

NOTE:

01. THE GROUP & UNIT CODE ON DRAWING SHOW "00" FOR COMMON PACKAGE THEREFORE, CONSIDER "11" FOR UNIT 1, "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR | EPC V : BHI  
E : EPC

03. CODE LIMIT PIPING  
A : BOILER PROPER  
B : BEP  
C : NEEP

04. CCC : CHEMICAL CLEANING CONNECTION

05. [X] : CONNECTION FOR VENT FUNNEL DRAIN







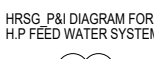
06. [L] : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

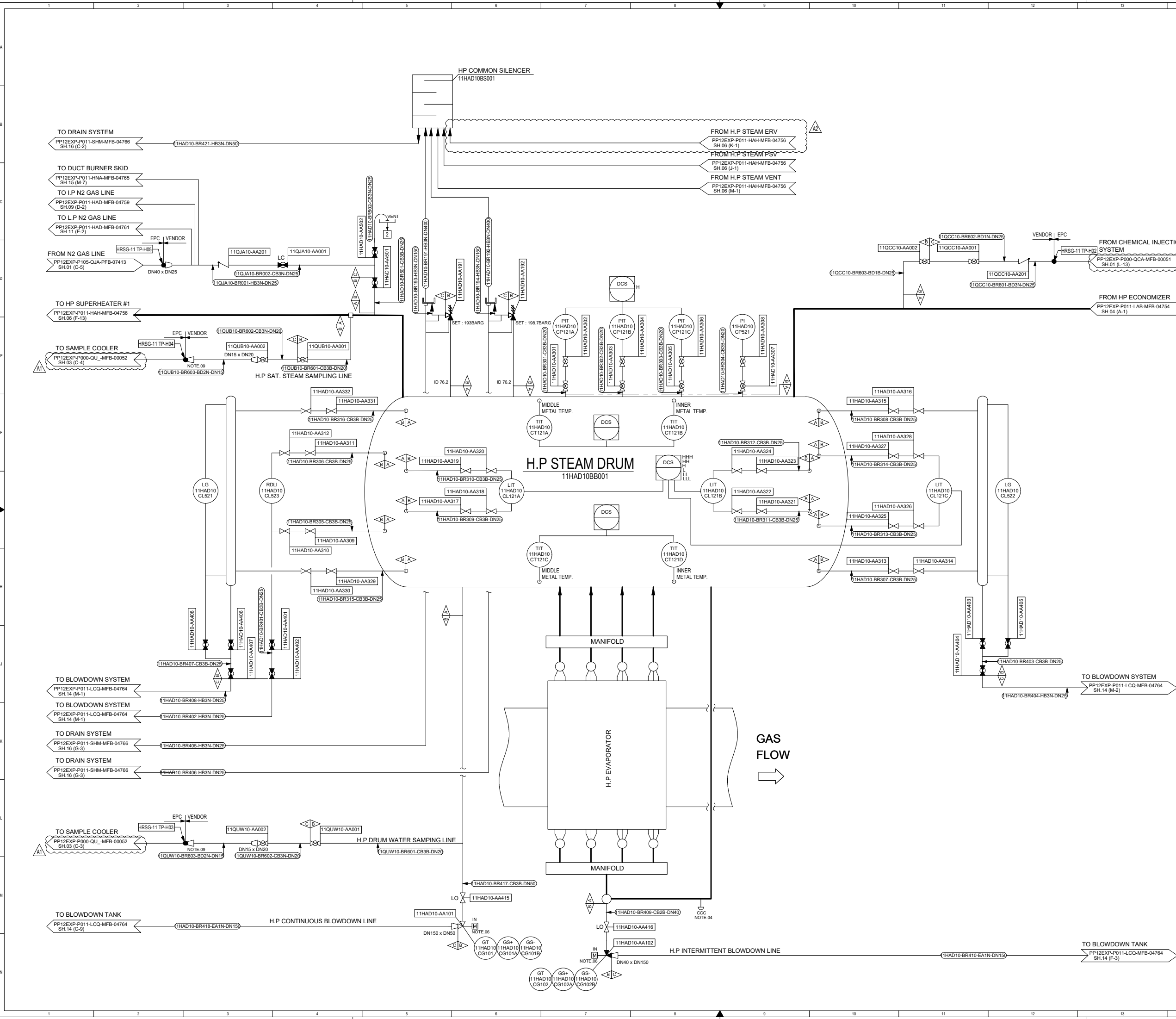
07. THE SCOPE OF THESE PITs AND RELATED ITEMS AS BELOW  
- HOOK UP DESIGN : BY BHI  
- STANCHION LOCATION DESIGN : BY SECCO III  
- IO LIST : BY SEPCO III  
- VFD CONTROL LOGIC : BY SEPCO III  
- HOOK UP MATERIALS STANCHION CONDUIT, CABLES ETC SUPPLY BY SEPCO III  
- PIPING MATERIAL, PIPE FITTING VALVE BY SEPCO III  
- PIPING ROUTING INFORMATION : BY BHI

| REFERENCE DRAWINGS: |               |
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| REV.                                  | DATE  | DESCRIPTION | PREPARED  | CHECKED | APPROVED |
|---------------------------------------|---|-------------|---|---------|----------|
| PROJECT : PP12 CCPP EXPANSION PROJECT |   |             |   |         |          |
| PRINCIPAL BUYER:                      |    |             | SAUDI POWER PROCUREMENT COMPANY   |         |          |
| PROJECT COMPANY:                      |    |             | SAUDI ELECTRICITY COMPANY   |         |          |
| PROJECT COMPANY'S CONSULTANT:         |    |             | FICHTNER GMBH & Co. KG  |         |          |
| EPC CONTRACTOR CONSORTIUM:            |   |             | SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD.<br>DOOSAN ENERLITY                     |         |          |
| SUB SUPPLIER:                         |    |             |   |         |          |
|                                       | DATE  | NAME        | TITLE   |         |          |
| PREPARED                              | 07-MAR-25   | KJLEE       |  |         |          |
| DESIGNED                              | 07-MAR-25   | KJLEE       |   |         |          |
| CHECKED                               | 07-MAR-25   | WJCHOI      |   |         |          |
| APPROVED                              | 07-MAR-25   | SHYOO       |   |         |          |
| ORG. NO.: PP12EXP-P011-LAB-MFB-04754  |   |             | SCALE: None SHT: 04 OF 18 REV: A2   |         |          |



NOTE:

01. THE GROUP & UNIT CODE ON DRAWING SHOW "00" FOR COMMON PACKAGE THEREFORE, CONSIDER "11" FOR UNIT 1, "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR | EPC    V : BHI  
                      E : EPC

03. CODE LIMIT PIPING

A : BOILER PROPER  
B : BEP  
C : NBEF

04. CCC : CHEMICAL CLEANING CONNECTION

05. : STEAM SAMPLING NOZZLE

06. LOCATE HRSG DRUM INTERMITTENT AND CONTINUOUS BLOWDOWN VALVES AS CLOSE AS PRACTICAL TO BLOWDOWN TANK.

07. : CONNECTION FOR VENT FUNNEL DRAIN

08. : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

09. IT SHALL BE COMPATIBLE FOR TUBE CONNECTION.  
(BOP TUBE SIZE : 12.7mm (1/2"))

REFERENCE DRAWINGS:

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PROJECT : PP12 CCPP EXPANSION PROJECT

PRINCIPAL BUYER : SAUDI POWER PROCUREMENT COMPANY

PROJECT COMPANY : SAUDI ELECTRICITY COMPANY

PROJECT COMPANY'S CONSULTANT : FICHTNER FICHTNER GMBH & Co. KG

EPC CONTRACTOR CONSORTIUM : SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD. DOOSAN ENERBILITY

SUB SUPPLIER : BHI CO., LTD.

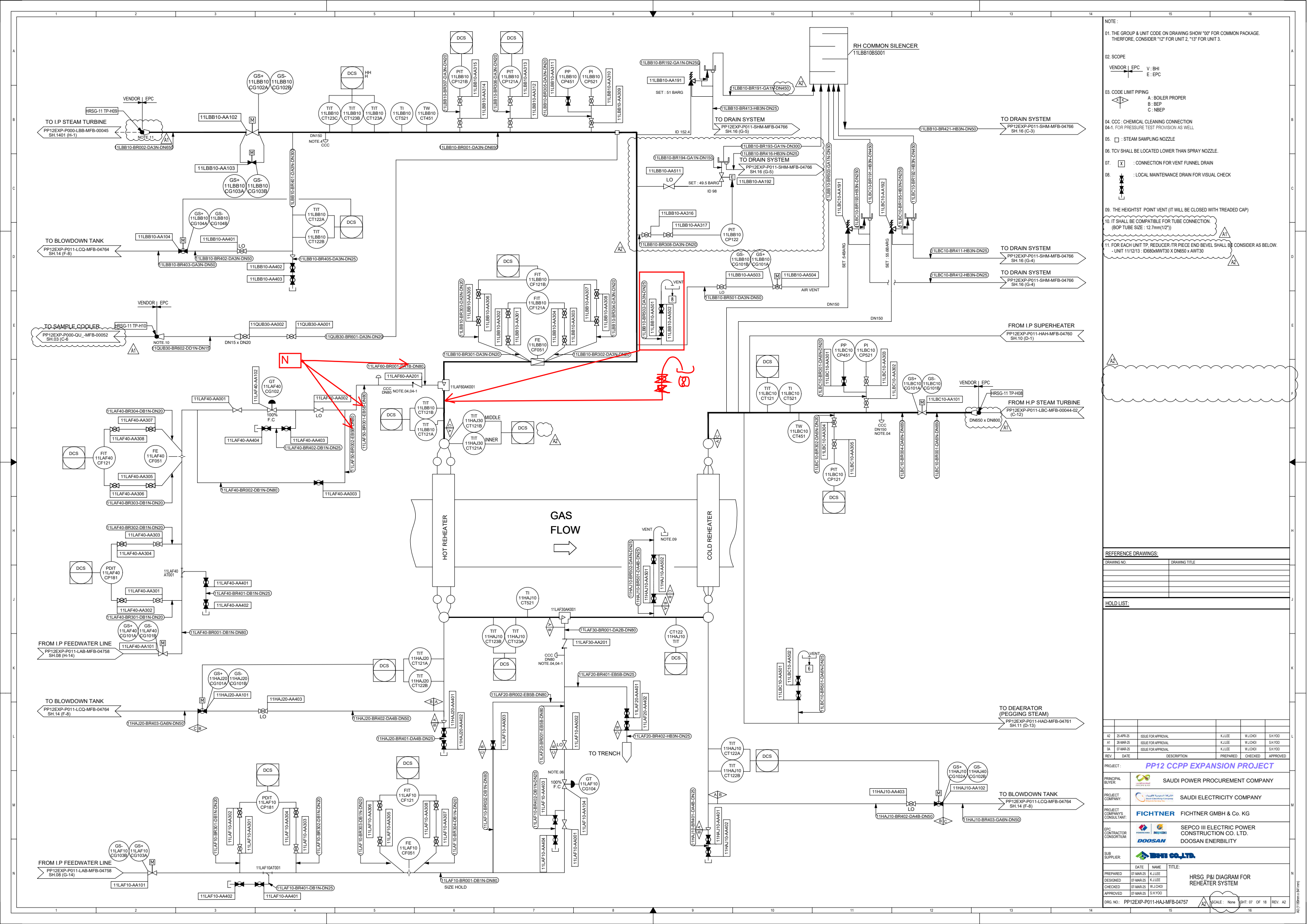
| DATE      | NAME     | TITLE:   |
|-----------|----------|--|
| 07-MAR-25 | KJLEE    | HRSG P&I DIAGRAM FOR<br>H.P. STEAM DRUM SYSTEM |
| 07-MAR-25 | KJLEE    |  |
| 07-MAR-25 | W.J.OHDI |  |
| 07-MAR-25 | S.H.YOO  |  |

DRG. NO.: PP12EXP-P011-HAD-MFB-04755    SCALE: None    SHT. 05 OF 18    REV. A2

As 11 (8mm x 84mm)







- NOTE:
01. THE GROUP & UNIT CODE ON DRAWING SHOW "00" FOR COMMON PACKAGE. THEREFORE, CONSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.
  02. SCOPE  
VENDOR | EPC  
V: BHI  
E: EPC
  03. CODE LIMIT PIPING  
A: BOILER PROPER  
B: REP  
C: NBEF
  04. CCC: CHEMICAL CLEANING CONNECTION  
04-1. FOR PRESSURE TEST PROVISION AS WELL.
  05. : STEAM SAMPLING NOZZLE
  06. TCV SHALL BE LOCATED LOWER THAN SPRAY NOZZLE.
  07. : CONNECTION FOR VENT FUNNEL DRAIN
  08. : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK
  09. THE HEIGHT/ST POINT VENT (IT WILL BE CLOSED WITH TREADED CAP)
  10. IT SHALL BE COMPATIBLE FOR TUBE CONNECTION.  
(BOP TUBE SIZE: 12.7mm(1/2"))
  11. FOR EACH UNIT TP, REDUCER ITR PIECE END BEVEL SHALL BE CONSIDER AS BELOW.  
- UNIT 11/12/13: ID680MM/WT30 X DN650 X AW730

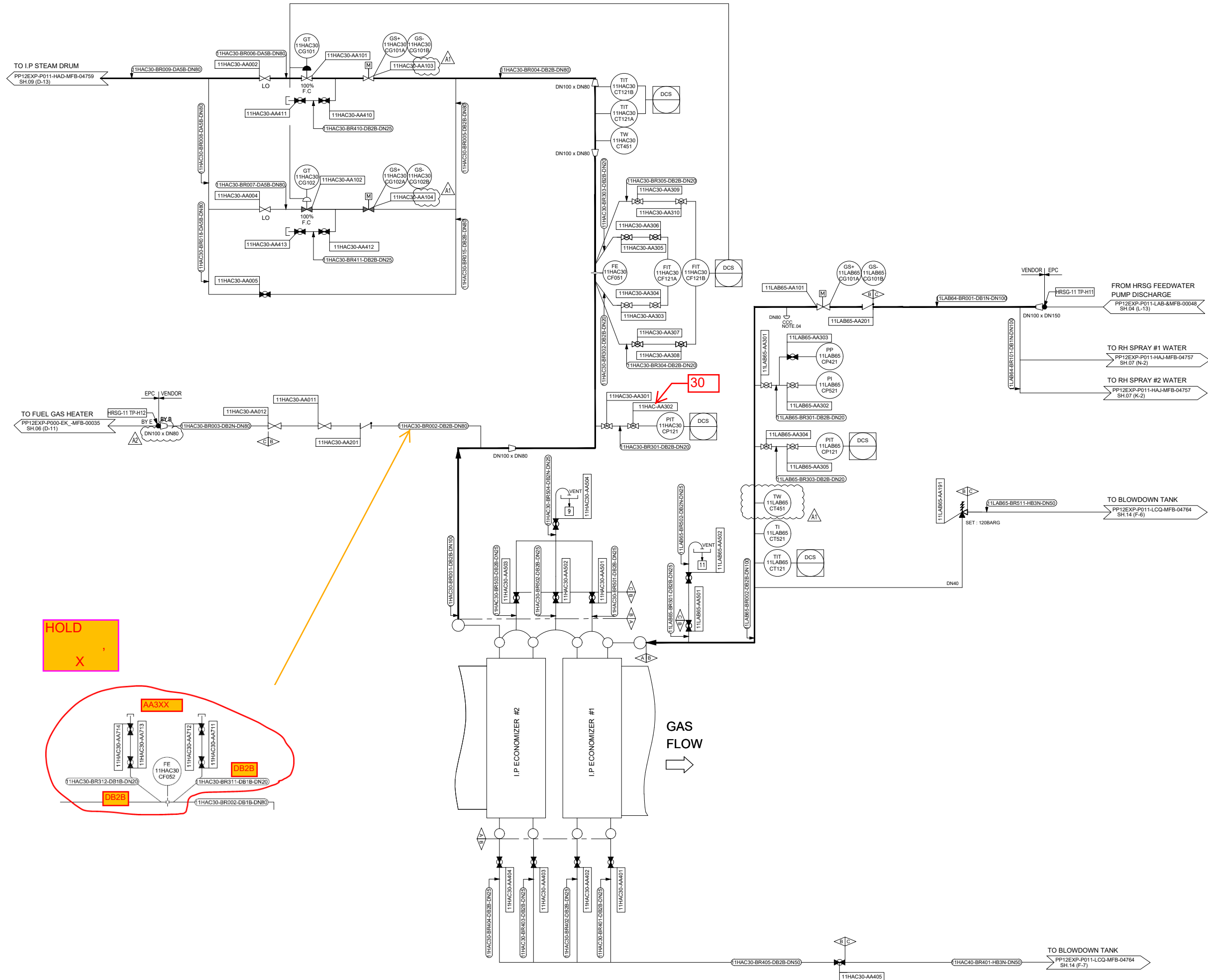
REFERENCE DRAWINGS:

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HOLD LIST:

| REV. | DATE      | DESCRIPTION        | PREPARED | CHECKED | APPROVED |
|------|-----------|--------------------|----------|---------|----------|
| A2   | 25-MAR-25 | ISSUE FOR APPROVAL | KJLEE    | WJCHOI  | SHYOO    |
| A1   | 25-MAR-25 | ISSUE FOR APPROVAL | KJLEE    | WJCHOI  | SHYOO    |
| 01   | 25-MAR-25 | ISSUE FOR APPROVAL | KJLEE    | WJCHOI  | SHYOO    |

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|  |           |   |  |                                      |  |               |         |          |  |  |  |
| A2   | 25-APR-25 | ISSUE FOR APPROVAL  |  |                                      |  | KJ.LEE        | WJ.CHOI | SH.YOO   |  |  |  |
| A1   | 25-MAR-25 | ISSUE FOR APPROVAL  |  |                                      |  | KJ.LEE        | WJ.CHOI | SH.YOO   |  |  |  |
| A0   | 07-MAR-25 | ISSUE FOR APPROVAL  |  |                                      |  | KJ.LEE        | WJ.CHOI | SH.YOO   |  |  |  |
| REV  | DATE      | DESCRIPTION   |  |                                      |  | PREPARED      | CHECKED | APPROVED |  |  |  |
| PROJECT : <b>PP12 CCPP EXPANSION PROJECT</b> |           |   |  |                                      |  |               |         |          |  |  |  |
| PRINCIPAL BUYER:                             |           | SAUDI POWER PROCUREMENT COMPANY                                   |  |                                      |  |               |         |          |  |  |  |
| PROJECT COMPANY:                             |           | SAUDI ELECTRICITY COMPANY   |  |                                      |  |               |         |          |  |  |  |
| PROJECT COMPANY'S CONSULTANT:                |           | FICHTNER FICHTNER GMBH & Co. KG                                   |  |                                      |  |               |         |          |  |  |  |
| EPC CONTRACTOR CONSORTIUM:                   |           | SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD.<br>DOOSAN ENERLITY |  |                                      |  |               |         |          |  |  |  |
| SUB SUPPLIER:                                |           | BHI CO., LTD.   |  |                                      |  |               |         |          |  |  |  |
| DATE   |           | NAME  |  | TITLE:                               |  |               |         |          |  |  |  |
| PREPARED                                     | 07-MAR-25 | KJ.LEE  |  | HRSG P&I DIAGRAM FOR REHEATER SYSTEM |  |               |         |          |  |  |  |
| DESIGNED                                     | 07-MAR-25 | KJ.LEE  |  |                                      |  |               |         |          |  |  |  |
| CHECKED                                      | 07-MAR-25 | WJ.CHOI   |  |                                      |  |               |         |          |  |  |  |
| APPROVED                                     | 07-MAR-25 | SH.YOO  |  |                                      |  |               |         |          |  |  |  |
| DRG. NO.: PP12EXP-P011-HAJ-MFB-04757         |           |   |  |                                      |  |               |         |          |  |  |  |
|  |           | A2  |  | SCALE: None                          |  | SHT: 07 OF 18 |         | REV: A2  |  |  |  |








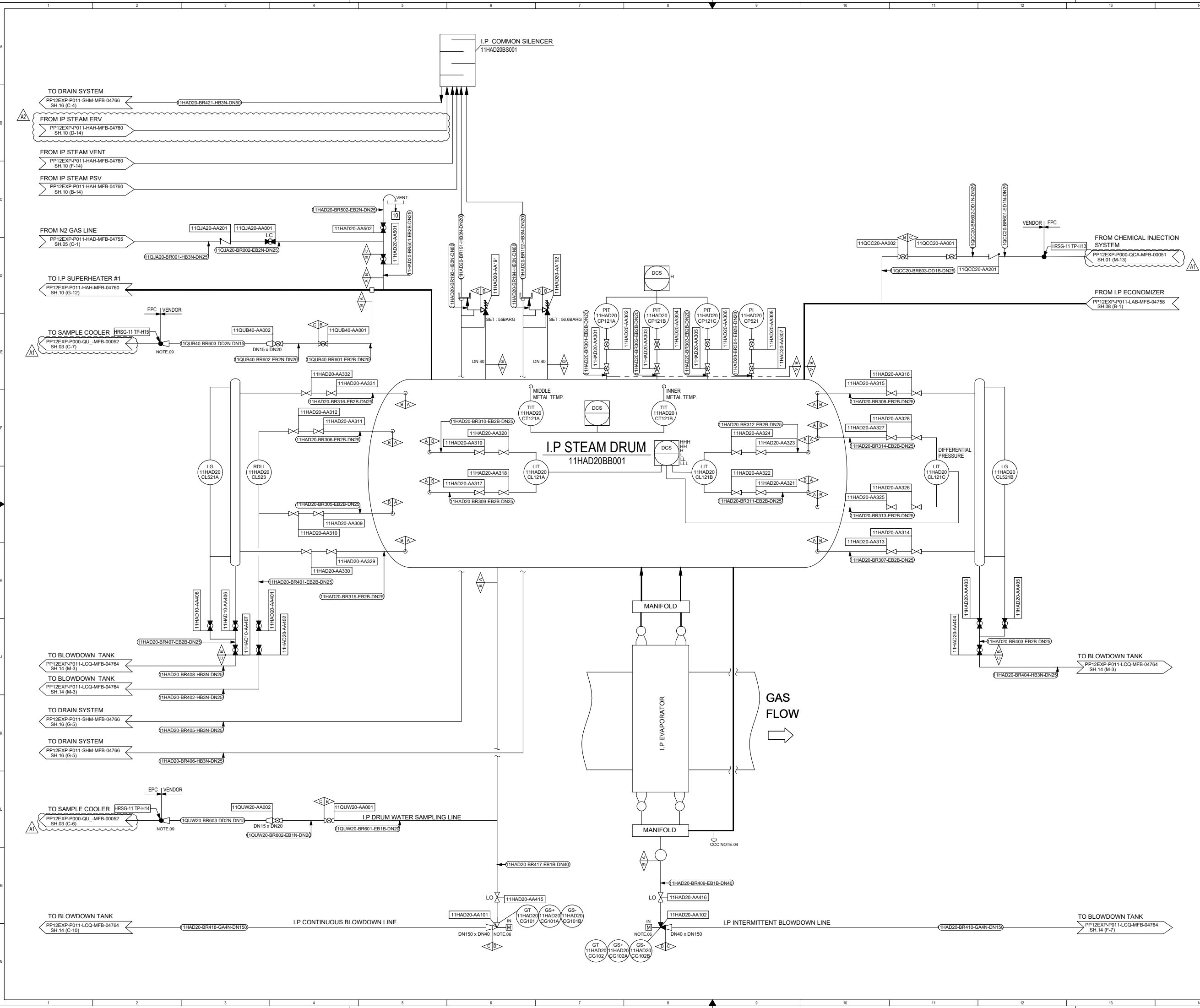
- NOTE:
01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1.  
THEREFORE, CONSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.
02. SCOPE
- VENDOR | EPC V: BHI  
E: EPC
03. CODE LIMIT PIPING
- A: BOILER PROPER  
B: BEP  
C: NBEP
04. CCC: CHEMICAL CLEANING CONNECTION
05. [X] : CONNECTION FOR VENT FUNNEL DRAIN
06. [Symbol] : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

| REFERENCE DRAWINGS: |               |
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| DRAWING NO.         | DRAWING TITLE |
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HOLD LIST:

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|--|---|---|
| PROJECT: PP12 CCPP EXPANSION PROJECT   |   |   |
| PRINCIPAL BUYER:<br>              | SAUDI POWER PROCUREMENT COMPANY                                   |   |
| PROJECT COMPANY:<br>              | SAUDI ELECTRICITY COMPANY   |   |
| PROJECT COMPANY'S CONSULTANT:<br> | FICHTNER FICHTNER GMBH & Co. KG                                   |   |
| EPC CONTRACTOR CONSORTIUM:<br>    | SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD.<br>DOOSAN ENERLITY |   |
| SUB SUPPLIER:<br>                 |   |   |
| DATE   | NAME  | TITLE:  |
| PREPARED 07-MAR-25   | K.J.LEE   | HRSG P&I DIAGRAM FOR<br>I.P FEED WATER SYSTEM |
| DESIGNED 07-MAR-25   | K.J.LEE   |   |
| CHECKED 07-MAR-25  | W.J.OH  |   |
| APPROVED 07-MAR-25   | S.H.YOO   |   |
| DRG. NO.: PP12EXP-P011-LAB-MFB-04758   |   |   |
| A2 SCALE: None SHT 08 OF 18 REV. A2  |   |   |



NOTE :

01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1.  
THEREFORE, CONSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR | EPC V : BHI  
E : EPC

03. CODE LIMIT PIPING

A : BOILER PROPER  
B : BEP  
C : NBEF

04. CCC : CHEMICAL CLEANING CONNECTION

05. ☐ : STEAM SAMPLING NOZZLE

06. LOCATE HRSG DRUM INTERMITTENT AND CONTINUOUS BLOWDOWN AS CLOSE AS PRACTICAL TO BLOWDOWN TANK

07. ☒ : CONNECTION FOR VENT FUNNEL DRAIN (REFER TO SH.16)

08. : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

09. IT SHALL BE COMPATIBLE FOR TUBE CONNECTION.  
(COP TUBE SIZE : 12.7mm (1/2"))

| REFERENCE DRAWINGS: |               |  |  |  |
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PROJECT : **PP12 CCPP EXPANSION PROJECT**

PRINCIPAL BUYER : SAUDI POWER PROCUREMENT COMPANY

PROJECT COMPANY : SAUDI ELECTRICITY COMPANY

PROJECT COMPANY'S CONSULTANT : FICHTNER GMBH & Co. KG

EPC CONTRACTOR CONSORTIUM : SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD. DOOSAN ENERBILITY

SUB SUPPLIER : DOOSAN ENEBRITY

| DATE      | NAME     | TITLE:   |
|-----------|----------|--|
| 07-MAR-25 | K.J.LEE  | HRSG P&I DIAGRAM FOR<br>I.P. STEAM DRUM SYSTEM |
| 07-MAR-25 | K.J.LEE  |  |
| 07-MAR-25 | W.J.OHOI |  |
| 07-MAR-25 | S.H.YOO  |  |

DRG. NO.: PP12EXP-P011-HAD-MFB-04759

SCALE : None

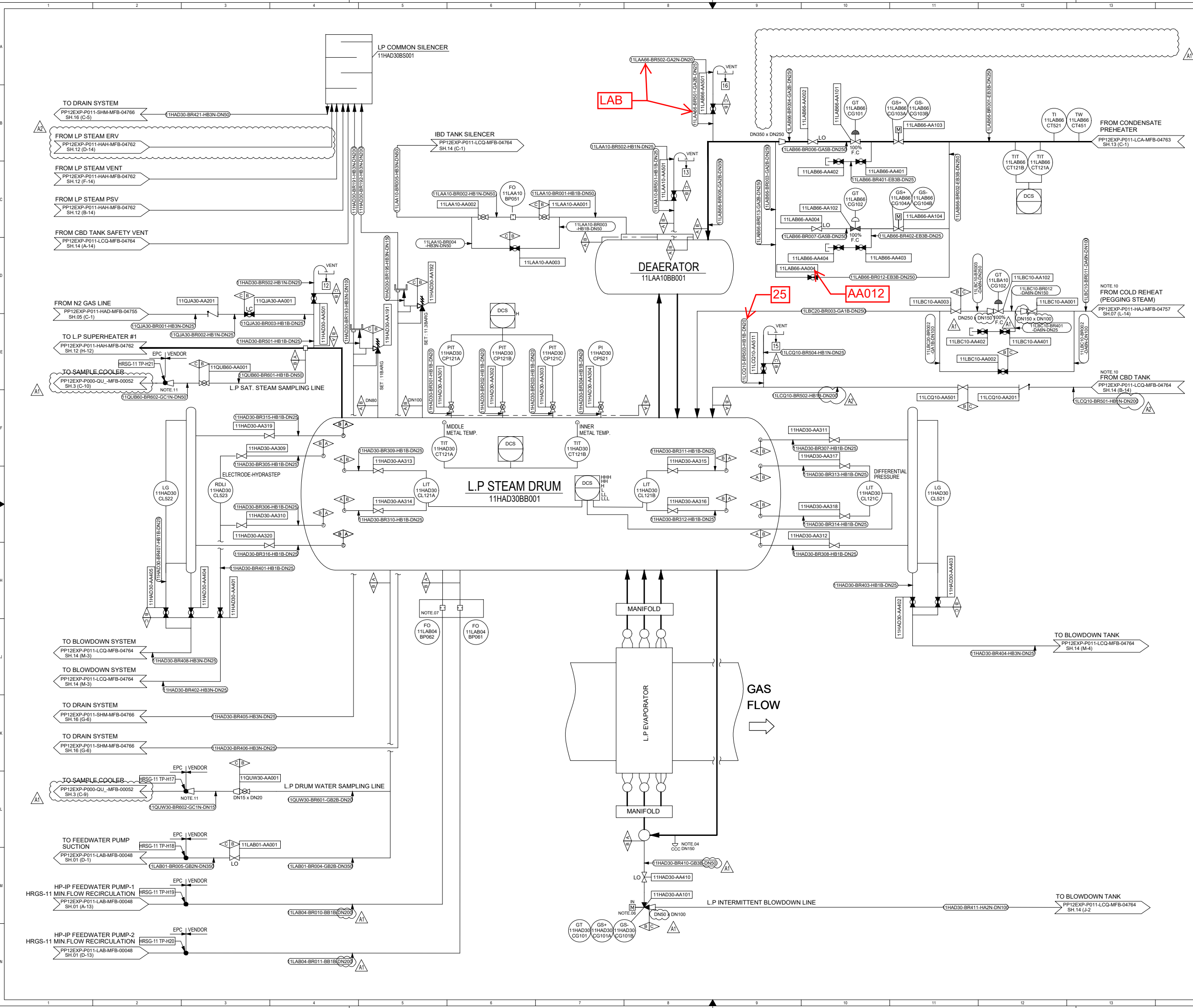
SHT. 09 OF 18

REV. A2

AS 11 (8mm x 84mm)







NOTE:

01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1.  
THEREFORE, CONSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR EPC V: BHI  
E: EPC

03. CODE LIMIT PIPING

A: BOILER PROPER  
B: BEP  
C: NEEP

04. CCC: CHEMICAL CLEANING CONNECTION

05. □: STEAM SAMPLING NOZZLE

06. LOCATE HRSG DRUM INTERMITTENT AND CONTINUOUS BLOWDOWN AS CLOSE AS PRACTICAL TO BLOWDOWN TANK

07. THESE RESTRICT ORIFICES WILL BE SUPPLIED BY OTHERS  
ALSO, THEY SHALL BE LOCATED AS CLOSE AS POSSIBLE TO LP DRUM.

08. X: CONNECTION FOR VENT FUNNEL DRAIN (REFER TO SH.16)

09. LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

10. IT IS RECOMMENDED THAT VALVES TO BE LOCATED TO HIGHER POSITION THAN THE LP DRUM NOZZLE TO AVOID CONDENSATE ACCUMULATION.

11. IT SHALL BE COMPATIBLE FOR TUBE CONNECTION.  
(BOP TUBE SIZE: 15.8mm 5/8")

REFERENCE DRAWINGS:

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PROJECT: PP12 CCPP EXPANSION PROJECT

|                               |   |
|-------------------------------|---|
| PRINCIPAL BUYER:              | SAUDI POWER PROCUREMENT COMPANY                                   |
| PROJECT COMPANY:              | SAUDI ELECTRICITY COMPANY   |
| PROJECT COMPANY'S CONSULTANT: | FICHTNER FICHTNER GMBH & Co. KG                                   |
| EPC CONTRACTOR CONSORTIUM:    | SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD.<br>DOOSAN ENERLITY |
| SUB SUPPLIER:                 | DOOSAN CO., LTD.  |

| DATE      | NAME   | TITLE    |
|-----------|--------|----------|
| 07-MAR-25 | KJLEE  | DESIGNED |
| 07-MAR-25 | WJCHOI | CHECKED  |
| 07-MAR-25 | SHYOO  | APPROVED |

HRSG P&I DIAGRAM FOR L.P. STEAM DRUM SYSTEM

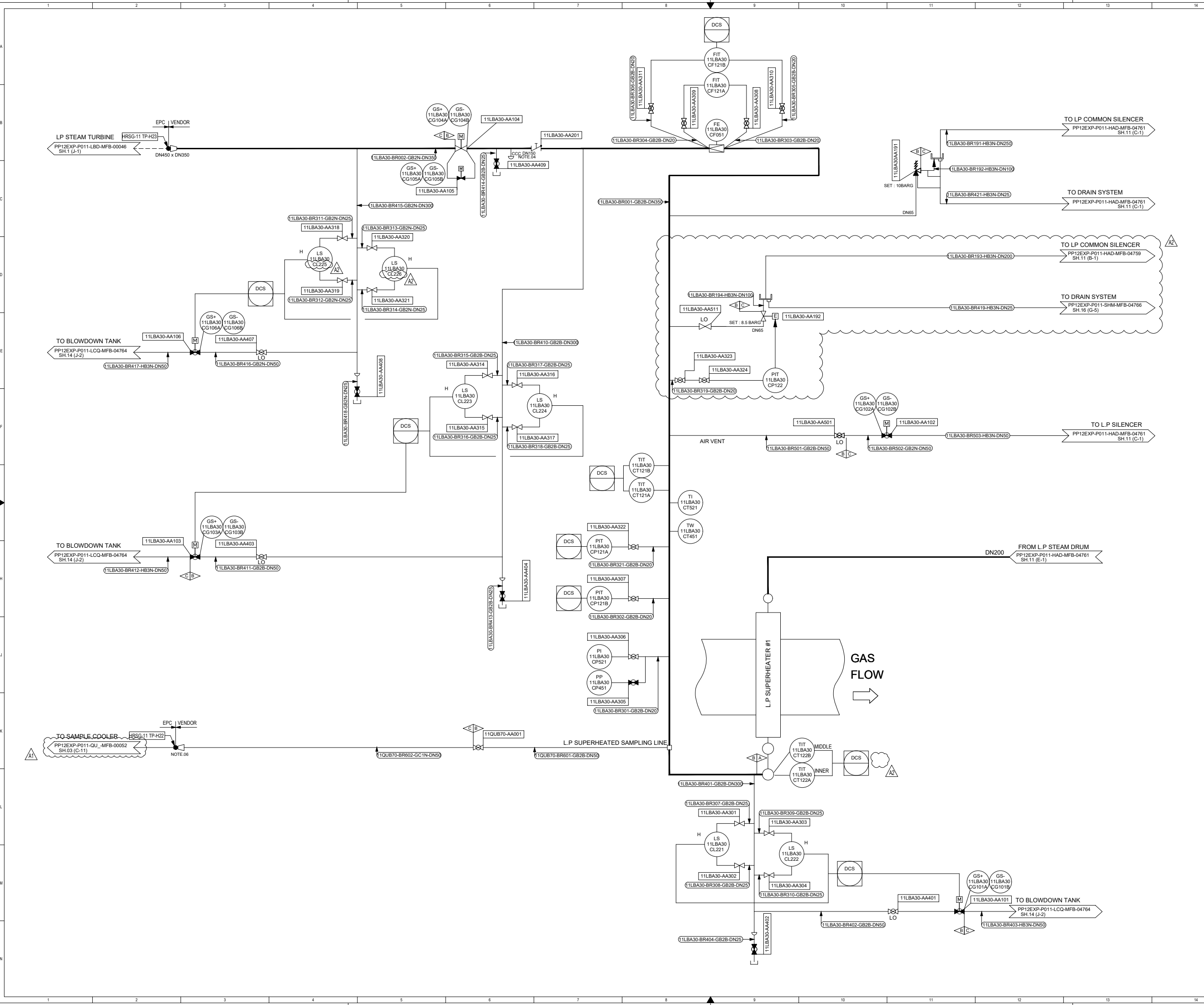
DRG. NO.: PP12EXP-P011-HAD-MFB-04761

SCALE: None

SHT: 11 OF 18

REV: A2





NOTE:

01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1.  
THEREFORE, COSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR | EPC | V : BHI  
E : EPC

03. CODE LIMIT PIPING

A : BOILER PROPER  
B : BEP  
C : NBP

04. CCC : CHEMICAL CLEANING CONNECTION

05. : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

06. IT SHALL BE COMPATIBLE FOR TUBE CONNECTION.  
(BOP TUBE SIZE : 15.8mm 5/8")

REFERENCE DRAWINGS:

| DRAWING NO. | DRAWING TITLE |
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HOLD LIST:

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PROJECT : PP12 CCPP EXPANSION PROJECT

PRINCIPAL BUYER : SAUDI POWER PROCUREMENT COMPANY

PROJECT COMPANY : SAUDI ELECTRICITY COMPANY

PROJECT COMPANY'S CONSULTANT : FICHTNER FICHTNER GMBH & Co. KG

EPC CONTRACTOR CONSORTIUM : SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD. DOOSAN ENERBILITY

SUB SUPPLIER : DOOSAN CO., LTD.

DATE : 07-MAR-25 NAME : K.J.LEE TITLE : HRSG P&I DIAGRAM FOR L.P SUPERHEATER SYSTEM

DESIGNED : 07-MAR-25 K.J.LEE

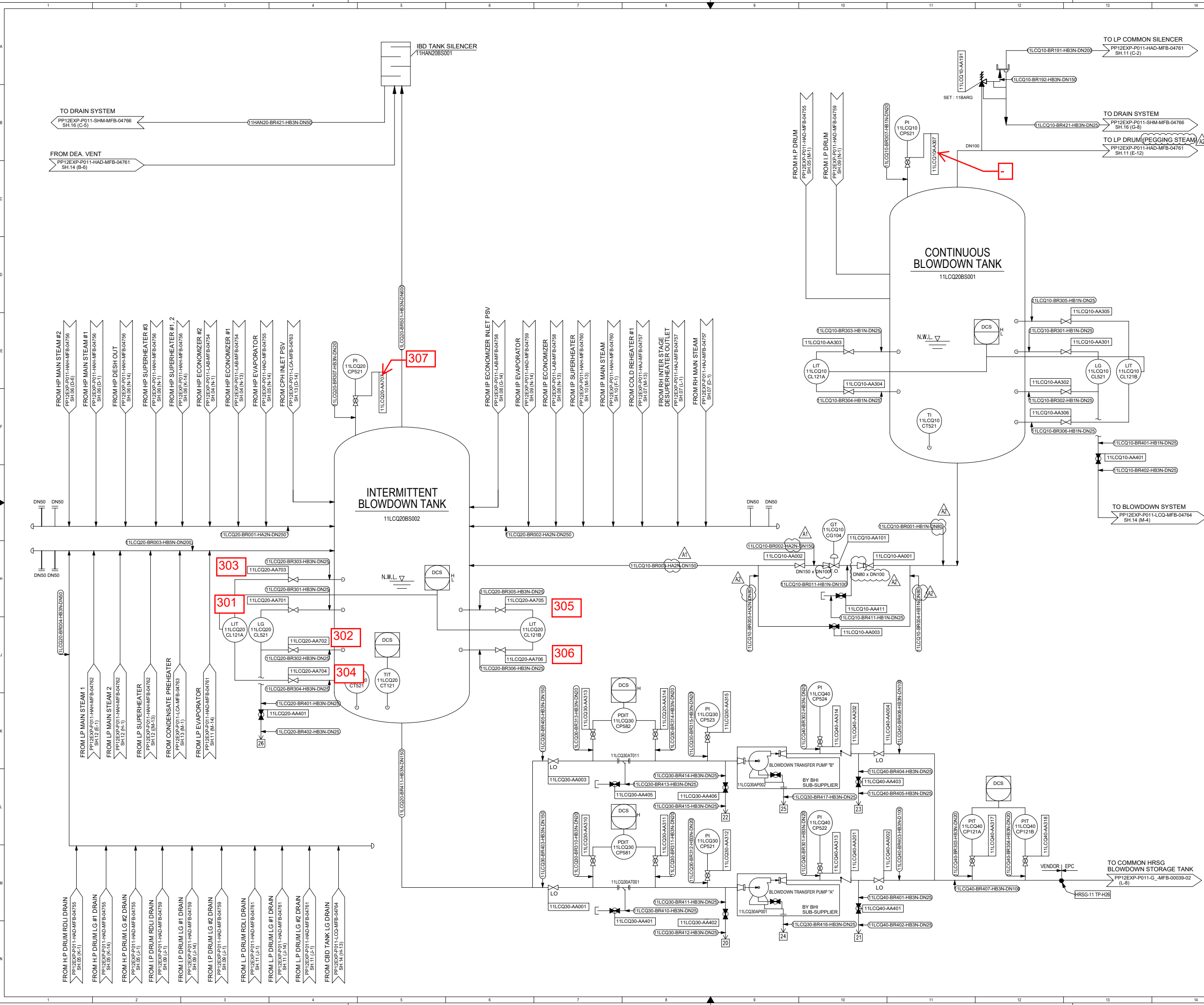
CHECKED : 07-MAR-25 W.J.OHOI

APPROVED : 07-MAR-25 S.H.YOO

DRG. NO. : PP12EXP-P011-HAH-MFB-04762 SCALE : None SMT: 12 OF 18 REV. A2

As 11 (8mm x 84mm)





NOTE:

01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1. THEREFORE, COSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR | EPC V: BHI E: EPC

03. CODE LIMIT PIPING

A : BOILER PROPER  
B : BEP  
C : NBP

04. CCC : CHEMICAL CLEANING CONNECTION

05. LOCATE HRSG START UP AND CONTINUOUS BLOWDOWN VALVES AS CLOSE AS PRACTICAL TO BLOWDOWN TANK.

06. : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

REFERENCE DRAWINGS:

| DRAWING NO. | DRAWING TITLE |
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HOLD LIST:

| REV. | DATE      | DESCRIPTION        | PREPARED | CHECKED | APPROVED |
|------|-----------|--------------------|----------|---------|----------|
| A2   | 25-MAR-25 | ISSUE FOR APPROVAL | KJLEE    | WJCHOI  | SHYOO    |
| A1   | 28-MAR-25 | ISSUE FOR APPROVAL | KJLEE    | WJCHOI  | SHYOO    |
| 04   | 07-MAR-25 | ISSUE FOR APPROVAL | KJLEE    | WJCHOI  | SHYOO    |

PROJECT: PP12 CCPP EXPANSION PROJECT

PRINCIPAL BUYER: SAUDI POWER PROCUREMENT COMPANY

PROJECT COMPANY: SAUDI ELECTRICITY COMPANY

PROJECT COMPANY'S CONSULTANT: FICHTNER FICHTNER GMBH & Co. KG

EPC CONTRACTOR CONSORTIUM: SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD. DOOSAN ENERLITY

SUB SUPPLIER: BHI CO., LTD.

DATE: 07-MAR-25 NAME: KJLEE TITLE: HRSG P&I DIAGRAM FOR BLOWDOWN TANK SYSTEM

DESIGNED: 07-MAR-25 WJCHOI

CHECKED: 07-MAR-25 SHYOO

APPROVED: 07-MAR-25 SHYOO

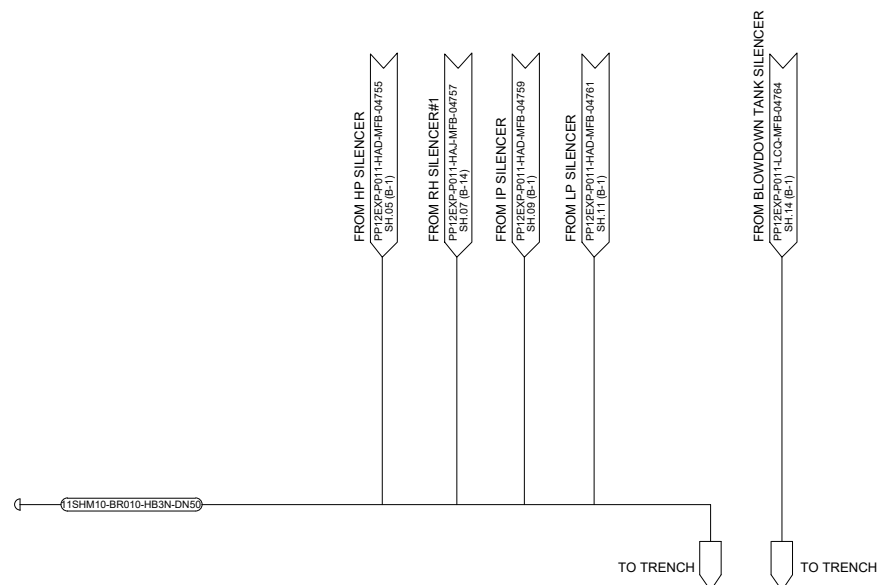
DRG. NO.: PP12EXP-P011-LCQ-MFB-04764 SCALE: None SHT: 14 OF 18 REV: A2

As 11 (8mm x 84mm)

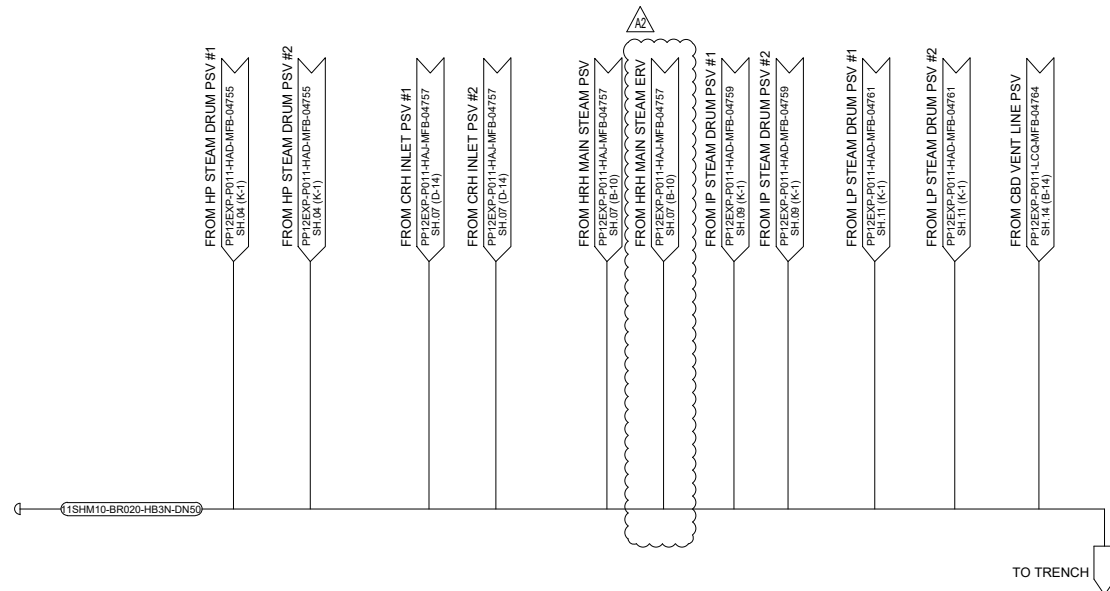




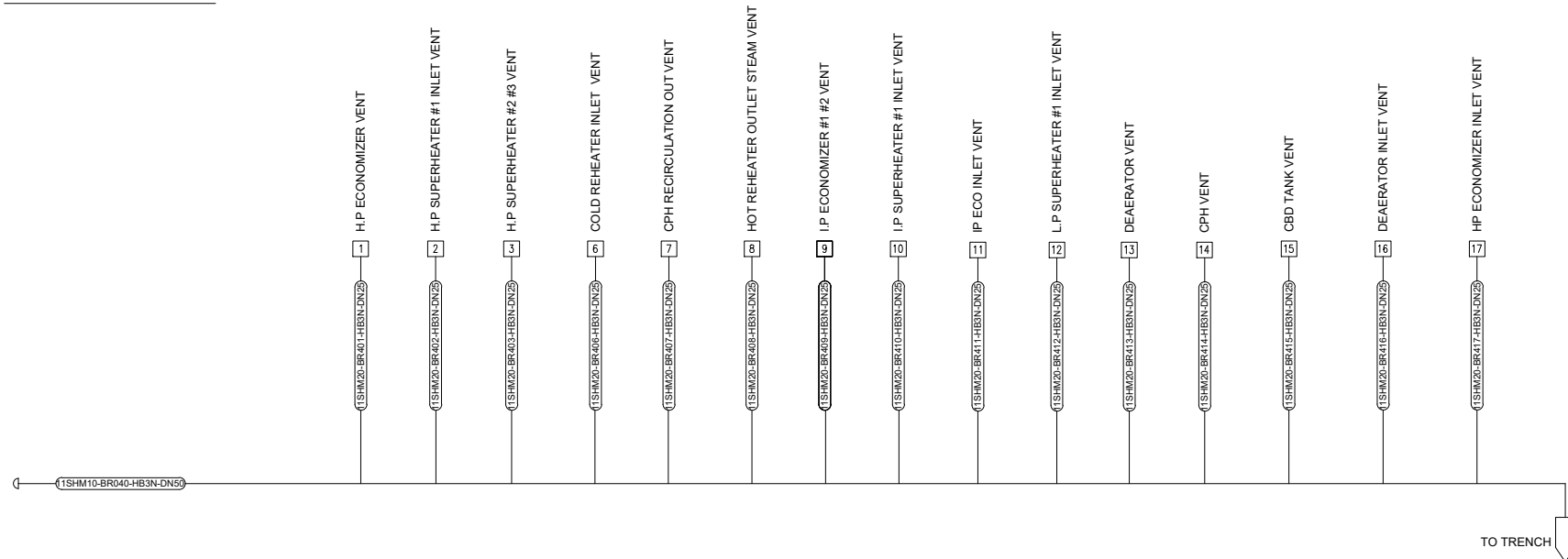
SILENCER DRAIN LINE



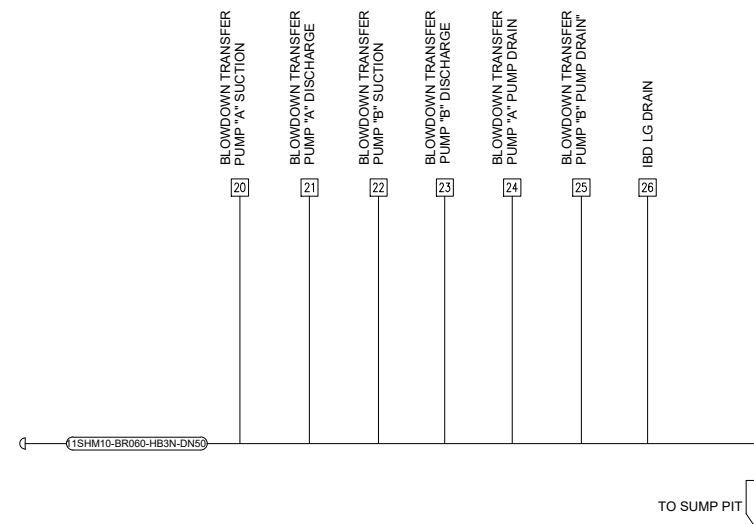
PRESSURE SAFETY VALVE DRAIN LINE



FUNNEL DRAIN LINE



## IBD TANK AREA DRAIN LINE



NOTE :

01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1. THEREFORE, COSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.

## 02. SCOPE

VENDOR | EPC    V : BHI  
F : EPC

### 03. CODE LIMIT PIPING


 A : BOILER PROPER  
 B : BEP  
 C : NBEP


04. CCC : CHEMICAL CLEANING CONNECTION

[illegible]

## HOLD LIST:

| REV. | DATE      | DESCRIPTION        | PREPARED | CHECKED | APPROVED |
|------|-----------|--------------------|----------|---------|----------|
| A2   | 25 APR 25 | ISSUE FOR APPROVAL | KJ LEE   | WJ DHO  | SIX YOO  |
| A1   | 26 MAR 25 | ISSUE FOR APPROVAL | KJ LEE   | WJ DHO  | SIX YOO  |
| 0A   | 07 MAR 25 | ISSUE FOR APPROVAL | KJ LEE   | WJ DHO  | SIX YOO  |

PROJECT: PP12 CCPP EXPANSION PROJECT




|           |   |                                 |
|-----------|---|---------------------------------|
| PRINCIPAL |  | SAUDI POWER PROCUREMENT COMPANY |
|-----------|---|---------------------------------|

|   |  |
|---|--|
| <p>  <b>MINISTARSTVO<br/>OBRAZOVANJA I<br/>NAUKA<br/>REPUBLIKE<br/>SRBIJE</b> </p> | <p> <b>POSREDOVANJE U PROMETU<br/>POSREDOVANJE U PROMETU<br/>POSREDOVANJE U PROMETU</b> </p> |
|---|--|

PROJECT COMPANY:  SAUDI ELECTRICITY COMPANY

**PROJECT COMPANY'S CONSULTANT** **FICHTNER** FICHTNER GMBH & Co. KG

500  SEPCO III ELECTRIC POWER

CONTRACTOR CONSORTIUM:    CONSTRUCTION CO. LTD.  
DOOSAN ENERGY


[illegible]

|           |  |
|-----------|--|
| SUPPLIER: |  <b>BMT</b> |
|-----------|--|

|          |           |         |                      |
|----------|-----------|---------|----------------------|
|          | DATE      | NAME    | TITLE                |
| PREPARED | 07-MAR-25 | K.J.LEE | HRSC B&I DIAGRAM FOR |

|          |           |          |
|----------|-----------|----------|
| DESIGNED | 07-MAR-25 | K.J.LEE  |
| CHECKED  | 07-MAR-25 | W.J.CHOI |

DRAIN SYSTEM

|          |           |         |   |
|----------|-----------|---------|---|
| APPROVED | 07-MAR-25 | S.H.YOO |  |
|----------|-----------|---------|---|

|  |    |    |
|--|----|----|
|  | 15 | 16 |
|--|----|----|



SCALE : Non

SHT

16 OF

2

FROM INSTRUMENT AIR LINE  
PP12EXP-P000-QEA-MFB-00038  
SH.3 (J-5)

EPC | VENDOR

HRS G-11 TP-H30

1QFB71-BR001-HCSN-DN20

HP FEEDWATER LCV 30%

11LAB61-AA103 11QFB72-AA001

HP FEEDWATER LCV 100%

11LAB61-AA101 11QFB72-AA002

HP FEEDWATER LCV 100%

11LAB61-AA102 11QFB72-AA003

HP ECONOMIZER BYPASS TCV

11LAB65-AA101 11QFB72-AA004

HP INTER STAGE DESUPERHEATER TCV

11LAB10-AA102 11QFB72-AA005

HP FINAL STAGE DESUPERHEATER TCV

11LAB40-AA102 11QFB72-AA006

RH INTER STAGE DESUPERHEATER TCV

11LAB10-AA103 11QFB72-AA008

RH FINAL STAGE DESUPERHEATER TCV

11LAB40-AA102 11QFB72-AA009

IP DRUM LCV 100%

11THAC30-AA101 11QFB72-AA011

IP DRUM LCV 100%

11THAC30-AA102 11QFB72-AA012

IP MAIN STEAM PCV

11LIBA20-AA102 11QFB72-AA013

LP DRUM LCV 100%

11LAB66-AA101 11QFB72-AA014

LP DRUM LCV 100%

11LAB66-AA102 11QFB72-AA015

LP DRUM PEGGING STEAM PCV

11LBC10-AA102 11QFB72-AA016

CPH BYPASS TCV

11LCA20-AA103 11QFB72-AA018

CPH RECIRCULATION LINE TCV

11LCB30-AA101 11QFB72-AA019

CBD TANK OUTLET LCV

11LCG10-AA101 11QFB72-AA020

HP STEAM ERV

11LAB10-AA102 11QFB72-AA041

REHEATER STEAM ERV

11LB810-AA102 11QFB72-AA042

IP STEAM ERV

11LB820-AA102 11QFB72-AA043

LP STEAM ERV

11LB830-AA102 11QFB72-AA044

DUCT BURNER FRONT

11QFB72-BR003-HCSN-DN40

DUCT BURNER FUEL GAS SKID

11QFB72-BR003-HCSN-DN20

SCR VAPORIZER AREA

11QFB72-BR003-HCSN-DN20

SCR NH3 ANALYZER

11QFB72-BR003-HCSN-DN20

DN15

BY BHI SUB-SUPPLIER

TO DUCT BURNER  
PP12EXP-P011-HHA-MDA-04804  
(M-1)

TO DUCT BURNER  
PP12EXP-P011-HHA-MDA-04804  
(K-1)

TO SCR VAPORIZER AREA  
PP12EXP-P011-QCD-MFB-04859  
(K-1)

TO SCR NH3 ANALYZER  
(STACK EL.XX)  
PP12EXP-P011-QCD-MFB-04859  
(C-14)

NOTE:

01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1 THEREFORE, COSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.

02. SCOPE

VENDOR | EPC

V: BHI  
E: EPC

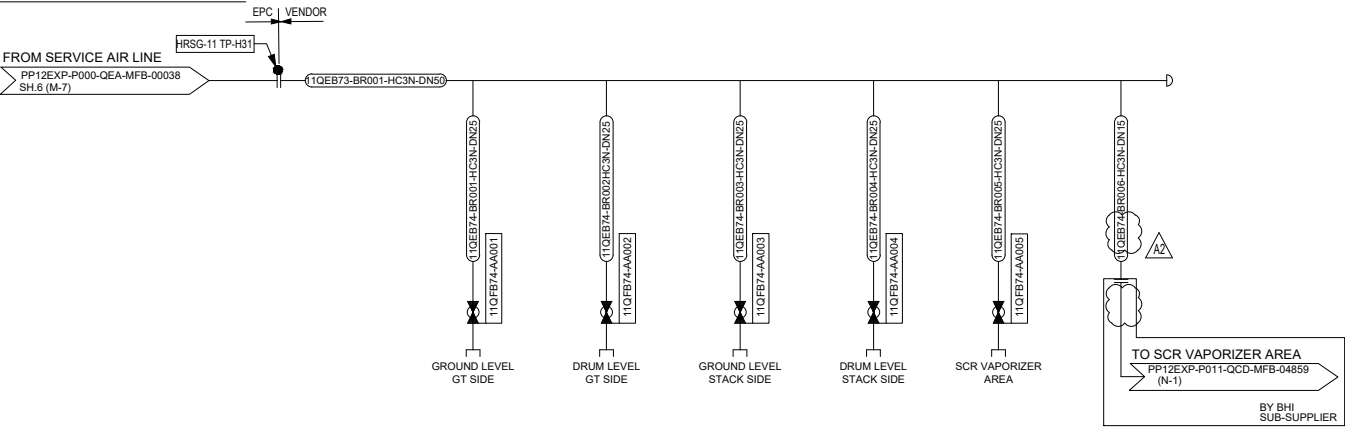
03. CODE LIMIT PIPING

A: BOILER PROPER  
B: BEP  
C: NBP

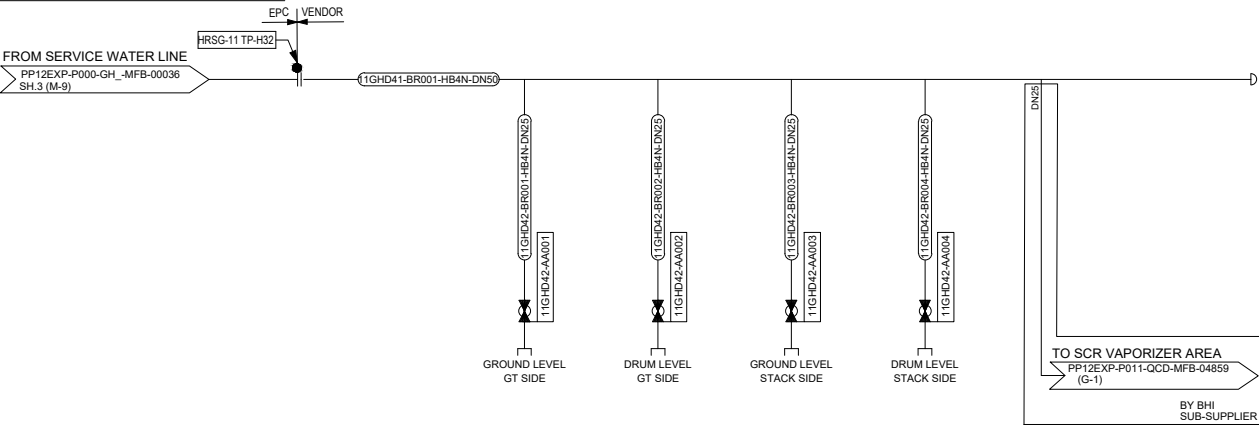
04. : LOCAL MAINTENANCE DRAIN FOR VISUAL CHECK

[illegible]

SERVICE AIR SYSTEM



SERVICE WATER SYSTEM



NOTE :  
01. THE GROUP & UNIT CODE ON DRAWING SHOW "11" FOR UNIT 1.  
THEREFORE, COSIDER "12" FOR UNIT 2, "13" FOR UNIT 3.  
02. SCOPE  
VENDOR | EPC V : BHI  
E : EPC  
03. CODE LIMIT PIPING  
A : BOILER PROPER  
B : BEP  
C : NBEP

| REFERENCE DRAWINGS: |               |
|---------------------|---------------|
| DRAWING NO.         | DRAWING TITLE |
|                     |               |
|                     |               |
|                     |               |
|                     |               |
|                     |               |

| HOLD LIST: |  |
|------------|--|
|            |  |
|            |  |
|            |  |
|            |  |
|            |  |

| REV. | DATE | DESCRIPTION | PREPARED | CHECKED | APPROVED |
|------|------|-------------|----------|---------|----------|
|      |      |             |          |         |          |
|      |      |             |          |         |          |
|      |      |             |          |         |          |

PROJECT : PP12 CCPP EXPANSION PROJECT

|                               |   |
|-------------------------------|---|
| PRINCIPAL BUYER:              | SAUDI POWER PROCUREMENT COMPANY                                     |
| PROJECT COMPANY:              | SAUDI ELECTRICITY COMPANY   |
| PROJECT COMPANY'S CONSULTANT: | FICHTNER GMBH & Co. KG  |
| EPC CONTRACTOR CONSORTIUM:    | SEPCO III ELECTRIC POWER CONSTRUCTION CO. LTD.<br>DOOSAN ENERBILITY |
| SUB SUPPLIER:                 | BHI CO., LTD.   |

| DATE               | NAME     | TITLE:                                    |
|--------------------|----------|---|
| PREPARED 07-MAR-25 | K.J.LEE  | HRSG_P&I DIAGRAM FOR UTILITY SYSTEM (2/2) |
| DESIGNED 07-MAR-25 | K.J.LEE  |   |
| CHECKED 07-MAR-25  | W.J.CHOI |   |
| APPROVED 07-MAR-25 | S.H.YOO  |   |

DRG. NO.: PP12EXP-P011-GHD-MFB-04768

|    |             |         |       |         |
|----|-------------|---------|-------|---------|
| AZ | SCALE: None | SHT: 18 | OF 18 | REV: AZ |
|----|-------------|---------|-------|---------|