ABC FIRE EXT.
$18.00

HYDROSTATICTLY TEST
~~RECHARGE~~ 15 LB CO2 25.00
5 LB CO2 16.00
WATER 16.00

5 LB ABC — 35.00
10 LB. ABC — 55.00

RECHARGE 5 LB. 11.00
" 10 LB. 16.00

WORK AUTHORIZATION/ESTIMATE (MAINTENANCE MANAGEMENT)

NAVFAC 11014/22 (10-74) S/N 0105-LF-002-7110
Supersedes NAVDOCKS 2353 and 2356

Instructions for completing form are contained in NAVFAC MO-321

1. ACTIVITY	2. ACTIVITY CODE	3. JOB ORDER NO.
Facilities Management Dept., NAVHOSP CLNC	068093	07940

4. ESTIMATE NO.	5. REQUESTED STARTING DATE	6. PRIORITY	7. INSPECTION GENERATED	8. FACILITY NO.	9. EQUIPMENT NO.
			☐ YES ☐ NO	NH-100	

10. RPI CAT CODE	11. COST ACCOUNT CODE	12.	13.	14.
	P1-9380			

15. NAVY ACCOUNTING DATA

a. APPROPRIATION SYMBOL AND SUBHEAD	b. OBJECT CLASS	c. BUREAU CONTROL NUMBER	d. AUTH. ACCOUNTING ACTIVITY	e. TRANS CODE	f. PROPERTY ACCTG. ACTIVITY	g. COST CODE
1781804.1886		680930			68093	

16. FOR FURTHER INFORMATION CALL *(Name and telephone)*	17. SKETCH/PLAN ATTACHED IF "YES" INDICATE NUMBER	18. LABOR CLASS CODE *(Except for overhead)*
	☐ YES _____ ☐ NO	07

19. JOB TITLE

Hydrostatic Test Fire Extinguishers NH-100

20. GENERAL JOB DESCRIPTION

Perform hydrostatic test on all fire extinguishers in NH-100 as per attached description and schedule.

Completed

21. ESTIMATE

a. BREAKDOWN OF WORK

JOB PHASE NO. (1)	WORK CENTER (2)	DESCRIPTION (3)	EST. HOURS (4)
	32	As above	120

b. SUMMARY OF ESTIMATE

WORK CENTER (5)	LABOR HOURS (6)	LABOR (7)	MATERIAL (8)	TOTAL ESTIMATE (9)
32	120	1856	3365	5221
TOTAL	120	1856	3365	5221
c. CONTINGENCY				
d. OVERHEAD AND/OR SURCHARGE				
e. GRAND TOTAL				5221

22. DISTRIBUTION

MCD							
ADP							
MAINT							

23. AUTHORIZED WORK TO BE PERFORMED *(Signature)*

R.N. GRAHAM, LT CEC USNR

TITLE: Head, Facilities Mgt, NAVHOSP CLNC

DATE: 22 Dec 87

B-9379

WORK DESCRIPTION

1. Purchase 20 each, 2 1/2 gallon water extinguisher Model 240 made by Amerex Corporation, NSN 4210-00-720-1815.

   20 Each at $29.08 = $582.00

2. Purchase 20 each, 15 LB. C02 extinguishers, NSN 4210-00-202-7858.

   20 Each at $91.98 = $1,840.00

3. Purchase 6 each 5 LB. C02 extinguishers, Model 322 by Amerex Corporation. NSN 4210-00-595-1777.

   6 Each at $52.03 = $316.00

4. After all purchased extinguishers have been received, exchange the new extinguishers with each area as shown on attached sheet. Install new tag on extinguisher and mark the date new extinguisher was installed.

5. Fill out 1149 to have the extinguishers that were removed hydrostatic tested by GSA contractor as per attached specifications.

6. After that set has been hydrostatic tested, use them to replace the extinguishers in the next area. Note on tag.

7. Then do the same as before to have hydrostatic tested. Continue this same cycle until all extinguishers have been hydrostatic tested.

Elwood
ACTION TAKEN!
Your Copy

11000
13
05 Apr 94

From: Elwood Morris
To: LT Smith

Subj: HYDROSTATIC TESTING OF PORTABLE FIRE EXTINGUISHERS

Ref: (a) NFPA 10

Encl: (1) Page 10-14 of NFPA 10

1. In accordance with reference (a), all portable extinguishers are required to be hydrostatically tested every five years. Previous testing was completed in 1988 (see enclosure (1)).

2. I propose to purchase and install new A:B:C 5 lb. portable extinguishers (dry chemical) in lieu of having our existing extinguishers hydrostatic tested.

My justification for this proposal is as follows:

a. To hydrostatic test requires installing a temporary extinguisher at each location, sending the permanent extinguisher off for testing, then replacing the temporary extinguisher. We have 156 each water extinguisher, 88 each 15 lb CO^2, and 30 each 5 lb. CO^2. The estimated cost is:

Water 156 @ $16	=	$2,496
15 lb CO^2 88 @ $25	=	2,200
5 lb CO^2 30 @ $10	=	480
		$5,176
120 hrs. labor	=	$2,417
		$7,593

Hydrostatic test has to be accomplished every five years.

b. To purchase and replace the existing extinguishers with 5 lb. A:B:C (dry chemical) will require replacing the existing, and changing the stickers on the cabinet to show that the extinguisher is for all fires.

The estimated cost is:

New A:B:C 5 lb. 274 each @ $18	=	$4,932
Labor to install 68 hrs.	=	1,370
		$6,302
New stickers		125
		$6,427

3. Advantages of A:B:C over existing:

a. A:B:C have to be hydrostatic tested every 12 years (see enclosure (1)).

b. One size extinguisher covers all.

c. One extinguisher for all type of fires - will not have to think about which extinguisher to use during a fire situation.

d. Less expensive.

4. I talked to MCB Fire Inspector (Ms. Huffman) and she recommends this idea. According to her, the MCB is going to A:B:C.

5. Onslow Memorial Hospital has gone completely to 5 lb A:B:C.

6. Mr. John Kokinda (Safety Dept) agrees with this idea.

7. This cost is P1 money.

Elwood Morris

ELWOOD MORRIS

Table 5-2

Hydrostatic Test Interval for Extinguishers

Extinguisher Type	Test Interval (Years)
Soda-Acid	Note 1
Cartridge-Operated Water and/or Antifreeze	Note 1
Stored Pressure Water, Loaded Stream, and/or Antifreeze	5
Wetting Agent	5
Foam	Note 1
AFFF (Aqueous Film Forming Foam)	5
Dry Chemical with Stainless Steel Shells	5
Carbon Dioxide	5
Dry Chemical, Stored Pressure, with Mild Steel Sheels, Brazed Brass Shells, or Aluminum Shells	12
Halogenated Agents	12
Dry Powder, Cartridge- or Cylinder-Operated, with Mild Steel Sheels	12

NOTE 1: These extinguishers have had a 5-year hydrostatic test interval. When the next regular hydrostatic test date arrives, extinguishers of this type shall not be tested but removed from service.
NOTE 2: All types of extinguishers with copper or brass shells joined by soft solder are prohibited from hydrostatic testing. [See 5-1.3(f).]
NOTE 3: Stored pressure water extinguishers with fiberglass shells (pre-1976) are prohibited from hydrostatic testing due to manufacturer's recall.

5-3.2 Stored Pressure Types. All stored pressure extinguishers shall be hydrostatically tested at the factory test pressure not to exceed three times the normal operating pressure.

NOTE: Extinguishers that are required to be returned to the manufacturer for recharging shall be hydrostatically tested only by the manufacturer.

5-3.3 Cartridge-Operated Types. Cartridge- or cylinder-operated dry chemical and dry powder types of extinguishers shall be hydrostatically tested at their original factory test pressure as shown on the nameplate or shell.

5-3.4 Test Pressures for Hose Assemblies.

5-3.4.1 Carbon dioxide hose assemblies requiring a hydrostatic pressure test shall be tested at 1,250 psi (8619 kPa).

5-3.4.2 Dry chemical and dry powder hose assemblies requiring a hydrostatic pressure test shall be tested at 300 psi (2068 kPa) or at service pressure, whichever is higher.

5-4 Test Equipment.

5-4.1 General.

5-4.1.1 This standard only permits the hydrostatic testing of pressure vessels used as fire extinguishers.

WARNING: If air or gas is used as a sole medium for pressure testing, the failure of the extinguisher vessel will be violent and dangerous.

5-4.1.2 When extinguisher shells, cylinders, or cartridges fail a hydrostatic pressure test, they shall be destroyed by the owner or at his/her direction.

5-4.2 Test Equipment for Compressed Gas Types.

5-4.2.1 The equipment for testing cylinders and cartridges shall be of the water jacket type that meets the specifications of the pamphlet *Methods for Hydrostatic Testing of Compressed Gas Cylinders* (CGA C-1), published by the Compressed Gas Association.

5-4.2.2 Hose assemblies of carbon dioxide extinguishers that require a hydrostatic test shall be tested within a protective cage device.

5-4.3* Test Equipment for Noncompressed Gas Types.

5-4.3.1 The equipment for testing noncompressed gas types consists of the following:

(a) A hydrostatic test pump, hand or power operated, to be capable of producing not less than 150 percent of the test pressure. It is to include appropriate check valves and fittings.

(b) A flexible connection for attachment to the test pump. It shall be provided with necessary fittings to test through the extinguisher nozzle, test bonnet, or hose outlet, as is applicable.

(c) A protective cage or barrier for personnel protection, designed to provide visual observation of the extinguisher under test.

5-4.3.2 Drying equipment is required to dry all nonwater types of extinguishers that have passed the hydrostatic test.

5-5 Testing Procedures.

5-5.1 Compressed Gas Types.

5-5.1.1 In addition to the visual examinations required prior to test as stated in 5-1.3, an internal examination shall be made prior to the hydrostatic test. The procedures for this internal examination shall be in accordance with the requirements of the *Standard for Visual Inspection of Compressed Gas Cylinders* (CGA C-6) and *Standard for Visual Inspection of High-Pressure Aluminum Compressed Gas Cylinders* (CGA C-6.1), published by the Compressed Gas Association.

5-5.1.2 The hydrostatic testing of compressed gas cylinders and cartridges shall be in accordance with the procedures specified in the pamphlet *Methods for Hydrostatic Testing of Compressed Gas Cylinders* (CGA C-1), published by the Compressed Gas Association.

5-5.2* Testing Procedures for Noncompressed Gas Types. The testing procedures for noncompressed gas cylinders and shells and hose assemblies are detailed in Appendix A of this standard.

5-5.3* Testing Procedures for Hose Assemblies. The testing procedures for hose assemblies requiring a hydrostatic test are detailed in Appendix A.

5-5.4 Recording of Tests.

5-5.4.1 Compressed Gas Types. For compressed gas cylinders and cartridges passing a hydrostatic test, the month, year, and the DOT identification number shall be stamped into the cylinder in accordance with the re-

ASHLAND, VIRGINIA 23005
804-798-3381

HYDRAULIC DESIGN INFORMATION SHEET

ME NAVAL REGIONAL MEDICAL CENTER — DATE 5-5-80
OCATION BOILER ROOM (REVISION #1)
BUILDING "E" LEVEL #1 — SYSTEM NO. BOILER RM
CONTRACTOR WORSHAM SPRINKLER CO. , INC. — CONTRACT NO. 10006
CALCULATED BY P. WAYNE HODNETT — DRAWING NO.
CONSTRUCTION:( )COMBUSTIBLE (X)NON-COMBUSTIBLE — CEILING HEIGHT
OCCUPANCY

S !( )NFPA 13 ( )LT. HAZ. ORD.HAZ.GP.( )1( )2( )3( )EX. HAZ.
Y !( )NFPA 231 ( )NFPA 231C FIGURE CURVE
S !( )OTHER
T !( )SPECIFIC RULING MADE BY DATE
E
M !AREA OF SPRINKLER OPERATION 3000 SYSTEM TYPE
!DENSITY-GAL/MIN/SQ.FT .2 (X)WET( )DRY( )DELUGE( )PREACTION
D !AREA PER SPRINKLER 130 SPRINKLER OR NOZZLE
E !HOSE ALLOWANCE GPM-INSIDE 0 MAKE GEM MODEL F-950
S !HOSE ALLOWANCE GPM-OUTSIDE 0 SIZE 1/2 K-FACTOR 5.56
I !RACK SPRINKLER ALLOWANCE 0 TEMPERATURE RATING 286
G !
N !

CALCULATION SUMMARY ! GPM REQUIRED 753.97 PSI REQUIRED 112.81 AT BASE OF RISER
! C FACTOR USED: OVERHEAD 120 UNDERGROUND 0

W ! WATER FLOW TEST ! PUMP DATA ! TANK OR RESERVOIR
A !DATE & TIME ! RATED CAP 500 ! CAP. 0
T !STATIC PSI 0 ! AT PSI 85 ! ELEV. 0
E !RESIDUAL PSI 0 ! ELEV 11.77 !
R !GPM FLOWING 0 ! ! WELL
!ELEVATION ! ! PROOF FLOW GPM 0
S ! ! !
U !
P !
P !LOCATION :750 GPM AVAILABLE AT PUMP DISCHARGE @ 115 PSI
L !SOURCE OF INFORMATION :
Y !

!COMMODITY CLASS LOCATION
C !STORAGE HT. AREA AISLE WIDTH
O !STORAGE METHOD:SOLID PILED % PALLETIZED % RACK %
M
M ! ! ( )SINGLE ROW( )CONVENTIONAL PALLET( )AUTOMATIC STORAGE( )ENCAPSULATED
! R ! ( )DOUBLE ROW( )SLAVE PALLET( )SOLID SHELVING( )NON-ENCAPSULATED
S ! A ! ( )MULTIPLE ROW ( )OPEN
T ! C !
O ! K ! FLUE SPACING IN INCHES: CLEARANCE:STORAGE TO CEILING
R ! ! LONGITUDINAL TRANSVERSE FT.
A ! !
G ! ! HORIZONTAL BARRIERS PROVIDED:
E ! !

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING D LEVEL 1 (ZONE 1D1)

JOB INFORMATION

JOB NUMBER :10006
JOB NAME :NAVAL REG. MED. CTR.
JOB LOCATION :CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION :U.S. GOVT.

SHEET 1 OF 9
DATE 1-28-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 621.30 G.P.M. AT 111.33 P.S.I. AT PUMP DISCHARGE.
K-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	:500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	:85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	:11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.
2. APPENDAGE CHACK AREA ATTACHED.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING E BASEMENT

JOB INFORMATION

SHEET 1 OF 5
DATE 2-5-80

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.200 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 [redacted] f
		SYSTEM TYPE	: DRY

CALCULATION SUMMARY

SYSTEM REQUIRES - 681.60 G.P.M. AT 101.21 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 100
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 760.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING E LEVEL 1 (ZONE 1E2)

JOB INFORMATION

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SHEET 1 OF 8
DATE 1-31-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 666.20 G.P.M. AT 88.47 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.
2. DRY APPENDAGE DATA ATTACHED.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING F LEVEL 1 (GRID)

JOB INFORMATION

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SHEET 1 OF 12
DATE 1-29-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.250 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 994.10 G.P.M. AT 80.91 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. CHECK AREA ATTACHED.
2. DOCK APPENDAGE AREA ATTACHED.
3. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

ASHLAND, VIRGINIA 23005
804-798-3381

HYDRAULIC DESIGN INFORMATION SHEET

NAME NAVAL REGIONAL MEDICAL CENTER — DATE 5-5-80
LOCATION STANDPIPE DESIGN AT RISER #1 (REMOTE RISER)(R-1)
BUILDING — SYSTEM NO. RISER #1
CONTRACTOR WORSHAM SPRINKLER CO. , INC. — CONTRACT NO. 10006
CALCULATED BY P. WAYNE HODNETT — DRAWING NO.
CONSTRUCTION:( )COMBUSTIBLE (X)NON-COMBUSTIBLE — CEILING HEIGHT
OCCUPANCY

SYSTEM TYPE: ( )NFPA 13 ( )LT. HAZ. ORD.HAZ.GP.( )1( )2( )3( )EX. HAZ.
( )NFPA 231 ( )NFPA 231C FIGURE CURVE
( )OTHER
( )SPECIFIC RULING MADE BY DATE

AREA OF SPRINKLER OPERATION 0 — SYSTEM TYPE
DENSITY-GAL/MIN/SQ.FT 0 — (X)WET( )DRY( )DELUGE( )PREACTION
AREA PER SPRINKLER 0 — SPRINKLER OR NOZZLE
HOSE ALLOWANCE GPM-INSIDE 500 — MAKE MODEL
HOSE ALLOWANCE GPM-OUTSIDE 0 — SIZE K-FACTOR 0
RACK SPRINKLER ALLOWANCE 0 — TEMPERATURE RATING

CALCULATION SUMMARY: GPM REQUIRED 500 — PSI REQUIRED 0 — AT BASE OF RISER
C FACTOR USED: — OVERHEAD 120 — UNDERGROUND 0

WATER SUPPLY

WATER FLOW TEST
DATE & TIME
STATIC PSI 0
RESIDUAL PSI 0
GPM FLOWING 0
ELEVATION

PUMP DATA
RATED CAP 500
AT PSI 85
ELEV 11.77

TANK OR RESERVOIR
CAP. 0
ELEV. 0

WELL
PROOF FLOW GPM 0

LOCATION :750 GPM AVAILABLE AT PUMP DISCHARGE @ 115 PSI
SOURCE OF INFORMATION :

COMMODITY CLASS LOCATION
STORAGE HT. AREA AISLE WIDTH
STORAGE METHOD:SOLID PILED % PALLETIZED % RACK %

STORAGE ARRANGEMENT: ( )SINGLE ROW( )CONVENTIONAL PALLET( )AUTOMATIC STORAGE( )ENCAPSULATED
( )DOUBLE ROW( )SLAVE PALLET( )SOLID SHELVING( )NON-ENCAPSULATED
( )MULTIPLE ROW ( )OPEN

RACK
FLUE SPACING IN INCHES: CLEARANCE:STORAGE TO CEILING
LONGITUDINAL TRANSVERSE FT.
HORIZONTAL BARRIERS PROVIDED:

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING A LEVEL #2 ZONE 2B SIMILAR

JOB INFORMATION

SHEET 1 OF 15
DATE 1-31-80

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 [redacted] f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 636.50 G.P.M. AT 106.51 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville , North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING A (LEVEL 1) ZONES 1B1, 1C1, 1C2, & 1D2 ARE SIMILAR FOR HYD. CALC (E)

JOB INFORMATION

JOB NUMBER : 10006 SHEET 1 OF 12
JOB NAME : NAVAL REG. MED. CTR. DATE 1-28-80
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 [redacted] f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 564.80 G.P.M. AT 109.80 P.S.I. AT PUMP DISCHARGE.
K-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.
2. SIMILAR GRIDS ON THIS LEVEL TO BE SIZED SIMILARLY.

WORSHAM SPRINKLER CO., INC.
ASHLAND, VIRGINIA 23005
804-798-3381

HYDRAULIC DESIGN INFORMATION SHEET

NAME NAVAL REGIONAL MEDICAL CENTER — DATE 5-13-80
LOCATION 0081
BUILDING ZONE 2B1 BUILDING "B" — SYSTEM NO. ZONE 2B1
CONTRACTOR WORSHAM SPRINKLER CO. , INC. — CONTRACT NO. 10006
CALCULATED BY P. WAYNE HODNETT — DRAWING NO. 10 OF 17
CONSTRUCTION: ( )COMBUSTIBLE (X)NON-COMBUSTIBLE — CEILING HEIGHT
OCCUPANCY

SYSTEM DESIGN

( )NFPA 13 ( )LT. HAZ. ORD.HAZ.GP.( )1( )2( )3( )EX. HAZ.
( )NFPA 231 ( )NFPA 231C FIGURE CURVE
( )OTHER
( )SPECIFIC RULING MADE BY DATE

AREA OF SPRINKLER OPERATION	3000
DENSITY-GAL/MIN/SQ.FT	.1
AREA PER SPRINKLER	130
HOSE ALLOWANCE GPM-INSIDE	0
HOSE ALLOWANCE GPM-OUTSIDE	0
RACK SPRINKLER ALLOWANCE	0

SYSTEM TYPE
( )WET( )DRY( )DELUGE( )PREACTION

SPRINKLER OR NOZZLE
MAKE STAR MODEL FLUSH
SIZE 1/2 K-FACTOR 5.6
TEMPERATURE RATING 212

CALCULATION SUMMARY: GPM REQUIRED 786.55 PSI REQUIRED 101.73 AT BASE OF RISER
C FACTOR USED: OVERHEAD 120 UNDERGROUND 0

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE & TIME		RATED CAP	500	CAP.	0
STATIC PSI	0	AT PSI	85	ELEV.	0
RESIDUAL PSI	0	ELEV	11.77		
GPM FLOWING	0				
ELEVATION				WELL	
				PROOF FLOW GPM	0

LOCATION :750 GPM AVAILABLE AT PUMP DISCHARGE @ 115 PSI
SOURCE OF INFORMATION :

COMMODITY CLASS LOCATION
STORAGE HT. AREA AISLE WIDTH
STORAGE METHOD: SOLID PILED % PALLETIZED % RACK %

STORAGE

( )SINGLE ROW( )CONVENTIONAL PALLET( )AUTOMATIC STORAGE( )ENCAPSULATED
( )DOUBLE ROW( )SLAVE PALLET( )SOLID SHELVING( )NON-ENCAPSULATED
( )MULTIPLE ROW ( )OPEN

RACK

FLUE SPACING IN INCHES: CLEARANCE: STORAGE TO CEILING
LONGITUDINAL TRANSVERSE FT.

HORIZONTAL BARRIERS PROVIDED:

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING C LEVEL 2 GRID

JOB INFORMATION

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SHEET 1 OF 12
DATE 2-4-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.10 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
HACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 [redacted] f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 635.40 G.P.M. AT 111.66 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING C LEVEL 2 DRY AREA (Pre-Action)

JOB INFORMATION

SHEET 1 OF 10
DATE 2-4-80

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: ENTIRE AREA	SPRINKLER MAKE	: GEM
DENSITY	: 0.10 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212° [redacted] f
		SYSTEM TYPE	: DRY

CALCULATION SUMMARY

SYSTEM REQUIRES - 486.80 G.P.M. AT 112.67 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 100
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING C LEVEL 2 ZONE ZC1

JOB INFORMATION

NUMBER :10006
NAME :NAVAL REG. MED. CTR.
LOCATION :CAMP LEJEUNE - N.C.
HORITY HAVING JURISDICTION :U.S. GOVT.

SHEET 1 OF 10
DATE 2-4-80

SYSTEM DESIGN

NDARDS USED : CONTRACT DOCUMENTS

AL AREA OF PRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
SITY	: 0.10 G.P.M.	SPRINKLER MODEL	: F-950
IDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
SIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
K SPRINKLER		SPRINKLER TEMP. RATING	: 212 f
LLOWANCE (G.P.M.)	: N/A	SYSTEM TYPE	: WET

CALCULATION SUMMARY

TEM REQUIRES - 628.50 G.P.M. AT 114.95 P.S.I. AT PUMP DISCHARGE.
ACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST	PUMP DATA	TANK OR RESERVOIR
E :	RATED AT (GPM) : 500.00	CAPACITY (GALS.) :
E :	AT (PSI) : 85.00	ELEVATION :
TIC (PSI) :	ELEVATION : 11.77'	
IDUAL (PSI) :		
Y (GPM) :		
VATION :		
. OF TEST :		
RCE OF INFO. :		

NOTES

750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING D LEVEL 2 ZONE 2D2 (ZONES 2D1 & 2D1A SIMILAR)

JOB INFORMATION

SHEET 1 OF 8
DATE 2-4-80

OB NUMBER :10006
OB NAME :NAVAL REG. MED. CTR.
OB LOCATION :CAMP LEJEUNE - N.C.
UTHORITY HAVING JURISDICTION :U.S. GOVT.

SYSTEM DESIGN

TANDARDS USED : CONTRACT DOCUMENTS

OTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
ENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
NSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
UTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
ACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212° [redacted] f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

YSTEM REQUIRES - 673.40 G.P.M. AT 114.60 P.S.I. AT PUMP DISCHARGE.
-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
ATE	:	RATED AT (GPM)	:500.00	CAPACITY (GALS.)	:
IME	:	AT (PSI)	:85.00	ELEVATION	:
TATIC (PSI)	:	ELEVATION	:11.77'		
ESIDUAL (PSI)	:				
LOW (GPM)	:				
LEVATION	:				
OC. OF TEST	:				
OURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDING D LEVEL 2 DRY AREA (PRE-ACTION)

JOB INFORMATION

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SHEET 1 OF 4
DATE 2-4-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: LARGER ROOM	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 ~~285~~ f
		SYSTEM TYPE	: DRY

CALCULATION SUMMARY

SYSTEM REQUIRES - 244.00 G.P.M. AT 61.14 P.S.I. AT CONN. TO RISER.
C-FACTOR USED = OVERHEAD 100
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				

LOC. OF TEST :
SOURCE OF INFO. :

NOTES

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

LEVEL 1 OF BUILDINGS G & H (ZONE 1G2)

JOB INFORMATION

SHEET 1 OF 9
DATE 1-23-80

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 585.60 G.P.M. AT 109.04 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.
2. OTHER SYSTEMS IN THESE BUILDINGS ON THIS FLOOR ARE SIZED SIMILAR

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville , North Carolina 27284

GENERAL AREA DESCRIPTION

SECOND LEVEL OF BUILDINGS G & H (TREE SYS.)

JOB INFORMATION

JOB NUMBER :10006
JOB NAME :NAVAL REG. MED. CTR.
JOB LOCATION :CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION :U.S. GOVT.

SHEET 1 OF 9
DATE 1-23-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 618.20 G.P.M. AT 82.39 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	:500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	:85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	:11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

DRY AREA OF THE 3RD. LEVEL OF BUILDING H

JOB INFORMATION

JOB NUMBER :10006
JOB NAME :NAVAL REG. MED. CTR.
JOB LOCATION :CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION :U.S. GOVT.

SHEET 1 OF 7
DATE 1-23-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 ~~165~~ f
		SYSTEM TYPE	: DRY

CALCULATION SUMMARY

SYSTEM REQUIRES - 556.50 G.P.M. AT 84.78 P.S.I. AT REF. POINT (
C-FACTOR USED = OVERHEAD 100
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	:500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	:85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	:11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. SEE NOTE ON SHEET #7.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BUILDINGS G & H LEVEL #4 ZONES 3G1, 3G2 & 3H1 ARE SIMILAR

JOB INFORMATION

SHEET 1 OF 11
DATE 1-23-80

JOB NUMBER : 10006
JOB NAME : NAVAL REGIONAL MEDICAL CENTER
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.100 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: 212 f
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 591.00 G.P.M. AT 104.30 P.S.I. AT pump discharge.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND n/a

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 g.p.m. at 115.00 p.s.i. available at pump discharge.
2. grids on levels 2 3 & 4 are all sized similar.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

BOILER ROOM

JOB INFORMATION

SHEET 1 OF 6
DATE 2-6-80

JOB NUMBER : 10006
JOB NAME : NAVAL REG. MED. CTR.
JOB LOCATION : CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION : U.S. GOVT.

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	: 3000 SQ. FT.	SPRINKLER MAKE	: GEM
DENSITY	: 0.200 G.P.M.	SPRINKLER MODEL	: F-950
INSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER SIZE	: 1/2 X 1/2
OUTSIDE HOSE STREAMS (G.P.M.)	: N/A	SPRINKLER K-FACTOR	: 5.56
RACK SPRINKLER ALLOWANCE (G.P.M.)	: N/A	SPRINKLER TEMP. RATING	: VARIES
		SYSTEM TYPE	: DRY

CALCULATION SUMMARY

SYSTEM REQUIRES - 718.70 G.P.M. AT 114.81 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 100
UNDERGROUND N/A

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	: 500.00	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	: 85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	: 11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 750.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.

Hydraulic Summary Sheet By
Worsham Sprinkler Co., Inc.
1355 South Park Drive
Kernersville, North Carolina 27284

GENERAL AREA DESCRIPTION

ALL RISERS ARE SIMILAR

STANDPIPE DESIGN AT RISER #1 (REMOTE RISER)

JOB INFORMATION

JOB NUMBER :10006
JOB NAME :NAVAL REGIONAL MEDICAL CENTER
JOB LOCATION :CAMP LEJEUNE - N.C.
AUTHORITY HAVING JURISDICTION :U.S. GOVT.

SHEET 1 OF 4
DATE 1-2-80

SYSTEM DESIGN

STANDARDS USED : CONTRACT DOCUMENTS

TOTAL AREA OF SPRINKLER OPERATION	:	SPRINKLER MAKE	:
DENSITY	:	SPRINKLER MODEL	:
INSIDE HOSE STREAMS (G.P.M.)	: 500.00	SPRINKLER SIZE	:
OUTSIDE HOSE STREAMS (G.P.M.)	:	SPRINKLER K-FACTOR	:
RACK SPRINKLER ALLOWANCE (G.P.M.)	:	SPRINKLER TEMP. RATING	:
		SYSTEM TYPE	: WET

CALCULATION SUMMARY

SYSTEM REQUIRES - 500.00 G.P.M. AT 113.89 P.S.I. AT PUMP DISCHARGE.
C-FACTOR USED = OVERHEAD 120
UNDERGROUND

WATER SUPPLY

WATER FLOW TEST		PUMP DATA		TANK OR RESERVOIR	
DATE	:	RATED AT (GPM)	:500	CAPACITY (GALS.)	:
TIME	:	AT (PSI)	:85.00	ELEVATION	:
STATIC (PSI)	:	ELEVATION	:11.77'		
RESIDUAL (PSI)	:				
FLOW (GPM)	:				
ELEVATION	:				
LOC. OF TEST	:				
SOURCE OF INFO.	:				

NOTES

1. 500.00 G.P.M. AT 115.00 P.S.I. AVAILABLE AT PUMP DISCHARGE.