３－３　パレスチナ側分担事業の概要

日本国のコミュニティ開発支援無償資金協力は自助努力による開発への支援を目的にしており、この方針に基づき日本国政府は受益国側にも応分の負担を設定している。この原則は世界中の全ての受益国に対し、平等に適用されている。従って、日本国政府が本プロジェクトの実施を決定した場合、パレスチナ側は以下の措置を講じなければならない。

（1）　本プロジェクトに必要な資料・情報を日本側に提供すること

（2）　本プロジェクトに必要な土地を用意し、MEHE が建物を建設する権利を確保すること

（3）　本プロジェクトの実施に先立ち必要となる、既存施設および障害物の解体撤去工事を行うこと

（4）　完成後に緑化エリアに植採を実施すること

（5）　完成後の施設に必要となる電力、上水道、電話その他付随的設備の敷地内への引き込みと接続工事を行うこと

（6）　本プロジェクトに含まれる基本的な家具・機材を除き、完成後の施設に追加する必要がある家具・機材の調達を行うこと

（7）　本プロジェクトによって建設される建物の適正な運営・維持管理に必要となる人員と予算を確保すること

（8）　日本にある銀行との銀行取り決めに基づき包括的支払い授権書にかかる通知手数料、および支払手数料を負担すること

（9）　調達代理契約及び調達代理機関と交わす各契約に基づいた物品および役務の提供に関し、パレスチナ西岸地区で課される関税、国内税、およびその他課税を免除すること

（１０）調達代理契約及び調達代理機関と交わす各契約に基づいて、本プロジェクトに携わる個人がパレスチナ西岸地区に入域し、滞在する場合に必要な便宜を与えること

（１１）本プロジェクトの下で建設される施設を MEHE の管轄の下に適正かつ効果的に使用し維持すること

（１２） 建設期間中必要となる資材置場、現場事務所用地を可能な限り計画敷地に近い場所に確保し、工事期間中を通して無償で施工業者に貸与すること

（１３） 本プロジェクトのために必要なすべての許可、承諾、権限を取得すること

（１４） 本プロジェクトの範囲内で日本のコミュニティ開発支援無償資金協力によって負担される費用以外の全ての費用を負担すること（既存施設解体、インフラの引き込み・接続工事など）

（１５） 建設工事に先立ち、調達代理機関の協力の下に各種許認可を取得すること、および工事完了や使用開始にあたっての当局の許可が必要な場合はそれを取得すること

（１６） 本プロジェクトの促進のために調達代理機関が便宜的、決定、判断等を要請する場合は速やかに対応すること

３－４　プロジェクトの運営・維持管理計画

３－４－１　運営計画

（１）教員配置

本プロジェクトの目的は２部制解消のための学校分割移転、校舎借上げの停止、老朽化校舎の建替えにあり、計画対象校あるいは移転元の既存校において教員はすでに配置されている。このため本プロジェクト実施に伴う教員の増員は生じない。

（２）職員配置

パレスチナにおける学校職員は、校長、副校長（教員が兼務)、秘書、清掃スタッフから構成されるが、校長、秘書、清掃スタッフに関しては、計画対象校あるいは移転元の既存校に既に配置されているため、新たに職員を配置する必要はない。

（３）学校運営

パレスチナでは、MEHE が教職員給与にかかる人件費と学校施設の光熱費や通信費などの運営費を負担している。光熱費や通信費に関しては MEHE が直接電気会社等に支払っている。上記以外の学校運営にかかる事務用品や消耗品は各学校予算（生徒からの徴収金、キャンティーンを賃貸する民間業者からの家賃収入、その他寄付から構成される）から購入される。なお、学校予算は各校で校長が管理している。

３－４－２　維持管理計画

学校施設の清掃に関しては、各学校に必ず 1 人以上の清掃スタッフが配置されており、トイレを含めて教室、事務室等は常に清潔に保たれている。清掃スタッフは学校の正職員として MEHE が雇用している。なお、パレスチナの公立校では生徒は学校施設を清掃する義務を持たない。

施設や教育家具の修理やメンテナンス等の費用は原則として学校予算で賄われ、時には PTA や自治体からの寄付もメンテナンス費用に充てる。維持管理費用が学校予算等で賄うことができない場合、地方教育局が財政的、技術的な援助を行う場合もある。

３－５　プロジェクトの概略事業費

３－５－１　協力対象事業の概略事業費

本協力事業を実施する場合に必要となる事業費総額は 9.16 億円となり、先に述べた日本とパレスチナの負担区分に基づく双方の経費内訳は以下に示す積算条件によれば次の通りと見積もられる。ただし、この額は交換公文上の供与限度額を示すものではない。

（１）日本側負担経費

概算総事業費　904.2 百万円

表３－２０　日本側負担経費内訳

費目		概算事業費　(百万円)	
施設費	建設費	630.4	657.8
	家具費	27.4	
機材費（輸送費含む）		18.1	
調達代理機関費		95.6	
弁護士費		2.8	
施工監理費		129.9	
合計		904.2	

（２）パレスチナ側負担経費

US$ 113,300.-（約 12.1 百万円）

表３－２１　パレスチナ側負担経費

費目		金額　（千 US$）	日本円換算(百万円)
資本経費	電力引き込み・接続費	60.0	6.4
	給水接続費	15.0	1.6
	既存建物解体費	30.0	3.2
	銀行手数料	8.3	0.9
合計		113.3	12.1

（３）積算条件

①　積算時点　　：平成 20 年 6 月

②　為替交換レート　　：１US$= 106.73 円

：1 現地通貨（NIS）　=　31.391 円

③　施工・調達期間　　：詳細設計、工事期間は施工工程に示した通り。

④　その他　　：積算は日本国政府の無償資金協力の制度を踏まえて行う。

３－５－２　運営・維持管理費

（１）教職員給与

教職員の増員は必要ないため、本プロジェクト実施に伴う教職員給与の追加発生はない。

（２）学校運営経費

パレスチナでは学校運営経費（光熱費、通信費等）は MEHE が負担する。本プロジェクトでは２部制を解消するために Beita 校および Wadi Fara'a 校の午前または午後の部が移転するための校舎が新築される。16 教室を有する 1 校当りの平均学校運営経費は年間 6,000NIS であるため、MEHE は当該 2 校のために年間 12,000NIS の学校運営経費を負担する必要がある。

また、Beit Dajan 校、Jericho 校、Al Fara'a 校の 3 校では施設規模拡大に伴い、各校で年間約 3,000NIS の光熱費の増加が見込まれる。このため MEHE は当該 3 校のために年間 9,000NIS の光熱費増加を負担する必要がある。

したがって本プロジェクト実施に伴い、MEHE は年間 21,000NIS の学校運営経費を負担する必要がある。

（３）維持管理費

本プロジェクトで建設する施設は、引渡し後数年間は修理を必要としないと考えられるが、汚水汲み取りは定期的に行われなければならない。また、5 年、10 年毎に施設の再塗装を行う必要がある。再塗装と汚水汲み取りの頻度と経費は以下の通りである。

表３－２２　維持管理費用

項目		頻度	年間あたり費用(NIS)
再塗装	外部柱型、庇、パラペット、廊下	10 年に 1 度	45,738
	鋼製建具	5 年に 1 度	2,806
汚水汲み取り		汚水槽が満杯になる毎	145,000
合計			193,544

(約 6,076,000 円　1NIS=31.391 円)

（４）運営・維持管理費の合計

本プロジェクト実施より増加する運営・維持管理費として、光熱費、再塗装費、汚水汲み取り費がある。このうち、光熱費、5 年、10 年に一度に行われる再塗装費および、Jericho 校の汚水汲み取り費は MEHE によって負担される。本プロジェクトにかかる運営・維持管理費の同庁負担金額の合計は年間あたり 98,544NIS であり、この額は 2007/8 年度合計予算 1,515.3 億 NIS の 0.007%であることから十分負担可能と考えられる。

また、Beita 校、Wadi Fara 校、Beit Dajan 校、Al Fara'校の汚水汲み取り年間当たり費用はそれぞれ 29,000NIS である。この金額は表３－２３によれば各村（あるいは難民キャ

ンプ）の年間予算の 0.42~2.12%程度であり、負担可能である旨各村より確認を得ている。

表３－２３　年間運営・維持管理費用

負担者	費目	年間当たり費用（NIS）
MEHE	光熱費（5 校分）	21,000
	再塗装	48,544
	Jericho 校汚水汲み取り	29,000
	小計	98,544
Beita 村	汚水汲み取り	29,000
Wadi Fara 村	汚水汲み取り	29,000
Beit Dajan 村	汚水汲み取り	29,000
Al Fara'a 難民キャンプ	汚水汲み取り	29,000
	合計	214,544

表３－２４　各自治体の 2007 年度予算および予算に占める維持管理費割合

	Beita 村	Wadi Fara'a 村	Beit Dajan 村	Al Fara'a 難民キャンプ
汚水汲み取り費(NIS)	29,000	29,000	29,000	29,000
2007 年度予算(NIS)	6,745,068	1,370,218	1,460,395	6,315,421
予算に占める汚水汲取り費(%)	0.42	2.12	1.99	0.46

第４章　プロジェクトの妥当性の検証

第４章　プロジェクトの妥当性の検証

４－１　プロジェクトの効果

本プロジェクトではナブルス、トゥバス、およびジェリコの 3 県において、計画対象の 5 校に 69 教室および理科実験室をはじめとする特別教室、教員室等の事務関連室およびトイレを建設する。また、家具および教育機材も併せて調達する。本プロジェクトの実施による効果は下記のとおり整理される。

表４－１　プロジェクトの効果

現状と課題	協力対象事業での対策	直接効果	間接効果
1. 教室不足のため、2 部制を採用する学校や、近い将来 2 部制を採用せざるをえない学校がある。 <現在 2 部制採用校> ・Beita 校 ・Wadi Fara'a 校 <将来 2 部制採用校> ・Beit Dajan 校[1] ・Jericho 校[2]	現在 2 部制を採用している 2 校の午前の部または午後の部を移転・収容する為、学校施設を新築する。 （計 32 教室）	2 部制が解消される。 現在 2 部制を強いられている 1,750 人が 1 部制で授業を受けられるようになる。	＊生徒の成績・士気が向上する。 ＊学校運営が円滑になる。 ＊生徒・教職員および家族の生活時間帯が通常通りに戻る。
	我が国の援助がなければ近い将来 2 部制に移行する 2 校に対して、それぞれ学校施設を増築または移転新築する。 （計 28 教室）	1 部制が維持される。850 人が将来的にも 1 部制での授業を保障される。	＊ジェリコ市では西側にのみ公立学校が存在しているが、Jericho 校を市の東側に移転新築することにより、東側在住の生徒の通学距離・通学時間が短縮される。
2. 他の施設を借用して運営しており、借用施設ではカリキュラム通りの授業が行えない学校がある。 <他施設借用校> ・Jericho 校 ・Al-Fara'a 校	他施設借用校に対して、普通教室のほか、理科実験室、コンピューター室、図書室等の特別教室を含んだ学校施設を新築する。	カリキュラム通りの授業が行えるようになる。 標準サイズに満たない矮小教室が解消できる。	＊生徒の成績・士気が向上する。

[1] Beit Dajan 校の老朽施設を取り壊せば、残った校舎で 2 部制を敷かざるを得ない。
[2] Jericho 校が校舎借用を取り止めれば、その生徒を収容する為にジェリコ市内の他の学校が 2 部制になる。

４－２　課題・提言

４－２－１　相手国側の取り組むべき課題・提言

本プロジェクトによって整備される施設が継続的かつ有効に使用されるために、主管官庁であり実施機関でもあるMEHEが取り組むべき課題は以下のとおりである。

- 本プロジェクトによって増設･移転される教室に対して適正な人数の生徒を受け入れ適切なクラス編成を行う。
- 本プロジェクトによって増築・新築移転される校舎に対して、必要な運営・維持管理費を割り当てる。特に5年、10年に一度、比較的多額な再塗装工事が必要となるため、特別の予算措置を行う。
- 汚水の汲取りを関係自治体が継続して行うよう指導・モニタリングを続ける。

４－３　プロジェクトの妥当性

本プロジェクトは以下の理由により我が国の無償資金協力による協力対象事業の実施が妥当であると判断される。

- 本プロジェクトの裨益対象はパレスチナの公立学校生徒など一般市民である。
- 本プロジェクトのプロジェクト目標はパレスチナの教育施設の新築移転･建替えを通じて学習環境を改善することであり、我が国無償資金協力の目的であるBHN、教育および人造りに合致する。
- 本プロジェクト計画対象校は、パレスチナ独自の資金と人材、技術で運営・維持管理を行うことができる。また、本プロジェクトの実施には過度に高度な技術を必要としない。
- 本プロジェクトの内容は「パレスチナ復興開発計画」および「教育 5 カ年計画(2007-2011)」の戦略・政策に資する計画である。
- 本プロジェクト実施には収益性を伴わない。
- 本プロジェクトの実施に伴う社会面・環境面での負の影響がほとんどない。
- 我が国の無償資金協力の制度により、特段の困難なくプロジェクトの実施が可能である。

４－４　結論

本プロジェクトは前述のように多大な効果が期待されると同時に、本プロジェクトが広くパレスチナ住民のBHNの向上に寄与するものであることから、協力対象事業の一部に対して、我が国の無償資金協力を実施することの妥当性が確認される。さらに、本プロジェクトの運営・維持管理についてもパレスチナ側体制は人員・資金ともに可能な範囲であるため問題ないと考えられ、本プロジェクトは円滑かつ効果的に実施しうると考えられる。

資　料

１．調査団員氏名・所属

(1) 概略設計調査（平成 20 年 5 月 17 日～平成 20 年 6 月 20 日）

氏名	業務内容	所属
岡本　茂	団長	独立行政法人　国際協力機構 資金協力支援部準備室　審議役
安田　智幸	計画管理	独立行政法人　国際協力機構 資金協力支援部準備室　業務監理第二課　主任
道川　久文	業務主任/建築計画/教育計画	株式会社　毛利建築設計事務所
毛利　信弘	建築設計	株式会社　毛利建築設計事務所
吉澤　博幸	施工計画/調達事情/積算	株式会社　毛利建築設計事務所
高橋　美奈子	業務調整/教育計画 II	株式会社　毛利建築設計事務所
山本　晋一	建築設計 II	株式会社　毛利建築設計事務所

(2) 概要説明調査（平成 20 年 10 月 9 日～平成 20 年 10 月 23 日）

氏名	業務内容	所属
小林　勤	団長	独立行政法人　国際協力機構 パレスチナ事務所　次長
安田　智幸	計画管理	独立行政法人　国際協力機構 資金協力支援部　実施監理第二課　調査役
前田　憲次	調達監理	財団法人　日本国際協力システム 業務第一部　施設第二課　課長補佐
道川　久文	業務主任/建築計画/教育計画	株式会社　毛利建築設計事務所
吉澤　博幸	施工計画/調達事情/積算	株式会社　毛利建築設計事務所

(3) 入札図書参考資料説明（平成 21 年 1 月 30 日～平成 21 年 2 月 7 日）

氏名	業務内容	所属
道川　久文	業務主任/建築計画/教育計画	株式会社　毛利建築設計事務所
毛利　信弘	建築設計	株式会社　毛利建築設計事務所
吉澤　博幸	施工計画/調達事情/積算	株式会社　毛利建築設計事務所

２．調査行程

(1) 概略設計調査（平成 20 年 5 月 17 日～平成 20 年 6 月 20 日）

日時			A	C	C	D	E	F	G
			JICA		コンサルタント				
			団長／総括	計画管理	業務主任／建築計画／教育計画	建築設計	施工計画／調達事情／積算	教育計画II（自主補強）	建築設計II（自主補強）
			岡本茂	安田智幸	道川久文	毛利　信弘	吉澤　博幸	高橋美奈子	山本晋一
			8日間	8日間	35日間	29日間	35日間	36日間	19日間
0	5/16	金						成田 →	
1	5/17	土	成田 →　テルアビブ				成田 → テルアビブ	→ テルアビブ	
2	5/18	日	サイト視察（ナブルス）						
3	5/19	月	在イスラエル日本大使館表敬、JICAパレスチナ事務所表敬（テルアビブ）、ラマッラに移動				Cに同行		
4	5/20	火	教育・高等教育庁協議（ラマッラ）、類似案件視察				現地再委託（I)業務	Cに同行	
5	5/21	水	サイト視察（ジェリコ、トゥバス）				現地再委託（I)業務	Cに同行	
6	5/22	木	ミニッツ署名				施工積算関連調査	Cに同行	
7	5/23	金	日本大使館、JICA事務所報告（テルアビブ）			成田 →　パリ	資料整理	Cに同行	
8	5/24	土	テルアビブ　？　パリ		団内協議	パリ　→　テルアビブ	団内協議		
9	5/25	日			他ドナー調査(KFW)		施工積算関連調査	Cに同行	
10	5/26	月			他ドナー調査(EU)		ラマッラ積算関連調査	Cに同行	
11	5/27	火			他ドナー調査(ノルウェィ)		ラマッラ積算関連調査	教育関連調査	
12	5/28	水			ナブルスコンサルタント調査・類似案件視察		ナブルス積算関連調査	教育関連調査	
13	5/29	木			現地コンサルタント調査		ラマッラ積算関連調査	教育関連調査	
14	5/30	金			資料整理				
15	5/31	土			団内協議				
16	6/1	日			現地コンサルタント調査		ラマッラ積算関連調査	教育関連調査	成田 →　テルアビブ
17	6/2	月			サイト調査準備				テルアビブ→ラマッラ
18	6/3	火			サイト調査 (Beit Dajan, Nablus)				
19	6/4	水			サイト調査 (Baita, South Nablus)				
20	6/5	木			サイト調査 (Al Fara'a, Tubas)				
21	6/6	金			団内協議				
22	6/7	土			サイト調査　(Jericho, Jericho)				
23	6/8	日			サイト調査　(Al-Zubeidat, Jericho)				
24	6/9	月			サイト調査 (Wadi Fara'a)				
25	6/10	火			配置案作成		積算関連調査	教育関連調査	Cに同行
26	6/11	水			配置案作成		積算関連調査	教育関連調査	Cに同行
27	6/12	木			教育省協議	現地再委託（I)業務		教育関連調査	Cに同行
28	6/13	金			資料整理				
29	6/14	土			フィールドレポート案作成				Cに同行
30	6/15	日			教育省協議	現地再委託（I)業務		Cに同行	Cに同行
31	6/16	月			追加調査		施工積算関連追加調査	Cに同行	Cに同行
32	6/17	火			教育省協議、フィールドレポート署名		施工積算関連追加調査	Cに同行	Cに同行
33	6/18	水			大使館、JICA報告				テルアビブ→アムステルダム
34	6/19	木			テルアビブ　→　パリ				アムステルダム→成田
35	6/20	金			パリ　→　成田				

(2) 概要説明調査（平成 20 年 10 月 9 日～平成 20 年 10 月 23 日）

			官団員 (Official Members)			コンサルタント (Consultants)	
			小林 勤 Mr. Kobayashi	安田 智幸 Mr. Yasuda	前田 憲次 Mr. Maeda	道川 久文 Mr. Michikawa	吉澤 博幸 Mr. Yoshizawa
			団長(現地) Leader	計画管理 Planning Management	調達監理 Procurement Management (JICS)	(a) 業務主任/建築計画/教育事情 Project Manager/Construction Planning/Education Planning	(b) 施工計画/積算 Architectural Design
1	10月9日 9-Oct	木 Th			成田 (NRT) 13:00 → フランクフルト (FRA) 18:00 JL407		
2	10月10日 10-Oct	金 Fr			フランクフルト (FRA)10:15 → テルアビブ(TLV) 14:00 LH686 16:00 JICA表敬(Courtesy call to JICA)		
3	10月11日 11-Oct	土 Sa			移動:テルアビブ → ジェリコ→ラマラ) ジェリコサイト視察 (Transfer Tel Aviv → Jericho → Ramallah) Inspection for Jericho site		
4	10月12日 12-Oct	日 Su			AM 教育庁表敬/協議 (Meeting with MEHE) 現地再委託業務 (Sub Consultant negotiation)		
5	10月13日 13-Oct	月 Mo			公共事業庁中央入札局 (Central Tender Department, if it's necessary), コンサルタント協会、建設業協会 (Meeting with Engineers Association & Contractors Union) 教育省補足協議 (Additional Meeting with MEHE)		現地再委託業務 (Sub Consultant negotiation)
6	10月14日 14-Oct	火 Tu		成田 (NRT)11:35 → フランクフルト(FRA) 16:35 NH209	補足調査 (Additional Survey)	教育省設計協議 (Meeting on Design with MEHE) 現地再委託業務 (Sub Consultant negotiation)	
7	10月15日 15-Oct	水 We		フランクフルト(FRA)10:15 → テルアビブ(TLV)14:00 LH686 16:00 JICA表敬(Courtesy call to JICA)	補足調査 (Additional Survey)	教育省設計協議 (Meeting on Design with MEHE) 機材補足調査(Additional survey for Equipment)	
8	10月16日 16-Oct	木 Th	08:00 テルアビブ → ラマラ (Transfer Tel Aviv → Ram Allah)		教育省協議 (Meeting with MEHE)		
			11:00 教育庁表敬/協議 (Courtesy call to MEHE, Explanation on DBD, M/D Discussion) 14:00 ミニッツ協議 (M/D Discussion)				補足調査 (Additional Survey)
9	10月17日 17-Oct	金 Fr	資料整理 (data analysis)				
10	10月18日 18-Oct	土 Sa	サイト調査4校 (Site Survey for 4 schools)				
11	10月19日	日	09:00 計画庁および教育庁協議 (M/D Discussion, MOP&MEHE) 12:00 ミニッツ署名 (Signing Minutes)				
	19-Oct	Su	ラマラ(Ram Allah)→テルアビブ (Tel Aviv)		補足調査 (Additional Survey)	現地コンサリタントと打ち合せ (Meeting with Local Consultant)	
12	10月20日	月	09:00 大使館報告 (Report to EOJ) 10:00 JICA報告 (Report to JICA)				
	20-Oct	Mo		テルアビブ(TLV)15:45 → フランクフルト (FRA)20:00 LH687	12:00 教育庁補足協議 (Additional Meeting with MEHE)		
13	10月21日 21-Oct	火 Tu		フランクフルト (FRA) 20:45	ラマラ → テルアビブ (Ram Allah Transfer →Tel Aviv) テルアビブ(TLV) 15:45 → フランクフルト (FRA) 20:00 LH687		
14	10月22日 22-Oct	水 We		→成田着 (NRT) 14:50 NH210	フランクフルト (FRA) 21:00 →		
15	10月23日 23-Oct	木 We			成田着 (NRT) 15:00 JL 408		

（3）入札図書参考資料説明（平成 21 年 1 月 30 日～平成 21 年 2 月 7 日）

			コンサルタント (Consultants)		
			道川　久文 Mr. Michikawa	毛利　信弘 Mr. Mohri	吉澤　博幸 Mr. Yoshizawa
			(a) 業務主任/建築計画/教育事情 Project Manager/ Architectural Planning/ Education Planning	(b) 建築設計 Architectural Design	(b) 施工計画/調達事情/積算 Construction & Procurement Planning/ Cost Estimate
1	1月30日 31-Jan	金 Fr	成田 (NRT) 1330 (JL407) 1745 フランクフルト (FRA)		
2	1月31日 31-Jan	土 Sa	フランクフルト (FRA) 1005 (LH686) 1450 テルアビブ(TLV) 移動:テルアビブ　→　ラマラ (Transfer Tel Aviv → Ram Allah)		
3	2月1日 1-Feb	日 Su	現地コンサルタントと打ち合せ(Meeting with Local Consultant)		
4	2月2日 2-Feb	月 Mo	教育省に入札参考資料説明 (Explanation of Draft Tender Documents to MEHE)		
5	2月3日 3-Feb	火 Tu	教育省協議 (Discussion with MEHE on Technical Notes)		
6	2月4日 4-Feb	水 We	テクニカルノート署名 (Signing the Technical Notes)		
7	2月5日 5-Feb	木 Th	移動:ラマラ→テルアビブ (Ram Allah → Tel Aviv) JICA / 大使館報告 (Report to JICA / EOJ) テルアビブ(TLV) 1635 (LH687) 2000 フランクフルト (FRA)		
8	2月6日 6-Feb	金 Fr	フランクフルト (FRA) 2025 (JL408)→		
9	2月7日 7-Feb	土 Sa	→1550 成田着 (NRT)		

３．関係者（面会者）リスト

Ministry of Education and Higher Education

Ms. Laime Mustafa Alami		Minister
Building Section	Mr. Fawaz Mujahed	Director General, Buildings
	Mr. Fakhri Safadi	Director of Engineering
	Mr. Abdul Salan	Director, School Building Services
	Ms. Wisam Nakhleh	Head, Division of Projects/Building
	Ms. Khawla Shihadeh	Head, Division of Design
	Ms. Sarab Omar	Architectural Engineer
	Mr. Samer Mousa	Electrical Engineer
	Ms. Rowaida Shaker	Structural Engineer
	Ms. Hedab Omar	Structural Engineer
	Mr. Khaled Edwan	Staff, Engineering Building Department
	Mr. Rami Ismail	Engineer
	Mr. Jehad A Draidi	Acting Director General of Projects
	Mr. Sai'd Jawhari	Acting Head of Supervision Section
Ms. Hana A. Abu Hijleh		Director, Procurement and Tendering
Mr. Nida Abu Baker		Staff, Procurement Section
Mr. Mahmoud Dawod		Director, Equipment
Mr. Hussein M. Manssor		Acting Director General, Supplies
Mr. Yahya Shawa Maeh		Head, Division of Planning
Mr. Munjid Suleiman		Head, Division of Statistics
Mr. Mahdi. M F Hamdan		Head, Division of School Map
Ms. Sara Hammoudeh		Director, Budget
Mr. Mustafa M. Al-Odeh		Vice Director General, Administrative Affairs
Mr. Iyad M. Abuarrah		Director, Department of Authentication
Mr. Faiz Sulieman		Director of Distribution
Mr. Kamal Bawatna		Director of Textbook and Printing
Mr. Taleb H. Mohammad		Director, Computer Center
Mr. Mohammad Qalalwa		Director of Supplies Dept.

Ministry of Planning

Dr. Cairo Arafat	Director General
Mr. Ibrahim Abdulrahim	Director General

Ministry of Public Works and Housing

Mr. Bassam Jaber	Director of Central Tendering Department

Ministry of Local Government

Mr. Fawaz Rabaia	General Coordinator, JICA Projects

Directorate of Education, Nablus

Mrs. Sanar Akkob	Director of Education
Mr. Hussain Abdulhaq	Head, Dept of Engineering
Ms. Samar Qadi	PR Responsible
Mr. Tayseir Mohammad Abu Wardeh	Headmaster of Beit Dajan School
Ms. Abeer Hanani	Teacher
Ms. Samar Hanaysheh	Teacher

Directorate of Education, South Nablus

Mr. Mohammad Awwad	Director of Education
Mr. Ismail Faleh	Head, Division of Planning
Mr. Nazmi Yusuf Dweikaf	Headmaster, Baita Basic Boys School
Ms. Suhair Issa Saeed Jaber	Headmistress, Baita Basic Co-ed School

Directorate of Education, Tubas

Mr. Iyad Mohammad Ahnarrar	Director of Education
Mr. Yassin Abdul-latief Banymatter	Headmaster, Al-Fara'a Secondary School
Mr. Nasser Abu Kishk	Teacher, Fara'a Basic School

Directorate of Education, Jericho

Mr. Mohammad A. El-Hawwash	Director of Education, Jericho
Ms. Amal Johar	Civil Engineer, Educational Directorate of Jericho
Ms. Fadia Omran	Statistics and Planning
Mr. Imad Jabeh	-
Mr. Taiseer Saeed Deraghmeh	Headmaster, Al-Buhtari Boys School
Ms. Hana Saleem Zubeidat	Headmaster, Al-Zubeidat Girls School

Bait Dajan (Nablus)

Mr. Nasser Abu-Jeesh	Mayor of Beit Dajan

Beita (Nablus)

Mr. Arab Shurafa	Head of Municipality

Al-Fara'a (Tubas)

Mr. Basem Zakarnel	Directorate Engineer
Mr. Nedal Sawalmeh	Officer of Local Committee
Mr. Husni Mohammad Zahran	Engineering Dep. Ministry of Local Government

Jericho Municipality (Jericho)

Mr. Hassan Saleh	Mayor
Ms. Samar Zaina	Head of Planning Project Section
Mr. Mohammad Fetiane	Head of Executing Department
Mr. Adnan Hammad	Council Member
Ms. Dima Qasen	-

Al-Zubeidat Villege (Jericho)

Mr. Hassan Jarmi	Council Member
Mr. Asmail Zubeidat	Council Member

Palestinian Contractors Union – Jerusalem

Mr. Samih Tubeileh	Senior Vice President
Mr. Naser Osaily	Vice President
Mr. Adel Odah	Chairman
Mr. Adel O. Bader	General Secretary
Mr. Jiries H. Attalla	Board Member
Mr. Mamdouh Al Saber	Board Member

Engineers Association – Jerusalem Center

Mr. Marwan K. Jum'a	Chairman
Mr. Faisal Diab	Director, Tech. Affairs Dept
Mr. Eyad Bakeer	Chairman Engineering Offices Board

Islamic Development Bank

Dr. Jawad Naji	Deputy Minister
Dr. Naser Jaber Rayyan	Senior Business Advisor

Mr. Abdel Rahman Shtayeh	Engineer

EU

Mr. Osama Bazour	Procurement Expert

KfW

Ms. Nadia Shabana	Program Officer

The Representative Office of Norway to the Palestinian Authority

Ms. Grate Løchen	Deputy Representative/Counselor
Ms. Signe Marie Breivik	Programme Advisor

在イスラエル日本国大使館

松田　邦紀	公使
西岡　達史	一等書記官
光本　政彦	二等書記官
田中　香織	二等書記官

在パレスチナ日本政府代表事務所

Mr. Tetsushi Kondo	Head

JICA イスラエル事務所

小池　誠一	所長
小林　勤	次長
岩崎　明宏	所員
酒本　和彦	所員
岩瀬　英明	企画調査員
水谷　徹哉	企画調査員

JICA フィールドオフィス（ラマッラ）

Dr. Nawahda Amin	Project Coordinator

JICA フィールドオフィス（ジェリコ）

Dr. Abed Al-Naser Makky	Coordinator

4. 討議議事録
(1) 概略設計調査

MINUTES OF DISCUSSIONS ON OUTLINE DESIGN STUDY ON THE PROJECT FOR ESTABLISHMENT OF NEW SCHOOLS IN THE WEST BANK

In response to the request from the Palestinian Authority (hereinafter referred to as "PA"), the Government of Japan decided to conduct Outline Design Study on the Project for Establishment of New Schools in the West Bank (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent the Outline Design Study Team (hereinafter referred to as "the Team"), which was headed by Mr. Shigeru OKAMOTO, Executive Advisor to the Director General, Grant Aid and Loan Support Department, JICA to PA and was scheduled to stay in the West bank from May 18, 2008 to June 18, 2008.

The Team held discussions with the officials concerned of PA and conducted field survey at the study area. In the course of discussions and field survey, both parties have confirmed the main items described in the attached sheets.

Ramallah
May 22, 2008

Mr. Shigeru OKAMOTO
Leader,
Outline Design Study Team
Japan International Cooperation Agency

H.E. Lamis Mustafa Alami
Minister
Ministry of Education and Higher Education
Palestinian Authority

H.E. Dr. Samir Abdallah
Minister
Ministry of Planning
Palestinian Authority

ATTACHMENT

1. Objectives of the Project

The objectives of the Project are to improve educational environment through the construction of facilities for schools. Through achievement of this objective, it is expected that the Project will contribute to the improvement of the quality of education and providing access to education for all children, which are described as one of main targets of "the Five Year Plan."

2. Purpose of the Outline Design Study

2-1. PA side understood the purpose of the Outline Design study, which was explained by the Team with the Inception Report.

2-2. PA side understood the implementation of the Project will be finally determined by the Government of Japan based on the result of the Outline Design study.

3. Responsible and Implementing Organization

The responsible and implementing organization of the Project is the Ministry of Education and Higher Education. The organization chart of implementing organization is shown in **ANNEX 1.**

4. Project Sites

PA side proposed five (5) candidate sites as shown in **ANNEX 2.**

5. Components of the Project

PA side requested that the components of the Project are described in **ANNEX 3.**

6. Japan's Grant Aid Scheme

6-1. PA side understood the Japan's Grant Aid Scheme for Community Empowerment described in **ANNEX 4-1** and **ANNEX 4-2,** which were explained by the Team.

6-2. PA side assured to take the necessary measures, as described in **ANNEX 5,** for smooth implementation of the Project.

6-3. PA side assured to take the necessary measures to make VAT exemption for all local contracts

6-4. Relevant Issues on ANNEX5 for the Project

- Clear level and reclaim the site (No.2)

PA side strongly requested that the cost for clearing, leveling and reclaiming the land were to be covered by the Grant Aid. The Team explained the basic principle of Japan's Grant Aid scheme that the recipient government takes responsibility for those works. However, the Team will examine possibility to include those works into the Grant Aid from the technical point of view.

- Gates, fences and playgrounds of schools (No.3)

PA side strongly requested that the cost of construction of the gates, fences and playing grounds were to be covered by the Grant Aid. The Team explained the basic principle of Japan's Grant Aid scheme that the recipient government takes responsibility for those works.

- Furniture and equipment procured by the Project (No.7-6))

PA

Both sides agreed that furniture and equipment to be procured by the Project will be limited to the basic furniture and equipment which are essential for educational facilities.

- **Budget and Personnel (No.12)**

PA side assured to allocate necessary budget and personnel for the maintenance of the facilities constructed by the Project

7. Framework of Project Implementation and Scope of Works

Both sides agreed on the following framework of implementation;

7-1. The implementation flow of the Japan's Grant Aid Scheme for Community Empowerment is shown in **ANNEX 6**, "Procurements Guideline for Grand Aid for Community Empowerment" is shown in **ANNEX 7**,

7-2. PA side shall conclude a procurement management service contract with Japan International Cooperation System (JICS), who shall carry out the following Terms of References;

(1) Administration of the Grant Budget
(2) Preparation and evaluation of tender
(3) Signing contracts with contractors, suppliers or service providers
(4) Payment to contractors, suppliers or service providers
(5) Assisting to organize committee meetings
(6) Management of the progress of the project

7-3. To implement the project smoothly, both sides confirmed to facilitate a committee composed of PA side and the government of Japan. The members of committee shall be as follows;

(1) Representative of Embassy of Japan in Israel or his/her deputy
(2) Representative of Ministry of Education and Higher Education or his/her deputy
(3) Representative of Ministry of Planning or his/her deputy

7-4. The construction supervision and the construction works will be implemented based on the contents of the Outline Design Study.

7-5. PA side strongly insisted on applying national competitive bidding procedures. Both sides agreed to have further discussions on the possibility to materialize this clause depending on the assessment of the Team that Palestinian local contractors have enough capacity to undertake the work of this project.

8. Schedule of the Study

The Consultant members of the Team will proceed to carry out further studies in the West Bank until 18th of June, 2008.

Based on the results of the field survey and study in Japan, JICA will dispatch the second Outline Design mission to the West Bank in October 2008 to explain the draft report of the Outline Design.

9. Other Relevant Issues

9-1. Land Tenure for the Project sites

PA side understood that the land tenure of the sites are one of the most important criteria to implement the Project. The Team understood that the lands of all candidate sites are authorized

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to be used exclusively for the Project.

9-2. Components and Facilities

If the cost of the project exceeds the available budget as a result of the tender, the component of the project or the number of classrooms may be modified. If the cost of the project is less than the budget, the construction of additional facilities or the provision of additional equipment may be taken into consideration.

9-3. Design of the facilities

Both sides agreed to design the facilities by utilizing the standard design of PA schools. If necessary, the consultant team would modify the design based on the condition of the Project sites.

9-4. Security

The Team explained that the Japanese side was concerned about the security of the Project sites. Both sides agreed that a new arrangement for implementation of the Project will be discussed at any stage of the Project in case the Japanese side judged that the security situation of the site(s) was not appropriate to implement the Project.

ANNEX 1: Organization Chart of Ministry of Education and Higher Education
ANNEX 2: Candidate Sites for the Project and Priority
ANNEX 3: Facilities Requested by the Palestine side
ANNEX 4-1: The Japan's Grant Aid for Community Empowerment
ANNEX 4-2: Flow of Funds for implementation under the Japan's Grant Aid for Community Empowerment
ANNEX 5: Major Undertakings by each Government
ANNEX 6: Implementation Flow of Grant Aid for Community Empowerment
ANNEX 7: Procurement Guidelines for Grant Aid for Community Empowerment

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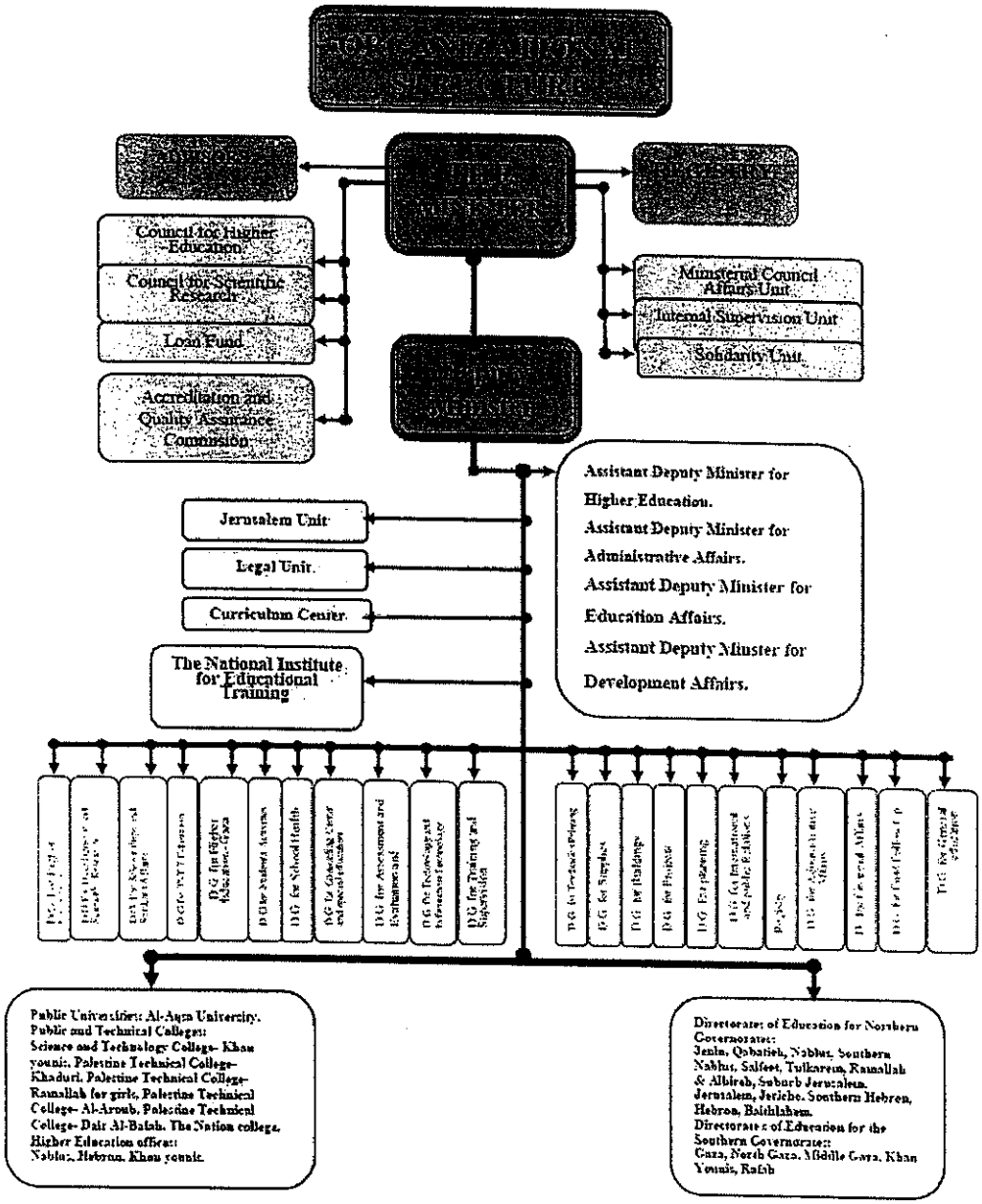
ANNEX 1

1- The organization structure of the Ministry of Education & higher Education (Organization Chart)



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ANNEX 2

Candidate Sites for the Project and Priority

Priority	District	Site
1	Nablus	Beita
2	Tubas	Al-Fara'a
3	Jericho	Al-Zubeidat
4	Jericho	Jericho
5	Nablus	Beit Dajan
6		Alternative candidate site
7		Alternative candidate site for extension work

Annex 3

Facilities requested by PA Side

Facilities
Classrooms
Laboratory
Library
Computer room
Technology laboratory
Arts and crafts room
Multi purpose room
Home Economics Room for girls school
Teachers' room
Administrative rooms
Toilets
Furniture
Equipment
Shade
Canteen

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ANNEX4-1

Japan's Grant Aid Scheme for Community Empowerment (Tentative)

The Grant Aid scheme provides a recipient country ("the Recipient") with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

The Grant Aid scheme for Community Empowerment ("GACE") aims toward development of communities by empowering their capability as a whole to assure the sustainable development and overcome various threats, thus seeks to enhance human security. Multiple components can be combined to effectively meet the needs of communities. Contractors, suppliers or consultants are not confined to Japanese firms only, and construction can be done based on the local method, which leads to cost reduction.

1. Procedures for GACE

GACE is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Outline Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

Firstly, the application or request for a GACE project submitted by the Recipient is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for GACE. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the Outline Design Study, using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's GACE, based on the Outline Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the Recipient.

For the smooth and proper execution of the Grant, JICA is designated by the Government of Japan as an organization responsible for necessary works aiming at expediting the proper execution of the Grant.

Procurement Management Agent is designated to conduct the procurement services of products and services (including fund management, preparing tenders, contracts and so on) for GACE on behalf of the Recipient. The Agent is an impartial and specialized organization and shall render services according to the Agent Agreement with the Recipient. The Agent is recommended to the Recipient by the Government of Japan and agreed between the two Governments in the Agreed Minutes ("A/M").

2. Outline Design Study

1) Contents of the Study

The aim of the Outline Design Study ("the Study"), conducted by JICA on a requested project ("the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

(1) Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies and communities concerned of the recipient country necessary for the Project's implementation.
(2) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme for community empowerment from a technical, social and economic point of view;

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(3) Confirmation of items agreed upon by both parties concerning the basic concept of the Project.
(4) Preparation of an outline design of the Project.
(5) Estimation of cost for the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Outline Design of the Project is confirmed considering the guidelines of Japan's Grant Aid scheme.

The Government of Japan requests the Government of the Recipient to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the Recipient through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses registered consulting firms. JICA selects firms based on proposals submitted by interested firms. The firms selected carry out a Outline Design Study and write a report, based upon terms of reference set by JICA.

The consulting firms to work on the Project's implementation after the Exchange of Notes could be, in principle, of any nationality as long as the Firm satisfies the conditions specified in the tender documents.

3. Implementation of GSCE after the E/N

1) Exchange of Notes (E/N)

GACE is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

2) Procedural details

Procedural details on the procurement of products and services under GACE are to be agreed upon between the authorities of the two governments concerned at the time of the signing of the E/N.

Essential points to be agreed upon are outlined as follows:

a) JICA is in a position to expedite the proper execution of the program.
b) The products and services shall be procured and provided in accordance with "Procurement Guidelines for Grant Aid for Community Empowerment".
c) The Recipient shall conclude an employment contract with the Agent.
d) The Recipient shall designate the Agent as the representative acting in the name of the Recipient concerning all transfers of funds to the Agent.

3) Focal Points of "Procurement Guidelines for Grant Aid for Community Empowerment"

a) The Agent

The Agent is the organization which provides procurement services of products and services on behalf of the Recipient according to the Agent Agreement with the Recipient. The Agent is recommended to the Recipient by the Government of Japan and agreed between the two Governments in the A/M.

b) Agent Agreement

The Recipient shall conclude an Agent Agreement, within one month after the date of entry into force of the E/N, in accordance with the A/M. The scope of the Agent's services shall be clearly specified in the Agent Agreement.

c) Approval of the Agent Agreement

The Agent Agreement, which is prepared as two identical documents, shall be submitted to the Government of Japan by the Recipient through the Agent. The Government of Japan confirms whether or not the Agent Agreement is concluded in conformity with the E/N and the Procurement Guidelines for Grant Aid for Community Empowerment, and approves the contract.

The Agent Agreement concluded between the Recipient and the Agent shall become effective after the approval by the Government of Japan in a written form.

d) Payment Methods

The Agent Agreement shall stipulate that "regarding all transfers of the fund to the Agent, the Recipient shall designate the Agent to act on behalf of the Recipient and issue a Blanket Disbursement Authorization ("the BDA") to conduct the transfer of the fund (Advances) to the Procurement Account from the Recipient Account."

The Agent Agreement shall clearly state that the payment to the Agent shall be made in Japanese yen from the Advances and that the final payment to the Agent shall be made when the total Remaining Amount become less than 3 % of the Grant and its accrued interest.

e) Products and Services Eligible for Procurement

Products and services to be procured shall be selected from those defined in the E/N and the A/M.

f) Firms

In principle, a Firm of any nationality could be contracted as long as the Firm satisfies the conditions specified in the tender documents.

g) Method of Procurement

In implementing procurement, sufficient attention shall be paid so that there is no unfairness among tenderers who are eligible for the procurement of products and services.

For this purpose, competitive tendering shall be employed in principle.

h) Tender Documents

The tender documents should contain all information necessary to enable tenderers to prepare valid offers for the products and services to be procured by GACE.

The rights and obligations of the Recipient, the Agent and the Suppliers of the products and services should be stipulated in the tender documents to be prepared by the Agent. Besides this, the tender documents shall be prepared in consultation with the Recipient.

i) Pre-qualification Examination of Tenderers

The Agent may conduct a pre-qualification examination of tenderers in advance of the tender so that the invitation to the tender can be extended only to eligible firms. The pre-qualification examination should be performed only with respect to whether or not the prospective tenderers have the capability of accomplishing the contracts concerned without fail. In this case, the following points should be taken into consideration:

(1) Experience and past performance in contracts of a similar kind
(2) Property foundation or financial credibility
(3) Existence of offices, etc. to be specified in the tender documents.

j) Tender Evaluation

The tender evaluation should be implemented on the basis of the conditions specified in the tender documents.

Those tenders which substantially conform to the technical specifications, and are responsive to other stipulations of the tender documents, shall be judged in principle on the basis of the submitted price, and the tenderer who offers the lowest price shall be designated as the successful tenderer.

The Agent shall prepare a detailed tender evaluation report clarifying the reasons for the successful tender and the disqualification and submit it to the Recipient to obtain confirmation before concluding the contract with the successful tenderer.

The Agent shall, before a final decision on the award is made, furnish JICA with a detailed evaluation report of tenders, giving the reasons for the acceptance or rejection of tenders.

k) Additional Procurement

If there is an additional procurement fund after competitive and / or selective tendering and / or

direct negotiation for a contract, and the Recipient would like an additional procurement, the Agent is allowed to conduct an additional procurement, following the points mentioned below:

(1) Procurement of the same products and services

When the products and services to be additionally procured are identical with the initial tender and a competitive tendering is judged to be disadvantageous, the additional procurement can be implemented by a direct contract with the successful tenderer of the initial tender.

(2) Other procurements

When products and services other than those mentioned above in (1) are to be procured, the procurement should be implemented through a competitive tendering. In this case, the products and services for additional procurement shall be selected from among those in accordance with the E/N and the A/M.

l) Conclusion of the Contracts

In order to procure products and services in accordance with the E/N and the A/M, the Agent shall conclude contracts with firms selected by tendering or other methods.

m) Terms of Payment

The contract shall clearly state the terms of payment. The Agent shall make payment from the "Advances", against the submission of the necessary documents from the Firm on the basis of the conditions specified in the contract, after the obligations of the Firm have been fulfilled. When the services are the object of procurement, the Agent may pay certain portion of the contract amount in advance to the firms on the conditions that such firms submit the advance payment guarantee worth the amount of the advance payment to the Agent.

4) Undertakings required by the Government of the recipient country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as the following:

a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the Project,
b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities around the sites,
c) To secure buildings prior to the procurement in case the installation of the equipment,
d) To ensure all the expense and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the verified contracts,
f) To accord Japanese nationals, whose services may be required in connection with supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

5) "Proper Use"

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

6) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

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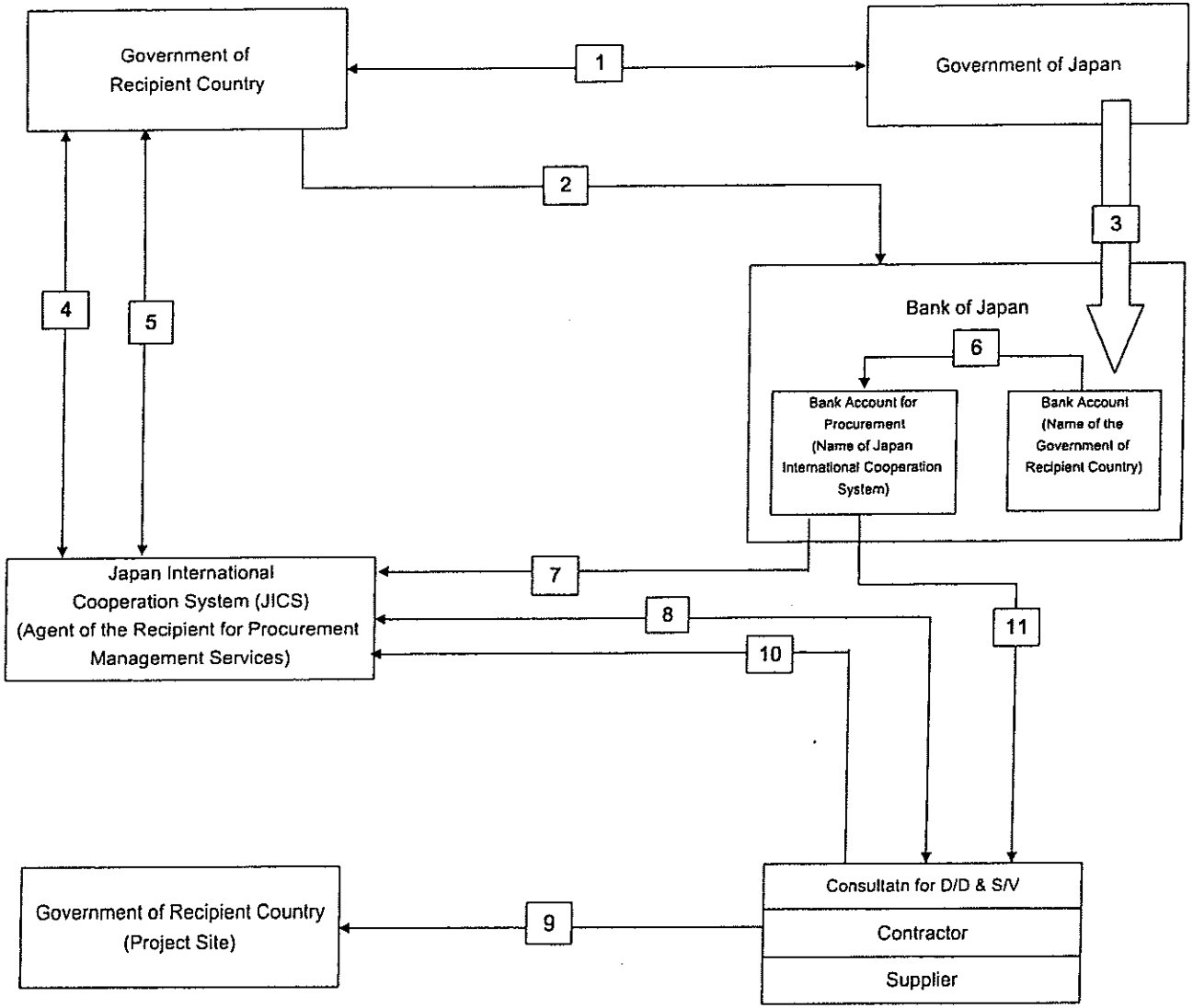
ANNEX 4-2 Flow of Funds for implementation under the Japan's Grant Aid for Community Empowerment



1 Signing of Exchange of Notes (E/N)

2 Banking Arrangement (B/A)

3 Disbursement of Funds from the Government of Japan

4 Signing of Agreement for Agent (A/A)

5 Decision of Components of Products and Service

6 Transfer of Funds

7 Payment of the Remuneration for Agent

8 Conclusion of Contract

9 Construction and/or Procurement of Equipment

10 Application for Payment

11 Payment

ANNEX 5 Major Undertakings to be taken by Each Government

No	Items	To be covered by Grant Aid	To be covered by PA
1	To secure land		•
2	To clear, level and reclaim the site when needed		•
3	To construct gates and fences around the site and playground		•
4	To construct the Parking lot	N.A.	N.A.
5	To construct roads		
	1) Within the site	N.A.	N.A.
	2) Outside the site		•
6	To construct the building	•	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		•
	b. The drop wiring and internal wiring within the site	•	
	c The main circuit breaker and transformer	•	
	2) Water Supply		
	a. The city water distribution main to the site		•
	b The supply system within the site (receiving and elevated tanks)	•	
	3) Drainage		
	a. The city drainage main (for storm sewer and others to the site)		•
	b The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	•	
	4) Gas Supply		
	a The city gas main to the site	N.A.	N.A.
	b. The gas supply system within the site	N.A.	N.A.
	5) Telephone System		
	a The telephone trunk line to the main distribution frame/panel (MDF) of the building	N.A.	N.A.
	b. The MDF and the extension after the frame/panel	N.A.	N.A.
	6) Furniture and Equipment		
	a. General furniture	•	•
	b. Project equipment	•	•
8	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of BDA		•
	2) Payment commission		•
9	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	•	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	•	
10	To accord Japanese nationals, whose service may be required in connection with the supply		
	of the products and the services under the verified contract, such facilities as may be necessary for their entry		•
	into the recipient country and stay therein for the performance of their work as far as PA has authority		
11	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which		
	may be imposed in the recipient country with respect to the supply of the products		•
	and services under the verified contracts as far as PA has authority.		
12	To maintain and use properly and effectively the facilities constructed		
	and equipment provided under the Grant Aid		•
13	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for		
	the transportation and installation of the equipment		•
	B/A: Banking Arrangement BDA: Blanket Distribution Authorization		

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ANNEX 6 Implementation Flow of Grant Aid for Community Empowerment

1	Conclusion of Exchange of Notes (E/N)	The Government of Recipient Country and the Government of Japan conclude Exchange of Notes (E/N) after approval of the Grant for community empowerment by the Government of Japan.
2	Conclusion of Banking Arrangement (B/A)	The Recipient Government and a bank in Japan (the Bank of Tokyo-Mitsubishi, UFJ) conclude Banking Arrangement (B/A) to open an account in the name of the Recipient Government. The account is called 'Recipient Account'.
3	Disbursement of Funds	Following the E/N and B/A, the total amount of the grant is transferred into the 'Recipient Account'.
4	Conclusion of Agent Agreement (A/A)	As soon as the Exchange of Notes (E/N) is signed, JICS concludes an Agent Agreement (A/A) with the Recipient Government. JICS will explain about procurement procedures, responsibilities of the Recipient Government and JICS, and remuneration of JICS as an Agent.
5	Transfer of the Grant Funds	Before starting procurement services, the grant funds are transferred from the 'Recipient Account' to 'JICS Procurement Account'. JICS then takes full responsibility for managing the grant funds until payment is completed for the procurement services. By signing Blanket Disbursement Authorization (BDA), the Recipient Government designates JICS as their representative and gives authorities to transfer all the funds under this project on behalf of the Recipient Government.
6	Payment of Agent's Fee	The Recipient Government shall pay JICS Agent's Fee for its services to be rendered pursuant to the Agent Agreement. Agent's Fee shall be paid to JICS from the fund transferred to 'JICS procurement account'.
7	Selection of a Consultant for Detail Design and Supervision	JICS selects a consultant for Supervision in the proper manner based on the research results of the Outline Design Study.
8	Selection of Contractors	JICS selects contractors, utilizing research results provided by the consultant.
	(1) Tender document preparation	JICS prepares tender documents for selecting contractors based on the results of Outline Design Study and information provided by the consultant.
	(2) General Procurement Notice (GPN) and Pre-qualification of Prospective Tenderers	JICS advertises for tenders by means of GPN in widely read newspapers and JICS website. JICS then assesses the eligibility of registered companies for tender.
	(3) Tender and Tender Evaluation	JICS conducts a tender by International Competitive Bidding (ICB) or other appropriate manners. The tender is evaluated by JICS and a successful tenderer is determined based on agreement made among the concerned parties.
	(4) Conclusion of Contract	Contract is concluded between JICS and the successful tenderer.
9	Procurement of Goods	JICS procures equipment agreed to be procured for the project in the following manner.
	(1) Tender document preparation	Same as No. 8.
	(2) General Procurement Notice (GPN) and Pre-qualification of Prospective Tenderers	
	(3) Tender and Tender Evaluation	
	(4) Conclusion of Contract	
10	School Construction and Delivery of Goods	JICS informs the Recipient Government of the construction and delivery schedule. If any problem should occur, JICS cooperates with the Recipient Government, JICA and Japanese Embassy in order to solve the problem in accordance with the contract. The Recipient Government shall take necessary measures to ensure smooth customs clearance and tax exemption.
11	Payment for Goods and Services	When necessary documents for payment are submitted by a contractant (consultant, supplier, contractor), JICS examines their contents and, if satisfactory, makes payment from the 'JICS Procurement Account' to the contractant.
12	Implementation of Soft Component Program	In case that a soft component program is implemented, JICS selects NGOs or other agencies for its implementation, concludes a contract and makes a payment.

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Annex 7

Procurement Guidelines for Grant Aid for Community Empowerment

August, 2006

(Up to October 2008)

Ministry of Foreign Affairs of Japan

PART I. Basic Principles

I. Introduction

These Guidelines set forth the general rules to be followed in the procurement of products and services by the Grant Aid for Community Empowerment (hereinafter referred to as "GACE") which is agreed upon by the Exchange of Notes (hereinafter referred to as "the E/N") between the Government of Japan and the Government of the recipient country (hereinafter referred to as "the Recipient" that is defined in II. 2 below).

The application of these Guidelines shall be stipulated in the Agreed Minutes on Procedural Details (hereinafter referred to as "the A/M") signed together with the E/N between the Government of Japan and the Recipient.

The rights and obligations of the Recipient, procurement agent (hereinafter referred to as "the Agent") and the firm who supplies or provides products and services for GACE (hereinafter referred to as "the Firm" that is defined in II. 5. below) are governed by the contract concluded between the Recipient and the Agent (referred to as "employment contract" in the A/M and hereinafter referred to as "the Agent Agreement"), by the tender documents and by the contracts concluded between the Agent and the Firm, and not by these Guidelines.

II. Parties Concerned

In these guidelines, relations among the Government of Japan, the Recipient, the Agent and the Firm are as follows:

1. The Government of Japan is the provider of GACE.
2. The Recipient is the beneficiary of the Grant and is responsible for the execution of GACE. The Recipient entrusts the Agent with the procurement of products and services.
3. JICA is designated by the Government of Japan as an organization responsible for necessary works aiming at expediting the proper execution of the Grant.
4. The Agent is an impartial and specialized organization which provides procurement services of products and services on behalf of the Recipient according to the Agent Agreement with the Recipient. The Agent is recommended to the Recipient by the Government of Japan and agreed between the two Governments in the A/M.
5. The Firm is the provider of products and services for GACE in accordance with the contract with the Agent.

Part II. Guidelines for the Use of the Agent

I. General

1. Role of the Agent

The Agent shall conduct the procurement services of products and services for GACE on behalf of the Recipient. The Agent shall render services with due expertise and in a fair and impartial manner to ensure the smooth and proper execution of GACE in order to contribute to fulfilling the purpose of the assistance.

The Agent shall work to maintain rights and interests of the Recipient and maximize the impacts of Japan's assistance. The Agent is also required to pay attention to minimizing the burden of the Recipient.

2. Agent Agreement

The Recipient shall conclude an Agent Agreement within one month after the date of entry into force of the E/N, with the Agent in accordance with the A/M.

After the approval of the Agent Agreement by the Government of Japan in a written form, the Agent shall conduct services referred to paragraph 3 below on behalf of the Recipient.

3. Services of the Agent

The Agent shall conduct the services referred to in the Appendix II of the A/M.

II. Approval of the Agent Agreement

1. General

The Agent Agreement, which is prepared as two identical documents, shall be submitted to the Government of Japan by the Recipient through the Agent. The Government of Japan confirms whether or not the Agent Agreement is concluded in conformity with the E/N, the A/M and these Guidelines, and approves the contract.

The Agent Agreement concluded between the Recipient and the Agent shall become effective after the approval by the Government of Japan in a written form.

2. Reference to the E/N

The Agent Agreement shall refer to the E/N as follows: "the Government of Japan executes the Grant Aid for Community Empowerment to the Government of (name of recipient country) in accordance with the E/N signed on (date of signature) between the two Governments".

3. Scope of the Services

The scope of the Agent's services shall be clearly specified in the Agent Agreement. The Agent Agreement with the scope of Agent's services in conflict with the E/N and the A/M shall not be approved by the Government of Japan.

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4. Completion of the Services

The Agent Agreement shall clearly state that when the entire amount of the fund transferred from the Recipient's Account in the name of the Recipient at a Bank in Japan (hereinafter referred to as "the Recipient Account") to the Account in the name of the Agent (hereinafter referred to as "the Procurement Account") has been paid for the procurement of products and services, or when the remaining amount of the said fund has been transferred to the Recipient Account, the Agent's services shall be regarded as complete.

5. Agent's Fees

The amount and currency or calculations of Agent's fees shall be precisely and correctly stated in the Agent Agreement. The conditions and amount or calculation for additional fees to which the Agent is entitled shall be clearly stated.

6. Approval of the Agent Agreement

The Agent Agreement shall clearly state that it shall become effective after the approval by the Government of Japan in a written form.

7. Payment Methods

The Agent Agreement shall stipulate that "regarding all transfers of the fund to the Agent, the Recipient shall designate the Agent to act on behalf of the Recipient and issue a Blanket Disbursement Authorization (hereinafter referred to as "the BDA") to conduct the transfer of the fund (hereinafter referred to as "Advances") to the Procurement Account from the Recipient Account."

The Agent Agreement shall clearly state that the payment to the Agent shall be made in Japanese yen from the Advances and that the final payment to the Agent shall be made when the total Remaining Amount become less than 3 % of the Grant and its accrued interest.

8. Force Majeure

The Agent Agreement shall contain the clause stipulating "failure on the part of the Agent to fulfill obligations under the Agent Agreement would not be considered a default if such a failure is the result of an event of force majeure defined in the conditions of the Agent Agreement."

9. Responsibilities and Obligations of the Recipient

The Agent Agreement shall clearly state the responsibilities and obligations of the Recipient in accordance with the E/N.

10. Amendment of the Agent Agreement

If an amendment of the Agent Agreement is required, the amended Agent Agreement shall clearly state that:

(1) all the clauses except that which is amended, remain unchanged.

(2) the amendment of the contract shall become effective only after the approval by the Government of Japan in a written form.

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Part III. Guidelines for the Procurement of Products and Services

I. General

1. Products and Services Eligible for Procurement

Products and services to be procured shall be selected from those defined in the E/N and the A/M.

The guidelines issued by the Agent shall be applied to the selection of consultants (persons or juridical persons including universities, NGOs, and others with expertise and experience) necessary for implementation of the projects in the Grant Aid.

2.Firms

In principles, a Firm of any nationality could be contracted as long as the Firm satisfies the conditions specified in the tender documents.

3. Misprocurement

The Government of Japan requires that, under contracts funded by the Grant, tenderers and Firms observe the highest standard of ethics during the procurement and execution of such contracts. In this regard, the Government of Japan shall demand that the Recipient and the Agent shall reject a tender if it determines that the tenderer has engaged in corrupt or fraudulent practices in competing for the contract in question. The Government of Japan shall recognize a Firm as ineligible, for a period determined by the Government of Japan, to be awarded a contract funded by the Grant if it at any time determines that the Firm has engaged in corrupt or fraudulent practices in competing for, or in executing any other contracts funded by the Grant or other Japanese ODA.

When the authorities concerned of the Government of Japan decide to impose against a firm such administrative sanctions as debarment, exclusion of goods manufactured, etc., from Japanese governmental procurement, the Government of Japan may ask the Recipient and the Agent to exclude the goods manufactured by the sanctioned firm from the procurement under the Grant, for the period of the sanctions by such authorities concerned of the Government of Japan.

II. Procurement Procedures

1. Transfer of the fund

The Agent shall take necessary measures for transferring the fund necessary for the procurement of products and services from the Recipient Account to the Procurement Account prior to the procurement procedures (The fund transferred to the Procurement Account is called "the Advances").

2. Method of Procurement

(1) Competitive Tendering

In implementing procurement, sufficient attention shall be paid so that there is no unfairness among tenderers who are eligible for the procurement of products and services.

For this purpose, competitive tendering[1] shall be employed in principle.

(2) Other Procurement Methods

If competitive tendering is deemed inappropriate or impractical due to any of the following special situations, the Agent is permitted to proceed with procurement on selective tendering[2], international shopping[3] or direct contracting[4]:

1) When spare parts or accessories, etc. for existing equipment or equipment manufactured by specified manufacture are procured (In this case direct contracting is expected).
2) When there are adequate reasons to maintain uniformity and continuity of the products and services provided under an existing contract (In this case direct contracting is expected).
3) When the number of firms to satisfy the conditions is limited (In this case selective tendering or international shopping is expected).
4) When it is quite doubtful that the prospective tenderers would be interested in participating in competitive tendering, and thereby the advantages of competitive tendering would be outweighed by the administrative burdens involved (In this case selective tendering or international shopping is expected).
5) Part or all of the tender procedure was not successfully completed and re-tendering is implemented (In this case selective tendering or international shopping is expected).
6) When emergency procurement is required for the assistance for natural disasters or humanitarian assistance.
7) When consultants are to be selected (In this case, competitions among contents of Technical Proposals or direct contracting with the consultant recommended by JICA is expected)[5]

When procurement method other than competitive tendering are employed, the Agent shall

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[1] Competitive tendering is a procurement method in which tender opportunity is publicized and open to all potential tenderers who are qualified for the tender, and the contract is awarded to the tenderer who offers the most advantageous conditions for the contracting entity.

[2] Selective tendering is a form of competitive tendering based on a direct invitation of tenderers without an initial tender publicity, according to certain qualifications obtained from several tenderers to ensure competitive prices.

[3] International shopping is a contract method based on the comparison of quotations obtained from several firms to ensure competitive prices.

[4] Direct contracting is a contract method based on negotiation directly with a firm before contracting.

[5] Ways of selecting consultants are described in the guidelines issued by the Agent.

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implement procedures in such a manner as to comply with the competitive tendering procedures described in these Guidelines to the fullest possible extent, in order to ensure the transparency of the selecting procedures.

(3) Additional Procurement

If there is a balance in the Procurement Account including accrued interest after the selection of firms, and the Recipient would like an additional procurement, the Agent is allowed to conduct an additional procurement, following the points mentioned below:

1) Procurement of the same products and services

The additional procurement may be implemented by a direct contracting with the successful tenderer of the initial tender when a competitive tendering is judged to be disadvantageous or uneconomical in such cases where the products and services to be additionally procured are identical with the initial tender and also the quantity to be additionally procured is limited, or there was no other participants than the successful tenderer in the initial tender. When a direct contracting with the same firm is not necessarily advantageous or appropriate in such case where a portion of the balance is relatively large, firms shall be selected through a new tendering procedure.

2) Other procurements

When products and services other than those mentioned above in (1) are to be procured, the procurement should be implemented through a competitive tendering. In this case, the products and services for additional procurement shall be selected from among those in accordance with the E/N and the A/M.

3. Size of Tender Lot

If a possible tender lot may be technically and administratively divided and such a division is likely to result in the broadest possible competition, the tender lot should be divided into two or more. On the other hand, in the interest of obtaining the broadest possible competition, any one lot for which a tender is invited should, whenever possible, be of a size large enough to attract tenderers.

4. Tender Conditions

The Agent shall fully study and consider technical specifications, construction period, required technical standards, prices, manufacturing, transportation, trade regulations, etc. regarding goods and services to be procured and finalize appropriate tender and Procurement Conditions after obtaining confirmation by the Recipient. Also, the price expected for the procurement (referential price) shall be set in advance for reference in the selection of firms.

5. Tender Publicity

Tender Publicity shall be carried out in an appropriate manner so that all qualified and

interested tenderers shall have fair opportunity to learn about and participate in the tender.

The tender notice should be publicized at least in a newspaper of general circulation in the recipient country (or neighboring countries) or in Japan, and in the easily accessible webpage operated by the Agent. The main items to be contained in the public announcement are as follows:

(1) Name of the Grant

(2) Names of products and services to be procured

(3) Name of the Agent and contact information including a location of its webpage (written as an Agent for the Recipient)

(4) Required qualifications of tenderers

(5) Other relevant information considered to be necessary for firms to determine whether to participate in the tender

The Agent is only required to publicize information from (1) to (3) above in the newspapers if other details including (4) and (5) above are advertised on the webpage of the Agent.

6. Language

The tender invitation, tender documents and contracts should be prepared in English, French or Spanish.

III. Tender Documents

1. General

(1) The tender documents should contain all information necessary to enable tenderers to prepare valid offers for the products and services to be procured under GACE.

(2) The rights and obligations of the Recipient, the Agent and the Firms of the products and services should be stipulated in the tender documents to be prepared by the Agent. The tender documents shall be prepared in consultation with the Recipient.

(3) The tender documents shall clearly state that " the Government of Japan shall extend Non-Project Grant Aid to the Government of (name of recipient country) in accordance with the E/N signed on (date of signature)."

(4) The tender documents shall clearly state that "The Government of Japan requires that, under contracts funded by the Grant, tenderers and Firms observe the highest standard of ethics during the procurement and execution of such contracts. In this regard, the Government of Japan shall demand that the Recipient and the Agent shall reject a tender if it determines that the tenderer has engaged in corrupt or fraudulent practices in competing for the contract in question. The Government of Japan shall recognize a Firm as ineligible, for a period determined by the Government of Japan, to be awarded a contract funded by the Grant if it at any time determines that the Firm has engaged in corrupt or fraudulent practices in competing for, or in executing any other contracts funded by the Grant or

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other Japanese ODA.

When the authorities concerned of the Government of Japan decide to impose against a firm such administrative sanctions as debarment, exclusion of goods manufactured, etc., from Japanese governmental procurement, the Government of Japan may ask the Recipient and the Agent to exclude the goods manufactured by the sanctioned firm from the procurement under the Grant, for the period of the sanctions by such authorities concerned of the Government of Japan."

2. Contents of the Tender Documents

The tender documents should consist of the following documents:

(1) Instruction to Tenderers
(2) Procurement Conditions
(3) Form of the tender
(4) Draft of the contract

If a fee is charged for the tender documents, it should be reasonable and reflect the cost of implementation of the tender procedure.

3. Major Items Related to the Instruction to Tenderers

(1) The instruction to tenderers should clearly describe the procedure for question & answers, and correction regarding the tender documents, tender procedures, tender evaluations, and the other relevant issues of the tendering process.
(2) The instruction to tenderers should clearly describe the products and services to be procured, qualifications required of tenderers, existence of local agents, elimination of disqualified firms from the tender, eligible source countries, place and date of the delivery, insurance, transportation, bond, warranty and other pertinent items.
(3) The instruction to tenderers should clearly describe that the tender price shall be stated in figures and words as firm and final, and if there is a difference between the price in words and that in figures, the price in words is deemed correct.

4. Procurement Conditions

(1) Clarity and Accuracy of Conditions

The Procurement Conditions should specify clearly and in detail the services to be performed, the products and services to be supplied and the relevant terms such as contents of the products and services, technical specifications, the place of delivery, etc.

The Procurement Conditions should identify the main factors or criteria to be taken into account in evaluation and comparison of tenders. The Procurement Conditions should be prepared so as to secure the broadest possible competitive tendering.

(2) Impartiality of the Technical Specifications

The technical specifications supplied with Procurement Conditions should be based on the

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related characteristics and required capacities of the products and services to be procured.

Making reference to trademark names, catalogue numbers or similar classifications should be avoided unless in the case of the procurement of particular spare parts, etc.

(3) Standards

In the event that specifications require products to comply with industrial standards, specifications in the tender document should state that the products meeting the Japan Industrial Standards (JIS) or other internationally accepted standards, such as ISO, which insure an equal or higher quality than the standards mentioned shall also be accepted.

5. Forms of Tender

The following forms of tender should be clarified: 1) tender qualification certificates, 2) tender specifications and 3) the tender price.

6. Draft of the Contract

The draft contract should clearly state "the contract terms" such as "the rights and obligations of the Recipient, the Agent and the firm, etc." and the following items:

(1) Terms of payment
(2) Warranty period
(3) Performance bond
(4) Non-performance of the contract
(5) Force majeure
(6) Settlement of disputes

IV. Implementation of Tender

1. Preparatory Period for the Tender

The allowable period for the preparation and submission of the tender should be determined with due consideration to the particular circumstances related to GACE in the recipient country and the scale and complexity of the tender lots. Sufficient period before the date of tender should be allowed from the date when the documents are made available for potential tenderers.

2. Guarantee for the Tender

The Agent may request that the tenderers submit bid bond (e.g. bank guarantees) for the tender. The amount of the bid bond, however, should not be so high as to discourage potential tenderers. The bid bonds submitted from the unsuccessful tenderers should be returned immediately after the award of the contract.

3. Questions and Answers regarding the Tender Documents

The Agent, for the purpose of the smooth implementation of the tender, should accept

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questions about the tender documents from the purchasers of the documents and provide answers to the questions, in accordance with the following points:

(1) A reasonable period should be set, respectively for accepting questions and providing answers to those questions.

(2) The answers should be given to all those who have purchased the tender documents well in advance of the date of tender so that the prospective tenderers can take proper measures.

4. Correction and Alteration of the Tender Documents

Any additional information, supplementary explanations, correction of errors and alterations related to the tender documents should be notified to all those who have purchased the tender documents well in advance of the date of tender so that prospective tenderers can take proper measures.

5. Pre-qualification Examination of Tenderers

(1)The Agent may conduct a pre-qualification examination of tenderers in advance of the tender so that the invitation to the tender can be extended only to eligible firms.

(2)The pre-qualification examination should be performed only with respect to whether or not the prospective tenderers have the capability of accomplishing the contracts concerned without fail.

(3)In this case, the following points should be taken into consideration:

1) Experience and past performance in contracts of a similar kind
2) Property foundation or financial credibility
3) Existence of local offices, etc. to be specified in the tender documents

6. Tender Procedures

(1) The tender documents should clearly indicate the deadline of the date and time for accepting the tendering as well as the date and place for opening the tender.

(2) The tenderer shall be instructed to submit the following necessary tender documents:
1) Tender qualification certificates
2) Tender specifications
3) Tender price

(3) All tenders should be opened in the presence of the Agent and tenderers or their representatives at the fixed date, time and place. The presence of tenderers is not requirement and tenderers who do not attend the tender opening shall not be disadvantaged in the respect of selection procedure.

(4) Any tender submitted after the specified deadline is not acceptable as a valid tender.

(5) In opening tenders with the attendance of tenderers, the name of each tenderer and the tender price concerned should be read aloud and recorded.

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7. Supplementary Explanation and Modification of the Tender during Evaluation

(1) No tenderers shall be permitted to modify the contents of the tenders after the tenders have been opened.

(2) The Agent may request any tenderers to make a supplementary explanation but not permitted to request them for a substantial modification of the contents of the tenders during tender evaluation.

8. Confidentiality of Tender Process

Until notification of the award has been sent to the successful tenderer, the Recipient and the Agent shall not disclose to the tenderers and to other people who are not officially concerned with the tender procedures, any information on the examination of the tenders, supplementary explanations and evaluations, or any information related to the recommendation of a successful tenderer.

9. Examination of Tenders

The Agent shall examine the following items with regard to the submitted tenders:

(1) Serious errors in calculation

(2) Attachment of requested documents

(3) Attachment of requested certificates

(4) Attachment of requested guarantees

(5) Attachment of proper signatures to the documents

(6) Conformity of the submitted tenders with the instruction of the tender documents

In examining the tenders, if a tender does not substantially conform to the specifications, or contains inadmissible reservations or is otherwise not substantially responsive to the tender documents, it should be disqualified.

After the above examination, each tender that satisfies the conditions should be technically examined for evaluation and comparison, in principle beginning with those submitted from the tenderer with the lowest tender price.

10. Tender Evaluation

(1)The tender evaluation should be implemented on the basis of the conditions specified in the tender documents.

(2)Those tenders which substantially conform to the technical specifications, and are responsive to other stipulations of the tender documents, shall be judged in principle on the basis of the submitted price, and the tenderer who offers the lowest price shall be designated as the successful tenderer. In case the selection of successful tenderer solely based on the submitted prices is not appropriate or irrational in the respect of the natures of the products or services to be procured, other elements than the price such as length of

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delivery or construction periods, superiority of technical specifications, etc might be considered by qualifying their degrees and evaluated comprehensively together with the price competitiveness. In such cases, method and standard of tender evaluation shall be clearly explained in the tender documents.

(3)In cases where satisfactory results in the respect of price or other relevant elements, if any, are not offered in the tender, the Agent may negotiate with the most advantageous tenderer (if this fails to obtain satisfactory results, the second ranking tenderer) to try and conclude a satisfactory contract (a contract ad libitum).

(4)If the tender is divided into several lots, the tender evaluation should be performed for each lot.

11. Tender Evaluation Report

The Agent shall prepare a detailed tender evaluation report clarifying the reasons for the successful tender and the disqualification, and submit it to the Recipient to obtain confirmation before concluding the contract with the successful tenderer. The Agent shall submit a detailed evaluation report of tenders to JICA for its information, while the notification of the results to the tenderers will not be premised on the confirmation by JICA.

12. Notification to the results

(1)The Agent, within the validity period specified in the tender documents, should notify all the tenderers of the results of the tender. In case notification of result within the validity period is not possible, the Agent shall notify all the tenderers of the extension of the period before the expiry of the original period.

(2)No tenderers shall be required, as a condition to be successful tenders, to bear responsibilities or obligations that are not described in the tender documents.

13. Rejection of Tenders and re-tender

(1) The Agent shall not implement the re-tendering with the same specifications merely for the purpose of reducing the price except when the lowest tender price has exceeded the referential price. The rejection of all tenders may only be justified in the following cases:

1) Successful tender was not given even after the result of negotiation with the advantageous tenderers in such case where offer prices extremely exceed the referential price.

2) All tenders do not comply with the tender documents as a result of the examination and evaluation of the tenders.

3) It is clear that competition is impeded in the process.

4) There is a rational reason to believe that the aim of procurement shall not be achieved by continuing the ongoing tender procedure.

(2) In case all the tenders are to be rejected and the re-tender to be called, the Agent should examine the causes and consider revising the specifications and other conditions specified

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in the original tender documents as well as procurement methods.

V. Conclusion of the Contract

1. General

In order to procure products and services in accordance with the E/N and the A/M, the Agent shall conclude contracts with firms selected by tendering or other methods. If more than one lot is awarded to the same contractor, the contracts may be combined into one.

2. Reference to the E/N

The contract shall clearly state that "the Government of Japan executes (name of grant aid) the Grant Aid to the Government of (name of recipient country) in accordance with the E/N signed on (date of signature) between the two Governments".

3. Contents of the Products and Services

The contract shall clearly state the contents of the products and services to be procured. The contract with the contents of the procurement of products and services which are not covered by the E/N shall not be concluded.

4. Contract Price

The amount of all contract prices including the Agent's services shall not exceed the Grant and its accrued interest.

Each contract price shall be precisely and correctly stated in words and figures side by side. If there is any difference between prices in words and those in figures, the prices in words are considered to be correct.

5. Terms of Payment

The contract shall clearly state the terms of payment. The Agent shall make payment from the "Advances", against the submission of the necessary documents from the Firm on the basis of the conditions specified in the contract, after the obligations of the Firm have been fulfilled. When the services are the object of procurement, the Agent may pay certain portion of the contract amount in advance to the firms on the conditions that such firms submit the advance payment guarantee worth the amount of the advance payment to the Agent.

6. Warranty

The contract shall clearly state the contents and the period of warranty if warranty is provided to products and services to be procured from the providers of such products and services.

7. Performance Guarantee

The Firms may be requested to submit performance guarantees. Such a performance guarantee shall be of an appropriate amount, and it shall be returned immediately after delivery of the products and completion of all services.

8. Non-performance of the Contract

The contract shall clearly state that if the performance of a contract by the Firm is delayed from the contracted period of execution or results in non-performance due to other reasons including bankruptcy, etc., the Agent is permitted to claim the payment of indemnities, forfeiture of the Performance Guarantee, or cancellation of the contract against the Firm.

9. Force Majeure

The contract shall contain a clause to the effect that failure on the part of the Firm to fulfill obligations under the contract would not be considered a default if such failure is the result of an event of force majeure as defined in the terms of the contract.

10. Settlement of Disputes

The contract shall contain clauses dealing with the settlement of disputes.

11. Responsibilities and Obligations of Each Party

The contract shall clearly state the responsibilities and obligations of the Recipient, the Agent and the Firms.

12. Applicable Law

The contract shall clearly state the applicable law by which the contract is governed and interpreted.

13. Effectuation of the Contract

The contract shall become effective only after the signing of the contract between the Agent and the Firm.

14. Reporting to JICA

The Agent shall submit the copy of the contract with the Firm to JICA for its information.

15. Amendment of the Contract

If an amendment of the contract is required, the Agent, obtaining the consent of the Recipient in advance, shall conclude a contract for the amendment with the Firm. The amended contract shall clearly state that "All clauses except that which is or are amended, remain unchanged". Also, the Agent shall submit the copy of the amended contract to JICA

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for its information.

16. Announcement of Results of contracts

The Agent shall, as soon as the conclusion of contracts, announce information on the contract such as name of item, name of firm, amount of contract and date of contract on the webpage of the Agent.

(2) 概要説明調査

MINUTES OF DISCUSSIONS
ON
THE OUTLINE DESIGN STUDY ON THE PROJECT FOR ESTABLISHMENT OF NEW SCHOOLS IN THE WEST BANK
(EXPLANATION ON DRAFT REPORT)

In May 2008, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched an Outline Design Study Team on the Project for Establishment of New Schools in the West Bank (hereinafter referred to as "the Project") to the Palestinian Authority (hereinafter referred to as "PA"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain to and to consult with PA the components of the draft report, JICA sent the Draft Report Explanation Team (hereinafter referred to as "the Team"), which was headed by Mr. Tsutomu KOBAYASHI, Senior Representative, JICA Palestine Office to PA and was scheduled to stay in the West bank from October 10, 2008 to October 20, 2008.

As a result of discussions, both parties have confirmed the main items described in the attached sheets.

Ramallah
October 19, 2008

Mr. Tsutomu KOBAYASHI
Leader,
Outline Design Study Team
Japan International Cooperation Agency

Ms. Lamis M. Alami
Minister
Ministry of Education and Higher Education
Palestinian Authority

Dr. Cairo Arafat
Director General
Ministry of Planning
Palestinian Authority

Palestinian National Authority
Ministry of Education & Higher Education

ATTACHMENT

1. **Contents of the draft report**
PA side agreed and accepted in principle the contents of the draft report explained by the Team.

2. **Japan's Grant Aid Scheme**
PA side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by PA side described in Annex 5 of the Minutes of Discussions signed by both parties on May 18, 2008.
The Team explained the new Grant Aid system for Community Empowerment under the renewed JICA effective on October 1 2008, the respective roles of concerned authorities and the flow of funds for implementation as described in ANNEX 4. PA side understood its explanation.

3. **Final Report**
JICA will complete the final report in accordance with the result of discussions and forward it to PA side around March 2009.

4. **Sites and Components of the Project**
Both sides agreed that sites and components of the project are prioritized as described in ANNEX 1. The list will be revised in consultation with each other taking into consideration the priorities of PA side on necessary after the conclusion of the Exchange of Notes.

5. **Responsible and Implementing Organization**
The responsible and implementing organization of the Project is the Ministry of Education and Higher Education (MEHE).

6. **Taxes Exemption**
The Ministry of Education and Higher Education (MEHE) will provide the consultants and contractors being concerned with the project at implementation stage with possible facilities regarding the exemption and/or refund of VAT in cooperation with the Ministry of Finance.

7. **Other relevant issues**

7-1. Site preparation works to be covered by the PA side
PA side agreed to demolish the existing building at Beita school site before the commencement of construction by Japanese side.
The Team explained that site preparation works such as land development, construction of the retailing walls will be undertaken by Japanese side. PA side understood that this is an exceptional measure to the Japan's grant Aid scheme.

7-2. Exterior works to be covered by the PA side
The Team explained that exterior works such as fences, gates and pavement will be undertaken by Japanese side. PA side understood that this also is an exceptional measure to the Japan's grant Aid scheme.

PA side agreed to plant trees and flowers in the green area at each school after completion of the construction.

7-3. Maintenance, Renewal of Computer Lab Equipment
PA side agreed that the maintenance and renewal of computer lab equipment provided by Japanese side shall be undertaken by PA side

7-4. Confirmation of Land-Use Rights
The Team confirmed that PA side has already obtained and delivered to the Team the legal documents concerning the land ownership for all the sites.

7-5. Allocation of necessary budget and personnel

PA side agreed to allocate enough budget and personnel (teachers and general staff) to properly operate and maintain the facilities and equipment covered by the Project.

7-6. Method of Procurement

(1) Selection of the Contractors and the Suppliers

PA side strongly insisted again on applying national competitive bidding procedure. The Team understood the organized and strict tender system in Palestine. The Team replied that JICA shall discuss the procedure requested by PA side with concerned parties of Japanese side and will inform PA side of the final decision.

(2) Selection of the Construction Supervision Consultant

PA side asked the possibility of selecting a local consultant as a prime consultant for construction supervision work. The Team explained that JICA shall recommend to PA side the Japanese consultant who conducts Outline Design Study Survey as a prime consultant for supervision in accordance with the Grant Aid for Community Empowerment scheme. PA side understood the explanation.

7-7. Shade for Jericho Boy's School

PA side requested the Team to enlarge the size of the Shade for Jericho Boy's School up to about 150 ㎡ due to extremely hot climate in Jericho area. The Team accepted PA's request and replied that JICA shall discuss its request with concerned parties of Japanese side and will inform PA side of the final decision.

7-8. Confidentiality of the Project Cost Estimation

Both sides agreed that the Project Cost Estimation should never be duplicated or released to any outside parties before signing of all the Contracts for the Project. PA sides understood that the Project Cost Estimation attached as ANNEX 3. is provisional and is subject to change.

7-9. Confidentiality of the Contents of the Draft Report

Both sides agreed that the contents of the draft report should be kept confidential, be dealt with carefully and never be disclosed to any third parties.

7-10. Contingency

PA side raised its concern regarding compensation of both parties of the construction contracts in case of fluctuation of exchange rate of the currency of the contract against NIS and fluctuation of Palestinian construction price index according to decision of PA cabinet. PA side requested to take this into account in calculating the construction budget and put contingency item in the cost estimation table.

The Team replied that it's not allowed to have contingency budget in Japan's Grant Aid for Community Empowerment scheme and promised to have further discussion with concerned parties in Japan to cope with this issue.

7-11. Other

During a meeting with MOP officials, the team re- explained the modality of implementation for this project and the necessity of the items of the Japanese consultants mentioned in the cost estimation table for the proper implementation of the Project. PA side requested that an evaluation of the approach supported by JICA which has high technical assistance costs for international consultants will be reviewed in order to identify the implementation methods with more effective cost, national ownership to be adapted in future endeavors. The Team understood its request and accepted to convey this PA's special requests to the Government of Japan.

ANNEX 1. : Sites and Components of the Project
ANNEX 2. : Undertakings to be borne by PA side
ANNEX 3. : The Project Cost Estimation
ANNEX 4. : Flow of Funds for implementation

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ANNEX 1. Sites and Components of the Project

Project Schools and Components

Components \ School Name, Governorate & Grade	Beita Boys School	Wadi Fara'a Girls School	Beit Dajan Boys School	Jericho Boys School	Al-Fara'a Boys School
	Nablus	Tubas	Nablus	Jericho	Tubas
	1-8	6-12	1-12	5-12	10-12
Facility Components					
No. of Classrooms	16	16	12	16	9
Library	1	1	0	1	1
Administration Unit	1	1	0	1	1
Teachers Room	1	1	1	1	1
First Aid	1	1	1	1	1
Social Worker Room	1	1	1	1	1
Science Lab (General)	0	0	0	0	1
Biology & Chemistry Lab	1	1	0	1	0
Physics & Technology Lab	1	1	0	1	0
Arts & Crafts Room	1	1	0	1	1
Computer Lab	1	1	0	1	1
General Stores	1	1	0	1	1
Toilets	1	1	1	1	1
Canteen & Shade	1	1	1	1	1
Home Economics Room	0	1	0	0	0
Furniture and Equipment Components					
School Furniture	1set	1set	1set	1set	1set
Computer Equipment	1set	1set	0	1set	1set
Educational Media Equipment	1set	1set	0	1set	1set
Science Equipment	1set	1set	0	1set	1set
Home Economics Equipment	0	1set	0	0	0

ANNEX 2. Undertakings to be Borne by PA Side

(1) To provide the Japanese side with information and data related to the Project;

(2) To obtain the necessary land to implement the Project and secure the rights for MEHE to construct school facilities;

(3) To remove obstacles and demolish existing buildings prior to the Project construction;

(4) To plant flowers and trees in the green areas after the completion of the construction;

(5) To lead and connect power supplies, water supplies, telephone lines and other incidental facilities to the completed Project facilities;

(6) To procure additional furniture and equipment necessary for the completed Project facilities except for the basic furniture and equipment included in the Project;

(7) To secure sufficient staff and budget necessary for the adequate operation, repair and maintenance of the Project facilities constructed within the Project;

(8) To bear commissions for Blanket Disbursement Authorization, handling charges and other necessary fees related to the banking arrangement with a bank in Japan for receiving the Grant Aid for the Project;

(9) To provide the consultants and contractors being concerned with the project at implementation stage with possible facilities regarding the exemption and/or refund of VAT in cooperation with the Ministry of Finance;

(10) To accord all individuals entry into the country and the staying therein, along with such facilities as may be necessary for the performance of their work and whose services may be required in connection with the Project, including the supply of products and services under the procurement management contract and contracts with Procurement Management Agent;

(11) To ensure that all facilities and products constructed and purchased under the Project will be effectively used and properly maintained under the jurisdiction of MEHE;

(12) To provide free of charge, for the duration of the construction period and in a vicinity close to the Project site, adequate land space for the storage of supplies and materials and for a site construction office to be used by contractors;

(13) To grant all the required permits and approvals needed for implementation of the Project;

(14) To bear all the necessary expenses for the Project not covered by the Grant Aid for Community Empowerment Scheme (including demolition of existing facilities, lead and connection of infrastructure lines, etc.);

(15) To obtain, in cooperation with and under the guidance of the Procurement Management Agent, all the various necessary permits including those needed prior to construction, and those needed for the use of Project facilities after construction completion;

(16) To respond promptly to the Procurement Management Agent's requests for decisions and judgments regarding implementation of the Project.

ANNEX 3. : The Project Cost Estimation

(1) Total Cost to Be Borne by the Japanese Side JPY 905.4 million

Total Cost to be Borne by the Japanese Side

Item		Estimated Cost (JPY Million)	
Facility Construction	Construction Cost	626.7	653.7
	Furniture Cost	27.0	
Equipment Cost (Transportation Fee Included)		22.8	
Procurement Management Agent Fee		95.6	
Lawyer's Fee		2.8	
Construction Supervision Fee		130.5	
Total		**905.4**	

JPY stands for Japanese Yen.

(2) Total Cost to Be Borne by the PA Side US$ 113,300.-

Total Cost to Be Borne by PA Side

US$ 113,300.- (Approx. JPY12.1 Million)

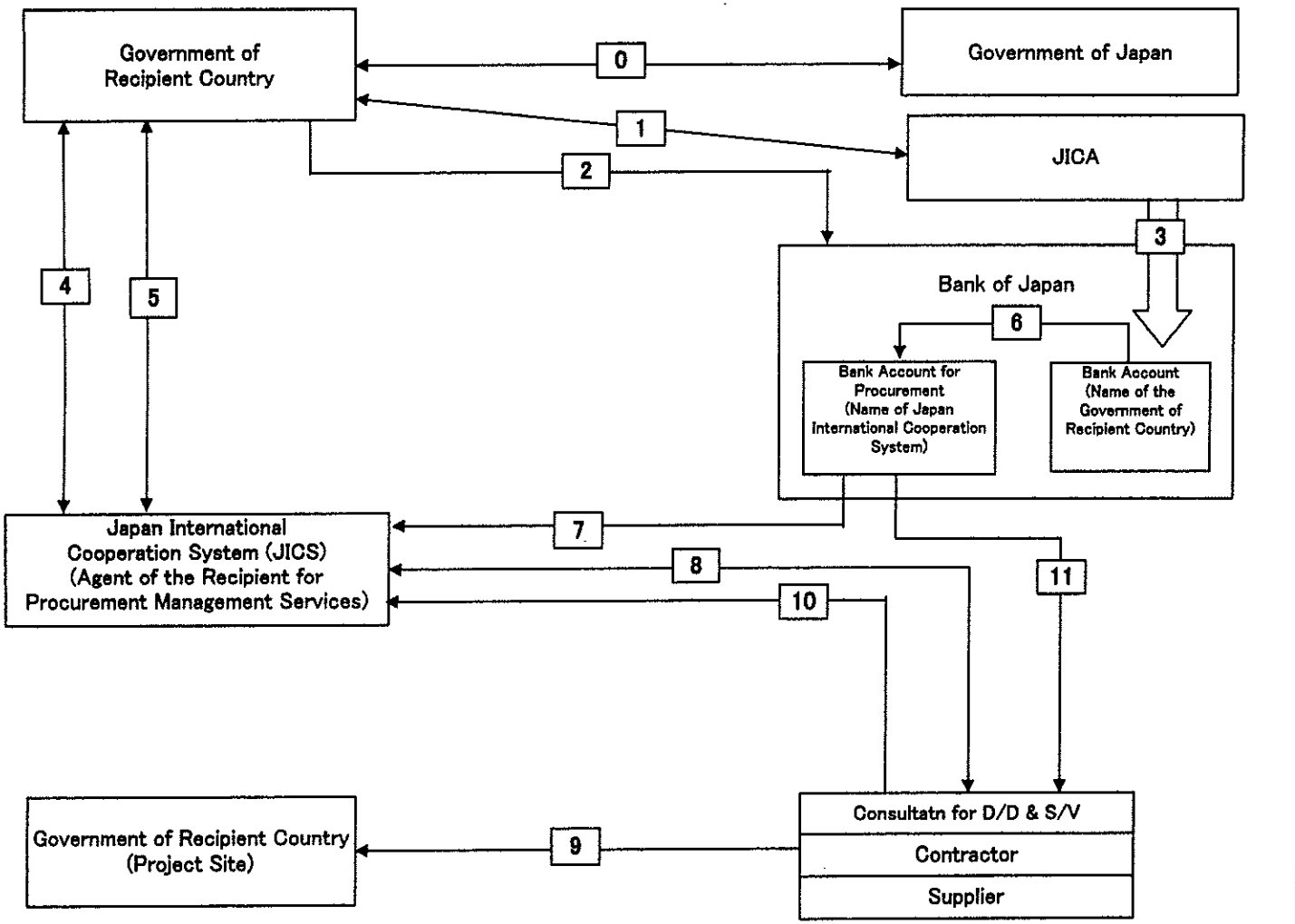
Item		Estimated Cost (US$: Thousand)	(Equivalent to JPY: Million)
Capital Cost	Power Connection	60.0	6.4
	Water Connection	15.0	1.6
	Demolition Cost	30.0	3.2
	Banking Arrangement Fee	8.3	0.9
Total		113.3	12.1

(3) Conditions

(i) Time of Estimation: June, 2008.

(ii) Currency Exchange Rate: 1US$ = JPY 106.73,
1NIS = JPY 31.391

ANNEX 4 Flow of Funds for implementation under the Japan's Grant Aid for Community Empowerment



0	Signing of Exchange of Notes (E/N)
1	Signing of Grant Agreement (G/A)
2	Banking Arrangement (B/A)
3	Disbursement of Funds
4	Signing of Agreement for Agent (A/A)
5	Decision of Components of Products and Service
6	Transfer of Funds
7	Payment of the Remuneration for Agent
8	Conclusion of Contract
9	Construction and/or Procurement of Equipment
10	Application for Payment
11	Payment

5. 事業事前計画表（概略設計時）

１．案件名
パレスチナ　ヨルダン川西岸地区学校建設計画
２．要請の背景
パレスチナでは、教育分野を将来のパレスチナ独立の礎となる人材を育成する為の重点分野として位置づけている。2007 年末に発表された「パレスチナ復興開発計画（2008-2010）」、および「教育 5 カ年計画(2007－2011)」では共に、①教育アクセスの向上、②教育の質の向上、③教育行政の改善を目標とし具体的な行動および予算計画を策定している。特に、教育アクセスの向上に関しては、基礎教育、中等教育の就学率をそれぞれ 99%及び 98%まで引き上げると明確な目標を定めている。 本プロジェクトが対象とするヨルダン川西岸地区では 2002/3~2006/7 年度の 5 年間で基礎・中等教育就学者が毎年平均 2.6%増加している。特に、中等教育の就学者数の増加が著しく毎年平均 8.7% 増加している。この就学者増に対して、学校建設は追いついておらず、ヨルダン川西岸地区では多くの学校が一般の建物を間借りするか、2 部制を敷いて人口増に対応している。こうした間借りの建物は、本来教育目的の施設ではないため、理科実験室やコンピューター室等が整備されておらずカリキュラムに沿った教育が出来ていないなど、教育の質の向上の大きな阻害要因となっている。また、2 部制は授業時間が制限されるため、これもまた教育の質向上に対する阻害要因となっている。 こうした状況の下、本プロジェクトはヨルダン川西岸地区の教育の質が改善されることを上位目標とし、同地域の 5 サイトの教育施設の整備を行うものである。なお、最終的に実施されるサイト数は詳細設計段階で決定される。
３．プロジェクト全体計画概要
(1) プロジェクト全体計画の目標 協力対象サイトにおいて、2 部制解消、1 部制維持、老朽校舎使用停止および借用校舎解消が達成される。直接裨益対象者は協力対象サイトである Beita 校、Wadi Fara 校、Beit Dajan 校、Jericho 校、Al Fara'a 校にて学習する全生徒 2,900 人である。 (2) プロジェクト全体計画の成果 １）協力対象サイトにおいて、教室・特別教室・事務緒室・トイレ、および学校家具・機材が整備される。 ２）協力対象サイトに学校が移転され、学校運営体制が整備される。 (3) プロジェクト全体計画の主要活動 １）協力対象サイトの教室・特別教室・事務緒室・トイレを建設する。 ２）協力対象サイトの学校家具・教育機材を調達する。 ３）上記新築施設にて学校教育を行う。 (4) 投入（インプット） １）日本側（＝本案件）：無償資金協力 9.04 億円

２）パレスチナ側

（ア）協力対象サイトの教職員配置

（イ）協力対象サイトの運営・維持管理費

⑸ 実施体制

主管官庁及び実施機関：パレスチナ教育・高等教育庁

４．無償資金協力案件の内容

⑴ サイト

ヨルダン川西岸地区内のナブルス県、トゥバス県、ジェリコ県の合計 5 サイト

⑵ 概要

１）造成・外構工事を行う。

２）教室・特別教室・事務緒室・トイレを建設する。

３）学校家具・教育機材を調達する。

⑶ 相手国側負担事項

１）建設用地の確保

２）既存施設および障害物の解体撤去工事

⑷ 概略事業費

概略事業費　9.16 億円（無償資金協力 9.04 億円、パレスチナ側負担 0.12 億円）

⑸ 工期

調達代理契約、入札期間を含め約 24 ヶ月（予定）

⑹ 貧困、ジェンダー、環境及び社会面の配慮

特になし

５．外部要因リスク

現在、小康状態にあるイスラエル - パレスチナ関係が悪化しない

６．過去の類似案件からの教訓の活用

特になし

７．プロジェクト計画全体の事後評価に係わる提案

⑴　プロジェクト全体計画の目標達成を示す成果指標

項目	2008 年（実施前）	2011 年（実施後）
2 部制実施、あるいは近い将来 2 部制実施に移行する学校数	4	0
校舎を借用している学校数	2	0

⑵　その他の成果指標

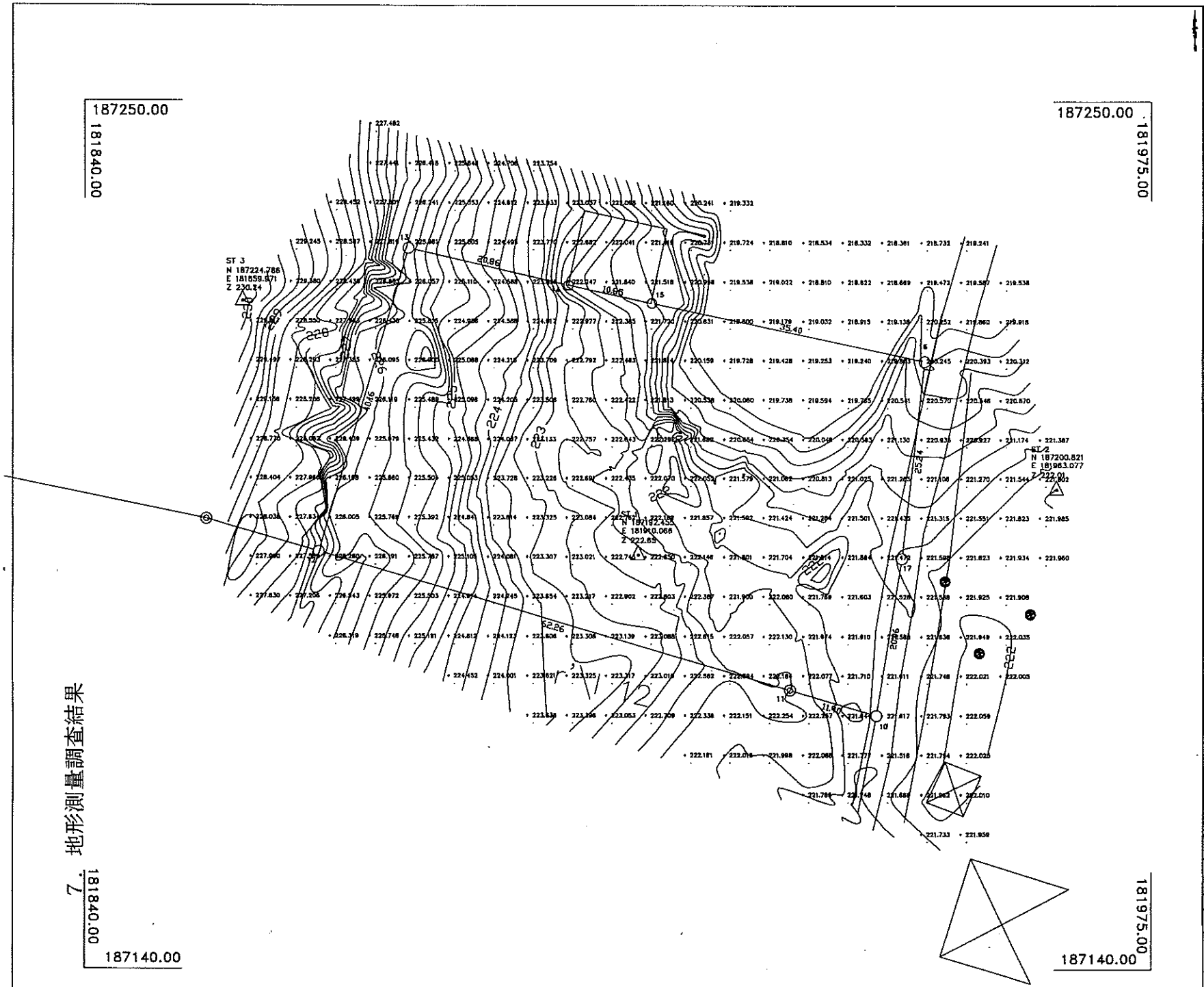
特になし

⑶　評価のタイミング

2011 年以降（協力対象施設竣工後）

6. 参考資料／入手資料リスト

No.	名称	形態	オリジナル・コピー	発行機関	発行年
1	DIR Ammar Secondary School （入札図書）	電子データ		EU	-
2	Bezzaria Basic Boys School （入札図書）	電子データ		IDB	-
3	Neileen School （入札図書）	電子データ		AFD	-
4	Tammoun B. School （入札図書）	電子データ		France	-
5	Tubas B. B. School （入札図書）	電子データ		KfW	-
6	Al-Hamadallah （入札図書）	電子データ		France	-
7	Al-Jalazoon （入札図書）	電子データ		KfW	-
8	Borqa School （入札図書）	電子データ		IDB	-
9	Education Statistical Yearbook 2002/2003-2003/4	図書	オリジナル	教育・高等教育庁	2004
10	Teache Education Strategy in Palestine	図書	オリジナル	教育・高等教育庁	2008
11	Five Year Plan 2007-2011 （ドラフト）	電子データ		教育・高等教育庁	2008
12	Sonia Plan	電子データ		教育・高等教育庁	2007
13	1-10 学年 科学教科書	図書	オリジナル	教育・高等教育庁	2005-2007
14	11-12 学年 生物学教科書	図書	オリジナル	教育・高等教育庁	2005-2007

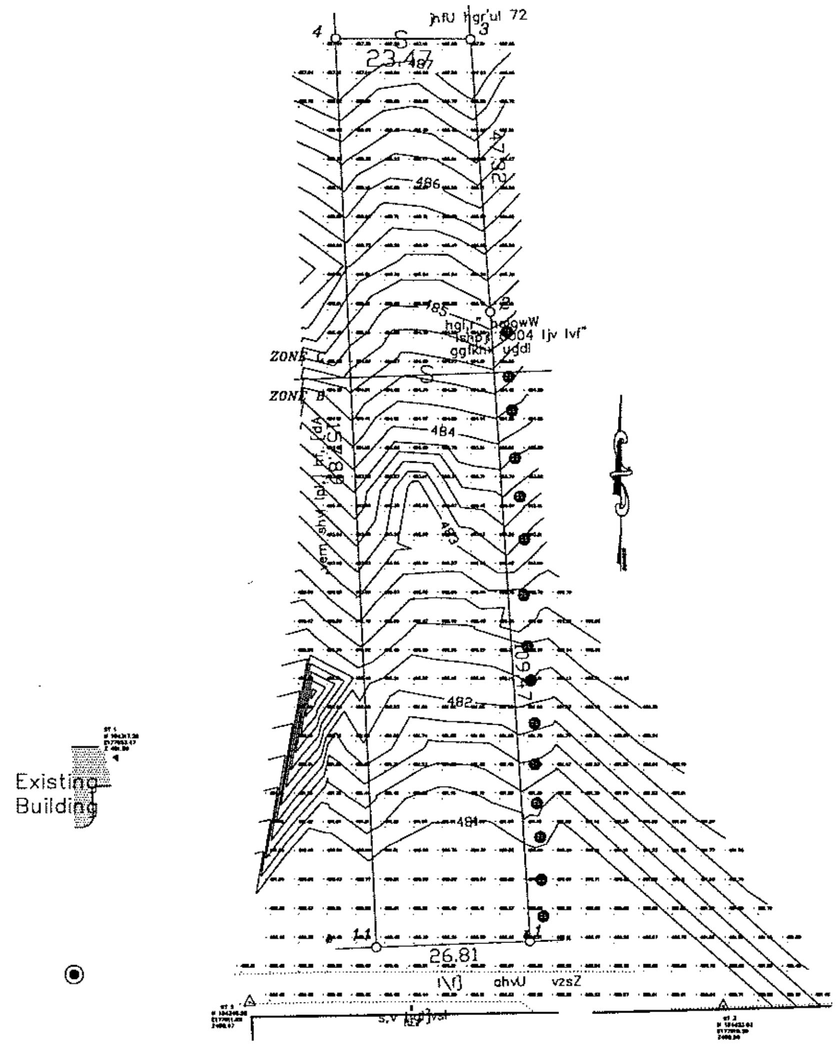


7. 地形測量調查結果

PALESTINIAN NATIONAL AUTHORITY

MINISTRY OF EDUCATION

M.S.O



MODERN SURVEY OFFICE

PALESTINIAN
NATIONAL AUTHORITY

MINISTRY OF EDUCATION

PROJECT NAME: jericho school

PROJECT NO:

District:

Block No: 2

Parcel No: 27

Area:

Legend

HOS		
BRAX		
OHDS		
FDUNS		
FDUNS		
CNC		
CONC-FLOOR	CONCRETE FLOOR	
ASP		
SH		
FE		
CV		
RW	RETAINING WALL	
SV	STONE WALL	
CS		
EP	ELEC POLE	
TP	TEL POLE	
TMS	TEL MH	
MH	SEWAGE MH	
STORMH	STORM MH	
WMH	WATER MH	

Issue Date:

No.	Date	Revisions	Description

M.S.O

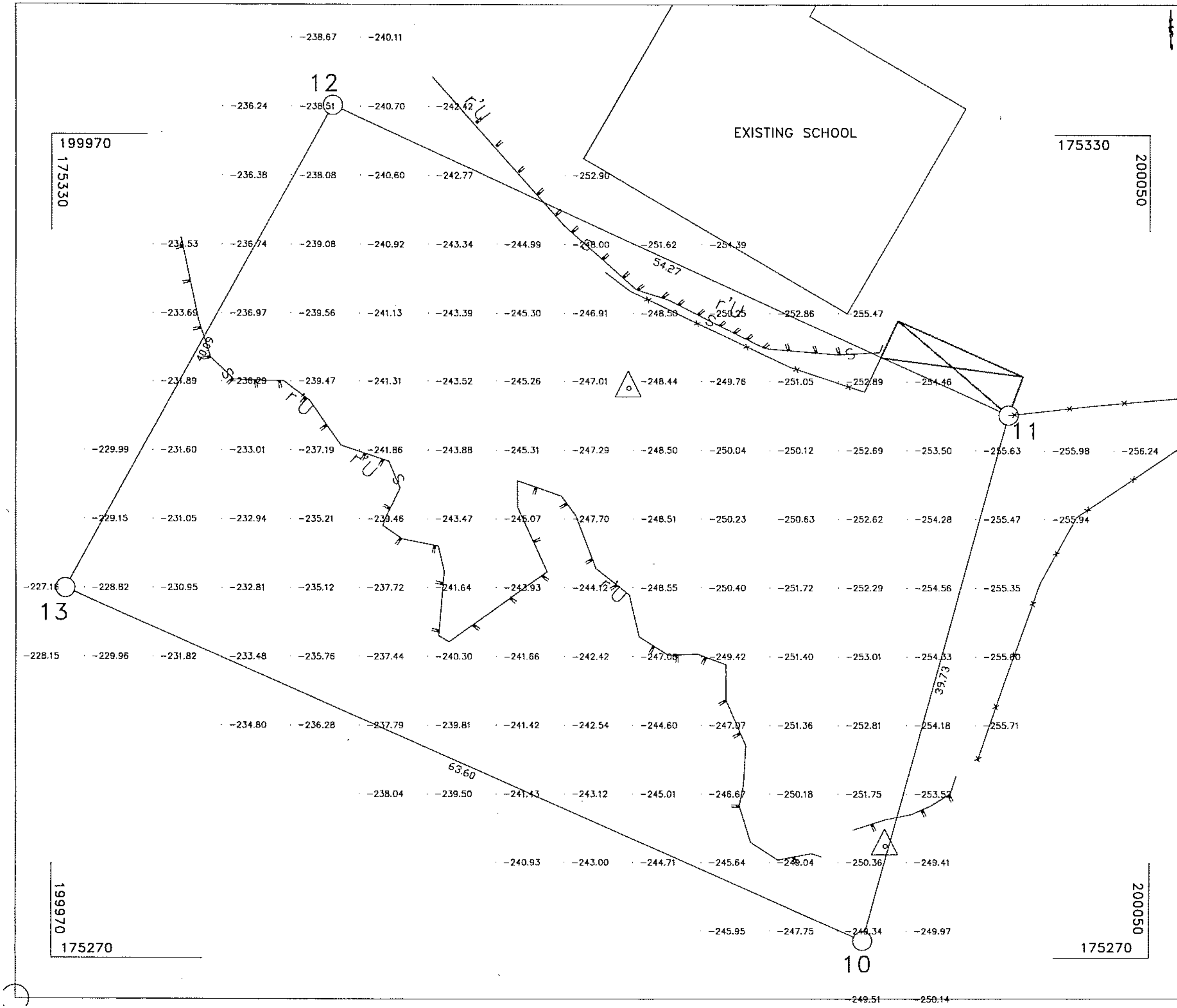
Prepared/Drawn By:

Checked By:

Approved by:

Scale: 1 : _

Sheet Serial No:



MODERN SURVEY OFFICE

PALESTINIAN
NATIONAL AUTHORITY

MINISTRY OF EDUCATION

PROJECT NAME: Zubidat School

PROJECT NO:

District : Jericho

Block No : 72

Parcel No : 8

Area :

Legend

Issue Date

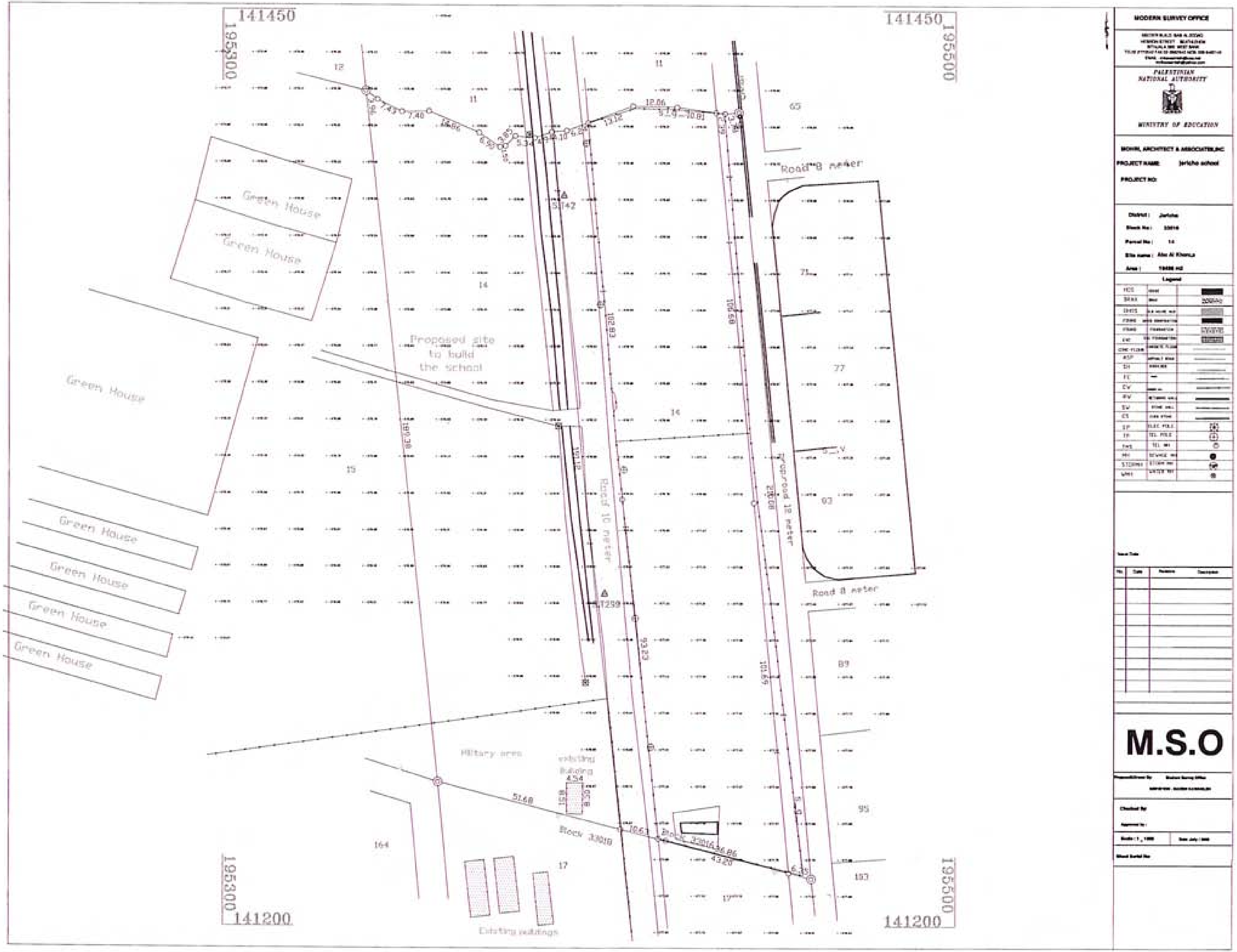
No.	Date	Revision	Description

M.S.O

Checked By:

Approved by :

Sheet Serial No:


MODERN SURVEY OFFICE
PALESTINIAN NATIONAL AUTHORITY
MINISTRY OF EDUCATION
PROJECT NAME: jericho school
PROJECT NO:
District: Jericho
Parcel No: 14
Legend
M.S.O
141450
195300
195500
141200
Green House
Green House
Green House
Green House
Green House
Green House
Green House
Proposed site to build the school
Road 10 meter
Proposed road 12 meter
Road 8 meter
Road 8 meter
Military area
existing building
Existing buildings
Block 33010
12
11
14
15
17
164
65
71
77
93
89
95
193
189.38
102.93
106.68
101.69
93.23
51.68
10.61
43.28
12.06
13.12
7.43
7.40

8．地盤調査結果

GEOTECHNICAL SITE SOIL INVESTIGATION REPORT

ESTABLISHMENT OF NEW SCHOOLS IN THE WEST BANK

Prepared for:
MOHRI, ARCHITECTS & ASSOCIATES, INC.

Prepared by:
HIJJAWI CONSTRUCTION LABS

JULY – 2008

Messrs. MOHRI, Architects & Ass., Inc.
Tokyo – Japan

Ref. : SI/271,272,273,276,277,278/A **Date : 25/7/2008**

Mr. Hisafumi Michikawa
Project Manager

Project - Establishment of New Schools in the West Bank - Palestine
Subject - Geotechnical Site Investigation Report

Dear Sir,

With reference to the signed on 16/6/2008 agreement, **Hijjawi Construction Labs (HCL)** is pleased to submit this report of the site investigation carried out for the proposed construction sites of the above mentioned project.

The investigation ended up with conclusions and recommendations relevant to the findings. Those, in addition to the laboratory test results and engineering recommendations are herewith attached.

We look forward for further cooperation and would like to take this opportunity to highly considerate your confidence in our laboratories. For any clarification concerning this report, please contact us at your convenience.

Yours sincerely,

Dr. Sami A. Hijjawi
General Manager

CONTENTS

1. INTRODUCTION

1.1 GENERAL

This report presents the outcome of the geotechnical site investigation carried out for the proposed construction sites of new schools in Al Fara'a, Wadi Al Fara'a, Beit Dajan, Beita, Jericho and Al Zubeidat.

1.2 PROJECT DESCRIPTION

According to the given information, the soil investigation is required for the proposed construction sites, the area of each is about 5,000 square meters. Each school building will consist of three floors.

1.3 PURPOSE AND SCOPE

Investigation of the underground conditions at a site is prerequisite to the economical design of the substructure elements. It is also necessary to obtain sufficient information for feasibility and economic studies for any project.

For this particular project, and due to the type of proposed structures, which highly depend on the nature of soils, the site investigation becomes of special importance to obtain sufficient information about the geotechnical parameters of the ground.
In general, **the purpose of this site investigation** was to provide the following:

- Information to allow the geotechnical consultant to make a recommendations on the type and classification of the soils.

- Sufficient data/ laboratory tests to make settlement and swelling predictions.

- Sufficient information for the structural engineer for the design of most suitable and safe foundations.

- Location of the groundwater level.

- Information regarding compaction properties of the encountered materials.

This was accomplished through the close cooperation of **HCL**'s geotechnical engineer and the technical staff of its Geotechnical Department.

2. FIELD EXPLORATION AND TESTING

2.1 DRILLING

2.1.1 The geotechnical investigation program agreed upon with **Hijjawi Construction Labs** to explore the subsurface conditions included the drilling of four boreholes at each site in Al Fara'a, Beit Dajan, Beita, and Jericho: two to a depth of 9m each and two to a depth of 6m each.

2.1.2 In Wadi Al Fara'a site, it was agreed upon to make a verification borehole and review of a site investigation report, previously done for the site.

2.1.3 For Al Zubeidat school location, a preliminary inspection of the geotechnical conditions was agreed upon due to the difficult topography of the site and the difficult access of drilling and exploration equipment.

The test borings were located in the field by our representative by measuring relative to the property corners and other identifiable landmarks using the provided site plan for each school. The locations of the test borings are shown on the Boring Location Maps for each site.

Soil logs for the test borings shown on the Boring Location Plans are presented in Appendix of this report.

2.2 Sampling

According to the drilling requirements set in the agreement, continuous coring was carried out. For this purpose:

- double tube core barrel was used in rock formations (ASTM D2113),
- thin wall tubes were used for sampling of cohesive undisturbed samples (ASTM D1587),

- split spoon samplers with accessories were used for SPT testing (ASTM D1586),
- the down the hole hammer (DTH) with outside diameter of 100 mm was used to penetrate the formation and collect samples in subsurface layers with loose gravelly formations,

Soil samples were obtained from the test borings and returned to our office for further review and laboratory analyses. The soils observed during logging of the test borings were classified according to the Unified Soils Classification System (USCS), utilizing field classification procedures outlined in ASTM D 2488.

The borings were advanced using a truck mounted, Mobile B-31 drilling rig. Standard Penetration Tests were performed, and representative samples were collected in accordance with ASTM D 1586 sampling procedures.

Depths referred to in this report are relative to the existing ground surface elevations at the time of our field investigation. The surface and subsurface conditions described in this report are as observed at the site at the time of our field investigation.

2.3 FIELD TESTING – STANDARD PENETRATION TEST (SPT)

The Standard Penetration Test (SPT) was carried out in all boreholes (wherever applicable) at 1m interval as required. The test was carried out by means of the 50.8 mm outside diameter split - spoon sampler, which was driven to penetration of 450 mm by repeated blows of a 63.5 Kg monkey falling through 760 mm. The number of blows for the last 300-mm of driving was recorded as the standard penetration number (N-value).

The records from the SPT are given in the borehole logs.

3. LABORATORY TESTING

Representative soil and rock samples were collected from the drilled boreholes, tightly sealed and transported to **HCL**'s Laboratories in Nablus.

3.1 TESTS CARRIED OUT

The following tests were performed to evaluate the engineering properties of the soils and rocks influencing the performance of the proposed structure:

- **Natural moisture contents** were determined in accordance with **ASTM D-2216.**

- **Grain size distribution (sieve analysis)** in accordance with **ASTM D-422.**

- **Atterberg limits (Liquid and Plastic)** in accordance with **ASTM D-4318.** Liquid and plastic limit tests were conducted on the powder of the obtained samples and the plasticity index (PI) was determined.

- **Direct shear test** in accordance with ASTM D-3080, where three (remolded) identical specimens were sheared under three vertical load conditions and the maximum shear stress in each case was measured. The strength parameters, namely cohesion (c) and angle of internal friction (Ø) were determined from the maximum shear-vs- normal stress plot.

- **One - dimensional consolidation** in accordance with ASTM D--2435,

- **Unconfined compression** test in accordance with ASTM D-2166.

- **Specific gravity and absorption** in accordance with **ASTM C-127.**

- **Test for Unconfined Compressive Strength** of Intact Rock Core Specimens in accordance with **ASTM D-2938,**

- **Swelling Potential Analysis** - An indication of the susceptibility of the clayey soil encountered to swelling or shrinkage due to increase or decrease in moisture content has been provided by swelling potential evaluation. Experimental and analytical evaluation were carried out on different samples extracted from boreholes at different depths in Beita, Beit Dajan and Jericho locations.

- **Swelling Pressure** - Following the identification of the swelling and the qualitative and quantitative evaluation of the swelling potential, an evaluation of the swelling pressure was carried out. Swelling pressure was determined in the one-dimensional oedometer (consolidation apparatus), where undisturbed clay sample was flooded with water and the load required to maintain constant volume change was recorded.

3.2 SUMMARY OF TEST RESULTS

The results of the mentioned above tests are summarized in the attached tables for each location.

4. BEARING CAPACITY ANALYSIS AND FOUNDATION TYPES

The bearing capacity of subsurface materials at the expected foundation levels for each location was calculated utilizing the following three approaches:

4.1 USING SOIL MECHANICS EQUATIONS

The bearing capacity was calculated using the shear test parameters of cohesion and angle of internal friction and the soil density of the specimens extracted from the boreholes. The following well known Terzaghi equation with correction terms suggested by Schultze can be used to calculate the bearing capacity of rectangular foundation of any sides ratio B:L

$$q_{ult} = (1+ 0.3\ B/L)\ CN_C + \gamma_o\ DN_q + (1- 0.2\ B/L)\ (\gamma_1 B/2)\ N_\gamma$$

where:

γo - Unit weight of soil above foundation level in KN/m^3.

$\gamma 1$ - Unit weight of soil below foundation level in KN/m^3.

C,Ø - Strength parameters of the soil below foundation level in KN/m^2 and degrees respectively.

B - Width of foundation in (m)

L - Length of foundation in (m).

N_C, N_q, N_γ - Bearing capacity coefficients dependent on the angle of internal friction of the soil below foundation level (dimensionless).

D - Depth of foundation (m).

The bearing capacity was computed by a special computer program using both Terzaghi and Vesic methods. Based on the calculations, the calculated bearing capacity values are given in the table shown below.

4.2 USING THE JORDANIAN CODE'S INSTRUCTIONS

According to the known codes of engineering practice, the bearing capacity of rocks is taken as a percentage of the unconfined compressive strength of rock core samples tested in accordance with ASTM D-2938.

Following the Jordanian Code for Foundations and Retaining Walls (Amman- 1992) [§3/7/1-2], the mentioned percentage is 5% for rocks with RQD ≤ 75 % and the bearing capacity should not exceed 10 Kg/cm². Taking the lowest compressive strength value of rock core specimens from the tables with test results for each location (attached to this report), and applying the percentage of 5%, the bearing capacities were calculated.

4.3 USING THE SPT TEST RESULTS

The values of standard penetration numbers (N) were related to allowable bearing pressures using the empirical relationship (curve) established by Terzaghi and Peck.

4.4 RECOMMENDED FOUNDATION TYPES AND BEARING CAPACITIES

Based on the above described methods for bearing capacity analysis, and taking into consideration the site subsurface conditions at each location, the following table summarizes the recommended type and depth of foundations for each school location and the recommended bearing capacity at the proposed foundation level.

A- Shallow Foundations:

Location	Recommended Foundation		Bearing capacity values (Kg/cm²)			Recommended Bearing capacity Value (Kg/cm²)
	Type	Depth (m)	Terzaghi	SPT	Jordanian Code	
Al Fara'a	Isolated	1.5	-	-	4.0	4.0
Wadi Al Fara'a	Isolated	1.5	-	-	3.3	3.0
Beita	Assume Isolated	2.0	1.6	1.7	-	2.0 See (B) below

Beit Dajan	Assume isolated	2.0	1.7	1.6	-	See (B) below
Jericho	Assume isolated	2.0	1.5	1.8	-	See (B) below

B- Deep foundations (Beit Dajan, Beita and Jericho):

Whereas the formations within the sites of Beit Dajan, Jericho and mostly Beita consist of compressible clays, we recommend to design the piles and pile groups as friction piles. This will reduce or avoid the detrimental effects of soil volume change (swelling and shrinkage) along the bored depths of the boreholes.

The number, length and bearing capacity of single piles and pile groups can be calculated based on the loads acting from the superstructures of the buildings.

4.5 REVIEW OF WADI AL FARA'A REPORT

The previously prepared report for Wadi Al Fara'a school location (Reference No. 322/A/2007 dated 12/12/2007) was reviewed by our geotechnical engineer, along with the findings of the drilling of a new 6m borehole at the middle of the site. The obtained results of sampling and testing confirm the results given in the mentioned report. Borehole log and summary of test results are given in the attachments to this report.

4.6 INSPECTION (PRELIMINARY INVESTIGATION) OF AL ZUBEIDAT SITE

The main objective of the inspection was to primarily evaluate the soil subsurface conditions and to make general description of the subsurface soil formations.

Observations:

The proposed site is located in a mountainous area in Al Zubeidat and is bordered by an existing school building from the north. The site is steeply sloped to the east with difference in elevation from the street exceeding 15m.

Based on visual examination of the site and the surroundings, especially the location of the existing school on the north of the plot, the soil formation within the area consists mostly of hard and fractured formation of limestone with occasional pockets filled with silty clay. The rock is exposed on the surface. Three samples of surface rocks were collected for evaluation (specific gravity and water absorption determination). The results of these are attached in the tables with test results.

General view of rock formations

Vertical cut in the rock formations

The described limestone is suitable to support the building loads on isolated footings with tie beams. Continuous strip footings can also be used.

Conclusions:

- The soil formation consists of limestone.
- The subsurface material is suitable to support the building loads on isolated footings.
- The presumed soil bearing capacity for preliminary design purposes is 4.0 kg/cm^2.

- The detailed subsurface physical and mechanical properties and final foundation recommendations are recommended to obtain from comprehensive geotechnical site investigation, which can be performed by our company upon your request after the preparation of the site for construction at the future stages of the project.

5. SETTLEMENT ANALYSIS

5.1 Beita, Beit Dajan and Jericho Sites

The settlement of the footings to be built on the existing formations can be calculated using the following elastic theory equation:

$$S = Q_n B I \frac{(1-\mu^2)}{E}$$

where:

Q_n - Net foundation pressure (Kg/cm²)
B - Width of foundation (m)
μ - Poisson's ratio
E - Deformation modulus (Kg/cm²)
I - Influence factor.

Considering the results of one - dimensional consolidation test carried out on representative undisturbed samples, and assuming Qn = 2.0 Kg/ cm² , we have :

Location	Qn (Kg/cm²)	B (cm)	μ	E (Kg/cm²)	I	S (cm)
Beita	2.0	200	0.2	140	1.2	3.3
Beit Dajan	2.0	200	0.2	190	1.2	2.4
Jericho	2.0	200	0.2	180	1.2	2.6

The above settlement is the immediate part of final settlement which takes place during application of loading as a result of elastic deformation of the soil without change in water content. This settlement does not consider any compaction or soil improvement that might be carried out prior to the foundation construction.

5.2 Al Fara'a and Wadi Al Fara'a Sites

With footings designed and constructed on the encountered formations and as described in §4 above, the settlement is negligible.

It should be noted that the results and recommendations of this report are solely based on the collected samples from the drilled boreholes on **July 6th-21st , 2008** and assuming that the subsurface conditions at the investigated sites do not significantly deviate from those encountered.

Our office should be notified, in writing, immediately after foundation excavation and before the construction of foundations to inspect the excavations and confirm that the required ground is reached and all undesirable and loose materials are removed. The foundation excavation inspections are carried out at separate fees.

6 . REFERENCES

- **Code of practice for Site Investigations.** BS 5930: 1981. British Standards Institution.
- **Methods of Test for Soils for Civil Engineering Purposes.** BS 1377: 1975. British Standards Institution.
- K.H. Head. **Manual of Soil Laboratory Testing.** Vol. 1 & 2. ELE International Ltd. London, 1984.
- J.E. Bowles. **Foundation Analysis and Design.** Third edition. McGraw - Hill International, 1982.
- M.J. Tomlinson. **Foundation Design and Construction.** Fourth edition, ELBS, London, 1983.
- R.Peck, W.Hanson, T.Thornburn. **Foundation Engineering.** 2nd edition, Willey, 1980.
- N. Tsytovich. **Soil Mechanics.** Mir Publishers. Moscow, 1987.

7. APPENDICES

7. APPENDICES

Hijjawi

BOREHOLE LOG

Project	Beit Dajan School (MOHRI Architects & Ass.-Japan)			Location	Beit Dajan
Borehole No.	1	Page No.	1/1	Drilling Date	12/7/2008
Ground level	0.0			Weather	Sunny
Drill Rig	Mobile B-31			Operator	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows)			
					15	15	15	N
0.0			Reddish brown silty clay	CH	28	37	45	R
1.0			Granular, poorly graded gravel sand mixture with little fines	GP	7	8	9	17
2.0			plastic silty clay with very little pebbles	CL	7	7	8	15
3.0					8	7	8	15
4.0					8	8	9	17
5.0					9	8	9	17
6.0					8	9	9	18
7.0					7	7	8	15
8.0					8	7	9	16
9.0								
10.0								
11.0								
12.0			End of boring @ 9m					

Water Record			
Level, at which water was encountered	None	Color of water	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	Dr. Sami A. Hijjawi	

Hijjawi

BOREHOLE LOG

Project	Beit Dajan School (MOHRI Architects & Ass.-Japan)			Location	Beit Dajan
Borehole No.	2	Page No.	1/1	Drilling Date	12/7/2008
Ground level	0.0			Weather	Sunny
Drill Rig	Mobile B-31			Operator	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows)			
					15	15	15	N
0.0			Reddish brown silty clay	CH				
			Granular, poorly graded gravel sand mixture with little fines	GP	30	38	42	R
1.0								
			Brown, medium moist, fine, medium plastic silty clay with very little pebbles	CL	6	6	8	14
2.0								
					6	7	8	15
3.0								
					7	7	9	16
4.0								
					8	8	9	17
5.0								
					7	8	9	17
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6m					

Water Record

Level, at which water was encountered	None	Color of water	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	Dr. Sami A. Hijjawi	

Hijjawi

BOREHOLE LOG

Project	Beit Dajan School (MOHRI Architects & Ass.-Japan)				**Location**	Beit Dajan				
Borehole No.	3	**Page No.**	1/1	**Drilling Date**	13/7/2008					
Ground level	0.0			**Weather**	Sunny					
Drill Rig	Mobile B-31			**Operator**	Adnan					

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Reddish brown silty clay	CH	26	32	45	R
1.0			Granular, poorly graded gravel sand mixture with little fines	GP	9	8	9	17
2.0			Brown, medium moist, fine, medium plastic silty clay with very little pebbles	CL	8	8	8	16
3.0					9	8	9	17
4.0					8	8	9	17
5.0					8	9	9	18
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6 m					

Water Record

Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Beit Dajan School (MOHRI Architects & Ass.-Japan)				**Location**	Beit Dajan				
Borehole No.	4	**Page No.**	1/1	**Drilling Date**	13/7/2008					
Ground level	0.0			**Weather**	Sunny					
Drill Rig	Mobile B-31			**Operator**	Adnan					

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Reddish brown silty clay	CH	24	28	33	R
1.0			Gravel sand mixture, little fines	GP				
2.0			Brown, medium moist, fine, medium plastic silty clay with very little pebbles	CL	8	7	7	14
3.0					8	8	9	17
4.0					7	9	9	18
			Gravel sand mixture, little fines	GP	7	7	8	15
5.0			Brown, medium moist, fine, medium plastic silty clay with very little pebbles	CL	7	8	8	16
6.0					6	8	8	16
7.0					7	7	8	15
8.0					8	9	8	17
9.0								
10.0								
11.0								
12.0			End of boring @ 9m					

Water Record

Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Beita School (MOHRI Architects & Ass. – Japan)			**Location**	Beita - Nablus
Borehole No.	1	**Page No.**	1/1	**Drilling Date**	8-7-2008
Ground level	0.0			**Weather**	Sunny
Drill Rig	Mobile B-31			**Operator**	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows)			
					15	15	15	N
0.0								
					6	8	8	16
1.0								
			Dry to medium moist, fine deposits of silty clay with little pebbles	CL	7	7	9	16
2.0								
					6	6	8	14
3.0								
					6	7	8	15
4.0								
			Dense clayey gravels, gravel sand-clay mixture	GC	30	25	35	R
5.0								
					46	55	-	R
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6 m					

Water Record

Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Beita School (MOHRI Architects & Ass. – Japan)			**Location**	Beita - Nablus
Borehole No.	2	**Page No.**	1/1	**Drilling Date**	9-7-2008
Ground level	0.0			**Weather**	Sunny
Drill Rig	Mobile B-31			**Operator**	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows)			
					15	15	15	N
0.0			Dry to medium moist, fine deposits of silty clay with little pebbles	CL				
					6	8	9	17
1.0								
					7	8	9	17
2.0								
					8	8	8	16
3.0								
					7	8	9	17
4.0								
			Mix of dense boulders, gravels and little silty clay	GC	52	-	-	R
5.0								
					66	-	-	R
6.0								
					58	-	-	R
7.0								
			Dense clayey silty Gravel	GC	48	53	-	R
8.0								
					45	49	56	R
9.0								
10.0								
11.0								
12.0			End of boring @ 9 m					

Water Record

Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Beita School (MOHRI Architects & Ass. – Japan)			Location	Beita - Nablus
Borehole No.	3	Page No.	1/1	Drilling Date	9-7-2008
Ground level	0.0			Weather	Sunny
Drill Rig	Mobile B-31			Operator	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows) 15	15	15	N
0.0								
					8	8	9	17
1.0								
					7	7	8	15
2.0			Dry to medium moist, fine deposits of silty clay with little pebbles	CL				
					8	7	9	16
3.0								
					9	9	8	17
4.0								
					8	9	9	18
5.0								
			Dense clayey gravel	GC	46	59	-	R
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6 m					

Water Record

Level, at which water was encountered	None	Color of water	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	Dr. Sami A. Hijjawi	

Hijjawi

BOREHOLE LOG

Project	Beita School (MOHRI Architects & Ass. – Japan)			**Location**	Beita - Nablus
Borehole No.	4	**Page No.**	1/1	**Drilling Date**	9-7-2008
Ground level	0.0			**Weather**	Sunny
Drill Rig	Mobile B-31			**Operator**	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows) 15	15	15	N
0.0								
					6	6	8	14
1.0								
			Dry to medium moist, fine deposits of silty clay with little pebbles	CL	7	6	8	14
2.0								
					7	8	9	17
3.0								
					8	9	10	19
4.0								
					42	41	55	R
5.0			Mix of dense boulders, gravels and little silty clay	GC				
					44	46	56	R
6.0								
					50	52	-	R
7.0								
					40	42	51	R
8.0			Dense clayey silty Gravel	GC				
					42	48	56	R
9.0								
10.0								
11.0								
12.0			End of boring @ 9 m					

Water Record			
Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Al Fara'a School (MOHRI Architects & Ass.-Japan)					**Location**	Al Fara'a				
Borehole No.	1	**Page No.**	1/1		**Drilling Date**	6-7-2008					
Ground level	0.0				**Weather**	Sunny					
Drill Rig	Mobile B-31				**Operator**	Adnan					

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Dry, hard formation of creamy limestone	-				
								R
1.0								
			Dry, medium hard formation of creamy, slightly weathered marlstone	-				R
2.0								
								R
3.0								
								R
4.0								
								R
5.0								
								R
6.0								
								R
7.0								
								R
8.0								
								R
9.0								
10.0								
11.0								
12.0			End of boring @ 9m					

Water Record			
Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Al Fara'a School (MOHRI Architects & Ass.-Japan)			**Location**	Al Fara'a
Borehole No.	2	**Page No.**	1/1	**Drilling Date**	6-7-2008
Ground level	0.0			**Weather**	Sunny
Drill Rig	Mobile B-31			**Operator**	Adnan

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Dry, medium hard formation of creamy, slightly weathered marlstone	-				
								R
1.0								
								R
2.0								
								R
3.0								
								R
4.0								
								R
5.0								
								R
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6m					

Water Record

Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Al Fara'a School (MOHRI Architects & Ass.-Japan)			**Location**	Al Fara'a		
Borehole No.	3	**Page No.**	1/1	**Drilling Date**	7-7-2008		
Ground level	0.0			**Weather**	Sunny		
Drill Rig	Mobile B-31			**Operator**	Adnan		

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Dry, medium hard formation of creamy, slightly weathered marlstone	-				
								R
1.0								
								R
2.0								
								R
3.0								
								R
4.0								
								R
5.0								
								R
6.0			Moist, medium hard formation of creamy, slightly weathered marlstone	-				
								R
7.0								
								R
8.0								
								R
9.0								
10.0								
11.0								
12.0			End of boring @ 9m					

Water Record			
Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Al Fara'a School (MOHRI Architects & Ass.-Japan)					**Location**	Al Fara'a			
Borehole No.	4	**Page No.**	1/1		**Drilling Date**	7-7-2008				
Ground level	0.0				**Weather**	Sunny				
Drill Rig	Mobile B-31				**Operator**	Adnan				

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Dry, medium hard formation of creamy, slightly weathered marlstone	-				
								R
1.0								
								R
2.0								
								R
3.0			Moist, medium hard formation of creamy, slightly weathered marlstone	-				
								R
4.0								
								R
5.0								
								R
6.0			End of boring @ 6m					
7.0								
8.0								
9.0								
10.0								
11.0								
12.0								

Water Record			
Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Jericho School (MOHRI Architects & Ass.-Japan)			Location	Jericho
Borehole No.	1	Page No.	1/1	Drilling Date	20/7/2008
Ground level	0.0			Weather	Sunny
Drill Rig	Mobile B-31			Operator	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows)			
					15	15	15	N
0.0			Reddish brown, fine and plastic silty clay with roots and vegetation	CH				
1.0					5	6	6	12
2.0					6	7	7	14
3.0			Dark brown, fine, medium plastic silty clay with little pebbles	CL	7	7	8	15
4.0					8	8	9	17
5.0					8	9	9	18
6.0					8	9	10	19
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6m					

Water Record

Level, at which water was encountered	None	Color of water	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	Dr. Sami A. Hijjawi	

Hijjawi

BOREHOLE LOG

Project	Jericho School (MOHRI Architects & Ass.-Japan)				**Location**	Jericho					
Borehole No.	2	**Page No.**	1/1	**Drilling Date**	20/7/2008						
Ground level	0.0			**Weather**	Sunny						
Drill Rig	Mobile B-31			**Operator**	Adnan						

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0			Reddish brown, fine and plastic silty clay with roots and vegetation	CH				
					6	7	6	13
1.0								
					7	7	7	14
2.0								
					7	8	8	16
3.0			Grayish, fine, medium plastic silty clay with little pebbles	CL				
					9	8	8	16
4.0								
					9	9	9	18
5.0								
					8	9	10	19
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0			End of boring @ 6m					

Water Record			
Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

Hijjawi

BOREHOLE LOG

Project	Jericho School (MOHRI Architects & Ass.-Japan)			Location	Jericho
Borehole No.	3	Page No.	1/1	Drilling Date	21/7/2008
Ground level	0.0			Weather	Sunny
Drill Rig	Mobile B-31			Operator	Adnan

Scale (m)	Sam-pler Type	Sym-bol	Description of soil strata	USCS	SPT (No. of blows)			
					15	15	15	N
0.0								
					6	7	7	14
1.0			Reddish brown, fine and plastic silty clay with roots and vegetation	CH				
					6	8	7	15
2.0								
					7	8	9	17
3.0								
					8	9	9	18
4.0								
					8	9	9	19
5.0								
			Grayish, fine, medium plastic silty clay with little pebbles	CL	8	9	9	18
6.0								
					8	8	9	17
7.0								
					7	9	9	18
8.0								
					8	9	9	18
9.0								
10.0								
11.0								
12.0			End of boring @ 9m					

Water Record			
Level, at which water was encountered	None	Color of water	-
Water level 24hrs. after completion	None		

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	Dr. Sami A. Hijjawi	

Hijjawi

BOREHOLE LOG

Project	Jericho School (MOHRI Architects & Ass.-Japan)				**Location**	Jericho					
Borehole No.	4	**Page No.**	1/1	**Drilling Date**	21/7/2008						
Ground level	0.0			**Weather**	Sunny						
Drill Rig	Mobile B-31			**Operator**	Adnan						

Scale (m)	**Sam-pler Type**	**Sym-bol**	**Description of soil strata**	**USCS**	**SPT (No. of blows)**			
					15	**15**	**15**	**N**
0.0								
					6	7	7	14
1.0			Reddish brown, fine and plastic silty clay with roots and vegetation	CH				
					6	7	7	14
2.0								
					7	8	8	16
3.0								
					8	8	9	17
4.0								
					8	9	9	18
5.0								
					9	9	9	18
6.0			Grayish to creamy, fine, medium plastic silty clay with little pebbles	CL				
					7	8	8	16
7.0								
					7	8	10	18
8.0								
					9	9	9	18
9.0								
10.0								
11.0								
12.0			End of boring @ 9m					

Water Record			
Level, at which water was encountered	None	**Color of water**	-
Water level 24hrs. after completion		None	

Remarks :

USCS- Unified Soil Classification System
R- Refusal (more than 50 blows)

Approved :	**Dr. Sami A. Hijjawi**	

BEARING CAPACITY OF SHALLOW FOUNDATIONS
Terzaghi and Vesic Methods

Date: July 24, 2008
Identification: Beit Dajan

Input

Units of Measurement

	si	SI or E

Foundation Information

Shape	SQ	SQ, CI, CO, or RE
B =	2	m
L =	2	m
D =	2	m

Soil Information

c =	29	kPa
phi =	11	deg
gamma =	18	kN/m^3
Dw =	20	m

Factor of Safety

F =	3

Results

	Terzaghi	Vesic
Bearing Capacity		
q ult =	508 kPa	629 kPa
q a =	169 kPa	210 kPa
Allowable Column Load		
P =	677 kN	839 kN

Unit conve	1
Gamma w	9.8
phi (radian	0.191986

Terzaghi Computations

a theta =	1.551681
Nc =	10.16
Nq =	2.98
N gamma	1.21
gamma' =	18
coefficient	1.3
coefficient	0.4
sigma zD'	36

Vesic Computation

Nc =	8.80
sc =	1.31
dc =	1.40
Nq =	2.71
sq =	1.19
dq =	1.25
N gamma	1.44
s gamma =	0.60
d gamma =	1.00
B/L =	1
k =	1
W sub f	0

BEARING CAPACITY OF SHALLOW FOUNDATIONS
Terzaghi and Vesic Methods

Date: July 24, 2008
Identification: Beita School

Input

Units of Measurement: si SI or E

Foundation Information
- Shape: SQ SQ, CI, CO, or RE
- B = 2 m
- L = 2 m
- D = 2 m

Soil Information
- c = 28 kPa
- phi = 10 deg
- gamma = 18 kN/m^3
- Dw = 20 m

Factor of Safety
- F = 3

Results

	Terzaghi	Vesic
Bearing Capacity		
q ult =	462 kPa	567 kPa
q a =	154 kPa	189 kPa
Allowable Column Load		
P =	615 kN	756 kN

Unit conve	1
Gamma w	9.8
phi (radian	0.174533

Terzaghi Computations

a theta =	1.491934
Nc =	9.60
Nq =	2.69
N gamma	1.04
gamma' =	18
coefficient	1.3
coefficient	0.4
sigma zD'	36

Vesic Computation

Nc =	8.34
sc =	1.30
dc =	1.40
Nq =	2.47
sq =	1.18
dq =	1.24
N gamma	1.22
s gamma =	0.60
d gamma =	1.00
B/L =	1
k =	1
W sub f	0

BEARING CAPACITY OF SHALLOW FOUNDATIONS
Terzaghi and Vesic Methods

Date: July 24, 2008
Identification: Jericho School

Input

Units of Measurement
si SI or E

Foundation Information
Shape: SQ SQ, CI, CO, or RE
B = 2 m
L = 2 m
D = 2 m

Soil Information
c = 30 kPa
phi = 9 deg
gamma = 18 kN/m^3
Dw = 20 m

Factor of Safety
F = 3

Results

	Terzaghi	Vesic
Bearing Capacity		
q ult =	455 kPa	554 kPa
q a =	152 kPa	185 kPa
Allowable Column Load		
P =	606 kN	738 kN

Unit conve	1
Gamma w	9.8
phi (radian	0.15708

Terzaghi Computations

a theta =	1.434398
Nc =	9.09
Nq =	2.44
N gamma	0.88
gamma' =	18
coefficient	1.3
coefficient	0.4
sigma zD'	36

Vesic Computation

Nc =	7.92
sc =	1.28
dc =	1.40
Nq =	2.25
sq =	1.16
dq =	1.23
N gamma	1.03
s gamma =	0.60
d gamma =	1.00
B/L =	1
k =	1
W sub f	0

Hijjawi			SUMMARY OF LABORATORY TEST RESULTS								
			Ref. : SI/271		**Project :** Establishment of New Schools in the West Bank					**Site :** Al Fara'a	
BH No.	**Sample Depth (m)**	**Moisture Content (%)**	**% Finer Sieve No. # 200**	**Atterberg Limits**		**Specific Gravity**	**Shear Parameters**		**Water absorption (%)**	**Unconfined Compression (q_u) (KN/m²)**	**USCS Classifi-cation**
				LL (%)	**PI**		**C (KN/m²)**	**Ø (°)**			
1	0.0-1.5	6.5	NA	NP	NP				8.0	82	
	1.5-9.0	8.4	84.9	39.4	19.7	2.72	12	19			CL
2	0.0-6.0	7.1	79.8	38.9	18.5	2.72	11	18			CL
3	0.0-6.0	5.9	80.5	38.7	19.0	2.72	12	19			CL
	6.0-9.0	14.5	83.5	40.1	19.9	2.72	13	18			CL
4	0.0-3.0	6.3	78.8	38.4	18.4	2.72	10	17			CL
	3.0-6.0	15.1	81.2	39.8	20.0	2.72	14	18			CL

NA – Not applicable
NP – Non Plastic

Hijjawi			SUMMARY OF LABORATORY TEST RESULTS **Ref. :** SI/272 **Project :** Establishment of New Schools in the West Bank **Site :** Wadi Al Fara'a								
BH No.	**Sample Depth (m)**	**Moisture Content (%)**	**% Finer Sieve No. # 200**	**Atterberg Limits**		**Specific Gravity**	**Shear Parameters**		**Water absorption (%)**	**Unconfined Compression (q_u) (KN/m²)**	**USCS Classifi-cation**
				LL (%)	**PI**		**C (KN/m²)**	**Ø (°)**			
1	0.0-0.5	5.4	35.4	42.8	21.0						
	0.5-4.0	4.5	NA	NP	NP				7.8	72	
	4.0-6.0	5.0	NA	NP	NP				8.9	66	

NA – Not applicable
NP – Non Plastic

Hijjawi

SUMMARY OF LABORATORY TEST RESULTS

Ref. : SI/273 **Project :** Establishment of New Schools in the West Bank **Site :** Beit Dajan

BH No.	Sample Depth (m)	Moisture Content (%)	% Finer Sieve No. # 200	Atterberg Limits LL (%)	Atterberg Limits PI	Specific Gravity	Shear Parameters C (KN/m²)	Shear Parameters Ø (°)	Swelling and Consolidation: Potential swelling (%)	Swelling and Consolidation: Swelling pressure (Kg/cm²)	Swelling and Consolidation: Modulus of deformation (Kg/cm²)	USCS Classification
1	0.0-1.0	7.0	90.2	51.9	23.4	2.73						CH
	1.0-2.0	6.9	27.8	22.5	8.5		0	29				GP
	2.0-9.0	19.3	89.3	49.8	20.1	2.73	44	15	1.38	1.1	225	CL
2	0.0-0.5	6.5	88.4	50.4	22.3	2.73						CH
	0.5-1.5	6.6	25.4	21.4	8.6		0	28				GP
	1.5-6.0	15.8	89.0	48.7	20.0	2.73	43	15	1.36	1.0	220	CL
3	0.0-1.0	6.8	81.8	49.0	19.3	2.72						CL
	1.0-2.0	12.7	26.7	21.6	9.4		0	28				GP
	2.0-6.0	16.4	84.9	47.9	18.8	2.72	43	16	1.24	0.8	190	CL
4	0.0-1.0	6.4	88.0	51.1	22.9	2.73						CH
	1.0-1.5	6.9	25.8	25.0	8.0		0	29				GP
	1.5-4.5	12.9	90.2	51.0	23.4	2.73	44	14	1.82	1.2	235	CH
	4.5-5.0	10.2	28.9	29.1	11.5		0	27				GP
	5.0-9.0	16.7	90.2	49.1	20.3	2.73	45	14	1.40	1.1	230	CL

Hijjawi	SUMMARY OF LABORATORY TEST RESULTS											
	Ref. : SI/276		**Project :** Establishment of New Schools In the West Bank							**Site :** Beita		
BH No.	**Sample Depth (m)**	**Moisture Content (%)**	**% Finer Sieve No. # 200**	**Atterberg Limits**		**Specific Gravity**	**Shear Parameters**		**Swelling and Consolidation**			**USCS Classifi-cation**
				LL (%)	**PI**		**C (KN/m²)**	**Ø (°)**	**Potential swelling (%)**	**Swelling pressure (Kg/cm²)**	**Modulus of deformation (Kg/cm²)**	
1	0.0-4.0	12.5	88.4	47.5	16.4	2.73	45	15	1.0	0.75	145	CL
	4.0-6.0	7.9	18.8	NP	NP	2.65	0	27				GC
2	0.0-4.5	9.5	87.8	48.1	17.5	2.72	42	16	1.1	0.90	215	CL
	4.5-7.5	7.9	15.9	NP	NP	2.66	0	28				GC
	7.5-9.0	9.3	32.2	NP	NP	2.65	8	23				GC
3	0.0-5.5	12.4	92.6	43.4	14.0	2.73	41	28	0.83	0.70	135	CL
	5.5-6.0	8.9	28.9	NP	NP	2.65	9	24				GC
4	0.0-4.0	8.7	87.8	46.9	16.0	2.72	42	16	1.0	0.73	140	CL
	4.0-7.0	7.2	15.0	NP	NP	2.65	0	27				GC
	7.0-9.0	8.0	27.5	NP	NP	2.64	0	24				GC

NA – Not applicable
NP – Non Plastic

Hijjawi

SUMMARY OF LABORATORY TEST RESULTS

Ref. : SI/277 **Project :** Establishment of New Schools in the West Bank **Site :** Jericho

BH No.	Sample Depth (m)	Moisture Content (%)	% Finer Sieve No. # 200	Atterberg Limits LL (%)	Atterberg Limits PI	Specific Gravity	Shear Parameters C (KN/m²)	Shear Parameters Ø (°)	Swelling and Consolidation: Potential swelling (%)	Swelling and Consolidation: Swelling pressure (Kg/cm²)	Swelling and Consolidation: Modulus of deformation (Kg/cm²)	USCS Classification
1	0.0-3.0	8.9	89.3	51.6	24.0	2.73	46	14	1.90	114	185	CH
	3.0-6.0	20.2	68.4	37.0	13.1	2.72	34	18	0.80	75	145	CL
2	0.0-3.0	10.4	86.9	50.9	23.8	2.73	45	15	1.88	112	178	CH
	3.0-6.0	18.4	77.9	34.6	13.5	2.71	33	18	0.80	81	140	CL
3	0.0-3.0	4.3	84.3	50.5	23.9	2.73	45	14	1.90	114	182	CH
	3.09.0	19.4	75.6	33.9	13.5	2.71	33	17	0.80	80	140	CL
4	0.0-3.5	8.2	84.5	50.4	24.1	2.73	45	15	1.90	120	190	CH
	3.5-9.0	21.0	89.6	40.4	16.1	2.72	38	16	0.99	85	165	CL

Hijjawi	SUMMARY OF LABORATORY TEST RESULTS **Ref. :** SI/278 **Project :** Establishment of New Schools in the West Bank **Site :** Al Zubeidat									
BH No.	**Sample Depth (m)**	**Moisture Content (%)**	**% Finer Sieve No. # 200**	**Atterberg Limits**		**Specific Gravity**	**Shear Parameters**		**Water absorption (%)**	**Unconfined Compression (q_u) (KN/m²)**	**USCS Classifi-cation**
				LL (%)	**PI**		**C (KN/m²)**	**Ø (°)**			
Surface samples	0.0	-				2.645			2.7	185	
	0.0	-				2.640			3.1	175	
	0.0	-				2.639			3.5	155	

Note : Samples were collected from the exposed surface rocks for evaluation only.

مختبرات حجاوي الانشائية
Hijjawi Construction Labs

M-S/MOHRI, Architect & Associates, Inc.
Tokyo - Japan

Date : 25/7/2008

Mr. Hasafumi Michikawa
Mr. Hiroyuki Yoshizawa

Project - Soil Investigation for New Schools in the West Bank
Subject - Borehole Location Maps

Dear Sirs,

Kindly find attached the borehole location maps for the school sites, were we did drilling and investigations.

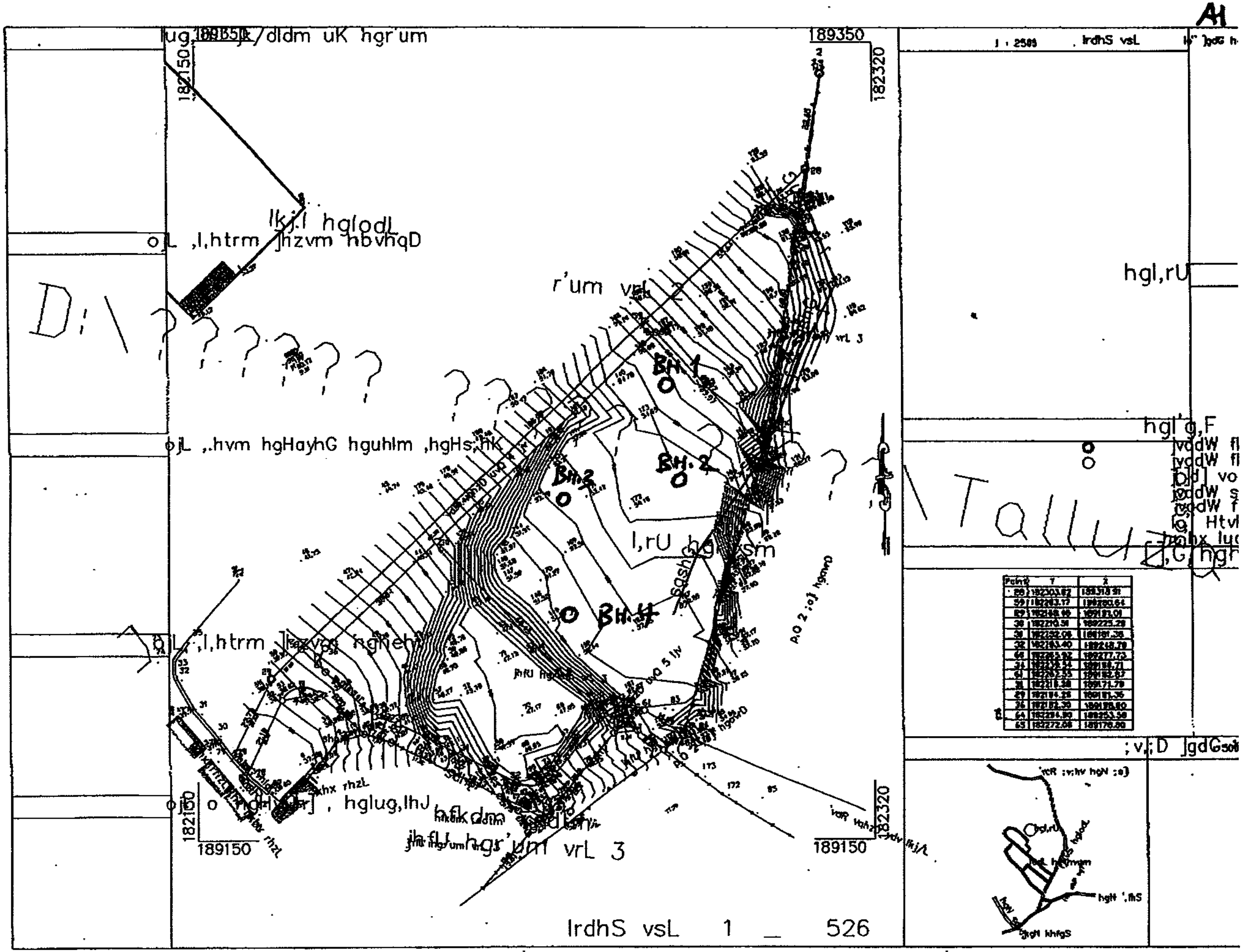
Assuring our best regards.

Yours sincerely,

Dr. Sami A. Hijjawi
General Manager

Attachments: 5 pages.

شارع ١٥ - نابلس - فلسطين - تلفون : ٠٩/٢٣٨٢٦٣٦ فاكس : ٠٩/٢٣٣٨٣٣٤ - ص.ب ١٨٧٤
Str. No. 15 - Nablus - Palestine - Tel. 09/2382636 Fax. 09/2338334 - www.hcl.com.ps , E-mail:info@hcl.com.ps



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59	182283.17	189280.64
89	182168.00	189183.01
30	182210.51	189225.28
38	182232.06	189191.36
32	182183.40	189248.79
66	182263.92	189277.73
34	182238.24	189188.71
61	182262.55	189182.67
31	182218.38	189171.79
29	182184.25	189181.35
36	182182.30	189198.60
64	182294.90	189253.58
65	182272.06	189176.60

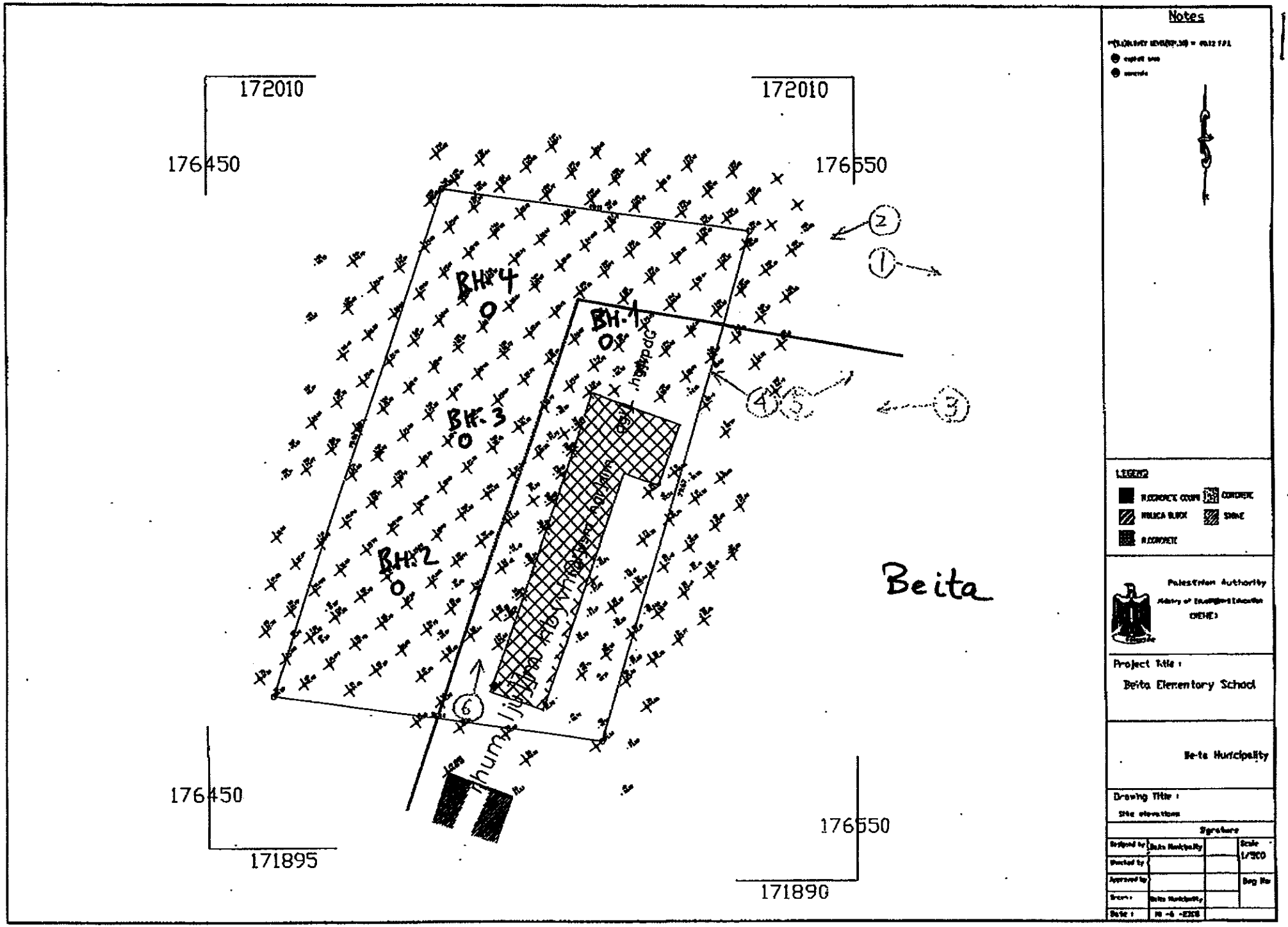
ra:ra'a

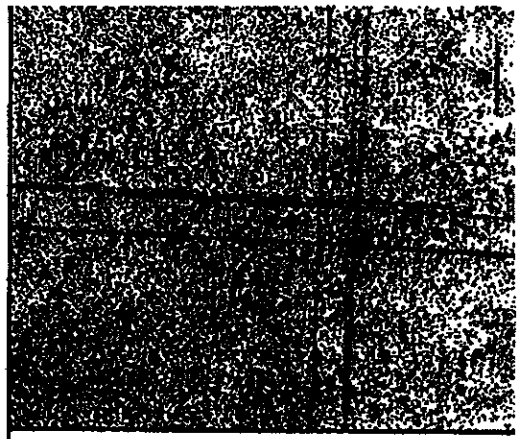
.rU lK hgHp,hQ hg

hgl,rU – lv| hg,b

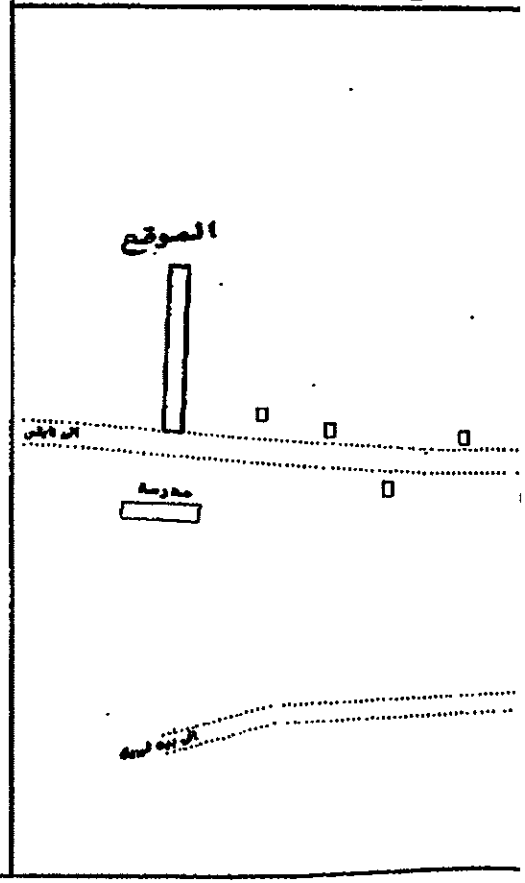
hx l]vsm
hx rhzL
m fkhx
v
;S .vhuD
. jk/dlD
lhJ
]hedhJ

gl,rU trdh|K vbtdh





الموقع بدون مقياس رسم



ختم وملاحظات دائرة الاثار

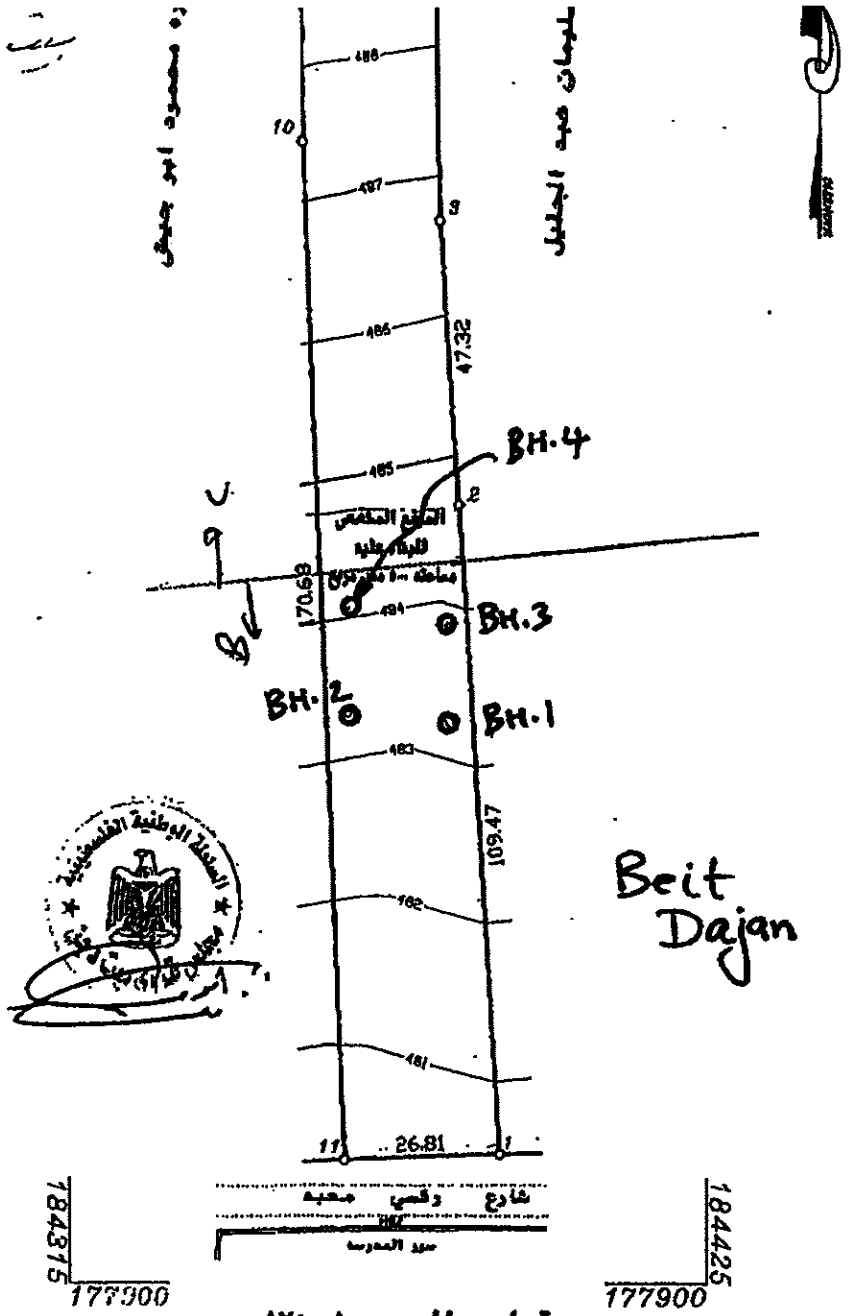
التعديلات لبناء مدرسة حكومية

42

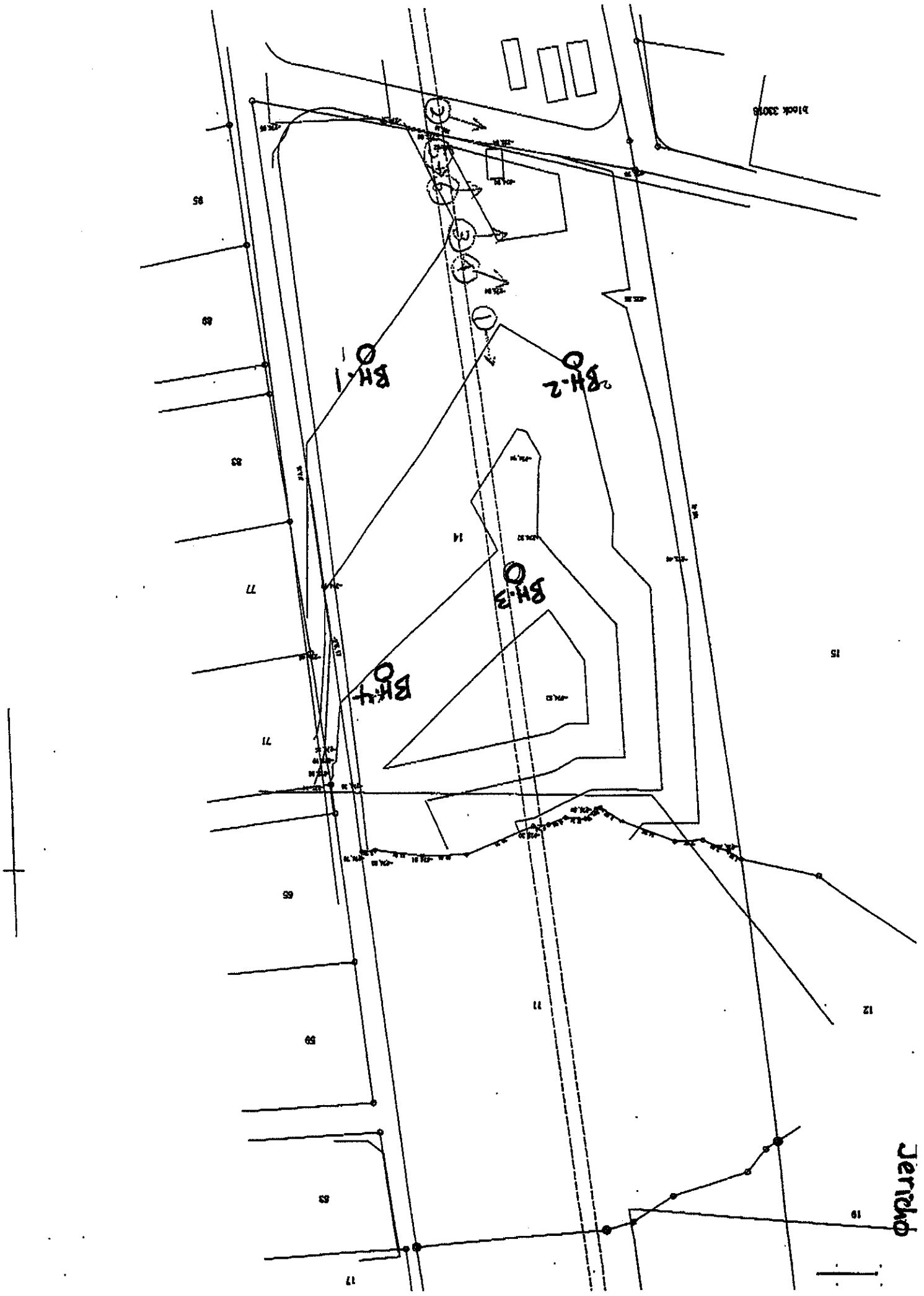
2008

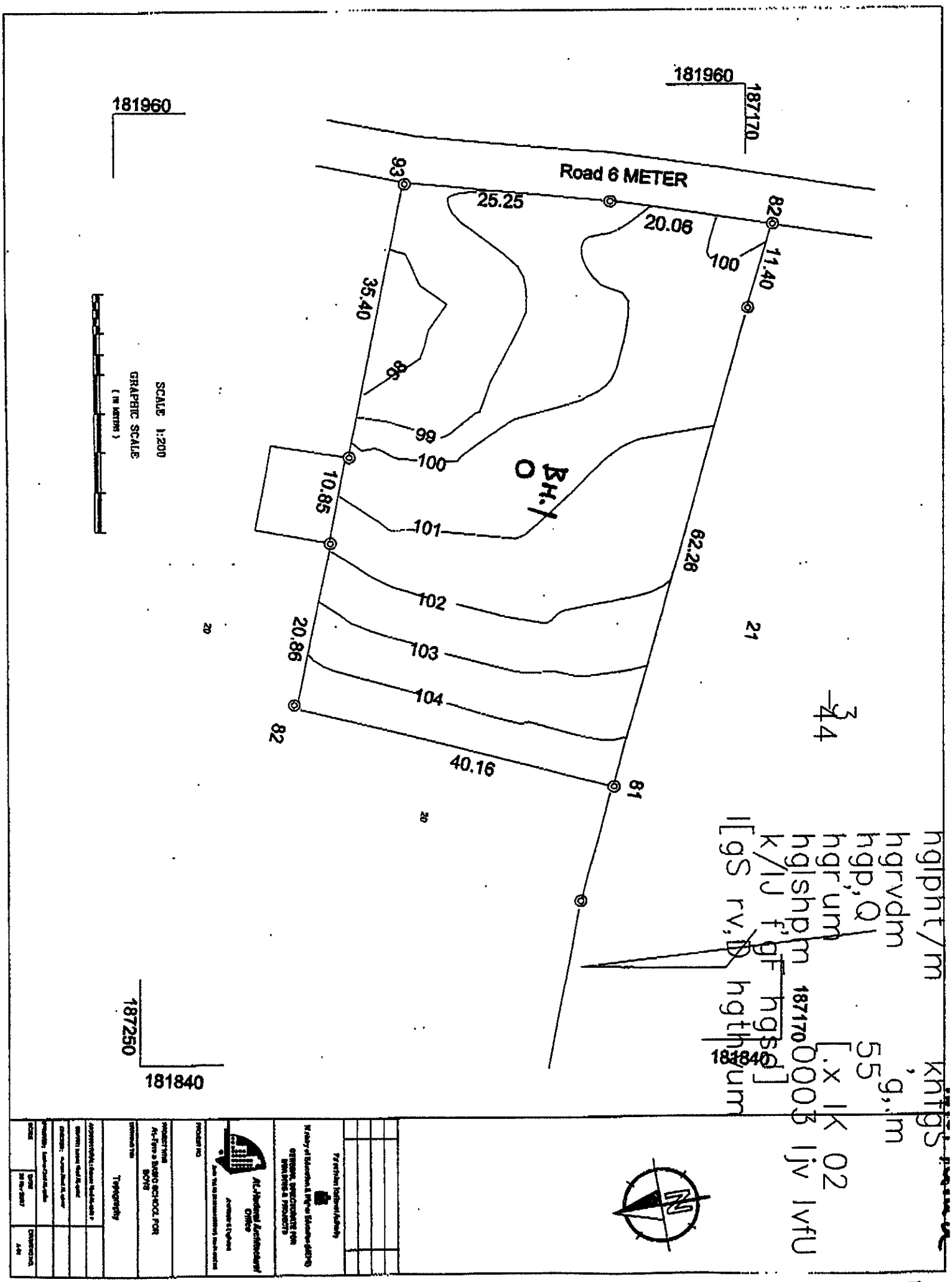
3/12/2008

ختم خط الارتفاع ومعلومات



مقياس الرسم ١:٢٥٠


BH-1
BH-2
BH-3
BH-4
Jericho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20.06
11.40
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102
20.86
103
104
82
40.16
81
21
181960
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SCALE 1:200
GRAPHIC SCALE