

Engineer's Soils Report

Overlook Estates Addition #3

Lots 1-28

Municipality of Anchorage

Prepared for:

Eklutna, Inc.

16515 Centerfield Drive #108

Eagle River, AK 99577

Prepared By:

Pannone Engineering Services, LLC

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PALMER, AK 99645

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Submitted By:



Steven R. Pannone, P.E.

Principal, Civil Engineer

June 18, 2020

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Engineering Report

Project Description

This soils report is to identify the suitability of the soils on the subject lots for on-site septic systems. The subject lots are the proposed subdivision of Overlook Estates Addition #3 LOTS 1-28. This report will detail the soils encountered during the soils investigation, existing topography, impact to surrounding wells and septic system and the suitability of the soils encountered for the use of on-site wastewater disposal systems and water supply systems. The lots range from approximately 54,590 square feet to 66,268 square feet in size. All the proposed lots are currently undeveloped.

Soils Investigation

Pannone Engineering Services (PES) performed a soils investigation on May 14, 15, and 18 of 2020, in the area that the subdivided lots will be located. The test pits were excavated by White Raven Excavating and were excavated to the maximum extent of the excavator or until refusal. The test pits revealed a limited variety of soils. PES did not encounter bedrock in any of the test pits, groundwater was observed during excavation on lots 5,8,9, and 26. Water monitoring was conducted on all test holes on May 26, 2020. Please see the attached soils logs for soil profiles, percolation rates and groundwater levels.

Topography

The proposed Subdivision is located on Eagle River Rd approximately 6 miles from the intersection of Eagle River Rd and Eagle River Loop Rd. The slope is generally from North to South across the entire proposed subdivision. The subject area slopes are approximately 5-15% with no steep slopes in the vicinity.

Surface water

An unnamed stream runs through the proposed subdivision. The stream flows from North to South through Lot 26 and meanders south between Lots 4 & 5. The stream centerline as well as a one hundred-foot (100') conventional wastewater system setback, a fifty-foot (50') Advanced wastewater treatment system setback, and a twenty-five (25') stream protection setback are shown on the attached subdivision site plan. Eagle River flows from East to West across the Southern property line of the proposed subdivision. At no point is the nearest edge of Eagle River within one hundred feet (100') of the proposed subdivision. Class A Wetlands exist in the area and are shown on the site plan, the southeast corner of Lots 1 & 2 are in the wetland area. These areas will not be used for on-site wastewater disposal systems or private wells. All required separation distances required AMC 15.65 have been observed.

Existing water and wastewater systems

All lots in the proposed subdivision are currently undeveloped. There are developed lots to the North which are part of Overlook Estates Subdivision. The existing water supply systems are private wells and have 100-foot protective radii around them (i.e. a new wastewater disposal system may not be located less than 100 feet from these private water wells.) The documented wells are far enough back on the lot that their protective well radii do not affect the proposed subdivision lots.

Water Availability

This subdivision is located on Eagle River Rd where water is readily available. The surrounding wells are between 140 and 450 feet deep. The static water levels range between 48 and 180 feet below the ground surface. The existing well flow data that was available shows that the wells in the area can produce anywhere from 1.5 to 8.0 gallons per minute.

Based on the record research and field data we collected, there appears to be adequate water available for the proposed subdivision without affecting the surrounding wells.

Legal Description	Well Depth	Static Water Level	Production	Nitrates mg/L
Overlook B4, L1	300	150	3 gpm	0 (2007), 0.2 (2002), 0.5 (2000)
Overlook B4, L2	450	110	1.5 gpm	0.69 (2001)
Overlook B4, L3	423	180	1.5 gpm	0.1 (1990)
Overlook B4, L4	160	48	2.0 gpm	Unknown
Overlook B1, L5	141	70	5 gpm	Satisfactory (2005)
Overlook B1, L6	141	100	8 gpm	1.94 (2015), 2.31 (2006)
Overlook B1, L4	200	100	3.5 gpm	4.36 (2007), 4.11 (2003), 2.24 (1994)

Engineering Criteria

The soils in this area are typically organics underlain by silty sands and gravel. PES conducted 30 percolation tests on the proposed lots and found percolation rates varying from (<1.0 mpi) to (6-15 mpi)

Based upon the soil test results there are several options for systems that could be installed on all the lots in the proposed subdivision. Each of the proposed lots has a designated septic reserve area of 10,000 square feet except for Lot 2 which has 12,000 square feet of reserve. There are no steep areas within the respective reserve areas. Any lot with a percolation rate of less than one (1) minute per inch shall conform to 15.65.210D.1.c.

The table below has the test hole depths, percolation rates and depth to ground water on each perspective lots in the subdivision.

LOT	TH #	TH DEPTH	PERC RATE (MPI)	GROUND H2O LEVEL	REQUIRED RES AREA
1	TH1	15.0	0.4	N/A	10000.0
2	TH2	15.0	6.0	N/A	12000.0
3	TH3	15.0	0.2	N/A	10000.0
4	TH4	16.0	1.7	14.8	10000.0
5	TH5	16.0	0.6	15.2	10000.0
6	TH6	15.5	0.3	N/A	10000.0
7	TH7	16.0	0.1	N/A	10000.0
8	TH8	16.0	2.4	N/A	10000.0
9	TH9	17.0	0.2	15.7	10000.0
10	TH10	17.0	0.6	N/A	10000.0
11	TH11	15.0	0.1	N/A	10000.0
12	TH12	15.0	1.1	14.8	10000.0
13	TH13	15.0	0.1	N/A	10000.0
14	TH14	15.0	0.1	N/A	10000.0
15	TH15	15.0	0.1	N/A	10000.0
15	TH15B	14	0.1	N/A	10000.0
16	TH16	15.0	0.9	N/A	10000.0
16	TH16B	14	0.4	N/A	10000.0
17	TH17	15.0	1.1	N/A	10000.0
18	TH18	15.0	1.1	N/A	10000.0
19	TH19	15.0	0.1	N/A	10000.0
20	TH20	15.0	0.1	N/A	10000.0
21	TH21	15.0	0.1	N/A	10000.0
22	TH22	15.0	0.4	N/A	10000.0
23	TH23	15.5	0.6	N/A	10000.0
24	TH24	16.0	0.3	N/A	10000.0
25	TH25	15.5	0.4	N/A	10000.0
26	TH26	15.0	0.4	13.0	10000.0
27	TH27	15.0	1.1	N/A	10000.0
28	TH28	15.0	2.4	N/A	10000.0

Site Information

For a subdivision, a site plan stamped by an engineer must show specific areas for the septic system based on the observed percolation rate and Title 15.65.180, Table 2. These areas must meet all set back requirements of Title 15.65. According to Table 2, an area of 10,000 sf must be shown for areas with a percolation rate of 1-5 MPI, an area of 12,000 sf must be shown for areas with a percolation rate of 5-12 MPI, and an area of 14,000 sf must be shown for areas with a percolation rate of 12-24 MPI. The attached site plan shows the reserve areas per these requirements.

The Municipality of Anchorage (Moa) Regulations (15.65) govern for single-family homes. These regulations require a minimum of four (4) feet vertical separation between the bottom of a soil absorption system and ground water for a conventional wastewater disposal system, six feet (6') to bedrock or other impermeable layers (tight silts and clays with a percolation rate greater than 120 minutes per inch) and must be located greater than 100 feet horizontally from any surface water (Creeks and ponds). Additionally, the accepting soils must have a percolation rate of less than 120 minutes per inch. A lot must have room for a primary and reserve soil absorption system.

Appendix A

Site Plan

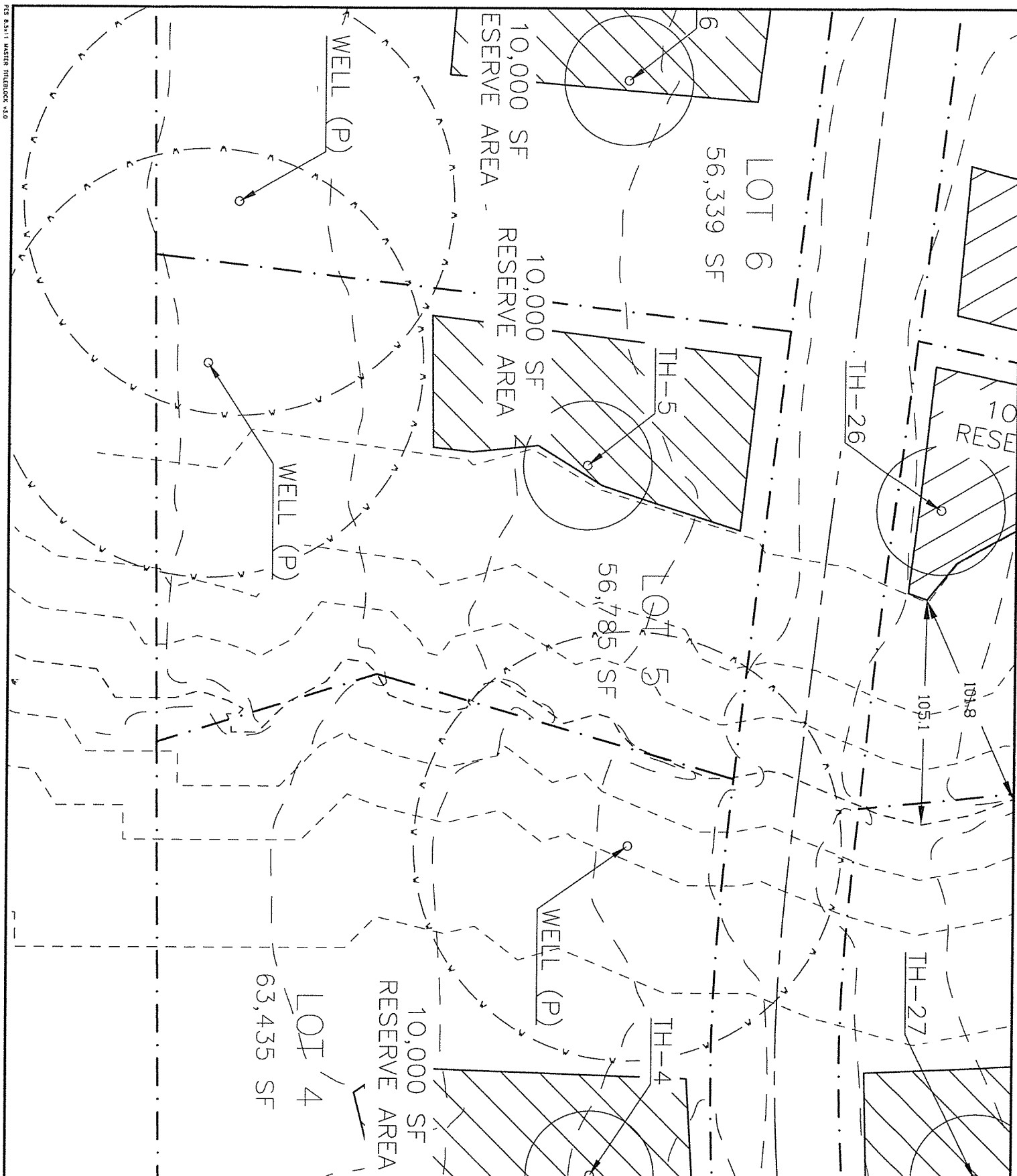
Soil Logs

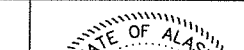



2.) GROUNDWATER WAS MONITORED ON
MAY 26, 2020

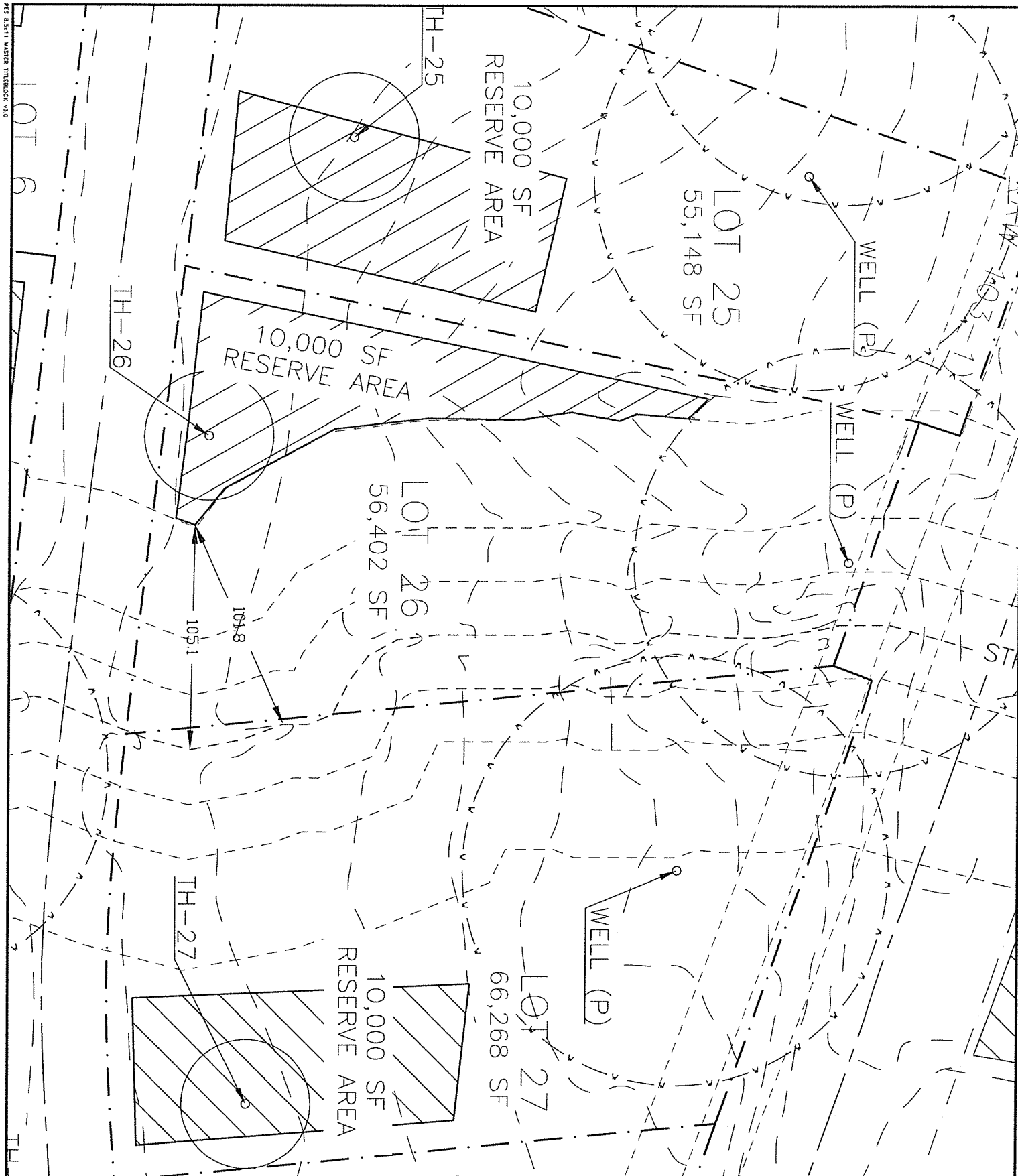
SITE PLAN


Journal of Management Education 34(10)



NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS		DATE
FOR MOA REVIEW ONLY						6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577				SCALE
						1" = 60'
DRAWN						P.I.D. NO.
ACP						PERMIT NO.
SITE PLAN						SHEET
						2 OF 33

MS 2.5-11 MASTER INTERLOCK 2-0



NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201			REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY						SCALE 1" = 60'
			P.I.D. NO.			
			PERMIT NO.			
			SHEET 3 OF 33			
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577				
DRAWN	ACP					
SITE PLAN						

SOILS LOG – PERCOLATION TEST

TEST HOLE 1

1	OR	ORGANICS
2	GM/ SM	
3		
4	SP/GP	GRAY SAND AND GRAVEL W/ SILT
5		
6	OR	
7		
8		
9		
10	SP/GP	
11		
12		
13		
14	SM	
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? -14.5
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

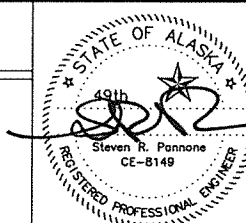
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1502	3.00	---	---	
2		1504.25	9.00	6.00"	2.25 MIN	0.38
3		1505	3.00	---	---	
4		1507.5	9.00	6.00"	2.5 MIN	0.42
5		1508	3.00	---	---	
6		1510.5	9.00	6.00"	2.5 MIN	0.42

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.42 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 4 FT AND 5 FT.
- TEST RUN FOR OVER AN HOUR,
LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL
STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 4 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 2

	OR	ORGANICS
1	GM/SM	
2	SP/GP	
3	SM/GM	SILTY SANDY GRAVEL
4	SP/GP	
5	SP	
6		
7		
8		
9		
10	SP/GP	
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? n/a

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN


READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1427	3.00	---	---	
2		1437	5.193	2.193"	10 MIN	4.6
3		1438	3.00	---	---	
4		1448	4.710	1.710"	10 MIN	5.9
5		1448	3.00	---	---	
6		1458	4.658	1.658"	10 MIN	6.0

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 6.0 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 4 FT AND 5 FT.
- TEST RUN FOR OVER AN HOUR,
LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

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FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 5 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 3

	OR	ORGANICS
1	GP/SP	
2	GM/SM	FROZEN SILTY SAND
3	GP/SP	
4	GM/SM	OLD ORGANICS
5		
6		
7	SP/GP	SANDY GRAVEL W/ SILTS
8		
9		
10		
11	GM/SM	
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

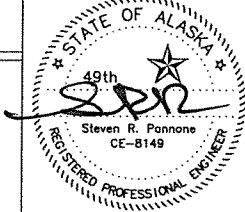
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1239	3.00	---	---	
2		1240	9.00	6.00"	1 MIN	0.2
3		1240	3.00	---	---	
4		1241	9.00	6.00"	1 MIN	0.2
5		1241	3.00	---	---	
6		1242	9.00	6.00"	1 MIN	0.2

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.2 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 4 FT AND 5 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
DRAWN				NTS	
ACP				P.I.D. NO	
SOIL LOG				PERMIT NO.	
				SHEET	
				6 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 4

1	OR	ORGANICS
2	GM/SM	FROZEN SILTY SAND & GRAVEL
3	GP/SP	
4	GM/SM	
5		
6		
7	SP/GP	SANDY GRAVEL W/ SILTS
8		
9		
10		
11	GM/SM	
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? -14.8'
DATE: 5/26/2020

SLOPE

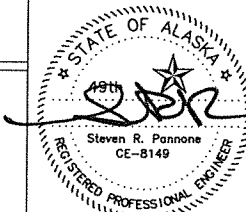
SEE SITE PLAN

READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1204	3.00	----	----	
2		1212.25	9.00	6.00"	8.25 MIN	1.4
3		1212.5	3.00	----	----	
4		1222.5	8.755	5.755"	10 MIN	1.7
5		1223	3.00	----	----	
6		1233	8.721	5.721"	10 MIN	1.7

SOIL TEST RESULTS/ANALYSIS
 • PERCOLATION RATE 1.7 (min/inch)
 (Hydrologic Soils Group: HSG A)
 • PERC HOLE DIAMETER 6"
 • TEST RUN BETWEEN 4 FT AND 5 FT.
 • TEST RUN FOR OVER AN HOUR,
 LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
 ALL STATE
 AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

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FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 7 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 5

1	OR	ORGANICS
2	GM	
3	ML	
4	SP/SM	
5		
6		
7		
8		
9		
10	SP/GP	SANDY GRAVEL
11		
12		
13		
14		
15		
16	BOH	

SLOPE

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? YES

IF YES, AT WHAT
DEPTH? 15.0'

DEPTH TO WATER AFTER
MONITORING? 15.17'

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

DATE PERFORMED: 14MAY2020

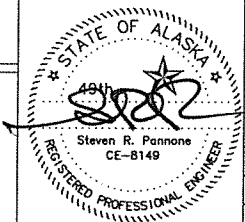
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1211	3.00	---	---	
2		1213.25	9.00	6.00"	1.25 MIN	0.2
3		1214	3.00	---	---	
4		1217.5	9.00	6.00"	3.50 MIN	0.6
5		1218	3.00	---	---	
6		1221.58	9.00	6.00"	3.58 MIN	0.6

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.6 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3 FT AND 4 FT.
- TEST RUN FOR OVER AN HOUR,
LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088)			REVISIONS	DATE
FOR MOA REVIEW ONLY		P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201				6/18/2020
DRAWN		OVERLOOK ESTATES ADDITION #3				SCALE
ACP		EKLUTNA INC				NTS
SOIL LOG		16515 CENTERFIELD DRIVE				P.I.D. NO
		EAGLE RIVER, AK 99577				PERMIT NO.
						SHEET
						8 OF 33

SOILS LOG - PERCOLATION TEST

TEST HOLE 6

	OR	ORGANICS
1	GP/SP	
2	GP/SP	LIGHT BROWN
3		
4	GM/SM	
5	OR	
6		
7		
8	GM/SM	
9		
10		
11		
12	GP/SP	
13		
14		
15		

BOH

DATE PERFORMED: 14MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

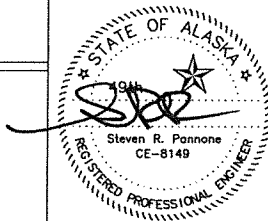
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1144	3.00	---	---	
2		1145.83	9.00	6.00"	1.83 MIN	0.3
3		1146	3.00	---	---	
4		1148	9.00	6.00"	2 MIN	0.3
5		1148	3.00	---	---	
6		1150	9.00	6.00"	2 MIN	0.3

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.3 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.5 FT AND 4.5 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

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FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 9 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 7

1	OR	ORGANICS
	GP/SP	
2	GP	
3		
4		
5		
6	OR	
7	GP/SP	
8		
9		
10		
11		
12		
13		
14		
15		
16		

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

DATE PERFORMED: 14MAY2020

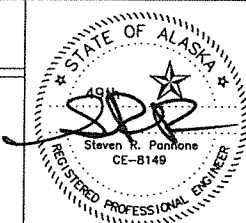
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1122	3.00	---	---	
2		1122.5	9.00	6.00"	0.5 MIN	0.08
3		1123	3.00	---	---	
4		1123.67	9.00	6.00"	0.67 MIN	0.1
5		1124	3.00	---	---	
6		1124.83	9.00	6.00"	0.83 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 10 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 8

1	OR	ORGANICS
2	SP	
3		
4	SW/SM	
5		
6		
7		
8		
9		
10		
11	GP/SP	
12		
13		
14		HEAVING SAND & SILT
15		
16	BOH	

SLOPE

SEE SITE PLAN

SEE SITE PLAN



SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? YES

IF YES, AT WHAT DEPTH? 15.0'

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

DATE PERFORMED: 14MAY2020

READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1306	3.00	---	---	
2		1315	9.00	6.00"	9 MIN	1.5
3		1316	3.00	---	---	
4		1326	7.263	4.263"	10 MIN	2.3
5		1327	3.00	---	---	
6		1337	7.205	4.205"	10 MIN	2.4

Note: Sand Heaved to 11.75

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 2.4 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDELINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
DRAWN	ACP			P.I.D. NO	
				PERMIT NO.	
SOIL LOG				SHEET	
				11 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 9

1	OR	ORGANICS
2	GP/SP	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17	BOH	

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? YES

IF YES, AT WHAT
DEPTH? 17.0'

DEPTH TO WATER AFTER
MONITORING? -15.7'

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

DATE PERFORMED: 14MAY2020

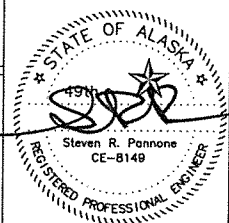
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1355	3.00	---	---	
2		1355.67	9.00	6.00"	0.67 MIN	0.1
3		1356	3.00	---	---	
4		1356.83	9.00	6.00"	0.83 MIN	0.1
5		1401	3.00	---	---	
6		1402	9.00	6.00"	1 MIN	0.2

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.2 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
DRAWN	ACP			P.I.D. NO.	
				PERMIT NO.	
SOIL LOG				SHEET	
				12 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 10

1	OR	ORGANICS
2	GP/SP	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17	BOH	

SLOPE

SEE SITE PLAN

SEE SITE PLAN

SLOPE

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a

DATE: 5/26/2020

DATE PERFORMED: 14MAY2020

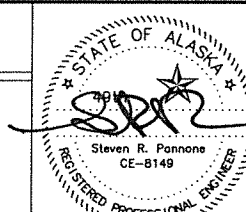
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1443	3.00	---	---	
2		1445.5	9.00	6.00"	2.5 MIN	0.4
3		1446	3.00	---	---	
4		1449.25	9.00	6.00"	3.25 MIN	0.5
5		1451	3.00	---	---	
6		1454.83	9.00	6.00"	3.83 MIN	0.6

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.6 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 13 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 11

1	OR	ORGANICS
2	GP/SP	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 14MAY2020

SLOPE	SEE SITE PLAN
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WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a
DATE: 5/26/2020

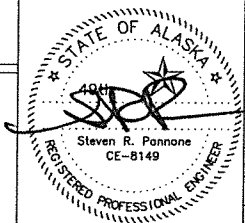
SLOPE
SEE SITE PLAN

READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1548	3.00	---	---	
2		1548.33	9.00	6.00"	0.33 MIN	0.06
3		1558	3.00	---	---	
4		1558.5	9.00	6.00"	0.50 MIN	0.08
5		1559	3.00	---	---	
6		1559.5	9.00	6.00"	0.50 MIN	0.08

- SOIL TEST RESULTS/ANALYSIS**
- PERCOLATION RATE **0.08 (min/inch)** (Hydrologic Soils Group: HSG A)
 - PERC HOLE DIAMETER 6"
 - TEST RUN BETWEEN **3.0 FT AND 4.0 FT.**
 - TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
					SCALE
					NTS
DRAWN	ACP	OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
SOIL LOG				PERMIT NO.	
				SHEET	
				14 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 12

1	OR	ORGANICS
2	GP/SP	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE	SEE SITE PLAN
-------	---------------

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? -14.8
DATE: 5/26/2020

SLOPE
SEE SITE PLAN

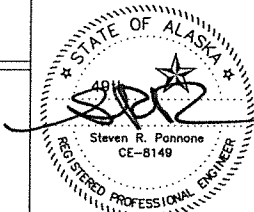
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	832	3.00	---	---	
2		838	9.00	6.00"	6 MIN	1
3		838	3.00	---	---	
4		844.5	9.00	6.00"	6.5 MIN	1.1
5		845	3.00	---	---	
6		851.5	9.00	6.00"	6.5 MIN	1.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 1.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 2.0 FT AND 3.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDELINES IN EFFECT ON THE DATE OF THIS TEST.

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FOR MOA REVIEW ONLY					6/18/2020
				SCALE	NTS
				P.I.D. NO.	
DRAWN	ACP	OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577	PERMIT NO.		
SOIL LOG			SHEET	15 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 13

1	OR	ORGANICS
2	GM	SILTY SAND
3		
4		
5		
6		
7	GP/SP	
8		
9		
10	OR	ORGANICS
11		
12	GM/GP	SILTY SANDY GRAVEL
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

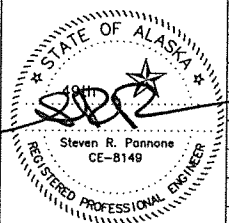
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	925	3.00	---	---	
2		925.5	9.00	6.00"	0.5 MIN	0.1
3		926	3.00	---	---	
4		926.67	9.00	6.00"	0.67 MIN	0.1
5		927	3.00	---	---	
6		927.75	9.00	6.00"	0.75 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
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				NTS	
				P.I.D. NO	
				PERMIT NO.	
DRAWN	ACP			SHEET	
SOIL LOG				16 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 14

1	OR	ORGANICS
2	GM	SILTY GRAVEL
3		
4	GP/SP	
5		
6	OR	
7		
8		
9		
10	GP/SP	
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

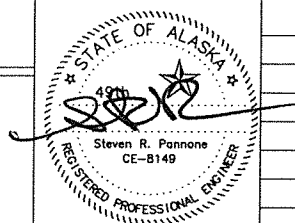
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	956	3.00	---	---	
2		956.33	9.00	6.00"	0.33 MIN	0.1
3		957	3.00	---	---	
4		957.5	9.00	6.00"	0.5 MIN	0.1
5		958	3.00	---	---	
6		958.58	9.00	6.00"	0.58 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: Pannone Engineering Services LLC. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
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FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 17 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 15

	OR	ORGANICS
1	GM	SANDY GRAVEL
2		
3		
4	GP/SP	W/ COBBLES
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

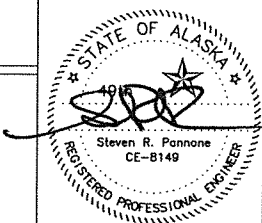
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1045	3.00	---	---	
2		1045.33	9.00	6.00"	0.33 MIN	0.1
3		1046	3.00	---	---	
4		1046.5	9.00	6.00"	0.5 MIN	0.1
5		1047	3.00	---	---	
6		1047.5	9.00	6.00"	0.58 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

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		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
				P.I.D. NO	
				PERMIT NO.	
DRAWN	ACP			SHEET	
SOIL LOG				18 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 15B

1	OR	ORGANICS
2	GP/SP	W/ COBBLES
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

SLOPE

SEE SITE PLAN

SEE SITE PLAN



DATE PERFORMED: 15MAY2020

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1430	3.00	---	---	
2		1430.5	9.00	6.00"	0.5 MIN	0.1
3		1431	3.00	---	---	
4		1431.5	9.00	6.00"	0.5 MIN	0.1
5		1432	3.00	---	---	
6		1432.58	9.00	6.00"	0.58 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 4.0 FT AND 5.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

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		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
DRAWN	ACP			P.I.D. NO	
				PERMIT NO.	
SOIL LOG				SHEET	
				19 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 16

1	OR	ORGANICS
2	GM	SANDY GRAVEL
3		
4	GP/SP	W/ COBBLES
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

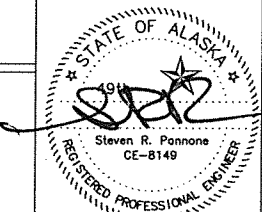
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1109	3.00	---	---	
2		1112.25	9.00	6.00"	3.25 MIN	0.5
3		1113	3.00	---	---	
4		1118.5	9.00	6.00"	5.5 MIN	0.9
5		1119	3.00	---	---	
6		1124.5	9.00	6.00"	5.5 MIN	0.9

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.9 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
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NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 20 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 16B

1	OR	ORGANICS
2	GP/SP	W/ COBBLES
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

SLOPE

SEE SITE PLAN

SEE SITE PLAN

SLOPE

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a

DATE: 5/26/2020

DATE PERFORMED: 15MAY2020

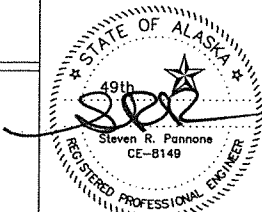
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1505	3.00	---	---	
2		1507	9.00	6.00"	2 MIN	0.3
3		1508	3.00	---	---	
4		1510	9.00	6.00"	2 MIN	0.3
5		1511	3.00	---	---	
6		1513.25	9.00	6.00"	2.25 MIN	0.4

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.4 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 4.0 FT AND 5.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY				SCALE NTS	P.I.D. NO
DRAWN	ACP	OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		PERMIT NO.	
SOIL LOG				SHEET 21 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 17

1	OR	ORGANICS
2	GM	SILTY SANDY GRAVEL W/ COBBLES
3		
4	GP/SP	W/ COBBLES
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

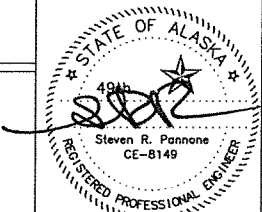
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1205	3.00	---	---	
2		1210	9.00	6.00"	5 MIN	0.8
3		1211	3.00	---	---	
4		1217.5	9.00	6.00"	6.5 MIN	1.1
5		1218	3.00	---	---	
6		1224.5	9.00	6.00"	6.83 MIN	1.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 1.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE
AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 22 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 18

1	OR	ORGANICS
2	GM	SILTY SANDY GRAVEL W/ COBBLES
3		
4	GP/SP	W/ COBBLES
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN


READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1135	3.00	---	---	
2		1141	9.00	6.00"	6 MIN	1
3		1141	3.00	---	---	
4		1147	9.00	6.00"	6 MIN	1
5		1147	3.00	---	---	
6		1153.5	9.00	6.00"	6.5 MIN	1.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 1.1 (min/inch) (Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
DRAWN	ACP			P.I.D. NO.	
				PERMIT NO.	
SOIL LOG				SHEET	
				23 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 19

1	OR	ORGANICS
2	GM	SILTY SANDY GRAVEL
3		
4	GP/SP	W/ COBBLES
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 15MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN


READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1344	3.00	---	---	
2		1344.5	9.00	6.00"	0.5 MIN	0.1
3		1345	3.00	---	---	
4		1345.58	9.00	6.00"	0.58 MIN	0.1
5		1346	3.00	---	---	
6		1346.67	9.00	6.00"	0.67 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch) (Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by Hultquist Homes

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
				SCALE	NTS
				P.I.D. NO.	
DRAWN	ACP	OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		PERMIT NO.	
SOIL LOG				SHEET	
				24 OF 33	

TEST HOLE 20

SOILS LOG - PERCOLATION TEST

Depth (ft)	Soil Type	Description
0 - 1	OR	ORGANICS
1 - 2	GM	SILTY SANDY GRAVEL
2 - 15	GP/SP	W/ COBBLES

BOH

DATE PERFORMED: 15MAY2020

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

SLOPE

SEE SITE PLAN

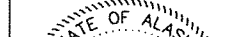
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/15/20	1405	3.00	---	---	
2		1405.25	9.00	6.00"	0.25 MIN	0.04
3		1406	3.00	---	---	
4		1406.5	9.00	6.00"	0.5 MIN	0.1
5		1407	3.00	---	---	
6		1407.3	9.00	6.00"	0.5 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDELINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
					SCALE
					NTS
					P.I.D. NO
DRAWN		ACP			PERMIT NO.
SOIL LOG		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577			SHEET
					25 OF 33

SOILS LOG - PERCOLATION TEST

TEST HOLE 21

1	OR	ORGANICS
2	GM	SILTY SANDY GRAVEL
3	GP/SP	
4	OR	ORGANICS
5		
6		
7		
8	GP/SP	W/ COBBLES
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN


READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1039	3.00	----	----	
2		1039.5	9.00	6.00"	0.5 MIN	0.1
3		1040	3.00	----	----	
4		1040.58	9.00	6.00"	0.58 MIN	0.1
5		1041	3.00	----	----	
6		1041.58	9.00	6.00"	0.58 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 5.0 FT AND 6.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 26 OF 33	

TEST HOLE 22

SOILS LOG - PERCOLATION TEST

Depth (ft)	Soil Type	Soil Description
1	OR	ORGANICS
2	GM	
3	GP/SP	SAND AND GRAVEL
4		
5		
6		
7	GM	SAND AND GRAVEL
8	GP/SP	
9		
10		
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

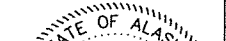
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1102	3.00	---	---	
2		1103.5	9.00	6.00"	1.5 MIN	0.3
3		1104.5	3.00	---	---	
4		1106.5	9.00	6.00"	2 MIN	0.3
5		1107	3.00	---	---	
6		1109.58	9.00	6.00"	2.58 MIN	0.4

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.4 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDELINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
				P.I.D. NO	
				PERMIT NO.	
DRAWN	ACP				SHEET
SOIL LOG					27 OF 33

SOILS LOG – PERCOLATION TEST

TEST HOLE 23

	OR	ORGANICS
1	GM/SM	SILTY SANDY GRAVEL
2		
3	GP/SP	SAND AND GRAVEL
4		
5	GM/SM	
6		
7		
8		
9		
10		
11	GP/SP	
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

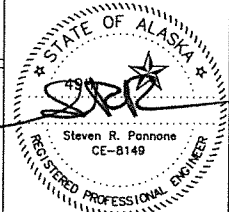
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1129	3.00	---	---	
2		1131.5	9.00	6.00"	2.5 MIN	0.4
3		1132	3.00	---	---	
4		1135	9.00	6.00"	3 MIN	0.5
5		1136	3.00	---	---	
6		1139.5	9.00	6.00"	3.5 MIN	0.6

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.6 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 5.0 FT AND 6.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 28 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 24

1	OR	ORGANICS
2	GM/SM	SILTY SANDY GRAVEL
3	GP	SAND AND GRAVEL
4		
5	OR	ORGANICS
6		
7		
8		
9		
10		
11	GP/SP	
12		
13		
14		
15		
16		

BOH

DATE PERFORMED: 14MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

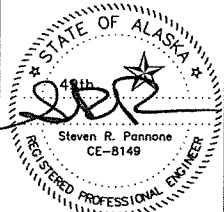
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1056	3.00	---	---	
2		1057.25	9.00	6.00"	1.25 MIN	0.2
3		1058	3.00	---	---	
4		1059.67	9.00	6.00"	1.67 MIN	0.3
5		1100	3.00	---	---	
6		1101.75	9.00	6.00"	1.75 MIN	0.3

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.3 (min/inch) (Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: **Pannone Engineering Services LLC**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 29 OF 33	

TEST HOLE 25

SOILS LOG - PERCOLATION TEST

Layer Number	Soil Type	Soil Description
1	OR	ORGANICS
2	GM	
3	GP/GM	SILTY SANDY GRAVEL
4		
5		
6		
7		
8		
9	OR	ORGANICS
10	GP/GM	
11		
12		
13		
14		SM/GM
15		

BOH

DATE PERFORMED: 14MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

SLOPE

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a

DATE: 5/26/2020

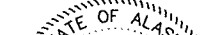
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	1025	3.00	---	---	
2		1025.83	9.00	6.00"	0.83 MIN	0.1
3		1026	3.00	---	---	
4		1027.83	9.00	6.00"	1.83 MIN	0.3
5		1028	3.00	---	---	
6		1030.25	9.00	6.00"	2.25 MIN	0.4

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.4 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 3.0 FT AND 4.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC**. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDELINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 30 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 26

1	OR	ORGANICS
2	GM	SILTY SANDY GRAVEL
3		
4		
5		
6	GP	SILTY SEAM @ 6.0'
7		
8		
9		
10		
11		
12	SM	
13		
14		
15		

BOH

DATE PERFORMED: 14MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? YES

IF YES, AT WHAT DEPTH? 13.0'

DEPTH TO WATER AFTER MONITORING? 13.0'

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

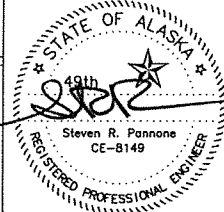
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/14/20	955	3.00	---	---	
2		955.33	9.00	6.00"	0.33 MIN	0.1
3		956	3.00	---	---	
4		956.5	9.00	6.00"	0.5 MIN	0.1
5		957	3.00	---	---	
6		957.58	9.00	6.00"	0.58 MIN	0.1

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 0.1 (min/inch) (Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 4.0 FT AND 5.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDELINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
DRAWN				P.I.D. NO	
ACP				PERMIT NO.	
SOIL LOG				SHEET	
				31 OF 33	

SOILS LOG – PERCOLATION TEST

TEST HOLE 27

1	OR	ORGANICS
2	GM/SM	SILTY SANDY GRAVEL
3		
4	OR	ORGANICS
5	SP	
6		
7		
8		
9		
10		
11	GP/SP	
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER
ENCOUNTERED? NO

IF YES, AT WHAT
DEPTH? N/A

DEPTH TO WATER AFTER
MONITORING? n/a
DATE: 5/26/2020

SLOPE

SEE SITE PLAN

READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1301	3.00	---	---	
2		1304.83	9.00	6.00"	3.83 MIN	0.6
3		1305	3.00	---	---	
4		1310.75	9.00	6.00"	5.75 MIN	0.9
5		1311	3.00	---	---	
6		1317.5	9.00	6.00"	6.5 MIN	1.1

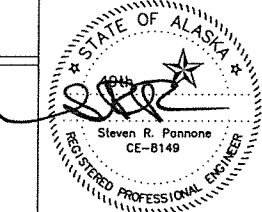
SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 1.1 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 6.0 FT AND 7.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST
THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by **White Raven**

PERFORMED BY: **Pannone Engineering Services LLC.** I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH
ALL STATE

AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE 6/18/2020
FOR MOA REVIEW ONLY					SCALE NTS
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		P.I.D. NO	
DRAWN	ACP			PERMIT NO.	
SOIL LOG				SHEET 32 OF 33	

SOILS LOG - PERCOLATION TEST

TEST HOLE 28

1	OR	ORGANICS
2	GM/SM	SILTY SANDY GRAVEL
3	GP/SP	SANDY GRAVEL
4	OR	ORGANICS
5	GM/SM	
6	SP	
7	GP/SP	
8		
9		
10	SM	
11		
12		
13		
14		
15		

BOH

DATE PERFORMED: 18MAY2020

SLOPE

SEE SITE PLAN

SEE SITE PLAN

WAS GROUND WATER ENCOUNTERED? NO

IF YES, AT WHAT DEPTH? N/A

DEPTH TO WATER AFTER MONITORING? n/a

DATE: 5/26/2020

SLOPE

SEE SITE PLAN

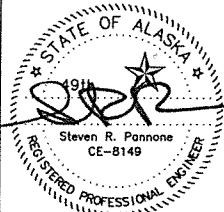
READING	DATE	CLOCK TIME	WATER LEVEL READING	NET DROP	NET TIME	MPI
1	5/18/20	1324	3.00	---	---	
2		1334	8.840	5.840"	10 MIN	1.7
3		1335	3.00	---	---	
4		1345	7.250	4.250"	10 MIN	2.4
5		1345	3.00	---	---	
6		1355	7.212	4.212"	10 MIN	2.4

SOIL TEST RESULTS/ANALYSIS

- PERCOLATION RATE 2.4 (min/inch)
(Hydrologic Soils Group: HSG A)
- PERC HOLE DIAMETER 6"
- TEST RUN BETWEEN 2.0 FT AND 3.0 FT.
- TEST RUN FOR OVER AN HOUR, LAST THREE READINGS PROVIDED.

COMMENTS: Test hole excavated by White Raven

PERFORMED BY: Pannone Engineering Services LLC. I CERTIFY THAT THIS TEST WAS PERFORMED IN ACCORDANCE WITH ALL STATE AND MUNICIPAL GUIDLINES IN EFFECT ON THE DATE OF THIS TEST.

NOTES:		PANNONE ENG SVC, LLC (C.I. 1088) P.O. BOX 1807 PALMER, AK 99645 PHONE (907) 745-8200 FAX (907) 745-8201		REVISIONS	DATE
FOR MOA REVIEW ONLY					6/18/2020
		OVERLOOK ESTATES ADDITION #3 EKLUTNA INC 16515 CENTERFIELD DRIVE EAGLE RIVER, AK 99577		SCALE	
				NTS	
DRAWN	ACP			P.I.D. NO	
				PERMIT NO.	
SOIL LOG				SHEET	
				33 OF 33	