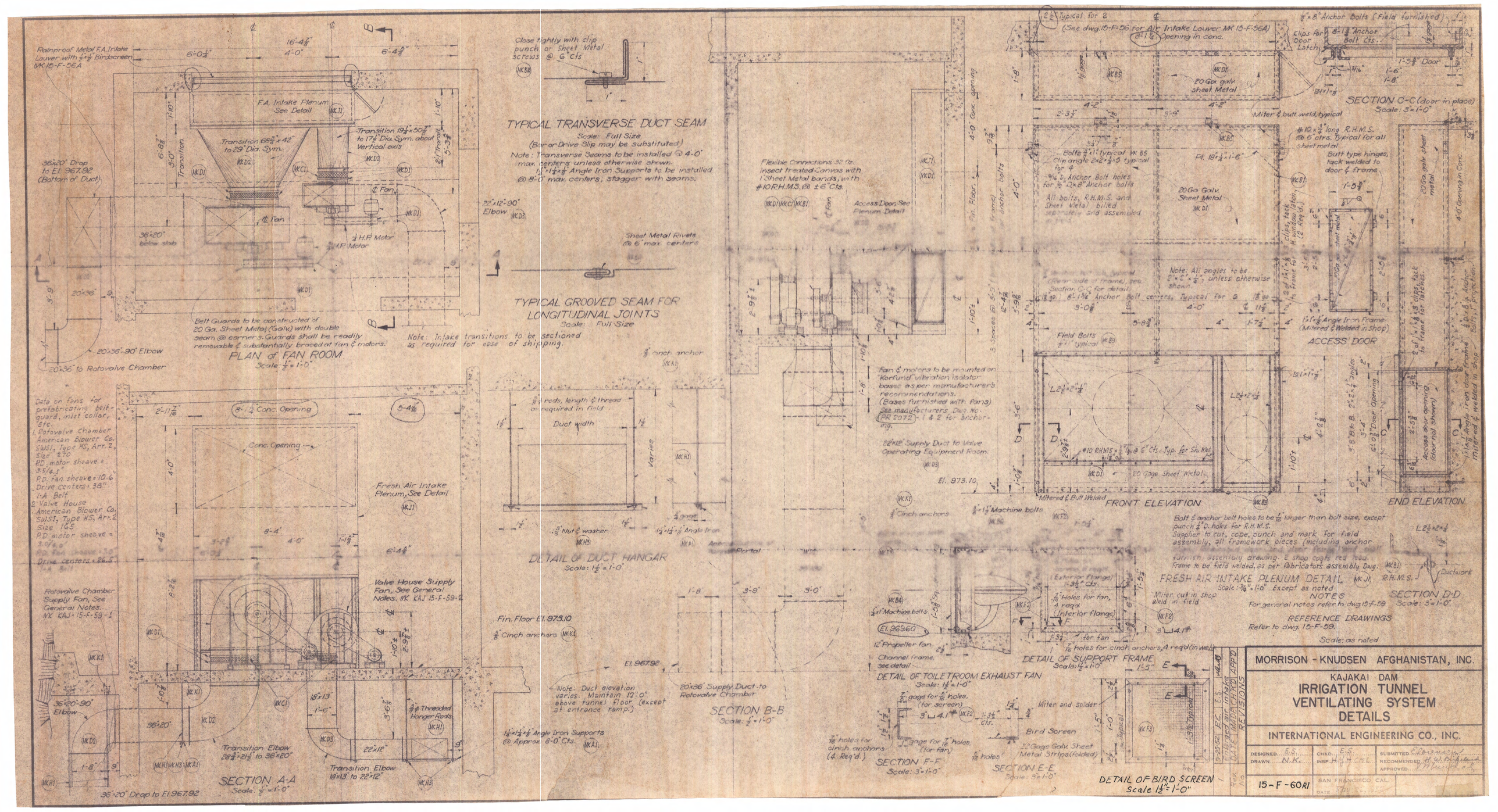
PLAN of FAN ROOM
Scale: 1/2" = 1'-0"
Rainproof Metal F.A. Intake Louver with 1/2" Birdscreen MK 15-F-56A
F.A. Intake Plenum See Detail
Transition 68 1/2" x 42" to 29" Dia. Sym.
Transition 19 1/2" x 50 1/2" to 17 1/2" Dia. Sym. about Vertical axis
36"x20" Drop to El. 967.92 (Bottom of Duct)
36"x20" below slab
1/4 H.P. Motor
20"x36"-90° Elbow
20"x36" to Rotovalve Chamber
Belt Guards to be constructed of 20 Ga. Sheet Metal (Galv.) with double seam @ corners. Guards shall be readily removable & substantially braced at fan & motors.
Note: Intake transitions to be sectioned as required for ease of shipping.
TYPICAL TRANSVERSE DUCT SEAM
Scale: Full Size
(Bar or Drive Slip may be substituted)
Note: Transverse Seams to be installed @ 4'-0" max. centers unless otherwise shown.
1 1/2" x 1 1/2" x 1/8" Angle Iron Supports to be installed @ 8'-0" max. centers; stagger with seams.
22"x12"-90° Elbow
Close tightly with clip punch or Sheet Metal screws @ 6" Cts.
Sheet Metal Rivets @ 6" max. centers
TYPICAL GROOVED SEAM FOR LONGITUDINAL JOINTS
Scale: Full Size
Data on fans for prefabricating belt guard, inlet collar, etc.
1. Rotovalve Chamber American Blower Co. SWSI, Type HS, Arr. 2, Size #20
P.D. motor sheave = 3.5/4.2"
P.D. fan sheave = 10.6"
Drive centers = 38"
1-A Belt
2. Valve House American Blower Co. SWSI, Type HS, Arr. 2 Size 16.5
P.D. motor sheave = 3.0/4.0"
Drive centers = 26.5
1-A Belt
Rotovalve Chamber Supply Fan, See General Notes. MK KAJ-15-F-59-1
Fresh Air Intake Plenum, See Detail
Valve House Supply Fan, See General Notes. MK KAJ 15-F-59-2
36"x20"-90° Elbow
36"x20"
Transition Elbow 26 1/2" x 21 1/2" to 36"x20"
Transition Elbow 18"x13" to 22"x12"
18"x13"
22"x12"
3/8" ϕ Threaded Hanger Rods
96"x20" Drop to El. 967.92
SECTION A-A
Scale: 1/2" = 1'-0"
DETAIL OF DUCT HANGAR
Scale: 1 1/2" = 1'-0"
3/8" ϕ rods, length & thread as required in field
Duct width
Varies
3/8" Nut & washer
1 1/2" x 1 1/2" x 1/8" Angle Iron
Fin. Floor El. 973.10
3/8" Cinch anchors
El. 967.92
Note: Duct elevation varies. Maintain 12'-0" above tunnel floor (except at entrance ramp.)
1 1/2" x 1 1/2" x 1/8" Angle Iron Supports @ Approx. 6'-0" Cts.
20"x36" Supply Duct to Rotovalve Chamber
SECTION B-B
Scale: 1/2" = 1'-0"
Flexible Connections 32 Oz. insect treated Canvas with (Sheet Metal bands, with #10 R.H.M.S. @ ± 6" Cts.
Access Door, See Plenum Detail
Fan & motors to be mounted on "Korfund" vibration isolator bases as per manufacturer's recommendations. (Bases furnished with Fans) See manufacturers Dwg. No. PR 2072 - 1 & 2 for anchoring.
22"x12" Supply Duct to Valve Operating Equipment Room.
El. 973.10
3/8" Cinch anchors
3/8" x 1 1/2" Machine bolts
1/4" Machine bolts
EL. 969.60
12" Propeller fan
Channel frame, see detail
DETAIL OF TOILET ROOM EXHAUST FAN
Scale: 1 1/2" = 1'-0"
7/32" gage for 5/16" holes, (for screen)
3" ⊔ 4.1#
7/32" gage for 7/16" holes, (for fan)
7/16" holes for cinch anchors (4 req'd.)
SECTION F-F
Scale: 3" = 1'-0"
Miter and Solder
Bird Screen
20 Gage Galv. Sheet Metal Strips (Folded)
7/16" holes
SECTION E-E
Scale: 3" = 1'-0"
(Exterior flange) 3/8" Cts.
7/16" holes for fan, 4 req'd (Interior flange)
for fan
7/16" holes for cinch anchors, 4 req'd (in web)
DETAIL OF SUPPORT FRAME
Scale: 1 1/2" = 1'-0"
DETAIL OF BIRD SCREEN
Scale 1 1/2" = 1'-0"
(See dwg. 15-F-56 for Air Intake Louver MK 15-F-56A)
Typical for 2
8'-1 1/4" Opening in conc.
20 Ga. galv. sheet Metal
Bolts 3/4" x 1" typical MK B5
Clip angle 2 x 2 x 1/4 x 8 typical for 4
9/16" ϕ Anchor Bolt holes for 5/8" ϕ x 8" Anchor bolts
All bolts, R.H.M.S. and Sheet Metal billed separately and assembled
Pl. 18 1/2" x 1'-6"
20 Ga. Galv. Sheet Metal
Note: All angles to be 2 x 2 x 1/4 unless otherwise shown.
Field Bolts 3/4" typical
#10 R.H.M.S. x 1 1/4" @ 6" Cts. Typ. for Sh. Met.
20 Gage Sheet Metal
Mitered & Butt Welded
FRONT ELEVATION
Bolt & anchor bolt holes to be 1/16" larger than bolt size, except punch 1 1/2" ϕ holes for R.H.M.S.
Supplier to cut, cope, punch and mark for field assembly, all framework pieces (including anchor
furnish assembly drawing. & shop coats red lead.
Frame to be field welded, as per fabricators assembly Dwg.
FRESH AIR INTAKE PLENUM DETAIL
Scale: 3/4" = 1'-0" Except as noted
Miter cut in shop Weld in field
NOTES
For general notes refer to dwg. 15-F-59
REFERENCE DRAWINGS
Refer to dwg. 15-F-59.
Scale: as noted
1/4" x 8" Anchor Bolts (Field furnished)
Clips for Door Latch
8'-1 1/4" Anchor Bolt Cts.
1'-9 1/2" Door
SECTION C-C (door in place)
Scale: 3" = 1'-0"
Miter & butt weld, typical
#10 x 3/4" long R.H.M.S. @ 6" ctrs. Typical for all sheet metal
Butt type hinges, tack welded to door & frame
20 Ga. galv. sheet metal
4'-0" Opening in Conc.
1 1/2" x 1 1/2" x 1/8" Angle Iron Frame (Mitered & Welded in shop)
ACCESS DOOR
Access door opening (door not shown)
1 1/2" x 1 1/2" x 1/8" angle iron door frame mitered & welded in shop
SECTION D-D
Scale: 3" = 1'-0"
MORRISON - KNUDSEN AFGHANISTAN, INC.
KAJAKAI DAM
IRRIGATION TUNNEL VENTILATING SYSTEM DETAILS
INTERNATIONAL ENGINEERING CO., INC.
DESIGNED E.S.
DRAWN N.K.
CHKD. E.S.
INSP. H.
SUBMITTED
RECOMMENDED
APPROVED
SAN FRANCISCO, CAL.
15-F-60R1