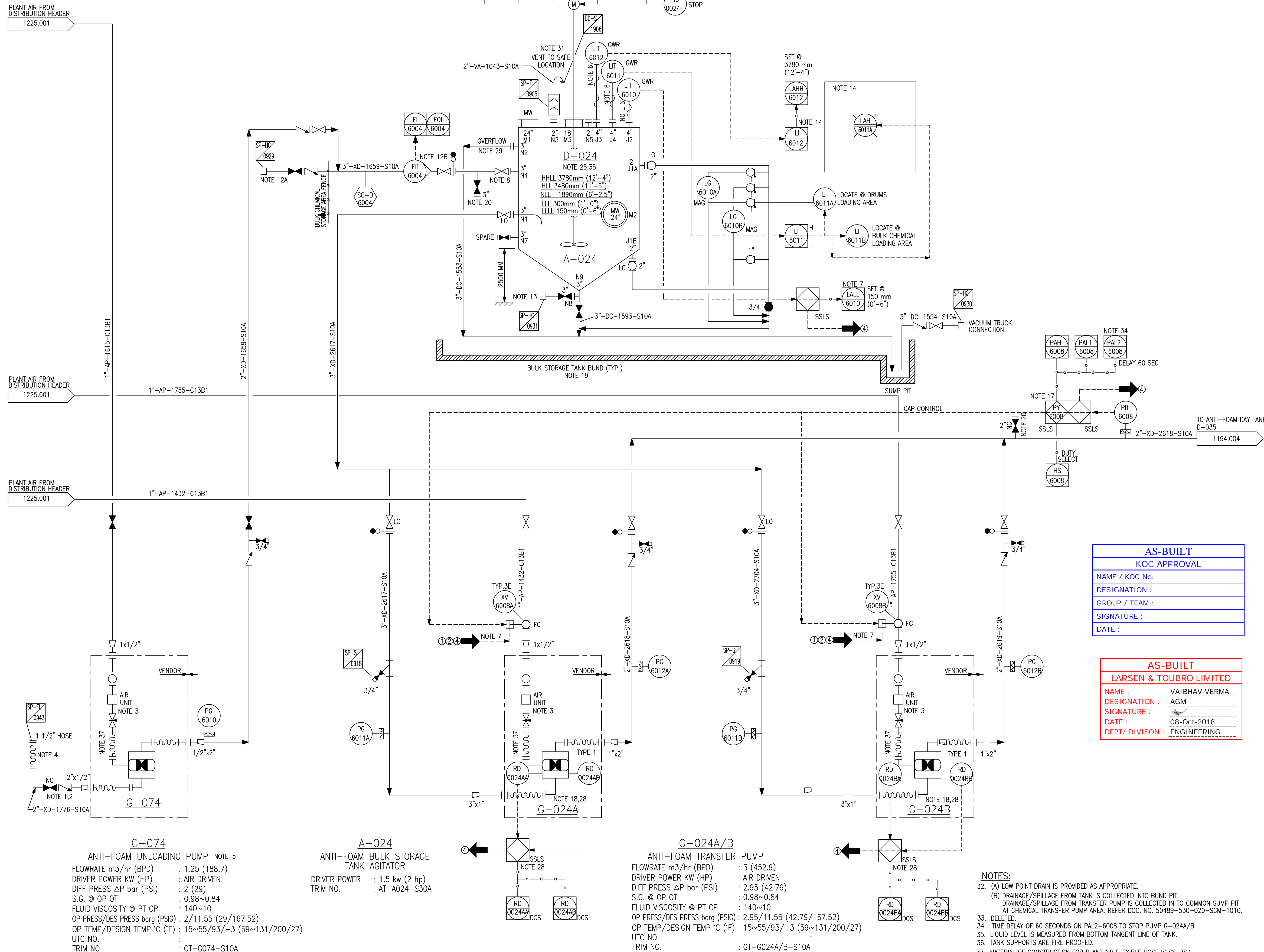


D-024
ANTI-FOAM BULK STORAGE TANK
CAPACITY m3 (BBLs) : 31.3 (196.9)
ID mm (ft.-in) : 3000 (9'-10")
HEIGHT (F/T)mm (ft.-in) : 4140 (13'-7")
OP PRESS /DES PRESS barg (PSIG) : ATM/ATM+STATIC HEAD
OP TEMP /DESIGN TEMP °C (°F) : 15~55/93/-3 (59~131/200/27)
UTC NO. :
TRIM NO. : DT-D024-S10A/S30A



- GENERAL NOTES:
- FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001 & .002.
 - ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PREFIXED BY 530-.
 - ALL INSTRUMENT NUMBERS SHOWN ON THIS P&ID ARE PREFIXED BY 030-.
 - FOR TYPICAL INSTRUMENT CONNECTION SBDV, XV, MOV AND ESDV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.001, .002, .003, .004, .005, .006 & .007.
 - FOR MISCELLANEOUS PIPING TYPICAL VALVING, DRAINAGE AND GENERAL ARRANGEMENT OF LEVEL INSTRUMENTS, PUMPS & CONTROL VALVES SEE DRAWING 50489-530-020-PID-1108.001 TO 1108.010.
 - DRAWING NUMBERS SHOWN IN P&ID CONTINUATION BOXES ARE ABBREVIATED SHOWING DRAWING SEQUENTIAL NUMBERS ONLY. THE FULL FORM OF THE DRAWING NUMBER IS 50489-530-020-PID-XXXX.SHT. NO.
 - FOR MATERIAL SELECTION DIAGRAM SEE DRAWINGS 50489-530-020-MSD-1001.001 TO 1023.
 - DETAIL NUMBERING FOR CI, SC, CC & CP SEE DRAWING 50489-530-020-PID-1108.003.
 - PAINTING & COATING ARE IN ACCORDANCE WITH KOC-P-001.
 - LOW POINT DRAIN & HIGH POINT VENT ARE INDICATED IN P&ID.
 - FOR CAUSE & EFFECT REFER DOC. NO. 50489-530-020-PHL-1009.
 - FOR ALARM VALUES REFER DOC. NO. 50489-530-020-SUM-1006.
- NOTES:
- FLEXIBLE HOSE WITH LONG PIPE END IS INSERTED INTO CHEMICAL DRUM FOR UNLOADING.
 - UTILITY STATION IS PROVIDED IN DRUM UNLOADING AREA.
 - COMBINATION FILTER, REGULATOR, PRESSURE GAUGE AND LUBRICATOR.
 - FLEXIBLE HOSE WITH DRY BREAK COUPLING IS CONNECTED TO HARD PIPE WITH 2"x1 1/2" REDUCING FLANGE FOR CONNECTION TO DRUM / SEMI-BULK CONTAINER (APPLICABLE FOR ALL BULK STORAGE TANK).
 - TWO SPARE PUMPS G-080 AND G-081 WITH ALL THE ANCILLARIES ARE LOCATED IN THE MAINTENANCE BUILDING.
 - GWR TYPE LEVEL TRANSMITTER.
 - LOW LOW LIQUID LEVEL STOPS ANTI-FOAM TRANSFER PUMPS, G-024A/BAND AGITATOR, A-024.
 - LOCATE VALVE WITHIN SIGHT OF LEVEL GAUGE.
 - DELETED.
 - A. CHEMICAL TANKER LOADING CONNECTION.
B. TRANSMITTER IS PROVIDED WITH LOCAL COUNTER WHICH IS RESETTABLE INSTANTANEOUS AND NON-RESETTABLE TOTAL INDICATIONS.
 - CHEMICAL PUMP OUT CONNECTION TO BE EASILY ACCESSIBLE.
 - PROVIDE ANNUNCIATOR SCHEME TO SUIT REQUIREMENTS AS INDICATED. TANK HIGH LEVEL ALARM IS DEDICATED TO A SPECIFIC LEVEL.
(A) ONE TEST (IN DCS) FOR ALL CHEMICAL BULK DELIVERY & DRUMS UNLOADING / TRANSFER AREA FLASHER & HORNS.
ONE RESET (IN DCS) FOR ALL CHEMICAL BULK DELIVERY & DRUMS UNLOADING / TRANSFER AREA FLASHERS.
ONE ACCEPT (IN DCS) FOR ALL CHEMICAL BULK DELIVERY & DRUMS UNLOADING / TRANSFER AREA HORNS.
(B) TANK (D-021) AREA HAS INDIVIDUAL FLASHING RED LIGHT ON TANK LEVEL HIGH: TWO (2) COMMON HORNS XA-6035B/XA-6029A ON ANY TANK LEVEL HIGH-HIGH.
(C) UNLOADING AREA-ONE COMMON FLASHER ON ANY TANK HIGH LEVEL (LAH-6034A) ONE COMMON HORN XA-6035A ON ANY TANK LEVEL HIGH HIGH.
 - EYEWASH & SAFETY SHOWERS ARE INSTALLED AT LOADING CONNECTION OUTSIDE FENCE, CHEMICAL TRANSFER PUMP SHELTER AND BULK CHEMICAL STORAGE TANK/INJECTION PUMP SHELTER AREAS.
 - DELETED.
 - (A) HHLL IN D-035 STOPS DUTY AND STANDBY TRANSFER PUMPS G-024A/B BY SSLS LOGIC CLOSING XV-6008A/B.
(B) PAH-6008 STOPS DUTY AND STANDBY PUMPS BY DCS CLOSING XV-6008A/B.
(C) PAL1-6008 STARTS DUTY TRANSFER PUMP BY DCS OPENING XV-6008A OR B.
(D) PAL2-6008 STARTS STANDBY PUMP BY DCS OPENING XV-6008A OR B.
(E) ZSC OF LCV-6071 STOPS DUTY & STANDBY TRANSFER PUMP G-024A/B BY SSLS LOGIC.
(F) PUMP IN CASE OF DUTY PUMP DISCREPANCY (START COMMAND & NO FEEDBACK) OR RAPTURE OF TRANSFER PUMP.
 - PUMPS ARE LOCATED IN CURBED AREA TO CONTAIN SPILLAGES.
 - TANK CONCRETE BUND IS 115% CONTAINMENT OF D-024.
 - NEAREST POSSIBLE BYPASS CONNECTION FOR BULK STORAGE TANK TO ANTI-FOAM TRANSFER PUMP DISCHARGE HEADER.
 - 21,22,23,24. DELETED.
 - a) VERTICALLY MOUNTED MOTOR TYPE AGITATOR.
b) ALLOW ADEQUATE HEAD ROOM OF SHELTER FOR AGITATOR WITHDRAWAL.
 - ANTI-RESISTANT CHEMICAL FLOOR BASED IS REQUIRED.
 - EMERGENCY PUSH BUTTON IN THE FIELD IS AT A SAFE DISTANCE.
 - PUMPS ARE PROVIDED WITH RUPTURE ALARM.
 - OVERFLOW NOZZLE IS LOCATED ABOVE HHLL.
 - PUMP & TANK AREA ARE PAVED. FLOOR IS SLOPED TOWARDS BUND PIT.
 - VENT TO SAFE LOCATION ARE AS PER KOC-G-002.

AS-BUILT
KOC APPROVAL

NAME / KOC No: _____
DESIGNATION: _____
GROUP / TEAM: _____
SIGNATURE: _____
DATE: _____

AS-BUILT
LARSEN & TOUBRO LIMITED

NAME: VAIBHAV VERMA
DESIGNATION: AGM
SIGNATURE: _____
DATE: 08-Oct-2018
DEPT/ DIVISION: ENGINEERING

Z1	ISSUED FOR AS-BUILT	BAK/CHS	AKG	SRA	RAK	08.10.18
Z0	ISSUED FOR AS-BUILT	BAK/CHS	AKG	SRA	RAK	01.09.18
01	ISSUED FOR CONSTRUCTION	BAK/CHS	AKG	SRA	RAK	23.11.16
0	ISSUED FOR CONSTRUCTION	HSB/VSA	AKG	SRA	RAK	01.04.16
C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	21.10.15
OC	ISSUED INCORPORATED CLIENT COMMENTS	JSI/SSI	AKG	SRA	RAK	03.06.15
B	ISSUED INCORPORATED CLIENT COMMENTS	JSI/VSA	AKG	SRA	RAK	21.02.15
A	ISSUED FOR APPROVAL	BAK/ABY	AKG	SRA	RAK	12.12.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
				APPRD.		

CONTRACTOR REVISION

KUWAIT OIL CO. K. S. C.  **شركة النفط الكويتي ش.م.ك.**
A Subsidiary of Kuwait Petroleum Corporation

CONTRACTOR DETAILS:-

LARSEN & TOUBRO LIMITED
FARIDABAD

PROJECT TITLE:-

NEW GATHERING CENTRE GC-30
IN NORTH KUWAIT

DOCUMENT TITLE:-

PIPING & INSTRUMENTATION DIAGRAM
ANTI-FOAM STORAGE TANK (D-024) AND DISTRIBUTION

PROJECT NO.	DRAWING NO.	REV.	KOC DRG. NO.	REV.
EF1902	CONTRACTOR DRG. NO.		50489-530-020-PID-1188	
	SHEET NO. 1 OF 1		Z1	
	COMPANY DRG. NO.		REV.	
	EF1902-530-DCO-PID-0188.001		A4	
	SHEET NO.			