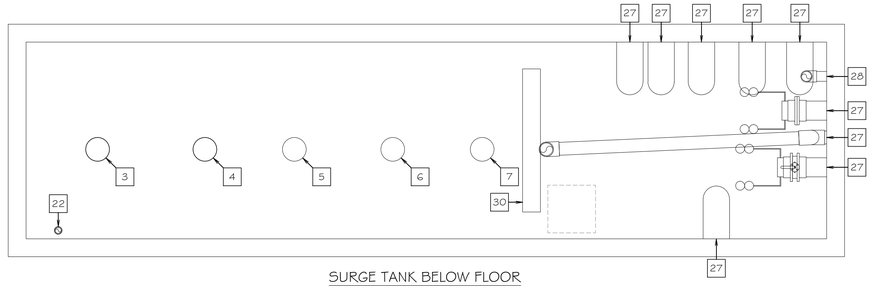
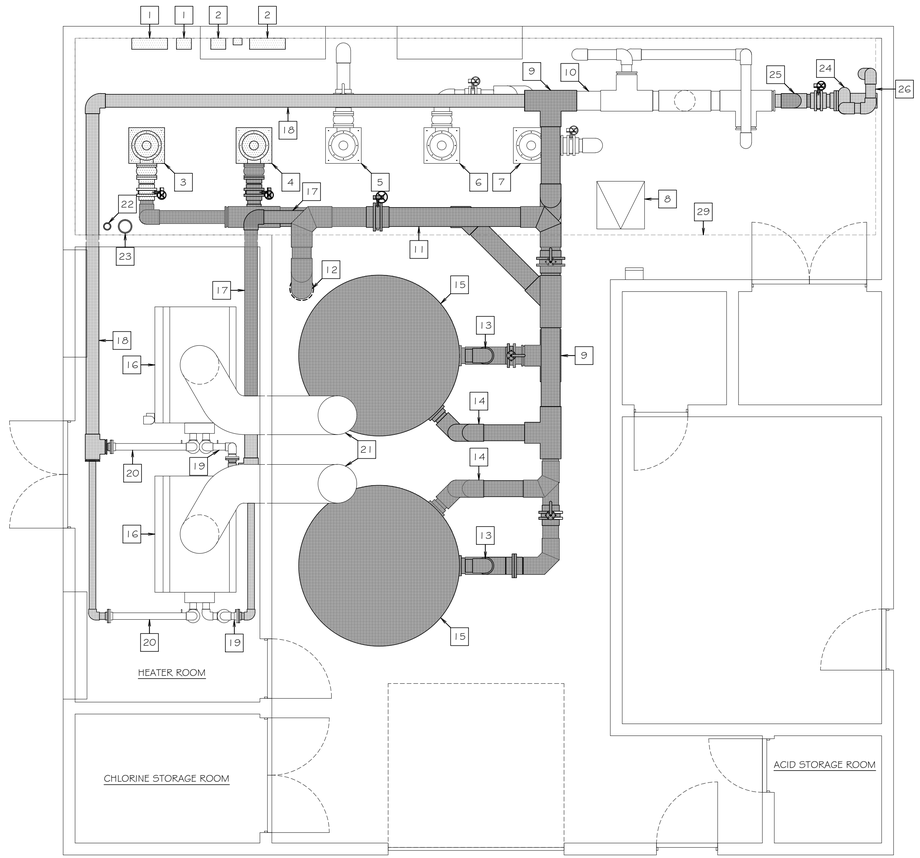


SURGE TANK BELOW FLOOR



1 EXISTING FILTER EQUIPMENT LAYOUT

SCALE: 1/4" = 1'-0"

KEY NOTES

ITEM	DESCRIPTION
1	REMOVE AND DISPOSE OF EXISTING FILTRATION PUMP #1 DISCONNECT, STARTER AND VFD.
2	REMOVE AND DISPOSE OF EXISTING FILTRATION PUMP #2 DISCONNECT, STARTER AND VFD.
3	REMOVE AND DISPOSE OF EXISTING FILTRATION PUMP #1
4	REMOVE AND DISPOSE OF EXISTING FILTRATION PUMP #2
5	EXISTING BODY SLIDE PUMP TO REMAIN
6	EXISTING TUBE SLIDE PUMP TO REMAIN
7	EXISTING PLAY FEATURE PUMP TO REMAIN
8	EXISTING SURGE TANK HATCH TO REMAIN
9	REMOVE AND DISPOSE OF EXISTING 12" FILTERED WATER SUPPLY PIPE
10	EXISTING 12" FILTERED WATER SUPPLY PIPE TO REMAIN
11	REMOVE AND DISPOSE OF EXISTING 12" FILTER BACKWASH PIPE
12	EXISTING BACKWASH HUB DRAIN TO REMAIN
13	REMOVE AND DISPOSE OF EXISTING 10" FILTER INFLUENT PIPING
14	REMOVE AND DISPOSE OF EXISTING 10" FILTER EFFLUENT PIPING
15	REMOVE AND DISPOSE OF EXISTING PADDOCK MODEL #6735-V-2C SAND FILTER (127.22 SQ. FT)
16	EXISTING LAARS 3,050,000 BTU POOL WATER HEATER TO REMAIN
17	REMOVE AND DISPOSE OF EXISTING 8" PVC HEATER INFLUENT PIPE
18	REMOVE AND DISPOSE OF EXISTING 8" PVC HEATER EFFLUENT PIPE
19	EXISTING 4" COPPER HEATER INFLUENT PIPE TO REMAIN
20	EXISTING 4" COPPER HEATER EFFLUENT PIPE TO REMAIN
21	EXISTING 26" VENT PIPE TO REMAIN
22	EXISTING 4" REFLECTION PIPE TO REMAIN
23	EXISTING 8" FILL PIPE TO REMAIN
24	REMOVE AND SAVE EXISTING DROP SLIDE PUMP
25	REMOVE AND DISPOSE OF EXISTING 8" DROP SLIDE PUMP SUCTION PIPE
26	REMOVE AND DISPOSE OF EXISTING 6" DROP SLIDE SUPPLY PIPE, ABOVE FILTER ROOM FLOOR ONLY
27	EXISTING PIPING TO REMAIN
28	EXISTING 6" DROP SLIDE SUPPLY PIPE TO REMAIN
29	EXISTING SURGE TANK BELOW FILTER ROOM FLOOR
30	EXISTING BAFFLE WALL

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1300 MOON LAKE BLVD.
HOFFMAN ESTATES, IL 60169

△	DATE	REVISION

DESCRIPTION:
EXISTING FILTER
EQUIPMENT LAYOUT

DATE:	11.16.17
DRAWN BY:	RRD / TJM
JOB NO.	A17269

SP-1

DEEP HOPPER MAIN DRAIN NOTES:

1. THE EXISTING DEEP HOPPER UNBLOCKABLE 1'-11" X 15'-11" MAIN DRAIN WITH (10) 18" X 18" GRATES IN A CUSTOM STAINLESS STEEL FRAME MEETS ANSI/APSP 16.
2. THE EXISTING DEEP HOPPER UNBLOCKABLE SUBMERGED SUCTION OUTLET HAS (2) 12" PIPES. THE TWO 12" PIPES EACH CONNECT TO THE EXISTING SURGE TANK.
3. THE EXISTING DEEP HOPPER MAIN DRAIN IS A FIELD FABRICATED OUTLET CONSISTING OF (10) LAWSON AQUATICS #MLD-FGD-1818 GRATES IN A CUSTOM STAINLESS STEEL FRAME. THE LAWSON AQUATICS #MLD-FGD-1818 GRATES INSTALLED HAVE BEEN CERTIFIED BY NSF (A NATIONALLY RECOGNIZED TESTING LAB) IN ACCORDANCE WITH ANSI/APSP 16. EACH GRATE IS SECURED TO THE STAINLESS STEEL FRAME WITH THE STAINLESS STEEL SCREWS SPECIFIED. THE MAIN DRAIN IS IN CONFORMANCE WITH ANSI/APSP 16. EACH OF THE #MLD-FGD-1818 GRATES ARE MARKED WITH ALL NECESSARY INFORMATION IN ACCORDANCE WITH ANSI/APSP 16.
4. THE MAXIMUM FLOW CAPABILITY OF EACH DEEP HOPPER 12" MAIN DRAIN PIPE IS 3,481 G.P.M. PER THE PIPE FLOW CALCULATIONS SUBMITTED IN 2010 (IDPH PERMIT #223-2010). THE TOTAL MAXIMUM FLOW CAPABILITY FOR THE TWO DEEP HOPPER MAIN DRAIN PIPES IS 6,962 G.P.M.
5. THE EXISTING DEEP HOPPER MAIN DRAIN IS A FIELD FABRICATED OUTLET AND CONFORMS TO ANSI/APSP 16. THE MAXIMUM APPROVED FLOW RATE FOR EACH 18" X 18" GRATE IS 816 G.P.M. THE TOTAL MAXIMUM APPROVED FLOW RATE FOR (10) 18" X 18" GRATES IS 8,160 G.P.M. THIS MAXIMUM FLOW RATE IS IN CONFORMANCE WITH ANSI/APSP 16 PER THE CALCULATIONS SUBMITTED IN 2010 (IDPH PERMIT #223-2010).
6. THE TOTAL MAXIMUM FLOW CAPABILITY OF THE TWO 12" MAIN DRAIN PIPES DOES NOT EXCEED THE MAXIMUM FLOW RATE OF THE NEW MAIN DRAIN GRATES.

PLUNGE AREA MAIN DRAIN NOTES:

1. THE (2) EXISTING PLUNGE AREA (2) NEW UNBLOCKABLE 18" X 36" MAIN DRAINS MEETS ANSI/APSP 16.
2. THE (2) EXISTING PLUNGE AREA UNBLOCKABLE SUBMERGED MAIN DRAINS, EACH WITH A 12" PIPE. THE (2) 12" PIPES COMBINE TO A 12" PIPE THAT CONNECTS TO THE EXISTING SURGE TANK.
3. THE PLUNGE AREA (2) 18" X 36" LAWSON AQUATICS #FI-SG-1836 HAVE 28"-DEEP SUMPS, EACH WITH (2) 18" X 18" #MLD-GO-1818 GRATES INCLUDED. THE #MLD-GO-1818 GRATES WERE INCLUDED ON THE SUMP AND GRATE COMBINATION THAT WAS CERTIFIED BY NSF (A NATIONALLY RECOGNIZED TESTING LAB) IN ACCORDANCE WITH ANSI/APSP 16. EACH #FI-SG-1836 SUMP FROM LAWSON AQUATICS HAS (1) 10" COUPLING CONNECTION. EACH OF THE #MLD-GO-1818 GRATES IS SECURED WITH THE STAINLESS STEEL SCREWS PROVIDED BY THE MANUFACTURER IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. EACH OF THE #MLD-GO-1818 GRATES ARE MARKED WITH ALL NECESSARY INFORMATION IN ACCORDANCE WITH ANSI/APSP 16.
4. THE MAXIMUM FLOW CAPABILITY OF THE PLUNGE AREA 12" MAIN DRAIN PIPE IS 2,934 G.P.M. PER THE ATTACHED PIPE FLOW CALCULATIONS SUBMITTED IN 2010 (IDPH PERMIT #223-2010).
5. THE EXISTING 18" X 36" MAIN DRAINS ARE FIELD FABRICATED OUTLETS AND CONFORM TO ANSI/APSP 16. THE MAXIMUM FLOW RATE FOR EACH SUMP AND GRATES IS 1,600 G.P.M. THIS MAXIMUM FLOW RATE IS IN CONFORMANCE WITH ANSI/APSP 16. THE TOTAL MAXIMUM APPROVED FLOW RATE FOR (2) MAIN DRAINS IS 3,200 G.P.M.
6. THE TOTAL MAXIMUM FLOW CAPABILITY OF THE 12" MAIN DRAIN PIPE DOES NOT EXCEED THE MAXIMUM FLOW RATE OF THE (2) MAIN DRAINS.

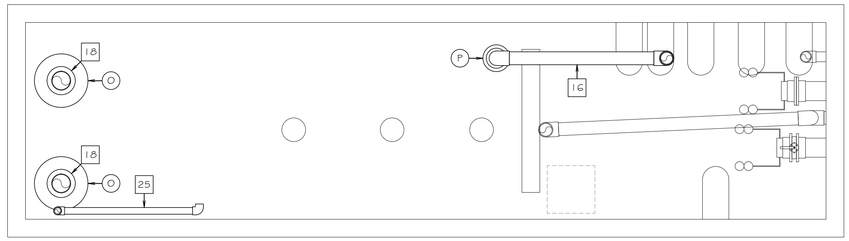
KEY NOTES

ITEM	DESCRIPTION
1	EXISTING SURGE TANK HATCH
2	NEW 12" FILTERED WATER SUPPLY PIPE
3	CONNECT TO EXISTING 12" FILTERED WATER SUPPLY PIPE
4	PROVIDE CLEARANCE FOR FILTER TOP REMOVAL
5	EXISTING BACKWASH HUB DRAIN, CUT FLUSH WITH FLOOR
6	NEW 10" FILTER INFLUENT PIPING
7	NEW 10" FILTER EFFLUENT PIPING
8	NEW FILTER AIR COMPRESSOR
9	EXISTING LAARS 3,050,000 BTU POOL WATER HEATER
10	NEW 8" CPVC HEATER INFLUENT PIPE
11	NEW 8" CPVC HEATER EFFLUENT PIPE
12	CONENCT TO EXISTING 4" COPPER HEATER INFLUENT PIPE
13	CONNECT TO EXISTING 4" COPPER HEATER EFFLUENT PIPE
14	EXISTING 26" VENT PIPE
15	CAP EXISTING 8" PIPE
16	NEW 8" DROP SLIDE PUMP SUCTION PIPE
17	NEW 6" DROP SLIDE SUPPLY PIPE, CONNECT TO EXISTING
18	NEW 12" FILTRATION PUMP SUCTION PIPE
19	NEW 6" FILTER PRECOAT PIPE
20	NEW 4" REFLECTION PIPE, EXTEND AWAY FROM PUMP SUCTION PIPES
21	EXISTING 8" FILL PIPE
22	REINSTALL EXISTING DROP SLIDE PUMP
23	FILL EXISTING PENETRATION WITH LIGHT-WEIGHT, NON-SHRINK CONCRETE

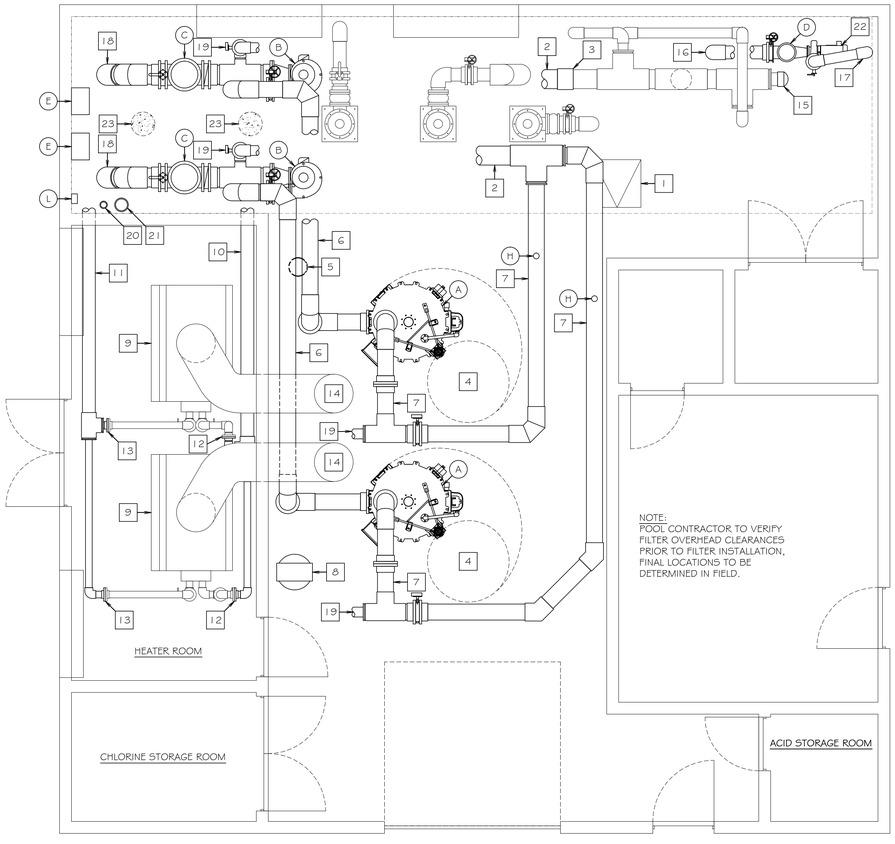
NEW FILTRATION EQUIPMENT LIST

THE EQUIPMENT MANUFACTURERS AND CATALOG NUMBERS LISTED BELOW, AND NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS, ARE SHOWN TO PROVIDE A STANDARD. EQUIPMENT BY OTHER MANUFACTURERS WILL BE APPROVED IF SAID EQUIPMENT IS SHOWN TO BE EQUAL TO THAT SPECIFIED.

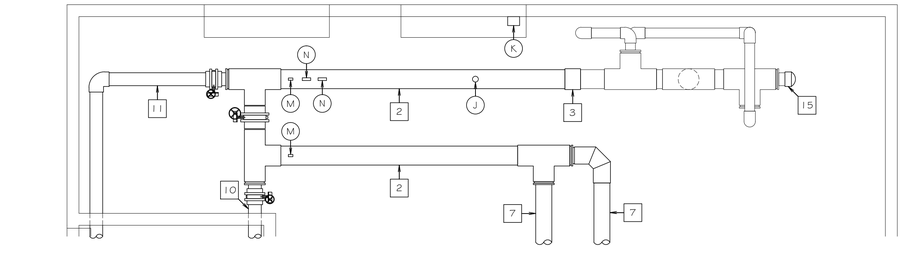
ITEM	DESCRIPTION	MANUFACTURER	CATALOG NO.	QTY.
A	FILTER, REGENERATIVE "PERLITE" MEDIA, W/ 1,211 SQ. FT. OF FILTER AREA, 1.20 G.P.M. / SQ. FT. OF FILTER AREA FILTRATION RATE, STEEL TANK, W/ CONTROL PANEL, AIR COMPRESSOR, MEDIA VACUUM TRANSFER SYSTEM AND PNEUMATIC VALVES.	NEPTUNE BENSON	SP-49-48-1548	2
B	FILTRATION PUMP AND MOTOR, FLOODED SUCTION, 1,460 G.P.M. @ 80 FT. TDH, 40 H.P., 208/230 VOLT, 3-PHASE,1750 RPM, W/ EPOXY COATING ON ALL INTERIOR CAST IRON PARTS.	PACO	60123 LC	2
C	STRAINER, FIBERGLASS, 12" W/ TWO STAINLESS STEEL BASKETS.	NEPTUNE BENSON	1500NBFG12R1	2
D	STRAINER, FIBERGLASS, 8" X 4" W/ TWO STAINLESS STEEL BASKETS.	NEPTUNE BENSON	1500NBFG84R1	1
E	VARIABLE FREQUENCY DRIVE, 208/230 VOLT, 3-PH, 60 Hz, W/ NEMA 3 ENCLOSURE AND COOLING FAN, INTEGRAL DISCONNECT AND LINE REACTOR, VERIFY VOLTAGE AND HORSEPOWER FOR MOTOR BEFORE ORDERING.	ABB	ACS550 SERIES	2
F	VACUUM GAUGE, 0" - 30", 2 1/2" DIAL, LIQUID FILLED, WITH STAINLESS STEEL TUBE AND SOCKET, SNUBBER NO. 872-2 AND GAUGE COCK NO. 865MFG.	TRERICE	700	3
G	PRESSURE GAUGE, 0 - 60 PSI, 2 1/2" DIAL, LIQUID FILLED, WITH STAINLESS STEEL TUBE AND SOCKET, SNUBBER NO. 872-2 AND GAUGE COCK NO. 865MFG.	TRERICE	700	3
H	MAGNETIC FLOW SENSOR, 10", FOR FILTRATION PUMP AND MOTOR VARIABLE FREQUENCY DRIVE CONTROL.	SIGNET	3-2551-P1-12	2
J	MAGNETIC FLOW SENSOR, W/ INTEGRAL DISPLAY, 12".	SIGNET	3-2551-P1-42	1
K	SWITCHING POWER SUPPLY, 110 VOLT, 1-PHASE, 4.2 AMP OUTPUT CAPACITY AT 24 VOLTS.	SIGNET	7300-1024	1
L	AUTOMATIC WATER LEVEL CONTROLLER, W/ ELEVEN POLE BASE MODEL #ZPD11, PROBES MODEL #A94-10 & MOISTURE PROOF ENCLOSURE MODEL #C1-C, 115 VOLT, 1-PHASE.	CARLOS GAVAZZI	S194-156-115	1
M	THERMOMETER, 30° TO 130° FAHRENHEIT RANGE WITH SEPARABLE WELL NO. 138-0015.2.	TRERICE	A40543	2
N	AQUASTAT, SET TO 115° FAHRENHEIT.	HONEYWELL	L4006A1959	2
O	PVC ANTI-VORTEX PLATE, 12" CONNECTION, 36" DIAMETER PLATE.	NEPTUNE BENSON	AVPLATE12PVCKIT	2
P	PVC ANTI-VORTEX PLATE, 8" CONNECTION, 18" DIAMETER PLATE.	NEPTUNE BENSON	AVPLATE8PVCKIT	1

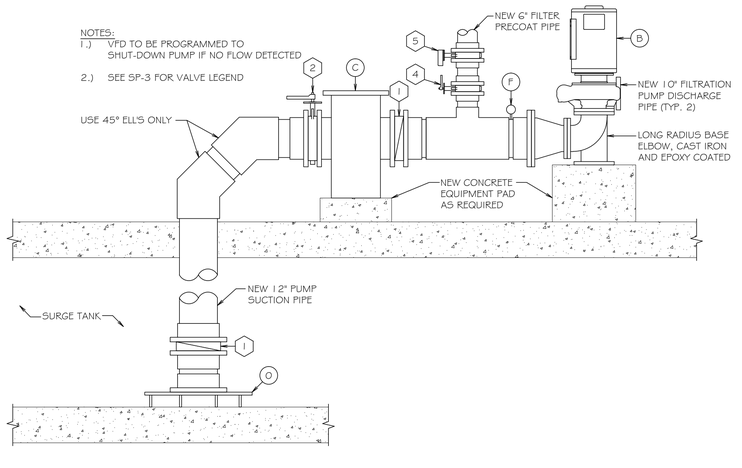


SURGE TANK BELOW FLOOR

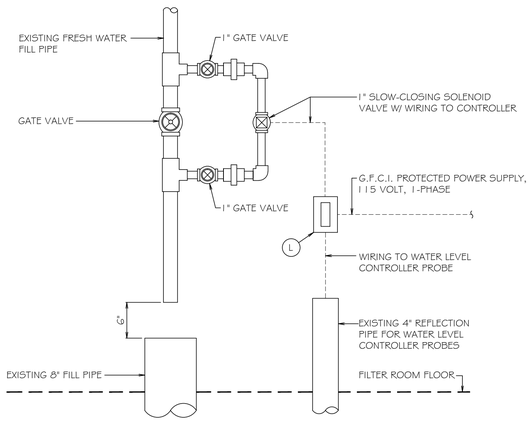


1 NEW FILTER EQUIPMENT LAYOUT
SCALE: 1/4" = 1'-0"





2 NEW TYPICAL PUMP DETAIL
SCALE: 1/2" = 1'-0"



3 TYPICAL WATER LEVEL CONTROLLER
SCALE: 1" = 1'-0"

DATA	TOTAL
FILTER FLOWRATE:	2,920 G.P.M.

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1300 MOON LAKE BLVD.
HOFFMAN ESTATES, IL 60169

△	DATE	REVISION

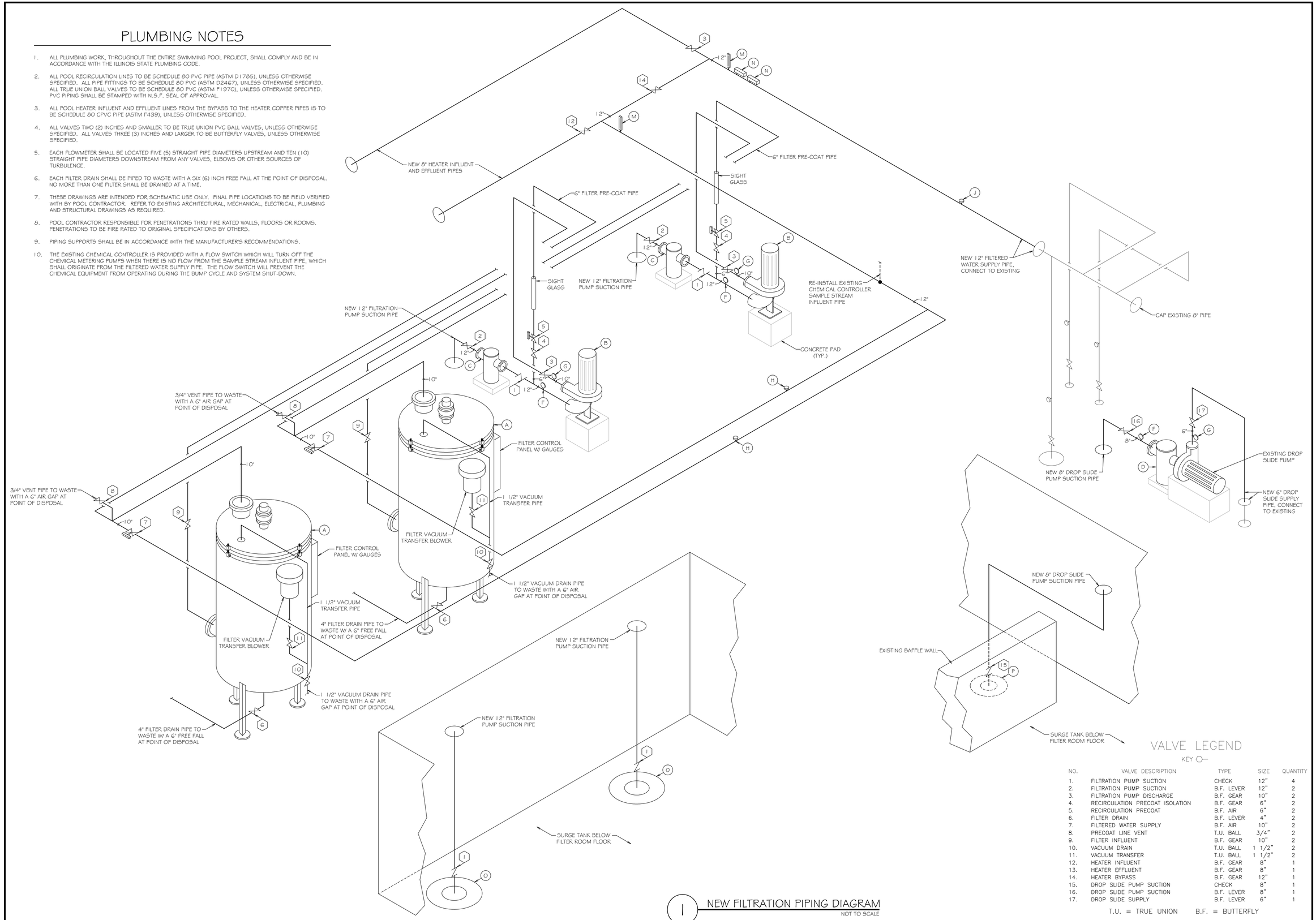
DESCRIPTION:
NEW FILTER EQUIPMENT LAYOUT, EQUIPMENT LIST, DETAILS AND NOTES

DATE:	11.16.17
DRAWN BY:	RRD / TJM
JOB NO.	A17269

SP-2

PLUMBING NOTES

1. ALL PLUMBING WORK, THROUGHOUT THE ENTIRE SWIMMING POOL PROJECT, SHALL COMPLY AND BE IN ACCORDANCE WITH THE ILLINOIS STATE PLUMBING CODE.
2. ALL POOL RECIRCULATION LINES TO BE SCHEDULE 80 PVC PIPE (ASTM D1785), UNLESS OTHERWISE SPECIFIED. ALL PIPE FITTINGS TO BE SCHEDULE 80 PVC (ASTM D2467), UNLESS OTHERWISE SPECIFIED. ALL TRUE UNION BALL VALVES TO BE SCHEDULE 80 PVC (ASTM F1970), UNLESS OTHERWISE SPECIFIED. PVC PIPING SHALL BE STAMPED WITH N.S.F. SEAL OF APPROVAL.
3. ALL POOL HEATER INFLUENT AND EFFLUENT LINES FROM THE BYPASS TO THE HEATER COPPER PIPES IS TO BE SCHEDULE 80 CPVC PIPE (ASTM F439), UNLESS OTHERWISE SPECIFIED.
4. ALL VALVES TWO (2) INCHES AND SMALLER TO BE TRUE UNION PVC BALL VALVES, UNLESS OTHERWISE SPECIFIED. ALL VALVES THREE (3) INCHES AND LARGER TO BE BUTTERFLY VALVES, UNLESS OTHERWISE SPECIFIED.
5. EACH FLOWMETER SHALL BE LOCATED FIVE (5) STRAIGHT PIPE DIAMETERS UPSTREAM AND TEN (10) STRAIGHT PIPE DIAMETERS DOWNSTREAM FROM ANY VALVES, ELBOWS OR OTHER SOURCES OF TURBULENCE.
6. EACH FILTER DRAIN SHALL BE PIPED TO WASTE WITH A SIX (6) INCH FREE FALL AT THE POINT OF DISPOSAL. NO MORE THAN ONE FILTER SHALL BE DRAINED AT A TIME.
7. THESE DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL PIPE LOCATIONS TO BE FIELD VERIFIED WITH BY POOL CONTRACTOR. REFER TO EXISTING ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND STRUCTURAL DRAWINGS AS REQUIRED.
8. POOL CONTRACTOR RESPONSIBLE FOR PENETRATIONS THRU FIRE RATED WALLS, FLOORS OR ROOMS. PENETRATIONS TO BE FIRE RATED TO ORIGINAL SPECIFICATIONS BY OTHERS.
9. PIPING SUPPORTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
10. THE EXISTING CHEMICAL CONTROLLER IS PROVIDED WITH A FLOW SWITCH WHICH WILL TURN OFF THE CHEMICAL METERING PUMPS WHEN THERE IS NO FLOW FROM THE SAMPLE STREAM INFLUENT PIPE, WHICH SHALL ORIGINATE FROM THE FILTERED WATER SUPPLY PIPE. THE FLOW SWITCH WILL PREVENT THE CHEMICAL EQUIPMENT FROM OPERATING DURING THE BUMP CYCLE AND SYSTEM SHUT-DOWN.



VALVE LEGEND

KEY ○—

NO.	VALVE DESCRIPTION	TYPE	SIZE	QUANTITY
1.	FILTRATION PUMP SUCTION	CHECK	12"	4
2.	FILTRATION PUMP SUCTION	B.F. LEVER	12"	2
3.	FILTRATION PUMP DISCHARGE	B.F. GEAR	10"	2
4.	RECIRCULATION PRECOAT ISOLATION	B.F. GEAR	6"	2
5.	RECIRCULATION PRECOAT	B.F. AIR	6"	2
6.	FILTER DRAIN	B.F. LEVER	4"	2
7.	FILTERED WATER SUPPLY	B.F. AIR	10"	2
8.	PRECOAT LINE VENT	T.U. BALL	3/4"	2
9.	FILTER INFLUENT	B.F. GEAR	10"	2
10.	VACUUM DRAIN	T.U. BALL	1 1/2"	2
11.	VACUUM TRANSFER	T.U. BALL	1 1/2"	2
12.	HEATER INFLUENT	B.F. GEAR	8"	1
13.	HEATER EFFLUENT	B.F. GEAR	8"	1
14.	HEATER BYPASS	B.F. GEAR	12"	1
15.	DROP SLIDE PUMP SUCTION	CHECK	8"	1
16.	DROP SLIDE PUMP SUCTION	B.F. LEVER	8"	1
17.	DROP SLIDE SUPPLY	B.F. LEVER	6"	1

T.U. = TRUE UNION B.F. = BUTTERFLY

1 NEW FILTRATION PIPING DIAGRAM
NOT TO SCALE

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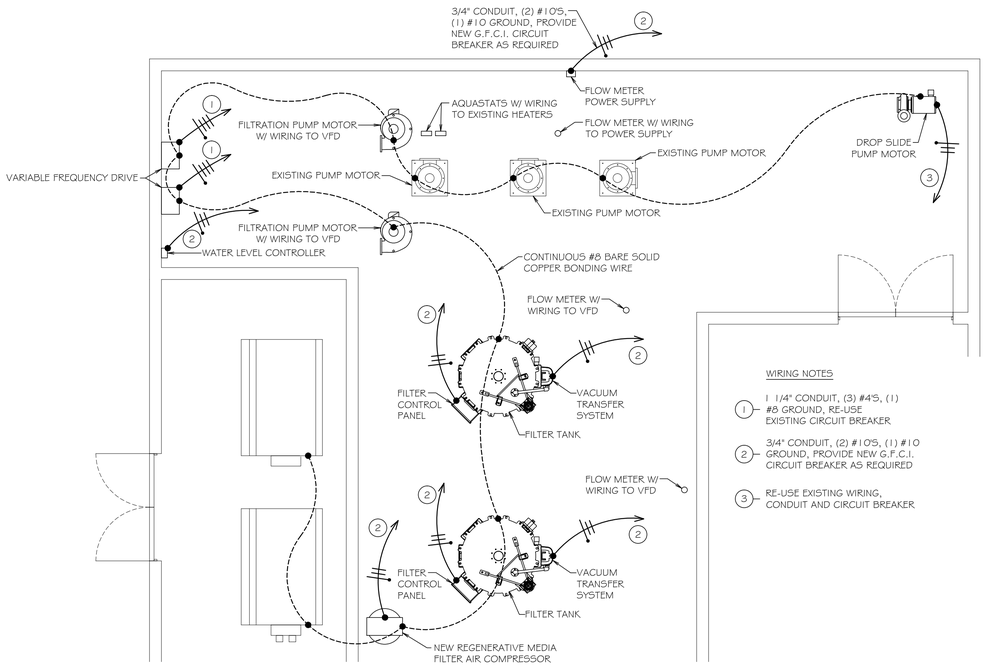
#	DATE	REVISION

DESCRIPTION:
FILTRATION PIPING DIAGRAM AND VALVE LEGEND

DATE:	11.16.17
DRAWN BY:	RRD / TJM
JOB NO.	A17269

SP-3



WIRING NOTES

1. 1 1/4" CONDUIT, (3) #4'S, (1) #8 GROUND, RE-USE EXISTING CIRCUIT BREAKER
2. 3/4" CONDUIT, (2) #10'S, (1) #10 GROUND, PROVIDE NEW G.F.C.I. CIRCUIT BREAKER AS REQUIRED
3. RE-USE EXISTING WIRING, CONDUIT AND CIRCUIT BREAKER

NOTE:
ALL ASPECTS OF THE ELECTRICAL INSTALLATION TO BE IN COMPLIANCE WITH THE 2008 NEC

1 NEW FILTER EQUIPMENT ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

ELECTRICAL REQUIREMENTS

ITEM OF EQUIPMENT	VOLTAGE	PHASE	H.P. / AMPS	QUANTITY	CONTROLS & INTERLOCKS
FILTER CONTROL PANEL	120	1	30 AMPS	TWO	WIRED TO VFD AND WIRED TO RUN CONFIRM CONTACT
FILTER VACUUM TRANSFER BLOWER	120	1	1 1/2 H.P.	TWO	PRE-WIRED TO FILTER CONTROL PANEL
FILTER AIR COMPRESSOR	120	1	15 AMPS	ONE	WIRING TO FILTER REGULATOR AND FILTER CONTROL PANEL
FILTRATION PUMP	480	3	40 H.P.	TWO	WIRED TO VFD
SWITCHING POWER SUPPLY	110	1	2.5 AMPS	ONE	WIRED TO MAGNETIC FLOW SENSOR
AUTOMATIC WATER LEVEL CONTROLLER	115	1	10 AMPS	ONE	SEE DETAIL

* NOTE: VARIABLE FREQUENCY DRIVE TO BE PROVIDED BY PUMP AND MOTOR SUPPLIER - FIELD VERIFY VOLTAGE BEFORE ORDERING

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HOFFMAN ESTATES, IL 60169

	DATE	REVISION

DESCRIPTION:
NEW FILTER EQUIPMENT ELECTRICAL PLAN AND ELECTRICAL REQUIREMENTS

DATE:	11.16.17
DRAWN BY:	RRD / TJM
JOB NO.	A17269

SP-4

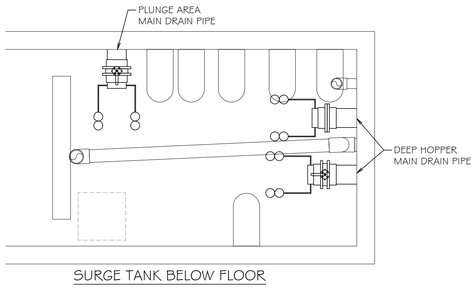
NEW EQUIPMENT LIST

ITEM	DESCRIPTION	MANUFACTURER	CATALOG NO.	QTY.
A	AUTOMATIC CHEMICAL CONTROLLER, W/ PROBES, FLOW CELL AND PIG-TAIL CONNECTIONS FOR RELAYS, 115 VOLT, 1-PHASE.	ACUTROL	AK110	1
B	SAMPLE STREAM PUMP AND MOTOR, 1/2 H.P., 110 VOLT, 1-PHASE, 1725 RPM, TEFC, FIBERGLASS BASE W/ STAINLESS STEEL HARDWARE AND PENTAIR PACKAGE 161-6" PLASTIC STRAINER W/ EXTRA BASKET. CONTACT THOMAS PUMP COMPANY.	EBARA	JEU1506	2
C	CHLORINATOR, CALCIUM HYPOCHLORITE, 244.8 LBS./DAY CAPACITY WITH 1 1/2 H.P. CIRCULATION PUMP AND MOTOR, 110 VOLT, 1-PHASE.	AXIALL	3070AT	1
D	CHLORINATOR, CALCIUM HYPOCHLORITE, 244.8 LBS./DAY CAPACITY WITH 1 1/2 H.P. CIRCULATION PUMP AND MOTOR, 110 VOLT, 1-PHASE.	AXIALL	3070AT	1
E	ACID (MURIATIC ACID) METERING PUMP, 85 G.P.D., 110-VOLT, 1-PHASE.	STENNER	85M5	1

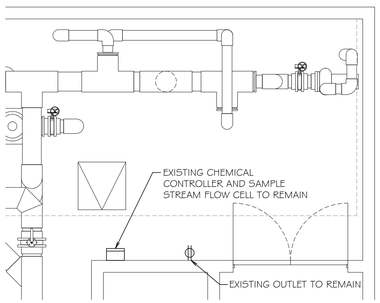
DATA	ZERO DEPTH	PLUNGE POOL	LAP POOL	TOTAL
SURFACE AREA:	9,972 SQ. FT.	951 SQ. FT.	3,744 SQ. FT.	14,670 SQ. FT.
VOLUME:	142,896 GALLONS	25,535 GALLONS	217,449 GALLONS	385,880 GALLONS
FLOW RATE:	1,588 G.P.M.	426 G.P.M.	906 G.P.M.	2,920 G.P.M.
VOLUME TURN OVER RATE:	1 HOUR 30 MINUTES	1 HOUR	4 HOURS	-

ELECTRICAL REQUIREMENTS

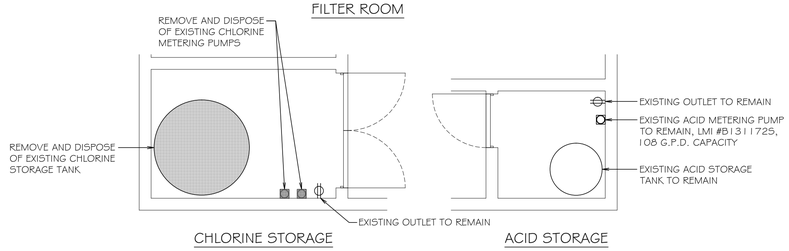
ITEM OF EQUIPMENT	VOLTAGE	PHASE	H.P. / AMPS	QUANTITY	CONTROLS & INTERLOCKS
AUTOMATIC CHEMICAL CONTROLLER	115	1	10 AMPS	ONE	PLUG INTO G.F.C.I. OUTLET
CHEMICAL METERING PUMP	120	1	1.7 AMPS	ONE	PLUG INTO CHEMICAL CONTROLLER
CHLORINATOR CONTROL SYSTEM	110	1	1 1/2 H.P.	TWO	PLUG INTO CHEMICAL CONTROLLER AND G.F.C.I. OUTLET
SAMPLE STREAM PUMP MOTOR	110	1	1/2 H.P.	TWO	WIRED TO CHEMICAL CONTROLLER AND PLUG INTO G.F.C.I. OUTLET.



SURGE TANK BELOW FLOOR



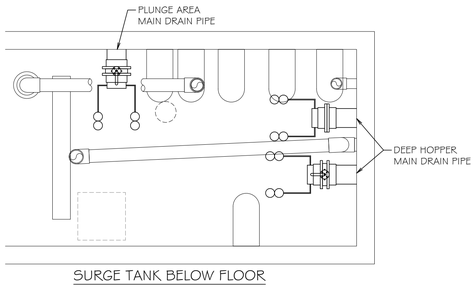
FILTER ROOM



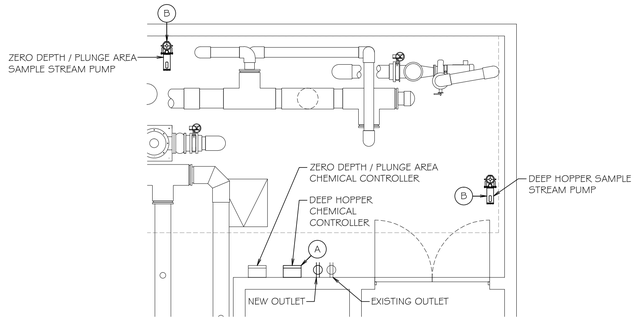
CHLORINE STORAGE ACID STORAGE

1 EXISTING CHEMICAL SYSTEM LAYOUT

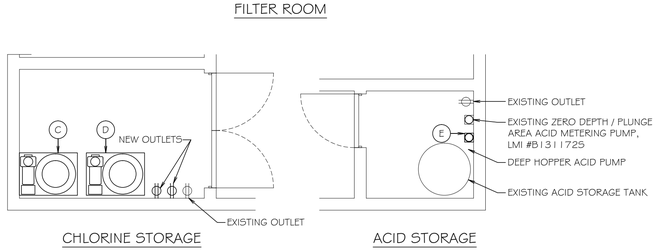
(ALTERNATE) SCALE: 1/4" = 1'-0"



SURGE TANK BELOW FLOOR



FILTER ROOM



CHLORINE STORAGE ACID STORAGE

2 NEW CHEMICAL SYSTEM LAYOUT

(ALTERNATE) SCALE: 1/4" = 1'-0"

PLUMBING NOTES

1. ALL PLUMBING WORK, THROUGHOUT THE ENTIRE SWIMMING POOL PROJECT, SHALL COMPLY AND BE IN ACCORDANCE WITH THE ILLINOIS STATE PLUMBING CODE.
2. PIPE MATERIALS FOR ALL POOL RECIRCULATION LINES TO BE, AS PER PLAN, SCHEDULE 80 PVC(ASTM D1785), UNLESS OTHERWISE SPECIFIED. PVC PIPING SHALL BE STAMPED WITH N.S.F. SEAL OF APPROVAL.
3. POOL WATER HEATER INFLUENT PIPE FROM THE BYPASS TO EXISTING HEATER INFLUENT PIPE TO BE SCH. 80 C.P.V.C.
4. EACH FLOWMETER SHALL BE LOCATED FIVE (5) STRAIGHT PIPE DIAMETERS UPSTREAM AND TEN (10) STRAIGHT PIPE DIAMETERS DOWNSTREAM FROM ANY VALVES, ELBOWS OR OTHER SOURCES OF TURBULENCE.
5. FILTER DRAIN SHALL BE PIPED TO WASTE WITH A SIX (6) INCH AIR GAP AT THE POINT OF DISPOSAL.
6. THESE DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL PIPE LOCATIONS TO BE FIELD VERIFIED BY POOL CONTRACTOR.
7. ALL VALVES THREE (3) INCHES AND SMALLER TO BE TRUE UNION PVC BALL VALVES. ALL VALVES FOUR (4) INCHES AND LARGER TO BE BUTTERFLY VALVES.
8. POOL CONTRACTOR TO MINIMIZE THE USE OF FITTINGS WHEREVER POSSIBLE.
9. THE CHEMICAL CONTROLLERS AND CHEMICAL EQUIPMENT SHALL BE INTERLOCKED W/ THE FILTRATION PUMPS. DURING SYSTEM SHUT-DOWN OR BUMP CYCLES THE CHEMICAL SYSTEMS ARE TO BE DISABLED.
10. SAMPLE STREAM INFLUENT PIPING SHALL ORIGINATE FROM THE MAIN DRAIN PIPES. SAMPLE STREAM EFFLUENT PIPING SHALL DISCHARGE INTO THE SURGE TANK.

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SEASCAPE AQUATIC
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HOFFMAN ESTATES, IL 60169

	DATE	REVISION

DESCRIPTION:
ALTERNATE
CHEMICAL SYSTEM LAYOUTS, EQUIPMENT LIST, DATA, PLUMBING NOTES, AND ELECTRICAL REQUIREMENTS

DATE:	11.16.17
DRAWN BY:	RRD / TJM
JOB NO.	A17269

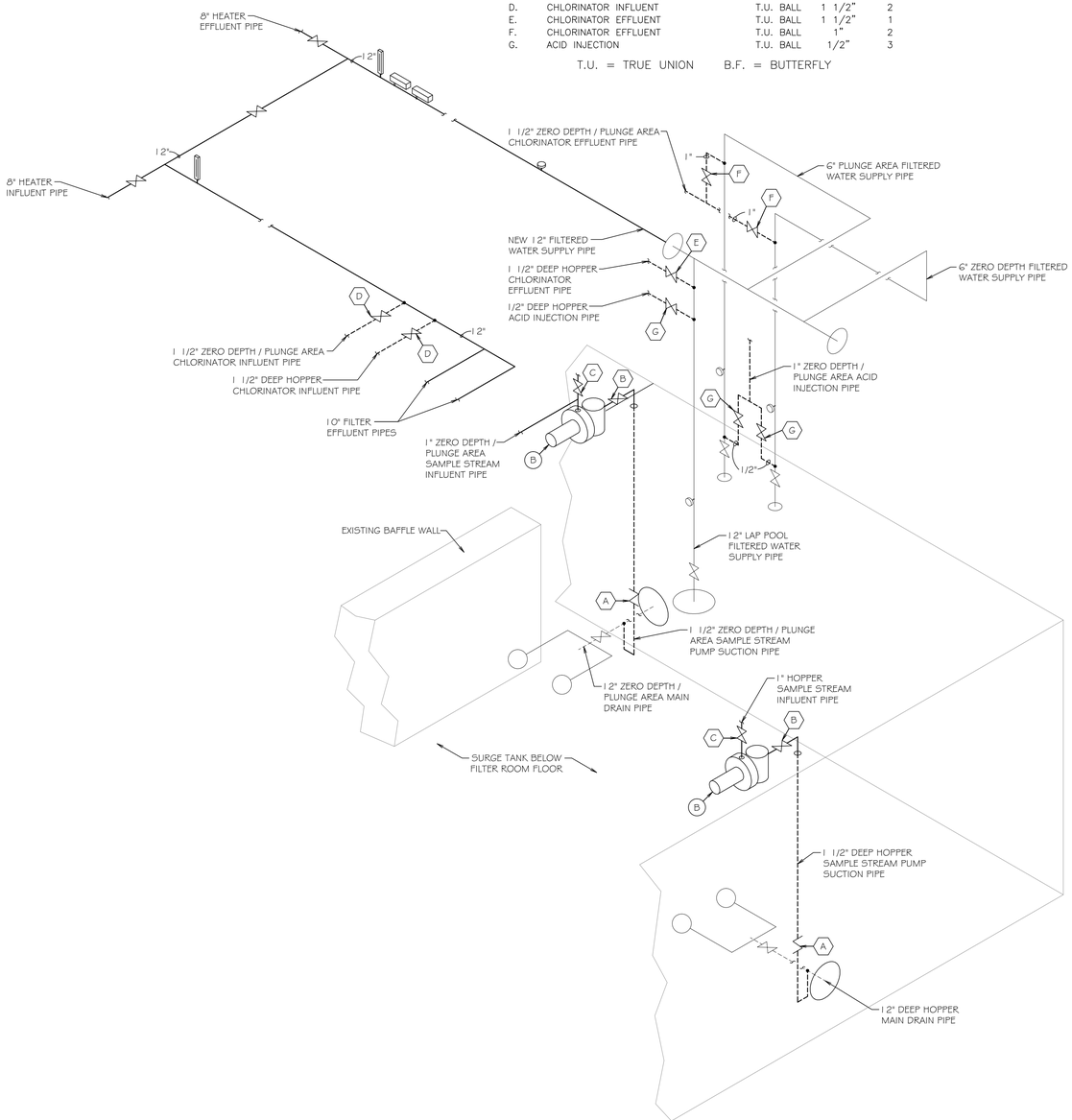
SP-5

VALVE LEGEND
(ALTERNATE)

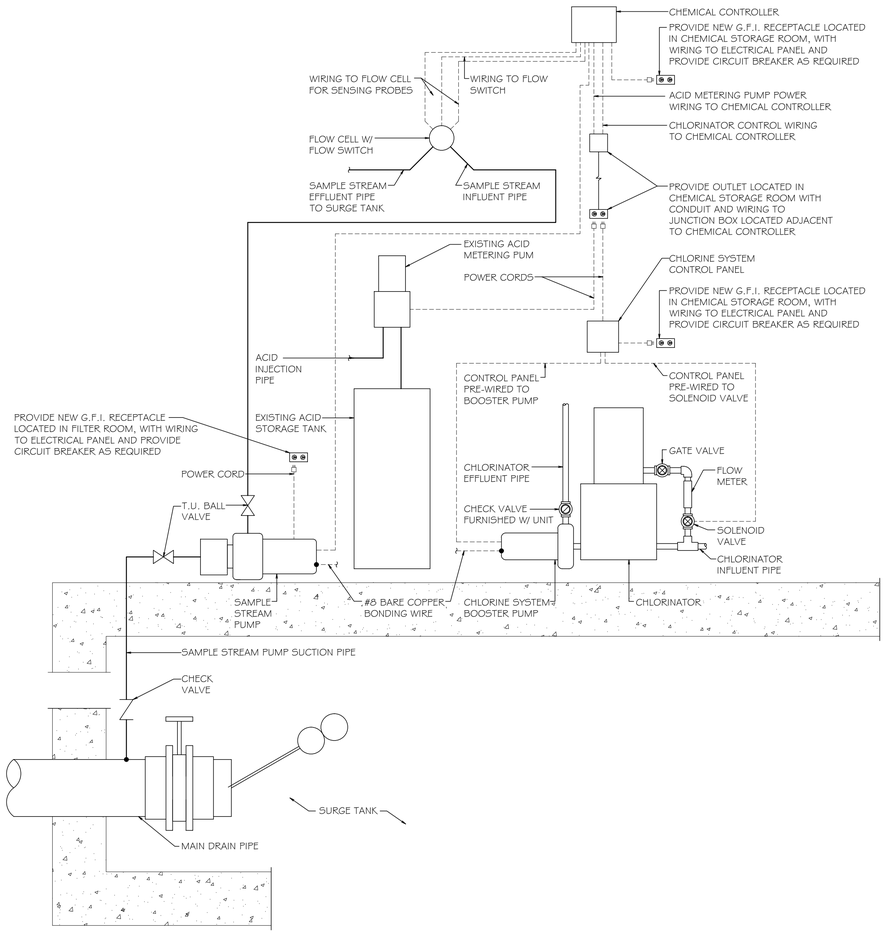
KEY ○—

NO.	VALVE DESCRIPTION	TYPE	SIZE	QUANTITY
A.	SAMPLE STREAM PUMP SUCTION	CHECK	1 1/2"	2
B.	SAMPLE STREAM PUMP SUCTION	T.U. BALL	1 1/2"	2
C.	SAMPLE STREAM INFLUENT	T.U. BALL	1"	2
D.	CHLORINATOR INFLUENT	T.U. BALL	1 1/2"	2
E.	CHLORINATOR EFFLUENT	T.U. BALL	1 1/2"	1
F.	CHLORINATOR EFFLUENT	T.U. BALL	1"	2
G.	ACID INJECTION	T.U. BALL	1/2"	3

T.U. = TRUE UNION B.F. = BUTTERFLY



1 NEW CHEMICAL SYSTEM PIPING DIAGRAM
(ALTERNATE) NOT TO SCALE



2 TYPICAL CHEMICAL CONTROLLER DETAIL
NOT TO SCALE

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HOFFMAN ESTATES, IL 60169

#	DATE	REVISION

DESCRIPTION:
ALTERNATE
CHEMICAL SYSTEM
PIPING DIAGRAM AND
VALVE LEGEND

DATE:	11.16.17
DRAWN BY:	RRD / TJM
JOB NO.	A17269

SP-6