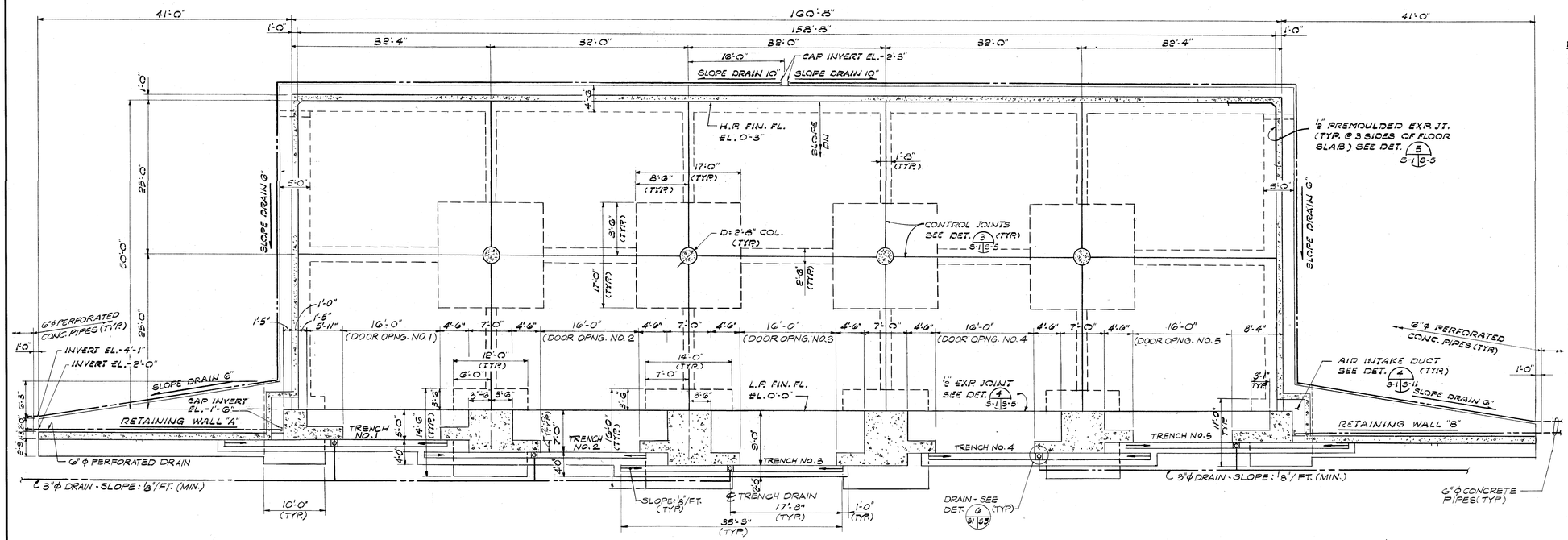
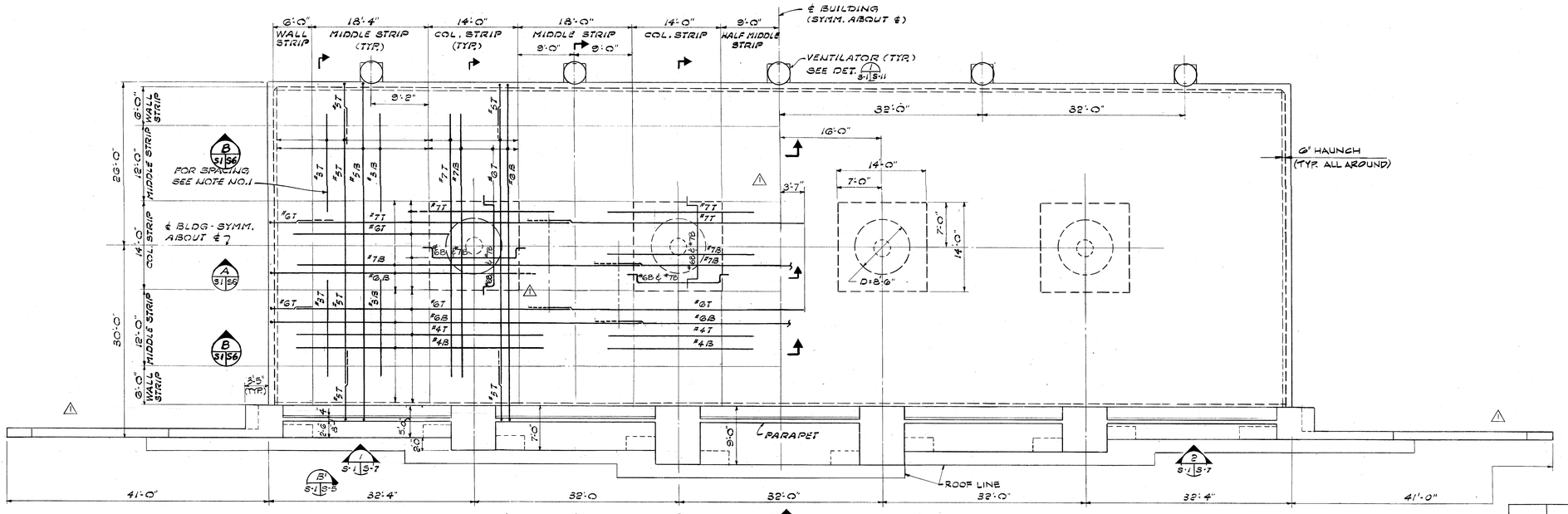


FLOOR PLAN

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



ROOF PLAN

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

NOTES:

1. ALL REINF. BARS SHALL BE SPACED @ 10"o.c. UNLESS NOTED OTHERWISE.
2. THE FOLLOWING ELEVATION, SECTIONS & DETAILS SHALL BE USED FOR MAGAZINE WITH LOADING PLATFORM ONLY.

   ELEVATION 2 S2|S5, 3 S2|S7, 4 S2|S7

   SECTION 4 S4|S5, 5 S4|S5, 6 S4|S3, 1 S3|S4, 2 S3|S4, A S4|S4, B S4|S4

   DETAIL 1 S5|S5, 2 S5|S5, C S4|S4, D S4|S4, 5 S7|S7
3. THE FOLLOWING ELEVATION AND SECTIONS SHALL BE USED FOR MAGAZINE WITHOUT LOADING PLATFORM ONLY.

   ELEVATION 1 S1|S3, 1 S7|S7

   SECTION 1 S4|S5, 2 S4|S5, 3 S4|S5
4. ALL OTHER ELEVATIONS, PLANS, SECTIONS AND DETAILS SHALL BE USED FOR MAGAZINE WITH AND WITHOUT LOADING PLATFORM UNLESS NOTED OTHERWISE.
5. POUR SLAB IN CHECKERBOARD PATTERN (SLAB DIM. = 25'-32')
6. GROUND COVER SHALL BE DETERMINED BY GENERAL SITE FILL MATERIAL AND CLIMATIC CONDITION. (GROUND COVER MUST BE MAINTAINED AT MAXIMUM 6" HEIGHT.)
7. IF THE DEPTH OF THE FOOTINGS (SIDEWALLS, BACKWALL, COLUMNS, PILASTERS AND GRADE BEAMS) HAVE TO BE INCREASED EITHER BECAUSE OF THE DEPTH OF FROST OR TO OBTAIN SUITABLE SOIL BEARING CAPACITY AS SPECIFIED, THE VOLUME OF SOIL BETWEEN THE DEPTH OF THE FOOTING SHOWN ON THE DRAWINGS AND THE DEPTH REQUIRED SHALL BE REPLACED WITH CONCRETE. RETAINING WALLS, WHOSE FOOTING DEPTHS MUST BE INCREASED FOR FROST SHALL BE REDESIGNED. IF THE SOIL BEARING CAPACITY IS LESS THAN THAT SPECIFIED THEN THE RETAINING WALL FOOTINGS MUST BE REDESIGNED.

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1/8" = 1'-0" (5' 0 5' 10 15')

GENERAL NOTES

MATERIALS AND CONSTRUCTION

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'c = 4,000 PSI AT 28 DAYS.
2. ALL REINFORCING BARS SHALL CONFORM TO THE SPECIFICATION FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT, ASTM DESIGNATION A615, GRADE 60.
3. CONCRETE AGGREGATE SHALL HAVE A MAXIMUM SIZE OF 1 INCH.
4. ALL REINFORCING BARS SHALL BE CONTINUOUS IN ANY ONE DIRECTION EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS.
5. EXCEPT AS NOTED, ALL CONCRETE CONSTRUCTION AND DETAILING SHALL CONFORM TO THE LATEST STANDARDS OF THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315), AND BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318).
6. EXCEPT FOR WELDED WIRE FABRIC, NO WELDING OF REINFORCING BARS SHALL BE PERMITTED UNLESS INDICATED ON DRAWINGS.
7. ALL STRUCTURAL STEEL, METAL DOORS, EQUIPMENT, ETC. SHALL BE CONNECTED TO GROUND BUSES WITH #2 COPPER GROUND CABLE.
8. STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL CARBON STEEL, ASTM DESIGNATION A36.
9. ALL STRUCTURAL STEEL PLATES SHALL CONFORM TO THE SPECIFICATION FOR HOT-ROLLED, CARBON STEEL SHEET AND STRIP, STRUCTURAL QUALITY, ASTM DESIGNATION A570.
10. METAL ROOFING, SIDING, AND FLASHINGS SHALL CONFORM TO THE SPECIFICATION FOR THE DESIGN OF LIGHT GAUGE COLD-FORMED STRUCTURAL STEEL MEMBERS, LATEST EDITION.
11. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
12. WELDING FOR STRUCTURAL STEEL SHALL CONFORM TO THE STRUCTURAL WELDING CODE, AWS D1.1, LATEST EDITION.
13. 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.
14. ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE PROCEDURES GIVEN IN NOTES ON SHEET S-9.
15. TOP 12 INCHES OF SUBGRADE SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY AND EARTH ABOVE STRUCTURE SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY, EACH IN ACCORDANCE WITH ASTM STANDARD D1557.
16. UNLESS NOTED ON DRAWINGS, SPLICE LENGTH OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 (LATEST EDITION) FOR CLASS C SPLICES.
17. FOR FILLET WELD SIZES NOT SHOWN ON DRAWINGS, PROVIDE MINIMUM SIZE FILLET WELDS IN ACCORDANCE WITH WELDING CODE AWS D1.1, LATEST EDITION.
18. UNLESS SHOWN OTHERWISE, ALL REINFORCING BAR HOOKS SHALL BE STANDARD HOOKS IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 318, LATEST EDITION.
19. SECTION TAKEN ON THIS SHEET NO. → 1 (S1|S3) ← SECTION OR ELEV. MARKS SECTION SHOWN ON THIS SHEET NO. → 3 (S1|S2) → ELEV. SHOWN ON THIS SH. NO. / ELEV. TAKEN ON THIS SH. NO.

SOIL DATA

A.	ASSUMED SOIL BEARING PRESSURE	- 4,000 PSF
B.	ASSUMED DYNAMIC RESPONSE FACTOR (SOIL BEARING)	- 2.5
C.	ASSUMED LATERAL SOIL PRESSURE COEF.: MAGAZINE WALLS	- 0.5
	WING WALLS	- 0.3
D.	ASSUMED COEF. OF FRICTION (CONC. ON SOIL)	- 0.50

DESIGN LOADS

STATIC LOADS:

A.	ROOF DEAD LOAD (1½ FT. EARTH FILL +6" GRAVEL FILL)	- 200 PSF
B.	FLOOR LIVE LOAD	- 2,000 PSF
C.	PLATFORM AND RAMP LIVE LOAD	- 1,000 PSF
D.	ROOF LIVE LOAD	- 100 PSF

SEISMIC LOAD:

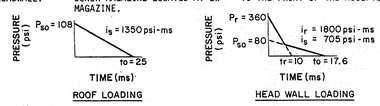
ADEQUATE FOR SEISMIC LOADS INDUCED BY EARTHQUAKE MOTIONS UP TO ZONE 4

BLAST LOAD:

BASED ON INTERMAGAZINE SEPARATION DISTANCES FOR A QUANTITY (W) OF H.E. EQUAL TO 350,000 LBS AS FOLLOWS:

A. ROOF: DONOR MAGAZINE LOCATED AT $2W^{1/3}$ TO THE REAR OF THE ACCEPTOR MAGAZINE.

B. HEADWALL: DONOR MAGAZINE LOCATED AT $2W^{1/3}$ TO THE FRONT OF THE ACCEPTOR MAGAZINE.



DEFLECTION CRITERIA (MAXIMUM SUPPORT ROTATIONS)

A.	ROOF SLAB	- 8°
B.	HEAD WALL	- 6°
C.	HEADER BEAM	- 2°
D.	PILASTERS X_m/X_c	- 3.0
E.	BLAST DOORS	- 12°

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
1	REVISED SPLICES, EXTENDED #6 B. BAR ON "ROOF PLAN"	FJW	10-14-87	ND

REVISIONS

STATE OF NEW YORK — EDWARD BRUCE LAING — 25 — LICENSED PROFESSIONAL ENGINEER

GATEWAY ACTION TO: P.P. Price, DDESB, 6/30/89

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.,N.Y.

E. LANG, PRINCIPAL, 4-23-87 DATE
NAVFACENGCOM
ENGINEER IN CHARGE, BRANCH MANAGER
R.a. Rea, 5/8/87 DATE
FIRE PROTECTION ENGINEER
T.R. Rutherford PE, 5/8/87 DATE
CRITERIA MANAGER
APPROVED
FEB COMMANDER, NAVFACENGCOM, DATE 6/9/89

DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350

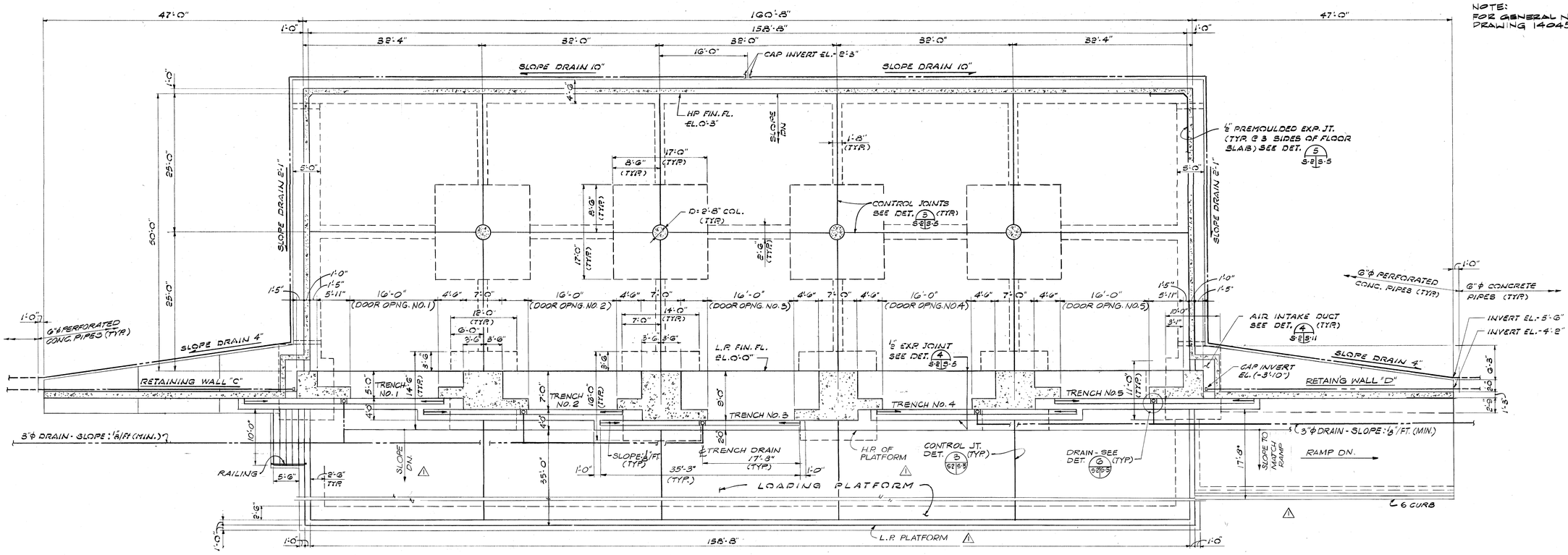
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

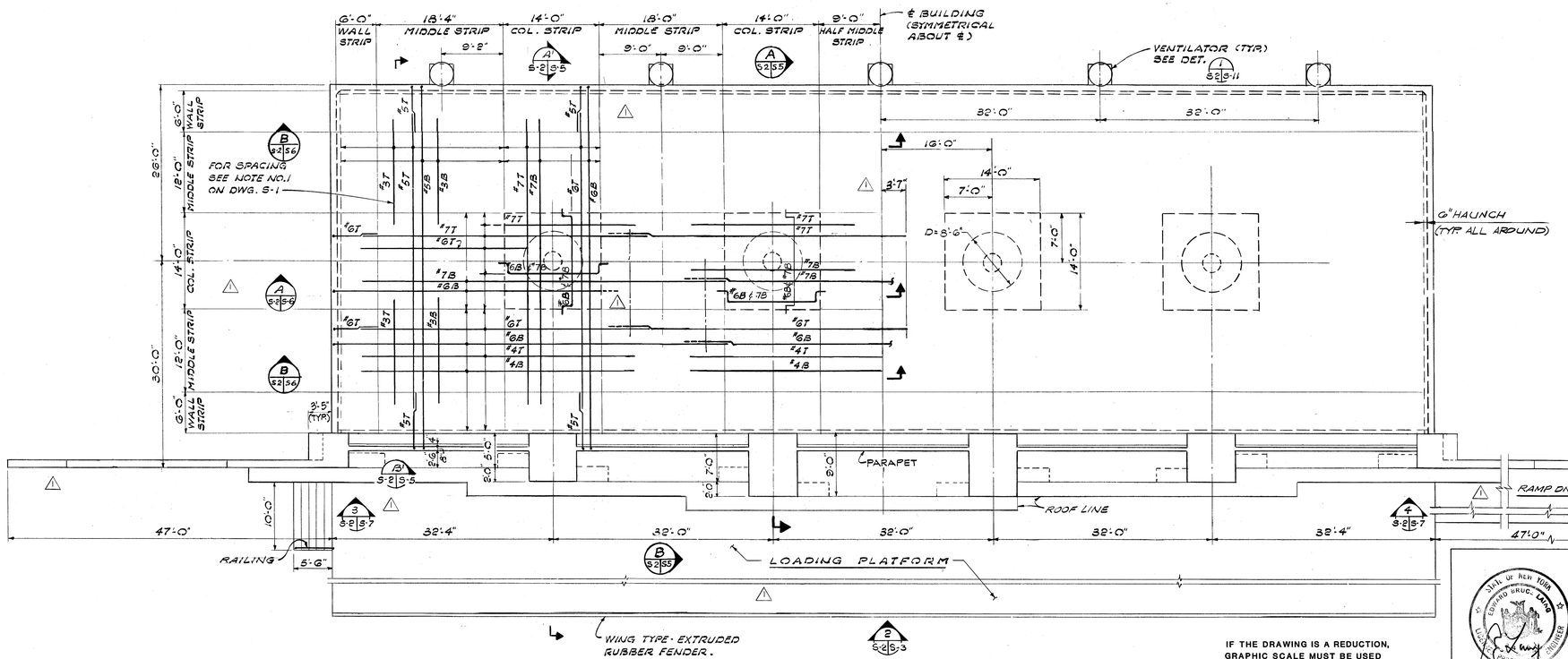
BOX MAGAZINE TYPE F
FLOOR PLAN & ROOF PLAN
(WITHOUT EXTERIOR PLATFORM)

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	S-1
F	80091	1404541	
SCALE AS NOTED	CONTRACT NO		SHEET 1
CATEGORY CODE 421	SPEC NO NFSS-M44		OF 15

NOTE:
FOR GENERAL NOTES, SEE NAVFAC DRAWING 1404541.



FLOOR PLAN
SCALE: 1/8" = 1'-0"



ROOF PLAN
SCALE: 1/8" = 1'-0"

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1/8" = 1'-0" 5' 0 5' 10' 15'

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
1	REVISED SPLICES, EXTENDED BARS IN 'ROOF PLAN'	FJW	10-14-87	ND

REVISIONS

STATE OF NEW YORK — EDWARD BRUCE LANDS — LICENSED PROFESSIONAL ENGINEER

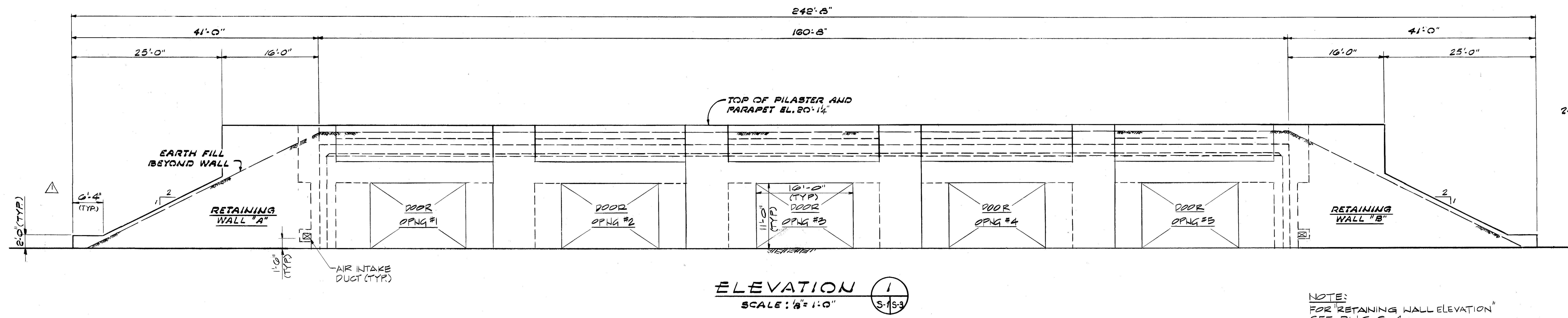
SATISFACTORY TO: [signature] 6/30/87 (ODESS / DATE)

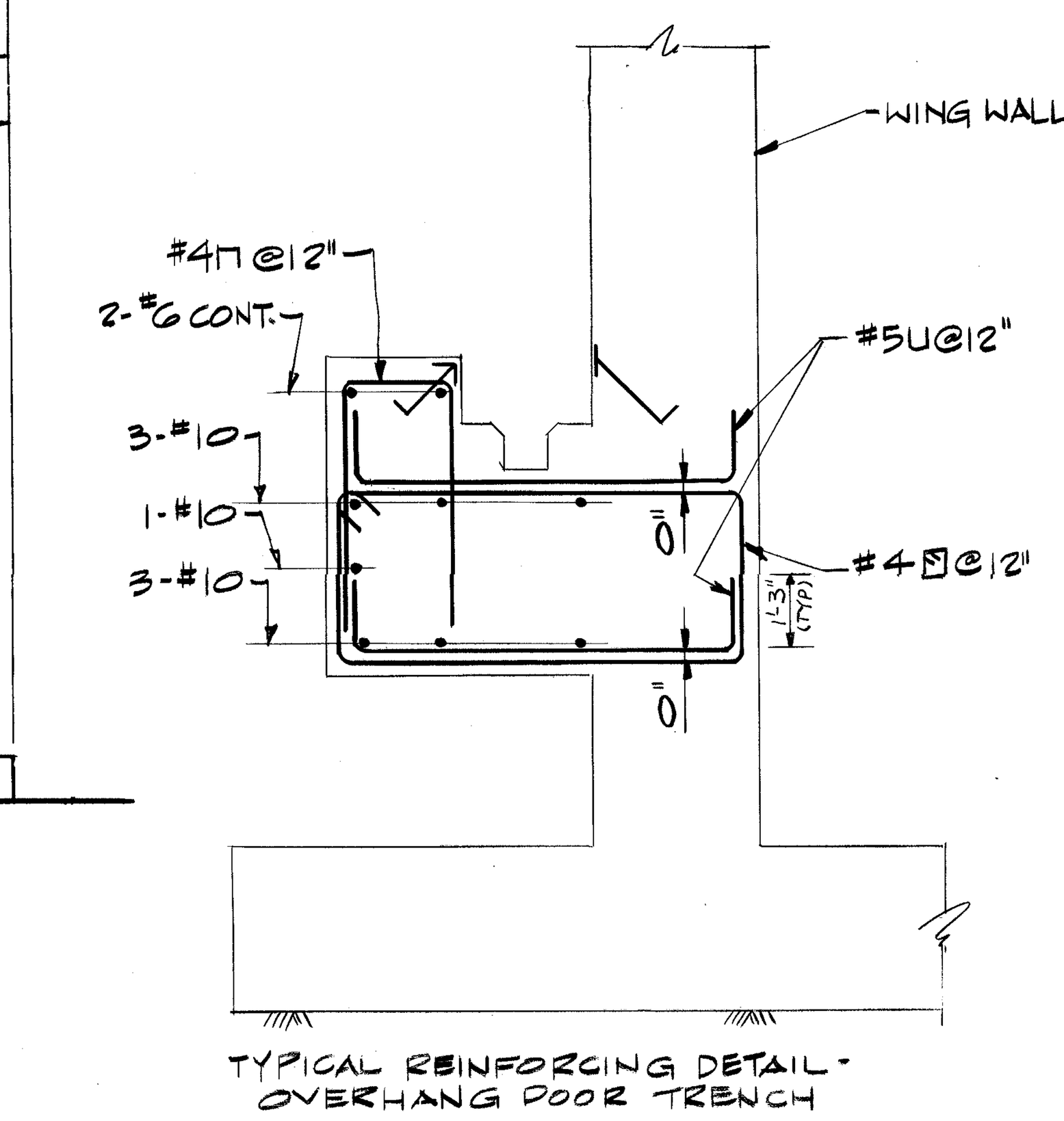
AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.N.Y.

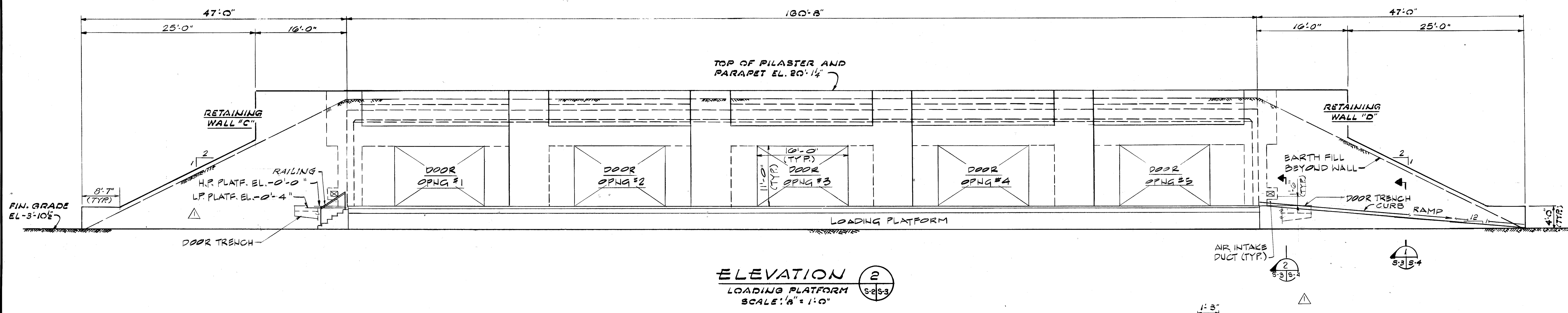
E. LANG 4-23-87 (PRINCIPAL / DATE)
NAVFACENGCOM (ENGINEER IN CHARGE / BRANCH MANAGER)
R.G. Rice 5/8/87 (FIRE PROTECTION ENGINEER / DATE)
T.R. RUBIERERA DE 5/8/87 (CRITERIA MANAGER / DATE)
APPROVED [signature] 4/87 (FOR COMMANDER, NAVFACENGCOM / DATE)

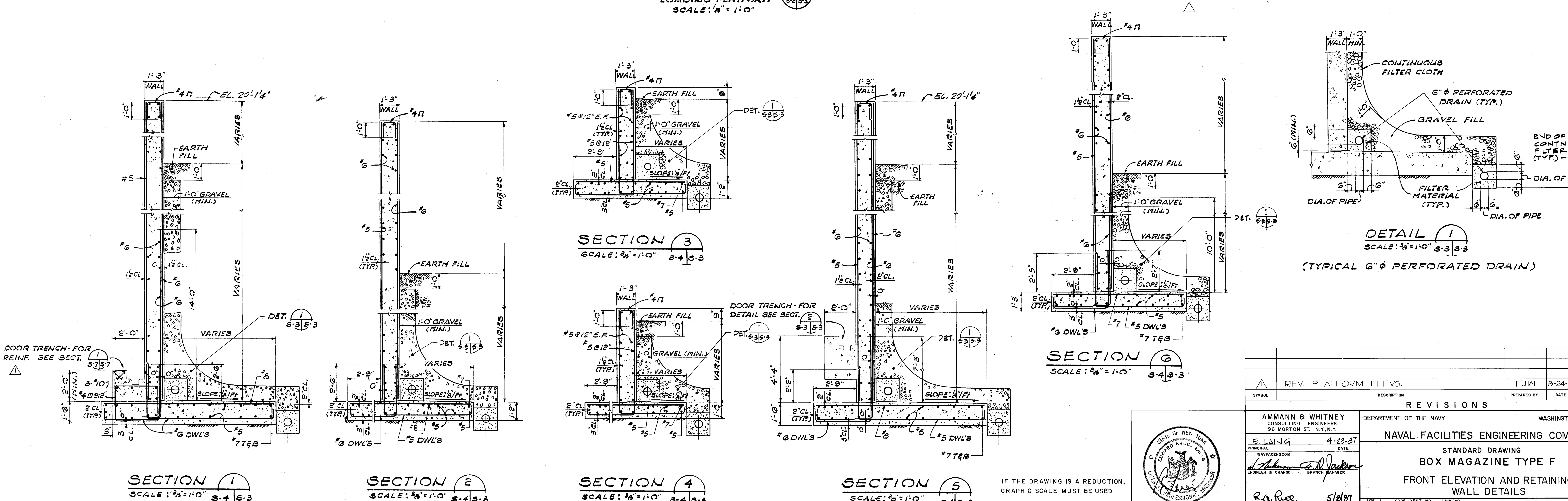
DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350
NAVAL FACILITIES ENGINEERING COMMAND
STANDARD DRAWING
BOX MAGAZINE TYPE F
FLOOR PLAN & ROOF PLAN
(WITH EXTERIOR PLATFORM)

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404542	S-2
SCALE AS NOTED	CONTRACT NO		SHEET 2
CATEGORY CODE 421	SPEC. NO NFSS-M44		OF 15









IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1/8" = 1'-0"   3/8" = 1'-0"

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
△	REV. PLATFORM ELEVS.	FJW	8-24-88	ND

REVISIONS

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y., N.Y.

E. LAING 4-23-87
PRINCIPAL DATE
NAVFACENGCOM
ENGINEER IN CHARGE / BRANCH MANAGER
R.G. Rice 5/8/87
FIRE PROTECTION ENGINEER DATE
T.R. RUTHERFORD P.E. 5/8/87
CRITERIA MANAGER DATE
APPROVED
FOR COMMANDER, NAVFACENGCOM
SATISFACTORY TO 6/30/87

DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350

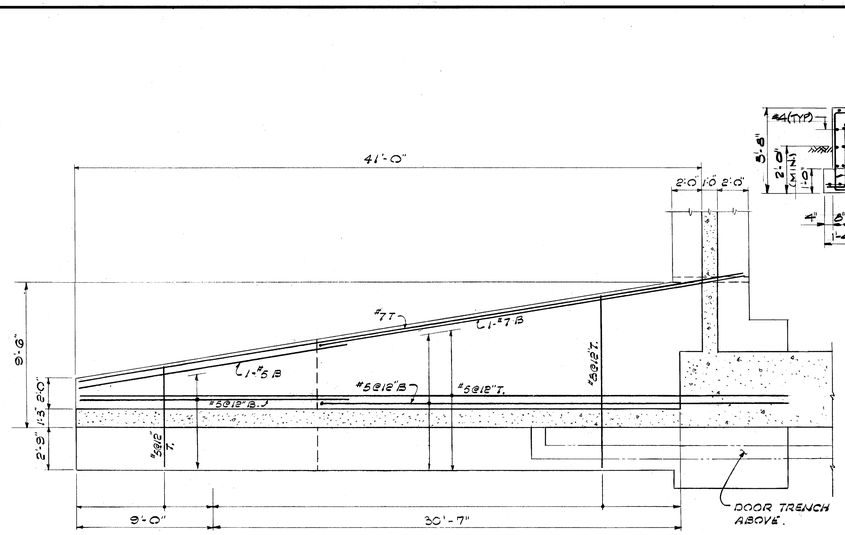
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

BOX MAGAZINE TYPE F

FRONT ELEVATION AND RETAINING WALL DETAILS

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404543	S-3
SCALE	AS NOTED	CONTRACT NO	SHEET 3
CATEGORY CODE	421	SPEC NO NFSS-M44	OF 15

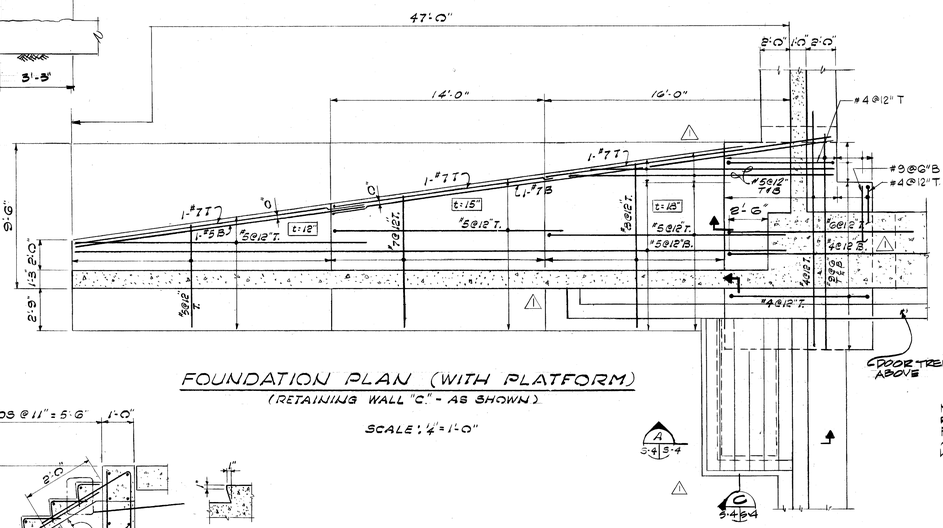


FOUNDATION PLAN (WITHOUT PLATFORM)

(RETAINING WALL "A" AS SHOWN)
(RETAINING WALL "B" OPP. HAND)
SCALE: 1/4" = 1'-0"

SECTION C

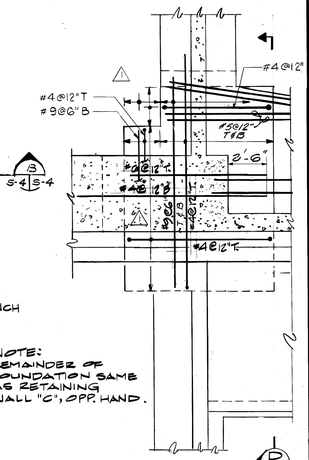
SCALE: 3/8" = 1'-0" 4 | 4-4



FOUNDATION PLAN (WITH PLATFORM)

(RETAINING WALL "C" - AS SHOWN)

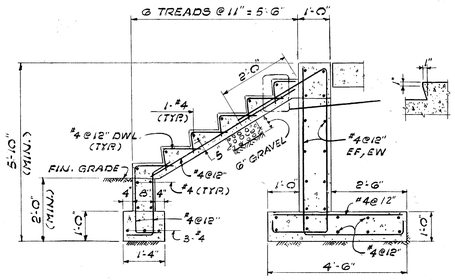
SCALE: 1/4" = 1'-0"



NOTE:
REMAINDER OF FOUNDATION SAME AS RETAINING WALL "C", OPP. HAND.

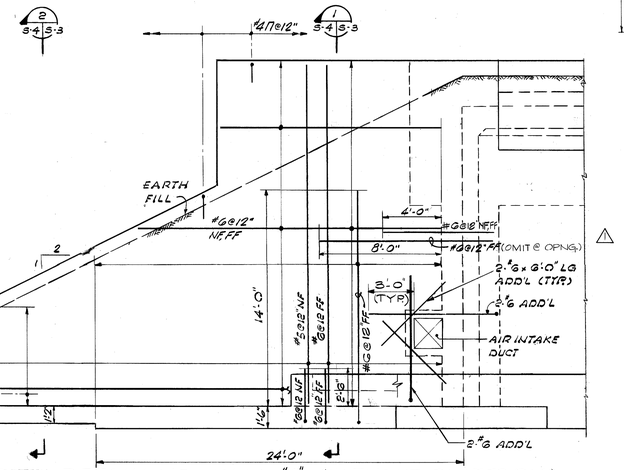
FOUNDATION PLAN (WITH PLATFORM) RETAINING WALL "D" AS SHOWN

SCALE: 1/4" = 1'-0"



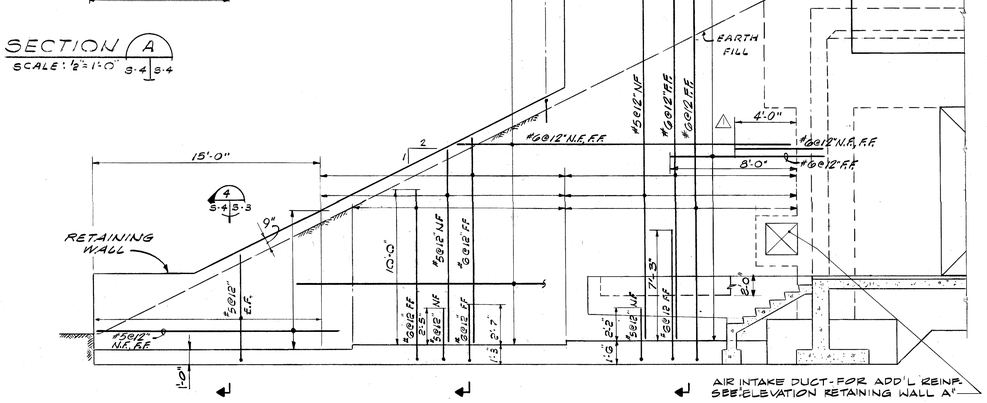
SECTION A

SCALE: 1/2" = 1'-0" 3-4 | 3-4



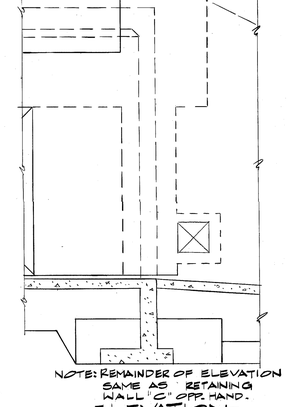
ELEVATION - RETAINING WALL "A" (WITHOUT PLATFORM)

(RETAINING WALL "B" OPP. HAND SIMILAR)
SCALE: 1/4" = 1'-0"



ELEVATION - RETAINING WALL "C" (WITH PLATFORM)

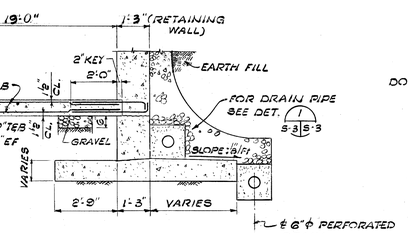
SCALE: 1/4" = 1'-0"



NOTE: REMAINDER OF ELEVATION SAME AS RETAINING WALL "C" OPP. HAND.

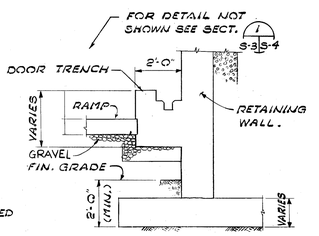
ELEVATION- RETAINING WALL "D" (WITH PLATFORM)

SCALE: 1/4" = 1'-0"



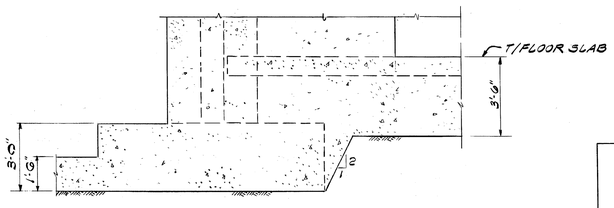
SECTION 1 D

SCALE: 3/8" = 1'-0" S-3 | S-4 S-4 | S-4



SECTION 2

SCALE: 3/8" = 1'-0" S-3 | S-4



SECTION B

SCALE: 3/8" = 1'-0" S-4 | S-4

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1/4" = 1'-0" 5' 0 5'

3/8" = 1'-0" 1' 0 1' 2' 3' 4' 5' 6' 7'

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
1	REV. REBAR	FJW	8-24-88	ND

REVISIONS

STATE OF NEW YORK — EDWARD CRUZ LAING — LICENSED PROFESSIONAL ENGINEER

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.,N.Y.

E. LAING 4-29-87
PRINCIPAL DATE

NAVFACENGCOM
ENGINEER IN CHARGE — BRANCH MANAGER

R.A. Rice 5/8/87
FIRE PROTECTION ENGINEER DATE

T.R. RUTHERFORD PE 5/8/87
CRITERIA MANAGER DATE

APPROVED
FOR COMMANDER, NAVFACENGCOM — DATE

SATISFACTORY TO
NAVFACENGCOM — DATE 6/30/87

DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350

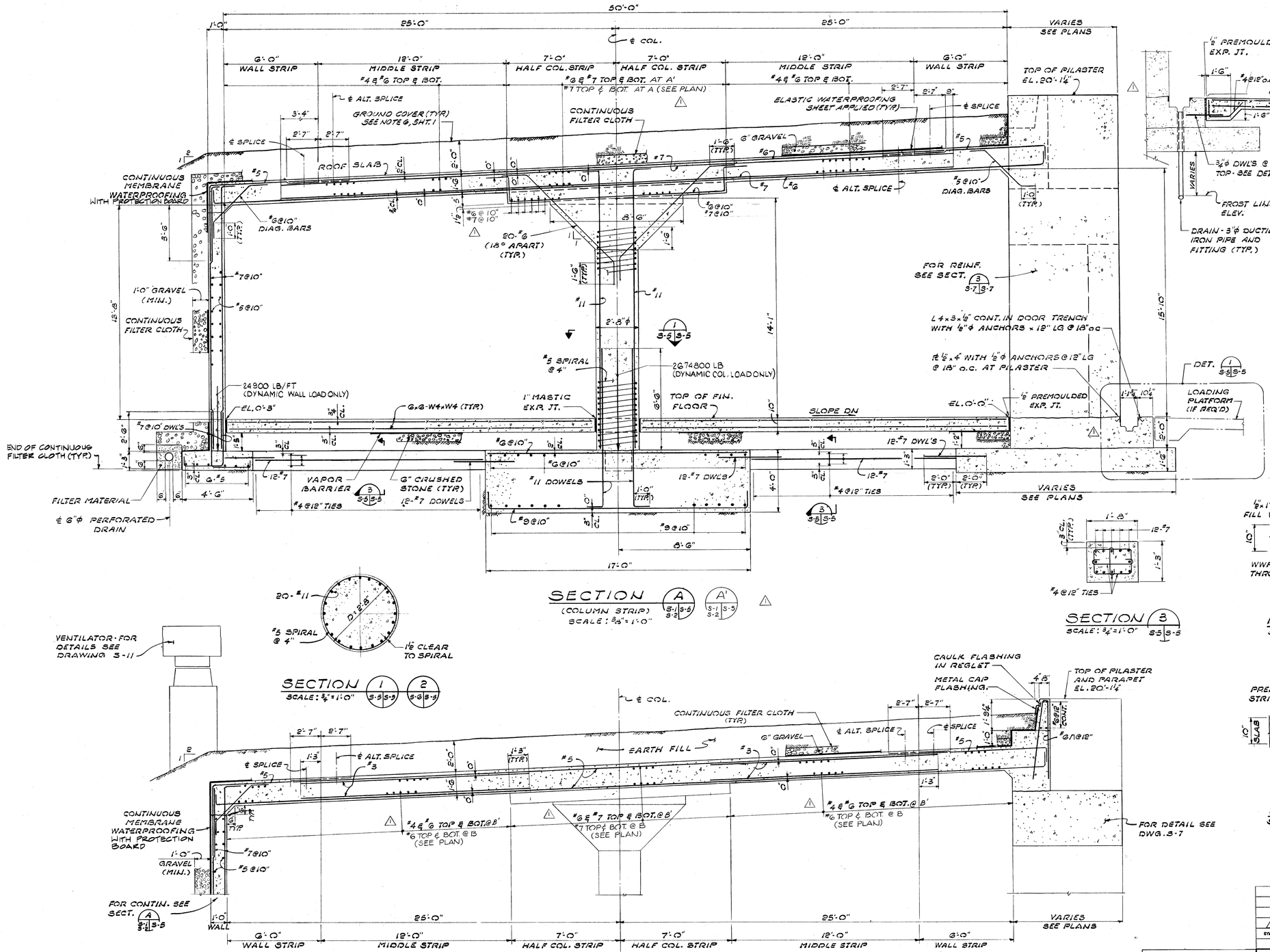
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

BOX MAGAZINE TYPE F

FRONT ELEVATION & RETAINING WALL DETAILS

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404544	S-4
SCALE AS NOTED	CONTRACT NO		SHEET 4
CATEGORY CODE 421	SPEC NO NFSS-M44		OF 15



IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

3/8" = 1'-0" 1' 0 1' 2' 3' 4' 5' 6' 7'

3/4" = 1'-0" 1' 0 1' 2' 3'

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
1	REV. REBAR	FJW	8-24-88	ND

REVISIONS

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.,N.Y.

E. LAING 4-23-87
PRINCIPAL DATE

NAVFACENGCOM
ENGINEER IN CHARGE BRANCH MANAGER

R.A. Rich 5/8/87
FIRE PROTECTION ENGINEER DATE

T.R. Rumberger PE 5/8/87
CRITERIA MANAGER DATE

APPROVED
FOR COMMANDER, NAVFACENGCOM DATE 6/30/89

SATISFACTORY TO
ADDRESS P. O'Brien 6/30/89 DATE

STATE OF NEW YORK EDWARD BRUCE LAING LICENSED PROFESSIONAL ENGINEER

DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350

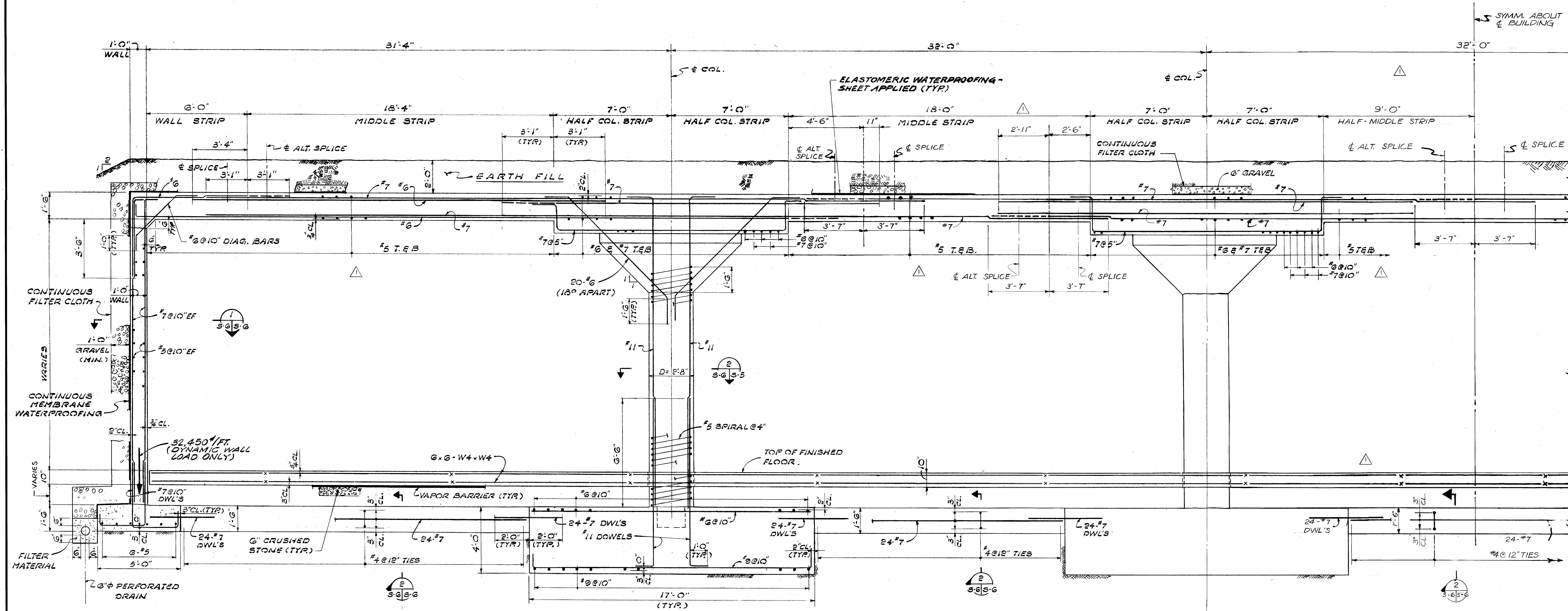
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

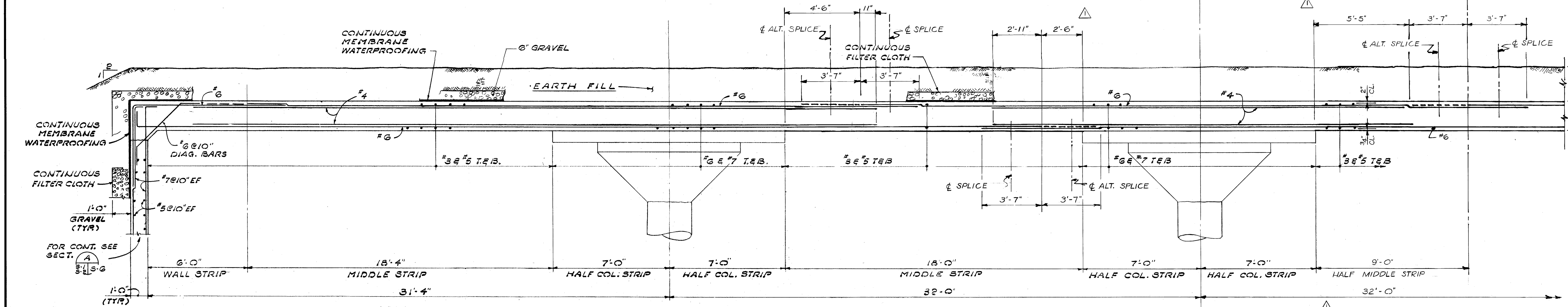
BOX MAGAZINE TYPE F

SECTIONS & DETAILS

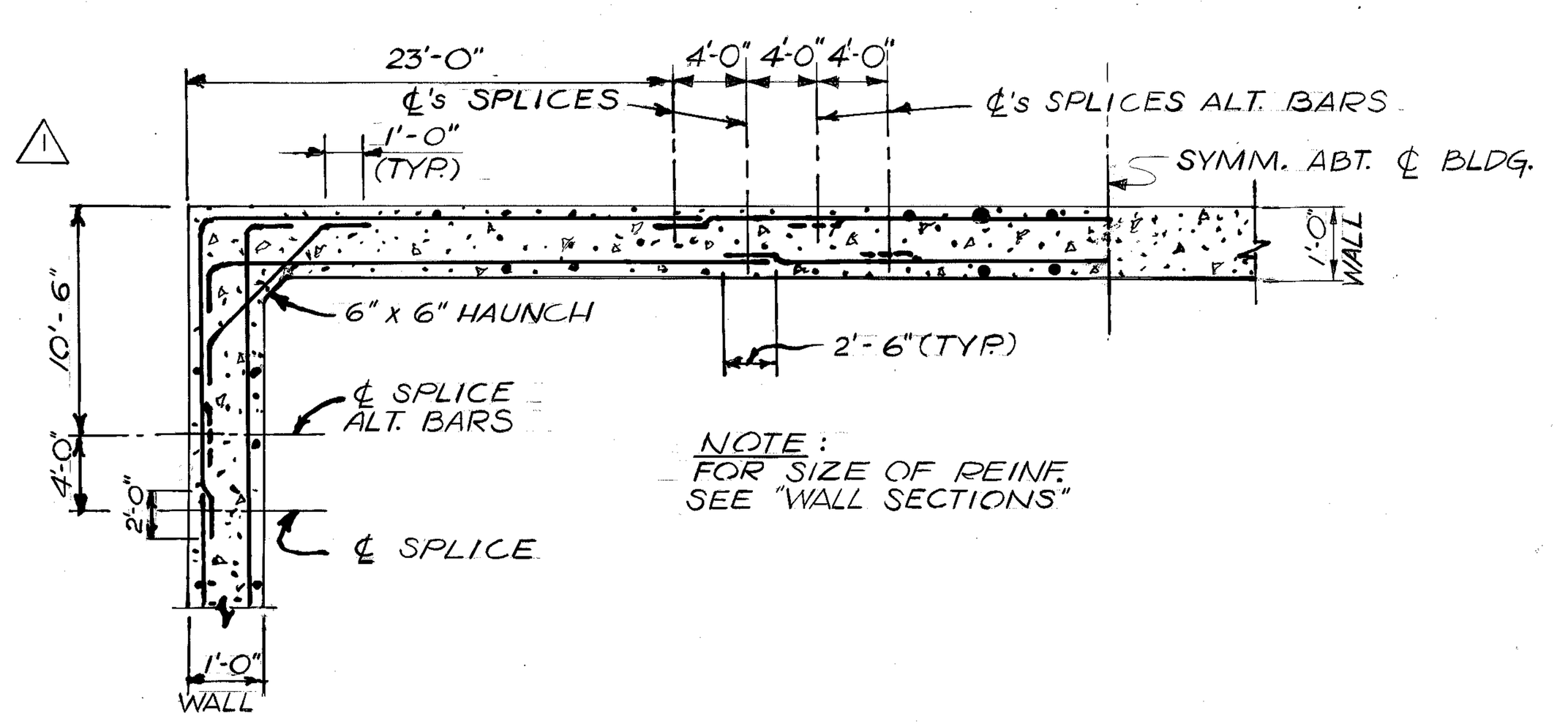
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	S-5
F	80091	1404545	
SCALE AS NOTED		CONTRACT NO	SHEET 5
CATEGORY CODE 421		SPEC NO NFSS-M44	OF 15



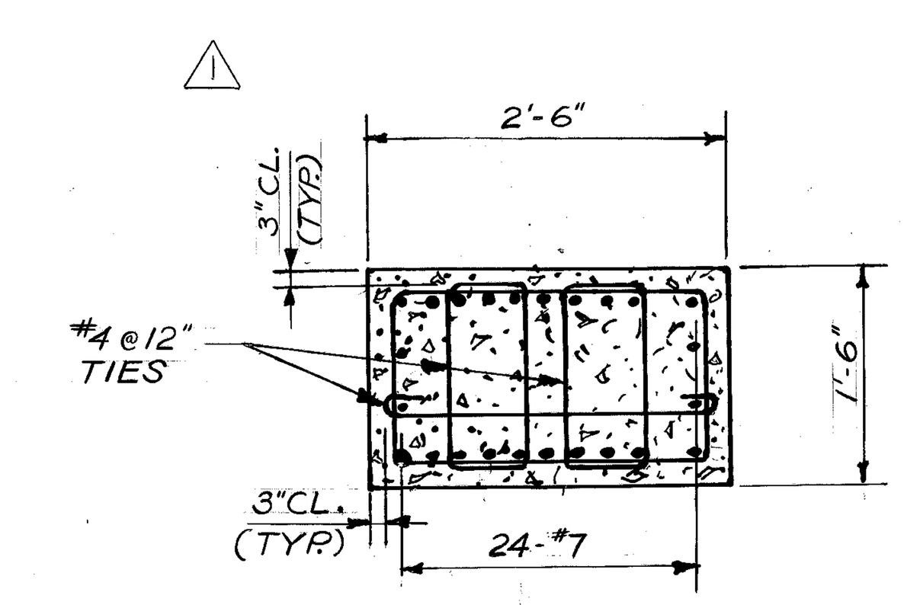
SECTION A
(COLUMN STRIP) S-1 S-2 S6
SCALE: 3/8" = 1'-0"



SECTION B
(TYP. FOR WALL & MIDDLE STRIPS) S-1 S-2 S6
SCALE: 3/8" = 1'-0"



SECTION 1 S-6 S-6
N.T.S.
(REQ'D SPLICING OF HORIZONTAL WALL REINF.)



SECTION 2 S-6 S-6
SCALE: 3/4" = 1'-0"

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
	RELOCATED ¢ BLDG. REVISED SPLICE LOCATIONS, EXTENDED SLABS IN SECTS. A & B - RELOCATE SECTS. 1 & 2			

REVISIONS

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y., N.Y.

E. LAING — PRINCIPAL — 4-23-87 DATE

NAVFACENGCOM
H. Nickerson — ENGINEER IN CHARGE
G. D. Jackson — BRANCH MANAGER

R. A. Rice — FIRE PROTECTION ENGINEER — 5/8/87 DATE
T.R. RUTHERFORD P.E. — CRITERIA MANAGER — 5/8/87 DATE
APPROVED — FOR COMMANDER, NAVFACENGCOM — 5/9/87 DATE

SATISFACTORY TO: P.D. Price — DDESB — 5/30/87 DATE

State of New York — Edward Bruce Laing — 4661 — Licensed Professional Engineer

DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350

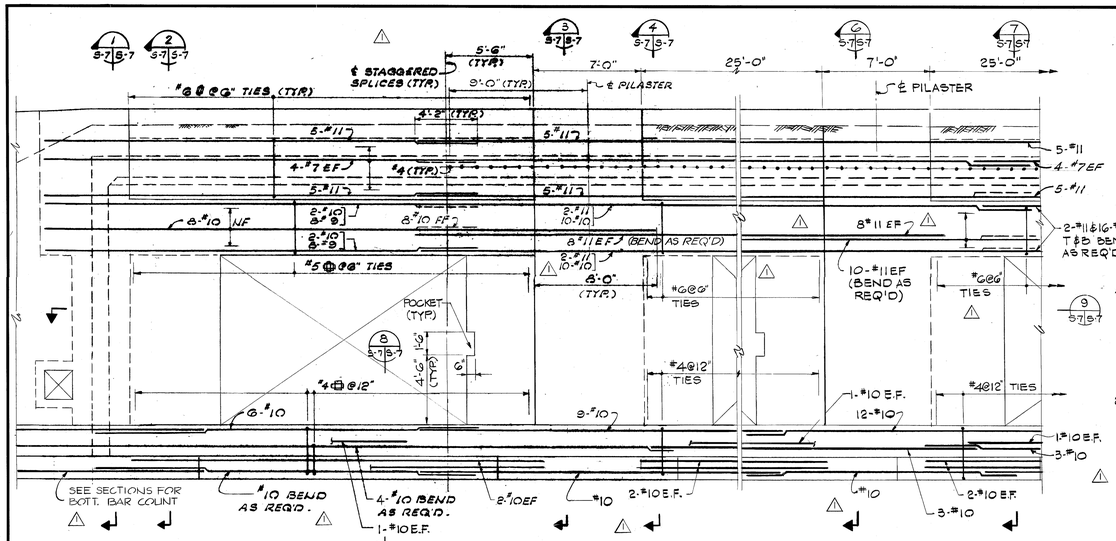
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

BOX MAGAZINE TYPE F

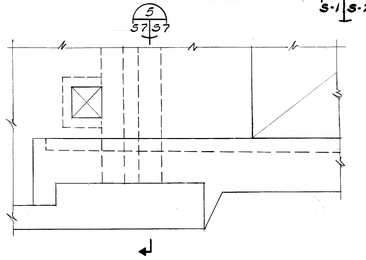
SECTIONS & DETAILS

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404546	S-6
SCALE AS NOTED		CONTRACT NO	SHEET 6
CATEGORY CODE 421		SPEC NO NFSS-M44	OF 15

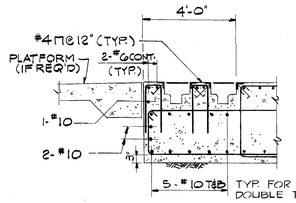


ELEVATION 1 SHOWN (S-1 | S-7)
SCALE: 1/4" = 1'-0"

ELEVATION 2 OPP HAND (S-1 | S-7)



ELEVATION 3 SHOWN, 4 OPP HAND (S-2 | S-7)



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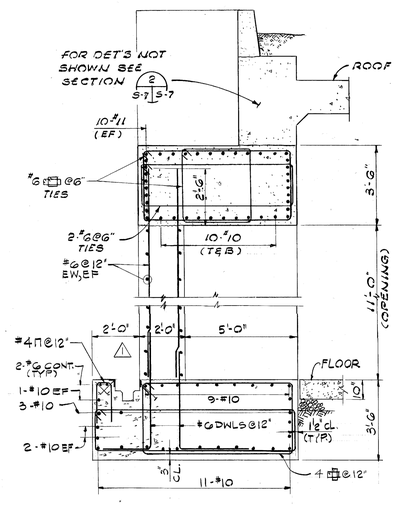

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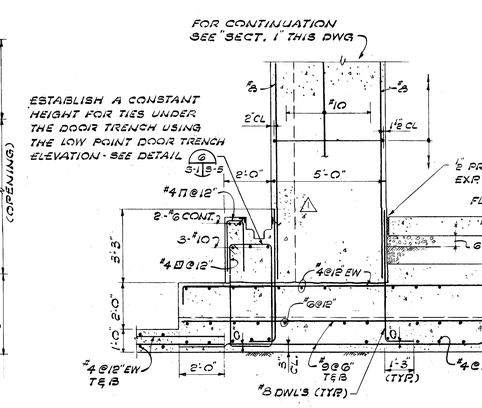

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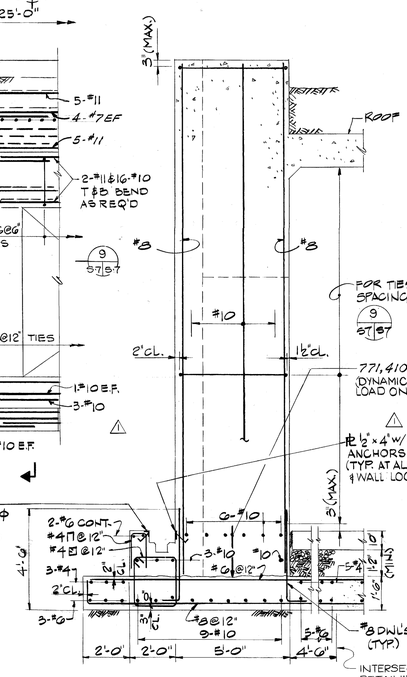

SECTION 1 (S-7 | S-7)
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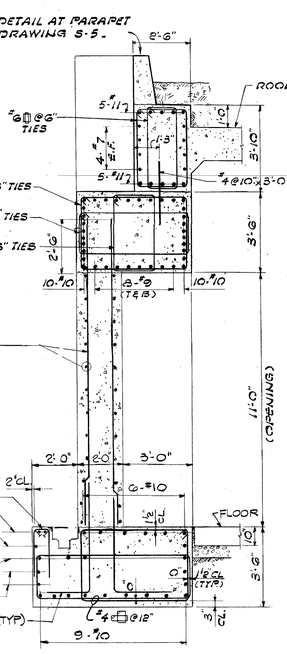

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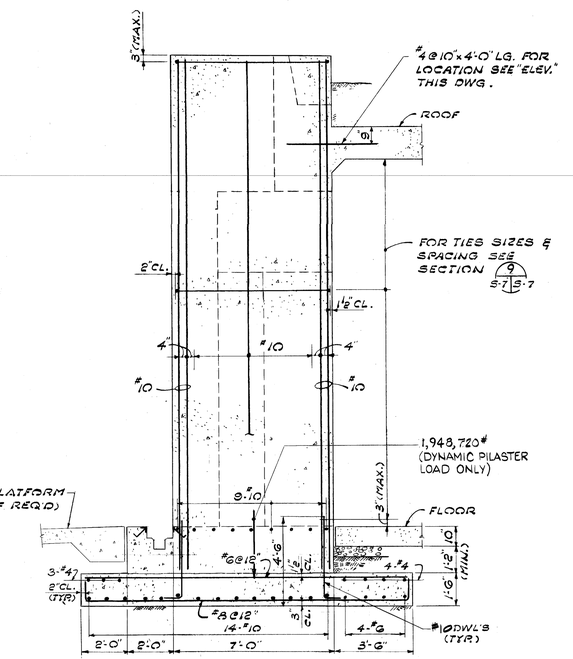

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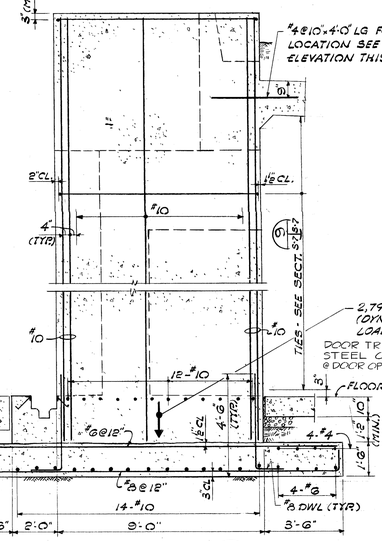

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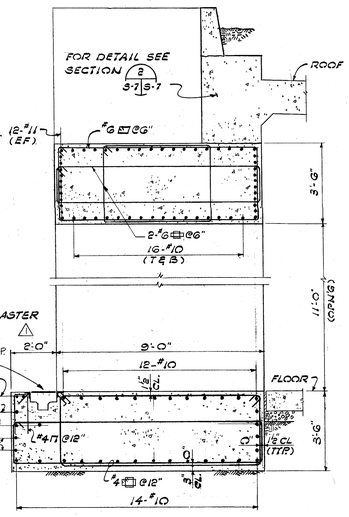
SCALE: 3/8" = 1'-0"



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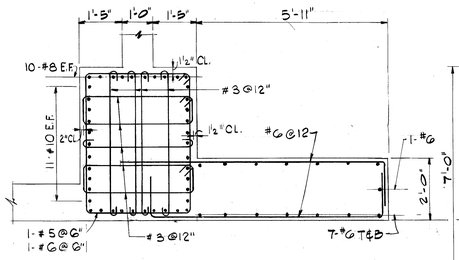
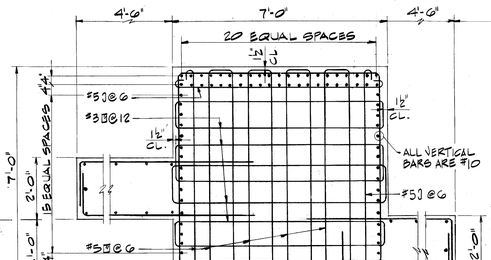
SCALE: 3/8" = 1'-0"





SECTION 9 (S-7 | S-7)
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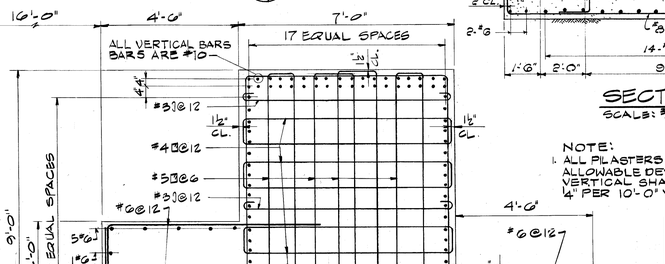


NOTE:
1. ALL PILASTERS SHALL BE PLUMB, ALLOWABLE DEVIATION FROM THE VERTICAL SHALL NOT EXCEED 1/4" PER 10'-0" VERTICAL HEIGHT.

⚠ 2. PROVIDE DOWELS FOR ALL VERTICAL BARS IN PILASTER & WALLS

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1/4" = 1'-0" 5' 0 5'

3/8" = 1'-0" 1' 0 1' 2' 3' 4' 5' 6' 7'

1/2" = 1'-0" 1' 0 1' 2' 3' 4' 5'

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
⚠	REV. REBAR, TRENCH COVERS & CALLOUTS	FJW	5/16/88	ND

REVISIONS

STATE OF NEW YORK — EDWARD BRUCE LAING — LICENSED PROFESSIONAL ENGINEER

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.,N.Y.

E. LAING 4-23-87
PRINCIPAL DATE
NAVFACENGCOM
ENGINEER IN CHARGE BRANCH MANAGER

Ra Rue 5/16/87
FIRE PROTECTION ENGINEER DATE
T.R. RUTHERFORD BE 5/18/87
CRITERIA MANAGER DATE
APPROVED
FOR COMMANDER, NAVFACENGCOM

DATE APPROVED FOR PUBLICATION 6/30/87
DOESB DATE

DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350

NAVAL FACILITIES ENGINEERING COMMAND

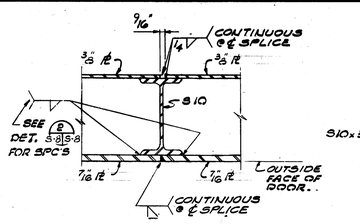
STANDARD DRAWING

BOX MAGAZINE TYPE F

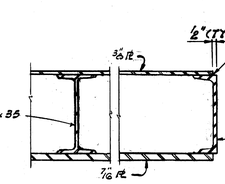
PILASTER & MISCELLANEOUS DETAILS

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	S-7
F	80091	1404547	
SCALE AS NOTED	CONTRACT NO		SHEET 7
CATEGORY CODE 421	SPEC NO NFSS-M44		OF 15

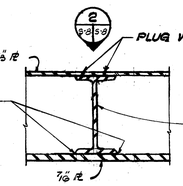
REVISIONS				
LTR	DESCRIPTION	PREP'D BY	DATE	APPROVED
△	DIMENSIONS, NOTES, SECT. MARK	FJW	5/16/88	ND



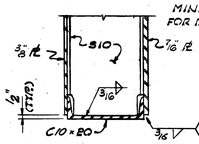
NOTE: COVER ℓ's SHALL BE SPLICED ONLY AS REQUIRED BY THE SIZE OF ℓ's AVAILABLE. LOCATION OF SPLICE(S) SHALL BE DETERMINED BY THE CONTRACTOR & THE SPLICE(S) SHALL CONFORM TO THIS DETAIL



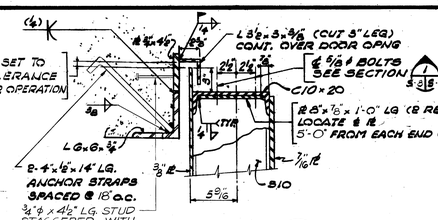
DETAIL 1 S-8|S-8



DETAIL 2 S-8|S-8



SECTION 1 S-8|S-8



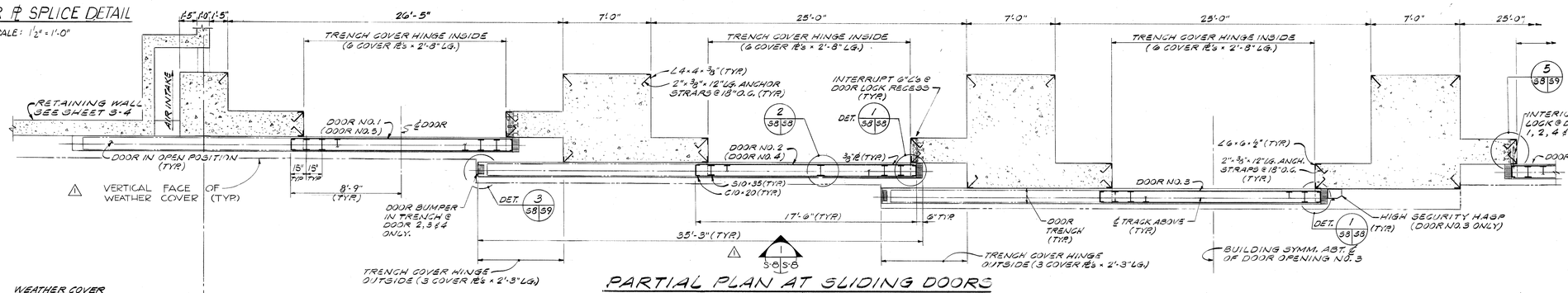
SECTION 2 S-8|S-8

TYPICAL DOOR DETAILS

SCALE: 1½" = 1'-0"

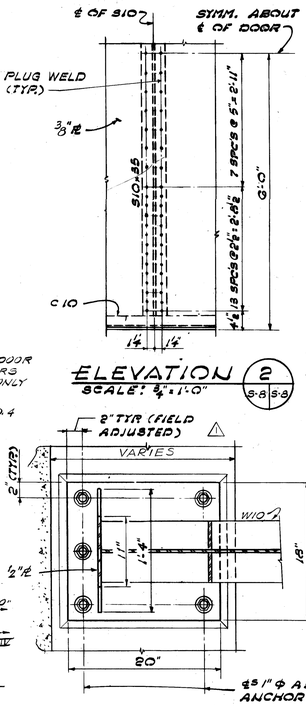
COVER ℓ SPLICE DETAIL

SCALE: 1½" = 1'-0"



PARTIAL PLAN AT SLIDING DOORS

SCALE: 1/4" = 1'-0"

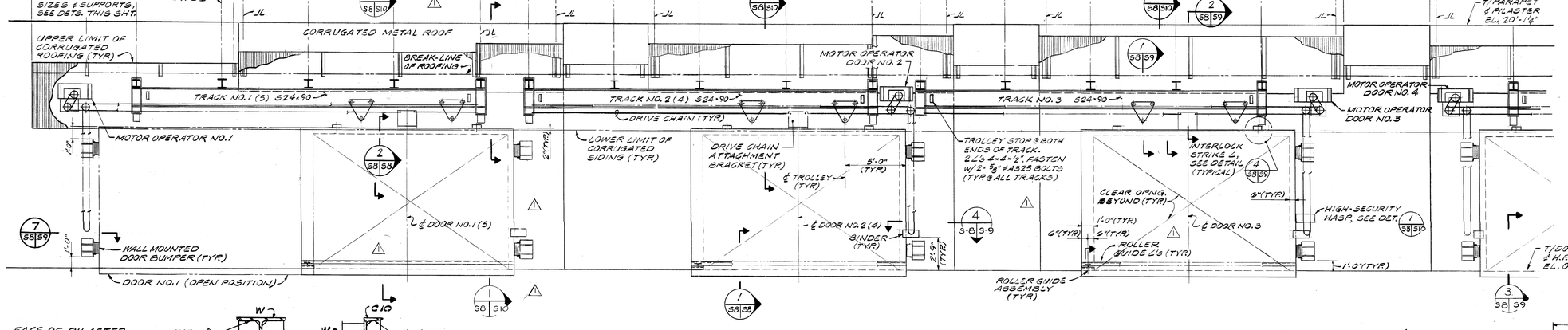


ELEVATION 2 S-8|S-8

SCALE: ½" = 1'-0"

SECTION 5 S-8|S-8

SCALE: 1½" = 1'-0"

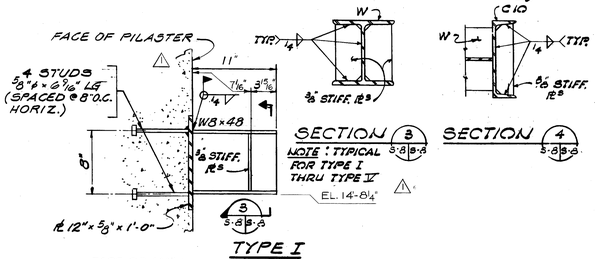


ELEVATION 1 S8|S9

SCALE: 1/4" = 1'-0"

△ NOTE: PROVIDE EMBEDDED ℓs & SUITABLE ANCHORS TO SUPPORT DOOR MOTOR OPERATORS

NOTE: FOR PAINTING REQUIREMENTS, SEE SHEET 9



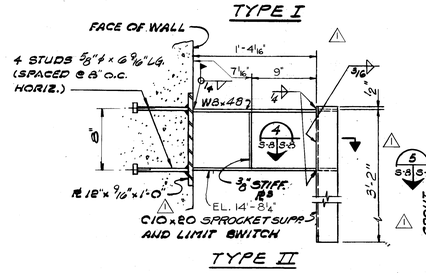
SECTION 3 S-8|S-8

NOTE: TYPICAL FOR TYPE I THRU TYPE IV

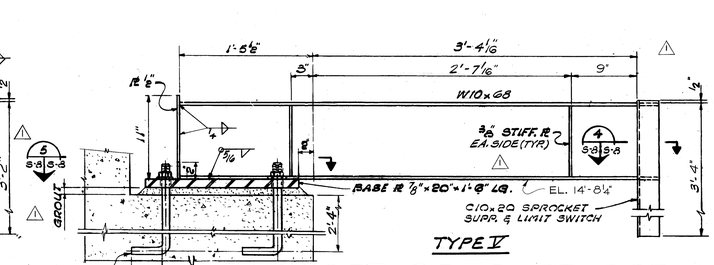
EL. 14-8¼"

SECTION 4 S-8|S-8

TYPE I



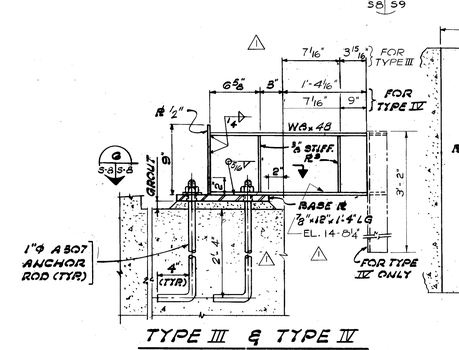
TYPE II



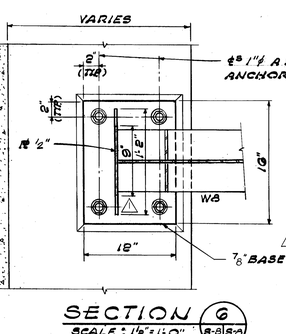
TYPE V

SUPPORT BRACKET DETAILS

SCALE: 1½" = 1'-0"



TYPE III & TYPE IV



SECTION 6 S-8|S-8

SCALE: 1½" = 1'-0"

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALES MUST BE USED.

1/4" = 1'-0" 5' 0 5'

3/4" = 1'-0" 1' 0 1' 2' 3'

1-1/2" = 1'-0" 12' 6' 0 1'

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y., N.Y.

E. LAING 4-23-87
PRINCIPAL DATE
NAVFACENGCOM

ENGINEER IN CHARGE BRANCH MANAGER

R.A. Rice 5/6/87
FIRE PROTECTION ENGINEER DATE
T.R. RUTHERFORD PE 5/8/87
CRITERIA MANAGER DATE
APPROVED

SATISFACTORY AS TO DOSS: P.R. Price 6/30/87 DATE

FOR COMMANDER, NAVFACENGCOM 6/9/87

DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350

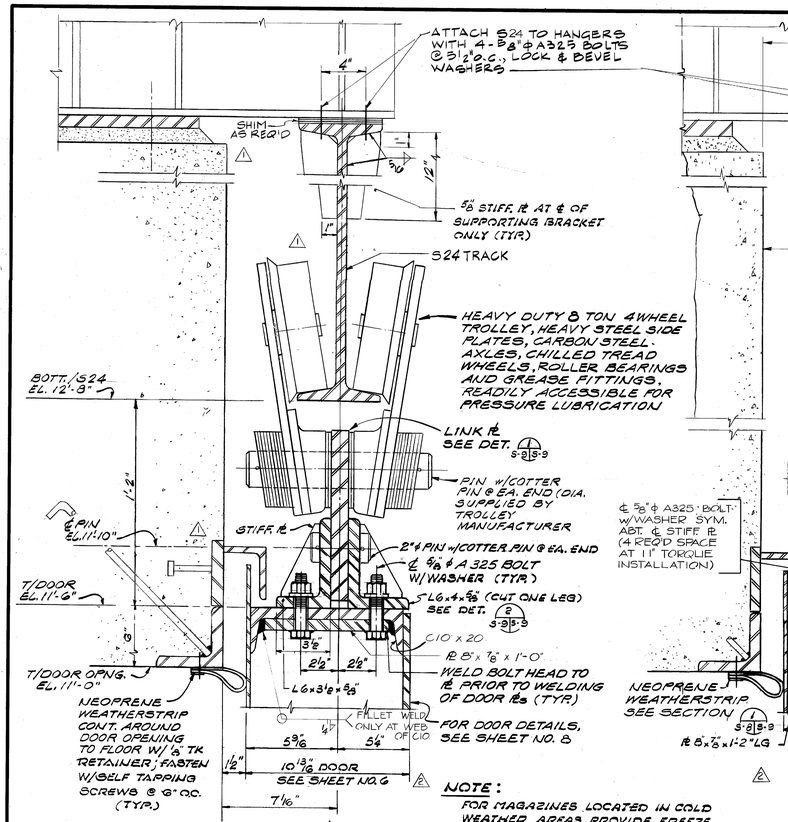
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

BOX MAGAZINE TYPE F

SLIDING DOOR DETAILS

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	S-8
F	80091	1404548	
SCALE AS NOTED	CONTRACT NO	SHEET	8
CATEGORY CODE 421	SPEC NO NFSS-M44	OF	15



NOTES:

DOOR REQUIREMENTS

1. ALL DUST, DIRT, OIL, GREASE, WELD FLUX RESIDUE, SALTS, RUST SCALE, LOOSE RUST & OTHER FOREIGN MATTER THAT MAY INHIBIT PAINT BOND TO STRUCTURAL STEEL SHALL BE REMOVED IN THE SHOP IN ACCORDANCE WITH THE STEEL STRUCTURES PAINTING COUNCIL (SSPC), SP6.
2. EXCEPT FOR CONTACT SURFACES OF MOVING PARTS ALL EXPOSED SURFACES OF STRUCTURAL STEEL SHALL RECEIVE ONE 1.5 MIL (DRY) COAT OF ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645. UNEXPOSED SURFACES SHALL RECEIVE 1.0 MIL (DRY) COAT OF ASPHALT VARNISH CONFORMING TO FEDERAL SPECIFICATION TT-V-51. ALL PRIMER COATING SHALL BE PERFORMED IN THE SHOP.
3. ALL EXPOSED SURFACES OF STRUCTURAL STEEL SHALL RECEIVE TWO FIELD COATS OF PAINT WITH A MINIMUM THICKNESS OF 4.0 MIL (DRY) CONFORMING TO FEDERAL SPECIFICATION TT-P-102 OR TT-P-37.
4. DOOR & HARDWARE SHALL BE SHOP ASSEMBLED TO INSURE PROPER CONTACT, CLEARANCES, ALIGNMENT & ENGAGEMENT OF THE DOORS & SMOOTH OPERATION OF LOCKING & DRIVE MECHANISMS. THIS ASSEMBLY WILL BE AT NO ADDITIONAL COST TO THE GOVERNMENT.
5. ALL WEATHER STRIPPING SHALL BE CLOTH INSERTED NEOPRENE, ONE-EIGHTH INCH (⅛") THICK, & CONFORMING TO THE FEDERAL SPECIFICATION HH-P-151.
6. ALL PINS, BEARINGS, GEARS, SPROCKETS, SHAFTS AND SHEAVES SHALL BE DESIGNED FOR A DOOR LIFE OF 50 000 HOURS OF OPERATION

ELECTRICAL REQUIREMENTS

1. ALL EQUIPMENT GROUNDING CONDUCTORS & STRAPS SHALL BE SIZED IN COMPLIANCE WITH THE NEC.
2. GROUNDING CONDUCTORS SHALL BE PROVIDED WITH GREEN INSULATION EQUIVALENT TO THE INSULATION ON THE ASSOCIATED PHASE CONDUCTORS.
3. FEEDER & BRANCH CIRCUIT GROUNDING CONDUCTORS SHALL BE BRAZED TO THE GROUNDING BAR OR CONNECTED WITH APPROVED PRESSURE CONNECTORS.
4. WIRING SHALL BE INSTALLED IN A RIGID CONDUIT.

DOOR OPERATOR REQUIREMENTS

1. DESIGN REQUIREMENTS - (a) OUTDOOR OPERATION (b) 80 PSF WIND LOAD, (c) 15 FPM VELOCITY FOR OPENING AND CLOSING DOORS.
2. GEARS, SHAFTS AND SPROCKETS - ALL GEARS IN SPEED REDUCTION UNIT SHALL BE THE MACHINED TYPE. GEARS AND SHAFTS SHALL BE MOUNTED WITH LONG-LIFE BEARINGS, ENCLOSED IN OIL TIGHT HOUSING AND OPERATED AT ALL TIMES IN AN OIL BATH. ALL SPROCKETS SHALL BE FROM STEEL PLATES.
3. CASTINGS - SHEAVES & OTHER CASTINGS SHALL BE CLOSE GRAINED ALLOYED GRAY CAST IRON.
4. ROLLER CHAINS - ALL ROLLER CHAINS SHALL BE HEAVY DUTY, HIGH STRENGTH, PRECISION ASSEMBLED, AND DESIGNED FOR A SAFETY FACTOR OF 5.
5. MOTOR - THE MOTOR SHALL OPERATE NORMALLY AT NO MORE THAN 75 PERCENT OF RATED CAPACITY.
6. LIMIT SWITCHES - TYPE: MECHANICALLY ACTUATED. LIMIT SWITCH SHALL STOP THE DOOR AT END OF TRAVEL (OPEN AND CLOSED POSITIONS)
7. PUSH BUTTON STATION - PUSH BUTTON UNIT SHALL BE A CONSTANT PRESSURE, HEAVY DUTY WEATHER PROOF CONTROL STATION
8. EMERGENCY OPERATION - PROVIDE A CHAIN-GEAR MECHANISM FOR MANUAL OPERATION OF THE DOOR IN THE EVENT OF AN ELECTRICAL FAILURE. A MOTOR DISCONNECT, USING A MECHANICAL DEVICE, SHALL BE PROVIDED FOR EMERGENCY OPERATION

Installation Procedure for Interior Locking System:

1. INSTALL THE DOOR LOCK ASSEMBLY ON THE WALL AT 4'-6" ABOVE FINISHED FLOOR.
2. OPEN & CLOSE MAGAZINE DOOR SEVERAL TIMES AND EACH TIME THE DOOR STOPS IN CLOSED POSITION MARK THE LOCATION OF CONTACT OF 1⅛" STEEL ROD ON 6"x6" STEEL BLOCK.
3. REMOVE ANY OBSTRUCTIONS TILL THE CONTACT LOCATION IS SATISFACTORILY ESTABLISHED.
4. DRILL HOLE IN STEEL BLOCK AS INDICATED IN SECTION 11 S-9 S-9

1" = 1'-0" 0 1' 2'

1-1/2" = 1'-0" 12" 6" 0 1

3" = 1'-0" 12" 9" 6" 3" 0

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALES MUST BE USED.

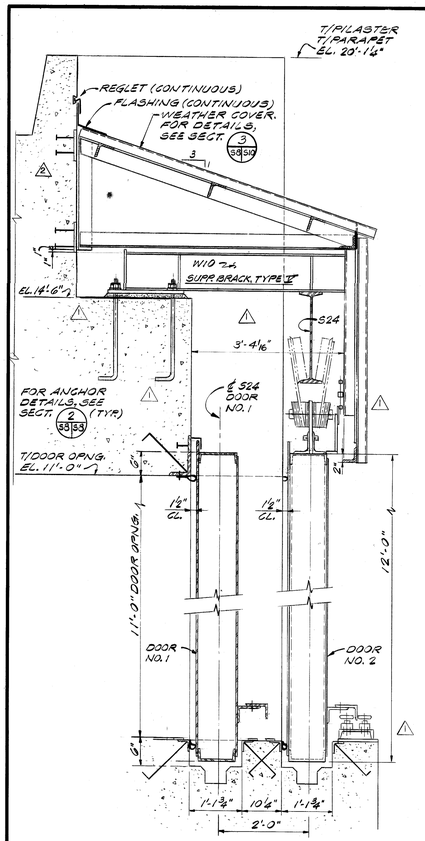
SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
	REVISIONS			
2	DIMEN'S, WELDS	DGC	1/29/91	
1	REV. DIM. FROM 7'1/4" TO 7'1/16" IN SECTION 1	FJN	5/16/88	ND

AMMANN & WHITNEY, CONSULTING ENGINEERS, 96 MORTON ST. N.Y., N.Y.
PRINCIPAL: E. LAING 4-23-87 DATE
NAVFACENGCOM APPROVAL
EXAMINER IN CHARGE: [signature] BRANCH MANAGER
[signature] 5/18/87
FIRE PROTECTION ENGINEER: T.R. RUTHERFORD AE 5/28/87 DATE
CRITERIA MANAGER APPROVAL
[signature] 6/30/87
DOE'S DATE

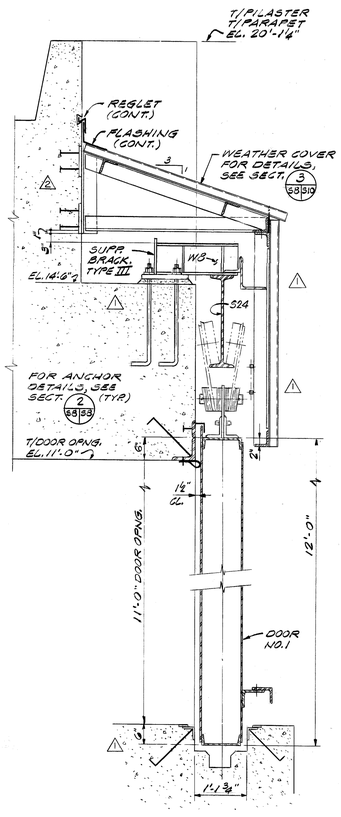
STATE OF NEW YORK — EDMUND BRUCE LAING — LICENSED PROFESSIONAL ENGINEER

DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350
NAVAL FACILITIES ENGINEERING COMMAND
STANDARD DRAWING
BOX MAGAZINE TYPE F
SLIDING DOOR DETAILS

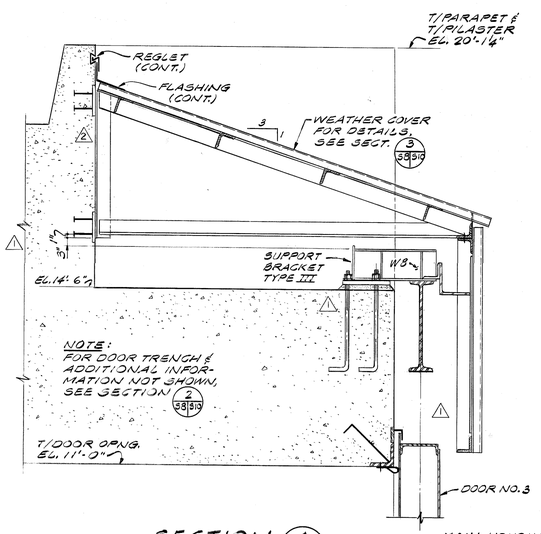
SIZE: F — CODE IDENT NO: 80091 — NAVAC DRAWING NUMBER: 1404549 — S-9
SCALE: AS NOTED — CONTRACT NO
CATEGORY CODE: 421 — SPEC NO: NFSS-M44 — SHEET 9 OF 15



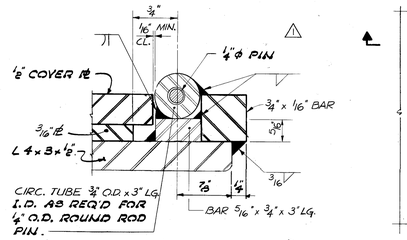
SECTION 1
SCALE: 3/4"=1'-0" S8 S10



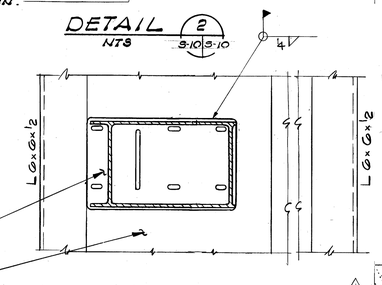
SECTION 2
SCALE: 3/4"=1'-0" S8 S10



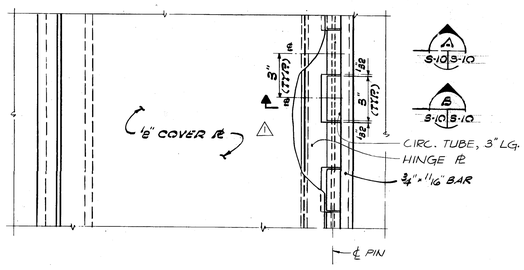
SECTION 4
SCALE: 3/4"=1'-0" S8 S10



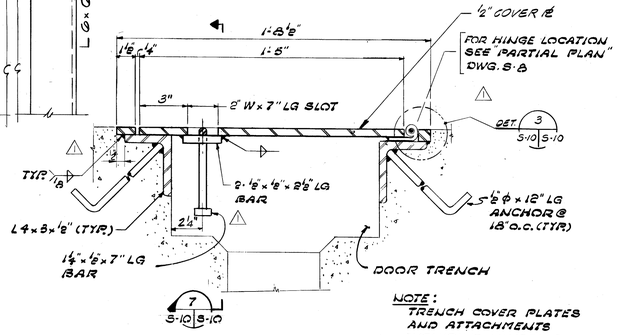
DETAIL 2
NTS S10 S10



SECTION 4
SCALE: 1½"=1'-0" S10 S10

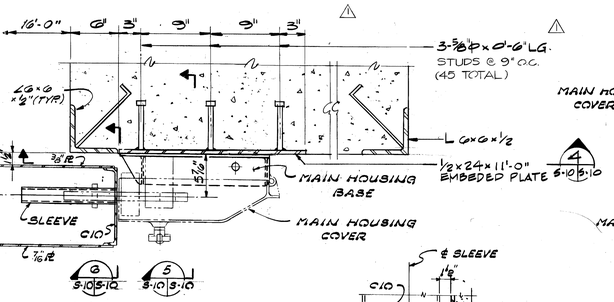


PARTIAL PLAN
(DOOR TRENCH COVER PLATES)
SCALE: 3"=1'-0"

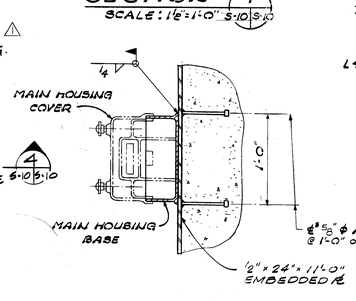


NOTE:
TRENCH COVER PLATES AND ATTACHMENTS INCLUDING HINGES SHALL BE GALVANIZED.

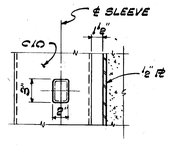
SECTION A
SCALE: 3"=1'-0" S10 S10



DETAIL 1
"HIGH SECURITY S8 S10
HASP" (NAPEC #1338)
SCALE: 1½"=1'-0"



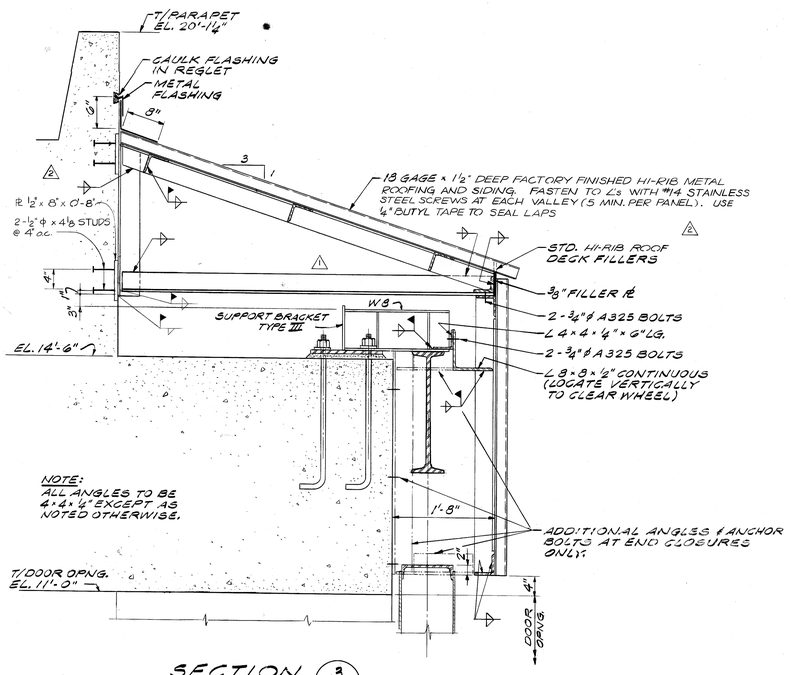
SECTION 5
SCALE: 1½"=1'-0" S10 S10



SECTION 6
SCALE: 1½"=1'-0" S10 S10

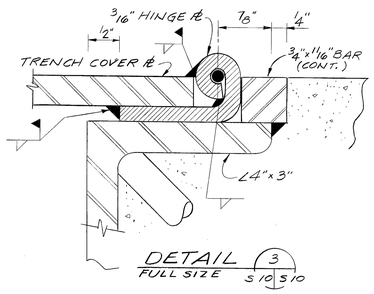
SECTION B
SCALE: 3"=1'-0" S10 S10

SECTION 7
SCALE: 3"=1'-0" S10 S10



NOTE:
ALL ANGLES TO BE 4"x4"x¼" EXCEPT AS NOTED OTHERWISE.

SECTION 3
SCALE 1"=1'-0" S8 S10



DETAIL 3
FULL SIZE S10 S10

NOTE:
HIGH SECURITY HASP ON DOOR #3 SHALL BE NAPEC 1832 UNIVERSAL HASP, GOVT FURNISHED & SHALL BE INSTALLED IN ACCORDANCE WITH NAVAMPROENGCEN PUBLICATION "STANDARD PLANS FOR HIGH SECURITY HASPS AND INTRUDER DETECTION SYSTEMS ASHORE" INSTALLATION PROCEDURE FOR THE HASP SHALL FOLLOW STEPS 1 THRU 8 LISTED ON NAPEC STANDARD DWGS 1446.

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1-1/2" = 1'-0"	12" 6" 0 1'
3/4" = 1'-0"	1' 0 1' 2' 3'
1" = 1'-0"	1' 0 1' 2'
3" = 1'-0"	12" 9" 6" 3" 0

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
2	GENERAL REVISION	DGC	1-30-91	
1	GENERAL REVISION	FJW	8-24-88	ND

REVISIONS

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.N.Y.

E. LAING 4-23-87
PRINCIPAL DATE

NAVFACENGCOM
ENGINEER IN CHARGE BRANCH MANAGER

R.A. Lee 5/8/87
FIRE PROTECTION ENGINEER DATE

T.R. RUTHERFORD AE 5/8/87
CRITERIA MANAGER DATE

APPROVED 6/24/87
FOR COMMANDER, NAVFACENGCOM

SATISFACTORY AS DRAWN
DOES 6/20/87
DATE

STATE OF NEW YORK
EDWARD GRUCCI, L.A.
PROFESSIONAL ENGINEER

DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350

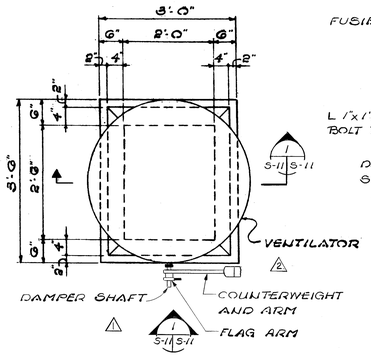
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

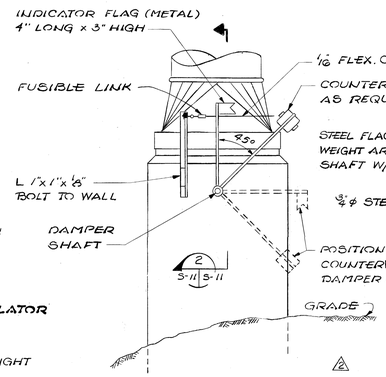
BOX MAGAZINE TYPE F

SLIDING DOOR DETAILS

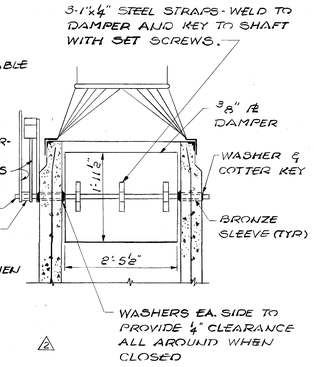
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404550	S-10
SCALE AS NOTED	CONTRACT NO		SHEET 10 OF 15
CATEGORY CODE 421	SPEC NO NFSS-M44		



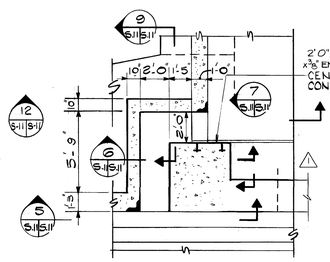
DETAIL 1
SCALE: 3/4" = 1'-0"



ELEVATION 1
SCALE: 3/4" = 1'-0"

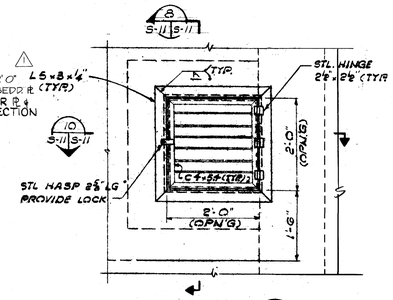


SECTION 2
SCALE: 3/4" = 1'-0"

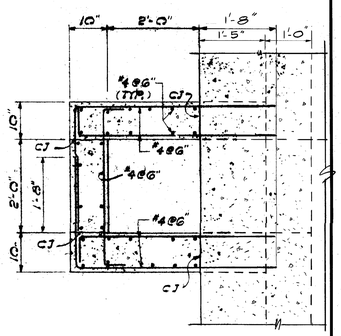


DETAIL 4
SCALE: 1/4" = 1'-0"

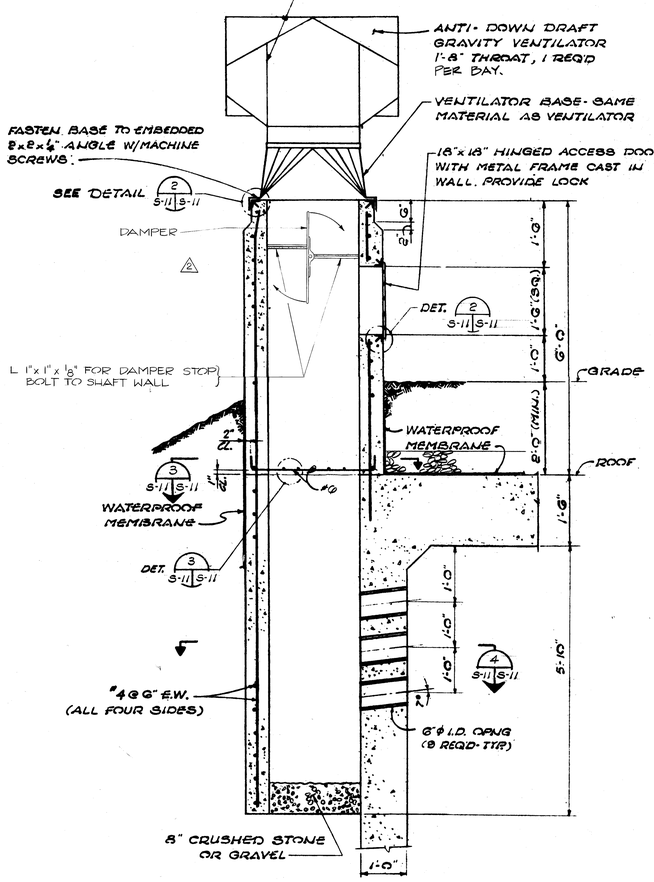
DETAIL OF AIR INTAKE DUCT



SECTION 5
SCALE: 3/4" = 1'-0"

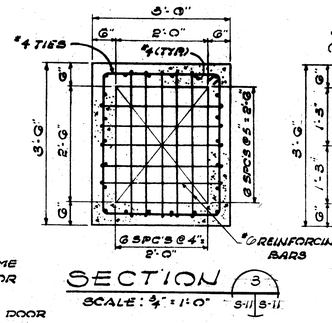


SECTION 6
SCALE: 3/4" = 1'-0"

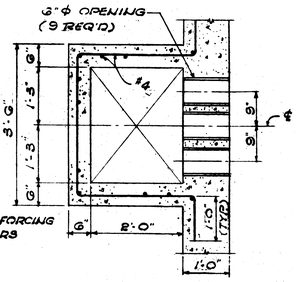


SECTION 1
SCALE: 3/4" = 1'-0"

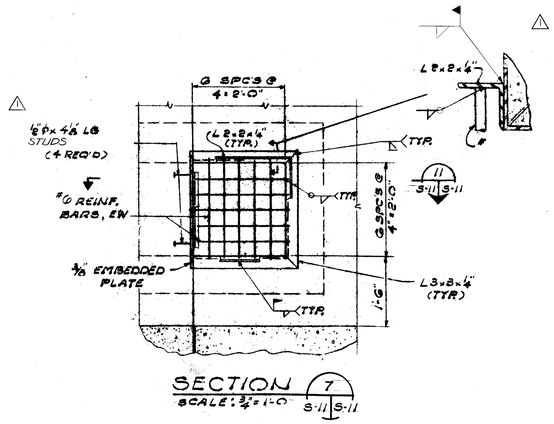
DETAILS OF VENTILATOR SHAFT



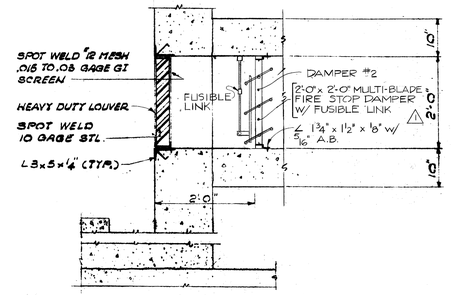
SECTION 3
SCALE: 3/4" = 1'-0"



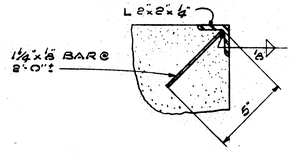
SECTION 4
SCALE: 3/4" = 1'-0"



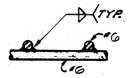
SECTION 7
SCALE: 3/4" = 1'-0"



SECTION 8
SCALE: 3/4" = 1'-0"



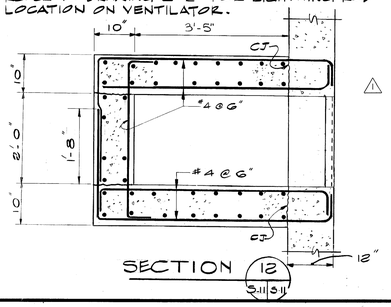
DETAIL 2
SCALE: 3"=1'-0"



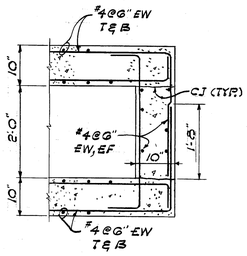
DETAIL 3
M.T.S.

NOTES:

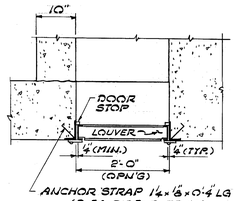
1. ALL DAMPER & SHAFT ASSEMBLIES SHALL OPERATE FREELY AND POSITIVELY.
2. FUSIBLE LINKS SHALL HAVE MELTING POINT OF 160° TO 165° F. BREAKING STRENGTH SHALL BE SUITABLE FOR LOADS IMPOSED BY COUNTERWEIGHTS.
3. ALL SET SCREWS AND MACHINE SCREWS SHALL BE BRASS.
4. DESIGN FOR VENTILATOR IS BASED ON A STEADY WIND SPEED OF 85 M.P.H.
5. REFER TO DRAWING E-2 FOR LIGHTNING ROD LOCATION ON VENTILATOR.



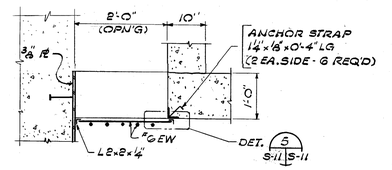
SECTION 12



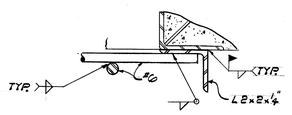
SECTION 9
SCALE: 3/4" = 1'-0"



SECTION 10
SCALE: 3/4" = 1'-0"



SECTION 11
SCALE: 3/4" = 1'-0"



DETAIL 5
NTS

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

1/4" = 1'-0" 5' 0 5'

3/4" = 1'-0" 1' 0 1' 2' 3'

3" = 1'-0" 12" 9" 6" 3" 0

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
2	GENERAL REVISION	FJW	6-24-88	ND
1	GENERAL REVISION	FJW	8-24-88	ND

REVISIONS

DESIGNED BY: P.B. Price 6/30/88 DATE

AMMANN & WHITNEY CONSULTING ENGINEERS 96 MORTON ST. N.Y.N.Y.

E. LAING 4.23.87 PRINCIPAL DATE

NAVFACENGCOM ENGINEER IN CHARGE BRANCH MANAGER

FIRE PROTECTION ENGINEER DATE

CRITERIA MANAGER DATE

APPROVED FOR COMMANDER, NAVFACENGCOM DATE 5/9/88

DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350

NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

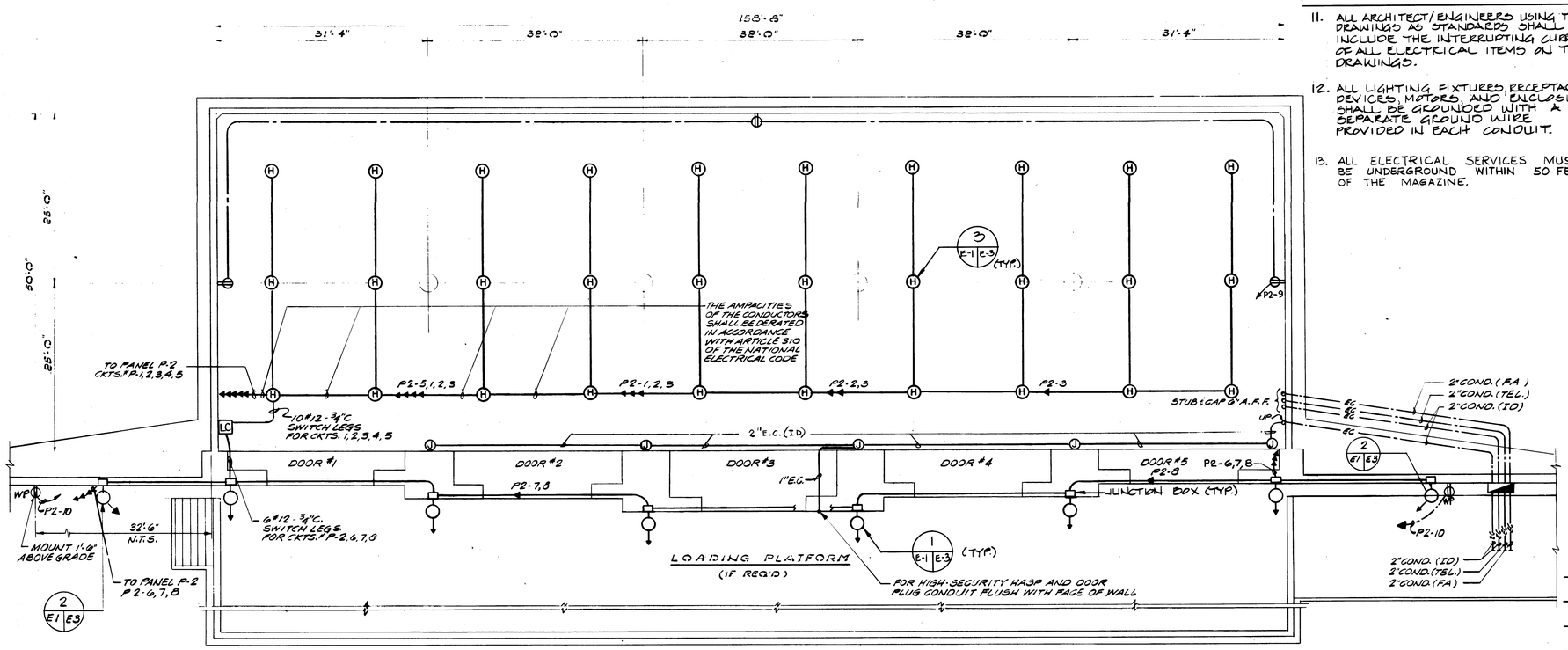
BOX MAGAZINE TYPE F

VENTILATOR DETAILS

SIZE F | CODE IDENT NO 80091 | NAVFAC DRAWING NUMBER 1404551 | S-11

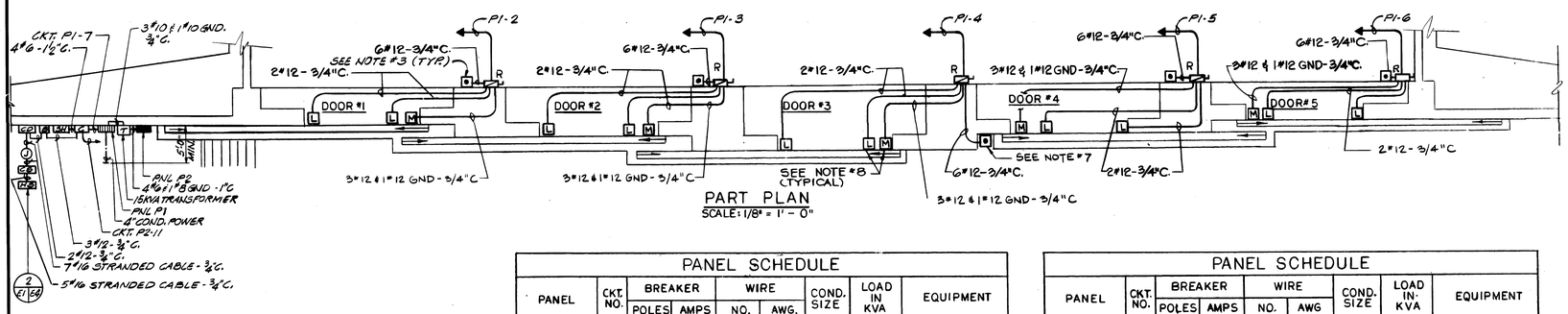
SCALE AS NOTED | CONTRACT NO | SHEET 11

CATEGORY CODE 421 | SPEC NO NFSS-M44 | OF 15



FLOOR PLAN

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



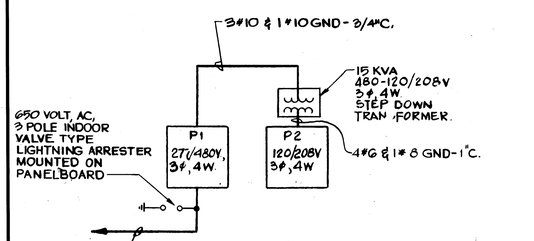
PART PLAN

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

PANEL SCHEDULE

PANEL	CKT. NO.	BREAKER POLES	BREAKER AMPS	WIRE NO.	WIRE AWG.	COND. SIZE	LOAD IN KVA	EQUIPMENT
P1 277/480 V. 3Ø, 4W	—	3	100	—	—	—	62.5	MAIN BREAKER
	1	3	30	3	10	3/4"	15.0	TRANSFORMER
	2	3	20	3	12	3/4"	1.0	DOOR #1
	3	3	20	3	12	3/4"	1.0	DOOR #2
	4	3	20	3	12	3/4"	1.0	DOOR #3
	5	3	20	3	12	3/4"	1.0	DOOR #4
	6	3	20	3	12	3/4"	1.0	DOOR #5
	7	3	60	4	6	3/4"	40.5	HEAT TRACING CONTACTOR
	8	3	20	—	—	—	1.0	SPARE
	9	3	20	—	—	—	1.0	
	10	3	20	—	—	—	—	

TOTAL CONNECTED LOAD 62.5 KVA



POWER SUPPLY DIAGRAM

PANEL SCHEDULE

PANEL	CKT. NO.	BREAKER POLES	BREAKER AMPS	WIRE NO.	WIRE AWG	COND. SIZE	LOAD IN KVA	EQUIPMENT
P2 120/208 3Ø, 4W	—	3	60	—	—	—	15.0	MAIN BREAKER
	1	1	20	2	12	3/4"	1.2	MAGAZINE LTG.
	2	1	20	2	12	3/4"	1.2	
	3	1	20	2	12	3/4"	1.2	
	4	1	20	2	12	3/4"	1.2	
	5	1	20	2	12	3/4"	1.2	
	6	1	20	2	12	3/4"	.9	EXTERIOR LTG.
	7	1	20	2	12	3/4	.9	
	8	1	20	2	12	3/4"	.6	
	9	1	20	2	12	3/4"	.6	RECEPTACLES
(GFI)	10	1	20	2	12	3/4"	.4	RECEPTACLES
SEE NOTE #10	11	1	20	2	12	3/4"	.1	HEAT TRACING CONTROL
	12	1	20	—	—	—	.5	SPARE
	13	1	20	—	—	—	.5	
	14	1	20	—	—	—	.5	

TOTAL CONNECTED LOAD 15 KVA

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

1/8" = 1'-0" 5' 0 5' 10' 15'

GENERAL NOTES:

11. ALL ARCHITECT/ENGINEERS USING THESE DRAWINGS AS STANDARDS SHALL INCLUDE THE INTERRUPTING CURRENTS OF ALL ELECTRICAL ITEMS ON THEIR DRAWINGS.
12. ALL LIGHTING FIXTURES, RECEPTACLES, DEVICES, MOTORS, AND ENCLOSURES SHALL BE GROUNDED WITH A SEPARATE GROUND WIRE PROVIDED IN EACH CONDUIT.
13. ALL ELECTRICAL SERVICES MUST BE UNDERGROUND WITHIN 50 FEET OF THE MAGAZINE.

1. FOR INFORMATION NOT INDICATED ON DRAWINGS SEE SPECIFICATION.
2. MINIMUM SIZE WIRE SHALL BE #12 AWG. 90°C. RATED TYPE THHN MINIMUM SIZE CONDUIT SHALL BE 3/4" RIGID GALVANIZED STEEL.
3. ALL ELECTRICAL EQUIPMENT AND INSTALLATION INSIDE THE MAGAZINE SHALL BE IN ACCORDANCE WITH THE N.E.C. NFPA 70 REQUIREMENTS FOR HAZARDOUS LOCATIONS CLASS I, DIVISION II GROUP D, AND CLASS II, DIVISION II, GROUP G.
4. ALL EXPLOSIONPROOF RECEPTACLES SHALL BE PROVIDED WITH A MATING EXPLOSIONPROOF PLUG.
5. LIGHTING CONTROL CENTER SHALL CONTAIN THE REQUIRED AMOUNT OF SINGLE POLE, 20A., 125V. SWITCHES TO CONTROL THE MAGAZINE INTERIOR LIGHTS AND THE OUTSIDE FLOODLIGHTS. THE LIGHTING CONTROL CENTER SHALL HAVE A NEMA 7 TYPE ENCLOSURE.
6. FOR DOOR WIRING DIAGRAMS SEE SCHEMATIC DIAGRAMS ON DRAWING E-3.
7. DOOR CONTROL PUSHBUTTON STATION SHALL BE MOUNTED 4'-0" ABOVE PLATFORM.
8. THE EXACT LOCATION OF DOOR OPERATOR AND DOOR SWITCHES SHALL BE IN ACCORDANCE WITH DOOR MANUFACTURERS REQUIREMENTS.
9. FOR LIGHTING FIXTURE SCHEDULE DWG. E-3.
10. FOR HEAT TRACING SEE DWG. E-4. CKT. P2-11 IS REQUIRED ONLY WHEN HEAT TRACING IS PROVIDED AT SITE. IF HEAT TRACING IS NOT INSTALLED THEN CKT. P2-11 SHALL REMAIN A SPARE.

SYMBOLS (THIS DRAWING ONLY)

- (H) CEILING MOUNTED 150W. H.P.S. LTG. FIXTURE WITH STANDARD DOME REFLECTOR.
- WALL MOUNTED 250W HIGH PRESSURE SODIUM MARINE TYPE FLOODLIGHT. ARROW INDICATES AIMING DIRECTION OF LUMINAIRE.
- DUPLEX RECEPTACLE 20A, 125V, 2P, 3W GROUNDING TYPE.
- TEL/FA/ID TERMINAL CABINET, 30"W x 36"H x 6"D, IN NEMA 4 ENCLOSURE, WITH TAMPER SWITCH.
- 277/480V, 3Ø, 4W. PANEL P-1. IN NEMA 4 ENCLOSURE
- (T) 480V.-120/208V. 3Ø. 4W, STEP-DOWN TRANSFORMER, IN NEMA 4, ENCLOSURE, WALL MOUNTED
- 120/208V, 3Ø, 4W LIGHTING PANEL, IN NEMA 4 ENCLOSURE
- WIRES IN RIGID STEEL CONDUIT CONCEALED IN CEILING OR WALL.
- WIRES IN RIGID STEEL CONDUIT CONCEALED IN FLOOR, OR BELOW GRADE
- WIRES IN RIGID STEEL CONDUIT EXPOSED.
- EC — EMPTY RIGID STEEL CONDUIT RUN UNDERGROUND ENCASED IN CONCRETE ENVELOPE WITH A MINIMUM 3" COVER.
- COND.(C) CONDUIT
- LIGHTNING ARRESTOR
- W.P. WEATHERPROOF
- P2-1 → CKT. TO PANEL (CKT.#1 TO PNL P2)
- (LC) LIGHTING CONTROL CENTER
- (M) DOOR OPERATOR INCLUDING MOTOR AND BRAKE
- (R) 480V. 3P COMBINATION REVERSING STARTER WITH NON FUSED DISCONNECT SWITCH AND 120V. CONTROL TRANSFORMER. STARTER SHALL BE NEMA SIZE 1, RATED AT 10 HP, WITH 30A. FUSE CLIP, IN A NEMA 7 ENCLOSURE.
- DOOR CONTROL PUSHBUTTON STATION WITH KEY OPERATOR SWITCH AND "OPEN", "CLOSE", "STOP" MOMENTARY PUSHBUTTONS SHALL BE OILTIGHT.
- (L) DOOR LIMIT SWITCH
- E.C. EMPTY CONDUIT
- N.T.S. NOT TO SCALE
- TEL. TELEPHONE
- G.F.I. CIRCUIT BREAKER WITH GROUND FAULT INTERRUPTOR
- A.F.F. ABOVE FINISH FLOOR
- I.D. INTRUSION DETECTION
- F.A. FIRE ALARM
- (J) JUNCTION BOX
- (SD) SNOW DETECTOR AND TEMPERATURE CONTROLLER IN NEMA 4 ENCLOSURE. SEE DWG. E-4 AND PART. PLAN THIS SHEET.
- (SM) SNOW MELTING POWER PANEL 277/480V, 3Ø, 4W., IN NEMA 4 ENCLOSURE. SEE DWG. E-4 AND PART. PLAN THIS SHEET.
- (C) 60A., 3P, CONTACTOR WITH 120V. CONTROL COIL, IN NEMA 4 ENCLOSURE. SEE DWG. E-4 AND PART. PLAN THIS SHEET.
- (B) BY-PASS SWITCH, 2P, 125V., DOUBLE THROW SWITCH WITH GREEN INDICATING LAMP FOR MANUAL OVERRIDE INDICATION, IN NEMA 4 ENCLOSURE. SEE DWG. E-4 AND PART. PLAN THIS SHEET.
- (HS) HEATED SENSOR EMBEDDED IN PAVEMENT, SEE DWG. E-4 AND PART. PLAN THIS SHEET.
- (CS) COLD SENSOR EMBEDDED IN PAVEMENT, SEE DWG. E-4 AND PART. PLAN THIS SHEET.

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY

REVISIONS

STATE OF NEW YORK — EDWARD BRUCE LAING — LICENSED PROFESSIONAL ENGINEER

DATE PREPARED 6/30/87

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.,N.Y.

E.LAING 4-22-87
PRINCIPAL DATE

APPROVED FOR
DEPARTMENT OF THE NAVY
COMMANDER OR HEAD, ENGINEERING DIVISION

R.A. Rice 4/30/87
FIRE PROTECTION ENGINEER DATE

J.T.R. Richard PE 4/30/87
ELECTRICAL ENGINEER DATE

APPROVED
DEPARTMENT OF THE NAVY
WASHINGTON, D.C. 20360

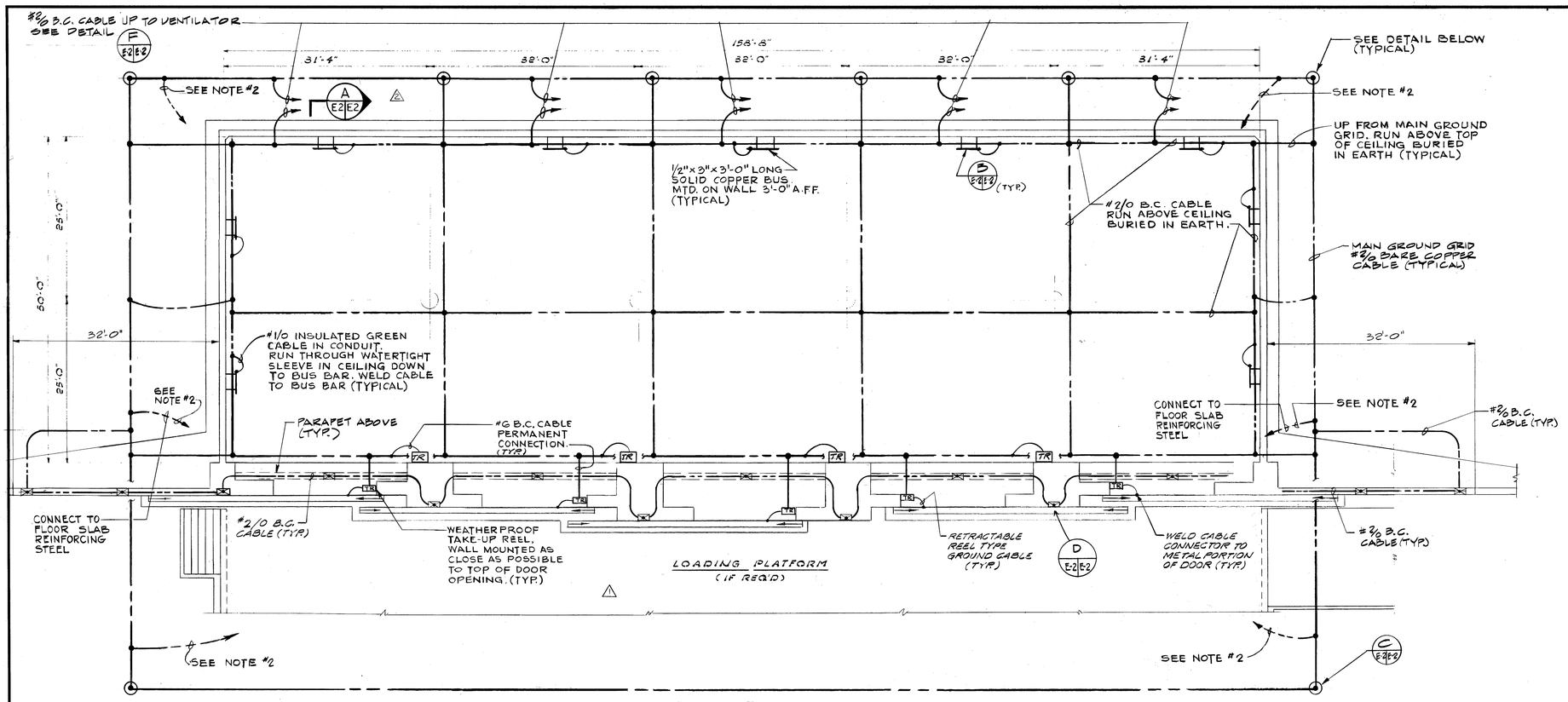
NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

BOX MAGAZINE TYPE F

LIGHTING AND POWER PLAN

CODE IDENT NO.	MAP OR DRAWING NUMBER	
F 80091	1404552	E-1
SCALE AS NOTED	CONTRACT NO	SHEET 12
CATEGORY CODE 421	SPEC NO NFSS-M44	OF 15



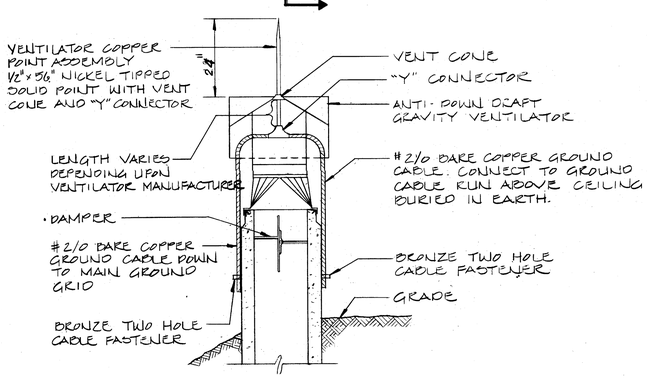
FLOOR PLAN
SCALE: 1/8" = 1'-0"

NOTES

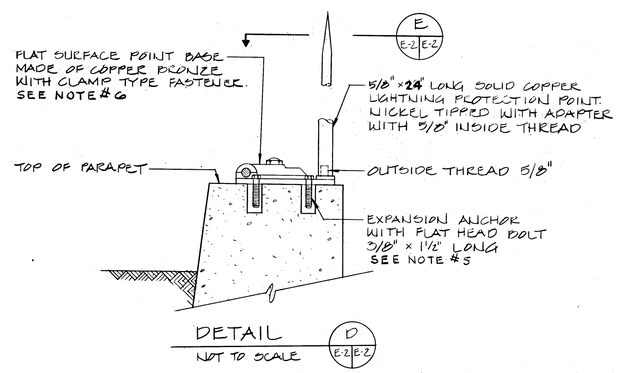
1. GROUND RODS SHALL BE COPPER-CLAD STEEL 3/4" X 10' LONG MIN..
2. ALL REINFORCING STEEL IN BUILDING AND PLATFORM IN FRONT OF BUILDING SHALL BE BONDED TO BUILDING GROUND BUS.
3. ALL METAL EQUIPMENT AND PARTS IN THE BUILDING SHALL BE BONDED TO GROUND BUS.
4. ALL BONDING CONNECTIONS SHALL BE MADE WITH #6 AWG BARE COPPER GROUND CABLE MINIMUM.
5. SETTING SHOWN IS SUGGESTED ANCHOR BOLT MOUNTING FOR LIGHTNING PROTECTION POINTS.
6. GROUND CONNECTIONS SHOWN ARE TYPICAL FOR ALL LIGHTNING PROTECTION POINTS.
7. FOR GENERAL GROUNDING & LIGHTNING PROTECTION REQUIREMENTS REFER TO NAVFAC STANDARD SPEC. M-43, SECTION 16601 AND DM 4.6.
8. LIGHTNING PROTECTION SHOWN IS FOR ONE (1) FIVE BAY STRUCTURE ONLY. LIGHTNING PROTECTION FOR MULTIPLE OR CLUSTERED STRUCTURES MUST BE SITE ADAPTED.
9. FOR GENERAL NOTES SEE DWG. E-1.
10. LIGHTNING PROTECTION POINTS SHALL BE LOCATED AS SHOWN ON THE PLAN - MAXIMUM SPACING SHALL BE 16'-0".

SYMBOLS (THIS DRAWING ONLY)

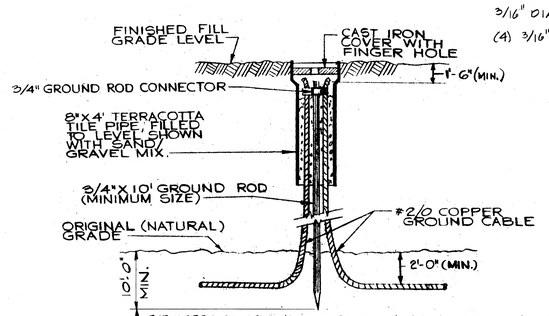
- BARE COPPER GROUND CABLE
- GROUND ROD 3/4" X 10' LG.
- COPPER GROUND BUS BAR 1/2" X 2" X 3' LG.
- TR — GROUND CABLE TAKE UP REEL. (WALL MTD.)
- EXOTHERMIC WELD.
- B.C. — BARE COPPER
- MTD. — MOUNTED
- LIGHTNING PROTECTION POINT 5/8" x 24" LONG SOLID COPPER, NICKEL TIPPED WITH ADAPTER WITH 5/8" INSIDE THREAD.



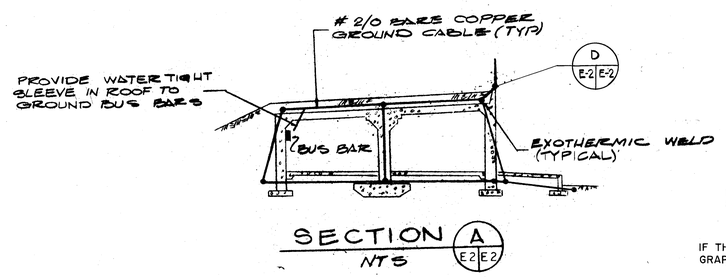
TYPICAL VENTILATOR DETAIL F E-2 E-2
NOT TO SCALE



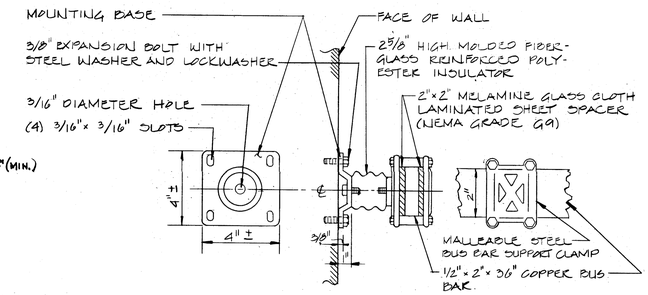
DETAIL D E-2 E-2
NOT TO SCALE



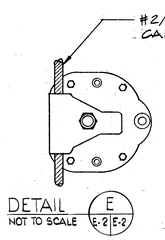
DETAIL - GROUND ROD INSTALLATION IN EARTH FILL
N.T.S. C E-2 E-2



SECTION A E-2 E-2
NTS



TYPICAL GROUND BUS BAR MOUNTING DETAIL
TWO (2) CLAMPS REQUIRED PER BUS BAR B E-2 E-2
NOT TO SCALE



DETAIL E E-2 E-2
NOT TO SCALE

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

1/8" = 1'-0" 5' 0 5' 10' 15'

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
	REVISIONS			
2	GENERAL REVISION	DGC	2-11-91	
1	GENERAL REVISION	FJW	8-24-88	ND

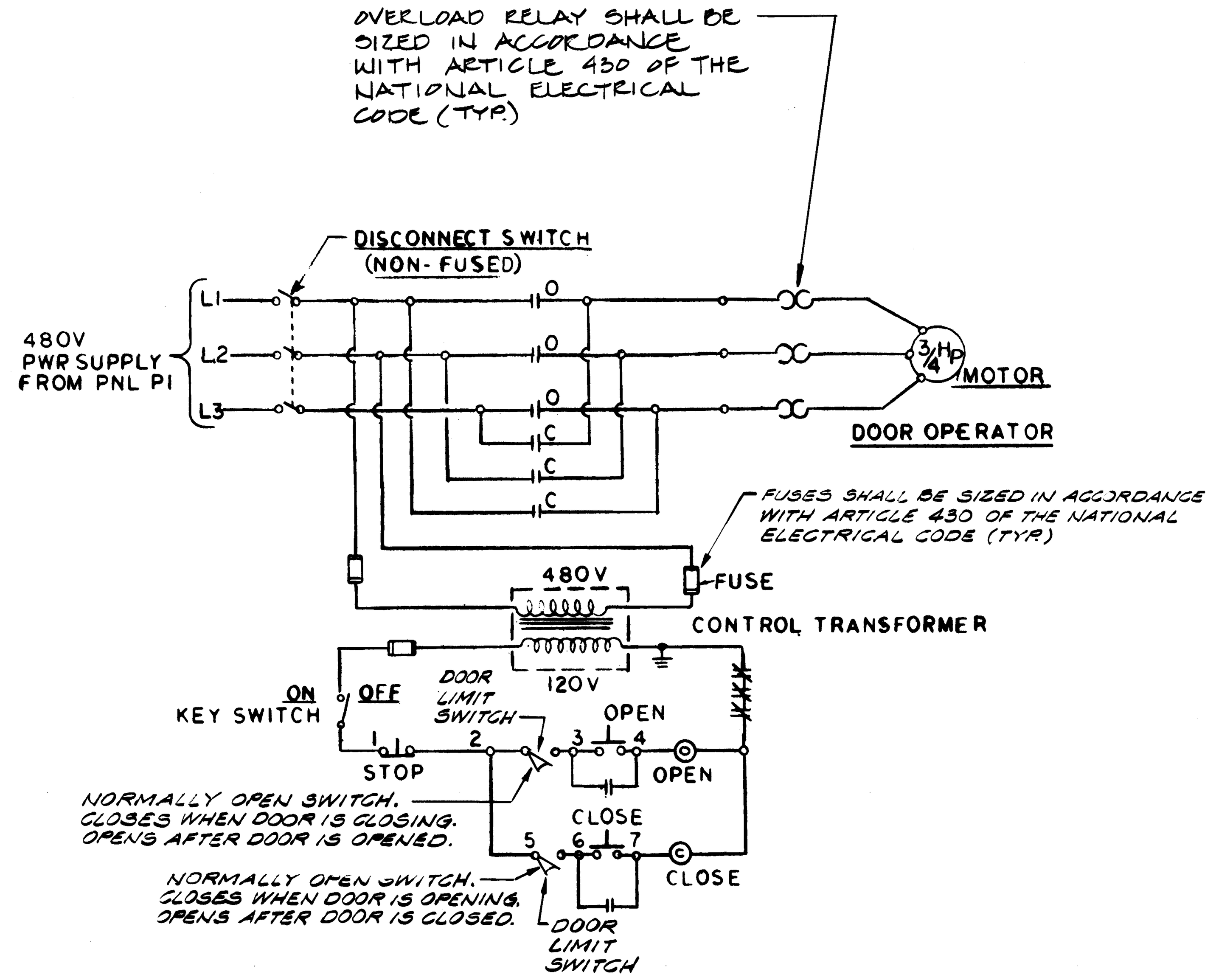
STATE OF NEW YORK — EDWARD DRUG LAING — LICENSED PROFESSIONAL ENGINEER

SATISFACTORY BY: [signature] 6/30/87 DATE
DOESB

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y.,N.Y.
E. LAING 4-23-87 PRINCIPAL DATE
NAVFACENGCOM ENGINEER IN CHARGE BRANCH/MANAGER
FIRE PROTECTION ENGINEER DATE
CRITERIA MANAGER DATE
APPROVED [signature] DATE 6/9/87 FOR COMMANDER, NAVFACENGCOM

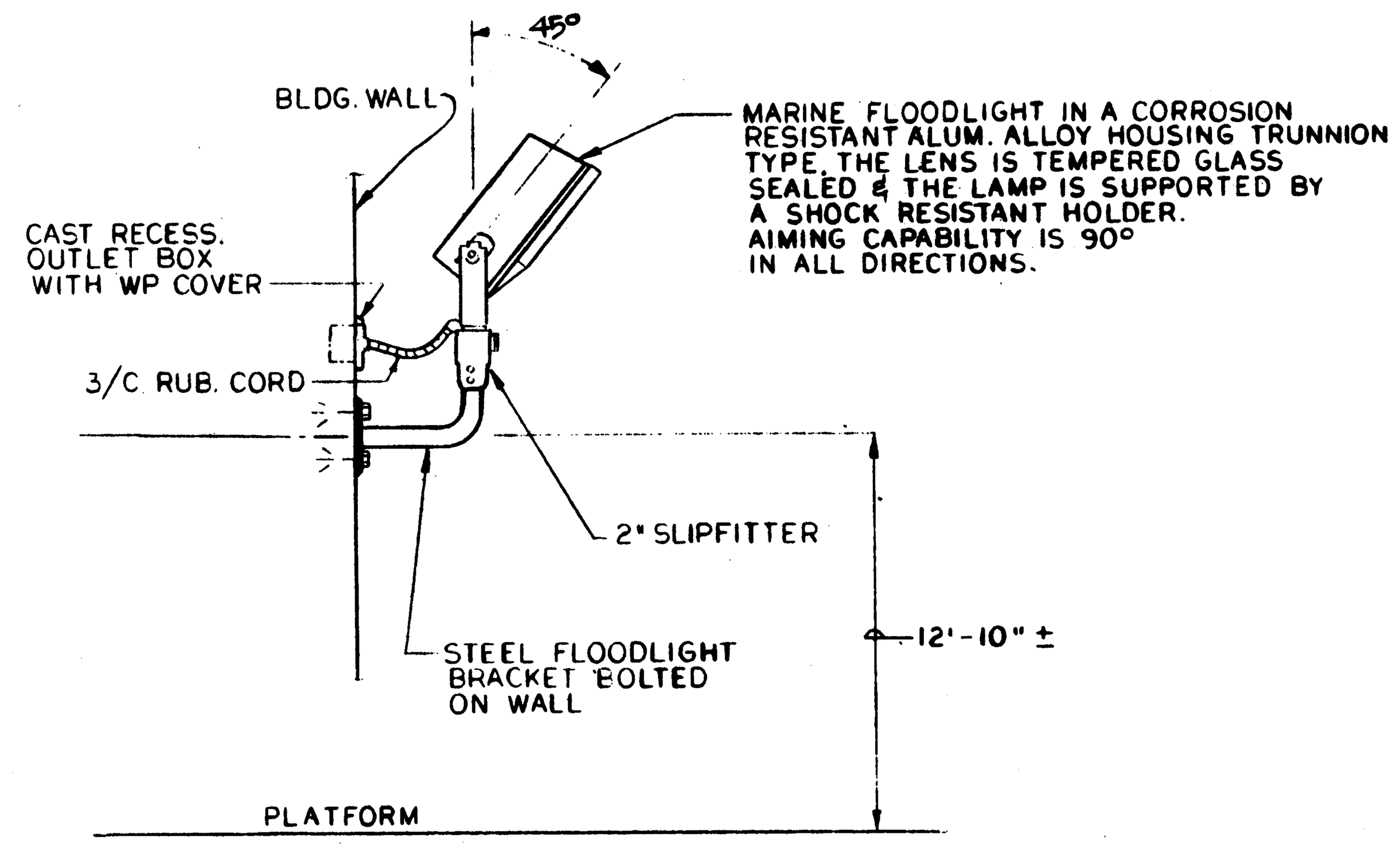
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350
NAVAL FACILITIES ENGINEERING COMMAND
STANDARD DRAWING
BOX MAGAZINE TYPE F
GROUNDING PLAN AND DETAILS

SIZE	IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404553	E-2
SCALE AS NOTED	CONTRACT NO		SHEET 13
CATEGORY CODE 421	SPEC NO NFSS-M44		OF 15



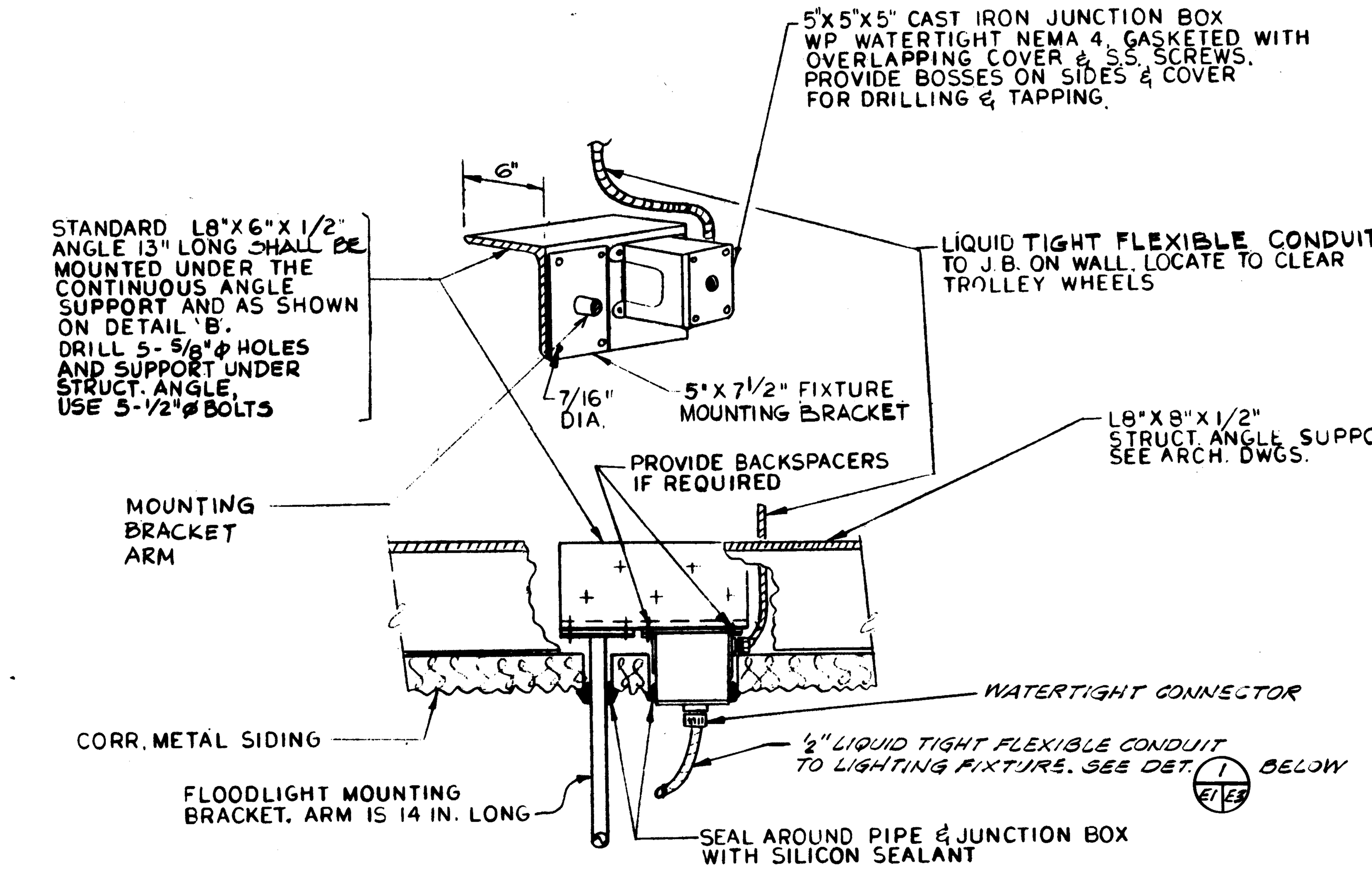
SLIDING DOOR SCHEMATIC DIAGRAM

TYPICAL FOR DOOR #1, #2, #3, #4, & #5



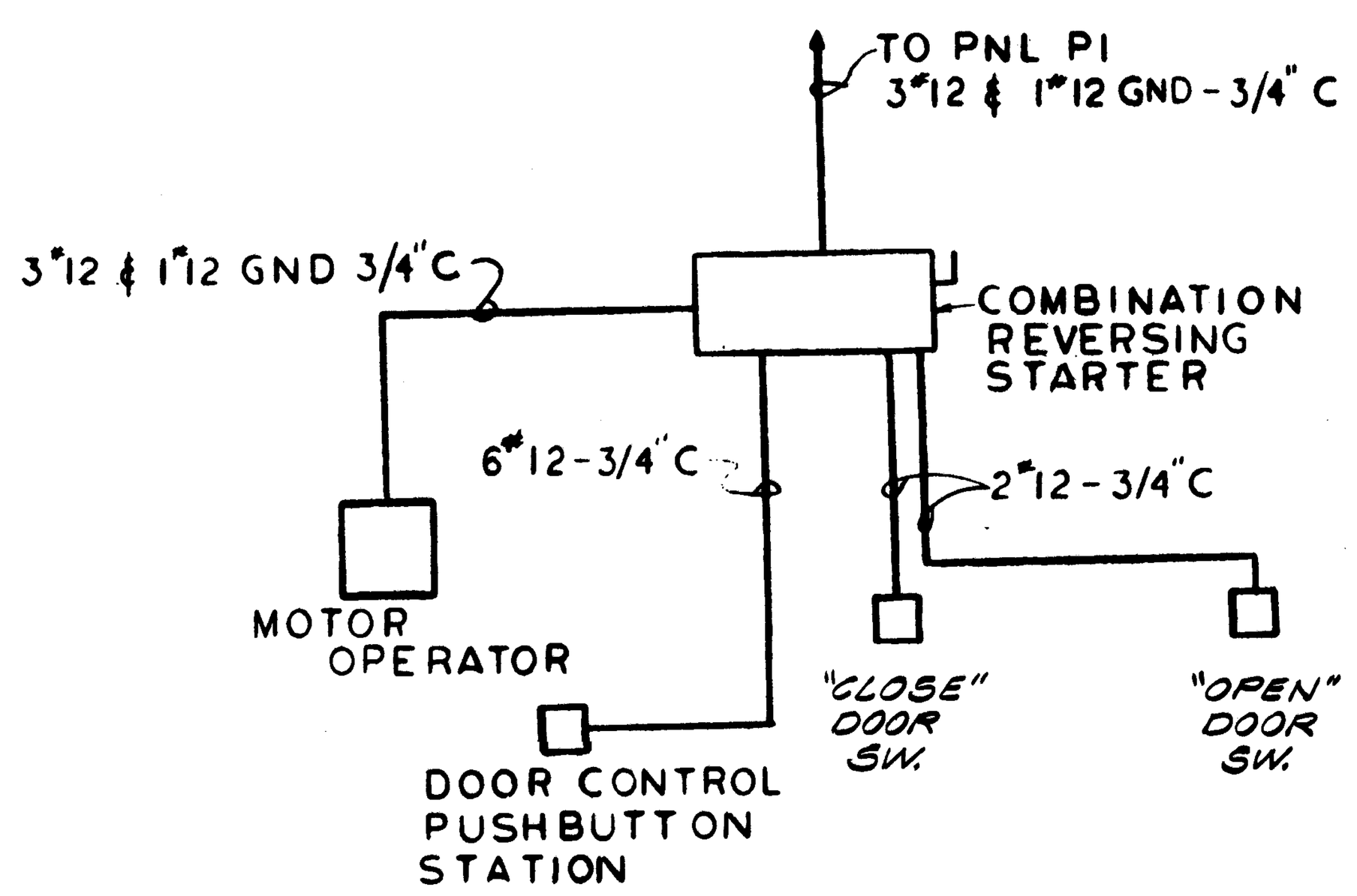
EXTERIOR FLOODLIGHT DETAIL (2 / E-1, E-3)

N.T.S.



DETAIL (4 / E-3, E-3)

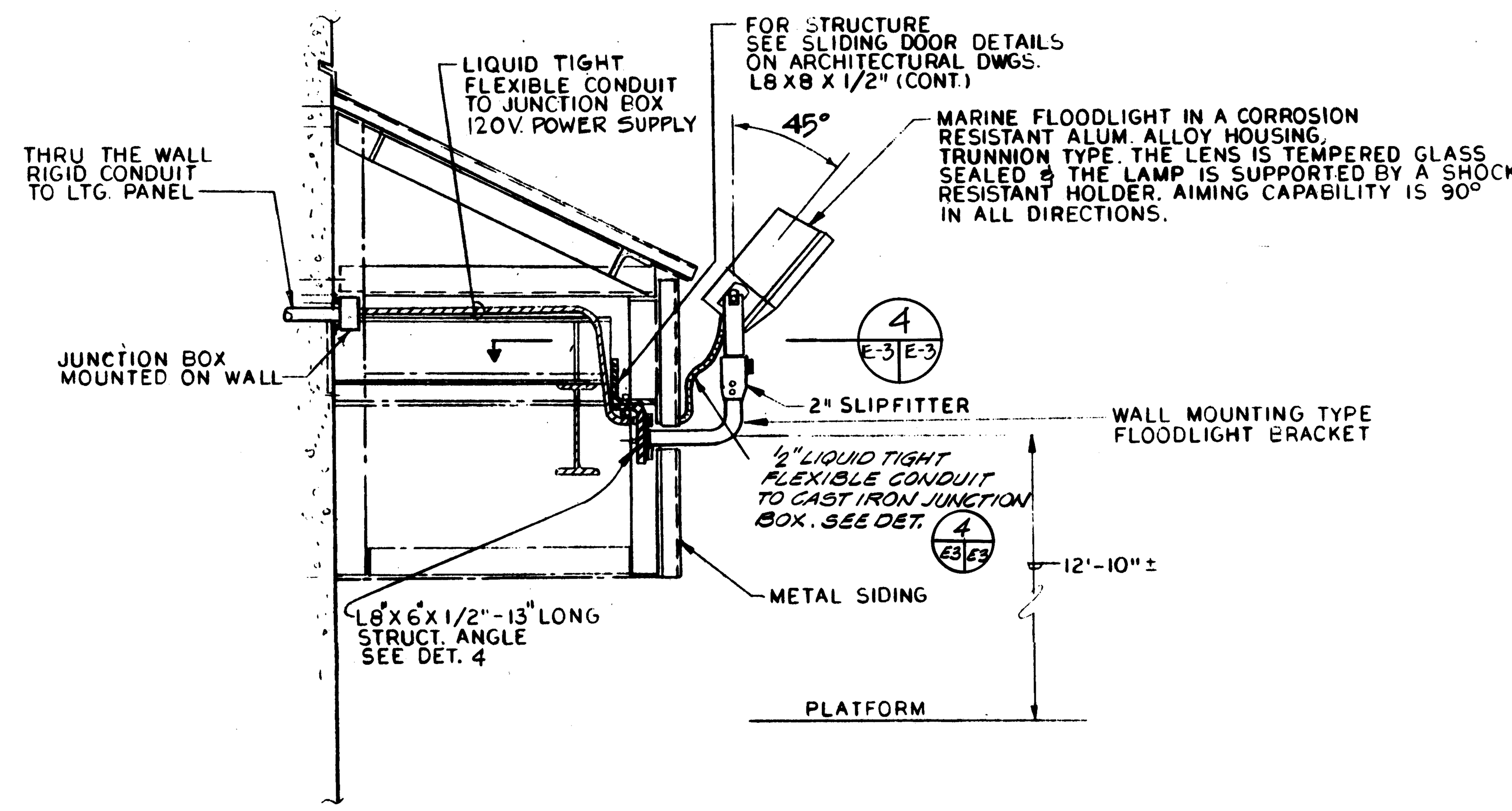
N.T.S.



SLIDING DOOR

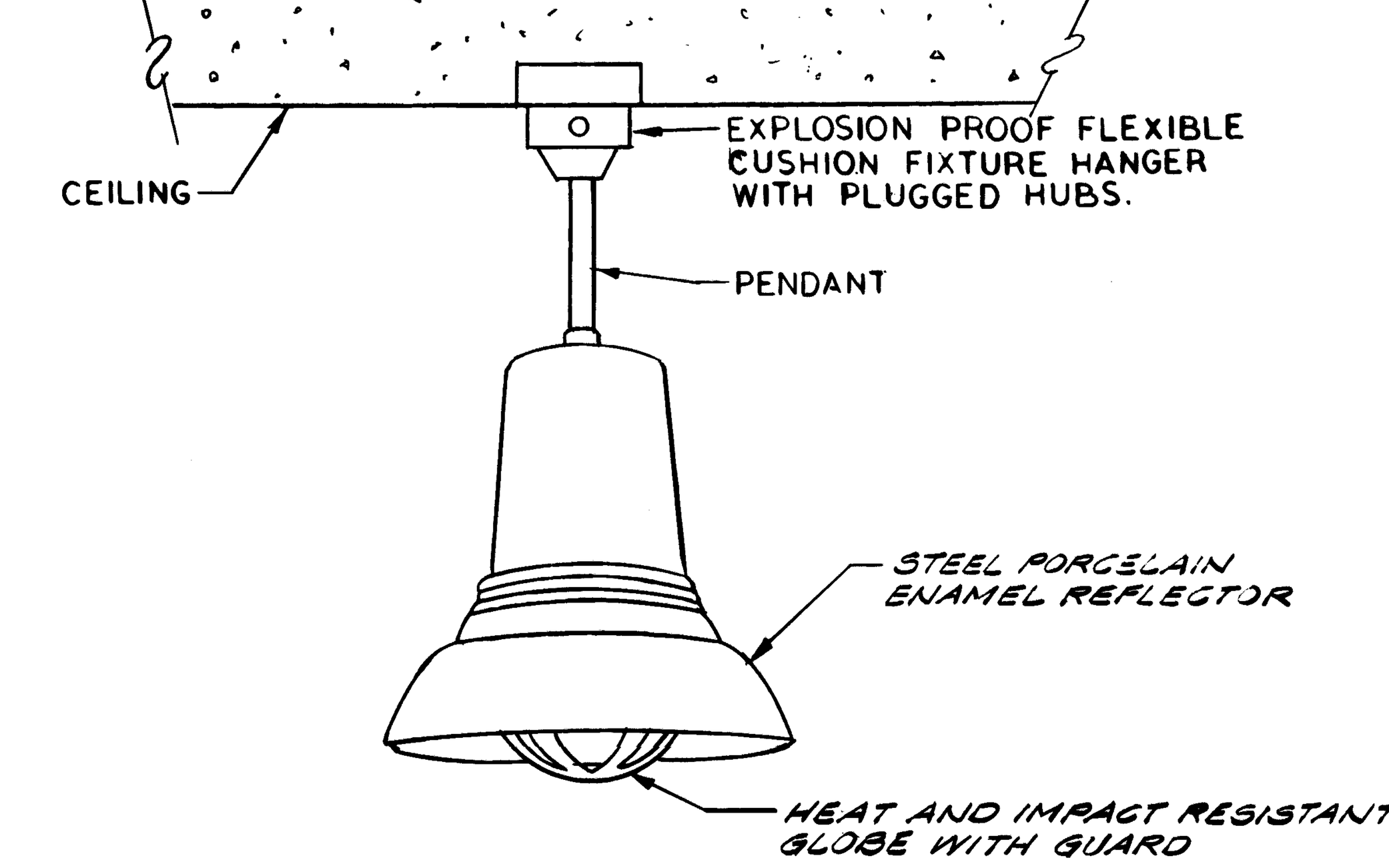
WIRING INSTALLATION DIAGRAM

TYPICAL FOR DOORS #1, #2, #3, #4, & #5



EXTERIOR FLOODLIGHT - DETAIL (1 / E-1, E-3)

N.T.S.



INTERIOR EXPLOSION PROOF LIGHTING FIXTURE MOUNTING DETAIL (3 / E-1, E-3)

N.T.S.

LIGHTING FIXTURE SCHEDULE

DESIGNATION & SYMBOL	LAMP DATA TYPE	QTY.	WATTS	VOLTAGE	TOTAL▲ WATTS	FIXTURE INFORMATION DESCRIPTION	MTG.
(H)	HIGH PRESS. SODIUM	1	150	120	200	EXPLOSION PROOF HIGH PRESSURE SODIUM FIXTURE WITH INTEGRAL BALLAST, PRISMATIC GLASS GLOBE WITH GUARD AND STEEL PORCELAIN ENAMEL STANDARD DOME REFLECTOR. GLASS GLOBE SHALL BE OF THE HEAT AND IMPACT RESISTANT TYPE.	PENDANT WITH FLEXIBLE CUSHION HANGER
←O→	HIGH PRESS. SODIUM	1	250	120	300	MARINE FLOODLIGHT IN ACCORDANCE WITH UL 595 SHALL BE CORROSION RESISTANT AND HAVE AN INTEGRAL BALLAST. THE LENS DOOR SHALL CONTAIN A HEAT AND IMPACT RESISTANT GLASS AND BE WEATHERPROOF SEALED. THE LAMP HOLDER SHALL BE SHOCK RESISTANT. FIXTURE SHALL HAVE INTEGRALLY MOUNTED PHOTO ELECTRIC CONTROL. FIXTURE SHALL BE CAPABLE OF BEING AIMED 90° IN BOTH DIRECTIONS FROM THE VERTICAL AND/OR HORIZONTAL PLANES. FIXTURE SHALL HAVE A QUARTZ AUXILIARY LAMP. ✻	TRUNNION TYPE

▲ INCLUDES BALLAST WATTAGE

✻ THE INCLUSION OF A QUARTZ AUXILIARY LAMP AND/OR PHOTO ELECTRIC CONTROL SHALL BE DETERMINED BY THE JURISDICTION AT EACH SITE

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY

REVISIONS

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y., N.Y.

E. LAING 4-23-87
PRINCIPAL DATE

DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20360

NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

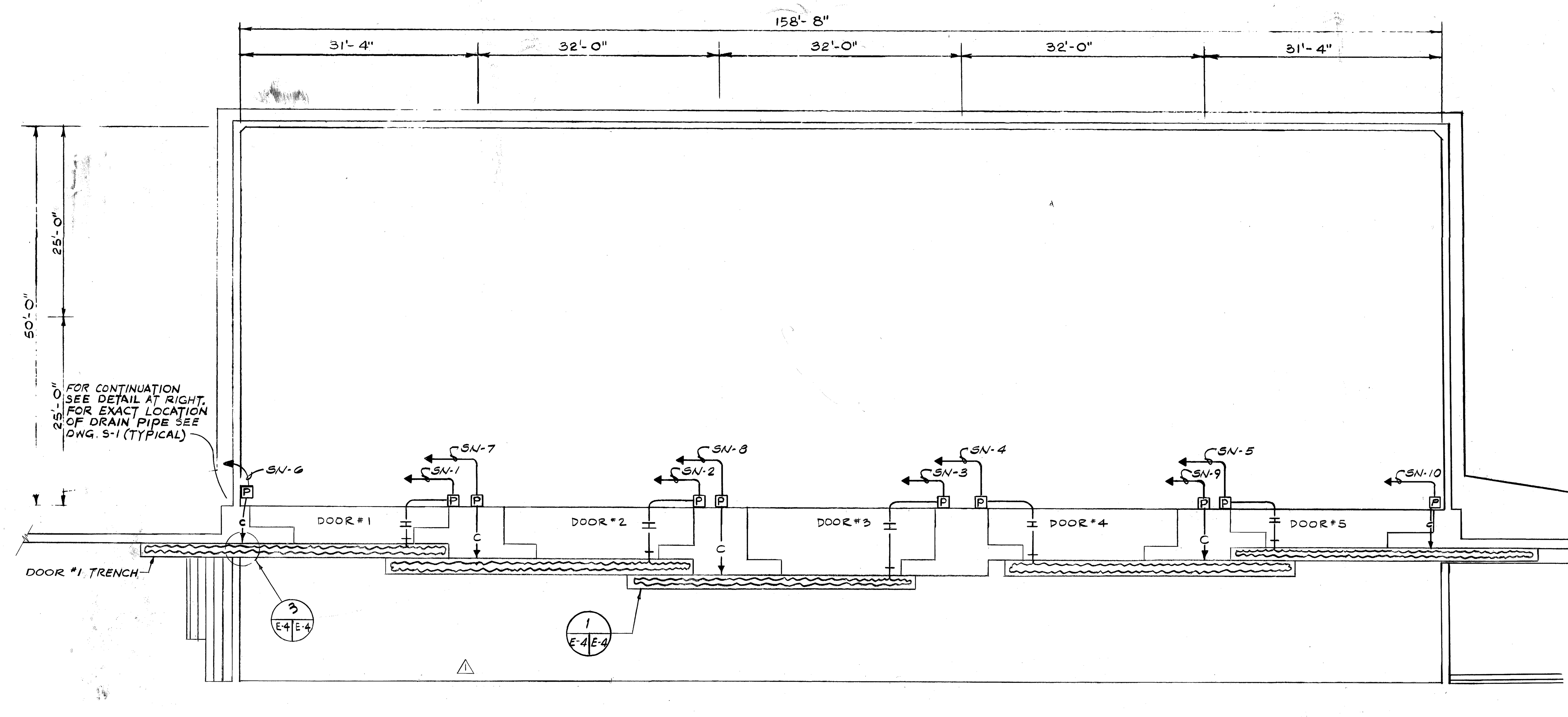
BOX MAGAZINE TYPE F

SCHEMATIC DIAGRAMS AND DETAILS

SIZE F | CODE IDENT NO 80091 | NAVFAC DRAWING NUMBER 1404554 | E-3

SCALE AS NOTED | CONTRACT NO | SHEET 14 of 15

CATEGORY CODE 421 | SPEC NO NFSS-M44



FLOOR PLAN

SCALE 1/8" = 1'-0"

NOTE:

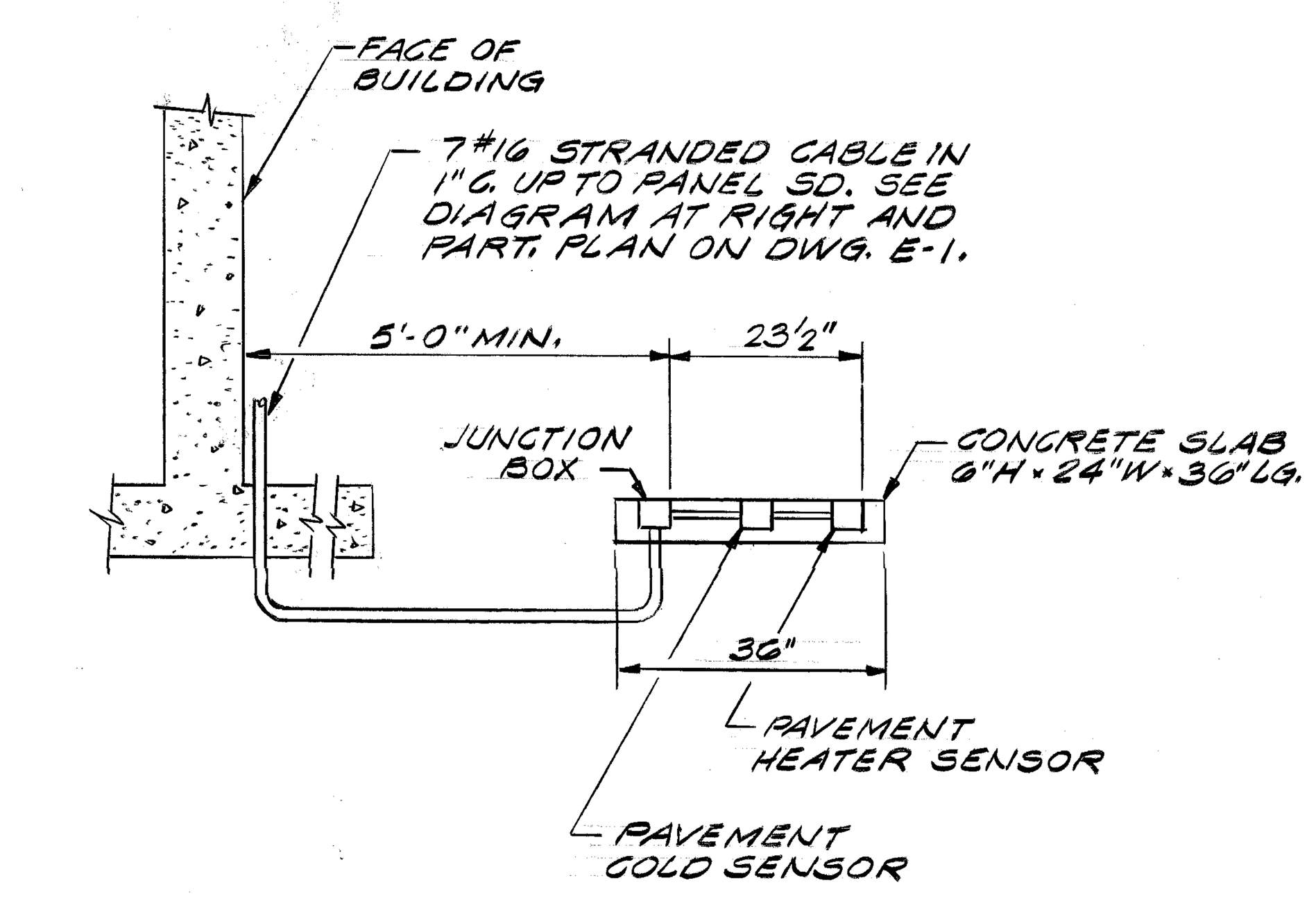
1. FOR GENERAL NOTES SEE DWG E-1.
2. FOR PNL.P1 & P2 SCHEDULE SEE DWG E-1.
3. THE BASIS OF DESIGN FOR THE SNOW MELTING SYSTEM ON THIS DRAWING IS A HEAT DENSITY OF 60W/FT.² AS PER ASHRAE
   ALL A/E'S SITE ADAPTING EACH BUILDING WHERE SNOW MELTING IS TO BE INSTALLED SHALL USE THE PROPER HEAT DENSITY FOR THAT PARTICULAR GEOGRAPHIC AREA AS PER THE ASHRAE SYSTEMS HANDBOOK - CHAPTER "SNOW MELTING", CLASS III.
4. FOR LOCATION OF SNOW MELTING PANEL SN, PANEL SD, CONTACTOR, BY-PASS SWITCH, AND SENSORS, SEE DWG. E-1.

PANEL SCHEDULE (SEE NOTE #3)								
PANEL	CKT NO.	BREAKER		WIRE		COND SIZE	LOAD IN KVA	EQUIPMENT
		POLES	AMPS	NO.	AWG			
	—	—	—	—	—	—	—	
PNL SN 277/480V., 3φ, 4W	1	1	20	2	12	3/4	4.4	HEAT TRACING DOOR #1
	2	1	20	2	12	3/4	4.4	DOOR #2
	3	1	20	2	12	3/4	4.4	DOOR #3
	4	1	20	2	12	3/4	4.4	DOOR #4
	5	1	20	2	12	3/4	4.4	DOOR #5
	6	1	15	2	12	3/4	3.3	DRAIN PIPE HEAT TRACING
	7	1	15	2	12	3/4	3.3	
	8	1	15	2	12	3/4	3.3	
	9	1	15	2	12	3/4	3.3	
	10	1	15	2	12	3/4	3.3	
	11	1	20	—	—	—	1.0	SPARE
	12	1	15	—	—	—	1.0	
	13	1	—	—	—	—	—	SPACE
	14	1	—	—	—	—	—	

TOTAL CONNECTED LOAD 40.5 KVA

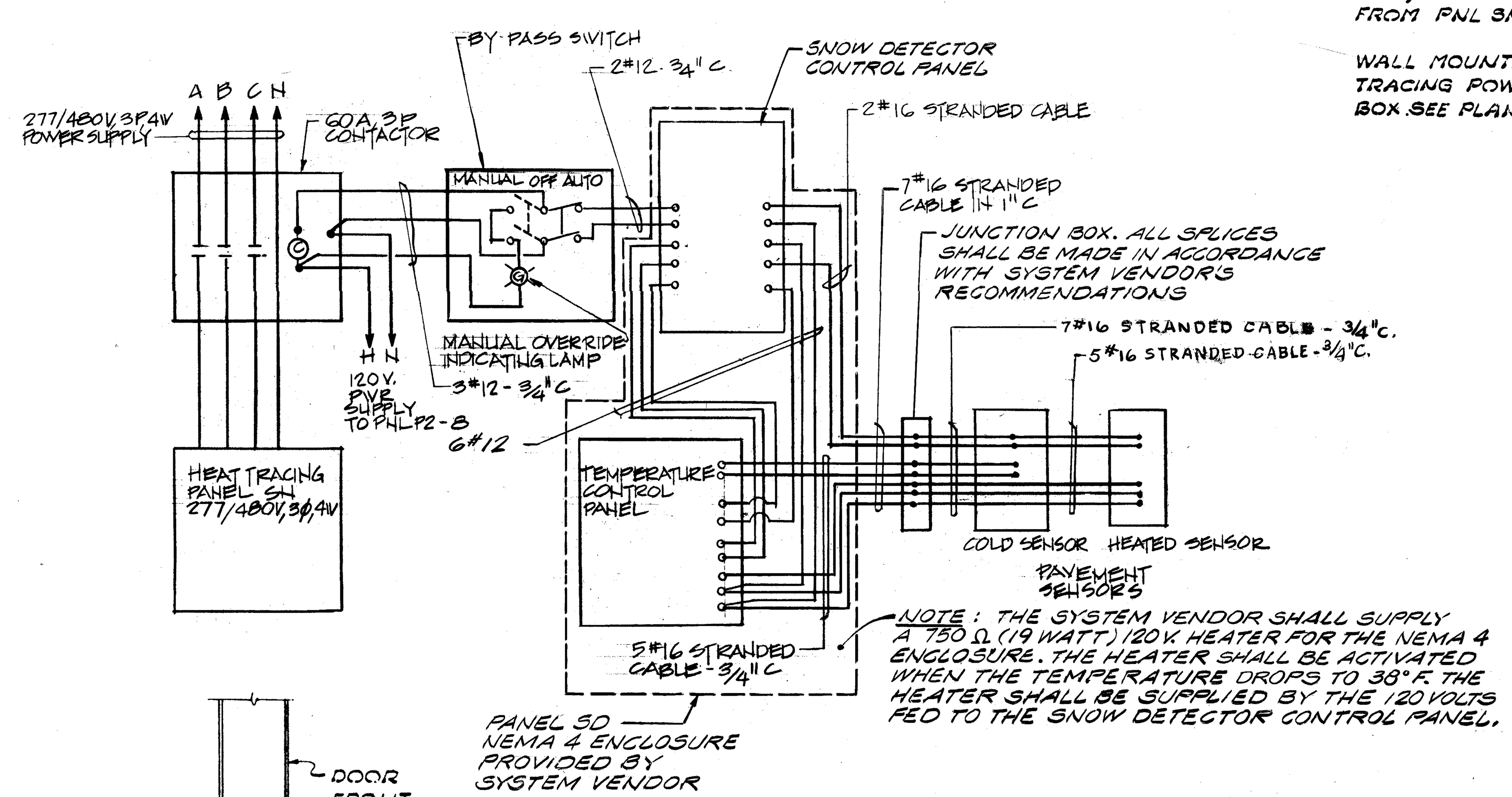
SYMBOLS (THIS DWG. ONLY)

- SN — SNOW MELTING POWER PANEL 277/480V., 3φ, 4W.
- --— — RIGID STEEL CONDUIT RUN UNDERGROUND ENCASED IN CONCRETE ENVELOPE WITH A MINIM 3" COVER.
- P — HEAT TRACING POWER KIT BOX IN EXPLOSION PROOF ENCLOSURE.
- —H— — 1½" RIGID STEEL CONDUIT WITH HEAT TRACING CABLE. CONDUIT CONCEALED IN CONCRETE FLOOR.
- ~~~ — HEAT TRACING CABLE - 277V., 1φ.
- C — 1" RIGID STEEL CONDUIT WITH DRAIN PIPE HEAT TRACING CABLE. CONDUIT EMBEDDED IN CONCRETE.
- (C) — CONTACTOR COIL 120V.
- (J) — JUNCTION BOX.



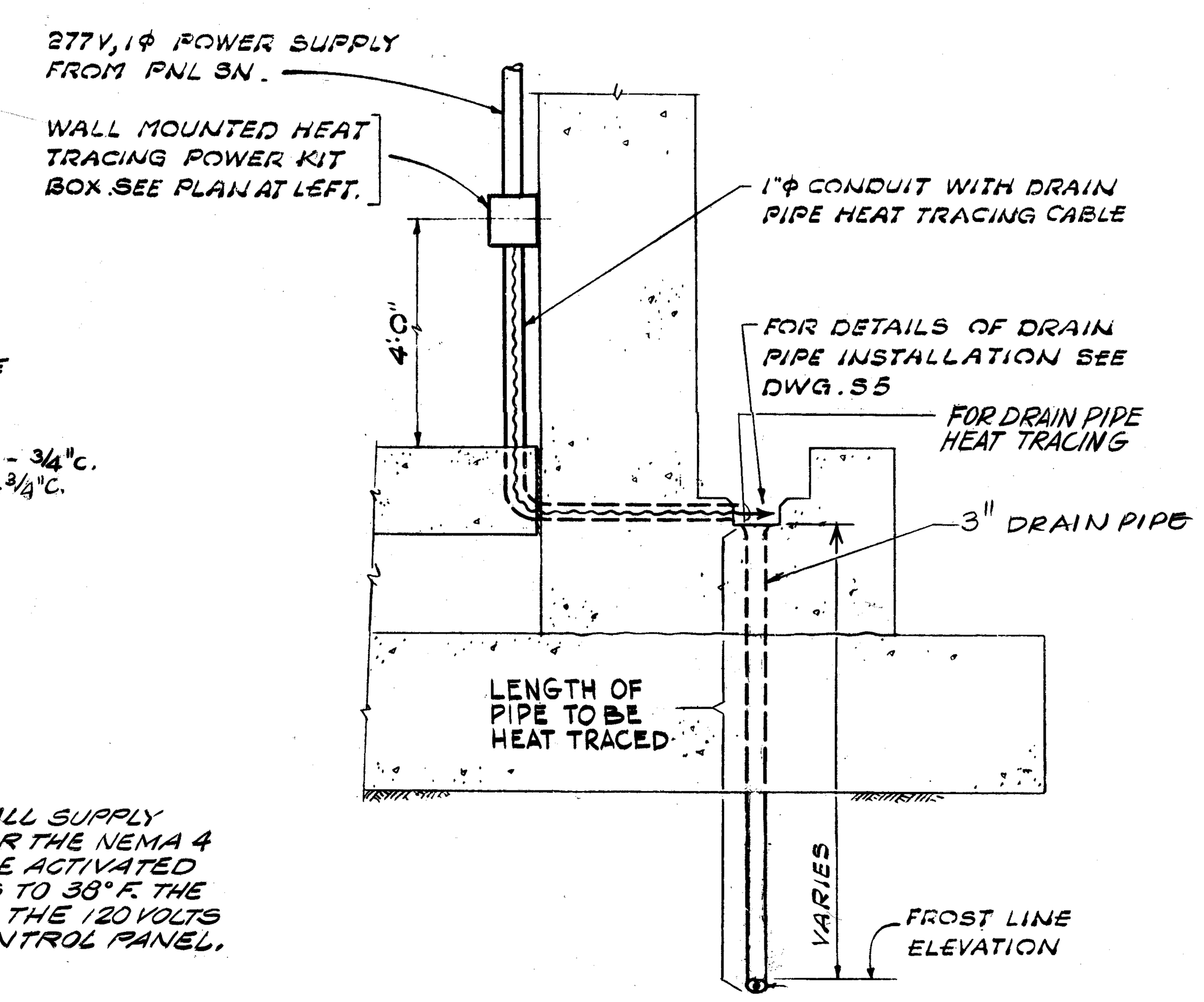
SNOW SENSORS LOCATION DETAIL (2, E-1 / E-4)

N.T.S.



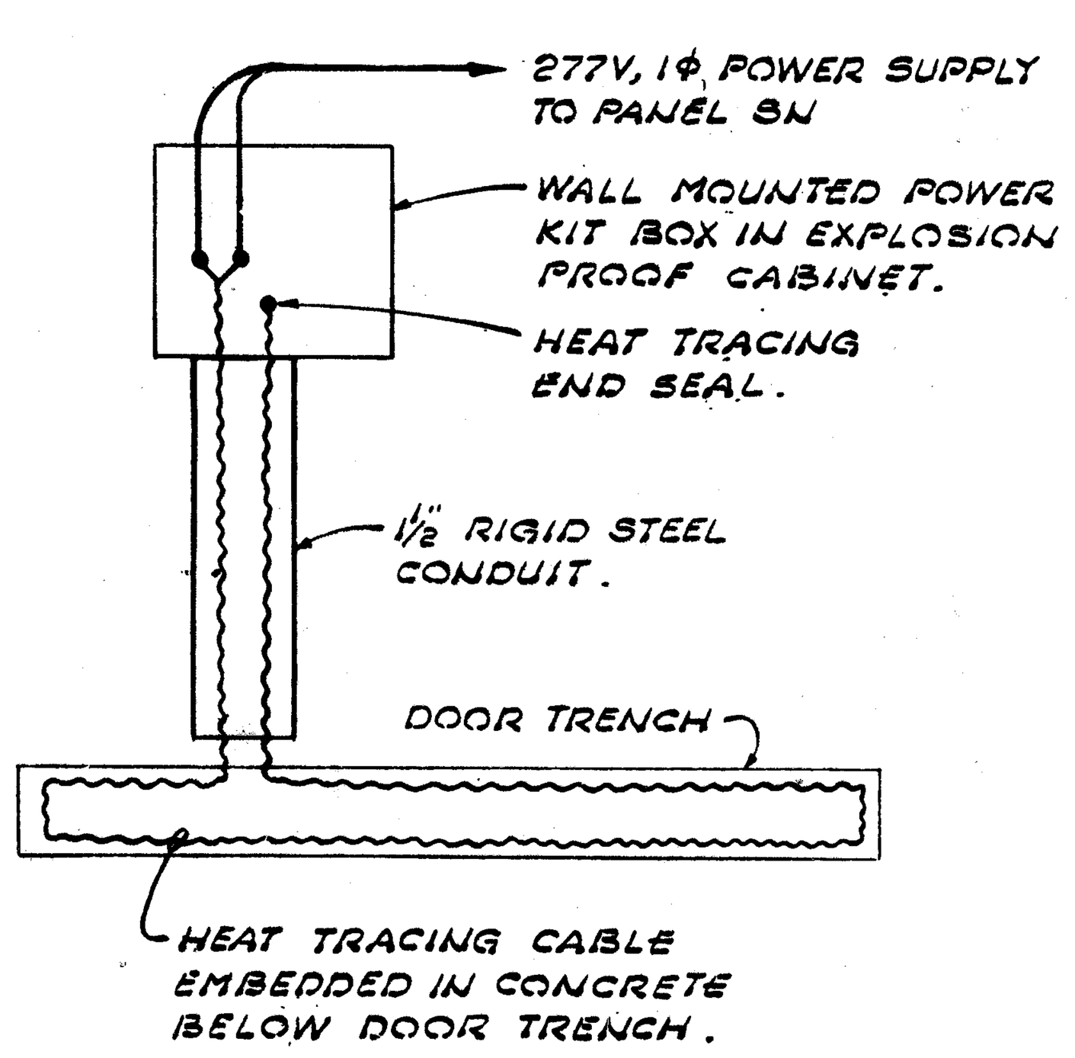
HEAT TRACING WIRING DIAGRAM

N.T.S.



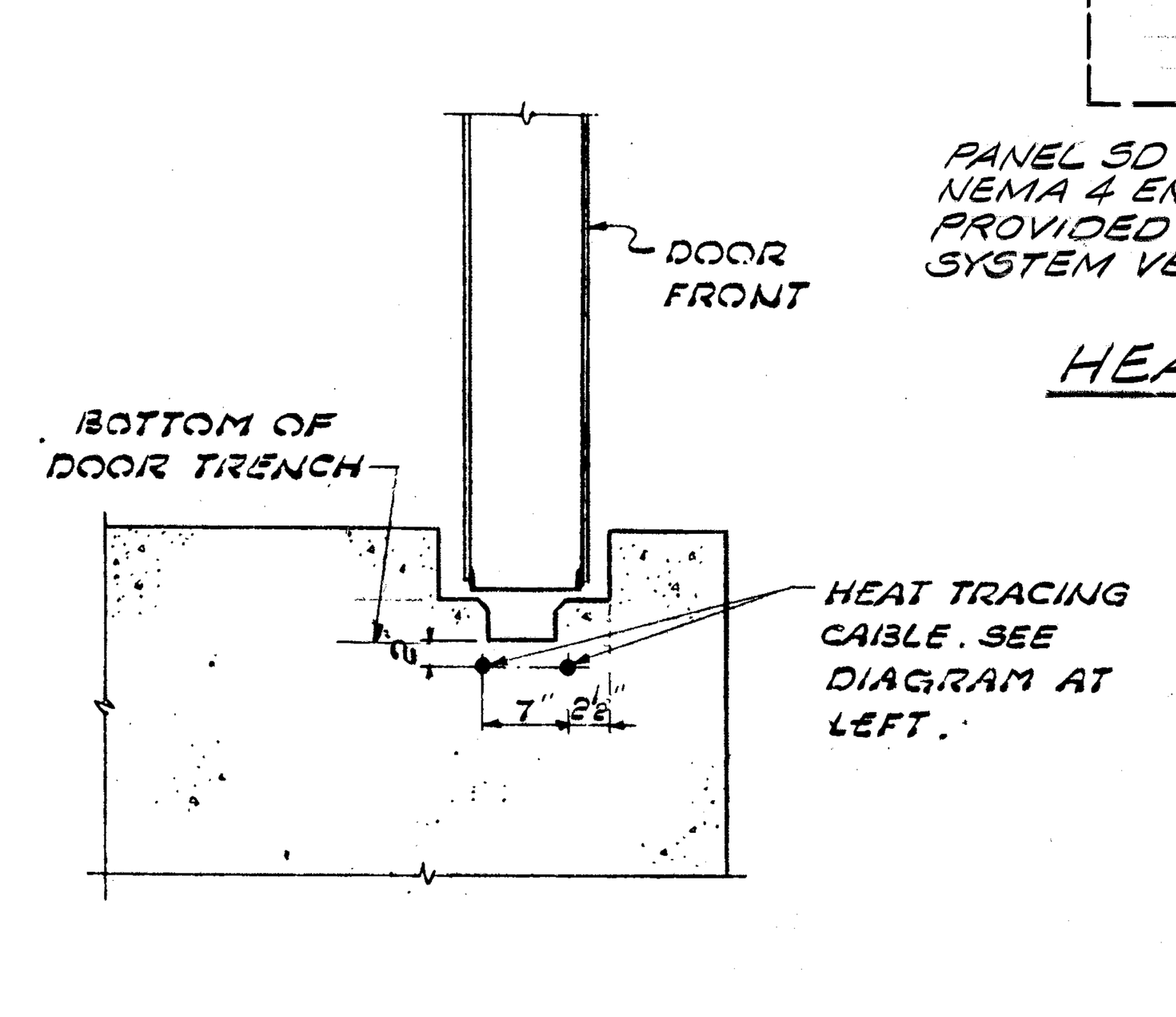
DRAIN PIPE HEAT TRACING DETAIL (3, E-4 / E-4)

NOT TO SCALE



TYPICAL DOOR TRENCH HEAT TRACING WIRING DIAGRAM

NOT TO SCALE



HEAT TRACING CABLE DETAIL (1, E-4 / E-4)

SCALE: 3/4" = 1'-0"

IF THE DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED

3/4" = 1'-0" 1' 0 1' 2' 3'

1/8" = 1'-0" 5' 0 5' 10' 15'

SYMBOL	DESCRIPTION	PREPARED BY	DATE	APPROVED BY
1	GENERAL REVISION	FJW	8-24-88	ND

REVISIONS

AMMANN & WHITNEY
CONSULTING ENGINEERS
96 MORTON ST. N.Y., N.Y.

E. LAING — PRINCIPAL — DATE 4-23-87

NAVFACENGCOM

ENGINEER IN CHARGE — BRANCH MANAGER

FIRE PROTECTION ENGINEER — DATE 5/8/87

T.R. RUTHERFORD P.E. — CRITERIA MANAGER — DATE 5/8/87

APPROVED — DATE 6/9/87 — FOR COMMANDER, NAVFACENGCOM

SATISFACTORY TO — DATE 6/30/87

DEPARTMENT OF THE NAVY — WASHINGTON, D.C. 20350

NAVAL FACILITIES ENGINEERING COMMAND

STANDARD DRAWING

BOX MAGAZINE TYPE F

HEAT TRACING

SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	
F	80091	1404555	E-4
SCALE AS NOTED		CONTRACT NO	SHEET 15
CATEGORY CODE 421		SPEC NO NFSS-M44	OF 15