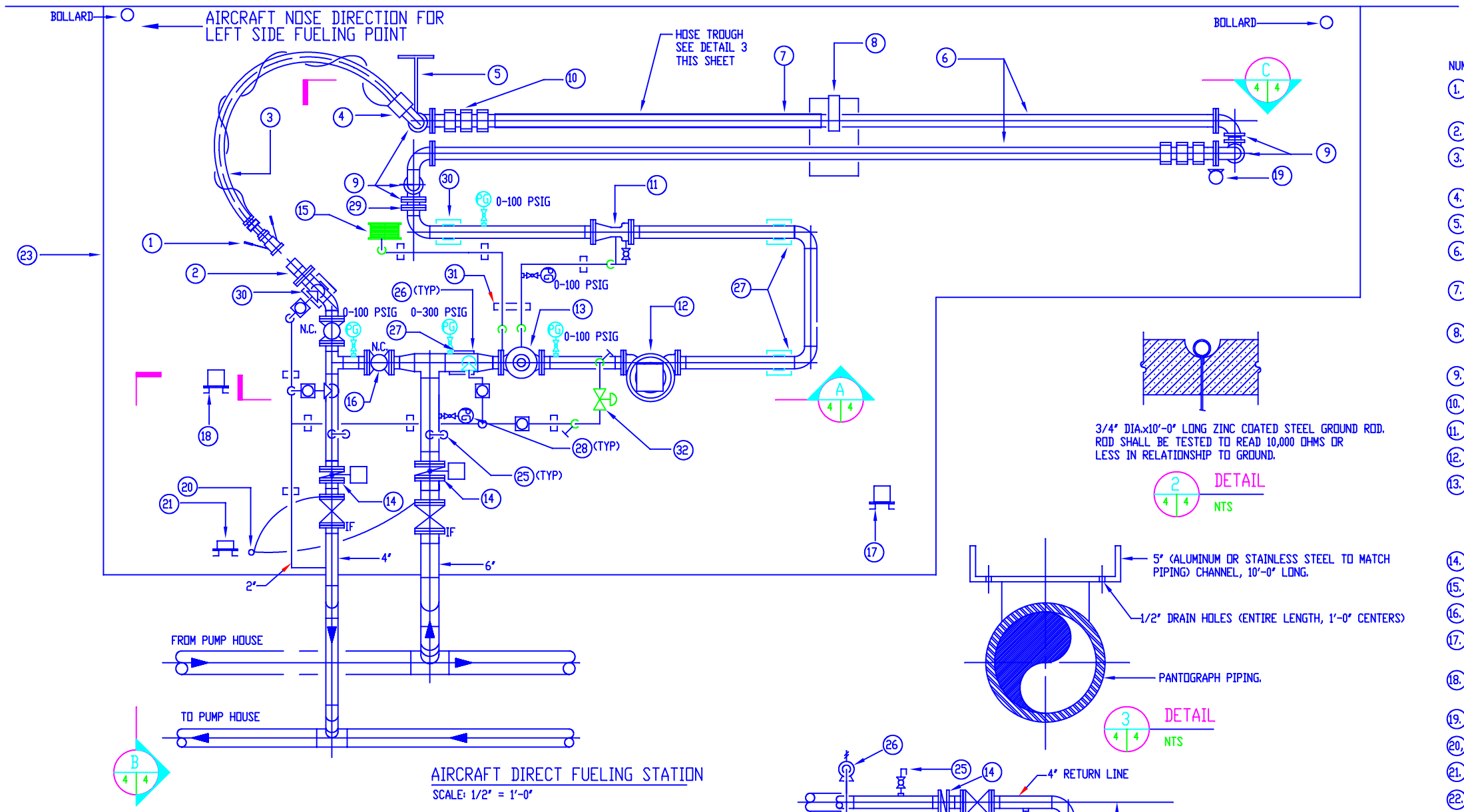
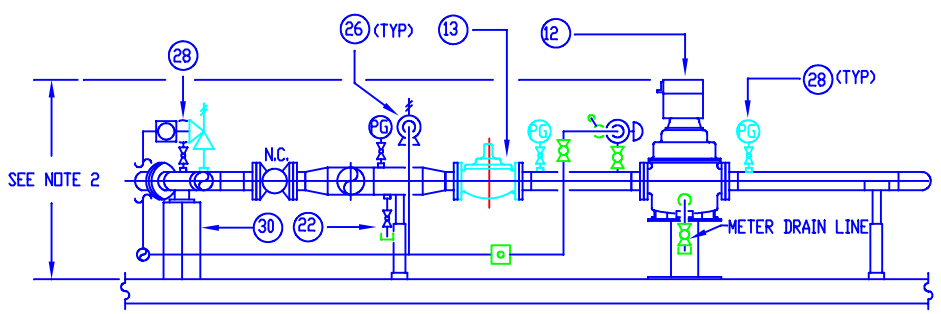
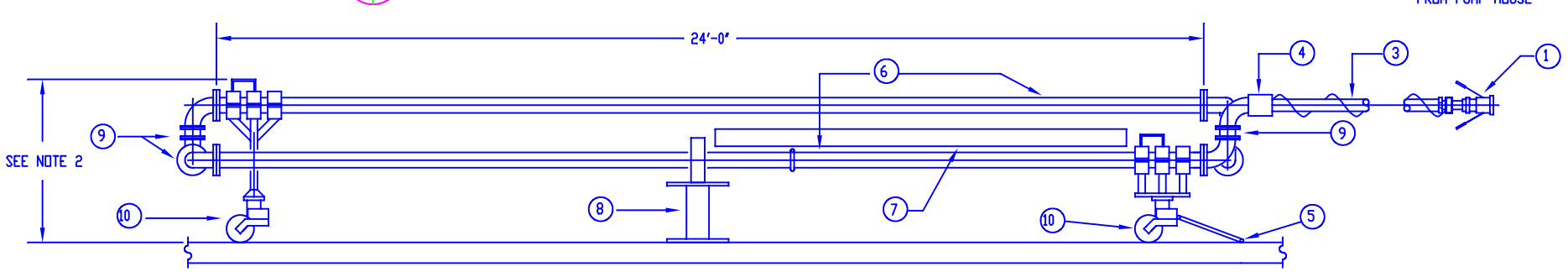


AIRCRAFT DIRECT FUELING STATION
SCALE: 1/2" = 1'-0"



A SECTION
SCALE: 1/2" = 1'-0"

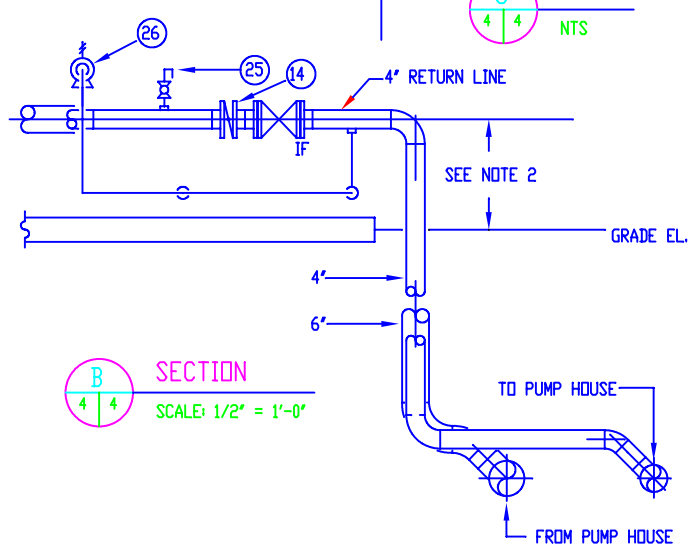


C SECTION
SCALE: 1/2" = 1'-0"

3/4" DIA.x10'-0" LONG ZINC COATED STEEL GROUND ROD. ROD SHALL BE TESTED TO READ 10,000 OHMS OR LESS IN RELATIONSHIP TO GROUND.

2 DETAIL
NTS

3 DETAIL
NTS



B SECTION
SCALE: 1/2" = 1'-0"

NUMBERED NOTES:

1. PRESSURE FUELING NOZZLE W/ 60 MESH STRAINER, HOSE END PRESSURE CONTROLLER AND DRY BREAK COUPLING (D-1R)
2. 2-1/2" D-1 NOZZLE ADAPTER W/ VACUUM TIGHT DUST CAP.
3. 2-1/2" DIAMETER API 1529 AIRCRAFT FUELING HOSE. NOMINAL 10' LENGTH. HOSE TO HAVE EXTERNALLY WRAPPED BOND WIRE FROM HOSE COUPLING TO HOSE COUPLING.
4. EMERGENCY BREAKAWAY COUPLING.
5. PULL HANDLE.
6. TWO PIPE SECTION, SS OR ALUMINUM PANTOGRAPH. NOMINAL LENGTH: 24' PER PIPE SECTION. DIAMETER OF PANTOGRAPH PIPING SHALL BE AS SPECIFIED.
7. HOSE TRAY, SEE DETAIL 3
8. HINGED HOLDING BRACKET W/ HASP AND LOCK. TO FOLD AND ALLOW PANTOGRAPH PIPE SECTIONS TO PASS WHEN EXTENDING.
9. SWIVEL JOINTS (TYP).
10. ALL TERRAIN WHEELS (TYP FOR 4).
11. FUELING STATION VENTURI.
12. 600 GPM FUELING STATION METER.
13. 4" REFUELING CONTROL VALVE WITH: (a) PRESSURE CONTROL FROM REMOTE SENSE (VENTURI), (b) SURGE CONTROL PILOT, (c) OPENING SPEED CONTROL, (d) DEADMAN CONTROLLED ELECTRONIC SOLENOID, (e) DIFFERENTIAL PRESSURE PILOT TO MAINTAIN VALVE CONTROL AND (f) THERMAL RELIEF FEATURE
14. HIGH PERFORMANCE WAFER TRUNNION VALVE W/ 165°F FUSIBLE LINK
15. DEADMAN REEL.
16. EMERGENCY CROSS CONNECTION PERMITS FUELING THROUGH THE RETURN LINE
17. EMERGENCY STOP PUSHBUTTON STATION. MAY SERVE MORE THAN ONE STATION. COORDINATE LOCATION WITH COMMAND FUELS ENGINEER/SAFETY.
18. CONTROL STATION WITH PUSHBUTTONS FOR START/STOP AND LIGHT FOR INDICATING STATION CONDITION. (RED - GREEN)
19. STEEL POST W/ RESILIENT BUMPER.
20. GROUNDING ROD, SEE DETAIL 2
21. CATHODIC PROTECTION TEST STATION.
22. LOW POINT DRAIN.
23. CONCRETE PAD, SEE NOTE 3
24. SAMPLE CONNECTION
25. MANUAL AIR VENT W/ COUPLING FOR HOSE CONNECTION
26. RELIEF VALVE
27. PIPE SUPPORT
28. PRESSURE GAGE WITH SURGE RECORDING ARROW (0-300 PSI)
29. PANTOGRAPH CONNECTION POINT. DIRECTION AND/OR ELEVATION FOR POINT OF CONNECTION MAY VARY BASED ON PANTOGRAPH TYPE, AND MAXIMUM ALLOWABLE HEIGHT RESTRICTIONS.
30. PIPE ANCHOR.
31. CHANNEL TYPE PIPE SUPPORT.
32. AUTOMATIC PANTOGRAPH PRESSURE RELIEF VALVE (PPRV) WITH ELECTRONIC SOLENOID, BUILT-IN CHECK FEATURE. ENABLED (AS BACK PRESSURE CONTROL VALVE) WHEN DEADMAN IS DEPRESSED. OPEN WHEN DEADMAN IS RELEASED.

NOTE: 1. THE PANTOGRAPH ILLUSTRATED IS NOT REPRESENTATIVE OF ONE MANUFACTURER AND IS NOT INTENDED TO RESTRICT PRODUCTS OF OTHER MANUFACTURERS. SEE NFGS 15194 FOR ALLOWABLE OPTIONAL DESIGNS. THE PANTOGRAPH MUST BE NAVFAC/NAVAIR APPROVED.

2. DESIGNER MUST COORDINATE MAXIMUM ALLOWABLE HEIGHT OF PANTOGRAPH AND AIRCRAFT DIRECT FUELING STATION EQUIPMENT, PIPES AND VALVES WITH COMMAND FUEL FACILITIES ENGINEER (36" MAX)

3. FUELING STATION AREA RUNOFF SHALL BE IN ACCORDANCE WITH CURRENT STATE, FEDERAL AND LOCAL ENVIRONMENTAL REGULATIONS.

REVISIONS

					APPROVED
					DATE
				DESCRIPTION	
				STA.	

A/E CONTRACT NO. N62467-95-D-110

Robert and Company
Engineers - Architects - Planners
96 Poplar Street, N.W. Atlanta, Georgia 30335-6001

ACTIVITY - SATISFACTORY TO
APPROVED DATE

FOR, COMMANDER, NAVAIRSYSCOM
APPROVED DATE

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION NORFOLK, VIRGINIA
DEFINITIVE STANDARD

AIRCRAFT DIRECT FUELING SYSTEM
MISCELLANEOUS DETAILS

CODE I.D. NO. 80091 SIZE D
SCALE: -
EFD NO. -
STA. PROJ. NO. -
SPEC. NO. -
CONSTRN. CONTR. NO. -
NAVFAC DRAWING NO. 1404003
SHEET - OF -
4 OF 4

RAC JOB NO. 99009-00