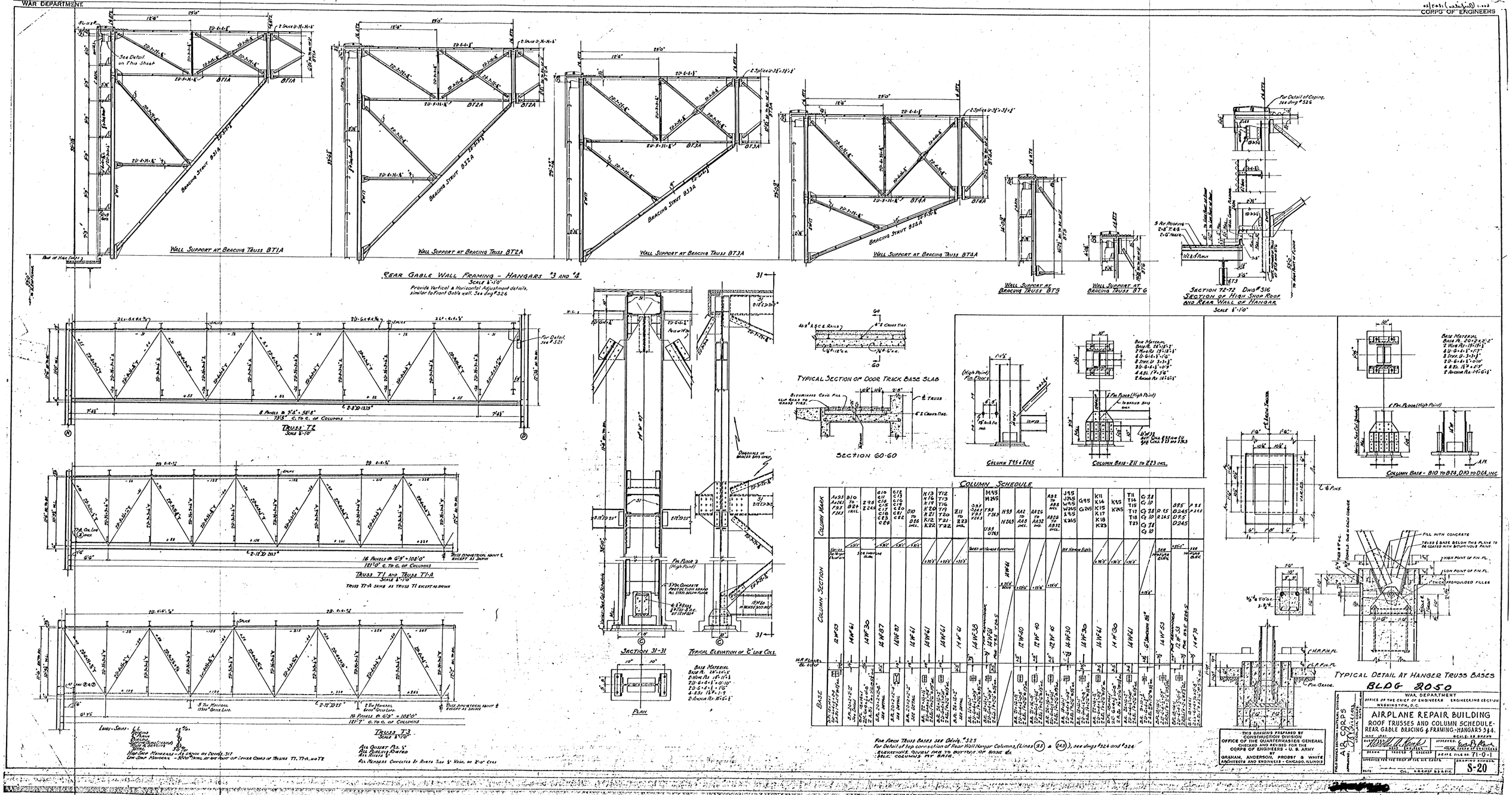
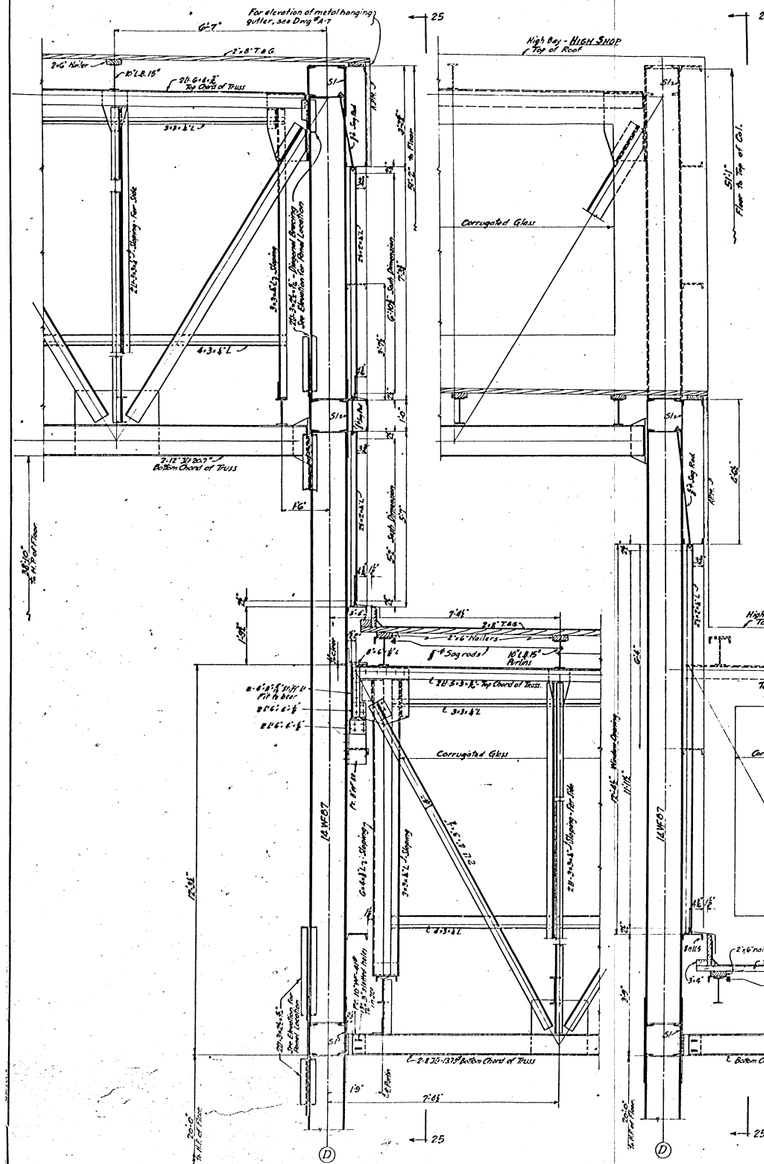
WAR DEPARTMENT

CORPS OF ENGINEERS

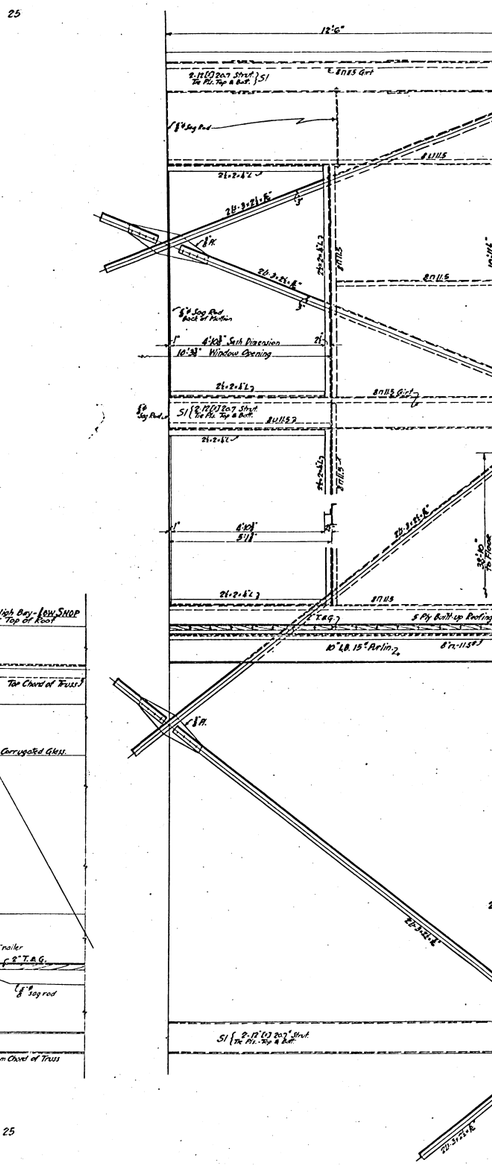


WAR DEPARTMENT

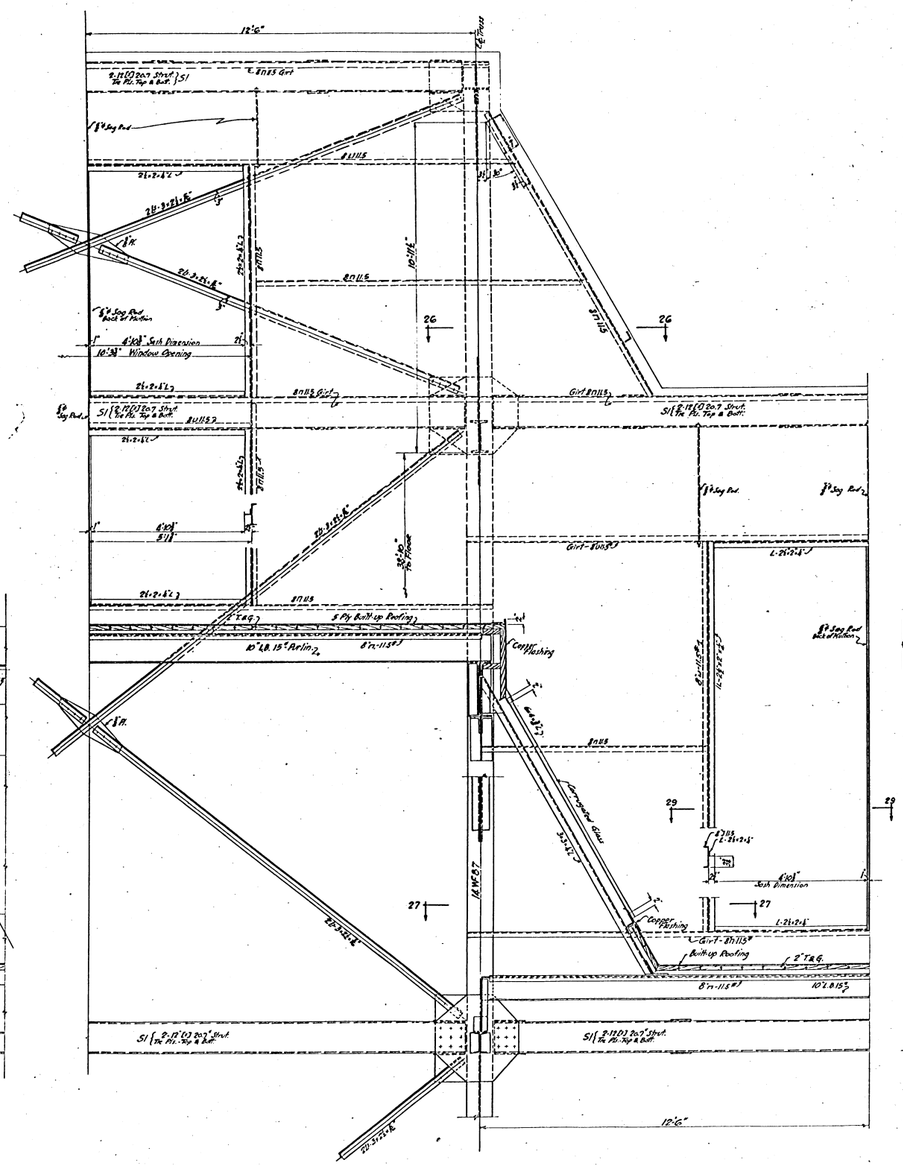
CORPS OF ENGINEERS



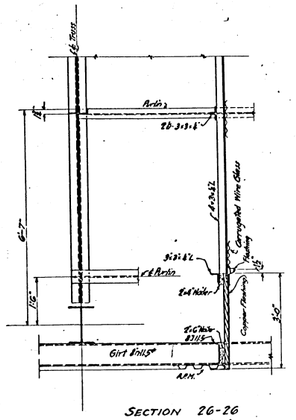
SECTION THRU HIGH BAY
BETWEEN HIGH AND LOW SHOPS



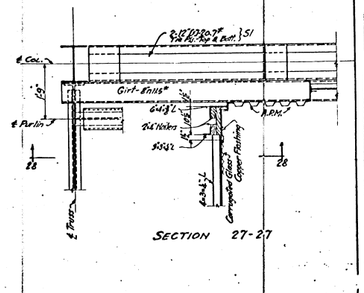
SECTION THRU LOW BAY
BETWEEN HIGH AND LOW SHOPS



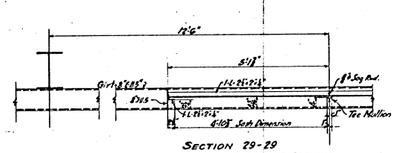
SECTION 25-25



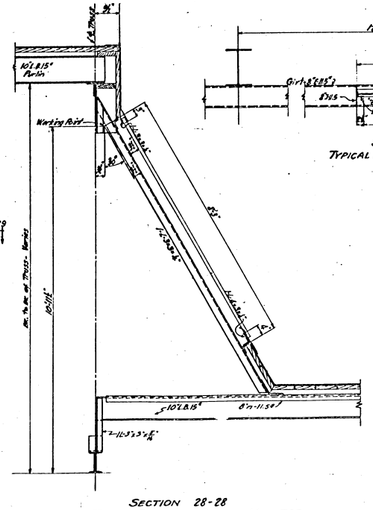
SECTION 26-26



SECTION 27-27



SECTION 29-29
TYPICAL DETAIL OF WINDOW OPENING



SECTION 28-28
TYPICAL DETAIL OF SLOPING MONITOR

THIS DRAWING PREPARED BY
CONSTRUCTION DIVISION
OFFICE OF THE QUARTERMASTER GENERAL
CHECKED AND REVISED FOR THE
CORPS OF ENGINEERS - U. S. ARMY
BY
GR. HAM, ANDERSON, PROBST & WHITE
ARCHITECTS AND ENGINEERS - CHICAGO, ILLINOIS

BLDG 2050

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C.
ENGINEERING SECTION

AIRPLANE REPAIR BUILDING
INTERIOR WALL FRAMING
SECTIONS - SHOPS

MAY 1941 — SCALE AS SHOWN

APPROVED FOR THE CHIEF OF ENGINEERS

DRAWN — TRACED — CHECKED

OFFICE FILE NO. T1-0-1

DRAWING NUMBER S-21

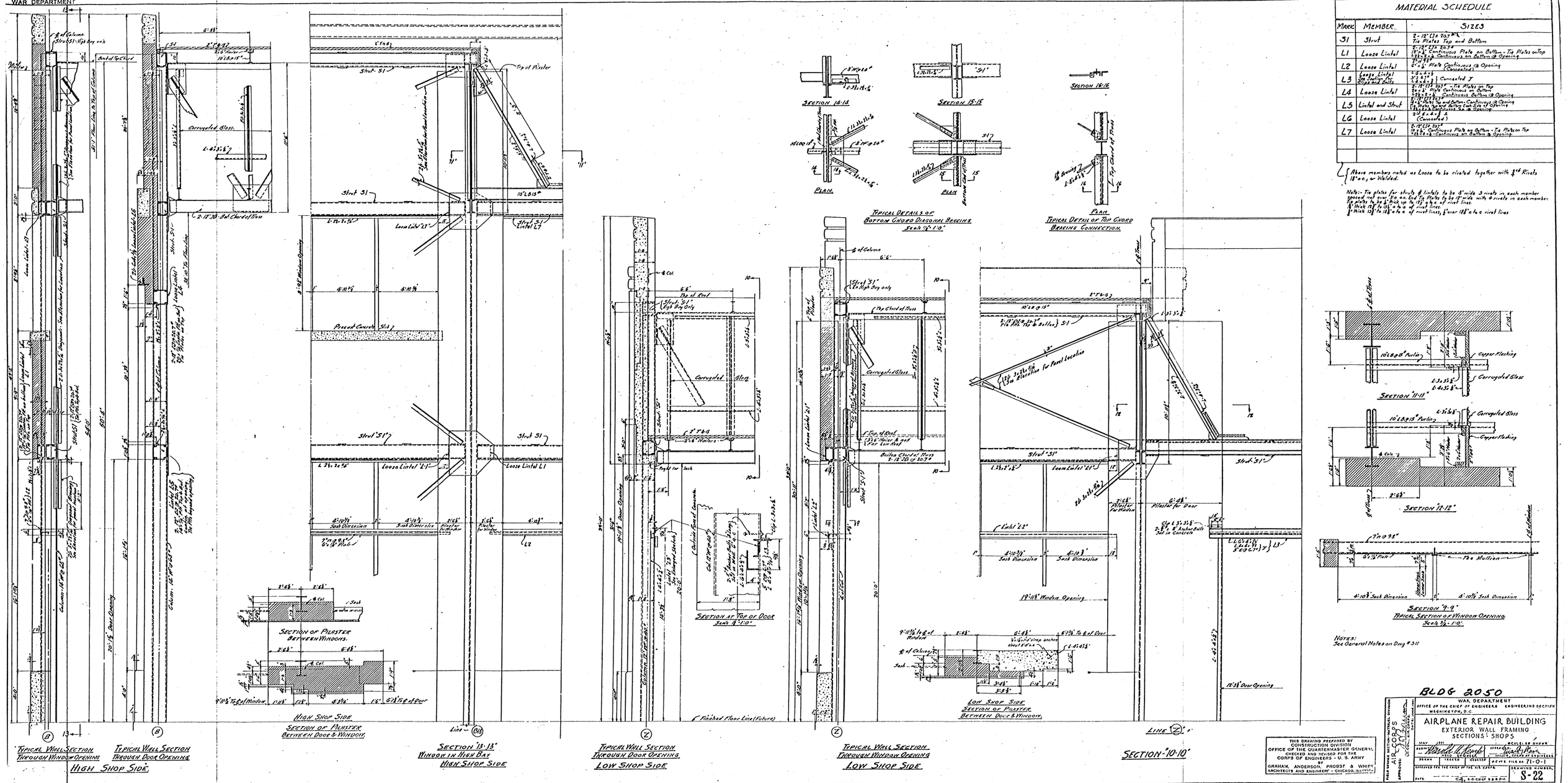
FIELD SERVICES SECTION-MATERIAL DIVISION
APPROVED FOR THE CHIEF OF ENGINEERS
AIR CORPS
COL. A.C. CHIEF S.&E.DIV.

[redacted]

REDUCED 50% 35-2050-2.21

WAR DEPARTMENT

CORPS OF ENGINEERS



MATERIAL SCHEDULE

MARK	MEMBER	SIZES
S1	Strut	2-12" ['s 20.7# Tie Plates Top and Bottom
L1	Loose Lintel	2-12" ['s 20.7# (Back to Back) Continuous Plate on Bottom - Tie Plates on Top 1/2"x6" Continuous on Bottom @ Opening
L2	Loose Lintel	3/8"x6" 6"x 1/2" Plate Continuous @ Opening
L3	Loose Lintel See Section for Clips and Bolts	6"x4"x 1/2" Connected T
L4	Loose Lintel	2-12" ['s 20.7# - Tie Plates on Top 1/2"x6" Plate Continuous on Bottom 1/2"x6" Continuous Bottom @ Opening
L5	Lintel and Strut	2-12" ['s 20.7# Top and Bottom - Continuous @ Opening (Plate Top and Bottom Cut Out at 11" Opening) 1/2"x6" Continuous Top @ Opening
L6	Loose Lintel	3"x3"x3"x 1/4" (Connected)
L7	Loose Lintel	2-12" ['s 20.7# Top & Bottom - Continuous Plate on Bottom - Tie Plates on Top 1/2"x6" Continuous on Bottom @ Opening

{ Above members noted as Loose to be riveted together with 3/4" Rivets 18" o.c., or Welded.

Note:- Tie plates for struts & lintels to be 6" wide 3 rivets in each member spaced not over 3" on end. Tie Plates to be 12" wide with 6 rivets in each member. Tie plates to be 1/2" thick up to 15" gage of rivet lines. 3/8" thick 15" to 18" gage of rivet lines. 1/4" thick 18" to 18" gage of rivet lines, 1/4" over 18" gage rivet lines

BLDG 2050

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS ENGINEERING SECTION
WASHINGTON, D.C.

AIRPLANE REPAIR BUILDING
EXTERIOR WALL FRAMING
SECTIONS - SHOPS

MAY 1941 SCALE: 1/8" = 1'-0"

DRAWN: Wendell H. Rank — PVT. ENGINEER
TRACED — CHECKED
APPROVED: Grant Hoar — LIEUT. COLONEL, CORPS OF ENGINEERS
APPROVED FOR THE CHIEF OF THE AIR CORPS
DATE — COL. A.C. CHIEF S.D.D. DIV.
A.C.F.S. FILE NO. 71-0-1
DRAWING NUMBER S-22

THIS DRAWING PREPARED BY CONSTRUCTION DIVISION OFFICE OF THE QUARTERMASTER GENERAL CHECKED AND REVISED FOR THE CORPS OF ENGINEERS - U. S. ARMY BY GRAHAM, ANDERSON, PROBST & WHITE ARCHITECTS AND ENGINEERS - CHICAGO, ILLINOIS

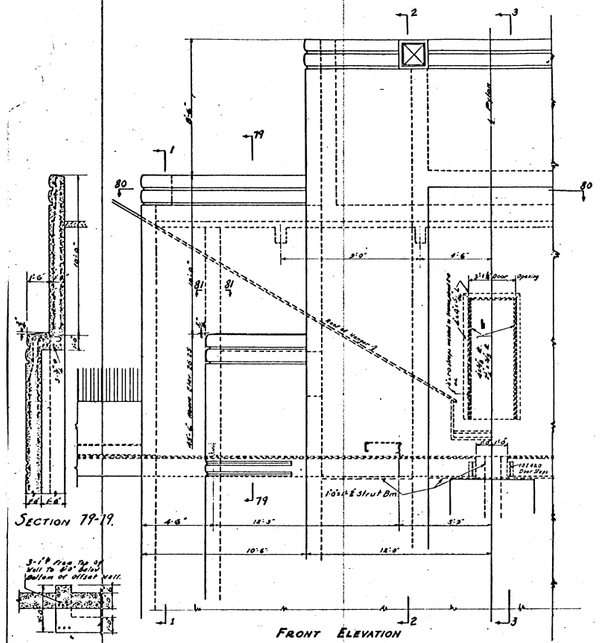
FILED AIRFIELD SECTION, TECHNICAL DIVISION
APPROVED: AIR CORPS
LT. COL., A.C. CHIEF

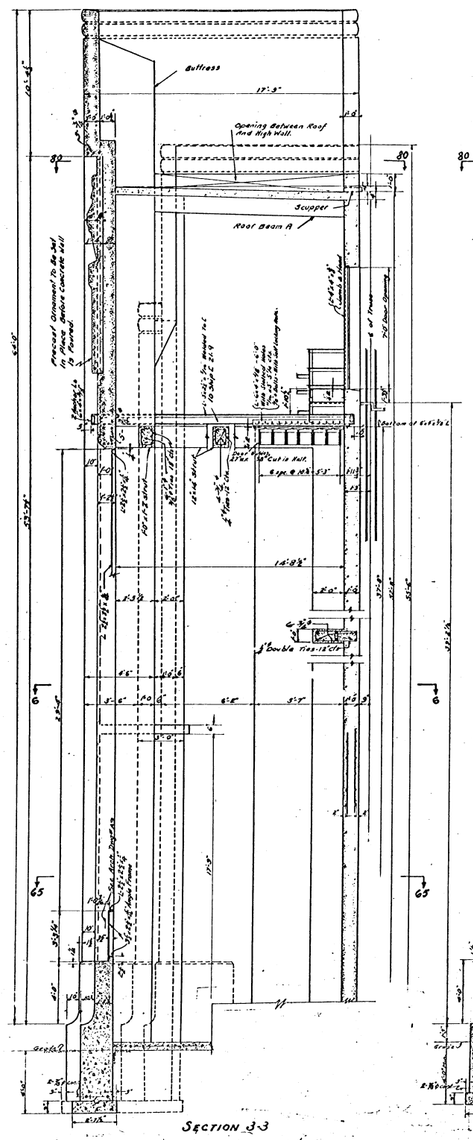
REDUCED 50%

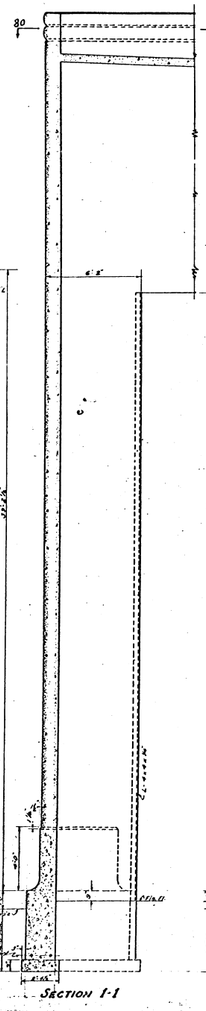
35-2050-2.20

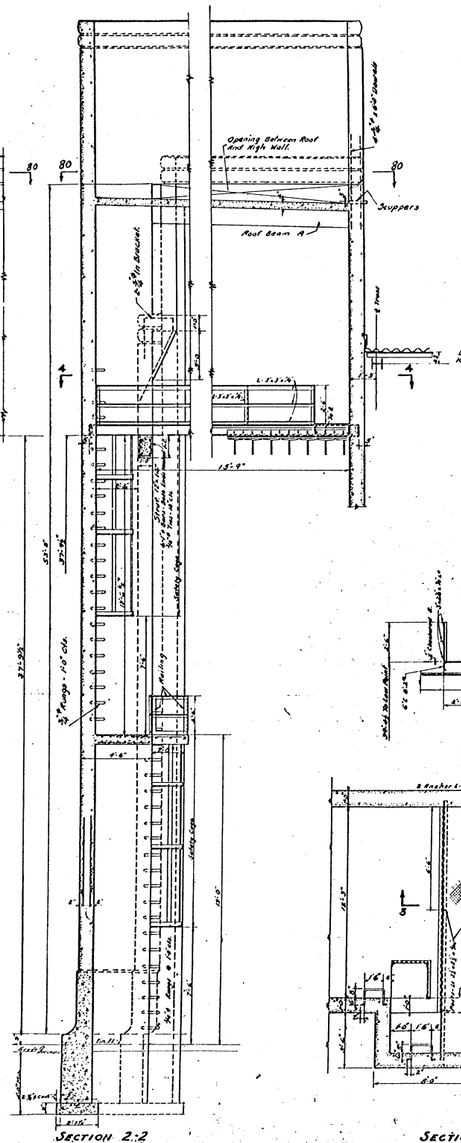
WAR DEPARTMENT

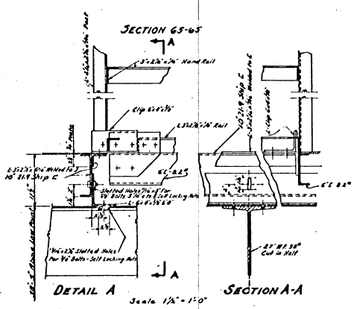
CORPS OF ENGINEERS

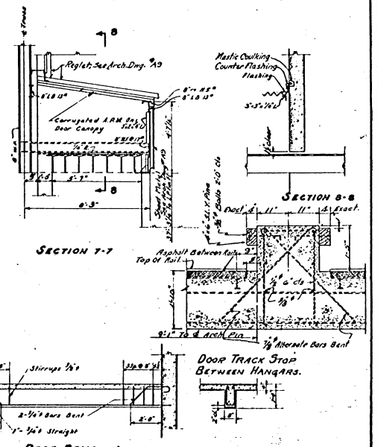


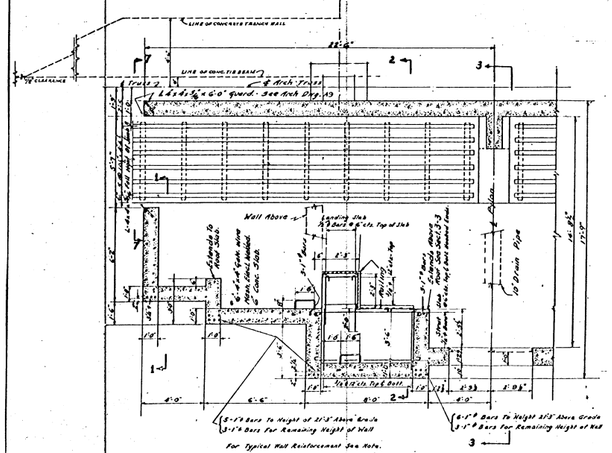


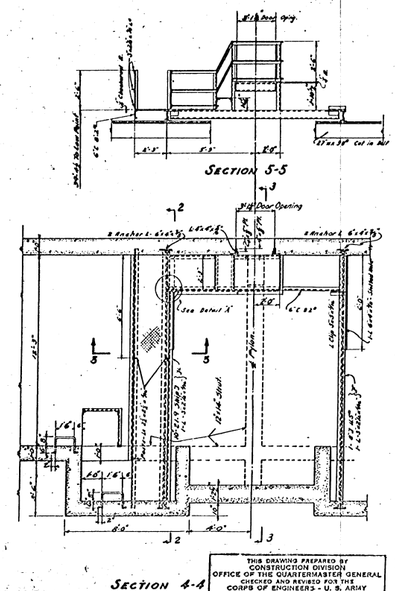


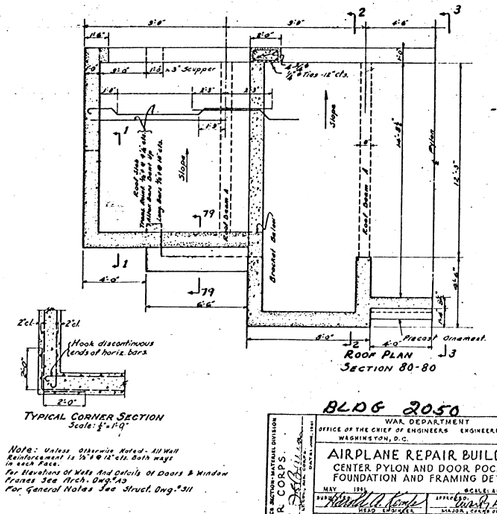












Note: Unless Otherwise Noted - All Wall Reinforcement is ⅝" @ 12" cts. Both ways in each face.
For Elevations of Walls And Details of Doors & Window Frames See Arch. Dwg. 43
For General Notes See Struct. Dwg. 311

THIS DRAWING PREPARED BY CONSTRUCTION DIVISION OFFICE OF THE QUARTERMASTER GENERAL CHECKED AND REVISED FOR THE CORPS OF ENGINEERS - U. S. ARMY BY GRAHAM, ANDERSON, PROBST & WHITE ARCHITECTS AND ENGINEERS - CHICAGO, ILLINOIS

BLDG 2050

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS ENGINEERING SECTION
WASHINGTON, D.C.

AIRPLANE REPAIR BUILDING
CENTER PYLON AND DOOR POCKETS-
FOUNDATION AND FRAMING DETAILS

MAY 1941 SCALE: AS SHOWN

DRAWN: Richard A. Kende DESIGNED: TRACED: CHECKED: SUPERVISED: Walter J. Rose
ASSIST. CHIEF OF ENGINEERS

APPROVED FOR THE CHIEF OF THE AIR CORPS: Col. A.C. CHIEF S.&D. DIV.

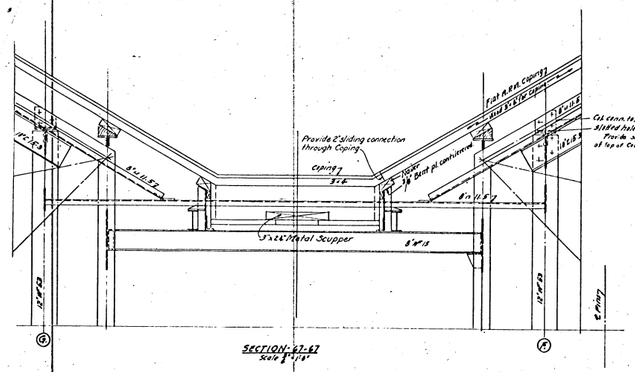
A.C.F.S. FILE NO. T1-0-1

DRAWING NUMBER: S-23

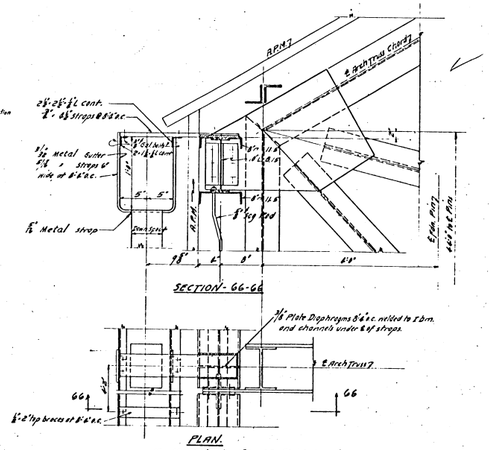
PRINTS BEARING ARCHITECT'S SEAL AND SIGNATURE ARE APPROVED FOR THE AIR CORPS: Lt. Col. A.C. Chief S.&D. Div.

REDUCED 50%

35-2050-2.17

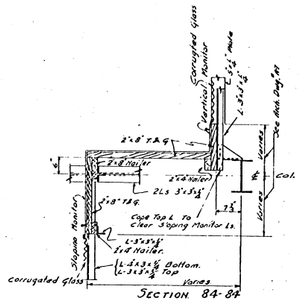


SECTION-67-67
Scale 3/4"=1'0"

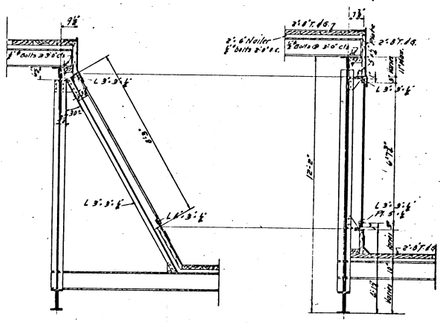


SECTION-66-66

PLAN.
10'×12' HANGING GUTTER CONNECTION.
Scale 1 1/2"=1'0"
For extent of gutter see Arch. Elev. Dwg. #A-6

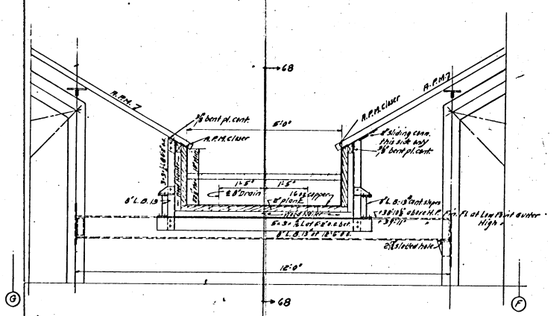


SECTION 84-84
Typical Detail Of Return Wall Between Sloping & Vertical Monitors.

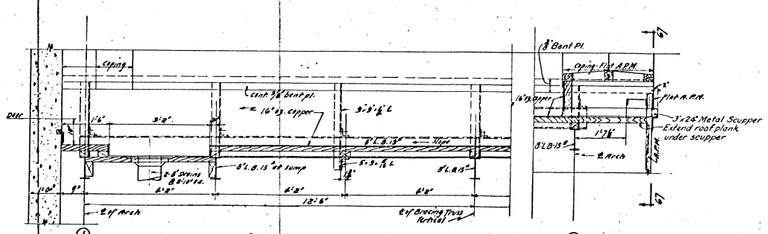


TYPICAL SECTION THRU. SLOPING MONITOR SASH
Scale 3/4"=1'0"

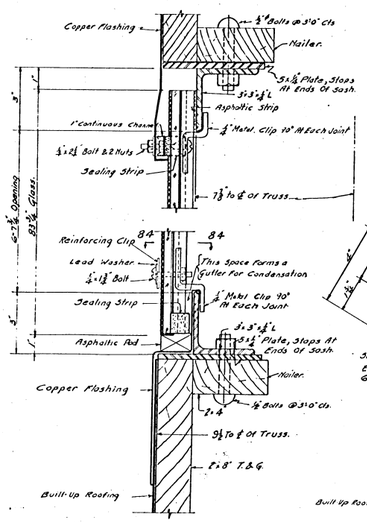
TYPICAL SECTION THRU. VERT. MONITOR SASH
Scale 3/4"=1'0"
SEE DWGS. A-7 & S-15



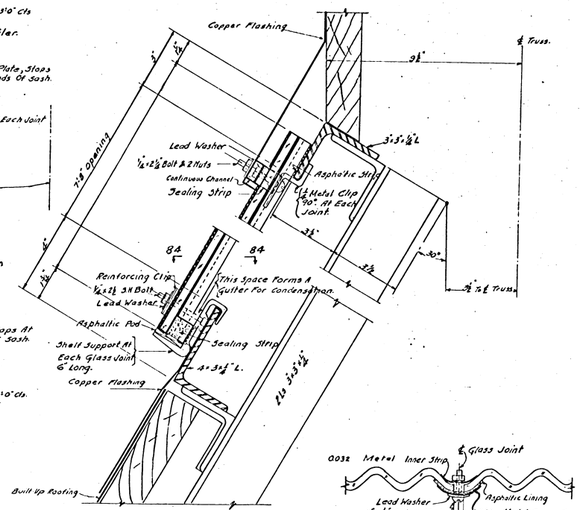
SECTION THROUGH GUTTER BETWEEN HANGARS
Scale 3/4"=1'0"
For Location of Gutter in Plan, see Dwg #S-16



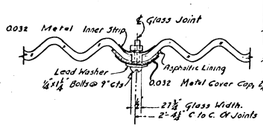
SECTION-68-68
Scale 3/4"=1'0"



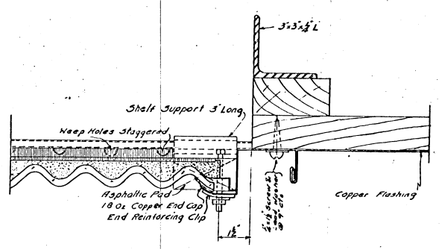
SECTION THRU VERTICAL MONITOR-WINDOW.



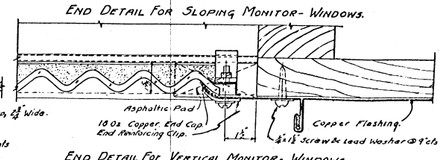
SECTION THRU. SLOPING MONITOR-WINDOW.



TYPICAL GLASS JOINT.



END DETAIL FOR SLOPING MONITOR-WINDOWS.



END DETAIL FOR VERTICAL MONITOR-WINDOWS.

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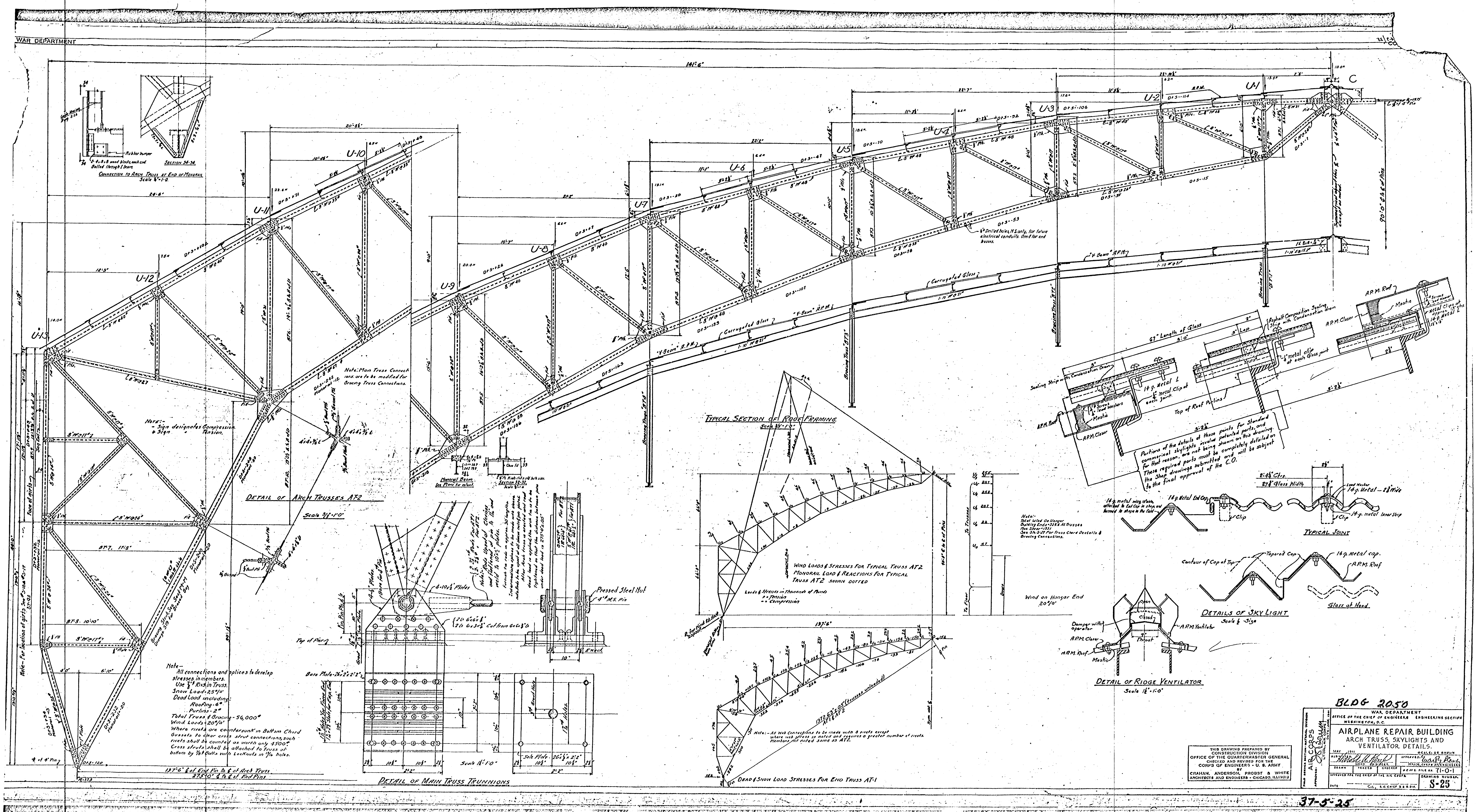
6206 2050

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS ENGINEERING SECTION
WASHINGTON, D.C.

AIRPLANE REPAIR BUILDING
MISCELLANEOUS STRUCTURAL DETAILS

FIELD SERVICE SECTION-MATERIAL DIVISION
APPROVED: A.R. CORPS
MAY 1941
SCALE: AS SHOWN
DRAWN: TRACED: CHECKED:
HEAD DRAWER
CHIEF, CORPS OF ENGINEERS
ACORS FILE No. T1-O-1
APPROVED FOR THE CHIEF OF THE AIR CORPS
DATE: Col. A.C. CHIEF S.S.D.D.IV
DRAWING NUMBER S-24

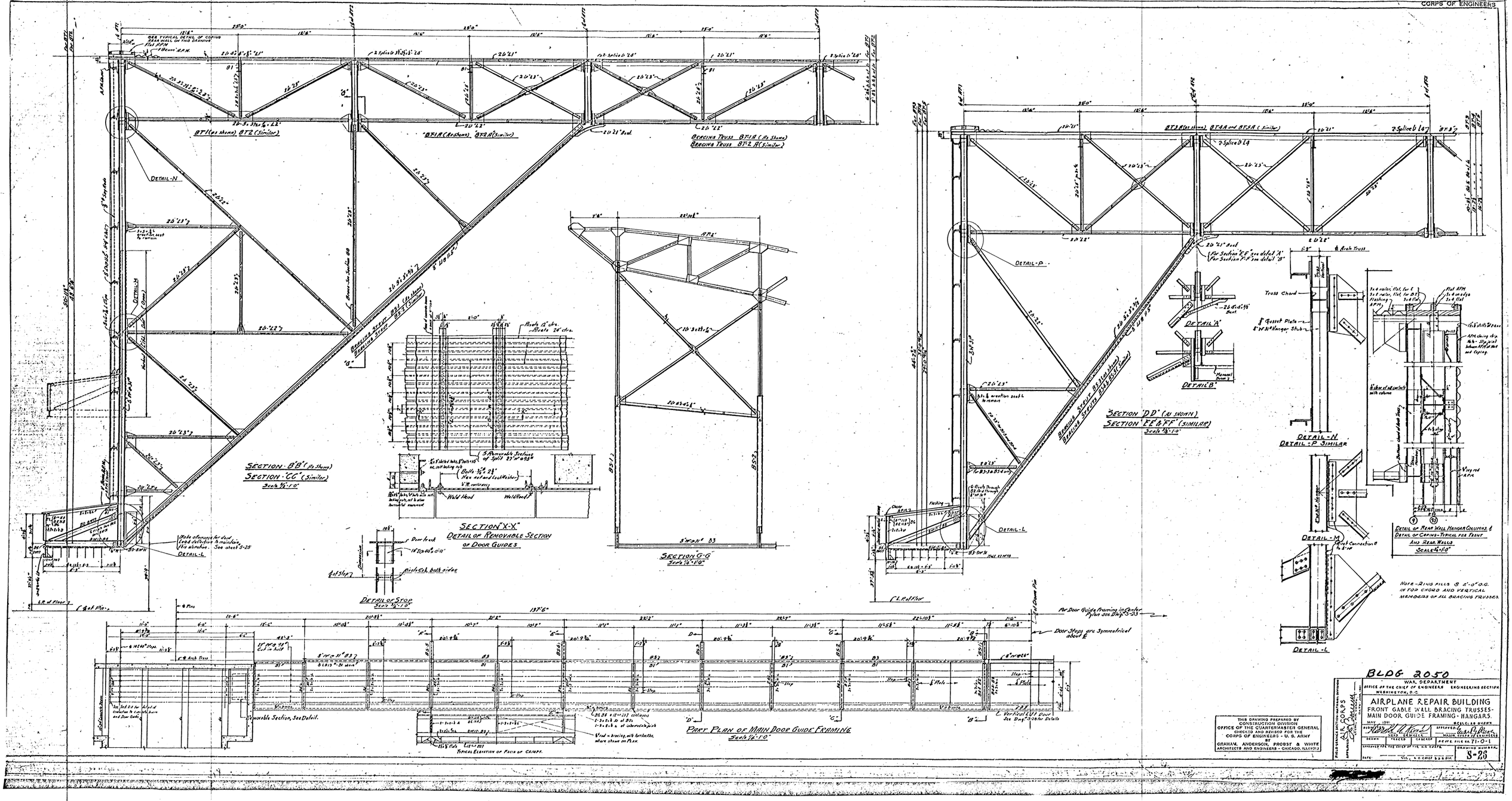
REDUCED TO: 35-2050-2.18


WAR DEPARTMENT
CONNECTION TO ARCH TRUSS AT END OF MONORAIL
Scale ¾"=1'-0
Rubber bumper
2-4x8x8 wood blocks each end. Bolted through I beam.
SECTION 34-34
U-13
U-12
U-11
U-10
U-9
U-8
U-7
U-6
U-5
U-4
U-3
U-2
U-1
C
141'-6"
Note: Main Truss Connections are to be modified for Bracing Truss Connections.
Note:-
- Sign designates Compression.
+ Sign " Tension.
DETAIL OF ARCH TRUSSES AT-2
Scale 3/8"=1'-0"
Monorail Beam
See Plans for extent.
SECTION 32-32
Note- For location of girts See #S-10 & S-19
Face of girts
Bracing Strut-See Sect M-M Drawgs. S19 for Braced Bay
Note-
All connections and splices to develop stresses in members.
Use ⅞" Rivs. in Truss.
Snow Load-25#/□'
Dead Load including:
Roofing-6#
Purlins-2#
Total Truss & Bracing-56,000#
Wind Loads-20#/□'
Where rivets are countersunk in Bottom Chord Gussets to clear cross strut connections, such rivets shall be counted as worth only 4500#.
Cross struts shall be attached to truss at bottom by ⅞" Bolts with Locknuts in 1⅟16 holes.
137'-6" ℄ of End Pin to ℄ of Arch Truss
275'-0" ℄ to ℄ of End Pins
Symmetrical about this ℄ except as noted.
90'-0" ℄ to ℄ of Pins
"V-Beam" A.P.M.
Corrugated Glass
Bracing Truss "BT-1"
Bracing Truss "BT-2"
Bracing Truss "BT-3"
Bracing Truss "BT-4"
⅝" Drilled holes, N.S. only, for future electrical conduits. Omit for end trusses.
Pressed Steel Nut
4" M.S. Pin
4-10x½" Plates
Note: Rods Upset at Clevises and flattened at pin to 1⅛" and weld to 10x½" plates.
Furnish tie rods in approx. 30' lengths. Intermediate splices to be made with sleeve nuts. Rods to be upset at all sleeve nuts & pin plates.
After Arch truss is erected and roof dead load is applied, the arch tie is to be tightened so that the distance between pins under dead load is 275'-0.05"
Top of Pier
Base Plate-26x2"x2'-2"
Sole Plate-26x½x2'-2"
Scale 1½"=1'-0"
DETAIL OF MAIN TRUSS TRUNNIONS
TYPICAL SECTION OF ROOF FRAMING
Scale ⅛"=1'-0"
WIND LOADS & STRESSES FOR TYPICAL TRUSS AT2
MONORAIL LOAD & REACTIONS FOR TYPICAL TRUSS AT2 SHOWN DOTTED
Loads & Stresses in Thousands of Pounds
+ = Tension
- = Compression
137'-6"
1372.63'±.05' (trusses unloaded) AT1 & AT2
Note:- All Web Connections to be made with 8 rivets except where web stress is noted and requires a greater number of rivets. Members not noted same as AT2.
DEAD & SNOW LOAD STRESSES FOR END TRUSS AT-1
To Trusses
To Floor
Doors
Note:-
Total Wind On Hangar Building Ends=32R.6 At Trusses
Max. Shear=1531
See Sh. S-27 For Truss Chord Details & Bracing Connections.
Wind on Hangar End 20#/□'
67" Length of Glass
5'-0"
3" Lap
Asphalt Composition Sealing Strip with Condensation drain
Sealing Strip with Condensation Drain
14 g. Metal L
¼" metal Clip at each Joint.
¼" metal clip at each Glass joint
¼" Screws ¼" lead Washers
Mastic
A.P.M. Roof
A.P.M. Closer
Top of Roof Purlins
5'-2½"
Metal Clips at approx. 15" ctrs.
14 g. Metal L
Portions of the details at these points for Standard commercial skylights involve patented parts, and for that reason, are not being shown on this drawing. These required parts must be completely detailed on the Shop drawings submitted and will be subject to the final approval of the C.O.
2'-4½" Ctrs.
27¾" Glass Width
Lead Washer
14 g. Metal - 2¾" Wide
14 g. metal wing 10" wide, attached to End Cap in shop and formed to shape in the field
14 g. Metal End Cap
Clip
14 g. metal Inner Strip
TYPICAL JOINT
Contour of Cap at Top
Tapered Cap
14 g. Metal cap.
A.P.M. Roof
Glass at Head
DETAILS OF SKY LIGHT
Scale ½ Size
Open
Closed
Damper with operator
A.P.M. Ventilator
A.P.M. Closer
A.P.M. Roof
Mastic
9" Throat
DETAIL OF RIDGE VENTILATOR
Scale 1½"=1'-0"
BLDG 2050
THIS DRAWING PREPARED BY CONSTRUCTION DIVISION OFFICE OF THE QUARTERMASTER GENERAL CHECKED AND REVISED FOR THE CORPS OF ENGINEERS - U. S. ARMY BY GRAHAM, ANDERSON, PROBST & WHITE ARCHITECTS AND ENGINEERS - CHICAGO, ILLINOIS
FIELD SERVICE SECTION - MATERIEL DIVISION
APPROVED: AIR CORPS
LT. COL. AIR CORPS
DATE: JUNE, 1941
WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS ENGINEERING SECTION
WASHINGTON, D.C.
AIRPLANE REPAIR BUILDING
ARCH TRUSS, SKYLIGHTS AND VENTILATOR DETAILS.
MAY 1941
SCALE: AS SHOWN
SUBMITTED:
HEAD ENGINEER
APPROVED:
MAJOR, CORPS OF ENGINEERS
DRAWN
TRACED
CHECKED
A.C.H.E. FILE NO. 71-0-1
APPROVED FOR THE CHIEF OF THE AIR CORPS
DATE:
COL., A.C. CHIEF B & G DIV.
DRAWING NUMBER
S-25
37-5-25

35-2050-2.17A

WAR DEPARTMENT

CORPS OF ENGINEERS



BLDG 2050

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS ENGINEERING SECTION
WASHINGTON, D.C.

AIRPLANE REPAIR BUILDING
FRONT GABLE WALL BRACING TRUSSES-
MAIN DOOR GUIDE FRAMING-HANGARS.

MAY 1941 — WORKS CLAS DIVISION

DRAWN: REED CANNELLS — TRACED: — CHECKED: — APPROVED: Walter Peterson, Walter Peterson, Walter Peterson — DESIGN ENGINEER — ACME FILE NO. 71-0-1

APPROVED FOR THE CHIEF OF ENG. BY CAPT. — DATE: — CIV. & CHIEF D.D.D. DIV.

DRAWING NUMBER S-23

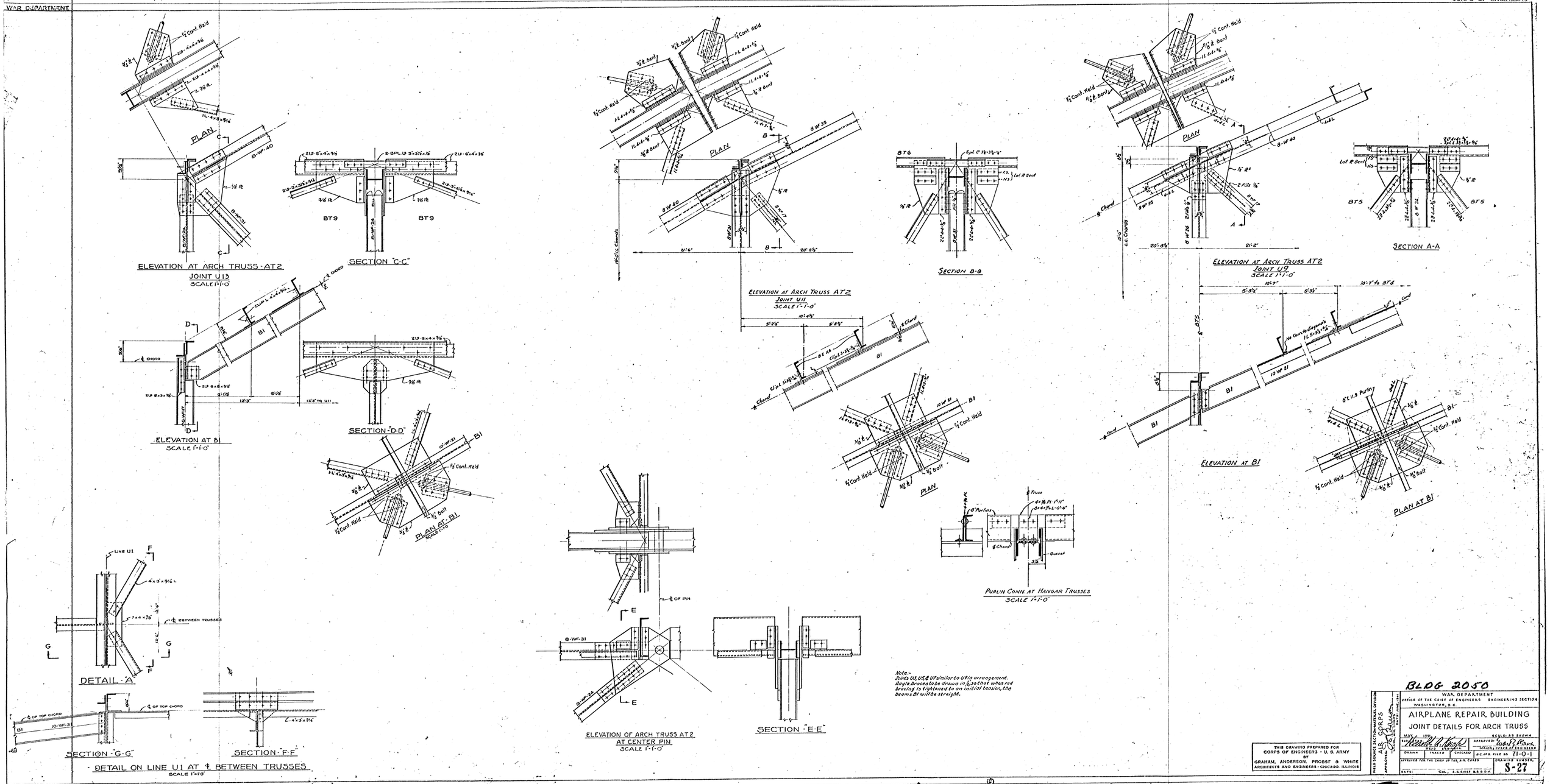
FIELD SERVICE SECTION-MATERIAL DIVISION — CORPS OF ENGINEERS — APPROVED: Lt. Col. Corps of Engineers

THIS DRAWING PREPARED BY CONSTRUCTION DIVISION OFFICE OF THE QUARTERMASTER GENERAL CHECKED AND REVISED FOR THE CORPS OF ENGINEERS - U. S. ARMY BY GRAHAM, ANDERSON, PROBST & WHITE ARCHITECTS AND ENGINEERS - CHICAGO, ILLINOIS

35-2050-2.17

WAR DEPARTMENT

CORPS OF ENGINEERS



Note:-
Joints U3, U5 & U7 similar to U9 in arrangement.
Angle braces to be drawn in ½ so that when rod bracing is tightened to an initial tension, the beams B1 will be straight.

THIS DRAWING PREPARED FOR
CORPS OF ENGINEERS - U. S. ARMY
BY
GRAHAM, ANDERSON, PROBST & WHITE
ARCHITECTS AND ENGINEERS - CHICAGO, ILLINOIS

BLDG 2050

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS ENGINEERING SECTION
WASHINGTON, D.C.

AIRPLANE REPAIR BUILDING
JOINT DETAILS FOR ARCH TRUSS

MAY 1940 — SCALE: AS SHOWN
DRAWN — TRACED — CHECKED — APPROVED: Wm. F. Rowe, ASSIST. CHIEF OF ENGINEERS
APPROVED FOR THE CHIEF OF THE U.S. CORPS — C.E.P.R. FILE NO. 71-0-1
DATE: — CHI. ENG. CHIEF B&R D.V. — DRAWING NUMBER S-27

FIELD SERVICE SECTION-NAVIGATION DIVISION
APPROVED: A.E. CORPS
Jos. Ransom
DATE: JUNE 1940

REDUCED 50% 35-2050-2-16