INDEX OF DRAWINGS

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2001252	2 of 10	SITE PLAN
2001253	3 of 10	MAGAZINE ELEVATIONS & LAYOUT PLAN
2001254	4 of 10	GRADING & EMBANKMENT DETAILS
2001255	5 of 10	ROADWAY PROFILES
2001256	6 of 10	TYPICAL ROADWAY SECTIONS
2001257	7 of 10	MAGAZINE DETAILS · 1
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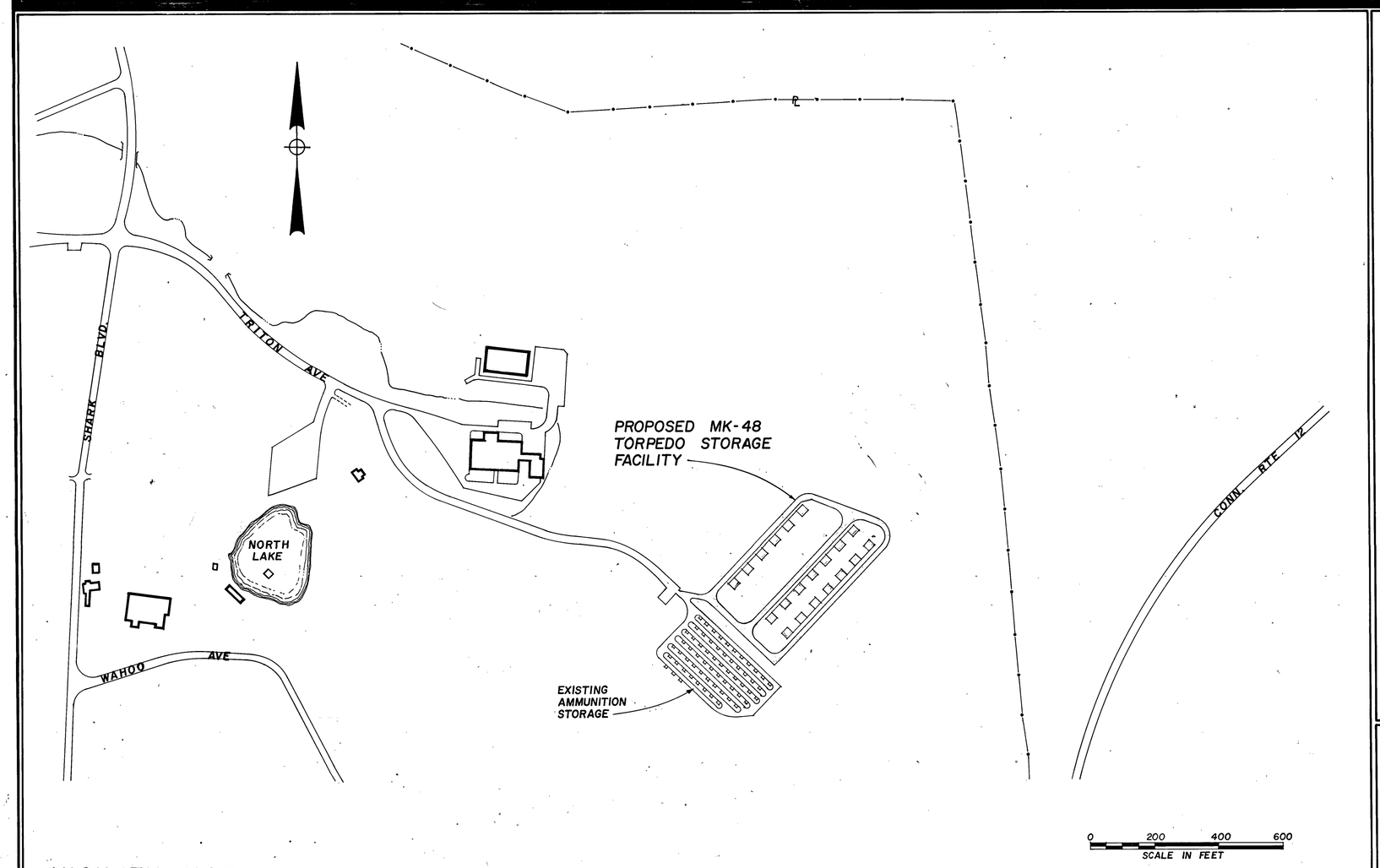
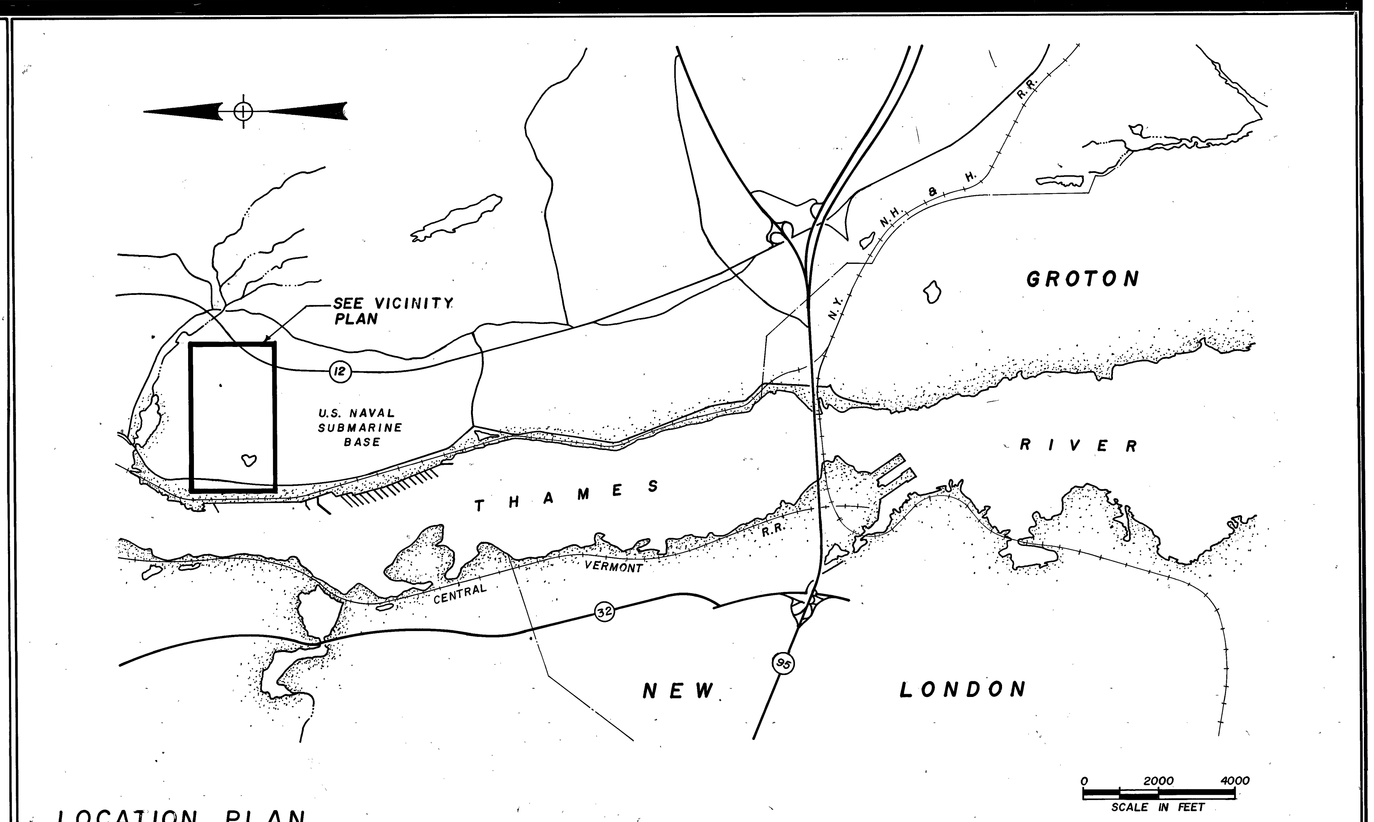
1059128	1 of 6	STANDARD · SITING PLAN
1059129	2 of 6	STANDARD · PLANS & SECTIONS
1059130	3 of 6	STANDARD · ELEVATIONS & SECTIONS
1069906	4 of 6	STANDARD · DOOR DETAILS
1059132	5 of 6	STANDARD · VENTILATION DETAILS
1059133	6 of 6	STANDARD · ELECTRICAL

MK-48 STORAGE FACILITY · NAVAL SUBMARINE BASE NEW LONDON GROTON, CONNECTICUT



VICINITY MAP



LOCATION PLAN

CHECK GRAPHIC SCALES BEFORE USING

STATE OF NEW YORK · REGISTERED PROFESSIONAL ENGINEER · NO. 029 · LICENSED PROFESSIONAL ENGINEER

SATISFACTORY TO: DATE

DALE ENGINEERING COMPANY
UTICA, NEW YORK
ENGINEERS

DES. B.C. | DR. J.P. | CHK. B.C.

SUBMITTED BY: DATE 11-24-71
JOHN B. STETSON PRESIDENT

NORDIV
HD. Civil & Engr. Div.
HD. Public Works Div.

APPROVED DATE
OFFICER IN CHARGE
APPROVED DATE
NORDIV FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
NAVAL BASE PHILADELPHIA, PA.

U.S. NAVAL SUBMARINE BASE NEW LONDON
GROTON CONN.

MK-48 STORAGE FACILITY
LOCATION PLAN & INDEX OF DRAWINGS

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	2001251
SCALE AS NOTED		CONTR. CONTR. NO. N62472 72C 0069
		SPEC. 04-72-0069 SHEET 1 OF 10

J.O. 5422A211

AA-014

REVISIONS				
LTR.	DESCRIPTION	PREPARED BY	DATE	APPROVED
A	REVISED AS BUILT	J.P.	6/20/73	
B	SLAG ADDED (AS BUILT)	N.S.E.	12/21/75	

* WATER ENCOUNTERED AT 1-1/2 FEET

BORING	DEPTH	STRATUM DESCRIPTION	BLOWS PER 1'
B-1	5	GRAY ORGANIC SILT, CLAY WITH FINE SAND	1
		END OF FILL	1
	10	GRAY FINE SAND	39
	15	GRADING WITH ROCK ZONES	35
	20		
	25	REFUSAL AT 25 FEET	
B-2		BROWN SILT, GRADING WITH ROCK FRAGMENTS	2
	5	GNEISS WITH OCCASIONAL QUARTZITE SEAMS	69%
	10		73%
	15		
*B-4	5	GRAY ORGANIC SILT, CLAY WITH THICK ROOTS	1
		GRADING SOFTER	1
	10	END OF FILL	
	15	COBBLES AT 14.5 FEET	1
		BROWN FINE SAND, GRADING WITH SILT AND	60
	20	ROCK FRAGMENTS. REFUSAL AT 20.25 FEET.	33/6"
B-5	5	GRAY ORGANIC SILT, CLAY WITH THICK ROOTS	1
		END OF FILL	1
	10	BROWN FINE SAND AND SILT	
	15	DECOMPOSED ROCK	96
	20	GNEISS WITH OCCASIONAL QUARTZITE SEAMS	57%
	25		
B-6	5	GRAY ORGANIC SILT, CLAY WITH THICK ROOTS	1
		END OF FILL	
		BROWN FINE SAND, WITH GRAVEL	
	10	WEATHERED GNEISS	8%
	15		
	20		
B-8	5	GRAY ORGANIC SILT, CLAY WITH THICK ROOTS	1
		GRADING TO VERY SOFT	1
	10		
	15	END OF FILL	1
		MOTTLED BROWN AND GRAY SILT WITH SAND	23
	20	BROWN FINE TO COARSE SAND WITH GRAVEL	74
	25	GRADING WITH SILT	138
	30	WEATHERED GNEISS WITH OCCASIONAL QUARTZITE SEAMS	10%
	35		
B-9	5	GRAY ORGANIC SILT WITH THICK ROOTS	1
		BROWN SILT	38
	10	REFUSAL AT 8 FEET	
B-10	5	GRAY ORGANIC SILT, CLAY WITH THICK ROOTS	1
		GRADING SOFTER	1
	10	END OF FILL	1
	15	BROWN FINE TO MEDIUM SAND WITH GRAVEL	115/9"
			113
	20	GNEISS WITH OCCASIONAL QUARTZITE SEAMS	81%
	25		77%

BORING	DEPTH	STRATUM DESCRIPTION	BLOWS PER 1'
B-11	5	GRAY ORGANIC SILT, WITH FINE SAND	1
		GRADING SOFT WITH CLAY - BELOW 4 FEET	1
	10	BROWN SILTY SAND, WITH GRAVEL	153
	15	BROWN FINE TO COARSE SAND AND GRAVEL	100/2"
		WITH COBBLES	
	20	AUGER REFUSAL AT 16'-6"	
B-12	5	GRAY ORGANIC SILT, CLAY WITH ROOTS	1
	10		1
			1
	15	BROWN SILTY FINE TO MEDIUM SAND	19
	20	BROWN FINE TO COARSE SAND AND GRAVEL	
	25	AUGER REFUSAL AT 19'-6"	
B-13	5	GRAY ORGANIC SILT AND CLAY. GRADING SOFT	1
	10	AUGER REFUSAL AT 7'-4"	1

WATER ENCOUNTERED AT 5'-7"

WATER ENCOUNTERED AT 1'-2"

WATER ENCOUNTERED AT 1 FOOT

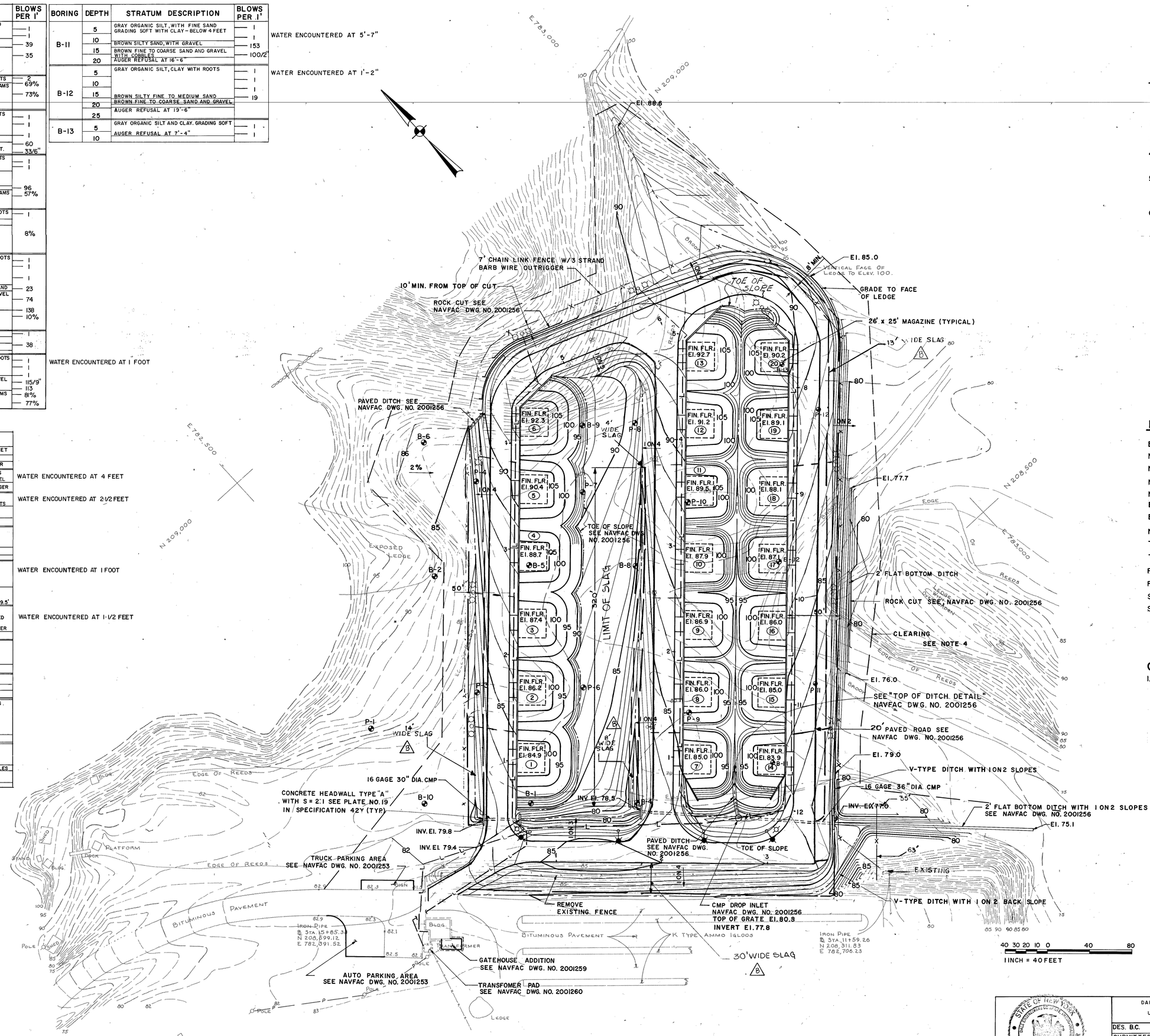
PROBES	DEPTH	STRATUM DESCRIPTION
P-1	5	DARK GRAY ORGANIC SILT, BOULDER AT 1.5 FEET
		BROWN SILTY FINE SAND
	10	REFUSAL WITH 4 INCH SOLID STEM AUGER
P-3	5	DARK GRAY ORGANIC SILT, CLAY WITH ROOTS
		BROWN SILTY SAND WITH TRACE OF GRAVEL
	10	REFUSAL AT 8'-8" WITH 4" SOLID STEM AUGER
P-4	5	GRAY ORGANIC SILT, CLAY WITH ROOTS
		GRADING WITH COBBLES & ROCK FRAGMENTS AT 5.5
	10	BROWN SILTY FINE TO COARSE SAND
	15	REFUSAL WITH 4" SOLID STEM AUGER
P-6	5	GRAY ORGANIC SILT, CLAY WITH ROOTS
	10	GRADING WITH COBBLES AT 9.5'
		BROWN SILTY FINE SAND WITH GRAVEL
	15	REFUSAL WITH 4" SOLID STEM AUGER
P-7	5	GRAY ORGANIC SILT, CLAY WITH ROOTS
	10	BROWN SILTY FINE SAND
	15	GRADING WITH COBBLES AND ZONES OF DECOMPOSED ROCK
	20	REFUSAL WITH 4" SOLID STEM AUGER AT 19.5'
P-8	5	GRAY ORGANIC SILT, CLAY WITH ROOTS
		GRADING WITH COBBLES AND DECOMPOSED ROCK
	10	REFUSAL AT 11' WITH 4" SOLID STEM AUGER
	15	
P-9	5	GRAY ORGANIC SILT, CLAY WITH ROOTS
	10	BROWN SILTY SAND WITH COBBLES
	15	REFUSAL WITH 4" SOLID STEM AUGER
P-10	5	GRAY ORGANIC SILT, CLAY WITH ROOTS
		GRADING WITH COBBLES
		BROWN SILTY SAND WITH GRAVEL
	10	REFUSAL WITH 4" SOLID STEM AUGER
P-11	5	GRAY ORGANIC SILT, CLAY WITH ROOTS.
	10	
	15	BROWN SILTY SAND WITH GRAVEL
	20	AUGER REFUSAL AT 20'
P-12	5	GRAY ORGANIC SILT AND CLAY
	10	BROWN AND GRAY SILT WITH SAND
		BROWN SAND AND GRAVEL WITH COBBLES
	15	
	20	AUGER REFUSAL AT 18'-3"

WATER ENCOUNTERED AT 4 FEET

WATER ENCOUNTERED AT 2-1/2 FEET

WATER ENCOUNTERED AT 1 FOOT

WATER ENCOUNTERED AT 1-1/2 FEET



SITE AND OUTSIDE UTILITY NOTES

1. ELEVATION DATUM - MEAN LOW WATER U.S. NAVAL SUBMARINE BASE, NEW LONDON - GROTON, CONNECTICUT.
2. COORDINATE SYSTEM - CONNECTICUT STATE COORDINATE SYSTEM.
3. LAYOUT PLAN & GEOMETRICS - SEE NAVFAC DWG. NO. 2001253
4. THE LIMITS OF CLEARING SHALL BE 20 FEET OUTSIDE OF GRADING LIMITS OR FENCES WHICHEVER IS GREATER.
5. FIGURES UNDER THE COLUMN LABELED "BLOWS PER FOOT" INDICATE THE NUMBER OF BLOWS REQUIRED TO ADVANCE THE SPLIT-SPOON SAMPLER ONE FOOT USING A 140LB WEIGHT FALLING 30INCHES.
6. THE PERCENTAGE OF RECOVERY OF A CORED SAMPLE IS INDICATED UNDER THE COLUMN LABELED "BLOWS PER FOOT".
7. EXISTING FENCE SHALL NOT BE REMOVED UNTIL NEW FENCE HAS BEEN INSTALLED AND INSPECTED.

LEGEND

EXISTING CONTOURS	90
NEW CONTOURS	90
NEW STORM LINE	
NEW LIGHTING & POWER CABLES	L L
NEW LIGHTING UNIT	
EXISTING POWER	P P
EXISTING PAVEMENT	
NEW PAVEMENT	
TEST BORINGS	B-7
TEST PROBES	P-7
FENCE	X X
FLOOD LIGHTS	
STREET LIGHTS	
SPOT ELEVATIONS	823

GENERAL NOTES

1. DETAILS SHOWN ON NAVFAC DRAWINGS NUMBER 2001251 THROUGH 2001260 SHALL SUPERCEDE SIMILAR DETAILS SHOWN ON STANDARD DRAWINGS.

CHECK GRAPHIC SCALES BEFORE USING

STATE OF NEW YORK — DALE ENGINEERING COMPANY — LICENSED PROFESSIONAL ENGINEER — NO. 023

DALE ENGINEERING COMPANY
UTICA, NEW YORK
ENGINEERS

DES. B.C. | DR. L.P. | CHK B.C.

SUBMITTED BY — DATE
JOHN B. STETSON — PRESIDENT

NORDIV
HD. CIVIL — RVD.
HD. ELECT. — RVD.

APPROVED — DATE
OFFICER IN CHARGE

SATISFACTORY TO: — DATE

APPROVED — DATE
NORDIV FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
NAVAL BASE PHILADELPHIA, PA.

U S NAVAL SUBMARINE BASE NEW LONDON
GROTON CONN.

MK-48 STORAGE FACILITY

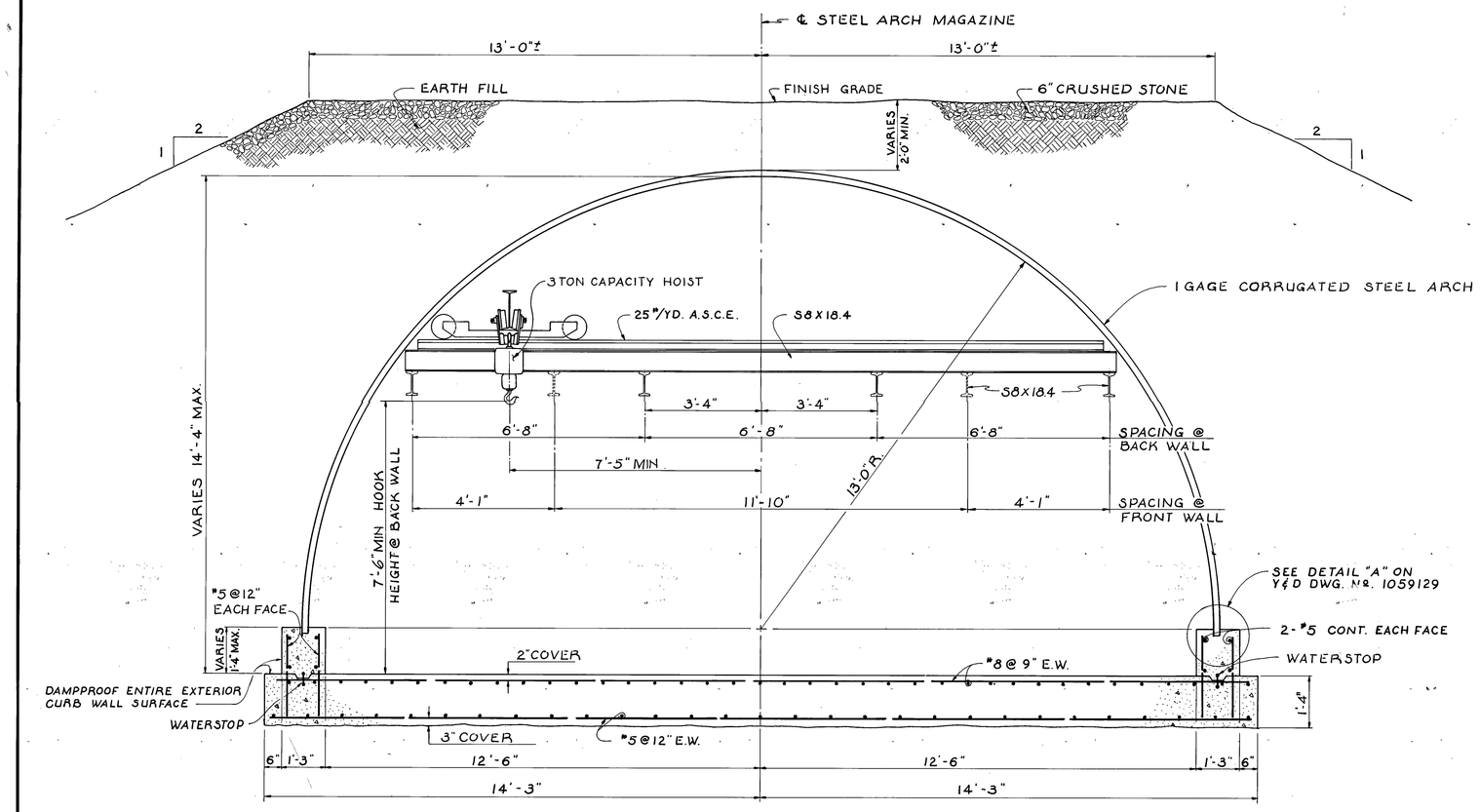
SITE PLAN

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	2001252
SCALE AS NOTED		CONSTR. CONTR. NO. N62472 72C 0069
		SPEC. 04-72-0069 SHEET 2 OF 10

J.O. 5422A211

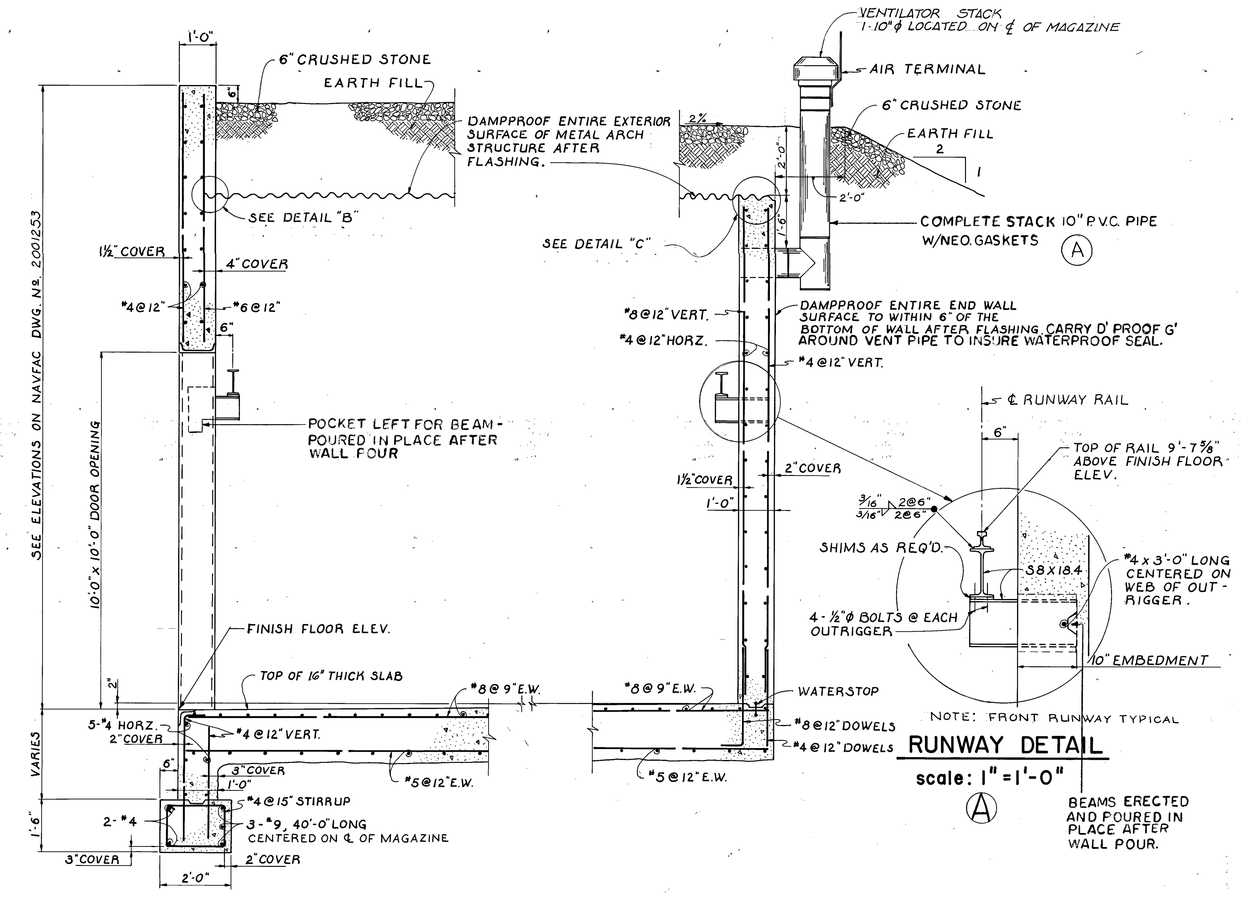
AA-015

REVISIONS				
LTR.	DESCRIPTION	PREPARED BY	DATE	APPROVED
(A)	REVISED AS BUILT	J. P	6/22/73	
(B)	REVISED (ADDED DETAIL B & C @ DOOR FRAME ELEVATION @ GG SECTION)	N.S.E	1/2/74	



TYPICAL MAGAZINE SECTION

scale: 1/2" = 1'-0"



SECTION C - C

scale: 1/2" = 1'-0"

(A)

REAR WALL SECTION

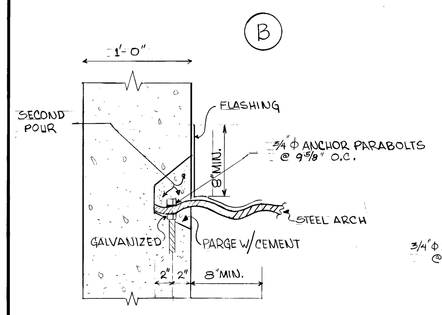
scale: 1/2" = 1'-0"

(A)

RUNWAY DETAIL

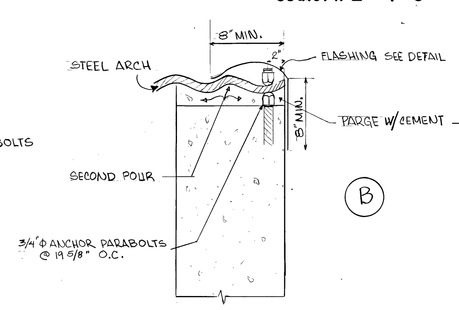
scale: 1" = 1'-0"

(A)



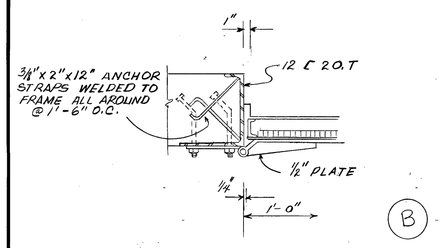
DETAIL "B"

SCALE: 1½" = 1'-0"



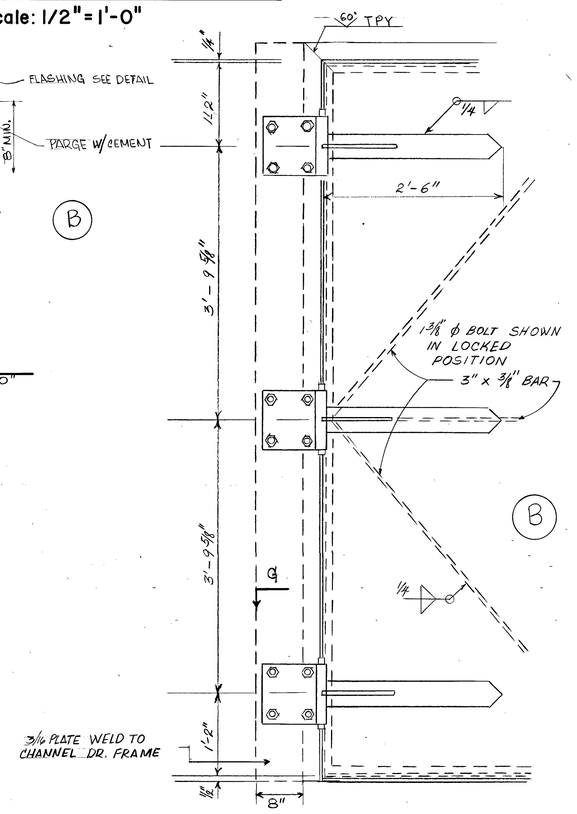
DETAIL "C"

SCALE: 1½" = 1'-0"



PARTIAL SECTION GG

SCALE: 1" = 1'-0"



PARTIAL ELEVATION DOOR FRAME

SCALE: 1 INCH = 1 FOOT

MAGAZINE NOTES

1. FOOTING DRAINS, VAPOR BARRIER & COARSE AGGREGATE FILL SHOWN ON Y&D DRAWING NO. 1059129 WILL NOT BE REQUIRED.
2. DRAINAGE FILL AND BURLAP SHOWN ON Y & D DRAWING NO. 1059130 WILL NOT BE REQUIRED.
3. MAXIMUM SOIL PRESSURE FOR DESIGN PURPOSES SHALL BE:

MAGAZINES	1,000 PSF
RETAINING WALLS	1,800 PSF

1½ INCH = 1 FOOT

2 1 0 2 4

1/2 INCH = 1 FOOT

1 6" 0 1 2

1 INCH = 1 FOOT

CHECK GRAPHIC SCALES BEFORE USING

STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — No. 023

DALE ENGINEERING COMPANY
UTICA, NEW YORK
ENGINEERS

DES. B.C. DR. L.P. CHK. B.C.
SUBMITTED BY: DATE
JOHN B. STETSON PRESIDENT
NORDIV
HD. RVD.
HD. DIR.
APPROVED DATE
OFFICER IN CHARGE
SATISFACTORY TO: DATE
APPROVED DATE
NORDIV FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
NAVAL BASE PHILADELPHIA, PA.
U.S. NAVAL SUBMARINE BASE NEW LONDON
GROTON CONN.

MK-48 STORAGE FACILITY

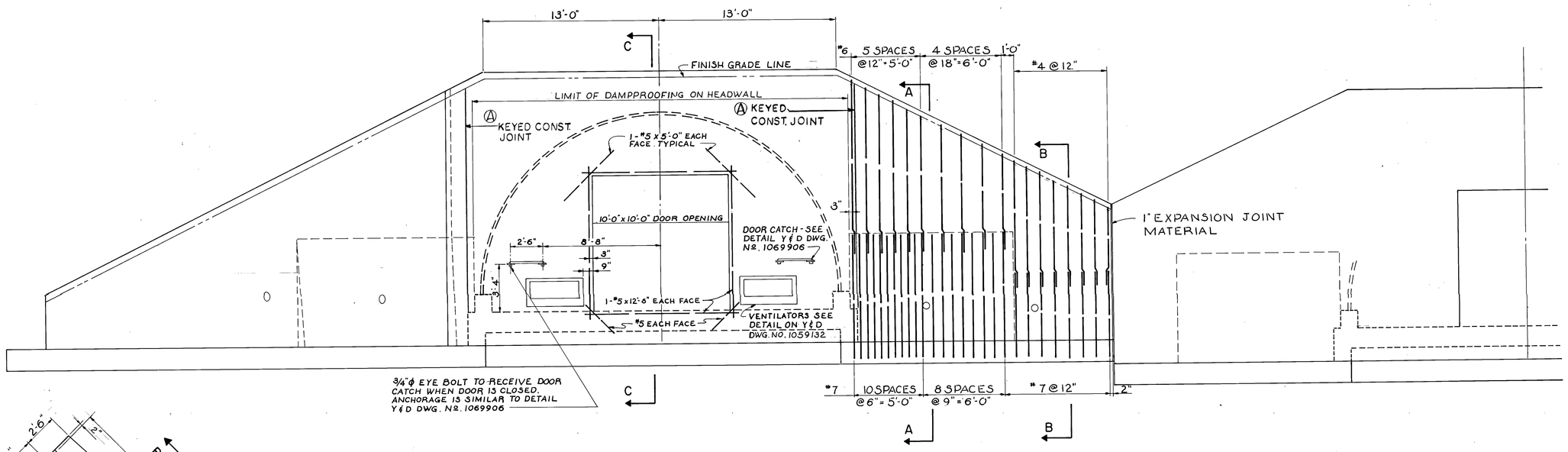
MAGAZINE DETAILS - I

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	2001257
SCALE AS NOTED		CONSTR. CONTR NO. N62472 72C 0069
		SPEC. 04-72-0069 SHEET 7 OF 10

J.O. 5422A211

AA-020

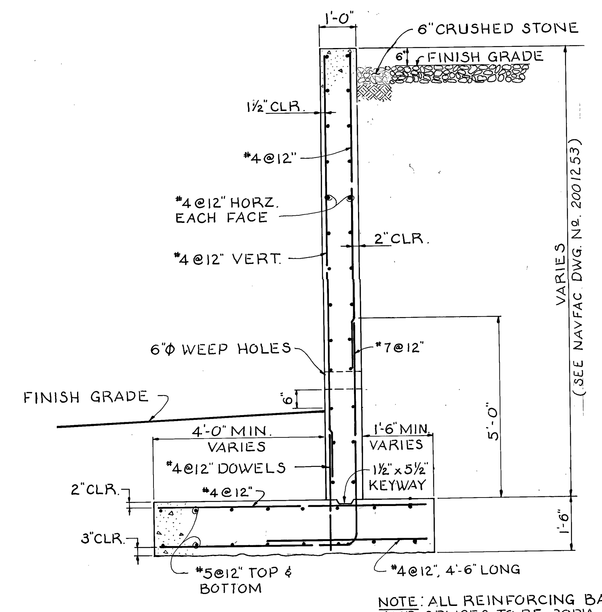
REVISIONS				
LTR.	DESCRIPTION	PREPARED BY	DATE	APPROVED
Ⓐ	REVISED AS BUILT	J. P	6/22/73	
Ⓐ	JOINT DETAIL (AS BUILT)	N.S.E	12/20/73	



FRONT WALL ELEVATION

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

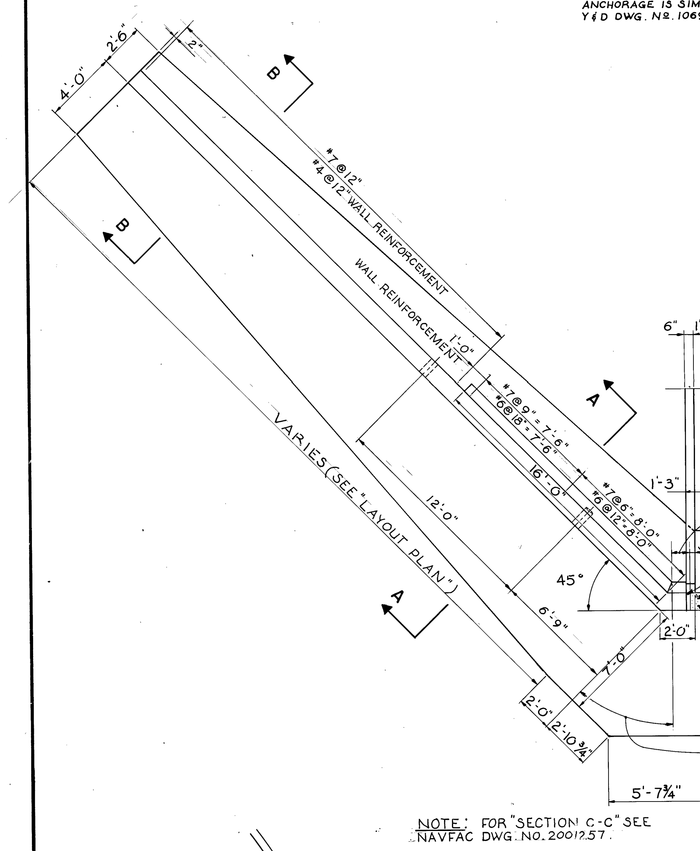
NOTE: DETAIL D SHOWN ON Y&D DRAWING Nº. 1059132 WILL NOT BE REQUIRED.

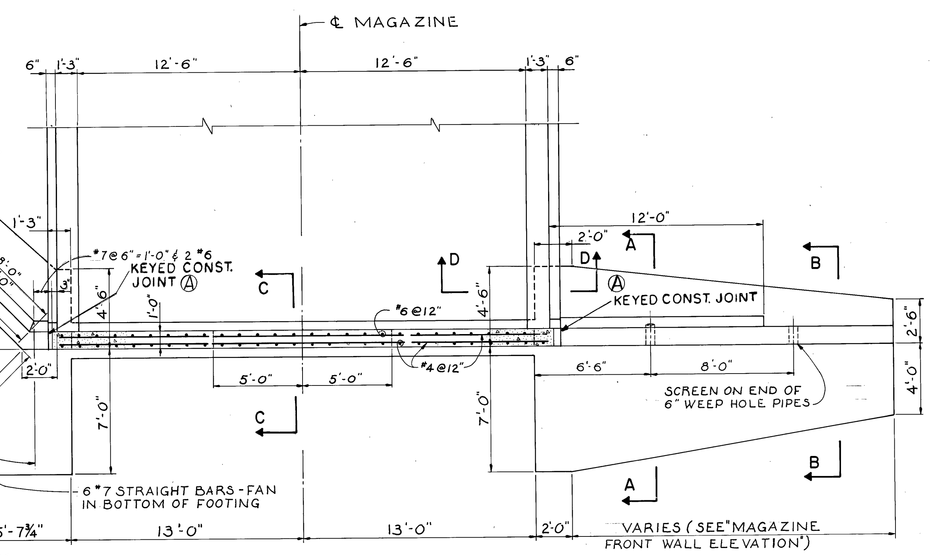


NOTE: ALL REINFORCING BAR LAPS AND SPLICES TO BE 30DIA. MIN.

SECTION B-B

scale: 1/2" = 1'-0"

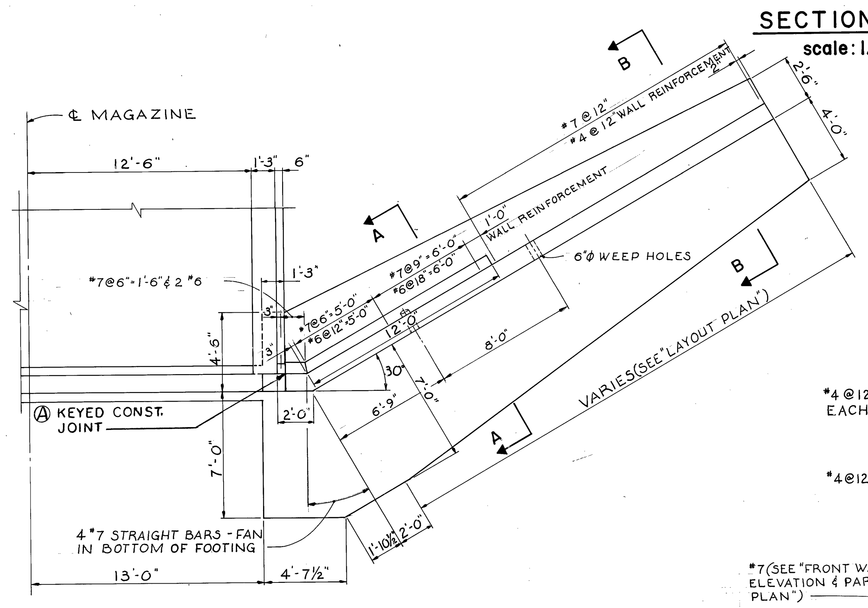


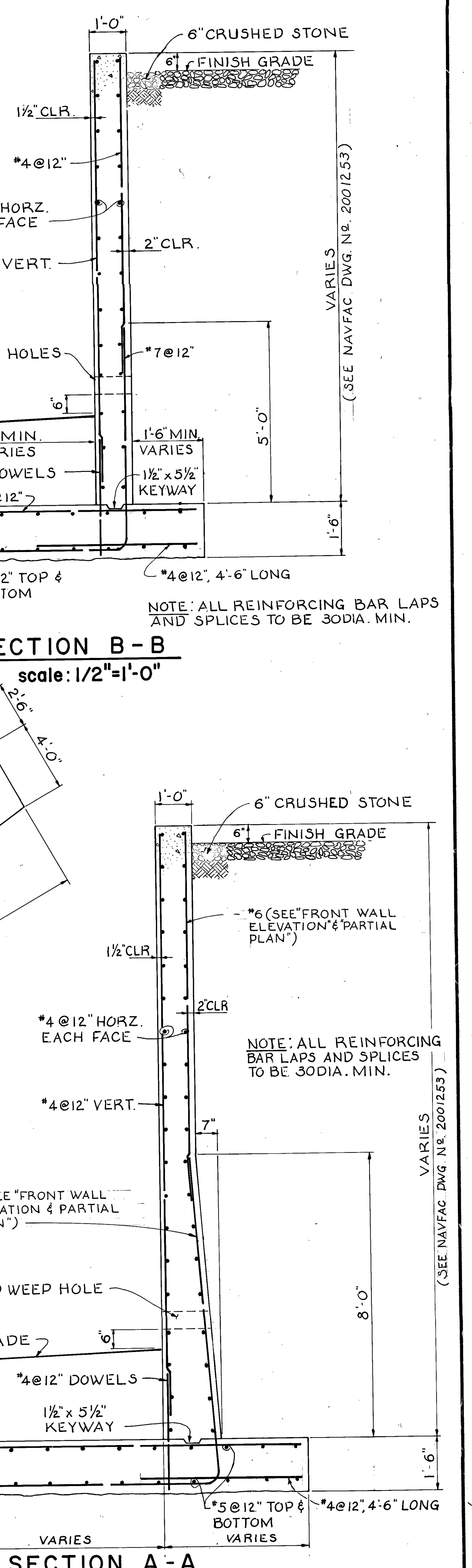


NOTE: FOR "SECTION C-C" SEE NAVFAC DWG. NO. 2001257.

PARTIAL PLAN - FRONT WALL

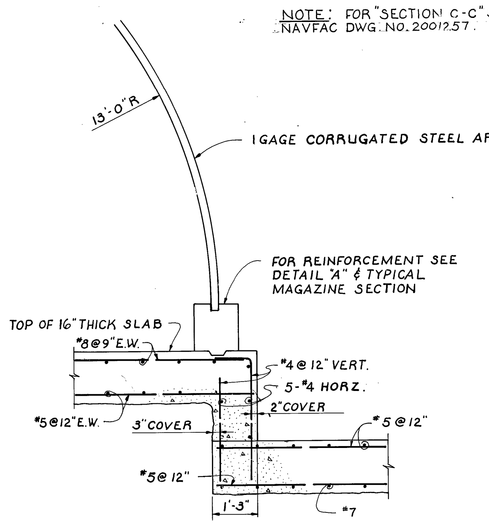
scale: 1/4" = 1'-0"





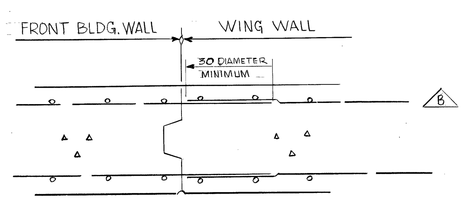
SECTION A-A

scale: 1/2" = 1'-0"

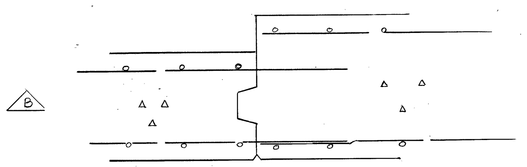


SECTION D-D

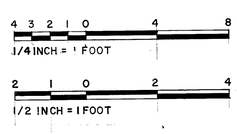
scale: 1/2" = 1'-0"



TYPICAL SECTION WHERE WALL THICKNESSES ARE EQUAL



TYPICAL SECTION WHERE WALL THICKNESSES ARE NOT EQUAL



CHECK GRAPHIC SCALES BEFORE USING

STATE OF NEW YORK — REGISTERED PROFESSIONAL ENGINEER — No. 039 — JOHN B. SHUMER

SATISFACTORY TO: DATE

DALE ENGINEERING COMPANY, UTICA, NEW YORK ENGINEERS

DES. B.C. | DR L.P. | CHK. B.C.

SUBMITTED BY: John B. Stetson 11-22-71 — DATE
JOHN B. STETSON, PRESIDENT

NORDIV HD. Carl J. Fuda 26 RVD. / DIR. W. B. Mason 25

APPROVED — DATE

OFFICER IN CHARGE

APPROVED: D. P. Mann 12-8-71 — DATE
NORDIV FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
NAVAL BASE PHILADELPHIA, PA.
U.S. NAVAL SUBMARINE BASE NEW LONDON
GROTON CONN.

MK-48 STORAGE FACILITY

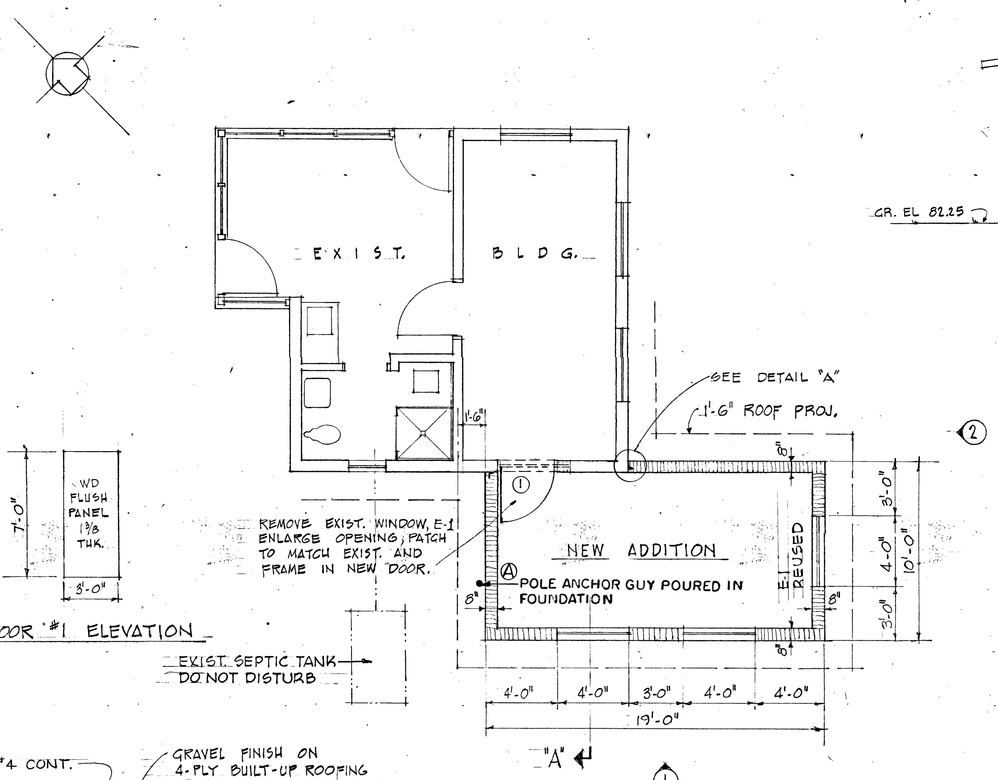
MAGAZINE DETAILS - 2

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	2001258
SCALE AS NOTED		CONSTR. CONTR NO. N62472 72C 0069
		SPEC. 04-72-0069 SHEET 8 OF 10

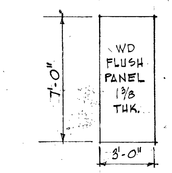
J.O. 5422A211

AA-021

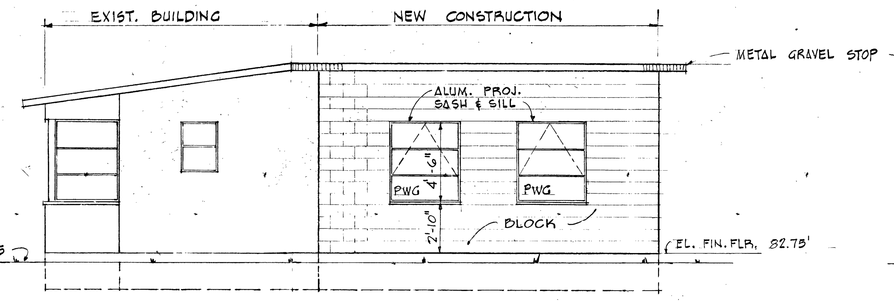
REVISIONS				
LTR.	DESCRIPTION	PREPARED BY	DATE	APPROVED
A	REVISED AS BUILT	J. P.	6/22/73	
B	REVISED AS BUILT	N.S.E	1/2/74	



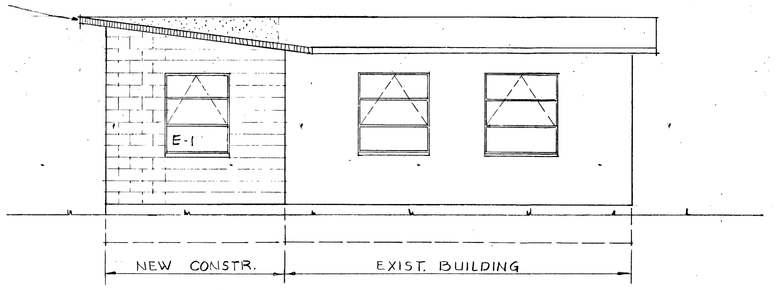
FLOOR PLAN
SCALE 1/4" = 1'-0"



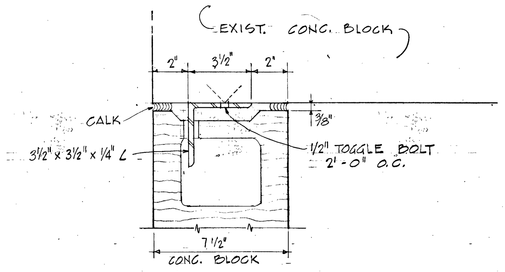
DOOR #1 ELEVATION



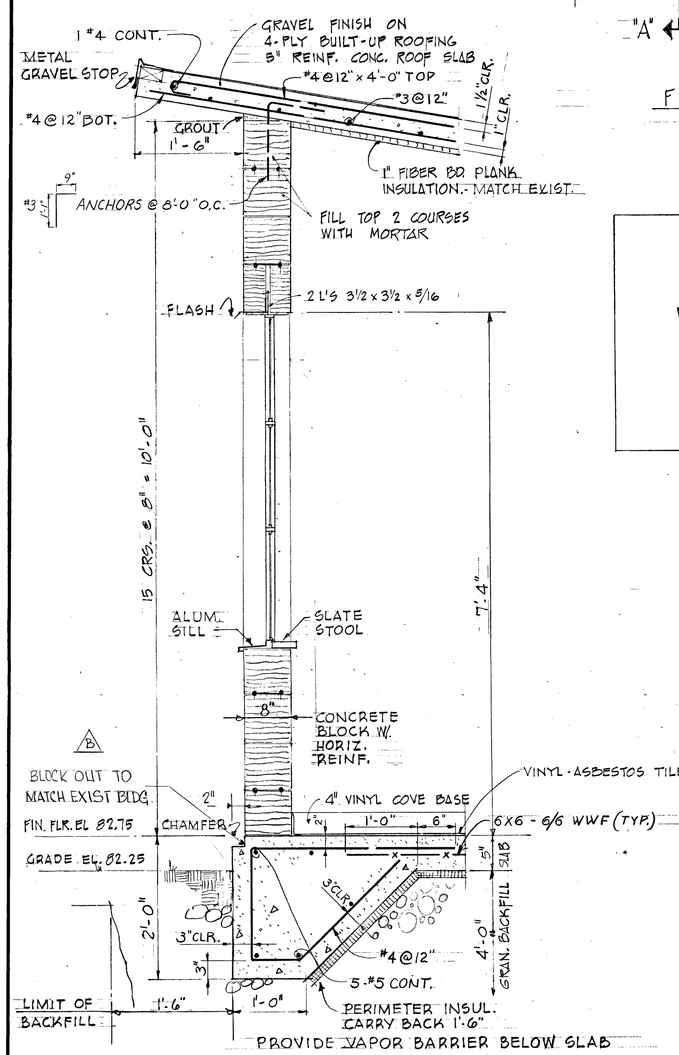
ELEVATION 1
SCALE 1/4" = 1'-0"



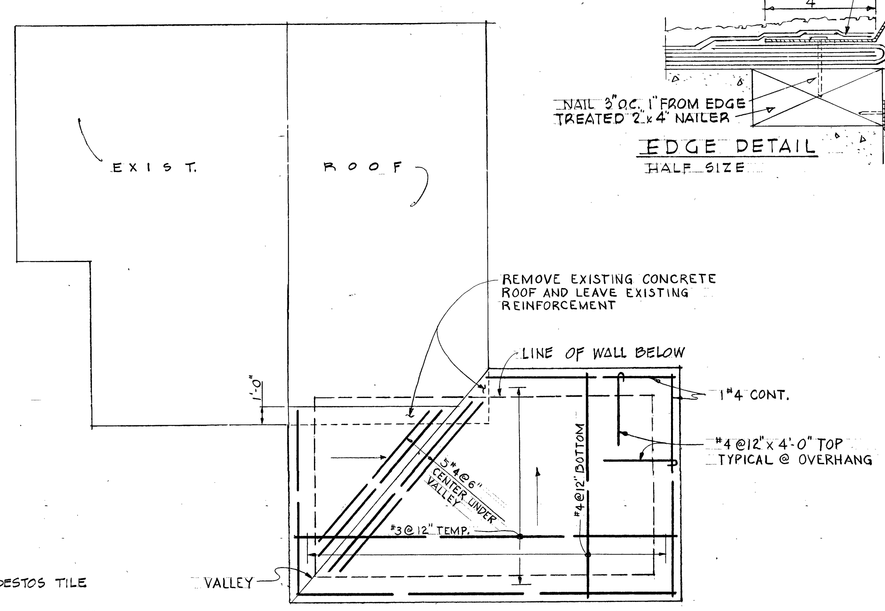
ELEVATION 2
SCALE 1/4" = 1'-0"



DETAIL "A"
SCALE 1" = 3"

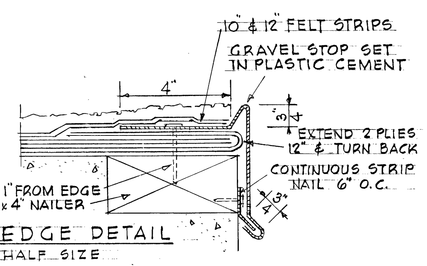


TYPICAL WALL SECTION "A"
SCALE 1" = 1'-0"

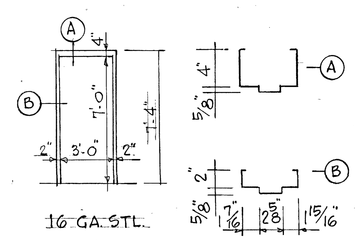


ROOF PLAN
SCALE 1/4" = 1'-0"

ROOFING NOTE: WHERE NEW ROOFING INTERSECTS EXISTING: SPUD OFF EXIST. GRAVEL & CUT BACK PLIES 2'-0" MIN. MOP IN NEW ROOFING

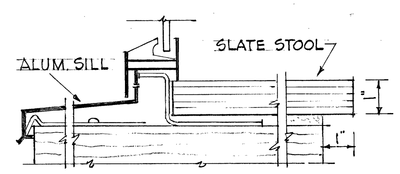


EDGE DETAIL
HALF SIZE



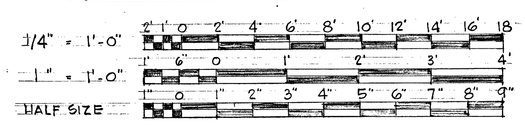
METAL FRAME DETAILS

NOTES:
ROOF LIVE LOAD - 40 PSF
FLOOR LIVE LOAD - 75 PSF



SILL DETAILS
HALF-SIZE
MATCH EXISTING

GRAPHIC SCALES



CHECK GRAPHIC SCALE BEFORE USING

STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — NO. 029

DALE ENGINEERING COMPANY
UTICA, NEW YORK
ENGINEERS

DES. J.D. DR. J.P. CHK. J.D.
SUBMITTED BY DATE
JOHN B. STETSON PRESIDENT
NORDIV
HD. RVD
HD. DIR

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
NAVAL BASE PHILADELPHIA, PA.
U.S. NAVAL SUBMARINE BASE NEW LONDON
GROTON CONN.

MK-48 STORAGE FACILITY
GATEHOUSE ADDITION

APPROVED DATE
OFFICER IN CHARGE
APPROVED DATE
NORDIV FOR COMMANDER NAVFAC

SATISFACTORY TO: DATE

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	2001259
SCALE AS NOTED		CONSTR. CONTR. NO. N62472 72C 0069
		SPEC. 04-72-0069 SHEET 9 OF 10

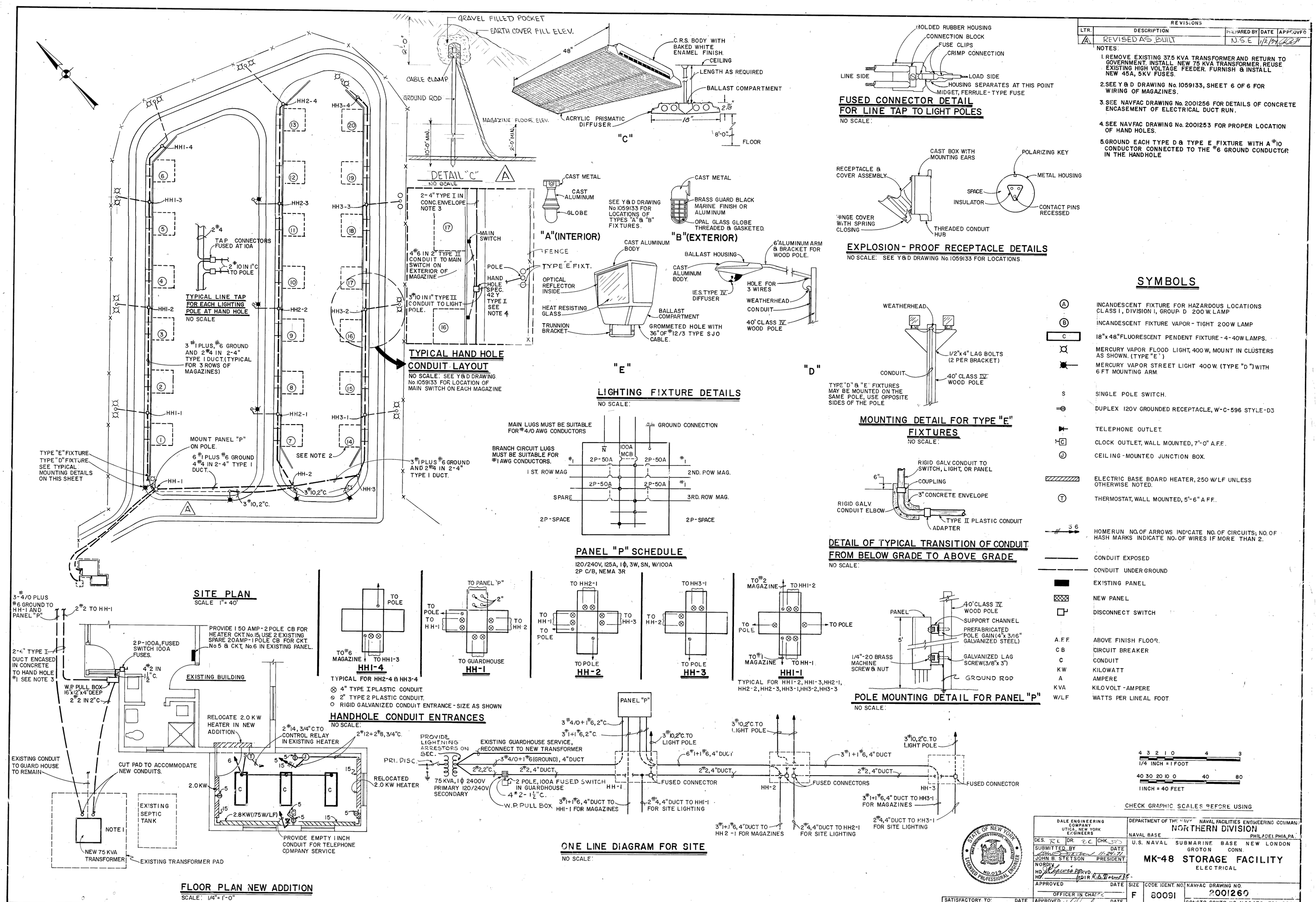
J.O. 5422A211

AA-022

REVISIONS				
LTR.	DESCRIPTION	PREPARED BY	DATE	APPROVED
A	REVISED AS BUILT	N.S.E	1/12/74	

NOTES:

1. REMOVE EXISTING 37.5 KVA TRANSFORMER AND RETURN TO GOVERNMENT. INSTALL NEW 75 KVA TRANSFORMER. REUSE EXISTING HIGH VOLTAGE FEEDER. FURNISH & INSTALL NEW 45A, 5KV FUSES.
2. SEE Y & D DRAWING No. 1059133, SHEET 6 OF 6 FOR WIRING OF MAGAZINES.
3. SEE NAVFAC DRAWING No. 2001256 FOR DETAILS OF CONCRETE ENCASEMENT OF ELECTRICAL DUCT RUN.
4. SEE NAVFAC DRAWING No. 2001253 FOR PROPER LOCATION OF HAND HOLES.
5. GROUND EACH TYPE D & TYPE E FIXTURE WITH A #10 CONDUCTOR CONNECTED TO THE #6 GROUND CONDUCTOR IN THE HANDHOLE



SYMBOLS

(A)	INCANDESCENT FIXTURE FOR HAZARDOUS LOCATIONS CLASS I, DIVISION I, GROUP D 200 W. LAMP
(B)	INCANDESCENT FIXTURE VAPOR-TIGHT 200 W LAMP
C	18" x 48" FLUORESCENT PENDENT FIXTURE - 4-40 W LAMPS.
	MERCURY VAPOR FLOOD LIGHT, 400 W, MOUNT IN CLUSTERS AS SHOWN. (TYPE "E")
	MERCURY VAPOR STREET LIGHT 400 W. (TYPE "D") WITH 6 FT MOUNTING ARM.
S	SINGLE POLE SWITCH.
	DUPLEX 120V GROUNDED RECEPTACLE, W-C-596 STYLE-D3
	TELEPHONE OUTLET.
C	CLOCK OUTLET, WALL MOUNTED, 7'-0" A.F.F.
J	CEILING-MOUNTED JUNCTION BOX.
	ELECTRIC BASE BOARD HEATER, 250 W/LF UNLESS OTHERWISE NOTED.
T	THERMOSTAT, WALL MOUNTED, 5'-6" A.F.F.
3 6	HOMERUN NO. OF ARROWS INDICATE NO. OF CIRCUITS; NO. OF HASH MARKS INDICATE NO. OF WIRES IF MORE THAN 2.
	CONDUIT EXPOSED
	CONDUIT UNDERGROUND
	EXISTING PANEL
	NEW PANEL
	DISCONNECT SWITCH
A.F.F.	ABOVE FINISH FLOOR.
C.B.	CIRCUIT BREAKER
C	CONDUIT
KW	KILOWATT
A	AMPERE
KVA	KILOVOLT-AMPERE
W/LF	WATTS PER LINEAL FOOT

4 3 2 1 0 4 3
1/4 INCH = 1 FOOT
40 30 20 10 0 40 80
1 INCH = 40 FEET

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UTICA, NEW YORK
ENGINEERS

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
NAVAL BASE — PHILADELPHIA, PA.

DES. R.L. DR. R.C. CHK. J.S.
SUBMITTED BY — DATE 11-24-71
JOHN B. STETSON — PRESIDENT
NORDIV HD. — REVD. — DIR.

U.S. NAVAL SUBMARINE BASE NEW LONDON
GROTON CONN.

MK-48 STORAGE FACILITY
ELECTRICAL

APPROVED — DATE
OFFICER IN CHARGE
APPROVED — DATE 12-8-71
NORDIV FOR COMMANDER NAVFAC

SIZE: F — CODE IDENT. NO. 80091 — NAVFAC DRAWING NO. 2001260
CONSTR. CONTR. NO. N62472-72C-0069
SCALE: AS NOTED — SPEC. 04-72-0069 — SHEET 10 OF 10

SATISFACTORY TO: DATE

J.O. 5422A211

AA-023