

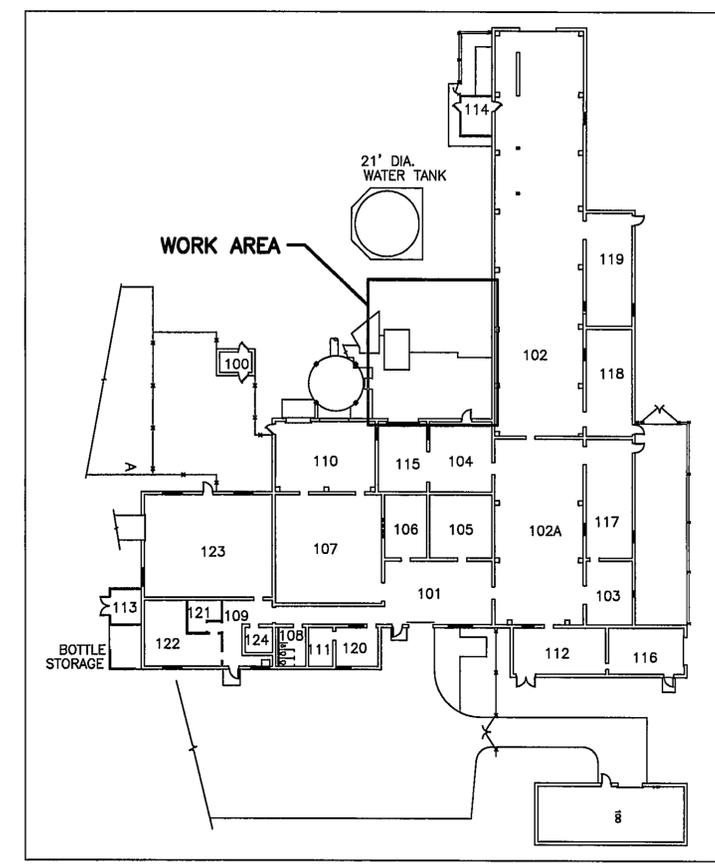
CF4 RECLAMATION SYSTEM INSTALLATION - PLAN
SCALE: 3/8" = 1'-0"

AVAILABLE UTILITIES:

- LIQUID NITROGEN (LN₂): FROM EXISTING 6000 GALLON STORAGE TANK. MAXIMUM MASS FLOWRATE - 966 LBS/HR @ 50 PSIG -320°F.
*EXISTING PRESSURE BUILDING COIL AND SUPPLY REGULATOR LIMIT THE MAXIMUM LN₂ FLOW. HIGHER PEAK LN₂ FLOWS WILL REQUIRE CONTRACTOR TO REPLACE EXISTING PRESSURE BUILDING COIL, SUPPLY REGULATOR AND ANY OTHER COMPONENTS (PIPE, RELIEF VALVES) TO DELIVER LN₂ TO NEW RECLAIMER IN ACCORDANCE WITH ASME B31.3 AND NASA LANGLEY HANDBOOK 1710.40, SAFETY REGULATIONS COVERING PRESSURIZED SYSTEMS.
*MAXIMUM LN₂ USAGE SHALL NOT EXCEED 1,565 LBS OF LN₂ PER 30 MINUTE FULL RUN CYCLE. SEE SPECIFICATION SECTION 15230 FOR COMPLETE REQUIREMENTS.
- GASEOUS NITROGEN (GN₂) - FROM EXISTING 6000 GALLON STORAGE TANK. MAXIMUM FLOWRATE 116 SCFM.
- SERVICE AIR - FROM EXISTING DISTRIBUTION SYSTEM AT VALVE 3140A. MAXIMUM FLOWRATE APPROXIMATELY 50 SCFM.

INSTALLATION NOTES:

- FOR GENERAL INSTALLATION NOTES SEE DRAWING 1239520. FOR EXISTING RECLAIMER DESIGN SEE REFERENCE DRAWING LD-708794.
△ EXISTING 6000 GALLON LN₂ STORAGE TANK INFORMATION (SEE REFERENCE DRAWING 1103732):
NATIONAL BOARD No.: 53631
MVE, INC.-NEW PRAGUE, MINNESOTA
VLS-6000-SC-75-NASA
INNER VESSEL ONLY
MAWP @ FULL VACUUM: 75 PSI @ 100°F
MINIMUM DESIGN METAL TEMPERATURE: -320°F @ 75 PSI
SERIAL No.: 2084
YEAR BUILT: 1996
TARE WEIGHT: 19032
- △ 12" RECLAIMER INLET CONNECTION FROM VACUUM PUMPS. SEE DRAWING 1239523 FOR CONTINUATION.
- △ POINT OF CONNECTION FOR GN₂ IS AT EXISTING CV3035N (CV-2). SEE REFERENCE DRAWING 1103732.
- △ POINT OF CONNECTION FOR SERVICE AIR IS AT VALVE 3140A. SEE REFERENCE DRAWING LD-708795.
- △ POINT OF CONNECTION FOR HIGH PRESSURE CF₄ (5000 PSIG) AT EXST 2" CF₄ PIPING. SEE REFERENCE DRAWING LD-706813.
- △ CONTRACTOR SHALL REMOVE EXISTING CONCRETE AS REQUIRED TO INSTALL CONCRETE FOUNDATIONS FOR NEW RECLAIMER EQUIPMENT. NEW EQUIPMENT PADS SHALL HAVE AN ALLOWABLE SOIL BEARING PRESSURE OF 2000 LB/FT² MAXIMUM.



KEY PLAN

REVISIONS				REVISIONS									
DATE	LTR	FREQ	DESCRIPTION	BY	CHECK	APPD	DATE	LTR	FREQ	DESCRIPTION	BY	CHECK	APPD
4/28/04	A	1	"VACUUM PUMPS" WAS "RELOCATED VACUUM PUMPS"	WJG	CBM	CM							

Sverdrup
TECHNOLOGY INC.
TECHNOLOGY GROUP

WORK ORDER NO.		APPROVALS	
NO.	DATE	NAME	ORGANIZATION
D.O. 1014/4023			
APPROVALS	DATE		
DRAFT.			
ENG./DES.	06/07/02	E. DOHERTY	
CHECK	06/07/02	R. WINEMAN	
PROJ. ENG.	06/07/02	G. VOLKMAN	
SUPV.N.	06/07/02	R. WINEMAN	

FOR DRAWING INDEX SEE DRAWING 1239510	
NATIONAL AERONAUTICS & SPACE ADMINISTRATION LANGLEY RESEARCH CENTER HAMPTON, VIRGINIA 23681-0001	
PROJECT TITLE	FY 03 - 20-INCH MACH 6 CF4 TUNNEL RECLAIMER MODIFICATIONS
DRAWING TITLE	CF4 RECLAMATION SYSTEM INSTALLATION PLAN AND NOTES
BUILDING NO.	1275
SIZE	D
DRAWING NO.	1239526
SHEET NO.	P14

TOLERANCE ON DIMENSIONS UNLESS SHOWN OTHERWISE
ANGULAR ±
X.XXX (2 DECIMAL PLACES) ±.02
X.XXX (3 DECIMAL PLACES) ±.005

SURFACE FINISH IN MICROINCHES UNLESS OTHERWISE SHOWN

DATE REVISION