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COMMITTEE REPORT

SENATE

FURTHER: Finance

2/24/81

Date: _____

Mr. President:

The Committee on HEALTH, EDUCATION & SOCIAL SERVICES has had SA 211

making a special appropriation for construction of a school at Sand Point

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for _____ same title
 new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

[Handwritten signature]

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MEMBERS HAVING
OTHER RECOMMENDATIONS:

[Handwritten signature]

[Handwritten signature]

 CHAIRMAN

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED
AS A UNIT IN THE ORIGINAL DOCUMENT

SAND POINT SCHOOL

SB 211

Alaska State Legislature



SENATOR
BOB MULCAHY
REPRESENTING
THE ALEUTIAN CHAIN,
KODIAK ISLAND
AND THE PRIBILOF ISLANDS

HOME ADDRESS
P.O. BOX 246
KODIAK, ALASKA 99813
(907) 486-3561

DURING SESSION
POUCH V
JUNEAU, ALASKA 99811

State Senate

March 2, 1981

TO: Senator Charles Parr, Chairman
Senate Health, Education and Social Services Committee

FROM: Senator Bob Mulcahy

RE: SB 211, "An Act making a special appropriation for
construction of a school at Sand Point", for
\$8,000,000.

Enclosed is the back up information for the above bill.

Funding Information
General Fund \$8,000,000
Other Funds -0-
\$8,000,000

Introduced: 2/24/81
Referred: Health, Education &
Social Services and Finance

1 IN THE SENATE

BY MULCAHY

2 SENATE BILL NO. 211

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation for construction
7 of a school at Sand Point; and providing for an effec-
8 tive date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 * Section 1. The sum of \$8,000,000 is appropriated from the general fund
11 for payment as a grant to the City of Sand Point for construction of a
12 school.

13 * Sec. 2. The appropriation made by this Act shall be disbursed in
14 accordance with AS 37.05.315.

15 * Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-
16 070(c).

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REVISED STUDY

for

NEW ELEMENTARY-SECONDARY
EDUCATIONAL COMPLEX

for

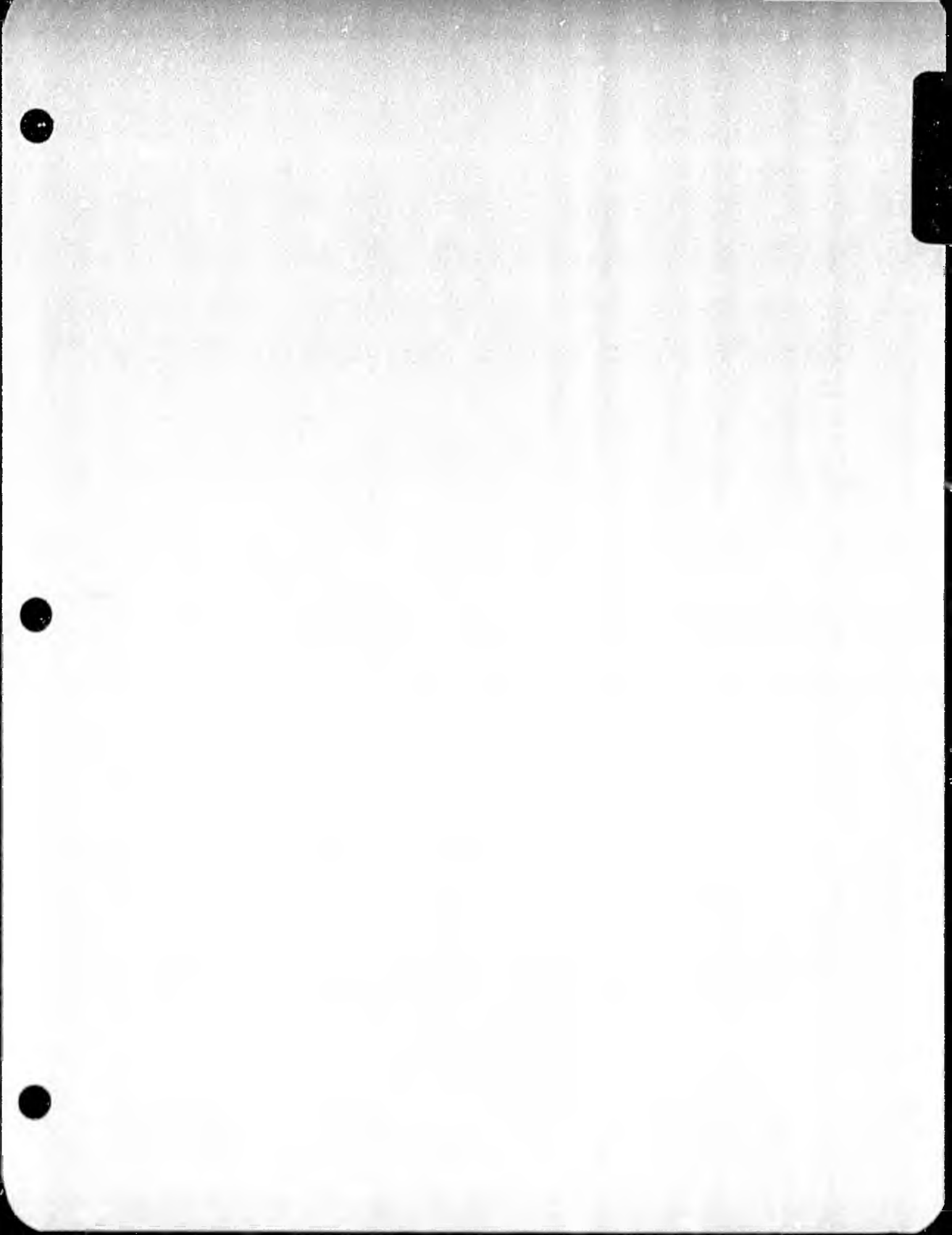
CITY OF SAND POINT,
ALASKA

January 23, 1981

Prepared by,
LANE + KNORR + PLUNKETT
Architects & Planners
800 Cordova, Suite 201
Anchorage, Alaska 99501
(907) 276-4939

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STUDY FOR A NEW ELEMENTARY SECONDARY EDUCATIONAL COMPLEX FOR THE
CITY OF SAND POINT, ALASKA.

ABSTRACT

The existing educational facility is inadequate for present and future needs. The facilities included are below the minimum guidelines of the State of Alaska Department of Education, the Department of Transportation and Public Facilities and the requirements of the Molly Hootch Case Decree. Furthermore, the 4 acre site is substandard and will not readily accept an addition sufficient to handle present or future needs of the rapidly growing Sand Point population.

The existing facility does not meet many elements of current Life Safety Codes, Handicapped Statutes and Guidelines, Energy Guidelines and Uniform Building, Mechanical and Electrical Codes. The building is poorly organized, inefficient, difficult to heat and costly to maintain.

It is the desire of the City of Sand Point to construct a new educational complex located either to the north of the existing community or as an alternative between the developing airport center and the existing community adjacent to the boat harbor. Land in the amount of 25 acres would be dedicated for a long range development for the school site to accommodate a twenty to thirty year growth period. The site size is commensurate with DOE Guidelines. The facility would be approximately 37,000 square feet as required by DOE/DOT Standards. The project cost of this facility, to be opened in September, 1983 based on funding in 1981 would be \$8,000,000 complete. The school, once completed, would house 182 students and would accommodate probable growth until a first addition could be completed.

The facility would reduce operation and maintenance costs by 10% on a per capita student basis and fuel consumption by 44% on a per square foot comparison with the existing facility.

FEASIBILITY STUDY FOR NEW ELEMENTARY SECONDARY EDUCATIONAL COMPLEX AT
SAND POINT, ALASKA

Introduction

The following is an investigation of long range, medium range and short range needs for academic, multi-purpose, resource and administrative education space for the City of Sand Point. The study is based on projections and revisions to those projections of the 1977 Comprehensive Plan prepared for the City of Sand Point by Bomhoff and Associates.

Due to the 200 mile limit and other economic factors, population trends of Sand Point and the economic growth for the community have already exceeded the 1985 population, economic forecast, and educational enrollment patterns. The current population for Sand Point is in excess of 770 persons. The school enrollment for all pupils of school age in Sand Point is currently in excess of 153. This is a 25% growth pattern over and above that predicted for the 1979-80 school year in the Comprehensive Plan completed in 1977.

New plans in the community and current construction underway include eleven units of family housing under the HUD Mutual Help Program, one nine-unit apartment building, a six-unit apartment building and an additional six-unit townhouse project. Since completion of the 1977 plan, an additional twelve units of apartments have also been erected within the town proper.

These trends and a 2.5 million dollar road and water supply improvements, a new deep water port about to be constructed, and the infusion of permanent year-around families for the growing crab and bottom fish industries indicate that the 1983 population could exceed 900 persons with a school population in excess of 200 pupils from grades K through 12.

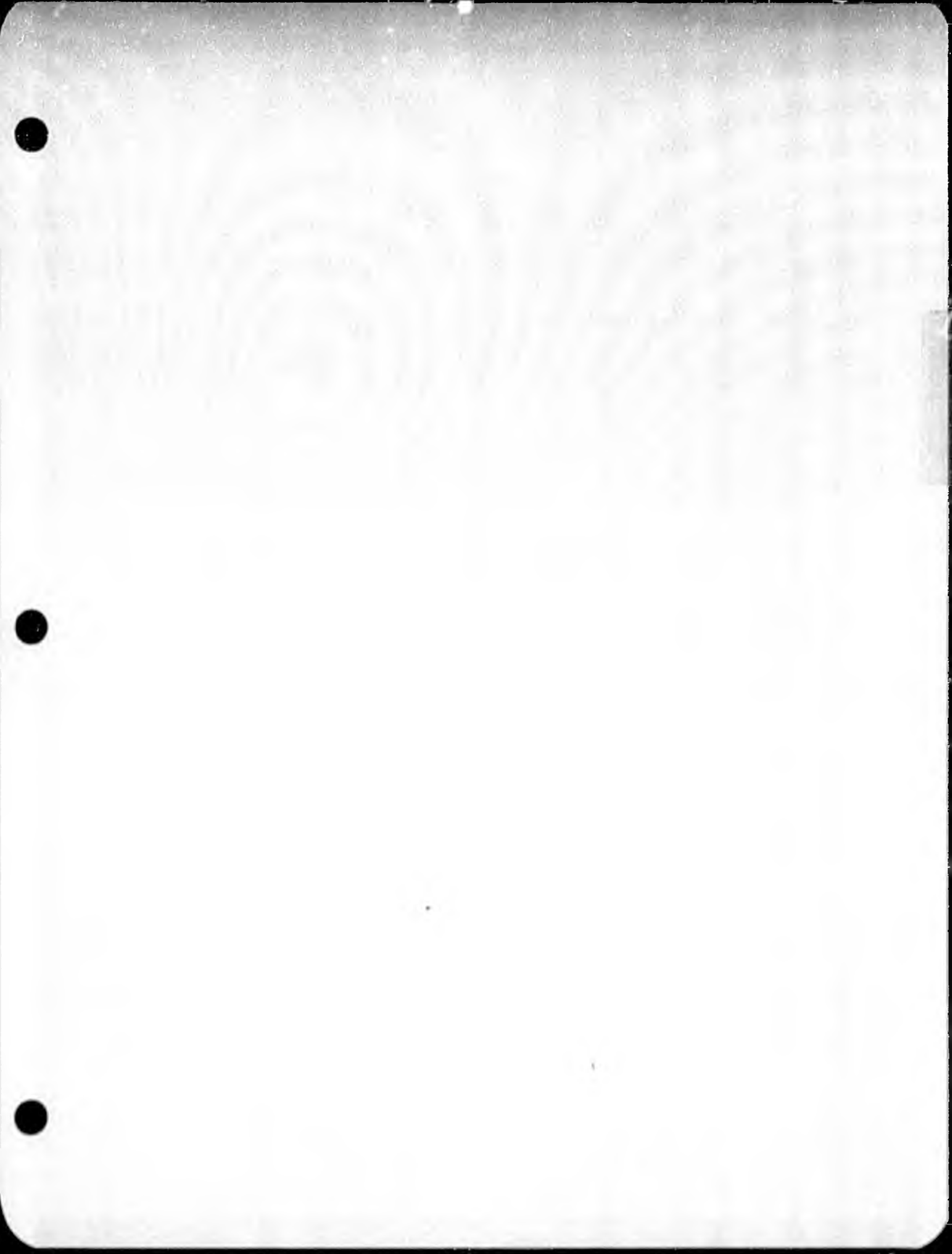
The existing school site, including available city land immediately surrounding the site, provides only four acres of land of which approximately 20% has a slope in excess of 15% and is too steep for playground or educational facilities.

The existing facility does not meet handicap standards and is deficient in many aspects of the Uniform Building Code and Department of Education's recommended educational standards as well as the minimum requirements of the Consent Decree of the Molly Hootch Case.

This study will include population projections based on economic forecast, statistical data, and current growth trends. Also included is a forecast of student population projections based on estimated growth. Alternative sites and utility development costs have been proposed to properly project overall project costs. A survey of code, energy, maintenance and planning deficiencies of existing facilities has been completed. A detailed list of code compliance requirements is included in the Appendices.

The Department of Education program requirements have been tabulated for the existing school enrollment as well as for facilities of various growth increments through 300 total students.

A recommended first increment is included with future increments depending on rate of growth. Detailed design requirements and layouts should be developed once funding limits have been established, and topographic and soils information have been obtained for the site selected.



POPULATION AND HOUSING GROWTH SINCE 1977

The 1977 permanent population at Sand Point was 535. The 1979 permanent population was 773. Transient population increased from 90 to 100 in the same period.

The current population exceeds the highest growth projection of the 1977 plan by 73 persons or 10% above the high projection and 15% above the "most probable" projection.

This growth can be evidenced by the increase in housing starts and the anticipated starts and pre-sales for next year. Housing vacancies are non-existent.

An aerial count of new construction was conducted utilizing late 1976 aerial photography and 1979 photos. A total of 10 new single family homes have been constructed. Five mobile homes have been added. A four-plex and a nine-plex have been constructed and are occupied. The total development is then 28 units for a population capacity of 118.

Presently under construction are a six-plex and a nine-unit apartment building. Eleven units of HUD financed, single-family homes are scheduled for completion late in 1980. An additional six-plex and a six-unit townhouse are also scheduled for construction. This will add 42 additional units with a population capacity of approximately 188.

The combination of what has been constructed and what is envisioned will only handle 306 additional residents which is consistent with the 238 population growth evidenced since completion of the comprehensive plan. All units are either presold or pre-rented and therefore represent current housing deficiencies and need. The current household average of 3.8 suggests overcrowding which the current construction program will help alleviate. The construction will not accommodate future growth however.

POPULATION PROJECTIONS

Short range, medium range and long range population projections have been prepared using three techniques. The simplest and most straight forward has been the linear extension of the growth rate since 1976. The second involves a projection statistically based on a consistent rate of change of rate of growth (i.e. acceleration) since 1920. The third involves a thorough analysis of all factors which influence population growth in Sand Point, industrial economic growth, ratio of basic to secondary employment, family size, and number of persons per job in the community.

A total growth projection through the year 2000 has been developed with a "most probable" middle path being identified. It is interesting to note that two of the three methods yield a similar long range projection for the "most probable" projection.

The results can be justified by the following factors:

1. Sand Point's location is well suited.
2. \$12,000,000 annual bottom fish harvest in the area will develop.
3. Oil exploration will commence within the 20-year time frame.
4. Adequate buildable land is available.
5. Sufficient water supply exists.
6. Adequate deep water port facilities exist and will be expanded.
7. Airport is sufficient for growth.
8. Development is not unlike growth of other Alaskan communities which are geographically unlimited (e.g. Anchorage, Wasilla)
9. Renewable energy sources are available to supplement fossil fuels (wind, mini hydro); geothermal sources are located on adjacent mainland.
10. Bottom fisheries will attract year-around residents to replace transient cannery workers.

11. Sand Point will continue to be a transshipment point for Unga Island, Nelson Lagoon, Port Moeller and Squaw Harbor.
12. Gold and mining operations will redevelop on Unga Island in 1980, with 250 people expected to be involved in initial development operations.
13. A Borough may be formed with Sand Point as the economic, transportation and Government Center.

METHODS:

A. Straight Line Projections

The accompanying charts illustrate low, probable low, most probable, probable high and high growth trends based on 1976 - 79 actual growth. School enrollment projections have been based on a low of 20% of the population and a high of 25% of the population with a "most probable" of 23% of the population projected. The 20% figure has been applied to the low growth estimates which is consistent with the current trend in Sand Point. Sudden high growth tends to indicate relocation of single people and couples with or without preschool age children. There is a slight lag between growth and school population increase.

B. Rate of Increase Projection Method

The accompanying charts illustrate population and school age children projections based on an extension of the rate of increase in population. Such projections are only applicable where economics, utilities, geographic and land availability do not preclude growth. Sand Point is such a city. Other similar Alaska community growth patterns are included in Appendix C. An analysis of the rate of rise of the Rate of Increase on 20-year intervals is included for comparison and justification of method.

Two examples of rate of rise correlations in Sand Point are the boat harbor expansion and subsequent housing market growth. The boat harbor expansion from approximately 88 slips (transient berths not included) to 128 between 1977 and 1979 provided 45.45% additional permanent boat moorage. During that same period the population increased from 529 to 773, an increase of 46.12%.

The housing stock by the end of 1980 will have increased by 70 units over the 1976 count of 128 plus two permanent units in the motel or 130. This represents a projected increase of 53.8%. This is based on 12 units of multi-family housing being added for which construction has not started. Failure to commence these units will result in further overcrowding and a housing shortage.

Such statistics compare with the minimum school enrollment projections based on population growth through 1979 only. The projected increase of school age children at 46.12% would eventually increase the school enrollment from the 1976 mark of 133 to 194. This is consistent with the 202 - 205 projection based on no future growth in the community.

Given the fact that the Sand Point community has a strong economic base, what then are the primary factors which will prohibit population growth? There is favorable justification for the argument that community growth will be stifled and restrained by the lack of available facilities. The shortage of economic base related facilities, in this case boat moorage, restrained the short range growth of the community. Failure to provide adequate housing will further inhibit growth, as will the failure to keep up with the demand for adequate educational facilities. In time, lack of health, commercial, and recreational facilities will detract from natural growth based on an increased economic base. Land availability, utility development, and transportation facilities must also keep up with growth to encourage settlement consistent with the economic potential.

The rate of increase projections assume the land, utilities, and facilities will in fact keep up with growth and will not inhibit long range development. The rate also assumes a rate of increase of economic resources consistent with the patterns developed since 1920.

The method used for the projections is as follows:

1. The rate of increase is calculated for each 20 year period in community history. For Sand Point these rates are as follows:

1920 - 1940	100%	(50 - 100 persons)
1940 - 1960	150%	(100 - 250 persons)
1960 - 1980	250%	(250 - 900 persons) estimated

2. The rate of increase from one twenty year period to the next is computed. For Sand Point these rates are:

100 - 150%	+ 50%
150 - 260%	+ 110%

3. The change in rate of increase is then projected for the year 2000. For Sand Point this would be an additional 60% to 170% for a total increase of 420% for a total population of 4,680 persons for the year 2000. This compares with the highest projections using the straight line method. Annual increases are then computed logarithmically.
4. A 10% and 20% deviation is then used to compute the yearly low, probable low, probable high and highest projections.
5. Percentage of school children is then calculated similar to the straight line method using a range of 20% to 25% of the population.

C. Economic Base Growth Projections

This method takes a known economic potential and bases the population projection on several rates of attaining that economic potential. The method incorporates the following variables:

1. Ratio of resource to basic jobs. For Sand Point this is \$3,275,000 for 100 basic jobs or \$32,250 per job based on 1977 Comprehensive Plan figures.
2. Ratio of basic jobs to secondary jobs. A range is used with the 1976 ratio of .33 as a low figure and the Alaska maximum of 1.0 as the high figure. The most probable is the mid range of values indicated.
3. Ratio of jobs to population. The current 4.7 figure is used as a maximum. The 3.6 figure recommended in the 1977 Comprehensive Plan is included as the most probable. A 3.0 minimum is used to offset the range of possibilities.
4. Numbers of people per household.
The current average of 3.8 is considered the high range. The low range is placed at 3.0 as estimated in the comprehensive plan. A 3.4 mid range has been selected as most probable as Sand Point is probably not going to attract a very large single or retired population for some time.
5. Ratio of school children to population. The range of 20% - 25% is used with 23% as the most probable. This is based on the widely variable recent population to student ratio as follows:

	<u>Ratio</u>	<u>Percentage</u>
1971 - 1972	360/125	34.7%
1972 - 1973	420/133	31.6%
1973 - 1974	450/132	29.3%
1974 - 1975	475/130	27.3%
1975 - 1976	500/140	28.0%
1976 - 1977	529/132	
1977 - 1978	600/139	23.1%
1978 - 1979	690/126	18.2%
1979 - 1980	773/155	20.5%

The 1978-1979 statistic is atypical due to the one year relocation or drop-out of 8 of 18 tenth grade students. These students re-entered the school in the eleventh grade a year later.

Although the decrease reflects the general decline in the number of children it is far more drastic than national averages. This is due to the rapid growth in an isolated community. This growth tends to attract young couples without children or without school age children. The increase to 23% of the population is beginning to be evidenced by the higher number of kindergarten (18), (11 the year before), preschool (13) and 3 year olds (17) who will be starting school in the next few years. As with the straight line method, the higher ratios have been applied to higher growth rates.

The economic forecast is based on the \$12,000,000 annual sustained yield bottom fish projection of the 1977 Comprehensive Plan. Escalated to 1980 the value is as follows at 10% escalation per year.

<u>Date</u>	<u>Value</u>
1976	\$12,000,000
1977	\$13,200,000
1978	\$14,520,000
1979	\$15,970,000
1980	\$17,460,000

The ratio of resource to jobs projected to 1980 is as follows at 10% escalation.

<u>Date</u>	<u>Value</u>
1976	\$32,000
1977	\$35,200
1978	\$38,700
1979	\$42,600
1980	\$46,900 or \$47,000

To determine the number of jobs and subsequent population increase, the most probable growth has been projected based on the assumption that the sustained yield for bottom fish in the Sand Point area will be gradually reached by the year 2000. The growth is projected logarithmically. The probable low and probable high figures represent growth 10% lower or higher and the low and high figures represent growth 20% lower or higher. The highest growth rate assumes the sustained yield will be reached in 16 years. The lowest growth assumes the yield would be reached in 24 years.

Page 7.

This variation allows for an underestimation of the yield or the percentage of the total yield which will filter through Sand Point. Conversely, the increased projections allow for increase in yield or introduction of new economic base elements such as oil and gas exploration, mineral development, tourism and agriculture.

SAND POINT
POPULATION GROWTH PROJECTIONS

METHOD A: STRAIGHT LINE

STRAIGHT LINE PROJECTION

YEAR	ACTUAL	1977 ESTIMATES			STRAIGHT LINE PROJECTION				
		ORIGINAL PROJ. LOW	MOST PROBABLE	HIGH	LOW	PROBABLE LOW	MOST PROBABLE	PROBABLE HIGH	HIGH
1976	495								
1977	529								
1978	650								
1979	773	620	675	700					
1980		650	700	725	850	875	900	925	950
1981		655	715	755	925	975	1,025	1,075	1,125
1982		660	730	785	1,000	1,075	1,150	1,225	1,300
1983		665	745	815	1,075	1,175	1,275	1,375	1,475
1984		670	760	845	1,150	1,275	1,420	1,525	1,650
1985		675	775	875	1,225	1,375	1,525	1,675	1,825
1986		683	786	900	1,300	1,475	1,650	1,825	2,000
1987		691	797	925	1,375	1,575	1,775	1,975	2,175
1988		699	808	950	1,450	1,675	1,900	2,125	2,350
1989		707	819	975	1,525	1,775	2,025	2,275	2,525
1990		715	830	1,000	1,600	1,875	2,150	2,425	2,700
1991					1,675	1,975	2,275	2,575	2,875
1992					1,750	2,075	2,400	2,725	3,050
1993					1,825	2,175	2,525	2,875	3,225
1994					1,900	2,275	2,650	3,025	3,400
1995					1,975	2,375	2,775	3,175	3,575
1996					2,050	2,475	2,800	3,325	3,750
1997					2,125	2,575	3,025	3,475	3,925
1998					2,200	2,675	3,150	3,625	4,100
1999					2,275	2,775	3,275	3,775	4,275
2000					2,356	2,875	3,400	3,925	4,450
Rate Increase Per Year (Persons)					75	100	125	150	175

SAND POINT
 POPULATION GROWTH PROJECTIONS
 METHOD B: RATE OF INCREASE

R A T E O F I N C R E A S E

YEAR	ACTUAL	1977 ESTIMATES			R A T E O F I N C R E A S E				
		ORIGINAL PROJ. LOW	MOST PROBABLE	HIGH	LOW	PROBABLE LOW	MOST PROBABLE	PROBABLE HIGH	HIGH
1976	495								
1977	529								
1978	650								
1979	773	620	675	700					
1980		650	700	725	720	810	900	990	1,080
1981		655	715	755	784	882	980	1,078	1,176
1982		660	730	785	840	945	1,050	1,155	1,260
1983		665	745	815	920	1,035	1,150	1,265	1,380
1984		670	760	845	1,000	1,125	1,250	1,357	1,500
1985		675	775	875	1,088	1,224	1,360	1,496	1,632
1986		683	766	900	1,180	1,327	1,475	1,622	1,770
1987		691	797	925	1,280	1,440	1,600	1,760	1,920
1988		699	808	950	1,380	1,552	1,725	1,897	2,070
1989		707	819	975	1,480	1,665	1,850	2,035	2,220
1990		715	830	1,000	1,620	1,822	2,025	2,227	2,430
1991					1,768	1,989	2,210	2,431	2,652
1992					1,928	2,169	2,410	2,651	2,892
1993					2,120	2,385	2,650	2,915	3,180
1994					2,340	2,632	2,925	3,217	3,510
1995					2,620	2,947	3,275	3,602	3,930
1996					2,780	3,127	3,475	3,822	4,170
1997					2,960	3,300	3,700	4,147	4,440
1998					3,140	3,532	3,925	4,317	4,710
1999					3,368	3,789	4,210	4,621	5,052
2000					3,744	4,212	4,680	5,148	5,616
Deviation					-20%	-10%		+10%	+20%

SAND POINT

POPULATION PROJECTIONS

METHOD C - ECONOMIC GROWTH BASE

SUMMARY OF BASIS FOR CALCULATION

	Low	Probable Low	Most Probable	Probable High	High
Economic Base Increase in % 1980 - 2000	-20%	-10%	0	+10%	+20%
Total Economic Base Increase 1980 dollars	13,968,000	15,714,000	17,410,000	19,206,000	20,952,000
Average Value/Basic Job	47,500	47,500	47,500	47,500	47,500
Increase in Total Jobs To Year 2000	294	330	367	404	445
Ratio Basic/Secondary Employment	.33	.50	.67	.75	1.0
Total Employment Increase In Year 2000	396	445	611	707	882
Ratio Jobs/Population	3.0	3.3	3.6	4.0	4.7
Total Increase Population/ Year 2000	1,188	1,468	2,199	2,828	4,168
1979 Population	773	773	773	773	773
1980 Population (Est.)	875	888	900	912	925
TOTAL Population (Year 2000)	2,065	2,356	3,099	3,740	5,085

SAND POINT
POPULATION GROWTH PROJECTS

METHOD C: Economic Growth Base

ECONOMIC GROWTH BASE

YEAR	ACTUAL	1977 ESTIMATES			ECONOMIC GROWTH BASE				
		ORIGINAL PROJ. LOW	MOST PROBABLE	HIGH	LOW	PROBABLE LOW	MOST PROBABLE	PROBABLE HIGH	HIGH
1976	495								
1977	529								
1978	650								
1979	773	620	675	700					
1980		650	700	725	875	888	900	912	925
1981		655	715	755	900	920	950	980	1,025
1982		660	730	785	925	960	1,000	1,050	1,125
1983		665	745	815	950	1,000	1,050	1,125	1,230
1984		670	760	845	990	1,025	1,100	1,200	1,325
1985		675	775	875	1,010	1,075	1,180	1,275	1,450
1986		683	786	900	1,050	1,115	1,225	1,350	1,575
1987		691	797	925	1,100	1,150	1,300	1,480	1,700
1988		699	808	950	1,140	1,210	1,375	1,570	1,850
1989		707	819	975	1,180	1,275	1,475	1,690	2,000
1990		715	830	1,000	1,225	1,320	1,550	1,800	2,200
1991					1,300	1,400	1,675	1,950	2,375
1992					1,350	1,490	1,800	2,100	2,600
1993					1,425	1,575	1,925	2,250	2,875
1994					1,510	1,700	2,100	2,475	3,225
1995					1,650	1,810	2,280	2,725	3,550
1996					1,700	1,900	2,400	2,880	3,750
1997					1,790	1,990	2,550	3,050	4,000
1998					1,850	2,090	2,675	3,210	4,250
1999					1,980	2,225	2,900	3,600	4,690
2000					2,063	2,356	3,099	3,740	5,085

% Deviation

-20 %

- 0 %

+10 %

+20 %

SUMMARY OF ADVANTAGES AND DISADVANTAGES OF METHODS EMPLOYED

A. Straight Line

Although based on existing data, growth is not correlated to economic base or history of growth of similar communities in the State. It does not reflect the logarithmic redistribution nature of population growth.

B. Rate of Rise

This method does not concern itself with anything but statistical comparisons with previous community growth and growth in other similar areas. It is dependent on economic growth in the same acceleration as its prior community development which in turn requires additional economic resources to be developed once a sustained yield in an existing resource is reached. It overlooks short term lack of facilities to provide growth but is dependent on long term facilities sufficient to sustain economic growth. It is logarithmically projected and is therefore consistent with actual growth patterns.

C. Economic Base

This method is by far the most rational basis. It is limited only to the foreseeable economic basis and trends. It cannot be based on non-existent or undiscovered resources. It is logarithmic. It makes assumptions regarding time necessary to develop a sustained yield of the resource. It is therefore a conservative forecast.

D. Recommendations

The Economic Base Method should be used to predicate short range school population growth. As new resources are developed or existing ones reach a sustained yield or are exhausted, the projections should be revised using similar techniques.

The Rate of Rise Method is best used for long range (20 years and up) possibilities. It should be used to identify potential and to make long range plans. Thus, the school site should be sized to handle the eventuality of 1000 to 1100 students. The school should have potential for expansion to accommodate this growth or a policy should be made as to the maximum size for any one building or facility.

SAND POINT SCHOOL ENROLLMENT

<u>YEAR</u>	<u>TOTALS</u>	
1968-1969	72	(elementary only)
1969-1970	88	(elementary only)
1970-1971	98	(elementary only)
1971-1972	125	
1972-1973	133	
1973-1974	132	
1974-1975	130	
1975-1976	140	

School Age Population Projections

Method: A - STRAIGHT LINE PROJECTION

STRAIGHT LINE PROJECTION

Year	ACTUAL	1977 PROJECTIONS	MINIMUM CONSIDERING NO GROWTH	LOW POPULATION GROWTH	PROBABLE LOW	MOST PROBABLE	PROBABLE HIGH	HIGH POPULATION GROWTH
1976	133	132						
1977	139	133						
1978	126	135						
1979	155	136						
1980	155	125	157	171	177	183	191	199
1981		129	154	178	192	207	222	237
1982			157	194	214	235	258	281
1983			161	210	225	258	270	325
1984			166	225	258	304	330	368
1985			171	241	280	326	366	412
1986			173	257	302	350	402	456
1987			183	273	324	379	438	500
1988			190	288	346	408	474	543
1989			195	304	368	437	510	587
1990			202	320	386	465	546	631
1991			207	336	412	494	582	675
1992				351	434	523	618	718
1993				367	456	552	654	762
1994				383	478	580	690	806
1995				399	500	609	726	850
1996				414	522	638	762	893
1997				430	544	667	798	937
1998				446	566	695	834	981
1999				462	588	724	846	1,025
2000				477	610	753	906	1,068
± School Age				21%	22%	23%	24%	25%

School Age Population Projections

Method: B - RATE OF INCREASE

RATE OF INCREASE

Year	ACTUAL	1977 PROJECTIONS	RATE OF INCREASE					
			MINIMUM CONSIDERING NO GROWTH	LOW POPULATION GROWTH	PROBABLE LOW	MOST PROBABLE	PROBABLE HIGH	HIGH POPULATION GROWTH
1976	133	132						
1977	139	133						
1978	126	135						
1979	155	136						
1980	155	125	157	159	161	189	216	246
1981		129	154	162	188	207	237	270
1982			157	164	194	225	258	294
1983			161	176	207	241	277	315
1984			166	193	227	264	303	345
1985			171	210	247	287	325	375
1986			173	228	269	312	359	408
1987			183	247	291	339	389	442
1988			190	268	316	368	422	480
1989			195	289	314	396	455	517
1990			202	310	366	425	488	555
1991			207	340	400	465	534	607
1992				371	437	508	583	663
1993				404	477	554	636	723
1994				445	524	609	699	795
1995				491	579	672	772	877
1996				550	648	753	864	982
1997				583	687	799	917	1,042
1998				621	726	851	995	1,110
1999				659	777	902	1,036	1,177
2000				707	833	968	1,111	1,263
% School Age				21%	22%	23%	24%	25%

SCHOOL AGE POPULATION PROJECTIONS

METHOD C: ECONOMIC GROWTH BASE

ECONOMIC GROWTH BASE

YEAR	ACTUAL	1977 PROJ.	MINIMUM CONSIDERING NO GROWTH.	LOW POPULATION GROWTH	PROBABLE LOW	MOST PROBABLE	PROBABLE HIGH	HIGH POPULATION GROWTH
1976	133	132						
1977	139	133						
1978	126	135						
1979	155	136						
1980	155	125	157	183	195	207	219	231
1981		129	154	189	202	218	235	256
1982			157	194	211	230	252	281
1983			161	199	220	241	270	307
1984			166	207	225	253	288	331
1985			171	212	236	264	306	362
1986			173	220	245	281	324	393
1987			183	231	253	299	355	425
1988			190	239	266	316	376	462
1989			195	247	280	339	405	500
1990			202	257	290	372	432	550
1991			207	273	308	385	468	593
1992				283	327	414	504	650
1993				299	346	442	540	718
1994				317	374	483	594	806
1995				346	398	524	654	887
1996				357	418	552	691	937
1997				375	437	586	732	1,000
1998				388	459	615	770	1,062
1999				415	489	667	864	1,172
2000				433	518	712	897	1,271
School Age				210	220	230	240	250

Current School Enrollment and Projections Based on No Additional Growth

The attached table illustrates the total school age children in Sand Point by grade since 1976 as well as the total enrollment figures listed in the Comprehensive Plan. The additional figures represent the projected school growth based on no change in current population structure. The city pre school figures of 13, 4-year olds and 17, 3-year olds and the present jump to 18 kindergarten pupils were used to determine the average of 16 new school students in each grade each year. These figures exceed the 1977 plan estimates. This is consistent with the 1977 Comprehensive Plan which stated 25% of the population consisted of school age (5 - 18) children. The 1979 percentage is 20%. This decline is viewed as temporary. This is caused by the sudden population increase consisting of young couples with pre school youngsters or who have recently or will soon have children. The statistics show a relatively small change in families with children in other grades.

The long range timetable for growth in school enrollment without additional growth in the community is shown on the tables. A total enrollment of 205 to 210 should be envisioned by 1990. This would require a 37,000 square foot facility with 25,000 square feet of assignable space and a 15 to 25 acre site. The present facility contains only 13,351 assignable square feet. Its specific deficiencies are outlined in the existing facility section of this report. These requirements should be construed as absolute minimums based on no additional community growth.

SAND POINT SCHOOL ENROLLMENT

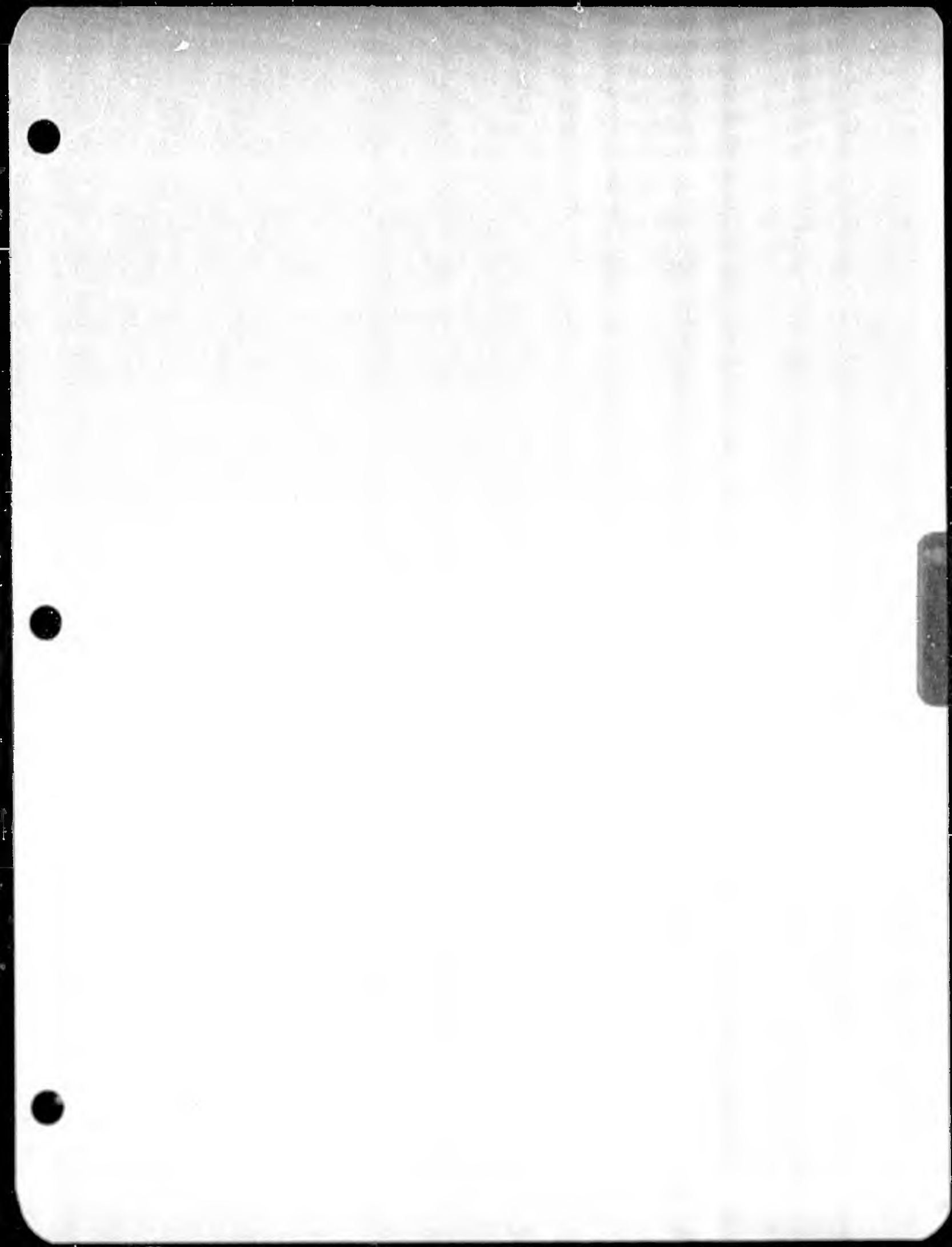
<u>GRADE</u>	1976-77		1977-78		1978-79		1979-80	
	<u>EST.</u>	<u>ACTUAL</u>	<u>EST.</u>	<u>ACTUAL</u>	<u>EST.</u>	<u>ACTUAL</u>	<u>EST.</u>	<u>ACTUAL</u>
K		11		6		8		18
1		7		9		9		11
2		7		7		10		9
3		11		6		8		11
4		9		13		5		9
5		9		10		11		6
6		11		11		8		14
7		11		11		11		11
8		19		13		11		11
9		7		18		12		12
10		17		11		10		13
11		11		17		8		19
12		3		7		15		11
<u>TOTAL</u>	132	133	133	139	135	126	136	155

SAND POINT SCHOOL ENROLLMENT GROWTH THROUGH 1992 ASSUMING NO FURTHER POPULATION INCREASE

<u>GRADE</u>	<u>1977</u>	<u>1980-81</u>	<u>1977</u>	<u>1981-82</u>	<u>1982-83</u>	<u>1983-84</u>
K	EST.	13	EST.	16	16	16
1		18		13	16	16
2		11		18	13	16
3		9		11	18	13
4		11		9	11	18
5		9		11	9	11
6		6		9	11	9
7		14		6	11	11
8		11		14	6	9
9		17		11	14	6
10		12		11	11	14
11		13		12	11	11
12		19		13	12	11
<hr/>						
TOTAL	125	157	129	154	157	161

SAND POINT SCHOOL ENROLLMENT GROWTH THROUGH 1991-92 ASSUMING NO FURTHER POPULATION GROWTH

<u>GRADE</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>
K	16	16	16	16	16	16	16	16
1	16	16	16	16	16	16	16	16
2	16	16	16	16	16	16	16	16
3	16	16	16	16	16	16	16	16
4	13	16	16	16	16	16	16	16
5	18	13	16	16	16	16	16	16
6	11	18	13	16	16	16	16	16
7	9	11	18	13	16	16	16	16
8	11	9	11	18	13	16	16	16
9	9	11	9	11	18	13	16	16
10	6	9	11	9	11	18	13	16
11	14	6	9	11	9	11	18	16
12	11	14	6	9	11	9	11	18
<hr/>								
TOTAL	166	171	173	183	190	195	202	207



RECOMMENDED SCHOOL SIZE

Based on population projections and availability schedules, the following alternative design possibilities appear most realistic.

Scheme I: 202 Students

Design of a 202 student elementary-secondary school would provide for long range (1990) needs only, providing no further growth was evident in the community. It would not satisfy projected growth needs through 1990 unless the growth rate was extremely low in which it would suffice until 1984 for the "probable low" projection. In short, it would probably be obsolete once it was constructed.

Scheme II: 222 Students

Design of a 222 student elementary-secondary school would provide for long range needs through 1986 only if the lowest growth rate occurred. It would provide for the long range need to the year 2000 only if no additional growth takes place in Sand Point. It will provide for "most probable" growth only through the first year of occupancy. The "fast track" scheduling would be necessary to complete an addition in time to prevent drastic overcrowding. It would provide for only lowest population growth projections through 1986, and allow for a reasonable time for construction of a first addition. The "probable low" projection of 220 students in 1983 indicates a "fast track" planning schedule would also be necessary to avoid overcrowding. Growth rates beyond "most probable" could not be handled and if such growth took place, the facility would be obsolete prior to occupancy.

Scheme III: 242 Students

This scheme provides for "most probable" growth through 1983-1984. If funded by direct appropriation the first addition would be complete by fall of 1984 thereby obviating any overcrowding. "Fast track" planning could be used if growth exceeded the "most probable". Occupancy for the first addition would then occur in September 1983 and would result in a slightly overcrowded condition (10 students) for the 1982-83 school year. For the highest population growth the scheme would be obsolete at completion of the first increment. Such extreme growth to 1025 total persons in Sand Point in 1981 (an increase of 250 or 35%

RECOMMENDED SCHOOL SIZE (continued)

of the population) would be immediately recognized in 1980, in time to supplement the design and project budget to accommodate such growth.

It is recommended Scheme I be selected. It provides the flexibility for the short range growth within reasonable funding restraints. The Scheme will require careful monitoring of growth in preschool age children in Sand Point as well as overall population increase trends.

A large increase in population in Sand Point will mean a large jump in school children two to four years later. Similarly, a large expansion in services, facilities such as boat moorage or industrial growth should be anticipated in sufficient time to program funds. This will allow school construction to keep up with or remain slightly ahead of student population.

Recommended Concept for Development

The long range plan for the facility should have a basic layout capable of a student population of at least 750 and preferably 1000 students. Ample space for parking, playgrounds, and athletic fields should be included for such growth.

The eventual population could be divided into several buildings or could be one complex with several "pods" connected to a multipurpose "core" facility for administration, gymnasium and other shared facilities.

A plan with four academic areas should be considered. They could be divided into the following basic age groups:

Primary K - 2
Elementary 3 - 6 or 3 - 5
Junior High 7 - 9 or 6 - 8
Senior High 10 - 12 or 9 - 12

Each would be capable of eventually handling approximately 250 students. Each could expand independently of the others. Two media centers would be developed, one for all secondary and one for all elementary students. These facilities and other shared facilities such as special education classrooms could be located between the groups served.

Administrative spaces could be located convenient to public entry and in a fashion to allow for expansion independent of various school groups.

SCHEDULING AND PHASING

To determine an appropriate first increment of construction it must first be determined the minimum time necessary to construct the new school and the first addition thereafter. The initial facility size would then be planned for the number of students anticipated up to the completion of the first addition. Three schedules follow. The first presumes a bond issue for each increment. The second assumes a direct appropriation from the 1980 legislature for the initial increment and the first addition. The third presumes a direct appropriation with the "fast-track" approach to planning, design, and bidding of the first addition. This last method would be utilized only in the cases where growth occurred so rapidly it became necessary to plan the first addition prior to occupancy of the initial increment.

Schedule for 1981 Funding:

1. Latest Schedule For Initial Increment
Feasibility completion, December 1, 1979.
Submit for funding, January 1980.
Obtain approval for funding, 1981 Legislative Session.

Complete Design, February 1982.
Open Bids, March 1982.
Award Contract, April 1982.
Complete construction, April 1983.
Move in, May - June 1983.
First session occupancy, September 1983.

2. Earliest Schedule for Completion of First Addition
Complete feasibility for addition, December 1983.
Submit for funding, January 1984.
Obtain approval for funding, 1984 Legislative Session.

Complete design, February 1985.
Open Bids, March 1985
Award Contract, April 1985
Complete Construction, December 1985 - March 1986
Move in - May - June 1986
First session occupancy, 1986 - 1987 school year

SAND POINT COST ESTIMATES

A. Previous estimates.

Estimates for similar facilities are as follows:

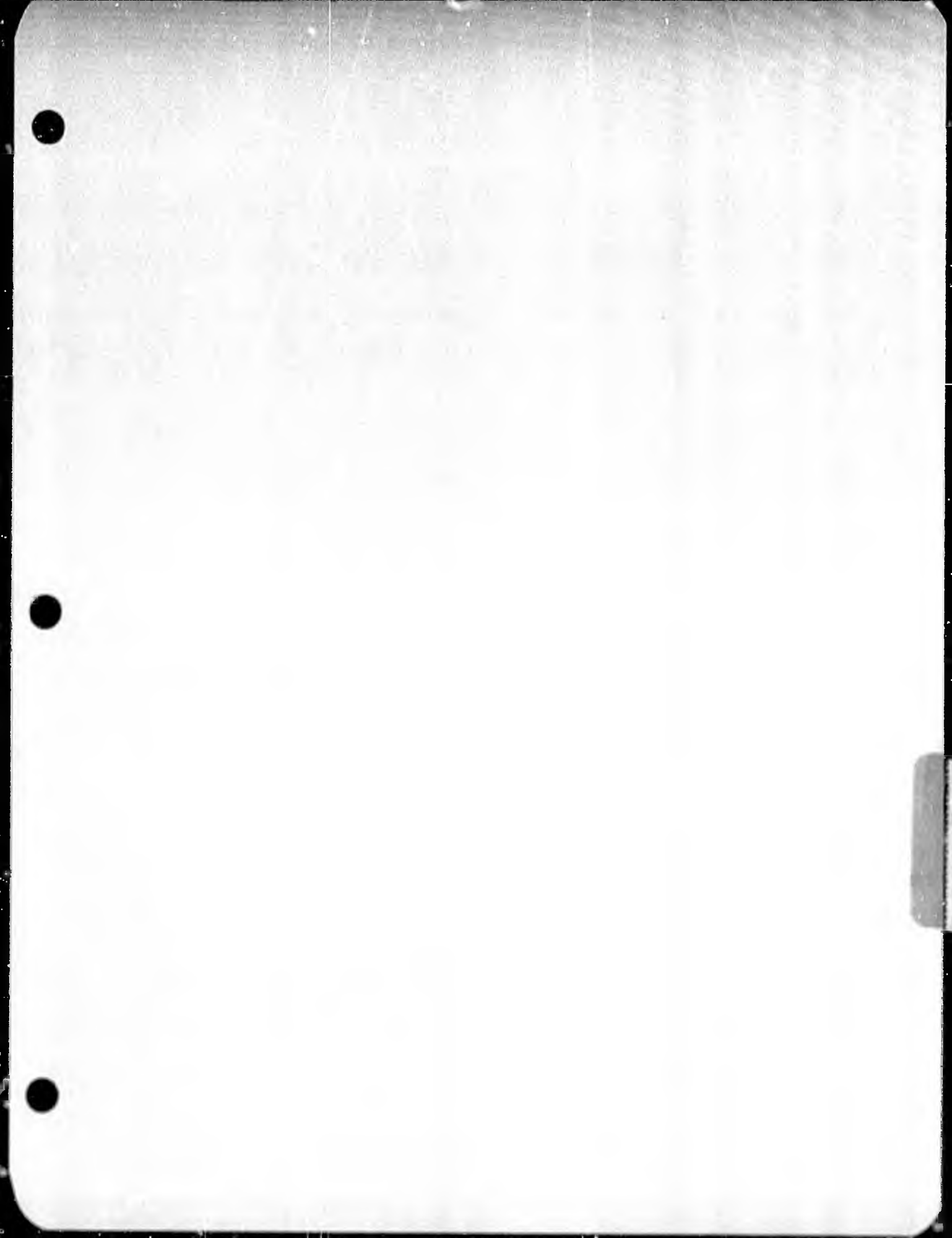
	Funded	Proj. Cost	Built	Size	Const. Cost	Const. Cost/SF	Project Cost/SF
1. Unalaska School Additions	1979	\$ 3,500,000	1981	18,500	\$3,000,000	\$162.00	\$190.00
2. Adak School Add.	1978	1,400,000	1979	6,716	1,000,000	149.00	208.00
3. Adak Fish & Wildlife Hdots.	1979		1980	10,000	2,300,000	230.00	Unknown
4. Larson Bay School (Kodiak)	1978	1,637,100	1979	10,000	1,247,000	130.00	163.70
5. Ouzinkie School (Kodiak)	1978	1,001,000	1979	7,500	1,064,000 (Bid)	145.00	Unknown
6. Wasilla School Addition	1977		1980	60,000	5,400,000	90.00	Unknown
7. Bush School Average	1978		1979	8,000		183.88	210.00

B. Projected estimates escalated for comparison to year of construction at Sand Point

1. Unalaska	1979	\$ 3,850,000	1981	18,500	\$3,300,000	\$178.00	\$209.00	
2. Adak School Additions	1978	1,694,000	1981	6,716	1,211,000	181.00	230.00	
3. Sand Point Scheme I	a.	1981	\$9,647,202	1982	37,875	\$7,192,500	\$180.00	\$254.71
	b.	1981	10,611,922	1983	37,875	7,987,500	200.00	280.18
	c.	1982	11,573,214	1984	37,875	8,786,250	220.00	308.20
	d.	1982	12,840,425	1985	37,875	9,664,275	242.00	339.02
Scheme II	a.	1981	10,516,890	1982	41,625	7,867,500	180.00	252.70
	b.	1981	11,570,779	1983	41,625	8,737,500	200.00	277.98
	c.	1982	12,727,857	1984	41,625	9,611,250	220.00	305.77
	d.	1982	14,000,643	1985	41,625	10,572,375	242.00	336.25
Scheme III	a.	198	11,430,232	198	45,375	8,542,500	180.00	251.36
	b.	198	12,573,255	198	45,375	9,487,500	200.00	277.10
	c.	1982	13,930,581	198	45,375	10,436,250	220.00	304.21
	d.	1982	15,213,639	198	45,375	11,479,875	242.00	335.25

SAND POINT COST ESTIMATES

Scheme IV		<u>Project Cost</u>	<u>Built</u>	<u>Size</u>	<u>Const. Cost</u>	<u>Const. Cost</u> <u>per Sq. Ft.</u>	<u>Project Cost</u> <u>per Sq. Ft.</u>
a.	1981	9,000,000	1982	32,000	5,900,000	184.37	250.00
b.	1981	9,800,000	1983	32,000	6,489,000	202.80	275.00
c.	1982	9,680,000	1984	32,000	7,138,000	223.08	302.50
d.	1982	10,648,000	1985	32,000	7,852,000	245.38	332.75



SAND POINT COST ESTIMATES

C. Estimate Rationale

On the positive side, Sand Point has adequate construction activity underway to potentially minimize mobilization costs. It has some lodging space but little food service. Some equipment exists for earthwork, hauling, etc. Transportation facilities are adequate for barge or air service. Warehousing space is marginal to adequate. Borrow pits for coarse and fine aggregate are available for earthwork and sand for concrete is available. A considerable amount of other construction work is underway and large contractors are mobilized.

On the negative side, the local labor force is minimal and is principally limited to carpenters and laborers. Adequate food and lodging may not be available thereby requiring a contractor to set up a camp for his crews. Utility extensions will be costly and will add to the square foot price of the buildings. (The Adak and Unalaska school projects had minimal utility work involved).

The Adak School price is considered extremely good compared with other work in the area such as the Fish and Wildlife Headquarters Project. As good as it was, however, projecting it to the 1981 construction season correlates it favorably with the Unalaska estimate which was originally based on a 1979 construction season and may be underestimated for that area for 1980 construction.

The high project cost projections for Sand Point are based on the format and regulations required by the DOT/DOE grant process. Beginning with a \$180 per square foot construction cost and a \$375,000 utility development cost, the grant application then requires a 12% initial construction contingency regardless of project size. To this must be added a 10% equipment allowance and 5% for art work. These mark ups total 22% when applied in accordance with the formula. The remainder of the total mark up of 34% is to cover DOE/DOT costs (3%) additional project contingencies, design, inspection, soils work, surveys and project administration costs.

A preliminary grant application budget has been prepared for each scheme, following DOTPF regulations.

APPENDIX "B"
GRANT PROJECT BUDGET

CRITERION: Facility Procurement
REGION: SH

PROJECT NAME AND LOCATION: Sand Point School, Sand Point, Alaska

PROJECT NO:

FUNDING:	\$	(A/C:)	_____	Date:	_____	Issued by:	_____
(source)	\$	(A/C:)	_____	Grantee:	_____	Prepared by:	_____
	\$	(A/C:)	_____	Issued by:	_____	Issued by:	_____
	\$	(A/C:)	_____	DO/FF:	_____	DO/FF:	_____
Total Funding:	\$		_____	Agency Commission:	_____	Agency Commission:	_____
				Financial Review Officer:	_____	Financial Review Officer:	_____
				Division Director:	_____	Division Director:	_____
				Grant Agency:	_____	Grant Agency:	_____
				Approving Agency:	_____	Approving Agency:	_____

Facility Type: 45,375 square feet new facility to house 242 elementary & secondary students including offices, storage, restrooms, corridor areas.

FINANCIAL DESCRIPTION:	ACTV. Code:	GRANT	ACTV. Code:	F.O.T./P.C.	APPROX. AMT.	REMARKS
0-LAND:	Total	\$ 0		\$ 0	\$ 0	
Appraisals	07A					
Acquisition	07B					
Legal Expense	07L					
Payroll	07P					
Travel	07T					
Contingency	07C					
1-SITE INVESTIGATION:	Total	\$ 27,825		\$ 0	\$ 27,825	
Soils Information	17K	15,000				Test hole & soils report.
Land Surveyors	17L	10,000				Boundary, topo & existing landmarks.
Payroll	17P					3 trips @ \$500 each.
Inspection	17I					
Travel	17T	1,500				
Water Survey	17W					
Contingency	17C	1,325				5%
2-OTHER SERVICES:	Total	\$ 50,230		\$ 5,922	\$ 44,308	
Archaeological Study	27A					
Design Review	27C			5,922		3 reviews levels 2 & 4
Cost Control	27E					
Program Consultant	27K					
Work of Art	27Q	44,308				0.5% Construction Cost per AS
Contingency	27C	1,392		1,392		5%
3-DESIGN SERVICE:	Total	\$ 622,758		\$ 0	\$ 622,758	
Additional Services	37A	1,000				Master Plan and project survey
Sub-Consultants	37C	1,000				Cost Consultant
Fees	37F	478,000				A/E 6%
Office Expense	37J					
Payroll-In. Acc. Org.	37P					
Reimbursable Expense	37R	1,000				Reproduction, printing, travel
Travel-In. Acc. Org.	37T					16 trips @ \$500 each
Contingency	37C	43,758				5%
4-ADMINISTRATION:	Total	\$ 3,160		\$ 124,564	\$ 127,724	
Cost of Sales Charge	47A			124,564		.007% of funding
Office Expense	47J	1,000				24 months @ \$125
Payroll	47P	1,000				.002% of funding
Travel	47T	1,000				1 trip Sand Point to Anchorage
Contingency	47C	160				5%
5-DESIGN DESIGN:	Total	\$ 0		\$ 70,910	\$ 70,910	
Office Expense	57J			70,910		.005% of funding
Payroll	57P					
Travel	57T					
Contingency	57C					5% (15 days) 3 reviews (Arch. 5 days + Mech/Elec. 4 days each. Const. 4 days. Final Insp. 2 days)
6-CONSTRUCTION SVCS:	Total	\$ 77,700		\$ 24,720	\$ 102,420	
Special Consultants	67C					DO/FF Insp. 24 days. 1 trip/mo. @ \$4 mo.
Office Expense	67J					
Payroll	67P	41,000		14,720		Asst. 14 days + clerical
Travel	67T	16,000		14,000		Inspector 12 mo. @ \$4,000
Contingency	67C	10,700		11,000		12 trips @ \$500 each. } Grantee
7-EQUIPMENT:	Total	\$ 114,750		\$ 0	\$ 114,750	10% Bldg. Cost
8-CONTRACT:	Total	\$ 9,547,000		\$ 0	\$ 9,547,000	
Construction Contract	87C					
P.M.S.	87E					
Construction Fee	87F	1,100,000				
UTILITY SERVICES		175,000				
Contingency	87C	1,272,000				10% Construction Cost
9-TOTAL RESTRICTED AND UNRESTRICTED:	Total	\$ 10,118,733		\$ 124,564	\$ 10,243,297	
						1% of funding
						30.6% of funding
PROJECT TOTAL		\$ 10,118,733		\$ 124,564	\$ 10,243,297	

APPENDIX "B"
GRANT PROJECT BUDGET

DIVISION: Facility Procurement
REGION: SW

78-727
NOV 40
LOCATION: Sand Point School, Sand Point, Alaska

PROJECT NO:

FUNDING:	\$	(A/C:	Date	Totals	Unexp. Amt.
(source)	\$	(A/C:			Grantee:
	\$	(A/C:			Prepared by
	\$	(A/C:			Approved by
Total Funding:	\$				00777

FUNCTIONAL DESCRIPTION:	ACTY. Code:	GRANT	ACTY. Code:	A.O.T. P.S.	UNEXP. AMT.	REMARKS
0-LAND:	Total	\$ 0		\$ 0	\$ 0	
Appraisals	07A					
Acquisition	07B					
Legal Expense	07L					
Payroll	07P					
Travel	07T					
Contingency	07C					
1-SITE INVESTIGATION:	Total	\$ 27,828		\$ 0	\$ 27,828	
Soils Investigation	17A	18,000				Test hole & soils report
Land Surveys	17L	10,000				Boundary, topo & existing landmarks.
Payroll	17P					
Inspection	17O					
Travel	17T	1,500				3 trips @ \$500 each
Water Survey	17W					
Contingency	17C	1,328				
2-OTHER SERVICES:	Total	\$ 41,305		\$ 8,922	\$ 47,227	
Architectural Study	27A			8,922		3 reviews - levels 2 & 4
Design Advice	27C					
Cost Control	27E					
Program Consultant	27K					0.5% construction cost per AS
Work of Art	27Q	10,318				
Contingency	27C	1,367		891		
3-DESIGN SERVICES:	Total	\$ 216,450		\$ 0	\$ 216,450	
Professional Services	37A	1,000				Master Plan, pre-act survey, cost consultant
Sub-consultants	37C	4,000				A/E
Fees	37F	171,000				
Office Expense	37J					
Payroll - In. Abs. Deg.	37P					
Miscellaneous Expense	37S	4,000				Printing reproduction, travel (6 @ \$500 each)
Travel - In. Abs. Deg.	37T					
Contingency	37C	14,000				
4-ADMINISTRATION:	Total	\$ 1,260		\$ 118,000	\$ 119,260	
Supplies - Large	47A			118,000		0078 of funding
Office Expense	47J	200				24 months @ \$25
Payroll	47P	1,000				0025 of funding
Travel	47T					1 trip Sand Point to Anchorage
Contingency	47C	160				
5-OPERATION:	Total	\$ 0		\$ 65,056	\$ 65,056	
Office Expense	57A					COST of funding
Payroll	57P					0.5% (15 da.) 2 reviews (Arch. 3 da. + Mech. 4 da. + Elect. 4 da. Const. 4 da.) Final Insp. & Elect. 15 days
Travel	57T					
Contingency	57C					
6-CONSTRUCTION (BY OTHER AGENCY):	Total	\$ 77,700		\$ 24,720	\$ 102,420	
Office Expense	67J					007777 Insp. 24 da. 1 trip/mo x 14
Payroll	67P	48,000				Assist. 14 da. + clerical
Travel	67T	28,000				Inspector 12 mo. @ \$4,000
Contingency	67C	1,700				2 trips @ \$500 each. } Grantee
7-CONTRACT:	Total	\$ 749,220		\$ 1	\$ 749,221	10% Bldg. Cost
8-OTHER SERVICES:	Total	\$ 8,811,000		\$ 1	\$ 8,811,001	
Construction	87C					12% Construction Cost
P.R.S.	87B					
Construction	87A	7,480,000				
Materials	87D	1,331,000				
Contingency	87C	88,000				
93-TOTAL RESTRICTED FUND:		\$ 10,227,680		\$ 210,415	\$ 10,438,095	10 Project Funding
94-TOTAL UNRESTRICTED FUND:				\$ 89,742	\$ 89,742	007777 @ 0.001% of funding
TOTAL:		\$ 10,227,680		\$ 210,415	\$ 10,438,095	

Sandpoint School Sand Point, Alaska

Project Name:	37,875 square feet new facility to house 202 Elementary & Secondary students including offices, storage, classroom service & support areas
Location:	
Contract No.:	
Contract Date:	
Contract Value:	
Contract Type:	
Contract Status:	

Category	Amount	Unit Price	Quantity	Subtotal	Notes
Construction	27,825		0	27,825	
Professional Services	10,000			10,000	Test hole & soils report Boundary, topo & exist. landmarks 3 trips @ \$500 each 5%
Materials	1,500			1,500	
Travel	1,325			1,325	
Subtotal	30,975			30,975	
Construction	29,500			29,500	0.5% Construction cost per A/E 5%
Materials	1,475			1,475	
Subtotal	31,975			31,975	
Professional Services	422,140			422,140	Master Plan, Project Survey Cost Consultant A/E Reproduction, printing, travel (6 trips @ \$500 ea.) 5%
Materials	411,000			411,000	
Travel	20,140			20,140	
Subtotal	431,140			431,140	
Construction	1,300			1,300	
Materials	1,300			1,300	
Travel	1,300			1,300	
Subtotal	3,900			3,900	
Construction	0			0	
Materials	0			0	
Travel	0			0	
Subtotal	0			0	
Construction	77,700			77,700	0.05% of funding 15 da. 2 Reviews (Arch 5 da) Final Insp. 15 da. const 1 trip
Materials	0			0	
Travel	0			0	
Subtotal	77,700			77,700	
Construction	68,750			68,750	(insp. 12 mo @ 4000) (2 trips @ 500 ea.) Granton
Materials	0			0	
Travel	0			0	
Subtotal	68,750			68,750	
Construction	580,000			580,000	10% Bldg. Cost
Materials	0			0	
Travel	0			0	
Subtotal	580,000			580,000	
Construction	0			0	
Materials	0			0	
Travel	0			0	
Subtotal	0			0	
Construction	0			0	
Materials	0			0	
Travel	0			0	
Subtotal	0			0	
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Travel	0			0	
Subtotal	0			0	
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Travel	0			0	
Subtotal	0			0	
Construction	0			0	
Materials	0			0	
Travel	0			0	
Subtotal	0			0	
Construction					

C. Scheme II : 41,265 square feet/222 students

<u>Element</u>	<u>Cost</u>	<u>Bldg. Size</u>	<u>Cost/SF/YR</u>	<u>Student Population</u>	<u>Cost Student/YR</u>	<u>Difference/ Present</u>
Insurance	\$41,265	41,265	\$1.00	222	\$185.87	
Fuel Oil	\$31,361	41,265	\$0.76	222	\$141.26	
Electricity	\$64,786	41,265	\$1.57	222	\$291.82	
Water/Sewer	\$ 4,126	41,265	\$0.10	222	\$ 18.58	
Telephone	\$ 4,951	41,265	\$0.12	222	\$ 22.20	
Janitorial	\$37,138	41,265	\$0.90	222	\$167.28	
Bldg. Maintenance	\$23,108	41,265	\$0.56	222	\$104.09	
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TOTAL	\$206,735	41,265	\$5.01	222	\$931.10	
ROUND OFF	\$210,000	41,265	\$5.05	222	\$935.00	\$80.00/ student

D. Scheme III : 45,375 square feet/242 students

<u>Element</u>	<u>Cost</u>	<u>Bldg. Size</u>	<u>Cost/SF/YR</u>	<u>Student Population</u>	<u>Cost Student/YR</u>	<u>Difference/ Present</u>
Insurance	\$45,515	45,375	\$1.00	242	\$187.50	
Fuel Oil	\$34,485	45,375	\$0.76	242	\$142.50	
Electricity	\$71,238	45,375	\$1.57	242	\$294.37	
Water/Sewer	\$ 4,537	45,375	\$0.10	242	\$ 18.74	
Telephone	\$ 5,445	45,375	\$0.12	242	\$ 22.50	
Janitorial	\$40,837	45,375	\$0.90	242	\$168.74	
Bldg. Maintenance	\$25,410	45,375	\$0.56	242	\$105.00	
<hr/>						
TOTAL	\$227,467	45,375	\$5.01	242	\$939.25	
ROUND OFF	\$230,000	45,375	\$5.05	242	\$940.00	\$65.00/ student

5. Scheme IV: 32,000 square feet, 182 students.

<u>Element</u>	<u>Cost</u>	<u>Bldg. Size</u>	<u>Cost/SF/YR</u>	<u>Student Population</u>	<u>Cost Student/YR</u>	<u>Difference/ Present</u>
Insurance	\$32,000	32,000	\$1.00	182	\$175.00	
Fuel Oil	\$24,320	32,000	\$0.76	182	\$133.62	
Electricity	\$50,240	32,000	\$1.57	182	\$278.79	
Water/Sewer	\$3,200	32,000	\$0.10	182	\$17.50	
Telephone	\$3,840		\$0.12	182	\$21.09	
Janitorial (est.)	\$28,900	32,000	\$0.90 (est.)	182	\$58.24	
Bldg. Maintenance (est.)	\$16,000	32,000	\$0.50 (est.)	182	\$67.91	
TOTAL	\$159,000	32,000	\$4.95	182	\$872.15	
ROUND OFF	\$160,000	32,000	\$4.95	182	\$875.00	\$130.00/ student

CALCULATION OF FUEL OIL COSTS

Present Building

Cost/year	\$33,900,00
Area	24,865 sf
Cost/Gal.	\$ 1.41
No. Gal.	24,038
Gal./SF	0.96
BTU @ 140,000	
BTU/Gal.	134,000
BTU @ 75% eff/heat loss/sf	100,800
BTU/sf/mo	8,400
BTU/sf/day	276
BTU/sf/hr	11.5

Future Buildings

ASHRAE 90 - 75 code applies
u. Requirement for ceilings 0.6
u. Requirement for walls .20
Total/sf/floor assuming equal areas/sf 0.26
 ΔT (est) (mean annual temp. 40⁰) x 25⁰ F.
 $u\Delta T$ 6.5 BTU/hr/ft²

Difference From Existing Building 5.0 BTU/hr/ft²

BTU/sf/floor/year 6.5 x 24 x 365
156 x 365 = 56,940
BTU @ 75% efficiency 75,866
BTU @ 140,000 BTU/Gal = .054 gal/sf/yr
BTU @ price/gal/ 1.41 \$0.66

CONCLUSIONS

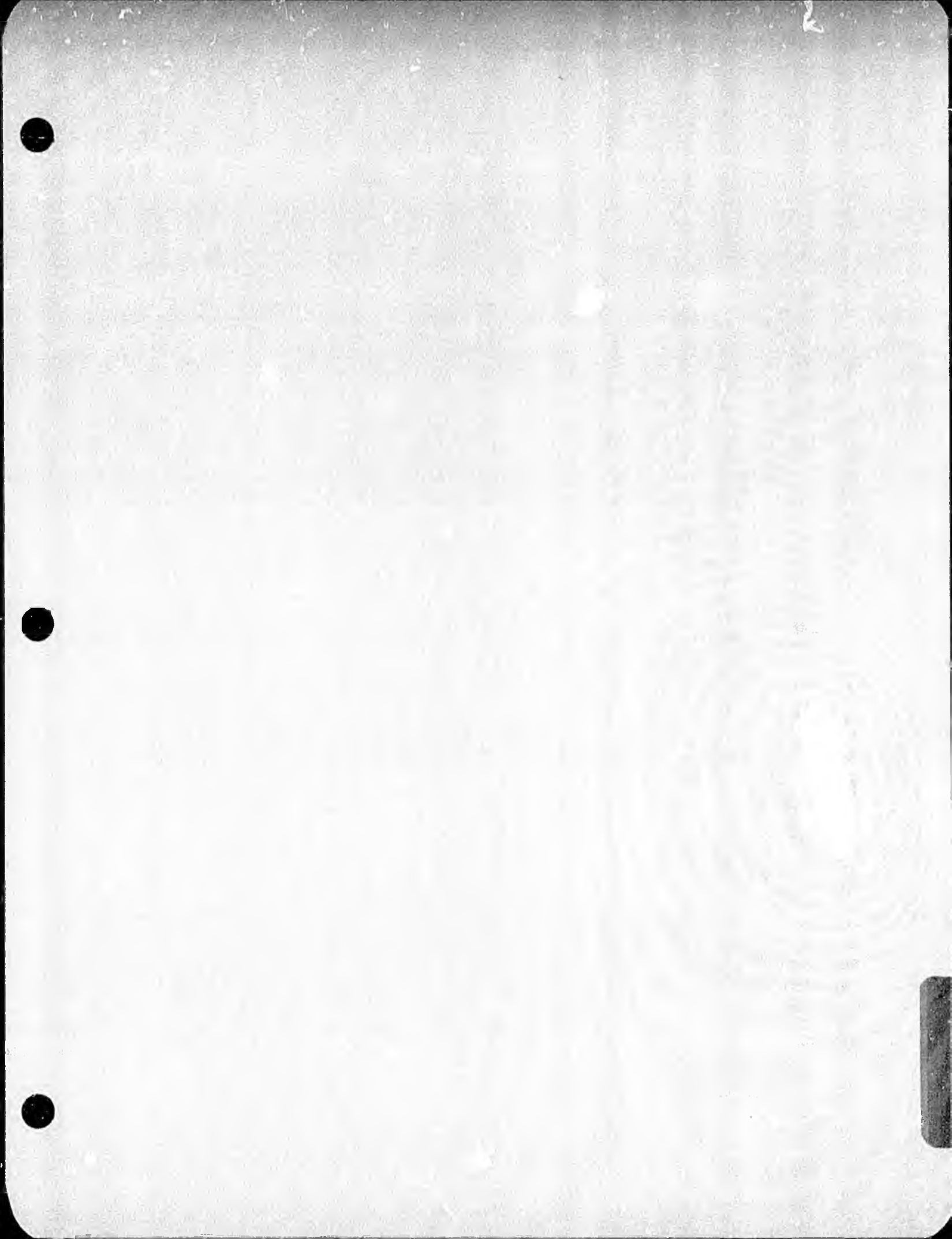
The new facility will be required to comply with DOT/PF Energy Guidelines. As a result, fuel costs will be cut by 44% on a price per square foot basis.

Custodial and maintenance costs will be reduced 10% and 4% respectively for the first several years.

Insurance costs will remain constant on a per square foot basis based on a sprinklered building.

All costs are based on 1980-81 budget operating figures and have not been escalated for inflation.

The overall operation and maintenance costs will be reduced approximately 10% based on an annual cost per student basis when computed for the design load of the building.



EXISTING FACILITIES

Description:

- 1. LAND AREA - Recommended (126 - 160 students): 10 to 20 acres
(200 students): 15 to 25 acres
(240 students): 15 to 25 acres

Existing: (156 students): 4 acres

The recommended area of 10 to 20 acres is intended to permit future expansion of the school building and parking facilities. Most importantly, the recommended area is designed to allow eventual incorporation of complete outdoor recreational facilities to the school complex. At the present site, not only is the north portion too steep for adequate playground facilities, but the existing land area of only 4 acres prohibits even the most basic planning for future incorporation of the total range of facilities this school complex should eventually possess.

	<u>TOTAL</u>	<u>ASSIGNABLE</u>
2. GROSS BUILDING AREA -		
Recommended (126 - 160 students):	23,010 s.f.	17,700 s.f.
(200 students):	33,875 s.f.	25,000 s.f.
(240 students):	44,160 s.f.	30,250 s.f.
Existing: (156 students):	24,846 s.f.	13,351 s.f.

The existing school building is very inefficient. The recommended minimum Total Gross Area of 23,010 s.f. for 126 to 160 students presupposes that 23% of this area will be "unassignable" space (corridors, boiler room, etc.) leaving 17,700 s.f. for use as classrooms, offices, etc. Please note, however, that although the existing Total Gross Area incorporates slightly more area than is recommended, 46% of the existing Total Gross Area is "unassignable", leaving only 13,351 s.f. of assignable space. Thus, the existing school lacks 4,349 s.f. of "assignable" (or usable) area. Presently, 33% more

assignable area is required. Should future enrollment approach 200, 87% more assignable area would be required.

3. CLASSROOMS - Recommended (126 - 160 students): 5,400 s.f.
(200 students): 7,200 s.f.
(240 students): 7,200 s.f.

Existing: (156 students): 4,063 s.f.

This represents a shortfall in required classroom space of 1,337 s.f. In testament to this, it should be noted that the school now has one more teacher than the total number of available classrooms. Presently, classroom space availability requires that kindergarten classes be held on the upper floor level, resulting in forced violation of building codes. Presently, 32% more classroom space is required. Should future enrollment approach 200, 77% more classroom space would be required.

4. LIBRARY - Recommended (120 - 160 students): 2,000 s.f.
(200 students): 2,400 s.f.
(240 students): 2,600 s.f.

Existing: (156 students): 858 s.f.

Existing facilities provide totally inadequate stack, reference and reading space. There is no librarian office. Presently, 133% more library space is required. Should future enrollment approach 200, 179% more library space would be required.

5. SCIENCE - Recommended (120 - 160 students): 1,000 s.f.
(200 students): 1,200 s.f.
(240 students): 1,300 s.f.

Existing: (156 students): 496 s.f.

Science classroom space is inadequate from every standpoint. Presently, 102% more science classroom space is required. Should future enrollment approach 200, 141% more science classroom space would be required.

6. OFFICE - Recommended (120 - 160 students): 350 s.f.
(200 students): 600 s.f.
(240 students): 800 s.f.

Existing (156 students): 332 s.f.

Office space is barely adequate, and added space could be used to good advantage. Presently, only 5% more office space is required at current levels of enrollment. Should future enrollment approach 200, 70% more office space would be required.

7. BUSINESS EDUCATION - Recommended (120 - 160 students): 400 s.f.
(200 students): 800 s.f.
(240 students): 1,000 s.f.

Existing (156 students): 804 s.f.

These figures are misleading. Actually, the Business Education classroom shares space with Journalism, thus, there is no excess space here and existing space for business administration (and journalism) is just adequate.

8. HOME SCIENCE - Recommended (120 - 160 students): 600 s.f.
(200 students): 800 s.f.
(240 students): 800 s.f.

Existing (156 students): 320 s.f.

No added space required.

9. INDUSTRIAL EDUCATION - Recommended (126 - 160 students): 1,200 s.f.
(200 students): 1,800 s.f.
(240 students): 2,100 s.f.

Existing (156 students): 2,045 s.f.

No added space required. It should be noted that several separate shop programs completely utilize the available space. It would be easily possible to make constructive use of additional space, were it available.

It should be noted that welding, carpentry and car repair activities all occur within the shop area, and that the Fire Marshal has ruled that these activities must be separated. The present shop layout cannot accomplish this. Also, due to the lack of a special separate storage facility, gas containers are stored within the shop. This is against NFPA requirements.

10. MULTI-PURPOSE - Recommended (126 - 160 students): 6,750 s.f.
(200 students): 9,000 s.f.
(240 students): 9,000 s.f.

Existing (156 students): 3,856 s.f.

Interior dimensions of 71' x 55', part of which is taken up by bleachers, prohibit ~~most~~ of standard high school sized basketball court (84' x 50').

Plan configuration is inconvenient and inappropriate for school assemblies. Incorporation of a stage, or even use of a movable platform as a stage, is not possible due to plan configuration and exit requirements. No storage facilities exist for the wide range of equipment used within the multi-purpose room.

The multi-purpose room floor is of vinyl asbestos tile (V.A.T.) rather than more durable hardwood or synthetic sheet flooring. The V.A.T. floor is in constant need of upkeep.

Existing multi-purpose room is inadequate for many reasons. Presently, 75% more multi-purpose space is required. Should future enrollment approach 200, 133% more multi-purpose space would be required.

11. KITCHEN - Recommended (200 students): 1,800 s.f.
(240 students): 1,800 s.f.

Existing (156 students): 0 s.f.

The absence of a kitchen precludes any possibility of a hot lunch program. Present enrollment and possibility of increased enrollment require immediate consideration of this program. In similar-sized schools, location of a kitchen adjacent to the multi-purpose room, thus allowing the multi-purpose room to be used as a cafeteria, has proven to be of great value to the overall school program. Should future enrollment approach 200, an 1,800 s.f. kitchen would definitely be required.

12. MAINTENANCE/STORAGE - Recommended: 550 s.f.
Existing (156 students): 300 s.f.

Presently, there are no planned storage facilities for multi-purpose room equipment or for bulky maintenance equipment. These items must now be stored in a crawl space beneath the reentrance to the building due to lack of adequate space elsewhere. This is in violation of building codes. Presently, 83% more storage space is required

13. STAFF LOUNGE

There is no planned faculty lounge. Presently, for lack of any other facilities, a coffee-maker and a few chairs are placed in the boiler room as a make shift lounge. This violates many building and safety codes. This situation is totally unacceptable, and a lounge of at least 150 s.f. is suggested.

14. STAFF WORKROOM -

There is no planned staff workroom. Presently, a mimeo machine and other supplies are placed under the main stairs, for lack of any other facilities. This is in violation of building codes. This situation is unacceptable, and a workroom of at least 120 s.f. is suggested.

15. HANDICAPPED REQUIREMENTS -

The building violates a multitude of state requirements for handicapped accessibility. There are many conditions which present serious obstructions to handicapped persons, ... such as the "split-level" entry to the school, the lack of adequate entry to toilets, the insufficiently wide toilet stalls, and the incorrect toilet mounting heights. Secondly, it would be very expensive to correct.

It should be noted that to correct these deficiencies would prove very costly. For example, to correct the many stairs within the building would require a network of exterior ramps, to allow wheelchair occupants to gain access to all parts of the building.

16. MECHANICAL ROOM - Recommended - As Required
Existing - 796 s.f.

The mechanical room is very small, with boiler and other controls inconveniently located. Operation and maintenance activities of mechanical systems are made difficult due to lack of space. (Mechanical Room should be at least 50% larger). This situation is made worse due to the Staff Lounge having to be located within the mechanical room. Also, many code violations exist: vents are within 10 feet of windows, there is no 1-hour separation between the mechanical room and the rest of the building, the boilers are not surrounded by a 6" high non-combustible dike. Finally, the life-expectancy of all machinery and equipment within the mechanical room appears to be very limited.

17. COST IMPLICATIONS OF REPAIRS -

It is highly probable that if alterations were to be proposed in order to provide increased floor areas to accommodate present and/or future enrollment levels, and to provide for handicapped accessibility, that the extent of the repairs would require the entire building to comply with all code requirements for new buildings, per Uniform Building Code Section 104. This would entail considerable added costs. It is possible the cost of code compliance work would exceed the cost of facility expansion work.

18. ENERGY CONSIDERATIONS -

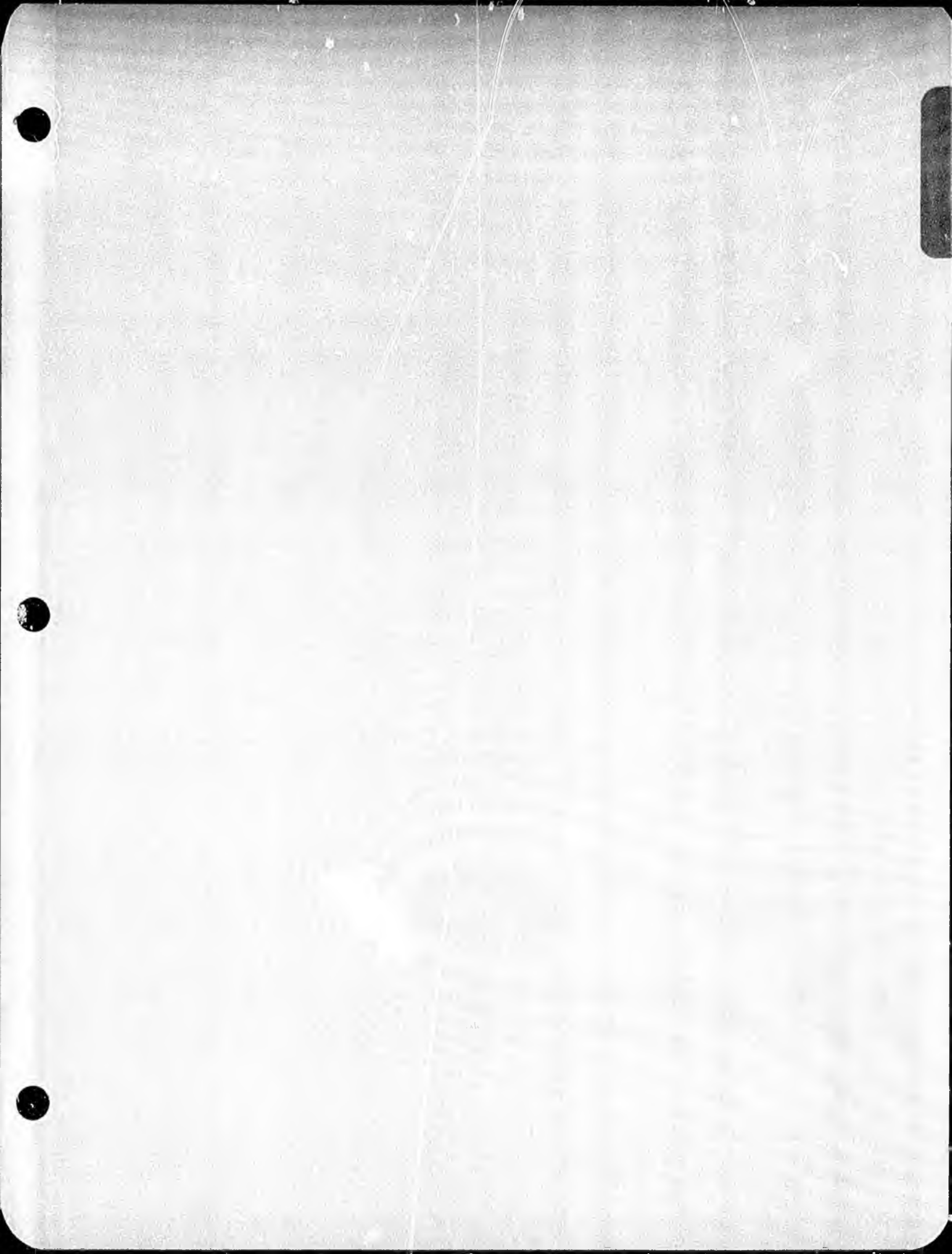
The present building, built in 1951, is very inefficient energy-wise, both in its size and shape. The building is grossly underinsulated and would require much added insulation in all walls and roofs. Subsequent additions to the school were made before the era of passive solar energy, and incorporated energy-wasting features, such as the wide expanse of north-facing windows located near the ceiling of the multipurpose room.

19. MAINTENANCE CONSIDERATIONS -

Generally, the building is old and its age is showing, not only visually but in increased costs necessary for maintenance. Many finishes on the building are plywood, which are now requiring repainting at frequent intervals. Also, the large amount of general circulation space resulting from the inefficient plan now requires continuous janitorial attention and expenses.

20. OPERATIONAL CONSIDERATIONS

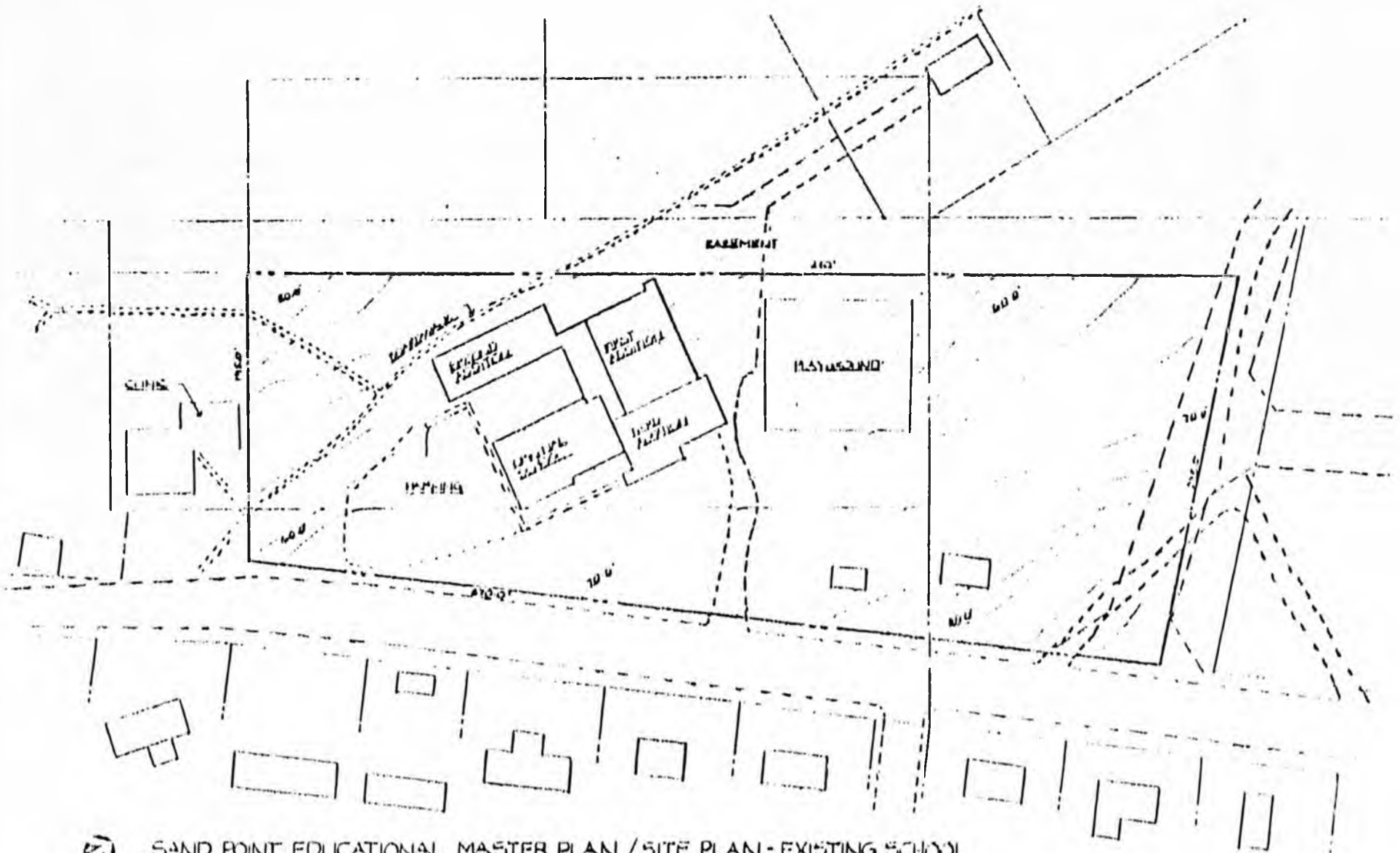
High school functions presently occur on both upper and lower floors. The difficulty in maintaining physical separation of elementary and secondary students has long caused operational problems.



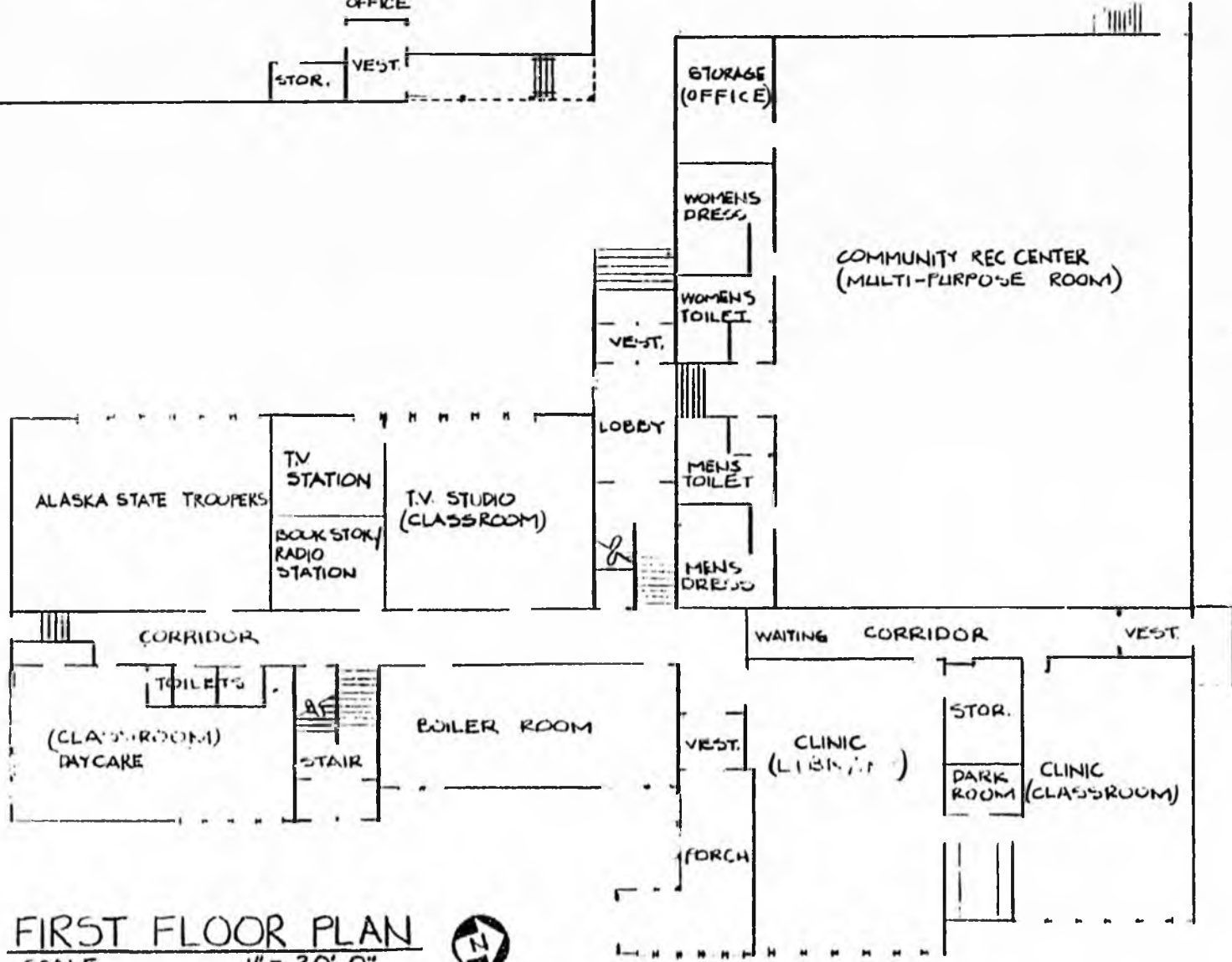
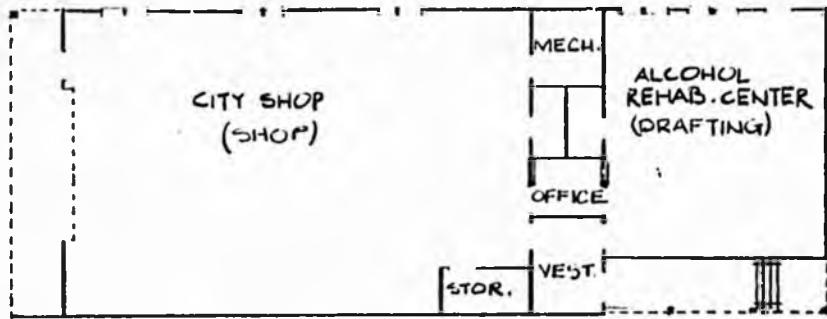
Proposed Alternative Uses of Existing Facility

The attached sketches illustrate potential uses for the existing facility. Each of the organizations listed currently has staff or need for space in Sand Point. In addition representatives of the City of Sand Point have made contact with the State of Alaska Department of Administration regarding possibility of additional agencies need for space in Sand Point. A survey of various State agencies with office needs in Sand Point is underway.

The existing facility will, as the drawings illustrate become a much needed civic center building for administrative, maintenance, health, social, and recreational uses.



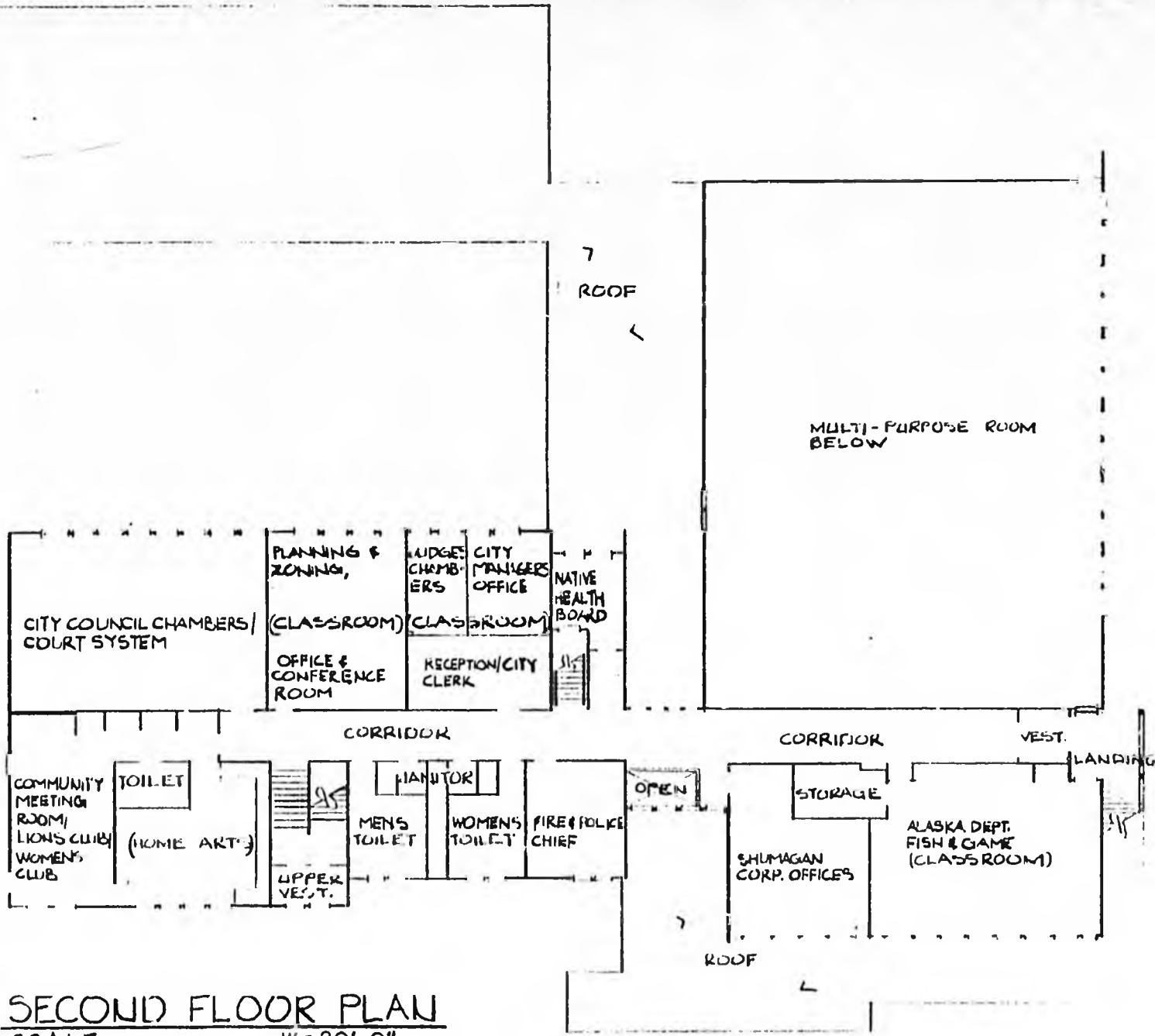
SAND POINT EDUCATIONAL, MASTER PLAN / SITE PLAN - EXISTING SCHOOL
 APRIL 1978



FIRST FLOOR PLAN
 SCALE 1" = 20', 0"

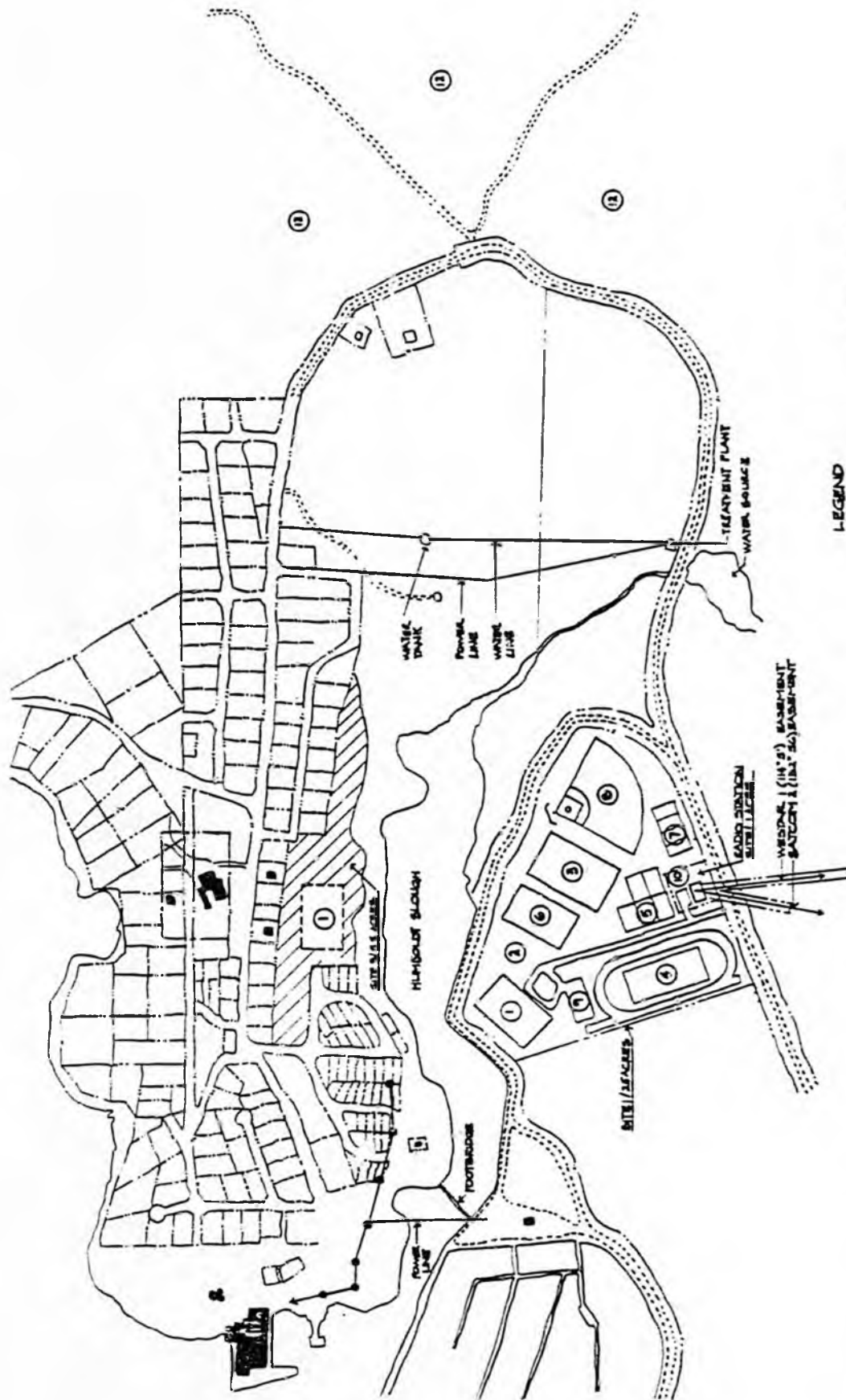


PROPOSED ALTERNATIVE
 USES OF EXISTING FACILITY



SECOND FLOOR PLAN
SCALE 1" = 20'-0"

PROPOSED ALTERNATIVE
USES OF EXISTING FACILITY



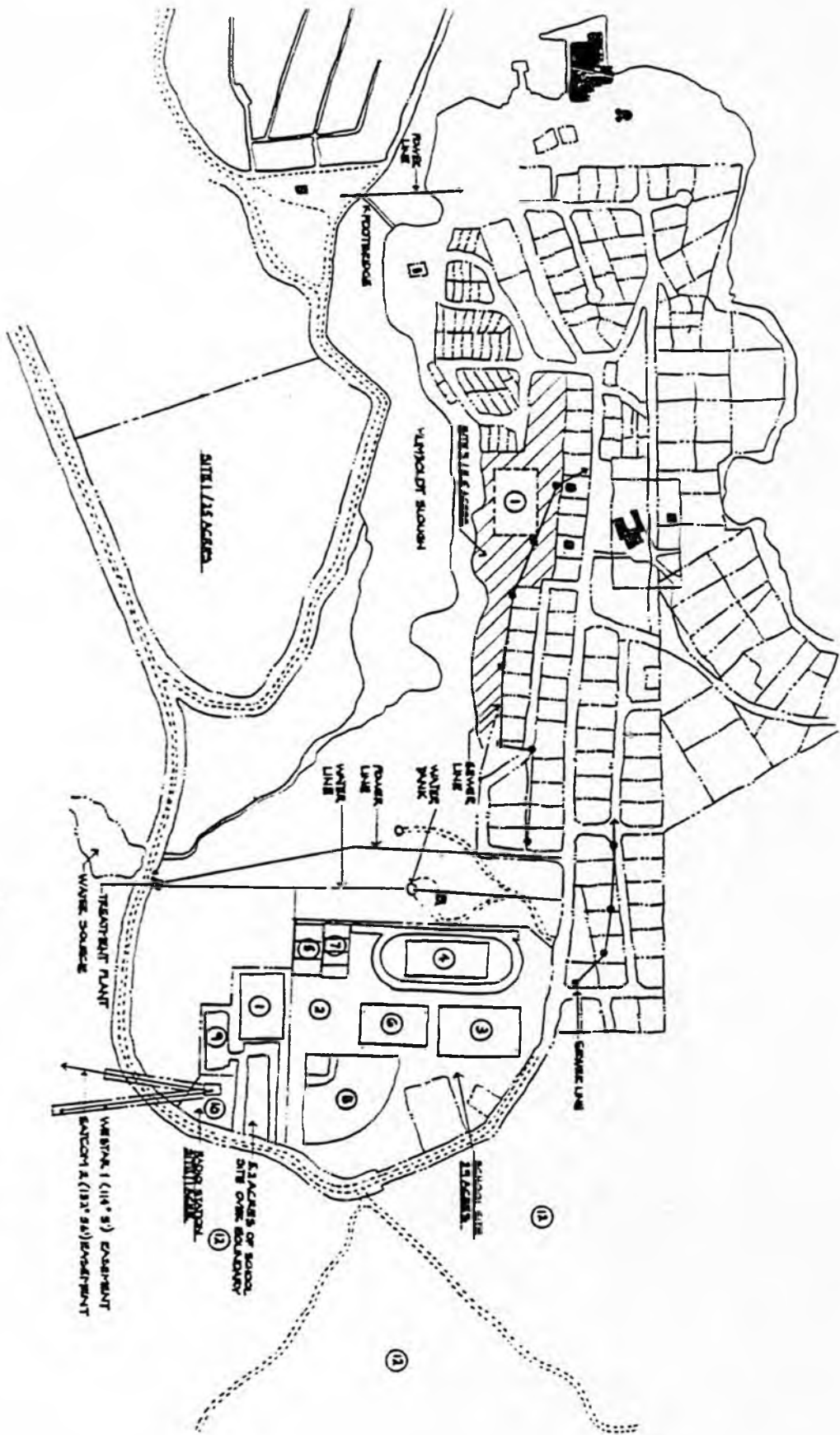
- LEGEND**
- 1 SCHOOL
 - 2 PLAYGROUND
 - 3 SOCCER
 - 4 FOOTBALL TRACK
 - 5 BASKETBALL
 - 6 FIELD HOCKEY
 - 7 TENNIS
 - 8 BASKETBALL
 - 9 PARKING - 80 CARS
 - 10 RADIO STATION
 - 11 RADIO TOWER
 - 12 FUTURE HOUSING

SAND POINT EDUCATIONAL MASTER PLAN - SCHEME 1
1" = 400'



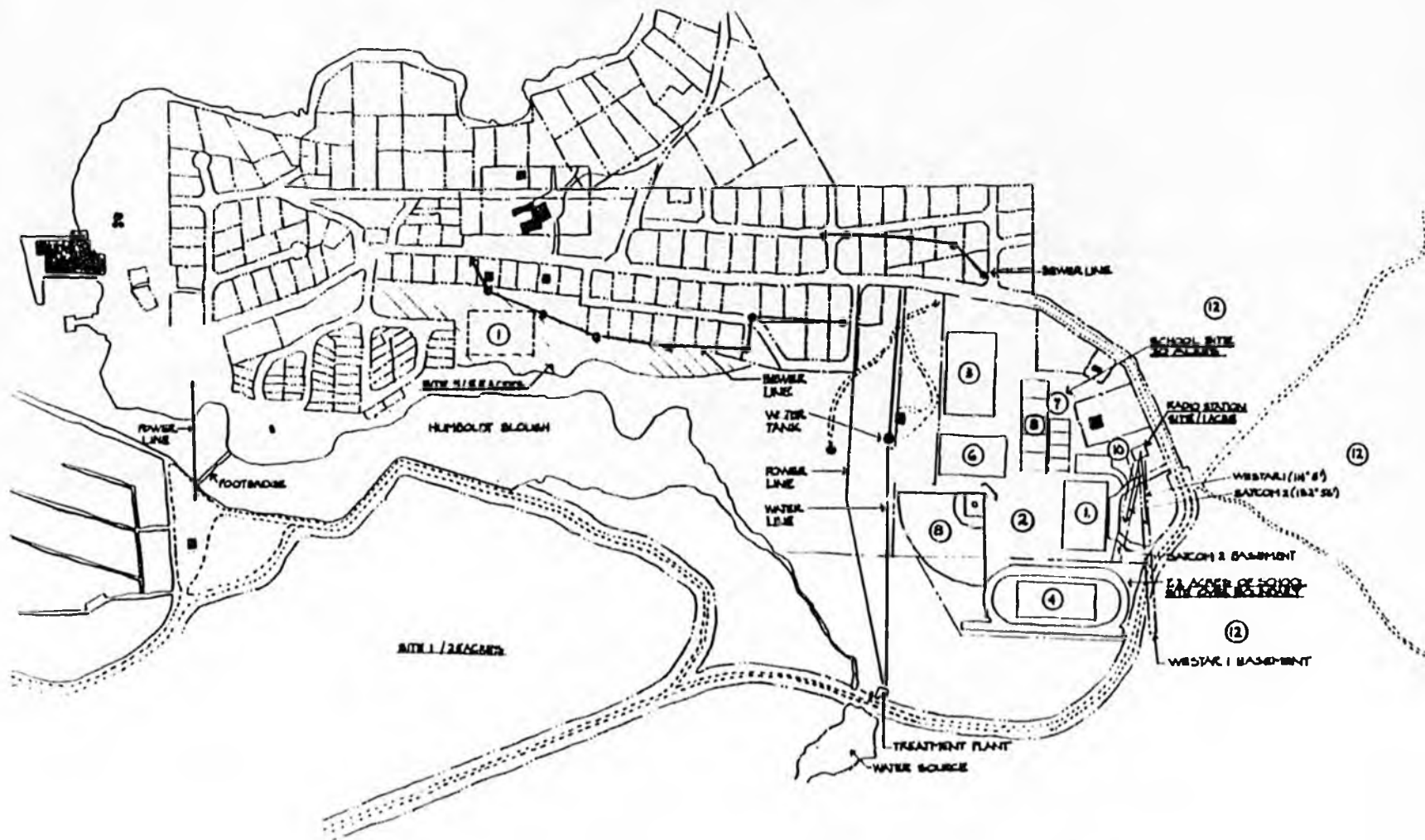


SAND POINT EDUCATIONAL MASTERPLAN SCHEME 2
1:1,400



LEGEND

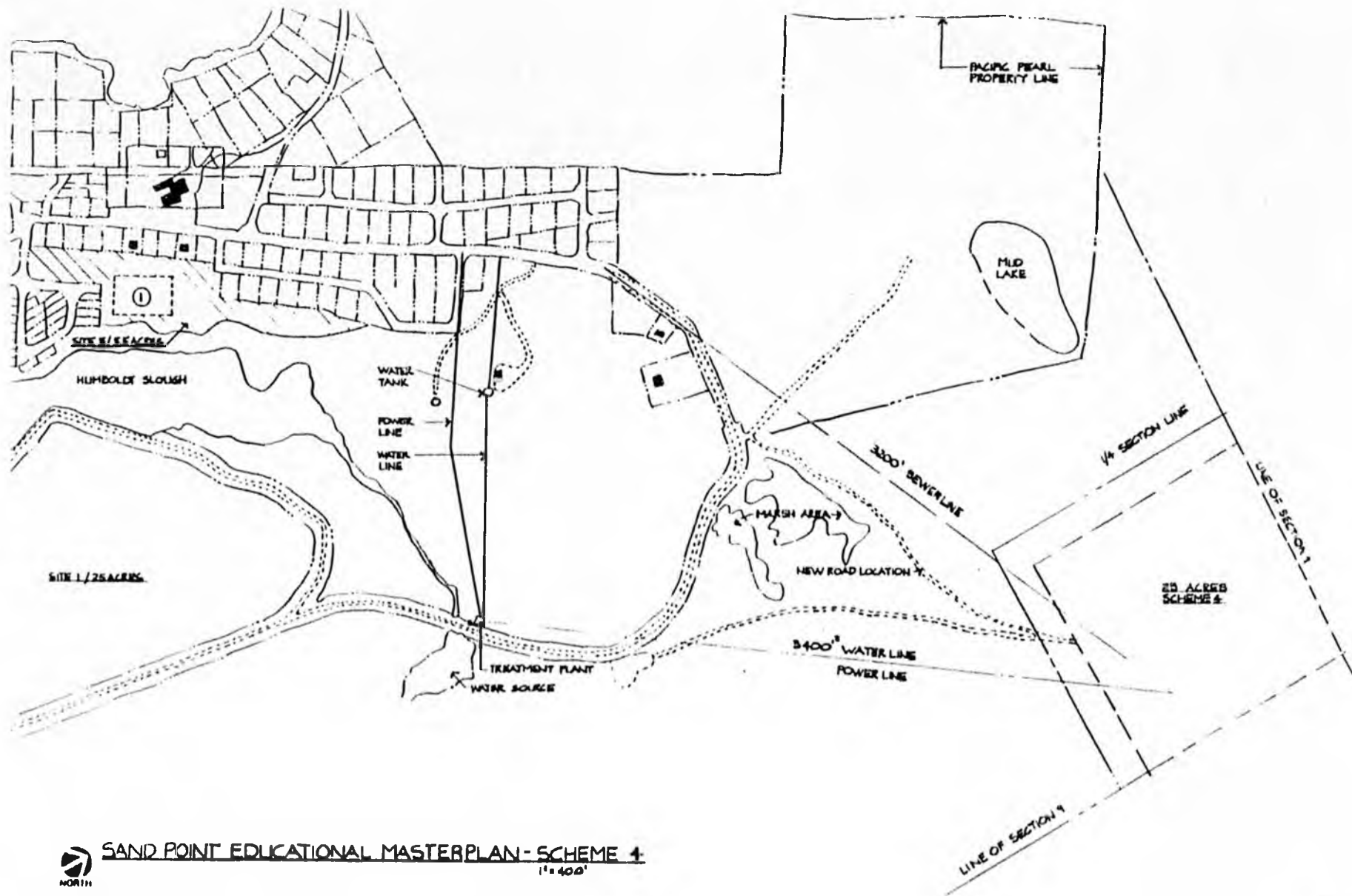
- 1 SCHOOL
 - 2 PLAYGROUND
 - 3 SOCCER
 - 4 FOOTBALL / TRACK
 - 5 HANDBALL
 - 6 FIELD HOCKEY
 - 7 TENNIS
 - 8 BASEBALL
-
- 9 BUILDING - SOCCERS
 - 10 ROAD SWATH
 - 11 ROAD ROWER
 - 12 FUTURE HOUSING



SAND POINT EDUCATIONAL MASTERPLAN - SCHEME 3
1" = 400'

LEGEND

- | | |
|---------------------|----------------------|
| 1. SCHOOL | 9. PARKING - 80 CARS |
| 2. PLAYGROUND | 10. RADIO STATION |
| 3. SOCCER | 11. RADIO TOWER |
| 4. FOOTBALL / TRACK | 12. FUTURE HOUSING |
| 5. BASKETBALL | |
| 6. FIELD HOCKEY | |
| 7. TENNIS | |
| 8. BASEBALL | |



SAND POINT EDUCATIONAL MASTERPLAN - SCHEME 4

1" = 400'

RECOMMENDATIONS FOR ALTERNATIVE SITES

1. Site One

This site has excellent views, exposure and is visible from most of the community. Topography and soils are adequate for long range growth. The land ownership is disputed. Due to its proximity to the small boat harbor, Planning and Zoning Commission have recommended this area be set aside for light industrial uses only. Should light industry develop in the area, the school facility would be incompatible. The site is conveniently located on the main road between the airport and the present town center with easy pedestrian access to the existing town by way of the foot bridge across Humboldt Slough. Utility extensions would be expensive (\$375,000). This figure has been used in Budget Calculations.

2. Site Two

This site is currently owned by Pacific Pearl. Preliminary contact with the Anchorage area manager indicated the possibility the company would make available land for a school site. This does not appear to be the current feeling however. Acquisition costs have not been included in the budget preparations. Although close to the existing community and adjacent to utility services, this scheme is not recommended due to the presence of suitable alternative sites of sufficient areas which are presently or will be in city ownership in the near future. Soils and topography are adequate. The comprehensive plan recommended this site for light industrial use.

3. Site Three

This site attempts to utilize city or non company land for initial development with Pacific Pearl Company land for future growth. The topography is not especially suited for building construction. The site lies in a drainage depression and could be subject to seasonal flooding. Although reasonably close to utilities, it is not recommended due to the necessity of acquiring private land for future growth.

4. Site Four (Green Hill Site)

This site has been recommended by the Planning and Zoning Commission. It is located northeast of the present community in an area scheduled for future residential expansion of the community. It would provide a catalyst for residential expansion in the area through road and utility improvements for the school. Construction of facilities adjacent to the road is not recommended as the soils, drainage and topography in that area are marginal. At a distance of about 800 feet from the road the slope is very gradual, drained, and uniform. It faces south and would have good views in three directions, good exposure and would be highly visible in the community. Although the farthest site from the existing community, it is anticipated that community growth will soon expand and encircle this site. Although a portion of this site lies in the watershed for the town water source, it is located a sufficient distance from the reservoir to not cause any negative environmental impact on the water source. There are no current restrictions from the Public Health Service, Alaska Department of Environmental Conservation or Department of Natural Resources regarding construction on this site. An evaluation of the potential additional utility development costs is as follows:

Site Four (continued)

1. Utility and Road Improvement Estimates
New 8" water line extension

3,400 feet
\$ 60/foot
\$204,000

Comparison: Kodiak Fish & Wildlife Headquarters estimate,
1,600 l.f. x \$60/ \$96,000
Actual Bid, \$100,000

2. New sewer line connection

3,200 feet (includes manholes at each change in direction)
\$ 80/foot
\$240,000

3. Electrical extension (assuming 100% cost borne by school development)

4,000 feet
\$ 20/foot
\$80,000

4. Telephone service extension electrical (if borne by school development)

4,000 feet
\$ 10/foot
\$40,000

5. Additional road improvements

1,200 feet, 30 foot wide average, 2' thick

72,000 cu. ft. = 3,000 cu. yds. @ \$15.00 = \$45,000

Excavation and clearing, grubbing
36,000 cu. ft. = 1,500 cu. yds. @ \$6.00 = \$ 9,000

\$54,000

Culverts, signage 6,000

\$60,000

TOTAL MAXIMUM	\$624,000
TOTAL PREVIOUS ESTIMATE	<u>\$375,000</u>
DIFFERENCE	\$249,000

Alternate A

Delete sewer connection. Replace with septic tank and 400 ft. drain field.
Delete \$190,000

Alternate B

Delete water connection and install well and 100,000 - 250,000 gallon storage tank.

Well, 100'	\$25,000
Pump, etc.	\$10,000
Storage tank	<u>\$60,000</u>
	\$95,000

Delete \$109,000

SUMMARY OF ALTERNATES

A. Less for septic system	\$250,000	
	<u>-190,000</u>	
	+\$ 50,000	over current \$375,000 budget
B. Less for well and storage tank.	<u>-\$109,000</u>	
	-\$ 60,000	less than \$375,000 current budget.

From the foregoing analysis, it is recommended the budgets for the three school sizes remain as they are if this site is selected. The contingency and equipment funds are sufficient to cover increases in utility development costs (if any). It is probable that an on-site septic tank and drain field are feasible and also probable. A sufficient aquifer exists for a well and storage reservoir to provide adequate quantity and flow for domestic water and fire protection. Should both these conditions prove correct, utility and road development will actually be slightly less than currently budgeted.

Use of this site will require a conveyance and appropriate easements from the local Native Corporation. Sufficient land remains between the school site and Mud Lake to provide road access with residential lots on either side.

5. Site Five

Although not illustrated in detail, a brief review of lands within the town proper was conducted. The only site readily available in the center of town is located on Pacific Pearl property behind and to the east of the existing city buildings. The site is only 5.5 acres and the topography precludes much development, playing fields and future expansion possibilities. It is not recommended.

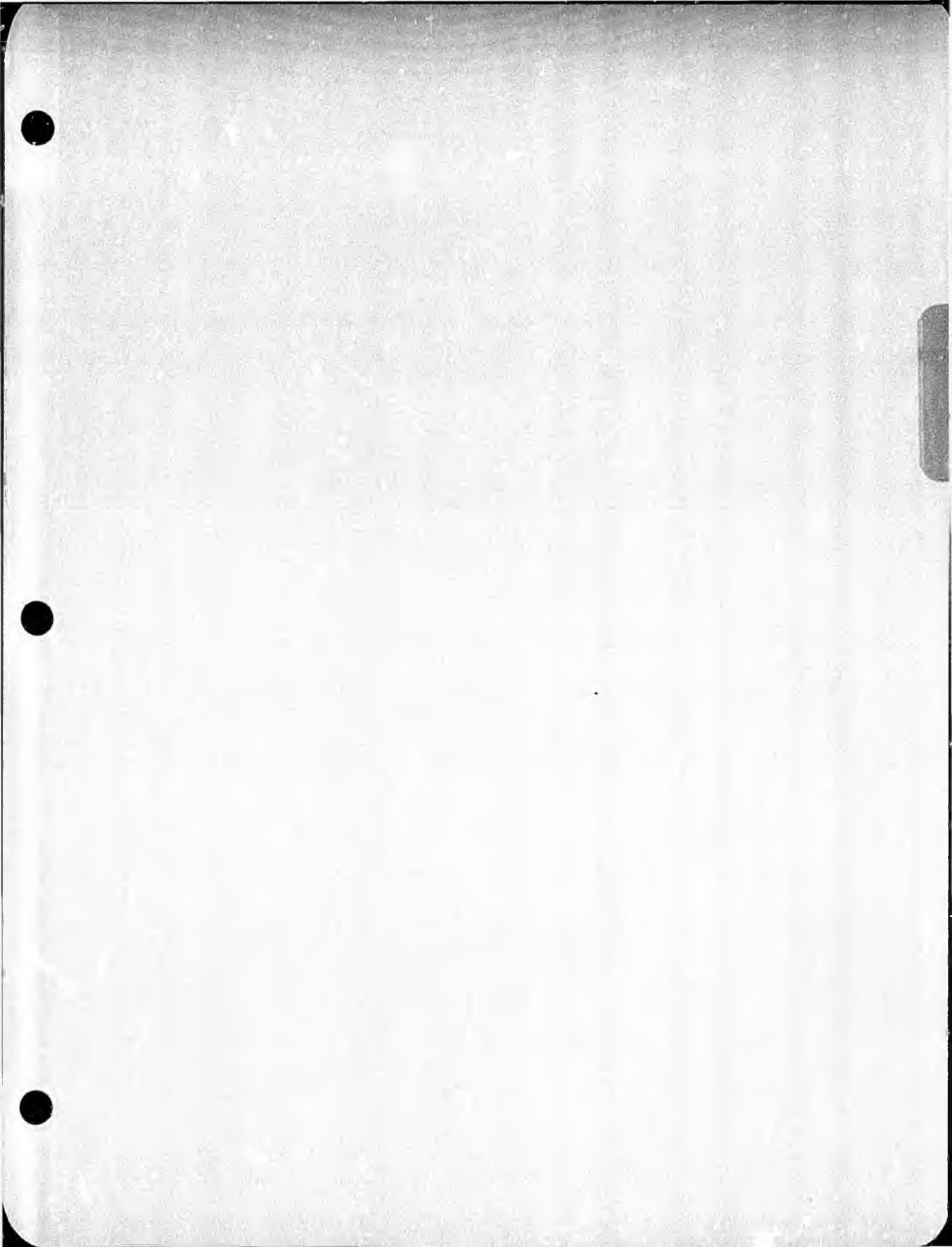
Conclusions

Due to the long range land use plans for industrial development in the vicinity of Site One, Site Four is recommended as the first choice with Site One as an alternate. Should conveyance of land for Site Four delay planning and construction of the new facility, and should ownership of Site One be resolved, it may be necessary to reconsider Site One with appropriate buffers between the school and any industrial land use.

SPACE PROGRAM ALTERNATIVES

* Department of Education Square Footage Recommendations for Elementary and Secondary Combined School Population

SPACE FUNCTION	PRESENT SIZE	*162 STUDENTS	DIFF.	*182 STUDENTS	DIFF.	*202 STUDENTS	DIFF.	*222 STUDENTS	DIFF.	*242 STUDENTS	DIFF.	*262 STUDENTS	DIFF.	*282 STUDENTS	DIFF.	*302 STUDENTS	DIFF.
Land Area	3.75 Acres	10-20		10-20		15-25		15-25		15-25		15-25		15-25		15-25	
Total Gross Area S.F.	24,864	30,375		32,000	9261	37,875	13,011	41,265	16,761	45,375	20,511	49,125	24,261	52,875	28,011	56,625	24,864
Assignable	13,351	20,250	6899	20,700	9399	25,250	11,899	27,750	14,399	30,250	16,899	32,750	19,399	35,250	21,899	37,750	24,399
Non-Assignable	11,513	10,125	1388	11,375	138	12,625	1,112	13,875	2,362	15,125	3,612	16,375	4,862	17,625	6,112	18,875	7,362
Class-rooms	4062.75	5,400 4,800 max.	1337.25	6,600 4,800 max.	1537.25	5,600 (7) 8,400 max.	1537.25	6,400 (8) 8,400 max.	2337.25	8,000 8,400 max.	1937.25	8,400 8,400 max.	4337.25	7,300 8,400 max.	5237.25	9,600 (12) 11,200 max.	5537.25
Learn. Res. Ctr. Library	858	2,000 3,700 max.	1142	2,200 3,700 max.	1342	3,000 4,800 max.	2142	3,000 4,800 max.	2142	3,500 4,800 max.	2642	4,000 4,800 max.	3142	4,800 4,800 max.	3942	5,000 5,900 max.	4142
Science	496	1,000 2,000 max.	504	1,100 2,000 max.	604	2,000 1,600 max.	1504	2,000 3,600 max.	1504	2,700 3,600 max.	2204	3,300 3,600 max.	2804	3,600 3,600 max.	3104	3,800 4,800 max.	3304
Business Education	833.5	400 1,000 max.	-483.5	600 1,000 max.	-283.5	800 1,200 max.	-83.5	800 1,200 max.	-83.5	800 1,200 max.	-83.5	1,000 1,200 max.	116.5	1,200 1,200 max.	316.5	1,400 1,400 max.	516.5
Home Science	819.5	600 800 max.	-219.5	700 1,000 max.	-119.5	800 1,200 max.	-19.5	800 1,200 max.	-19.5	900 1,200 max.	-19.5	1,000 1,200 max.	180.5	1,325 1,200 max.	505.5	1,400 1,600 max.	580.5
Indust. Ed.	2045	1,200 2,400 max.	-845	1,500 2,400 max.	-545	2,000 3,000 max.	-45	2,300 3,000 max.	255	2,700 3,000 max.	655	3,000 3,000 max.	955	3,500 3,000 max.	1455	3,500 4,800 max.	1455
Music	0	2,000 2,000 max.		2,000 2,000 max.		1,600 2,200 max.		2,200 2,200 max.		2,200 2,200 max.		2,200 2,200 max.		2,200 2,200 max.		2,375 2,400 max.	
Art	0	1,200 1,200 max.		1,200 1,200 max.		1,600 1,600 max.		1,600 1,600 max.		1,600 1,600 max.		1,600 1,600 max.		2,100 1,600 max.		2,000 2,000 max.	
Teacher Office	0	600 max.		600 max.		800 800 max.		800 800 max.		800 800 max.		800 800 max.		800 800 max.		900 1,200 max.	
Teach Lounge/Hk. Rm.	0	500 max.		500 max.		800 800 max.		800 800 max.		800 800 max.		800 800 max.		800 800 max.		900 900 max.	
Admin. Space	332	350 1,000 max.	18	500 1,000 max.	168	800 1,300 max.	468	900 1,300 max.	568	1,000 1,700 max.	668	1,300 1,300 max.	968	1,300 1,300 max.	968	1,300 1,600 max.	968
Student Activities	0	300 max.		300 max.		400 400 max.		400 400 max.		400 400 max.		400 400 max.		400 400 max.		500 500 max.	
Health Office	0	300 max.		300 max.		300 500 max.		400 500 max.		400 500 max.		400 500 max.		500 500 max.		500 600 max.	
Multi-Purpose Room	3856	3000/6750 8000 max.	2894	3000/7500 8,000 max.	3644	8,000 9,000 max.	4144	9,000 9,000 max.	5144	9,000 9,000 max.	5144	9,000 9,000 max.	5144	9,000 9,000 max.	5144	10,000 10,000 max.	6144
Guidance Office	0	200 max.		200 max.		300 300 max.		300 300 max.		300 300 max.		300 300 max.		300 300 max.		300 300 max.	
Food Service	0	1,600 max.		1,600 max.		1,800 1,800 max.		1,200 1,800 max.		1,400 1,800 max.		1,800 1,800 max.		1,800 1,800 max.		1,800 1,800 max.	
Janitor	59.5	150 max.	90.5	100 200 max.	90.5	150 200 max.	40.5	200 200 max.	90.5	200 200 max.	140.5	200 200 max.	140.5	200 200 max.	190.5	250 250 max.	190.5
Maintenance	0	550 max.		550 max.		300 600 max.		375 600 max.		375 600 max.		500 600 max.		600 600 max.		600 650 max.	
Storage	519.5					300											
Class Room Storage		300		300		400		500		500		525		700		800	
Locker, Boys		600/600 max	457	600/600 m.	457	000/1200m	857	1200/1200m	1057	1200/1200m	1057	1200/1200m	1057	200/1200m	1057	1300/1500m	1357
Locker, Girls		600/600 max	433.25	600/600m	433.25	000/1200m	833.25	1200/1200m	1033.25	200/1200m	1033.25	200/1200m	1033.25	200/1200m	1033.25	1300/1500m	1333.25
Mech. Room	795	1,400 2,475 max.	605	1,400 2,475 max.	605	1,400 2,850 max.	605	1,800 2,850 max.	1005	2,200 2,850 max.	1405	2,800 2,850 max.	2005	2,850 2,850 max.	2055	3,000 3,275 max.	2205
Faculty, WC	63																
Boys, WC	150	250	100	250	100	300	150	300	150	300	150	300/300m	150	300/300m	150	350/350m	200
Girls, WC	148	250	102	250	102	300	148	300	148	300	148	300/300m	148	300/300m	148	350/350m	198
Circulation Vert/Horiz.		1,800 max.	429	1,800 max.	420	2,700 2,700 max.	1320	2,700 2,700 max.	1320	2,700 max.	1320	2,700 max.	1320	2,700 max.	1320	3,000 3,600 max.	1620
Assignable (Actual)						28,800		30,900		34,200		36,700		40,125		42,475	
Non-Assignable (Actual)						9,000		10,725		11,175		12,425		12,750		14,150	



ALEUTIAN REGION SCHOOL DISTRICT
SURVEY AND ANALYSIS FOR
LIFE SAFETY AND HEALTH CODE PROBLEMS
AT SAND POINT SCHOOL

APPENDIX B

Page 1.

This report is based on field investigation conducted in March of 1979 and subsequent research and analysis. These findings are further documented by field notes and photographs. Design drawings and some "as-builts" for the original building and additions are also available. Because it is obvious that the cost of correcting even the most critical life safety hazards will exceed allocated funding, the recommendations have not been defined in detail. For the same reason, research on handicap access problems has also been limited to general requirements and conditions. The comments below are not listed in any order of priority but are merely a series of logical and functional groupings of detailed problems.

1. Doors

Number, width and location of doors is acceptable except:

- a. Some doors are 2'-10-1/2" width and some are 5'-4" pairs with mullion, which does not permit the mandatory 32" clear width when open. (6 doors) UBC 3303.d.
- b. See requirement for 1-hour corridor or separate exits at grade under corridor below.
- c. Some doors have to be chained shut or padlocked because of vandalism to panic bars (4) and some have illegal dead bolts (1) UBC 3303.c.
- d. Landing outside exit from art and drafting room is too low below threshold and does not have required 5' length. UBC 3303.h.
- e. Glazing at doors is not required safety glass (8 doors) UBC 3303.i.
- f. There is no handicapped access to this building. UBC Table 33-A.
- g. One boiler room door swings the wrong way besides lacking a fire rating. Also, boiler room requires a 6" non-combustible sill or dike. UBC 3320.a.

2. Corridors

Construction of corridors is deficient in some areas that will require major refinishing.

- a. Lockers in upper corridor reduce the width to less than the required 6'-0" (actual width 5'-8") UBC 3317.e.
- b. Corridors are required to be 1-hour construction unless each classroom has at least one exit door directly to the exterior at ground level, etc. Since the old school has 3 classrooms well below grade and 3 on the second story, it will be more practical (though very expensive) to upgrade the corridors to 1-hour. To upgrade these corridors to 1-hour construction with 20-minute rated doors, would require the following:

Appendix B

5/8" gypsum wallboard on both sides of wall or two layers on one side - totals 3800 SF of surface or 7600 SF of material

Ceilings will require another 1280 SF gypsum wallboard

New doors, with closers, total 18 for this one item. There are other doors that will require 1-hour "B" label not included in this item. See item 2.c. below.

- c. The main corridor at first floor of the old school has a return air plenum built into the ceiling. This construction of combustible materials is a very serious hazard. New ductwork and fire dampers are discussed under the mechanical portion of this report prepared by Crews MacInnes & Hoffman. New ceiling finish is covered in part (gypsum wallboard) under 2b above, but some framing of metal studs (approximately 600 SF) and acoustic treatment will be required.

3. Miscellaneous Exiting Problems

- a. There is a need for 10 additional exit signs and repair or replacement of 3 damaged or unacceptable signs. These must be lit either from within or by appropriate emergency lights listed in the electrical section of this report.
- b. Stair handrails are missing, loose, have incorrect end detail, or are mounted at the wrong height. This involves 72 LF of new handrails, 14 end details, and remounting of 72 LF of handrails. UBC Section 3305.
- c. Stair width is 4 to 5 inches short of required 5 foot width. UBC 3317.g. This one will be nearly impossible to correct and the requirement may likely be waived by reviewing agencies.
- d. Balcony railings are not of the required height. This can be corrected by adding a top rail or building up the wood cap detail. UBC 1716.
- e. There is a single step up one foot inside the door exiting from the north stair well (exterior). The requirement is for a minimum 5' landing. An alternate solution would be to raise that last step and the door to the inside floor level then construct a new landing and steps to match outside.

4. Required Occupancy Separations (not to be confused with fire-resistive construction required elsewhere)

- a. Home Arts classroom will require a one-hour separation wall including a one-hour "B" label door. This is per code interpretations given by Fire Marshal Andre Schalk for similar condition at Cold Bay. This involves 600 SF of wall (x 2 layers) and 900 SF of ceiling (which may already be done) and one labeled door. This door, contrary to "as-built" drawings dated 3 January 1978, is not a rated fire door assembly.

- b. Store rooms and janitor closets also require one-hour occupancy separation. This means 380 SF of wall (x 2 layers), 44 SF of ceiling and 4 doors. UBC 802.c.
- c. Main door (double) at Media Center has a "B" label but also a louver with no fire damper. Louver must be closed off, provided with a fire damper or relocated with a fire damper.
- d. There are ducts into and out of the A/V storage room requiring fire dampers. UBC See 4306.
- e. The boiler room has windows and duct penetrations directly beneath second floor windows. The boiler room windows must be replaced with 3/4-hour, automatic closing or fixed units. Because of the duct penetrations, which cannot be closed off or fire dampered, the Fire Marshal may require similar work on the upstairs windows. UBC 808.

5. Health Related Code Problems

- a. Toilet room finishes do not meet the "non absorbent" requirements of UBC 1711.a. This involves walls (wainscot required) floors and base. This also applies to toilet compartments. This section will require 6 new toilet compartments but more may be required below.
- b. Fixture units. The Building Code occupancy capacity of this building (which correctly does not include the gym) is 342 people even though present enrollment is only about 130. The State Health & Social Services office allows fixture units to be based on actual enrollment. It is reasonable to assume half girls and half boys for calculation of fixture units. On that basis, the code requires 2 water closets for girls and 1 water closet and 3 urinals for boys. There must also be one lavatory for each two water closets or urinals (1 for girls and 2 for boys). These are partially dependent on location and arrangement.

Therefore, including replacement of one bad unit, there are 2 additional urinals required. Depending on where the new urinals are installed, one or more new lavatories may also be required.

- c. Ventilation. Additional mechanical ventilation will be required. Only two toilet rooms have natural ventilation but even those should have mechanical added as it is unreasonable to keep windows open continuously in this climate.

6. Maintenance Related Safety Problems

- a. Owner furnished combustibles abound in places where they should never be allowed. This calls for considerable cleanup and discipline in use of the building. Items b and c below are closely related. The mechanical room and crawl spaces are loaded with large amounts of illegally stored material, in some cases literally garbage.

- b. Spaces under stairs may not be used for storage unless they are finished out as for one-hour construction. Considering the expense, it may be better for the Owner to close off those spaces so they cannot be used for storage.
 - c. Provide adequate and proper storage for flammables outside the school. This means a detached, secure and correctly ventilated outbuilding of 60 to 80 SF size (unheated). Quantities of flammable liquids presently stored in the school are unacceptable.
 - d. Welding in the shop building is an extremely hazardous situation and should be eliminated until an approved welding booth can be installed. There is no provision for direct venting of automobile exhausts, though automobile work, presumably with engines running, is performed here. Fire extinguishers were present but hard to find amid the general litter and disorder of this shop.
7. Handicapped access problems are extensive. As noted above, there is presently no handicapped access to this building although a relatively simple ramp could be constructed to the north door at the ground floor. Likewise, there is no barrier-free toilet facility in the school and remodeling to remove the barriers would be extensive.

Handicap access problems have not been reported in detail and specific recommendations have not been worked up because they go beyond our intended scope of life and health safety. It is obvious that life safety corrections alone will cost far in excess of present funding allocations. But the following three items should give some idea of the scope of work required to provide handicap access.

- a. Ramp at north end of first floor - about 150 SF of wood frame ramped deck with 30 lineal feet of guard rail.
- b. Toilet Room Remodel

Upstairs existing toilet rooms 300 SF, downstairs new toilet rooms cut out of classroom space 300 SF (including all new fixtures).
- c. Ramped access to second floor requires a 400 SF enclosed ramp, and about 200 square feet of internal remodel. This does not resolve the problem of easy access between floors as the two ramps would be at opposite ends of the building and their outer ends would be very distant. If such internal access is required, an elevator would be the only solution.

Mechanical and Electrical Comments from our consultants are attached.

Sand Point School - Mechanical

A. Major Life Safety Code Corrections.

1. Provide switches for all oil burners on boilers, furnaces and water heaters to allow emergency shut-down of same. Locate at exit from Boiler Rooms in school and shop.
2. Provide fusible shut-off oil valve on each oil supply line to each above oil burner.
3. Return air to furnaces in old part of school is transported through combustibile above corridor ceiling spaces. Return air sheet metal ducts must be installed with a fire damper in each connection where it passes through corridor wall to classroom. See related work in architectural section.
4. Provide high temperature controllers in furnace supply and return air ducts, connected to stop furnace fan on activation.
5. Same as No. 4, for shop air handling unit.
6. No separation has been provided in shop between metal working, wood working mechanics and welding area. This makes for severe potential fire hazard. Required addition of approved welding booth or removal of welding equipment.
7. Provide an electric bottle gas kill switch in Science Room to close a new solenoid valve at gas supply tanks.

B. Other Code Deficiencies.

1. No provision has been made for handicapped. See architectural Section 7.
2. No estimate of plumbing fixtures per occupancy count has been made, but we suspect there are an insufficient number of plumbing fixtures. See architectural Section 5b.
3. Toilet Rooms may not all require mechanical ventilation. Architect check for proper area of operable windows. Ditto Shower Rooms. See Architectural Section 5c.
4. Specific use exhaust ventilation systems are required for shop areas. Examples: welding, woodworking, engine, etc.

C. Related Recommendations Not Specifically Required by Code.

1. If not required by code, toilet and shower rooms should have mechanical ventilation added under this item. See comments in architectural.
2. Trough urinal requires automatic flushing to be acceptable, however, existing unit is in such condition to demand replacement.
3. Refurbish all temperature control devices and systems.
4. Provide electric supervision of sprinkler main shut-off valve in Boiler Room to alarm when valve is closed.

Sand Point School - Electrical

The following items are required by code and are considered essential for the continued safe operation of the school:

1. Check out and repair of entire fire alarm system is recommended. At present, the system occasionally goes into an alarm status for no apparent reason.
2. Provide supervisory switch on sprinkler system main valve. Switch is to connect to fire alarm panel to sound trouble signal on sprinkler zone whenever valve is not in fully open position.
3. Provide manual fire station at art room exit (shop building).
4. Provide manual fire alarm station at northeast exit stairway (latest building addition).
5. Provide exit signs at each required building exit and at each change of direction leading to exit. (Requires 10 exit signs.)
6. Provide battery powered emergency lights throughout entire building to provide 1 foot candle lighting level on the floor. Requires approximately 30 battery powered emergency lights and rewiring to provide night lights. Includes replacement of existing multi-purpose room emergency lights with vandalproof or guarded units.
7. Remove junk, garbage, storage cabinets, etc. that presently is restricting access to electrical equipment.

The following items are not required by code, but are considered necessary for the continued safe operation of the school:

1. Replace all panelboards, wiring, light switches and receptacles in the original school building. This equipment has probably deteriorated to the point where circuit breakers will no longer provide necessary protection, wiring insulation is subject to breakdown, switches and receptacles will fault and arc. Although there is no sign of electrical fires having occurred at this school, other buildings of approximately the same age have encountered problems. Also, the lack of adequate receptacles in classrooms has resulted in improper use of extension cords, home-made outlet boxes, etc. which are also a hazard.
2. Provide additional lighting over stairways. In some areas, burning out of one light bulb would leave the area in darkness. Requires approximately four (4) lamp surface mounted fluorescent fixtures.

The following items are required by code but are not considered an immediate hazard.

1. Provide ground connection between main distribution panel and water main.
2. Check grounding system continuity throughout all branch circuits. (Some areas were found where grounding conductors were not connected.)
3. Connect fire alarm system power supply ahead of main disconnect.
4. Replace temporary wiring to exterior floodlights. (This was on the work schedule at the time of inspection and may already have been accomplished.)
5. Provide disconnect switch at boiler room exhaust fan and at shop air handling unit.
6. Replace existing shop mezzanine fan connection with permanent, grounded, code approved wiring system.
7. Replace existing wiring run exposed on floor of shop mezzanine to an area where it will be less subject to damage.
8. Provide adequate supports for conduit runs across shop ceiling.
9. Replace missing junction box and equipment cover plates.
10. Relocate piping in front of main distribution panel to provide 36" clear working space.
11. Replace existing 30/2 circuit breaker (feeding kitchen range) with 50/2 circuit breaker. Replace existing 3#6 aluminum feeding kitchen range with 3#6 copper.

APPENDIX C

POPULATION PROJECTIONS FOR CITIES WITH COMPARABLE GROWTH

	<u>KETCHIKAN</u>	<u>ANCHORAGE</u>	<u>JUNEAU</u>
1890	40		1,253
1900	459		1,864
1910	1,613		1,644
1920	2,458	1,856	3,058
1930	3,796	2,277	4,043
1940	4,695	3,495	5,729
1950	5,305	*11,254	5,956
1960	6,483	*44,237	6,797
1970	10,041	127,542	13,556
1980 (est.)	18,000	195,000	20,000

*1950

Spenard - 2,108

Mt. View - 2,880

Eastchester - 3,096

*1960

Spenard - 9,074

Sand Point City School District

Box 101
Sand Point, Alaska 99661
(907) 383-2393

Frederick J. Kent
Superintendent
Board of Directors
William Eubank
President
Edee Jacobsen
Janet Ludrick
Inge Martinsen
Eleanor Moritz



January 23, 1981

Andre' C. Schalk
Deputy Fire Marshal III
Supervisor, Southcentral Region

Dear Sir:

Upon receiving a copy of the letter, concerning the deficiencies that exist in our school in regard to fire safety, I feel I must reply to the first one concerning the storage of lumber and metal working.

We are presently conducting classes in welding, engine repair, woodworking/boatbuilding, and general shop in the same room. As the instructor in charge of this program, I do not feel that we can sacrifice an area because of a lack of storage space for wood. Presently, we have boats hanging from the ceiling, machines and engines on casters for movement around the room and all the wall area space taken up.

Because of the nature of employment opportunities on this island, I can foresee an expansion in this program as fast as can be handled and not a step backward.

Welding and engine repair are vital skills that are needed for repair of the fishing boats. If we can not teach these areas, then our program will suffer enormous harm.

The great need for more space in which to conduct a quality program is again brought home by these violations of the Alaska Fire Safety Code, which can not be helped under the present working conditions.

I ask for your assistance in finding a solution to these problems, so we can improve the quality of education here in Sand Point and not retard it.

Sincerely,

A handwritten signature in cursive script that reads "Steve D. Musser".

Steve D. Musser
Industrial Arts Instructor

SDM/ljk

cc: Ronald A. Hendrie
William Nix

Sand Point City School District

Box 101
Sand Point, Alaska 99661
(907) 383-2393



Frederick J. Kent
Superintendent
Board of Directors
William Eubank
President
Edna Jacobsen
Janet Ludvick
Inge Martinsen
Eleanor Moritz

January 27, 1981

Andre' C. Schalk
Deputy Fire Marshall III
Supervisor, Southcentral Region
P.O. Box 6188, Annex
Anchorage, Alaska 99502

Dear Mr. Schalk,

In response to your letter of January 13th concerning deficiencies that exist in the State Fire Code at Sand Point School, I have answered as follows:

1. Metal and wood working classes are held in the same room because we have only one room. Any attempt to partition the room into separate metal and woodworking areas would make it impossible to conduct either class. It is not possible to build 20 foot boats in an 18 foot space or to adequately spread out enough to tear down diesel engines. Both functions are an integral part of our overall program.

We will keep the big door open and carry on all potentially dangerous functions such as welding and washing down of machine parts outside. I hope this will meet your requirements. It doesn't make for an ideal teaching situation but we will comply.

2. The special education classroom is the old entryway to the new section of the building. This is more of a porch than a corridor. We had to recondition this room to make it a usable classroom area. All desks and file cabinets are against the wall and a 6 foot cleared space is maintained for fire exit at all times. While this is certainly not an ideal situation I feel that it is the best we can do under the current building restrictions.

3. Due to the total lack of storage in the building, combustible materials have a way of showing up in the boiler room from time to time. We will make a renewed effort to keep it out.
4. The north entry to the building is on the down slope side and from there we do have two floors. The main entrance, however, is from the south, or upper slope area, and at that point the building is split level. One entering from the south has a choice of going up to the main floor or down to the basement. Technically, the Kindergarten, first and second grades are located on the 1st floor as there is really only a basement and a main floor. We have had to go into the basement and partition it for classrooms, but we do not really consider the building a two story structure.

I hope that these corrections and explanations will meet with your approval. If you have any further questions please feel free to drop me a line.

Sincerely,



Frederick J. Kent
Superintendent

FJK/ljk

c.c. Jim Elliot
Lee Hayes
Rep. Eric Sutcliff
Senator Bob Mulcahy



NEA - ALASKA

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Mary Ann Einlinger
Deputy Executive Secretary
Fairbanks Office

JUNEAU OFFICE
147 SOUTH FRANKLIN #207
JUNEAU, ALASKA 99801
PHONE: (907) 586-3090

ANCHORAGE REGIONAL OFFICE
1411 WEST 33rd
ANCHORAGE, ALASKA 99503
PHONE: (907) 274-0536

FAIRBANKS REGIONAL OFFICE
825 COLLEGE ROAD
FAIRBANKS, ALASKA 99701
PHONE: (907) 456-4435

February 24, 1981

TO: Chairman Don Clocksin
Members of the House HESS Committee

FROM: Bob Manners
NEA-Alaska

RE: House Bill 192

MEMORANDUM OF SUPPORT

NEA-Alaska strongly supports the passage of HB 192 which makes a special appropriation for construction of a school at Sand Point and encourages that this legislation be given expeditious and favorable consideration. *Same as SB 211*

In this era of rather extensive new school constructions, additions, and extensive building programs, it is essential that we take a closer look at those Districts in which the current facilities are far less than adequate.

"Less than adequate" does not even accurately describe the present circumstance in Sand Point. Library facilities are not sufficient, thus denying some children access to library services. Converting hallways to classrooms and purloining space from other classrooms has become necessary. Needless to say, lounge areas, workrooms, storage rooms, and even office space is virtually non-existent due to the need for classroom space.

The adequacy of the gym and various shop areas is far less than desirable and may even be in violation of fire/safety codes and standards. Quite naturally this circumstance significantly constrains and actually eliminates many essential programs and services to students.

Sand Point is a growing community and continued growth is a realistic projection. It is essential that immediate support be available so that they might be able to offer the kind of educational program to their students that students in other parts of the state already enjoy.

With our financial resource, Alaska must make adequate provision for our most important "natural resource", the education of our youth.

Thank you for your consideration. We look forward to the opportunity to provide more information when your committee considers this bill.

C: Stephen P. McCombs, President
Sand Point Education Assn.
William Eubank, President
Sand Point Board of Education

Representative Eric Sutcliffe
Representative Sam Cotton
Senator Bob Mulcahy

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February 3, 1981

City Resolution 81-

School Resolution 81-

A resolution requesting funds for the construction of a new school building in Sand Point by the Sand Point City Council and the Sand Point City School Board.

Whereas, the existing educational facility at Sand Point is inadequate for present and future needs, and

Whereas, said facility is below minimum guidelines of the Department of Education, Department of Transportation and Public Facilities, and requirements of the Molly Hootch Case Decree, and

Whereas, the present four acre site is substandard and does not allow for additions to handle present or future needs of an expanding population, and

Whereas, the existing vocational area is insufficient to allow for adequate fisheries related education so vital to our area, and

Whereas, sufficient utilization of the existing structure as a combination city hall-state office building has been validated.

Now, therefore, it is hereby resolved by the city council of Sand Point and the School Board of Sand Point that they recognize the need for a new school as their number one priority, and request that funds be made available to complete said project.

Adopted by the City Council of Sand Point, Alaska at a regular meeting of said council held this 10th day of February, 1981.

Mayor-City of Sand Point

Adopted by the School Board of Sand Point, Alaska at a regular meeting of said board held this 2nd day of February 1981.

President-School Board

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Eleanor Moritz

Members of City Council

David Kent
William P. Eubank
Rosemarie Ludrick
Andrew J. Moritz Jr.
Robert G. McCallum
Paul F. Hill

Members of School Board

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Inga Martineen
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c.c Governor
State agencies
Senators
Legislators

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED
AS A UNIT IN THE ORIGINAL DOCUMENT.



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Robert C. Manners
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February 24, 1981

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Members of the House HESS Committee

FROM: Bob Manners
NEA-Alaska

RE: *Senate*
House Bill ~~192~~ 211

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William Eubank, President
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representative Eric Sutcliffe
Representative Sam Cotton
Senator Bob Mulcahy

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William Eubank

President-School Board

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Sand Point Education Assn.
William Eubank, President
Sand Point Board of Education

Representative Eric Sutcliffe
Representative Sam Cotton
Senator Bob Mulcahy

STUDY FOR A NEW ELEMENTARY SECONDARY EDUCATIONAL COMPLEX FOR THE
CITY OF SAND POINT, ALASKA.

ABSTRACT

The existing educational facility is inadequate for present and future needs. The facilities included are below the minimum guidelines of the State of Alaska Department of Education, the Department of Transportation and Public Facilities and the requirements of the Molly Hootch Case Decree. Furthermore, the 4 acre site is substandard and will not readily accept an addition sufficient to handle present or future needs of the rapidly growing Sand Point population.

The existing facility does not meet many elements of current Life Safety Codes, Handicapped Statues and Guidelines, Energy Guidelines and Uniform Building, Mechanical and Electrical Codes. The building is poorly organized, inefficient, difficult to heat and costly to maintain.

It is the desire of the City of Sand Point to construct a new educational complex located either to the north of the existing community or as an alternative between the developing airport center and the existing community adjacent to the boat harbor. Land in the amount of 25 acres would be dedicated for a long range development for the school site to accommodate a twenty to thirty year growth period. The site size is commensurate with DOE Guidelines. The facility would be approximately 32,000 square feet as required by DOE/DOT Standards. The project cost of this facility, to be opened in September, 1983 based on funding in 1981 would be \$8,000,000 complete. The school, once completed, would house 182 students and would accommodate probable growth until a first addition could be completed.

The facility would reduce operation and maintenance costs by 10% on a per capita student basis and fuel consumption by 44% on a per square foot comparison with the existing facility.

Current School Enrollment and Projections Based on No Additional Growth

The attached table illustrates the total school age children in Sand Point by grade since 1976 as well as the total enrollment figures listed in the Comprehensive Plan. The additional figures represent the projected school growth based on no change in current population structure. The city pre school figures of 13, 4-year olds and 17, 3-year olds and the present jump to 18 kindergarten pupils were used to determine the average of 16 new school students in each grade each year. These figures exceed the 1977 plan estimates. This is consistent with the 1977 Comprehensive Plan which stated 25% of the population consisted of school age (5 - 18) children. The 1979 percentage is 20%. This decline is viewed as temporary. This is caused by the sudden population increase consisting of young couples with pre school youngsters or who have recently or will soon have children. The statistics show a relatively small change in families with children in other grades.

The long range timetable for growth in school enrollment without additional growth in the community is shown on the tables. A total enrollment of 205 to 210 should be envisioned by 1990. This would require a 37,000 square foot facility with 25,000 square feet of assignable space and a 15 to 25 acre site. The present facility contains only 13,351 assignable square feet. Its specific deficiencies are outlined in the existing facility section of this report. These requirements should be construed as absolute minimums based on no additional community growth.

SAND POINT SCHOOL ENROLLMENT

<u>GRADE</u>	1976-77		1977-78		1978-79		1979-80	
	<u>EST.</u>	<u>ACTUAL</u>	<u>EST.</u>	<u>ACTUAL</u>	<u>EST.</u>	<u>ACTUAL</u>	<u>EST.</u>	<u>ACTUAL</u>
K		11		6		8		18
1		7		9		9		11
2		7		7		10		9
3		11		6		8		11
4		9		13		5		9
5		9		10		11		6
6		11		11		8		14
7		11		11		11		11
8		19		13		11		11
9		7		18		12		12
10		17		11		10		13
11		11		17		8		19
12		3		7		15		11
<u>TOTAL</u>	132	133	133	139	135	126	136	155

SAND POINT SCHOOL ENROLLMENT GROWTH THROUGH 1992 ASSUMING NO FURTHER POPULATION INCREASE

<u>GRADE</u>	<u>1977</u>	<u>1980-81</u>	<u>1977</u>	<u>1981-82</u>	<u>1982-83</u>	<u>1983-84</u>
K	EST.	13	EST.	16	16	16
1		18		13	16	16
2		11		13	13	16
3		9		11	18	13
4		11		9	11	18
5		9		11	9	11
6		6		9	11	9
7		14		6	9	11
8		11		14	6	9
9		11		11	14	6
10		12		11	11	14
11		13		12	11	11
12		19		13	12	11
<hr/>						
TOTAL	125	157	129	154	157	161

SAND POINT SCHOOL ENROLLMENT GROWTH THROUGH 1991-92 ASSUMING NO FURTHER POPULATION GROWTH

<u>GRADE</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>
K	16	16	16	16	16	16	16	16
1	16	16	16	16	16	16	16	16
2	16	16	16	16	16	16	16	16
3	16	16	16	16	16	16	16	16
4	13	16	16	16	16	16	16	16
5	18	13	16	16	16	16	16	16
6	11	18	13	16	16	16	16	16
7	9	11	18	13	16	16	16	16
8	11	9	11	18	13	16	16	16
9	9	11	9	11	18	13	16	16
10	6	9	11	9	11	18	13	16
11	14	6	9	11	9	11	18	16
12	11	14	6	9	11	9	11	18
TOTAL	166	171	173	183	190	195	202	207

