GENERAL NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMpressive STreNGTH OF fc=4,000 PSI
   AT 28 DAYS AND SHALL HAVE A MINIMUM DENSITY OF 145 PCF.
2. ALL REINFORCING BARS SHALL CONFORM TO THE SPECIFICATION FOR DEFORMED BILLET
   STEEL BARS FOR CONCRETE REINFORCEMENT, ASTM DESIGNATION A616, GRADE 60.
3. CONCRETE AGGREGATE SHALL HAVE A MAXIMUM SIZE OF 1/2 INCH.
4. ALL REINFORCING BARS SHALL BE CONTINUOUS IN ANY ONE DIRECTION EXCEPT WHERE
   OTHERWISE SHOWN ON THE DRAWINGS.
5. NO WELDING OF REINFORCING BARS SHALL BE PERMITTED UNLESS INDICATED ON DRAWINGS.
6. ALL STRUCTURAL STEEL, METAL DOORS, EQUIPMENT, ETC. SHALL BE CONNECTED TO
   GROUND BUSES WITH COPPER GROUND CABLE.
7. STRUCTURAL STEEL, SHAPES, PLATES AND BARS SHALL CONFORM TO THE SPECIFICATION
   FOR STRUCTURAL STEEL, ASTM DESIGNATION A36.
8. METAL ROOFING AND SIDING SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL
   SHEET STEEL, ASTM A446.
9. BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE SPECIFICATION FOR LOW CARBON
   STEEL THREADED STANDARD FASTENERS, ASTM DESIGNATION A307, GRADE A AND HIGH
   STRENGTH BOLTS FOR STRUCTURAL STEEL JOINTS, ASTM DESIGNATION A325. ALL BOLTS
   SHALL HAVE THREADS EXCLUDED FROM THE SHEAR PLANE.
10. UNLESS NOTED ON DRAWINGS, SPLICING LENGTH OF REINFORCING BARS SHALL BE IN
    ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 (LATEST EDITION) FOR CLASS B
    SPICES.
11. FOR FILLER WELD SIZES NOT SHOWN ON DRAWINGS, PROVIDE MINIMUM SIZE FILLER
    WELDS IN ACCORDANCE WITH WELDING CODE AWS D1.1, LATEST EDITION.
12. UNLESS SHOWN OTHERWISE, ALL REINFORCING BAR HOOKS SHALL BE STANDARD HOOKS
    IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
    ACI 318, LATEST EDITION.
13. HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED EXCEPT AS
    SHOWN ON DRAWINGS 4-5, 5-6, 6-7, 7-8, 8-9, 9-10, 10-11, 11-12, 12-13, 13-14 & 14-15.
14. ALL TOPSOIL, ORGANIC MATERIAL AND OTHER UNSUITABLE MATERIALS BENEATH MAGAZINE
    STRUCTURE SHALL BE REMOVED TO SATISFY BEARING STRATUM AND REPLACED WITH
    STRUCTURAL FILL TO THE REQUIRED ELEVATION.
15. ALL STRUCTURAL FILL SHALL CONFORM TO ASTM D 33, SIZE 5 & 7 AND SHALL BE COMPACTED
    IN ACCORDANCE WITH ASTM D 1557. THE TOP 12 INCHES OF STRUCTURAL FILL SHALL BE
    PLACED IN CONFORM TO THE SPECIFICATION FOR THE REAR WALL.
16. ELEVATION MARKS MORE THAN 3000 LBS SHALL NOT BE USED ON THE STRUCTURE
    ROOF WITHIN TEN (10) FEET FROM THE EDGE OF THE FOUNDATIONS.
17. TAKEN ON THIS SHEET NO. ELEV MARK ShOWN ON THIS DETAIL SHEET NO.

SOIL DATA

MAGAZINE:
A. ALLOWABLE SOIL BEARING PRESSURE = 4,000 PSF
B. ALLOWABLE DYNAMIC RESPONSE FACTOR (SOIL BEARING) = 2.0
C. ALLOWABLE LATERAL SOIL PRESSURE COEFFICIENT
   c) MAGAZINE WALLS = 0.5
   h) MG WALLS = 0.3
   d) ALLOWABLE COEFFICIENT OF FRICTION (CONCRETE ON SOIL) = 0.50
   E. MODULUS OF SUBGRADE REACTION = 150 PC - 250 PC

DEFLECTION CRITERIA

MAXIMUM SUPPORT ROTATIONS OR DUCTILITY RATIO:
A. ROOF SLAB = 8°
B. HEAD WALL = 6°
C. HEADER BEAM = 2°
D. PLASTERS M = 2.0
E. BLAST DOORS = 12°

DESIGN LOADS

STATIC LOADS:
A. ROOF DEAD LOAD (19 FT. EARTH FILL + 6 IN. (GRAVEL)) = 200 PSF
B. FLOOR LOAD
   a) UNIFORM STORAGE LIVE LOAD = 2000 PSF
   b) FORKLIFT LIFT LOAD (Model NO. SL-88-ESS) = 5000 LB MAX LOAD
   C. PLATFORM AND RAMPS LIVE LOAD = 1000 PSF
D. ROOF LIVE LOAD = 100 PSF

SEISMIC LOADS:
ACADEMIC TO SEISMIC LOADS COMPLIED BY THE NATURAL IN 100 PSF

WIND LOADS:
NAVAIR 0-202, CIVIL AIRCRAFT

BLAST LOADS:
NAVAIR 0-5
BASED ON INTERMAGAZINE SEPARATION DISTANCES FOR A QUANTITY (X)
Serie. EQUAL TO 350,000 LBS AS FOLLOWS:
A. ROOF DONOR MAGAZINE LOCATED AT 2W 75 TO THE REAR OF THE ACCEPTOR MAGAZINE.
B. HEAD WALL DONOR MAGAZINE LOCATED AT 2W 75 TO THE FRONT OF THE ACCEPTOR
   MAGAZINE.

STANDARD DRAWING NOTE:
THIS DRAWING SET, NAVFAC DRAWINGS 6448589 THRU
6448621, WAS APPROVED AS THE STANDARD 7-BAR
EARTH COVERED MAGAZINE DESIGN FOR THE TYPE F

IF SCALE IS A PACKED
IT IS 1/48 SCALE REDUCED ACCORDINGLY.
FLOOR PLAN

Scale: 1" = 1'-0"

NOTES:
1. DATUM ELEVATION 0'-0" TAKEN AS TOP OF TRENCH WALL AND TOP OF TRENCH COVER. FOR ACTUAL ELEVATION SEE CIVIL DRAWINGS.
2. FOR CONTINUATION OF BUILDING DRAINS SEE CIVIL DRAWINGS.
FLOOR PLAN

SCALE: 1" = 1'-0"

ALTERNATE BARS
BAR SPACING = 12"
(TYPICAL EACH WAY)

FLOOR SLAB BAR SPLICES

NOTE:
1. FOR "RETAINING WALL ELEVATION" SEE DMG. S-4.
2. FOR ADDITIONAL REINFORCING AT DOOR TRENCHES SEE DMG'S S-14 & S-10.
3. FOR STAGGERED SPLICES:
   BAR SPLICE INDICATED THIS
   ALTERNATE BAR SPICE INDICATED THIS
   SEE SECTION "FLOOR SLAB BAR SPLICES" THIS SHEET.

ELEVATION

SCALE: 1" = 1'-0"

IF SHEET IS ONE SIDE
IT IS INDICATED AS
SHEETS NEED ACCORDINGLY

APPENDIX A

NAVY THE DESIGN

STANDARD BOX MAGAZINE TYPE "F"

FLOOR PLAN & HEADWALL ELEVATION
(M52 PLANNING)

FILE VS. STRESSING

6,448,591 S-3
NOTE: FOR ALTERNATE EARTH FILL DRAINAGE SYSTEM SEE DWG. S-13.
Foundation Plan

Retaining Wall "A" as shown
Retaining Wall "B" (opposite hand)
Scale 1" = 1'-0"

Elevation - Retaining Wall "A"
Retaining Wall "B" (opposite hand)
Scale 1" = 1'-0"

Note:
Platform omitted for clarity.

Section
Scale 1" = 1'-0"

Note:
For reinforcement not shown
See Drawing S-7 and S-11.

Vapor Barrier

Structural Fill

6" Crushed Stone
(see note 2, dimo. 5-7)

Earth Fill
Beyond

1/Wall
El. +20'-0"

7/Platform

Fin. Drain

7/Platform

7/Trench Cover
El. 0'-0"

For Trench Drain
See Detail 7/210

6" Crushed Stone
(see note 2, dimo. 5-7)
DETAIL
SCALE: WM = 1'-0"

(TYPICAL 6" PERFORATED DRAIN)

DOOR TRENCH - FOR
REMOV. SEE SECT. (TYP)

SECTION
SCALE: WM = 1'-0"

NOTE:
FOR INFORMATION NOT SHOWN
SEE SECTION

SECTION
SCALE: WM = 1'-0"

NOTE:
FOR INFORMATION NOT SHOWN
SEE SECTION

SECTION
SCALE: WM = 1'-0"

NOTE:
FOR ALTERNATE EARTH FILL DRAINAGE
SYSTEM SEE DWG. S-13.
NOTES:
1. VENTILATOR SHALL BE DESIGNED BY THE CONTRACTOR FOR A SUSTAINED WIND SPEED OF 132 M.P.H.
2. REFER TO DRAWING E-5 FOR LIGHTING ROD LOCATION ON VENTILATOR.
3. ALL MOVING PARTS SHALL BE NON-SparkING TYPE.
4. GRAVITY VENTILATOR SHALL BE INTRINSICALLY SAFE.
1. Use door centering bolts to position the trolley pin & base for a balanced door.
2. Weld trolley mounting base to guide angles and spacer bars after balancing door.
3. Contractor may submit alternate trolleys & mounts for approval.
ELECTRICAL LEGEND AND ABBREVIATIONS:

- \( F \): Fluorescent fixture for hazardous locations
- \( A \): American wire gauge
- \( M \): Automatic transfer switch
- \( N \): Non-automatic
- \( S \): Surface mount
- \( AFS \): American fork switch
- \( AMF \): Automatic transfer switch
- \( MTS \): Manual transfer switch
- \( ATS \): Automatic transfer switch
- \( NTS \): Non-transfer switch
- \( BSL \): Building service line
- \( C \): Circuit breaker
- \( D \): Distribution unit
- \( E \): Emergency fixture
- \( ED \): Emergency disconnect
- \( EP \): Explosion-proof for hazardous location
- \( F \): Fire alarm
- \( FAP \): Fire alarm panel
- \( FS \): Fire sprinkler
- \( FAPG \): Fire alarm panel, guarded
- \( FSC \): Fire smoke control
- \( FAS \): Fire alarm switch
- \( FA \): Fire alarm
- \( G \): Grounding conductor
- \( GM \): Generator main
- \( HFL \): High frequency
- \( HGR \): High ground resistance
- \( HPS \): High pressure sodium
- \( H \): High
- \( HP \): High pressure
- \( I \): Illuminator
- \( ID \): Isolation device
- \( JB \): Junction box
- \( KV \): Kilo volt
- \( KW \): Kilo watt
- \( KL \): Kilowatt
- \( KWH \): Kilowatt hour
- \( L \): Lighting fixture
- \( LF \): Load center
- \( M \): Maximum
- \( MAX \): Maximum
- \( MED \): Medium
- \( N \): Normally
- \( NON \): Non
- \( NOS \): No
- \( NP \): Not provided
- \( NOS \): No
- \( O \): One wire
- \( OOS \): One wire
- \( OB \): Overload breaker
- \( O \): One wire
- \( P \): Panel
- \( PL \): Platform
- \( R \): Red
- \( RCH \): Red, change
- \( RPC \): Remote panel control
- \( SCM \): Switching control
- \( S \): Surface mount
- \( SBC \): Standard box connection
- \( SD \): Secondary distribution
- \( SFM \): Service feeding main
- \( SFM \): Service feeding main
- \( SM \): Switching unit
- \( SW \): Switching unit
- \( T \): Transformer
- \( T \): Transformer
- \( TH \): Transformer housing
- \( T \): Transformer
- \( U \): Unusual
- \( V \): Voltage
- \( W \): Watt
- \( WM \): Waterproof
- \( WR \): Water resistant
- \( X \): Extra
- \( Y \): Yellow
- \( Z \): Zero

SINGLE LINE DIAGRAM

LIGHTING FIXTURE SCHEDULE

<table>
<thead>
<tr>
<th>FIXTURE SYMBOL</th>
<th>TYPE</th>
<th>QUANTITY</th>
<th>AMPS</th>
<th>VOLTS</th>
<th>WATTS</th>
<th>REMARKS</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>SF</td>
<td>AS</td>
<td>150</td>
<td>120</td>
<td>1800</td>
<td>REFER TO DRAWING E-5</td>
</tr>
<tr>
<td>A</td>
<td>SF</td>
<td>AS</td>
<td>200</td>
<td>120</td>
<td>2400</td>
<td>REFER TO DRAWING E-5</td>
</tr>
</tbody>
</table>

GENERAL NOTES:
1. The entire electrical installation shall be in accordance with the latest edition of the National Electrical Code.
2. All interior electrical equipment shall be in accordance with the NEC. NEMA requirements for hazardous locations, exact type of classification shall be determined for each site.
3. Provide seal fittings as required by the National Electrical Code.
4. For door controls see performance specifications.
5. The exact location and type of door operator, control station, and alarm switch(es) shall be in accordance with door manufacturers requirements and drawings in 1-10 and 1-11.
6. All architect/engineers using these drawings as standards shall include the interconnecting currents of all electrical runs on their drawings.

NAVAL FACILITIES ENGINEERING COMMAND
STANDARD BOX MAGAZINE TYPE "F"
NOTES:
1. ALL GROUNDING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
2. THE GROUND LOOP SHALL BE LOCATED F-0" (MEANING FROM THE FOOTPRINT OF THE FACILITY).
3. ALL REINFORCING STEEL IN BUILDING & PLATFORM (IF PROVIDED) SHALL BE BONDED TO THE GROUND LOOP.
4. EACH METAL DOOR LOUVER OR SHUTTER SHALL BE BONDED TO THE GROUND LOOP.
5. ALL METAL EQUIPMENT WITHIN THE BUILDING SHALL BE GROUNDED VIA THE GROUND BUS.
6. CONNECT TO VENTILATOR, SEE DETAIL ON DRAWING E-5.
7. REFER TO SHEET E-6 FOR GROUND BUS MOUNTING DETAIL.

FLOOR PLAN
SCALE: 1" = 1'-0"

TYPICAL AT EACH CONSTRUCTION JOINT IN PLATFORM RETAINING WALL
N.T.S.

TYPICAL AT EACH EXPANSION JOINT IN PLATFORM SLAB—ON—GRADE
N.T.S.

EACH PLATFORM (WHERE PROVIDED) PANEL ALONG EXTERIOR BUG WALL SHALL BE BONDED TO PANEL NO. 10 ALONG PLATFORM EDGE. ADJACENT EDGE PANELS SHALL BE BONDED AND EVERY SECOND PANEL (NO TOTAL) SHALL BE BONDED TO GROUND LOOP. ADJACENT RETAINING WALL SECTION SHALL BE BONDED ACROSS CONSTRUCTION JOINT AND EVERY SECOND PANEL SHALL BE BONDED TO GROUND LOOP.