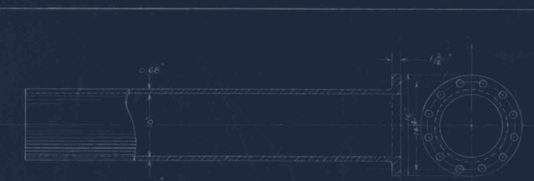
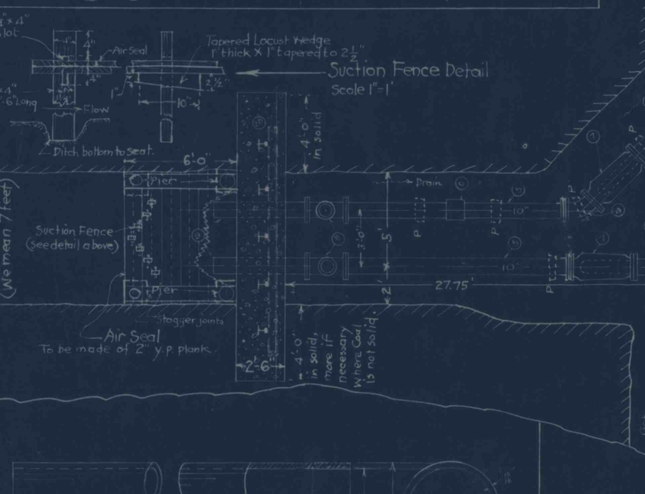
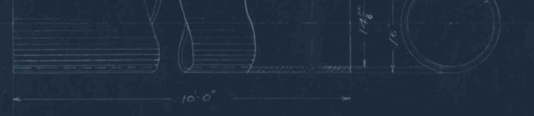


Scale: 1"=1'

Detail of Acid-Resisting Bronze Bulkhead Pipe
Item No. 9 - Flange One End - 2 Required As Shown
Bronze Content 75% Copper - 15% Lead - 10% Tin





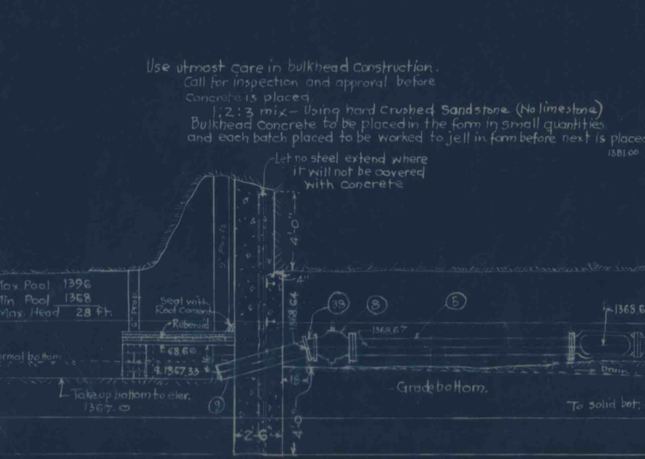
Scale: 1"=1'

Detail of Acid-resisting Bronze Connection - Item No. 20
Bronze Content 75% Copper - 15% Lead - 10% Tin

See plan 1-J-58 for Pump Room - Roof line and Floor
See plan 1-J-59 for Foundation Plan for Pumps.

Item No.	Quantity	Description
1	2	Hazleton 2 Stage Volute Pumps, 10" Suction 8" Disch, extended to 10"1640 GPM, 542' Head, 1775 RPM, 298 B.H.P. Bronze Case, Stainless steel shaft, chrome impellers, cast iron base. Both pumps to be Left-Hand rotation (Looking at suction end)
1-X	1	Spare rotating element for the above pumps, same as specified above.
2	2	G.E. 2200 V - 300 H.P. AC Motors, 1775 R.P.M. - Type Model Serial No. Frame No
3	2	Reduced Voltage hand starters for the above motors
4	4	U.S.C.I.P.&F.Co. 10" class D C.I. flanged ⅜ curves (45°), 9.94" center to face, F&D. 12-1" holes on 14¼" B.C.
5	4	Standard 12-ft lengths of 10" class D C.I. flanged pipe, F&D. 12-1" holes on 14¼" B.C.
6	3	Dresser Cast Couplings, style 53, to fit 11.40" O.D. pipe, for use with cold mine water
7	2	Hazleton 10" flanged Suction line strainers, C.I. body, bronze basket, F&D. 12-1" holes on 14¼" B.C.
8	2	Hazleton 10" Flanged All Bronze Plug Valves; F&D. 12-1" holes on 14¼" B.C.
9	2	Pieces of 10" Bronze pipe, as per detail for Bulkhead pipe.
10	1	U.S.C.I.P.&F.Co. 10" class F C.I. flanged ⅛ curve (45°) 14" C. to f., F&D. 16-1⅛" holes on 15¼" B.C.
11	2	Hazleton 10" Extra Heavy (250#) mine check valves with mercoid switches, bronze body, bronze trimmed, with by-pass and by-pass valve of size nearest 2", F&D. 16-1⅛" holes on 15¼" B.C.
12	3	Standard 12-ft. lengths of 10" C.I. class "F" flanged pipe; F&D 16-1⅛" holes on 15¼" B.C.
13	2	Dresser Cast Couplings, style 53, to fit 11.60" O.D. pipe, for use with cold mine water.
14	2	Crane No 7½ E. 250#/10" Iron body, Flanged, wedged gate valves, O.S.&Y., brass trimmed, brass stems; F&D. 16-1⅛" holes on 15¼" B.C.
15	2	C.I. Ex. hvy (250#) 14" to 10" Flanged reducers, 16" f. to f.; F&D. on 14" end 20-1¼" holes on 20¾" B.C. and on 10" end 16-1⅛" holes on 15¼" B.C.
16	2	U.S.C.I.P.&F.Co. 14" class F C.I. flanged Y branches, code word "Finnacity"; F&D. 20-1⅜" holes on 20¾" B.C.
17	2	Standard 12-ft. lengths of 14" class F C.I. flanged pipe; F&D. 20-1¼" holes on 20¾" B.C.
18	1	U.S.C.I.P.&F.Co. 14" class F C.I. flanged ⅛ curve (45°), 18" C. to f.; F&D 20-1¼" holes on 20¾" B.C.
19	2	Dresser cast coupling, style 53, to fit 16" O.D. pipe; for use with cold mine water.
20	1	Bronze Connection as per detail
21	531	Feet, to nearest random length, flange #1 of 14" O.D. steel pipe; ⅜" wall, plain ends.
22	21	Feet, to nearest random length, of 20" O.D. steel pipe, ⅜" wall, plain ends.
23	1	14" C.I. flanged (125#) 45° lateral, as shown in Crane Cat. 38, p. 13, F&D. 12-1⅛ holes on 18¾" B.C.
24	1	14" C.I. flanged (125#) 45° elbow; F&D. 12-1⅛ holes on 18¾" B.C.
25	1	Standard 12-ft. length of 14" C.I. flanged pipe, 125# pressure; F&D. 12-1⅛ holes on 18¾" B.C.
26	95	Barrels Lehigh cement for Pump hole grout (127 bbls. used Nov. 12-13, 1947)
27	70	Barrels Lehigh cement for Power hole grout (72 Bbl. used after casing was placed, 17 bbl. used in drilling)
28	20	Cu. yds. 1:2:3 mix concrete bulkhead; require 34 bbl cement, 41 sand, 2 OT ⅜"-0 or sandrock
29	1	Only 125# Fes. 14" C.I. companion flange; F&D. 12-1⅛ holes on 18¾" B.C.
30	1	Only 125# Fes. C.I. blind flange, 21" flange dia. (for 14" pipe), F&D. 12-1⅛" holes on 18¾" B.C.
31	100	Feet, to nearest random length, of ⅜" x 2" O.H. square edge flat bars, about 20' lengths
32	534	Feet 18" drilled pump hole (513 ft of 14" O.D. bevelled-edge casing to be grouted in hole)
33	532	Feet 12" drilled power hole (540 ft. of 7" O.D. threaded casing to be grouted in hole)
	140	⅛" x 3½" machine bolts with hex. nuts
	144	1" x 5" machine bolts with hex. nuts
	170	1" x 4" machine bolts with hex. nuts
	15	Lineal yds ⅛" thick gasket gum = 1 yard wide.
	1	2 Ton Y & T. Geared Hoist, complete with trolley.

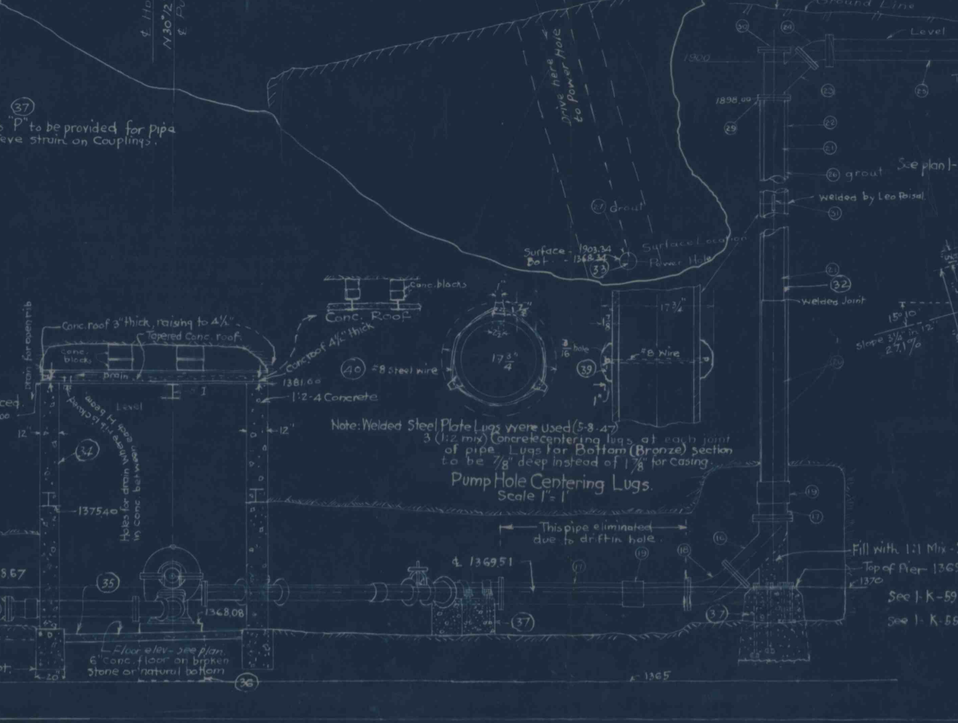
			Bbls. Cement	N. Tons Sand	N. Tons G. Sandrock
34	42	Cu. yds 1:2:4 mix concrete Walls	63	25	50
35	7	" " " " " Floor	10	4	8
36	5	" " " " " Bases	8	3	6
37	3	" " " " " Piers	4	2	4
38	210	Babbit wedged fillers, as per detail			
39	28	Steel centering Lugs.			
40	200'	#8 steel wire (clothes line wire)			
41	5	cu. yds. 1:2:3 mix concrete roof	9	4	5
	20	cu yds, 1:2:3 mix - Conc. Bulkhead	34	14	20



Scale: 1"=1'

Detail of Acid-resisting Bronze Connection - Item No. 20
Bronze Content 75% Copper - 15% Lead - 10% Tin

Note: (37) Supports "P" to be provided for pipa to relieve strain on Couplings.



APPROVAL OF BULKHEAD

State of Pennsylvania } S.S.
County of Somerset }

On this day of 194 before me, the undersigned officer, personally appeared who acknowledged that the concrete bulkhead hereon detailed was constructed under his supervision according to the specifications shown hereon.

My Commission expires

Approved:-

	Inspector	Bit. District
	Inspector	Bit. District
	Inspector	Bit. District

Pittsburgh Consolidation Coal Company
Mine 123 - Gray, Pa.
No. 1 NORTHEAST PUMP STATION
Scale ¼"=1' April 10, 1946
Engr. Dept. Acosta, Pa.

Ref. C.

Revised 4-23-46 - No bars @ 2 inches of Louis-Allis.
Revised 10-25-46 - Lowered Section 1367.50, Lowered Pumps, 8" Conc center legs, Suction Fence, 8" Conc. on Steel Fillers (38)
Rev. 6-3-47 - Elev. Floor, Suct. and disch. elevs.
" 7-15-47 - Roof.
" 10-9-47 - Items 5, 8 & 9 elevated, Fillers #38 increased in thickness.

1-K-53