

5. Bases for Calculation of Hospital Volume

(1) Population

1) Objected Population

a.	MOH data	35,000	
b1.	Population of Jericho District without Refugees (PRC data)		
	- Year 1992	25,957	
	- Year 2002	37,118	
	- Year 1997 (calculated proportionally)	31,538	
b2.	Population of Refugees Camp in Jericho District (PRC data)		
	- Year 1994	4,799	
	b1 + b2 = 36,335	<u>36,000</u>	- 1)

2) Future Expectation

a.	Pre-occupied Population of Jericho District (MOH data) ..	100,000	
b1.	Refugees out of Palestine (JICA data)		
	- Lebanon	328,176	
	- Syria	314,039	
	- Jordan	1,072,561	
	Total	1,714,766	(67% of the Population in Palestine)
b2.	Expected Population of Jericho District with returned refugees (PRC data) in the year 2002 (calculated proportionally)		
	- $37,118 + 1,714,776 \times 25,957 \div 2,238,987 = 56,998$	<u>50,000</u>	- 2)

(2) Number of Beds

a.	Existing Jericho Hospital	50
b.	Beds / Population (1,000)	
	- WHO recommendation 2 Beds / 1,000	
	Objected Population $35,000 \times 2/1,000$	70
	Future Expectation $50,000 \times 2/1,000$	100

- WHO acceptable number on process 1.5 Beds / 1,000
- Objected Population $35,000 \times 1.5/1,000$ 53 - b)
- Future Expectation $50,000 \times 1.5/1,000$ 75

c. New Jericho Hospital will be an only Hospital in the District.

(3) Number of Out Patients

a. Admit Referral Patients from PHC and MCH in Jericho District, and Emergency Patients

b. Number of Out Patients of the existing Jericho Hospital (1994)

- General Surgery 350
- Obstetrics / Gynaecology 100
- Pediatrics 130
- Orthopedics 240
- Physiotherapy 240
- General Internal Medicine 150
- Total 1,210 / month
- Average 49 / day

c. Number of Emergency Patients of the existing Jericho Hospital (1994)

- General Surgery 900 - 1,330
- Orthopedics 900 - 1,420
- Total 2,750 / month
- Average 92 / day

d. Future Expectation

- Rate of increase in population without refugees from the year 1994 to 1997
(PRC data)
 $31,538 \div 28,189 = 1.12$
- Rate of increase in patients is 1.2 after considering returned refugees
- Expected number of Out Patients 60 / day - d1)
- Expected number of Emergency Patients 110 / day - d2)

(4) Number of Operations and Deliveries

a. Number of Beds in Obstetrics

$$\frac{(\text{Objected Population}) \times (\text{Birth Rate}) \times (\text{Average of Hospitalized Days}) \times 100}{1,000 \times 365 \times \text{Effective Rate of Beds (\%)}}$$

$$= \frac{36,000 \times 45 \times 2.5 \times 100}{1,000 \times 365 \times 80\%} \dots\dots\dots 14$$

b. 70% of deliveries in the district will be done in PHC

Needed Beds in the Hospital $14 \times 30\% \dots\dots\dots \underline{5}$ - b)

c. $5 (\text{average number of delivery / day}) \times 0.8 \div 2.5 = 1.6$

- Number of Delivery Table $\dots\dots\dots \underline{1}$ - c1)

- Number of Labor Beds $\dots\dots\dots \underline{2}$ - c2)

d. Number of Operations

- 95 / month
- 22.8 / bed-year (10-13 / bed-year in Shifa Hospital)

e. Number of Operation Theaters

$$\frac{(\text{Number of Operations / year})}{(\text{Number of Operations / room-day}) \times 50 \text{ weeks} \times (\text{Work Day / Week})}$$

$$= \frac{1,140}{2.5 \times 50 \times 5} \dots\dots\dots \underline{2} \quad - e)$$

(5) Private Room

a. Purpose

- Recover after operation
- Serious illness
- Infection case

b. Number of Rooms

- for HCU	male and female	2	
- for serious illness and infection case	male and female	2	
- for infant		2	
Total		<u>6</u>	- b)

c. Private room can be used as 2 Beds room in case of emergency.

6 Cost Estimation Borne by Palestinian Authority

6. Cost Estimation Borne by Palestinian Authority

(1) Estimated Cost

a) Removal of building obstacles from the site	None
b) Cost of ordinary furniture and fittings	None
c) Transfer of existing equipment	20,000 US\$
Total	20,000 US\$

(2) Other Cost

In addition to the above, the Palestinian Authority will be required to pay the following expenses.

- a) Bank commission (approximately 0.1% of amount listed in E/N)
- b) Import Tax (based on CIF prices)

7 Estimate of Operation and Maintenance Cost

7. Estimate of Operation and Maintenance Cost

A. Personnel Cost

Standard wages and allowances data for a public hospital supplied by the Palestinian Authority are used to estimate the personnel cost which is adequate to secure capable staff members as envisaged by the personnel plan.

a) Doctor	1,100US\$ × 12months × 10persons =	132,000US\$	
b) Nurse	500US\$ × 12months × 30persons =	180,000US\$	
c) Technician	600US\$ × 12months × 8persons =	57,600US\$	
d) Administrator	500US\$ × 12months × 30persons =	180,000US\$	
<hr/>			
Total	78persons =	549,600US\$/year	-A)

B. Consumables Cost

The cost of consumables and medical supplies may substantially change depending on the level of activities. The estimate is based on such data as annual medical supplies procurement budget provided by the Palestinian side and the list of standard consumables of the equipment to be provided under the Project.

① Medical Supplies

$$\begin{aligned} \text{Annual budget} &: 13,000,000\text{US\$} \div 2,472\text{beds} = 5,258\text{US\$/bed} = 5,250\text{US\$/bed} \\ &5,250\text{US\$/bed} \times 50\text{bed} = \underline{262,500\text{US\$}} \quad - \text{ (a)} \end{aligned}$$

② Consumables

$$\begin{aligned} &\text{X-ray films, contrast medium, developing solution, various reagents and recording} \\ &\text{paper, etc.} \quad : \quad \underline{34,000\text{US\$/year}} \quad - \text{ (b)} \end{aligned}$$

③ Hospital Meals

$$2\text{US\$/day} \times 365\text{day} \times 50\text{bed} \times 0.8 = \underline{29,200\text{US\$/year}} \quad - \text{ (c)}$$

$$\text{Total (a) + (b) + (c)} \quad \quad \quad 325,700\text{US\$/year} \quad - \text{ B)}$$

C. Operation Cost

The annual operation cost is estimated based on the assumed consumption rates of water, electricity, gas and telephones.

① Water Bill

(Annual Consumption)

- General Use : $50\text{bed} \times 1,500\ell/\text{bed}\cdot\text{day} \times 365\text{day}/\text{year} = 27,375\text{m}^3/\text{year}$
- Cooling Water : $(2,040\ell/\text{min} \times 0.015 \times 60\text{min}/\text{h} \times 12\text{h}/\text{day} + 750\ell/\text{min} \times 0.015 \times 60\text{min}/\text{h} \times 24\text{h}/\text{day}) \times 300\text{day}/\text{year} \times 0.75 = 8,602\text{m}^3/\text{year}$
- Total : $27,375\text{m}^3/\text{year} + 8,602\text{m}^3/\text{year} = 35,977\text{m}^3/\text{year} = 36,000\text{m}^3/\text{year}$

(Annual Cost)

- Basic Charge : $500\text{US}\$/\text{month} \times 12\text{month} = 6,000\text{US}\$$
- Unit Charge : $0.17\text{US}\$/\text{m}^3 \times 36,000\text{m}^3 = 6,120\text{US}\$$
- Total : 12,120US\$

- ④

② Electricity Bill

(Daily Consumption)

The level of contracted electricity supply is assumed to be 180KW-200KW(400W/m²-50W/m²). Assuming that the above figure is the peak level, the daily electricity consumption is calculated below based on the average load fluctuation.

40KW	× 5hrs	=	200KWh	(00:00-05:00)
70KW	× 4hrs	=	280KWh	(05:00-09:00)
130KW	× 3hrs	=	390KWh	(09:00-12:00)
150KW	× 4hrs	=	600KWh	(12:00-16:00)
110KW	× 2hrs	=	220KWh	(16:00-18:00)
60KW	× 2hrs	=	120KWh	(18:00-20:00)
50KW	× 4hrs	=	200KWh	(20:00-24:00)
Average :			2,010KWh / day	

(Annual Consumption)

Given the climatic conditions of the project site, the electricity consumption level is believed to be constant throughout the year.

$$2,010\text{Kwh}/\text{day} \times 365\text{day}/\text{year} = 733,650\text{Kwh}/\text{year} = 740,000\text{Kwh}/\text{year}$$

(Annual Cost)

- Basic Charge : $2,300\text{US\$/month} \times 12\text{months} = 27,600\text{US\$}$
- Unit Charge : $0.13\text{US\$/Kwh} \times 740,000\text{Kwh} = 96,200\text{US\$}$
- Total : 123,800US\$

- (b)

③ Gas Bill

(Annual Consumption)

Assuming an LPG consumption rate of gas ranges of 60,000 Kcal/h, the annual LPG consumption is calculated below.

$$60,000\text{Kcal/h} \times 3\text{h/day} \times 365\text{day/year} \times 0.8 \div 15,000\text{Kcal/kg} = 3,504\text{kg/year}$$
$$= 3,500\text{kg/year}$$

(Annual Cost)

$$0.35\text{US\$/kg} \times 3,500\text{kg/year} = 1,225\text{US\$/year}$$

- (c)

④ Telephone Bill

(Annual Talking Time)

A hospital with the size of the new Jericho Hospital is usually expected to have 14 joining telephone lines, 5 joining lines are believed to be sufficient in view of the fact that no direct extensions to the ward will be installed. According to the calculation table compiled by the Japan Telephone Industry Association, the total talking time per hour for 5 lines is calculated as follows ;

$$87.48\text{HCS (hundred call seconds)} \times 100\text{seconds} = 8,748\text{seconds}$$

$$\text{Annual Talking Time} : 8,748/360 \times 24\text{h} \times 365\text{day} = 21,286\text{h/year} = 22,000\text{h/year}$$

Assuming that the share of outgoing calls is 40%, the talking time of outgoing calls will be 8,800h/year.

(Annual Cost)

- Basic Charge : $1,200\text{US\$/month} \times 12\text{months} = 14,400\text{US\$}$
- Unit Charge : $4.5\text{US\$/h} \times 8,800\text{hrs/year} = 39,600\text{US\$}$
- Total : 54,000US\\$/year

- (d)

⑤ Fuel Oil Bill

〈Annual Consumption〉

- Absorption Refrigerator : $270\text{kg/h} \times 2\text{unit} \times 538\text{Kcal/kg} \times 12\text{h/day} \times 0.5$
 $\times 25\text{day/month} \times 12\text{month} \div 10,600\text{Kcal/}\ell = 49,333\ell/\text{year}$
- Steam Sterilizer : $50\text{kg/h} \times 1\text{unit} \times 538\text{Kcal/kg} \times 4\text{h/day} \times 25\text{day/month}$
 $\times 12\text{month} \div 10,600\text{Kcal/}\ell = 3,045\ell/\text{year}$
- Hot Water Supply : $220\ell/\text{person-day} \times 50\text{person} = 11,000\ell/\text{day}$
 Average temperature : 20°C
 Fuel consumption : $11,000\ell/\text{day} \times (60-20) \times 300\text{day/year}$
 $\div 10,600\text{Kcal/}\ell = 12,452\ell/\text{year}$
 Solar system contribution rate : 50%
 $12,452\ell/\text{year} \times 0.5 = 6,226\ell/\text{year}$
- Total : $49,333\ell/\text{year} + 3,045\ell/\text{year} + 6,226\ell/\text{year} = 58,604\ell/\text{year}$

Assuming a boiler thermal efficiency of 0.7,

$$58,604\ell/\text{year} \div 0.7 = 83,720\ell/\text{year} = 83,700\ell/\text{year}$$

〈Annual Cost〉

0.3US\$/ℓ × 83,700ℓ/year =	<u>25,110US\$</u>	- ①
Total ① + ② + ③ + ④ + ⑤	216,255US\$	- 1)

2) Maintenance Cost

① Building Maintenance Cost

The actual building maintenance cost significantly varies from year to year while generally increasing with the passing of time. Here, the average annual repair cost over a span of 30 years is assumed to be 1.2US\$/m² and is used to estimate the building maintenance cost.

$$1.2\text{US}/\text{m}^2 \times 4,383\text{m}^2 = 5,259\text{US}\$ = \underline{5,250\text{US}\$/\text{year}} \quad - \text{①}$$

② Building Services Maintenance Cost

The building services maintenance cost remains low in the first 5 years and begins to increase thereafter due to the need to replace parts or equipment. Here, it is assumed

that the average annual repair cost over a span of 10 years equivalent to approximately 1.5% of the total building services equipment cost, i.e. approximately 1,550,000US\$).

$$1,550,000\text{US\$} \times 1.5\% = \underline{23,250\text{US\$/year}} \quad - \textcircled{b}$$

Within the \textcircled{b} , cost for fluorescent lamp is listed below.

Lump	Quantity	Life Span (h)	Lighting Hours		Replacement /year (year)	Unit Price (US\$)	US\$/year
			h/day	h/year			
FL 40W	802	12,000	12	4,380	1/3	4	1,070
FL 20W	46	8,500	12	4,380	1/2	2.8	65
FL 15W	2	6,000	12	4,380	1/1.5	2	3
FL 10W	21	6,000	24	8,760	1/0.7	2	60
FDL 13W	113	6,000	12	4,380	1/1.5	7.7	580
FDL 18W	126	6,000	12	4,380	1/1.5	8.4	705
IL 60W	7	2,000	12	4,380	2/1	0.9	13
IL 20W	4	2,000	12	4,380	2/1	0.9	7
ミニハロ 50W	56	2,000	12	4,380	2/1	9.8	1,100
HF 200W	10	12,000	12	4,380	1/3	26	87

Total Cost 3,690 US\$/year

③ Equipment Maintenance Cost

The equipment maintenance cost remains low for the first couple of years and begins to gradually increase thereafter. Here, following the typical example in Japan, the annual equipment maintenance cost is assumed to be 1.5% of the equipment cost for the first 5 years and 4% for the next 5 years.

40% of the equipment is requiring regular maintenance work.

First 5 years : 12,300US\$/year - \textcircled{c}

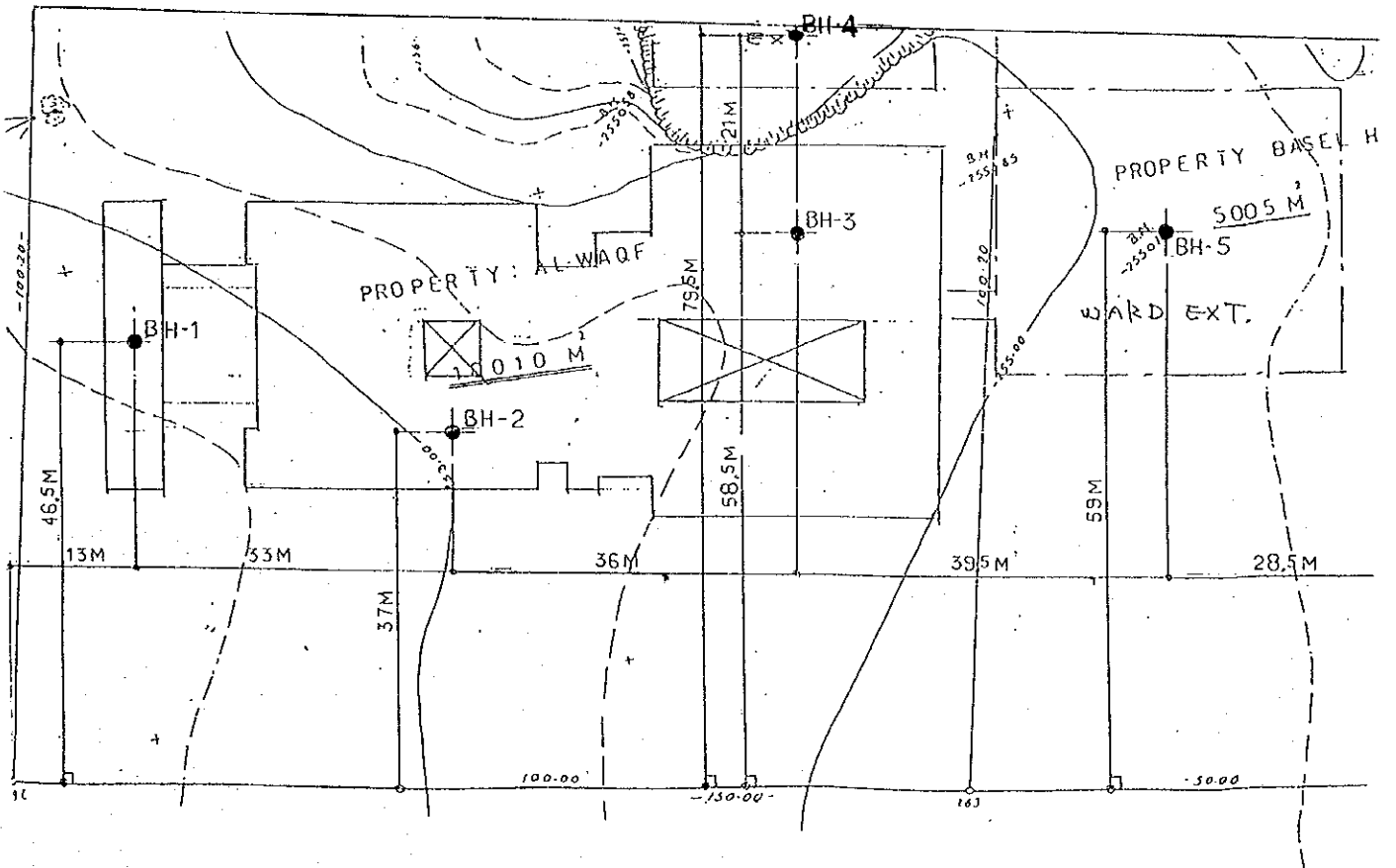
Next 5 years : 32,800US\$

Total : $\textcircled{a} + \textcircled{b} + \textcircled{c} = 40,800\text{US\$/year}$ - 2)

Total Operation Cost : 1)+2)=257,055US\$/year - C)

8 Site Information

8 Site Information



Borehole number: **BH-1**
 Job number: 65095
 Client: KUMI SEKKEI CO.,LTD.
 Co-ords (x,y): 20013.00,30046.50
 G.W. Table (m): 0.00
 Date started: 27.6.95
 Total depth (m): 25.00
 Supervised by: DR. WLADIMIR TROSTANOVSKY
 Type of sampler: PLYETHELIN BAGS
 Remarks: Hard chalk layer appear at a depth of 25.00 m

Project name: NEW JERICHO HOSPITAL
 Site location: AKABAT JABER CAMP
 Vertical scale: 1:200
 Elevation (m): -252.40
 Date: 20.7.95
 Date finished: 02.7.95
 Checked by: ENG.BASIM HAZZAN
 Logged by: NAZAR KHOURY

Type of boring: AUGERING

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Depth [m]	Recovery	S a m p l e s	DESCRIPTION	S y m b o l	U S C S	Color	Plasticity	Sieving	LAB TESTS	FIELD TESTS	
										SPT (Blows/0.3m)	
0.00	0 (100%)		Loess 黄土								
-252.40			DRY LOES/SILT		CL	White	L				
2.00					-Cl		ow				
-254.40							M				
4.00							ed				
-256.40		LOES					ium				
6.00											
-258.40											
8.00											
-260.40			WET MARL		CI	Yellow	M				
10.00					-	-Green	ed				
-262.40					CH		ium				
12.00							High				
-264.40											
14.00											
-266.40											
16.00											
-268.40		MARL 泥灰土									
18.00											
-270.40											

SPT (Blows/0.3m) Atterberg limits Recovery Thin-wall tube - Odor - PH
 Penetration wp RQD Cased length * - Estetics
 Vane Shear [KPa] w Split spoon Rock core - Swedish Fall Cone
 ▲ Remolded Undisturbed X Fines Sand Gravel Auger Wash OTHER □ - Originality
F S G

25.00											
-277.40											
Dry Density at 10.00 m depth is 1795 kg/cub m Specific gravity (Gs) at 8.0 m is 2.81 α											

Borehole number: **BH-2**
 Job number: 65095
 Client: KUMI SEKKEI CO.,LTD.
 Co-ords (x,y): 20046.00,30037.00
 G.W. Table (m): 0.00
 Date started: 27.6.95
 Total depth (m): 25.00
 Supervised by: DR. WLADIMIR TROSTANOVSKY
 Type of sampler: PLYETHELIN BAGS
 Remarks: Hard chalk layer appear at a depth of 25.00 m

Project name: NEW JERICHO HOSPITAL
 Site location: AKABAT JABER CAMP
 Vertical scale: 1:200
 Elevation (m): -253.20
 Date: 20.7.95
 Date finished: 02.7.95
 Checked by: ENG.BASIM HAZZAN
 Logged by: NAZAR KHOURY
 Type of boring: AUGERING

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Depth [m]	Recovery	Samples	DESCRIPTION	SYMBOL	USCS	Color	Plasticity	Sieving	LAB TESTS		FIELD TESTS	
									w, L, PL (%)	Y _{max} Shrink (kPa)	SPT (Blows/0.3m)	
0.00												
-253.20			DRY LOES/SILT		CI	White	Medium					
2.00												
-255.20												
4.00												
-257.20												
6.00												
-259.20												
8.00												
-261.20												
10.00			WET MARL		CI-CH	Yellow-Green	Medium-High					
-263.20												
12.00												
-265.20												
14.00												
-267.20												
16.00												
-269.20												
18.00												
-271.20												
20.00												
-273.20												
22.00												
-275.20												
25.00												
-278.20												

Dry Density at 10.00 m depth is 1795 kg/cub m
 Specific gravity (Gs) at 8.0 m is 2.81

Borehole number: **BH-3**
 Job number: 65095
 Client: KUMI SEKKEI CO.,LTD.
 Co-ords (x,y): 20082.00,30058.50
 G.W. Table [m]: 0.00
 Date started: 27.6.95
 Total depth [m]: 25.00
 Supervised by: DR. WLADIMIR
 TROSTANOVSKY

Project name: NEW JERICHO HOSPITAL
 Site location: AKABAT JABER CAMP
 Vertical scale: 1:200
 Elevation [m]: -254.35
 Date: 20.7.95
 Date finished: 02.7.95
 Checked by: ENG.BASIM HAZZAN
 Logged by: NAZAR KHOURY

Type of sampler: PLYETHELIN BAGS
 Remarks: Hard chalk layer appear at a depth of 23.00 m
 Type of boring: AUGERING

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Depth [m]	Recovery	S a m p l e s	DESCRIPTION	S y m b o l	U S C S	Color	Plasticity	Sieving	LAB TESTS		FIELD TESTS	
									w (%)	L.P.L (%)	0	100
0.00	TTTT											
-254.35			DRY LOES/SILT	---	CI	White	M-ed-ium					
2.00		LOES										
-258.35												
4.00												
-258.35												
6.00												
-260.35												
8.00												
-262.35			WET MARL	---	CI-CH	Yellow-Green	M-ed-ium High					
10.00		MARL										
-264.35												
12.00												
-268.35												
14.00												
-268.35												
16.00												
-270.35												
18.00												
-272.35												
20.00												
-274.35												
23.00		CHALK										
-277.35												

Dry density at a depth of 10.0 m is 1595 kg/cub m
 Specific Gravity at a depth of 9.0 m is 2.80

Borehole number: **BH-4**
 Job number: 65095
 Client: KUMI SEKKEI CO.,LTD.
 Co-ords (x,y): 20082.00,30079.50
 G.W. Table [m]: 0.00
 Date started: 27.6.95
 Total depth [m]: 17.00
 Supervised by: DR. WLADIMIR TROSTANOVSKY
 Type of sampler: POLYETHELYN BAGS
 Remarks: Hard chalk layer appear at a depth of 12.00 m

Project name: NEW JERICHO HOSPITAL
 Site location: AKABAT JABER CAMP
 Vertical scale: 1:200
 Elevation [m]: -255.06
 Date: 20.7.95
 Date finished: 02.7.95
 Checked by: ENG.BASIM HAZZAN
 Logged by: NAZAR KHOURY
 Type of boring: AUGERING

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Depth [m]	Recovery	Sample	DESCRIPTION	Symbol	USCS	Color	Plasticity	Sieving	LAB TESTS		FIELD TESTS	
									w, L, P, (%)	100	SPT (Blows/0.3m)	50
0.00	0 (%)100											
-255.06			DRY LOES/SILT		CI	White	Med-ium				4	
2.00											10	
-257.06											30	
4.00		LOES									14	
-258.06											30	
6.00											17	
-259.06											30	
8.00											23	
-261.06											30	
10.00		MARL	WET MARL		CI-CH	Yellow-Green	Med-ium				24	
-263.06											30	
12.00											28	
-265.06											30	
14.00		CHALK			CL		Low				28	
-267.06											30	
17.00											32	
-272.06											30	
Dry density at a depth of 9.0 m is 1705 kg/cub m Specific Gravity at a depth of 9.0 m is 2.80												

Borehole number: **BH-5**
 Job number: 65095
 Client: KUMI SEKKEI CO.,LTD.
 Co-ords (x,y): 20121.50,30059.00
 G.W. Table (m): 0.00
 Date started: 27.6.95
 Total depth (m): 25.00
 Supervised by: DR. WLADIMIR
 TROSTANOVSKY
 Type of sampler: POLYETHELYN BAGS
 Remarks: Hard chalk layer appear at a
 depth of 25.00 m

Project name: NEW JERICHO HOSPITAL
 Site location: AKABAT JABER CAMP
 Vertical scale: 1:200
 Elevation (m): -255.01
 Date: 20.7.95
 Date finished: 02.7.95
 Checked by: ENG.BASIM HAZZAN
 Logged by: NAZAR KHOURY
 Type of boring: AUGERING

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Depth [m]	Recovery	Samp ples	DESCRIPTION	SYMBOL	USCS	Color	Plasticity	Sieving	LAB TESTS	FIELD TESTS	
										0	100
0.00	0 (100%)										
-255.01		LOES	DRY LOES/SILT	---	Cl	White	M- ed- ium	F		18	30
2.00										18	30
-257.01										8	30
4.00										30	30
-258.01										6	30
6.00										30	30
-261.01										12	30
8.00										30	30
-263.01		MARL	WET MARL	---	Cl- CH	Yellow- Green	M- ed- ium Hi- gh		30	31	
10.00									30	34	
-265.01									30	34	
12.00									30	34	
-267.01									30	34	
14.00									30	34	
-269.01									30	34	
16.00									30	34	
-271.01											
18.00											
-273.01											
20.00											
-276.01											
22.00											
-277.01											
25.00											
-280.01											

Specific Gravity at a depth of 9.0 m is 2.71

9 Possessed Equipment of Existing Jericho Hospital

9 Possessed Equipment of Existing Jericho Hospital

Name of Equipment	Q'ty (Existing)	Condition				Duration	Country of Origin	Q'ty of Equip. to be transferred from existing Jericho H.	Remarks
		Good	Usable	Reparable	Unusable				
(Out Patient Dept.)									
Infusion Pump	10	10			New	Japan	⑦	Nakanura Medical FP-955	
Portable Patient Monitor	1	1			N	Japan	①	Nihon Kouden OEC-6102	
Electric Suction Unit	1	1			N	Japan	①	Asahi Medical 103	
Examination Bed for Endoscope	1	1			N	Japan	①	Kakinuma K-1020A	
Diagnostic Laparoscope	1	1			N	Japan	①	Olympus A5259 etc.	
Diagnostic Endoscope Set	1	1			N	Japan	①	Olympus GIF-XQ etc.	
Cardiac Respiratory Monitor for Infant	3	3			N	USA	① & Tert. ②	Air Shields Vickers V1-S	
Infant Ventilator	1	1			N	Japan	①	Acoma Medical ICV-60	
ICU Incubator	1	1			N	USA	Tertiary	Air Shields Vickers C100QT	
Syringe Pump	8	8			N	Japan	④	Nakanura Medical SP-60	
Ultrasonic Nebulizer	2	2			N	Japan	①	Nakanura Medical U-100	
Pediatric Laryngofiberscope	2	2			N	Japan	②	Olympus ENF-L3	
Electric Suction Unit	2	2			6	Germany	-	ESCHMANN	
ECG Unit	1	1			7	Germany	-	WENNEN	
Ventilator	1			1	12	USA	-	Bennet	
Defibrillator	2	2			2	Germany	-	WENNEN	
Oxygen Meter	1	1			1	USA	-	BCI	
(OG Dept.)									
Fetal Heart Detector	1	1			N	Japan	①	Toitsu MT-430	
Gyn. Surgical Instruments Set	2	2			N	Japan	①	Nakanura Medical N-4820	
Anesthesia Apparatus	2	2			N	Japan	①	Kimura Medical FANCY-80M	
Infant Care Unit	2	2			N	Japan	-	Nakanura Medical NIW-3500	
Maternity Ultrasound Scanner	1	1			N	USA	-	GE RT-X200	
Medical Refrigerator	1	1			N	Japan	-	Kayagaki Medical ER-100N	
ECG	1			1	12	Germany	-	WANNEN	
Infusion Pump	1			1	10	USA	-	EASYLIFE	
Ultrasound Scanner	1		1		9	Japan	-	Aroka Medical	
Fetal Monitor	1	1			5	USA	-	COROMETRIC	
Fetal Heart Monitor	1	1			7	USA	-	ECHOSOUND	
Suction Unit	1			1	10	Germany	-	DEVIBISS	
Delivery Bed	2	2			N	Japan	-	Nakanura Medical GD-2000	
Delivery Instrument Set	4	4			N	Japan	②	Nakanura Medical N-4840	
Vacuum Extractor	1	1			N	Japan	-	Nakanura Medical GT-200	
Vacuum Extractor	1		1		10	Germany	-	VACUMAT	
Blood Pressure Monitor	1	1			N	Japan	①	Colin BP-8800	
Suction Unit	3	3			N	Japan	②	Mizuho Medical MSP-207M	

Name of Equipment	Q'ty (Existing)	Condition				Duration	Country of Origin	Q'ty of Equip. to be transferred from existing Jericho II.	Remarks
		Good	Usable	Reparable	Unusable				
Infant Incubator, STD type	2	2				N	Japan	②	Nakamura Medical H-1000D
Ultrasonic Nebulizer	1	1				N	Japan	①	Asahi Medical 107
Phototherapy Machine	2	2				N	Japan	①	Nakamura Medical PT-1600
Apnea Alarm	1	1				N	Japan	①	Nakamura Medical EA-1200
Incubator (Laboratory)	1		1			5	USA	-	AIR-SHIELDS
Biological Microscope	2	2				N	Japan	①	Nikon LABOPHOT-2
Contrast Microscope	1	1				N	Japan	①	Nikon LABOPHOT-2PH
Hematocrit Centrifuge, 12,000rpm	1	1				N	Japan	①	Kubota 3110
Distiller	1	1				N	Japan	①	Advantic Toyo GS-500
RO Water Pulifier	1	1				N	Japan	①	Millipore Japan M-RX12
Autoclave	1	1				N	Japan	①	Asahi Medical 320-A
Centrifuge, 6000rpm	2	2				N	Japan	②	Kubota 5100
UV/VIS Spectrophotometer	1	1				N	Japan	①	Hitachi U-1100
Blood Gas Analyzer	1	1				N	USA	①	AVL AVL-995BB
Electrolyte Analyzer	1	1				N	USA	①	AVL AVL-988-3
Electrophoresis Analyzer	1	1				N	Japan	①	Joko CTE-1000
Incubator	1	1				N	Japan	①	Kayagaki KFF-35PM
Mixer for Tube	1	1				N	Japan	①	Tietick BR-30LF
Blood Cell Counter	1	1				N	Japan	Tertiary	Sysmex F-820
Automatic Chemical Analyzer	1	1				N	USA	Tertiary	Chiba-Corning EXPRESS PLUS
Microplate Reader	1	1				N	Japan	①	Corona Elect. MTP-120
Centrifuge, 3000rpm	2		2			7	Germany	-	HERMLE Z-320
Biological Microscope	1		1			10	Japan	-	Olympus CH-2
Spectrophotometer	1	1				7	Germany	-	LKB/NOVASPEL
Spectrophotometer	1		1			6	Sweden	-	PHARMASIA
Frame Photometer	1		1			7	USA	-	Corning 410C
Dilutor	1		1			7	USA	-	Corning 805
Medical Refrigerator (Blood Bank)	1	1				7	USA	-	Forma Scientific
Blood Unit Shaker	1	1				N	Japan	①	Titick BR-30LF
Blood Bag Sealer	1	1				N	Japan	①	Terumo ME-AC157
Blood Bank Refrigerator	1	1				N	Japan	①	Katoman UB5000
Blood Plasma Freezer	1	1				N	Japan	①	Nihon Freezer SC-20
Donor Chair (Radiology)	1	1				N	Japan	①	Paramount KD-H23
X-Ray Machine, Mobile Type	1	1				N	Japan	-	Acoma X-ray MBA-200
Bucky's Table	1	1				N	Japan	-	Oobayashi
Ultrasound Scanner	1	1				N	USA	①	GE RT-X200

10 Fee for Medical Care Services

10 Fee for Medical Care Services

Palestinian National Authority

Ministry of Health

Technical office - Nablus

Tel - 09-384775 - 384776

Fax - 09-384777

a- Day care services are to be eliminated as there are no units in the Hospitals to handle such services.

b-1- All costs incurred for surgical preparations should be redeemed in full from uninsured patients.

2- One In-hospital day for expecting mothers in maternity ward 100 NIS
for uninsured Patient also pays for all drugs use (Attached is a drug list).

3- In-Patient days for tourists 2768 NIS
Visitors of Palestinian Origin - who do not hold a West Bank I.D. card will be treated as a native Palestinian and when he / she use health services, he / she pays similar fees, However he / she is not eligible to participate in the health Insurance Plan.

4- Treatment in the ICU 450 NIS

5- One in-patient day in psychiatric hospital for non-residents 146 NIS

6- One in-patient day in psychiatric hospital for tourists 658 NIS

7- One in-patient day for kidney patients non-residents 951 NIS

8- Each in-patient day for car accidents 960 NIS

9- Medical Reports

a- 1st report Free

b- Each additional medical report for Insured persons 15 NIS

c- Each additional Medical report for uninsured 30 NIS

d- Medical report for car accidents 170 NIS

10- Copy of an entire medical file 500 NIS

This however is subject to an official letter of approval from the legal department of the ministry to the relevant department in the hospital allowing this copy.

11- Medications

a- Medications for insured persons 3 NIS

B- Medications for uninsured Per cost

All prescription drugs from MOH facilities are issued to insured persons only.

All prescription drugs for children under 3 is free.

12- X-ray	
a- Normal X-ray (each)	25 NIS
b- Radiology test with contrast material	100 NIS
c- Security Deposit for X-ray	50 NIS
d- Radiology report	Free
e- CT scan	400 NIS
f- Ultrasound	345 NIS
13- Laboratory test (For each test on the form)	25 NIS
14- Blood Bank	
a- 100 ML - Unit of Blood	50 NIS
b- 500 ML - Unit of Blood	50 NIS
c- Blood test	50 NIS
15- Ambulance	
a- Within the municipality	54 NIS
b- Outside the municipality per <i>KM</i>	2 NIS
Rates for ambulance services for insured and un-insured is the same.	
16- Vaccination	
a- For travel abroad (insured and un-insured)	100 NIS
b- For Naj (insured and un-insured)	20 NIS
17- Cancer	
a- Chemotherapy	Per cost
18- Physical therapy	
a- Physical Therapy treatment	—
19- E-E-G-	50 NIS
20- Clinic visit	
a- Dr. treatment in outpatient department	10 NIS
b- Nurse treatment in OP clinic	10 NIS

21- Hospital visit	
a- Treatment by Dr. in Hospital	20 NIS
OP clinic	
b- Treatment by nurse in Hospital	
OP clinic	10 NIS
c- ECG in Hospital OP clinic	30 NIS
d- Treadmill test - (OP)	150 NIS
e- Echocardiography (OP)	150 NIS
f- Respiratory function test (OP)	150 NIS
g- Bronchoscopy (OP)	300 NIS
h- Gastroscopy (OP)	300 NIS
i- Colonoscopy (OP)	600 NIS
j- Laparoscopy (OP)	400 NIS
22- Emergency room treatment	50 NIS
23- Driving tests	
a- 1st test	194 NIS
b- 2nd test	194 NIS
c- Review committee for drivers	294 NIS
d- Drivers test in health clinics	100 NIS

Free Health Services

- a- Treatment of contagious diseases and epidemics - in accordance with the list of diseases as issued by the MOH.
- b- MCH clinics.
- c- All public health tests at the request of the MOH.
- d- All school tests by public school health.
- e- Oncology diagnosis.
- f- Children under 3.
- g- Army casualties.
- h- Emergency care for school children during school hours.
- i- Referral cases to medical committees from other government depts. for diagnosis.

- j- Health Insurance
- | | | |
|--|-------------------|---------|
| 1- Voluntary health insurance premiums | AS
NIS-monthly | 111 NIS |
| 2- Students 18-21 Yr. | | 20 NIS |
| Students 21-30 Yr. | | 40 NIS |
- 3- All referral cases from Intifada casualty association.
- a- Free medical treatment in health clinics - No. medications, however the association should secure cost of drugs from outside sources.
 - b- For Hospitalizations, members must secure a written order from the referral section of the ministry.
 - Hospitalizations for newly insured's is effective 30 days from day of joining the health insurance plan.
 - Referrals to health facilities outside the governmental health facilities is effective 4 months from the date of issuance - for all kinds of insurance.

Deputy Health Ministry
Dr. Husam Abdulhadi

Circular

Subject - Fees for health services

I am pleased to inform you that as of 18-2-95 fees for health services will be as follows

<u>Hospitalizations</u>	<u>NIS</u>
1- One day for uninsured if the health insurance is not valid	300
a- Minor operations	200
b- Medium type operations	400
c- Major surgeries	600
e- Cataract extraction and ^t intra ocular lens implant- for insured	450
f- Cataract extraction and -intra- ocular lens implant -for uninsured	900

11 Monitoring Indicators for Medical Institute

11 Monitoring Indicators for Medical Institute

1. Basic Philosophy

- Whether or not there is basic philosophy.
- To what extent the basic philosophy has filtered into the hospital staffers.
- Conformity of the basic philosophy to the actual situation.

2. Conformity of the Facilities

2-1) Conformity of the hospital facilities to regional medical activities

- To use patient statistics to determine the regional coverage of the medical services provided.
 - No. of patients by residential area and by type of illness
- Investigate the scale of hospital wards and the medical departments covered by medical institutions in the region.

3. Diagnosis/Treatment Functions

3-1) Medical Departments in which Diagnosis/Treatment is Provided.

- a) Summary of activities (by month, for the past five years)
 - No. of physicians by specialty (by medical department)
 - No. of patient beds
 - Bed occupancy ratio
 - No. of inpatients (by medical department)
 - No. of outpatients (by medical department)
- b) Quality of the activities
 - No. of Medical departments in which diagnosis and treatment is provided.
 - Special outpatient clinic
 - Emergency aid system
 - Whether or not the system of treatment by medical terms is adopted.
 - Whether or not conferences are held regularly.
 - Whether or not the hospital accepts interns.
 - Whether or not the hospital collaborates with other medical institutions.

3-2) Nursing Department

- No. of nurses (by medical department)
- Ratio of registered nurses vs. practical nurses
- Nursing system
- Average night duty days per month (average)
- System for education/training
- Time study on the work hours of nurses
- Whether or not medical clerks are allocated.
- System for delivering goods and supplies

3-3) Pharmaceutical Department

- Whether or not guidance is given on the taking of medicine.
- Whether or not the patients' history of taking medicine can be traced.
- Whether or not the system of administering medicines to inpatients through a unified channel is adopted.
- Waiting time of outpatients (average)
- Inventory system
- Establishment of a standard optimum stock
- Number of medicine items available
- Whether or not the medicines readily available in patient wards undergo regular inspection. If you have any, please show the contents.

3-4) Inspection Department

- No. of inspection items that can be carried out.
- No. of inspection specialists
- Whether or not the inspection systems are computerized. If they are computerized, please show the contents.
- Whether or not subcontractors are used.
- Whether or not the hospital carries out inspections commissioned by other hospitals. If so, please show the contents.

3-5) Radiology Department

- Contents and types of equipment
- No. of radiology specialists
- Conditions of protection measures

3-6) Meal Service Department

- No. of nutritionists
- Whether or not meals are adequately heated and served at adequate timings.
- How long is the menu cycle.
- How are the ingredients for meals preserved (place of storage, how many days' supply)

3-7) Operation Department

- No. of operation rooms and their main usage
- Whether each operation room is used exclusively for a particular department, or is used on a shared basis
- No. of operations by operation methodology
- Securing of anesthetists
- Cleanliness of the operation rooms
- Whether or not the operation schedule is managed smoothly

3-8) Material and Equipment Department

- Range and volume of the activities (per day, per month)
 - Medical equipment and materials
 - Sterilization equipment and materials
 - Sanitary equipment and materials
 - General equipment and materials
- No. of staffers
- Type and quantity of equipment
- Degree and rang of cleanliness management
- Delivery method

3-9) Others

- Whether or not the hospital has rehabilitation facilities.
- Whether or not the hospital has a visiting nurses' room.
- Whether or not the hospital adopts countermeasures against nosocomial (in-hospital) infection (if yes, the specific measures adopted).
- Management of the patients' the medical histories

3-10) Conformity of the hospital facilities to regional medical activities

- No. of patients consulted per physician per day (for inpatients, and for outpatients)
- No. of medicines prepared Pharmaceutical Department staffer per day
- No. of inspections carried out per inspection specialist per day
- No. of radiological inspections carried out per radiology specialist per day
- No. of meals prepared per Meal Service Department staffer per day

4. Balance of Accounts

- Income
 - Government subsidy
 - Income from pay beds
 - Income from advanced medical treatment (Heart survey, X-ray diagnosis, etc.)
 - Income from high level services (ICU, paid-basis rehabilitation care, etc.)
- Costs
 - Personnel costs
 - Equipment/material costs
 - For medicine
 - For medical equipment
 - For preparing meals
 - Expenses
 - Infrastructure (power and water supply)
 - Maintenance costs
 - Expendable supplies

5. Financial Data

- Balance Sheet

6. Services Provided to Patients

- Whether or not amenities are provided for the hospital facilities
- Degree of patient satisfaction

7. Management and Maintenance

- Organization of the hospital
- Personnel Management
- System of maintenance

8. Workplace Environment

- Whether or not dormitories for staffers are provided.
- Whether or not day nurseries for staffers are provided.
- Whether or not welfare facilities are provided.
- Whether or not a system of lending uniforms to staffers is adopted.
- Whether or not regular health checkups are carried out on staffers.
- Working hours
- To confirm whether good communication is maintained between the management and the labor by focusing on the following two points :
 - Whether or not the hospital has an in-house public relations journal.
 - Whether or not there are activities hosted by the hospital

9. Facilities and Buildings

- Perception based on external appearance (confirm the image of the hospital by visually inspecting the damages and soils on the exteriors of the hospital facilities)
- Perception based on the appearance of interiors (confirm the image of the hospital by visually inspecting the damages and soils on the exteriors of the hospital facilities)
- Sense of cleanliness
- History of the building and facilities
- Structure
- The period of durability (Physical)
- Availability of vertical transport systems
- Air-conditioning systems
- Electrical systems
- Plumbing and sanitary systems
- Existing problems

10. Machines and Devices

- Medical machines and devices (steam sterilizer, gas sterilizer, etc.)
- Future plans to renew the machines and devices.

JICA