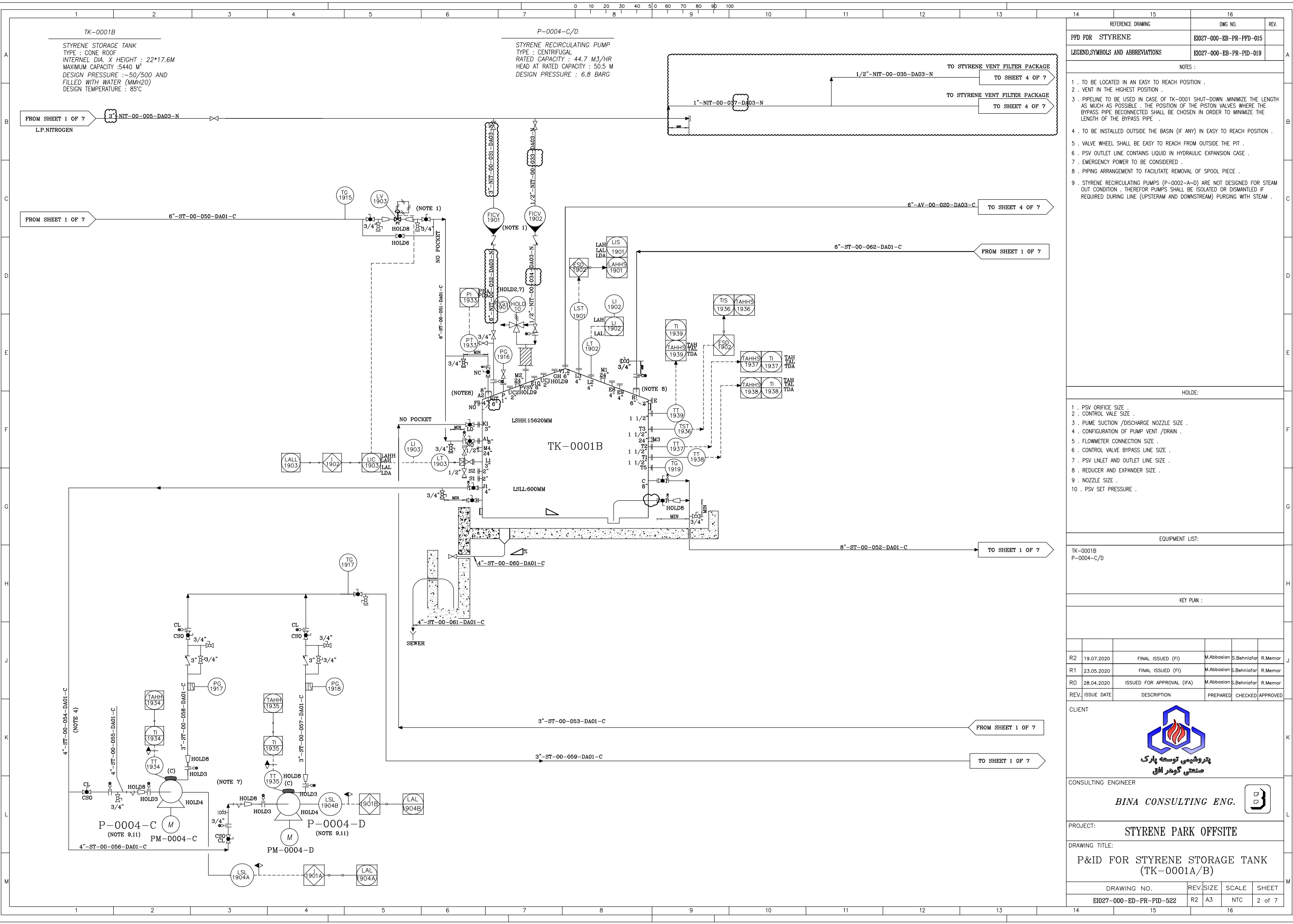


REFERENCE DRAWING		DWG NO.	REV.
PFD FOR STYRENE		EI027-000-EB-PR-PFD-015	
LEGEND,SYMBOLS AND ABBREVIATIONS		EI027-000-EB-PR-PID-019	
NOTES :			
1 . TO BE LOCATED IN AN EASY TO REACH POSITION .			
2 . VENT IN THE HIGHEST POSITION .			
3 . PIPELINE TO BE USED IN CASE OF TK-0001 SHUT-DOWN .MINIMIZE THE LENGTH AS MUCH AS POSSIBLE . THE POSITION OF THE PISTON VALVES WHERE THE BYPASS PIPE BECONNECTED SHALL BE CHOSEN IN ORDER TO MINIMIZE THE LENGTH OF THE BYPASS PIPE .			
4 . TO BE INSTALLED OUTSIDE THE BASIN (IF ANY) IN EASY TO REACH POSITION .			
5 . VALVE WHEEL SHALL BE EASY TO REACH FROM OUTSIDE THE PIT .			
6 . PSV OUTLET LINE CONTAINS LIQUID IN HYDRAULIC EXPANSION CASE .			
7 . EMERGENCY POWER TO BE CONSIDERED .			
8 . PIPING ARRANGEMENT TO FACILITATE REMOVAL OF SPOOL PIECE .			
9 . STYRENE RECIRCULATING PUMPS (P-0004-A~D) ARE NOT DESIGNED FOR STEAM OUT CONDITION . THEREFOR PUMPS SHALL BE ISOLATED OR DISMANTLED IF REQUIRED DURING LINE (UPSTREAM AND DOWNSTREAM) PURGING WITH STEAM .			
10 . FOR REFRIGERATION UNIT PACKAGE REFER TO VENDORS DATA BOOK.			
HOLDE:			
1 . PSV ORIFICE SIZE .			
2 . CONTROL VALE SIZE .			
3 . PUME SUCTION /DISCHARGE NOZZLE SIZE .			
4 . CONFIGURATION OF PUMP VENT /DRAIN .			
5 . FLOWMETER CONNECTION SIZE .			
6 . CONTROL VALVE BYPASS LINE SIZE .			
7 . PSV UNLET AND OUTLET LINE SIZE .			
8 . REDUCER AND EXPANDER SIZE .			
9 . NOZZLE SIZE .			
10 . PSV SET PRESSURE .			
EQUIPMENT LIST:			
TK-0001A P-0004-A/B RU-0001-A/B			
KEY PLAN :			
CLIENT			
CONSULTING ENGINEER			
BINA EPC CONTRACTOR CO.			
PROJECT:			
STYRENE PARK OFFSITE			
DRAWING TITLE:			
P&ID FOR STYRENE STORAGE TANK (TK-0001A/B)			
DRAWING NO.		REV.	SIZE
EI027-000-ED-PR-PID-522		R2	A3
SCALE		SHEET	
NTC		1 of 7	



REFERENCE DRAWING	DWG NO.	REV.
PPD FOR STYRENE	EI027-000-EB-PR-PPD-015	
LEGEND,SYMBOLS AND ABBREVIATIONS	EI027-000-EB-PR-PID-019	

- NOTES :
- 1 . TO BE LOCATED IN AN EASY TO REACH POSITION .
 - 2 . VENT IN THE HIGHEST POSITION .
 - 3 . PIPELINE TO BE USED IN CASE OF TK-0001 SHUT-DOWN .MINIMIZE THE LENGTH AS MUCH AS POSSIBLE . THE POSITION OF THE PISTON VALVES WHERE THE BYPASS PIPE BECONNECTED SHALL BE CHOSEN IN ORDER TO MINIMIZE THE LENGTH OF THE BYPASS PIPE .
 - 4 . TO BE INSTALLED OUTSIDE THE BASIN (IF ANY) IN EASY TO REACH POSITION .
 - 5 . VALVE WHEEL SHALL BE EASY TO REACH FROM OUTSIDE THE PIT .
 - 6 . PSV OUTLET LINE CONTAINS LIQUID IN HYDRAULIC EXPANSION CASE .
 - 7 . EMERGENCY POWER TO BE CONSIDERED .
 - 8 . PIPING ARRANGEMENT TO FACILITATE REMOVAL OF SPOOL PIECE .
 - 9 . STYRENE RECIRCULATING PUMPS (P-0002-A~D) ARE NOT DESIGNED FOR STEAM OUT CONDITION . THEREFOR PUMPS SHALL BE ISOLATED OR DISMANTLED IF REQUIRED DURING LINE (UPSTREAM AND DOWNSTREAM) PURGING WITH STEAM .

- HOLDE:
- 1 . PSV ORIFICE SIZE .
 - 2 . CONTROL VALE SIZE .
 - 3 . PUME SUCTION /DISCHARGE NOZZLE SIZE .
 - 4 . CONFIGURATION OF PUMP VENT /DRAIN .
 - 5 . FLOWMETER CONNECTION SIZE .
 - 6 . CONTROL VALVE BYPASS LINE SIZE .
 - 7 . PSV UNLET AND OUTLET LINE SIZE .
 - 8 . REDUCER AND EXPANDER SIZE .
 - 9 . NOZZLE SIZE .
 - 10 . PSV SET PRESSURE .

EQUIPMENT LIST:					
TK-0001B					
P-0004-C/D					

KEY PLAN :

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
R2	19.07.2020	FINAL ISSUED (FI)	M.Abbasian	S.Behniafar	R.Memar
R1	23.05.2020	FINAL ISSUED (FI)	M.Abbasian	S.Behniafar	R.Memar
RO	28.04.2020	ISSUED FOR APPROVAL (IFA)	M.Abbasian	S.Behniafar	R.Memar

CLIENT



CONSULTING ENGINEER

BINA CONSULTING ENG.

PROJECT: STYRENE PARK OFFSITE

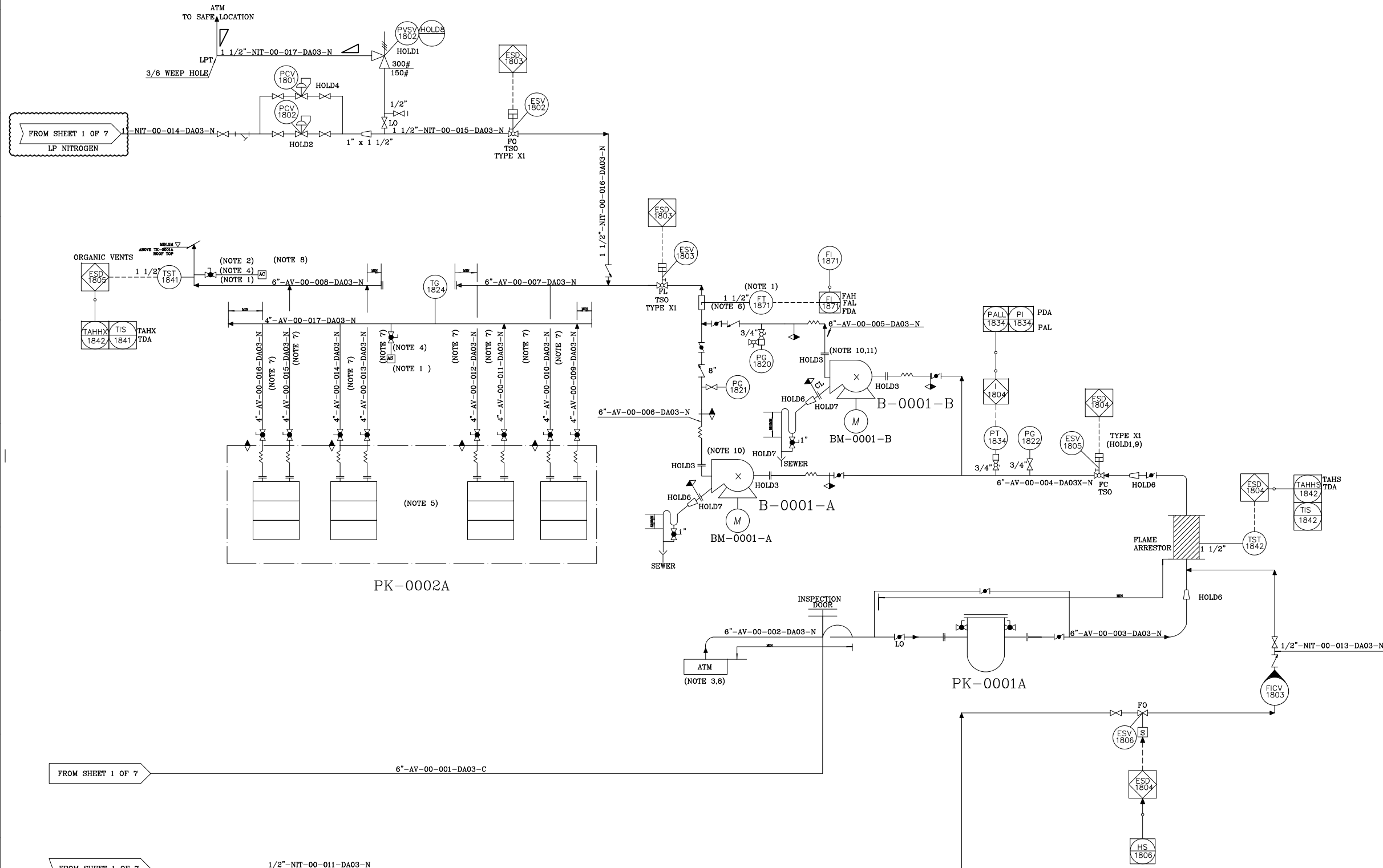
DRAWING TITLE: P&ID FOR STYRENE STORAGE TANK (TK-0001A/B)

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-000-ED-PR-PID-522	R2	A3	NTC	2 of 7

PK-0001A
STYRENE VENT FILTER PACKAGE
RATED CAPACITY : 1188 NM³/3HR
TYPE : BASKET
DESIGN PRESSURE : 3.5 BARG

PK-0002A
ACTIVATED CARBON PACKAGE
RATED CAPACITY : 1188 NM³/HR

B-0001-A/B
STYRENE VENT BLOWER
TYPE : CENTRIFUGAL
RATED CAPACITY : 1188 NM³/HR
TOTAL HEAD RATED : 0.1 BAR



REFERENCE DRAWING		DWG NO.	REV.
PFD FOR STYRENE		EI027-000-EB-PR-PFD-015	
LEGEND,SYMBOLS AND ABBREVIATIONS		EI027-000-EB-PR-PID-019	
NOTES :			
1 . TO BE LOCATED IN AN EASY TO REACH POSITION .			
2 . SUPPORT PIPE WITH TK-0001A .			
3 . A DEVICE TO AVOID SAND INLET SHALL BE FORESEEN .			
4 . SAMPLING POINT CHARACTERISTICS TO BE DEFINED ACCORDING TO LOCAL CODES OR REGULATION .			
5 . TO BE INSTALLED UNDER ROOF .			
6 . PIPE SHALL BE STRAIGHT AND WITH A CONSTANT DIMETER FOR LENGHT OF AT LEAST 7 DIAMETERS UPSTREAM THE PITOT FLOWMETER AND AT LEAST 50DIAMETERS DOWNSTREAM .THE INSTRUMENT SHALL BE EQUIPPED WITH A SEALING SYSTEM ALL OWNING THE EXTRACTION OF THE MEASURING ELEMENT WITOUT LEAKAGES TO ENVIRONMENT AND AIR INLET IN THE PIPE .			
7 . LINE DN TO BE CONFIRMED ACCORDING TO PK-0002A FINAL CHARACTERISTICS.			
8 . VENTS TO BE INSTALLED CLOSE TO EACH GAS DETECTOR TO BE FORSEEN FOR BOTH VENTS .			
9 . MANUAL RESET HAS BEEN CONSIDERED FOR EVX -XXX & EVX -XXX .			
10 . TO BE FILLED WITH COMPATIBLE SEAL FLUID .			
11 . 'U' SEAL IS PROVIDED FOR DRAINING ANY CONDENSATE FROMED BECAUSE OF CONDENSATION OF SOLVENT VAPORS .			
HOLDE:			
1 . PSV ORIFICE SIZE .			
2 . CONTROL VALE SIZE .			
3 . BLOWER SUCTION / DISCHARGE NOZZLE SIZE .			
4 . CONTROL VALVE BYPASS LINE SIZE .			
5 . PSV INLET AND OUTLET LINE SIZE .			
6 . REDUCER AND EXPANDER SIZE .			
7 . BLOWER CASING DRAIN SIZE .			
8 . PSV SET PRESSURE .			
EQUIPMENT LIST:			
PK-0001A B-0001-A/B PK-0002A			
KEY PLAN :			
CLIENT			
CONSULTING ENGINEER			
PROJECT:			
DRAWING TITLE:			
P&ID FOR STYRENE STORAGE TANK (TK-0001A/B)			
DRAWING NO.		REV.	SIZE
EIO27-000-ED-PR-PID-522		R2	A3
SCALE		SHEET	
NTC		3 of 7	

PK-0001B

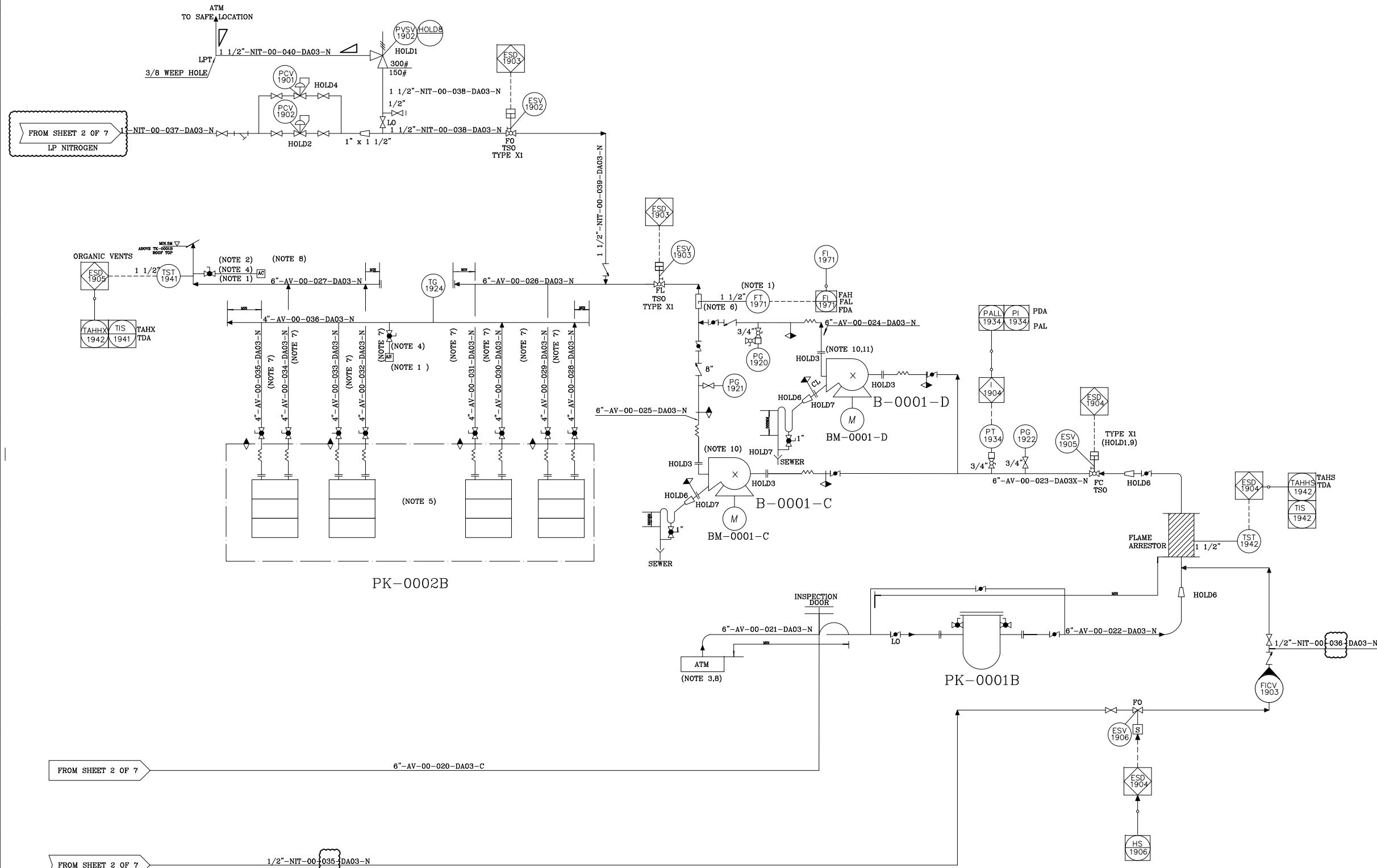
STYRENE VENT FILTER PACKAGE
RATED CAPACITY : 1188 NM / 3HR
TYPE : BASKET
DESIGN PRESSURE : 3.5 BARG

PK-0002B

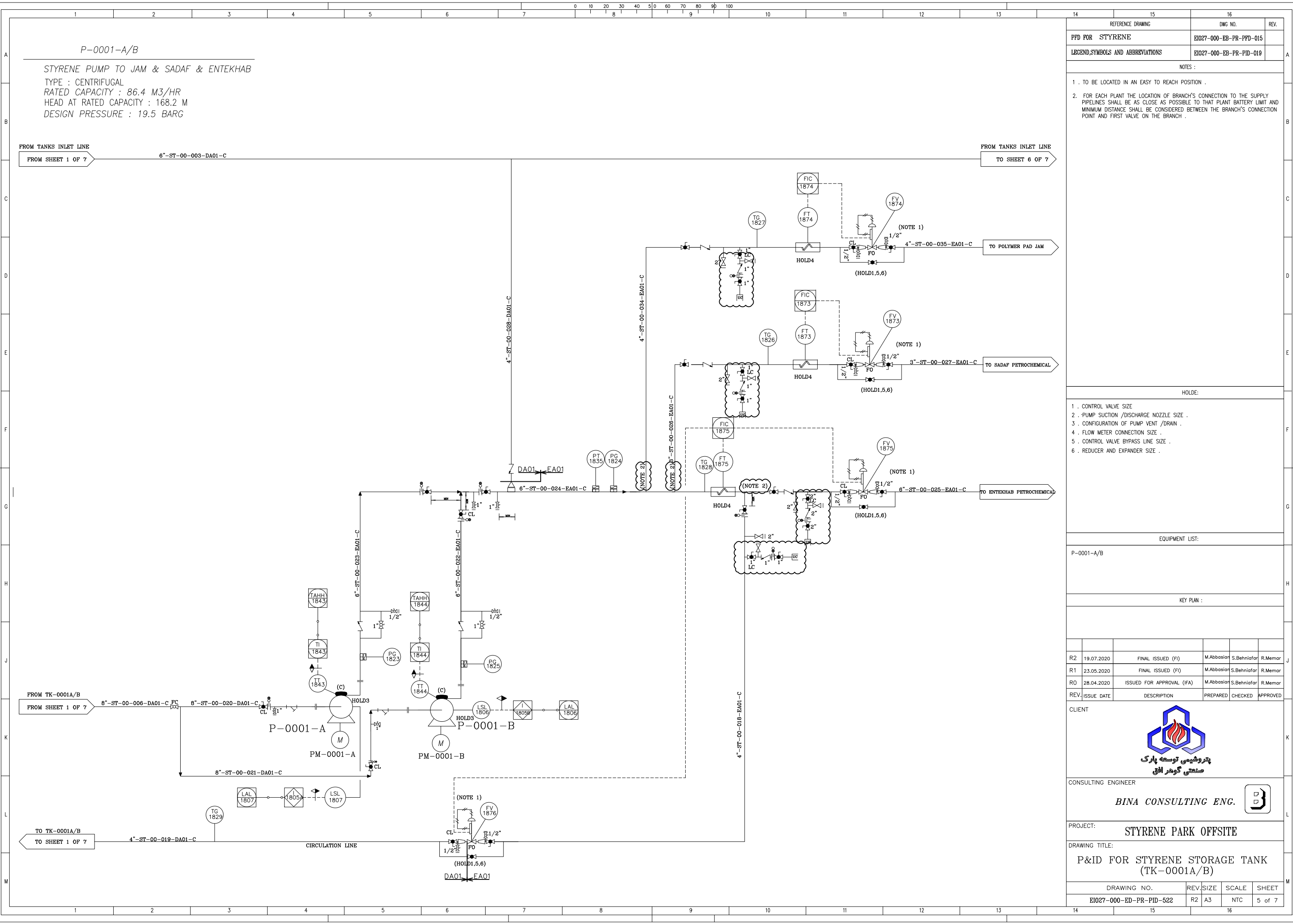
ACTIVATED CARBON PACKAGE
RATED CAPACITY : 1188 NM3 /HR

B-0001-C/D

STYRENE VENT BLOWER
TYPE : CENTRIFUGAL
RATED CAPACITY : 1188 NM3/HR
TOTAL HEAD RATED : 0.1 BAR



REFERENCE DRAWING		DWG NO.	REV.
PFD FOR STYRENE		EI027-000-EB-PR-PFD-015	
LEGEND,SYMBOLS AND ABBREVIATIONS		EI027-000-EB-PR-PID-019	
NOTES :			
1 . TO BE LOCATED IN AN EASY TO REACH POSITION .			
2 . SUPPORT PIPE WITH TK-0001B .			
3 . A DEVICE TO AVOID SAND INLET SHALL BE FORESEEN .			
4 . SAMPLING POINT CHARACTERISTICS TO BE DEFINED ACCORDING TO LOCAL CODES OR REGULATION .			
5 . TO BE INSTALLED UNDER ROOF .			
6 . PIPE SHALL BE STRAIGHT AND WITH A CONSTANT DIMETER FOR LENGHT OF AT LEAST 7 DIAMETERS UPSTREAM THE PITOT FLOWMETER AND AT LEAST 50DIAMETERS DOWNSTREAM .THE INSTRUMENT SHALL BE EQUIPPED WITH A SEALING SYSTEM ALL OWING THE EXTRACTION OF THE MEASURING ELEMENT WITOUT LEAKAGES TO ENVIRONMENT AND AIR INLET IN THE PIPE .			
7 . LINE DN TO BE CONFIRMED ACCORDING TO PK-0002B FINAL CHARACTERISTICS.			
8 . VENTS TO BE INSTALLED CLOSE TO EACH GAS DETECTOR TO BE FORSEEN FOR BOTH VENTS .			
9 . MANUAL RESET HAS BEEN CONSIDERED FOR EVX -XXX & EVX -XXX .			
10 . TO BE FILLED WITH COMPATIBLE SEAL FLUID .			
11 . 'U' SEAL IS PROVIDED FOR DRAINING ANY CONDENSATE FROMED BECAUSE OF CONDENSATION OF SOLVENT VAPORS .			
HOLDE:			
1 . PSV ORIFICE SIZE .			
2 . CONTROL VALE SIZE .			
3 . BLOWER SUCTION / DISCHARGE NOZZLE SIZE .			
4 . CONTROL VALVE BYPASS LINE SIZE .			
5 . PSV INLET AND OUTLET LINE SIZE .			
6 . REDUCER AND EXPANDER SIZE .			
7 . BLOWER CASING DRAIN SIZE .			
8 . PSV SET PRESSURE .			
EQUIPMENT LIST:			
PK-0001B B-0001-C/D PK-0002B			
KEY PLAN :			
CLIENT			
CONSULTING ENGINEER			
PROJECT:			
DRAWING TITLE:			
P&ID FOR STYRENE STORAGE TANK (TK-0001A/B)			
DRAWING NO.		REV.	SIZE
EI027-000-ED-PR-PID-522		R2	A3
SCALE		SHEET	
NTC		4 of 7	



REFERENCE DRAWING	DWG NO.	REV.
PFD FOR STYRENE	EI027-000-EB-PR-PFD-015	
LEGEND,SYMBOLS AND ABBREVIATIONS	EI027-000-EB-PR-PID-019	

- NOTES :
- 1 . TO BE LOCATED IN AN EASY TO REACH POSITION .
 2. FOR EACH PLANT THE LOCATION OF BRANCH'S CONNECTION TO THE SUPPLY PIPELINES SHALL BE AS CLOSE AS POSSIBLE TO THAT PLANT BATTERY LIMIT AND MINIMUM DISTANCE SHALL BE CONSIDERED BETWEEN THE BRANCH'S CONNECTION POINT AND FIRST VALVE ON THE BRANCH .

- HOLDE:
- 1 . CONTROL VALVE SIZE
 - 2 . PUMP SUCTION /DISCHARGE NOZZLE SIZE .
 - 3 . CONFIGURATION OF PUMP VENT /DRAIN .
 - 4 . FLOW METER CONNECTION SIZE .
 - 5 . CONTROL VALVE BYPASS LINE SIZE .
 - 6 . REDUCER AND EXPANDER SIZE .

EQUIPMENT LIST:

P-0001-A/B

KEY PLAN :

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
R2	19.07.2020	FINAL ISSUED (FI)	M.Abbasior	S.Behniafar	R.Memar
R1	23.05.2020	FINAL ISSUED (FI)	M.Abbasior	S.Behniafar	R.Memar
RO	28.04.2020	ISSUED FOR APPROVAL (IFA)	M.Abbasior	S.Behniafar	R.Memar

CLIENT



CONSULTING ENGINEER

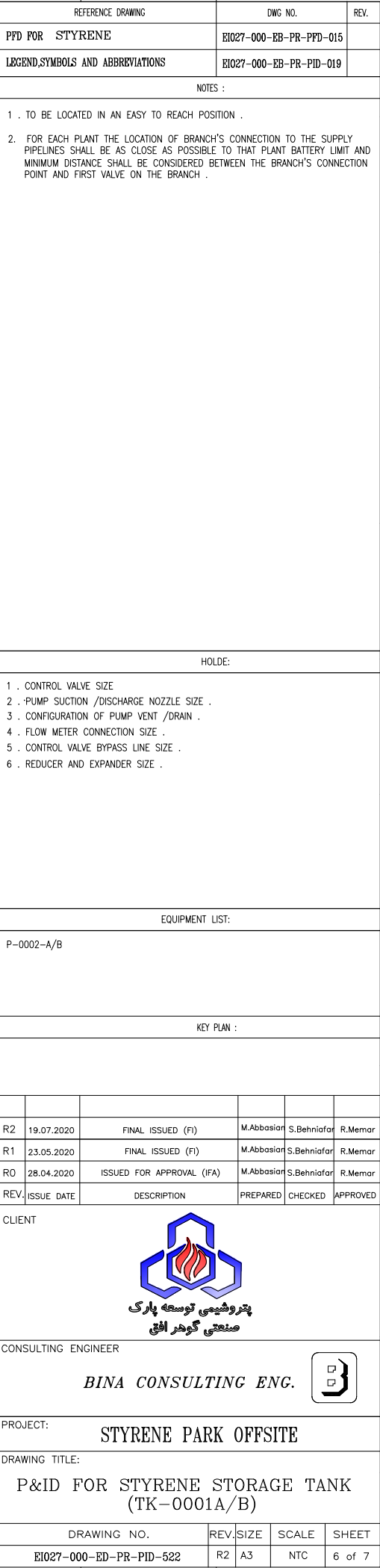
BINA CONSULTING ENG.


PROJECT: STYRENE PARK OFFSITE

DRAWING TITLE: P&ID FOR STYRENE STORAGE TANK (TK-0001A/B)

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-000-ED-PR-PID-522	R2	A3	NTC	5 of 7

STYRENE PUMP TO DALAHOO
TYPE : CENTRIFUGAL
RATED CAPACITY : 45.4 M3/HR
HEAD AT RATED CAPACITY : 168.2 M
DESIGN PRESSURE : 19.5 BARG

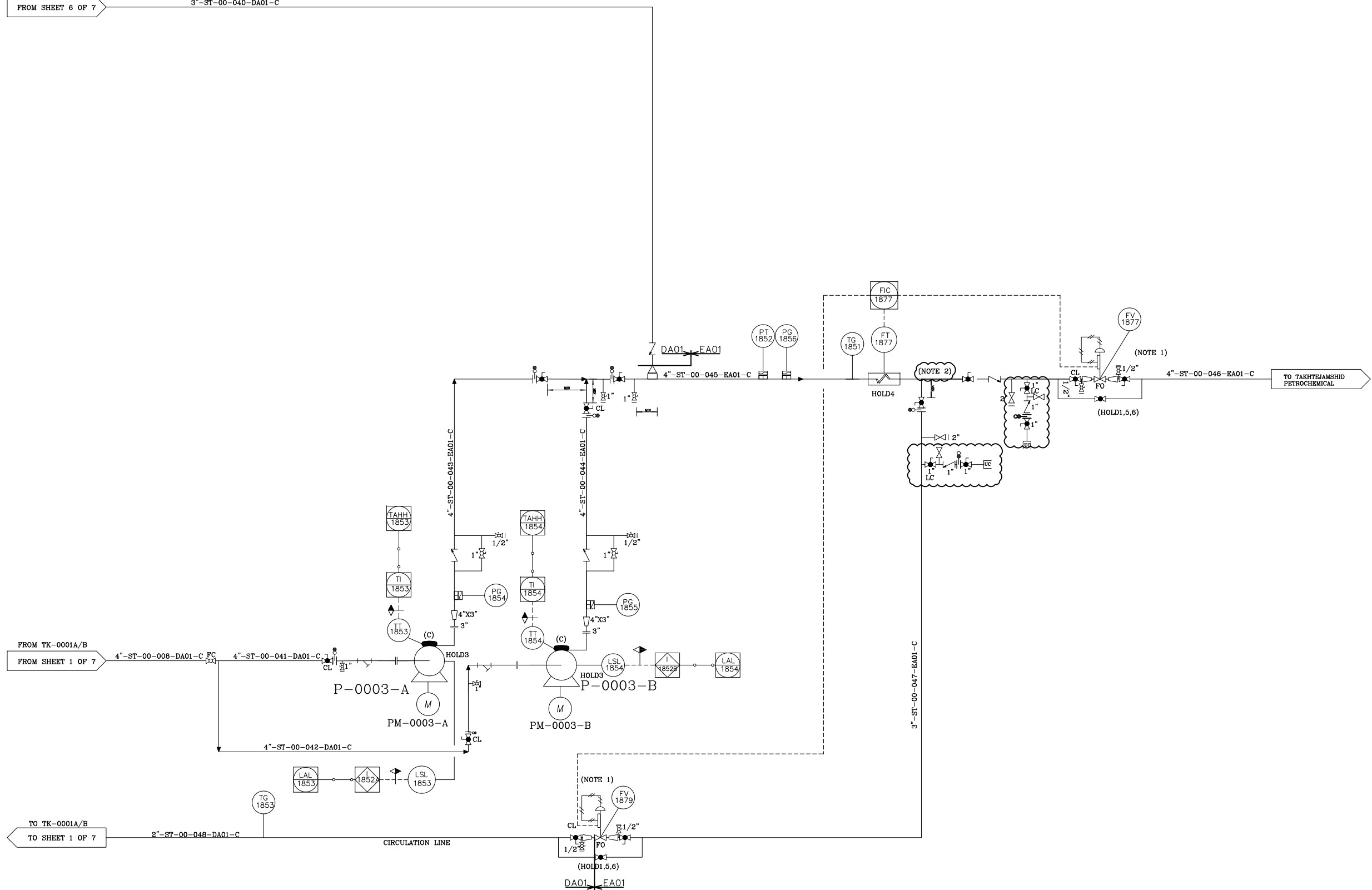


CONSULTING ENGINEER				
<i>BINA CONSULTING ENG.</i>				
PROJECT:				
STYRENE PARK OFFSITE				
DRAWING TITLE:				
P&ID FOR STYRENE STORAGE TANK (TK-0001A/B)				
DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-000-ED-PR-PID-522	R2	A3	NTC	6 of 6

STYRENE PUMP TO TAKHTEJAMSHID
TYPE : CENTRIFUGAL
RATED CAPACITY : 14.3 M3/HR
HEAD AT RATED CAPACITY : 168.8 M
DESIGN PRESSURE : 19.5 BARG

FROM SHEET 6 OF 7

3"-ST-00-040-DA01-C



NOTES :
<ol style="list-style-type: none"> 1 . TO BE LOCATED IN AN EASY TO REACH POSITION . 2. FOR EACH PLANT THE LOCATION OF BRANCH'S CONNECTION TO THE SUPPLY PIPELINES SHALL BE AS CLOSE AS POSSIBLE TO THAT PLANT BATTERY LIMIT AND MINIMUM DISTANCE SHALL BE CONSIDERED BETWEEN THE BRANCH'S CONNECTION POINT AND FIRST VALVE ON THE BRANCH .

HOLDE:

- 1 . CONTROL VALVE SIZE
- 2 . PUMP SUCTION /DISCHARGE NOZZLE SIZE .
- 3 . CONFIGURATION OF PUMP VENT /DRAIN .
- 4 . FLOW METER CONNECTION SIZE .
- 5 . CONTROL VALVE BYPASS LINE SIZE .
- 6 . REDUCER AND EXPANDER SIZE .

EQUIPMENT LIST:

P-0003-A/B

KEY PLAN :

R2	19.07.2020	FINAL ISSUED (FI)	M.Abbasfar	S.Behniafar	R.Memarian
R1	23.05.2020	FINAL ISSUED (FI)	M.Abbasfar	S.Behniafar	R.Memarian
R0	28.04.2020	ISSUED FOR APPROVAL (IFA)	M.Abbasfar	S.Behniafar	R.Memarian
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED

CLIENT



CONSULTING ENGINEER

BINA CONSULTING ENG.

PROJECT:

STYRENE PARK OFFSITE

DRAWING TITLE:

P&ID FOR STYRENE STORAGE TANK
(TK-0001A/B)

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-000-ED-PR-PID-522	R2	A3	NTC	7 of 7