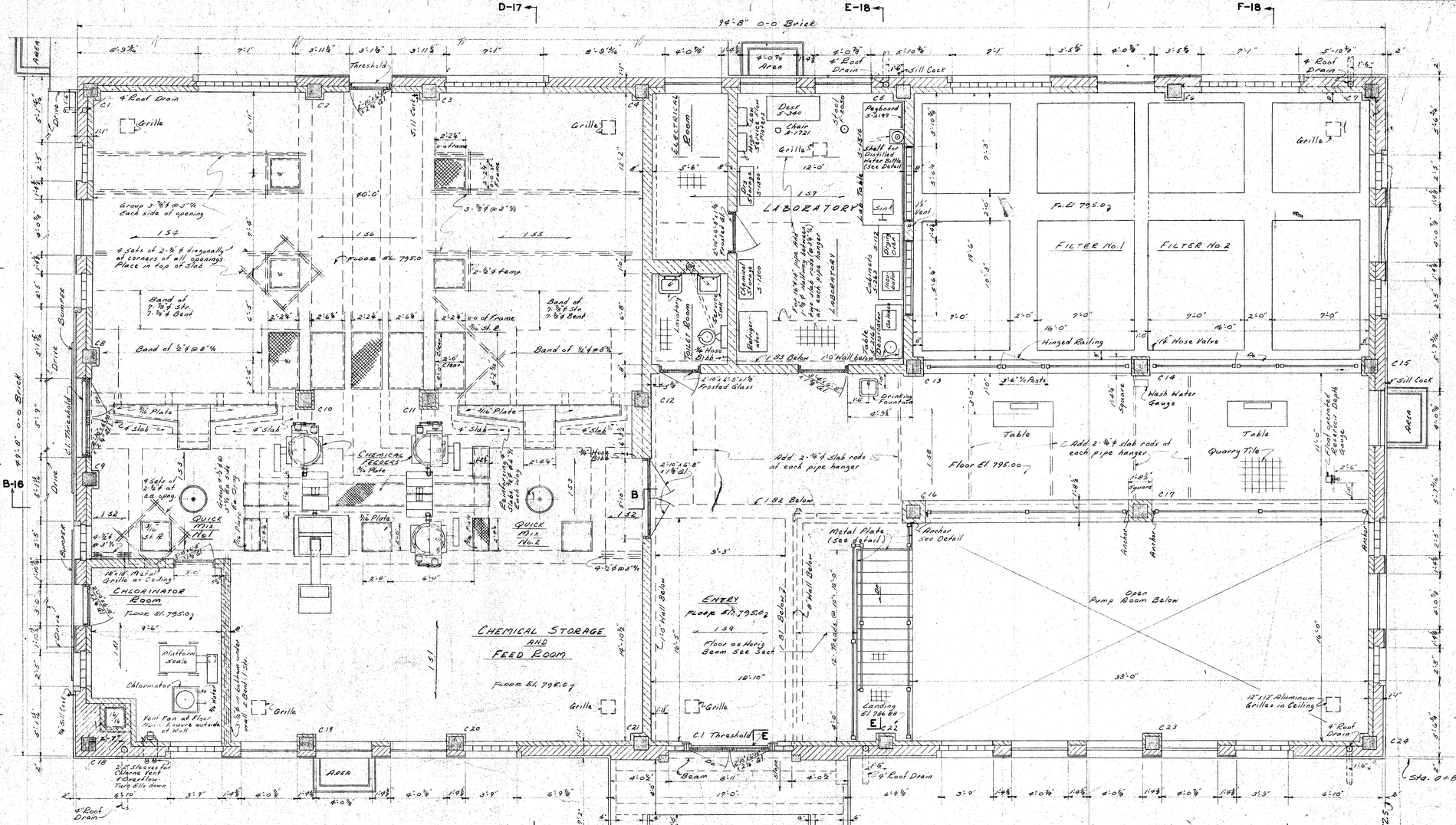
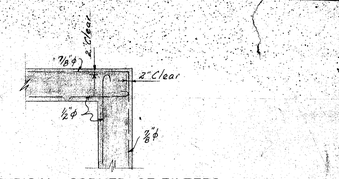
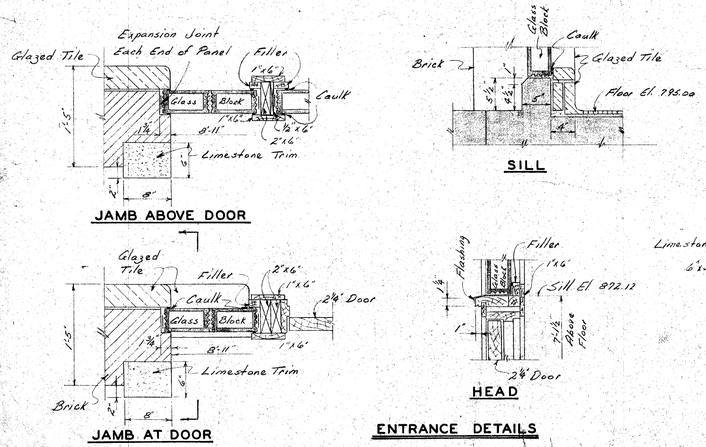


FIRST FLOOR PLAN





Follow Mfg's Recommendations for Expansion Joints, Caulking, and Ties for Glass Block

Note: All Windows to be Alzo with Aluminum Frames.

KEY
- Brick Walls
- Glazed Tile Walls
- Concrete
- Limestone
- Fire Brick

FIRST FLOOR SLAB SCHEDULE

Mark	Depth	Reinforcing			Remarks
		Str.	Truss	Temp.	
151	9"	⅝"ø @ 12"-½"	⅝"ø @ 12"-½"	½"ø @ 12"-0"	
152	9"	⅝"ø @ 9"-½"	—	½"ø @ 12"-0"	
153	6"	½"ø @ 10"-0"	½"ø @ 10"-0"	½"ø @ 12"-0"	
154	9"	⅝"ø @ 12"-0"	⅝"ø @ 12"-0"	½"ø @ 12"-0"	Extend Truss Rods 3'-9" into 155
155	9"	⅝"ø @ 12"-0"	⅝"ø @ 12"-0"	½"ø @ 12"-0"	" " 3'-9" into 154
156	9"	⅝"ø @ 28½"-0"	—	⅜"ø @ 12"-0"	
157	9"	⅝"ø @ 12"-0"	⅝"ø @ 12"-0"	½"ø @ 12"-0"	
158	7"	⅝"ø @ 16"-0"	⅝"ø @ 16"-0"	⅜"ø @ 10"-0"	At Stair Landing Only Extend Truss Rods to First Light and Hook
159	9"	⅝"ø @ 12"-0"	⅝"ø @ 12"-0"	⅜"ø @ 10"-0"	Extend Truss Rods to stair well & hook (Truss up at third point) Add in Cantilever ⅝"ø @ 12"-0" Top x 13'-0" long Hook End

All Straight (Bottom) Rods to be S.A.

FIRST FLOOR BEAM SCHEDULE

Mark	Size		Reinforcing		Stirrups	
	Width	Depth	Str.	Truss	Size	Spacing
181	10"	22"	4-⅞"ø	3-⅞"ø	⅜"ø	10 ea. End 2", 6 @ 4", 5", 8", 10"
182	12"	28"	3-⅞"ø	3-⅞"ø	½"ø	12 " 2", 5", 6", 7", 8", 9", 10", 12"
183	10"	22"	3-⅞"ø	3-⅞"ø	⅜"ø	4 " 4", 9", 10", 10"
184	12"	45"	3-1"ø	3-1"ø	⅜"ø	9 " 2", 3", 4", 4", 5", 6", 7", 10"

PLANS & DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4"=1'-0"
UNLESS NOTED 1949

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SETTLING BASINS

CORAGULATION BASIN No.1
Showing Longitudinal-Flow Type of Slow Mix

CORAGULATION BASIN No.2
Showing Cross-Flow Type of Slow Mix

CHANNEL

INFLUENT CHAMBER

QUICK MIX No.1

QUICK MIX No.2

AREA

FILTER No.1

FILTER No.2

Surface Wash Unit

Floor El. 783.50

Floor El. 791.00

Floor El. 782.50

Floor El. 792.50

Open Pump Room Below

Quarry Tile on Stairs, Up and on Landing

Landing El. 786.88

Blind Flange

All Valves at face of Filters are to be operated hydraulically

Horizontal Beam

Vertical Beam

Bracket

Each Area

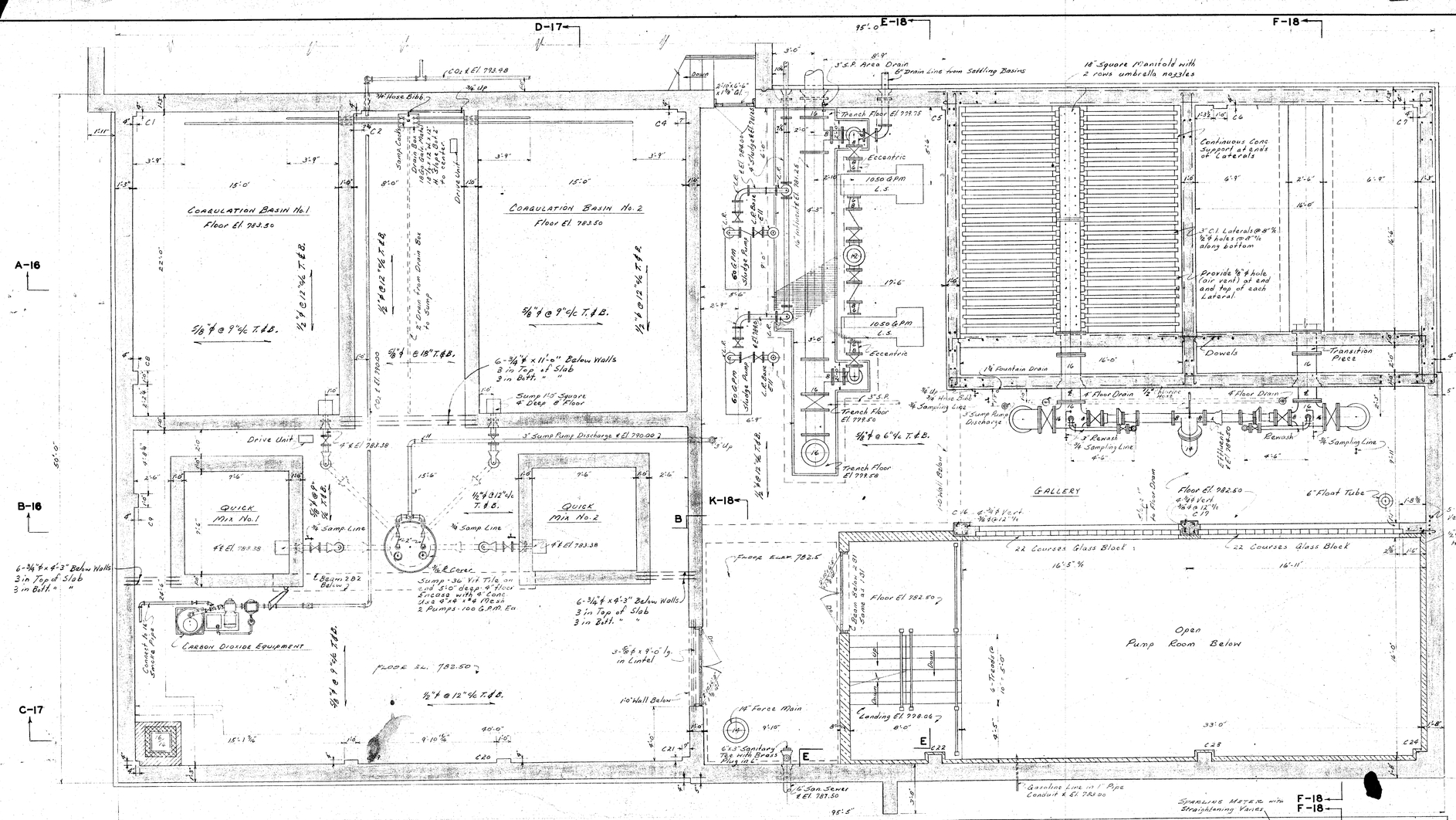
SECTIONAL PLAN AT ELEVATION 792.50

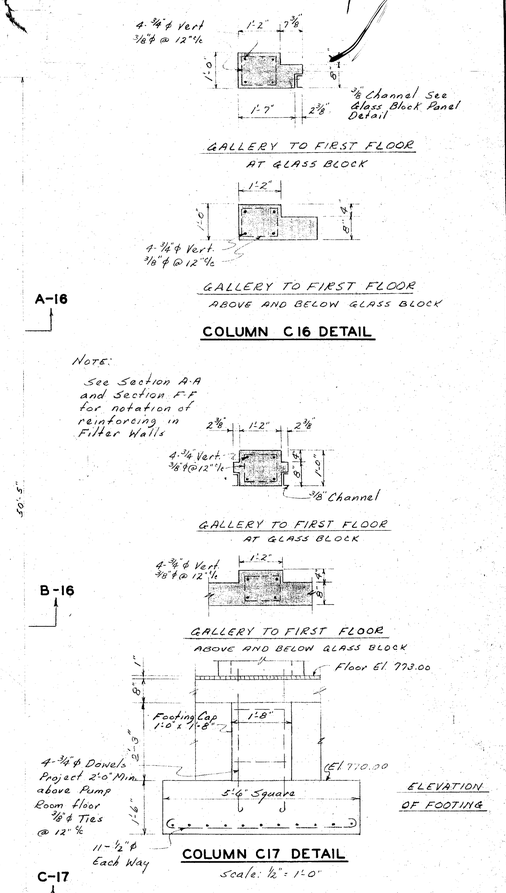
DETAIL DOWNTAKE
Scale: 1/2"=1'-0"

DETAIL TIMBER BAFFLE
Scale: 1/2"=1'-0"

STEEL PLATE COVER
17 Frames Req'd
Scale: 3"=1'-0"

PLAN & DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4"=1'-0" UNLESS NOTED 1949
14/37





GENERAL NOTES

Concrete:
All concrete shall test 3,000 lbs per sq. in. at 28 days.
All exposed interior concrete corners to be beveled with 3/4"x3/4" chamfer strip.
Construction joints in places other than shown on plans shall be provided and located only with the approval of the Engineer and all such joints shall be provided with dowels of the same size and spacing as the main reinforcement.
Provide 24 ga. copper strips 6" wide for full length of construction joints in walls and slabs which are subject to any water and as called for on plans.
Dimensions shown for door and window openings are merely nominal and Contractor shall check actual dimensions before laying up masonry.

Reinforcing:
All reinforcing steel to be deformed bars meeting A.S.T.M.-A 15-39 (Intermediate grade new billet) or A.S.T.M.-A 16-35 (Rail)
All detailing, fabrication, and erection to comply with C.R.S.I. code when not otherwise called for.
All rods to be supported and spaced in the forms with approved wire chairs meeting C.R.S.I. code.
All walls, when not otherwise reinforced, to have 1/2"ϕ @ 12"c/c H&V. Each Face.
At all corners of wall or slab openings, or where sleeves or pipe lines pass through walls or slabs, provide 4 sets of 2-1/2"ϕ x 3'-0" longer than opening on all four diagonal sides unless otherwise noted.
Submit shop drawings for all reinforcing steel in TRIPLICATE and secure approval of Engineer before fabricating.
Allow 3/4" clear coverage for steel in slabs; 1" in walls, and 1 1/2" in beams and columns.
Footing reinforcing shall be 3" above bottom, unless otherwise noted.
Bars not continuous throughout their length shall be lapped 40 diameters.
Minimum reinforcement transverse to the direction of main reinforcement shall be 3/8"ϕ @ 12"c/c
Dowels placed in construction joints shall project 40 diameters each way from the joint and be of the same size and spacing as the main reinforcing.
Hook all wall rods at least 1'-6" around corners. Bottom bars of all beams to be hooked.

Miscellaneous:
After excavation is completed obtain Engineer's approval on bearing stratum before pouring concrete.
All loosened earth under footings and slabs shall be thoroughly removed and the space backfilled with sand or gravel well tamped in place before concrete is 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 pouring concrete.

Note:
S.P. indicates Soil Pipe.
Valves for High Service, Wash, and Low Service Pumps shall be O.S.&Y.
Provide 1" Drain from base plates of all Pumps to floor drains or trenches.

PLANS & DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4"=1'-0" UNLESS NOTED 1949
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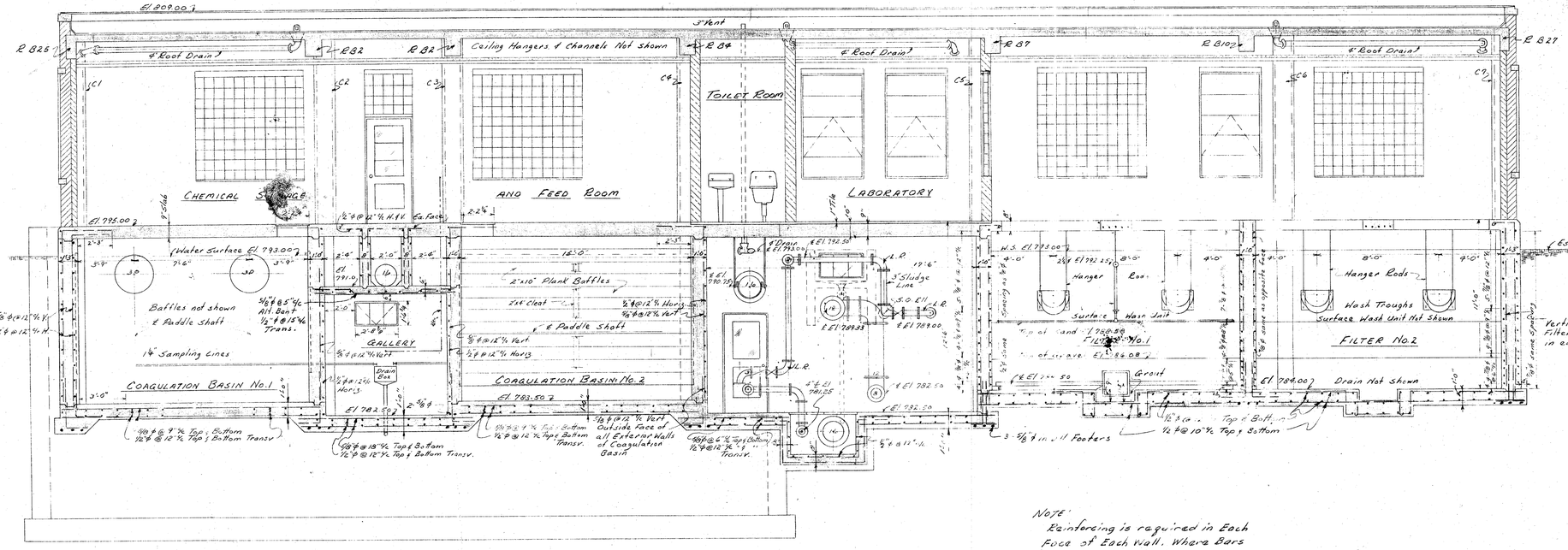
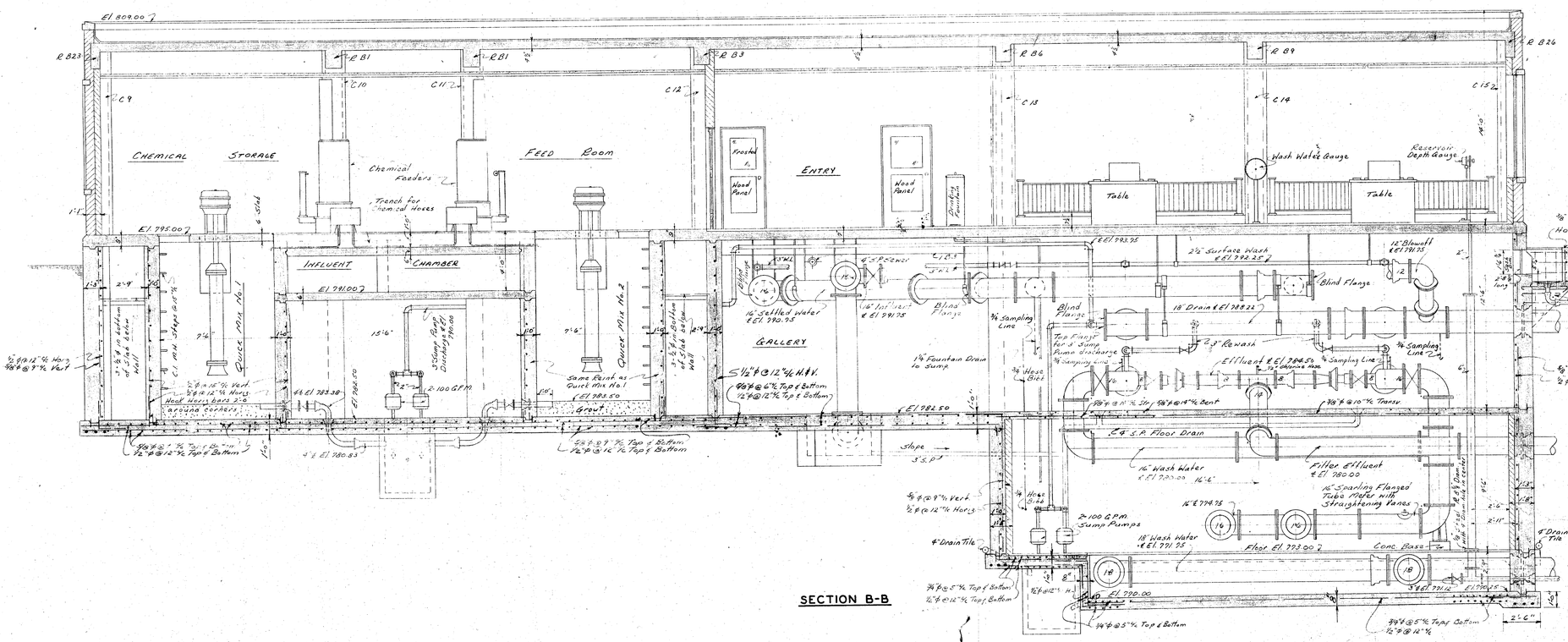
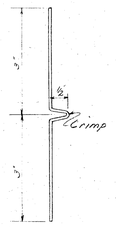


NOTE
Reinforcing is required in Each Face of Each Wall. Where Bars are shown in one face only, provide 1/2 ϕ @ 12"c/c H&V in other face. Provide Dowels in Slabs for 1/2 ϕ





DETAIL - STOP
Scale: 6"=1'-0"

SECTIONS & DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4"=1'-0" UNLESS NOTED 1949
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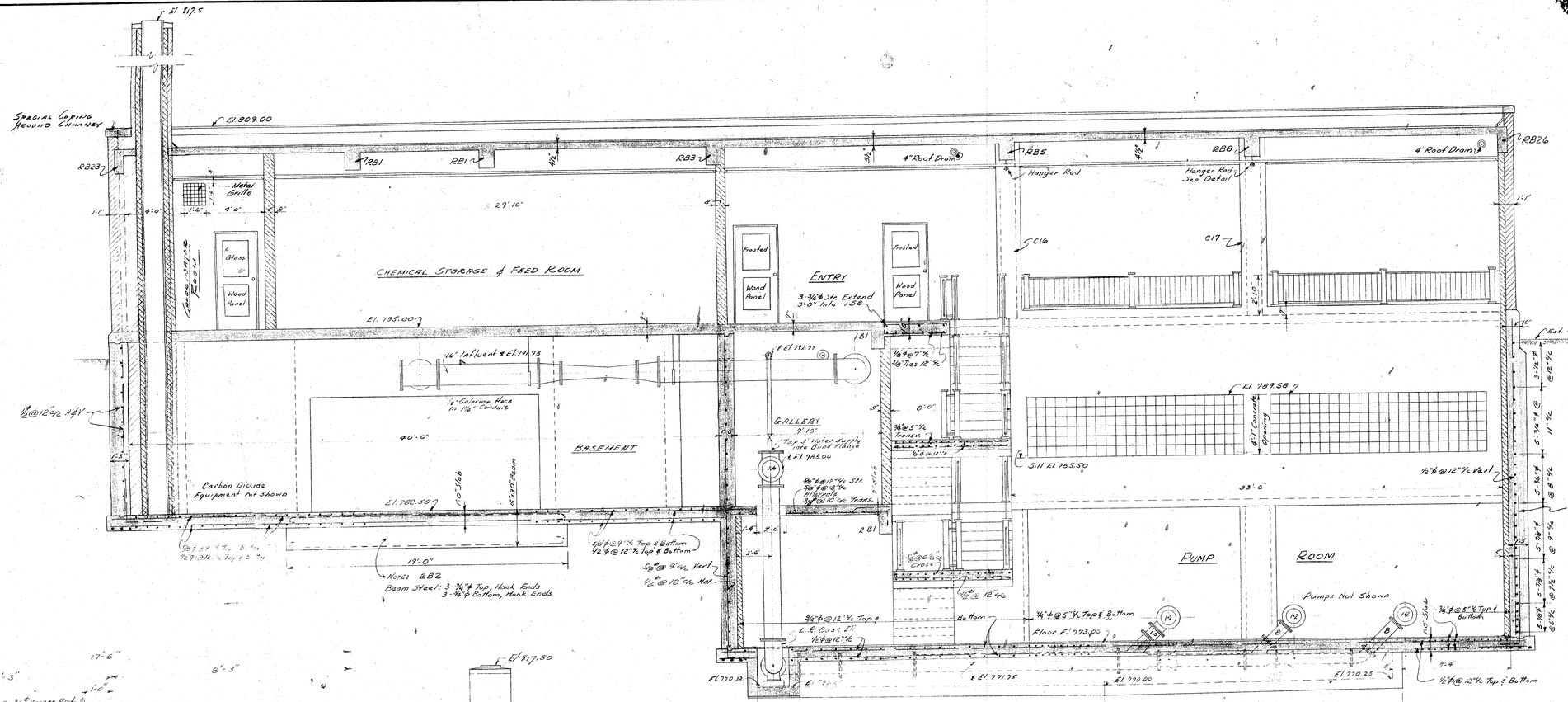


SECTIONS & DETAILS

CHEMICAL & FILTER BUILDING

SECTION C

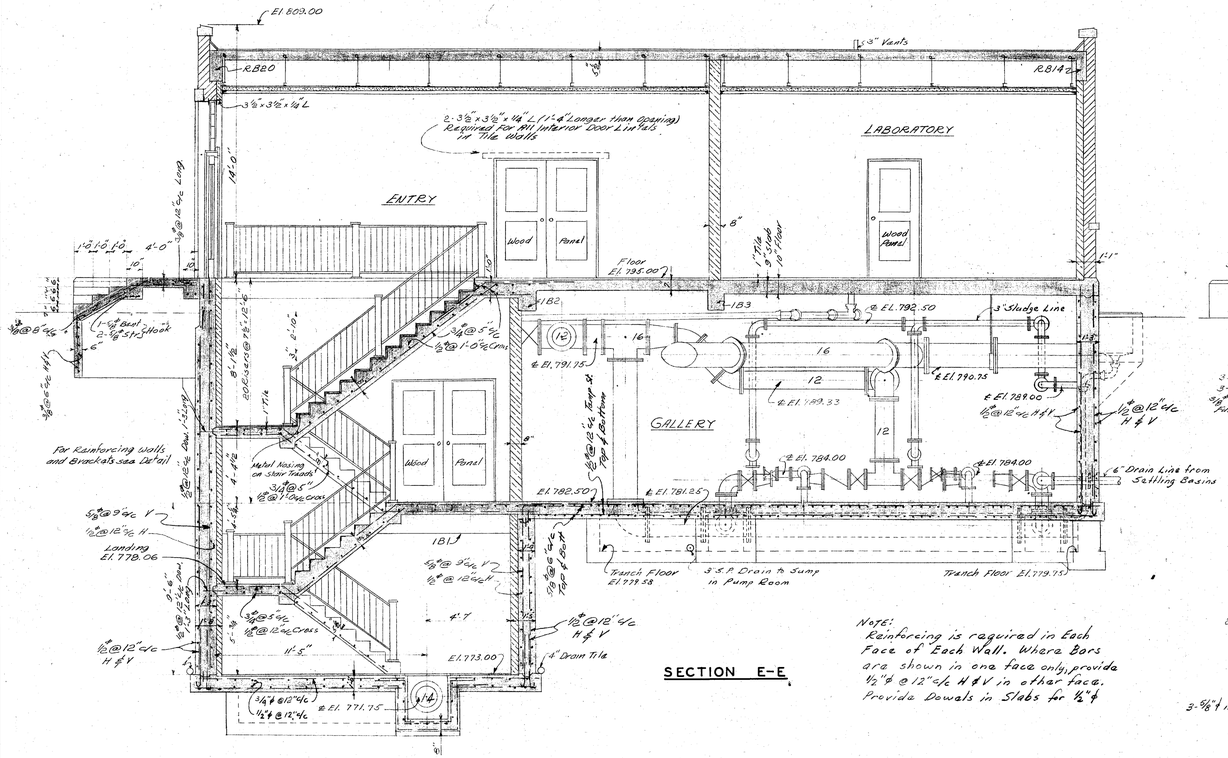
SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

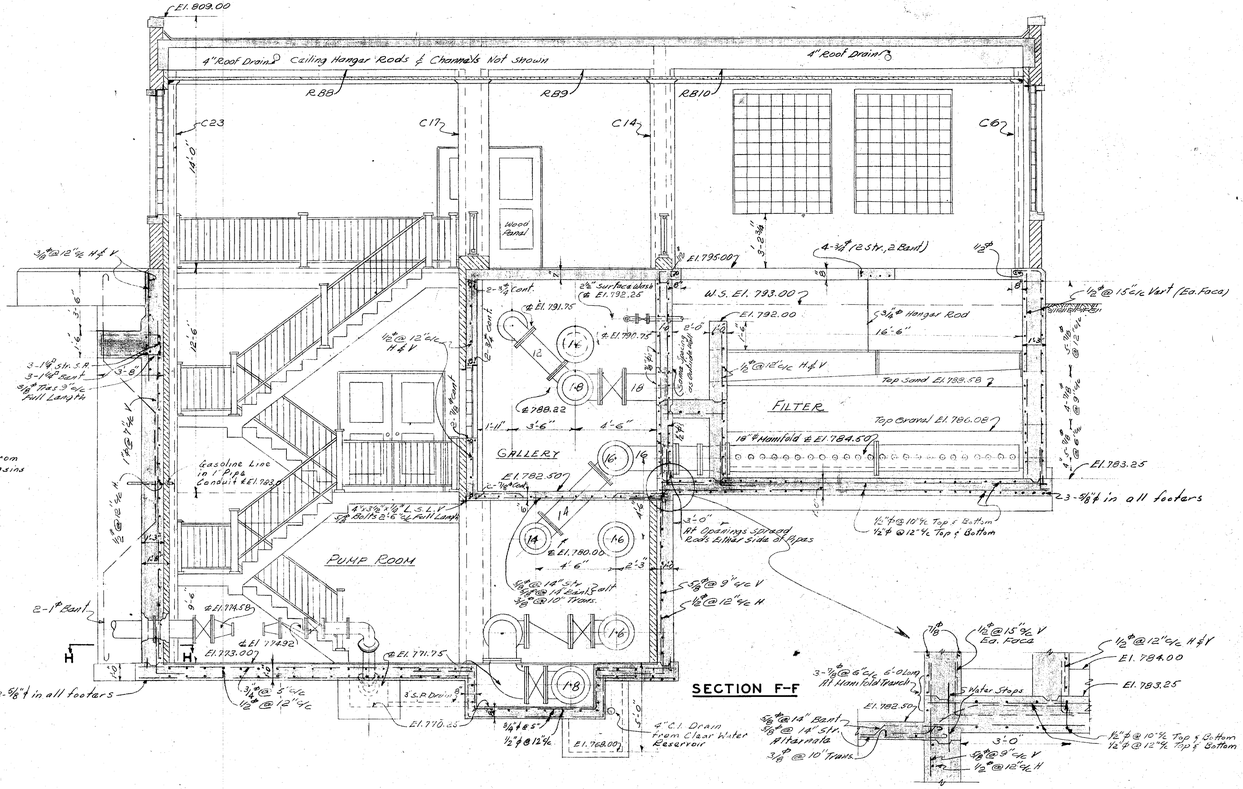
SCALE: 1/4" = 1'-0"
UNLESS NOTED 1949

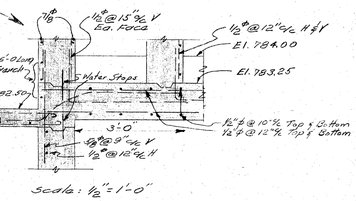
17
37



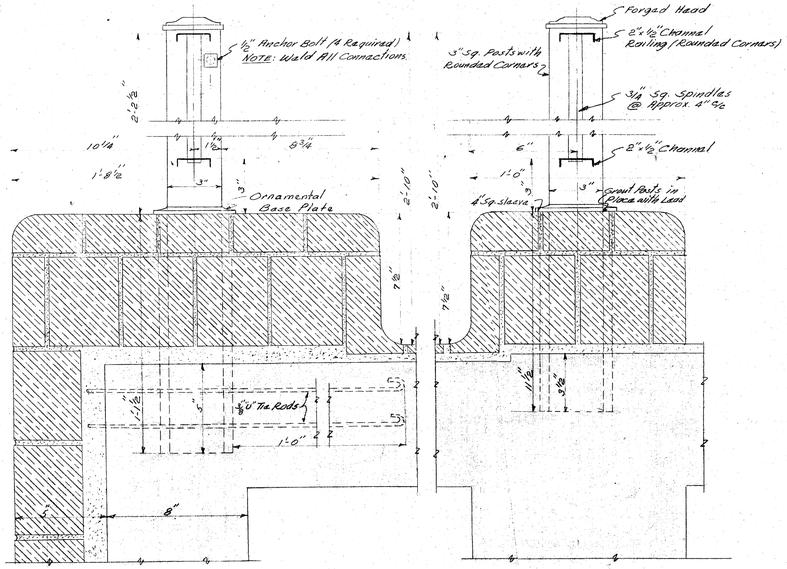
SECTION E-E

Note: Reinforcing is required in Each Face of Each Wall. Where Bars are shown in one face only, provide ½"ø @ 12" c/c H & V in other face. Provide Dowels in Slabs for ½"ø





SECTION F-F

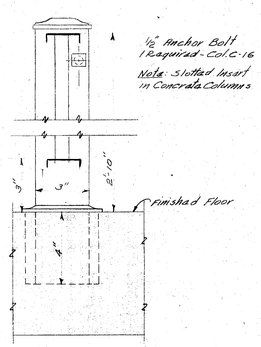


RAILING AROUND PUMP ROOM

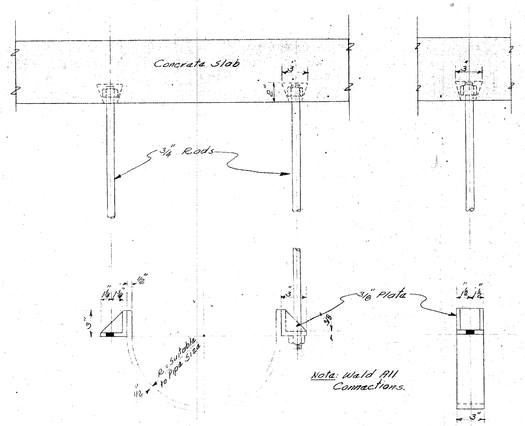
RAILNG ALONG FILTER

RAILING DETAIL

Scale: 3"=1'-0"

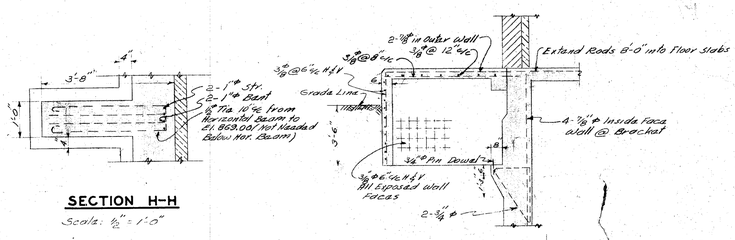


RAILING AT STAIRS



PIPE HANGER DETAILS

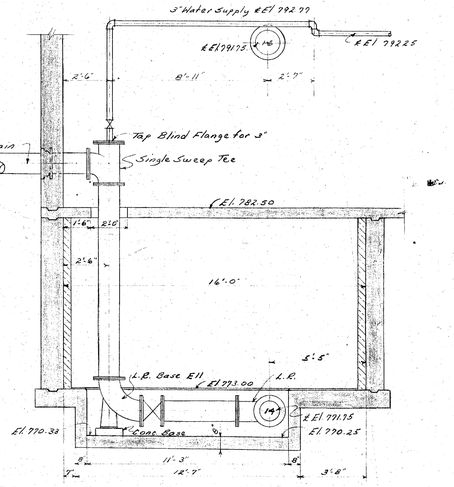
Scale: 1½"=1'-0"



SECTION BUTTRESS G-G

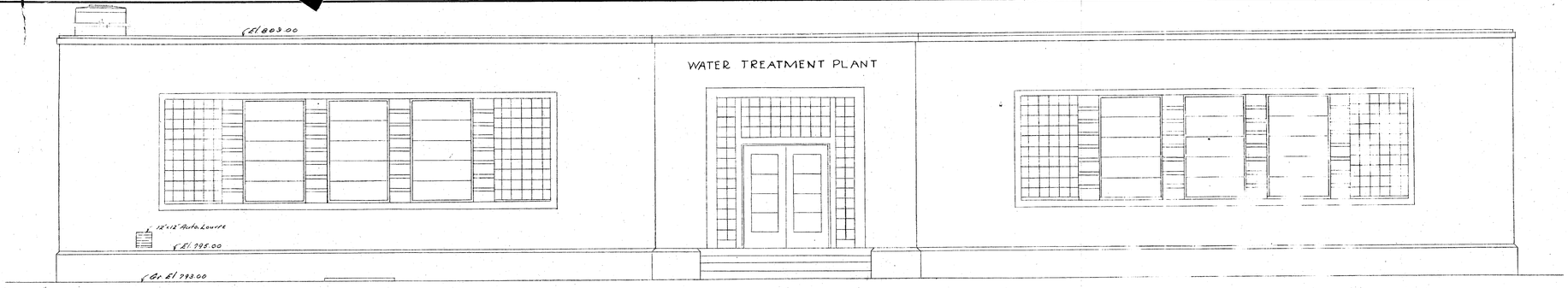
SECTION H-H

Scale: ½"=1'-0"

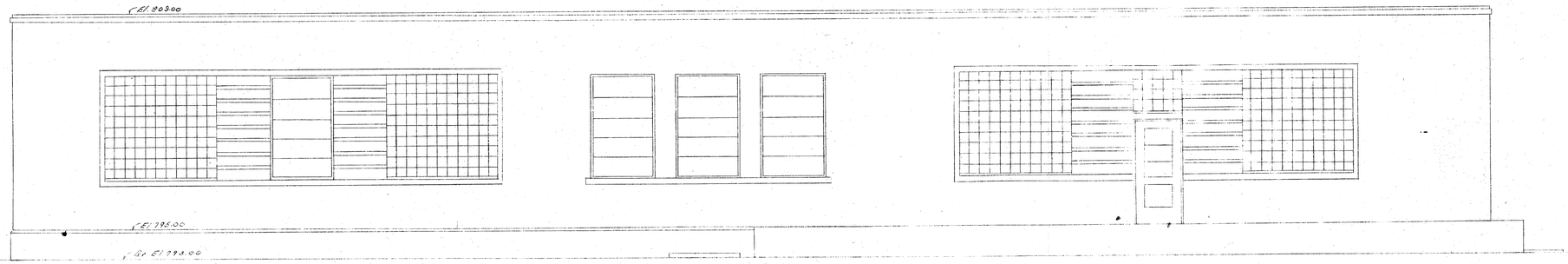


SECTION K-K

SECTIONS & DETAILS
CHEMICAL & FILTER BUILDIN
SECTION C
SURFACE WATER SUPPL
VAN WERT, OHIO
FINKBEINER, PETTIS & STRO
CONSULTING ENGINEERS - TOLE
SCALE: 1/4"=1'-0"
UNLESS NOTED 1949



WEST ELEVATION



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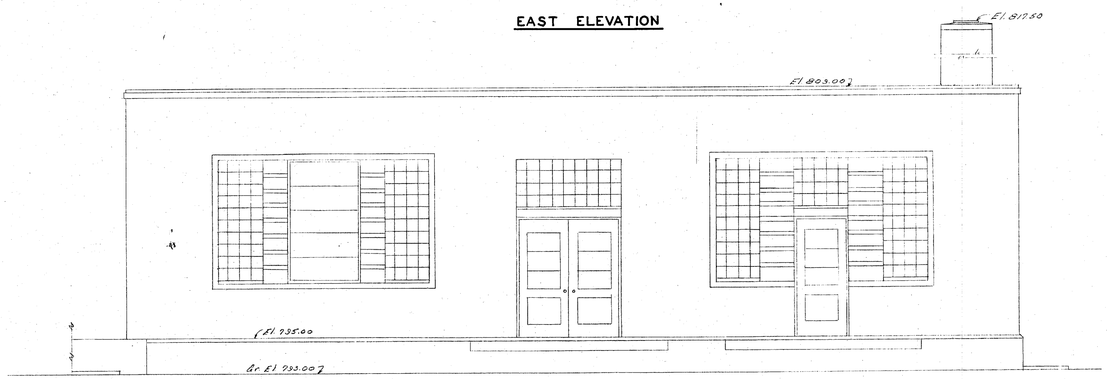

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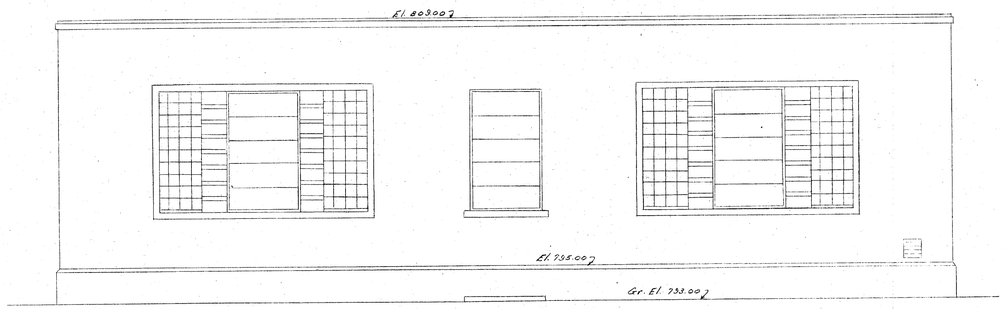

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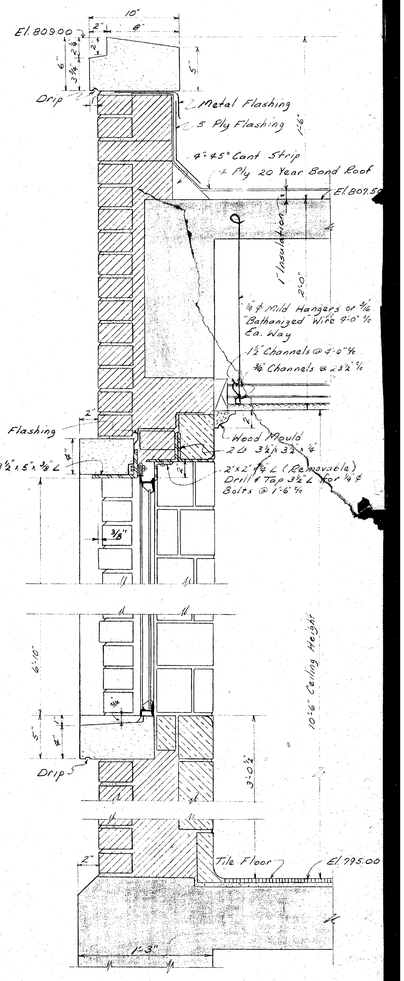


EXTERIOR WALL DETAIL

Scale: 1½" = 1'-0"

ELEVATIONS

CHEMICAL & FILTER BUILDING

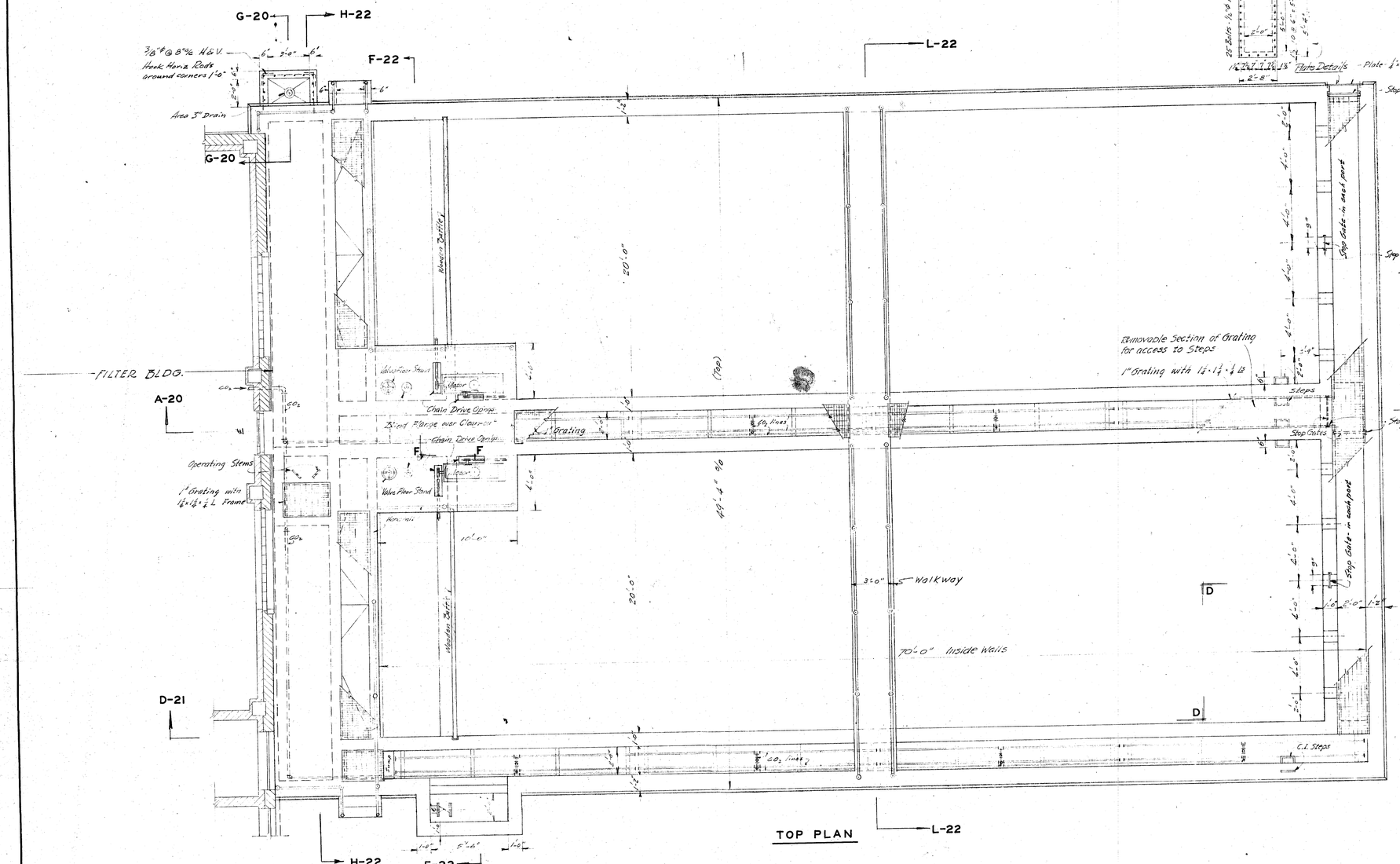
SECTION C

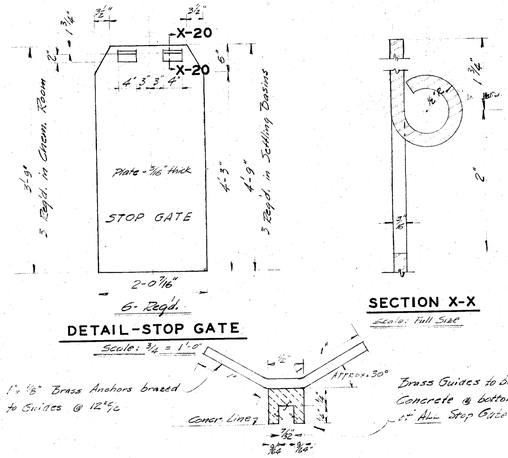
SURFACE WATER SUPPLY

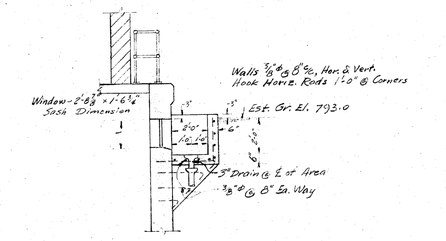
VAN WERT, OHIO

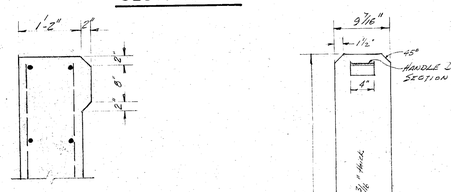
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

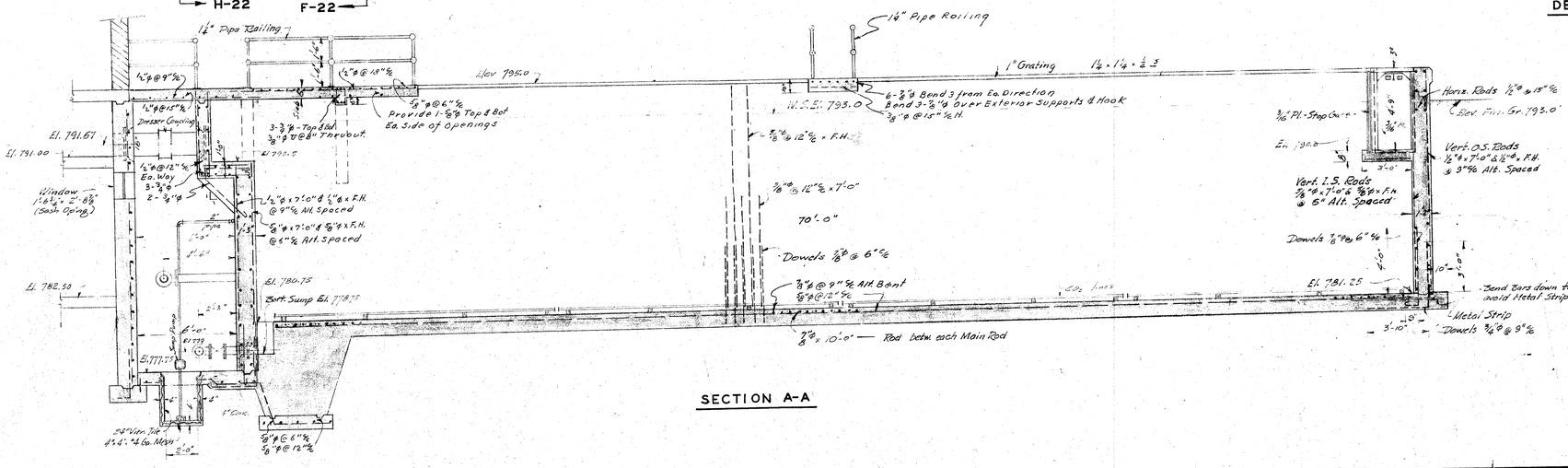
SCALE: 1/4" = 1'-0"









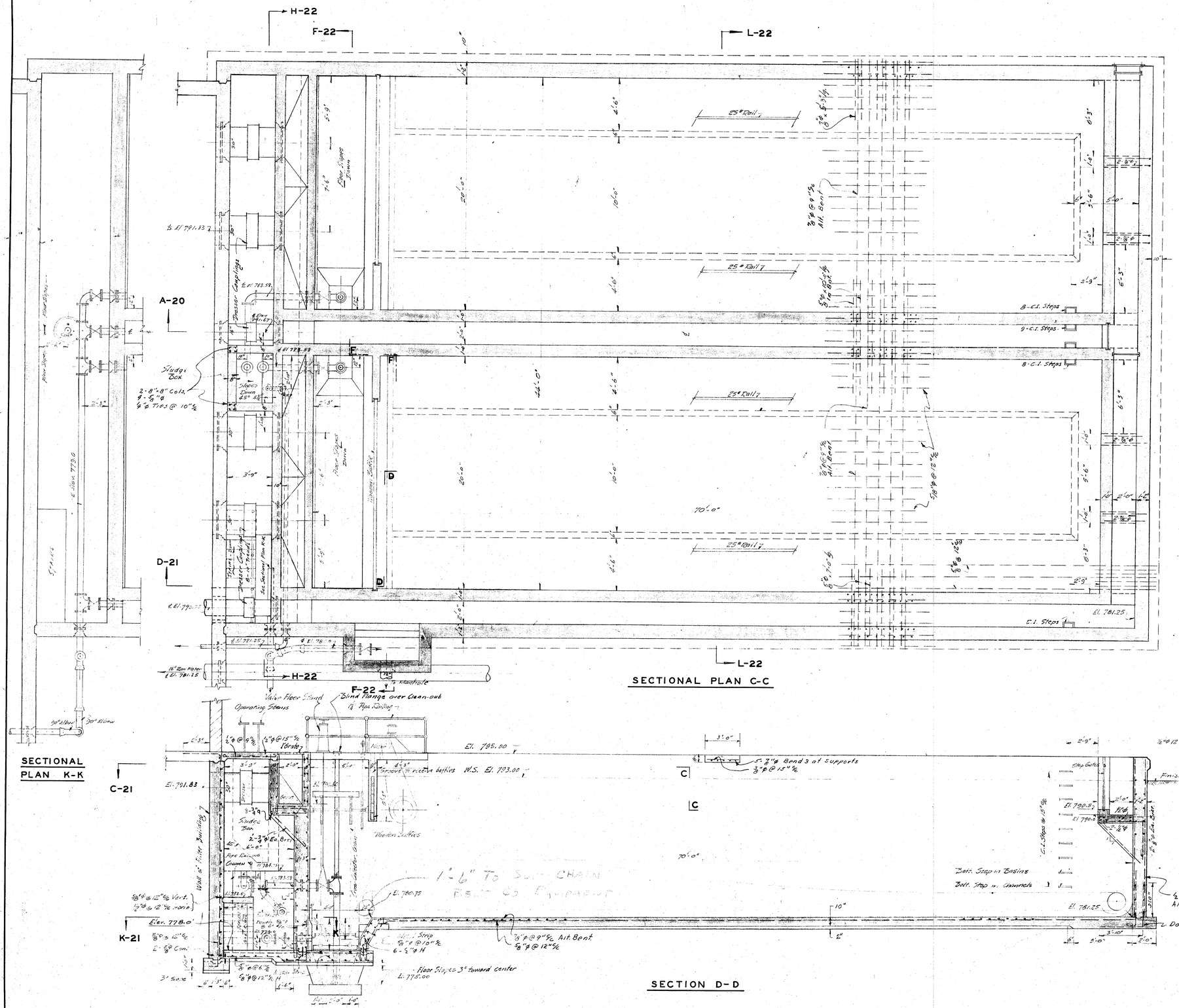


PLAN SECTION & DETAILS
SETTLING BASIN
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1/4" = 1'-0"
UNLESS NOTED 1949

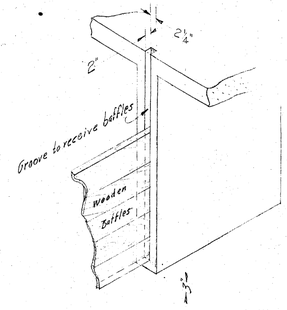
20
37



SECTIONAL PLAN K-K

SECTIONAL PLAN C-C

SECTION D-D



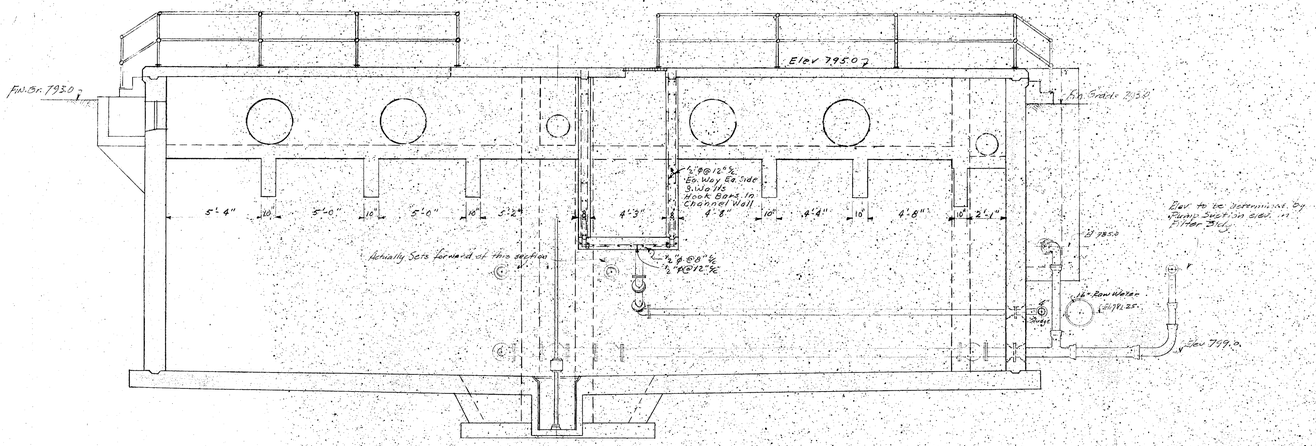
DETAIL OF GROOVES FOR BAFFLES

PLAN, SECTION & DETAIL
SETTLING BASIN
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO

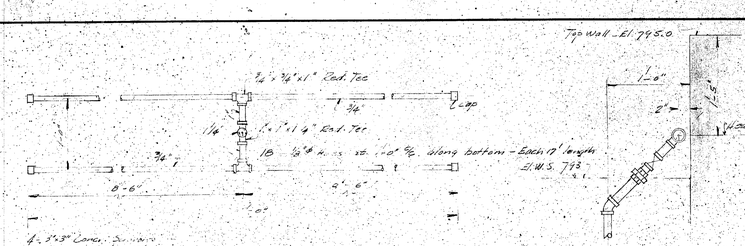
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1/4"=1'-0"
UNLESS NOTED 1949

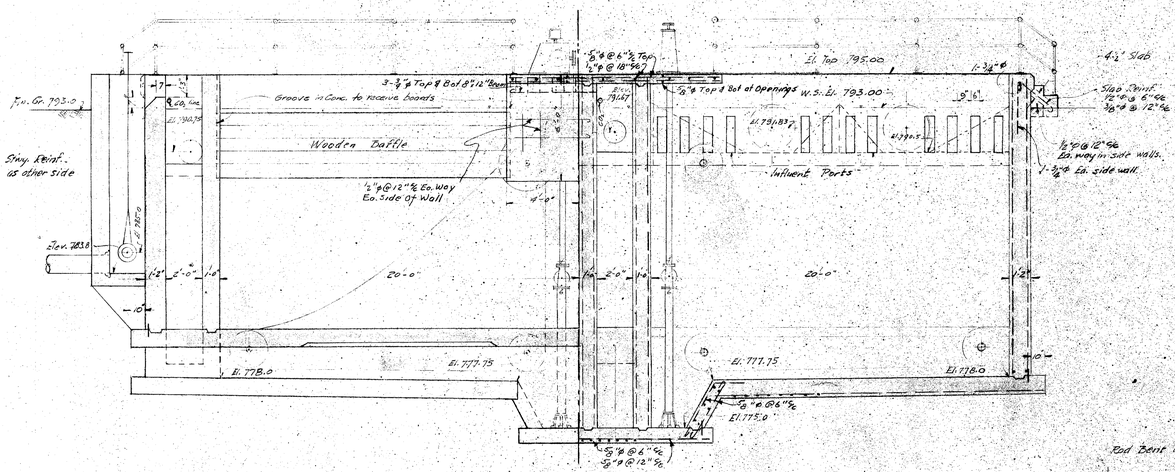
21/37



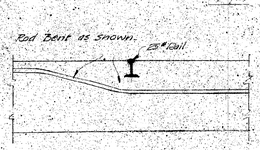
SECTION H-H



DETAIL OF CO_2 GRID

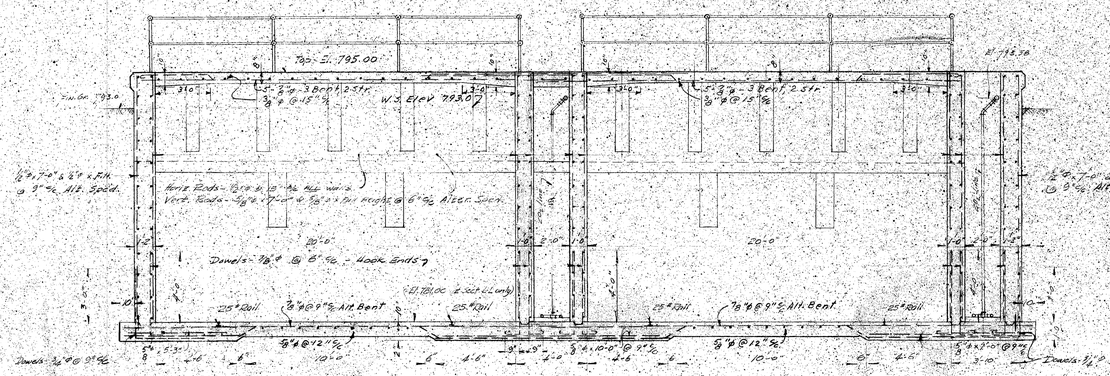


SECTION F-F



SLAB RODS DETAIL

Scale 1"=1'-0"



Note: ⅝"ø - 5'-5", 7'-0" & 10'-0" Rods to be placed between Main Slab Rods.

SECTION L-L (TYPICAL)

SECTIONS & DETAILS
SETTLING BASIN
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: ¼"=1'-0" UNLESS NOTED 1949

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37

PLAN OF FIRST FLOOR

HEATING DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4"=1'-0"
UNLESS NOTED 1949

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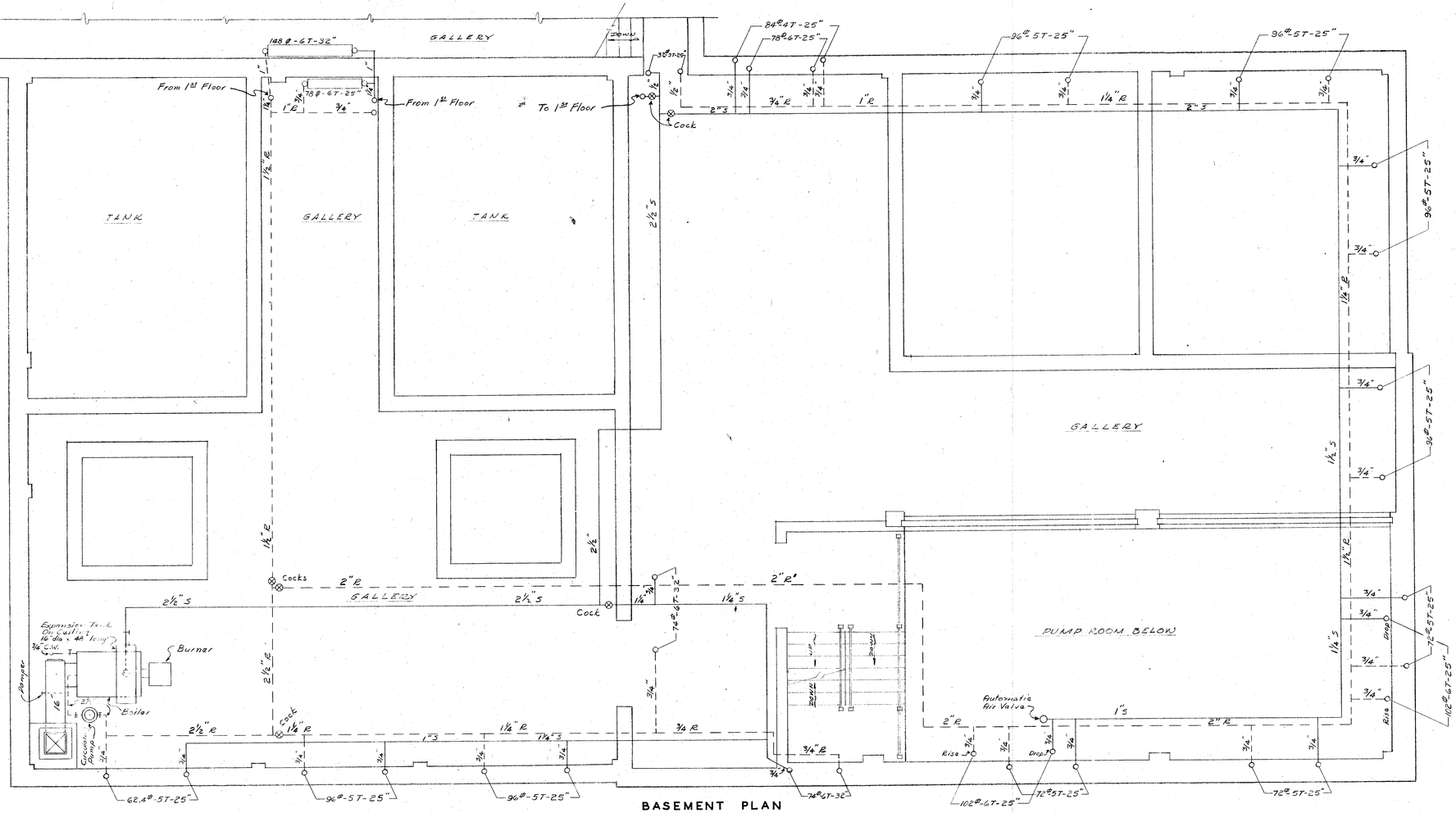
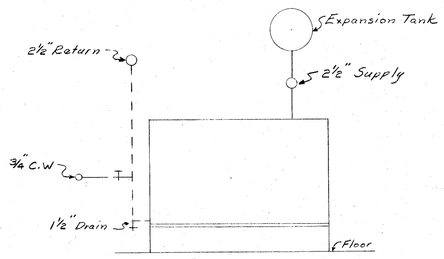
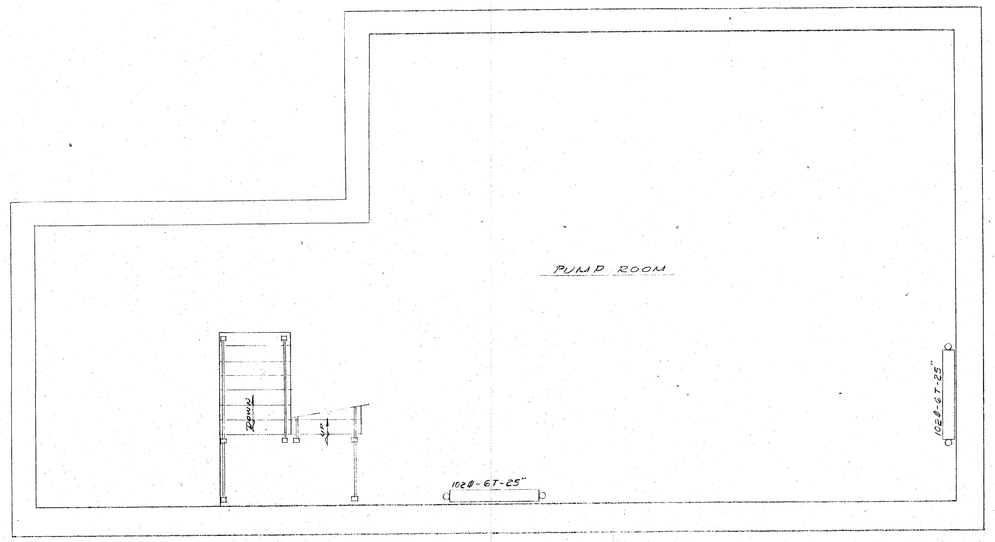
37



BASEMENT PLAN



BOILER CONNECTIONS



PUMP ROOM FLOOR

HEATING DETAILS

CHEMICAL & FILTER BUILDING

SECTION C

SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1/4" 1'-0"
UNLESS NOTED 1949

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SETTLING BASIN

SETTLING BASIN

WALKWAY

NOTE:
MOUNT PLUG-IN STRIP IN LABORATORY ABOVE TABLES APPROXIMATELY 36" ABOVE FINISHED FLOOR. 6-2 & 3 WIRE RECEPTACLES.

SLUDGE PUMP MOTORS CONTROL

MAIN CIRCUIT BREAKER 1000 AMP. 4 PSN - FEEDER DUCT

TO TRANSMITTERS

ELECTRICAL ROOM

LOW SERVICE FLOW METER

LABORATORY

HIGH SERVICE FLOW METER

TOILET

THERMOSTAT

DOWN TO PANEL L.B.1

FILTER NO. 1

FILTER NO. 2

REMOTE CONTROL PANEL

WASH WATER GUAGE

FLOATROL

LIGHTING PANEL L-1.1

ALARM BELL

FLOOR EL. 795.00 OPERATING FLOOR

TO FIXTURES 'L' & 'M'

TO FIXTURES 'L' & 'M'

DOWN TO FOUR POLE SWITCH ELEV. 782.50

PUMP ROOM

FLOOR EL. 773.00

ENTRY

QUICK MIX NO. 1

2 HP.

QUICK MIX NO. 2

2 HP.

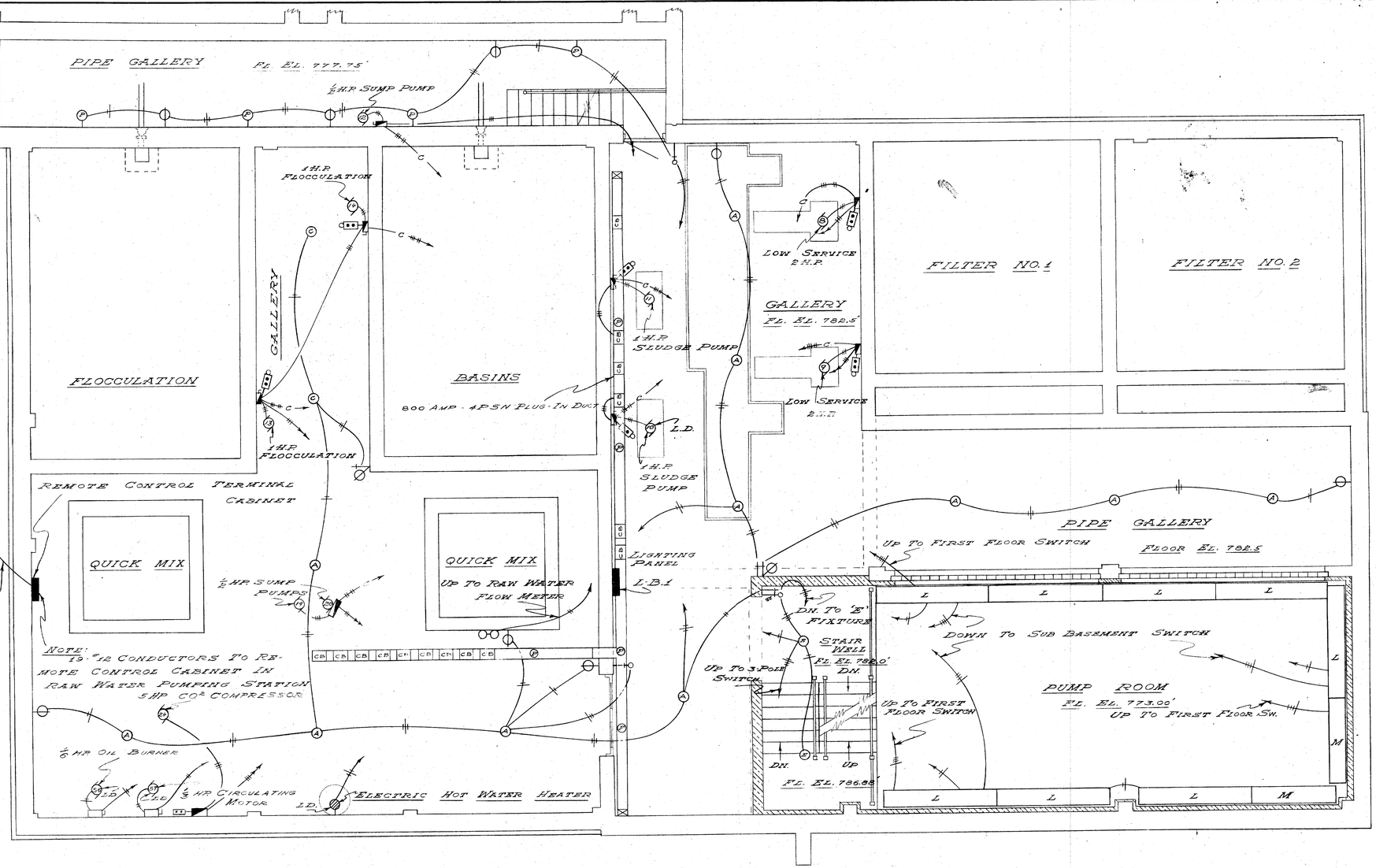
CHLORINATOR ROOM

CHEMICAL STORAGE

FIRST FLOOR TREATMENT PLANT ELECTRICAL WIRING LAYOUT

SCALE: 1/4" = 1'-0"

ELECTRICAL DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4"=1'-0"
1949



ELECTRICAL WIRING SYMBOLS

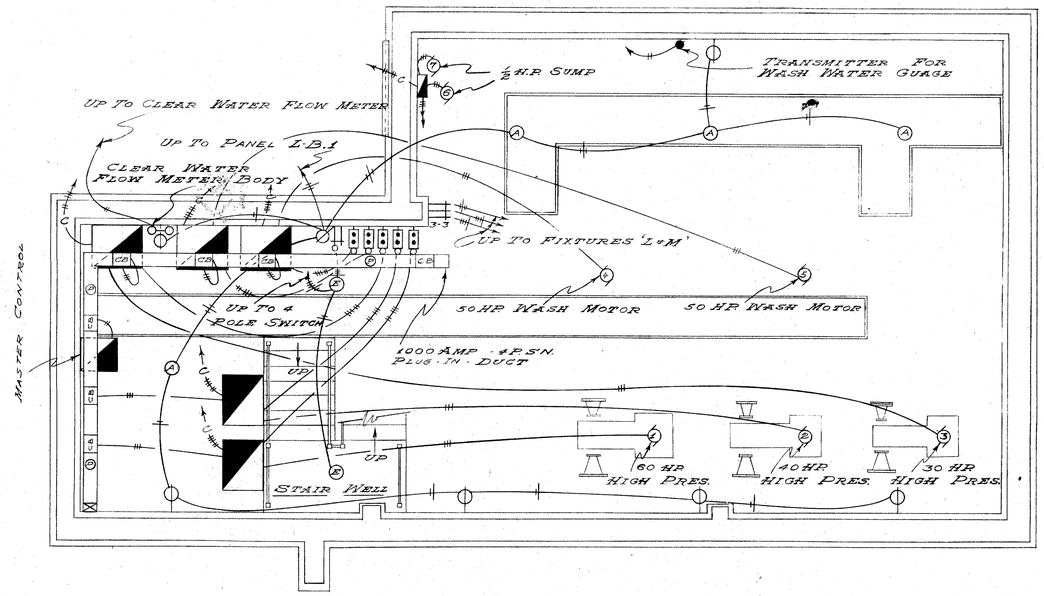
- (A) 200 WATT VAPOR PROOF SHALLOW DOME FIXTURE
- (B) 4 TUBE - 200 M.A. LOUVERED COMMERCIAL FLUORESCENT FIXTURE
- (C) 150 WATT VAPOR GLOBE & GUARD
- (D) 200 WATT ENCLOSING GLOBE COMMERCIAL FIXTURE
- (E) 2-60 WATT ENCLOSING GLOBE
- (F) 200 WATT WATER TIGHT GLOBE & GUARD - CROUSE HINDS - VDR2009
- (G) 200 WATT RLM VAPOR PROOF REFLECTOR
- (H) EXTERIOR ORNAMENTAL PENDANT FIXTURE
- (K) 150 WATT ENCLOSING GLOBE COMMERCIAL FIXTURE
- (L) 4 TUBE - 200 M.A. - EIGHT FOOT COMMERCIAL FLUORESCENT FIXTURE
- (M) 4 TUBE - 200 M.A. - SIX FOOT COMMERCIAL FLUORESCENT FIXTURE
- (N) 200 WATT SEMI - FLUSH VIA DUCT FIXTURE
- (P) 200 WATT VAPOR PROOF FIXTURE - CROUSE HINDS - VC12009
- (S) 1-20 WATT FLUORESCENT WALL MOUNTED FIXTURE
- (V) 150 WATT SHALLOW DOME FIXTURE
- SINGLE POLE FLUSH SWITCH
- SINGLE POLE FLUSH SWITCH & PILOT LIGHT
- THREE POLE FLUSH SWITCH
- THREE POLE FLUSH SWITCH & PILOT LIGHT
- FOUR POLE FLUSH SWITCH & PILOT LIGHT
- DUPLEX CONVENIENCE RECEPTACLE
- DUPLEX CONVENIENCE RECEPTACLE ONE CIRCUIT
- MOTOR OUTLET FLOOR TYPE (SIZE AS INDICATED)
- MOTOR OUTLET (SIZE AS INDICATED)
- EXHAUST FAN MOTOR OUTLET (SIZE AS INDICATED)
- MAGNETIC MOTOR STARTER - REDUCED VOLTAGE
- MAGNETIC MOTOR STARTER - ACROSS THE LINE)
- SAFETY SWITCH (SIZE AS INDICATED)
- SAFETY SWITCH AHEAD OF MAGNETIC MOTOR STARTER
- ELECTRIC PANEL (TYPE AS INDICATED)
- START & STOP PUSH BUTTON STATION
- START & STOP PUSH BUTTON STATION & PILOT LIGHT
- LO-X - 4 P.S.N. WEATHER PROOF DUCT, SERVICE ENTRANCE
- TWO WIRE 120 VOLT - 60 ~ CIRCUIT
- THREE WIRE 120/240 VOLT CIRCUIT - 1 PHASE
- FOUR WIRE 120/240 VOLT CIRCUIT - 3 PHASE DELTA
- WIREMOLD PLUG-IN STRIP - 6 - 2#3 WIRE RECEPTACLES
- LIGHTING HOME RUN OR AS INDICATED
- POWER HOME RUN OR AS INDICATED
- C — CONTROL CIRCUIT - TO REMOTE CONTROL PANEL
- 8" ALARM BELL - MOUNTING HEIGHT - 8'
- BELL RINGING TRANSFORMER
- LADDER SUPPORT - SEE DETAIL
- FLOATROL - 3 CIRCUIT
- L.D. LOCATE AS DIRECTED
- FL. FLOOR
- DN. DOWN
- MH. MOUNTING HEIGHT
- EL. ELEVATION
- HP. HORSE POWER
- THREE WIRE 240 VOLT CIRCUIT - 3 PHASE POWER
- 4000 WATT ELECTRIC HOT WATER HEATER
- SELECTOR SWITCH MOTOR STARTER
- 4 P.S.N. - LO-X - CORROSION RESISTANT FEEDER DUCT
- 4 P.S.N. - LO-X - PLUG-IN DUCT
- CB — CIRCUIT BREAKER PLUG - TYPE BCD (SIZE AS INDICATED)
- VERTICAL RISE - 800 AMP - 4 P.S.N. - FEEDER DUCT
- TELEPHONE OUTLET
- START & STOP & SELECTOR SWITCH STATION

NOTE: ELECTRICAL WIRING SYMBOLS ALSO APPLY TO SECTION A

BASEMENT TREATMENT BUILDING ELECTRICAL WIRING LAYOUT

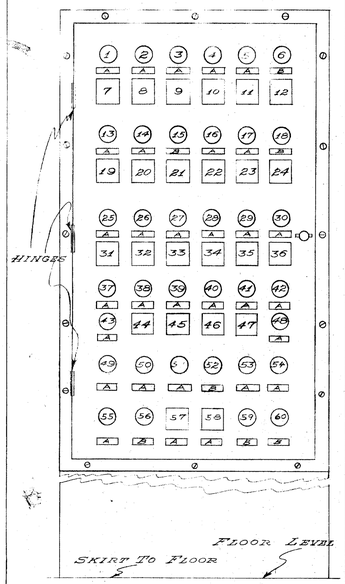
SCALE: ¼" = 1'-0"

ELECTRICAL DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: 1/4" = 1'-0"
1949
26/37



SUB-BASEMENT TREATMENT BUILDING ELECTRICAL WIRING LAYOUT

SCALE: ¼"=1'-0"



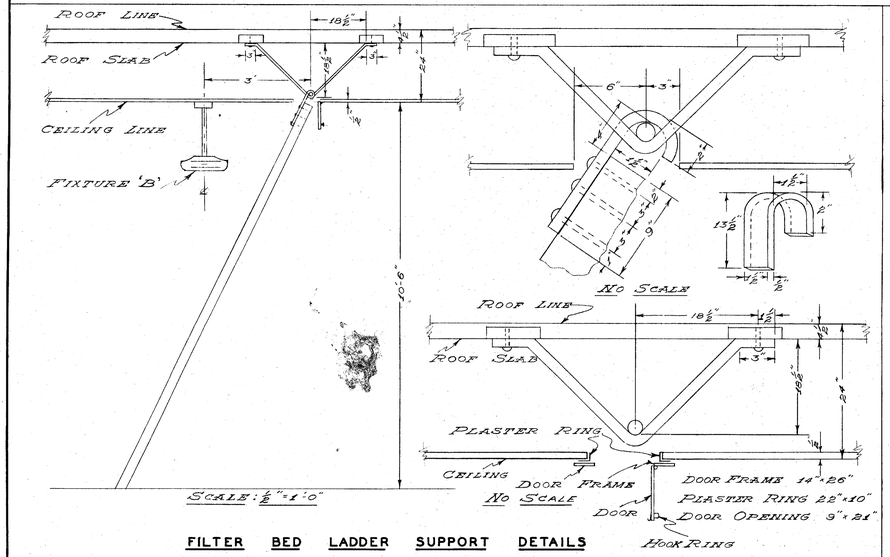
REMOTE CONTROL PANEL

No SCALE

NOTE:
See Specifications For Relay Which Shall Be Mounted In Remote Control Panel.

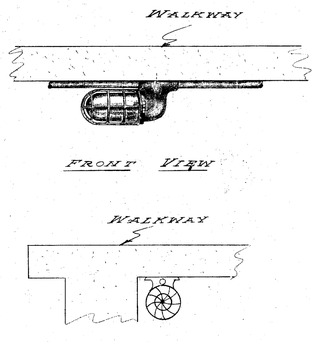
REMOTE CONTROL PANEL LEGEND

*1.- No. 1 - High Service Pump, White Pilot Light
*2.- No. 2 - High Service Pump, White Pilot Light
*3.- No. 3 - High Service Pump, White Pilot Light
*4.- No. 15 - Quick Mix, Green Pilot Light
*5.- No. 16 - Quick Mix, Green Pilot Light
*6.- Future Pilot Light, Drill Only
*7.- No. 1 - High Service Pump, Start & Stop Switch. Momentary Contact.
*8.- No. 2 - High Service Pump, Start & Stop Switch. Momentary Contact.
*9.- No. 3 - High Service Pump, Start & Stop Switch. Momentary Contact.
*10.- No. 15 Quick Mix, Start & Stop Switch. Momentary Contact.
*11.- No. 16 - Quick Mix, Start & Stop Switch. Momentary Contact.
*12.- Future Switch, Drill Only.
*13.- No. 17 - Settling Basin Motor, - Amber Pilot Light
*14.- No. 18 Settling Basin Motor, - Amber Pilot Light
*15.- Future Pilot Light - Drill Only.
*16.- No. 13 - Slow Mix, Green Pilot Light
*17.- No. 14 - Slow Mix, Green Pilot Light
*18.- Future Pilot Light - Drill Only
*19.- No. 17 Settling Basin Motor, Start & Stop Switch. Momentary Contact
*20.- No. 18 Settling Basin Motor, Start & Stop Switch. Momentary Contact
*21.- Future Switch, Drill Only.
*22.- No. 13 - Slow Mix, Start & Stop Switch. Momentary Contact.
*23.- No. 14 - Slow Mix, Start & Stop Switch. Momentary Contact.
*24.- Future Switch - Drill Only
*25.- No. 8 - Low Service Pump, Amber Pilot Light
*26.- No. 9 - Low Service Pump, Amber Pilot Light
*27.- No. 10 - Sludge Pump, Blue Pilot Light
*28.- No. 11 - Sludge Pump, Blue Pilot Light
*29.- No. 4 - Wash Pump, Clear Pilot Light
*30.- No. 5 - Wash Pump, Clear Pilot Light
*31.- No. 8 - Low Service Pump, Start & Stop Switch. Momentary Contact.
*32.- No. 9 - Low Service Pump, Start & Stop Switch. Momentary Contact.
*33.- No. 10 - Sludge Pump, Start & Stop Switch. Momentary Contact.
*34.- No. 11 - Sludge Pump, Start & Stop Switch. Momentary Contact.
*35.- No. 4 - Wash Pump, Start & Stop Switch. Momentary Contact.
*36.- No. 5 - Wash Pump, Start & Stop Switch. Momentary Contact.
*37.- No. 12 - Sump Pump, Red Pilot Light
*38.- No. 26 - Raw Water (Pump Motor), Amber Pilot Light
*39.- No. 27 - Raw Water (Pump Motor), Amber Pilot Light
*40.- No. 28 - Raw Water (Pump Motor), Amber Pilot Light
*41.- No. 29 - Raw Water (Pump Motor), Amber Pilot Light
*42.- No. 6 - Sump Pump, Red Pilot Light
*43.- No. 33 - 1 H.P. Water Screen Motor, Clear Pilot Light
*44.- No. 26 - Raw Water (R Station) Start & Stop Switch. Momentary Contact
*45.- No. 27 - Raw Water (R Station) Start & Stop Switch. Momentary Contact
*46.- No. 28 Raw Water (R Station) Start & Stop Switch. Momentary Contact
*47.- No. 29 Raw Water (R Station) Start & Stop Switch. Momentary Contact
*48.- No. 7 - Sump Pump, Red Pilot Light
*49.- No. 19 Sump Pump, Red Pilot Light
*50.- Green Pilot Light - Floatrol - Raw Water
*51.- Red Pilot Light - Floatrol - Raw Water
*52.- Future Pilot Light - Drill Only.
*53.- Red Pilot Light - Clear Well Floatrol
*54.- *32 - 25 H.P. Wash Spray Motor - Clear Pilot Light
A - Nameplates
B - Future Name Plates - Finished - Less Engraving
*55.- No. 20 - Sump Pump - Red Pilot Light
*56.- Future Pilot Light - Drill Only
*57.- Single Pole Selector Switch - Off & On - Raw Water Floatrol
*58.- Future Selector Switch
*59.- Future Pilot Light - Drill Only
*60.- Future Pilot Light - Drill Only



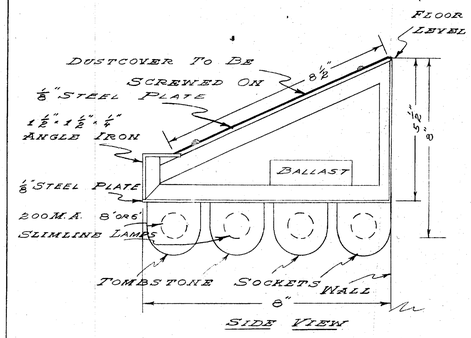
FILTER BED LADDER SUPPORT DETAILS

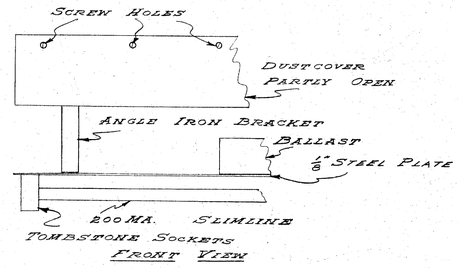
SCALE As NOTED



FIXTURE 'F'

No SCALE

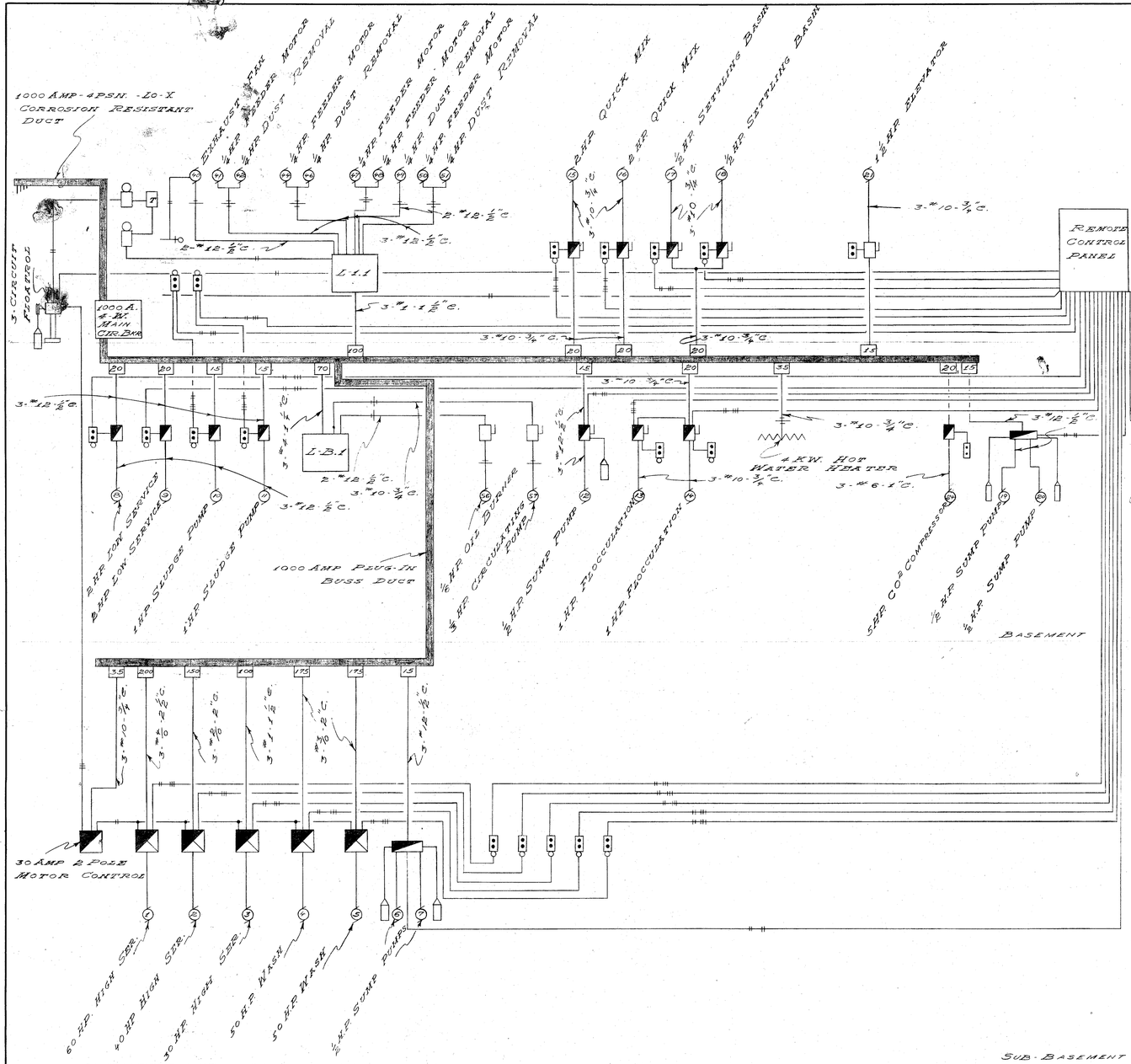


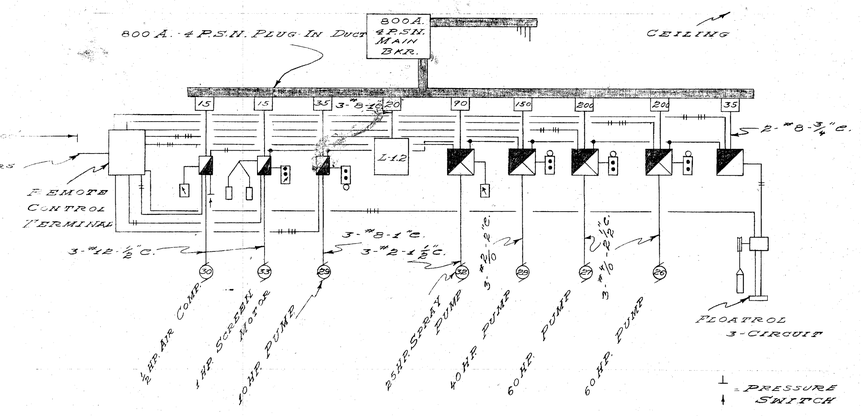


PUMP ROOM LIGHTING FIXTURE – 'L' & 'M'

No SCALE

ELECTRICAL DETAILS
CHEMICAL & FILTER BUILDING
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO
SCALE: AS NOTED
1948
27





ELECTRIC PANEL SCHEDULE

PANELS	FUSE SWITCHES	15 A. S.P. CIR. BKRS.	20 A. S.P. CIR. BKRS.	PLUG-IN CIR. BKRS.	REMARKS
L-1.1		13	29	100	120/240 VOLTS - 3W. S.N.
L.B.1		14	6	70	120/240 VOLTS - 3W. S.N.
L-1.2		6	2	20	120/240 VOLTS - 3W. S.N.

RAW WATER PUMPING STATION

TREATMENT BUILDING

ONE LINE ELECTRIC POWER & LIGHTING FEEDER DIAGRAM

No Scale

ELECTRICAL DETAILS

SECTION A & B

SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: NO SCALE

1949

25
37

HALF TOP PLAN

HALF BOTTOM PLAN

PLAN

SECTIONAL PLAN

SECTION F-F

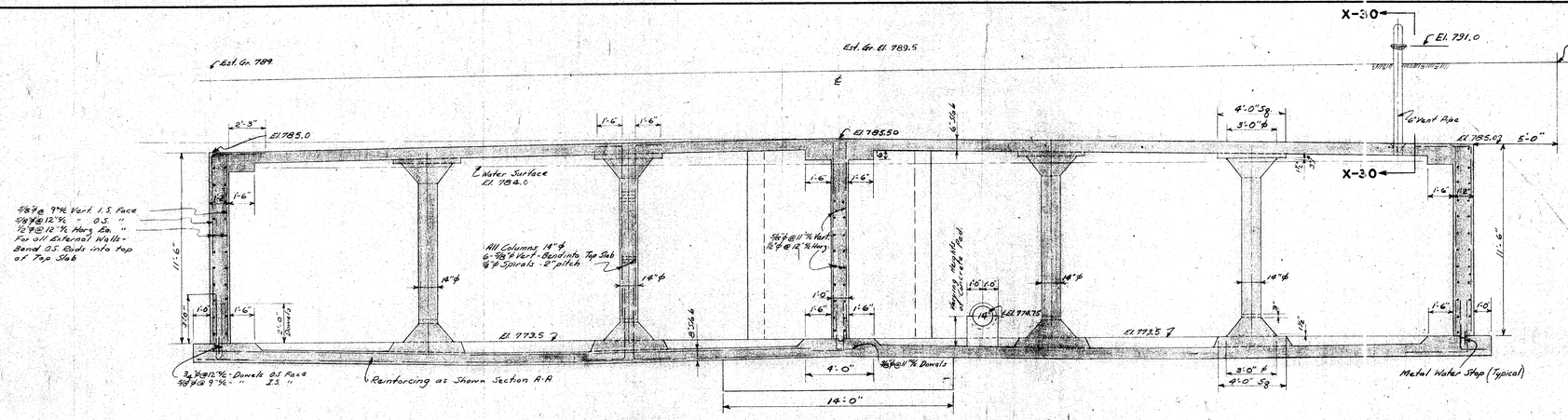
PLAN
CLEAR WATER RESERVOIR
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

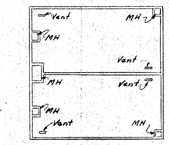
SCALE: 1/4" = 1'-0"
UNLESS NOTED

1949

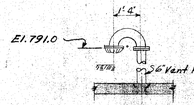
22
33



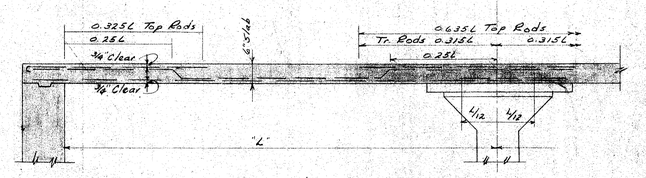
SECTION D-D



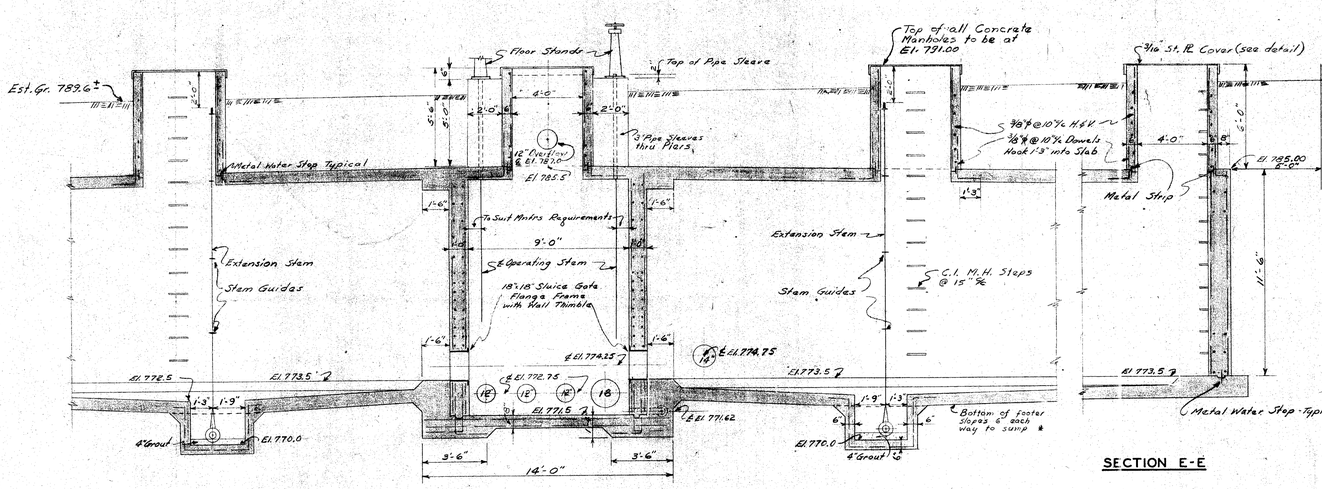
PLAN-RESERVOIR
No Scale



SECTION X-X



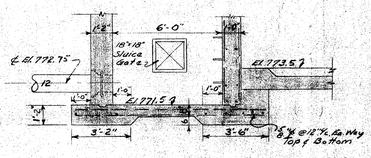
TYPICAL BENDING ROOF SLAB RODS



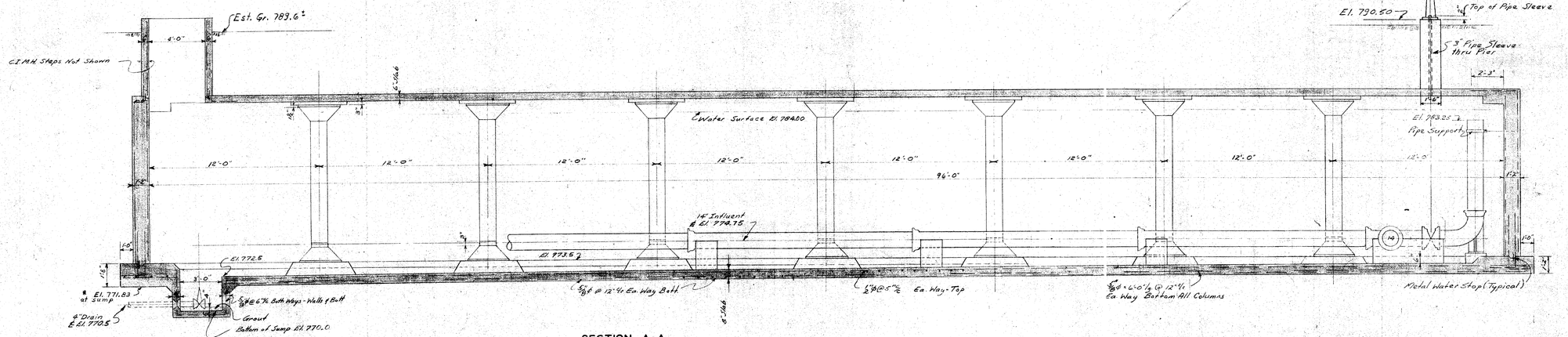
SECTION C-C

SECTION E-E

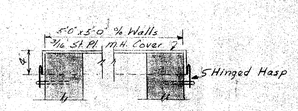
All Rods ⅝"ϕ - 6" Slab			
ROOF BEND SCHEDULE			
Band No.	No. Sr. Rods	No. Rt. Rods	No. Top Rods
A1	2	3	2-Ea. End
A2	4	6	6- " "
A3	3	5	6- " "
A4	2	3	2- " "
A5	2	3	1- " "
A6	3	5	3- " "
A7	2	3	1- " "
B1	3	6	—
B2	3	6	—
B3	3	6	—
B4	3	3	—
B5	3	3	—
B6	3	3	—
B7	3	3	—
C1	2	3	—
C2	6	9	6-Ea. End
C3	6	9	6- " "
C4	2	3	2- " "
C5	2	3	1- " "
C6	3	5	3- " "
C7	2	3	1- " "
C8	2	3	—
D1	3	6	—
D2	3	6	—
D3	3	6	—
D4	3	3	—
D5	5	9	3-Ea. End



SECTION B-B



SECTION A-A



DETAIL-MANHOLE COVERS

Piping Revised as per Shop Drawing ES 6363 1/20/50 D.F.

* Revised 2/22/50 T.K. Revised 8/23/49 N.P.

SECTIONS & DETAILS
CLEAR WATER RESERVOIR
SECTION C
SURFACE WATER SUPPLY
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1/4"=1'-0"
UNLESS NOTED 1949

20
37

34

FILTER BUILDING ADDITION

SECTION A

WATER WORKS IMPROVEMENTS

VAN WERT, OHIO

FINKBEINER, PETTIS AND STROUT CONSULTING ENGINEERS - TOLEDO, OHIO

1963

These drawings and plans approved, subject to full compliance with all requirements of Revised Code of Ohio and Ohio State Building Code, Chapter... 12 Y 1 - 12 Y 4 ..... Construction and erection in violation of above will nullify and void this approval.
DIVISION OF FACTORY AND BUILDING INSPECTION
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF OHIO

Abb # 33134

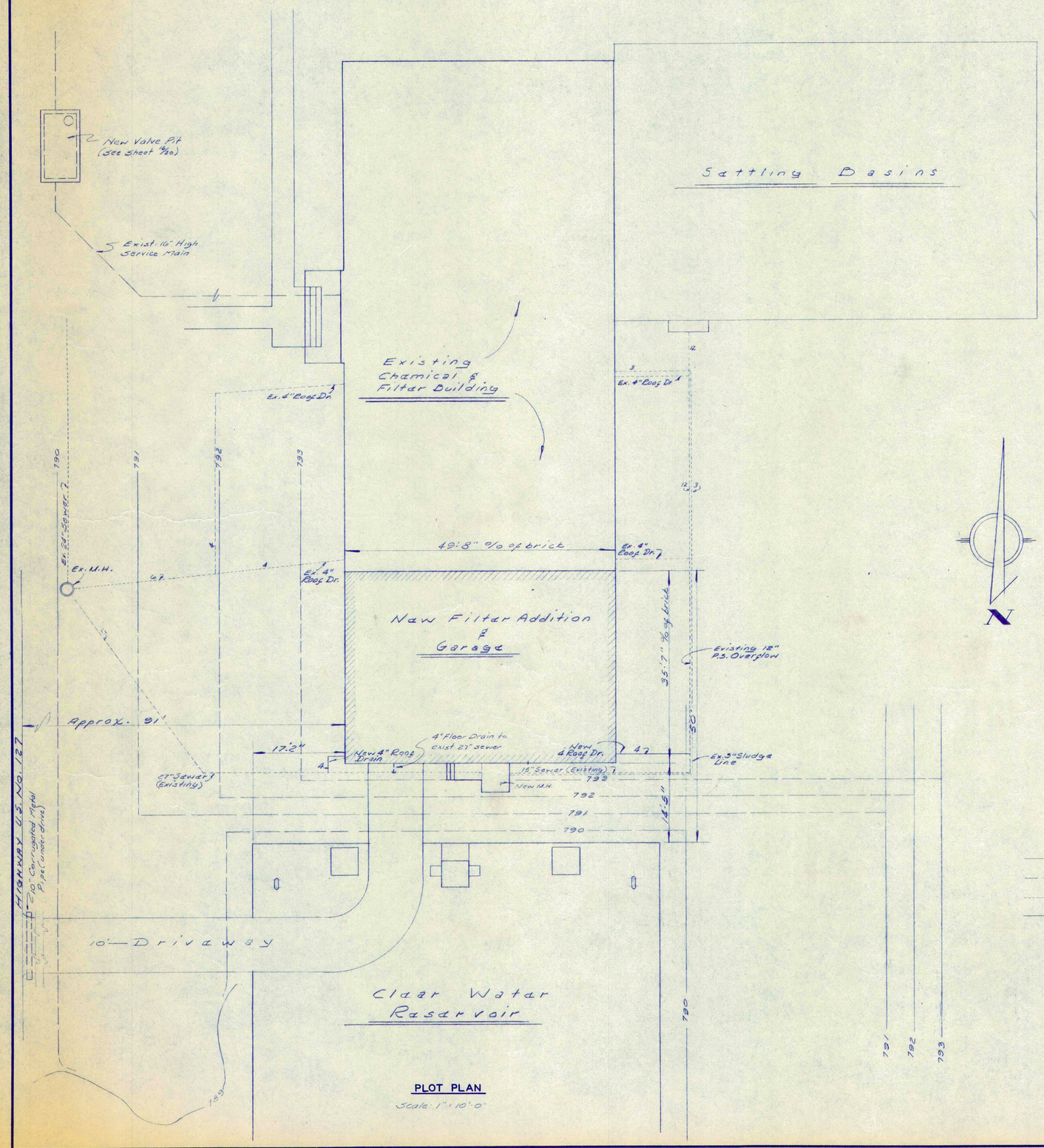
This approval is subject to compliance with all contingencies in their entirety, before any portion of the construction affected by them is started.
Approved drawings must be kept on the site during the entire construction period.

DEPT. OF INDUSTRIAL RELATIONS
DIV. OF FACTORY AND BUILDING INSPECTION
APPROVED
MAY - 7 1964
STATE OF OHIO
BY ..... P.E.

APPROVED
CITY OF VAN WERT, OHIO

BY _____ DATE 12-30-63
MAYOR

BY _____ DATE 12-30-63
DIRECTOR OF PUBLIC SERVICE



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.

REINFORCING:

Allow 2000lbs. 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-15 (intermediate grade new billet) or ASTM A-16 (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.

MISCELLANEOUS:

After excavation is completed, obtain Engineer's approval on soil bearing before placing concrete.

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.

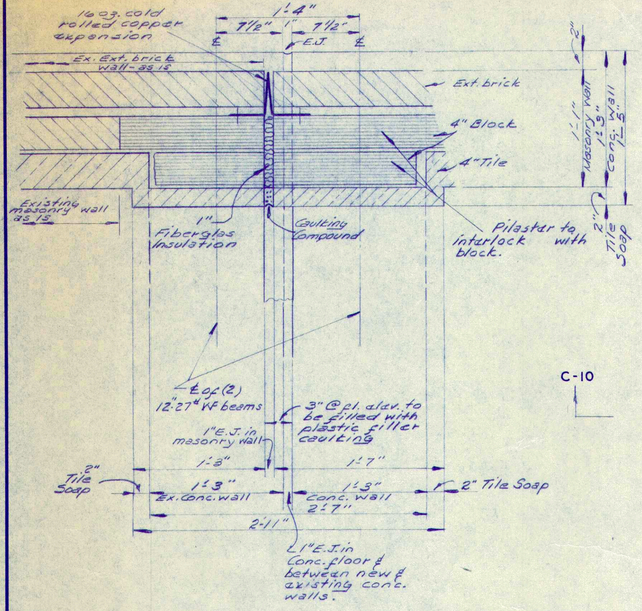
All excavation for pipe, etc. that occurs below a main foundation slab or footing shall be filled with Class II concrete to the bottom of the slab or footing.

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

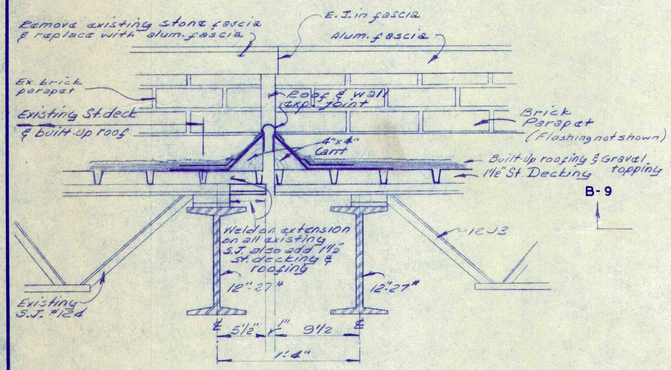
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

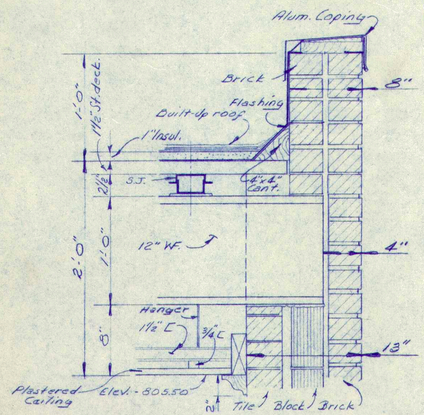
SCALE: AS NOTED 1963 DR. BY AJM CH. BY RBO



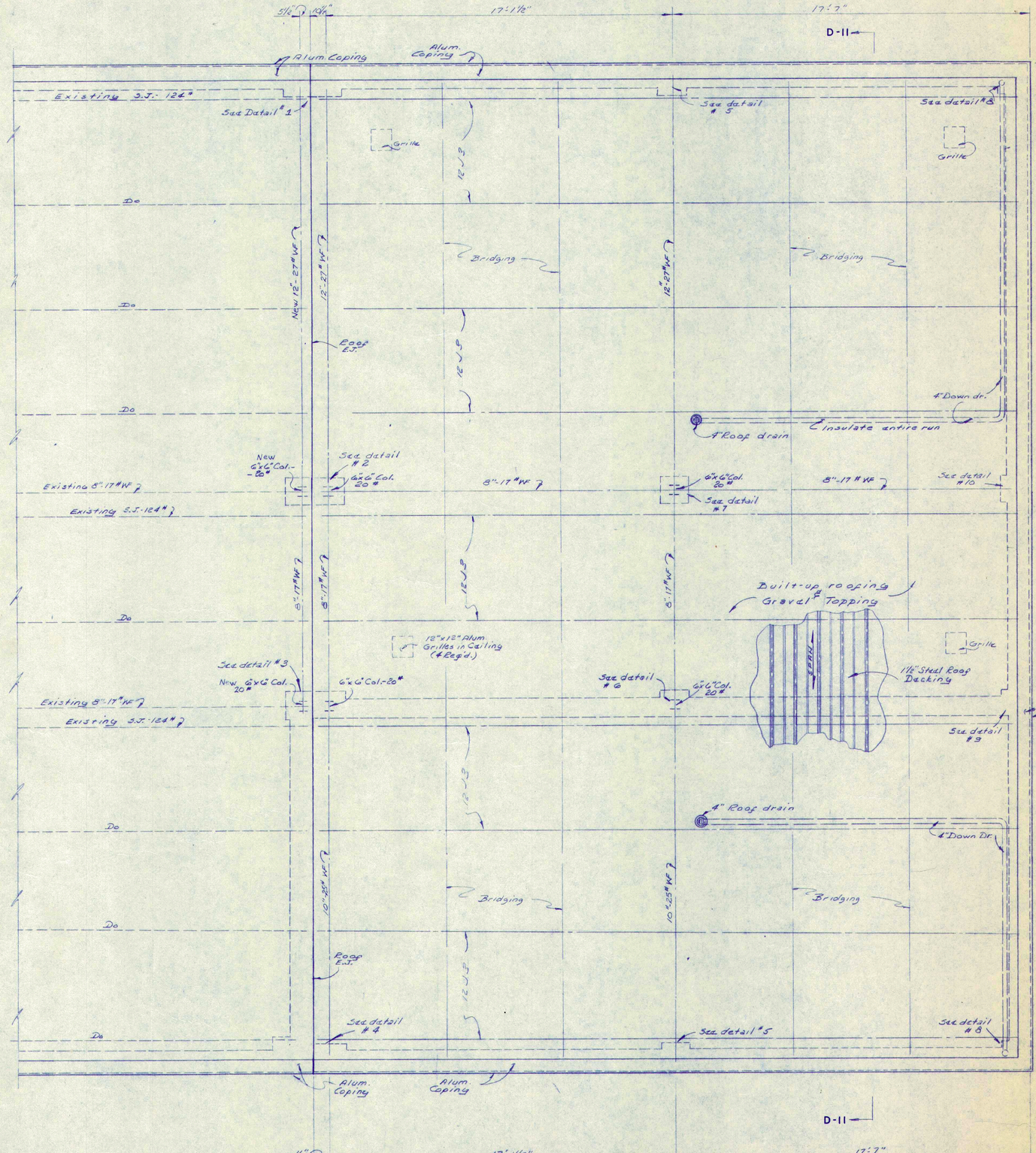
DETAIL NO. 1
(TYPICAL WALL EXPANSION JOINT)
Scale: 1½" = 1'-0"



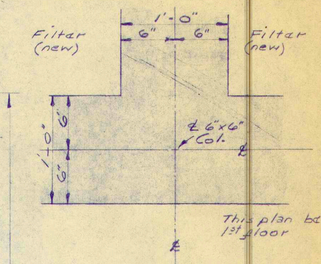
TYPICAL ROOF EXPANSION JOINT.
Scale: 1½" = 1'-0"



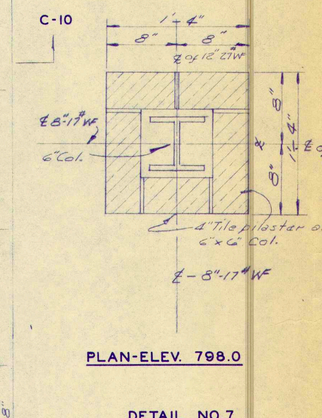
TYPICAL BEAM SUPPORT AT WALLS
Scale: 1½" = 1'-0"



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

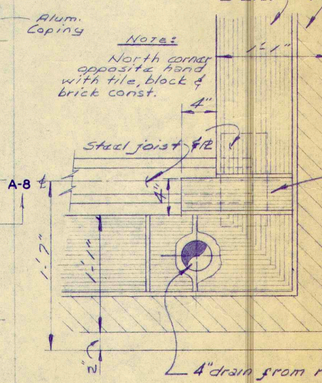


PLAN-ELEV. 792.0



PLAN-ELEV. 798.0

DETAIL NO. 7
Scale: 1½" = 1'-0"

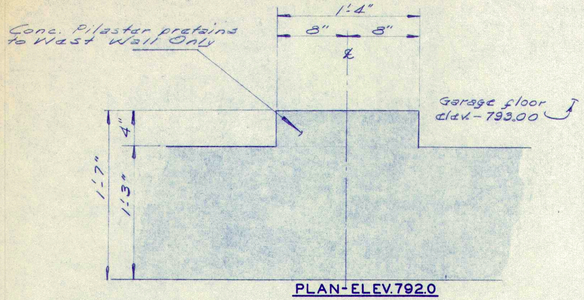


DETAIL NO. 8
Scale: 1½" = 1'-0"

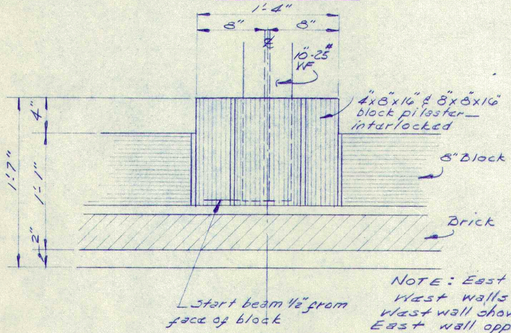
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: AS NOTED 1963 DR. BY MJM CH. BY RBO



PLAN-ELEV.792.0

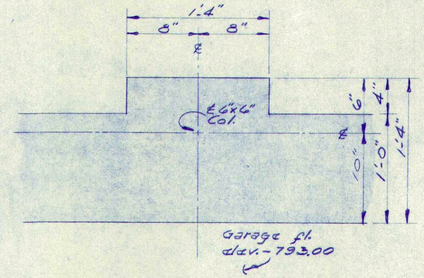


PLAN-ELEV. 798.0

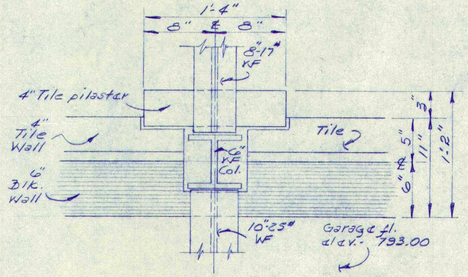
NOTE: East & West walls same. West wall shown above, East wall opposite, except instead of 10" beam use 12"

DETAIL NO. 5

Scale: 1½"=1'-0"



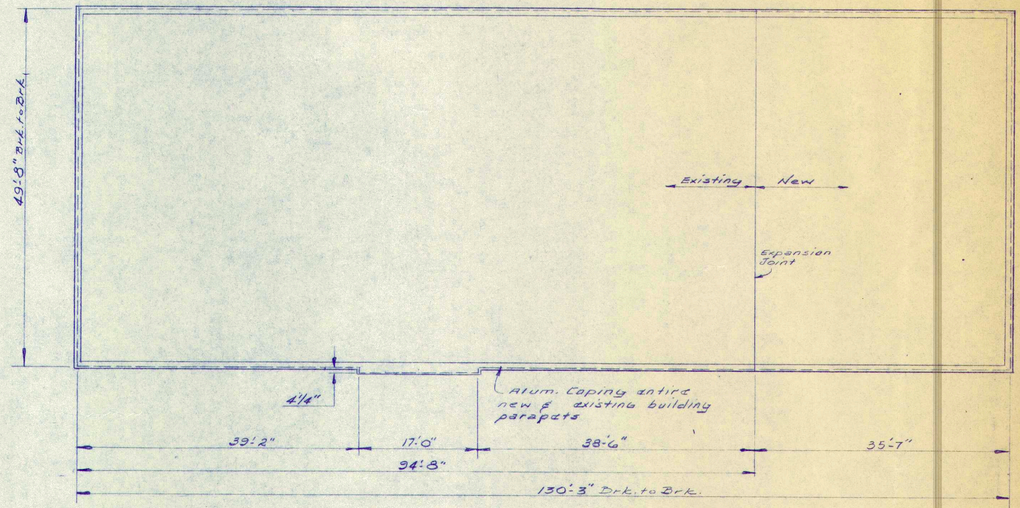
PLAN-ELEV. 792.0



PLAN-ELEV. 807.17

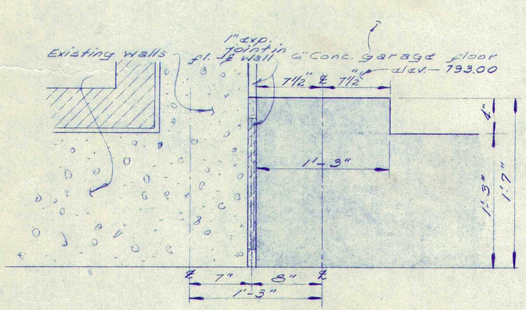
DETAIL NO.6

Scale: 1½"=1'-0"

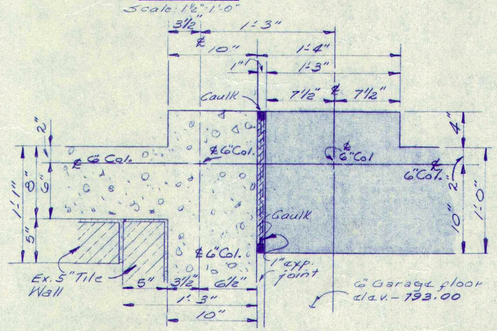


ROOF PLAN

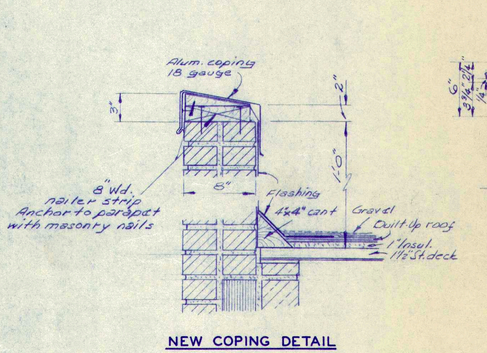
Scale: 1"=10'-0"



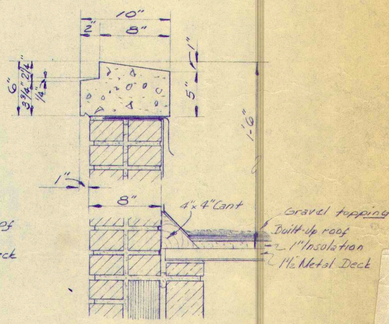
PLAN-ELEV. 792.0



PLAN-ELEV. 792.0



NEW COPING DETAIL



EXISTING COPING DETAIL

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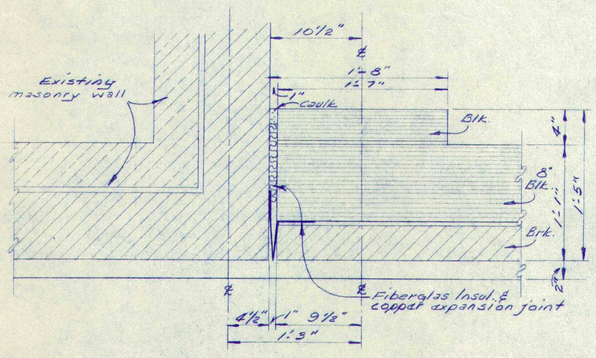
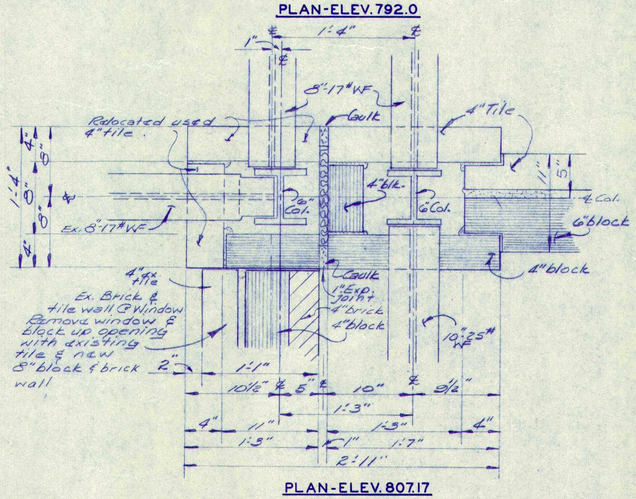


PLAN-ELEV. 798.0

DETAIL NO.4

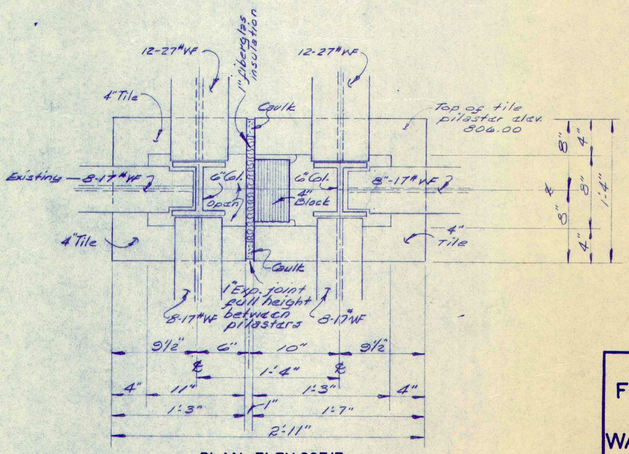
Scale: 1½"=1'-0"



PLAN-ELEV. 807.17

DETAIL NO.3

Scale: 1½"=1'-0"



PLAN-ELEV. 807.17

DETAIL NO.2

Scale: 1½"=1'-0"

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED

1963

DR. BY MJM

CH. BY REBO

EXISTING STRUCTURE

SECTIONAL PLAN - ELEV. 800.0
Scale: 1/8" = 1'-0"

DETAIL NO. 10
Scale: 1" = 1'-0"

DETAIL NO. 9
Scale: 1" = 1'-0"

NOTE: All pilasters to be solid block.

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: AS NOTED
1963
DR. BY MJM
CH. BY RLS

Ex. Filter #2

Pump Room (open)

Existing Filters

Existing (Open) Pump Room Below

Filter #3

Filter #4

Typical Stagger Splices With Opp. End

Filter Wash Troughs — 3 per filter

Wash trough

Wash trough See Sht. for details

(4) - 7/16" Dia. Surface Wash Units Req'd. per Filter

3"x3"x 3/8" Galvanized Angles

Pipe L support

Clip anchor to wall

4" Roof Drain

Tie in for filter surface wash - 2½" Water Supply

2½" Water

18" Dr.

Drain

Caulk

1"-6"x1'-6" O.F. Corner Bar Typical

1" from ex. conc. wall

Drasser Coupling @ New Tie in

16" Filter Influent

Exist. fl. slab

New fl. Slab

Drasser Coupling

Blind Flange

Wall Sleeve

¾" line to sill cock

Stop & waste valve

2½" Pipe sleeve

Air release 1" Pipes

Up

New M.H.

Existing M.H. to be removed after 15" 27" Sewers & 18" W.W. Dr. are diverted into new M.H.

Area under garage floor to be backfilled

Plain running trap

4" down & into exist. 27" Sewer

4" Drain

2'-6" Conc. piling down to undisturbed soil. 3 req'd.

4" Roof drain

Column 4-4L's w/ 13 lbs @ ℄

Column 4-4L's w/ 13 lbs @ ℄

Column 4-4L's w/ 13 lbs @ ℄

C-10

B-9

A-8

K-11

D-11

EXISTING STRUCTURE

SECTIONAL PLAN - ELEV. 792.5

N

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

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

1963

DR. BY TJM

CH. BY RBS

5
26

Filter #2

Pipe Gallery

Open Pump Room (Below)

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

Caulk

New 1/2" Chlorine hose in 1/4" conduit

Exist. Chlorine connection - relocate as shown.

Ex. Pipe Gallery
Fl. elev. - 782.50

Open Ex. Pump Room (Below)

SECTIONAL PLAN - ELEV. 787.0
Scale: 3/8" = 1'-0"

Tile Filter Block #3 Filter

Tile Filter Block #4 Filter

Cone deflector Baffle @ El. 783.83

1" Air Release Pipe

4'-0"

E.J.

24" Fl. casting & blind flange

4" Floor Drain

3" Filter Drain

Chlorine line-down

24" Flange Wall Casting & Blind Flange

Filter

Rate of flow controller

Butterfly Valves

16" Sampling Lines

N. Water

Floor Elev. 782.50

Ex. 15" Sewer to be tied into new M.H

New M.H. Bottom elev. 782.50

46" Ex. H&V

Ex. 27" Sewer to be tied into New M.H

This stub wall up to underside of garage footer

Top of Slab

Alum. Grating Size as shown on plans

1/2"-L Frame (Alum.)

1" x 1/4" x 4" Anchor angle welded to Frame @ 18" c/c.

FLOOR SUPPORT

Conc. wall

Alum. grating

1/4" Alum. "L" 1 1/4" x 1 1/4" x 3/16"

Conc. cinch anchors @ 18" c/c.

WALL SUPPORT

FLOOR GRATING DETAILS
Scale: 1 1/2" = 1'-0"

1/4" Pipe Railing

Grating

3/8" Bolts & Lock Nuts with 1" Washer

10" C Stringer

RAILING DETAIL
Scale: 1 1/2" = 1'-0"
10 3/8" wide Stair treads (4) Req'd. 2 per stairs

Concrete wall

Grate Treads

1" Alum. Grating

1 1/4" Pipe Railing

10" C 15.3# Stringer

(1) - 4'-0" Long
(1) - 5'-0" Long

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

1 1/4" x 4" x 2'-0 3/4" Flat Stk. weld to C-C (2) Req'd. (1) per stairs

C-C 8.2#

2 - 0 3/4" Lg. (4) Req'd. 2 per stairs

3/8 inch Anchors on South stairs only

1" Alum. Grating elev. 795.00

10" C-15.3# Stringer

2 @ 4'-0" Long
2 @ 5'-0" Long

4" x 4" x 4 3/4" weld to Stringer 3/8 inch anchors in floor (4) Req'd. 2 per stair

Conc. floor elev. 793.00

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

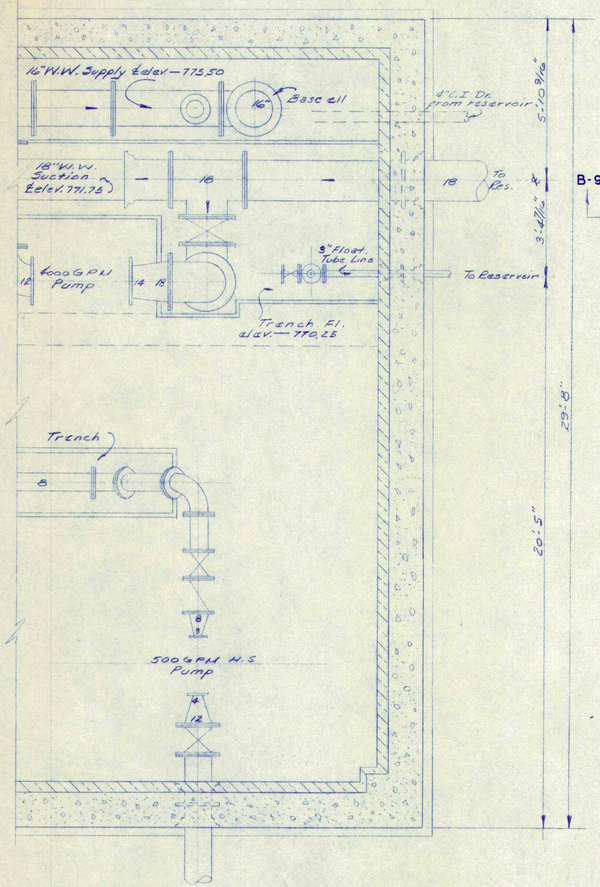
STAIR & LANDING DETAILS

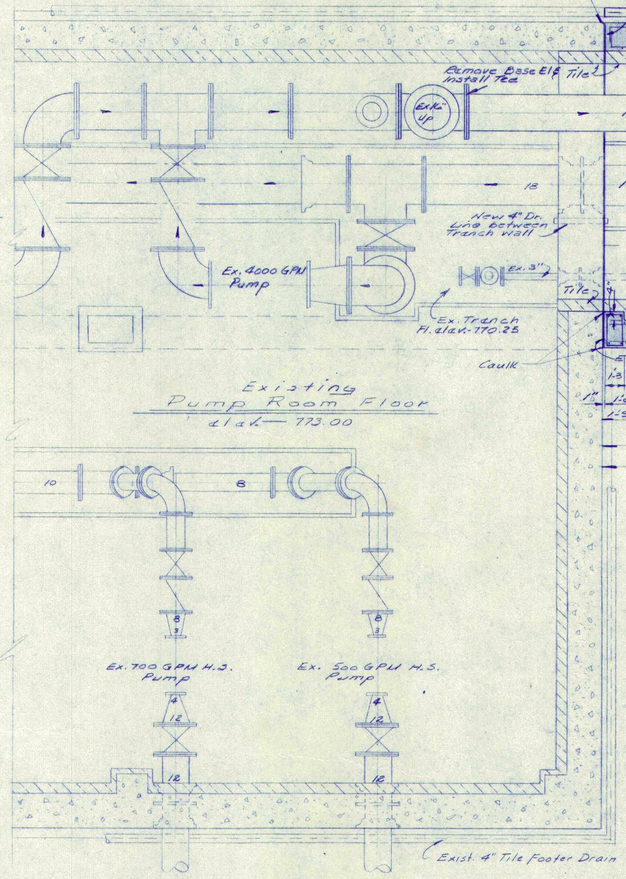
N

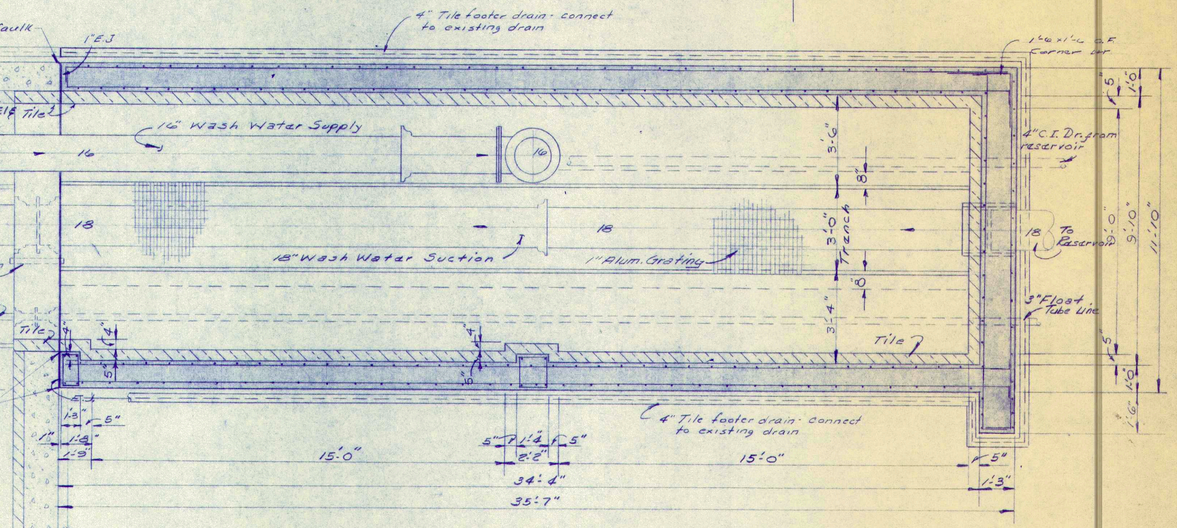
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: AS NOTED
1963
DR. BY MJM
CH. BY RBO



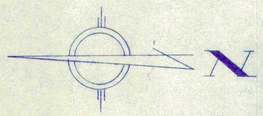


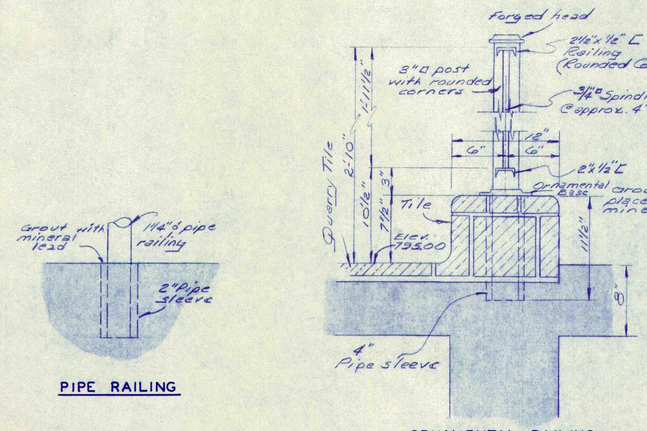


SECTIONAL PLAN - ELEV. 778.0

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

EXISTING STRUCTURE



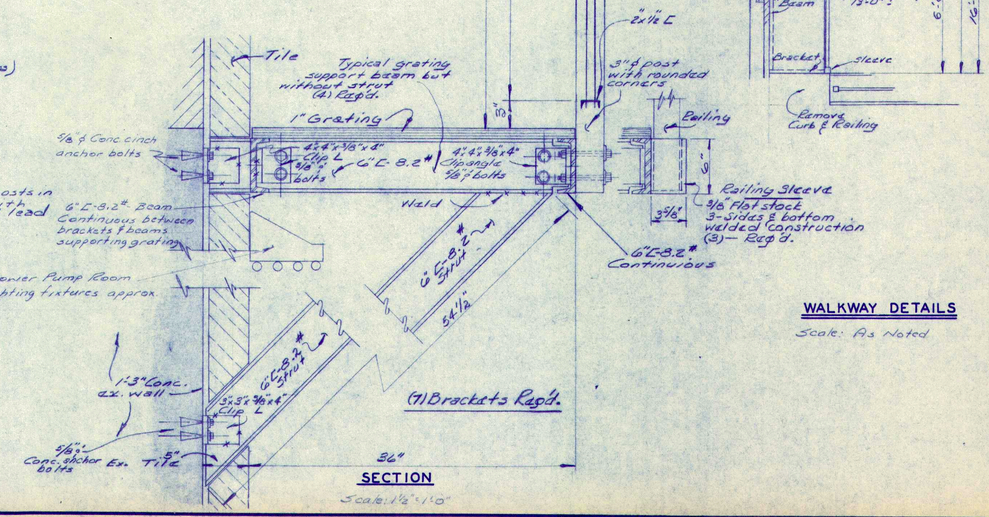


PIPE RAILING

ORNAMENTAL RAILING

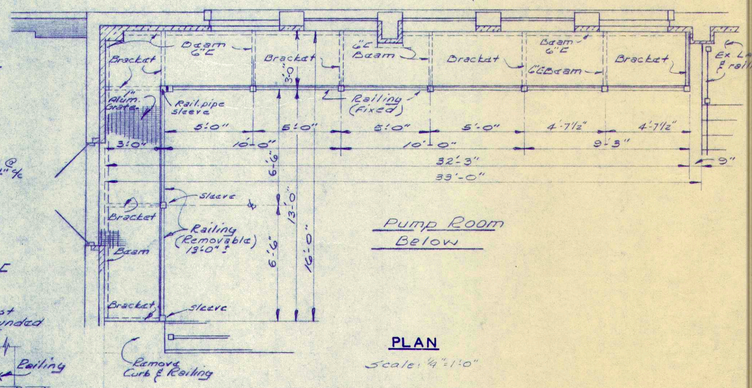
RAILING DETAILS

Scale: 1½" = 1'-0"



SECTION

Scale: 1½" = 1'-0"



PLAN

Scale: ¼" = 1'-0"

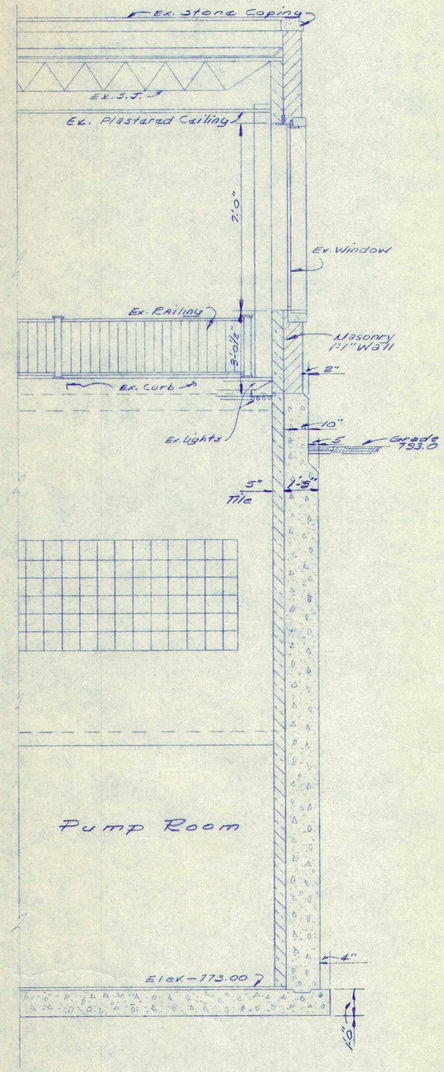
WALKWAY DETAILS

Scale: As Noted

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

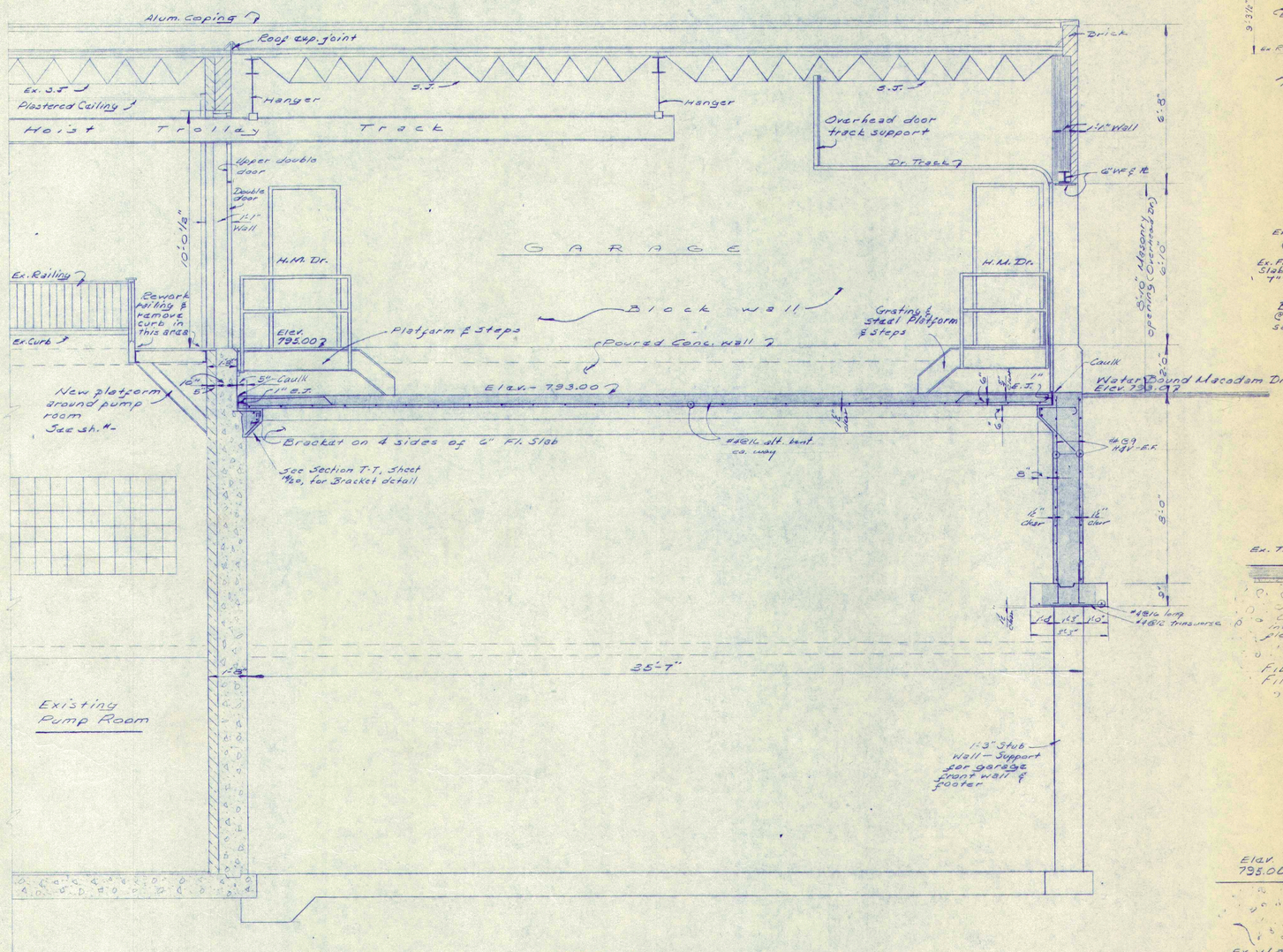
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED
1963
DR. BY MJM
CH. BY RBO
2-60



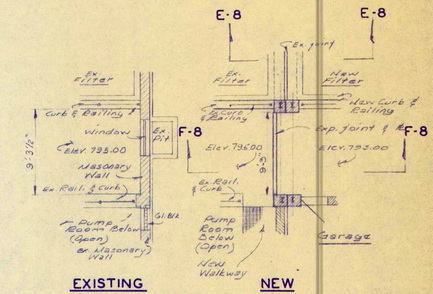
EXISTING STRUCTURE

Scale: ⅜" = 1'-0"

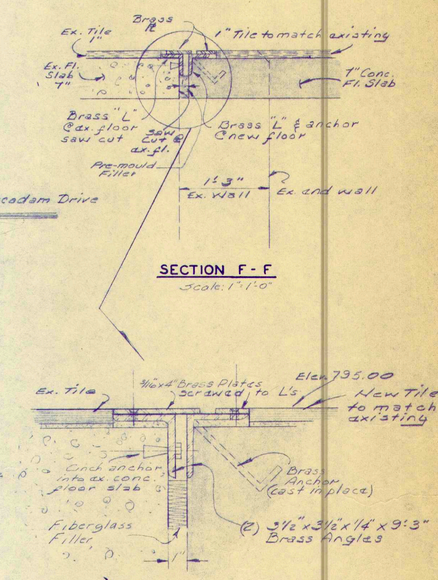


SECTION A - A

Scale: ⅜" = 1'-0"

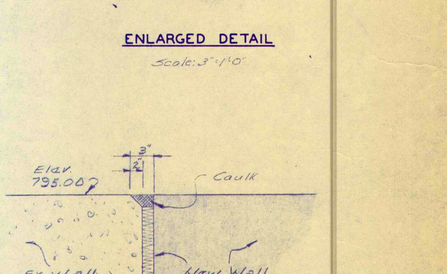


Scale: ⅛" = 1'-0"



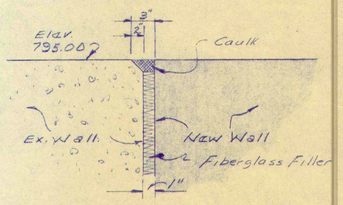
SECTION F - F

Scale: 1" = 1'-0"



ENLARGED DETAIL

Scale: 3" = 1'-0"



SECTION E - E

Scale: 1½" = 1'-0"

EXPANSION JOINT DETAILS

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

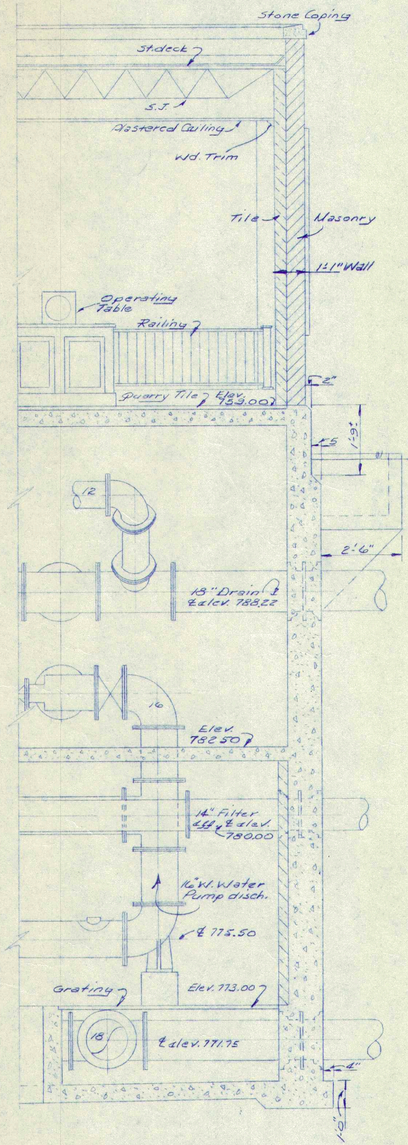
SCALE: AS NOTED

1963

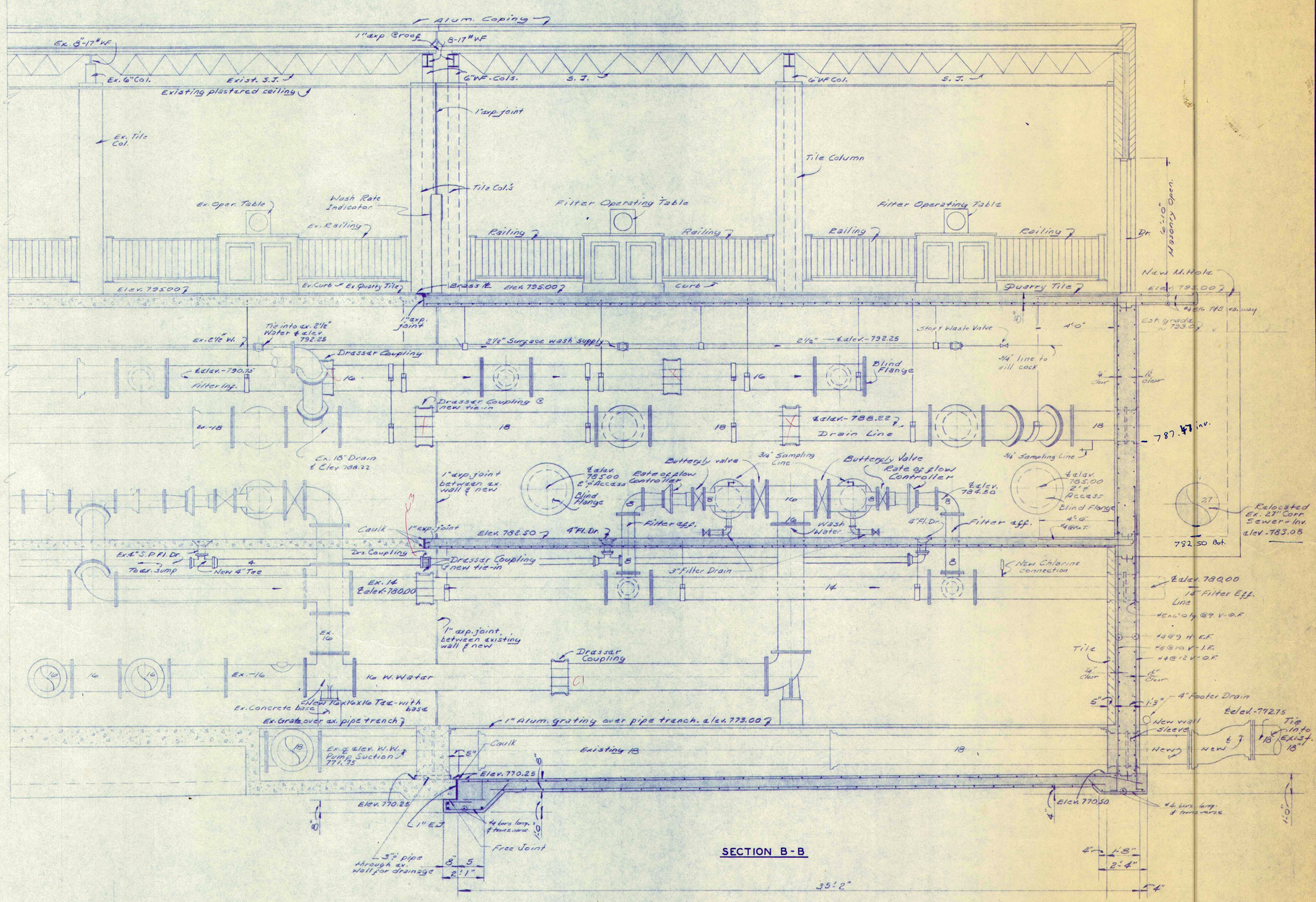
DR. BY MJM

CH. BY RBO

20



EXISTING STRUCTURE



SECTION B-B

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

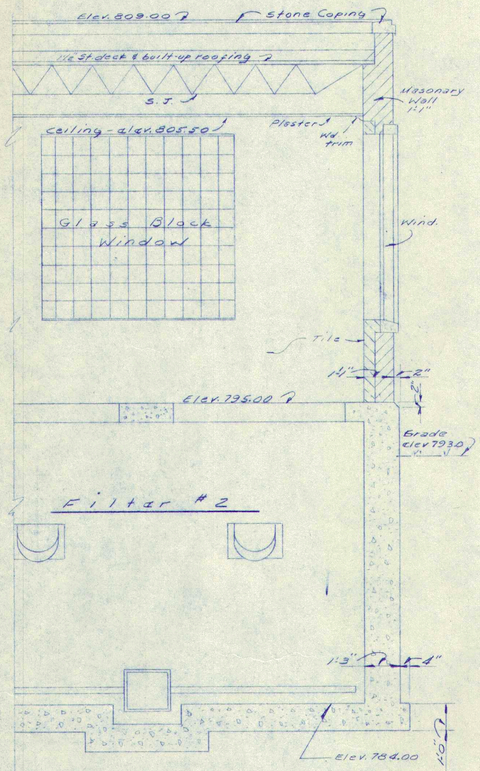
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

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

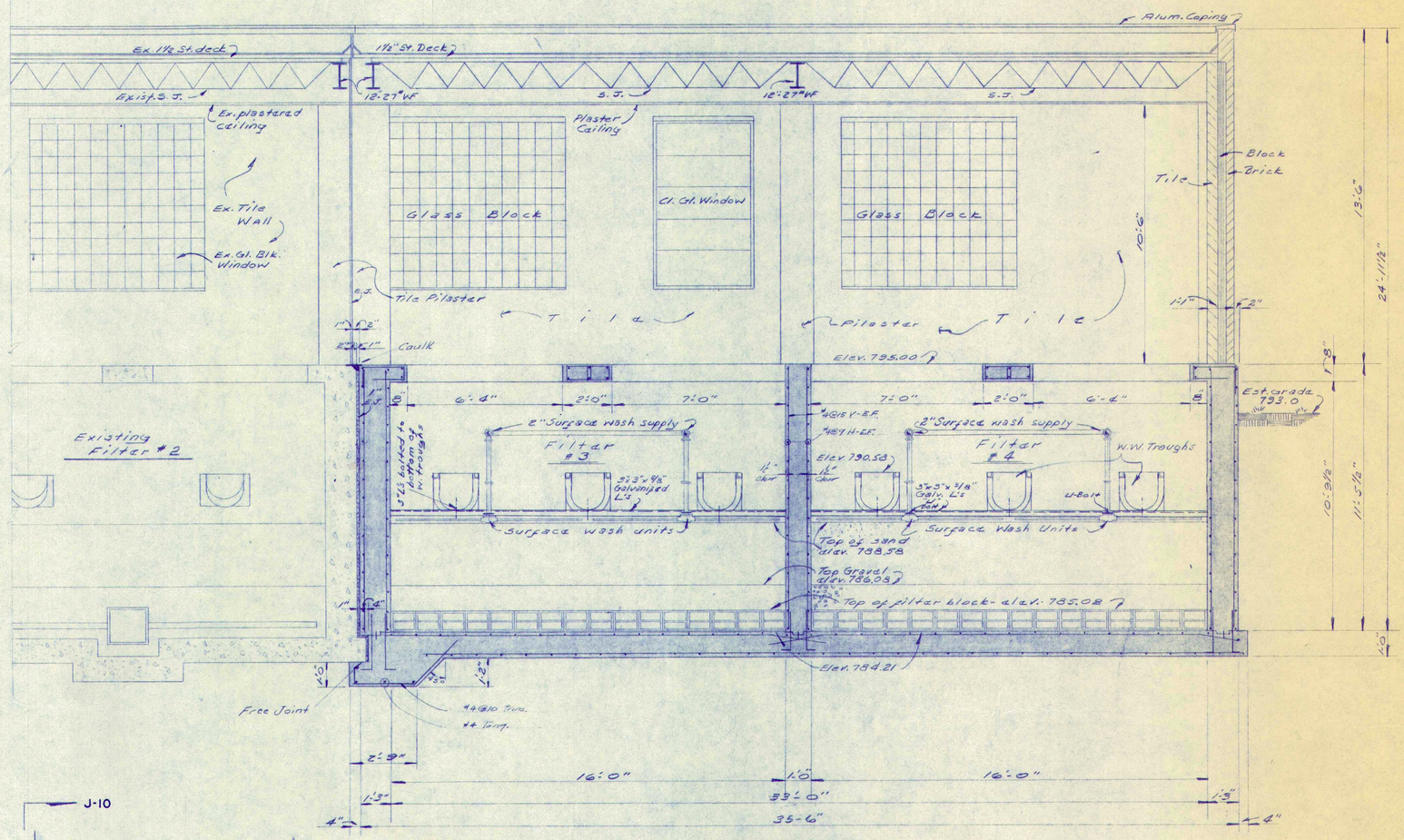
DR. BY RMM

CH. BY RBO

1963

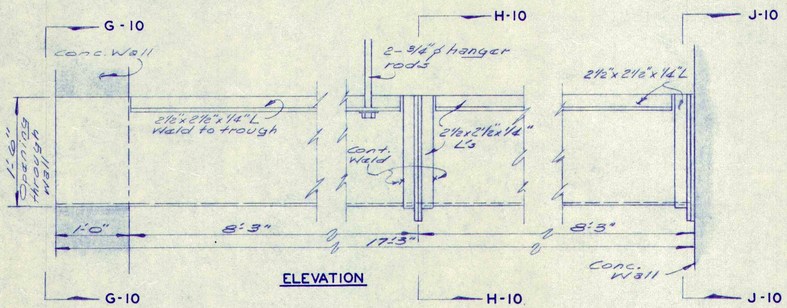


EXISTING STRUCTURE

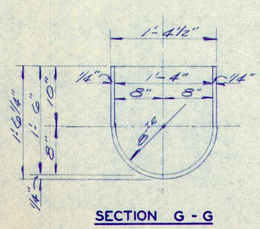


SECTION C - C

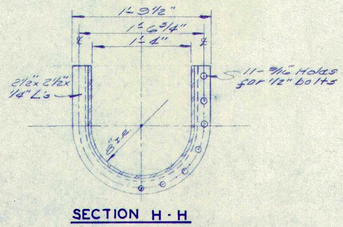
Scale: ⅜"=1'-0"



ELEVATION

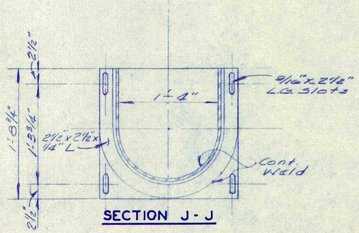


SECTION G - G

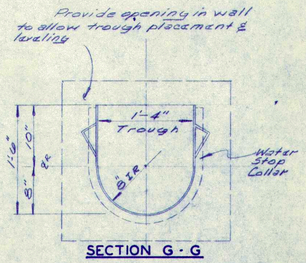


SECTION H - H

ALUMINUM TROUGHS



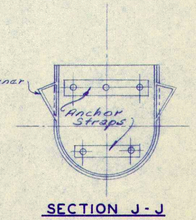
SECTION J - J



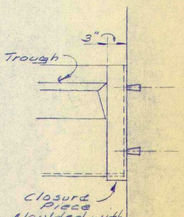
SECTION G - G

WASH WATER TROUGH DETAILS

Scale: 1"=1'-0"



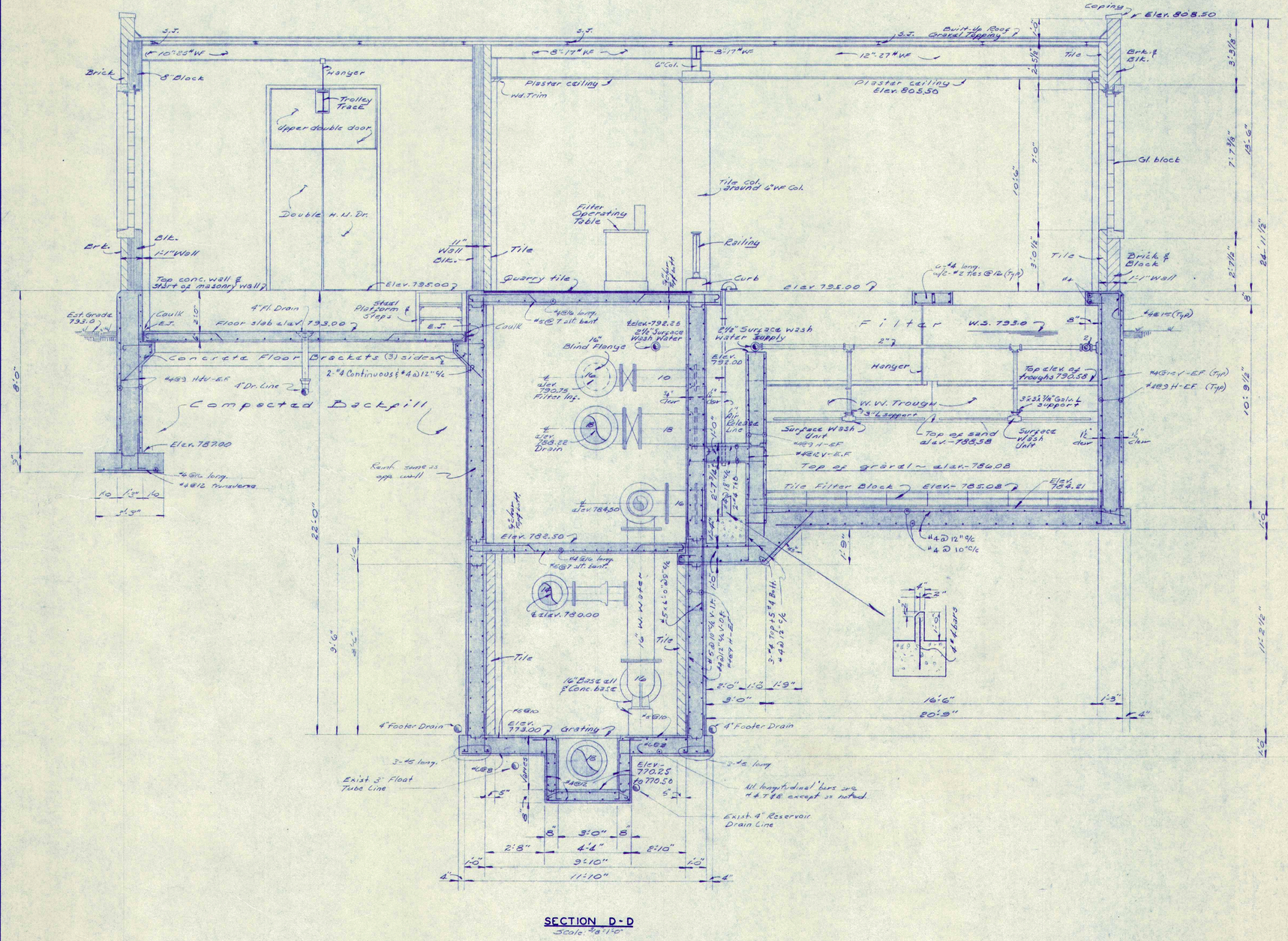
SECTION J - J



PARTIAL ELEVATION

FIBERGLASS TROUGHS

FILTER BUILDING ADDITIO
SECTION A
WATER WORKS IMPROVEMENT
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHI
SCALE: AS NOTED
1963
DR. BY MJM
CH. BY RBC


Brick
8" Block
Hanger
Trolley Track
Upper double door
Double H.M. Dr.
Blk. 1'-1" Wall
Brk.
Top conc. wall & start of masonry wall
Elev. 795.00
Est. Grade 733.0
Caulk E.J.
4" Fl. Drain
Floor slab elev. 733.00
Steel Platform & Steps
Concrete Floor Brackets (3) sides
2"ø Continuous @ 4'-0" & 12" c/c
#4@3 H.W.-E.F.
4" Dr. Line
Compacted Backfill
Elev. 787.00
#4@7'c long. #4@12 transverse
11" Wall Blk.
Tile
Quarry tile
Filter Operating Table
Railing
Curb
Tile col. around 6"ø Col.
S.J.
10"-23"ø W
8"-17"ø NE
12"-27"ø NE
6" Col.
Built-up Roof Gravel Topping
Coping
Elev. 808.50
Plaster ceiling
Wd. Trim
Plaster ceiling Elev. 805.50
Tile
Brk. & Blk.
Gl. block
Brick & Block
1'-1" Wall
Elev. 795.00
#4@15 (Typ)
Filter W.S. 735.0
8" Surface Wash water supply
Elev. 792.00
16" Blind Flange
Elev. 792.25
2½" Surface Wash Water
Hanger
Top elev. of troughs 790.58
#4@3 H-EF (Typ)
#4@9 H-EF (Typ)
W.W. Trough
3"ø Support
3"x3"x⅜" Galv. L Support
Surface Wash Unit
Surface Wash Gate
Top of sand elev. - 785.58
Top of gravel - elev. 786.08
Tile Filter Block Elev. - 785.08
Elev. 784.21
#4@12 V-E.F.
#4 @ 12" c/c
#4 @ 10" c/c
Elev. 784.50
Elev. 782.50
#4@6'c long. #4@7 alt. bent
6"ø Influent Pipe
16" W. Water
#4@10 H.W.
#4@12 V.W.
#4@7 H-EF
3-#4 Trip. 15" B.H. #4@12-5/8
#4@10
16" Base ell & Conc. base
Elev. 780.00
Tile
4" Footer Drain
Elev. 773.00 Grating
#4@3
3-#4 long.
Exist. 3" Float Tube Line
#4@12
Elev. - 770.25 to 770.50
All longitudinal bars are #4 T&B except as noted.
Exist. 4" Reservoir Drain Line
#4@10
#4@12
#4@3
#4@7
#4@8
#4@9
#4@10
#4@12
#4@15
#4@18
#4@20
#4@24
#4@30
#4@36
#4@40
#4@45
#4@48
#4@50
#4@60
#4@70
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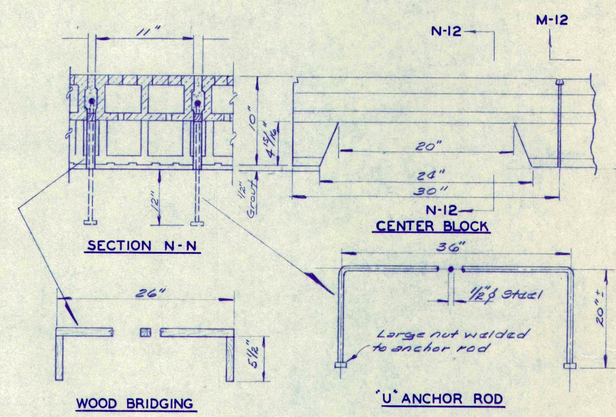


SECTION N-N

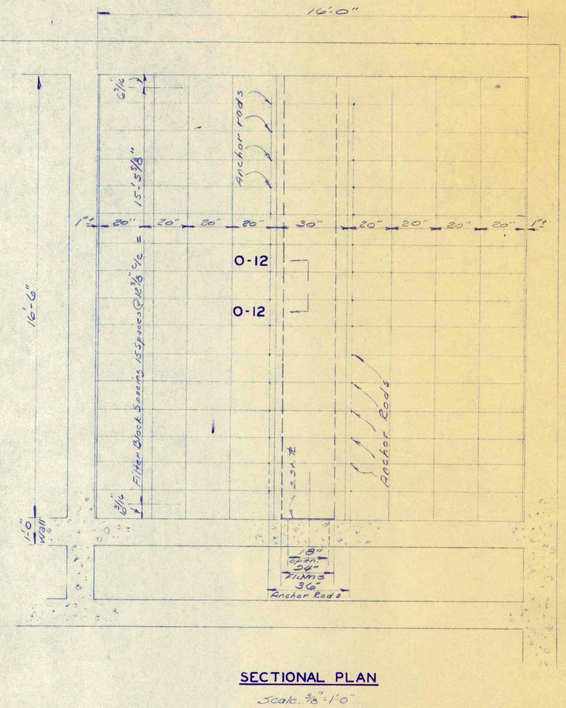
CENTER BLOCK

WOOD BRIDGING

"U" ANCHOR ROD

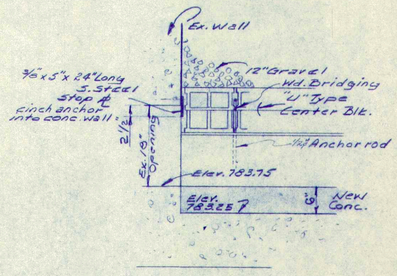
CENTER BLOCK DETAILS

Scale: 1½"=1'-0"



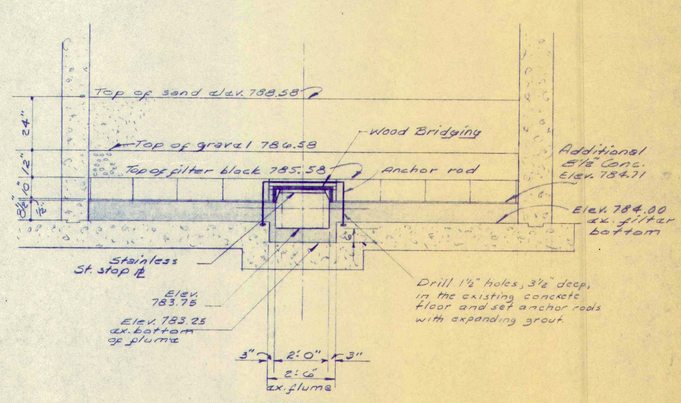
SECTIONAL PLAN

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



SECTION O-O

Scale: ¾"=1'-0"



SECTION M-M

Scale: ½"=1'-0"

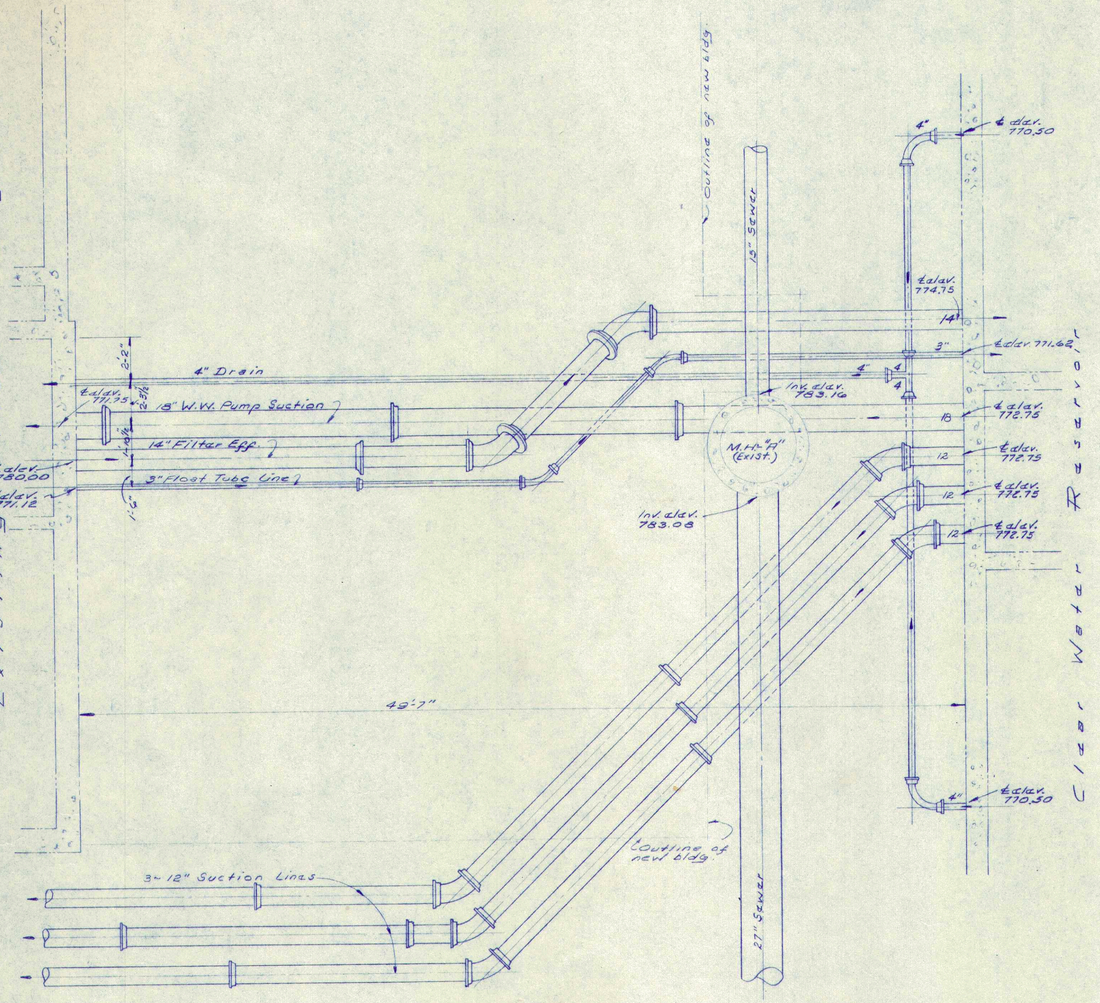
M-12

NEW FILTER UNDERDRAIN-EXISTING FILTERS

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

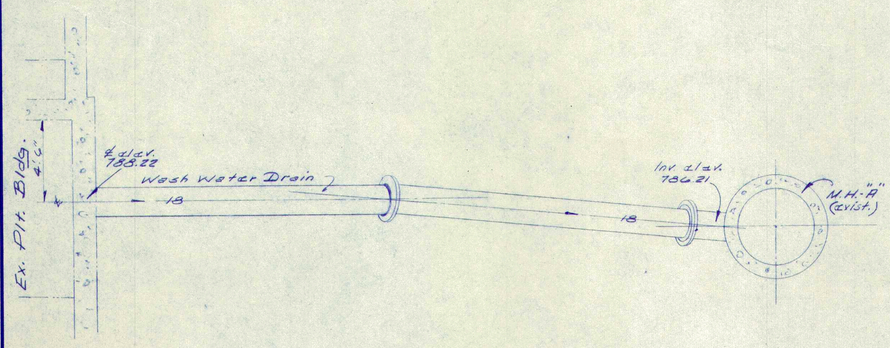
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED
1963
DR. BY MJM
CH. BY RBO
12
20



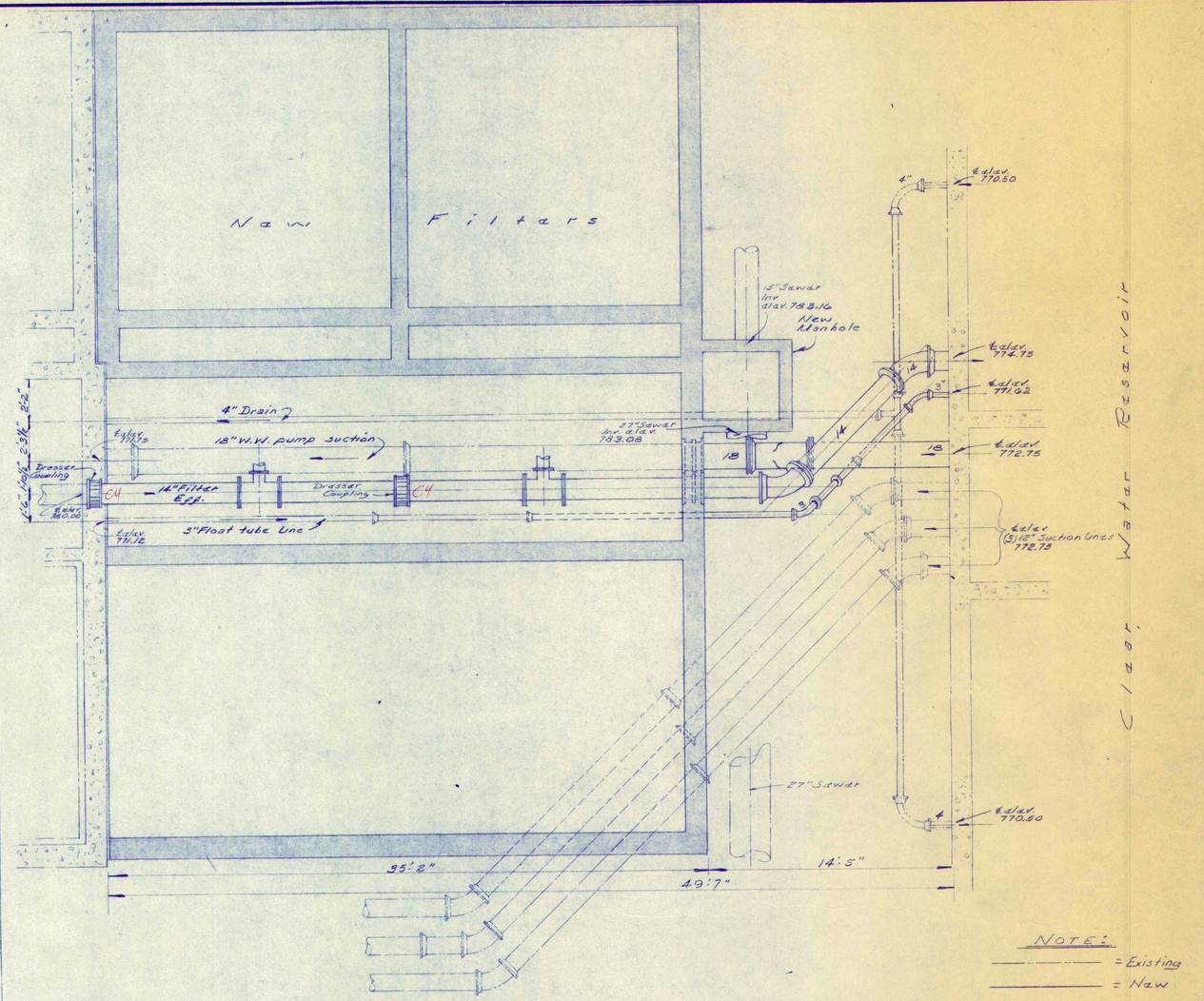
EXISTING EXTERIOR PIPING

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



EXISTING WASH WATER DRAIN

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



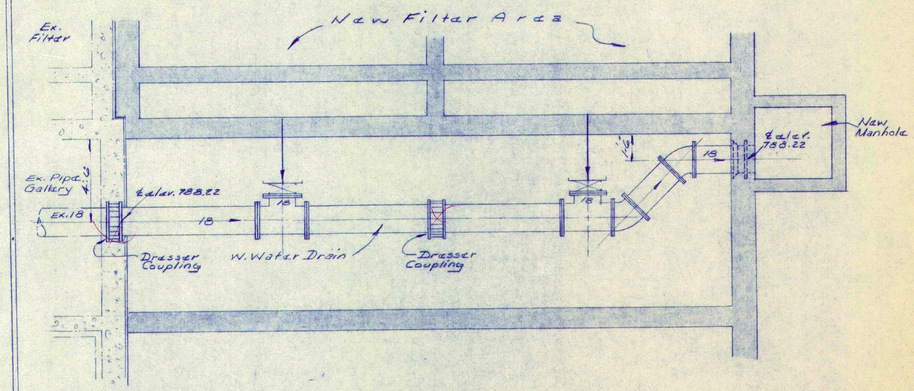
REVISED EXTERIOR AND NEW INTERIOR PIPING

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

NOTE:

——— = Existing

——— = New



NEW WASH WATER DRAIN

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

FILTER BUILDING ADDITION

SECTION A

WATER WORKS IMPROVEMENTS

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT

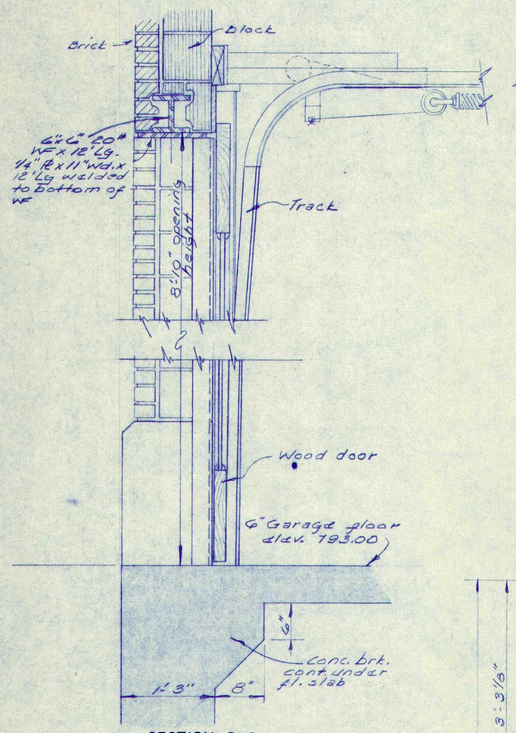
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED

1963

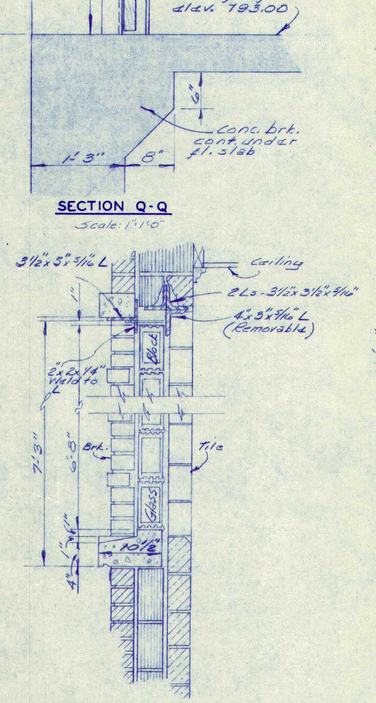
DR. BY MJM

CH. BY RBO



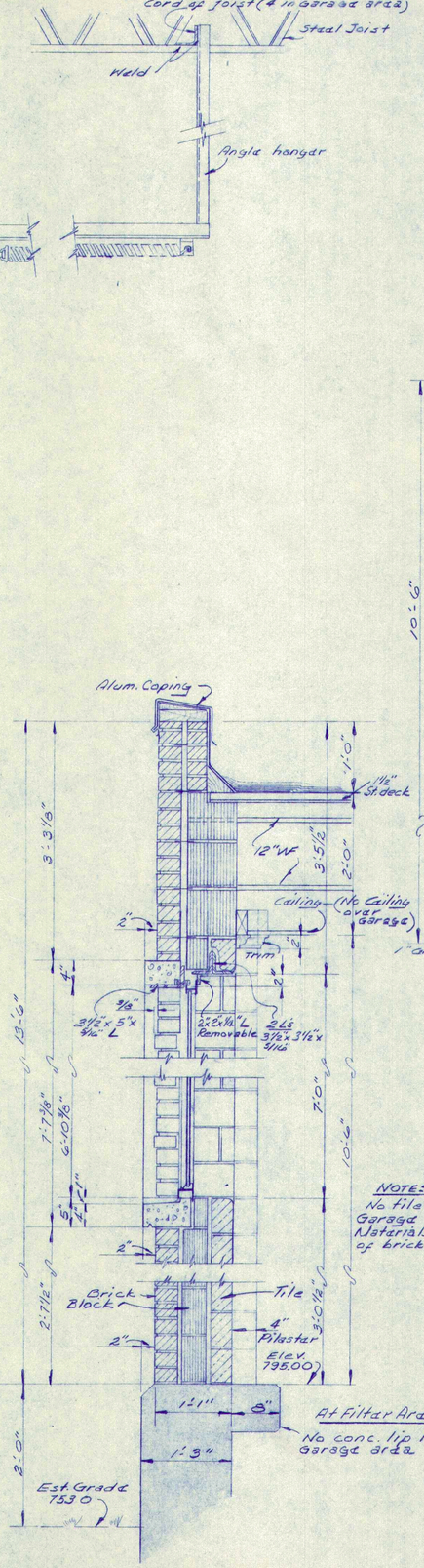
SECTION Q-Q

Scale: 1"=1'-0"



SECTION R-R

Scale: 1"=1'-0"

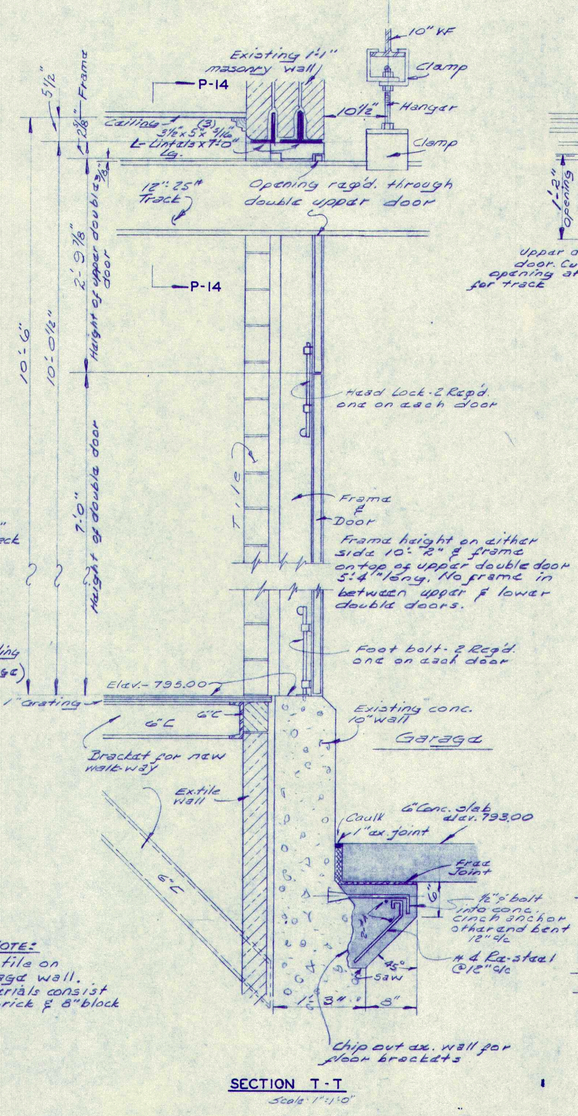


NOTE:
No tile on Garage wall. Materials consist of brick & 8" block

At Filter Area
No conc. lip in Garage area

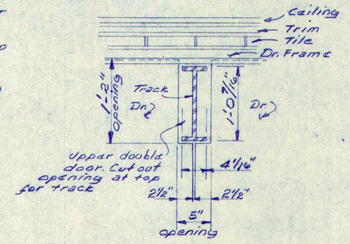
SECTION S-S

Scale: 1"=1'-0"



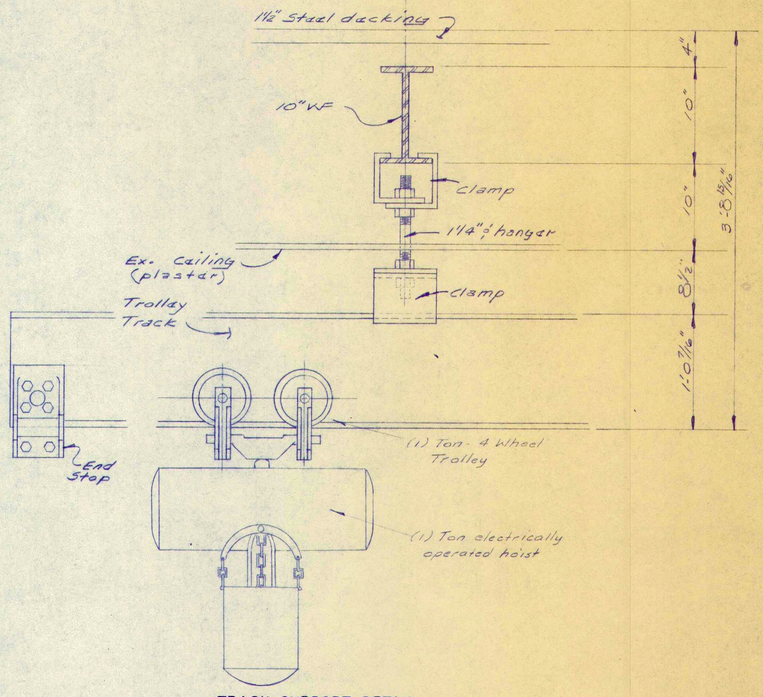
SECTION T-T

Scale: 1"=1'-0"



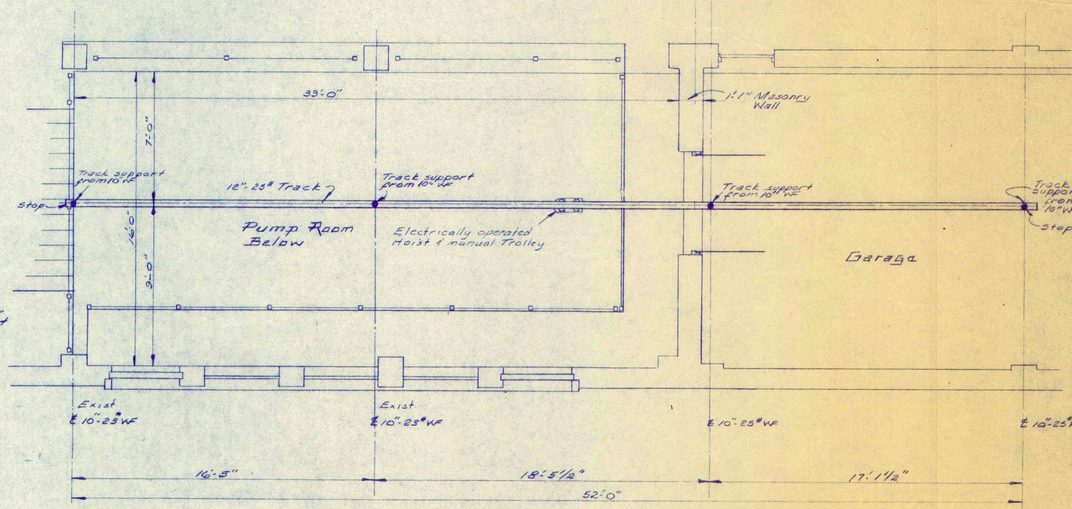
SECTION P-P

Scale: 1"=1'-0"



TRACK SUPPORT DETAIL

Scale: 1½"=1'-0"



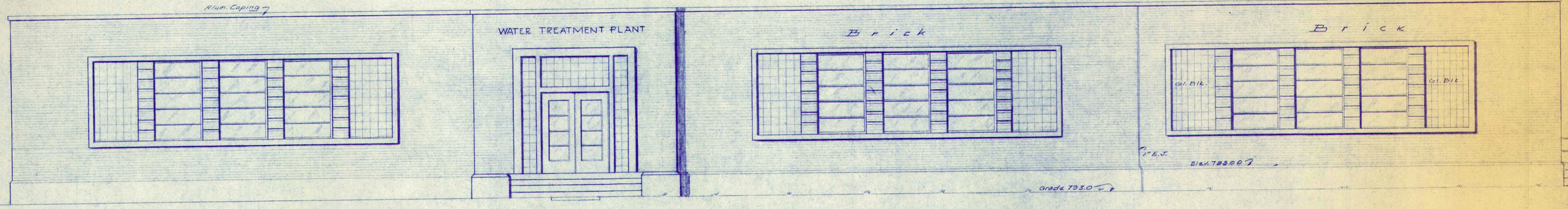
PLAN HOIST TRACK

Scale: ¼"=1'-0"

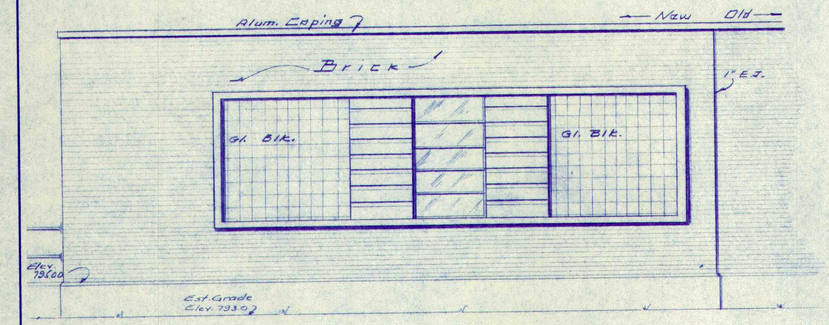
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

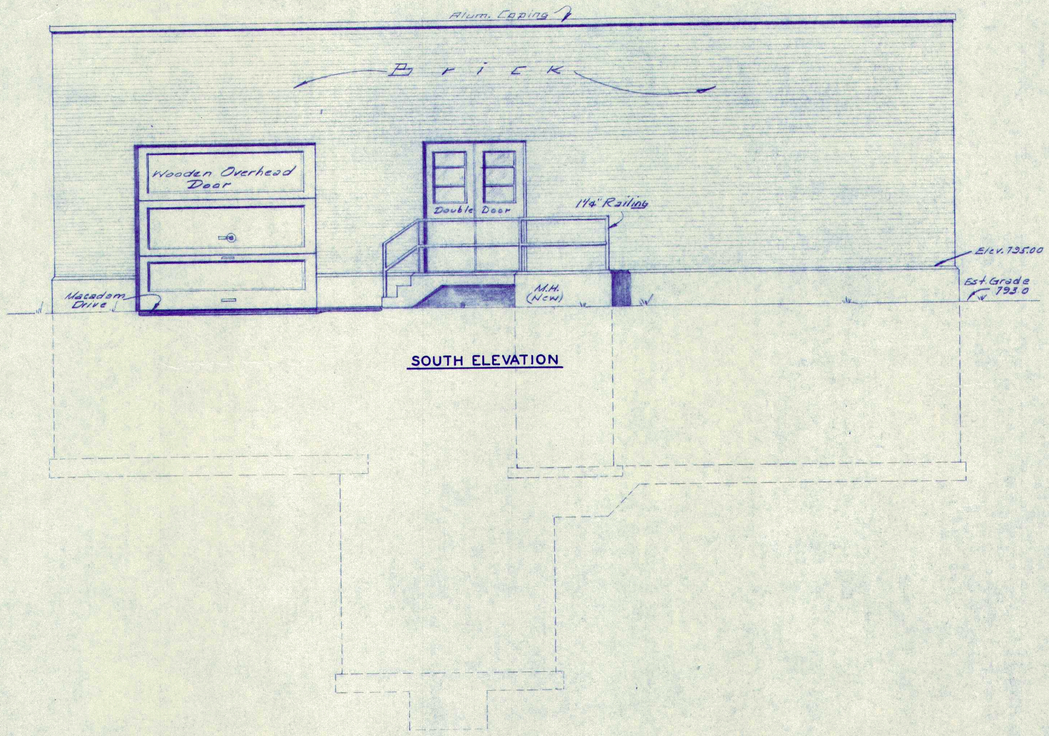
SCALE: AS NOTED
1963
DR. BY RAJR
CH. BY RBO



WEST ELEVATION



EAST ELEVATION



SOUTH ELEVATION

NOTE:

All beams are to be bolted using standard beam connections.

All column base plates are to be 8"x 8"x 5/8".

All beam bearing wall plates are to be 9"x 9"x 3/8".

Steel joist are to be anchored at walls with government type anchors of at least 5/8"ϕ diameter.

Bridging to consist of continuous 1"x1"x⅛" angles welded to top and bottom chords and anchored to masonry at each end with bridging anchors

All beams to be anchored to pilasters by 2-¾"ϕ x 12" lg. J bolts
All columns to be anchored @ base by 2-¾"ϕ x 24" lg J bolts

KEY

- Brick Wall
- Tile Wall
- Concrete Block
- Concrete
- Existing Conc.

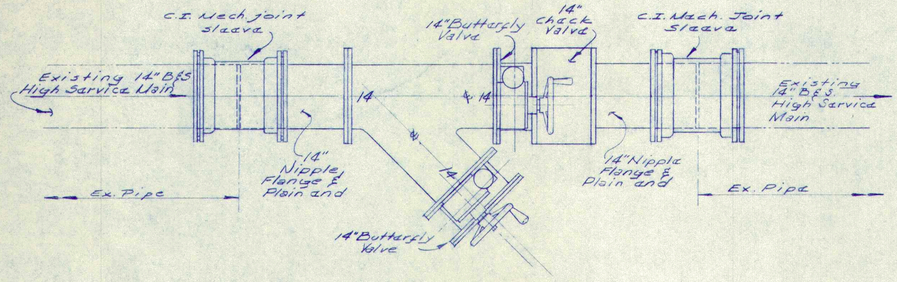
DOOR SCHEDULE

MARK	No.	SIZE	THRESHOLD	GLASS	LINTEL
A	1	5'-4" x 7'-0" (Double Dr.) H.M.	Weather Stripping 1	2-1/8 x 32 5/16" x 11-1/4"	(3) 6"x 3½"x 5/16 6"x 3½"x 5/16 6"x 3½"x 5/16
B	1	2'-8" x 7'-0" H.M.	—	—	6"x 3½"x 5/16
C	1	2'-6" x 7'-0" H.M.	—	—	6"x 3½"x 5/16
D	1	12'-8" Wide x 8'-0" High Overhead Coiling Door	On Floor	—	6"x 3½"x 5/16
E	1	5'-4" x 7'-0" H.M. (Double Dr.)	—	—	—
F	1	5'-4" x 8'-3⅞" H.M. (Double Dr.)	—	—	(3) 6"x 3½"x 5/16 6"x 3½"x 5/16 6"x 3½"x 5/16

FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

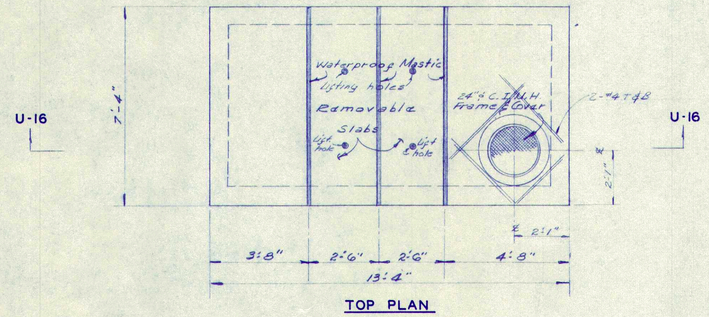
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHIO

SCALE: 1/4" = 1'-0" 1963 DR. BY [illegible] CH. BY [illegible]

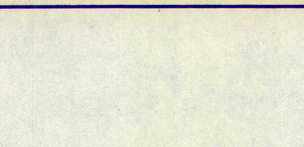


PIPING DETAIL

Scale: 3/4"=1'-0"

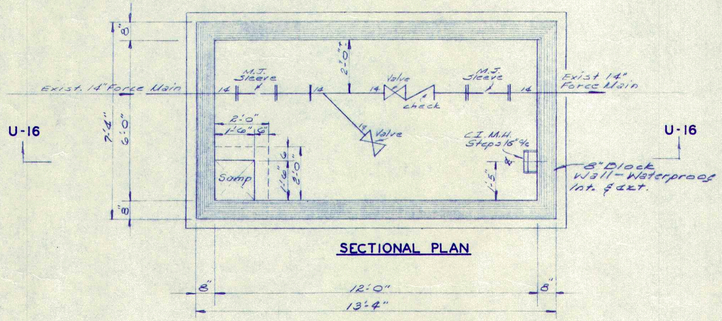


TOP PLAN

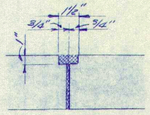


LIFT HOLE DETAIL

Scale: 1½"=1'-0"

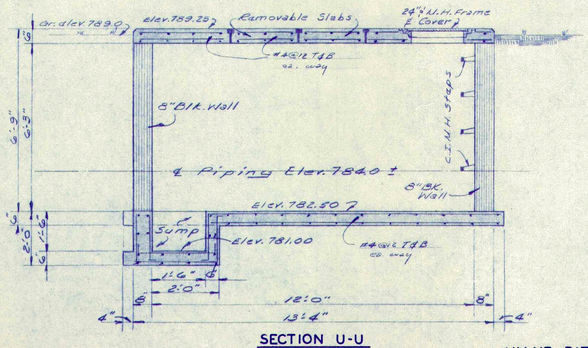


SECTIONAL PLAN



JOINT DETAIL

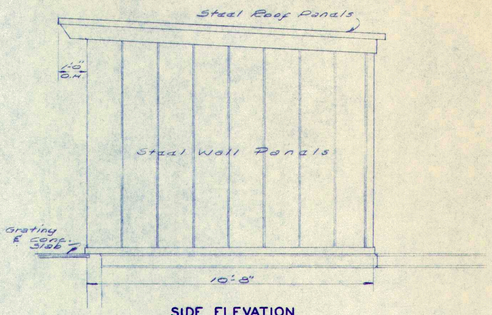
Scale: 1½"=1'-0"



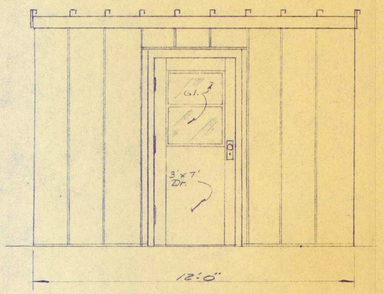
SECTION U-U

VALVE PIT DETAILS

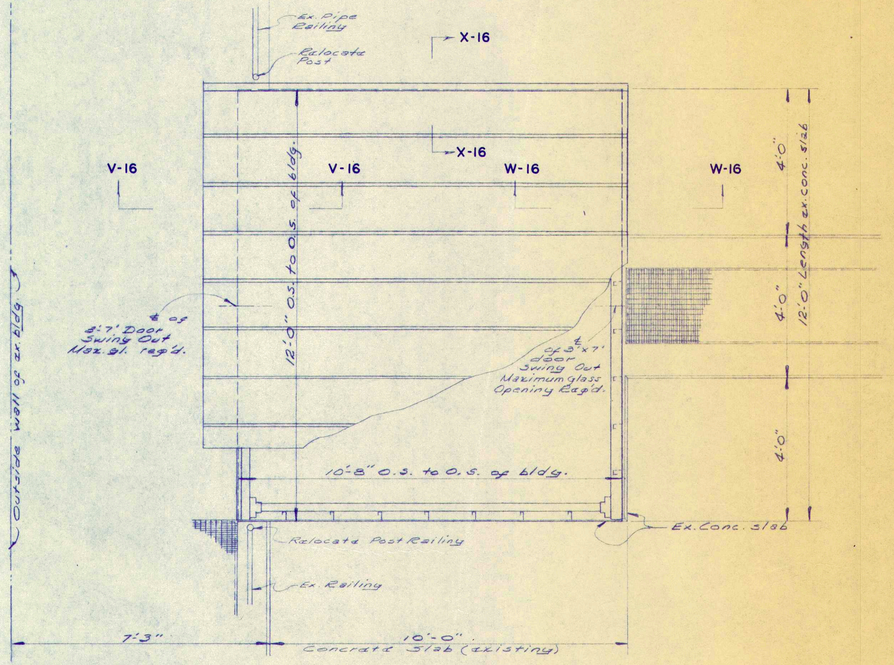
Scale: 3/8"=1'-0" Unless noted



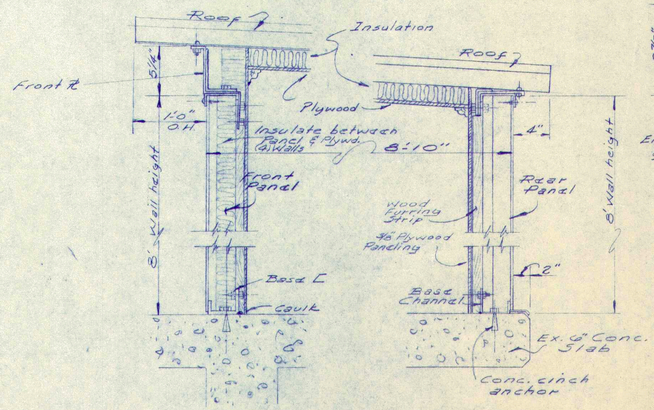
SIDE ELEVATION



FRONT ELEVATION



PLAN



SECTION V-V

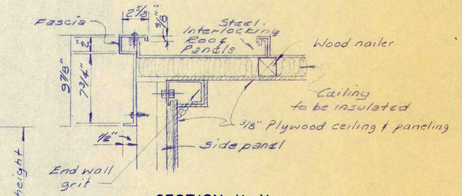
Scale: 1½"=1'-0"

SECTION W-W

Scale: 1½"=1'-0"

SLUDGE COLLECTOR DRIVE ENCLOSURE

Scale: ½"=1'-0" Unless noted



SECTION X-X

Scale: 1½"=1'-0"

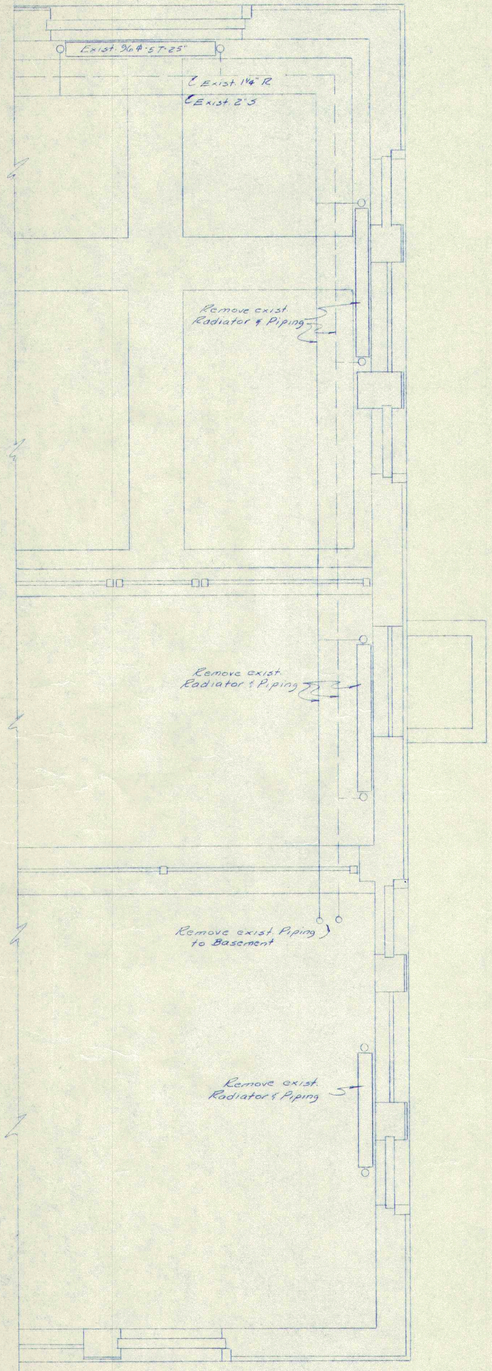
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED

DR. BY MJM
CH. BY RBA

1963



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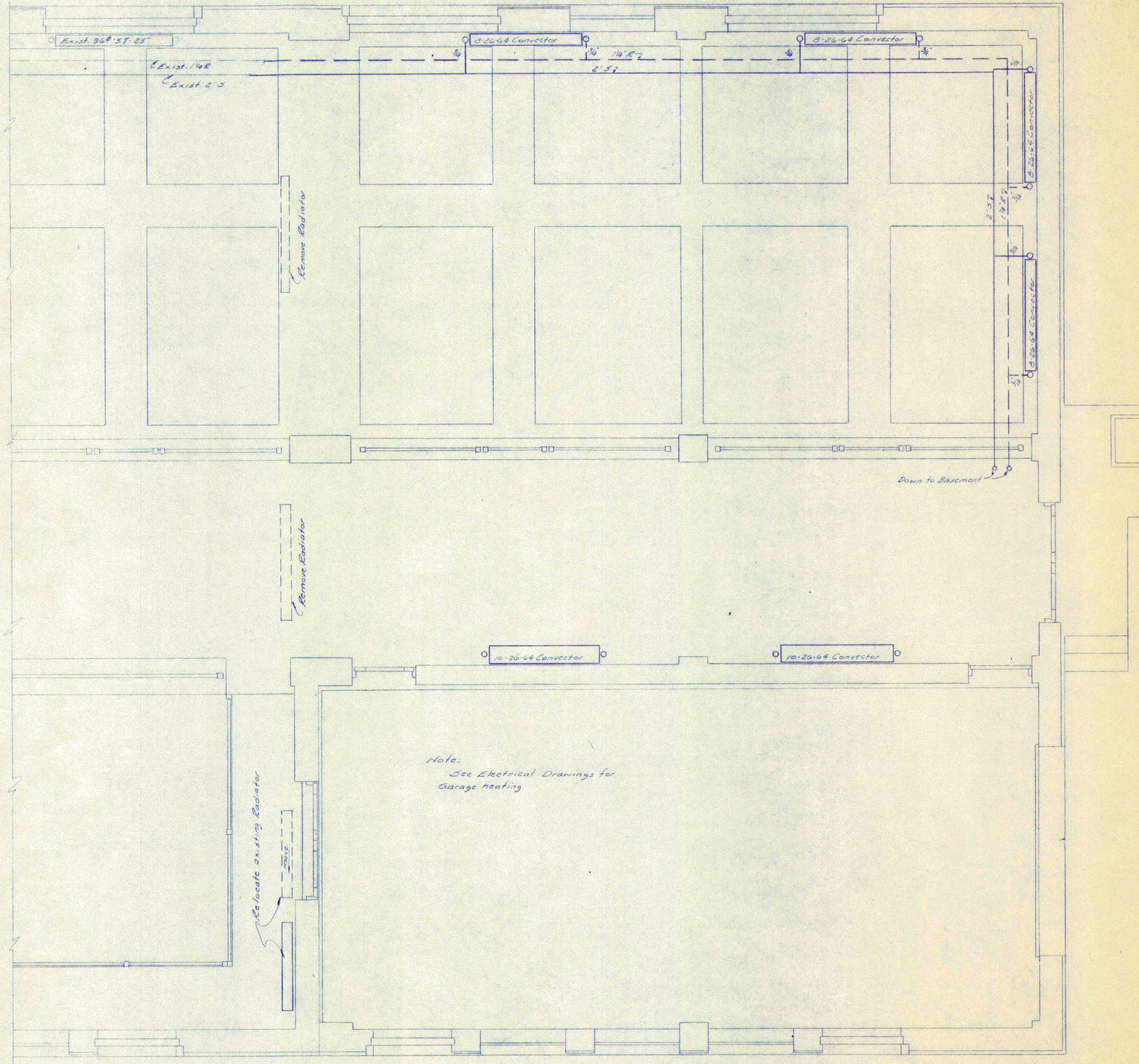
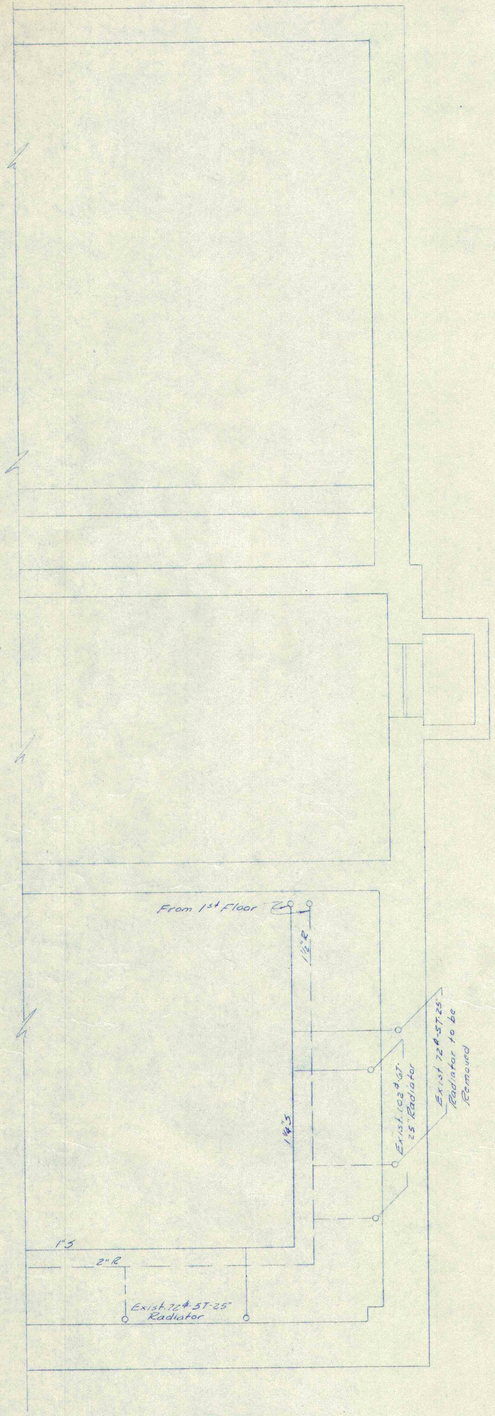


SECTIONAL PLAN FIRST FLOOR

HEATING DETAILS
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: 3/8" = 1'-0"
1963
DR. BY REO
CH. BY CAS



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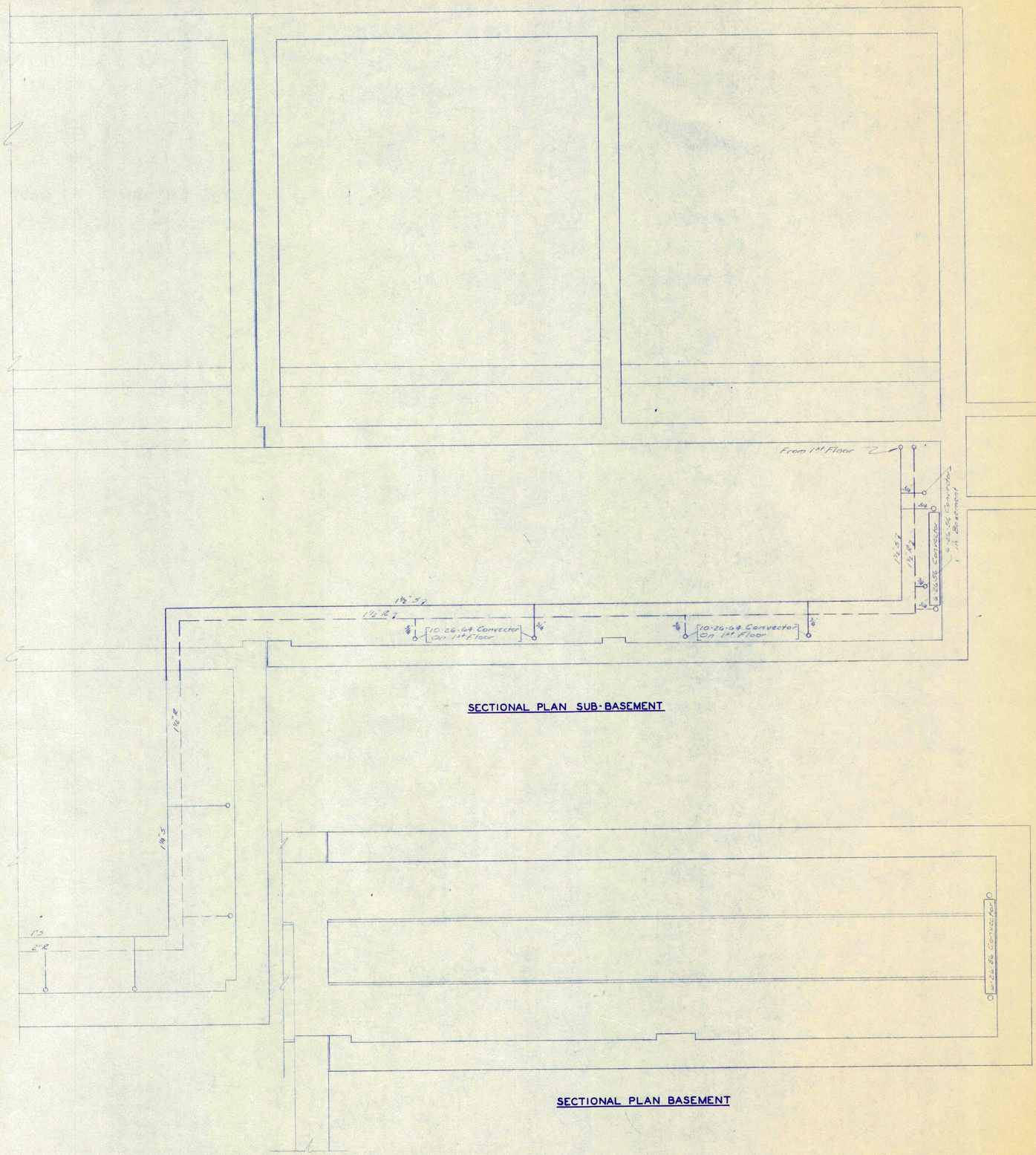


SECTIONAL PLAN SUB-BASEMENT

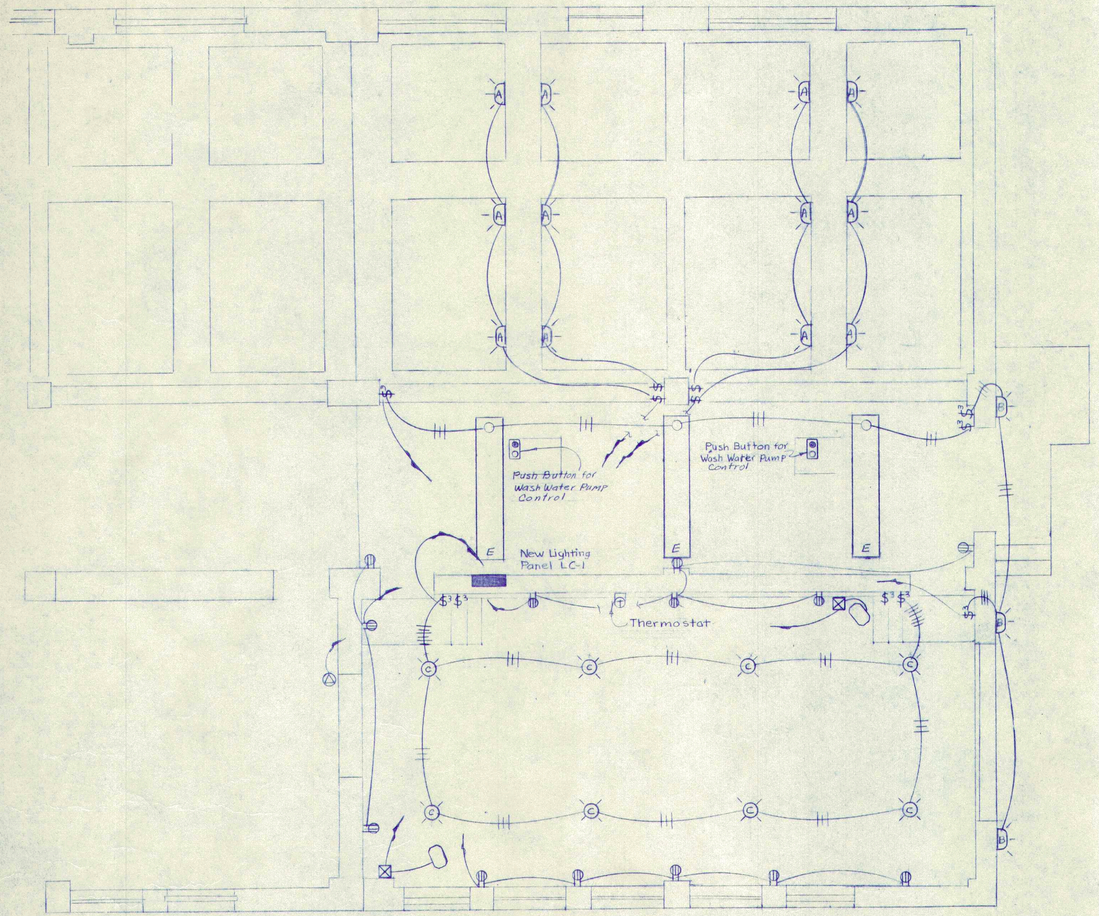
SECTIONAL PLAN BASEMENT

HEATING DETAILS
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

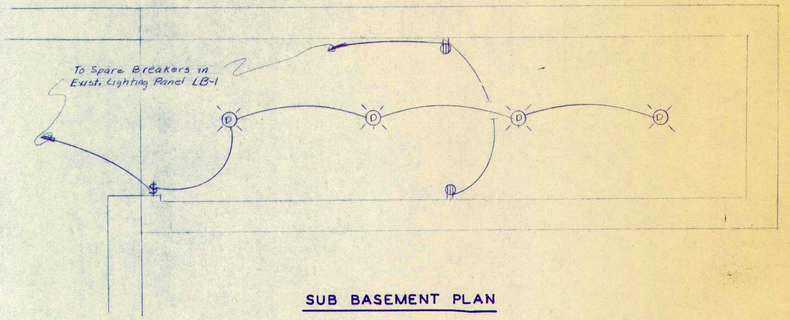
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: 3/8"=1'-0" 1963 DR. BY RBO CH. BY CAS

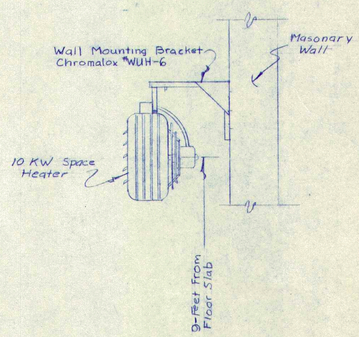
12
20



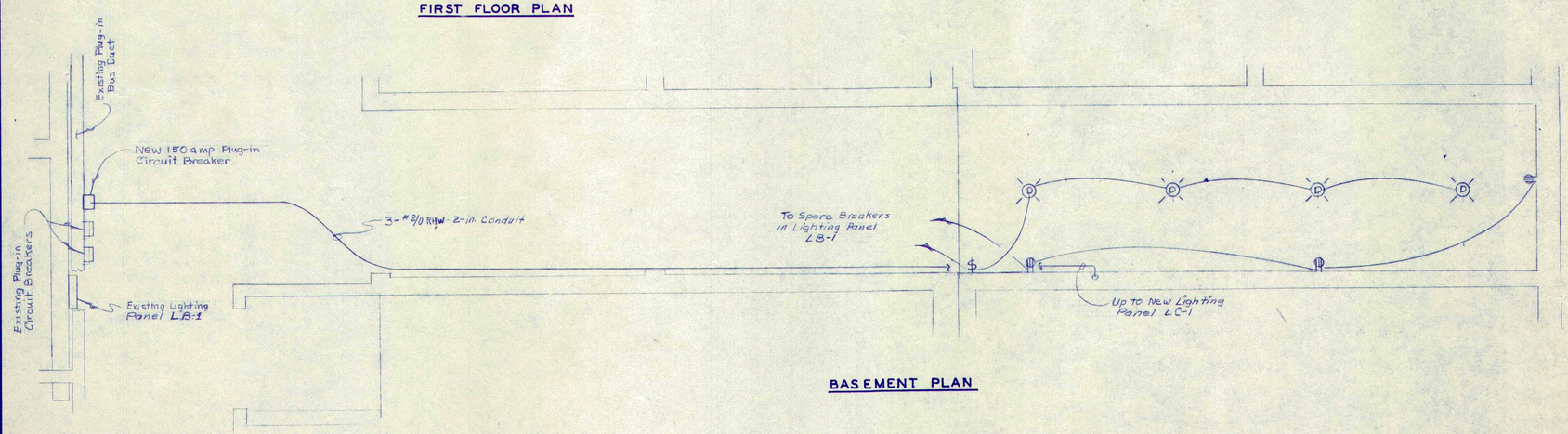
FIRST FLOOR PLAN



SUB BASEMENT PLAN



ELECTRIC HEATER MOUNTING



BASEMENT PLAN

SYMBOLS

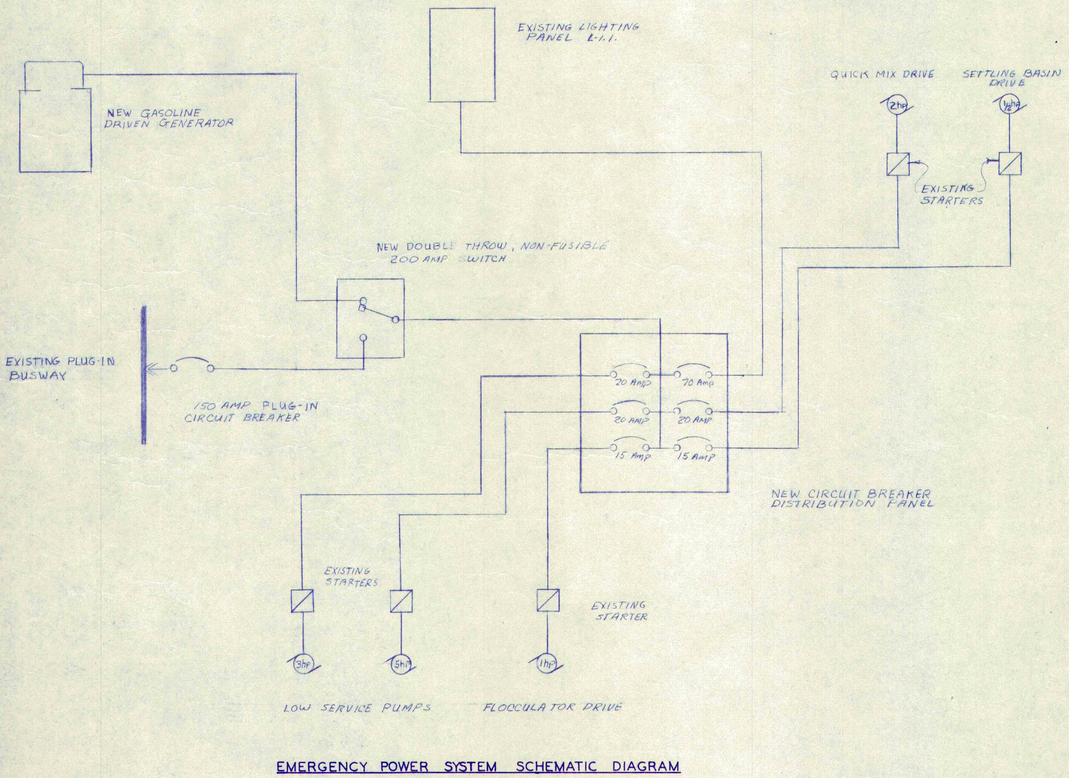
A	Incandescent Lighting Fixture - 300 Watt Wall Mounted with Cast Guard — Holophane #480-CG
B	Incandescent Lighting Fixture - 300 Watt Wall Mounted — Holophane - #480
C	Incandescent Lighting Fixture - 300 watt with Spun Aluminum cover — Holophane - #665
D	Incandescent Lighting Fixture - 200 Watt, Vaportight with Junction Box — Russell Stall - #6334A
D E	Fluorescent Lighting fixture - 4-96-inch Slimline 74 watt Lamps with 35°C x 25°L Louver - Miller - #CA-4202-08
$	Single Pole Toggle Switch, 20 amps 277 volts — Hubble - #1221-I
$3	Three-Way Toggle Switch - 20 amps 277 volts — Hubble - #1223-I
	Duplex Receptacle - 3 wire grounding Type 20 amp 125 volt — Hubble - #5362
	Lighting Panel - Single Phase 3 Wire Solid Neutral
	Electric Space Heater - 10 Kilowatts Three Phase 240 volts — Chromalox - Model A - 2411100
	Magnetic Contactor - 3 pole - 50 amp per Pole 240 volt Holding Coil — Chromalox - #CR-350-A
T	Thermostat - Double-Pole Single Throw 240 volt 55°-85°F Range — Chromalox - #WR-66
	"Start-Stop" Push Button Station - Oil-Tight Surface Mounting — Square-D-type TY-21
	Electric Hoist Outlet - ½ hp Three Phase 240 Volt

ELECTRICAL DETAILS
FILTER BUILDING ADDITION
SECTION A
WATER WORKS IMPROVEMENTS
VAN WERT OHIO

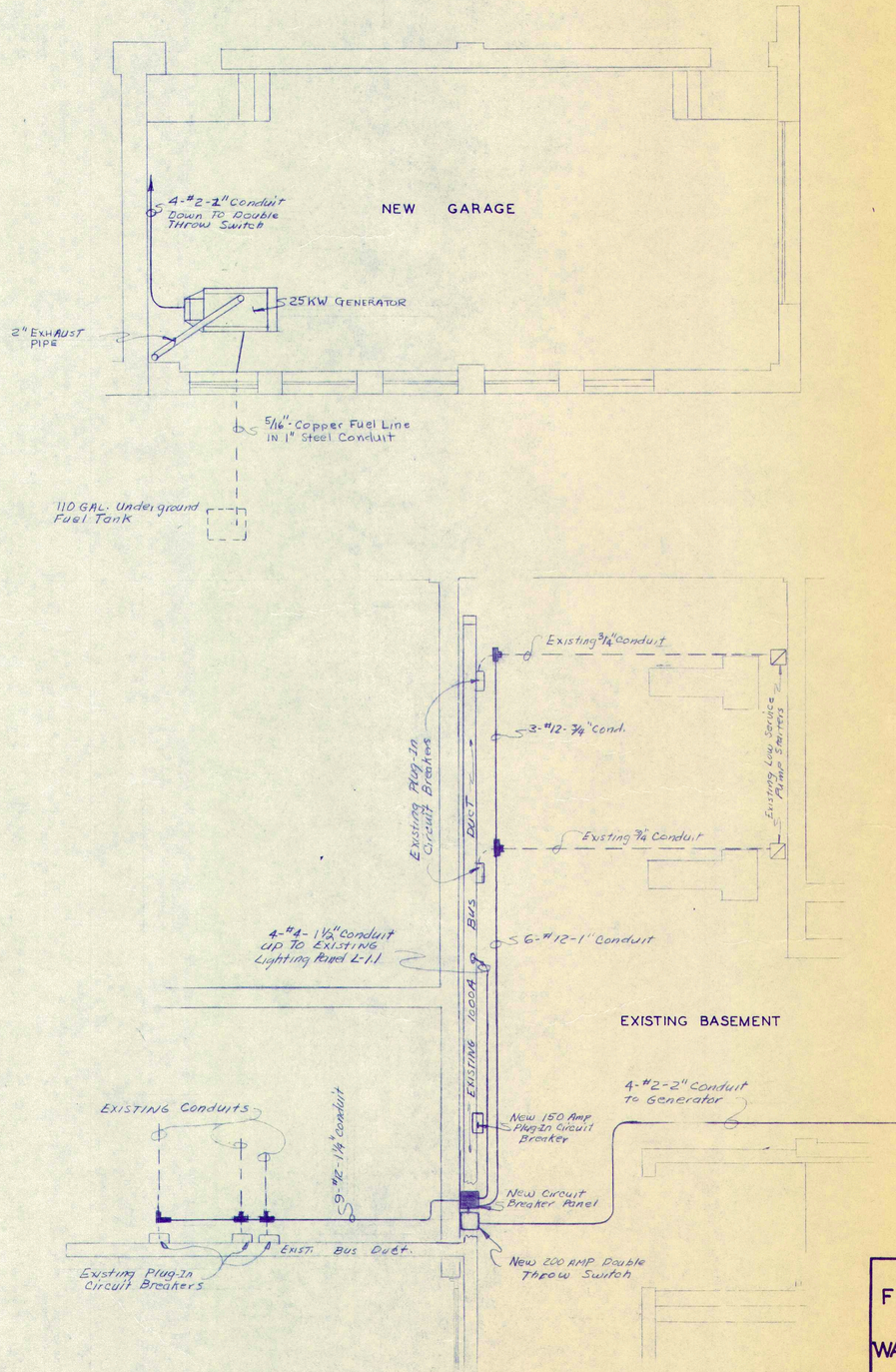
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED
1963
DR. BY GRM
CH. BY

19/20



EMERGENCY POWER SYSTEM SCHEMATIC DIAGRAM



EMERGENCY SYSTEM PLAN

ELECTRICAL DETAILS
FILTER BUILDING ADDITIO
SECTION A
WATER WORKS IMPROVEMEN
VAN WERT OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, O
SCALE: AS NOTED 1963 DR. BY GRM
CH. BY

RAW WATER RESERVOIR

SECTION D

WATER WORKS IMPROVEMENTS

VAN WERT, OHIO

FINKBEINER, PETTIS AND STROUT CONSULTING ENGINEERS - TOLEDO, OHIO

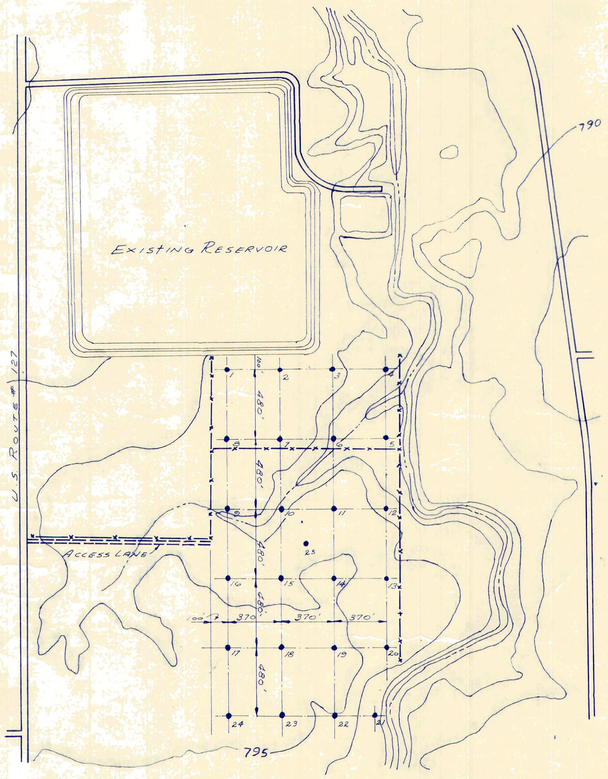
1964

APPROVED
CITY OF VAN WERT, OHIO

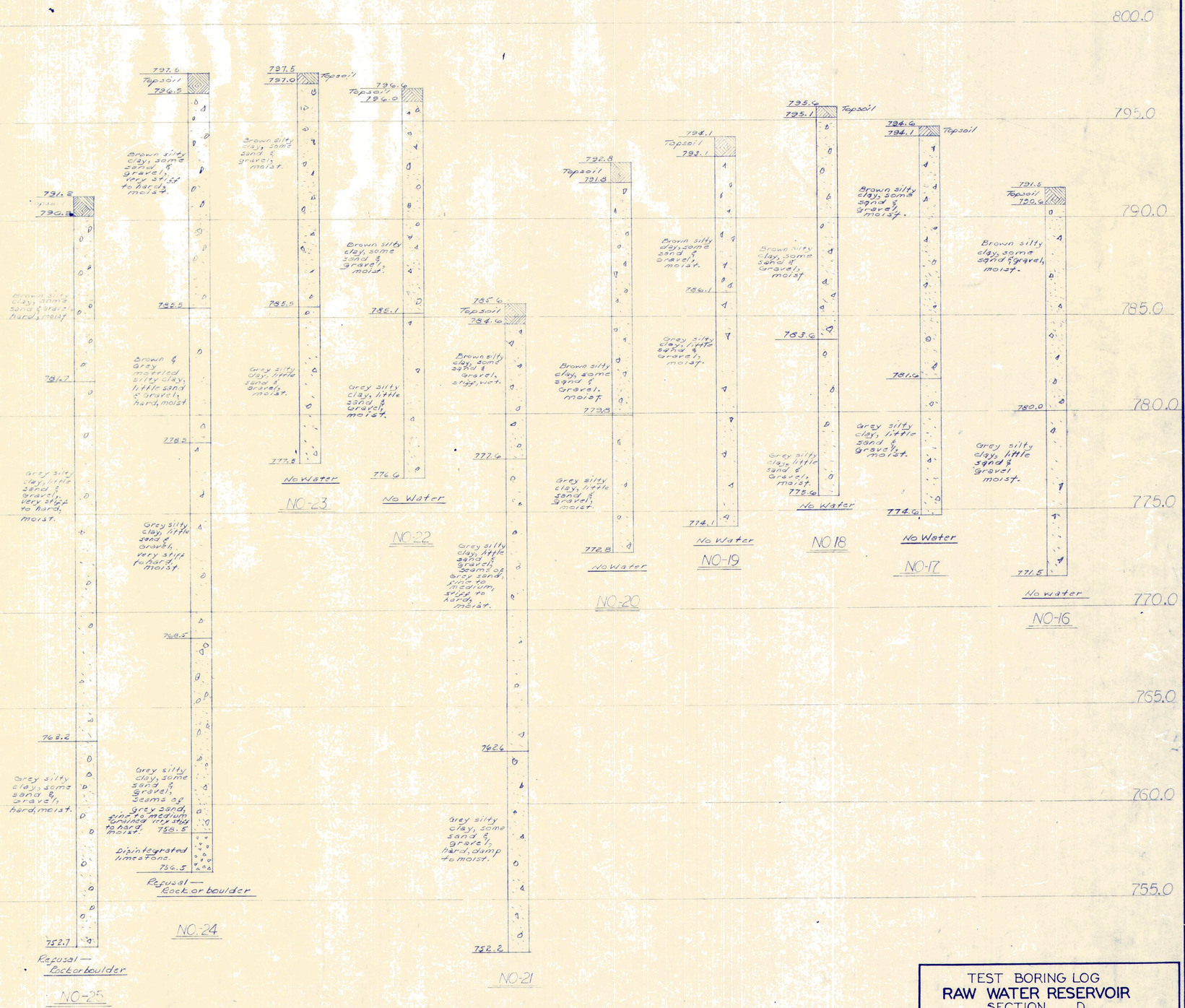
BY _____ DATE _____
MAYOR

BY _____ DATE _____
DIRECTOR OF PUBLIC SERVICE

RECORD DRAWINGS
CORRECTED AS CONSTRUCTED 11-12-65 C J M



LOCATION PLAN



CORRECTED AS CONSTRUCTED 10-5-65 C J M

TEST BORING LOG
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO
SCALE: AS NOTED 1964 DR. BY MJM CH. BY REO

800.0
795.0
790.0
785.0
780.0
775.0
770.0
765.0
760.0
755.0
750.0

NO-15
791.8
791.5 Topsoil
Brown silty clay, some sand & gravel, moist.
Grey silty clay, little sand & gravel, moist.
771.8
No Water

NO-14
793.3
Topsoil
792.3
Brown silty clay, some sand & gravel, moist.
781.3
Grey silty clay, little sand & gravel, moist.
778.8
No Water

NO-13
791.9
Topsoil
790.9
Brown silty clay, some sand & gravel, very stiff to hard
779.9
Grey silty clay, little sand & gravel, very stiff, moist
768.9
grey silty clay, some sand & gravel, seams of grey sand, fine to medium grained, stiff to very stiff, moist to wet.
754.07

NO-12
790.0
Topsoil
789.0
Brown silty clay, some sand & gravel moist
779.0
Grey silty clay, little sand & gravel, moist
770.0
No Water

NO-11
792.1
Topsoil
791.1
Brown silty clay, some sand & gravel, moist.
772.1
Grey silty clay, little sand & gravel, moist.
776.0
No Water

NO-10
787.8
Topsoil
786.8
Brown silty clay, some sand & gravel, moist.
776.8
Grey silty clay, little sand & gravel, moist.
767.8
No Water

NO-9
791.2
Topsoil
790.2
Brown silty clay, some sand & gravel, stiff to hard, moist.
779.2
Grey silty clay, little sand & gravel, stiff to very stiff, moist to wet.
763.2
Grey silty clay, some sand & gravel, hard, damp to moist.
751.3
Refusal—Rock or boulder

NO-8
791.7
Topsoil
790.7
Brown silty clay, some sand & gravel, moist.
780.7
Grey silty clay, little sand & gravel, moist.
771.7
No Water

NO-7
791.3
Topsoil
790.4
Brown silty clay, some sand & gravel, moist.
778.8
Grey silty clay, little sand & gravel moist.
771.3
No Water

NO-6
788.7
787.7 Topsoil
Brown silty clay, some sand & gravel, moist.
776.7
Grey silty clay, little sand & gravel, moist.
767.7
No Water

NO-5
785.3
Topsoil
784.3
Brown silty clay, some sand & trace of gravel, moist.
777.3
Grey silty clay, little sand & gravel, moist.
766.3
No Water

NO-4
790.2
790.4 Topsoil
Brown silty clay, some sand & gravel, stiff to hard, moist.
774.2
Grey silty clay, little sand & gravel, very stiff, wet.
767.2
Grey silty clay, some sand & gravel, seams of grey sand, fine to medium grained, very stiff to hard, moist.
755.4
Refusal-Rock or boulder
No Water

NO-3
793.2
Topsoil
792.3
Brown silty clay, some sand, trace of gravel, moist.
781.2
Grey silty clay, little sand, trace of gravel, moist.
773.2
No Water

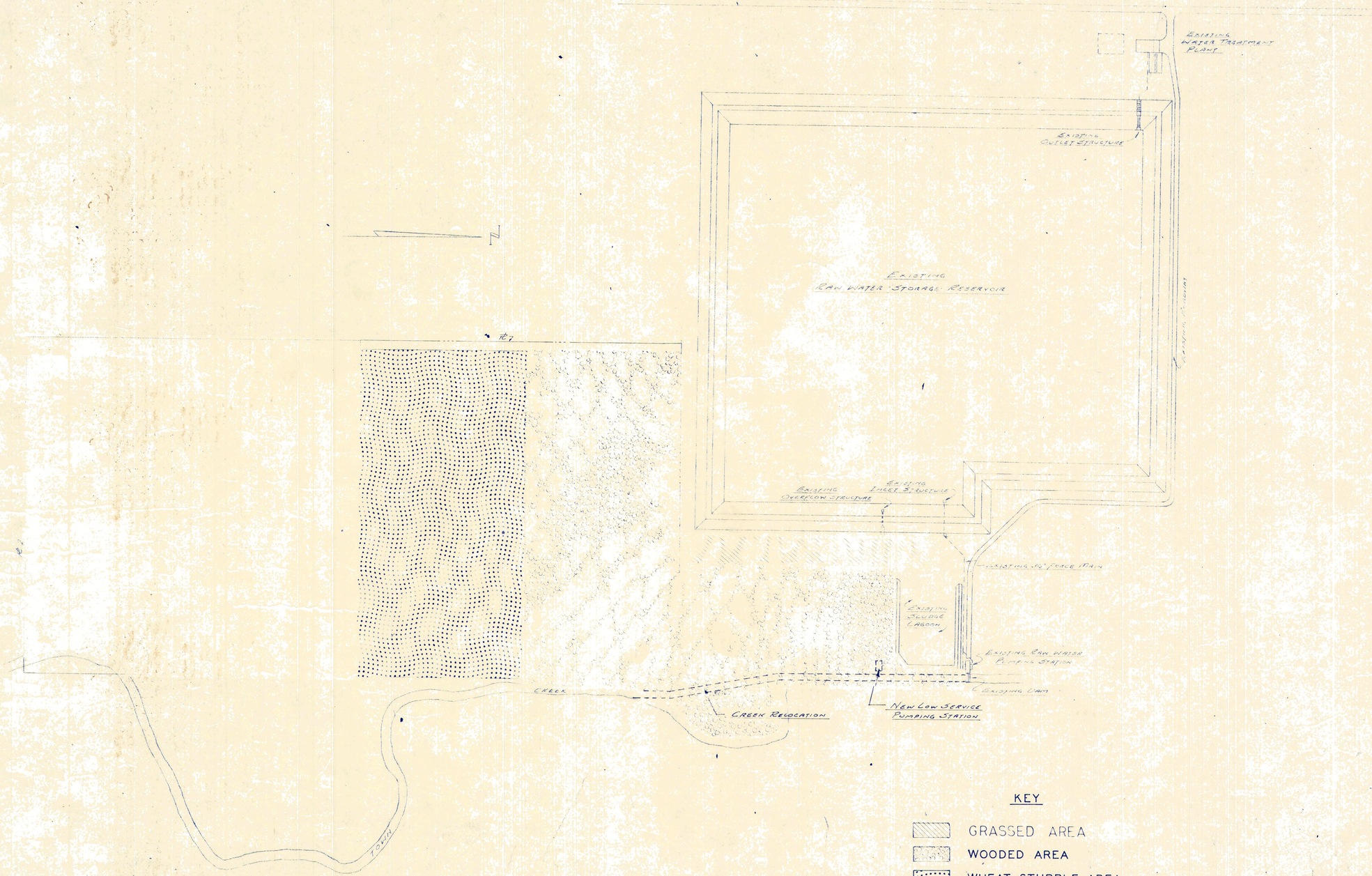
NO-2
795.0
Topsoil
794.1
Brown silty clay, some sand, gravel, moist.
785.0
Grey silty clay, little sand, trace of gravel, moist
775.0
No Water

NO-1
795.5
795.1 Topsoil
Brown silty clay, some sand & gravel, seams of brown silt, occasional seams of fine brown sand, hard, moist.
782.5
Grey silty clay, little sand, trace of gravel, very stiff, moist.
766.5
Grey very sandy silty clay, trace of gravel, medium, moist.
757.0
Grey silty clay, little sand, trace of gravel, seams of grey sand, fine to medium grained, very stiff, moist.
755.5

CORRECTED AS CONSTRUCTED 10-5-65 C J M

TEST BORING LOG
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO
SCALE: ———— 1964 DR. BY MJM CH. BY RBO

U.S. ROUTE 127



KEY

- GRASSED AREA
- WOODED AREA
- WHEAT STUBBLE AREA
- OAT STUBBLE AREA

CORRECTED AS CONSTRUCTED 10-5-65 C J M

CLEARING & GRUBBING PLAN RAW WATER RESERVOIR

SECTION D

WATER WORKS IMPROVEMENTS

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: 1"=200' 1964 DR. BY GDR CH. BY RBC

0+00
Property Corner

0+79.25
0+97.25

1+60

3+60

3+76.23

11+60

12+32.75
12+40.15

89°38'

134.16 ℄ R

135.60'

34.42

30.0

20.0

180.0'

1340.16

℄ R & R 7

1230.66'

℄ R & R 7

13+09.18
Property Corner

2309'

Existing Raw Water Storage Reservoir

Abandoned Water Well

Inside Toe Finish Slope = Elev. 786.50

Inside Top Finish Slope Elev. 810.33

Outside Top Finish Slope Elev. 810.50

Outside Toe Finish Slope: Elev. Varies

180°13'

1306.35' ℄ R

24+73.5

23+63.25

22+40.62
Property Corner

33.75'

89°01'

30.0

2+45
Outlet Structure

23+90.0

20" Butterfly Valve F.M.J.
20" x 20" Tee

23+66.25

23+46.25

23+63.25

1302.45'

3+45
Inlet Structure

23+61.0

23+78.5

23+48.5

Water Stop

Water Stop

20" Butterfly Valve F.M.J.
20" x 16" x 20" Tee

23+42.5

70°0'

Overflow Structure
12+07.25

90°48'

N

CORRECTED AS CONSTRUCTED 10-11-65 C J M

STAKING PLAN
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

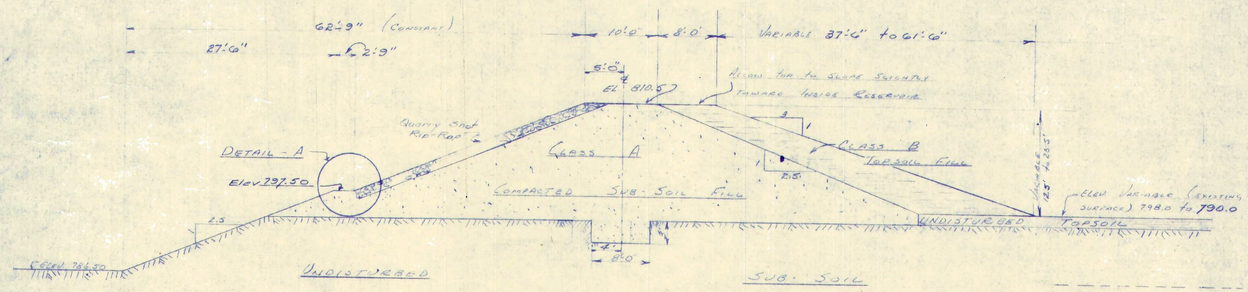
SCALE: 1" = 100'

1964

DR. BY ODR
CH. BY RBO

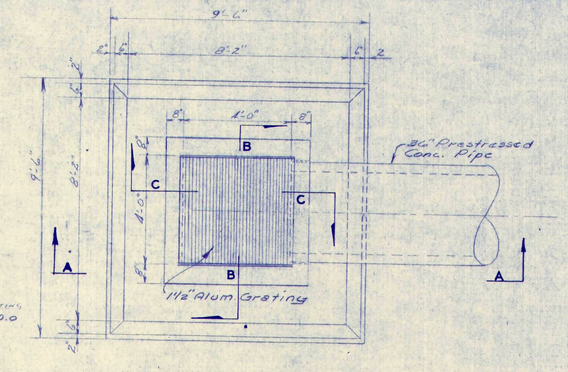
23

GENERAL PLAN
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO
FINKBEINER, PETTIS & STROUT

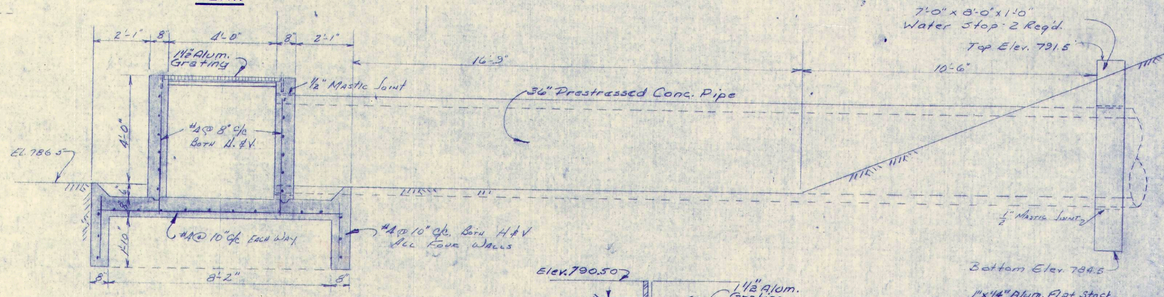


TYPICAL
CROSS SECTION OF DIKE

SCALE: 1"=10'-0"



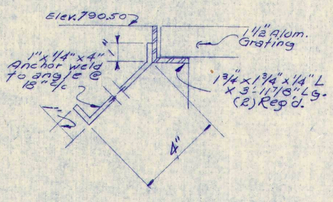
PLAN



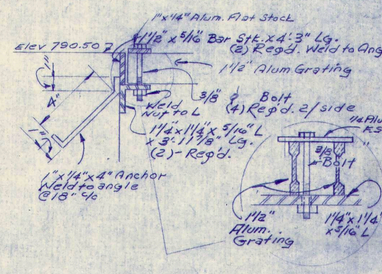
SECTION A-A

INLET STRUCTURE

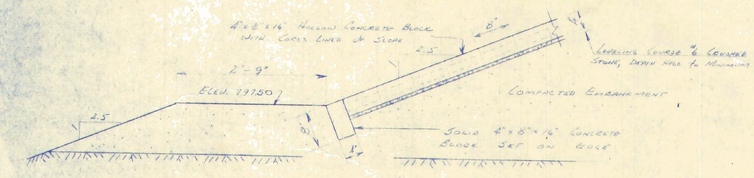
SCALE: ½"=1'-0"



SECTION—C—C

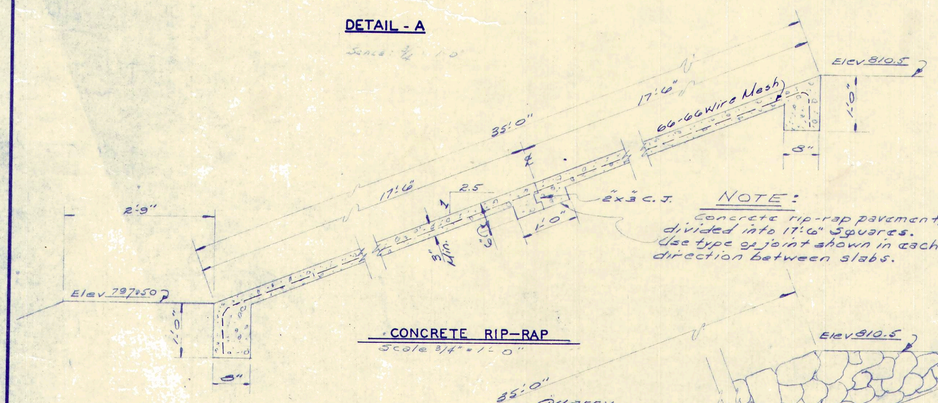


SECTION—B—B



DETAIL - A

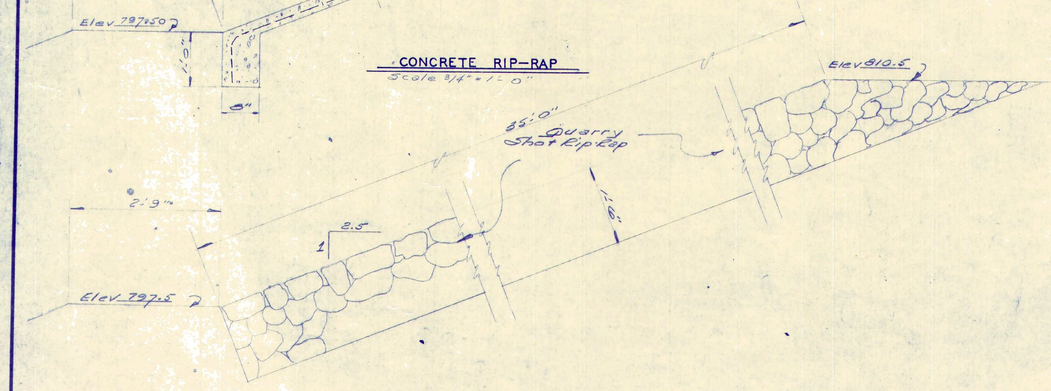
Scale ½"=1'-0"



NOTE:
Concrete rip-rap pavement, divided into 17'-6" Squares. Use type of joint shown in each direction between slabs.

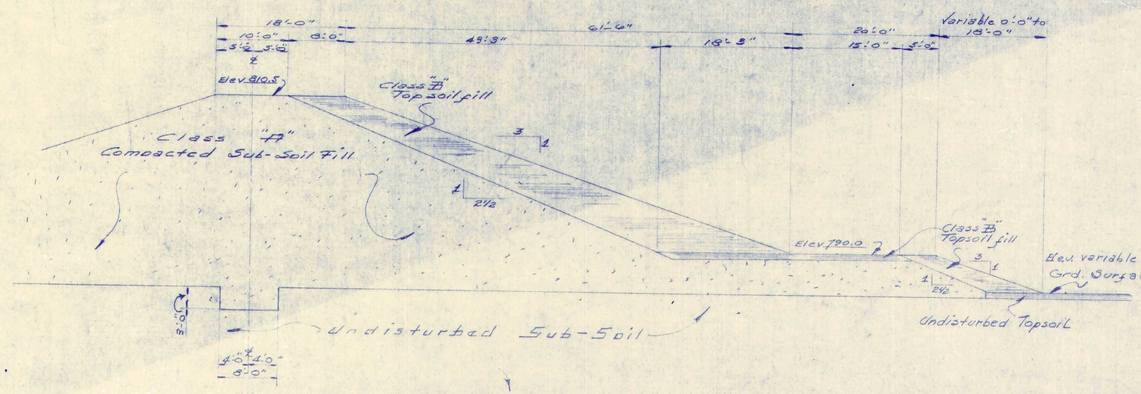
CONCRETE RIP-RAP

Scale 3/4"=1'-0"



QUARRY SHOT RIP-RAP

Scale 3/4"=1'-0"



CROSS SECTION OF DIKE
PORTION OF EAST SIDE

Scale 1"=10'-0"

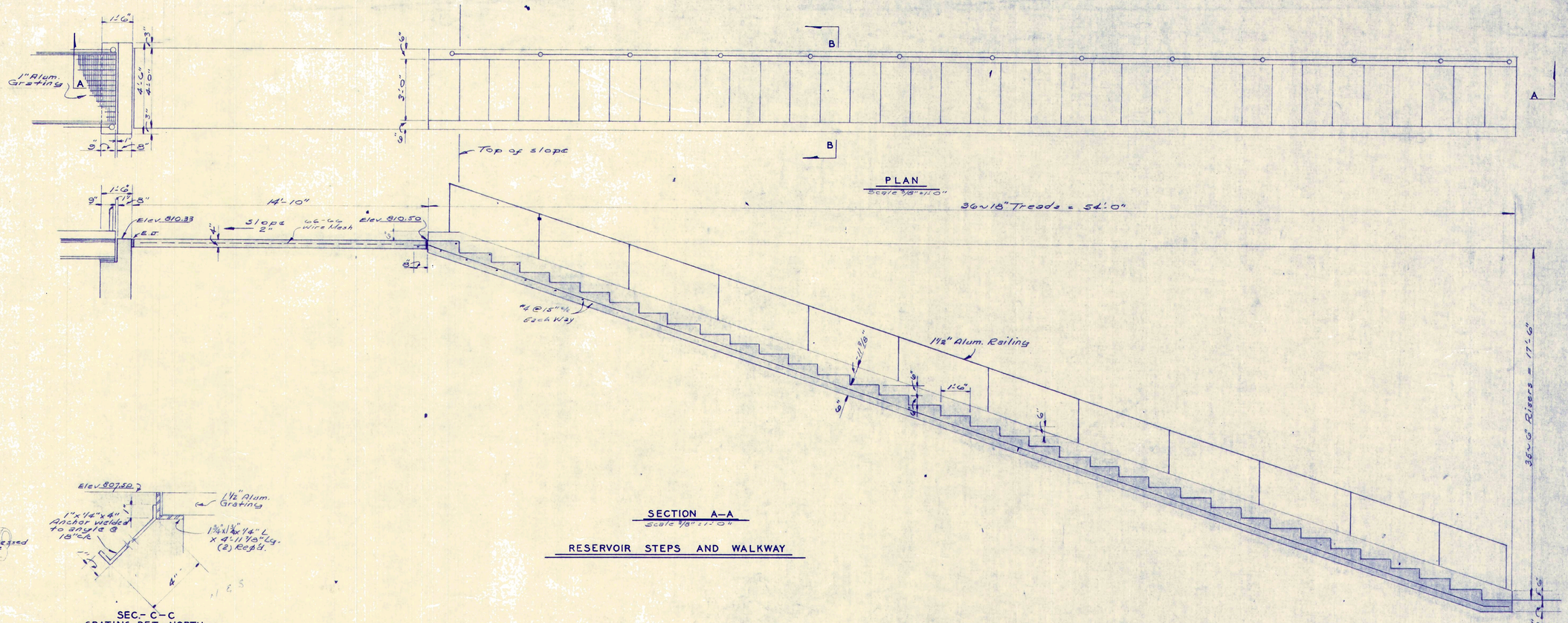
CORRECTED AS CONSTRUCTED 10-11-65 C J M

DETAILS
RAW WATER RESERVOIR
SECTION D

WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED 1964 DR. BY MJM CH. BY RBO

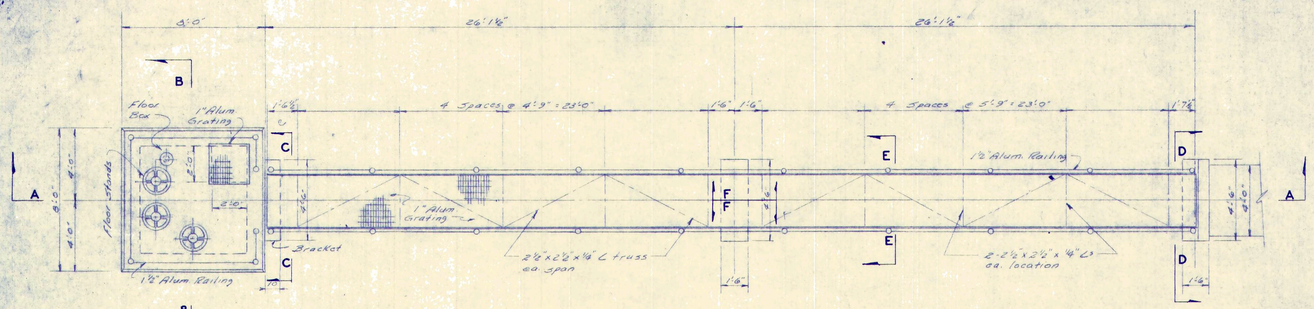


DETAILS
RAW WATER RESERVOIR
SECTION D

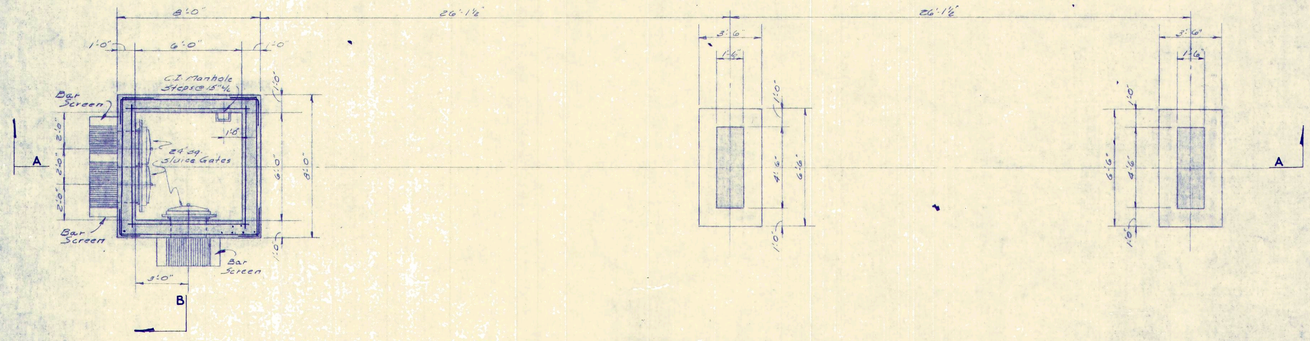
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

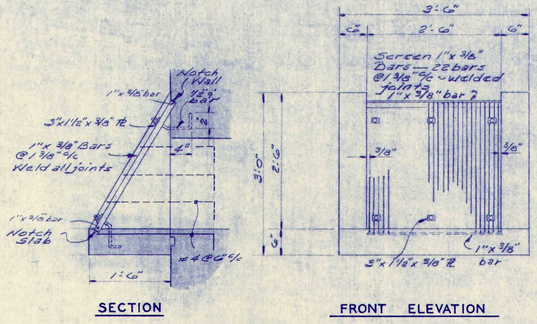
SCALE: AS NOTED 1964 DR. BY MJM CH. BY RBO 7/13



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



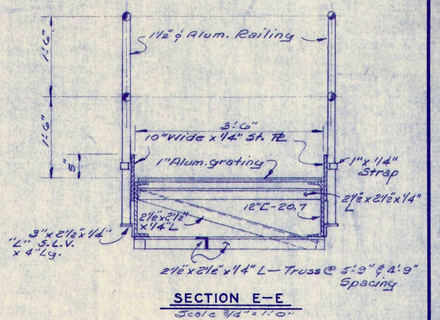
SECTIONAL PLAN
ELEV — 805.50



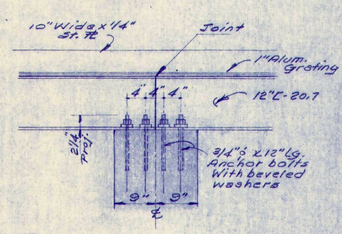
SECTION

FRONT ELEVATION

BAR SCREEN DETAILS
Scale 3/4"=1'-0"

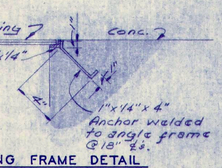


SECTION E—E
Scale 3/4"=1'-0"

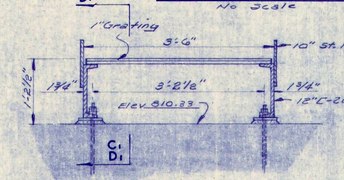


SECTION F-F
Scale 3/4"=1'-0"

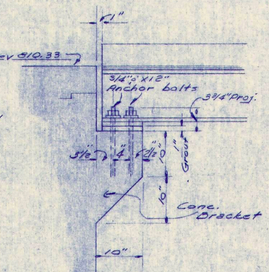
NOTE:
Provide hinge & locking hasp on grating



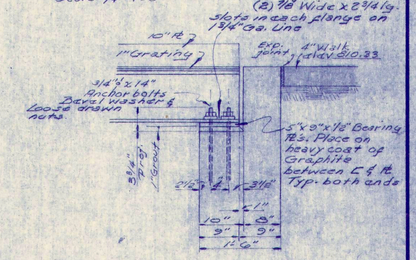
GRATING FRAME DETAIL
No Scale



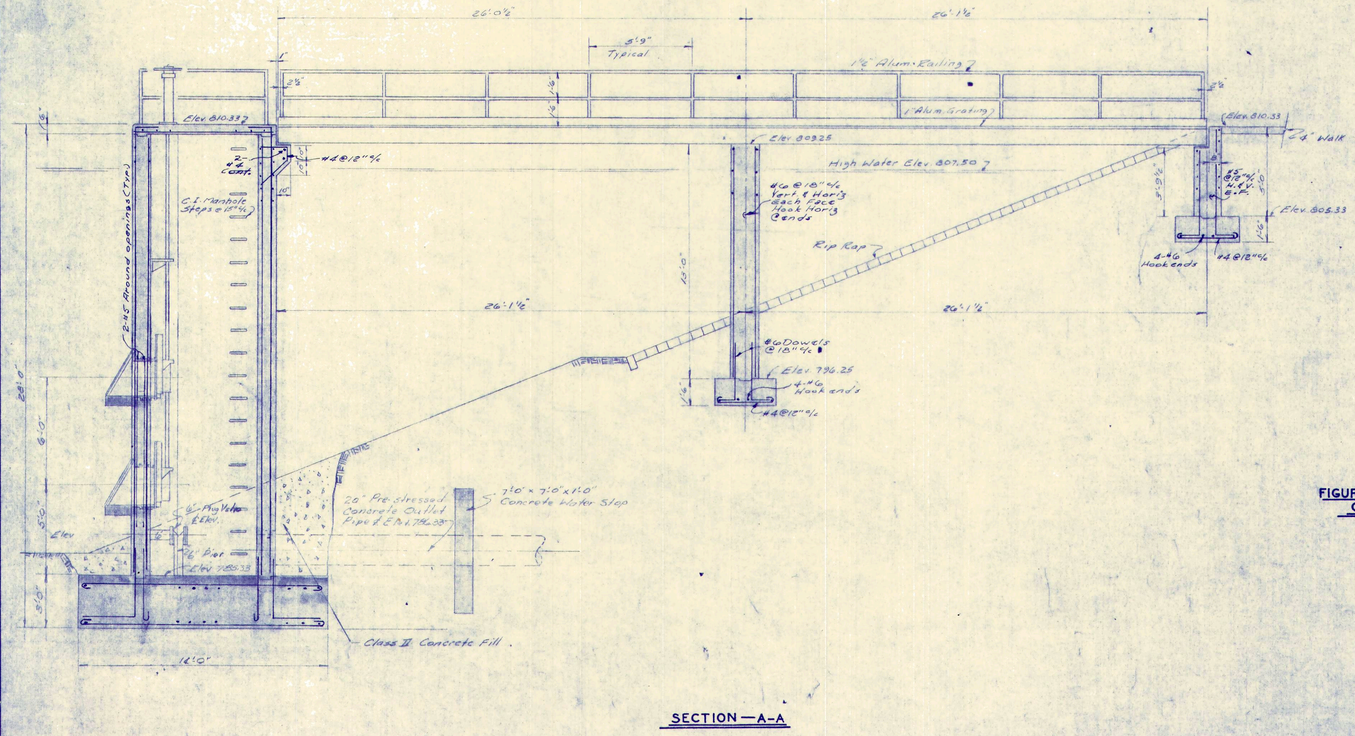
SECTION D—D
Scale 3/4"=1'-0"



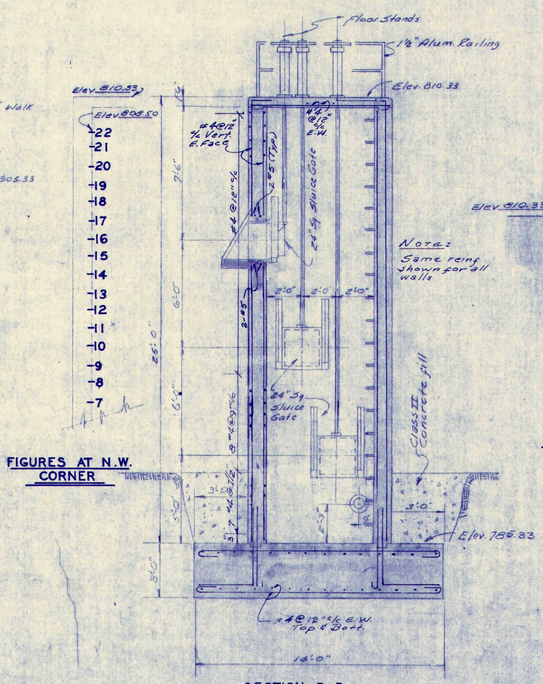
SECTION C1—C1
Scale 3/4"=1'-0"



SECTION D1—D1
Scale 3/4"=1'-0"



SECTION — A-A



FIGURES AT N.W. CORNER

SECTION B—B

CORRECTED AS CONSTRUCTED 11-12-65 C J M

OUTLET STRUCTURE
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO
SCALE: AS NOTED 1964 DR. BY MJM CH. BY RBC

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 2000 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-15 (intermediate grade new billet) or ASTM A-16 (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.

MISCELLANEOUS:

After excavation is completed, obtain Engineer's approval on soil bearing before placing concrete.

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.

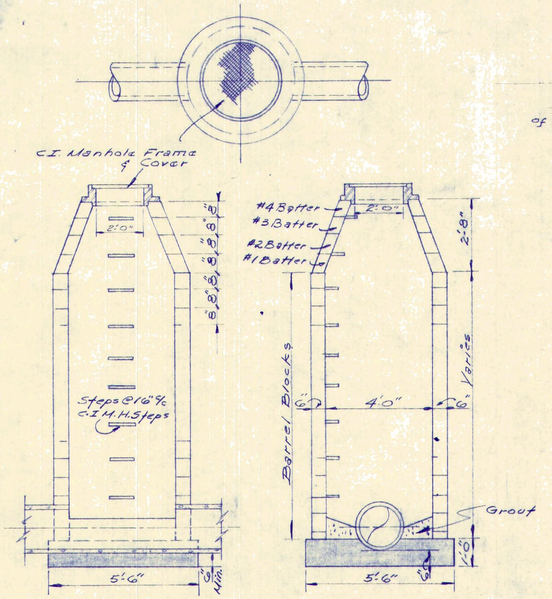
Suitable pipe supports shall be provided and installed at points shown or as directed by the Engineer.

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.

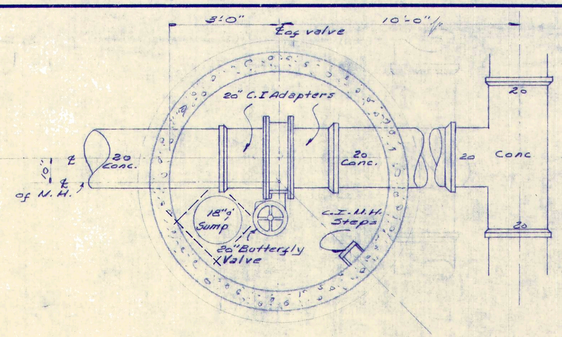
All excavation for pipe, etc. that occure below a main foundation slab or footing shall be filled with Class II concrete to the bottom of the slab or footing.

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

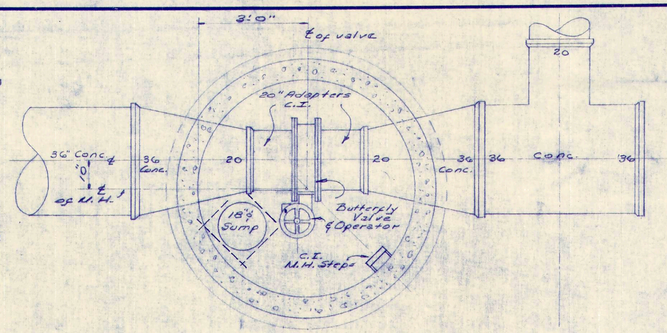


CONCRETE BLOCK MANHOLE

Scale 3/8"=1'-0"



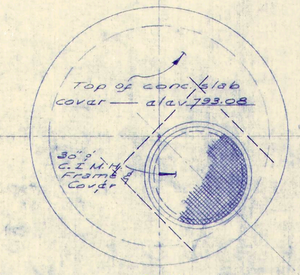
SECTIONAL PLAN



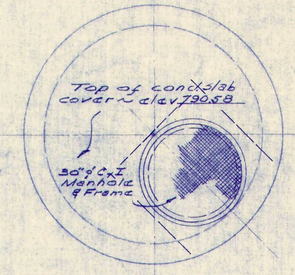
SECTIONAL PLAN

NOTE:
#4 diag bars around sump & M.H. openings (in Top)

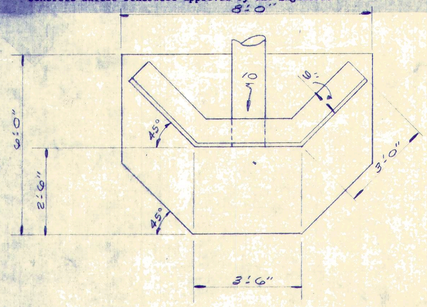
¼" Neoprene around pipe going thru conc. M.H. walls



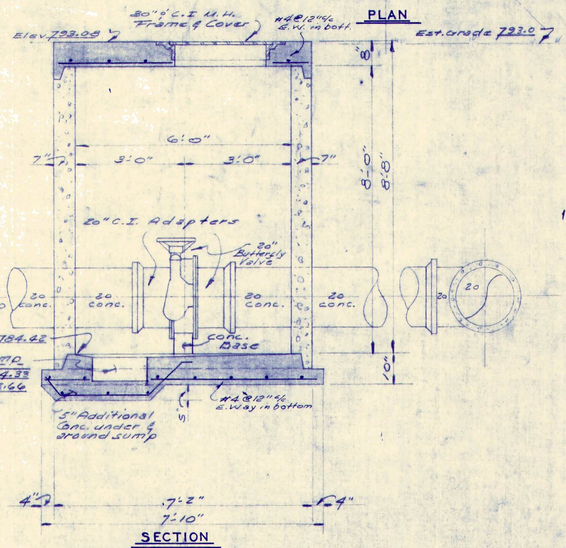
PLAN



PLAN



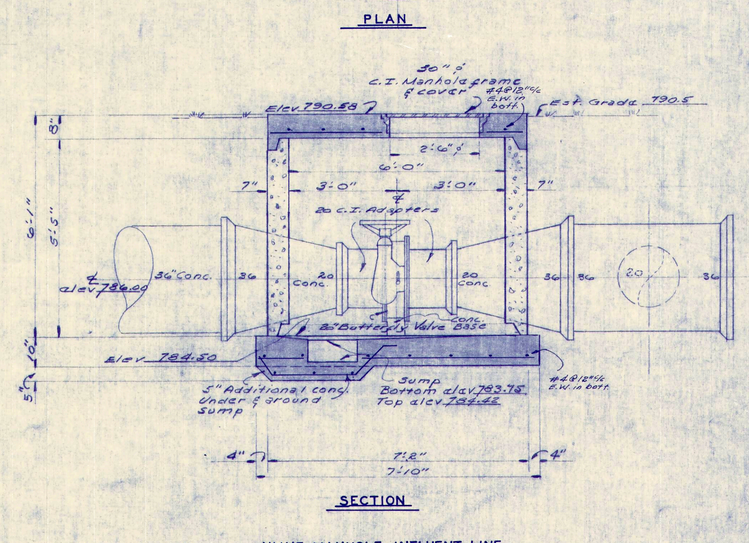
PLAN



SECTION

VALVE MANHOLE EFFLUENT LINE

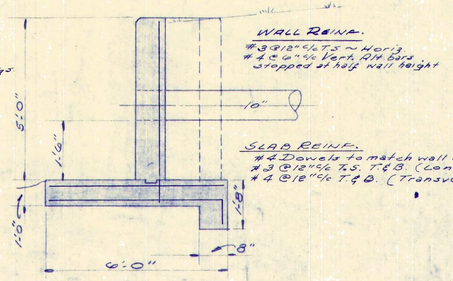
Scale ½"=1'-0"



SECTION

VALVE MANHOLE INFLUENT LINE

Scale ½" = 1'-0"

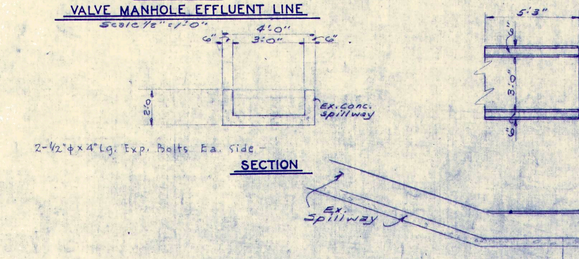


ELEVATION

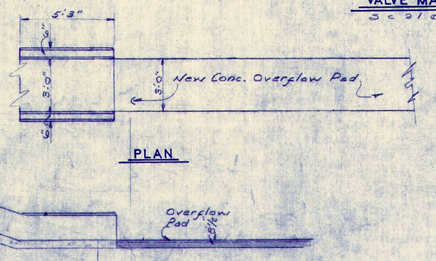
SECTION

HEADWALL DETAIL

No Scale



SECTION

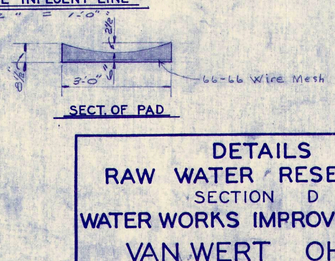


PLAN

ELEVATION

SPILLWAY REVISION

Scale ¼" = 1'-0"



SECT. OF PAD

CORRECTED AS CONSTRUCTED 11-12-65 C J M

DETAILS
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT OHIO
FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: AS NOTED 1964 DR. BY MJM CH. BY RBO

9/73

790
780
770
790
780
770
8
7
6
5
4
3
2
1
0
℄ C.R. PROFILE
New Creek Bottom
℄ PROPOSED 18" DRAIN
NEW LOW SERVICE PUMPING STATION
EXISTING SLUDGE LAGOON
EXIST. FENCE
EXISTING SLUDGE OVERFLOW BOX
EXISTING POWER POLES
EXISTING LOW SERVICE PUMPING STATION
EXISTING DAM
℄ of RELOCATED CREEK
Rip-Rap
FILL ABANDONED CREEK CHANNEL
N

CORRECTED AS CONSTRUCTED 11-12-65 C J M

TOWN CREEK RELOCATION
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE: HORIZ. 1"=40'
VERT. 1"=4'
1964
DR. BY ODR
CH. BY RBO
14/73

790
780
770

NEW CREEK BOTTOM PROFILE

℄ PROFILE

14 13 12 11 10 9 8 7

1.25% ANGLE

1.50% ANGLE

℄ RESERVOIR EMBANKMENT

℄ & RELOCATED CREEK ℄

170'-0"

32'

24'

FEATHER NEW CREEK BOTTOM AND BANKS TO MEET EXISTING

FILL ABANDONED CREEK CHANNEL

N

CORRECTED AS CONSTRUCTED 11-11-65 C J M

TOWN CREEK RELOCATION
RAW WATER RESERVOIR
SECTION D

WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

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

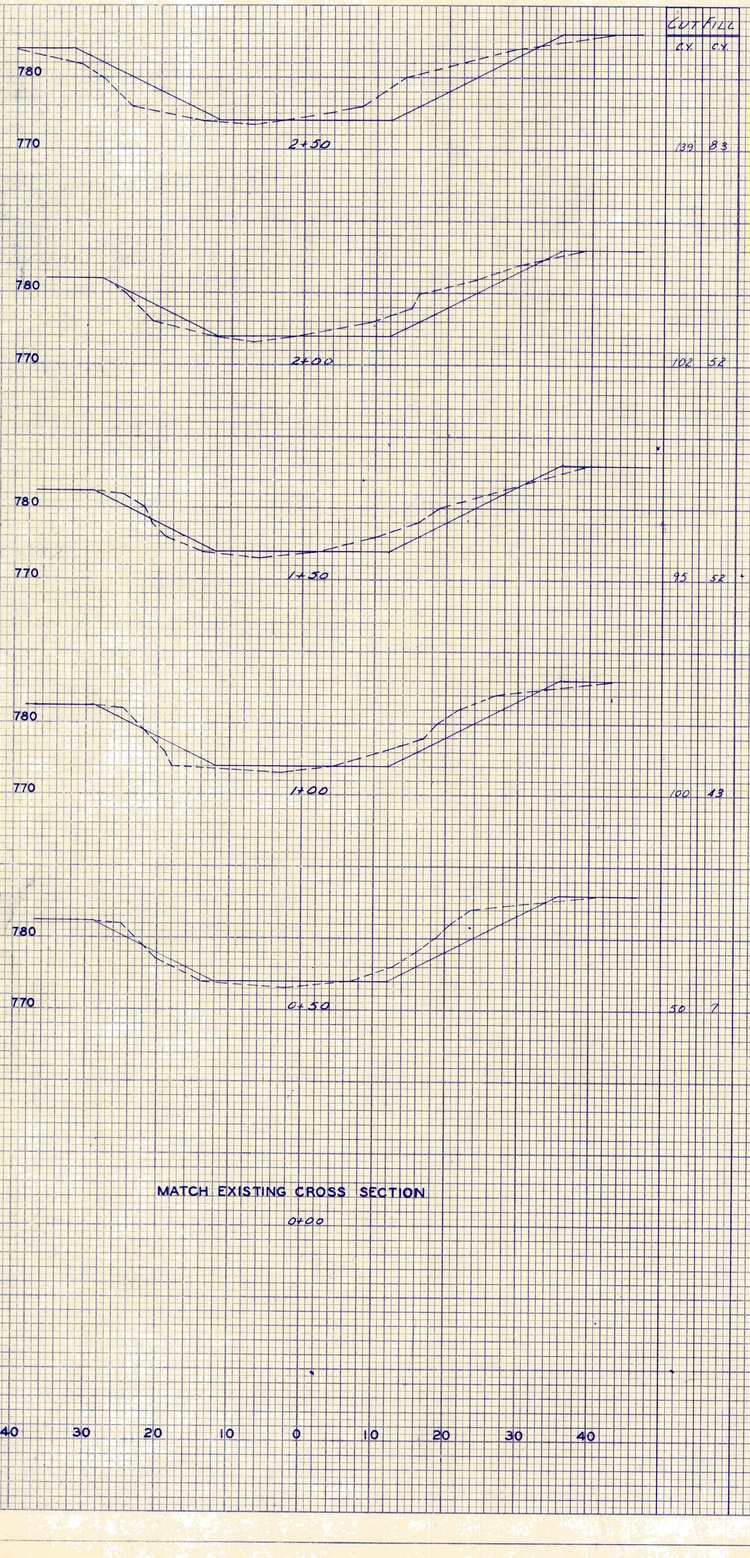
1964

DR. BY ODE
CH. BY RBO

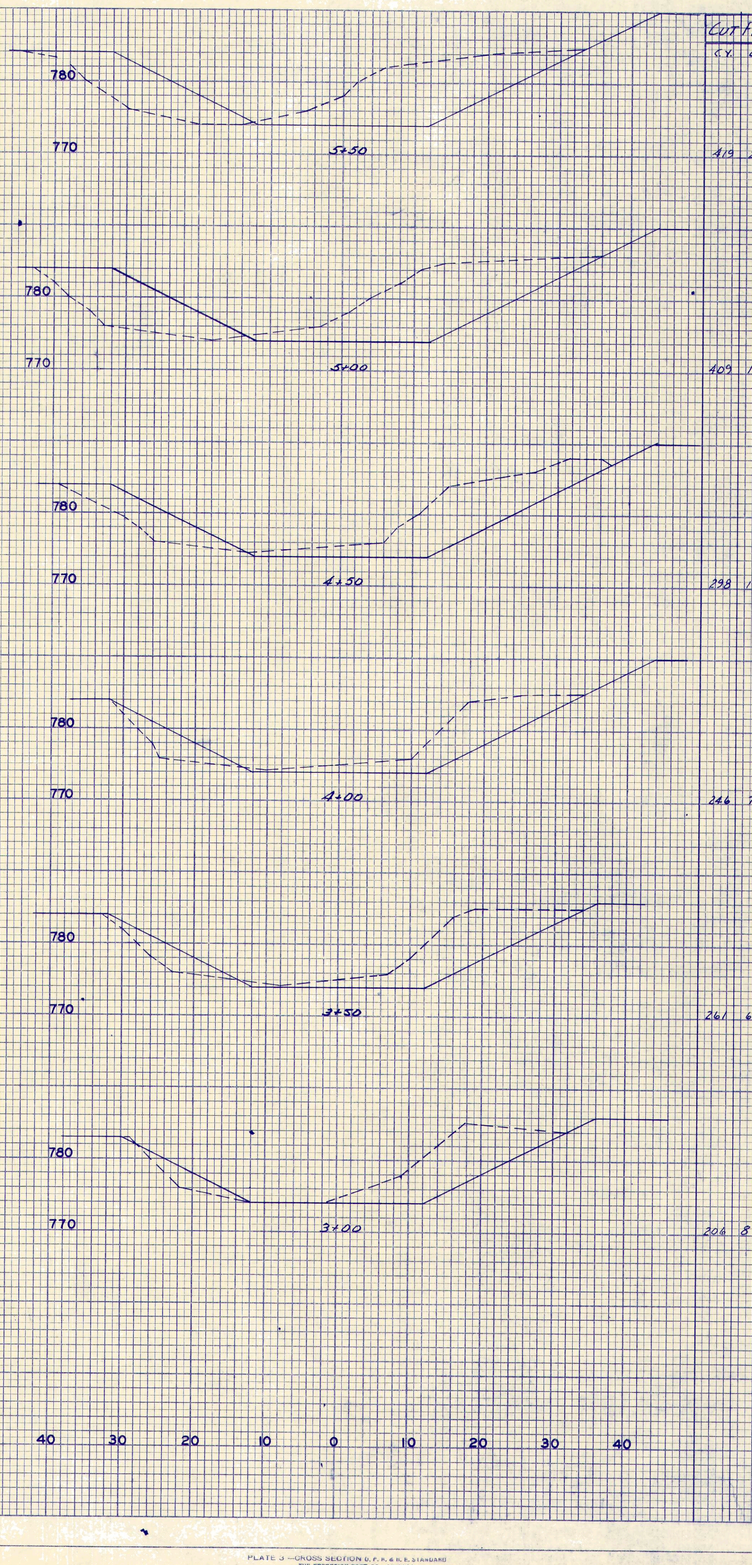
19

FINAL SURVEY		BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK			
NO.			
AREAS	AREAS CHECKED		

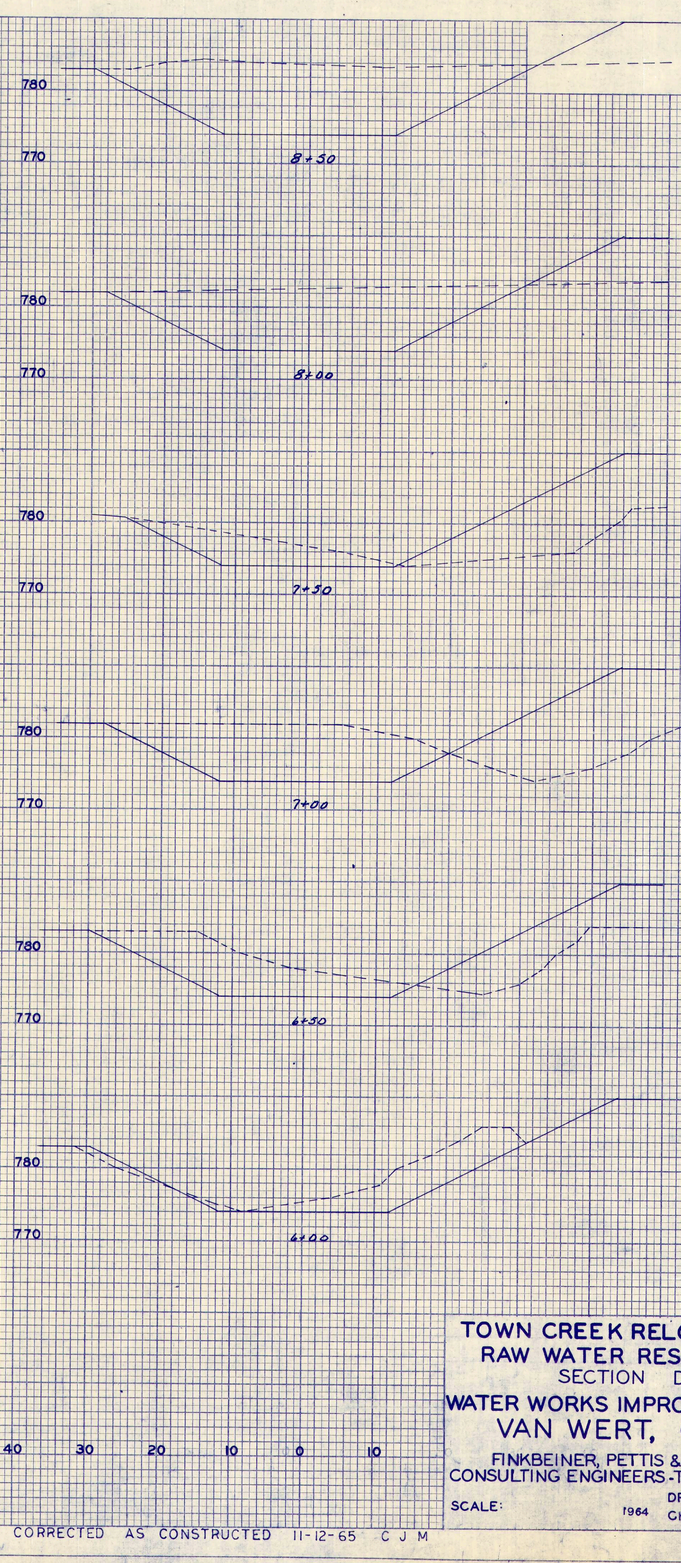
ORIGINAL SURVEY		BY	DATE
SURVEYED			
PLOTTED			
TEMPLATE			
NOTE BOOK	AREAS CHECKED		
NO.			



CUT	FILL
C.Y.	C.Y.
139	83
102	52
95	52
100	43
50	7



CUT	FILL
C.Y.	C.Y.
419	237
409	193
298	109
246	75
261	61
206	87



CUT	FILL
C.Y.	C.Y.
719	20
412	222
298	367
328	311
174	254
330	117

TOWN CREEK RELOCATION
RAW WATER RESERVOIR
SECTION D
WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO, OHIO

SCALE:

1964 DR. BY CDR CH. BY EBS

12/13

CORRECTED AS CONSTRUCTED 11-12-65 C J M

PLATE 3 —CROSS SECTION O. F. P. & R. R. STANDARD
THE FREDERICK POST CO., CHICAGO

	Cut CY	Fill CY
11+50	957	44
11+00	1072	35
10+50	1068	37
10+00	974	57
9+50	874	63
9+00	800	63

MATCH EXISTING CROSS SECTION

	Cut CY	Fill CY
14+00	155	46
13+50	247	87
13+00	448	79
12+50	704	68
12+00	820	55

780 / 770

40 30 20 10 0 10 20 30 40

FINAL SURVEY — SURVEYED / PLOTTED / TEMPLATE / NOTE BOOK / NO. / BY / DATE / AREAS / AREAS CHECKED

ORIGINAL SURVEY — SURVEYED / PLOTTED / TEMPLATE / NOTE BOOK / NO. / BY / DATE / AREAS / AREAS CHECKED

TOWN CREEK RELOCATION
RAW WATER RESERVOIR
SECTION D

WATER WORKS IMPROVEMENTS
VAN WERT, OHIO

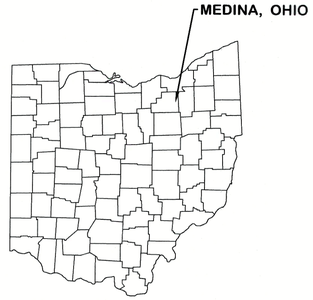
FINKBEINER PETTIS & STROUT
CONSULTING ENGINEERS-TOLEDO OHIO

SCALE: 1964 DR. BY ODR CH. BY REO

CORRECTED AS CONSTRUCTED 11-12-65 C J M

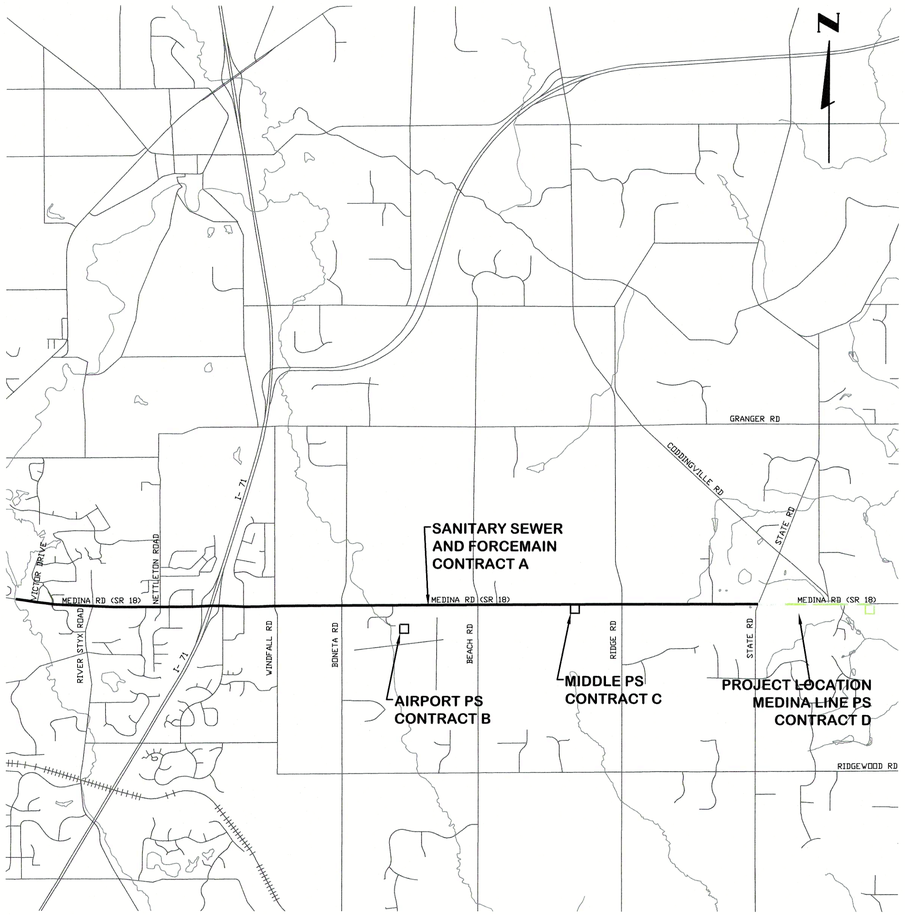
PLATE 3 — CROSS SECTION OF FINISHED STANDARD THE FREDERICK POST CO., CHICAGO

Medina County Sanitary Engineers



MEDINA COUNTY SANITARY ENGINEER

STATE ROUTE 18 CORRIDOR SANITARY SEWER AND PUMP STATION IMPROVEMENTS (S-500/00-324.1D) CONTRACT D - MEDINA LINE PS & FORCE MAIN



LOCATION MAP

0 500 1000 2000

SCALE IN FEET

SHARON TOWNSHIP
MEDINA COUNTY
OHIO

COUNTY APPROVAL STAMP

* move the construction entrance on sheet EC-0.2 to EC-3.1 and move the inlet protection detail on sheet EC-3.1 to EC-0.2

Add ground mounted post note (monday.com) to sheets w/ those details
Add power pole sheets HL-10.11 - 60.21 ?
TC 81.11 - 85.22

Add ground sign sheets TC - 41.10 - 52.20

Remove silt fence detail from sheet EC-3.1 already on EC-0.2

* on SR sheets inlet protection in legend ref detail on sheet EC-0.2, but the detail is only on EC-3.1
No longer Needed

Overhead sign sheets TC 16.22 - 22.20

pavement marking sheets TC 65.10 - 71.10

Already Done
EC detail sheets DM-1.1, 1.2, 4.3

ENGINEER:
JONES & HENRY ENGINEERS, LTD.
3103 EXECUTIVE PARKWAY
SUITE 300
TOLEDO, OHIO 43606

OWNER:
MEDINA COUNTY SANITARY ENGINEER
791 WEST SMITH ROAD
MEDINA, OHIO 44256

NOTE:
ROOF DRAINS, FOUNDATION DRAINS, AND ALL OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

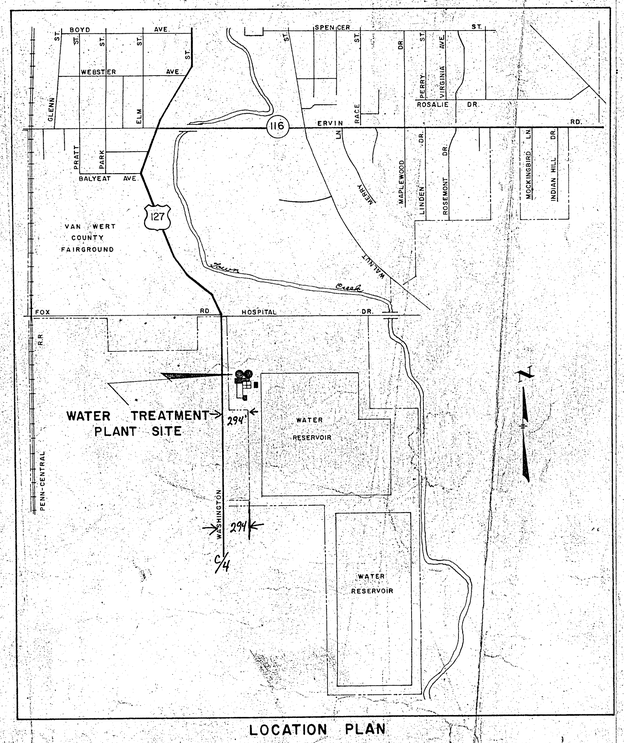
AMB ODOT Review 2/27/2026

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

Jones & Henry Engineers, Ltd.
Fluid thinking®.
www.JHeng.com

JOB NO:	979-7849.016
STATUS:	PERMIT SET
DATE:	FEBRUARY 2026

TOL-7849\016\COVER-COVER
2/19/2026 1:14 PM - CLENDER
2/20/2026 4:35 PM



LOCATION PLAN

WATER TREATMENT PLANT IMPROVEMENTS

VAN WERT, OHIO

FINKBEINER, PETTIS AND STROUT, LIMITED — CONSULTING ENGINEERS — TOLEDO, OHIO

1975

RECORD DRAWING

DRAWING 1 THROUGH 67 HAS BEEN CORRECTED AS CONSTRUCTED ON INFORMATION PROVIDED TO US BY THE CONTRACTOR

CONTRACTOR: H.U. TUTTLE & SON, INC.
P.O. BOX 1153, 280 SHAW
WAPAKONETA, OHIO 45895

SUB CONTRACTORS: THOMAS D. QUINN
SPIREX STRUCTURES, INC.
REYNOLDS ELECTRIC, INC.
C.L. FAGLY PLUMBING & HEATING INC.
UNICRETE SUPPLY CO.

RESIDENT REPRESENTATIVE: MERLIN THETON

LOW SERVICE PUMP
HIGH SERVICE PUMP
MAIN
VARIABLE
CHEMICAL
SLUDGE PUMP
CHLORINATION EQUIP.
EMERGENCY
GENERATOR
FILTER

H.P. FLOOR CORP.

1. Existing Site Plan

2. Grading and Staking Plan

3. Piping Plan

CHEMICAL BUILDING

4. Elevations & Enlarged Piping Plan

5. Roof Plan

6. Sectional Plan - Elev. 829.00

7. Sectional Plan - Elev. 808.33

8. Sectional Plan - Elev. 797.50

9. Sectional Plan - Elev. 788.00

10. Section

11. Section

12. Section

13. Quick Mix - Plans & Sections

14. Quick Mix Room Details, Chemical Dispersion Chamber Details, Domed Entrance Details, Treatment Basin Sampling Schematic, and Treatment Basin Gutter Details

15. Building Details and Section

16. Building Details

17. Lime Storage Bin, Platform and Ladder Details

18. Door Schedule, Ladder, Railing, Window and Lime Fill Access Door Details

19. Plant Water Schematic, and Roof, Floor, Sump & Sink Drain Schematic

20. Roof and Floor Drain Layout

21. Structural Roof Beam Plan and Details

22. Structural Floor Plan - Elevation 815.75 and Details

23. Structural Details

24. Structural Floor Plan - Elevation 801.00 and Details

25. Structural Floor Plan - Elevation 781.83

26. Construction Joints For Bottom Concrete Slab and Walls, Section Thru Treatment Basins, Treatment Basin Sludge Sump Details, Sump and Elevator Sump Details, Section Thru Gutter

27. Structural Concrete Stairs and Details

28. Structural Concrete Stairs and Details

29. Structural Concrete Stairs and Details

30. Structural Plans & Sections of Quick Mix Room

31. Structural Plans & Section of Elevator Shaft

32. Structural Sections

33. Chlorine Storage Monorail Layout and Details. Monorail Layout and Details of Material Handling From New to Existing Building

34. Chlorine Storage Room Exhaust System Layout

35. Heating and Ventilating Sectional Plan and Details Elev. 808.00

36. Heating and Ventilating Layouts

37. Pavement Sections, Manhole, Catch Basin Details, Wall Castings, and Force Main and Water Blocking Details. Sludge Tank Fill Line Details

38. Valve Schedule

FILTER BUILDING ADDITION

39. Elevations and Roof Plan

40. Floor Plan

41. Sectional Plan - Elev. 792.50

42. Sectional Plan - Elev. 787.00

43. Sections

44. Details

45. Structural Details and New Overflow Structure

EXIST. CHEMICAL & FILTER BUILDING

46. Roof Plan and Details

47. Floor Plan & Door Details

48. Basement Plan, Quick Mix Detail and Low Service Pumping Layout

49. Door Schedule, Window Details and Vault Piping

50. Heating & Ventilating Layout

51. Valve Schedule and Small Piping Layout. Water, Drainage & Chlorine. Existing Waste Washwater Pump. Sta. Revisions

EXISTING SETTLING BASIN

52. Plan and New Overflow Structure

RECARBONATION BASIN

53. Plan, Sectional Plan and Sections

54. Valve Schedule, Grating, Baffle Wall, Railing, Drain Line, Wood Partition Support and Underwater Burner Details

55. Structural Details

CLEAR WATER RESERVOIR

56. Sectional Plan, Section and Valve Schedule

SLUDGE LAGOONS

57. Site Plan

58. Sections, Details & Structural

ELECTRICAL

59. Plot Plan

60. One Line Schematic

61. First Floor Plan - New Chemical Building

62. Second Floor Plan - New Chemical Building

63. Basement Plan - New Chemical Building

64. First Floor & Sectional Plans - Filter Building Addition

65. First Floor & Sectional Plans - Existing Chemical Building

66. Miscellaneous Tables

67. Tables, Symbols, Abbreviations and Details

HIGHWAY U. S. 127

GAS MAIN

E.P.

E.P.

15"

C.B. – 787.58
10" N – 784.56
10" S – 784.46
10" E – 784.20
12" W – 784.13

C.B. 786.92
24" N – 782.54
24" S – 782.57
8" NE – 784.56
8" SE – 783.95
4" WSW – 785.15

M.H. 787.58
14" N & S – 783.68
4" ENE – 785.75

EX. C.B. TO BE REMOVED

10"
10"

2"

14"
16"
24"

790.8
783.40-24" N.
783.41-2"
785.60-6"
786.08-4"

24" SEWER

14"

VAULT

14" FORCE MAIN
16" FORCE MAIN

HYD.

SEPTIC TANK

6"

6"

27" SEWER

6" ROOF DRAIN

4" ROOF DRAIN

4" PLANT WATER

6" DRAIN

W.F.

2" GAS SUPPLY

GAS TANK

4"

4" ROOF DRAIN

(3) 12" SUCTION LINES

SIDEWALK

METER

ASPHALT ROADWAY AND PARKING

T.B. #

CLEAR WATER RESERVOIR

CHEMICAL & FILTER BUILDING

16" FILTER INF.
16" WATER
16" DRAIN

4"

4" ROOF DRAIN

12"

FILTER FLUME

SETTLING BASINS

24" FILTER INF.

12" OVERFLOW

3"

16"

T.B. #

INCINERATOR (TO BE REMOVED BY OWNER)

ASPHALT ROADWAY

16" DRAIN

T.B. #

WASTE WASHWATER PUMP STATION

PLUGGED

12"

16"

PLUGGED "T"

VALVE M.H.

3" SLUDGE LINE TO LAGOON

16" WASTE WASHWATER

10' STONE DRIVE

16" PLANT INF.

TOE OF DIKE

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-22-80	L.E.C.	M.L.K.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 1" = 20'
DESIGNED BY G.G.N.
DRAWN BY D.A.A.
CHECKED BY W.C.K.

EXISTING SITE PLAN
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
1 OF 57

BRUNING 44-511

HIGHWAY U. S. 127

C.B.
788.41
784-13-12" W.
784.44-15" N.
785.35-15" S.

C.B.
787.91
785.50-15" S.

INV. ELEV.
787.58

ELEV.
788.8

ELEV.
788.7

E.P.

E.P.

15"

VAULT

RELOCATED HYD. & VALVE

SEPTIC TANK

GAS TANK

METER

ASPHALT AREA

CLEAR WATER RESERVOIR

CHEMICAL & FILTER BUILDING

STD. BY GEN. ADD.

FILTER BUILDING ADDITION

CHEMICAL BUILDING

SETTLING BASINS

TREATMENT BASIN

TREATMENT BASIN

GRAVEL

T.B.

T.B.

T.B.

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

EXISTING RELOCATED 4' GATE

EXISTING RELOCATED 10' GATE

WASTE WASHWATER PUMP STATION

4' GATE

4' GATE

12' GATE

M.H. 794.08

S.W.

S.W.

ASPHALT PARKING AREA

STONE DRIVE

SLUDGE TANK FILL AREA

EXISTING STEPS TO RESERVOIR

TOE OF DIKE

EXIST. ROAD

ASPHALT ROADWAY

789.
790.
791.
792.
793.
794.

LEGEND

- EXISTING CONTOURS
- NEW CONTOURS
- NEW CATCH BASIN
- NEW MANHOLE

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-22-80	L.E.C.	M.A.M.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 1" = 20'
DESIGNED BY G.S.N.
DRAWN BY D.A.A.
CHECKED BY W.C.K.

GRADING AND STAKING PLAN
WATER TREATMENT PLANT
IMPROVEMENTS
VAN WERT, OHIO

PROJECT VAN-[illegible]

2

BRUNING 44-512

HIGHWAY U. S. 127

N

E. P.

E. P.

15"

C.B. 788.5
784.13-12" W.
784.62-15" N.
785.92-15" S.

INV. ELEV. 786.5 15" N.

58 L.F. - 15" @ 1.00 %

88 L.F. - 15" @ 1.00 %

12"

C.B. 787.5
785.50-15" S.

790.8
783.41-24" N.
783.41-27"
785.60-6"
786.08-4"

6"

24" SEWER

VAULT

14" FORCE MAIN
16" FORCE MAIN

PLUG

RELOCATED HYDRANT & VALVE

14"
16"
24"

24"

4"

8"

8"

M.H. 787.5
783.68-14"
785.75-4"

C.B. 786.5
782.54-24" N.
782.57-24" S.
784.98-8" N.E.
783.08-8" S.E.
785.18-4" W.S.W.

27" SEWER

6" ROOF DRAIN

4" ROOF DRAIN

SEPTIC TANK

6" DRAIN

6" DRAIN

6" WATER

6" DRAIN

4" PLANT WATER

2"

ABANDON DRAIN

GAS TANK

4"

(3) 12" SUCTION LINES

GAS METER

EX. 4" ROOF DRAIN

CLEAR WATER RESERVOIR

3" INTO EXIST. 27" SEWER

CHEMICAL & FILTER BUILDING

2" SUMP PUMP

3" DRAIN

NEW 4" X 3" RED. TIE INTO EX. 3" AT WALL

STANDBY GEN. ADDITION

FILTER BUILDING ADDITION

12"

12" OVERFLOW

4"

SETTLING BASINS

CHEMICAL BUILDING

TREATMENT BASIN

12" OVERFLOW W/FLAP GATE

45 L.F. @ 2.00 %
4" DRAIN

CONC. SPLASH PAD

INV 789.85

INV 790.40

12" OVERFLOW W/FLAP GATE

TREATMENT BASIN

12"

12"

SIDEWALK

24" SEWER - INFLUENT

18" DRAIN

SIDEWALK

18"

6"

24"

24"

4" SLUDGE LINE

ELEV. 794.08

6"

4"

18" DRAIN

3"

INV. ELEV. 782.08

WASTE WASHWATER PUMP STATION

18"

1,000 GAL. UNDERGRD. STG. TANK

REMOVE EXIST. 12" PIPE SEE SHEET # FOR DETAILS

18"

PLUGGED TEE

VALVE MANHOLE

4" SLUDGE

NOTE: FOR ENLARGED PIPING PLAN SEE SHEET NO. 4

60"

R008

16" WASTE WASHWATER

2" WATER LINE

16" R.T. INF.

SW

SLUDGE TANK FILL AREA

(SEE DETAILS SHT. NO. 37)

3" VALVE IN DRAIN LINE, SEE SHT. # 37

EXIST. 3" TO SLUDGE LAGOONS

4" X 3" RED.

EXIST. ROADWAY TO LAGOONS

NOTE
FOR PLANT FLOW SEE FLOW SCHEMATIC SHEET NO. 38

ROTARY PAVILION

WATER DISTRIBUTION

NOTE
ALL OUTSIDE VALVES ARE PLUG VALVES UNLESS OTHERWISE NOTED, WITH EXTENSION STEMS, OPERATING NUTS & VALVE BOXES

WAS HERE

TOE OF DIKE

PLAN
1" = 20'

LEGEND

- EXISTING PIPING
- NEW PIPING
- STREET WASHER (NEW)
- FIRE HYDRANT (RELOCATED)
- NEW VALVE
- NEW CATCH BASIN
- NEW MANHOLE

NOTE — BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL LOCATE AND ESTABLISH THE ELEVATIONS OF ALL EXISTING PIPING TO BE CONNECTED OR CROSSED WITH NEW PIPING TO AVOID PIPING CONFLICTS. AFTER FIELD VERIFICATION OF EXISTING PIPING ELEVATIONS, ENGINEER WILL ESTABLISH ELEVATIONS OF NEW LINES AND/OR REVISIONS REQUIRED FOR EXISTING LINES.

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	CHANGED OVERFLOW LOCATION	3/13/78	R.W.O.	G.B.N.
	Record Drawing	2.2880	L.E.C.	M.L.H.

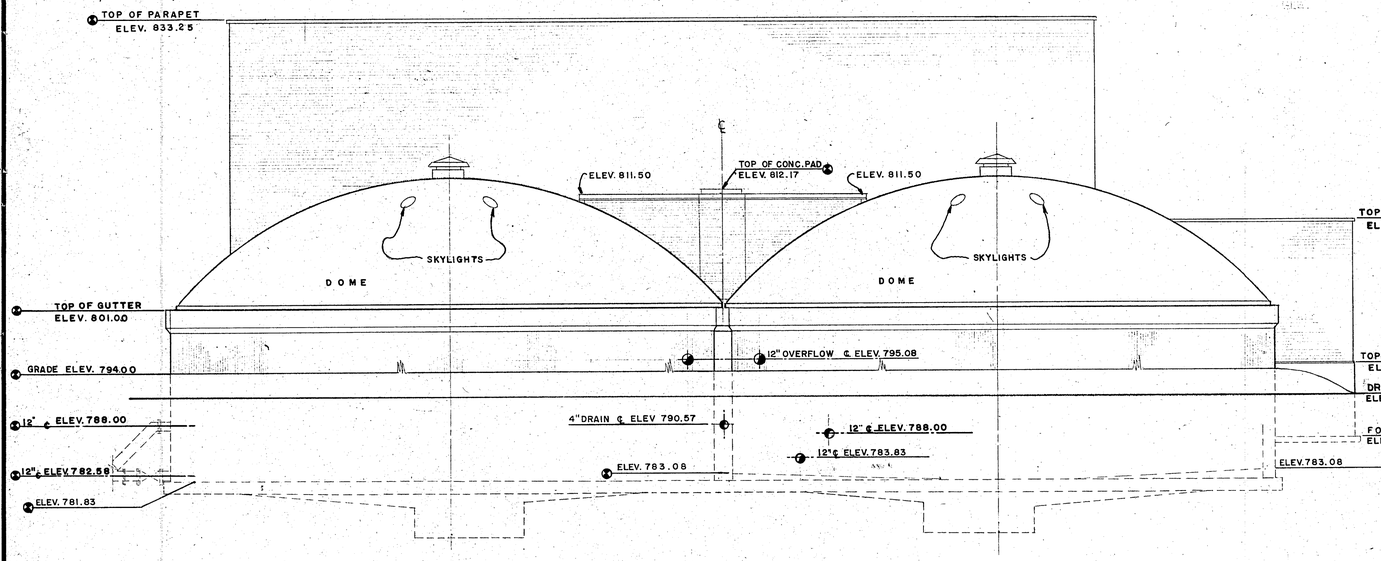
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 1" = 20'
DESIGNED BY G.G.N.
DRAWN BY LLW
CHECKED BY W.C.K.

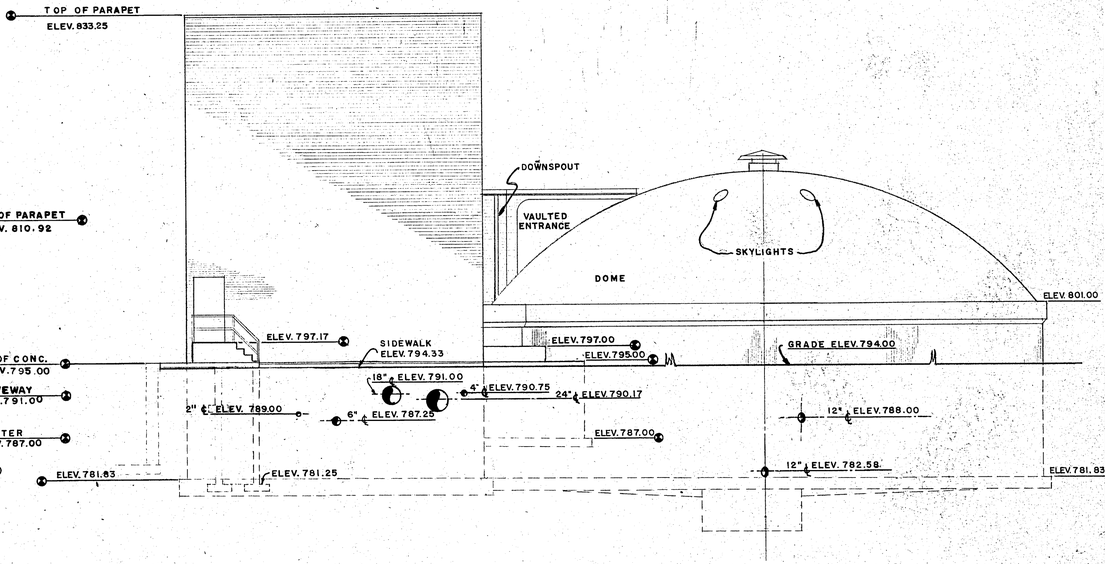
PIPING PLAN
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-
3 OF 61

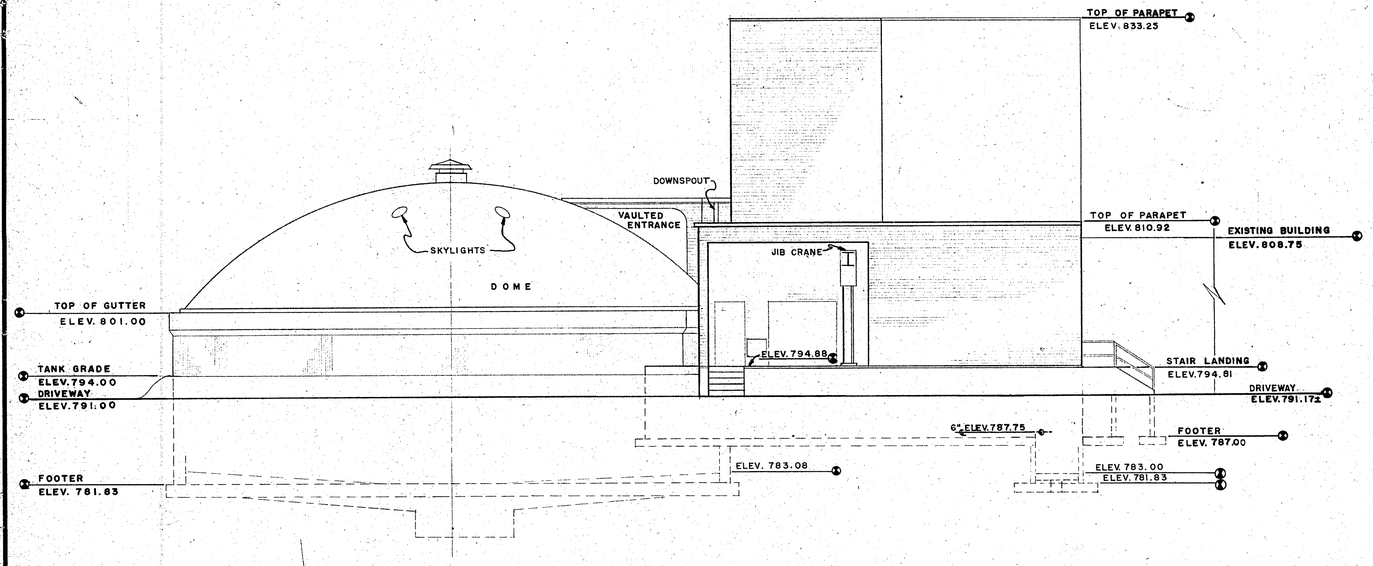
BRUNING 44-510



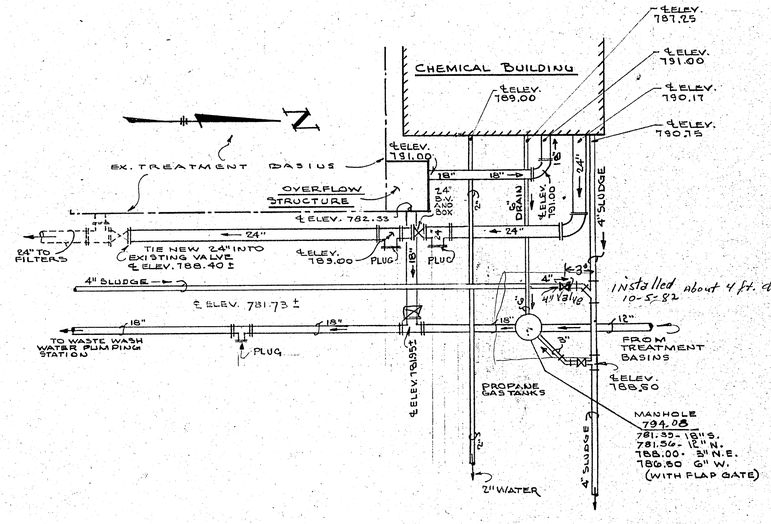
NORTH ELEVATION



EAST ELEVATION



WEST ELEVATION



ENLARGED PIPING PLAN
SCALE 3/32" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	CHANGED 10" TO 12" FROM	3/13/76	R.W.O.	G.G.N.
	TREATMENT BASINS			
	Record Drawing	2-25-80	L.E.C.	M.L.M.

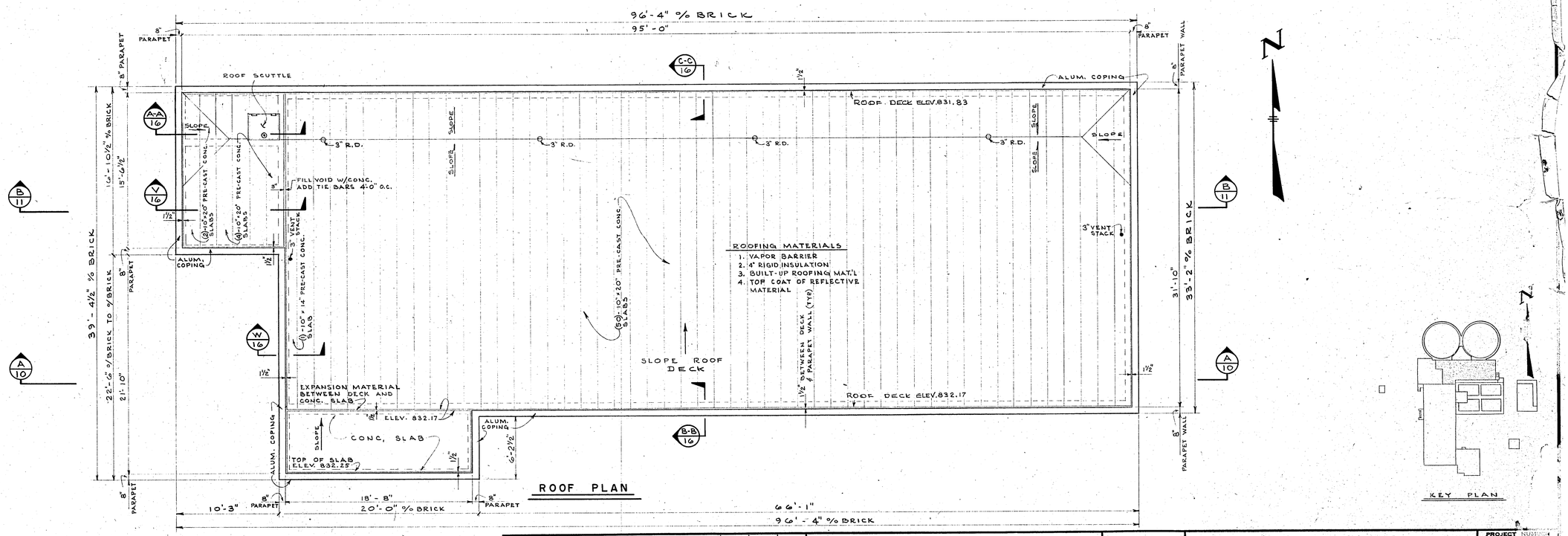
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 1/8" = 1'-0"
DESIGNED BY: G.G.N.
DRAWN BY: L.L.W.
CHECKED BY: W.C.K. G.G.N.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW.103
SECTION:
DATE: 10-20-75
4 OF 17

BRUNING 44-511



ROOF PLAN

KEY PLAN

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-25-80	L.E.C.	M.L.M.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/16" = 1'-0"
DESIGNED BY: G. G. N.
DRAWN BY: R. S. G.
CHECKED BY: W. C. K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 102 J1
SHEET NO.: 10-
DATE:
5 OF

BRUNING 44-510

℄ BASIN

℄ BETWEEN BASINS

℄ BASIN

DOME

SKYLIGHT (3 REQ)

12'-0"

90°

45°

45°

12'-0"

90°

VENTILATOR

12'-0"

TREATMENT BASIN NO. I

TREATMENT BASIN NO. II

SKYLIGHT (3 REQ)

DOME

12'-0"

90°

45°

45°

12'-0"

90°

VENTILATOR

12'-0"

℄

C/12

C/12

27'-6 1/2"

42'-8" % BRICK

41'-4"

FACE OF BRICK

39'-10"

24'-10" % BRICK

23'-6"

8" PARAPET

8" PARAPET

3'-11"

125'-1" % BRICK

100'-3"

96'-4" % BRICK

30'-6"

6" O.H.

30'-6"

24'-3"

ALUM. GRAVEL STOP

HIGH POINT OF ROOF - ELEV. 814.67

ROOF SCUTTLE

6" O.H. (TYP.)

VAULTED ENTRANCE

VAULTED ENTRANCE

CONC. BM.

SLOPE

CONC. ROOF SLAB W/ VAPOR BARRIER, 4" RIGID INSULATION, BUILT-UP ROOFING MAT'L; TOP COAT OF REFLECTIVE MATERIAL

ELEV. 811.50

6" O.H. (TYP.)

FASCIA SUMP SEE DETAIL SHEET #14

ALUM. GRAVEL STOP

SLOPE

ELEV. 811.50

FASCIA SUMP

6" CONC. PAD RECOVERY UNIT

C.J.

C.J.

8" SQ. CONC. COL.

BRICK

8" PARAPET

ALUM. COPING

ROOF DECK ELEV. 809.33

SLOPE

(2) 4" LIME FILL LINES (DOWN)

LADDER - SEE SHT. #18 FOR DETAILS

ELEVATOR SHAFT

OPENING IN FLOOR FOR 14"x12" HEAT DUCT

4" LIME FILL LINES

EXHAUST DUCT

16"x8" REGISTER ON 4"x4" CURB

LIME BIN DUST COLLECTOR

BLOCK

BRICK

DUST COLLECTOR

CHEMICAL FEEDERS

PLATFORM (IN SUMP) GRATING ELEV. 825.00

M.H.

M.H.

LADDER & SAFETY BAND SEE SHT. #17 FOR DETAILS

24"x24" REGISTER

24"x10" REGISTER

STEEL PLATES ON 4" CURBS FOR FUTURE EQUIPMENT

4'-0"

3" F.D. ELEV. 815.67

4" DRAIN (DN.) 3" VENT (UP)

C.J.

ROOF DECK ELEV. 809.17

CORES DAMMED & JOINT FILLED W/CONC. LAP & WELD TOP BARS

SLOPE

OPENING IN ROOF DECK - SEE SHEET #34 FOR DETAILS

ROOFING MATERIALS

1. VAPOR BARRIER
2. 4" RIGID INSULATION
3. BUILT-UP ROOFING MAT'L
4. TOP COAT OF REFLECTIVE MATERIAL

SLOPE

3" R.D.

3" R.D.

3" R.D.

SLOPE

SLOPE

3" VENT STACK

ROOF DECK ELEV. 809.00

ALUM. COPING

8" PARAPET

EXIST. CHIMNEY

38'-4"

39'-0" % BRICK

1'-0½" MASONRY WALL

17'-11"

20'-0" % BRICK

12.5'-1" % BRICK

1'-0½" MASONRY WALL

6 @ 1'-1"

LIME STORAGE BINS

84'-0"

14'-6"

11'-0"

3'-8"

5'-0"

6'-0"

3'-8"

17'-8"

3" F.D.'S ELEV. 815.67

3" F.D. ELEV. 815.67

3" F.D. ELEV. 815.67

3" F.D.'S ELEV. 815.67

CHEMICAL STORAGE AREA

FLOOR ELEV. 815.75 AT WALLS

SERVICE SINK

4" HIGH CURB & RAILING

LANDING ELEV. 808.37

5'-6½"

4'-0"

6'-2½"

HAND RAIL

DOWN

4" HIGH CURB & RAILING

HAND RAIL

LANDING ELEV. 807.76

24"x10" REGISTER ON 4"x4" CURB

24"x10" REGISTER ON 4"x4" CURB

1'-0" SQ. CONC. COL. TYP.

C.J.

C.J.

BRICK

FACE OF CONC. COL.

1'-0" COL.

1'-0" COL.

1'-0" COL.

1'-0" COL.

1'-0½" MASONRY WALL

1'-0½" MASONRY WALL

15'-0½"

10'-0"

4'-8"

4½"

33'-1" % BRICK

SECTIONAL PLAN - ELEV. 829.00

EXISTING ROOF

EXISTING PARAPET ELEV. 808.75

EXISTING PARAPET ELEV. 808.75

KEY PLAN

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-25-80	L.E.C.	M.L.H.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/16" = 1'-0"
DESIGNED BY: G.G.N.
DRAWN BY: R.S.G.
CHECKED BY: W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 1103
SECTION:
DATE: 10-20-77
6 OF 67

BRUNING 44-510

SECTIONAL PLAN — ELEV. 808.33

TREATMENT BASIN NO. I

TREATMENT BASIN NO. II

℄ BASIN — 61'-0" — ℄ BASIN

℄ BETWEEN BASINS

HIGH POINT OF GUTTER ELEV. 800.92

TOP OF WALL ELEV. 801.00

2'-0" ϕ FLARE OVERFLOW ELEV. 798.33

2'-0" ϕ FLARE OVERFLOW ELEV. 797.08

4" DRAIN ELEV. 800.25

11 LAUNDERS REQ'D 12" x 9" DEEP

RECIRCULATION PUMP

RECIRCULATION DRIVE UNITS

RAILING

23'-0" DIA.

18'-0" DIA.

14'-0" DIA.

30'-0" DIA.

BRICK UNIT

EFFLUENT PUMP

40'-0"

30'-0"

30'-0"

30'-0"

6" GUTTER

4"

7"

35°

DOME

DOME

DOME

DOME

1'-0"

9'-7"

BUILT-UP AREA W/CLASS II CONC. FOR PROPER DRAINAGE

30'-6½" R. (BRICK TO ℄ BASIN

EFFLUENT LAUNDER 2'-0" x 2'-0" DEEP

BRIDGE WALKWAY

BRIDGE WALKWAY

8" TYP.

BRICK

BLOCK

QUICK MIX ROOM

QUICK MIX MOTOR

QUICK MIX MOTOR

3" DRAIN ELEV. 800.83

2" DRAIN ELEV. 800.83

MASONRY C.J.

MASONRY C.J.

5'-0"

5'-0"

5'-0"

5'-0"

2'-5"

3'-4" O.S.

3'-4" O.S.

SEE SHEET #18 FOR WINDOW DETAIL

TOP OF WALL ELEV. 801.00

3" DRAIN ELEV. 800.25

24'-5" ℄ TO ℄ CONC.

10'

3'-0"

10'

TOP OF PLANTING WALL ELEV. 795.00

TOP OF PLANTING WALL ELEV. 797.00

LOW POINT OF GUTTER ELEV. 800.42

8'-0"

24" PLANTING AREA

1'-0½"

2"

FACE OF CONC.

18'-0"

10"

24'-10" % BRICK

14'-10"

1'-0"

9'-0"

2"

1'-4"

TOP OF PLANTING WALL ELEV. 795.00

LOW POINT OF GUTTER ELEV. 800.42

PLANTING AREA

3" DR. ELEV. 800.25

BRICK

BRICK

DOWN

3'-4"

LOADING DOCK

(2) 4" LIME FILL LINES (DOWN & UP)

3'-9½"

1'-0½"

5'-0"

VENT UP

HAND RAIL

4" DRAIN (PIPED)

4'-3½"

3'-11½"

1'-7"

17'-8"

6'-8"

ELEVATOR

8'-0"

1'-0"

1'-4"

3" PLANTING DOWEL

2'-4"

1'-0"

12'-4"

3 TON JIB CRANE

BLOCK

BRICK

CONC.

13'-9½"

1'-0"

12'-11½"

1'-0"

9'-3"

1'-0"

VENT (UP)

C.O.

WATER COOLER

3" F.D.'s ELEV. 800.92

3" F.D. ELEV. 800.92

EMERGENCY SHOWER AND EYE WASH W/50 GAL. TEMPERING TANK

3" F.D. ELEV. 800.92

3" F.D.'s ELEV. 800.92

SWITCH

MONORAIL - 2 TON

CHLORINE STORAGE ROOM

MONORAIL - 2 TON

4'-8"

4'-0"

6"

CONC. WALL UNDER STAIRS

6" CURB & RAILING

UP

HAND RAIL

HAND RAIL

DOWN

6'-8"

LANDING ELEV. 808.37

FLOOR ELEV. 795.00

ELEV. 801.00

3" VENT UP

3" DRAIN (UP & DN)

C.J.

BLOCK

BRICK

38'-0"

CHIMNEY (EXISTING)

59'-0" % BRICK

EXIST. PARAPET ELEV. 808.75

EXIST. ROOF

EXIST. PARAPET ELEV. 808.75

1 TON MONORAIL OVERHEAD SEE SHT. #33 FOR DETAILS

SEE DETAIL "B" SHT. #16 FOR THE INTERLOCKING OF EXIST. BRICK W/NEW BRICK

66'-1" % BRICK

FERRIC SULPHATE FEEDERS

LIME SLAKER & FEEDER

CHEMICAL DISPERSION CHAMBERS SEE SHT. #13 & 14 FOR DETAILS

¾" ALUM. GRATING

SINK

LIME DUST CONTAINER 14" HEAT DUCT THRU FLOOR

C.O.

2'-10"

2" HOLE FOR FLUORIDE FEED

4'-0"

RELOCATED FLUORIDE FEED PUMP & CONTAINER (55 GALLON DRUM)

RELOCATED EXIST. SCALES (RECESSED) SEE DETAILS SHT. 24

11'-0"

6'-0"

7'-1"

14'-8"

1'-6"

12'-9"

11'-0"

7'-6"

15'-2"

14'-8"

14'-8"

14'-8"

83'-8"

13'-10"

17'-8"

BLOCK

BRICK

3" F.D. ELEV. 800.92

4"

4'-8"

4" DRAIN (UP & DOWN)

3'-0"

8'-4"

8'-4"

5'-0"

4'-10"

MASONRY C.J.

HAND RAIL

RAILING

RAILING

HAND RAIL

DOWN

3" F.D. ELEV. 797.20

LANDING ELEV. 797.25

LANDING ELEV. 797.17

RAILING

UP

HAND RAIL

LANDING @ ELEV. 807.76

8'-4"

4'-8"

7'-6"

5'-0"

7'-6"

6'-4"

4'-9"

33'-2" % BRICK

33'-6" % CONC.

34'-3"

FLOOR ELEV. 801.00 AT WALLS

36" x 12" DUCT THRU FLOOR

32" x 10" DUCT THRU FLOOR

24" x 10" DUCT THRU FLOOR

1'-0" SQ. CONC. COL. (TYP.)

24" x 10" DUCT THRU FLOOR

4" TYP.

BLOCK

MASONRY C.J.

MASONRY C.J.

BRICK

EXISTING SETTLING BASIN

12'-8" o/BRICK TO o/CONC.

43'-0" % CONC.

42'-8" % BRICK

23'-6½" % BRICK

21'-6"

15'-1½"

10'-7"

18'-1"

4'-0"

10½"

3'-6"

2'-5"

11"

1'-0½"

4'-0"

3'-10"

2"

8'-6"

4'-6"

4'-2"

3'-6"

6"

4'-6"

9'-4"

KEY PLAN

N

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	CHANGED OVERFLOW LOCATION	5/15/76	R.W.D.	G.G.N.
2.	ADDED TEMP. TANK FOR EMER. SHOWER	5/15/76	R.W.D.	G.G.N.
	Record Drawing	2-2500	L.E.C.	M.L.H.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/16" = 1'-0"
DESIGNED BY G.G.N.
DRAWN BY R.S.G.
CHECKED BY W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NO. VA
DRAWING NO. 11
SECTION
DATE

BRUNING 44-510—

TREATMENT BASIN NO. I

TREATMENT BASIN NO. II

SECTIONAL PLAN – ELEV. 797.50

EXISTING PLANT
FLOOR ELEV. 795.00

CHLORINE STORAGE ROOM
FLOOR ELEV. 795.00

SUMP DETAIL
SCALE 3/4" = 1'-0"

KEY PLAN

℄ BASIN

℄ BETWEEN BASINS

GRAVEL

4'-0" SQ. CONC. SPLASH PAD 4" THICK

12" FLAP GATE

12" OVERFLOW PIPE & ELEV. 795.08

4" DRAIN DOWN TO ELEV. 790.42

RIB FORMED SURFACE (TYP) SEE DETAIL ON SHT. # 14

30'-0" DIA.

40'-0"

30'-0"

1'-0"

10" TYP.

17'-0"

9'-0"

9'-0"

Lower lagoons EL. 782
upper lagoons EL. 795

WATER Elevation 798.25 ± 2"

3/4" SAMPLING LINE DOWN TO SAMPLING SINK

EFF. LAUNDER BOTT. ELEV. 796.00

EFFLUENT CHAMBER

ELEV. 794.83

24" ℄ ELEV. 793.83

TRANSFER FLUMES

QUICK MIX

TOP OF GROUT ELEV. 792.83

WEIR WALL 4" DRAIN ℄ ELEV. 791.67

INFLUENT CHAMBER

ELEV. 791.50

4" DRAIN ℄ ELEV. 790.92

3" DRAIN DOWN

WC 29

WC 21

WC 20

WC 19

WC 18

G-1

G-2

G-3

G-4

G-5

G-6

G-7

G-8

G-9

G-10

G-11

G-12

G-13

G-14

G-15

G-16

G-17

G-18

G-19

G-20

G-21

G-22

G-23

G-24

G-25

G-26

G-27

G-28

G-29

G-30

G-31

G-32

G-33

G-34

G-35

G-36

G-37

G-38

G-39

G-40

TREATMENT BASIN NO. I

TREATMENT BASIN NO. II

SECTIONAL PLAN — ELEV. 788.00

EXISTING SETTLING BASIN

EXIST. COAGULATION BASIN ELEV. 783.50

NOTE

PERIMETER INSULATION SHALL BE PROVIDED TO 3'-0" BELOW GRADE ON EXTERIOR WALLS ON THE EAST & SOUTH WALLS OF CHEMICAL BUILDING AND WEST AND NORTH WALLS OF CHLORINE STORAGE ROOM

KEY PLAN

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	CHANGED OVERFLOW LOCATION	5/18/76	P.W.O.	G.G.N.
	Record Drawing	2-25-80	L.E.C.	M.L.H.

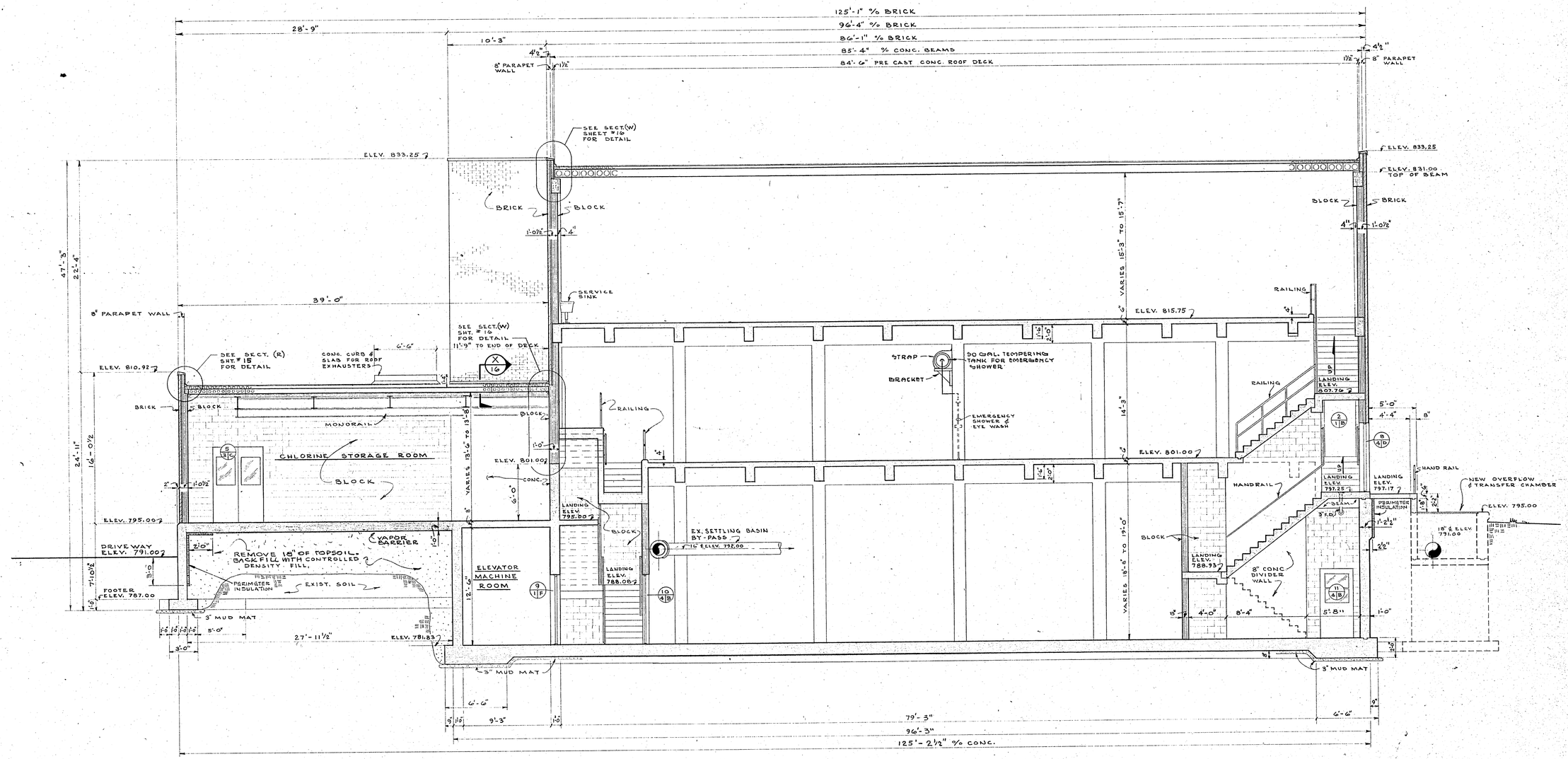
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/16" = 1'-0"
DESIGNED BY G. G. N.
DRAWN BY R. S. G.
CHECKED BY W. C. K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
9 OF 157

BRUNING 44-510



A
5, 6, 7, 8, 9

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	ADDED TEMP. TANK FOR EM. SHOWER	3/18/76	R.W.O.	G.G.N.
	Record Drawing	2-25-80	L.E.C.	M.L.H.

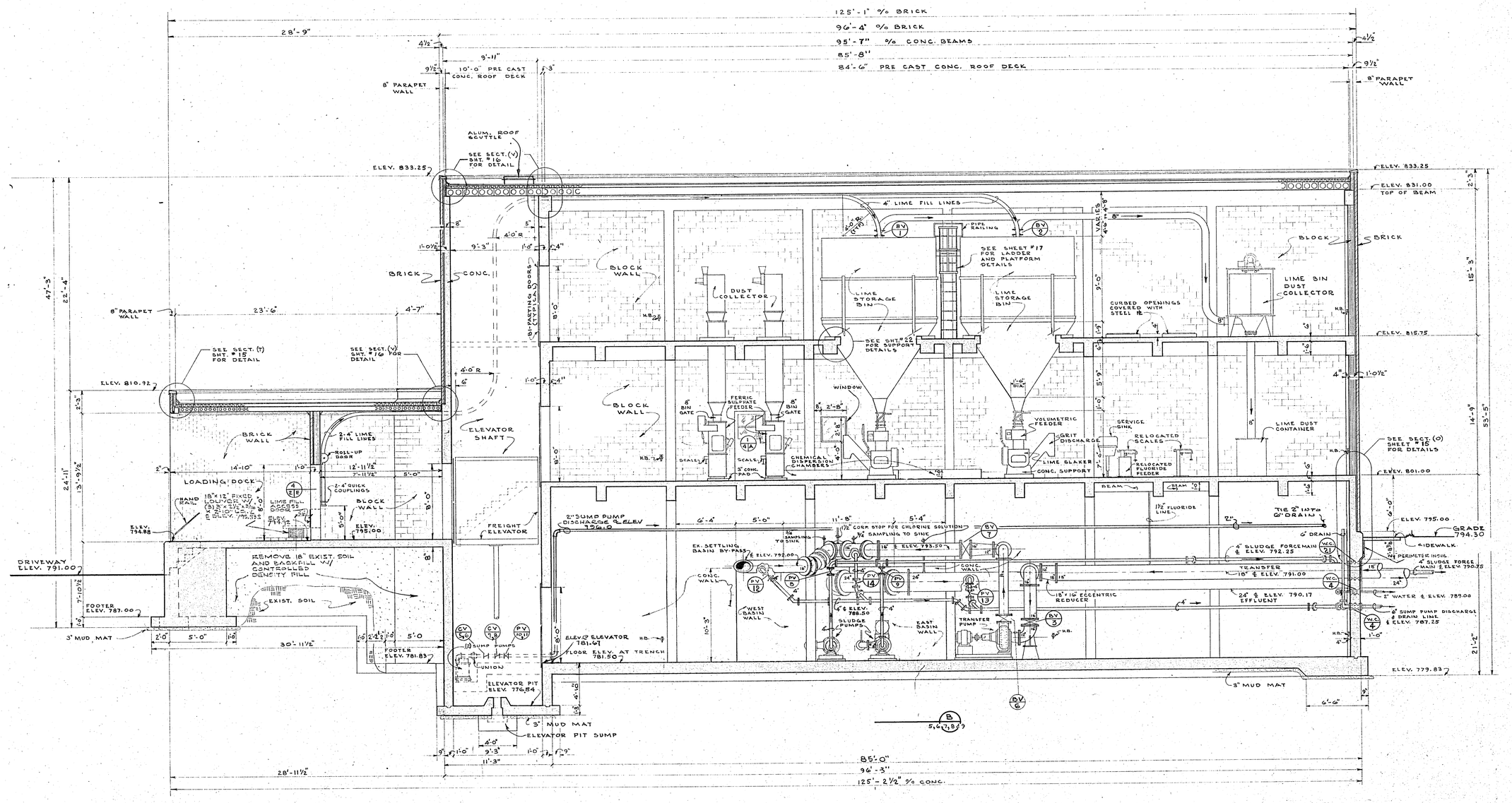
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/16" = 1'-0"
DESIGNED BY G. G. N.
DRAWN BY R. S. G.
CHECKED BY W. C. K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 JI
SECTION
DATE 10-20-75
10 OF 67

BRUNING 44-510



REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	PILASTER DIMENSION CHANGED	3/13/170	PWO	GGN
	Record Drawing	2-25-80	L.E.C.	MLH

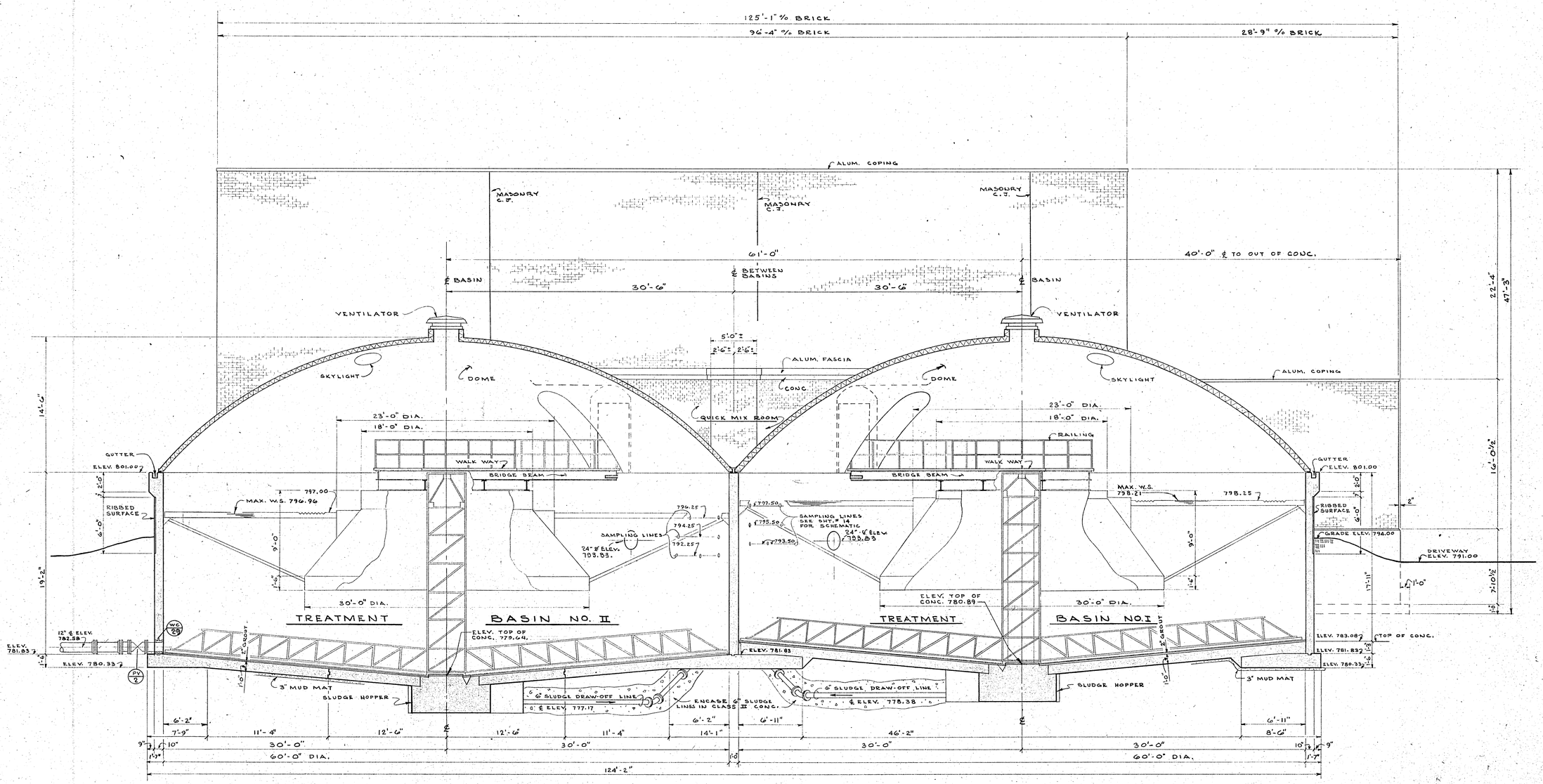
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/16" = 1'-0"
DESIGNED BY: G. G. N.
DRAWN BY: R. S. G.
CHECKED BY: W. C. K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
11 OF 67

BRUNING 44-510—



C 2,7,8,9

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	RAISED ELEV. OF 24" INFLUENT LINES	3/15/76	PWO	G.G.N.
	Record Drawing	2-25-80	L.E.C.	M.L.H.

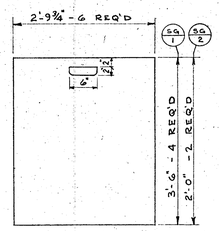
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING | ENGINEERS
TOLEDO, OHIO

SCALE 3/16" = 1'-0"
DESIGNED BY G. G. N.
DRAWN BY R. S. G.
CHECKED BY W. C. K.

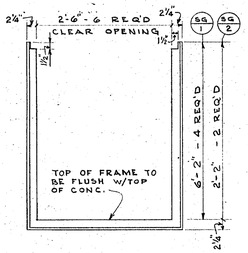
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
12 OF 67

BRUNING 44-511



ALUM. STOP GATE



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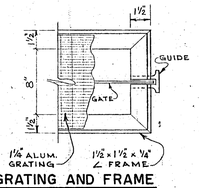
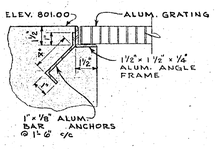
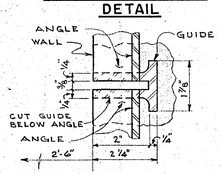


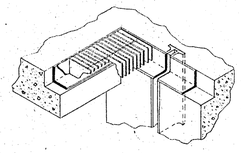
GRATING AND FRAME DETAIL



GRATING SUPPORT DETAIL



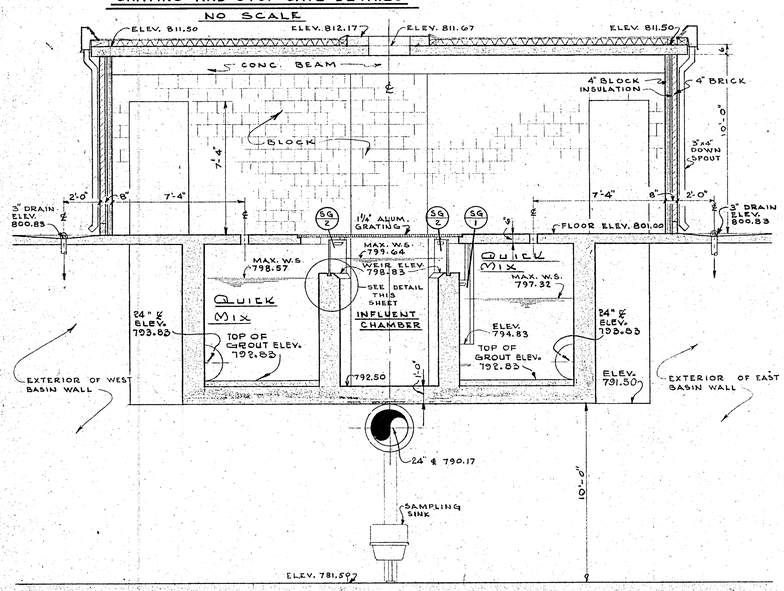
SECTION

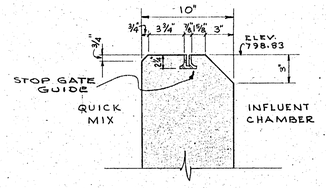


TYPICAL GRATING AND FRAME DETAIL

GRATING AND STOP GATE DETAILS

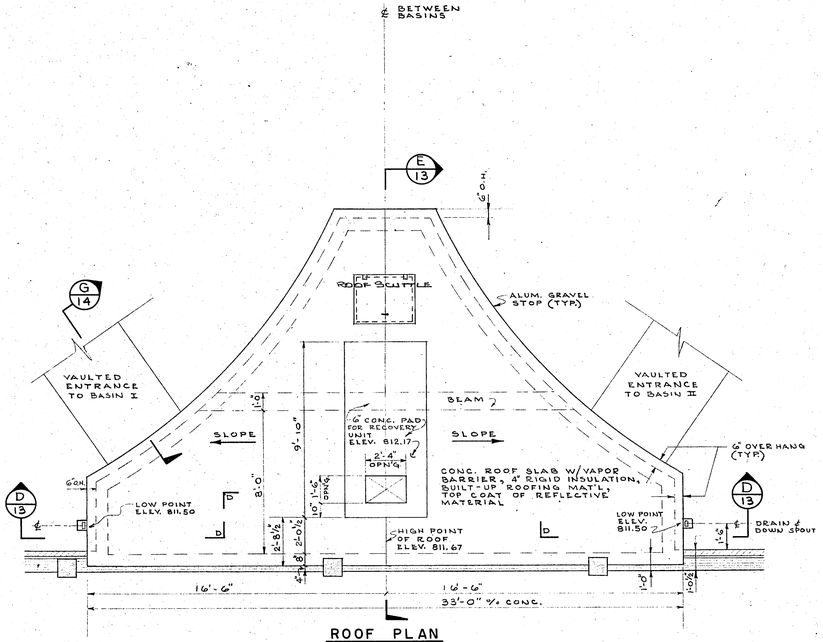
NO SCALE





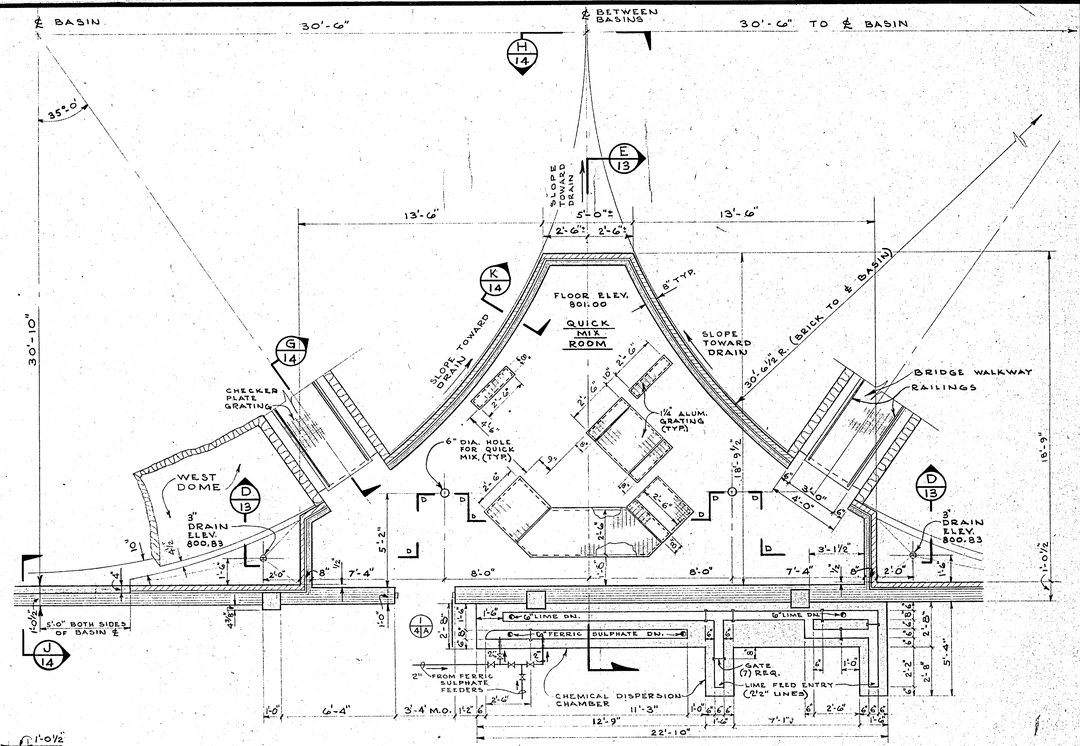
SECTION THRU WEIR WALL

SCALE: 1½" = 1'-0"



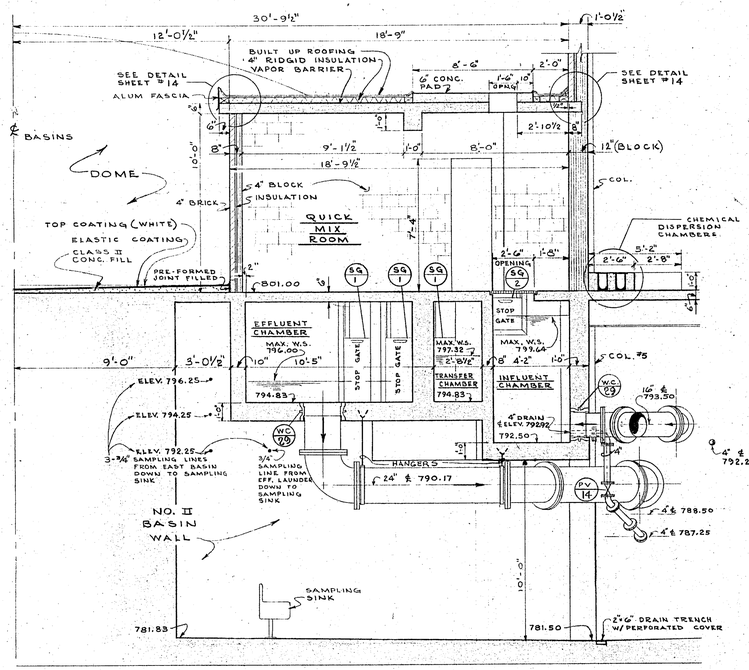
ROOF PLAN

SCALE: 1/4" = 1'-0"



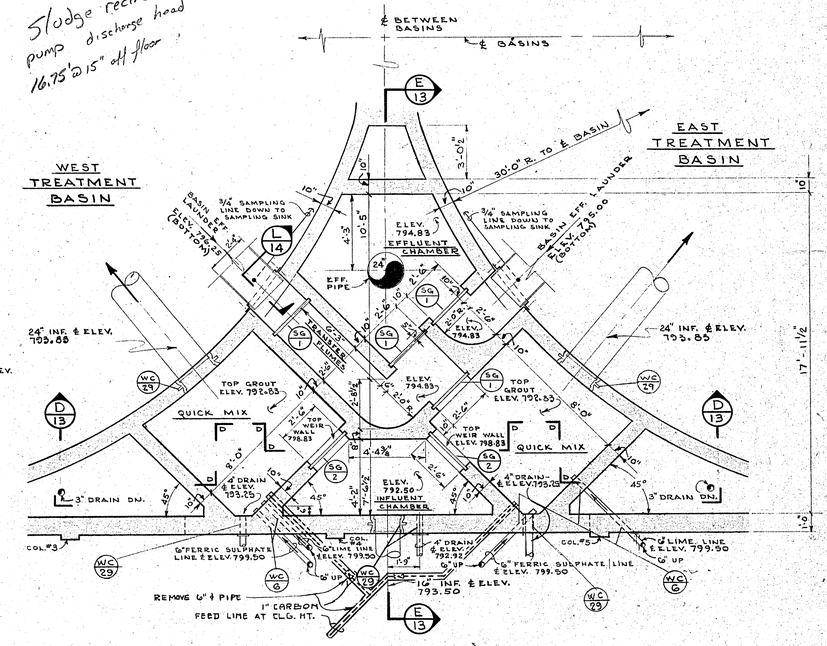
SECTIONAL PLAN – ELEV. 801.50

SCALE: 1/4" = 1'-0"



SCALE: 1/4" = 1'-0" (E 13)

Sludge recirculation pump discharge head 16.75' @ 15" off floor



SECTIONAL PLAN – ELEV. 800.00

SCALE: 1/4" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	Changed Size of Chem. Feed Lines	2/21/76	P.W.O.	G.G.N.
2.	Added Carbon Feed Line	3/1/76	P.W.O.	G.G.N.
3.	Changed Quick Mix Basin	3/15/76	P.W.O.	G.G.N.
	Record Drawing	2-26-80	L.E.C.	M.L.K.

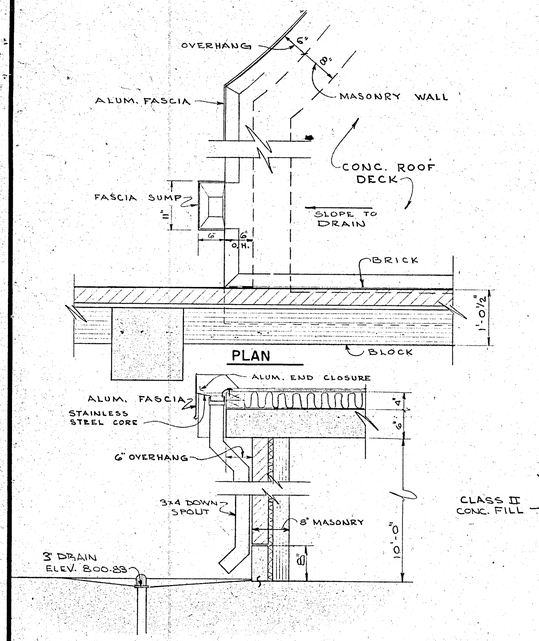
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: G. G. N.
DRAWN BY: R. S. G.
CHECKED BY: W. C. K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
13 OF 67

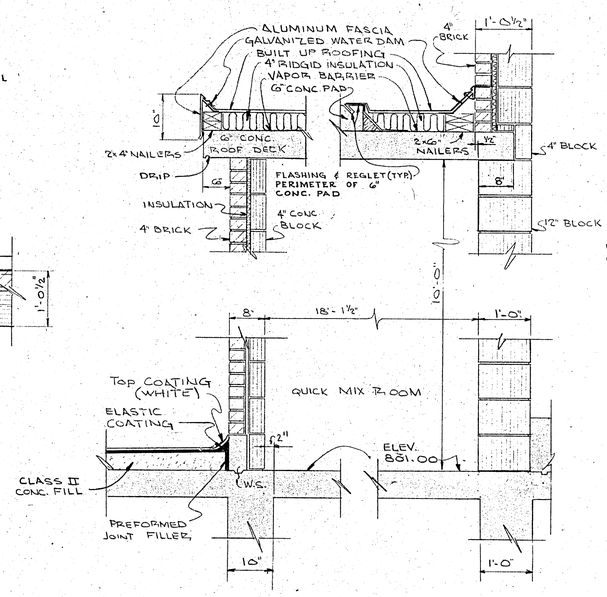
BRUNING 44-510—



DETAIL

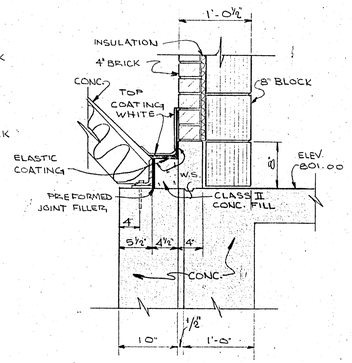
QUICK MIX ROOF DRAIN DETAILS

SCALE: 3/4" = 1'-0"

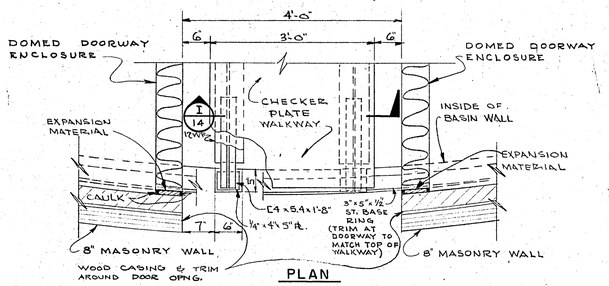


SECTION THRU QUICK MIX ROOM

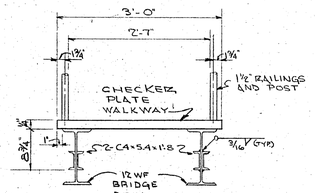
SCALE: 3/4" = 1'-0"



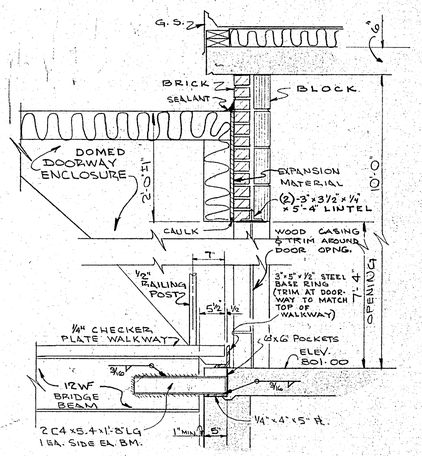
SCALE 1"=1'-0" (J 7,13)



PLAN



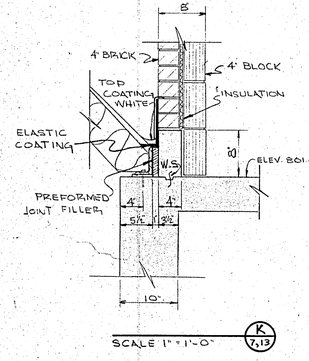
SCALE 3/4" = 1'-0" (I 14)



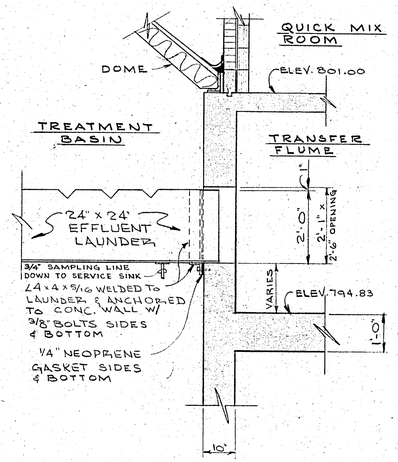
TYPICAL (2) BASINS (G 7,13)

SCALE 3/4" = 1'-0"

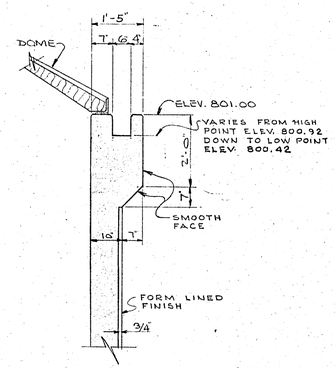
DOMED ENTRANCE DETAILS



SCALE 1"=1'-0" (K 7,13)



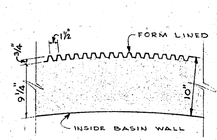
SCALE 1/2" = 1'-0" (L 8,13)



SECTION

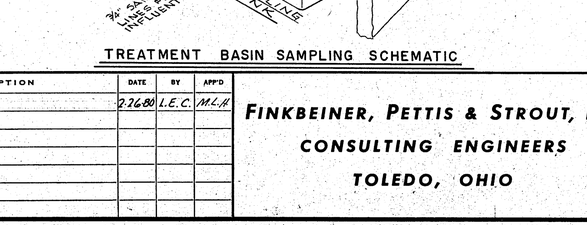
TREATMENT BASIN GUTTER DETAILS

SCALE 1/2"=1'-0"

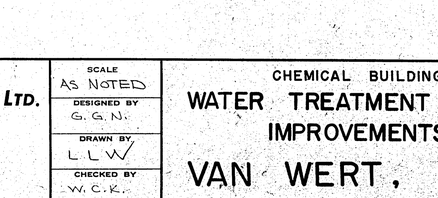


SECTION THRU FORM LINED WALL

SCALE 1"=1'-0"



SECTION

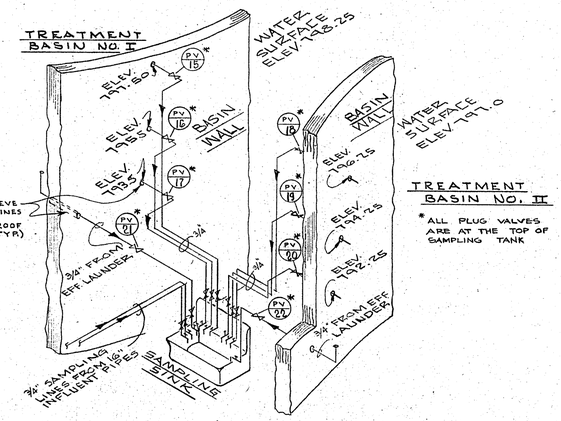


GUIDE DETAIL

GATE DETAIL

CHEMICAL DISPERSION CHAMBER DETAILS

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



TREATMENT BASIN SAMPLING SCHEMATIC

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2.26.80	L.E.C.	M.L.H.

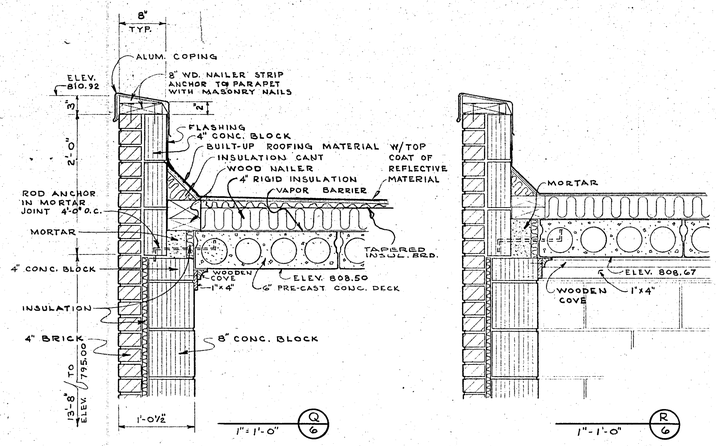
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

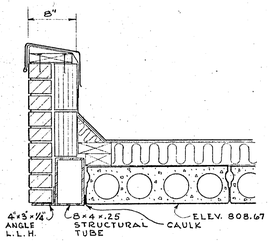
SCALE: AS NOTED
DESIGNED BY: G. G. N.
DRAWN BY: L L W
CHECKED BY: W. C. K.

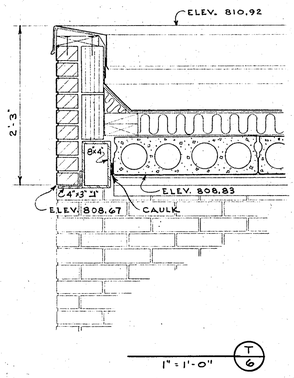
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

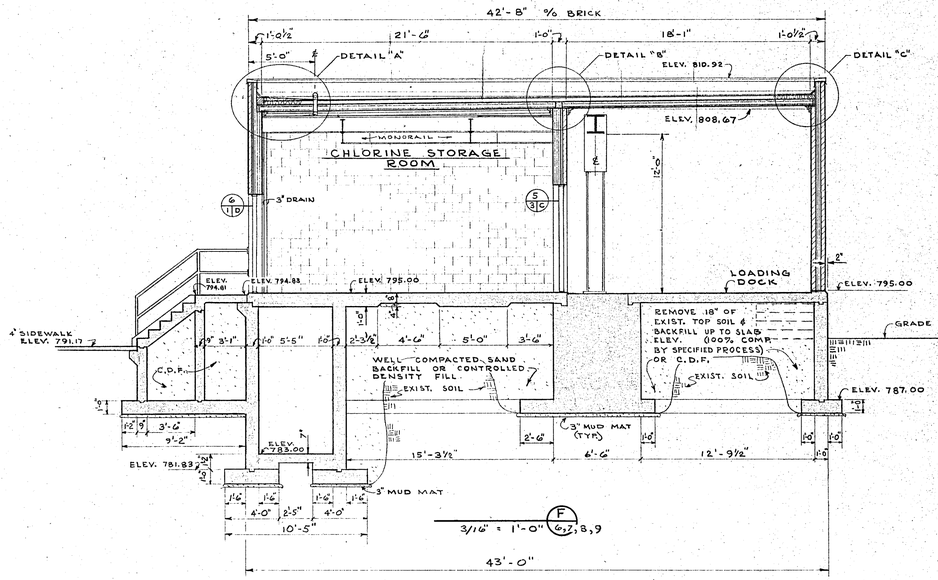
PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
14 OF 67

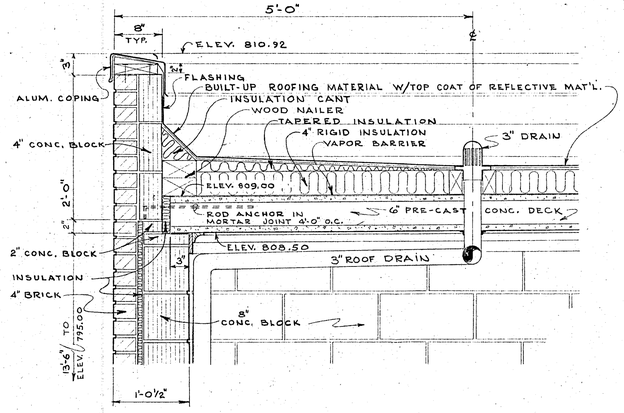
BRUNING 44-511—



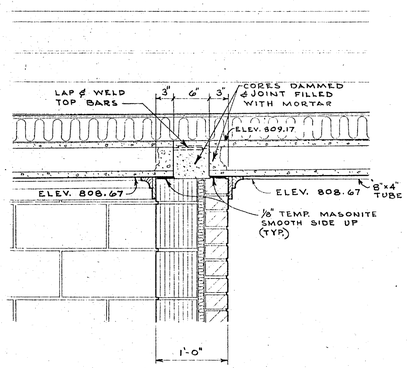




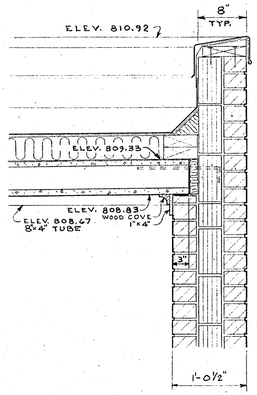




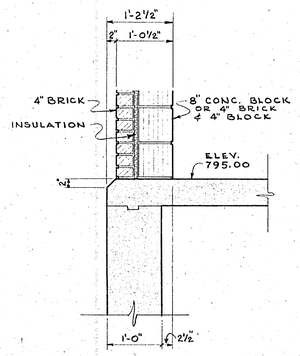
DETAIL "A"
1" = 1'-0"

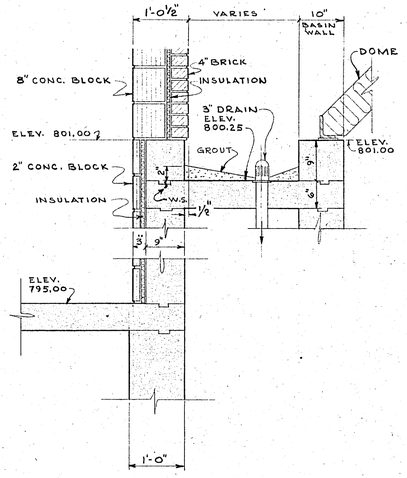


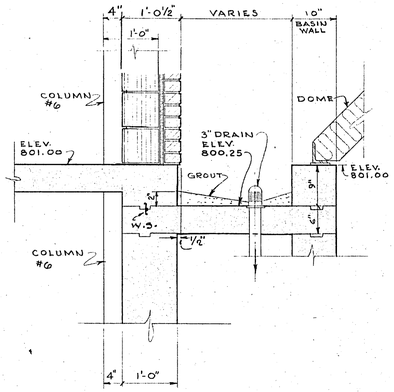
DETAIL "B"
1" = 1'-0"

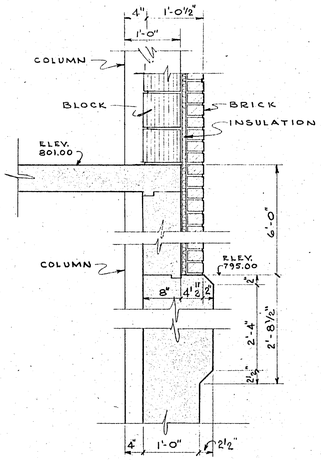


DETAIL "C"
1" = 1'-0"









REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2260	L.E.C.	M.L.H.

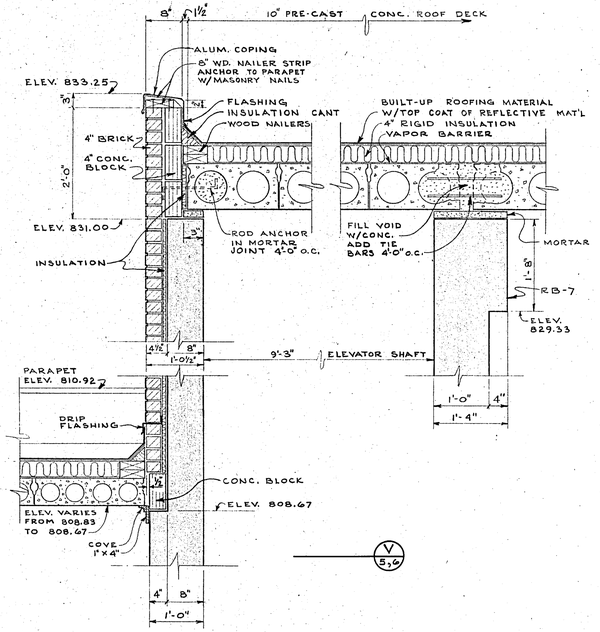
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	G. G. N.
DRAWN BY	R. S. G.
CHECKED BY	W. C. K.

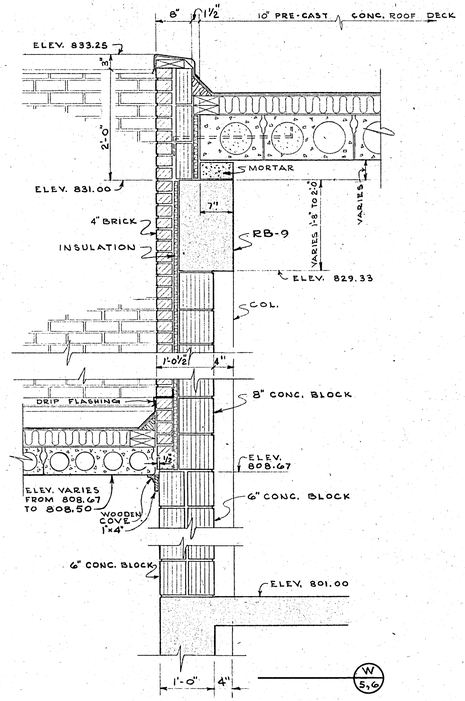
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	15 OF 17

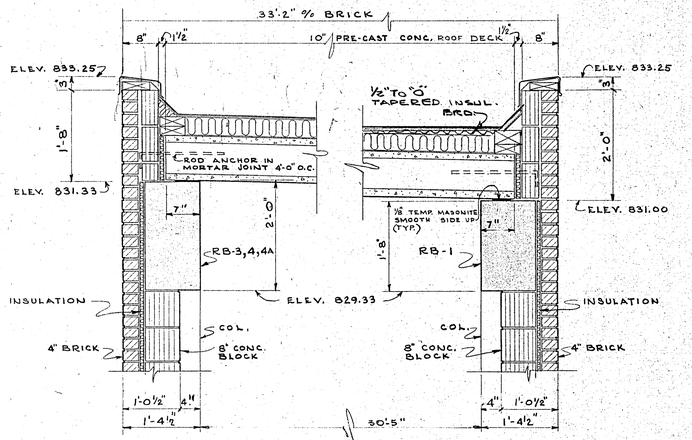
BRUNING 44-510



V
5,6

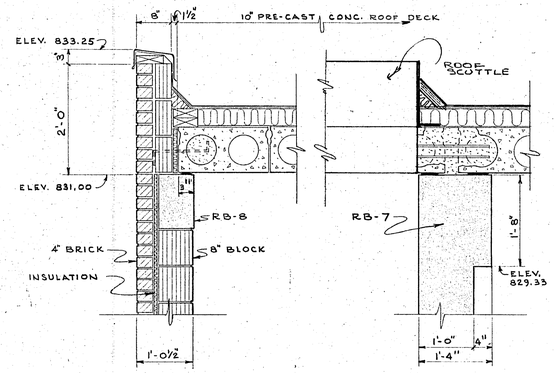


W
5,6

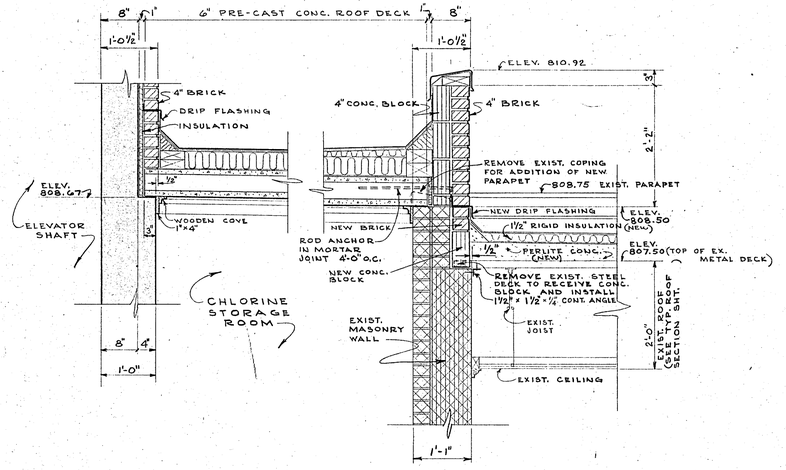


B-B
5

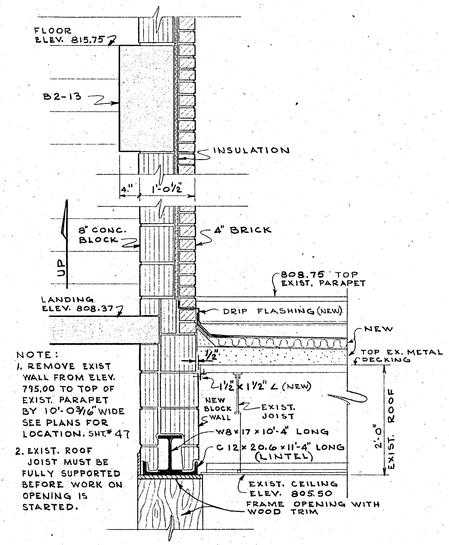
C-C
5



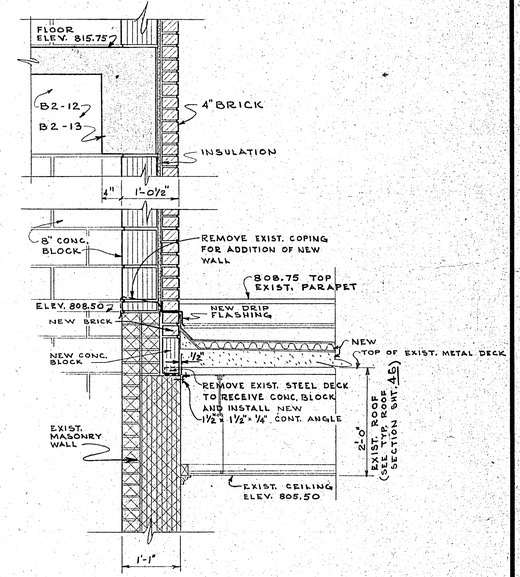
A-A
5



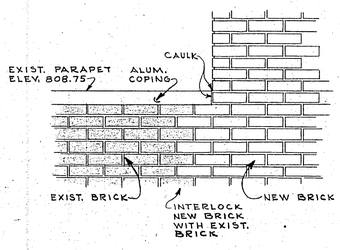
X
6,7,10



Y
6,7



Z
6,7



DETAIL "D"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.L.K.

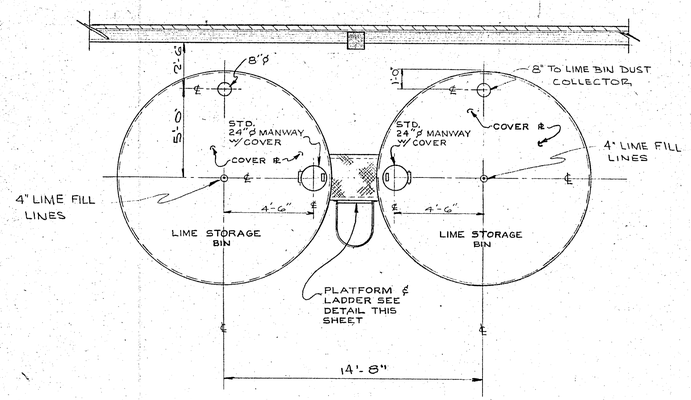
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/4" = 1'-0"
DESIGNED BY G. G. N.
DRAWN BY R. S. G.
CHECKED BY W. C. K.

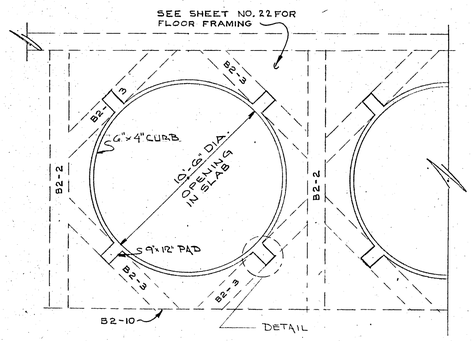
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 JI
SECTION
DATE 10-20-75
16 OF 167

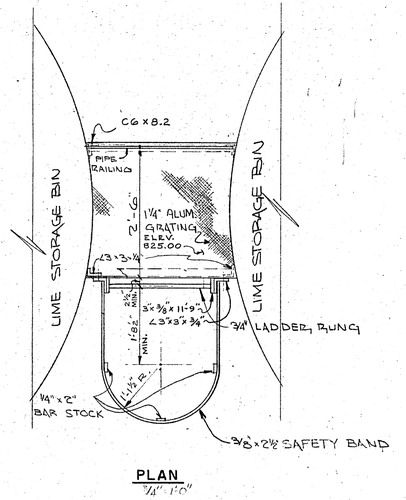
BRUNING 44-511



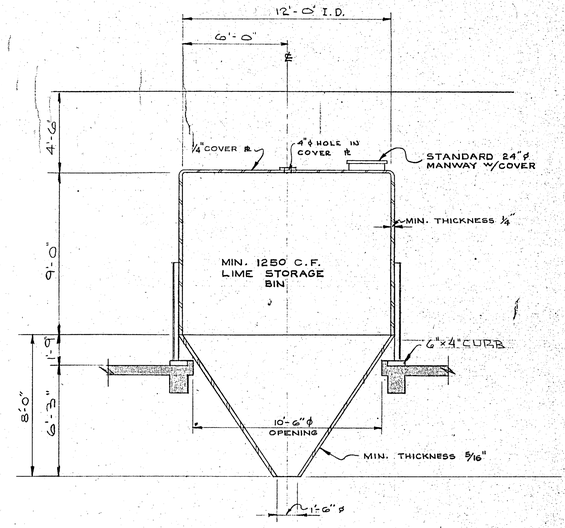
TOP PLAN
1/4" = 1'-0"



PLAN AT FLOOR
1/4" = 1'-0"



PLAN
1/4" = 1'-0"

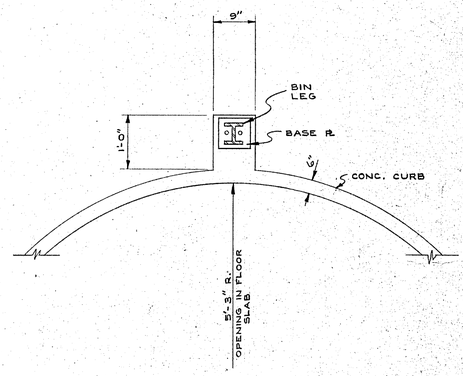


SECTION
1/4" = 1'-0"

DETAIL
3/4" = 1'-0"

SECTION
3/8" = 1'-0"

PLATFORM AND LADDER DETAILS



PARTIAL SECTIONAL PLAN ELEV. 816.25
3/4" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.L.H.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: DLC
DRAWN BY: LLW
CHECKED BY: W.C.K.

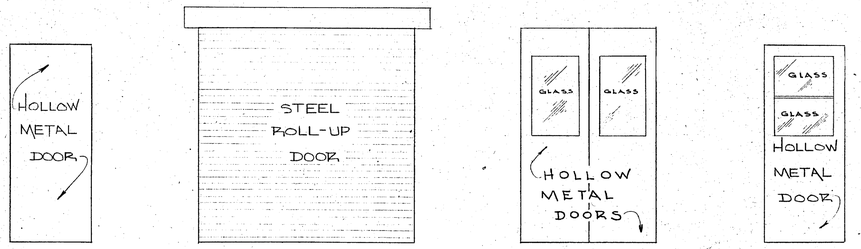
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
17 OF 67

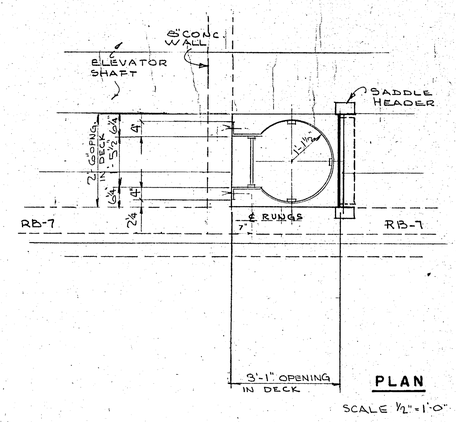
BRUNING 44-511

DOOR SCHEDULE

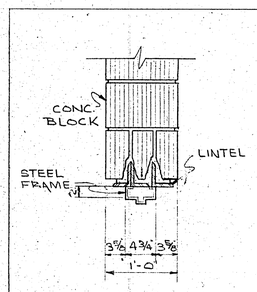
DR. NO.	SIZE	THICK	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	FRAME MATERIAL	MASONRY OPENING	REMARKS	*LINTELS * L.L.V. UNLESS NOTED
1	3'-0"x7'-2"	1 3/4"	4	HM	A	HM	3'-4"x7'-4"		3"x3½"x¼"x4'-8" LLV
2	2'-8"x7'-2"	1 3/4"	1	HM	B	HM	3'-0"x7'-4"		3"x3½"x¼"x4'-8" L
3	3'-0"x7'-2"	1 3/4"	1	HM	C	HM	3'-4"x7'-4"		3"x3½" x ¼"x4'-8" LLV
4	8'-0"x8'-0"	1 3/4"	2	STEEL	E	STEEL	8'-0"x8'-0"	20 GA. GALV. #5 SLOT CURTAIN	SEE DETAIL BELOW
5	2'-6"x8'-0"	1 3/4"	3	HM	C	HM	5'-4"x8'-2"		3"x3½"x¼" x 6'-8" LLV
6	3'-0"x7'-2"	1 3/4"	1	HM	D	HM	3'-4"x7'-4"		3"x3½"x¼"x4'-8" LLV
7	3'-0"x7'-2"	1 3/4"	4	HM	H	HM	3'-4"x7'-4"	12" x 12" LOUVER	NONE REQUIRED
8	3'-0"x7'-2"	1 3/4"	4	HM	D	HM	3'-4"x7'-4"		3"x3½"x¼"x4'-8" LLV
9	3'-0"x7'-2"	1 3/4"	1	HM	F	HM	3'-4"x7'-4"		NONE REQUIRED
10	3'-0"x7'-2"	1 3/4"	4	HM	B	HM	3'-4"x7'-4"	12" x 12" LOUVER	3"x3½"x¼"x4'-8" LL
11	3'-0"x7'-2"	1 3/4"	4	HM	B	HM	3'-4"x7'-4"		3"x3½"x¼"x4'-8" LL



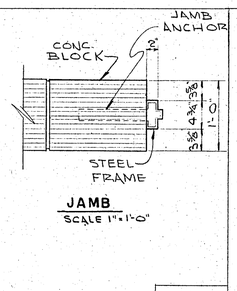
DOOR TYPES
SCALE 3/8" = 1'-0"



PLAN
SCALE ½" = 1'-0"

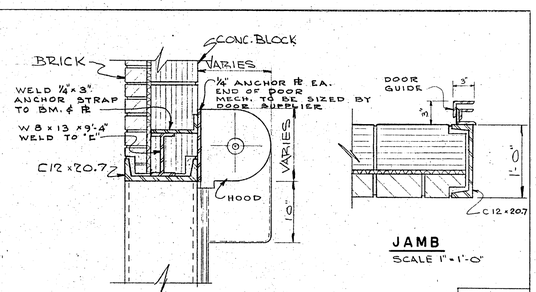


HEAD
SCALE 1"=1'-0"



JAMB
SCALE 1"=1'-0"

A



HEAD
SCALE 1"=1'-0"

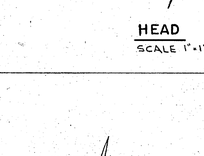
JAMB
SCALE 1"=1'-0"

E

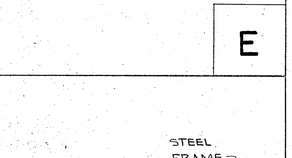
HEAD
SCALE 1"=1'-0"

JAMB
SCALE 1"=1'-0"

B

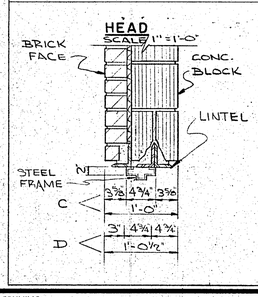


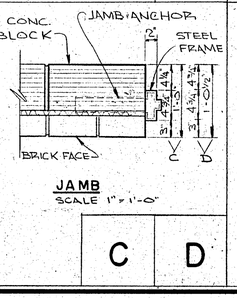
HEAD
SCALE 1"=1'-0"



JAMB
SCALE 1"=1'-0"

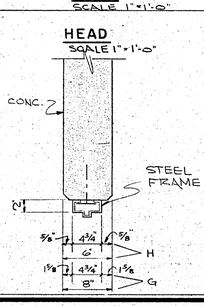
F

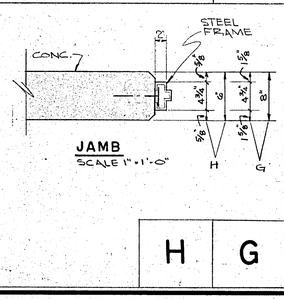




JAMB
SCALE 1"=1'-0"

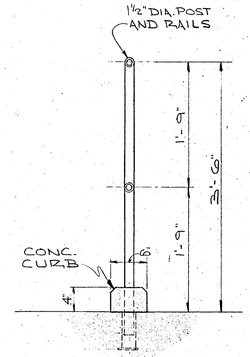
C D



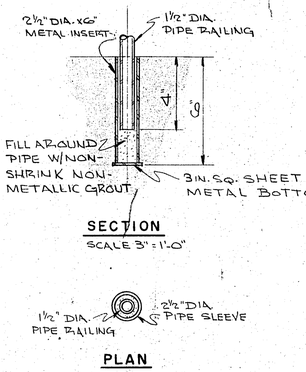


JAMB
SCALE 1"=1'-0"

H G

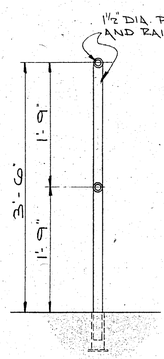


RAILING IN CURB
SCALE 1"=1'-0"



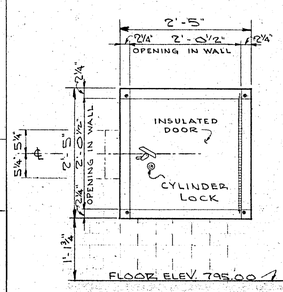
SECTION
SCALE 3" = 1'-0"

PLAN

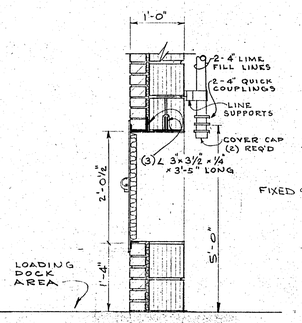


RAILING IN SLAB
SCALE 1"=1'-0"

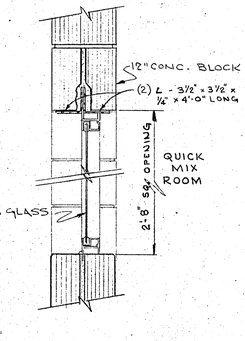
RAILING DETAILS



ELEVATION

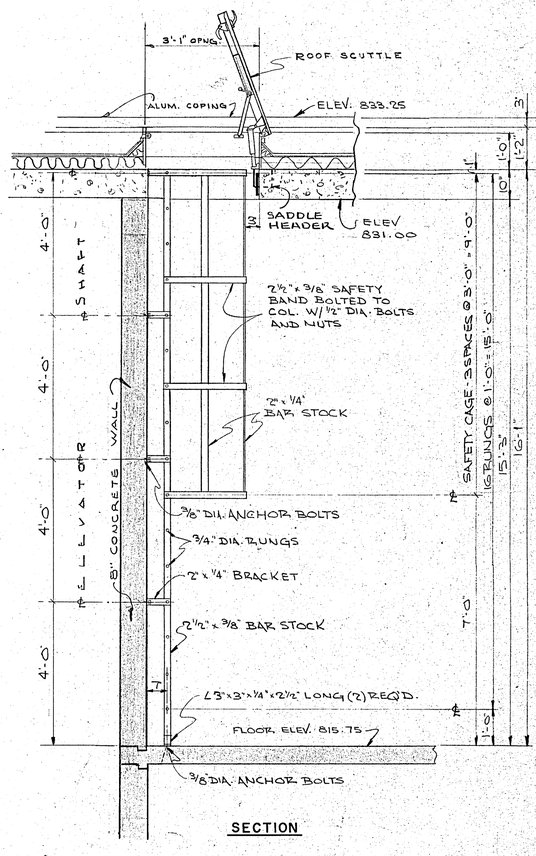


SECTION



WINDOW DETAIL
SCALE: 1"=1'-0"

LIME FILL ACCESS DOOR DETAILS
SCALE: 3/8" = 1'-0"



SECTION

LADDER DETAIL
SCALE ½" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.L.N.

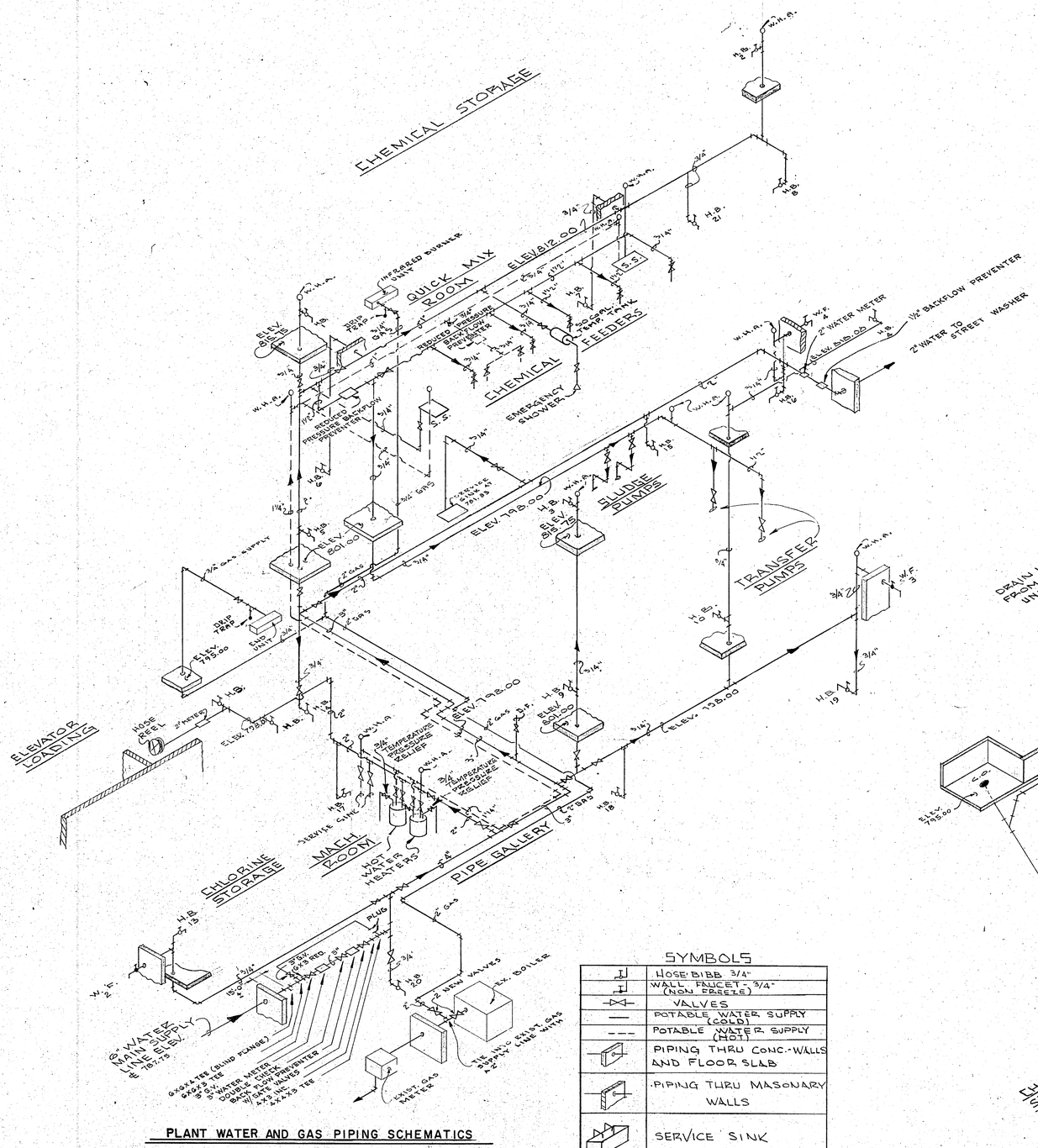
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: G.G.N.
DRAWN BY: L.L.W.
CHECKED BY: W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
18 OF 67

BRUNING 44-511



PLANT WATER AND GAS PIPING SCHEMATICS

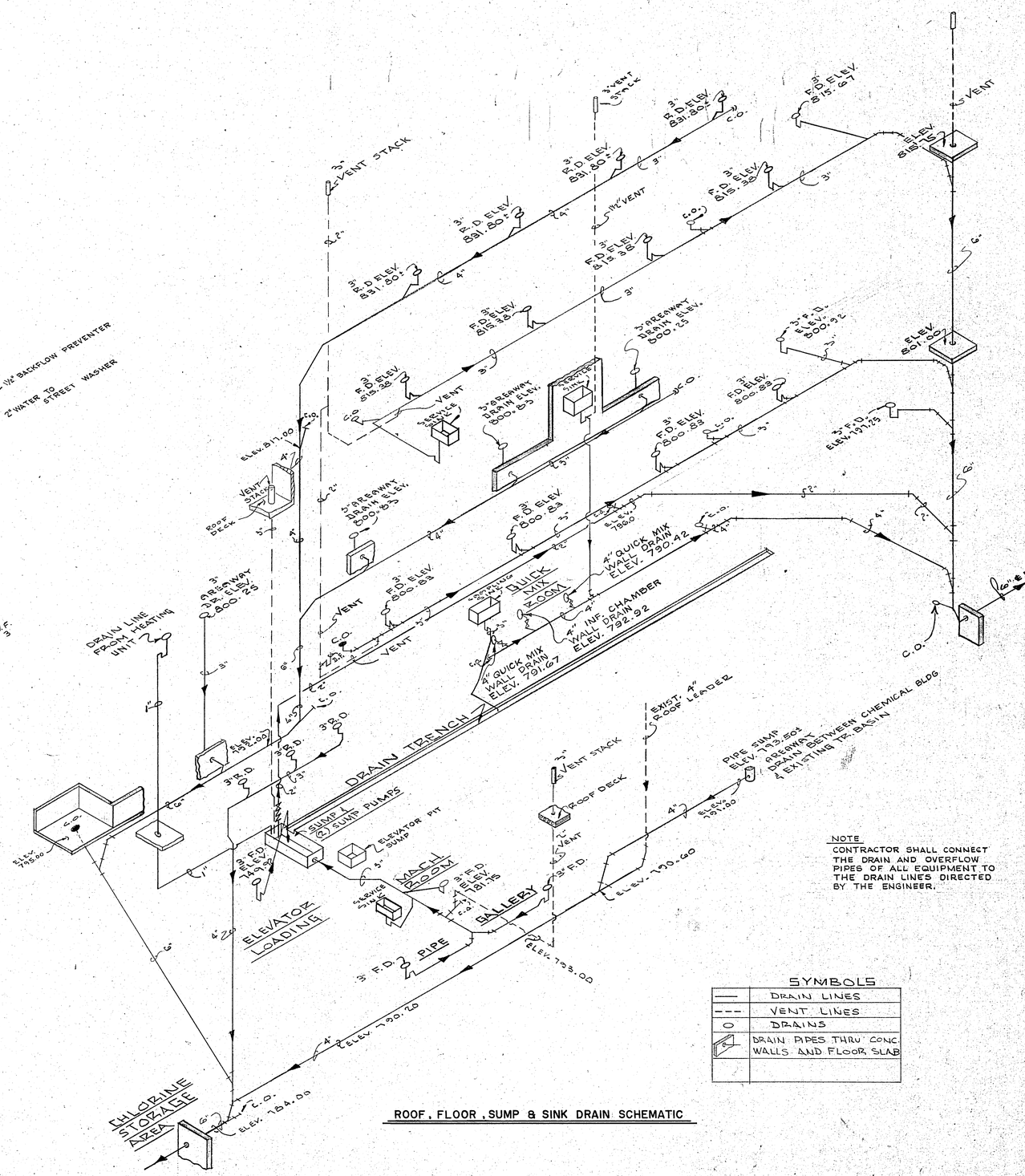
SYMBOLS

	HOSE BIBB 3/4"
	WALL FAUCET - 3/4" (NON FREEZE)
	VALVES
	POTABLE WATER SUPPLY (COLD)
	POTABLE WATER SUPPLY (HOT)
	PIPING THRU CONC.-WALLS AND FLOOR SLAB
	PIPING THRU MASONARY WALLS
	SERVICE SINK
W.H.A.	WATER HAMMER ARRESTOR

21 - HOSE BIBBS REQUIRED
4 - WALL FAUCETS REQUIRED

NUMBER OF VALVES & FITTINGS AS REQUIRED BY CODE

NOTE: ALL HOSE BIBBS AND WATER FAUCETS TO BE SET AT 2'-6" ABOVE FLOOR OR GRADE.



ROOF, FLOOR, SUMP & SINK DRAIN SCHEMATIC

SYMBOLS

	DRAIN LINES
- - -	VENT LINES
O	DRAINS
	DRAIN PIPES THRU CONC. WALLS AND FLOOR SLAB

NOTE
CONTRACTOR SHALL CONNECT THE DRAIN AND OVERFLOW PIPES OF ALL EQUIPMENT TO THE DRAIN LINES DIRECTED BY THE ENGINEER.

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	Added Temp. Tank for Emer. Shower	5/9/76	PWO	GGN
	Record Drawing	2-26-80	LEC.	M.J.M.

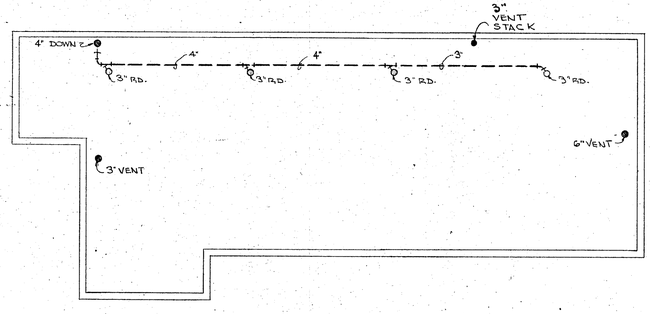
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: NO SCALE
DESIGNED BY: M. J. M.
DRAWN BY: L. L. W.
CHECKED BY: W. C. K.

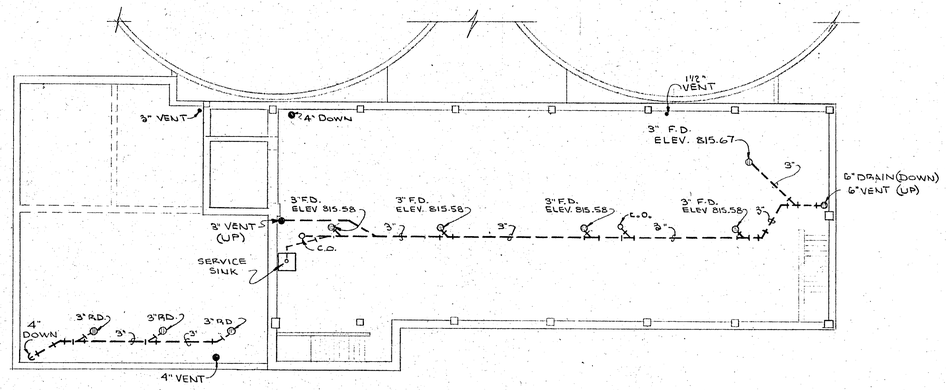
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
19 OF 67

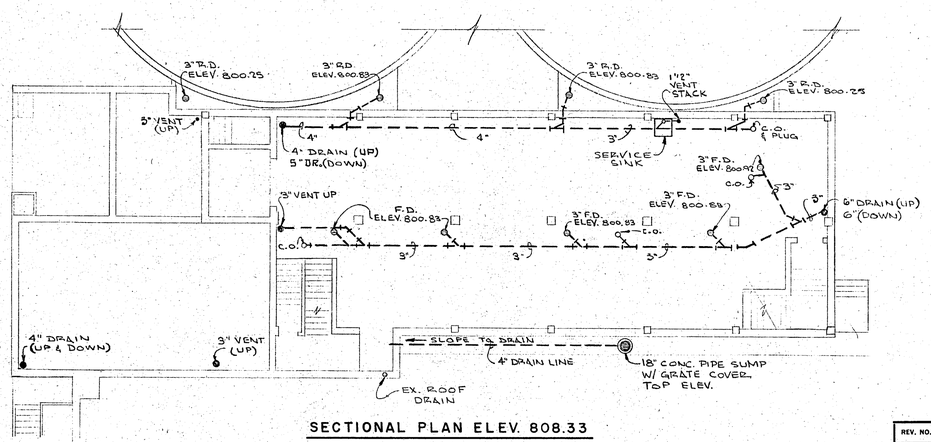
BRUNING 44-511



ROOF PLAN



SECTIONAL PLAN ELEV. 829.00



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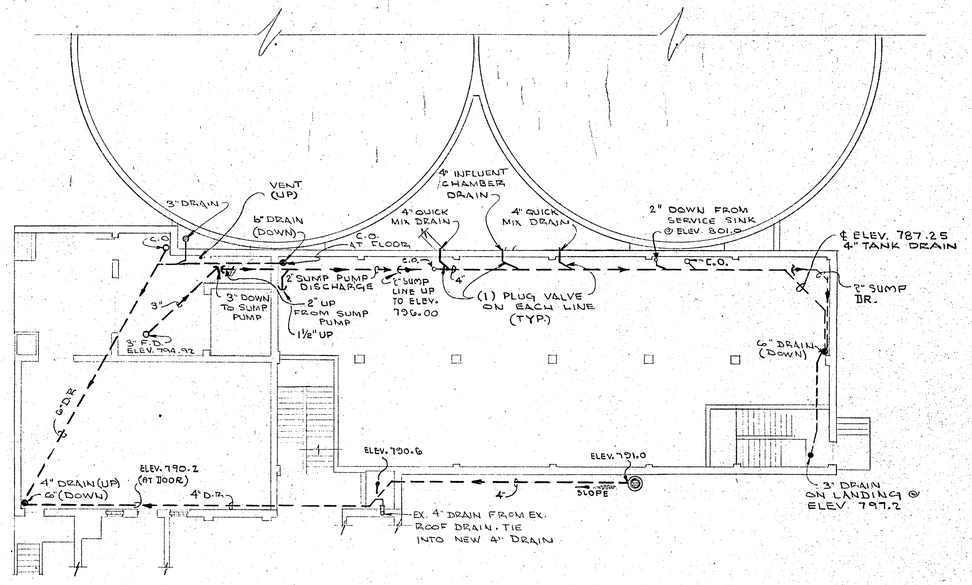
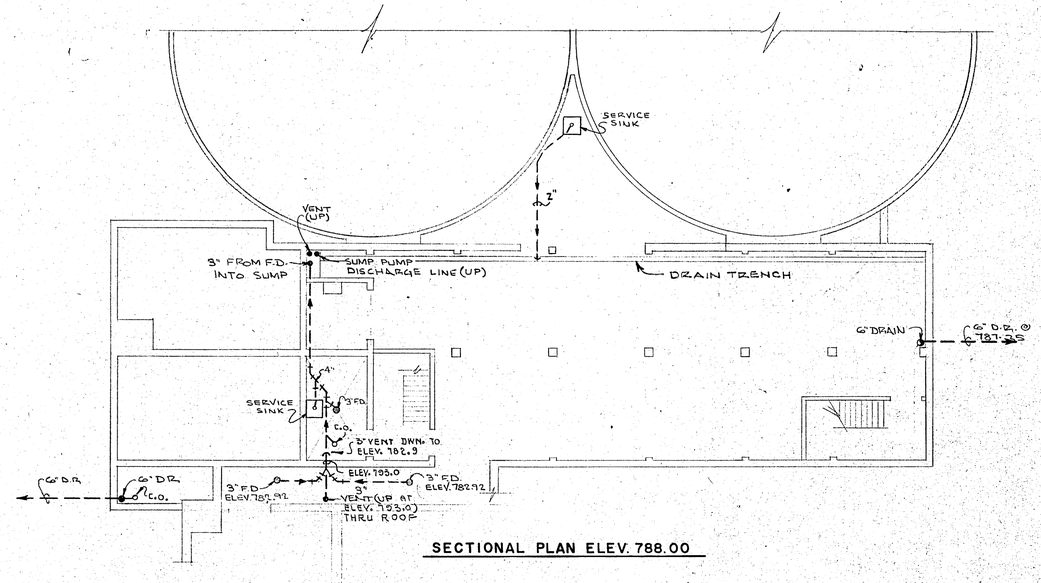


SECTIONAL PLAN ELEV. 797.00



SECTIONAL PLAN ELEV. 788.00

ROOF AND FLOOR DRAIN LAYOUT

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-6-80	L.E.C.	M.L.W.

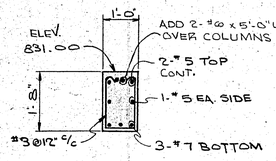
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: NO SCALE
DESIGNED BY: M J M
DRAWN BY: L L W
CHECKED BY: G.G.N. W.C.K.

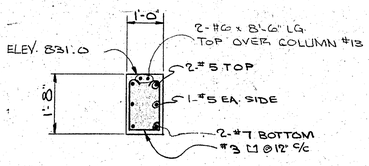
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
20 OF 67

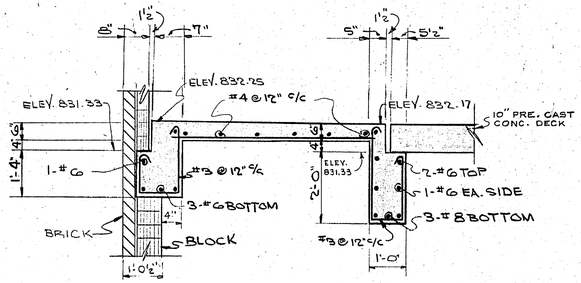
BRUNING 44-511



RB-1
1/2" = 1'-0"

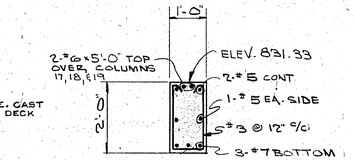


RB-2
1/2" = 1'-0"

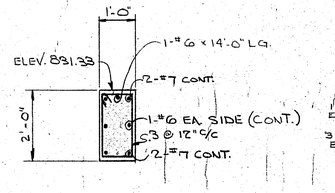


RB-6
1/2" = 1'-0"

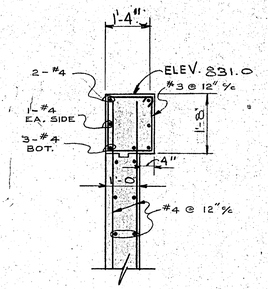
RB-4
1/2" = 1'-0"



RB-3
1/2" = 1'-0"



RB-5
1/2" = 1'-0"



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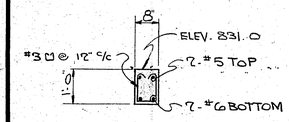
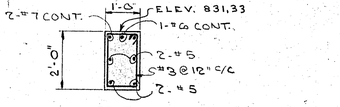
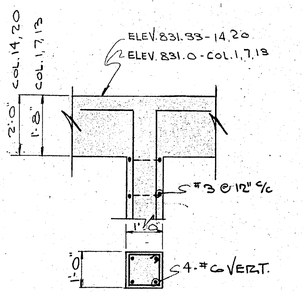
1/2" = 1'-0"

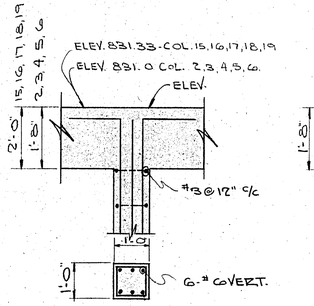


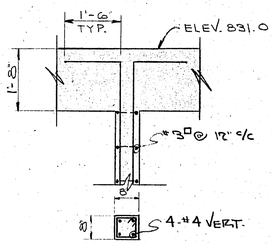
RB-8
1/2" = 1'-0"

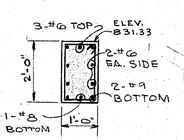


RB-5A
SCALE 1/2" = 1'-0"

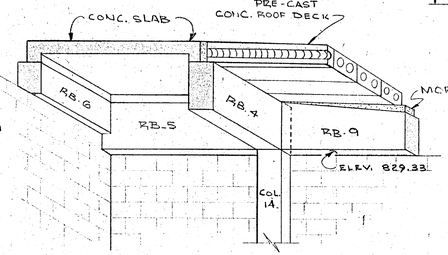




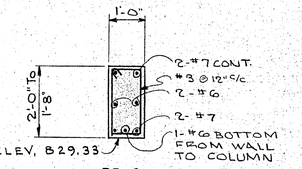




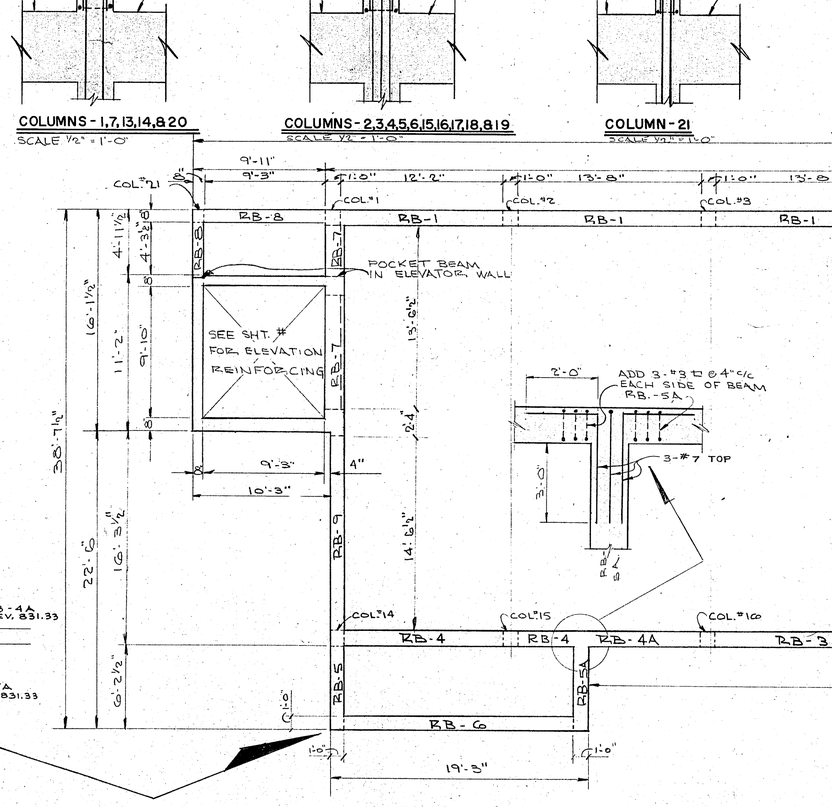
RB-4A
SCALE 1/2" = 1'-0"



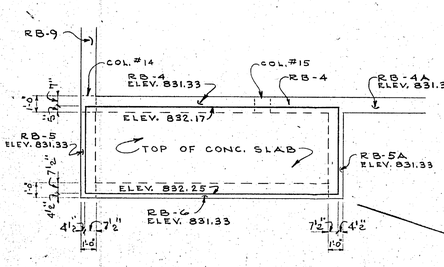
S.W. CORNER VIEW
NO SCALE



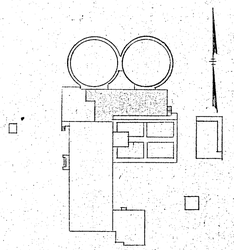
RB-9
SCALE 1/2" = 1'-0"



ROOF BEAM PLAN
SCALE 3/16" = 1'-0"



CONC. SLAB DETAIL
SCALE: 3/16" = 1'-0"



KEY PLAN

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	22680	L.E.C.	M.L.H.

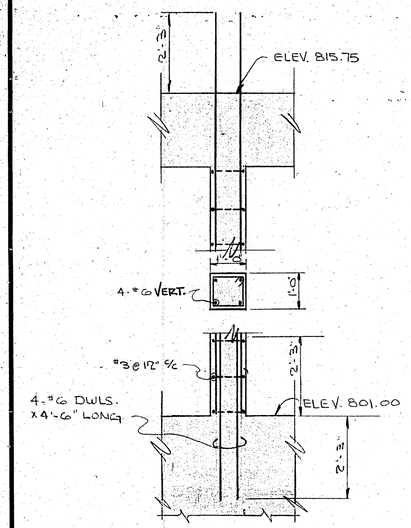
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: D.L.C.
DRAWN BY: L.L.W.
CHECKED BY: G.G.N. W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

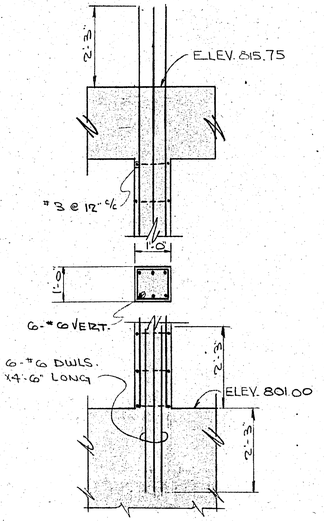
PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
21 OF 67

BRUNING 44-511



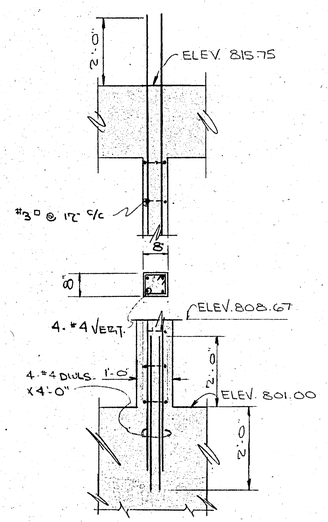
COLUMNS-1,7,13,14,&20

SCALE 1/2" = 1'-0"



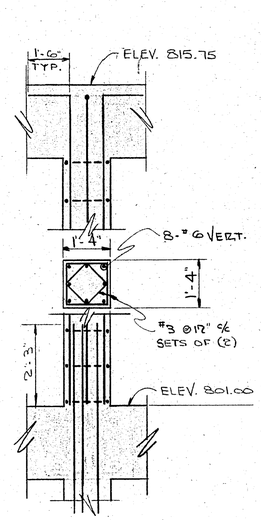
COLUMNS-2,3,4,5,6,15,16,17,18,&19

SCALE 1/2" = 1'-0"



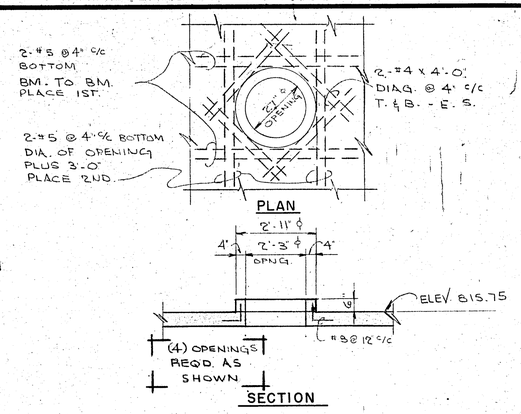
COLUMN-21

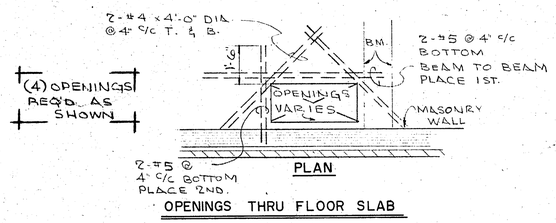
SCALE 1/2" = 1'-0"



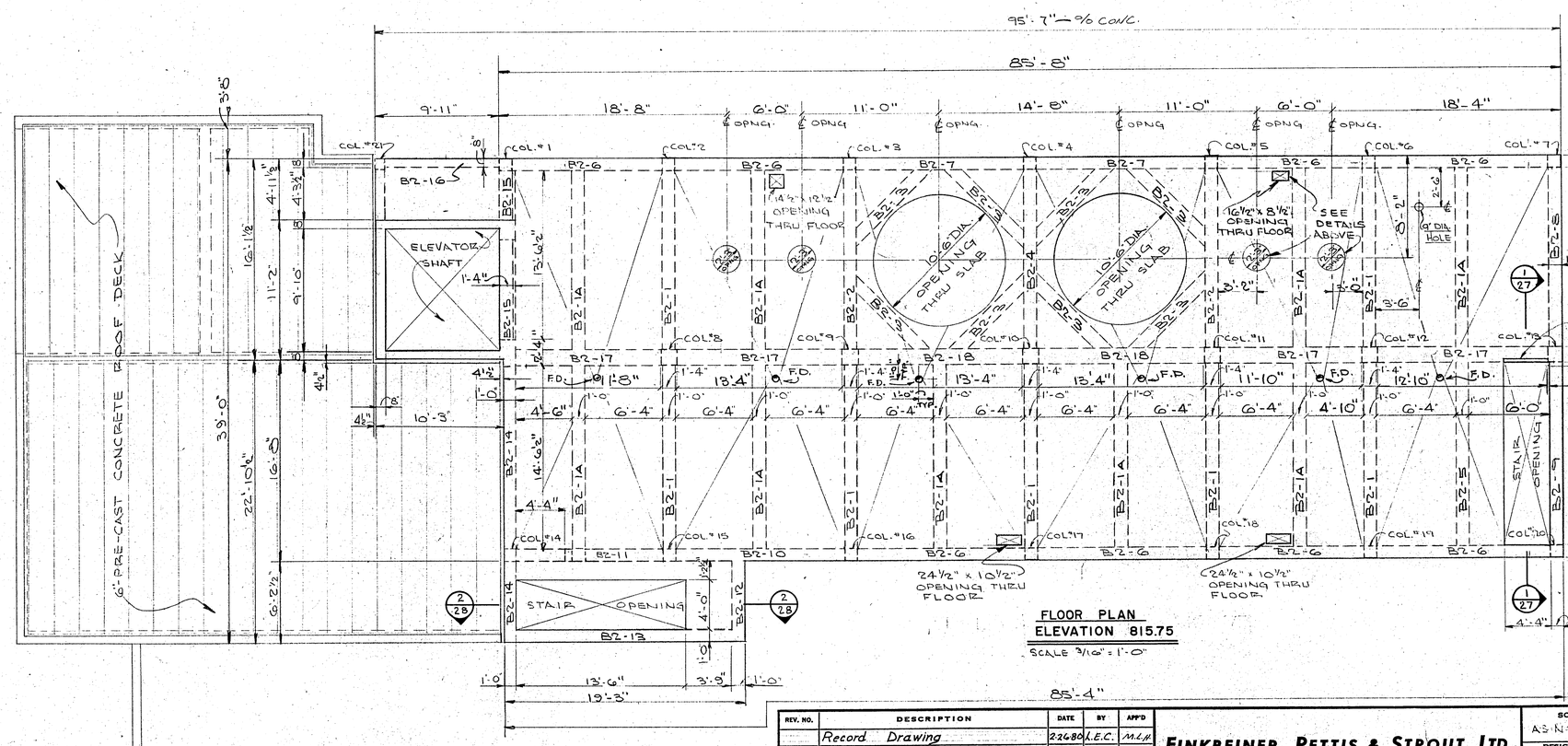
COLUMNS-8,9,10,11,&12

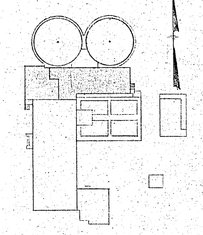
SCALE 1/2" = 1'-0"





OPENINGS THRU FLOOR SLAB





REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.L.H.

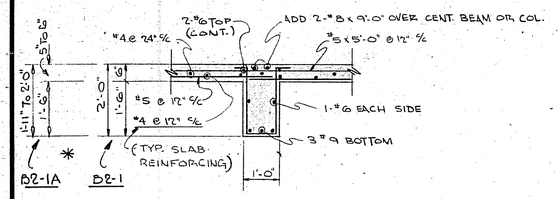
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: D. L. C.
DRAWN BY: L. L. W.
CHECKED BY: G. G. N. W. C. K.

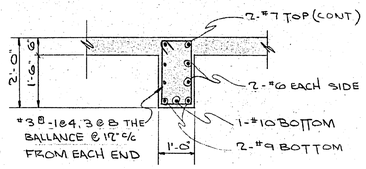
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
22 OF 67

BRUNING 44-510



B2-1 & B2-1A



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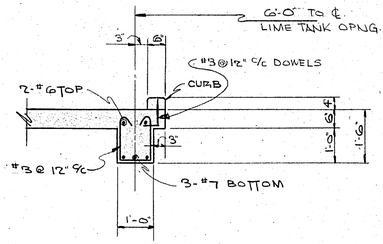

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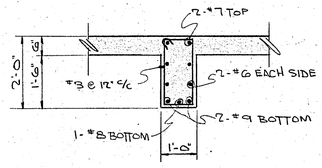

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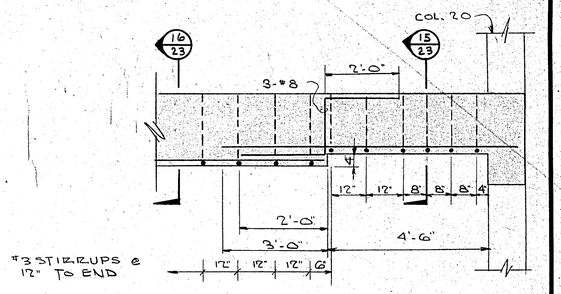
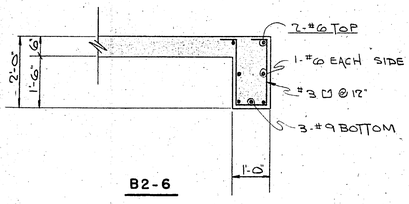


ELEVATION



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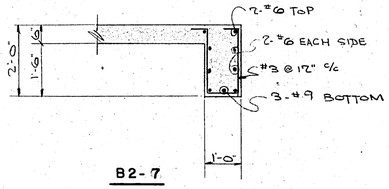

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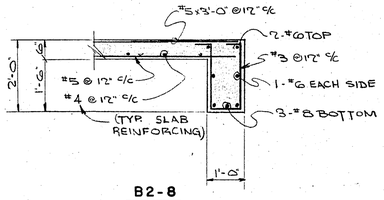

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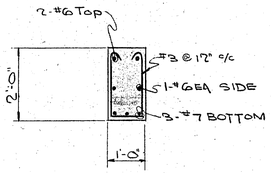

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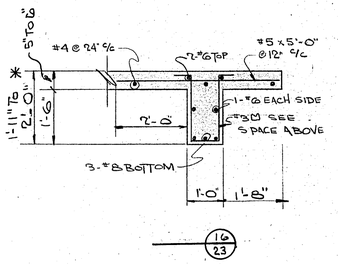
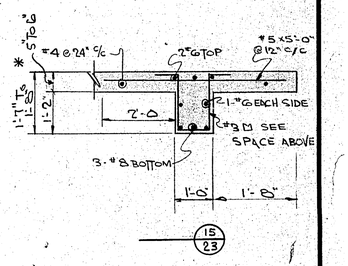
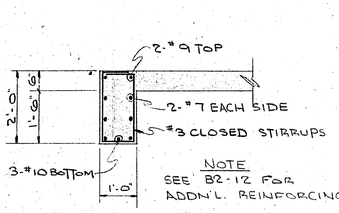


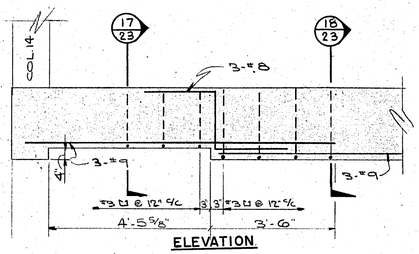


B2-5



NOTE
SEE B2-12 FOR ADDN'L. REINFORCING

B2-10



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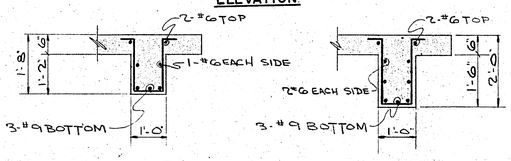
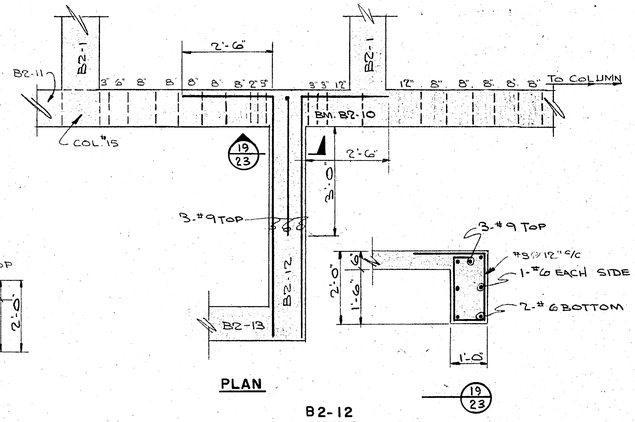
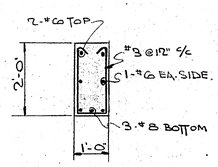


17/23 B2-11 18/23

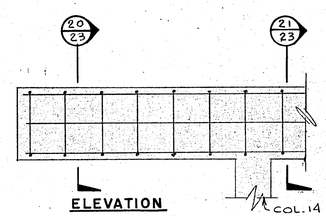


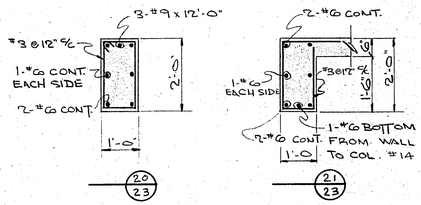
PLAN

B2-12

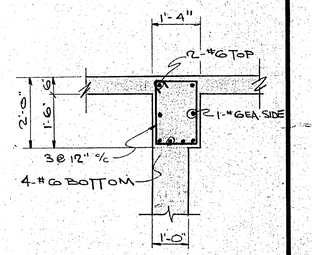


B2-13





B2-14



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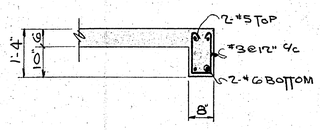
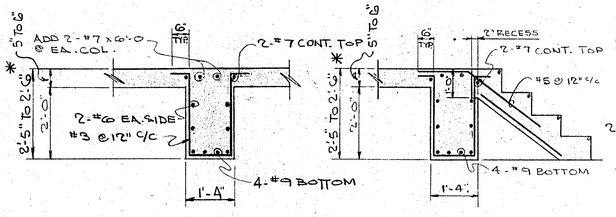


B2-16



B2-17 B2-18

* 1" SLOPE TO FLOOR DRAINS - SEE SHEET NO. 72
TOP OF ALL FL. DRAINS ELEV. 815.67

NOTE: HIGH POINT OF ALL CONCRETE IS AT ELEVATION 815.75

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.C.H.

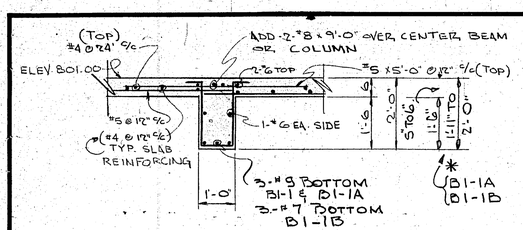
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 1/2" = 1'-0"
DESIGNED BY D L C
DRAWN BY L L W
CHECKED BY G.G.N. W.C.K.

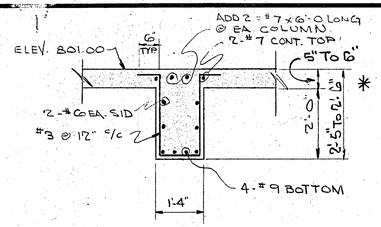
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
23 OF 67

BRUNING 44-510—



B1-1, B1-1A & B1-1B



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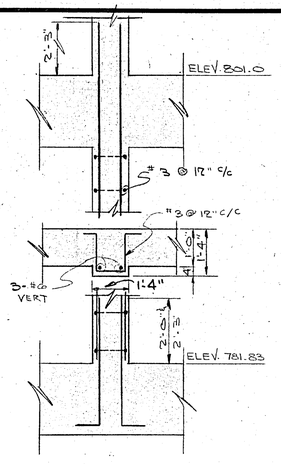
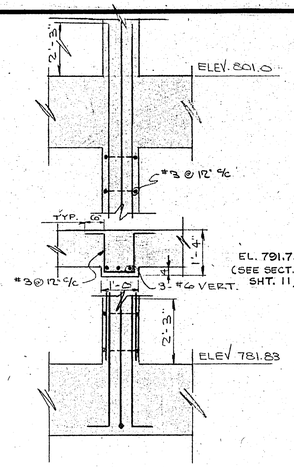


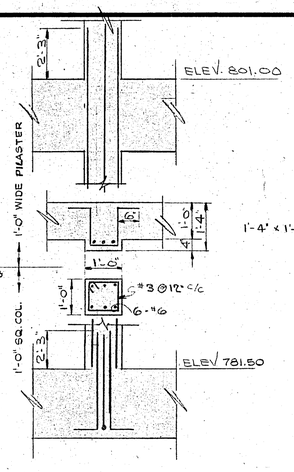
COLUMNS-13 & 14

SCALE 1/2" = 1'-0"



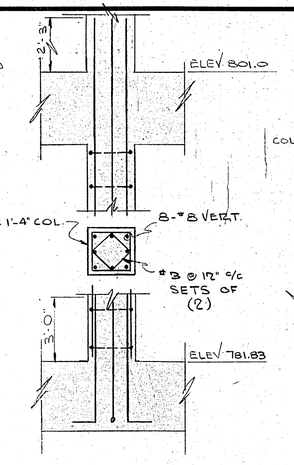
COLUMNS-2,4,5,6,16,17,18,&19

SCALE 1/2" = 1'-0"



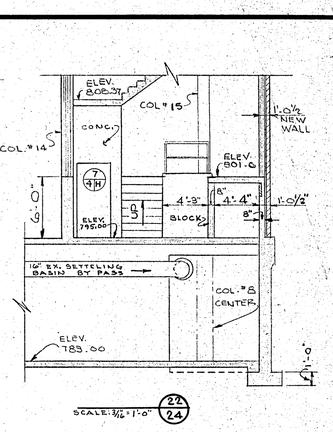
COLUMN - 3

SCALE 1/2" = 1'-0

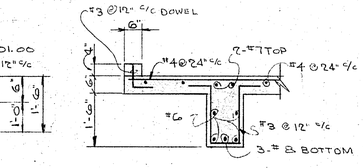


COLUMNS - 8,9,10,11,&12

SCALE 1/2" = 1'-0

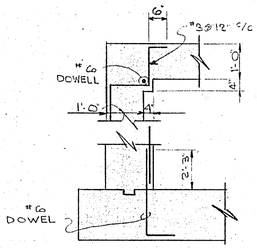


SCALE: 3/16" = 1'-0" 22/24



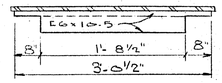
B1-3

B1-4



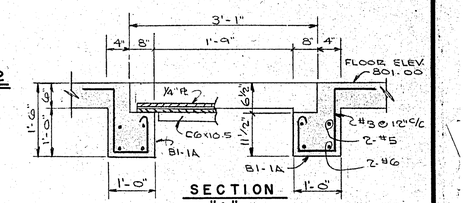
COLUMNS — 7, & 20

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

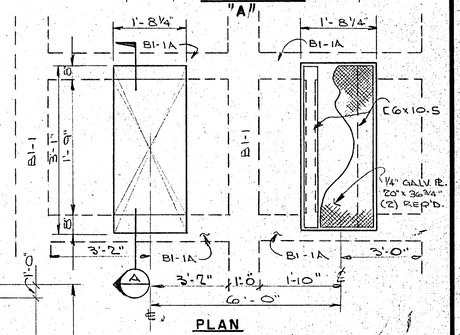


(4) REQ'D. EQ x 10.5

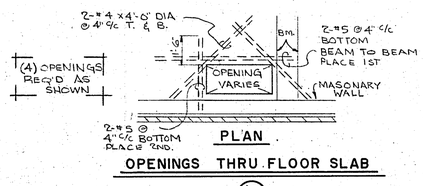
CHANNEL DETAILS



SECTION "A"

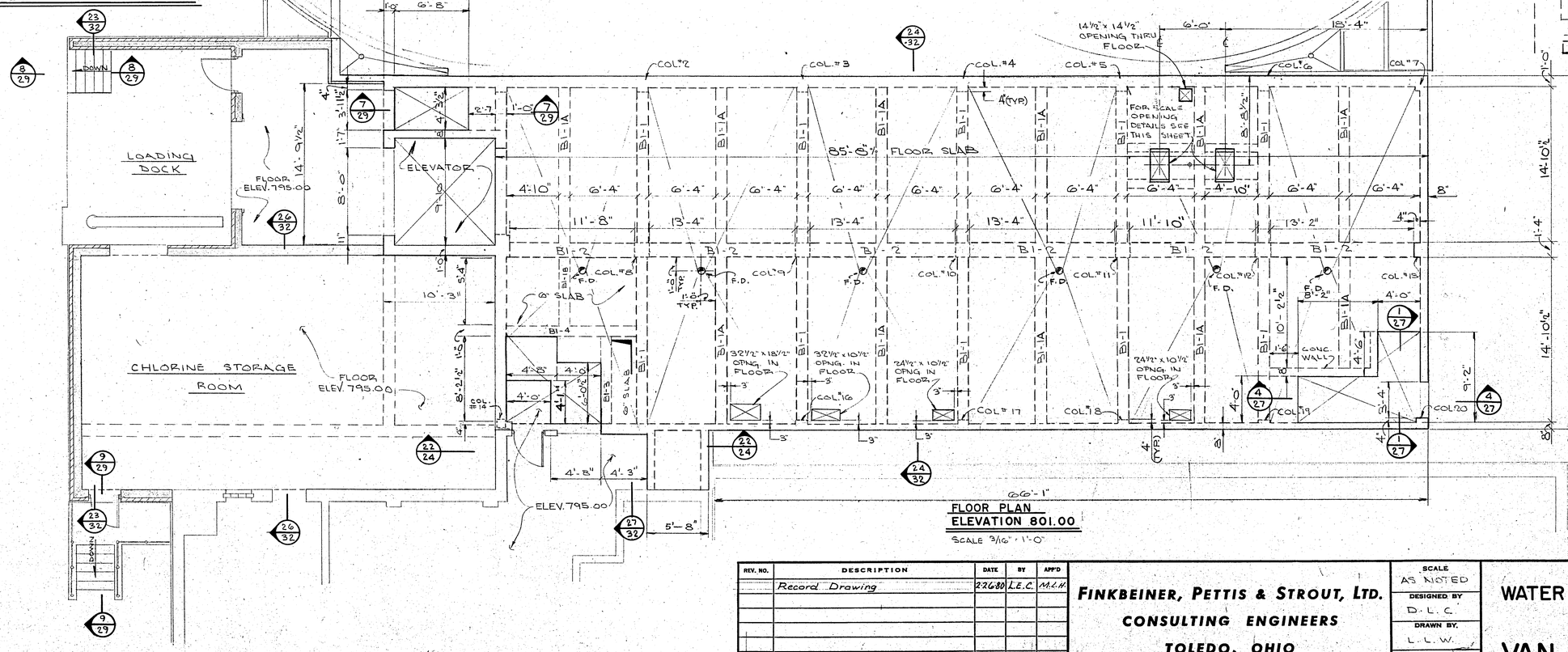


PLAN
SCALE OPENING DETAILS
SCALE: NONE

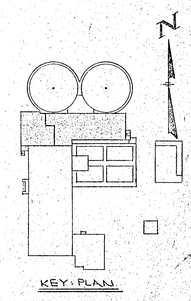


PLAN

OPENINGS THRU FLOOR SLAB



FLOOR PLAN
ELEVATION 801.00
SCALE 3/16" = 1'-0"



KEY PLAN

NOTE:
HIGH POINT OF ALL CONCRETE AT ELEV. 801.00
* 1" SLOPE TO FLOOR DRAINS (SEE PLAN)
TOP OF ALL FLOOR DRAINS ELEV. 800.92

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	22680	L.E.C.	M.L.H.

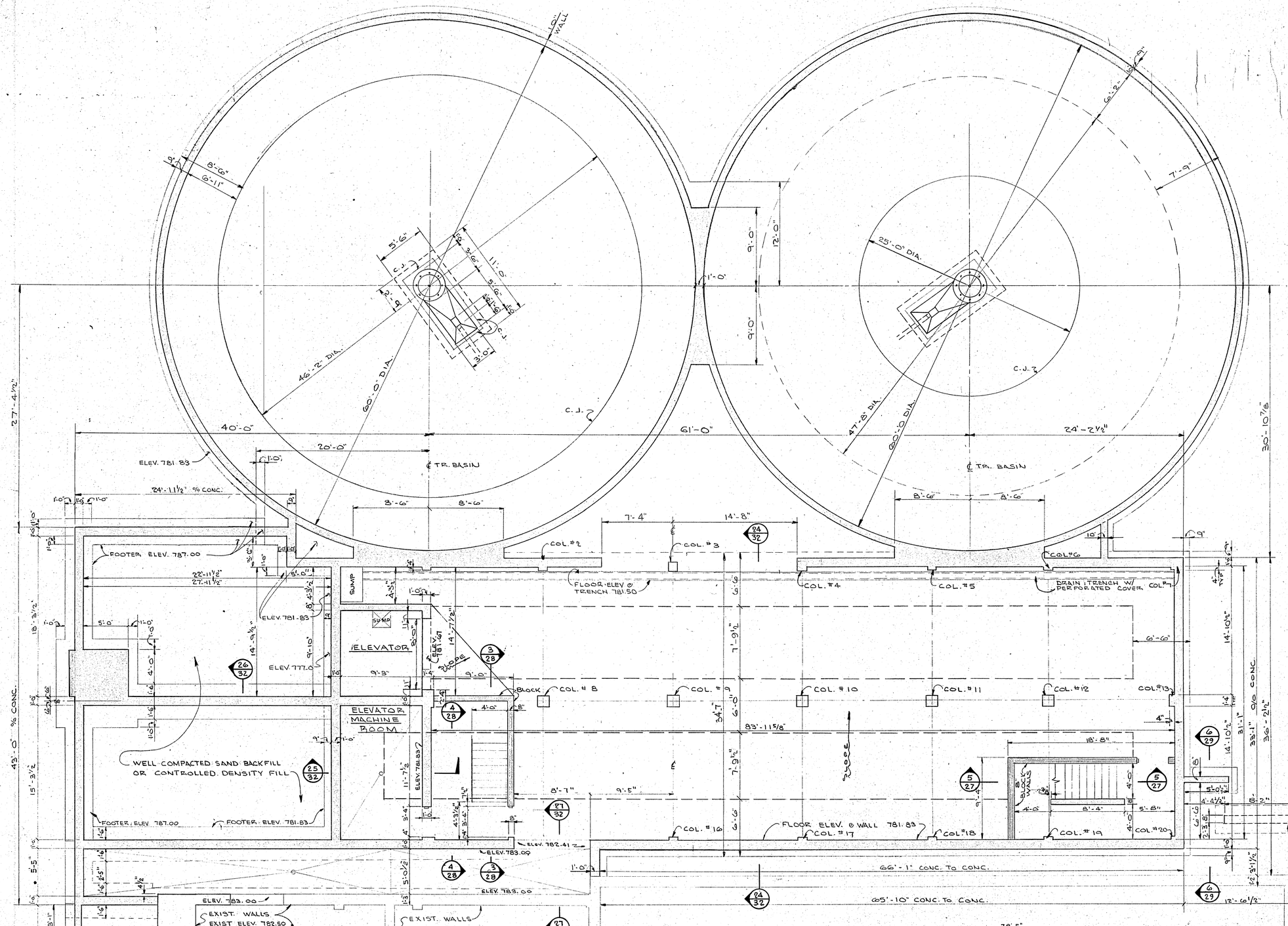
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: D. L. C.
DRAWN BY: L. L. W.
CHECKED BY: W. C. K. G. G. N.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
24 of 167

BRUNING 44-510



FLOOR PLAN
ELEV. 781.83

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2.26.80	L.E.C.	M.L.H.

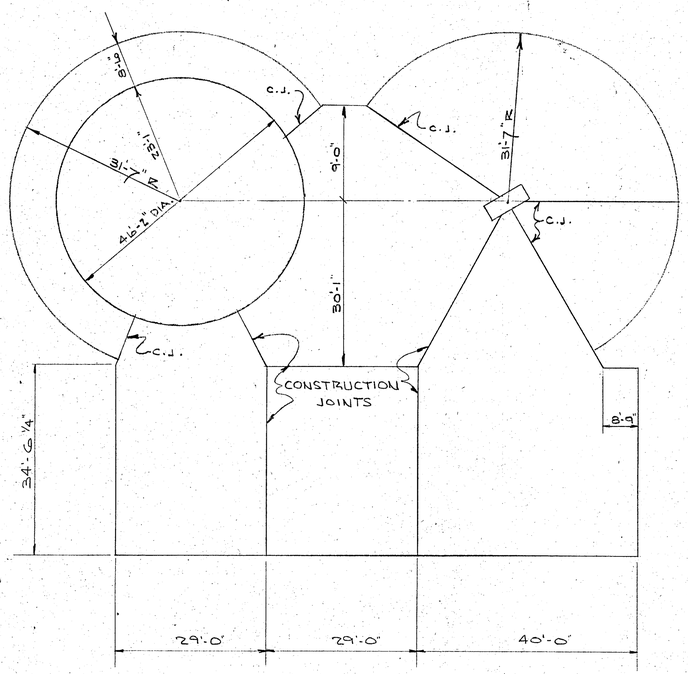
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/16"=1'-0"
DESIGNED BY D.L.C.
DRAWN BY L.L.W.
CHECKED BY W.C.K.

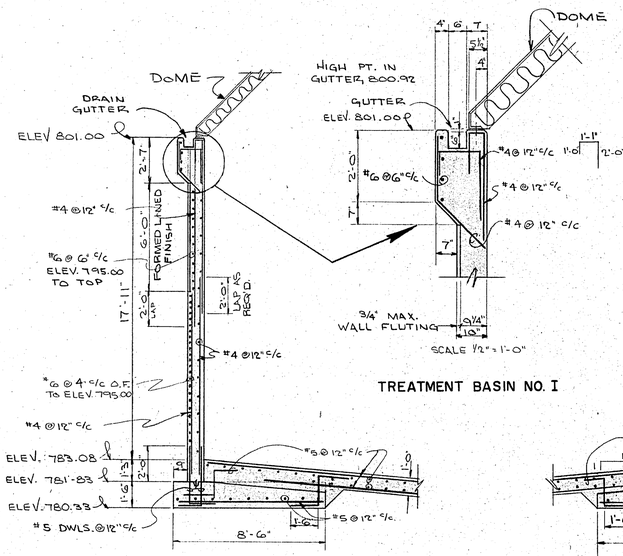
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
25 OF 67

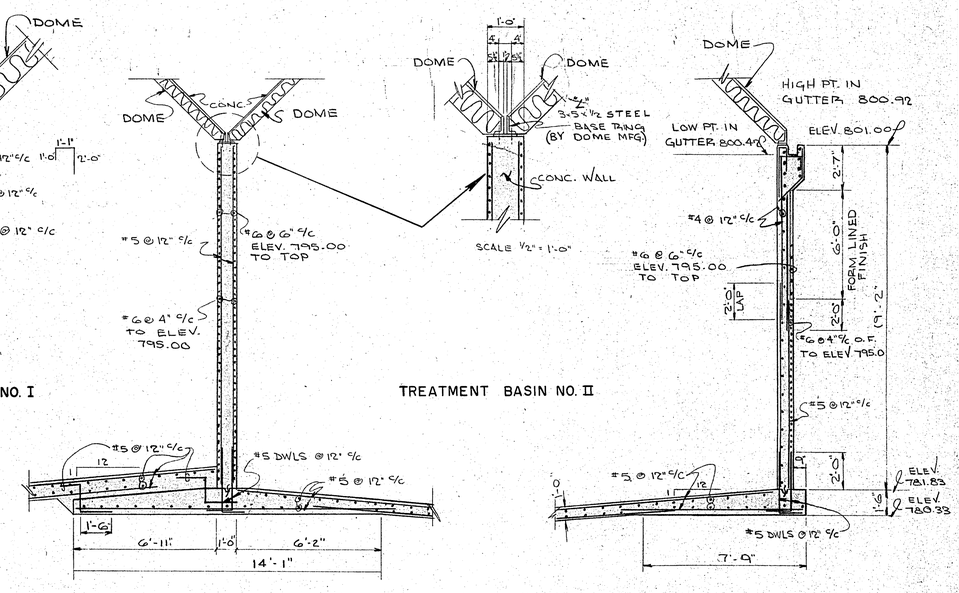
BRUNING 44-511



CONSTRUCTION JOINTS FOR BOTTOM CONCRETE SLAB



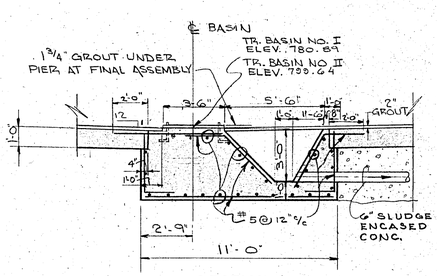
TREATMENT BASIN NO. I



TREATMENT BASIN NO. II

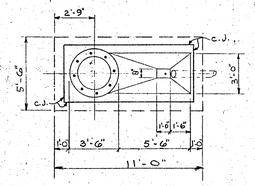
SECTION THRU TREATMENT BASINS

SCALE: 1/4" = 1'-0"



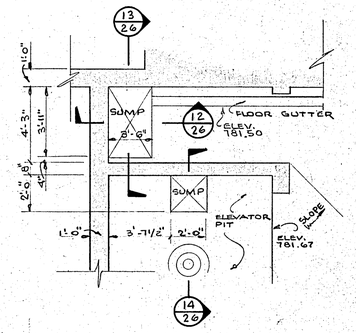
SECTION

SCALE: 1/4" = 1'-0"



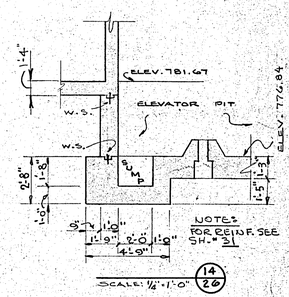
PLAN

SCALE: 3/16" = 1'-0"

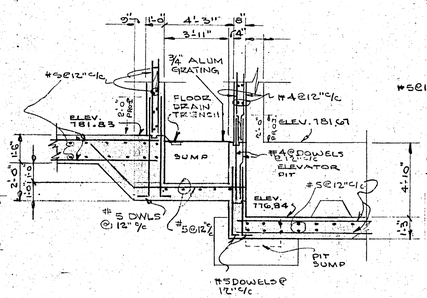


PLAN

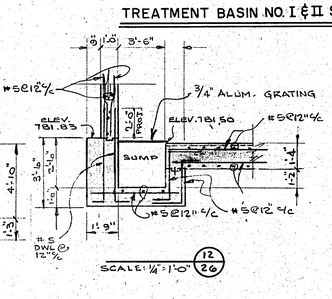
SCALE: 1/4" = 1'-0"



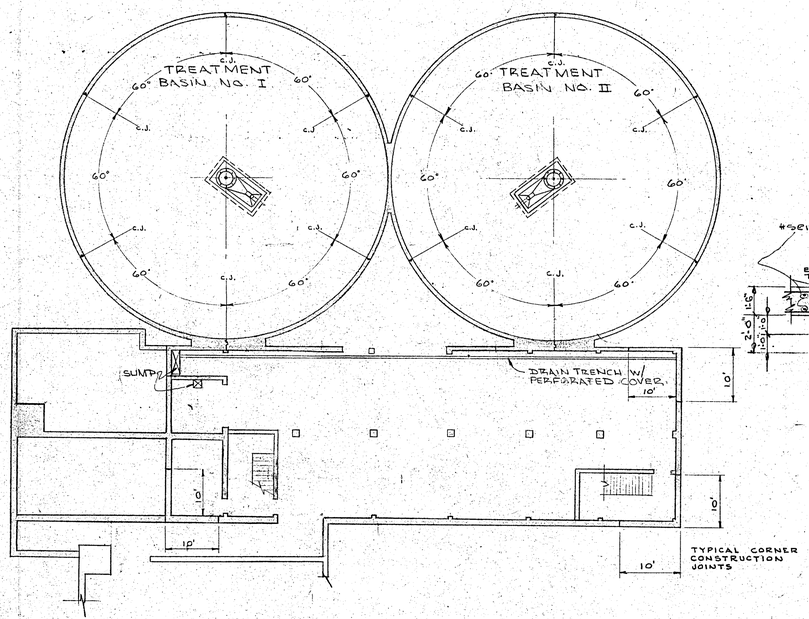
TREATMENT BASIN NO. I & II SLUDGE SUMP DETAILS



SCALE: 1/4" = 1'-0" (13/26)



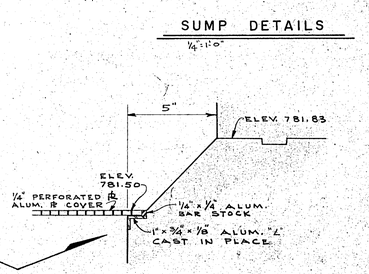
SCALE: 1/4" = 1'-0" (12/26)



CONSTRUCTION JOINTS FOR WALLS

SECTION THRU DRAIN TRENCH

SCALE 1/2" = 1'-0"



SUMP DETAILS

1/4" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2.26.80	L.E.C.	M.L.H.

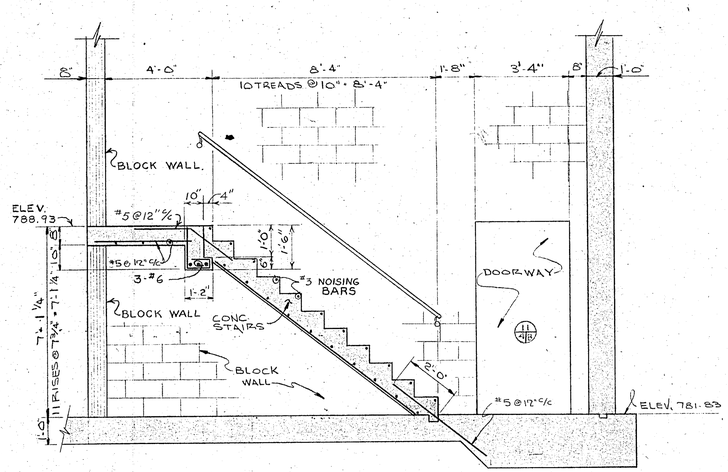
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	B. L. C.
DRAWN BY	L. L. W.
CHECKED BY	G. G. N. W. C. R.

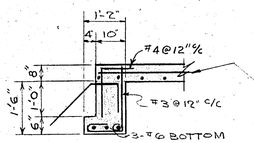
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

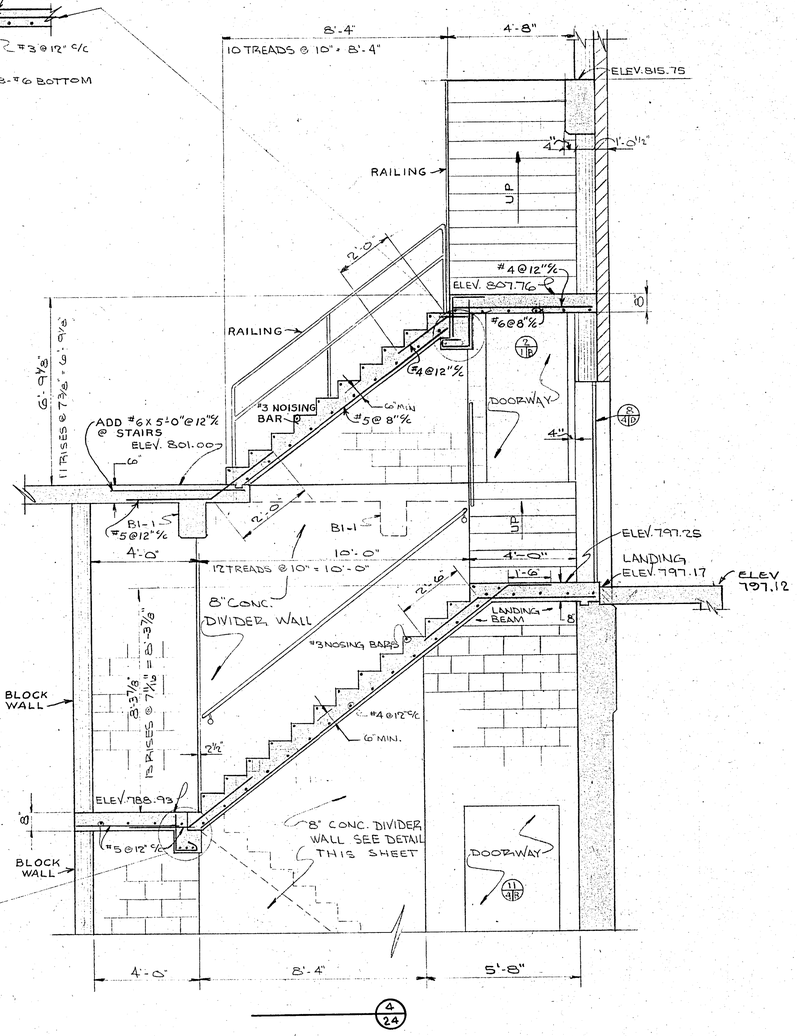
PROJECT NUMBER	VANW 103 J1
SECTION	10-20-75
DATE	
	26 OF 67

BRUNING 44-511

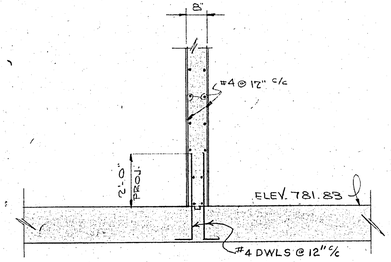


5/25

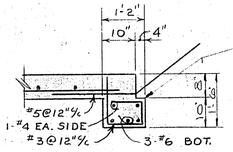


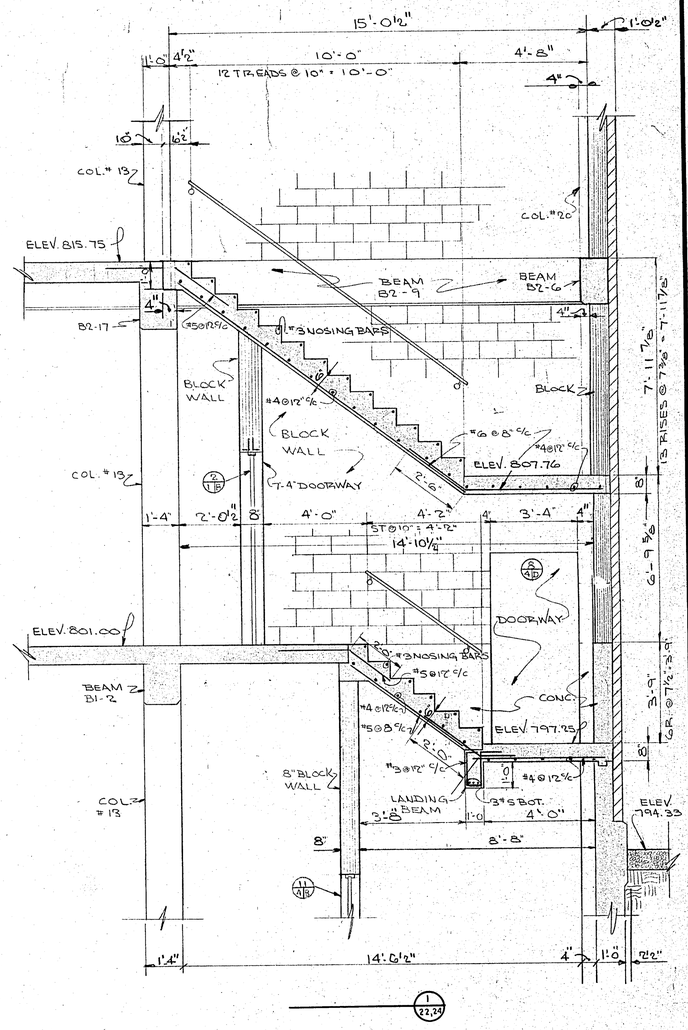


4/24



8" CONCRETE DIVIDER WALL





1/23,24

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	22680	L.E.C.	M.L.H.

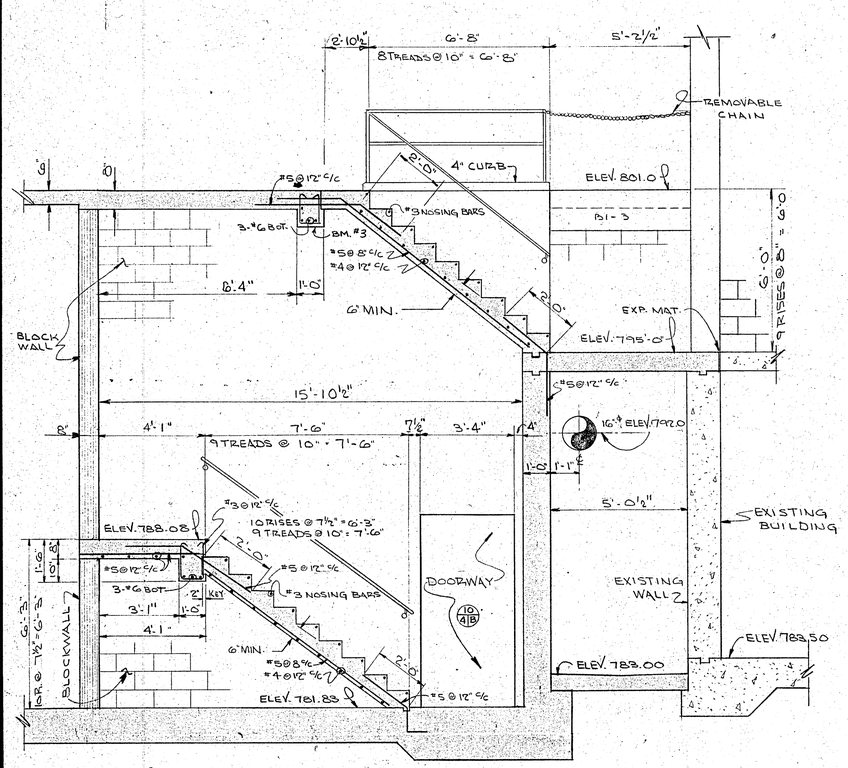
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	3/8" = 1'-0"
DESIGNED BY	D. L. C.
DRAWN BY	L.L.W.
CHECKED BY	G.G.N. W.C.K.

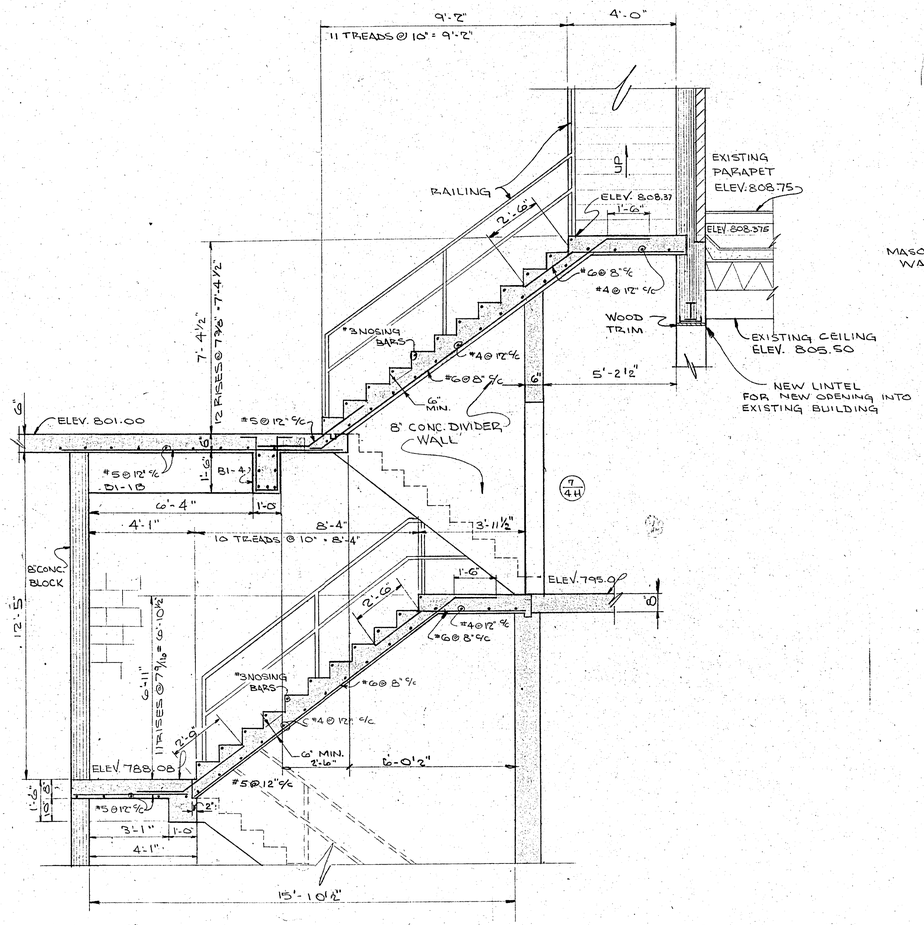
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	27 OF 67

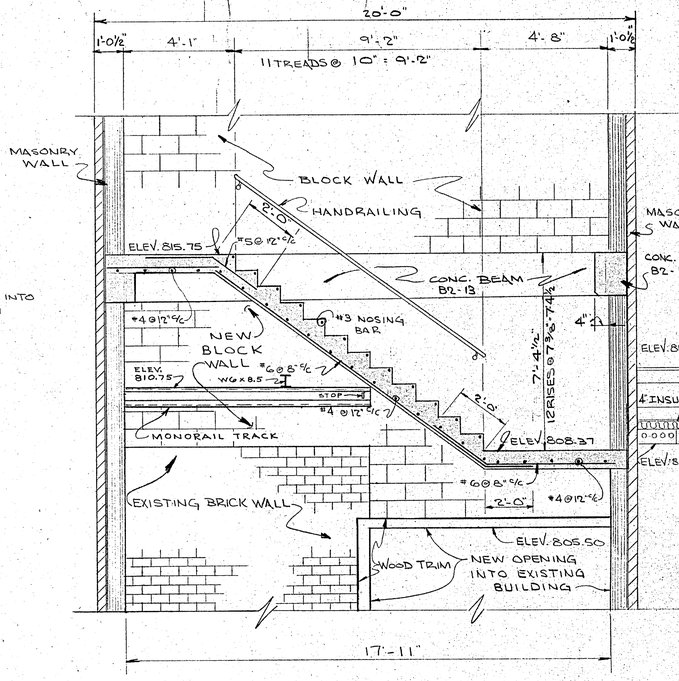
BRUNING 44-519



3/25



4/25



2/22

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.L.H.

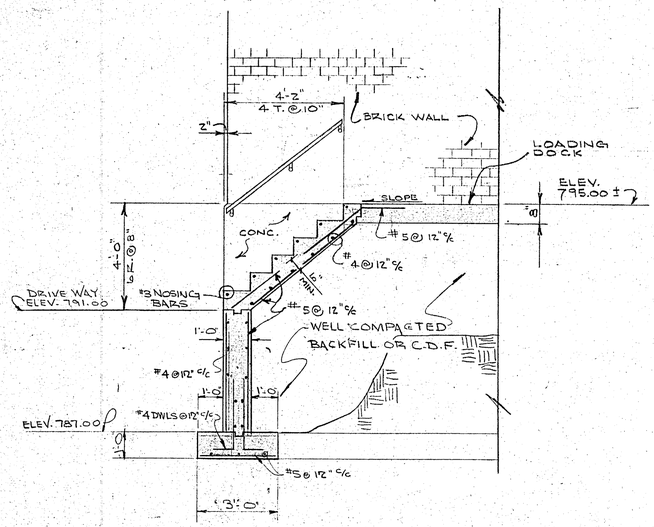
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/8" = 1'-0"
DESIGNED BY: D.L.C.
DRAWN BY: L.L.W.
CHECKED BY: W.C.K.

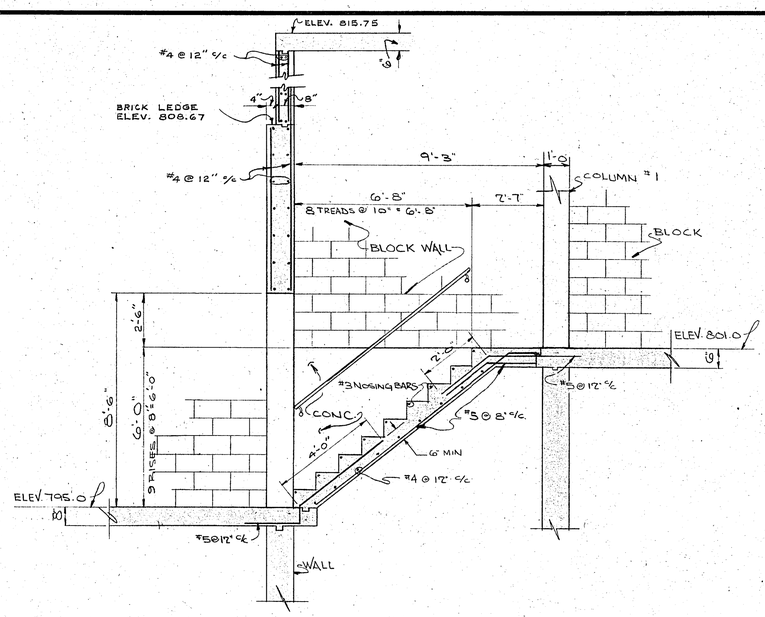
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
28 OF 67

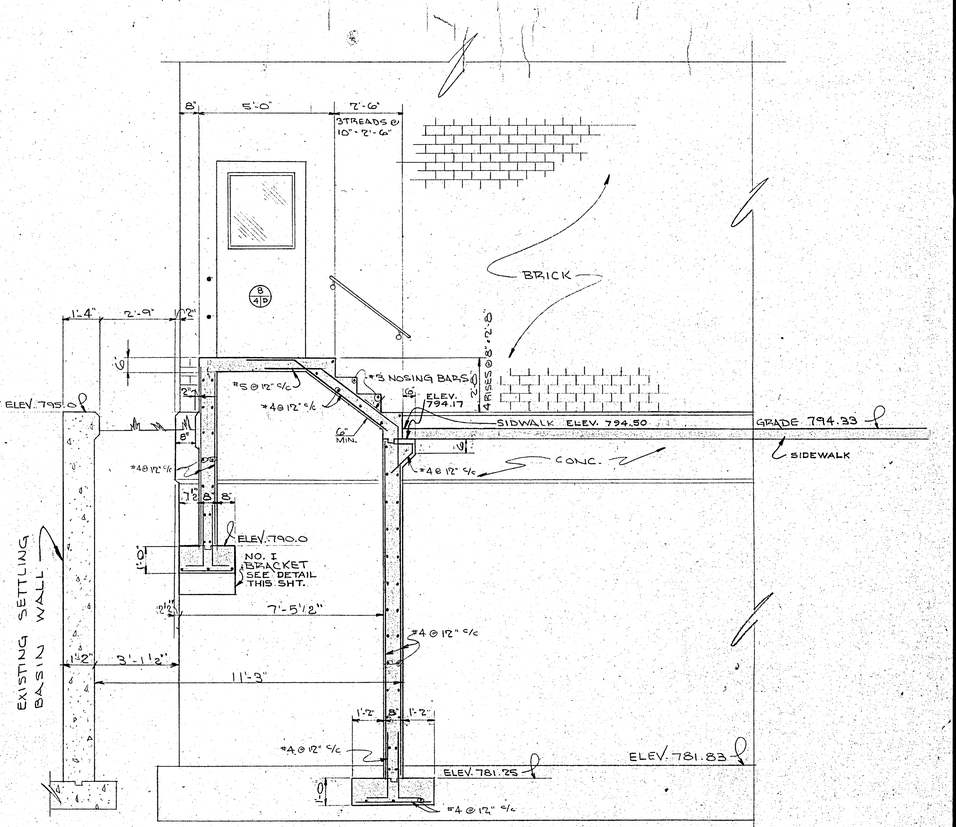
BRUNING 44-511



8/24



7/24



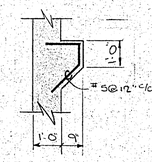
10/29

9/24

10/29

11/29

SECTIONAL PLAN ELEVATION 791.00



SECTION
NO. 1
BRACKET DETAIL

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-26-80	L.E.C.	M.L.H.

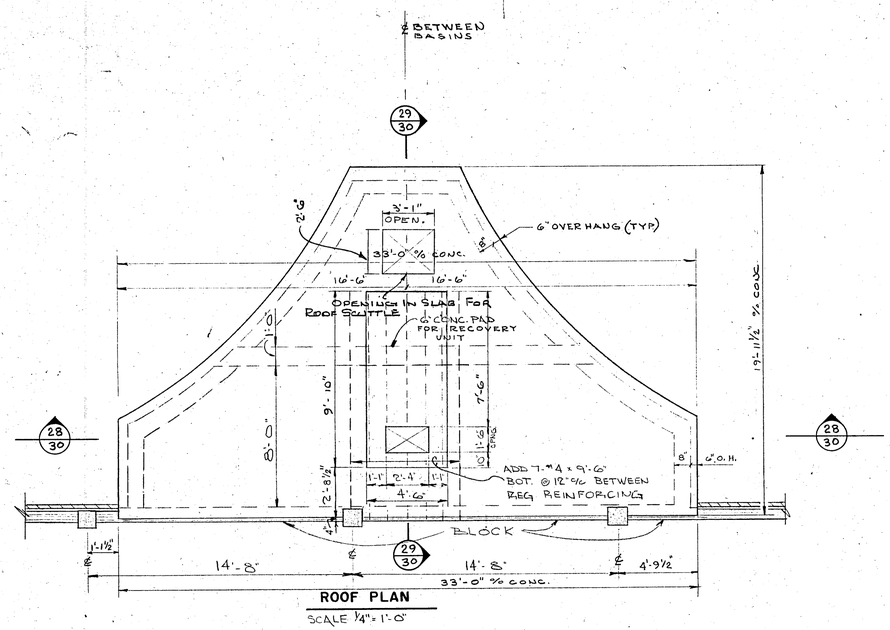
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/8" = 1'-0"
DESIGNED BY D.L.C.
DRAWN BY L.L.W.
CHECKED BY W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

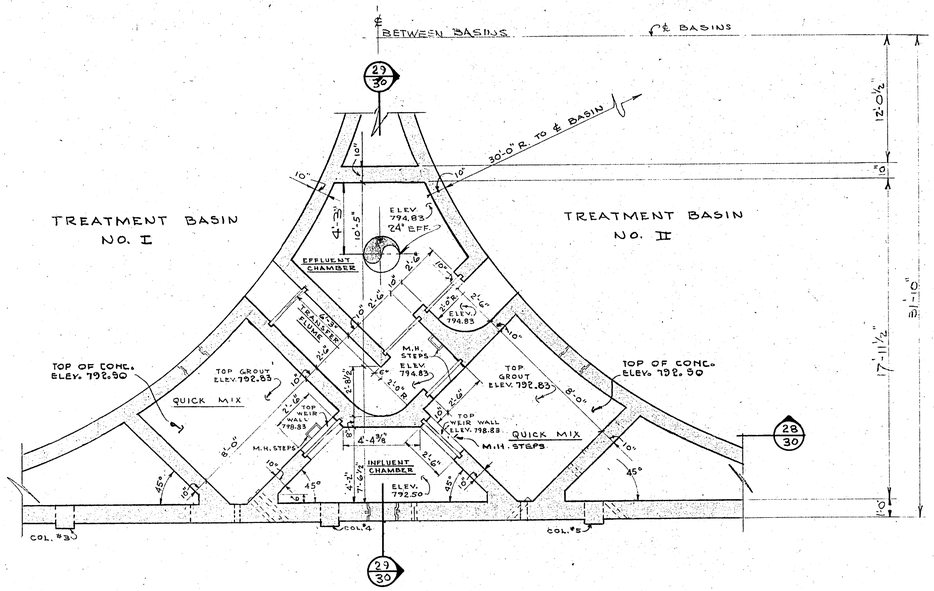
PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
29 OF 67

BRUNING 44-511



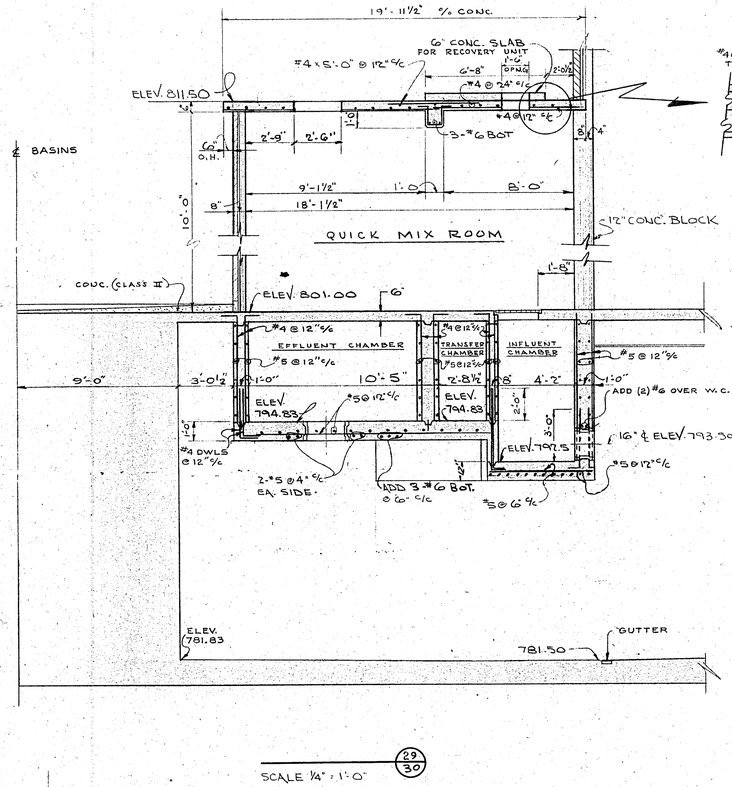
ROOF PLAN

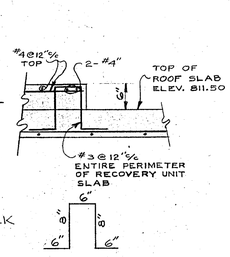
SCALE ¼" = 1'-0"

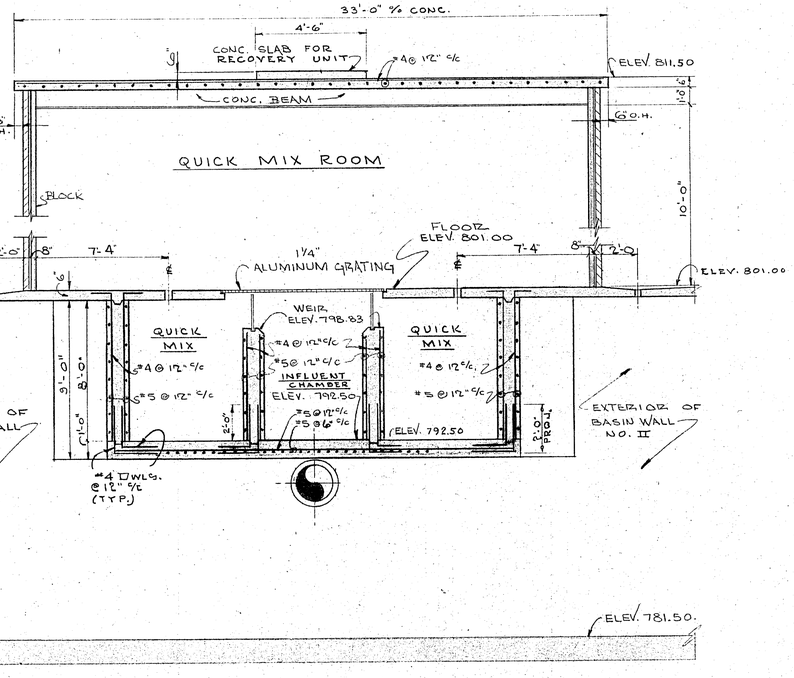


SECTIONAL PLAN ELEV. 799.00

SCALE : ¼" = 1'-0"







SCALE ¼" = 1'-0"

SCALE ¼" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	CHANGED QUICK MIX BASIN	3/15/76	PWD	GBN
	Record Drawing	2/26/80	L.E.C.	M.L.H.

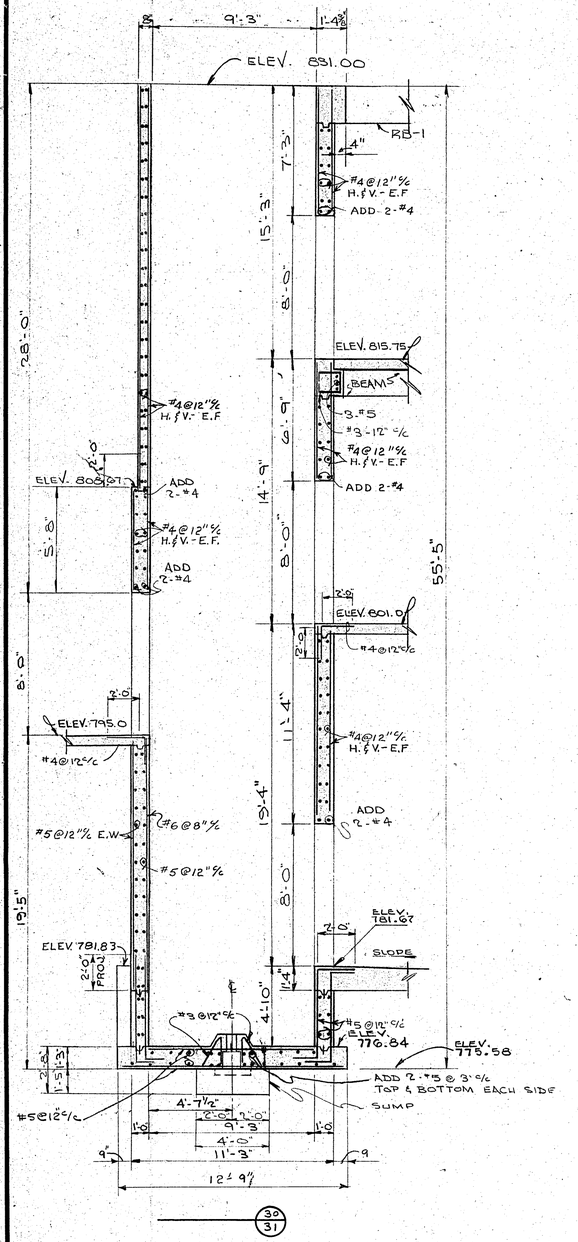
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

AS NOTED
DESIGNED BY D L C
DRAWN BY L L W
CHECKED BY G.G.N. W.C.K.

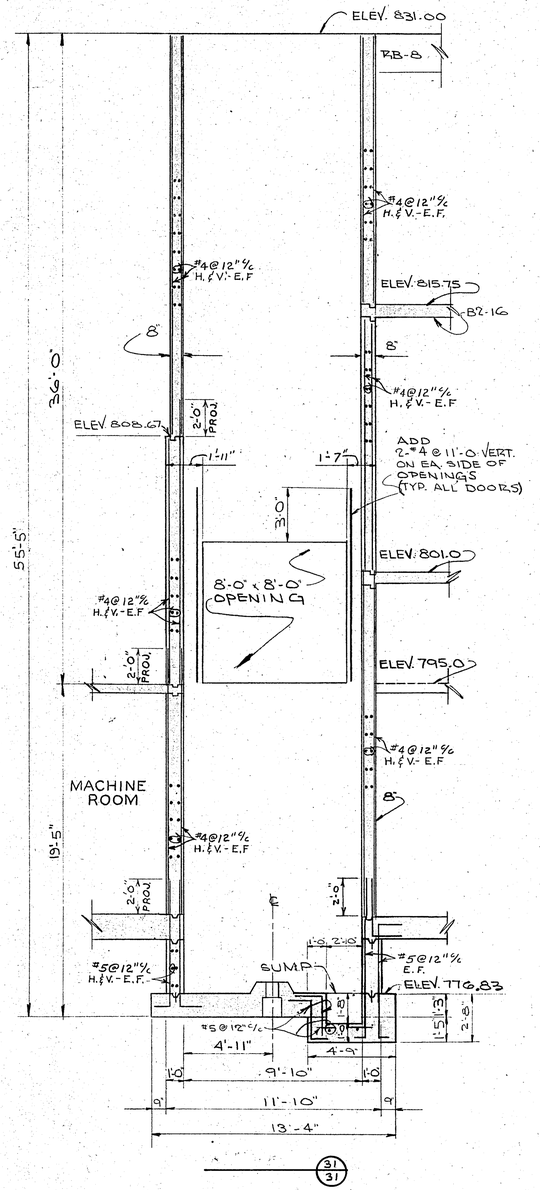
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 JI
SECTION
DATE 12-20-75
30 of 57

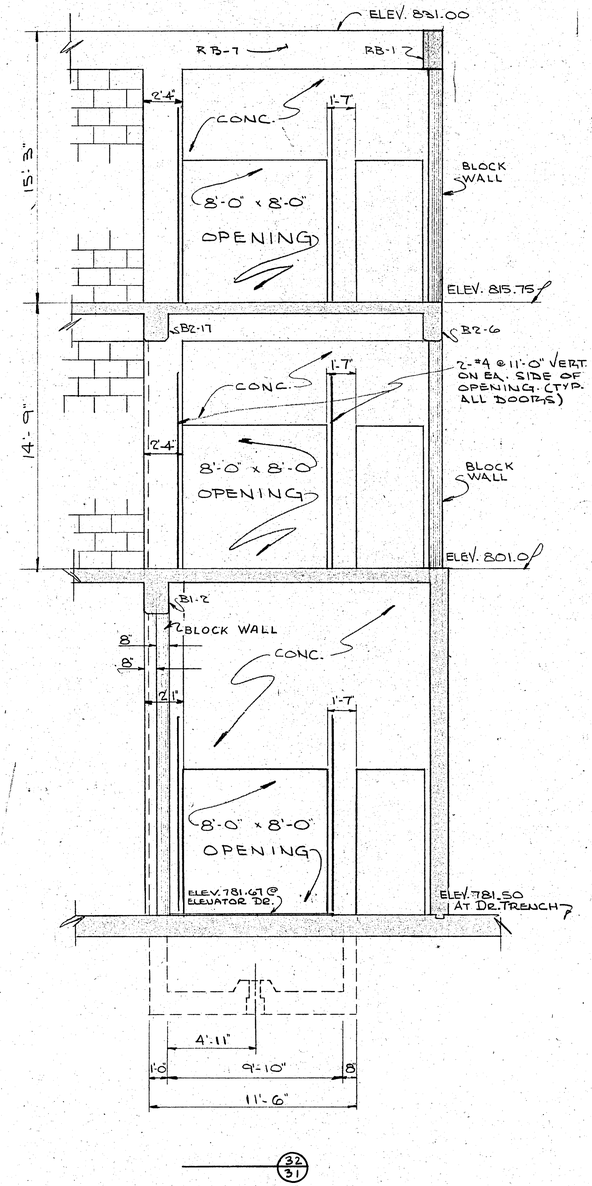
BRUNING 44-510—



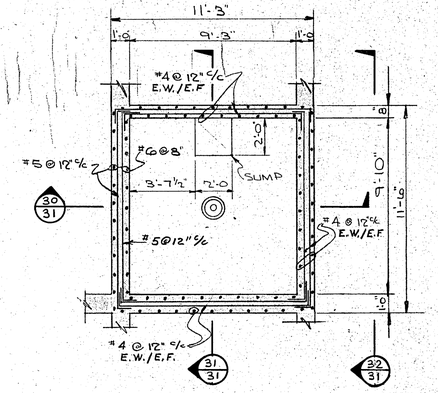
30/31



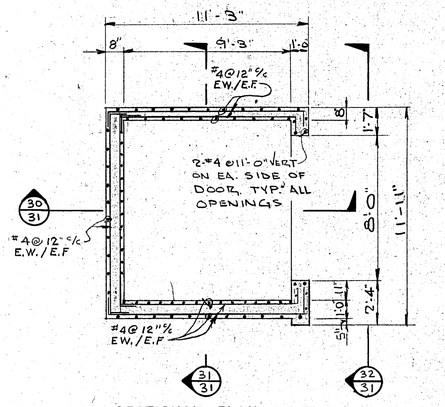
31/31



32/31



SECTIONAL PLAN
ELEVATION 794.00



SECTIONAL PLAN
ELEVATION 818.00

ELEVATOR SHAFT DETAILS

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.L.H.

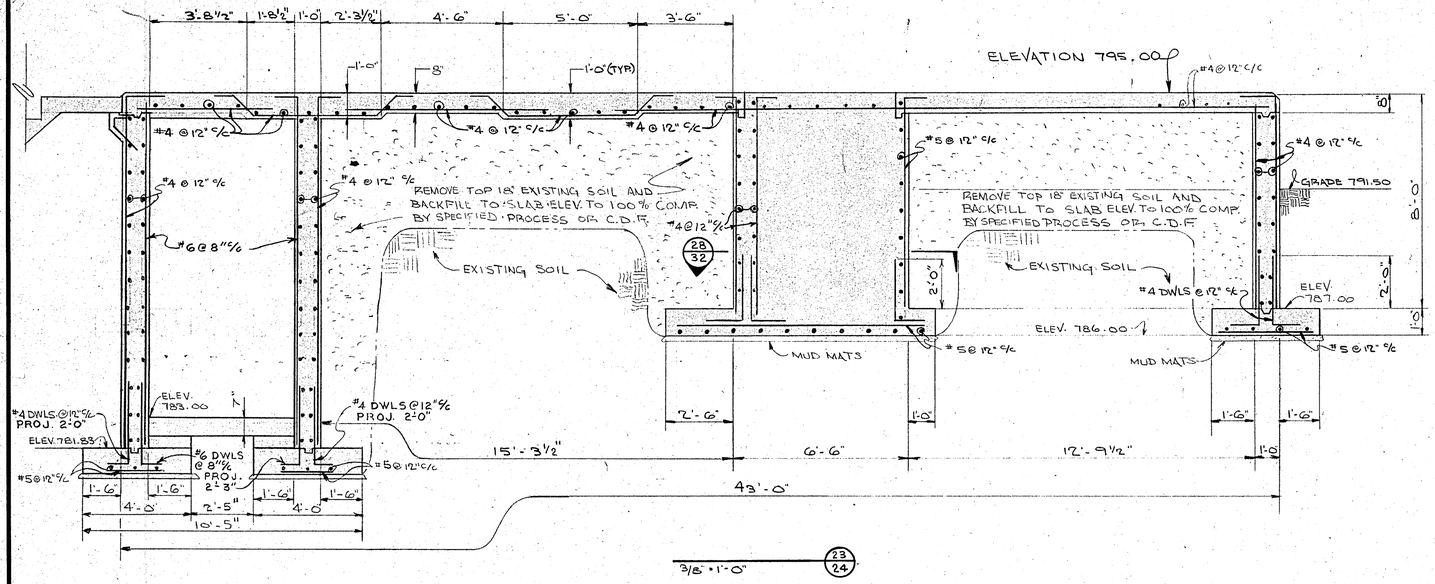
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

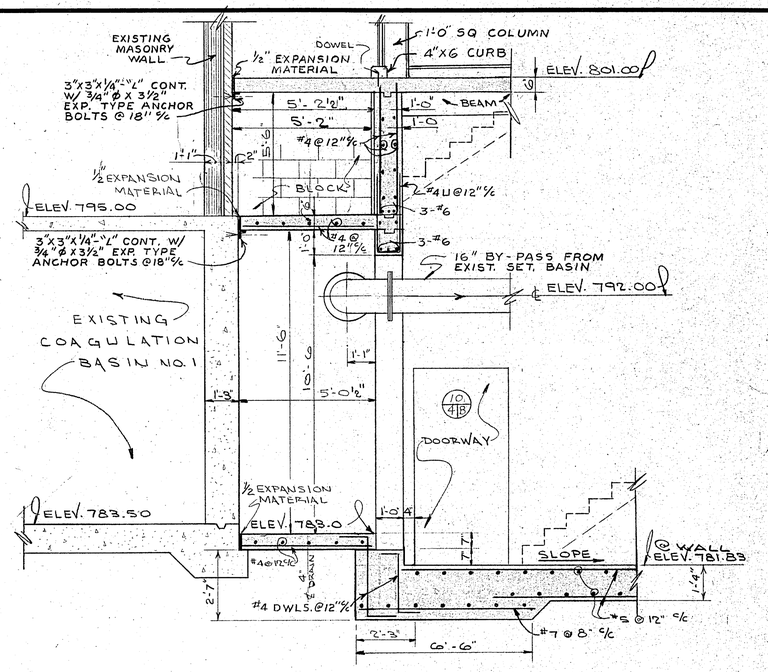
SCALE 1/4" = 1'-0"
DESIGNED BY D.L.C.
DRAWN BY L.L.W.
CHECKED BY G.G.N. W.C.K.

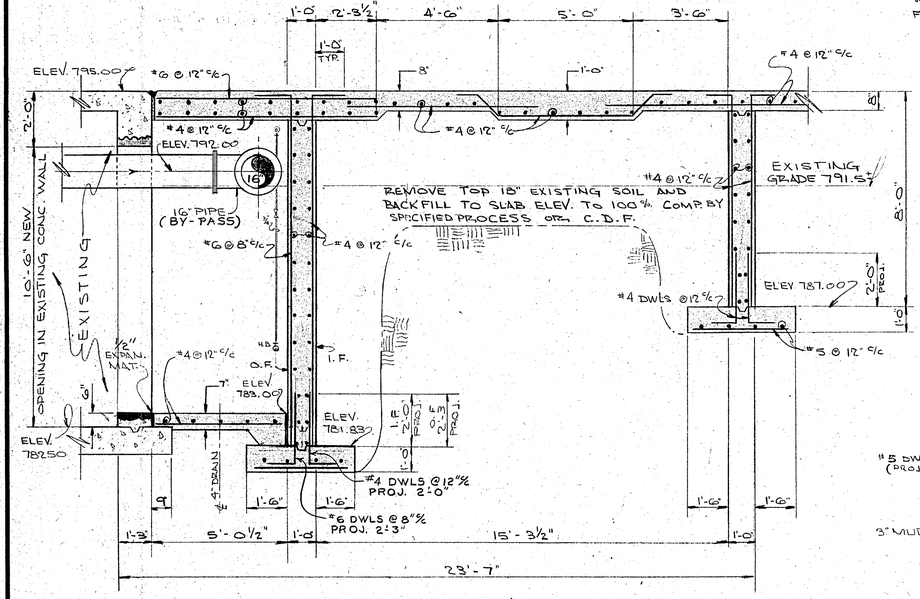
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

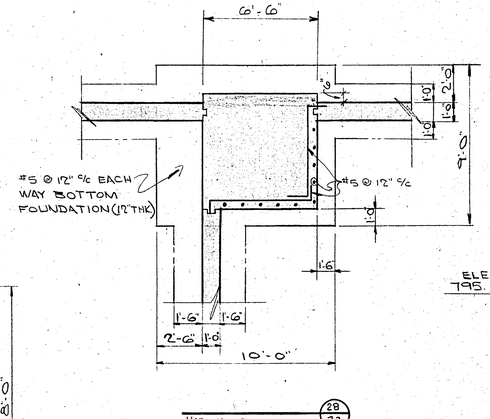
PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
31 OF 67

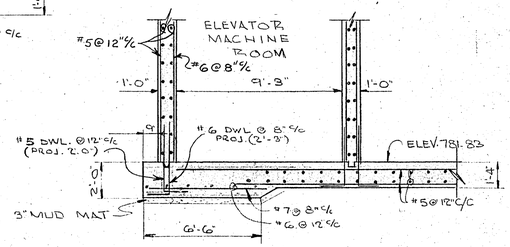
BRUNING 44-511

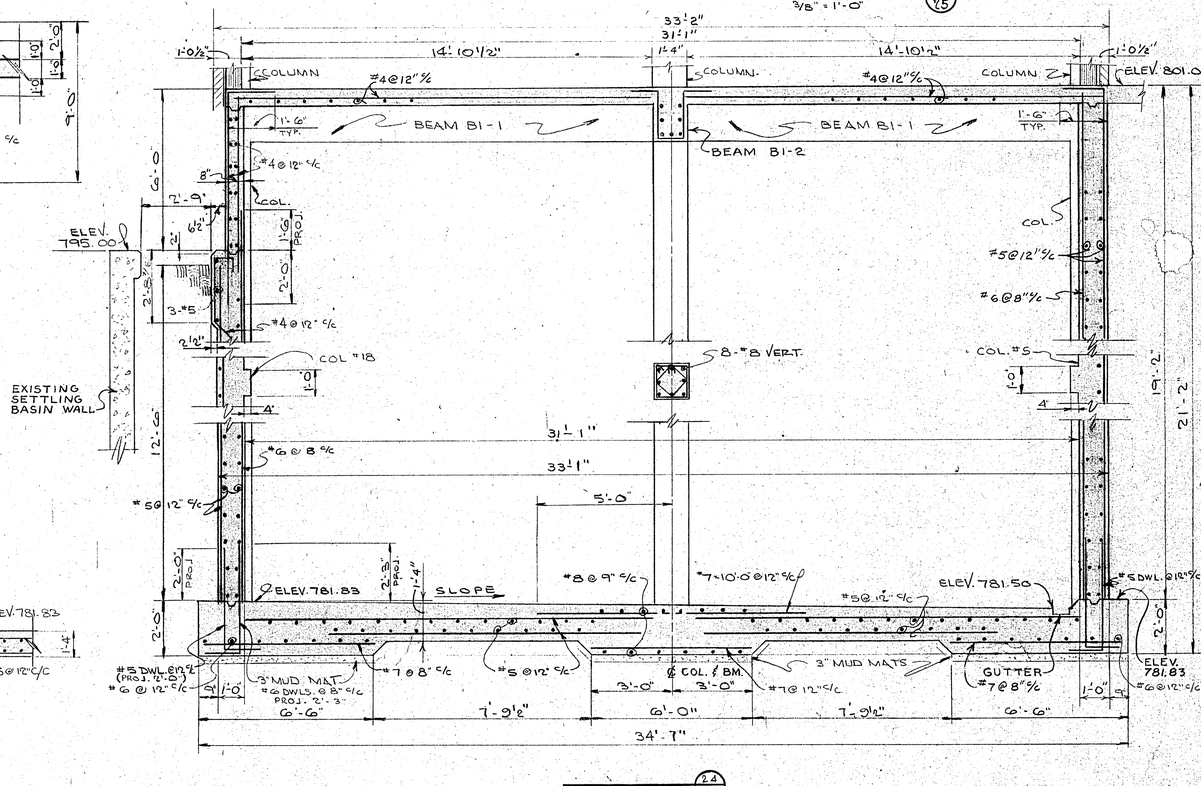












REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.L.H.

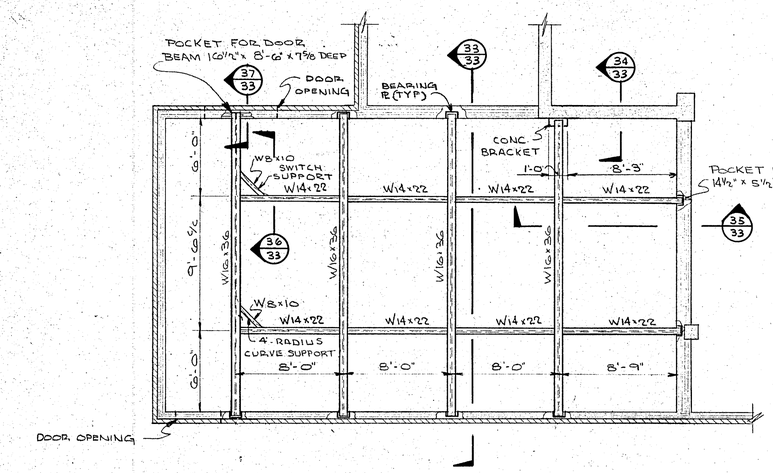
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	D.L.C.
DRAWN BY	L.L.W.
CHECKED BY	G.G.N. W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

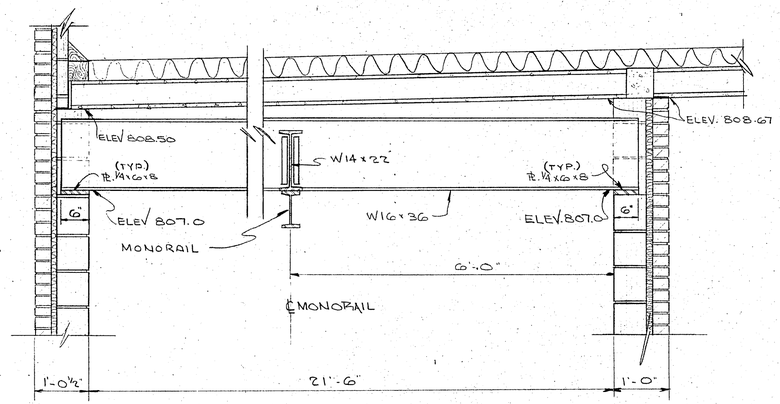
PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	32 1/2 OF 167

BRUNING 44-510

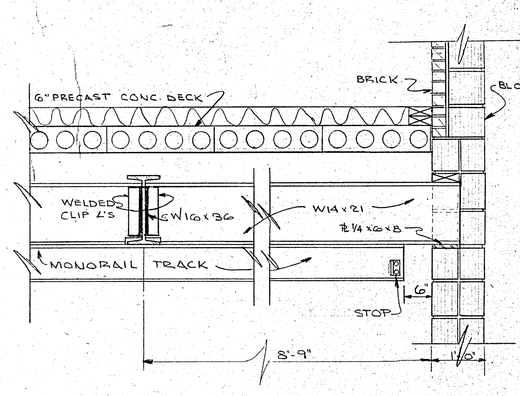


NOTE
ALL BEAMS TO HAVE BOTTOM FLANGES LEVEL

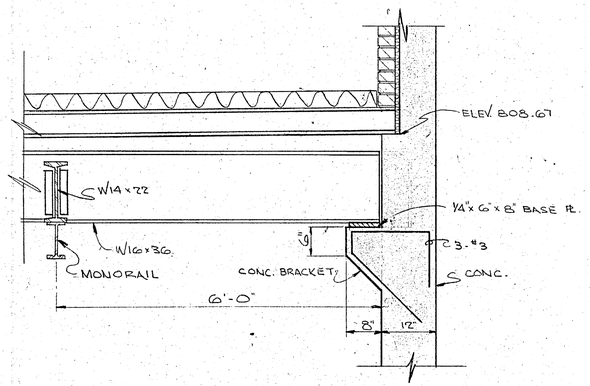
CHLORINE STORAGE MONORAIL LAYOUT



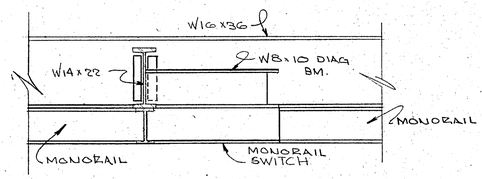
SCALE 3/4" = 1'-0" (33/33)



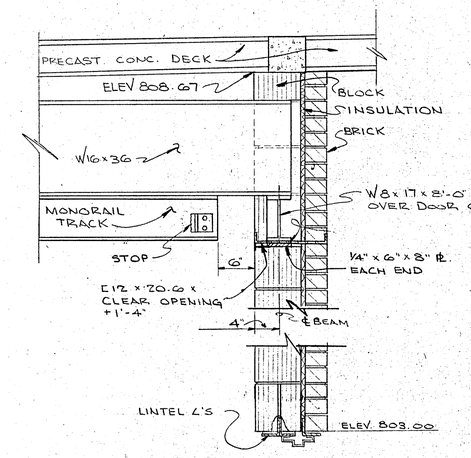
SCALE 3/4" = 1'-0" (35/33)



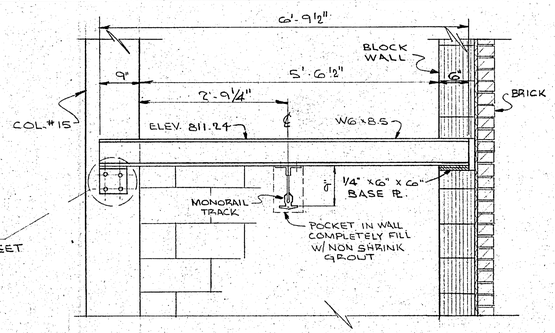
SCALE 3/4" = 1'-0" (34/33)



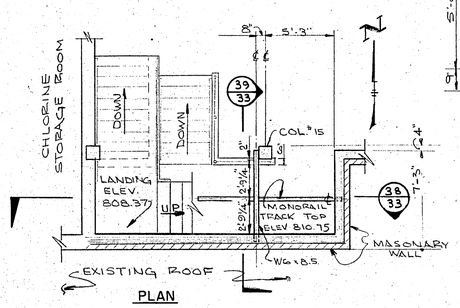
SCALE 3/4" = 1'-0" (36/33)



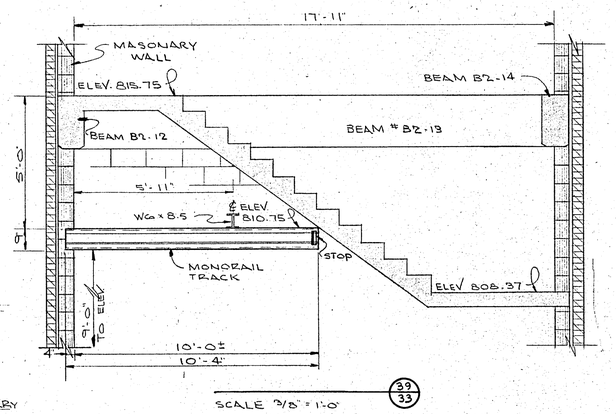
SCALE 1" = 1'-0" (37/33)



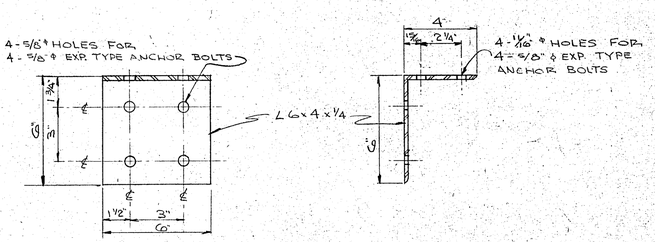
SCALE 3/4" = 1'-0" (38/33)



PLAN



SCALE 3/8" = 1'-0"



MONORAIL SUPPORT BEAM ANGLE SEAT
SCALE 3" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.L.H.

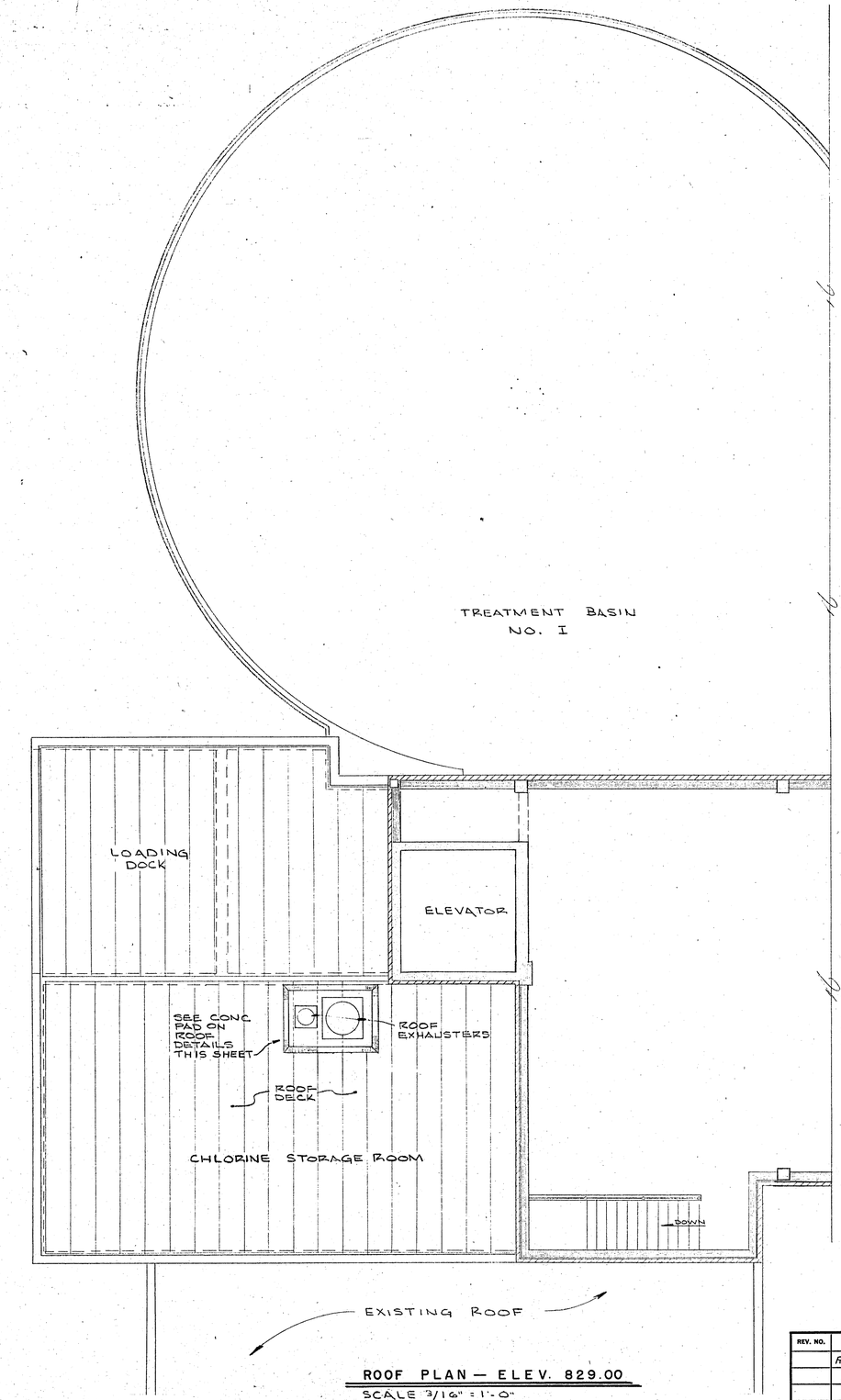
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: D.L.C.
DRAWN BY: U.L.W.
CHECKED BY: G.J.H. / W.C.K.

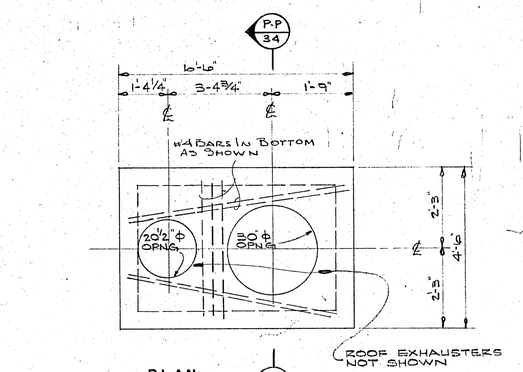
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
33 OF 67

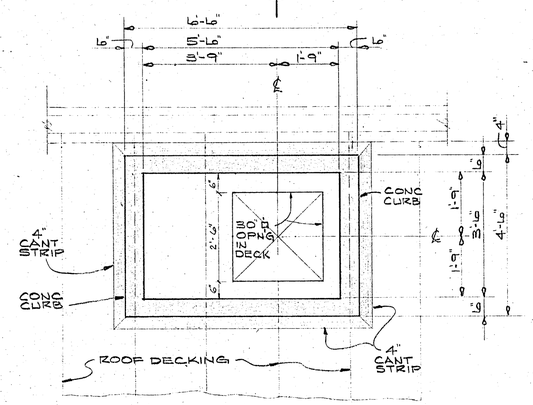
BRUNING 44-511



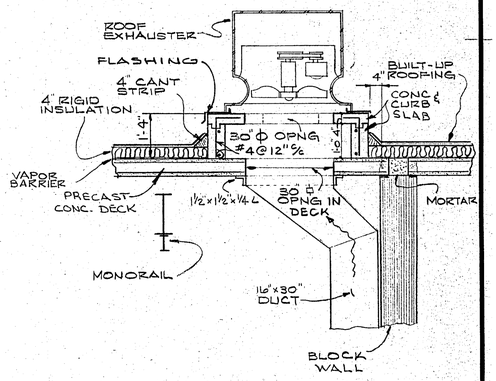
ROOF PLAN — ELEV. 829.00
SCALE 3/16" = 1'-0"



PLAN



SECTIONAL PLAN



P-P 34

ROOF EXHAUSTER DETAILS
SCALE 1/2" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-2780	L.E.C.	M.L.H.

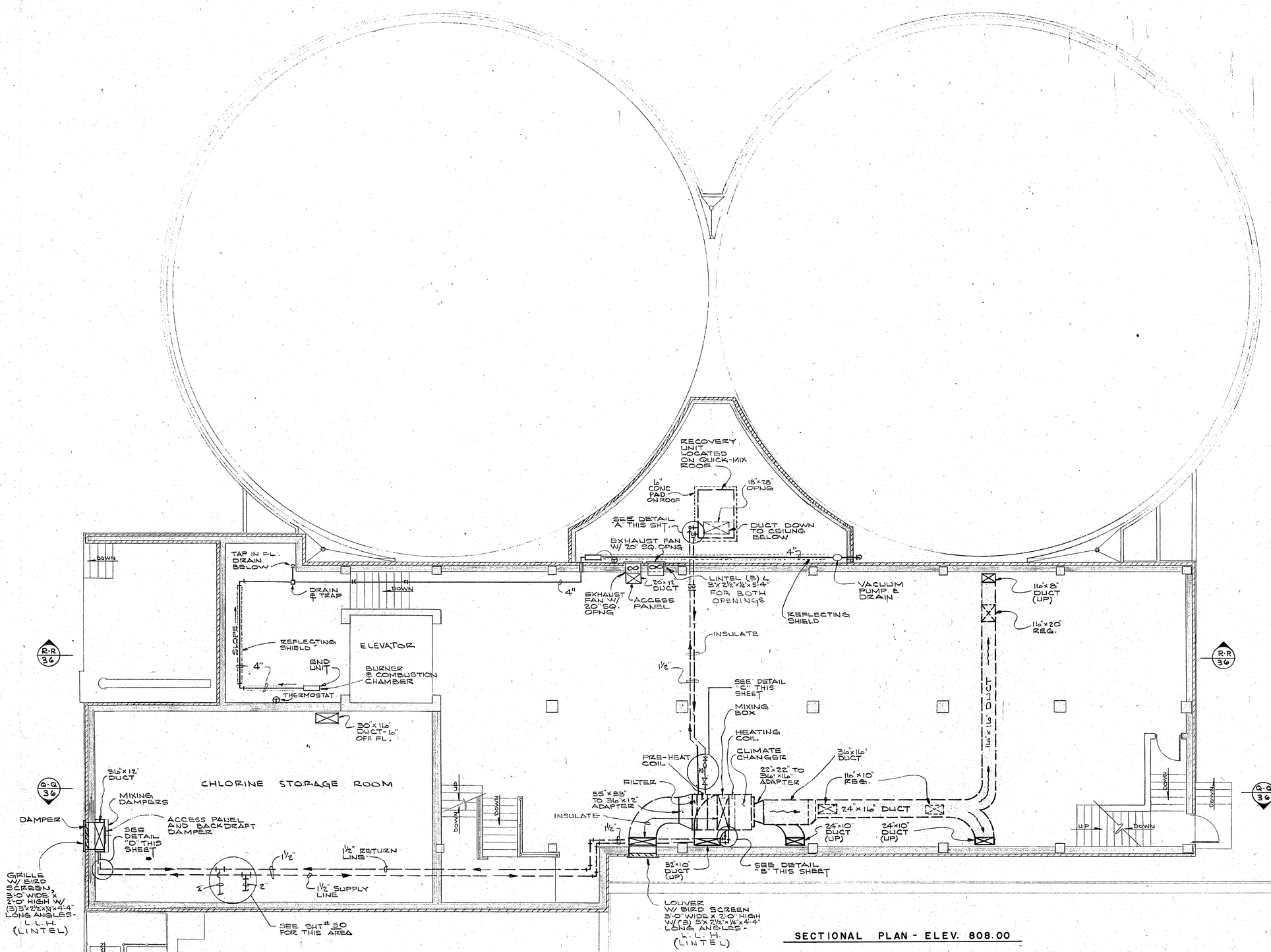
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: L.V.M.
DRAWN BY: D.A.A.
CHECKED BY: L.V.M.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

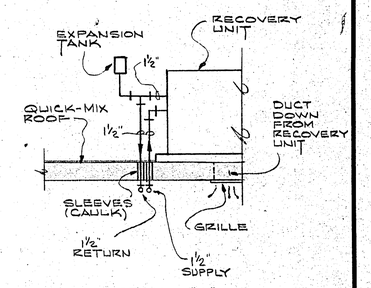
PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
34 OF 67

BRUNING 44-510—

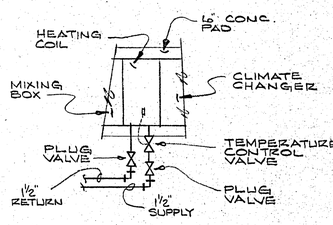


SECTIONAL PLAN - ELEV. 808.00

N



DETAIL "A"



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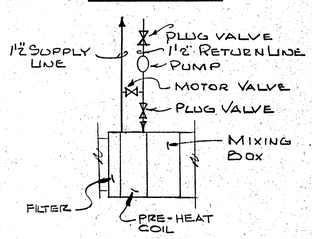
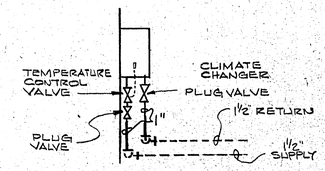


DETAIL "C"



DETAIL "D"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.L.H.

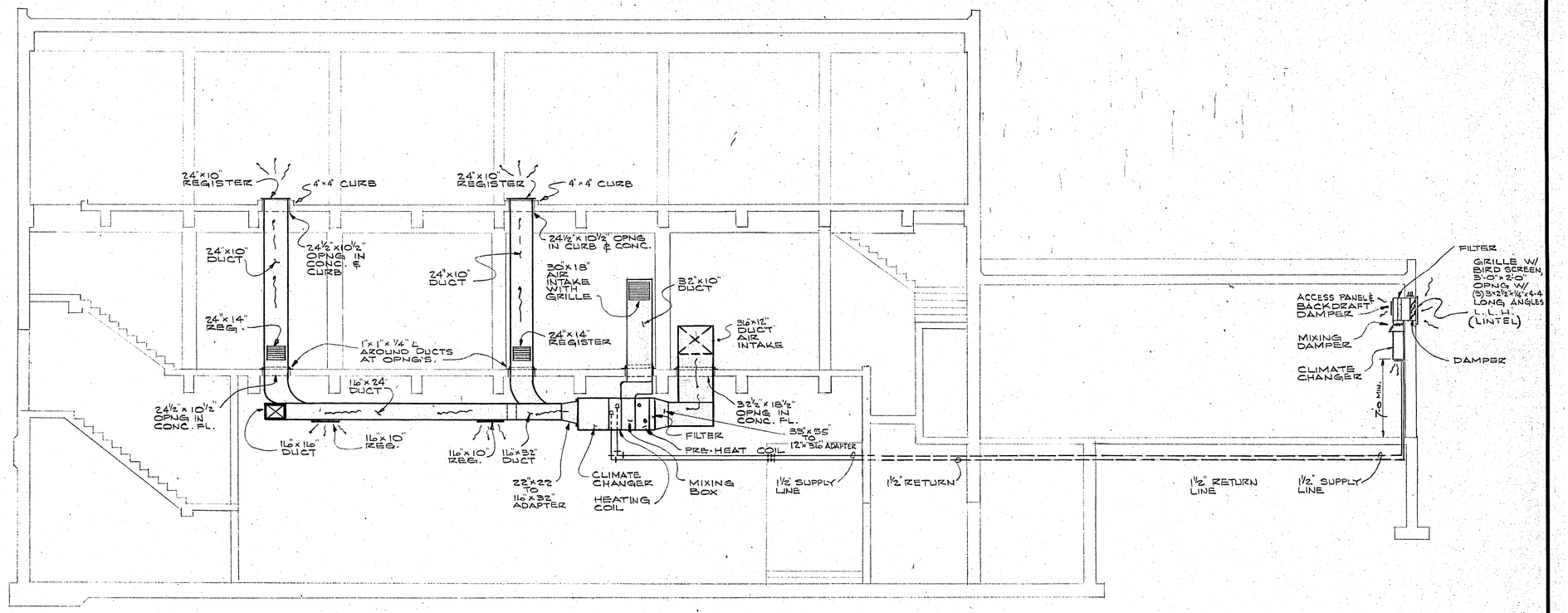
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	3/16" = 1'-0"
DESIGNED BY	L.V.M.
DRAWN BY	D.A.A.
CHECKED BY	L.V.M

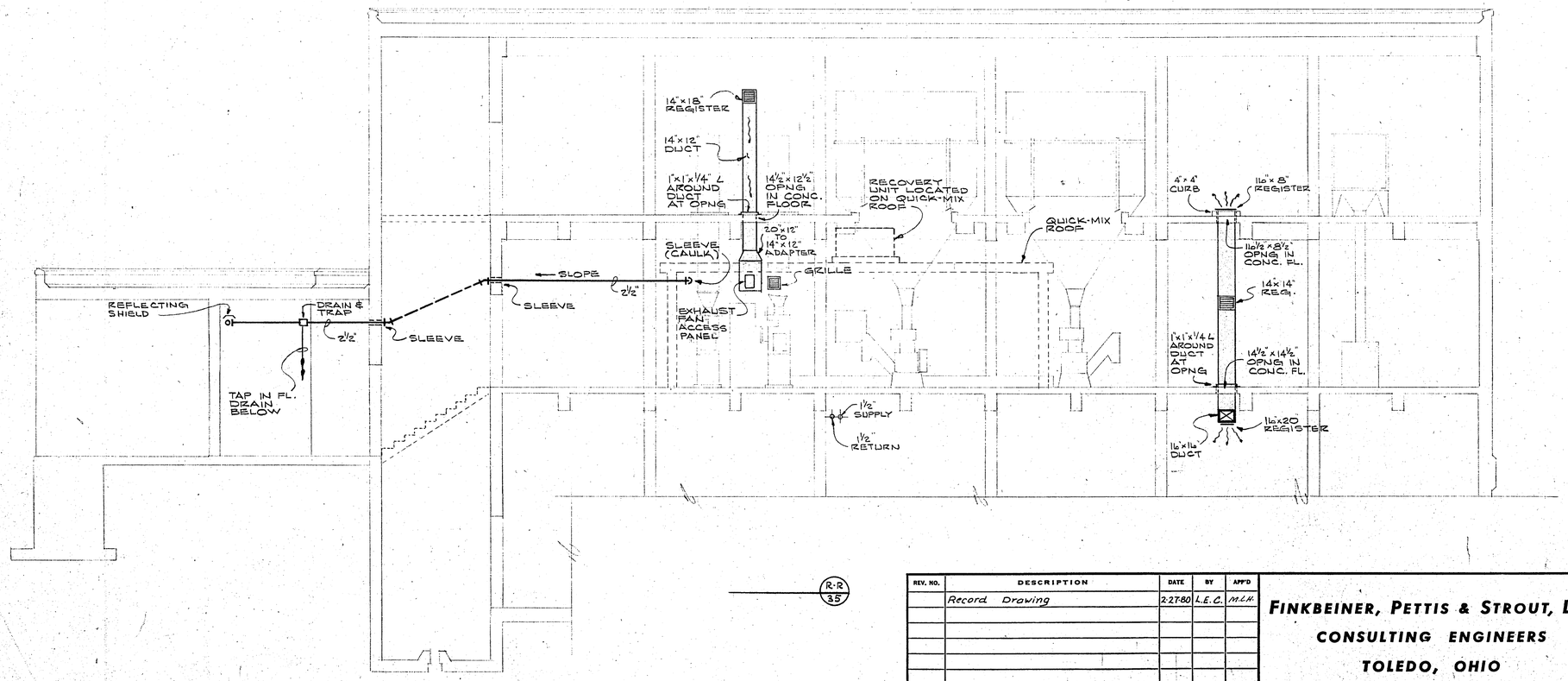
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	35 OF 167

BRUNING 44-510



R-Q
35



R-R
35

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.C.H.

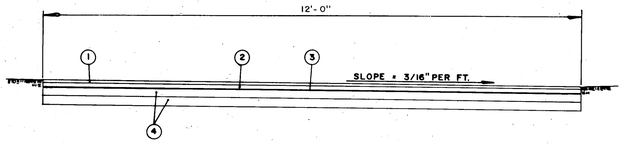
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/16" = 1'-0"
DESIGNED BY: L.V.M.
DRAWN BY: D.A.A.
CHECKED BY: L.V.M.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

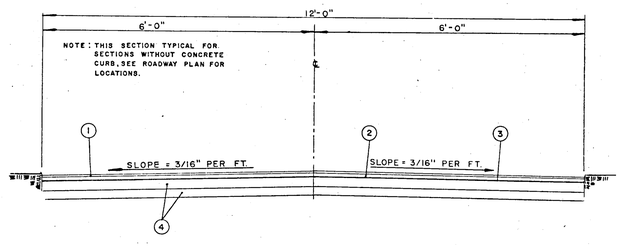
PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
36 OF 67

BRUNING 44-510—



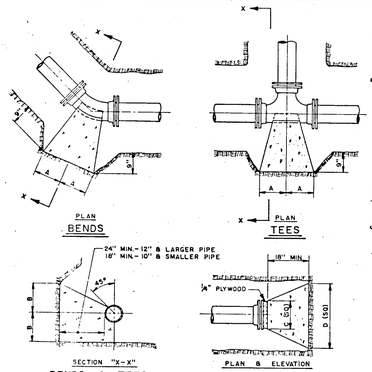
① ITEM - 404 - 1" THICK SURFACE COURSE
② ITEM - 402 - 1 1/2" THICK LEVELING COURSE
③ ITEM - 408 - PRIME COAT - 0.35 GAL./SQ.YD.
④ ITEM - 304 - AGGREGATE BASE 8" THICK - 2 - 4" LIFTS

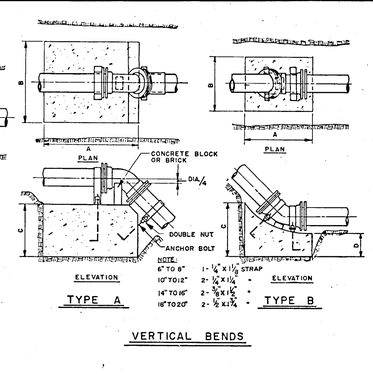
NOTE:
PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS.

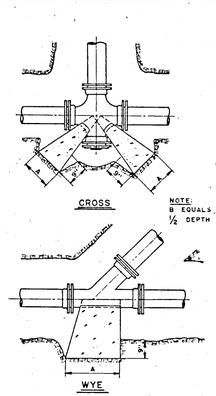


TYPICAL PAVEMENT SECTIONS

SCALE 1" = 1'-0"







VERTICAL BENDS

TYPE	SIZE	¼ BENDS A	¼ BENDS B	⅛ BENDS A	⅛ BENDS B	1/16 BENDS A	1/16 BENDS B	TEES A	TEES B	PLUGS C	PLUGS D
2000 PSF SOIL	6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
	8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"

NOTE:
BASED ON 100 P.S.I. STATIC PRESSURE PLUS A.W.W.A. WATER HAMMER.
ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.

TYPE	SIZE	TYPE A A	TYPE A B	TYPE A C	TYPE B A	TYPE B B	TYPE B C	TYPE B D
2000 PSF SOIL	6"	36"	30"	24"	24"	24"	24"	16"
	8"	42"	36"	24"	30"	24"	30"	18"

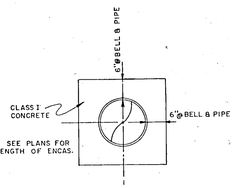
NOTE:
BASED ON 100 P.S.I. STATIC PRESSURE PLUS A.W.W.A. WATER HAMMER.
ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.

TYPE	SIZE	CROSS A	CROSS B	WYE A	WYE B
2000 PSF SOIL	6"	10"	12"	9"	10"
	8"	13"	16"	12"	13"

NOTE:
BASED ON 100 P.S.I. STATIC PRESSURE PLUS A.W.W.A., WATER HAMMER.
ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.

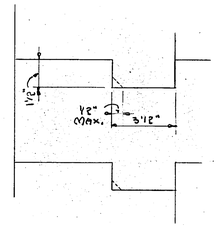
FORCE MAIN AND WATER MAIN BLOCKING DETAILS

NO SCALE

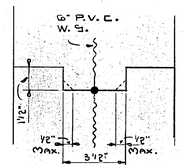


CONCRETE ENCASEMENT FOR WATER MAIN

NO SCALE

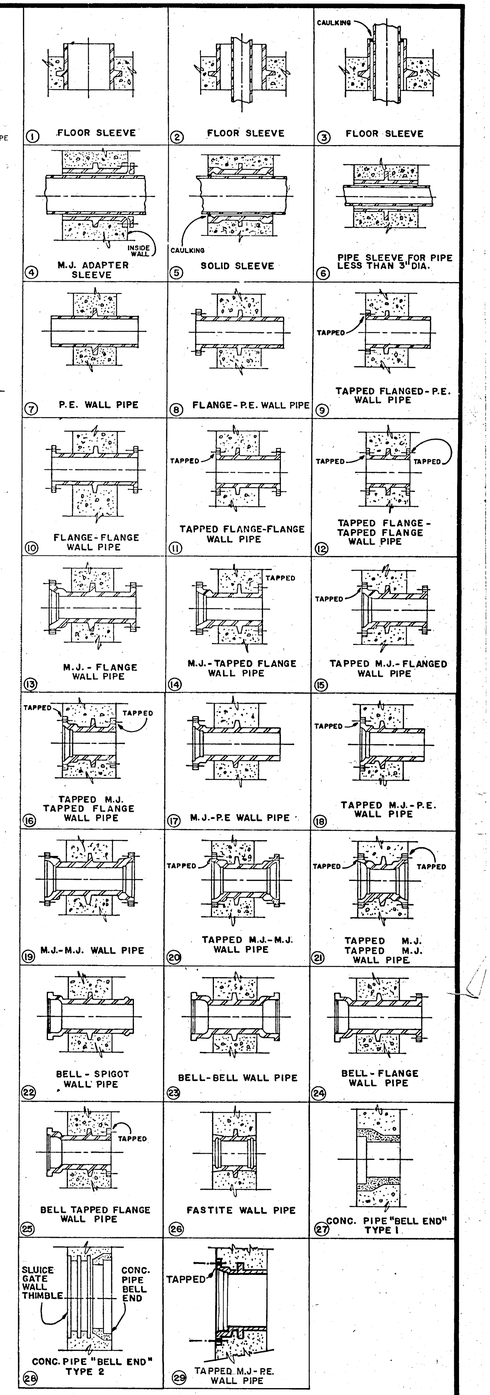


SECTION



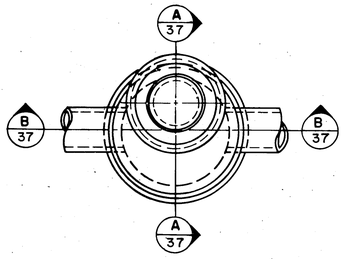
SECTION

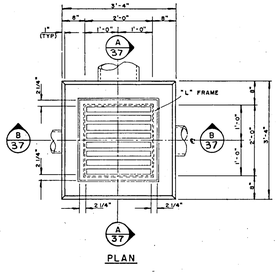
TYPICAL 2x4 CONSTRUCTION JOINT & WATERSTOP DETAILS

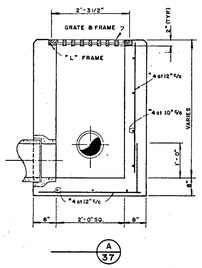


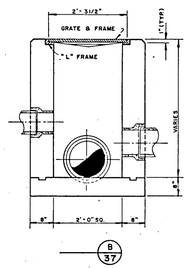
WALL CASTINGS

NO SCALE



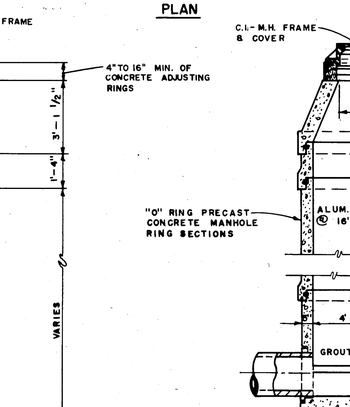


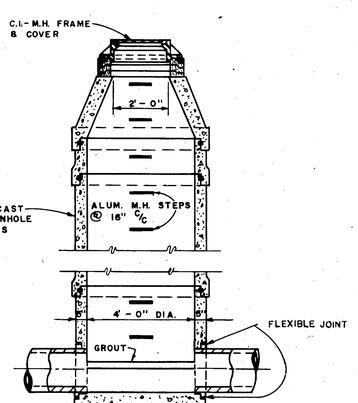




CATCH BASIN DETAILS

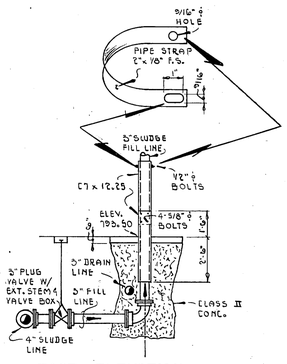
SCALE: ½" = 1'-0"

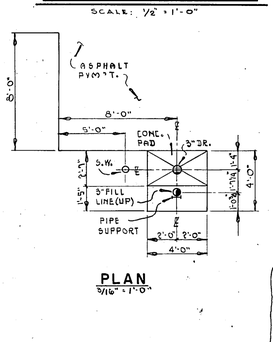


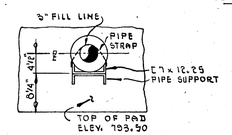


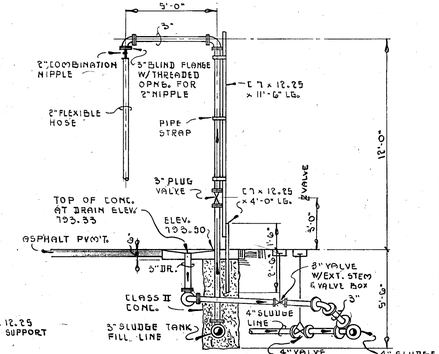
ECCENTRIC MANHOLE FOR SEWERS 24" AND LESS

SCALE ~ ¾" = 1'-0"









SLUDGE TANK FILL LINE DETAILS

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	ADDED CONSTRUCTION JOINT	3/31/76	PWD	BGN
	AND WATERSTOP DETAIL			
	Record Drawing	12/80	L.E.C.	M.L.H.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: G.G.N.
DRAWN BY: R.S.G.
CHECKED BY: W.C.K.

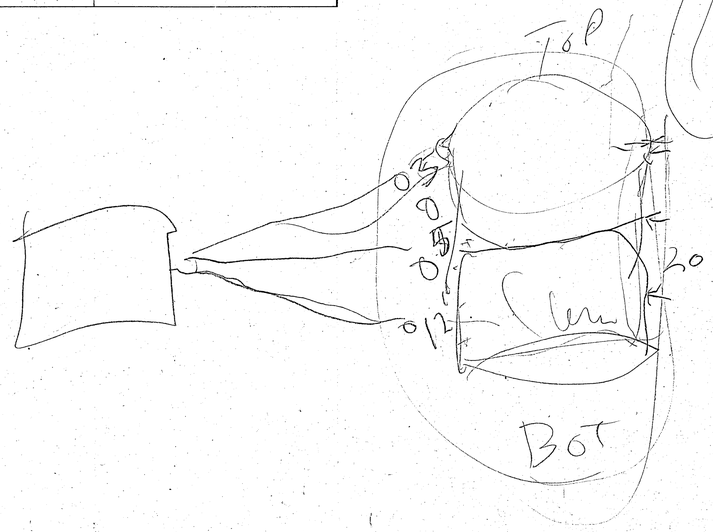
DETAILS
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

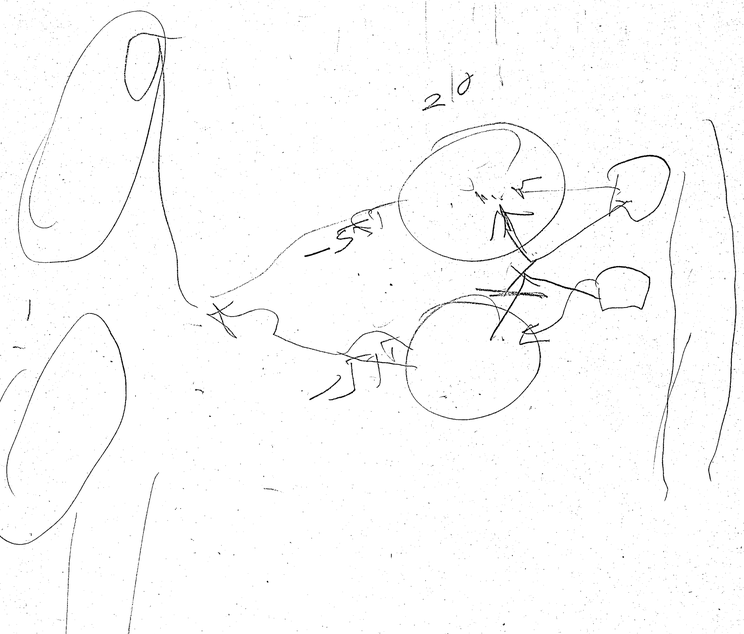
PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
37 OF 67

BRUNING 44-511—

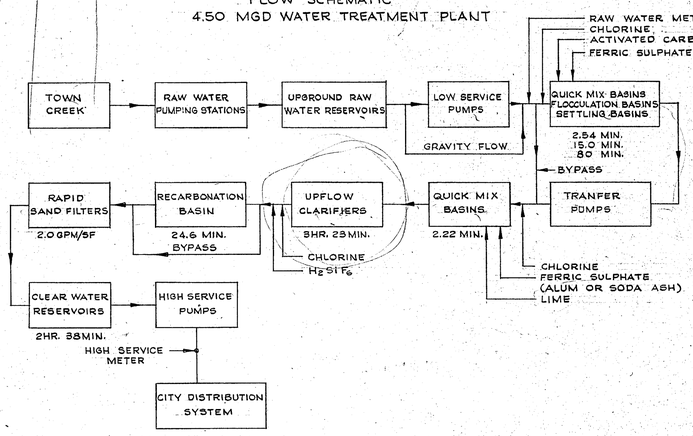
CHEMICAL BUILDING - VALVE AND FITTING SCHEDULE

NO.	TYPE	SIZE	OPERATOR	NOTES
HB 1	HOSE BIBB (SCREWED)	3/4"	MANUAL	
HB 2	" "	3/4"	"	
HB 3	" "	3/4"	"	
HB 4	" "	3/4"	"	
HB 5	" "	3/4"	"	
HB 6	" "	3/4"	"	
HB 7	" "	3/4"	"	
HB 8	" "	3/4"	"	
HB 9	" "	3/4"	"	
HB 10	" "	3/4"	"	
HB 11	" "	3/4"	"	
HB 12	" "	3/4"	"	
HB 13	" "	3/4"	"	
HB 14	" "	3/4"	"	
HB 15	" "	3/4"	"	
HB 16	" "	3/4"	"	
HB 17	" "	3/4"	"	
HB 18	" "	3/4"	"	
HB 19	" "	3/4"	"	
HB 20	HOSE BIBB (SCREWED)	3/4"	MANUAL	
HB 21	HOSE BIBB (SCREWED)	3/4"	MANUAL	
WF 1	WATER FAUCET (SCREWED)	3/4"	MANUAL	NON FREEZE
WF 2	" "	3/4"	"	" "
WF 3	" "	3/4"	"	" "
WF 4	" "	3/4"	"	" "
BV 1	ISOLATION BUTTERFLY VALVE (FLANGED)	8"	HANDWHEEL	LIME BIN DUST LINE TO DUST COLLECTOR
BV 2	" "	8"	"	" "
BV 3	" "	16"	"	TRANSFER PUMP SUCTION
BV 4	" "	16"	"	" "
BV 5	" "	12"	"	TRANSFER PUMP DISCHARGE
BV 6	" "	12"	"	" "
BV 7	CONTROL BUTTERFLY VALVE (FLANGED)	16"	ELECTRIC	TRANSFER PUMP CONTROL VALVE. INCLUDED IN ITEM 19-SPECIFICATIONS
BV 8	BY-PASS BUTTERFLY VALVE (FLANGED)	16"	HANDWHEEL W/CHAIN	EX. SETTLING BASIN BY-PASS LINE
CV 1	CHECK VALVE (FLANGED)	12"		TRANSFER PUMP DISCHARGE
CV 2	" "	12"		" "
CV 3	" "	4"		SLUDGE PUMP DISCHARGE
CV 4	" "	4"		" "
CV 5	CHECK VALVE (SCREWED)	2"		SUMP PUMP DISCHARGE
CV 6	" "	2"		" "
CV 7	" "	2"		" "
CV 8	" "	2"		" "
CV 9	" "	1½"		ELEVATOR SUMP DISCHARGE
CV 10	" "	1½"		" "
PV 1	PLUG VALVE W/VALVE BOX (MECHANICAL JOINT)	12"	EXT. STEM & PARTS	TREATMENT BASIN DRAINS
PV 2	PLUG VALVE (MECHANICAL JOINT)	12"	" "	" "
PV 3	PLUG VALVE (FLANGED)	6"	LEVER	TREATMENT BASIN SLUDGE DRAWOFF
PV 4	" "	6"	"	" "
PV 5	" "	6"	"	SLUDGE PUMP SUCTION
PV 6	" "	6"	"	" "
PV 7	" "	6"	"	" "
PV 8	" "	4"	"	SLUDGE PUMP DISCHARGE
PV 9	" "	4"	"	" "
PV 10	PLUG VALVE (SCREWED)	2"	"	SUMP PUMP DISCHARGE
PV 11	PLUG VALVE (SCREWED)	2"	LEVER	SUMP PUMP DISCHARGE
PV 12	PLUG VALVE (FLANGED)	4"	"	QUICK MIX BASIN DRAIN
PV 13	" "	4"	"	" "
PV 14	" "	4"	"	INFLUENT CHAMBER DRAIN
PV 15	PLUG VALVE (SCREWED)	3/4"	"	TREATMENT BASIN NO.I SAMPLING
PV 16	" "	3/4"	"	" "
PV 17	" "	3/4"	"	" "
PV 18	" "	3/4"	"	TREATMENT BASIN NO.II SAMPLING
PV 19	" "	3/4"	"	" "
PV 20	" "	3/4"	"	" "
PV 21	" "	3/4"	"	TREATMENT BASIN NO. I EFFLUENT FLUME SAMPLING
PV 22	" "	3/4"	"	TREATMENT BASIN NO II EFFLUENT FLUME SAMPLING
PV 23	" "	3/4"	"	
PV 24	PLUG VALVE (SCREWED)	3/4"	LEVER	
PV 25	" "	1½"	LEVER	ELEVATOR PIT SUMP DISCHARGE
SC	SAMPLING COCK (SCREWED)- TORED'D	3/4"	MANUAL	LOCATED AT SAMPLING SINK
BAV	BALL VALVE (SCREWED)	1½"	MANUAL	CHLORINE INSTITUTE





FLOW SCHEMATIC
4.50 MGD WATER TREATMENT PLANT



REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.L.H.

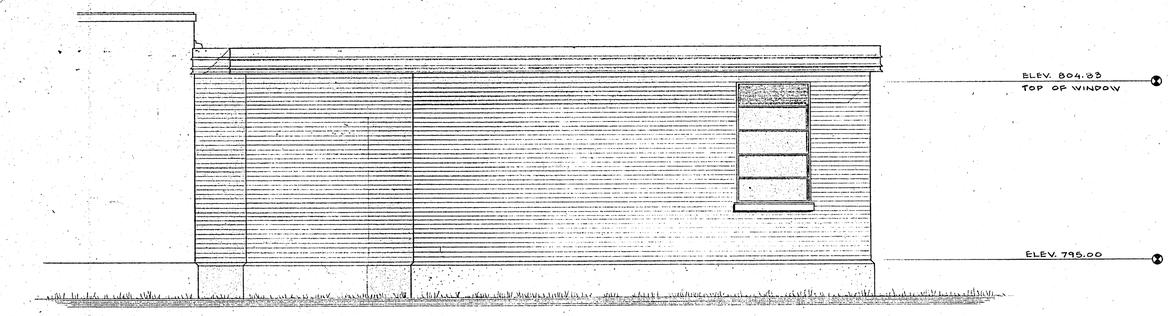
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: NONE
DESIGNED BY: G.C.N.
DRAWN BY: R.S.G.
CHECKED BY: W.C.K.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

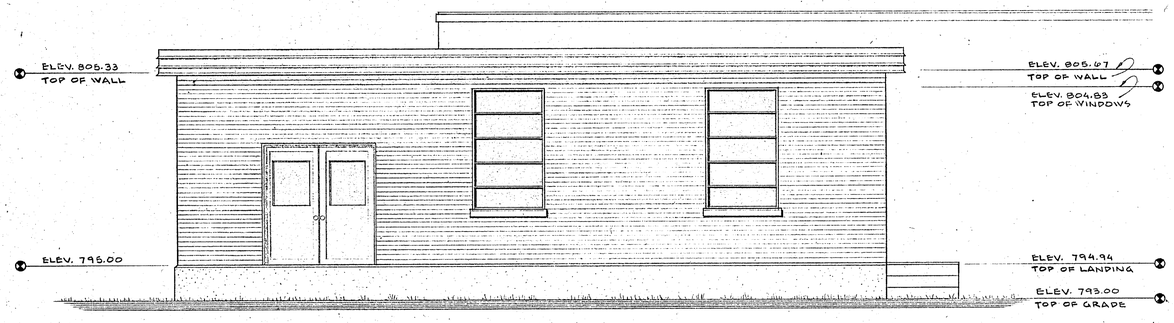
PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
38 OF 67

BRUNING 44-511—



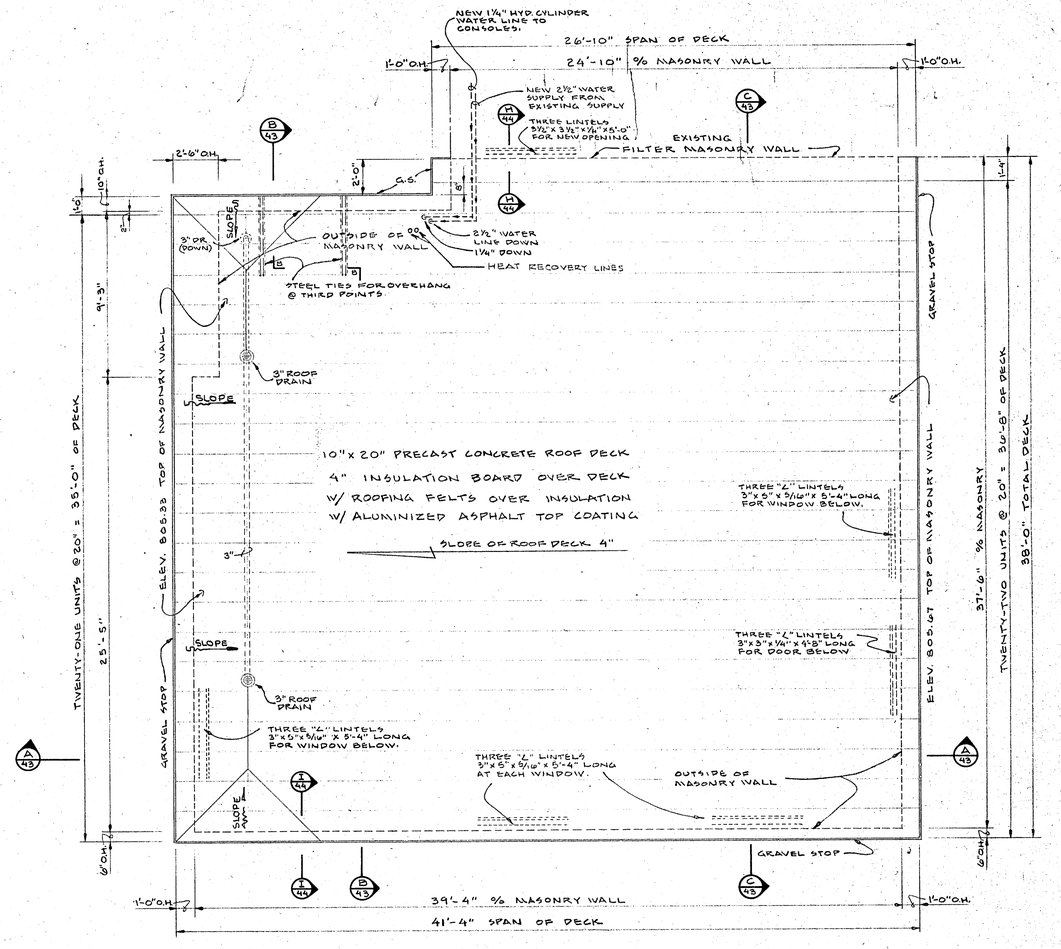
SOUTH ELEVATION

SCALE: 1/4"=1'-0"



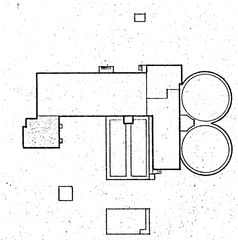
EAST ELEVATION

SCALE: 1/4"=1'-0"



ROOF PLAN

SCALE: 1/4"=1'-0"



REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-27-80	L.E.C.	M.L.H.

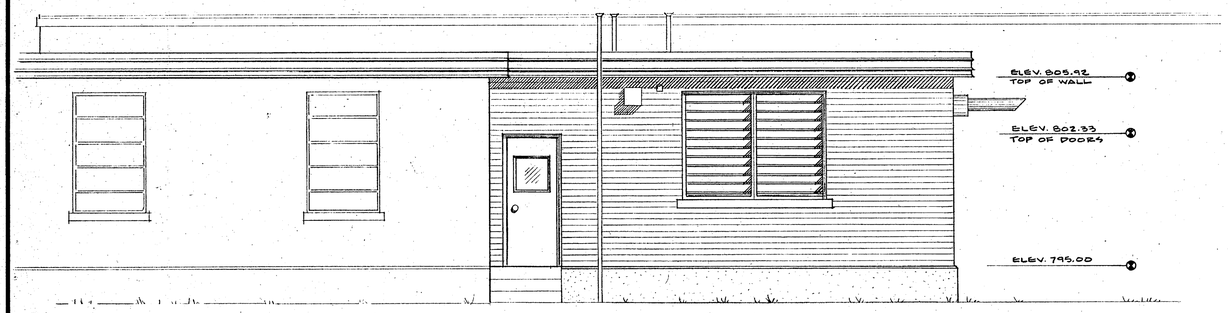
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.C.N. W.C.K.

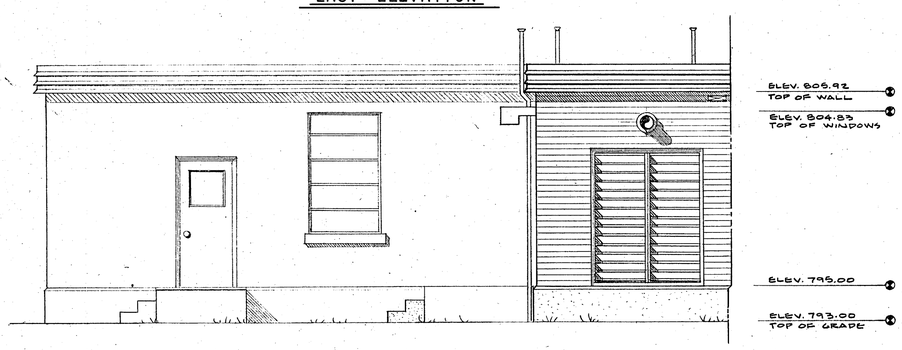
FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
39 OF 67

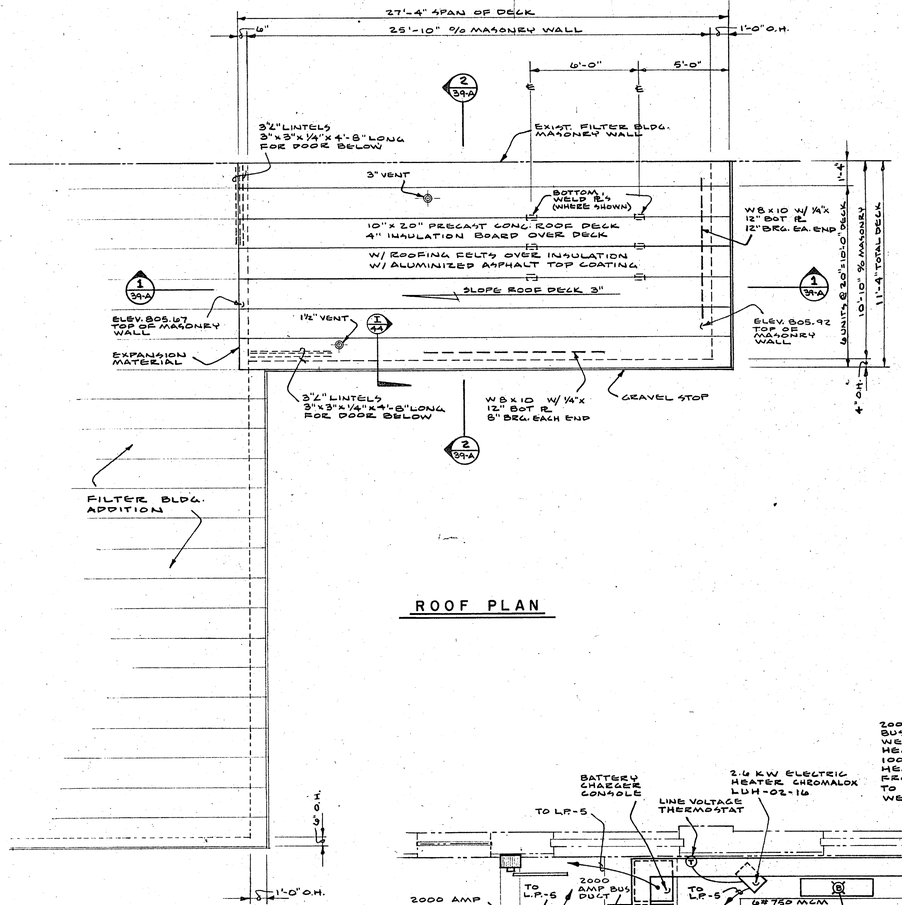
BRUNING 44-510—



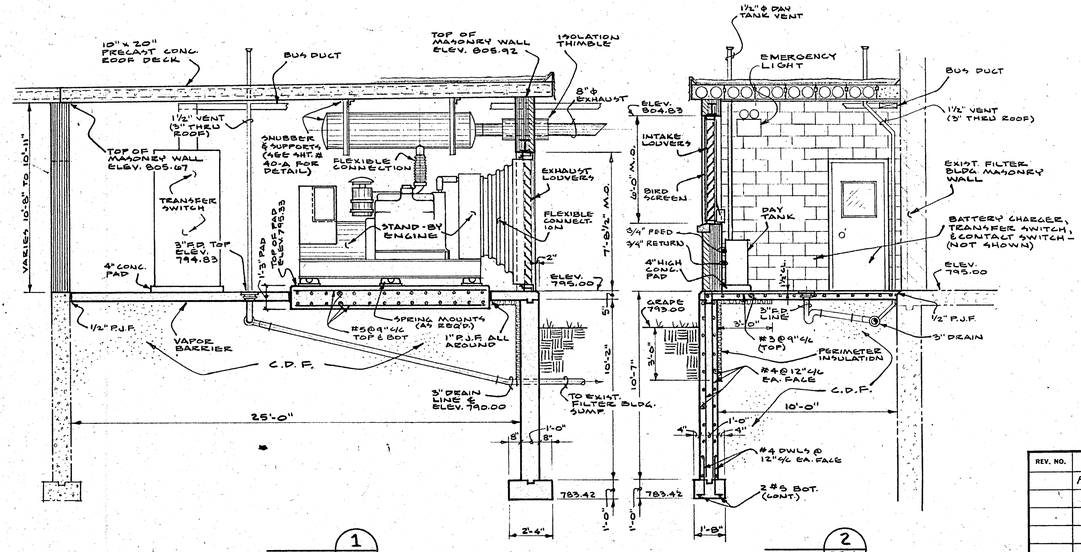
EAST ELEVATION

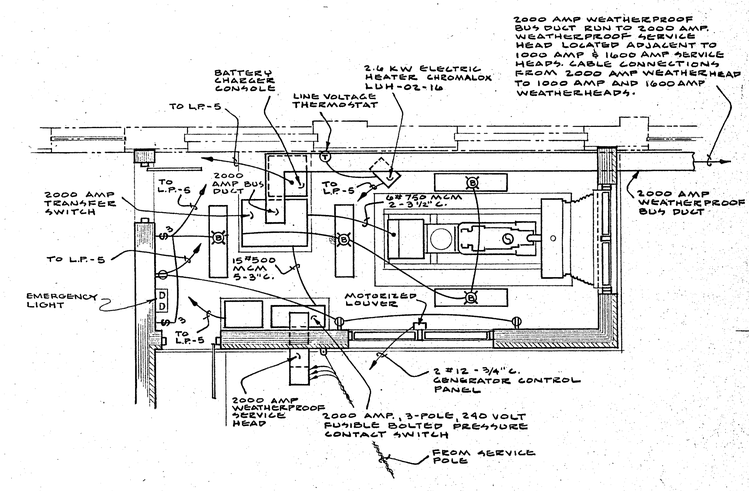


NORTH ELEVATION



ROOF PLAN





ELECTRICAL LAYOUT

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2.27.80	L.E.C.	M.L.N.

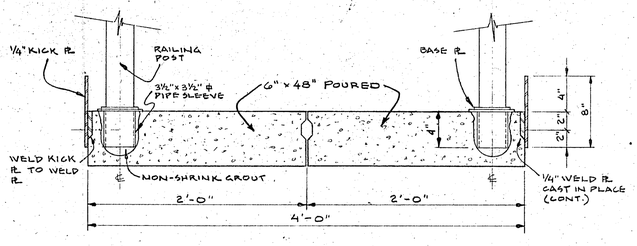
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 1/4"= 1'-0"
DESIGNED BY M.J.M. & F.A.P.
DRAWN BY C.T.V.
CHECKED BY G.W.J. & W.C.K.

STAND-BY GENERATOR BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

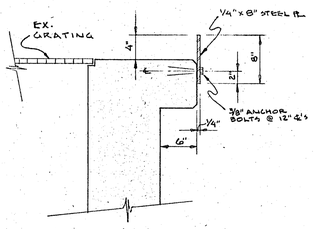
PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
39-A OF 47

BRUNING



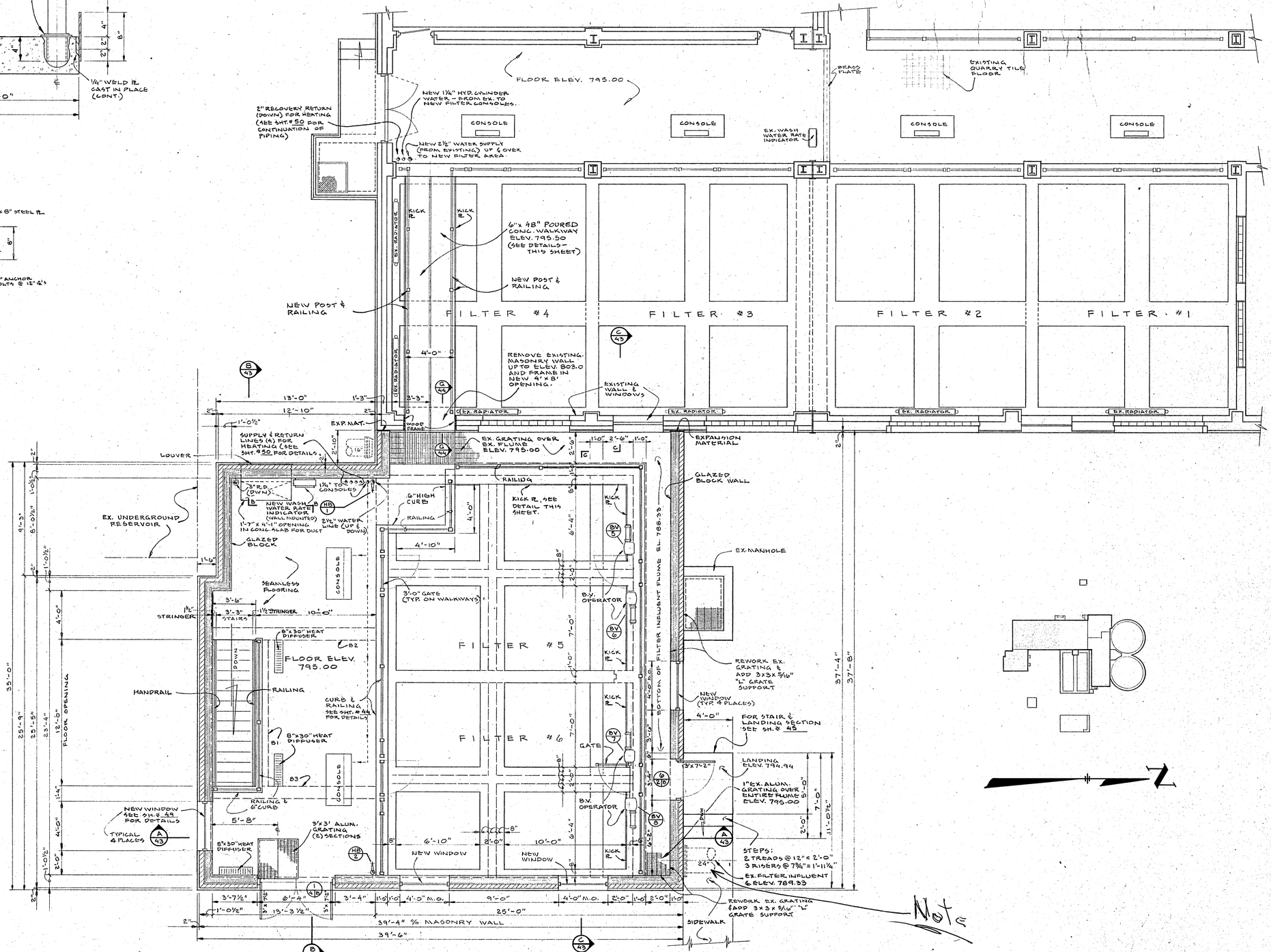
WALKWAY DETAIL

SCALE: 1½" = 1'-0"



KICK PLATE DETAIL

SCALE: 1" = 1'-0"



PLAN

1/4" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	ADDED 6" HIGH CONC. CURB	3/10/76	PWO	GGN
	Record Drawing	22780	L.E.L.	M.L.H.

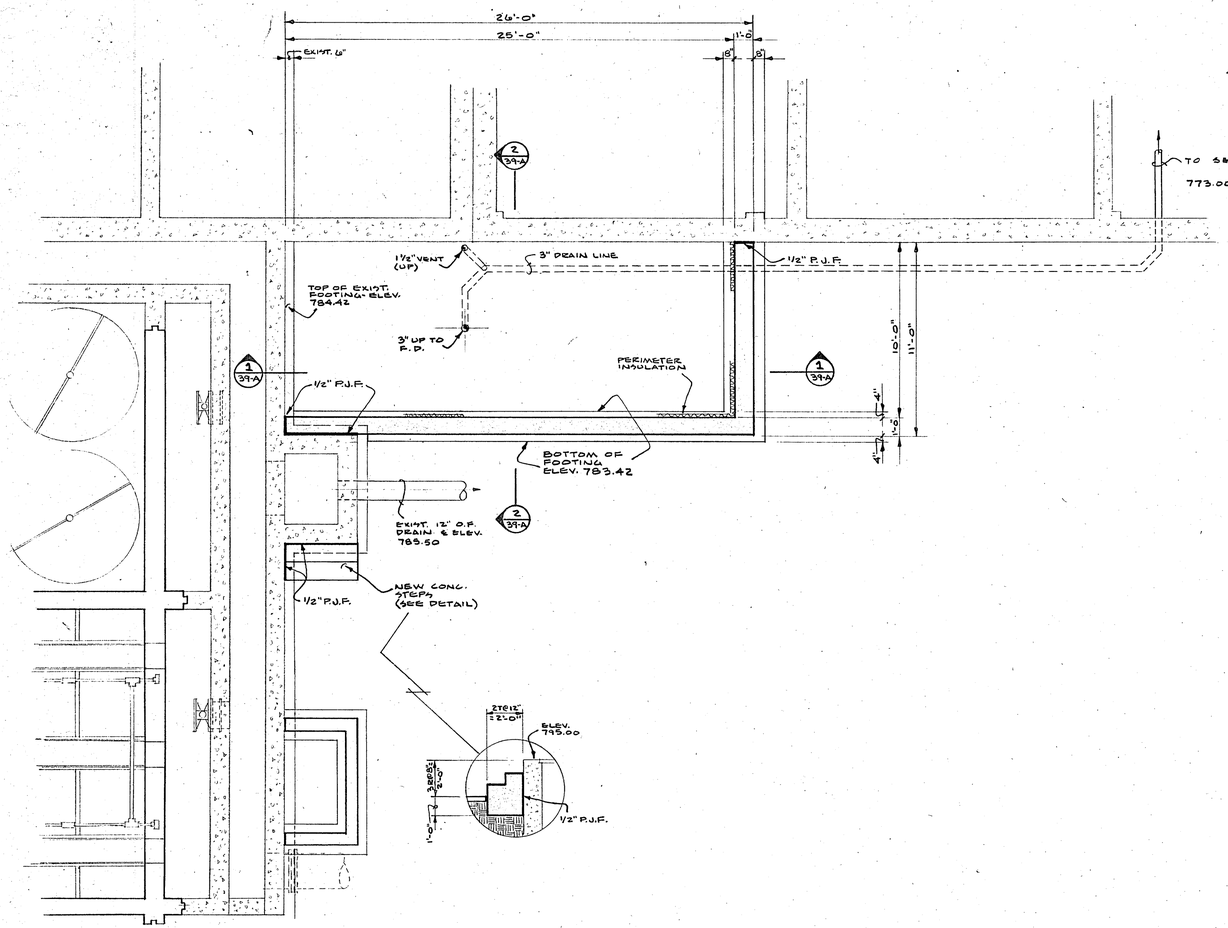
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

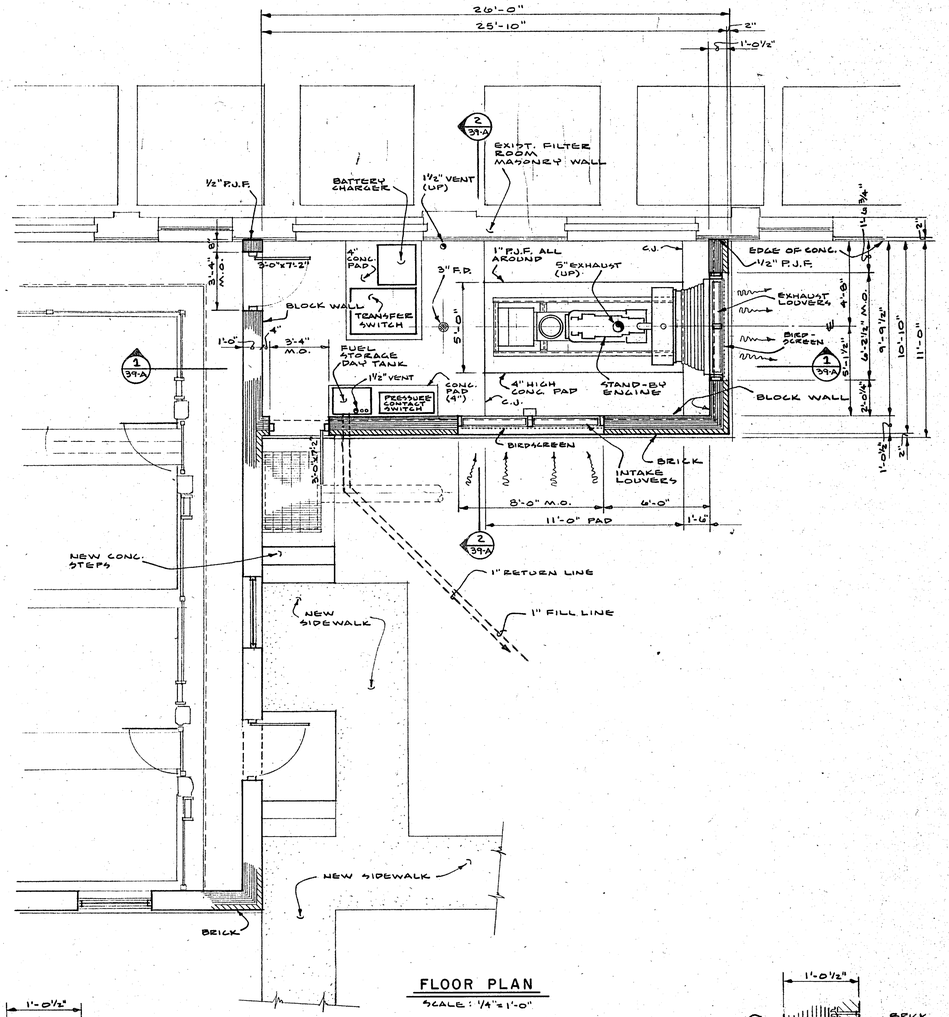
PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
40 OF 47

BRUNING 44-510



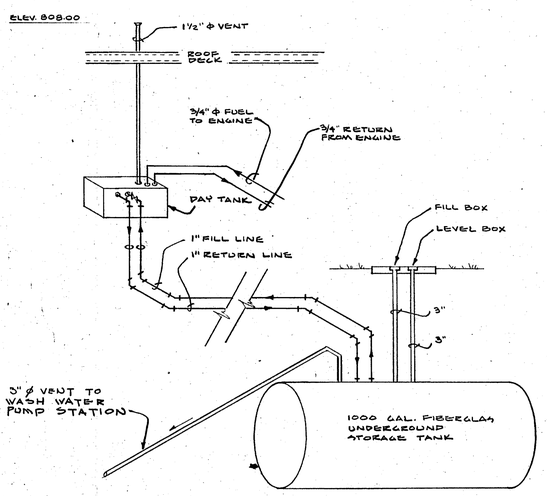
FOOTING PLAN

SCALE: 1/4" = 1'-0"



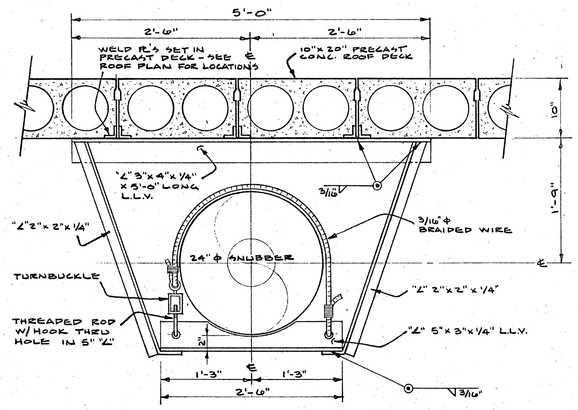
FLOOR PLAN

SCALE: 1/4" = 1'-0"



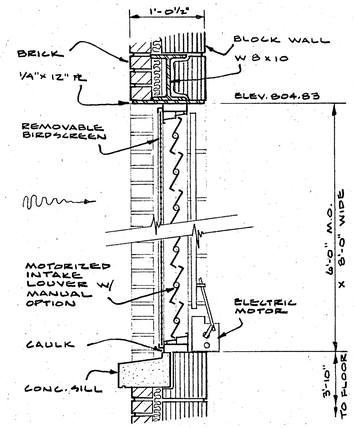
FUEL LINE SCHEMATIC

NO SCALE



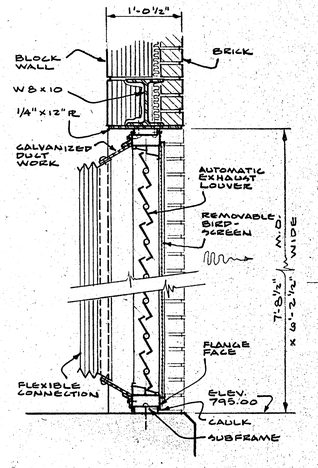
SNUBBER SUPPORT DETAIL

SCALE: 1" = 1'-0"



INTAKE LOUVER DETAIL

SCALE: 1" = 1'-0"



EXHAUST LOUVER DETAIL

SCALE: 1" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	22780	L.E.C.	M.L.H.

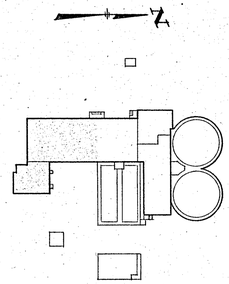
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

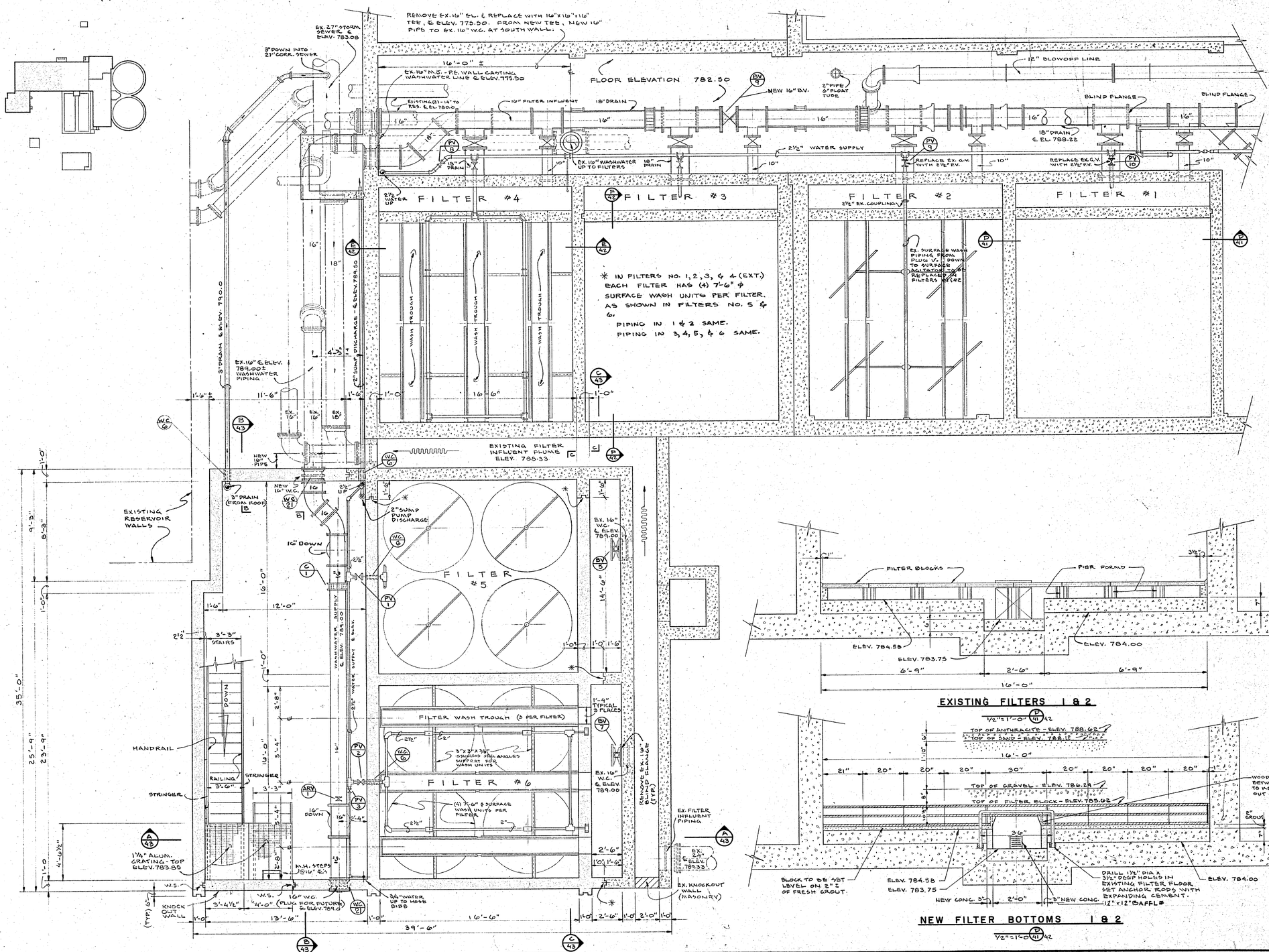
SCALE	AS NOTED
DESIGNED BY	M.J.M.
DRAWN BY	C.T.V.
CHECKED BY	G.W.J. & W.C.K.

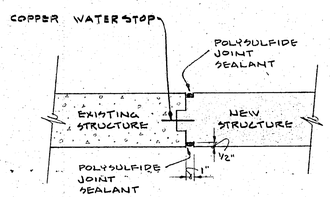
STAND-BY GENERATOR BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 JI
SECTION	
DATE	10-20-75
	40-A OF 67

BRUNING







* IF WATERSTOP IS MISSING FROM EXISTING JOINT - SEAL EACH SIDE OF VERTICAL WALL JOINTS AND TOP OF HORIZONTAL WALL JOINTS.

DETAIL NO. 1
SCALE: 3/4" = 1'-0"

* IF WATER STOP IS NOT FOUND REFER TO DETAIL NO. 1 (THIS SHEET)

SECTIONAL PLAN ELEVATION - 792.50
SCALE: 1/4" = 1'-0"

EXISTING FILTERS 1 & 2

NEW FILTER BOTTOMS 1 & 2
½" = 1'-0" P-41/42

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	ANTHRACITE TO 0" THICKNESS	3/6/80	R.W.D.	G.G.N.
2.	RECORD DRAWING	2-28-80	L.E.C.	M.L.H.

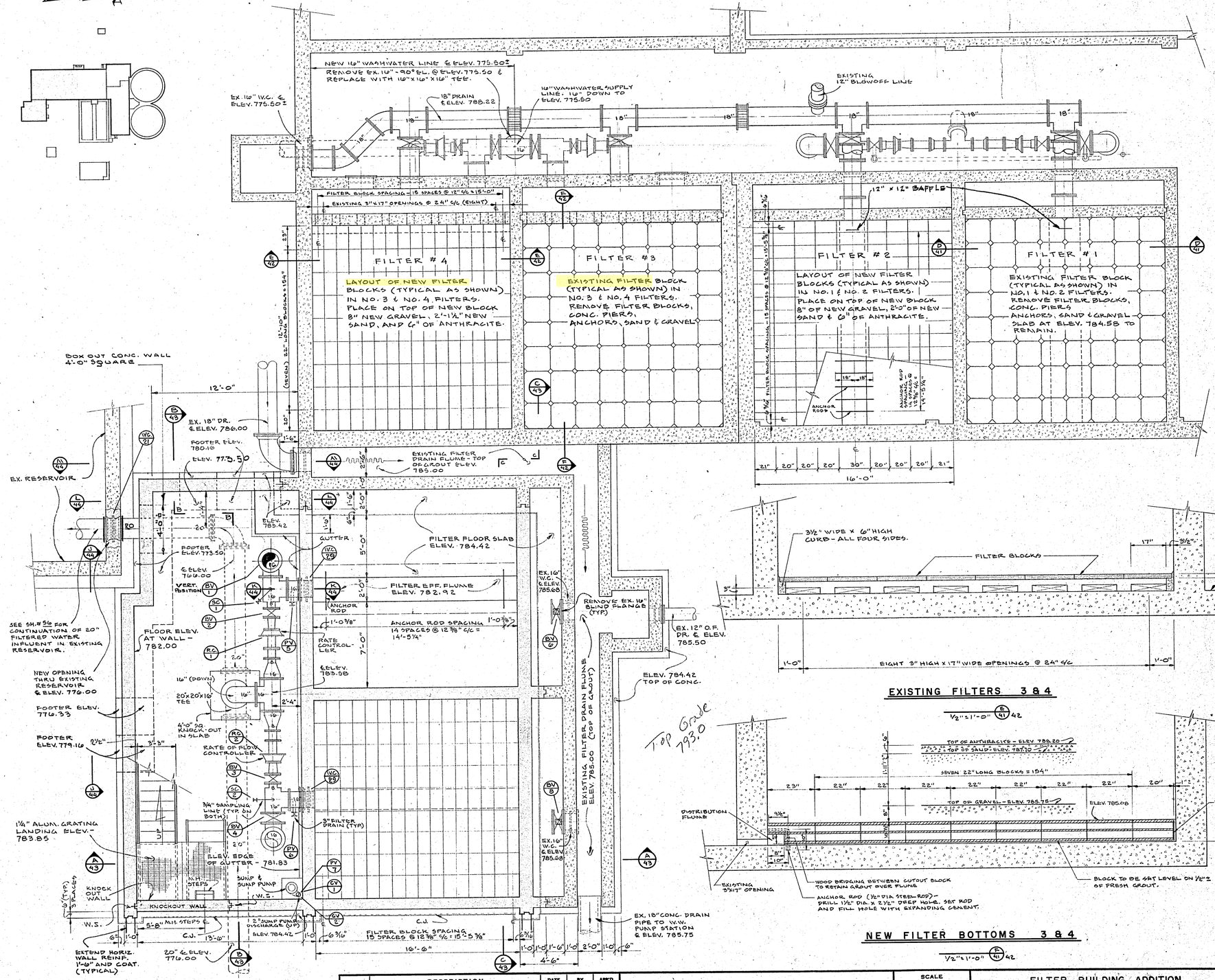
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	M.J.M.
DRAWN BY	C.T.V.
CHECKED BY	C.G.N. W.C.K.

FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	41 OF 67

BRUNING 44-510



SECTIONAL PLAN ELEVATION - 787.00

SCALE: ¼"=1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1a	ANTHRACITE TO 6"	3/8/76	PWO	GGW
	THICKNESS			
	Record Drawing	2-28-80	L.E.C.	M.C.H.

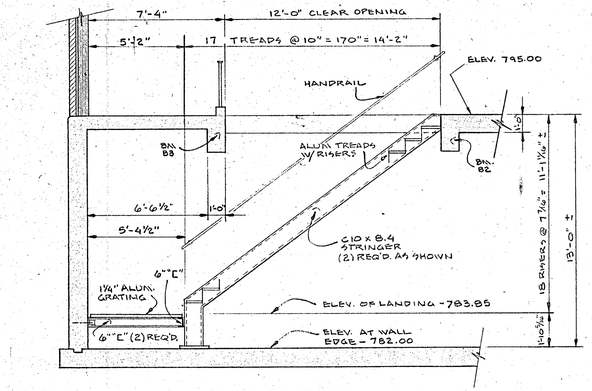
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: N.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

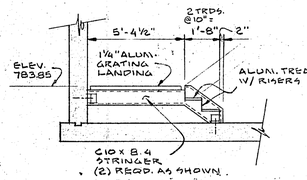
FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
42 OF 47

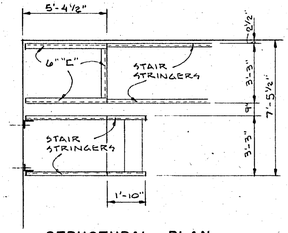
BRUNING 44-510



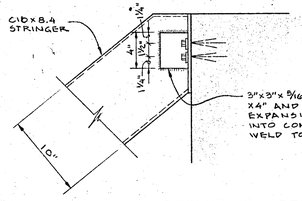
SECTION
¼" = 1'-0"



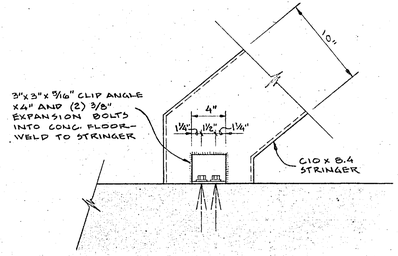
SECTION
¼" = 1'-0"



STRUCTURAL PLAN
¼" = 1'-0"

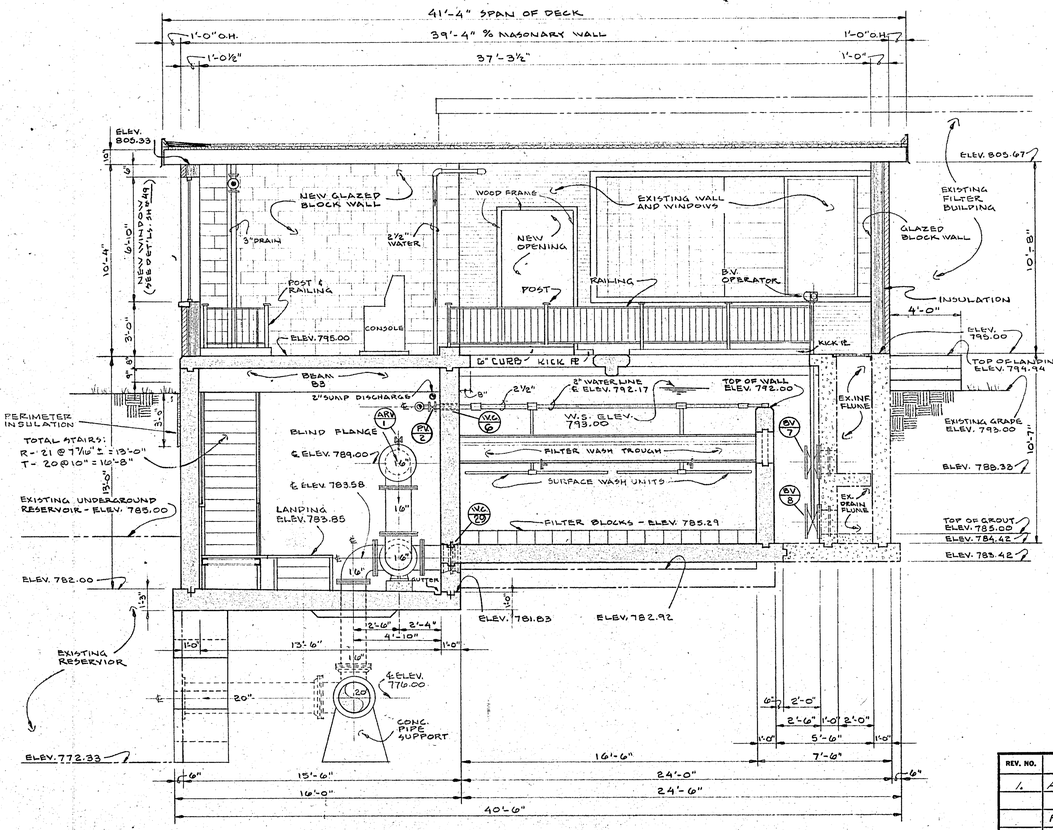


ANCHORING DETAIL
SCALE: 1½" = 1'-0"

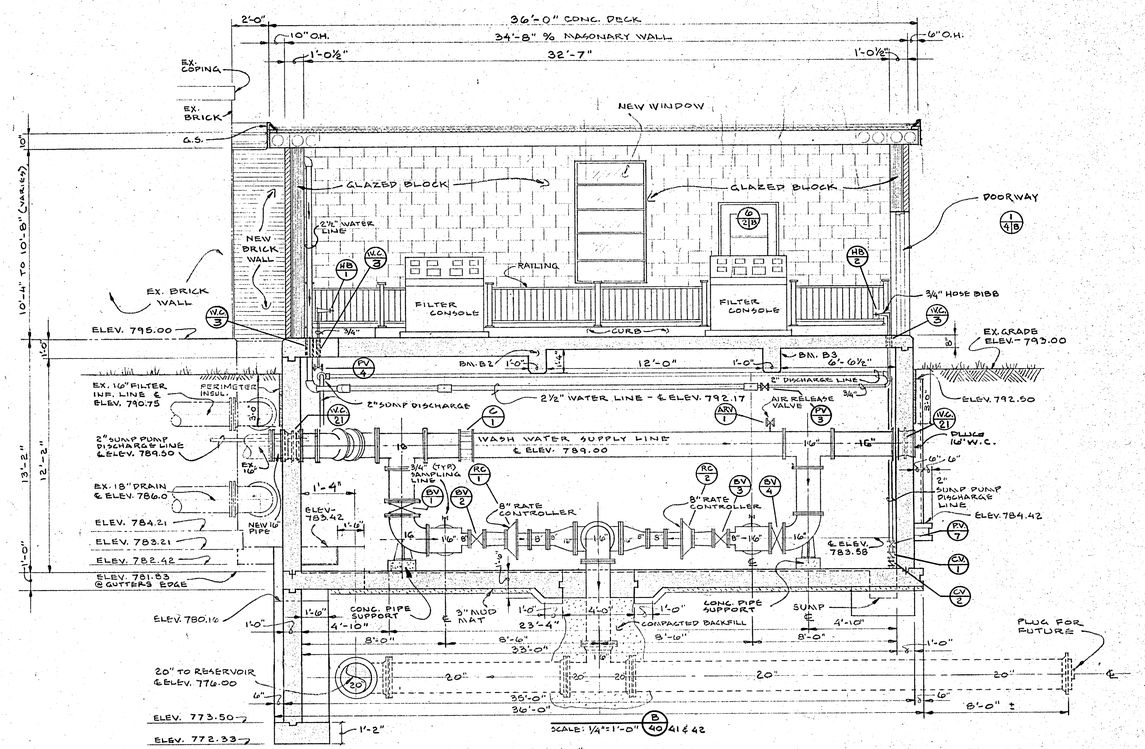


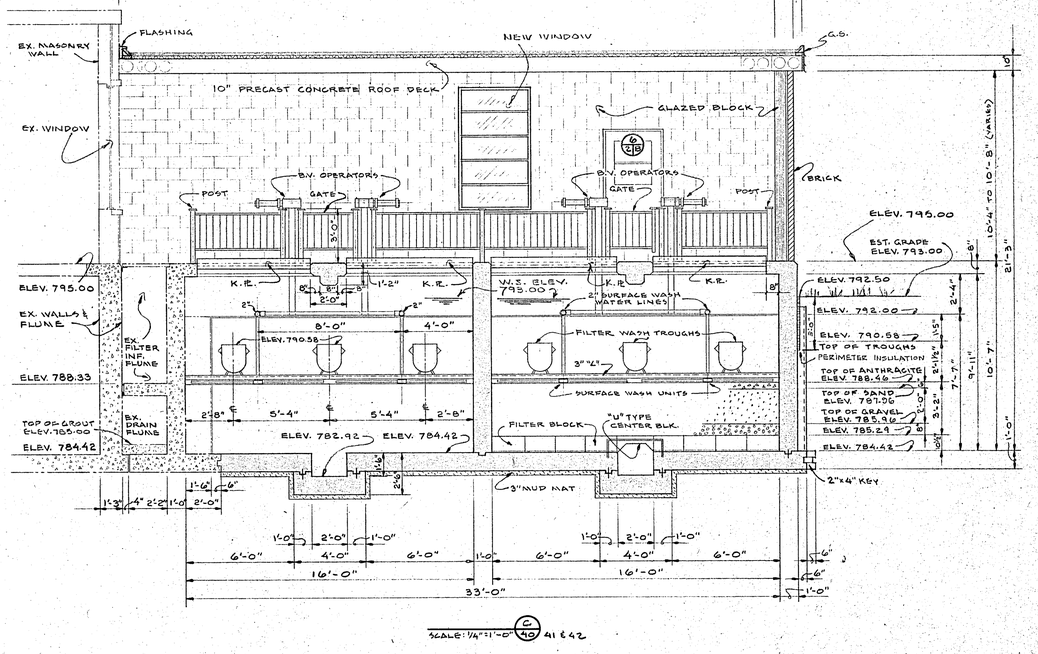
ANCHORING DETAIL
SCALE: 1½" = 1'-0"

STAIR DETAILS



SCALE: ¼"=1'-0" (A/40) 41 & 42





SCALE: ¼"=1'-0" (C/40) 41 & 42

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	ANTHRACITE TO Co.	3/18/76	PWD	GEW
	THICKNESS			
	Record Drawing	2/28/80	L.E.C.	MLH

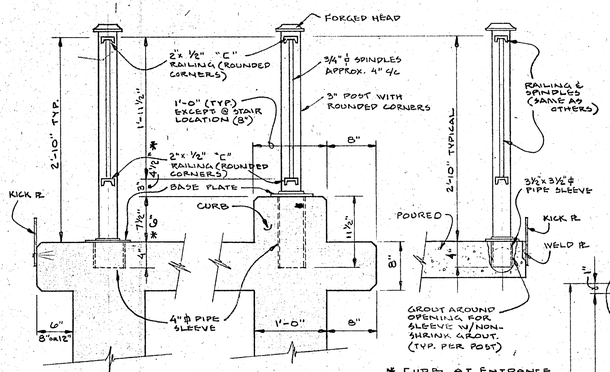
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
43 OF 47

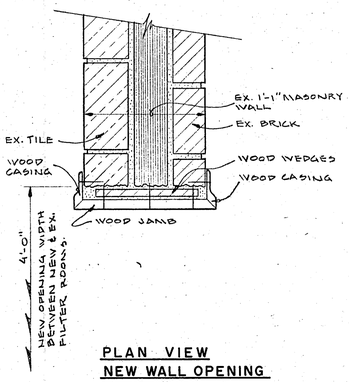
BRUNING 44-510—



RAILING DETAILS

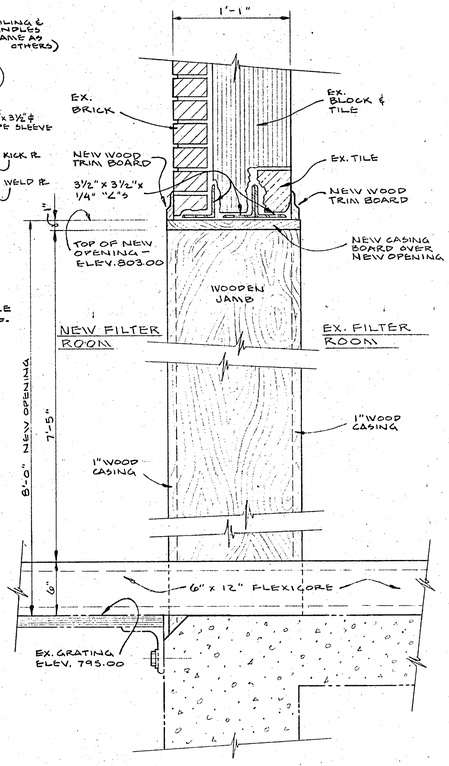
SCALE: 1"=1'-0"

* CURB AT ENTRANCE TO EX. FILTER BLDG.



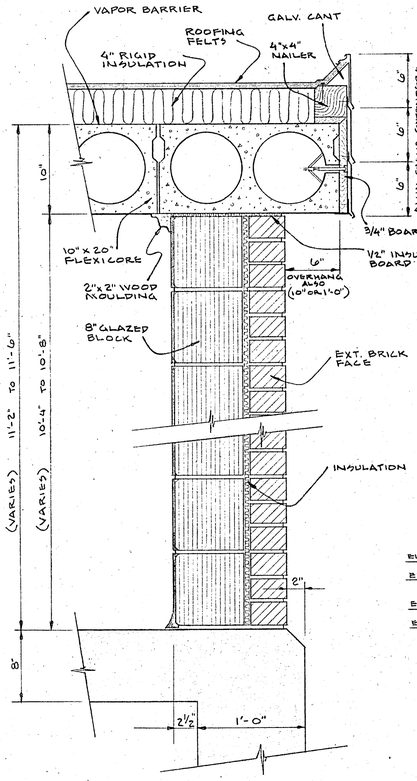
PLAN VIEW NEW WALL OPENING

SCALE: 1½"=1'-0"



NEW OPENING

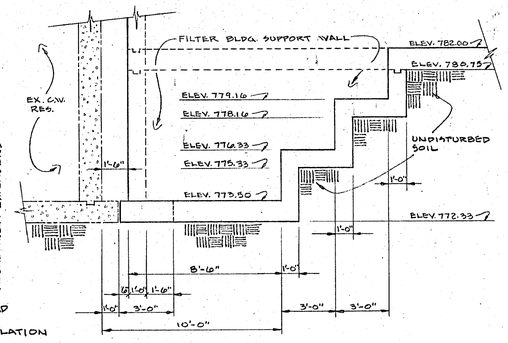
SCALE: 1½"=1'-0" (G / 40)



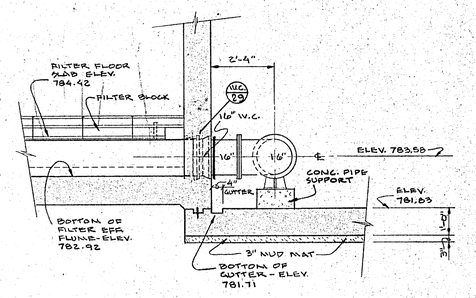
TYPICAL WALL SECTION

SCALE: 1½"=1'-0"

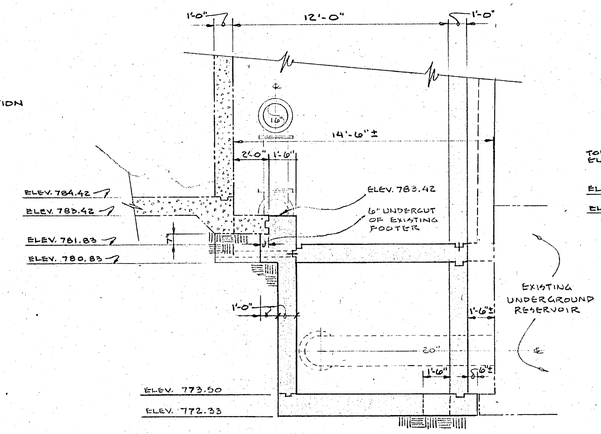
WALL DETAILS



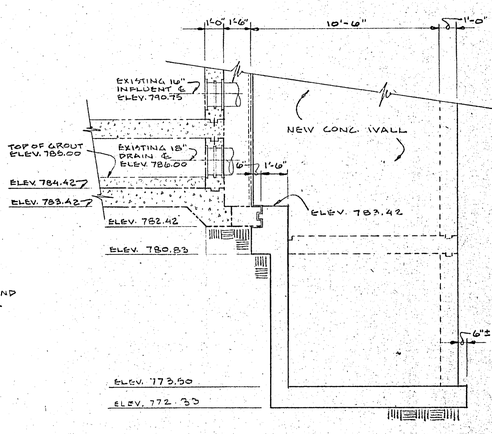
SCALE: ¼"=1'-0" (J / 42)



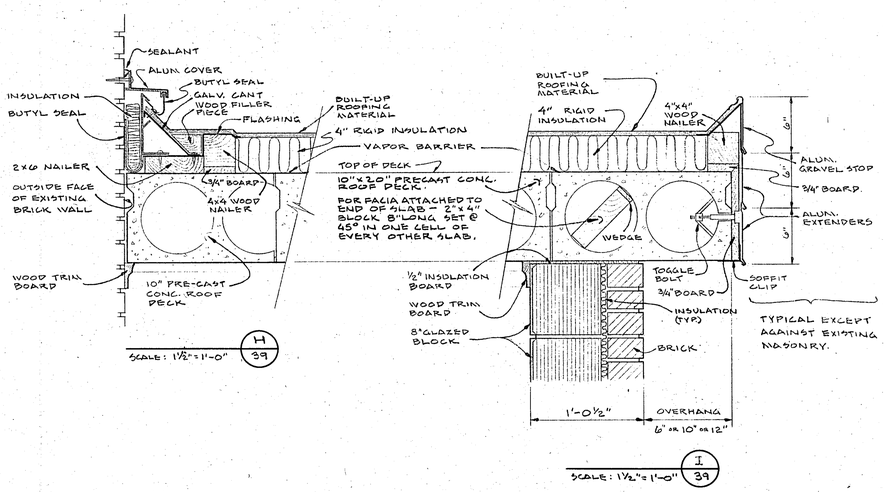
SCALE: 3/8"=1'-0" (K / 42)



SCALE: ⅛"=1'-0" (L / 42)



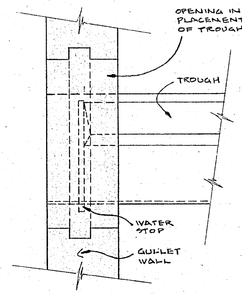
SCALE: ⅛"=1'-0" (M / 42)



SCALE: 1½"=1'-0" (H / 39)

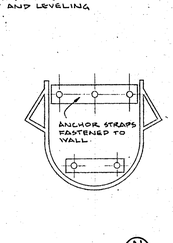
SCALE: 1½"=1'-0" (I / 39)

ROOF DETAILS

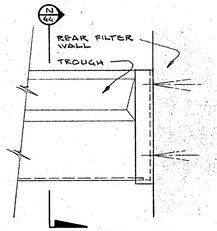


GULLET WALL END TREATMENT

SCALE: 1"=1'-0"

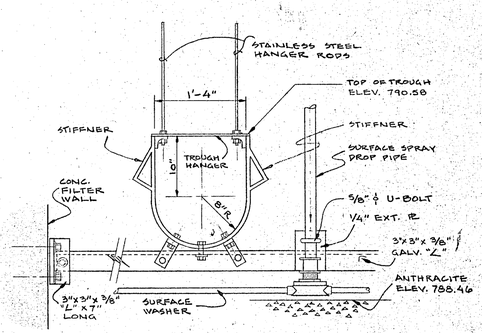


SCALE: 1"=1'-0" (N / 44)



REAR WALL END TREATMENT

SCALE: 1"=1'-0"



SECTION

SCALE: 1"=1'-0"

FIBERGLASS FILTER WASH TROUGH DETAILS

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-28-80	L.E.C.	M.L.H.

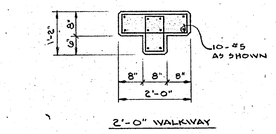
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N., W.C.K.

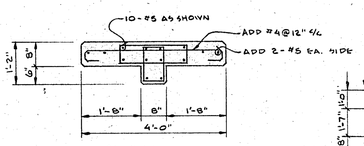
FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
44 OF 67

BRUNING 44-510



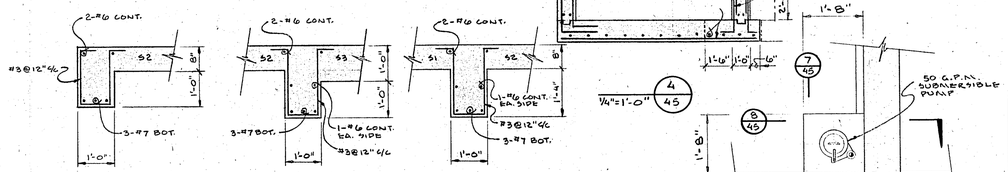
2'-0" WALKWAY



4'-0" WALKWAY

WALKWAY DETAILS

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

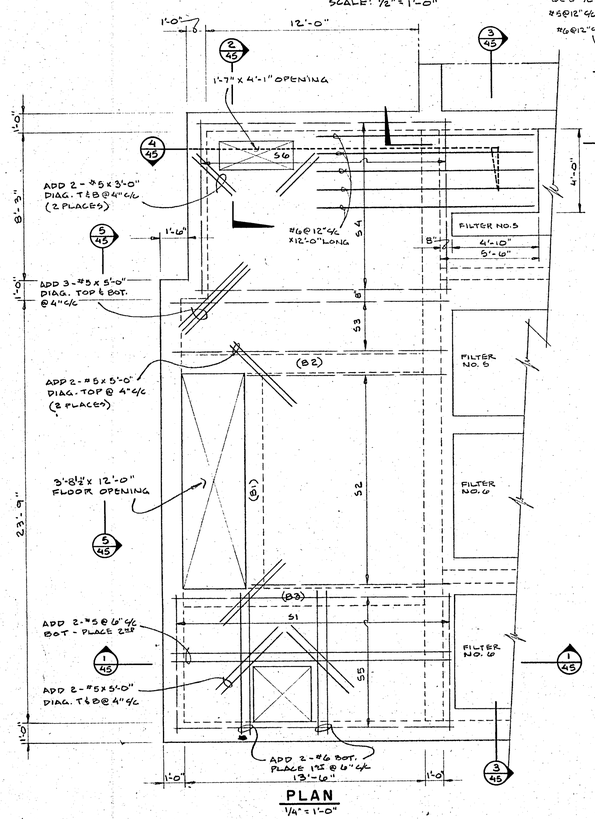


BEAM B1 | BEAM B2 | BEAM B3

1/4"=1'-0" (4/45)

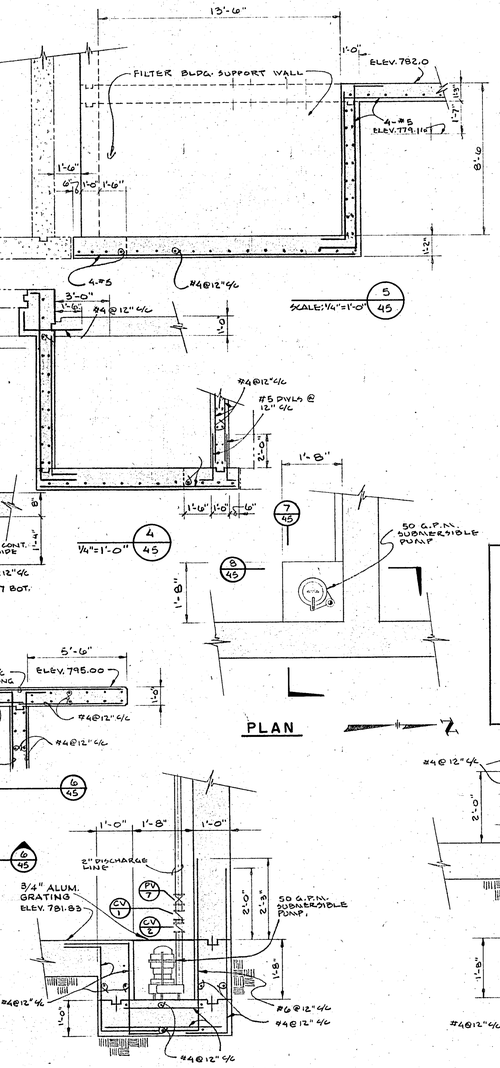
BEAM DETAILS

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



PLAN

1/4" = 1'-0"



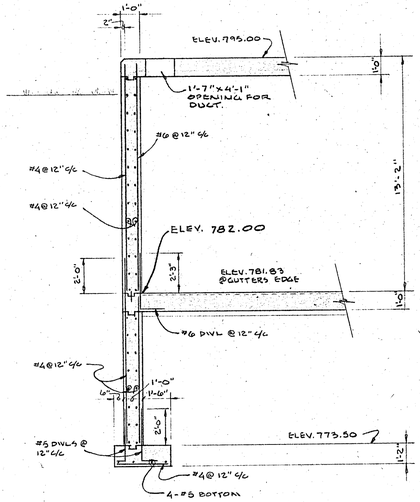
SECTION (7/45)

SUMP DETAILS

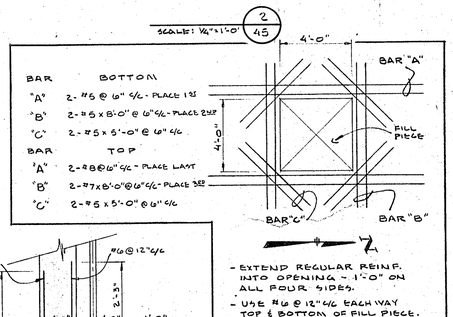
SCALE: 1/2" = 1'-0"

SLAB MARK	SLAB THICK.	REINF. LOCATION	REINFORCING
S1	8"	BOT. - PLACE 1ST	#5@12" c/c
S2	8"	BOT. - PLACE 1ST	#6@12" c/c
S3	12"	BOT. - PLACE 1ST	#6@6" c/c
S4	12"	BOT. - PLACE 1ST	#6@8" c/c
S5	8"	BOT. - PLACE 2ND	#5@12" c/c
S6	8"	BOT. - PLACE 2ND	#5@12" c/c

SLAB REINFORCEMENT



SCALE: 1/4"=1'-0" (5/45)

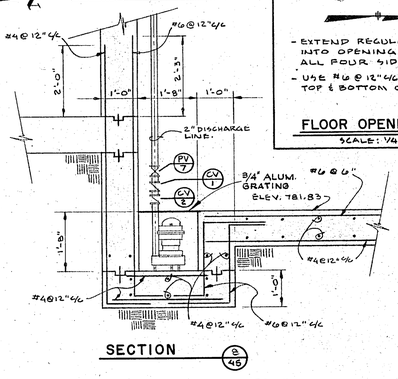


SCALE: 1/4"=1'-0" (2/45)

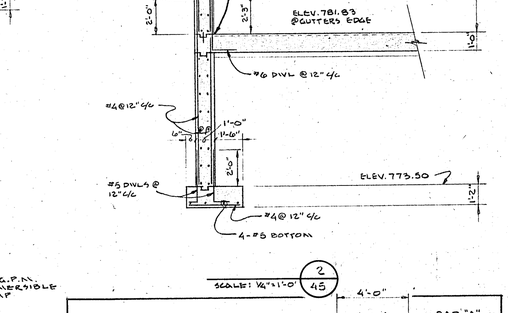
- EXTEND REGULAR REINF. INTO OPENING - 1'-0" ON ALL FOUR SIDES.
- USE #6 @ 12" c/c EACH WAY TOP & BOTTOM OF FILL PIECE.

FLOOR OPENING DETAIL

SCALE: 1/4" = 1'-0"

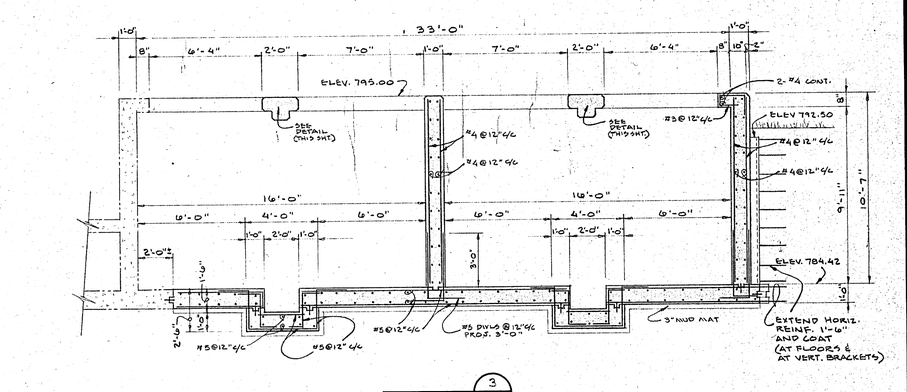


SECTION (8/45)

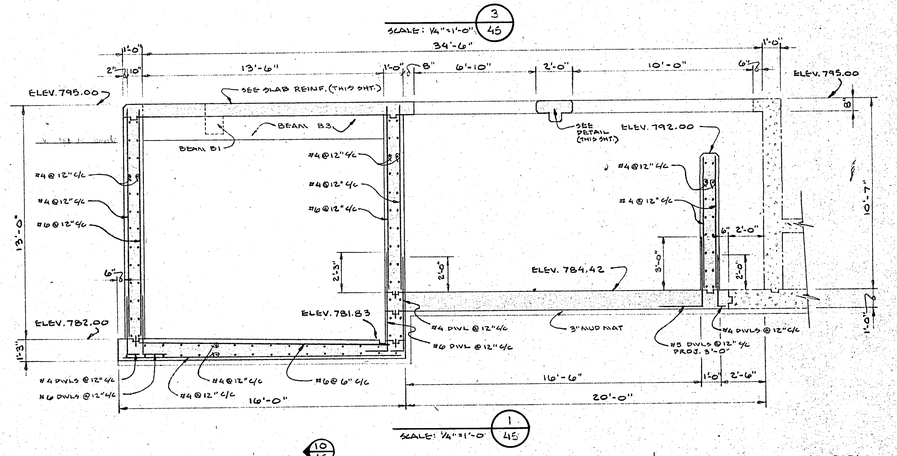


STAIR & LANDING SECTION

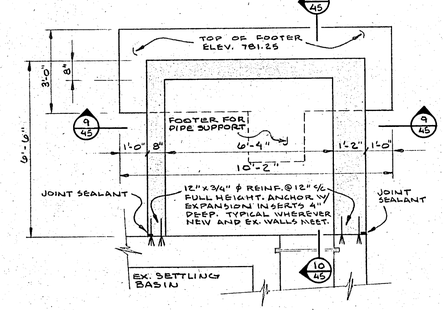
SCALE: 1/2" = 1'-0"



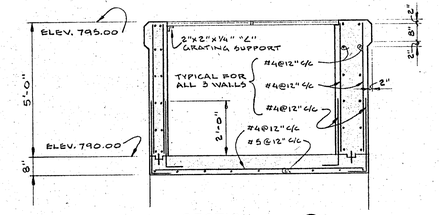
SCALE: 1/4"=1'-0" (3/45)



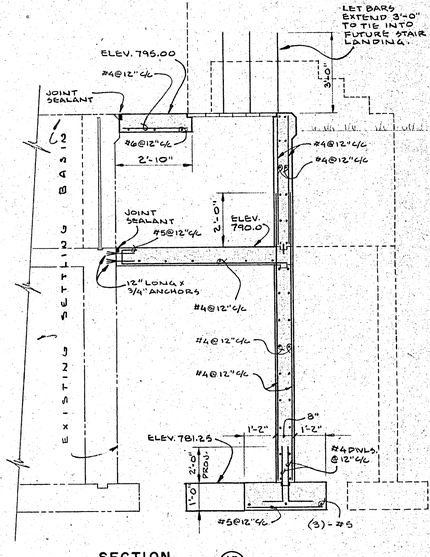
SCALE: 1/4"=1'-0" (1/45)



SECTIONAL PLAN



SECTION (9/45)



SECTION (10/45)

NEW OVERFLOW STRUCTURE

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

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	12-80	L.E.C.	M.L.K.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: D.L.C.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

FILTER BUILDING ADDITION
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
45 OF 47

BRUNING 44-510

130'-3" % MASONRY

35'-7" | 38'-6" | 94'-8" | 17'-0" | 39'-2"

49'-8" % MASONRY

EXISTING ROOF EXPANSION

(NEW CHEMICAL BUILDING (CHLORINE STORAGE ROOF DECK))

CONCRETE ELEV. 807.83

4" ROOF DRAIN (TO REMAIN)

ELEV. OF CONC. AT EX. ROOF DRAIN. 807.62

GRILLE IN CEILING

ROOF VENTILATOR TO BE REMOVED AND OPENING IN DECK TO BE COVERED WITH METAL PLATE. (TYP. FOR ALL)

ROOF VENTILATOR (TO BE REMOVED)

4" ROOF DRAIN (NEW)

EXISTING STEEL JOISTS

ROOF VENTILATOR - REMOVE & COVER OPENING IN DECK W/ METAL PLATE.

SLOPE

ELEV. OF CONC. AT EX. ROOF DRAINS - 807.62 (TYP.)

ROOF VENTILATOR (TO BE REMOVED)

GRILLE IN CEILING

EXISTING STEEL ROOF DECK ELEV. - 807.50

NEW 3" EXHAUST STACK

CARBON ROOM EXHAUST

NEW 3" VENT

CHIMNEY

ROOF VENTILATOR TO BE REMOVED & OPENING IN DECK TO BE COVERED WITH METAL PL. (TYP. FOR ALL)

EXHAUST FAN FOR LINE FEEDERS TO BE REMOVED.

CONC. ELEV. 807.83

REMOVE ROOF VENTILATOR

EX. 3" VENT

(NEW) THREE ½" LINTELS 3"x5"x 5/16" x 5'-4" LONG FOR WINDOW BELOW

NEW ROOF TOP RECOVERY UNIT ON CONC. PAD

1½" VENT

EXISTING STEEL JOISTS

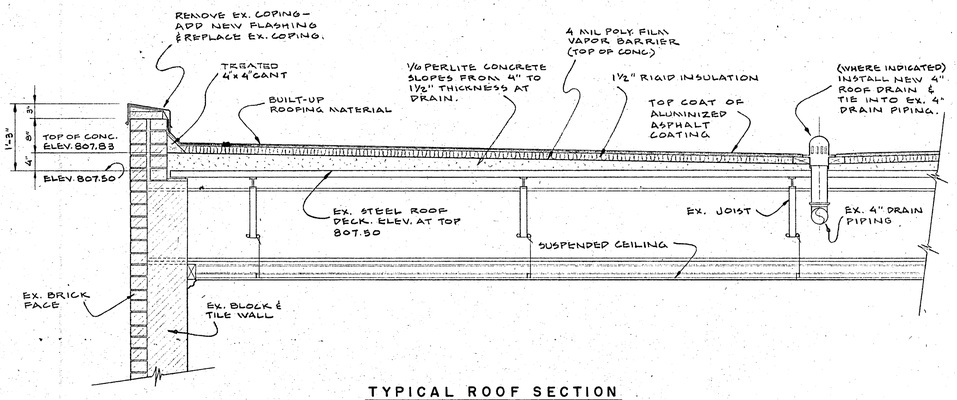
EX. ROOF DRAIN (DOWN)

1964 ROOF AREA

NEW CHEM. BLDG.

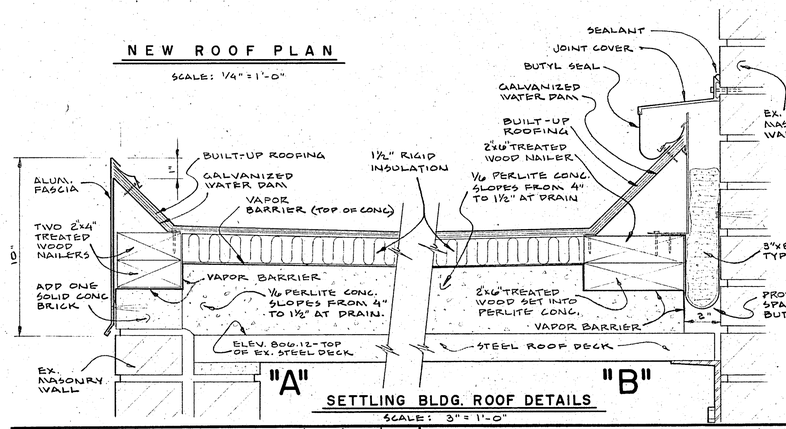
NEW ROOF PLAN

SCALE: 1/4" = 1'-0"



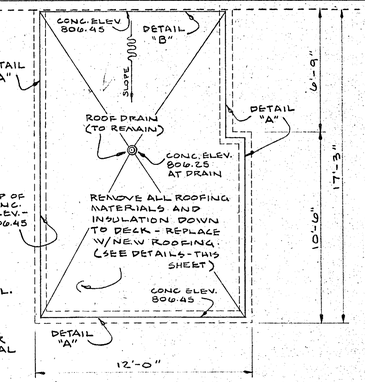
TYPICAL ROOF SECTION

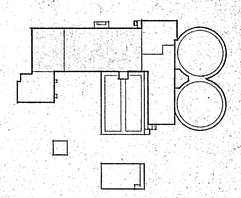
SCALE: 3/4" = 1'-0"



SETTLING BLDG. ROOF DETAILS

SCALE: 3" = 1'-0"





REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-29-80	L.E.C.	M.L.H.

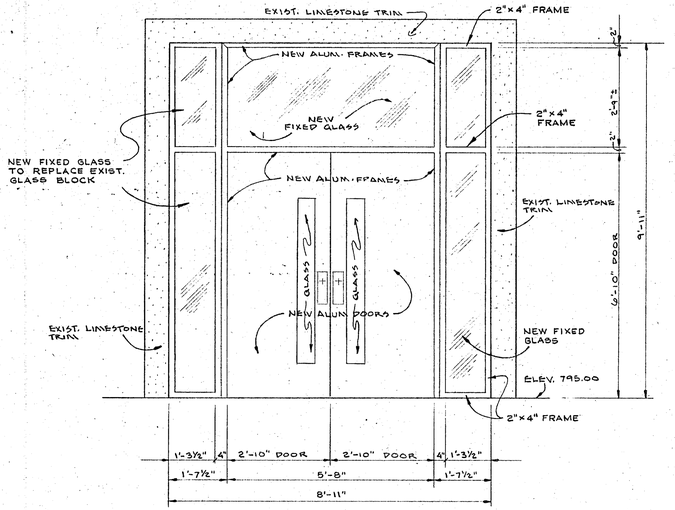
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

EXIST. CHEMICAL & FILTER BLDG.
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

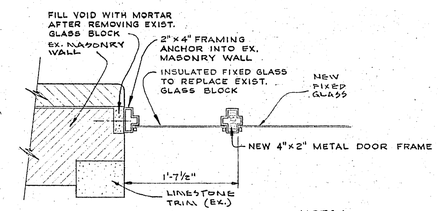
PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
46 OF 107

BRUNING 44-510



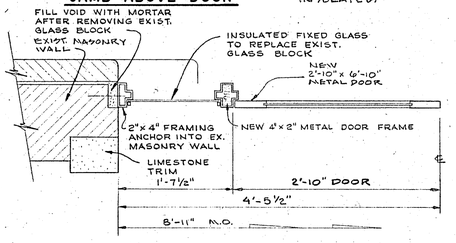
NEW DOOR ELEVATION

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

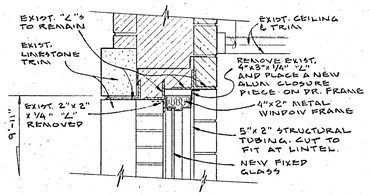


NOTE:
ALL DOOR FRAMES AND TUBING TO BE INSULATED.

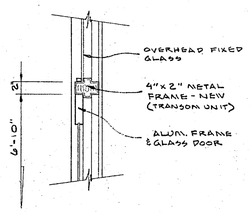
JAMB ABOVE DOOR



JAMB AT DOOR



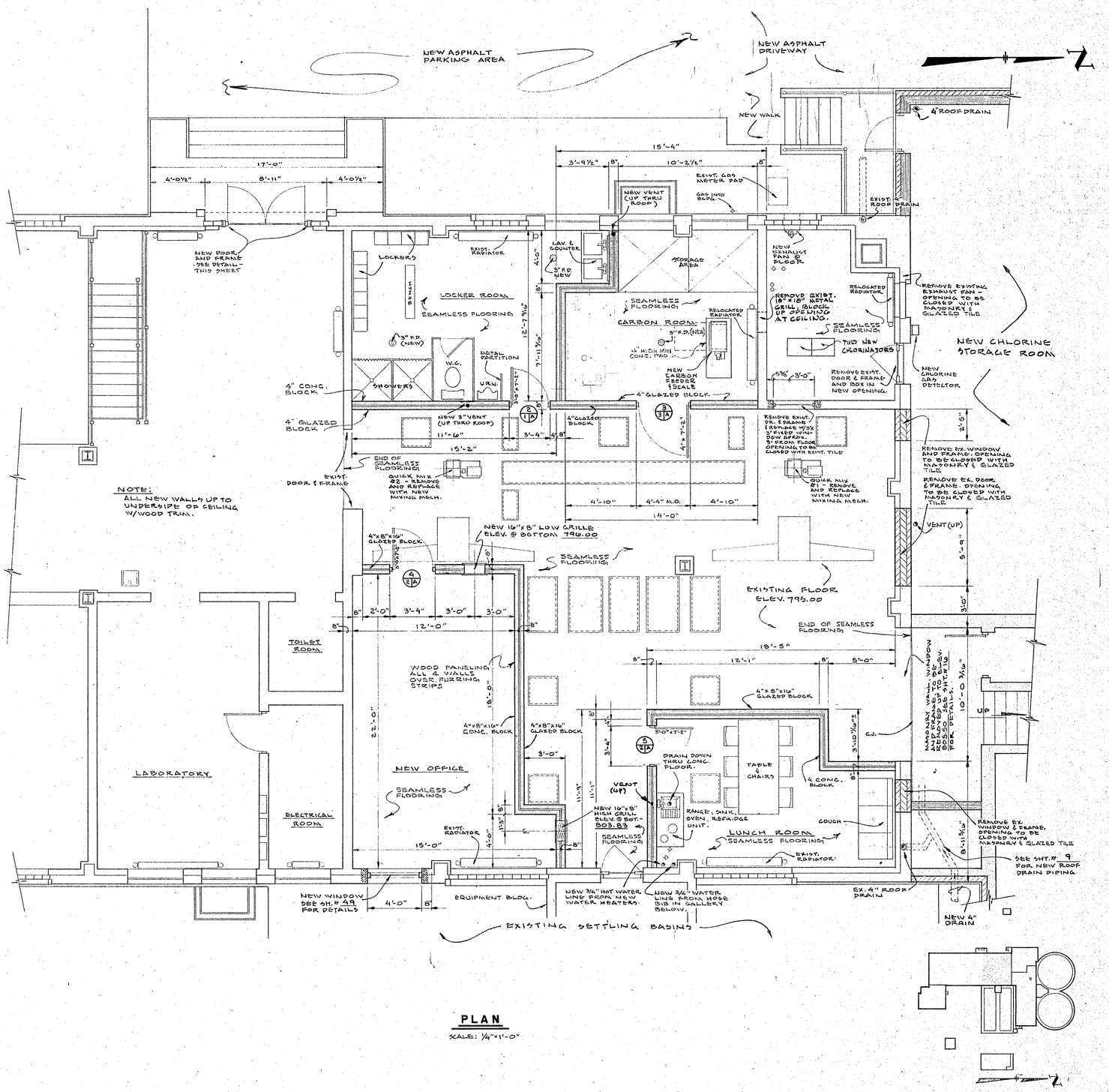
PANEL HEAD



HEAD

NEW DOOR DETAILS

SCALE: 1"=1'-0"



PLAN

SCALE: 1/4"=1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-23-80	L.E.C.	M.L.H.

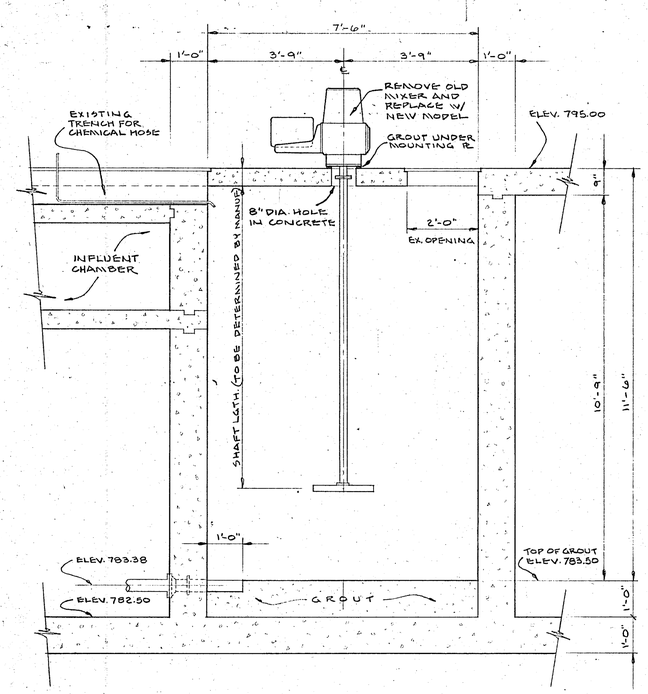
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	M.J.M.
DRAWN BY	C.T.V.
CHECKED BY	G.G.N. W.C.K.

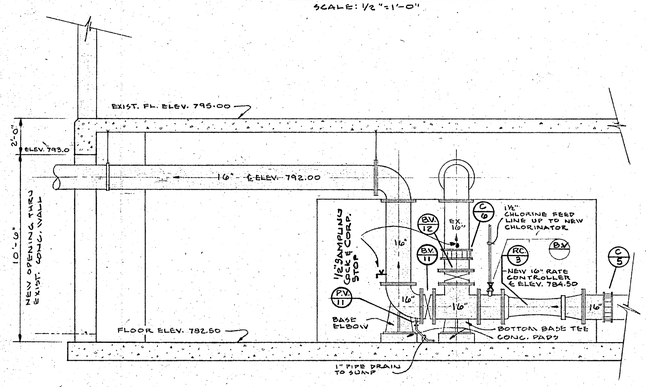
EXIST. CHEMICAL & FILTER BLDG.
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	47 OF 67

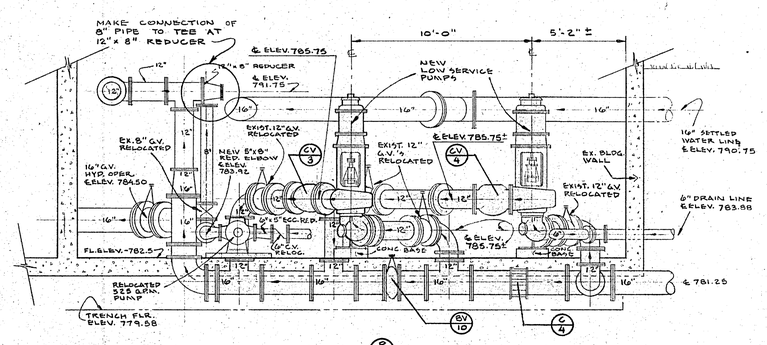
BRUNING 44-510



SECTION
QUICK MIX DETAIL
SCALE: 1/2"=1'-0"



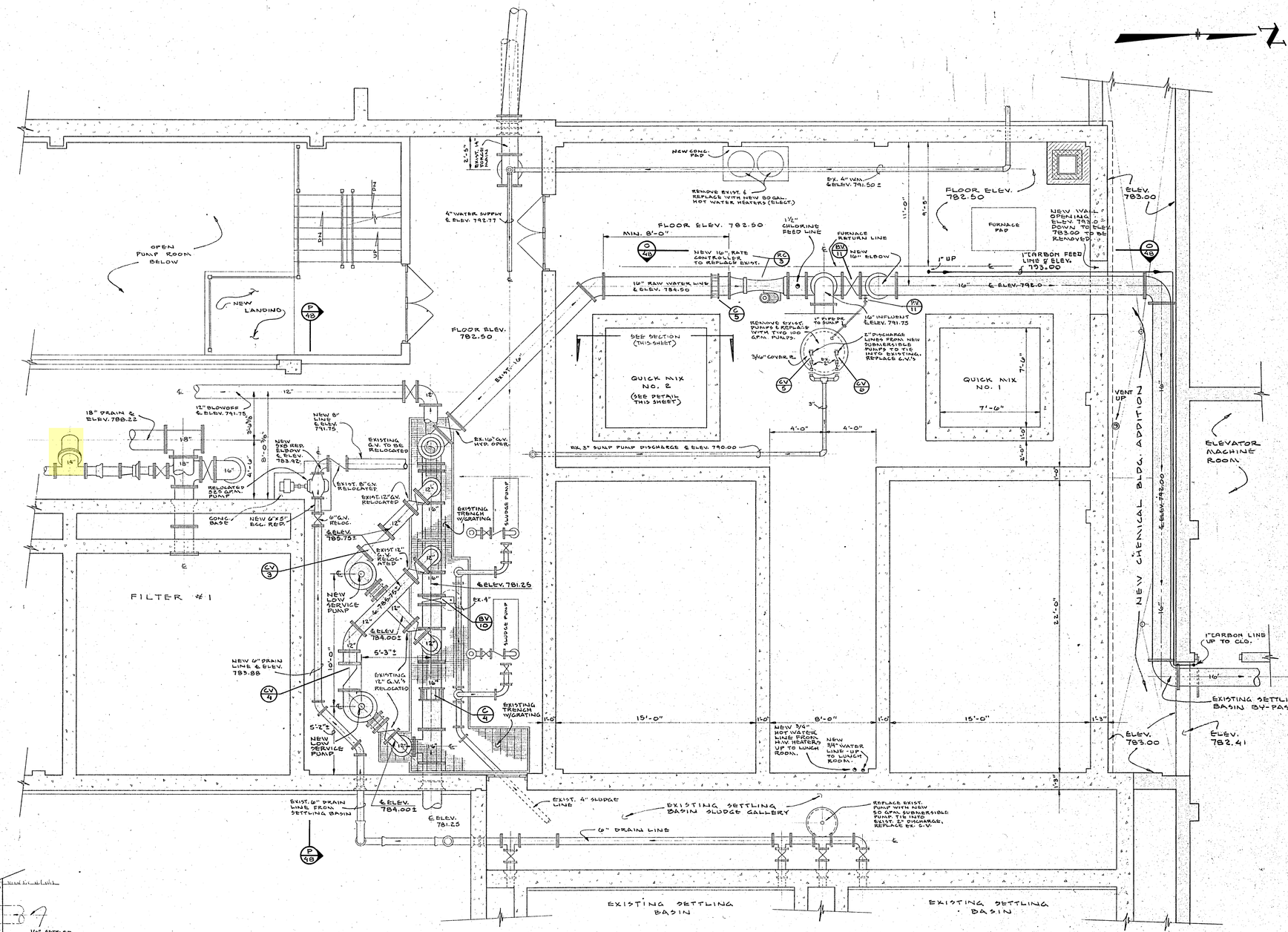
¼"=1'-0"



¼"=1'-0"

LOW SERVICE PUMPING LAYOUT

NOTE:
SHADED PIPING REPRESENTS NEW PIPING.



BASEMENT PLAN
SCALE: ¼"=1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	Added 1" Carbon Feed Line	3/13/76	PWD	GBN
	Record Drawing	2/23/80	L.E.C.	M.C.H.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

EXIST. CHEMICAL & FILTER BLDG.
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION
DATE: 10-20-75
48 OF 67

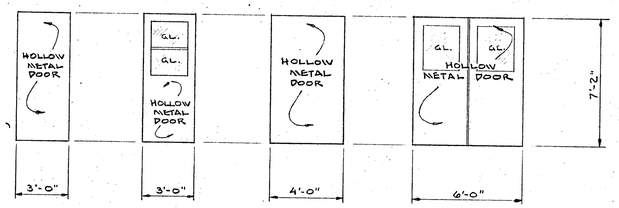
BRUNING 44-510—

FILTER ADDITION & EXIST. CHEMICAL BLDG.

DOOR SCHEDULE

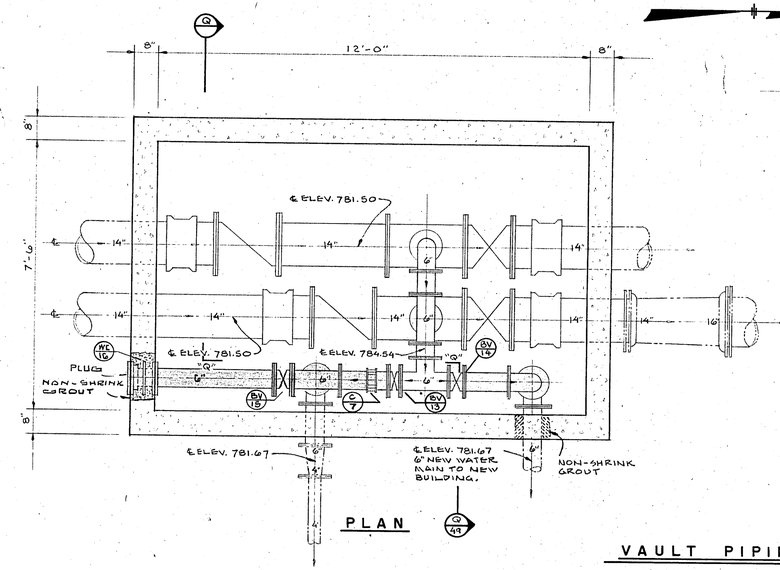
DOOR NO.	SIZE	THICKNESS	DOOR		FRAME		REMARKS	LINTELS
			TYPE	MATERIAL	TYPE	MATERIAL		
1	TWO 3'-3" x 7'-2"	1¾"	4	HOLLOW METAL	B	H.M.	EXTERIOR DOUBLE DOOR PART GLASS	THREE 3½" x 3½" x ¼" x 7'-8" ⊥LL
2	3'-0" x 7'-2"	1¾"	1	HOLLOW METAL	A	H.M.	12" x 21" LOUVER	TWO 3½" x 3½" x ¼" x 4'-8" ⊥L
3	4'-0" x 7'-2"	1¾"	3	HOLLOW METAL	A	H.M.		TWO 3½" x 3½" x ¼" x 5'-8" ⊥L
4	3'-0" x 7'-2"	1¾"	2	HOLLOW METAL	A	H.M.	PART GLASS	TWO 3½ x 3½ x ¼ x 4'-8" ⊥L
5	3'-0" x 7'-2"	1¾"	2	HOLLOW METAL	A	H.M.	12" x 21" LOUVER PART GLASS	TWO 3½" x 3½" x ¼" x 4'-8" ⊥L
6	3'-0" x 7'-2"	1¾"	2	HOLLOW METAL	B	H.M.	PART GLASS	THREE 3½" x 3½" x ¼" x 4'-8" ⊥LL

DOOR NUMBER
DOOR TYPE — FRAME TYPE



1 2 3 4

DOOR TYPES

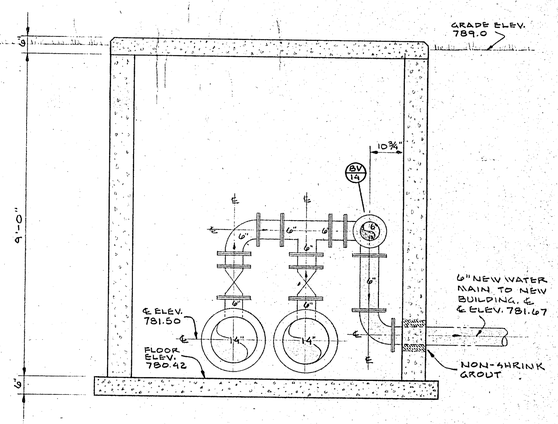


PLAN

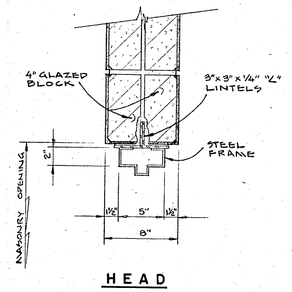
Q/A9

VAULT PIPING

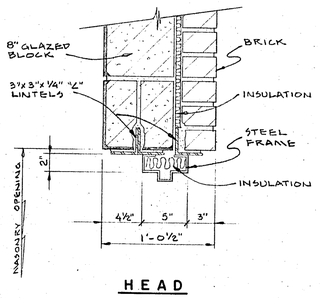
SCALE: ½" = 1'-0"



SCALE: ½" = 1'-0" Q/A9



HEAD



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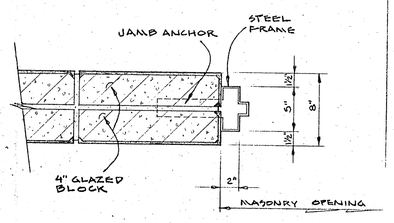
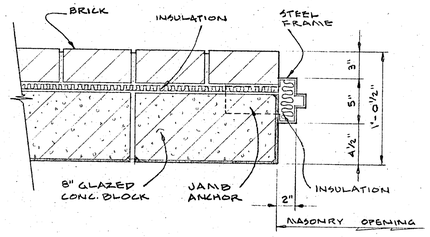


JAMB



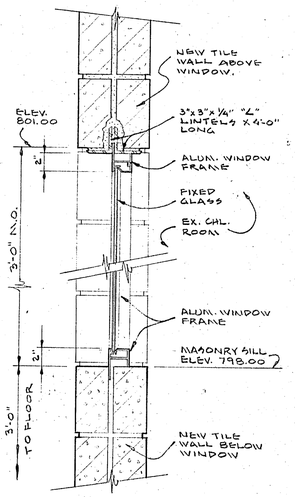
JAMB

A

FRAME DETAILS AND TYPES

SCALE: ½" = 1'-0"

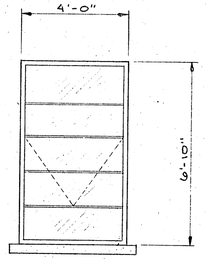
B



HEAD & SILL

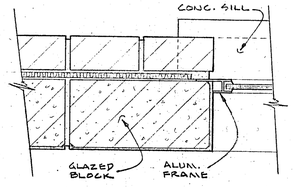
SCALE: 1½" = 1'-0"

NEW WINDOW FOR CHLORINE ROOM

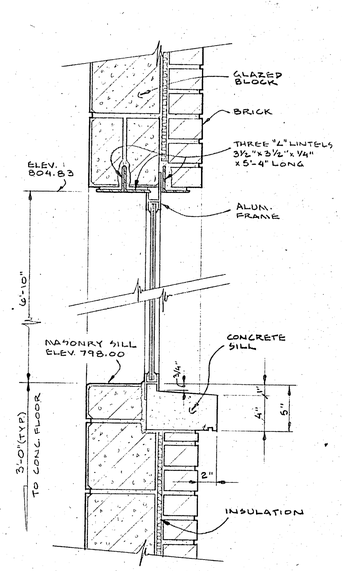


ELEVATION

3/8" = 1'-0"



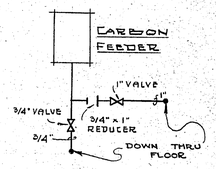
JAMB



HEAD & SILL

EXTERIOR WINDOW DETAILS

SCALE: 1½" = 1'-0"



CARBON FEEDER DISCHARGE PIPING SCHEMATIC

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	6" PIPING TO SOUTH WALL IN VAULT	3/31/76	PWD	SGN
.	Record Drawing	2.2.80	L.E.C.	M.L.H.

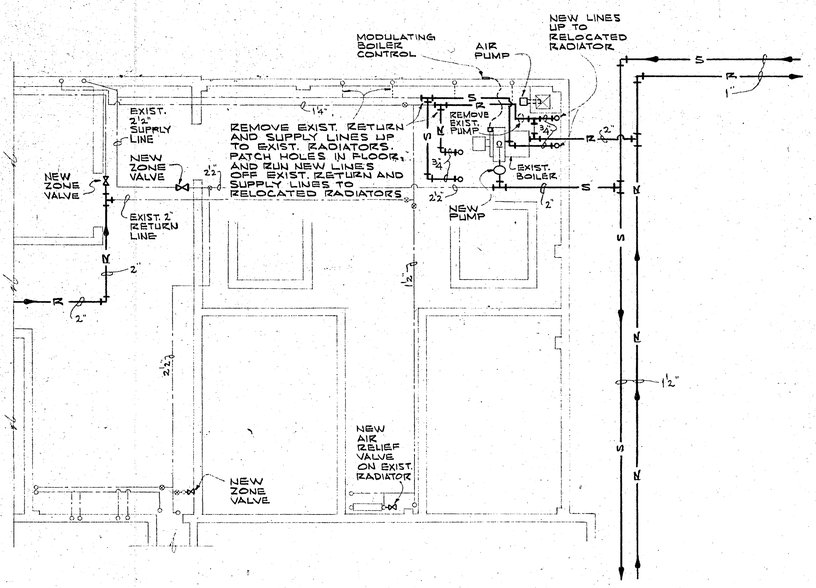
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	M.J.M.
DRAWN BY	C.T.V.
CHECKED BY	G.A.N. W.C.K.

EXIST. CHEMICAL & FILTER BLDG.
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

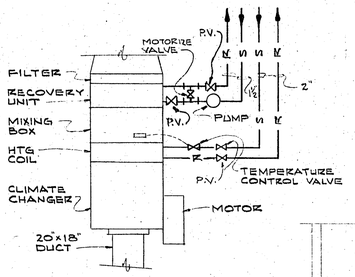
PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	49 OF 67

BRUNING 44-510

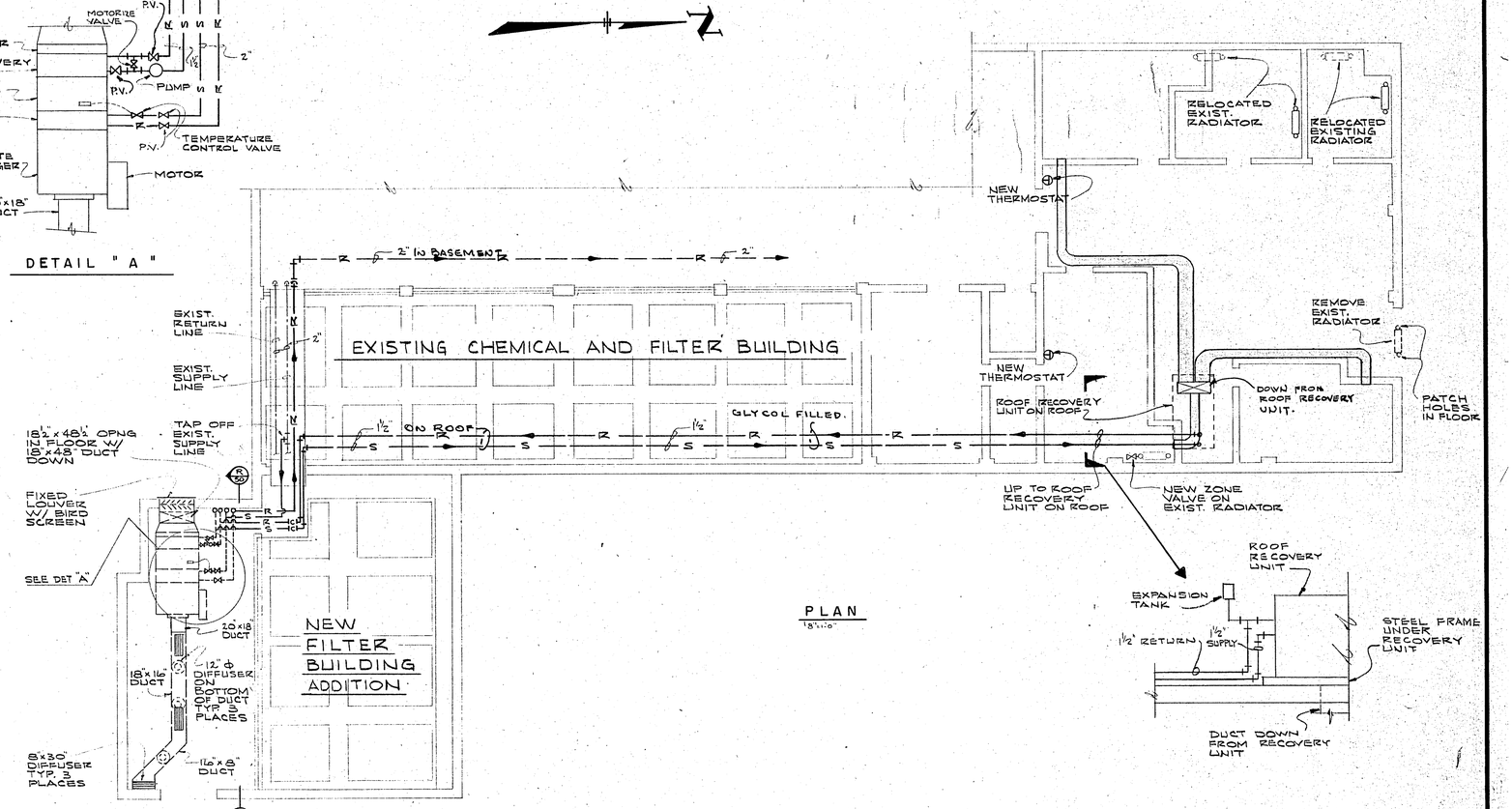


BASEMENT PLAN

1/8"=1'-0"

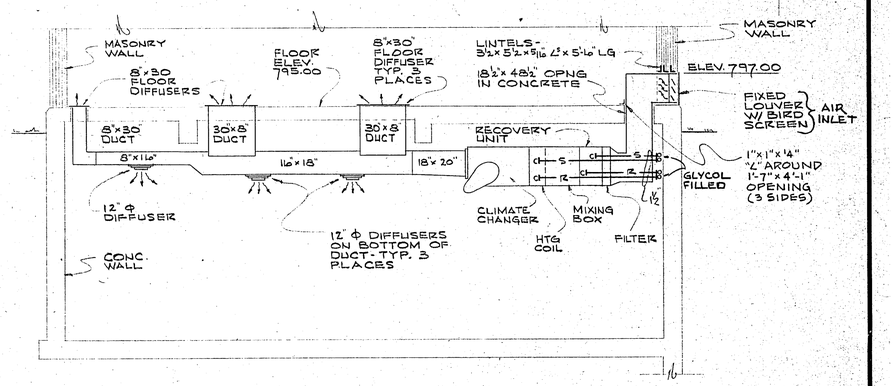


DETAIL "A"



PLAN

1/8"=1'-0"



¼"=1'-0"

HEATING & VENTILATING LAYOUT

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-25-80	L.E.C.	M.L.M.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	L.V.M.
DRAWN BY	D.A.A.
CHECKED BY	G.G.N. W.C.K.

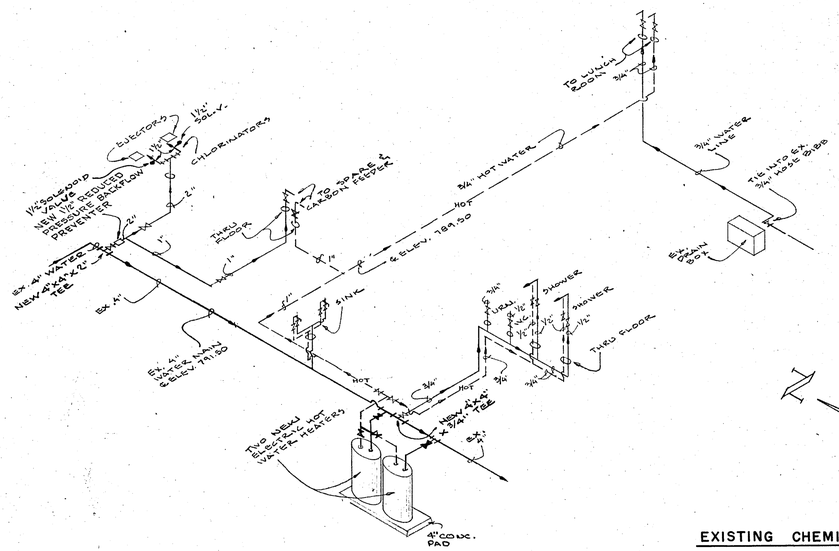
EXIST. CHEMICAL, FILTER, & FILTER ADDITION BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	50 OF 67

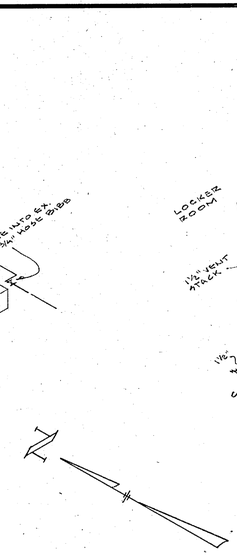
BRUNING 44-510—

EXISTING CHEMICAL, FILTER & FILTER ADD. BLDG.

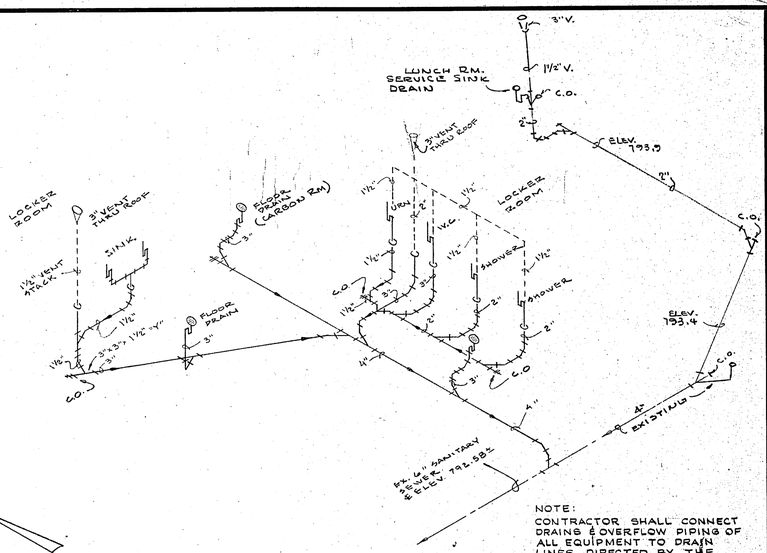
VALVES AND FITTING SCHEDULE				
NO.	TYPE	SIZE	OPERATOR	NOTES
ARV 1	AIR RELEASE VALVE	3/4"	MANUAL	WASHWATER SUPPLY LINE
BV 1	BUTTERFLY VALVE	16"	HYDRAULIC	FILTER #5 BACKWASH INFLUENT
BV 2	"	8"	"	FILTER #5 EFFLUENT
BV 3	"	8"	"	FILTER #6 EFFLUENT
BV 4	"	16"	"	FILTER #6 BACKWASH INFLUENT
BV 5	"	16"	"	FILTER #5 INFLUENT
BV 6	"	16"	"	FILTER #5 BACKWASH DRAIN
BV 7	"	16"	"	FILTER #6 INFLUENT
BV 8	"	16"	"	FILTER #6 BACKWASH DRAIN
BV 9	"	16"	HANDWHEEL	FILTER INFLUENT ISOLATION
BV 10	"	16"	"	PLANT RAW WATER INFLUENT
BV 11	"	16"	HANDWHEEL	RAW WATER LINE TO TREATMENT BASINS
BV 12	"	16"	"	RAW WATER LINE TO EXISTING SETTLING BASINS
BV 13	"	6"	"	HIGH SERVICE VAULT PIPING
BV 14 & 15	"	6"	"	"
C 1	COUPLING	16"		WASHWATER SUPPLY LINE.
C 2	"	12"		BLOWOFF LINE
C 3	"	12"		"
C 4	"	16"		PLANT RAW WATER INFLUENT LINE
C 5	"	16"		"
C 6	"	16"		PLANT RAW WATER INFLUENT LINE
C 7	"	6"		HIGH SERVICE VAULT PIPING
CV 1	CHECK VALVE	2"		SUMP PUMP DISCHARGE LINE
CV 2	"	2"		"
CV 3	"	12"		LOW SERVICE DISCHARGE PIPING
CV 4	"	12"		"
CV 5	"	2"		EXISTING SUMP PUMP DISCHARGE LINE
CV 6	"	2"		"
HB 1	HOSE BIBB	3/4"	MANUAL	FILTER #5 AREA
HB 2	"	3/4"	"	FILTER #6 AREA
PV 1	PLUG VALVE	2 1/2"	HYDRAULIC	FILTER #5 SURFACE WASH
PV 2	"	2 1/2"	"	FILTER #6 SURFACE WASH
PV 3	"	3/4"	LEVER	TO HOSE BIBB
PV 4	"	3/4"	"	"
PV 5	"	3"	"	FILTER #5 EFFLUENT DRAIN
PV 6	"	3"	"	FILTER #6 EFFLUENT DRAIN
PV 7	"	2"	"	SUMP PUMP DISCHARGE LINE
PV 8	"	2 1/2"	"	SURFACE WASH WATER SUPPLY LINE
PV 9	"	2 1/2"	HYDRAULIC	FILTER #2 SURFACE WASH
PV 10	"	2 1/2"	HYDRAULIC	FILTER #1 SURFACE WASH
PV 11	"	1"	LEVER	PIPE DRAIN
RC 1	RATE CONTROLLER	8"		FILTER #5 EFFLUENT
RC 2	"	8"		FILTER #6 EFFLUENT
RC 3	"	16"		PLANT RAW WATER INFLUENT
SC 1	SAMPLING COCK	3/4"	MANUAL	FILTER #5 EFFLUENT
SC 2	"	3/4"	"	FILTER #6 EFFLUENT



HOT & COLD WATER PIPING

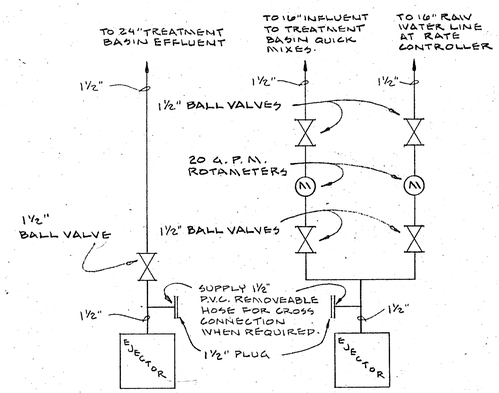


EXISTING CHEMICAL BUILDING



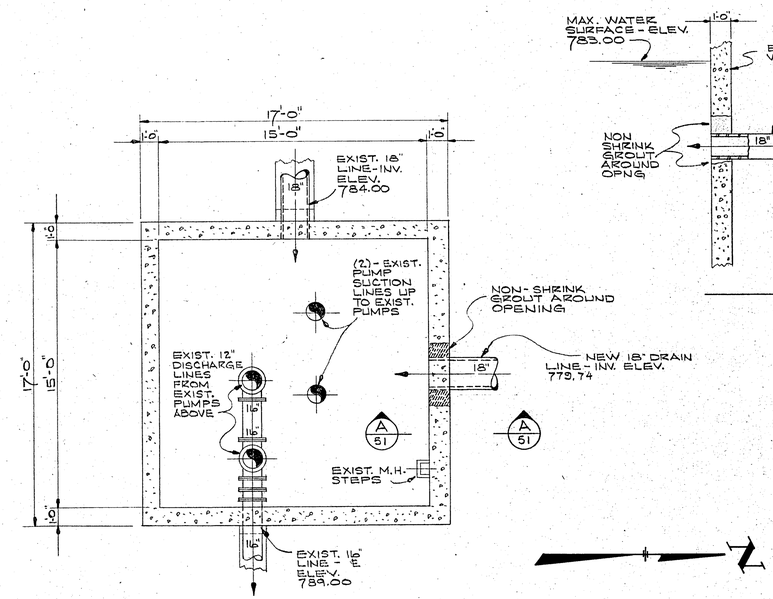
NOTE:
CONTRACTOR SHALL CONNECT DRAINS & OVERFLOW PIPING OF ALL EQUIPMENT TO DRAIN LINES DIRECTED BY THE ENGINEER.

DRAIN PIPING

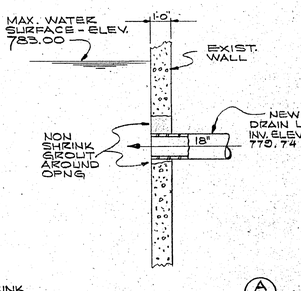


CHLORINE SOLUTION SCHEMATIC

VALVES AND FITTING SCHEDULE				
NO. REQ'D.	TYPE	SIZE	OPERATOR	NOTES
23	PLUG VALVES	VARIES	LEVER	HOT & COLD WATER PIPING
1	BACKFLOW PREVENTER	2"		HOT & COLD WATER PIPING TO CHEMICAL FEEDER
5	BALL VALVES	1 1/2"	LEVER	CHLORINE SOLUTION LINES
2	ROTAMETERS			20 G.P.M. CAPACITY
2	SOLENOID VALVES	1 1/2"	ELECTRIC	WATER SUPPLY CONTROL VALVES



SECTIONAL PLAN — ELEV. 793.00



REVISIONS TO EXIST. WASTE WASHWATER PUMP STATION
SCALE 1/4" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-29-80	L.E.C.	M.C.M.

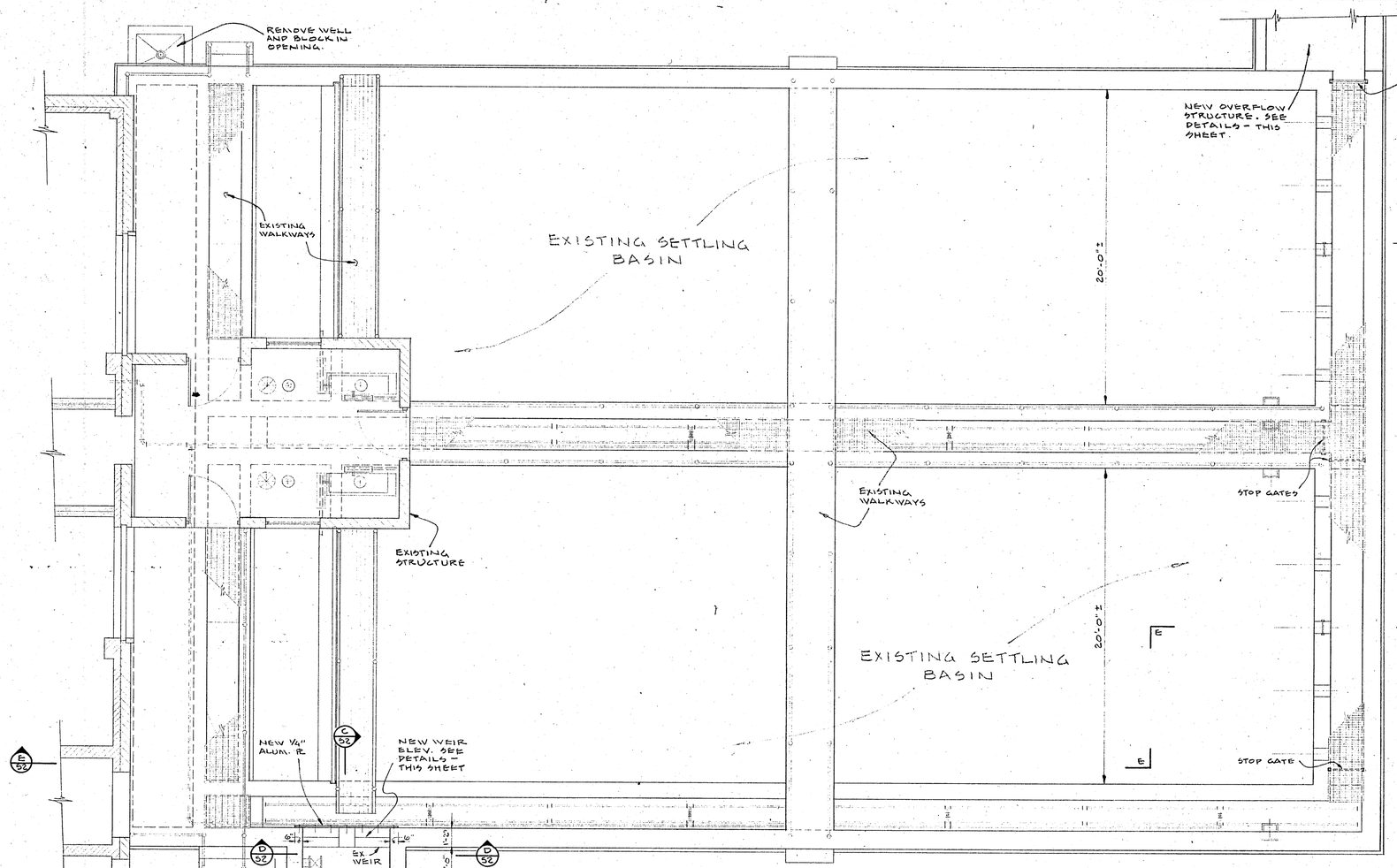
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: M.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

VALVE & PIPING LAYOUTS
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

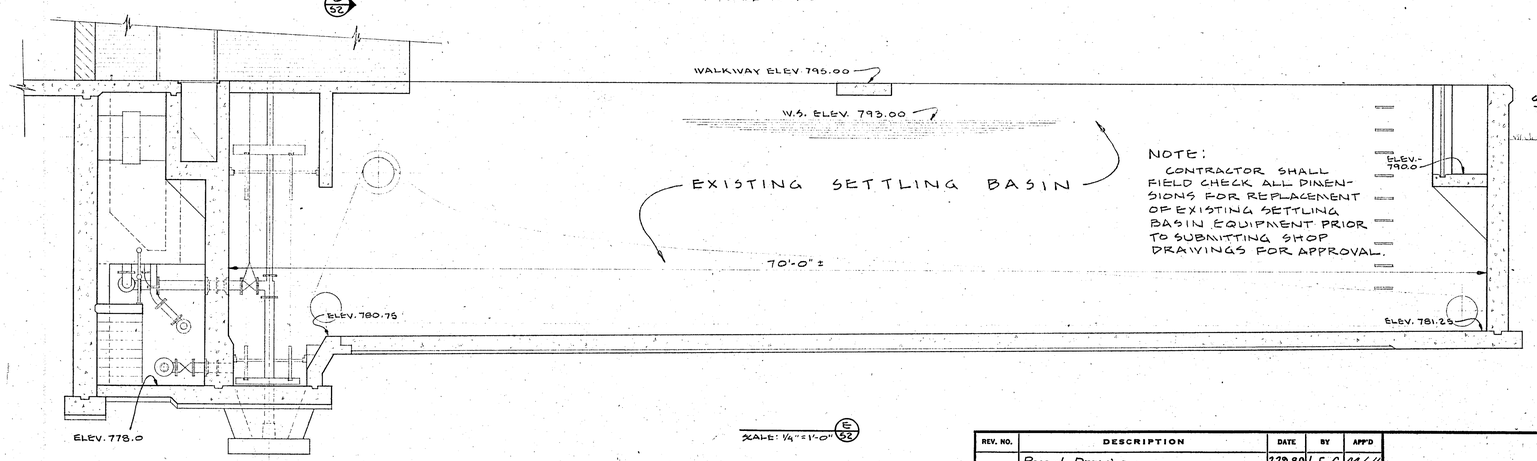
PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
51 OF 67

BRUNING 44-510

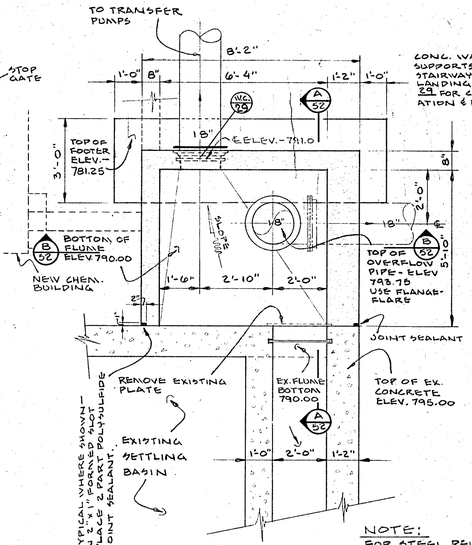


PLAN

SCALE: 1/4"=1'-0"



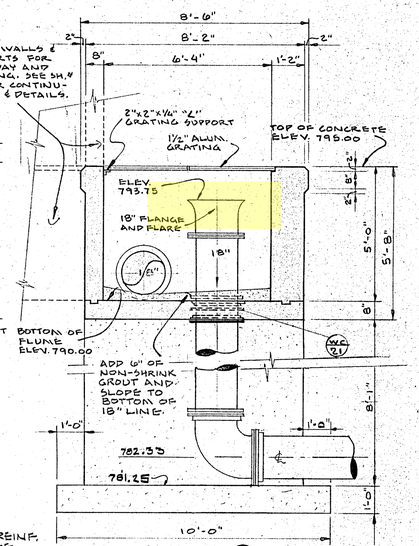
SCALE: 1/4"=1'-0"

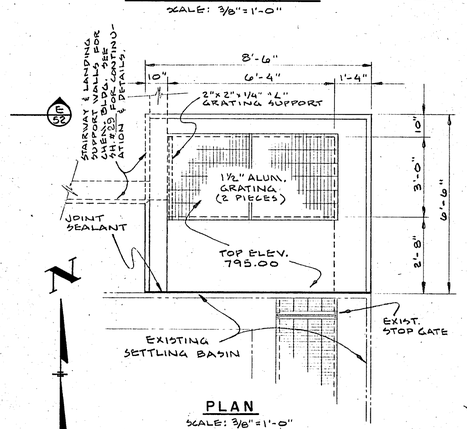


SECTIONAL PLAN

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

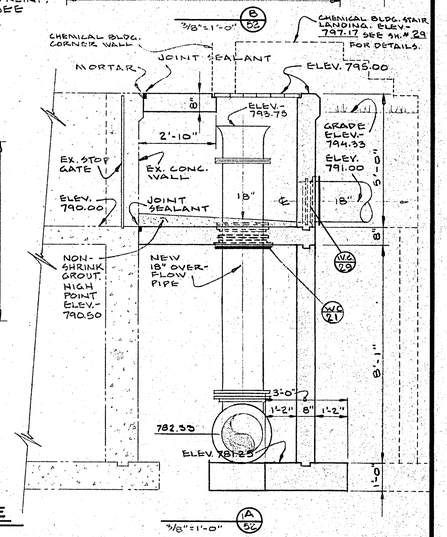
NOTE:
FOR STEEL REINF. DETAILS - SEE SHT. # 45





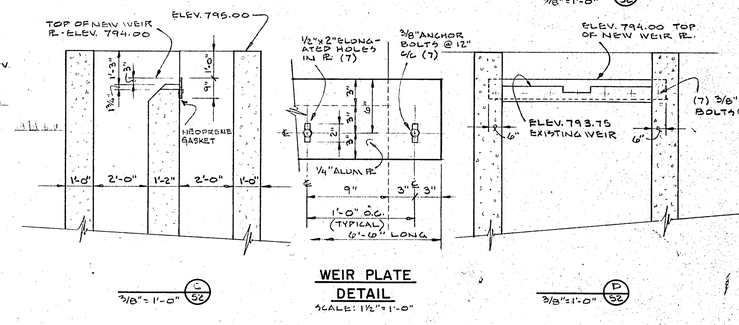
PLAN

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



NEW OVERFLOW STRUCTURE

3/8"=1'-0"



3/8"=1'-0"

WEIR PLATE DETAIL

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

3/8"=1'-0"

REVISED WEIR DETAILS

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-29-80	L.E.C.	M.L.H.

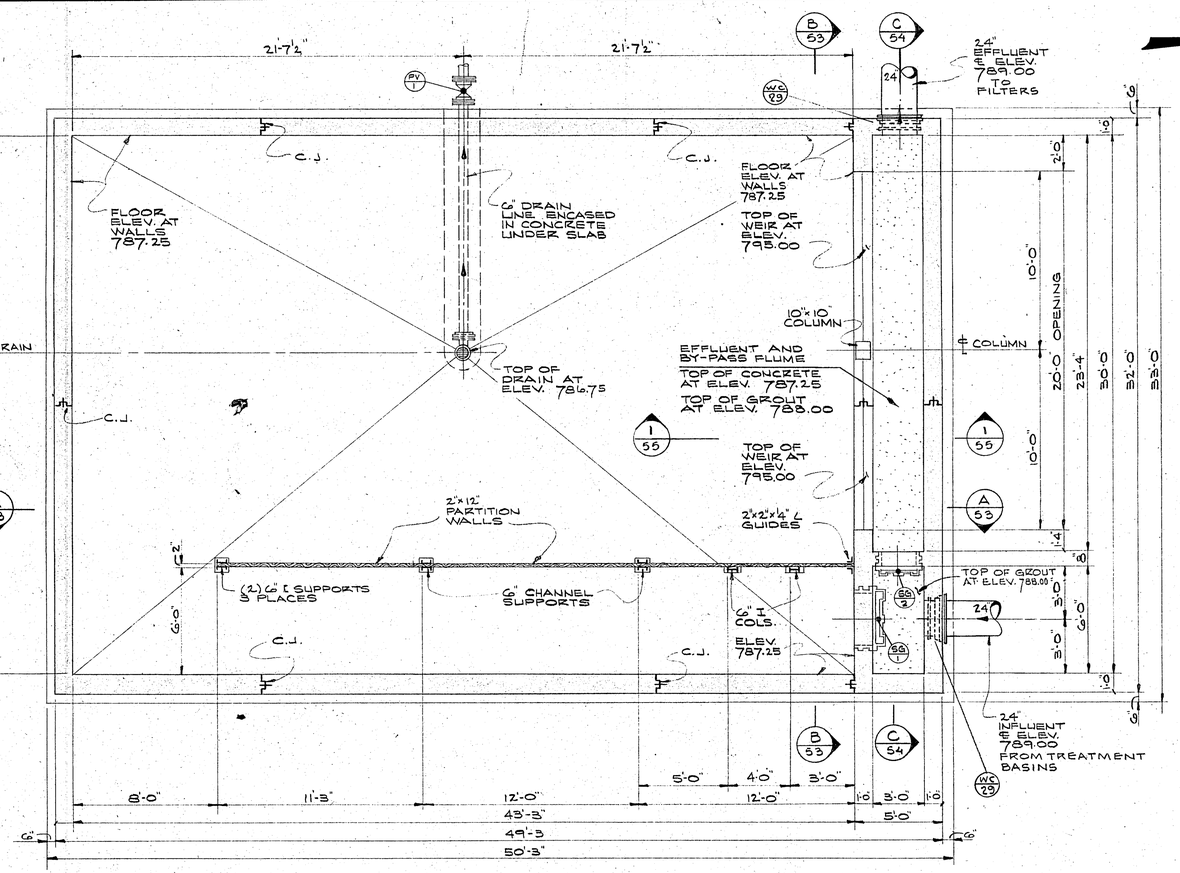
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: N.J.M.
DRAWN BY: C.T.V.
CHECKED BY: G.G.N. W.C.K.

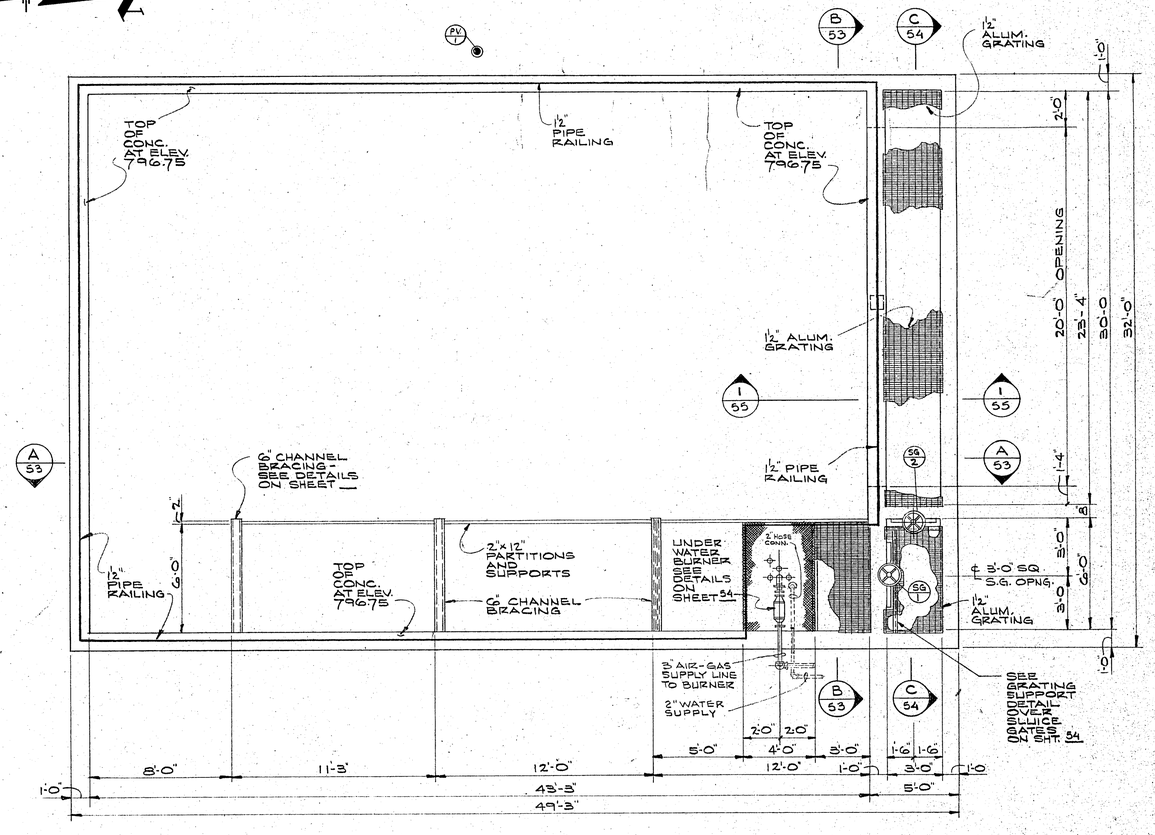
SETTLING BASIN REVISIONS
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
52 OF 107

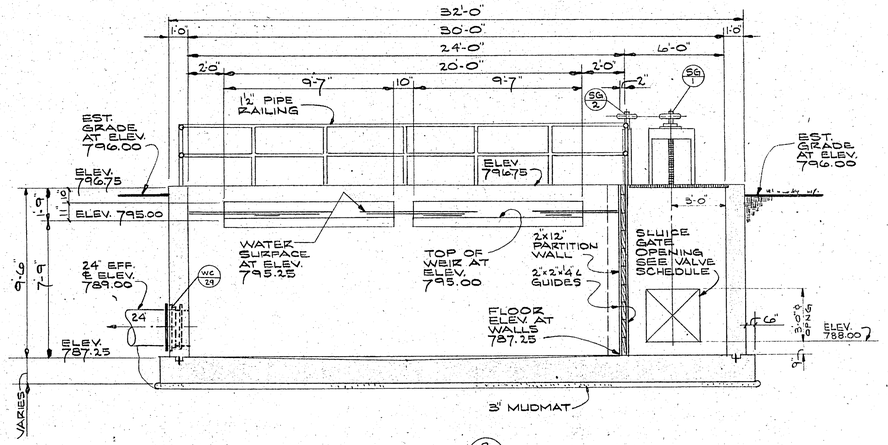
BRUNING 44-510

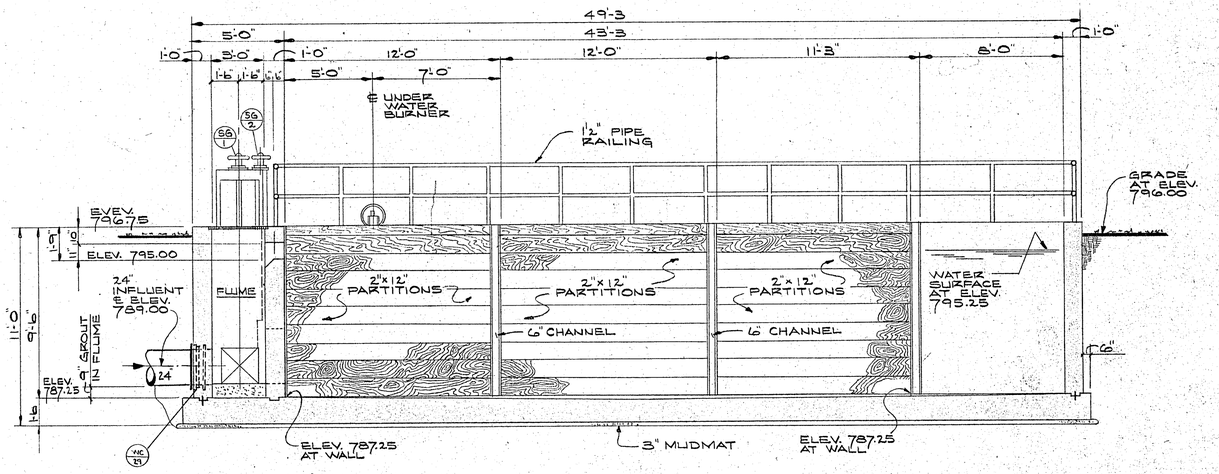


SECTIONAL PLAN



PLAN





VOID NOT CONSTRUCTED

REV. NO.	DESCRIPTION	DATE	BY	APP'D
-	Record Drawing	2-29-80	L.E.C.	M.L.H.

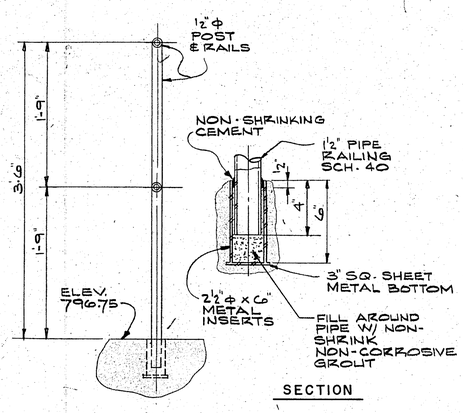
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	1/4"=1'-0"
DESIGNED BY	G.G.N.
DRAWN BY	D.A.A.
CHECKED BY	W.C.K.

RECARBONATION BASIN
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

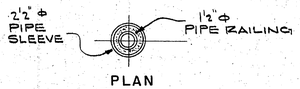
PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	53 OF 147

BRUNING 44-510



ELEVATION

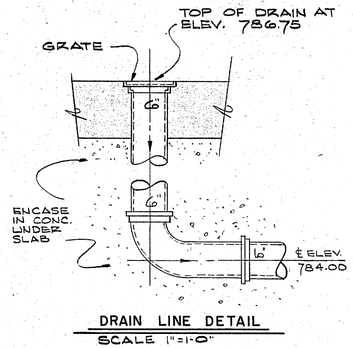
SECTION



PLAN

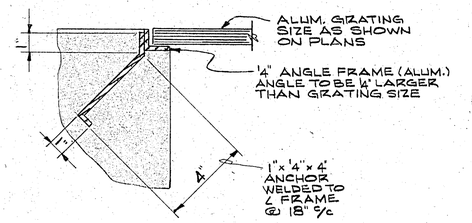
RAILING DETAILS

SCALE 1"=1'-0"



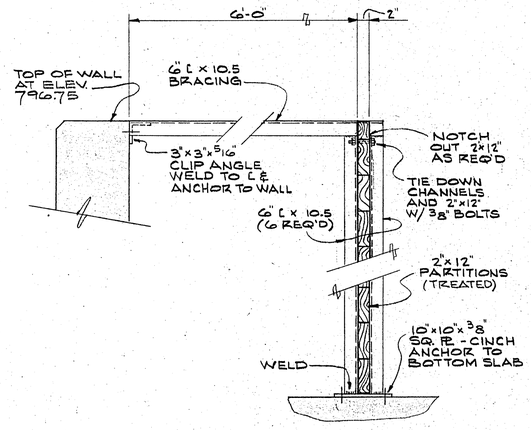
DRAIN LINE DETAIL

SCALE 1"=1'-0"



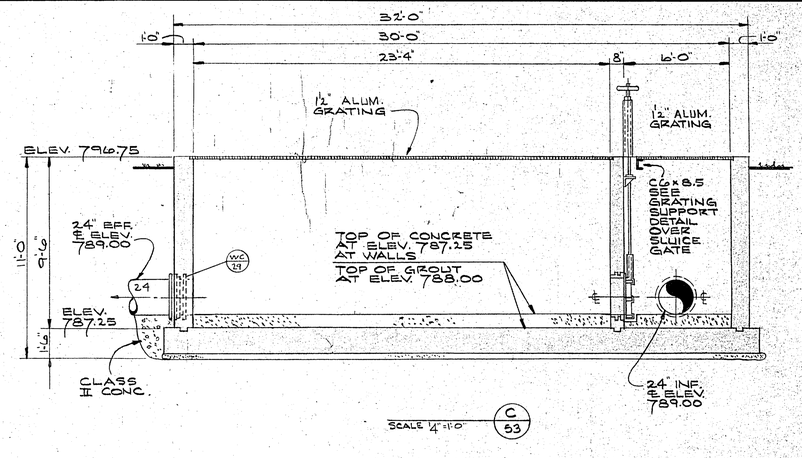
GRATING SUPPORT DETAIL NO. I

SCALE 3"=1'-0"

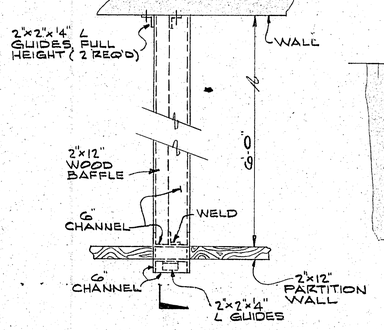


WOOD PARTITION SUPPORT DETAILS

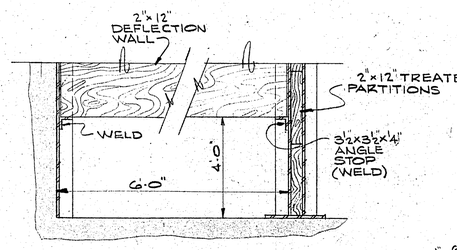
SCALE 1"=1'-0"



SCALE ¼"=1'-0" C 53



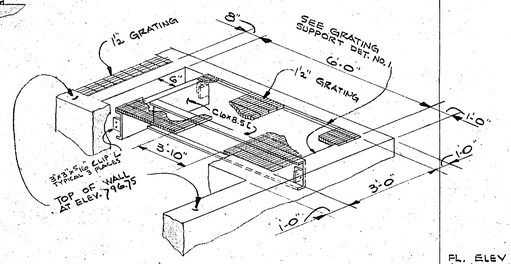
PLAN



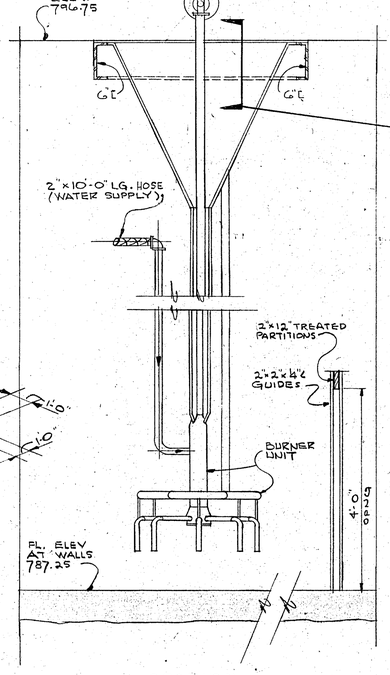
SECTION

BAFFLE WALL DETAILS

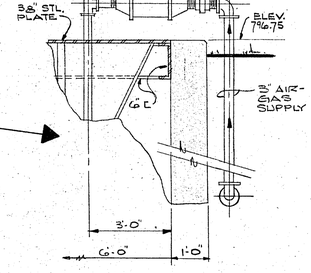
SCALE 1"=1'-0"

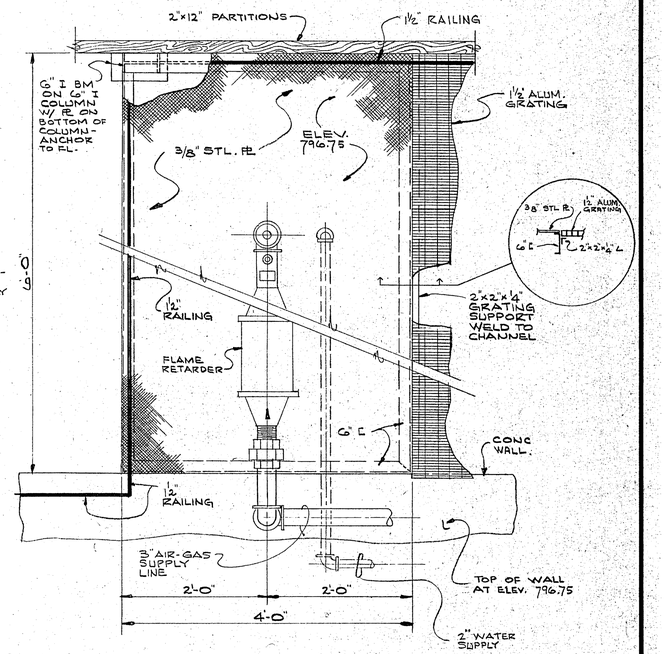


GRATING SUPPORT DETAIL OVER SLUICE GATES



SECTION





PLAN

NOTE:
STEEL PLATE AND STRUCTURAL MEMBERS SHALL BE HOT DIPPED GALVANIZED. ANCHOR BOLTS, NUTS, ETC. SHALL BE GALVANIZED OR STAINLESS STEEL.

UNDERWATER BURNER DETAILS

VOID NOT CONSTRUCTED

VALVE AND FITTING SCHEDULE

NO	TYPE	SIZE	OPERATOR	NOTES
(PV-1)	PLUG VALVE, MECHANICAL JOINT	6"	VALVE BOX AND PARTS	BASIN DRAIN LINE
(SA-1)	SLUICE GATE, FLANGED TYPE	3'x3'	CRANK OPERATED FL. STAND	EXTENSION STEM W/ FLANGED WALL THIMBLE 12" IN LENGTH
(SA-2)	SLUICE GATE, FLANGED TYPE	2'x2'	CRANK OPERATED FL. STAND	EXTENSION STEM W/ FLANGED WALL THIMBLE 8" IN LENGTH

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2.25.80	L.E.C.	M.L.H.

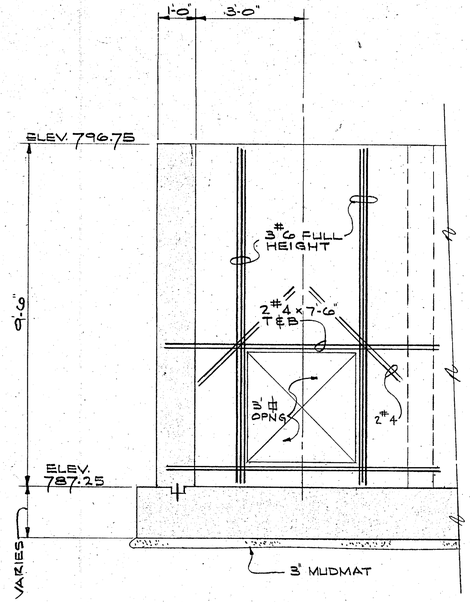
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: AS NOTED
DESIGNED BY: G.S.N.
DRAWN BY: D.A.A.
CHECKED BY: W.C.K.

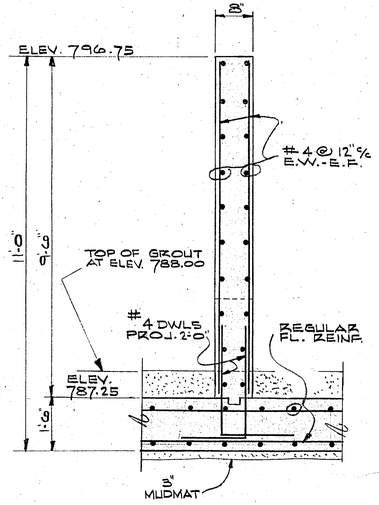
RECARBONATION BASIN
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
54 OF 67

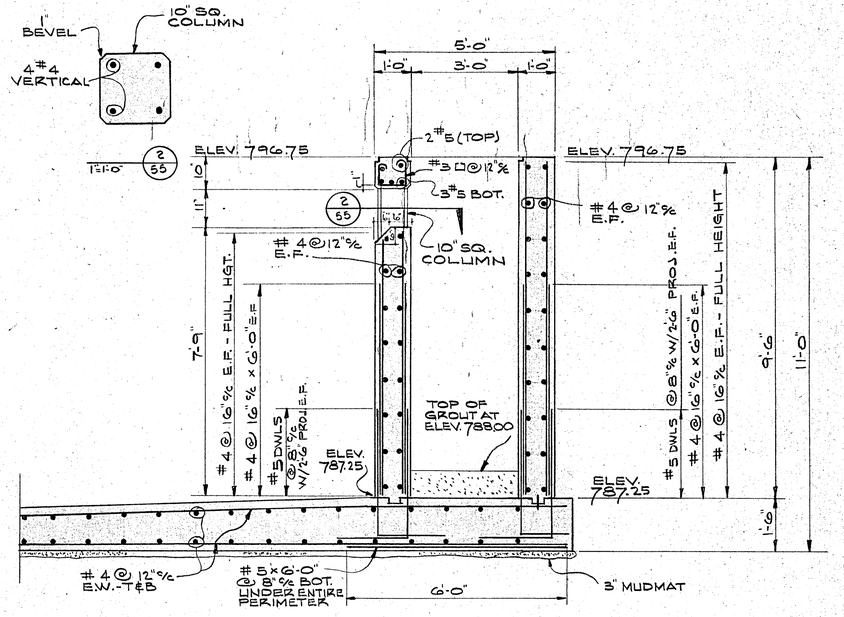
BRUNING 44-511



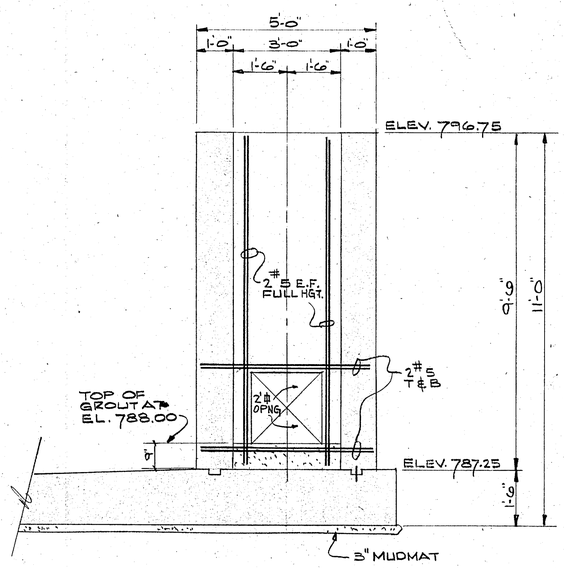
REINFORCING FOR 3' SQ. SLUICE GATE OPENING -(OUTLET SIDE)



REINFORCING FOR 8" WALL IN FLUME

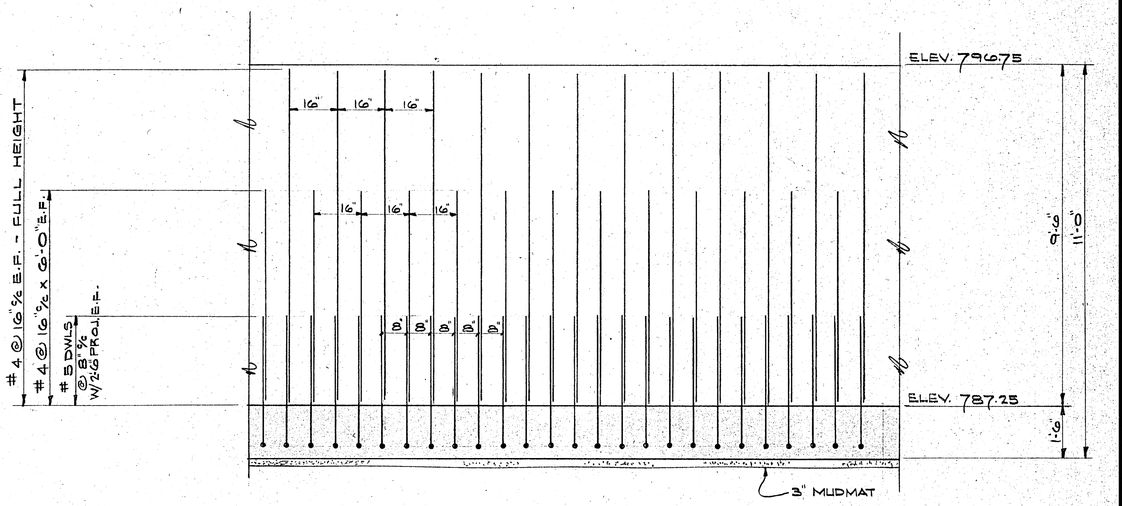


1/53



REINFORCING FOR 2' SQ. SLUICE GATE OPENING.- (OUTLET SIDE)

REINFORCING FOR 24" DIA. OPENING



TYPICAL ELEVATION OF EXTERIOR AND INTERIOR WALL REINFORCING

VOID NOT CONSTRUCTED

REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2.28.80	L.E.C.	M.L.M.

FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

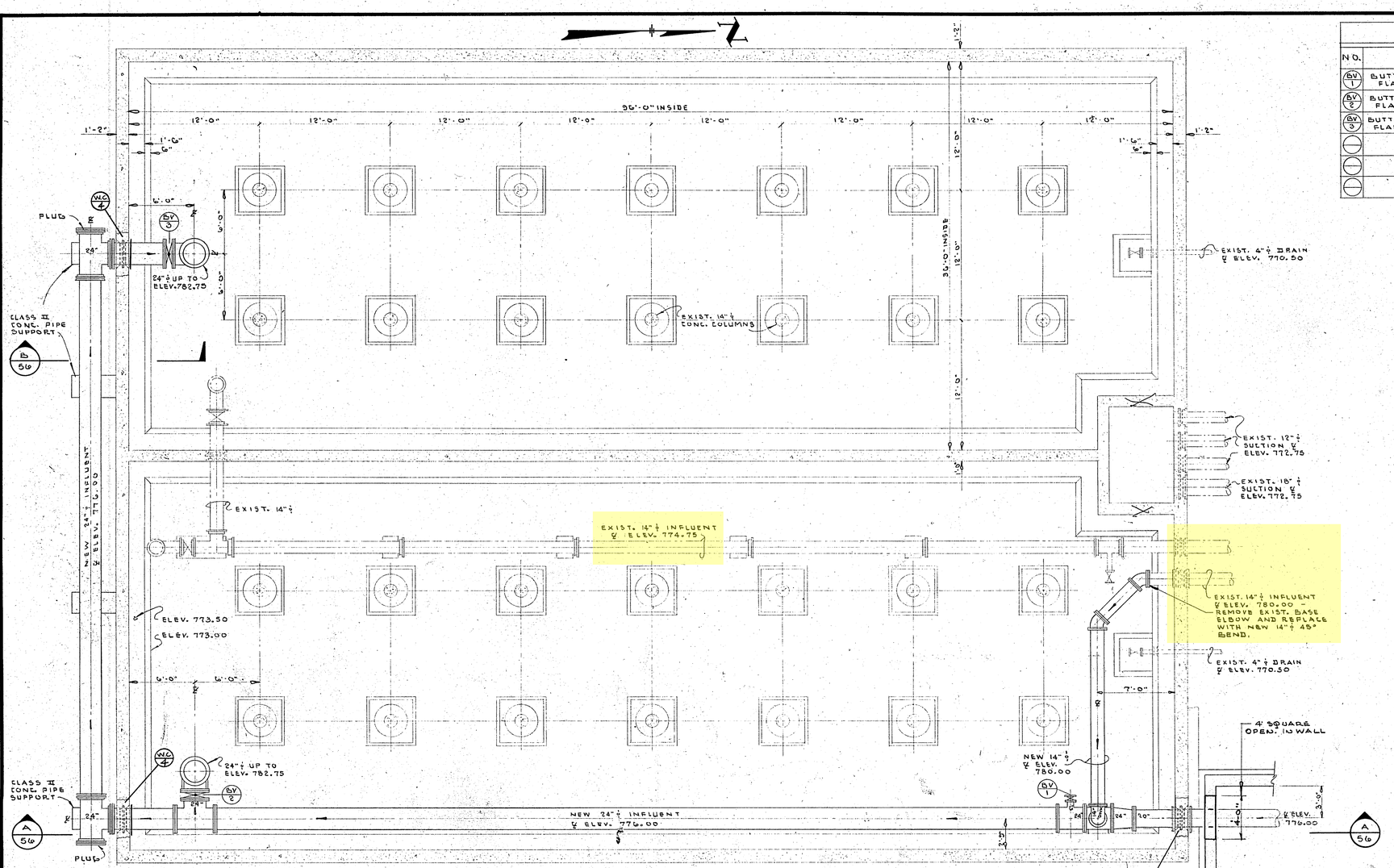
SCALE 1/2" = 1'-0"
DESIGNED BY D.L.C.
DRAWN BY D.A.A.
CHECKED BY W.C.K.

RECARBONATION BASIN
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

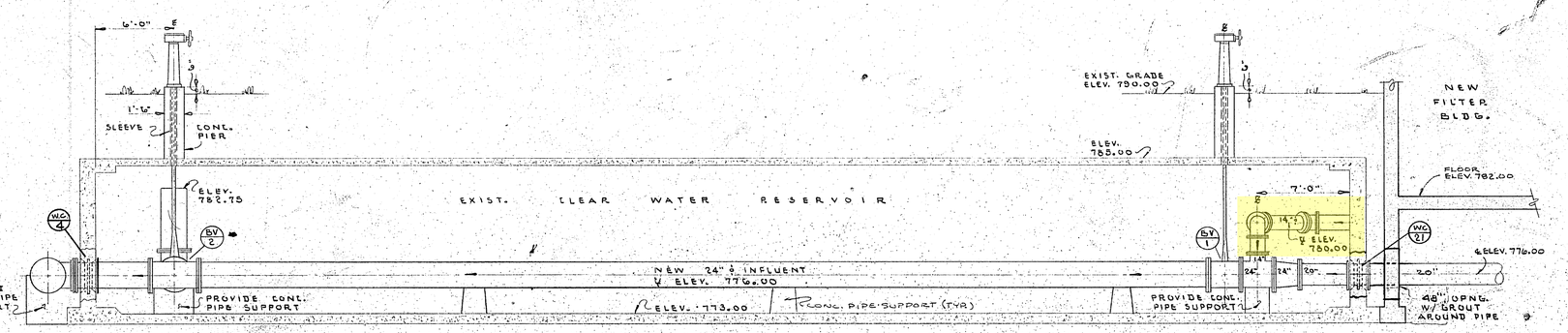
PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
55 OF 67

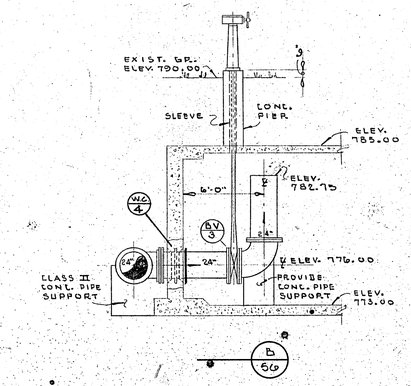
BRUNING 44-511

VALVE AND FITTING SCHEDULE			
NO.	TYPE	SIZE	OPERATOR	REMARKS
BV 1	BUTTERFLY VALVE FLANGE JOINT	6"	HANDWHEEL	PROVIDE EXTENSION STEM AND FLOOR STAND
BV 2	BUTTERFLY VALVE FLANGE JOINT	24"	HANDWHEEL	PROVIDE EXTENSION STEM AND FLOOR STAND
BV 3	BUTTERFLY VALVE FLANGE JOINT	24"	HANDWHEEL	PROVIDE EXTENSION STEM AND FLOOR STAND



SECTIONAL PLAN





REV. NO.	DESCRIPTION	DATE	BY	APP'D
	Record Drawing	2-20-80	L.E.C.	M.L.H.

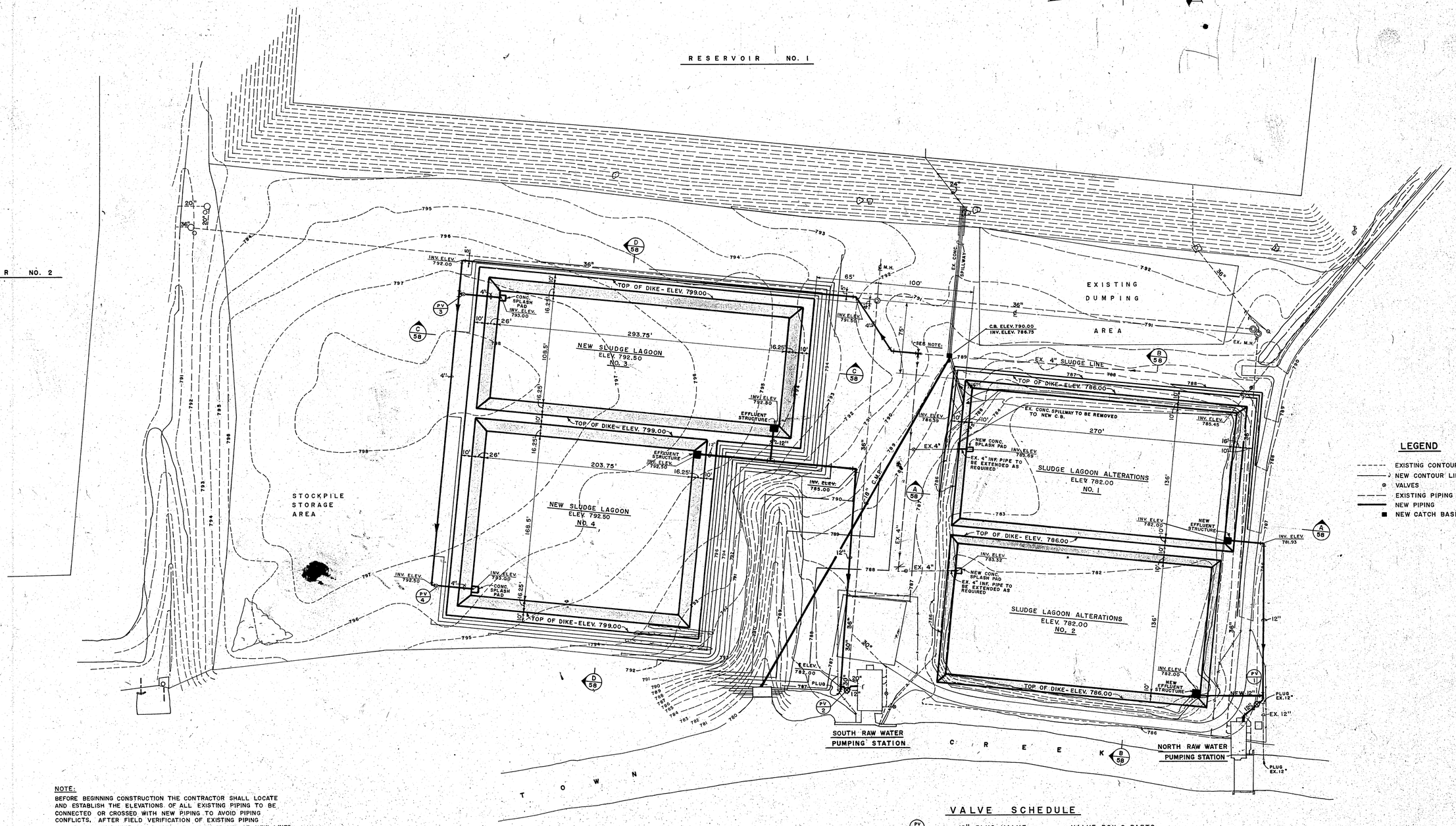
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE 3/16"=1'-0"
DESIGNED BY
Spec. Cond.
DRAWN BY P. W. O.
CHECKED BY W. L. K.

CLEAR WATER RESERVOIR REVISIONS
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER VANW 103 J1
SECTION
DATE 10-20-75
56 OF 67

BRUNING 44-510



NOTE:
BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL LOCATE AND ESTABLISH THE ELEVATIONS OF ALL EXISTING PIPING TO BE CONNECTED OR CROSSED WITH NEW PIPING TO AVOID PIPING CONFLICTS. AFTER FIELD VERIFICATION OF EXISTING PIPING ELEVATIONS, ENGINEER WILL ESTABLISH ELEVATIONS OF NEW LINES AND/OR REVISIONS REQUIRED FOR EXISTING LINES.

B.M. #1-A — NORTH RAW WATER PUMPING STATION 1ST. FLOOR @ ELEV. 787.00

LEGEND

- EXISTING CONTOUR LINES
- NEW CONTOUR LINES
- VALVES
- EXISTING PIPING
- NEW PIPING
- NEW CATCH BASIN

VALVE SCHEDULE

PV 1	12" PLUG VALVE	VALVE BOX & PARTS
PV 2	12" PLUG VALVE	VALVE BOX & PARTS
PV 3	4" PLUG VALVE	VALVE BOX & PARTS
PV 4	4" PLUG VALVE	VALVE BOX & PARTS

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	CHANGED SLOPE ON ONE LAGOON SIDE	3/31/80	PWD	BGN
	Record Drawing	7-29-80	L.E.C.	M.L.H.

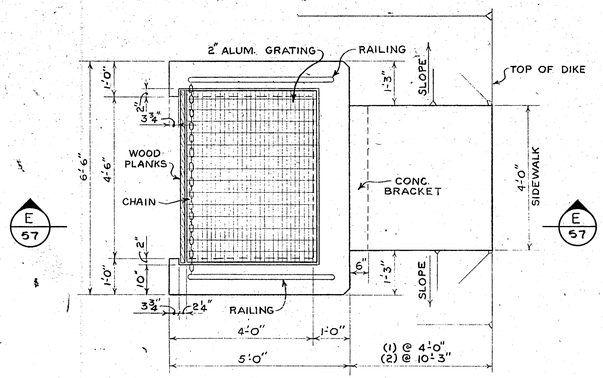
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 1" = 50'
DESIGNED BY: D.A.B.
DRAWN BY: R.A.S.
CHECKED BY: W.C.K. G.G.N.

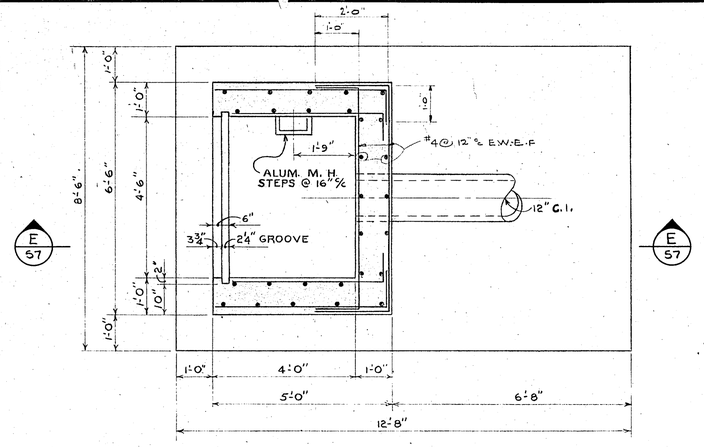
SLUDGE LAGOONS
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 J1
SECTION:
DATE: 10-20-75
57 OF 67

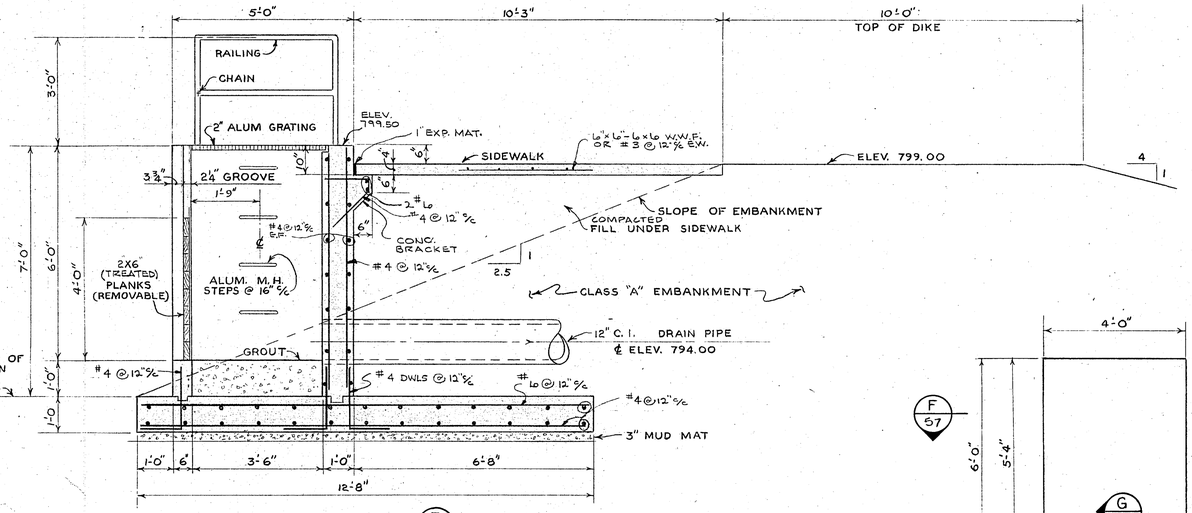
BRUNING 44-512—



PLAN

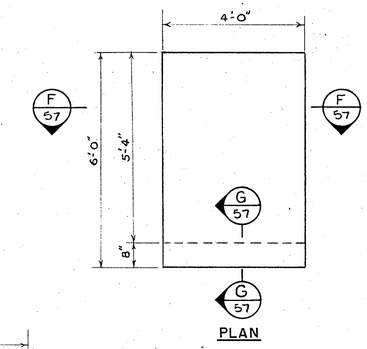


SECTIONAL PLAN - TYP. EACH STRUCTURE

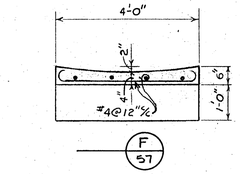


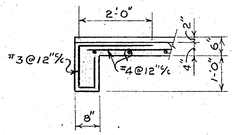
(2) - REQUIRED
SEE SHT # 57 FOR LOCATION

NEW SLUDGE LAGOON EFFLUENT STRUCTURES
½"=1'-0"



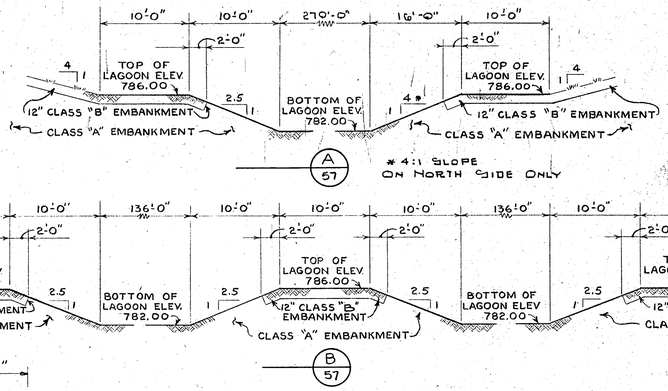
PLAN





(4) REQUIRED
SEE SHT. # _____ FOR LOCATION

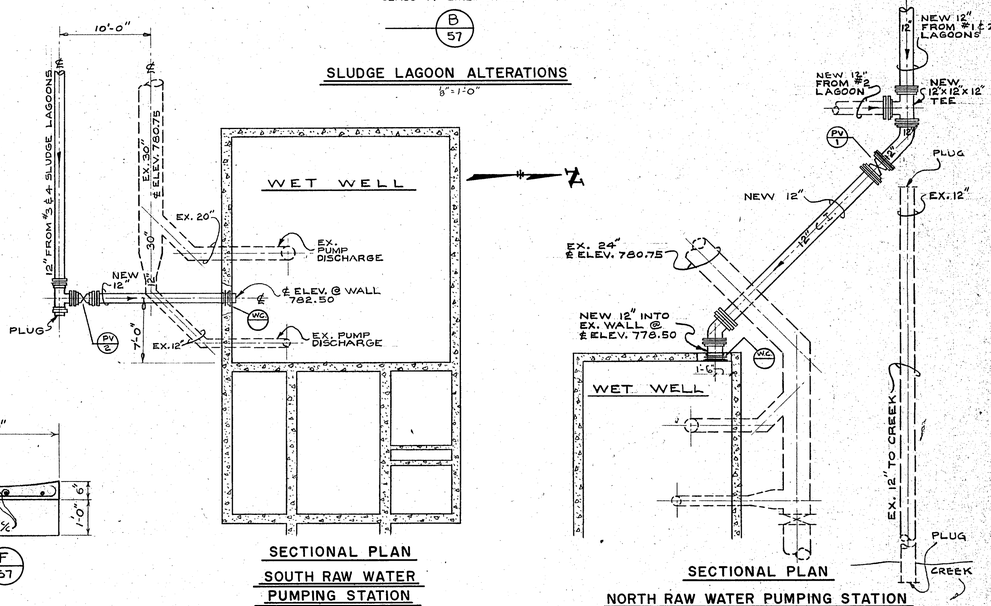
CONCRETE SPLASH PAD DETAILS
½" = 1'-0"



A 57

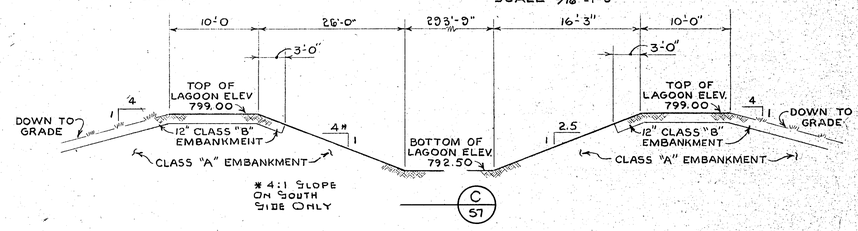
B 57

SLUDGE LAGOON ALTERATIONS
1" = 1'-0"

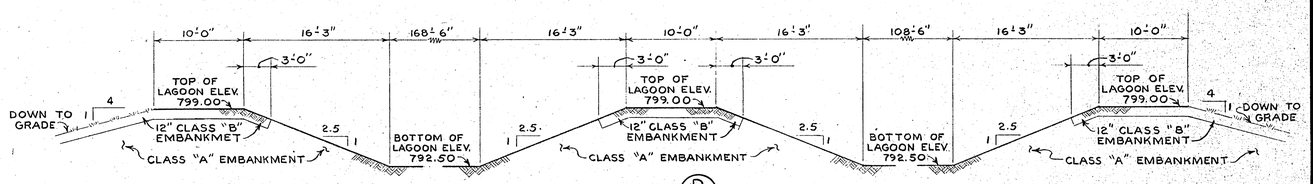


SECTIONAL PLAN
SOUTH RAW WATER PUMPING STATION
SCALE ⅛"=1'-0"

SECTIONAL PLAN
NORTH RAW WATER PUMPING STATION
SCALE 3/16"=1'-0"

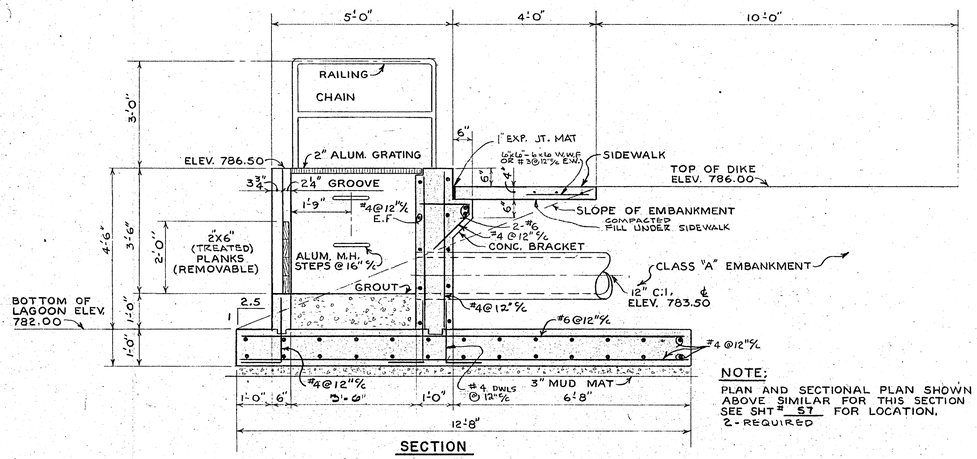


C 57



D 57

NEW SLUDGE LAGOON
1/8" = 1'-0"



NOTE:
PLAN AND SECTIONAL PLAN SHOWN ABOVE SIMILAR FOR THIS SECTION SEE SHT # 57 FOR LOCATION.
2 - REQUIRED

SECTION

EXISTING SLUDGE LAGOON ALTERATIONS EFFLUENT STRUCTURE
½" = 1'-0"

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1.	Changed Slope On One Side of Lagoons	3/3/76	PWO	GGH
	Record Drawing	2-29-80	L.E.C.	M.L.H.

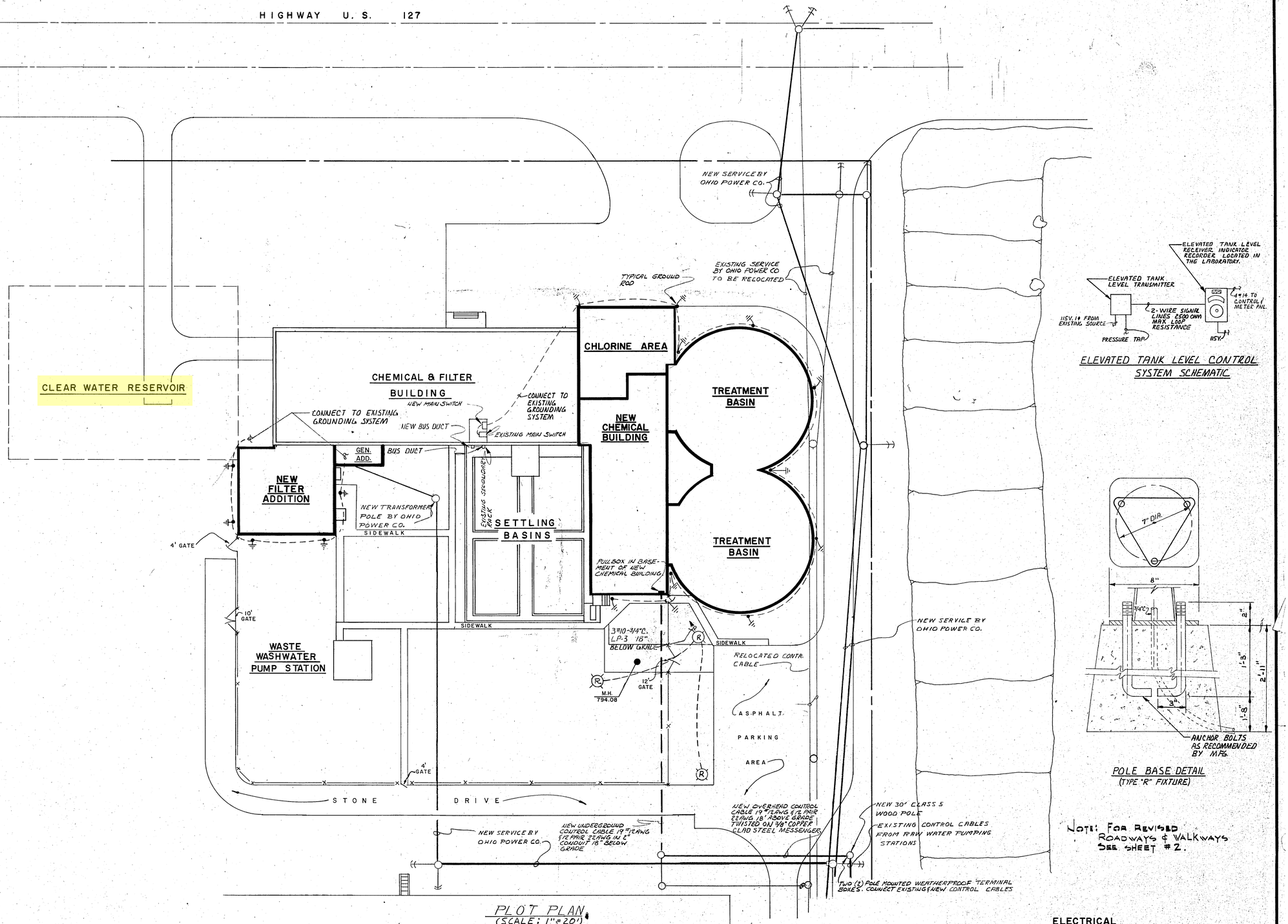
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	D.A.B.
DRAWN BY	R.A.S.
CHECKED BY	W.C.K. G.G.N.

SLUDGE LAGOONS
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	58 OF 67

BRUNING 44-510



PLOT PLAN
(SCALE: 1" = 20')

ELEVATED TANK LEVEL CONTROL SYSTEM SCHEMATIC

POLE BASE DETAIL
(TYPE "R" FIXTURE)

NOTE: FOR REVISED ROADWAYS & WALKWAYS SEE SHEET #2.

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	Record Drawing	2-29-80	L.E.C.	M.L.M.

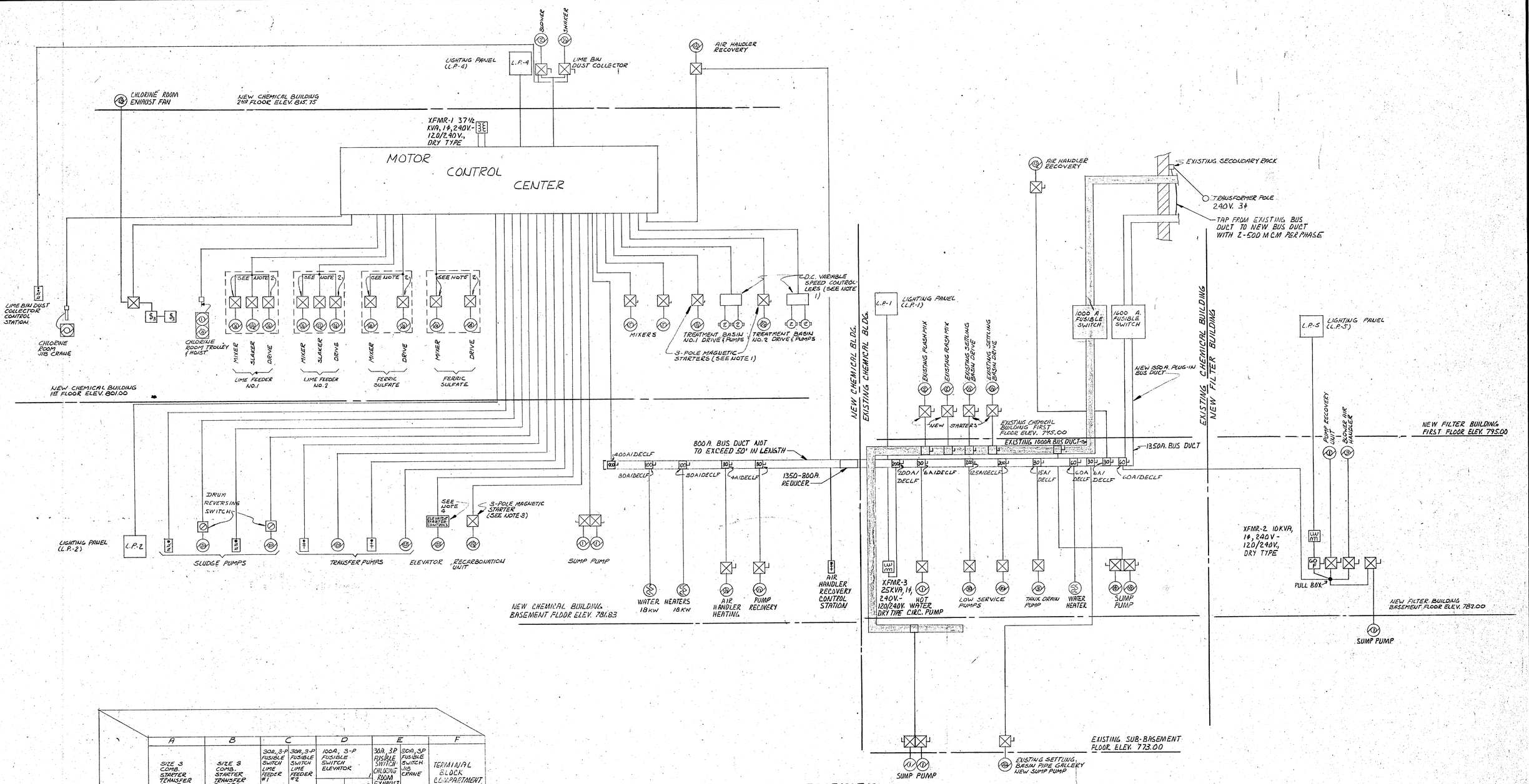
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE	AS NOTED
DESIGNED BY	F.G.D.
DRAWN BY	R.G.S.
CHECKED BY	R.D.T.

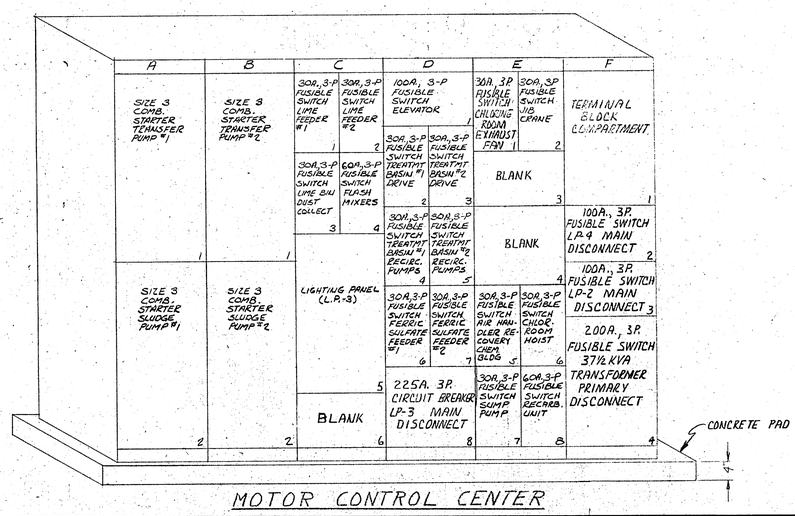
ELECTRICAL
PLOT PLAN
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER	VANW 103 J1
SECTION	
DATE	10-20-75
	59 of 67

BRUNING 44-510—



ONE LINE SCHEMATIC



MOTOR CONTROL CENTER

NOTES:

1. FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR TREATMENT BASIN EQUIPMENT.
2. FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR CHEMICAL FEEDING EQUIPMENT - SEE ITEM 13
3. FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR RECARBONATION EQUIPMENT
4. FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR ELEVATOR

ELECTRICAL

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	Record Drawing	2-28-80	L.E.C.	M.J.H.

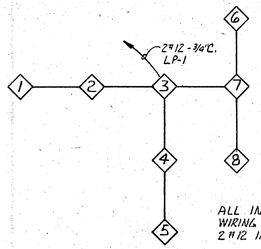
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: NO SCALE
DESIGNED BY: F.G.D.
DRAWN BY: R.G.S.
CHECKED BY: R.D.T.

ONE LINE SCHEMATIC
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW103JI
SECTION:
DATE: 10-20-75
60 OF 67

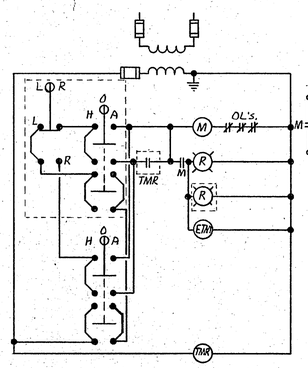
BRUNING 44-510



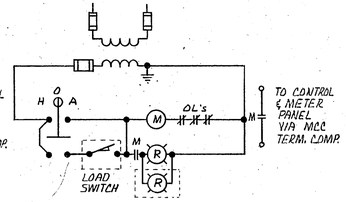
ALL INTERCONNECTING WIRING TO BE 4#18 & 2#12 IN 3/4"C.

1. NEW FILTER BUILDING
2. EXISTING LABORATORY
3. NEW OFFICE
4. EXISTING CHEMICAL BUILDING BASEMENT
5. EXISTING PLANT SUB-BASEMENT
6. SECOND FLOOR-NEW CHEMICAL BUILDING
7. FIRST FLOOR-NEW CHEMICAL BUILDING
8. BASEMENT FLOOR-NEW CHEMICAL BUILDING

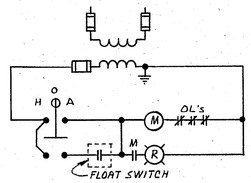
INTERCOM SYSTEM BLOCK DIAGRAM



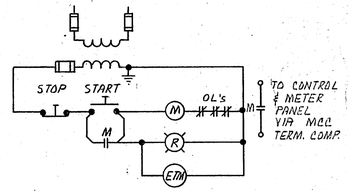
SLUDGE PUMP (2 REQ'D.)



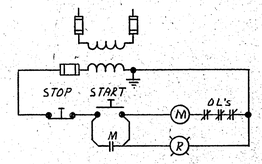
DUST COLLECTOR SHAKER



SUMP PUMP-EXISTING PIPE GALLERY
SUMP PUMP-NEW FILTER BUILDING

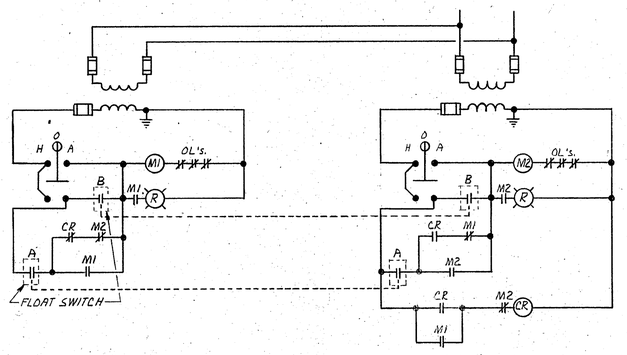


TRANSFER PUMPS (2 REQ'D.)
LOW SERVICE PUMPS (2 REQ'D.)
MIXERS (4 REQ'D.)

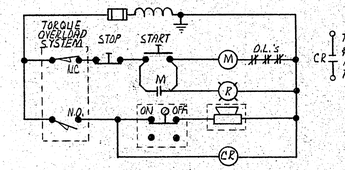


PUMP RECOVERY UNIT-NEW FILTER BUILDING
BLOWER AIR HANDLER-NEW FILTER BUILDING
AIR HANDLER RECOVERY-EXIST. CHEMICAL BUILDING
HOT WATER CIRC. PUMP-EXIST. CHEMICAL BLDG.
AIR HANDLER RECOVERY-NEW CHEMICAL BUILDING
AIR HANDLER HEATING-NEW CHEMICAL BUILDING
PUMP RECOVERY UNIT-NEW CHEMICAL BUILDING
TANK DRAIN PUMP

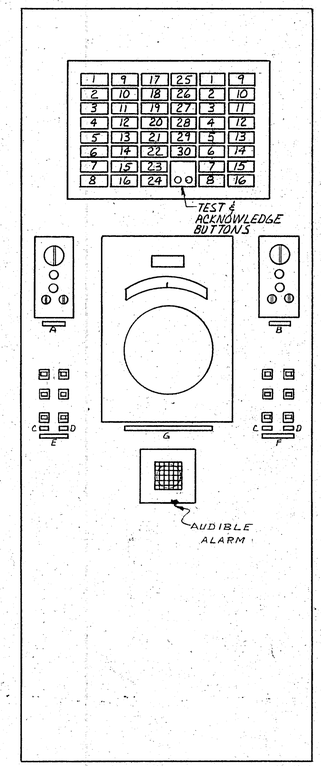
DUST COLLECTOR EXHAUSTER



SUMP PUMP-NEW CHEMICAL BUILDING
SUMP PUMP-EXISTING SUB-BASEMENT



TREATMENT BASIN DRIVES (2 REQ'D.)
(SEE NOTE 2)



CONTROL AND METER PANEL
(SEE NOTE NO 4)

STATUS ANNUNCIATOR LEGEND

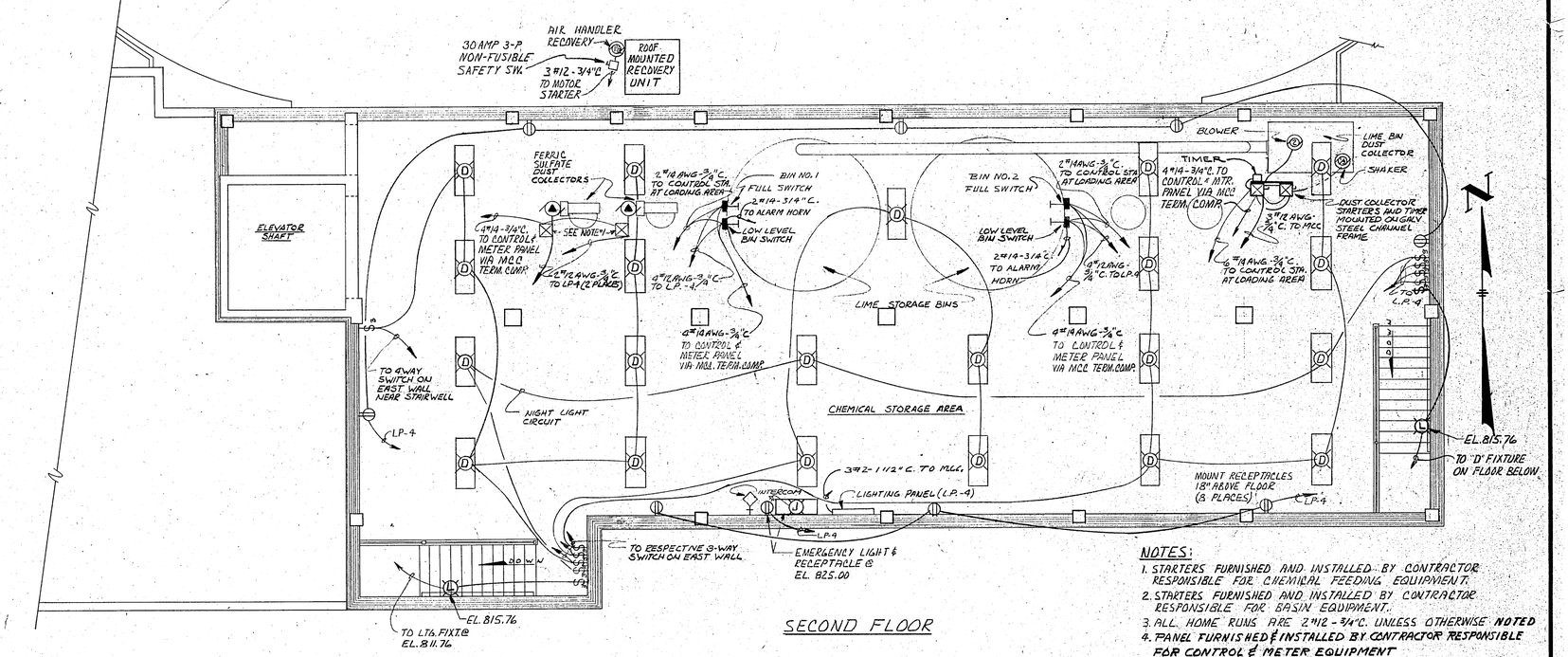
1. LOW SERVICE PUMP NO 1-ON
2. LOW SERVICE PUMP NO 2-ON
3. TRANSFER PUMP NO 1-ON
4. TRANSFER PUMP NO 2-ON
5. FERRIC SULFATE FEEDER NO 1-ON
6. FERRIC SULFATE FEEDER NO2-ON
7. SETTLING TANK QUICK MIXER NO 1-ON
8. SETTLING TANK QUICK MIXER NO 2-ON
9. TREATMENT BASIN FLASH MIXER NO 1-ON
10. TREATMENT BASIN FLASH MIXER NO 2-ON
11. LIME SLAKER NO 1-ON
12. LIME SLAKER NO 2-ON
13. LIME FEEDER NO 1-ON
14. LIME FEEDER NO 2-ON
15. FERRIC SULFATE FEEDER CARBON ROOM-ON
16. CARBON FEEDER - ON
17. LIME BIN DUST COLLECTOR EXHAUSTER-ON
18. LIME BIN DUST COLLECTOR SHAKER-ON
19. SLUDGE PUMP NO 1-ON
20. SLUDGE PUMP NO 2-ON
21. RECARBONATION UNIT-ON
22. TREATMENT BASIN NO 1 PUMP NO 1-ON
23. TREATMENT BASIN NO 1 PUMP NO 2-ON
24. TREATMENT BASIN NO 1 DRIVE-ON
25. TREATMENT BASIN NO 2 PUMP NO 1-ON
26. TREATMENT BASIN NO 2 PUMP NO 2-ON
27. TREATMENT BASIN NO 2 DRIVE-ON
28. LIME BIN NO. 1 - FULL
29. LIME BIN NO. 2 - FULL
30. EMERGENCY EYE WASH

ALARM ANNUNCIATOR LEGEND

1. SETTLING TANK BASIN INFLUENT FLUME - HI LEVEL
2. SETTLING TANK BASIN INFLUENT FLUME - LO LEVEL
3. TREATMENT BASIN NO 1 OVERTORQUE
4. TREATMENT BASIN NO 2 OVERTORQUE
5. LIME BIN NO 1 - LO LEVEL
6. LIME BIN NO 2 - LO LEVEL
7. RECARBONATION UNIT TROUBLE
8. CHLORINE GAS LEAK
9. NORTH ELEVATED TANK HI LEVEL
10. NORTH ELEVATED TANK LO LEVEL
11. TREATMENT BASIN NO 1 HI LEVEL
12. TREATMENT BASIN NO 2 HI LEVEL
13. FERRIC SULFATE FEEDER NO. 1 - TROUBLE
14. FERRIC SULFATE FEEDER NO. 2 TROUBLE
15. FILTER FLUME HIGH LEVEL
16. TREATMENT BASINS HIGH LEVEL

NAMEPLATE LEGEND

A. RAW WATER RATE OF FLOW CONTROLLER
B. TRANSFER PUMP VALVE CONTROLLER
C. NO 1
D. NO 2
E. LOW SERVICE PUMPS
F. TRANSFER PUMPS
G. RAW WATER FLOW INDICATOR - RECORDER - TOTALIZER



SECOND FLOOR

NOTES:
1. STARTERS FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR CHEMICAL FEEDING EQUIPMENT.
2. STARTERS FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR BASIN EQUIPMENT.
3. ALL HOME RUNS ARE 2#12 - 3/4"C. UNLESS OTHERWISE NOTED
4. PANEL FURNISHED & INSTALLED BY CONTRACTOR RESPONSIBLE FOR CONTROL & METER EQUIPMENT

ELECTRICAL

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	Record Drawing	2-19-80	L.E.C.	M.L.H.

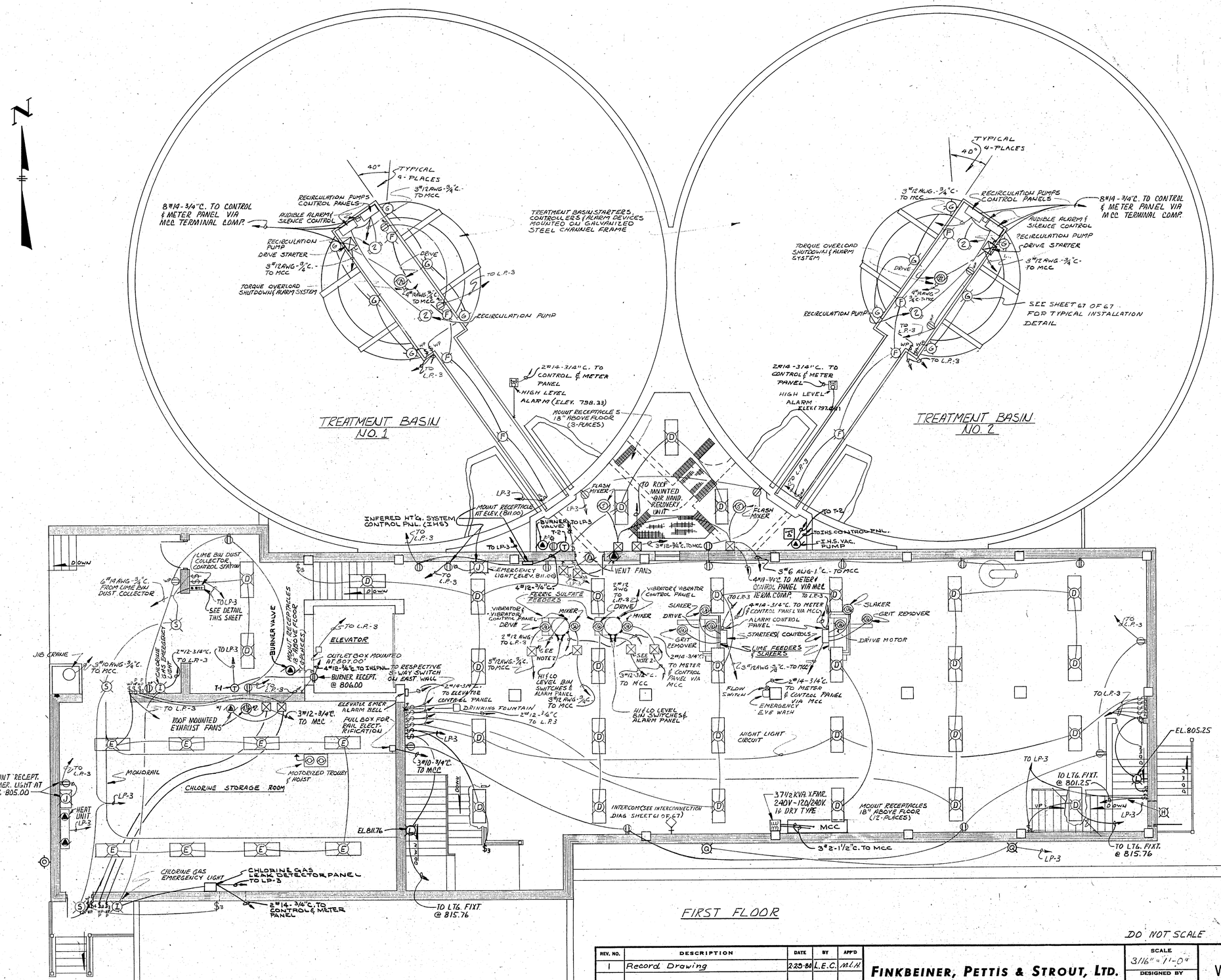
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: NO SCALE
DESIGNED BY: F.G.D.
DRAWN BY: R.G.S.
CHECKED BY: R.D.T.

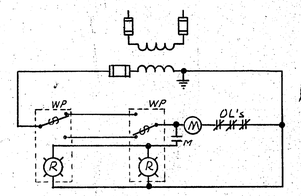
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
61 OF 67

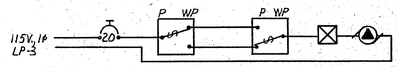
BRUNING 44-510



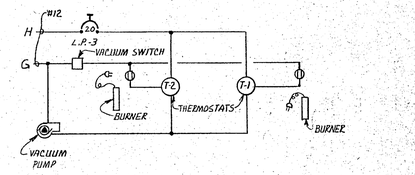
FIRST FLOOR



CHLORINE ROOM EXHAUST FAN #2
CONTROL SCHEMATIC

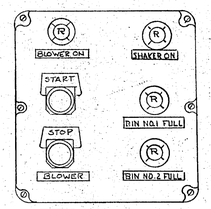


CHLORINE ROOM EXHAUST FAN #1
CONTROL SCHEMATIC



BURNER CONTROL WIRING DIAGRAM

REFER TO CO-RAY-VAC SHOP DRAWINGS FOR WIRING DETAILS.



DETAIL
LIME BIN DUST COLLECTOR CONTROL STATION

NOTE:
1. ALL HOME RUNS ARE 2#12-3/4"C. UNLESS OTHERWISE NOTED.
2. STARTERS FURNISHED AND INSTALLED BY CONTRACTOR RESPONSIBLE FOR FERRIC SULFATE FEEDERS

DO NOT SCALE

ELECTRICAL

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	Record Drawing	2-29-80	L.E.C.	M.L.H.

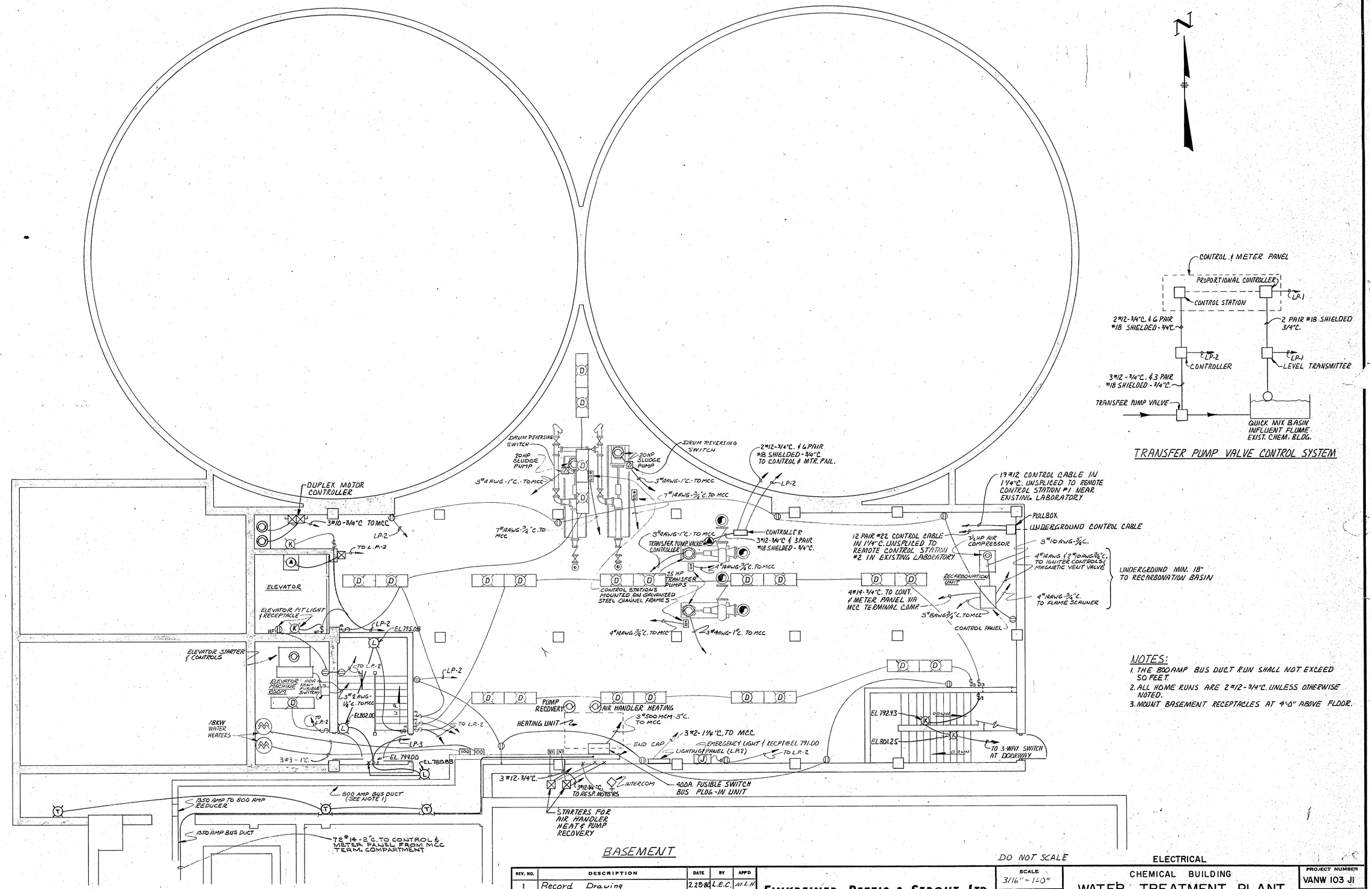
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/16" = 1'-0"
DESIGNED BY: F.G.D.
DRAWN BY: RGS
CHECKED BY: R.D.T.

CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
62 OF 67

BRUNING 44-510



BASEMENT

TRANSFER PUMP VALVE CONTROL SYSTEM

NOTES:

1. THE 800 AMP BUS DUCT RUN SHALL NOT EXCEED 50 FEET.
2. ALL HOME RUNS ARE 2#12 - 3/4"C. UNLESS OTHERWISE NOTED.
3. MOUNT BASEMENT RECEPTACLES AT 4'-0" ABOVE FLOOR.

DO NOT SCALE

REV. NO.	DESCRIPTION	DATE	BY	APP'D
1	Record Drawing	2.2080	L.E.C.	M.L.M.

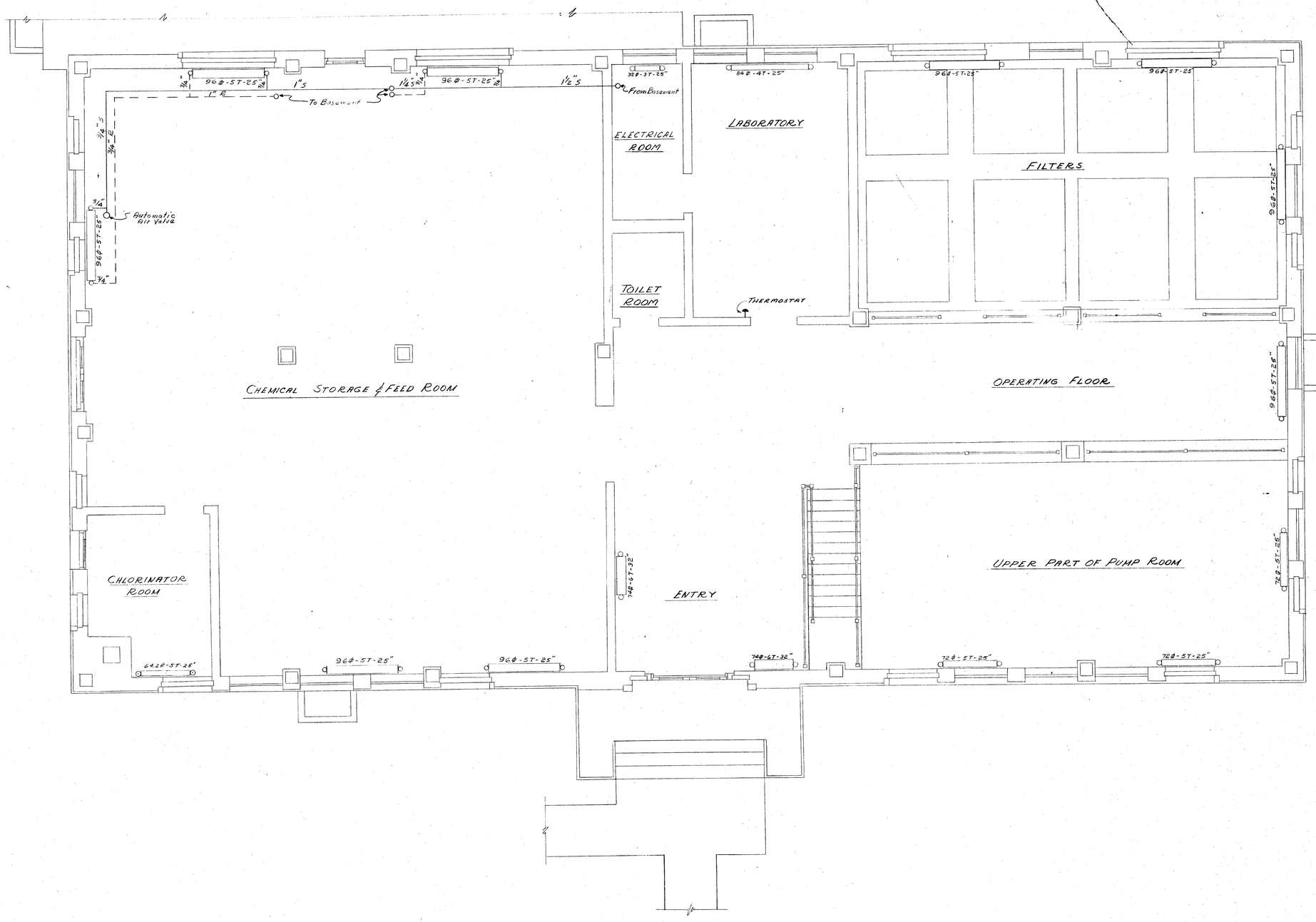
FINKBEINER, PETTIS & STROUT, LTD.
CONSULTING ENGINEERS
TOLEDO, OHIO

SCALE: 3/16" = 1'-0"
DESIGNED BY: F.G.D.
DRAWN BY: R.G.S.
CHECKED BY: R.D.T.

ELECTRICAL
CHEMICAL BUILDING
WATER TREATMENT PLANT IMPROVEMENTS
VAN WERT, OHIO

PROJECT NUMBER: VANW 103 JI
SECTION:
DATE: 10-20-75
63 OF 67

BRUNING 44-510



PLAN OF FIRST FLOOR

HEATING DETAILS

CHEMICAL & FILTER BUILDIN

SECTION C

SURFACE WATER SUPPLY

VAN WERT, OHIO

FINKBEINER, PETTIS & STROUT
CONSULTING ENGINEERS - TOLEDO, OHI

SCALE: 1/4"=1'-0"
UNLESS NOTED 1949