





# E & D Water Wells, LLC

3530 West Spence Ln.  
Wasilla, AK 99623  
(907) 373-1598 Fax: (907) 357-1598



Borough <b>MATSU</b>	Subdivision <b>MERCIFUL ESTATES</b>	Lot <b>1</b>	Block	Section QTRS.	Section	Township	Range	Meridian <b>SEWARD</b>
Location / Sketch <b>CLASS A</b>				Well Owner <b>DROBENKO INV.</b> <b>354-2819</b>				
Depths Measured From: <input checked="" type="checkbox"/> Casing Top <input type="checkbox"/> Ground Surface				Well Depth:		Date Of Completion		
Borehole Data: Material Type & Color		Depth From To		Depth of Hole: <b>90</b> Ft. Depth of Casing: <b>80</b> Ft.		<b>2.16.15</b>		
<b>STICK UP</b>	<b>0</b>	<b>3</b>	Depth To Static Water Level: <b>49'</b> Ft. Below <input type="checkbox"/> Top of Casing <input type="checkbox"/> Ground Surface Date: <b>2.16.15</b>					
<b>TOP SOIL - mixed</b>	<b>3</b>	<b>9</b>	Method Of Drilling: <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Cable Tool <input type="checkbox"/> Other:					
<b>Loose Sandy Gravel</b>	<b>9</b>	<b>38</b>	Use Of Well: <input type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Monitor <input checked="" type="checkbox"/> Public Supply <input type="checkbox"/> Other					
<b>CLAY GRAVEL</b>	<b>38</b>	<b>71</b>	Casing Stick-Up: <b>3'</b> Ft. Dll. <b>6"</b> In. to <b>6"</b> Ft. Casing Type: <b>408 20 SDR</b> In. to <b>6"</b> Ft.					
<b>WATER GRAVEL</b>	<b>71</b>	<b>90</b>	Well Intake Opening Type: <input type="checkbox"/> Open End <input checked="" type="checkbox"/> Screened <input type="checkbox"/> Perforated <input type="checkbox"/> Open Hole					
			Depths Of Openings: <b>80'</b> To: <b>90'</b> Ft.					
			Screen Type: <b>STAINLESS STEEL</b> In. <b>6"</b>					
			Slot/Mesh Size: <b>35</b> Length: <b>10'</b> Ft.					
			Gravel Pack Type: <b>LOOSE</b>					
			Volume Used: _____ Depth to Top: _____					
			Group Type: <b>Bentonite</b> Volume: _____					
			Depth: From <b>10'</b> Ft. to <b>ground level</b>					
			Development Method: <b>AIR + TURBOPUMP</b>					
			Duration: <b>Howe</b>					
			Pumping Level & Yield: _____ Ft. After <b>1</b> Hrs. Pumping <b>40</b> gpm					
			Pump Intake Depth: _____ Ft. Horsepower: _____					
			Well Disinfected Upon Completion? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

## CONTRACTOR INFORMATION:

**E & D WATER WELL**

Registered Business Name

**Ed Bean 7-6-15**

Signature of Authorization Representative

Date

REMARKS: **Bentonite was added**

**to casing - Bentonite from 10' around casing 3" to ground level**

**JOB #150070615**





THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

**Department of Environmental  
Conservation**

DIVISION OF ENVIRONMENTAL HEALTH  
Drinking Water Program

1700 E Bogard Rd. Bldg B, Ste 103  
Wasilla, Alaska 99654  
Main: 907.376.1805  
Fax: 907.376.2382  
[www.dec.alaska.gov](http://www.dec.alaska.gov)

March 7, 2016

Catherine Whaley  
Firedance Tutoring Center  
2070 N. Merciful Circle  
Wasilla, AK 99654

RE: Firedance Tutoring Center  
Lot 1, Merciful Estates  
Drinking Water System Classification Determination: **Non-Transient Non-Community (NTNC)**  
System Approval Required (PR# 9917)

Dear Ms. Whaley:

Thank you for submitting a completed *Public Water System Classification* form. According to the information submitted, this drinking water system will serve a tutoring center with up to 15 staff and 135 students. Based on a review of the submitted information, this drinking water system is classified as a Non-Transient Non-Community public water system

System Classification: Non-Transient Non-Community Water System (NTNC)	
Service Connections & Population Served	
Number of service connections	1
Number of days per year of operation	180
Residents (primary place of abode)	0
Non-transient (>6 months per year)	Up to 150
Transient (<6 months per year)	0

This drinking water system is required to be approved by the department. To request approval, please contract with a professional engineer licensed in the state of Alaska to provide engineering plans for the system to this office for review and approval. (Checklists detailing the submittal requirements are available upon request or online at: [http://dec.alaska.gov/eh/dw/Engineering/Plan\\_rev\\_checklist.htm](http://dec.alaska.gov/eh/dw/Engineering/Plan_rev_checklist.htm))

The department requests submittal of engineering plans within 60 days of the receipt of this letter. Contact this office to discuss an extension of time if necessary.

Please note, in addition to the plan review and routine water quality monitoring, the Drinking Water Regulations,

Ms. Catherine Whaley

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March 7, 2016

18 AAC 80.007, require that this system be actively supervised as described in the Operator Certification Regulations, 18 AAC 74, by operators who are certified in accordance with AS 46.30 and 18 AAC 74. For more information on operator certification requirements contact Ken Smith, Environmental Program Specialist (907-465-5136 or [Ken.Smith@alaska.gov](mailto:Ken.Smith@alaska.gov).)

The basis for this determination is information submitted by the owner of the system. If the summary above is inaccurate, please contact this office. You are required to contact the department to update this information when it changes. Changes to the water source, treatment (if provided), number of service connections, population served, or number of days of operation may result in a change to the system classification and the associated plan review and monitoring requirements. Contact this office for more information regarding classification determinations.

### Appeal Process

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195- 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Requests for an adjudicatory hearing or informal review may be made by mail, electronic mail, or facsimile. Informal review requests must be delivered to the Division Director at 555 Cordova St., Anchorage, Alaska 99501, within 15 days of receipt of this decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, Larry Hartig, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days of this decision. If a hearing is not requested within 30 days, the right to appeal is waived. More information on the Department's administrative appeals process can be found at the following website: <http://www.dec.state.ak.us/commish/ReviewGuidance.htm>.

If you have any questions or concerns, please don't hesitate to contact me at 376-1805, or via email at [gary.ellis@alaska.gov](mailto:gary.ellis@alaska.gov)

Sincerely,



Gary Ellis, E.I.T.  
Environmental Engineering Associate  
Drinking Water Program, Wasilla Office

cc: Scott Fogue and Amy Hill, DEC, Drinking Water Program – via email  
Breanna Bullock, DEC, Food Safety & Sanitation – via email  
Oran Woolley, DEC, Engineering Support & Plan Review – via email  
Ken Smith, DEC, Facilities Group – via email  
Mike Erdman, P.E. (Erdman & Associates) – via email



**ERDMAN & ASSOCIATES**  
**Consulting Engineers / Water Testing Laboratory**

5200 Dunbar Drive  
 Wasilla, AK 99654

Phone 907-376-6989  
 Fax 907-373-2157

August 4, 2015

Alaska Department of Environmental Conservation  
 Attn: Mr. Oran Woolley  
 1701 N Bogard Road  
 Wasilla, AK 99654

Re: Firedance Tutoring Center; L1 Merciful Estates; Proposed Onsite Wastewater Disposal System;  
 E&A Project #08092; REQUEST FOR APPROVAL TO CONSTRUCT

Mr. Woolley,

Attached for your review and approval are design drawings, ADEC plan review checklists and owner's statement, as well as a check for the ADEC plan review fee of \$360.

**Project Description**

The proposed project is a conventional onsite septic tank/drainfield. The facility served is a tutoring center, which will have a maximum of 10 staff members, and will serve a maximum of 120 students. Students do not attend full time, but rather have scheduled appointments for tutoring sessions.

Our design criteria and calculations are as follows:

**Design Wastewater Flows:**

Staff	15 gpd * 10 =	150
Students	10 gpd * 120 =	1,200
Total (Q).....		<b>1,250 GPD</b>

**Septic Tank Sizing:**

$V = 0.75Q + 1,125 = 0.75(1,250) + 1,125 = 2,063$  gallons  
 Design – 2,500 gallon 2-comp tank

**Soil Absorption System Sizing:**

Subsurface soils are clean gravel with sand, visually classified as GP-GW  
 Assumed percolation rate faster than 1 minute/inch  
 Design calls for ADEC-Approved filter sand – Design Application Rate 0.8 gpd/sq ft

Minimum SAS Size =  $1,250 \text{ gpd} / (0.8 \text{ gpd/sq ft}) = 1,563 \text{ sq ft}$   
 Design SAS Size – 30' x 55' = 1,650 sq ft

Mr. Oran Woolley, ADEC  
Re: Fircdance Tutoring Center

4 August 2015  
Page Two

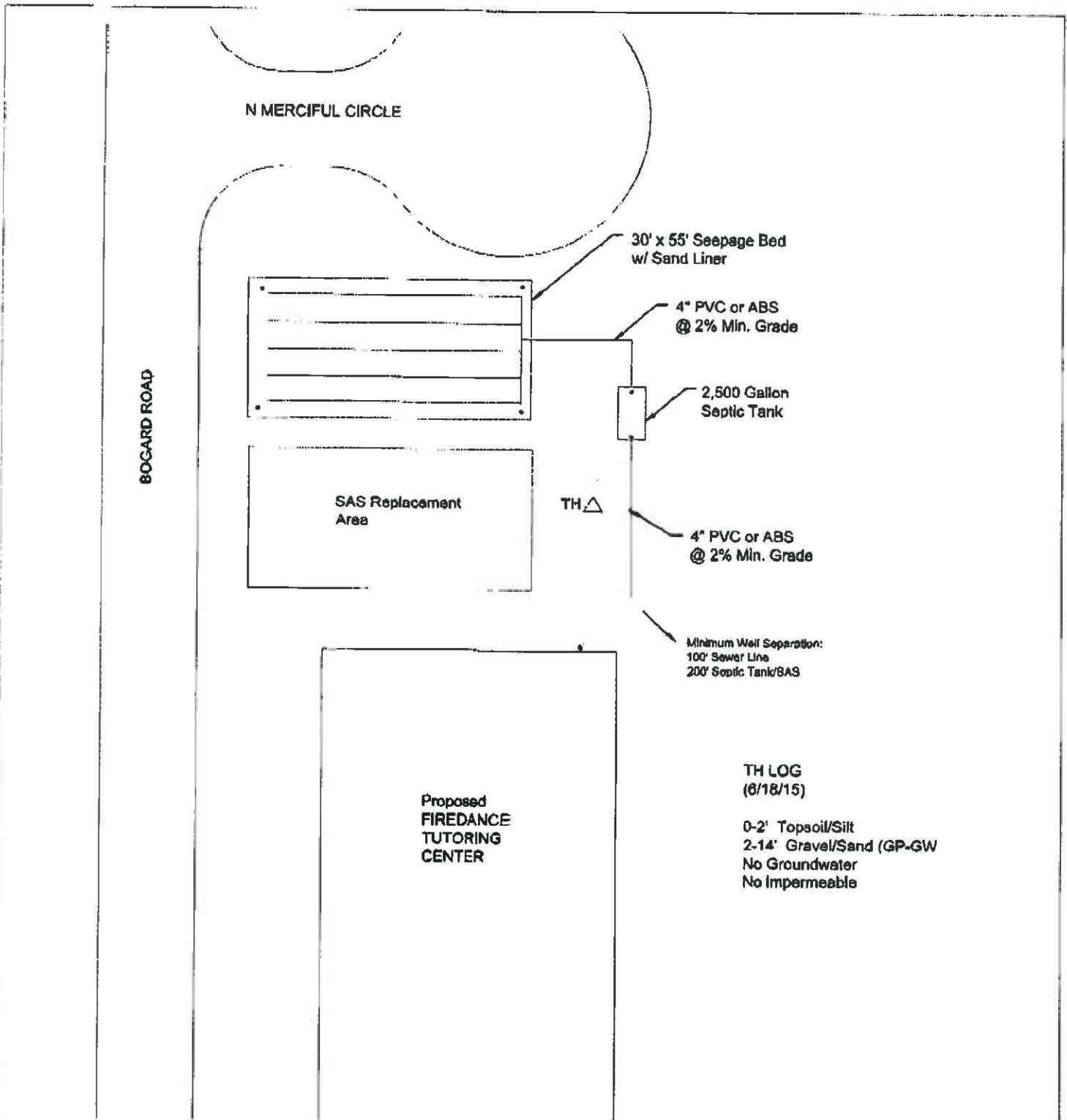
**Summary**

At this time we are requesting issuance of "Approval to Construct". Thank you for your assistance, and please call or email if you have any questions or need additional information.

Sincerely,

Michael R. Erdman, P.E.

cc: Alex Drobenko  
Catherine Whaley



## SEPTIC SYSTEM PLAN VIEW

NTS

SEPTIC DESIGN DRAWING  
Firedance Tutoring Center  
Wasilla, Alaska

ERDMAN & ASSOCIATES  
5200 Dunbar Drive  
Wasilla, AK 99654

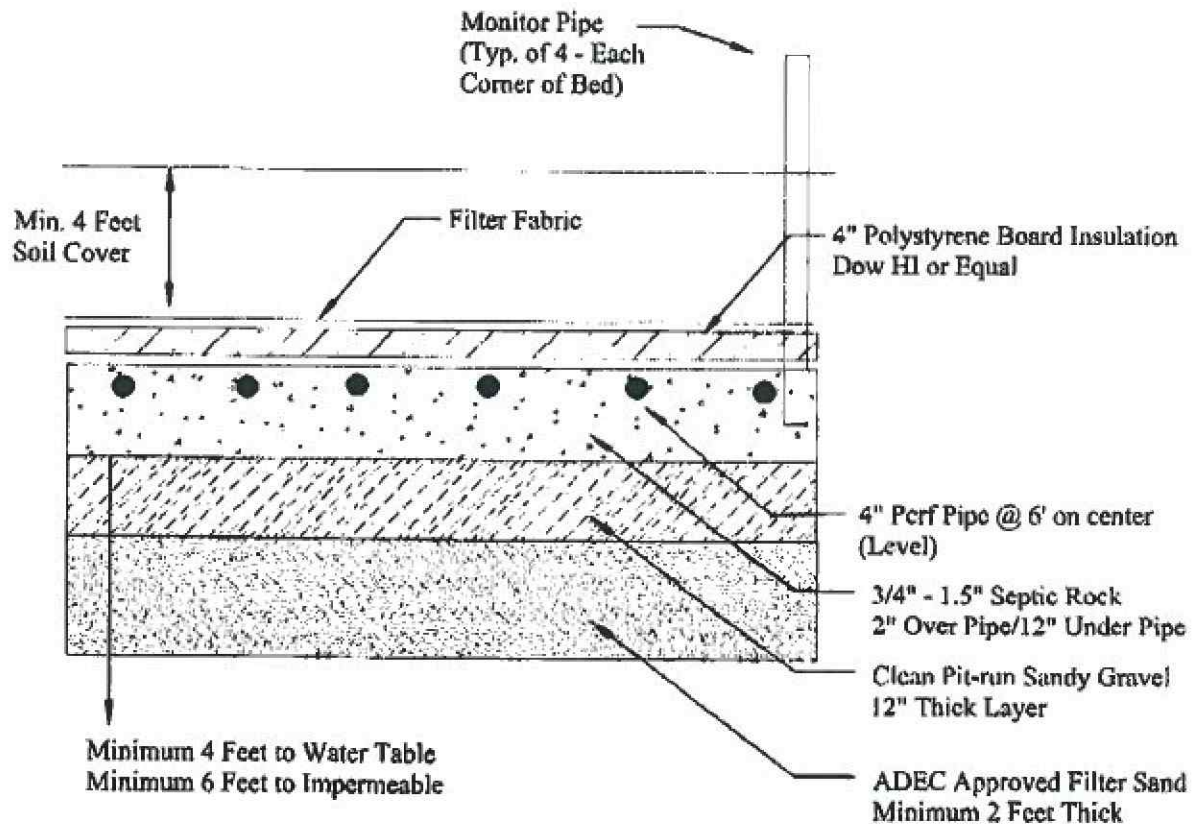


Sheet 1 of 2

Scale As Noted

Project #15110

4 August 2015



### SEEPAGE BED SECTION

NTS

#### NOTES:

1. Construction shall be in conformance with ADEC regulations and construction standards (Certified Installer Manual).
2. Contractor shall coordinate with Engineer to allow for inspection of all work prior to burial.
3. Contractor shall be responsible for construction site safety.

**SEPTIC DESIGN DRAWING**  
 Firedance Tutoring Center  
 Wasilla, Alaska

**ERDMAN & ASSOCIATES**  
 5200 Dunbar Drive  
 Wasilla, AK 99654

Sheet 2 of 2

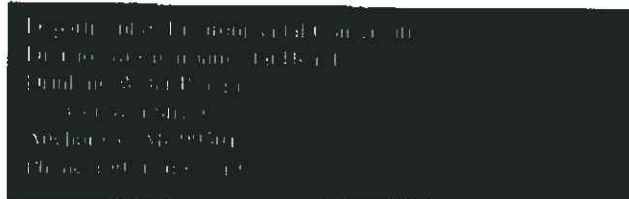
Scale As Noted

Project #15110

4 August 2015







## ALASKA PUBLIC WATER SYSTEM LOCATIONAL DATA COLLECTION FORM

Public Water System Name: Firedance Tutoring Center		PWS ID#:
Name of Person Determining Lat/Long: Michael R. Erdman, PE		Phone: (907) 232-3140
Name of Person Completing Form: Michael R. Erdman		Phone: (907) 232-3140
Local Facility Name: Well		Date Collected:
		Date Completed:
1) Facility Type. (Check one)		
Sources: <input checked="" type="checkbox"/> Wellhead <input type="checkbox"/> Surface Water Intake <input type="checkbox"/> Treatment Plant		
2) The date the latitude and longitude were researched or collected. Example: 06/30/2007		
0 3 / 2 4 / 2 0 1 6		
3) Latitude in decimal degrees. Must be recorded in WGS 84. For Alaska, latitudes are between 51 and 80 North. Give data to available accuracy. Example: +56.234230		
+ 6 1 . 6 0 1 4 2 1		
4) Longitude in decimal degrees. Must be recorded in WGS 84. For Alaska, longitudes are generally -126 to -180 West. The minus sign means "West." Use + for "East." Example: -136.23423		
- 1 4 9 . 3 5 4 2 7		
5) Are the latitude/longitude coordinates taken at the Wellhead /Intake? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, describe the proximity to the wellhead/intake (for example, 30 feet NW of the wellhead or intake)		
6) Type of GPS Unit used to determine latitude and longitude. (Describe unit and model number) Samsung Galaxy S5		
7.) Lat/long accuracy in meters. GPS accuracy is typically encoded in the unit's display. The datum used must be in WGS 84. Example: 30. (meters)		
. 3 0 . Meters		
8.) Site map or aerial image identifying the location of the facility must be provided to assist DEC Staff verify the lat/long location in the State geospatial database. (As-built, Google Maps, Google Earth, MSN Live Earth, Yahoo Maps are all acceptable.)		
<input checked="" type="checkbox"/> Yes a map with approximate location has been provided.		