

D-003  
(DRY CRUDE STORAGE TANK)  
TYPE : FIXED CONE ROOF TANK  
SIZE m (ft-in) : 39.66 (130'- 1") ID x 14.4 (47'-3") H

## GENERAL NOTES:

- FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001.
- ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530-.
- FOR ESDV, SBDV AND MOV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.001.
- FOR MISCELLANEOUS PIPING DETAILS SEE DRAWING 50489-530-020-PID-1108.001.
- DELETED.
- DELETED.

## NOTES:

- FOAM POURER IS LOCATED JUST BELOW TANK RIM BEAM AT TOP OF THE TANK SHELL AND IS FITTED WITH AN INTERNAL SPLIT DEFLECTOR PLATE. FOR MORE DETAILS OF FOAM POURER SEE APPENDIX 1.3 KOC-L-009, REV.4.
- VENDOR TO SUPPLY FOAM MAKER AND ENTRANCE ORIFICE PLATE.
- 2 1/2" x 4 WAY SUCTION HEADERS ON SKID ARE POSITIONED 90° TO THE PREVAILING WIND DIRECTION.
- DELETED.
- ACCESS PLATFORM FOR FOAM POURER ARE PROVIDED.
- 45° FITTINGS TO FOAM POURER LINES AS PER SECTION 7.4.2.3 OF KOC-L-009, REV.4.
- FOR DETAILS OF TYPICAL FOAM SYSTEM AND 4 WAY SUCTION COLLECTING HEAD SEE APPENDIX 1.3 OF KOC STANDARD KOC-L-009, REV.4.
- THE SIZE OF THE RISERS ARE MIN. 4" DIAMETER FOR WET, DRY AND DUAL CRUDE OIL STORAGE TANKS.
- FOAM LINES AND CONNECTION TO TANKS ARE ALSO SHOWN ON P&ID 50489-530-020-PID-1124 FOR TANK D-003.

## REFERENCE DOCUMENT:

NFPA-11	STANDARD FOR LOW, MEDIUM AND HIGH EXPANSION FOAM SYSTEM
50489-530-041-GAD-1201-001	GA DRAWING FOR DRY CRUDE STORAGE TANK
50489-530-000-DAT-1501	DATASHEET FOR FIXED FIRE PROTECTION EQUIPMENT

AS-BUILT	
KOC APPROVAL	
NAME / KOC No:	
DESIGNATION:	
GROUP / TEAM:	
SIGNATURE:	
DATE:	

AS-BUILT	
LARSEN & TOUBRO LIMITED	
NAME: VAIBHAV VERMA	
DESIGNATION: AGM	
SIGNATURE:	
DATE: 30-SEP-2018	
DEPT/ DIVISION: ENGINEERING	

Z1	RE-ISSUED FOR AS-BUILT	HSH/ASA	NJ	SRA	RAK	30.09.18
Z0	ISSUED FOR AS-BUILT	HSH/ASA	NJ	SRA	RAK	06.08.18
0	ISSUED FOR CONSTRUCTION	HSH/ASA	NJ	SRA	RAK	02.03.16
C	ISSUED "INCORPORATED CLIENT COMMENTS"	HSH/ASA	NJ	SRA	RAK	07.08.15
B	ISSUED "INCORPORATED CLIENT COMMENTS"	HSH/ASA	NJ	SRA	RAK	21.07.15
A	ISSUED FOR APPROVAL	PAK/ASA	NJ	SRA	RAK	06.01.15
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

## CONTRACTOR REVISION

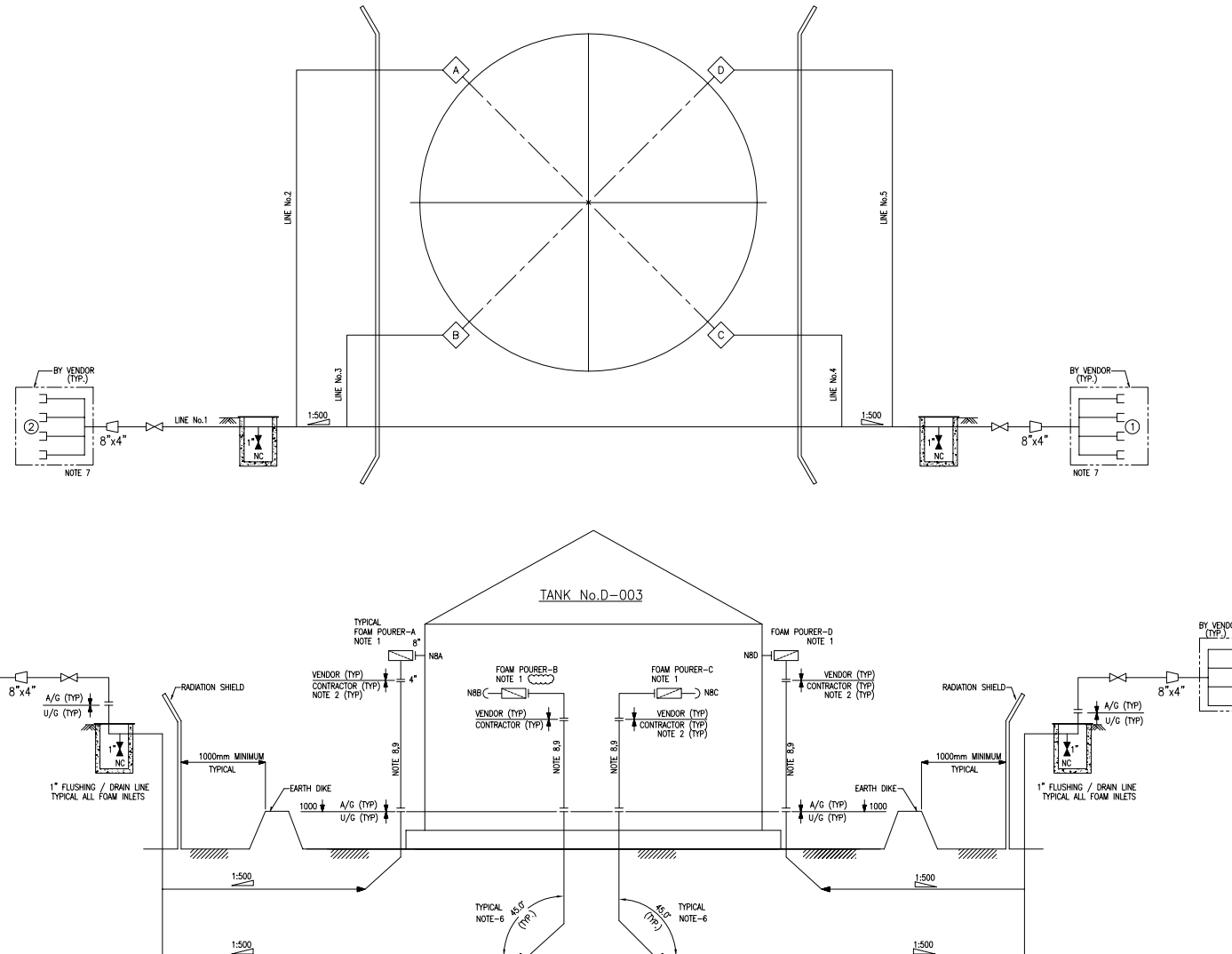


CONTRACTOR DETAILS:-  
**LARSEN & TOUBRO LIMITED**  
FARIDABAD

PROJECT TITLE:-  
NEW GATHERING  
CENTRE GC-30 IN NORTH KUWAIT

DOCUMENT TITLE:-  
PIPING & INSTRUMENTATION DIAGRAM  
FOAM SYSTEM FOR DRY CRUDE STORAGE  
TANK (D-003)

PROJECT NO.	DRAWING NO.	REV.
CONTRACTOR DRG. NO.	REV. KOC DRG. NO.	
50489-530-000-PID-1105.002	Z1	
SHEET NO. 2 OF 2	SHEET NO.	
COMPANY DRG. NO.	REV.	
EF1902	A1	
SHEET NO.		



TANK No.	I/D (M)	SURFACE AREA (M²)	SOLUTION #4.1 (LPM/M²)	FOAM #3% (LPM)	TOTAL FOAM 55 MINUTES (LITRES)	TANK NOZZLE NOS.	POURERS USED	LINE No. 1	LINE No. 2	LINE No. 3	LINE No. 4	LINE No. 5
D-003	39.66	1235	5065	152	8358	N8 A/B/C/D	A B C D	8"-FF-9017-Q15A	4"-FF-9018-Q15A	4"-FF-9019-Q15A	4"-FF-9020-Q15A	4"-FF-9021-Q15A