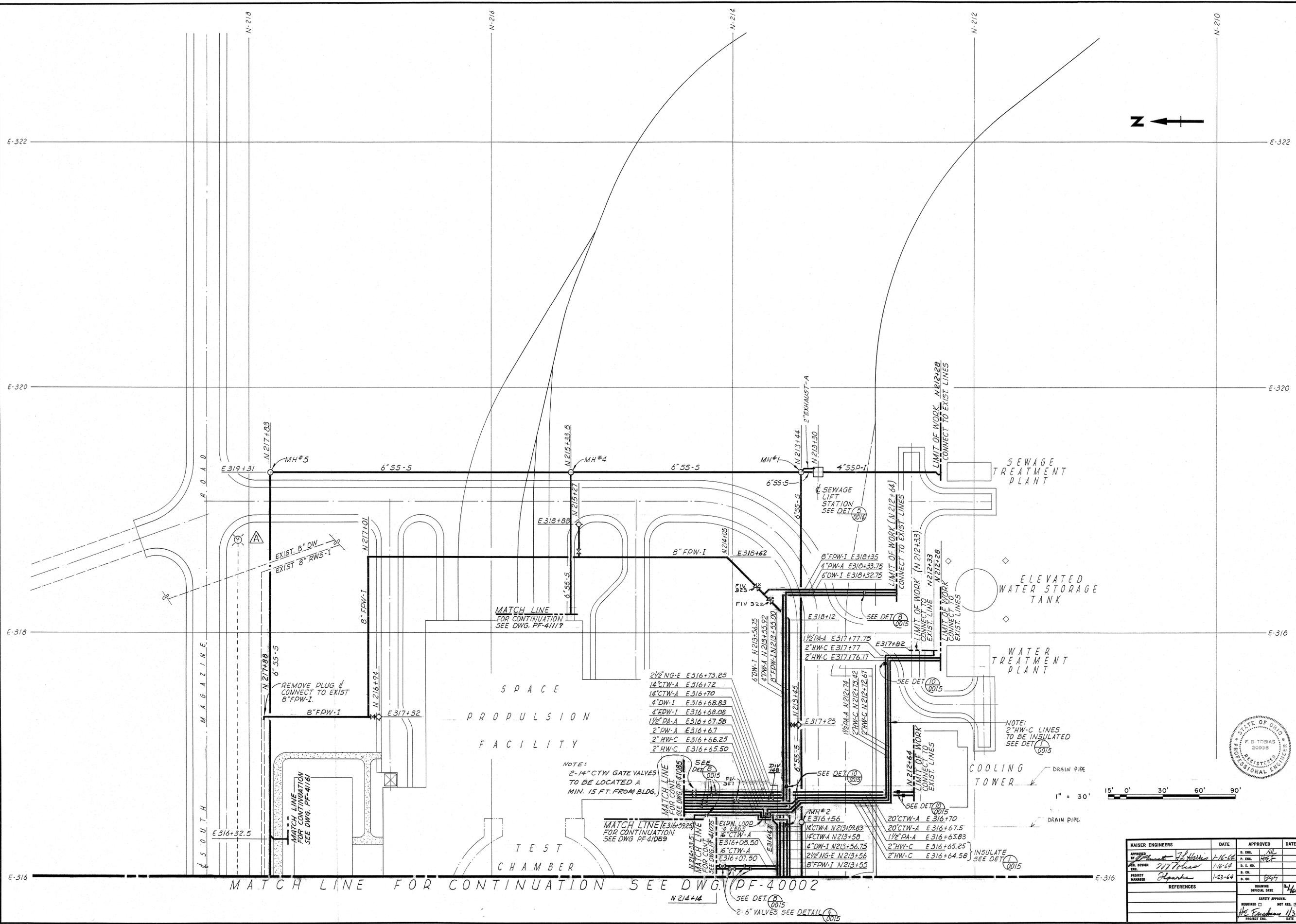


ADDITIONAL REFERENCE DRAWINGS, SET 2

PF-40002	Yard Piping at West Mechanical / West Side of SPF
PF-40003	Yard Piping at Cryogenic Room / East Side of SPF
PF-41116	Plan of Piping into West Mechanical
PF-41117	Section of Piping into West Mechanical





- GENERAL NOTES**
- FOR GENERAL NOTES, LEGEND & SCHEMATIC DIAGRAM SEE DWG. NO. PF-40001.
  - FOR YARD UTILITIES DETAILS SEE DWG. NO. PF-40014 AND 40015.
  - FOR SANITARY SEWER PROFILES SEE DWG. PF-40014.



A	ADDED LIGHT	1-17-63	D.M.L.
CHANGE NO.	REVISION	CK.	DATE

**KAISER ENGINEERS**  
DIVISION OF THE KAISER COMPANY  
ARCHITECT - ENGINEER

OAKLAND CALIFORNIA

NASA LEWIS RESEARCH CENTER  
PLUM BROOK STATION - SANDUSKY, OHIO  
SPACE PROPULSION FACILITY 14-11

YARD UTILITIES  
PLAN - SHEET 2

SCALE: 1"=30'  
DRAWN BY RASMUSSEN  
CHECKED FOX WINKLER

PROJECT NO. PF-40003

KAISER ENGINEERS	DATE	APPROVED	DATE
DESIGNED BY	1-16-64	A. ENG.	1-16-64
CHECKED BY	1-16-64	P. ENG.	1-16-64
PROJECT MANAGER	1-23-64	S. S. IN.	
REFERENCES		S. C. CR.	
		DRAWING OFFICIAL DATE	1-16-64
		SAFETY APPROVAL	2-16-64
		REQUIRED	NOT REQ. BY
		PROJECT ENG.	DATE

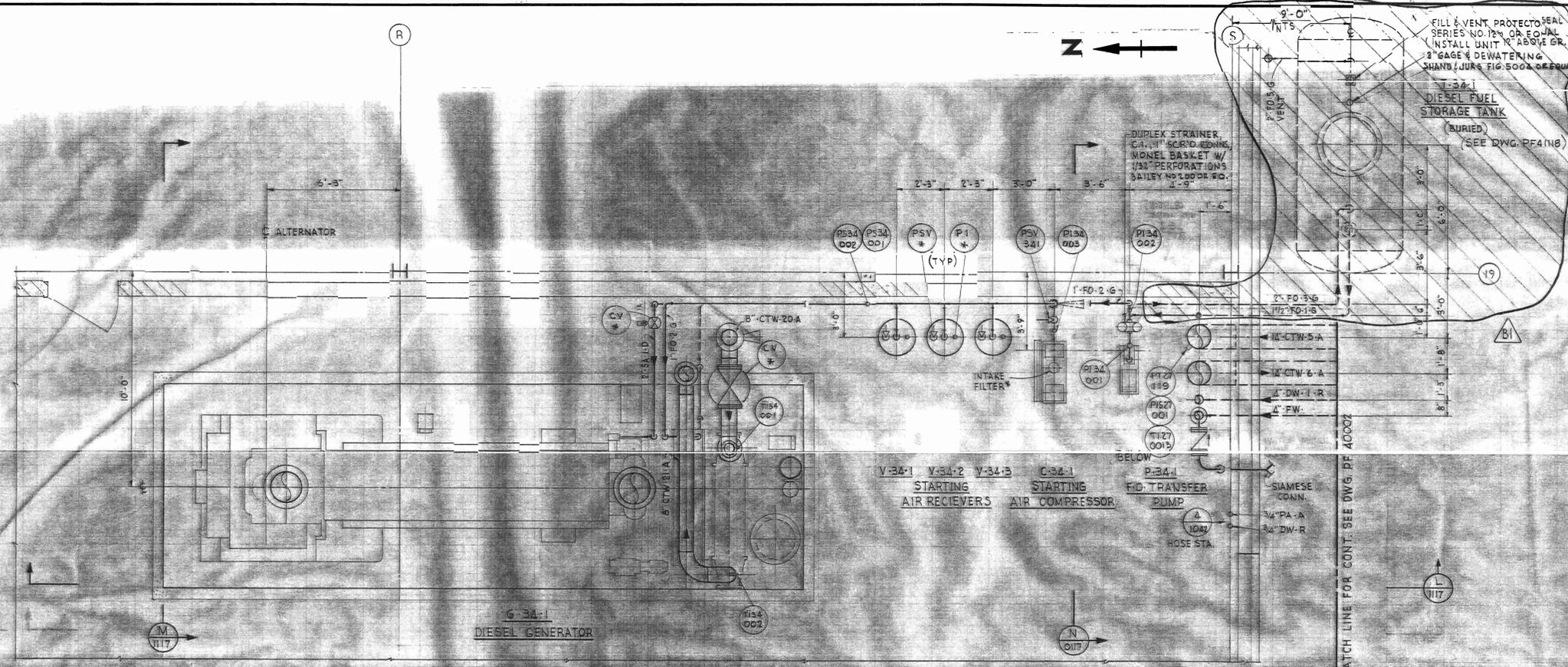
NOTE:  
2-14" CTW GATE VALVES  
TO BE LOCATED A  
MIN. 15 FT. FROM BLDG.

- 2 1/2" NG-E E316+73.25
- 1 1/2" CTW-A E316+72
- 1 1/2" CTW-A E316+70
- 4" DW-I E316+68.83
- 4" FDW-I E316+68.08
- 1 1/2" PA-A E316+67.58
- 2" DW-A E316+67
- 2" HW-C E316+66.25
- 2" HW-C E316+65.50

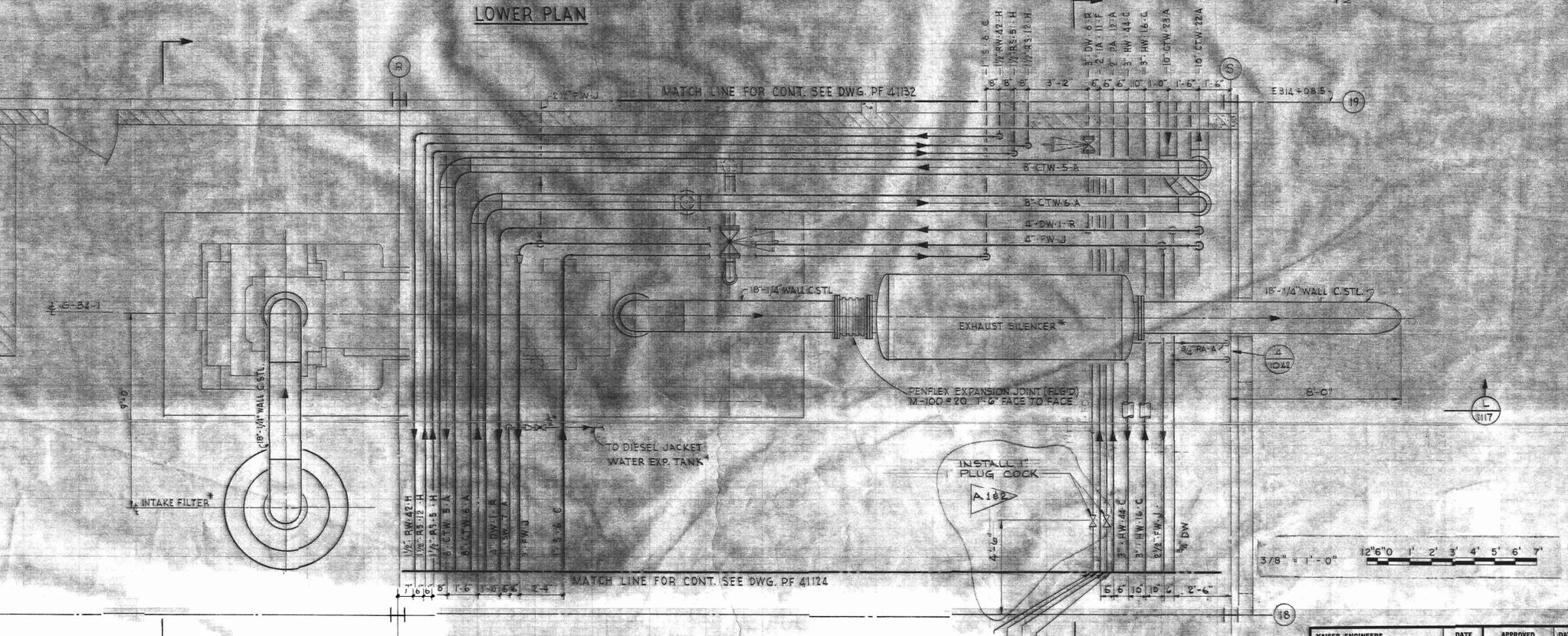
- MH#2 E316+56
- 1 1/2" CTW-A N213+59.83
- 1 1/2" CTW-A N213+58
- 4" DW-I N213+56.75
- 2 1/2" NG-E N213+56
- 8" FDW-I N213+55

MATCH LINE FOR CONTINUATION SEE DWG. (PF-40002)

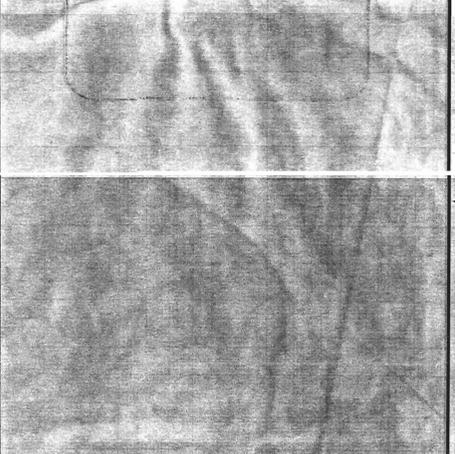
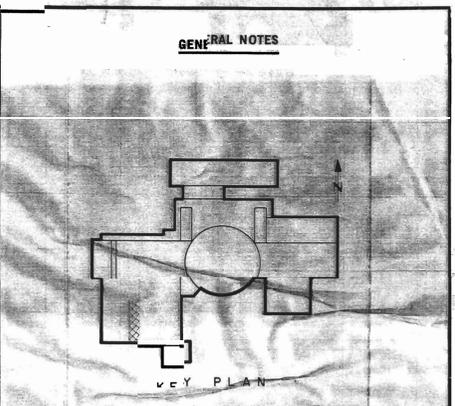
SEE DET. 0015  
2-6" VALVES SEE DETAIL 0015



LOWER PLAN



UPPER PLAN



CHANGE NO.	REVISION (M)	CHK.	DATE	DR. APP.
B 1	REVISED TO SHOW REMOVAL OF DIESEL FUEL TANK. REFER TO PF-SK-901226, AND FACILITY CHANGE NOTICE #FC-89-01	EM	1/28/64	W.H. HARRIS
A 2	INSTALLED 40,000 GAL FUEL STORAGE TANK	KES	3/31/64	W.H. HARRIS
A 1	INSTALLED FUEL OIL LINE DIESEL TO BOILERS	EJVA	1/20/64	W.H. HARRIS

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SPACE PROPULSION FACILITY 1411

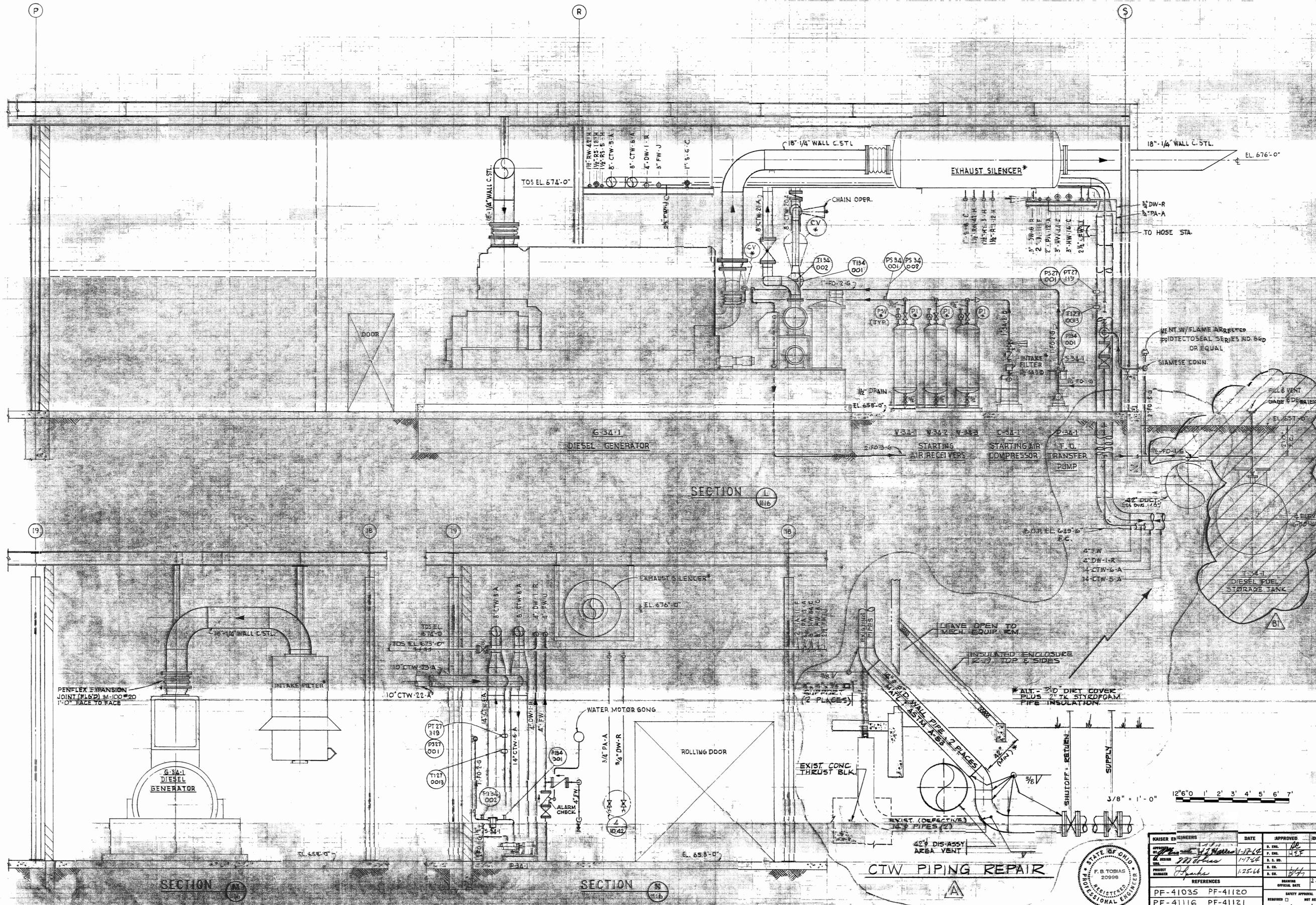
MECHANICAL ELECTRICAL & VACUUM AREA  
DIESEL GENERATOR PLANS

DRAWN BY E.C. SUAREZ  
CHECKED RENNEL CROOKS  
DATE 3/8-1-0" PF-41116

KAISER ENGINEERS	DATE	APPROVED	DATE
W.H. HARRIS	1-17-64	[Signature]	
M. TOBIAS	1-17-64	[Signature]	
J. SPANER	1-25-64	[Signature]	



REFERENCES	REVISED BY	DATE
3F 41025-41026-41027-41031		
41032-41033-41034-41035		
4121, 41117, 41120		



B	1	REVISED TO SHOW REMOVAL OF DIESEL FUEL TANK. REFER TO PF-SK-901226 AND FACILITY CHANGE NOTICE FC-69-01	8/91	1/17/91	11-228
A		REPAIR OF 14" CTW PIPING		10/7/88	11-228
CHANGE	NO.	REVISION	CHK	DATE	BR. APP.

**KAISER ENGINEERS**  
DIVISION OF THE KAISER COMPANY  
ARCHITECT - ENGINEER  
OAKLAND CALIFORNIA 94612

NASA LEWIS RESEARCH CENTER  
PLUM BROOK STATION - SANDUSKY, OHIO 44870  
SPACE PROPULSION FACILITY 1411

MECHANICAL, ELECTRICAL & VACUUM AREA  
DIESEL GENERATOR - SECTIONS

DRAWN BY E.C. SUAREZ  
CHECKED RENNELS CROOKS  
SCALE 3/8" = 1'-0"  
PROJECT NO. PF-4117

KAISER ENGINEERS	DATE	APPROVED	DATE
APPROVED: <i>[Signature]</i>	1/17/91	D. ENG. <i>[Signature]</i>	1/17/91
DESIGN: <i>[Signature]</i>	1/17/91	P. ENG. <i>[Signature]</i>	1/17/91
PROJECT NUMBER: <i>[Signature]</i>	1/25/88	D. S. ENG. <i>[Signature]</i>	1/25/88
REFERENCES:		DRAWING OFFICIAL DATE:	2/4/84
PF-41035 PF-41120		SAFETY APPROVAL:	
PF-41116 PF-41121		REMOVED BY:	
PF-41118		PROJECT ENG. DATE:	1/31/91

