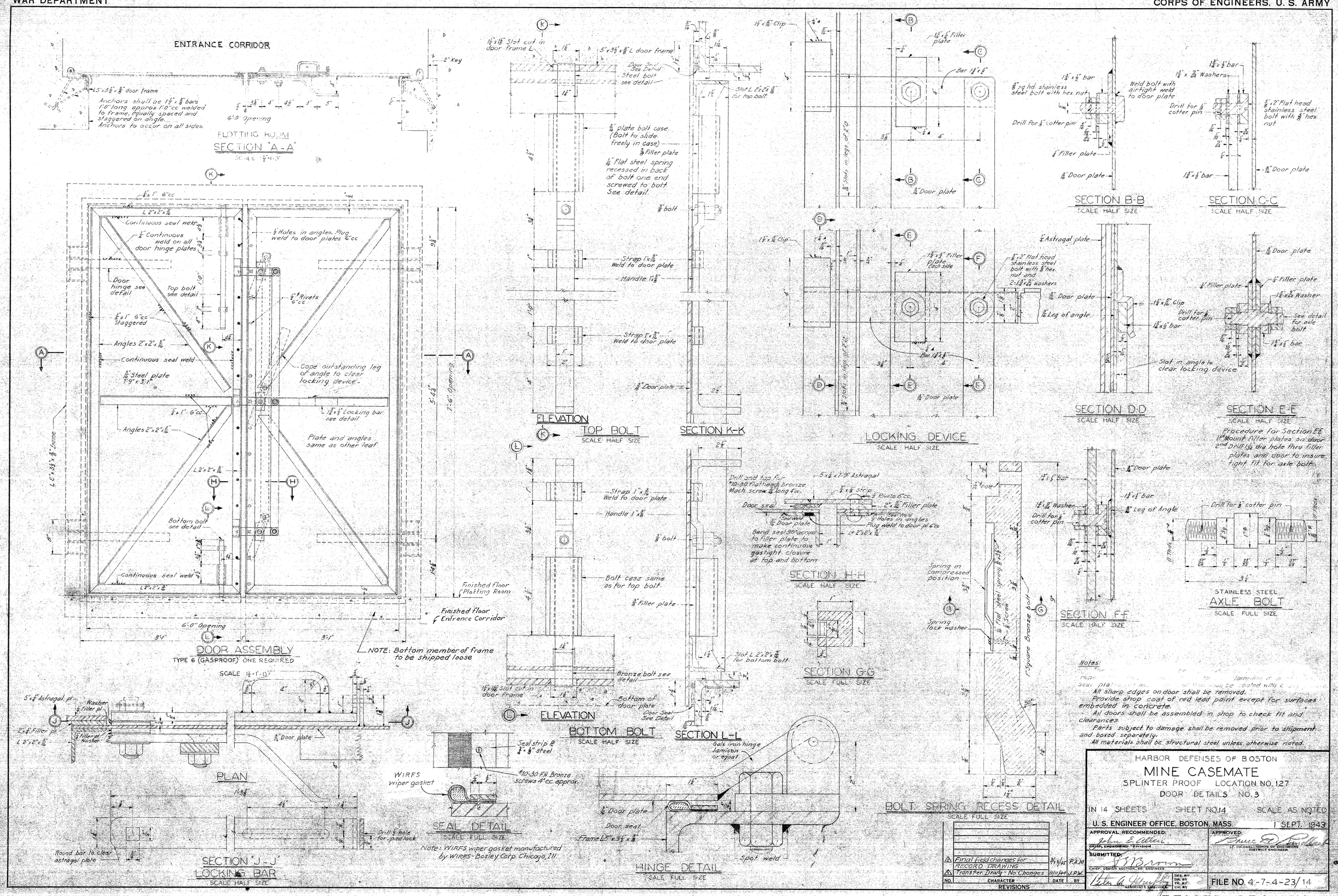
ENTRANCE CORRIDOR
2" Key
1.5"x3½"x⅜" door frame
Anchors shall be 1½"x⅜" bars 1'-0" long approx. 1'-0" cc welded to frame, equally spaced and staggered on angle. Anchors to occur on all sides.
6'-0" Opening
PLOTTING ROOM
SECTION "A-A"
SCALE ½"=1'-0"
Continuous seal weld
¼" Continuous weld on all door hinge plates
¼" Holes in angles. Plug weld to door plates 6" cc
Door hinge see detail
Top bolt see detail
⅝" Rivets 6" cc
¼"x1" 6" cc staggered
Angles 2"x2"x⅜"
Continuous seal weld
⅜" Steel plate 1'-9"x3'-1"
Cope outstanding leg of angle to clear locking device
⅜"x⅜" Locking bar see detail
Angles 2"x2"x⅜"
Plate and angles same as other leaf
Bottom bolt see detail
Continuous seal weld
Finished floor Plotting Room
Finished floor Entrance Corridor
6'-0" Opening
3'-1"
3'-1"
DOOR ASSEMBLY
TYPE 6 (GASPROOF) ONE REQUIRED
NOTE: Bottom member of frame to be shipped loose
1½"x1½" Slot cut in door frame
5"x3½"x⅜" L door frame
Door Seal See Detail
Steel bolt see detail
Slot L 2"x2"x⅜" for top bolt
⅜" plate bolt case. (Bolt to slide freely in case)
⅜" Filler plate
1/16" Flat steel spring recessed in back of bolt one end screwed to bolt. See detail.
⅜" bolt
Strap 1"x⅜" Weld to door plate
Handle 1"x⅜"
Strap 1"x⅜" Weld to door plate
⅜" Door plate
ELEVATION
TOP BOLT
SCALE HALF SIZE
SECTION K-K
Strap 1"x⅜" Weld to door plate
Handle 1"x⅜"
⅜" bolt
Bolt case same as for top bolt
⅜" Filler plate
Bronze bolt see detail
1½"x1½" Slot cut in door frame
Bottom of door plate
Door Seal See Detail
Slot L 2"x2"x⅜" for bottom bolt
ELEVATION
BOTTOM BOLT
SCALE HALF SIZE
SECTION L-L
1½"x⅜" Clip
1½"x½" Filler plate
Bar 1½"x½"
⅜" Slots in legs of 2"x2"
⅜" Door plate
1½"x⅜" Clip
1½"x½" Filler plate each side
⅝"x2" Flat head stainless steel bolt with ⅜" hex nut and 2-1½"x⅜" washers
⅜" Door plate
⅜" Leg of angle
Bar 1½"x½"
⅜" Door plate
LOCKING DEVICE
SCALE HALF SIZE
1½"x½" bar
⅝" sq hd. stainless steel bolt with hex nut
Weld bolt with airtight weld to door plate
Drill for ⅛" cotter pin
¼" Filler plate
⅜" Door plate
SECTION B-B
SCALE HALF SIZE
1½"x⅜" bar
1½"x⅜" Washers
⅝"x2" Flat head stainless steel bolt with ⅜" hex nut
⅜" Door plate
1½"x½" bar
SECTION C-C
SCALE HALF SIZE
¼" Astragal plate
⅜" Door plate
1½"x⅜" Clip
Drill for ⅛" cotter pin
1½"x½" bar
Slot in angle to clear locking device
SECTION D-D
SCALE HALF SIZE
⅜" Door plate
¼" Filler plate
1½"x⅜" Washer
See detail for axle bolt
1½"x½" bar
SECTION E-E
SCALE HALF SIZE
Procedure for Section EE
1st Mount filler plates on door
2nd Drill 15/16" dia hole thru filler plates and door to insure tight fit for axle bolt
5"x¼" Astragal
Drill and tap for #10-30 Flathead bronze Mach. screw ⅜" long 4" cc.
¼"x½" strip
⅝" Rivets 6" cc
2"x⅜" Filler plate
Door seal
Seal weld ⅜" Door plate
¼" Holes in angles Plug weld to door plate
L 2"x2"x⅜"
Bend seal 90° across to filler plate to make continuous gastight closure at top and bottom
SECTION H-H
SCALE HALF SIZE
Spring in compressed position
Spring lock washer
1" Square Bronze bolt
1" Flat steel spring
⅜" Screw
SECTION G-G
SCALE FULL SIZE
⅜" Door plate
1½"x½" bar
1½"x⅜" Washer
Drill for ⅛" cotter pin
1½"x½" bar
⅜" Leg of Angle
SECTION F-F
SCALE HALF SIZE
Drill for ⅛" cotter pin
17 Thds
3¼"
STAINLESS STEEL
AXLE BOLT
SCALE FULL SIZE
Notes:
All sharp edges on door shall be removed.
Provide shop coat of red lead paint except for surfaces embedded in concrete.
All doors shall be assembled in shop to check fit and clearances.
Parts subject to damage shall be removed prior to shipment and boxed separately.
All materials shall be structural steel unless otherwise noted.
SCALE 1½"=1'-0"
5"x¼" Astragal pl.
Washer
Filler pl.
2"x¼" Filler pl.
Filler pl. Washer
L 2"x2"x⅜"
⅜" Door plate
PLAN
Round bar to clear astragal plate
Drill ⅝" hole for padlock
SECTION "J-J"
LOCKING BAR
SCALE HALF SIZE
Seal strip ⅜"x⅛" steel
WIRFS wiper gasket
#10-30 F.H. Bronze screws 4" cc approx.
SEAL DETAIL
SCALE FULL SIZE
Note: WIRFS wiper gasket manufactured by WIRES-Bosley Corp. Chicago, Ill.
Cast iron hinge Jamison or equal
⅜" Door plate
Door seal
Frame L 5"x3½"x⅜"
Spot weld
HINGE DETAIL
SCALE FULL SIZE
BOLT SPRING RECESS DETAIL
SCALE FULL SIZE
HARBOR DEFENSES OF BOSTON
MINE CASEMATE
SPLINTER PROOF LOCATION NO. 127
DOOR DETAILS NO. 3
IN 14 SHEETS SHEET NO. 14 SCALE AS NOTED
U. S. ENGINEER OFFICE, BOSTON, MASS. 1 SEPT. 1943
APPROVAL RECOMMENDED: John E. Allen, CHIEF, ENGINEERING DIVISION
APPROVED: Bruce W. Campbell, LT. COLONEL, CORPS OF ENGINEERS, DISTRICT ENGINEER
SUBMITTED: F. F. Brown, CHIEF, DESIGN SECTION, SR. ENGINEER
Peter A. Wintsch, ASSISTANT ENGINEER
DES. BY: DR. BY: CK. BY: CH. BY:
FILE NO. 4-7-4-23/14
NO. CHARACTER DATE BY
REVISIONS
Final field changes for RECORD DRAWING 7/1/55 P.A.W.
Transfer Drwg - No Changes 8/11/44 J.P.W.
RECORD DRAWING