

ADDENDUM TO THE BID DOCUMENTS		Page: 1	Total Pages: 14
<u>Addendum No:</u> # 1		<u>Date this Addendum Issued:</u> January 30, 2024	
<u>Issuing Office:</u> Matanuska-Susitna Borough School District (MSBSD) Purchasing Department 690 Cope Industrial Way Palmer, Alaska 99645 Phone: (907) 861-5120 Facsimile: (907) 861-5184		<u>Previous Addenda Issued:</u> None _____ _____ _____ _____ _____	
<u>Return Acknowledgment To:</u> Issuing Department		<u>Date and Hour of Bid Due Date:</u> February 12, 2024 at 2:00 P.M.	
<u>Bid Title:</u> Upgrade Wells at Knik and Goose Bay Elementary School		<u>As Advertised (Frontiersman):</u> January 12 and 14, 2024	
<u>Bid No:</u> B24-04		<u>As Advertised (ADN):</u> January 12 and 14, 2024	
<p>The following corrections, changes, additions, deletions, revisions, and/or clarifications are hereby made a part of the contract documents. In case of conflicts between this addendum and previously issued documents, this addendum shall take precedence. The bidder must acknowledge receipt of this addendum in the space provided on Appendix #1. Failure to do so may subject the bidder to disqualification.</p> <p>Attachments Clarifications (2 pages)</p> <p>Attachment C: REVISED Bid Form (1 page)</p> <p>Appendix 10: REVISED Specification Section 33 11 13 (10 pages) It replaces pages 31 - 40 in Appendix 7, Drawings and Specifications</p>			
END OF ADDENDUM #1			

APPROVED BY:	Signature on File	DATE:	January 30, 2024
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ADDENDUM #1

Information in this addendum takes precedence over original information. All other provisions of the document remain unchanged.

Note to Bidders: Bidders are required to acknowledge all addenda on Appendix 1.

The following additions, corrections and changes are hereby made to the above-referenced Invitation to Bid.

QUESTIONS AND ANSWERS:

GENERAL QUESTIONS:

1. Q: Could I please get an engineer's estimate or cost range for this project?

A: The estimated cost is less than \$200,000.
2. Q: Per the well pump specs for RFQ BID #B24-04, it looks like both wells will have the same pumps and pumping conditions. Can you confirm this?

A: No, this is incorrect. A basis-of-design submersible assembly is specified for the Goose Bay Elementary School (GBE) well. Please note an approved equal will be accepted. The proposed Knik Elementary School (KNE) well may not have the same assembly. Please reference Appendix 10: REVISED Specification Section 33 11 13 Potable Water Supply Wells, Article 2.2 Well Pump and Article 3.5 Water Well Construction.
3. Q: The specs call out in sec. 33 11 13 Grouting that the grout is to be placed from ground surface to 10', the drawing shows the pitless adaptor being installed at 10' from ground surface. ADEC requires 10' of continuous grout below the pitless so the grout would need to be installed from 10' to 20' below ground surface. Please amend specs to meet ADEC requirements for grouting public drinking water wells.

A: Please reference detail D/C2.01 and associated Note 'C' that requires a minimum of 10 feet continuous grout below the pitless adapter for the proposed KNE well.
4. Q: The grouting specs call out for an 8" annular space of grout on the outside of the 6" casing. This would require installing 14" surface casing to 20'. ADEC only requires a 2" annular space of grout on the outside of the well casing. Will a 2" annular space of grout be acceptable?

A: The specifications do not require 8 inches annular space of grout. Please refer to Appendix 10: REVISED Specifications Section 33 11 13, Article 3.5 M1, that requires at least 8 inches diameter greater than the casing (4-inch radii). The requested two (2) inches is less than four (4) inches and will not be allowed. Please also reference detail D/C2.01 and associated Note 'C'.
5. Q: The grout specs call for the use of Portland cement for the surface grout. This well is being drilled in an earthquake prone area and cement has been observed to crack during earthquakes causing the surface seal around the casing to fail. It is a widely accepted practice to use bentonite for the surface grout in the construction of water wells in Alaska. Will bentonite be an acceptable substitute for cement as the surface grout around the 6" casing?



A: Equivalent materials, such as bentonite, will be considered as an acceptable substitute.

6. Q: Sec. 33 11 13 part 2.1 state all materials shall comply with NSF standard 61. Does this include the 6" well casing? NSF 61 compliant well casing is only made by one manufacturer, is extremely expensive and has to be special ordered with long lead times.

A: No. Please see the attached Appendix 10: REVISED Specification Section 33 11 13 Potable Water Supply Wells.

7. Q: Sec, 33 11 13 part 2.4 calls out the use of a lead packer to seal the well screen to the casing. Lead packers have not been used in the water well industry in over 50 years and have deemed unsafe for use in drinking water wells. Will a rubber K-Packer, which is now the industry standard, be allowed as a substitute?

A: Please see the attached Appendix 10: REVISED Specification Section 33 11 13 Potable Water Supply Wells.

8. Q: Is there an estimated well depth for this project?

A: Attachment C: REVISED Bid Form establishes a unit price per linear foot for installed well casing at KNE (Line Item 2). Payment for Line Item 2 shall be based on the actual length of casing installed. All other costs for a complete and operable well shall be included in Line Item 1.

9. Q: Will there be compensation if it is necessary to drill beyond the estimated well depth?

A: The revised bid form established a unit price per linear foot for installed well casing at KNE (Line Item 2). Payment for Line Item 2 shall be based on the actual length of casing installed. All other costs for a complete and operable well shall be included in Line Item 1.

10. Q: Is there an estimated length for the required screen?

A: No. There is not an estimated screen length for the proposed KNE well.

11. Q: In the Goose Bay School is there a lockable disconnect above the transformer in the Custodian RM125 or is there a lockout readily available at Panel "E1", to follow the NEC?

A: Panel "E1" is to receive a new circuit breaker disconnect to serve the new transformer, as indicated by Sheet Note #1 on plan Sheets E3 and E4. This circuit breaker shall be provided with provisions for locking in the open position in accordance with National Electrical Code 450.14.

12. Q: Will we be able to dispose of the chlorinated water thru a dechlorination process either into the culvert or woods on any of the sides of the school?

A: Yes.



ATTACHMENT C:
REVISED BID FORM

The undersigned hereby further proposes to furnish all services, including labor, supplies, and supervision necessary to upgrade the wells at Knik and Goose Bay Elementary Schools in full accordance with the bid documents.

ITEM NO.	BASE BID	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
1.	Upgrade the wells at Knik and Goose Bay Elementary School	1	\$_____	\$_____
2.	Furnish and install Well Casing at Knik Elementary School.	235 LF*	\$_____	\$_____
TOTAL PRICE FOR BASE BID				\$_____

*The estimated quantity will be used as a basis for the uniform comparison of bids only. Payment for Line Item 2 shall be based on the actual length of the casing installed. The MSBSD does not guarantee a minimum or maximum amount on the casing.

Company: _____ Date: _____
Printed

Contractor: _____
Signature

Contractor: _____
Printed Name



SECTION 33 11 13 – POTABLE WATER SUPPLY WELLS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Knik Elementary School (KES):

1. Design and construct new water well including casing, submersible pump assembly, water service pipe, valves, flushing hydrant, controls, and all appurtenances as further detailed in the attached Plans and Specifications.

B. Goose Bay Elementary School (GBE):

1. Remove and replace the existing submersible well pump assembly and drop pipe with a new submersible well pump assembly and drop pipe. Furnish and install new flushing hydrant, valves, and all appurtenances as further detailed in the attached Plans and Specifications.

1.2 REFERENCE STANDARDS AND SECTIONS

A. Alaska Department of Environmental Conservation (ADEC) Regulations 18 AAC 80

B. American Water Works Association

1. AWWA A100 – Standard for Water Wells
2. AWWA C651 – Disinfecting Water Mains
3. AWWA C654 – Disinfecting Water Wells

C. ASTM International

1. ASTM A53 – Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
2. ASTM B88 – Specification for Seamless Copper Water Tube
3. ASTM C150 – Standard Specification for Portland Cement

D. Uniform Plumbing Code, latest edition

E. National Sanitation Foundation NSF Standard 60 & 61

1.3 SUBMITTALS

Provide the following:

- A. A construction schedule and sequence of work to be performed.
- B. A complete list of materials to be used, including well casing, well screen, sanitary seal, well pump, well controls, watertight well cap, pitless adapter and water pipe.
- C. Accurately record actual locations for depth of pitless adapter, grouting depth, casing depth, static water depth, well depth, pump set elevation and water line bury depth and provide locations on record drawings.
- D. Provide well log and certification that the well installation is in compliance with the reference standards and specifically with ADEC requirements.
- E. Provide well development record including, but not be limited to, date, time, and elevation of water level in the well, before development; depth to bottom of well, name of project and date of development; method used for development, to include size, type and make of equipment, bailer, and/or pump used; time spent developing the well by each method, to include typical pumping rate, if pump is used; volume and physical character of water removed, to include changes during development in clarity, color, particulates, and odor; volume of water added to the well, if any; volume and physical character of sediment removed, to include changes during development in color, and odor; source of any water added to the well; clarity of water before, during, and after development; total depth of well and the static water level as per ASTM D 4750 from top of the casing, immediately after pumping/development, and 24 hours after development; name and job title of individual developing well; and name and/or description of the disposal facility/area, for the waters removed during development.
- F. Provide disinfection report for the well and piping. Report shall include type and form of disinfectant used, date and time of disinfectant injection start and completion, sampling locations, name of sampler, initial ppm of disinfectant and residual disinfectant ppm of disinfectant after 24 hours for each sample location, date and time of flushing start and completion, and residual disinfectant ppm after flushing at each sample location. Disinfectant shall be certified to NSF 60.
- G. Provide water testing report and certification that testing was performed in compliance with ADEC regulations. Report shall include date of report, project name, testing laboratory name, address and telephone number, time, date and location of water sample collection, name of sampler, and coliform bacteria, inorganic chemicals, nitrate, volatile organic chemicals and secondary chemical levels for each sample.
- H. Provide pressure testing report. Report shall include time and date of test, name of tester, and initial and final test pressure.
- I. Provide disposal plan for waters containing high amounts of disinfectant.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ADEC regulations, AWWA A100, AWWA C651 and Uniform Plumbing Code.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Use only new materials that conform to plan details, or as specified. All materials shall comply with NSF Standard 61. Only lead-free pipe, flux and solder may be used.

2.2 WELL PUMP

A. KES:

1. Well pump shall provide a minimum of 85 GPM at 50 psi to the mechanical pressure tank and shall have a stainless steel motor, pump and impeller. Contractor shall select a well pump based on actual flow available and well depth. Ensure pump operates properly using controls and transformers as specified under Sheet E4, "Electrical Details and Panel Schedules".

B. GBE:

1. Goulds 85GS100 submersible Pump and CentriPro M100434 10 HP motor as further detailed on Sheet C2.02, or approved equal. Ensure pump operates properly using controls and transformers as specified under Sheet E4, "Electrical Details and Panel Schedules".

2.3 WELL CASING

- A. Case the well with 6-inch diameter standard weight black pipe, Grade A or B, with beveled ends, meeting ASTM A 53.

- B. Well casing need not meet the NSF Standard 61 requirement.

2.4 WELL SCREEN

- A. Determine screen length, area, size of openings, and material after exploring water-bearing strata and analyzing samples from the strata. The Engineer will approve screen criteria depending on thickness and uniformity of water-bearing strata, analysis of aquifer samples, well requirements, and the screen manufacturer's recommendations. Obtain representative samples of sands and water in the aquifer. Take the sand sample after obtaining a satisfactory yield according to Section 3.06. Submit the samples and a copy of the drilling log to the screen manufacturer. Give the Engineer copies of transmittals to and from the screen manufacturer.
- B. Use a final length of screen as recommended by the screen manufacturer and approved by the Engineer. Use the largest diameter that can be installed in the casing.
- C. Use a screen made of either silicon steel or stainless steel, based on chemical analysis of the well water. Screen must be strong enough to resist damage during installation and external force after installation. Do not change screen alignment after installation.

- ADD 1**
- D. Provide fittings of the same material as the screen needed to seal top of screen tightly to casing and to close bottom of screen. If screen is installed inside casing, provide a packer seal at top of screen with 12-inch minimum overlap of casing and screen. If screen is attached to casing, provide suitable coupling or weld screen to casing. Standard well packer shall be a Figure K type self-sealing neoprene with a mild steel or stainless steel collar. The packer may be welded or threaded.

2.5 DROP PIPE

- A. Use 2-1/2" Schedule 40 galvanized steel pipe with galvanized couplings meeting ASTM A 53.

ADD 1

2.6 Submersible Cable

- A. Pump cable shall have three separate conductors and a ground and shall be included in a single continuous jacketed assembly. The insulation shall be water and oil resistant and suitable for continuous immersion. The cable should be adequately secured to the discharge pipe by plastic ties, or other non-metallic means, at 10 foot intervals.
- B. Contractor shall furnish and install a new submersible cable for GBE and KES.

2.7 PITLESS ADAPTER

- A. Use commercially available, 2-1/2" pitless adapter, Campbell Mfg, Baker Mfg, Boshart Industries, or approved equal.

2.8 TORQUE ARRESTOR

- A. Shall be installed directly above the well pump and at intervals along the drop pipe per manufacturer recommendations.

2.9 FLUSHING HYDRANT

- A. Use 2" Mainguard #78 below grade flushing hydrant manufactured by Kupferle, or approved equal.

2.10 GATE VALVE

- A. Use Mueller A-2362-8 resilient wedge gate valve with threaded ends, or approved equal.

2.11 GROUT

- A. Use grout consisting of 1 part Portland cement in accordance with ASTM C150 and 3 parts sand mixed with only enough water to form a workable mix. Use of bentonite or other additives to reduce shrinkage, reduce permeability, increase fluidity or control setting time must be approved by the Engineer.

2.12 WATER SERVICE PIPE

- A. Use 2-inch soft-drawn, seamless, annealed ASTM B88 Type K copper pipe with flared fittings. Use minimum number of fittings as practical.

2.13 DISINFECTION

- A. Use Liquid Chlorine, Calcium Hypochlorite, or Sodium Hypochlorite.

2.14 PRESSURE SWITCH

- A. Use CentriPro or approved equal, compatible with selected pump assembly. Adjusted to a 30-50 psi operating range. Locate switch with Engineer. Pressure switch shall be installed with an accompanying pressure gauge and isolation valve that allows the pressure switch and gauge to be isolated for replacement.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. Drawings indicate general location and arrangement of well and piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Locate all facilities as shown on the Drawings, unless deviations are approved on Shop Drawings. Complete the water system and ensure it operates properly at the time of acceptance of the work. Furnish and install all incidental parts not shown on the Plans or specified in this Section that are necessary to complete the water system.
- B. Install piping at indicated slope and free of sags and bends. Use fittings for changes in direction.
- C. Coordinate piping materials, sizes, entry locations, and pressure requirements with building water piping.
- D. Consult the Plans for estimated locations of other utilities near the construction. Use this data for information only. The City does not guarantee their accuracy. Confirm and mark the exact locations of all existing utilities before starting work.
- E. Excavate, bore, or probe by hand ahead of work where necessary to determine the exact location of underground conduit or other features that might interfere with construction. Support and protect conduits or other services that cross the trench. Immediately repair or replace any existing utilities that you break or damage.

3.2 WATER PIPE INSTALLATION

- A. Install pipe and fittings according to these Specifications or the manufacturer's recommendations. Lay pipe to the grades and lines shown on the Plans.

- B. Remove all foreign matter from pipe interior before lowering into the trench. When work is not in progress, securely close all open ends of pipe and fittings to keep out trench water, earth, rodents or other substances.
- C. Keep trenches dry to avoid laying pipe in water. Do not lay pipe when weather or trench conditions are unsuitable. Keep water away from new joints, until the joint materials have hardened.
- D. Use methods to cut pipe that will produce tight joints and will not damage the pipe.
- E. Inspect conduit before lowering it into the trench. Replace defective, damaged, or unsound pipe.
- F. Place pipe bedding to conform to plan details. Place bedding, if required, to give pipe a uniform bearing for its full length. Do not permit couplings to rest on solid or original trench bottoms.
- G. Pipe bends must not exceed the manufacturer's recommended limits. If the specified or required alignment requires deflections beyond the limits, furnish special bends or enough shorter lengths of pipe to provide angular deflection within the limits.
- H. Use standard lengths of pipe except where fittings require short lengths. Use the least number of fittings as possible
- I. Install pipe with a minimum cover of 10 feet unless indicated otherwise.
- J. Install warning tape 6 inches above the buried pipeline.

3.3 WATER PIPE TESTING

- A. Open bore flush service pipe and perform hydrostatic test. The Contractor shall furnish all necessary assistance, equipment, labor, materials and supplies necessary to complete the test to the satisfaction of the Engineer. Bleed all air from the line. Pressurize the line to 150 psi and terminate pumping. If the pressure remains constant for 30 minutes without the aid of the pump, the line will be considered watertight.
- B. Notify the Engineer 48 hours prior to test and notify the Engineer two hours in advance of the scheduled time if the test is to be delayed. In the event the Engineer does not receive adequate notification, the Contractor shall reimburse the Engineer for all expenses incurred, including but not limited to salary, transportation and administrative costs

3.4 WATER PIPE DISINFECTION

- A. Disinfect line by introducing a chlorine-water mixture into the line to achieve a dosage of 40 ppm to 50 ppm chlorine concentration. All fixtures on the line shall be opened to allow treatment to pass through. Maintain disinfectant in the system for 24 hours at which time a residual of 5 ppm chlorine shall be present in all parts of the water line.
- B. Flush, circulate and clean pipeline until all residual chlorine has been removed. Take samples from representative points in the system and submit to testing laboratory for bacteriological examination. Repeat disinfection until satisfactory results are obtained.

- C. Legally dispose of chlorinated water. Submit disposal plan for approval by Engineer and ADEC.

3.5 WATER WELL CONSTRUCTION

A. GENERAL

1. Drill, develop, case, and test wells. Furnish and place all materials at the sites as detailed on the Plans. Procure all required permits, certificates, and licenses.
2. Engineer does not guarantee the presence of water at the anticipated depth. The exact depth will depend on adequate yield and quality.
3. The water well for this facility is classified as a Non-Transient, non-Community Water Source (NTNCWS).

B. Protection of Site

1. Protect all structures, trees, shrubbery, etc., during the work. Remove from the site all cuttings, drillings, debris, and unused materials. Conduct water pumped from the well to a designated disposal area so as to not cause erosion or other damage to property or create a nuisance.

C. Bore and Casing

1. Drill the well straight, plumb, and large enough to receive the size of casing specified. Either weld or thread casing joints. Make the inside of the casing reasonably smooth and watertight. Casing shall extend a minimum of 24 inches above the finished ground surface.

D. Tolerance for Plumb:

1. The maximum allowable horizontal deviation (drift) of the well from the vertical shall not exceed a level that allows a pump assembly of nominal diameter 2" smaller than the nominal casing size to be installed without bending.

E. Tolerance for Alignment:

1. A pump of nominal diameter 2" smaller than the nominal casing size shall be able to be installed in the completed well to the top of the well screen without bending.

F. Correction of Faulty Plumbness and/or Alignment:

1. Should the completed well fail to meet the tolerances specified above, the Contractor shall correct such defects at his own expense.

G. Boring Log

1. Keep an accurate log of all materials encountered and the depths at which the changes in the formations occur, together with other information as required. Take samples of the materials found in each stratum at intervals of 5 feet or less. Preserve samples in your own receptacles. Mark the samples plainly to show the depth below the ground surface at which the sample was obtained. Include full, descriptive notes of everything found during drilling

and of all difficulties or unusual conditions. Describe all waterbearing strata in detail. Indicate whether the material is loose or compact, what color it is, and, if the material is gravel, whether it is water-worn or angular. Note the presence of any clay. After completing the well, deliver one copy of the log and results of the yield test to the Engineer for transmittal to the State according to AS 41.08.

H. Protecting Water Supply

1. Take all precautions as directed or necessary to prevent contaminated water, or water with undesirable physical or chemical characteristics, from entering the stratum from which the well will draw its supply. Take all necessary precautions during construction to prevent contaminated water, gasoline, etc., from entering the well through the opening or seeping through the ground surface.

I. Corrective Work

1. If the well becomes contaminated, or if water with undesirable physical or chemical characteristics enters the well due to Contractor's neglect, perform corrective work at your expense. Supply casings, seals, sterilizing agents, or other necessary materials to eliminate the contamination or shut off the undesirable water.

J. Temporary Capping

1. At all times during the work, protect the well to prevent tampering or contamination with foreign matter. After completing the well, provide and set a substantial screwed or flanged cap 24 inches above the finished ground surface, or as directed.

K. Testing and Developing

1. Yield Test. After completing the bore or as directed, pump to determine the yield. Submit proposed pumping procedures for review and approval. Determine the approximate level of water in the well before the yield test and immediately after completion. The desired yield is 85 gallons per minute with a sustained yield of 5,100 gallons per hour. The minimum yield test duration shall be 8 hours.
2. Furnish, install, and operate equipment of approved size and type for measuring the flow of water and depth to the water level in the well. Use a suitable flow-measuring device such as a weir box, orifice, or water meter.
3. If the well yield test does not provide the desired flow rates specified above, contractor shall evaluate the geologic and hydrologic well data and decide on another course of action. Submit proposed procedure to provide adequate flow within 10 working days.
4. After receiving approval for a satisfactory yield test, but before developing the well, take a water sample and submit it to an ADEC-approved laboratory for a bacteriological and chemical examination. Pay for all costs of samples and analysis.
 - a. Developing. After completing drilling, develop and clean out the well. Develop the well with a suitable surge plunger or other device designed to develop wells in the water-bearing formation you encounter. Develop to give the maximum practical yield of water per foot of drawdown. Develop to extract from the water-bearing

formation the practical maximum quantity of such fine materials that may, during the life of the well, be drawn into the casing when the well is pumped under maximum drawdown conditions. After completing developing, remove all sediment to the full depth of the well. Contractor's equipment and material remain their property; remove them at the end of the work. Prepare and provide to the Engineer a well development record.

L. Screen

1. Install well screen in accordance with the screen manufacturer's recommendations and as appropriate to the well-drilling method used

M. Grouting

1. When the well is accepted, ream the upper 10 feet of the bore to a diameter at least 8 inches greater than the casing OD. Center the casing in this section and hold it in place with enough spacers to maintain true alignment. Place grout in the area around the casing. Place the grout so that surface water and other impurities cannot infiltrate the well along the bore and casing. Use an approved grouting method. Force grout from the bottom of grout space toward the ground surface. Use a continuous grouting operation. Use continuous spacers of clean, durable material suitable for concrete aggregate.
2. Allow the grout to set for 3 days before doing any work that may disturb it or cause it to crack. Take care to protect the grout from damage and ensure proper curing during the 3-day setting period.

N. Abandonment of Well

1. If water supply is not satisfactory, abandon the well. Plug the abandoned well bore with impervious material as required. Compensation for abandoning well bores will be made in accordance with GP 90-05.
2. If drilling is abandoned at one location and began at another because of Contractor's operations, or if a satisfactory well bore as specified or required is not completed, plug the abandoned bore as specified. No compensation will be made for any work performed at the abandoned site. Salvaged materials remain your property.

3.6 WELL PUMP ASSEMBLY

- A. Install the drop pipe and pump as detailed on the Plans. Set the pump plumb on the casing. Furnish and install all required miscellaneous hardware not specified or detailed so that the water system will operate properly.
- B. On the basis of the yield test, the Contractor shall stipulate the depth to the bottom of casing and the pump set elevation.

3.7 WELL DISINFECTION

- A. After completing the pump assembly, disinfect the well by adding chlorine or hypochlorite in sufficient quantity so that a concentration of at least 50 ppm of chlorine shall be obtained in all parts of the well. Chlorine solution shall be prepared and introduced into the well in an approved manner and shall remain in the well for period of at least 12 hours but not more than 24 hours. Information on methods for preparing chlorine solution and introducing it into the well may be found in AWWA C654. After the contact period, the well shall be pumped until the residual chlorine content is not greater than 1.0 ppm. The well shall be pumped to waste for an additional 15 minutes with less than 1 ppm chlorine residual after which two samples shall be taken not less than 30 minutes apart and tested for the presence of coliform bacteria.
- B. Obtain sample bottles from an ADEC-approved testing laboratory. Collect water samples as specified by Table B in 18 AAC 80.205 (c) (2), and submit them to a State approved laboratory for testing. If the sample does not meet Public Health requirements, disinfect again and draw more samples until results are satisfactory.
- C. Legally dispose of chlorinated water. Submit disposal plan for approval by Engineer and ADEC.

3.8 WELL PERMITTING

- A. After completing well disinfection, submit copies of satisfactory test results to the Engineer for submission to ADEC. Engineer will obtain both interim and final approvals to operate the new well and water system

END OF SECTION 33 11 13