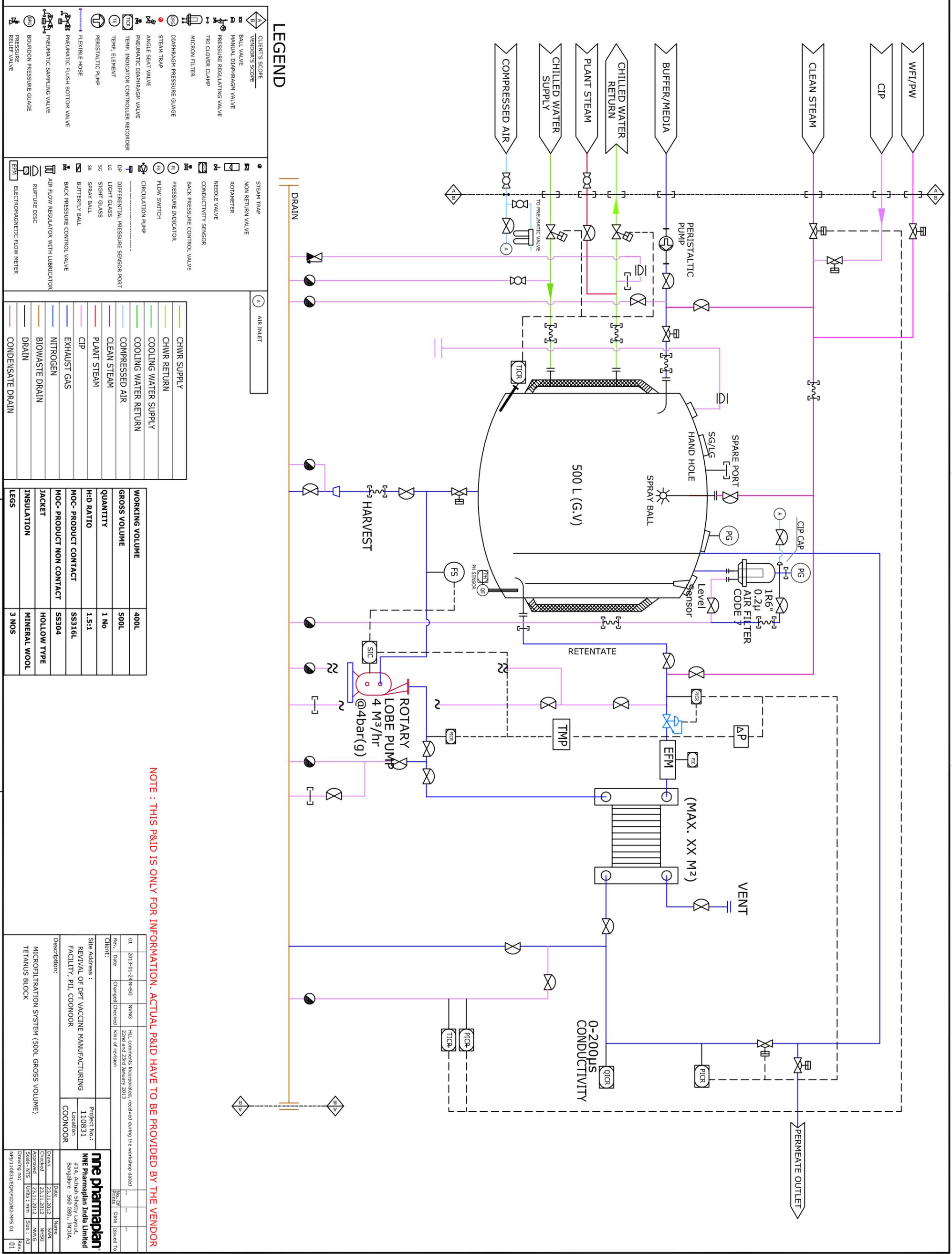


THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND NOT FOR PUBLICATION, BEING THE PROPERTY OF NNE PHARMAPLAN INDIA LIMITED, THE INFORMATION IS ISSUED ON THE UNDERSTANDING THAT NO PART THERE OF SHALL BE COPIED OR COMMUNICATED TO A THIRD PARTY WITHOUT AUTHORISATION IN WRITING FROM NNE PHARMAPLAN INDIA LIMITED.



LEGEND

- | | | | |
|--|-------------------------------------|--|------------------------------------|
| | CLIENT'S SCOPE | | AIR INLET |
| | VENDOR'S SCOPE | | STEAM TRAP |
| | BALL VALVE | | NON RETURN VALVE |
| | MANUAL DIAPHRAGM VALVE | | ROTAMETER |
| | PRESSURE REGULATING VALVE | | NEEDLE VALVE |
| | TRI CLOVER CLAMP | | CONDUCTIVITY SENSOR |
| | MICRON FILTER | | BACK PRESSURE CONTROL VALVE |
| | DIAPHRAGM PRESSURE GAUGE | | PRESSURE INDICATOR |
| | STEAM TRAP | | FLOW SWITCH |
| | ANGLE SEAT VALVE | | CIRCULATION PUMP |
| | TEMP. INDICATOR CONTROLLER RECORDER | | DIFFERENTIAL PRESSURE SENSOR PORT |
| | TEMP. ELEMENT | | LIGHT GLASS |
| | PERISTALTIC PUMP | | SIGHT GLASS |
| | FLEXIBLE HOSE | | SPRAY BALL |
| | PNEUMATIC FLUSH BOTTOM VALVE | | BUTTERFLY BALL |
| | PNEUMATIC SAMPLING VALVE | | BACK PRESSURE CONTROL VALVE |
| | BOURDON PRESSURE GAUGE | | AIR FLOW REGULATOR WITH LUBRICATOR |
| | PRESSURE RELIEF VALVE | | RUPTURE DISC |
| | ELECTROMAGNETIC FLOW METER | | AIR INLET |

- | | |
|--|----------------------|
| | CHWR SUPPLY |
| | CHWR RETURN |
| | COOLING WATER SUPPLY |
| | COOLING WATER RETURN |
| | COMPRESSED AIR |
| | CLEAN STEAM |
| | PLANT STEAM |
| | CIP |
| | EXHAUST GAS |
| | NITROGEN |
| | BIOWASTE DRAIN |
| | DRAIN |
| | CONDENSATE DRAIN |

WORKING VOLUME	
GROSS VOLUME	500L
QUANTITY	1 No
H/D RATIO	1.5:1
MOC- PRODUCT CONTACT	SS316L
MOC- PRODUCT NON CONTACT	SS304
JACKET	HOLLOW TYPE
INSULATION	MINERAL WOOL
LEGS	3 NOS

NOTE : THIS P&ID IS ONLY FOR INFORMATION. ACTUAL P&ID HAVE TO BE PROVIDED BY THE VENDOR

Rev.	Date	Changed/Checked	Kind of revision	Drawn	Checked	Approved
01	2013-01-24	NWSG	HLL comments incorporated, received during the workshop dated 22nd and 23rd January 2013			

Site Address :	Project No.:
REVIVAL OF DPT VACCINE MANUFACTURING FACILITY, PII, COONDOOR	110831
Client:	Location:
	COONDOOR
Description:	
MICROFILTRATION SYSTEM (500L GROSS VOLUME) TETANUS BLOCK	

nne pharmaplan	
#14, Achah Shetty Layout, Bangalore - 560 080., INDIA.	
Date	Name
23.11.2012	SAPL
23.11.2012	NWSG
23.11.2012	NWSG
Scale: NTS	Scale: mm
Sheet: 1	Sheet: 23
Drawing no:	Rev.
NPI/110831/EQP/PID/MS-RFS 01	01