



## PROCESS DESCRIPTION



### 3. COARSE CLEANING AND SCREENING

#### 3.1 Application

Prescreened stock from the drop chests and the bad batch chest is blended in the blend chest and then cleaned in two parallel high density cleaners at a medium consistency of approximately 3-4%. Heavy particles like staples, pieces of glass, stones, small metal pieces, etc. are separated by centrifugal forces and collected in a reject chamber at the bottom of the cleaner (junk trap).

This junk trap operates on a timer, discharging the rejects to the rake classifier to separate water and heavies.

The stock is then screened in a three stage hole screening to reduce the amount of high surface debris. Reject of the final stage is discharged to a dumpster.

#### 3.2 Operation

Stock is fed consistency controlled from one of the drop chests to the blend chest by operator's choice. Additionally the operator can blend stock from the bad batch chest. If the content of the bad batch chest is not usable for production, it is pumped to the sludge chest for thickening and discharge. The bad batch chest should be emptied as soon as possible to be prepared for further bad batches.

All flows into the blend chest are flow controlled to allow the operator to choose setpoints or blending ratio.

Stock is mixed by the blend chest agitator. A level alarm indicates high and low level in the chest. The agitator does not run below a minimum level.



## PROCESS DESCRIPTION



Blended stock is consistency controlled and pumped to the HD-cleaners. A slow opening on-off valve protects the cleaners against water hammer. The cleaner pressure drop is controlled with hand valves. To maintain constant throughput of the cleaners at various production rates, a portion of the accepts stream is recirculated back to the blend chest, maintaining a constant accept pressure.

The separated heavies settle in the junk trap and are purged on a timer. The junk trap is isolated by closing the on-off top valve and discharged by opening the bottom valve. The bottom valve closes and the deaeration and fill water valves open to fill the junk trap with water. When it is filled, the top valve opens again to allow settling of rejects.

The feed flow to the Primary Coarse Screen is controlled with a valve on the accept line with overrides from the fine screen feed chest level and the differential pressure across the screen. The blend chest pump is interlocked with primary coarse screen drive. Rejects are fed flow ratio controlled to an operations setpoint (approximately 20% of the inlet dry stock, depending on the raw material reject content) into the Secondary Coarse Screen Feed Tank. The stock is agitated with an agitator controlled by the stock level. The tank level is controlled with Clear Water No. 1 via the Level Control Water No. 1 Pump.

Stock is pumped to the Secondary Coarse Screen operated under differential pressure control. Accepts are fed forward to the fine screen feed chest. The secondary coarse screen feed pump is interlocked with the secondary coarse screen drive. The rejects are flow controlled to the operator's setpoint (approximately 30% of inlet dry stock) and fed to the Rejectsorter level box.

This overflow controlled level box feeds by gravity to the Rejectsorter with a hand controlled pinch valve.

Accepts from the Rejectsorter feed back to the secondary coarse screen feed tank and rejects are discharged to a dumpster.



## PROCESS DESCRIPTION

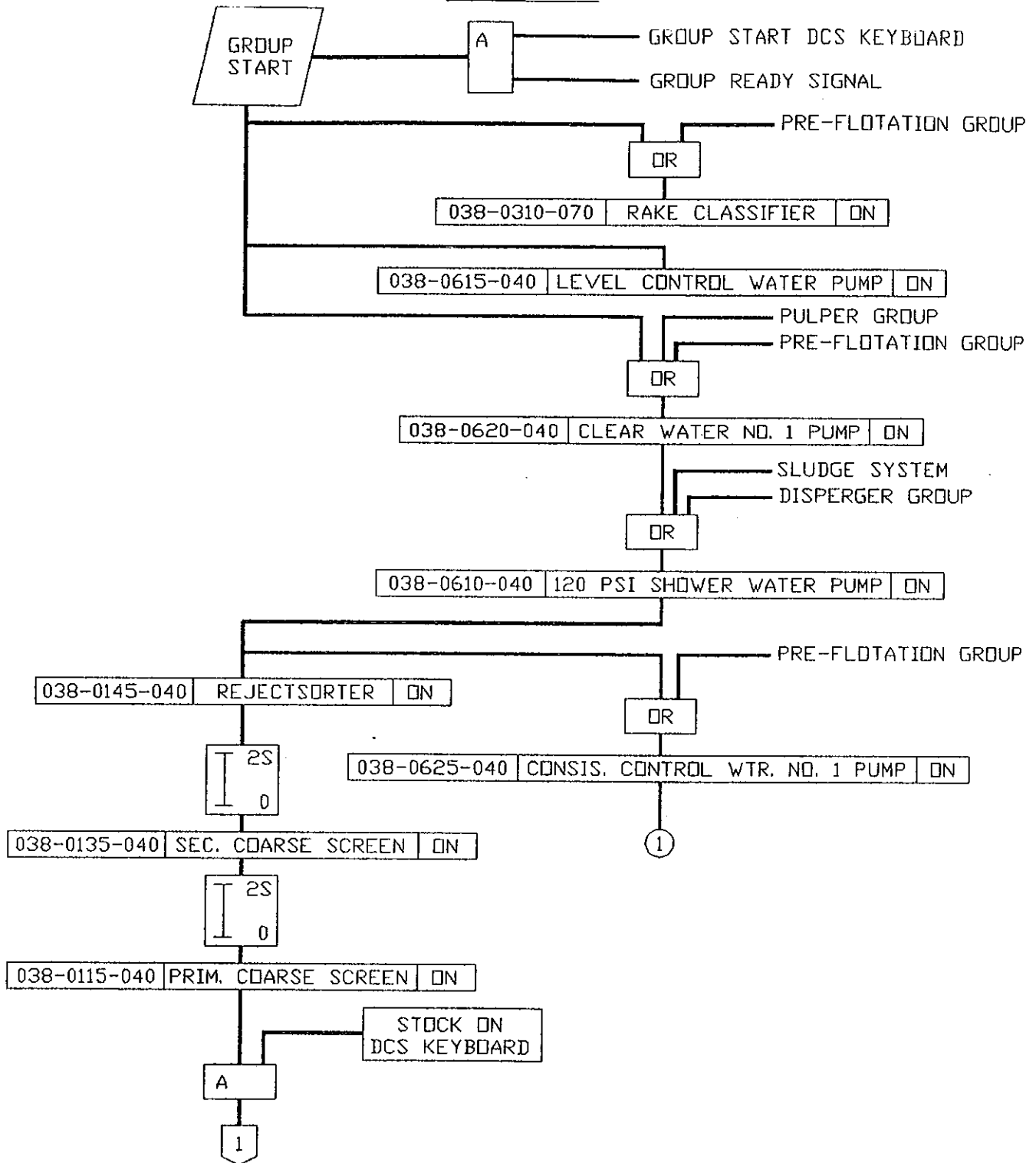


### 3.3 Starting Sequence of the Group

- Rejectsorter drive ready to start
- Secondary coarse screen ready to start
- Primary coarse screen ready to start
- Secondary coarse screen feed tank agitator ready to start
- Secondary coarse screen feed pump ready to start
- Blend chest pump ready to start
- Blend chest agitator ready to start

Find attached start/stop diagrams.

COARSE SCREENING  
GROUP START



2/16/93	CERTIFIED	AC	1
1/29/93	CERTIFIED	AC	0
12/21/92	PRELIMINARY	AC	A
DATE	REVISION	NAME	REV
SCALE : NONE	TITLE:		
SHEET 1 OF 2	COARSE SCREENING GROUP START/STOP DIAGRAM		
DRAWN BY AC	CHECKED KC	DATE 12/17/92	

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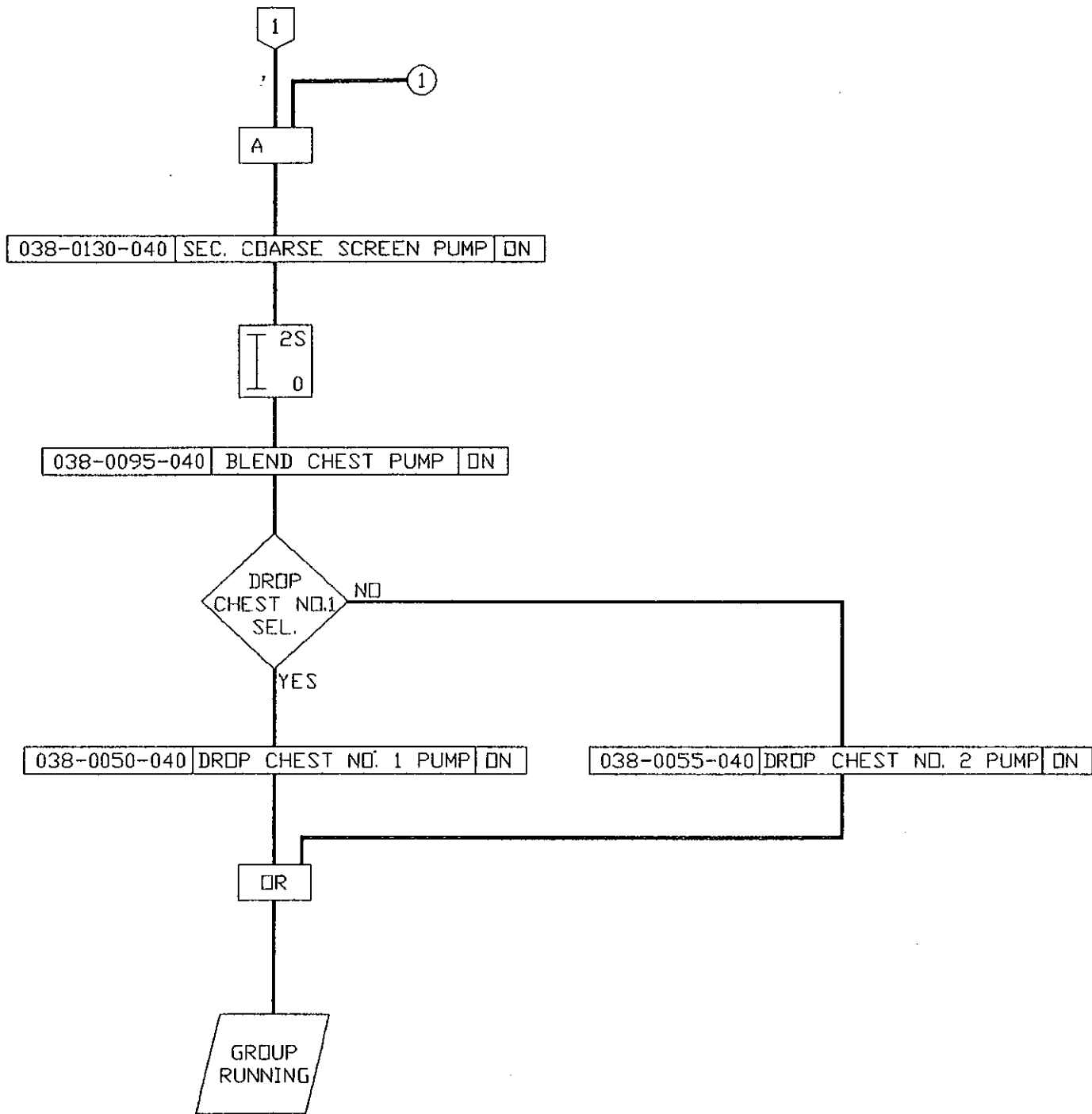
CLIENT DWG NO. 500-451

BEW DWG NO. TPI1-917-00430

BIRD ESCHER WYSS INC.  
MANSFIELD, MA

- CAD DRAWING -

COARSE SCREENING  
GROUP START



2/16/93	CERTIFIED	AC	1
1/29/93	CERTIFIED	AC	0
12/21/92	PRELIMINARY	AC	A
DATE	REVISION	NAME	REV
SCALE : NONE	TITLE: COARSE SCREENING GROUP START/STOP DIAGRAM		BEW DWG NO. TPI1-917-00430
SHEET 2 OF 2	DRAWN BY AC		BIRD ESCHER WYSS INC. MANSFIELD, MA
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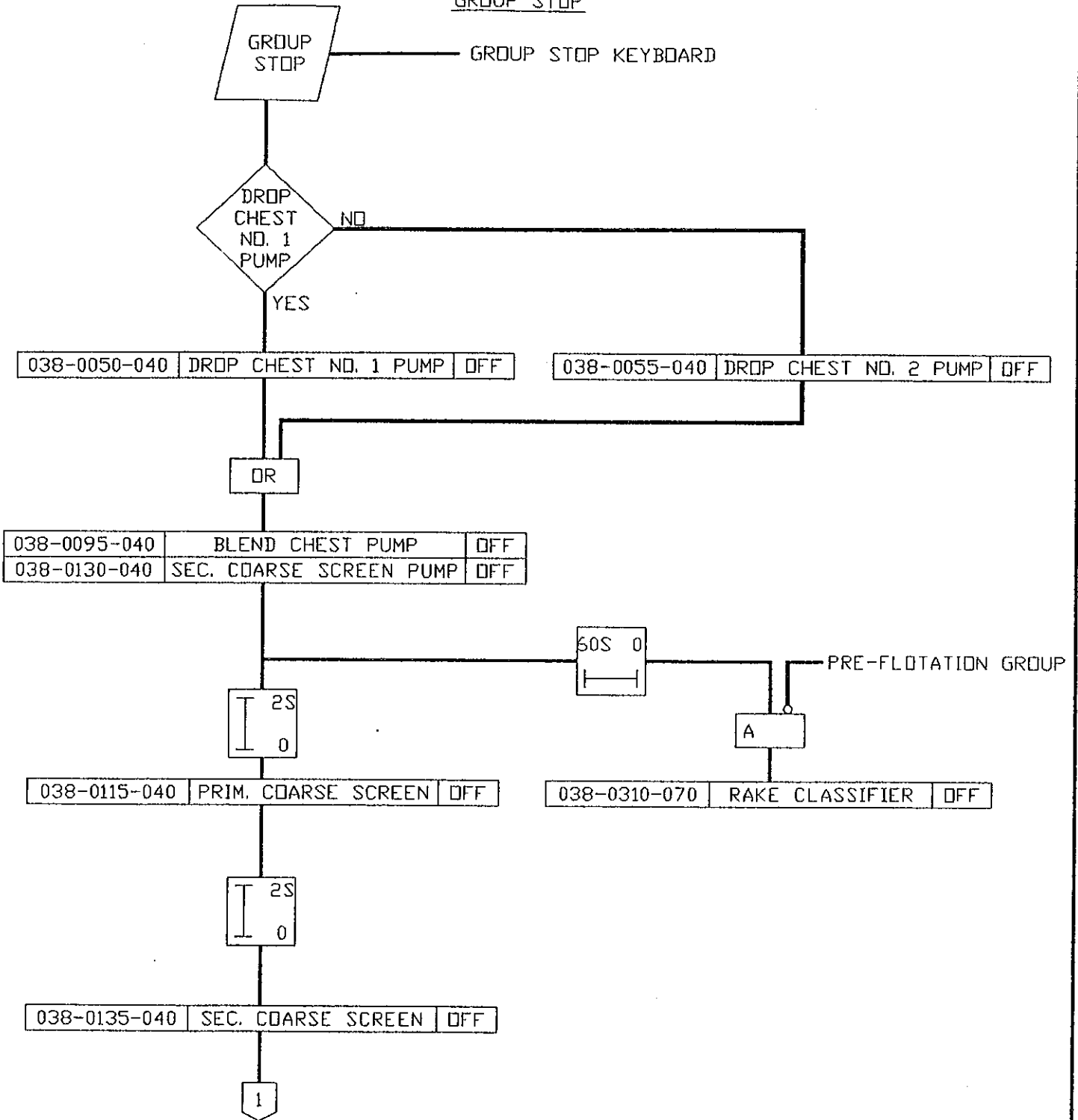


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CLIENT DWG NO. 500-451  
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COARSE SCREENING  
GROUP STOP



2/16/93	CERTIFIED	AC	1
1/29/93	CERTIFIED	AC	0
12/21/92	PRELIMINARY	AC	A
DATE	REVISION	NAME	REV
SCALE : NONE	TITLE: COARSE SCREENING GROUP START/STOP DIAGRAM		BEW DWG NO. TPI1-917-00420
SHEET 1 OF 2	DRAWN BY AC		BIRD ESCHER WYSS INC. MANSFIELD, MA
	CHECKED KC	DATE 12/7/92	

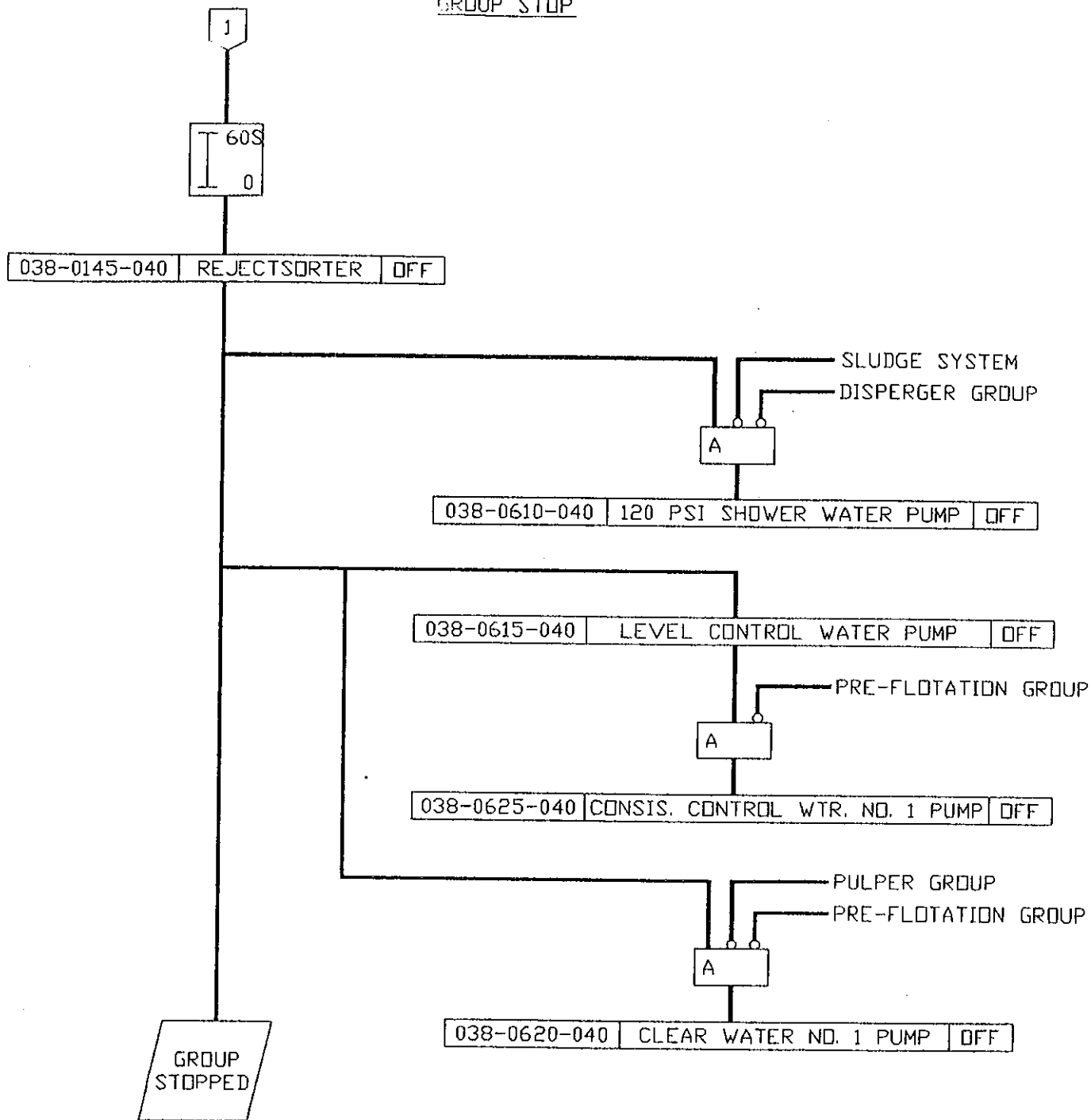



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CLIENT DWG NO. 500-450

- CAD DRAWING -

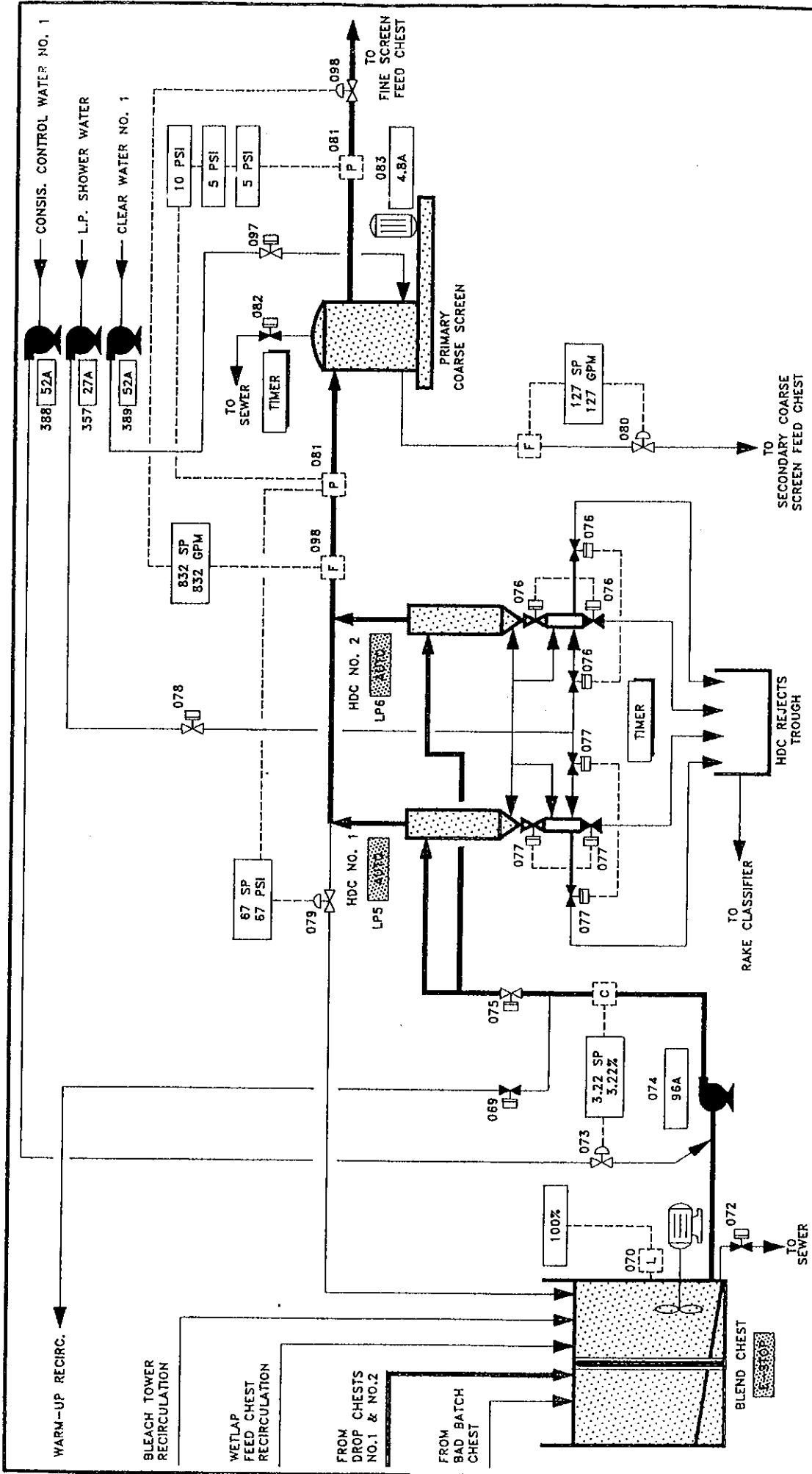
COARSE SCREENING  
GROUP STOP



1/29/93	CERTIFIED	AC	0	 BURROWS PAPER CORPORATION LITTLE FALLS, NEW YORK
12/21/92	PRELIMINARY	AC	A	
DATE	REVISION	NAME	REV	
SCALE : NONE		TITLE		CLIENT DWG NO. 500-450
SHEET 2 OF 2		COARSE SCREENING GROUP START/STOP DIAGRAM		BEW DWG NO. TP11-917-00420
DRAWN BY AC		CHECKED KC	DATE 12/7/92	BIRD ESCHER WYSS INC. MANSFIELD, MA

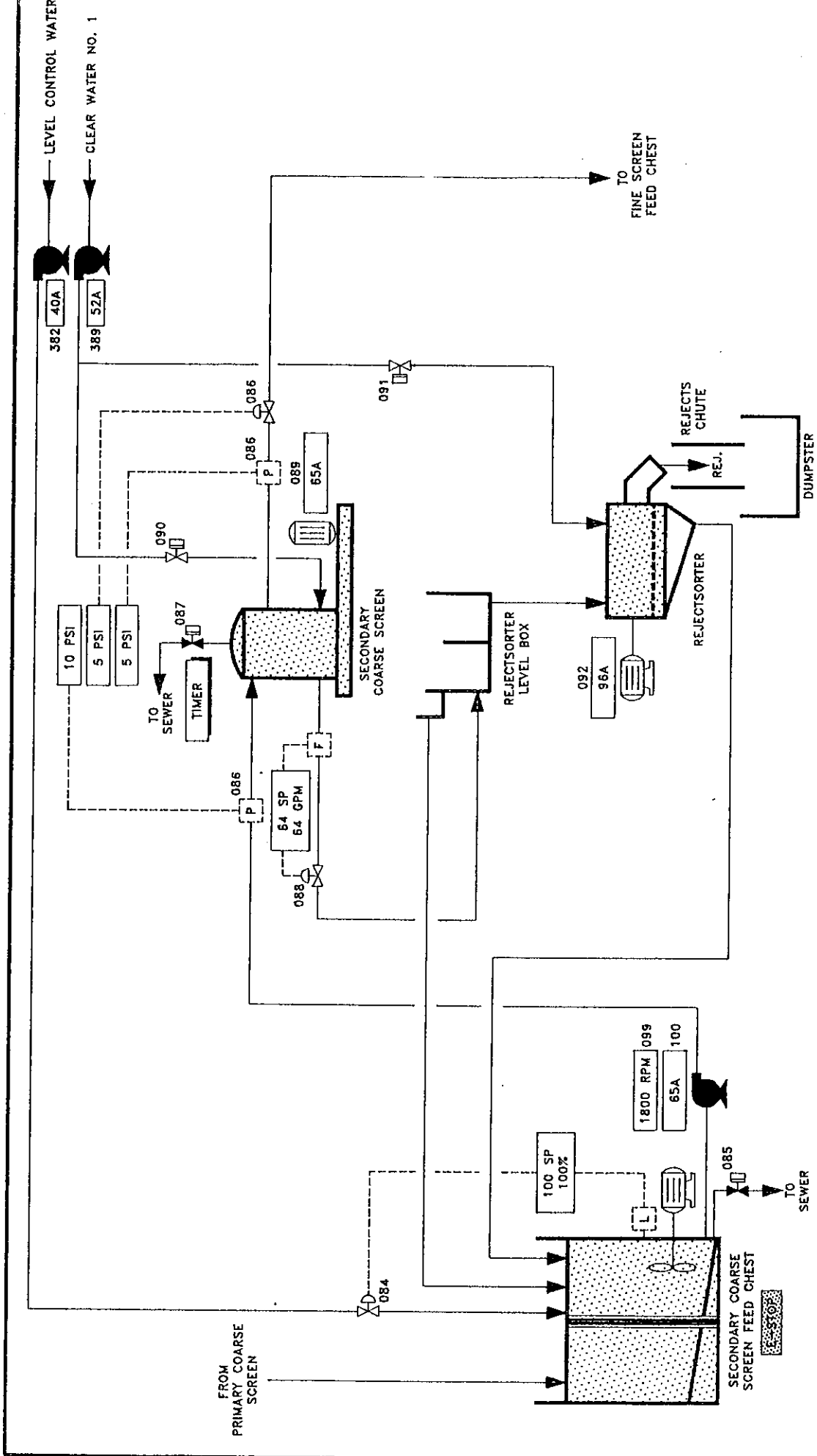
- CAD DRAWING -





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<b>BURROWS PAPER CORPORATION</b> LITTLE FALLS, NEW YORK		<b>DCS SCREENING</b> COARSE SCREEN LAYOUT	PROJECT SHEET NO. VPI3-917-00050	REV. NO. 500-504	REV. DATE 10/18/00
REFERENCES NONE		SCALE NONE			
REVISIONS NONE	DATE 10/18/00	BY JAC	CHECKED JAC	DRAWN JAC	DATE 10/18/00
REV. BY JAC	DATE 10/18/00	TIME 10:00	ACTION REV	DATE 10/18/00	BY JAC



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 WEN 370 NO. V/P13-917-00060  
 CLIENT DWG. NO. 500-505  
 REV. A

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 LITTLE FALLS, NEW YORK

**COARSE SCREENING**  
 DCS SCREEN LAYOUT

REV.	BY	CHKD	DATE	TITLE	SCALE	FILE	PROJECT	SHEET NO.

REV.	DATE	BY	DATE	DESCRIPTION

REFERENCES: NONE  
 SCALE: NONE  
 RELEASED FOR: A. COMPLETED  
 500 FILE: 38170000.DWG  
 REVISIONS:

# COARSE SCREENING GROUP



## GROUP SELECT

START  
 HOLD  
 STOP

MAN  
 AUTO

## STOCK SELECT

ON  
 OFF

## BAD BATCH CHEST PUMP

ON  
 OFF

GROUP READY  
 PROCESS GRAPHIC

- 092 96A 0145-040 REJECTSORTER
- 089 65A 0135-040 SECONDARY COARSE SCREEN
- 083 65A 0115-040 PRIMARY COARSE SCREEN

- 100 65A 0130-040 SECONDARY COARSE SCREEN PUMP
- 074 96A 0095-040 BLEND CHEST PUMP
- 0050-040 DROP CHEST NO.1 PUMP
- 0055-040 DROP CHEST NO.2 PUMP

- 382 40A 0615-040 LEVEL CONTROL WATER NO.1 PUMP
- 389 52A 0620-040 CLEAR WATER NO.1 PUMP
- 389 52A 0620-040 CLEAR WATER NO.1 PUMP
- 058 27A 0070-040 BAD BATCH CHEST PUMP

**BURROWS PAPER CORPORATION**  
 LITTLE FALLS, NEW YORK

NEW DWP NO. VPI3-917-10210  
 CLIENT DWP NO. 500-520

COARSE SCREENING  
 CONTROL GROUP LAYOUT

FILE PROJECT SHEET NO. NONE  
 SCALE NONE  
 DATE ACTION BY DATE

REV	BY	CHKD	DATE	THICKS	REVISIONS	SCALE	NONE	APPR	APPR	CHKD	CHKD	DESIGN	DESIGN	DATE	BY	DATE

CAD FILE: 30170021.DWG  
 REVISIONS

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