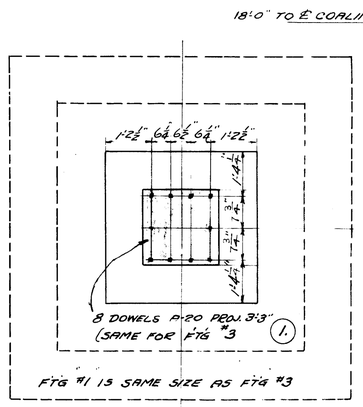
C-542-2



FTG #1 IS SAME SIZE AS FTG #3

18'-0" TO ℄ COALING TRACK

25'-0"

℄ COLUMNS

℄ COALING TRACK

9'-6"
7'-0"
4'-6"
2'-6"
8 DOWELS-P20 PROJ. 3'-3" SPACED SAME FOR FTG #4
2'-3"
1'-0" 6
2'-3½"
1'-6"
1'-3" x 10" BOLT PROJ. 1½"
1'-5"
2'-3½"
2½" x 10" BOLTS PROJ. 1½"
1-¾" x 10" BOLT PROJ. 1½"
1:2 Slope
TO ℄ 3"x1"x1" DEEP HOLES IN FLOOR FOR LADDER.
6'-0"
8'-3"
3'-6"
4'-6"
1'-6"
6"
12"
F
2

9'-0"
3'-0"
18'-0"
20'-0"
10'-0"
A
℄ MAIN STRUCTURE & REC. HOPPER
℄ COLUMNS
COLUMN LOADS ON TOP OF FOOTINGS ARE AS FOLLOWS;
#1 & #3 : 279,000 LBS.
#2 & #4 : 243,000 LBS.
4'-3"
1'-9"
2'-0"
1'-6"
6'-0"
8"
1'-0"
8¾" BOLTS PROJ. ½"
6¾" x 10" BOLTS PROJ. ½"
3'-0"
2'-0"
Proj. ½"
2'-0" BOOT SHAFT
THIS FLOOR MUST SLOPE TOWARD SUMP FROM ALL DIRECTIONS.
G
4

9'-0"
6'-6"
4'-0"
2'-0"
8 DOWELS-P20, PROJ 3'-3" SPACED SAME AS FOR FTG #1
3
12"
8'-0"
℄ COLUMNS

FTG #4 IS SAME SIZE AS FTG #2 Bars Ce
8 DOWELS-P20, PROJ. 3'-3" SAME FOR FTG #2
1'-7½"
6¾" 6¾"
1'-3"
1'-3"
1'-6"
E
2½" x 10" BOLTS PROJ. 1½"
2'-4½"
1'-3½"
1'-7½"
6"
6'-6"
4

18'-0"
B
12"
8'-0"
8'-0"
12"
1'-6"
3'-6" 12" SLAB
3'-0"
STONE IN CONCRETE TO BE WELL SPADED BACK FROM SURFACE OF FLOOR AND FLOOR TO BE TROWELLED TO A SMOOTH SURFACE
1-A12
1-A13
1-A14
1-A11
1-A9
1-A8
1-A7
1-A6
1-A5
1-A4
1-A1, 1-A2, & 1-A3
RADIALS SPACED 0'-9" CTRS AT BOTTOM.
5"x3½"x⅜" ∠
15'-93" ℓ SEPARATOR
1-A18
1-A17
1-A16
2-A5
3'-9½"
4-A10
2-A9
2-A6
10'-0"
22'-0"
12" SLAB
2-A24 : 80# ℓs
2'-5½"
2'-5½"
6'-6"
12"
4'-6"
6"
3'-0"
3'-0"
6"
4'-6"
12"
25'-6"
B
PLAN

4'-6"
1'-6"
6"
3'-0"
2-A23
2'-6"
5'-19"
7'-0"
8'-3"
4'-6"
12'-2"
1-A18
1-A17
1-A16
1-A15
15'-33" ℓ SEPARATOR
5"x3½"x⅜" ∠ WITH ANCHORS BENT UP INTO CONCRETE AND LOADER SIDE PLATES ATTACHED
1-A2
1-A1
9"
12"
5'-0"
2-A22
2'-0"
1-A21
1-A20
1-A19
1-A14
1'-6"
2'-10"
℄ COLS #1 & #2
3'-6"
12"
4'-6"
2'-6"
5'-19"
7'-0"
8'-3"
℄ COLS #3 & #4
1'-6"
3'-0"
4'-6"
2-A23
A
13'-0"
SECTION B-B

Piers 2'-6" square for cols. #1 & #4 extend up to 1'-6" above B/R Cooling track.

PCS	SIZE	LENGTH	BENDING X	Y	Z	MARK	WHERE PLACED
4	⅞" □	12'-3"	10'-3"	2'-0"	1'-3"	A-11	RADIALS IN HOPPER AT ENDS
4	"	15'-0"	13'-0"	2'-0"	1'-3"	" 12	" " " " "
4	"	15'-9"	13'-9"	2'-0"	1'-3"	" 13	" " " " "
2	"	11'-3"	9'-3"	2'-0"	1'-3"	" 14	" " " " "
2	"	8'-0"	6'-0"	2'-0"	1'-6"	" 15	" " " " SIDES
4	"	8'-9"	7'-3"	1'-6"	1'-0"	" 16	" " " " "
4	"	11'-0"	9'-6"	1'-6"	1'-0"	" 17	" " " " "
4	"	13'-0"	11'-6"	1'-6"	1'-0"	" 18	" " " " "
2	⅝" □	10'-0"	8'-6"	1'-6"	1'-0"	" 19	" " " " "

5'-6" FOR A1
6'-3" FOR A2
7'-0" FOR A3
3'-0"
3"
3"

1-1½" □ BAR, 14'-6" LG. MK'D A1 ∨
1-1½" □ " 16'-0" " " A2 ∨
1-1½" □ " 17'-6" " " A3 ∨

1'-6"
21'-0"
1'-6"
4-⅞" □ BARS, 24'-0" LG. MK'D A24
(FOR LOWER STRUT BETWEEN COL'S #2 & 4.)

STRAIGHT BARS				
PCS	SIZE	LENGTH	MARK	WHERE PLACED
1	½" □	12'-6"	A10	HOPPER SLOPES AT SIDES
32	⅞"	7'-0"	" 20	DOWELS IN FOOTINGS
4	½" □	1'-0"	" 21	" LOADER BLOCK
2	1" □	21'-0"	" 22	TOP EDGE HOPPER AT SIDES
4	1" □	17'-6"	" 23	" ENDS
4	¾" □	13'-4"	" 27	BEAM OVER LOADER CUT FROM 2-¾"x 24"-8"
4	1"	9'-0"	" 25	" BOOT PIT WALL.

PCS	SIZE	LENGTH	BENDING A	B	C	MARK
2	⅝" □	10'-0"	0'-10	6'-0	3'-2	A4
"	"	12'-9"	1'-6"	7'-3"	4'-0"	5
"	"	14'-3"	2'-0"	7'-10	4'-5"	6
"	"	16'-0"	2'-6"	8'-6"	5'-0"	7
"	"	17'-9"	3'-1"	9'-2	5'-6"	8
2	⅝" □	19'-6"	3'-8	9'-10	6'-0	A9

A
B
C
PLACE IN PAIRS AS SHOWN

ALL CORNERS ABOVE GRADE.

1'-1"
1'-1"
5½" WORKS
18-⅜" □ x 5'-3" BARS, MK'D A-26
(TIES FOR LOWER STRUT BETWEEN COL'S #2 & 4.)

1'-6"
3"
12"
3"
1'-6"
3½" TIES-A26 @ 12" CTRS
1-A24
B/R COALING TRACK
SECTION E-E
SECTION F-F SIMILAR

NOTE:
THE FOUNDATIONS SHOWN HEREON ARE DESIGNED FOR A LOADING OF 4,000# PER SQ.FT ON THE SOIL AT THE DEPTH CALLED FOR. F.M.&CO. BEING UNFAMILIAR WITH SOIL CONDITIONS DISCLAIM FURTHER RESPONSIBILITY.
SEE DR'G'S #C542-3 FOR ADDITIONAL DETAILS OF FOUNDATIONS.
SEE SPECIFICATIONS FOR CONCRETE MIXTURES.
WORK TO FIGURES AND NOT TO SCALE.

FOUNDATION DETAILS
FOR
COAL & SAND STATION
FOR THE
NEWBURGH & SO. SHORE R.R.
AT
CLEVELAND, OHIO.
FAIRBANKS, MORSE & CO.
CHICAGO, ILL.
E.A.M., A.J. 12-7-16

SCALE ½" & 1" = 1'-0"

C-542-2 1/8