

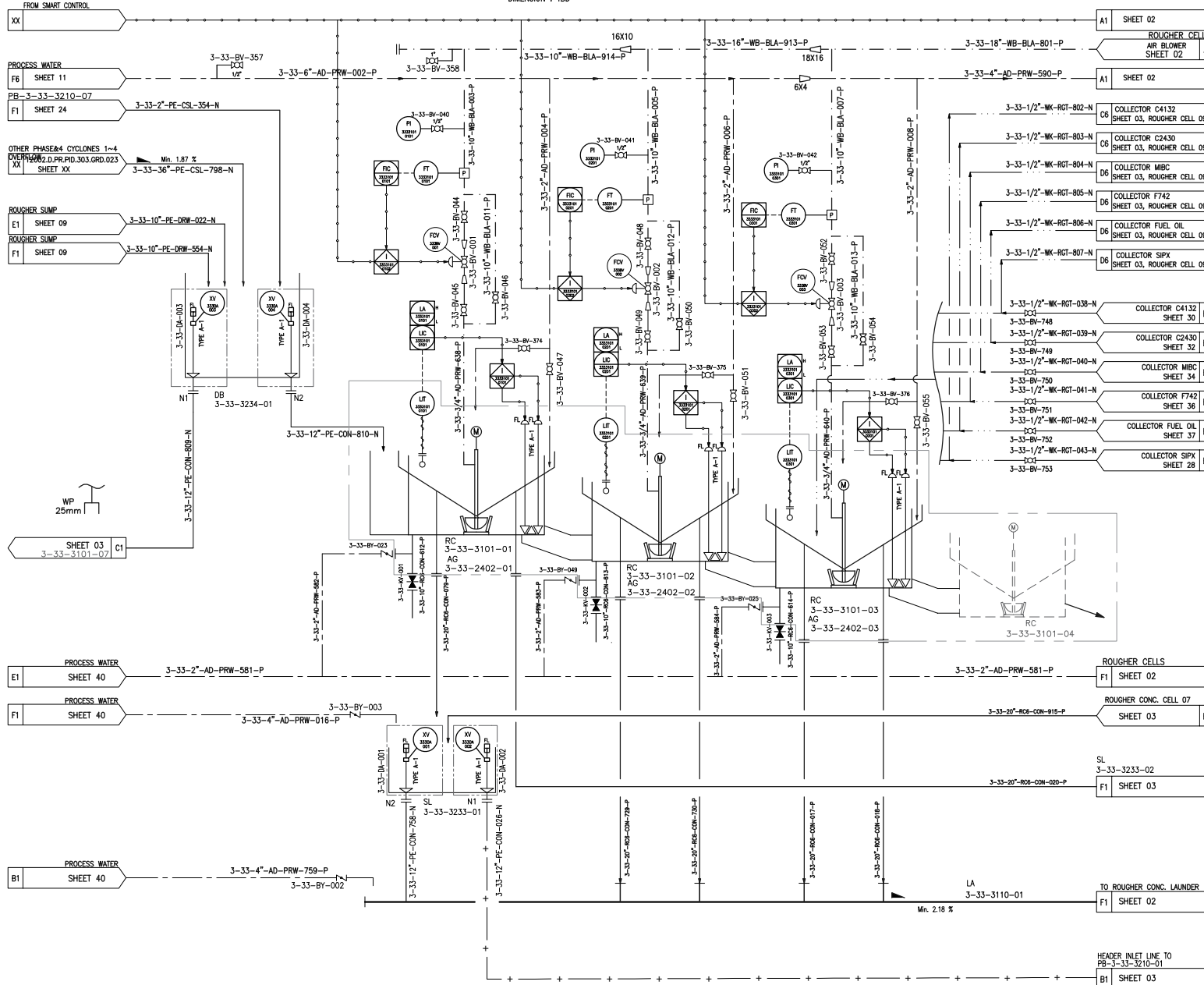
DISTRIBUTOR
ABBR.: DB
TAG NO.: 3-33-3234-01
TYPE: TBC
CAPACITY: TBD
DIMENSION: TBD

ROUGHER CELL
ABBR.: RC
TAG NO.: 3-33-3101-01~03
TYPE: CYLINDRICAL
CAPACITY: 320 m³
DIMENSION: TBD

ROUGHER MECHANISM
ABBR.: AG
TAG NO.: 3-33-2402-01~03
TYPE: TBC
CAPACITY: 320 m³
MOTOR: 280 kW

SPLITTER
ABBR.: SL
TAG NO.: 3-33-3233-01
TYPE: CUBOID, OPEN
CAPACITY: TBC
DIMENSION: TBD

LAUNDRER
ABBR.: LA
TAG NO.: 3-33-3110-01
TYPE: TBC
CAPACITY: 1272.79 m³/hr
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- DART VALVE CONFIGURATION WILL BE CONFIRMED BY FLOTATION CELL SUPPLIER.
- SPLITTER BOX FOR BYPASS FIRST TWO ROUGHER CELLS CONCENTRATE.
- 35 TON CRANE (WITH 10 TON AUXILIARY HOOK) TO SERVICE FLOTATION AND REGROUND AREAS.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- PROCESS WATER USED FOR FILLING THE FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- ALL REDUCERS WHOSE SIZES DEPEND ON VENDOR EQUIPMENT/DEVICES DATA HAVE NOT BEEN INCLUDED AT THIS STAGE. THEY WILL BE UPDATED IN FUTURE REVISIONS BASED ON THE LATEST RELEVANT VENDOR INFORMATION.
- ALL SLURRY PIPELINES, WHETHER GRAVITY OR PRESSURIZED, SHALL BE INSTALLED WITH A CONTINUOUS POSITIVE SLOPE OF MINIMUM 1% TOWARD THE NEAREST DRAIN OR LOW-POINT SUMP, TO MINIMIZE SOLIDS SETTLEMENT.
- THE VENT LINE IS LOCATED AT THE HIGHEST POINT OF THE PIPELINE TO ALLOW EFFECTIVE REMOVAL OF TRAPPED GASES.
- INTERMITTENT USE FOR FLUSHING OF LAUNDRER. THE FLUSHING LINE IS CONNECTED TO THE INLET (HEAD) OF THE LAUNDRER.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
06	2008.07.08	ISSUED FOR APPROVAL				
04	2008.12.03	ISSUED FOR APPROVAL				
03	2008.04.08	ISSUED FOR APPROVAL				
02	2008.10.11	ISSUED FOR APPROVAL				
01	2008.06.17	ISSUED FOR APPROVAL				
00	2008.06.04	ISSUED FOR REVIEW				

Client:

Consultant:

EPC Contractor:

Project:

Title:

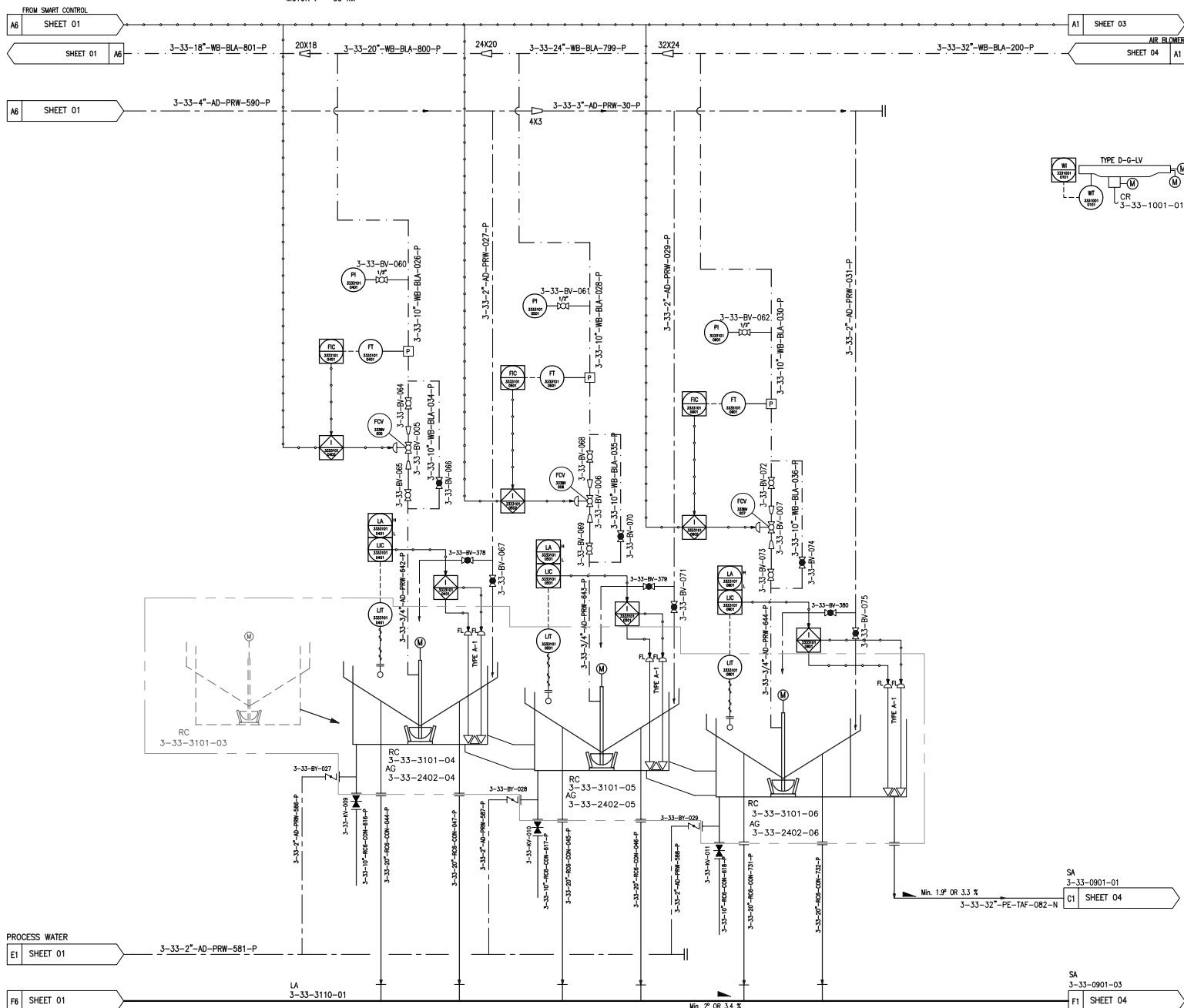
P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S.	01 OF 80	05
Library Code:	303-303-0000-00-PR-PID-025-05					00

ROUGHER CELL
ABBR.: RC
TAG NO.: 3-33-3101-04~06
TYPE: CYLINDRICAL
CAPACITY: 320 M³
DIMENSION: TBD

ROUGHER MECHANISM
ABBR.: AG
TAG NO.: 3-33-2402-04~06
TYPE: TBC
CAPACITY: 320 M³
MOTOR: 280 KW

CRANE
ABBR.: CR
TAG NO.: 3-33-1001-01
TYPE: Double Girder E.O.T
Crane with Auxiliary Hoist
CAPACITY: 30/10 ton
MOTOR: 55 KW



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- DART VALVE CONFIGURATION WILL BE CONFIRMED BY FLOTATION CELL SUPPLIER.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- PROCESS WATER USED FOR FILLING THE FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	02 OF 80	05
Library code: 303-003-0000-00-PR-PID-025-05					00

ROUGHER CELL
ABBR.: RC
TAG NO.: 3-33-3101-07-09
TYPE: CYLINDRICAL
CAPACITY: 320 m³
DIMENSION: TBD

ROUGHER MECHANISM
ABBR.: AG
TAG NO.: 3-33-2402-07-09
TYPE: TBC
CAPACITY: 320 m³
MOTOR: 280 kw

SPLITTER
ABBR.: SL
TAG NO.: 3-33-3233-02
TYPE: CUBOID, OPEN
CAPACITY: 788/916 m³/hr
DIMENSION: TBD

LAUNDER
ABBR.: LA
TAG NO.: 3-33-3110-02
TYPE: TBC
CAPACITY: 788/916 m³/hr
DIMENSION: TBD

REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- DART VALVE CONFIGURATION WILL BE CONFIRMED BY FLOTATION CELL SUPPLIER.
- SPLITTER BOX FOR BYPASS FIRST TWO ROUGHER CELLS CONCENTRATE.
- 35 TON CRANE (WITH 10 TON AUXILIARY HOOK) TO SERVICE FLOTATION AND REGRIND AREAS.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- PROCESS WATER USED FOR FILLING THE FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- INTERMITTENT USE FOR FLUSHING OF LAUNDER. THE FLUSHING LINE IS CONNECTED TO THE INLET (HEAD) OF THE LAUNDER.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.04	ISSUED FOR REVIEW				

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Consultant:

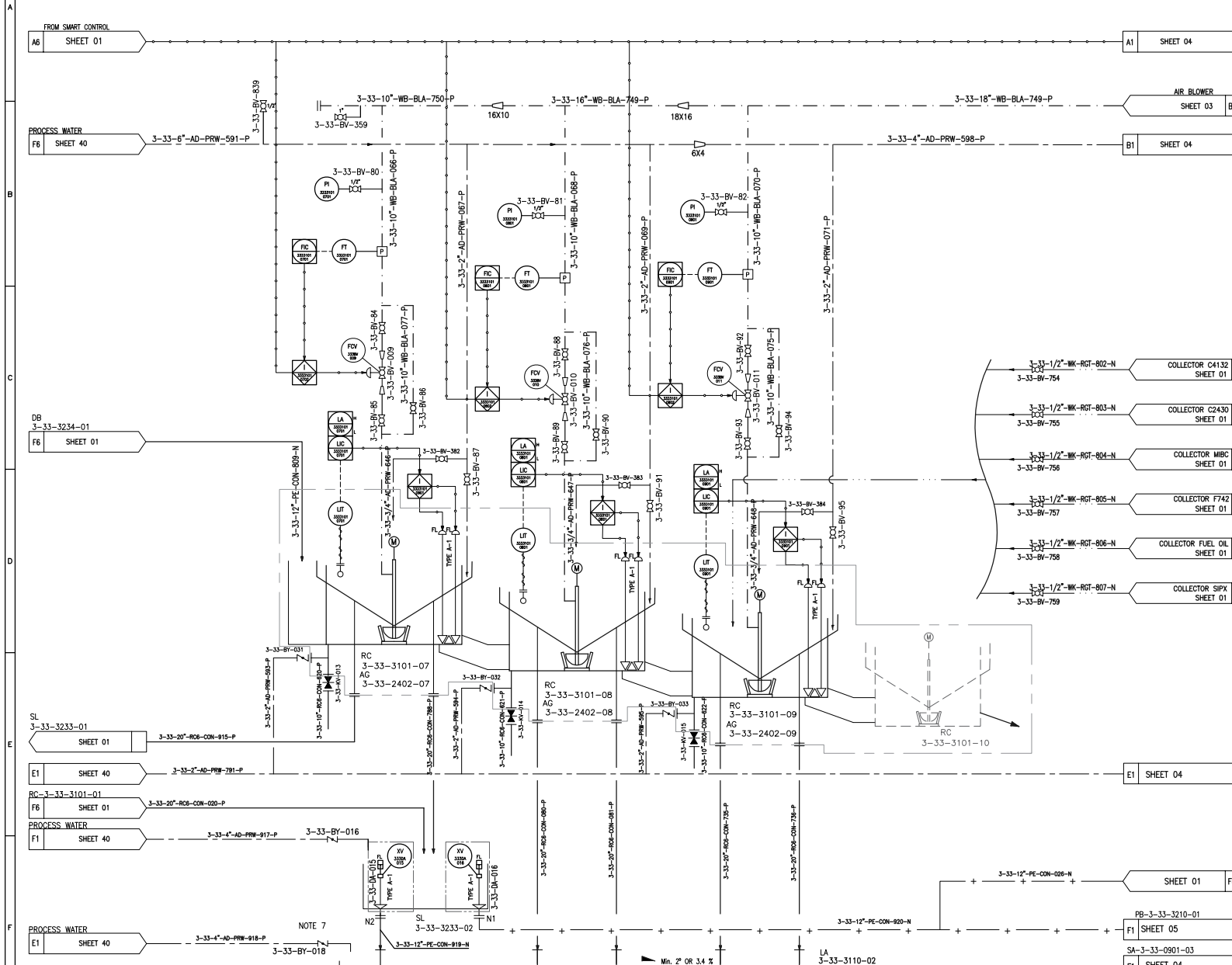
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Project:

Title:

P&ID FOR FLOTATION AREA-33

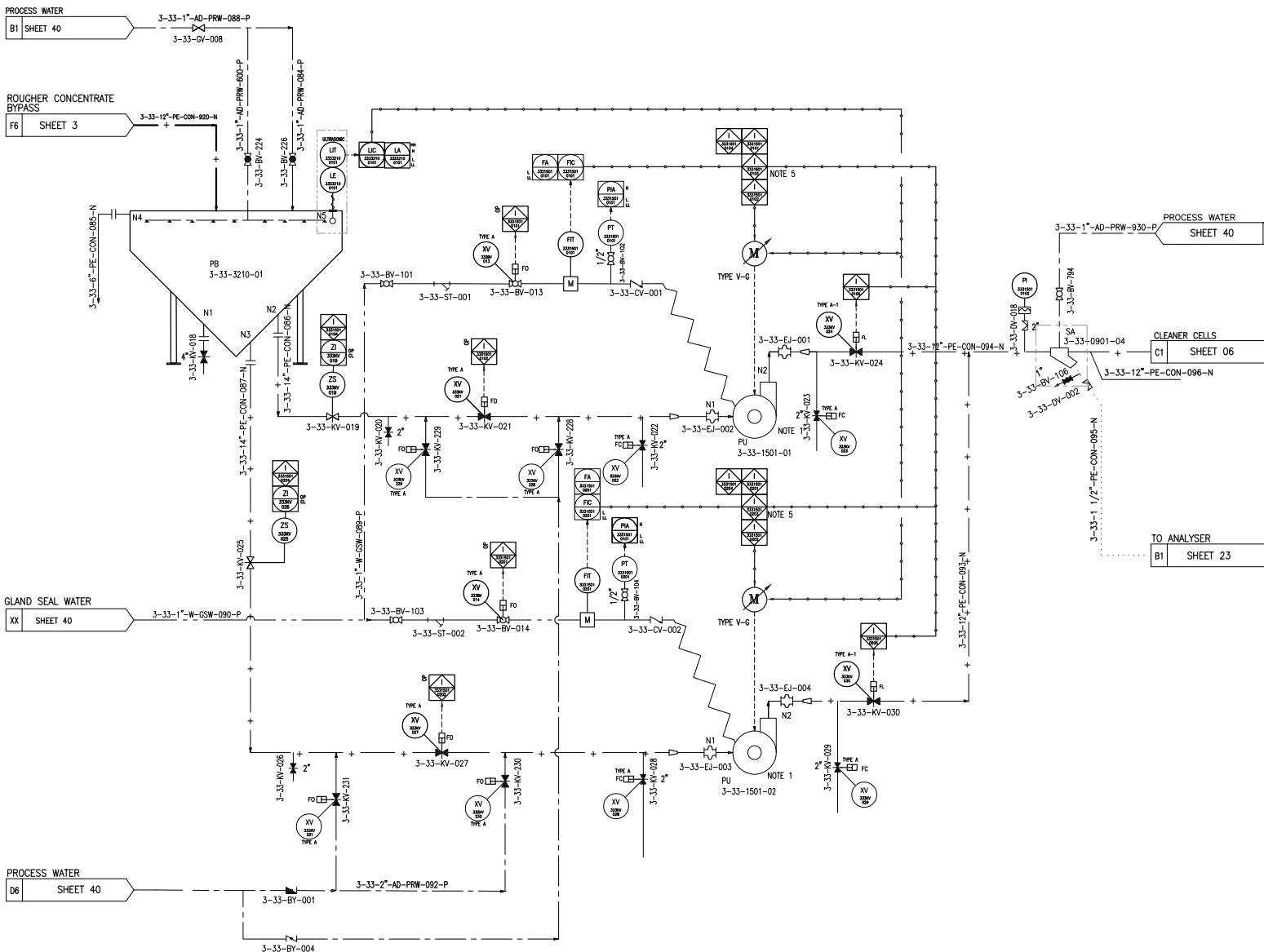
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Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	03 OF 80	05
Library code: 303-303-0000-00-PR-PID-025-05					00



PUMP_BOX
ABBR.: PB
TAG NO.: 3-33-3210-01
TYPE: TBC
CAPACITY: 70 M
DIMENSION :TBD

PUMP
ABBR.: PU
TAG NO.: 3-33-1501-01/02
TYPE: CENTRIFUGAL
CAPACITY: 794.93/916.15 m3/h
MOTOR : 500 KW

SAMPLER
ABBR.: SA
TAG NO.: 3-33-0901-04
TYPE: PIPE
CAPACITY: 794.93/916.15 m3/h
MOTOR : -



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
- ALL REDUCERS WHOSE SIZES DEPEND ON VENDOR EQUIPMENT/DEVICES DATA HAVE NOT BEEN INCLUDED AT THIS STAGE. THEY WILL BE UPDATED IN FUTURE REVISIONS BASED ON THE LATEST RELEVANT VENDOR INFORMATION.
- ALL SLURRY PIPELINES, WHETHER GRAVITY OR PRESSURIZED, SHALL BE INSTALLED WITH A CONTINUOUS POSITIVE SLOPE OF MINIMUM 1% TOWARD THE NEAREST DRAIN OR LOW-POINT SUMP, TO MINIMIZE SOLIDS SETTLEMENT.
- SWITCHOVER BETWEEN PUMPS IS INTERLOCKED TO ENSURE IT CAN ONLY OCCUR WHEN THE DISCHARGE VALVE OF THE NON-OPERATING PUMP IS CONFIRMED CLOSED.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant:

EPC Contractor:

Project:

Title:

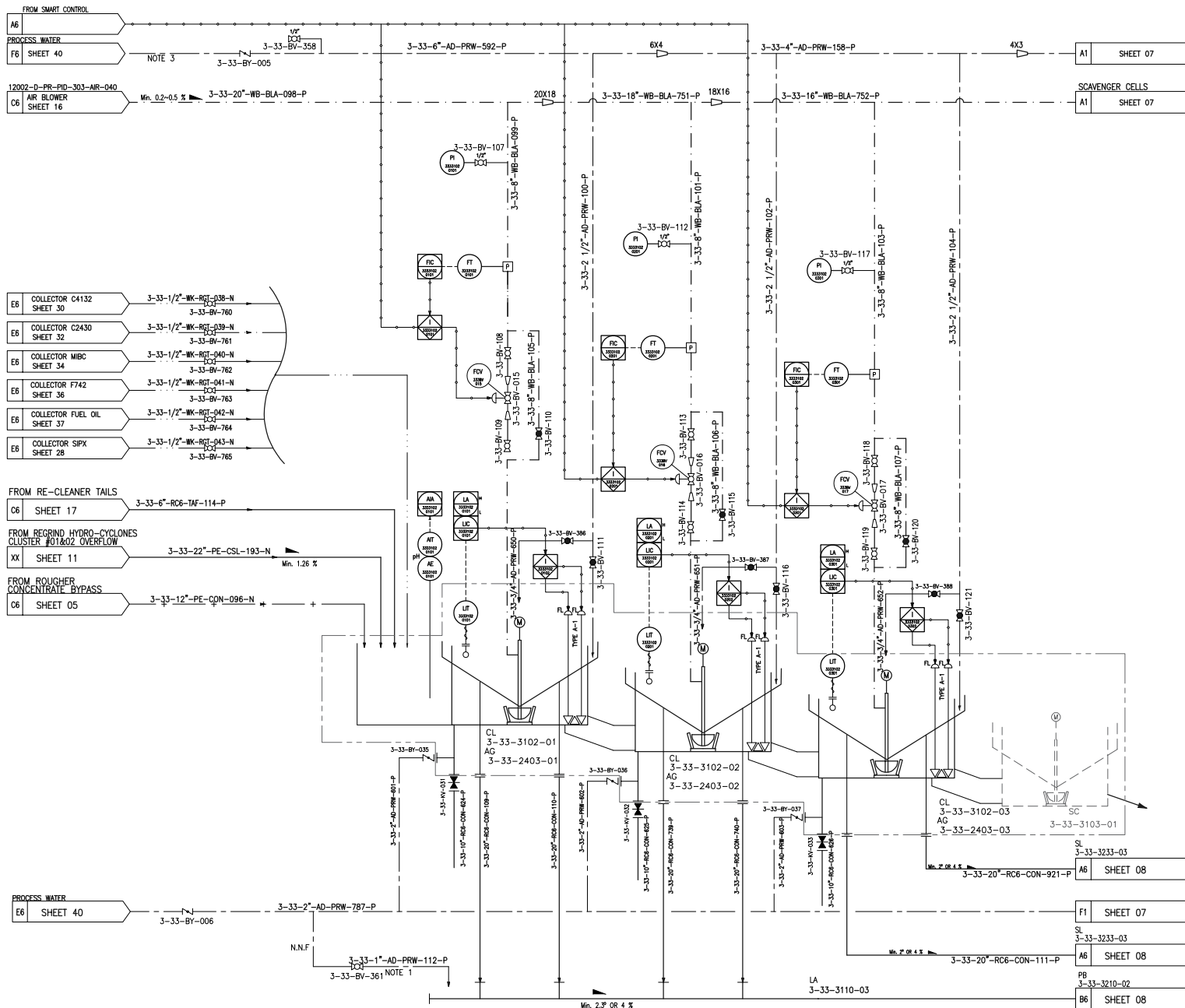
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Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	05 OF 80	05
Library code: 303-003-0000-00-PR-PID-025-05					00

CLEANER CELLS
ABBR.: CL
TAG NO.: 3-33-3102-01-03
TYPE: CYLINDRICAL
CAPACITY: 200 m³
DIMENSION: TBD

CLEANER MECHANISM
ABBR.: AG
TAG NO.: 3-33-2403-01-03
TYPE: TBD
CAPACITY: 200 m³
MOTOR: 220 kw

LAUNDER
ABBR.: LA
TAG NO.: 3-33-3110-03
TYPE: SLOPED CHANNEL
CAPACITY: 104/120 m³/h
MOTOR: -



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- INTERMITTENT USE FOR FLUSHING OF LAUNDER THE FLUSHING LINE IS CONNECTED TO THE INLET (HEAD) OF THE LAUNDER.
- DRAIN VALVE TO BE AT LOWEST POINT IN AIR LINE.
- PROCESS WATER USED FOR FILLING CLEANER AND CLEANER SCAVENGER CELLS.
- ALL INSTRUMENTS FOR CLEANER CELLS PACKAGE WILL BE SUPPLIED BY FLOTATION CELL VENDOR.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
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01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

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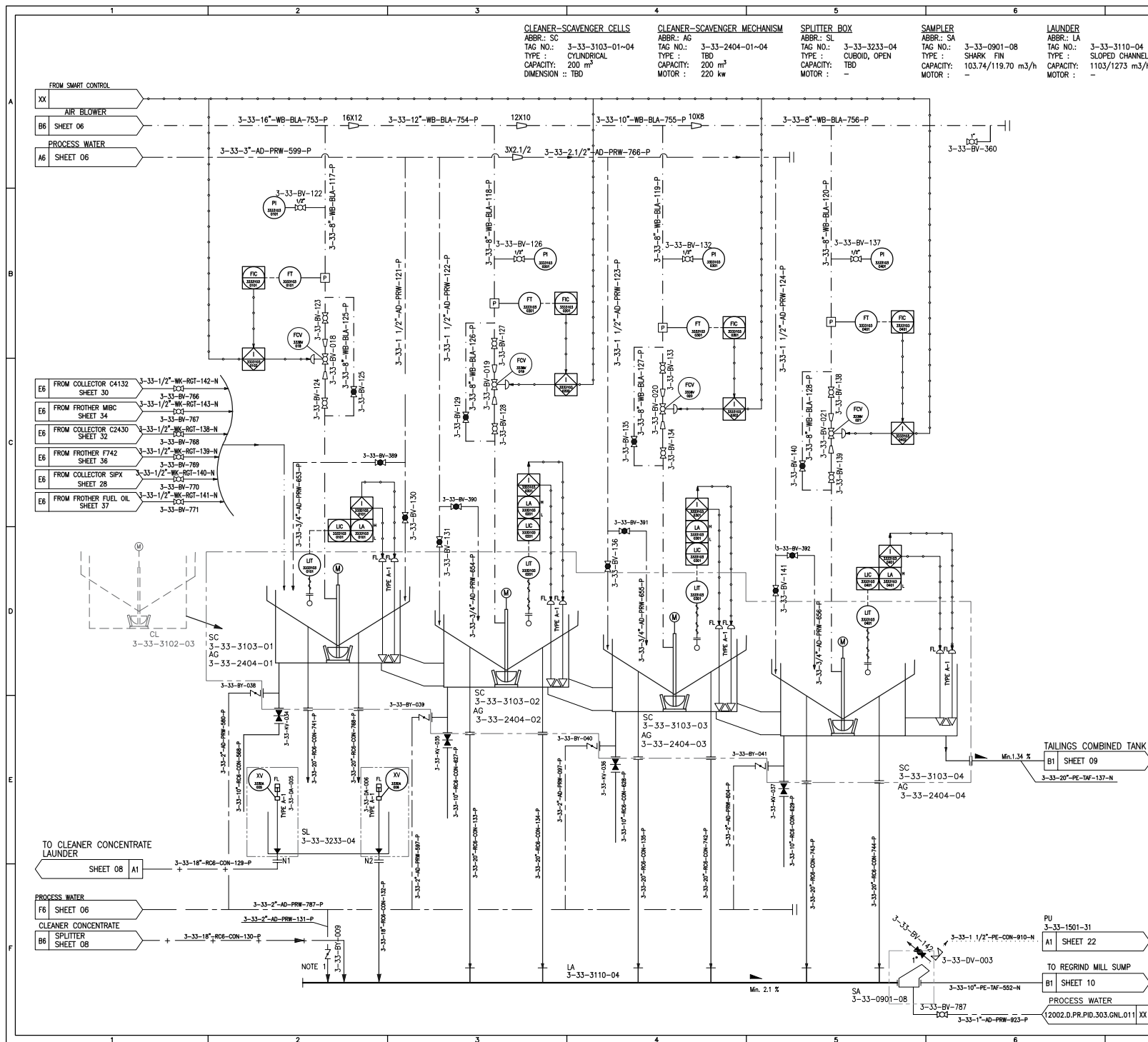
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Project:

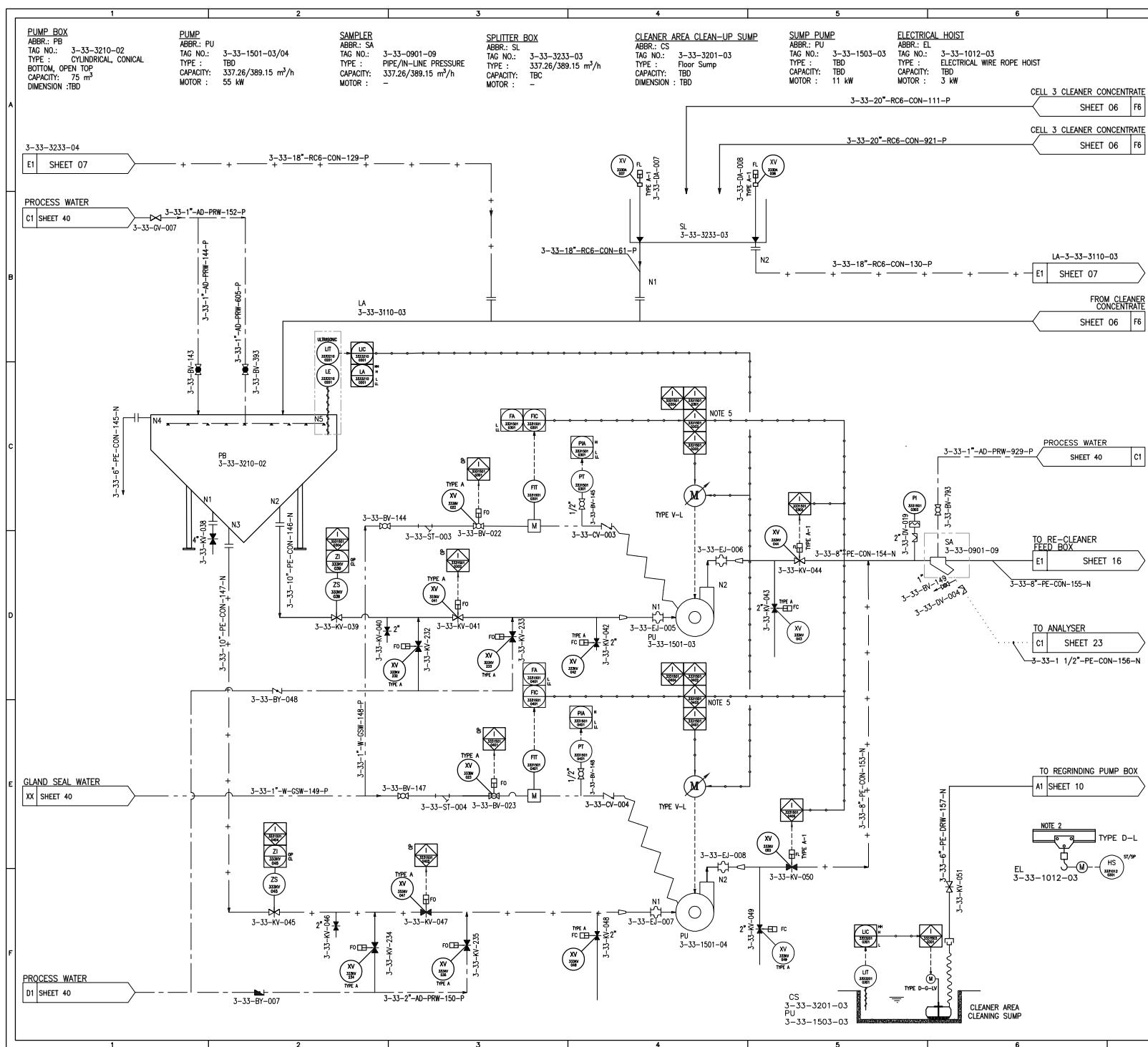
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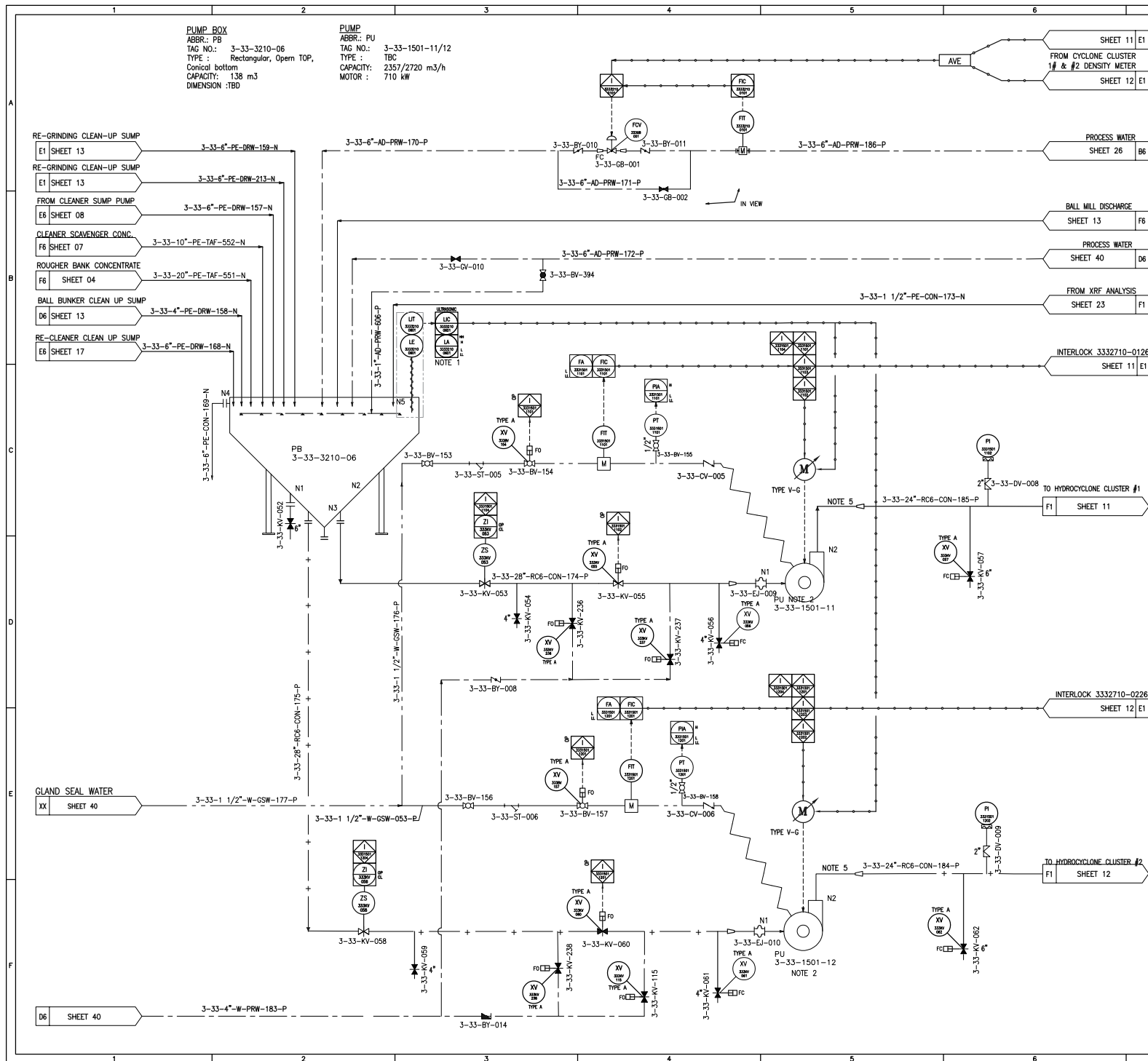
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Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	06 OF 80	05	00
Library code:	303-303-0000-00-PR-PID-025-05					



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REFERENCE			
REFERENCE. TITLE		REFERENCE. No.	
P&ID SYMBOL & LEGEND SHEET		12002-D-PR-PID-303-GNL-006	
PFD FOR Cu FLOTATION AREA-33		12002-D-PR-PFD-303-FLO-024	
NOTES			
1. INTERMITTENT USE FOR FLUSHING OF LAUNDER. THE FLUSHING LINE IS CONNECTED TO THE INLET (HEAD) OF THE LAUNDER.			
04. ALL INSTRUMENTS FOR CLEANER SCAVENGER CELLS PACKAGE WILL BE SUPPLIED BY FLOTATION CELL VENDOR.			
3. ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.			
4. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.			
5. THE VENT LINE IS LOCATED AT THE HIGHEST POINT OF THE PIPELINE TO ALLOW EFFECTIVE REMOVAL OF TRAPPED GASES			
6. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.			
LEGEND			
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REFERENCE					
REFERENCE. TITLE			REFERENCE. No.		
P&ID SYMBOL & LEGEND SHEET			12002-D-PR-PID-303-GNL-006		
PFD FOR Cu FLOTATION AREA-33			12002-D-PR-PFD-303-FLO-024		
NOTES					
1. PUMPS TO BE OPERATED AS DUTY & STANDBY. 2. ELECTRICAL HOIST USED FOR SUMP PUMP MAINTENANCE. 3. MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS. 4. THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION. 5. SWITCHOVER BETWEEN PUMPS IS INTERLOCKED TO ENSURE IT CAN ONLY OCCUR WHEN THE DISCHARGE VALVE OF THE NON-OPERATING PUMP IS CONFIRMED CLOSED.					
LEGEND					
KEYPLAN					
05	0505.07.09	ISSUED FOR APPROVAL			
04	0505.12.03	ISSUED FOR APPROVAL			
03	0505.04.08	ISSUED FOR APPROVAL			
02	0504.10.11	ISSUED FOR APPROVAL			
01	0504.09.17	ISSUED FOR APPROVAL			
02	0504.09.04	ISSUED FOR REVIEW			
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	AUTHORIZED
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Consultant:			EPC Contractor:		
Project:					
Title:					
P&ID FOR FLOTATION AREA-33					
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Library code: 303-1013-0000-00-PR-PID-025-05			FA	A3	N.T.S
			SHEET NO.	REV.	
			08 OF 80	CLIENT	VENDOR
			05	05	00



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- SUMP LEVEL CONTROLLED BY VARYING PUMP SPEED.
- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- REINFORCED RUBBER HOSE TO BE CONSIDERED FOR SLURRY PUMPS SUCTION AND DELIVERY LINES.
- ELECTRIC HOIST TO BE USED TO ACCESS CYCLONE FEED PUMPS FOR MAINTENANCE PURPOSES.
- MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

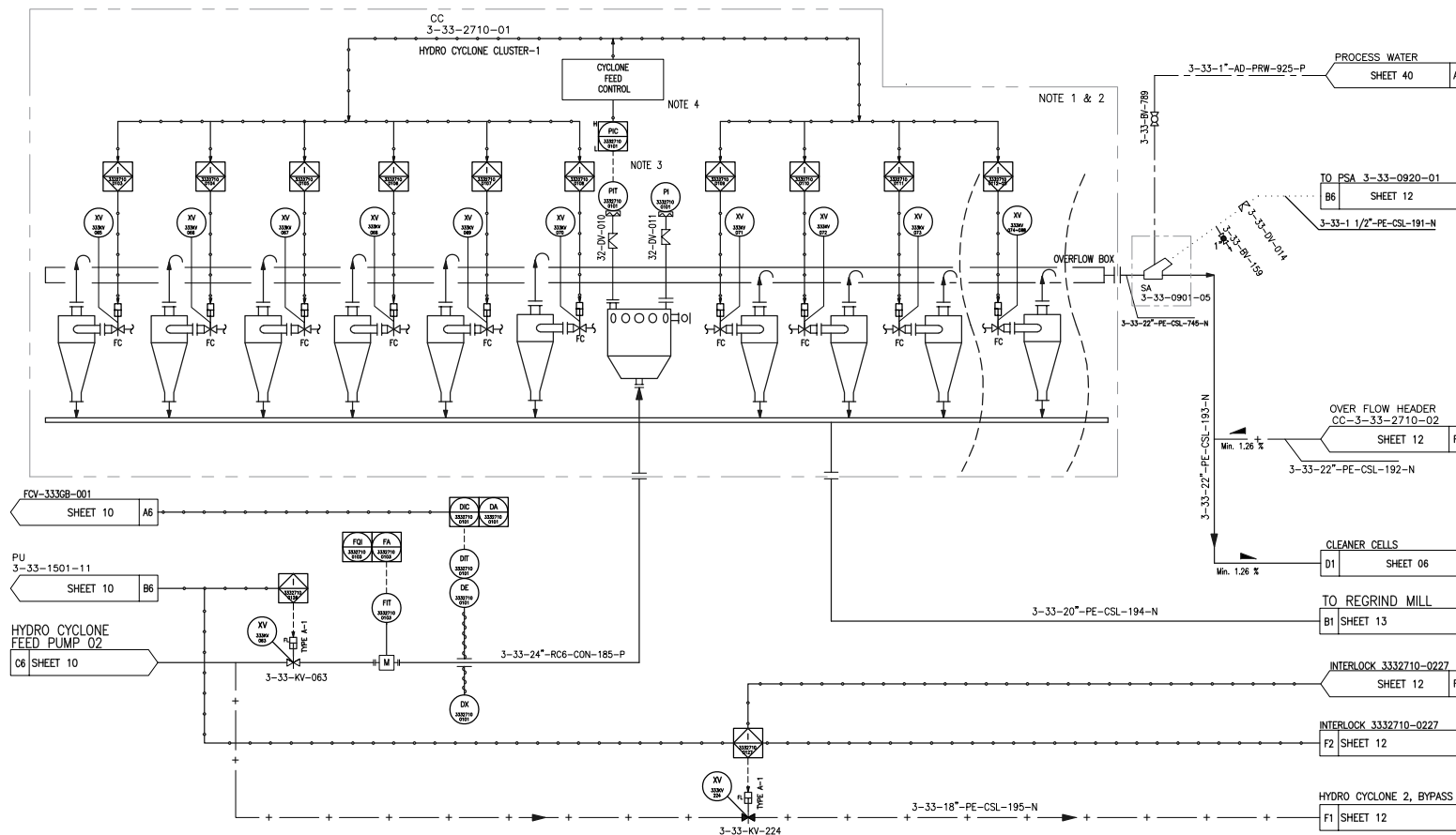
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P&ID FOR FLOTATION AREA-33

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Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	10 OF 80	05
Library code:	303-303-0000-00-PR-PID-025-05					00

HYDROCLONE CLUSTER
ABBR.: CC
TAG NO.: 3-33-2710-01
TYPE : TBD
CAPACITY: 1411/1629 m3/h
MOTOR : -

ABBR.: SA
TAG NO.: 3-33-0901-05
TYPE : SHARK FIN
CAPACITY: 1443.90/1666.03 m3/h
MOTOR : -



REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-001
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-02

1. DETAILED BATTERY LIMITS OF HYDROCYCLONE PACKAGE WILL BE FINALIZED AFTER SELECTING VENDOR
2. QUANTITY AND CYCLONE SIZE WILL BE FINALIZED BY VENDOR.
3. CYCLONE PRESSURE INSTRUMENT IS EQUIPPED WITH LCD.
4. DETAIL OF CYCLONE FEED CONTROL WILL BE PROVIDED BY VENDOR.
5. TYPE OF HYDRO-CYCLONE XV VALVES ARE TYPE A.
6. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
7. XV VALVES SHOULD BE EQUIPPED TO EMERGENCY HAND WHEEL.

[illegible]

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04	2025.07.06	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.02	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
	2024.08.24	ISSUED FOR REVIEW				
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED

Client

Consultant:

	EBC Contractor
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Project:

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-4IN-PID-033-0000-00-PR-025									
Document Number: 12002-D-PR-PID-303-FLO-025				CLASS	SIZE	SCALE	SHEET NO.	REV.	
Library code: 303-ED3-0000-00-PR-PID-025-05				FA	A3	N.T.S	11 OF 80	05	00

HYDROCYCLONE CLUSTER
ABBR.: CC
TAG NO.: 3-33-2710-02
TYPE : TBD
CAPACITY: 1411/1629 m³/h
MOTOR : -

SAMPLER
ABBR.: SA
TAG NO.: 3-33-0901-06
TYPE : SHARK FIN
CAPACITY: 1443.90/1666.03 m³/h
MOTOR : -

PARTICLE SIZE ANALYZER
REGRIND CYCLONE
ABBR.: PZ
TAG NO.: 3-33-0920-01
CAPACITY: 2/7 m³/h
POWER: 2.2 kW

REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. DETAILED BATTERY LIMITS OF HYDROCYCLONE PACKAGE WILL BE FINALIZED AFTER SELECTING VENDOR
2. QUANTITY AND CYCLONE SIZE WILL BE FINALIZED BY VENDOR.
3. CYCLONE PRESSURE INSTRUMENT IS EQUIPPED WITH LCD.
4. DETAIL OF CYCLONE FEED CONTROL WILL BE PROVIDE BY VENDOR.
5. TYPE OF HYDRO-CYCLONE XV VALVES ARE TYPE A.
6. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
7. XV VALVES SHOULD BE EQUIPPED TO EMERGENCY HAND WHEEL.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
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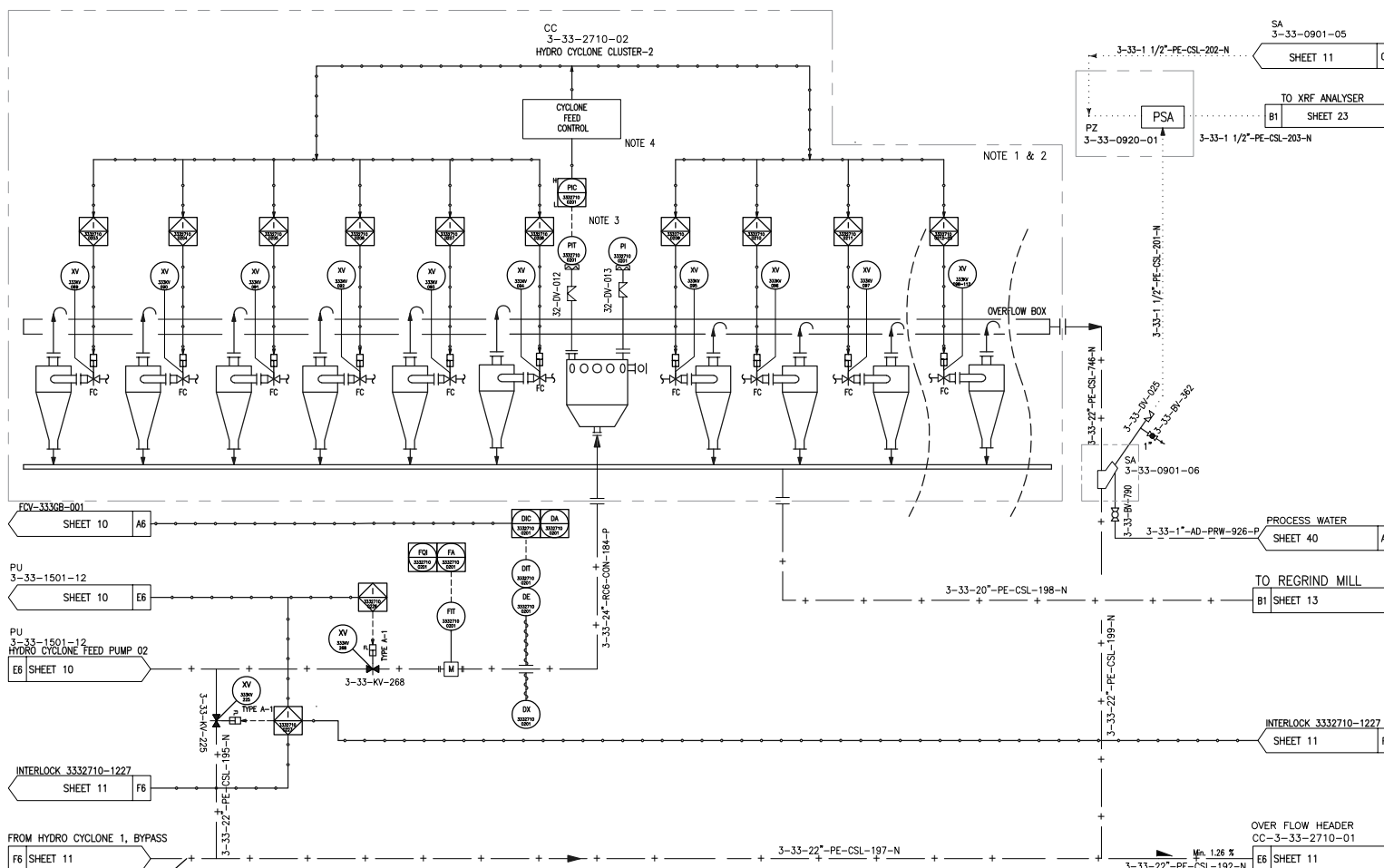
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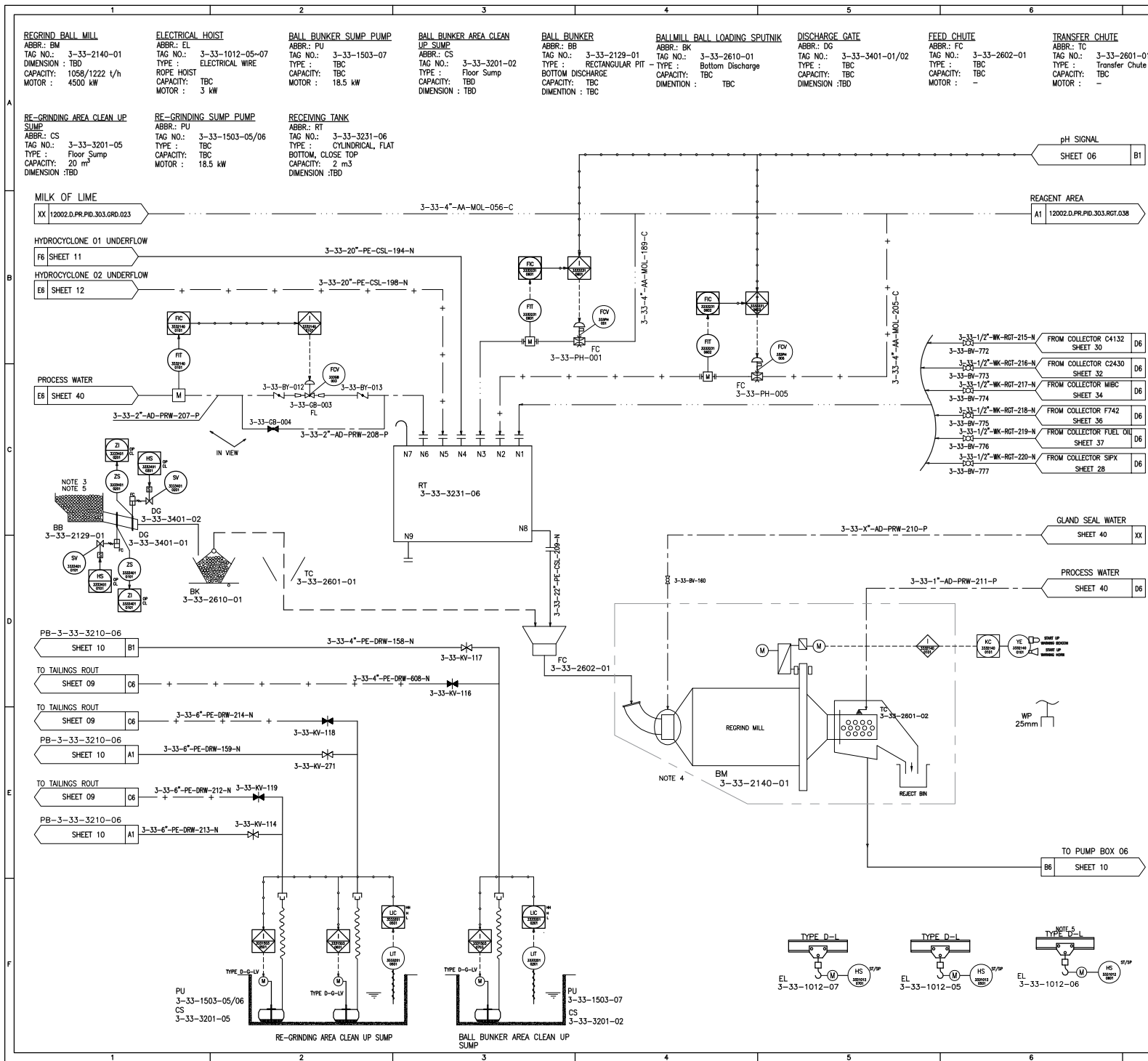
Project:

Title:

P&ID FOR FLOTATION AREA-33

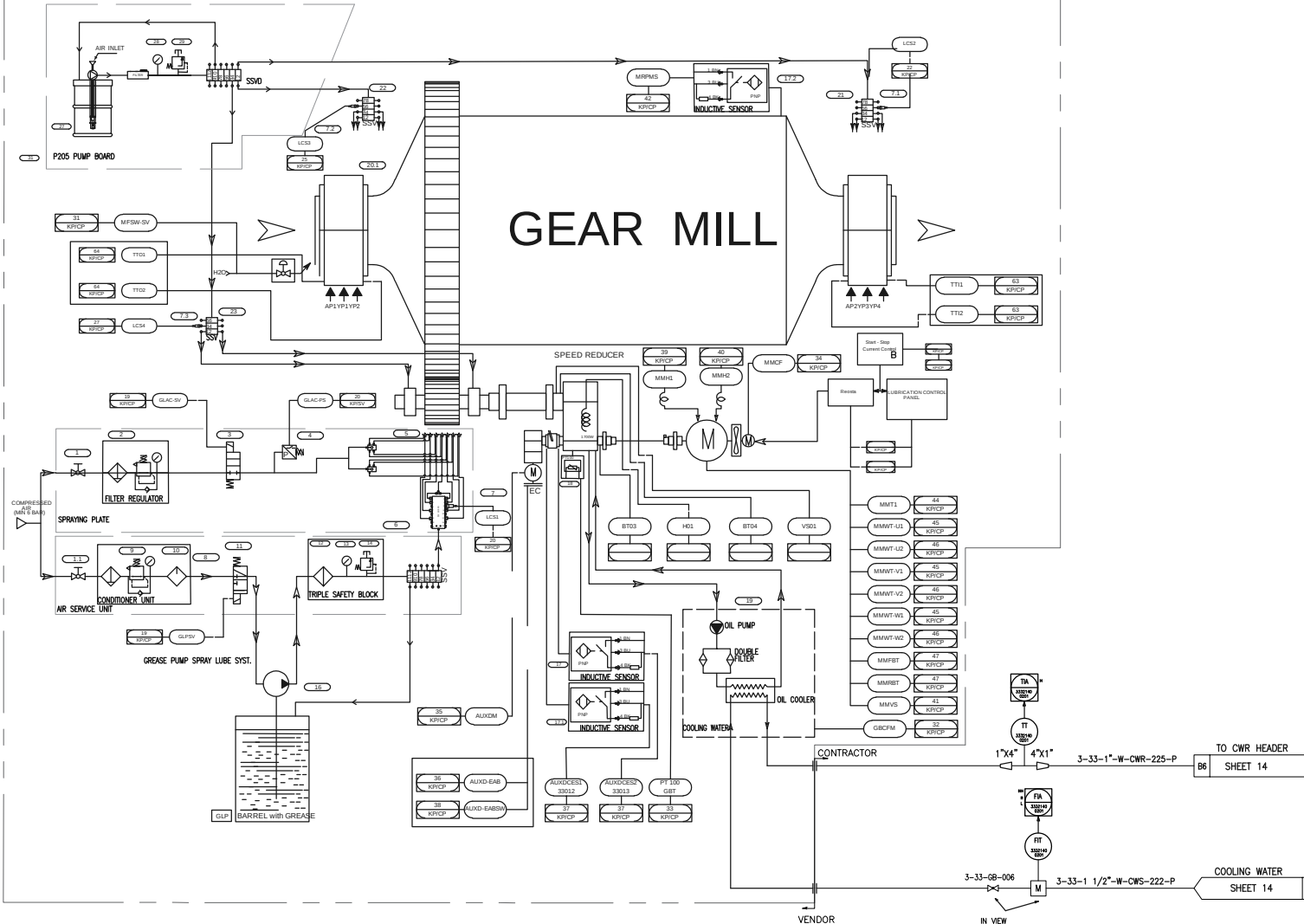
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Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	12 OF 80	05
Library code: 303-003-0000-00-PR-PID-025-05					00





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REFERENCE			
REFERENCE. TITLE		REFERENCE. No.	
P&ID SYMBOL & LEGEND SHEET		12002-D-PR-PID-303-GNL-006	
PFD FOR Cu FLOTATION AREA-33		12002-D-PR-PFD-303-FLO-024	
NOTES			
1. REGRIND MILL PID WILL BE PROVIDED BY VENDOR.			
2. BALL LOADING SYSTEM WILL BE FINALIZED BY VENDOR.			
3. BALL BUNKERS TO HAVE 30 DAYS CHARGE CAPACITY.			
4. REGRIND MILL UTILITIES (AMOUNT AND CHARACTERISTICS) WILL BE DETERMINED BY VENDOR.			
5. ELECTRIC HOIST TO HAVE MOVABLE BUGGY TO TRANSPORT BALL LOADING SPUTNIK TO REGRIND MILL.			
6. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.			
7. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.			
LEGEND			
</			

GEAR MILL



REGRIND BALL MILL BEARING LUBE SYSTEM 2 OF 2

REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. DETAIL P&ID OF THIS EQUIPMENT WILL BE PROVIDED BY VENDOR. THIS IS SAMPLE P&ID DRAWING (FOR INFORMATION).
2. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

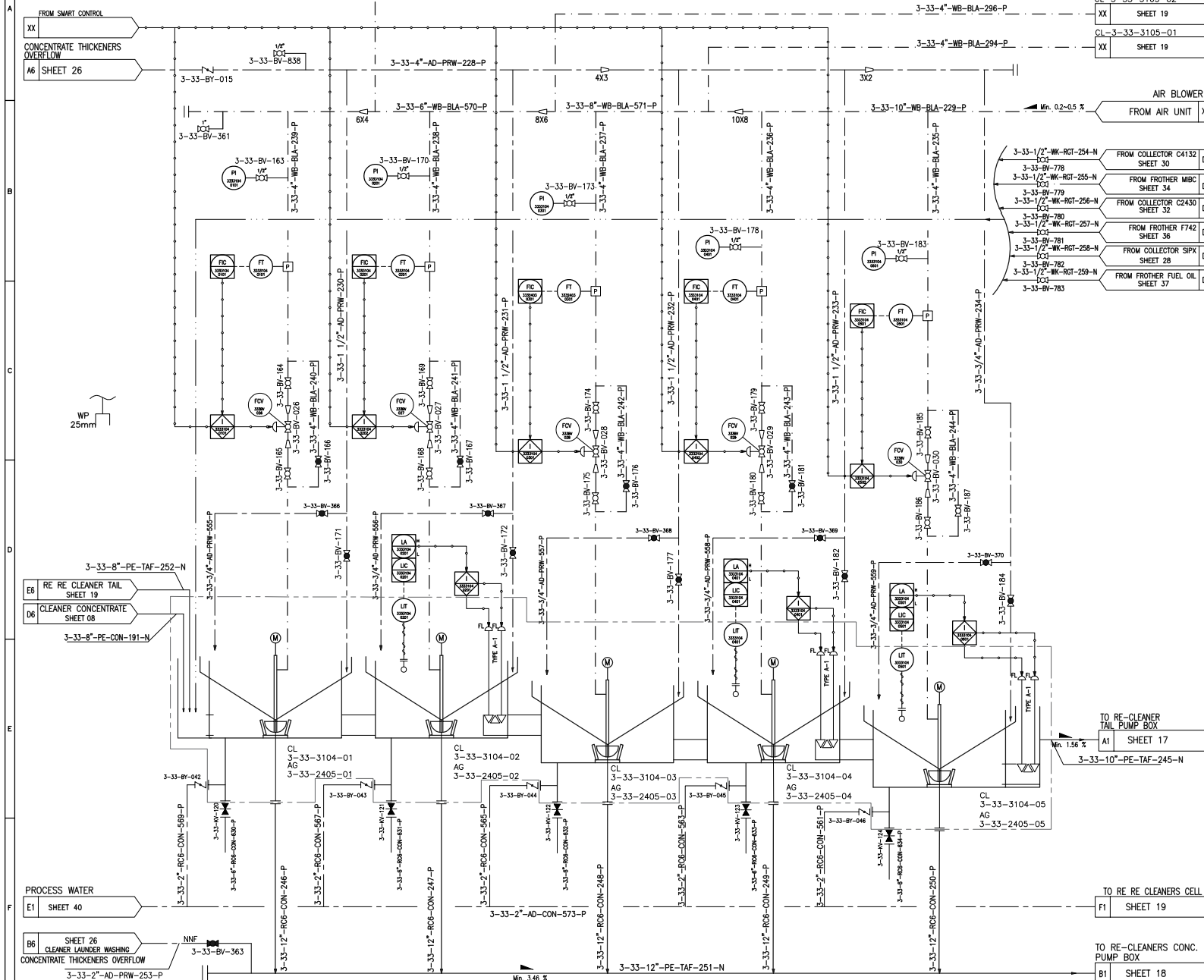
Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	5 OF 80	05
Library Code:	303-303-0000-00-PR-PID-025-05					00

RE-CLEANER CELL
ABBR.: CL
TAG NO.: 3-33-3104-01~05
TYPE: CYLINDRICAL
CAPACITY: 20 m³
DIMENSION: TBD

RE-CLEANER MECHANISM
ABBR.: AG
TAG NO.: 3-33-2405-01~05
TYPE: TBC
CAPACITY: 20 m³
MOTOR: 37 kw



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- INTERMITTENT USE FOR FLUSHING OF LAUNDER.
- PROCESS WATER USED FOR FILLING CLEANER AND CLEANER SCAVENGER CELLS.
- ALL INSTRUMENTS FOR CLEANER CELLS PACKAGE WILL BE SUPPLIED BY FLOTATION CELL VENDOR.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- SIZE OF AIR CONTROL VALVES AND RELEVANT REDUCERS WILL BE FINALIZED BY VENDOR DATA.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant:

EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-4IN-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	16 OF 80	05
Library code: 303-003-0000-00-PR-PID-025-05					00

PUMP BOX
ABBR.: PB
TAG NO.: 3-33-3210-03
TYPE: CYLINDRICAL,
CONICAL BOTTOM, OPEN TOP
CAPACITY: 28 m3
DIMENSION : TBD

PUMP
ABBR.: PU
TAG NO.: 3-33-1501-05/06
TYPE: TBC
CAPACITY: 254.54/279.85 m3/h
MOTOR : 132 kW

SAMPLER
ABBR.: SA
TAG NO.: 3-33-0901-10
TYPE: PIPE-IN-LINE PRESSURE
CAPACITY: 254.54/279.85 m3/h
MOTOR : -

SUMP PUMP
ABBR.: PU
TAG NO.: 3-33-1503-04
TYPE: TBC
CAPACITY: 160 m3/hr
REQUIRED POWER : 18.5 kW

RE-CLEANER AREA CLEANING SUMP
ABBR.: CS
TAG NO.: 3-33-3201-04
TYPE: Floor Sump
CAPACITY: TBD
DIMENSION : TBD

ELECTRICAL HOIST
ABBR.: EL
TAG NO.: 3-33-1012-04
TYPE: ELECTRICAL WIRE ROPE HOIST
CAPACITY: TBD
MOTOR : 3 kW

RE CLEANER TAIL

E6 SHEET 16 3-33-8"-PE-TAF-245-N
Min. 1.6" OR 2.8 %

PROCESS WATER

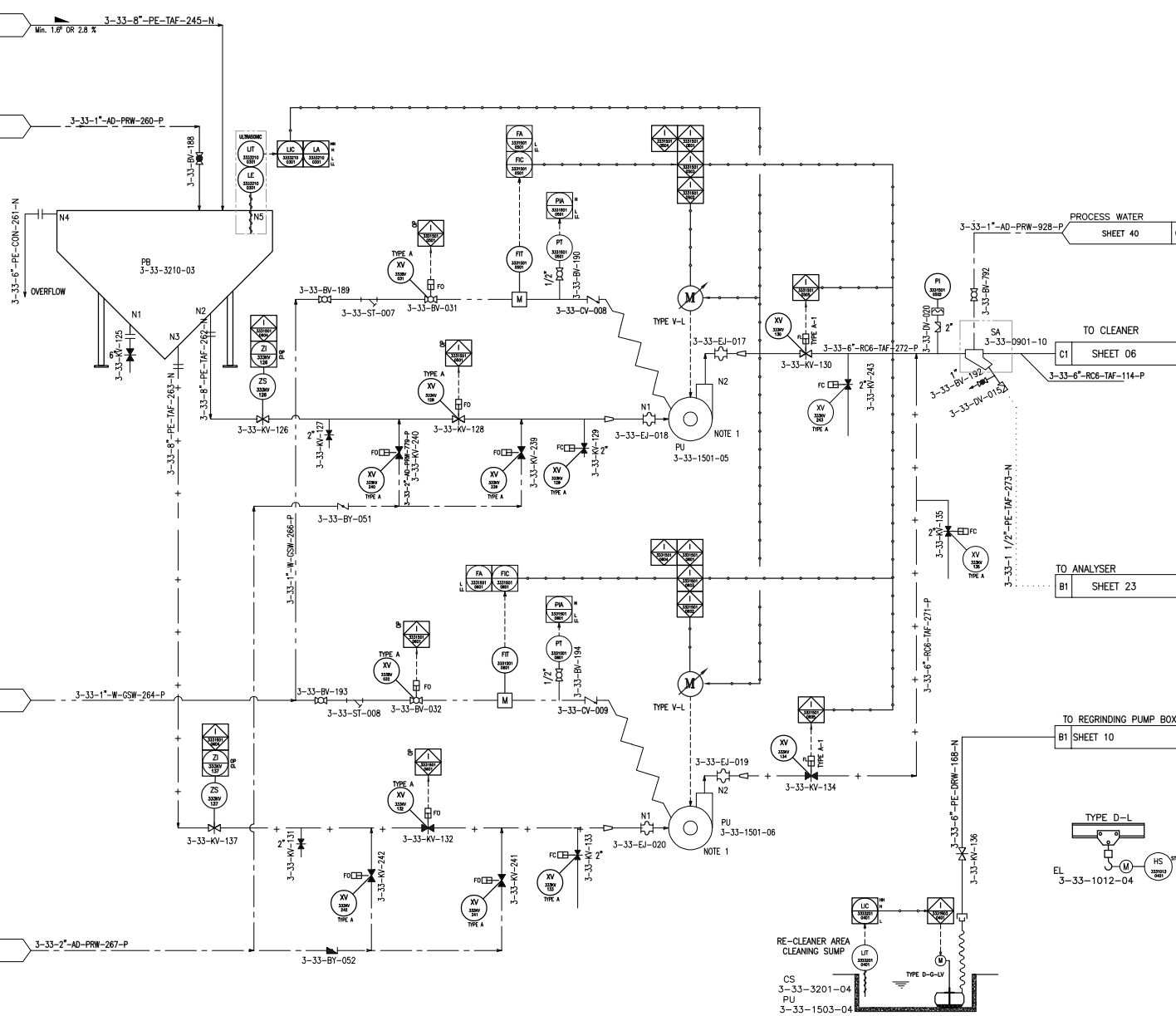
C1 SHEET 40 3-33-1"-AD-PRW-260-P

GLAND SEAL WATER

XX SHEET 40 3-33-1"-W-CSW-264-P

PROCESS WATER

D1 SHEET 40 3-33-2"-AD-PRW-267-P



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. PUMPS TO BE OPERATED AS DUTY & STANDBY.
2. MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
3. ELECTRICAL HOIST USED FOR SUMP PUMP MAINTENANCE.
4. THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:	
Consultant:	EPC Contractor:
Project:	
Title:	

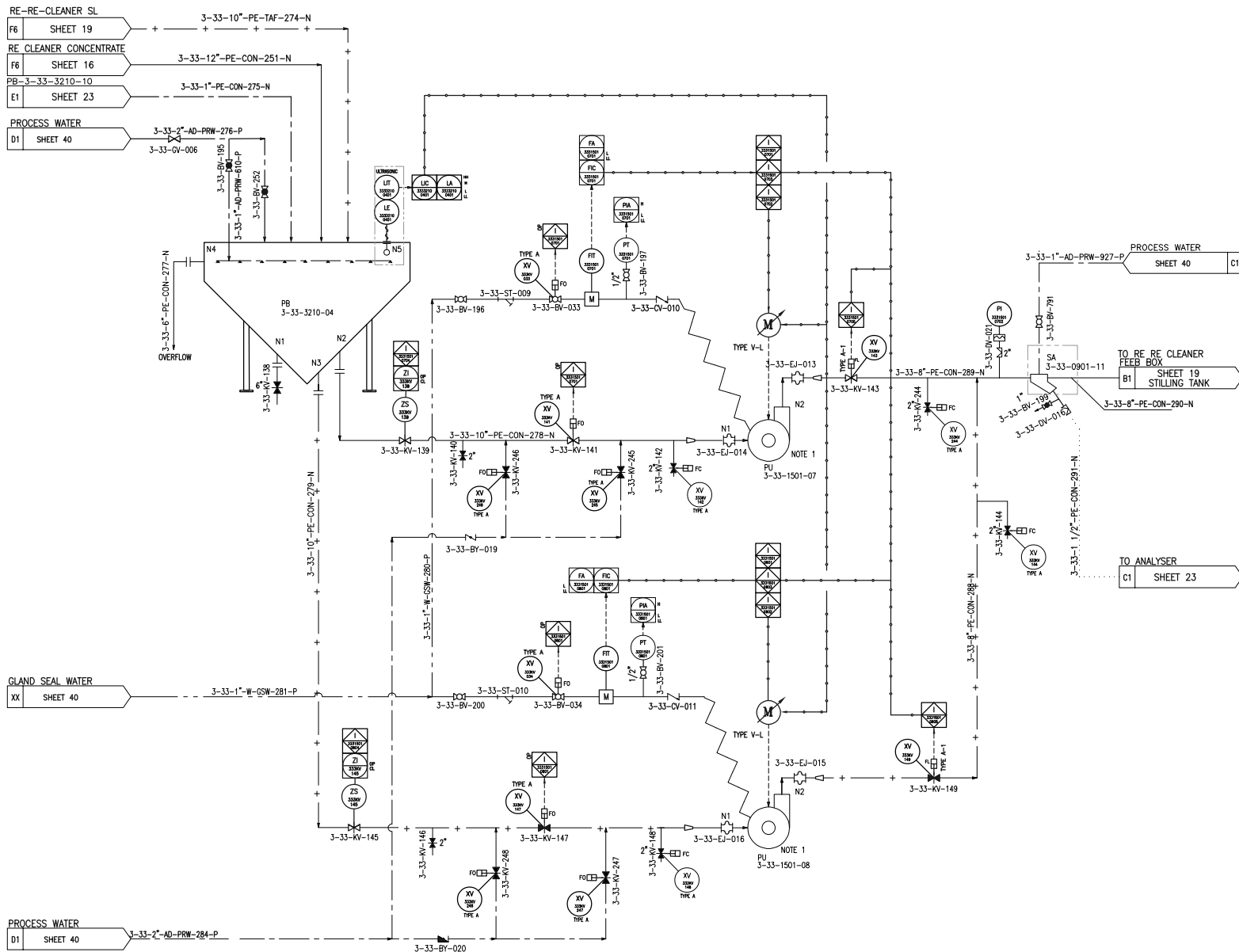
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Library code:	303-303-0000-00-PR-PID-025-05
CLASS	FA
SIZE	A3
SCALE	N.T.S
SHEET NO.	17 OF 80
REV.	05
CLIENT	00
VENDOR	00

SAMPLER
ABBR.: SA
TAG NO.: 3-33-0901-11
TYPE : PIPE/IN-LINE PRESSURE
CAPACITY: 262.78/303.23 m3/h
MOTOR : -

PUMP BOX
ABBR.: PB
TAG NO.: 3-33-3210-04
TYPE : CYLINDRICAL, CONICAL
BOTTOM, OPEN TOP
CAPACITY: 35 m3
DIMENSION : TBD

PUMP
ABBR.: PU
TAG NO.: 3-33-1501-07/08
TYPE : TBC
CAPACITY: 262.78/303.23 m3/h
MOTOR : 30 KW



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
- THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

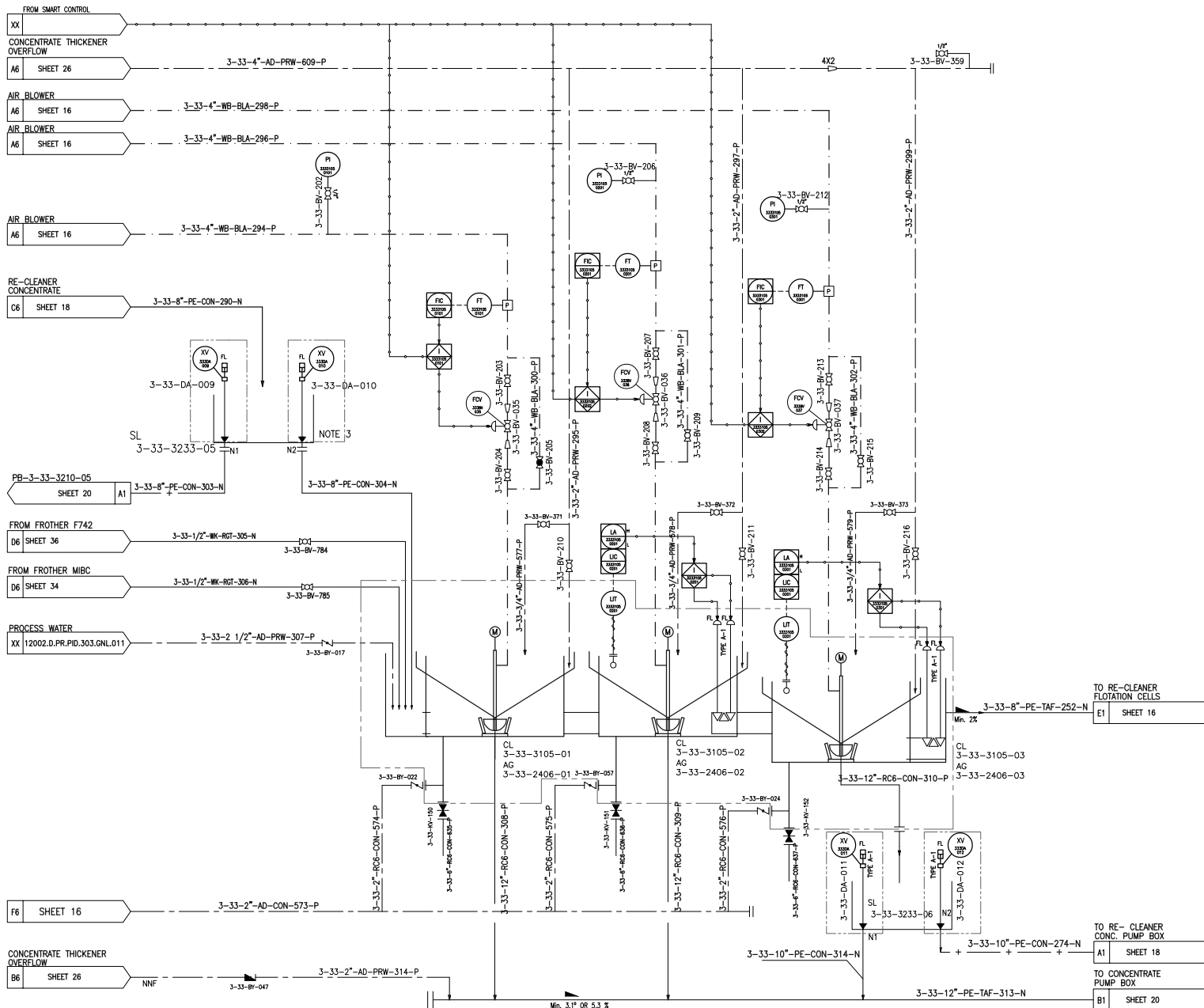
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Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	18 OF 80	05
Library code:	303-003-0000-00-PR-PID-025-05					00

RE-RE-CLEANER CELLS
ABBR.: CL
TAG NO.: 3-33-3105-01~03
TYPE: CYLINDRICAL
CAPACITY: 20 m³
DIMENSION: TBD

RE-RE-CLEANER MECHANISM
ABBR.: AG
TAG NO.: 3-33-2406-01~03
TYPE: TBC
CAPACITY: 20 m³
MOTOR: 37 kw

SPLITTER BOX
ABBR.: SL
TAG NO.: 3-33-3233-05
TYPE: CUBOID, OPEN
CAPACITY: TBC
MOTOR: -

SPLITTER BOX
ABBR.: SL
TAG NO.: 3-33-3233-06
TYPE: CUBOID, OPEN
CAPACITY: TBC
MOTOR: -



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- INTERMITTENT USE FOR FLUSHING OF LAUNDER.
- ALL INSTRUMENTS FOR RE-RE CLEANER CELLS PACKAGE WILL BE SUPPLIED BY FLOTATION CELL VENDOR.
- DRAIN VALVE TO BE AT LOWEST POINT IN AIR LINE.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- SIZE OF AIR CONTROL VALVES AND RELEVANT REDUCERS WILL BE FINALIZED BY VENDOR DATA.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

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02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A8	N.T.S	19 OF 80	05
Library code:	303-303-0000-00-PR-PID-025-05					00

PUMP BOX
ABBR.: PB
TAG NO.: 3-33-3210-05
TYPE : CYLINDRICAL, CONICAL BOTTOM,
OPEN TOP
CAPACITY: 35 m3
DIMENSION :TBD

PUMP
ABBR.: PU
TAG NO.: 3-33-1501-09/10
TYPE : TBD
CAPACITY: 173.19/199.83 m3/h
MOTOR : 55 kW

SAMPLER
ABBR.: SA
TAG NO.: 3-33-0901-12
TYPE : PIPE/IN-LINE PRESSURE
CAPACITY: 173.19/199.83 m3/h
MOTOR : -

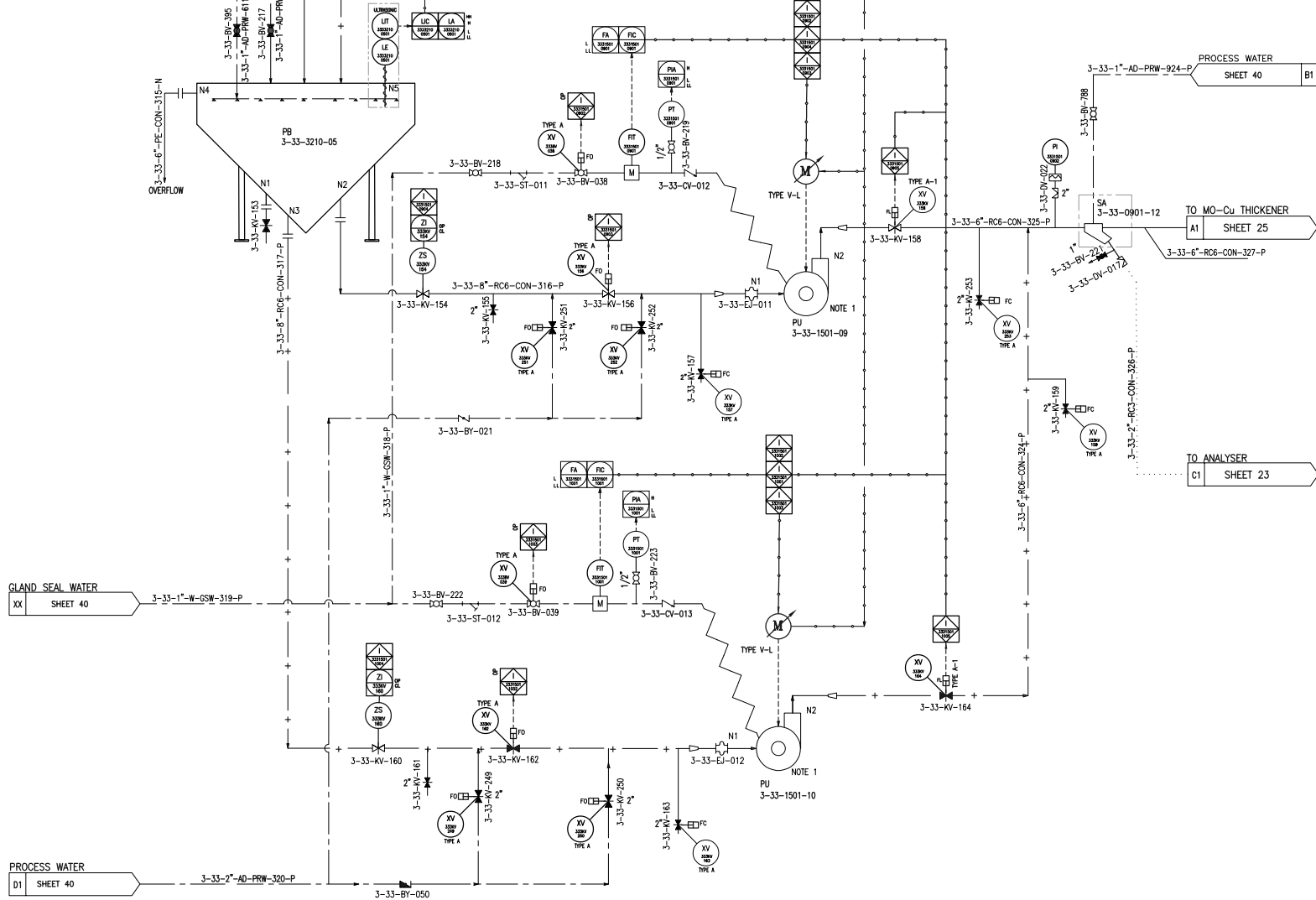
SPLITTER BOX

D1 SHEET 19 3-33-8"-PE-CON-303-N

RE-RE CLEANER
F8 SHEET 19 3-33-10"-PE-CON-313-N

PROCESS WATER
B1 SHEET 40 3-33-1"-AD-PRW-934-P

3-33-QV-004



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
- THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-4IN-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	20 OF 80	05
Library code: 303-003-0000-00-PR-PID-025-05					00

XRF ANALYZER
ABBR.: XZ
TAG NO.: 3-33-0920-02
TYPE :
CAPACITY: 3/6 m³/h
MOTOR : 5 kW

PUMP
ABBR.: PU
TAG NO.: 3-33-1501-17/18
TYPE : VERTICAL
CAPACITY: 24 m³/h
MOTOR : 7.5 kW

PUMP
ABBR.: PU
TAG NO.: 3-33-1501-19/20
TYPE : VERTICAL
CAPACITY: 9 m³/h
MOTOR : 7.5 kW

FROM CONDITIONING TANK
C6 SHEET 35
12002.D.PR.PID.303.GRD.023

FROM FINAL COMBINED TAILS
E6 SHEET 21

FROM TAILING OF ROUGHER BANK
B6 SHEET 21

FROM CLEANER SCAVENGER TAIL
B1 SHEET 22

ROUGHER CONCENTRATE
D6 SHEET 21

SCAVENGER CONCENTRATE
B1 SHEET 22

COMBINED REGRIND CYCLONE O.F.
C6 SHEET 12

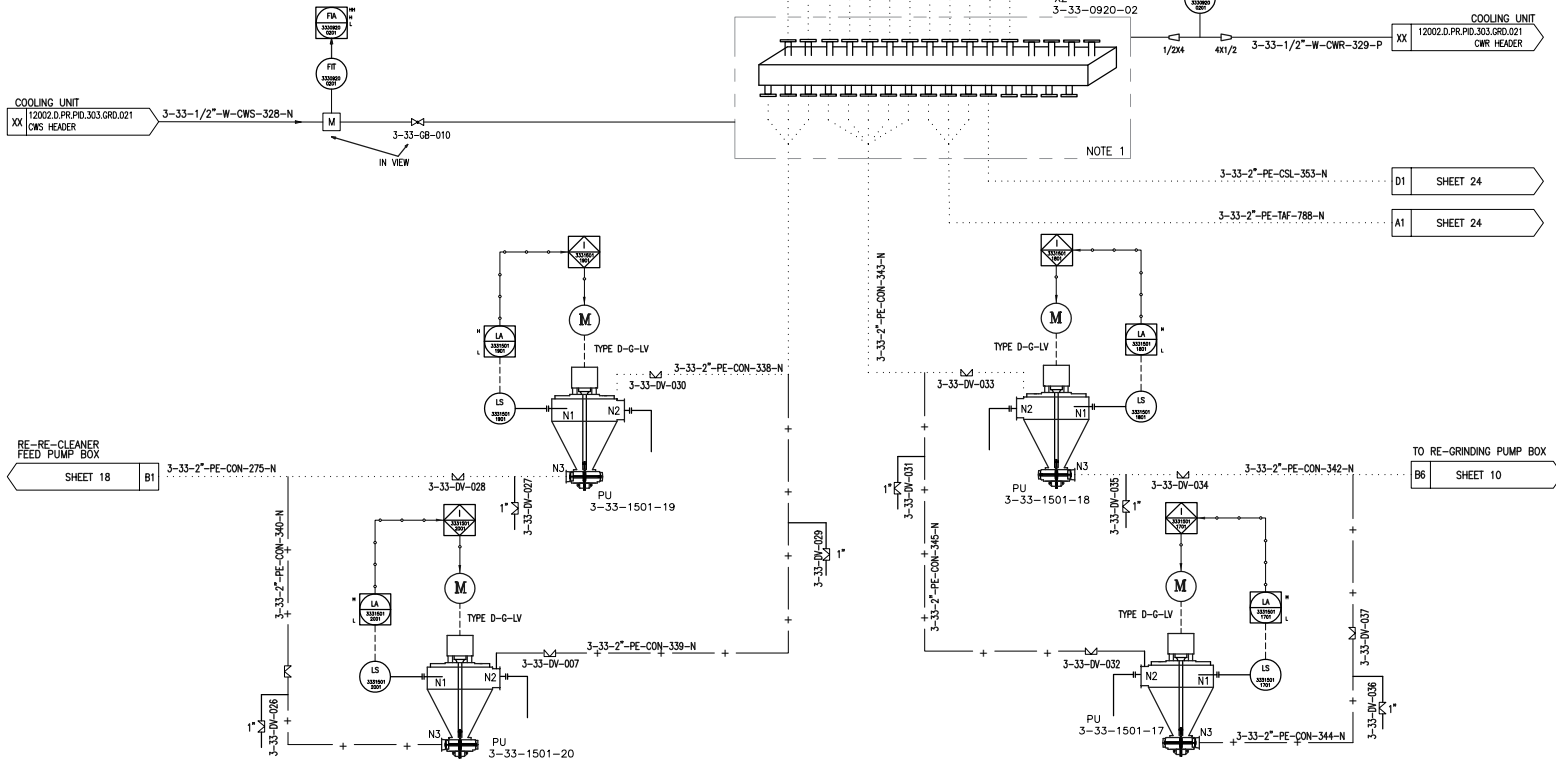
RE-CLEANER TAILS
D6 SHEET 17

ROUGHER CONC. BYPASS
D6 SHEET 05

CLEANER CONCENTRATE
D6 SHEET 08

RE-CLEANER CONCENTRATE
D6 SHEET 18

RE-RE-CLEANER CONCENTRATE
D6 SHEET 20



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- METHOD OF TRANSFERRING SLURRY FROM SAMPLER TO ANALYZER AND RETURNED LINE TO DEDICATED POINTS WILL BE FINALIZED AFTER PLANT LAYOUT AND SECTION IS COMPLETED.
- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- THE NUMBER OF PUMPS WILL BE FINALIZED BASED ON ARRANGEMENT.
- SIZE OF PIPE WILL BE FINALIZED AFTER SAMPLER FLOW RATE CONFIRMED BY RELEVANT VENDOR.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

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03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
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Consultant: EPC Contractor:

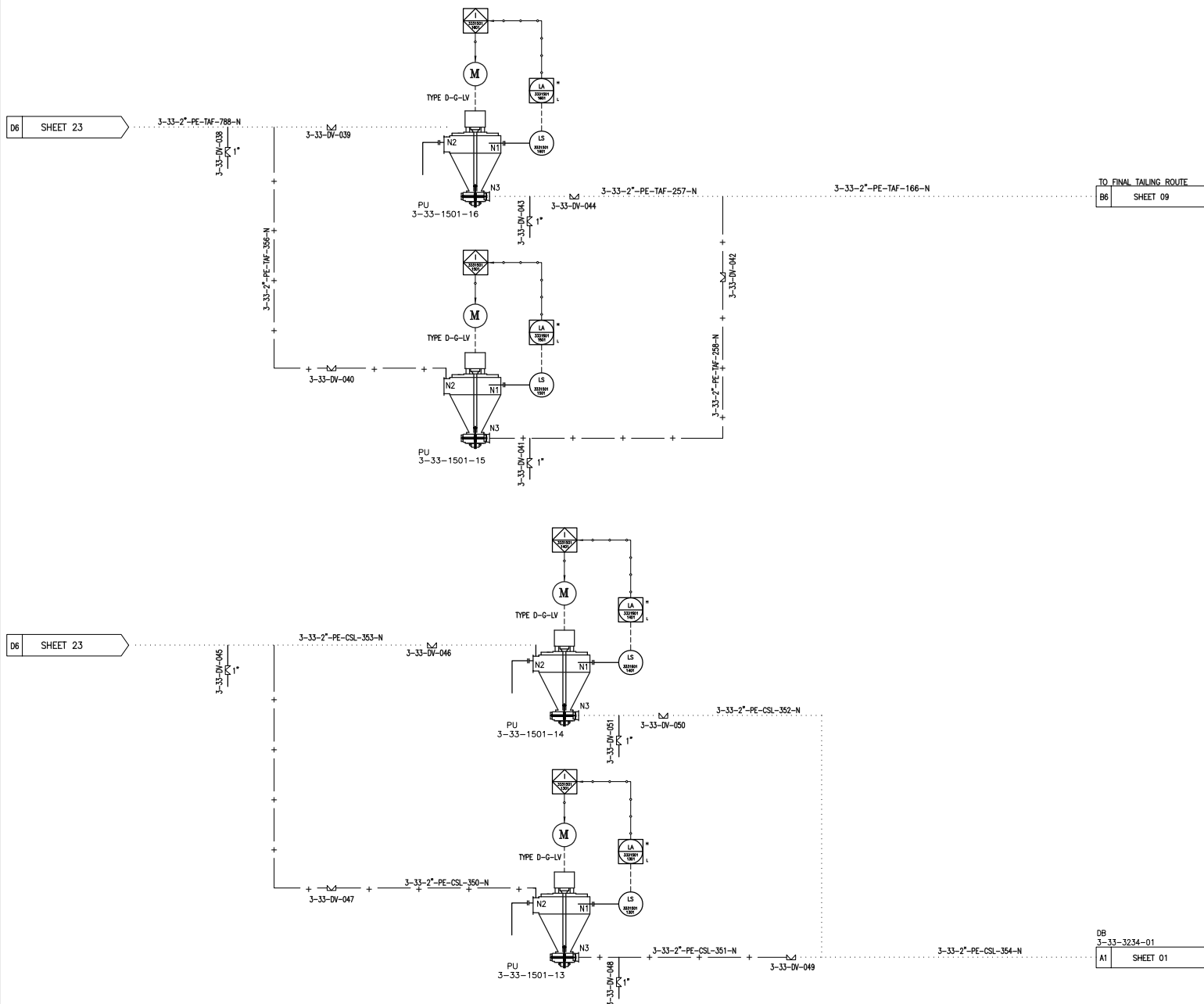
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P&ID FOR FLOTATION AREA-33

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Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	23 OF 80	05
Library code:	303-303-0000-00-PR-PID-025-05					00

PUMP	PUMP
ABBR.: PU	ABBR.: PU
TAG NO.: 3-33-1501-13/14	TAG NO.: 3-33-1501-15/16
TYPE : VERTICAL	TYPE : VERTICAL
CAPACITY: 12 m ³ /h	CAPACITY: 30 m ³ /h
MOTOR : 7.5 kW	MOTOR : 7.5 kW



REFERENCE									
REFERENCE. TITLE					REFERENCE. No.				
P&ID SYMBOL & LEGEND SHEET					12002-D-PR-PID-303-GNL-006				
PFD FOR Cu FLOTATION AREA-33					12002-D-PR-PFD-303-FLO-024				
NOTES									
1. METHOD OF TRANSFERRING SLURRY FROM SAMPLER TO ANALYZER AND RETURNED LINE TO DEDICATED POINTS WILL BE FINALIZED AFTER PLANT LAYOUT AND SECTION IS COMPLETED. 2. PUMPS TO BE OPERATED AS DUTY & STANDBY. 3. THE NUMBER OF PUMPS WILL BE FINALIZED BASED ON ARRANGEMENT. 4. SIZE OF PIPE WILL BE FINALIZED AFTER SAMPLER FLOW RATE CONFIRMED BY RELEVANT VENDOR. 5. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA. 6. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.									
LEGEND									
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12002-D-PR-PID-303-FLO-025			FA	A3	N.T.S	24 OF 80	05	00	
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303-003-0000-00-PR-PID-025-05									

CALIBRATION POT

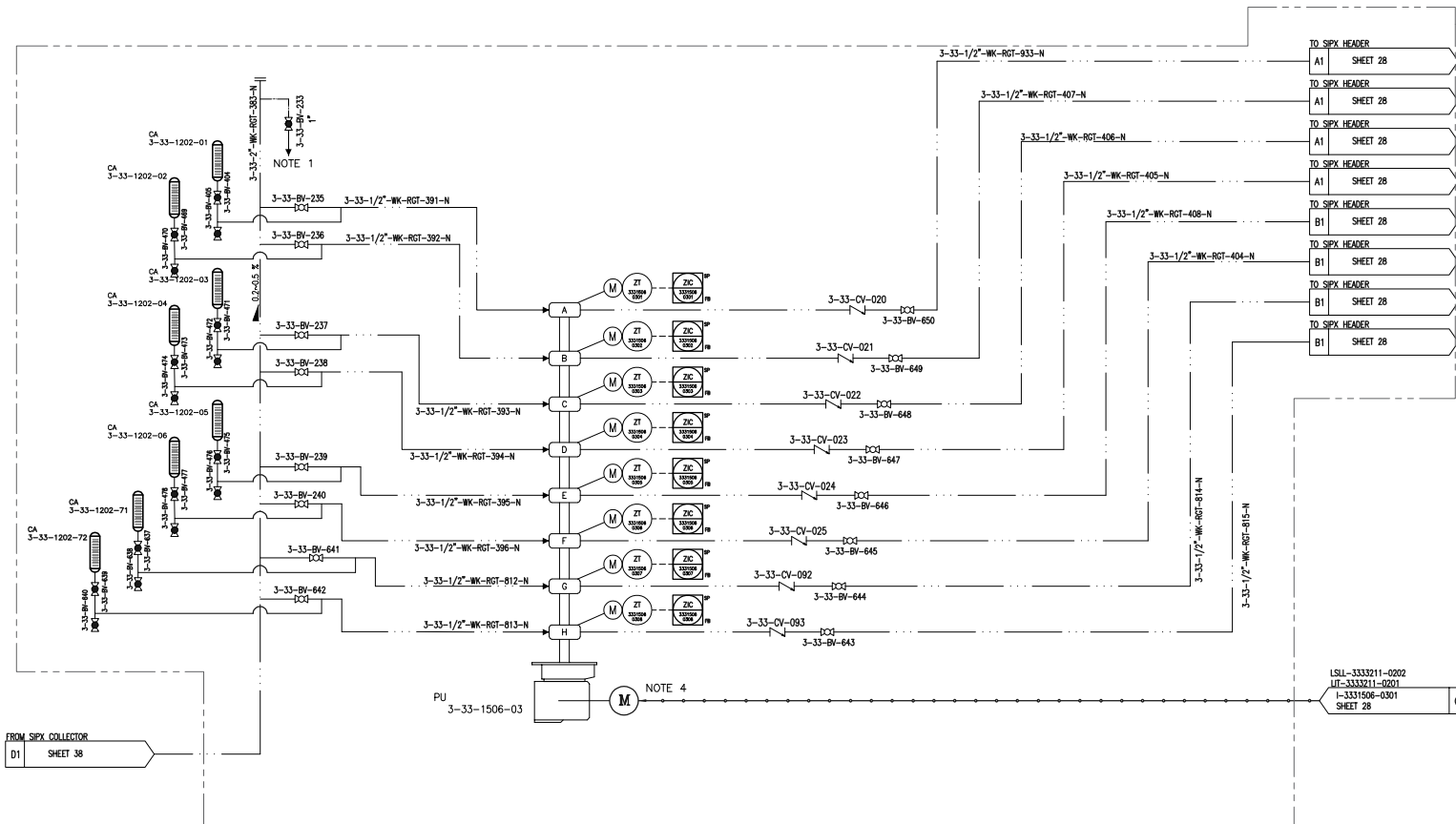
ABBR.: CA
TAG NO.: 3-33-1202-01~06
TYPE : TBD
CAPACITY: TBD ml
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 3-33-1506-03
TYPE : TBD
CAPACITY: 19.5/22.5 L/min
MOTOR : 1.1 KW

CALIBRATION POT

ABBR.: CA
TAG NO.: 3-33-1202-71/72
TYPE : TBD
CAPACITY: TBD ml
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
- AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

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Consultant:

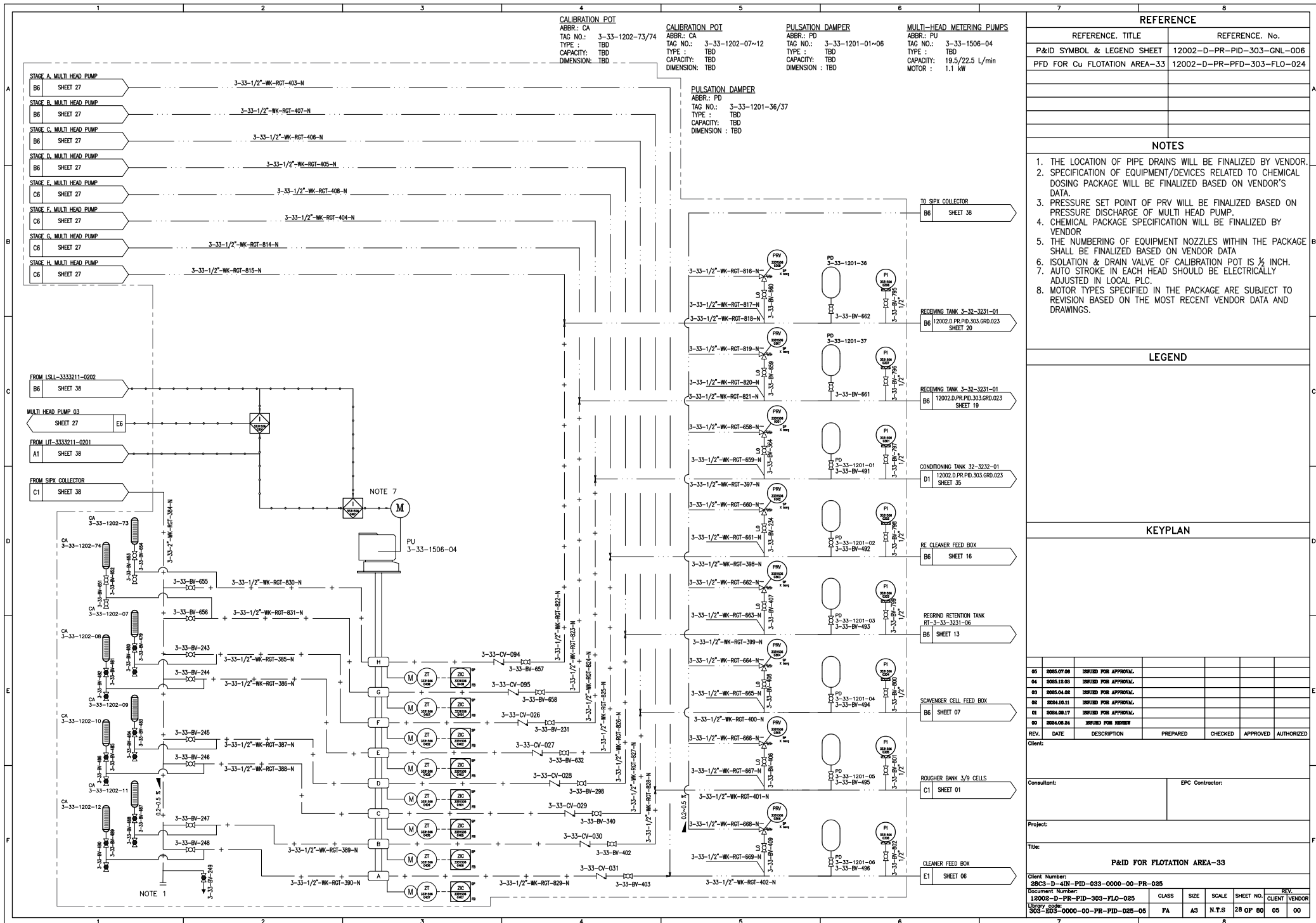
EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	27 OF 80	05
Library code: 303-003-0000-00-PR-PID-025-05					00



CALIBRATION POT

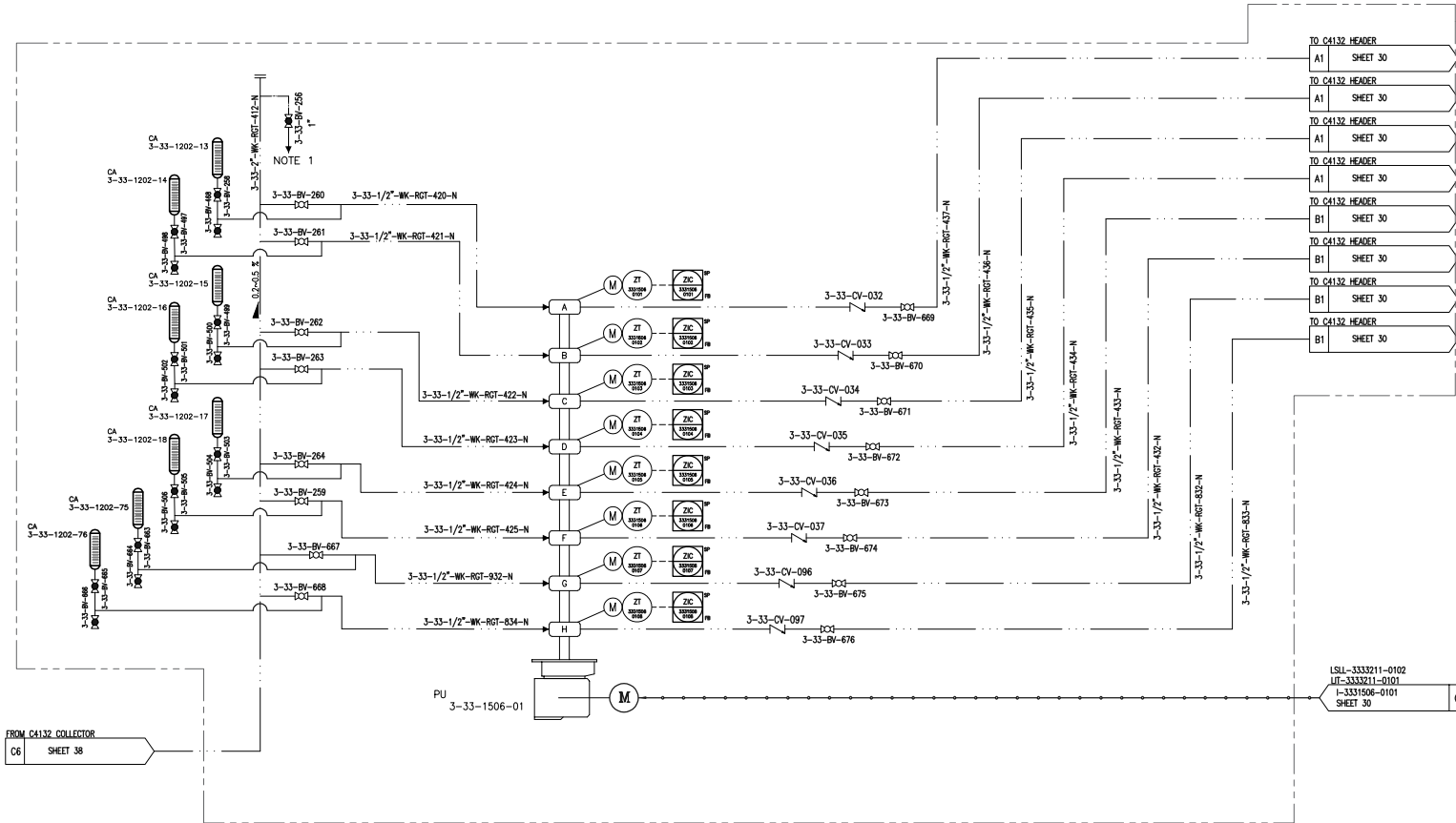
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TAG NO.: 3-33-1202-13~18
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR: PU
TAG NO.: 3-33-1506-01
TYPE : TBD
CAPACITY: 2/2.25 L/min
MOTOR : 15 kW

CALIBRATION POT

ABBR: CA
TAG NO.: 3-33-1202-75/76
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
- AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	29 OF 80	05
Library code:	303-003-0000-00-PR-PID-025-05					00

CALIBRATION POT

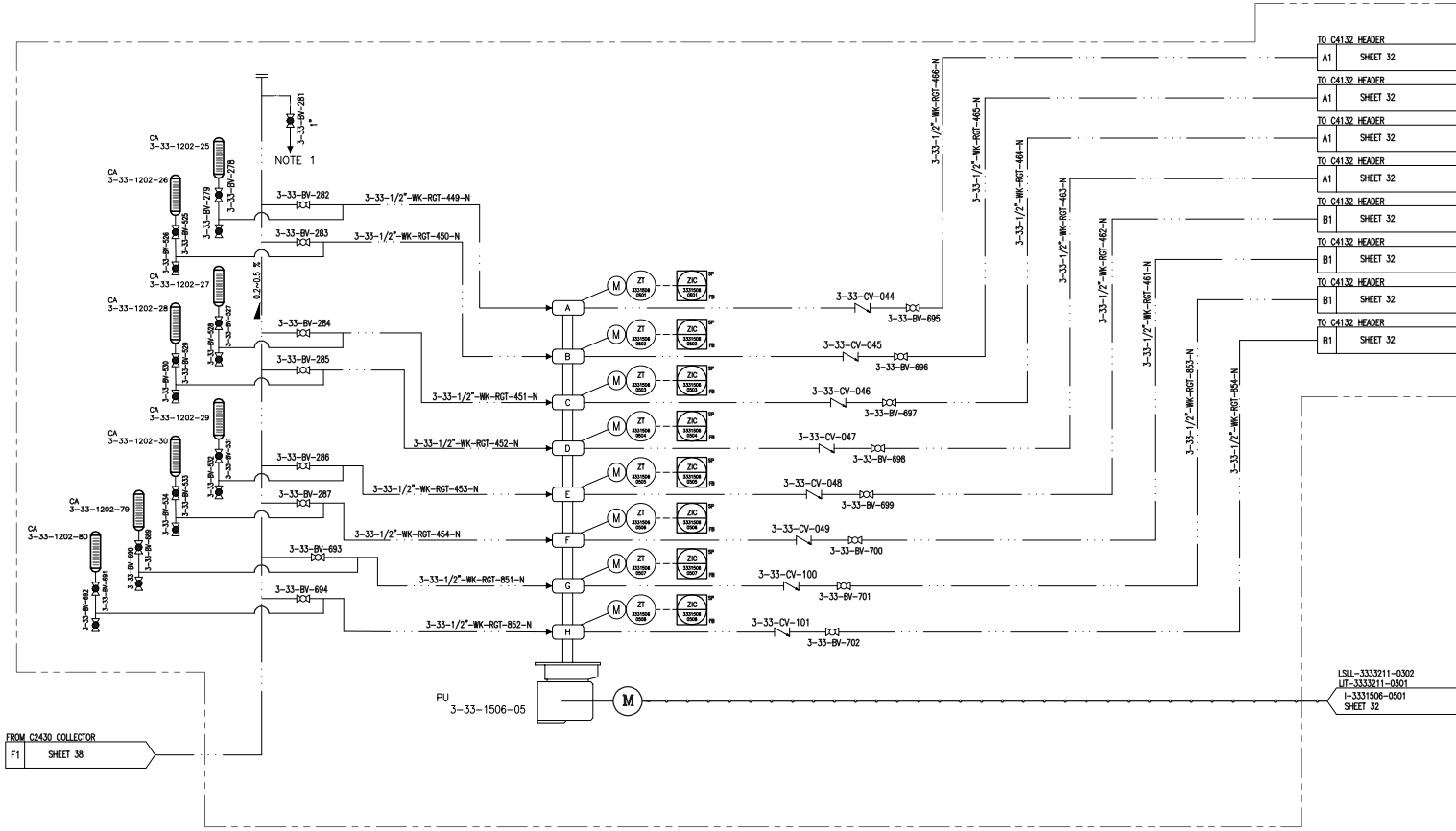
ABBR.: CA
TAG NO.: 3-33-1202-25~30
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 3-33-1506-05
TYPE : TBD
CAPACITY: 1.6/1.9 L/min
MOTOR : 1.1 kW

CALIBRATION POT

ABBR.: CA
TAG NO.: 3-33-1202-79/80
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH. AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

Consultant:

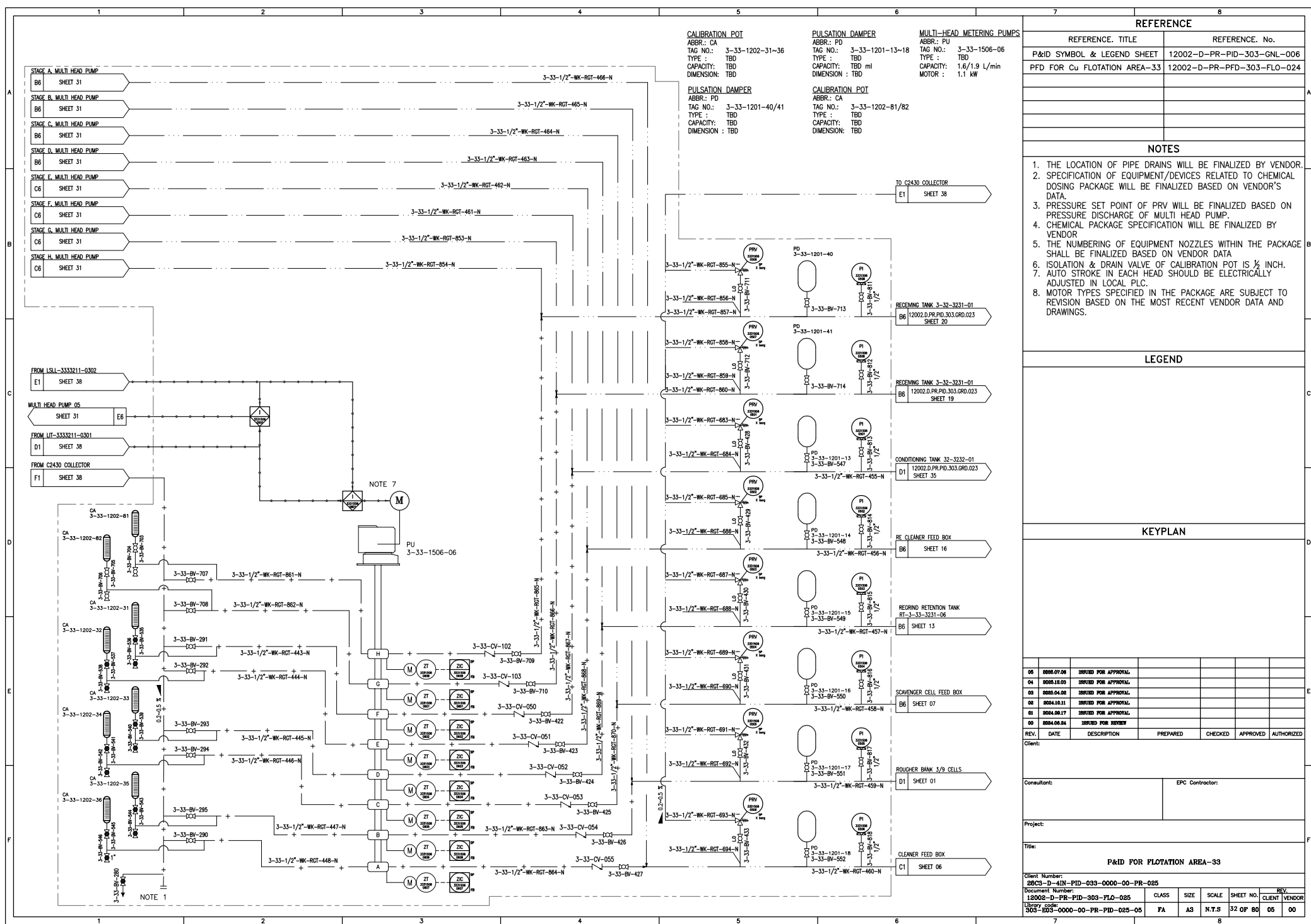
EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	31 OF 80	05
Library Code:	303-203-0000-00-PR-PID-025-05					00



CALIBRATION POT

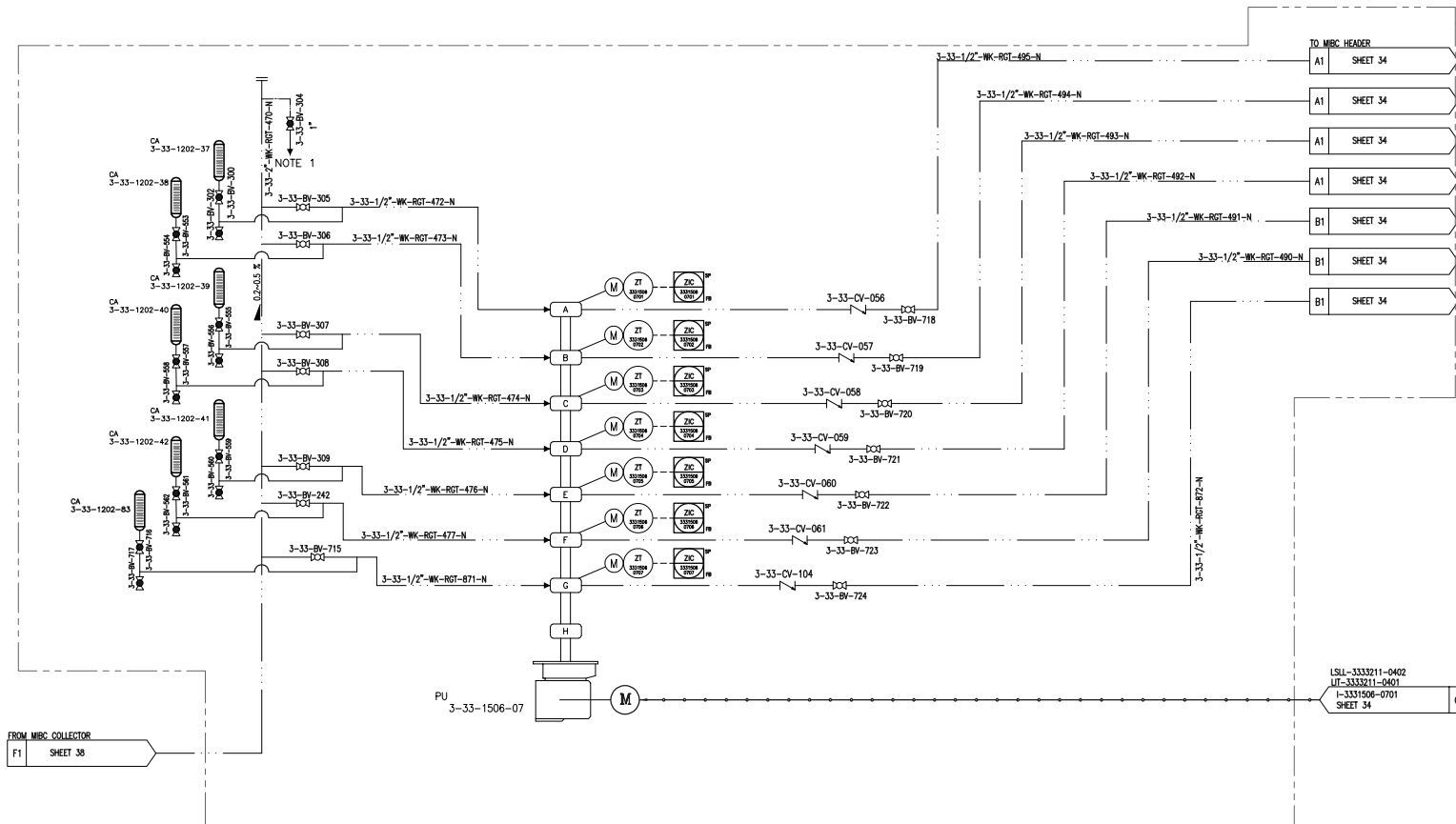
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TAG NO.: 3-33-1202-37~42
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 3-33-1506-07
TYPE : TBD
CAPACITY: 2.4/2.8 L/min
MOTOR : 1.1 kW

CALIBRATION POT

ABBR.: CA
TAG NO.: 3-33-1202-83
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH. AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
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01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-4IN-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	33 OF 80	05
Library code:	303-203-0000-00-PR-PID-025-05					00

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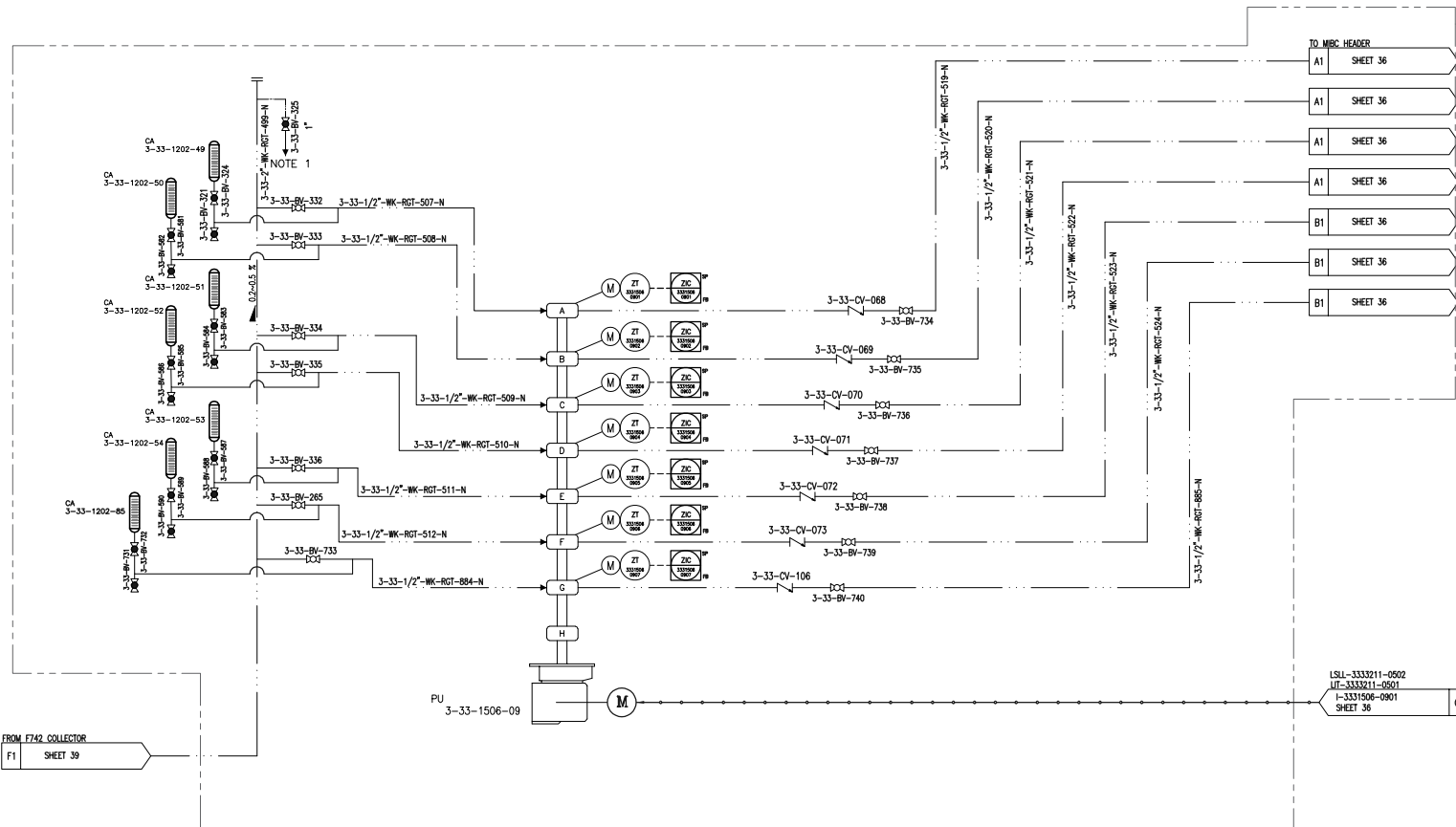
ABBR.: CA
TAG NO.: 3-33-1202-49-54
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 3-33-1506-09
TYPE : TBD
CAPACITY: 1.9/2.3 L/min
MOTOR : 1.1 kW

CALIBRATION POT

ABBR.: CA
TAG NO.: 3-33-1202-85
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
- AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
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00	2024.06.24	ISSUED FOR REVIEW				

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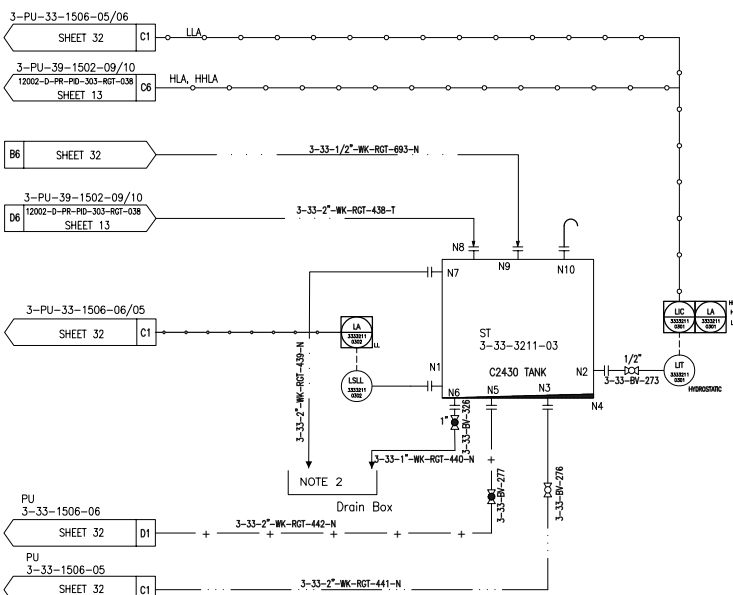
Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

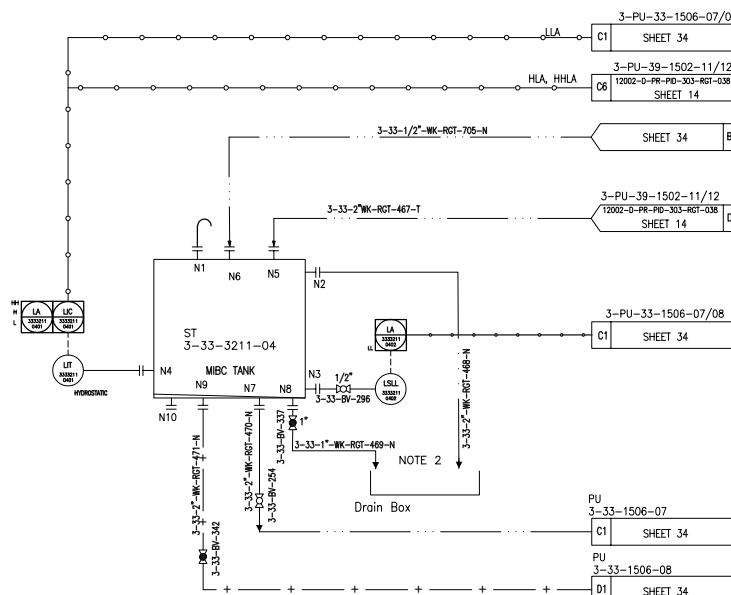
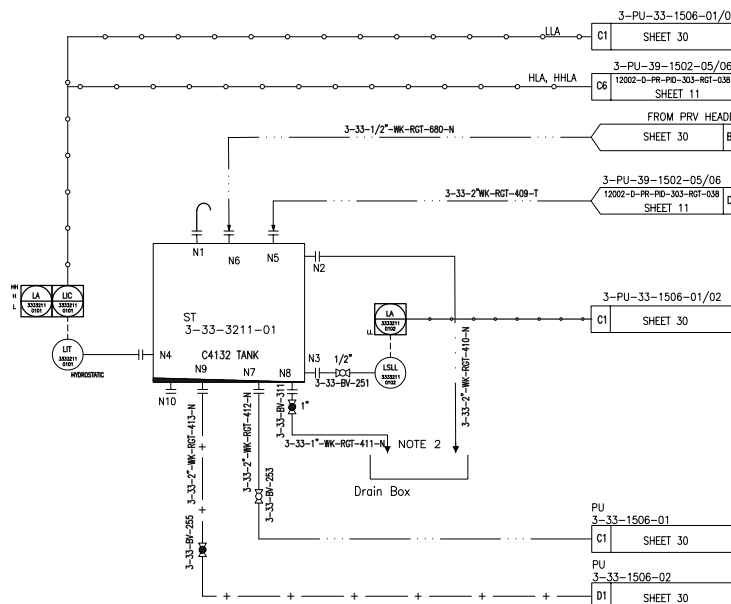
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Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	35 OF 80	05 00
Library code:	303-203-0000-00-PR-PID-025-05					



STORAGE TANK
 ABBR.: ST
 TAG NO.: 3-33-3211-02
 TYPE : CYLINDRICAL, CLOSED TOP, VERTICAL
 CAPACITY: 32.4 m3
 DIMENSION : TBD

STORAGE TANK
ABBR.: ST
TAG NO.: 3-33-3211-03
TYPE : CYLINDRICAL, CLOSED TOP, VERTICAL
CAPACITY: 2.7 m3
DIMENSION : TBD

STORAGE TANK
 ABBR.: ST
 TAG NO.: 3-33-3211-04
 TYPE : CYLINDRICAL, CLOSED TOP, VERTICAL
 CAPACITY: 4 m3
 DIMENSION : TBD



REFERENCE	
REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD For Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. THE LOCATION OF PIPE DRAINS WILL BE FINALIZED BY VENDOR.
2. DRAIN BOX IS CONSIDERED IN GROUND FLOOR.
3. SPECIFICATION OF EQUIPMENT/DEVICES RELATED TO CHEMICAL DOSING PACKAGE WILL BE FINALIZED BASED ON VENDOR'S DATA.
4. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA

LEGEND

KEYPLAN

06	2026.07.06	ISSUED FOR APPROVAL				
04	2026.12.03	ISSUED FOR APPROVAL				
03	2026.04.02	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.08.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

REV.	
Client:	

Consultant:

EPC Contractor:	
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Project:

	Title:

P&ID FOR FLOTATION AREA-33

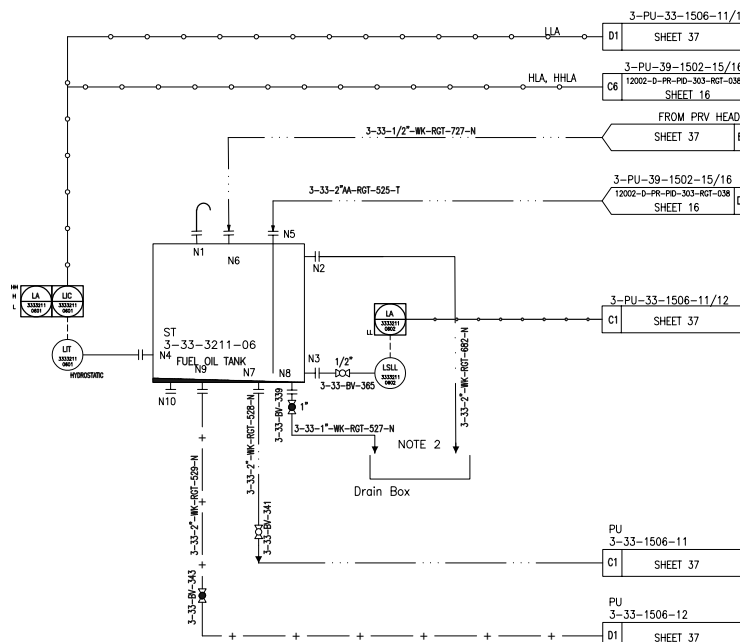
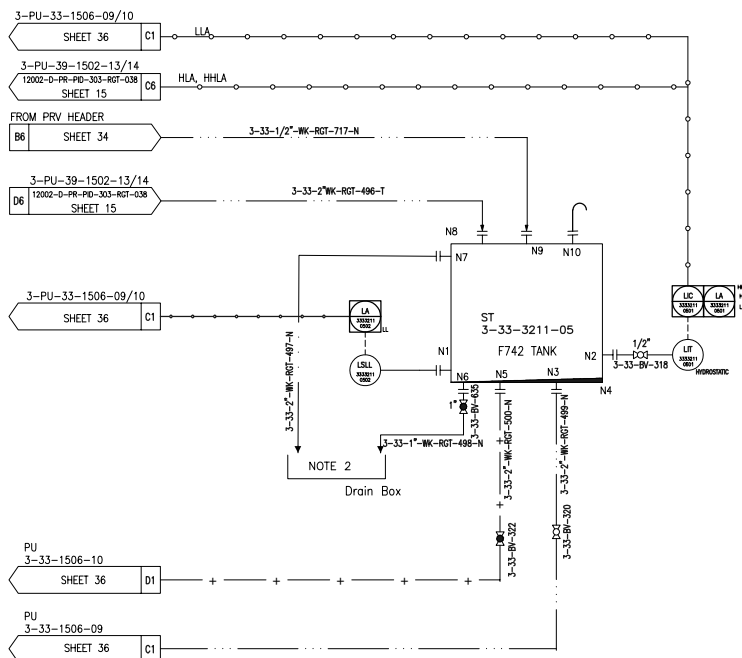
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Document Number

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12002-D-PR-PID-303-FLO-025					CLIENT	VENDOR
Library code:	FA	A3	N.T.S	38 OF 80	05	00
303-E03-0000-00-PR-PID-025-05						

STORAGE TANK
ABBR.: ST
TAG NO.: 3-33-3211-05
TYPE : CYLINDRICAL, CLOSED TOP, VERTICAL
CAPACITY: 3.2 m3
DIMENSION :TBD

STORAGE TANK
ABBR.: ST
TAG NO.: 3-33-3211-06
TYPE : CYLINDRICAL, CLOSED TOP, VERTICAL
CAPACITY: 4 m3
DIMENSION :TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. THE LOCATION OF PIPE DRAINS WILL BE FINALIZED BY VENDOR.
2. DRAIN BOX IS CONSIDERED IN GROUND FLOOR.
3. SPECIFICATION OF EQUIPMENT/DEVICES RELATED TO CHEMICAL DOSING PACKAGE WILL BE FINALIZED BASED ON VENDOR'S DATA.
4. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA

LEGEND

KEYPLAN

05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.08	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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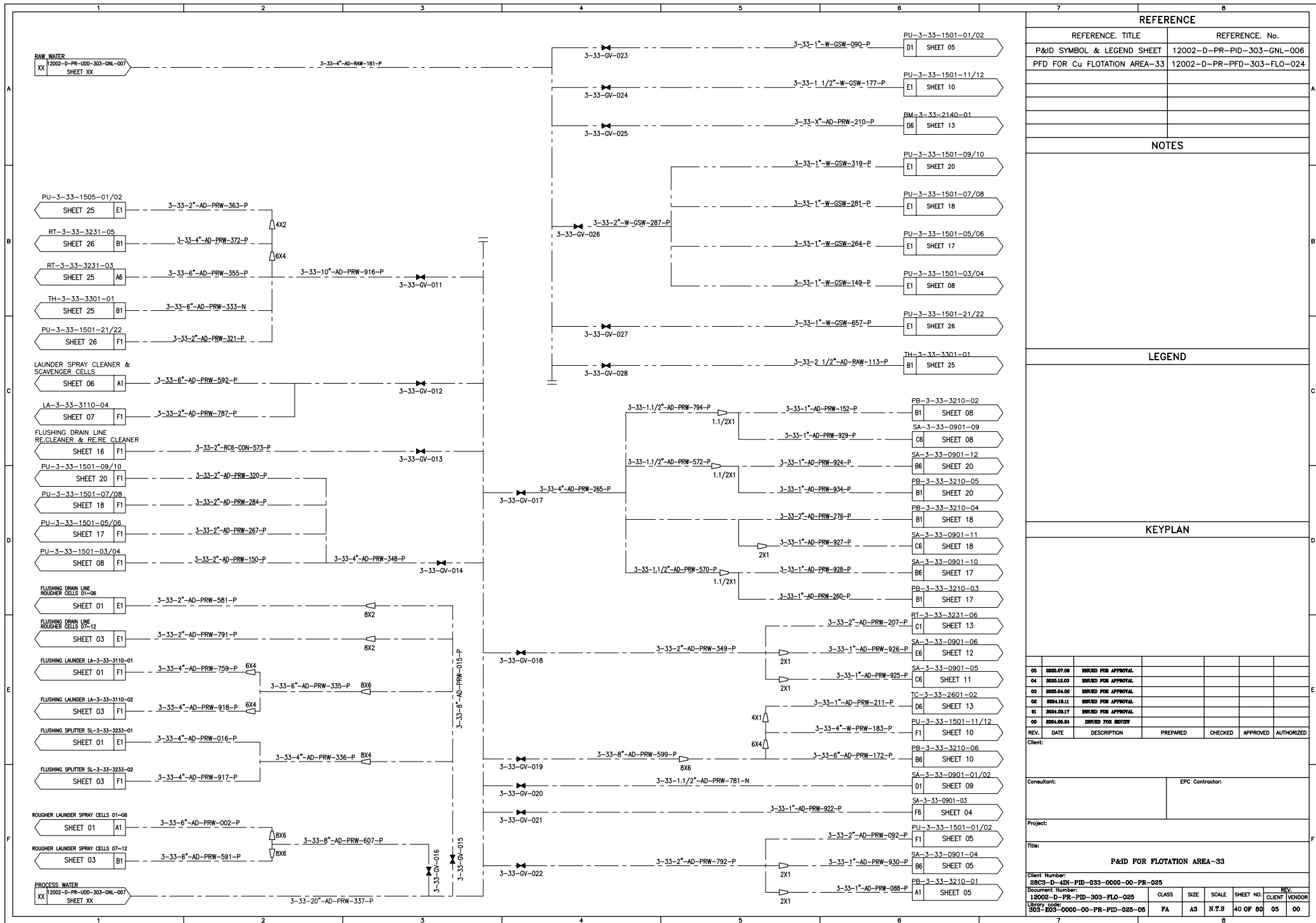
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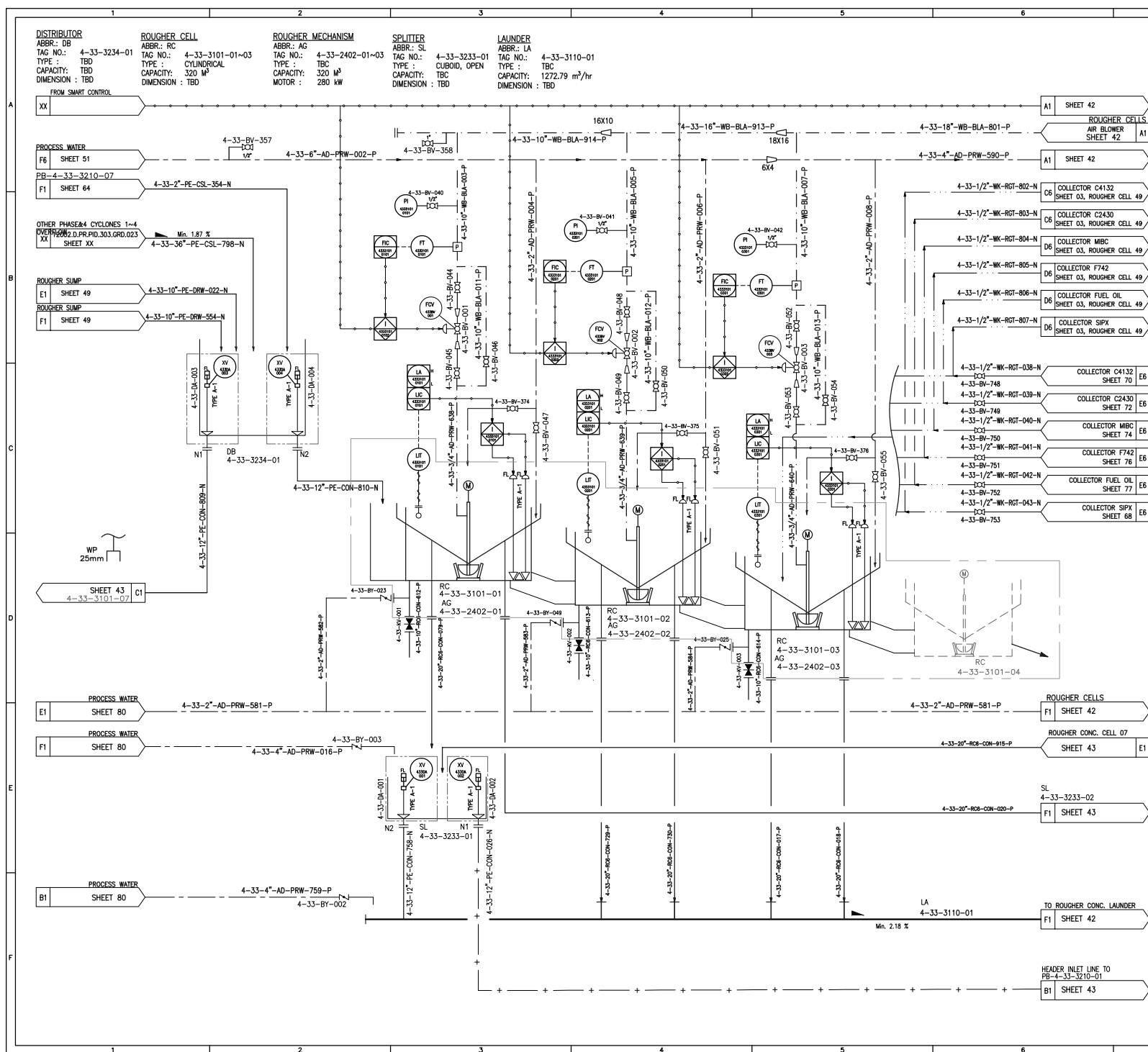
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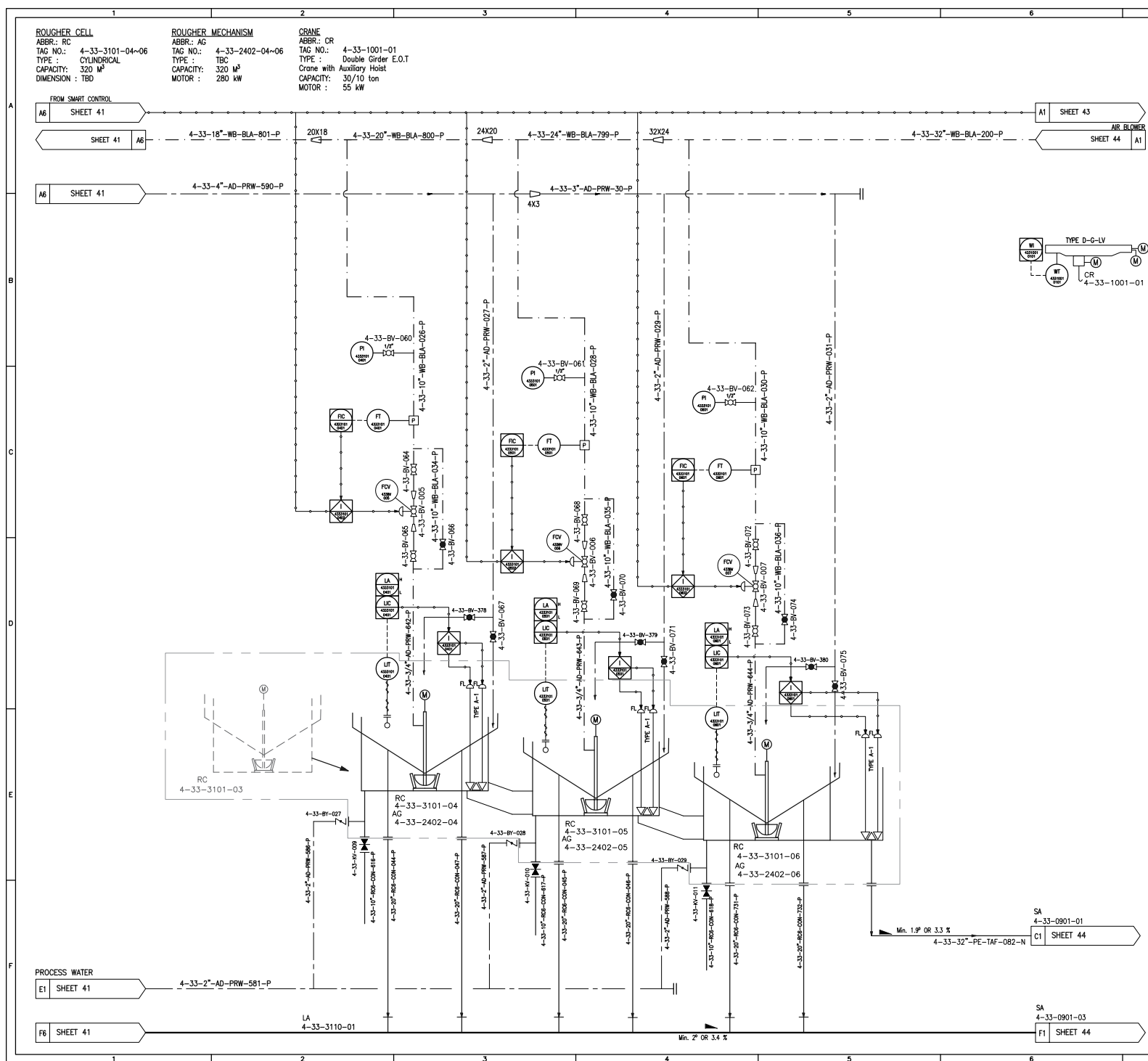
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REFERENCE	
REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. DART VALVE CONFIGURATION WILL BE CONFIRMED BY FLOTATION CELL SUPPLIER.
2. ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
3. PROCESS WATER USED FOR FILLING THE FLOTATION CELLS.
4. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINISHED BASED ON VENDOR DATA.
5. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

04	2025.07.08	ISSUED FOR APPROVAL				
05	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.02	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
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REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED

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Consultant:

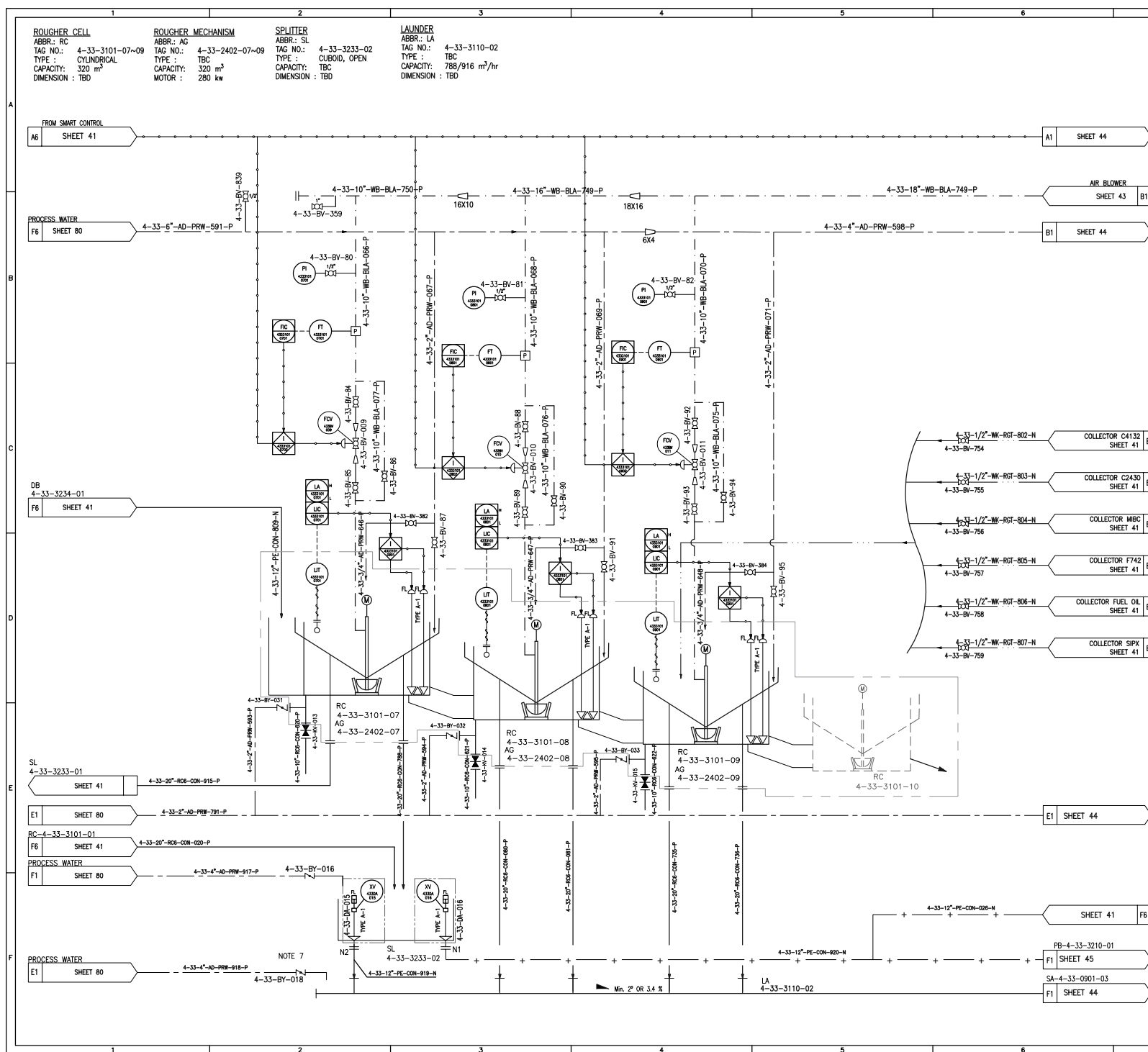
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Project:

P&ID FOR FLOTATION AREA-33

Client Number:
28C3-D-4IN-PID-033-0000-00-PR-025

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					CLIENT	VENDOR

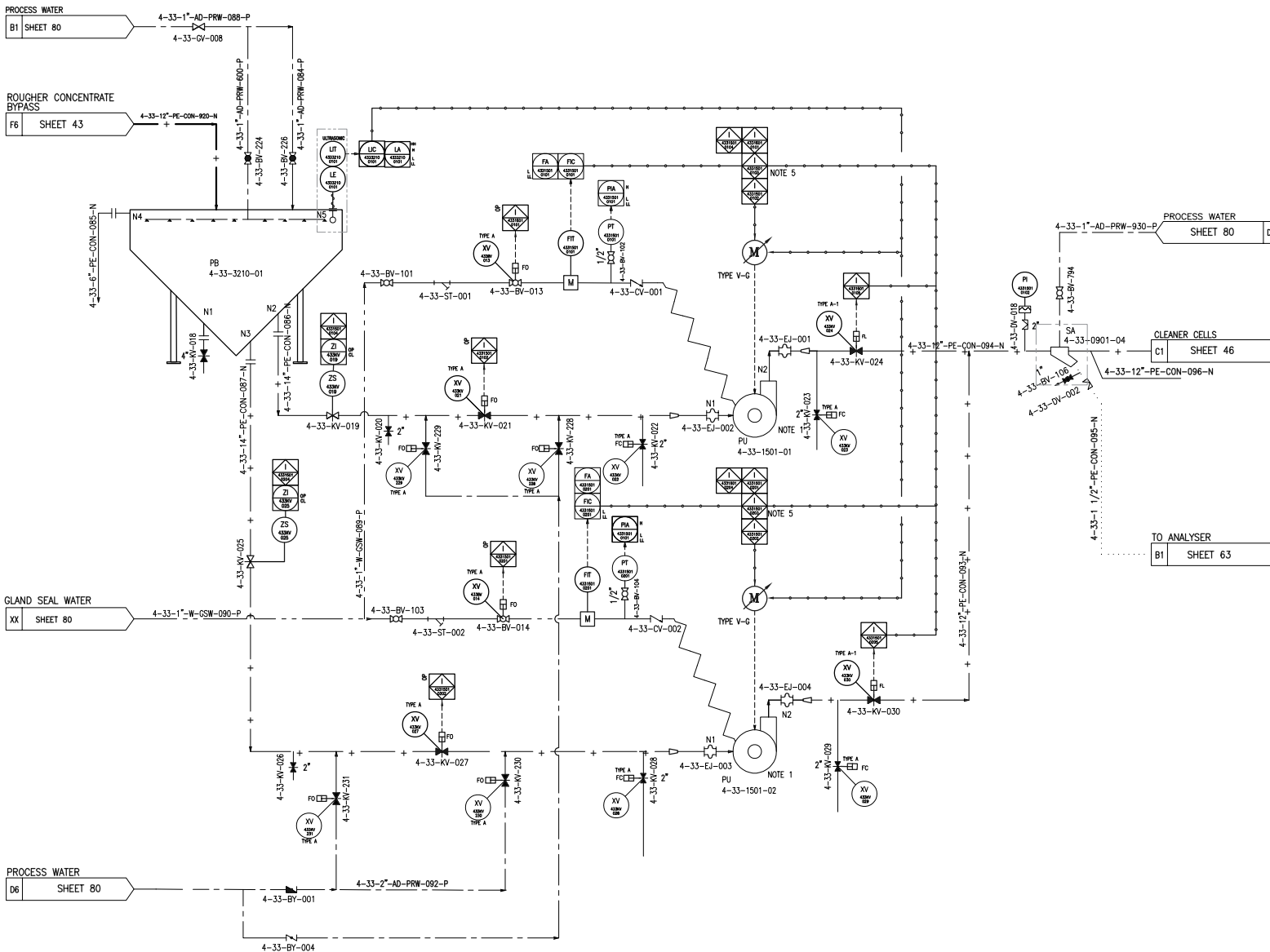


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REFERENCE. TITLE		REFERENCE. No.	
P&ID SYMBOL & LEGEND SHEET		12002-D-PR-PID-303-GNL-006	
PFD FOR Cu FLOTATION AREA-33		12002-D-PR-PFD-303-FLO-024	
NOTES			
1. DART VALVE CONFIGURATION WILL BE CONFIRMED BY FLOTATION CELL SUPPLIER.			
2. SPLITTER BOX FOR BYPASS FIRST TWO ROUGHER CELLS CONCENTRATE.			
3. 35 TON CRANE (WITH 10 TON AUXILIARY HOOK) TO SERVICE FLOTATION AND REGROUND AREAS.			
4. ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.			
5. PROCESS WATER USED FOR FILLING THE FLOTATION CELLS.			
6. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.			
7. INTERMITTENT USE FOR FLUSHING OF LAUNDER THE FLUSHING LINE IS CONNECTED TO THE INLET (HEAD) OF THE LAUNDER.			
8. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.			
LEGEND			
KEYPLAN			

PUMP BOX
ABBR.: PB
TAG NO.: 4-33-3210-01
TYPE: TBC
CAPACITY: 70 M
DIMENSION: TBD

PUMP
ABBR.: PU
TAG NO.: 4-33-1501-01/02
TYPE: CENTRIFUGAL
CAPACITY: 794.93/916.15 m³/h
MOTOR: 500 kW

SAMPLER
ABBR.: SA
TAG NO.: 4-33-0901-04
TYPE: PIPE
CAPACITY: 794.93/916.15 m³/h
MOTOR: -



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
- ALL REDUCERS WHOSE SIZES DEPEND ON VENDOR EQUIPMENT/DEVICES DATA HAVE NOT BEEN INCLUDED AT THIS STAGE. THEY WILL BE UPDATED IN FUTURE REVISIONS BASED ON THE LATEST RELEVANT VENDOR INFORMATION.
- ALL SLURRY PIPELINES, WHETHER GRAVITY OR PRESSURIZED, SHALL BE INSTALLED WITH A CONTINUOUS POSITIVE SLOPE OF MINIMUM 1% TOWARD THE NEAREST DRAIN OR LOW-POINT SUMP, TO MINIMIZE SOLIDS SETTLEMENT.
- SWITCHOVER BETWEEN PUMPS IS INTERLOCKED TO ENSURE IT CAN ONLY OCCUR WHEN THE DISCHARGE VALVE OF THE NON-OPERATING PUMP IS CONFIRMED CLOSED.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

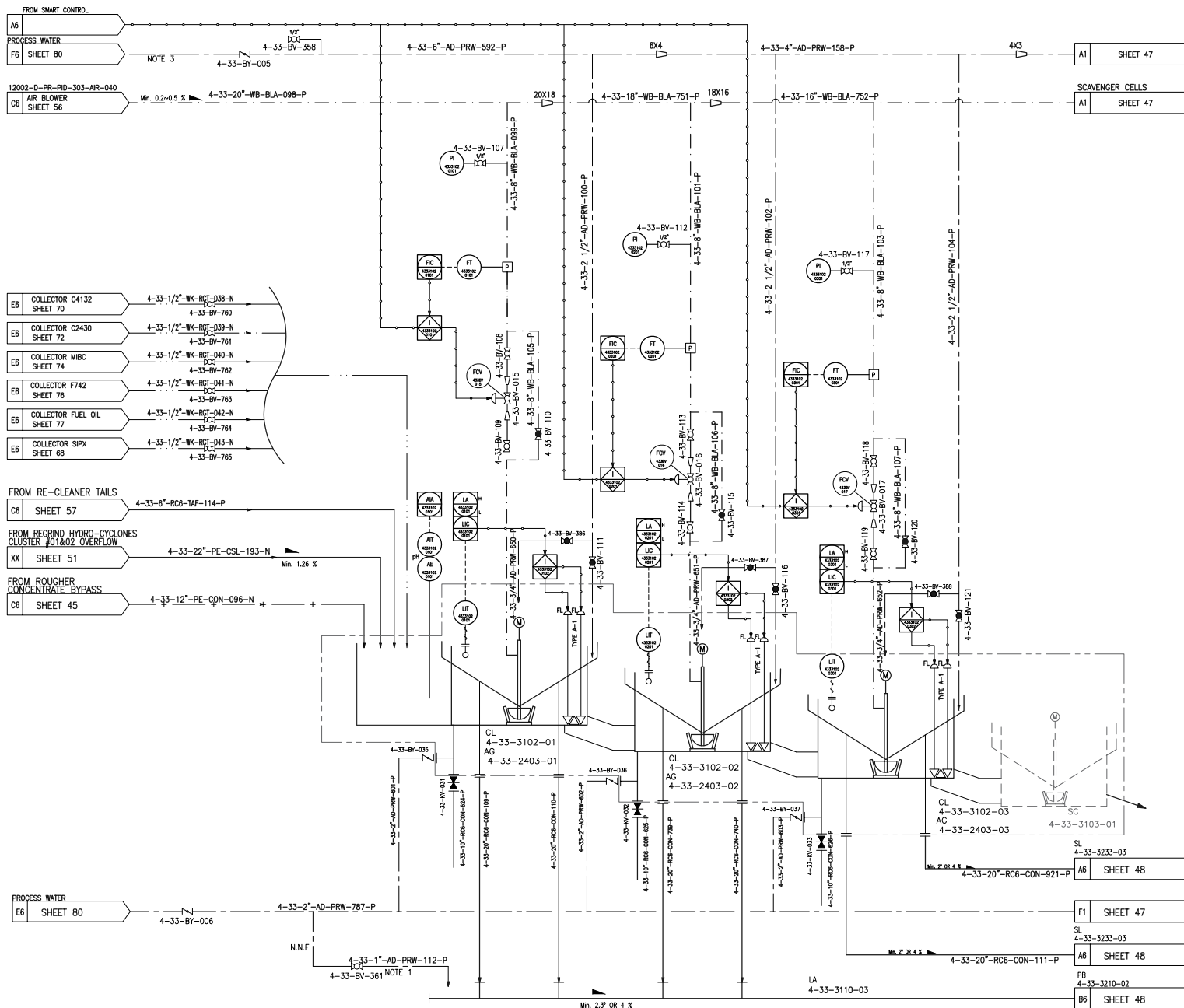
P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-4IN-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number: 12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	45 OF 80	05
Library Code: 303-003-0000-00-PR-PID-025-05					00

CLEANER CELLS
ABBR.: CL
TAG NO.: 4-33-3102-01-03
TYPE : CYLINDRICAL
CAPACITY: 200 m³
DIMENSION : TBD

CLEANER MECHANISM
ABBR.: AG
TAG NO.: 4-33-2403-01-03
TYPE : TBD
CAPACITY: 200 m³
MOTOR : 220 kw

LAUNDER
ABBR.: LA
TAG NO.: 4-33-3110-03
TYPE : SLOPED CHANNEL
CAPACITY: 104/120 m³/h
MOTOR : -



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- INTERMITTENT USE FOR FLUSHING OF LAUNDER THE FLUSHING LINE IS CONNECTED TO THE INLET (HEAD) OF THE LAUNDER.
- DRAIN VALVE TO BE AT LOWEST POINT IN AIR LINE.
- PROCESS WATER USED FOR FILLING CLEANER AND CLEANER SCAVENGER CELLS.
- ALL INSTRUMENTS FOR CLEANER CELLS PACKAGE WILL BE SUPPLIED BY FLOTATION CELL VENDOR.
- ULTRASONIC TYPE OF LEVEL TRANSMITTER IS CONSIDERED FOR FLOTATION CELLS.
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
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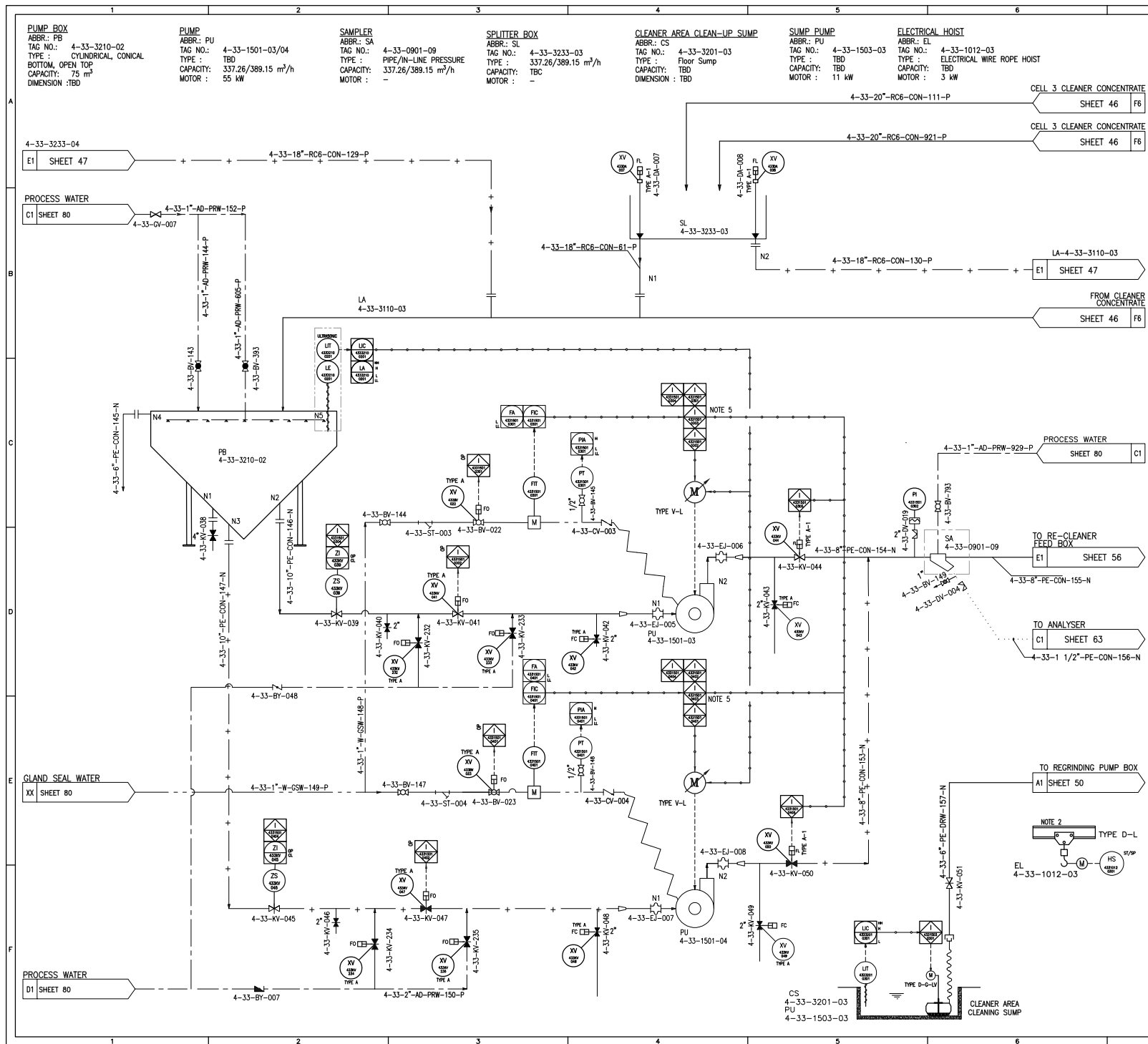
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Project:

Title:

P&ID FOR FLOTATION AREA-33

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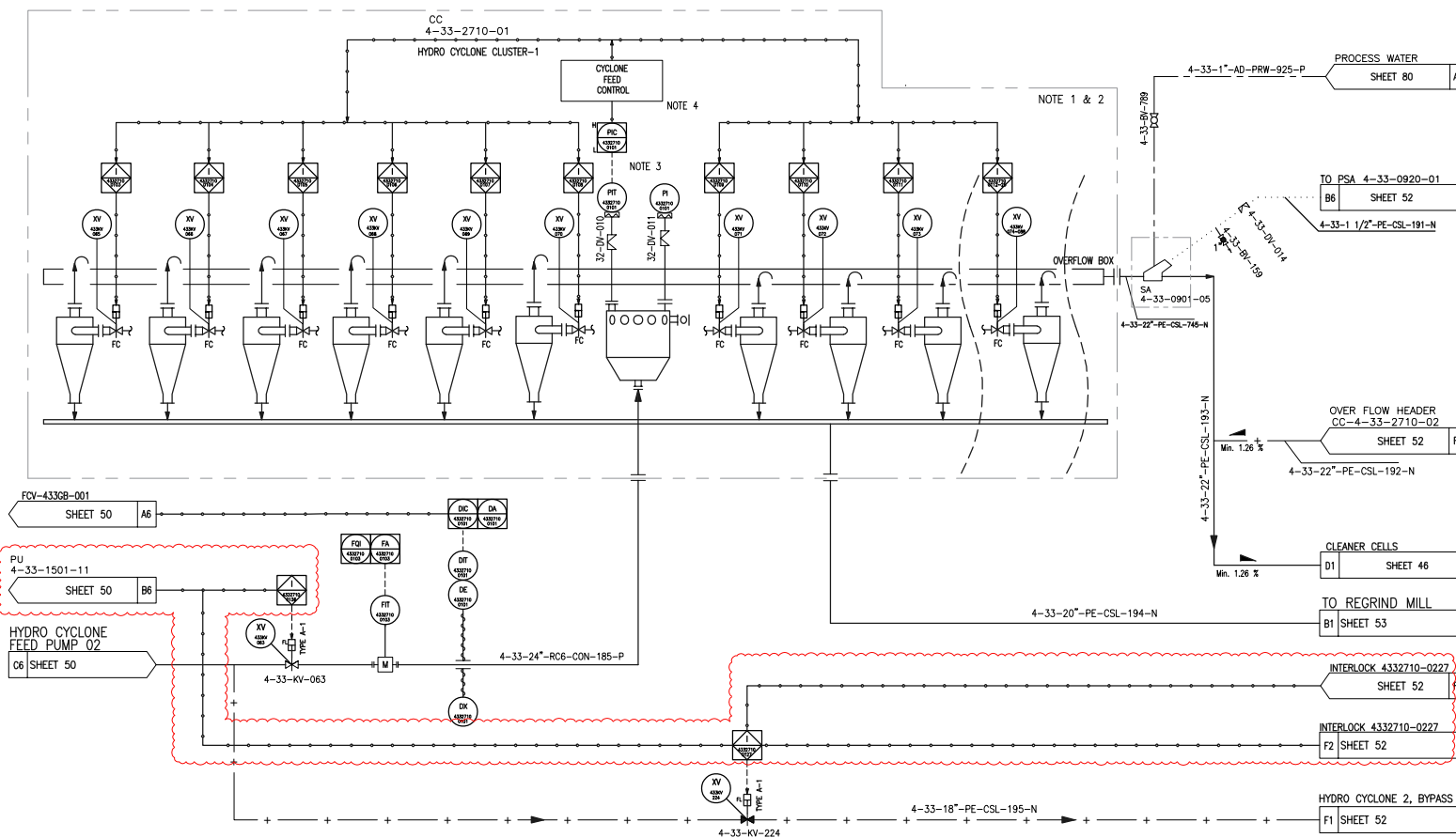


HYDROCYCLONE CLUSTER

ABBR.: CC
TAG NO.: 4-33-2710-01
TYPE: TBO
CAPACITY: 1411/1629 m³/h
MOTOR: -

SAMPLER

ABBR.: SA
TAG NO.: 4-33-0901-05
TYPE: SHARK FIN
CAPACITY: 1443.90/1666.03 m³/h
MOTOR: -



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. DETAILED BATTERY LIMITS OF HYDROCYCLONE PACKAGE WILL BE FINALIZED AFTER SELECTING VENDOR
2. QUANTITY AND CYCLONE SIZE WILL BE FINALIZED BY VENDOR.
3. CYCLONE PRESSURE INSTRUMENT IS EQUIPPED WITH LCD.
4. DETAIL OF CYCLONE FEED CONTROL WILL BE PROVIDE BY VENDOR.
5. TYPE OF HYDRO-CYCLONE XV VALVES ARE TYPE A.
6. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
7. XV VALVES SHOULD BE EQUIPPED TO EMERGENCY HAND WHEEL.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2005.07.08	ISSUED FOR APPROVAL				
04	2005.12.03	ISSUED FOR APPROVAL				
03	2005.04.02	ISSUED FOR APPROVAL				
02	2004.10.11	ISSUED FOR APPROVAL				
01	2004.09.17	ISSUED FOR APPROVAL				
00	2004.06.04	ISSUED FOR REVIEW				

Client:

Consultant:

EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	51 OF 80	05
Library code:	303-B03-0000-00-PR-PID-025-05					00

HYDROCyclone CLUSTER
ABBR.: CC
TAG NO.: 4-33-2710-02
TYPE : TBD
CAPACITY: 1411/1629 m³/h
MOTOR : -

SAMPLER
ABBR.: SA
TAG NO.: 4-33-0901-06
TYPE : SHARK FIN
CAPACITY: 1443.90/1666.03 m³/h
MOTOR : -

PARTICLE SIZE ANALYZER
REGRIND CYCLONE
ABBR.: PZ
TAG NO.: 4-33-0920-01
CAPACITY: 2/7 m³/h
POWER: 2.2 kW

REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. DETAILED BATTERY LIMITS OF HYDROCyclone PACKAGE WILL BE FINALIZED AFTER SELECTING VENDOR.
2. QUANTITY AND CYCLONE SIZE WILL BE FINALIZED BY VENDOR.
3. CYCLONE PRESSURE INSTRUMENT IS EQUIPPED WITH LCD.
4. DETAIL OF CYCLONE FEED CONTROL WILL BE PROVIDE BY VENDOR.
5. TYPE OF HYDRO-Cyclone XV VALVES ARE TYPE A.
6. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
7. XV VALVES SHOULD BE EQUIPPED TO EMERGENCY HAND WHEEL.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2008.07.08	ISSUED FOR APPROVAL				
04	2008.12.03	ISSUED FOR APPROVAL				
03	2008.04.02	ISSUED FOR APPROVAL				
02	2008.10.11	ISSUED FOR APPROVAL				
01	2008.09.17	ISSUED FOR APPROVAL				
00	2008.06.04	ISSUED FOR REVIEW				

Client:

Consultant:

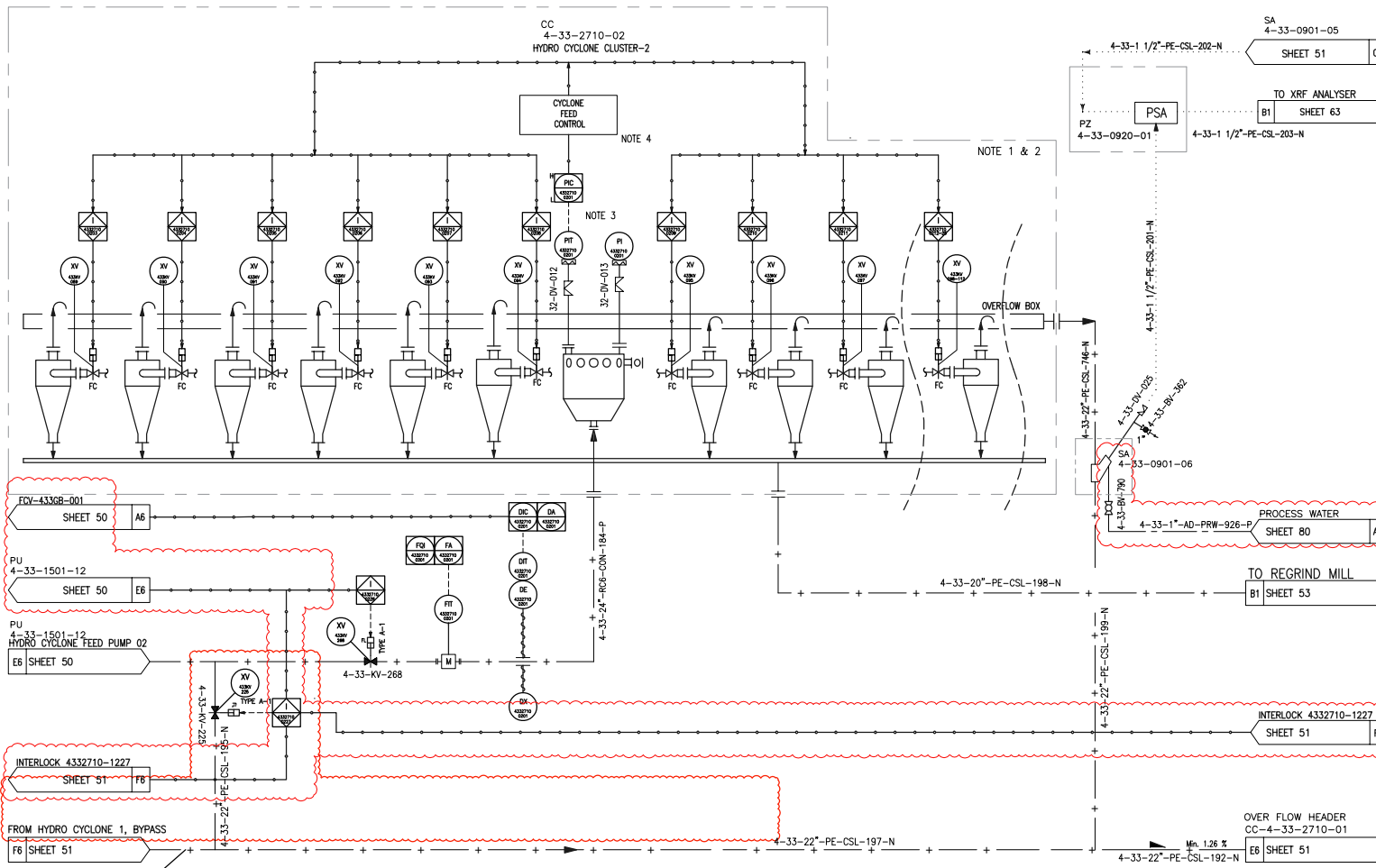
EPC Contractor:

Project:

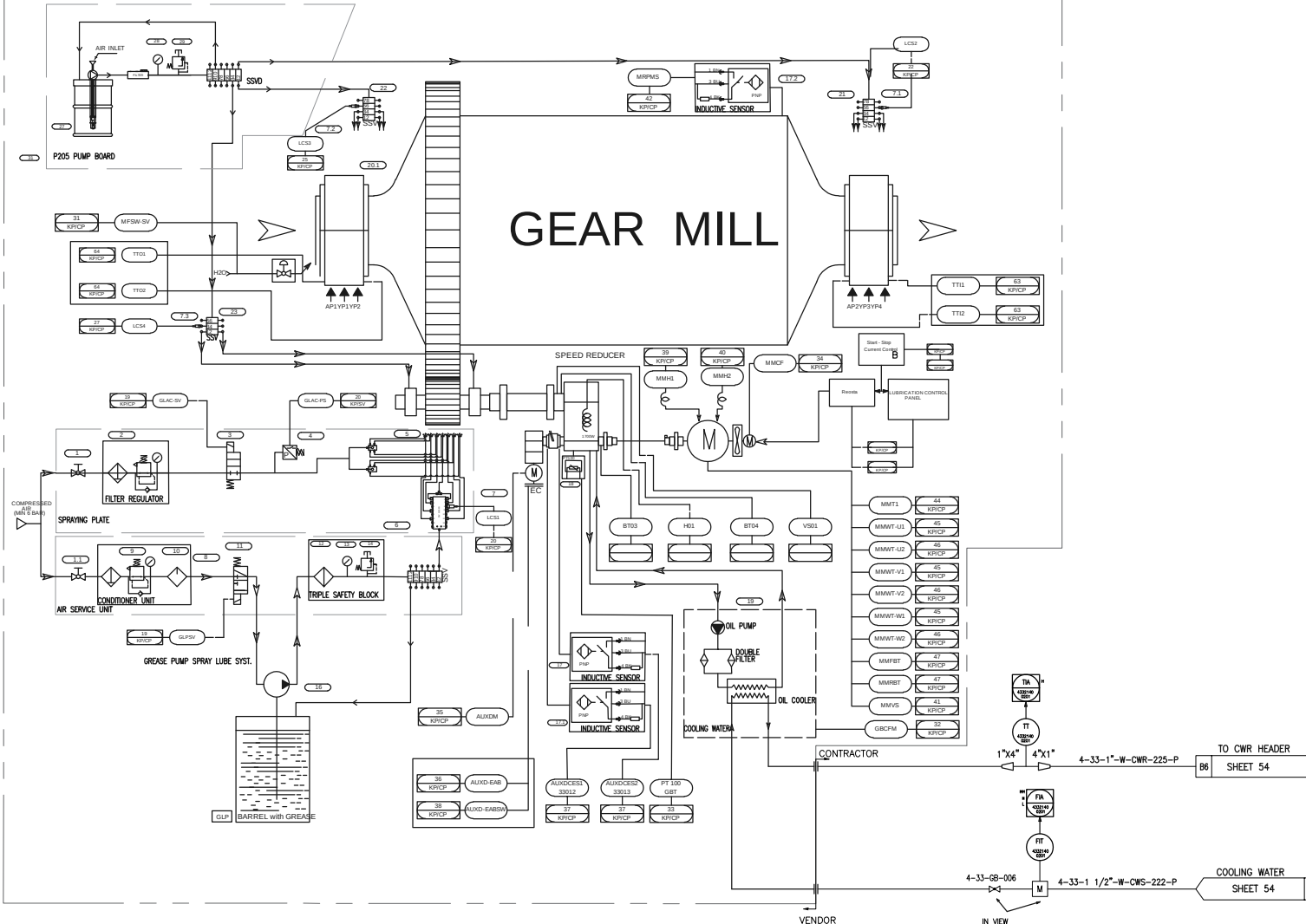
Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	52 OF 80	05
Library code:	303-B03-0000-00-PR-PID-025-05					00



GEAR MILL



REGRIND BALL MILL BEARING LUBE SYSTEM 2 OF 2

REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

1. DETAIL P&ID OF THIS EQUIPMENT WILL BE PROVIDED BY VENDOR. THIS IS SAMPLE P&ID DRAWING (FOR INFORMATION).
2. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.02	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

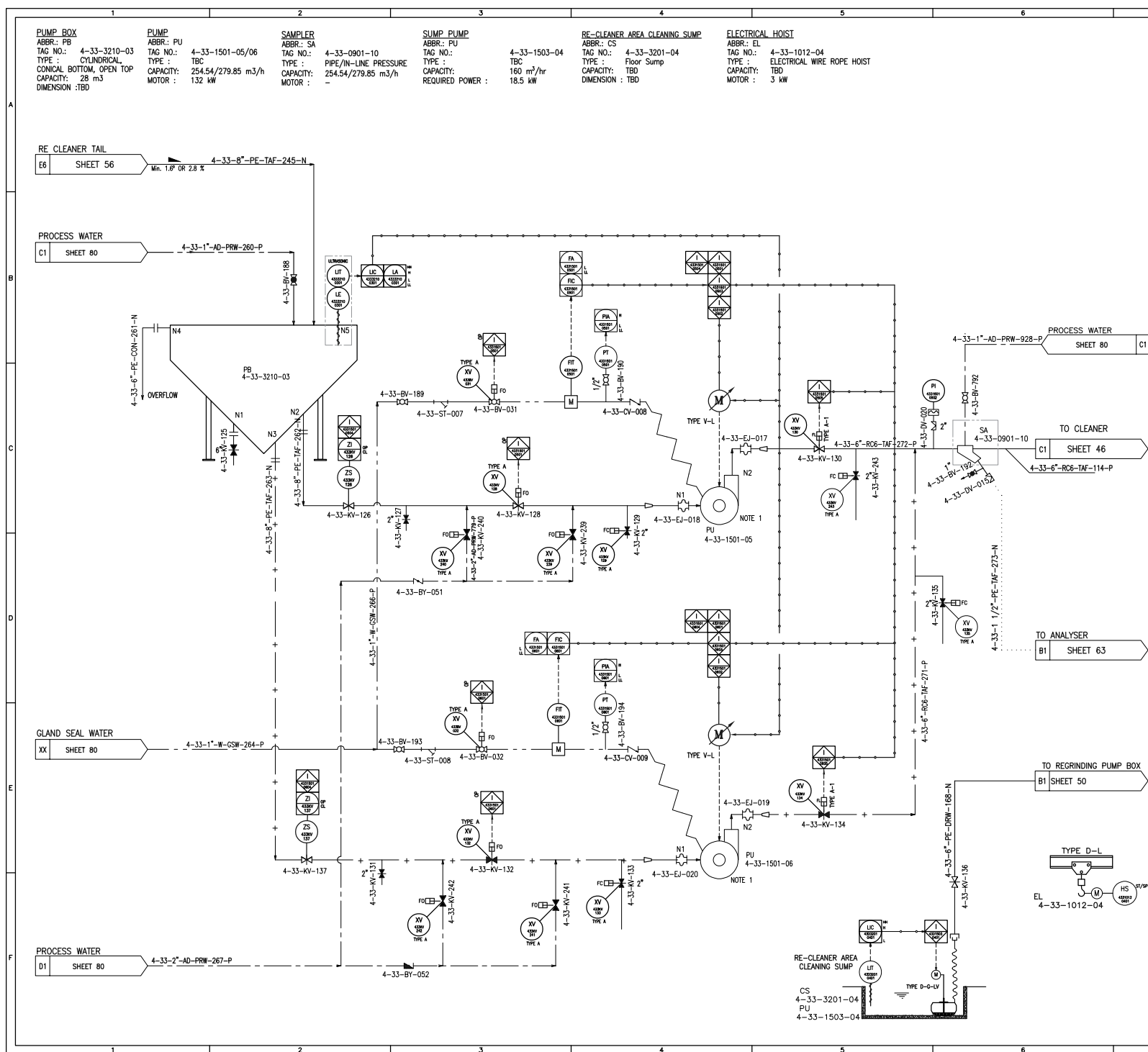
Consultant: EPC Contractor:

Project:

Title:

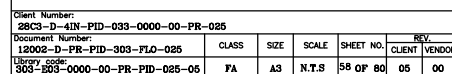
P&ID FOR FLOTATION AREA-33

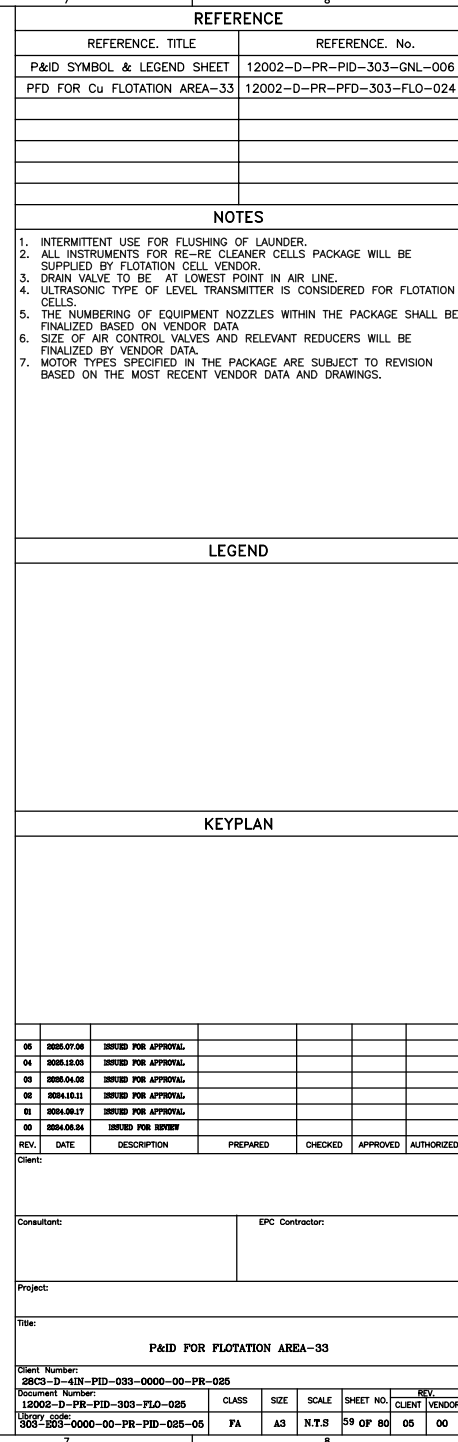
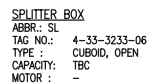
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Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	55 OF 80	05 00
Library Code:	303-203-0000-00-PR-PID-025-05					



7		8	
REFERENCE			
REFERENCE. TITLE		REFERENCE. No.	
P&ID SYMBOL & LEGEND SHEET		12002-D-PR-PID-303-GNL-006	
PFD FOR Cu FLOTATION AREA-33		12002-D-PR-PFD-303-FLO-024	
NOTES			
1. PUMPS TO BE OPERATED AS DUTY & STANDBY. 2. MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS. 3. ELECTRICAL HOIST USED FOR SUMP PUMP MAINTENANCE. 4. THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION.			
LEGEND			

PUMP
 ABBR.: PU
 TAG NO.: 4-33-1501-07/08
 TYPE : TBC
 CAPACITY: 262.78/303.23 m3/h
 MOTOR : 30 kW





PUMP BOX
ABBR.: PB
TAG NO.: 4-33-3210-05
TYPE : CYLINDRICAL, CONICAL BOTTOM,
OPEN TOP
CAPACITY: 35 m³
DIMENSION : TBD

PUMP
ABBR.: PU
TAG NO.: 4-33-1501-09/10
TYPE : TBD
CAPACITY: 173.19/199.83 m³/h
MOTOR : 55 kW

SAMPLER
ABBR.: SA
TAG NO.: 4-33-0901-12
TYPE : PIPE/IN-LINE PRESSURE
CAPACITY: 173.19/199.83 m³/h
MOTOR : -

SPLITTER BOX

D1 SHEET 59

RE-RE CLEANER

F6 SHEET 59

PROCESS WATER

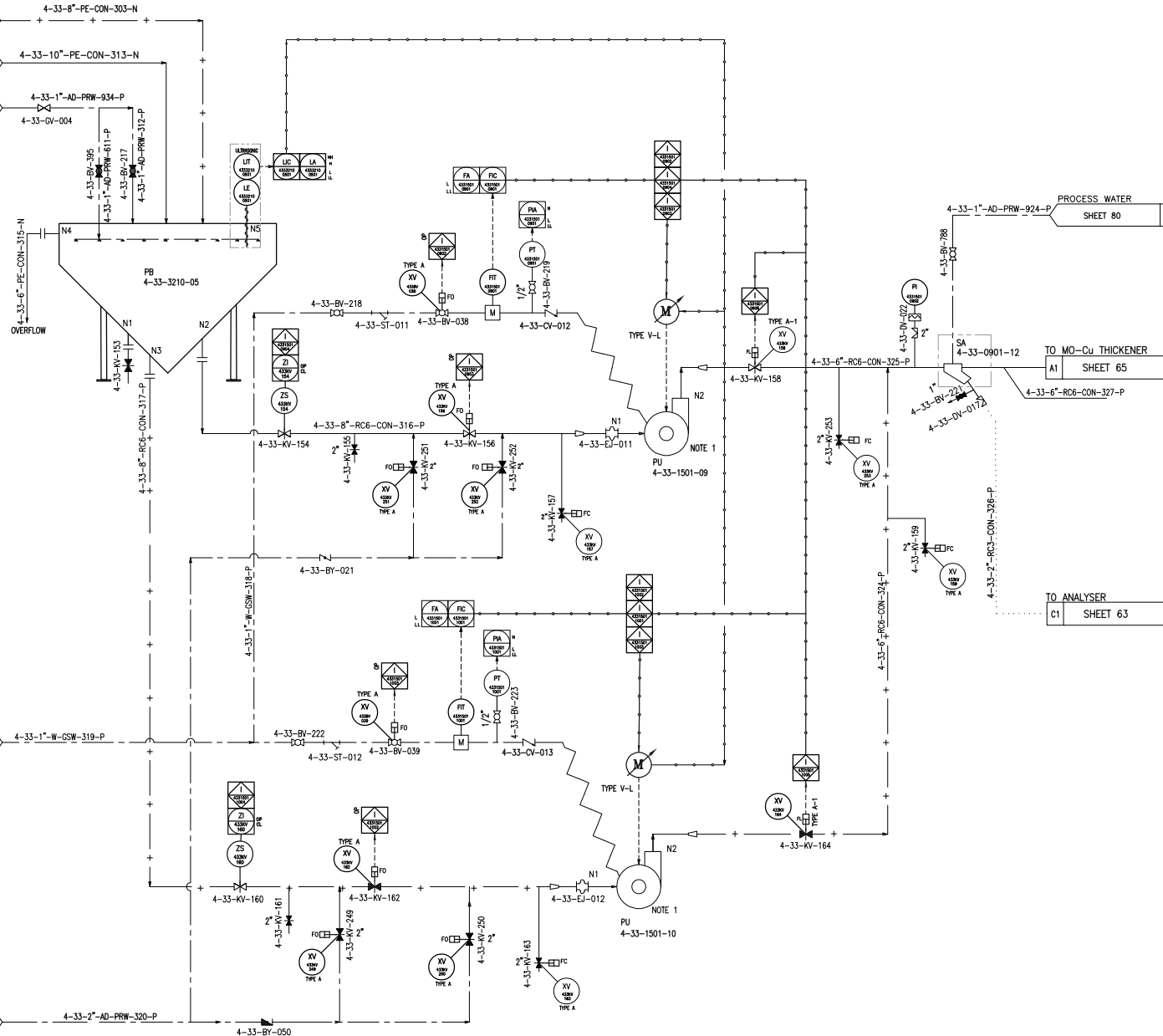
B1 SHEET 80

GLAND SEAL WATER

XX SHEET 80

PROCESS WATER

D1 SHEET 80



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- PUMPS TO BE OPERATED AS DUTY & STANDBY.
- MORE REINFORCED RUBBER HOSE MATERIAL SHOULD BE USED IN THE DISCHARGE PIPES OF SLURRY PUMPS.
- THE REDUCER TYPE WILL BE UPDATED ACCORDING TO THE PUMP VENDOR INFORMATION.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2008.07.08	ISSUED FOR APPROVAL				
04	2008.12.03	ISSUED FOR APPROVAL				
03	2008.04.02	ISSUED FOR APPROVAL				
02	2008.10.11	ISSUED FOR APPROVAL				
01	2008.09.17	ISSUED FOR APPROVAL				
00	2008.06.04	ISSUED FOR REVIEW				

Client:

Consultant:

EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	50 OF 80	05
Library code:	303-B03-0000-00-PR-PID-025-05					00

XRF ANALYZER
ABBR.: XZ
TAG NO.: 4-33-0920-02
TYPE: -
CAPACITY: 3/6 m³/h
MOTOR: 5 kW

PUMP
ABBR.: PU
TAG NO.: 4-33-1501-17/18
TYPE: VERTICAL
CAPACITY: 24 m³/h
MOTOR: 7.5 kW

PUMP
ABBR.: PU
TAG NO.: 4-33-1501-19/20
TYPE: VERTICAL
CAPACITY: 9 m³/h
MOTOR: 7.5 kW

FROM CONDITIONING TANK
C6 SHEET 75
12002.D.PR.PID.303.GRD.023

FROM FINAL COMBINED TAILS
E6 SHEET 61

FROM TAILING OF ROUGHER BANK
B6 SHEET 61

FROM CLEANER SCAVENGER TAIL
B1 SHEET 62

ROUGHER CONCENTRATE
D6 SHEET 61

SCAVENGER CONCENTRATE
B1 SHEET 62

COMBINED REGRIND CYCLONE D.F.
C6 SHEET 52

RE-CLEANER TAILS
D6 SHEET 57

ROUGHER CONC. BYPASS
D6 SHEET 45

CLEANER CONCENTRATE
D6 SHEET 48

RE-CLEANER CONCENTRATE
D6 SHEET 58

RE-RE-CLEANER CONCENTRATE
D6 SHEET 60

4-33-1 1/2"-PE-SLU-550-N

4-33-1 1/2"-PE-TAF-163-N

4-33-1 1/2"-PE-TAF-162-N

4-33-1 1/2"-PE-TAF-160-N

4-33-1 1/2"-PE-CON-083-N

4-33-1 1/2"-PE-CON-136-N

4-33-1 1/2"-PE-CSL-203-N

4-33-1 1/2"-PE-TAF-273-N

4-33-1 1/2"-PE-CON-095-N

4-33-1 1/2"-PE-CON-156-N

4-33-2"-RC3-CON-291-N

4-33-2"-RC3-CON-326-N

COOLING UNIT
XX 12002.D.PR.PID.303.GRD.021
CWS HEADER

4-33-1/2"-W-CWS-328-N

4-33-08-010

IN VIEW

RE-RE-CLEANER
FEED PUMP BOX
SHEET 58
B1

4-33-2"-PE-CON-275-N

4-33-2"-PE-CON-340-N

4-33-01-026

4-33-01-027

4-33-01-028

4-33-01-029

4-33-01-030

4-33-01-031

4-33-01-032

4-33-01-033

4-33-01-034

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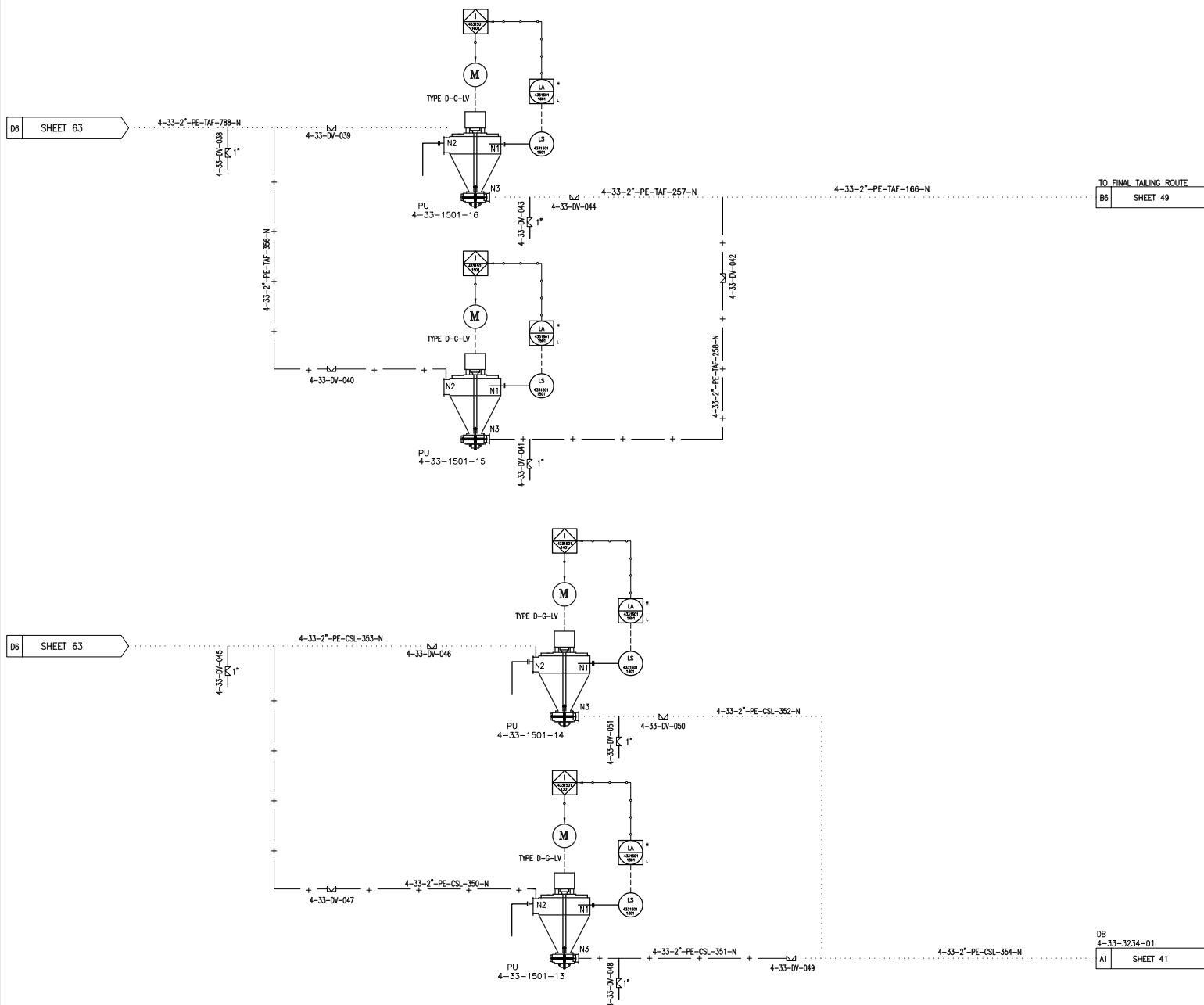
4-33-01-259

4-33-01-260

4-33-01-261

4-33-01-262

<u>PUMP</u>	<u>PUMP</u>
ABBR.: PU	ABBR.: PU
TAG NO.: 4-33-1501-13/14	TAG NO.: 4-33-1501-15/16
TYPE : VERTICAL	TYPE : VERTICAL
CAPACITY: 12 m ³ /h	CAPACITY: 30 m ³ /h
MOTOR : 7.5 kW	MOTOR : 7.5 kW



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-001
PDF FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-02

NOTES

1. METHOD OF TRANSFERRING SLURRY FROM SAMPLER TO ANALYZER AND RETURNED LINE TO DEDICATED POINTS WILL BE FINALIZED AFTER PLANT LAYOUT AND SECTION IS COMPLETED.
2. PUMPS TO BE OPERATED AS DUTY & STANDBY.
3. THE NUMBER OF PUMPS WILL BE FINALIZED BASED ON ARRANGEMENT.
4. SIZE OF PIPE WILL BE FINALIZED AFTER SAMPLER FLOW RATE CONFIRMED BY RELEVANT VENDOR.
5. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
6. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.02	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.34	ISSUED FOR REVIEW				

Client:

Consultant:

EPC Contractor	
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Project:

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-4IN-PID-033-0000-00-PR-025							
Document Number: 12002-D-PR-PID-303-FLO-025		CLASS	SIZE	SCALE	SHEET NO.	REV.	
Library code: 303-003-0000-00-PR-PID-025-05		FA	A3	N.T.S	64 OF 80	05	00
						CLIENT	VENDOR

CALIBRATION POT

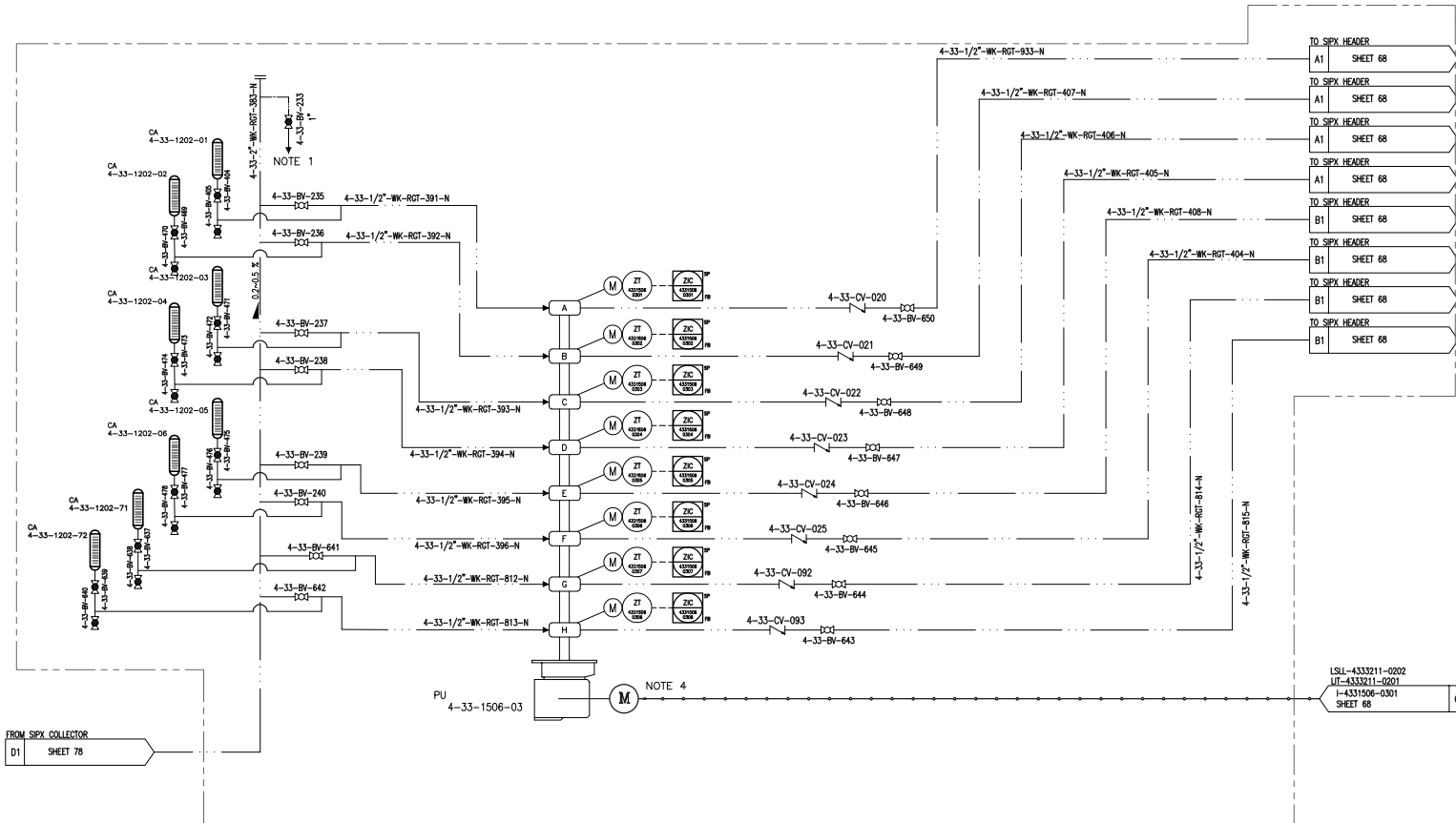
ABBR.: CA
TAG NO.: 4-33-1202-01~06
TYPE : TBD
CAPACITY: TBD ml
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 4-33-1506-03
TYPE : TBD
CAPACITY: 19.5/22.5 L/min
MOTOR : 1.1 KW

CALIBRATION POT

ABBR.: CA
TAG NO.: 4-33-1202-71/72
TYPE : TBD
CAPACITY: TBD ml
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

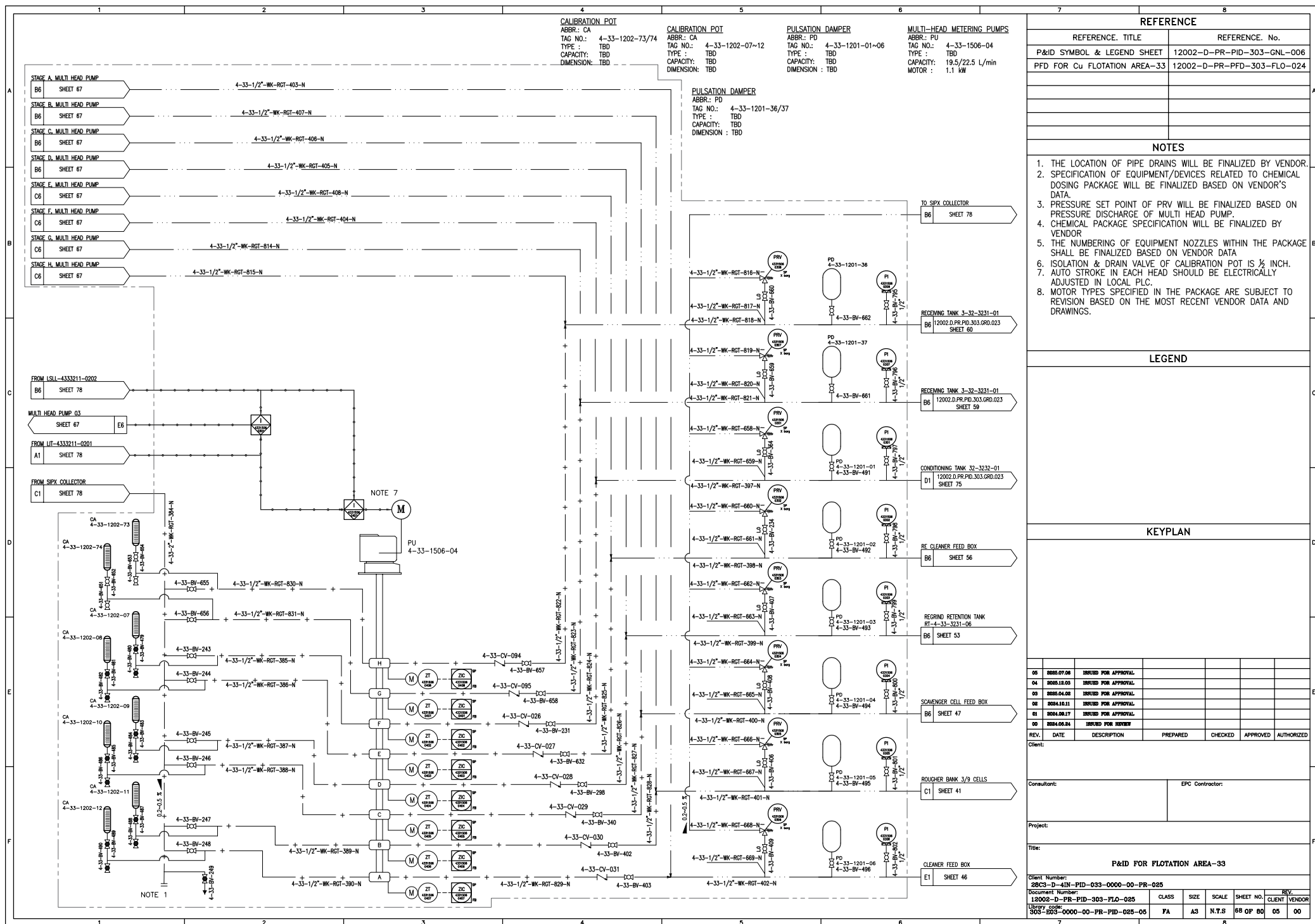
NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
- AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

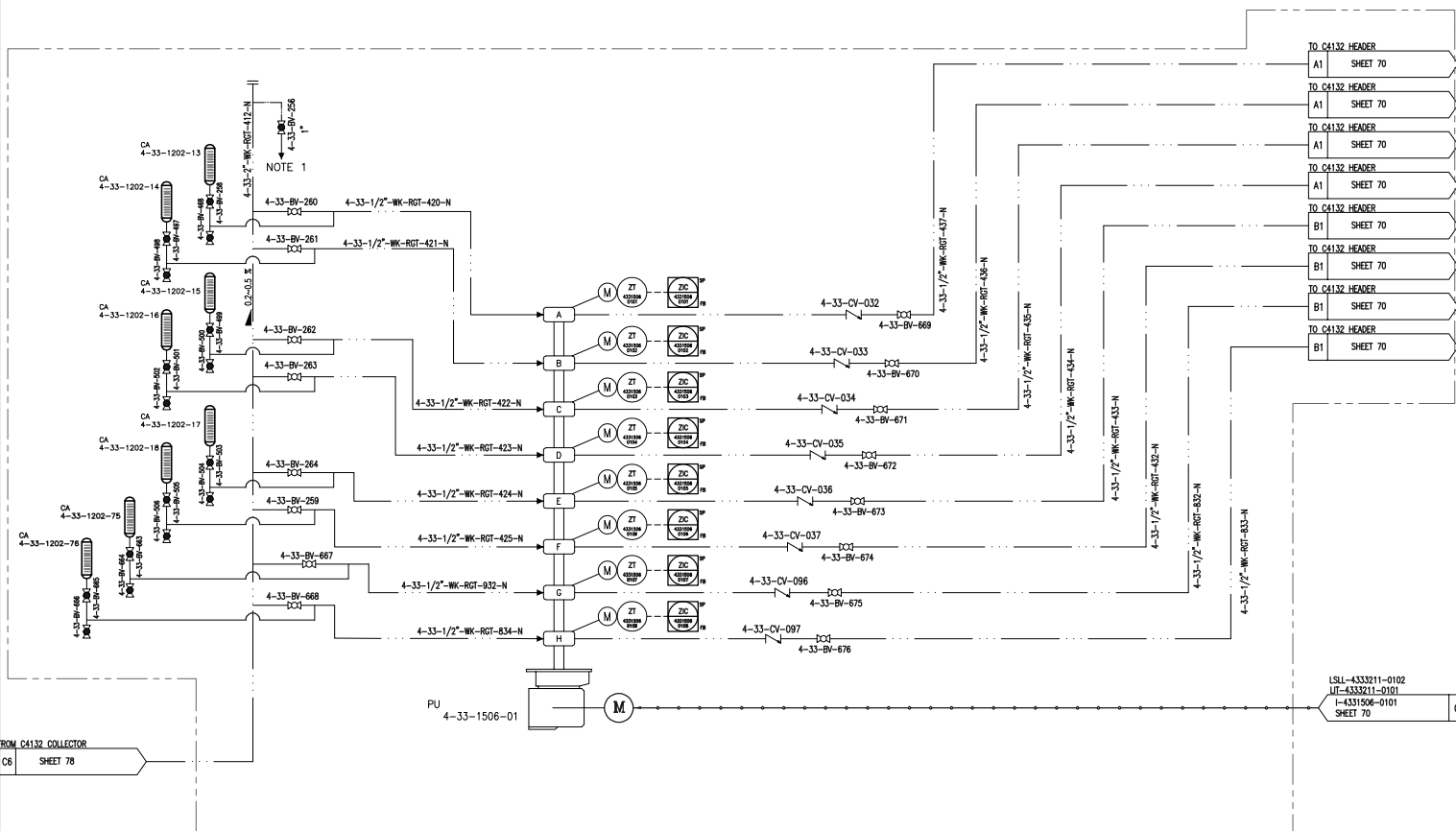
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				
Client:						
Consultant:			EPC Contractor:			
Project:						
Title:						
P&ID FOR FLOTATION AREA-33						
Client Number:						
Document Number:						
Library code:						
303-503-0000-00-PR-PID-025-05						
CLASS	SIZE	SCALE	SHEET NO.	REV.	CLIENT VENDOR	
FA	A3	N.T.S	67 OF 80	05	00	



ABBR.: CA
TAG NO.: 4-33-1202-13~18
TYPE.: TBD
CAPACITY: TBD
DIMENSION: TBD

ABBR.: PU
TAG NO.: 4-33-1506-01
TYPE : TBD
CAPACITY: 2/2.25 L/min
MOTOR : 15 kW

ABBREV.: CA
TAG NO.: 4-33-1202-75/76
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-001
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-021

1. CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR.
2. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA.
3. ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
4. AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
5. MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

TABLE 1	
Summary of the 1997-1998 and 1998-1999 School Years	
1997-1998	1998-1999
Number of schools: 10 Number of teachers: 10 Number of students: 10 Number of classrooms: 10 Number of students per classroom: 10 Number of students per teacher: 10 Number of students per school: 10 Number of students per district: 10 Number of students per state: 10 Number of students per country: 10 Number of students per world: 10	Number of schools: 10 Number of teachers: 10 Number of students: 10 Number of classrooms: 10 Number of students per classroom: 10 Number of students per teacher: 10 Number of students per school: 10 Number of students per district: 10 Number of students per state: 10 Number of students per country: 10 Number of students per world: 10

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06	2020.07.08	ISSUED FOR APPROVAL				
04	2020.12.03	ISSUED FOR APPROVAL				
03	2020.04.08	ISSUED FOR APPROVAL				
08	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
02	2024.05.24	ISSUED FOR REVIEW				

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
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Client:

Consultant:	EPC Contractor:
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Project:	
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Title: _____

P&ID FOR FLOTATION AREA-39

Client Number: _____

28C3-D-4IN-PID-033-0000-00-PR-025					
Document Number					REV

12002-D-PR-PID-303-FLO-025	CLASS	SIZE	SCALE	SHEET NO.	CLIENT	VENDOR
12002-D-PR-PID-303-FLO-025						

303-E03-0000-00-PR-PID-025-05	FA	A3	N.T.S	69 OF 80	05	00
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CALIBRATION POT

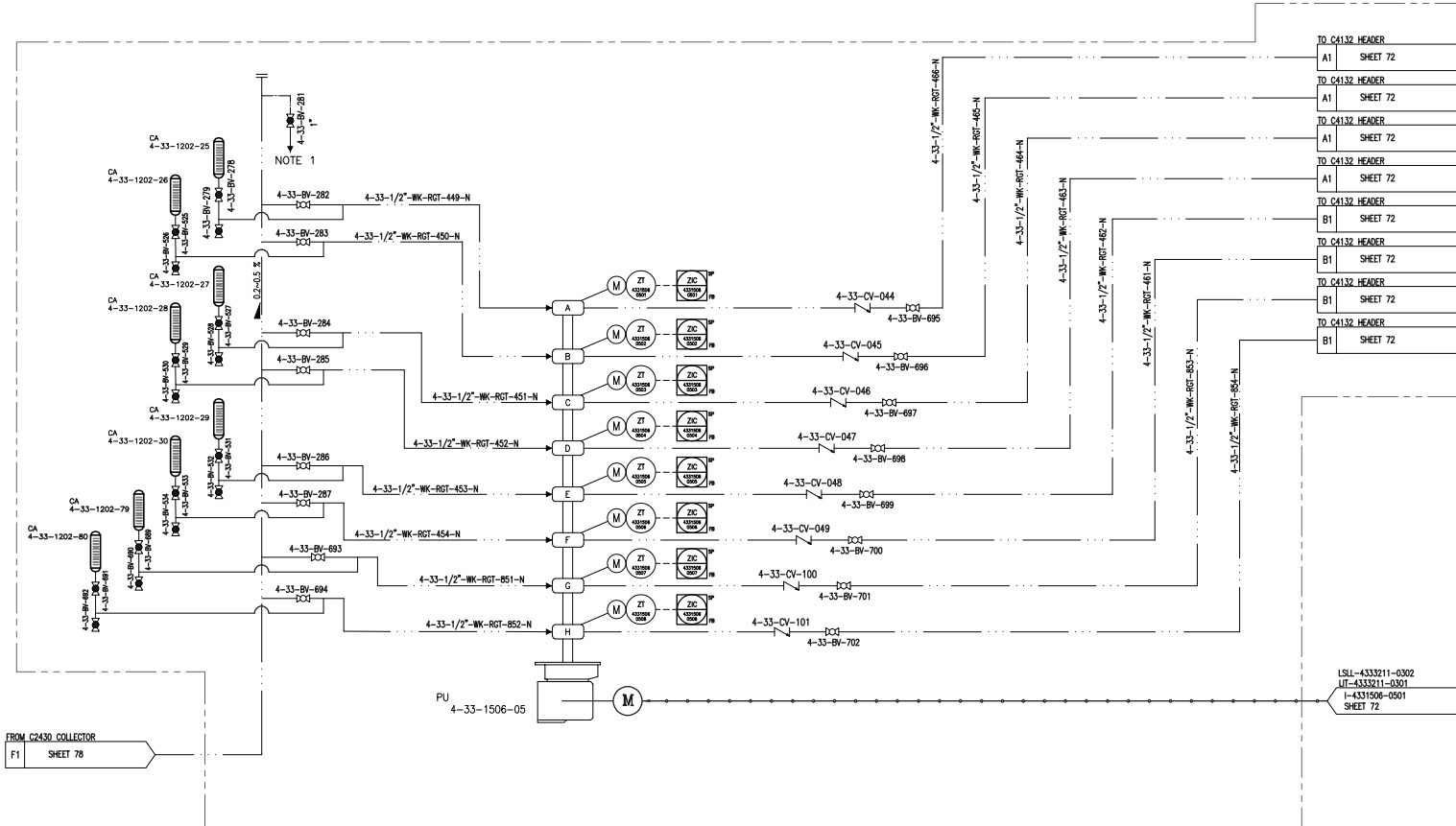
ABBR.: CA
TAG NO.: 4-33-1202-25~30
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 4-33-1506-05
TYPE : TBD
CAPACITY: 1.6/1.9 L/min
MOTOR : 1.1 kW

CALIBRATION POT

ABBR.: CA
TAG NO.: 4-33-1202-79/80
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
- AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-41N-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	71 OF 80	05 00
Library Code:	303-203-0000-00-PR-PID-025-05					

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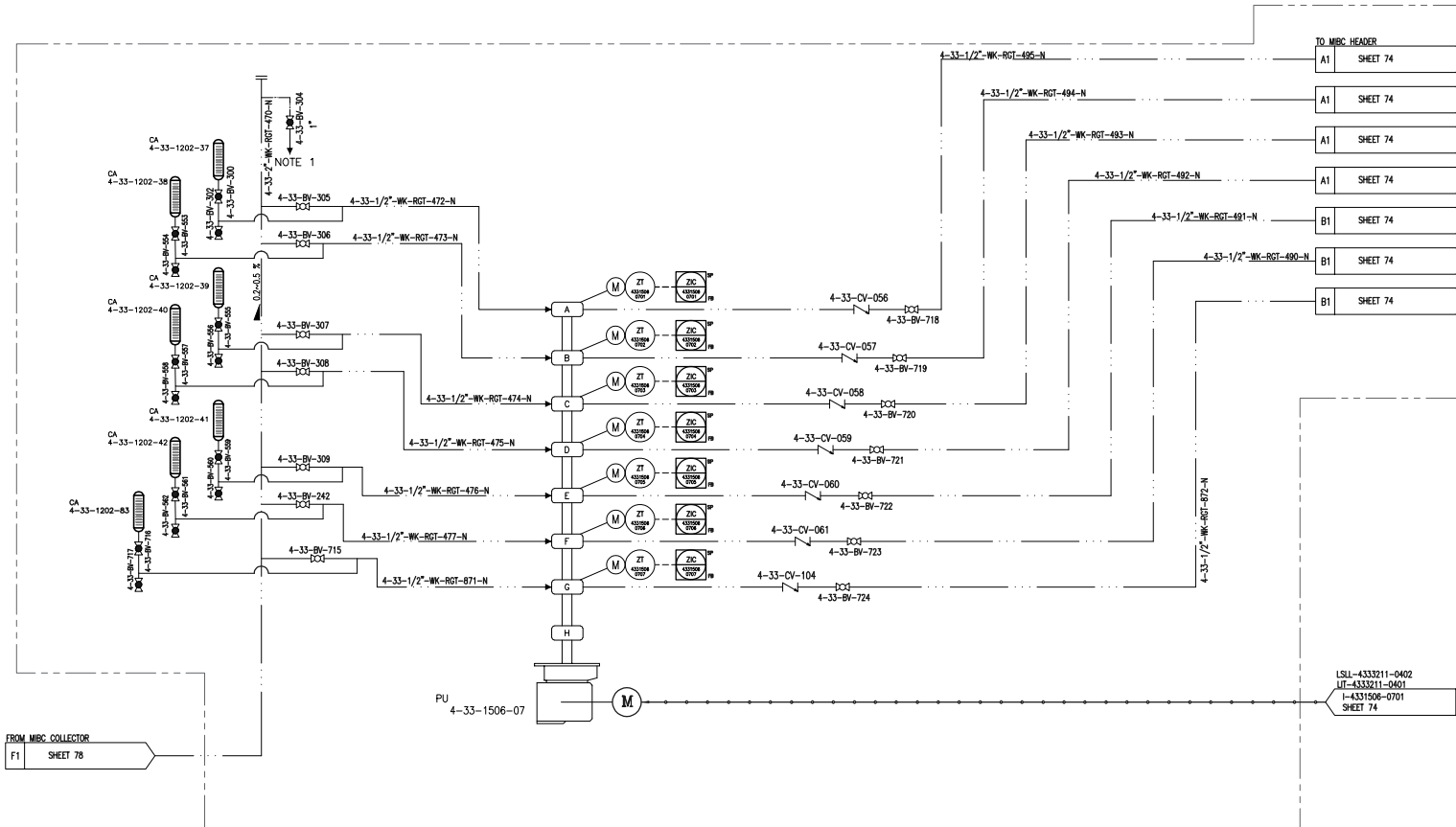
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TAG NO.: 4-33-1202-37~42
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 4-33-1506-07
TYPE : TBD
CAPACITY: 2.4/2.8 L/min
MOTOR : 1.1 kW

CALIBRATION POT

ABBR.: CA
TAG NO.: 4-33-1202-83
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH. AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

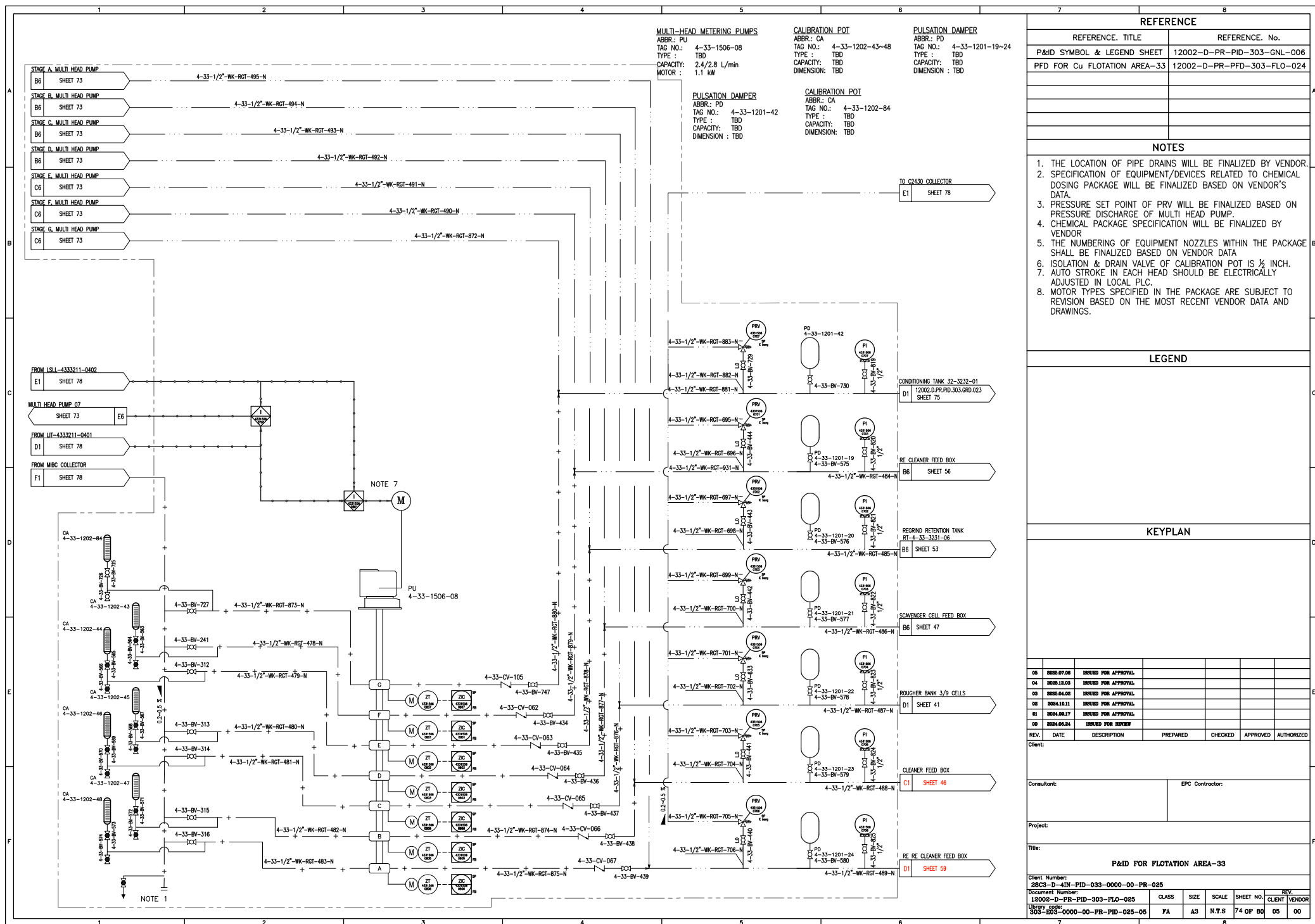
Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-4IN-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	73 OF 80	05 00
Library code:	303-203-0000-00-PR-PID-025-05					



CALIBRATION POT

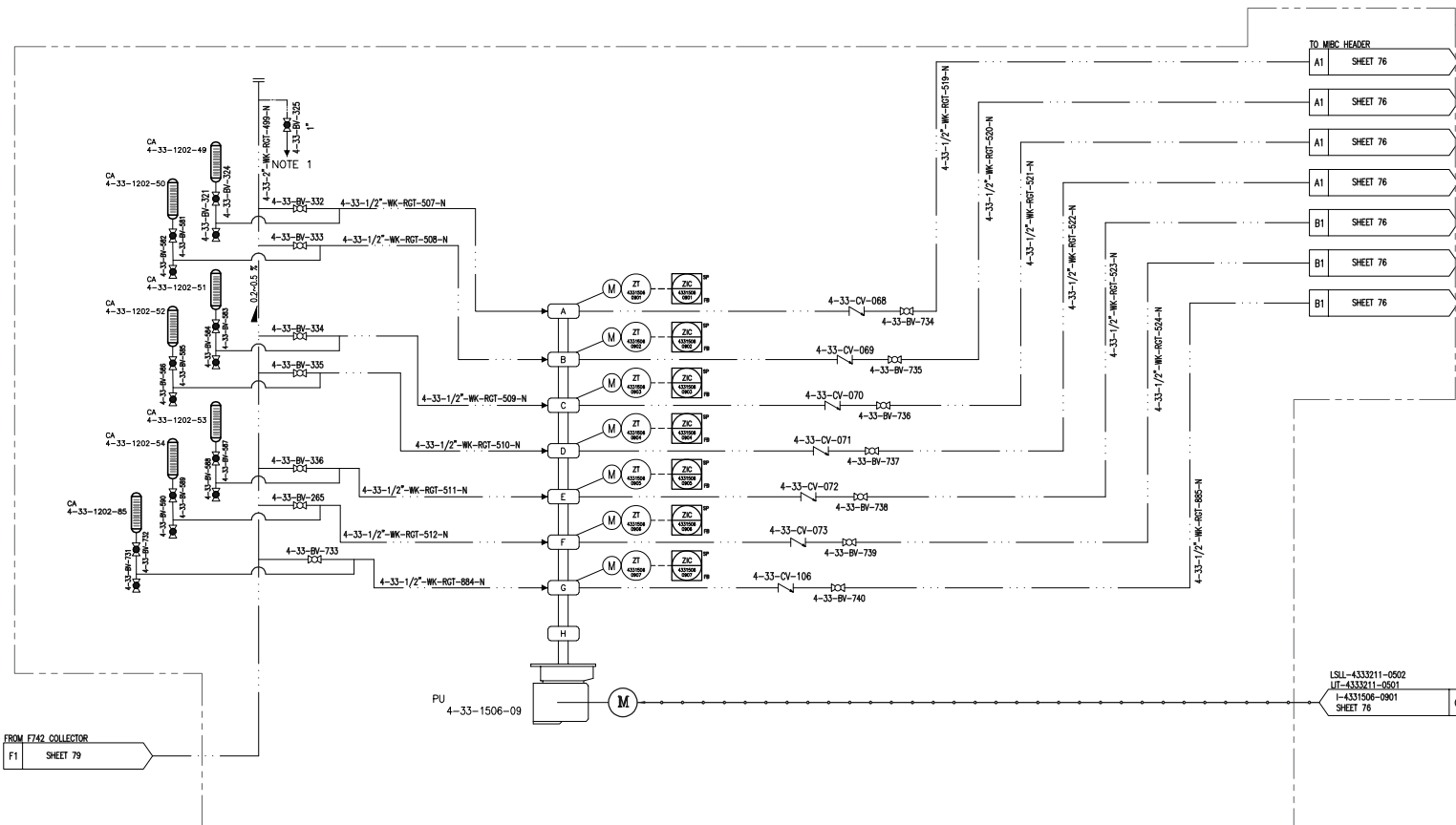
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TAG NO.: 4-33-1202-49-54
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD

MULTI-HEAD METERING PUMPS

ABBR.: PU
TAG NO.: 4-33-1506-09
TYPE : TBD
CAPACITY: 1.9/2.3 L/min
MOTOR : 1.1 kW

CALIBRATION POT

ABBR.: CA
TAG NO.: 4-33-1202-85
TYPE : TBD
CAPACITY: TBD
DIMENSION: TBD



REFERENCE

REFERENCE. TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-006
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-024

NOTES

- CHEMICAL PACKAGE SPECIFICATION WILL BE FINALIZED BY VENDOR
- THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA
- ISOLATION & DRAIN VALVE OF CALIBRATION POT IS 1/2 INCH.
- AUTO STROKE IN EACH HEAD SHOULD BE ELECTRICALLY ADJUSTED IN LOCAL PLC.
- MOTOR TYPES SPECIFIED IN THE PACKAGE ARE SUBJECT TO REVISION BASED ON THE MOST RECENT VENDOR DATA AND DRAWINGS.

LEGEND

KEYPLAN

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED
05	2025.07.08	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
00	2024.06.24	ISSUED FOR REVIEW				

Client:

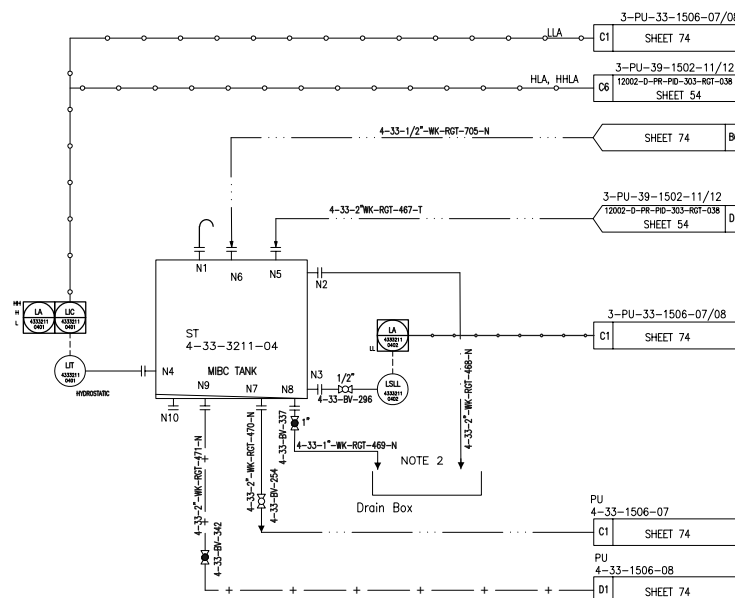
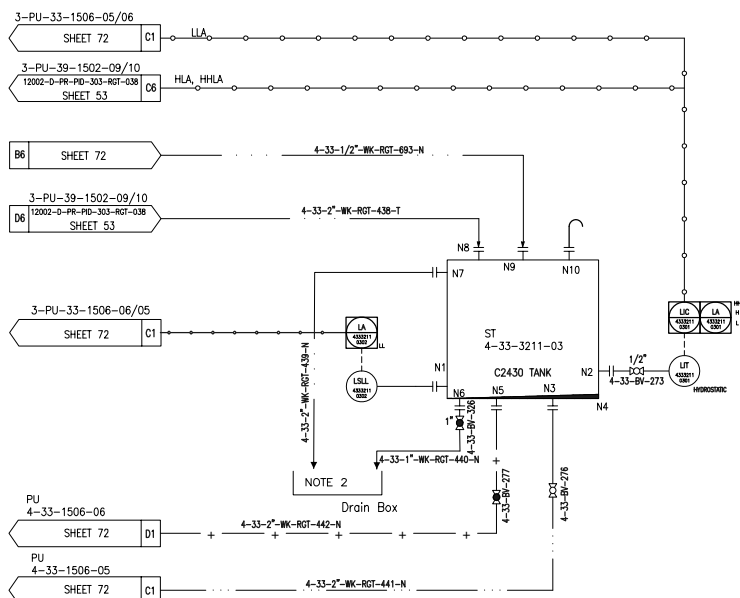
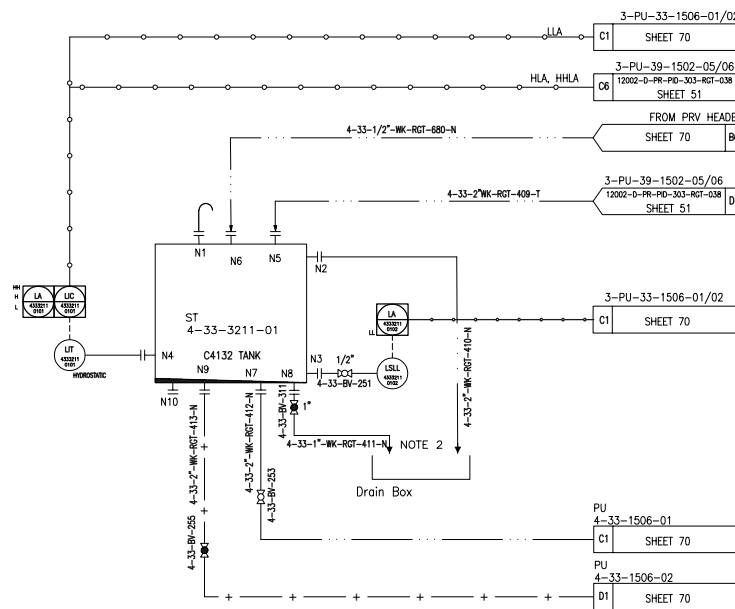
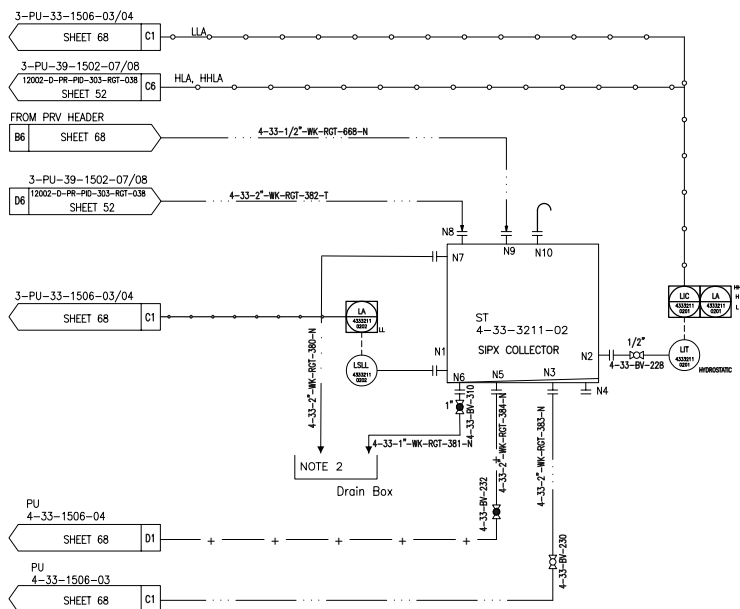
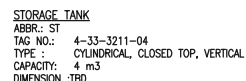
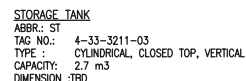
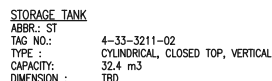
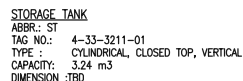
Consultant: EPC Contractor:

Project:

Title:

P&ID FOR FLOTATION AREA-33

Client Number:	28C3-D-4IN-PID-033-0000-00-PR-025	CLASS	SIZE	SCALE	SHEET NO.	REV.
Document Number:	12002-D-PR-PID-303-FLO-025	FA	A3	N.T.S	75 OF 80	05 00
Library code:	303-203-0000-00-PR-PID-025-05					



REFERENCE	
REFERENCE, TITLE	REFERENCE. No.
P&ID SYMBOL & LEGEND SHEET	12002-D-PR-PID-303-GNL-001
PFD FOR Cu FLOTATION AREA-33	12002-D-PR-PFD-303-FLO-021

- | NOTES |
|---|
| 1. THE LOCATION OF PIPE DRAINS WILL BE FINALIZED BY VENDOR |
| 2. DRAIN BOX IS CONSIDERED IN GROUND FLOOR. |
| 3. SPECIFICATION OF EQUIPMENT/DEVICES RELATED TO CHEMICAL DOSING PACKAGE WILL BE FINALIZED BASED ON VENDOR'S DATA |
| 4. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA |

LEGEND	
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KEYPLAN

05	2025.07.06	ISSUED FOR APPROVAL				
04	2025.12.03	ISSUED FOR APPROVAL				
03	2025.04.08	ISSUED FOR APPROVAL				
02	2024.10.11	ISSUED FOR APPROVAL				
01	2024.09.17	ISSUED FOR APPROVAL				
2024.08.24		ISSUED FOR REVIEW				
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED

Client: _____

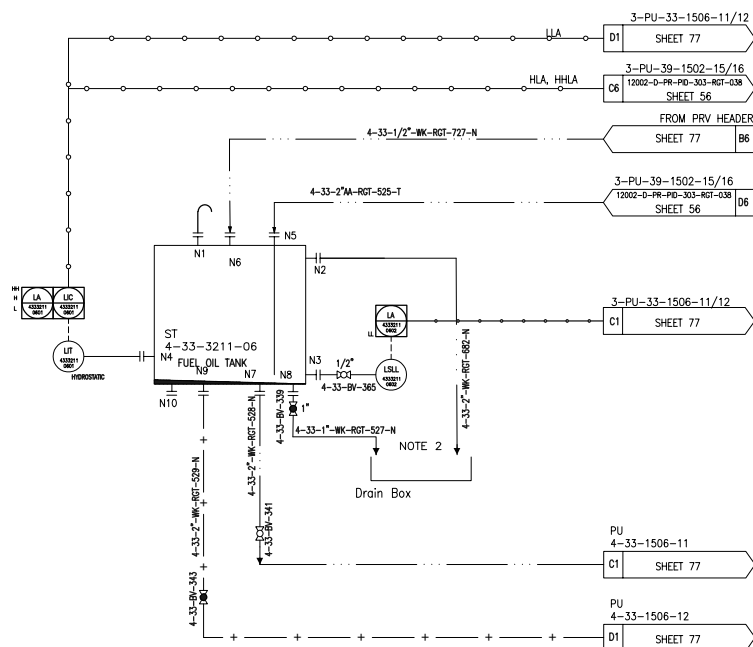
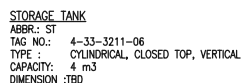
Consultant:	EPC Contractor:
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Project:	
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Title: _____

P&ID FOR FLOTATION AREA-33

Client Number: 28C3-D-4IN-PID-033-0000-00-PR-025									
Document Number: 12002-D-PR-PID-303-FLO-025				CLASS	SIZE	SCALE	SHEET NO.	REV.	
Library code: 303-E03-0000-00-PR-PID-025-05				FA	A3	N.T.S	78 OF 80	05	00



7		8			
REFERENCE					
REFERENCE. TITLE			REFERENCE. No.		
P&ID SYMBOL & LEGEND SHEET			12002-D-PR-PID-303-GNL-006		
PFD FOR Cu FLOTATION AREA-33			12002-D-PR-PFD-303-FLO-024		
NOTES					
1. THE LOCATION OF PIPE DRAINS WILL BE FINALIZED BY VENDOR. 2. DRAIN BOX IS CONSIDERED IN GROUND FLOOR. 3. SPECIFICATION OF EQUIPMENT/DEVICES RELATED TO CHEMICAL DOSING PACKAGE WILL BE FINALIZED BASED ON VENDOR'S DATA. 4. THE NUMBERING OF EQUIPMENT NOZZLES WITHIN THE PACKAGE SHALL BE FINALIZED BASED ON VENDOR DATA					
LEGEND					
KEYPLAN					
05	0005.07.06	ISSUED FOR APPROVAL			
04	0005.12.05	ISSUED FOR APPROVAL			
03	0005.04.08	ISSUED FOR APPROVAL			
02	0004.10.11	ISSUED FOR APPROVAL			
01	0004.09.17	ISSUED FOR APPROVAL			
00	0004.09.04	ISSUED FOR REVIEW			
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED AUTHORIZED
Client:					
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Project:					
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12002-D-PR-PID-303-FLO-025			FA	A3	N.T.S
Library code:			SHEET NO.		
303-003-0000-00-PR-PID-025-05			79 OF 80		
			REV.		
			CLIENT VENDOR		
			05 00		

