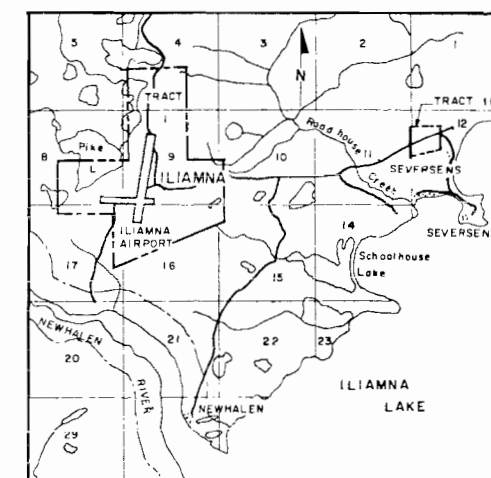
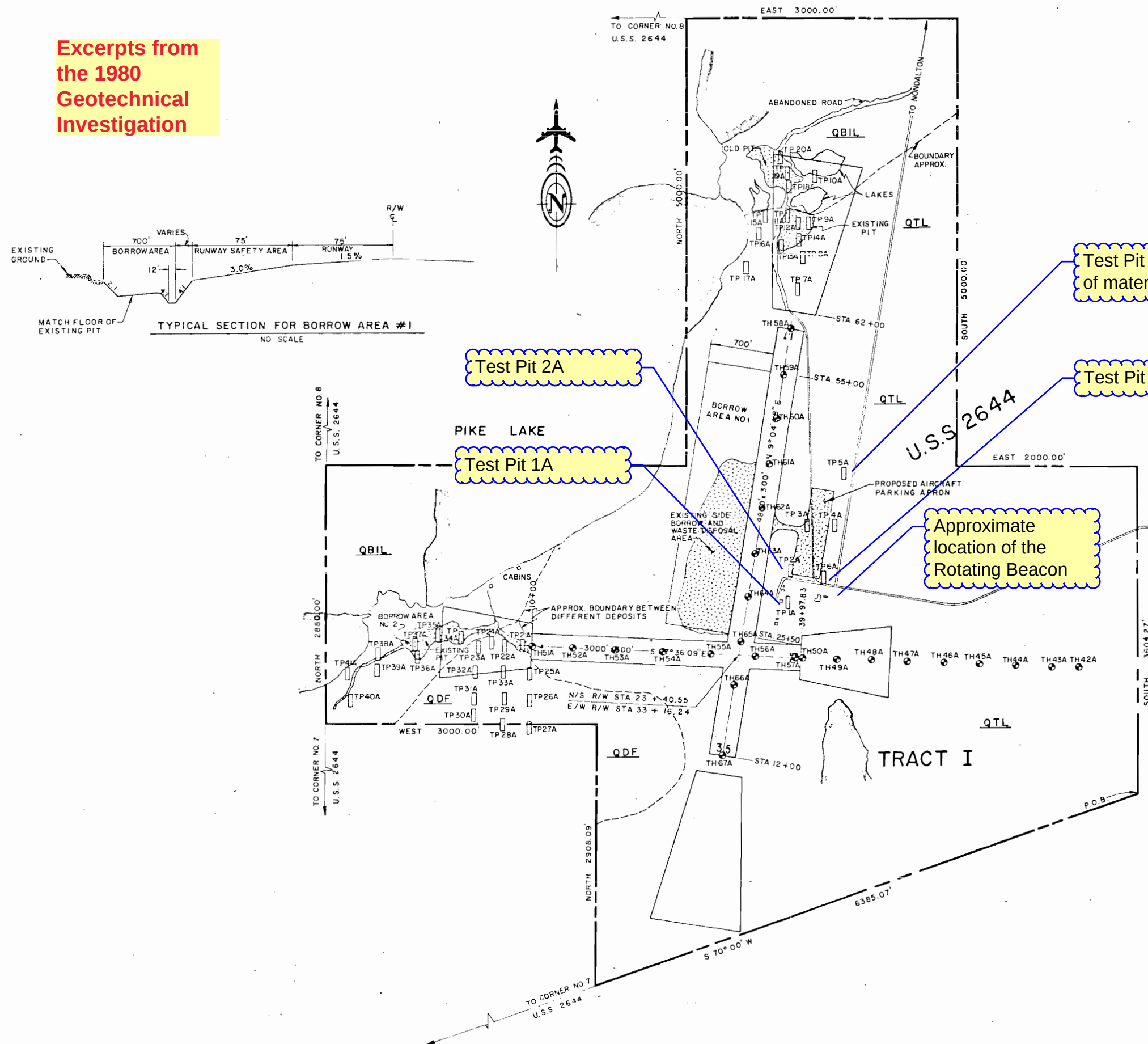


Excerpts from  
the 1980  
Geotechnical  
Investigation



VICINITY MAP  
SCALE: 1" = 1 MILE  
PROTRACTED T. 5 S., R. 33 W.  
SEWARD MERIDIAN, ALASKA

- LEGEND**
- TEST PIT
  - TEST HOLE
  - QTL LAKE TERRACE AND BEACH RIDGE DEPOSITS.
  - QBIL MORaine OF THE ILIUK STAGE
  - QDF HANGING DELTA, AND OUTWASH FAN DEPOSITS
  - SURFICIAL GEOLOGY TAKEN FROM SURFICIAL DEPOSITS OF THE ILIAMNA QUADRANGLE, ALASKA, U.S. GEOLOGICAL SURVEY BULLETIN NO 1368-A
  - AIRPORT PROPERTY LINE

STATE OF ALASKA  
DEPARTMENT OF PUBLIC WORKS  
DIVISION OF AVIATION

ILIAMNA AIRPORT

TEST PIT / TEST HOLE LOCATIONS

|    |      |           |                    |          |       |
|----|------|-----------|--------------------|----------|-------|
| BY | DATE | CHANGE    | SCALE              | DESIGNED | DRAWN |
|    |      |           | 1" = APPROX. 1200' | 70       | W.R.  |
|    |      | REVISIONS | CHECKED            |          | DATE  |

T.P. 1A  
10/16/79

0.75'

Bn Si/Org

3.0'

Bn Sa/Gr1  
No +3"  
Clean, dry

Bn Gr1/Sa and  
Sa/Gr1 alternating  
No +3", mostly 1 1/2" minus  
Clean

Groundwater @ 8ft

8.0'

BOP

Poorly graded Sand with Gravel (SP)  
interbedded with poorly graded Gravel with  
Sand (GP), clean (<3%p200), fine grained  
gravel (mostly 1.5" minus)

T.P. 2A  
10/16/79

Gradation for FS1A  
from 3-5ft

1% Si  
37% Sa  
62% Gr1

Bn Si/Org  
w/some roots, damp

1.6'

3.0'

FS 1A Bn Sa/Gr1  
A-1-a(0), GP, NFS  
LL=NV, PI=NV

5.0'

Clean  
No +3", mostly 1" minus  
w/thin lenses of Gr1/Sa

Groundwater @  
7.3ft

7.3'

BOP

Poorly graded Gravel with Sand (GP),  
non-frost susceptible, 62% passing 3",  
37% passing #4, 1% passing #200  
sieves.

FIELD BORING LOGS

ILIAMNA, ALASKA

Designed T. O.

Drawn *Ma*

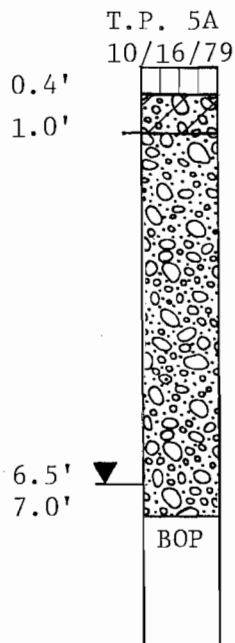
Scale 1 = 3'

Sheet 2 of 35

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION

DIVISION OF AVIATION

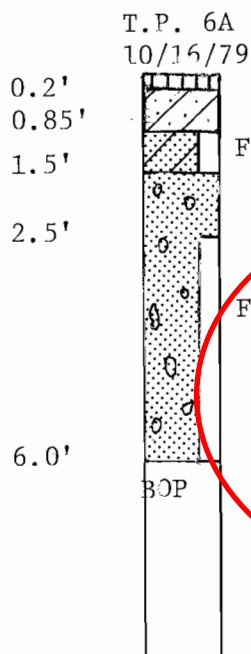


Bn Org, damp to wet  
w/small roots  
Bn Si/Sa/Gr1  
damp to wet

Bn Sa/Gr1  
Clean  
No +4", mostly  
1 1/2" minus

6% Si  
94% Sa  
M.S.=12.4%

1% Si  
48% Sa  
51% Gr1



Bn Org, w/sm. roots  
Bn Sa/Si, damp  
Bn Si/Sa, damp  
A-1-b(0), SW-SM, NFS  
LL=Nv, PI=Nv

FS 4 Bn Gr1/Sa interlayered  
w/SA/Gr1  
A-1-a(0), GP, NFS  
LL=Nv, PI=Nv  
Clean  
No +3", mostly 1" minus

Poorly graded Sand with Gravel  
(SP) interbedded with poorly  
graded Gravel with Sand (GP),  
non-frost susceptible, 51%  
passing 3", 48% passing #4, 1%  
passing #200 sieves

FIELD BORING LOGS

ILIAMNA, ALASKA

Designed T. O.

Drawn *Ma.*

Scale 1 = 3'

Sheet 4 of 35

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION

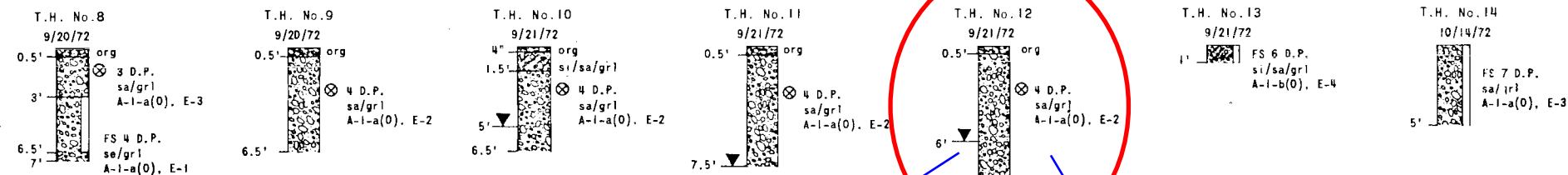
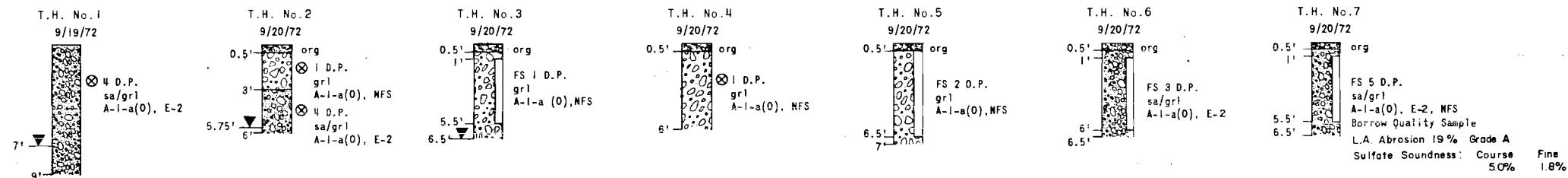
DIVISION OF AVIATION



Sandy gravel/gravelly sand from T.P. 5A, generally 1 1/2 inch minus. Typical of soil which underlies the proposed aircraft parking apron.

10-16-79

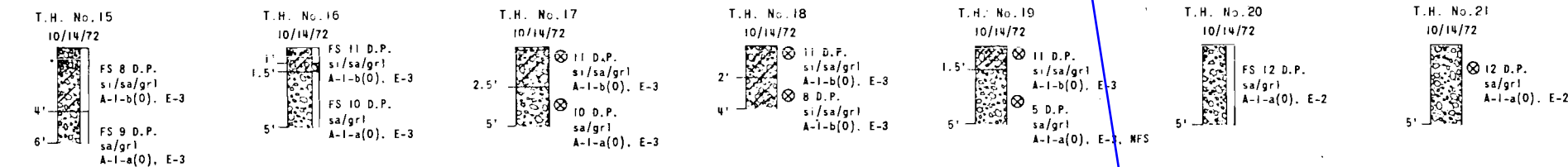
Excerpts from  
1972  
geotechnical  
Investigation



Groundwater at 6 ft

Field Sample 4

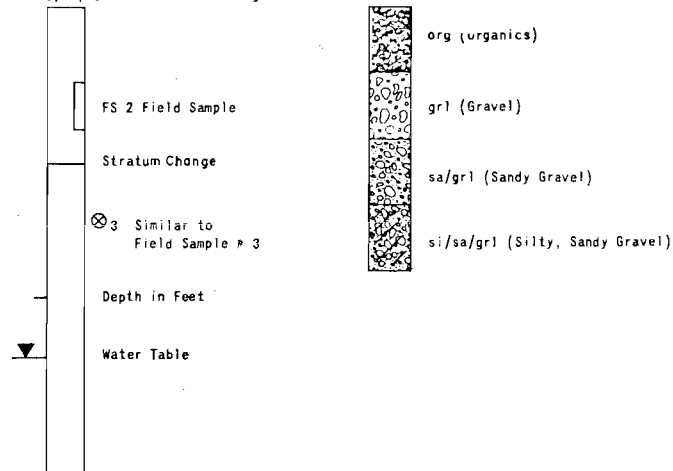
Poorly graded Gravel with Sand (GP), see Field Sample 4 for gradations of similar materials



\*Traces of organics (roots).  
.5' - 1.5'.

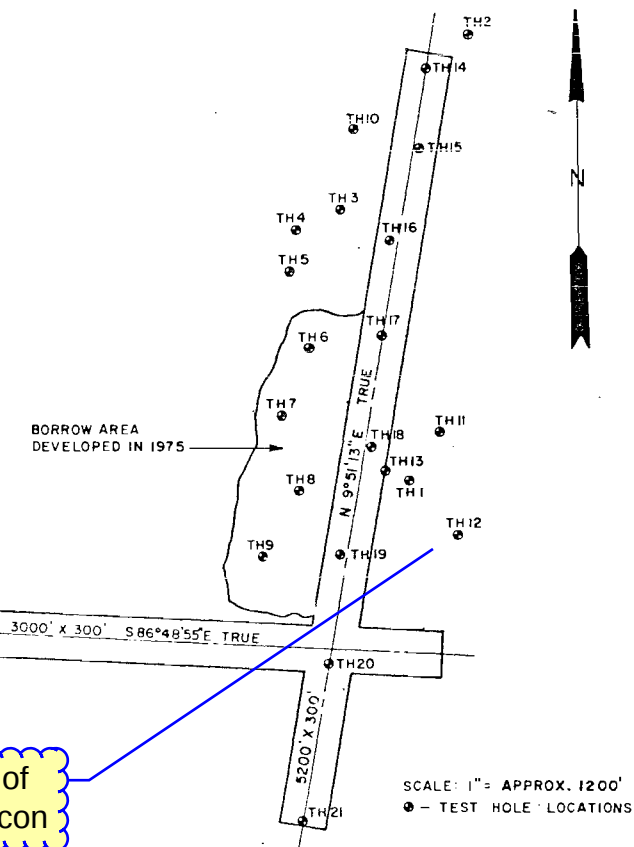
BORING LOG LEGEND

9/19/72 Date of Soil Boring



| TEST HOLE            | FIELD SAMPLE | DEPTH IN FT | MECHANICAL ANALYSIS - % PASSING |    |    |      |      |      |      |       |        |           | UNIFIED  | ASSHQ CLASS | FAA | FROST FSV |
|----------------------|--------------|-------------|---------------------------------|----|----|------|------|------|------|-------|--------|-----------|----------|-------------|-----|-----------|
|                      |              |             | 3"                              | 2" | 1" | 3/4" | 1/2" | 3/8" | 1/4" | 1/10" | 1/20"  | 1/40"     |          |             |     |           |
| BORROW INVESTIGATION |              |             |                                 |    |    |      |      |      |      |       |        |           |          |             |     |           |
| 3                    | 1            | 1-5.5'      | 100                             | 96 | 83 | 58   | 6    | 13   | 10   | 0.8   | grl    | A-1-a(0)  | E-2      | NFS         |     |           |
| 5                    | 2            | 5-6.5'      | 100                             | 95 | 86 | 62   | 7    | 2    | 11   | 0.8   | grl    | A-1-a(0)  | E-2      | NFS         |     |           |
| 6                    | 3            | 1-6.0'      | 100                             | 97 | 88 | 81   | 40   | 19   | 7    | 3     | so/grl | A-1-a(0)  | E-2      |             |     |           |
| 8                    | 4            | 3-6.5'      | 100                             | 98 | 94 | 89   | 70   | 47   | 12   | 10    | so/grl | A-1-a(0)  | E-1      |             |     |           |
| 7                    | 5            | 1-5.5'      | 100                             | 99 | 91 | 76   | 25   | 6    | 2    | 1     | so/grl | A-1-a(0)  | E-2      | NFS         |     |           |
| RUNWAY INVESTIGATION |              |             |                                 |    |    |      |      |      |      |       |        |           |          |             |     |           |
| 13                   | 6            | 0-1'        | 98                              | 97 | 89 | 84   | 78   | 69   | 61   | 48    | 25     | si/sa/grl | A-1-b    | E-4         |     |           |
| 14                   | 7            | 0-5'        | 100                             | 91 | 71 | 49   | 33   | 27   | 21   | 12    |        | so/grl    | A-1-a(0) | E-3         |     |           |
| 15                   | 8            | 0-4'        | 100                             | 97 | 89 | 73   | 40   | 33   | 28   | 17    |        | si/sa/grl | A-1-b    | E-3         |     |           |
| 15                   | 9            | 4-6'        | 100                             | 96 | 85 | 42   | 13   | 11   | 10   | 6     |        | so/grl    | A-1-a(0) | E-3         |     |           |
| 16                   | 11           | 15-5'       | 100                             | 99 | 99 | 89   | 20   | 17   | 13   | 8     |        | so/grl    | A-1-a(0) | E-3         |     |           |
| 16                   | 10           | 0-1'        | 100                             | 90 | 84 | 76   | 56   | 44   | 32   | 20    |        | si/sa/grl | A-1-b    | E-3         |     |           |
| 20                   | 12           | 0-5'        | 100                             | 98 | 91 | 77   | 54   | 46   | 16   | 7     |        | so/grl    | A-1-a(0) | E-2         |     |           |

General vicinity of the rotating beacon



TEST HOLE PLAN

- NOTES:
1. THE BORROW AREA INDICATED ABOVE WAS DEVELOPED IN 1975 AND THE MATERIAL REPRESENTED BY TH6 - TH9 HAS BEEN REMOVED. ASSOCIATED STRIPPING WAS SPREAD OVER THE FLOOR OF THE PIT
  2. ALL TEST HOLES INDICATED ON THIS PAGE WERE EXCAVATED IN 1972
  3. VARYING AMOUNTS OF AGGREGATE HAVE BEEN ADDED TO THE NORTH SOUTH RUNWAY SINCE THE DRILLING OF TH13-21.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
DIVISION OF AVIATION-DESIGN AND CONSTRUCTION  
ILIAMNA AIRPORT  
TEST HOLE LOCATIONS AND LOGS

|           |      |        |          |          |       |
|-----------|------|--------|----------|----------|-------|
| BY        | DATE | CHANGE | SCALE    | DESIGNED | DRAWN |
|           |      |        | AS SHOWN | 070      | 097   |
| REVISIONS |      |        | CHECKED  | DATE     |       |