
BACKGROUND:

This issuance updates and revises Chapter 13-4 "Site Selection and Evaluation Process" of Part 13 "Planning Documents and Reports" in Volume II "Health Care Facilities Planning" of the Indian Health Service, Technical Handbook for Environmental Health and Engineering.

Date

Gary J. Hartz, P.E.
Assistant Surgeon General
Director
Division of Facilities and
Environmental Engineering
Office of Public Health
Indian Health Service

MATERIAL TRANSMITTED

1. Volume II, Chapter 13-4
-
-

HANDBOOK MAINTENANCE

1. Place this Transmittal Notice behind "TAB B" of Volume I.
2. Replace Chapter 13-4 of Volume II.

PART 13 - SITE SELECTION AND EVALUATION PROCESS

CHAPTER 13-4 SITE SELECTION AND EVALUATION PROCESS

13-4.1	INTRODUCTION	(13-4)	1
13-4.2	SITE SELECTION PROCESS	(13-4)	1
13-4.3	RESPONSIBILITY	(13-4)	4
	PHASE I	(13-4)	7
	PHASE II	(13-4)	8
APPENDIX A - PHASE I PROTOTYPE REPORT		(13-4)	11
APPENDIX B - PHASE II PROTOTYPE REPORT		(13-4)	29

13-4.1 INTRODUCTION

This chapter of the Technical Handbook describes the Indian Health Service (IHS) health care facility site selection and evaluation process and delineates the responsibilities of the preparing and approving parties. The site selection process is a cooperative effort involving the preparing party and all affected tribes. Generally, the process consists of two phases in which proposed sites for each new, replacement, or expansion health care facility construction project are reviewed with the purpose of selecting one site that is mutually acceptable to IHS and all affected tribes.

The IHS maintains various priority lists of facilities needs. Each project on these lists, that involves new construction or replacement and/or expansion of existing health care facilities, including quarters units in some cases, requires a Program Justification Document (PJD), a Program of Requirements (POR), a project cost estimate, and a Phase II Site Selection Evaluation Report (SSER). In addition, a Phase I SSER is required for all new and replacement facilities. Because Engineering Services - (Dallas or Seattle) (ES) uses the Phase II SSER when preparing facility budget cost estimates and because design may not begin until a site has been selected, it is essential to complete the site selection process and the Phase II SSER as early in the planning process as possible. When a Phase I SSER is required, it supports the PJD. The Phase II SSER supports the POR.

13-4.2 SITE SELECTION PROCESS

PART 13 - SITE SELECTION AND EVALUATION PROCESS

GENERAL - The site selection process is initiated when the IHS Headquarters Division of Facilities and Environmental Engineering (DFEE), Office of Public Health (OPH), indicates that the draft PJD complies with IHS facilities planning guidelines and is ready to be completed for approval. If the proposed project includes new construction or replacement of an existing facility, the respective IHS Area Office is responsible for the completion of the Phase I Site Selection and Evaluation Report (SSER). During Phase I, a team, consisting of representatives from the IHS Area Office, Service Unit, and tribal personnel, evaluates various sites for the proposed project. The Phase II, or the final site analysis process, begins as soon as possible after the Phase I SSER has been approved and funding for the Phase II is available. If no Phase I SSER is required, Phase II is begun as soon as funding is available from IHS Headquarters. The Phase II SSER effort includes a detailed technical analysis and, if necessary, an update of any information appearing in a Phase I SSER. The funding provided by the IHS Headquarters is for Phase II site survey and plan, site use plan, soils investigation, and archaeological and/or site historical surveys. All other costs associated with the preparation of the Phase I and II SSERs are borne by the preparing office.

The IHS Area Office is responsible for initiating all phases of the site selection evaluation process by setting up a survey team, completing the survey and preparing a SSER. The approving official is the Associate Director, Office of Environmental Health and Engineering at the applicable IHS Area. After each SSER is approved, copies, with original signatures, are to be provided to the respective ES and to the Director, DFEE, OPH, at the IHS Headquarters. The IHS Headquarters will concur with the approval of the Phase I SSER, if such report is required, in its approval of the PJD. In turn, the IHS Headquarters approval of the POR will concur with approval of the Phase II SSER. As desired, the responsible IHS Area office can retain the services of the applicable ES to assist with the preparation of any aspect of the SSER.

PHASE I - In the Phase I Site Selection and Evaluation (SSER) process, each potential site is surveyed in terms of area requirements, accessibility, adequacy of support services, potential flood problems, etc. The sites are evaluated,

PART 13 - SITE SELECTION AND EVALUATION PROCESS

rated, and ranked based on predetermined criteria, and the applicable ES prepares a Phase I SSER documenting the findings and conclusions obtained during the survey. The report indicates a specific site as the first choice for the proposed facility. The Phase I SSER is used as supporting documentation for the final PJD and ensures that suitable sites are available for the proposed facility. A Phase I SSER is not necessary if the proposed project is limited to modernization/expansion of an existing facility because it is assumed the existing site will be used.

Before the Phase I survey begins, at least three sites must be identified that have adequate surface area and other desirable characteristics for placement of the planned facility. All affected tribes must be consulted regarding the general location of the proposed facility and should be involved in selecting specific sites for review. Any site selected should have the written concurrence of all affected tribes. Sites located adjacent to existing facilities that are being replaced should be considered and evaluated during Phase I. If a potential site is on Trust land, it must be set-aside in writing by the tribal officials and its availability for construction of a health care facility verified by the Bureau of Indian Affairs (BIA). Normally, tribal written concurrences and/or set-asides are in the form of tribal resolutions.

The IHS Area Office, upon notification by the IHS Headquarters, DFEE, that the draft PJD may be finalized for approval, establishes a site study team, schedules site visits and prepares the appropriate SSER. If a Phase I SSER is required, the IHS Area Office selects members for the site study team and schedules the Phase I survey. The site study team should consist of at least three members: an IHS Area representative; a representative from the applicable IHS Service Unit; and one tribal representative from each tribe. Representatives of other entities, including the ES (if ES services are retained) or the Bureau of Indian Affairs (BIA), may be included if deemed necessary. When the survey is completed, the required data is compiled along with the findings of the various team members and the Phase I report is prepared in accordance with the guidelines provided herein and in Appendix A, which contains a prototype Phase I SSER.

PART 13 - SITE SELECTION AND EVALUATION PROCESS

PHASE II - A Phase II SSER is necessary for all facilities and is completed as supporting documentation for the final POR. If a Phase I SSER has been completed or is not required, the IHS Area Office is responsible for the completion of a Phase II SSER. The Phase II site selection survey is to be organized as soon as the project PJD has been approved by the IHS Headquarters. The IHS Headquarters will provide funding for the site survey, use plan, soil reports, and archaeological and/or historical surveys portions of the Phase II SSER. Completing the Phase II SSER is a cooperative effort involving the applicable IHS Area Office and all affected tribes. The applicable ES can be retained to assist as needed.

Before the Phase II SSER is initiated, the IHS Area Office must obtain documentation from the BIA indicating that the sites, on trust land, that were proposed for selection consideration during Phase I, are still available for the proposed facility and that any of these sites, when finally selected, will be withdrawn from the tribal inventory.

Because a significant amount of time may have elapsed between completion of the Phase I SSER and commencement of Phase II, it is very important that the Phase I SSER be reviewed to ensure that the parameters which resulted in the original ranking of the sites have not changed. If these parameters have changed significantly, the Phase I SSER should be reviewed by the selection team to determine if a new ranking would result from these changes. If a new ranking results, a revised Phase I SSER must be prepared prior to commencing detailed evaluation of a specific site under Phase II. This revised Phase I SSER can be included in the Phase II SSER for the selected site. Appendix B contains a prototype Phase II SSER.

13-4.3 RESPONSIBILITY

As each phase of the site selection process is completed, the reports will be reviewed and recommended for approval by the preparing office, then forwarded to the Associate Director, Office of Environmental Health and Engineering at the applicable IHS Area, for approval.

PART 13 - SITE SELECTION AND EVALUATION PROCESS

The respective IHS Area has prime responsibility for completion of both the Phase I and Phase II SSER. This includes the responsibility for obtaining and verifying the data required to complete these reports.

The respective IHS Area Office is responsible for contacting the clearinghouses, committees, state and local officials, and other Federal agencies while preparing the elements of the Phase II SSER for which they have prime responsibility. A list of applicable Executive Orders, Public Laws and Regulations follows:

- a. Executive Order 12072
(Federal Space Management)
- b. Executive Order 11988
(Flood Hazard)
- c. Executive Order 12003
(Energy Conservation)
- d. Executive Order 11593
(Archaeological)
- e. Public Law 59-209 (Antiquities Act)
- f. Public Law 74-292 (Historic Sites)
- g. Public Law 85-627 (Archaeological Salvage)
- h. Public Law 86-523 (Reservoir Salvage)
- I. Public Law 88-665 (Historic Preservation Act)
- j. Public Law 93-112 (Rehabilitation Act)
- k. Public Law 91-190 (National Environmental Policy Act)
- l. Public Law 91-646 (Relocation Assistance)
- m. Public Law 93-291 (Archaeological)
- n. Public Law 91-524 (Agricultural Act)
- o. Public Law 90-480 (Architectural Barriers Act)
- p. Public Law 94-163 (Energy) (EPCA)
- q. Public Law 95-619 (Energy) (NECPA)
- r. Public Law 100-418 (Usage of Metric System)
- s. OMB Circular A-2 (Utilization, Retention and Acquisition of Federal Property)
- t. OMB Circular A-95 (Conformity with State or Regional Plans)
- u. NFPA 101 Life Safety Code (Latest Edition)
- v. Other Regulations, Ordinances, etc., pertaining to specific local and tribal governments

The IHS Headquarters, DFEE, must indicate that the draft PJD complies with IHS planning guidelines and policies and that it is

PART 13 - SITE SELECTION AND EVALUATION PROCESS

ready to be prepared in final for approval before the site selection and evaluation process can begin. Before the Phase II SSER can be completed, funds must be provided by IHS Headquarters for the previously identified elements of the Phase II SSER. Funds cannot be provided until appropriated by the Congress for the project.

To assist with the understanding of the established responsibilities, the following definitions are provided:

IHS Area: IHS Area Director or designee.

IHS HQ: IHS Headquarters. Currently responsible for health care facilities planning and construction is the Director, Division of Facilities and Environmental Engineering (DFEE), Office of Public Health (OPH).

ES: Director, Engineering Service (Dallas or Seattle), or designee.

Prime: The office(s) having "prime" responsibility for a listed task/activity is responsible for all planning, direction, execution, and follow-up of that task/activity. Where more than one office is indicated, there is joint responsibility, which requires the offices concerned to agree on who takes the lead, the equitable division of work, and a time schedule for completion of the task. Office(s) having a "prime" responsibility are to contact the office(s) which have "support" responsibilities to determine the extent to which their joint efforts are to be coordinated.

Phase I: This is the initial phase of the site selection and evaluation process. A Team, consisting of representatives from the respective IHS Area Office, the IHS Service Unit, and applicable tribe(s), evaluates various sites for each proposed health care facility project in the IHS Area and selects one for further consideration during Phase II.

Phase II: This is the final phase of the site selection and evaluation process in which the recommended site is reviewed in detail, to ensure its

PART 13 - SITE SELECTION AND EVALUATION PROCESS

adequacy and to identify potential problems that may need addressing during design and construction.

Support: The office(s) with "support" responsibility is to provide timely assistance and consultation to the office(s) having "prime" responsibility in accordance with a predetermined plan for coordination of joint efforts.

Tribe: Tribal governing bodies or designated tribal organizations.

The following table describes task activities related to the site selection and evaluation process for proposed IHS health care facilities and identifies the office or group having prime and support functions.

TASK ACTIVITY	RESPONSIBILITY	
	PRIME	SUPPORT
PHASE I		
1. To applicable IHS Area(s) and ES, identify projects, in Phase III of the IHS Health Facilities Construction Priority System, that require SSERs.	IHS-HQ (DFEE)	IHS Area(s), ES
2. Determine general location for proposed facility and designate at least three specific potential sites for consideration.	Tribe	IHS Service Unit (SU), IHS Area
3. Provide a tribal resolution to the IHS Area, identifying the potential sites, and indicating the tribe's support for the sites for the proposed facility.	Tribe	IHS Area, SU
4. Advise applicable IHS Area and ES that the final draft PJD complies with IHS planning criteria and is ready to be prepared for final approval. Provide an approved final draft copy of PJD to the IHS Area and ES.	IHS-HQ (DFEE)	IHS Area, SU, Tribe, ES

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

	<u>TASK ACTIVITY</u>	<u>RESPONSIBILITY</u>	
		<u>PRIME</u>	<u>SUPPORT</u>
5.	Request the IHS Area to proceed with the preparation of the Phase I SSER, if applicable.	IHS HQ (DFEE)	
6.	Establish team to evaluate at least three sites. Establish schedule for the review and preparation of the Phase I SSER.	IHS Area	SU, Tribe
7.	Obtain and verify data required to complete the Phase I SSER.	IHS Area	SU, Tribe
8.	Complete Phase I SSER.	IHS Area	SU, Tribe
9.	Review the Phase I SSER and recommend it for approval. Forward four copies, with original signatures, to the approving official.	IHS Area	SU, Tribe
10.	Review and approve Phase I SSER.	Associate Director (AD), OEHE, IHS Area	IHS-HQ (DFEE)
11.	Furnish copies, with original signatures, of approved Phase I SSER to IHS-HQ (DFEE) and ES.	AD, OEHE, IHS Area	
12.	Maintain and keep current the results of the Phase I SSER.	IHS Area	SU, Tribe
13.	In approving the PJD, provide concurrence for the approved Phase I SSER.	IHS-HQ (DFEE)	
14.	Ensure that Phase I SSERs have been completed for projects in Phase III of the IHS Health Facilities Construction Priority System.	IHS-HQ (DFEE)	IHS Area, ES

PHASE II

	<u>TASK ACTIVITY</u>	<u>RESPONSIBILITY</u>	
		<u>PRIME</u>	<u>SUPPORT</u>
1.	Advise the IHS Area and ES that the final draft POR complies with IHS planning criteria and is ready to be prepared for final approval. Provide an approved final draft copy of POR to the IHS Area and ES.	IHS-HQ (DFEE)	IHS Area, SU, Tribe, ES
2.	Request the IHS Area to proceed with the preparation of the Phase II SSER.	IHS HQ (DFEE)	
3.	Provide funds to IHS Area for site survey, use plan, soils investigation and archaeological and/or historical survey elements of the Phase II SSER.	IHS-HQ	
4.	Obtain documentation from the BIA, verifying that the selected site is available for the proposed new facility, and that the site has been withdrawn from tribal inventory for use by the IHS.	IHS Area	SU
5.	Schedule and conduct site visit(s) to evaluate the site(s).	IHS Area	SU
6.	Obtain and verify data required for the Phase II SSER.	IHS Area	SU, Tribe
7.	Contact applicable Federal, State and local agencies, as required, to obtain necessary permits and clearances, e.g. road access, rights-of-way, etc.	IHS Area	SU, Tribe

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

	<u>TASK ACTIVITY</u>	<u>RESPONSIBILITY</u>	
		<u>PRIME</u>	<u>SUPPORT</u>
8.	For the proposed site, prepare an Environmental Assessment or an Environmental Impact Statement, when required, complying with applicable public laws and regulations, e.g., flood plain avoidance, archeological/historic preservation, etc. The Phase II SSER cannot be completed until an environmental clearance has been provided by the IHS Area Environmental Officer.	IHS Area	SU
9.	Complete Phase II SSER.	IHS Area	SU, Tribe
10.	Review the Phase II SSER and recommend it for approval. Forward four copies, with original signatures, to the approving official.	IHS Area	
11.	Review and approve Phase II SSER.	AD, OEHE, IHS Area	IHS-HQ (DFEE)
12.	Furnish copies, with original signatures, of the approved Phase II SSER to IHS-HQ (DFEE) and ES.	AD, OEHE, IHS Area	
13.	Maintain and keep current the results of the Phase II SSER.	IHS Area	SU, Tribe
14.	In approving the POR, provide concurrence of the approved Phase II SSER.	IHS-HQ (DFEE)	
15.	Ensure that Phase II SSERs have been completed for projects in Phase III of the IHS Health Facilities Construction Priority System.	IHS-HQ (DFEE)	IHS Area, ES

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

APPENDIX A - PHASE I PROTOTYPE REPORT

PHASE I

SITE SELECTION AND EVALUATION REPORT

INDIAN HEALTH SERVICE

[Name and Type of Facility]

[Location], [State]

[Month] [Year]

[Area Name] Area Indian Health Service
Indian Health Service

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

Department of Health and Human Services

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

PHASE I

SITE SELECTION AND EVALUATION REPORT
INDIAN HEALTH SERVICE
[Name and Type of Facility]
[Location], [State]

RECOMMEND APPROVAL:

[Name] _____ Date _____
Director
Division of Facilities Management
Office of Environmental Health and Engineering
[Area Name] Area Indian Health Service
Indian Health Service

APPROVE:

[Name] _____ Date _____
Associate Director
Office of Environmental Health and Engineering
[Area Name] Area Indian Health Service
Indian Health Service

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

PHASE I

SITE SELECTION AND EVALUATION REPORT
INDIAN HEALTH SERVICE
[Name and Type of Facility]
[location], [State]

TABLE OF CONTENTS

- I. EXECUTIVE SUMMARY
- II. LAND AREA REQUIREMENTS
- III. UTILITIES REQUIREMENTS
- IV. INFORMATION ABOUT AVAILABLE SITES
- V. EVALUATION OF AVAILABLE SITES

TABS

- A MAPS
- B TRIBAL RESOLUTIONS
- C RATING SHEETS

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

I. EXECUTIVE SUMMARY

[The Executive Summary should be a succinct summarization of the report and should include at least the following:]

A. Project Description:

[Using the draft Program Justification Document (PJD), provide a brief narrative that includes the name and location of the IHS Area, the type and size of facility (For a health care facility, provide the gross area in square meters (m²).)(For staff quarters, provide the number of quarters units and the total gross area in m².), location of the proposed facility, and the facility site land area requirements in hectares (ha).]

B. Review Team:

[Provide the make-up of the review team, identifying names and organization of individuals involved.]

C. Methods Used:

[Provide information about methods used.]

D. Date of Site Investigation:

[Provide site investigation date(s).]

E. Evaluated Sites:

[Provide a list and location description of the proposed sites which were evaluated, and, if applicable, their relationship to the existing facility.]

F. Findings:

[Provide a brief description of the findings for each site.]

G. Recommendations:

[Provide recommendations for a site selection priority.]

II. LAND AREA REQUIREMENTS

[This portion of the report can be in a narrative format and include a brief description of the proposed project, including the health care facility (hospital, health center or health station); any other special site requirements such as a health care facility recreational area, and heliports/helipads; staff quarters; and staff quarters

PART 13 - SITE SELECTION AND EVALUATION PROCESS

recreational area(s). Building gross sizes are to be provided in square meters (m²) and land area requirements in hectares (ha).

For health care facilities, use the following table to determine land area requirements:

Land Area Required for Health Care Facility

Health Care Facility Size (gross m ²)	Land Area Requirement (ha)
0 - 2 300	1 - 2
2 301 - 3 900	2 - 3
3 901 - 5 600	3 - 4
5 601 - 8 400	4 - 6
8 401 - 11 100	6 - 7
11 101 - 16 700	7 - 10
16 701 and greater	10 and greater

The need for special facilities, other than that required for staff quarters, that would increase the site land area beyond that required for the health care facility, such as an airstrip, heliport/helipad, and health care facility recreational facilities, must be justified.

Land Area Required for Staff Quarters

For staff quarters, the land area requirement is determined by multiplying the number of quarters required times 0.135 ha. Space for staff quarters recreational facilities should be added equal to approximately 5 percent of the staff quarters land area site requirement. Space exceeding this 5 percent figure must be justified. Also, any other additional special facilities required for the staff quarters area must be justified.

Provide a table that shows the basic land area requirements for the health care facility, any special requirements for the health care facility, staff quarters, staff quarters recreational facilities, and any special requirements for staff quarters land area. The sum of these will provide the total land area requirement for the location.]

LAND AREA REQUIREMENTS

Hospital/Health Center/Health Station	[] ha
Other authorized special facilities for health care facility [List]	[] ha
Staff quarters	[] ha
Staff quarters recreational facilities	[] ha

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

Other authorized special facilities
 for staff quarters [List] [] ha

Total Land Area Requirements [] ha

III. UTILITIES REQUIREMENTS

[The utility usage requirements shown in this report are to be estimates based on current design criteria for new facilities. Adjustments should be made if the figures used are inappropriate for the specific location (e.g., all electric, higher heating requirements, Alaskan conditions, etc.) A statement indicating the rationale for any change should be included in the report. Using the following criteria, show in the report the applicable utility requirements, listed in the order shown.]

Below are the estimated usage requirements for the utilities expected to be needed for the proposed project, based on current design criteria for new facilities:

A. Water Supply:

HOSPITAL

[Number Annual outpatient visits (OPV) ¹] ÷ 250 days x
 114 liters/visit = _____ LPD ²
 (Includes persons accompanying patient.)

[Number Inpatient beds (IPB) ¹] x 568 LPD/bed = _____ LPD

[Number of staff ¹] x 114 LPD/staff = _____ LPD

SUBTOTAL Projected Hospital Water Supply Requirement = _____ LPD

1 Must agree with that shown in the PJD.

2 LPD = Liters per day

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

CLINIC (HEALTH CENTER or HEALTH STATION)

[Number Annual OPVs ¹] ÷ 250 days x 114 liters/visit = _____ LPD
(Includes persons accompanying patient.)

[Number of staff ¹] x 76 LPD/staff = _____ LPD

SUBTOTAL Projected Clinic Water Supply Requirement = _____ LPD

STAFF QUARTERS

[Number of staff quarters ³] x 1325 LPD/quarters = _____ LPD

SUBTOTAL Projected Quarters Water Supply Requirement = _____ LPD

TOTAL Projected Facility Water Supply Requirement = _____ LPD
(hospital/clinic + staff quarters)

B. Sewage Disposal:

HOSPITAL

[Subtotal projected hospital water usage] x 80% = _____ LPD

CLINIC (HEALTH CENTER or HEALTH STATION)

[Subtotal projected clinic water usage] x 80% = _____ LPD

STAFF QUARTERS

[Subtotal projected quarters water usage] x 80% = _____ LPD

TOTAL Projected Facility Sewage Requirement = _____ LPD
(hospital/clinic + staff quarters)

3 Estimated number of staff quarters for the facility shown in PJDQ.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

C. Electric:

HOSPITAL

[Building Gross Area] m² x 142 kWh/m²/yr = _____ kWh/yr ⁴

[Building Gross Area] m² x 0.09 kVA/m² = _____ kVA ⁵ demand

Assumed Energy Budget 473 kWh/m²/yr
(70% fuel, 30% electric)

CLINIC (HEALTH CENTER or HEALTH STATION)

[Building Gross Area] m² x 47 kWh/m²/yr = _____ kWh/yr

[Building Gross Area] m² x 0.11 kVA/m² = _____ kVA demand

Assumed Energy Budget 158 kWh/m²/yr
(70% fuel, 30% electric)

STAFF QUARTERS

[Gross Area for all quarters] m² x 33 kWh/m²/yr = _____ kWh/yr

[Gross Area for all quarters] m² x 0.01 kVA/m² = _____ kVA demand

Assumed Energy Budget 110 kWh/m²/yr
(70% fuel, 30% electric)

TOTAL Projected Facility Electric Requirement = _____ kWh/yr
(hospital/clinic + staff quarters)
= _____ kVA demand

D. Fuel:

HOSPITAL

Gas

[Building Gross Area] m² x 32 m³/m²/yr = _____ m³/yr

[Building Gross Area] m² x 0.02 m³/m²/hr = _____ m³/hr demand

4 kWh/yr = kilowatt-hour per year

5 kVA = kilovolt ampere

PART 13 - SITE SELECTION AND EVALUATION PROCESS

Propane

[Building Gross Area] m² x 47 liters/m²/yr = _____ liters/yr
[Building Gross Area] m² x 0.04 liters/m²/hr = _____ liters/hr demand

Oil

[Building Gross Area] m² x 31 liters/m²/yr = _____ liters/yr
[Building Gross Area] m² x 0.02 liters/m²/hr = _____ liters/hr demand

Assumed Energy Budget 1710 MJ/m²/yr
(70% fuel, 30% electric)

CLINIC (HEALTH CENTER or HEALTH STATION)

Gas

[Building Gross Area] m² x 11 m³/m²/yr = _____ m³/yr
[Building Gross Area] m² x 0.01 m³/m²/hr = _____ m³/hr demand

Propane

[Building Gross Area] m² x 15 liters/m²/yr = _____ liters/yr
[Building Gross Area] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Oil

[Building Gross Area] m² x 10 liters/m²/yr = _____ liters/yr
[Building Gross Area] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Assumed Energy Budget 570 MJ/m²/yr
(70% fuel, 30% electric)

STAFF QUARTERS

Gas

[Gross Area for all quarters] m² x 7 m³/m²/yr = _____ m³/yr
[Gross Area for all quarters] m² x 0.01 m³/m²/hr = _____ m³/hr demand

Propane

[Gross Area for all quarters] m² x 11 liters/m²/yr = _____ liters/yr
[Gross Area for all quarters] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Oil

[Gross Area for all quarters] m² x 7 liters/m²/yr = _____ liters/yr
[Gross Area for all quarters] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Assumed Energy Budget 399 MJ/m²/yr
(70% fuel, 30% electric)

PART 13 - SITE SELECTION AND EVALUATION PROCESS

TOTAL Projected Facility Fuel Requirements (hospital/clinic + staff quarters)	Gas	_____	m ³ /yr
	Gas	_____	m ³ /hr
			demand
	Propane	_____	liters/yr
	Propane	_____	liters/hr
			demand
	#2 Oil	_____	liters/yr
	#2 Oil	_____	liters/hr
			demand

E. Solid Waste Disposal:

[Describe requirements for the site.]

F. Hazardous Waste Disposal:

[Describe requirements for the site.]

G. Telephone:

[Describe requirements for the site.]

H. Telecommunications (Television, etc.):

[Describe requirements for the site.]

IV. INFORMATION ABOUT AVAILABLE SITES

[Discuss the sites that have been made available, referring to the maps in Tab A. Discuss the designations of availability of the sites being considered, referring to the tribal resolutions in Tab B. Then, provide the detailed information outlined below for each proposed site.]

For **each site** being considered, the below site information is to be provided:

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

PHASE I SSER SITE DESCRIPTION FORM

Site # []

1. Land Area Size: [] ha

2. Location:

[Describe site location in relation to nearest town, etc. and if applicable, existing IHS facility. Reference the area and site maps provided in Tab A, which should show all proposed sites and any existing IHS facility, as applicable.]

3. Population:

[Describe population of the community and surrounding area.]

4. Economy:

[Describe existing commercial, industrial and agricultural enterprises in the community and surrounding area. Include a description of the types of available employment, and the unemployment rate. (As applicable, this information should identify any differences for "local" or "non-local" hire staff.)

5. Housing:

[Describe type and condition of housing in the community and surrounding area. (As applicable, this information should identify any differences for "local" or "non-local" hire staff.)

6. Community Services:

[Describe services available in the community and surrounding area, including educational opportunities, medical and dental care, police protection, retail and shopping facilities, restaurants, churches, recreational facilities, theaters, etc. (As applicable, this information should identify any differences for "local" or "non-local" hire staff.)

7. Fire Protection:

[Describe fire fighting capability in the immediate area of the site including distance to nearest fire station, type of equipment, volunteer vs. full-time, etc.]

8. Access:

[(The Phase I SSER can contain brief information for the noted items of concern. The Phase II SSER is to contain detailed information.)

PART 13 - SITE SELECTION AND EVALUATION PROCESS

Describe access to the community and surrounding area from larger population centers and major cities via the existing road system. Address the access currently available to the site, and discuss any preliminary perceived improvements that might have to be made for access to and on the site. Provide preliminary verification that access to any other roadway is not restricted by other agencies. Provide information about any perceived easement requirements.]

9. Transportation:

[Describe all public transportation available, including rail, air, bus and automotive.]

10. Unique Considerations:

[Describe any unique features in the immediate area of the site including airports, airstrips, industrial activities, etc.]

11. Climate:

[For the Phase I SSER, briefly describe the local climate conditions. For the Phase II SSER, describe local climate conditions that prevail throughout the year, identifying predominate normal changes, including average and extreme temperatures (degrees Celsius), amounts and types of precipitation, wind velocity and direction, and any unique conditions. Discuss vis-a-vis solar applications.]

12. Topography:

[Describe general terrain and topographic features of the site and surrounding area.]

13. Visual:

[Describe visual features in the immediate area of the site and identify desirable and undesirable features.]

14. Air Quality:

[Describe any known air pollution or air quality problems within the immediate area of the site.]

15. Surface Water:

[Identify any surface water channels that are on or run through the site and describe as applicable. Identify any known potential concern for the project.]

16. Flood Clearance:

PART 13 - SITE SELECTION AND EVALUATION PROCESS

[Provide information about any known potential flood problems. The Phase II SSER is to contain the required flood plain certification.]

17. Type of Soil:

[Describe general characteristics of soil at the site, and identify any known potential concern for the project.]

18. Archaeological Clearance:

[Provide any known information about potential archaeological concerns. The Phase II SSER is to include applicable reports of archaeological surveys.]

19. Existing Water Supply System(s):

a. Operating utility company: [Name, location]

b. Type of supply system:

[Describe the water supply system in detail. Include the type of source such as surface, wells, etc.; the type of treatment provided; and the quality of the water. A statement should be included concerning compliance of the water with the Safe Drinking Act.]

c. Water storage:

[Describe the type and size of storage available and provide the following listed information.]

Total storage volume	_____	liters
Less fire flow reserve*	_____	liters
Total usable storage	_____	liters
Days of storage	_____	DAYS

[If there is no usable fire flow reserve, the water supply requirements will have to be increased to include sufficient capacity for fire flow requirements. If such is the case, make note of it in this section.]

PART 13 - SITE SELECTION AND EVALUATION PROCESS

d. Water distribution:

[Describe the distribution system, including any perceived problems that may need to be addressed for the new facility, and provide the below listed information.]

System pressure static: Maximum _____ kPa ⁶

Working pressure: Minimum _____ kPa

Maximum flow nearest to proposed site: _____ LPS ⁷

e. Adequacy of system for proposed facility:

[Describe the adequacy of the present water system to meet the proposed facility demand, including source, treatment, storage, distribution. Describe any deficiencies in the present system and upgrades required to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

20. Existing Sewage Disposal System(s):

a. Operating utility company: [Name, location]

b. Type of disposal system:

[Describe any existing sewage disposal system in detail. Include the type and extent of the sewage collection system and the capacity and type of treatment system.]

c. Adequacy of system for proposed facility:

[Describe adequacy of present system to meet proposed facility demand, including collection and treatment systems. Describe any deficiencies in the present system and any required upgrade to the system to meet the proposed facility demand. Include necessary extension of the collection system or an expansion of the treatment system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet

⁶ kPa = Kilopascal

⁷ LPS = liters per second

PART 13 - SITE SELECTION AND EVALUATION PROCESS

the needs of the health care facility and any staff quarters. The system serving each individual site must be reviewed and evaluated.]

21. Existing Electrical Power Supply System(s):

a. Operating utility company: [Name, location]

b. Type of electric system:

[Describe the type and extent of electrical system in detail. Include system characteristics such as available voltage and phase, quality of the power (i.e. the differences in amplitude of the phases.)]

c. Reliability of electric system:

[Discuss reliability of electric system including frequency and duration of outages and historical data.]

d. Adequacy of system for proposed facility:

[Describe the adequacy of the present system to meet proposed facility demand, including generation and distribution systems. Describe any deficiencies in the present system and any required upgrades to the system needed to meet the proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e. HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

22. Existing Fuel Supply(s):

a. Operating utility company: [Name , Location]

b. Type of fuel:

[Describe type and extent of present fuel system including storage and distribution system. If no facility exists in this location describe the type of fuel available in the general area.]

c. Reliability of fuel supply:

[Discuss historical data relating to fuel supply including availability during peak needs.]

d. Adequacy of fuel supply for proposed facility:

[Describe the adequacy of the present fuel supply to meet proposed facility demand including storage and distribution systems. Describe

PART 13 - SITE SELECTION AND EVALUATION PROCESS

any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of the distribution system and expansion of the storage facilities. If possible, consider all other proposed developments, i.e. HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health care facility and staff quarters.]

23. Existing Solid Waste Disposal System:

a. Operating servicing company(ies): [Name , Location]

b. Type of disposal system:

[Describe the type of solid waste collection systems that are available for servicing the site, frequency of pick-up and type, and distance to the nearest EPA approved solid waste disposal site, or as required locally.]

c. Reliability of solid waste disposal system:

[Discuss reliability of system including scheduled and unscheduled collections.]

d. Adequacy of collection and disposal systems for the proposed facility:

[Describe the adequacy of the present solid waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e, HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

24. Existing Hazardous Waste Disposal System:

a. Operating servicing company: [Name , Location]

b. Type of disposal system:

[Describe the type of hazardous waste collection systems that are available for servicing the site, frequency of pick-up and type, and distance to the nearest EPA approved disposal location, or as required locally.]

c. Reliability of hazardous waste disposal system:

PART 13 - SITE SELECTION AND EVALUATION PROCESS

[Discuss reliability of system including scheduled and unscheduled collections.]

- d. Adequacy of collection and disposal systems for the proposed facility:

[Describe the adequacy of the present hazardous waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. The system serving each individual site must be reviewed and evaluated.]

25. Existing Telephone System:

- a. Operating utility company: [Name , Location]
b. Type of telephone system:

[Describe the type of telephone system available in the area of the project site. Describe the existing distribution system (trunk lines) available and whether satellite, overhead, underground or combination.]

- c. Reliability of telephone system:

[Discuss historical reliability of system including down time and frequency of repair.]

- d. Adequacy of system for proposed facility:

[Describe adequacy of present system to meet proposed facility demand including headend and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

26. Existing Telecommunications (television) System:

- a. Operating utility company: [Name , Location]
b. Type of telecommunications (television) system(s):

(Describe the type of telecommunications system(s) available in the area of the project site. Describe the existing distribution system

PART 13 - SITE SELECTION AND EVALUATION PROCESS

available and whether satellite, overhead, underground or combination.)

c. Reliability of telecommunications system:

(Discuss historical reliability of system including down time and frequency of repair.)

d. Adequacy of system for proposed facility:

(Describe adequacy of present system to meet proposed facility demand including distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.)

V. EVALUATION OF AVAILABLE SITES

Using the information documented in parts II, III and IV of this report, the below identified rating team evaluated and rated the proposed available sites:

(List members of rating team, their affiliation and qualifications.)

On [**date(s)**], the rating team conducted [(provide type of survey and method)], which allowed them to evaluate the proposed available sites. Below is a summary of ratings assigned by the team members, as shown on the copies of **signed** rating sheets contained in Tab C.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

SUMMARY OF EVALUATIONS

	<u>Site #1</u> <u>WTD Rating</u>	<u>Site #2</u> <u>WTD Rating</u>	<u>Site #3</u> <u>WTD Rating</u>
Rater #1	_____	_____	_____
Rater #2	_____	_____	_____
Rater #3	_____	_____	_____
Rater #4	_____	_____	_____
TOTALS	_____	_____	_____

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

Tab C
PHASE I SITE SELECTION AND EVALUATION REPORT
SITE RATING SHEET

Page 1 of 3

Rater's Name _____

Date _____

Proposed Facility Name & Location _____

	<u>SITE #</u>		<u>SITE #</u>		<u>SITE #</u>
		WTD.		WTD.	
<u>SITE SELECTION PARAMETERS</u>	<u>RATING</u>	<u>WT</u>	<u>RATING</u>	<u>WT</u>	<u>RATING</u>
IMPACT ON COMMUNITY					
Services	_____	x 2 =	_____	_____	_____
Labor	_____	x 2 =	_____	_____	_____
Education	_____	x 2 =	_____	_____	_____
Community Planning	_____	x 3 =	_____	_____	_____
Housing	_____	x 2 =	_____	_____	_____
Recreation	_____	x 1 =	_____	_____	_____
Medical Services	_____	x 2 =	_____	_____	_____
EMPLOYEE & USER CONSIDERATION					
Housing	_____	x 2 =	_____	_____	_____
Transportation	_____	x 2 =	_____	_____	_____
Shopping & Eating	_____	x 2 =	_____	_____	_____
Recreation	_____	x 1 =	_____	_____	_____
Education	_____	x 2 =	_____	_____	_____
Religion, Cultural, Etc.	_____	x 2 =	_____	_____	_____
Personal Protection	_____	x 3 =	_____	_____	_____
Employee Health Service	_____	x 2 =	_____	_____	_____
_____	_____	x 2 =	_____	_____	_____
Accessibility (Handicapped)	_____	x 3 =	_____	_____	_____
_____	_____	x 3 =	_____	_____	_____
PHYSICAL PARAMETERS					
Site Location	_____	* x 4 =	_____	_____	_____
Type of Terrain	_____	* x 3 =	_____	_____	_____
Vegetation Conditions	_____	* x 3 =	_____	_____	_____
Soil Conditions	_____	* x 3 =	_____	_____	_____
Water Availability	_____	* x 4 =	_____	_____	_____
Water Supply Adequacy	_____	* x 4 =	_____	_____	_____
Sanitary Sewer Avail.	_____	* x 4 =	_____	_____	_____
Sanitary Sewer Adequacy	_____	* x 4 =	_____	_____	_____
_____	_____	* x 4 =	_____	_____	_____

* See Page 3 of 3 for factors to be used in these elements

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

Tab C

PHASE I SITE SELECTION AND EVALUATION REPORT

Rater's Initials: _____

SITE RATING SHEET

Page 2 of 3

<u>SITE #</u>	<u>SITE #</u>	<u>SITE #</u>	<u>SITE #</u>	<u>SITE #</u>	<u>SITE #</u>
		WTD.			WTD.
<u>SITE SELECTION PARAMETERS</u>	<u>RATING</u>	<u>WT</u>	<u>RATING</u>	<u>WT</u>	<u>RATING</u>
Electric Power Avail.	*	x 4 =	_____	*	x 4 = _____
Electric Power Adequacy	*	x 4 =	_____	*	x 4 = _____
Fuel Availability	*	x 4 =	_____	*	x 4 = _____
Fuel Adequacy	*	x 4 =	_____	*	x 4 = _____
Telephone Services		x 3 =	_____		x 3 = _____
Fire Protection		x 4 =	_____		x 4 = _____
Drainage (Flood Plain)		x 3 =	_____		x 3 = _____
Aesthetics		x 3 =	_____		x 3 = _____
Archaeological		x 3 =	_____		x 3 = _____
Climate		x 3 =	_____		x 3 = _____
Access		x 4 =	_____		x 4 = _____
 ENVIRONMENTAL CONSIDERATION - FACILITY TO COMMUNITY					
Noise		x 3 =	_____		x 3 = _____
Air Pollution		x 3 =	_____		x 3 = _____
Visual Pollution		x 3 =	_____		x 3 = _____
Water		x 3 =	_____		x 3 = _____
Sewer		x 3 =	_____		x 3 = _____
Solid Waste		x 3 =	_____		x 3 = _____
Aesthetics		x 3 =	_____		x 3 = _____
Ecology		x 3 =	_____		x 3 = _____
Transportation		x 3 =	_____		x 3 = _____
Traffic		x 3 =	_____		x 3 = _____
 ENVIRONMENTAL CONSIDERATION - COMMUNITY TO FACILITY					
Noise		x 3 =	_____		x 3 = _____
Air Pollution		x 3 =	_____		x 3 = _____
Visual Pollution		x 3 =	_____		x 3 = _____
Water		x 3 =	_____		x 3 = _____
Sewer		x 3 =	_____		x 3 = _____
Solid Waste		x 3 =	_____		x 3 = _____
EMF**		x 3 =	_____		x 3 = _____
Aesthetics		x 3 =	_____		x 3 = _____
Ecology		x 3 =	_____		x 3 = _____
Transportation		x 3 =	_____		x 3 = _____
Traffic		x 3 =	_____		x 3 = _____
 PROGRAM SUITABILITY					
Adequate size of site		x 4 =	_____		x 4 = _____
Building Constraints		x 3 =	_____		x 3 = _____
Support Services		x 3 =	_____		x 3 = _____
Other benefits ***		x 3 =	_____		x 3 = _____

TOTAL WEIGHTED RATING _____

* See Page 3 of 3 for factors to be used in these elements (Electromagnetic Forces (High Voltage Power Lines)).

*** Other benefits available to Indian populace.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

Tab C
 PHASE I SITE SELECTION AND EVALUATION REPORT
SITE RATING SHEET

Page 3 of 3

WEIGHT FACTORS:

- 1 - Minimal importance
- 2 - Moderately more than minimal importance
- 3 - Moderate importance
- 4 - Moderately less than high in importance
- 4 - High in importance

RATING:

- 1 - Poor
- 2 - Fair
- 3 - Good
- 4 - Average
- 5 - Optimum

*Ratings for these items are as listed below in conjunction with the IHS Budget Cost Estimating System. These factors and ratings should be consistent with those used in budget cost estimates for the proposed facility.

Site Location

- Within Established Community 5
- Other Buildings Adjacent 4
- Virgin Isolated Site 3

Sanitary Sewer Availability

- Adjacent to Site 5
- Within 150 meters 4
- > 150 meters, < 460 meters 3

Type of Terrain

- Level 5
- Broken 4
- Hilly 3

Sanitary Sewer Adequacy

- Yes 5
- No 2

Vegetation Conditions

- Open 5
- Slightly Treed 4
- Treed 3

Electrical Power Availability

- Adjacent to Site 5
- Within 150 meters 4
- > 150 meters, < 460 meters 3

Soil Conditions

- Normal Soil 5
- Rock Conditions 4
- Permafrost/Special Soil Conditions 3

Electrical Power Adequacy

- Yes 5
- No 2

Water Supply Availability

- Adjacent to Site 5
- Within 150 meters 4
- > 150 meters, < 460 meters 3

Fuel Availability

- Adjacent to Site 5
- Within 150 meters 4
- > 150 meters, < 460 meters 3

Water Supply Adequacy

- Yes 5
- No 2

Fuel Adequacy

- Yes 5
- No 2

 (Rater's signature)

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

APPENDIX B - PHASE II PROTOTYPE REPORT

PHASE II

SITE SELECTION AND EVALUATION REPORT

INDIAN HEALTH SERVICE

[Name and Type of Facility]

[Location], [State]

[Month] [Year]

[Area Name] Area Indian Health Service
Indian Health Service
Department of Health and Human Services

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

PHASE II

SITE SELECTION AND EVALUATION REPORT
INDIAN HEALTH SERVICE
[Name and Type of Facility]
[Location], [State]

RECOMMEND APPROVAL:

[Name] _____ Date _____
Director
Division of Facilities Management
Office of Environmental Health and Engineering
[Area Name] Area Indian Health Service

APPROVE:

[Name] _____ Date _____
Associate Director
Office of Environmental Health and Engineering
[Area Name] Area Indian Health Service
Indian Health Service

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

PHASE II

SITE SELECTION AND EVALUATION REPORT
INDIAN HEALTH SERVICE
[Name and Type of Facility]
[Location], [State]

TABLE OF CONTENTS

- I. EXECUTIVE SUMMARY
- II. BASIC PROJECT DATA
- III. LAND AREA REQUIREMENTS
- IV. UTILITIES REQUIREMENTS
- V. TECHNICAL EVALUATION
- VI. CONCLUSIONS AND RECOMMENDATIONS

TABS

- A1 MAP(s) OF SERVICE UNIT
- A2 MAP(s) OF LOCAL AREA **[including location of proposed site and if applicable, relation to existing facility]**
- A3 SITE PLAN(s)
- A4 PROPOSED SITE ACCESS PLAN
- B TRIBAL RESOLUTIONS RELATING TO PROPOSED SITE
- C SITE SURVEY PLAN(s) AND USE PLAN(s)
- D BIA VERIFICATION OF PROPOSED SITE AVAILABILITY
- E FLOOD PLAIN CLEARANCE
- F SOIL REPORTS
- G ARCHAEOLOGICAL and/or HISTORICAL SURVEY DATA
- H CORRESPONDENCE (Utilities)
- I ENVIRONMENTAL ASSESSMENT

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

I. EXECUTIVE SUMMARY

[The Executive Summary should be a succinct summarization of the report and should include at least the following:]

A. Project Summary:

[Provide a brief narrative that includes the name and location of the proposed IHS health care facility project, including the name and location of the IHS Area. Summarize the main components of the basic project data; identifying the type of project, whether it will be new, an addition, or a modernization/ renovation. Provide the type of health care facility (health station, health center, or inpatient facility) being proposed. Provide the estimated gross area, in square meters (m²), for the health care facility. For staff quarters, provide the number of quarters units and the total gross area in m². Identify any major special components.]

B. Review Team:

[Identify names and organization of individuals involved in the preparation of this report, or team members if a review team is reconstituted for this phase.]

C. Conclusions and Recommendations:

[Briefly state the results of the Phase II Site Selection and Evaluation Report (SSER), including a summary of the land and utilities requirements, validation of the site selected in the Phase I SSER, selected site data, Environmental Assessment, site evaluation, and final conclusion and recommendations. This is to include the identification of the amount of land estimated to be needed for the project, and the amount of land that has been made available (set-aside) for the selected site, both in hectares (ha).] Summarize any unusual or additional costs that must be added to the budget estimate.

II. BASIC PROJECT DATA

[Using the draft Program of Requirements, provide the below information. If any item listed below is not part of the project, do not delete item from the report format; only show it as being "not applicable" in the response.]

A. IHS Area:

[Provide name and location of IHS Area.]

B. Facility Name and Location:

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

[Provide name of health care facility, if such has been established, and proposed general location (city or community and state).]

C. Type of Health Care Facility:

[Provide type of IHS health care facility; i.e., health station, health center, or inpatient facility.]

D. Project Type:

[Identify whether the proposed project is for new, an addition, or a modernization/renovation.]

E. Proposed Health Care Services:

[Provide a brief outline of proposed health care services for the health care facility.]

F. Health Care Facility Size:

[The estimated size (building gross area) of the health care facility is to be provided in square meters (m²).]

G. Inpatient Beds:

[For an inpatient facility, provide the estimated number of proposed inpatient beds.]

H. Projected Annual OPV:

[Provide the annual outpatient visits (OPV) projected for the outpatient department.]

I. Projected Annual Dental Minutes:

[Provide the annual Dental Minutes projected for the dental clinic.]

J. Staff:

[Provide number of estimated proposed total staff.]

K. Staff Having Government Vehicles:

[Identify estimated number of Community Health and other technical staff members who would have assigned for official use Government vehicles needing parking at the health care facility.]

L. General Use Government Vehicles:

PART 13 - SITE SELECTION AND EVALUATION PROCESS

[Identify number of general use Government vehicles estimated to be located at the health care facility, which will need parking spaces.]

M. Buses:

[Identify number of buses estimated to need parking at the facility.]

N. Staff Quarters:

[For staff quarters, provide the total number of quarters units, and a breakdown by type (number of bedrooms) if available, plus the associated gross areas in m². Also, provide the number of handicapped accessible designated units by type.]

O. Special Components:

[Identify any authorized special components.]

III. LAND AREA REQUIREMENTS

[Note, the land areas requirements, in hectares (ha), for the various components of the proposed project are to be calculated by the below described methods, in lieu of the methods used in the Phase I SSER.]

A. Land Area Required for Proposed Health Care Facility:

Land Area for health care facility =
Building Gross Area of health care
facility in m² (Item II.F. above) ÷ 10,000 = [] ha

B. Special Site Requirements:

[Itemize and list any special site requirements that would increase the needed land area beyond that calculated above for the health care facility building gross area. Any difference from that listed in the Phase I Site Selection and Evaluation Report must be justified in the Phase II report. Some things that may increase the site requirements are an airstrip, heliport/helipad, and health care facility recreational facilities.]

PART 13 - SITE SELECTION AND EVALUATION PROCESS

C. Land Area Required for Proposed Staff Quarters:

[(If there are no staff quarters units to be constructed in the project, so note, and skip to next item, not deleting the item.) A single site is preferred for both the health care facility and the associated staff quarters to minimize site development cost. Situations at certain locations may warrant or dictate separate sites. If the draft Program of Requirements for Quarters (PORQ) has not been developed to the point that the proposed number of units by type (number of bedrooms) is shown, the site requirement for staff quarters is obtained from the following procedure. If detailed information about the number of quarters for the number of bedrooms is provided in the draft PORQ, SKIP the calculations shown below in Items III.C.1 and III.C.2, and provide the number of each size of quarters shown in the PORQ for these Items.]

1. Total staff quarters units required
(Item II.N. above.) = []
 - a. Total units [] x 40% = [] 3 bedroom units
 - b. Total units [] x 30% = [] 2 bedroom units
 - c. Total units [] x 30% = [] 1 bedroom units

2. Attached vs. Detached Units
 - a. Attached units
 - (1) All of the 1 and 2 bedroom units =
(Item III.C.1.c. + Item III.C.1.b) = []
 - (2) 1/3 of 3 bedroom units =
(1/3 x Item III.C.1.a) = []
 - (3) Total attached = [(Item III.C.2.a.(1)+
(Item III.C.2.a.(2))] = []
 - b. Detached units (2/3 of 3 bedroom units) =
(2/3 x Item III.C.1.a) = []

PART 13 - SITE SELECTION AND EVALUATION PROCESS

3. Housing Area Site

a. [] Number of detached units x 0.135 =
(Item III.C.2.b) x 0.135 = []ha

b. [] Number of attached units x 0.1112 =
(Item III.C.2.a.(3)) x 0.135 = []ha

c. Subtotal of housing area =
(Item III.C.3.a.)+(Item III.C.3.b.) = []ha

4. Housing Site Recreational Area.

[Recreation areas are essential and should represent at least five percent of the residential area. This figure could be increased if the individual lots are small or there is a large percentage of the quarters units in attached units. If a figure other than five percent is used, it must be justified.]

Housing Site Recreational Area = Subtotal of housing area
(Item III.C.3.c.) x 0.05 = []ha

5. Total Housing Area required =
(Item III.C.3.c.) + (Item III.C.4) = []ha

D. Proposed Parking:

[Most IHS facilities will require parking lots for staff and patient parking. Use the following procedure to determine the area required for parking. The information must agree with that shown in the POR.]

1. FACILITY STAFF PARKING Number of
Parking Spaces
(Use only one of the options shown below.)

a. Staff for Inpatient Facility (Hospital)
with car pooling (3 to 4 staff driving
their own car) with **no** staff quarters
within 0.8 km of the health care
facility = (Item II.J) x 0.8 x 0.75 = []
or

b. Staff for Inpatient Facility (Hospital)
with car pooling (3 to 4 staff driving
their own car) **with** staff quarters
within 0.8 km of the health care
facility = (Item II.J) x 0.8 x
0.75 x 0.8 = []
or

PART 13 - SITE SELECTION AND EVALUATION PROCESS

Number of
Parking Spaces

- c. Staff for Outpatient Facility with car pooling (3 to 4 staff driving their own car) with **no** staff quarters within 0.8 km of the health care facility = (Item II.J) x 0.95 x 0.75 = []
or
- d. Staff for Outpatient Facility with car pooling (3 to 4 staff driving their own car) **with** staff quarters within 0.8 km of the health care facility = (Item II.J) x 0.95 x 0.75 x 0.8 = []
- e. SUBTOTAL FACILITY STAFF PARKING = (Item III.D.1.a.) or (Item III.D.1.b.), (Item III.D.1.c.), or (Item III.D.1.d.), (as applicable) = []
2. VISITORS AND PATIENT PARKING
- a. Inpatient Beds (Item II.G.) x 1.0 = []
- b. Annual OPV (Item II.H.) x 0.002 = []
- c. Annual Dental Minutes (Item II.I.) x 0.00004 = []
- d. SUBTOTAL VISITOR AND PATIENT PARKING = (Item III.D.2.a.) + (Item III.D.2.b.) + (Item III.D.2.c.) = []
3. GOVERNMENT VEHICLES PARKING
- a. Professional and Technical Community Health Staff = (Item II.K.) x 1.0 = []
- b. General Use Vehicles = (Item II.L.) x 1.0 = []
- c. SUBTOTAL GOVERNMENT VEHICLES PARKING = (Item III.D.3.a.) + (Item III.D.3.b.) = []

PART 13 - SITE SELECTION AND EVALUATION PROCESS

Number of
Parking Spaces

4. OTHER VEHICLES PARKING

a. Buses (Additional parking may be required for buses. Provide a minimum of one space per facility. Justify need for more.) = (Item II.M.) x 1.0 = []

b. Other = []

c. Total Other Vehicles Parking = (Item III.D.4.a.) + (Item III.D.4.b.) = []

5. TOTAL PARKING SPACES = (Item III.D.1.d.) + (Item III.D.2.d.) + (Item III.D.3.c.) + (Item III.D.4.c.) = []

6. TOTAL PARKING AREA = [Total Parking Spaces] (Item III.D.5) x 0.003515 = []ha

E. Total Land Area Required:

1. Direct Use

a. Health Care Facility (Item III.A.) = []ha

b. Special Site Requirements (Item III.B.) = []ha

c. Staff Quarters (Item III.C.5) = []ha

d. Parking (Item III.D.6) = []ha

e. Subtotal (Item III.E.1.a.) + (Item III.E.1.b.) + (Item III.E.1.c.) + (Item III.E.1.d.) = []ha

f. Buffer between areas = 15% x (Item III.E.1.e.) = []ha

g. Total Land Area Requirement = (Item III.E.1.e.) + (Item III.E.1.f.) = []ha

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

IV. UTILITIES REQUIREMENTS

[Review and validate the information that was presented previously in Section III of the Phase I SSER. Restate and/or update the utility usage requirements based on current design criteria for new facilities. Adjustments should be made if the figures used are inappropriate for the specific location (e.g., all electric, higher heating requirements, Alaskan conditions, etc.) A statement indicating the rationale for any change should be included in the report.]

Below are the estimated usage requirements for the utilities expected to be needed for the proposed project, based on current design criteria for new facilities. [State if this data is the same as that presented in Section III of the Phase I SEER. For any deviation, provide an explanation.]

A. Water Supply

HOSPITAL

[Number Annual outpatient visits (OPV) ⁸] ÷ 250 days x
114 liters/visit = _____ LPD ⁹
(Includes persons accompanying patient.)

[Number Inpatient beds (IPB) ⁸] x 568 LPD/bed = _____ LPD

[Number of staff ⁸] x 114 LPD/staff = _____ LPD

SUBTOTAL Projected Hospital Water Supply Requirement = _____ LPD

CLINIC (HEALTH CENTER or HEALTH STATION)

[Number Annual OPV ⁸] ÷ 250 days x 114 liters/visit = _____ LPD
(Includes persons accompanying patient.)

[Number of staff ⁸] x 76 LPD/staff = _____ LPD

SUBTOTAL Projected Clinic Water Supply Requirement = _____ LPD

8 Must agree with that shown in the POR.

9 LPD = Liters per day.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

STAFF QUARTERS

[Number of staff quarters ¹⁰] x 1325 LPD/quarters = _____ LPD
SUBTOTAL Projected Quarters Water Supply Requirement = _____ LPD
TOTAL Projected Facility Water Supply Requirement = _____ LPD
(hospital/clinic + staff quarters)

B. Sewage Disposal

HOSPITAL

[Subtotal projected hospital water usage] x 80% = _____ LPD

CLINIC (HEALTH CENTER or HEALTH STATION)

[Subtotal projected clinic water usage] x 80% = _____ LPD

STAFF QUARTERS

[Subtotal projected quarters water usage] x 80% = _____ LPD
TOTAL Projected Facility Sewage Requirement = _____ LPD
(hospital/clinic + staff quarters)

C. Electric

HOSPITAL

[Building Gross Area] m² x 142 kWh/m²/yr = _____ kWh/yr ¹¹
[Building Gross Area] m² x 0.09 kVA/m² = _____ kVA ¹² demand

Assumed Energy Budget 473 kWh/m²/yr
(70% fuel, 30% electric)

10 Estimated number of staff quarters for the facility shown in PORQ.

11 kWh/yr = kilowatt-hour per year.

12 kVA = kilovolt ampere.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

CLINIC (HEALTH CENTER or HEALTH STATION)

[Building Gross Area] m² x 47 kWh/m²/yr = _____ kWh/yr

[Building Gross Area] m² x 0.11 kVA/m² = _____ kVA demand

Assumed Energy Budget 158 kWh/m²/yr
(70% fuel, 30% electric)

STAFF QUARTERS

[Gross Area for all quarters] m² x 33 kWh/m²/yr = _____ kWh/yr

[Gross Area for all quarters] m² x 0.01 kVA/m² = _____ kVA demand

Assumed Energy Budget 110 kWh/m²/yr
(70% fuel, 30% electric)

TOTAL Projected Facility Electric Requirement = _____ kWh/yr
(hospital/clinic + staff quarters)

= _____ kVA demand

D. Fuel

HOSPITAL

Gas

[Building Gross Area] m² x 32 m³/m²/yr = _____ m³/yr

[Building Gross Area] m² x 0.02 m³/m²/hr = _____ m³/hr demand

Propane

[Building Gross Area] m² x 47 liters/m²/yr = _____ liters/yr

[Building Gross Area] m² x 0.04 liters/m²/hr = _____ liters/hr demand

Oil

[Building Gross Area] m² x 31 liters/m²/yr = _____ liters/yr

[Building Gross Area] m² x 0.02 liters/m²/hr = _____ liters/hr demand

Assumed Energy Budget 1710 MJ/m²/yr
(70% fuel, 30% electric)

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
 VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

CLINIC (HEALTH CENTER or HEALTH STATION)

Gas

[Building Gross Area] m² x 11 m³/m²/yr = _____ m³/yr
 [Building Gross Area] m² x 0.01 m³/m²/hr = _____ m³/hr demand

Propane

[Building Gross Area] m² x 15 liters/m²/yr = _____ liters/yr
 [Building Gross Area] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Oil

[Building Gross Area] m² x 10 liters/m²/yr = _____ liters/yr
 [Building Gross Area] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Assumed Energy Budget 570 MJ/m²/yr
 (70% fuel, 30% electric)

STAFF QUARTERS

Gas

[Gross Area for all quarters] m² x 7 m³/m²/yr = _____ m³/yr
 [Gross Area for all quarters] m² x 0.01 m³/m²/hr = _____ m³/hr demand

Propane

[Gross Area for all quarters] m² x 11 liters/m²/yr = _____ liters/yr
 [Gross Area for all quarters] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Oil

[Gross Area for all quarters] m² x 7 liters/m²/yr = _____ liters/yr
 [Gross Area for all quarters] m² x 0.01 liters/m²/hr = _____ liters/hr demand

Assumed Energy Budget 399 MJ/m²/yr
 (70% fuel, 30% electric)

TOTAL Projected Facility Fuel Requirements	Gas	_____ m ³ /yr
(hospital/clinic + staff quarters)	Gas	_____ m ³ /hr demand
	Propane	_____ liters/yr
	Propane	_____ liters/hr demand
	#2 Oil	_____ liters/yr
	#2 Oil	_____ liters/hr demand

E. Solid Waste Disposal

(Describe requirements for the site.)

F. Hazardous Waste Disposal

(Describe requirements for the site.)

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

G. Telephone

(Describe requirements for the site.)

H. Telecommunications (Television, etc.)

(Describe requirements for the site.)

V. TECHNICAL EVALUATION

[In preparing for this section of this report, the information presented in Section IV of the Phase I SSER is to be reviewed for the selected site. In doing such, the information, assumptions and determinations regarding the selected site are validated. This report confirms that the selected site is still available and provides appropriate documentation, including that required from the BIA which certifies that the site is available and has been withdrawn from the tribal land inventory, if such is the case. The required flood plain certification is provided. Applicable reports of archaeological surveys are provided. Provide appropriate documentation about any proposed connections with existing utility sources, etc. Provide appropriate documentation about any proposed connections with existing sewage treatment system. Provide appropriate documentation about the proposed connection for the telephone system and other needed telecommunications systems. Highlight all known actions that will be required for the project. Point out any pending actions that affect the project.]

The site selected in the Phase I SSER has been reviewed and the information provided in that report has been validated to that presented below. Accordingly, the below information, assumptions, and determinations regarding the selected site, as shown on the maps in Tab A, have been determined to be valid. This report confirms that the selected site is still available and provides appropriate documentation in Tabs B, C and D.

A. Review of Basic Site Data and Service Requirements:

1. Land area size:

[Compare the land area size requirement that was developed in Section III of this Phase II SSER with that which has been made available and was selected in the Phase I SSER.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

2. Location:

[Describe site location in relation to nearest town, etc. and if applicable, existing IHS facility. Reference the area and site maps provided in Tab A, which should show the proposed site and any existing other IHS facility and/or facilities.]

3. Population:

[Describe population of the community and surrounding area.]

4. Economy:

[Describe existing commercial, industrial and agricultural enterprises in the community and surrounding area. Include a description of the types of available employment, and the unemployment rate. (As applicable, this information should identify any differences for "local" or "non-local" hire staff.)

5. Housing:

[Describe type and condition of housing in the community and surrounding area. (As applicable, this information should identify any differences for "local" or "non-local" hire staff.)

6. Community Services:

[Describe services available in the community and surrounding area, including educational opportunities, medical and dental care, police protection, retail and shopping facilities, restaurants, churches, recreational facilities, theaters, etc. (As applicable, this information should identify any differences for "local" or "non-local" hire staff.)

7. Fire Protection:

[Describe fire fighting capability in the immediate area of the site including distance to nearest fire station, type of equipment, volunteer vs. full-time, etc. Identify any area of concern that this project must address and provide for the proposed IHS facility.]

8. Access:

[The Phase II SSER is to contain detailed information. Describe access to the community and surrounding area from larger population centers and major cities via the existing road system. Address the access currently available to the site, and discuss any preliminary perceived improvements that might have to be made for access to and on the site. Provide preliminary verification that access to any other roadway is not restricted by other agencies. Provide information about any perceived

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

easement requirements. Identify any area of concern that this project must address and provide for the proposed IHS facility.]

9. Transportation:

[Describe all public transportation available, including rail, air, bus and automotive.]

10. Unique Considerations:

[Describe any unique features in the immediate area of the site including airports, airstrips, industrial activities, etc.]

11. Climate:

[For the Phase II SSER, describe local climate conditions that prevail throughout the year, identifying predominate normal changes, including average and extreme temperatures (degrees Celsius), amounts and types of precipitation, wind velocity and direction, and any unique conditions. Discuss vis-a-vis solar applications.]

12. Topography:

[Describe general terrain and topographic features of the site and surrounding area. Reference the site survey plan and use plan provided in Tab C.]

13. Visual:

[Describe visual features in the immediate area of the site and identify desirable and undesirable features.]

14. Air Quality:

[Describe any known air pollution or air quality problems within the immediate area of the site.]

15. Surface Water:

[Referencing Tab C, identify any surface water channels that are on or run through the site and describe as applicable. Identify any known potential concern for the project.]

16. Flood Clearance:

[Provide information about any known potential flood problems. The Phase II SSER is to reference the required flood plain certification that is contained in Tab E.]

17. Type of Soil:

PART 13 - SITE SELECTION AND EVALUATION PROCESS

[Discuss the results of the soils investigations as provided in the soils reports of Tab F. Describe general characteristics of soil at the site, and identify any known potential concern for the project.]

18. Archaeological Clearance:

[Provide any known information about potential archaeological concerns. Reference the providing of applicable reports of archaeological surveys in Tab G, and point out any known concerns that the project will have to address.]

19. Existing Water Supply System(s):

- a. Operating utility company: [Name, location]
- b. Type of supply system:

[Describe the water supply system in detail. Include the type of source such as surface, wells, etc.; the type of treatment provided; and the quality of the water. A statement should be included concerning compliance of the water with the Safe Drinking Act. Reference and include in Tab H any appropriate documents from applicable water supply company that deal with the availability.]

c. Water storage:

[Describe the type and size of storage available and provide the following listed information.]

Total storage volume	_____	liters
Less fire flow reserve*	_____	liters
Total usable storage	_____	liters
Days of storage	_____	DAYS

[If there is no usable fire flow reserve, the water supply requirements will have to be increased to include sufficient capacity for fire flow requirements. If such is the case, make note of it in this section. Reference and include in Tab H any correspondence provided by applicable utility company regarding water storage.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

d. Water distribution:

[Describe the distribution system, including any perceived problems that may need to be addressed for the new facility, and provide the below listed information.]

System pressure static: Maximum _____ kPa ¹³
Working pressure: Minimum _____ kPa
Maximum flow nearest to proposed site: _____ LPS ¹⁴

e. Adequacy of system for proposed facility:

[Describe the adequacy of the present water system to meet the proposed facility demand, including source, treatment, storage, distribution. Describe any deficiencies in the present system and upgrades required to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any correspondence dealing with the water distribution.]

20. Existing Sewage Disposal System(s):

- a. Operating utility company: [Name, location]
- b. Type of disposal system:

[Describe any existing sewage disposal system in detail. Include the type and extent of the sewage collection system and the capacity and type of treatment system. Reference and include in Tab H any applicable correspondence.]

c. Adequacy of system for proposed facility:

[Describe adequacy of present system to meet proposed facility demand, including collection and treatment systems. Describe any deficiencies in the present system and any required upgrade to the system to meet the proposed facility demand. Include necessary extension of the collection system or an expansion of the treatment system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the

13 kPa = Kilopascal

14 LPS = liters per second

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

overall system to meet the needs of the health care facility and any staff quarters. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any applicable correspondence.]

21. Existing Electrical Power Supply System(s):

a. Operating utility company: [Name, location]

b. Type of electric system:

[Describe the type and extent of electrical system in detail. Include system characteristics such as available voltage and phase, quality of the power (i.e. the differences in amplitude of the phases. Reference and include in Tab H any applicable correspondence.)]

c. Reliability of electric system:

[Discuss reliability of electric system including frequency and duration of outages and historical data. Reference and include in Tab H any applicable correspondence.]

d. Adequacy of system for proposed facility:

[Describe the adequacy of the present system to meet proposed facility demand, including generation and distribution systems. Describe any deficiencies in the present system and any required upgrades to the system needed to meet the proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e. HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any applicable correspondence.]

22. Existing Fuel Supply(s):

a. Operating utility company: [Name, Location]

b. Type of fuel:

[Describe type and extent of present fuel system including storage and distribution system. If no facility exists in this location describe the type of fuel available in the general area. Reference and include in Tab H any applicable correspondence.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

c. Reliability of fuel supply:

[Discuss historical data relating to fuel supply including availability during peak needs. Reference and include in Tab H any applicable correspondence.]

d. Adequacy of fuel supply for proposed facility:

[Describe the adequacy of the present fuel supply to meet proposed facility demand including storage and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of the distribution system and expansion of the storage facilities. If possible, consider all other proposed developments, i.e. HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health care facility and staff quarters. Reference and include in Tab H any applicable correspondence.]

23. Existing Solid Waste Disposal System:

a. Operating servicing company: [Name , Location]

b. Type of disposal system:

[Describe the type of solid waste collection systems that are available for servicing the site, frequency of pick-up and type, and distance to the nearest EPA approved solid waste disposal system, or as required locally. Reference and include in Tab H any applicable correspondence.]

c. Reliability of solid waste disposal system:

[Discuss reliability of system including scheduled and unscheduled collections. Reference and include in Tab H any applicable correspondence.]

d. Adequacy of collection and disposal systems for the proposed facility:

[Describe the adequacy of the present solid waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e, HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any applicable correspondence.]

PART 13 - SITE SELECTION AND EVALUATION PROCESS

24. Existing Hazardous Waste Disposal System:

a. Operating servicing company: [Name , Location]

b. Type of disposal system:

[Describe the type of hazardous waste collection systems that are available for servicing the site, frequency of pick-up and type, and distance to the nearest EPA approved disposal location, or as required locally. Reference and include in Tab H any applicable correspondence.]

c. Reliability of hazardous waste disposal system:

[Discuss reliability of system including scheduled and unscheduled collections. Reference and include in Tab H any applicable correspondence.]

d. Adequacy of collection and disposal systems for the proposed facility:

[Describe the adequacy of the present hazardous waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any applicable correspondence.]

25. Existing Telephone System:

a. Operating utility company: [Name , Location]

b. Type of telephone system:

[Describe the type of telephone system available in the area of the project site. Describe the existing distribution system (trunk lines) available and whether satellite, overhead, underground or combination. Reference and include in Tab H any applicable correspondence.]

c. Reliability of telephone system:

[Discuss historical reliability of system including down time and frequency of repair. Reference and include in Tab H any applicable correspondence.]

PART 13 - SITE SELECTION AND EVALUATION PROCESS

d. Adequacy of system for proposed facility:

[Describe adequacy of present system to meet proposed facility demand including headend and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any applicable correspondence.]

26. Existing Telecommunications (television) System:

a. Operating utility company: [Name , Location]

b. Type of telecommunications (television) system(s):

(Describe the type of telecommunications system(s) available in the area of the project site. Describe the existing distribution system available and whether satellite, overhead, underground or combination. Reference and include in Tab H any applicable correspondence.)

c. Reliability of telecommunications system:

(Discuss historical reliability of system including down time and frequency of repair. Reference and include in Tab H any applicable correspondence.)

d. Adequacy of system for proposed facility:

(Describe adequacy of present system to meet proposed facility demand including distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated. Reference and include in Tab H any applicable correspondence.)

B. Evaluation:

[Include specific statements and discussions covering all the parameters and subject matter investigated in Section A of this section. Consider alternative solutions to envisioned problems. Include consideration of any projects related to new facility (solar systems, etc.). Provide adequate data and discussion for project managers, A/E firms, etc., to clearly understand site problems that may be encountered in designing and building the proposed facility. Provide details of cost impacts.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

1. Site Features:

[Discuss the applicable site data presented in Section V.A. as it relates to the project needs for the below identified site features.]

a. Topography and Soil Conditions:

[Discuss topographic data including natural features, soil and foundation considerations and hazards, such as seismic, local surface drainage, including up and down stream capacities, unsuitable soil, steep slopes or other unusual surface problems and other geological features that may impact the site preparation costs of the facility. Refer to the soil reports provided in Tab F.]

b. Natural Features:

[Describe natural features such as trees, undergrowth, rock outcroppings and water forms that are to be preserved or utilized as a design element or may present a design problem.]

c. Size and Configuration:

[Discuss the land area size requirement developed in Section III of this report in comparison with the size of the land that has been made available. Refer to the metes and bounds survey, provided in Tab C, which shows the configuration of the land area being considered for the proposed site. Point out any known restrictions, easements or other legal infringements for the proposed site. Note any deficiencies and present possible solutions.]

d. Adjacent Land:

[Describe characteristics and land use (existing and proposed) of adjacent properties including grade, elevations and heights and nature improvements.]

e. Indigenous Cultural Entities:

[Identify any cultural entities including indigenous building materials, art forms *in the surrounding local area* and/or functional configurations to be used in design of the proposed facility.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

f. Existing Improvements on Proposed Site:

[Indicate all existing improvements on the proposed site, such as roads, streets, walks, parking areas, buildings, structures, and utilities including size and capacities. Discuss the impact that the existing will have on the proposed project.]

2. Site Access:

a. Location:

[Review the demographic relationship of the estimated user population, that would be served by the proposed facility, with the proposed site.]

b. Roads Infrastructure:

[Review the present and planned roads and highways in vicinity of proposed site, including envisioned conflicts and congestions, need for traffic controls, and vehicular and pedestrian influences. Comment on envisioned impact caused by the proposed project. Include discussion about any easement requirements, and/or approvals needed for access to roads, etc., from the state or tribal authorities.]

c. Access to Proposed Site:

[Compare what could be the requirements for site access with the existing conditions for access to the proposed site. This should include such things as road width, road surface, pedestrian walkways etc.]

d. Fire Fighting Capability:

[Describe accessibility of site to local fire fighting units.]

3. Site Orientation:

[Describe site orientation relative to site access, prevailing wind, cultural needs of the people served, etc.]

4. Transportation Services:

[Considering the public transportation systems available in the vicinity of proposed site, review the transportation services required to support the proposed project and any specific needs, such as air service, including a heliport or helipad, etc.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

5. Utility Systems:

[Recap availability, adequacy, and reliability of water supply, including fire protection; sewage disposal; electric power; fuel sources; solid waste collection and disposal systems; hazardous waste collection and disposal systems; telephone systems; and telecommunications (television) systems. Describe the envisioned impact that the proposed project will have on existing systems.

If utilities are not on or adjacent to the proposed site, describe the distance and cost of any connection or extension needed.

Describe and include in Tab H appropriate certifications from local utility companies as to availability, use, and adequacy of existing utilities for the proposed facility.

Review and describe connections and/or extension requirements for all utilities.

Describe any possible solar or other natural energy supplementary considerations related to the proposed site and facility.]

6. External Influences:

[Describe any present planned community use and development in the area of the proposed site.

Describe historical and/or archaeological considerations in the area of the proposed site.

Describe compatibility of proposed facility with existing and planned facilities in area.

Describe any visual blight, and any noise, air, water or solid waste pollution in the area of the proposed site, including sources of pollution.

Describe floodplain or water drainage hazards in the proposed site area.

Describe seismic zone considerations in the area of the proposed site.

Discuss climatic features of the area including temperature ranges (degree, days, etc.), humidity ranges, rainfall, snowfall, prevailing winds and any other unique climatic conditions.

Discuss location factors associated with the construction of the proposed site including availability of materials, labor and housing for construction, and facility operation; local population and distribution; and tribal economy and resources.]

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

7. Environmental Assessment:

[Reference and summarize the results and conclusions of the environmental assessment included in this report as Tab I. (The environmental assessment is to be prepared by applicable IHS Area office in accordance with authorities and policies promulgated by IHS pursuant to DHHS General Administration Manual, Part 30 - Environmental Protection.¹⁵ The preparation of this document is to be in accordance with instructions included in the IHS Environmental Review Manual. Questions 15 and 16 of Tab A-3 to that manual, "Environmental Review and Documentation," are not applicable to new facilities construction and are to be replaced with the following:

"15. Is the building greater than 1 115 square meters and greater than two ha of surface land area involved at a new site?"

"16. Is the project for other than buildings and greater than two ha of surface land involved?"

8. Other Requirements:

[Document the justification for any unique requirements than will impact the proposed site and project.]

9. Additional Data:

[Include additional data with supporting Tabs, as required, that may be needed to document an applicable concern, such as soil core boring data, etc.]

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions:

[Present a list of conclusions reached from the technical evaluation. As a minimum, make a firm statement concerning the acceptability of the site. Additional conclusions such as need for special attention to utility services, archaeological clearances, building siting for floodplain or geological factors, etc., must be listed here.]

[Make a statement to the affect that all mandatory Executive Orders, regulations, laws, etc. have been met and required clearances obtained.]

15 It is noted that actions associated with construction of 1 115 square meters or less of occupiable space are excluded, except when such construction impacts properties: (a) listed or eligible for listing on the National Register of Historic Places; (b) with possible archeological, prehistoric or scientific importance; and/or (c) located where natural asset review is mandated.

PART 13 - SITE SELECTION AND EVALUATION PROCESS

[Summarize unusual or additional costs that must be added to the project budget, which were not addressed in the Phase I SSER or those that have increased for some reason since that report was prepared. These costs might include, site acquisition, utility services and extensions, soil conditions, drainage problems (on-site or off-site), archaeologic or historic impacts, etc. Data should be included also for other project related costs, such as staff housing, demolition of existing buildings, and/or asbestos abatement of existing buildings, easements and special access requirements, etc.]

B. Recommendations:

[Include a statement recommending approval of the site along with any other recommendations related to actions to be taken to overcome deficiencies and/or problems. Specific approaches to identified problems must be recommended. Also, include recommendations relative to any projects related to the proposed facility such as housing, recreation areas, etc.]