

LOCAL AND REGIONAL REGULATIONS

PRIOR TO CONDUCTING WELL DECOMMISSIONING, MUNICIPAL AUTHORITIES SHOULD BE CONTACTED TO DETERMINE IF THERE ARE LOCAL REGULATIONS REGARDING THIS ACTIVITY.

WRITTEN RECORDS

PROVIDE COMPLETE AND ACCURATE WRITTEN RECORDS OF DECOMMISSIONING OPERATIONS. THE INFORMATION TO BE RECORDED TO INCLUDE THE ORIGINAL WELL LOG AND/OR CONSTRUCTION RECORD, THE TYPE OF GROUTING MATERIAL USED, VOLUME OF MATERIAL USED, AND METHOD OF PLACING GROUTING MATERIAL INTO THE WELL. UPON DECOMMISSIONING THE WELL, THE RECORD OF SUCH ACTION TO BE TURNED OVER TO THE OWNER. OWNER WILL SEND TO THE BUREAU OF WATER RESOURCE MANAGEMENT, 625 BROADWAY, ALBANY, NY, 12233-3508.

REMOVAL OF OBSTRUCTIONS

REMOVE EQUIPMENT, MATERIALS, DEBRIS, AND OBSTRUCTIONS THAT MAY INTERFERE WITH SEALING OF THE WELL OR BORING. THIS MAY INCLUDE PUMPING EQUIPMENT, DROP PIPE, PACKERS, ETC. VERIFY IN FIELD EXACT WELL EQUIPMENT INCLUDING SCREENS, PUMPS, PIPING, TORX ARRESTORS,

DISINFECTION

DISINFECT WELL USING A SOLUTION OF CALCIUM HYPOCHLORITE, SUCH AS HTH, CONTAINING APPROXIMATELY 65% TO 75% AVAILABLE CHLORINE.

CASING

VERIFY THE DEPTH OF THE WELL. CASING WITH AN OPEN ANNULAR SPACE SHOULD BE EITHER GROUTED IN PLACE OR REMOVED. FOR BIDDING PURPOSES, WELL CASING IS ESTIMATED TO BE 6" DIAMETER AND GOES INTO THE GROUND 150 FEET.

WHERE CASING IS GROUTED IN PLACE, CASING SHOULD BE CUT OFF AND CAPPED NOT LESS THAN 5 FEET BELOW FINISHED GRADE, WHERE PRACTICABLE. FOR WELLS LOCATED IN A BUILDING, UPON COMPLETION OF GROUTING THE CASING SHOULD BE FILLED TO FLOOR LEVEL WITH NO LESS THAN 12 INCHES OF CEMENT. CASING SHOULD BE CUT OFF NOT MORE THAN 3 INCHES FROM FLOOR LEVEL. AFTER THE GROUT HAS CONSOLIDATED, THE TOP OF THE CASING TO BE CLOSED AND SEALED. STEEL CASINGS TO BE SEALED WITH A WELDED STEEL PLATE.

GROUTING OF THE WELL

THE ENTIRE CASING, INCLUDING RISER ANNULAR SPACES BETWEEN CASINGS TO BE FILLED WITH EITHER CEMENT SLURRIES OR BENTONITE.

SLURRY MIXTURE AND PUMPING - WHEN A BENTONITE SLURRY, NEAT CEMENT SLURRY OR CONCRETE SLURRY IS USED, IT SHOULD BE PLACED INTO THE WELL UNDER PRESSURE VIA A TREMIE PIPE OF AT LEAST ONE INCH INSIDE DIAMETER. AT THE START OF OPERATIONS, THE TREMIE PIPE IS PLACED AT THE BOTTOM OF THE WELL TO AVOID SEGREGATION OR DILUTION OF SEALING MATERIALS. THE TREMIE PIPE TO BE SUBMERGED IN THE SLURRY AT ALL TIMES DURING SLURRY PLACEMENT. THE SLURRY MAY BE RAISED SLIGHTLY AS THE GROUT IS INTRODUCED TO THE CASING OR HOLE. PLACING OF GROUT TO THE DESIRED GROUT LEVEL SHOULD BE MONITORED BY PUMPING, AT WHICH TIME THE TREMIE PIPE MAY BE REMOVED. IF THE TREMIE PIPE REMAINS AT THE BOTTOM OF THE WELL DURING GROUT EMPLOYMENT, REMOVE THE PIPE PRIOR TO GROUT HARDENING.

CEMENT SLURRIES - NEAT CEMENT OR CONCRETE SLURRIES SHOULD BE PREPARED BY ADDING CEMENT OR SAND-AND-CEMENT TO THE CALCULATED REQUIRED VOLUME OF CLEAN WATER. THE MATERIAL TO BE ADEQUATELY MIXED UNTIL IT IS FREE OF LUMPS, THEN IMMEDIATELY PUMPED INTO THE WELL WITHOUT DELAY.

COARSE GRADE OR PELLETIZED BENTONITE - WHERE COARSE GRADE OR PELLETIZED BENTONITE IS USED, IT IS TO BE POURING SLOWLY INTO THE TOP OF THE WELL TO AVOID BRIDGING OF MATERIAL IN THE CASING OR BOREHOLE. PELLETS OR COARSE BENTONITE IS TO BE PLACED INTO THE WELL BY POURING AT AN EVEN RATE NOT TO EXCEED FIVE POUNDS PER FIVE MINUTE INTERVAL. FINE GRADE BENTONITE IS TO BE PLACED INTO THE WELL BY POURING AT AN EVEN RATE. BENTONITE IS NOT TO BE USED. A WORK PIPE OR WEIGHTED DROP STRING TO BE PLACED IN THE WELL AND THE HEIGHT OF ACCUMULATED PLUGGING MATERIAL MEASURED AFTER EACH 50 POUNDS OF BENTONITE IS PLACED IN THE WELL. IF MEASUREMENT INDICATES THAT BRIDGING OF PLUGGING MATERIAL HAS OCCURRED, A WORK PIPE, DRILL RODS, OR OTHER WEIGHTED DEVICE TO BE RUN INTO THE CASING TO BREAK THE BRIDGE. IF BRIDGING OCCURS IN THE BOTTOM OF THE SHIPPING CONTAINER, THE BRIDGE MAY BE BROKEN BY PLACING A WEIGHTED PIPE OR STRING INTO THE CASING TO PROMOTE EXPANSION OF THE BENTONITE ABOVE THE STATIC WATER LEVEL.

ADDITIONAL SEALING RECOMMENDATIONS FOR WELLS OR BORINGS IN UNCONSOLIDATED MATERIALS

IT IS RECOMMENDED THAT THE PORTION OF A WELL ADJACENT TO UNCONSOLIDATED MATERIAL BE FILLED WITH BENTONITE GROUT, HIGH SOLIDS BENTONITE GROUT, OR NEAT CEMENT GROUT. CONCRETE GROUT IS MOST APPROPRIATE FOR GROUTING IN THE DRY PORTION OF THE HOLE.



DWG LABEL	LOCATION	DESIGN MAKE AND MODEL	TOTAL CAPACITY	TOTAL DYNAMIC HEAD	MAX CONT OPERATING TEMP	INLET / OUTLET SIZE	RPM	HORSE POWER	FULL LOAD AMPS	VOLTAGE	PHASE	HERTZ	NOTES
			GPM	FEET	°F	NPS							
BP-2	PUMP ROOM P-1	GRUNDFOS HYDRO MULTI-BE 2 CME10-2	100	110	104	2.5	3450	3	16.6	208	3	60	1, 2

NOTES:

1. PACKAGED DUPLEX BOOSTER PUMP SYSTEM WITH VARIABLE FREQUENCY DRIVES AND DUPLEX CONTROL PANEL MOUNTED ON A SKID
2. EACH PUMP SIZED FOR 75% OF TOTAL SYSTEM CAPACITY.

DRAWING LABEL	LOCATION	MAKE AND MODEL NUMBER	TOTAL STORAGE CAPACITY (GALLONS)	MAXIMUM ACCEPTANCE VOLUME - GALLONS	WATER SERVICE PRESSURE (PSI)	MAXIMUM ALLOWABLE PRESSURE (PSI)	DIAMETER (INCHES)	HEIGHT (INCHES)	CONNECTION (NPT)	NOTES
HT-2	PUMP ROOM P-1	JOHN WOOD NO. JAPR 20-602	15	39.7	60	150	12	33 1/2	1	1, 2

NOTES:

1. REPLACEABLE BUTYL BLADDER (FDA APPROVED).
2. ASME CONSTRUCTION.



A.	REFER TO DRAWING NO. B0950 FOR GENERAL NOTES.
B.	REMOVE PLUMBING FIXTURES INDICATED, INCLUDING ASSOCIATED PIPING, FASTENERS, SUPPORTS, ETC. BACK TO FACE OF CONCRETE. REMOVE ALL REMAINING WALLS, BELOW FLOORS OR ABOVE CEILINGS.
C.	REPLACE OR RELOCATE PLUMBING FIXTURE INDICATED. MODIFY AND EXTEND EXISTING PIPING AS REQUIRED TO MEET FUTURE MR'S ROUGH-IN RECOMMENDATIONS AND TO MAKE ALL PIPING, CONDENSING, AND VENTING, ETC. WALLS, BELOW FLOORS OR ABOVE CEILINGS. PATCH DISTURBED SURFACES TO MATCH EXISTING. SEE "NOTES" FOR OTHERWISE. REFER TO "A" SERIES DWGS FOR EXACT LOCATION AND RISE/FAVOR OF NEW OR RELOCATED FIXTURES.
D.	REMOVE ABANDONED ACCESSIBLE PIPING TO MAIN BRANCHES. STACKS OR RISERS AS REQUIRED TO ELIMINATE EXPOSED PIPING AND DEAD END PIPING RUNS LONGER THAN 10 FEET. MINIMIZE EXPOSED PIPING TO MAINTAIN FINAL CONSTRUCTION OF WALLS, FLOORS AND CEILINGS.



S.E.D. Control No. 48-01-01-06-0-006-013

Rev. No.:	Date:	Description:



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TETRA TECH
ARCHITECTS & ENGINEERS

Mahopac Central School District
Mahopac, NY

Reconstruction To:
Mahopac Middle School

Enlarged Plans, Details and Schedule

Drawn By: DCG/ sef	Date: 08/21/20	Drawing Number:
Project No.: 121111-19002		BP400