NOZZLE SCHEDULE

NOZZLE NUMBER	SPRAY PATTERN	SPRAY ANGLE	SPRAY DISTIBUTION	FREE PASSAGE DIAMETER (IN)	DESIGN CAPACITY (GPM)	DESIGN PRESSURE (PSI)	SPRAY MEDIA	PIPE SIZE (IN)	THREADED END TYPE	REMARKS
N1	FULL CONE	110	UNIFORM	0.375	21.0	40	WATER	3/4 NPT	FEMALE	316 STAINLESS STEEL
N2	SOLID STREAM	--	UNIFORM	0.334	28.0	80	WATER	1/2 NPT	FEMALE	316 STAINLESS STEEL W/SS ADJUSTABLE BALL FITTING. INSTALL ANGLED AS INDICTATED.
N3	SOLID STREAM	--	UNIFORM	0.437	50.0	80	WATER	3/4 NPT	FEMALE	316 STAINLESS STEEL W/SS ADJUSTABLE BALL FITTING. INSTALL ANGLED AS INDICTATED.
N4	SOLID STREAM	--	UNIFORM	*	99.0	80	WATER	1-1/4 NPT	FEMALE	316 STAINLESS STEEL W/SS ADJUSTABLE BALL FITTING. INSTALL ANGLED AT 40 DEGREES ABOVE HORIZONTAL.

* MULTIPLE ORIFICE 1

INSTANTANEOUS WATER HEATER SCHEDULE

MARK	UNIT SERVES	LOCATION	CAPACITY (GPM)	EWT (°F)	LWT (°F)	ELECTRICAL KW	V	PH	AMPS	CW IN (IN)	HW OUT (IN)	NOTES
WH-1	LAVATORY SINK / KITCHEN SINK	LOX PLANT-MECH 106	1.5	50	120	15	208	1	72	3/4	3/4	
WH-2	SERVICE SINK	LOX PLANT-MAINTENANCE 103	3	50	120	36	480	3	44	3/4	3/4	
WH-3	EMERGENCY SHOWER / EYEWASH STATION	LOX PLANT-MAINTENANCE 103	20	50	85	108	480	3	132	1-1/4	1-1/4	[1][2]
WH-4	NOT USED	--	–	–	–	–	–	–	–	–	–	
WH-5	SERVICE SINK	SONOBUOY ISSUE/STORAGE FACILITY-JANITOR 101B	3	50	120	36	480	3	44	3/4	3/4	
WH-6	LAVATORY SINK / KITCHEN SINK	SONOBUOY ISSUE/STORAGE FACILITY-JANITOR 101B	1.5	50	120	18	208	1	87	3/4	3/4	
WH-7	EMERGENCY SHOWER / EYEWASH STATION	SONOBUOY ISSUE/STORAGE FACILITY-SONOBUOY\ISSUE 103	20	50	85	108	480	3	132	1-1/4	1-1/4	[1][2]

NOTES:
[1] TANKLESS HEATER FOR EMERGENCY SHOWER/EYEWASH APPLICATIONS.
[2] TEPID WATER OUT (85°F)

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AIR COMPRESSOR SCHEDULE

MARK	LOCATION	QTY	SCFM	PSI	MOTOR HP	VOLT	PH	RPM	RECEIVER CAPACITY (GALLONS)	UNIT WxLxH (IN)	NOTES	EQUIP WEIGHT (LBS)
AC-1	LOX FACILITY	1	17.5	175	5	208	1	750	70	–	[1],[2],[3]	400

NOTES:
[1] VERTICAL TANK WITH COMPRESSOR MOUNTED ON TOP.
[2] PROVIDE AUTOMATIC DRAIN VALVE.
[3] PROVIDE CONDENSATE DRAIN OIL/WATER SEPARATOR. SEPARATOR SHALL REDUCE OIL IN CONDENSATE TO A MAXIMUM OF10 PPM

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AIRCRAFT RINSE FACILITY VALVE SCHEDULE

MARK	SERVES	LOCATION	PIPE SIZE (IN)	VALVE SIZE (IN)	NOM-MAX WORKING PRESS (PSI)	TYPE	WT (LBS)	REMARKS & NOTES
ST-RF-1	DCVA INLET	Pump House	8	8	150-150	WYE STRAINER	320	
CV-RF-1	WATER INLET	Pump House	8	8	150-150	ELECTRONIC CONTROL VALVE	500	[1]
CV-RF-2	DRAIN	VALVE BOX	2	2	150-150	ELECTRONIC CONTROL VALVE	35	[2]
PRV-SF-1	UPPER WASH NOZZLES	RINSE RACK	6	6	150-150	PRESSURE REDUCING VALVE	428	[3]
PRV-SF-2	LOWER WASH NOZZLES	RINSE RACK	6	6	150-150	PRESSURE REDUCING VALVE	428	[4]
OSY-SF-1	WATER INLET	Pump House	8	8	150-150	OS&Y VALVE	250	[7]
OSY-SF-2	DCVA INLET	Pump House	8	8	150-150	OS&Y VALVE	250	[7]
OSY-SF-3	DCVA OUTLET	Pump House	8	8	150-150	OS&Y VALVE	250	[7]
OSY-SF-4	PVR-SF-1 INLET	Pump House	6	6	150-150	OS&Y VALVE	150	[7]
OSY-SF-5	PVR-SF-2 INLET	Pump House	6	6	150-150	OS&Y VALVE	150	[7]
DCVA-RF-1	WATER INLET	Pump House	8	8	150-150	DOUBLE CHECK VALVE ASSEMBLY	2608	[5]
WM-RF-1	WATER INLET	Pump House	8	8	150-150	WATER METER	123	[6]

NOTES:
[1] PROVIDE WITH PROGRAMMABLE VALVE CONTROLLER WHICH RESPONDS TO A 4 TO 20 ma SIGNAL FROM THE DDC SYSTEM. CONTROLLER TO PROVIDE INDEPENDENTLY ADJUSTABLE OPENING AND CLOSING RATES AND SYSTEM FLOW RATE. INITIAL FLOW RATE - 100 GPM
[2] PROVIDE WITH PROGRAMMABLE VALVE CONTROLLER WHICH RESPONDS TO A 4 TO 20 ma SIGNAL FROM THE DDC SYSTEM. CONTROLLER TO PROVIDE INDEPENDENTLY. ADJUSTABLE OPENING AND CLOSING RATES
[3] INITIAL SETPOINT - 80 PSIG
[4] INITIAL SETPOINT - 30 PSIG
[5] PROVIDE 8" DCVA VALVE WITH 8" INTEGRAL BYPASS CONNECTIONS
[6] AMI COMPLIANT METER COMPATABILE WITH THE EXISTING NAVAL AIR STATION WHIDBEY ISLAND AMI SYSTEM
[7] FORGED STEEL API 602 BOLTED BONNET OS&Y GATE VALVE, CLASS 300 (ASME B16.34), CARBON STEEL BODY MATERIAL (ASTM A 105N), FLANGED ENDS, FLEXIBLE WEDGE/DISC SURFACE - A217-CA15, SEAT SURFACE - STELLITE 6, STEM - STAINLESS STEEL Gr. 410

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PUMP SCHEDULE

MARK	SYSTEM	LOCATION	CAPACITY (GPM)	TDH (FT)	MOTOR HP	VOLT	PH	RPM	TYPE	NOTES	EQUIP WEIGHT
VTP-1	SANITARY SEWER SYSTEM	AIRCRAFT RINSE FACILITY	500	152	25	460	3	1770	VERTICAL TURBINE PUMP	[1] [2] [3]	1,000
SEP-1	SANITARY SEWER SYSTEM	LOX PLANT	20	80	2	460	3	3450	SUMP PUMP	[1] [3]	80
SEP-2	SANITARY SEWER SYSTEM	SONOBOUY ISSUE/STORAGE FACILITY	20	80	2	460	3	3450	SUMP PUMP	[1] [3]	80

NOTES: [1] TWO PUMPS SET UP IN DUPLEX ARRANGEMENT
[2] NPSHr 6.25 FEET MAXIMUM, 7.25 NPSHa
[3] PROVIDE WITH DUPLEX CONTROLLER FLOAT SWITCH ASSEMBLY, PUMP ALTERNATOR, AND AUDIBLE AND VISUAL ALARM

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SYM	DESCRIPTION	DATE	APPR
1	AMENDMENT 005	3/27/15	

NAVFAC

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FOR COMMANDER NAVFAC
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NAS WHIDBEY ISLAND
SATISFACTORY TO DATE
DES: BCD DRW: JML CHK: LDS
<<PM/DM>> JOSEPH KISIDAY
BRANCH MANAGER
CHIEF ENG/ARCH
<<XXX>>

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION WHIDBEY ISLAND

NAVAL FACILITIES ENGINEERING COMMAND ~ NORTHWEST
AULT FIELD - OAK HARBOR, WA

NAVAL AIR STATION WHIDBEY ISLAND
OAK HARBOR, WA
FY-15 MCON PROJECT P-259 P-8A AIRCRAFT
APRON EXPANSION - PART A

PLUMBING SCHEDULES

SCALE: AS NOTED
EPROJECT NO.:
CONSTR. CONTR. NO.: N44255-15-C-6003
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SHEET 202 OF 302

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DRAWFORM REVISION: 10 MARCH 2009

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