

**EQUIPMENT SCHEDULE**

ITEM	DESCRIPTION	LOCATION	ELECTRICAL MOTOR CHARACTERISTICS						PUMP		FAN				MOUNTING	REMARKS
			KW	HP	RPM	VOLTS	PHASE	HZ	CAPACITY (GPM)	HEAD (FT)	TYPE	CAPACITY (CFM)	SP (IN)	DRIVE		
MP 1	MAIN PUMP #1	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 2	MAIN PUMP #2	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 3	MAIN PUMP #3	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 4	MAIN PUMP #4	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 5	MAIN PUMP #5	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 6	MAIN PUMP #6	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 7	MAIN PUMP #7	WET WELL	410**	550**	890**	4160	3	60	30,000	49						SEE NOTES 1 AND 2
MP 8	MAIN PUMP #8	WET WELL	410**	550**	890**	4160	3	60	30,000	49						
LFP 9	EXIST. LOW FLOW PUMP #9	WET WELL	45	60	1160	460	3	60	2,500	59						
LFP 10	EXIST. LOW FLOW PUMP #10	WET WELL	45	60	1160	460	3	60	2,500	59						
G 1	SLIDE GATE ACTUATOR	OUTSIDE ABOVE GRADE	3.7	5		460	3	60								
G 2	KNIFE GATE ACTUATOR	ABOVE EL. -8.5	1.5	2		460	3	60								SEE NOTE 2

\* MINIMUM  
\*\* MAXIMUM

**PUMPING OPERATION RANGES WITH RISING WATER**

FUNCTION	SCADA (BUBBLER)		FLOAT	
	ELEVATION (FT)	LEVEL ABOVE WET PIT FLOOR (FT)	ELEVATION (FT)	LEVEL ABOVE WET PIT FLOOR (FT)
LOW FLOW LEAD START	-42.5	5.5	-41.5	6.5
LOW FLOW LAG START	-41.5	6.5	-40.5	7.5
LEAD MAIN START & ALL LOW FLOW STOP	-39.5	8.5	-39.0	9.0
LAG 1 MAIN START	-38.5	9.5	-38.0	18.0
LAG 2 MAIN START	-37.5	10.5	-37.0	11.0
LAG 3 MAIN START	-36.5	11.5	-36.0	12.0
LAG 4 MAIN START	-35.5	12.5	-35.0	13.0
LAG 5 MAIN START	-34.5	13.5	-34.0	14.0
LAG 6 MAIN START	-33.5	14.5	-33.0	15.0
LAG 7 MAIN START	-32.5	15.5	-32.0	16.0
HIGH WATER ALARM	-28.5	19.5	-28.5	19.5

**PUMPING OPERATION RANGES WITH FALLING WATER**

FUNCTION	SCADA (BUBBLER)		FLOAT	
	ELEVATION (FT)	LEVEL ABOVE WET PIT FLOOR (FT)	ELEVATION (FT)	LEVEL ABOVE WET PIT FLOOR (FT)
LAG 4, LAG 5, LAG 6, AND LAG 7 STOP	-40.0	8.0	-39.5	8.5
LEAD, LAG 1, LAG 2, LAG 3, STOP AND ALL LOW FLOW START	-41.0	7.0	-40.5	7.5
ALL LOW FLOW STOP	-43.5	4.5	-43.0	5.0
LOW WATER ALARM	-44.0	4.0	-44.0	4.0

**NOTES:**

1. THE DESIGN OF THE PUMP STATION HAS BEEN BASED ON A SPECIFIC PUMP. OTHER PUMPS PRODUCING THE SAME HYDRAULIC CHARACTERISTIC ARE ACCEPTABLE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL ADJUSTMENTS TO THE STATION DESIGN REQUIRED TO ADOPT HIS FINAL SELECTED PUMPS AT NO ADDITIONAL COST.
2. EQUIPMENT SHALL BE CLASS 1, DIV. 1 GROUP D EXPLOSION PROOF.
3. STAND-BY PUMP STARTS ONLY WHEN MOTOR OVERLOADS OR STARTING SEQUENCE FAILS FOR ANY MAIN PUMP.
4. LAG 7 MAIN PUMP SHALL BE STOP WHEN THE WATER LEVEL AT THE OUTFALL CHAMBER REACHES EL. 6.8'

M7

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
PUMP STATION NO. 27  
REHABILITATION  
EQUIPMENT SCHEDULE AND  
PUMPING OPERATING ELEV.

SCALE: N/A                      DRAWN BY: HFF  
DATE: 04-23-10                      CHECKED BY: KHC

