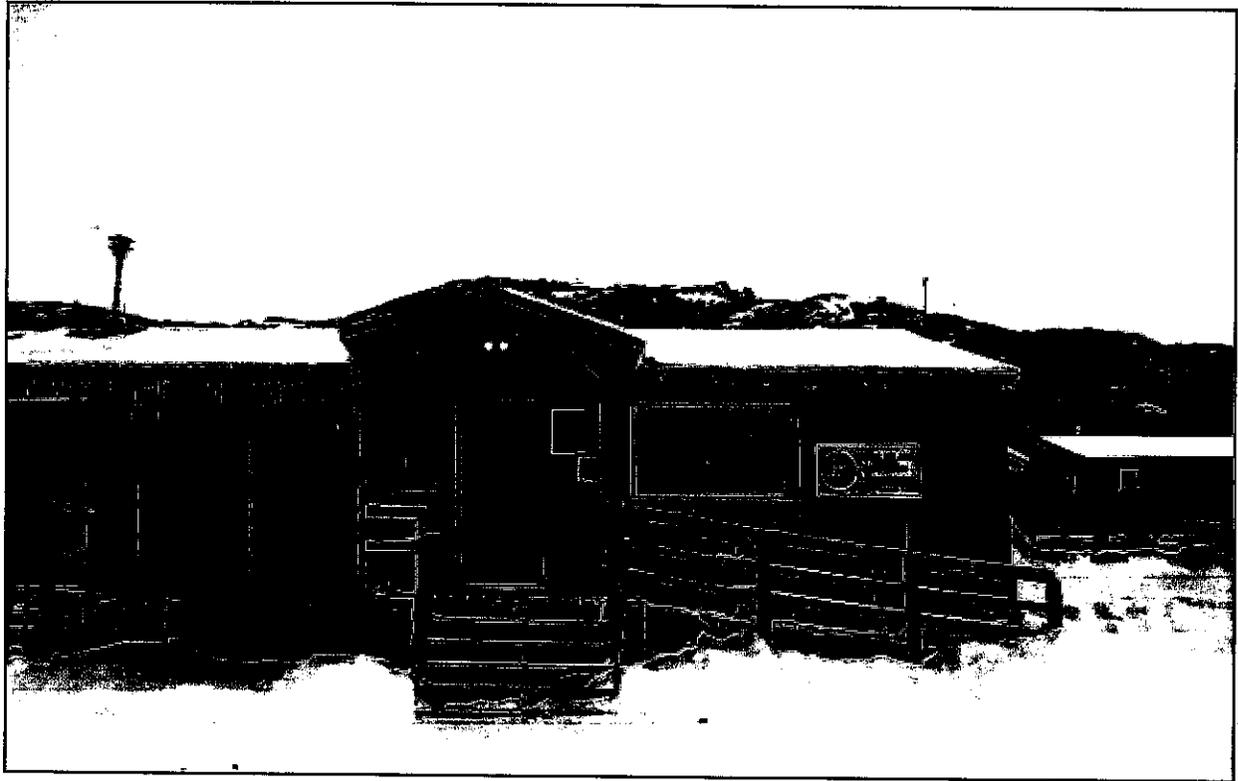


Manokotak Health Clinic



Alaska Rural Primary Care Facility

Assessment and Inventory Report

Final

December 18, 2001

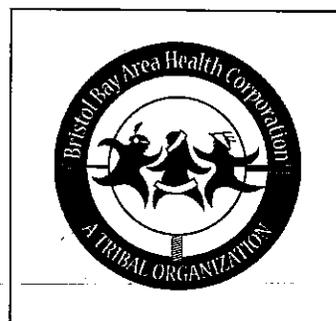


Table of Contents

I. EXECUTIVE SUMMARY	1
A. OVERVIEW	1
B. RENOVATION/UPGRADE AND ADDITION	1
C. NEW CLINIC	1
II. GENERAL INFORMATION	2
A. PURPOSE OF REPORT AND ASSESSMENT PROCESS	2
B. ASSESSMENT TEAM	2
C. REPORT FORMAT	2
D. SITE INVESTIGATION	3
III. CLINIC INSPECTION SUMMARY	4
A. COMMUNITY INFORMATION	4
B. GENERAL CLINIC INFORMATION	5
1) Physical Plant Information	5
2) Clinic Program Usage Information	5
3) Community Program Sheet	5
C. PROGRAM DEFICIENCY NARRATIVE	6
1) Space Requirements and Deficiencies	6
2) Building Issues	6
3) Functional Design Issues	7
4) Health Program Issues	7
5) Utilities	8
D. ARCHITECTURAL / STRUCTURAL CONDITION	8
1) Building Construction	8
2) Interior Construction	9
3) Structural	10
E. MECHANICAL CONDITION	10
1) Heating System	10
2) Ventilation System	10
3) Plumbing System	11
F. ELECTRICAL CONDITION	11
1) Electrical Service	11
2) Power Distribution	12

3) Grounding System _____	12
4) Exterior Elements _____	12
5) Electrical Devices and Lighting _____	12
6) Emergency System _____	12
7) Fire Alarm System _____	12
8) Telecommunication _____	13
G. CIVIL / UTILITY CONDITION _____	13
1) Location of Building _____	13
2) Site Issues _____	13
3) Proximity of Adjacent Buildings _____	13
4) Utilities _____	13
H. EXISTING FACILITY FLOOR PLAN (SITE PLAN IF AVAILABLE): _____	14
IV. DEFICIENCY EVALUATION _____	15
A. DEFICIENCY CODES _____	15
B. PHOTOGRAPHS _____	17
C. COST ESTIMATE GENERAL PROVISIONS _____	18
1) New Clinic Construction _____	18
2) Remodel, Renovations and Additions _____	19
V. SUMMARY OF EXISTING CLINIC DEFICIENCIES _____	21
VI. NEW CLINIC ANALYSIS _____	22
A. PROJECTED COST OF A NEW CLINIC _____	22
B. PROJECTED COST OF THE REPAIR/RENOVATION & ADDITIONS FOR EXISTING CLINIC	22
C. COMPARISON OF EXISTING CLINIC RENOVATION/ADDITION VERSUS NEW CLINIC	23
D. OVERALL PROJECT COST ANALYSIS _____	23
VII. CONCLUSIONS AND RECOMMENDATIONS _____	24
APPENDIX A: DEFICIENCIES	
APPENDIX B: GENERAL PHOTOGRAPHS	

I. EXECUTIVE SUMMARY

A. OVERVIEW

The Manokotak Health Clinic has approximately 1109 square feet (SF) of space located on tribal-owned land. The facility is owned by the Village Council and operated by Bristol Bay Area Health Corporation. The one-story building footprint is approximately 28' x 39' and was constructed in 1968, according to DCED. The clinic enters into a large room used as a waiting room, receptionist area, equipment and supply storage, and small janitor's closet. A seven-foot wall in the area conceals an old residential grade oil-fired furnace. In addition to the waiting area, the clinic has a small office/records room, non-ADA compliant bathroom, trauma room, examination room, office for Itinerate Health Provider (IHP) and a pharmacy/lab area. While waiting, patients are seated in a row of chairs near exam rooms. The clinic lacks a shower. There is one bathroom in the clinic located off of a narrow 2'-11" hallway. Patients, clinic and janitorial staff share the bathroom. The clinic lacks a kitchen and separate janitor's closet with mop sink. There are no sleeping/patient holding rooms available at the clinic. No meeting space was planned to accommodate special health clinics. There is no arctic entry at the front of the clinic to prevent cold air from entering the building. The front entry stairs and ramp are too steep and do not meet ADA or code requirements. Handrails do not meet code. The rear entry/exit is difficult to maneuver in emergencies where gurneys are required. There are no stairs at the rear entry. The clinic is in relatively poor condition and is too small to deliver health service programs to the community of 399 residents.

B. RENOVATION/UPGRADE AND ADDITION

The existing clinic requires an 897 SF addition to accommodate current needs and meet Alaska Rural Primary Care Facility space guidelines. An addition would be difficult to accomplish, as there are no abutting lots available. The clinic shares the building with city and village council offices and lacks adequate room to construct a ramp or other needed components. Major renovations and upgrades of the existing clinic are needed to accomplish an upgrade the poor condition of the clinic. The existing clinic requires major renovation to meet current code and standards. As can be seen from the enclosed documentation, the cost of renovation and addition far exceeds the cost of a new clinic.

C. NEW CLINIC

Based on the Denali Commissions Standard of Evaluation the estimated cost to remodel/add-onto the existing clinic is more than the cost of new construction. The community has proposed that a new 2000 SF Denali Commission Medium Clinic be built on a new site. A prototypical floor plan has been enclosed in this report. (See Section III.H.)

The community fully supports this effort and is currently assessing appropriate site locations.

II. GENERAL INFORMATION

A. PURPOSE OF REPORT AND ASSESSMENT PROCESS

ANTHC has entered into a cooperative agreement with the Denali Commission to provide for the management of the small clinic program under Alaska Rural Primary Care Facility (ARPCF) guidelines, assessment, planning, design and construction. Over 200 clinics will be inspected through the course of the program. The purpose of the Code and Condition survey report is to validate the data provided by the community in the Alaska Rural Primary Care Facility Needs Assessment. Providing each community with a uniform standard of evaluation for comparison with other communities to determine the relative need between for funding assistance for the construction of new or remodeled clinic facilities. The information provided in this report is a component of the scoring for the small clinic RFP the Denali Commission will send to communities in priority groups three and four. The information gathered will be tabulated and analyzed according to a set of fixed criteria that should yield a priority list for funding. Additionally, the relative cost of new construction vs. remodel/addition will be evaluated to determine the most efficient means to bring rural clinics to a uniform standard of program and construction quality.

A team of professional Architects and Engineers traveled to the site and completed a detailed Field Report that was reviewed by all parties. Subsequently, the team completed a draft and then final report of the facility condition.

B. ASSESSMENT TEAM

The survey was conducted on December 18, 2001 by Jerry Hann, AIA, Architect of Larsen Consulting Group, Inc.; Bill Henriksen, PE of RSA Engineering, Inc., and Joshua Smith of ANTHC. Accompanying the field inspection team was Rose Heyano, Director of Community Health Services, Bristol Bay Area Health Corporation. Joshua made introductions and conducted the briefings to ensure complete understanding of the inspection process. Preparation of the information gathered was a cumulative effort between the members of the field team, Holly Kelty, LCG's Project Coordinator and Estimations, Inc.

C. REPORT FORMAT

The format adopted is a modified "Deep Look" format, a facilities investigation and condition report used by both ANTHC and the Public Health Service, in maintaining an ongoing database of facilities throughout the country. Facilities are evaluated with respect to the requirements of the governing building codes and design guidelines. Building code compliance, general facility condition and program needs have been evaluated. The written report includes a floor plan of the clinic, site plan as available and new plans for renovation/upgrade or new clinics. Additional information was gathered during the field visit including a detailed Field Report and building condition checklist, sketches of building construction details, investigations of potential sites for new or replacement clinics and proposed plans for city utility upgrades. This information is available for viewing at ANTHC's Anchorage office and will be held for reference.

D. SITE INVESTIGATION

On December 18, 2001, the team flew to the site, made observations, took photos, and discussed facility needs with on-site personnel. Approximately three and a half hours were spent on site. Allowing adequate time to investigate mechanical and electrical systems, foundations, structure, building condition, and interview staff to assess current and projected health care needs.

Interviews were conducted with Teresa Ayojiak, Community Health Aide. These interviews and background data provide a clear understanding of the needs of the clinic facility, city and village council and members of the community.

III. CLINIC INSPECTION SUMMARY

A. COMMUNITY INFORMATION

Population:

- ◆ 399 (2001 Census)
- ◆ 2nd Class City, Unorganized Borough, Southwest Region Schools, Bristol Bay Native Corporation

Location: Manokotak is located 25 miles southwest of Dillingham on the Igushik River. It lies 347 miles southwest of Anchorage. Located at approximately 58d 58m N Latitude, 159d 03m W Longitude. (Sec. 12, T014S, R059W, Seward Meridian.) Manokotak is in the Bristol Bay Recording District. The area encompasses 36.4 square miles of land and .9 square miles of water.

History: Manokotak is one of the newer villages in the Bristol Bay region. It became a permanent settlement in 1946-47 with the consolidation of the villages of Igushik and Tuklung. People also migrated from Kulukak, Togiak and Aleknagik. Igushik is used as a summer fish camp by many of the residents of Manokotak. School was conducted in a church constructed in 1949 prior to the construction of a school in 1958-59. A post office was established in 1960. Trapping adds allure to the area but attraction has declined since the 1960's. The city was incorporated in 1970.

Culture: Manokotak is an Eskimo village with a fishing, trapping and subsistence lifestyle. The sale, importation or possession of alcohol is banned in the village.

Economy: Ninety-six residents hold commercial fishing permits for the salmon and herring fisheries in Togiak Bay. Many residents also trap fox, beaver, mink and otter. Nearly 95% of villagers leave Manokotak during the fishing season. The entire community depends on fishing and subsistence activities. Many residents move to Igushik or Ekuk each summer. Salmon, herring, sea lion, beluga whale, trout, ptarmigan, duck and berries are harvested. Symbiotic relationships exist with several area villages, especially Togiak and Twin Hills.

Facilities: Water is derived from two wells, treated and stored in a 150,000-gallon water storage tank. A piped water and sewer system, constructed in 1972, serves the school and all 68 households with complete plumbing. Manokotak Heights, located four miles to the south, is served by a well and treatment system. Water shortages have occurred in that area. New HUD housing units were built in 2000, and additional units are planned. A feasibility study is underway to evaluate system improvements, relocation of the landfill and implementation of a refuse collection system.

Transportation: Manokotak is accessible by air and water. Regular and chartered flights are available from Dillingham. There is a State-owned 2,740' lighted gravel airstrip located one mile to the north, and a 5,000' designated seaplane base. Lighterage services deliver cargo each summer (docking at the mud beach). Currently there are no docking facilities on the Igushik River. The Igushik River consists of tight, broad meandering loops. Many miles of waterway must be traversed via boat to cover a comparably short distance in air miles. A 6.5-mile road to a barge landing area on the Snake River began construction in 1998. ATVs, snow machines, and a few vehicles are used for local travel. During winter, fuel is hauled via snowmachine on the Manokotak Trail.

Climate: Manokotak is located in a climatic transition zone. The primary influence is maritime, although arctic climate affects the region. Average summer temperatures range from 40 to 70 degrees Fahrenheit; winter temperatures average from 4 to 30 degrees Fahrenheit. Annual precipitation ranges from 20 to 26 inches. Fog and high winds exist periodically through the year. The River is ice-free from June through mid-November.

B. GENERAL CLINIC INFORMATION

1) Physical Plant Information

The Manokotak Health Clinic has approximately 1092 square feet (SF) of space. The facility is owned by the Village Council and operated by Bristol Bay Area Health Corporation. The one-story building footprint is approximately 28' x 39'. The clinic entrance opens to a large area. This space is used as a waiting room, receptionist area, equipment/supply storage area, and a small janitor's closet. The room has a seven-foot wall that conceals an old, residential grade, oil-fired furnace. The clinic has a small office/records room, a non-ADA compliant bathroom, a trauma room, an additional exam room, and an office used for the pharmacy/lab and Itinerant Health Provider (IHP). Patient seating in the waiting area consists of a row of seats in front of the exam rooms. There is one bathroom in the clinic located off a narrow 2'-11" hall. The clinic lacks a shower, kitchen and separate janitorial closet with mop sink. Patients, clinic staff, and janitorial staff use the only bathroom. There are no sleeping room/patient holding rooms at the clinic. No designated meeting room for special clinics has been provided. There is no front arctic entry to prevent wind from entering the building when the door opens. The ramp and stairs are too steep and handrails do not meet code. The ramp does not meet ADA or code standards. The rear entry/exit is difficult to maneuver in emergencies where gurneys are needed. There are no stairs at the rear entrance. The clinic is in relatively poor condition and too small to deliver health service programs needs to the community. Sinks and fixtures are not ADA compliant. Door hardware lacks privacy latches and is not ADA compliant.

The clinic is just off the main road from the airstrip to end of the old town. Manokotak Heights is approximately 6 miles up the main road. Here, new subdivisions have been developed with a large new K-12 school facility having been just opened.

2) Clinic Program Usage Information

Patient records indicate the clinic saw an average of 151 patients per month in 2001 (averaged over 6 months), and 225 patients per month in 2000. Patient encounters decreased 33% in the last two years. Medical services are provided by four full-time Community Health Aides/Practitioner (CHA/Ps). Itinerant care includes a dentist who travels to Manokotak seven times a week, staying for approximately five days each trip, and a public health nurse, pediatrician and doctor who visit quarterly and stay for three to four days each trip.

3) Community Program Sheet

Attached at the end of this section is the Community Program Sheet completed by the Community of Manokotak.

PROGRAM

Community MANOKOTAK Unique ID # _____

Organization BSAHC

P1.0 Services

The your program provides these services and functions. A "YES" answer implies that these services are services listed in questions P1.1 - P1.41 and P4.1 - P4.7 may be considered components of comprehensive primary care. These services may be provided by a variety of health care providers, including Community Health Aides / Practitioners, Nurse Practitioners, Physician Assistants, Physicians, etc. Please indicate whether provided on a regular basis by full or part time local staff. If you answered "NO" or "Intermittent Basis Only" please indicate why by checking one or more boxes to the right, and then indicate if any of the services should be provided on a regular basis to meet local program and/or community goals.

		Currently Provided?			If Not, Why? (check all that apply)							Should Be Provided?	
		Yes	Int. Basis Only	No	Not Needed In This Size Comm.	Not Wanted By Comm.	Inadeq. Funding	Inadeq. Space	Inadeq. Equip.	Inadeq. Staff Avail.	Other	Yes	No
P1.3	Substance Abuse Diagnosis	X	X				X	X	X	X		X	
P1.4	Substance Abuse Treatment	X		X				X				X	
P1.5	Mental Health Diagnosis	X	X				X	X	X	X		X	
P1.5	Mental Health Treatment	X		X								X	
P1.13	Preventive Dental Services	X					X	X	X	X		X	
P1.14	Dental Treatment Services	X			X							X	

Handwritten notes on the right side of the table, including "No" and "Yes" markings.

Person Contacted in the Community: TERESA AYOJIAK, HEALTH AIDE

C. PROGRAM DEFICIENCY NARRATIVE

1) Space Requirements and Deficiencies

SPACE COMPARISON MATRIX												
Current Manokotak Actual SF to Denali Commission Medium Clinic												
Alaska Rural Primary Care Facility				Current Clinic			Medium Clinic			Difference		
Purpose / Activity	Designated Itinerant			Actual Net SF			ARPCF SF			Difference		
	Size	No.	Net Area (SF)	Size	No.	Net Area (SF)	Size	No.	Net Area (SF)	Size	No.	Net Area (SF)
Arctic Entries					0	0	0	50	2	100		-100
Waiting/Recep/Closet	150	1	150	60	1	60	150	1	150			+105
Trauma/Telemed/Exam	200	1	200	143	1	143	200	1	200			-28
Office/Exam				123	1	123	150	1	150			-17
Admin./Records				60	1	60	110		110			-62
Pharmacy/Lab				0	0	0	80	1	80			+10
Portable X-ray												
Specialty Clinic/Health Ed/Conf					0	0	0	150	1	150		+221
Patient Holding/ Sleeping Room					0	0	0	80	1	80		+58
Storage	150	1	150	160	1	160	100	1	100			+1205
HC Toilet				44	1	44	60	2	120			-19
Janitor's Closet				8	1	8	30	1	30			-26
Subtotal Net Area			500			598			1270			-672
Circulation & Net/Gross Conv. @ 45%						515			572			-57
Subtotal (GSF)						1113			1842			-729
Mechanical Space @ 8%					21	1	21		147			-126
Total Heated Space			500			1092			1989			-897
Morgue (unheated enclosed space)			0					30	1	30		30
Ext. Ramps, Stairs, Loading	HC Accessible			As Required			As Required			As Required		

- a. Overall Space Deficiencies: The facility size is 897 SF deficient of ARPCF space requirements.
- b. Specific Room Deficiencies: The clinic does not have an arctic entry. The following rooms are too small; trauma/exam, office/exam, administrative/records, HC toilet and janitor's closet. There are no sleeping room, shower and specialty clinic/health ed spaces.

2) Building Issues

- a. Arctic Entries: The clinic does not have arctic entries.
- b. Waiting / Reception: The clinic entrance opens to a large area. The space is used as a waiting room, receptionist area, and equipment/supply storage area. Patients sit in a row of attached seats in front of exam rooms while waiting.

- c. Exam / Trauma: There is one exam/trauma room that seems to be functioning well for daily clinic needs. The room is inadequately sized. The entry is 36" wide but hardware is not ADA compliant. The lab sink is not ADA compliant (See Mechanical Narrative).
- d. Exam Room: The exam room is small and lacks an entry door from the waiting room. Access to the exam room is through the trauma and IHP/Pharmacy rooms on either side. These doors are 36" wide but are not ADA compliant. The sink in the lab is not ADA compliant (See Mechanical Narrative).
- e. Office / Administration / Records: The room enclosed behind the reception desk is used for office, administration and record keeping needs. It is very crowded, used for multiple daily functions and is not adequate for office space.
- f. Pharmacy / Lab: The pharmacy/lab shares space with IHP and several large metal file cabinets. The sink in the lab is not ADA compliant (See Mechanical Narrative).
- g. Specialty Clinic / Health Education / Conference: There are no designated spaces for specialty clinic, health education or conferences in the clinic. In the past the waiting room has been used to meet these needs.
- h. Patient Holding / Sleeping Room: There are no Patient Holding or Sleeping Rooms at the clinic. Itinerant staff uses a cot in the waiting room when overnighting. There is no shower in the clinic available for IHP use.
- i. Storage: Storage is inadequate. There is not enough shelving or cabinets for proper medical storage. Storage is located wherever space is available with larger items in the waiting room.
- j. HC Toilet Facilities: None noted.
- k. Janitors Room: The janitor's closet is very small and lacks a mop sink.
- l. Mechanical/Boiler Room: A single, old, residential grade, oil-fired furnace serves the clinic. The furnace is located in a 7-foot tall plywood enclosure off the waiting room. The furnace room provides heating for the entire facility. There is a narrow 1'-7" hall that leads to the two-foot plywood mechanical room door.
- m. Ancillary Rooms: There are no ancillary rooms.

3) Functional Design Issues

- a. This facility is functionally inadequate for current programs and intended use. Most space does not meet functional size requirements. Patient care is sacrificed due to a need for more space to meet delivery needs. Manokotak is one of the fastest growing communities in the Bristol Bay region, community size and anticipated growth dictate a larger facility. The ability to perform required medical functions within the facility is severely hindered by lack of enclosed storage space, bathroom(s), arctic entries and other previously mentioned deficient areas.

4) Health Program Issues

- a. Patient Comfort and Privacy: Exam room doors are hollow core and do not provide adequate privacy with respect to sound level. Comfortable seating is not provided. There is very little

patient privacy in the waiting area. The open waiting room is completely inadequate and violates patient privacy.

- b. Medical/Infectious Waste: Waste is flown out as needed.
- c. Infection Control: Infection control is handled with minimal long-term control due to the lack of a mop sink in the janitor's closet. Floor material is sheet vinyl and is very worn. Wood base surrounds the flooring and should be sealed. Wood base makes cleaning and sanitation difficult. It is recommended that new sheet vinyl be installed with an integral cove base for ease of cleaning.
- d. Insect and Rodent Control: None noted.
- e. Housekeeping: This facility is difficult to clean and organize due to congestion. Cleaning and Sanitation are being handled at the best level currently possible.

5) Utilities

- a. Water Supply: Water is supplied to the clinic from the city water supply. The water service entrance is located in the restroom, exposed, next to the toilet. It is a two-pipe system that allows return water to circulate thereby minimizing the possibility of system freeze-up. The water heater is over ten years old (See Mechanical Narrative).
- b. Sewage Disposal: The facility is connected to the city sewer system. The ABS Pipe appears to be adequately sized for the facility. (See Mechanical Narrative).
- c. Electricity: Electrical service is provided by a single overhead service to the building. The main disconnect is located at the meter (See Electrical Narrative).
- d. Telephone: The clinic is served by a total of six telephone lines. Phone line include one for telephone access, a dedicated fax line, a dedicated data line for the computer, a direct line to Kakanak Hospital in Dillingham, and a line serving the Telemed system.
- e. Fuel Oil: A single 500-gallon fuel tank serves the clinic. The tank is located less than five feet from the building and is supported on an unstable steel stand. The fuel oil supply gravity feeds from the bottom of the tank (See Mechanical Narrative).

D. ARCHITECTURAL / STRUCTURAL CONDITION

1) Building Construction

- a. Floor Construction: The floor consists of sheet vinyl, over underlayment, over a plywood sub-floor, over 4' x 10' beam at center span with 2' x 10' joist spanning between a post and pad foundation. The foundation is assumed to be treated wood. Insulation is assumed to be R-38 batt in the floor, with 3/8" plywood soffit paneling covering insulation.
- b. Exterior Wall Construction: The walls are 2' x 6' construction at 16" o.c. Sheathing with 1' x 2' battens at the panel joints. It was assumed that fiberglass batt insulation is R-19 with vapor barrier, plywood paneling and a gypsum wallboard interior.

- c. Roof Construction: The metal roof appears to be a typical full-span truss at 24" o. c. with plywood deck. The insulation is approximately 10" or R-25 batt insulation, which is minimal for this region and climate. The insulation does not lay evenly across the ceiling and has many gaps between panels. There is minimal attic ventilation. Only eave vents have been installed. The furnace has a ducted supply air with ductwork running through the cold attic area. The suspended ductwork had some insulation on round branch ducts but rectangular mains were not insulated. The attic space is warmer than it should be due to the inadequacy of the mechanical system. Snow melting from the roof forms ice dams at the eaves.
- d. Exterior Doors: The exterior doors are painted insulated hollow metal in reasonably good shape. They do not have ADA hardware and have more than a 1/2" threshold (approx. 2 1/2" high).
- e. Exterior Windows: Windows are of double-pane, PVC casements and are in fairly good condition.
- f. Exterior Decks, Stairs, and Ramps: The landing, stairs, railings and handrails meet current codes. The ramp has a slope greater than 1:12.

2) Interior Construction

- a. Flooring: Floor material is sheet vinyl and is very worn. Wood base surrounds the worn sheet and should be sealed at the flooring. Wood base makes cleaning and sanitation difficult. A rolled-up integral vinyl base is recommended.
- b. Walls: The interior walls are of 2' x 4' wood construction with wood paneling. Walls lack sound insulation. This type of wall construction provides minimal patient privacy. Replacement with sound walls is recommended to meet current standards.
- c. Ceilings: Ceilings are of 12" x 12" acoustical tiles and are in reasonably good condition though a few tile need replacement.
- d. Interior doors: Interior doors are hollow core and provide no sound isolation. They are in poor condition and do not have ADA compliant hardware.
- e. Casework: Casework is a mix of wood with plastic laminate tops. Casework is in fairly good condition.
- f. Furnishings: The furnishings are old and worn. Only office chairs are available to patients with a variety of mismatched old desks. The exam table and exam room furniture is in good condition.
- g. Insulation:
 - ◆ Floor Insulation R-38 (Assumed)
 - ◆ Wall Insulation R-19
 - ◆ Attic/Roof Insulation R-25 (Assumed)
 - ◆ Attic Ventilation Eave Vents Only
- h. Tightness of Construction: The facility functional but has many air leaks throughout that minimize the air-tightness of the structure.

- i. Arctic Design: The clinic lacks arctic entries to protect the interior from the cold environment. Building orientation is satisfactory and clinic siting is adequate.

3) Structural

- a. Foundations: The foundation is post and pad. The system appears to move during the freeze-thaw cycle.
- b. Walls and Roof: The walls and metal roof are in poor but stable condition. Eaves are deteriorating due to ice damming. Some of the plywood sheathing is also deteriorating due to ice damming and should be replaced.
- c. Stairs, Landings: These elements do not meet code and need replacement.

E. MECHANICAL CONDITION

1) Heating System

- a. Fuel Storage and Distribution: A single 500-gallon fuel tank serves the clinic. The tank is located less than five feet from the building and is supported on an unstable steel stand. The tank does not appear to be properly vented. The tank is not equipped with a fuel gauge and the fill system lacks overflow protection. The fuel oil supply gravity feeds from the bottom of the tank to a schedule 40 black pipe, through an isolation valve (gate valve) then enters a fuel filter. The fuel line then adapts to a 3/8" soft copper pipe extending to the furnace room located in the storage area of the clinic waiting room. Inside the furnace room there is a fuel filter prior to the furnace burner. No isolation valve is supplied. The tank and related piping have a number of code violations with respect to support, venting, fill system, piping and valving. These violations are listed in the deficiency report.
- b. Furnace: An old residential grade, oil-fired furnace located in the furnace room provides heat to the facility. It was noted during the visit that the furnace ran almost continuously. The outside temperature was around -15 degrees Fahrenheit. At this temperature it would be expected to see an increased cycling of the furnace. The furnace has a ducted supply air with ductwork running through the cold attic area. The ductwork had some insulation on round branch ducts but rectangular mains were not insulated. Return air appears to be ducted to the cold attic space, where the attic acts as a return air plenum. There are no return air grilles located in the clinic ceiling. Return air is drawn through any crack or other opening in the ceiling to the attic area. As a result, return air temperature to the furnace cold, resulting in cool air supply temperature and a much longer cycle time for the furnace. This also causes the attic space to be warmer than it should be, thereby causing snow to melt from the roof, creating ice dams at roof eaves. The heat exchanger to the furnace was not investigated but it is likely to be corroded and possibly cracked as a result of the low return air temperature entering the furnace. There are a number of other deficiencies associated with the heating system itemized in the deficiency report.

2) Ventilation System

- a. Supply Air System: Supply air is ducted from the furnace to all occupied rooms of the clinic. As noted above, supply air is not properly insulated in the in the attic area. Uncontrolled ventilation air is created by the infiltration of outside air to the return of the furnace (See above). The primary source of ventilation for the clinic is by the use of operable windows. Ventilation requirements are not likely being met in the winter, as windows are typically kept shut. We generally recommend

designing and installing a positive ventilation system using an air handler unit or providing an outside air intake to the furnace if the system is heated using a furnace. We do not recommend installing outside air capability to the existing furnace system as the amount of outside air required would likely reduce the temperature of air passing over the heat exchanger possibly resulting in condensing or cracking the heat exchanger.

- b. Exhaust Air: A ceiling mounted exhaust fan serves the restroom. The fan is ducted to the exterior of the building and appears to be operating properly. The fan appears to be equipped with back draft dampers. Limited access to the attic area did not permit ductwork observation. Ductwork is assumed to be installed correctly.

3) Plumbing System

- a. Water System: Water is supplied to the clinic from the city water supply. Water service enters the clinic exposed in the bathroom, next to the toilet. Service is a two-pipe system that allows return water to circulate and thereby minimizing the possibility of a system freeze-up. The hot and cold water are run exposed in the restroom, then distributed to the sinks via clinic walls. The piping is not well supported and is un-insulated. Hot water is provided from a 50-gallon electric water heater. The water heater is over ten years old and should be replaced soon. There is no hot water re-circulation so delay in hot water temperatures is noted from the time. Tempering valves should be provided at the hand wash sinks and the shower to limit the maximum water temperature and reduce the risk of scalding.
- b. Sewer System: The facility is connected to the city sewage system. There is no yard cleanout outside the clinic, but a cleanout is located where the waste line exits the building. The waste piping has been run in ABS. It appears to be adequately sized for the facility. The waste system is not properly vented. We were unable to determine if individual fixtures were vented. Because there was no vent-through-roof it is assumed that the system is not vented per code.
- c. Fixtures: None of the bathroom plumbing fixtures are ADA compliant. ADA clearances are not met. The toilet lacks an elongated bowl and open seat as required by the Uniform Plumbing Code. The toilet is not sealed to the floor as is required to facilitate cleaning and provide a sanitary environment. There is no mop sink or janitor's sink in the facility. A janitor sink is required for proper cleaning of the facility and should be installed. Each exam room has its own sink. One sink is a deep stainless steel sink. The other is an enameled steel kitchen style sink. The handles on faucets are knob style and do not meet ADA requirements. The sinks should have hands free controls or wrist blade handles installed to provide a more sanitary method of shutting water off. There is no shower at the facility. Health providers mentioned that a clinic shower is highly desirable item.

F. ELECTRICAL CONDITION

1) Electrical Service

- a. Electrical service is provided by a single overhead service to the building. The main disconnect is located at the meter. The building is served with 2/0 copper conductors and neutral. The grounding rod serving the meter base was not fully driven.
- b. The main breaker size at the meter is 100 Amp. The service is 120/240V, 1 Ph, 3 wire.

2) Power Distribution

- a. There is a single panel board serving the clinic located in the hallway outside the restroom. The hallway is used to store stretchers that infringing upon the required panel clearance area. The panel board serving the clinic is a two pole 150 Amp ITE panel with room for 12 breakers. Seven breakers have been installed and are currently in use. There is one open knockout in the panel that should be covered or filled. It appeared that the panel schedule was up to date. Neutrals and grounds have not been separated in the panel.
- b. Branch circuit wiring is installed using Romex type wiring with a ground conductor. Much of the Romex wire we observed was poorly supported. Power for the furnace and water heater is not hard wired, but provided from local receptacles near the equipment. The wire used from the receptacles has been fabricated from unsupported Romex wire.

3) Grounding System

- a. A grounding wire extends from the meter and down to a grounding rod. The grounding electrode conductor appeared adequately sized for the service and was a #6 copper conductor at minimum. The grounding rod was not fully driven.

4) Exterior Elements

- a. There were no exterior lights to the building aside from a pair of exposed bulbs at the front entrance. The fixture was in poor condition and should be replaced. Other lighting around the perimeter of the building needs to be added. There were no outlets on the outside of the building.

5) Electrical Devices and Lighting

- a. Two of the receptacles in the building were found to be improperly wired. One in exam room #1 had the neutral and hot reversed and one in exam room #2 had an open ground. The receptacle in the restroom was not GFCI protected. There are no GFCI type receptacles near clinic sinks (although not required they are recommended).
- b. Lighting is predominately two ft fluorescent fixtures, using 2, F40 bulbs. Fixtures are in poor condition and lighting levels were noted to be low in all areas. All lighting in the facility should be upgraded.

6) Emergency System

- a. There were no emergency egress signs installed in the clinic. Battery back-up emergency exit signs should be installed.
- b. There were no emergency egress lights installed in the clinic. Emergency egress lights should be installed in appropriate locations.

7) Fire Alarm System

- a. There is no fire alarm system in the building, but battery powered smoke detectors were installed; two in the patient waiting area and one in each of the two exam rooms. All smoke detectors appeared to be operational.

8) Telecommunication

- a. The clinic is served by total of six telephone lines. One telephone line, a dedicated fax line, a dedicated data line for the computer, a direct line to Kanakanak Hospital in Dillingham, and a Telemed system line are in place.

G. CIVIL / UTILITY CONDITION

1) Location of Building

- a. Patient Access: The clinic is off the main road to the airstrip at the end of the old townsite. The "New" town is approximately six miles up the main road. New subdivisions have been developed in the new townsite. A large K-12 school facility was recently opened.
- b. Service Access: Road access is provided to the clinic.
- c. Other Considerations: The facility is located on a relatively flat site in with a good location and gravel pad.

2) Site Issues

- a. Drainage: Drainage from the site is adequate aside from a 100-foot-deep hole near the center of the building. This hole is a danger and should be filled.
- b. Snow: There does not appear to be a snow-drifting problem. The facility sits about 18" higher than the natural grade.

3) Proximity of Adjacent Buildings

- a. Buildings surround the clinic on all sides.

4) Utilities

- a. Water Supply: Water is supplied to the clinic from the city water supply. The water service enters at the restroom and is exposed next to the toilet. It is a two-pipe system that allows return water to circulate thereby minimizing the possibility of a system freeze-up. The water heater is over ten years old (See Mechanical Narrative).
- b. Sewage Disposal: The facility is connected to the city sewage system. The ABS Pipe appears to be adequately sized for the facility (See Mechanical Narrative).
- c. Electricity: Electrical service is provided by a single overhead service to the building. The main disconnect is located at the meter (See Electrical Narrative).
- d. Telephone: The clinic is served by a total of six telephones, two for telephone, a fax line, a dedicated data line for the computer, a direct line to Kanakanak Hospital in Dillingham, and Telemed system line.
- e. Fuel Oil: A single 500-gallon fuel tank serves the clinic. The tank is located less than five feet from the building and is supported on an unstable steel stand. The fuel oil supply gravity feeds from the bottom of the tank (See Mechanical Narrative).

H. EXISTING FACILITY FLOOR PLAN (SITE PLAN IF AVAILABLE):

Following this section we have attached drawings we have been able to identify, find, or create as part of this report.

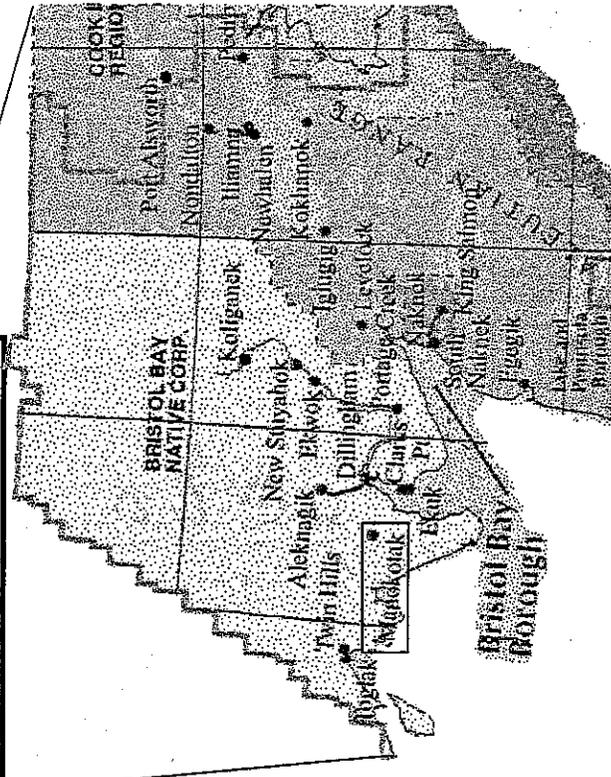
Map of Region

A1 Site Plan

A2 Existing Floor Plan

A3 Existing Wall Section

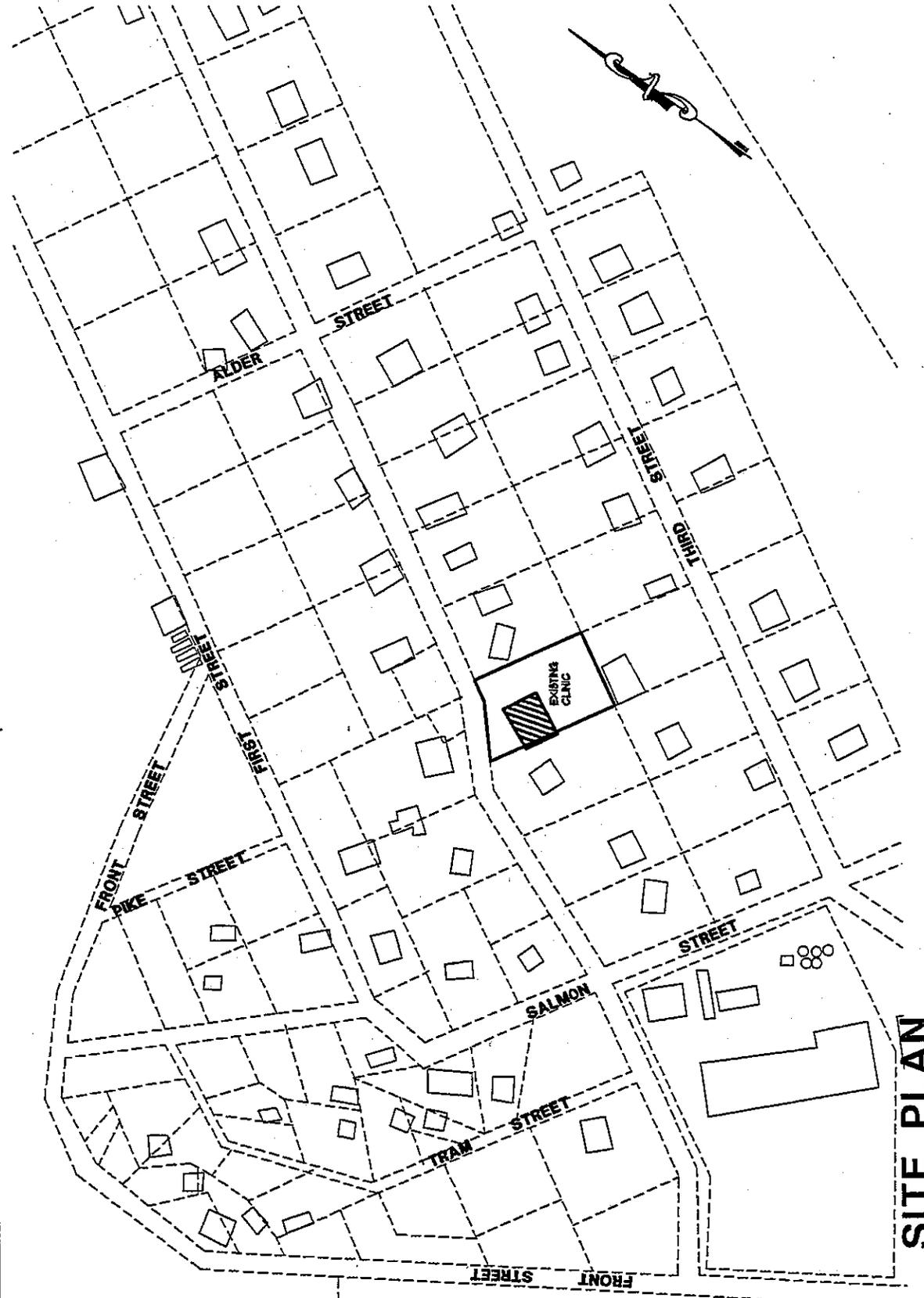
A4 Prototypical Clinic



**FACILITY ASSESSMENT AND
INVENTORY SURVEYS
FOR MANOKOTAK**

Alaska Native Tribal Health Consortium

DESIGNED BY:
DATE: 01/14/02
SCALE: NTS
JOB NO: 223.07



SITE PLAN

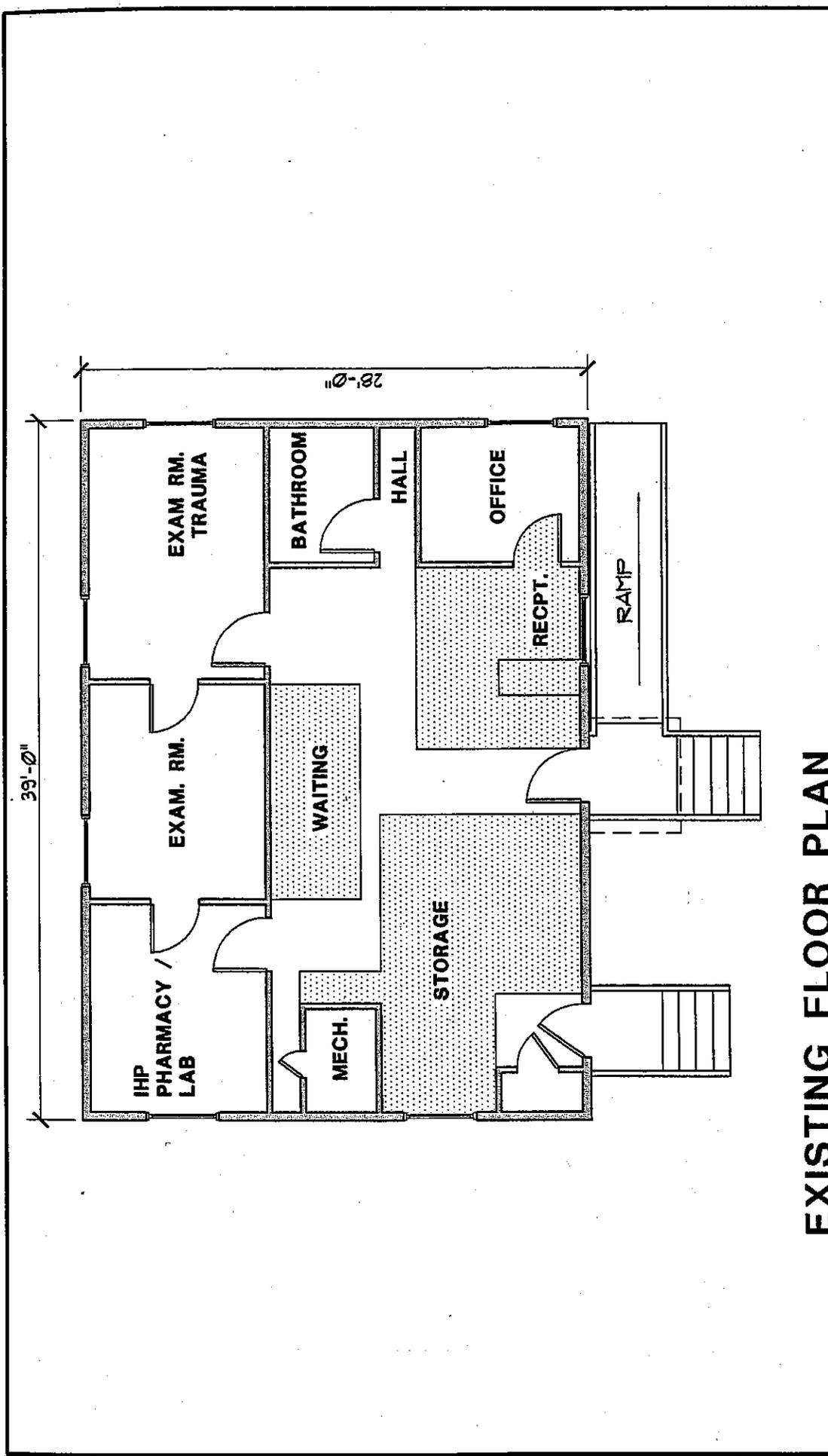
SCALE: NTS



FACILITY ASSESSMENT AND
INVENTORY SURVEYS
FOR MANOKOTAK
ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

DESIGNED BY:
DATE: 01/14/02
SCALE: NTS
JOB NO: 223.07

SHEET
A 1 OF 3

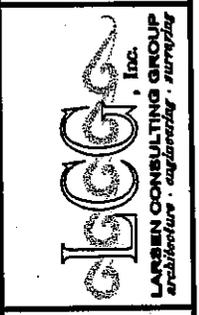


EXISTING FLOOR PLAN

SCALE: 1/8" = 1'-0"



GRAPHIC SCALE

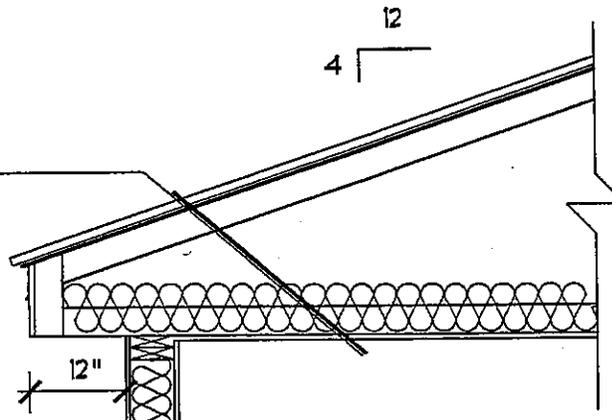


FACILITY ASSESSMENT AND
INVENTORY SURVEYS
FOR MANOKOTAK
ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

DESIGNED BY:	
DATE:	01/14/02
SCALE:	18"=1'
JOB NO:	223.07

TYP. ROOF/CEILING
ASSEMBLY:

METAL ROOF
PLYWOOD ROOF SHEATHING
WOOD TRUSS @24" O.C.
FOIL BACK INSUL.
PLYWOOD SHEATHING
ACCUSTICAL CEILING TILES



WALL ASSEMBLY:

PLYWOOD W/BATTONS @ JOINTS
2X6 @ 16" O.C. OR 24" O.C.
BATT INSUL. R-19 (ASSUMED)
WOOD PANELING

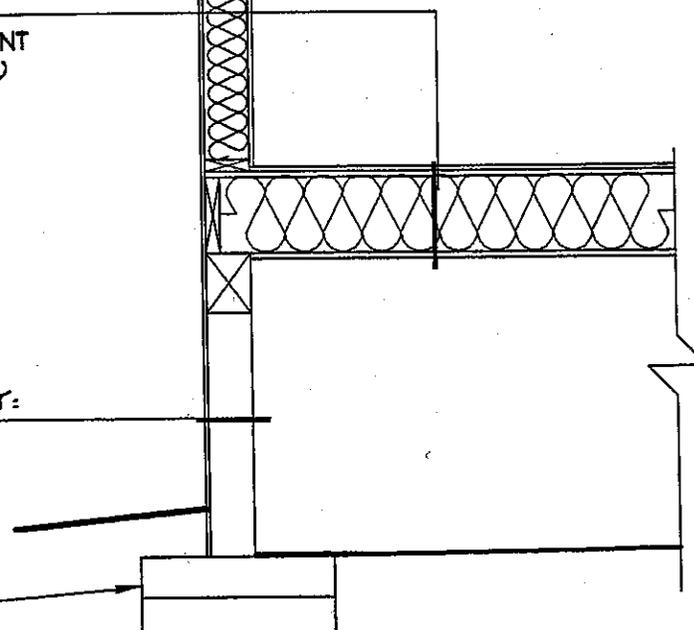
FLOOR
ASSEMBLIES:

SHEET VINYL/UNDERLAYMENT
UNDERLAYMENT (ASSUMED)
PLYWOOD SUBFLOOR
2x JOIST
ASSUME R-30 BATT INSUL.
PLYWOOD SOFFIT

POST & BEAM
FOUNDATION ASSEMBLY:

PLYWOOD SKIRTING
2X4 STUDS

ASSUMED TREATED
FOUNDATION PAD



EXISTING WALL SECTION

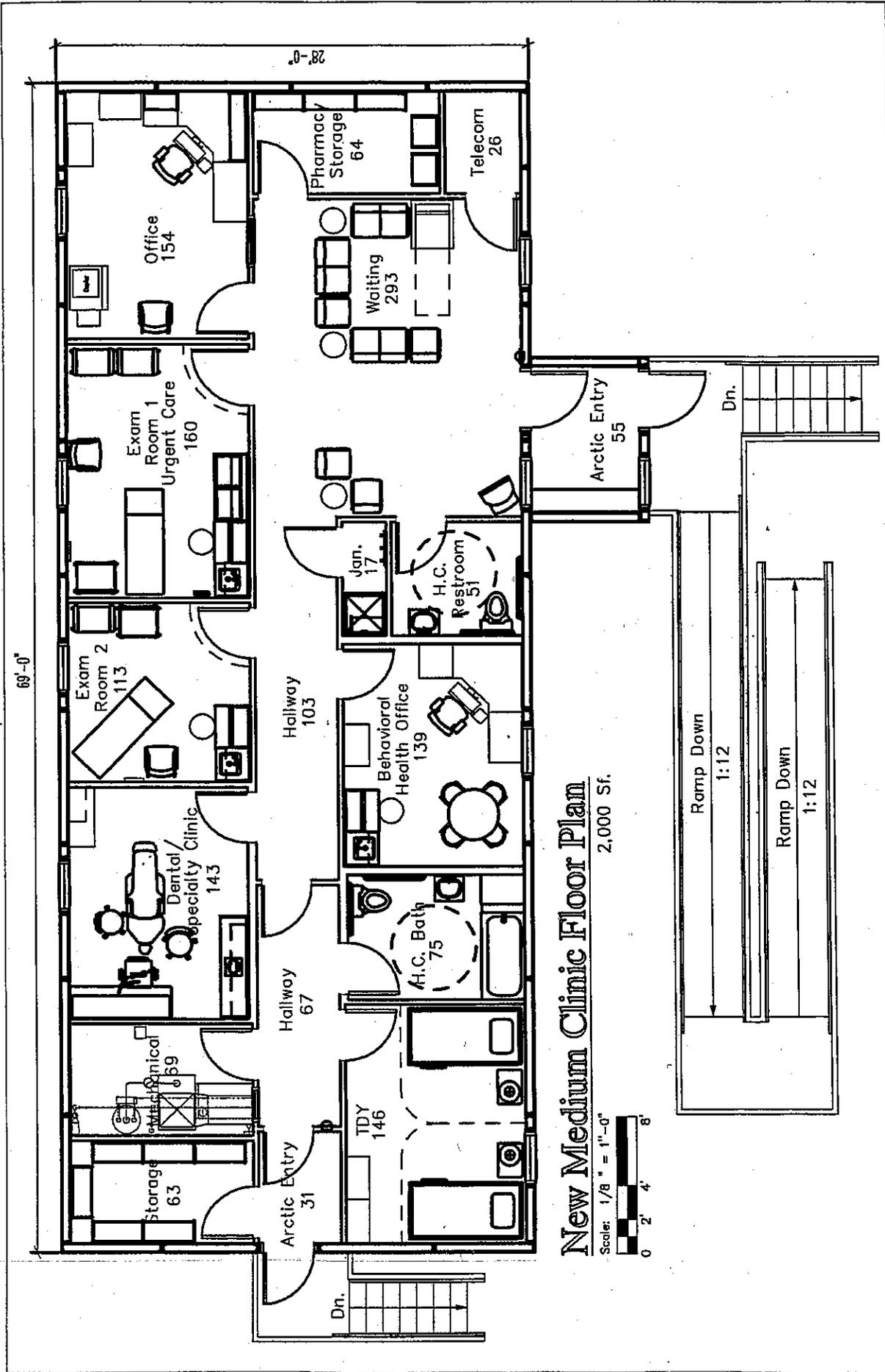
SCALE: 1/2" = 1'-0"

SHEET
A 3 OF 3

DESIGNED BY:
DATE: 01/14/02
SCALE: 1/2" = 1'
JOB NO: 223.07

FACILITY ASSESSMENT AND
INVENTORY SURVEYS
FOR MANOKOTAK
ALASKA NATIVE TRIBAL HEALTH CONSORTIUM





New Medium Clinic Floor Plan
 2,000 Sf.



Sheet Contents		Sheet #:	
NEW MEDIUM CLINIC FLOOR PLAN			
Drawn	Dals	Job No.	
DT Company	11/28/2001	910602	
Checked	G.L.W.		

**ALASKA PRIMARY CARE FACILITY
 CODE & CONDITION SURVEYS**
 For The Denali Commission



A4

IV. DEFICIENCY EVALUATION

A. DEFICIENCY CODES

The deficiencies are categorized according to the following deficiency codes to allow the work to be prioritized for funding. The codes are as follows:

- 01 Patient Care:** _____ Based on assessment of the facilities ability to support the stated services that are required to be provided at the site. Items required for the patients social environment such as storage, privacy, sensitivity to age or developmental levels, clinical needs, public telephones and furnishings for patient privacy and comfort.
- 02 Fire and Life Safety:** _____ These deficiencies identify areas where the facility is not constructed or maintained in compliance with provisions of the state mandated life safety aspects of building codes including the Uniform Building Code, International Building Code, The Uniform Fire Code, NFPA 101, The Uniform Mechanical and Plumbing Codes and The National Electrical Code. Deficiencies could include inadequacies in fire barriers, smoke barriers, capacity and means of egress, door ratings, safe harbor, and fire protection equipment not covered in other deficiency codes.
- 03 General Safety:** _____ These deficiencies identify miscellaneous safety issues. These are items that are not necessarily code items but are conditions that are considered un-safe by common design and building practices. Corrective actions required from lack of established health care industry safety practices, and local governing body code safety requirements. I.e. Occupational Safety Health Administration (OSHA) codes & standards.
- 04 Environmental Quality:** _____ Deficiencies based on Federal, State and Local environmental laws and regulations and industry acceptable practices. For example this addresses DEC regulations, hazardous materials and general sanitation.
- 05 Program Deficiencies:** _____ These are deficiencies that show up as variations from space guidelines evaluated through industry practices and observation at the facility site and documented in the facility floor plans. These are items that are required for the delivery of medical services model currently accepted for rural Alaska. This may include space modification

requirements, workflow pattern improvements, functional needs, modification or re-alignment of existing space or other items to meet the delivery of quality medical services. (Account for new space additions in DC 06 below)

- 06 Unmet Supportable Space Needs:** _____ These are items that are required to meet the program delivery of the clinic and may not be shown or delineated in the Alaska Primary Care Facility Space Guideline. Program modifications requiring additional supportable space directly related to an expanded program, personnel or equipment shall be identified in this section; for example additional dental space, specialty clinic, storage, or program support space that requires additional space beyond the established program.
- 07 Disability Access Deficiencies:** _____ The items with this category listing are not in compliance with the Americans with Disabilities Act. This could include non-compliance with accessibility in parking, entrances, toilets, drinking fountains, elevators, telephones, fire alarm, egress and exit access ways, etc.
- 08 Energy Management:** _____ These deficiencies address the efficiency of lighting, heating systems/fuel types and the thermal enclosures of buildings, processes, and are required for energy conservation and good energy management.
- 09 Plant Management:** _____ This category is for items that are required for easy and cost efficient operational and facilities management and maintenance tasks of the physical plant.
- 10 Architectural M & R:** _____ Items affecting the architectural integrity of the facility, materials used, insulation, vapor retarder, attic and crawlspace ventilation, general condition of interiors, and prevention of deterioration of structure and systems.
- 11 Structural Deficiencies:** _____ These are deficiencies with the fabric of the building. It may include the foundations, the roof or wall structure, the materials used, the insulation and vapor retarders, the attic or crawl space ventilation and the general condition of interior finishes. Foundation systems are included in this category.
- 12 Mechanical Deficiencies:** _____ These are deficiencies in the plumbing, heating, ventilating, air conditioning, or medical air systems, interior mechanical utilities, requiring maintenance due to normal wear and tear that would result in system failure.

- 13 **Electrical Deficiencies:** _____ These are deficiencies with normal or emergency power, electrical generating and distribution systems, interior electrical and communications utilities, fire alarm systems, power systems and communications systems within a building that should be repaired or replaced on a recurring basis due to normal wear and tear that would otherwise result in system failure.
- 14 **Utilities M & R:** _____ This category is used for site utilities for incoming services to facilities that are required for the building to be fully operational. Deficiencies may include sewer and water lines, water wells, water tanks, natural gas and propane storage, electric power and telecommunications distribution, etc.
- 15 **Grounds M & R:** _____ Real property grounds components that should be replaced on a recurring basis due to normal wear and tear. Deficiencies with respect to trees, sod, soil erosion, lawn sprinklers, parking, bridges, pedestrian crossings, fences, sidewalks & roadways, and site illumination etc. are considerations.
- 16 **Painting M & R:** _____ Any painting project that is large enough to require outside contractors or coordination with other programs.
- 17 **Roof M & R:** _____ Deficiencies in roofing, and related systems including openings and drainage.
- 18 **Seismic Mitigation:** _____ Deficiencies in seismic structural items or other related issues to seismic design, including material improperly anchored to withstand current seismic requirements effect. The elements under consideration should include the cost incidental to the structural work like architectural and finishes demolition and repairs.

B. PHOTOGRAPHS

We have attached photographs depicting the various deficiencies described in the narrative, itemized in the summary below. Photos do not cover all deficiencies and are intended to provide a visual reference to persons viewing the report not familiar with the facility.

We have included additional photos as Appendix B for general reference. These are intended to add additional information to the specific deficiencies listed and provide general background information.

C. COST ESTIMATE GENERAL PROVISIONS

1) New Clinic Construction

- a. Base Cost: The Base Cost provided in Section VI of this report is the direct cost of construction, inclusive of general requirements (described below) and contingency for design unknowns (an estimating contingency). The base cost is exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The Project Factors and Area Cost Factor are multipliers of the base costs.
- General Requirements are based on Anchorage costs without area adjustment. It is included in the Base Cost for New Clinics. These costs are indirect construction costs not specifically identifiable to individual line items. It consists of supervision, materials control, submittals and coordination, etc.
 - The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned.
- b. Project Cost Factors
- Equipment Costs for new medical equipment has been added at 17% of the cost of new floor space.
 - Design Services is included at 10% to cover professional services including engineering and design.
 - Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.
 - Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.
- c. Area Cost Factor: The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each community, following the site visit, and were modified, if necessary.
- d. Estimated Total Project Cost of New Building: This is the total estimated cost of the project, including design services. The construction contract will be work subject to Davis Bacon wages, and assumes construction before year-end 2002. No inflation factor has been applied to this data.

2) Remodel, Renovations and Additions

- a. Base Cost: The Base Cost provided in the specific deficiency sheets is the direct cost of construction, exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Most of the deficiency items do not constitute projects of sufficient size to obtain efficiency of scale. The estimate assumes that the projects are completed either individually, or combined with other similar projects of like scope. The numbers include moderate allowances for difficulties encountered in working in occupied spaces and are based on remodeling rather than on new construction costs. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The General Requirements, Design Contingency and Area Cost Factors are multipliers of the base costs.
- The cost of Additions to clinics is estimated at a unit cost higher than new clinics due to the complexities of tying into the existing structures.
 - Medical equipment is calculated at a flat rate of \$32/SF for additions of new space only and is included as a line item in the estimate of base costs.
- b. General Requirements Factor: General Requirements Factor is based on Anchorage costs without area adjustment. The factor is 1.20. It is multiplied by the Base Cost to get the project cost, exclusive of planning, architecture, engineering and administrative costs. This factor assumes projects include multiple deficiencies, which are then consolidated into single projects for economies of scale.
- c. Area Cost Factor: The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each community, following the site visit, and were modified, if necessary.
- d. Contingency for Design Unknowns (Estimating Contingency): The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned. The factor used is 1.15.
- e. Estimated Total Cost: This is the total estimated bid cost for work completed under Davis Bacon wage contracts, assuming construction before year-end 2002. This is the number that is entered in the front of the deficiency form. No inflation factor has been applied to this data.
- f. Project Cost Factors: Similar to new clinics, the following project factors have been included in Section VI of this report.
- Design Services are included at 10% to cover professional services including engineering and design.
 - Construction Contingency is included at 10% of the Adjusted Costs to cover changes encountered during construction.

- Construction Administration has been included at 8% of the Adjusted Costs. This is for monitoring and administration of the construction contract.

- g. Estimated Total Project Cost of Remodel/Addition: This is the total estimated cost of the project including design services, the construction contract cost for work completed under Davis Bacon wages and assuming construction before year-end 2002. No inflation factor has been applied to this data.

V. SUMMARY OF EXISTING CLINIC DEFICIENCIES

The attached sheets document deficiencies and provide recommendations for repairs or accommodation of current needs. A cost estimate for accomplishing the proposed modifications is also attached. The summary addresses individual deficiencies. If all deficiencies were to be addressed in a single construction project, there would be cost efficiencies not reflected in this tabulation.

These sheets are reports from the Access Data Base of individual Deficiencies compiled on individual forms and attached for reference.

Refer to Section VI. New Clinic Analysis for a comparison of remodel/addition to new construction.

Alaska Rural Primary Care Facility

ANTHC

Code and Condition Survey Report

Bristol Bay Area Health Corporation

(Summary Listing of Deficiencies by Code)

Clinic: 11 Manakotak

Deficiency Code	Reference	Work Description	Cost
01	Patient Care	Ama16 Renovate 1092 SF of existing clinic space.	\$116,231.00
02	Fire/Life Safety	Ama07 Remove framed enclosure and add an exterior mechanical room.	\$18,853.00
02	Fire/Life Safety	Ama13 Remove all inappropriate storage materials from crawl space.	\$1,067.00
02	Fire/Life Safety	Ema01 Remove stored equipment next to electrical panel.	\$199.00
02	Fire/Life Safety	Ema02 Install cover or breaker in open panel knockout.	\$1,334.00
02	Fire/Life Safety	Ema03 Separate the neutrals and grounds in the electrical panel.	\$351.00
02	Fire/Life Safety	Ema06 Replace the light at the main entrance and install a light fixture at the secondary exit	\$1,357.00
02	Fire/Life Safety	Ema07 Install battery back-up flashing style exit signs at the exits.	\$1,979.00
02	Fire/Life Safety	Ema08 Install emergency exit lights in the clinic near the exits and in the exam rooms.	\$2,862.00
02	Fire/Life Safety	Ema10 Install additional receptacles in the office areas and the exam rooms.	\$3,495.00
02	Fire/Life Safety	Ema11 Correct the wiring deficiencies for two existing receptacles the two exam rooms.	\$1,405.00
02	Fire/Life Safety	Ema12 Hard wire the water heater back to a new circuit in the electrical panel.	\$1,126.00
02	Fire/Life Safety	Ema13 Hard wire the furnace back to a new circuit in the electrical panel.	\$1,262.00
02	Fire/Life Safety	Ema14 Install GFCI receptacles in the restroom.	\$1,782.00
02	Fire/Life Safety	Ema15 Drive the grounding rod serving the meter base fully into the ground.	\$137.00
02	Fire/Life Safety	Mma01 Construct a filter box in the return air duct and install filters.	\$1,866.00
02	Fire/Life Safety	Mma02 Replace furnace.	\$9,895.00
02	Fire/Life Safety	Mma04 Change furnace flue to provide adequate clearance to combustibles.	\$9,733.00

Alaska Rural Primary Care Facility

ANTHC

Code and Condition Survey Report

Bristol Bay Area Health Corporation

(Summary Listing of Deficiencies by Code)

02	Fire/Life Safety	Mma05	Install an appropriate combustion air system for the furnace.	\$4,259.00
02	Fire/Life Safety	Mma06	Install a ducted return air system for the furnace.	\$5,831.00
02	Fire/Life Safety	Mma08	Re-support the fuel tank with stable supports.	\$6,119.00
02	Fire/Life Safety	Mma09	Install a proper vent for the fuel tank.	\$330.00
02	Fire/Life Safety	Mma10	Provide fuel gauge for fuel tank.	\$275.00
02	Fire/Life Safety	Mma11	Support the fuel piping between the tank and the building and in the building.	\$330.00
02	Fire/Life Safety	Mma12	Provide a fusible shutoff valve for the fuel oil supply piping in the furnace room.	\$392.00
02	Fire/Life Safety	Mma15	Install seismic straps on the water heater.	\$181.00
02	Fire/Life Safety	Mma16	Silicon seal the base of the toilet to the floor in the restroom.	\$69.00
02	Fire/Life Safety	Mma17	Install tempered water valves to protect from scalding.	\$244.00
03	Safety	Ema05	Install weather proof GFCI electrical receptacles on the outside of the building.	\$2,292.00
03	Safety	Mma14	Install a drip pan below the water heater and pipe the P&T relief to the pan.	\$551.00
04	Environmental Qualit	Ama11	Replace sheet vinyl with integral cove base.	\$12,807.00
04	Environmental Qualit	Mma03	Provide ventilation for the clinic.	\$21,690.00
04	Environmental Qualit	Mma18	Install hot water recirculation for the water heater.	\$1,596.00
04	Environmental Qualit	Mma19	Install a janitor sink in the facility.	\$3,291.00
05	Program	Ema04	Add additional circuits for outlets throughout the clinic.	\$1,380.00
05	Program	Ema09	Replace the light fixtures throughout the facility.	\$7,527.00
05	Program	Mma20	Install new wrist blade type handles for the clinic sinks	\$3,619.00
06	Supportable Space N	Ama01	Add 897 SF to meet minimum APCF program space requirements.	\$420,040.00
07	Disability Access	Ama03	Construct new stairs, handrails and guardrails at rear exit.	\$9,701.00
07	Disability Access	Ama04	Construct new stairs, handrails and guardrails at main entry.	\$9,701.00

Alaska Rural Primary Care Facility

ANTHC

Code and Condition Survey Report

Bristol Bay Area Health Corporation

(Summary Listing of Deficiencies by Code)

07	Disability Access	Ama05	Re-construct ramp to meet UBC and ADA requirements.	\$31,292.00
07	Disability Access	Ama06	Re-construct door frame. Remove and replace threshold.	\$2,916.00
07	Disability Access	Ama08	Remove threshold, repair sheet vinyl and install ADA approved threshold.	\$536.00
07	Disability Access	Ama09	Re-design space for access to toilet room.	\$1,684.00
07	Disability Access	Ama10	Re-design space for accessibility compliance.	\$7,296.00
07	Disability Access	Ama14	Replace exterior door hardware.	\$1,012.00
07	Disability Access	Ama15	Replace interior door hardware.	\$3,161.00
08	Energy Conservation	Ama02	Add insulation. Repair truss ends. Replace deteriorating siding.	\$27,816.00
08	Energy Conservation	Mma07	Insulate the supply air ductwork in the cold attic.	\$1,867.00
11	Structural M & R	Ama12	Construct new foundation and fill abandoned water well with gravel.	\$143,141.00
12	Mechanical M & R	Mma13	Replace the electric water heater.	\$1,649.00
12	Mechanical M & R	Mma21	Install plumbing vents that extend through the roof of the building.	\$917.00

Code / Conditions Subtotal:	\$374,175.00
Remodel Subtotal:	\$116,231.00
Addition Subtotal:	\$420,040.00
Clinic Total:	\$910,446.00

VI. NEW CLINIC ANALYSIS

The analysis of whether a new clinic is required is based on the Denali Commission standard of evaluation that "New Construction is viable if the cost of Repair/Renovation and Addition exceeds 75% of the cost of New Construction".

We have determined the cost of a New Clinic Construction to meet the Alaska Rural Primary Care Facility (ARPCF) Space Guidelines for this size of community. We have also determined the cost of Repair/Renovation & Addition to the existing clinic to meet the same ARPCF Space Guidelines.

A. PROJECTED COST OF A NEW CLINIC

The cost of a New Denali Commission 2000 SF Medium Clinic in Manokotak is projected to be:

• Base Anchorage Construction Cost per sf.		\$183
• Project Cost Factor:	@ 45%	\$ 82
Medical Equipment	17%	
Construction Contingency	10%	
Design Fees	10%	
Construction Administration	8%	
• Multiplier for Community	@ 1.69	\$183
Adjusted Cost per SF		\$448

Projected Cost of a New Clinic: 2000 sf. X \$448 = \$896,000

B. PROJECTED COST OF THE REPAIR/RENOVATION & ADDITIONS FOR EXISTING CLINIC

• Code & Condition Repairs/Renovations	.....	\$374,175
(Cost from Deficiency Summary)		
• Remodel/Upgrade Work (Def. Code 01 / Def. Ama16)	.....	\$116,231
100% of clinic 1092 SF = 1092 @ \$106/SF		
• Additional Space Required by ARPCF – 897 SF (Def Code 06 / Def. Ama01)		
o Base Anchorage Cost	.....	\$174
Medical Equipment.....		32
o Additional Costs	.....	72
General Requirements	20%	
Estimation Contingency	15%	
o Multiplier for Community at 1.69 AAF	.....	\$190
Adjusted Cost per SF	.....	\$468
Total Addition Cost of 897SF at \$468 =	.....	\$420,040
Project Cost Factor @ 28% =	.....	\$254,925
Construction Contingency	10%	
Construction Administration	8%	
Design Fees	10%	

Total Cost of Remodel/Addition \$1,165,371

C. COMPARISON OF EXISTING CLINIC RENOVATION/ADDITION VERSUS NEW CLINIC

Ratio of Renovation/Addition versus New Clinic is: \$1,165,371 / \$696,000 = 1.30 x cost of New Clinic

Based on Denali Commission standard of evaluation; the remodel/addition costs are more than 75% of the cost of new construction. A new clinic is recommended for this community.

- Note: Community factors may have been adjusted for recent 2001 cost adjustments and may have changed from previously published data distributed to the cities.

D. OVERALL PROJECT COST ANALYSIS

The overall project cost analysis below incorporates land, multi-use, utility costs, and road access costs, and project management fees if any are associated with the project.

Item	Quantity	Units	Unit Cost	Area Adjustment Factor	Total Cost	Allowable under "Small" Clinic Process (yes/no)
Primary Care Clinic (Allowable)	2000	SF	\$265.64	1.69	\$897,864	yes
Clinic (Non-allowable portion)	0	SF	\$265.64	1.69	\$0	no
Land	15,000	SF	\$2.00	1	\$30,000	yes
Multi-Use Facility Design Cost	0	LS	\$0.00	1	\$0	yes
Multi-Use Facility Construction Cost	0	LS	\$0.00	1	\$0	no
Utility						
Extension/Improvements	1	LS	\$15,000	1	\$15,000	yes
Road access & parking lot improvements	1	LS	\$5,000	1	\$5,000	yes
Subtotal Project Cost					\$947,864	
Project Management Fees					Unknown	
Total Project Cost					Unknown	

VII. CONCLUSIONS AND RECOMMENDATIONS

The existing Manokotak Health Clinic has served the community well for many years. Based on current ANTHC and NSHC delivery models for health care to rural Alaska, the facility is inadequate in size and condition to meet delivery needs. The existing structure could be adapted for other less clinical uses without extensive remodeling.

After careful review it is the recommendation of the consultant team that a new Denali Commission 2000 SF medium clinic be considered for Manokotak. The 897 SF addition to the clinic is required to meet current ARPCF space guidelines. The major renovation and upgrade of existing clinic space will cost 1.30 times the cost of a new clinic. This results in our recommendation for a new clinic for this community.